



silver seal

ENGINE PARTS MACHINE SHOP TOOLS & SUPPLIES





SILVER SEAL

Products Co., Inc.

Quality Engine Parts & Shop Supplies Since 1959



In 1959, E.L. "Spike" Havens understood the need for a product that would enable engine builders to renew the life of worn valve springs. Spike invented, patented, and launched the manufacturing of the VSI[®], the Valve Spring Insert. Designed with heat slashing serrations, VSI[®] still remains a truly unique product in today's market. It is the primary element on which Silver Seal Products Co. has advanced to the forefront.

- ① No Minimum Order!
- ① World Wide Locations for Fast Service!
- ① Same Day Shipping!
- ① Expedited Air Services Available!
- ① Highly Knowledgeable Tech Support!
- ① Drop Ship Service Available



**Silver Seal
is a Proud
Member of**



Hours

Mon-Fri	7am-7pm EST
Sat	8am-1pm EST
Sundays-Holidays	Closed

800-521-2936 Toll Free Phone (USA/Canada)
800-521-0580 Toll Free Fax (USA/Canada)
www.silver-seal.com

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RETURNS

If you are not happy with your Silver Seal purchase, Please call us, we will be glad to correct the problem by exchanging or refunding your order.

Call us 800-521-2936. Sorry, we cannot guarantee refund or exchange on parts that has been damaged by improper use or has been modified. If parts are a manufacture defect, we will issue refund immediately no questions asked.

FREIGHT TERMS

All shipments invoice total \$1000 NET or more we will allow full freight, if paid within terms, Air shipments to Alaska and Hawaii are excluded. NOTE: F.O.B items, Cleaners, Detergents 25lbs or more, Tumbling media, Glass bead, Steel Shot, Crankshaft Polisher, Quick Bore System, Quick Bore Cabinets, Mag coil, Magnetest Powder 25lbs or more, Liquid coolants and lubricants, Torque plates and Crank Wheels, do not qualify for freight allowance. Call our Customer Service Department if you have any questions.

Policy

All Shipments ship UPS, FedEx or USPS normally. We will utilize any other method per your request. Next day, 2nd day and 3-day select also available. We will try to make every effort but, cannot guarantee your order will ship same day. 4:30 pm EST

DAMAGED OR LOST SHIPMENT

Upon delivery, immediately inspect your package; the driver must note the damage in order to file a claim, and then call us we will assist with the claim procedure. Keep damaged item and all packaging until further advised.

Take Advantage of these additional Jobber Discounts.

Product	Discount
Bronze Guide Liners	10% on 5 or more, bulk pack.
Crankshaft Polishing Belts	10% on 10 or more
Flywheel Grinding Wheels	10% on 10 or more
Surface Grinding Wheels	10% on 2 or more
Surface Grinding Segments	10% on 8-14 15% on 15 or more
Valve Seat Wheels	10% on 15 or more
Head Resurfacing Belts	10% on 3-4 15% on 5 or more
Valve Stem Seals	10% on 100 pieces box

Mission Statement

The Team of Silver Seal Products Co., Inc. remains dedicated in providing our customers with the best in customer service with accurate and fast same day order fill. We are committed to develop and offer the widest selection of the finest shop supplies and engine parts in the industry for today's ever-changing engine designs. No Minimum required.

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PERSONALIZED ID TAB



PATENT#

5,482,000

PART #

ID TAB

USE HTA OR HTAP10 WITH ID TAB.



3 oz. (85 gram) Tube
(Approx. 200 Tabs)

PART #HTA



10.5 oz. (283 gram) Cartridge
(Approx. 700-750 Tabs)

PART #HTAP10

ID TAB

ADD YOUR PERSONALIZED TAB TO ALL PARTS AND ENGINES!

New! Now available personalized identification tabs to ID your products sold from your store! No more questions about returns and warranties. Affix tab on your parts with our heat tab adhesive to avoid improper warranty returns.

5,000 Piece minimum order with one time letter detail charge. Personalize with up to nine letters or numbers. Call for details. \$175.00 one time fee for tooling.

PROTECT-A-TRANS® TABS



ACTUAL SIZE

PART #
PTA

AVAILABLE IN 100
AND 500 PCS.

U.S. Patent #5,482,000

Heat sensitive center will melt at 255°F. Indicating transmission has overheated, thus avoiding warranty.

Page 11

“CUP STYLE” VALVE SPRING INSERT



Page 9

PART#

A508HP



MICRO SLEEVE™

Page 126

TRUSTED BY
MILLIONS FOR
DECADES!

Page 59



**DIGITAL BENCH TOP VALVE
SPRING TESTER**



PART #
VST5776

Page 45

**PREMIUM AIR OPERATED
COMPRESSOR**



PART #
4260N

Page 46

**DIGITAL VALVE SPRING
PRESSURE TESTER**



PART #
VST7601

Page 45

**HARDNESS TESTER
KIT INCLUDES TEST BLOCK,
TRANSDUCER & CARRYING CASE**



Part #
KK-1840

Page 115

**REPLACEMENT SIOUX®
HEAVY DUTY DRESSING TOOL**
"BEST QUALITY ON THE MARKET"



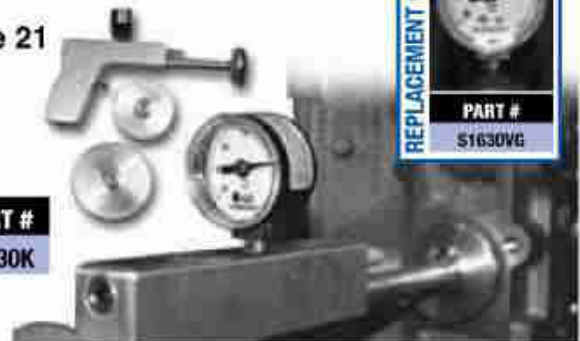
PART #
1716

Page 21

**REPLACEMENT SIOUX®
VACUUM TESTER KIT**

Page 21

PART #
S1630K





Brand New GMLS1, LS2 and LS7
Coil Bars and Coil Packs

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Part# D514A
Brand New Coil
1 Coil Pack. GM LS1,
LS2, LS7.

Part# D514A-BRK
Brand New Coil
4 Coil Packs and
Brackets.
GM LS1, LS2, LS7.

HIGH PERFORMANCE
SOLID STATE FUEL PUMPS

POSI-FLO LOW PRESSURE
SOLID STATE FUEL PUMPS

CUBE LOW PRESSURE
SOLID STATE FUEL PUMPS



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Page 125



VALVE SPRING COMPRESSORS

VALVE SPRING COMPRESSOR

The ideal tool for removing and replacing valve springs of Briggs & Stratton and other small engines.

PART #

4265VS



Page 47



PART #

4265LS

VALVE LIFTER &
SPRING COMPRESSOR

Unique lifter designed so that the jaws are practically parallel at all important positions. No ratchet or other lock is needed as the tool holds automatically at any point. Length 8 1/2"

OVERHEAD VALVE
SPRING
COMPRESSOR

The new sleek design fits more applications than other valve spring compressors on the market! Makes compressing the spring and removing the keepers a simple job, no need to remove the head. Also there is no need to readjust the tool after each spring, making it a fast and simple job.



PART #

4275

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VALVE GRINDER

Includes special valve grinding bit, grinding spring, vacuum cup, and small and large self-locking stems; Features a grinding bit that moves in short, smooth, and quick forward and backward thrusts, making it constantly advance inside the valve in new positions to ensure perfect grinding, a black enamel case and a spindle with a ball thrust bearing for easy use; Built for continued use.

PART #

4486

Page 20



OIL PANS

6.2L HUMMER OIL PAN



Part# TW6680B

6.5L HUMMER OIL PAN



Part# TW6681B

Page 52



PART #
10219

OPTIMAX™ 3000

CORDLESS, RECHARGEABLE BLUE LIGHT LED LEAK DETECTION FLASHLIGHT

- 15 times brighter than regular LED lights
- Power comparable to super-high intensity 150W lamp!
- Inspection range up to 20 feet (6.1 m) or more
- Compatible with all standard leak detection dyes
- 50,000-hour LED service life
- Powered by a rechargeable NiMH battery (included)
- AC charger
- Fluorescence-enhancing glasses



PART #
10228

OPTIMAX JR™

CORDLESS, ULTRA-COMPACT BLUE LIGHT LED LEAK DETECTION FLASHLIGHT

- Perfect for tight spaces
- Very high intensity blue light LED
- Power comparable to high-intensity 75W lamps
- Inspection range up to 8 feet (1.8 m) or more
- 100,000-hour LED service life
- Powered by 3 "AA" batteries (included)
- Fluorescence-enhancing glasses



PART #
10229

DUAL-MAX™

CORDLESS MULTI-FUNCTION FLASHLIGHT

- Two Powerful LEDs! One Lightweight Lamp!
- Features super-bright blue light LED for leak detection, plus white light LED for component inspection
- Power comparable to high-intensity 75W lamps
- Inspection range of up to 8 feet (1.8 m) or more
- Lightweight, compact design allows easy access into tight spaces
- 100,000-hour LED service life
- Powered by 3 AAA batteries (included)
- Fluorescence-enhancing glasses and holster

EVAPO-RUST™ Page 74

A NEW WAY TO SAFELY AND EASILY REMOVE RUST

PART# EVARQ



QUART

PART# EVAR1



1 GALLON

PART# EVAR3



3 GALLON

PART# EVAR5



5 GALLON

PART# EVAR55



55 GALLON

EVAPO-RUST® rust remover is an environmentally-safe water-based product that removes rust in minutes, without scrubbing. It's so easy to use, anyone can restore their rusted tools, auto parts, even firearms to like-new condition. One gallon de-rusts up to 300 lbs. of steel.



CYLINDER HEAD SPACER SHIMS

.020" Cylinder Head Spacer Shims

Cylinder Head Spacer Shims help restore the valve train geometry, valve clearance, compression ratio and cam timing to factory specifications on engines where the cylinder head and/or block surfaces have been resurfaced below factory limits.

Cylinder Head spacer shims precision cut from 0.020" cold rolled steel. Shims are individually produced using a CNC laser. This eliminates the rolled edge present on shims that are manufactured using a punch press.

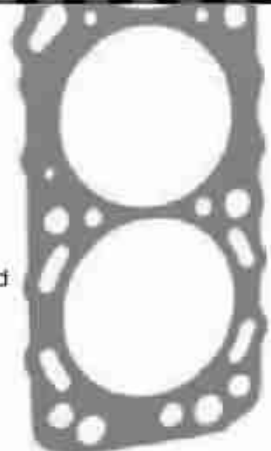
Thickness Available

.020 Stock Standard Shims

.030, .040, .060 Special Order

- Steel has a higher heat tolerance than copper, the material used for some other cylinder head shims. In hotter running late model engines, heat resistance is very important to insure the integrity of the shim. Steel is superior for this environment.
- Steel cylinder head shims have a hardness factor similar to that of the block. This allows the gasket fire ring to properly "crush" as the head is torqued to spec.
- Steel shims are less likely to be damaged in shipping and from mishandling or mishaps in the shop.

Visit www.Silver-Seal.com for complete listing of our head spacer Shims! Or call our tech hotline at 800-521-2936



SPEED REDUCER

Heat treated alloy steel pinions and gears packed in grease. has 1/2" hand chuck 90 rpm output with a 1750 input that fits into 1/2" square drive adapter. Housing is heavy cast aluminum. Oilite Bearing. Handle 5" overall width 10". For use with any electrical drill. For use with up to 1/2" drill bits. Weight 3 lbs.



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Part# SL3500

PREMIUM ELECTRIC CRANKSHAFT POLISHER



Page 107

Premium grade portable electric crankshaft polisher. Rugged all welded steel frame, powder coated for years of service. Molded aluminum spray shield comes standard, balanced for less fatigue.

Piston Pin Tool

Combine with 5-10 ton shop press to handle piston pins from 0.855" to 1.062". Unique anvil with interchangeable inserts. Directs pressing force to the pin.



KIT#

SL1020

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LS UNIVERSAL DEGREE WHEEL KIT, HEADS OFF



KIT #

KK646KT

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THE ORIGINAL VSI®

INDIVIDUALLY ENGINEERED, TESTED, AND PROVEN SUPERIOR!



.060 Type "A"
For Serviceable Springs
Std. - Copper Color
HP - Blue, Case Hardened
PATENTED SERRATIONS



.030 Type "B"
For New Springs
Std. - Silver Color
HP - Blue, Case Hardened
PATENTED SERRATIONS



.015 Type "C"
For Balancing
Std. - Black Color
HP - Blue Tempered
Spring Steel



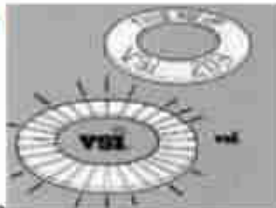
.060 Cup A500 Series
For Step/Flush Spring Pads
Std. - Copper Color
HP - Blue, Case Hardened
Helps Control Spring Walk
PATENTED SERRATIONS

REMEMBER, ONLY VSI® OFFERS THE FULL LINE,
DON'T BE FOOLED BY IMITATIONS!



PATENTED DESIGN

For decades, engine builders have been installing VSI Inserts/adjusters on all valve jobs. Why? Because they are superior to plain shims. Only VSI has patented heat-retarding serrations. Whether you're a PER or CER (Custom Engine Rebuilder), VSI completes the valve job, building your reputation while doing a complete job for your customer.



High-Performance Series VSI® are the preferred valve spring insert when assembling High-Performance cylinder heads. Aluminum heads require the installation of inserts to prevent the valve spring from damaging the aluminum spring seat. Standard shims are unable to handle the stress of racing spring pressures.

Plain shims are NOT designed for the stresses of high valve spring pressure.



VSI HP Series
Corrects & protects. Patented serrations dissipate heat.



- Patented Heat-Slashing Serrations.
- Equalizes the Installed Height & Pressure Among Springs.
- Type A (.060) & B (.030) HP Series are Case Hardened.
- Type C (.015) HP Series are Blue Tempered Spring Steel

FREE CABINET DISPENSER

with purchase of 30 box (#20000) or 50 box (#50000) assortment, or order separately (#5000MT)

30 BOX ASSORTMENT

Part #20000 (30 Boxes Type A & B)
Provides 80% Coverage on Pass. Cars, Trucks, Tractors, & Industrial Engines.

A100	A105	A202	A301	A502
B100	B105	B202	B301	A503HP
A102	A200	A203	A302	A801
B102	B200	B203	B302	A810
A103	A201	A300	A303	A820
B103	B201	B300	B303	A821

50 BOX ASSORTMENT

Part #50000 (1 Box Ea. - 50 Boxes)
Provides 98% Coverage on Pass. Cars, Trucks, Tractors, & Industrial Engines.

A100	A106	A204	A305	A407
A101	A107	A300	B305	A408
B101	A200	B300	A306	A409
A102	B200	A301	B400	A502
B102	A201	B301	A401	A503
A103	B201	A302	B402	A506
B103	A202	B302	A403	A600
A104	B202	A303	A404	C801HP
A105	A203	B303	A405	A810
B105	B203	A304	B406	A821

50 HOOK CABINET DISPENSER

EASY-TO-STORE BOXES



24" Wide x 18" High x 4-1/2" Deep

PART# 5000R

5 FREE boxes of VSI with every **5000R** cabinet.

Economy-Size Boxes



Save 10%
Add Suffix **RS** to the Part #



vs Listed By Part #

TYPE A .060 Springs In Service	Type B .030 New Springs	TYPE C .015 Spring Balancing	PATENTED DESIGN	
			O.D.	I.D.
A100	B100	C100	1.312	0.954
A101	B101	C101	1.000	0.688
A102(HP)	B102(HP)	C102(HP)	1.360	1.000
A103(HP)	B103(HP)	C103(HP)	1.500	1.031
*	*	C103S	1.500	1.000
A104	B104	C104	1.000	0.765
A105(HP)	B105(HP)	C105(HP)	1.218	0.875
A106	B106	C106HP	1.100	0.719
A107(HP)	B107(HP)	C107(HP)	1.250	0.625
A107S	B107S	C107S	1.250	0.680
*	B108HP	C108HP	0.970	0.445
*	B109	*	1.440	1.057
A200(HP)	B200(HP)	C200HP	1.360	0.640
A201(HP)	B201(HP)	C201(HP)	1.250	0.875
*	*	C202(HP)	0.915	0.640
A203(HP)	B203(HP)	C203(HP)	1.250	0.812
*	*	C105S	1.250	0.885
*	*	C203S	1.140	0.812
A204(HP)	B204(HP)	C204(HP)	0.796	0.515
*	*	*	0.760	0.578
A300(HP)	B300(HP)	C300(HP)	1.125	0.719
A301(HP)	B301(HP)	C301(HP)	1.375	0.765
A308	*	*	1.311	.869
A302HP	B302(HP)	C302(HP)	1.312	0.765
A102S	B102S	C102S	1.360	1.017
A508HP	*	*	1.400	1.265
A303(HP)	B303(HP)	C303(HP)	1.480	0.703
A304	B304	*	1.500	1.158
A305(HP)	B305(HP)	C305(HP)	1.437	0.785
A306(HP)	B306(HP)	C306(HP)	1.437	0.645
A306SHP	B306SHP	C306SHP	1.500	0.645
*	B400	*	1.750	0.820
A400S	B400S	*	1.650	1.180
A401	B401	*	1.600	0.820
*	B402	*	1.687	1.281
A403	B403	*	1.375	0.781
A404	*	*	1.500	0.875
A405	B405	*	1.750	0.890
*	B406	*	1.750	1.328
A407	B407	*	1.156	0.828
A408	B408	*	1.140	0.570
A409	*	*	1.312	0.755
*	B410	*	1.480	0.785
A600	*	*	1.937	1.250
A601HP	B601HP	C601HP	1.640	0.635
*	*	C602HP	1.500	0.765
*	B603HP	C603HP	1.500	0.562
A605HP	B605HP	C605HP	1.610	0.570

vs Listed By Outside/Inside Dia.

PATENTED DESIGN		TYPE A .060 Springs In Service	Type B .030 New Springs	TYPE C .015 Spring Balancing
O.D.	I.D.			
0.798	0.515	A204(HP)	B204(HP)	C204(HP)
0.915	0.640	A202	B202	C202(HP)
0.970	0.445	*	*	C108HP
1.000	0.688	A101	B101	C101
1.000	0.765	A104	B104	C104
1.100	0.719	A106	B106	C106HP
1.125	0.719	A300(HP)	B300(HP)	C300(HP)
1.140	0.570	A408	B408	*
1.156	0.828	A407	B407	*
1.216	0.875	A105(HP)	B105(HP)	C105(HP)
1.250	0.625	A107(HP)	B107(HP)	C107(HP)
1.250	0.680	A107S	B107S	C107S
1.250	0.875	A201(HP)	B201(HP)	C201(HP)
1.311	0.889	A308	*	*
1.312	0.755	A409	*	*
1.312	0.765	A302HP	B302(HP)	C302(HP)
1.312	0.954	A100	B100	C100
1.360	0.640	A200(HP)	B200(HP)	C200HP
1.360	1.017	A102(HP)	B102(HP)	C102(HP)
1.375	0.765	A102S	B102S	C102S
1.375	0.781	A301(HP)	B301(HP)	C301(HP)
1.400	1.265	A403	B403	*
1.437	0.645	A508HP	*	*
1.437	0.785	A306(HP)	B306(HP)	C306(HP)
1.440	1.057	A305(HP)	B305(HP)	C305(HP)
1.480	0.703	*	B109	*
1.480	0.703	A303(HP)	B303(HP)	C303(HP)
1.480	0.785	*	B410	*
1.500	0.562	*	B603HP	C603HP
1.500	0.845	A306SHP	B306SHP	C306SHP
1.500	0.765	*	*	C602HP
1.500	0.875	A404	*	*
1.500	1.000	*	*	C103S
1.500	1.031	A103(HP)	B103(HP)	C103(HP)
1.500	1.156	A304	B304	*
1.600	0.820	A401	B401	*
1.610	.570	A605HP	B605HP	C605HP
1.640	0.635	A601HP	B601HP	C601HP
1.650	1.180	A400S	B400S	*
1.687	1.281	*	B402	*
1.750	0.820	*	B400	*
1.750	0.890	A405	B405	*
1.750	1.328	*	B406	*
1.837	1.250	A600	*	*

*N/A

(HP) = Available in High Performance. Add suffix HP to part number, ex.A203HP

BOX QUANTITY LEGEND

REGULAR SERRATED STEEL

Series	Type	Qty.
100 - 200 - 300	A - B - C	100
400 - 500	A - B	50
600 & Specials "S"	A - B - C	25

A & B HIGH-PERF. CASE HARDENED;

C (HP) SERIES BLUE TEMPERED STEEL

100HP - 200HP - 300HP	A - B - C	50
500HP (Cup Style)	A	50
All 600HP Series	A - B - C	25
All 800 Series	A - B	48

(RS) REBUILDERS BULK PACK -

SAVE 10% ADD "RS" SUFFIX

AFTER PART NUMBER, EX. A102RS

Series	Type	Qty.
100 - 200 - 300 Regular	A - B - C	500
400 - 500 Regular	A - B	250
600 Regular & Specials "S"	A - B - C	125
100HP - 200HP - 300HP	A - B - C	250
500HP Series (Cup Style)	A	250
601HP Series	A - B - C	125
All 800 Series	A - B	250



"CUP STYLE" VALVE SPRING INSERTS

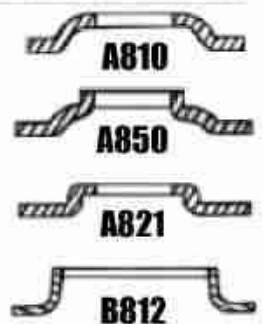
APPLICATION (REFER TO I.D./O.D. FOR PROPER FIT)	VSI O.D.	SPRING PAD O.D.	SPRING PAD I.D.	PART #	TYPE
Same Application as 102 Series	1.542	1.390	1.000	A502(HP)	.060
Same Application as 103 Series	1.640	1.520	1.031	A503HP	.060
Same Application as 306 Series	1.650	1.530	0.645	A506(HP)	.060
SB Chevy w/remachined Spring Pad	1.400	1.265	0.821	A505	.060
Crane 1.460 O.D. Spring	1.600	1.475	0.645	A507HP	.060
Small Block Chevy	1.400	1.265	0.580	A508HP	.060
SB Chevy, Ford, Chrysler 1.460 Spring	1.613	1.470	0.570	A512HP	.060
390-428 Ford, 383-440 Chrysler 1.540 Spring	1.700	1.550	0.570	A514HP	.060

PATENTED DESIGN


**Outside Cup
helps
control
spring walk**
**A512HP
A514HP
A508HP
Style**


"INSIDE CUP STYLE" VALVE SPRING INSERTS

APPLICATION (REFER TO I.D./O.D. FOR PROPER FIT)	SPRING PAD O.D.	SPRING PAD I.D.	PART #	TYPE
Audi, VW, Dodge	1.280	0.920	A850	.060
Ford, Mercury, Volvo	1.350	0.545	A810	.090
Chrysler 2.6L, Mitsubishi	1.370	0.942	A821	.060
Cummins OE#3042745/172034	1.250	0.940	B812	.030



SPECIAL APPLICATIONS

APPLICATION (REFER TO I.D./O.D. FOR PROPER FIT)	SPRING PAD O.D.	SPRING PAD I.D.	PART #	TYPE
Detroit Diesel, 92 Series	0.920	0.520	A802	.060
			B802	.030
Toyota	1.170	0.600	A880	.060
Datsun	1.200	0.523	830	.070
Datsun	1.218	0.875	836	.070
Honda	1.250	0.625	B840	.030
Chevrolet, Buick, Cadillac, Pontiac	1.250	0.812	A801	.060
Toyota	1.260	0.590	A881	.060
Chevy Luv	1.355	0.485	805	.070
Chrysler 2.2L, 2.5L	1.360	1.000	A820	.060
			B820	.030
			C820	.015
Toyota	1.385	0.565	882	.070
Ford 351 SVO	1.500	0.562	B603HP	.030
			C603HP	.015
#3309-Diamond H.P. Spring	1.500	0.765	C602HP	.015
Datsun (Set)Outer & Inner	Outer	0.995	831	.070
	Inner	0.965		
Chevy, Chrysler, Ford w/remachined guide	1.640	0.635	A601HP	.060
			B601HP	.030
			C601HP	.015
Caterpillar Md. #D-7 and D-8	1.937	1.250	A600	.060

Note: All 800 Series VSI are Case-Hardened


**We Accept These Major
Credit Cards**




silver seal

U.S. PATENT# 5,482,000

HEAT TABS & ADHESIVES

Cylinder Head Rebuilding

THE ONLY U.S. MADE PATENTED, CERTIFIED HEAT TAB AVAILABLE

YOUR PROTECTION AGAINST WARRANTY CLAIMS - FOREIGN TABS ARE NOT CERTIFIED



- ▶ Certification of Center Melt Material
- ▶ A MUST for Engine Builders - Large or Small
- ▶ Court Cases Won w/100% Results
- ▶ DO NOT Risk Your Hard Work Using Off Shore Imitations with NO CERTIFICATION

"FOR COMPLETE PROTECTION"

ATTACH ON EACH HEAD & BOTH SIDES OF BLOCK

When an engine reaches the temperature of the heat tab that is installed, the center will melt out, providing fast visual evidence!



PREMIUM



PREMIUM HIGH-TEMP GAS ENGINE 250-255°F (121-124°C)

QUANTITY	ENGINE STYLE HEAT TAB
1 BAG (100 TABS)	HTP1
5 BAGS (500 TABS)	HTP5
10 BAGS (1000 TABS)	HTP10

**3 HOLES ALLOW
ADHESIVE TO LOCK TAB**

SAVE 5%
SAVE 10%

HIGH-TEMP



HIGH-TEMP GAS ENGINE 250-255°F (121-124°C)

QUANTITY	ROUND HEAT TAB
1 BAG (100 TABS)	HT1
5 BAGS (500 TABS)	HT5
10 BAGS (1000 TABS)	HT10

SAVE 5%
SAVE 10%

LO-TEMP



LOW-TEMP DIESEL ENGINE 225-230°F (107-110°C)

QUANTITY	ROUND HEAT TAB
1 BAG (100 TABS)	HT1L
5 BAGS (500 TABS)	HT5L
10 BAGS (1000 TABS)	HT10L

SAVE 5%
SAVE 10%

MARINE



MARINE HEAT TABS 187-192°F (86-89°C)

QUANTITY	ROUND HEAT TAB
1 BAG (50 TABS)	HTM1

CUSTOM HEAT TAB



PERSONALIZED HEAT TABS AVAILABLE!

5,000 Piece minimum order, round or engine style, with one time letter detail charge. Personalize with **up to nine letters or numbers**. Call for details. \$175.00 one time fee for tooling.

FRONT

BACK



CERTIFICATION OF CENTER MELT MATERIAL

AVAILABLE ON REQUEST

- ▶ A MUST for Engine Builders - Large or Small
- ▶ Court Cases Won with **100% Results**
- ▶ DO NOT Risk Your Hard Work Using Off Shore Imitations with **NO CERTIFICATION**.

HEAT TAB ADHESIVE

EXCLUSIVE FORMULA!

Premium grade Heat Tab Adhesive provides proper heat transfer to the heat tab to get an accurate melt if the engine overheats past the temperature of the heat tab that is installed. Formulated for long-term holding strength under all engine operating conditions.

EFFECTIVE TEMPERATURE RANGE: -76° TO +350°F

TACK FREE IN 10-15 MINUTES. FULLY CURED IN 24 HOURS.



3 oz. (85 gram) Tube
(Approx. 200 Tabs)

PART #HTA



10.5 oz. (283 gram) Cartridge
(Approx. 700-750 Tabs)

PART #HTAP10



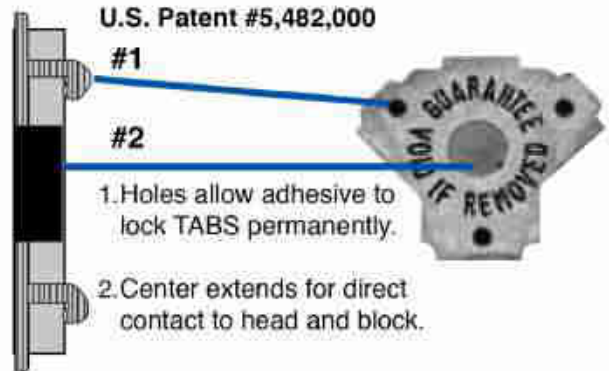
HEAT TAB KIT

PART #HTP SPECIAL

(Special package saves you 15%)

INCLUDES:

- 200 Premium Heat Tabs
- 1 3oz. Tube of Adhesive (HTA)
- 1 Tube-Grip Applicator (V200)
- 6 Extra Tube Tips (V052)



PROTECT-A-TRANS® TABS



ACTUAL SIZE

PART #
PTA

AVAILABLE IN 100
AND 500 PCS.

U.S. Patent #5,482,000

Heat sensitive center will melt at 255°F. Indicating transmission has overheated, thus avoiding warranty.

Directions for use:

Apply adhesive to back of **PROTECT-A-TRANS® TABS** and attach to side of transmission.

CERTIFICATION AND ACKNOWLEDGMENT OF WARRANTY AVAILABLE ON LINE TO PRINT AT SILVER-SEAL.COM

ACKNOWLEDGMENT OF WARRANTY

I hereby acknowledge that this transmission has a Protect-A-Trans® heat sensor attached which will indicate any extreme over heating. Removal or melting of tab voids implied warranty.

CUSTOMERS NAME



CERTIFICATION OF CENTER MELT MATERIAL

- ▶ **A MUST** for Transmission Builders - Large or Small
- ▶ Court Cases Won with **100% Results**
- ▶ **DO NOT** Risk Your Hard Work with **NO CERTIFICATION.**

PREMIUM PRECISION-GROUND 3-ANGLE SEAT CUTTING SYSTEM

Silver Seal tooling is compatible with Goodson, Kwik-Way, Neway, Newen, Peterson, Rottler, Serdi, Sunnen, T&S, Winona Van Norman, etc. Uses your existing seat grinding pilots with top size of .375", .385", .390" or .437".



NEW

3-ANGLE SEAT CUTTING KITS INCLUDE:

- (1) Ball Head
- (3) Tip Holders*
- (4) Carbide Blades
- (1) Tool Setting Fixture
- (1) Blade Mounting Screw
- (1) Blade Wrench
- (1) Spring Set
- (1) 1/8" Hex Key
- (1) 2.5mm Hex Key
- (1) 3/32" Hex Key

ORDER DRIVE ADAPTERS SEPARATELY.

3-ANGLE SEAT CUTTING KITS



SS375KIT	Fits pilot size .375" (9.53mm)
SS385KIT	Fits pilot size .385" (9.78mm)
SS390KIT	Fits pilot size .390" (9.90mm)
SS437KIT	Fits pilot size .437" (11.10mm)

BALL HEADS

SSBH375	BALL HEAD .375" (9.53mm) Included in SS375KIT
SSBH385	BALL HEAD .385" (9.78mm) Included in SS385KIT
SSBH390	BALL HEAD .390" (9.90mm) Included in SS390KIT
SSBH437	BALL HEAD .437" (11.10mm) Included in SS437KIT
SSBH375W	Large Ball Head Tool Body .375" (9.53mm)
SSBH385W	Large Ball Head Tool Body .385" (9.78mm)
SSBH375L	Extended Length Ball Head Tool Body .375" (9.53mm)
SSBH385L	Extended Length Ball Head Tool Body .385" (9.78mm)
SS5100	Serdi-Style Tool Body - Standard
SS5300	Serdi-Style Tool Body - Large

TIP HOLDERS

SS2000	TIP HOLDER .709" - 1.181" (18-30mm) *standard in kits
SS2001	TIP HOLDER 1.02" - 1.653" (26-42mm) *standard in kits
SS2002	TIP HOLDER 1.575" - 2.362" (40-60mm) *standard in kits
SS2003	Wide Body Ball Head Tip Holder 1.575" - 2.362" (40mm-60mm)
SS2004	Wide Body Ball Head Tip Holder 2.385" - 3.150" (58mm-80mm)

CARBIDE BLADES — standard in kits

S1	45° seat (.059") / 30° top (.071") / 60° throat
S2	30° seat (.051") / 15° top (.039") / 45° throat
S3	45° seat (.051") / 15° top (.039") / 60° top
S4	70° single angle (for throating)

DRIVE ADAPTERS

SSCM3	#3 Morse Taper Drive Adapter
SSCM4	#4 Morse Taper Drive Adapter
SS3/4SS	Bridgeport & DCM Drive Adapter
SSSUN	Sunnen Early Style Drive Adapter

ACCESSORIES

SSTSF	Tool Setting Fixture
SSBSCREW	Cutter Blade Mounting Screw
SSBWRENCH	Blade Wrench
SSAS	Automotive Spring Set (2 pc.)
SS1/8	1/8" Hex Key
SS2.5	2.5mm Hex Key
SS3/32	3/32" Hex Key
SS4X5MM	Replacement Screws for NWN Ball Head Base (5) - metric
SSBH1032	Replacement Screw for Ball Head Base - SAE 1032
SS2000S	Adjusting Screw for Holder #SS2000, OAL .395" (10mm)
SS2001S	Adjusting Screw for Holder #SS2001, OAL .475" (12mm)
SS2002S	Adjusting Screw for Holder #SS2002, OAL .825" (15.9mm)

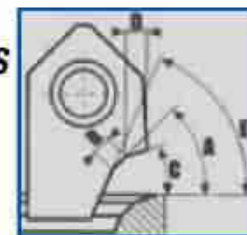


SSTSF



3-ANGLE SEAT CUTTER BLADES

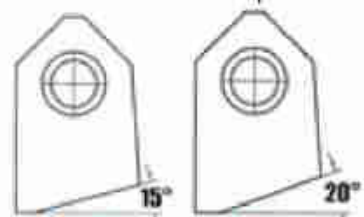
TOP QUALITY BLADES FIT ALL COMMON 3-ANGLE SEAT CUTTING FIXTURES



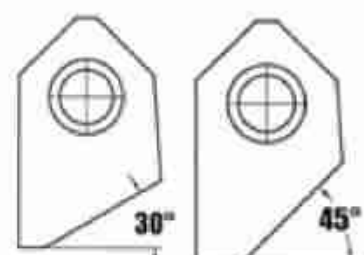
Seat Angle (A)	Seat Width (B)		Top Angle (C)	Top Width (D)		Throat Angle (E)	Newen Profile #	Serdi Profile #	Silver Seal Part #
	Inches	mm		Inches	mm				
30°	.039"	1.0mm	0°	.079"	1.5mm	60°	WA1-3024	15K30R60	S21
	.039"	1.0mm	20°	.063"	1.6mm	52°	WA1-3062	10H30D52-A1	S19
	.051"	1.3mm	15°	.039"	1.0mm	45°	WA1-3023	13E30U45-A1	S2
			15°	.055"	1.4mm	60°	WA1-5152	15G30U60-A1	S36
	.059"	1.5mm	15°	.071"	1.8mm	60°	WA1-2153	15J30U60-A1	S40
			20°	.118"	3.0mm	60°	WA1-3026	15Q30D80	S20
	.063"	1.6mm	15°	.079"	2.0mm	45°	WA1-3026	16K30U45-A1	S28
	.071"	1.8mm	15°	.055"	1.4mm	60°	WA1-3027	16G30U60-A1	S16
							60°	WA1-5121	R4-15
	.075"	1.9mm	15°	.079"	2.0mm	60°	WA1-3029	19K30U60-A1	S17
.079"	2.0mm	15°	.055"	1.4mm	60°	WA1-2202	20G30U60-A1	S22	
.098"	2.5mm	15°	.055"	1.4mm	60°	WA1-2252	25G30U60-A1	S18	
.150"	3.8mm	20°	.118"	3.0mm	45°	WA1-3199	*	S72	
37.5°	.063"	1.6mm	30°	.055"	1.4mm	60°	WA1-5414	16G37.5X60-A1	S41
	.071"	1.8mm	20°	.047"	1.2mm	52°	WA1-5006	18F37.5D52	S33
45°	.039"	1.0mm	25°	.039"	1.0mm	60°	WA1-1101	*	S73
			25°	.055"	1.4mm	60°	WA1-1102	10G45V60-A1	S39
			25°	.063"	1.6mm	52°	WA1-4588	*	S77
			25°	.071"	1.8mm	60°	WA1-1103	10J45V60-A1	S43
			25°	.118"	3.0mm	60°	WA1-1105	10Q45V60-A1	S44
			30°	.047"	1.2mm	60°	WA1-4026	10F45X60-A1	S11
			30°	.071"	1.8mm	60°	WA1-4090	10J45X60-A1	S46
			30°	.079"	2.0mm	60°	WA1-4303	10K45X60-A1	S47
			35°	.063"	1.6mm	52°	WA1-4029	10H45F52-A1	S23
	35°	.063"	1.6mm	55°	WA1-4030	10H45F55-A1	S10		
	35°	.063"	1.6mm	60°	WA1-4031	10H45F60-A1	S9		
	.047"	1.2mm	30°	.047"	1.2mm	60°	WA1-4182	12F45X60-A1	S48
			30°	.039"	1.0mm	60°	WA1-4032	13E45X60-A1	S3
			30°	.079"	2.0mm	52°	WA1-4034	13K45X52-A1	S8
	.051"	1.3mm	30°	.079"	2.0mm	60°	WA1-4035	13K45X60-A1	S27
			37°	.079"	2.0mm	52°	WA1-4033	13K45G52-A1	S26
			30°	.039"	1.0mm	60°	WA1-4036	14E45X60-A1	S13
	.055"	1.4mm	25°	.055"	1.4mm	52°	WA1-4241	*	S42
25°			.055"	1.4mm	60°	WA1-4003	15G45V60-A1	S35	
30°			.055"	1.4mm	60°	WA1-4216	15G45X60-A1	S49	
30°			.071"	1.8mm	45°	WA1-4077	15J45X52	S34	
30°			.071"	1.8mm	60°	WA1-4038	15J45X60-A1	S1	
37°			.071"	1.8mm	52°	WA1-4037	15J45G52-A1	S6	
.063"	1.6mm	30°	.039"	1.0mm	60°	WA1-4039	16E45X60-A1	S12	
		30°	.047"	1.2mm	60°	WA1-4136	16F45X60-A1	S50	
		30°	.079"	2.0mm	60°	WA1-4040	16K45X60-A1	S29	
.071"	1.8mm	30°	.063"	1.6mm	60°	WA1-4041	16H45X60-A1	S14	
		30°	.071"	1.8mm	52°	WA1-4146	18J45X52-A1	S45	
.075"	1.9mm	30°	.079"	2.0mm	60°	WA1-4042	19K45X60-A1	S15	
		25°	.055"	1.4mm	60°	WA1-1202	20G45V60-A1	S37	
.079"	2.0mm	30°	.047"	1.2mm	60°	WA1-4043	20F45X60-A1	S7	
		25°	.055"	1.4mm	60°	WA1-1252	25G45V60-A1	S38	

SINGLE ANGLE STRAIGHT CUTTERS

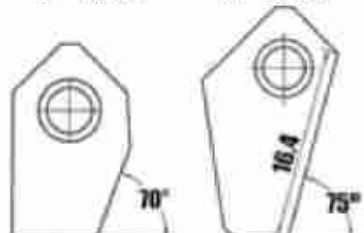
ANGLE	PART #
15° Straight	S54
20° Straight	S55
30° Straight	S31
45° Straight	S32
70° Straight	S4
75° Straight	S56



S54 NP - WA1-15 SP - 15-A1 S55 NP - WA1-20 SP - 20-A1



S31 NP - WA1-30 SP - 30-A1 S32 NP - WA1-45 SP - 45-A1



S4 NP - WA1-70 SP - 70-A1 S56 NP - WB3-085 SP - 75-A1

3-ANGLE SEAT CUTTER BLADES



silver seal

Cylinder Head Rebuilding

HIGH PERFORMANCE AND SPECIAL PROFILE TIPS



S51 NP - WA1-5118
SP - HP109B-A1



S52 NP - WA1-5120
SP - 451015R10S-A1



S53 NP - WA1-5119
SP - 451515R10S-AL



S57 NP - WB4-90-20
SP - 75-B3



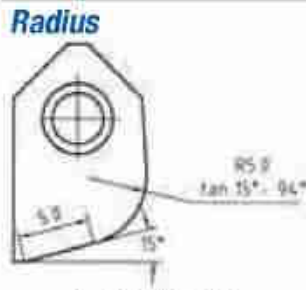
S68 NP - WB4-4028
SP - 10F45X80-B4



S69 NP - WB4-4038
SP - N/A



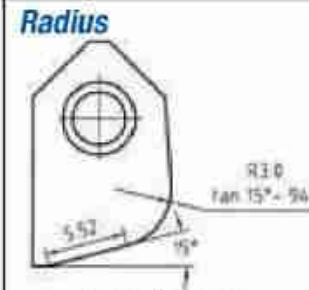
S78 NP - WB4-4006
SP - N/A



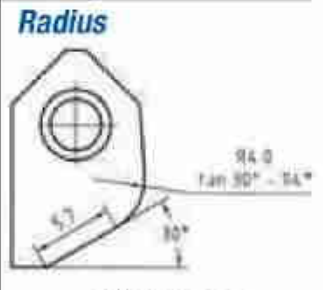
S55 NP - WA1-5428
SP - R5-15



S24 NP - WA1-90-16
SP - L-12



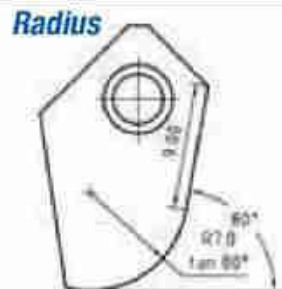
S58 NP - WA1-5121
SP - R4-15



S59 NP - WA1-5168
SP - R4-30



S60 NP - WB3-002
SP - R7-75



S61 NP - WB3-033
SP - 80-R7



S62



S63 NP - WB3-005
SP - S9026-B1



S64 NP - WB1-068
SP - HI-IN1-B1



S65 NP - WB1-072
SP - HP2028-B1



S66 NP - WB1-079
SP - 09G45F65R2-B1



S67 NP - WB3-003
SP - S9024-B1



NEWAY® CUTTER BODIES, & BLADES

Hand operated valve seat cutters provide an accurate, high quality repair method at a low cost.

STD. SERIES CUTTER BODIES (Use .375 Top Pilots)

DIAMETER	BLADE ANGLE	QTY.	REPL. BLADE #	CUTTER PART #
1.125" (28.6mm)	30°	3	SL6250	SL6278
	45°	3	SL6250	SL6268
	60°	3	SL6252	SL6269
1.250" (31.8mm)	30°/45°	3	SL6250	SL6230
	75°	3	SL6254	SL6206
	60°	3	SL6252	SL6270
	31°	3	SL6250	SL6602
1.375" (34.9mm)	30°/45°	3/3	SL6251/ SL6254	SL6232
	60°	3	SL6254	SL6205
1.500" (38.1mm)	15°/60°	5/5	SL6251/ SL6254	SL6619
	31°/46°	10	SL6251	SL6622
1.750" (44.5mm)	60°	3	SL6254	SL6293
	31°/46°	10	SL6251	SL6642
2.000" (50.8mm)	15°/60°	5/5	SL6251/ SL6254	SL6643
	31°/46°	10	SL6251	SL6652
2.000" (50.8mm)	15°/60°	5/5	SL6251/ SL6254	SL6653

SMALL SERIES CUTTER BODIES (Use .297 Top Pilots)

DIAMETER	BLADE ANGLE	QTY.	REPL. BLADE #	CUTTER PART #
.830" (21.1MM)	32°	3	Fixed	SL6132
.850" (21.6MM)	45°	3	Fixed	SL6131
.874" (22.2MM)	60°	3	Fixed	SL6133
.925" (23.5MM)	45°	3	Fixed	SL6143
.975" (24.8MM)	31°	3	SL6250	SL6115
	31°	3	SL6253	SL6123
	45°	3	SL6253	SL6122
1.000" (25.4MM)	15°	3	SL6253	SL6120
	30°	3	SL6250	SL6125
	60°	3	SL6252	SL6111
	75°	3	SL6254	SL6125
1.125" (28.6MM)	31°/46°	3/3	SL6253	SL6103
1.312" (33.3MM)	31°/46°	3/3	SL6251	SL6102

More sizes of small series cutter bodies available. Call For Price.

NEWAY® TUNGSTEN-CARBIDE BLADES



ORIGINAL REPLACEMENT CARBIDE CUTTERS & SCREWS.

	ANGLE	LENGTH	PART #
STANDARD CUTTER BLADES			
	0°-46°	5/16" (7.9mm)	SL6253
	0°-46°	3/8" (9.5mm)	SL6250
	0°-46°	1/2" (12.7mm)	SL6251
HARD SEAT CUTTER BLADES			
	0°-46°	3/8" (9.5mm)	SL6250LC
	0°-46°	1/2" (12.7mm)	SL6251LC
CORRECTION CUTTERS			
	60°-80°	1/2" (12.7mm)	SL6252
	60°-80°	3/4" (19mm)	SL6254
	60°-80°	1/2" (12.7mm)	SL6152*
	60°-80°	3/4" (19mm)	SL6154*
REPLACEMENT SCREWS			
10 - 32 Set Screw for Cutter Bodies			SL6262
5 - 40 Flat Head Screw for Wedges			SL6260

*Non-Serrated Blades

NEWAY GIZMATIC



PART #
SL6263

Machines valves 5/8" to 2" (15.9 to 50.8mm) diameter to 30° or 45° • No need to change collets for different valve stem diameters
• Uses tough tungsten carbide blades

REPLACEMENT CUTTER

SL6264

Easy Turn Wrench



Part #SL6261

Allows continuous control of material removal. Comes complete with 1/2" to 3/8" Drive Adaptor.

MIRA® TRI-CUT CUTTER BITS

Original Mira® Bits available in 3-Angle, Single Angle, & 90° Counterbore.

3-ANGLE CUTTERS

Seat Angle	Body Size	Seat Width	Top Angle	Throat Angle	Part #
30°	Long	.040"	15°	60°	M210B
	Long	.060"	23°	52°	M4515B
	Medium	.060"	23°	52°	M4515A(X)
	Long	.080"	15°	60°	M220B
	Long	.080"	23°	52°	M4516B
45°	Long	.040"	25°	60°	M110B
	Medium	.040"	30°	55°	M4004A
	Medium	.040"	35°	53°	M4037A(X)
	Short	.060"	25°	60°	M115C
	Medium	.060"	25°	60°	M115A
	Long	.060"	25°	60°	M115B
	Long	.060"	30°	60°	M4033B
	Short	.060"	35°	53°	M4038C(X)
	Medium	.060"	35°	53°	M4038A(X)
	Long	.060"	35°	53°	M4038B(X)
	Long	.080"	25°	60°	M120B
Long	.080"	35°	53°	M4039B	

SINGLE ANGLE CUTTERS

Seat Angle	Body Size	Part #
45°	Medium	M301A
	Short	M351C
75°	Medium	M351A
	Long	M351B
80°	Long	M363B



M301A

M351B

90° COUNTERBORE CUTTERS

Range	Part #
1.100"-1.650"	M390A(X)
1.350"-2.500"	M390B(X)

Note: 3-angle & counterbore cutters designated with (X) are available with premium carbide. To order, simply use the Part # followed by an "X".
Example: M4037AX



M390A(X)

M363B

MIRA® ACCESSORIES ARE ALSO AVAILABLE FROM SILVER SEAL, CALL FOR DETAILS!



3 Lengths Are Available & Designated by a Suffix Letter
A - Medium 0.95"-1.95"
B - Long 1.25"-2.75"
C - Short 0.80"-1.00" I.E. M210B =



Angle	Seat Width	Part #
45°	.039"/1mm	M4043B



Angle	Seat Width	Part #
45°	.039"/1mm	M4041B



Angle	Seat Width	Part #
15°	R.278"/R7mm	M354B



Angle	Seat Width	Part #
45°	.039"/1mm	M4048B



Angle	Seat Width	Part #
45°	.039"/1mm	M4047B



Angle	Seat Width	Part #
75°	R.276"/R7mm	M353A
75°	R.276"/R7mm	M353B

MIRA® PILOTS

Genuine Mira® Pilots are available in both screw-in (std. & long) and plug-in styles.



Plug-In Style

Guide Size	Dec. Size	Plug-In Part #
5/16"	.3114"	MFD791
	.3122"	MFD793
	.3126"	MFD794
	.3146"	MFD799
8mm	.3406"	MFD865
	.3437"	MFD873
11/32"	.3571"	MFD907
	.3720"	MFD945
	.3728"	MFD947
3/8"	.3732"	MFD948
	.3740"	MFD950
3/8" +.010	.3862"	MFD981

Screw-In Style

Guide Size	Dec. Size	Screw-In Part #
6.5mm	.2555"	MFK649
6.6mm	.2585"	MFK659
	.2602"	MFK661
8mm	.3169"	MFK805
	.3173"	MFK806
	.3181"	MFK808
9mm	.3543"	MFK900
3/8"	.3709"	MFK942
13/32"	.4043"	MFK1027
11mm	.4323"	MFK1098
1/2"	.4992"	MFK1268

Screw-In Style (Long)

Guide Size	Dec. Size	Screw-In (Long) Part #
5/16"	.3122"	MFN793
3/8"	.3732"	MFN948
	.3740"	MFN950
1/2"	.4968"	MFN1267
	.5000"	MFN1270



Valve Seat Wheels

10% Discount on Jobber Pricing 15 or More, Mix N' Match!

General Purpose
Recommended for roughing & finishing on cast iron seats and inserts. (Use light pressure for finishing.)



Stellite
Designed specifically for stellite and other hardened steel seats.



Finish
Use this wheel to put a fine finish on your valve seat. Stock removal is very limited.



Ruby
Removes stock fast & leaves a micro finish. Under light pressure it will leave a dull finish.



Nickel Chrome
To be used on Nickel Chromium chromalloy type valve seats.



SIoux, K.O. Lee, Keystone, U.S. Electric, Thor, Skil, Winona 11/16"-16 Thread

Wheel Size		General Purpose			Stellite		Finish		Ruby			Nickel Chrome
Inch	mm	30°	45°	90° Flat	45°	90° Flat	45°	90° Flat	30°	45°	90° Flat	90° Flat
7/8"	22									SX7/8"45R	SX7/8"90R	SX7/8"90NC
15/16"	24									SX15/16"45R	SX15/16"90R	SX15/16"90NC
1"	25									SX1"45R	SX1"90R	SX1"90NC
1-1/16"	27									SX1-1/16"45R	SX1-1/16"90R	SX1-1/16"90NC
1-1/8"	28	SX1-1/8"30	SX1-1/8"45	SX1-1/8"90			SX1-1/8"45F			SX1-1/8"45R	SX1-1/8"90R	SX1-1/8"90NC
1-1/4"	31	SX2002	SX2003	SX2103	SX2006	SX2120	SX2003F	SX2103F	SX2009R	SX2003R	SX2103R	SX2120NC
1-5/16"	33		SX2139	SX2140						SX2139R	SX2140R	
1-3/8"	35	SX2008	SX2009	SX2104	SX2012	SX2121	SX2009F	SX2104F	SX2011R	SX2009R	SX2104R	SX2121NC
1-7/16"	36		SX2138	SX2118						SX2138R	SX2118R	
1-1/2"	38	SX2014	SX2015	SX2105	SX2018	SX2122	SX2015F	SX2105F	SX2017R	SX2015R	SX2105R	SX2122NC
1-9/16"	39		SX2137	SX2119						SX2137R	SX2119R	
1-5/8"	41	SX2020	SX2021	SX2106	SX2024	SX2123	SX2021F	SX2106F	SX2023R	SX2021R	SX2106R	SX2123NC
1-11/16"	42		SX2136	SX2135						SX2136R	SX2135R	
1-3/4"	44	SX2026	SX2027	SX2107	SX2030	SX2124	SX2027F	SX2107F	SX2029R	SX2027R	SX2107R	SX2124NC
1-7/8"	47	SX2032	SX2033	SX2108	SX2036	SX2125	SX2033F	SX2108F	SX2035R	SX2033R	SX2108R	SX2125NC
2"	50	SX2038	SX2039	SX2109	SX2042	SX2126	SX2039F	SX2109F	SX2041R	SX2039R	SX2109R	SX2126NC
2-1/8"	54		SX2045	SX2110	SX2048	SX2127	SX2045F	SX2110F	SX2047R	SX2045R	SX2110R	SX2127NC
2-1/4"	57	SX2050	SX2051	SX2111	SX2054	SX2128	SX2051F	SX2111F	SX2053R	SX2051R	SX2111R	SX2128NC
2-3/8"	60	SX2056	SX2057	SX2112	SX2060	SX2129	SX2057F	SX2112F	SX2059R	SX2057R	SX2112R	SX2129NC
2-1/2"	63	SX2062	SX2063	SX2113	SX2066	SX2130	SX2063F	SX2113F	SX2065R	SX2063R	SX2113R	SX2130NC
2-5/8"	66	SX2068	SX2069	SX2114	SX2072	SX2131	SX2069F	SX2114F	SX2071R	SX2069R	SX2114R	SX2131NC
2-3/4"	70		SX2075	SX2115	SX2078	SX2132	SX2075F	SX2115F	SX2077R	SX2075R	SX2115R	SX2132NC
2-7/8"	73		SX2081	SX2116	SX2084	SX2133	SX2081F	SX2116F	SX2083R	SX2081R	SX2116R	
3"	76		SX2087	SX2117	SX2090	SX2134	SX2087F	SX2117F	SX2089R	SX2087R	SX2117R	

BLACK & DECKER, VAN DORN 9/16"-16 THREAD

Wheel Size		General Purpose			Stellite		Finish		Ruby			Nickel Chrome
Inch	mm	30°	45°	90° Flat	45°	90° Flat	45°	90° Flat	45°	90° Flat	90° Flat	
1-1/8"	28		BD1-1/8"45	BD1-1/8"90					BD1-1/8"45R	BD1-1/8"90R	BD1-1/8"90NC	
1-1/4"	31		BD2003	BD2103	BD2006	BD2120			BD2003R	BD2103R	BD2120NC	
1-5/16"	33								BD2139R	BD2140R		
1-3/8"	35			BD2104	BD2012	BD2121	BD2009F		BD2011R	BD2104R	BD2121NC	
1-7/16"	36								BD2138R	BD2118R		
1-1/2"	38				BD2018	BD2122	BD2015F		BD2015R	BD2105R	BD2122NC	
1-9/16"	39			BD2119					BD2137R	BD2119R		
1-5/8"	41	BD2020	BD2021		BD2024	BD2123	BD2021F	BD2106F	BD2021R	BD2106R	BD2123NC	
1-11/16"	42								BD2136R	BD2135R		
1-3/4"	44	BD2026			BD2030	BD2124	BD2027F		BD2027R	BD2107R	BD2124NC	
1-7/8"	47	BD2032	BD2033		BD2036	BD2125	BD2033F		BD2033R	BD2108R	BD2125NC	
2"	50	BD2038			BD2042	BD2126	BD2039F	BD2109F	BD2039R	BD2109R	BD2126NC	
2-1/8"	54	BD2044			BD2048	BD2127	BD2045F		BD2045R	BD2110R	BD2127NC	
2-1/4"	57	BD2050		BD2111	BD2054	BD2128	BD2054F		BD2051R	BD2111R		
2-3/8"	60		BD2057						BD2057R			
2-1/2"	63		BD2063		BD2066				BD2063R			
2-5/8"	66		BD2069		BD2072					BD2114R		
2-3/4"	70	BD2074	BD2075				BD2075F					
2-7/8"	73		BD2081		BD2084							
3"	76				BD2090							

KWIK-WAY 13/16"-13 THREAD 10% DISCOUNT ON JOBBER PRICING 15 OR MORE, MIX N' MATCH!

Wheel Size		General Purpose			Stellite		Finish		Ruby			Nickel Chrome
Inch	mm	30°	45°	90° Flat	45°	90° Flat	45°	90° Flat	30°	45°	90° Flat	90° Flat
7/8"	22	Z								KW7/8"45R	KW7/8"90R	KW7/8"90NC
15/16"	24									KW15/16"45R	KW15/16"90R	KW15/16"90NC
1"	25									KW1"45R	KW1"90R	KW1"90NC
1-1/16"	27									KW1-1/16"45R	KW1-1/16"90R	KW1-1/16"90NC
1-1/8"	28		KW1-1/8"45	KW1-1/8"90						KW1-1/8"45R	KW1-1/8"90R	KW1-1/8"90NC
1-1/4"	31		KW2003	KW2103	KW2006	KW2120	KW2003F	KW2103F	KW2005R	KW2003R	KW2103R	KW2120NC
1-6/16"	33		KW2139	KW2140						KW2139R	KW2140R	
1-3/8"	35	KW2008	KW2009	KW2104	KW2012	KW2121	KW2009F	KW2104F	KW2011R	KW2008R	KW2104R	KW2121NC
1-7/16"	36		KW2138	KW2118						KW2138R	KW2118R	
1-1/2"	38	KW2014	KW2015	KW2105	KW2018	KW2122	KW2015F	KW2105F	KW2017R	KW2015R	KW2105R	KW2122NC
1-9/16"	39		KW2137	KW2119						KW2137R	KW2119R	
1-5/8"	41	KW2020	KW2021	KW2106	KW2024	KW2123	KW2021F		KW2023R	KW2021R	KW2106R	KW2123NC
1-11/16"	42		KW2136	KW2135						KW2136R	KW2135R	
1-3/4"	44	KW2026	KW2027	KW2107	KW2030	KW2124	KW2027F	KW2107F	KW2029R	KW2027R	KW2107R	KW2124NC
1-7/8"	47	KW2032	KW2033	KW2108	KW2036	KW2125	KW2033F	KW2108F	KW2035R	KW2033R	KW2108R	KW2125NC
2"	50	KW2038	KW2039	KW2109	KW2042	KW2126	KW2039F	KW2109F	KW2041R	KW2039R	KW2109R	KW2126NC
2-1/8"	54	KW2044	KW2045	KW2110	KW2048	KW2127	KW2045F	KW2110F	KW2047R	KW2045R	KW2110R	KW2127NC
2-1/4"	57	KW2050	KW2051	KW2111	KW2054	KW2128	KW2051F			KW2051R	KW2111R	KW2128NC
2-3/8"	60	KW2056	KW2057	KW2112	KW2060	KW2129		KW2112F		KW2057R	KW2112R	KW2129NC
2-1/2"	63	KW2062	KW2063	KW2113	KW2066	KW2130				KW2063R	KW2113R	KW2130NC
2-5/8"	66	KW2068	KW2069	KW2114	KW2072	KW2131		KW2114F				KW2131NC
2-3/4"	70	KW2014	KW2075	KW2115	KW2078	KW2132						
2-7/8"	73	KW2080	KW2081	KW2116	KW2084	KW2133	KW2081F					
3"	76		KW2087	KW2117	KW2090	KW2134						

STONE HOLDER ADAPTER BUSHING



Bushing to adapt the Black and Decker stone holder to Sioux.

Part# BS385

THREAD REDUCING BUSHING



For using Kwik-Way (13/16-13) valve seat stones with Sioux (11/16-16) stone holder.

Part# KWA437

CALL FOR AVAILABILITY ON MORE STYLES AND SIZES OF SEAT GRINDING WHEELS.

SEE PAGE 25 FOR VALVE SEAT STONE HOLDERS

SMALL DIAMETER VALVE SEAT WHEELS

An extended hub is bonded to these small diameter wheels, eliminating interference obstacles on hard-to-reach seats.

Wheel Size		Ruby		Nickel Chrome
Inch	mm	45°	90° Flat	90° Flat
Sioux, K.O. Lee, Keystone, U.S. Electric, Thor, Skil, Winona (11/16"-16 Thread)				
7/8"	22	SX1012R	SX1112R	SX1112NC
15/16"	24	SX1013R	SX1113R	SX1113NC
1"	25	SX1014R	SX1114R	SX1114NC
1-1/16"	27	SX1015R	SX1115R	SX1115NC
Kwik-Way (13/16"-13 Thread)				
7/8"	22	KW1012R	KW1112R	KW1112NC
15/16"	24	KW1013R	KW1113R	KW1113NC
1"	25	KW1014R	KW1114R	KW1114NC
1-1/16"	27	KW1015R	KW1115R	KW1115NC



TOOLMAKERS INK

LAYOUT FLUID

Use our toolmakers ink when grinding seats as a method to check proper valve face to seat contact.



Description	Color	Part #
16 oz. Aerosol Can	Blue	4409
8 oz. Brush Top Bottle	Blue	4410
8 oz. Brush Top Bottle	Red	4410R
16 oz. Bottle Odorless Layout Fluid Dye Remover		4410DR



VALVE GRINDER



Includes special valve grinding bit, grinding spring, vacuum cup, and small and large self-locking stems; Features a grinding bit that moves in short, smooth, and quick forward and backward thrusts, making it constantly advance inside the valve in new positions to ensure perfect grinding, a black enamel case and a spindle with a ball thrust bearing for easy use; Built for continued use.

PART # 4486 INCLUDES THE 1-15/16" VACUUM CUP

REPLACEMENT CUP	SIZE
4487	1-5/16"
4488	1-3/4"
4489	3/4"
4490	1-3/16"



VALVE LAPPING TOOLS

Three styles to fit your needs

DESCRIPTION	CUP SIZE	PART #
ECONOMY (HARDWOOD)	3/4" & 1-5/16"	4226
	1-3/16" & 1-5/16"	4226A
MEDIUM (THICK HARDWOOD)	5/8" & 13/16"	4480
	1-1/8" & 1-3/8"	4481
H.D. POWER-GRIP (SPRING LOADED PLUNGER)	3/4", 1" & 1-1/4"	VLS001
REPLACEMENT CUPS	3/4" vacuum cup	VLC750
	1" vacuum cup	VLC100
	1-1/4" vacuum cup	VLC125

VALVE SEAT RING INSTALLATION TOOLS

Large square contact surfaces on hardened driving washers & heavy-duty driver body transmit solid, even pressure when hammering seat rings into place. Uses standard grinder pilots for accurate line-up. Order proper driver body separately.

DRIVING WASHERS

SIZE	PART#	SIZE	PART#
1-1/8"	SL3507	1-3/4"	SL3512
1-1/4"	SL3508	1-7/8"	SL3513
1-3/8"	SL3509	2"	SL3514
1-1/2"	SL3510	2-1/8"	SL3515
1-5/8"	SL3511	2-1/4"	SL3516
COMPLETE SET OF 10		SL3506	



DRIVER BODIES

DESCRIPTION	PART #
3/8" or .375" BD, Neway, K.O. Lee Pilots	SL3520
3/8"+.010 or .385" Sioux Pilots	SL3521
7/16" or .437" Kwik-Way Pilots	SL3522

CLOVER LAPPING COMPOUND

For years, Clover has been the preferred lapping compound for lapping/seating valves. Use on lapping stick for a fast, uniform finish. 1 lb.(16 oz) container.

GRADE	GRIT	PART #
Extra Coarse	100	4456
Coarse	120	4453
Medium	180	4454
Medium Coarse	220	4450
Medium Fine	240	4451
Fine	280	4455
Very Fine	320	4452
Very Fine	400	4457

4 OZ. DUPLEX CAN EQUAL PARTS (2 OZ.) OF 120 & 280 GRIT. 44500



VALVE SEAT PULLER



Designed for quick removal of valve seat inserts with minimum effort. Also handy for removing many types & sizes of grease seals.

DESCRIPTION	PART #
90° Tooth	4329
100° Tooth	4343
120° Tooth	4330

VALVE REFACING GRINDING OIL

A premium blend of virgin based straight cutting oil with extreme pressure additives. Provides excellent surface finish and corrosion protection for valve grinding.

SIZE	PART #
1 Gallon	4540
5 Gallons	4542



REPLACEMENT SIOUX® HEAVY DUTY DRESSING TOOL

"BEST QUALITY ON THE MARKET"

Our Replacement Sioux® valve seat wheel dresser is accurate and ideal for production service. Part comes with .385 pilot for Sioux®. Our part # S1716SXP available replacement pilot for Black & Decker, Kwikway and Sioux®. Standard replacement diamond 80702.

DESCRIPTION	PART #
.385" Pilot for Sioux (1702 and 1672)	S1716SXP
.375" Pilot for Black & Decker (1898BD)	S1716BD
.437" Pilot for Kwikway (KWH437-CE)	S1716KW

INCLUDES:

- ▶ Standard Replacement Diamond

PART # 80702

- ▶ Pilot for Wheel Holder



PART #
1716

SIOUX STYLE SPLINE DRIVE HIGH SPEED AIR DRIVER



INCLUDES:

- ▶ Diamond Adjusting Screw
- ▶ 1/4" air inlet
- ▶ 1 HP max
- ▶ 2-1/2" wheel capacity
- ▶ Weighs 5-1/2 lbs.
- ▶ 90° angle
- ▶ 10,000 RPM (governed)



PART #
SI1792SP

REPLACEMENT SIOUX® ELECTRIC SEAT GRINDING DRIVER

Features: Spline drive 120V AC-DC, 50-60 Hz, Spring Loaded Spindle for Dual-Action Grinding.



PART #
SI1710

REPLACEMENT PARTS

DESCRIPTION	PART #
Spindle Drive	SX22916
Bearing Cap	SX23694
Bearing Set	SX10113
FOR SIOUX® #1792 AIR SEAT GRINDER	
Spindle Drive	SX22939
Bearing Cap	SX33970
Bearing Set	SX10113



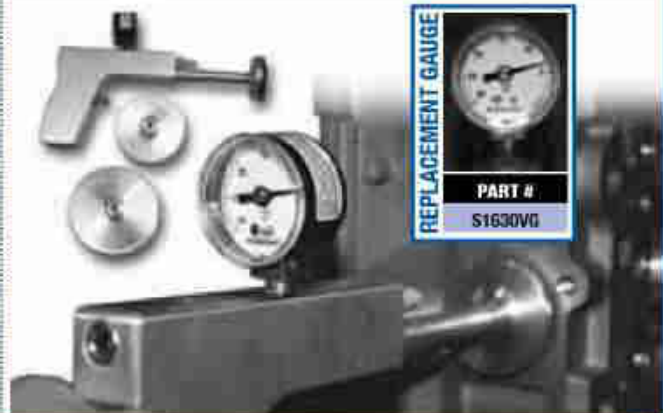
REPLACEMENT SIOUX® VACUUM TESTER KIT



PART #
S1630K

Top quality Vacuum Tester at an economical price! Easy to use hand held tester kit is designed to check valves, seats and guides for leakage. Spark plug cone adaptor allows you to test assembled engines.

KIT INCLUDES:	PART #
SIOUX® VACUUM TESTER KIT	S1630K
4" Stem Replacement	S1630A
2" Dia. Disc Pad	S16302
3" Dia. Disc Pad	S16303
4" Dia. Disc Pad	S16304
5" Dia. Disc Pad	S16305
6" Dia. Disc Pad (Not In Kit)	S16306
Vacuum Tester Gauge (Only)	S1630VG



PART #
S1630VG



FIXED CARBIDE VALVE SEAT CUTTERS

Replacement valve seat cutters for all popular guide & seat machines. High-grade carbide inserts are spaced for chatter free cutting. Recommended speed: 80-160 RPM.

Size	Kwik-Way, Peterson 5/8" Arbor	Winona, DCM 9/16" Arbor	IDL 5/8" Arbor
1"	K1000C	W1000	-
1-1/16"	K1062	W1062	-
1-1/8"	K1125	W1125	-
1-5/32"	K1156	W1156	-
1-3/16"	K1187	W1187	-
1-7/32"	K1218	-	-
1-1/4"	K1250	W1250	-
1-5/16"	K1312	W1312	I1312
1-3/8"	K1375	W1375	I1375
1-7/16"	K1437	W1437	I1437
1-1/2"	K1500	W1500	I1500
1-9/16"	K1562	W1562	I1562
1-5/8"	K1625	W1625	I1625
1-11/16"	K1687	W1687	I1687
1-3/4"	K1750	W1750	I1750
1-13/16"	K1812	W1812	I1812
1-7/8"	K1875	W1875	-
1-15/16"	K1937	W1937	-
2"	K2000	W2000	I2000
2-1/16"	K2063	W2063	I2063
2-1/8"	K2125	W2125	I2125
2-3/16"	K2187	W2187	I2187
2-1/4"	K2250	W2250	I2250
2-5/16"	K2312	W2312	I2312
2-3/8"	K2375	W2375	I2375
2-7/16"	K2437	W2437	I2437
2-1/2"	K2500	W2500	I2500



I1625



K1625



W1625

REPL. CARBIDE VALVE SEAT CUTTERS

Seat cutter bodies utilize replaceable cutting inserts with four cutting edges. When one edge wears, rotate insert to a new edge. Includes two cutting inserts, insert screws, and wrench.



Size	Kwik-Way, Peterson 5/8" Arbor	Winona, DCM 9/16" Arbor	Serdi 25mm Arbor	Repl. Carbide Inserts
1.187			RC1187SE	
1.250"	RC1250KP	RC1250DW	RC1250SE	RC250 Repl. Screw #RC250S Repl. Wrench #RC250W
1.312"	RC1312KP	RC1312DW	RC1312SE	
1.375"	RC1375KP	RC1375DW	RC1375SE	
1.437"	RC1437KP	RC1437DW	RC1437SE	
1.500"	RC1500KP	RC1500DW	RC1500SE	
1.562"	RC1562KP	RC1562DW	RC1562SE	
1.625"	RC1625KP	RC1625DW	RC1625SE	
1.687"	RC1687KP	RC1687DW	RC1687SE	
1.750"	RC1750KP	RC1750DW	RC1750SE	
1.812"	RC1812KP	RC1812DW	RC1812SE	
1.875"	RC1875KP	RC1875DW	RC1875SE	RC375 Repl. Screw #RC375S Repl. Wrench #RC375W
1.937"	RC1937KP	RC1937DW	RC1937SE	
2.000"	RC2000KP	RC2000DW	RC2000SE	
2.063"	RC2063KP	RC2063DW	RC2063SE	
2.125"	RC2125KP	RC2125DW	RC2125SE	
2.187"	RC2187KP	RC2187DW	RC2187SE	
2.250"	RC2250KP	RC2250DW	RC2250SE	
2.312"	RC2312KP	RC2312DW	RC2312SE	
2.375"	RC2375KP	RC2375DW	RC2375SE	
2.437"	RC2437KP	RC2437DW	RC2437SE	
2.500"	RC2500KP	RC2500DW	RC2500SE	

ADAPTOR FOR IDL

Fits IDL driver to adapt the 5/8" arbor Kwik-Way/Peterson Seat Cutters & Bowl Hogs.

PART # 8014



RC1500SE

RC1375DW

RC1250KP

BOWL HOGS

These carbide cutters will enlarge the valve bowl area fast and with little wear to the cutter. Ideal for High Performance applications. Use your standard driver from your seat & guide machine.



Throat	Range	Kwik-Way, Peterson 5/8" Arbor	Winona, DCM 9/16" Arbor
70°	1.08-1.83	8004	8001
	1.62-2.38	8005	8002
	2.00-2.75	8006	8003
75°	1.02-1.51	8020	8016
	1.33-1.82	8021	8017
	1.64-2.13	8022	8018
	1.95-2.44	8023	8019
78°	1.00-1.52	8010	8015
	1.25-1.75	8011	8017
	1.52-1.99	8012	8018
	1.75-2.25	8013	8019

VALVE SEAT PILOTS



SOLID TAPERED VALVE SEAT PILOTS
 PRECISION GROUND, HIGH-QUALITY STEEL.
 SELF CENTERING FOR ACCURATE ALIGNMENT.



Cylinder Head Rebuilding

		PART #					PART #					PART #		
INCH	MM	B&D NEWAY .375"	SIoux .385"	KWIKWAY .437"	INCH	MM	B&D NEWAY .375"	SIoux .385"	KWIKWAY .437"	INCH	MM	B&D NEWAY .375"	SIoux .385"	KWIKWAY .437"
.157	4.00	-	PS5157	-	.278	7.06	-	PS5278	PK5278	.357	9.07	-	PS5357	PK5357
.177	4.40	-	PS5177	-	.310	7.87	P1194D	PS5310	PK5310	.358	9.09	P1209F	PS5358	PK5358
.196	4.98	P1202A	PS5196	PK5196	.311	7.90	P1194B	PS5311	PK5311	.359	9.12	-	PS5359	PK5359
.197	5.00	P1202C	PS5197	PK5197	.312	7.92	P1194A	PS5312	PK5312	.370	9.40	P1197J	PS5370	PK5370
.198	5.02	P1202D	PS5198	PK5198	.313	7.95	P1194C	PS5313	PK5313	.371	9.42	P1197H	PS5371	PK5371
.2157	5.48	P1203B	PS5216	PK5216	.314	7.98	P1194E	PS5314	PK5314	.372	9.45	P1197F	PS5372	PK5372
.2165	5.50	P1203A	PS5217	PK5217	.315	8.00	P1194G	PS5315	PK5315	.373	9.47	P1197D	PS5373	PK5373
.2173	5.52	P1203C	PS5218	PK5218	.316	8.03	P1194I	PS5316	PK5316	.374	9.50	P1197B	PS5374	PK5374
.235	5.97	P1204B	PS5235	PK5235	.317	8.05	P1194K	PS5317	PK5317	.375	9.53	P1197A	PS5375	PK5375
.236	6.00	P1204A	PS5236	PK5236	.318	8.08	P1194M	PS5318	PK5318	.376	9.55	P1197C	PS5376	PK5376
.237	6.02	P1204C	PS5237	PK5237	.327	8.31	-	PS5327	-	.377	9.58	-	PS5377	PK5377
.238	6.05	-	PS5238	-	.328	8.33	-	PS5328	-	.378	9.60	-	PS5378	PK5378
.250	6.35	P1191A	PS5250	PK5250	.340	8.64	-	PS5340	PK5340	.379	9.63	-	PS5379	PK5379
.251	6.38	-	PS5251	PK5251	.341	8.66	P1196D	PS5341	PK5341	.388	9.80	P1211B	PS5388	-
.252	6.40	-	PS5252	-	.342	8.69	P1196B	PS5342	PK5342	.393	9.98	-	PS5393	PK5393
.258	6.55	-	PS5258	PK5258	.343	8.71	P1196A	PS5343	PK5343	.394	10.00	P1211A	PS5394	PK5394
.259	6.58	-	PS5259	PK5259	.344	8.74	P1196C	PS5344	PK5344	.433	11.00	P1212A	PS5433	PK5433
.260	6.60	P1205A	PS5260	PK5260	.345	8.76	P1196E	PS5345	PK5345	.434	11.02	-	PS5434	PK5434
.261	6.63	-	PS5261	PK5261	.346	8.79	P1196G	PS5346	PK5346	.435	11.05	-	PS5435	PK5435
.262	6.65	-	PS5262	PK5262	.347	8.81	-	PS5347	PK5347	.436	11.07	-	PS5436	PK5436
.263	6.68	-	PS5263	PK5263	.348	8.84	-	PS5348	PK5348	.437	11.10	P1199A	PS5437	PK5437
.273	6.93	-	PS5273	PK5273	.352	8.94	-	PS5352	PK5352	.438	11.13	-	PS5438	PK5438
.274	6.96	P1206B	PS5274	PK5274	.353	8.97	-	PS5353	PK5353	.500	12.70	-	PS5500	-
.275	7.00	P1206A	PS5275	PK5275	.354	9.00	P1209A	PS5354	PK5354	.501	12.73	-	PS5501	-
.276	7.01	P1206C	PS5276	PK5276	.355	9.02	-	PS5355	PK5355	.502	12.75	-	PS5502	-
.277	7.04	P1206E	PS5277	PK5277	.356	9.04	P1209E	PS5356	PK5356	Additional Sizes Available				



TAPERED CARBIDE PILOTS



INCHES	MM	PART #	INCHES	MM	PART #	INCHES	MM	PART #	INCHES	MM	PART #
.1575"	4.00	PTC1575	.2355"	5.98	PTC2355	.2785"	7.02	PTC2785	.344"	8.74	PTC3440
.177"	4.50	PTC1770	.2362"	6.00	PTC2362	.312"	7.93	PTC3120	.373"	9.47	PTC3730
.197"	5.00	PTC1970	.260"	6.60	PTC2600	.315"	8.00	PTC3150	.374"	9.50	PTC3740
.2185"	5.50	PTC2185	.2756"	7.00	PTC2756	.342"	8.70	PTC3420	.375"	9.53	PTC3750
.217"	5.52	PTC2170	.276"	7.01	PTC2760	.343"	8.72	PTC3430			

.375 TOP SIZE



STRAIGHT VALVE SEAT CARBIDE PILOTS

PRECISION GROUND, HIGH-QUALITY STEEL. SELF CENTERING FOR ACCURATE ALIGNMENT.



INCHES	MM	PART #	INCHES	MM	PART #	INCHES	MM	PART #	INCHES	MM	PART #	INCHES	MM	PART #
.1571"	3.99	PSC6157	.2358"	5.99	PSC6235	.2768"	7.03	PSC6278	.3433"	8.72	PSC6243	.3748"	9.52	PSC6282
.1575"	4.00	PSC6155	.2362"	6.00	PSC6236	.3118"	7.92	PSC6231	.3437"	8.73	PSC6244			
.1579"	4.01	PSC6159	.2368"	6.01	PSC6238	.3122"	7.93	PSC6232	.3440"	8.74	PSC6245			
.1767"	4.49	PSC6176	.2559"	6.5	PSC6255	.3130"	7.95	PSC6233	.3720"	9.45	PSC6272			
.1771"	4.50	PSC6177	.2594"	6.59	PSC6259	.3146"	7.99	PSC6234	.3724"	9.46	PSC6273			
.1929"	4.99	PSC6192	.2600"	6.61	PSC6260	.3150"	8.00	PSC6235	.3728"	9.47	PSC6278			
.1964"	5.00	PSC6196	.2752"	6.99	PSC6275	.3154"	8.01	PSC6236	.3732"	9.48	PSC6279			
.2157"	5.48	PSC6215	.2756"	7.00	PSC6277	.3157"	8.02	PSC6237	.3736"	9.49	PSC6280			
.2185"	5.50	PSC6216	.2760"	7.01	PSC6276	.3425"	8.70	PSC6242	.3744"	9.51	PSC6281			

.375 TOP SIZE



Black & Decker Stone Holder for use with Straight Valve Seat Pilots.

PART # 19988D

BLACK & DECKER 3/8" (.375") upper end size. 9/16 x16 thread.

EXTRA-LONG SOLID TAPERED PILOTS

10" OVERALL LENGTH GIVES YOU MORE DEPTH TO WORK IN WITH HEADS FEATURING DEEPER BOWL AREAS. GREAT FOR DIESEL APPLICATIONS. USE WITH 1702 STONE HOLDER.



INCHES	MM	PART #	INCHES	MM	PART #	INCHES	MM	PART #	INCHES	MM	PART #
.275"	7.00	PS275XL	.279"	7.09	PS279XL	.343"	8.71	PS343XL	.372"	9.45	PS372XL
.276"	7.01	PS276XL	.312"	7.92	PS312XL	.344"	8.74	PS344XL	.373"	9.47	PS373XL
.277"	7.04	PS277XL	.313"	7.95	PS313XL	.345"	8.77	PS345XL	.374"	9.50	PS374XL
.278"	7.06	PS278XL	.314"	7.98	PS314XL	.346"	8.79	PS346XL	.375"	9.52	PS375XL

.385 TOP SIZE



SIoux Stone Holder for use with Extra-Long Solid Tapered Pilots.

PART # 1702

SIoux STANDARD 3/8" + .010 (.385") upper end size. 11/16 x 16 thread.

HEAVY-DUTY SOLID TAPERED PILOTS

11-1/2" OVERALL LENGTH GIVES YOU MORE DEPTH TO WORK ON HEAVY DUTY ENGINES WITH DEEP BOWL AREAS. ESPECIALLY USEFUL ON LARGER, HEAVY DUTY ENGINES. USE WITH 1703 STONE HOLDER.



INCHES	MM	PART #	INCHES	MM	PART #	INCHES	MM	PART #	INCHES	MM	PART #
.562"	14.27	PS562HD	.564"	14.33	PS564HD	.626"	15.90	PS626HD	.628"	15.95	PS628HD
.563"	14.30	PS563HD	.625"	15.88	PS625HD	.627"	15.93	PS627HD			

.572 TOP SIZE



SIoux Stone Holder for use with Heavy-Duty Tapered Pilots.

PART # 1703

SIoux HEAVY-DUTY 9/16" + .010 (.572") upper end size. 7/8 x 14 thread.

EXPANDABLE VALVE SEAT PILOTS

(.020 RANGE) HARDENED STEEL, PRECISION GROUND



SIZE	RANGE	B&D		
		Neway .375	Sioux .385	Kwik-Way .437
6 mm	.233"-.253"	P1166	P1034	P1020
1/4"/6.6mm	.247"-.267"	P1150	P1011	P1002
6.6 mm	.253"-.273"	P1167	P1035	P1021
7mm	.272"-.292"	P1168	P1036	P1022
9/32"	.278"-.298"	P1151	P1012	-
5/16"/8mm	.309"-.329"	P1152	P1013	P1004
8.5mm/11/32	.332"-.352"	P1171	P1039	P1025

SIZE	RANGE	B&D		
		Neway .375	Sioux .385	Kwik-Way .437
11/32"/9mm	.340"-.360"	P1153	P1014	P1005
3/8"/9.5mm	.372"-.392"	P1154	P1015	P1006
25/64"/10mm	.390"-.410"	P1155	P1016	P1007
13/32"	.403"-.423"	P1156	P1017	P1008
7/16"/11mm	.430"-.450"	P1157	P1018	P1009
1/2"/12.7mm	.500"	-	P1172	-

Replacement Collets & Expanders Available

SPLIT PILOTS

.375 TOP SIZE



SIZE	RANGE	PART #	SIZE	RANGE	PART #	SIZE	RANGE	PART #
5.0 mm	.193"-.203"	P197SP	7.0mm	.273"-.283"	P275SP	9.0 mm	.351"-.361"	P354SP
5.5 mm	.213-.223"	P216SP	.312"	.299"-.319"	P312SP	.375"	.372"-.382"	P375SP
6.0 mm	.233-.243"	P236SP	8.0 mm	.312"-.322"	P315SP	.437"	.434"-.444"	P437SP
.250"	.247-.257"	P250SP	.343"	.340"-.350"	P343SP			

KWIK-WAY STONE HOLDER



PART #
KWH437-OE

REPL. PART	PART #
Cap	KWH437-OEC
Inner Assy.	KWH437-OEG

Completely rebuildable. Accepts 13/16-13 Kwik-Way valve seat stones. Use with tapered pilots with a .437 upper end. Not for use with Model NSG stones with 21/32-18 threads.

STONE HOLDER ADAPTER BUSHING



PART #
BS385

Bushing to adapt the Black and Decker stone holder to Sioux.

THREAD REDUCING BUSHING



PART #
KWA437

For using Kwik-Way (13/16-13) valve seat stone with Sioux (11/16-16) stone holder.

VALVE SEAT STONE HOLDERS



SIoux STANDARD 3/8" + .010 (.385") upper end size, 11/16 x 16 thread.

PART #
1702



SIoux HEAVY-DUTY 9/16" + .010 (.572") upper end size, 7/8 x 14 thread.

PART #
1703



KWIK-WAY 7/16" (.437") upper end size, 13/16 x 13 thread.

PART #
KWH437-OE



BLACK & DECKER 3/8" (.375") upper end size, 9/16 x 16 thread.

PART #
1998D

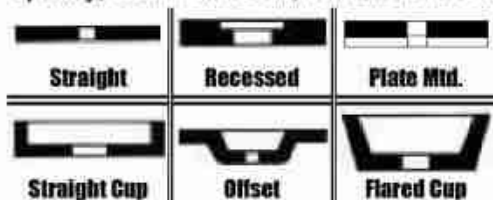


SIoux SHORT BODY 3/8" + .010 (.385") upper end size, 11/16 x 16 thread.

PART #
1672

VALVE REFACER WHEELS

Every wheel is tested for balance, consistent quality, with a smooth, vibration-free finish!



GP= GENERAL PURPOSE S= STELLITE R= RUBY  T= TITANIUM

MAKE	APP.	DIA. X HT. X ARBOR	MACHINE/MODEL	SHAPE	TYPE	ORIGINAL #	PART #
BLACK & DECKER, THOR, VAN DORN	Valve	4"x1"x5/8"	A, B, C, LW, M, MW, N, NW, NWO	Offset	R	39058	2300R
		4"x1"x5/8"	A, B, C, LW, M, MW, N, NW, NWO	Offset	GP	•	2300
		4"x1"x5/8"	A, B, C, LW, M, MW, N, NW, NWO	Offset	S	16371	2302
		5"x1"x5/8"	P, PC, PCB, T, TD, TG	Offset 20°	GP	34131	2304
	Stem	4"x1-1/8"x1/2"	All Models	Cup	GP	20939	2306
I.D.L., SUNNEN	Valve	8"x1-1/4"x1-1/2"	CG50, CG80, CG82, V90, VR7000	Flared	GP	8230	2374
	Valve	8"x1-1/4"x1-1/2"	CG50, CG80, CG82, V90, VR7000	Flared Cup	S	All Models	2373
	Valve	8"x1-1/4"x1-1/2"	CG50, CG80, CG82, V90, VR7000	Flared Cup	T	All Models	2374T
KWIK-WAY	Valve	4-1/2"x7/8"x7/8"	CV, SK, KK, VC, SV, XC	Offset	GP	010-0450-10	2308
		4"x3/4"x7/8"	4001, P	Offset	GP	101-0400-19	2307
		4-1/2"x7/8"x7/8"	CV, SK, KK, VC, SV, XC	Offset	S	•	2309
		5"x7/8"x7/8"	EVS, VS	Offset	GP	010-0509-01	2312
		5"x7/8"x7/8"	EVS, VS	Offset	R	•	2312R
		5"x7/8"x7/8"	EVS, VS	Offset	T	•	2312T
		5"x7/8"x7/8"	EVS, VS	Offset	S	010-0507-07	2316
		7"x1"x7/8"	SVS, SVS II	Offset	GP	010-0709-00	2320
		7"x1"x7/8"	SVS, SVS II	Offset	R	•	2320R
		7"x1"x7/8"	SVS, SVS II	Offset	T	•	2320T
	8"x1-3/8"x7/8"	VL	Offset	GP	010-0819-04	2322	
	Stem	6"x1-1/4"x3/4"	VL	Recessed	GP	010-0610-08	2317
3"x1-1/4"x5/8"		All Models Except VL & XC	Cup	GP	010-0300-05	2324	

VALVE REFACTOR WHEELS



Cylinder Head Rebuilding

MAKE	APP.	DIA. X HT. X ARBOR	MACHINE/MODEL	SHAPE	TYPE	ORIGINAL #	PART #
K.O. LEE	Valve	5"x3/4"x5/8"	All Models	Offset 15°	GP	OV5GH80	2326
		5"x3/4"x5/8"	All Models	Offset 15°	S	OV5GH80S	2326S
	Stem	4"x1"x5/8"	K500(C) & K403(C)	Cup	GP	RV4KH60	2330
		4"x1"x5/8"	K500(C) & K403(C)	Cup	R	•	2330R
		4"x1"x5/8"	All But K500(C) & K403(C)	Flt. Mtd.	GP	RV4GQKMB	2332
ROTTLER VR-7	Valve	7"x1"x7/8"	•	Offset	GP	VTRW-8	2320
	Valve	7"x1"x7/8"	•	Offset	T	VTRW-7	2320T
	Stem	3"x1-1/4"x5/8"	•	Cup	GP	VTRW-9	2324
ROTTLER VR-8	Valve	6"x1-1/8"x1-1/2"	•	Flared	GP	•	2374
		6"x1-1/4"x1-1/2"	•	Flared	T	•	2374T
SIOUX	Valve	4"x1"x5/8"	All But 680, 956, 2001, 2075	Offset	GP	78E	2300
		4"x1"x5/8"	All But 680, 956, 2001, 2075	Offset	R	•	2300R
		4"x1"x5/8"	All But 680, 956, 2001, 2075	Offset	T	•	2300T
		4"x1"x5/8"	All But 680, 956, 2001, 2075	Offset	S	83	2302
		7"x11/16"x1-3/4"	680, 956, 2001, 2075	Straight 15°	GP	173	2342
		7"x11/16"x1-3/4"	680, 956, 2001, 2075	Straight 15°	R	•	2342R
		7"x11/16"x1-3/4"	680, 956, 2001, 2075	Straight 15°	T	•	2342T
		7"x11/16"x1-3/4"	680, 956, 2001, 2075	Straight 15°	S	177	2344
	Stem	4"x1"x5/8"	All But 682, 685L	Cup	GP	81	2330
		4"x1"x5/8"	All But 682, 685L	Cup	R	•	2330R
SKIL, SNAP-ON	Valve	5"x3/4"x5/8"	All Models	Offset	GP	7556/VW80	2326
		5"x3/4"x5/8"	All Models	Offset	S	VW80S	2326S
	Stem	4"x1"x5/8"	All But Skil 491	Cup	GP	7557/VR2M86	2330
		4"x1"x5/8"	All But Skil 491	Cup	R	•	2330R
		4"x1"x5/8"	Skil 491	Flt. Mtd.	GP	72057	2332
SUNNEN, TOBIN ARP, S&D	Valve	6"x1-3/8"x3/4"	VR600, All S&D	Flared	GP	VR602	2356
	Stem	5"x1-3/8"x3/4"	VR6500, All S&D	Cup	GP	VR601	2358
WINONA, VAN NORMAN	Valve	5"x3/4"x5/8"	E, Y, YW, X, XA	Offset 15°	GP	75399	2326
		5"x3/4"x5/8"	K500HM, K403CM	Offset 15°	S	75400	2326S
		7"x1-3/8"x5/8"	VRW	Offset	GP	•	2371
		7"x1-3/8"x5/8"	VRW	Offset	T	•	2371T
		12"x5/8"x3"	CRW, VR-1000	Straight 15°	GP	802003/2407B	2366
	Stem	4"x1"x5/8"	E, Y, YW, X, XA	Cup	GP	40352	2330
		4"x1"x5/8"	E, Y, YW, X, XA	Cup	R	•	2330R
		10"x1-1/4"x3"	CRW	Recessed	GP	2407D	2370
10"x1-3/4"x3"	500	Recessed	GP	14364	2372		

COLORS MAY VARY DUE TO MANUFACTURING PROCESSES.



High Speed Steel Reamers For Cast Iron

High quality reamers are spiral fluted for a smooth finish every time. Crafted from the finest H.S. tool steel and tempered to assure long life. Special sizes and sharpening services available. Frequently used sizes are highlighted in **BOLD**.



Dec.	Frac/mm	Part#	Dec.	Frac/mm	Part#	Dec.	Frac/mm	Part#	Dec.	Frac/mm	Part#
.197	5.00	1217	.313	7.95	1176	.375	3/8"	1128	.472	12.00	1135
.214	5.44	1100	.314	7.97	1177	.376	9.55	1139	.495	12.57	1170
.215	5.46	1101	.315	8.00	1112	.377	9.58	1193	.496	12.60	1171
.2165	5.50	1185	.316	8.03	1174	.378	9.60	1182	.497	12.62	1172
.217	5.51	1103	.317	8.05	1175	.379	9.63	1209	.499	12.67	1179
.218	5.54	1104	.318	8.08	1178	.380	9.65	1194	.500	1/2"	1132
			.319	8.10	1211	.385	9.78	1195	.501	12.72	1200
.234	15/64"	1105	.320	8.12	1212	.386	9.80	1228	.502	12.75	1201
.235	5.97	1106	.327	8.31	1188	.388	9.86	1196	.561	14.25	1198
.236	6.00	1109	.328	21/64"	1189	.390	25/64"	1197	.562	9/16"	1133
.237	6.02	1107	.334	8.48	1279	.393	9.98	1205	.625	5/8"	1202
.238	6.05	1108	.340	8.64	1210	.394	10.00	1114	.628	15.95	1216
.250	1/4"	1115	.341	8.66	1119	.395	10.03	1229			
.256	6.50	1183	.342	8.69	1120	.396	10.05	1129			
.257	6.53	1206	.343	8.71	1121	.401	10.18	1160			
.258	6.55	1207	.3435	11/32"	1180	.402	10.21	1161			
.259	6.58	1208A	.344	8.74	1122	.403	10.24	1162			
.260	6.60	1173	.345	8.76	1123	.404	10.26	1163			
.261	6.63	1184	.346	8.79	1136	.405	10.29	1164			
.262	6.65	1186	.347	8.81	1181	.406	13/32"	1130			
.273	6.93	1222	.348	8.84	1137	.433	11.00	1134			
.274	6.96	1223	.353	8.97	1190	.434	11.02	1167			
.275	6.99	1224	.354	9.00	1113	.435	11.05	1140			
.2755	7.00	1111	.355	9.02	1191	.436	11.07	1142			
.276	7.01	1218	.356	9.04	1192	.437	7/16"	1131			
.277	7.03	1148	.357	9.06	1215	.438	11.13	1168			
.278	7.06	1225	.358	9.09	1138	.439	11.15	1169			
.279	7.09	1226	.371	9.42	1124	.440	11.17	1159			
.281	9/32"	1187	.372	9.45	1125	.452	11.49	1199			
.310	7.87	1116	.373	9.47	1126	.453	29/64"	1165			
.311	7.90	1117	.374	9.50	1127	.470	11.94	1203			



Drive Adaptor

Kwik-Way, Peterson, 1/2" dia. straight shank for drill chucks. 1/4" Square

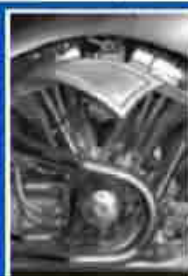
Part# SL4158



Drive Adaptor

Kwik-Way, Peterson or any "drill chuck type" seat & guide machine. 3/8" dia. straight shank. 1/4" Square

Part# SL1675



Small Engine Reamers

High quality reamers are spiral fluted for a smooth finish every time. Crafted from the finest H.S. tool steel and tempered to assure long life. Special sizes and sharpening services available.



Dec.	Frac/mm	Part#
.1575	4.00	1575SE
.1771	4.50	1771SE
.1960	4.98	1960SE
.1980	5.03	1980SE



Titanium-Nitride Coated Right Hand Cut Valve Guide Reamers

High quality reamers are spiral right hand cut for easier chip removal. Titanium-Nitride Coated Reamers can be used to ream bronze guides and less brittle than carbide. Ideal for use on Cast Iron. Frequently used sizes are highlighted in **BOLD**.



Dec.	Frac/mm	Part#
.216	5.50	TN1185B
.236	6.00	TN1110B
.248	6.3	TN1184B
.249	6.32	TN11183B
.25	6.35	TN1115B
.2755	7.00	TN1111B
.312	5/16"	TN1118B
.315	8.00	TN1112B
.34	8.64	TN1210B
.341	8.66	TN1119B
.342	8.69	TN1120B
.343	8.71	TN1121B
.344	8.74	TN1122B
.345	8.76	TN1123B
.354	9.00	TN1113B
.373	9.47	TN1126B
.374	9.50	TN1127B
.375	3/8"	TN1128B
.376	9.55	TN1139B
.377	9.58	TN1193B
.378	9.6	TN1182B



Premium Carbide Tipped Reamers

Special Note: Pilot portion of reamer is .004"-.006" smaller than size.

Carbide Tipped Valve Guide Reamers, made to last longer than high speed & carbon steel reamers. Will cut cast iron & bronze guides. Min. 500 RPM.

Size	Part #
.236" (6.0mm)	C1109
.260" (6.6mm)	C1173
.275" (7.0mm)	C1111
.312" (5/16")	C1118
.315" (8.0mm)	C1112
.342" (8.69mm)	C1120
.343" (11/32")	C1121
.344" (8.74mm)	C1122
.358" (9.09mm)	C1125
.373" (9.74mm)	C1126
.374" (9.50mm)	C1127
.375" (3/8")	C1128



Titanium-Nitride Coated Reamers

Ream cast iron & bronze based materials to a superior finish. Specially fluted, heat treated, and ground to achieve a precise I.D. with less effort than standard high speed reamers. Special sizes and sharpening service available.

Dec.	Frac/mm	Part #
3/16" Square Drive		
.236	6.00	1109T
.2755	7.00	1111T

Dec.	Frac/mm	Part #
1/4" Square Drive		
.315	8.00	1112T
.341	8.66	1119T
.342	8.69	1120T
.343	11/32"	1121T
.344	8.74mm	1122T
.358	9.09	1138T
.374	9.50	1127T
.375	3/8"	1128T

High Speed Steel Reamers For Bronze

Designed for reaming high-density bronze based materials. Specially fluted, heat treated and ground to produce a smooth on-size I.D. Frequently used sizes are highlighted in **BOLD**. Lubricant is required when reaming bronze. Use bronze reaming oil Part# 4528

Dec.	Frac/mm	Part#
.2165	5.50	SL1185B
.236	6.00	SL1110B
.250	6.35	SL1115B
.259	6.58	SL1208B
.260	6.60	SL1173B
.2755	7.00	SL1111B
.310	7.87	SL1116B

Dec.	Frac/mm	Part#
.311	7.90	SL1117B
.312	5/16"	SL1118B
.313	7.95	SL1176B
.314	7.97	SL1177B
.315	8.00	SL1112B
.316	8.03	SL1174B
.317	8.05	SL1175B

Dec.	Frac/mm	Part#
.318	8.08	SL1178B
.341	8.66	SL1119B
.342	8.69	SL1120B
.343	11/32"	SL1121B
.344	8.74	SL1122B
.345	8.76	SL1123B
.354	9.00	SL1113B

Dec.	Frac/mm	Part#
.371	9.42	SL1124B
.372	9.45	SL1125B
.373	9.47	SL1126B
.374	9.50	SL1127B
.375	3/8"	SL1128B
.376	9.55	SL1139B
.394	10.00	SL1114B



Bronze Guide Reaming Oil

Highly refined premium grade oil with excellent lubricating properties that enhance reaming operations. Provides an ideal surface finish and corrosion protection. Extends life of reamers. Use as a spray or dip.

Size	Part #
1 Pint	4529
1 Quart	4528
1 Gallon	4530



VALVE FACER REPLACEMENT CHUCKS

Accuracy guaranteed to hold .0005 or better at 1-7/16" from chuck face. Chuck supplied with standard size collet (range .3149"- .3543") Optional collets also offered.

KWIK-WAY CHUCKS

MODEL	PART #
All except EVS & SVS	SLW1000
SVS w/serial #100-2681, threaded end on chuck shaft.	SLW1001

SIOUX CHUCKS

MODEL	PART #
880	SLW1022
2001, 2075	SLW1023

OPTIONAL COLLETS

FITS KWIK-WAY & SIOUX CHUCKS

DECIMAL RANGE	MM RANGE	PART #
.120 - .160	3 - 4mm	SLW1004
.160 - .200	4 - 5mm	SLW1005
.200 - .236	5 - 6mm	SLW1006
.236 - .275	6 - 7mm	SLW1007
.275 - .315	7 - 8mm	SLW1008
.315 - .354	8 - 9mm	SLW1009
.354 - .393	9 - 10mm	SLW1010
.393 - .433	10 - 11mm	SLW1011
.433 - .472	11 - 12mm	SLW1012
.472 - .511	12 - 13mm	SLW1013
.511 - .551	13 - 14mm	SLW1014
SPANNER WRENCH For Valves Under 3.5mm		SLW1021



VALVE KEEPER INSTALLER & REMOVER

PART # 4296



New-Great Tool! Remove and install valve keepers with this one tool!

For fast installation, load the keepers in the retainer on the valve stem. Put the installer over the retainer. Hammer the installer to lock the keepers in the valve stem grooves.

To remove, hold the valve up. Put the open end of the tool over the valve stem. Hammer the tool to compress the spring. A magnet in the body of the tool will attract the keepers for quick removal.



VARIOUS SIZES AVAILABLE
DEAD BLOW HAMMER

INCLUDES TWO SIZES:
LARGE 5/16" - 3/8"
SMALL 4.5 - 7.5MM

TOOLMAKERS INK LAYOUT FLUID



Use our toolmakers ink when grinding seats as a method to check proper valve to seat contact.

DESCRIPTION	COLOR	PART #
16oz. Aerosol Can	BLUE	4409
8oz. Brush Top Bottle	BLUE	4410
8oz. Brush Top Bottle	RED	4410R
16oz. Bottle Odorless Layout Fluid Dye Remover		4410DR

COLLET VALVE HOLDERS

1/2" Adaptor chucks for small valves. Valve holder collets allow you to grind small valves using 1/2" adaptor chucks.



SIZE	INCHES	METRIC	PART #
1/8"	.0938 - .1250	2.382-3.175	2222
5/32"	.1250 - .1562	3.175-3.969	2223
3/16"	.1563 - .1875	3.970-4.762	2224
7/32"	.1875 - .2187	4.762-5.56	2225
1/4"	.2188 - .2500	5.57-6.350	2226

1/2" Adaptor Chuck/Collet Holder 2227

5 PIECE COLLET KIT W/1/2" ADAPTOR CHUCK 2220

2228 KIT			
SIZE	INCHES	METRIC	PART #
3/16"	.1563 - .1875	3.970-4.762	2224
7/32"	.1875 - .2187	4.762-5.56	2225
1/4"	.2188 - .2500	5.57-6.350	2226
1/2" Adaptor Chuck/Collet Holder			2227

SOLD SEPARATELY	INCHES	SIZE	METRIC
2221	.171	11/64"	4.36

TWO STONE VALVE GUIDE HONE

Resize the inside diameter of worn valve guides quickly & accurately. Hone makes high performance guide work quickly & easily! Stones provide close tolerance, precision valve guide finishing. Cross hatch finish achieved regardless of guide material, (cast iron, hardened steel, nickel bronze, etc.) resulting in excellent oil retention.

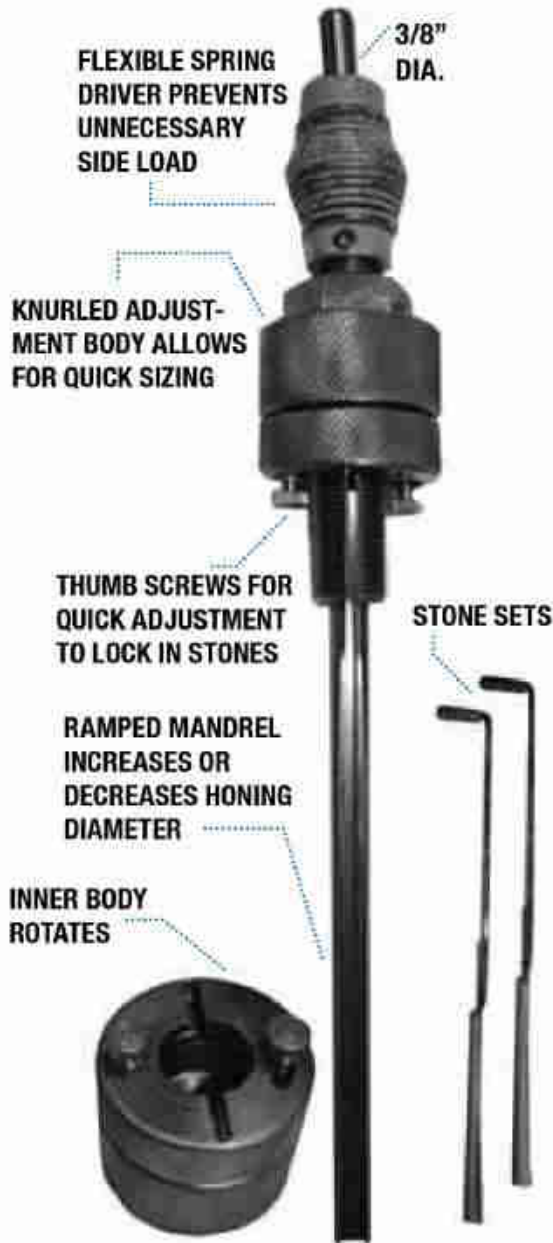
Hone supplied with one set of 220 grit silicone carbide stones - see below for size range required, Master hone set (Part #80603) covers .240 - .427 guide I.D.

MASTER HONE SET

PART #
80603

(RANGE: .240" - .427")

Set includes 1 Knurled Adjustment Body, 3 Mandrels, 3 - 220 Grit SC Stone Sets, and a storage box.

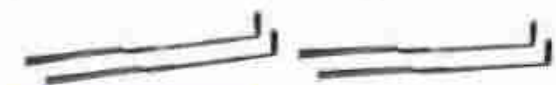


REPLACEMENT PARTS

SIZE	DESCRIPTION	PART #
.240" - .302"	Complete Hone*	80600
	Replacement Mandrel Only	80604
.302" - .365"	Complete Hone*	80601
	Replacement Mandrel Only	80605
.365" - .427"	Complete Hone*	80602
	Replacement Mandrel Only	80606
	Replacement Knurled Adjustment Body	80600C
	Replacement Spring	80600S

*Complete Hone Includes Knurled Adjustment Body (80600C)

REPLACEMENT STONE SETS (SOLD IN SETS OF TWO)



RANGE	ALUMINUM OXIDE FOR CAST IRON GUIDES			SILICONE CARBIDE FOR BRONZE GUIDES			
	1806	220G	320G	180G	220G	320G	500G
.240"-.302"	80607	80608	80609	80616	80617	80618	80625
.302"-.365"	80610	80611	80612	80619	80620	80621	80626
.365"-.427"	80613	80614	80615	80622	80623	80624	80627

KNURLING ARBORS

Resize arbors (knurlers) are self starting and feed themselves through each guide. The arbors can be backed out at anytime, virtually eliminating the possibility of being locked in the guide. A reamer is then used to obtain the desired valve to guide clearance. Simply use with a high speed drill and speed reducer. Valves can be installed with less than recommended guide clearance. Reconditions valve guides with up to .006" wear. Do not use on chilled or hardened guides.



STANDARD RESIZE KIT

DESCRIPTION	PART #	INCLUDES:		
STANDARD RESIZE KIT	SL1032			
MASTER RESIZE KIT	SL1033			
METRIC RESIZE KIT	SL1034			
Tap Wrench	SL4944	◆	◆	◆
Valve Guide Brush	SL1036	◆	◆	◆
Knurling Oil - 1 Qt.	4522	◆	◆	◆
5/16" Resize Arbor	SL1088		◆	◆
11/32" Resize Arbor	SL1089		◆	◆
3/8" Resize Arbor	SL1091		◆	◆
7/16" Resize Arbor	SL1094		◆	
6mm Resize Arbor	SL1081	◆		
7mm Resize Arbor	SL1082	◆		
8mm Resize Arbor	SL1083	◆		
9mm Resize Arbor	SL1084	◆		
.312 H.S. Reamer	1118		◆	◆
.341 H.S. Reamer	1119		◆	
.342 H.S. Reamer	1120		◆	
.343 H.S. Reamer	1121		◆	◆
.345 H.S. Reamer	1123		◆	◆
.371 H.S. Reamer	1124		◆	
.373 H.S. Reamer	1126		◆	◆
.375 H.S. Reamer	1128		◆	◆
.437 H.S. Reamer	1131		◆	
6mm H.S. Reamer	1109	◆		
7mm H.S. Reamer	1111	◆		
8mm H.S. Reamer	1112	◆		
9mm H.S. Reamer	1113	◆		

Optional Speed Reducer SL3500 is not included in kits.

KNURLING OIL



Prolongs the life of all types of knurling arbors. Lubricates guide bores while knurling. Helps the arbor raise metal further and cuts friction to lessen arbor wear.

DESCRIPTION	PART #
1 Quart	4522
1 Gallon	4524

KNURLING ARBORS

Reduces valve guide size. Use on guides with up to .006" wear, except chilled or hardened guides. Finish ream to obtain desired valve to guide clearance.



DEC.	FRAC/MM	PART #	DEC.	FRAC/MM	PART #
.216	5.50	SL1067	.348	11/32" +.005	SL1089A
.236	6.00	SL1081	.354	9.00	SL1084
.260	6.60	SL1080	.375	3/8"	SL1091
.275	7.00	SL1082	.390	3/8" +.015	SL1091B
.281	9.22"	SL1079			
.312	5/16"	SL1088	.416	13/32" +.010	SL1093B
.315	8.00	SL1083	.437	7/16"	SL1094
.343	11/32"	SL1089			

SPEED REDUCER

Heat treated alloy steel pinions and gears packed in grease. Has 1/2" hand chuck 90 rpm output with a 1750 input that fits into 1/2" square drive adapter. Housing is heavy cast aluminum. Oilite Bearing. Handle 5", overall width 10". For use with any electrical drill. For use with up to 1/2" drill bits. Weight 3 lbs.



Part# SL3500

REPLACEMENT PARTS FOR K-LINE SPEED REDUCER

PART #SL1031J
Speed reducer Input Dr.
End



PART #SL1031D
1/4" Sq. Speed reducer Dr.
Adaptor



PART #SL1031E
3/16" Sq. Speed reducer Dr.
Adaptor (Optional)



HAND KNURLER



DESCRIPTION	PART #
Complete Tool	4327
Replacement Knurler	4328

CORE DRILL-REAMER

MACHINE SHANK TYPE	CORE DRILLS			REAMERS			
	O.D.	PILOT	PART #	O.D.	PART #		
	15/32"	5/16"	7195	1/2"	7198		
		11/32"	7196				
		3/8"	7197				
	17/32"	11/32"	7202	9/16"	7204		
		3/8"	7203				
		7/16"	7200				
	.492	.343	7211	1/2"	7214		
		.373	7212				
	.427	.312	7100			.438	7101
		.312	7104				
	.490	.343	7105	.500	7107		
		.371	7106				
		.552	7111				
	.810	7109	.5625			7114	
	15/32"	5/16"	7054	1/2"	7057		
		11/32"	7055				
		3/8"	7056				
	17/32"	11/32"	7061	9/16"	7064		
		3/8"	7062				
19/32"	7/16"	7059	5/8"	7060			
	.412	.310	7752	.500	7753		
		.311	7758				
		.341	7762				
	.475	.341	7762		7764		
		.375	7763				
.5375	.341	7228	.5625	7231			
	.429	7mm	7192	.4995	7199		
	.492	.274	7213	1/2"	7214		
					7198		

CORE DRILL/REAMER COMBO

With a single pass, your 11/32", 3/8", or 5/16" guide can be drilled and reamed in a single step to accept a .500 O.D. Guide.

NOTE: DO NOT EXCEED 250 RPM

PART #	PART #	PART #	PART #	PART #
CDR7193	CDR6762	CDR7198	CDR6055	CDR6196



MACHINE	SHANK TYPE	SIZE	PART #
KWIK-WAY	1/2" Round	.343 x .500	CDR6196
		.375 x .500	CDR6197
PETERSON/ KANSAS INST./ DCM TECH	1/2" Round	.312 x .500	CDR6198
		.343 x .500	CDR6196
		.375 x .500	CDR6197
WINONA	.468 w/Flat	.343 x .500	CDR6055
SERDI	3/8" Round	.312 x .437	CDR7198
		.343 x .500	CDR7196
		.375 x .500	CDR7197
IDL/ VAN NORMAN	5/16" Sq. Dr.	.343 x .500	CDR6762
		.375 x .500	CDR6763
TORBIN-ARP & SUNNEN	5/16" Round w/Flat	.343" x .500	CDR6105
		.3125" x .500	CDR6107
	3/8" Round W/Flat	.375" x .500	CDR6106
FORD 6.0L NAVISTAR SERDI/T&S/ NEWEN/ROTTLER	.375 Round	.274" x .437"	CDR7100
CUMMINS 5.9L DIESEL SERDI/T&S/ NEWEN/ROTTLER	.375 Round	.274" x .500"	CDR7193



EXTRA-LONG VALVE GUIDE DRIVERS

Overall length of each driver is 9".

PART NO.	DEC.	MM	DRIVER OD
SL2990L	.196	5.0	.355
SL2991L	.216	5.5	.412
SL2992L	.236	6.0	.412
SL2993L	.260	6.6	.463
SL3001L	.275	7.0	.432
SL3002L	.315	8.0	.463
SL3005L	.312	7.92	.487
SL3006L	.343	8.73	.487
SL3007L	.375	9.52	.487

Valve Guide Drivers

Designed to remove and install cast iron or bronze valve guides easily. Made of a special heat-treated alloy steel for long life and durability. Choose from hand or air powered drivers.



Stem Dia.	Valve Guide		Air Drivers	Hand Drivers	
	Dec.	O.D.			Dec.
5mm	.197	9mm	.354	SL2990	SL2261
5.5mm	.2165	11mm	.433	SL2991	SL2262
6mm	.236	11mm	.433	SL2992	SL2265
6.6mm	.260	12mm	.472	SL2993	SL2266
7mm	.275	10mm	.394	SL3001	SL2267
8mm	.315	12mm	.472	SL3002	SL2270
5/16"	.312	7/16"	.437	SL3009	SL1754*
5/16"	.312	1/2"	.500	SL3005*	SL1757*
11/32"	.343	1/2"	.500	SL3006*	SL1765*
3/8"	.375	1/2"	.500	SL3007*	SL1766*
7/16"	.437	5/8"	.625	SL3008*	SL1774*

VALVE GUIDE AIR DRIVER KIT
4 Pc. Kit Contains Items Marked With a *
PART #SL3004

VALVE GUIDE HAND DRIVER KIT
5 Pc. Kit Contains Items Marked With a *
PART #SL2133



SMALL HOLE GAUGE SET

PART #
2229

This satin chrome plated tool set is ideal for checking valve guide wear and small hole diameters. With a range of 1/8-1/2 you simply insert the ball into hole and expand by turning on handle. Comes in a plastic pouch for easy storage.

MANUAL VALVE STEM / PISTON RING FILER

PART #
4297

V-Groove accommodates valve stem ends. Abrasive wheel produces clean finish. Also files piston rings to meet OE specification quickly and easily.



PART #
4297A
REPLACEMENT
120 GRIT GRINDING WHEEL

AIR HAMMER

Remove or install valve guides easily. Short strokes and uniform driving pressure minimizes guide end breakage.
Hose Size (I.D.): 3/8"
BPM: 3000
Opening: 401
Overall Length: 6-3/4"
Air Consumption: 4 C.F.M.
Bore: 11/16"
P.S.I.: 90 lbs.
Stroke: 2-5/8"
Air Inlet (NPT): 1/4"



PART #
18558

QUICK CHANGE RETAINER SPRING
18559

AIR POWERED DIESEL VALVE GUIDE DRIVERS

Drive guides in from the shoulder to prevent guide damage. Installing drivers are recessed to insure correct installed height.



APPLICATION	INSTALLER	REMOVER
Caterpillar 3406-3408	4637	4634
Cummins	4629*	4628*
Cummins L10	4639	-
Detroit GMC 53	4633*	4632*
Detroit GMC 71/92	4631*	4630*
International DT466	4635	4634
Mack	4627*	4626*
Mack (4 Valve Late)	4638	-

8 PIECE KIT CONTAINS ITEMS MARKED WITH A *PART #4625

Valve Guide Spot Facer

For Use With Air & Electric Drills

Shorter body, machine type cutter for use with any 3/8" or 1/2" air/electric drill. Heavy carbide blades quickly shorten or face cast iron guides with ease. Order cutter and pilots separately. All pilots are interchangeable. 15/16" Cutting Diameter.

Pilots Not Included (See Below)

Part #SL1270



Pilots for SL1270

Interchangeable pilots are available for most guide I.D.'s. Order to fit smooth or spiraled guide I.D.'s.

Size	Smooth I.D.	Undersized or Spiraled I.D.
5/16" (8mm)	SL1270A	SL1271A
11/32"	SL1270B	SL1271B
3/8"	SL1270C	SL1271C
7/16"	SL1270D	SL1271D
1/2"	SL1270E	SL1271E



Valve Guide O.D. Chamfer Tool

Use to restore chamfer 1/4" - 3/4" O.D. valve guides. Helps eliminate damage to seals. Use at low speed using hand drill, press, or seat guide machine. 1/2" x 1-5/8" long shank.



Part #IC118

Rocker Stud Remover Tap Alignment Kit

Use to remove factory installed rocker studs. Position tool over side-by-side studs, screw down on the retaining nut, and the stud is forced out. Assures accurate alignment when tapping the boss screw-in stud, just use the tool with supplied arbor.

Use with Chevy V6 & V8 Engines



Part #4363

Countersink for Bolt Holes

Chatterless countersink restores chamfer to about the top 1/16" of head bolt holes after block resurfacing. Prevents pulling thread material up into gaskets and making it seal poorly when you torque heads.

Part #IC121



4 Flute Piloted Cutters

Three Different Sizes Provide a Variety of Tasks



Application	Cutting Dia.	Shank Dia.	O.A.L.	Part #
Machining Guide Boss for Higher Cam Lift	11/16"	1/4"	3-1/8"	IC113
Use to True Head Bolt Seats. Helps Prevent Improper Torque.	15/16"	1/4"	3-1/8"	IC150
Cut Stud Bosses & Guide Tops	1-1/8"	1/4"	2-7/8"	IC140

Above Cutters Use 3/16" Shank Pilots Sold Below

Interchangeable Pilots (3/16" Shank)

Size	Part #
5/16" (.312)	IC134
11/32" (.3435)	IC135
3/8" (.375)	IC136
7/16" (.437)	IC152
1/2" (.500)	IC137



Rocker Stud Boss Cutter

Use with hand drill or seat & guide machine to cut (face) bosses without removing rocker arm studs for correct alignment to head. Complete with 2 carbide blades and depth control set screw.

Cutter Dia. 11/16"	Part #
Boss Cutter w/2 Blades	SL9311
Carbide Cutter Blade Ea. (2 Required)	SL9312
3/8" Pilot (Use w/Studs Removed)	SL9311A



Bolt Thread Hole Cleaner

Use with penetrant lube to clean rusty, dirty threads. Helps prevent improper torque readings. Use with forward/reverse drill motor at low speed, or with tap wrench, working tool in & out of hole.

Size	Part #
1/2-13	IC101
7/16-14	IC103
10mm-1.5	IC105
11mm-1.5	IC107
12mm-1.75	IC109





VALVE STEM SEAL INSTALLATION KIT

INSTALL VALVE STEM SEALS WITH VALVES IN HEAD



Installation tool and seal driver pilots off valve stem to ensure proper alignment. Each seal driver is color coded for each seal size.



DESCRIPTION	PART #
COMPLETE KIT INCLUDES BELOW:	T100KIT
5.5mm Seal Driver	T101
6.0mm Seal Driver	T102
6.6mm Seal Driver	T103
7.0mm Seal Driver	T104
8.0mm Seal Driver	T105
11/32" Seal Driver	T106
Seal Driver Holder	T107



PART #
4608

UNIVERSAL VALVE SEAL REMOVAL PLIERS

Remove seals on most OHC engines, including 4-valve cylinder heads that have a very narrow access to the seal. Pliers reach around valve stem for easy removal. Serrated tip removes OE or aftermarket seals.

TEFLON® SEAL INSTALLER

NO MORE SORE FINGERS!

Allows the seal to be driven squarely. Safely Install: .500, .531, & .562 Guide OD Seals (11/32", 3/8" Valve Stem)



PART #
T3



VARIABLE ANGLE VALVE STEM SEAL PLIERS

NARROW ACCESS DESIGN FOR THE SMALLEST VALVE STEM SEALS

PART #
4609

Rotating jaw assembly allows the plier handles to rotate to any position above the head while jaw assembly goes down into the spring cavity. Use straight or at any angle up to 90°. Jaw tip has a thin ledge for hooking underneath the stem seal. Also has vertical raised ridges inside the jaws to help grip the outside diameter of the valve stem seal.

180° Rotation!



VALVE GUIDE O.D. MACHINING TOOLS

A MUST FOR ALL PRESS-ON VALVE STEM SEALS

Individual carbide-tipped cutter bodies and hardened ground pilots are interchangeable and chuck into any portable drill or press. Does 3 jobs at once.

- 1) Faces the top to the correct length.
 - 2) Sizes the guide OD to accept press-on seals.
 - 3) Chamfers to top to prevent damage to seal.
- Order Body and Pilots Separately

CUTTER BODIES		PILOTS	
SIZE	PART #	STEM DIA.	PART #
.415	SL1435A	5/16" - 8mm	SL1435B
.428	SL1433A	11/32"	SL1438B
.475	SL1434A	3/8"	SL1442B
.500	SL1438A	7/16"	SL1445B
.530	SL1442A		
.562	SL1443A		
.625	SL1445A		

DELUXE GUIDE-LINER® AIR INSTALLATION KITS

Complete Kit featuring Deluxe Tooling, including an upgraded Carbide Boring Tool, Go-No-Go Gauge, Carbide Guide Top Cutter w/Pilot, Flex Hone, Removal Tool & Storage Box, complete with step-by-step instructions.



QUICK 5 STEP PROCESS

1. BORE
2. INSTALL
3. SIZE
4. TRIM
5. FINISH

Guide Size	Kit #	Boring Reamer	Reamer Bushing	Go-No-Go Gauge	Guide Brush	Auto Installer	Ball Broaches	GuideTop Cutter	Cutter Pilot	Flex Hone	Removal Tool
5/16"	SL1600NX	SL1719CB	SL8561	SL2500	SL1036	SL9961	SL5844 (.312), SL5845 (.313), SL5846 (.314)	SL4235	SL4238	4162	SL5680
11/32"	SL1601NX	SL1725CB	SL8566	SL2501	SL1036	SL9962	SL5857 (.3435), SL5858 (.3445), SL5859 (.3455)	SL4235	SL4239	4163	SL5681
3/8"	SL1602NX	SL1735CB	SL8571	SL2502	SL1036	SL9963	SL5872 (.374), SL5873 (.375), SL5874 (.376)	SL4235	SL4240	4164	SL5682
5mm	SL1613NX	SL3556CC	SL9921	SL2514	SL1036	SL9957	SL5901 (.1973), SL5902 (.1978), SL5903 (.1983)	SL4230	SL4247	4173	SL5677
5.5mm	SL1614NX	SL3561CC	SL9922	SL2498	SL1036	SL9958	SL5806 (.217), SL5809 (.2175), SL5810 (.218), SL5811 (.2185)	SL4233	SL4246	4173	SL5678
6mm	SL1612NX	SL3566CB	SL8601	SL2499	SL1036	SL9965	SL5815 (.237), SL5816 (.2375), SL5817 (.238), SL5818 (.2385)	SL4233	SL4245	4160	SL5679
6.6mm	SL1606NX	SL3571CB	SL8581	SL2504	SL1036	SL9966	SL5825 (.260), SL5826 (.261), SL5827 (.262)	SL4233	SL4242	4160	SL5684
7mm	SL1607NX	SL3576CB	SL8586	SL2505	SL1036	SL9967	SL5835 (.276), SL5836 (.277), SL5837 (.278), SL5838 (.279)	SL4233	SL4243	4161	SL5685
8mm	SL1608NX	SL3581CB	SL8591	SL2506	SL1036	SL9968	SL5847 (.315), SL5848 (.316), SL5849 (.317)	SL4235	SL4238	4162	SL5686
9mm	SL1609NX	SL3586CB	SL8589	SL2507	SL1036	SL9969	SL5864 (.354), SL5865 (.355), SL5866 (.356)	SL4235	SL4244	4163	SL5687

STANDARD GUIDE-LINER® AIR INSTALLATION KITS

Designed for the smaller to mid-sized shop. Each kit includes a carbide boring tool with accessories, packaged in a storage box, with complete step-by-step instructions. These kits are designed to be used with the SL8550 Bushing Kit.

Guide Size	Kit #	Boring Reamer	Reamer Bushing	Guide Brush	Auto Installer	Ball Broaches	Trim Tool
5/16"	SL1600RX	SL1719C-9	SL8561	SL1036	SL9961	SL5844 (.312), SL5845 (.313), SL5846 (.314)	SL1787
11/32"	SL1601RX	SL1725C-9	SL8566	SL1036	SL9962	SL5857 (.3435), SL5858 (.3445), SL5859 (.3455)	SL1797
3/8"	SL1602RX	SL1735C-9	SL8571	SL1036	SL9963	SL5872 (.374), SL5873 (.375), SL5874 (.376)	SL1807
5.5mm	SL1614RX	SL3561CC	SL9922	SL1036	SL9958	SL5806 (.217), SL5809 (.2175), SL5810 (.218), SL5811 (.2185)	SL3184
6mm	SL1612RX	SL3566C-9	SL8601	SL1036	SL9965	SL5815 (.237), SL5816 (.2375), SL5817 (.238), SL5818 (.2385)	SL3185
6.6mm	SL1606RX	SL3571C-9	SL8581	SL1036	SL9966	SL5825 (.260), SL5826 (.261), SL5827 (.262)	SL3205
7mm	SL1607RX	SL3576C-9	SL8586	SL1036	SL9967	SL5835 (.276), SL5836 (.277), SL5837 (.278), SL5838 (.279)	SL1897
8mm	SL1608RX	SL3581C-9	SL8591	SL1036	SL9968	SL5847 (.315), SL5848 (.316), SL5849 (.317)	SL1787
9mm	SL1609RX	SL3586C-9	SL8589	SL1036	SL9969	SL5864 (.354), SL5865 (.355), SL5866 (.356)	SL3235



VALVE SEAT BUSHING KITS

These kits offer sizes to fit most valve seats. Bushings easily disconnect from fixture head for quick size changes. Kits come in a sturdy, padded plastic storage case.

PART# SL9907 (7PC. KIT)

1"	SL9911
1-3/16"	SL9912
1-3/8"	SL9913
1-5/8"	SL9915
1-3/4"	SL9916
2"	SL9918
2-1/4"	SL9919

PART# SL9910 (9PC. KIT)

1-1/2"	SL9914
1-7/8"	SL9917

SL9910 INCLUDES EVERYTHING FROM SL9907 PLUS TWO EXTRA SIZE.





GUIDE-LINER® UNIVERSAL SIZE CHART

Selecting The Correct Guide-Liner

10% Discount on 5 or More Boxes

Select the proper guide I.D. which corresponds to the clearances you desire. All Guide-Liners® have been designed for maximum performance when finished to the stated minimum finished guide I.D. or larger.

GUIDE SIZE	MIN. I.D.	LENGTH	BRONZE BULLET-INT. SPIRAL		SMOOTH WALL		DFL	
			16 PACK	100 PACK	16 PACK	100 PACK	16 PACK	100 PACK
5/16"	.309	2.500	SL1916ST	SL1916STA	NA	NA	NA	NA
	.310	2.250	SL19112ST	SL19112STA	NA	NA	NA	NA
		3.130	SL1927ST	SL1927STA	NA	NA	SL1927C	SL1927CA
	.312	3.13	NA	NA	SL1840	SL1840A	SL1840C	SL1840CA
		3.13	SL1840ST	SL1840STA	N/A	N/A	NA	NA
.313	1.88	SL1913ST	SL1913STA	NA	NA	NA	NA	
BORED HOLE TOLERANCES .341 (8.66) – .3425 (8.700)								
11/32"	.338	2.40	SL1938ST	SL1938STA	NA	NA	NA	NA
	.339	2.50	SL1961ST	SL1961STA	NA	NA	NA	NA
	.341	2.50	SL1983ST	SL1983STA	SL1983	SL1983A	NA	NA
	.342	2.500	SL1932ST	SL1932STA	SL1932	SL1932A	NA	NA
	.343	2.500	SL1923ST	SL1923STA	NA	NA	SL1923C	SL1923CA
		3.130	SL1841ST	SL1841STA	SL1841	SL1841A	NA	NA
		3.880	NA	NA	SL1855	SL1855A	NA	NA
.344	2.500	SL1921ST	SL1921STA	NA	NA	SL1921C	SL1921CA	
BORED HOLE TOLERANCES .372 (9.45) – .3735 (9.487)								
3/8"	.368	2.500	SL1976ST	SL1976STA	NA	NA	NA	NA
	.370	3.130	SL1902ST	SL1902STA	NA	NA	NA	NA
	.371	2.500	SL1985ST	SL1985STA	NA	NA	NA	NA
	.373	2.500	SL1977ST	SL1977STA	SL1977	SL1977A	SL1977C	SL1977CA
		3.130	SL1992ST	SL1992STA	N/A	N/A	NA	NA
	.374	2.500	SL1974ST	SL1974STA	SL1974	SL1974A	NA	NA
		3.130	SL1842ST	SL1842STA	SL1842	SL1842A	SL1842C	SL1842CA
.375	2.500	SL1975ST	SL1975STA	SL1975	SL1975A	SL1975C	SL1975CA	
BORED HOLE TOLERANCES .404 (10.26) – .4055 (10.30)								
5MM	.197	1.630	SL1858ST	SL1858STA	NA	NA	NA	NA
BORED HOLE TOLERANCES .212 (5.37) – .2125 (5.395)								
5.5MM	.216	2.250	SL1857ST	SL1857STA	NA	NA	SL1857C	SL1857CA
	.217	2.500	SL1900ST	SL1900STA	NA	NA	NA	NA
BORED HOLE TOLERANCES .247 (6.27) – .2485 (6.312)								
6MM	.233	2.000	SL1998ST	SL1998STA	N/A	N/A	NA	NA
	.234	1.880	SL1999ST	SL1999STA	N/A	N/A	NA	NA
	.236	2.250	SL1856ST	SL1856STA	N/A	N/A	SL1856C	SL1856CA
	.238	2.250	SL1906ST	SL1906STA	NA	NA	NA	NA
BORED HOLE TOLERANCES .266 (6.76) – .2675 (6.795)								
6.6MM	.260	2.500	SL1849ST	SL1849STA	NA	NA	SL1849C	SL1849CA
BORED HOLE TOLERANCES .290 (7.37) – .2915 (7.404)								
7MM	.273	2.500	SL1904ST	SL1904STA	NA	NA	NA	NA
	.275	2.500	SL1929ST	SL1929STA	NA	NA	NA	NA
	.275	3.00	SL19100ST	SL19100STA	NA	NA	NA	NA
	.276	2.750	SL19107ST	SL19107STA	NA	NA	SL19107C	SL19107CA
	.277	2.500	SL1850ST	SL1850STA	SL1850	SL1850A	SL1850C	SL1850CA
	.278	1.810	SL1903ST	SL1903STA	NA	NA	NA	NA
	.279	2.500	SL1909ST	SL1909STA	NA	NA	NA	NA
BORED HOLE TOLERANCES .308 (7.82) – .3095 (7.861)								

Note: Do NOT hone or ream DFL Coated Guide-Liner® after installation.

NOTE: BOLD DESIGNATES UNIVERSAL SIZE/LENGTH



GUIDE-LINER® UNIVERSAL SIZE CHART

10% Discount on 5 or More Boxes

Selecting The Correct Guide-Liner

Select the proper guide I.D. which corresponds to the clearances you desire. All Guide-Liners® have been designed for maximum performance when finished to the stated minimum finished guide I.D. or larger.

GUIDE SIZE	MIN. I.D.	LENGTH	BRONZE BULLET-INT. SPIRAL		SMOOTH WALL		DFL	
			16 PACK	100 PACK	16 PACK	100 PACK	16 PACK	100 PACK
8MM	.312	2.500	SL1944ST	SL1944STA	NA	NA	NA	NA
	.313	2.500	SL1933ST	SL1933STA	SL1933	SL1933A	NA	NA
	.313	3.000	SL1937ST	SL1937STA	NA	NA	NA	NA
	.314	2.500	SL1997ST	SL1997STA	NA	NA	NA	NA
	.315	2.500	SL1939ST	SL1939STA	NA	NA	SL1939C	SL1939CA
	.315	3.150	SL1968ST	SL1968STA	NA	NA	NA	NA
	.316	2.500	SL1851ST	SL1851STA	SL1851	SL1851A	SL1851C	SL1851CA
	.317	2.500	SL1940ST	SL1940STA	NA	NA	SL1940C	SL1940CA
	.317	3.130	SL19101ST	SL19101STA	NA	NA	NA	NA
	.318	2.500	SL1942ST	SL1942STA	NA	NA	SL1942C	SL1942CA
		2.750	SL1967ST	SL1967STA	NA	NA	NA	NA
BORED HOLE TOLERANCES .346 (8.79) – .3475 (8.827)								
9MM	.346	2.500	SL19103ST	SL19103STA	NA	NA	NA	NA
		2.750	SL1852ST	SL1852STA	SL1852	SL1852A	SL1852C	SL1852CA
	.354	3.130	SL1925ST	SL1925STA	NA	NA	NA	NA
	.356	2.500	SL1943ST	SL1943STA	NA	NA	NA	NA
BORED HOLE TOLERANCES .385 (9.78) – .3865 (9.817)								
10MM	.393	3.130	SL1920ST	SL1920STA	NA	NA	NA	NA
BORED HOLE TOLERANCES .424 (10.77) – .4255 (10.81)								
11MM	.432	2.500	SL1988ST	SL1988STA	NA	NA	NA	NA
	.433	3.25	SL1905ST	SL1905STA	NA	NA	NA	NA
BORED HOLE TOLERANCES .466 (11.84) – .4675 (11.87)								

Note: Do NOT hone or ream DFL Coated Guide-Liner® after installation.

NOTE: BOLD DESIGNATES UNIVERSAL SIZE/LENGTH

.036 OVERSIZE THIN-WALL

Special Oversize Guide-Liners® repair oversized/damaged standard Thin-Wall Guide-Liner® bores.

		16 PACK	100 PACK	
5/16"	.312	3.13	SL1839	SL1839A
	.344 (8.74) BORED HOLE MAXIMUM ID			
11/32"	.343	3.130	SL1860	SL1860A
	.375 (9.53) BORED HOLE MAXIMUM ID			
3/8"	.374	3.130	SL1861	SL1861A
	.406 (10.31) BORED HOLE MAXIMUM ID			

.060 HEAVY DUTY THICK-WALL

Use for special applications including valve conversions.

		16 PACK	100 PACK	
5/16"	.312	3.25	SL1844	SL1844A
	.3735 (9.49) BORED HOLE MAXIMUM ID			
11/32"	.343	3.25	SL1845	SL1845A
	.4055 (10.30) BORED HOLE MAXIMUM ID			

GUIDE-LINER® REMOVAL TOOL

Easily removes old Guide-Liners® without disrupting original guide bore. Pilot aligns tool as you drive it through the guide. SL5758 Air Hammer Ball Broach Holder/Driver required with removal tool when using pneumatic hammer to remove the Guide-Liner®



GUIDE-LINERS SIZE	PART NO.	GUIDE-LINERS SIZE	PART NO.
5/16"	SL5680	6mm	SL5679
11/32"	SL5681	6.6mm	SL5684
3/8"	SL5682	7mm	SL5685
5.0mm	SL5677	8mm	SL5686
5.5mm	SL5678	9mm	SL5687

GUIDE-LINER® TRIMMING TOOL

For manually trimming off excess Guide-Liner® material after installation.



PART NO.	SIZE	PART NO.	SIZE
SL3183	5.5mm	SL1787	8mm
SL3185	6mm	SL3235	9mm
SL3205	6.6mm	SL1787	5/16"
SL1897	7mm	SL1797	11/32"
		SL1807	3/8"



BLACK BEAUTY® CARBIDE BORING TOOLS FOR POWDERED METAL AND CAST IRON GUIDES

The Ultimate Boring Tool for Precision and Extra Long Life

Replacement Boring Tools for
NX Series Guide-Liner® Kits



SIZE	USE WITH	PART NO.
.312 - .030	5/16" Guide-Liners®	SL1719CB
.343 - .030	11/32" Guide-Liners®	SL1725CB
.375 - .030	3/8" Guide-Liners®	SL1735CB
.236 - .030	6.0mm Guide-Liners®	SL3566CB
.260 - .030	6.6mm Guide-Liners®	SL3571CB
.275 - .030	7mm Guide-Liners®	SL3576CB
.315 - .030	8mm Guide-Liners®	SL3581CB
.354 - .030	9mm Guide-Liners®	SL3586CB
.394 - .030	10mm Guide-Liners®	SL3591CB
.437 - .030	11mm Guide-Liners®	SL1749CB

- Hardness - Rockwell C hardness of 93-95 allows faster operating speeds with extended tool life - even in hardened guides.
- Unique molecular structure resists galling or chip build up, resulting in reduced tool temperature.
- Lubricity - The lubricious surface aids in maintaining a lower temperature and efficient chip removal.
- Low temperature application process eliminates the possibility of tool warpage or annealing.
- Precision - Each reamer is carefully crafted to a .0002 tolerance or less. Hole sizing is true and consistent.

Genuine K-Line® Industries, Inc. Product
9" Overall Length

STANDARD CARBIDE BORING TOOLS FOR POWDERED METAL AND CAST IRON GUIDES

Replacement Boring Tools for
RX Series Guide-Liner® Kits



SIZE	USE WITH	PART NO.
.312 - .030	5/16" Guide-Liners®	SL1719C-9
.343 - .030	11/32" Guide-Liners®	SL1725C-9
.375 - .030	3/8" Guide-Liners®	SL1735C-9
.236 - .030	6.0mm Guide-Liners®	SL3566C-9
.260 - .030	6.6mm Guide-Liners®	SL3571C-9
.275 - .030	7mm Guide-Liners®	SL3576C-9
.315 - .030	8mm Guide-Liners®	SL3581C-9
.354 - .030	9mm Guide-Liners®	SL3586C-9
.394 - .030	10mm Guide-Liners®	SL3591C-9
.437 - .030	11mm Guide-Liners®	SL1749C-9

9" Overall Length

BLACK BEAUTY® CARBIDE BORING TOOLS FOR BRONZE GUIDES

Specifically designed to bore Manganese Bronze, Aluminum Bronze and Silicon Aluminum Bronze prior to Guide-Liner® installation.



SIZE	PART NO.
5/16" - 30	SL3519CSP
11/32" - 30	SL3525CSP
3/8" - 30	SL3535CSP
5.5mm - 30	SL3561CSP
6mm - 30	SL3566CSP
6.6mm - 30	SL3571CSP
7mm - 30	SL3576CSP
8mm - 30	SL3581CSP
9mm - 30	SL3586CSP

9" Overall Length

GUIDE PRO® SOLID CARBIDE BLACK BEAUTY® BORING TOOLS

SIZE	USE WITH	PART NO.
.312 - .030	5/16"	SL1719CC
.343 - .030	11/32"	SL1725CC
.375 - .030	3/8"	SL1735CC

SIZE	USE WITH	PART NO.
.197 - .030	5mm	SL3556CC
.216 - .030	5.5mm	SL3561CC
.236 - .030	6mm	SL3566CC
.275 - .030	7mm	SL3576CC
.315 - .030	8mm	SL3581CC
.354 - .030	9mm	SL3586CC



- 6 flute design for faster cutting action
- Solid carbide and patented **Black Beauty®** process provide increased longevity
- Left hand flutes send chips down out of the way for size consistency
- Accurately bores in most types of valve guide materials
- Pointed pilot for faster hole location
- Patented tool design provides a smoother finish

An exclusive line of **Guide-Liner®** boring tools designed to cut faster, straighter holes. Coupled with our patented **Black Beauty®** process and patented cutting geometric design, these solid carbide reamers provide a smoother finish. Life expectancy is considerably greater than standard brazed carbide boring tools.

AFTERMARKET BORING TOOLS GUIDE-LINER HAND BORING TOOLS



A fast and simple way to bore out your valve guides to accept .030 oversized Valve Guide-Liner®. The 1" pilot will accurately align the carbide reamer to cut a precise bore while using only a high RPM air or electric drill. This tool is ideal for small shops to PER's.

Seat Bushing Sold Separately, Not Supplied w/Comp. Assembly

Boring Accessories & Replacement Tooling

Guide Size	Complete Assembly	Reamer Bushing	Top Retainer	Spring	Carbide Reamer*
5/16"	SL8560	SL8561	SL8593	SL8596	SL1719C
11/32"	SL8565	SL8566	SL8593	SL8596	SL1725C
3/8"	SL8570	SL8571	SL8594	SL8597	SL1735C
7/16"	SL8575	SL8576	SL8594	SL8597	SL1749C
5mm	SL8611	SL8612	SL8592	SL8596	SL3556C
5.5mm	SL8613	SL8614	SL8592	SL8596	SL3561C
6mm	SL8600	SL8601	SL8592	SL8596	SL3566C
6.6mm	SL8580	SL8581	SL8592	SL8596	SL3571C
7mm	SL8585	SL8586	SL8592	SL8596	SL3576C
8mm	SL8590	SL8591	SL8593	SL8596	SL3581C
9mm	SL8595	SL8589	SL8593	SL8597	SL3586C

*For Black Beauty-style Carbide Reamers, add "B" to the end of the Part # (I.E. SL1719CB)

BORING BUSHING KIT

Kit Contains: 7 Bushings To Fit All The Popular Valve Seat Sizes.

Size	Part#	Size	Part#
1"	SL8552	1-5/8"	SL8555
1-3/16"	SL8553	1-3/4"	SL8556
1-3/8"	SL8554	2"	SL8557
1-1/2"	*SL8598	2-1/4"	SL8558

* Not Included In Kit



PART #
SL8550

AIR HAMMER BALL BROACH HOLDER/DRIVER

Replaceable
Rubberized
Bumper



.401 Parker Shank

SIZE	PART NO.
For Ball Broaches 5mm - 8mm	SL5758
1 For Ball Broaches 11/32" - 11mm 1/32"	SL5759
Replacement Bumper	SL5759B



	PART NO.
5/16"	SL9961
11/32"	SL9962
3/8"	SL9963
8mm	SL9968
9mm	SL9969
10mm	SL9970
11mm	SL9964

BRONZE BULLET® AUTO INSTALLER

#1 Rated Installation Tool

This universal tool features a **Guide-Liner®** holder incorporated into the driver assembly, making installation quick and effortless. Attach the Auto-Installer to the KL2680 H.D. Air Hammer, insert the **Bronze Bullet®** liner into the holder assembly, position the driver pilot and Bronze Bullet® liner into the bored hole and drive the Bronze Bullet® liner into the hole until the driver shoulder reaches the guide boss. The Auto-Installer eliminates the need for a separate holder and driver and can cut installation time in half. **U.S. Patent No. 5,355,572**



	PART NO.
5mm	SL9957
5.5mm	SL9958
6mm	SL9965
6.6mm	SL9966
7mm	SL9967

SMALL DIAMETER

BRONZE BULLET® AUTO INSTALLER

This line of metric auto installers features a reduced diameter **Guide-Liner®** holder for improved access to the valve guide in modern aluminum cylinder heads with small diameter valve bowls or overhead cam towers. **U.S. Patent No. 5,355,572**

REAMER BUSHINGS

Replacement Reamer Bushings for NX/RX Series Guide-Liner® Kits



SIZE	PART NO.	SIZE	PART NO.	SIZE	PART NO.
5/16"	SL8561	5.0mm	SL9921	7mm	SL8586
11/32"	SL8566	5.5mm	SL9922	8mm	SL8591
3/8"	SL8571	6mm	SL8601	9mm	SL8589
1/2"	SL9923	6.6mm	SL8581		



PART #
SL4235A

DELUXE GUIDE-TOP CUTTER WITH INTERCHANGEABLE CUTTER PILOTS

Deluxe Guide-Top Cutter spot faces excess **Guide-Liner®** material or faces off guide boss and combustion side of the valve guide if needed.

The tool shank is 5/8" in diameter x 4" long and the reversible carbide blade is .720 in diameter.

SL4236A REPLACEMENT CARBIDE BLADE

Cutter Pilots

CUTTERS	PART NO.	CUTTERS	PART NO.
5/16"-8MM	SL4238	9mm	SL4244
11/32"	SL4239	10mm	SL4248
3/8"	SL4240	11mm	SL4241



PART #
SL4235

GUIDE-TOP CUTTER

Designed to be used when cutting excess **Guide-Liners®**. It has replaceable carbide blades, which are fastened on with screws. Uses standard guide-top cutter pilots.

SL4236 REPLACEMENT CARBIDE BLADE (2 REQUIRED)

SL4237 REPLACEMENT HOLDING SCREW

5MM DELUXE GUIDE-TOP CUTTER

PART #

SL4230

This deluxe cutter is ideal for cutting excess **Guide-Liner®** material from valve guide bosses in limited clearance areas found on small port cylinder heads. The tool shank is 3/8" in diameter x 3 3/4" long and the reversible carbide blade can cut up to a 7/16" diameter guide boss. For use with the KL4247 5mm Cutter Pilot.

SL4247 CUTTER PILOT

SL4230A REPLACEMENT CARBIDE BLADE

HARD CHROME PLATED BALL BROACHES

A simple, fast method for sizing the inside diameter of **Bronze Guide-Liners®**. Made of high quality tool steel, hard chrome plated, with a special ground double ball configuration that quickly sizes the inside diameter and eliminates reaming or honing. Use with **SL5758** or **SL5759** Broach Holder/Driver.

BALL BROACHES SIZE	BALL SIZE	PART #	
	5/16"	.310 (7.87)	SL5842
		.311 (7.90)	SL5843
		.312 (7.92)	SL5844
		.313 (7.95)	SL5845
		.314 (7.98)	KL5846
	11/32"	.339 (8.61)	SL5853
		.340 (8.64)	SL5854
		.341 (8.66)	SL5855
		.342 (8.69)	SL5856
.3435 (8.725)		SL5857	
.3445 (8.750)		SL5858	
.345 (8.76)		SL5859	
.3455 (8.776)		SL5859	
3/8"	.3465 (8.801)	SL5860	
	.347 (8.81)	SL5886	
	.372 (9.45)	SL5871	
	.373 (9.47)	SL5869	
	.374 (9.50)	SL5872	
	.3745 (9.512)	SL5892	
	.375 (9.53)	SL5873	
	.3755 (9.538)	SL5893	
	.376 (9.55)	SL5874	
	.377 (9.56)	SL5890	
.378 (9.60)	SL5891		

BALL BROACHES SIZE	BALL SIZE	PART #	
	5mm	.1973 (5.011)	SL5901
		.1978 (5.024)	SL5902
		.1983 (5.037)	SL5903
		.1988 (5.050)	SL5904
	5.5mm	.215 (5.46)	SL5806
		.216 (5.49)	SL5807
		.217 (5.51)	SL5808
		.2175 (5.525)	SL5809
		.218 (5.54)	SL5810
.2185 (5.550)		SL5811	
6mm	.234 (5.94)	SL5812	
	.235 (5.97)	SL5813	
	.236 (6.00)	SL5814	
	.237 (6.02)	SL5815	
	.2375 (6.033)	SL5816	
	.238 (6.05)	SL5817	
	.2385 (6.058)	SL5818	
	.239 (6.07)	SL5819	
	.2395 (6.083)	SL5820	
	.240 (6.10)	SL5898	
6.5mm	.260 (6.60)	SL5825	
	.261 (6.63)	SL5826	
	.262 (6.65)	SL5827	
	.263 (6.68)	SL5828	

BALL BROACHES SIZE	BALL SIZE	PART #	
	7mm	.274 (6.96)	SL5833
		.275 (6.99)	SL5834
		.276 (7.01)	SL5835
		.2765 (7.023)	SL5832
		.277 (7.04)	SL5836
	8mm	.278 (7.06)	SL5837
		.279 (7.09)	SL5838
		.280 (7.11)	SL5839
		.281 (7.14)	SL5840
.282 (7.16)		SL5841	
9mm	.283 (7.19)	SL5831	
	.315 (8.00)	SL5847	
	.316 (8.03)	SL5848	
	.317 (8.05)	SL5849	
	.318 (8.08)	SL5850	
10mm	.319 (8.10)	SL5851	
	.320 (8.13)	SL5852	
	.354 (8.99)	SL5864	
	.355 (9.02)	SL5865	
11mm	.356 (9.04)	SL5866	
	.357 (9.07)	SL5862	
	.394 (10.00)	SL5876	
11mm	.395 (10.03)	SL5877	
	.396 (10.06)	SL5878	
	.433 (11.00)	SL5880	
	.434 (11.02)	SL5881	
.435 (11.05)	SL5882		

IMPORTANT: to obtain the recommended finished guide I.D., a slightly larger ball broach will be required (due to material flow-back that occurs during this sizing operation) typically, .001" (.025mm) to .0015" (.038mm) larger than the desired finished I.D.



SMALL DIAMETER DELUXE GUIDE-TOP CUTTER

PART #
SL4233

REVERSIBLE CARBIDE BLADE

This deluxe cutter is ideal for cutting excess **Guide-Liner®** material from valve guide bosses in limited clearance areas found on small port cylinder heads. Pilots are interchangeable with the larger SL4235A Deluxe Guide-Top Cutter. The tool shank is 3/8" in diameter x 3 3/4" long and the reversible carbide blade can cut up to a 7/16" diameter guide boss.

SL4234 REPLACEMENT CARBIDE BLADE

Cutter Pilots	CUTTERS	PART NO.
	5.5MM	SL4246
	6.0MM	SL4245
	6.6MM	SL4242
	7.0MM	SL4243

MID-SIZE .530 DIAMETER GUIDE-TOP CUTTER

PART #
SL4232

Reversible Carbide Blade

This guide-top cutter fills the size gap between the SL4233 (.437) and the SL4235A (.720). Designed for machining any press-in valve guides found in aluminum cylinder heads; bronze, powdered metal, or steel. Uses standard guide-top cutter pilots.

SL4232A REPLACEMENT CARBIDE BLADE





Valve Stem Height Gauge Set

New, easy to use, comes complete with five interchangeable, lightweight, billet aluminum measuring bodies and .001 dial indicator with solid billet aluminum display base. Each body is presettable for reference use. Made in the U.S.A.

Part #KK975DX
Complete Set Includes:
All Items Pictured Below



NEW



Description	Dimensions	Part #
Large Measuring Body	1.250" O.D., 1.090" I.D., 3.300" OAL	KK975-1
Medium Measuring Body	1.060" O.D., .812" I.D., 2.840" OAL	KK975-2
Small Measuring Body	.900" O.D., .770" I.D., 2.840" OAL	KK975-3
Small/Tall Measuring Body	.900" O.D., .770" I.D., 3.840" OAL	KK975-4
Ex-Small/Tall Measuring Body	.750" O.D., .625" I.D., 3.830" OAL	KK975-5

Height Gauges All Gauges Include 1" Setting Fixture



Height Gauge w/Indicator, 1-1/4" dia. body, interchangeable body sleeves to fit domestic or import.
Part #KK719



Height Gauge w/Indicator, 22mm dia. body.
Part #KK727



Height Gauge w/Indicator, long body, 1" dia. body.
Part #KK728

Valve Spring Height Gauge

Fast, accurate measuring of installed valve spring height. Compare reading to factory specs or use before and after valve work to find out how many spring spacers you need to restore original height.

Required to get proper installed spring height when using aftermarket springs. Standard micrometer type dial shows installed height within .001" for high performance work & all top quality valve jobs.



Height Range	Part #
1.600" - 2.100" (Most V8's)	KK712
1.400" - 1.800" (4 & 6 Cyl.)	KK713

Valve Stem Heights Book For Domestic Engines Thru 1986



Dimensions In Valve Grinding

Part #6000A

DIGITAL BENCH TOP VALVE SPRING TESTER


NEW

These digital bench top valve spring testers are the most accurate in determining measured valve spring pressure. They are manufactured from heavy-duty anodized billet aluminum and can check valve springs from 1.5 in. diameters and 3 7/8 in. tall. The digital display reads in 1 lb. increments and has backlighting for easy identification. The digital bench top valve spring testers also feature peak hold and automatic shutoff.

PART #
VST5776

SPRING SEAT PICK

Handy tool to remove O.E. spring seats prior to degreasing. Made of heat-treated carbon steel for durability. Knurled grip for positive control. Excellent tool for scribing.

PART #
4298

VALVE SPRING SEAT CUTTERS

Carbide-tipped valve spring seat cutters for enlarging/correcting valve spring pads and to lower spring seats for high-lift cams. Use pilots with an electric drill only.

Cutter Bodies

I.D.	x	O.D.	Part #
.625	x	1.350	SL1457
.625	x	1.476	SL1460
.625	x	1.500	SL1458
.625	x	1.570	SL1461
.625	x	1.635	SL1462
.625	x	1.750	SL1459

Pilots

Stem Dia.	Part #
5/16"-8mm	SL1435B
11/32"	SL1438B
3/8"	SL1442B
7/16"	SL1445B



DIGITAL MINI VALVE SPRING TESTER

NEW

Here's the affordable, portable way to test springs. The hex-design body is very versatile: use it in a vise or an arbor press. The device is designed to test valve spring pressure ranging from zero to 700 pounds (or 318 kgs) with an indicating resolution of 2 pounds (or 1 kg). Additional features include peak hold, backlit display screen, and automatic shut-off.



DIGITAL VALVE SPRING PRESSURE TESTER

NEW

Save time and money by enabling you to check valve spring pressures without removing the heads from the block. The base can be adjusted to fit a wide variety of common aluminum rocker lengths and offsets. The gauge reads in five-pound increments and has a peak hold feature and a backlit screen. Made from tough billet aluminum for corrosion protection and the handle area is knurled for a positive no-slip grip. The bright readout is powered by a single, long lasting 9-volt battery.


PART #
VST7601

BENCH TOP VALVE SPRING TESTER

GREAT VALUE!

Accurately check spring height versus spring pressure with our new heavy-duty bench top tester. Check springs up to 2" diameter, 4" in height, and 700 lbs. of spring pressure. Can be bench or vise mounted.


PART #
VST5075

PORTABLE VALVE SPRING TESTER

Need to check spring pressure at the track? No problem with this stud style valve spring compressor. This fully adjustable tool fits easily onto your rocker arm for pressure checks and will measure pressure up to 600 lbs.


PART #
VST5099

MINI VALVE SPRING TESTER

This Mini Valve Spring Tester is designed to work with any drill press, or bench vise.

DESCRIPTION	PART #
MINI VALVE SPRING TESTER (0-300 LBS.)	VST5080
MINI VALVE SPRING TESTER (0-600 LBS.)	VST5081





HEAVY DUTY AIR SPRING COMPRESSOR

Extra heavy duty, air powered valve spring compressor handles most types of valve springs, including racing springs in excess of 900 lbs. The no-flex frame is manufactured from billet stock metal alloys. Dual stage pneumatic controls operate the adjustable length ram. The large spring shoe compresses big block and most oversized racing springs up to 1.600. An optional shoe is available for larger springs.

DESCRIPTION	PART #
Repl. Shoe (1.675 I.D. Jaw)	SL9000-7
Optional Shoe (1.750 I.D. Jaw)	SL9000-8



PART #
SL9000

NEW Premium Air Operated Compressor



New fast operating shop grade air powered valve spring compressor handles most types of valves Springs including racing springs dual stage pneumatic controls operate the adjustable length ram optional spring shoes **rebuild kit are available upon request.**

PART #
4260N

INCLUDES: 3 sets of quick change jaws (for 7/8" - 2-1/2" dia. springs.)

Replacement jaws 4261, 4262 and 4263.

Air Operated Compressor

FEATURES: Two Finger Control. Operates with 90 psi air pressure. Parallel lift will not bend valve stems. Develops 270 lbs of pressure.

INCLUDES: 3 sets of quick change jaws (for 7/8" - 2-1/2" dia. springs.)

WEIGHS: 6-1/2 lbs.

REPLACEMENT PARTS:

Replacement jaws 4261, 4262 and 4263.

Air Cylinder - **PART #4260R**

(Fits Standard & HD Models, Cylinder w/Ram)

Air Cylinder Rebuild Kit - **PART #4260RK**

(Contains Seals, Valves, Buttons, Springs, & O-Rings)

Seals Only - **PART #4260S**



PART #
4260

SIZE	APPLICATION	PART #
8-1/2" x 9"	Standard Duty	4260
12-1/2" x 11-1/2"	Heavy Duty	4260HD

REPLACEMENT JAWS

USE WITH AIR & MANUAL VALVE SPRING COMPRESSORS



DESCRIPTION	PART #
Small, Straight Jaws	4261
Medium, Offset Jaws	4262
Large Straight Jaws	4263

RECESSED VALVE SPRING ADAPTORS

Use with conventional C-clamp valve spring compressors. Use on OHC cylinders with valve spring/cam follower bores recessed deep into cylinder head. Made of durable nylon (exc. 26mm) to prevent damage to heads. (Use with small compressor jaw.)



SIZE	PART #
26mm Steel	4266N3
27mm Black	4266N2
32mm Blue	4266N1

VALVE SPRING COMPRESSORS

VALVE SPRING COMPRESSOR

The ideal tool for removing and replacing valve springs of Briggs & Stratton and other small engines.

PART #
4265VS







PART #
4265LS

VALVE LIFTER & SPRING COMPRESSOR

Unique lifter designed so that the jaws are practically parallel at all important positions. No ratchet or other lock is needed as the tool holds automatically at any point. Length 8 1/2"



OVERHEAD VALVE SPRING COMPRESSOR

The new sleek design fits more applications than other valve spring compressors on the market! Makes compressing the spring and removing the keepers a simple job, no need to remove the head. Also there is no need to readjust the tool after each spring, making it a fast and simple job.



PART #
4275

MANUAL HEAVY DUTY SPRING COMPRESSOR



PART #
4269HD

Economical, heavy duty valve spring compressor designed for high performance, heavy duty, and standard spring applications. Easily handles spring pressure to 600+ lbs. Cantilever handle allows full 2-5/8" travel. Sliding valve spring jaw arm allows quick adjustment to valve spring.

STUD MOUNT VALVE SPRING COMPRESSOR



Remove valve springs from an assembled engine. Screws onto any 3/8" or 7/16" stud. Press down to compress coil spring then remove valve keepers.

PART #
4254

UNIVERSAL SPRING COMPRESSOR FOR OHC HEADS



Simple design allows you to work on most SOHC and DOHC heads while removing & installing keepers. Can be used without removing head from vehicle.

PART #
4655

Manual Chrome Plated Universal Compressor

PART #
4265

C-Frame Opening:

Height 10-1/2"

Depth 9-1/2"

Includes: 3 Jaw Sets (Part #4261, 4262, 4263)

Features: Use for 1" - 2-1/4" dia. springs, Marine "L" Head and O.H.V. One Hand Lock & Release Lever.



Manual Parallel/Vertical Lift Compressor

PART #
4265PL

C-Frame Opening:

Height 10"

Depth 8"

Includes: Jaw Set (Part #4262)

Features: Use for 1" - 2" dia. springs, Heavy Duty Cam-Lock for stiff springs.



VALVE SPRING ASSEMBLY/DISASSEMBLY

Use with your Guide & Seat Machine for assembly and disassembly of valve springs. 1/2" shaft rubber coated swivel plungers, 5/8" or 3/4" I.D.



DESCRIPTION	PART #
5/8" I.D., 7/8" O.D. Plunger	4298A
3/4" I.D., 1" O.D. Plunger	4298B

MAGNETIC VALVE KEEPER INSTALLERS



SIZE	PART #
6mm & 6.6mm	4291
7mm	4292
8mm & 5/16"	4293
11/32"	4294
3/8"	4295

Use with compressor to install keepers. Attach keepers to magnet. Align with groove. Release compressor until spring retainer locks keepers in place.



PART #
4290

TWIN MAGNETIC VALVE KEEPER TOOL

A great tool for removing or installing valve keepers. Works in half the time compared to a regular valve keeper tool. When installing keepers and retainers, put probe in handle, place on retainer, and strike with a mallet. Comes complete with Mercedes Benz adaptor.

Surface Grinding Segments

Silver Seal now offers the finest quality segments on the market today. Extensive research has led to a superb free-cutting product, with less buildup and a great finish.

Segment Applications

Color	Abrasive	Application
Black	Silicone Carbide	Cast Iron/Aluminum
Ruby	Aluminum Oxide	Steel/Hard Material

Machine/Model Number	Dia.	Segments Needed	Size	Color	Part # (1 ea.)
Kwikway					
858, 861	14"	10	65x20x100mm	Black	BK2622
862	16"	12		Ruby	PL2622
Peterson / Peterson Berco, Kansas Inst.					
RSC950 (Std. Model), SPY320, -1000, -1300	12"	8	65x25x100mm	Black	BK2604
RSC1200, 1550, SPY360, -1000, -1300, SPC-361	14"	10		Ruby	PL2604
RSC1200, RSC1550, RPYS1500	18"	12		Black	BK2600
1055, 1055 AWL, 1054 (requires 12 segments)	18"	14		Ruby	PL2600
RG32, RTY	12"	8	79x21x79mm	Black	BK2600
RG35, -300/900	13"	10	50X10X92mm	Black	BK2614
Winona Van Norman					
SM-2000, MG-3000, MG-3850	13"	8	65x25x100mm	Black	BK2604
SM-4000, SM-5000, MG-4000	13-7/8"	10		Ruby	PL2604
SM-6000A, SM6000C	17-3/4"	12		Black	BK2600
Storm Vulcan					
RT-17Y Early (Serial numbers up to 128696)	12-1/2"	8	79x21x79mm	Black	BK2600
RT-7Y Early (Serial numbers up to 103151)	14"	10		Ruby	PL2600
RT-17Y Late (Serial numbers 128697 & up)	14"	10	65x25x100mm	Black	BK2604
RT-7Y Early (Serial numbers 103152 & up)	16"	10		Ruby	PL2604



Surface Grinding Wheels

Engineered to provide you the highest quality and performance.



Machine / Model Number	Dia. x Hgt. x Face	Style	Part #
Kwik-way / Lempco			
545, 545-H, 855	12" x 3" x 9"	Plate Mount/Wire Wound	2632
545-B, 855-5, 856	14" x 3" x 11"	Plate Mount/Wire Wound	2635
545-BL, 860, 860A, L & T	16" x 3" x 13"	Plate Mounted	2638
Peterson			
Dry Grinder (24 Grit)	14" x 1-1/2" x 6"	Plate Mount 1" Hole (Dry)	2640
Dry Grinder (36 Grit)	14" x 1-1/2" x 6"	Plate Mount 1" Hole (Dry)	2641
902, 950, 952, 1050	14" x 2" x 9"	Nut Inserted (Wet)	2642
1054, 1050	16" x 2" x 11"	Nut Inserted (Wet)	2644
Van Norman			
561, 562	14" x 2" x 11"	Plate Mounted	2654
564, 566	16" x 2" x 11"	Plate Mounted	2656

Resurfacer Dressers

Kwik-Way (Old Style), Lempco 545
14 Cutters
 Complete Assembly - **Part #2902**
 Replacement Cutters - **Part #2909**

Peterson Dry Grinder, Berco 1200, 1500
8 Cutters - 5 Spacers
 Complete Assembly - **Part #2904**
 Replacement Cutters - **Part #2910**

Van Norman, Lempco, Storm RT7Y & RT-17Y
14 Cutters
 Complete Assembly - **Part #2900**
 Replacement Cutters - **Part #2908**

The Best Selection Of Super Abrasive Inserts

For Head And Block Resurfacing

CBN Inserts (Cubic Boron Nitride) For Cast Iron

CBN Inserts from Silver Seal have a special edge preparation which strengthens and enhances the life expectancy. Other company's inserts have an "Up Sharp" edge which is easily chipped. Our superior technology allows us to re-sharpen our inserts to the original edge prep characteristics.

Top Of The Line Double Sided CBN

(TiN Coated) adds 10% to the life expectancy of the CBN insert and as an added benefit it clearly indicates wear characteristics that tell you when an insert needs to be rotated.

Special Note: CBN500ST is an excellent choice for DCM machines that require a 1/16" shim to be used with a normal 1/8" insert. The strength characteristics are greatly enhanced.

Dia.	Thickness	Part #
3/8"	1/8"	CBN375T
1/2"	1/8"	CBN500T
1/2"	3/16"	CBN500ST



The Original Double Sided CBN

The original CBN offered by Silver Seal which has proven results in hundred of shops across the nation.

Dia.	Thickness	Part #
3/8"	1/8"	CBN375
1/2"	1/8"	CBN500
1/2"	3/16"	CBN500S



Economy Quality Single-Sided CBN with an "Up Sharp" Carbide Back. CBN Side for Cast Iron. Carbide Side for Aluminum.

A great choice for the small shop that does occasional resurfacing.

Dia.	Thickness	Part #
3/8"	1/8"	CBN375E
1/2"	1/8"	CBN500E
1/2"	3/16"	CBN500SE



PCD Inserts (Polycrystalline Diamond) For Aluminum

PCD Inserts are still the best choice for resurfacing aluminum. Because of the unique metallurgy of aluminum and the chemical interaction present with heat, CBN does not give the appropriate surface finish that PCD can provide.

The Original PCD

PCD Inserts consist of a layer of Polycrystalline Diamond bonded to a carbide substrate. As an added benefit, the carbide back can be used for aluminum heads after PCD side is used up.

Dia.	Thickness	Part #
3/8"	1/8"	PCD375
1/2"	1/8"	PCD500

Mallory Metal Shim For Use On DCM Machines

Special Note: Because PCD Inserts are only available in 1/8" thickness, we offer a 1/16" thick, 1/2" diameter Mallory Metal shim for use on DCM Machines.

Part #MM116

Carbide TiN Coated (Titanium Nitride) Carbide Inserts with an "Up Sharp" Edge for Aluminum

Back up for your PCD inserts or for the economy minded shop that does occasional aluminum resurfacing.

Dia.	Thickness	Part #
3/8"	1/8"	TINC375
1/2"	1/8"	TINC500
1/2"	3/16"	TINC500S



Surface Grinding Coolant

Concentrated low foaming, synthetic, water-based grinding coolant with special metal deactivators.

Size	Part #
1 Gallon	4514
5 Gallons	4516



Recommended Dilution Ratio 20:1 Mix To Water

Rotary Broach Replacement Tool Bit

Van Norman Model 530 & 570 Broach & VN2000 Mill



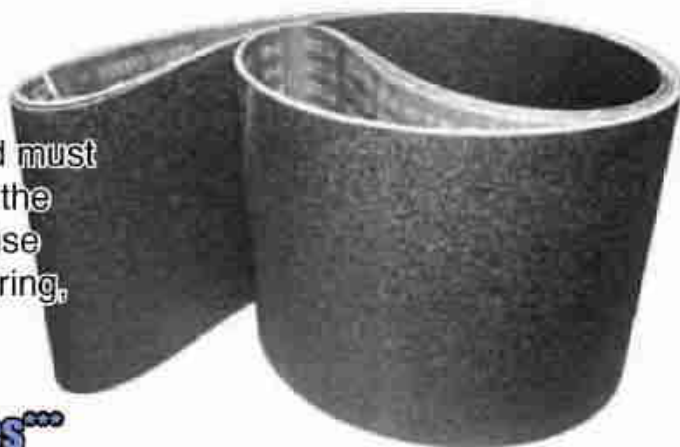
Part #KK065



Head Resurfacing Belts

Over 120 Different Belts!

Each belt is manufactured in-house and **must** meet a strict list of parameters insuring the highest quality belt available. We only use premium abrasives for an effective wearing, extended-life belt!



*****Best Selection - Best Prices*****

ALUMINUM-OXIDE

Good quality, red abrasive grains. Treated for extra long life. For use on Cast Iron. Down pressure is optional.

SILICONE-CARBIDE

Good quality, black abrasive grains. Use for Cast Iron and Aluminum (60G or 80G) is suggested. Excess down pressure is not recommended.

BLUE ZIRCONIA

Higher quality abrasive, tougher than A/O or S/C. Extremely cost effective because of it's longer life. Can be used on all types of material. Down pressure recommended.

CERAMIC

Best quality maroon abrasive. Longest lasting belts. Perfectly uniform grain. Use for Cast Iron or Steel. Down pressure recommended.

Custom sizes (width/length) are available.

All belts can be purchased in the following grits: 24, 36, 40, 60, & 80 grit. Call for details.

Backing

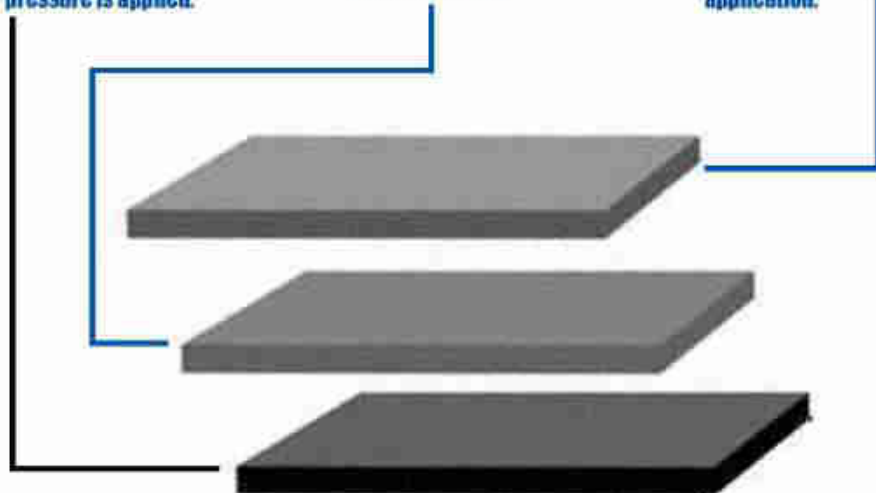
The finest cloth is used to compliment the bond and abrasive. It will not fray or tear when down pressure is applied.

Bonding

Premium resin bond grips the abrasive allowing it to fracture, but not pull out.

Abrasive

Our premium blend abrasives are designed to provide you with the best belt for your specific application.



Resurfacing Coolant

Low foaming synthetic concentrate blend, nitrate free, provides good tramp oil rejection & corrosion resistance at concentrations as low as 5%.



Dilution Ratio 30:1

Description	Part #
1 Gallon	4518
5 Gallons	4520

10% Discount On 3-4 Belts



15% Discount On 5 or More!



RESURFACING BELTS



Cylinder Head Rebuilding

Belt Size	Machine / Model No.	Grit	Dark Red Aluminum Oxide	Black Silicon Carbide	Blue Zirconia	Maroon Ceramic
10" x 87"	Rogers SB-1028, SF-1028, T&S Machine, Master Tool 1028	24	*	HRB200	*	*
		40	HRB102	HRB202	HRB302	*
		60	*	HRB203	HRB303	*
10" x 103"	Rogers SF-1036, T&S Machine, Master Tool PS1036	40	HRB107	HRB207	HRB307	*
		60	*	HRB208	HRB308	*
11-7/8" x 76"	Winona Van Norman BG-600, McGlogan	36	*	HRB211	HRB311	*
		40	HRB112	HRB212	HRB312	HRB412
		80	HRB114	HRB214	HRB314	*
11-7/8" x 79"	Rogers RMC-700, Peterson/K.I. RG-1203	36	*	HRB216	*	*
		40	HRB117	HRB217	HRB317	HRB417
		80	HRB119	HRB219	HRB319	*
11-7/8" x 89"	Rogers RMC-800, Winona Van Norman PG-1229	36	HRB121	HRB221	HRB321	*
		40	HRB122	HRB222	HRB322	HRB422
		60	*	HRB223	HRB323	*
		80	HRB124	HRB224	HRB324	*
11-7/8" x 91"	Peterson/K.I. RG-1234	36	*	HRB261	*	*
		40	HRB162	HRB262	HRB362	HRB462
		60	*	HRB263	HRB363	*
11-7/8" x 101"	Winona Van Norman PG-1232	80	HRB164	HRB264	HRB364	*
		40	HRB172	*	HRB372	HRB472
		60	*	*	HRB373	*
		80	HRB174	*	HRB374	*
12" x 78"	RMC	120	*	*	HRB376	*
		40	HRB127	HRB227	HRB327	*
14" x 86"	Automotive Craftsman #1486	24	*	HRB230	HRB330	*
		36	HRB131	*	HRB331	*
		40	HRB132	HRB232	HRB332	HRB432
		60	*	HRB233	HRB333	*
		80	HRB134	HRB234	*	*
14" x 103"	Master Tool 1436, Rogers RMC-1436 T&S Machine	36	*	HRB236	*	*
		40	HRB137	HRB237	HRB337	HRB437
		60	HRB138	HRB238	HRB338	*
		80	HRB139	HRB239	HRB339	*
14" x 107"	Kwik-Way 870	36	HRB141	HRB241	HRB341	*
		40	HRB142	HRB242	HRB342	HRB442
		60	HRB143	HRB243	HRB343	*
		80	HRB144	HRB244	*	*
14" x 113-1/4"	Storm Vulcan/Anderson AB1000A, Peterson/K.I./A&A PG-1400, Master Tool 1441	36	HRB146	*	HRB346	*
		40	HRB147	HRB247	HRB347	HRB447
		60	HRB148	HRB248	*	*
		80	HRB149	HRB249	*	*
15" x 127-1/2"	Storm Vulcan/Anderson AB1540A, Peterson/K.I./A&A PG-1500, Winona Van Norman BR-1500, BG-1515, BG-1520, IDL HS-4350	24	*	*	HRB350	*
		36	HRB151	HRB251	HRB351	*
		40	HRB152	HRB252	HRB352	HRB452
		80	HRB154	HRB254	*	*
18" x 161-5/8"	Storm Vulcan/Anderson AB1800A, Peterson PG-1800	40	HRB157	HRB257	HRB357	HRB457
		80	HRB159	HRB259	*	*



15" MAGNETIC COIL

USE WITH FLUORESCENT PARTICLE CRACK DETECTION PRODUCTS

- Detect fissures (cracks) in crankshafts, camshafts, cylinder heads, connecting rods, etc.
- 15" coil generates a full 3,000 ampere turns (AT) field.
- Equipped with 25 ft., 120V AC cord and 8 ft. cord w/foot pedal switch.
- Mounts to bench or use as a portable unit.
- Also used to demagnetize parts.

Directions For Use

1. Activate magnetic coil by depressing (constant) the "hands-free" foot switch while passing part through coil.
2. Use magnetic indicator to insure part is magnetized.
3. Spray part with fluorescent magnetic particle solution on area to be tested (can also dip part in bulk solution.)
4. Use UV blacklight to detect cracks (will show up as distinctive "yellow-green" lines).
5. Demag by depressing (constant) the foot switch and passing part through coil.

11226



Magnetic Coil / Accessories

Description	Part #
15" Magnetic Coil	11226
UV Black Light 110AC - 150 Watt	10210
UV Inspection Light 120AC - 6 Watt	SL511
UV 12 Volt/DC Black Light - 100 Watt	10217
Magnetic Indicator	11228

11232



11228



10210



11233



Fluorescent Powders/Concentrate

Description	Size	Part #
Pre-Mixed Fluorescent Solution	5 Gal.	11232
Fluorescent Magnetic Powder	1 Oz.	11237
Fluorescent Magnetic Powder	1 Lb.	11231
Solvent to Mix w/Fluorescent Powder	5 Gal.	11229
Solvent to Mix w/Fluorescent Powder	55 Gal.	11230
Aerosol, Fluorescent Oil Base Solution	12 Oz.	11233
Aerosol, Fluorescent Water Base Solution	12 Oz.	11236
Fluorescent Water Base Concentrate (1 quart makes 10 gallons.)	4-1 Qt. Bottles	11234
Mix 1 oz. of #11231 Fl. Mag. Powder to 5 Gal. #11229 Solvent		

NEW



PART #
10219

OPTIMAX™ 3000

CORDLESS, RECHARGEABLE BLUE LIGHT LED LEAK DETECTION FLASHLIGHT

- 15 times brighter than regular LED lights
- Power comparable to super-high intensity 150W lamps
- Inspection range up to 20 feet (6.1 m) or more
- Compatible with all standard leak detection dyes
- 50,000-hour LED service life
- Powered by a rechargeable NIMH battery (included)
- AC charger
- Fluorescence-enhancing glasses

NEW



PART #
10228

OPTIMAX JR™

CORDLESS, ULTRA-COMPACT BLUE LIGHT LED LEAK DETECTION FLASHLIGHT

- Perfect for tight spaces
- Very high intensity blue light LED
- Power comparable to high-intensity 75W lamps
- Inspection range up to 6 feet (1.8 m) or more
- 100,000-hour LED service life
- Powered by 3 "AA" batteries (included)
- Fluorescence-enhancing glasses

NEW



PART #
10229

DUAL-MAX™

CORDLESS MULTI-FUNCTION FLASHLIGHT

- Two Powerful LEDs! One Lightweight Lamp!
- Features super-bright blue light LED for leak detection, plus white light LED for component inspection
- Power comparable to high-intensity 75W lamps
- Inspection range of up to 6 feet (1.8 m) or more
- Lightweight compact design allows easy access into tight spaces
- 100,000-hour LED service life
- Powered by 3 AAA batteries (included)
- Fluorescence-enhancing glasses and holster

MAGNETEST® DETECTOR KIT

Completely Portable!

Two industrial grade encapsulated permanent magnets, Magnetest® iron powder, and powder bulb in plastic case.



Kit Part #19003

Kit Contains	Part #
Permanent Magnets	18600P
Spray Powder Bulb	10003
1 lb. Grey Powder	10004



Powder Atomizer Part #10003A
Replacement Bulb Part #10003B

CRACK DETECTION KIT

No Transformer Box to Carry Around!

Heavy duty magnetic inspection kit locates surface cracks and many subsurface defects in ferrous metals. Fully protected, moisture-proof switch for ease of use and reliability. Laminated core, polyurethane coated, momentary switch, with 9' power cord & DC adaptor. 120 VAC, 60 Hz., 5 amps nominal or 6/12 volt DC. Measures 8" x 2-1/2" x 6-3/4". Lift strength AC 12 lbs., DC 40+ lbs. Carrying case included (Part #1301).

Kit Part #
10000A



KIT CONTAINS THE FOLLOWING:

ITEM	PART #	ITEM	PART #
Electro Magnet	10000	DC Adaptor Cord	10001
Funnel (4 oz.)	10002	Spray Bulb (8 oz.)	10003
1 lb. Grey Powder	10004	Optional Replacement Switch	10000SN

ELECTRIC-MAG KIT

Time-Tested Reliability

Features: 110 VAC/2 AMP Nominal powered magnet with 80 lbs. vertical lift! Power switch on handle, measures 7"L x 5-1/2"H with 4-1/2" yoke opening with miniature lamp, 3 prong plug, & 8' power cord. Kit includes metal case, 1 lb. grey powder & powder atomizer. Replacement parts available.

Clearly See Where
Cracks Form

Part #11000

Replacement Switch
Part #11000SW



ORIGINAL MAGNETEST® POWDERS

4 Different Colors

Magnetest® Iron Performance Powders are manufactured and blended right in our own facility.

Available in
1, 3, 5, 25, or 100 lb.
containers.



	GREY	YELLOW	RED	WHITE
LB.	Part #	Part #	Part #	Part #
1	10004	10019	10024	10029
3	10005	10020	10025	10030
5	10006	10021	10026	10031
25	10007	10022	10027	10032
100	10008	10023	10028	10033

DYE PENETRANT CRACK FINDER KIT

1. Apply cleaner to surface and wipe dry.
2. Apply penetrant to area to be checked.
3. Remove excess penetrant with clean cloth.
4. Apply developer to expose crack.



For Cast Iron & Aluminum
Part #10010

Kit Contains	Part #
8.5 oz. Cleaner	10204
8.5 oz. Penetrant	10012
8.5 oz. Developer	10205
Storage Case	1305

ULTRAVIOLET (UV) FLUORESCENT

DETECTION LIGHT UP A LEAK

Easy to Use 4 Step Crack Check Procedure:

1. Spray-on cleaner to prepare surface of part.
2. Spray-on penetrant and allow 5 minutes to penetrate crack.
3. Spray-on developer.
4. Inspect part with UV black light - crack will appear as a distinctive "yellow-green" color when viewed under UV light.

Great for Aluminum Heads!

Part #10200

Kit Contains	Part #
Cleaner - 8.5 oz. Aerosol Can	10204
Developer - 8.5 oz. Aerosol Can	10205
Penetrant - 8.5 oz. Aerosol Can	10206
150 watt/110V AC high-intensity UV spot lamp with 7' cord complete with UV safety glasses.	10210
Replacement Bulb	10211



Seal-Lock® Air Hammer

Small & Compact

The Perfect Peening Hammer for Repairing Cracked Castings! With Features Not Found In Any Other Air Hammer.

**Part #
18600**

Uses Less Air
Only 3 C.F.M.
@90 P.S.I.

Light Weight 20 oz.
Reduces Operator
Fatigue

Rugged
Virtually
Maintenance
Free Cast
Aluminum
Handle



**Handy
Slip Chuck**

**Exclusive Patented
Metering Trigger**
Perfectly Controlled
From 0 to 13,000
Blows Per Minute

Less Than 6" Overall Length
Lets You Work In Tight Areas

Seal-Lock® Peening Tips

Peening Tips Snap in and out of Chuck easily and are safely locked in. The Air Hammer has no dangerous, cumbersome spring retainers. Tips have round shanks.

Part# 18601

3-1/2" Round End



Part# 18602

3-1/2" Pointed End



Part# 18603

7" Round End



Part# 18604

7" Pointed End



Part# 18605

4" Flat Chisel



Part# 18606

4" Offset Flat Chisel



Part# 18607

6-1/2" Blank



Part# 18608

8-1/2" Curved End



Sealmaster®

Stitching Pins & Chemical Weld® Pins

Makes All Other Grooved repair Pins Obsolete!

One pin to repair both cast iron & aluminum castings! Two sizes: 1/2" & 7/8" long pins. Use 11/64" drill & #12-28 Tap to install pins. Chemical Weld Pin threads are coated with a high temp chemical welding agent for sealing.



Description	Part #
Sealmaster® Starter Kit Contains: 10 Each # 6A & #6B Pins, 1 Each #D6 Drill Bit, & T6 Heavy Duty Tap	K1000
Sealmaster® Master Kit Contains: 100 box of #6A & #6B Pins, 2-2" Cut Off Discs w/1/4" arbor, 1 each #D6 Drill Bit, # T6 Heavy Duty Tap, 1-1/4" oz. Btl. TMT™ Lube, 50ml btl., Grip 2 oz. Btl. Fluid Weld, & Plastic Storage Case	K4000
1/2" Stitching Pins (100/box)	6A
1/2" Chem. Weld Pins (100/box)	6ACW
7/8" Stitching Pins (100/box)	6B
7/8" Chem. Weld Pins (100/box)	6BCW
Reg. Stitching Pins (for 12-28)	6C
Chem. Weld Pins (for 12-28)	6CCW
11/64" Titanium Nitride Drill Bit (for 12-28)	D6-1
12-28 Heavy Duty Tap	T6
12-28 Heavy Duty Tight Fit Tap	T6TF

Seal-Lock® Cold Fusion Crack Repair

For Cast Iron & Aluminum Cylinder Heads & Blocks

When making repairs on thin castings, it is best to remove as little parent material as possible. Tests prove thin casting repairs require a repair plug diameter in the range of .150" to .230" with a .030" per inch taper, and an optimum thread pitch of 32 threads per inch. Fusion plugs are made to meet these requirements. Benefits - less material removed, less installation torque required, and less tendency to propagate the crack requires SEAL-LOCK® Fusion Plugs.



Part# FP150

(100/Box)
.175" Top Dia.
.150 Bottom Dia.
32 Threads Per Inch

Part# FP200

(100/Box)
.230" Top Dia.
.200" Bottom Dia.
32 Threads Per In.

Fusion Plugs Tools

Part#

Cold Fusion Kit Contains:		Part#
Box FP150 & FP200 Plugs; w/ 1 Ea. 150 Tap, 200 Tap, 3 Ea. 1/8" & 11/64" Drill Bits, 2-2" Cut-Off Discs w/ 1/4" Arbor, 1 Ea. Bottle TMT™ Lube & Fluid Weld		CFR100
Tap (FP150 Plug)		FT150T
Tap (FP200 Plug)		FT200T
1/8" Titanium Nitride Drill Bit (set of 3)		FD150T
11/64" Titanium Nitride Drill Bit (set of 3)		FD200

SEAL-LOCK® MAG II®

Features new rare earth magnetic alloys. Portable, these permanent magnets weigh less than 2 Lbs.! Enclosed in nylon covers & guaranteed forever to never lose their power. Kit includes set of Mag II® probes, 1 lb. Crack Detection powder and a plastic storage case.

COMPLETE KIT



PART #

19003

MAG II PROBES



PART #

19003A

Sealace® Taper Plugs & Alumalace® Taper Plugs

Stronger - More Durable - Leak Proof

Sealace® Taper Plugs are manufactured from an alloy that is many times stronger than cast iron, yet Sealace exhibits coefficients of expansion and contraction identical to cast iron.

Alumalace® Taper Plugs are manufactured from aluminum, alloyed in exactly the same way as aluminum castings.

Each plug contains **ZINC ELECTROLYTE**, which inhibits corrosion in the repair area and ultimately fills pin holes and voids, adjacent to the repair, thus creating a **permanent** and **impenetrable** seal against leakage.

Guaranteed Never To Crack!

No other repair plugs offer this vital added assurance that all of your crack repairs will be forever corrosion-free and leak-proof!

Plug #	Dia. x Length	Box Qty.	Sealace® Plug Part #	Alumalace® Plug Part #	Sealace® Titanium-Nitride Tap Part # (1 ea.)	Sealace® Titanium-Nitride Drill Part # (3 ea.)
#4	.205/.155 x 1"	100	10113	20111	12113T	*17117T
#1	.275/.225 x 1"	100	10111	•	12111T	*17111T
#3	.350/.275 x 1-3/8"	50	10112	•	12112T	*17113T

U.S. Patent No. 4,599,781 & Canadian Patent No. 1,238,276

* (3 pk.), drill bit size will vary dependent upon casting thickness.

Seal Lock® Cylinder Repair Kits



Kit #20008

Description	Qty.	Part #	Includes:
Standard Cylinder Kit		20009	
Deluxe Cylinder Kit		20010	
Alumalace® Repair Kit		20008	
#1 Sealace® Taper Plugs	100	10111	◆ ◆
#3 Sealace® Taper Plugs	50	10112	◆ ◆
#4 Sealace® Taper Plugs	100	10113	◆ ◆
Alumalace® Taper Plugs	100	20111	◆ ◆ ◆
#1 Sealace® Titanium Nitride Taps	2	12111T	◆ ◆
#3 Sealace® Titanium Nitride Taps	1	12112T	◆ ◆
#4 Sealace® Titanium Nitride Taps	2	12113T	◆ ◆
Alumalace® Titanium Nitride Tap	1	12113T	◆ ◆ ◆
3/16" Titanium Nitride Drill Bit	3	17111T	◆ ◆
17/64" Titanium Nitride Drill Bit	1	17113T	◆ ◆
9/64" Titanium Nitride Drill Bit	1	17117T	◆ ◆ ◆
TMT® Lubricant (1-1/4 oz. bottle)	1	30111	◆ ◆ ◆
Seal-Lock® Fluid Weld® (2 oz. bottle)	1	30333	◆ ◆ ◆
Grip® 50ml Bottle	1	30650	◆ ◆
Tab Seals 7 Gram Tablets	2	30702	◆ ◆
Seal-Lock® Air Hammer	1	18600	◆
3-1/2" Round End Peening Tool	1	18601	◆
3-1/2" Pointed End Peening Tool	1	18602	◆
Curved Peening Tool	1	18608	◆

Seal-Lock® & Seal-Lock Jig

Using the Seal-Lock® Jig, a drill bit, and an air drill, patterns of tangent holes are drilled straddling the crack. Seal-Locks are inserted into the patterns. Once in place, they act like giant staples, keeping the crack forever from reopening or propagating further. The balance of the crack between the Seal-Locks is sealed using Seal-Lace Taper Plugs, capable of holding pressures in excess of 6000 PSI. Peen with air hammer & grind to finish.



Description	Pkg.	Part #
3/16" 3-lobe for up to 1/4" casting	25	14112
3/16" 5-lobe for up to 1/4" casting	25	14117
3/16" Seal-Lock® Jig	1	16113



HYLOMAR M

The original and genuine non-setting gasket and jointing compound specified by OEM's around the world.

- ▶ Rolls-Royce approved/authorized
- ▶ Dichloromethane free
- ▶ Wide operating temperature range(-50 to +250° C)
- ▶ Resistant to water, coolants, gases, oils, hydrocarbons and many other chemicals
- ▶ Fuel Resistant

For use with the following industries:
Auto, HGV, Rail, Marine, camping & leisure and bikes and bicycles



80 ML TUBE CARTON



200 ML AEROSOL

HYLOMAR M SIZE	PART #
40 mL Tube Blister Card	HM10
80 mL Tube Carton	HM20
200 mL Aerosol	HM30
250 mL Brush-Top Tin	HM40
300 mL Cartridge	HM50
1 Litre Tin	HM60

HYLOMAR UNIVERSAL BLUE



100G TUBE CARTON

Is the leading non-setting gasket & jointing compound available today. The product can be used to replace a traditional gasket or to "dress" it to significantly improve the performance of the gasket.

HYLOMAR BLUE SIZE	PART #
40g Tube Blister Card	HB10
40g Tube Carton	HB20
100g Tube Carton	HB30
350g Cartridge	HB40

- ▶ Non-hardening
- ▶ Wide operating temperature range (-40 to +250° C)
- ▶ Resistant to water, coolants, gases, oils, hydrocarbons and many other chemicals
- ▶ Fuel resistant

For use with the following industries:
Auto, HGV, Rail, Marine, camping & leisure and bikes and bicycles



350G CARTRIDGE



PART# HCB8062

HYLOCOOL THERMAL BARRIER GEL IS A WATER SOLUBLE BLUE GEL THAT INHIBITS HEAT TRANSFER AND HELPS REDUCE WARPING, DISTORTION, DISCOLORATION, AND DAMAGE TO COATINGS, ESPECIALLY ON THIN GAUGE METALS. THE HYLOCOOL GEL WORKS AS A PHASE CHANGE MATERIAL AND IS DESIGNED TO MAXIMIZE THE COOLING FROM EVAPORATION OF THE WATER CONTAINED IN THE GEL. THE EFFECT LASTS UNTIL THE GEL EVAPORATES, LEAVING NO MESS BEHIND. 8OZ. BOTTLE. PART # HCB8062

HYLOMAR ADVANCED FORMULATION & AFHV



The original and genuine non-setting gasket and jointing compound specified by OEM's around the world.

- ▶ Fills imperfections on mating surfaces thus forming a seal.
- ▶ Wide operating temperature range (-40 to +250° C)
- ▶ No gap filling - metal to metal contact
- ▶ Resistant to oil, fuel and many other chemicals
- ▶ Pratt & Witney approved

ADVANCED FORMULATION SIZE	PART #
85g Tube	HA10
250 mL Tin	HA20
300 mL Cartridge	HA30

For use with the following industries:
Auto, HGV, Rail, Marine, camping & leisure and bikes and bicycles



ADVANCED FORMULATION HIGH VISCOSITY SIZE	PART #
85g Tube	HV10
250mL Tin	HV20
300mL Cartridge	HV30

For use with the following industries:
Auto, HGV, Rail, Marine, camping & leisure and bikes and bicycles

HYLOMAR AEROGRADE



HYLOMAR AEROGRADE PL32

The original non-setting gasket & jointing compound approved by Rolls- Royce and NATO.

HYLOMAR AEROGRADE SIZE	PART #
PL32 AeroGrade 100g Tube	HP10

HYLOMAR AEROGRADE ULTRA PL32A

Non-chlorinated solvent version of AeroGrade carrying Rolls- Royce approval. Can be used as a direct replacement for AeroGrade PL32.

HYLOMAR AEROGRADE ULTRA SIZE	PART #
PL32A AeroGrade ULTRA 75mL Tube	HU20

For use in the Aerospace and Defense industries.

HYLOTYTE RED



HYLOTYTE RED

Semi-hardening gasket and jointing compound offering improved gap filling capabilities and resistance to hot water and steam compared to HyloMAR Universal Blue.

- ▶ Semi Hardening
- ▶ Wide operating temperature range (-40 to +250° C)
- ▶ Resistant to oils, coolants, gases and many other chemicals
- ▶ Improved gap filling
- ▶ Improved resistance to hot water and steam

For use with the following industries:

Auto, HGV, Rail, Marine, camping & leisure and bikes and bicycles

HYLOTYTE RED SIZE	PART #
50g Tube (Blister Card)	HY50



EXHAUST PRODUCTS



EXHAUST PRODUCTS

HyloMAR Exhaust Assembly pastes and putties are formulated in accordance with the latest health and environmental legislation and are able to withstand temperatures of up to 1100° C

HYLOMAR EXHAUST ASSEMBLY PASTE

Seal joints in exhaust systems and lubricates joints during fitting.

HYLOMAR EXHAUST REPAIR PUTTY

Specially formulated to fill small holes and cracks in exhaust systems thus delaying the need for replacement.

EXHAUST PRODUCTS	PART #
Exhaust Assembly Paste 140g Tube	HE40
Exhaust Assembly Paste 500g Cartridge	HE50
Exhaust Repair Putty 250g Tub	HE20

SILVER SEAL® ENGINE TABS

PREVENT COOLING SYSTEM LEAKS AFTER YOUR REBUILD

A must for engine rebuilders and mechanics for preventing internal and external cooling system leaks. Engine tabs guard against thermal and mechanical distortion, seepage at gaskets, hoses, and cracks. Install through freeze plug openings or in radiator. Tabs remain solid until cooling system is filled.



FULL SIZE TAB

3/4" Dia. x 1" Ht.
4,6,& 8 Cyl = 1 Tab
Truck & Industrial = 2 Tabs

HALF SIZE TAB

3/4" Dia. x 1/2" Ht.
4,6,& 8 Cyl = 2 Tab
Truck & Industrial = 4 Tabs

FULL SIZE TAB

Package/Qty.	Part#
1 box of 50	ET-50
10 boxes of 50	ET-500
500 pc. bulk	ET-500B
20 boxes of 50	ET-1000
1,000 pc. bulk	ET-1000B

HALF SIZE TAB

Package/Qty.	Part#
1 box of 50	ET-55
10 boxes of 50	ET-505
500 pc. bulk	ET-505B
20 boxes of 50	ET-1005
1,000 pc. bulk	ET-1005B

SEAL-TABS®

SEAL & PREVENT LEAKS, 3-1/2 GRAM TABLETS

Permanently seal and prevent leaks in automotive cooling systems. Does not contain metallic particles or fibers. Safe, nontoxic, odorless! Ultra compacted Seal-Tabs® will only dissolve in water or anti-freeze. When dissolved, the leak sealing formula is released throughout the cooling system, permanently sealing minute leaks that might have been missed in assembly, testing or installation.



Packaged	Part#
20 Tab Box	30700
50 Tab Box	30701
2 Tab Pack	30702

SEAL-LOCK® GRIP®

Fast Curing - Easy Application - No Mixing

A superior high strength, high temperature resistant single component anaerobic sealant/retaining compound that locks, seals, and retains a wide variety of parts. Heating for approximately 15 minutes at 200°F speeds curing and increases strength. Heat resistant. When fully cured, GRIP® is resistant to solvents.



Prevents
Leakage, Contamination, Corrosion.
Stops
Loosening from Vibration.

PART #
30650

50ml Bottle

PART #
30655

250ml Bottle

SILVER SEAL® HEAD & BLOCK SEAL

Silver Seal® Head & Block Seal repairs cracks in cast iron, aluminum, blocks, or heads. Special ceramic coatings formula also seals cooling system gaskets, studs, and freeze plug leaks. Use to seal guides and sleeves. Simply flush-n-seal to do the job:

Engine Size	Amt. Needed
4 Cylinder	8 Oz.
6 & 8 Cylinder	16 Oz.



16 Oz. Bottle - Part #KVS2000

Case of 12 Bottles - Part #KVS2012

SEAL-LOCK® HEAD & BLOCK SEALER

HEAD & BLOCK INSURANCE

- Cross Links with Oxides (rust) Inside Water Jackets to Form a Tough, Flexible Lining that Seals Leaks and Contains Cooling System Pressures.
- Not Affected by Water or Coolant (Anti-Freeze).
- Prevents Rust and Corrosion.
- Conducts Heat Evenly Through Casting - Without Insulating.
- Seals Porosity, Pin Holes, and Fine Cracks In Cast Iron & Aluminum Heads/Blocks
- Withstands Engine Operating Temperatures.

Quart

PART #
30444

Gallon

PART #
30445



SEAL-LOCK® FLUID-WELD®

Withstands Temperatures Up To 3000°F!

Repairs fine cracks, pin holes, and porosity in cast iron or aluminum heads and blocks. Improves sealing ability of crack repair plugs and pins. Seals injector tubes, gaskets, freeze plugs, etc. Superior lubricating ability eases installation of valve seat inserts, valve guides, sleeves, and other pressed fit parts.



Non-Flammable & Non-Toxic



3 SIZES AVAILABLE
2 OZ. - PART# 30333
8.8 OZ. - PART# 30334
1 GAL. - PART# 30335

The "Original" Radiator **LEAK STOPPER**®

Leak Stopper® is a metallic sealer with a carrying agent that stays in suspension until carried to the leaking area. Metallic particles seal leaks when exposed to air. Ten minutes of engine operation completes the sealing cycle. A profitable year round seller. When you buy a case of Leak Stopper®, you will receive a silver dollar for each carton (12).

**TRUSTED BY
MILLIONS FOR
DECADES!**



**Counter Top
Display
24 Tubes
Part #CD24
Order by the Case
12 Carton Case
(288 Tubes)
Part #CD288**

**Hanging
Display
24 Tubes
Part #HU24
Order by the Case
12 Carton Case
(288 Tubes)
Part #HU288**



SILVER SEAL® HEAD & BLOCK SEAL

Silver Seal® Head & Block Seal repairs cracks in cast iron, aluminum, blocks, or heads. Special ceramic coatings formula also seals cooling system gaskets, studs, and freeze plug leaks. Use to seal guides and sleeves. Simply flush-n-seal to do the job.

Engine Size	Amt. Needed
4 Cylinder	8 Oz.
6 & 8 Cylinder	16 Oz.

16 Oz. Bottle PART# KVS2000

Case of 12 Bottles PART# KVS2012



LEAK DETECTION SEAL TEST®

Automotive fluid leak detection system takes the guess work out of finding leaks in engines, transmissions, radiator coolant systems, and fuel systems.

SEAL TEST® SYSTEM SAFE!

Fluorescent leak tracer dyes are custom blended to be 100% compatible with the system being tested. They are non-harmful to system fluids, gaskets, seals, and other component parts. No need to drain or remove after repairs are made.



PART# SL511

PART# 10210

**Tracer
Dyes**

Seal Test® UV System Kits

Description	Part #
8 watt/120V AC fluorescent tube style UV lamp, 14" L x 1-3/4" dia. with 20 ft. cord, incl. in clear polypropylene tube.	SL511
150 watt/110V AC hi-intensity UV spot lamp with 7' cord complete with UV safety glasses. Includes case.	10210
12V DC 100 watt hi-intensity UV lamp. Complete with 18 ft. cord, battery terminal clamp connectors, cigarette lighter adaptor, and UV safety glasses. Includes case.	10217

Note: Order Dyes Separately.

Replacement Parts & Accessories

Description	Part #
Replacement bulb (for Part #SL511)	SL504
Replacement bulb (for Part #10210)	10211
Replacement bulb (for Part #10217)	10216
UV Safety Glasses	10222
UV Lens Filter for Part #10210 & 10217	10223

Seal Test® Leak Tracer Dyes

Description	Part #
Gas & Diesel Oil Crankcase (1 oz. to 5 qts. lube oil)	10227-1 (1-1 oz. Bottle)
Gas & Diesel Fuel Systems (1 oz. to 5 gallons fuel)	10227-6 (6-1 oz. Bottles)
ATF, Gear Lube, Hyd. Oil (1 oz. to 8 pints ATF)	10227-12 (12-1 oz. Bottles)
Radiator-Coolant System (1 oz. to 2 gallons anti-freeze)	10235-1 (1 oz. Bottle) 10236 (16 oz. Bottle) 10237 (32 oz. Bottle)



HEAT TAB ADHESIVE

EXCLUSIVE FORMULA!

Premium grade Heat Tab Adhesive provides proper heat transfer to the heat tab to get an accurate melt if the engine overheats past the temperature of the heat tab that is installed. Formulated for long-term holding strength under all engine operating conditions.
 Effective Temperature Range: -76° to +350°F
 Tack free in 10-15 minutes. Fully cured in 24 hours.

Heat Tab Kit

Part #HTP SPECIAL

(Special package saves you 15%)

Includes:

- 200 Premium Heat Tabs
- 1 3oz. Tube of Adhesive (HTA)
- 1 Tube-Grip Applicator (V200)
- 6 Extra Tube Tips (V052)



See Full Listing of Heat Tabs on Page 10.



3 oz. (85 gram) Tube
(Approx. 200 Tabs)

PART #
HTA



10.5 oz. (283 gram) Cartridge
(Approx. 700-750 Tabs)

PART #
HTAP10

NEW SEAL-LOCK® GREEN GRIP®

Green anaerobic adhesive is a high-performance high viscosity sealant retaining compound will not set as long as it is in contact with the air. When clamped between metallic parts and sealed off from contact with air it polymerizes very rapidly for use in tight gaps. Part also has good water resistance heat may be added to speed cure time.

PART #
30677



ALL-IN-ONE SILICONE®

SIMPLIFY YOUR INVENTORY WITH ONE PREMIUM GRADE RTV SILICONE THAT DOES IT ALL.

Choose from four colors; Aluminum, Blue, Black, and Clear. Each color performs at high temperatures, has low volatility, and is oxygen-sensor safe. All-In-One® Silicone stands up to any automotive application where RTV silicone is used.



Color	Black		Aluminum		Blue	Clear
Size	3 Oz.	11.17 Oz.	3 Oz.	11.17 Oz.	3 Oz.	3 Oz.
Part #	V135	V142	V195	V202	V165	V105

TUBE-GRIP® DISPENSING TOOL

The Tube-Grip® Dispensing Tool creates 10 times more pressure than squeezing by hand, squeezes 35% more material out for a total of 96%, eliminates most clean-up, and increases the precision in application.



PART #
V200

SEAL-LOCK® GRIP®

250ML

FAST CURING - EASY APPLICATION - NO MIXING

A superior high strength, high temperature resistant single component anaerobic sealant/retaining compound that locks, seals, and retains a wide variety of parts. Heating for approximately 15 minutes at 200°F speeds curing and increases strength. Heat resistant. When fully cured, GRIP® is resistant to solvents, Prevents Leakage, Contamination, Corrosion Stops Loosening from Vibration.

PART #
30650



50ML

PART #
30655



250ML

EPOXI-PUTTY®

EPOXI-PUTTY® is a kneadable, steel-reinforced epoxy putty that cures rock hard within minutes of mixing. After 3 hours, EPOXI-PUTTY® can be drilled, tapped, filed, etc. and will withstand temperatures up to 300° F.



PART #
V636

SOLVENT 184®



Non-flammable Solvent 184® is a great cleaner for brakes, alternators, electric motors, starters, and removing Hylomar®. 16 Oz. Can

PART #
V265

THE ORIGINAL PRE-LUBE TANK - PART #EL05

Our original system comes complete with 5 quart capacity tank, triple purpose top (oil fill/dipstick measure/Patented Pressure Release Safety Cap*), 8 ft. oil supply hose (rated at 250 psi), and 2 universal engine connector fittings.

Simply fill the tank with engine oil, pressurize tank with air (50-100 psi), connect pre-lube oil supply hose to engine oil sending unit port, open tank flow-control valve, and in just a few seconds pre-lube is complete.

***IMPORTANT: THE EL05 IS THE ONLY PRE-LUBE SYSTEM AVAILABLE ON THE MARKET WITH THE PATENTED SAFETY PRESSURE RELEASE CAP WHICH PREVENTS THE OPERATOR FROM OPENING A PRESSURIZED TANK, THUS AVOIDING PERSONAL INJURY. (PAT. #5,036,996) (**OTHER SUPPLIERS DO NOT CARRY THIS! CHECK BEFORE YOU PURCHASE!**)**



FRICITION MASTER (A/L-22) ASSEMBLY LUBE

Protect your engine from costly dry-start failures by assembling your engine using A/L-22 Assembly Lube. Provides superior protection against dry start failure for up to fifteen minutes running time. Used on all types of parts where metal to metal protection's vital, especially on camshafts, crankshafts, and bearings.



Description	Part #
2 oz. Bottle w/Spout	4565
8 oz. Bottle w/Spout	4566
1 Gallon Jug	4568
5 Gallon Pail	4569

VALCO-TORCO "MPZ" ASSEMBLY LUBE

With its distinctive red color and natural attraction to metal, provides a pre-lubricant for all engine parts. It offers superior protection against scuffing, galling, and metal transfer during the break in of a new or rebuilt engine. MPZ Cam Lube is used to protect cam lobes, lifters, and other highly stressed engine parts during the initial cranking and break-in of new or rebuilt engines.



Description	Part #
Assy. Lube (1 oz. Tube)	V751
Assy. Lube (4 oz. Bottle)	V752
Assy. Lube (12 oz. Bottle)	V753
Cam Lube (1 oz. Tube)	V754
Aerosol Gel Lube (8 Oz. Can)	V755

MOLY PRE-LUBE

An excellent engine parts liquid pre-lubricant designed to leave a tacky, protective film that remains during engine assembly, before engine pre-start, and engine oil circulation critical wear-in period. Non-harmful to internal engine parts, oil, gaskets, or seals.

PACKAGE SIZE	PART #
1 Pint	4551
1 Quart	4552
1 Gallon	4554



MOTOR ASSEMBLY WHITE GREASE

A multipurpose lithium grease formulated to provide excellent mechanical stability and resistance to water. Performs well in high speed, heavy load conditions. Withstands temperatures of -20°F to 300°F.

PART #
V903



Self-Tapping Solid Repair Inserts

The best solid repair system available! Unlike ordinary helically coiled inserts, **Seal-Lock®** inserts are solid bushings that provide a precision fit for spark plug threads that will never cause compression leaks. And since they are self tapping, they will never back out when spark plug is removed. **Repair damaged spark plug threads!**

Seal-Lock® Self Tapping Thread Repair Systems are Covered By U.S. Patent No. 4,703,968; Canada Patent No. 1,282,965



Self-Tapping slots provide sharp cutting edges that tap into castings. Tapping slots trap cuttings and lock insert bushing into place

Optional Insert Tool & Replacement Inserts

Description	Qty.	Part #
M14 Long Insert Driver	1	14001L
M14 x 3/4" Insert (1/2 thread .647" OD)	5	14750H

Seal-Lock®

Self Tapping Thread Repair System For Cast Iron or Cast Aluminum Heads, Taper seat or Gasket Type Ports

Spark Plug Kits

Description	Qty.	Part #
M12 x 1.25 Kit Contains: 20004		
M12 Insert Driver	1	12001
M12 Pilot	1	12003
3/4" Reach Inserts	3	12750*
TMT Lube (1-1/4 oz.)	1	30111
M14 x 1.25 Kit Contains: 20007		
M14 Insert Driver	1	14001
M14 Piloted Reamer	1	14002
M14 Pilot	1	14003
3/8" Reach Inserts	3	14375*
1/2" Reach Inserts	3	14500*
3/4" Reach Inserts	3	14750*
TMT Lube (1-1/4 oz.)	1	30111
M18 x 1.50 Kit Contains: 20005		
M18 Insert Driver	1	18001
M18 Pilot	1	18003
1/2" Reach Inserts	3	18500*
TMT Lube (1-1/4 oz.)	1	30111

*10-Pk. Inserts Avail. Separately.

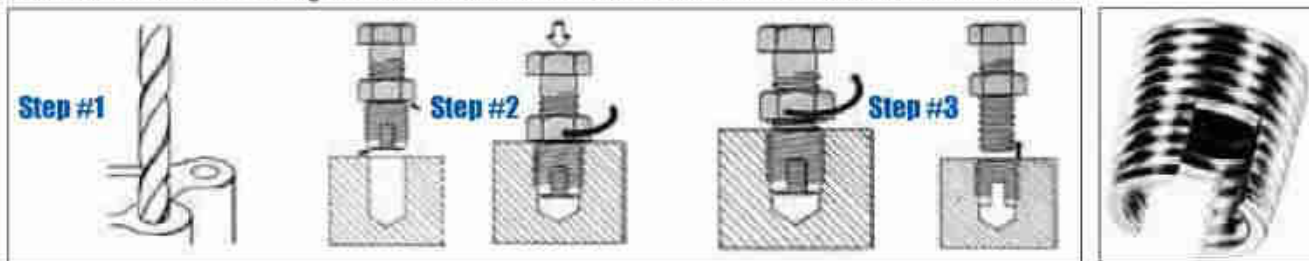
Shop Essentials

Seal-Lock® Self Tapping Thread Repair Inserts

Guaranteed Superior To Any Other Thread Repair System Or Your Money Back!

NOW.... You can replace stripped, worn or damaged threads in Cast Iron, Aluminum, Magnesium, Copper, Brass, Bronze, Steel, etc...With Solid Steel Threads Without Taps or Special Tools!

Your New Threads are - Stronger - More Durable - Corrosion Resistant - Vibration Proof - Pressure Proof



Standard Assortment Part #400	Metric Assortment Part #500	Large Thread Assortment Part #600	Assortment Package Part #700
Contains 5 Ea.: 1/4-20, 3/8-16, 5/16-18, 7/16-14	Contains 5 Ea.: M6 x 1, M8 x 1.25, M10 x 1.5	Contains 5 Ea.: 1/2-13, M12 x 1.75, 1/2-20, 9/16-12	Contains 2 Ea.: 8-32, 10-32, 1/4-20, 5/16-18, 3/8-16, 7/16-14, 1/2-13, 1/2-20, M6 x 1.0, M8 x 1.25, M10 x 1.5, M12 x 1.75

Insert O.D. is .020/.040 Over Drill Size

Thread Size	Qty.	Drill Size	Part #	Thread Size	Qty.	Drill Size	Part #	Thread Size	Qty.	Drill Size	Part #
8-32	50	#6	40062	1/4"-28	40	5/16"	40278	M11x1.5	15	9/16"	40433
6-40	50	#6	40064	5/16-18	25	7/16"	40312	7/16-14	15	9/16"	40437
M4 x 0.7	50	A	40120	3/16-24	25	3/8"	40324	7/16-20	15	9/16"	40457
8-32	50	A	40125	M8 x 1.25	25	3/8"	40325	M12x1.75	10	19/32"	40472
8-36	50	A	40136	M9 x 1.25	20	15/32"	40354	1/2"-13	10	5/8"	40500
M5 x 0.8	50	9/32"	40140	3/8-16	20	17/32"	40375	1/2"-20	10	43/64"	40520
10-24	50	9/32"	40149	3/8-24	20	31/64"	40379	9/16-12	10	43/64"	40562
10-32	50	19/64"	40187	M10x1.25	15	43/64"	40390	5/8-11	10	3/4"	40625
M6 x 1.0	40	5/16"	40236	M10x1.5	15	9/16"	40393	3/4-10	10	63/64"	40750
1/4-20	40	5/16"	40250	M10x1.75	15	9/16"	40399				

BULK COILED THREAD REPAIR INSERTS

Coarse - Metric Series

Fine - Metric Series

Thread Size & Length	25pc. Bulk Inserts Part#	Thread Size & Length	25pc. Bulk Inserts Part#
8-32 x .164	B122031	10-32 x .190	B122201
8-32 x .246	B12203	10-32 x .285	B12220
8-32 x .328	B122032	10-32 x .390	B122202
10-24 x .190	B122041	1/4-28 x .250	B122211
10-24 x .285	B12204	1/4-28 x .375	B12221
10-24 x .385	B122042	1/4-28 x .500	B122212
12-24 x .216	B122051	5/16-24 x .312	B122221
12-24 x .324	B12205	5/16-24 x .469	B12222
12-24 x .432	B122052	5/16-24 x .625	B122222
1/4-20 x .250	B122061	3/8-24 x .375	B122231
1/4-20 x .375	B12206	3/8-24 x .582	B12223
1/4-20 x .500	B122062	3/8-24 x .750	B122232
5/16-18 x .312	B122071	7/16-20 x .438	B122241
5/16-18 x .469	B12207	7/16-20 x .856	B12224
5/16-18 x .625	B122072	7/16-20 x .875	B122242
3/8-16 x .375	B122081	1/2-20 x .500	B122251
3/8-16 x .562	B12208	1/2-20 x .750	B12225
3/8-16 x .750	B122082	1/2-20 x 1.00	B122252
7/16-14 x .438	B122091	9/16-18 x .582	B122261
7/16-14 x .856	B12209	9/16-18 x .844	B12226
7/16-14 x .875	B122092	9/16-18x1.125	B122262
1/2-13 x .500	B122101	5/8-18 x .625	B122271
1/2-13 x .750	B12210	5/8-18 x .938	B12227
1/2-13 x 1.00	B122102	5/8-18 x 1.250	B122272
9/16-12 x .562	B122111		
9/16-12 x .844	B12211		
9/16-12x1.125	B122112		

BULK COILED THREAD REPAIR INSERTS

Coarse - Metric Series

Fine - Metric Series

Thread Size & Length	25pc. Bulk Inserts Part#	Thread Size & Length	25pc. Bulk Inserts Part#
M6 x 1 x 0"	B222421	M8 x 1 x 8"	B222441
M6 x 1 x 9"	B22242	M8 x 1 x 12"	B22244
M6 x 1 x 12"	B222422	M8 x 1 x 16"	B222442
M7 x 1 x 7"	B222431	M10 x 1.25 x 10"	B222461
M7 x 1 x 10.5"	B22243	M10 x 1.25 x 15"	B22246
M7 x 1 x 14"	B222432	M10 x 1.25 x 20"	B222462
M8 x 1.25 x 8"	B222451	M12 x 1.5 x 12"	B222491
M8 x 1.25 x 12"	B22245	M12 x 1.5 x 18"	B22249
M8 x 1.25 x 16"	B222452	M12 x 1.5 x 24"	B222492
M10 x 1.5 x 10"	B222471	M14 x 1.5 x 14"	B222511
M10 x 1.5 x 15"	B22247	M14x 1.5 x 21"	B22251
M10 x 1.5 x 20"	B222472	M14 x 1.5 x 26"	B222512
M12 x 1.75 x 12"	B222481	M16 x 1.5 x 16"	B222531
M12 x 1.75 x 16"	B22248	M16 x 1.5 x 24"	B22253
M12 x 1.75 x 24"	B222482	M16 x 1.5 x 32"	B222532
M14 x 2 x 14"	B222521		
M14 x 2 x 21"	B22252		
M14 x 2 x 28"	B222522		
M16 x 2 x 16"	B222541		
M16 x 2 x 24"	B22254		
M16 x 2 x 32"	B222542		

SPARK PLUG SERIES

Thread Size & Length	25pc. Bulk Inserts Part#	Complete Kit Part#	Installation Tool Part#	Tap Part#
10-1.0mm x 1/2"	B32285	B32285K	B32285I	06285
12-1.25mm x 1/2"	B32286	B32286K	B32286I	06287
12-1.25mm x 3/4"	B32287			
14-1.25mm x 3/8"	B32288			
14-1.25mm x 7/16"	B32289			
14-1.25mm x 4/2"	B32292	B32290K	B32290I	06291
14-1.25mm x 1/2"	B32290			
14-1.25mm x 3/4"	B32291			
16-1.50mm x 1/2"	B32293	B32293K	B32293I	06293

THREAD REPAIR KITS

COARSE METRIC SERIES

Thread Size & Length	Complete *Kit Part#	Installation Tool Part#	Tap Part#	Drill Size
8-32 x .246"	B12203K	B12203I	06203	11/64"
10-24 x .285"	B12204K	B12204I	06204	13/64"
12-24 x .324"	B12205K	B12205I	06205	15/64"
1/4-20 x .375"	B12206K	B12206I	06206	17/64"
5/16-18 x .469"	B12207K	B12207I	06207	21/64"
3/8-16 x .562"	B12208K	B12208I	06208	25/64"
7/16-14 x .856"	B12209K	B12209I	06209	29/64"
1/2-13 x .750"	B12210K	B12210I	06210	17/32"
9/16-12 x .844"	B12211K	B12211I	06211	19/32"

*Kit Contains: 10 Inserts up to 3/8", 5 inserts 7/16" and up, 1 installation tool & tap.

FINE METRIC SERIES

Thread Size & Length	Complete *Kit Part#	Installation Tool Part#	Tap Part#	Drill Size
10-32 x .265"	B12220K	B12220I	06220	19/64"
1/4-28 x .375"	B12221K	B12221I	06221	17/64"
5/16-24 x .469"	B12222K	B22245I	06222	21/64"
3/8-24 x .562"	B12223K	B12223I	06223	25/64"
7/16-20 x .856"	B12224K	B12224I	06224	29/64"
1/2-20 x .750"	B12225K	B12225I	06225	33/64"
9/16-18 x .844"	B12226K	B12226I	06226	37/64"
5/8-18 x .938"	B12227K	B12227I	06227	41/64"

*Kit Contains: 10 Inserts up to 3/8", 5 inserts 7/16" and up, 1 installation tool & tap.

THREAD REPAIR KITS

COARSE METRIC SERIES

Thread Size & Length	Complete *Kit Part#	Installation Tool Part#	Tap Part#	Drill Size
M8 x 1 x 0"	B22242K	B22242I	06242	1/4"
M7 x 1 x 10.5"	B22243K	B22243I	06243	9/32"
M8 x 1.25 x 12"	B22245K	B22245I	06245	21/64"
M10 x 1.5 x 15"	B22247K	B22247I	06247	13/32"
M12 x 1.75 x 16"	B22248K	B22248I	06248	31/64"
M14 x 2 x 21"	B22252K	B22252I	06252	37/64"
M16 x 2 x 24"	B22254K	B22254I	06254	21/32"

*Kit contains: 10 Inserts up to 10mm, 5 Inserts 12mm & up, 1 Tap & 1 Installation Tool.

FINE METRIC SERIES

Thread Size & Length	Complete *Kit Part#	Installation Tool Part#	Tap Part#	Drill Size
M8 x 1 x 12"	B22244K	B22245I	06244	21/64"
M10 x 1.25 x 15"	B22246K	B22246I	06246	13/32"
M12 x 1.5 x 18"	B22249K	B22249I	06249	31/64"
M14x 1.5 x 21"	B22251K	B22251I	06251	9/16"
M16 x 1.5 x 24"	B22253K	B22253I	06253	21/32"

*Kit contains: 10 Inserts up to 10mm, 5 Inserts 12mm & up, 1 Tap & 1 Installation Tool.





CARBON STEEL INSERTS INCH KITS



Approved by Leading Automobile Manufacturers:
 TIME-SERT® inserts are a thin wall solid bushing insert. This guarantees easy installation and allows for full load use of tapped hole, ensuring protection against stress and vibration. TIME-SERT® inserts are "lined" internal to external which gives a very thin wall thickness which means TIME-SERTs can be installed in areas of limited space and clearance. TIME-SERT® being a solid bushing insert gives it added strength, easily withstands high temperatures without damage or deforming.

Shop Essentials

Inch Kit Size	Kit Part No.	Insert Length Inches	Insert Part No.
4-40	TS0440	.200	TS4401
6-32	TS0632	.250	TS6321
8-32	TS0832	.250 .320	TS08321 TS08323
10-24	TS0024	.240 .300 .370	TS00240 TS00241 TS00243
10-32	TS0032	.240 .300 .370	TS00320 TS00321 TS00323
12-24	TS0124	.300 .370 .472	TS01241 TS01243 TS01245
1/4-20	TS0140	.280 .380 .500 .750	TS01400 TS01401 TS01403 TS1405
1/4-32	TS0142	.180 .250 .380 .500	TS01421 TS01423 TS01425 TS01427
1/4-28	TS0148	.280 .380 .500	TS01480 TS01481 TS01483
5/16-18	TS0561	.350 .450 .620 .750	TS05610 TS05611 TS05613 TS5615
5/16-24	TS0562	.350 .450 .620 .750	TS05620 TS05621 TS05623 TS5625

Inch Kit Size	Kit Part No.	Insert Length Inch	Insert Part No.
3/8-16	TS0381	.312	TS03818
		.400	TS03819
		.520	TS03811
		.620	TS03813
		.750	TS03815
3/8-24	TS0382	.350	TS03825
		.520	TS03821
		.750	TS03823
7/16-14	TS0761	.400	TS07610
		.600	TS07611
		.870	TS07613
7/16-14	TS0761	.400	TS07610
		.600	TS07611
		.870	TS07613
		1.000	TS076135
		1.200	TS7615
		1.500	TS7617
7.16-20	TS0762	.250	TS7629
		.370	TS076320
		.480	TS07627
		.620	TS07621
		.870	TS07623
		1.000	TS076231
		1.370	TS7625
7/16-24	TS0764	.500	TS07641
		.600	TS07643
		.870	TS07645
1/2-13	TS0121	.400	TS01217
		.650	TS01211
		1.000	TS01213
		1.250	TS01219
		1.500	TS01215
1/2-20	TS0122	.400	TS01225
		.650	TS01221
		1.000	TS01223
		1.370	TS01227
9/16-12	TS0961	.500	TS09610
		.750	TS09611
		1.120	TS09615
9/16-18	TS0968	.350	TS09687
		.450	TS09685
		.750	TS09681
		1.120	TS09683
5/8-11	TS0581	.500	TS05810
		.850	TS05811
		1.250	TS05813
5/8-18	TS0588	.320	TS05881
		.450	TS05887
		.850	TS05883
		1.250	TS05885
3/4-10	TS0341	.750	TS03415
		1.100	TS03411
		1.500	TS03413
3/4-16	TS0346	.650	TS03460
		1.100	TS03461
		1.500	TS03463

METRIC KITS & INSERTS

TIME-SERT® threaded inserts are approved by leading automotive manufacturers. Easily repair stripped threads in cylinder head bolt stripped threads, spark plug thread repair as well as oil drain pan. Many thread repair kits are available for your threaded bushing application in metric and american sizes. TIME-SERT the very best in thread repair.



Metric Kit Size	Kit Part NO.	Insert Length Metric	Insert Part No.
M3 x 0.5	TS1305	4.3	TS13051
		6.0	TS13053
M4 x 0.7	TS1407	4.0	TS14077
		6.0	TS14071
		8.0	TS14073
M5 x 0.8	TS1508	7.6	TS15081
		10.0	TS15083
		12.0	TS15085
M6 x 1.0	TS1610	8.0	TS16105
		9.4	TS16101
		12.0	TS16103
		17.0	TS16107
		19.0	TS16109
M7 x 1.0	TS1710	10.0	TS17101
		14.0	TS17103
M8 x 1.0	TS1810	7.5	TS18100
		11.7	TS18101
M8 x 1.25	TS1812	9.0	TS181210
		10.0	TS18125
		11.7	TS18121
		14.0	TS18129
		16.2	TS18123
		20.0	TS18127
M9 x 1.25	TS1912	13.0	TS19121
		18.0	TS19123
M10 x 1.0	TS1010	22.0	TS19127
		6.2	TS10100
		8.0	TS10105
		9.0	TS10101
		15.0	TS10103
M10 x 1.25	TSV1012	8.0	TS10127
		14.0	TS10121
		16.2	TS10123
		20.0	TS10125
		25.0	TS10129
M10 x 1.5	TS1015	8.4	TS10157
		11.0	TS101511
		14.0	TS10151
		17.0	TS101517
		20.0	TS10153
		22.0	TS101522
24.5	TS10155		

Metric Kit Size	Kit Part No.	Insert Length Metric	Insert Part No.
M11 x 1.25	1112	22.0	TS11123
		28.0	TS11121
M11 x 1.5	1115	16.2	TS11151
		22.0	TS11153
		30.0	TS11155
M12 x 1.25	1212	9.0	TS12121
		11.0	TS12129
		15.0	TS12123
		24.0	TS12125
		30.0	TS12127
M12 x 1.5	1215	6.7	TS12157
		9.2	TS12151
		16.2	TS12153
		24.0	TS12155
		30.0	TS12159
M12 x 1.75	1217	10.0	TS12177
		12.0	TS12170
		16.2	TS12171
		24.0	TS12173
		30.0	TS12179
M13 x 1.5	1315	14.0	TS13151
		19.0	TS13153
		24.0	TS13155
		28.0	TS13157
M14 x 1.5	1415	6.6	TS14151
		9.4	TS14153
		12.7	TS14155
		17.8	TS14157
		24.5	TS14158
28.0	TS14159		
M14 x 2.0	1420	12.0	TS14201
		18.0	TS14203
		24.0	TS14205
		30.0	TS14207
M16 x 1.5	1615	7.0	TS16151
		12.7	TS16153
		24.0	TS16155
		32.0	TS16157
M16 x 2.0	1620	16.0	TS16200
		24.0	TS16201
		32.0	TS16203
M18 x 1.5	1815	10.0	TS18151
		15.0	TS18157
		18.3	TS18153
		27.0	TS18155
M20 x 1.5	2015	9.0	TS20150
		12.0	TS20151
		17.0	TS20153
		30.0	TS22155
M22 x 1.5	2215C	10.0	TS22151
		15.0	TS22153
		20.0	TS24155
M24 x 1.5	2415C	7.6	TS24150
		10.0	TS24151
		15.0	TS24153
		20.0	TS24155
		30.0	TS24157



GENERAL MOTORS KITS

TIME-SERT® kits have been tested and approved by General Motors. There is no other company approved for these repairs in aluminum blocks.



KIT	KIT PART NO.	INSERT PART NO.
NORTHSTAR 4.0/4.6 Head Bolt M11x1.5	TSJ-42385-500	TS11155
NORTHSTAR 4.0/4.6 Head Bolt OVERSIZING M11x1.5	TSJ-42385-500BS	J-42385-507BS
NORTHSTAR 4.0/4.6 Main Bearing M10x1.5	TSJ-42385-300	TS101522
NORTHSTAR 2000 Head Bolt M11x1.5	TSJ-42385-2000	TS11155
LL8 Straight 6 M11x2.0 Head Bolt	TS4001	TS112030
PV6 M11x1.5 Head Bolt also called LX3 3.5 Liter	TS6001	TS11155
NORTHSTAR 2004 PV8 M11x2.0	TSJ-42385-2030	TS112030
GEN3 Engine Head Bolt M11x2.0	TSJ-42385-100	TS112030
GEN3 Engine Main Bearing M10x2.0	TSJ-42385-120	TS102022

FORD KITS

KIT	KIT PART NO.	INSERT PART NO.
Ford Spark Plug M14x1.25	TS5553	TS51459
Ford Spark Plug M16x1.5 3 VALVE	TS3221	TS32214
Ford Head Bolt 4.0/5.4 M11x1.5	TS8111	TS11155
Ford Drain Pan Kit	TS0765	TS07629

VOLKSWAGON KITS

KIT	KIT PART NO.	INSERT PART NO.
Volkswagon Touareg Drain Pan M24x1.5	TS2415C	TS24150
Porsche & V.W. Case Studs M10x1.5	TS10855	TS10155
Optional Tap Guide Plate	TS31094	-
Solex Carb M10x1.0	TS1181	TS11611
Solex Carb M8x1.0	TS1881	TS18811

M14 X 1.25 ALUMINUM INSERTS

ALUMINUM TAPER SEAT INSERTS		
Insert Length Inch	Insert Length Metric	INSERT PART NO.
.270	7.0	TS44181A
.490	10.0	TS44183A
.620	15.7	TS44185A
.660	16.8	TS44186A
.950	24.0	TS44187A

ALUMINUM WASHER SEAT INSERTS		
Insert Length Metric	Insert Length Metric	INSERT PART NO.
.270	7.0	TS44121A
.320	8.0	TS44123A
.370	9.4	TS44125A
.430	11.0	TS44127A
.530	13.5	TS44113A
.600	15.0	TS44129A
.660	16.8	TS44111A
.905	23.0	TS44112A

HONDA KITS

KIT	KIT PART NO.	INSERT PART NO.
Honda D16 M10x1.25 Head Bolt	TS4180	TS10129
Honda Odyssey M12x1.5 Head Bolt	TS7220	TS12159
Honda Civic Hybrid M912x1.5 Head Bolt	TS9210	TS19127
Honda & Acura M11x1.5 Head Bolt	TS7111	TS11155
Honda & Acura Oversized M11x1.5 Head Bolt	TS7111BS	TSJ-42385-507BS
Honda Pipe Thread Repair Kit 1/8-28 BSBP	TS0128	TS01281
Honda & Acura Drain Pipe "Aluminum"	TS1415C	TS141.53
Honda & Acura Drain Pan "Tin Pans"	TS1485 Reduces M14 to M12	TS12151
Honda & Acura Alternator Bolt M10x1.25	TS1012C	TS10125

SPARK PLUG KITS

WASHER SEAT INSERTS

INSERT	Insert Length Inch	Insert Length Metric	INSERT PART NO.
M10X1.0	.380	9.0	TS40101
	.600	15.0	TS40103
M12X1.25	.360	9.0	TS42121
	.600	15.0	TS42123
	.690	17.5	TS42125
M14X1.25	.270	7.0	TS44121
	.320	8.0	TS44123
	.370	9.4	TS44125
	.430	11.0	TS44127
	.530	13.5	TS44113
	.600	15.0	TS44129
	.660	16.8	TS44111
	.905	23.0	TS44112
M18X1.5	.400	10.0	TS48151
	.720	18.3	TS48153
7/8-18	.430	11.0	TS47181
	.780	20.0	TS47183

METRIC KIT SIZE	KIT PART NO.
M10X1.0 Standard	4010
M10x1.0 Deep Hole	4010E
M12x1.25	4212
M14x1.25 Standard	4412
M14x1.25 Deep Hole	4412E
M16x1.5	4615
7/8-18	4718

TAP SOCKETS

PART #
TS70500
TS70940

TELESCOPING MIRROR

PART #
3205

OIL PAN DRAIN KITS

Easily repair oil pan stripped or leaking threads. Steel threads are approximately 3 times the tensile strength of aluminum. These kits can be used in any vehicle where the size is available.



DRAIN PAN KITS		
KIT	KIT PART NO.	INSERT PART NO.
1/2-20 Drain Pan	TS0122A	TS01225
Ford Drain Pan "TIN PAN ONLY"	TS0765	TS07629
3/4-16 Drain Pan	TS0346C	TS03460
M12x1.25 Drain Pan	TS1212C	TS12121
M12x1.5 Drain Pan	TS1215C	TS12151
M12x1.75 Drain Pan	TS1217C	TS12170
M14x1.5 Aluminum Drain Pan	TS1415C	TS14153
M14x1.5 Aluminum Drain Pan	TS1415A	TS14155
Honda & Acura "TIN PAN ONLY"	TS1485	TS12151
M14X1.25 Drain Pan	TS14125A	TS44127
M16x1.5 Drain Pan	TS1615C	TS16153
M18x1.5 Drain Pan	TS1815C	TS18151
M20x1.5 Drain Pan	TS2015C	TS20151
M22x1.5 Drain Pan	TS2215C	TS22151
M24x1.5 Drain Pan	TS2415C	TS24150

TAPER SEAT INSERTS

M14x1.25	.270	7.0	TS44181
	.400	10.0	TS44183
	.620	15.7	TS44185
	.880	18.8	TS44186
	.950	24.0	TS44187
M18x1.5	.400	10.0	TS48181

SEAT CUTTERS

SEAT CUTTER GUIDE		
For use when the tap tap cannot be threaded deep enough to allow use of the seat cutter.		
SIZE	P/N	PRICE
M14X1.25	TS44195	\$6.60

SMALLER O.D TAPER SEAT CUTTERS	
For use on some taper seat spark plug repairs that have limited access to the spark plug hole.	
SIZE	P/N
M14x1.25	TS44196
M14x1.25 Extended	TS44196E
M18x1.5	TS48195

UNIVERSAL HEAD BOLT KITS

KIT	KIT PART NO.	INSERT PART NO.
Universal M10x1.5 Head Bolt	TS7580	TS10155
Universal M10x1.25 Head Bolt	TS8250	TS10129
Universal M11x1.5 Head Bolt	TS2200	TS11155
Universal M11x1.25 Head Bolt	TS11125	TS11121
Universal M12x1.5 Head Bolt	TS4800	TS12159
Universal M12x1.25 Head Bolt	TS4700	TS12127
Universal M12x1.75	TS4900	TS12178

TAP GUIDES-INCHES

Size	Part #
1/4-20	TS31420
1/4-28	TS31420
5/16-18	TS35168
5/16-24	TS35168
3/8-16	TS33816
3/8-24	TS33824
7/16-14	TS37164
7/16-20	TS37162
1/2-13	TS31213
1/2-20	TS31225
3/4-10	TS33415
3/4-16	TS33416

TAPER PIPE THREAD KITS

KIT	KIT PART NO.	INSERT PART NO.
1/8-27	TS0127	TS01271
1/4-18	TS0118	TS01181
3/8-18	TS0318	TS03181
1/2-14	TS0214	TS02141
3/4-14	TS0414	TS04141

SCREW EXTRACTOR

PART #
TS73907
TS73308
TS73406
TS73415

STRAIGHT CARTRIDGE ROLLS

1/8" HOLE, BOX OF 50.

Dia./Length	Grit	Part #
1/4" x 1-1/2"	40	2602
	80	2606
	120	2607
3/8" x 1"	40	2609
	60	2610
	80	2611
3/8" x 1-1/2"	120	2612
	40	2613
	60	2614
3/8" x 1-1/2"	80	2615
	120	2616
	320	2732
1/2" x 1-1/2"	40	2733
	60	2619
	80	2620
1/2" x 1-1/2"	120	2621
	80	2623
	40	2678
3/4" x 1-1/2"	80	2679
	120	2734



PART # 2713L

FULL-TAPER SPIRAL CARTRIDGE ROLLS

1/8" HOLE, BOX OF 50.

Dia./Length	Grit	Part #
3/8" x 1-1/2"	40	2735
	80	2624
	120	2736
1/2" x 1-1/2"	320	2737
	40	2738
	60	2625
1/2" x 1-1/2"	80	2589
	120	2626
	5/8" x 1"	40
5/8" x 1"	80	2688
	40	2685
5/8" x 1-1/2"	80	2686
	5/8" x 2"	80
3/4" x 2"	80	2739



PART # 2712

HALF-TAPER SPIRAL CARTRIDGE ROLLS

1/8" HOLE, BOX OF 50.

Dia./Length	Grit	Part #
3/8" x 1"	40	2682
	80	2683
	120	2740
3/8" x 1-1/2"	40	2741
	80	2742
	120	2743
1/2" x 1-1/2"	320	2744
	40	2745
	80	2746
5/8" x 1-1/2"	40	2747
	80	2684



PART # 2751

X-BUFFS

10 PER BOX



Fine finish honing and polishing pads provide an easy method to clean and prep bores & passage ways of various engine parts.

2-Ply		
Dia.	Finish	Part #
3/4"	Medium	2720
	Very Fine	2721
1"	Medium	2722
	Very Fine	2723
1-1/2"	Medium	2724
	Very Fine	2725
3-Ply Heavy-Duty		
1-1/2"	Medium	2726
	Very Fine	2727



PART # 2728

MANDRELS - 1/4" SHANK

For 1/8" hole Cartridge Rolls			
For use on:	OAL	Pilot length	Part #
1" L. rolls	2-1/2"	3/4"	2751
1" L. rolls	6"	3/4"	2751L
1-1/2" L. rolls	2-3/4"	1"	2713
1-1/2" L. rolls	6"	1"	2713L
2" L. rolls	3-1/4"	1-1/2"	2712
2" L. rolls	6"	1-1/2"	2712L



PART # 2730

For X-Buff/Flap Wheel		For X-Buffs	
Length	Part #	Length	Part #
4-3/8"	*2730	3"	2728
*includes 3 set screws		4"	2729

Abrasive Bands

Aluminum Oxide/Resin Bond
Sold Individually



Description	Grit	Part #
1" dia. x 1" L.	40	2714
1" dia. x 1" L.	80	2603
Mandrel, 1/4" Shank		2600

MOUNTED FLAP WHEELS

1" ABRASIVE LENGTH

1/4" Straight Shank		
Dia.	Grit	Part #
1"	60	2660
	80	2661
	120	2592
1-1/2"	80	2663
	80	*2665
2"	120	*2668
	80	2595
	120	2670
2-1/2"	80	2596
3"	80	2674



*1/2" Abrasive Length

1/4"-20 Threaded Shank

1"	80	2667
	120	2748
	60	2671
2"	80	2672
	120	2749
1/4"-20 Straight Shank Adaptor		2731



Shop Essentials



TUNGSTEN CARBIDE ROTARY BURRS

BUILT FOR HIGH EFFICIENCY AND RAPID METAL REMOVAL (1/4" SHANK)

SHAPE	STYLE	BURR DIA.	LENGTH OF CUT	SHANK LENGTH	PART #
Ball	Single Cut	1/2"	7/16"	2-1/2"	52
		1/2"	7/16"	6"	52S
		3/4"	11/16"	2-1/2"	54
	Double Cut	1/4"	7/32"	2-1/2"	49DC
		1/2"	7/16"	2-1/2"	52DC
		1/2"	7/16"	6"	52SDC
Aluminum Cut	3/8"	5/16"	2-1/2"	108AC	
	1/2"	7/16"	2-1/2"	110AC	
Cylinder Radius	Single Cut	5/8"	1"	2-1/2"	50
	Aluminum Cut	3/8"	3/4"	2-1/2"	100AC
Angled Cone	Single Cut	60 deg.	1/2"	2-1/2"	40
		90 deg.	3/4"	2-1/2"	42
Radius Cone	Single Cut	1/2"	1-1/8"	2-1/2"	44
		1/2"	1-1/8"	6"	44S
		1/2"	1-1/4"	6"	43S
		5/8"	1-15/16"	2-1/2"	43
	Aluminum Cut	1/2"	1-1/8"	2-1/2"	120AC
Cone	Single Cut	1/4"	3/4"	2-1/2"	62
		1/4"	1"	2-1/2"	64
		3/8"	3/4"	2-1/2"	66
	Double Cut	1/4"	3/4"	2-1/2"	66DC
	Radius Tree	Single Cut	3/8"	3/4"	2-1/2"
3/8"			3/4"	6"	45S
3/4"			1-1/4"	2-1/2"	46
Double Cut		3/8"	3/4"	2-1/2"	45DC
		3/8"	3/4"	6"	45SDC
		1/2"	1"	2-1/2"	47DC
Aluminum Cut	3/8"	3/4"	2-1/2"	104AC	
	1/2"	1"	2-1/2"	106AC	
Tree	Single Cut	5/8"	1"	2-1/2"	58
Cylinder	Single Cut	1/8"	1/2"	2-1/2"	33
		1/2"	1"	6"	59S
		1"	1"	2-1/2"	60
	Double Cut	1/8"	1/2"	2-1/2"	33DC
	Aluminum Cut	3/8"	3/4"	2-1/2"	116AC
1/2"		1"	2-1/2"	118AC	
Oval	Single Cut	1/2"	7/8"	6"	51S
	Double Cut	3/8"	5/8"	2-1/2"	48DC
		1/2"	7/8"	6"	51SDC
	Aluminum Cut	3/8"	5/8"	2-1/2"	112AC
1/2"		7/8"	2-1/2"	114AC	

SINGLE CUT Use for material removal	DOUBLE CUT Designed for fast material removal	ALUMINUM CUT Specifically used for aluminum applications
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H.S.S. ROTARY BURRS

2-1/2" LENGTH • SINGLE CUT*

SHAPE	BURR DIA.	LENGTH OF CUT	PART #
Ball	1/4"	1/4"	81
	1/2"	1/2"	82
	3/4"	3/4"	86
Cylinder Radius	5/16"	1"	78
Angled Cone	90 deg.	3/4"	53
Cone	1/4"	3/4"	92
	1/4"	1"	59
Radius Tree	3/8"	3/4"	55
	1/2"	1-1/8"	74
	3/4"	1-1/4"	57
Tree	5/8"	1"	84

*All rotary burrs have a 1/4" dia. shank that may be used with any standard die grinder. Use of safety glasses is highly recommended when using these tools.

MOUNTED POINTS WITH 1/4" SHANK

 A1 W: 3/4" L: 2-1/2"	 A3 W: 1" L: 2-3/4"	 A4 W: 1-1/8" L: 1-1/4"	 A5 W: 3/4" L: 1-1/8"	 A11 W: 3/8" L: 2"
 A12 W: 1-1/8" L: 1-1/4"	 A14 W: 1-1/8" L: 7/8"	 A15 W: 1/4" L: 1-1/8"	 A21 W: 1" L: 1"	 A23 W: 3/4" L: 1"
 A24 W: 1/4" L: 3/4"	 A25 Dia: 1"	 A26 Dia: 5/8"	 A31 W: 1-3/8" L: 1"	 A32 W: 1" L: 5/8"
 A34 W: 1-1/2" L: 3/8"	 A36 W: 1-5/8" L: 3/8"	 A38 W: 1" L: 1"	 236 W: 1-5/8" L: 1/2"	 B52 W: 3/8" L: 3/4"

Mini Air Sander Replacement Belts

DESCRIPTION	PART#
80 Grit Belts, 10 Pk, 3/8" x 13"	231A
120 Grit Belts, 10 Pk, 3/8" x 13"	231B

AIR DIE GRINDER



PART #
239

1/4" DRIVE STANDARD GRINDER

- 22,000 rpm, 7" OAL, 1-1/4 lbs.
- Rear exhaust minimizes chip flyback.
- Ball bearing construction for long tool life.

ECONOMY HEAD HOLDERS

VALUE PRICED



PART #
4268

- Head can be mounted either side up.
- Tapered mandrels can fit any size head bolt hole.
- Clearance for guide knurling, ball broaching, or any type of pass through tooling.

360° POLISHED ALUMINUM UNIVERSAL HEAD HOLDER

PROFESSIONAL GRADE

Head can be rotated 360°. Use with import and domestic heads. Slip resistant neoprene coated rails hold head in position & provide protection. Use with cams & cranks while measuring or magnafluxing. Can be mounted for increased stability.



PART #
4271

CYLINDER HEAD MILLING ADAPTERS

Save time when setting up import cylinder heads by using these adapters. Eliminate time consuming stud removal and height adjustment on milling machine using vertical setup plate by using the exhaust side bolt holes or existing studs and allows for height adjustment.

(1 PAIR)

PART #
4348



CYLINDER HEAD STUD SPACER

Threaded stud spacer allows fast & easy setup when resurfacing on foreign or domestic cylinder heads. Eliminates removing and installing old studs.

METRIC 8MM X 1.25

STANDARD 3/8" - 16

(1 PAIR)

PART #
4360

(1 PAIR)

PART #
4361





GLASS BEAD GLOVES

NEW, IMPROVED!

Fully embossed/rough hand, textured to provide a firm grip while cleaning parts. Gloves are cotton lined, finely tailored, with finished seamed cuffs, and designed to fit following cabinets: ABS, Aero, Clean-Peen, Econoline, Empire, Goff, Kelco, K.I., Median Blast, Pauli & Griffin, Snap-On, Trinco, Universal, Winona V.N., Zero, and others.

Port Hole Diameter	Port Hole Circum.	Overall Length	Pkg. Description	Part #
6"	19"	23"	Pair	4779
7"	22"	26"	Pair	4781
7"	22"	30"	Pair	4782
8"	25"	26"	Pair	4783
			Pair	4709
8"	25"	30"	Pair/Extra Left	4711
			Left (only)	4708
			Right (only)	4710
9"	28"	30"	Pair	4784
			Pair	4786
10"	25"	30"	Pair/Extra Left	4788
			Left (only)	4785
			Right (only)	4787
13"	41"	30"	Pair	4789



Shop Essentials

HOT TANK GLOVES

Alkaline & oil resistant, lined for heat protection, mid-forearm gauntlet style, Neoprene coated.

- PART #**
4700
PAIR
- PART #**
4704
SHOULDER LENGTH PAIR



DISPOSABLE GLOVES

LATEX DISPOSABLE GLOVES

Protect your hands while using spray paint, bluing dye, etc. Gloves fit either hand. Large Size fits most hands.

- (BOX/100)
- PART #**
LG01



HEAT/FLAME RESISTANT GLOVES

One size fits all. Provides heat protection for up to 400°F. Use for removing heads, blocks, etc. from ovens.

- PART #**
4702
PAIR



BLUE NITRIL DISPOSABLE GLOVES

Powdered, latex free gloves are 4 mil thick and have a textured finish. Large size fits most hands.

- (BOX/100)
- PART #**
LG02

DISPOSABLE DUST MASK

Double-banded, double strapped.

OSHA APPROVED
(BOX/20)

- PART #**
4719



EYE & FACE PROTECTION

PROTECTIVE SAFETY GLASSES

These protective safety glasses have adjustable temples with flat fold side shields. Features universal bridge and temples; adjustable from 5-1/2" to 6-1/2".



- PART #**
4722

PROTECTIVE APRONS

PVC/Nylon Aprons

The ultimate in heavy duty protection. The ideal apron for the engine builder. Apron is puncture, acid, and caustic resistant. 35"W x 45"L

- PART #**
4714



COTTON DENIM APRONS

100% heavy duty cotton denim with three 30"L grommet ties at neck and waist. 28"W x 36"L and machine washable. Bib pocket at chest includes pencil sleeve. Hip pockets are roomy; ideal for small accessories.

- PART #**
4715



FIBERGLASS FACE SHIELD

Lightweight fiberglass face shield gives excellent protection to entire face. Positive lock headgear.

Clear window measures 8"x9" at .080" thick.

- PART #**
4716
- PART #**
4716S

REPLACEMENT SHIELD



PROTECTIVE SAFETY GOGGLES

Fits over glasses. Made of soft vinyl plastic.

- PART #**
4724



PREMIUM SILVER SHOT

Silver Shot is a new soft metallic shot for blast cleaning aluminum, cast iron, and steel parts with no surface deterioration. Proven to last longer than glass beads and conventional steel shot, unlike glass beads, it won't break down into dust, and it will not work harden during use like steel shot. **Packaged in a 50 lb. pail**



RECOMMENDED USAGE FOR AIR BLASTING CABINETS:

Suction Type - Part #SS070
 Pressure Type - Part #SS070 or SS230
 Centrifugal or Paddle
 Wheel Machines -Part #SS110 or SS230

Use On	SAE Size	Screen Size	Part #
Aluminum or Zinc Parts	S70	#40&45	SS070
Removing Carbon Deposits	S110	#30&35	SS110
Cast Iron or Steel Parts	S170	#20&25	SS170
Cast Iron or Steel Parts	S230	#18&20	SS230

*The lower the SAE size, the finer the shot.

GENERAL CLEANING MEDIA

STEEL SHOT

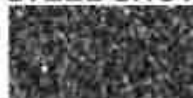


For Cleaning Cast Iron/Steel
 SAE - 170
 #20 & #25 Screen
 50 Lb. Pail

PART #

7016

STEEL SHOT



For Removing Carbon Deposits
 SAE - 110
 #30 & #35 Screen
 50 Lb. Pail

PART #

7010

GLASS BEAD



All Metals, Leaves Clean Surface
 SAE - Standard
 #60-#140 Screen
 50 Lb. Pail

PART #

7017

STAINLESS STEEL

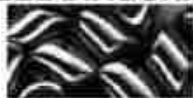


All Metals, Best On Aluminum
 SAE - 110
 #30 & #35 Screen
 50 Lb. Pail

PART #

7011

STEEL DIAGONALS



For Parts Cleaning Tumblers
 SAE - 1/4" (.250")
 25 Lb. Pail

PART #

7014

STEEL BALL CONES



For Parts Cleaning Tumblers
 SAE - 3/8" (.375")
 25 Lb. Pail

PART #

7015

CLEANING MEDIA

For soft material like brass and aluminum.



Part No.	Description	Bag Size
7022	Ceramic Vibratory	25 lbs.

Shop Essentials

GLASS BEAD WINDOW FILM

Save your bead blasting cabinet glass with replacement mylar film. Easily attaches to cabinet!



APPLICATION (5/PK) PART

Zero (12"x19" Self Adhesive)	GB400
Trinco (12"x24" Non Adhesive)	GB500

GLASS BEAD GUNS

LARGE MACHINE STYLE

Fits most large glass bead machines, Zero, Empire, WVN, Blast-It-All, Etc.



PART #

GB200

Replacement Parts Part

Gun Body	GB201
Brass Fitting	GB202
Nozzle Holding Nut	GB203

Rebuild Kit# Nozzle

GB210	GB209 (1/4" I.D.)
GB220	GB219 (5/16" I.D.)
GB230	GB229 (3/8" I.D.)
GB240	GB239 (7/16" I.D.)

Rebuild Kits

Includes a Nozzle, Orifice, Lock Nut, and O-Ring

SMALL MACHINE STYLE

Fits most small glass bead machines, Econoline, Trinco, Etc.



Replacement Parts Part

Gun Body	GB101
Carbide Nozzle 3/4" O.D., 5/16" I.D.	GB102

PART #

GB100



ULTRASONIC CLEANER

SAFE TO USE ON FERROUS METALS & ALUMINUM

A highly concentrated, powerful, fast acting, penetrating, biodegradable ultrasonic cleaner/degreaser. This amazing detergent is water-based and contains no chlorinated or petroleum solvents, no acids or free caustic. ULTRASONIC CLEANER has no flash point, making it safer than solvents. ULTRASONIC CLEANER contains multiple penetrating emulsifiers that dissolve and float away even the most stubborn grease. ULTRASONIC CLEANER is cost effective and can significantly reduce hazardous waste and reporting requirements. Can be used at ambient temperatures up to 180°F.

BLEND	MIX	PACKAGE SIZE	PART #
Liquid	1:10-1:20 Parts with Water	5 gallon pail	CH30522

PARTS CLEANING SOLVENT

NATURAL PLUS - ALL METAL CLEANER

Non-flammable and non-caustic all purpose parts cleaner. Blend of citrus-base liquid concentrate designed to replace chlorinated solvents and other harsh alkaline cleaners. For use in recirculating washers, tumblers, & dip tanks. Safe on all metals but should be tested prior to cleaning plastics and painted surfaces. VOC value rated under 10%. Temperature range up to 120°F.

BLEND	MIX	PACKAGE SIZE	PART #
Liquid	1:3-1:10 Parts with Water	1 gallon jug	CH30901
		5 gallon pail	CH30900

PRO-SOAP HEAVY DUTY HAND CLEANER

A superior all natural hand cleaner for removing dirt, grease, grime, ink, paint, resin, and tar. Contains natural cleaning citrus oil and moisturizing cocoa oil to leave hands clean and conditioned. Does not contain harmful abrasives or petroleum solvents.

BLEND	MIX	PACKAGE SIZE	PART #
Powder	Use As Is	7 lb. jug	CH02999
		Case: 4-7 lb. jugs	CH03000



Immediately determine the alkalinity or acidity of a solution. Just dip, shake and match these easy to use strips. This kit contains 200 strips and a color chart all in a plastic case. Ph values under 7.0 are acidic, values of 7.0 are neutral and values under 7.0 are alkaline or basic.

PART #
VSIPIKIT



EVAPO-RUST™

A NEW WAY TO SAFELY AND EASILY REMOVE RUST



EVAPO-RUST® rust remover is an environmentally-safe water-based product that removes rust in minutes, without scrubbing. It's so easy to use, anyone can restore their rusted tools, auto parts, even firearms to like-new condition. One gallon de-rusts up to 300 lbs. of steel.

QUART	1 GALLON	3 GALLON	5 GALLON	55 GALLON
PART# EVARQ	PART# EVAR1	PART# EVAR3	PART# EVAR5	PART# EVAR55

FINAL SPRAY

ALKALINE SPRAY WASHING & HOT TANK COMPOUND FOR USE ON ALL METALS

A powdered alkaline compound for cleaning all metals. Final spray is free rinsing, non-corrosive, and has a mild alkalinity. Final Spray was designed to replace silicated products that tend to bake-on aluminum surfaces and deposit frosty or powdery residue which interferes with machining, conversion coatings, and gives aluminum a dull appearance. It leaves no residue to interfere with inspecting, spot welding, and machining. Final Spray has three complex ingredients that inhibit rust and protect metal parts. Parts cleaned with Final Spray emerge from the tank clean and shiny.

BLEND	MIX JET SPRAY	MIX TANK	PKG. SIZE	PART #
Powder	1/2-3 oz. per gal. of water	3-6 oz. per gal. of water	125 lb. drum	CH40712
			500 lb. barrel	CH50712

PRESSURE WASHING & STEAM CLEANING

PRO-WASH SURFACE CLEANER

Medium-to-heavy duty concentrated cleaner specially formulated for use in high pressure and steam cleaner systems to clean all washable surfaces. Mix with hot or cold water. Rapidly penetrates and emulsifies dirt, oil, and grease. Use as engine degreaser. Moderate foaming action with lemon odor. Temperature range up to 180°F.

BLEND	MIX	PKG. SIZE	PART #
Liquid	1:10-1:50 Parts With Water	5 gallon pail	CH30405

SPECIAL NOTE:

All 500 lb. drums are shipped F.O.B. California.

HOT TANK CLEANERS

PRODUCT NAME	APPLICATION	TEMP. RANGE	MIX RATIO	PACKAGE SIZE	PART #
CITRUS SOAK (POWDER)	All Metals	140°F	2-10 oz. per gallon of water.	50 lb. Pail	CH30814
				125 lb. Keg	CH40814
				500 lb. Barrel	CH50814
HURRICANE BLUE (POWDER)	All Metals	100-160°F	Varies, start with 4 lbs. per 10 gallons of water.	24 lb. Pail	CHHB24
				50 lb. Pail	CHHB50
				125 lb. Keg	CHHB125
FERROUS SOAK (POWDER)	Ferrous Metals Only	160-200°F	2-10 oz. per gallon of water	50 lb. Pail	CH30701
				500 lb. Barrel	CH50701
PH NEUTRALIZER (POWDER)	All Metals	N/A	Use with pH Test Kit	25 lb. Pail	CH30011

JET CLEANERS

PRODUCT NAME	APPLICATION	TEMP. RANGE	MIX RATIO	PACKAGE SIZE	PART #
CITRUS SPRAY (POWDER)	All Metals	160-190°F	3-6 oz. per gallon of water	50 lb. Pail	CH31862
				125 lb. Keg	CH41862
				500 lb. Barrel	CH51862
PRO SPRAY (POWDER)	All Metals	160-190°F	3-6 oz. per gallon of water	50 lb. Pail	CH31801
				125 lb. Keg	CH41801
				500 lb. Barrel	CH51801
KEPHOS CLEANER (POWDER)	Ferrous Metals Only	180-200°F	3-8 oz. per gallon of water	50 lb. Pail	CH30465
				500 lb. Barrel	CH50465
PH NEUTRALIZER (POWDER)	All Metals	N/A	Use with pH Test Kit	25 lb. Pail	CH30011
FOAM CONTROL (LIQUID)	All Metals	Up to 212°F	1-5 oz. per 40 gal. solution	32 oz. Quart	CH20014


PART #
SSA-1000

SURE SHOT SPRAYER

The Sure Shot features metal construction, brass nozzles, and corrosion resistant internal working parts. The sprayer has a 32 oz. liquid capacity. Steel sprayers can be used with oil and solvent based materials. Repair kits are available, as well as a variety of nozzles and extensions.

Sure Shot sprayers are an inexpensive way to apply bulk chemicals like cleaners, degreasers, penetrating oils, solvents and lubricants. They use readily available compressed air, instead of flammable or dangerous propellants, and because they are reusable you don't have to worry about disposal of empty cans.


PART #
SSA-2000

SURE SHOT ATOMIZER

Model "B" Sprayers are available in 8oz and 16oz capacities. The sprayers are the same diameter as an aerosol can and can be used with many products. All Model "B" sprayers come standard with Viton® seals. These seals are compatible with MOST products. Other seals are available. Always check with your chemical supplier or to be sure the product you are using is compatible with the Sure Shot sprayer you choose.

STEEL CLEANING BASKETS

2 PIECE BASKET

PART #
4738


A light weight steel all galvanized basket which is impervious to solvents. Not for use with strong alkaline or caustic cleaners. Although it has two halves for easy filling, it assembles quickly to a 9" Dia. x 16" long enclosed basket.

1 PIECE BASKET

PART #
4739


With clips, lid, and handle

(9" Dia. x 8-1/4" Long)

PART #
4739L

PART #
4739B

Lid & Clip For #4739B Basket Only (With Handle)

SMALL/MEDIUM BASKETS

DURABLE WIRE MESH BASKETS WITH SNAP LOCK LID.


PART #
4738S

Size: 2" Dia. x 6" Long


PART #
4738M

Size: 4-1/4" Dia. x 6-3/4" Long

STEEL DIP BASKETS

Zinc plated dip basket for soaking/cleaning parts. 10" Dia. with carrying handle and hooks to hang basket while draining. Sturdy, light weight basket for use with solvents and non-caustic cleaners. Fits 5 & 7 gallon plastic or metal pails. (Pail not included.)

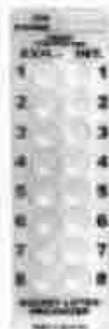

PART #
4740

BUCKET LIFTER CLEANING BASKET

KEEP LIFTERS ORGANIZED & CLEAN

PART #
BLC-01

Sixteen compartments keep lifters in order during cleaning. Heavy duty latch keeps lid closed. Perforated basket allows flow to all lifters. Remove divider to clean other parts.


PART #
BLO-02


BUCKET LIFTER ORGANIZER

Sixteen compartments to keep clean lifters separate and in order. Color coded with printed red & blue assembly position numbers to keep intake separate from exhaust. Use easy to remove dry erase markers to mark job number and engine information on organizer. Easy clean up for the next job!

SMALL PARTS CLEANER

PART #
4737

Easy to use mini parts cleaner. Put parts inside and shoot glass beading through top hole, then shake to remove excess through release holes. Unit is 6" long and 2" in diameter. Made out of heavy duty metal.



KEEPER CLEANER HOLDER

PART #
4736

Clean keepers & small parts in dip cans & parts cleaner. 1/4" holes in top and bottom allows solvent to clean parts. Made of PVC, impervious to solvents.



FLOW-THRU PARTS CLEANING BRUSHES

These are the best brushes for washing parts! An ergonomic polypropylene handle, designed to reduce wrist fatigue, and synthetic filaments resistant to solvent type cleaners make this the best brush for your money! Both brushes are supplied with a 24" tube designed to fit .500" to .600" O.D. washer nozzles.


PART #
B3321

PART #
B3320

COATED ABRASIVE INDUSTRIAL BELTS ABRASIVE CLOTH SHOP ROLLS

10 PER PACK

Aluminum Oxide & Silicon Carbide available in grits 24-400.*

Zirconia available in grits 24-120.*



WIDTH	LENGTH	ALUMINUM OXIDE	SILICON CARBIDE	ZIRCONIA
3/8	13	AB100	AB200	AB300
1/2	12	AB101	AB201	AB301
1/2	18	AB102	AB202	AB302
1/2	24	AB103	AB203	AB303
3/4	18	AB104	AB204	AB304
3/4	20-1/2	AB105	AB205	AB305
1	12	AB106	AB206	AB306
1	30	AB107	AB207	AB307
1	42	AB108	AB208	AB308
1-1/8	21	AB109	AB209	AB309
1-1/2	60	AB110	AB210	AB310
1-1/2	72	AB111	AB211	AB311
2	20	AB112	AB212	AB312
2	48	AB113	AB213	AB313
2	60	AB114	AB214	AB314
2	72	AB115	AB215	AB315
2	132	AB116	AB216	AB316
2-1/2	48	AB117	AB217	AB317
2-1/2	60	AB118	AB218	AB318
2-1/2	72	AB119	AB219	AB319
3	18	AB120	AB220	AB320
3	21	AB121	AB221	AB321
3	24	AB122	AB222	AB322
3	60	AB123	AB223	AB323
3	72	AB124	AB224	AB324
3-1/2	15-1/2	AB125	AB225	AB325
4	21	AB126	AB226	AB326
4	21-3/4	AB127	AB227	AB327
4	24	AB128	AB228	AB328
4	36	AB129	AB229	AB329
6	48	AB130	AB230	AB330

***NOTE: WHEN ORDERING, PLEASE SPECIFY GRIT**
WE CAN MAKE ANY SIZE BELT UP TO 52" WIDE.
PLEASE CALL 1-800-521-2936 FOR PRICING & AVAILABILITY.

Continuous 150 foot (50 yard) rolls allow you to cut what you need! Packaged in a dispenser for storage.



WIDTH	GRIT PART #							
	50	80	100	120	180	220	240	320
1"	---	2944	2946	2948	2952	2954	2956	2958
1-1/2"	2960	2964	2966	2968	2972	2974	2976	2978

NYLON-ABRASIVE IMPREGNATED CLEANING PADS



Use wet or dry for general cleaning, light deburring, or finish blending.

PAD SIZE - 6"X9"
10 PADS PER PACK
PART #2561

SUPER FINISH BELT GREASE- Part#2999A

Grease & aluminum-oxide powder creates luster & a bright finish. 28 oz

ABRASIVE BELT HOLDER- Part# 2999E

Works like a giant "Eraser". Simply press firmly against running abrasive for a few seconds or until loaded particles have been removed. 13.3 oz.

ABRASIVE BELT GREASE STICK- Part#2999G

Light bodied grease that provides lubrication and prevents clogging, leaving the abrasive grit free to cut and smooth. 20 oz

WIRE END BRUSHES

BEST QUALITY- U.S. MADE

For Cast Iron: Heat treated high tensile steel wire provides superior fatigue resistance and excellent brushing action.

For Aluminum: Specially designed stainless steel brushes are the top pick, eliminating contamination and possible rust formation. Removes carbon, not aluminum.

CAST IRON KNOTTED

Length	Duty	Wire Size	Part No.
3/4"	Severe	.014	B3076
3/4"	Extreme	.020	B3084
1-1/8"	Severe	.014	B3075
1-1/8"	Extreme	.020	B3082

CAST IRON CRIMPED

Length	Duty	Wire Size	Part No.
1/2"	Med/Heavy	.020	B3079
3/4"	Medium	.014	B3077
3/4"	Med/Heavy	.014	B3080
1"	Medium	.014	B3078
1"	Med/Heavy	.020	B3081

ALUMINUM CRIMPED

Length	Duty	Wire Size	Part No.
1/2"	Standard	.006	B3065
3/4"	Standard	.006	B3066
1"	Standard	.006	B3067

NON-SPARK CRIMPED

Length	Duty	Wire Size	Part No.
3/4"	Standard	.010	B3120
1"	Standard	.010	B3121

**ROLOC®
BRISTLE
DISCS**


Brush away gasket material with tough, molded plastic bristle discs. Use these plastic discs instead of wire brushes to prevent cutting or gouging. High max operating speed for use on die grinding.

Will not remove base material

ROLOC BRISTLE DISCS

Part No.	Dia.	Color	Grit	Application
BD524	2"	Green	Coarse 50 grit	Steel
BD525	2"	Yellow	Medium 80 grit	Aluminum or Steel
BD526	2"	White	Fine 120 grit	Aluminum
BD526	3"	Green	Coarse 50 grit	Steel
BD527	3"	Yellow	Medium 80 grit	Aluminum or Steel
BD529	3"	White	Fine 120 grit	Aluminum
BD533	4"	Green	Coarse 50 grit	Steel
BD534	4"	Yellow	Medium 80 grit	Aluminum or Steel

NOTE: 4" Roloc Discs have an arbor size of 5/8-11

**ROLOC
BRISTLE DISC
HOLDERS**

2" disc holder
Part No.
BH779
25,000 max
operating speed

3" disc holder
Part No.
BH786
10,000 max
operating speed

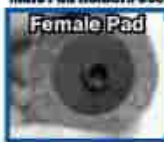
PAD HOLDER (WITH MANDREL)

FEMALE PAD HOLDERS use **MALE PADS.**
MALE PAD HOLDERS use **FEMALE PADS.**

Dia.	Desc.	Fem. Part #	Male Part #
2"	Medium	2696	2696M
3"	Medium	2692	2692M
4"	Medium	2702	2702M



Male Pad Holders Use



Female Pad Holders Use



**Replacement Mandrel -
Part #2697**

CONDITIONING PADS

Dia.	Desc.	Pk/Qty	FEMALE PART # USE WITH MALE HOLDER	Male Part # USE WITH FEMALE HOLDER
2"	Fine	10	2695	2695M
2"	Medium	10	2693	2693M
2"	Coarse	10	2694	2694M
3"	Fine	10	2691	2691M
3"	Medium	10	2689	2689M
3"	Coarse	10	2690	2690M
4"	Fine	10	2699	-
4"	Medium	10	2700	2700M
4"	Coarse	10	2701	2701M



1^{1/4}" wide,
precision-ground,
double-edge,
carbide blade.

**SUPER
SCRAPER**

Part No: 2449

Nickel chrome-plated
1/8" steel shank.
Hardwood handle.

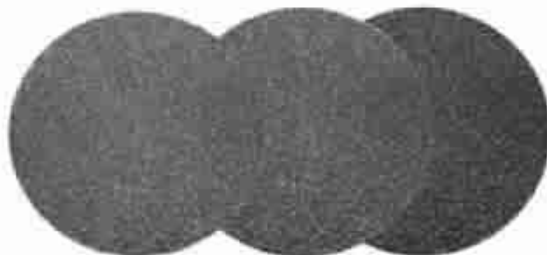
The "super" scraper is ideal for just about anything! Removes hard to budge glues, paint, rust, metal build up, gaskets etc. Works on any metal even aluminum. The difference from other scrapers is in the precision ground carbide edge. The double edge carbide blade is built to last 100x longer than most typical steel blades.

Engine Cleaning Brush Kit

10 pc. kit contains all the necessary brushes needed for a typical rebuild. Kit includes the following:

Brush Type	Part #	Brush Type	Part #
3/8"x34" Oil Gallery Brush	B3044	4" Cyl. Wash Brush	B3202
1/2"x34" Oil Gallery Brush	B3045	Lifter Bore Brush	B3038
5/8"x34" Oil Gallery Brush	B3046	Parts Cleaning Brush	B3062
11/32" Valve Guide Brush	B3021	1/4" Feed Hole Brush	B2951
3/8" Valve Guide Brush	B3022	5/16" Cam Brush	B3041

**KIT PART #
B3049DX**


SANDING DISCS (ALUMINUM OXIDE / RESIN BOND)

Dia.	Grit	Pk/Qty	FEMALE PART # USE WITH MALE HOLDER	MALE PART # USE WITH FEMALE HOLDER
2"	40	10	2703	2703M
2"	60	10	2704	2704M
2"	80	10	2705	2705M
2"	120	10	2706	2706M
3"	40	10	2707	2707M
3"	60	10	2708	2708M
3"	80	10	2709	2709M
3"	120	10	2710	2710M

WIRE END BRUSHES

BEST QUALITY - U.S. MADE

For Cast Iron: Heat treated high tensile steel wire provides superior fatigue resistance and excellent brushing action.

Cast Iron Knotted



Length	Duty	Wire Size	Part #
3/4"	Severe	.014	B3076
3/4"	Extreme	.020	B3084
1-1/8"	Severe	.014	B3075
1-1/8"	Extreme	.020	B3082



Aluminum Crimped

Length	Duty	Wire Size	Part #
1/2"	Standard	.006	B3065
3/4"	Standard	.006	B3066
1"	Standard	.006	B3067

WIRE END BRUSHES

BEST QUALITY - U.S. MADE

For Aluminum: Specially designed stainless steel brushes are the top pick, eliminating contamination and possible rust formation. Removes carbon, not aluminum.

Cast Iron Crimped



Length	Duty	Wire Size	Part #
1/2"	Med/Heavy	.020	B3079
3/4"	Medium	.014	B3077
3/4"	Med/Heavy	.020	B3080
1"	Medium	.014	B3078
1"	Med/Heavy	.020	B3081



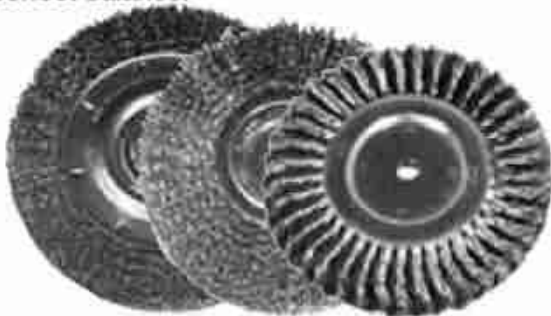
Non-Spark Crimped

Length	Duty	Wire Size	Part #
3/4"	Standard	.010	B3120
1"	Standard	.010	B3121

WIRE WHEEL BRUSHES

Solid Ring Construction

Our brushes run smoother, last longer and provide a perfect balance.



DIA.	WIRE STYLE	DUTY	WIRE SIZE	ARBOR HOLE	FACE WIDTH	PART #
4"	Std.	Std.	.006	3/8"-1/2"	1/2"	B3134
		Medium	.014	3/8"-1/2"	3/4"	B3140
	Crimped	Heavy	.014	5/8"-1/2"	1-1/8"	B3130
		Super	.014	3/8"-1/2"	1/2"	B3150
6"	Crimped	Medium	.014	5/8"-1/2"	3/4"	B3141
		Heavy	.014	5/8"-1/2"	1-1/8"	B3131
	Twisted	Super	.014	5/8"-1/2"	1/2"	B3152
		Knotted	Extreme	.023	5/8"-1/2"	3/8"
8"	Crimped	Medium	.014	5/8"-1/2"	1"	B3143
		Heavy	.014	5/8"-1/2"	1-1/4"	B3133
	Twisted	Super	.014	5/8"-1/2"	5/8"	B3153
		Knotted	Extreme	.023	5/8"-1/2"	1/2"

SURFACE CONDITIONING PADS

Hook & Loop Pad Holder Type

Removes gaskets and other surface residue material fast! Press hook & loop disc onto grip pad holder.



Dia.	Finish	Qty.	Part No.
2"	Coarse	10	2554
2"	Medium	10	2556
4"	Coarse	10	2550
4"	Medium	10	2552
2" Grip Holder w/1/4" Straight Shank			2560
4 - 4-1/2" Grip Holder w/1/4" Straight Shank			2558

Gasket Removal Coated Discs

Safe on Aluminum & Cast Iron

Removes gaskets, carbon, rust, & paint. Cleans & polishes!

Description	Part No.
2" Removal Disc	2572
3" Removal Disc	2573
2" Holder	2696M
3" Holder	2692M



VALVE GUIDE BRUSHES

STEEL OR NYLON

Power brushes are 9-1/2" OAL, Nylon hand brushes are 12" with loop handle, 2-1/2" - 3" trim length.

DIA.	POWER(1/4" SHAFT)		HAND NYLON
	STEEL	NYLON	
1/4"	B2990	B3005	*B3019
5/16"	B3000	B3006	*B3020
11/32"	B3001	B3007	*B3021
3/8"	B3002	B3008	*B3022
7/16"	B3003	B3009	*B3023
1/2"	B3004	B3010	*B3024
9/16"	B2960	B2963	-
5/8"	B2961	B2964	-
3/4"	B2962	B2965	B3039
7/8"	B2950	-	-



**6/PC. NYLON BRUSH KIT
(*INCLUDED)**

**PART #
B3025**

FEED LINE & CRANK HOLE BRUSHES

FOR ENGINE PREP

Size	Length	Steel	Nylon
1/8" x 2"	12"	-	B3018
3/16" x 2"	7"	B21090	-
1/4" x 2"	10"	B2951	B3040
	10" H.D.	BH2951	-
5/16" x 2"	10"	B2952	-
	12"	-	B3041
5/16" x 2-1/2"	10" H.D.	BH2952	-
	34"	-	B3027
3/8" x 2-1/2"	12"	B2953	B3042
	12" H.D.	BH2953	-
3/8" x 3"	34"	-	B3044
7/8" x 3"	6" H.D.	-	B3038*

*Lifter Bore Brush

CUSTOM DIESEL BRUSHES

FOR COPPER CLEANING & PREP WORK

DETROIT DIESEL

Carbon steel wire, use as seat brush to insure perfect seating of newly installed coppers.



**PART #
B3309**

(149)

**PART #
B3307**

**PART #
B3308**

(53 / 71 / 92)

CUMMINS

Stainless steel wire, cleans/polishes copper. Use as bench tool.



**PART #
B3301**

**PART #
B3302**

Carbon steel wire, use as seat brush to insure perfect seating of newly installed coppers.

STEEL TUBE BRUSHES

1" TRIM, 3-1/2" OAL

Dia.	Part #	Dia.	Part #
1/4"	B21072	1/2"	BFR2501
5/16"	B21175	5/8"	B21078
3/8"	BFR2500	1"	B21075
7/16"	B21142		

OIL GALLERY BRUSHES

STANDARD AND ULTRA-DUTY

The right size to fit your application.

	Size	Length	Grade	Part #
Nylon	5/16" x 2-1/2"	34"	Standard	B3027
	3/8" x 3"	34"	Standard	B3044*
	1/2" x 2-1/2"	34"	Standard	B3045*
	5/8" x 2-1/2"	34"	Standard	B3036
	5/8" x 3"	34"	Standard	B3046*
	3/4" x 2-1/2"	34"	Standard	B3037
	3/4" x 3"	12"	Standard	B3039
	3/4" x 3"	34"	Standard	B3047*
	3/4" x 3"	40"	Standard	B3048*
	5 pc. Nylon Brush Kit (* Included)			
Steel	5/16" x 2"	10"	Standard	B2952*
	3/8" x 2-1/2"	12"	Standard	B2953*
	1/2" x 2-1/2"	12"	Ultra-Duty	BH3500
	1/2" x 2-1/2"	34"	Standard	B2954*
	1/2" x 2-1/2"	34"	Ultra-Duty	BH2954
	5/8" x 3"	12"	Standard	B2955
	5/8" x 3"	12"	Ultra-Duty	BH2955
	5/8" x 3"	30"	Standard	B2956*
	5/8" x 3"	30"	Ultra-Duty	BH2956
	3/4" x 3"	30"	Ultra-Duty	BH2958
	3/4" x 3"	40"	Standard	B2957*
	3/4" x 3"	40"	Ultra-Duty	BH2957
	7/8" x 3"	24"	Standard	B2959
	1" x 3"	40"	Standard	B2967
1-1/2" x 3"	40"	Standard	B2968	
5 Pc. Steel Brush Kit (* Included)				B3049S



Engine Cleaning Brush Kit

10 pc. kit contains all the necessary brushes needed for a typical rebuild. Kit includes the following:

Brush Type	Part #	Brush Type	Part #
3/8"x34" Oil Gallery Brush	B3044	4" Cyl. Wash Brush	B3202
1/2"x34" Oil Gallery Brush	B3045	Lifter Bore Brush	B3038
5/8"x34" Oil Gallery Brush	B3046	Parts Cleaning Brush	B3062
11/32" Valve Guide Brush	B3021	1/4" Feed Hole Brush	B2951
3/8" Valve Guide Brush	B3022	5/16" Cam Brush	B3041

**KIT PART #
B3049DX**



THREAD CLEANING BRUSHES

3-1/2" BRUSH LENGTH 6-1/2" OAL

Dia. x Wire Size	Part #
3/4" x .008	B3011S
7/8" x .008	B3014S
1-1/2" x .010	B3013S



KNOTTED CUP BRUSHES

Heavy-duty single row knotted brush perform a variety of tasks. 5/8"-11NC.

Dia.	Wire	Part #
3-1/2"	.014	B3087
3-1/2"	.020	B3050
3-1/2"	.023	B3053
4"	.014	*B3070
4"	.014	B3088
4"	.020	B3051
5"	.014	B3089
6"	.014	B3071



*Double Row

HOLLOW/FLARED END BRUSHES

A) Hollow End: Use for G.P. applications.
B) Flared End: Excellent for side-action use. 1/4" shank.

Style	Dia.	Wire	Part #
B	1"	.020	B3072
B	1-1/2"	.020	B3083
A	1-3/4"	.0118	B3085
A	2-3/4"	.0118	B3086
B	2-3/4"	.020	B3073
B	3"	.020	B3074



CYLINDER WASHING BRUSHES

Nylon bristled brushes are designed to efficiently clean the cylinder walls after honing. Use with warm water & detergent. 18-1/2" length.



Dia.	Part #
3-1/2"	B3200
4"	B3202
4-1/2"	B3204
5"	B3206

MISCELLANEOUS BRUSHES

STYLE	OVERALL LENGTH	BRISTLE LENGTH	PART #	DESCRIPTION
A	13-3/4"	5-3/4"	B3060	Hand Scratch Brush
B	10"	5"	B3061	Wire Hand Brush
C	8-1/4"	1/4"	B3095	File Card Brush
D	11"	2-3/4"	B3062	Nylon Parts Brush
E	5-3/4"	3/4"	B3064	Tin Handle Brush
F	7-7/8"	1-3/4"	B3063	Stainless Injector Brush
F	7-7/8"	1-3/4"	*B3063S	Stainless Injector Brush

*Weaveback

SPECIALTY BRUSHES

Port Brushes

As brush wears, cut back spring for fresh wire.



Dia.	Wire	Length	Part #
1/4"	.020	4"	B3093
1/2"	.020	2-1/2"	B3094

Tight Area End Brushes

As brush wears, cut back to expose fresh wire.



Dia.	Wire	Length	Part #
1/4"	.012	6"	B3090
3/8"	.017	6"	B3091

Carbon Removal Brush

Cobalt-tipped cable brush for excessive carbon removal.

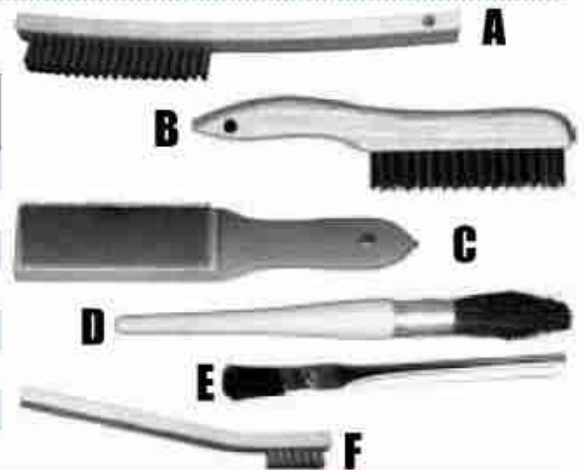


1/2" ball, 5/16" cable | B3092

BUTTERFLY BOLT HOLE BRUSHES

Brushes provide an efficient solution for cleaning bolt holes. 2-1/4" OAL. Holder is 1/4" Shank, 3-1/8" OAL.

DIA.	WIRE	BRUSH PART #	HOLDER PART #
1/4"	.005	BF2505	BFH1
5/16"	.005	BF3125	
3/8"	.008	BF3758	
7/16"	.008	BF4378	
1/2"	.008	BF5008	
5/8"	.008	BF6258	
3/4"	.008	BF7508	



PREMIUM GRADE HONING OILS AND LUBRICANTS

AND THE FINEST QUALITY WATER SOLUBLE SYNTHETIC GRINDING COOLANTS

Selecting the correct honing oil, grinding coolant, & other machine shop lubricants is just as important as selecting the best machine tooling and abrasives. We've chosen the finest base stocks and additives to formulate the highest quality blends for automotive machine shop use! Your choice of concentrates, or use as is, our products are economically packaged to fit your needs. If you require a custom blend, call us for price and availability.



OIL & LUBRICANTS

KNURLING OIL

Best Blend for valve guide knurling arbors and general knurling tools. Extends tool life and provides corrosion protection.

SIZE	PART #
1 Pint	4521
1 Quart	4522
1 Gallon	4524
5 Gallons	4526

VALVE GRINDING OIL

A premium blend of virgin based straight cutting oil with extreme pressure additives. Provides excellent surface finish, and corrosion protection for valve grinding. A blended concentrate for all valve refacers.

SIZE	PART #
1 Gallon	4540
5 Gallons	4542

PREMIUM GRADE VALVE GRINDING OIL - NEW

RED in Color - Premium grade - OEM matched - Superior to Aftermarket grade Oils - Reducing loading in wheel and provides free cool cutting of valves

SIZE	PART #
1 Gallon	4570
5 Gallon	4571

DIAMOND LAP OIL

A premium grade cutting oil with enhanced lubricating properties that extends the life of diamond laps by preventing excessive wear. Use as a dip or spray.

SIZE	PART #
1 Quart	4534

BRONZE GUIDE REAMING OIL

Highly refined premium grade oil with excellent lubricating properties that enhance reaming operations. Provides an ideal surface finish and corrosion protection. Extends life of reamers. Use as a spray or dip.

SIZE	PART #
1 Pint	4529
1 Quart	4528
1 Gallon	4530

TAP-MACHINE-TOOL (TMT®) LUBE

Finest quality lubricant for taps, reamers, drill bits, and valve seat cutters. A pure, synthetic lubricant that does it all, even on stainless steel and aluminum. A little goes a long way.

SIZE	PART #
1-1/4 Oz. Bottle	30111

WAY LUBE OIL

Premium blend of highly refined lubricating oils designed for use as a premium quality slide and way lubricant. It provides maximum lubricity, and is an exceptional anti-wear, long life, way lubricant.

SIZE	PART #
1 Gallon	4538

RUST INHIBITOR

Use on all metals! A non-chlorinated solvent based corrosion inhibitor designed to displace water & act as a fingerprint neutralizing agent. A formulated preservative that provides corrosion protection during storage or shipping for periods up to one month. Use as a spray, dip, or soak. (HAZMAT Required)

SIZE	PART #
1 Gallon	4548
5 Gallons	4550

SUMP DEODORIZING TABLETS (SDT®)

Destroys coolant odors immediately! This is not a perfume. Easy to use tablets reduce biofilm and neutralizes endotoxins. Designed to eliminate and control odors in small sumps (200 gallons or less). Use one tablet for every 25 gallons, each treatment lasts between one and two weeks.

SIZE	PART #
15 Tablets Per Tube	4561
Case/12 Tubes (180 Tablets)	4562

HONING OILS

GENERAL PURPOSE HONING OIL

CLEAR IN COLOR

A great economical clear honing oil for all machines and general machine shop use! Easy to tell when oil is dirty and needs changing. A straight cut, light viscosity general purpose honing oil with no additives. Preferred by the Big 3 & P.E.R.'s.

SIZE	PART #
1 Gallon	85001
5 Gallons	85005
55 Gallons	85055

MEDIUM-DUTY HONING OIL (CK50) AMBER COLOR

Top quality, medium duty honing oil blended especially for cylinder resizing, main bearing bore correction, and general purpose honing operations. Chlorine free, it's an excellent blend of refined mineral oil with high pressure additives for good lubricity and finish. Designed for use as a concentrate for spraying or pressure flow. Use with CK and CH Honing Machines.

5 Gal. Quantity Discounts Available
See Price Sheet for Details.

SIZE	REPLACES	PART #
5 Gallons	CK-50	84005
55 Gallons	CK-50-55	84055

HEAVY-DUTY HONING OIL (MAN845) AMBER COLOR

Finest quality, heavy duty, honing oil blend. Chlorine free, a premium blend of highly refined oil and extreme pressure additives intended to provide high lubricity capabilities for an excellent finish. For use in LBB Honing Machines and HS30 Honing Stands for rod reconditioning, pin fitting, and similar honing jobs. Designed to be used as a concentrate for spray or pressure flow.

SIZE	REPLACES	PART #
1 Gallon	MAN845	84501
5 Gallons	MAN845-5	84505
15 Gallons	MAN845-15	84515
55 Gallons	MAN845-55	84555

COOLANTS

FLYWHEEL GRINDING COOLANT BLUE COLOR

A concentrated synthetic blend formulated for use in all types of flywheel grinders. Nitrite Free. Also works well as a rust inhibitor that provides up to 30 days indoor storage "Rust Protection" at a concentration as low as 3%.

Recommended Dilution Ratio
30:1 Mix Concentrate To Water
1 Quart = 7.5 Gallons
1 Gallon = 30 Gallons
5 Gallons = 150 Gallons

SIZE	PART #
1 Quart	4504
1 Gallon	4506
5 Gallons	4508

RESURFACING BELT COOLANT BLUE COLOR

Low foaming, synthetic concentrate blend, nitrite free, provides good tramp oil rejection and corrosion resistance at concentrations as low as 5%.

Recommended Dilution Ratio
30:1 Mix Concentrate To Water
1 Gallon = 30 Gallons
5 Gallons = 150 Gallons

SIZE	PART #
1 Gallon	4518
5 Gallons	4520

ALUMINUM CUTTING PINK COLOR EXCELLANT FOR PCD & CBN

Perfect for finishing and surfacing Aluminum Heads. Prevents material from "sticking" to PCD and CBN inserts. Can be used with cast iron!

SIZE	PART #
1 Quart	4535AL
1 Gallon	4536AL

SURFACE GRINDING COOLANT AMBER COLOR

A nitrite free synthetic concentrate blend that is low foaming and gives excellent corrosion protection at low concentrations of 5%. Can be used for single piece wheels and surface grinder segments.

Recommended Dilution Ratio
20:1 Mix Concentrate To Water
1 Gallon = 20 Gallons
5 Gallons = 100 Gallons

SIZE	PART #
1 Gallon	4514
5 Gallons	4516

CRANKSHAFT/CAM GRINDING COOLANT LIGHT AMBER COLOR

A pure synthetic concentrate blend, without nitrates, phenol, or sulfur. Low foaming. It also provides excellent rust protection of finished cranks and cams up to 30 days.

Recommended Dilution Ratio
20:1 Mix Concentrate To Water
1 Quart = 5 Gallons
1 Gallon = 20 Gallons
5 Gallons = 100 Gallons

SIZE	PART #
1 Quart	4510
1 Gallon	4512
5 Gallons	4513
55 Gallons	4509

MULTI-PURPOSE GRINDING COOLANT

An exceptional all-purpose synthetic grinding concentrate designed to work on both ferrous and nonferrous metals where excellent cooling and cleanliness are required. The wheel is kept open; therefore increasing the time between wheel dressings. Also provides superior rust protection.

Recommended Dilution Ratio
20:1 Mix Concentrate To Water
1 Gallon = 20 Gallons
5 Gallons = 100 Gallons

SIZE	PART #
1 Gallon	4545
5 Gallons	4547

ENGINE PAINTS



MAKE HEADS & BLOCKS LOOK NEW AGAIN!

Top quality - fast drying engine paint allows you to restore engine parts to original finish/color.



PAINT/DUST PROTECTIVE PLUGS

PACKAGED 100 PLUGS PER BOX

SIZE	PART #
14mm	6520
1/4"	6523
1/2"	6524
5/8"	6525
3/4"	6526
1"	6527



PAINT CAN SPRAY HANDLE



PART #
P20

METAL PAINT MARKERS

STANDARD



Write on plastic, glass, and various metals. A spring loaded stainless steel ball tip allows proper coverage. Fast drying, highly visible permanent paint.

INDUSTRIAL



Fast drying, high gloss enamel paint for permanent markings on metal, glass, plastic, wood, cloth, etc. Works on any surface: wet, dry, or oily. Hard point valve on tip to release paint.

	COLOR	PART #
STANDARD	Yellow 2 Oz.	4414
	White 2 Oz.	4415
	Red 2 Oz.	4417
	Orange 2 Oz.	4416
	Blue 2 Oz.	4418
INDUSTRIAL	Yellow	4440
	White	4441
	Black	4442
	Gold	4443
	Red	4445
	Orange	4446
	Green	4447
	Silver	4448
	Blue	4449

CASTING/FINISH PART

Cast Iron Gray	P1
Chrome Aluminum	P2
Blast - Aluminum	P15
Stainless Steel	P17
High Gloss Black	P40

OE COLOR/ENAMEL PAINT

GM Black	P3
Ford Gray	P4
Ford Blue	P6
Chevy Orange	P7
Mustang Blue	P8
Machinery Gray	P16
John Deere Green	P24
School Bus Yellow	P18
Caterpillar Yellow	P27

1200° F. HI-TEMP

Aluminum	P21
Black	P22
Cast Iron Gray	P23

12 oz. aerosol cans sold individually or by case.

HAZMAT

Aerosol Paint Requires Special Handling

PARTS IDENTIFYING SYSTEM KIT

PART #
4439



EACH KIT CONTAINS:

- ▶ 1000 2-1/4" x 3-1/2" Tags
- ▶ 1000 Tag Wires
- ▶ 3 Black Industrial Markers

Pear shaped parts identification tags for connecting rods, heads, and other parts.

TOOL CRIB® AUTO CHEMICALS



DESCRIPTION	OZ.	PART #
Silicone Lube	13.5	AC01
Dry Film Graphite Lube	14.2	AC02
Red Insulating Varnish	16.5	AC03
Carb & Choke Cleaner	16.0	AC04
5-Way Corrosion Inhibitor & Lube	15.0	AC05
Super Strength Penetrating Oil	15.3	AC06
Non-Chlorinated Brakes Cleaner	13.2	AC07

MECHANICS WIRE

Multi-purpose black annealed utility wire for general shop use, as well as unlimited uses for engine rebuilders! Annealing makes wire soft and easy to use, while strong enough to hold parts together.

WIRE SIZE	SPOOL SIZE	PART #
14 Gauge	5 lb. (295')	MW101
16 Gauge	5 lb. (480')	MW102
18 Gauge	5 lb. (630')	MW103



TWIST WIRE PLIERS

Twist Wire Pliers designed with "lockwire" electrical fasteners in mind. Easy to use; attach wire from fasteners and lock handles. Release and pull knob for single twist; hold pliers and push knob to spin wire and lock fastener in place.



PART #
6001

HEAD & CRANK BOXES

PROTECT YOUR PARTS WHILE STORING OR WHEN SHIPPING

Hand slots on each end for easy handling with reinforced bottom & sides. Plenty of room for heads with studs, BB Chevy, and some Diesel heads. Blank spaces for your company name and your part number. These sturdy shipping boxes will protect your finished crankshaft or cylinder heads.

W x L x H	Strength	Qty.	Description	Part #
8-1/4"x29"x6-3/4"	200 lb.	15	V8 BB Ford, Mo-par, & Cranks	4596
10"x31"x10"	300 lb.	15	Heavy Duty	4598



BIG BLOCK ENGINE BAGS

These heavy duty 3 mil bags perform like 4 mil bags at no extra cost. Multi-layered film bag provides the best tear, puncture, and impact resistance. Fits all BB & most Diesel engines. Larger size 30" x 24" x 50".

(100/roll)

PART #

4589



SMALL PART ZIPPER BAGS

High quality zip-lock bags protects your small parts from dust and moisture. Two mill thick, made of 100% virgin clear polyethylene film.

(100/pack)

W" X L"

PART #

5" x 6"

4485

3" x 5"

4483



HEAD & CRANK BAGS

Measures 10" x 8" x 36" to fit most cylinder heads and crankshafts. Material is clear Virgin Poly Plastic, 3 mils thick. With imprint area for you to mark your Part #.

(100/roll)

PART #

4587



STORAGE BAGS

SMALL BLOCK ENGINE BAGS

Protects your finished work from dirt, dust, & moisture. Store pistons, cranks, heads, & engines in these plastic, waterproof bags. Imprint area for writing engine types. Measures 30" x 10" x 50" and fits most 4, 6, and 8 cylinder applications. Material is clear Virgin Poly Plastic, 2 mils thick.

(100/roll)

PART #

4588



STRETCH FILM 2 SIZES NOW AVAILABLE

Heavy duty 80 gauge wrap film protects products and packages from moisture and dirt during storage and shipping. Clings tightly without using twine or tape. No need to stock several bag sizes.

Size	Part #
5"x1000' w/Ext. Core	4592
15"x1500' w/3" Core (Case/4 Rolls)	4593




4592 Shown



1-EDGE CUTTER BITS
GENERAL BORING
VAN NORMAN


MODEL	TYPE	DIA.	PART#
777,900,905,944,965	General	1/4"	BV085
777S,777S4,944S	General	3/8"	BV079
	Hard	3/8"	BV020

KWIK-WAY


MODEL	TYPE	DIA.	PART #
F, FT, FL, FN, FR, FS	Rough	5/16"	BK20R
FW, FWS, FWSII, FX	Finish	5/16"	BK20F

ROTTLER


MODEL	TYPE	LENGTH	DIA.	PART #
All Bars	General	1-1/4"	11/32"	BR101
	General	1-7/16"	11/32"	BR107
	General	1-3/4"	11/32"	BR103

1-EDGE CUTTER BITS
SLEEVE CUT OFF
VAN NORMAN


MODEL	LENGTH	DIA.	PART#
777,777S4,944S	7/8"	3/8"	BV300

KWIK-WAY


MODEL	TYPE	DIA.	PART #
After #1770	Sleeve Cut-Off	5/16"	BK20C

ROTTLER


MODEL	TYPE	LENGTH	DIA.	PART #
All Bars	Sleeve Cut-Off	1-3/4"	11/32"	BR10C

6-EDGE CUTTER BITS
WITH REPLACEMENT TIPS, O.E. HOLDER

MANUFACTURER	MODEL	DIA.	PART #
VAN NORMAN	777S, 777S4, 944S	3/8"	BV800
KWIK-WAY	F, FT, FL, FN, FR, FS, FW, FWS, FWSII, FX	5/16"	BK500
ROTTLER	All Models	11/32"	BR700

REPLACEMENT SCREW (BV800, BK500, BR700)	S109
REPLACEMENT TIP (BV800, BK500, BR700)	BC300


BV800

BK500

BR700

BC300

(Enlarged to show detail.)

NOTE: Cutting tip not included with Holder

KWIK-WAY
GENERAL BORING BAR TOOL HOLDERS


MODEL	LENGTH	PART #
FW, FR, FS, Short	2-1/16"	BK118
FL, FN, F Short, FW, FR, FS, long	2-9/16"	BK116
FL Medium, FN, FT, F Long	3"	BK117
FL Long	3-5/8"	BK124

MODEL	LENGTH	PART #
FW, SII, FWS, FX	1-11/32"	BK142
	1-3/4"	BK141
	2-3/32"	BK149
	2-1/4"	BK150

REPLACEMENT CUTTER BITS	3 EDGE	6 EDGE
General Purpose	BC101	BC120
Premium (Titanium Coated)	BC102	BC131

SLEEVE CUT OFF TOOL HOLDERS



MODEL	LENGTH	PART #
FW, FR, FS, Short	2-1/8"	BK118C
FL, FN, FT, F Short FW, FR, FS Long	2-9/16"	BK116C
FL Medium, FN, FT, F Long	3-1/16"	BK117C
FL Long	3-5/8"	BK124C
FWSII, FWS, FX Short	1-3/4"	BK141C
	2-1/8"	BK149C

REPLACEMENT CUTTER 3 EDGE	
General Purpose	BC119
Premium (Tin Coated)	BC115

OFFSET CUTTING TOOL HOLDERS (BLIND HOLES)


MODEL	LENGTH	PART #
FW, FR, FS	2-1/32"	BK146
FN, FT, F	2-21/32"	BK148
FL	3"	BK151
FWSII, FWS, FX	1-21/32"	BK152
	2-5/32"	BK147

REPLACEMENT CUTTER 3 EDGE	
General Purpose	BC101
Premium (Tin Coated)	BC102

O-RING CUTTER TOOL HOLDERS


MODEL	LENGTH	PART #
FWSII, FWS, FX	2-1/8"	BK155
FW, FR, FS	2-5/32"	BK156
FL, FN, FT, F	2-7/8"	BK158

REPLACEMENT CUTTER BITS	
.037" Cutter General Purpose	BC157
.037" Cutter Steel	BC158

VAN-NORMAN

GENERAL BORING BAR TOOL HOLDERS

MODEL	LENGTH	THICKNESS	PART #
777, 900, 905, 944	1-15/16"	5/16"	BV134
	2-5/16"	5/16"	BV135
	2-13/16"	5/16"	BV136
944 Short	2-5/16"	9/16"	BV121
944S Long, 777S Short	2-9/16"	9/16"	BV122
777S Long	3-7/16"	9/16"	BV123

REPLACEMENT CUTTER BITS	6 EDGE
General Purpose	BC120 
Premium (Titanium Coated)	BC131 

SLEEVE CUT OFF TOOL HOLDERS

MODEL	LENGTH	THICKNESS	PART #
777, 900, 905, 944	1-15/16"	5/16"	BV134C
	2-5/16"	5/16"	BV135C
	2-13/16"	5/16"	BV136C
944 Short	2-5/16"	9/16"	BV121C
944S Long, 777S Short	2-9/16"	9/16"	BV122C
777S Long	3-7/16"	9/16"	BV123C

REPLACEMENT CUTTER 3 EDGE	
General Purpose	BC119 
Premium (Tin Coated)	BC115 

TOOL HOLDERS OFFSET CUTTING (BLIND HOLES)

MODEL	LENGTH	THICKNESS	PART #
777, 900, 905, 944 Short	2-3/8"	5/16"	BV197
777, 900, 905, 944 Long	2-3/4"	5/16"	BV198
944S	1-5/8"	9/16"	BV125
777S	2-1/16"	9/16"	BV126
777S	2-13/16"	9/16"	BV127

REPLACEMENT CUTTER BITS	3 EDGE
General Purpose	BC101
Premium (Titanium Coated)	BC102

SETTING FIXTURE FOR VAN-NORMAN OFFSET CUTTERS PART# BV196

O-RING CUTTER TOOL HOLDERS

MODEL	LENGTH	THICKNESS	PART #
777, 900, 905, 944	1-15/16"	5/16"	BV159
	2-15/16"	5/16"	BV160
944S	2-9/16"	9/16"	BV154
777S	3-3/8"	9/16"	BV153

REPLACEMENT CUTTER BITS	
.037" Cutter General Purpose	BC157
.037" Cutter Steel	BC158

O-RING WIRE One Pound Spools (200 Ft.) Stainless Steel PART #BC159

ROTTLER

GENERAL BORING BAR TOOL HOLDERS

MODEL	LENGTH	PART #
All Models	1-15/16"	BR170
	2-5/16"	BR171
	2-3/4"	BR172


REPLACEMENT CUTTER BITS	6 EDGE
General Purpose	BC120 
Premium (Titanium Coated)	BC131 

SLEEVE CUT OFF TOOL HOLDERS

MODEL	LENGTH	PART #
All Models	1-15/16"	BR170C
	2-5/16"	BR171C
	2-3/4"	BR172C

REPLACEMENT CUTTER 3 EDGE	
General Purpose	BC119
Premium (Tin Coated)	BC115

O-RING CUTTER TOOL HOLDERS

MODEL	LENGTH	PART #
All Models	1-15/16"	BR180
	2-9/16"	BR181 
	3"	BR182

REPLACEMENT CUTTER BITS	
.037" Cutter General Purpose	BC157
.037" Cutter Steel	BC158

DIAMOND LAPS

MACHINE	MODEL	PART #
Kwik-Way	All Bars	KK1000
Van Norman	777, 777S, 777S4	KK1001
Van Norman	900, 905, 943, 944, 944S, 965	KK1002
Rotler	D & F Series	KK1003
Storm-Vulcan	All Bars	KK1004
Dressing Stick 500 Grit (For All Diamond Laps)		KK1005

We Accept These Major Credit Cards



Short Block Rebuilding



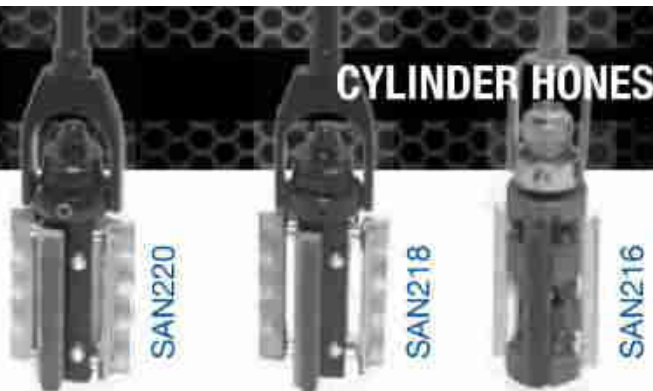
HONE STOP ASSEMBLY

FEATURES RUBBER COLLAR TO PREVENT DAMAGE TO THE BLOCK.

High quality design enables you to set the hone depth for all cylinders in just one step, preventing cylinder taper and preserving stone life.



Bushing I.D.	Part #
1/2"	4741
9/16"	4742
5/8"	4743
3/4"	4744



PORTABLE CYLINDER HONES

Designed For Use In All Cylinder Honing Applications

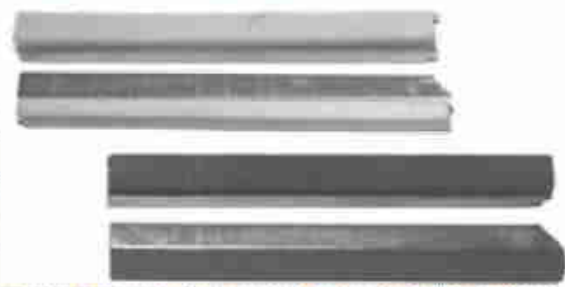
Product features include: Fast stock removal, accurate sizing of cylinder, heavy-duty universal joint, works with partial or complete honing, and a storage case. Automotive hones include 1 set of SAN300 stones. Small engine hone includes 1 ea. SAN608, SAN610, & SAN612 stones.

APPLICATION	RANGE	DRIVE SHAFT		
		DIA.	LENGTH	PART #
Small Engine	1.75"-2.75"	1/2"	6.00"	SAN216
Standard Automotive	2.50"-5.50"	5/8"	12.00"	SAN218
Heavy-Duty Automotive	2.50"-5.50"	5/8"	12.00"	SAN220

SMALL ENGINE CYLINDER HONE STONES

Stone sets fit above Model #SAN216 and consist of two stones and two wipers. Stones are 3-1/2" long, available in three grits, and are easily changed.

CYLINDER SIZE RANGE	STONE & WIPER SET PART #		
	80 GRIT	180 GRIT	280 GRIT
1.75"-2.20" (44.5mm-55.9mm)	SAN602	SAN608	SAN614
2.05"-2.50" (52.0mm-63.5mm)	SAN604	SAN610	SAN616
2.35"-2.75" (59.6mm-69.9mm)	SAN606	SAN612	SAN618



PLATEAU BRUSHES

Designed to produce a finish that rivals a perfectly "Broken-In" engine which will minimize initial wear on piston rings.

- Removes loose, fractured and torn fragments of metal.
- 15- 20 Stroke per cylinder provides a superior finish.
- As the brush wears down, it can be used on smaller bores.

CYLINDER BORE PLATEAU BRUSHES

DIA.	BORE SIZE	PART #
1-1/4"	7/8" - 1"	UFB125
1-1/2"	1" - 1-1/4"	UFB150
2"	1-1/4" - 1-3/4"	UFB200
2-1/2"	1-3/4" - 2-1/4"	UFB250
3"	2-1/4" - 2-3/4"	UFB300
3-1/2"	2-3/4" - 3-1/4"	UFB350
4"	3" - 3-1/2"	UFB400
4-1/2"	3-1/2" - 4"	UFB450
5"	4" - 4-1/2"	UFB500
5-1/2"	4-1/2" - 5"	UFB550
6"	5" - 5-1/2"	UFB600
6-1/2"	5-1/2" - 6"	UFB650
7"	6" - 6-1/2"	UFB700

3/8" Stem Dia.
4" Abrasive Length
14" OAL



NOTE: Similar abrasive material is used on OEM engines for finishing after diamond or stone honing.

GENERAL PURPOSE HONING OIL

A great economical clear honing oil for all machines and general machine shop use! Easy to tell when oil is dirty and needs changing. A straight cut, light viscosity general purpose honing oil with no additives. Preferred by the Big 3 & P.E.R.'s.

SIZE	PART #
1 Gallon	85001
5 Gallons	85005
55 Gallons	85055



Short Block Rebuilding

SILVER SEAL® CYLINDER HONING STONES

FOR ALL AN-STYLE HONES AND HONE BODIES.

Use with Sunnen "AN" type hones and many other popular models including Silver Seal models SAN218 and SAN220 hones shown on page . Integral style holder sets include 2 holders with stones and 2 holders with aluminum wipers. Blind hole stones measure 2-3/16" long. All other stones are 4" long.



FOR PORTABLE AND POWER HONES

BORE RANGE	APPLICATION	ROUGHING 70 GRIT	MEDIUM 150 GRIT	FINISHING 220 GRIT	FINE FINISH 280 GRIT	X-FINE FINISH 400 GRIT
2.5"-2.7"	Cast Iron	SAN115	SAN215	•	SAN515	SG25J87
	Cast Iron	SAN100	SAN200	SAN300	SAN500	SM27J87
2.7"-4.1"	Hard Sleeves	•	SAN230	•	SAN530	•
	Blind Holes	SAN10071	SAN20071	SAN30071	SAN50071	•
3.5"-5.5"	Cast Iron	SAN101	SAN201	SAN301	SAN501	SN37J87
	Hard Sleeves	•	SAN231	•	SAN531	•
	Blind Holes	SAN10171	SAN20171	SAN30171	SAN50171	•
4.7"-15.0"	Cast Iron	SAN106	SAN206	SAN306	SAN506	SW47J87
	Hard Sleeves	•	SAN236	•	SAN536	•

FOR POWER HONES ONLY



BORE RANGE	APPLICATION	MEDIUM 150 GRIT	FINISHING 220 GRIT	FINE FINISH 280 GRIT
2.7"-4.1"	Cast Iron	SAN200G	SAN300G	SAN500G
	Blind Holes	SAN20071G	SAN30071G	SAN50071G
3.5"-5.5"	Cast Iron	SAN201G	SAN301G	SAN501G
	Blind Holes	SAN20171G	SAN30171G	SAN50171G

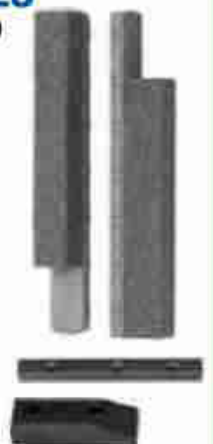
Note: "G" series Power Hone Only stones are green in color & last longer than normal gray stones. Use extra pressure to achieve maximum results.

HONING STONES & SHOES

FOR SUNNEN CV-616 & CK10

Sold & Packaged in Pairs

STONES		
APPLICATION	SUNNEN #	PART #
Roughing	EHU-133	80072*
Hard Blocks	EHU-518	80073
General Purpose	EHU-525	80082*
Finishing	JHU-625	80102*
SHOES		
Wear Shoes	CK-3070	80981
Alignment Shoes	CK-3120	80982



*For Hard Materials, Fast Stock Removal, and Extended Life, Order Red Aluminum Oxide (AR). Example: 80082AR

Short Block Rebuilding



FLEX-HONES®

All Flex-Hone® tools produce a conditioned surface finish. These unique hones use a low-temperature, low pressure abrading system that produces a clean, long wearing surface. Designed to create a crosshatched surface pattern for oil retention. The silicon carbide hones are attached to flexible nylon stems that allow the hones to float, thereby assuring self-alignment to bore. They produce a soft cutting action. Use with 10-30 wt. motor oil or honing oil (applied sparingly to bore wall). Operate hone for 10-45 seconds. Repeat until desired surface finish is achieved.

Flex-Hones® are supplied in silicon carbide as standard, available in all sizes and styles in 120, 180, 240, and 320 grits.



DIAMOND FLEX HONE FOR FINISHING

- ▶ Carbide
- ▶ Ceramic
- ▶ Hardened tool steel
- ▶ Some Heat treated material

SILICON-CARBIDE FLEX-HONES

FOR FINISHING

- ▶ Low carbon steel
- ▶ Stainless steel
- ▶ Cast Iron
- ▶ Aluminium
- ▶ Bronze

ALUMINUM-OXIDE FLEX-HONES

FOR FINISHING

- ▶ Aluminum
- ▶ Brass
- ▶ Bronze
- ▶ Copper

SMALL ENGINE CYLINDERS

Standard Duty 8" Long

Hone Size	Size Metric	180 Part #	240 Part #
1"	25.4mm	4125	4125240
1 1/4"	31.8mm	4130	4130240
1 1/2"	38.1mm	4131	4131240
1 3/4"	44.5mm	4132	4132240
2"	51mm	4100	4100240
2-1/4"	57mm	4101	4101240
2-1/2"	64mm	4102	4102240
2-3/4"	70mm	4103	4103240
3"	76mm	4104	4104240

BLOCK CYLINDERS

Standard Duty 13-1/2" Long

Hone Size	Size Metric	Bore Range	120 Part #	240 Part #	320 Part #
3-1/4"	83mm	3.000"-3.125"	4105	4105240	4105320
3-1/2"	89mm	3.125"-3.500"	4106	4106240	4106320
3-3/4"	95mm	3.500"-3.750"	4107	4107240	4107320
4-1/8"	105mm	3.750"-4.125"	4108	4108240	4108320
4-5/8"	118mm	4.125"-4.825"	4109	4109240	4109320

BLOCK CYLINDERS & LINERS

Heavy Duty

13-1/2" Long (Hone Size 3" - 4-1/2")

17-1/2" Long (Hone Size 5" - 7-1/2")

Hone Size	Size Metric	Bore Range	120 Part #	240 Part #
3"	76mm	2.750"-3.000"	4110	4110240
3-1/4"	83mm	3.000"-3.250"	4111	4111240
3-1/2"	89mm	3.000"-3.500"	4112	4112240
3-3/4"	95mm	3.250"-3.750"	4178	4178240
4"	101mm	3.500"-4.000"	4113	4113240
4-1/4"	108mm	3.750"-4.250"	4172	4172240
4-1/2"	114mm	4.000"-4.500"	4114	4114240
5"	127mm	4.500"-5.000"	4115	4115240
5-1/2"	140mm	5.000"-5.500"	4116	4116240
6"	152mm	5.500"-6.000"	4117	4117240
6-1/2"	165mm	6.000"-6.500"	4118	4118240
7"	178mm	6.500"-7.000"	4119	4119240
7-1/2"	190mm	7.000"-7.500"	4177	4177240

ALUMINUM OXIDE FLEX-HONES FOR NICASIL

SIZE	MM	OAL	PART#
2 1/4"	57.2	8"	4101NC
2 3/8"	60.2	8"	4102NC
2 1/2"	63.5	8"	4103NC
2 5/8"	66.5	8"	4104NC
2 3/4"	69.8	8"	4105NC
3"	76.2	8"	4106NC
3 1/4"	82.6	13"	4107NC
3 1/2"	88.9	13"	4108NC
3 3/4"	95.3	13"	4109NC
4 1/4"	107.9	13"	4110NC
4 5/8"	117.5	13"	4111NC

Short Block Rebuilding

DIAMOND FLEX HONE

FOR FINISHING

- ▶ Carbide
- ▶ Ceramic
- ▶ Hardened tool steel
- ▶ Some Heat treated material

SILICON-CARBIDE FLEX-HONES

FOR FINISHING

- ▶ Low carbon steel
- ▶ Stainless steel
- ▶ Cast Iron
- ▶ Aluminum
- ▶ Bronze

ALUMINUM-OXIDE FLEX-HONES

FOR FINISHING

- ▶ Aluminum
- ▶ Brass
- ▶ Bronze
- ▶ Copper

DIAMOND FLEX-HONE



Designed for surface finishing and cross hole deburring of harder materials such as carbide, ceramic and space age alloys, this cylinder hone is an efficient solution to your tough applications. Our Diamond Flex Hone is available in three different grit selections.



Hone Size	Size Metric	Part #	Hone Size	Size Metric	Part #
5/32"	4mm	4166DH	11/32"	9mm	4163DH
11/64"	4.5mm	4167DH	3/8"	10mm	4164DH
13/64"	5mm	4173DH	7/16"	11mm	4165DH
7/32"	5.5mm	4168DH	15/32"	12mm	4175DH
1/4"	6.4mm	4160DH	33/64	13mm	4174DH
9/32"	7mm	4161DH	9/16"	14mm	4176DH
5/16"	8mm	4162DH	10/32	15mm	4177DH

BRAKE CYLINDER 180 GRIT

Hone Size	Size Metric	Part #	Hone Size	Size Metric	Part #
9/16"	14mm	4120	1"	25.4mm	4125
5/8"	16mm	4121	1-1/8"	29mm	4126
23/32"	18mm	4122	1-3/8"	35mm	4127
3/4"	19mm	4123	1-5/8"	41mm	4128
7/8"	22mm	4124	2"	51mm	4100

VALVE GUIDE

240 Grit

Hone Size	Size Metric	Part #
13/64"	5mm	4173
1/4"	6.4mm	4160
9/32"	7mm	4161
5/16"	8mm	4162
11/32"	9mm	4163
23/64"	9.5mm	4133
3/8"	10mm	4164
7/16"	11mm	4165
15/32"	12mm	4175

LIFTER BORE

180 Grit

Hone Size	Size Metric	Part #
1/2"	13mm	4174
5/8"	16mm	4121
3/4"	19mm	4123
7/8"	22mm	4124
1"	25.4mm	4125
1-1/8"	29mm	4126
1-3/8"	35mm	4127
1-1/2"	38mm	4176
1-3/4"	44mm	4136

JOURNAL BORE FLEX-HONES®

These specially designed hones allow you to deburr and remove material using a low-temperature abrading process. This provides a superb journal surface for both bearing insert or aluminum journal. Just the right finishing touch for a free running cam shaft.

Cam Bearing Flex-Hones® include a threaded pipe nipple adaptor for an extension rod which allows you to reach each journal within the entire length of the cylinder head and engine block.

CAM BEARING

180 Grit - Order hone one size larger than bore size

Hone Size	Size Metric	Part #
2"	51mm	4155
2-1/4"	57mm	4156
2-1/2"	64mm	4157
2-3/4"	70mm	4158

O.H.C. CAM JOURNAL BORE

180 Grit - New material for O.H.C. bearings or aluminum heads.

Hone Size	Size Metric	Part #
1-1/8"	29mm	QBH100
1-1/4"	32mm	QBH101
1-3/8"	35mm	QBH102
1-1/2"	38mm	QBH103
1-5/8"	41mm	QBH104
1-3/4"	45mm	QBH105



18" EXTENSION ROD

USE WITH ALL CAM BEARING FLEX-HONES®

PART #
4159

TORQUE PLATES

Cylinders can distort up to .004" when torquing head bolts. With this much distortion, piston rings won't seal properly. To help eliminate distortion, use precision machined torque plates to duplicate actual cylinder conditions, and to achieve the high degree of bore accuracy required during the boring & honing process.



COMES COMPLETE WITH BOLTS & CAP SCREWS

See Our Cylinder Flex-Hones on Page 82

CHAMFERING CONES & MANDRELS

Use to chamfer rough edges on cylinders after boring. Allows easier installation of pistons. Helps prevent piston ring damage! Available in 60 grit Aluminum Oxide or Premium Zirconia Cones. Use with portable drill.

QUANTITY DISCOUNT: 10% on 10 or more.
20% on 25 or more.

Description	Part #
82° Aluminum Oxide 2" x 3" x 3-1/2" Cone	A47
82° Zirconia 2" x 3" x 3-1/2" Cone	A47Z
82° CHAMFERING CONE MANDREL	A48
45° Aluminum Oxide Cone	A49
45° Zirconia Cone	A49Z
45° CHAMFERING CONE MANDREL	A50



PART #

A47

PART #

A47Z



PART #

A49

PART #

A49Z



PART #

A48



PART #

A50

MAKE	ENGINE SIZE	MAXIMUM OVERBORE	PART #
Chevy	All V6	4.060	6608
Chevy	302,327,350 V8	4.060	6603
Chevy	400 S.B. V8	4.165	6604
Chevy	398 -454 V8	4.310	6605
Ford	2300 OHC 4 Cyl	3.830	6600
Ford	260-400 V6	4.060	6601
Ford	4.6L Modular V8	3.580	6612
Ford	352-428 V8	4.290	6602
Ford	429-460 V8	4.420	6610
GM	2.5L VIN "R" 4 Cyl.	4.060	6606
GM	2.5L VIN "U" 4 Cyl.	4.060	6607
GM	2.8L V6	3.564	6609
Buick	3.8L/4.1L V6	4.020	6615
Mopar	2.2L/2.5L 4 Cyl	80mm	6619
Mopar	273-360 V8	4.100	6614
Olds	400-455 V8	4.180	6618
Pontiac	389-455 V8	4.210	6611

CYLINDER WALL DE-GLAZER



Fast cutting and self-centering. Flexible drive shaft sets stone tension! Fits 2" to 7" diameter cylinders. Use with portable drill.

DESCRIPTION	PART #
De-Glazer with 3 Grit Stones	4200
Coarse Repl. Grit Stones	4198
Medium Repl. Grit Stones	4201
Fine Repl. Grit Stones	4202

H.D. CYLINDER RIDGE REAMER

Tungsten carbide cutters remove ridges from top of cylinders. A must before replacing piston rings. For use on 3" to 5" (77mm - 127mm) cylinder diameters. Smooth cutting is assured by fine thread feeding. Changing from one cylinder to another without readjusting is easy with the three position spring loaded cutter.

PART #

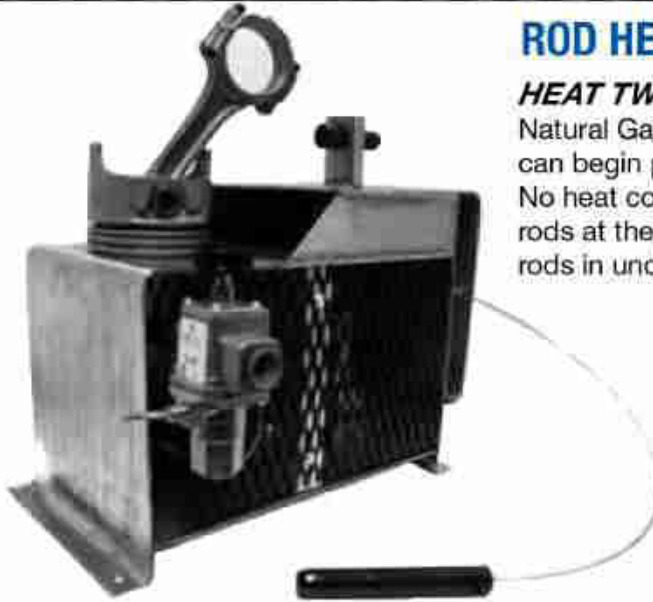
84000

Replacement Cutter Blades

PART #

84001





ROD HEATERS 11,000 BTU'S

HEAT TWO RODS AT ONE TIME!

Natural Gas & L.P.G. Save Time: No warm-up required. You can begin piston assembly almost immediately. Save Money: No heat coils or electrical circuits to replace. You can do 2 rods at the same time (in approximately 2-3 min.) Assemble 8 rods in under 10 minutes.

NATURAL GAS ROD HEATER

Connect to 1/2" natural gas line.

PART #RH1G

L.P.G. ROD HEATER

Propane tank, regulator, & hose not included.

PART #RH2LPG

TEMPERATURE INDICATING CRAYONS

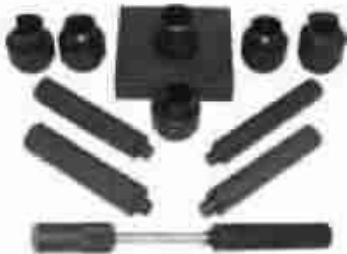
Mark part before heating. When designated temperature is reached, the mark will melt. Available with melting points from 200° - 600°.



TEMP.	PART #	TEMP.	PART #
200°F	4431	500°F	4437
450°F	4436	600°F	4438

PIN EXTRACTOR SET *IDEAL FOR USE WITH YOUR SHOP PRESS*

Designed to remove piston pins safely and quickly. Use with any shop press. Made for universal use of high quality steel, can be altered to fit virtually any piston.



DESCRIPTION		PART #	
COMPLETE PIN EXTRACTOR SET		SL1029	
Piston Guide Assembly Includes: SL1029M, SL1029N, & SL1029P		SL1029I	
DESCRIPTION	PART #	DESCRIPTION	PART #
#0 Fixture for .800 Pins	SL1029A	#3 Fixture for 1.010 Pins	SL1029D
#1 Fixture for .950 Pins	SL1029B	#4 Fixture for 1.100 Pins	SL1029E
#2 Fixture for 1.010 Pins	SL1029C	#5 Fixture for .865 Pins	SL1029F
Base Block	SL1029G	1.000 Drift Pin	SL1029L
.760 Drift Pin	SL1029H	Tapered Handle	SL1029M
.812 Drift Pin	SL1029J	Threaded Rod	SL1029N
.875 Drift Pin	SL1029K	Threaded Adaptor	SL1029P

PISTON PIN REMOVAL FIXTURE



Adjust screws for height of piston sides at wrist pin. (Example: .050 on 400 Chevy). Prevents piston pin distortion when wrist pin is pressed out.

DESCRIPTION	PART #
Domestic - 4-1/2" Radius	7018
Import - 3.2" - 3.875"	7019
Set of Each (7018 & 7019)	7020

PISTON PIN INSTALLATION GAUGE

Simply set & lock sliding collar for repetitive installations!



PART #
SL1025

Short Block Rebuilding



Piston Pin Tool

Combine with 5-10 ton shop press to handle piston pins from 0.855" to 1.062". Unique anvil with interchangeable inserts. Directs pressing force to the pin.



KIT# SL1020

SUPPORT SHOES	
SL1020A	#1 INSERT
SL1020B	#2 INSERT
SL1020C	#3 INSERT
SL1020D	#4 INSERT
SL1020E	#5 INSERT
SL1020F	#6 INSERT



PIN GUIDES	
SL1020G	21.7MM
SL1020H	22.7MM
SL1020I	23.5MM
SL1020J	24.5MM
SL1020K	25.1MM
SL1020L	26.1MM
SL1020M	26.7MM
SL1020N	27.6MM

MISCELLANEOUS	
SL1020O	C FRAME
SL1020P	RECEIVER TUBE
SL1020Q	STOP PLUG
SL1020R	REAR SUPPORT W/ WING NUT
SL1020S	BASE
SL1020T	BODY GUIDE
SL1020U	SPRING
SL1020V	DRIFT PIN DRIVER

ELECTRIC PISTON RING FILER AN ACCURATE GRIND IN SECONDS!

- Powerful 12-Volt Electric Motor
- Rechargeable Battery & Battery Charger
- Set Ring End Gaps Accurately
- Dial Indicator Measures the Correct Grind Amt.
- Includes Two (2) 120-Grit Grinding Wheels



PART # 4297E

PISTON RING FILER

Manual piston ring filer enables you to assure proper piston ring end gap! Position piston ring against dowel pins and crank handle to turn filing wheel. Grind and check gap with feeler gauge to meet OE specifications.

PART # 4297



120 GRIT GRINDING WHEEL

PART # 4297A



PISTON RING INSTALLER

Accepts rings from 3/64" to 1/4" (1.2mm to 6.3mm) thick. Tapered jaw design securely holds ring. Tool reduces ring breakage.

PART # 4289



RING EXPANDER

For installing and removing piston rings without the danger of breakage or distortion.

DESCRIPTION	PART #
1-1/4" - 2-1/4" Dia.	4224S
2"-4" Diameter	4234S
2-3/4" - 4-1/4" Dia.	4224
3-1/2" - 7" Diameter	4225



PISTON RING GAP TOOL

This portable rotary filer allows you to accurately file correct ring gap on any make or diameter piston ring. Includes mounting brackets and extra-hard (fine grit) carbide coated wheel.

PART # 4288



FINE GRIT CARBIDE GRINDING WHEEL

PART # 4288A



FIXED SIZE TAPERED RING COMPRESSORS



- Precision machined from heat-treated aluminum & hard anodized.
- Features positive grip surface.
- Reduces assembly time eliminates distortion & breakage of rings.

BORE SZ.	PART #	BORE SZ.	PART #	BORE SZ.	PART #	BORE SZ.	PART #
2.935	TRC2935	4.020	TRC4020	4.160	TRC4160	4.375	TRC4375
2.972	TRC2972	4.030	TRC4030	4.165	TRC4165	4.380	TRC4380
3.189	TRC3189	4.040	TRC4040	4.170	TRC4170	4.390	TRC4390
3.209	TRC3209	4.060	TRC4060	4.175	TRC4175	4.400	TRC4400
3.347	TRC3347	4.070	TRC4070	4.180	TRC4180	4.440	TRC4440
3.425	TRC3425	4.080	TRC4080	4.185	TRC4185	4.470	TRC4470
3.504	TRC3504	4.095	TRC4095	4.190	TRC4190	4.500	TRC4500
3.738	TRC3738	4.100	TRC4100	4.195	TRC4195	4.530	TRC4530
3.766	TRC3766	4.120	TRC4120	4.200	TRC4200	4.560	TRC4560
3.796	TRC3796	4.125	TRC4125	4.250	TRC4250	4.600	TRC4600
3.810	TRC3810	4.130	TRC4130	4.260	TRC4260	4.625	TRC4625
3.875	TRC3875	4.135	TRC4135	4.310	TRC4310	4.670	TRC4670
3.905	TRC3905	4.140	TRC4140	4.320	TRC4320	4.675	TRC4675
3.935	TRC3935	4.145	TRC4145	4.340	TRC4340	4.680	TRC4680
4.000	TRC4000	4.150	TRC4150	4.350	TRC4350	4.685	TRC4685
4.005	TRC4005	4.155	TRC4155	4.360	TRC4360	4.750	TRC4750

RING SQUARING TOOL

These tools are designed to go deep in the bore for accurate end gap measurement. They feature a machined no slip positive grip surface. Four sizes available, will fit most bore diameters.



DESCRIPTION	PART #
3.810" - 3.960"	RST3810
4.000" - 4.230"	RST4000
4.240" - 4.360"	RST4240
4.500" - 4.625"	RST4500

ADJUSTABLE TAPERED RING COMPRESSOR

Double Coated Aluminum Ring Compressor has tapered sleeve allowing free and easy installation of rings and pistons. Adjust with a screwdriver. Three sizes available for most domestic & import applications.



DESCRIPTION	PART #
4.00" - Adjusting range (3.940-4.060)	2240
4-1/8" - Adjusting range (4.065-4.185)	2241
4-1/4" - Adjusting range (4.190-4.310)	2242

PART

4213A

9 Band
2-1/8" - 4-3/8"



RING COMPRESSOR KIT

This Kit (# 4213) includes: 6 Bands covering 2-7/8" - 4-3/8" rings and pliers that allow a very fine adjustment of the band. Kit # 4213A includes: 9 bands covering from 2-1/8" - 4-3/8" plus pliers.

DESCRIPTION	PART #
6 BAND RING COMPRESSOR KIT	4213
9 BAND RING COMPRESSOR KIT	4213A
Pliers	4214
Band 2-1/8" - 2-3/8"	4215A
Band 2-3/8" - 2-5/8"	4217A
Band 2-5/8" - 2-7/8"	4218A
Band 2-7/8" - 3-1/8"	4215
Band 3-1/8" - 3-3/8"	4216
Band 3-3/8" - 3-5/8"	4216A
Band 3-5/8" - 3-7/8"	4217
Band 3-7/8" - 4-1/8"	4218
Band 4-1/8" - 4-3/8"	4219
OPTIONAL SIZES	
Band 4-1/2" - 4-3/4"	4220
Band 4-3/4" - 5"	4221
Band 5" - 5-1/4"	4222
Band 5-1/2" - 6"	4223

PART

4213

6 Band
2-7/8" - 4-3/8"



SHOP GRADE RING COMPRESSOR

Compressor band takes all rings at once. Self-locking ratchet pawl prevents early release.

Description	Part #
2-1/8" - 5" Diameter	4206
3-1/2" - 7" Diameter	4207
3-1/2" - 7" Diameter Truck & Tractor.	4208





Heavy-Duty Rod Splitting Fixture

Easy To Use - Works Fast!

Quickly separates the cap from the rod without damage. Simply loosen the rod nuts a couple turns, place the rod onto the splitting fixture, and pull the handle. Portable, for use with your bench top vise.



PART# KK649

ROD BOLT PROTECTORS

ELIMINATE CRANK JOURNAL DAMAGE

Connecting rod bolt protectors help avoid crankshaft journal and rod bolt damage during installation & removal.

One Pair -

PART# 4234

100 Pairs -

PART# 4235



One Size Fits All

ROD SAFETY PINS

KEEP "EM" TOGETHER

These pins solve the problem of keeping your rods & caps together. Works in a jet cleaner or soak tanks. Not for oven use. Made of tempered spring wire.



Description

Part #

7" Small Size, Cap on Rod

4347S

14" Large Size, Set of Rods

4347L

ROD INSTALLATION BLOCK

Install Rod Bolts The Easy Way!

Universal block provides the surface to position the connecting rod squarely while installing rod bolts. The hardened aluminum block has a lip to prevent slippage through a vise while the rod bolts are hammered or pressed in.



PART# 4231

ROD BOLT STRETCH INDICATOR

A "MUST HAVE" TOOL

Unit holds itself in place leaving both hands free to torque bolt properly. Complete instructions included.



PART# KK714

HIGH IMPACT DEAD BLOW HAMMERS



Weight	Face Dia.	Head Length	OAL	Part #
13 oz.	1-1/4"	3-1/8"	10-1/8"	SSH0
21 oz.	1-3/4"	3-3/4"	11-1/4"	SSH1
26 oz.	2"	4-1/8"	12-3/4"	SSH2
45 oz.	2-1/4"	4-5/8"	14-3/8"	SSH3
53 oz.	2-3/4"	5-3/8"	15-1/4"	SSH4

Piston Installation Hammer

SSH8

ROD VISES

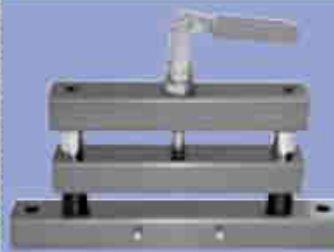
PROFESSIONAL



Does not damage connecting rods. Clamp rods securely to align parting faces while you torque rod bolts. This clamp is portable for vise or use in work bench.

PART# 4346

HEAVY DUTY



Heavy-duty rod vise is designed to hold two aluminum or steel rods securely. Complete with an easy grip handle and fast release latch for high production output. Made of aluminum alloy, this vise can be mounted in a bench vise or permanently on a bench.

PART# 4347

ELECTRIC BALANCER SCALES

ACCURACY GUARANTEED

Engine balance scales save money by permitting easy, accurate, do-it-yourself balancing and weighing minimizing engine vibration and component failure.

These precision scales are perfect for balancing pistons, rods, clutch weights, etc. Digital models are powered by one 9 volt battery or an optional AC adapter. Balancing scales are used with Rod Balancing Stand KK640.



Rod Balancer Stand

Balance your pistons & rods for smooth operating engine performance. This quality all aluminum stand is also adjustable to level a rod. Includes: Scale support, 2 discs (2" & 2.3")


PART #
KK640

Digital Balance Scale Description	Part #
0 to 2000 Gram (1 Gram Reading)	KK639
0 to 3000 Gram (1 Gram Reading)	KK639A
0 to 2000 Gram (.01 Gram Reading)	KK639B
AC Adaptor for Above Scales	KK721

HEAVY METAL FOR INTERNAL CRANK BALANCING

A selection of 5 sizes ranging from 1/2" - 1". 1.2" Length.

Hole Size	Length	Press Fit	Grams	Part #
1/2"	1.2"	+002	65	HM65
5/8"	1.2"	+002	110	HM110
3/4"	1.2"	+002	147	HM147
7/8"	1.2"	+002	198	HM198
1"	1.2"	+002	265	HM265
1/2"	1"	+002	57	HM57
5/8"	1"	+002	91	HM91
3/4"	1"	+002	122	HM122
7/8"	1"	+002	169	HM169
1"	1"	+002	227	HM227



ROD & CAP GRINDING WHEELS

FOR SUNNEN



Machine	Size	Shape	Part #
CRG 500 501	4" x 1-1/2" x 1" GP	Cup	2502
CRG700 Series	6" x 2" x 1-1/4" GP	Cup	2506
	6" x 2" x 1-1/4" hard	Cup	2508

ROD HONING STONES FOR SUNNEN

Sunnens Mandrels	Use	Qty.	Sunnens#	Part#
 Con-Rod CR-1450 CR1750 Mandrel	GP	1	CR-2	80001
	Finishing	1	CR-4	80005
 Con-Rod CR-1900 CR4300 Mandrel	Roughing	1	CR-10	80010
	GP	1	CR-12	80020
 Con-Rod (pin) Sunnen KL Mandrel	Finishing	1	CR-14	80030
	Roughing	1	KL-5	80150
 Piston & King (pin) Sunnen ML Mandrel	GP	1	KL-7	80170
	Finishing	1	KL-13	80180
 Con-Rod (pin), Sunnen PL Mandrel	Roughing	1	ML-5	80210
	GP	1	ML-7	80230
 Con-Rod (pin), Sunnen PL Mandrel	Finishing	1	ML-13	80240
	Roughing	1	PL-5	80270
 Con-Rod (pin) SL720 - SL2300 Mandrel	GP	1	PL-7	80280
	Finishing	1	PL-13	80290
 Con-Rod (pin) SL720 - SL2300 Mandrel	Roughing	1	SL-5	80330
	GP	1	SL-7	80340
 Con-Rod (pin) SL720 - SL2300 Mandrel	Finishing	1	SL-13	80350

REPLACEMENT GUIDE SHOES FOR SUNNEN

Sunnens Mandrels	Use	Qty.	Sunnens#	Part#
	1.450-1.900	2	CR40-D	80970
	1.900-4.700	2	CR50-D	80975
	1.900-4.700	2	CR50-B	80980
	9.90-1.156	2	VA-B	80990
	.994-1.125	2	UD-B	80994

"B" Suffix = Bronze



DOWEL PULLER KITS

REMOVE DOWEL PINS FAST!

Slide Hammer-type puller removes dowel pins fast & easy from cylinder heads, blocks, crankshafts, flywheels, etc.



STANDARD DOWEL PULLER KIT

Kit Includes: Sliding weight, main shaft, collet closer, release stand, and 1/4", 5/16", 3/8" and 7/16" collets.

PART #
4300

METRIC DOWEL PULLER KIT

Includes: Sliding weight, main shaft, collet closer, release stand, and 4mm, 5mm, 6mm, and 8mm collets.

PART #
4300M

THREADED DOWEL PULLER KIT

Includes: Sliding weight, main shaft, collet closer, release stand, 5 threaded pullers (8-32, 10-32, 1/4-20, 5/16-18, and 3/8-16), and 1/4", 5/16", 3/8" and 7/16" collets.

PART #
4300TP



Replacement Parts

Description	Part#
Sliding Weight	4301
Collet Closer	4302
Release Stand	4303
Main Shaft	4304
3/16" (.187) Collet	4305
1/4" (.250) Collet	4306
5/16" (.312) Collet	4307
3/8" (.375) Collet	4308
7/16" (.437) Collet	4309
1/2" (.500) Collet	4310
9/16" (.562) Collet	4311
5/8" (.625) Collet	4312
.640 Collet-Chevrolet	4313
.675 Collet-Ford	4314
.687 - 11/16" Collet	4315

Description	Part#
.735 Collet-Ford	4316
.750 - 3/4" Collet	4317
.800 Collet-Ford	4318
.157 - 4mm Collet-VW	4331
.197 - 5mm Collet-VW	4319
.236 - 6mm Collet-VW	4320
.315 - 8mm Collet-VW	4321
.393-10mm Collet-VW	4351
.472-12mm Collet-VW	4352
Threaded Collets	
8-32	4306TP
10-32	4307TP
1/4"-20	4308TP
5/16"-18	4309TP
3/8"-16	4310TP

HEAVY DUTY STUD PULLER

Finally, a stud puller built to last! For best results, use with an impact wrench, which allows concentrated pressure on the stud without side pressure to the inner mandrel. Fits 5/16" or 3/8" threaded studs.

Replacement	Part #
Bearing	4344B
Nut	4344N
Washer	4344W
Housing	4344H
Screw	4344S



PART# 4344

ADJUSTABLE HD SCREW-IN STUD REMOVER

REMOVES STUDS UP TO 1/2"

Remove or install right & left-hand studs with ease - 1/2" square drive for hand tools or pneumatic impact tools. Flush mount jaws and tapered outer body lets you get between studs with as little as 3/4" clearance. Precision machined and hardened jaws for long life, no extra parts that are prone to breakage with repeated use.



PART# 4362 Replacement Jaw Kit **PART#** 4362J

STUD EXTRACTING TOOL

Easily allows removal of stubborn studs, such as rocker or cylinder head studs. Also removes broken studs that have a portion of the stud sticking up. Roller cam action grips the stud tighter as it turns. 1/4" - 3/4" capacity, 1/2" drive.



PART# 4396

STUD REMOVER SET

Unique roller cam design can be used for any stud length. Ideal for work in tight spaces. Made from hardened alloy steel. Case included.



WARNING:
Not to be used with pneumatic impact wrench.
HAND WRENCH ONLY!

FRACTIONAL SET

Contains 4 Drivers:
1/4", 5/16", 3/8", 7/16"

PART# 4349

Replacement Pullers

SIZE	PART #
1/4"	4349A
5/16"	4349B
3/8"	4349C
7/16"	4349D

METRIC SET

Contains 4 Drivers: 6mm, 8mm, 10mm, 12mm

PART# 4350

Replacement Pullers

SIZE	PART #
12mm	4350A
10mm	4350B
8mm	4350C
6mm	4350D

VALVE CLEARANCE DISC KITS



MAGNETIC DISC HOLDER INCLUDED

14MM TOYOTA KIT

14mm Diameter Kit includes 4 of each size.
RANGE: 2.40MM-3.30MM (.05MM INCREMENTS)

PART #

TOYK

25MM HONDA/TOYOTA KIT

25mm Diameter Kit includes 2 of each size.
RANGE: 2.30MM-3.50MM (.05MM INCREMENTS)

PART #

HONK

27MM NISSAN KIT

(1.0, 1.3, & 1.8 16V)
 27mm Diameter Kit includes 4 of each size.
RANGE: 2.00MM-3.00MM (.05MM INCREMENTS)

PART #

NISK

28MM TOYOTA KIT

(1.9L 4AFE) 28mm Diameter Kit includes 4 of each size.
RANGE: 2.50MM-3.30MM (.05MM INCREMENTS)

PART #

TOY28K

31MM VW/AUDI/CHRYSLER KIT

31mm Diameter Kit includes 5 of each size.
RANGE: 3.05MM-4.20MM (.05MM INCREMENTS)

PART #

VWAK

34MM TOYOTA TRUCK KIT

34mm Diameter Kit includes 4 of each size.
RANGE: 2.20MM-3.40MM (.05MM INCREMENTS)

PART #

TOYTK

HOW TO ORDER REPLACEMENT PACKS

For single disc size replacements, order
 Make & Disc Size.

Ex.: Honda 3.05 disc = HONK3.05

Sold in 4 pc. packs (except 25mm - 2pc. pack)
 (Part #TOYK & TOY37K are only sold in kit form.)

RESURFACER HOLDERS



Description	mm	Part #
Jaguar	17.3	4614
Honda & Toyota	25.0	4622
Nissan	27.0	4613
Toyota	28.0	4615
VW/Audi	31.0	4618
Toyota Truck	34.0	4620

HEAD-SAVER SHIM KIT

Use shims under cam towers to correct timing chain tension and valve clearance when more than .015 is removed during resurfacing of OHC heads.



DESCRIPTION	PART #
Datsun	
Fits 4 Cyl. L-16, L-18, & L-20 (1968-1978)	0591000
Fits 6 Cyl. L-21, L-23, & L-26	0591001
Mercedes	
4 & 5 Cylinder Engine	0591004
6 Cylinder Engine	0591006

HANDHELD ROD SPLITTING TOOL



Easily separate your connecting rod caps with this non-marring hand-held splitter. Just turn the handle and the unit opens up so the 4 non-marring ends push the cap apart. Fits Chevy S/B and other similar journal diameters; minimum diameter is 1.980", and the maximum when fully expanded is 2.330".
 U.S. Pat. 7,155,791

PART #
4617

TOYOTA/LEXUS VALVE ADJUSTING TOOL

This simple tool provides easy depression of the valve lifter so the wedge tool can be inserted. With this clearance, the old insert can be removed and the new insert with the correct thickness can be installed.

DESCRIPTION	PART #
Complete Set	4605



PISTON RING SQUARING TOOL

Get your piston rings aligned the first time! Just simply press piston rings down for perfect depth every time. U.S. Pat. 6,042,456

PART #
4619



QUICK-BORE®

Quick - Easy - Economical

"Quick-Drive" Three-Sided Drill Chuck Adaptor Drive End provides fast on/off release from 1/2" drill motor. Part# BTO875T

Align bore aluminum O.H.C. cylinder heads simply and inexpensively. Over one thousand shops big and small now enjoy quick, accurate, high profit rebuilds with this system. **Complete job - setup, align bore, install bearings - in less than 15 minutes!**

Cutter/Reamer No guess work or need to use special micrometers. Special fixed 3 angle cutters require only light pressure (push or pull) to feed cutter through journal bore.

Oversized Bushings provide faster set up time when installing inserts. Oversize bushings eliminate the need to install bearing before continuing line boring operation. Bushings are sized to cutter. Specify BTB and cutter size. (Example: BTB14225 for use with BTC14225 Mitsubishi Cutter)

Precision ground and Hardened Drive Bars have replaceable "Quick Drive" bar ends that come with the bar. Bar length is designed for cutting of multi-journals.

Quick Hex Drive Drill Chuck Adaptor Part# BTO875H

5/8" Bar Part# BTO6250
7/8" Bar Part# BTO8750

Our steel backed babbitted OHC journal bearings are stronger and more forgiving than aluminum type bearings.



Over Fifteen Years Experience Solving Your Overhead Cam Align-Bore Problems!

No Need To Buy A New Cam!

Use our .020" Undersized O.H.C. Half Shell Journal Bearings

Reground old cam to .020" under (.010" off cam journals), align bore head using the same Quick-Bore® cutter and bushings (see page 196-199) as with standard bearings; Install undersize bearings and undersize cam.

Chrysler (81-Up) (2.2L, 2.5L)	SPDA1U
Ford (91-Up) (4.6L V8 SOHC)	SFA3U
Honda Accord/Prelude (83-90) (12 Valve 1.3L, 1.5L, 1.8L, 2.0L)	SHA1U
Honda Civic/CXR (84-87) (12 Valve 1.3L, 1.5L)	SHA2U
Isuzu (81-92 Mits. Eng.) (1.8L, 2.0L, 2.3L, 2.6L)	SMIA1U
Mazda/Ford (83-Up) (2.0L, FE, 2.2L)	SMZA2U
Mitsubishi (83-Up) (1.6L, 1.8L, 2.4L, 2.6L)	SMIA1U
Mitsubishi (78-Up) (3.0L V6 SOHC)	SMIA5U
Nissan (87-Up) 2.0L, 2.2L, 2.4L (Z20, Z22, Z24)	SNIA6U
Toyota (74-Up) (2.2L, 20R, 2.4L, 22R, 22REC)	STOA1U
Volkswagen/Audi (78-Up) (2.0L, 2.1L, 2.2L, 2.3L)	SVVA1U

Fixed Cutter Reamer

Fixed cutter/reamer has 3 angles which cut and ream in one pass. Cutter can be pushed or pulled through journal. OE standard size cutters, oversized and special cutters available!



Alignment Bushing

Precision ground, tapered bushings provide quick & easy alignment for a perfect job every time.



Offset Bushing

(+/- .005) Available to raise or lower center line of cam, or when cutting caps and standard cutter is used, specify OS after bushing number.

Oversize Bushings

Available for faster set up. Eliminate the need to install bearings before continuing align bore operation. Specify BTB and cutter number. (Example: BTB11474 for use with BTC11474 cutter.)

Bearing Tang Cutters

Designed to fit over the cylinder head and cap dowels to accurately align and cut bearing tang grooves using a flute carbide end mill supplied with jig.



Quick-Bore® - Part# QB1001

Machine Shop Standard Package

Save 10% off regular price when you order Standard Package! Covers 19 of the most popular aluminum OHC cylinder head applications for Chrysler, Ford, Isuzu, Mitsubishi, Nissan and Toyota. Includes 4 journal repair bearing cutters, 4 OE journal cutters, 8 drive bar alignment bushings, 5/8" & 7/8" drive bars, and Quick-Bore® Work Center Cabinet. Also includes FREE! Allen wrenches for cutter set screws, parts cleaning brush, dead blow hammer, and cutting fluid concentrate.

Applications Covered in QB1001 Package	Part #s Included in QB1001 Package*		
Chrysler 2.2L, 2.5L	Bearing Cutters	Alignment Bushings	Tang Cutters
Ford 4.6L SOHC, DOHC	BTC14819	BTB13779 (2)	TC104S
Isuzu 1.8L, 2.0L, 2.3L, 2.6L	BTC14225	BTB13385 (2)	TC100S
Mitsubishi 1.6L, 1.8L, 2.0L, 2.2L, 2.4L, 2.6L, 3.0L V6 SOHC	BTC13841	BTB13001 (2)	TC102S
Nissan 2.0L, 2.2L, 2.4L, Z/22, 24, 28	BTC11474	BTB1063 (2)	TC105S
Toyota 2.2L 20R, 2.4L 22R, 3.0L SOHC	OE Cutters	Drive Bars	Work Center Cabinet
	BTC1376	BTO8750 (7/8")	QB1000
	BTC1336	BTO6250 (5/8")	
	BTC1299		
	BTC1339		

Quick-Bore® Work Center Included In Package Above

QB1000 Work Center

Cabinet is easy to set up! Made of heavy 18 gauge metal with powered metal painted surface. Bench Cabinet. Size: 32" W x 21" D

Storage shelves

accommodate storage of cutter/reamers, bushings, bearings, and accessories.

Bar hooks

provide storage for both 5/8" BTO6250 (30") and 7/8" BTO8750 (36") drive bars.

Cutting fluid pump

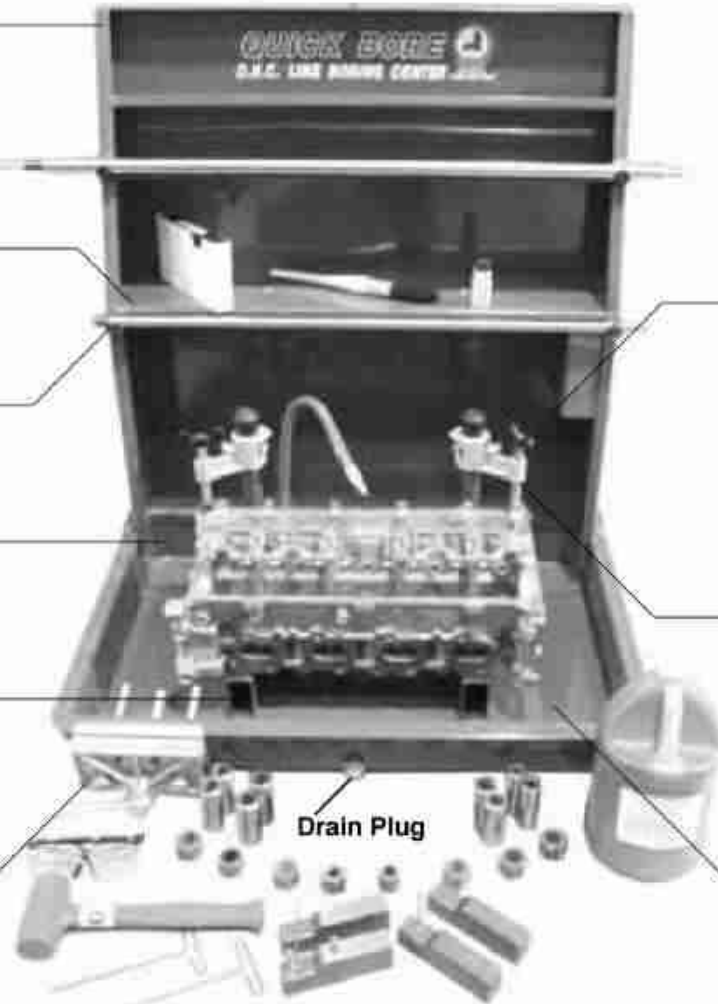
has extra long, flexible fluid hose with adjustable flow control valve.

Natural rubber pads

provide a resting place for cylinder head to prevent damaging head gasket surface.

Aluminum jaw vice

holds journal cap secure when cutting tang or filing.



Accessories.

Work Center includes 2 T-handle Allen wrenches for cutters, 1 parts cleaning brush, 1 dead blow hammer (21 oz) and 1 quart aluminum cutting fluid (dilute 20:1)

Lighted work area.

24" fluorescent light with safety acrylic diffuser and on/ off switch.

Protection.

Double GFI receptacle allows you to plug in an electric drill right at the Work Center.

Fully adjustable clamping system.

Side rails, combined with a rotating ACME screw clamp, hold the cylinder head secure. Allows fast setup and disassembly of jobs.

Cutting fluid reservoir

holds three gallons of aluminum cutting fluid.

*Pick and choose the components to customize a system that fits your needs. All cutters, bushings, drive bars, and work center can be sold separately to design the system that works for you.

Popular OHC Application (When ordering, refer to Cam Diameter if model application is not shown)		Year	Cam Dia.	Bearing Set Part # (Cam position)	Bearing Cutter Part #	Alignment Bushing Part # (Qty. Req.)	Tang Cutter Part #	O.E. Cutter Part #	O.E. Alignment Bushing Part # (Qty. Req.)
ACURA (5 Cyl.)									
2.5L (G25A1, G25A4 SOHC)	1992-98	1.1000	-SHA5	BTC11855*	BTB1102(2)	N/A	BTC11010*	BTB1102(2)	
CHEVROLET (4 Cyl.)									
1.5L	1985-89	1.0215	*SEC144	BTC1113*	BTB10225(2)	N/A	BTC10215*	BTB10225(2)	
1.6L (SOHC/DOHC)	1985-88	1.1025	N/A	N/A	N/A	N/A	BTC11025*	BTB1104(2)	
CHRYSLER (4 Cyl.)									
1.4L (SOHC Mitsubishi Engine)	1979-84	1.8100	SMIA3	BTC18918^	BTB18118(2)	TC100S	BTC18100^	BTB18118(2)	
1.5L (SOHC Mitsubishi Engine)	1985-96	1.8100	SMIA3	BTC18918^	BTB18118(2)	TC100S	BTC18100^	BTB18118(2)	
2.2L, 2.5L (SOHC)	1981-96	1.3760	*SPDA1	BTC14819^	BTB13779(2)	TC104S	BTC1376^	BTB13779(2)	
2.4L, 2.6L (SOHC Mitsubishi Engine)	1989-98	1.3360	*SMIA1	BTC14225^	BTB13385(2)	TC100S	BTC1336^	BTB13385(2)	
Heavy wall bearing appl. (.020 OS)		1.3360	*SMIA2	BTC14971^	BTB13385(2)	N/A	N/A	N/A	
4.7L (SOHC)	2000-09	1.396	*SPDA4	BTC1376^	BTB1396(2)	N/A	N/A	N/A	
DODGE (4 Cyl.)									
2.0L (DOHC)	1989-Up	1.0220	*SEC144	BTC1113*	BTB10225(2)	N/A	BTC10215*	BTB10225(2)	
FORD									
			SFA2						
			SFA2-1(1)	BTC18435^	BTB22055(1)				
			SFA2-2(2)	BTC18535^	BTB1792(1)				
			SFA2-3(3)	BTC18635^	BTB1883(1)				
			SFA2-4(4)	BTC18735^					
			SFA2-5(5)	BTC18835^	BTB18025(1)				
1.6L (B6), 1.8L (BP) (Mazda Eng.)	1987-96	1.7100	SMZA1	BTC17931^	BTB17131(2)	N/A	BTC1710^	BTB17131(2)	
1.8L (DOHC Mazda Engine)	1991-Up	1.0215	SEC144	BTC1113*	BTB10225(2)	N/A	BTC10215*	BTB10225(2)	
			SFA1						
			SFA1-1(1)	BTC19035^	BTB18870(1)				
			SFA1-2(2)	BTC18985^	BTB18020(1)				
			SFA1-3(3)	BTC18935^	BTB22055(1)				
			SFA1-4(4)	BTC18885^					
			SFA1-5(5)	BTC18835^					
2.0L SOHC/DOHC, 2.2L SOHC (Mazda)	1984-97	1.2585	*SMZA2	BTC13439^	BTB12599(2)	N/A	BTC1257^	BTB12599(2)	
			SNIA3L(Left)						
			SNIA2-1 (1,2,3)	BTC19309^	BTB18509(2)				
			SNIA3-2(4)	BTC17538^	BTB16737(1)				
			SNIA3R(Right)						
			SNIA3-1(1)	BTC19702^	BTB18903(1)				
			SNIA2-1 (2,3,4)	BTC19309^	BTB18509(2)				
			SNIA3-2(5)	BTC17538^	BTB16737(1)				
4.6L (V8, SOHC)	1991-97	1.0625	*SFA3	BTC11474	BTB1063(2)	N/A	BTC10625*	BTB1063(2)	
4.6L (V8, SOHC/DOHC)	1997-Up	1.0625	*SFA5	BTC11474	BTB1063(2)	N/A	BTC11474	BTB1063(2)	
5.4L (V8, SOHC)	1997-03	1.0625	*SFA5	BTC11474	BTB1063(2)	N/A	BTC11474	BTB1063(2)	
6.8L (V8, SOHC)	1997-05	1.0625	*SFA5	BTC11474	BTB1063(2)	N/A	BTC11474	BTB1063(2)	
4.6L (V8, DOHC)	2003-Up	1.1256	*SFA13L/R	BTC12137	BTB1128(2)	N/A	BTC11474	BTB1127(2)	
5.0L (V8, DOHC)	2010-Up	1.1256	*SFA13L/R	BTC12137	BTB1128(2)	N/A	BTC1126	BTB1127(2)	
5.4L (V8, DOHC)	2003-Up	1.1256	*SFA13L/R	BTC12137	BTB1128(2)	N/A	BTC1126	BTB1127(2)	
GM (4 Cyl.)									
1.6L (SOHC)	1972-82	1.3390	-SMIA1	BTC14225^	BTB13385(2)	TC100S	BTC1339^	BTB13385(2)	
Heavy wall bearing appl. (.020 OS)		1.3390	*SMIA2	BTC14971^	BTB13385(2)	N/A	N/A	N/A	
1.9L (DOHC)	1991-Up	1.1398	*SGMA2	BTC12655^	BTB11415(2)				
1.9L (SOHC Isuzu Engine)	1982-88	1.3390	*SMIA1	BTC14225^	BTB13385(2)	TC100S	BTC1339^	BTB13385(2)	
Heavy wall bearing appl. (.020 OS)		1.3390	*SMIA2	BTC14971^	BTB13385(2)	N/A	N/A	N/A	
HONDA (4 Cyl.)									
1.3L, 1.5L (SOHC)	1984-89	1.1395	-SHA2	BTC12655^	BTB11415(2)	TC101S	BTC1139*	BTB1142(2)	
1.6L (SOHC)	1992-95	1.1395	-SHA4	BTC12655^	BTB11415(2)	TC101S	BTC1139*	BTB1142(2)	
1.8L, 2.0L (SOHC)	1983-90	1.1395	-SHA1	BTC12655^	BTB11415(2)	TC103S	BTC1139*	BTB1142(2)	
2.0L	1990-Up	1.0615	N/A	N/A	N/A	N/A	BTC10615*	BTB1063(2)	
2.2L (SOHC F22A & B Series)	1990-97	1.1000	-SHA3	BTC11855*	BTB1102(2)	N/A	BTC11010*	BTB1102(2)	

Legend: *5/8" Drive Bar Req. (Part #BT06250) ^7/8" Drive Bar Required (Part #BT08750) -Half-Shell Bearings

NOTE: OE Cutters bring head cam journals back to OE standard, use only if replacement bearings are not intended.

Popular OHC Application (When ordering, refer to Cam Diameter if model application is not shown)		Year	Cam Dia.	Bearing Set Part # (Cam position)	Bearing Cutter Part #	Alignment Bushing Part # (Qty. Req.)	Tang Cutter Part #	O.E. Cutter Part #	O.E. Alignment Bushing Part # (Qty. Req.)
HYUNDAI (4 Cyl.)									
2.2L		1991-93	1.0215	•SEC144	BTC1113*	BTB10225(2)	N/A	BTC10215*	BTB10225(2)
1.5L (Mitsubishi Engine)		1985-94	1.8100	SMIA3	BTC18918^	BTB18118(2)	TC100S	BTC18100^	BTB18118(2)
1.8L (Mitsubishi Engine)		1985-90	1.3360	•SMIA1	BTC14225^	BTB13385(2)	TC100S	BTC1338^	BTB13385(2)
Heavy wall bearing appl. (.020 OS)			1.3360	•SMIA2	BTC14971^	BTB13385(2)	N/A	N/A	N/A
INFINITI (6 Cyl.)									
3.0L (SOHC VG30E)		1990-93	1.8866	SNIA3L(Left) SNIA2-1 (1,2,3) SNIA3-2(4) SNIA3R(Right) SNIA3-1(1) SNIA2-1 (2,3,4) SNIA3-2(5)	BTC19309^ BTC17538^ BTC19702^ BTC19309^ BTC17538^	BTB18509(2) BTB16737(1) BTB18903(1) BTB18509(2) BTB16737(1)			
ISUZU (4 Cyl.)									
1.8L, 2.0L, 2.3L, 2.6L		1989-97	1.3390	•SMIA1	BTC14225^	BTB13385(2)	TC100S	BTC1339^	BTB13385(2)
3.2L (DOHC)		1992-Up	1.0615	N/A	N/A	N/A	N/A	BTC10615*	BTB1063(2)
MAZDA (4 Cyl.)									
1.6L (B6), 1.8L (BP)		1986-94	1.7100	SMZA1	BTC17931^	BTB17131(2)	N/A	BTC1710^	BTB17131(2)
1.8L (DOHC)		1991-Up	1.0215	•SEC144	BTC1113*	BTB10225(2)	N/A	BTC10215*	BTB10225(2)
2.0L (FE), 2.2L		1983-Up	1.2585	•SMZA2	BTC13439^	BTB12599(2)	N/A	BTC1257^	BTB12599(2)
2.6L (G6) & (G80 SOHC)		1989-96	1.1790	•SMZA4	BTC12655^	BTB11815(2)	N/A	BTC1179*	BTB1182(2)
MITSUBISHI									
1.2L, 1.4L, 1.4L, 1.5L		1983-96	1.8100	SMIA3	BTC18918^	BTB18118(2)	TC100S	BTC18100^	BTB18118(2)
1.6L, 1.8L, 2.0L, 2.2L, 2.4L, 2.6L		1978-Up	1.3360	•SMIA1	BTC14225^	BTB13385(2)	TC100S	BTC1336^	BTB13385(2)
Heavy wall bearing appl. (.020 OS)			1.3360	•SMIA2	BTC14971^	BTB13385(2)	N/A	N/A	N/A
2.0L (SOHC G52B, 4G52)		1973-88	1.3360	•SMIA4	BTC14225^	BTB13385(2)	TC100S	BTC1336^	BTB13385(2)
3.0L (V6 SOHC)		1987-96	1.3360	•SMIA5	BTC14225^	BTB13385(2)	N/A	BTC1336^	BTB13385(2)
NISSAN (4 Cyl.)									
1.3L (E13), 1.5L (E15), 1.6L (E16)		1979-90	1.6515	SNIA4	BTC17340^	BTB16540(2)	N/A	BTC16500^	BTB16540(2)
1.6L (GA16)		1989-90	1.6515	SNIA1	BTC17340^	BTB16540(2)	N/A	BTC16500^	BTB16540(2)
1.8L (CA18), 2.0L (CA20)		1982-90	1.8090	SNIA5	BTC18914^	BTB18113(2)	N/A	BTC18100^	BTB18118(2)
2.0L, 2.2L, 2.4L (Z20, Z22, Z24)		1979-89	1.2990	•SNIA6	BTC13841^	BTB13001(2)	TC105S	BTC1299^	BTB13001(2)
3.0L (SOHC & DOHC)		1987-98	1.8866	SNIA3L(Left) SNIA2-1 (1,2,3) SNIA3-2(4) SNIA3R(Right) SNIA3-1(1) SNIA2-1 (2,3,4) SNIA3-2(5)	BTC19309^ BTC17538^ BTC19702^ BTC19309^ BTC17538^	BTB18509(2) BTB16737(1) BTB18903(1) BTB18509(2) BTB16737(1)			
3.0L (SOHC)		1984-88	1.8472	SNIA2L(left) SNIA2R(right)	BTC19309^ BTC19309^	BTB18509(2) BTB18509(2)			
SATURN (4 Cyl.)									
1.9L (DOHC)		1991-Up	1.1396	•SGMA2	BTC12655^	BTB11415(2)			
TOYOTA (4 Cyl.)									
2.2L (20R), 2.4L (22R)		1974-Up	1.2990	•STOA1	BTC13841^	BTB13001(2)	TC102S	BTC1299^	BTB13001(2)
(2.3, 4 AC)		1988-Up	1.1025	N/A	N/A	N/A	N/A	BTC11025*	BTB1104(2)
6.0L (24V/DOHC)		1986	1.0615	N/A	N/A	N/A	N/A	BTC10615*	BTB1063(2)
3.0L (SOHC)		1989-Up	1.3370	•SMIA1	BTC14225^	BTB13385(2)	TC100S	BTC1336^	BTB13385(2)
VOLVO (4 Cyl.)									
2.1L, 2.3L		1976-Up	1.1790	•SVDA1	BTC12655^	BTB11815(2)	N/A	BTC1179*	BTB1182(2)
VOLKSWAGEN (INCLUDES AUDI)									
(Water Cooled)			1.0215	•SEC144	BTC1113*	BTB10225(2)	N/A	BTC10215*	BTB10225(2)
1.8L (SOHC)		1982-94	1.1070	•SVWA2	BTC11095^	BTB10225(2)	N/A	BTC11070*	BTB10225(2)
2.0L, 2.1L, 2.2L, 2.3L (5 Cyl.)		1978-Up	1.2575	•SVWA1	BTC13439^	BTB12599(1)	N/A	BTC1256*	BTB12560(1)
			1.1795	•SVWA1	BTC12655^	BTB11815(2)	N/A	BTC1179*	BTB1182(1)

The cam in each of these engines has dual journal sizes as noted to the right. The cutters and bushings for both journal sizes must be used.

Legend: *5/8" Drive Bar Req. (Part #BT06250) ^7/8" Drive Bar Required (Part #BT08750) •Half-Shell Bearings

NOTE: OE Cutters bring head cam journals back to OE standard, use only if replacement bearings are not intended.

Replacement End Mill for Tang Cutters - Part #TCMILL

Cutters Available for Multiple Cam Journal Size Applications. Call for Technical Assistance on These Applications:
Audi (5 Cyl.) 2.0L, 2.2L, 2.3L (78-Up); BMW (6 Cyl.) E Series (Belt Drive); Ford Escort 1.6L (4 Cyl., 81-85); Ford Escort 1.9L (4 Cyl., 87-Up); Nissan 3.0L VG30 E (6 Cyl., Right Back, 87-Up)

We Have OHC (OE) Cutters Now Available For:

Chrysler 2.2L & 2.5L for +.020 Oversized Cam - Part #BTC1396
Ford 4.6L (V8) for +.020 Oversized Cam - Part #BTC10827
Mitsubishi/Eagle Talon 1.6L, 1.8L, & 2.0L - Part #BTC1113

Universal Camshaft Bearing Tool Kit

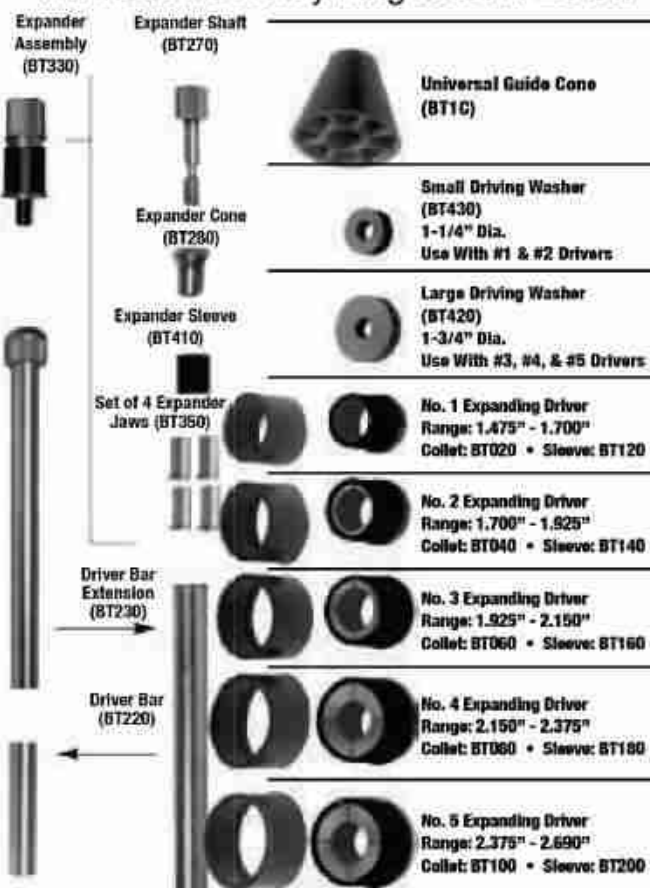
Complete tool in heavy duty molded plastic case.

Bearing range 1.125" to 2.690".



Complete Kit Part #BT000

Kit Includes Everything Shown Below



Expanding Collets and Rubber Sleeves

Size	Collet Part #	Sleeve (2-Pk.) Part #
1.475-1.700	BT020	BT120
1.700-1.925	BT040	BT140
1.925-2.150	BT060	BT160
2.150-2.375	BT080	BT180
2.375-2.690	BT100	BT200

Engine Builder's #1 Choice To Install Cam Bearings



Drivers & Accessories

Here's the fast, simple, economical cam tool that changes hundreds of different sized cam bearings with one of four expanding mandrels. This cam bearing tool adjusts instantly to undersized cam bearings and let's you install/remove them out of any engine. Save money by ordering the complete kit! Bearing range 1.375" to 2.750".



Kit #BT1

Kit Includes: 5" Drive Bar, 36" Drive Bar, Guide Cone, Set of Washers, Large & Small Expanders, 4 Sets of Mandrels w/Sleeves, Wall Mount Rack.

Kit #BT2

Kit Includes: BT1 + 24" Drive Bar (Save 35% on 24" Drive Bar when purchased in this kit!)



5" Driver	BT1B
24" Driver	BT2B
36" Driver	BT3B
48" Driver (V12 Cummings)	BT4B
Bar cap	BT1CAP
Guide Cone	BT1C
Rubber Sleeves For Mandrels	1.370 BT5NS
	1.682 BT6NS
	1.875 BT7NS
	2.250 BT8NS
Drive Washers	1.370 BT5W
	1.682 BT6W
	1.875 BT7W
	2.250 BT8W
Expanding Mandrels	1.370 BT5M
	1.682 BT6M
	1.875 BT7M
	2.250 BT8M
Expanders	1-7/32" BT3E
	1-5/8" BT4E
	Threaded Stud BT1S

UNIVERSAL CAM CHECKER TOOL .750 TO 1.050



Part No.
CBT902

This easy-to-use tool simply slides down into the lifter bore and is adjusted until expanded securely. Supplied with two followers: one for flat tappet cams and one for roller cams.

JOURNAL BORE FLEX-HONES®

These specially designed hones allow you to deburr and remove material using a low-temperature abrading process. This provides a superb journal surface for both bearing insert or aluminum journal. Just the right finishing touch for a free running cam shaft.

Cam Bearing Flex-Hones® include a threaded pipe nipple adaptor for an extension rod which allows you to reach each journal within the entire length of the cylinder head and engine block.

O.H.C. CAM JOURNAL BORE

180 Grit - New material for O.H.C. bearings or aluminum heads.

Hone Size	Size Metric	Part #
1-1/8"	29mm	QBH100
1-1/4"	32mm	QBH101
1-3/8"	35mm	QBH102
1-1/2"	38mm	QBH103
1-5/8"	41mm	QBH104
1-3/4"	45mm	QBH105

CAM BEARING

180 Grit - Order hone one size larger than bore size

18" Extension Rod
Use with all Cam
Bearing Flex-Hones®



PART #
4159

Hone Size	Size Metric	Part #
2"	51mm	4155
2-1/4"	57mm	4156
2-1/2"	64mm	4157
2-3/4"	70mm	4158

UNIVERSAL CAMSHAFT INSTALLATION TOOL



Part #CT898

This easy-to-use universal camshaft installation tool comes complete with five adaptors for most domestic V6 & V8 engines. The heavy duty comfort-grip handle provides plenty of support.

CAMSHAFT INSTALLATION TOOL

Providing a solid grip, this hex design handle makes it easy to install or remove camshafts. Installation bolts included on handle. For Chevy V-6 & V-8 ex. hydraulic roller camshafts.

PART# CBT100



VALCO-TORCO "MPZ" ASSEMBLY LUBE

With its distinctive red color and natural attraction to metal, provides a pre-lubricant for all engine parts. It offers superior protection against scuffing, galling, and metal transfer during the break in of a new or rebuilt engine. MPZ Cam Lube is used to protect cam lobes, lifters, and other highly stressed engine parts during the initial cranking and break-in of new or rebuilt engines.

DESCRIPTION	PART #
Assy. Lube (1 oz. Tube)	V751
Assy. Lube (4 oz. Bottle)	V752
Assy. Lube (12 oz. Bottle)	V753
Cam Lube (1 oz. Tube)	V754
Aerosol Gel Lube (8 Oz. Can)	V755



PREMIUM CRANKSHAFT POLISHING BELTS

LONGER LASTING, PREMIUM GRADE AT STANDARD PRICING

Call for your FREE 3 Belt First Time Buyer Trial

(Part #CPB-Trial) on any of the sizes and grits below.

Aluminum Oxide Grain, specially treated for long life. Triple flex cotton blue backing for proper edge roll. 2 layer premium resin over resin bond. This, coupled with the correct grit selection will provide the best possible finish. Manufactured by a division of Silver Seal Products.

Save 10% by ordering 10 boxes or more! (Assorted sizes & grit)

PREMIUM CRANKSHAFT POLISHING BELTS

Priced & Packaged 10 Per Box

Length	Width	240G	320G	400G	Length	Width	240G	320G	400G
42"	1"	3028	3026	3029	77"	3/4"	3094	3074	3071S
55-3/4"	1"	3031	3030	7/8"		3075			
	3/4"	3038	3032	3035		1"	3096	3076	3072
	1"	3040	3034	3033		1-1/8"	3078	3083	
60"	1-1/4"	3037	3036			1-1/4"	3098	3080	3071
	1-1/2"	3039				1-3/8"	3082		
	2"	3041	3041S			1-1/2"	3100	3084	3085
	3/4"	3048	3044	3051		1-5/8"	3086	3192	
	1"	3050	3046	3042		1-11/16"	3087		
64"	1-1/4"	3053	3053S			1-3/4"	3102	3088	
	1-1/2"	3051S	3047S	3043	1-7/8"	3090	3093		
	1-3/4"	3049	3049S	3045	2"	3103	3092	3073	
	2"	3081	3077		2-1/4"			3079	
	3/4"	3057S	3057	3047	91"	3/4"	3120	3108	
70"	1"	3060	3058	3063		1"	3122	3110	3106
	1-1/4"	3061	3061S			1-1/4"	3124	3112	
	3/4"	3069	3069S			1-1/2"	3126	3114	
	1"	3068	3064	3065		1-3/4"	3128	3116	
72"	1-1/4"	3070	3066			2"	3130	3118	
	1-1/2"	3067	3067S			115"	1"	3134	3132
	1-3/4"	3059	3059S			116"	1-1/2"	3129	



BUFF BRIGHT SURFCO MICRO FINISH BELTS

PRICED & PACKAGED 1 PER BOX

Performance strength, premium Aluminum-Oxide resin belts manufactured especially for very fine polishing. Will not remove material giving a non-directional polish. Sides wear to journal radii. Great for high performance work

Length	Width	Super Micro	
		Micro Surcco	Surcco
60"	3/4"	3184	3184S
	1"	3153	3153S
64"	3/4"	3157	3157S
	1"	3158	3158S
70"	3/4"	3185	3185S
	1"	3164	3164S
72"	3/4"	3186	3186S
	1"	3167	3167S
77"	3/4"	3171	3171S
	1"	3173	3173S
91"	3/4"	3187	3187S
	1"	3183	3183S

Specialty Tools

SKY-BLUE PREMIUM

CRANKSHAFT POLISHING BELTS

Priced & Packaged 10 Per Box

Top quality belt boasts a Sky-Blue backing that readily conforms to journal radii. Exceptionally high grade Aluminum-Oxide grains are bonded to this flexible material, along with an active lubricant which reduces grinding heat, also extending belt life.

Length	Width	320G	400G
60"	3/4"	3360	3362
	1"	3361	3363
64"	3/4"	3384	3386
	1"	3385	3387
70"	3/4"	3370	3372
	1"	3371	3373
72"	3/4"	3374	3376
	1"	3375	3377
77"	3/4"	3378	3380
	1"	3379	3381
91"	3/4"	3390	3392
	1"	3391	3393

SUPER FINISH BELT GREASE

Grease & aluminum-oxide powder creates luster & a bright finish. 28 oz.

PART# 2999A

ABRASIVE BELT UNLOADER

Works like a giant "Eraser". Simply press firmly against running abrasive for a few seconds or until loaded particles have been removed. 13.3 oz.

PART# 2999E

ABRASIVE BELT GREASE STICK

Light bodied grease that provides lubrication and prevents clogging, leaving the abrasive grit free to cut and smooth. 20 oz.

PART# 2999G

SUPER FINE CORK/ ABRASIVE

POLISHING BELTS

Semi Flex Backing, Abrasive Bonded Cork. Priced & Packaged 1 Per Box.

LENGTH	3/4" PART #	1" PART #
60"	3484	3453
64"	3457	3458
70"	3485	3464
72"	3486	3467
77"	3471	3473
91"	3487	3483

CRANKSHAFT ROUGHING BELTS

Priced & Packaged 10 Per Box

L x W	80 Grit Part #	120 Grit Part #	180 Grit Part #
64"x1"	3056	3054	3052
70"x1"	•	•	3062
77"x1"	•	3104	•
91"x1"	3131	•	•

PORTABLE ELECTRIC CRANKSHAFT POLISHERS

64" & 72" MODELS AVAILABLE



BELT LENGTH	PART #
61" - 64"	3135
2" Flanged Rollers	3135-2
69" - 72"	3133
2" Flanged Rollers	3133-2

120V, single phase 1/2 HP, 10,000 RPM Motor with 12' cord. Balanced design for less wrist fatigue. Dust filter installed in motor for long life. Each unit comes standard with 1" or 2" flanged rollers. Optional style/size rollers also available.

NEW

PREMIUM ELECTRIC CRANKSHAFT POLISHER



Premium grade portable electric crankshaft polisher. Rugged all welded steel frame, powder coated for years of service. Molded aluminum spray shield comes standard, balanced for less fatigue.

BELT LENGTH	PART #
61" - 64"	3135P
2" Flanged Rollers	3135P-2
69" - 72"	3133P
2" Flanged Rollers	3133P-2

FREE BOX OF 10 POLISHING BELTS (YOUR CHOICE OF SIZE/GRIT) WITH PURCHASE OF PREMIUM POLISHER!

- All units have heavy duty power switch and cord.
- Two lengths available to aid in any polishing job.
- Equipped with a built to last Baldor motor.
- The choice of top shops and builders.
- **MADE IN THE USA.**

PORTABLE AIR CRANKSHAFT POLISHER

Features a high torqued output 11,000 RPM air motor. Lightweight alloy frame (weighs only 9 lbs.). Polisher is balanced for extended use. Unit will adjust to belt lengths from 64" to 72". Supplied with 1" rollers, optional 2" wide rollers also available.



PART# 3144

REPLACEMENT PARTS










DESCRIPTION	PART #
1" Flanged Rollers (3)	3136
2" Flanged Rollers (3)	3137
1" Unflanged Rollers (3)	3147
2" Unflanged Rollers (3)	3148
Replacement Dayton Motor	3138
Replacement Baldor Motor	3138P110 NEW
Replacement Baldor Motor	3138P220 NEW



STEADY REST SHOES - For Crank Grinders

Model (Shoe Width)	Style Upper	Style Lower	Upper Part #	Lower Part #
Berco				
225, 270	1	1	SR01	SR01
Scledum-DCM				
SV200, RG200	1	1	SR02	SR02
SV230, RG230, RG200N, RG270(narrow)	1	1	SR03	SR03
SV230, RG230, RG200N, RG270(Wide)	1	1	SR04	SR04
Storm Vulcan				
1648 (Wide)	2	3	SR08	SR09
15 STD (Narrow)	4	5	SR10	SR11
15A STD, 15AW	4	5	SR14	SR15
15C STD, 15CW	6	5	SR16	SR17
Van Norman				
OE# 438-42	7	7	SR20	SR20
OE# 111-5446	8	8	SR23	SR23
Winona V.N. Zan Rosso				
250, 280 (Narrow)	1	1	SR24	SR24
210 OE#815801	9	N/A	SR25	N/A

STYLE GUIDE

#1	#2	#3
		
#4	#5	#6
		
#7	#8	#9
		



CRANKSHAFT GRINDING WHEELS

Our material composition provides superior performance & durability. Each wheel is diamond ground and trued for your convenience.

Call For Availability On Sizes Not Listed



Style Guide

- 1. Straight, Both Sides
2. Recessed, 1 Side Only
3. Recessed, 2 Sides
4. Hub, 1 Side Only

Table with 3 columns: Width, Style, Part#. Includes Storm Vulcan 14, 15.

Table with 3 columns: Width, Style, Part#. Includes Storm Vulcan 15, 15 Special, 1550, 1548.

Camshaft Grinding Wheels. High Tech wheels for your complete line of cams. Includes Storm Vulcan 75, 75A, 75D, 1165, 1165A and Van Norman 253, 254, 255; Berco RAC1500, RAC2130.

Table with 3 columns: Width, Style, Part#. Includes Lempeco (Kwik-Way) TKG Series, 518.

Table with 3 columns: Width, Style, Part#. Includes Lempeco (Kwik-Way) 519.

Table with 3 columns: Width, Style, Part#. Includes Storm Vulcan 15A (to Serial #593).

Table with 3 columns: Width, Style, Part#. Includes Storm Vulcan 15A (from serial# 594) #15A Special, 15C (to serial #172)& 1860.

Table with 3 columns: Width, Style, Part#. Includes Storm Vulcan 15A (from serial# 594) #15A Special, 15C (to serial #172)& 1860.

Table with 3 columns: Width, Style, Part#. Includes Van Norman 438, 448, 460, 465; Zanrosso CG-210(early)Scledum 200, RMC/Robbi Rex 1200.

Table with 3 columns: Width, Style, Part#. Includes Storm Vulcan 15C.

Table with 3 columns: Width, Style, Part#. Includes Storm Vulcan 15C.

Table with 3 columns: Width, Style, Part#. Includes SV New Scledum RG2, 230; Winona VN 400, 438, 439, 448, 460, 465, 475, 476, 666, CG250; Peterson/Berco 180B, 225A, B, C; Zanrosso 210, 230; AMC K-1100.

Table with 3 columns: Width, Style, Part#. Includes SV New Scledum RG2, 230; Winona VN 400, 438, 439, 448, 460, 465, 475, 476, 666, CG250; Peterson/Berco 180B, 225A, B, C; Zanrosso 210, 230; AMC K-1100.

Table with 3 columns: Width, Style, Part#. Includes Lempeco (Kwik-Way) KGB, C, E.

Table with 3 columns: Width, Style, Part#. Includes SV New Scledum 230, 270, 280; Winona VN 400, 438, 475, 476, 666, CG250; Peterson/Berco 260, 260A, 260B, 270B, 270A, B, C; Zanrosso Mito 250.

Table with 3 columns: Width, Style, Part#. Includes SV New Scledum 270, 280; Zanrosso Mito 280 RMC; Robbi Rex 1800, Rex 2200L.

Table with 3 columns: Width, Style, Part#. Includes SV New Scledum 270, 280; Zanrosso Mito 280 RMC; Robbi Rex 1800, Rex 2200L.

Table with 3 columns: Width, Style, Part#. Includes SV New Scledum 250 Storm Vulcan 350A, B, C RMC/Robbi Rex 2200M, 2700M, 3100M; Winona VN 111; Peterson/Berco 300, 350 Zanrosso Mito 360.

PLASTIGAGE

CHECKING BEARING CLEARANCES

Check main and rod bearing clearances quickly and accurately. Plastigage is a special extruded plastic thread with accurately controlled "crush" properties. Product is color-coded with instructions included.



Clearance Range	Color	Qty.	Part #
.001" to .003" (.025 to .076mm)	Green	10pk.	4411
.002" to .006" (.051 to .152mm)	Red	10pk.	4412
.004" to .009" (.102 to .229mm)	Blue	10pk.	4413
Assortment Pack 5 Green, 3 Red, 2 Blue		10pk.	4444

WOODRUFF KEYS

All keys priced and sold in 25 piece boxes.

USA#	Size W x L x H	Application	Part#
304	3/32 x 1/2 x 3/16	Chrysler	6350
404	1/8 x 1/2 x 3/16	GMC Truck	6352
406	1/8 x 3/4 x 19/64	Various	6354
505	5/32 x 5/8 x 7/32	AMC, Ford	6355
506	5/32 x 3/4 x 9/32	Various	6356
507	5/32 x 7/8 x 11/32	Various	6357
606	3/16 x 3/4 x 9/32	AMC, Ford, GM	6358
607	3/16 x 7/8 x 11/32	AMC, GM	6359
*	3/16 x 1-3/8 x 23/64	Ford 6 Cyl.	6363
608	3/16 x 1-3/8 x 3/8	Ford 6&8 Cyl.	6362
*	3/16 x 1-13/32 x 19/64	Ford 8 Cyl.	6364
*	3/16 x 1-3/4 x 23/64	Ford 8 Cyl.	6365
*	3/16 x 2-3/8 x 13/32	GMC 6 Cyl.	6367
*	15/64 x 23/32 x 9/32	Ford V6	6368
806	1/4 x 3/4 x 9/32	Chrys, Dodge	6369
808	1/4 x 1 x 13/32	Farm & Indus.	6370
810	1/4 x 1-1/4 x 1/2	Farm & Indus.	6371
817-1	1/4 x 1-3/8 x 25/64	Buick 8 Cyl.	6372
1010	5/16 x 1-1/4 x 1/2	VW 4 Cyl. Van	6373
1217	3/8 x 2-1/8 x 33/64	Various	6374
*	3/8 x 3-3/4 x 1/4	Ford Trk 8 Cyl.	6375

CRANKSHAFT TURNING

NUTS & SOCKETS

CAN BE USED WITH A DEGREE WHEEL

Use these time saving tools during short block rebuilding to ease the task of crankshaft rotation. Remove dampener, slip over snout, and turn to desired position.



PART# N2510



PART# SL2510

Application	Nut Part #	Socket Part #
Chevy Small Block	N2510	SL2510
Ford, Pont, Buick SB	N2511	SL2511
Mopar Big Block	N2512	SL2512
Chevy BB	N2513	SL2513

HEAD & CRANK BAGS



Measures 10" x 8" x 36" to fit most cylinder heads and crankshafts. Material is clear Virgin Poly Plastic, 3 mils thick. With imprint area for you to mark your Part #.

PART #
4587

(100/roll)

CARBON CRANKSHAFT

WELDING PLUGS

Four sizes cover oil holes from .105 to .500.



Small End	Large End	Length	Part # (100 Pk)
.105	.250	.300	6385CWP
.190	.312	.300	6386CWP
.240	.375	.450	6387CWP
.365	.500	.450	6388CWP

Specialty Tools

FLYWHEEL GRINDING WHEELS

Silver Seal offers the best wheel for each application. When selecting a wheel, keep in mind that harder flywheels need a softer stone and softer flywheels need harder stones. We recommend keeping a variety of wheels on hand.



Quantity Discounts Available

For a Dowel Puller, See Page 98.

Harder
Softer

Used On	Size (1-1/4" Arbor)	Description	Part #
Cast Iron	6" / 4-1/2" x 2"	Black/Speckled, G.P. Std. Life	2402
	6" / 4-1/2" x 2-5/8"	Black/Speckled, G.P. Long Life	2404
	6" x 2-1/2"	Black/Speckled, G.P. Straight Cup	2409
	4" / 3" x 1-1/2"	Black/Speckled, G.P. Small Dia.	2400
	3" / 2-1/4" x 1-1/2"	White, Fast Grinding On Hard Surface	2407
Steel/Ductile Iron	6" / 4-1/2" x 2"	Pink, Std. Life, Flared Cup	2403
	6" / 4-1/2" x 2-5/8"	Pink, Extended Life, Flared Cup	2405
	4" / 3" x 1-1/2"	Pink, Small Dia., Flared Cup	2401
	6" / 4-1/2" x 2-5/8"	Prem. Ruby, Extended Life, Flared Cup	2404R
	4" / 3" x 1-1/2"	Prem. Ruby, Small Dia., Flared Cup	2400R

Note: Our premium grain ruby wheels run cooler at a higher pressure, therefore cutting freer and leaving a superb finish!

WHEEL DRESSERS - FLYWHEELS

COMPLETE HAND DRESSER

For All Machines

PART# 2920

REPLACEMENT STONE

PART# 2922



COMPLETE ASSEMBLY (FOR PETERSON & DCM)

PART# 2924

REPLACEMENT STAR SET (5 PC.)

PART# 2926



COMPLETE ASSEMBLY (FOR WINONA)

PART# 2928

REPLACEMENT STAR SET (7 PC.)

PART# 2930



SMALL ARBOR FLYWHEEL GRINDING WHEELS



Dia. x Hgt. x Arb.	Shape	Color	Part #
3" / 2-1/4" x 1-1/4" x 5/8"	Flared Cup	White	2406
5" / 3-3/4" x 2" x 15/16"	Flared Cup	Black	2420

TRUE UP YOUR CRANK MOUNTING SURFACE

3" / 2-1/4" x 1-1/4" x 3/4"
Flared Stone repairs warped flywheels

PART# 2430



CBN FLYWHEEL GRINDING WHEEL

AN EFFICIENT ALTERNATIVE TO CONVENTIONAL ABRASIVES

PART# CBN400F

- 4" dia. x 1-1/4" arbor
- A full 1/8" thick CBN material
- Precision balanced Aluminum core

PART# CBN600F

- 6" dia. x 1-3/4" H. x 1-1/4" arbor
- A full 1/8" thick CBN material
- Precision balanced Aluminum core



NOTE: For optimum results, use with fresh grinding coolant and increased coolant flow.

Flywheel Grinding Coolant

A concentrated synthetic blend formulated for use in all types of flywheel grinders. Nitrite Free!



Size	Part #
1 Quart	4504
1 Gallon	4506
5 Gallons	4508

Recommended Dilution Ratio - 30:1

FLYWHEEL CUTTER TIP

FOR WINONA VAN NORMAN 570 ROTARY BROACH

3-Edge carbide tip fits 570 rotary broach flywheel attachment. Van Norman #25368.



PART# KK904

Quantity Discounts Available

FLYWHEEL/FLEXPLATE BALANCE WEIGHTS

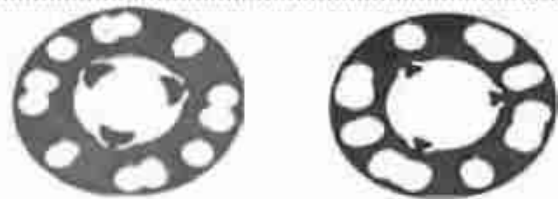
Converts Chevy 350 Flywheels to 400/454

Description	Part #
350 to 400 Chevy Flywheel	7006
Same as 7006, Except Fits Flywheel or Flexplate	7007
350 to 454 Chevy Flywheel	7008



FLYWHEEL POSITIONING SHIMS

Avoid costly clutch problems & comebacks! After resurfacing wheel, restore clutch pedal height with Silver Seal Flywheel Shims. These shims bolt up between the flywheel and crank flange for a fast, inexpensive fix.



Make	Engine Size/Application	.025 Part #	.050 Part #	.089 Part #
Chrysler/Mitsubishi	1.4L, 1.5L, 1.6L, 1.8L, 2.0L, 2.2L, 2.4L, 2.5L, 2.6L, 3.0L, 3.3L, 3.5L, 3.8L	FSY462A	FSY462B	•
	3.9L, 4.0L, 5.2L, 5.6L, 5.8L, 5.9L, 6.3L, 6.5L, 7.2L	FSC852A	FSC852B	•
Ford	1.3L, 2.8L, 2.9L, 4.0L(6 hole)	FSF629A	FSF629B	•
	1.6L, 1.9L, 2.0L, 2.3L, 3.0L(6 hole), 3.1L, 3.3L, 3.4L, 3.8L, 3.9L, 4.1L, 4.2L, 4.6L(6 hole), 4.7L, 4.9L, 5.0L, 5.4L(6 hole), 5.8L	FSF468A	FSF468B	FSF468C
	5.7L, 5.9L, 6.4L, 6.9L, 7.3L(not dual mass flywheel), 7.5L	FSF460A	FSF460B	•
GM	2.0L HO, 2.2L, 2.3L, 2.4L, 2.5L, 2.8L, 3.1L, 3.8L	FSG628A	FSG628B	FSG628C
	2.0L, 2.3L, 4.3L	FSG643A	FSG643B	•
	3.0L, 3.2L, 3.3L, 3.7L, 5.0L, 5.3L, 5.7L, 6.0L, 6.2L(Diesel), 6.5L, 6.6L, 6.7L, 7.0L, 7.3L, 7.4L(not 455), 8.1L	FSG857A	FSG857B	FSC857C
Honda	1.2L, 1.3L, 1.5L, 1.6L, 1.8L, 2.0L, 2.2L, 2.3L, 2.7L	FSH402A	FSH402B	•
Jeep	2.4L, 2.5L	FSG628A	FSG628B	FSG628C
	4.0L, 5.4L, 5.9L	FSC852A	FSC852B	•
Mazda	1.2L, 1.3L, 1.5L, 1.6L, 1.8L, 1.9L, 2.0L, 2.2L, 2.4L, 2.7L, 3.0L	FSM420A	FSM420B	•
Nissan	1.5L, 1.6L, 1.8L, 2.0L, 2.2L, 2.4L, 2.6L, 2.8L, 3.0L(except V6)	FSN418A	FSN418B	•
Suzuki	1.8L(Sidekick)	FST462A	FST462B	•
Toyota	1.5L, 1.6L, 1.8L, 1.9L, 2.0L, 2.2L, 2.3L, 2.4L, 2.6L, 3.0L	FST462A	FST462B	•

Silver Seal offers a great selection of diamond dressers to fit your machine. All diamonds are thoroughly inspected to meet our quality control standards, insuring a high caliber diamond dresser at a competitive price.

VALVE REFACING MACHINES

Machine	Description	Part #
Black & Decker, Skil, Sioux, Thor, Van Dorn, Van Norman	3/8" x 1-5/8" Round Shank	80700
Kwik-Way, Tobin Arp S & D	5/16" x 2-1/4" Round Shank	80760
Kwik-Way, Valve Master (1714)	1/2" x 3", 1/2"-20NF Thread, 3/4" Screw Head	80699
Sioux (1713, 1715)	3/8" x 3", 3/8"-24NF Thread, 3/4" Screw Head	80702
U.S. (6A14288)	7/16" x 2" Round Shank	80753
Hall 80, Kwik-Way, K.O. Lee, Van-Norman, K.R. Wilson	1/4" x 1" Overall Length, 1/2" x Step, 7/16" Head	80750
Skil (Talent)	5/16" x 2-3/8", 5/16"-18NC Thread, 5/8" Screw Head	80706
Van Norman (500)	3/8" x 1-5/8" Round Shank	80700
Kwik-Way SV, CV, VS	7/16" x 3", 7/16"-20NF Thread, 3/4" Screw Head	80697
Sioux 680, 682, 956	3/8" x 2 1/2" 3/8" x -24NF Thread, 3/4" Screw Head	80767

Valve Reseating Machines

Machine	Description	Part #
Black & Decker, S&D, Van Dorn, Tobin Arp	3/8" x 2-3/8", 3/8" -24NF Thread, 3/4" Screw Head	80701
Kwik-Way PB	1/2" x 3", 1/2" -20NF Thread 3/4" Screw Head	80699
Sioux (1715), thor, Kwik-Way (NSG)	3/8" x 3", 3/8" -24NF Thread 3/4" Screw Head	80702
Kwik-Way (Heavy Duty)	1/2" x 3", 3/4" Screw Head, 1/2"-20 NF Threaded	80698
Kwik-Way	1/4" x 1" Step Shank	80750
Hall (Heavy Duty), Snap-On, U.S., Skil, Black & Decker	5/16" x 2-3/8", 5/16" -24NF Thread, 5/8" Screw Head	80695
K.O. Lee, Skil	5/16" x 2-3/8", 5/16" x 18NC Threaded, 5/8" Screw Head	80706
Sioux Heavy Duty (1715B)	3/8" Hex Shank x 2" Long 1/4" -28 Right Hand Thread	80755
Sioux Heavy Duty (1715A)	3/8" x 2-3/4" 3/8" -24NF Thread	80703
Winona	1/4" x 2" Round Shank	80704

CLUTCH GRINDING MACHINES

Machine	Description	Part #
Lempco AC, NAC, VAC, Do-All	7/16" x 2" Round Shank	80753
Van Norman (444)	3/8" x 1-5/8" Round Shank	80700

PISTON GRINDERS

Machine	Description	Part #
Van Norman (75, 76), Relio	3/8" x 1-5/8" Round Shank	80700
Storm Vulcan D-3	7/16" x 2" Round Shank	80753
Van Norman 101	3/8" x 1-5/8" Round Shank	80700

ROD & CAP MACHINES

Machine	Description	Part #
Sunnen Rod and Cap Grinder (CRG-500)	3/8" x 1-5/8" Round Shank	80700
Storm Vulcan No. 65 Rod Grinder	1/2" x 3", 1/2" -20NF Thread, 3/4" Screw Head	80699

DRUM LATHES

Machine	Description	Part #
Van Norman (All except 302 and 302H)	3/8" x 1-5/8" Round Shank	80700
Barret, V.N. (302 & 302H)	3/8" x 3" Round Shank	80761
Lempco	7/16" x 2" Round Shank	80753
Ammco 5000	1/2" x 1-3/4" Round Shank	80764

CRANK / CAMSHAFT GRINDERS

Machine	Description	3/4 Carat (Part #)		1 Carat (Part #)		1-1/2 Carat (Part #)		2 Carat (Part #)	
		Std.	Superior	Std.	Superior	Std.	Superior	Std.	Superior
Storm Vulcan 14, 15, 15A, 15C, 75, 75A	1/2"x3" Round Shank	80762	80762S	81762	81762S	82762	82762S	83762	83762S
Van Norman, Lempco, Landis	7/16"x1-3/8" Step Shank 5/8" Head	-	-	80759	80759S	81759	81759S	82759	82759S
Berco	Taper Shank Step Type, 5/8" Head 2-1/4"	-	-	80754	80754S	81754	81754S	82754	82754S

Note: Superior Diamonds offer a longer life, more uniform wheel finish, and are resetttable. Call for details.



Part# 80695

Part# 80697

Part# 80699

Part# 80754
Part# 81754
Part# 82754

Part# 80702

Part# 80703

Actual Size



Part# 80767

Part# 80761

Part# 80760

Part# 80698

Part# 80701

Part# 80762
Part# 81762
Part# 82762

Part# 80706

Actual Size



Part# 80753

Part# 80764

Part# 80704

Part# 80700

Part# 80759
Part# 81759
Part# 82759

Part# 80750

Part# 80755



KWIK-CHECK STRAIGHT EDGES

Straight edges for determining height variation across a surface quick and accurately. Precision ground two sides with +/- .001" variance over length. Commonly used on flywheels, crankshaft saddles, head & block warpage.



Common Use	Length	Part #
Flywheel/Restricted Areas	12"	SE12
Small Engines 1 side grounded	24"	SE24
Small Engines 2 sides grounded	24"	SE24-2G
General Use	32"	SE32
Truck or Industrial Engines 1 side grounded	36"	SE36
Truck or Industrial Engines 2 sides grounded	36"	SE36-2G
Truck & Diesel	48"	SE48

WARP ALIGNMENT GAUGE

Ideal as a straight edge and for checking crankshaft and camshaft saddles. 26" long.



PART# SE26

STARRETT - PRECISION LEVELS

Ground & graduated vials are housed in a satin finished, brass protective tube with a friction-fit closing cover to prevent breakage. Base made of the highest quality seasoned casting and are precision machined on the bearing surface. Each level contains a cross test vial to simultaneously level in both directions.



Length	Part #	Accessories	Part #
8" Level	KK723	Replacement Vial	KK723V
12" Level	KK724	Replacement Vial	KK724V

12" FEELER GAUGE SET

25 BLADES TOTAL

Includes the following sizes:

- .0015, .002, .003, .004, .005, .006, .007, .008, .009, .010, .011, .012, .013, .014, .015, .016, .017, .018, .019, .020, .021, .025, .027, .030, .040



PART# FGSET

Individual 12" Feeler Blades

1/2" Width, 3/16" hole in one end, hardened and polished German steel, each blade is permanently marked with it's proper size. To order, simply use prefix FG in front of gauge size. (for example, part #FG0015 = .0015" gauge size)

Available in the following gauge sizes:

- .001, .0015, .002, .0025, .003, .004, .005, .006, .007, .008, .009, .010, .011, .012, .013, .014, .015, .016, .017, .018, .019, .020, .021, .022, .023, .024, .025, .026, .027, .028, .029, .030, .031, .032, .033, .034, .035

FEELER GAUGE SET

26 BLADES TOTAL, 3-1/2" LONG

Includes the following sizes:

- .0015, .002, .0025, .003, .004, .005, .006, .007, .008, .009, .010, .011, .012, .013, .014, .015, .016, .017, .018, .019, .020, .021, .022, .023, .024, .025



PART# KK678

UNIVERSAL VALVE GUIDE LEVEL

Precision machined level fits all popular guide pilot top sizes. Includes 4" Starrett level.



Complete Level PART# KK730

Replacement Vial PART# KK730V

Valve Spring Height Gauge

Fast, accurate measuring of installed valve spring height. Compare reading to factory specs or use before and after valve work to find out how many spring spacers you need to restore original height. Required to get proper installed spring height when using aftermarket springs. Standard micrometer type dial shows installed height within .001" for high performance work & all top quality valve jobs.



HEIGHT RANGE	PART#
1.600" - 2.100"(MOST V8'S)	KK712
1.400" - 1.800"(4&6 CYL.)	KK713

NEW Precision Measuring

Portable testers that do it all.

Surface Roughness Tester

KIT INCLUDES TEST SAMPLE, TOOL KIT & DURABLE CARRY CASE



Part #
KK4500



- ▶ Today, for the purpose of checking Ra values, the use of portable, hand held, surface roughness testers are not only economical, but are digital and easy to use.
- ▶ These surface roughness testers are a given necessity for any shop floor that receives work with Ra requirements.

Hardness Tester

KIT INCLUDES TEST BLOCK, TRANSDUCER & CARRYING CASE



Part #
KK-1840

- ▶ Loaded with the most popular features for hardness testing including memory and USB Output.
- ▶ Portable Hardness Tester specializing in testing large hard metal parts.



Ultrasonic Thickness Gauge

- ▶ Most popular ultrasonic thickness gauge is loaded with features such as scan, Min/Max setting and USB Output and includes 5Mhz dual sensor probe, couplant gel, software and rugged carry case



NEW
Part #
KK2800

Part No.		
KK2800-4 Couplant Gel 4oz.	KK2800-8 Couplant Gel 8oz.	KK2800-5L Couplant Gel 5L



DIGITAL OUTSIDE INCH MICROMETERS .0001 ACCURACY

- Hammettone Blue baked enamel frame.
- Meets or exceeds federal accuracy specifications.
- Anvil and spindle hardened & precision ground with microlap finish on carbide tipped measuring faces.
- Spindle thread is hardened, ground, and lapped.
- Ratchet stop thimble in all models.
- Quick, easy zero adjustment on sleeve.
- Microfine graduations on satin chrome.
- Positive locking nut on spindle.
- To ensure error free readings, every fifth thousandth is numbered on the thimble. Digit counter reads to .001" on the sleeve, .0001" on thimble.



0-3" Micrometer Set (KK654, KK655, KK656)		KK652	
Range	Part #	Range	Part #
0-1"	KK654	3-4"	KK657
1-2"	KK655	4-5"	KK658
2-3"	KK656	5-6"	KK659



Micrometer Stand
Part #2232

OUTSIDE INCH MICROMETERS

- .001" reading plus .0001 vernier.
- Swiss style design, balance, and quality.
- Ratchet stop for exact & repetitive readings.
- Microfine graduations allow for easy reading.
- Carbide faces: .250" Diameter.
- Meets or exceeds U.S. Federal specs. for accuracy.
- Price includes standard, wrench, and fitted case.

Accuracy: .0001" Flatness: .00003" Parallelism: .00005"
Graduation: .0001" Spindle Diameter: .256"



0-4" Micrometer Set		KK666	
0-6" Micrometer Set		KK629	
Range	Part #	Range	Part #
0-1"	KK660	3-4"	KK663
1-2"	KK661	4-5"	KK664
2-3"	KK662	5-6"	KK665

ONE-REVOLUTION DIAL CALIPERS SPECIAL FEATURES & ADVANTAGES

Measuring face hardened, precision ground, and micro-lapped for absolute accuracy. Satin chrome finish, crisp engraved graduations, and made of stainless steel. Includes a deluxe fitted case.



Range	Grad.	Accuracy	Part #
0-6"	.001"	.001" per 6"	KK670
0-8"	.001"	.001" per 6"	KK686

DEPTH BASE ATTACHMENT

Adapts to any brand of dial and vernier caliper. Single screw allows quick attachment. Ground and surface hardened. Base length: 3"

Calipers NOT Included



PART# KK694

DEPTH MICROMETER SET

- Ratchet stop insures consistent & repetitive measurements.
- .157" Diameter rods with lapped
- measuring end.
- Satin - Chrome Finish.
- Two adjusting wrenches
- Fitted Case
- Accuracy: +/- .0003"
- Graduation: .001"



Range	Base	# of Rods	Part #
0-4"	2-1/2"	4	KK676
0-6"	4"	6	KK630

VALVE GUIDE DIAL BORE GAUGE

Effective range from .240" to .380" Grad .0001/Inch. Complete with all the necessary spacers and extensions for those close tolerance measurements.

Features:

- AGD Bore Gauge Indicator
- Self-Centering
- Carbide Contact Point
- Adjustable Tolerance Pointers
- Fitted Wood Case



PART# KK800

CYLINDER DIAL BORE GAUGES

ECONOMICAL & ACCURATE

- Measures cylinder wall taper & out of-round.
- Precision gauge is self centering & adjusts quickly.
- Spacers & wrench are included.
- Range: 2"-6"
- Fitted carrying case included.

Graduations	Part #
.001"	KK697
.0005"	KK667



VALVE SEAT RUNOUT GAUGE

Check valve seat runout on any automobile, truck, motorcycle, snowmobile, or outboard engine with this jeweled bearing indicator. Most engine valve seat runout specifications require accuracy within .001". Place gauge over pilot, position probe on valve seat and rotate gauge a full revolution. .200" Range, .001" Graduations, and a 0-50-0 Reading.



Pilots	Pilot Top	Part #
B&D, Neway	3/8"	KK679
Sioux	3/8"+.010"	KK680

DIAL INDICATOR

- Rev. counter hand. Suppl. w/lug backs.
- Bezel knurled; easily adjusted through 360°.
- Includes adjustable tolerance limit markers.
- Lug Back: 3/8" Dia. Shank
- Reading: 0-100
- Graduation: .001"
- Dia. Dial: 2-1/4"



PART# KK683

ROD BOLT STRETCH INDICATOR

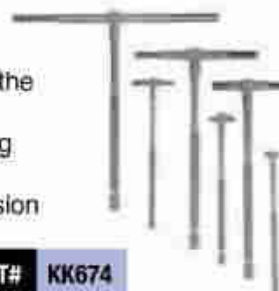
Unit holds itself in place leaving both hands free to torque bolt properly. Instructions & Rod Bolt Stretch recommendations included.



PART# KK714

TELESCOPING GAUGE SET

- Satin - Chrome finish
- Contact points are hardened steel and precision ground on the ends.
- Rigid handle with self-centering system
- Smooth & constant spring tension
- Range: 5/16"-6"

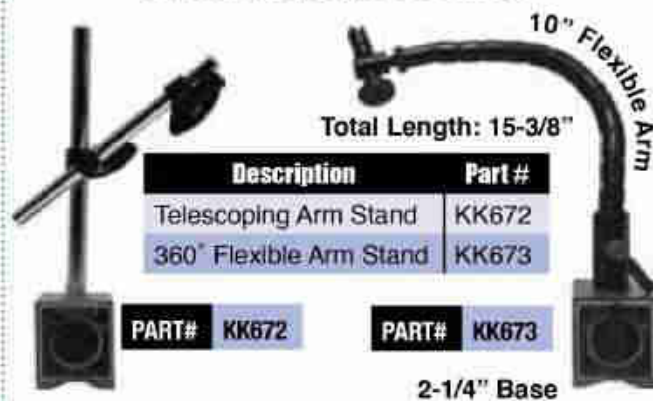


PART# KK674

MAGNETIC BASES FOR DIAL INDICATORS

85 LBS. OF MAGNETIC PULL!

Features V-Base for round or flat surfaces. Will not mar polished surfaces.



Description	Part #
Telescoping Arm Stand	KK672
360° Flexible Arm Stand	KK673

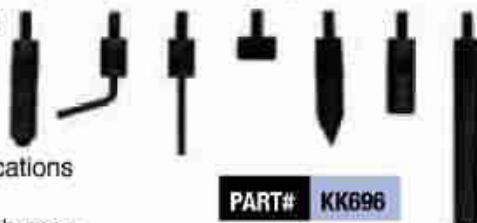
PART# KK672

PART# KK673

2-1/4" Base

INDICATOR POINT KIT

PERFORM MORE OPERATIONS WITH YOUR DIAL



- AGD Specifications
- 4-48 thread
- Complete with case.

PART# KK696

- 22 Assorted points fit most indicators.

UNIVERSAL DEGREE WHEEL KIT

This kit contains all of the tools needed to degree cams, assuring proper cam timing and lobe lift. Features deluxe components including a 9" degree wheel and indicator, dial indicator mount, 2 valve check springs, clamp kit, 14mm top dead center locator, wire degree wheel, pointer, detailed instructions, and a durable foam padded carrying case.

For Use With Heads On Engines



PART# KK644KT

DEGREE WHEELS

Use degree wheel to find top dead center or for checking cam timing

8" Degree Wheel | **Part #KK644**



UNIVERSAL DEGREE WHEEL KIT HEADS OFF



Kit #

KK645KT



For use with **heads off** engine. This kit contains all the tools needed to degree cams in the most popular engines, assuring proper cam timing and lobe lift. Features deluxe components including 9" degree wheel, dial indicator, adjustable blue billet aluminum dial indicator mount, black billet aluminum top dead center locator, wire degree wheel pointer, detailed instructions, and a durable foam padded carrying case.

PISTON DOME THICKNESS CHECKER

Now you can modify piston domes or fly-cut valve pockets knowing how much material there is to work with. This simple to use tool includes a .001" dial indicator and a contact point that permits measurement of the most complex dome shapes. An essential tool for every well-equipped performance shop.



PART# KK992

TOP DEAD CENTER LOCATER

This tool provides a positive stop for the piston when locating top dead center. Screws into the spark plug hole.

PART# KK701 **(Chevy)**
PART# KK701A **(Chrysler)**



DECK BRIDGES

2 Models Available

- Checks Piston-To-Deck Clearance
- For Cylinder Bores Up To 4-1/2"
- Part #KK990 is Magnetic Which Holds The Unit Firmly In Place.



KK991



KK990

Description	Part #
Deck Bridge w/o Magnetic Base	KK991
Magnetic Deck Bridge	KK990

CAM CHECKING FIXTURE

Includes 0-1.000" Dial Indicator (0.001") No more fumbling with a magnetic base and a dial indicator to measure cam lift. This fixture maintains and holds the dial indicator and 5" extension (included) in the precisely correct position over the lifters, assuring proper geometry. Supplied with 1/2" and 7/16" adapters for use with any engine block.



PART# KK900

LS UNIVERSAL DEGREE WHEEL KIT, HEADS OFF



Kit #

KK646KT



For use with **heads off** LS engines. This kit contains all the tools needed to degree cams in the most popular engines, assuring proper cam timing and lobe lift. Features deluxe components including 9" degree wheel, dial indicator, adjustable blue billet aluminum dial indicator mount, black billet aluminum top dead center locator, wire degree wheel pointer, professional stainless steel crankshaft tuning socket, detailed instructions, and a durable foam padded carrying case.

CYLINDER HEAD CC KIT

- Lab grade glass burette with glass petcock and easy to read etched graduations.
- Burette has 100cc capacity, graduated in 0.2 cc division lines.
- Multi-position clamp, rod, and support stand with stable base.
- Includes a flat plexi-plate which covers the combustion chamber.
- Comes complete with detailed racer instructions revealing how easy it is to professionally CC cylinder heads.



PART# KK995

DUAL GAUGE LEAKDOWN TESTER KIT

This dual gauge tester measures the ability of cylinders to hold compressed air. Attach shop air and use tester to pinpoint bad valves, worn piston rings, cracked cylinder walls, leaking head gaskets, etc. Easy-to-read gauge to monitor input air pressure.



Kit Includes: Precision regulator and combination M14 & M18 adaptor on 26" long air pressure hose, plastic storage case with instructions.

PART# LDT02

QUICK COMPRESSION TESTER

Short offset stem with a rubber cone tip permits easy seating in any spark plug port. Fits domestic & import engines. Large face dial gauge allows fast & accurate readings. (0-300 psi and 21 bar.)



PART# LDT03

TWIST WIRE PLIERS

Twist Wire Pliers designed with "lockwire" electrical fasteners in mind. Easy to use; attach wire from fasteners and lock handles. Release and pull knob for single twist; hold pliers and push knob to spin wire and lock fastener in place.

PART# 6001



UNIVERSAL PUSH ROD STRAIGHTNESS CHECKER

Easily check concentricity to discard any power-robbing, bent push rods; insert pushrod between spring-loaded holders, spin the pushrod, and read the re-positionable dial indicator (.001"). Dial indicator included.

Part # 4962



TOOL & DIE GRADE METAL FIGURE STAMPS

Excellent grade, letter, and number figures for machine shop use.

Description	Part #
1/8" Number Stamps (0-9)	4227
3/16" Number Stamps (0-9)	4229
1/4" Number Stamps (0-9)	4286
1/8" Letter Stamps (A-Z)	4228
3/16" Letter Stamps (A-Z)	4230



TRANSFER PUNCH SET

Set is made of hardened and tempered tool steel, black oxide finish. Sizes marked on punches and supplied with metal index stand.

28 Piece Set Range:
3/32" through 1/2" by increments of 64th's, and one 17/32"

PART# KK631



ENGINE ROTATION ADAPTOR

GREAT FOR CHEVY V6 & V8 ENGINES

Eliminates broken balancer bolts! Tool allows you to rotate crankshaft the proper way when turning crank with the balancer installed. Easy to attach to a balancer. Rotate crank with a 1/2" breaker bar or 1" socket and breaker bar. Also useful when assembling engine or degreasing the cam.



PART# 4353

VALVE LASH WRENCH SETS

No need to have three hands to do valve lash adjustment! Simply position the adjusting wrench over the rocker arm lockdown and drop the appropriate T-Handle through the hole in the wrench - with one hand doing the job of two! Then make the lash adjustment with a feeler gauge according to the camshaft manufacturer's specifications.



Description	Part #
1/2" w/3/16" & 1/8" T-Handles	4250
7/16" w/1/8" T-Handle	4251
9/16" w/3/16" & 7/32" T-Handles	4252
5/8" w/3/16" & 7/32" T-Handles	4253

Specialty Tools

GM OIL PICKUP SCREEN TOOLS

- Dead center impact.
- No damage to pick-up tube.
- Firmly seat flange against pump housing.
- No need for welding.
- Set screw holds part firmly in tool for convenience and easy starts, or use without.
- Can be used on models other than GM which use press-type oil pick-up screens.
- Made of 4340 chrome Moly steel, 52 Rockwell hardness

Application	Tube O.D.	Part #
Fits all GM SB V6 & V8	5/8"	4278
Fits all GM BB V8	3/4"	4276



OIL GALLEY PLUG REMOVAL TOOL

Pipe-plug sockets designed to be used on square male & female type plugs. The socket is a 1/2" drive impact, and the bit is made of tool steel. The 2-1/2" long bit can be extended or retracted to suit the engine builder's needs.

Plug Removal Set - Part #VKSET

All 5 Tools (w/Bits) One For Each Size

Size	Replacement Bits	Part #
3/8"	VK0375B	VK0375
5/16"	VK0312B	VK0312
1/4"	VK0250B	VK0250
3/16"	VK0180B	VK0180
9/32"	Socket (No Bit)	VK0280



CHAIN ENGINE LIFT

For easy lifting or removal of automobile engines, transmissions, or other heavy units. Half-ton load tested.

PART# 4406

ENGINE LIFT EYE

Lifts Cylinder Heads & Engine Blocks



Standard

PART# 4277

3/8", 7/16", and 1/2" Bolts

Metric

PART# 4277M

9mm, 11mm, and 12mm Bolts



FRONT OIL GALLEY PLUG TOOL

Just insert plug to galley oil hole and tap to install! Once the plug is below the surface, tool "peens" the block in 2 places, thus preventing pop-out. All in one 3/4" drive.

Fits Most Applications. Great For Small Block Chevy's.

PART# 6560



REBUILDERS FREEZE PLUG DRIVER

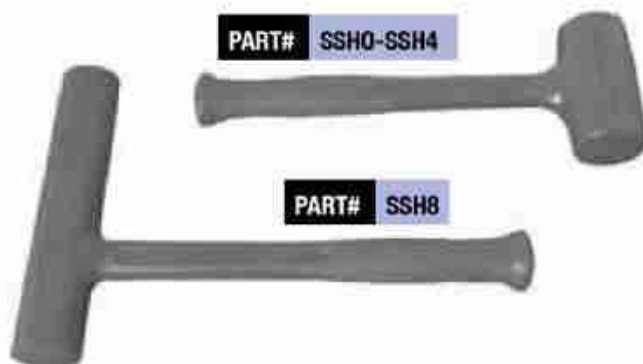
- Use with Dead Blow Hammer for best results.
- Does not damage or mark freeze plug.
- Save your sockets.
- Easy to use.

Plug Size	4" Driver	6" Driver
1-3/8"	EP1375S	EP1375L
1-1/2"	EP1500S	EP1500L
1-5/8"	EP1625S	EP1625L
1-3/4"	EP1750S	EP1750L
2"	-	EP2000L



HIGH IMPACT DEAD BLOW HAMMERS

No marks, no sparks, complete protection and safety. Our new Dead Blow Hammers are available in many different sizes to suit your needs. Inner core is heat treated steel welded together and filled with just the right amount of steel shot for a sustained impact. The outer shell is made of trucothane (custom formulated urethane) which eliminates mushrooming, bronze chip pickup, and is cut resistant. Handle is textured and flanged for a sure grip. A tool you'll have for years!



Weight	Face Dia.	Head Length	OAL	Part #
13 oz.	1-1/4"	3-1/8"	10-1/8"	SSH0
21 oz.	1-3/4"	3-3/4"	11-1/4"	SSH1
26 oz.	2"	4-1/8"	12-3/4"	SSH2
45 oz.	2-1/4"	4-5/8"	14-3/8"	SSH3
53 oz.	2-3/4"	5-3/8"	15-1/4"	SSH4

Piston Installation Hammer

SSH8

BENCH GRINDER WHEELS

General purpose wheels for steel and cast iron. 1/4" Arbor hole but we offer reduced bushings.

Size	Grit	Part #
6" X 1/2"	46	2442
	60	2444
6" X 3/4"	46	2448
	60	2450
6" X 1"	60	2456
	36	2458
7" X 1"	46	2460
	60	2462
8" X 1"	46	2466
	36	2476
10" X 1-1/4"	46	2478
	60	2480
10" X 1-1/2"	36	2482



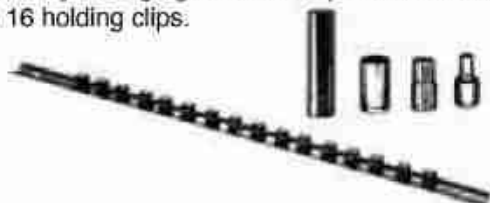
BENCH GRINDER WHEEL STAR DRESSERS

Hand dressers for wheels up to 16".

Description	Part #
Complete Dresser for Wheels up to 10" Dia.	2912
Cutter Replacement Set includes 4 blades, 2 spacers (for 2912)	2914
Complete Dresser for Wheels 10" - 16" Dia.	2916
Cutter Replacement Set includes 4 blades, 2 spacers (for 2916)	2918

SOCKET HOLDERS

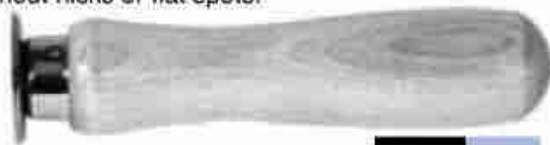
Socket holders keep socket firmly in place on rail, yet allow easy arranging of holder clip. Each rail comes with 16 holding clips.



Description	Part #	Description	Part #
1/4" Holder	4256	1/2" Holder	4258
3/8" holder	4257	Set - 1 Of Each	4259

Peeler GASKET/SURFACE SCRAPER

Designed specifically for removing chemical gasket material. The unique, self-leveling, conical blade will not dig into surfaces, and it is free to rotate so that it is somewhat self-sharpening and maintains a good sharp edge without nicks or flat spots.



PART# V888

GASKET/SURFACE SCRAPER

Plastic "screw-driver" style grip handle, heavy duty 1/4" shank with 1" wide chisel edge, 9-1/2" long.

PART# 4341



DEBURRING TOOL

Deburring Cutter - hollow handle stores blades - removable end cap. Patented push-button locking collet device removes/inserts new blades. Body of light weight wear-resistant acetal material fits hand without slippage or fatigue. Round head blades for safe deburring of drilled and machined holes, end milled areas, tubing backside of holes.



Description	Part #
Deburring tool w/2 blades	KK606
Package of 10 blades/for steel and aluminum	KK607

POWER MAG®

ELECTRIC MAGNET PARTS RETRIEVAL TOOL

An ON/OFF electric magnet parts retrieval tool designed to pick up parts with ease. Includes 18" long flexible wand that retains its shape to snake through holes and passages. Power switch allows you to energize magnet to pick up parts and prevent magnet from sticking to metal surfaces. (9 volt battery not included).

PART# 4404PM



MAGNET TOOLS

Pocket Magnet - 6"



PART# 4402

Telescoping Pocket Magnet - 5-1/4" to 17-1/4" Long



PART# 4403

Specialty Tools

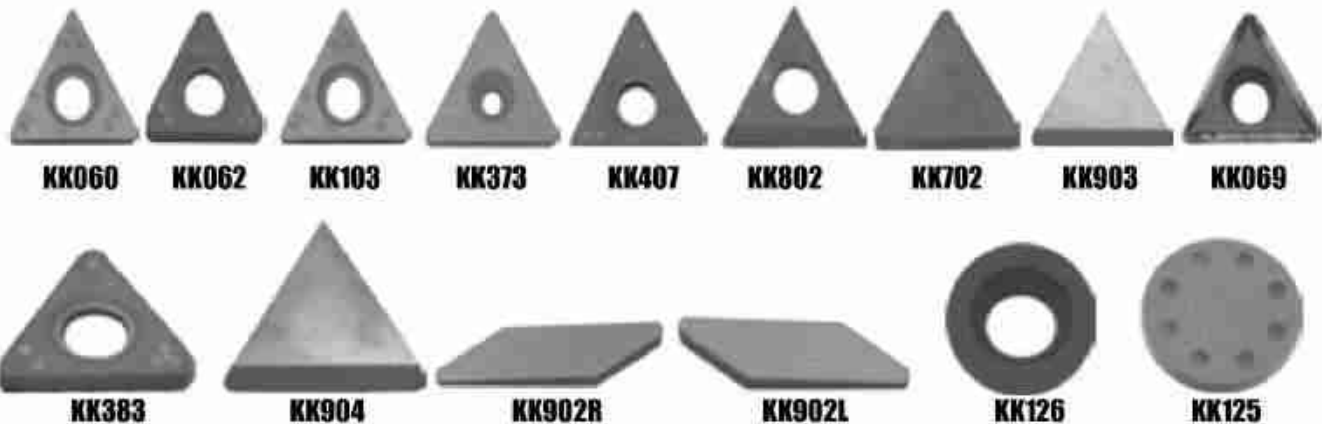


SOLID CARBIDE BRAKE LATHE REPLACEMENT INSERTS









Qty. Discounts Available! See Price Sheet

Machine	Model #	OEM #	Rake	Edge	Part #
Accu-Turn	Combo Disc/Drum Lathes	433796	Pos.	3	KK060
	On The Car Lathes	878051	Neg.	6	KK062
All-Tool	747	3331	Neg.	6	KK062
Ammco	700, 710, 1000, 2002, 3000, 4000, 4100, 7000, 7500, 7700	6914	Neg.	6	KK062
	3850 (1/32")	7681	Pos.	3	KK103
	HD 5000, 6000, 6002	5677	Pos.	3	KK373
	Twin Cutters 6900, 6950, 7900	6914	Neg.	6	KK062
	Twin Cutters 6900, 6950 (1/32")	7681	Pos.	3	KK103
Bean	B401, B410, B501, B601	90487	Pos.	3	KK407
Bear	1410, 1466, 1467, 1468, 1469, & 1478	2264, 72265	Neg.	6	KK383
FMC	600, 601, 700, 701	90487	Pos.	3	KK407
	505, On The Car Lathes	91212	Pos.	3	KK802
Hoffman	660	3331	Neg.	6	KK062
Hunter	201 Disc Lathe & 205 Combo Lathe	V30207167	Neg.	6	KK702
	BL300 On The Car Lathe	221580-2	Neg.	6	KK062
	205 Drum Lathe	V29687	Pos.	3	KK903
Kwik-Way	SDL, CBL, NCL, Kwik-Lathe On The Car Lathe	109-1092-23	Pos.	3	KK802
Performance	6600, 7100, 7200, 7600	3331	Neg.	6	KK062
Pre-Cut	On The Car Lathes	50-742	Pos.	3	KK069
RJ West	Perfect 400, 1115HD, 1215	W139	Pos.	3	KK060
Snap-On	YA277, YA278, YA282, YA180 On the Car Lathe	109-1092-23	Pos.	3	KK802
Star	XDL, XDS, 835A, 1776	CB-60	Neg.	6	KK062
Winona, Van Norman, REIS	204, 204D, 205, 205DC, 415, 243VX, & Others	29687	Pos.	3	KK903
	204, 205, 205DR, 243, 243XV, 300, 302, 333	302-7167	Pos.	2	KK902R
	303, 304, 305, 404, 405, V22	304-7167	Pos.	2	KK902L
	Flywheel Cutter & Flywheel Attachment	29005	Pos.	3	KK904
Round Tips	With Hole - Use With All Machines		Pos.	360°	KK126
	Without Hole - Use With All Machines		Pos.	360°	KK125

Specialty Tools



REPLACEMENT BRAKE LATHE CARBIDE INSERT TOOLHOLDERS

Machine (Model #)	Application	OEM #	Part #	Picture
Ammco (1000,2002,3000,4000, 4100,7700) All-Tool (747) Hoffman (660) Performance (6600,7100,7200,7600)	For Drums 1/2" x 3/8" x 2-1/2" Use KK062 Insert	9872	KK782	
Ammco (3000,3850,4000,4100, 7000,6900,6950 Twin Cutters) All-Tool (747) Hoffman (660) Performance (6600,7100,7200,7600)	For Rotors 3/8" x 3/8" x 1-7/8" Use KK062 Insert	10701 10702	KK191 KK192	
Ammco HD (5000,6000,6002)	For Rotors 5/8" x 5/8" x 4-1/2" Use KK373 Insert	5878	KK878	
Accu-Turn (Fits All Comb. Lathes) FMC (600,601,700,701, Rototruer) Hoffman (Perfect 400)	For Drums/Rotors 3/8" x 3/8" x 3" Use KK062 Insert	433763 433764	KK404 KK405	
Bear (1410,1466,1467,1468,1469,1478)	For Drums/Rotors 3/8" x 3/8" x 2-3/4" Use KK062 Insert	90495 90494	KK424 KK425	
Kwik-Way (CBL,NCL, SDL) Snap-On (Y282,Y277,Y278,180)	For Drums/Rotors 3/8" x 3/8" x 2-1/2" Use KK802 Insert	109-1091-00 109-1091-02	KK804 KK805	
Accu-Turn, FMC Ammco, Kwik-Way	(Curved Holder, For Rotors with a Flange) For Rotors 3/8" x 3/8" x 3" Use KK407 Insert	434057 434056	KK464 KK465	
Ammco, Hoffman, Performance, All-Tool, Others	3/8"x3/8"x1-3/16" Use KK125 Insert		KK125L KK125R	

BRAZED CARBIDE BRAKE LATHE TOOLS FITS POPULAR BRAKE DRUM LATHES

Size	Style	Application	Part #
3/8" Sq. x 2-1/2"	Left	Replaces Bear 43-46L; Bear 23211; Star CB8; VN 302-7272	KK42
	Right	Replaces Bear 43-46R; Bear 20718; Star LB16; VN 302-7171	KK41
3/8" x 1/2" x 3"	Left	Replaces Ammco 2043 For 3000, 4000, 4100, & 7700 Lathes	KK47
	Right	Replaces Ammco 2042 For 3000, 4000, 4100, & 7700 Lathes	KK45
5/8" Sq. x 4"	Left	Replaces Ammco 5725, For 5000/6000; Star CB30; VN Big Brute for 310-404 UNTIL SUPPLIES LAST	KK573



KK41



KK45

HARDSPOT CUTTERS

Size	Application	Part #
1/2" Sq. x 2-3/4" (Left Hand)	Replaces Ammco 4726, H.D. Car/Med. Duty Truck	KK952
5/8" Sq. x 4"	Super Duty Truck Drum, Tool For Ammco 5000/6000 VN 310,404,405	KK720



KK573



KK47



KK42



KK952



KK720

BRAKE DRUM GRINDING WHEELS

 For Van Norman
 204, 302, 303, 304, 204H, 333, 404


Part No.	Size	Mfg. No.
2373	3" x 5/8" x 3/4"	29594 (204)
2375	3" x 5/8" x 1"	8522
2376	3 1/2" x 5/8" x 1"	8931
2377	4" x 5/8" x 1"	8523
2378	5" x 5/8" x 1"	8524

For Ammco

Part No.	Size	Mfg. No.
2381	2 1/2" x 3/8" x 3/8"	333

For Lemppo

Part No.	Size	Mfg. No.
2382	3" x 1/2" x 5/8"	Y235

 For Van Norman 310
 (Big Brute)

Part No.	Size
2379	3" x 1" x 1"
2380	4" x 1" x 1"

BRAKE SILENCER BELTS & BANDS
ELIMINATE VIBRATIONS & STOP CHATTER

Top quality rubber O.E. replacement silencer bands & belts are weighted to eliminate vibration (exc. KK80/81). Available in several lengths & widths, covering all car and truck applications.

	Size	Description	Part #
Disc Bands	5/8"x28-1/2"	Fits 6-9" Vented Rotors	KK71
	3/8"x25-1/2"	Fits 6-9" Solid Rotors	KK96
	9/16"x31-1/2"	Fits 10-12" Solid Rotors	KK94
	3/8"x20-3/4"	Fits 10-12" Vented Rotors	KK95
	9/16"x36-1/2"	Fits 13-15" Truck Rotors	KK98
Drum Belts	5/8"x35"	Repl. FMC 90984 & Ammco 6920, For Univ. Vented Rotors	KK69
	1-1/4"x35"	Replaces Ammco 6930 For Heavy Duty Trucks	KK70
	1-3/4"x72"	Repl. FMC 90988 & Ammco 5280, For Passenger Cars	KK80
	2-3/4"x72"	Repl. FMC 90983 & Ammco 5290, For Truck Drums	KK81

BRAKE FLEX-HONES®
BRAKE CYLINDER

Size	Part #
9/16" - 14mm	4120
5/8" - 16mm	4121
23/32" - 18mm	4122
3/4" - 20mm	4123
7/8" - 22mm	4124
1" - 25mm	4125
1-1/8" - 29mm	4126
1-3/8" - 35mm	4127
1-5/8" - 41mm	4128
2" - 51mm	4100

**Standard Grit
is 180.**
**Special order
grits
available
upon
request.**

BRAKE ROTOR

Produces a non-directional pattern to reduce squeal. Hones are 2-1/2" diameter.

Size	Part #
60 Grit (Coarse)	BR060
120 Grit (Medium)	BR120
240 Grit (Fine)	BR240

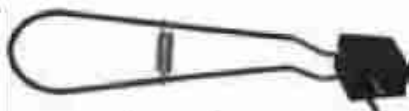
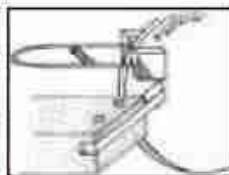

BRAKE SILENCER PRESSURE PADS

 Tough, durable replacement pads fit Ammco Model 7075 Brake Rotor Silencer (O.E. #9183)
 Set of 2.

PART# KK83

**ANTI-CHATTER CLAMP ON SILENCER
OUTLASTS RUBBER STRAPS/BANDS**

Anti-Chatter silencer fits both vented (thick) and non-vented (thin) rotors. Silencer rides at the cutter. Fits Ammco, Bear, FMC, Van Norman, Lemppo, Kwik-Way and others. Pads fit over rotor and in front of cutter tips. Metal pins fit behind cutter and follow cut-off.


PART# KK86
BRAKE CYLINDER HONE

Fast-cutting, self-centering with adjustable cutting tension. Capacity 3/4" to 2-1/2". 3 Stones to a Set.

Description	Part #
Cylinder Hone w/Mod. Stones	4203
Repl. Med. Grit Stones	4204
Repl. Fine Grit Stones	4205


SPINDLE BOOT

Spindle boot is designed to replace worn & torn boots on Ammco Models 3000 & 4000 Brake Lathes. (O.E. #3085)

PART# KK85


FACET PUROLATOR FUEL PUMPS

HIGH PERFORMANCE SOLID STATE FUEL PUMPS



- For use with engines ranging in size from 1 cylinders to 6 cyl.
- 12-Volt, Fitting Size: 1/8-27 INT, 24-inch Minimum Dry Lift, No Check Valve, No Positive Shut-Off
- Compatible with gasoline, diesel, biodiesel, blended alcohol fuels and fuel additives
- Solid State Reliability and Durability: solid state circuits to meet or exceed all performance specifications
- Easy to Install, Easy to Service: 2-bolt installation, plus the small size makes installation easy
- For best results, mount the pump close to the fluid or fuel tank and below the liquid level.
- Eliminates Vapor Lock: when properly installed on most vehicles, a constant, smooth, dependable supply of fuel under pressure is assured in the hottest weather and high altitudes.
- Sealed Electronics
- UL-Certified, VCA-Certified
- Complies to Mil-Std-461D
- Replaceable 74-micron filter
- Built-in magnet to collect metal particles for additional filtration
- Self-Priming and Self-Regulating
- Corrosion-Resistant: Completed 100-hour salt spray test
- 1.6 amp average draw
- Cannot be used with positive ground
- Comes with FEP42370 filter
- Made in USA

Choose From 3 Styles

#FEP59SV

For Hi-Performance 8 Cylinder Engines
12V Neg. Ground • 6 - 8 PSI
32-GPH/121-LPH

#FEP60SV

For 1 - 4 Cylinder Engines
12V Neg. Ground • 2.75 - 4 PSI
36-GPH/136-LPH

#FEP87SV

For 6 - 8 Cylinder Engines
12V Neg. Ground • 4 - 5.5 PSI
36-GPH/136-LPH

POSI-FLO LOW PRESSURE SOLID STATE FUEL PUMPS



- For use with engines ranging in size from 1 cylinder to 4 cyl.- 12-Volt, Fitting Size: 1/8-27 INT, 12-inch Minimum Dry Lift, Ring Negative Leads, No Positive Leads, No Check Valve, No Positive Shut-Off
- Compatible with gasoline, diesel, biodiesel, blended alcohol fuels and fuel additives
- Solid State Reliability, proven on thousands of original equipment applications: No electrical contacts, No bearings, No diaphragms to wear out or fatigue
- Lasts 4-5 times longer than most other electric fuel pumps
- Easy to Install, Easy to Service: 2-bolt installation, plus the small size makes installation easy
- For best results, mount the pump close to the fluid or fuel tank and below the liquid level
- Eliminates Vapor Lock: when properly installed on most vehicles, a constant, smooth, dependable supply of fuel under pressure is assured in the hottest weather and high altitudes.
- Composite case housing
- Sealed Electronics
- Reverse Polarity protection
- ELV compliant
- Self-Priming and Self-Regulating
- Corrosion-Resistant
- Internal 3.5 amp fuse
- 1.6 amp average draw
- Cannot be used with positive ground
- Comes with FEP735 filter
- Made in USA



Choose From 2 Styles

#FEP04SV

For 1 - 4 Cylinder Engines
1.5 - 4.0 PSI
23-GPH

#FEP06SV

For 6 - 8 Cylinder Engines
4.0 - 7.0 PSI
32-GPH

CUBE LOW PRESSURE SOLID STATE FUEL PUMPS



- For use with engines ranging in size from 1 cylinder to 4 cyl.
- 12-Volt, Fitting Size: 1/8-27 INT, 12-inch Minimum Dry Lift, .25 Ring Negative Lead, No Positive Leads, No Check Valve, No Positive Shut-Off
- Compatible with gasoline, diesel, biodiesel, blended alcohol fuels and fuel additives
- Solid State Reliability and Durability, proven on thousands of original equipment applications: No electrical contacts, No bearings, No diaphragms to wear out or fatigue
- Lasts 4-5 times longer than most other electric fuel pumps
- Easy to Install, Easy to Service: 2-bolt installation, plus the small size makes installation easy
- For best results, mount the pump close to the fluid or fuel tank and below the liquid level
- Eliminates Vapor Lock: when properly installed on most vehicles, a constant, smooth, dependable supply of fuel under pressure is assured in the hottest weather and high altitudes
- Transient Protection
- Sealed Electronics
- Reverse Polarity protection
- Self-Priming and Self-Regulating
- UL-Certified, ELV-Compliant
- Corrosion-Resistant: Completed 100-hour salt spray test
- 1.6 amp average draw
- Can be used with positive ground
- Comes with FEP735 filter
- Made in USA

Choose From 2 Styles

#FEP42SV

For 1 - 4 Cylinder Engines
1.5 - 4.0 PSI
25-GPH

#FEP12SV

For 6 - 8 Cylinder Engines
4.0 - 7.0 PSI
32-GPH

Specialty Tools

MICRO SLEEVE™ Crankshaft Seal Surface Sleeves



The Micro Sleeve Solves All These Problems!
Create a new seal surface with a Micro Sleeve Crankshaft Seal Surface Sleeve!

Micro Sleeve Seal Surface Sleeves are better than OE seal surfaces and better than stainless steel repair sleeves. Tests show 182,000+ miles with a .0012" wear (test results available).

ENGINE TYPE	SHAFT DIA.		YEAR(S)	LOCATION	SLEEVE PART #	INSTALLATION TOOL/BTN. #
BMW						
2.5L / 2.8L	3.542"	----	1989-91	REAR	MS347-1	MST347
CHRYSLER						
2.0L/2.4L Neon	1.260"	----	1995-05	FRONT	MS361-1	MST352
2.0L/2.4L Neon	3.584"	----	1995-05	REAR	MS342	MST331
2.2L Early	1.374"	----	1981-88	FRONT	MS344	MST334
2.2L Late	1.123"	----	1989-98	FRONT	MS363	MST363
2.5L (must install sprocket 1st)	1.123"	----	1989-98	FRONT	MS363-1	MST363
2.5L Late	1.458"	----	1990-98	FRONT	MS357	MST357
2.2L/2.5L	3.584"	----	1981-98	REAR	MS342	MST331
2.2L/2.5L	3.580" x .520"	USE WITH REGROUND CRANK	1981-98	REAR	MS342-G	MST331
2.4L	3.583"	----	1988-01	REAR	MS342	MST331
2.5L Jeep	2.901"	----	1983-02	REAR	MS337	MST339
2.6L FWD	3.149"	----	1983-89	REAR	MS346	MST346
2.6L RWD	3.149"	----	1983-89	REAR	MS346-F	MST353-F
2.6L RWD	3.123" x .820"	USE WITH REGROUND CRANK	1983-89	REAR	MS346-G	MST346
2.7L	1.260"	----	1996-06	FRONT	MS361-1	MST361
2.7L	3.583"	----	1986-06	REAR	MS342	MST331
3.0L	1.458"	----	1987-01	FRONT	MS357	MST357
3.3L/3.8L	1.098" x .700"	USE WITH REGROUND CRANK	1987-01	FRONT	MS363-G	MST363
3.0L/3.2L/3.3L/3.5L/3.8L	3.584"	----	1987-01	REAR	MS342	MST331
3.0L/3.2L/3.3L/3.5L/3.8L	3.580" x .520"	USE WITH REGROUND CRANK	1987-01	REAR	MS342-G	MST331
4.7L NEW!	3.938"	----	2000-06	MS375	MST375	----
SPECIAL NOTE FOR CHRYSLER APPLICATIONS: Micro Sleeve recommends the possible use of "stud lock" on the inside diameter of all Chrysler rear seal surface sleeves, as there have been under tolerance tail flanges found on "virgin" crankshafts.						
FORD						
1.6L/1.9L/2.0L	1.355" x .525"	USE WITH REGROUND CRANK	1988-00	FRONT	MS334-G	MST334
1.6L/1.9L/2.0L	3.485"	----	1988-00	REAR	MS333	MST333
1.6L/1.9L/2.0L	3.442" x .618"	USE WITH REGROUND CRANK	1986-00	REAR	MS333-G	MST333
2.0L RANGER	1.708"	----	1983-88	FRONT	MS349	MST349
2.0L RANGER	3.825"	----	1983-88	REAR	MS335-1	MST335
2.0L ZETEC	3.465"	----	1985-06	REAR	MS333	MST333
2.0L ZETEC	3.442" x .618"	USE WITH REGROUND CRANK	1995-06	REAR	MS333-G	MST333
2.2L PROBE	1.338"	----	1986-93	FRONT	MS350	MST334

CRANKSHAFT REPAIR SLEEVES



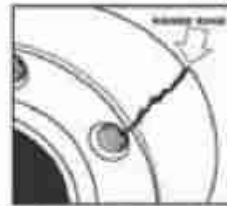
MICRO SLEEVE™



During the normal course of use, the seal will wear a groove in the crankshaft flange.



Pressure distortion is caused by the overtightening of the flywheel/flexplate mounting bolts (air impact used, not torque wrench), or reused "dirty" bolts.



Cracks above the mounting bolt holes can also be caused by the extreme stress of overtightening the flywheel/flexplate mounting bolts.



ENGINE TYPE	SHAFT DIA.	YEAR(S)	LOCATION	SLEEVE PART #	INSTALLATION TOOL/BTN. #	
FORD CONTINUED						
2.2L PROBE	3.538"	1986-93	REAR	MS347	MST347	
2.3L/2.5L HSC & OHC	1.796"	1984-01	FRONT	MS349	MST349	
2.3L HSC	3.485"	1984-94	REAR	MS333	MST333	
2.3L HSC	3.442" x .618"	USE WITH REGROUND CRANK	1984-94	REAR	MS333-G	MST333
2.3L OHC	3.625"	1986-97	REAR	MS335-1	MST335	
2.3L OHC	3.602" x 1.075"	USE WITH REGROUND CRANK	1986-97	REAR	MS335-G	MST335
2.5L HSC	3.465"	1986-91	REAR	MS333	MST333	
2.5L HSC	3.442" x .618"	USE WITH REGROUND CRANK	1986-91	REAR	MS333-G	MST333
2.5L OHC	3.625"	1988-01	REAR	MS335-1	MST335	
2.5L OHC	3.602" x 1.075"	USE WITH REGROUND CRANK	1988-01	REAR	MS335-G	MST335
2.5L/3.0L/3.4L DURETEC	3.625"	1997-06	REAR	MS331-2	MST331	
2.5L/3.0L/3.4L DURETEC	3.602" x .910"	USE WITH REGROUND CRANK	1997-06	REAR	MS331-G2	MST331
2.8L/2.9L RANGER	2.375"	1974-92	REAR	MS341	MST341	
2.8L/2.9L RANGER	2.353" x .680"	USE WITH REGROUND CRANK	1974-92	REAR	MS341-G	MST341
3.0L	3.488"	1986-02	REAR	MS340-1	MST333	
3.0L	3.442" x 1.030"	USE WITH REGROUND CRANK	1986-02	REAR	MS340-G1	MST333
3.2L SHO	3.485"	1993-95	REAR	MS333	MST333	
3.4L SHO	3.625"	1996-99	REAR	MS331-2	MST331	
3.8L/4.2L	3.625"	1993-06	REAR	MS331	MST331	
3.8L/4.2L	3.602" x .720"	USE WITH REGROUND CRANK	1993-06	REAR	MS331-G1	MST331
4.0L	2.375"	1990-06	REAR	MS341	MST341	
4.0L	2.353" x .680"	USE WITH REGROUND CRANK	1990-06	REAR	MS341-G	MST341
4.6L/5.4L	3.625"	1991-06	REAR	MS331-2	MST331	
4.6L/5.4L	3.602" x .910"	USE WITH REGROUND CRANK	1991-06	REAR	MS331-G2	MST331
4.9L/240 ci	3.748"	1994-97	REAR	MS332-1	MST332	
4.9L/240 ci	3.727" x .710"	USE WITH REGROUND CRANK	1994-97	REAR	MS332-G1	MST332
5.0L	3.625"	1993-01	REAR	MS331	MST331	
5.0L	3.602" x .720"	USE WITH REGROUND CRANK	1993-01	REAR	MS331-G1	MST331
5.8L	3.748"	1993-97	REAR	MS332-1	MST332	
5.8L	3.727" x .710"	USE WITH REGROUND CRANK	1979-97	REAR	MS332-G1	MST332
6.8L	3.625"	1997-06	REAR	MS331-2	MST331	
GM/CHEVROLET						
1.8L O/J PONTIAC	1.220"	1982-88	FRONT	MS345	MST334	
1.8L O/J PONTIAC	3.381"	1982-88	REAR	MS343	---	
1.8L O/J PONTIAC	3.359" x .510"	USE WITH REGROUND CRANK	1982-88	REAR	MS343-G	---
2.0L CHEV Late	2.991"	1984-91	REAR	MS337	MST339	
2.0L CHEV Late	2.968" x .590"	USE WITH REGROUND CRANK	1984-91	REAR	MS337-G	MST339
2.0L B/O/P/OHC	1.220"	1987-94	FRONT	MS345	MST334	
2.0L B/O/P/OHC (crank #902280389)	3.538"	1987-94	REAR	MS347	MST347	
2.2L GM SOHC	2.991"	1990-02	REAR	MS337	MST339	
2.2L GM SOHC	2.968" x .590"	USE WITH REGROUND CRANK	1990-02	REAR	MS337-G	MST339



ENGINE TYPE	SHAFT DIA.		YEAR(S)	LOCATION	SLEEVE PART #	INSTALLATION TOOL/BTN. #
GM/CHEVROLET CONTINUED						
2.3L/2.4L QUAD 4	3.228"	---	1987-01	REAR	MS353	MST353
2.3L/2.4L QUAD 4	3.203" x .815"	USE WITH REGROUND CRANK	1987-01	REAR	MS353-G	MST353
2.5L PONTIAC	2.988"	---	1985-93	REAR	MS339	MST339
2.5L PONTIAC	2.964" x .470"	USE WITH REGROUND CRANK	1985-93	REAR	MS339-G	MST339
2.8L/3.1L/3.4L/3.5L CHEV	2.991"	---	1985-06	REAR	MS337	MST339
2.8L/3.1L/3.4L/3.5L CHEV	2.968" x .560"	USE WITH REGROUND CRANK	1985-06	REAR	MS337-G	MST339
3.3L BUICK	3.228"	---	1991-93	REAR	MS353	MST353
3.3L BUICK	3.203" x .815"	USE WITH REGROUND CRANK	1991-93	REAR	MS353-G	MST353
3.8L BUICK(vin L & K)	3.228"	---	1990-06	REAR	MS353	MST353
3.8L BUICK(vin L & K)	3.203" x .615"	USE WITH REGROUND CRANK	1990-06	REAR	MS353-G	MST353
3.8L BUICK FWD (cast 502,113, 267)	2.833" x .555"	USE WITH REGROUND CRANK	1992-99	REAR	MS364-G	MST364
4.1L/4.5L/4.9L CAD	2.830"	---	1982-93	REAR	MS352	MST352
4.3L/5.0L/5.7L CHEV 3.737" (except LS1)		---	1986-02	REAR	MS338	MST332
4.3L/5.0L/5.7L CHEV (except LS1)	3.715" x .750"	USE WITH REGROUND CRANK	1986-02	REAR	MS338-G	MST332
6.0L HD/7.0L/7.4L	4.324"	---	1990-00	REAR	MS356-1	MST356
4.8L/5.3L/6.0L CHEV Narrow Flange	3.833 x .780"	USE WITH REGROUND CRANK	1999-06	REAR	MS379-G	---
4.8L/6.8L CHEV Wide Flange	3.833 x 1.157"	USE WITH REGROUND CRANK	1999-06	REAR	MS379-G1	---
5.7L LS1 (Gen III) Narrow Flange	3.833" x .780"	USE WITH REGROUND CRANK	1997-04	REAR	MS379-G	---
B-1L	4.332"	---	2000-05	REAR (sleeve/seal kit only)		MST301-1
HONDA/ACURA						
1.5L ALL	1.220"	---	1984-91	FRONT	MS345-1	MST334
1.5L D15 ALL	3.149"	---	1984-91	REAR	MS346-F	MST353-F
1.5L D15 ALL	3.123" x .700"	USE WITH REGROUND CRANK	1984-91	REAR	MS346-G2	MST346
1.6L D16/B16A28A3	1.220"	---	1988-00	FRONT	MS345-1	MST334
1.6L D16/B16A28A3	3.149"	---	1988-00	REAR	MS346-F	MST353-F
1.6L D16/B16A3	3.123" x .700"	USE WITH REGROUND CRANK	1988-00	REAR	MS346-G2	MST346
1.7L D17	3.149"	---	1986-02	REAR	MS346-F	MST353-F
1.8L EK1-10mm flywhl. bolt	2.888" x .740"	USE WITH REGROUND CRANK	1979-83	REAR	MS354-G	---
1.8L EK1-12mm flywhl. bolt	2.968" x .750"	USE WITH REGROUND CRANK	1979-83	REAR	MS337-G1	MST339
1.8L ES1-ES2/ET2	3.148"	---	1983-87	REAR	MS346-F	MST353-F
1.8L ES1/ES2/ET2	3.123" x .700"	USE WITH REGROUND CRANK	1983-87	REAR	MS346-G2	MST346
2.0L BS/BT/B20A3/B20A5	1.358" x .525"	USE WITH REGROUND CRANK	1983-01	FRONT	MS334-G	MST334
2.0L BS/BT/B20A3/B20A5	3.148"	---	1983-01	REAR	MS346-F	MST353-F
2.0L BS/ BT/B20A3/B20A5	3.123" x .700"	USE WITH REGROUND CRANK	1983-01	REAR	MS346-G2	MST346
2.0L F20/K20 3.149"		---	2000-02	REAR	MS346-F	MST353-F
2.1L B21A1	3.148"	---	1990-91	REAR	MS346-F	MST353-F
2.1L B21A1	3.123" x .700"	USE WITH REGROUND CRANK	1990-91	REAR	MS346-G2	MST346
2.2L F22A.B1.B2/H22A	1.575"	---	1990-01	FRONT	MS359	MST359
2.2L F22A.B1.B2/H22A	3.148"	---	1990-01	REAR	MS346-F	MST353-F
2.2L F22A.B1.B2/H22A	3.123" x .700"	USE WITH REGROUND CRANK	1990-01	REAR	MS346-G2	MST346
2.3L F23A/H23A	1.575"	---	1992-02	FRONT	MS359	MST359
2.3L F23A/H23A	1.548" x .400"	USE WITH REGROUND CRANK	1992-02	FRONT	MS359-G	MST359
2.3L F23A/H23A	3.148"	---	1992-02	REAR	MS346-F	MST353-F
2.3L F23A/H23A	3.123" x .700"	USE WITH REGROUND CRANK	1992-02	REAR	MS346-G2	MST346
2.5L C25A1	3.149"	---	1986-92	REAR	MS346-F	MST353-F
2.5L G25A4	3.148"	---	1992-98	REAR	MS346-F	MST353-F
2.7L C27A1	3.149"	---	1988-97	REAR	MS346-F	MST353-F
2.7L C27A1	3.123" x .700"	USE WITH REGROUND CRANK	1988-97	REAR	MS346-G2	MST346
3.0L C30/J30	3.148"	---	1991-03	REAR	MS346-F	MST353-F
3.0L C30/J30	3.123" x .700"	USE WITH REGROUND CRANK	1991-03	REAR	MS346-G2	MST346
3.2L C32A1	3.149"	---	1991-02	REAR	MS346-F	MST353-F
3.2L C32A1	3.123" x .700"	USE WITH REGROUND CRANK	1991-02	REAR	MS346-G2	MST346
3.5L C35/J35	3.149"	---	1996-02	REAR	MS346-F	MST353-F

CRANKSHAFT REPAIR SLEEVES



MICRO SLEEVE™

MICRO SLEEVE SEAL SURFACE SLEEVES ARE BETTER THAN OE SEAL SURFACES AND BETTER THAN STAINLESS STEEL REPAIR SLEEVES. TESTS SHOW 182,000+ MILES WITH A .0012" WEAR (TEST RESULTS AVAILABLE).

ENGINE TYPE	SHAFT DIA.		YEAR(S)	LOCATION	SLEEVE PART #	INSTALLATION TOOL/BTN. #
INTERNATIONAL						
152/198 Scout 3.750"	3.750"	---	1958-75	REAR	MS336	MST332
304/345/392/0.9L early	3.750"	---	1958-98	REAR	MS336	MST332
304/345/392/0.9L early	3.727" x .520"	USE WITH REGROUND CRANK	1958-98	REAR	MS336-G	MST332
ISUZU						
1.9L G200	3.203" x 1.300"	USE WITH REGROUND CRANK	1983-87	REAR	MS353-G1	MST353
2.0L 4ZC-1	3.737"	---	1983-89	REAR	MS338-1	MST332
2.2L F22B6	3.149"	---	1988-97	REAR	MS346-F	MST353-F
2.3L 4ZD1 / 2.6L 4ZE1	1.575"	---	1984-97	FRONT	MS359-1	MST359
2.3L 4ZD1/ 2.6L 4ZE1	1.548" x .510"	USE WITH REGROUND CRANK	1984-97	FRONT	MS359-G1	MST359
2.3L 4ZD1/2.6L 4ZE1	3.737"	---	1984-97	REAR	MS338-1	MST332
2.3L 4ZD1/2.6L 4ZE1	3.715" x .860"	USE WITH REGROUND CRANK	1984-97	REAR	MS338-G1	MST332
3.2L 6VD1/3.5L 6VE1	3.737"	---	1992-01	REAR	MS338	MST332
3.2L 6VD1/3.5L 6VE1	3.715" x .750"	USE WITH REGROUND CRANK	1992-01	REAR	MS338-G	MST332
MAZDA						
1.5L Z5	3.240" x .815"	USE WITH REGROUND CRANK	1985-88	REAR	MS368-G	MST353
1.6L B822mm & 27mm	3.240" x .815"	USE WITH REGROUND CRANK	1985-01	REAR	MS368-G	MST353
1.8L BP	3.240" x .815"	USE WITH REGROUND CRANK	1985-01	REAR	MS368-G	MST353
2.0L MA	3.149"	---	1979-85	REAR	MS346-F	MST353-F
2.0L MA	3.123" x .820"	USE WITH REGROUND CRANK	1979-85	REAR	MS346-G	MST346
2.0L FE/2.2L F2	1.338"	---	1982-93	FRONT	MS350	MST334
2.0L FE/2.2L F2	3.538"	---	1982-93	REAR	MS347	MST347
2.0L FS	1.851" x .470"	USE WITH REGROUND CRANK		FRONT	MS378-G	MST365
2.0L FS	3.480" x .600"	USE WITH REGROUND CRANK		REAR	MS373-G	---
2.3 KJ	1.851" x .470"	USE WITH REGROUND CRANK		FRONT	MS378-G	MST365
2.3 KJ	2.929" x .800"	USE WITH REGROUND CRANK		REAR	MS376-G	MST339
2.5L KL	1.338"	---	1993-2/94	FRONT	MS350	MST334
2.5 KL	2.929" x .800"	USE WITH REGROUND CRANK		REAR	MS376-G	MST339
2.5KL	1.851"	---	2/94-99	FRONT	MS378-G	MST365
2.6L G8	3.541"	---	1989-94	REAR	MS347-1	MST347
2.6L G54B (Mits)	3.149"	---	1987-88	REAR	MS346-F	MST353-F
3.0L JE	2.929" x .850"	USE WITH REGROUND CRANK		REAR	MS376-G1	MST339
3.0L B3000	3.488"	---	1994	REAR	MS340-1	MST333
3.0L B3000	3.442" x 1.030"	USE WITH REGROUND CRANK	1994	REAR	MS340-G1	MST333

ORDER IN BULK OR BOX

Engine Parts



ENGINE TYPE	SHAFT DIA.		YEAR(S)	LOCATION	SLEEVE PART #	INSTALLATION TOOL/BTN. #
MINI						
1.5L 4G15	2.811" x .460"	USE WITH REGROUND CRANK	1988-00	REAR	MS352-G	MST352
1.5L G15B/4G32	2.811" x 1.000"	USE WITH REGROUND CRANK	1985-88	REAR	MS352-G1	MST352
1.6L 4G81	1.708" x .590"	USE WITH REGROUND CRANK	1985-93	FRONT	MS367-G	MST349
1.6L 4G81	3.149"	---	1985-93	REAR	MS346-F	MST353-F
1.8L 4G61	3.123" x .820"	USE WITH REGROUND CRANK	1985-93	REAR	MS346-G	MST346
1.8L 4G37	1.708" x .475"	USE WITH REGROUND CRANK	1988-94	FRONT	MS367-G2	MST349
1.8L 4G37	2.811" x 1.000"	USE WITH REGROUND CRANK	1988-94	REAR	MS352-G1	MST352
1.8L G82B	3.149"	---	1984-88	REAR	MS346-F	MST353-F
1.8L 4G93	1.456"	---	1992-01	FRONT	MS357	MST357
1.8L 4G93	3.346"	---	1992-00	REAR	MS366	MST366
1.8L 4G93	3.323" x .585"	USE WITH REGROUND CRANK	1992-01	REAR	MS366-G	MST366
2.0L 4G63/G63B	1.708" x .590"	USE WITH REGROUND CRANK	1985-92	FRONT	MS367-G	MST349
2.0L 4G63/G63B 6 bolt	3.149"	---	1985-92	REAR	MS346-F	MST353-F
2.0L 4G63/G63B 7 bolt	3.323" x .585"	USE WITH REGROUND CRANK	1993-99	REAR	MS366-G	MST366
2.3L 4D55 Diesel	3.149"	---	1983-86	REAR	MS346-F	MST353-F
2.4L 4G64/G64B	1.708" x .590"	USE WITH REGROUND CRANK	1985-01	FRONT	MS367-G	MST349
2.4L G64 6 Bolt	3.149"	---	1985-92	REAR	MS346-F	MST353-F
2.4L G64 7 Bolt	3.323" x .585"	USE WITH REGROUND CRANK	1993-02	REAR	MS366-G	MST366
2.6L G54B FWD	3.149"	---	1983-89	REAR	MS346	MST346
2.6L G54B RWD	3.149"	---	1983-89	REAR	MS346-F	MST353-F
2.6L G54B RWD	3.123" x .820"	USE WITH REGROUND CRANK	1983-89	REAR	MS346-G	MST346
3.0L 8G72	1.456"	---	1988-02	FRONT	MS357	MST357
3.0L 8G72	3.584"	---	1988-02	REAR	MS342	MST331
3.0L 8G72	3.560" x .520"	USE WITH REGROUND CRANK	1988-02	REAR	MS342-G	MST331
3.5L 8G74	1.456"	---	1994-01	FRONT	MS357	MST357
3.5L 8G74	3.584"	---	1994-01	REAR	MS342	MST331
3.5L 8G74	3.560" x .520"	USE WITH REGROUND CRANK	1994-01	REAR	MS342-G	MST331
NISSAN						
1.5L E15	3.149"	---	1982-85	REAR	MS346-1	MST346
1.5L E15	3.123" x .700"	USE WITH REGROUND CRANK	1982-85	REAR	MS346-G2	MST346
1.6L E16	3.149"	---	1983-88	REAR	MS346-1	MST346
1.8L E16	3.123" x .700"	USE WITH REGROUND CRANK	1983-88	REAR	MS346-G2	MST346
1.8L CA16/GA16	3.306"	---	1987-99	REAR	MS358	MST358
1.8L CA16/GA16	3.281" x .700"	USE WITH REGROUND CRANK	1987-99	REAR	MS358-G	MST358
1.7L CD17 Diesel	3.306"	---	1985-86	REAR	MS358	MST358
1.8L CA18	3.306"	---	1984-89	REAR	MS358	MST358
2.0L L20/Z20	3.149"	---	1974-86	REAR	MS346-F	MST353-F
2.0L L20/Z20 A	3.123" x 1.140"	USE WITH REGROUND CRANK	1974-86	REAR	MS346-G1	MST346
2.0L CA20	3.306"	---	1982-89	REAR	MS358	MST358
2.0L CA20	3.281" x .700"	USE WITH REGROUND CRANK	1982-89	REAR	MS358-G	MST358
2.0L SR20DE	3.306"	---	1991-00	REAR	MS358	MST358
2.0L SR20DE	3.281" x .700"	USE WITH REGROUND CRANK	1991-00	REAR	MS358-G	MST358
2.4L L24/Z24/KA24	3.149"	---	1970-02	REAR	MS346-F	MST353-F
2.4L L24/Z24/KA24 A	3.123" x 1.140"	USE WITH REGROUND CRANK	1970-02	REAR	MS346-G1	MST346
2.5L SD25	3.149"	---	1981-86	REAR	MS346-F	MST353-F
2.6L L26/2.8L L28	3.149"	---	1974-89	REAR	MS346-F	MST353-F
2.6L L26/2.8L L28 A	3.123" x 1.140"	USE WITH REGROUND CRANK	1974-89	REAR	MS346-G1	MST346
3.0L VG30E Lite 4/87	1.575"	---	1987-99	FRONT	MS359	MST359
3.0L VG30E Lite 4/87	1.548" x .400"	USE WITH REGROUND CRANK	1987-99	FRONT	MS359-G	MST359
3.0L VG30E	3.306"	---	1984-99	REAR	MS358	MST358

MICROSLEEVE Diesel Applications

Make	Engine Type	Location	Part #	Tool #
Caterpillar	3118	Harmonic Balancer	MS856	MST856
Caterpillar	3126	Harmonic Balancer	MS856	MST856
Caterpillar	3206	Harmonic Balancer	MS850	MST850
Cummins	4BT	Front Crankshaft	MS858	MST858
Cummins	4BT	Rear Crankshaft	MS851F	MST851F
Cummins	6BT	Front Crankshaft	MS858	MST858
Cummins	6BT	Rear Crankshaft	MS851F	MST851F
Cummins	6C	Rear Crankshaft	MS851F	MST851F
Cummins	L10	Front Crankshaft	MS857	MST857
Cummins	M11	Front Crankshaft	MS857	MST857
Cummins	855	Front Crankshaft	MS856	MST856
Detroit Diesel	8.2L	Harmonic Balancer	MS858	MST858
GM	6.2L	Harmonic Balancer	MS852	MST852
GM	6.2L (late)	Rear Crankshaft	MS854F	MST854F
GM	6.5L	Harmonic Balancer	MS853	MST852
GM	6.5L	Rear Crankshaft	MS854F	MST854F
GM	6.6L (401GMC)	Harmonic Balancer	MS855	MST855
GM	7.1L (432)	Harmonic Balancer	MS855	MST855
GM	7.8L (478)	Harmonic Balancer	MS855	MST855
GM	10.4L (637)	Harmonic Balancer	MS855	MST855
GM	12.0L (702)	Harmonic Balancer	MS855	MST855
Navistar	6.9L	Harmonic Balancer	MS858	MST858
Navistar	7.3L	Harmonic Balancer	MS858	MST858

MICROSLEEVE Overhead Cam Seal Surface Sleeves

Modern single and double overhead cams can be rebuilt in today's remanufactured engines. Overhead cams can be reground and, in some cases, roller cams have job wear that still falls within factory specifications. The main problem is oil seal groove wear. The need to have no oil leaks in this area is critical because of timing belts and pulleys. Micro Sleeve overhead cam repair sleeves address this problem so expensive

Make	Engine Type	Shaft	Year(s)	Part #	Tool #
Chrysler	1.8L	1.376"	1981-95	MS701	MST701
Chrysler	2.0L	1.376"	1983-94	MS701	MST701
Chrysler	2.2L	1.376"	1981-96	MS701	MST701
Chrysler	2.4L	1.376"	1983-94	MS701	MST701
Chrysler	2.5L	1.376"	1989-96	MS701	MST701
Chrysler	3.0L	1.376"	1987-99	MS701	MST701
Ford	1.6L/1.9L	1.647"	1986-99	MS702	MST702
Ford	2.0L/2.3L Pinto	1.708"	1986-99	MS703	MST349
Mazda	1.5L Z5	1.338"	ALL	MS706	MST706
Mazda	1.6L B6	1.338"	ALL	MS706	MST706
Mazda	1.6L ZM	1.338"	ALL	MS706	MST706
Mazda	1.8L BP	1.338"	ALL	MS706	MST706
Mazda	2.0L FE	1.338"	ALL	MS706	MST706
Mazda	2.0L FS	1.338"	ALL	MS706	MST706
Mazda	2.2L F2	1.338"	ALL	MS706	MST706
Mitsubishi	1.8L	1.376"	1981-95	MS701	MST701
Mitsubishi	2.0L	1.376"	1983-99	MS701	MST701
Mitsubishi	2.2L	1.376"	1981-96	MS701	MST701
Mitsubishi	2.4L	1.376"	1983-94	MS701	MST701
Mitsubishi	2.5L	1.376"	1989-96	MS701	MST701
Mitsubishi	3.0L	1.376"	1987-99	MS701	MST701
Nissan	1.6L E16	1.575"	1983-88	MS704	MST704
Nissan	3.0L VG30	1.338"	1984-99	MS706	MST706
Toyota	1.5L 3E, 3EE	1.376"	1992-96	MS701	MST701
Toyota	1.6L 4AC	1.376"	1983-97	MS701	MST701
Suzuki	1.3L/1.6L	1.260"	1982-99	MS705	MST361

Seal Surface Sleeves & Split Seals

Do Not Use Standard Crankshaft Seal Surface Sleeves For Two-Piece Seals!

The seal will not flex enough to take the extra shaft diameter. As a result, the seal will burn up. Also, the ends of the two piece seal will not join properly. To repair a two-piece seal in the limited applications listed, you must grind the crank flange, and bring it back to standard with an undersized Mico Sleeve crankshaft seal surface sleeve.

Engine	Grind to / width	Location	Part #
2.8L GM	2.968" X .560"	REAR	MS337-G
5.0L FORD	3.602" X .720"	REAR	MS331-G1
5.8L FORD	3.727" X .710"	REAR	MS332-G1
5.8L Modified FORD	3.727" X .710"	REAR	MS332-G1
400 FORD	3.727" X .710"	REAR	MS332-G1
2.5L PONTIAC	2.964" X .470"	REAR	MS339-G1

MICROSLEEVE Universal Installation Tool Kit

Used for precise installation of all Micro Sleeve rear crankshaft seal surface sleeve except where noted. Patent registered with the U.S. Patent Office.

Kit Contents:

- 12" x 3/4" Threaded Rod
- Slide Hammer
- Large Backing Plate
- Small Backing Plate
- Pilot Bearing Hole Guide Buttons
- 3 "cups" for MS348-F
- Application/Dimension Card



Part #MST301-1

Repl. Installation Cups

Part #	Used to Install Part #
MS7331	MS331, MS331-1, MS331-2, MS331-G1, MS331-G2, MS342, MS342-G
MS7332	MS332-1, MS332-G1, MS336, MS336-G, MS338, MS338-1, MS338-G
MS7333	MS333, MS333-G, MS340-1
MS7335	MS335-1, MS335-G
MS7339	MS337, MS337-G, MS337-G1, MS338, MS338-G, MS376G
MS7341	MS341, MS341-G
MS7346	MS346, MS346-1, MS346-G, MS346-G1, MS346-G2
MS7347	MS347, MS347-1
MS7352	MS352, MS352-G, MS352-G1, MS360
MS7353	MS353, MS353-G, MS353-G1, MS368-G
MS7353-F	MS346-F
MS7356	MS356-1
MS7358	MS358, MS358-G
MS7364	MS364-G, MS362-G
MS7360	MS366, MS366-G
MS7371-F	MS371-F

MICROSLLEEVE™ Harmonic Balancer Seal Surface Sleeves

Engine Type	Year(s)	Sleeve Part #	Installation Tool #
AMC/Jeep			
134 2.2L F	1950-73	MS225	MST228
134 2.2L L	1941-65	MS225	MST228
148 2.5L	ALL	MS225	MST228
151 2.5L	1980-84	MS228	MST228
161 2.7L F	1950-56	MS225	MST228
161 2.7L L	1950-56	MS225	MST228
173 2.8L	1984-87	MS228-1	MST228
196 3.2L	1958-65	MS221	MST228
199 3.3L	1965-70	MS221	MST228
232 3.8L	1965-79	MS221	MST228
242 4.0L	1987-91	MS221	MST228
258 4.2L	1965-90	MS221	MST228
290 4.8L	1967-69	MS222	MST222
304 5.0L	1970-81	MS222	MST222
343 5.6L	1967-69	MS222	MST222
360 5.9L	1970-90	MS222	MST222
390 6.4L	1968-70	MS222	MST222
401 6.6L	1971-76	MS222	MST222
Chevrolet/GM			
112 1.8L	1982-86	MS228	MST228
121 2.0L	1983-91	MS228	MST228
151 2.5L	1977-98	MS228	MST228
173 2.8LS W, X, Y, Z, 1,7,9 FWD	1980-83	MS228-1	MST228
173 2.8L auto/f. FWD	1987-89	MS228-2	MST228
2.8L man/f. 3.1L & 3.4L	1987-03	MS228-2	MST228
194 3.2L Chev	1962-67	MS228	MST228
200 3.3L Chev	1978-79	MS228	MST228
204 3.3L B/P/Chev	1991-92	MS237	MST222
215 3.5L Pont	1964-65	MS228	MST228
216 3.5L Chev	1938-53	MS228	MST228
229 3.8L Chev	1980-84	MS228	MST228
230 3.8L Chev	1963-70	MS228	MST228
231 3.8L late	1990-05	MS237	MST222
231 3.8L Chev	1976-78	MS228	MST228
235 3.9L Chev	1941-62	MS228	MST228
250 4.1L Chev	1966-76	MS228	MST228
252 4.1L Buick	1980-84	MS231	MST222
4.1L/4.5L/4.9L Cad	1982-99	MS231	MST222
260 4.3L Diesel	1979-85	MS231	MST222
260 4.3L Buick/Pont	1975-82	MS222	MST222
261 4.3L Chev	1954-62	MS228	MST228
262 4.3L Chev	1975-76	MS228	MST228
262 4.3L Chev/Pont	1985-99	MS228	MST228

Engine Type	Year(s)	Sleeve Part #	Installation Tool #
Chevrolet/GM (Continued)			
265 4.3L B/O/P	1980-81	MS229-1	MST226
265 4.4L Chev	1955-57	MS228	MST228
267 4.4L B/O/P	1979-82	MS228	MST228
283 4.6L Chev	1957-67	MS228	MST228
292 4.8L Chev	1963-69	MS228	MST228
301 4.9L B/O/P	1977-81	MS229-1	MST226
302 5.0L Chev	1966-73	MS228	MST228
305 5.0L Chev	1976-99	MS228	MST228
305 5.0L GMC Trk	1960-75	MS227	MST227
307 5.0L Y B/O/P/Cad	1980-90	MS222	MST222
307 5.0L Chev	1966-73	MS228	MST228
326 5.3L Pont	1963-67	MS229-1	MST226
327 5.4L Chev	1962-69	MS228	MST228
330 5.4L Olds	1964-67	MS222	MST222
348 5.7L Chev	1958-65	MS228	MST228
350 5.7L Chev	1967-02	MS228	MST228
350 5.7L N Diesel	1978-85	MS231	MST222
350 5.7L R B/O/P/Cad	1977-80	MS222	MST222
350 5.7L Pont	1968-77	MS229-1	MST226
351 5.7L GMC	1960-73	MS227	MST227
366 6.0L Chev	1966-98	MS230	MST227
389 6.4L Pont	1959-66	MS229-1	MST226
390 6.4L Cad	1963	MS222	MST222
394 6.5L Olds	1959-64	MS222	MST222
396 6.6L (402) Chev	1965-70	MS230	MST227
400 6.6L Olds	1965-69	MS222	MST222
400 6.6L SB Chev	1970-80	MS228	MST228
400 6.6L Pont	1967-79	MS229-1	MST226
400 6.6L	1975-80	MS230	MST227
401 6.6L GMC	1960-65	MS227	MST227
403 6.6 L Olds	1977-79	MS222	MST222
409 6.7L Chev	1961-65	MS230	MST227
421 6.9L Pont	1963-66	MS229-1	MST226
425 7.0L Olds	1965-67	MS222	MST222
427 7.0L Chev	1966-00	MS230	MST227
428 7.0L Pont	1967-69	MS229-1	MST226
429 7.0L Cad	1964-67	MS222	MST222
454 7.4L Chev	1970-99	MS230	MST227
455 7.5L Olds	1968-76	MS222	MST222
455 7.5L Pont	1970-76	MS229-1	MST226
8.1L	2000-05	MS230	MST227
502	ALL	MS230	MST227



MICRO SLEEVE™ Harmonic Balancer Seal Surface Sleeves

Chrysler			
156 2.6L	1981-87	MS238	MST228
170 2.8L	1961-69	MS223-1	MST223
198 3.2L	1970-74	MS223-1	MST223
225 3.7L	1961-87	MS223-1	MST223
239 3.9L	1986-95	MS224-1	MST223
251 4.1L	1953-69	MS223-1	MST223
273 4.5L Car	1965-69	MS224-1	MST223
273 4.5L Trk	1965-68	MS224	MST223
277 4.6L	1956-57	MS224	MST223
301	1957	MS224	MST223
303 Canadian built	1956-58	MS224	MST223
313 Canadian built	1956-58	MS224	MST223

Engine Type	Year(s)	Sleeve Part #	Installation Tool #
Chrysler (Continued)			
315	1956-58	MS224	MST223
318 5.0L Poly/Sm Blik	1957-01	MS224-1	MST223
325	1957-58	MS224	MST223
340 5.6L	1968-73	MS224-1	MST223
350	1958	MS224	MST223
331-354 Hemi engines	1954-57	MS224	MST223
360 5.9L	1971-03	MS224-1	MST223
361 5.9L	1958-77	MS224	MST223
383 6.3L	1959-71	MS224	MST223
392 Hemi	1957-58	MS224	MST223
400 6.6L	1972-79	MS224	MST223
413 6.8L	1959-77	MS224	MST223
426 7.0L Wedge	1963-71	MS224	MST223
426 7.0L Hemi	1964-71	MS224	MST223
440 7.2L	1966-80	MS224	MST223

Continental			
69 Y Series	ALL	MS222	MST222
91 Y Series	ALL	MS222	MST222
112 Y Series	ALL	MS222	MST222

Ford			
140 2.3L HSC	1984-96	MS233	MST228
144 2.4L	1960-64	MS225	MST228
2.5L Duratec	1997-05	MS226-1	MST226
170 2.8L	1961-72	MS225	MST228
2.8L	1979-86	MS236	MST236
2.9L	1986-92	MS236	MST236
183 3.0L	1988-05	MS235	MST226
200 3.3L	1963-83	MS225	MST228
215 3.5L	1952-53	MS226	MST226
221 3.6L	1962-63	MS226-2	MST226

Engine Type	Year(s)	Sleeve Part #	Installation Tool #
Ford (Continued)			
223 3.7L	1954-64	MS226	MST226
3.8L & 4.2L	1980-05	MS226-2	MST226
239 3.9L	1954	MS229-1	MST226
240	1965-72	MS226-1	MST226
4.0L	1990-05	MS236	MST236
250 4.1L	1969-80	MS226-1	MST226
255 4.2L	1980-82	MS226-2	MST226
280 4.3L	1962-65	MS226-2	MST226
272 4.5L	1955-57	MS229-1	MST226
281 4.6L	1991-05	MS226-1	MST226
289 4.7L	1963-68	MS226-2	MST226
292 4.8L	1957-64	MS229-1	MST226
300 4.9L	1965-97	MS226-1	MST226
302 5.0L	1968-99	MS226-2	MST226
312 5.1L	1958-64	MS229-1	MST226
330 5.4LHD	1964-78	MS227	MST227
330 5.4LMD	1964-77	MS226-2	MST226
332 5.4L	1958-63	MS226	MST226
5.4L	1998-05	MS226-1	MST226
351 5.8L Cleveland	1970-74	MS226-2	MST226
351 5.8LM	1975-81	MS226-2	MST226
351 5.8L Windsor	1969-97	MS226-2	MST226
352 5.8L	1958-67	MS226-2	MST226
360 5.9L	1968-76	MS226-2	MST226
361 5.9L	1968-74	MS227	MST227
370 6.2L	1968-91	MS227	MST227
390 6.4L	1961-76	MS226-2	MST226
391 6.4L	1964-78	MS227	MST227
400 6.8L	1971-82	MS226-2	MST226
401 6.6L	1958-81	MS227	MST227
406 6.6L	1962-65	MS226-2	MST226
410 6.7L	1958-67	MS226-2	MST226
427 7.0L	1963-68	MS226-2	MST226
428 7.0L CJ	1966-70	MS226-2	MST226
429 7.0L	1969-84	MS227	MST227
460 7.5L	1968-98	MS226-2	MST226
475 7.8L	1958-81	MS227	MST227
477 7.9L	1958-81	MS227	MST227
534 8.8L	1958-81	MS227	MST227

We Accept These Major Credit Cards



MICROSLEEVE™ Harmonic Balancer Seal Surface Sleeves

Ford Tractor			
134 2.2L	ALL	MS226	MST226
172 2.8L	ALL	MS226	MST226
800 Series	ALL	MS226	MST226
900 Series	ALL	MS226	MST226
4000 Series	ALL	MS226	MST226
6000 Series	ALL	MS226	MST226
International			
C113	ALL	MS226	MST226
C123	ALL	MS226	MST226
C135	ALL	MS226	MST226
100 Farmall	ALL	MS226	MST226
130 Farmall	ALL	MS226	MST226
140 Farmall	ALL	MS226	MST226
200 Farmall	ALL	MS226	MST226
230 Farmall	ALL	MS226	MST226
240 Farmall	ALL	MS226	MST226
152 - 198 Scout	ALL	MS239	MST239
304	ALL	MS239	MST239
345	ALL	MS239	MST239
392	ALL	MS239	MST239
Mack Truck			
EN414 engine	ALL	MS224	MST223
EN441 engine	ALL	MS224	MST223
Nissan			
1.6LCA16 & GA16	1987-99	MS240	MST240
Toyota			
20 & 22 R Engines	1974-95	MS233	MST228

MICROSLEEVE™ Diesel Applications

Make	Engine Type	Location	Part #	Tool #
Caterpillar	3116	Harmonic Balancer	MS856	MST856
Caterpillar	3126	Harmonic Balancer	MS856	MST856
Caterpillar	3206	Harmonic Balancer	MS850	MST850
Cummins	4BT	Front Crankshaft	MS858	MST858
Cummins	4BT	Rear Crankshaft	MS851F	MST851F
Cummins	6BT	Front Crankshaft	MS858	MST858
Cummins	6BT	Rear Crankshaft	MS851F	MST851F
Cummins	6C	Rear Crankshaft	MS851F	MST851F
Cummins	L10	Front Crankshaft	MS857	MST857
Cummins	M11	Front Crankshaft	MS857	MST857
Cummins	855	Front Crankshaft	MS856	MST856
Detroit Diesel	8.2L	Harmonic Balancer	MS858	MST858
GM	6.2L	Harmonic Balancer	MS852	MST852
GM	6.2L (late)	Rear Crankshaft	MS854F	MST854F
GM	6.5L	Harmonic Balancer	MS853	MST852
GM	6.5L	Rear Crankshaft	MS854F	MST854F
GM	6.6L (401GMC)	Harmonic Balancer	MS855	MST855
GM	7.1L (432)	Harmonic Balancer	MS855	MST855
GM	7.8L (478)	Harmonic Balancer	MS855	MST855
GM	10.4L (637)	Harmonic Balancer	MS855	MST855
GM	12.0L (702)	Harmonic Balancer	MS855	MST855
Navistar	6.9L	Harmonic Balancer	MS858	MST858
Navistar	7.3L	Harmonic Balancer	MS858	MST858

Harmonic Balancer Puller
Part #4600



Harmonic Balancer Installer Tool
For SB/BB Chevy Part #HBP100



Harmonic Balancer Puller/Installer Kit
Part #HBP100K



Engine Parts

CRANKSHAFT REPAIR SLEEVES



ENGINE TYPE	SHAFT DIA.		YEAR(S)	LOCATION	SLEEVE PART #	INSTALLATION TOOL/BTN. #
NISSAN CONTINUED						
3.0L VG30	3.306"	---	1994-02	REAR	MS358	MST358
3.0L VG30	3.281" x .700"	USE WITH REGROUND CRANK	1994-02	REAR	MS358-G	MST358
3.3L VG33	3.306"	---	1995-06	REAR	MS358	MST358
3.0L VG33	3.281" x .700"	USE WITH REGROUND CRANK	1995-06	REAR	MS358-G	MST358
3.5L VG35	3.306"	---	2002-06	REAR	MS358	MST358
SATURN						
1.0L OHC	2.991"	---	1990-02	REAR	MS337	MST339
1.9L OHC	2.968" x .560"	USE WITH REGROUND CRANK	1990-02	REAR	MS337-G	MST339
SUBARU						
1.8L EA81 w/ gear	2.994"	---	1980-89	REAR	MS337	MST339
1.8L EA81 w/ gear	2.968" x .750"	USE WITH REGROUND CRANK	1980-89	REAR	MS337-G	MST339
1.8L EA82 w/o gear	2.994"	---	1985-94	REAR	MS337-1	MST339
1.8L EA82 w/o gear	2.968" x .750"	USE WITH REGROUND CRANK	1985-90	REAR	MS337-G1	MST339
1.8L EJ18E	3.384"	---	1993-97	REAR	MS343	---
1.8L EJ18E	3.359" x .600"	USE WITH REGROUND CRANK	1993-97	REAR	MS343-G1	---
2.2L EJ22/2.5L EJ25	3.384"	---	1989-01	REAR	MS343	---
2.2L EJ22/2.5L EJ25	3.359" x .600"	USE WITH REGROUND CRANK	1989-01	REAR	MS343-G1	---
2.7L ER27	2.994"	---	1988-91	REAR	MS337-1	MST339
2.7L ER27	2.968" x .750"	USE WITH REGROUND CRANK	1988-91	REAR	MS337-G1	MST339
3.0L EG33	3.382"	---	1991-02	REAR	MS343	---
3.0L EG33	3.359" x .600"	USE WITH REGROUND CRANK	1991-02	REAR	MS343-G1	---
SUZUKI						
1.0L 3 cyl/1.3L G13	1.260"	---	1982-99	FRONT	MS361-1	MST352
1.0L 3 cyl/1.3L G13 A	2.650" x .700"	USE WITH REGROUND CRANK	1982-99	REAR	MS362-G	MST352
1.6L G16K A	2.650" x .700"	USE WITH REGROUND CRANK	1989-99	REAR	MS362-G	MST352
1.6L G16K	1.260"	---	1989-99	FRONT	MS361-1	MST352
TOYOTA/LEXUS						
1.5L 1AC/3AC	1.260"	---	1990-88	FRONT	MS361-2	MST352
1.5L 1AC/3AC	2.757"	---	1990-88	REAR	MS360	MST352
1.5L 3E/3EE/5EFE	1.372"	---	1987-98	FRONT	MS344-1	MST334
1.5L 3E/3EE/5EFE	3.149"	---	1987-98	REAR	MS346-1	MST346
1.6L 4AC/4AF/4AG	1.260"	---	1983-97	FRONT	MS361-2	MST352
1.6L 4AC/4AF/4AG	2.757"	---	1983-97	REAR	MS360	MST352
1.8L 7AFE	1.260"	---	1993-97	FRONT	MS361-2	MST352
1.8L 7AFE	2.757"	---	1993-97	REAR	MS360	MST352
2.0L 2SE/3SFE/2.2L 5SFE	1.653"	---	1983-01	FRONT	MS365	MST365
2.0L 2SE/3SFE/2.2L 5SFE	3.347"	---	1983-01	REAR	MS366	MST366
2.0L 2SE/3SFE/2.2L 5SFE	3.923" x .585"	USE WITH REGROUND CRANK	1983-01	REAR	MS366-G	MST366
2.0L 3YE	3.149"	---	1983-85	REAR	MS346	MST346
2.2L 20R/2.4L22R	3.149"	---	1975-95	REAR	MS346	MST346
2.2L 20R/2.4L22R	3.123" x .820"	USE WITH REGROUND CRANK	1975-95	REAR	MS346-G	MST346
2.4L 2L Diesel	3.947"	---	1992-90	REAR	MS366	MST366
2.4L 2T/2R/2	3.464"	---	1991-05	REAR	MS333	MST333
2.5L 2VZFE	1.575"	---	1988-91	FRONT	MS359-1	MST359
2.5L 2VZFE	3.625"	---	1988-91	REAR	MS331-1	MST331
2.8L 4ME/2.8L 5ME	3.149"	---	1976-88	REAR	MS346	MST346
2.7L 3RZFE	3.464"	---	1994-06	REAR	MS333	MST333
3.0L 3VZFE/1MZFE/3VZE	1.575"	---	1988-06	FRONT	MS359-1	MST359
3.0L 3VZFE/1MZFE/3VZE	3.625"	---	1988-06	REAR	MS331-1	MST331
3.0L 7MGE/7MGTE	3.149"	---	1986-92	REAR	MS346	MST346
3.4L 5VZFE	1.575"	---	1995-06	FRONT	MS359-1	MST359
3.4L 5VZFE	3.625"	---	1995-06	REAR	MS331-1	MST331
Volkswagen						
1.8L JH/JN/ABG	3.346"	---	1984-93	REAR	MS366	MST366
Volvo						
2.3L B23F/B230F A	3.602" x .910"	USE WITH REGROUND CRANK	1983-95	REAR	MS331-G2	MST331



Valve Guide O.D. Machining Tools A Must for All Press-on Valve Stem Seals

Individual carbide-tipped cutter bodies and hardened ground pilots are interchangeable and chuck into any portable drill or press. Does 3 jobs at once.

- 1) Faces the top to the correct length.
- 2) Sizes the guide OD to accept press-on seals.
- 3) Chamfers to top to prevent damage to seal.

Order Body and Pilots Separately

Cutter Bodies

Size	Part #
.415	SL1435A
.420	SL1436A
.428	SL1433A
.475	SL1434A
.490	SL1437A
.500	SL1438A
.530	SL1442A
.562	SL1443A
.625	SL1445A



Pilots

Stem Dia.	Part #
5/16" - 8mm	SL1435B
11/32"	SL1438B
3/8"	SL1442B
7/16"	SL1445B

HARLEY DAVIDSON MOTORCYCLE VALVE STEM SEALS

Model	Nominal Stem Dia.	Guide O.D.	Part #
Early Shovel Shouldered	3/8	.625	95105
Late Shovel 80-84 Shouldered	3/8	.625	95109
Iron Head Sportster 1985 & Earlier EXH	5/16	.531	95112
	5/16	.531	95118 All Rubber Seal
Late Model Sportster	5/16	.420	95121
Evo & Twin Cam	5/16	.420	95124
Twin Cam Late (Top Heat Seal)	7m	.562	95127
V-Rod	6m	.347	95130

Performance Valve Stem Seals

Silver Seal® Performance Valve Stem Seals are a combination of OEM quality and Racer Technology. Our metal body valve stem seals are designed to resist exotic fuels and additives while providing continuous service temperature at 400°F (205°C) with intermittent temperatures up to 550°F (288°C).



Performance Seals With Rubber Inside of Seal Skirt

Nominal Stem Dia.	Guide O.D.	Part #	
7mm	.276	.432	75103
7mm	.276	.562	75105
5/16"	.311	.428	75115
5/16"	.311	.500	75121
5/16"	.311	.502	75124
5/16"	.311	.531	75127
11/32"	.342	.478	75133
11/32"	.342	.502	75139
11/32"	.342	.530	75142
11/32"	.342	.531	75145
11/32"	.342	.562	75148
11/32"	.342	.562	75151
11/32"	.342	.625	75154
3/8"	.373	.500	75157
3/8"	.373	.531	75160
3/8"	.373	.562	75163
3/8"	.373	.625	75169
7/16"	.437	.625	75171

Performance Seals With All Steel Jacket No Rubber Inside Seal Skirt

Nominal Stem Dia.	Guide O.D.	Part #	
5.5mm	.216	.476	85099
6mm	.236	.476	85100
7mm	.276	.476	85106
8mm	.315	.476	85130

Designed to be used with Triple High Performance Valve Springs

Nominal Stem Dia.	Guide O.D.	Part #	
5/16"	.311	.500	85121
5/16"	.311	.502	85124
11/32"	.342	.500	85136
11/32"	.342	.530	85142
3/8"	.373	.500	85145
3/8"	.373	.531	85148

Teflon® & Rubber Valve Stem Seals

An Engine Rebuilding Tradition for Many Years.

(16 or 100 Pack Box). Teflon® is a registered trademark of DuPont.

Stem Dia.	Guide O.D.	Valve Stem Seal Part #	Guide Cutter	Cutter Pilot
11/32"	.500	1611	SL1438A	SL1438B
	.530	1711	SL1442A	SL1438B
	.562	1811	SL1443A	SL1438B
	.594	1911	N/A	N/A
3/8"	.500	1612	SL1438A	SL1442B
	.562	1812	SL1443A	SL1442B
10mm	14mm	1810M	N/A	N/A
29/64"	.660	6040	N/A	N/A
1/2"	.687	2216	N/A	N/A

Teflon® Valve Stem Seals

Used by High Performance Engine Builders Worldwide.

(16 or 100 Pack Box). Teflon® is a registered trademark of DuPont.

Stem Dia.	Guide O.D.	Valve Stem Seal Part #	Guide Cutter	Cutter Pilot
5/16"	.415	DT9010	SL1435A	SL1435B
	.500	DT1610	SL1438A	SL1435B
	.530	DT1710	SL1442A	SL1435B
11/32"	.500	DT1611	SL1438A	SL1438B
	.530	DT1711	SL1442A	SL1438B
3/8"	.500	DT1612	SL1438A	SL1442B
	.530	DT1712	SL1442A	SL1442B



High-Performance Valve Stem Seals

Manufactured from a unique polymer material that conforms and maintains the required radial tension during High-Performance engine temperature changes. This seal is self lubricating, providing superior protection during start up. The high temperature resistant material tolerates nitromethane, methanol, and all types of racing fuel. (16 or 100 Pack Box).



Stem Dia.	Guide O.D.	Color	Part #
11/32"	.500	Red	DT1611R
11/32"	.530	Orange	DT1711O
3/8"	.530	Blue	DT1712B

HIGH PERFORMANCE VALVE STEM SEAL KIT

A complete, 102 pc. kit offers everything needed to cover 5/16", 11/32", & 3/8" seal applications. Each kit includes 3 pilots, 2 carbide cutters, 1 Teflon installation tool and 96 asst. Teflon valve stem seals packed in a compartment-style storage box with instructions.

Part #VS1000K



Teflon® Seal Installer



Part #T3

High Performance Valve Stem Seal Kit Includes:

Cutter Bodies

Size	Part #
.500	SL1438A
.530	SL1442A



Pilots

Stem Dia.	Part #
5/16" - 8mm	SL1435B
11/32"	SL1438B
3/8"	SL1442B



Teflon® Valve Stem Seals

Stem Dia.	Guide O.D.	Qty.	Part #
5/16"	.500	16	DT1610
	.530	16	DT1710
11/32"	.500	16	DT1611
	.530	16	DT1711
3/8"	.500	16	DT1612
	.530	16	DT1712





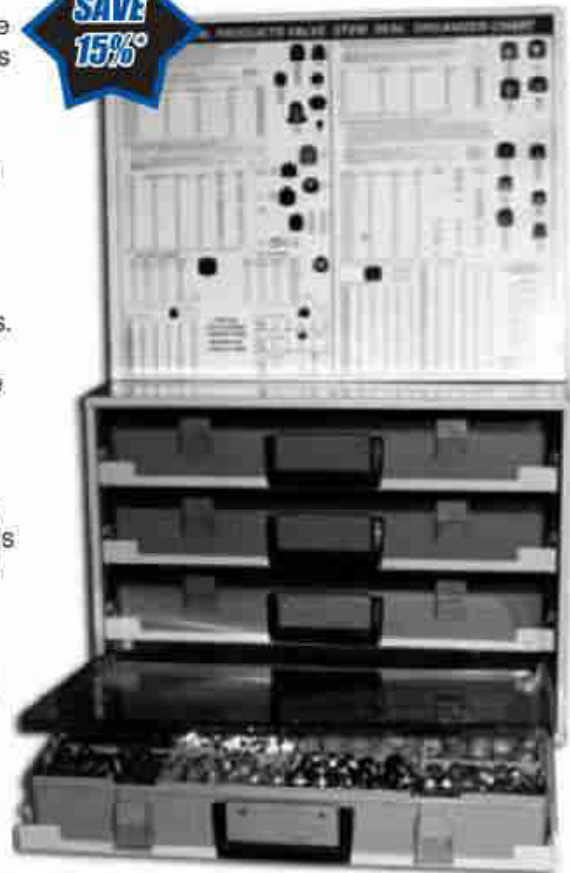
Valve Seal Organizer

Organizer includes 50 of the most popular seals. Keep your valve stem seals clean & organized with no time wasted opening boxes and researching numbers.



Includes: Heavy Duty Metal Cabinet w/Pull-Out Drawers
Four Satchel Style Case/Drawers w/See-Through Lid
Dimensional/Specification Chart
1,416 Pieces of the Most Popular Seals

Features: Specification chart references dimension for both guides & stem. Instructions describe the proper way to size seals. Chart indicates material & temperature ranges. The heavy duty yet lightweight cabinet has positive locking latches and a durable carrying handle, allowing you to easily carry seals to and from your work area. Color photos show seal style & part # for easy reordering. The cabinet comes pre-assembled and can be set on a bench or a shelf. The overall dimensions of the organizer is 20-1/4" wide x 15-3/4" deep x 14-3/4" high. Complete set of labels included. The pull-out drawers are made of a molded plastic that includes adjustable inserts to change compartment sizes. Can hold up to 1600 pieces.



Complete Kit - Part #VSSO (Payment Terms Available!)

Satchel Case/Drawers Only (18-1/2"W x 13"L x 3"H)

Part #10162

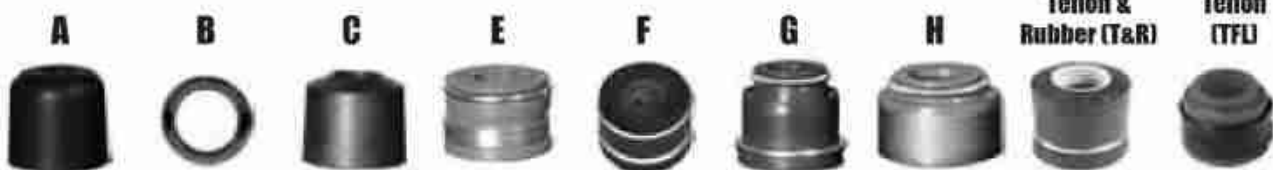
Valve Stem Seal Cabinet Only

Part #LC4

Valve Stem Seal Organizer Includes

*Compared To Open Stock Pricing

Qty.	Part #	Nominal Size	Type	Qty.	Part #	Nominal Size	Type	Qty.	Part #	Nominal Size	Type
16	55519	1/4" x .630	H	32	15124	5/16" x .855	A	32	35595	11/32" x .815	A
100	25333	5/16" x .400	B	32	25124	5/16" x .855	A	32	35823	11/32" x .825	A
16	45333	5/16" x .400	B	16	1611	11/32" x .500	T&R	32	15612	11/32" x .880	A
16	55608	5/16" x .603	H	16	DT1611	11/32" x .500	TFL	32	25612	11/32" x .880	A
16	45398	5/16" x .610	E	16	DT1711	11/32" x .530	TFL	32	35140	11/32" x .890	A
16	55614	5/16" x .610	H	16	1811	11/32" x .562	T&R	32	15241	11/32" x .900	A
32	25923	5/16" x .650	C	32	45704	11/32" x .650	E	32	25241	11/32" x .900	A
32	45923	5/16" x .650	C	32	15704	11/32" x .670	F	16	1612	3/8" x .500	T&R
16	45356	5/16" x .660	E	32	25704	11/32" x .670	E	16	DT1612	3/8" x .500	TFL
16	45357	5/16" x .660	E	32	15736	11/32" x .690	F	16	DT1712	3/8" x .530	TFL
16	45604	5/16" x .660	G	32	15483	11/32" x .700	E	16	1812	3/8" x .562	T&R
16	55396	5/16" x .665	H	32	25483	11/32" x .700	E	32	35240	3/8" x .705	A
16	45506	5/16" x .680	E	32	45483	11/32" x .700	E	32	25616	3/8" x .780	C
16	45799	5/16" x .680	E	32	35563	11/32" x .715	A	32	25076	3/8" x .785	F
32	15389	5/16" x .710	F	100	25120	11/32" x .755	A	32	15108	3/8" x .885	A
32	15144	5/16" x .710	G	16	45120	11/32" x .755	A	32	25108	3/8" x .885	A
32	15113	5/16" x .840	A	32	15126	11/32" x .755	A				



Engine Parts

Valve Stem Seal Designs

Umbrella - Ideally the stem diameter for this seal should not exceed .025" oversize. Diameter must clear I.D. of valve spring and divert oil away from guide.



Type A

O-Ring Seal - Reduces excessive oil flow contact to valve stem. Optimize with Umbrella seals. Applies up to .025" oversize valves.



Type B

Positive Seal - (No Rings or Bands) Can be used with a wide range of stem and guide dimensions. Grooved, seal to stem contact controls oil flow to guide. Note: We recommend stem not to exceed +.015" oversize.



Type C

Positive Seal - (With spring seat) Latest OEM design for aluminum cylinder head applications. Tension spring grooved seal to stem contact controls oil flow to guide. Will allow up to +.003" oversize stem applications. (also called top hat.)



Type D

Positive Seal - (With Ring or Bands) Excellent seal for guide contact tension. Grooved seal, stem contact controls oil flow to guide. Recommended not to exceed +.015" oversize stem.



Type E

Positive Seal - (With 1 or 2 Rings) Recommended seal for correct guide contact tension, also is a grooved seal. Stem contact controls oil flow to guide. Recommended not to exceed +.015" oversize stem.



Type F

Positive Seal - (With Spring and Band) Great seal to control guide contact tension. Grooved seal stem controls oil flow to guide. Not to exceed +.015" oversize stem.



Type G

Positive Seal - (Metal clad with spring) Tight guide to seal fit. Recommended not to exceed +.003" oversized valve stem.



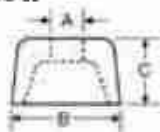
Type H

Valve Stem Seal Specifications

Stem Seal Id.	Top Stem ID (A)	Bottom Sead ID (B)	Seal OD (C)	Overall Height (D)	Seal Type	Part #
5 mm	.186	.358	----	.372	H	55836
5.5 mm	.175	.405	----	.400	H	55724
5.5 mm	.180	.395	----	.425	H	55709
5.5 mm	.182	.367	----	.456	H	55840
5.5 mm	.185	.398	----	.3915	H	55706
5.5 mm	.195	.433	----	.3898	H	55837
7/32	.192	.433	----	.3898	H	55848
7/32	.192	.433	----	.3898	H	55849
7/32	.203	.425	----	.408	H	55857
7/32	.205	.485	----	.737	D	55802
6 mm	.196	.424	----	.573	D	55806
6 mm	.196	.390	----	.740	D	55821
6 mm	.198	.430	----	.419	H	55653
6 mm	.198	.430	----	.620	H	55659
6 mm	.200	.425	----	.405	H	55861
6 mm	.203	.337	----	.385	H	55717
6 mm	.204	.429	----	.4331	H	55841
6 mm	.205	.420	----	.401	H	55708
6 mm	.208	.386	----	.450	H	55834
6 mm	.209	.430	----	.450	H	55710
6 mm	.210	.437	----	.512	D	55814
6 mm	.210	.460	----	.800	D	55819
6 mm	.212	.430	----	.315	H	55842
6 mm	.212	.430	----	.315	H	55843
6 mm	.215	.432	.530	.360	G	45606
6 mm	.216	.425	----	.4016	H	55831
6 mm	.228	.445	----	.6435	D	55655
1/4	.206	.430	----	.707	D	55654
1/4	.231	.426	----	.505	H	55828
1/4	.235	.502	.615	.515	H	55225
1/4	.240	.415	.630	.390	H	55519
1/4	.245	.438	----	.5795	D	55803
1/4	.246	.485	----	.5725	H	55854
1/4	.247	.485	----	.798	D	55686
1/4	.248	.446	.630	.474	E	45819
1/4	.248	.435	----	.8065	D	55801
6.5 mm	.234	.472	----	.395	H	55835
6.5 mm	.238	.428	----	.3465	E	45810
6.5 mm	.240	.413	----	.4528	H	55838
6.5 mm	.241	.428	----	.342	E	45811
6.5 mm	.243	.470	----	.4724	H	55606
7 mm	.230	.424	----	.499	H	55705
7 mm	.232	.424	----	.437	H	55704
7 mm	.238	.497	----	.790	D	55813
7 mm	.240	.371	----	.385	H	55688
7 mm	.240	.235	----	.382	H	55723
7 mm	.242	.460	----	.650	D	55820
7 mm	.243	.4715	.550	.4675	H	55542
7 mm	.244	.463	----	.733	D	55689
7 mm	.244	.485	----	.835	D	55822
7 mm	.2465	.4875	----	.560	H	55719
7 mm	.250	.448	----	.4016	H	55825



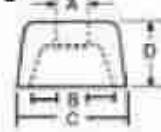
Type A



Type B



Type C



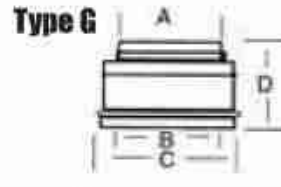
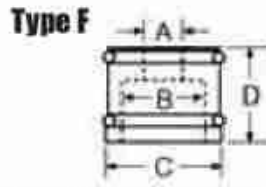
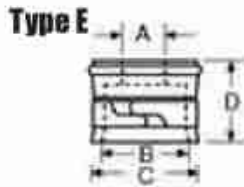
Type D



Stem Seal Id.	Top Stem ID (A)	Bottom Sead ID (B)	Seal OD (C)	Overall Height (D)	Seal Type	Part #
7 mm	.252	.420	----	.545	E	45821
7 mm	.252	.467	----	.5906	H	55829
7 mm	.255	.4875	----	.560	H	55720
7 mm	.255	.464	----	.4252	H	55844
7 mm	.275	.504	.603	.496	H	55608
7 mm	.290	.458	----	.416	H	45396
9/32	.245	.506	----	.5118	H	55845
9/32	.248	.408	----	.385	H	55853
9/32	.252	.472	----	.3819	H	55830
9/32	.252	.472	----	.5118	H	55833
9/32	.254	.412	----	.391	H	45519
9/32	.265	.455	.710	.365	G	25144
9/32	.271	.552	----	.4425	H	55852
9/32	.294	.425	.650	.549	C	45923
7.5 mm	.278	.432	----	.573	E	45812
7.5 mm	.280	.436	.660	.567	G	45604
7.5 mm	.284	.503	.620	.3875	H	55532
7.5 mm	.284	.551	----	.5035	H	55826
7.5 mm	.290	.468	.560	.539	H	55603
7.5 mm	.292	.492	.660	.4875	E	45356
7.5 mm	.292	.482	.660	.4875	E	45357
5/16	.205	.430	----	.719	D	55656
5/16	.270	----	.680	.515	A	15602
5/16	.272	.515	----	.516	H	55726
5/16	.275	----	.810	.730	A	55611
5/16	.275	.540	----	.900	D	55816
5/16	.276	.515	.593	.775	D	55610
5/16	.276	.496	----	.527	H	55702
5/16	.278	.455	.665	.425	H	55396
5/16	.278	.460	----	.378	E	45145
5/16	.278	.480	----	.887	D	55811
5/16	.278	.484	----	.6417	H	55827
5/16	.280	----	.855	.715	A	15124
5/16	.280	----	.400	.080	B	15923
5/16	.280	----	.470	.100	B	25619
5/16	.280	.490	----	.502	H	55725
5/16	.283	.492	----	.890	D	55817
5/16	.283	.492	----	.890	D	55818
5/16	.285	.465	.710	.365	G	15144
5/16	.285	.425	.650	.549	C	25923
5/16	.285	.465	.710	.365	G	45144
5/16	.285	----	.895	.590	A	25115
5/16	.285	.392	----	.362	E	45804
5/16	.285	.494	----	.508	H	55716
5/16	.288	.465	----	.481	E	45808
5/16	.290	----	.840	.695	A	15113
5/16	.290	.470	.680	.495	E	45506
5/16	.290	.465	.680	.495	E	45799

Stem Seal Id.	Top Stem ID (A)	Bottom Sead ID (B)	Seal OD (C)	Overall Height (D)	Seal Type	Part #
5/16	.290	.551	----	.4331	H	55832
5/16	.291	.465	----	.475	E	45809
5/16	.292	----	.840	.695	A	25113
5/16	.292	.463	.610	.480	E	45398
5/16	.292	.560	----	1.11	D	55808
5/16	.295	.540	.710	.555	F	15389
5/16	.295	.470	----	.511	E	45802
5/16	.295	.555	----	1.09	D	55815
5/16	.297	.465	.610	.483	E	45397
5/16	.300	----	.400	.080	B	25333
5/16	.300	----	.400	.080	B	45333
5/16	.300	.470	.615	.400	H	55341
5/16	.300	.475	.680	.4905	E	45506
5/16	.300	.425	.600	.450	E	45875
5/16	.300	.420	.590	.455	E	45877
5/16	.300	.460	----	1.112	D	55807
5/16	.302	.543	.710	.551	F	25389
5/16	.303	----	.850	.675	A	35129
5/16	.305	----	.815	.630	A	35671
5/16	.313	----	.400	.750	B	15333
8 mm	.272	.549	.593	.490	H	55607
8 mm	.274	.465	----	.4528	H	55839
8 mm	.282	.412	----	.410	H	55620
8 mm	.284	.470	----	.5394	H	55823
8 mm	.286	.460	----	.376	H	55714
8 mm	.288	.506	.610	.5118	H	55614
8 mm	.290	.550	----	.4724	H	55824
11/32	.290	.462	----	.486	E	45805
11/32	.295	.498	----	.5255	H	55701
11/32	.300	.546	----	.454	H	55860
11/32	.301	.546	----	.5895	H	55862
11/32	.302	.490	----	.524	H	55727
11/32	.303	.520	----	.527	H	55728
11/32	.305	----	.800	.820	A	15307
11/32	.305	----	.905	.820	A	15782
11/32	.305	----	.850	.750	A	25679
11/32	.305	----	.905	.820	A	25782
11/32	.305	.505	.690	.475	F	25736
11/32	.305	.549	----	.491	H	55703
11/32	.306	.482	----	.418	H	45341
11/32	.306	.548	----	.484	H	55712
11/32	.306	.488	----	.531	H	55850
11/32	.306	.488	----	.5375	H	55851
11/32	.308	.549	----	.5827	H	55846
11/32	.308	.548	----	.5827	H	55847
11/32	.310	----	.800	.800	A	15117
11/32	.310	----	.755	.560	A	15120
11/32	.310	----	.920	.550	A	15136

VALVE STEM SEAL SPECIFICATIONS



Stem Seal Id.	Top Stem ID (A)	Bottom Seal ID (B)	Seal OD (C)	Overall Height (D)	Seal Type	Part #
11/32	.310	----	.900	.720	A	15249
11/32	.310	----	.880	.860	A	15612
11/32	.310	----	.885	.300	A	15977
11/32	.310	----	.800	.800	A	25117
11/32	.310	----	.765	.765	A	25126
11/32	.310	----	.900	.720	A	25249
11/32	.310	----	.880	.860	A	45616
11/32	.310	----	.885	.300	A	45977
11/32	.312	.555	.730	.300	F	25205
11/32	.312	----	.755	.560	A	45120
11/32	.313	.560	.680	.840	D	55605
11/32	.315	----	.895	.600	A	15115
11/32	.315	----	.755	.760	A	15834
11/32	.315	----	.855	.715	A	25124
11/32	.315	.475	.670	.4525	F	25704
11/32	.315	.495	.720	.482	E	45205
11/32	.316	.494	.700	.490	E	45736
11/32	.316	.600	----	.490	E	45806
11/32	.318	.468	.670	.449	F	15704
11/32	.318	.600	----	.490	E	45807
11/32	.318	.510	----	.4345	H	55713
11/32	.320	----	.885	.450	A	15101
11/32	.320	.562	.730	.460	F	15205
11/32	.320	----	.900	.675	A	15241
11/32	.320	.500	.700	.485	E	25483
11/32	.320	.500	.700	.485	E	45483
11/32	.320	----	.885	.450	A	25101
11/32	.320	----	.755	.560	A	25120
11/32	.320	----	.900	.685	A	25241
11/32	.320	.460	.650	.551	E	45704
11/32	.321	.490	.680	.490	E	45399
11/32	.323	.620	----	.449	C	45900
11/32	.325	.510	.690	.475	F	15736
11/32	.325	.485	.700	.473	E	15483
11/32	.325	----	.885	.327	A	25977
11/32	.328	----	.700	.455	A	35882
11/32	.331	.525	----	.4815	F	25701
11/32	.332	.627	----	.697	H	55855
11/32	.332	.627	----	.691	H	55856
11/32	.335	----	.900	.140	A	15472
11/32	.335	----	.825	.365	A	35823
11/32	.335	----	.885	.695	A	35958
11/32	.335	----	.880	.645	A	25118
11/32	.335	----	.890	.635	A	35140
11/32	.337	----	.715	.450	A	35563
11/32	.338	.620	----	.449	C	45901
11/32	.339	----	.815	.440	A	35595
11/32	.340	----	.765	.610	A	35130

Stem Seal Id.	Top Stem ID (A)	Bottom Seal ID (B)	Seal OD (C)	Overall Height (D)	Seal Type	Part #
11/32	.346	----	.885	.790	A	25108
11/32	.350	.550	.800	.561	C	45241
9 mm	.321	.535	----	.677	H	55711
3/8	.308	----	----	.068	B	35800
3/8	.310	----	.765	.762	A	15126
3/8	.316	----	.905	.720	A	15320
3/8	.320	----	.880	.870	A	25612
3/8	.326	.664	----	.702	H	55707
3/8	.3335	.584	----	.410	H	55718
3/8	.335	----	.880	.645	A	15118
3/8	.335	----	.935	.790	A	15613
3/8	.337	.490	----	.390	H	55721
3/8	.338	.520	----	.520	H	55730
3/8	.338	.618	----	.521	H	55858
3/8	.339	.554	----	.500	E	45813
3/8	.339	.600	----	1.112	D	55812
3/8	.340	.490	----	.530	H	55729
3/8	.342	----	.885	.790	A	15108
3/8	.345	.584	.785	.475	F	15076
3/8	.345	.550	.780	.570	C	15616
3/8	.345	.550	.780	.570	C	25616
3/8	.3455	.6035	----	.514	H	55722
3/8	.349	.580	.785	.4525	F	25076
3/8	.350	----	.885	.755	A	15110
3/8	.350	----	.885	.755	A	25110
3/8	.350	----	.880	.815	A	35819
3/8	.352	.574	----	1.242	D	55810
3/8	.354	.618	----	1.295	D	55809
3/8	.355	.620	----	1.489	D	55804
3/8	.356	.628	----	1.073	D	55805
3/8	.359	----	.930	.805	A	15105
3/8	.360	----	.710	.450	A	35811
3/8	.360	.727	----	.860	C	45902
3/8	.362	----	.870	1.125	A	15875
3/8	.365	----	.885	.620	A	35025
3/8	.365	.563	----	.620	H	55859
3/8	.367	----	.705	.4535	A	35240
3/8	.368	----	.890	.703	A	35566
3/8	.368	.564	----	.211	A	55731
3/8	.371	.751	----	.561	A	35900
7/16	.430	----	.935	.820	A	35793
1/2	.478	.655	----	.494	H	55715



Year	I/E	Style	Material	Part #
ALLIS-CHALMERS				
4.236 Perkins Diesel 8 Valve, L4				
ALL	I&E	1-Ring	Teflon/Rubber	1812
AMC JEEP				
2.4L 148 C.I., L4, Vin 1 "Jeep Power-Tech"				
2002-04	I&E	Top Hat	Viton	55054
2.5L 151 C.I., L4, Vin B "GM"				
1980-83	I&E	O-Ring	Nitrile	15333
1980-83	I&E	Umbrella	Nitrile	15120
1980-83	I&E	2-Ring	Nitrile	15704
1980-83	I&E	O-Ring	Poly	25333
1980-83	I&E	Umbrella	Poly	25120
1980-83	I&E	2-Ring	Poly	25704
1980-83	I&E	Umbrella	Nylon	35563
1980-83	I&E	O-Ring	Viton	45333
1980-83	I&E	Umbrella	Viton	45120
1980-83	I&E	Ring & Band	Viton	45704
1980-83	I&E	1-Ring	Teflon/Rubber	1811
1980-83	I&E	Ring & Band	Teflon	DT1811
2.8L 173 C.I., V6, Vin W "GM"				
1984-86	I&E	O-Ring	Nitrile	15333
1984-86	I&E	Ring & Band	Nitrile	15483
1984-86	I&E	O-Ring	Poly	25333
1984-86	I&E	All-Rubber	Poly	25616
1984-86	I&E	Ring & Band	Poly	25483
1984-86	I&E	All-Rubber	Viton	45241
1984-86	I&E	Ring & Band	Viton	45483
1984-86	I&E	1-Ring	Teflon/Rubber	1811
1984-86	I&E	Ring & Band	Teflon	DT1811
4.0L 242 C.I., L6, Vin L, M, S "Jeep"				
1999-06	I&E	Metal Clad	Viton	55900
4.2L 258 C.I., L6, Vin A, C, M, T "AMC"				
1971-90	I&E	Umbrella	Nitrile	15113
1971-90	I&E	Ring & Band	Nitrile	15483
1971-90	I&E	Umbrella	Poly	25113
1971-90	I&E	Ring & Band	Poly	25483
1971-90	I&E	Umbrella	Nylon	35566
1971-90	I&E	Ring & Band	Viton	45483
1971-90	I&E	1-Ring	Teflon/Rubber	1811
5.0L 304 C.I., V8, Vin H "AMC"				
1970-81	I&E	Umbrella	Nitrile	15124
1970-81	I&E	Ring & Band	Nitrile	15076
1970-81	I&E	Umbrella	Poly	25124
1970-81	I&E	Umbrella	Nylon	35566
5.9L 360 C.I., V8, Vin 7, N, P "AMC"				
1970-91	I&E	Umbrella	Nitrile	15241
1970-91	I&E	Ring & Band	Nitrile	15076

Year	I/E	Style	Material	Part #
AMC JEEP				
5.9L 360 C.I., V8, Vin 7, N, P "AMC" (Cont.)				
1970-91	I&E	Umbrella	Poly	25241
1970-91	I&E	Umbrella	Nylon	35566
AUDI				
2.2L 2226cc L5 Vin A, P, R, AAN "TURBO"				
1992-96	I&E	Metal Clad	Viton	55688
2.3L 2309cc L5 Vin E, 7A				
1990-91	I&E	Metal Clad	Viton	55688
2.8L 2771cc V6 AAN, AFC				
1995-98	I&E	Metal Clad	Viton	55688
3.6L 3562cc V8 Vin E, PT				
1990-91	I&E	Metal Clad	Viton	55688
4.2L 4172cc V8 Vin W, ABH				
1992-94	I&E	Metal Clad	Viton	55688
CASE				
3.9L 390 Series, L4 Cummins B & BT Diesel, 8 Valve				
	I	Ring & Band	Viton	45805
3.9L 390 Series, L4 Cummins B & BT Diesel, 8 Valve				
	I&E	Ring & Band	Viton	45802
5.9L 590 Series L6, Cummins B & BT Diesel, 12 Valve				
	I	Ring & Band	Viton	45805
	I&E	Ring & Band	Viton	45802
A267D Diesel, 8 Valve, L4				
	I	Umbrella	Nitrile	15126
G188D Diesel, 8 Valve, L4				
	I&E	1-Ring	Teflon/Rubber	1811
CATERPILLAR				
7.2L 3126 L6, 12 Valve				
	I&E	Top Hat	Viton	55807
10.3L C10 L6				
	I&E	Oil Shield	Viton	55731
7.2L 3126B L6, 18 Valve				
	E	Metal Clad	Viton	55721
12.0L C12 L6				
	I&E	Oil Shield	Viton	55731
14.6L C15 L6				
	I&E	Metal Clad	Viton	55721
D330C 8 Valve L4,				
	I&E	Umbrella	Nylon	35900
1673C 12 Valve L6				
	I&E	Umbrella	Nylon	35900
3114 8 Valve L4,				
	I&E	Top Hat	Viton	55807

Part # Material Guide

15000 Series
Nitrile - 225°F

25000 Series
Polyacrylic - 350°F

35000 Series
Nylon - 375°F

45000 Series
Viton - 400°F

55000 Series
Viton/Metal Clad - 400°F

Part #'s in **BOLD** are
common replacements

Year	I/E	Style	Material	Part #
CATERPILLAR - (CONT.)				
3116 12 Valve I4				
	I&E	Top Hat	Viton	55807
3304 8 Valve I4,				
	I&E	Umbrella	Nylon	35900
3306 12 Valve I6				
	I&E	Umbrella	Nylon	35900
3406 24 Valve I6				
	I&E	Umbrella	Nylon	35900
3406B 24 Valve I6				
	I&E	Umbrella	Nylon	35900
3406C 24 Valve I6				
	I&E	Metal Clad	Viton	55721
3406E 24 Valve I6				
	I&E	Metal Clad	Viton	55721
3408 32 Valve Diesel, V8				
	I&E	Umbrella	Nylon	35900
3408C 32 Valve Diesel, V8				
	I&E	Metal Clad	Viton	55721
3408E 32 Valve Diesel, V8				
	I&E	Metal Clad	Viton	55721
3408E 32 Valve Diesel, V8				
	I&E	Metal Clad	Viton	55721
3412 48 Valve Diesel, V12				
	I&E	Umbrella	Nylon	35900
3412C 48 Valve Diesel, V12				
	I&E	Metal Clad	Viton	55721
3412E 48 Valve Diesel, V12				
	I&E	Metal Clad	Viton	55721
CHRYSLER				
1.5L 1468cc, 90 C.I., I4, Vin K "G15B Mits"				
1985-94	I&E	Positive	Viton	45806
1.6L 1597cc, 98 C.I., I4, Vin F, Z "4G61 Turbo Mits"				
1989-90	I&E	Positive	Viton	45806
1.6L 1597cc, 98 C.I., I4, Vin 3, B, F, K "G32.G32B, Mits" "Turbo"				
1971-88	I&E	Metal Clad	Viton	55608
1.8L 1755cc, 107 C.I., I4, Vin B, T "4G37 Mits"				
1989-94	I&E	Metal Clad	Viton	55608
1.8L 1834cc, 112 C.I., I4, Vin C, D "4G93 Mits."				
1992-94	I&E	Metal Clad	Viton	55653
2.0L 1995cc / 1996cc I4, VIN C, F, Y				
1995-05	I&E	Top Hat	Viton	55654
2.0L 1995cc / 1996cc I4				
1974-91	I&E	Metal Clad	Viton	55608
2.2L 135 C.I., I4, Vin 8, A, B, C, D, E, P "TURBO"				

Year	I/E	Style	Material	Part #
CHRYSLER (CONT.)				
2.2L 135 C.I., I4, Vin 8, A, B, C, D, E, P "TURBO"				
1981-84	I&E	All-Rubber	Viton	45923
2.3L 2346cc, 143 C.I., I4, DIESEL Vin 9, J "4D55T Turbo Mits"				
1983-85	I&E	Metal Clad	Viton	55608
2.4L 2351cc, 148 C.I., I4, Vin B, X, EDZ, G, S "TURBO"				
1995-04	I&E	Top Hat	Viton	55654
2.4L 2351cc, 148 C.I., I4, Vin G "4G64 Mits"				
2001-04	I&E	Metal Clad	Viton	55653
2.4L 2351cc, 148 C.I., I4, Vin G, W "G64B Mits"				
1990-93	I&E	Metal Clad	Viton	55608
2.5L 2507cc, 153 C.I., I4, Vin J "TURBO"				
1989-92	I&E	All-Rubber	Viton	45923
2.5L 2507cc, 153 C.I., I4, Non Turbo				
1988-93	I	Ring & Band	Viton	45506
1986-93	E	Positive	Viton	45799
2.5L 2497cc, 152 C.I., V6, Vin H, N "G673 Mits"				
1995-00	I	Metal Clad	Viton	55653
1995-00	E	Metal Clad	Viton	55659
2.6L 2555cc, 156 C.I., I4, Vin 7, D, E, F, G, H, N, W "G54B Mits"				
1978-89	I&E	Metal Clad	Viton	55608
2.7L 167 C.I., V6, Vin R, T, U				
1998-04	I&E	Top Hat	Viton	55656
2.8L 170 C.I. I6 Vin 6, A				
1960-83	I&E	Umbrella	Nylon	35025
1960-83	I&E	Umbrella	Poly	25241
1960-83	I&E	Umbrella	Nitrile	15241
1960-83	I&E	1-Ring	Teflon/Rubber	1811
1960-83	I	All-Rubber	Viton	45241
1960-83	I	All-Rubber	Poly	25618
1960-83	E	Umbrella	Viton	45977
3.0L 2972cc, 181 C.I., V6, Vin H "G672 Mits."				
2001-04	I	Metal Clad	Viton	55653
2001-04	E	Metal Clad	Viton	55659
3.0L 2972cc, 181 C.I., V6, Vin B, J "G672 Mits."				
1991-96	I&E	Positive	Viton	45806
3.0L 2972cc, 181 C.I., V6, Vin 3, H, S "G672 Mits."				
1987-00	I&E	Metal Clad	Viton	55608
3.2L 3200cc, 197 C.I., V6, Vin J				
1998-01	I&E	Top Hat	Viton	55655
3.2L 198 C.I., I6, Vin A, B				
1960-83	I&E	Umbrella	Nitrile	15241
1960-83	I&E	Umbrella	Poly	25241
1960-83	I&E	Umbrella	Nylon	35025
1960-83	I	All-Rubber	Poly	25616
1960-83	I	All-Rubber	Viton	45241

Part # Material Guide

15000 Series
Nitrile - 225°F

25000 Series
Polyacrylic - 350°F

35000 Series
Nylon - 375°F

45000 Series
Viton - 400°F

55000 Series
Viton/Metal Clad - 400°F

Part #'s in **BOLD** are
common replacements



Year	I/E	Style	Material	Part #
CHRYSLER (CONT.)				
3.2L 198 C.I., I6, Vin A, D				
1960-83	E	Umbrella	Viton	45977
1980-83	I&E	1-Ring	Teflon/Rubber	1812
3.3L 201 C.I., V6, Vin 3, G, R, S, T, U				
2001-09	I&E	All-Rubber	Viton	45821
3.3L 201 C.I., V6, Vin 3, G, R, S, T, U				
1990-00	I&E	O-Ring	Nitrile	15923
1990-00	I&E	All-Rubber	Viton	45923
3.5L 215 C.I., V6, Vin 4, F, G, K, M, V				
1993-05	I&E	Top Hat	Viton	55655
3.7L 226 C.I., V6, Vin K				
2002-09	I&E	Top Hat	Viton	55009
3.7L 225 C.I., I6, Vin 6, B, C, D, E, F, H, J, M, N, W, X				
1980-87	I&E	Umbrella	Nitrile	15241
1980-87	I&E	Umbrella	Poly	25241
1980-87	I&E	Umbrella	Nylon	35025
1980-87	I	All-Rubber	Poly	25616
1980-87	I	All-Rubber	Viton	45241
1980-87	E	Umbrella	Viton	45977
3.8L 230 C.I., V6, Vin L				
2001-09	I&E	All-Rubber	Viton	45821
1991-00	I&E	All-Rubber	Viton	45923
3.9L 239 C.I., V6, Vin M				
1987-95	I&E	Umbrella	Nitrile	15241
1987-95	I&E	Umbrella	Poly	25241
1987-95	I&E	Umbrella	Nylon	35025
1987-95	I	All-Rubber	Poly	25616
1987-95	I	All-Rubber	Viton	45241
1987-95	E	Umbrella	Viton	45977
3.9L 239 C.I., V6, Vin X				
1988-91	I&E	Metal Clad	Viton	55901
4.7L 287 C.I., V8, Vin J, N				
2000-04	I&E	Top Hat	Viton	55689
5.2L 318 C.I., V8, Vin Y				
1988-92	I	Metal Clad	Viton	55855
1988-92	E	Metal Clad	Viton	55856
5.2L 318 C.I., V8				
1959-95	I&E	Ring & Band	Nitrile	15076
1959-95	I&E	1-Ring	Teflon/Rubber	1812
1959-95	I	All-Rubber	Poly	25616
1959-95	I	All-Rubber	Viton	45241
1959-95	E	Umbrella	Viton	45977
1959-95	I&E	Umbrella	Nylon	35025
5.7L 345 C.I., Vin 2,d,h,t "Hemi"				
2003-09	I&E	Top Hat	Viton	55902

Year	I/E	Style	Material	Part #
CHRYSLER (CONT.)				
5.9L 359 C.I., I6, Vin 8, C, D "TURBO CUMMINS"				
1989-98	I	Ring & Band	Viton	45805
5.9L 359 C.I., I6, Vin 8, C, D "TURBO CUMMINS"				
1989-98	E	Ring & Band	Viton	45802
5.9L 359 C.I., I6, Vin 6 "TURBO CUMMINS"				
1998-02	I	Metal Clad	Viton	55720
1998-02	E	Metal Clad	Viton	55719
5.9L 360 C.I., V8, Vin 5, 7 "TRUCK"				
1988-92	I	Metal Clad	Viton	55855
1988-92	E	Metal Clad	Viton	55856
5.9L 360 C.I., V8				
1970-95	I&E	Ring & Band	Nitrile	15076
1970-95	I&E	1-Ring	Teflon/Rubber	1812
1970-95	I	All-Rubber	Poly	25616
1970-95	I	All-Rubber	Viton	45241
1970-95	E	Umbrella	Viton	45977
1970-95	I&E	Umbrella	Nylon	35025
CUMMINS				
3.9L 239 C.I., I4, 4B & 4BT Turbo Diesel				
	E	Ring & Band	Viton	45805
3.9L 239 C.I., I4, 4B & 4BT Turbo Diesel				
	I&E	Ring & Band	Viton	45802
5.9L 359 C.I., I6, 6B & 6BT 12 Valve Turbo Diesel				
	E	Ring & Band	Viton	45805
5.9L 359 C.I., I6, 6B & 6BT 12 Valve Turbo Diesel				
	I&E	Ring & Band	Viton	45802
5.9L ISB ISB 359 C.I., I6, Turbo-Diesel 24 Valve				
	I	Metal Clad	Viton	55720
	E	Metal Clad	Viton	55719
8.3L 505 C.I. 6C Series I6				
	I&E	Top Hat	Viton	65805
HB-4 I4				
	I&E	Ring & Band	Viton	45802
CS464 12 Valve I6				
	I&E	Top Hat	Viton	55805
HB-6 12 Valve I6				
	I&E	Ring & Band	Viton	45802
L-10 24 Valve I6				
	I&E	Metal Clad	Viton	55859
N-14 I6				
	I&E	Top Hat	Viton	55804
NH/NT Series 855 C.I. I6				
	I&E	1-Ring	Teflon/Rubber	2214
NH180 I6				
	I&E	1-Ring	Teflon/Rubber	1811

Part # Material Guide

15000 Series
Nitrile - 225°F

25000 Series
Polyacrylic - 350°F

35000 Series
Nylon - 375°F

45000 Series
Viton - 400°F

55000 Series
Viton/Metal Clad - 400°F

Part #'s in **BOLD** are
common replacements

Year	I/E	Style	Material	Part #
CUMMINS				
NH195 I6				
	I&E	1-Ring	Teflon/Rubber	1811
NVH450, V1486, VT1486, VT600 V12				
	I&E	1-Ring	Teflon/Rubber	1811
DAEWOO				
2.0L 2000cc, I4, Vin Z "X20SE Isuzu"				
1999-02	I&E	Metal Clad	Viton	55717
2.2L 2200cc, I4, Vin 2 "X22SE Isuzu"				
1999-02	I&E	Metal Clad	Viton	55717
DETROIT DIESEL				
60 Series				
	I&E	Metal Clad	Viton	55860
53 Series 2 Valve Head 2, 3, 4, 6, & 8 Cylinder				
	E	1-Ring	Teflon/Rubber	9010
	E	Metal Clad	Viton	55853
	E	Ring & Band	Teflon	DT1208
	E	1-Ring	Teflon/Rubber	1208
71 Series				
	E	1-Ring	Teflon/Rubber	1811
	E	1-Ring	Teflon/Rubber	9010
	E	Metal Clad	Viton	55853
92 Series				
	E	1-Ring	Teflon/Rubber	9010
	E	Metal Clad	Viton	55853
8.2L V8, Naturally Aspirated & Turbo				
	I&E	Metal Clad	Viton	55852
FORD				
1.3L 1295cc, 81 C.I., I4				
1981-85	I&E	All Rubber	Nitrile	15144
1981-85	I&E	1-Spring	Poly	25144
1.3L 1295cc, 81 C.I., I4, Valve, Vin H, K				
1988-97	I&E	Metal Clad	Viton	55833
1.6L 1598cc, 98 C.I., I4, Vin L, W				
1971-92	I&E	All Rubber	Nitrile	15144
1971-92	I&E	1-Spring	Poly	25144
1971-92	I&E	All-Rubber	Viton	45923
1971-92	I&E	Ring & Band	Teflon	DT1711
1.6L 1598cc, 98 C.I., I4, Vin Z "X20SE Isuzu"				
1991-94	I&E	Metal Clad	Viton	55857
1.6L 1598cc, 98 C.I., I4, Vin 5 "86 Mazda"				
1988-89	I&E	Metal Clad	Viton	55833
1.6L 1598cc, 98 C.I., I4, Vin 6 "Turbo"				
1991-94	I&E	Metal Clad	Viton	55831
1.8L 112 C.I., I4, Vin 8 "Mazda"				

Year	I/E	Style	Material	Part #
FORD (CONT.)				
1.8L 112 C.I., I4, Vin 8 "Mazda"				
1994-96	I	Metal Clad	Viton	55861
1991-93	I&E	Metal Clad	Viton	55857
1.9L 116 C.I., I4, Vin 9, J				
1992-96	I&E	All Rubber	Nitrile	15144
1992-96	I&E	1-Spring	Poly	25144
1992-96	I&E	Positive	Viton	45144
2.0L 1989cc, 122 C.I., I4, Vin n, "Duratec"				
2005-09	I&E	Top Hat	Viton	55903
2.0L 122 C.I., I4, Vin 3, Z "ZETEC"				
1995-04	I&E	Top Hat	Viton	55819
2.0L 1989cc, 122 C.I., I4, Vin A "Mazda"				
1994-97	I&E	Metal Clad	Viton	55861
1993	I&E	Metal Clad	Viton	55831
2.0L 1989cc, 122 C.I., I4, Vin C				
1983-86	I&E	Ring & Band	Nitrile	15483
1983-86	I&E	2-Ring	Nitrile	15736
1983-86	I&E	Ring & Band	Poly	25483
1983-86	I&E	Ring & Band	Viton	45483
1983-86	I&E	Ring & Band	Teflon	DT1711
2.2L 2184cc, 133 C.I., I4, Vin L "Turbo Mazda"				
1988-92	I&E	Umbrella	Viton	45120
1988-92	I&E	All-Rubber	Viton	45923
1988-92	I&E	Metal Clad	Viton	55833
2.3L I4 Vin d, z, "duratec"				
2005-09	I&E	Top Hat	Viton	55903
2.3L 140 C.I., I4, Vin A				
1995-97	I&E	Metal Clad	Viton	55854
2.3L 140 C.I., I4, Vin E "TURBO Mitsubishi" - "A,B,2,T,W Ford"				
1977-94	I&E	2-Ring	Nitrile	15736
1985-87	I&E	Metal Clad	Viton	55608
2.3L 140 C.I., I4, Vin T, W "Turbo", Vin B "HSC"				
1977-86	I&E	2-Ring	Nitrile	15736
1977-86	I&E	Ring & Band	Nitrile	15483
1977-86	I&E	Ring & Band	Poly	25483
1977-86	I&E	Ring & Band	Viton	45483
1977-88	I&E	Ring & Band	Teflon	DT1711
2.3L 140 C.I., I4, Vin A, Y				
1974-86	I&E	Umbrella	Nitrile	15120
1974-86	I&E	2-Ring	Nitrile	15704
1974-86	I&E	Umbrella	Poly	25120
1974-86	I&E	2-Ring	Poly	25704
1974-86	I&E	Umbrella	Nylon	35563
1974-86	I&E	Umbrella	Viton	45120
1974-86	I&E	Ring & Band	Viton	45704
1974-86	I&E	Ring & Band	Teflon	DT1711

Part # Material Guide

 15000 Series
Nitrile - 225°F

 25000 Series
Polyacrylic - 350°F

 35000 Series
Nylon - 375°F

 45000 Series
Viton - 400°F

 55000 Series
Viton/Metal Clad - 400°F

 Part #'s in **BOLD** are
common replacements



Year	I/E	Style	Material	Part #
FORD (CONT.)				
2.4L 144 C.I. I6				
1960-64	I&E	Umbrella	Nitrile	15124
1980-84	I&E	Umbrella	Poly	25124
1960-64	I&E	Umbrella	Nylon	35129
1960-64	I&E	1-Ring	Teflon/Rubber	1610
2.5L 153 C.I. I4, Vin C				
1999-01	I&E	Top Hat	Viton	55822
2.5L 153 C.I. I4, Vin C - Ranger				
1998	I&E	Metal Clad	Viton	55854
2.5L 153 C.I. I4, Vin D "HSC"				
1986-90	I&E	Umbrella	Nitrile	15120
1986-90	I&E	Ring & Band	Nitrile	15483
1986-90	I&E	Umbrella	Poly	25120
1986-90	I&E	Ring & Band	Poly	25483
1986-90	I&E	Umbrella	Nylon	35563
1986-90	I&E	Umbrella	Viton	45120
1986-90	I&E	Ring & Band	Viton	45483
2.5L 155 C.I. V6, Vin G, I "DURATEC"				
1995-02	I&E	Top Hat	Viton	55802
2.5L 2450cc, 152 C.I., V6, Vin B "Mazda KL"				
1993-97	I	Metal Clad	Viton	55861
2.8L 171 C.I., V6, Vin S				
1974-83	I&E	All Rubber	Nitrile	15144
1974-83	I&E	1-Spring	Poly	25144
1974-83	I&E	Positive	Viton	45144
2.9L 177 C.I. I6				
1986-90	I&E	Metal Clad	Viton	55396
3.0L 182 C.I. V6, Vin 1 "DURATEC"				
1996-05	I&E	Top Hat	Viton	55802
3.0L 182 C.I. V6, Vin 1, W "VG30E Nissan"				
1993-02	I	Metal Clad	Viton	55828
1993-02	E	Ring & Spring	Viton	45604
3.0L 182 C.I. V6, Vin 1, 2, U "VULCAN"				
1986-99	I	Ring & Band	Viton	45356
1986-99	E	Ring & Band	Viton	45357
3.3L 3275cc, V6, Vin T "VG33E HISSAN"				
1999-02	I	Metal Clad	Viton	55704
3.3L 200 C.I. I6, Vin B, T, X				
1963-83	I&E	Umbrella	Nitrile	15113
1963-83	I&E	Umbrella	Poly	25113
1963-83	I&E	Umbrella	Nylon	35129
1963-83	I&E	1-Ring	Teflon/Rubber	1610
3.8L 232 C.I. V6, Vin 3, 4, R				
1989-93	I&E	Top Hat	Viton	55822
1996-98	I&E	Metal Clad	Viton	55854

Year	I/E	Style	Material	Part #
FORD (CONT.)				
3.8L 232 C.I. V6, Vin 3, 4, R				
1989-95	I	Metal Clad	Viton	55850
1989-95	E	Metal Clad	Viton	55851
1982-88	I&E	Umbrella	Nitrile	15120
1982-88	I&E	Umbrella	Poly	25120
1982-88	I&E	Umbrella	Nylon	35599
3.8L 232 C.I. V6, Vin 3, 4, R				
1982-88	I&E	Ring & Band	Viton	45704
3.9L 238 C.I. V6, Vin G "TRUCK"				
2004-07	I&E	Top Hat	Viton	55904
3.9L 238 C.I. V6, Vin G "DOHC CAR"				
2004-06	I&E	Top Hat	Viton	55905
3.9L 240 C.I. I6, Vin A				
1965-84	I&E	2-Ring	Nitrile	15704
1965-84	I&E	2-Ring	Poly	25704
4.0L 245 C.I. V6, Vin E, K				
1997-09	I&E	Top Hat	Viton	55820
4.0L 245 C.I. V6, Vin X "VGE4 German"				
1998-01	I&E	Metal Clad	Viton	55396
4.0L 240 C.I. I6				
1986-93	I&E	Umbrella	Nitrile	15124
1986-93	I&E	Umbrella	Poly	25124
1986-93	I&E	Metal Clad	Viton	55396
4.2L 256 C.I. V6, Vin 2 "TRITON"				
1999-04	I&E	Top Hat	Viton	55822
1997-98	I&E	Metal Clad	Viton	55854
4.6L 281 C.I. V8, Vin 8, gas only SOHC				
2006-09	I&E	Top Hat	Viton	55906
4.6L 281 C.I. V8, Vin B, V, Y "InTech"				
1995-04	I&E	Top Hat	Viton	55686
4.6L 281 C.I. V8, Vin 6, 9, W				
1992-93	I&E	Top Hat	Viton	55801
1994-09	I&E	Top Hat	Viton	55907
4.9L 300 C.I. I6, C5PG, 300GF				
1985-94	I&E	Ring & Band	Nitrile	15483
1985-94	I&E	Umbrella	Nitrile	15115
1965-94	I&E	O-Ring	Nitrile	15333
1985-94	I&E	Ring & Band	Poly	25483
1985-94	I&E	Umbrella	Poly	25115
1965-94	I&E	O-Ring	Poly	25333
1985-94	I&E	Umbrella	Nylon	35140
1965-94	I&E	Ring & Band	Viton	45483
1985-94	I&E	1-Ring	Teflon/Rubber	1611
1985-94	I&E	Ring & Band	Teflon	DT1811

Part # Material Guide

15000 Series Nitrile - 225°F	25000 Series Polyacrylic - 350°F	35000 Series Nylon - 375°F	45000 Series Viton - 400°F	55000 Series Viton/Metal Clad - 400°F	Part #'s in BOLD are common replacements
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Year	I/E	Style	Material	Part #
FORD (CONT.)				
4.9L 300 C.I., I6, Vin Z "LPG", Vin Y "Light Duty"				
1991-96	I	2-Ring	Nitrile	15704
1991-96	I	2-Ring	Poly	25704
1991-96	I	Ring & Band	Viton	45704
1991-96	E	Ring & Band	Nitrile	15483
1991-96	E	Ring & Band	Poly	25483
1991-96	E	Ring & Band	Viton	45483
4.9L 300 C.I., I6, F-250 PICKUP				
1965-91	I&E	Umbrella	Nitrile	15241
1965-91	I&E	All-Rubber	Viton	45241
5.0L 302 C.I., V8, Vin F, G, N, P				
1968-95	I&E	Umbrella	Nitrile	15124
1968-95	I&E	Ring & Band	Nitrile	15483
1968-95	I&E	Umbrella	Poly	25124
1968-95	I&E	Ring & Band	Poly	25438
1968-95	I&E	Umbrella	Nylon	35595
1968-95	I&E	Ring & Band	Viton	45483
1968-95	I&E	Ring & Band	Viton	45704
1968-95	I&E	Ring & Band	Viton	45736
1968-95	I&E	1-Ring	Teflon/Rubber	1811
1968-95	I&E	Ring & Band	Teflon	DT1811
5.0L 302 C.I., V8, Vin F				
1969-01	I&E	Viton Insert	Viton	45900
1969-01	I&E	1-Ring	Teflon/Rubber	1811
1969-01	I&E	Ring & Band	Teflon	DT1811
5.0L 302 C.I., V8, Vin N, P				
1993-01	I&E	Metal Clad	Viton	55862
1993-01	I&E	1-Ring	Teflon/Rubber	1811
1993-01	I&E	Ring & Band	Teflon	DT1811
5.4L 330 C.I., V8, Vin L,M,Z Triton, Supercharged				
1997-09	I&E	Top Hat	Viton	55907
5.4L 330 C.I., V8, Vin 5, v "Triton"				
1997-09	I&E	Top Hat	Viton	55908
5.4L 330 C.I., V8, Vin A, R "In-Tech"				
1995-04	I&E	Top Hat	Viton	55686
5.8L 351 C.I., V8, Vin R "LIGHTNING"				
1993-95	I	2-Ring	Nitrile	15736
1993-95	I	Ring & Band	Viton	45483
1993-95	E	2-Ring	Poly	25701
5.8L 351 C.I., V8, 351W Car & Truck				
1986-93	I	Ring & Band	Viton	45399
1986-93	I	Metal Clad	Viton	N32478
1986-93	E	Umbrella	Nylon	35595
5.8L 351 C.I., V8, 351W, 351M Vin H Car				
1969-93	I&E	Umbrella	Nitrile	15124
1969-93	I&E	Ring & Band	Nitrile	15483

Year	I/E	Style	Material	Part #
FORD (CONT.)				
5.8L 351 C.I., V8, 351W, 351M Vin H Car				
1969-93	I&E	Umbrella	Poly	25124
1969-93	I&E	Ring & Band	Poly	25483
1969-93	I&E	Umbrella	Nylon	35140
1969-93	I&E	Ring & Band	Viton	45483
5.8L 351 C.I., V8, 351M				
1969-91	I&E	2-Ring	Nitrile	15736
5.8L 351 C.I., V8, 351W, 351M Truck				
1975-89	I&E	Umbrella	Nitrile	15124
1975-89	I&E	2-Ring	Nitrile	15704
1975-89	I&E	Ring & Band	Nitrile	15483
5.8L 351 C.I., V8, 351W, 351M Truck				
1975-89	I&E	Umbrella	Poly	25124
1975-89	I&E	2-Ring	Poly	25704
1975-89	I&E	Ring & Band	Poly	25483
1975-89	I&E	Umbrella	Nylon	35140
1975-89	I&E	Ring & Band	Viton	45483
1975-89	I&E	1-Ring	Teflon/Rubber	1811
1975-89	I&E	Ring & Band	Teflon	DT1811
6.1L 370 C.I., V8, Vin A, H				
1979-91	I&E	Umbrella	Nitrile	15118
1979-91	I&E	Ring & Band	Nitrile	15483
1979-91	I&E	Umbrella	Poly	25118
1979-91	I&E	Ring & Band	Poly	25483
1979-91	I&E	Umbrella	Nylon	35025
1979-91	I&E	Ring & Band	Viton	45483
1979-91	I&E	Ring & Band	Teflon	DT1811
6.6L 400 C.I., V8, Vin S, Z				
1971-82	I	Umbrella	Nitrile	15124
1971-82	I	Umbrella	Poly	25124
1971-82	I	Umbrella	Nylon	35140
1971-82	E	Umbrella	Nitrile	15101
1971-82	E	Umbrella	Nylon	35563
6.6L 401 C.I., I6, CF600/800 SERIES				
1986-94	I&E	Metal Clad	Viton	55858
6.8L 415 C.I., V10 Vin S "Heavy Duty TRITON"				
1997-09	I&E	Top Hat	Viton	55686
6.9L 420 C.I., V8, Vin 1 "Navistar"				
1983-87	I&E	Spring & Band	Viton	45813
1983-87	E	Umbrella	Nylon	35566
7.0L 429 C.I., V8, Vin 8 "Medium Duty"				
1991-98	I	2-Ring	Nitrile	15704
1991-98	I	2-Ring	Poly	25704
1991-98	I	Ring & Band	Viton	45704
1991-98	E	2-Ring	Nitrile	15736
1991-98	E	Ring & Band	Viton	45483

Part # Material Guide

15000 Series
Nitrile - 225°F

25000 Series
Polyacrylic - 350°F

35000 Series
Nylon - 375°F

45000 Series
Viton - 400°F

55000 Series
Viton/Metal Clad - 400°F

Part #'s in **BOLD** are
common replacements



Year	I/E	Style	Material	Part #
FORD (CONT.)				
7.0L 429 C.I., V8, Vin C, J, K, N, Z				
1968-83	I&E	Umbrella	Nitrile	15241
1968-83	I&E	Ring & Band	Nitrile	15483
1968-83	I&E	2-Ring	Nitrile	15736
1968-83	I&E	Umbrella	Poly	25241
1968-83	I&E	Ring & Band	Poly	25486
1968-83	I&E	Umbrella	Nylon	35025
1968-83	I&E	Ring & Band	Viton	45483
7.0L 429 C.I., V8, Vin J "Medium Duty"				
1991-98	I	2-Ring	Nitrile	15704
1991-98	I	2-Ring	Poly	25704
1991-98	E	Ring & Band	Nitrile	15483
1991-98	E	Ring & Band	Poly	25483
1991-98	E	Ring & Band	Viton	45483
7.0L 429 C.I., V8, Vin K "Medium Duty"				
1979-91	I&E	Umbrella	Nitrile	15118
1979-91	I&E	Umbrella	Nitrile	15116
1979-91	I&E	Umbrella	Poly	25118
1979-91	I&E	All-Rubber	Poly	25616
1979-91	I&E	Umbrella	Nylon	35140
1979-91	I&E	All-Rubber	Viton	45241
7.3L 445 C.I., V8, Vin C, K "Navistar"				
1988-94	I&E	Ring & Band	Nitrile	15076
1988-94	I&E	Umbrella	Nylon	35566
7.3L 445 C.I., V8, Vin F "Navistar Turbo Direct Inj." "Power Stroke"				
1994-03	I&E	Top Hat	Viton	55815
7.3L 445 C.I., V8, Vin M "Navistar"				
1988-94	I&E	Spring & Band	Viton	45813
7.5L 460 C.I., V8, 460L S, G, 875 R				
1992-94	I	Metal Clad	Viton	55845
1992-94	E	Ring & Band	Nitrile	15483
1992-94	E	Ring & Band	Poly	25483
1992-94	E	Ring & Band	Viton	45483
1972-92	I&E	Umbrella	Nitrile	15241
1972-92	I&E	Umbrella	Poly	25241
1972-92	I&E	Umbrella	Nylon	35240
1972-92	I&E	All-Rubber	Viton	45241
7.5L 460 C.I., V8, Vin A, C				
1968-87	I&E	Ring & Band	Nitrile	15076
1968-87	I&E	Umbrella	Nylon	35566
7.5L 460 C.I., V8, Vin A, J, L				
1987-92	I	Ring & Band	Viton	45806
1987-92	E	Ring & Band	Viton	45807
1973-87	I&E	All-Rubber	Poly	25616
1973-87	I&E	Umbrella	Nylon	35025

Year	I/E	Style	Material	Part #
1973-87	I&E	All-Rubber	Viton	45241
7.5L 460 C.I., V8, 460L S, G, 875 R				
1986-92	I&E	2-Ring	Nitrile	15704
1986-92	I&E	2-Ring	Poly	25704
1986-92	I&E	Ring & Band	Viton	45704
7.5L 460 C.I., V8, Vin G "Includes LPG"				
1992-97	I&E	Ring & Band	Viton	45483
7.8L 477 C.I., V8, D8PM, M				
1958-81	I&E	Umbrella	Nitrile	15105
1958-81	I&E	Umbrella	Poly	25105
8.8L 534 C.I., V8, Vin L "Medium Duty"				
1958-81	I&E	Umbrella	Nitrile	15105
1958-81	I&E	Umbrella	Poly	25105
GENERAL MOTORS				
1.0L 993cc, 61 C.I., I3, Geo Vin 6 "G10 Suzuki"				
1989-00	I&E	Metal Clad	Viton	55836
1.0L 993cc, 61 C.I., I3, Chevy Vin 5, M "G10 Suzuki"				
1985-88	I&E	Metal Clad	Viton	55830
1.3L 1295cc, 79 C.I., I4, Geo Vin 9 "G13BA Suzuki"				
1995-97	I&E	Metal Clad	Viton	55830
1.3L 1295cc, 79 C.I., I4, Chevy Vin 2 "G13BB Suzuki"				
1998-01	I&E	Metal Clad	Viton	55836
1.5L 1471cc, 92 C.I., I4, Vin 7, K "4XC1 Isuzu"				
1985-89	I&E	Metal Clad	Viton	55825
1.6L 1588cc, 98 C.I., I4, Geo Vin 6 "G16KV Suzuki"				
1994-00	I&E	Metal Clad	Viton	55836
1.6L 1588cc, 98 C.I., I4, Geo Vin 6 "4XE1 Isuzu"				
1990-93	I&E	Metal Clad	Viton	55831
1.6L 1588cc, 98 C.I., I4, Geo Vin 5 "4AGE Toyota" "4XE1W Isuzu"				
1990-92	I&E	Metal Clad	Viton	55831
1.6L 1588cc, 98 C.I., I4, Geo Vin 5, 6 "4AF, 4AFE Toyota"				
1989-97	I&E	Metal Clad	Viton	55831
1.6L 1588cc, 98 C.I., I4, Geo Vin U "G16KC Suzuki"				
1989-95	I&E	Metal Clad	Viton	55830
1.6L 1588cc, 98 C.I., I4, Vin 6 "Korean"				
1988-93	I&E	Metal Clad	Viton	45519
1.6L 1588cc, 98 C.I., I4, Vin 5 "4AGE Toyota"				
1988	I&E	Metal Clad	Viton	55831
1.6L 1588cc, 98 C.I., I4, Vin 4 "4ALC Toyota"				
1985-88	I&E	Metal Clad	Viton	55825
1.6L 98 C.I., I4, Vin 9, C, E				
1976-87	I	Ring & Band	Viton	45506
1976-87	E	Ring & Band	Viton	45802
1.8L 1788cc, 110 C.I., I4, Geo Vin 8 "4XF1 Isuzu" "7AFE Toyota"				
1992-97	I&E	Metal Clad	Viton	55831

Engine Parts

Part # Material Guide

15000 Series
Nitrile - 225°F

25000 Series
Polyacrylic - 350°F

35000 Series
Nylon - 375°F

45000 Series
Viton - 400°F

55000 Series
Viton/Metal Clad - 400°F

Part #'s in **BOLD** are
common replacements

Year	I/E	Style	Material	Part #
GENERAL MOTORS (CONT.)				
1.8L 1762cc, 110 C.I., I4, Vin 8 "1ZZFE Toyota"				
1998-02	I&E	Metal Clad	Viton	55709
1.8L 1819cc, 110 C.I., I4, Vin D "4FB1 Isuzu" Vin N "Isuzu"				
1972-86	I&E	Ring & Spring	Viton	45604
1.8L 112 C.I., I4, Vin G				
1982	I	Ring & Band	Viton	45506
1982	E	Ring & Band	Viton	45802
1.8L 1816cc, 110 C.I., I4, Vin B "G100Z Isuzu"				
1976-79	I&E	Ring & Spring	Viton	45604
1.8L 1762cc, 110 C.I., I4, Vin L "2ZZGE Toyota" "High Output"				
2000-06	I&E	Metal Clad	Viton	55724
1.8L 1762cc, 110 C.I., I4, Vin 8 "1ZZFE Toyota"				
2003-05	I&E	Metal Clad	Viton	55709
1.9L 119 C.I., I4, Vin A "Isuzu"				
1982-85	I&E	Ring & Spring	Viton	45604
2.0L 1995cc, 122 C.I., I4, Vin PX "Ecotec turbo"				
2004-09	I&E	Top Hat	Viton	55909
2.0L 122 C.I., I4, Vin Y				
1983-89	I	Ring & Band	Viton	45506
1983-89	E	Ring & Band	Viton	45802
2.0L 1995cc, 122 C.I., I4, Vin C "J20A Suzuki"				
1999-03	I&E	Metal Clad	Viton	55861
2.0L 122 C.I., I4, Vin H "Brazil"				
1988-94	I&E	Metal Clad	Viton	45519
2.2L 134 C.I., I4, Vin b,d,f,h "Ecotec"				
2004-09	I&E	Top Hat	Viton	55909
2.2L 134 C.I., I4, Vin 4, 5				
1998-03	I&E	Top Hat	Viton	55813
2.2L 134 C.I., I4, Vin 4, 5				
1994-97	I&E	Ring & Band	Viton	45819
2.2L 134 C.I., I4, Vin S "Isuzu"				
1981-84	I&E	Metal Clad	Viton	55827
2.2L 134 C.I., I4, Vin 4, G				
1990-93	I	Ring & Band	Viton	45506
1990-93	E	Ring & Band	Viton	45802
2.3L 138 C.I., I4, Vin D "Quad 4"				
1984-95	I&E	Metal Clad	Viton	55845
1988-91	I&E	Positive	Viton	55225
2.4L 146 C.I., I4, Vin 5,B,PVZ "Ecotec"				
2006-09	I&E	Top Hat	Viton	55909
2.4L 146 C.I., I4, Vin T, LD9				
1996-02	I&E	Metal Clad	Viton	55708

Year	I/E	Style	Material	Part #
GENERAL MOTORS (CONT.)				
2.5L 2500cc, V6, Vin 4 "H25A Suzuki"				
2001-04	I&E	Metal Clad	Viton	55861
2.5L 151 C.I., I4, Vin U "Pontiac"				
1987-93	I	Ring & Band	Viton	45875
1987-93	E	Ring & Band	Viton	45877
2.5L 153 C.I., I4				
1962-86	I&E	2-Ring	Nitrile	15736
1962-86	I&E	O-Ring	Nitrile	15333
1962-86	I&E	Umbrella	Nitrile	15120
1962-86	I&E	Ring & Band	Nitrile	15483
1962-86	I&E	O-Ring	Poly	25333
1962-86	I&E	Umbrella	Poly	25120
1962-86	I&E	Ring & Band	Poly	25483
1962-86	I&E	Umbrella	Nylon	35563
1962-86	I&E	O-Ring	Viton	45333
1962-86	I&E	Umbrella	Viton	45120
1962-86	I&E	Ring & Band	Viton	45483
1962-86	I&E	1-Ring	Teflon/Rubber	1811
1962-86	I&E	Ring & Band	Teflon	DT1811
2.5L 153 C.I., I4				
1986-95	I	Ring & Band	Viton	45506
1986-95	E	Ring & Band	Viton	45802
2.8L 169 C.I., I4, Vin 8 "Vortec"				
2004-05	I&E	Top Hat	Viton	55621
2.8L 173 C.I., V6, Vin S, W				
1988-92	I	Ring & Band	Viton	45397
1988-92	E	Ring & Band	Viton	45398
2.8L 173 C.I., V6, Vin 1, 7,B,S,W, X, Z				
1980-87	I&E	Umbrella	Nitrile	15120
1980-87	I&E	O-Ring	Nitrile	15333
1980-87	I&E	2-Ring	Nitrile	15704
1980-87	I&E	Umbrella	Poly	25120
1980-87	I&E	O-Ring	Poly	25333
1980-87	I&E	2-Ring	Poly	25704
1980-87	I&E	Umbrella	Nylon	35563
1980-87	I&E	Umbrella	Viton	45120
1980-87	I&E	O-Ring	Viton	45333
1980-87	I&E	Ring & Band	Viton	45704
1980-87	I&E	1-Ring	Teflon/Rubber	1811
1980-87	I&E	Ring & Band	Teflon	DT1811
3.0L 181 C.I., V6, Vin I				
1988-92	I&E	Metal Clad	Viton	55910
3.0L 181 C.I., V6, Vin R				
1997-01	I&E	Metal Clad	Viton	55717
3.0L 181 C.I., V6, Vin L, E				
1982-87	I&E	2-Ring	Nitrile	15736

15000 Series
Nitrile - 225°F

25000 Series
Polyacrylic - 350°F

35000 Series
Nylon - 375°F

45000 Series
Viton - 400°F

55000 Series
Viton/Metal Clad - 400°F

Part #'s in **BOLD** are
common replacements



Year	I/E	Style	Material	Part #
GENERAL MOTORS (CONT.)				
3.0L 181 C.I., V6, Vin L, E				
1982-87	I&E	Ring & Band	Poly	25483
1982-87	I&E	Ring & Band	Viton	45483
3.0L 181 C.I. "Buick"				
1982-83	I&E	2-Ring	Nitrile	15205
1982-83	I&E	Umbrella	Nitrile	15120
1982-83	I&E	2-Ring	Poly	25205
1982-83	I&E	Umbrella	Nylon	35563
1982-83	I&E	Umbrella	Viton	45120
1982-83	I&E	1-Ring	Teflon/Rubber	1811
1982-83	I&E	Ring & Band	Teflon	DT1811
3.1L 189 C.I., V6, Vin J				
2000-05	I&E	Top Hat	Viton	55816
3.1L 189 C.I., V6, Vin W, T				
1989-94	I	Ring & Band	Viton	45397
1985-94	E	Ring & Band	Viton	45398
3.1L 189 C.I., V6, Vin D				
1990-95	I&E	Umbrella	Nitrile	15120
1990-95	I&E	O-Ring	Nitrile	15333
1990-95	I&E	Umbrella	Poly	25120
1990-95	I&E	O-Ring	Poly	25333
1990-95	I&E	Umbrella	Viton	45120
1990-95	I&E	O-Ring	Viton	45333
1990-95	I&E	1-Ring	Teflon/Rubber	1811
1990-95	I&E	Ring & Band	Teflon	DT1811
3.1L 189 C.I., V6, Vin M				
1994-99	I&E	Top Hat	Viton	55811
3.3L 204 C.I., V6, Vin N				
1989-93	I&E	2-Ring	Nitrile	15736
1989-93	I&E	Ring & Band	Nitrile	15483
1989-93	I&E	Ring & Band	Poly	25483
1989-93	I&E	Ring & Band	Viton	45483
3.4L 207 C.I., V6, Vin E				
2000-05	I&E	Top Hat	Viton	55816
3.4L 207 C.I., V6, Vin E, F				
1996-99	I&E	Top Hat	Viton	55811
3.4L 207 C.I., V6, Vin S				
1993-95	I&E	2-Ring	Nitrile	15704
1993-95	I&E	2-Ring	Poly	25704
1993-95	I&E	Ring & Band	Viton	45704
3.4L 207 C.I., V6, Vin X				
1991-97	I&E	Metal Clad	Viton	55845
3.5L 214 C.I., V6, Vin H				
1999-03	I&E	Top Hat	Viton	55821

Year	I/E	Style	Material	Part #
GENERAL MOTORS (CONT.)				
3.8L 229 C.I., V6, Vin 9, K				
1980-84	I&E	Umbrella	Nitrile	15120
1980-84	I&E	O-Ring	Nitrile	15333
1980-84	I&E	Ring & Band	Nitrile	15483
1980-84	I&E	2-Ring	Nitrile	15736
3.8L 229 C.I., V6, Vin 9, K				
1980-84	I&E	Umbrella	Poly	25120
1980-84	I&E	O-Ring	Poly	25333
1980-84	I&E	Ring & Band	Poly	25483
1980-84	I&E	Umbrella	Nylon	35563
1980-84	I&E	Umbrella	Viton	45120
1980-84	I&E	Ring & Band	Viton	45483
1980-84	I&E	1-Ring	Teflon/Rubber	1811
1980-84	I&E	Ring & Band	Teflon	DT1811
3.8L 231 C.I., V6, Vin L				
1978-95	I	Metal Clad	Viton	N32690
3.8L 231 C.I., V6, Vin 1, 4 "Supercharged"				
2000-05	I	Ring & Band	Viton	45808
2000-05	E	Ring & Band	Viton	45809
1991	I	Ring & Band	Nitrile	15483
1991	I	Ring & Band	Poly	25483
1991	I	Umbrella	Nylon	35563
1991	I	Ring & Band	Viton	45483
1991	E	2-Ring	Nitrile	15205
1991	E	2-Ring	Poly	25205
3.8L 231 C.I., V6, Vin 7, 9 "Turbo Buick"				
1984-87	I	Ring & Band	Nitrile	15483
1984-87	I	Ring & Band	Poly	25483
1984-87	I	Umbrella	Nylon	35563
1984-87	I	Ring & Band	Viton	45483
1984-87	E	2-Ring	Nitrile	15205
1984-87	E	2-Ring	Poly	25205
1977-95	E	Ring & Band	Nitrile	15483
1977-95	E	Ring & Band	Poly	25483
1977-95	E	Umbrella	Nylon	35563
1977-95	E	Ring & Band	Viton	45483
3.9L 239 C.I., I4, Vin L "Turbo Cummins"				
1989-91	I&E	Ring & Band	Viton	45805
1989-91	I&E	Ring & Band	Viton	45802
4.1L 250 C.I., V8, Vin 7, 8 "Cadillac"				
1982-88	I&E	Positive	Viton	55341
4.1L 250 C.I., I6, Vin C, D, L, N, P, Q, S				
1966-84	I&E	Umbrella	Nitrile	15120
1966-84	I&E	O-Ring	Nitrile	15333
1966-84	I&E	Ring & Band	Nitrile	15483

Part # Material Guide

15000 Series
Nitrile - 225°F

25000 Series
Polyacrylic - 350°F

35000 Series
Nylon - 375°F

45000 Series
Viton - 400°F

55000 Series
Viton/Metal Clad - 400°F

Part #'s in **BOLD** are
common replacements

Year	I/E	Style	Material	Part #
GENERAL MOTORS (CONT.)				
4.1L 250 C.I., I6, Vin C, D, L, N, P, Q, S				
1966-84	I&E	2-Ring	Nitrile	15736
1966-84	I&E	Umbrella	Poly	25120
1966-84	I&E	O-Ring	Poly	25333
1966-84	I&E	Ring & Band	Poly	25483
1966-84	I&E	Umbrella	Nylon	35563
4.1L 250 C.I., I6, Vin C, D, L, N, P, Q, S				
1966-84	I&E	Umbrella	Viton	45120
1966-84	I&E	O-Ring	Viton	45333
1966-84	I&E	Ring & Band	Viton	45483
1966-84	I&E	1-Ring	Teflon/Rubber	1811
1966-84	I&E	Ring & Band	Teflon	DT1811
4.1L 252 C.I., V6, Vin 4 "Buick" .605 Guide				
1980-84	I&E	Umbrella	Nitrile	15120
1980-84	I&E	2-Ring	Nitrile	15205
1980-84	I&E	Umbrella	Poly	25120
1980-84	I&E	2-Ring	Poly	25205
1980-84	I&E	Umbrella	Nylon	35563
1980-84	I&E	Umbrella	Viton	45120
1980-84	I&E	1-Ring	Teflon/Rubber	1811
1980-84	I&E	Ring & Band	Teflon	DT1811
4.1L 252 C.I., V6, Vin 4 "Buick" .552 Guide				
1980-87	I&E	Umbrella	Nitrile	15120
1980-87	I&E	Ring & Band	Nitrile	15483
1980-87	I&E	Umbrella	Poly	25120
1980-87	I&E	Ring & Band	Poly	25483
1980-87	I&E	Umbrella	Nylon	35563
1980-87	I&E	Umbrella	Viton	45120
1980-87	I&E	Ring & Band	Viton	45483
1980-87	I&E	1-Ring	Teflon/Rubber	1811
1980-87	I&E	Ring & Band	Teflon	DT1811
4.2L 256 C.I., I6, Vin S				
2002-04	I&E	Top Hat	Viton	55821
4.3L 262 C.I., V6, Vin W				
1996-02	I&E	Metal Clad	Viton	55703
4.3L 262 C.I., V6, Also 1975-76				
1985-96	I&E	O-Ring	Nitrile	15333
1985-96	I&E	Umbrella	Nitrile	15120
1985-96	I&E	Ring & Band	Nitrile	15483
1985-96	I&E	O-Ring	Poly	25333
1985-96	I&E	Umbrella	Poly	25120
1985-96	I&E	Ring & Band	Poly	25483
1985-96	I&E	Umbrella	Nylon	35563
1985-96	I&E	O-Ring	Viton	45333
1985-96	I&E	Umbrella	Viton	45120
1985-96	I&E	Ring & Band	Viton	45483

Year	I/E	Style	Material	Part #
GENERAL MOTORS (CONT.)				
4.3L 262 C.I., V6, Also 1975-76				
1985-96	I&E	1-Ring	Teflon/Rubber	1811
1985-96	I&E	Ring & Band	Teflon	DT1811
4.4L 267 C.I., V8, Vin J "Chevrolet"				
1979-82	I&E	Ring & Band	Viton	45483
1979-82	I&E	O-Ring	Nitrile	15333
1979-82	I&E	Umbrella	Nitrile	15120
1979-82	I&E	O-Ring	Poly	25333
4.4L 267 C.I., V8, Vin J "Chevrolet"				
1979-82	I&E	Umbrella	Poly	25120
1979-82	I&E	Umbrella	Nylon	35563
1979-82	I&E	Ring & Band	Viton	45433
1979-82	I&E	Umbrella	Viton	45120
1979-82	I&E	1-Ring	Teflon/Rubber	1811
1979-82	I&E	Ring & Band	Teflon	DT1811
4.5L 273 C.I., V8, Vin 3, 5, 8 "Cadillac"				
1988-92	I&E	Positive	Viton	55341
1988-92	I&E	Metal Clad	Viton	55341
4.6L 281 C.I., V8, Vin 9, A, Y "Northstar"				
2000-09	I&E	Top Hat	Viton	55911
1993-99	I&E	Top Hat	Viton	55808
4.8L 293 C.I., V8, Vin V				
2001-09	E	Top Hat	Viton	55818
2001-09	I	Top Hat	Viton	55817
1999-01	I&E	Metal Clad	Viton	55716
4.8L 292 C.I., I6, Vin S, T				
1963-89	I&E	Ring & Band	Viton	45483
1963-89	I&E	O-Ring	Nitrile	15333
1963-89	I&E	Umbrella	Nitrile	15120
1963-89	I&E	O-Ring	Poly	25333
1963-89	I&E	Umbrella	Poly	25120
1963-89	I&E	Umbrella	Nylon	35563
1963-89	I&E	O-Ring	Viton	45333
1963-89	I&E	Umbrella	Viton	45120
1963-89	I&E	1-Ring	Teflon/Rubber	1811
1963-89	I&E	Ring & Band	Teflon	DT1811
4.9L 300 C.I., V8, Vin B "Cadillac"				
1991-95	I&E	Positive	Viton	55341
4.9L 301 C.I., V8, Vin W, Y				
1968-81	I&E	Umbrella	Nitrile	15120
1968-81	I&E	2-Ring	Nitrile	15704
1968-81	I&E	Umbrella	Poly	25120
4.9L 301 C.I., V8, Vin W, Y				
1968-81	I&E	2-Ring	Poly	25704
1968-81	I&E	Umbrella	Nylon	35563
1968-81	I&E	Umbrella	Viton	45120

Part # Material Guide					
15000 Series Nitrile - 225°F	25000 Series Polyacrylic - 350°F	35000 Series Nylon - 375°F	45000 Series Viton - 400°F	55000 Series Viton/Metal Clad - 400°F	Part #'s in BOLD are common replacements



Year	I/E	Style	Material	Part #
GENERAL MOTORS (CONT.)				
4.9L 301 C.I., V8, Vin W, Y				
1968-81	I&E	Ring & Band	Viton	45704
1968-81	I&E	1-Ring	Teflon/Rubber	1811
1968-81	I&E	Ring & Band	Teflon	DT1811
5.0L 305 C.I., V8				
1998-02	I&E	Metal Clad	Viton	55703
5.0L 305 C.I. & 307 C.I. V8				
1967-95	I&E	Umbrella	Nitrile	15120
1967-95	I&E	O-Ring	Nitrile	15333
5.0L 305 C.I. & 307 C.I. V8				
1967-95	I&E	Ring & Band	Nitrile	15483
1967-95	I	Umbrella	Nylon	35563
1967-95	E	Umbrella	Nylon	35240
1967-95	I&E	Umbrella	Poly	25120
1967-95	I&E	O-Ring	Poly	25333
1967-95	I&E	Ring & Band	Poly	25463
1967-95	I&E	Umbrella	Viton	45120
1967-95	I&E	O-Ring	Viton	45333
1967-95	I&E	Ring & Band	Viton	45483
1967-95	I&E	1-Ring	Teflon/Rubber	1811
1967-95	I&E	Ring & Band	Teflon	DT1811
5.3L 323 C.I., V8				
2001-08	I	Top Hat	Viton	55817
2001-08	E	Top Hat	Viton	55818
1999-01	I&E	Metal Clad	Viton	55716
5.7L 350 C.I., V8, Vin G "LST"				
2001-04	I	Top Hat	Viton	55817
2001-04	E	Top Hat	Viton	55818
1997-01	I&E	Metal Clad	Viton	55716
5.7L 350 C.I., V8, Vin P "LTY"				
1994-97	I&E	Metal Clad	Viton	55703
5.7L 350 C.I., V8, Vin R				
1996-02	I&E	Metal Clad	Viton	55703
5.7L 350 C.I., Diesel				
1977-85	I&E	Umbrella	Nitrile	15120
1977-85	I&E	2-Ring	Nitrile	15704
1977-85	I&E	Ring & Band	Nitrile	15483
1977-85	I	Umbrella	Nylon	35563
1977-85	E	Umbrella	Nylon	35595
1977-85	I&E	Umbrella	Poly	25120
1977-85	I&E	2-Ring	Poly	25704
1977-85	I&E	Ring & Band	Poly	25463
1977-85	I&E	Umbrella	Viton	45120
1977-85	I&E	Ring & Band	Viton	45704
1977-85	I&E	Ring & Band	Viton	45483
1977-85	I&E	1-Ring	Teflon/Rubber	1811

Year	I/E	Style	Material	Part #
GENERAL MOTORS (CONT.)				
5.7L 350 C.I., Diesel				
1977-85	I&E	Ring & Band	Teflon	DT1811
5.7L 350 C.I.				
1967-93	I&E	O-Ring	Nitrile	15333
1967-93	I&E	Umbrella	Nitrile	15120
1967-93	I&E	2-Ring	Nitrile	15704
1967-93	I&E	Ring & Band	Nitrile	15483
1967-93	I	Umbrella	Nylon	35563
1967-93	E	Umbrella	Nylon	35595
1967-93	I&E	O-Ring	Poly	25333
1967-93	I&E	Umbrella	Poly	25120
5.7L 350 C.I.				
1967-93	I&E	2-Ring	Poly	25704
1967-93	I&E	Ring & Band	Poly	25463
1967-93	I&E	O-Ring	Viton	45333
1967-93	I&E	Umbrella	Viton	45120
1967-93	I&E	Ring & Band	Viton	45704
1967-93	I&E	Ring & Band	Viton	45483
1967-93	I&E	1-Ring	Teflon/Rubber	1811
1967-93	I&E	Ring & Band	Teflon	DT1811
6.0L 364 C.I., V8, Vin N, U				
2001-09	I	Top Hat	Viton	55817
2001-09	E	Top Hat	Viton	55818
1999-01	I&E	Metal Clad	Viton	55716
6.0L 368 C.I., V8, Vin G "Cadillac"				
1980-84	I&E	Metal Clad	Viton	N32890
6.0L 366 C.I., V8				
1966-98	I&E	Umbrella	Nitrile	15118
1966-98	I&E	Ring & Band	Nitrile	15483
1966-98	I&E	Umbrella	Poly	25118
1966-98	I&E	Ring & Band	Poly	25463
1966-98	I&E	Umbrella	Nylon	35025
1966-98	I&E	Ring & Band	Viton	45483
6.2L 376, 378 C.I., V8, Vin U, Y "Vortec"				
2007-09	I	Top Hat	Viton	55817
2007-09	E	Top Hat	Viton	55818
6.2L 379 C.I., V8, Vin C, J				
1982-93	I	O-Ring	Nitrile	15333
1982-93	I	O-Ring	Poly	25333
1982-93	I	O-Ring	Viton	45333
1982-93	E	Ring & Band	Nitrile	15076
1982-93	E	Metal Clad	Viton	55718
6.5L 395 C.I., V8				
1992-02	I	O-Ring	Nitrile	15333
1992-02	I	O-Ring	Poly	25333
1992-02	I	O-Ring	Viton	45333

Part # Material Guide

15000 Series
Nitrile - 225°F

25000 Series
Polyacrylic - 350°F

35000 Series
Nylon - 375°F

45000 Series
Viton - 400°F

55000 Series
Viton/Metal Clad - 400°F

Part #'s in **BOLD** are
common replacements

Year	I/E	Style	Material	Part #
GENERAL MOTORS (CONT.)				
6.5L 395 C.I., V8				
1992-02	E	Ring & Band	Nitrile	15076
6.6L 400 C.I., V8, Vin 1 "Duramax"				
2001-04	I&E	Metal Clad	Viton	55723
6.6L 400 C.I., V8, Small block				
1975-80	I&E	O-Ring	Nitrile	15333
1975-80	I&E	Umbrella	Nitrile	15120
1975-80	I&E	2-Ring	Nitrile	15704
1975-80	I&E	O-Ring	Poly	25333
1975-80	I&E	Umbrella	Poly	25120
1975-80	I&E	2-Ring	Poly	25704
1975-80	I&E	Umbrella	Nylon	35563
6.6L 400 C.I., V8, Small block				
1975-80	I&E	O-Ring	Viton	45333
1975-80	I&E	Umbrella	Viton	45120
1975-80	I&E	Ring & Band	Viton	45704
1975-80	I&E	1-Ring	Teflon/Rubber	1811
1975-80	I&E	Ring & Band	Teflon	DT1B11
7.0L 427 C.I., V8, Vin E, "Z06"				
2007-09	I	Top Hat	Viton	55817
2007-09	E	Top Hat	Viton	55818
7.0L 427 C.I., V8, Heavy Duty Double Spring				
1968-90	I&E	Ring & Band	Nitrile	15076
1968-90	I&E	Umbrella	Nitrile	15612
1968-90	I&E	Umbrella	Nylon	35819
1968-90	I&E	Umbrella	Nylon	35025
1968-90	I&E	Umbrella	Viton	45616
7.4L 454 C.I., V8, CAR				
1970-00	I&E	Umbrella	Nitrile	15612
1970-00	I&E	2-Ring	Nitrile	15736
1970-00	I&E	Umbrella	Nylon	35025
1970-00	I&E	Umbrella	Viton	45616
7.4L 454 C.I., V8, "Double Spring Truck"				
1973-00	I&E	Umbrella	Nitrile	15612
1973-00	I&E	Ring & Band	Nitrile	15076
1973-00	I&E	Umbrella	Nylon	35025
1973-00	I&E	Umbrella	Nylon	35819
1973-00	I&E	Umbrella	Viton	45616
8.1L 496 C.I., V8, Vin G "Vortec"				
2001-07	I&E	Metal Clad	Viton	55722
1.3L 1342cc I4 EV1-EV2				
1984-86	I&E	Positive	Viton	45606
1.3L 1342cc I4 D13A2-D15A1				
1987	I&E	Positive	Viton	45606

Year	I/E	Style	Material	Part #
HONDA				
1.5L 1488cc I4 EM1				
1980-83	I&E	Positive	Viton	45606
1.5L 1488cc I4 EW1-EW2 D15A2, EW3-EW4 D15A3				
1984-88	I&E	Positive	Viton	45606
1976-78	I&E	Positive	Viton	45606
2.2L 2156cc, I4, H22A1				
1990-01	I	Metal Clad	Viton	55848
1990-01	E	Metal Clad	Viton	55849
2.3L 2254cc, I4, F23A1, F23A4, F23A5, F23A7				
1998-02	I	Metal Clad	Viton	55848
2.3L 2254cc, I4, F23A1, F23A4, F23A5, F23A7				
1998-02	E	Metal Clad	Viton	55849
2.4L 2354cc, I4, K24A4				
2003-05	I	Metal Clad	Viton	55848
2.4L 2354cc, I4,				
2003-05	E	Metal Clad	Viton	55849
2.6L 2559cc, I4, 4ZE1 "Isuzu"				
1994-96	I&E	Ring & Spring	Viton	45604
3.0L 2997cc, V6, J30A1				
2000-05	I	Metal Clad	Viton	55848
2000-02	E	Metal Clad	Viton	55849
3.2L 3165cc, V6, 6VD1 "Isuzu"				
1994-97	I&E	Metal Clad	Viton	55831
1994-97	I&E	Metal Clad	Viton	55831
3.5L 3474cc, V6, J35A1				
1999-04	I	Metal Clad	Viton	55848
1999-04	E	Metal Clad	Viton	55849
HYUNDAI				
1.5L 1468cc, I4				
1986-94	I&E	Positive	Viton	45606
1.6L 1596cc, I4				
1992-95	I&E	Positive	Viton	45606
2.0L 1997cc, I4				
1992-98	I&E	Positive	Viton	45606
2.4L 2351cc, I4				
1999-05	I&E	Positive	Viton	45606
3.0L 2972cc, V6				
2001	E	Positive	Viton	45606
1990-98	I&E	Metal Clad	Viton	55608
3.5L 3500cc, V6				
2002-05	E	Positive	Viton	45606
IHC				
1.8L 113 C.I. I4, C113				
	I&E	1-Ring	Teflon/Rubber	1811

Part # Material Guide					
15000 Series Nitrile - 225°F	25000 Series Polyacrylic - 350°F	35000 Series Nylon - 375°F	45000 Series Viton - 400°F	55000 Series Viton/Metal Clad - 400°F	Part #'s in BOLD are common replacements



Year	I/E	Style	Material	Part #
IHC (CONT.)				
2.0L 123 C.I. I4, U123 POWER UNIT, SUPER A1 AND AV1, SUPER C, 100, 100HC, 200				
	I&E	1-Ring	Teflon/Rubber	1811
2.2L 135 C.I. I4, 91, 93, 201, 330, 340, 404, 2404, IND. LO-BOY, T5, TC5, T340, T340A - C135				
	I&E	1-Ring	Teflon/Rubber	1811
2.4L 146 C.I. I4, 424, 500, 500C, 660, 770, 780, 2424 - C146				
	I&E	Umbrella	Nitrile	15120
	I&E	Umbrella	Poly	25120
2.4L 146 C.I. I4, 424, 500, 500C, 660, 770, 780, 2424 - C146				
	I&E	Umbrella	Viton	45120
2.5L 152 C.I. I4, 122, H, HV, IA, IU4, OA, W, W4 - C152				
	I&E	1-Ring	Teflon/Rubber	1811
2.5L 153 C.I. I4, 93, 105, 203, 210, 225, 230, 275, 375, 444, 504, 2444, 2500, 2504, 3514, 4000 - C153				
	I&E	1-Ring	Teflon/Rubber	1811
2.7L 164 C.I. I4, SUPER H, HV, W4, U164 - C164				
	I&E	1-Ring	Teflon/Rubber	1811
2.9L 175 C.I. I4, 375, 454, 464, 2400A, 2400B, 2405B, 2410B, 2412B, 3400A, 3514, T7 SERIES C175				
	I&E	1-Ring	Teflon/Rubber	1811
3.6L 221 C.I. L6, 205, 260, 315, 460, 605, 4008, 3618 - C221				
	I&E	O-Ring	Nitrile	15333
3.8L 232 C.I. L6, 275, 375				
	I&E	Ring & Band	Viton	45483
4.3L 263 C.I. L6, 50, 403, 560, 615, 656, 660, 706, 2656, 2706, 3600A, 3800A, 3850, UC263				
	I&E	O-Ring	Nitrile	15333
4.6L 282 C.I. L6, 403, 503 - C282				
	I&E	Umbrella	Nitrile	15126
4.8L 291 C.I. L6, 616, 622, 666, 706, 756, 766, 2706, 2756, 9000, HYDRO 70 - C291				
	I&E	Umbrella	Nitrile	15126
4.9L 301 C.I. L6, C301				
	I&E	Umbrella	Nitrile	15126
5.9L 360 C.I. L6				
	I&E	Top Hat	Viton	55809
7.6L 466 C.I. L6				
	I&E	Top Hat	Viton	55812
	I&E	Top Hat	Viton	55809
	I&E	Oil Shield	Viton	55731
8.7L 530 C.I. L6				
	I&E	Top Hat	Viton	55812
	I&E	Top Hat	Viton	55808
	I&E	Top Hat	Viton	55812

Year	I/E	Style	Material	Part #
IHC (CONT.)				
2.5L 152 C.I. I4				
	I&E	O-Ring	Nitrile	15333
3.2L 196 C.I. I4				
	I&E	O-Ring	Nitrile	15333
3.8L 232 C.I. L6				
1969-78	I&E	Umbrella	Nylon	35586
5.6L 345 C.I. V8				
	I&E	O-Ring	Nitrile	15333
I.H.C. NAVISTAR				
	I&E	Top Hat	Viton	55809
6.4L 392 C.I. V8				
	I&E	O-Ring	Nitrile	15333
6.6L 400 C.I. V8				
1974-75	I&E	Umbrella	Nylon	35586
6.9L 420 C.I. V8				
1983-87	I&E	Spring & Band	Viton	45813
1983-87	E	Umbrella	Nylon	35586
7.3L 444 C.I. V8				
1986-93	I&E	Spring & Band	Viton	45813
1986-93	E	Umbrella	Nylon	35586
7.5L 461 C.I. V8				
	I&E	O-Ring	Nitrile	15333
7.6L 466 C.I. L6				
	I&E	Top Hat	Viton	55809
	I&E	Oil Shield	Viton	55731
	I&E	Top Hat	Viton	55812
	I&E	Top Hat	Viton	55808
7.8L 478 C.I. V8				
	I&E	O-Ring	Nitrile	15333
8.7L 530 C.I. L6				
	I&E	Top Hat	Viton	55812
	I&E	Top Hat	Viton	55808
9.0L 549 C.I. V8				
	I&E	O-Ring	Nitrile	15333
S0240 12 Valve L6				
	I&E	O-Ring	Nitrile	15333
ISUZU				
1.6L 1588cc, I4, Vin 4 "4XE1W TURBO" 4XE1W, 4XE1				
1989-93	I&E	Metal Clad	Viton	55831
1.8L 1817cc, I4, Vin B, P "4FB1"				
1981-87	I&E	Ring & Spring	Viton	45804
1.8L 1817cc, I4, Vin 8 "4XF1"				
1992	I&E	Metal Clad	Viton	55831

Part # Material Guide

15000 Series
Nitrile - 225°F

25000 Series
Polyacrylic - 350°F

35000 Series
Nylon - 375°F

45000 Series
Viton - 400°F

55000 Series
Viton/Metal Clad - 400°F

Part #'s in **BOLD** are
common replacements

Year	I/E	Style	Material	Part #
ISUZU (CONT.)				
2.0L 1994cc, I4, Vin F "4ZC1 TURBO"				
1985-89	I&E	Ring & Spring	Viton	45604
2.2L 2180cc, I4, Vin D, "X22SE"				
1998-03	I&E	Metal Clad	Viton	55717
2.2L 2180cc, I4, Vin 4, 5 "GM"				
1998-00	I&E	Top Hat	Viton	55813
1996-97	I&E	Ring & Band	Viton	45819
2.2L 2238cc, I4, Vin S "C223"				
1981-87	I&E	Metal Clad	Viton	55714
2.2L 2238cc, I4, Vin S "C223"				
1981-87	I&E	Metal Clad	Viton	55827
2.2L 2180cc, I4				
1996-97	I&E	Ring & Band	Viton	45819
2.3L 2254cc, I4, Vin L "4ZDT"				
1986-95	I&E	Metal Clad	Viton	55714
1986-95	I&E	Ring & Spring	Viton	45804
2.3L 2254cc, I4				
1988-99	I	Metal Clad	Viton	55848
1998-99	E	Metal Clad	Viton	55849
2.6L 2559cc, I4, Vin E "4ZE1"				
1989-97	I&E	Ring & Spring	Viton	45604
2.8L 2827cc, V6, Vin B "GM LL2"				
1989-91	I&E	O-Ring	Nitrile	15333
3.1L 3137cc, V6, Vin Z "GM CPC"				
1992-94	I	Ring & Band	Viton	45803
1992-94	E	Ring & Band	Viton	45398
1991	I	Metal Clad	Viton	55845
1991	E	O-Ring	Nitrile	15333
3.2L 3165cc, V6, Vin V "GVD1"				
1992-97	I&E	Metal Clad	Viton	55831
4.2L 256 C.I. L6, Vin S "GM"				
2003-04	I&E	Top Hat	Viton	55821
5.3L 323 C.I. V8, Vin P "GM"				
2003-04	I	Top Hat	Viton	55817
2003-04	E	Top Hat	Viton	55816
4BD1T & 4BD2T Industrial I4				
	I&E	Metal Clad	Viton	55711
6BD1T & 6BD2T Industrial I6				
	I&E	Metal Clad	Viton	55711
JOHN DEERE				
2.9L 3029 I3				
	I&E	Ring & Band	Viton	45398
3.9L 4039 I4				
	I&E	Ring & Band	Viton	45398

Year	I/E	Style	Material	Part #
JOHN DEERE (CONT.)				
4.5L 4045 I4				
	I&E	Ring & Band	Viton	45398
5.9L 6059 I6				
	I&E	Ring & Band	Viton	45398
6.8L 6068 I6				
	I&E	Ring & Band	Viton	45398
KOMATSU				
12.2L 743 C.I. I6				
	I&E	1-Ring	Teflon/Rubber	1811
14.0L 855 C.I. I6				
	I&E	1-Ring	Teflon/Rubber	2214
MACK				
E6350-2 Valve Diesel I6				
	E	Metal Clad	Viton	55715
E6350-4 Valve Diesel I6				
	I&E	Metal Clad	Viton	55707
E7-4 Valve Diesel I6				
	I&E	Metal Clad	Viton	55707
E7-ETECH 4 Valve Diesel I6				
	I&E	Metal Clad	Viton	55707
END673, END7573, ET673, ETA673 "12 Valve" Diesel & Turbo Diesel I6				
	E	Metal Clad	Viton	55715
END707, END711 "12 Valve" I6				
	E	Metal Clad	Viton	55715
END7675, ETSK675 "12 Valve" Diesel I6				
	E	Metal Clad	Viton	55715
END7676, ETSK676 "12 Valve" I6				
	E	Metal Clad	Viton	55715
MAZDA				
1.5L 1490cc, I4				
1981-85	I&E	Metal Clad	Viton	55607
1.6L 1597cc, I4				
1994-95	I	Metal Clad	Viton	55861
1986-94	I&E	Metal Clad	Viton	55833
1.6L 1597cc, I4 B6E Turbo				
1988-89	I&E	Metal Clad	Viton	55831
1.8L 1839cc, I4				
1995-04	I	Metal Clad	Viton	55881
1990-95	I&E	Metal Clad	Viton	55831
2.0L 1970cc, I4				
1979-84	I&E	Metal Clad	Viton	55607
2.0L 1991cc, I4				
2001-04	I&E	Top Hat	Viton	55819

Part # Material Guide

15000 Series
Nitrile - 225°F

25000 Series
Polyacrylic - 350°F

35000 Series
Nylon - 375°F

45000 Series
Viton - 400°F

55000 Series
Viton/Metal Clad - 400°F

Part #'s in **BOLD** are
common replacements



Year	I/E	Style	Material	Part #
MAZDA				
2.0L 1991cc, I4				
1994-03	I	Metal Clad	Viton	55861
1993	I&E	Metal Clad	Viton	55831
2.0L 1998cc, I4				
1984-87	I&E	Metal Clad	Viton	55826
2.2L 2184cc, I4, V6 "F2"				
1988-92	I&E	Metal Clad	Viton	55833
2.2L 2184cc, I4				
1987-93	I&E	Metal Clad	Viton	55826
2.3L 2295cc, I4				
1995-98	I&E	Metal Clad	Viton	55854
2.3L 2254cc, V6				
1995-02	I	Metal Clad	Viton	55861
2.3L 2295cc, I4				
1994	I&E	Ring & Band	Viton	45483
2.5L 2492cc, I4				
1999-01	I&E	Top Hat	Viton	55822
2.5L 2497cc, V6				
1993-02	I	Metal Clad	Viton	55861
2.6L 2606cc, I4				
1989-94	I&E	Metal Clad	Viton	55833
2.6L 2555cc, I4				
1987-88	I&E	Ring & Band	Viton	45483
2.6L 2555cc, I4				
1987-88	I&E	Metal Clad	Viton	55608
3.0L 2954cc, V6				
1993-95	I	Metal Clad	Viton	55861
3.0L 2954cc, V6				
1990-98	I&E	Metal Clad	Viton	55833
3.0L 2954cc, V6, Vin 1 "FORD"				
2001-04	I&E	Top Hat	Viton	55802
3.0L 2954cc, V6, Vin U "FORD"				
1994-99	I	Ring & Band	Viton	45356
1994-99	E	Ring & Band	Viton	45357
3.0L 2954cc, V6				
1992	I&E	Metal Clad	Viton	55831
3.0L 2954cc, V6				
1988-98	E	Metal Clad	Viton	55826
4.0L 4016cc, V6, Vin K "V6E4 FORD"				
1991-00	I&E	Metal Clad	Viton	55396
MINI				
4.0L 4016cc, V6, Vin E "FORD"				
2001-08	I&E	Top Hat	Viton	55820

Year	I/E	Style	Material	Part #
MINI (CONT.)				
1.5L 1468cc, I4, Vin A, "4615", Vin J "G4DJ", Vin K "G15B", Vin X "4615"				
1985-02	I&E	Positive	Viton	45606
1.5L 1439cc I4, 4633 Forklift Mitsubishi				
	I&E	Ring & Band	Viton	45483
	I&E	Metal Clad	Viton	55608
1.6L 1597cc, I4, Vin Y "4661", Vin Z "4661 TURBO"				
1989-92	I&E	Positive	Viton	45606
1.6L 1597cc, I4, Vin F "G32B TURBO"				
1985-88	I&E	Metal Clad	Viton	55608
1.8L 1755cc, I4, Vin B, T "4637"				
1990-94	I&E	Metal Clad	Viton	55608
1.8L 1795cc, I4, Vin 4 "G62B"				
1983	I&E	Metal Clad	Viton	55608
1.8L 1795cc, I4, Vin G "G62B TURBO"				
1984-88	I&E	Metal Clad	Viton	55608
2.0L 1997cc I4, 4663T				
1990-99	I&E	Positive	Viton	45606
2.0L 1997cc, I4, Vin D, "4663 TURBO"				
2003-05	I&E	Positive	Viton	45606
2.0L 1997cc, I4, Vin E, R "4663"				
1989-94	I&E	Positive	Viton	45608
2.0L 1997cc, I4, Vin F, U, "4663 TURBO"				
1990-99	I&E	Positive	Viton	45606
2.0L 1997cc, I4, Vin 5, D "G63B"				
1983-89	I&E	Metal Clad	Viton	55608
2.0L 1997cc, I4, Vin V "4663"				
1989-92	I&E	Metal Clad	Viton	55608
2.0L 1996cc I4, Chrysler Engine				
1995-99	I&E	Top Hat	Viton	55654
2.0L 1997cc, I4, Vin Y, "420A Chrysler"				
1995-99	I&E	Top Hat	Viton	55654
2.0L 2000cc, I4, Vin E, "4694"				
2002-04	I&E	Metal Clad	Viton	55653
2.3L 2346cc, I4, Vin 9, J "4B55"				
1983-85	I&E	Metal Clad	Viton	55608
2.4L 2351cc, I4, "4664"				
1994-95	I&E	Positive	Viton	45608
2.4L 2351cc, I4, Vin L "G64B"				
1985-88	I&E	Metal Clad	Viton	55608
2.4L 2351cc, I4, Vin G, W				
1989-94	I&E	Metal Clad	Viton	55608

Part # Material Guide

15000 Series
Nitrile - 225°F

25000 Series
Polyacrylic - 350°F

35000 Series
Nylon - 375°F

45000 Series
Viton - 400°F

55000 Series
Viton/Metal Clad - 400°F

Part #'s in **BOLD** are
common replacements

Year	I/E	Style	Material	Part #
NISSAN				
2.4L 2351cc, I4, Vin F, "4G69"				
2004	I&E	Metal Clad	Viton	55653
2.4L 2351cc, I4, Vin G, Y, "4G64"				
1993-04	I&E	Metal Clad	Viton	55653
2.6L 2555cc, I4, Vin 7, E "654B"				
1983-89	I&E	Metal Clad	Viton	55608
2.6L 2555cc, I4, Vin H, N "654B TURBO"				
1986-89	I&E	Metal Clad	Viton	55608
3.0L 2972cc V6, 6G72				
1991-99	I&E	Positive	Viton	45606
3.0L 2972cc, V6, Vin H, S, "6G72"				
1988-99	I&E	Metal Clad	Viton	55608
3.0L 2972cc, V6, Vin F, H, L, P, "6G72"				
1997-04	I&E	Metal Clad	Viton	55659
3.5L 3497cc, V6, Vin M "6G74"				
1994-96	I&E	Positive	Viton	45606
3.5L 3497cc, V6, Vin P, R, "6G74"				
1997-04	I&E	Metal Clad	Viton	55659
3.8L 3797cc, V6, Vin S, "6G75"				
2003-04	I&E	Metal Clad	Viton	55659
1.2L 1237cc, I4, Vin C, "A12A"				
1980-82	I&E	Metal Clad	Viton	55603
1.3L 1288cc, I4, Vin H, "A13"				
1974	I&E	Metal Clad	Viton	55603
1.4L 1393cc, I4, Vin H, P, "A14"				
1975-81	I&E	Metal Clad	Viton	55603
1.5L 1488cc, I4, Vin H, M, "E15" "E15S"				
1982-84	I&E	Metal Clad	Viton	55829
1.5L 1488cc, I4, Vin P, "A15"				
1980-82	I&E	Metal Clad	Viton	55823
1.6L 1597cc, I4, CA16DE				
1987	I&E	Metal Clad	Viton	55834
1.6L 1597cc, I4, Vin A, E, "GA16DE"				
1991-99	I&E	Metal Clad	Viton	55840
1.6L 1597cc, I4, Vin M, P, "E16" "E16S" "E16L"				
1983-88	I&E	Metal Clad	Viton	55829
1.6L 1597cc, I4, Vin G, "GA16I"				
1989-90	I	Metal Clad	Viton	55834
1989-90	E	Metal Clad	Viton	55838
1.7L 1688cc, I4, Vin S, "CD17"				
1983-85	I&E	Metal Clad	Viton	55828
1.8L 1809cc, I4, QG18DE				
2000-04	I&E	Metal Clad	Viton	55840

Year	I/E	Style	Material	Part #
NISSAN (CONT.)				
1.8L 1809cc, I4, Vin C, "CA18DE"				
1988-89	I&E	Metal Clad	Viton	55834
1.8L 1809cc, I4, Vin C, "CA18E TURBO"				
1984-86	I&E	Metal Clad	Viton	55828
1.8L 1770cc, I4, Vin H, P, "L18"				
1973-74	I&E	Ring & Spring	Viton	45604
2.0L 1952cc, I4, Vin F, "Z20"				
1975-83	I&E	Ring & Spring	Viton	45604
2.0L 1974cc, I4, Vin H, "CA20S"				
1982-89	I&E	Metal Clad	Viton	55828
2.0L 1998cc, I4, Vin B, G, "SR20DE"				
1991-01	I&E	Metal Clad	Viton	55834
2.2L 2187cc, I4, Vin M, "Z22"				
1981-82	I&E	Ring & Spring	Viton	45604
2.2L 2187cc, I4, Vin R, "Z22E"				
1982-83	I&E	Ring & Spring	Viton	45604
2.4L 2389cc, I4, Vin N, "Z24"				
1983-97	I&E	Ring & Spring	Viton	45604
2.4L 2389cc, I4, Vin F, H, S, "KA24E"				
1989-94	I	Metal Clad	Viton	55828
1989-94	E	Metal Clad	Viton	55839
2.4L 2393cc, I6, Vin H, "L24E"				
1977-84	I&E	Ring & Spring	Viton	45604
2.4L 2389cc, I4, Vin A, B, D, M, "KA24DE"				
1996-04	I&E	Metal Clad	Viton	55704
2.4L 2389cc, I4, Vin F, H, S, "KA24E"				
1995-97	I	Metal Clad	Viton	55704
2.5L 2488cc, I4, Vin J, "SD25"				
1983-86	I&E	Ring & Spring	Viton	45604
2.6L 2565cc, I6, Vin R, "L26"				
1974	I&E	Ring & Spring	Viton	45604
2.8L 2753cc, I6, Vin H, "L28E"				
1975-83	I&E	Ring & Spring	Viton	45604
2.8L 2793cc, I6, Vin S, "LD28"				
1981-83	I&E	Ring & Spring	Viton	45604
3.0L 2960cc, V6, Vin C, "VG30DETT TURBO"				
1990-01	I&E	Metal Clad	Viton	55834
1984-89	I	Metal Clad	Viton	55828
3.0L 2960cc, V6, Vin I, H, W, "VG30, VG30E"				
1984-88	E	Ring & Spring	Viton	45604
1994-88	I	Metal Clad	Viton	55828
1984-94	I	Metal Clad	Viton	55704
3.3L 3275cc, V6, Vin A, "VG33E"				
1996-03	I	Metal Clad	Viton	55704
1996-03	E	Ring & Spring	Viton	45604

Part # Material Guide

15000 Series
Nitrile - 225°F

25000 Series
Polyacrylic - 350°F

35000 Series
Nylon - 375°F

45000 Series
Viton - 400°F

55000 Series
Viton/Metal Clad - 400°F

Part #'s in **BOLD** are
common replacements



Year	I/E	Style	Material	Part #
NISSAN (CONT.)				
3.5L 3500cc, V6, VQ35DE				
2001-03	I&E	Metal Clad	Viton	55834
3.5L 3500cc, V6, VQ35DE				
2001-03	I&E	Metal Clad	Viton	55834
PERKINS				
3A152 Diesel L3				
	I&E	Ring & Band	Viton	45804
3AD152 Direct Injection Diesel L3				
	I&E	Ring & Band	Viton	45804
4A203 Diesel, 4AD203 Direct Inj. Diesel L4				
	I&E	Ring & Band	Viton	45804
A4.236 Diesel L4				
	I&E	1-Ring	Teflon/Rubber	1912
6.305 Diesel 12 Valve L6				
	I&E	Ring & Band	Viton	45804
A6.354 & AT6.354 TURBO & ATC6.354				
	I&E	Umbrella	Nitrile	15120
	I&E	Umbrella	Poly	25120
	I&E	Umbrella	Viton	45120
D354, 6.354 Diesel 12 Valve L6				
	I&E	Umbrella	Nitrile	15120
	I&E	Umbrella	Poly	25120
	I&E	Umbrella	Viton	45120
T6.354 Turbo Diesel 12 Valve L6				
	I&E	Umbrella	Nitrile	15120
	I&E	Umbrella	Poly	25120
	I&E	Umbrella	Viton	45120
SAAB				
2.0L 1985cc, I4, Vin 3, D, J, B2011, B2021, B202L				
1973-88	I&E	Ring & Band	Viton	48483
1973-88	I&E	Metal Clad	Viton	55808
SATURN				
1.9L 116 C.I. I4, VIN 7				
1999-02	I&E	Top Hat	Viton	55814
1991-98	I&E	Top Hat	Viton	55803
3.0L 181 C.I., V6, Vin R				
2000-04	I&E	Metal Clad	Viton	55717
SUBARU				
1.8L 1820cc EJ18E				
1993-97	I&E	Metal Clad	Viton	55475
2.0L 1994cc EJ20, EJ205, "Turbo"				
2002-05	I&E	Metal Clad	Viton	55475
2.2L 2212cc EJ22T, "Turbo"				
1991-94	I&E	Metal Clad	Viton	55475

Year	I/E	Style	Material	Part #
SUBARU (CONT.)				
2.2L 2212cc EJ22E				
1990-98	I&E	Metal Clad	Viton	55475
2.2L 2212cc Vin 3,4,6, "EJ22EZ"				
1999-01	I&E	Metal Clad	Viton	55475
2.5L 2457cc Vin 6, "EJ25"				
1999-09	I&E	Metal Clad	Viton	55475
2.5L 2457cc Vin 6, "EJ25D"				
1997-99	I&E	Metal Clad	Viton	55475
2.5L 2457cc EJ25E "Turbo"				
2004-09	I&E	Metal Clad	Viton	55475
3.3L 3318cc Vin 3.8 "EG33D"				
1992-97	I&E	Metal Clad	Viton	55475
SUZUKI				
1.3L 1298cc, I4, G13K, G13BB				
1989-01	I&E	Metal Clad	Viton	55836
1.3L 1298cc, I4, G13A, G13BA				
1986-97	I&E	Metal Clad	Viton	55830
1.6L 1590cc, I4, G16B, G16KV				
1992-01	I&E	Metal Clad	Viton	55836
1.6L 1590cc, I4, G16KC				
1989-95	I&E	Metal Clad	Viton	55830
1.8L 1840cc, I4, Vin 2, 4 "J18A"				
1996-02	I&E	Metal Clad	Viton	55861
2.0L 1998cc, I4, J20A				
1999-03	I&E	Metal Clad	Viton	55861
2.5L 2500cc, V6, H25A				
2001-03	I&E	Metal Clad	Viton	55861
2.7L 2737cc, V6, H27A				
2001-03	I&E	Metal Clad	Viton	55861
TOYOTA				
1.3L 1290cc, I4, Vin K, "4K"				
1981-82	I&E	Metal Clad	Viton	55814
1.3L 1290cc, I4, Vin K, "4KE"				
1983-84	I&E	Metal Clad	Viton	55814
1.5L 1456cc, I4, Vin E, "3E", "3EE"				
1987-94	I&E	Metal Clad	Viton	55831
1.5L 1497cc, I4, Vin G, E, "5EFE"				
1992-98	I	Metal Clad	Viton	55831
1.6L 1588cc, I4, Vin A.T, "2TC", "4AF", "4AFE", "4AGE", "4AGEC", "4AGELC", "4AGEZ Supercharged"				
1.6L 1588cc, I4, Vin A.T, "2TC", "4AF", "4AFE", "4AGE", "4AGEC", "4AGELC", "4AGEZ Supercharged"				
1971-97	I&E	Metal Clad	Viton	55814

Part # Material Guide

15000 Series
Nitrile - 225°F

25000 Series
Polyacrylic - 350°F

35000 Series
Nylon - 375°F

45000 Series
Viton - 400°F

55000 Series
Viton/Metal Clad - 400°F

Part #'s in **BOLD** are
common replacements

Year	I/E	Style	Material	Part #
TOYOTA (CONT.)				
1.8L 1762cc, I4,				
2000-04	I&E	Metal Clad	Viton	55724
1.8L 1770cc, I4, Vin T, "3TC"				
1980-82	I&E	Metal Clad	Viton	55614
1.8L 1839cc, I4, Vin C, "ICTLC TURBO"				
1984-85	I&E	Metal Clad	Viton	55614
1.8L 1762cc, I4, Vin A, B, "7AFE"				
1993-97	I&E	Metal Clad	Viton	55831
1.8L 1762cc, I4, Vin R, "1ZFE"				
1998-04	I&E	Metal Clad	Viton	55709
2.0L 1995cc, I4, Vin S, "2SELG"				
1983-88	I&E	Metal Clad	Viton	55614
2.0L 1998cc, I4, Vin S, "3SGTE TURBO"				
1988-95	I&E	Metal Clad	Viton	55861
2.0L 1998cc, I4, Vin P, "3SFE" TRUCK, "3SELG"				
1986-00	I&E	Metal Clad	Viton	55831
2.0L 1998cc, I4,				
2001-03	I&E	Metal Clad	Viton	55709
2.2L 2189cc, I4, Vin R,Y, "2OR", "4YEC", 4Y Forklift				
1975-80	I&E	Metal Clad	Viton	55614
2.2L 2164cc, I4, Vin G, S, "5SFE"				
1990-01	I&E	Metal Clad	Viton	55831
2.3L 2253cc, L6, Vin "2M"				
1988-72	I	Top-Hat	Viton	55610
1988-72	E	Metal Clad	Viton	55532
2.4L 2366cc, I4, Vin R, "22R"				
1981-90	I&E	Metal Clad	Viton	55614
2.4L 2366cc, I4, Vin R, "22RE"				
1989-95	I	Metal Clad	Viton	55614
1989-95	E	Metal Clad	Viton	55614
2.4L 2366cc, I4, Vin R, "22REC"				
1986-89	I&E	Metal Clad	Viton	55614
2.4L 2438cc, I4, Vin A, K, "2TZFE"				
1991-97	I&E	Metal Clad	Viton	55861
2.4L 2438cc, I4, Vin L, U, "2RZFE"				
1995-04	I	Metal Clad	Viton	55831
2.4L 2398cc, I4, 2AZFE				
2001-04	I&E	Metal Clad	Viton	55709
2.5L 2508cc, V6, Vin V, "2VZFE"				
1988-91	I&E	Metal Clad	Viton	55831
2.6L 2563cc, L6, Vin M, "4M"				
1974-80	I	Top-Hat	Viton	55610
1974-80	E	Metal Clad	Viton	55532

Year	I/E	Style	Material	Part #
TOYOTA (CONT.)				
2.7L 2694cc, I4, Vin M, U, "3RZFE"				
1994-04	I	Metal Clad	Viton	55831
2.8L 2754cc, L6, Vin M, "5MGE"				
1982-88	I&E	Metal Clad	Viton	55614
2.8L 2759cc, L6, Vin M, "5ME"				
1981-82	I	Top-Hat	Viton	55610
1981-82	E	Metal Clad	Viton	55532
3.0L 2997cc, L6, Vin D, J, "2JZGE"				
1994-96	I&E	Metal Clad	Viton	55861
3.0L 2997cc, L6, Vin E, J, "2JZGTE TURBO"				
1994-98	I	Metal Clad	Viton	55831
3.0L 2997cc, L6, Vin D, J, 2JZGE "Lexus"				
1992-03	I&E	Metal Clad	Viton	55861
3.0L 2995cc, V6, Vin F, G, "1MZFE"				
1994-04	I	Metal Clad	Viton	55706
1994-04	E	Metal Clad	Viton	55709
3.0L 2954cc, L6, Vin M, "7MGE", "7MGTE TURBO"				
1986-82	I&E	Metal Clad	Viton	55831
3.0L 2959cc, V6, Vin V, "3VZFE"				
1988-95	I&E	Metal Clad	Viton	55614
1988-93	E	Metal Clad	Viton	55614
3.0L 2959cc, V6, Vin V, "3VZFE"				
1992-93	I	Metal Clad	Viton	55841
3.3L 3300cc, V6, 3MZFE				
2004	I	Metal Clad	Viton	55706
2004	E	Metal Clad	Viton	55709
3.4L 3378cc, V6, Vin N, V, "5VZFE"				
1995-04	I	Metal Clad	Viton	55841
3.5L 2GRFE				
2005-09	I	Metal Clad	Viton	55706
2005-09	E	Metal Clad	Viton	55709
3.9L 3878cc, L6, Vin F, "F Industrial"				
1967-74	I&E	Metal Clad	Viton	55824
4.0L 3969cc, V8, Vin H, U, 1UZFE "Toyota"				
1990-97	I&E	Metal Clad	Viton	55831
4.0L 3969cc, V8, Vin H, U, 1UZFE "Toyota"				
1998-00	I	Metal Clad	Viton	55709
4.0L 4000cc, V6, 1GRFE				
2003-09	I	Metal Clad	Viton	55706
2003-09	E	Metal Clad	Viton	55709
4.0L 3956cc, L6, Vin F, "3FE"				
1988-82	I&E	Metal Clad	Viton	55824
4.2L 4227cc, L6, Vin F, "2F" "2F Industrial"				
1977-87	I&E	Metal Clad	Viton	55824

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15000 Series
Nitrile - 225°F

25000 Series
Polyacrylic - 350°F

35000 Series
Nylon - 375°F

45000 Series
Viton - 400°F

55000 Series
Viton/Metal Clad - 400°F

Part #'s in **BOLD** are
common replacements



Year	I/E	Style	Material	Part #
TOYOTA (CONT.)				
4.3L 4293cc, V8, 3UZFE "Lexus"				
2001-04	I	Metal Clad	Viton	55709
4.5L 4477cc, L6, Vin D, J, "1FZFE"				
1993-97	I&E	Metal Clad	Viton	55825
4.7L 4663cc, V8, Vin T, "2UZFE"				
1998-04	I	Metal Clad	Viton	55709
5.7L 3URFE				
2007-09	I	Metal Clad	Viton	55706
2007-09	E	Metal Clad	Viton	55709
Year	I/E	Style	Material	Part #
VOLKSWAGEN				
1.8L 1780cc, I4, Vin B, C, "PL"				
1987-89	I&E	Metal Clad	Viton	55688
1.9L 1896cc, I4, Vin F, G, J, 1Z, AAZ, AHU, ALH, BEW "TURBO"				
1996-03	I&E	Metal Clad	Viton	55688
2.0L 1984cc, I4, Vin B, C, E, J, "9A"				
1990-02	I&E	Metal Clad	Viton	55688
2.8L 2792cc V6,				
1992-02	I&E	Metal Clad	Viton	55688
Year	I/E	Style	Material	Part #
VOLVO				
2.1L 2127cc, I4, Vin 4, 41, 45, B21E, B21FT				
1976-85	I&E	Metal Clad	Viton	55603
2.3L 2316cc, I4, Vin 8, B230F, B230FD				
1983-95	I&E	Metal Clad	Viton	55603
2.4L 2383cc I6 Vin 7, D24				
1983-84	I&E	Metal Clad	Viton	55603
2.7L 2673cc, V6, Vin 61, 65, B27F				
1976-86	I&E	Metal Clad	Viton	55603
2.8L 2849cc V6, Vin 6, B28F				
1980-85	I&E	Metal Clad	Viton	55603

High Performance Valve Stem Seal Kit

A complete, 102 pc. kit offers everything needed to cover 5/16", 11/32", & 3/8" seal applications. Each kit includes 3 pilots, 2 carbide cutters, 1 Teflon installation tool and 96 asst. Teflon valve stem seals packed in a compartment-style storage box with instructions.

Part #VS1000K



Engine Parts

Valve Stem Seal Designs

Umbrella - Ideally the stem diameter for this seal should not exceed .025" oversize. Diameter must clear I.D. of valve spring and divert oil away from guide.



Type A

O-Ring Seal - Reduces excessive oil flow contact to valve stem. Optimize with Umbrella seals. Applies up to .025" oversize valves.



Type B

Positive Seal - (No Rings or Bands) Can be used with a wide range of stem and guide dimensions. Grooved, seal to stem contact controls oil flow to guide. Note: We recommend stem not to exceed +.015" oversize.



Type C

Positive Seal - (With spring seat) Latest OEM design for aluminum cylinder head applications. Tension spring grooved seal to stem contact controls oil flow to guide. Will allow up to +.003" oversize stem applications. (also called top hat.)



Type D

Positive Seal - (With Ring or Bands) Excellent seal for guide contact tension. Grooved seal, stem contact controls oil flow to guide. Recommended not to exceed +.015" oversize stem.



Type E

Positive Seal - (With 1 or 2 Rings) Recommended seal for correct guide contact tension, also is a grooved seal. Stem contact controls oil flow to guide. Recommended not to exceed +.015" oversize stem.



Type F

Positive Seal - (With Spring and Band) Great seal to control guide contact tension. Grooved seal stem controls oil flow to guide. Not to exceed +.015" oversize stem.



Type G

Positive Seal - (Metal clad with spring) Tight guide to seal fit. Recommended not to exceed +.003" oversized valve stem.



Type H

VALVE STEM SEALS INTERCHANGE



Valve Stem Seal Kits*

Fel-Pro	Detroit Gasket	Silver Seal	Fel-Pro	Detroit Gasket	Silver Seal	Fel-Pro	Detroit Gasket	Silver Seal	Fel-Pro	Detroit Gasket	Silver Seal
SS 8112	10001	13082-16	SS 70283	10035	13060-8	SS 72533	-	13198-4	SS 72650-1	-	13162-12
SS 8418	10002	13082-18	SS 70283-1	-	13060-18	SS 72545	-	13086-4	SS 72667	10127	13046-12
SS 10066	10056	13102-16	SS 70287	10025	13049-18	SS 72566	10136	13186-8	SS 72668	10124	13118-8
SS 10777	10120	13120-18	SS 70310	-	13172-4	SS 72566-1	-	13108-18	SS 72675	10120	13001-8
SS 11636	10023	13043-18	SS 70359	10043	13081-18	SS 72567	10154	13161-8	SS 72675-1	10250	13189-8
SS 11868	10121	13107-18	SS 70380	-	13081-8	SS 72590	10142	13190-4	SS 72678	10129	13143-8
SS 12419	-	13126-8	SS 70373	10003	13125-8	SS 72582	-	13081-8	SS 72679	-	13015-8
SS 12434	-	13131-18	SS 70393	10008	13029-18	SS 72553	10130	13192-8	SS 72680	10148	13015-8
SS 12443	10015	13026-16	SS 70303-1	-	13023-12	SS 72561	10067	13078-12	SS 72680-1	10307	13134-8
SS 12784	10038	13001-8	SS 70359	10040	13193-12	SS 72581	10345	13018-12	SS 72681	-	VB1087AK
SS 10294	-	13068-8	SS 70390	10024	13009-8	SS 72581-1	-	13018-8	SS 72682	-	13050-8
SS 13234	-	13115-18	SS 70675	-	13153-18	SS 72582	10034	13019-8	SS 72682-1	-	13050-18
SS 13351	10076	13088-18	SS 70684	-	13161-8	SS 72587	10017	13182-8	SS 72683	10129	13021-8
SS 13351-1	-	13069-12	SS 70680	-	13094-8	SS 72567-1	10030	13025-12	SS 72684	10126	13050-12
SS 13380	10077	13047-18	SS 70702	10032	13008-8	SS 72568-1	10172	13008-12	SS 72686	10181	13046-12
SS 13394	10048	13005-18	SS 70710	-	13029-12	SS 72569-1	10162	13036-8	SS 72687	10184	13180-8
SS 13584-1	-	13002-8	SS 70721	10029	13011-12	SS 72604	-	13067-8	SS 72688	10224	13111-8
SS 13399	-	13044-18	SS 70738	-	13109-18	SS 72608	10041	13101-8	SS 72689	-	13158-18
SS 13399-1	-	13044-12	SS 70716	10005	13100-8	SS 72612	10174	13115-8	SS 72700	10206	13188-12
SS 13401	10051	13004-18	SS 70817	10098	13130-8	SS 72615	-	13114-12	SS 72702	-	13188-8
SS 13607	10090	13101-12	SS 70819	10189	13012-12	SS 72616	10025	13020-12	SS 72704	-	13024-8
SS 13807-1	-	13101-18	SS 70819-1	-	13122-12	SS 72617	-	13048-4	SS 72706	10241	13112-8
SS 13955	-	13005-8	SS 70851	10054	13106-18	SS 72619	10016	13048-8	SS 72709	10242	13112-8
SS 17149	10058	13003-8	SS 71152	10112	13053-18	SS 72621	-	13046-12	SS 72710	-	13127-8
SS 27165	10166	13126-8	SS 72504	10182	13044-18	SS 72619	10180	13123-12	SS 72711	-	13176-8
SS 27179	10150	13042-8	SS 72504-1	-	13157-18	SS 72621	10042	13113-8	SS 72712	-	13185-12
SS 27278	10178	13005-10	SS 72512	10147	13107-8	SS 72622	-	13046-12	SS 72713	-	VB1086AK
SS 27283	10161	13002-8	SS 72513	-	13105-10	SS 72623	-	13110-24	SS 72715	-	VB1086AK
SS 27358	10171	13067-12	SS 72514-2	10018	13016-8	SS 72624	-	13007-16	SS 72716	-	13001-8
SS 27415	10139	13003-12	SS 72514-3	10011	13015-12	SS 72625	-	13007-16	SS 72717	10247	13008-18
SS 27418	-	13104-8	SS 72522	10045	13042-8	SS 72626	10148	13118-8	SS 72718	10253	13008-8
SS 27475	10152	13031-8	SS 72524	10029	13034-8	SS 72627	-	13004-12	SS 72719	-	13008-8
SS 27503	10188	13102-12	SS 72525	-	13069-18	SS 72628	10185	13054-8	SS 72720	-	13015-8
SS 27504	10170	13103-12	SS 72526	-	13018-18	SS 72629	-	13063-8	SS 72721	-	13002-12
SS 27508	10146	13014-8	SS 72527	-	13081-18	SS 72630	10134	13112-8	SS 72722	-	13024-12
SS 70014	10113	13006-18	SS 72528	-	13135-24	SS 72631	10167	13060-8	SS 72723	-	13054-12
SS 70037	10085	13133-8	SS 72529	-	13018-24	SS 72632	10173	13061-12	SS 72724	-	13061-18
SS 70038	-	13041-8	SS 72530	-	13061-18	SS 72633	10166	13061-8	SS 72725	-	13155-8
SS 70060	-	13126-8	SS 72531	-	13001-12	SS 72634	10123	13117-8	SS 72726	-	13004-12
SS 70070	-	13046-18	SS 72532	10136	13034-4	SS 72658	10163	13152-8	SS 72821	-	13027-18
SS 70084-1	-	13097-8	SS 72533	10141	13034-4						
SS 70151	10133	13122-12									

Valve Stem Seals*

Primmer	Silver Seal	Primmer	Silver Seal	Primmer	Silver Seal	Primmer	Silver Seal
OC231	13205	OC237	13205	OC243	13205	OC249	13205
OC271FA	25705	OC277	13135	OC283	13135	OC289	13135
OC290	13205	OC296	13135	OC302	13135	OC308	13135
OC340FA	35333	OC346	13135	OC352	13135	OC358	13135
OC350	35563	OC356	13135	OC362	13135	OC368	13135
OC351	35740	OC364	13135	OC370	13135	OC376	13135
OC352	46916	OC378	13135	OC384	13135	OC390	13135
OC353	45241	OC386	13135	OC392	13135	OC398	13135
OC354	45977	OC394	13135	OC400	13135	OC406	13135
OC355	35179	OC402	13135	OC408	13135	OC414	13135
OC356	35140	OC410	13135	OC416	13135	OC422	13135
OC359	35740	OC418	13135	OC424	13135	OC430	13135
OC380	35205	OC426	13135	OC432	13135	OC438	13135
OC381	35793	OC434	13135	OC440	13135	OC446	13135
OC382	18700	OC442	13135	OC448	13135	OC454	13135
OC450FA	25123	OC444	13135	OC450	13135	OC456	13135
OC452	13135	OC452	13135	OC458	13135	OC464	13135
OC453FA	35701	OC454	13135	OC460	13135	OC466	13135
OC450	16243	OC456	13135	OC462	13135	OC468	13135
OC450FA	25123	OC458	13135	OC464	13135	OC470	13135
OC452	13135	OC460	13135	OC466	13135	OC472	13135
OC453FA	35701	OC462	13135	OC468	13135	OC474	13135
OC450	16243	OC464	13135	OC470	13135	OC476	13135
OC450FA	25123	OC466	13135	OC472	13135	OC478	13135
OC452	13135	OC468	13135	OC474	13135	OC480	13135
OC453FA	35701	OC470	13135	OC476	13135	OC482	13135
OC450	16243	OC472	13135	OC478	13135	OC484	13135
OC450FA	25123	OC474	13135	OC480	13135	OC486	13135
OC452	13135	OC476	13135	OC482	13135	OC488	13135
OC453FA	35701	OC478	13135	OC484	13135	OC490	13135
OC450	16243	OC480	13135	OC486	13135	OC492	13135
OC450FA	25123	OC482	13135	OC488	13135	OC494	13135
OC452	13135	OC484	13135	OC490	13135	OC496	13135
OC453FA	35701	OC486	13135	OC492	13135	OC498	13135
OC450	16243	OC488	13135	OC494	13135	OC500	13135
OC450FA	25123	OC490	13135	OC496	13135	OC502	13135
OC452	13135	OC492	13135	OC498	13135	OC504	13135
OC453FA	35701	OC494	13135	OC500	13135	OC506	13135
OC450	16243	OC496	13135	OC502	13135	OC508	13135
OC450FA	25123	OC498	13135	OC504	13135	OC510	13135
OC452	13135	OC500	13135	OC506	13135	OC512	13135
OC453FA	35701	OC502	13135	OC508	13135	OC514	13135
OC450	16243	OC504	13135	OC510	13135	OC516	13135
OC450FA	25123	OC506	13135	OC512	13135	OC518	13135
OC452	13135	OC508	13135	OC514	13135	OC520	13135
OC453FA	35701	OC510	13135	OC516	13135	OC522	13135
OC450	16243	OC512	13135	OC518	13135	OC524	13135
OC450FA	25123	OC514	13135	OC520	13135	OC526	13135
OC452	13135	OC516	13135	OC522	13135	OC528	13135
OC453FA	35701	OC518	13135	OC524	13135	OC530	13135
OC450	16243	OC520	13135	OC526	13135	OC532	13135
OC450FA	25123	OC522	13135	OC528	13135	OC534	13135
OC452	13135	OC524	13135	OC530	13135	OC536	13135
OC453FA	35701	OC526	13135	OC532	13135	OC538	13135
OC450	16243	OC528	13135	OC534	13135	OC540	13135
OC450FA	25123	OC530	13135	OC536	13135	OC542	13135
OC452	13135	OC532	13135	OC538	13135	OC544	13135
OC453FA	35701	OC534	13135	OC540	13135	OC546	13135
OC450	16243	OC536	13135	OC542	13135	OC548	13135
OC450FA	25123	OC538	13135	OC544	13135	OC550	13135
OC452	13135	OC540	13135	OC546	13135	OC552	13135
OC453FA	35701	OC542	13135	OC548	13135	OC554	13135
OC450	16243	OC544	13135	OC550	13135	OC556	13135
OC450FA	25123	OC546	13135	OC552	13135	OC558	13135
OC452	13135	OC548	13135	OC554	13135	OC560	13135
OC453FA	35701	OC550	13135	OC556	13135	OC562	13135
OC450	16243	OC552	13135	OC558	13135	OC564	13135
OC450FA	25123	OC554	13135	OC560	13135	OC566	13135
OC452	13135	OC556	13135	OC562	13135	OC568	13135
OC453FA	35701	OC558	13135	OC564	13135	OC570	13135
OC450	16243	OC560	13135	OC566	13135	OC572	13135
OC450FA	25123	OC562	13135	OC568	13135	OC574	13135
OC452	13135	OC564	13135	OC570	13135	OC576	13135
OC453FA	35701	OC566	13135	OC572	13135	OC578	13135
OC450	16243	OC568	13135	OC574	13135	OC580	13135
OC450FA	25123	OC570	13135	OC576	13135	OC582	13135
OC452	13135	OC572	13135	OC578	13135	OC584	13135
OC453FA	35701	OC574	13135	OC580	13135	OC586	131



Rear Crank & Timing Cover Seals

Each seal meets or exceeds OEM quality standards, competitively priced.

Acura

Engine	Cyl.	Year	Pcs.	Material	Rear Crank Seal Part #	Comments	Timing Cover Seal Part #	Comments
1.8L/1797cc DOHC	L4	1996	1	Viton	NAN3732-M0			
1.8L/1834cc B16A1 DOHC	L4	1990-93	1	Viton	NAN3732-M0			
2.5L/2456cc G25A1,G25A4 SOHC	L4	1992-96	1	Viton	NAN3732-M0			

AMC/Jeep

2.46L/150 OHV	L4	1987-95	1		77040		14226	
3.3L/201 OHV	V6	1990-95	1		38168			
3.6L/232 OHV	L6	1964-79	1		38168			
4.0L/242 OHV	L6	1987-95	1		38168		14226	
4.2L/258 OHV	L6	1971-90	2		18690		14226	
5.0L/304 OHV	V8	1970-79	2		18693			
5.9L/360 OHV	V8	1970-78	2		18693		34235	2 pc.
6.6L/401 OHV	V8	1971-76	2		18693			

Chrysler

1.4L/1410cc SOHC (Mitsu.)	L4	1982-84	1	Silicone	18810		NRHR687-80	(1980-84)
1.5L/1468cc SOHC (Mitsu.)	L4	1991-95	1	Silicone	18810			
		1985-90	1	Silicone	18810		NRHR687-80	
1.6L/1595cc DOHC (Mitsu.)	L4	1989-90	1	Viton	18811		18856	
1.6L/1597cc SOHC (Mitsu.)	L4	1980-88	1	Silicone	18810		18856	
1.8L/1755cc SOHC (Mitsu.)	L4	1991-95					18857	
		1989-90	1	Silicone	18810		18856	
		1983-86	1	Silicone	38400			
		1987-95	1	Viton	18811			
2.0L/1997cc SOHC,DOHC (Mitsu.)	L4	1983-91					18856	
		1991-95					18858	
2.2L/135 SOHC	L4	1981-94	1		38168			
2.3L/2346cc Diesel Vin "D" (Mitsu.)	L4	1984-86	1	Viton	18811		18856	
		1983	1	Silicone	38400		18856	
2.4L/2351cc SOHC (Mitsu.)	L4	1994-95					18858	18856(1990)
		1990-92	1	Viton	18811			
2.5L/151 OHV Vin "B" (GM)	L4	1980-83	1	Viton	78460		74241	
2.5L/153 SOHC	L4	1986-95	1		38168			
2.6L/2555cc SOHC (Mitsu.)	L4	1987-89	1	Viton	18811			
		1980-86	1	Silicone	38400			
2.8L/173 Vin "W" (GM)	V6	1984-86	1	Silicone	78244		74241	
3.0L/2972cc DOHC (Mitsu.)	V6	1991-95	1	Viton	18820		18826	
3.0L/2972cc SOHC (Mitsu.)	V6	1990-95	1	Viton	78562		18857	
		1987-90	1	Viton	78562			
3.3L/201 OHV	V6	1990-95	1		38168			
3.5L/215 SOHC	V6	1993-95	1		38168			
3.8L/230 OHV	V6	1991-95	1		38168			
5.2L/316 OHV	V8	1957-89	2		38198		34235	2 pc.
5.6L/340 OHV	V8	1968-73	2		38198		34235	2 pc.
5.9L/360 OHV	V8	1971-92	2		38378		34235	2 pc.
6.6L/400 OHV	V8	1972-78	2		38213			
7.2L/440 OHV	V8	1966-78	2		38213			

Ford

1.6L/98 SOHC	L4	1981-85	1	Silicone	78245			
			1	Poly	NUH0164-80			
2.0L/122 SOHC	L4	1983-89	1	Silicone	68102			
			1	Viton	68103			
			1	Poly	NUH0164-80			
2.3L/140 OHC Car/Truck	L4	1981-94	1	Silicone	68102			
			1	Viton	68103			
2.3L/140 HSC OHV	L4	1984-94	1	Silicone	78245			
2.5L/153 HSC OHV	L4	1986-90	1	Silicone	78245			
2.8L/171 OHV	V6	1983-86	1	Silicone	68419		64257	w/flange
							64258	w/o flange

REAR CRANK/TIMING COVER SEALS



Ford (Cont.)

Engine	Cyl.	Year	Pcs.	Material	Rear Crank Seal Part #	Comments	Timing Cover Seal Part #	Comments
2.9L/177 OHV	V6	1986-92	1	Silicone	68419		64257	w/flange
							64258	w/o flange
3.0L/183 OHV	V6	1986-97	1	Silicone	78245		64257	w/flange
3.3L/200 OHV	V6	1963-83					NAD7795-E0	
3.8L/232 Fuel Injected OHV	V6	1983-93	1	Poly	NUN0164-G0		64257	w/flange(1982-93)
			1	Silicone	68102		64258	w/o flange(1982-93)
			1	Viton	68103			
3.8L/232 Carbureted OHV	V6	1982-83	2		68288			
4.0L/244 Truck OHV	V6	1990-94	1	Silicone	68419		64257	w/flange
							64258	w/o flange
4.2L/250 OHV	L6	1969-80	2		68288		64257	w/flange
							64258	w/o flange
4.2L/255	V6	1997	1	Poly	NUN0164-G0			
			1	Silicone	68102			
			1	Viton	68103			
4.2L/255	V8	1980-92	2		68288		64257	w/flange
							64258	w/o flange
4.9L/300 Truck OHV	L6	1980-97	1	Silicone	68107		64257	w/flange
			1	Viton	NUN0819-E1		64258	w/o flange
5.0L/302 Fuel Injected OHV	V8	1980-94	1	Poly	NUN0164-G0		64257	w/flange(1980-97)
			1	Silicone	68102		64258	w/o flange(1980-97)
			1	Viton	68103			
5.0L/302 Carbureted OHV	V8	1968-80	2		68288		64257	w/flange
5.4L/330 OHV	V8	1964-78	2		68592		64257	w/flange
							64258	w/o flange
5.8L/351W OHV	V8	1983-97	1	Silicone	68107		64257	w/flange(1980-97)
5.8L/351C,M OHV	V8	1969-83	2		68145		64258	w/o flange
6.9L/420 Navistar/Intl. - Diesel OHV	V8	1983-88	2		68592			
7.5L/460 OHV	V8	1980-85	2		68135			

GM

1.8L/98 OHC	L4	1980-83					74241	
1.8L/112 Pontiac VIN J,O SOHC	L4	1982-84	1	Viton	78762	5.5mm wide	74241	(1982-83)
			1	Viton	78244	10mm wide		
2.0L/122 Chevrolet OHV	L4	1983-89	1	Viton	78762	5.5mm wide	74241	(1982-84)
			1	Viton	78244	10mm wide		
2.2L/134 Chevrolet 2, G OHV	L4	1990-97	1	Viton	78244	10mm wide		
2.3L/138 Olds. Quad IV A, D DOHC	L4	1988-96	1	Viton	78591		18721	
2.3L/138 Quad IV SOHC	L4	1992-94					N32586/N32587	
2.4L/146 Chevrolet Quad T DOHC	L4	1996-02	1	Viton	78591		18721	
2.5L/151 Pontiac OHV	L4	1980-83	1	Viton	78460		74241	
		1982-87	2	Poly	78452			
2.8L/173 Chevrolet W, Z OHV	V6	1980-85	1	Viton	78762	5.5mm wide	74241	(1980-93)
		1983-93	1	Viton	78244	10mm wide		
3.0L/181 Buick OHV	V6	1982-88	2		78390			
3.1L/189 Chevrolet D,V,W OHV	V6	1987-97	1	Viton	78244	10mm wide	74241	(1990)
3.3L/204 Buick OHV	V6	1989-90	2		78390			
3.4L/207 Chevrolet S OHV	V6	1993-95	1	Viton	78244	10mm wide		
			2	Poly	78764			
3.8L/229 Chevrolet	V6	1980-84	2	Silicone	78512	wide double-lip	74241	
			2	Viton	78513	wide double-lip		
3.8L/231 Buick OHV	V6	1975-91	2		78390			
4.1L/250 Chevrolet OHV	L6	1979-84					74241	
4.1L/252 Buick OHV	V6	1980-84	2		78390			
4.1L/252 Cadillac OHV	V8	1985-88	1	Viton	78396		18723	
		1982-85	2		78221			
4.3L/262 Chevrolet OHV	V6	1986-95	1	Silicone	78461	0.040 I.D.	74241	(1985-94)
			1	Viton	78464			



GM (Cont.)

Engine	Cyl.	Year	Pcs.	Material	Rear Crank Seal Part #	Comments	Timing Cover Seal Part #	Comments
4.3L/265 "W" OHV	V8	1994-96	1	Silicone	78461	0.040 I.D.		
			1	Viton	78464			
4.5L/273 Cadillac OHV	V8	1988-92	1	Viton	78396		18723	
4.8L/292 OHV	L6	1980-90					74241	
4.9L/300 Cadillac OHV	V8	1991-95	1	Viton	78396		18723	
5.0L/305 Chevrolet OHV F.I.	V8	1986-95	1	Silicone	78461	0.040 I.D.		
			1	Viton	78464		74241	
			2	Poly	78764			
5.0L/305 Chevrolet OHV Carb.	V8	1967-85	2	Silicone	78512	wide double-lip	74241	
			2	Viton	78513	wide double-lip		
5.0L/305 Chevrolet OHV Carb.	V8	1960-75	2		78463			
5.0L/307 Oldsmobile OHV	V8	1980-90	2		18690		74288	
			2	Poly	78764			
5.4L/327 Chevrolet OHV	V8	1962-69	2	Silicone	78512	wide double-lip	74241	
			2	Viton	78513	wide double-lip		
			1	Silicone	78461	0.040 I.D.		
5.7L/350 Chevrolet OHV	V8	1986-95	1	Viton	78464		74241	
			2	Poly	78764			
5.7L/350 Chevrolet OHV	V8	1961-85	2	Silicone	78512	wide double-lip	74241	
			2	Viton	78513	wide double-lip		
5.7L/350 Oldsmobile OHV	V8	1978-85	2		18690		74288	
6.0L/366 Chevrolet Truck OHV	V8	1966-90	2		78228		NUB0142-EO	
6.0L/368 Cadillac OHV	V8	1980-85	2		78241			
6.2L/381 Chevy Truck Diesel	V8	1982-96	2		78446		NUB0142-EO	
6.5L/396 Chevrolet OHV	V8	1965-72	2		78228		NUB0142-EO	
			2	Poly	78764			
6.6L/400 SB Chevrolet OHV	V8	1970-76	2	Silicone	78512	wide double-lip	74241	
			2	Viton	78513	wide double-lip		
6.6L/400 BB Chevrolet OHV	V8	1971-72	2		78228		NUB0142-EO	
6.6L/401 "M" OHV	V8	1973-77	2		78463			
6.6L/403 Oldsmobile OHV	V8	1965-69	2		68135			
7.0L/427 Chevrolet OHV	V8	1966-69	2		78228			
7.4L/454 OHV	V8	1970-90	2		78228			
7.4L/454	V8	1991-99	1	Viton	18730		NUB0142-EO	
7.5L/455 Oldsmobile OHV	V8	1968-76	2		68135			

Aluminum Rear Crank Seal Retainer

Fits GM V6 4.3L & V8 305/350

Don't gamble on your work, reclaiming the O.E. retainer could be a problem. Those aluminum units develop stress fractures and are often the cause of failure. We offer a replacement kit that includes a rear main seal (#78461 silicone) which has a .040" smaller ID that compensates for reground & polished crankshafts.



Description	Part #
*Retainer, Silicone Seal & Gasket	6517
Retainer, Viton Seal & Gasket	6517V
Aluminum Retainer Only	6518
Gasket Only	6519
Viton Seal	78464
*Silicone Seal (.040 Smaller I.D.)	78461

*For reground or polished crankshafts.

Honda

1.3L/1335cc EJ1,EM1 SOHC	L4	1980-83	1	Poly	NAHG924-Y0		
1.3L/1342cc EV1,D13A2 SOHC	L4	1984-87					NBN2259-G0
1.5L/1468cc EW,D15A SOHC	L4	1984-87	1	Poly	NBHH013-B0		NBN2259-G0
1.5L/1493cc D15B1,2,8 SOHC	L4	1988-91	1	Poly	NBHH013-B0		NBN2259-G0
1.5L/1493cc D15B7,8,D15Z1 SOHC	L4	1992-95	1	Viton	NAH3732-M0		
1.8L/1590cc D16A6 SOHC	L4	1988-91	1	Poly	NBHH013-B0		NBN2259-G0
1.6L/1590cc D16Z6 SOHC	L4	1992-95	1	Viton	NAH3732-M0		
		1981-83	1	Silicone	NBH1034-E0		
1.8L/1751cc EK1 SOHC	L4	1980	1	Poly	NAHG924-Y0		
1.8L/1829cc A18A,ES,ET SOHC	L4	1983-87	1	Poly	NBHH013-B0		
2.0L/1955cc A20A,BS,BT SOHC	L4	1985-90	1	Poly	NBHH013-B0		NAH2077-F0
2.0L/1958cc B20A3,5 SOHC/DOHC	L4	1990-91	1	Viton	NAH3732-M0		
2.1L/2056cc DOHC	L4	1990-91	1	Viton	NAH3732-M0		
2.2L/2156cc F22A1,4,6,F22B1 SOHC	L4	1990-96	1	Viton	NAH3732-M0		
2.3L/2259cc H23A1 SOHC	L4	1992-95	1	Viton	NAH3732-M0		

REAR CRANK/TIMING COVER SEALS



ISUZU									
Engine	Cyl.	Year	Pcs.	Material	Rear Crank Seal Part #	Comments	Timing Cover Seal Part #	Comments	
1.5L/1471cc 4XC1 SOHC(FWD)	L4	1985-91	1	Silicone	18800		18851	(1986)	
1.5L/1471cc 4XC1 SOHC(RWD)	L4	1985-91	1	Silicone	18801				
1.9L/1949cc G200Z SOHC	L4	1983-87	1	Silicone	18801		18851		
2.3L/2254cc 4ZD1 SOHC	L4	1993-95	1	Silicone	18802		18851		
		1988-92	1	Silicone	18805		18851		
2.6L/2559cc 4ZE1 SOHC	L4	1991-94	1	Silicone	18802		18851		
		1988-90	1	Silicone	18805		18851		
Mazda									
1.5L/1490cc SOHC	L4	1981-85	1	Silicone	18806		18855		
1.6L/1597cc B6,B6T SOHC/DOHC	L4	1986-95	1	Silicone	18807				
1.8L/1839cc BP SOHC, BP-ZE DOHC	L4	1990-94	1	Viton	18807				
2.0L/1970cc MA SOHC	L4	1980-85					NAN2791-G1		
2.2L/2184cc F2,F2-T SOHC	L4	1987-88	1	Viton	77017				
2.6L/2555cc AM1 SOHC	L4	1987-88	1	Viton	18811		18860		
Mitsubishi									
1.5L/1468cc G15B,4G15,G4AJ SOHC	L4	1985-96	1	Silicone	18810				
1.6L/1595cc 4G61 DOHC	L4	1989-92	1	Viton	18811		18856		
1.6L/1597cc G32B(incl.Turbo) SOHC	L4	1985-88	1	Silicone	18810		18856		
1.8L/1755cc 4G37 SOHC	L4	1992-94	1	Silicone	18810				
		1989-91	1	Viton	18811		18856	(1989-90)	
1.8L/1795cc G62B(incl.Turbo) SOHC	L4	1983-88	1	Viton	18811		18856		
1.8L/1834cc 4G93 SOHC	L4	1992-94	1	Viton	18812		18857		
2.0L/1997cc 4G63 SOHC/DOHC/Turbo	L4	1993-94	1	Viton	18812		18858	(1992-94)	
		1983-92		Viton	18811		18856	(1983-91)	
2.3L/2346cc 4D55 Diesel SOHC	L4	1983-85	1	Viton	18811		18858		
2.6L/2555cc G54B SOHC	L4	1983-89	1	Viton	18811		18860		
3.0L/2972cc 6G72 DOHC	V6	1988-94	1	Viton	18820		18857		
Nissan									
1.6L/1597cc GA16DE DOHC	L4	1991-93	1	Viton	18821				
1.8L/1597cc SOHC	L4	1989-90	1	Viton	18821		18862	(1983-88)	
1.8L/1780cc CD17 Diesel SOHC	L4	1983-86	1	Viton	18821		18864		
1.8L/1809cc CA16DE DOHC	L4	1986-89	1	Viton	18821				
2.0L/1952cc Z20/E/S SOHC	L4	1980-85					18866		
2.0L/1974cc CA20S SOHC	L4	1982-89	1	Viton	18821		18864	(1987-89)	
2.0L/1998cc SR20DE DOHC	L4	1991-95					18868		
2.2L/2187cc Z22/E SOHC	L4	1981-83					18866		
2.4L/2389cc KA24E,DE SOHC/DOHC	L4	1989-94					18868		
2.4L/2389cc Z24/I SOHC	L4	1983-89					18866		
2.4L/2393cc L24,L24E SOHC	L6	1980-84					18866		
2.8L/2753cc L28,E,ET SOHC	L6	1980-83					18866		
3.0L/2960cc VG30... SOHC/DOHC	V6	1985-95	1	Viton	18821		18864		
Toyota									
1.3L/1290cc 4K,4KE OHV	L4	1981-82					NAN2304-P0		
1.5L/1456cc 3E,3EE SOHC	L4	1987-84	1	Viton	18824		18825		
1.5L/1497cc 5EFE DOHC	L4	1992-96	1	Viton	18824		18825	(1992-95)	
1.6L/1587cc 4AC,F,G,L SOHC/DOHC	L4	1995-96	1	Viton	18870		18826	(1988-89)	
1.8L/1762cc 7AFE DOHC	L4	1993-95	1	Viton	18870				
1.8L/1770cc 3TC OHV	L4	1980-82					NAN2304-P0		
2.2L/2189cc 20R SOHC	L4	1980	1	Silicone	18830		18874		
2.4L/2366cc 22R,22RE,22REC SOHC	L4	1986-95	1	Silicone	18831		18875		
		1981-85	1	Silicone	18830		18874		
2.6L/2563cc 4M,4ME SOHC	L6	1980	1	Silicone	18830		18874		
2.8L/2759cc 5ME,5MGE SOHC/DOHC	L6	1981-88	1	Silicone	18830		18874	(1981-82)	
3.0L/2954cc 7MGE, 7MGTE DOHC	L6	1986-92	1	Silicone	18830				
3.0L/2958cc 3VZE SOHC	V6	1988-94	1	Viton	18832				
4.2L/4230cc 2F OHV	L6	1985-87					NBE2698-E0		

Silver Seal Black Powder Coated "OEM Style" Oil Pans

With Nearly 300 Domestic And Import Applications

Acura, AMC, Chrysler (Pictures Start on Pg. 149)

Acura

Liter	CI/CC	Eng.	Year	Application (Reference Only)	Part #	Comments
1.6L	1590	L4	1986-89	Integra	TW6770B	
1.8L	1834	L4	1990-01	Integra (Exc. GS-R & Type-R)	TW6771B	
2.2L	2156	L4	1997	CL	TW6613B	
2.3L	2254	L4	1998-99	CL	TW6773B	

AMC

2.5L	151	L4	1980-83	Eagle, Concord, Spirit	TW6762B	
5.0L	304	V8	1970-81	Ambassador, Gremlin, Hornet, Javelin, CJ/DJ Series	TW6585	
5.9L	360	V8	1970-88	Ambassador, Cherokee, Javelin, J Series, Wagoneer	TW6585	
6.6L	401	V8	1971-76	Ambassador, Cherokee, J10/20, Matador, Wagoneer	TW6585	

Chrysler (Includes Dodge, Plymouth)

1.5L	1468	L4	1987-94	Colt, Excel, Mirage, Precis, Scoupe, Summit	TW6512B	No Baffle
1.5L	1468	L4	1990-96	Colt, Mirage, Precis, Summit	TW6511B	W/Baffle
1.6L	1596	L4	1989-92	Colt, Eiantra, Mirage, Summit	TW6708B	
1.8L	1596	L4	1989	Colt, Mirage	TW6709B	
2.0L	1996	L4	1995-96	Neon	TW6557B	
2.0L	1996	L4	1995-99	Avenger, Eclipse, Sebring, Talon	TW6504B	
2.0L	1997	L4	1989-92	2000 GTX, Galant, Laser, Talon, Sonata(92-95)	TW6708B	
2.0L	1997	L4	1990-92	2000 GTX, Eclipse, Galant, Laser, Talon	TW6709B	
2.4L	2429	L4	1995-00	Breeze, Cirrus, Stratus, Sebring	TW6711B	
2.5L	2507	L4	1986-95	Mini-Van, Acclaim, Daytona, LeBaron, Shadow	TW6508B	
2.8L	170	L6	1960-69	Dodge Pickup/Van, Barracuda, Dart, Lancer, Valiant	TW225T	
3.0L	2972	V6	1987-00	Mini-Van, Acclaim, Daytona, LeBaron, Spirit	TW6507B	
3.2L	198	L6	1962-74	Dodge Pickup/Van, Barracuda, Dart, Duster, Scamp	TW225T	
3.3L	201	V6	1990-02	Mini-Van, Dynasty, Imperial, New Yorker	TW6505B	W/O Oil Level Sensor
3.3L	201	V6	1990-02	Mini-Van, Dynasty, New Yorker	TW6506B	W/Oil Level Sensor
3.5L	3497	V8	1993-97	Concorde, Intrepid, LHS, New Yorker, Vision	TW6705B	
3.7L	225	L6	1960-87	Dodge Pickup/Van, Dart, Duster, Fury, LeBaron	TW225T	
3.8L	230	V6	1991-02	Mini-Van, Imperial, New Yorker	TW6505B	W/O Oil Level Sensor
3.8L	230	V6	1991-02	Mini-Van, New Yorker	TW6506B	W/Oil Level Sensor
3.9L	239	V6	1987-91	Dakota, Dodge Pickup & Van	TW6710B	
3.9L	239	V6	1992-03	Dakota, Durango, Dodge Pickup & Van	TW6716B	
5.2L	318	V8	1971-91	Dodge Pickup, Dodge/Plymouth Van, Ramcharger	TW6509B	
5.2L	318	V8	1965-72	Barracuda, Challenger, Charger, Dart, Satellite	TW6569B	
5.2L	318	V8	1973-89	Caravelle, Challenger, Diplomat, Fifth Avenue	TW6706B	
5.2L	318	V8	1992-97	Dodge Pickup & Van, Ramcharger	TW6712B	
5.2L	318	V8	1994-01	Dodge Pickup & Van, Grand Cherokee	TW6713B	W/O Oil Level Sensor
5.2L	318	V8	1992-03	Dakota, Durango, Dodge Van	TW6715B	
5.6L	340	V8	1965-72	Barracuda, Challenger, Charger, Dart, Satellite	TW6569B	
5.6L	340	V8	1973-89	Caravelle, Challenger, Diplomat, Fifth Avenue	TW6706B	
5.9L	360	V8	1971-91	Dodge Pickup, Dodge/Plymouth Van, Ramcharger	TW6702B	
5.9L	360	V8	1992-97	Dodge Pickup & Van, Ramcharger	TW6712B	

Chrysler, Cummins, Ford

Chrysler (Cont.)

Liter	CI/CC	Eng.	Year	Application (Reference Only)	Part #	Comments
5.9L	360	V8	1994-02	Dodge Pickup & Van	TW6713B	W/O Oil Level Sensor
5.9L	360	V8	1998-03	Dakota, Durango, Dodge Van	TW6715B	
5.9L	361	V8	1958-66	Belvedere, Custom, Fury, Newport, Polara, Savoy	TW6563B	
5.9L	361	V8	1962-64	Mopar Big Block "B", 7 quart, 7" Extra Deep Pan	TW5750B	
6.3L	383	V8	1959-71	Dodge Pickup, Belvedere, D/W Series, Dart, 300	TW6563B	
6.3L	383	V8	1959-71	Mopar Big Block "B", 7 quart, 7" Extra Deep Pan	TW5750B	
6.6L	400	V8	1971-78	Dodge Pickup/Van, Charger, Fury, Monaco, Satellite	TW6563B	
6.6L	400	V8	1971-78	Mopar Big Block "B", 7 quart, 7" Extra Deep Pan	TW5750B	
6.8L	413	V8	1959-65	300, Custom, Dart, Imperial, New Yorker, T&C	TW6563B	
6.8L	413	V8	1961-65	Mopar Big Block "RB", 7 quart, 7" Extra Deep Pan	TW5750B	
7.0L	426	V8	1963-71	Challenger, Charger, Cuda, Duster, Roadrunner	TW6563B	
7.0L	426	V8	1965-71	Mopar Big Block "HEMI", 7 quart, 7" Extra Deep Pan	TW5750B	
7.2L	440	V8	1966-79	Dodge Pickup/Van, Charger, Cuda, Roadrunner	TW6563B	
7.2L	440	V8	1966-79	Mopar Big Block "RB", 7 quart, 7" Extra Deep Pan	TW5750B	

Cummins

	N14		1980-02	Cummins N14 Front Sump	TW6701B	
	N14		1980-02	Cummins N14 Rear Sump	TW6799B	

Ford (Includes Lincoln, Mercury)

1.3L	1295	L4	1986-93	Festiva	TW6618B	W/Baffle
1.6L	1598	L4	1987-88	Mercury Tracer, Mazda 323	TW6618B	W/Baffle
2.0L	1989	L4	1993-03	Probe, Mazda 626, MX-6, Protégé	TW6780B	
2.2L	2184	L4	1988-92	Probe, Mazda 626, MX-6	TW6622B	W/O Oil Level Sensor
2.2L	133	L4	1989-92	Probe (includes GT)	TW6513B	W/Oil Level Sensor
2.3L	140	L4	1987-90	Mustang	TW6745B	W/O Oil Level Sensor
2.3L	140	L4	1985-86	Capri, Cougar, LTD, Marquis, Mustang, Merkur XR4i	TW6745B	W/O Oil Level Sensor
2.3L	140	L4	1985-86	Capri, Cougar, LTD, Marquis, Mustang	TW6746B	W/Oil Level Sensor
2.5L	2450	V6	1993-02	Probe GT, Mazda 626, MX-6, Millenia	TW6781B	
2.8L	171	V6	1983-86	Aerostar, Bronco II, Ranger	TW6728B	W/O Oil Level Sensor
2.9L	177	V6	1986	Bronco II, Ranger	TW6728B	W/O Oil Level Sensor
2.9L	177	V6	1986-92	Bronco II, Ranger	TW6729B	W/Oil Level Sensor
3.0L	182	V8	1986-90	Taurus, Sable	TW6516B	W/O Oil Level Sensor
3.0L	182	V8	1986-90	Taurus, Aerostar, Sable	TW6517B	W/Oil Level Sensor
3.0L	182	V6	1991-99	Taurus, Tempo, Windstar, Sable	TW6514B	W/O Oil Level Sensor
3.0L	182	V6	1991-98	Taurus, Windstar, Sable, Probe(90-92)	TW6515B	W/Oil Level Sensor
3.0L	182	V6	1990-92	Aerostar, Ranger	TW6518B	
3.0L	182	V8	1993-97	Aerostar, Ranger, Mazda B3000(94-01)	TW6545B	W/Oil Level Sensor
3.0L	182	V6	1993-01	Ranger, Mazda B3000, Aerostar(97)	TW6546B	W/O Oil Level Sensor
3.0L	2960	V6	1994-98	Mercury Villager, Nissan Quest	TW6783B	W/Oil Level Sensor
3.0L	2960	V6	1994-98	Mercury Villager, Nissan Quest	TW6784B	W/O Oil Level Sensor
3.3L	3275	V6	1999-02	Mercury Villager, Nissan Quest	TW6783B	W/Oil Level Sensor
3.3L	3275	V6	1999-02	Mercury Villager, Nissan Quest	TW6784B	W/O Oil Level Sensor
3.8L	232	V6	1988-95	Taurus, Sable, Continental, Windstar(95-98)	TW6730B	W/O Oil Level Sensor
3.8L	232	V6	1988-95	Taurus, Sable, Continental, Windstar(95-98)	TW6731B	W/Oil Level Sensor
4.2L	255	V8	1981-82	F-100 Pickup	TW6414B	
4.2L	255	V8	1980-82	Capri, Cougar, Fairmont, LTD, Mustang, T-Bird	TW6405B	W/O Oil Level Sensor
4.2L	255	V8	1980-82	Fairmont, LTD, Mustang, Thunderbird, Cougar	6513B	Front Sump, No Dipstick



Ford, General Motors

Ford (Cont.)

Liter	CI/CC	Eng.	Year	Application (Reference Only)	Part #	Comments
4.2L	255	V8	1980	Granada, Monarch	TW6742B	No Baffle
4.2L	255	V8	1980	Granada, Monarch	TW6743B	W/Baffle
4.2L	256	V8	2004	F-150 Pickup	TW6747B	
4.3L	260	V8	1963-64	Fairlane, Falcon, Mustang, Comet, Cyclone	6513B	
4.6L	261	V8	1991-02	Crown Victoria, Grand Marquis, Town Car	TW6734B	
4.6L	261	V8	1997-04	Expedition, F-150, F-250 Pickup	TW6747B	
4.6L	261	V8	1997-04	E-150, E-250 Econoline Van	TW6748B	
4.7L	289	V8	1963-68	Fairlane, Falcon, Galaxie, LTD, Mustang, Torino	6513B	
4.7L	289	V8	1964-68	Comet, Cougar, Fairlane, Falcon, Mustang, Torino	TW6742B	No Baffle
4.7L	289	V8	1964-68	Comet, Cougar, Fairlane, Falcon, Mustang, Torino	TW6743B	W/Baffle
4.9L	300	L6	1983-96	Bronco, Ford Pickup, Ford Van	TW6543B	
4.9L	300	L6	1980-82	Bronco, Ford Pickup, Ford Van	TW6725B	Dipstick Tube In Pan
4.9L	300	L6	1967-79	Ford Pickup	TW6744B	
5.0L	302	V8	1980-96	Bronco, Ford Pickup, Ford Van	TW6414B	
5.0L	302	V8	1961-64	Ford Van	TW6542B	Dipstick Tube In Pan
5.0L	302	V8	1979-95	Capri, Cougar, Crown Vic, Mustang, T-Bird, Town Car	TW6405B	W/O Oil Level Sensor
5.0L	302	V8	1981-95	Capri, Cougar, Crown Vic, Mustang, T-Bird, Mark VII	TW6406B	W/Oil Level Sensor
5.0L	302	V8	1976-79	Capri, Fairmont, LTD, Marquis, Mustang, Zephyr	TW6407B	Dipstick Tube In Pan
5.0L	302	V8	1966-80	Comet, Cougar, Fairlane, Falcon, Mustang, Torino	TW6742B	No Baffle
5.0L	302	V8	1966-80	Comet, Cougar, Fairlane, Falcon, Mustang, Torino	TW6743B	W/Baffle
5.0L	302	V8	1966-90	Crown Vic, LTD, Mustang, Torino, T-Bird, Mark VI	6513B	Front Sump
5.4L	330	V8	1997-03	Expedition, Ford Pickup, Navigator	TW6747B	
5.4L	330	V8	1997-04	Ford Van	TW6748B	
5.8L	351	V8	1969-90	Crown Vic, LTD, Mustang, Torino, Galaxie 500, Cougar	6514B	Front Sump, No Dipstick
5.8L	351	V8	1985-97	Bronco, F Series Pickup, Ford Van	TW6415B	
5.8L	351	V8	1981-87	Bronco, F Series Pickup, Ford Van	TW6727B	Dipstick Tube In Pan
5.8L	351	V8	1979-91	Crown Victoria, Grand Marquis, LTD	TW6733B	Dipstick Tube In Pan
5.8L	351C, 351M	V8	1970-79	Ford Pass. Car, 351C, 351M, 400	6514CB	Front Sump
5.8L	352	V8	1966-67	Pickup, Wagon, Galaxie, Meteor, Monterey(61-62)	TW6561B	
6.4L	390	V8	1961-77	Pickup, Wagon, Fairlane, Galaxie, Mustang, T-Bird	TW6561B	
6.6L	400	V8	1977	Lincoln Continental, Mark V	TW6560B	Front Sump
6.6L			1968-91	Ford New Holland	TW6732B	
6.7L	406	V8	1961-65	Custom, Galaxie, Sunliner, Victoria, Monterey	TW6561B	
6.9L	420	V8	1963-67	Ford Pickup, Ford Van	TW6416B	
7.0L	427	V8	1963-68	Fairlane, Galaxie, T-Bird, Station Wagon, Comet	TW6561B	
7.0L	429	V8	1966-73	Galaxie 500, LTD, T-Bird, Wagon, Torino (Exc. Boss)	TW6560B	Front Sump
7.3L	445	V8	1966-94	Ford Pickup, Ford Van	TW6416B	
7.3L	445	V8	1994-96	Ford Pickup, Ford Van	TW6740B	
7.3L	445	V8	1997-03	Excursion, Ford Pickup & Van	TW6741B	
7.5L	460	V8	1966-78	Custom 500, LTD, Torino, Continental, Mark III, IV, V	TW6560B	Front Sump
7.5L	460	V8	1983-89	Ford F-250, F-350 Pickup	TW6735B	Screw-in Dipstick Tube
7.5L	460	V8	1989-92	Ford F-250, F-350, F-450 Pickup	TW6558	Push-in Dipstick Tube
7.5L	460	V8	1993-94	Ford F-250, F-350, F-450 Pickup	TW6736B	
7.5L	460	V8	1995-97	Ford F-250, F-350, F-450 Pickup	TW6736B	
7.8L	460		1968-91	Ford New Holland	TW6732B	

General Motors

1.0L	993	L3	1985-95	Firefly, Metro, Sprint, Suzuki Swift, Forsa	TW6754B	
1.0L	993	L3	1996-00	Firefly, Metro	TW6769B	
1.3L	1295	L4	1992-95	Firefly, Metro; Suzuki Swift(89-95)	TW6631B	
1.3L	1295	L4	1996-01	Firefly, Metro; Suzuki Swift	TW6763B	

General Motors

General Motors (Cont.)

Liter	CI/CC	Eng.	Year	Application (Reference Only)	Part #	Comments
1.6L	1588	L4	1985-92	Nova, Prizm, Toyota Corolla, MR2	TW6633B	W/O Oil Cooler
1.6L	1588	L4	1989-95	Tracker, Sunrunner; Suzuki Sidekick	TW6632B	
1.6L	1590	L4	1995-00	Tracker, Sunrunner; Suzuki Sidekick, Vitara, X-90	TW6764B	
1.6L	1587	L4	1989-92	Geo Prizm; Toyota Celica, Corolla, MR2	TW6635B	W/O Oil Cooler
1.6L	1587	L4	1993-97	Geo Prizm, Toyota Corolla	TW6639B	
1.9L	116	L4	1991-02	Saturn SC, SL, SW Series	TW6757B	
2.0L	122	L4	1987-92	Firenza, Grand Am, LeMans; Skyhawk, Sunbird	TW6605B	W/O Oil Level Sensor
2.0L	122	L4	1993-94	Sunbird	TW6606B	W/Oil Level Sensor
2.0L	122	L4	1987-89	Beretta, Cavalier, Corsica, Firenza, Tempest	TW6582B	W/O Oil Level Sensor
2.2L	134	L4	1990-02	Beretta, Cavalier, Century, Ciera, Corsica, Sunfire	TW6582B	W/O Oil Level Sensor
2.2L	134	L4	1990-02	Beretta, Cavalier, Century, Ciera, Corsica, Sunfire	TW6583B	W/Oil Level Sensor
2.5L	151	L4	1978-93	Camaro, Celebrity, Century, Cutlass, Fiero, S10, S15	TW6762B	
2.8L	173	V6	1987-89	Beretta, Cavalier, Century, Cutlass, Grand Prix	TW6587B	W/O Oil Level Sensor
2.8L	173	V6	1980-86	6000, Celebrity, Century, Cutlass, Citation, Fiero	TW6581B	
2.8L	173	V6	1982-86	Blazer, Camaro, Firebird, S10/S15 Pickup 4X2	TW6750B	
2.8L	173	V6	1987-93	Blazer, Camaro, Firebird, S Series Pickup	TW6751B	
3.0L	181	V6	1985-88	Calais, Delta 88, Grand Am, Skylark, Somerset	TW6410B	W/O Oil Level Sensor
3.1L	189	V6	1988-95	Beretta, Cutlass, Grand Prix, Lumina, Regal, 6000	TW6587B	W/O Oil Level Sensor
3.1L	189	V6	1990-92	Camaro, Firebird	TW6751B	
3.3L	204	V6	1989-93	Century, Cutlass Calais/Ciera, Skylark	TW6410B	W/O Oil Level Sensor
3.4L	207	V6	1991-94	Cutlass Supreme, Grand Prix, Lumina	TW6587B	W/O Oil Level Sensor
3.4L	207	V6	1995-97	Cutlass Supreme, Grand Prix, Lumina, Monte Carlo	TW6588B	W/Oil Level Sensor
3.8L	231	V6	1995-98	LeSabre, Park Avenue, Mini-Van(95)	TW6752B	W/O Oil Level Sensor
3.8L	231	V6	1995-04	Delta 88, Grand Prix, Impala, Monte Carlo, Regal	TW6753B	W/Oil Level Sensor
3.8L	231	V6	1990-94	Bonneville, Delta 88, LeSabre, Regal, Mini-Van(92-94)	TW6408B	W/O Oil Level Sensor
3.8L	231	V6	1990-95	Bonneville, Delta 88, LeSabre, Regal, Mini-Van(92-94)	TW6409B	W/Oil Level Sensor
3.8L	231	V6	1986-90	Bonneville, Century, Ciera, Delta 88, 98, Elektra	TW6410B	W/O Oil Level Sensor
3.8L	231	V8	1988-90	Reatta, Riviera, Toronado	TW6758B	W/Oil Level Sensor
4.3L	265	V8	1994-96	Caprice	TW6404B	4 Qt.; W/ Oil Level Sensor
4.3L	262	V6	1986-96	Chev./GMC Pickup, Mini-Van & Van	TW6412B	
4.3L	262	V6	1988-95	Blazer S10, Jimmy S15, S10/S15 Pickup 4X2	TW6413B	
4.4L	267	V8	1980-82	Camaro, Caprice, Impala, LeSabre, Malibu, Regal	TW6401B	Dipstick On Pass. Side
4.4L	267	V8	1979	El Camino, LeMans, Malibu, Monte Carlo	TW6402B	Dipstick Tube In Pan
4.6L	283	V8	1963-67	Chev./GMC Pickup, Bel Air, Biscayne, Impala	TW6400B	Dipstick On Driver Side
5.0L	305	V8	1986-02	Chev./GMC Pickup & Van, Blazer, Pass. Cars	TW6403B	4 Qt. W/O Oil Level Sensor
5.0L	305	V8	1991-93	Caprice, Roadmaster(91)	TW6404B	4 Qt. W/Oil Level Sensor
5.0L	305	V8	1980-85	Chev./GMC Pickup & Van, Blazer, Pass. Cars	TW6401B	Dipstick On Pass. Side
5.0L	305	V8	1968-79	Chev./GMC Pickup & Van, Blazer, Pass. Cars	TW6400B	Dipstick On Driver Side
5.0L	305	V8	1978-79	Century, Cutlass, Grand Prix, Malibu, Regal	TW6402B	Dipstick Tube In Pan
5.4L	327	V8	1964-69	Chev./GMC Pickup, Bel Air, Camaro, Impala	TW6400B	Dipstick On Driver Side
5.7L	350	V8	1986-02	Chev./GMC Pickup & Van, Blazer, Pass. Cars	TW6403B	4 Qt. W/O Oil Level Sensor
5.7L	350	V8	1991-97	Camaro, Caprice, Firebird, Fleetwood, Roadmaster	TW6404B	4 Qt.; W/ Oil Level Sensor
5.7L	350	V8	1980-85	Chev./GMC Pickup & Van, Blazer, Pass. Cars	TW6401B	Dipstick On Pass. Side
5.7L	350	V8	1987-79	Chev./GMC Pickup & Van, Blazer, Pass. Cars	TW6400B	Dipstick On Driver Side
5.7L	350	V8	1978-79	Century, Cutlass Cruiser, Malibu	TW6402B	Dipstick Tube In Pan
5.7L	350	V8	1986-02	Chev./Gmc Pickup & Van, Suburban	TW6759B	5 Quart
5.7L	350 (Marine)	V8	1986-Up	Chevy Small Block - Marine Applications 86 & up	TW6760B	



General Motors, Honda, Hyundai, International

General Motors (Cont.)

Liter	CI/CC	Eng.	Year	Application (Reference Only)	Part #	Comments
6.2L	379	V8	1982-91	Chev./GMC Pickup & Van, Suburban, Blazer	TW6765B	
6.2L	379	V8	1992-93	Chev./Gmc Pickup & Van, Suburban	TW6766B	
6.5L	395	V8	1992-02	Chev./Gmc Pickup & Van, Suburban, Yukon, Tahoe	TW6766B	
6.5L	396	V8	1966-70	Camaro, Chevelle, Malibu, Nova, Beaumont	TW6761B	
6.5L	396	V8	1968-70	GM Mark 4 Engine (not Corvette)	TW6550B	
6.6L	400	V8	1980	Chev./Gmc Pickup & Van, Suburban	TW6401B	Dipstick On Pass. Side
6.6L	400	V8	1970-79	Chev./GMC Pickup & Van, Blazer, Pass. Cars	TW6400B	Dipstick On Driver Side
6.6L	402	V8	1970-72	Camaro, Chevelle, Chev./Gmc Pickup, Suburban	TW6761B	
6.6L	402	V8	1970-72	GM Mark 4 Engine (not Corvette)	TW6550B	
7.4L	454	V8	1970-76	Camaro, Chevelle, Chev./Gmc Pickup, Van, Suburban	TW6761B	
7.4L	454	V8	1970-95	GM Mark 4 Engine (not Corvette)	TW6550B	
7.4L	454	V8	1991-00	Chev./Gmc Pickup & Van, Suburban	TW6767B	
7.4L	330-455	V8	All	Oldsmobile 330-455 All years(except 1975-400)	TW6484B	
7.4L	301-455	V8	1974-81	Pontiac 301-455	TW6586B	

Honda

1.3L	1342	L4	1984-87	Civic	TW6770B	
1.5L	1487	L4	1984-87	Civic, CRX	TW6770B	
1.5L	1487	L4	1988-95	Civic, Civic Del Sol, CRX	TW6609B	
1.6L	1590	L4	1988-89	Integra	TW6770B	
1.6L	1590	L4	1988-95	Civic, Civic Del Sol, CRX	TW6609B	
1.6L	1590	L4	1994-00	Civic, Civic Del Sol	TW6771B	
1.6L	1590	L4	1996-00	Civic (SOHC)	TW6772B	
1.8L	1829	L4	1983-87	Prelude, Accord SE-I(85)	TW6611B	
1.8L	1829	L4	1984-85	Accord	TW6612B	
2.0L	1955	L4	1985-89	Accord, Prelude	TW6611B	
2.0L	1972	L4	1997-01	Honda CRV	TW6615B	
2.2L	2156	L4	1990-97	Accord, Odyssey, Prelude; Acura CL(97)	TW6613B	
2.3L	2259	L4	1992-96	Prelude	TW6613B	
2.3L	2254	L4	1996-02	Accord, Odyssey; Acura CL, Isuzu Oasis(98-99)	TW6773B	

Hyundai

1.5L	1488	L4	1990-94	Excel, Scoupe(91-92)	TW6512B	No Baffle
1.5L	1495	L4	1993-94	Scoupe (Exc.Turbo)	TW6774B	No Baffle
1.5L	1495	L4	1995-02	Accent, Scoupe(95 Exc. Turbo)	TW6775B	W/Baffle
1.5L	1495	L4	1993-94	Scoupe (Turbo)	TW6776B	
1.5L	1495	L4	1995	Scoupe (Turbo)	TW6777B	
1.6L	1596	L4	1992-95	Elantra	TW6708B	
1.6L	1600	L4	2001-04	Accent	TW6775B	W/Baffle
1.8L	1836	L4	1993-95	Elantra	TW6708B	
1.8L	1796	L4	1996-98	Elantra, Tiburon(97)	TW6778B	
2.0L	1997	L4	1992-95	Sonata	TW6708B	
2.0L	1975	L4	1997-01	Tiburon, Elantra(99-00)	TW6778B	

International

7.3L	445	V8	Pre 93	International Navistar (Diesel)	TW6417B	
7.3L	445	V8	1981-97	International DT466, DTA466 (Rear Sump)	TW6720B	Rear Sump
7.3L	445	V8	1981-97	International DT360	TW6722B	
7.3L	445	V8	1994-01	International DTA466, DT408 & DT530	TW6723B	W/O Pan Heater
7.3L	445	V8	1994-01	International DT466, DT530	TW6724B	W/Pan Heater

Isuzu, Jeep, Mazda, Mitsubishi, Nissan

Isuzu						
liter	CI/CC	Eng.	Year	Application (Reference Only)	Part #	Comments
2.2L	2156	L4	1996-97	Oasis	TW6613B	
2.3L	2254	L4	1996-99	Oasis	TW6773B	
Jeep						
2.5L	150	L4	1986-95	Cherokee, Comanche, Wagoneer, Wrangler, CJ7(86)	TW6616B	
2.5L	151	L4	1980-83	CJ5, CJ7, Scrambler	TW6762B	
3.8L	232	L6	1971-78	CJ5, CJ6, DJ5, Jeepster(73), Wagoneer(71)	TW6707B	
4.0L	242	L6	1987-91	Cherokee, Comanche, Wagoneer, Wrangler	TW6703B	W/O Oil Level Sensor
4.0L	242	L6	1992-01	Cherokee, Grand Cherokee, Wagoneer, Wrangler	TW6703B	W/O Oil Level Sensor
4.0L	242	L6	1992-97	Cherokee, Grand Cherokee, Wrangler	TW6704B	W/Oil Level Sensor
4.2L	258	L6	1972-90	CJ5, CJ6, J10, Cherokee, Wagoneer, Wrangler	TW6707B	
5.2L	318	V8	1993-98	Grand Cherokee, Grand Wagoneer(93)	TW6713B	W/O Oil Level Sensor
5.2L	318	V8	1993	Grand Cherokee	TW6714B	W/Oil Level Sensor
5.9L	360	V8	1998	Grand Cherokee	TW6713B	W/O Oil Level Sensor
Mazda						
1.5L	1489	L4	1995	Protégé	TW6620B	W/Baffle
1.6L	1598	L4	1986-87	323	TW6726B	No Baffle
1.6L	1598	L4	1988-89	323; Ford Festiva; Mercury Tracer	TW6618B	W/Baffle
1.6L	1597	L4	1990-01	323, MX-3, Protégé	TW6619B	
1.6L	1597	L4	1994-96	MX-3	TW6620B	W/Baffle
1.8L	1839	L4	1990-91	323	TW6619B	
1.8L	1845	V6	1992-94	MX-3	TW6781B	
1.8L	1839	L4	1999-00	Protégé	TW6780B	
2.0L	1986	L4	1983-87	626	TW6623B	
2.0L	1989	L4	1993-03	626, MX-6, Protégé, Ford Probe	TW6780B	
2.2L	2184	L4	1988-92	626, MX-6; Ford Probe	TW6622B	W/O Oil Level Sensor
2.2L	2184	L4	1987-93	B2200 Pickup	TW6779B	
2.5L	2497	V6	1993-02	626, MX-6, Millenia; Ford Probe GT	TW6781B	
3.0L	2954	V6	1994-01	B3000 Pickup; Ford Ranger, Aerostar	TW6545B	W/Oil Level Sensor
3.0L	2954	V6	1994-01	B3000 Pickup; Ford Ranger, Aerostar	TW6546B	W/O Oil Level Sensor
3.0L	2954	V6	1988-98	MPV 2WD, 929(88-91)	TW6782B	
Mitsubishi						
1.5L	1468	L4	1987-94	Mirage, Precis	TW6512B	No Baffle
1.5L	1468	L4	1990-95	Mirage, Precis	TW6511B	W/Baffle
1.6L	1597	L4	1989	Mirage	TW6709B	
1.6L	1597	L4	1991-92	Mirage	TW6708B	
2.0L	1997	L4	1989-92	Eclipse, Galant (w/o Turbo)	TW6708B	
2.0L	1997	L4	1990-92	Eclipse, Galant (w/Turbo)	TW6709B	
2.0L	1997	L4	1995-99	Eclipse (w/o Turbo)	TW6504B	
Nissan						
1.6L	1597	L4	1989-99	200SX, NX, Pulsar NX, Sentra	TW6626B	
1.8L	1809	L4	1989	Pulsar NX (SOHC)	TW6626B	
2.4L	2389	L4	1993-01	Altima	TW6785B	
3.0L	2960	V6	1994-98	Quest; Mercury Villager	TW6783B	W/O Oil Level Sensor
3.0L	2960	V6	1994-98	Quest; Mercury Villager	TW6784B	W/Oil Level Sensor
3.0L	2960	V6	1989-94	Maxima	TW6786B	
3.3L	3275	V6	1999-02	Quest; Mercury Villager	TW6783B	W/O Oil Level Sensor
3.3L	3275	V6	1999-02	Quest; Mercury Villager	TW6784B	W/Oil Level Sensor



Subaru, Suzuki, Toyota

Subaru

Liter	Ci/CC	Eng.	Year	Application (Reference Only)	Part #	Comments
1.8L	1781	H4	1993-97	Impreza	TW6788B	
2.2L	2212	H4	1990-92	Legacy	TW6787B	
2.2L	2212	H4	1992-99	Impreza, Legacy	TW6788B	
2.5L	2458	H4	1996-04	Forester, Legacy, Impreza(96)	TW6787B	
2.5L	2458	H4	2000-04	Legacy	TW6788B	

Suzuki

1.0L	993	L3	1985-93	Forsa, Swift; Chev Sprint, Geo Metro, Pont. Firefly	TW6754B	
1.3L	1295	L4	1989-95	Swift; Chev./Geo Metro, Pontiac Firefly	TW6631B	
1.3L	1295	L4	1996-01	Swift; Chev./Geo Metro, Pontiac Firefly	TW6763B	
1.8L	1590	L4	1989-95	Sidekick; Chev./Geo Tracker, Pont Sunrunner	TW6632B	
1.6L	1590	L4	1992-95	Esteem, Swift	TW6631B	
1.6L	1590	L4	1996-00	Esteem	TW6763B	
1.8L	1590	L4	1996-01	Sidekick X90, Vitara; Chev./Geo Tracker, Sunrunner	TW6764B	

Toyota

1.5L	1456	L4	1987-94	Paseo, Tercel	TW6789B	
1.5L	1497	L4	1995-99	Paseo, Tercel	TW6645B	
1.8L	1588	L4	1984-88	Corolla, MR2; Chev. Nova, Geo Prizm	TW6633B	W/O Oil Cooler
1.6L	1587	L4	1985-88	Corolla, MR2	TW6634B	W/Oil Cooler
1.6L	1587	L4	1988-93	Celica, Corolla, MR2; Geo Prizm	TW6635B	W/O Oil Cooler
1.6L	1587	L4	1988-91	Corolla, MR2	TW6636B	W/Oil Cooler
1.6L	1587	L4	1988-92	Corolla 4WD	TW6638B	
1.6L	1587	L4	1993-97	Corolla; Geo Prizm	TW6639B	
2.0L	1998	L4	1986-91	Camry, Celica	TW6790B	
2.0L	1998	L4	1996-00	Rav4	TW6790B	
2.2L	2164	L4	1982-01	Camry, Solara(99-01)	TW6642B	
2.2L	2164	L4	1990-99	Celica, MR2	TW6790B	
2.2L	2189	L4	1979-80	Toyota Pickup 2WD (20R Eng.)	TW6791B	
2.2L	2189	L4	1979-80	Toyota Pickup 4WD	TW6792B	
2.4L	2368	L4	1981-95	Toyota Pickup 2WD, 4Runner(90-91, 4WD, A.T.)	TW6791B	
2.4L	2368	L4	1981-95	Toyota Pickup 4WD, 4Runner	TW6792B	
2.4L	2368	L4	1990-91	4Runner 2WD & 4WD w/Manual Trans	TW6792B	

Oil Pans (Acura, AMC)

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Acura (2.2L)



TW6613B

Acura (1.6L)



TW6770B

Acura (1.8L)



TW6771B

Acura (2.3L)



TW6773B

AMC (304,360,401)



TW6585

AMC (2.5L)



TW6762B

Oil Pans (Chrysler)

Chrysler (170,198,225)



TW225T

**Chrysler
(361,383,400,413,426,440)**



TW5750B

Chrysler (2.0L)



TW6504B

Chrysler (3.3L, 3.8L)



(w/o Oil Level Sensor)

TW6505B

Chrysler (3.3L, 3.8L)



(w/Oil Level Sensor)

TW6506B

Chrysler (3.0L)



TW6507B

Chrysler (2.5L)



TW6508B

Chrysler (318)



TW6509B

Chrysler (1.5L, 2.4L)



(w/Baffle)

TW6511B

Chrysler (1.5L)



(w/o Baffle)

TW6512B

Chrysler (2.0L)



TW6557B

**Chrysler
(361,383,400,413,426,440)**



TW6563B

Chrysler (318,340)



TW6569B

Chrysler (360)



TW6702B

Chrysler (3.5L)



TW6705B

Chrysler (318,340)



TW6706B

Chrysler (1.6L, 2.0L)



TW6708B

Chrysler (1.6L, 2.0L)



TW6709B

Chrysler (3.9L)



TW6710B

Chrysler (2.4L)



TW6711B

Chrysler (318,360)



TW6712B

Chrysler (318,360)



(w/o Oil Level Sensor)

TW6713B

Chrysler (318,360)



TW6715B

Chrysler (3.9L)



TW6716B



Oil Pans (Cummins, Ford)

Cummins (N-14)



(Front Sump)

TW6701B

Cummins (N-14)



(Rear Sump)

TW6799B

Ford (255,260,289,302)



(Front Sump, No Dipstick)

6513B

Ford (351W)



(Front Sump, No Dipstick)

6514B

Ford (351C,351M,400)



(Front Sump)

6514CB

Ford (302, 5.0L)



(w/o Oil Level Sensor)

TW6405B

Ford (302)



(w/Oil Level Sensor)

TW6406B

Ford (302)



(Dipstick Tube In Pan)

TW6407B

Ford (255,302)



TW6414B

Ford (351W)



TW6415B

Ford (6.9L, 7.3L)



TW6416B

Ford (2.2L)



(w/Oil Level Sensor)

TW6513B

Ford (3.0L)



(w/o Oil Level Sensor)

TW6514B

Ford (3.0L)



(w/Oil Level Sensor)

TW6515B

Ford (3.0L)



(w/o Oil Level Sensor)

TW6516B

Ford (3.0L)



(w/Oil Level Sensor)

TW6517B

Ford (1.3L, 1.6L)



TW6518B

Ford (289,302)



(Dipstick Tube In Pan)

TW6542B

Ford (300, 4.9L)



TW6543B

Ford (3.0L)



(w/Oil Level Sensor)

TW6545B

Ford (3.0L)



(w/o Oil Level Sensor)

TW6546B

Ford (460)



(Push-In Dipstick Tube)

TW6558

Ford (400,460)



(Front Sump)

TW6560B

Ford (390,427)



TW6561B

Oil Pans (Ford)

Ford (1.3L, 1.6L)



(w/Baffle)

TW6618B

Ford (2.2L)



(w/o Oil Level Sensor)

TW6622B

Ford (3.0L, 4.9L)



(Dipstick Tube In Pan)

TW6725B

Ford (3.51W)



(Dipstick Tube In Pan)

TW6727B

Ford (2.8L, 2.9L)



(w/o Oil Level Sensor)

TW6728B

Ford (2.9L)



(w/Oil Level Sensor)

TW6729B

Ford (3.8L)



(w/o Oil Level Sensor)

TW6730B

Ford (3.8L)



(w/Oil Level Sensor)

TW6731B

Ford (4.0L)



TW6732B

Ford (3.51W)



(Dipstick Tube In Pan)

TW6733B

Ford (4.6L)



TW6734B

Ford (4.6L)



(Screw-In Dipstick Tube)

TW6735B

Ford (4.6L)



TW6736B

Ford (7.3L)



TW6740B

Ford (7.3L)



TW6741B

Ford (2.89,3.02)



(w/o Baffle)

TW6742B

Ford (2.89,3.02)



(w/Baffle)

TW6743B

Ford (3.0L, 4.9L)



TW6744B

Ford (2.3L)



(w/o Oil Level Sensor)

TW6745B

Ford (2.3L)



(w/Oil Level Sensor)

TW6746B

Ford (4.2L, 4.6L)



TW6747B

Ford (4.6L)



TW6748B

Ford (2.0L)



TW6780B

Ford (2.5L)



TW6781B



Oil Pans (Ford, GM)

Ford (3.0L, 3.3L)



(w/Oil Level Sensor)

TW6783B

Ford (3.0L, 3.3L)



(w/o Oil Level Sensor)

TW6784B

GM (283,305,327,350)



(Dipstick on Driver Side.)

TW6400B

GM (267,305,350)



(Dipstick on Passenger Side.)

TW6401B

GM (267,305,350)



(Dipstick Tube in Pan)

TW6402B

GM (305,350)



(4 Qt., w/o Oil Level Sensor)

TW6403B

GM (265,305,350)



(4 Qt., w/Oil Level Sensor)

TW6404B

GM (3.8L)



(w/o Oil Level Sensor)

TW6408B

GM (3.8L)



(w/Oil Level Sensor)

TW6409B

GM (3.8L)



(w/o Oil Level Sensor)

TW6410B

GM (4.3L)



TW6412B

GM (4.3L)



TW6413B

GM (330-455 Olds)



TW6484B

GM (454)



TW6550B

GM (2.8L)



TW6581B

GM (2.0L, 2.2L)



(w/o Oil Level Sensor)

TW6582B

GM (2.2L)



(w/Oil Level Sensor)

TW6583B

GM (301-455 Pontiac)



TW6586B

GM (3.1L, 3.4L)



(w/o Oil Level Sensor)

TW6587B

GM (3.4L)



(w/Oil Level Sensor)

TW6588B

GM (2.0L)



(w/o Oil Level Sensor)

TW6605B

GM (2.0L)



(w/Oil Level Sensor)

TW6606B

GM (1.3L)



TW6631B

GM (1.6L)



TW6632B

Oil Pans (GM, Honda)

GM (1.6L)



(w/o Oil Cooler)

TW6633B

GM (1.6L)



(w/o Oil Cooler)

TW6635B

GM (1.6L)



TW6639B

GM (2.8L)



TW6750B

GM (2.8L, 3.1L)



TW6751B

GM (3.8L)



(w/o Oil Level Sensor)

TW6752B

GM (3.8L)



(w/Oil Level Sensor)

TW6753B

GM (1.0L)



TW6754B

GM (1.9L)



TW6757B

GM (3.8L)



(w/Oil Level Sensor)

TW6758B

GM (350)



(5 Quart)

TW6759B

GM (350 Marine)



TW6760B

GM (396)



TW6761B

GM (2.5L)



TW6762B

GM (1.3L)



TW6763B

GM (1.6L)



TW6764B

GM (6.2L)



TW6765B

GM (6.2L)



TW6766B

GM (454)



TW6767B

GM (1.0L)



TW6769B

Honda (1.5L)



TW6609B

Honda (1.8L, 2.0L)



TW6611B

Honda (1.8L)



TW6612B

Honda (2.2L, 2.3L)



TW6613B



Oil Pans (Honda, Hyundai, International, Isuzu, Jeep)

Honda (2.0L)



TW6615B

Honda (1.3L, 1.5L, 1.6L)



TW6770B

Honda (1.6L)



TW6771B

Honda (1.6L)



TW6772B

Honda (2.3L)



TW6773B

Hyundai (1.5L)



(w/o Baffle)

TW6512B

Hyundai (1.6L, 1.8L, 2.0L)



TW6708B

Hyundai (1.5L)



(w/o Baffle)

TW6774B

Hyundai (1.5L)



(w/Baffle)

TW6775B

Hyundai (1.5L)



TW6776B

Hyundai (1.5L)



TW6777B

Hyundai (1.8L, 2.0L)



TW6778B

International (7.3L, Pre-93)



TW6417B

International (7.3L)



(Rear Sump)

TW6720B

International (7.3L)



TW6722B

International (7.3L)



(w/o Pan Heater)

TW6723B

International (7.3L)



(w/Pan Heater)

TW6724B

Isuzu (2.2L)



TW6613B

Isuzu (2.3L)



TW6773B

Jeep (2.5L)



TW6616B

Jeep (4.0L)



(w/o Oil Level Sensor)

TW6703B

Jeep (4.0L)



(w/Oil Level Sensor)

TW6704B

Jeep (258, 3.8L)



TW6707B

Jeep (318,360)



(w/o Oil Level Sensor)

TW6713B

Oil Pans (Jeep, Mazda, Mitsubishi, Nissan)

Jeep (318)



(w/Oil Level Sensor)

TW6714B

Jeep (2.5L)



TW6762B

Mazda (3.0L)



(w/Oil Level Sensor)

TW6545B

Mazda (3.0L)



(w/o Oil Level Sensor)

TW6546B

Mazda (1.6L)



(w/Baffle)

TW6618B

Mazda (1.6L, 1.8L)



TW6619B

Mazda (1.5L, 1.6L)



(w/Baffle)

TW6620B

Mazda (2.2L)



(w/o Oil Level Sensor)

TW6622B

Mazda (2.0L)



TW6623B

Mazda (1.6L)



(w/o Baffle)

TW6726B

Mazda (2.2L)



TW6779B

Mazda (1.8L)



TW6780B

Mazda (1.8L, 2.5L)



TW6781B

Mazda (3.0L)



TW6782B

Mitsubishi (2.0L)



TW6504B

Mitsubishi (1.5L)



(w/Baffle)

TW6511B

Mitsubishi (1.5L)



(w/o Baffle)

TW6512B

Mitsubishi (1.6L)



TW6708B

Mitsubishi (2.0L)



TW6709B

Nissan (1.8L)



TW6626B

Nissan (3.0L, 3.3L)



(w/o Oil Level Sensor)

TW6783B

Nissan (3.0L, 3.3L)



(w/Oil Level Sensor)

TW6784B

Nissan (2.4L)



TW6785B

Nissan (3.0L)



TW6786B



Oil Pans (Subaru, Suzuki, Toyota)

Subaru (2.2L, 2.5L)



TW6787B

Subaru (1.8L, 2.2L, 2.5L)



TW6788B

Suzuki (1.3L, 1.6L)



TW6631B

Suzuki (1.6L)



TW6632B

Suzuki (1.0L)



TW6754B

Suzuki (1.3L, 1.6L)



TW6763B

Suzuki (1.6L)



TW6764B

Toyota (1.6L)



(w/o Oil Cooler)

TW6633B

Toyota (1.6L)



(w/Oil Cooler)

TW6634B

Toyota (1.6L)



(w/o Oil Cooler)

TW6635B

Toyota (1.6L)



(w/Oil Cooler)

TW6636B

Toyota (1.6L)



TW6638B

Toyota (1.6L)



TW6639B

Toyota (2.2L)



TW6642B

Toyota (1.5L)



TW6645B

Toyota (1.5L)



TW6789B

Toyota (2.0L, 2.2L)



TW6790B

Toyota (2.2L, 2.4L)



TW6791B

Toyota (2.4L)



TW6792B



We Accept The Following Major Credit Cards



Unplated Steel Stock Replacement Oil Pans

SB Chevy

4 Qt. Capacity

Year	Dipstick	Style	Part #
1955-79	Driver's Side	2 pc. Rear Seal	6500
1980-85	Passenger Side	2 pc. Rear Seal	6501
1986-Up	Passenger Side	1 pc. Rear Seal	6503

SB Chevy

Custom Design, Extra Step for Virtually All Applications

Year	Dipstick	Style	Part #
All Years	Either Side	1 pc. Rear Seal	TW3700

BB Chevy

396-454 w/Baffle

Year	Model	Part #
1965-95	Mark IV (does not fit Corvette)	TW6550
1965-92	Extra Clearance Pan	TW6550A

Olds/Pontiac

Year	Model	Part #
1974-81	Pontiac 301-455	TW6586
	Oldsmobile 330-455 (All except 1975 400)	TW6484

Ford

Year	Model	Part #
1987-93	5.0 302 Mustang (Dual Sump)	6540
1965-87	260, 289, 302 (Front Sump Car)	6513
All	351W (Front Sump Car)	6514
1970-79	351C, 351M, 400	6514C
1958-76	390, 406, 427	TW6561
1968-79	429, 460 (Front Sump Car)	TW6560

Chrysler/Dodge

Year	Model	Part #
Early	Dodge Early 273, 318, 340 Car Only	TW6569
All	Mopar 361, 383, 400, 413, Hemi 426	TW6563
1966-Up	BB Mopar Hemi 361-440 & 426 (7" Extra Deep Pan)	TW5750
	Pick-Up for Hemi Pan (for B&RB) 3/8"-18 Threads	TW7050
	Pick-Up for Hemi Pan (Stock Hemi) 3/8"-18 Threads	TW7051





SB Chevy "Finned" Polished Aluminum Oil Pans

4 Qt. Capacity, Drain Plug & Mounting Bolts Included

Year	Dipstick	Style	Part #
1955-79	Driver's Side	2 pc. Rear Seal	TW5290
1980-85	Passenger Side	2 pc. Rear Seal	TW5295
1986-Up	Passenger Side	1 pc. Rear Seal	TW5300



TW5290



TW5295

Chrome Plated Steel Stock Replacement Oil Pans

SB Chevy

4 Qt. Capacity

Year	Dipstick	Style	Part #
1955-79	Driver's Side	2 pc. Rear Seal	6500CP
1955-79	Driver's Side	2 pc. Rear Seal	6500OR (Orange)
1980-85	Passenger Side	2 pc. Rear Seal	6501CP
1986-Up	Passenger Side	1 pc. Rear Seal	6503CP



6500CP/OR



6501CP

Buick/Olds/Pontiac

Year	Model	Part #
1975-83	Buick 14 Bolt	OPB231CP
1974-81	Pontiac 301-455	TW6586CP
Oldsmobile 330-455 (All Except 1975-400)		TW6484CP



6503CP



OPB231CP

BB Chevy

396-454 w/Baffle

Year	Style	Part #
1965-92	Extra Clearance Pan	TW6550ACP



TW6586CP



TW6484CP



TW6550ACP

Marine Oil Pans (No Baffle, Unplated)

Make	Year	Dipstick	Style	Part #
SB Chevy	1955-79	Driver's Side	2 pc. Rear Seal	6500M
SB Chevy	1980-85	Passenger Side	2 pc. Rear Seal	6501M
SB Chevy	1986-Up	Passenger Side	1 pc. Rear Seal	6503M
BB Chevy	1965-95	Mark IV (does not fit Corvette)		TW6550M



6500M

Chrome Plated Steel Stock Replacement Oil Pans

Chrysler/Dodge (Stock Capacity)

Year	Make/Model	Part #
1964-87	Dodge Early 273, 318, 340 Car Only	TW6569CP
All	Chrysler Mopar 361, 383, 400, 413, Hemi 426, 440	TW6563CP
All	Dodge Truck Slant 6 170, 198, 225 (Blue Paint)	TW225T


TW6569CP
TW6563CP

**OE Blue
TW225T**

Ford (Stock Capacity)

Year	Make/Model	Part #
1983-93	5.0 302 Mustang (Dual Sump)	6540CP
1965-87	260, 289, 302 (Front Sump Car)	6513CP
1967-87	351W (Front Sump Car)	6514CP
1970-80	351, 351M, 400 (Front Sump Car)	6514CCP
1958-76	390, 406, 427 (Front Sump Car)	TW6561CP
1968-78	429, 460 (Front Sump Car)	TW6560CP


6540CP
6513CP

6514CP
6514CCP

TW6561CP
TW6560CP

Oil Pan Drain Plugs

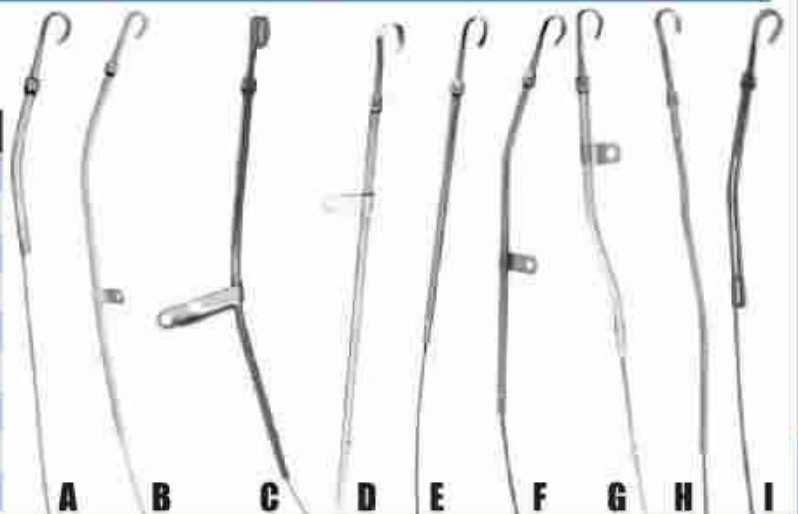
Style	Part #
Replaces 1/2" Self Tapping Type Drain Plug	4243
Double Oversized to Replace 1/2" Drain Plug	4244
Magnetic (1/2"-20 Thread)	4245
Magnetic - 14mm	4246



Chrome Engine Dip Sticks

Dress-Up Style To Replace O.E.

Description	Plc	Part #
Chevy SB Thru-77	A	TW6505CP
Chevy SB 1980-82	B	TW6534CP
Chevy SB 1982-85	C	TW6522CP
Chevy BB 1965-90	D	TW6538CP
Chrysler 318, 340, 360	E	TW6541CP
Chrysler 383, 426, 440	F	TW6542CP
Ford 260, 289, 302	G	TW6535CP
Olds 350-455/Pontiac 403	H	TW6536CP
Pontiac V8 Exc. 389/403	I	TW6537CP


A
B
C
D
E
F
G
H
I



Steel Drag Racing Pan

Super Comp - Super Gas - Bracket Series

Features built-in crank scrapers. Rear sump trap door with sophisticated oil control. Clears 3-7/8" stroke cranks with steel rods. Use with all popular starter flywheel combinations. 8" deep, 7 quart capacity. Fits most Chassis (except Chevy II). Jlg welded .055 USA steel. Uses standard block mounted oil filter. Includes magnetic oil drain, oil pick-up, and bolts. Comes in a black finish.



Application	Part #
Small Block Chevy	TW5170
Big Block Chevy Mark IV	TW5175

Weekend Drag Racer Pans

7009CP



Small Block Chevy 1955-79, 283-350

Driver's Side Dipstick,
8-1/4" Deep, Rear Trap
Door, 7 Qt. Capacity.

Finish	Part #
Zinc	TW5150
Chevy Orange	7009
Chrome Plated	7009CP
Pick-Up Tube	TW7009

TW7009



TW7008CP



Big Block Chevy 1965-Up, 396-454

Driver's Side Dipstick,
8-1/4" Deep, Rear Trap
Door, 6 Qt. Capacity.

Finish	Part #
Zinc	TW7008Z
Chevy Orange	TW7008A
Chrome Plated	TW7008CP
Pick-Up Tube	TW7008

TW7008



TW5155



Small Block Chevy 1980-85

Passenger Side Dipstick,
8-1/4" Deep, Rear Trap
Door, 7 Qt. Capacity

Finish	Part #
Zinc	TW5155
Chevy Orange	TW5154
Pick-Up Tube	TW7009

TW7009



TW5164



Chevy Nova/Monza 1962-67

Driver's Side Dipstick, 8-1/4"
Deep, Rear Trap Door, 7 Qt.
Capacity (Will not fit power.)

Finish	Part #
Black	TW5164
Unplated	TW5165
Pick-Up Tube	TW7009

TW7009





Steel Circle Track Pan

Late Model Stock Cars, Sportsman, & Pro Stock Racers

SB Chevy Hardcore Circle Track Pan, Not For The Light Hearted!

Features built-in scrapers & uni-directional screen to reduce windage and create more horsepower. Extended sump wings and trap door baffles control oil under continuous cornering, braking, and acceleration! Clears 3-7/8" stroke cranks with steel rods. Use with popular starter flywheel combos. 7" deep, 6 quart capacity. Use with block mounted oil filter. Boss for remote dipstick and oil temp sensor. Includes magnetic drain plug, high volume oil pump screen, and hardware!



Part #TW5280



Circle Track Pans

Standard Circle Track Small Block Chevy

1955-79

Driver's Side Dipstick,
7-1/4" Deep, 2 Trap
Doors, 6 Qt. Capacity.



TW5110

Finish	Part #
Zinc	TW5100
Unplated	TW5110
Black OEM	TW5105
Pick-Up Tube (Std.)	TW7106
Pick-Up Tube (Hi-Vol.)	TW7107

Champion Style Small Block Chevy

1955-79

Driver's Side Dip-
stick, 7" Deep, 6 Trap
Doors, 2 Runners,
3 Crank Scrap-
ers, 7 Qt.
Capacity.



TW5085

Finish	Part #
Zinc	TW5080
Unplated	TW5090
Black OEM	TW5085
Pick-Up Tube (Std.)	TW7102
Pick-Up Tube (Hi-Vol.)	TW7103

Standard Circle Track Small Block Chevy

1980-85

Driver's Side Dipstick,
7-1/4" Deep, 2 Trap
Doors, 6 Qt. Capacity.



TW5120

Finish	Part #
Zinc	TW5120
Unplated	TW5130
Black OEM	TW5140
Pick-Up Tube (Std.)	TW7106
Pick-Up Tube (Hi-Vol.)	TW7107

Claimer Style Small Block Chevy

1955-79

Driver's Side Dipstick,
Made with Thicker
Material, 2 Trap Doors,
Crank Scraper with
Windage Tray,
Reinforced Rails,
4 Qt. Capacity.



TW5240

Finish	Part #
Zinc	TW5220
Unplated	TW5240
Black OEM	TW5260
Pick-Up Tube (Std.)	TW7100
Pick-Up Tube (Hi-Vol.)	TW7110



Fabricated Aluminum Racing Valve Covers

NEW



TW9504FV

Application	Style	Part #
SB Chevy	Standard	TW9500FV
SB Chevy	Center Bolt	TW9501FV
SB Chevy	w/Billet Rail	TW9502FV
BB Chevy	Standard	TW9503FV
BB Chevy	w/Billet Rail	TW9504FV
SB Ford	Standard	TW9505FV

Chevy Aluminum Valve Covers

Style	Year	Description	Polished/Chrome	Baffle (Y/N)	# of Holes	Part #	
SB Chevy							
 <p>CNC Flame Logo Polished</p>	1958-85	Short 2-9/16"	Polished	Y	1	TW4830	
	1958-85	Short 2-9/16"	Polished	N	1	TW4860	
	1958-85	Short 2-9/16"	Chrome	Y	1	TW4840	
	1958-85	Tall 3-11/16"	Polished	Y	1	TW4810	
	1958-85	Tall 3-11/16"	Polished	N	1	TW4850	
	1958-85	Tall 3-11/16"	Chrome	Y	1	TW4820	
	1986-Up	Short, Center Bolt Down	Polished	Y	1	TW4890	
	1986-Up	Short, Center Bolt Down	Chrome	Y	1	TW4900	
 <p>Smooth Polished</p>	1958-85	Short 2-9/16"	Polished	Y	1	TW4790	
	1958-85	Short 2-9/16"	Polished	N	1	TW4710	
	1958-85	Short 2-9/16"	Chrome	Y	1	TW4800	
	1958-85	Short 2-9/16"	Chrome	N	1	TW4720	
	1958-85	Short 2-9/16"	Polished	N	0"	TW4670	
	1958-85	Tall 3-11/16"	Polished	Y	1	TW4770	
	1958-85	Tall 3-11/16"	Polished	N	1	TW4690	
	1958-85	Tall 3-11/16"	Chrome	Y	1	TW4780	
	1958-85	Tall 3-11/16"	Chrome	N	1	TW4700	
	1958-85	Tall 3-11/16"	Polished	N	0"	TW4650	
	1986-Up	Short, Center Bolt Down	Polished	Y	1	TW4910	
	1986-Up	Short, Center Bolt Down	Polished	Y	2	TW4920	
1986-Up	Short, Center Bolt Down	Polished	Y	1/2	TW4940		
1986-Up	Short, Center Bolt Down	Polished	N	0"	TW4870		
 <p>CNC Ball Milled</p>	1958-85	Short 2-9/16"	Polished	Y	1	TW4750	
	1958-85	Short 2-9/16"	Polished	N	1	TW4630	
	1958-85	Short 2-9/16"	Chrome	Y	1	TW4760	
	1958-85	Short 2-9/16"	Chrome	N	1	TW4640	
	1958-85	Tall 3-11/16"	Polished	Y	1	TW4730	
	1958-85	Tall 3-11/16"	Polished	N	1	TW4610	
	1958-85	Tall 3-11/16"	Chrome	Y	1	TW4740	
	1958-85	Tall 3-11/16"	Chrome	N	1	TW4620	
	1986-Up	Short, Center Bolt Down	Polished	Y	1	TW4960	
	1986-Up	Short, Center Bolt Down	Polished	Y	2	TW4930	
	1986-Up	Short, Center Bolt Down	Polished	Y	1/2	TW4950	
	1986-Up	Short, Center Bolt Down	Chrome	Y	1	TW4970	
	BB Chevy						
	CNC Flame Logo	1965-95	Tall 3-11/16"	Polished	N	1	TW5020
1965-95		Tall 3-11/16"	Chrome	N	1	TW5030	
Smooth	1965-95	Tall 3-11/16"	Polished	N	1	TW5040	
	1965-95	Tall 3-11/16"	Chrome	N	1	TW5050	
	1965-95	Tall 3-11/16"	Polished	Y	0"	TW5000	
CNC Ball Milled	1965-95	Tall 3-11/16"	Polished	N	1	TW4990	
	1965-95	Tall 3-11/16"	Chrome	N	1	TW4980	

*Customize - No Hole, Drill Your Own Plumbing

Small Block Chevy

305-350 Stock Replacement
(1978-86) With Baffle

Description	Part #
Chrome Steel 2-5/8"	6511CP
Unplated Steel 2-5/8"	6511
Chrome Steel 3-5/8"	TW6553CP



(1.25" Dia. Hole, Use TW4804 Oil Cap)

305-350 Stock Replacement
Short (1978-86)
With Baffle, Wire Harness

Description	Part #
Chrome Steel 2-5/8"	6541CP
Unplated Steel 2-5/8"	6541



(.900" Dia. Hole, Use TW4804 Oil Cap)

305-350 Stock Replacement
(1986-Up) Center Bolt Down
With Baffle

Description	Part #
Chrome Steel 2-5/8"	6506CP
Unplated Steel 2-5/8"	6506



(1.25" Dia. Hole, Use 6539 Oil Cap)

350 Logo

(1958-85) Chrome Steel w/Baffle

Description	Part #
Short 2-5/8"	TW4510
Tall 3-5/8"	TW4500



327 Logo

(1958-85) Chrome Steel w/Baffle

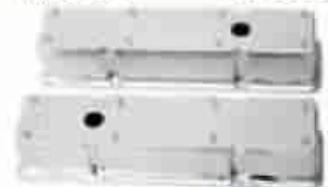
Description	Part #
Short 2-5/8"	TW4530
Tall 3-5/8"	TW5070



283-350 "Two Piece"

(1958-85) Chrome Steel (No Baffle)

Description	Part #
Tall 3-3/4"	TW4600



Steel Circle Track

Fits 1958-86 SB Chevy (Baffled)

Driver side cover is 4-1/8"L x 1-1/2" O.D. tubes.
Passenger side cover is plain, no tubes/holes.

Description	Part #
Zinc Plated	TW4590
Black Paint	TW4580
Unplated	TW4570



Chevy V6 4.3L

Truck Only

Short (1985-93) With Baffle

Description	Part #
Unpainted Steel	TW6502



(.900" Dia. Hole, Use 6539 Oil Cap)

Big Block Chevy

454 Logo - Chrome Steel
With Baffle 396-502
(1965-95)

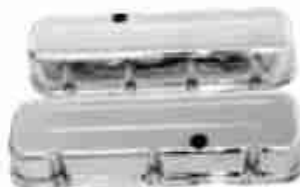
Description	Part #
Short 2-5/8"	TW5060
Tall 3-5/8"	TW4520



Smooth Polished - Steel

(1965-95) 396, 454, 502 w/Baffle

Description	Part #
Chrome Stock Hgt.	TW6551CP
Unplated Stock Hgt.	TW6551
Chrome 3-5/8" Tall	TW6556CP



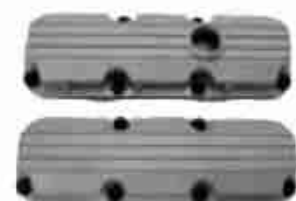
(1.25" Dia. Hole, Use 6539 Oil Cap)

Buick 3800 (Plastic)

Vin K

Complete w/Gaskets, 6 Bolts,
and Grommets

Description	Part #
Plastic, Right Bank	IL625R
Plastic, Left Bank	IL625L





Ford

Smooth Polished Steel

Fits 1962-Up Ford 260, 289, 302, 351W, 5.0L w/Baffle

Description	Part #
Chrome Steel 3-1/2"	6512CP
Unplated Steel 3-1/2"	6512
Unplated (Two Hole)	6512-2

(1.25" Dia. Hole, Use 6539 Oil Cap)

Our Most Popular Ford Valve Cover!



6512-2



6512CP

390/427 Stock Replacement

Fits 1958-76 Ford 390/427

Description	Part #
Chrome Steel 3-7/8"	TW5205



6.9L/7.3L Navistar Stock Replacement Oil Pans

For 1983-88 6.9L/7.3L Ford & International, Black Paint



Description	Part #
OE #1805454C1	TW54C1



Description	Part #
OE #1805647C1, w/EGR	TW47C1



Description	Part #
OE #1813319C1, w/Bracket	TW19C1



Description	Part #
OE #1813271C1, w/Oil fill	TW71C1

Smooth Polished Steel

Fits 1968-Up Ford BB 429-460 w/Baffle

Description	Part #
Chrome Steel 3-11/16"	TW5210



2.3, 2.5L SB Ford



Description	Part #
Black Paint	XFT1010

OE #F5TE6582AE



Description	Part #
Black Paint	XFT1030



Description	Part #
Black Paint	XFT1040

OE #E9JE-6582AA



Description	Part #
Black Paint	XFT1050

Boss 302 Stock Replacement

Fits 1970-Up Ford Boss 302, 351C, 351M w/Baffle

Description	Part #
Chrome Steel 3"	TW5180



AMC/Jeep

232/258 Stock Replacement

Fits 1964-80 AMC/Jeep 199, 232, 258 Three Hole Cover w/Baffle

Description	Part #
Chrome Steel 3-1/2"	TW6587CP



(1.25" Dia. Hole)

Chrysler

318/340/360 Stock Replacement

Chrome Steel, Fits 1964-73 318, 340, 360, w/Baffle

Desc.	Part #
3-1/4"	TW6572CP



(1.25" Dia. Hole, Use 6539 Oil Cap)

Wing Nuts

Style	Length	Thread	Part #	
Anodized Aluminum T-Bar	Red	4-3/4"	1/4"-20 x 1-1/4"	TW6526
	Blue	4-3/4"	1/4"-20 x 1-1/4"	TW6527
	Gold	4-3/4"	1/4"-20 x 1-1/4"	TW6528
	Silver	4-3/4"	1/4"-20 x 1-1/4"	TW6530
Chrome Steel T-Bar	4"	1/4"-20 x 1-3/8"	TW6529	
	5"	1/4"-20 x 1-3/8"	TW6525	
Chrome Steel	3-1/2"	1/4"-20 x 1"	TW6523	
	3-1/2"	5/16"-18 x 1"	TW6524	
Chrome Steel Hex Head Mini Bolt	1-3/8"	1/4"-20 x 1-3/8"	TW6531	
Black Steel Replacement Stud	1-3/8"	1/4"-20 x 1-3/8"	TW6532	



Grommets (Push-In Style)

Make	Style	I.D.	O.D.	Part #
Chevy	PCV w/Foam	N/A	1-1/4"	TW9358N
Chevy	Short Valve Cover	3/4"	1"	TW4400
Chevy	Tall Valve Cover	1"	1-1/4"	TW6510
Ford	Valve Cover	3/4"	1-1/8"	TW9760
Chevy	Valve Cover	1/2"	1-1/4"	6507



Oil Caps (Chrome)

Type	Style	Application	Part #
Twist-In	Steel	Most GM Valve Covers	TW4804
Push-In	Plastic	For 1.25" Dia. Hole	6539
Screw-In	Plastic	GM 1987-Up	TW4805
Push-In	Plastic	GM1987-Up	TW4807



Breather Caps

Style	Part #
3/4" Neck"	TW7200
1" Neck"	TW7202
3/4" Neck w/PCV Tube"	TW7203
2-3/4" Dia.	TW7201



Valve Cover Hold Downs

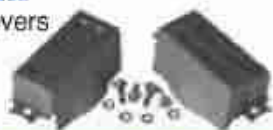
Finish	Length	Part #
Chrome Steel	4-1/4"	TW6520
Chrome Steel	1-1/2"	TW6521
O.E. Style Cast	4-7/8"	TW4440



Baffles For Aluminum

Fits Small Block Chevy Valve Covers

Tall - Part #TW4420
Short - Part #TW4430



Aluminum Valve Cover Spacers

Use with stock valve covers when modified valve train is used. Priced per set.

Description	Part #
SB Chevy 1.150"	AV900
BB Chevy 1.150"	AV910
Ford Cleveland 1.200"	AV920
Ford 429/460 1.400"	AV930
Ford 260-302-351W 1.200"	AV940





SB Chevy Timing Covers

Chrome Aluminum

Description	Part #
Cover Only	TW3500
Complete Kit*	TW3500KT



Polished Aluminum

Description	Part #
Cover Only	TW3510
Complete Kit*	TW3510KT



*Complete Kit Includes Cover, Seals, and Bolts.

SB Chevy Aftermarket Style Cover

8" Balancer Car or Truck (Bolt-On Tab)

Small Block Chevy Timing Cover fits 1985-92 car or truck applications. Cover includes bolt-on tab to fit 8" balancer. 2 finishes to choose from, chrome or steel. Chrome cover available in kit form which includes cover, seal, gaskets, and bolts. Replaces OEM #10243967.

Finish	Part #
Unplated	6544
Chrome	6544CP



SB Chevy Direct OEM Replacement Timing Covers

Our Small Block Chevy Direct OEM Replacement Covers are made with high quality materials and have welded on tabs. Chrome Kits include cover, seal, gaskets, and bolts.



Year	Description	Finish	Part #
1985-91	8" Balancer Truck (OE #12531283)	Unplated	6504
		Chrome	6504CP
		Chrome Kit	6504KCP
1992-95	7" Balancer Truck or Van (OE #12523972)	Unplated	6504LA
1982-93	7" Balancer Car (OE #1233974)	Unplated	6504A
1987-95	7" Balancer Truck or Van (OE #12523972)	Unplated	6504L
		Chrome	6504LCP
		Chrome Kit	6504LKCP

SB Chevy Chrome Steel 2 Piece Timing Cover Sets

Includes Cover, Seal, & Bolts
Part #TW6506CP



Includes Cover & Gaskets
Part #TW3520



SB Chevy Timing Cover Accessories

Timing Cover Seal - Part #74288

SB & BB Timing Cover Bolts

Finish	Part #
Black	S8424
Chrome	S6040BOLT

SB Timing Cover Gaskets

3 Piece Set for 1 Piece Covers



TW3599

Aluminum Bolt-On Timing Tabs

Works with 6", 7", and 8" balancers.

Finish	Part #
Polished	6544AT
Chrome	6544CT

SB Chevy Chrome Bolt-On Timing Tabs

Fits Balancer	Part #
6", 7", 8"	6544T
7" w/Pointer	6544S



6544CT

6544T

6544S

6544R

Chevy Timing Covers Stock Replacement 4.3L

Timing Cover

Fits 1985-92
"No Balance Shaft"
Applications
OE #12513961



Unplated Steel - Part #6504L6

BB Chevy 396-454 Aluminum Timing Covers



Description	Chrome Part #	Polished Part #
Cover Only	TW6540	TW6545
Complete Kit	TW6540KT	TW6545KT

Kit Includes Cover, Seals, and Bolts

BB Chevy 396-454 Steel Timing Covers

Unplated
Part #TW6552

Chrome
Part #TW6552CP



BB Chevy Timing Cover Accessories

Type	Style	Part #
Timing Tabs	No Pointer	6997
Timing Tabs	8" w/Pointer	6997A
Gasket Kit for Aluminum or Steel Timing Covers		TW6552

General Motors 2.5L
4 Cylinder, 82-93



General Motors 2.8L
1982-93

General Motors 2.8L-3.1L
1987-93

Plastic Timing Covers

For Late Model GM Applications

Our new timing covers for 262, 4.3, and 305-350 GM models are OEM quality plastic replacements. All four versions include a built-in seal and bolts.

	FRONT	BACK
without Sensor Hole		
	<p>305, 350 GM, 1996-Up w/Sensor Hole (OEM #12558343, 93800970) - Part #6508 w/o Sensor Hole (OEM #12562818) - Part #6508WO</p>	
	FRONT	BACK
with Sensor Hole		
	<p>4.3 GM, 1996-Up w/Sensor Hole (OEM #12554555, 93445880) - Part #6509 w/o Sensor Hole (OEM #12554557) - Part #6509WO</p>	

BB Chevy 454-502 Timing Covers (Gen 5/6)

Aluminum. Fits BB Chevy 454-502, Gen 5 or Gen 6.

NEW

TW6542			<table border="1"> <thead> <tr> <th>Fits</th> <th>Part #</th> </tr> </thead> <tbody> <tr> <td>Gen 5 1991-95 OE #12551544</td> <td>TW6542</td> </tr> <tr> <td>Gen 6 1996-Up OE #12561062</td> <td>TW6544</td> </tr> </tbody> </table>	Fits	Part #	Gen 5 1991-95 OE #12551544	TW6542	Gen 6 1996-Up OE #12561062	TW6544
Fits	Part #								
Gen 5 1991-95 OE #12551544	TW6542								
Gen 6 1996-Up OE #12561062	TW6544								



1983-90, 4 Cyl., 2.5L
1965-90, 6 Cyl., 232 & 258

NEW



Part #1W681U

1993-Up, 6 Cyl., 4.0L
1993-Up, 4 Cyl., 2.5L

NEW



Part #TW6811

1973-91, V8 AMC 304, 260,
401

NEW



Part #TW6820

Oil Pump Kit - Part #TW6821

Buick Timing Cover Kits

1964-86 V6, 196, 231, 252, & 350 RWD applications. No plates required! Includes tall gears, distributor gaskets, oil pump springs, relief valve, and timing cover seals. Drilled at bottom to accept 14 or 20 bolt pattern pans.

High Volume Timing Cover (Part #6571KTS) has 50% more oil PSI than a Standard Replacement Cover (Part #6570KTS).

Aluminum High Volume Kit

Master Kit
Part #6571KTS
Includes:
Timing Cover, Cover Seal,
Oil Pump Kit, Oil Filter Adaptor

Standard Kit
Part #6571HI
Includes:
Timing Cover, Cover Seal, Oil
Pump Kit

Stock Replacement Std. Volume Kit

Master Kit
Part #6570KTS
Includes:
Timing Cover, Cover Seal,
Oil Pump Kit, Oil Filter Adaptor

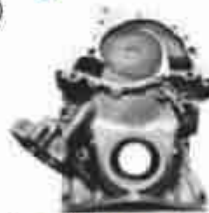
Standard Kit
Part #6570SC
Includes:
Timing Cover,
Cover Seal

Complete Cover to Block to Water Pump Gasket Set
Part #6570GS



Buick Timing Cover

FWD only (80-85)
3.0L & 3.8L Dist.
Driven, Includes
Part #6573 Seal



Alum. Cover - Part #TW6750
Gasket Kit - Part #6570GS

Buick Oil Pump Kit

Complete Kit includes
filter housing,
springs, washers,
and a relief
valve.



Description	Part #
Complete Kit	6570FA
Filter Housing Only	6570HS
Gears, Spring, & Relief Valve Only	6570PK

Timing Mark

Timing Mark for 2.5 Buick.

Part #6572TM

Timing Mar¹

Timing Mark for
6570SC & 6571HI
Buick 231
Timing Covers



Part #6570TM

Oil Filter Housing

For use with 6571HI, 6570SC, and
TW6750 Buick Timing Covers.
Metric "Thread" - Part #6570HS
Std. USA "Thread" - Part #6577HS

HARD TO FIND!

Buick 455 Timing Cover

1967-76 Buick 400, 430, 455 Applications. Front
Mounted Seal.

Cover & Seal Only - Part #TW455



General Motors Timing Covers

General Motors 2.5L
NEW 4 Cylinder, 82-93



Steel with Seals, OEM #10044603
Part #TW6900



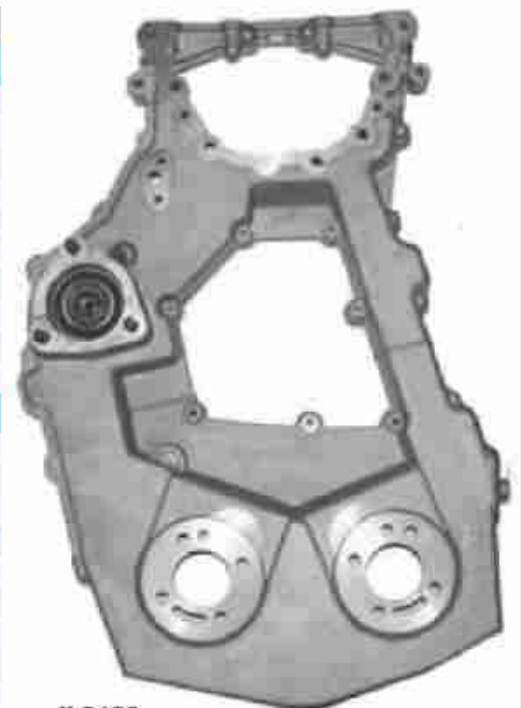
General Motors 2.8L-3.1L

Year	Description	Finish	Part #
2.8L	1982-86	14100617, 1259037	TW6988
2.8L	1987-92	14090537, 1004900	TW6902
2.8L	1982-86	14024263, 1403352	TW6989
3.1L	1990-92	14090537, 1004900	TW6902

O.E. GM Quad 4 (138 L4) Timing Covers & Component Engine Parts

Replacement parts for SOHC & DOHC "Quad 4's"

Year	Description	OE #	Part #
SOHC Quad 4			
92-94	Aluminum Timing Cover Housing	24570608	IL0608
92-94	Steel Timing cover	24573027	IL3027
92-94	Timing Chain	24572394	IL2394
92-94	Timing Chain Guide	24572049	IL2049
92-94	Timing Cover Housing Gasket	24570577	N32588
92-94	Timing Cover Gasket	24570409	N32587
93-94	Inner Valve Cover Gasket	24572857	N32601
93-94	Outer Valve Cover Gasket	24572858	N32602
92-93	Inner Valve Cover Gasket	22535393	N32583
92-93	Outer Valve Cover Gasket	22535394	N32584
DOHC Quad 4			
93-96	Aluminum Timing Cover Housing	24570466	IL0466
93-96	Steel Timing Cover	24572039	IL2038
93-96	Timing Cover Housing Gasket	24570452	N32585
93-96	Timing Cover Gasket	24570409	N32587
93-96	Valve Cover Gasket (Inner Intake - 2nd Design)	24572857	N32601
93-96	Valve Cover Gasket (Outer Inner - 2nd Design)	24572858	N32602
93-96	Valve Cover Gasket (Inner Exh. - 2nd Design)	24572872	N32621
93-96	Valve Cover Gasket (Outer Exh. - 2nd Design)	24572873	N32620
87-93	Valve Cover Gasket (Inner Intake - 1st Design)	22535393	N32583
87-93	Valve Cover Gasket (Outer Inner - 1st Design)	22535394	N32584
87-93	Valve Cover Gasket (Inner Exh. - 1st Design)	22535391	N32581
87-93	Valve Cover Gasket (Outer Exh. - 1st Design)	22535392	N32582
Quad 4 Component Engine Parts			
87-96	Timing Cover Seal	22531277	NUH0403FO
87-96	Timing Cover Cam Seal	22533550	NUH0404EO
87-96	Valve Spring Retainer	22531219	IL1219
87-96	Oil Pump Pick-Up Screen	22539133	IL9133
87-96	Oil Pan Baffle	22536409	IL6409
92-94	Engine Lift Hook Bracket	24570038	IL0038
90-96	Power Steering Arm Bracket	24570077	IL0077
87-96	Thermostat Housing Gasket	22532248	IL2248



IL0466



N32587



Ford Timing Covers

289, 302, 351W, 67-92

Includes Dipstick Plug & T/C Seal.
V-Belt Drive.



Part #TW6600

Timing Mark - Part #TW6600T

460, 65-97

Aluminum Cover Includes Dipstick
Plug & T/C Seal. V-Belt Drive.



Part #TW6657KT

302, 351 Truck, 87-97

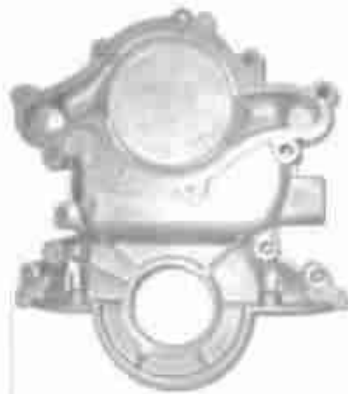
Aluminum Rev. Flow Serpentine Belt
Drive & T/C Seal.



Part #TW6650

5.0 Explorer/Mountaineer VIN P

96-01, Includes Timing Cover Seal.
Replaces OEM #F67E6P041AA.



Part #TW6606

302 V8, Elec. Fuel Pump, 81-95

Includes Seal. OEM #E8AE-6019A.

NEW



Part #TW6607

302-351 V8, 69-84

Includes Seal. OEM #E3AE-6059BB.

NEW



Part #TW6608

300 6 Cyl., 65-Up

OEM #E6TE-6059

NEW



Part #TW6611

1.9L, 85-90

Plastic, Replaces OEM# E9FZ6019A.



Outer - Part #6620

2.3L



OEM #D4FZ6019B (74-91 Inner)

Part #6568

Toyota Timing Covers

20R/22R Early 78-84 **22REC Exc. Turbo 85-96**



Part #TW22R



Part #TW22REC

Chrysler/Dodge Timing Covers

NEW Chrysler V8
318-360 97-99
OEM #53006705



Part #TW6805

Dodge V6, V8
V6 3.9L, V8 318,340,360
Incl. Seal, OEM #53009638



Part #TW6800

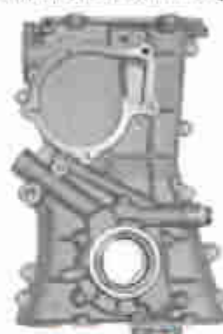
Nissan Timing Covers

Engine	Liter	Years	Nissan #	Part #
KA24E	2.4L	1990-95	13500-30R00	TW6907
GA16	1.6L	1989-90	13500-77A00	TW6908
GA16DE	1.6L	1991-96	13500-53401	TW6909
KA24DE	2.4L	1991-94	13500-53F00	TW6906
KA24DE	2.4L	1993-97	13500-1E402	TW6905
SR20DE	2.0L	1991-00	13500-53J00	TW6904

Note: All Timing Covers Include Oil Pump & Crankshaft Seals



TW6907



TW6908



TW6909



TW6906



TW6905



TW6904

Harmonic Balancers

Silver Seal now offers 97 part numbers covering the most popular domestic and import applications. Our balancers are manufactured to meet or exceed OEM quality. Balancers include Woodruff Keys and Mounting Bolts (where necessary).

Warning Signs for Harmonic Balancer Replacement

- Front Main Seal Leaks
- Excessive Engine Vibration
- Inability To Correctly Set The Ignition Timing
- Rubber Deterioration Between The Hub & Outer Ring
- Slipping/Squealing Drive Belts or Accelerated Belt Wear
- Excessive Wear on the Keyways, Crank, or Balancer Hub
- Pulley Grooves with a Polished Spot are Signs of a Warped Balancer



AMC - Eagle - Jeep

Liter	CI/CC	Engine	Year	Application (Reference Only)	Part#	Comments
1.6L	1595	L4	1989-90	Passenger (OE# MD377604)	HBH181	Mitsubishi supplied engine
2.0L	1997	L4	1990-94	Passenger (OE# MD377604)	HBH181	Mitsubishi supplied engine
			1995-98	Talon w/Turbo (OE# MD377604)		
2.4L	2351	L4	1994-96	Passenger (OE# MD377604)	HBH181	Mitsubishi supplied engine
2.5L	151	L4	1983-90	Passenger & Truck (OE#3242886)	HBJ101	Utilizes flat belt (serpentine)
2.8L	173	V6	1982-87	SUV & Truck (OE#14085401)	HBG161	
3.8L	232	L6	1975-80	Passenger & Truck (OE#J3225201)	HBJ106	Utilizes 1-1/4" ring thickness
4.0L	242	L6	1987-03	SUV & Truck (OE#33002920)	HBJ104	Utilizes flat belt (serpentine)
4.23L	258	L6	1975-80	Passenger & Truck (OE#J3225201)	HBJ106	Utilizes 1-1/4" ring thickness
5.9L	360	V6	1973-91	Passenger & Truck (OE#3230131)	HBJ100	Includes bolt, key & washer

Chrysler - Dodge - Plymouth

2.0L	1997	L4	1990-94	Compact (OE#MD377604)	HBH181	Mitsubishi built engine
2.4L	2351	L4	1994	Van (OE#MD377604)	HBH181	Mitsubishi built engine
			1989	Raider (OE#MD311472)	HBD189	Utilizes one serpentine and one v-belt
3.0L	2972	L4	1990-91	D-50 Truck (OE#MD311472)		
3.9L	239	V6	1987-91	Truck/Van (OE#4173443)	HBD102	Utilizes oil slinger
5.2L	318	V8	1972-91	Passenger & Truck (OE#4173443)	HBD102	Utilizes oil slinger
5.6L	340	V8	1972-91	Passenger & Truck (OE#4173443)	HBD102	Utilizes oil slinger
5.9L	360	V8	1972-93	Passenger & Truck (OE#4173447)	HBD103	

Ford - Lincoln - Mercury

1.9L	118	L4	1991-96	Compact Passenger (OE#F7CZ6318BA)	HBF125	Utilizes pulse ring
2.3L	140	L4	1992-94	Tempo/Topaz HSC engine	HBF123	Bolt, key & washer included
3.0L	183	V6	1986-89	Passenger & Van (OE#E8DE6316A & BA)	HBF200	Excluding SHO engines
3.0L	183	V6	1990-94	Passenger, Truck, & Van (OE#F0DE63168A)	HBF201	Excluding SHO engines
3.0L	183	V6	1995-03	Passenger (OE#F8DE6316AA)	HBF126	Cast iron replaces aluminum, discard pulse ring. Mazda built engine
3.2L	187	V6	1993-95	SHO Passenger (OE#F3DZ6B321A)	HBF118	With A.T., Yamaha built engine
3.4L	203	V6	1996-99	SHO Passenger (OE#F6DZ6B321AA)	HBF122	Yamaha built engine
3.8L	232	V6	1988-95	Passenger (OE#F4DZ6B321A)	HBF119	
4.0L	240	L6	1965-70	Truck (OE#E3TZ6312E)	HBF112	Three groove v-belt
4.0L	244	V6	1990-03	Truck-Explorer-Ranger (OE#F0TZ6B321A)	HBF127	
4.3L	260	V6	1962-65	Passenger (OE#C5AZ6312B)	HBF107	Utilizes 3-bolt hub
4.6L	281	V8	1992-03	Passenger & Truck (OE#F3AE6316AA)	HBF117	SOHC from 6/25/92
4.7L	289	V8	1964-68	Passenger (OE#C5AZ6312B)	HBF107	Utilizes 3-bolt hub, excluding 271 HP
4.9L	300	L6	1965-86	Truck (OE#E3TZ6312E)	HBF112	Three groove v-belt
4.9L	300	L6	1987-95	Truck (OE#E7TZ6312A)	HBF114	Utilizes serpentine flat belt
4.9L	300	L6	1996	Truck & Van (OE#F6TE6316GA)	HBF202	Utilizes serpentine flat belt
5.0L	302	V8	1970	Passenger (OE#D7TZ6316A)	HBF108	"Boss" engine
5.0L	302	V8	1970-80	Passenger & Truck (OE#D7TZ6316A)	HBF108	
5.0L	302	V8	1970-80	Passenger & Truck (OE#D8TZ6316B)	HBF109	Has 4-bolt hub for accessory pulleys
5.0L	302	V8	1981-84	Truck - Van only (OE#E1TZ6316D)	HBF111	EEC system utilized
5.0L	302	V8	1984-95	Passenger & Truck (OE#E4TZ6316A)	HBF113	Does not utilize EEC system
5.4L	342	V8	1997-00	Truck (OE#F75Z6312AC)	HBF124	
5.8L	351W	V8	1981-97	Passenger & Truck (OE#E8TZ6316B)	HBF116	Does not utilize EEC system
5.8L	351M	V8	1971-82	Passenger & Truck (OE#several)	HBF199	Modified engine
6.8L	400M	V8	1971-82	Passenger & Truck (OE#several)	HBF199	Modified engine
7.3L	445	V8	1988-94	Truck Diesel (OE#E8TZ6316A)	HBF115	Without turbo, indirect injection
7.3L	445	V8	1995-97	Truck Diesel (OE#180184321AB)	HBF120	Utilizes 8-rib serpentine belt
7.5L	460	V8	1979-95	Truck (OE#D9TZ6316C)	HBF110	Use with original weighted spacer in 1979
7.5L	460	V8	1996-97	Truck (OE#F5TE6316CA)	HBF121	

GMC - Chevrolet - Buick - Cadillac - Oldsmobile - Pontiac

Liter	Ci/CC	Engine	Year	Application (Reference Only)	Part#	Comments
2.3L	140	L4	1987-02	Passenger (OE#24575562)	HBC165	
2.4L	145	L4	1987-02	Passenger (OE#24575562)	HBC165	
2.5L	151	L4	1987-92	Passenger (OE#10101369)	HBC147	
2.8L	173	V6	1982-87	Passenger & Truck (OE#14085401)	HBC161	Rear Wheel Drive applications
2.8L	173	V6	1983-86	Passenger (OE#14083394)	HBC160	Transversed mounted Chevy built engine
2.8L	173	V6	1988-89	Passenger (OE#1400630)	HBC162	Rear Wheel Drive applications
2.8L	173	V6	1988-93	S-Series Truck (OE#14100630)	HBC162	
3.1L	189	V8	1987-94	Passenger (OE#24504611)	HBC170	
3.1L	189	V6	1994-00	Passenger & Van (OE#24504609)	HBC164	Chevrolet built engine
3.3L	204	V6	1989-90	Passenger (OE#12339997)	HBC153	Buick built engine two pulse rings, bolt, key, & washer incl.
3.3L	204	V6	1991-92	Passenger (OE#24501985)	HBC149	Buick built engine, two pulse rings
3.3L	204	V6	1993	Mid-size Passenger (OE#24502175)	HBC203	Buick built engine two pulse rings
3.4L	207	V6	1994-00	Passenger & Van (OE#24504609)	HBC164	Chevrolet built engine
3.7L	230	L6	1988-73	Passenger & Truck (OE#3898590)	HBC139	2-groove v-belt with narrow center band
3.8L	229	V8	1978-84	Passenger (OE#14082324)	HBC159	
3.8L	231	V8	1988-88	Passenger (OE#25527381)	HBC166	Buick built engine, replaces all steel dampner
3.8L	231	V8	1988-90	Passenger (OE#25535485)	HBC167	Buick built engine VIN "C"
3.8L	231	V8	1990-92	Passenger (OE#24501201)	HBC171	Alt. OE#25534911
3.8L	231	V8	1991-92	Passenger (OE#88980259)	HBC206	With Supercharger
3.8L	231	V6	1993-94	Passenger (OE#24502176)	HBC172	Alt. OE#24503065
3.8L	231	V6	1993-95	Passenger (OE#88980265)	HBC207	With Supercharged engine - Alt. OE#24507414
3.8L	231	V8	1995	Passenger (OE#88980264)	HBC208	With Supercharger - Alt. OE#s 24503041, 24504739
3.8L	231	V8	1995-03	Passenger (OE#24504737)	HBC173	Buick built engine
3.8L	231	V6	1996-03	Passenger (OE#12583268)	HBC154	Supercharged Buick built engine
4.1L	250	L6	1986-73	Passenger & Truck (OE#3898590)	HBC139	2-groove v-belt with narrow center band
4.1L	250	L6	1975-78	Passenger & Truck (OE#352153)	HBC133	2-groove v-belt with wide center band
4.1L	250	L6	1977-84	Passenger & Truck (OE#458149)	HBC134	2-groove v-belt
4.1L	252	V8	1985-88	Passenger (OE#12589753)	HBC156	Cadillac built engine
4.3L	260	V8	ALL	Passenger (OE#22506730)	HBC163	Oldsmobile built engine
4.3L	262	V8	1969-75	Passenger (OE#6272223)	HBC143	6 inch, solid inertia ring
4.3L	262	V6	1985-95	Passenger & Truck (OE#10172764)	HBC151	
4.3L	262	V6	1993-97	Passenger (OE#12551138)	HBC155	
4.5L	273	V8	1988-92	Passenger (OE#12589753)	HBC156	Cadillac built engine
4.6L	283	V8	1965-68	Passenger (OE#3898904)	HBC140	6-1/8" dia., Nodular crank, 12 o'clock timing, 3/4" ring
4.8L	292	L6	1975-89	Truck (OE#3857352)	HBC169	Alt. OE#10141202
4.9L	300	V8	1991-95	Passenger (OE#12589753)	HBC156	Cadillac built engine
5.0L	305	V8	1969-95	Passenger & Truck (OE#6272221)	HBC174	6-3/4 inch, 2 o'clock timing, solid inertia ring
5.0L	305	V8	1977-86	Truck (OE#458653)	HBC135	8 inch, 12 o'clock timing, hollow back inertia ring
5.0L	305	V8	1977-93	Passenger & Truck (OE#458653)	HBC168	6-3/4 inch, 12 o'clock timing, hollow back inertia ring
5.0L	307	V8	1965-68	Passenger (OE#3898904)	HBC140	6-1/8" dia., Nodular crank, 12 o'clock timing, 3/4" ring
5.0L	307	V8	1969-72	Passenger (OE#6272223)	HBC143	6 inch, solid inertia ring
5.0L	307	V8	ALL	Passenger (OE#22506730)	HBC163	Oldsmobile built engine
5.4L	327	V8	1965-68	Passenger (OE#3898904)	HBC140	6-1/8" dia., Nodular crank, 12 o'clock timing, 3/4" ring
5.4L	327	V8	1969	Passenger & Truck (OE#6272221)	HBC174	6-3/4 inch, 2 o'clock timing, solid inertia ring
5.7L	350	V8	1966-79	Passenger (OE#477682)	HBC136	Pontiac built engine
5.7L	350	V8	1969-95	Passenger & Truck (OE#6272221)	HBC174	6-3/4 inch, 2 o'clock timing, solid inertia ring
5.7L	350	V8	1969-96	Passenger & Truck (OE#6272222)	HBC141	8 inch, 2 o'clock timing, solid inertia ring
5.7L	350	V8	1977-86	Truck (OE#458653)	HBC135	8 inch, 12 o'clock timing, hollow back inertia ring
5.7L	350	V8	1977-93	Passenger & Truck (OE#458653)	HBC168	6-3/4 inch, 12 o'clock timing, hollow back inertia ring
5.7L	350	V8	1993-97	Passenger (OE#12551138)	HBC155	
5.7L	350	V8	1996-02	Truck (OE#10243271)	HBC152	
5.7L	350	V8	1998-02	Camaro - Firebird (OE#12553118)	HBC157	
5.7L	350	V8	2004	GTO (OE#12553118)	HBC157	
5.7L	350	V8	ALL	Passenger (OE#22506730)	HBC163	Oldsmobile built engine
6.2L	381	V8	1982-93	Truck (OE#14022671)	HBC158	Diesel engine
6.2L	381	V8	1988-93	Truck & Van (OE#12557345)	HBC205	Diesel engine "PULLEY ONLY"
6.5L	396	V8	1965-70	Passenger & Truck (OE#3860010)	HBC177	375 horse engine
6.5L	396	V8	1966-72	Passenger & Truck (OE#386008)	HBC138	325 / 330 / 350 horse engines
6.5L	395	V8	1994-02	Truck (OE#10154688)	HBC150	Diesel engine
6.5L	395	V8	1994-02	Truck & Van (OE#12557345)	HBC205	Diesel engine "PULLEY ONLY"



GMC - Chevrolet - Buick - Cadillac - Oldsmobile - Pontiac (Cont.)

Liter	CI/CC	Engine	Year	Application (Reference Only)	Part#	Comments
6.6L	400	V8	1968-79	Passenger (OE#477682)	HBC136	Pontiac built engine
6.6L	400SB	V8	1970-80	Passenger & Truck (OE#6272225)	HBC144	External balanced engine
6.6L	402	V8	1970-72	Passenger & Truck (OE#386008)	HBC138	350 horse engine
6.6L	403	V8	ALL	Passenger (OE#22506730)	HBC163	Oldsmobile built engine
7.0L	427	V8	1965-70	Passenger (OE#3860010)	HBC177	425 horse engine
7.0L	427	V8	1966-72	Corvette (OE#3860008)	HBC138	390 / 400 horse engine
7.4L	454	V8	1973-90	Passenger & Truck (OE#10141212)	HBC148	
7.4L	454	V8	1991-97	Truck (OE#10101160)	HBC146	
7.5L	455	V8	1968-79	Passenger (OE#477682)	HBC136	Pontiac built engine

Honda

2.2L	2156	L4	1990-93	Accord (OE#13810PT1003)	HBH195	Top pulley has 4 grooves, lower has 3 grooves
2.2L	2156	L4	1992-96	Prelude (OE#13810PT1003)	HBH195	Excluding VTEC engine, top pulley has 4 grooves, lower has 3 grooves
2.2L	2156	L4	1994-97	Accord-Odyssey (OE#13810POA003)	HBH194	Top pulley has 5 grooves, lower has 3 grooves
2.3L	2259	L4	1992-96	Prelude (OE#13810PT1003)	HBH195	Excluding VTEC engine, top pulley has 4 grooves, lower has 3 grooves

Hyundai

1.5L	G4EK	L4	1993	Scoupe (OE#2312422001)	HBH178	Non-turbo application
1.5L	G4EK	L4	1994-99	Accent - Scoupe (OE#2312422020)	HBH179	
1.5L	G4DJ	L4	1990-94	Excel - Scoupe (OE#2312424010)	HBH180	Mitsubishi built engine
1.6L	1595	L4	1992-95	Compact (OE#2312433111)	HBH181	Mitsubishi built engine
1.8L	1836	L4	1993-95	Compact (OE#2312433111)	HBH181	Mitsubishi built engine
2.0L	1997	L4	1992-98	Compact (OE#2312433111)	HBH181	Mitsubishi built engine
3.0L	2972	V6	1989-96	Compact (OE#2312935010)	HBH182	Mitsubishi built engine (exclusive to Hyundai)

Isuzu

2.8L	173	V6	1989-91	Truck (OE#14100630)	HBC162	
3.1L	3160	V6	1991-94	Truck (OE#14100630)	HBC162	

Mazda

3.0L	183	V6	1994	B3000 Truck (OE#F0DE63168A)	HBF201	
3.0L	183	V6	1995-00	B3000 Truck (OE#F8DE6316AA)	HBF126	Cast iron replaces aluminum, discard pulse ring
4.0L	244	V6	1990-03	Truck-B4000, Navajo (OE#F0TZ6B321A)	HBF127	

Mitsubishi

1.5L	1468	L4	1990-94	Precis (OE#2312424010)	HBH180	
1.6L	1595	L4	1989-92	Compact (OE#MD377604)	HBH181	
2.0L	1997	L4	1990-98	Compact (OE#MD377604)	HBH181	
2.0L	1998	L4	1995-99	Eclipse Compact (OE#MD377604)	HBH181	With turbo
2.4L	2351	L4	1993-99	Compact (OE#MD377604)	HBH181	
3.0L	2972	V6	1989-00	Montero (OE#MD311472)	HBD189	Utilizes one serpentine and one v-belt
3.0L	2972	V6	1990-94	Compact Truck (OE#MD311472)	HBD189	Utilizes one serpentine and one v-belt
3.0L	2972	V6	1997-00	Montero Sport (OE#MD311472)	HBD189	Utilizes one serpentine and one v-belt
3.5L	3497	V6	1994-99	Montero (OE#MD311472)	HBD189	Utilizes one serpentine and one v-belt

Saab

2.0L	1985	L4	1985-94	900-series (OE#9107665)	HBS190	89-93 w/turbo, 94 conv. w/turbo - w/o timing trigger
2.0L	1985	L4	1973-84	99 & 900-series (OE#7501950)	HBS191	
2.0L	1985	L4	1985-94	900-series (OE#8789315)	HBS192	Without turbo
2.0L	1985	L4	1986-90	9000-series (OE#9321530)	HBS193	With turbo

Toyota

2.4L	2366	L4	1978-84	All 20R, 22R, & 22RE	HBT197	Gas engine
2.4L	2366	L4	1985-95	All (OE#1347035020)	HBT183	Utilizes 2 v-belts and oil slinger
3.0L	2959	L6	1988-95	Truck (OE#1340865011)	HBT198	With or without power steering, gas engine
4.0L	3956	L6	1988-92	Landcruiser (OE#1347061030)	HBT187	
4.2L	258	L6	1973-87	Landcruiser (OE#1347061010)	HBT184	Non-A/C single pulley
4.2L	258	L6	1973-87	Landcruiser (OE#1347061010)	HBT185	With A/C three v-belt pulleys
4.2L	258	L6	1973-87	Landcruiser (OE#1347060120)	HBT186	Non-A/C double pulley

Volvo

2.3L	2259	L4	1989-91	740 & 940-series (OE#91351957)	HBV196	DOHC B234F engines
2.3L	2316	L4	1985-95	240-940 series (OE#91351940)	HBV186	Gas engine



Oil Pans (Subaru, Suzuki, Toyota)

Subaru (2.2L, 2.5L)



TW6787B

Subaru (1.8L, 2.2L, 2.5L)



TW6788B

Suzuki (1.3L, 1.6L)



TW6631B

Suzuki (1.6L)



TW6632B

Suzuki (1.0L)



TW6754B

Suzuki (1.3L, 1.6L)



TW6763B

Suzuki (1.6L)



TW6764B

Toyota (1.6L)



(w/o Oil Cooler)

TW6633B

Toyota (1.6L)



(w/Oil Cooler)

TW6634B

Toyota (1.6L)



(w/o Oil Cooler)

TW6635B

Toyota (1.6L)



(w/Oil Cooler)

TW6636B

Toyota (1.6L)



TW6638B

Toyota (1.6L)



TW6639B

Toyota (2.2L)



TW6642B

Toyota (1.5L)



TW6645B

Toyota (1.5L)



TW6789B

Toyota (2.0L, 2.2L)



TW6790B

Toyota (2.2L, 2.4L)



TW6791B

Toyota (2.4L)



TW6792B



We Accept The Following Major Credit Cards



Unplated Steel Stock Replacement Oil Pans

SB Chevy

4 Qt. Capacity

Year	Dipstick	Style	Part #
1955-79	Driver's Side	2 pc. Rear Seal	6500
1980-85	Passenger Side	2 pc. Rear Seal	6501
1986-Up	Passenger Side	1 pc. Rear Seal	6503

SB Chevy

Custom Design, Extra Step for Virtually All Applications

Year	Dipstick	Style	Part #
All Years	Either Side	1 pc. Rear Seal	TW3700

BB Chevy

396-454 w/Baffle

Year	Model	Part #
1965-95	Mark IV (does not fit Corvette)	TW6550
1965-92	Extra Clearance Pan	TW6550A

Olds/Pontiac

Year	Model	Part #
1974-81	Pontiac 301-455	TW6586
	Oldsmobile 330-455 (All except 1975 400)	TW6484

Ford

Year	Model	Part #
1987-93	5.0 302 Mustang (Dual Sump)	6540
1965-87	260, 289, 302 (Front Sump Car)	6513
All	351W (Front Sump Car)	6514
1970-79	351C, 351M, 400	6514C
1958-76	390, 406, 427	TW6561
1968-79	429, 460 (Front Sump Car)	TW6560

Chrysler/Dodge

Year	Model	Part #
Early	Dodge Early 273, 318, 340 Car Only	TW6569
All	Mopar 361, 383, 400, 413, Hemi 426	TW6563
1966-Up	BB Mopar Hemi 361-440 & 426 (7" Extra Deep Pan)	TW5750
	Pick-Up for Hemi Pan (for B&RB) 3/8"-18 Threads	TW7050
	Pick-Up for Hemi Pan (Stock Hemi) 3/8"-18 Threads	TW7051





SB Chevy "Finned" Polished Aluminum Oil Pans

4 Qt. Capacity, Drain Plug & Mounting Bolts Included

Year	Dipstick	Style	Part #
1955-79	Driver's Side	2 pc. Rear Seal	TW5290
1980-85	Passenger Side	2 pc. Rear Seal	TW5295
1986-Up	Passenger Side	1 pc. Rear Seal	TW5300



TW5290



TW5295

Chrome Plated Steel Stock Replacement Oil Pans

SB Chevy

4 Qt. Capacity

Year	Dipstick	Style	Part #
1955-79	Driver's Side	2 pc. Rear Seal	6500CP
1955-79	Driver's Side	2 pc. Rear Seal	6500OR (Orange)
1980-85	Passenger Side	2 pc. Rear Seal	6501CP
1986-Up	Passenger Side	1 pc. Rear Seal	6503CP



6500CP/OR



6501CP

Buick/Olds/Pontiac

Year	Model	Part #
1975-83	Buick 14 Bolt	OPB231CP
1974-81	Pontiac 301-455	TW6586CP
Oldsmobile 330-455 (All Except 1975-400)		TW6484CP



6503CP



OPB231CP

BB Chevy

396-454 w/Baffle

Year	Style	Part #
1965-92	Extra Clearance Pan	TW6550ACP



TW6586CP



TW6484CP



TW6550ACP

Marine Oil Pans (No Baffle, Unplated)

Make	Year	Dipstick	Style	Part #
SB Chevy	1955-79	Driver's Side	2 pc. Rear Seal	6500M
SB Chevy	1980-85	Passenger Side	2 pc. Rear Seal	6501M
SB Chevy	1986-Up	Passenger Side	1 pc. Rear Seal	6503M
BB Chevy	1965-95	Mark IV (does not fit Corvette)		TW6550M



6500M

Chrome Plated Steel Stock Replacement Oil Pans

Chrysler/Dodge (Stock Capacity)

Year	Make/Model	Part #
1964-87	Dodge Early 273, 318, 340 Car Only	TW6569CP
All	Chrysler Mopar 361, 383, 400, 413, Hemi 426, 440	TW6563CP
All	Dodge Truck Slant 6 170, 198, 225 (Blue Paint)	TW225T


TW6569CP
TW6563CP

**OE Blue
TW225T**

Ford (Stock Capacity)

Year	Make/Model	Part #
1983-93	5.0 302 Mustang (Dual Sump)	6540CP
1965-87	260, 289, 302 (Front Sump Car)	6513CP
1967-87	351W (Front Sump Car)	6514CP
1970-80	351, 351M, 400 (Front Sump Car)	6514CCP
1958-76	390, 406, 427 (Front Sump Car)	TW6561CP
1968-78	429, 460 (Front Sump Car)	TW6560CP


6540CP
6513CP

6514CP
6514CCP

TW6561CP
TW6560CP

Oil Pan Drain Plugs

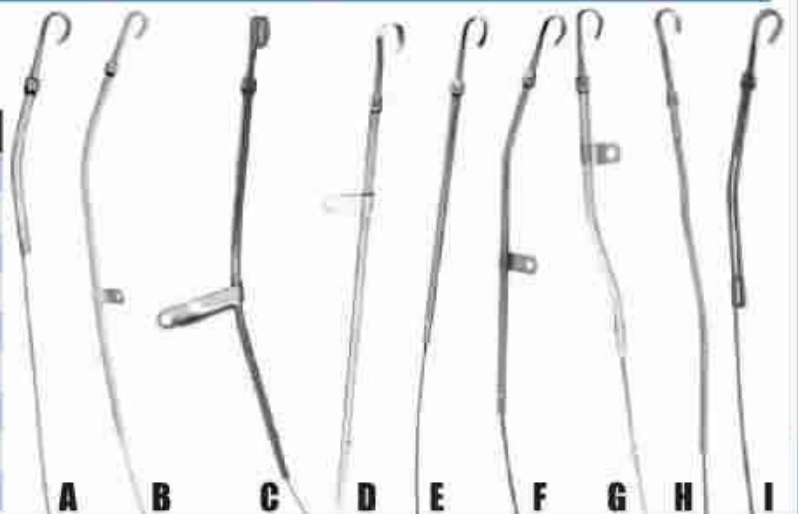
Style	Part #
Replaces 1/2" Self Tapping Type Drain Plug	4243
Double Oversized to Replace 1/2" Drain Plug	4244
Magnetic (1/2"-20 Thread)	4245
Magnetic - 14mm	4246



Chrome Engine Dip Sticks

Dress-Up Style To Replace O.E.

Description	Plc	Part #
Chevy SB Thru-77	A	TW6505CP
Chevy SB 1980-82	B	TW6534CP
Chevy SB 1982-85	C	TW6522CP
Chevy BB 1965-90	D	TW6538CP
Chrysler 318, 340, 360	E	TW6541CP
Chrysler 383, 426, 440	F	TW6542CP
Ford 260, 289, 302	G	TW6535CP
Olds 350-455/Pontiac 403	H	TW6536CP
Pontiac V8 Exc. 389/403	I	TW6537CP


A
B
C
D
E
F
G
H
I



Steel Drag Racing Pan

Super Comp - Super Gas - Bracket Series

Features built-in crank scrapers. Rear sump trap door with sophisticated oil control. Clears 3-7/8" stroke cranks with steel rods. Use with all popular starter flywheel combinations. 8" deep, 7 quart capacity. Fits most Chassis (except Chevy II). Jlg welded .055 USA steel. Uses standard block mounted oil filter. Includes magnetic oil drain, oil pick-up, and bolts. Comes in a black finish.



Application	Part #
Small Block Chevy	TW5170
Big Block Chevy Mark IV	TW5175

Weekend Drag Racer Pans

7009CP



Small Block Chevy 1955-79, 283-350

Driver's Side Dipstick,
8-1/4" Deep, Rear Trap
Door, 7 Qt. Capacity.

Finish	Part #
Zinc	TW5150
Chevy Orange	7009
Chrome Plated	7009CP
Pick-Up Tube	TW7009

TW7009



TW7008CP



Big Block Chevy 1965-Up, 396-454

Driver's Side Dipstick,
8-1/4" Deep, Rear Trap
Door, 6 Qt. Capacity.

Finish	Part #
Zinc	TW7008Z
Chevy Orange	TW7008A
Chrome Plated	TW7008CP
Pick-Up Tube	TW7008

TW7008



TW5155



Small Block Chevy 1980-85

Passenger Side Dipstick,
8-1/4" Deep, Rear Trap
Door, 7 Qt. Capacity

Finish	Part #
Zinc	TW5155
Chevy Orange	TW5154
Pick-Up Tube	TW7009

TW7009



TW5164



Chevy Nova/Monza 1962-67

Driver's Side Dipstick, 8-1/4"
Deep, Rear Trap Door, 7 Qt.
Capacity (Will not fit power.)

Finish	Part #
Black	TW5164
Unplated	TW5165
Pick-Up Tube	TW7009

TW7009





Steel Circle Track Pan

Late Model Stock Cars, Sportsman, & Pro Stock Racers

SB Chevy Hardcore Circle Track Pan, Not For The Light Hearted!

Features built-in scrapers & uni-directional screen to reduce windage and create more horsepower. Extended sump wings and trap door baffles control oil under continuous cornering, braking, and acceleration! Clears 3-7/8" stroke cranks with steel rods. Use with popular starter flywheel combos. 7" deep, 6 quart capacity. Use with block mounted oil filter. Boss for remote dipstick and oil temp sensor. Includes magnetic drain plug, high volume oil pump screen, and hardware!



Part #TW5280



Circle Track Pans

Standard Circle Track Small Block Chevy

1955-79

Driver's Side Dipstick,
7-1/4" Deep, 2 Trap
Doors, 6 Qt. Capacity.



TW5110

Finish	Part #
Zinc	TW5100
Unplated	TW5110
Black OEM	TW5105
Pick-Up Tube (Std.)	TW7106
Pick-Up Tube (Hi-Vol.)	TW7107

Champion Style Small Block Chevy

1955-79

Driver's Side Dip-
stick, 7" Deep, 6 Trap
Doors, 2 Runners,
3 Crank Scrap-
ers, 7 Qt.
Capacity.



TW5085

Finish	Part #
Zinc	TW5080
Unplated	TW5090
Black OEM	TW5085
Pick-Up Tube (Std.)	TW7102
Pick-Up Tube (Hi-Vol.)	TW7103

Standard Circle Track Small Block Chevy

1980-85

Driver's Side Dipstick,
7-1/4" Deep, 2 Trap
Doors, 6 Qt. Capacity.



TW5120

Finish	Part #
Zinc	TW5120
Unplated	TW5130
Black OEM	TW5140
Pick-Up Tube (Std.)	TW7106
Pick-Up Tube (Hi-Vol.)	TW7107

Claimer Style Small Block Chevy

1955-79

Driver's Side Dipstick,
Made with Thicker
Material, 2 Trap Doors,
Crank Scraper with
Windage Tray,
Reinforced Rails,
4 Qt. Capacity.



TW5240

Finish	Part #
Zinc	TW5220
Unplated	TW5240
Black OEM	TW5260
Pick-Up Tube (Std.)	TW7100
Pick-Up Tube (Hi-Vol.)	TW7110



Fabricated Aluminum Racing Valve Covers

NEW



TW9504FV

Application	Style	Part #
SB Chevy	Standard	TW9500FV
SB Chevy	Center Bolt	TW9501FV
SB Chevy	w/Billet Rail	TW9502FV
BB Chevy	Standard	TW9503FV
BB Chevy	w/Billet Rail	TW9504FV
SB Ford	Standard	TW9505FV

Chevy Aluminum Valve Covers

Style	Year	Description	Polished/Chrome	Baffle (Y/N)	# of Holes	Part #
SB Chevy						
 <p>CNC Flame Logo Polished</p>	1958-85	Short 2-9/16"	Polished	Y	1	TW4830
	1958-85	Short 2-9/16"	Polished	N	1	TW4860
	1958-85	Short 2-9/16"	Chrome	Y	1	TW4840
	1958-85	Tall 3-11/16"	Polished	Y	1	TW4810
	1958-85	Tall 3-11/16"	Polished	N	1	TW4850
	1958-85	Tall 3-11/16"	Chrome	Y	1	TW4820
	1986-Up	Short, Center Bolt Down	Polished	Y	1	TW4890
	1986-Up	Short, Center Bolt Down	Chrome	Y	1	TW4900
 <p>Smooth Polished</p>	1958-85	Short 2-9/16"	Polished	Y	1	TW4790
	1958-85	Short 2-9/16"	Polished	N	1	TW4710
	1958-85	Short 2-9/16"	Chrome	Y	1	TW4800
	1958-85	Short 2-9/16"	Chrome	N	1	TW4720
	1958-85	Short 2-9/16"	Polished	N	0"	TW4670
	1958-85	Tall 3-11/16"	Polished	Y	1	TW4770
	1958-85	Tall 3-11/16"	Polished	N	1	TW4690
	1958-85	Tall 3-11/16"	Chrome	Y	1	TW4780
	1958-85	Tall 3-11/16"	Chrome	N	1	TW4700
	1958-85	Tall 3-11/16"	Polished	N	0"	TW4650
	1986-Up	Short, Center Bolt Down	Polished	Y	1	TW4910
	1986-Up	Short, Center Bolt Down	Polished	Y	2	TW4920
1986-Up	Short, Center Bolt Down	Polished	Y	1/2	TW4940	
1986-Up	Short, Center Bolt Down	Polished	N	0"	TW4870	
 <p>CNC Ball Milled</p>	1958-85	Short 2-9/16"	Polished	Y	1	TW4750
	1958-85	Short 2-9/16"	Polished	N	1	TW4630
	1958-85	Short 2-9/16"	Chrome	Y	1	TW4760
	1958-85	Short 2-9/16"	Chrome	N	1	TW4640
	1958-85	Tall 3-11/16"	Polished	Y	1	TW4730
	1958-85	Tall 3-11/16"	Polished	N	1	TW4610
	1958-85	Tall 3-11/16"	Chrome	Y	1	TW4740
	1958-85	Tall 3-11/16"	Chrome	N	1	TW4620
	1986-Up	Short, Center Bolt Down	Polished	Y	1	TW4960
	1986-Up	Short, Center Bolt Down	Polished	Y	2	TW4930
	1986-Up	Short, Center Bolt Down	Polished	Y	1/2	TW4950
	1986-Up	Short, Center Bolt Down	Chrome	Y	1	TW4970
BB Chevy						
CNC Flame Logo	1965-95	Tall 3-11/16"	Polished	N	1	TW5020
	1965-95	Tall 3-11/16"	Chrome	N	1	TW5030
Smooth	1965-95	Tall 3-11/16"	Polished	N	1	TW5040
	1965-95	Tall 3-11/16"	Chrome	N	1	TW5050
CNC Ball Milled	1965-95	Tall 3-11/16"	Polished	Y	0"	TW5000
	1965-95	Tall 3-11/16"	Polished	N	1	TW4990
1965-95	Tall 3-11/16"	Chrome	N	1	TW4980	

*Customize - No Hole, Drill Your Own Plumbing

Small Block Chevy

305-350 Stock Replacement
(1978-86) With Baffle

Description	Part #
Chrome Steel 2-5/8"	6511CP
Unplated Steel 2-5/8"	6511
Chrome Steel 3-5/8"	TW6553CP



(1.25" Dia. Hole, Use TW4804 Oil Cap)

305-350 Stock Replacement
Short (1978-86)
With Baffle, Wire Harness

Description	Part #
Chrome Steel 2-5/8"	6541CP
Unplated Steel 2-5/8"	6541



(.900" Dia. Hole, Use TW4804 Oil Cap)

305-350 Stock Replacement
(1986-Up) Center Bolt Down
With Baffle

Description	Part #
Chrome Steel 2-5/8"	6506CP
Unplated Steel 2-5/8"	6506



(1.25" Dia. Hole, Use 6539 Oil Cap)

350 Logo

(1958-85) Chrome Steel w/Baffle

Description	Part #
Short 2-5/8"	TW4510
Tall 3-5/8"	TW4500



327 Logo

(1958-85) Chrome Steel w/Baffle

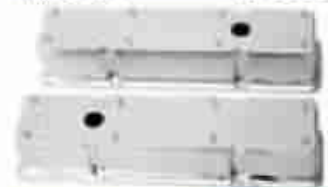
Description	Part #
Short 2-5/8"	TW4530
Tall 3-5/8"	TW5070



283-350 "Two Piece"

(1958-85) Chrome Steel (No Baffle)

Description	Part #
Tall 3-3/4"	TW4600

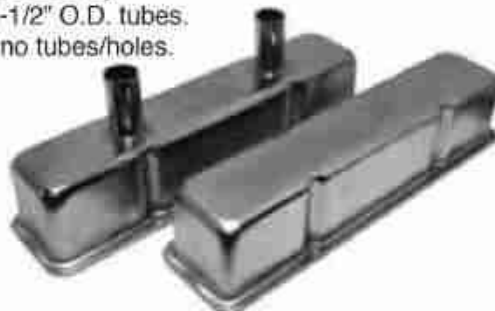


Steel Circle Track

Fits 1958-86 SB Chevy (Baffled)

Driver side cover is 4-1/8" L x 1-1/2" O.D. tubes.
Passenger side cover is plain, no tubes/holes.

Description	Part #
Zinc Plated	TW4590
Black Paint	TW4580
Unplated	TW4570



Chevy V6 4.3L

Truck Only

Short (1985-93) With Baffle

Description	Part #
Unpainted Steel	TW6502



(.900" Dia. Hole, Use 6539 Oil Cap)

Big Block Chevy

454 Logo - Chrome Steel
With Baffle 396-502
(1965-95)

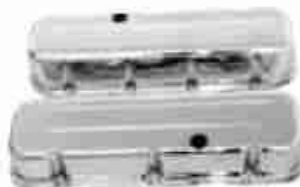
Description	Part #
Short 2-5/8"	TW5060
Tall 3-5/8"	TW4520



Smooth Polished - Steel

(1965-95) 396, 454, 502 w/Baffle

Description	Part #
Chrome Stock Hgt.	TW6551CP
Unplated Stock Hgt.	TW6551
Chrome 3-5/8" Tall	TW6556CP



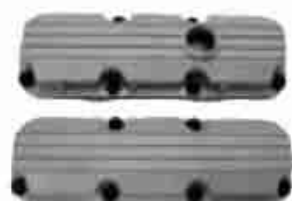
(1.25" Dia. Hole, Use 6539 Oil Cap)

Buick 3800 (Plastic)

Vin K

Complete w/Gaskets, 6 Bolts,
and Grommets

Description	Part #
Plastic, Right Bank	IL625R
Plastic, Left Bank	IL625L





Ford

Smooth Polished Steel

Fits 1962-Up Ford 260, 289, 302, 351W, 5.0L w/Baffle

Description	Part #
Chrome Steel 3-1/2"	6512CP
Unplated Steel 3-1/2"	6512
Unplated (Two Hole)	6512-2

Our Most Popular Ford Valve Cover!

(1.25" Dia. Hole, Use 6539 Oil Cap)



6512-2



6512CP

390/427 Stock Replacement

Fits 1958-76 Ford 390/427

Description	Part #
Chrome Steel 3-7/8"	TW5205



6.9L/7.3L Navistar Stock Replacement Oil Pans

For 1983-88 6.9L/7.3L Ford & International, Black Paint



Description	Part #
OE #1805454C1	TW54C1



Description	Part #
OE #1805647C1, w/EGR	TW47C1



Description	Part #
OE #1813319C1, w/Bracket	TW19C1



Description	Part #
OE #1813271C1, w/Oil fill	TW71C1

Smooth Polished Steel

Fits 1968-Up Ford BB 429-460 w/Baffle

Description	Part #
Chrome Steel 3-11/16"	TW5210



2.3, 2.5L SB Ford



Description	Part #
Black Paint	XFT1010

OE #F5TE6582AE



Description	Part #
Black Paint	XFT1030



Description	Part #
Black Paint	XFT1040

OE #E9JE-6582AA



Description	Part #
Black Paint	XFT1050

Boss 302 Stock Replacement

Fits 1970-Up Ford Boss 302, 351C, 351M w/Baffle

Description	Part #
Chrome Steel 3"	TW5180



AMC/Jeep

232/258 Stock Replacement

Fits 1964-80 AMC/Jeep 199, 232, 258 Three Hole Cover w/Baffle

Description	Part #
Chrome Steel 3-1/2"	TW6587CP



(1.25" Dia. Hole)

Chrysler

318/340/360 Stock Replacement

Chrome Steel, Fits 1964-73 318, 340, 360, w/Baffle

Desc.	Part #
3-1/4"	TW6572CP



(1.25" Dia. Hole, Use 6539 Oil Cap)

Wing Nuts

Style	Length	Thread	Part #	
Anodized Aluminum T-Bar	Red	4-3/4"	1/4"-20 x 1-1/4"	TW6526
	Blue	4-3/4"	1/4"-20 x 1-1/4"	TW6527
	Gold	4-3/4"	1/4"-20 x 1-1/4"	TW6528
	Silver	4-3/4"	1/4"-20 x 1-1/4"	TW6530
Chrome Steel T-Bar	4"	1/4"-20 x 1-3/8"	TW6529	
	5"	1/4"-20 x 1-3/8"	TW6525	
Chrome Steel	3-1/2"	1/4"-20 x 1"	TW6523	
	3-1/2"	5/16"-18 x 1"	TW6524	
Chrome Steel Hex Head Mini Bolt	1-3/8"	1/4"-20 x 1-3/8"	TW6531	
Black Steel Replacement Stud	1-3/8"	1/4"-20 x 1-3/8"	TW6532	



Grommets (Push-In Style)

Make	Style	I.D.	O.D.	Part #
Chevy	PCV w/Foam	N/A	1-1/4"	TW9358N
Chevy	Short Valve Cover	3/4"	1"	TW4400
Chevy	Tall Valve Cover	1"	1-1/4"	TW6510
Ford	Valve Cover	3/4"	1-1/8"	TW9760
Chevy	Valve Cover	1/2"	1-1/4"	6507



Oil Caps (Chrome)

Type	Style	Application	Part #
Twist-In	Steel	Most GM Valve Covers	TW4804
Push-In	Plastic	For 1.25" Dia. Hole	6539
Screw-In	Plastic	GM 1987-Up	TW4805
Push-In	Plastic	GM1987-Up	TW4807



Breather Caps

Style	Part #
3/4" Neck*	TW7200
1" Neck*	TW7202
3/4" Neck w/PCV Tube*	TW7203
2-3/4" Dia.	TW7201



Valve Cover Hold Downs

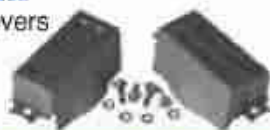
Finish	Length	Part #
Chrome Steel	4-1/4"	TW6520
Chrome Steel	1-1/2"	TW6521
O.E. Style Cast	4-7/8"	TW4440



Baffles For Aluminum

Fits Small Block Chevy Valve Covers

Tall - Part #TW4420
Short - Part #TW4430



Aluminum Valve Cover Spacers

Use with stock valve covers when modified valve train is used. Priced per set.

Description	Part #
SB Chevy 1.150"	AV900
BB Chevy 1.150"	AV910
Ford Cleveland 1.200"	AV920
Ford 429/460 1.400"	AV930
Ford 260-302-351W 1.200"	AV940





SB Chevy Timing Covers

Chrome Aluminum

Description	Part #
Cover Only	TW3500
Complete Kit*	TW3500KT



Polished Aluminum

Description	Part #
Cover Only	TW3510
Complete Kit*	TW3510KT



*Complete Kit Includes Cover, Seals, and Bolts.

SB Chevy Aftermarket Style Cover

8" Balancer Car or Truck (Bolt-On Tab)

Small Block Chevy Timing Cover fits 1985-92 car or truck applications. Cover includes bolt-on tab to fit 8" balancer. 2 finishes to choose from, chrome or steel. Chrome cover available in kit form which includes cover, seal, gaskets, and bolts. Replaces OEM #10243967.

Finish	Part #
Unplated	6544
Chrome	6544CP



SB Chevy Direct OEM Replacement Timing Covers

Our Small Block Chevy Direct OEM Replacement Covers are made with high quality materials and have welded on tabs. Chrome Kits include cover, seal, gaskets, and bolts.



Year	Description	Finish	Part #
1985-91	8" Balancer Truck (OE #12531283)	Unplated	6504
		Chrome	6504CP
		Chrome Kit	6504KCP
1992-95	7" Balancer Truck or Van (OE #12523972)	Unplated	6504LA
1982-93	7" Balancer Car (OE #1233974)	Unplated	6504A
1987-95	7" Balancer Truck or Van (OE #12523972)	Unplated	6504L
		Chrome	6504LCP
		Chrome Kit	6504LKCP

SB Chevy Chrome Steel 2 Piece Timing Cover Sets

Includes Cover, Seal, & Bolts
Part #TW6506CP



Includes Cover & Gaskets
Part #TW3520



SB Chevy Timing Cover Accessories

Timing Cover Seal - Part #74288

SB & BB Timing Cover Bolts

Finish	Part #
Black	S8424
Chrome	S6040BOLT

SB Timing Cover Gaskets

3 Piece Set for 1 Piece Covers



TW3599

Aluminum Bolt-On Timing Tabs

Works with 6", 7", and 8" balancers.

Finish	Part #
Polished	6544AT
Chrome	6544CT

SB Chevy Chrome Bolt-On Timing Tabs

Fits Balancer	Part #
6", 7", 8"	6544T
7" w/Pointer	6544S



6544CT

6544T

6544S

6544R

Chevy Timing Covers Stock Replacement 4.3L

General Motors 2.5L
4 Cylinder, 82-93

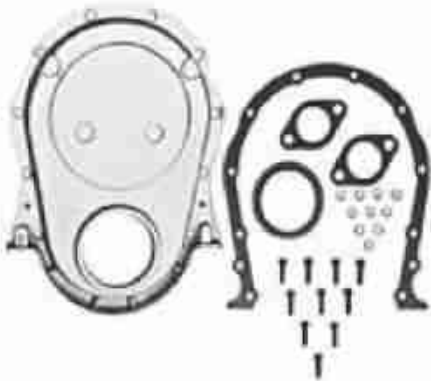
Timing Cover

Fits 1985-92
"No Balance Shaft"
Applications
OE #12513961



Unplated Steel - Part #6504L6

BB Chevy 396-454 Aluminum Timing Covers



Description	Chrome Part #	Polished Part #
Cover Only	TW6540	TW6545
Complete Kit	TW6540KT	TW6545KT

Kit Includes Cover, Seals, and Bolts

BB Chevy 396-454 Steel Timing Covers

Unplated
Part #TW6552

Chrome
Part #TW6552CP



BB Chevy Timing Cover Accessories

Type	Style	Part #
Timing Tabs	No Pointer	6997
Timing Tabs	8" w/Pointer	6997A
Gasket Kit for Aluminum or Steel Timing Covers		TW6552

Plastic Timing Covers

For Late Model GM Applications

Our new timing covers for 262, 4.3, and 305-350 GM models are OEM quality plastic replacements. All four versions include a built-in seal and bolts.

FRONT BACK

without
Sensor Hole



305, 350 GM, 1996-Up

w/Sensor Hole (OEM #12558343, 93800970) - **Part #6508**

w/o Sensor Hole (OEM #12562818) - **Part #6508WO**

FRONT BACK

with
Sensor Hole



4.3 GM, 1996-Up

w/Sensor Hole (OEM #12554555, 93445880) - **Part #6509**

w/o Sensor Hole (OEM #12554557) - **Part #6509WO**

BB Chevy 454-502 Timing Covers (Gen 5/6)

Aluminum. Fits BB Chevy 454-502, Gen 5 or Gen 6.

NEW



Fits	Part #
Gen 5 1991-95 OE #12551544	TW6542
Gen 6 1996-Up OE #12561062	TW6544



1983-90, 4 Cyl., 2.5L
1965-90, 6 Cyl., 232 & 258

NEW



Part #1W681U

1993-Up, 6 Cyl., 4.0L
1993-Up, 4 Cyl., 2.5L

NEW



Part #TW6811

1973-91, V8 AMC 304, 260,
401

NEW



Part #TW6820

Oil Pump Kit - Part #TW6821

Buick Timing Cover Kits

1964-86 V6, 196, 231, 252, & 350 RWD applications. No plates required! Includes tall gears, distributor gaskets, oil pump springs, relief valve, and timing cover seals. Drilled at bottom to accept 14 or 20 bolt pattern pans.

High Volume Timing Cover (Part #6571KTS) has 50% more oil PSI than a Standard Replacement Cover (Part #6570KTS).

Aluminum High Volume Kit

Master Kit
Part #6571KTS
Includes:
Timing Cover, Cover Seal,
Oil Pump Kit, Oil Filter Adaptor

Standard Kit
Part #6571HI
Includes:
Timing Cover, Cover Seal, Oil
Pump Kit.

Stock Replacement Std. Volume Kit

Master Kit
Part #6570KTS
Includes:
Timing Cover, Cover Seal,
Oil Pump Kit, Oil Filter Adaptor

Standard Kit
Part #6570SC
Includes:
Timing Cover,
Cover Seal

Complete Cover to Block to Water Pump Gasket Set
Part #6570GS



Buick Timing Cover

FWD only (80-85)
3.0L & 3.8L Dist.
Driven, Includes
Part #6573 Seal



Alum. Cover - Part #TW6750
Gasket Kit - Part #6570GS

Timing Mark

Timing Mark for 2.5 Buick.

Part #6572TM

Timing Mark

Timing Mark for
6570SC & 6571HI
Buick 231
Timing Covers.



Oil Filter Housing

For use with 6571HI, 6570SC, and
TW6750 Buick Timing Covers.

Metric "Thread" - Part #6570HS
Std. USA "Thread" - Part #6577HS



HARD TO FIND!

Buick 455 Timing Cover

1967-76 Buick 400, 430, 455 Applications. Front
Mounted Seal.

Cover & Seal Only - Part #TW455



General Motors Timing Covers

General Motors 2.5L
NEW 4 Cylinder, 82-93



Steel with Seals, OEM #10044603
Part #TW6900



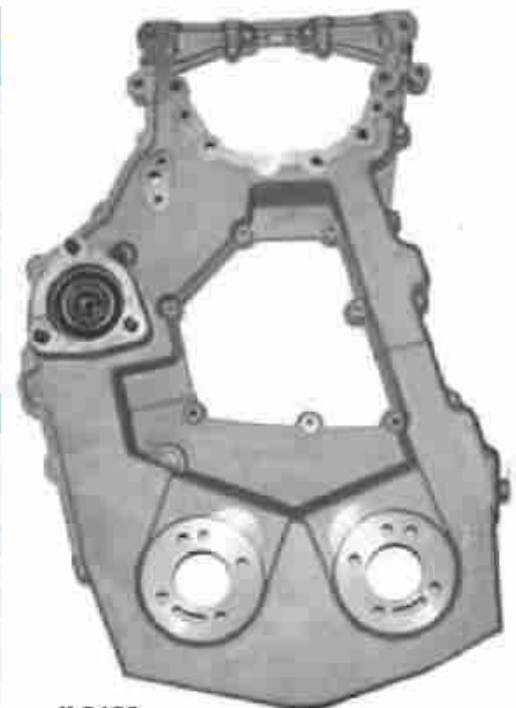
General Motors 2.8L-3.1L

2.8L	1982-86	14100617, 1259037
TW6988		
2.8L	1987-92	14090537, 1004900
TW6902		
2.8L	1982-86	14024263, 1403352
TW6989		
3.1L	1990-92	14090537, 1004900
TW6902		

O.E. GM Quad 4 (138 L4) Timing Covers & Component Engine Parts

Replacement parts for SOHC & DOHC "Quad 4's"

Year	Description	OE #	Part #
SOHC Quad 4			
92-94	Aluminum Timing Cover Housing	24570608	IL0608
92-94	Steel Timing cover	24573027	IL3027
92-94	Timing Chain	24572394	IL2394
92-94	Timing Chain Guide	24572049	IL2049
92-94	Timing Cover Housing Gasket	24570577	N32588
92-94	Timing Cover Gasket	24570409	N32587
93-94	Inner Valve Cover Gasket	24572857	N32601
93-94	Outer Valve Cover Gasket	24572858	N32602
92-93	Inner Valve Cover Gasket	22535393	N32583
92-93	Outer Valve Cover Gasket	22535394	N32584
DOHC Quad 4			
93-96	Aluminum Timing Cover Housing	24570466	IL0466
93-96	Steel Timing Cover	24572039	IL2038
93-96	Timing Cover Housing Gasket	24570452	N32585
93-96	Timing Cover Gasket	24570409	N32587
93-96	Valve Cover Gasket (Inner Intake - 2nd Design)	24572857	N32601
93-96	Valve Cover Gasket (Outer Inner - 2nd Design)	24572858	N32602
93-96	Valve Cover Gasket (Inner Exh. - 2nd Design)	24572872	N32621
93-96	Valve Cover Gasket (Outer Exh. - 2nd Design)	24572873	N32620
87-93	Valve Cover Gasket (Inner Intake - 1st Design)	22535393	N32583
87-93	Valve Cover Gasket (Outer Inner - 1st Design)	22535394	N32584
87-93	Valve Cover Gasket (Inner Exh. - 1st Design)	22535391	N32581
87-93	Valve Cover Gasket (Outer Exh. - 1st Design)	22535392	N32582
Quad 4 Component Engine Parts			
87-96	Timing Cover Seal	22531277	NUH0403FO
87-96	Timing Cover Cam Seal	22533550	NUH0404EO
87-96	Valve Spring Retainer	22531219	IL1219
87-96	Oil Pump Pick-Up Screen	22539133	IL9133
87-96	Oil Pan Baffle	22536409	IL6409
92-94	Engine Lift Hook Bracket	24570038	IL0038
90-96	Power Steering Arm Bracket	24570077	IL0077
87-96	Thermostat Housing Gasket	22532248	IL2248



IL0466



N32587



Ford Timing Covers

289, 302, 351W, 67-92

Includes Dipstick Plug & T/C Seal. V-Belt Drive.



Part #TW6600

Timing Mark - Part #TW6600T

460, 65-97

Aluminum Cover Includes Dipstick Plug & T/C Seal. V-Belt Drive.



Part #TW6657KT

302, 351 Truck, 87-97

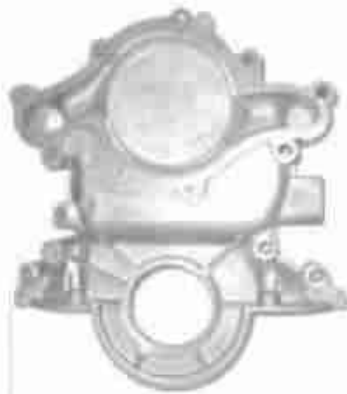
Aluminum Rev. Flow Serpentine Belt Drive & T/C Seal.



Part #TW6650

5.0 Explorer/Mountaineer VIN P

96-01, Includes Timing Cover Seal. Replaces OEM #F67E6P041AA.



Part #TW6606

302 V8, Elec. Fuel Pump, 81-95

Includes Seal. OEM #E8AE-6019A.

NEW



Part #TW6607

302-351 V8, 69-84

Includes Seal. OEM #E3AE-6059BB.

NEW



Part #TW6608

300 6 Cyl., 65-Up

OEM #E6TE-6059

NEW



Part #TW6611

1.9L, 85-90

Plastic, Replaces OEM# E9FZ6019A.



Outer - Part #6620

2.3L



OEM #D4FZ6019B (74-91 Inner)

Part #6568

Toyota Timing Covers

20R/22R Early 78-84 **22REC Exc. Turbo 85-96**



Part #TW22R



Part #TW22REC

Chrysler/Dodge Timing Covers

NEW Chrysler V8
318-360 97-99
OEM #53006705



Part #TW6805

Dodge V6, V8
V6 3.9L, V8 318,340,360
Incl. Seal, OEM #53009638



Part #TW6800

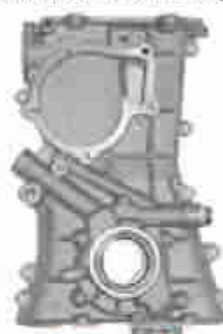
Nissan Timing Covers

Engine	Liter	Years	Nissan #	Part #
KA24E	2.4L	1990-95	13500-30R00	TW6907
GA16	1.6L	1989-90	13500-77A00	TW6908
GA16DE	1.6L	1991-96	13500-53401	TW6909
KA24DE	2.4L	1991-94	13500-53F00	TW6906
KA24DE	2.4L	1993-97	13500-1E402	TW6905
SR20DE	2.0L	1991-00	13500-53J00	TW6904

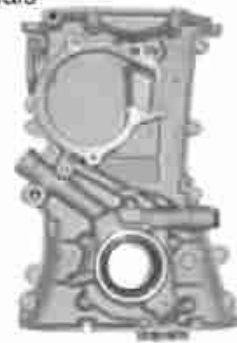
Note: All Timing Covers Include Oil Pump & Crankshaft Seals



TW6907



TW6908



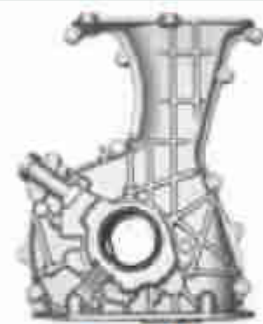
TW6909



TW6906



TW6905



TW6904

Harmonic Balancers

Silver Seal now offers 97 part numbers covering the most popular domestic and import applications. Our balancers are manufactured to meet or exceed OEM quality. Balancers include Woodruff Keys and Mounting Bolts (where necessary).

Warning Signs for Harmonic Balancer Replacement

- Front Main Seal Leaks
- Excessive Engine Vibration
- Inability To Correctly Set The Ignition Timing
- Rubber Deterioration Between The Hub & Outer Ring
- Slipping/Squealing Drive Belts or Accelerated Belt Wear
- Excessive Wear on the Keyways, Crank, or Balancer Hub
- Pulley Grooves with a Polished Spot are Signs of a Warped Balancer



AMC - Eagle - Jeep

Liter	CI/CC	Engine	Year	Application (Reference Only)	Part#	Comments
1.6L	1595	L4	1989-90	Passenger (OE# MD377604)	HBH181	Mitsubishi supplied engine
2.0L	1997	L4	1990-94	Passenger (OE# MD377604)	HBH181	Mitsubishi supplied engine
			1995-98	Talon w/Turbo (OE# MD377604)		
2.4L	2351	L4	1994-96	Passenger (OE# MD377604)	HBH181	Mitsubishi supplied engine
2.5L	151	L4	1983-90	Passenger & Truck (OE#3242886)	HBJ101	Utilizes flat belt (serpentine)
2.8L	173	V6	1982-87	SUV & Truck (OE#14085401)	HBG161	
3.8L	232	L6	1975-80	Passenger & Truck (OE#J3225201)	HBJ106	Utilizes 1-1/4" ring thickness
4.0L	242	L6	1987-03	SUV & Truck (OE#33002920)	HBJ104	Utilizes flat belt (serpentine)
4.23L	258	L6	1975-80	Passenger & Truck (OE#J3225201)	HBJ106	Utilizes 1-1/4" ring thickness
5.9L	360	V6	1973-91	Passenger & Truck (OE#3230131)	HBJ100	Includes bolt, key & washer

Chrysler - Dodge - Plymouth

2.0L	1997	L4	1990-94	Compact (OE#MD377604)	HBH181	Mitsubishi built engine
2.4L	2351	L4	1994	Van (OE#MD377604)	HBH181	Mitsubishi built engine
			1989	Raider (OE#MD311472)	HBD189	Utilizes one serpentine and one v-belt
3.0L	2972	L4	1990-91	D-50 Truck (OE#MD311472)		
3.9L	239	V6	1987-91	Truck/Van (OE#4173443)	HBD102	Utilizes oil slinger
5.2L	318	V8	1972-91	Passenger & Truck (OE#4173443)	HBD102	Utilizes oil slinger
5.6L	340	V8	1972-91	Passenger & Truck (OE#4173443)	HBD102	Utilizes oil slinger
5.9L	360	V8	1972-93	Passenger & Truck (OE#4173447)	HBD103	

Ford - Lincoln - Mercury

1.9L	118	L4	1991-96	Compact Passenger (OE#F7CZ6318BA)	HBF125	Utilizes pulse ring
2.3L	140	L4	1992-94	Tempo/Topaz HSC engine	HBF123	Bolt, key & washer included
3.0L	183	V6	1986-89	Passenger & Van (OE#E8DE6316A & BA)	HBF200	Excluding SHO engines
3.0L	183	V6	1990-94	Passenger, Truck, & Van (OE#F0DE63168A)	HBF201	Excluding SHO engines
3.0L	183	V6	1995-03	Passenger (OE#F8DE6316AA)	HBF126	Cast iron replaces aluminum, discard pulse ring. Mazda built engine
3.2L	187	V6	1993-95	SHO Passenger (OE#F3DZ6B321A)	HBF118	With A.T., Yamaha built engine
3.4L	203	V6	1996-99	SHO Passenger (OE#F6DZ6B321AA)	HBF122	Yamaha built engine
3.8L	232	V6	1988-95	Passenger (OE#F4DZ6B321A)	HBF119	
4.0L	240	L6	1965-70	Truck (OE#E3TZ6312E)	HBF112	Three groove v-belt
4.0L	244	V6	1990-03	Truck-Explorer-Ranger (OE#F0TZ6B321A)	HBF127	
4.3L	260	V6	1962-65	Passenger (OE#C5AZ6312B)	HBF107	Utilizes 3-bolt hub
4.6L	281	V8	1992-03	Passenger & Truck (OE#F3AE6316AA)	HBF117	SOHC from 6/25/92
4.7L	289	V8	1964-68	Passenger (OE#C5AZ6312B)	HBF107	Utilizes 3-bolt hub, excluding 271 HP
4.9L	300	L6	1965-86	Truck (OE#E3TZ6312E)	HBF112	Three groove v-belt
4.9L	300	L6	1987-95	Truck (OE#E7TZ6312A)	HBF114	Utilizes serpentine flat belt
4.9L	300	L6	1996	Truck & Van (OE#F6TE6316GA)	HBF202	Utilizes serpentine flat belt
5.0L	302	V8	1970	Passenger (OE#D7TZ6316A)	HBF108	"Boss" engine
5.0L	302	V8	1970-80	Passenger & Truck (OE#D7TZ6316A)	HBF108	
5.0L	302	V8	1970-80	Passenger & Truck (OE#D8TZ6316B)	HBF109	Has 4-bolt hub for accessory pulleys
5.0L	302	V8	1981-84	Truck - Van only (OE#E1TZ6316D)	HBF111	EEC system utilized
5.0L	302	V8	1984-95	Passenger & Truck (OE#E4TZ6316A)	HBF113	Does not utilize EEC system
5.4L	342	V8	1997-00	Truck (OE#F75Z6312AC)	HBF124	
5.8L	351W	V8	1981-97	Passenger & Truck (OE#E8TZ6316B)	HBF116	Does not utilize EEC system
5.8L	351M	V8	1971-82	Passenger & Truck (OE#several)	HBF199	Modified engine
6.8L	400M	V8	1971-82	Passenger & Truck (OE#several)	HBF199	Modified engine
7.3L	445	V8	1988-94	Truck Diesel (OE#E8TZ6316A)	HBF115	Without turbo, indirect injection
7.3L	445	V8	1995-97	Truck Diesel (OE#180184321AB)	HBF120	Utilizes 8-rib serpentine belt
7.5L	460	V8	1979-95	Truck (OE#D9TZ6316C)	HBF110	Use with original weighted spacer in 1979
7.5L	460	V8	1996-97	Truck (OE#F5TE6316CA)	HBF121	

GMC - Chevrolet - Buick - Cadillac - Oldsmobile - Pontiac

Liter	Ci/CC	Engine	Year	Application (Reference Only)	Part#	Comments
2.3L	140	L4	1987-02	Passenger (OE#24575562)	HBC165	
2.4L	145	L4	1987-02	Passenger (OE#24575562)	HBC165	
2.5L	151	L4	1987-92	Passenger (OE#10101369)	HBC147	
2.8L	173	V6	1982-87	Passenger & Truck (OE#14085401)	HBC161	Rear Wheel Drive applications
2.8L	173	V6	1983-86	Passenger (OE#14083394)	HBC160	Transversed mounted Chevy built engine
2.8L	173	V6	1988-89	Passenger (OE#1400630)	HBC162	Rear Wheel Drive applications
2.8L	173	V6	1988-93	S-Series Truck (OE#14100630)	HBC162	
3.1L	189	V8	1987-94	Passenger (OE#24504611)	HBC170	
3.1L	189	V6	1994-00	Passenger & Van (OE#24504609)	HBC164	Chevrolet built engine
3.3L	204	V6	1989-90	Passenger (OE#12339997)	HBC153	Buick built engine two pulse rings, bolt, key, & washer incl.
3.3L	204	V6	1991-92	Passenger (OE#24501985)	HBC149	Buick built engine, two pulse rings
3.3L	204	V6	1993	Mid-size Passenger (OE#24502175)	HBC203	Buick built engine two pulse rings
3.4L	207	V6	1994-00	Passenger & Van (OE#24504609)	HBC164	Chevrolet built engine
3.7L	230	L6	1988-73	Passenger & Truck (OE#3898590)	HBC139	2-groove v-belt with narrow center band
3.8L	229	V8	1978-84	Passenger (OE#14082324)	HBC159	
3.8L	231	V8	1988-88	Passenger (OE#25527381)	HBC166	Buick built engine, replaces all steel dampner
3.8L	231	V8	1988-90	Passenger (OE#25535485)	HBC167	Buick built engine VIN "C"
3.8L	231	V8	1990-92	Passenger (OE#24501201)	HBC171	Alt. OE#25534911
3.8L	231	V8	1991-92	Passenger (OE#88980259)	HBC206	With Supercharger
3.8L	231	V6	1993-94	Passenger (OE#24502176)	HBC172	Alt. OE#24503065
3.8L	231	V6	1993-95	Passenger (OE#88980265)	HBC207	With Supercharged engine - Alt. OE#24507414
3.8L	231	V8	1995	Passenger (OE#88980264)	HBC206	With Supercharger - Alt. OE#s 24503041, 24504739
3.8L	231	V8	1995-03	Passenger (OE#24504737)	HBC173	Buick built engine
3.8L	231	V6	1996-03	Passenger (OE#12583268)	HBC154	Supercharged Buick built engine
4.1L	250	L6	1986-73	Passenger & Truck (OE#3898590)	HBC139	2-groove v-belt with narrow center band
4.1L	250	L6	1975-78	Passenger & Truck (OE#352153)	HBC133	2-groove v-belt with wide center band
4.1L	250	L6	1977-84	Passenger & Truck (OE#458149)	HBC134	2-groove v-belt
4.1L	252	V8	1985-88	Passenger (OE#12589753)	HBC156	Cadillac built engine
4.3L	260	V8	ALL	Passenger (OE#22506730)	HBC163	Oldsmobile built engine
4.3L	262	V8	1969-75	Passenger (OE#6272223)	HBC143	6 inch, solid inertia ring
4.3L	262	V6	1985-95	Passenger & Truck (OE#10172764)	HBC151	
4.3L	262	V6	1993-97	Passenger (OE#12551138)	HBC155	
4.5L	273	V8	1988-92	Passenger (OE#12589753)	HBC156	Cadillac built engine
4.6L	283	V8	1965-68	Passenger (OE#3898904)	HBC140	6-1/8" dia., Nodular crank, 12 o'clock timing, 3/4" ring
4.8L	292	L6	1975-89	Truck (OE#3857352)	HBC169	Alt. OE#10141202
4.9L	300	V8	1991-95	Passenger (OE#12589753)	HBC156	Cadillac built engine
5.0L	305	V8	1969-95	Passenger & Truck (OE#6272221)	HBC174	6-3/4 inch, 2 o'clock timing, solid inertia ring
5.0L	305	V8	1977-86	Truck (OE#458653)	HBC135	8 inch, 12 o'clock timing, hollow back inertia ring
5.0L	305	V8	1977-93	Passenger & Truck (OE#458653)	HBC168	6-3/4 inch, 12 o'clock timing, hollow back inertia ring
5.0L	307	V8	1965-68	Passenger (OE#3898904)	HBC140	6-1/8" dia., Nodular crank, 12 o'clock timing, 3/4" ring
5.0L	307	V8	1969-72	Passenger (OE#6272223)	HBC143	6 inch, solid inertia ring
5.0L	307	V8	ALL	Passenger (OE#22506730)	HBC163	Oldsmobile built engine
5.4L	327	V8	1965-68	Passenger (OE#3898904)	HBC140	6-1/8" dia., Nodular crank, 12 o'clock timing, 3/4" ring
5.4L	327	V8	1969	Passenger & Truck (OE#6272221)	HBC174	6-3/4 inch, 2 o'clock timing, solid inertia ring
5.7L	350	V8	1966-79	Passenger (OE#477682)	HBC136	Pontiac built engine
5.7L	350	V8	1969-95	Passenger & Truck (OE#6272221)	HBC174	6-3/4 inch, 2 o'clock timing, solid inertia ring
5.7L	350	V8	1969-96	Passenger & Truck (OE#6272222)	HBC141	8 inch, 2 o'clock timing, solid inertia ring
5.7L	350	V8	1977-86	Truck (OE#458653)	HBC135	8 inch, 12 o'clock timing, hollow back inertia ring
5.7L	350	V8	1977-93	Passenger & Truck (OE#458653)	HBC168	6-3/4 inch, 12 o'clock timing, hollow back inertia ring
5.7L	350	V8	1993-97	Passenger (OE#12551138)	HBC155	
5.7L	350	V8	1996-02	Truck (OE#10243271)	HBC152	
5.7L	350	V8	1998-02	Camaro - Firebird (OE#12553118)	HBC157	
5.7L	350	V8	2004	GTO (OE#12553118)	HBC157	
5.7L	350	V8	ALL	Passenger (OE#22506730)	HBC163	Oldsmobile built engine
6.2L	381	V8	1982-93	Truck (OE#14022671)	HBC158	Diesel engine
6.2L	381	V8	1988-93	Truck & Van (OE#12557345)	HBC205	Diesel engine "PULLEY ONLY"
6.5L	396	V8	1965-70	Passenger & Truck (OE#3860010)	HBC177	375 horse engine
6.5L	396	V8	1966-72	Passenger & Truck (OE#386008)	HBC138	325 / 330 / 350 horse engines
6.5L	395	V8	1994-02	Truck (OE#10154688)	HBC150	Diesel engine
6.5L	395	V8	1994-02	Truck & Van (OE#12557345)	HBC205	Diesel engine "PULLEY ONLY"



GMC - Chevrolet - Buick - Cadillac - Oldsmobile - Pontiac (Cont.)

Liter	CI/CC	Engine	Year	Application (Reference Only)	Part#	Comments
6.6L	400	V8	1968-79	Passenger (OE#477682)	HBC136	Pontiac built engine
6.6L	400SB	V8	1970-80	Passenger & Truck (OE#6272225)	HBC144	External balanced engine
6.6L	402	V8	1970-72	Passenger & Truck (OE#386008)	HBC138	350 horse engine
6.6L	403	V8	ALL	Passenger (OE#22506730)	HBC163	Oldsmobile built engine
7.0L	427	V8	1965-70	Passenger (OE#3860010)	HBC177	425 horse engine
7.0L	427	V8	1966-72	Corvette (OE#3860008)	HBC138	390 / 400 horse engine
7.4L	454	V8	1973-90	Passenger & Truck (OE#10141212)	HBC148	
7.4L	454	V8	1991-97	Truck (OE#10101160)	HBC146	
7.5L	455	V8	1968-79	Passenger (OE#477682)	HBC136	Pontiac built engine

Honda

2.2L	2156	L4	1990-93	Accord (OE#13810PT1003)	HBH195	Top pulley has 4 grooves, lower has 3 grooves
2.2L	2156	L4	1992-96	Prelude (OE#13810PT1003)	HBH195	Excluding VTEC engine, top pulley has 4 grooves, lower has 3 grooves
2.2L	2156	L4	1994-97	Accord-Odyssey (OE#13810POA003)	HBH194	Top pulley has 5 grooves, lower has 3 grooves
2.3L	2259	L4	1992-96	Prelude (OE#13810PT1003)	HBH195	Excluding VTEC engine, top pulley has 4 grooves, lower has 3 grooves

Hyundai

1.5L	G4EK	L4	1993	Scoupe (OE#2312422001)	HBH178	Non-turbo application
1.5L	G4EK	L4	1994-99	Accent - Scoupe (OE#2312422020)	HBH179	
1.5L	G4DJ	L4	1990-94	Excel - Scoupe (OE#2312424010)	HBH180	Mitsubishi built engine
1.6L	1595	L4	1992-95	Compact (OE#2312433111)	HBH181	Mitsubishi built engine
1.8L	1836	L4	1993-95	Compact (OE#2312433111)	HBH181	Mitsubishi built engine
2.0L	1997	L4	1992-98	Compact (OE#2312433111)	HBH181	Mitsubishi built engine
3.0L	2972	V6	1989-96	Compact (OE#2312935010)	HBH182	Mitsubishi built engine (exclusive to Hyundai)

Isuzu

2.8L	173	V6	1989-91	Truck (OE#14100630)	HBC162	
3.1L	3160	V6	1991-94	Truck (OE#14100630)	HBC162	

Mazda

3.0L	183	V6	1994	B3000 Truck (OE#F0DE63168A)	HBF201	
3.0L	183	V6	1995-00	B3000 Truck (OE#F8DE6316AA)	HBF126	Cast iron replaces aluminum, discard pulse ring
4.0L	244	V6	1990-03	Truck-B4000, Navajo (OE#F0TZ6B321A)	HBF127	

Mitsubishi

1.5L	1468	L4	1990-94	Precis (OE#2312424010)	HBH180	
1.6L	1595	L4	1989-92	Compact (OE#MD377604)	HBH181	
2.0L	1997	L4	1990-98	Compact (OE#MD377604)	HBH181	
2.0L	1998	L4	1995-99	Eclipse Compact (OE#MD377604)	HBH181	With turbo
2.4L	2351	L4	1993-99	Compact (OE#MD377604)	HBH181	
3.0L	2972	V6	1989-00	Montero (OE#MD311472)	HBD189	Utilizes one serpentine and one v-belt
3.0L	2972	V6	1990-94	Compact Truck (OE#MD311472)	HBD189	Utilizes one serpentine and one v-belt
3.0L	2972	V6	1997-00	Montero Sport (OE#MD311472)	HBD189	Utilizes one serpentine and one v-belt
3.5L	3497	V6	1994-99	Montero (OE#MD311472)	HBD189	Utilizes one serpentine and one v-belt

Saab

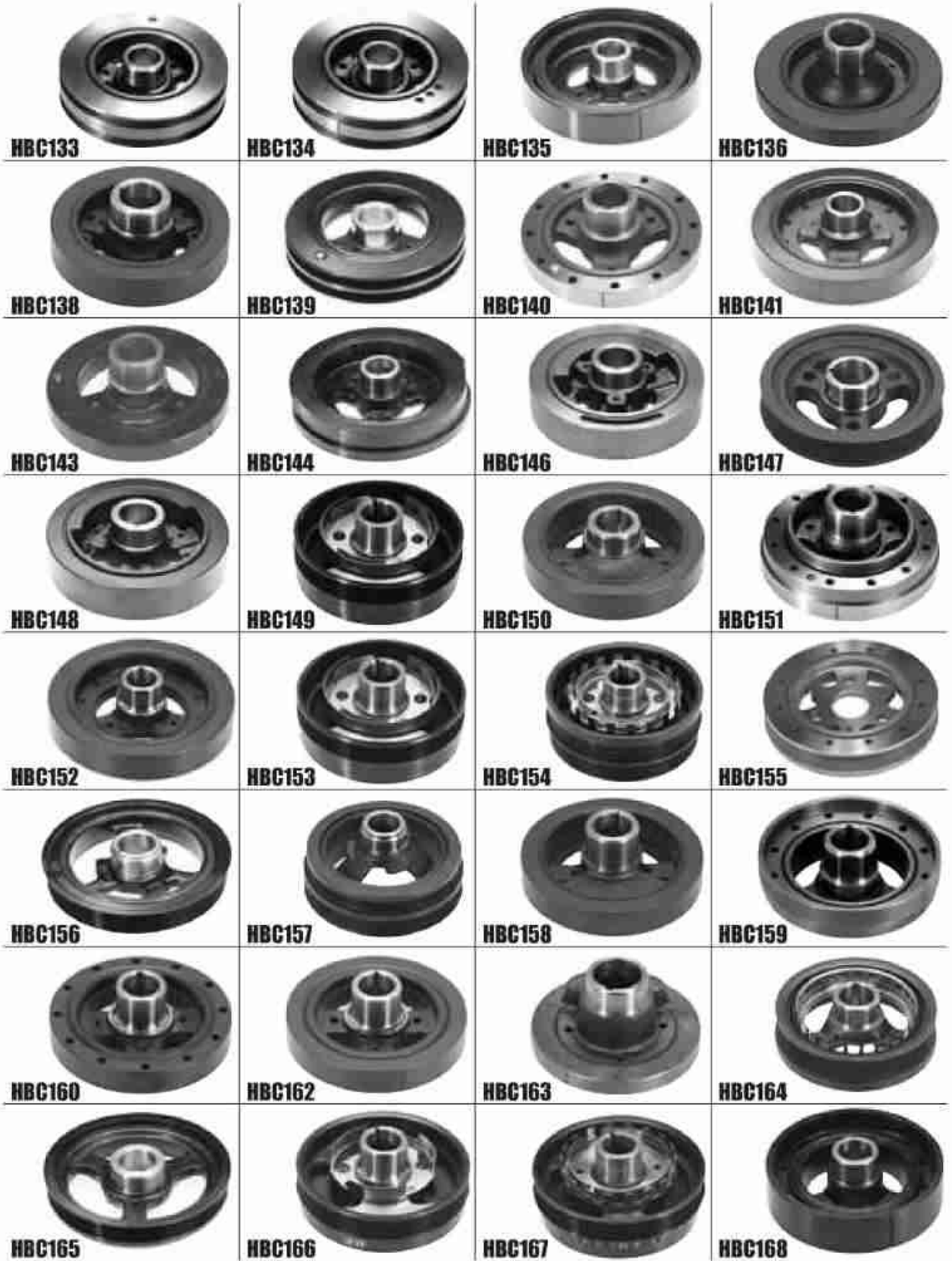
2.0L	1985	L4	1985-94	900-series (OE#9107665)	HBS190	89-93 w/turbo, 94 conv. w/turbo - w/o timing trigger
2.0L	1985	L4	1973-84	99 & 900-series (OE#7501950)	HBS191	
2.0L	1985	L4	1985-94	900-series (OE#8789315)	HBS192	Without turbo
2.0L	1985	L4	1986-90	9000-series (OE#9321530)	HBS193	With turbo

Toyota

2.4L	2366	L4	1978-84	All 20R, 22R, & 22RE	HBT197	Gas engine
2.4L	2366	L4	1985-95	All (OE#1347035020)	HBT183	Utilizes 2 v-belts and oil slinger
3.0L	2959	L6	1988-95	Truck (OE#1340865011)	HBT198	With or without power steering, gas engine
4.0L	3956	L6	1988-92	Landcruiser (OE#1347061030)	HBT187	
4.2L	258	L6	1973-87	Landcruiser (OE#1347061010)	HBT184	Non-A/C single pulley
4.2L	258	L6	1973-87	Landcruiser (OE#1347061010)	HBT185	With A/C three v-belt pulleys
4.2L	258	L6	1973-87	Landcruiser (OE#1347060120)	HBT186	Non-A/C double pulley

Volvo

2.3L	2259	L4	1989-91	740 & 940-series (OE#91351957)	HBV196	DOHC B234F engines
2.3L	2316	L4	1985-95	240-940 series (OE#91351940)	HBV186	Gas engine





HBC169



HBC170



HBC171



HBC172



HBC173



HBC174



HBC177



HBC203



HBC205



HBC206



HBC207



HBC208



HBD102



HBD103



HBD189



HBF107



HBF108



HBF109



HBF110



HBF111



HBF112



HBF113



HBF114



HBF115



HBF116



HBF117



HBF118



HBF119



HBF120



































HBF121



HBF122



HBF123

 HBF124	 HBF125	 HBF126	 HBF127
 HBF199	 HBF200	 HBF201	 HBF202
 HBG161	 HBH178	 HBH179	 HBH180
 HBH181	 HBH182	 HBH194	 HBH195
 HBH100	 HBH101	 HBH104	 HBH106
 HBS190	 HBS192	 HBS193	 HBT183
 HBT184	 HBT185	 HBT186	 HBT187
 HBT197	 HBT198	 HBV188	 HBV196



CAST IRON CLAIMER EXHAUST SMALL BLOCK CHEVY

"Ram's Horn" Straight center dump outlet cast iron exhaust manifolds. Uses include pure stock dirt track racing where stock cast iron exhaust manifolds are required by sanctioning bodies. Performance gains have been realized over other aftermarket stock cast iron exhaust manifolds offered in the industry, even the 2-1/4" diameter dump. Most aftermarket 2-1/4" dump manifolds have small cylinder port openings restricting flow making the extra diameter virtually useless. Some sanctioning bodies do not allow porting in this area. Our "stocker" exhaust manifold cylinder port openings are typically larger than the stock head port opening on a small block Chevrolet "as cast" allowing for better flow at higher RPM even though the smaller diameter dump outlet is utilized.

Dump	Side	Part #
Center	Left or Right	EMG159
Rear	Left	EMG182
Rear	Right	EMG183

Installation hardware kit included.



EXHAUST HEADERS

SB CHEVY "HUGGER" SET

Fits 1982-Up SB Chevy.
Includes Gaskets & Hardware.



Style	Part #
Black	EHC350B
Chrome	EHC350CP
Stainless Steel	EHC350SS
Ceramic	EHC350CR

SB CHEVY 283-400 "SHORTY" SET

Fits 1967-81 Camaro (Exc. 67-69 w/AC), 1968-87 Chevelle, 1968-79 Chevy II & Nova, 1970-87 Monte Carlo. Includes Gaskets & Hardware.



Style	Part #
Black	EHC400B
Chrome	EHC400CP
Stainless Steel	EHC400SS
Ceramic	EHC400CR

FORD MUSTANG 5.0L

"SHORTY" SET
Fits 1986-95 5.0L.
Includes Gaskets & Hardware.



Style	Part #
Black	EHF302B
Chrome	EHF302CP
Stainless Steel	EHF302SS
Ceramic	EHF302CR

SB CHEVY PICK-UP HEADER SETS, 1-5/8" PIPE DIA., 3/8" FLANGE

Fits 1988-95 Chevy Pick-Up.
Includes Gaskets & Hardware.



Style	Part #
Black	EHT350B
Chrome	EHT350CP
Stainless Steel	EHT350SS
Ceramic	EHT350CR

Fits 1973-85 Chevy Pick-Up.
Includes Gaskets & Hardware.



Style	Part #
Black	EHT350B-1
Chrome	EHT350CP-1
Stainless Steel	EHT350SS-1
Ceramic	EHT350CR-1

Fits 1966-72 Chevy Pick-Up.
Includes Gaskets & Hardware.



Style	Part #
Black	EHT350B-2
Chrome	EHT350CP-2
Stainless Steel	EHT350SS-2
Ceramic	EHT350CR-2

CHROME SB CHEVY EXHAUST MANIFOLD DRESS-UP COVER SET

Works with all stock SB Chevy exhaust manifolds. Hardware included.



PART# EHC0350

PART# EHCZ350

STEEL 3" HEADER REDUCER WITH WELDED RING

Small end is 2-1/4" Dia.



Exhaust Manifold Kits

122 Part Numbers For Popular Domestic and Import Applications

- Silver Seal Manifolds **include Hardware Kits (Studs, Nuts, etc.), Gaskets, and Heat Shields or Hot Air Stoves as needed.**
- We have eliminated excess inventory by including plugs for EGR ports, A.I.R. tube holes, and O2 sensor holes for applications that do not require these features.
- OEM Manifolds are thinner & lighter than in the past, and are prone to fissure (cracking) caused by thermal expansion, "hot spots" created by heat shields & the corrosive nature of exhaust gases. Due to advanced engineering, we have eliminated, where possible, these inherent weaknesses.

AMC-Eagle-Jeep

Liter/CI	Eng.	Year	Application (Reference Only)	Part#	Comments
1.5L/1498cc	L4	1989-90	Summit (Mitsubishi engine)	EMD111	
		1991-92	Summit (Mitsubishi engine)	EMD112	
		1993-96	Summit (Mitsubishi engine)	EMD222	Cast iron, w/heat shields, w/oxygen sensor prov.
2.5L/151	L4	1983-02	Cherokee, CJ, Comanche, Eagle, Wagoneer, Wrangler	EMJ104	w/Heat shield
3.4L/199	L6	1965-68	American, Classic	EMJ101	Cast iron
		1969-70	Hornet, Rambler		
3.9L/232	L6	1969-79	Ambassador, American, Cherokee, CJ, Classic, Concord, DJ, Gremlin, Hornet, Javelin, Jeepster, J-Series, Marlin, Matador, Pacer, Rambler, Rebel, Spirit, Wagoneer	EMJ101	Cast iron
		1987-90	Cherokee, Comanche, Wagoneer	EMJ210	Tubular w/heat pipe
4.0L/242	L6	1991-98	Cherokee, Comanche, Grand Cherokee, Wrangler	EMJ211	Tubular design
		1971-79	Ambassador, AMX, Concord, Cherokee, CJ, DJ, Gremlin, Hornet, Javelin, Jeepster, J-Series, Matador, Pacer, Spirit, Wagoneer	EMJ101	Cast iron
4.3L/258	L6	1981-90	Cherokee, CJ, Concord, Eagle, Grand Wagoneer, J-Series, Spirit, Wagoneer, Wrangler	EMJ103	Cast iron
		1972-88	Ambassador, AMX, CJ, Cherokee, Javelin, J-Series, Jeepster, Matador, Wagoneer	EMJ244	(Right) Cast iron w/ or w/o A.I.R.
5.0L/304	V6	1972-88	Ambassador, AMX, Cherokee, Grand Wagoneer, J-Series, Javelin, Jeepster, Matador, Wagoneer	EMJ244	(Right) Cast iron w/ or w/o A.I.R.
5.9L/360	V8	1972-91	Ambassador, AMX, Cherokee, J-Series, Javelin, Jeepster, Matador, Wagoneer	EMJ244	(Right) Cast iron w/ or w/o A.I.R.
6.8L/401	V8	1972-88	Ambassador, AMX, Cherokee, J-Series, Javelin, Matador, Wagoneer	EMJ244	(Right) Cast iron w/ or w/o A.I.R.

Chrysler-Dodge-Plymouth Passenger Cars

1.5L/1468cc	L4	1987-90	Colt non-turbo (Mitsubishi motor)	EMD111	Cast iron		
		1991-92	Colt non-turbo (Mitsubishi motor)	EMD112	Cast iron		
		1993-96	Colt	EMD222	Cast iron, w/heat shields, w/oxygen sensor provision		
2.0L/122	L4	1995-99	Neon	EMD225	Cast iron, w/heat shield, 2-bolt rd. exh. dump		
2.4L/148	L4	1995-00	Breeze, Cirrus, Sebring, Stratus	EMD227	Cast iron, w/heat shield, 4-bolt sq. exh. dump		
3.3L/198	L6	1970-74	Baracuda, Challenger, Dart, Valiant	EMD105	Cast iron		
		Aspen, Baracuda, Challenger, Charger, Cordoba, Coronet, Dart, Diplomat, Duster, LeBaron, Mirada, Monaco, Polara, Satellite, Valiant, Volare					
3.7L/225	L6	1970-83		EMD105	Cast iron		
		1977-79	All			EMD106	(Left) w/ or w/o A.I.R.
						EMD107	(Right) w/ or w/o AIR or EGR tube, uses heat riser
5.2L/318	V8	1977-80	All	EMD106	(Left) w/ or w/o A.I.R.		
				EMD107	(Right) w/ or w/o AIR or EGR tube, uses heat riser		
5.9L/360	V8	1977-80	All	EMD106	(Left) w/ or w/o A.I.R.		
				EMD107	(Right) w/ or w/o AIR or EGR tube, uses heat riser		

Dodge-Plymouth Trucks

2.5L/151	L4	1996-02	Dakota	EMJ104	w/heat shield (when needed)
3.3L/198	L6	1970-71	D-series Truck, Ramcharger, Trail Duster, Van	EMD105	Cast iron
		1970-87	D-series Truck, Ramcharger, Trail Duster, Van		
3.7L/225	L6	1987-91	Dakota	EMD232	(Left) w/heat riser w/wo EGR
		1994-95	Dakota		
5.2L/318	V8	1996-99	Dakota	EMD109	(Left) Cast iron
		1998-00	Durango	EMD109	(Left) Cast iron
		1977-91	D-series Truck, Ramcharger, Trail Duster, Van B-series	EMD106	(Left) w/ or w/o A.I.R.
				EMD107	(Right) w/ or w/o A.I.R. & EGR tube, uses heat riser
		1994-95	D-series Truck, Van B-series (Gasoline)	EMD109	(Left) Cast iron
		1996-01	D-series Truck, Van B-series (Gasoline)	EMD108	(Right) w/EGR at rear
		1999-02	Dakota	EMD109	(Left) Cast iron
5.9L/360	V8	1998-01	Durango	EMD109	(Left) Cast iron
		1977-92	D-series Truck, Ramcharger, Trail Duster, Van B-series	EMD106	(Left) w/ or w/o A.I.R.
				EMD107	(Right) w/ or w/o A.I.R. & EGR tube, uses heat riser
		1994-95	D-series Truck, Van B-series (Gasoline)	EMD109	(Left) Cast iron
		1996-01	D-series Truck, Van B-series (Gasoline)	EMD108	(Right) w/EGR at rear
		EMD109	(Left) Cast iron		



Dodge-Plymouth Trucks

Table with columns: Liter/CI, Eng, Year, Application (Reference Only), Part#, Comments. Rows include Dodge-Plymouth Trucks with various engine sizes and applications.

Ford-Lincoln-Mercury Passenger Cars

Table with columns: Liter/CI, Eng, Year, Application (Reference Only), Part#, Comments. Rows include Ford-Lincoln-Mercury Passenger Cars with various engine sizes and models.

Ford Trucks

Table with columns: Liter/CI, Eng, Year, Application (Reference Only), Part#, Comments. Rows include Ford Trucks with various engine sizes and models.

Ford Trucks

Liter/CI	Eng.	Year	Application (Reference Only)	Part#	Comments
5.9L/352	V8	1965-67	F-series Truck	EMF157	(Right) Cast Iron, has 2" exhaust dump opening
5.9L/360	V8	1968-76	F-series Truck	EMF158	(Left) Cast iron has 2" exhaust dump opening
				EMF157	(Right) Cast Iron, has 2" exhaust dump opening
6.1L/370	V8	1983-90	Medium Duty Truck F-series (Gas)	EMF143	(Left & Right) Cast Iron center dump clamp on style pipe hook up w/A.I.R. holes
		1991-98	Medium Duty Truck F-series (F.I. Gas)	EMF233	(Left & Right) Cast Iron, center dump w/EGR provision by exhaust dump "F1HE" castings
6.4L/390	V8	1968-76	F-series Truck	EMF158	(Left) Cast Iron has 2" exhaust dump opening
				EMF157	(Right) Cast Iron, has 2" exhaust dump opening
6.6L/400M	V8	1977-82	E-series Van, F-series Truck	EMF148	(Left) Cast Iron
				EMF121	(Right) Cast Iron
7.0L/429	V8	1983-90	Medium Duty Truck F-series (Gas)	EMF143	(Left & Right) Cast Iron center dump clamp on style pipe hook up w/A.I.R. holes
		1991-98	Medium Duty Truck F-series (F.I. Gas)	EMF233	(Left & Right) Cast Iron, center dump w/EGR provision by exhaust dump "F1HE" castings
		1975-87	E-series Van, F-series Truck, carbureted	EMF125	(L.) Cast Iron w/or w/o AIR holes top of exh. ports
7.5L/460	V8	1988	E-series Van w/carb	EMF127	(R.) Cast Iron w/or w/o AIR holes top of exh. ports
				EMF125	(L.) Cast Iron w/or w/o AIR holes top of exh. ports
				EMF127	(R.) Cast Iron w/or w/o AIR holes top of exh. ports
				EMF151	(Left) Cast Iron, w/one EGR hole at rear by port
1988-97	E-series Van, F-series Truck	EMF154	(Left) Cast Iron w/1 EGR hole at front by port & 3 EGR holes at rear between port & exhaust dump		
		EMF152	(Right) cast iron, no provisions for EGR holes		
		EMF155	(Right) cast iron, w/ provisions for 2 EGR holes at front and rear ports can be plugged where needed		

GM Passenger Cars

Buick

2.0L/122	L4	1985-86	Skyhawk	EMG178	Tubular design w/heat shield
		1987	Skyhawk w/turbo	EMG177	Cast Iron
2.5L/151	L4	1983-91	Skylark, Sommerset, Century(1983-92)	EMG178	Tubular design w/heat shield
3.1L/189	V6	1994-96	Century, Regal, Skylark(Chevy engine)	EMG228	(Rear) Tubular design w/heat shield
3.3L/204	V6	1989-93	Century, Skylark (Buick engine)	EMG230	(Rear) Tubular design w/heat shield
		1977-78	Century, Regal, Skylark(Chevy engine)	EMG179	(Left/w/ w/o AIR or oxy sensor 3-stud male flange
			EMG183	(Right/w/ w/o A.I.R., w/heat shield, 3-stud flange	
5.0L/305	V8	1979	Skylark (Chevy engine)	EMG179	(Left/w/ w/o AIR or oxy sensor 3-stud male flange
		1978-79	Century, (Chevy engine)	EMG183	(Right/w/ w/o A.I.R., w/heat shield, 3-stud flange
		1978	Full Size (Chevy engine)	EMG179	(Left/w/ w/o AIR or oxy sensor 3-stud male flange
		EMG183	(Right/w/ w/o A.I.R., w/heat shield, 3-stud flange		
		1978-86	Century, Fullsize Sedan(Chevy engine)	EMG255	(Right) Cast Iron w/heat stove, 3-bolt flange
5.7L/350	V8	1977-78	Century, Regal, Skylark (Chevy engine)	EMG179	(Left/w/ w/o AIR or oxy sensor 3-stud male flange
		1978-79	Century (Chevy engine)	EMG183	(Right/w/ w/o A.I.R., w/heat shield, 3-stud flange
		1994-95	Full Size Sedan & Wagon	EMG255	(Right) Cast Iron w/heat stove 3-bolt flange
				EMG184	(R.) w/AIR pipe fitting front of manifold, w/heat shield

Cadillac

2.0L/122	L4	1985-86	Cimarron	EMG178	Tubular design w/heat shield
		1994-95	Full Size	EMG184	(R.) w/AIR pipe fitting front of manifold, w/heat shield
5.7L/350	V8	1998-00	Escalade	EMG194	(Left) w/heat shield
				EMG193	(Right) Cast Iron

Chevrolet

1.5L/147cc	L4	1987-89	Spectrum non turbo	EMG202	
2.5L/151	L4	1983-92	Celebrity, Camaro(1982-86), Citation(1983-87)	EMG176	Tubular design w/heat shield
3.1L/189	V6	1995-96	Lumina, Monte Carlo	EMG228	(Rear) Tubular design w/heat shield
				EMG179	(Left/w/ w/o AIR or oxy sensor 3-stud male flange
4.3L/262	V8	1975	Full Size Sedan & Wagon, Nova	EMG183	(Right/w/ w/o A.I.R., w/heat shield, 3-stud flange
				EMG179	(Left/w/ w/o AIR or oxy sensor 3-stud male flange
				EMG183	(Right/w/ w/o A.I.R., w/heat shield, 3-stud flange
4.5L/267	V8	1980	Camaro	EMG179	(Left/w/ w/o AIR or oxy sensor 3-stud male flange
		1981	Camaro	EMG183	(Right/w/ w/o A.I.R., w/heat shield, 3-stud flange
		1979-82	El Camino, Full Size Sedan, Monte Carlo	EMG255	(Right) Cast Iron w/heat stove, 3-bolt flange
5.0L/302	V8	1969	Camaro	EMG182	(Left/w/ w/o A.I.R. & oxygen sensor, 3-stud flange
				EMG183	(Right/w/ w/o A.I.R., w/heat shield, 3-stud flange
5.0L/305	V8	1976-79	Camaro	EMG179	(Left/w/ w/o AIR or oxy sensor 3-stud male flange
				EMG183	(Right/w/ w/o A.I.R., w/heat shield, 3-stud flange
				EMG179	(Left/w/ w/o AIR or oxy sensor 3-stud male flange
				EMG183	(Right/w/ w/o A.I.R., w/heat shield, 3-stud flange
				EMG179	(Left/w/ w/o AIR or oxy sensor 3-stud male flange
1980-81	Camaro	EMG183	(Right/w/ w/o A.I.R., w/heat shield, 3-stud flange		
		1977-79	Chevelle, El Camino, Full Size Sedan/Wagon Sprint, Nova(1978-79)	EMG179	(Left/w/ w/o AIR or oxy sensor 3-stud male flange
		1978-86	El Camino, Full Size Sedan, Monte Carlo	EMG183	(Right/w/ w/o A.I.R., w/heat shield, 3-stud flange
				EMG255	(Right) Cast Iron w/heat stove, 3-bolt flange



GM Passenger Cars

liter/CI	Eng.	Year	Application (Reference Only)	Part#	Comments
Chevrolet					
5.0L/307	V8	1969-73	Camaro, Chevelle, Nova(1970-73)	EMG182	(Left)w/ or w/o A.I.R. & oxygen sensor, 3-stud flange
		1969	Nova (Manual Transmission)	EMG183	(Right)w/ or w/o A.I.R., wheat shield, 3-stud flange
5.5L/327	V8	1969	Nova (Automatic Transmission)	EMG182	(Left)w/ or w/o A.I.R. & oxygen sensor, 3-stud flange
		1969	Camaro	EMG183	(Right)w/ or w/o A.I.R., wheat shield, 3-stud flange
		1965	Corvette, except F.I., Hi-Perf., A.T.	EMG160	(Left)center dump w/ front all. bracket, w/ or w/o AIR
		1966-67	Corvette	EMG160	(Left)center dump w/ front all. bracket, w/ or w/o AIR
		1966-68	Corvette	EMG201	(Left)center dump w/ wide all. bracket, w/ or w/o A.I.R.
		1969	Full Size Sedan & Wagon	EMG166	(Left) angle back center dump w/ or w/o A.I.R.
		1969-75	Camaro 145-300 H.P.	EMG159	(Right&Left)Cast iron, center dump w/ or w/o A.I.R.
		1976-80	Camaro, Nova(1976-79)	EMG182	(Left)w/ or w/o A.I.R. & oxygen sensor, 3-stud flange
		1995	Camaro	EMG183	(Right)w/ or w/o A.I.R., wheat shield, 3-stud flange
		1970-75	Chevelle, El Camino, Monte Carlo, Nova, Sprint	EMG179	(Left)w/ or w/o AIR or oxy sensor, 3-stud male flange
5.7L/350	V8	1976-77	Chevelle, El Camino, Monte Carlo, Nova, Sprint	EMG183	(Right)w/ or w/o A.I.R., wheat shield, 3-stud flange
		1969	Corvette	EMG201	(Left)center dump w/ wide all. bracket, w/ or w/o A.I.R.
		1970-71	Corvette 330 & 370 H.P.	EMG159	(Right&Left)Cast iron, center dump w/ or w/o A.I.R.
		1970-71	Corvette 270, 300, & 350 H.P.	EMG201	(Left)center dump w/ wide all. bracket, w/ or w/o A.I.R.
		1972-80	Corvette	EMG160	(Left)center dump w/ front all. bracket, w/ or w/o AIR
		1978	El Camino, Sprint	EMG159	(Right&Left)Cast iron, center dump w/ or w/o A.I.R.
		1978-80	El Camino, Full Size Sedan, Malibu (gas)	EMG179	(Left)w/ or w/o AIR or oxy sensor, 3-stud male flange
		1969-70	Full Size Sedan & Wagon	EMG255	(Right) Cast iron w/heat stove 3-bolt flange
		1971-75	Full Size Sedan & Wagon	EMG166	(Left) angle back center dump w/ or w/o A.I.R.
		1976-79	Full Size Sedan & Wagon	EMG159	(Right&Left)Cast iron, center dump w/ or w/o A.I.R.
		1981-86	Full Size Sedan & Wagon excluding Diesel	EMG182	(Left)w/ or w/o A.I.R. & oxygen sensor, 3-stud flange
		1994-95	Full Size Sedan & Wagon	EMG183	(Right)w/ or w/o A.I.R., wheat shield, 3-stud flange
		1978-79	Full Size Sedan & Wagon	EMG179	(Left)w/ or w/o AIR or oxy sensor, 3-stud male flange
		1981-86	Full Size Sedan & Wagon excluding Diesel	EMG183	(Right)w/ or w/o A.I.R., wheat shield, 3-stud flange
1994-95	Full Size Sedan & Wagon	EMG197	(Right)3-bolt dump, w/ or w/o A.I.R., has heat shield		
6.6L/396-402	V8	1966-72	Chevelle, El Camino, Full Size Sedan/Wagon, Monte Carlo, Nova, Sprint, Camaro(1967-72)	EMG164	(right) w/ or w/o A.I.R., in top of ports
6.6L/400SB	V8	1971-75	Chevelle, El Camino, Full Size Sedan/Wagon, Monte Carlo, Sprint	EMG182	(Left)w/ or w/o A.I.R. & oxygen sensor, 3-stud flange
		1976	Chevelle, El Camino, Full Size Sedan/Wagon, Monte Carlo(1976-77), Sprint	EMG183	(Right)w/ or w/o A.I.R., wheat shield, 3-stud flange
7.2L/427	V8	1968-69	Full Size Sedan & Wagon	EMG179	(Left)w/ or w/o AIR or oxy sensor, 3-stud male flange
7.4L/454	V8	1970-76	Chevelle, El Camino, Full Size Sedan/Wagon, Monte Carlo, Sprint	EMG183	(Right)w/ or w/o A.I.R., wheat shield, 3-stud flange
				EMG164	(right) w/ or w/o A.I.R., in top of ports
Geo					
1.6L/1587cc	L4	1989-97	Prizm (Toyota motor) SOHC	EMT204	wheat shield, oxygen sensor in exhaust pipe
1.8L/1588cc	L4	1990-93	Storm (Isuzu motor) SOHC	EMG203	
Oldsmobile					
2.0L/122	L4	1985-86	Firenza	EMG178	Tubular design w/heat shield
2.5L/151	L4	1983-92	Calais, Ciera, Omega	EMG176	Tubular design w/heat shield
3.1L/189	V6	1993-96	Ciera, Cutlass (Chevy engine)	EMG228	(Rear) Tubular design w/heat shield
3.3L/204	V6	1989-93	Achieva, Calais, Ciera (Buick engine)	EMG230	(Rear) Tubular design w/heat shield
4.3L/262	V6	1991-94	Bravada	EMG185	(Left) w/heat pipe
		1996-01	Bravada	EMG186	(Right)
4.5L/267	V8	1981-82	Cutlass	EMG188	(Left)Cast iron w/heat shield & EGR prov. w/o AIR
		1978-86	Cutlass (Chevy engine)	EMG255	(Right) Cast iron w/heat stove 3-bolt flange
5.0L/305	V8	1977-79	Omega (Chevy engine)	EMG255	(Right) Cast iron w/heat stove 3-bolt flange
		1978-79	Cutlass, Full Size Sedan/Wagon(Chev. eng.)	EMG179	(Left)w/ or w/o AIR or oxy sensor, 3-stud male flange
		1977-79	Omega (Chevy engine)	EMG183	(Right)w/ or w/o A.I.R., wheat shield, 3-stud flange
5.7L/350	V8	1978-79	Cutlass, Full Size Sedan/Wagon(Chev. eng.)	EMG179	(Left)w/ or w/o AIR or oxy sensor, 3-stud male flange
		1978-79	Omega (Chevy engine)	EMG183	(Right)w/ or w/o A.I.R., wheat shield, 3-stud flange
				EMG255	(Right) Cast iron w/heat stove 3-bolt flange

GM Passenger Cars

Liter/CI	Eng.	Year	Application (Reference Only)	Part#	Comments
Pontiac					
2.0L/122	L4	1985-89	Grand Am, Sunbird	EMG178	Tubular design w/heat shield
		1987-90	Sunbird, w/turbo	EMG177	Cast Iron
2.5L/151	L4	1983-91	6000, Fiero, Firebird, Grand Am, Phoenix	EMG176	Tubular design w/heat shield
3.1L/189	V6	1994-96	Grand Prix (Chevy engine)	EMG228	(Rear) Tubular design w/heat shield
3.3L/204	V6	1992-93	Grand Am (Buick engine)	EMG230	(Rear) Tubular design w/heat shield
4.5L/267	V8	1981-82	Grand Prix, LeMans, Full Size Sedan	EMG255	(Right) Cast Iron w/heat stove 3-bolt flange
			Full Size Sedan & Wagon, LeMans, Ventura (Chevy engine)	EMG179	(Left)w/ w/ w/ AIR or oxy sensor, 3-stud male flange
		1977		EMG183	(Right)w/ w/ w/ A.I.R. w/heat shield, 3-stud flange
5.0L/305	V8	1977-81	Firebird, Phoenix (Chevy engine)	EMG179	(Left)w/ w/ w/ AIR or oxy sensor, 3-stud male flange
				EMG183	(Right)w/ w/ w/ A.I.R. w/heat shield, 3-stud flange
		1978-86	Full Size Sedan, Grand Prix, LeMans	EMG255	(right) Cast Iron w/heat stove 3-bolt flange
5.0L/307	V8	1971-72	Ventura (Chevy engine)	EMG182	(Left)w/ w/ w/ A.I.R. & oxygen sensor, 3-stud flange
				EMG183	(Right)w/ w/ w/ A.I.R. w/heat shield, 3-stud flange
		1977-79	Phoenix, Ventura (Chevy engine)	EMG179	(Left)w/ w/ w/ AIR or oxy sensor, 3-stud male flange
5.7L/350	V8	1978-79	Firebird, LeMans (Chevy engine)	EMG183	(Right)w/ w/ w/ A.I.R. w/heat shield, 3-stud flange
		1978	LeMans	EMG255	(Right) Cast Iron w/heat stove 3-bolt flange
		1995	Firebird	EMG184	(R) w/AIR pipe fitting front of manifold, w/heat shield

GM Trucks

2.5L/151	L4	1985-90	Astro, Safari Mini Vans	EMG176	Tubular design w/heat shield
		1985-93	S/T-series compact Truck, Blazer, Jimmy	EMG175	Tubular design w/heat shield
4.1L/250	L6	1979-84	G-series Van, Cab & Chasis, Blazer, C/K Truck, Jimmy, Suburban	EMG246	Cast Iron, dual outlet exhaust dump
		1996-01	Astro, Safari Mini Vans	EMG192	(Left) Cast Iron, w/EGR provision at rear port
		2002	Astro, Safari Mini Vans	EMG187	(Right)Cast Iron, w/ EGR or oxygen sensor prov.
		1996	Express/Savana Full Size Van	EMG192	(Left) Cast Iron, w/EGR provision at rear port
		1995	G-series Van, Cab & Chasis w/4L60E auto transmission	EMG190	(L) Cast Iron, w/EGR & oxy sens. hole w/heat shield
				EMG189	(Right)Cast Iron, w/EGR hole prov., w/heat shield
4.3L/262	V6	1989-02	G-series Van, Cab & Chasis	EMG192	(Left) Cast Iron, w/EGR provision at rear port
		1988-95	S/T-series compact Truck, Blazer, Jimmy	EMG185	(Left) Cast Iron w/heat shield & stove pipe
				EMG186	(Right) Cast Iron
		1996-01	S/T-series compact Truck, Blazer, Jimmy	EMG188	(Left)Cast Iron w/heat shield & EGR prov., w/ AIR
				EMG187	(Right)Cast Iron, w/ EGR or oxygen sensor prov.
		2002	S/T-series compact Truck, Blazer, Jimmy	EMG187	(Right)Cast Iron, w/ EGR or oxygen sensor prov.
		1988-95	VIN C/K/R/V Trucks, Blazer, Jimmy, Suburban, Tahoe, Yukon	EMG190	(L) Cast Iron, w/EGR & oxy sens. hole w/heat shield
				EMG189	(Right)Cast Iron, w/EGR hole prov., w/heat shield
		1996-98	VIN C/K/R/V Trucks, Blazer, Jimmy, Suburban, Tahoe, Yukon	EMG192	(Left) Cast Iron, w/EGR provision at rear port
				EMG191	(Right) Cast Iron
4.6L/283	V8	1985-88	Blazer, Jimmy, Truck, Suburban	EMG160	(Left)center dump w/ front alt. bracket, w/ w/ AIR
				EMG166	(Left) angle back center dump w/ w/ A.I.R.
				EMG201	(Left)center dump w/ side alt. bracket, w/ w/ A.I.R.
				EMG159	(Right)(Left)Cast Iron, center dump w/ w/ A.I.R.
				EMG167	(R) Cast Iron, ctr. dump angle back w/ w/ A.I.R.
		1996	Express/Savana Full Size Van	EMG194	(Left) w/EGR provision at rear port, w/heat shield
		1977-82	G-series Van, Cab & Chasis	EMG179	(Left)w/ w/ w/ AIR or oxy sensor, 3-stud male flange
		1983-86	G-series Van, Cab & Chasis	EMG179	(Left)w/ w/ w/ AIR or oxy sensor, 3-stud male flange
				EMG180	(Right)w/ w/ w/ A.I.R. w/heat shield, 3-stud flange
		1987-94	G-series Van, Cab & Chasis	EMG200	(Left)w/ oxy sensor & EGR hole prov. 3-stud flange
				EMG199	(Right)w/heat shield & EGR provision, 3-stud flange
		5.0L/305	V8	1995	G-series Van, Cab & Chasis
				EMG162	(Right) w/ w/ w/ EGR provision, w/heat shield
1997-00	G-series Van, Cab & Chasis			EMG194	(Left) w/EGR provision at rear port, w/heat shield
1977-80	VIN C/K/R/V Trucks, Blazer, Jimmy, Suburban			EMG179	(Left)w/ w/ w/ AIR or oxy sensor, 3-stud male flange
				EMG183	(Right)w/ w/ w/ A.I.R. w/heat shield, 3-stud flange
1981-86	VIN C/K/R/V Trucks, Blazer, Jimmy, Suburban			EMG197	(Right)3-bolt dump, w/ w/ A.I.R., has heat shield
				EMG196	(Right) w/ w/ w/ one E.G.R. hole, 3-stud flange
1987	VIN C/K/R/V Trucks, Blazer, Jimmy, Suburban			EMG195	(Left) w/ w/ w/ oxygen sensor & EGR hole provisions, male dump, 3-stud flange
				EMG161	(Right) w/ w/ w/ one EGR hole provision, w/ heat shield, male dump, 3-stud flange
1988-95	VIN C/K/R/V Trucks, Blazer, Jimmy, Suburban, Tahoe, Yukon			EMG163	(L) w/ w/ w/ oxy sensor or EGR prov. w/heat shield
		EMG162	(Right) w/ w/ w/ EGR provision, w/heat shield		
1996-99	VIN C/K/R/V Trucks, Blazer, Jimmy, Suburban, Tahoe, Yukon	EMG194	(Left) w/EGR provision at rear port, w/heat shield		
		EMG193	(Right) Cast Iron		



GM Trucks

liter/Ci	Eng.	Year	Application (Reference Only)	Part#	Comments
5.0L/307	V8	1968-72	Blazer, Jimmy, Truck, Suburban.	EMG159	(Right&Left)Cast Iron, center dump w/or w/o A.I.R.
				EMG160	(Left)center dump w/front alt. bracket w/or w/o AIR
				EMG166	(Left) angle back center dump w/or w/o A.I.R.
				EMG201	(Left)center dump w/ide alt bracket w/or w/o A.I.R
5.4L/327	V8	1971-73	G-series Van, Cab & Chasis	EMG167	(R.)Cast Iron,ctr.dump angle back w/or w/o A.I.R
				EMG182	(Left)w/or w/o A.I.R.&oxygen sensor, 3-stud flange
				EMG182	(Left)w/or w/o A.I.R.&oxygen sensor, 3-stud flange
				EMG183	(Right)w/or w/o A.I.R., wheat shield, 3-stud flange
5.7L/350	V8	1973	VIN C/K/R/V Trucks, Blazer, Jimmy, Suburban	EMG182	(Left)w/or w/o A.I.R.&oxygen sensor, 3-stud flange
				EMG183	(Right)w/or w/o A.I.R., wheat shield, 3-stud flange
				EMG159	(Right&Left)Cast Iron, center dump w/or w/o A.I.R.
				EMG160	(Left)center dump w/front alt. bracket w/or w/o AIR
5.7L/350	V8	1965-68	Blazer, Jimmy, Truck, Suburban	EMG166	(Left) angle back center dump w/or w/o A.I.R.
				EMG201	(Left)center dump w/ide alt bracket w/or w/o A.I.R
				EMG167	(R.)Cast Iron,ctr.dump angle back w/or w/o A.I.R
				EMG166	(Left) angle back center dump w/or w/o A.I.R.
5.7L/350	V8	1969-72	P-Series Truck, Motorhome, Step Van	EMG167	(R.)Cast Iron,ctr.dump angle back w/or w/o A.I.R
				EMG159	(Right&Left)Cast Iron, center dump w/or w/o A.I.R.
				EMG166	(Left) angle back center dump w/or w/o A.I.R.
				EMG167	(R.)Cast Iron,ctr.dump angle back w/or w/o A.I.R.
5.7L/350	V8	1969-72	Blazer, Jimmy, Truck, Suburban	EMG166	(Left) angle back center dump w/or w/o A.I.R.
				EMG167	(R.)Cast Iron,ctr.dump angle back w/or w/o A.I.R.
				EMG194	(Left) w/EGR provision at rear port, wheat shield
				EMG159	(Right&Left)Cast Iron, center dump w/or w/o A.I.R.
5.7L/350	V8	1996	Express/Savana Full Size Van	EMG200	(Left)w/oxy sensor & EGR hole prov, 3-stud flange
				EMG199	(Right)w/heat shield & EGR provision,3-stud flange
				EMG159	(Right&Left)Cast Iron, center dump w/or w/o A.I.R.
				EMG160	(Left)center dump w/front alt. bracket w/or w/o AIR
5.7L/350	V8	1983-90	Forward Control Cab Medium Duty	EMG201	(Left)center dump w/ide alt bracket w/or w/o A.I.R
				EMG182	(Left)w/or w/o A.I.R.&oxygen sensor, 3-stud flange
				EMG179	(Left)w/or w/o AIR or oxy sensor 3-stud male flange
				EMG180	(Right)w/or w/o A.I.R., wheat shield, 3-stud flange
5.7L/350	V8	1989-93	Forward Control Cab Medium Duty	EMG179	(Left)w/or w/o AIR or oxy sensor 3-stud male flange
				EMG180	(Right)w/or w/o A.I.R., wheat shield, 3-stud flange
				EMG200	(Left)w/oxy sensor & EGR hole prov, 3-stud flange
				EMG199	(Right)w/heat shield & EGR provision,3-stud flange
5.7L/350	V8	1967-70	G-series Van, Cab & Chasis	EMG159	(Right&Left)Cast Iron, center dump w/or w/o A.I.R.
				EMG160	(Left)center dump w/front alt. bracket w/or w/o AIR
				EMG201	(Left)center dump w/ide alt bracket w/or w/o A.I.R
				EMG182	(Left)w/or w/o A.I.R.&oxygen sensor, 3-stud flange
5.7L/350	V8	1971-76	G-series Van, Cab & Chasis	EMG179	(Left)w/or w/o AIR or oxy sensor 3-stud male flange
				EMG180	(Right)w/or w/o A.I.R., wheat shield, 3-stud flange
				EMG179	(Left)w/or w/o AIR or oxy sensor 3-stud male flange
				EMG180	(Right)w/or w/o A.I.R., wheat shield, 3-stud flange
5.7L/350	V8	1977-84	G-series Van, Cab & Chasis	EMG200	(Left)w/oxy sensor & EGR hole prov, 3-stud flange
				EMG199	(Right)w/heat shield & EGR provision,3-stud flange
				EMG162	(Right) w/or w/o EGR provision, wheat shield
				EMG200	(Left)w/oxy sensor & EGR hole prov, 3-stud flange
5.7L/350	V8	1983-84	G-series Van, Cab & Chasis (non LPG)	EMG199	(Right)w/heat shield & EGR provision,3-stud flange
				EMG162	(Right) w/or w/o EGR provision, wheat shield
				EMG200	(Left)w/oxy sensor & EGR hole prov, 3-stud flange
				EMG199	(Right)w/heat shield & EGR provision,3-stud flange
5.7L/350	V8	1985-87	G-series Van, Cab & Chasis (Engine M.K.L)	EMG162	(Right) w/or w/o EGR provision, wheat shield
				EMG200	(Left)w/oxy sensor & EGR hole prov, 3-stud flange
				EMG199	(Right)w/heat shield & EGR provision,3-stud flange
				EMG194	(Left) w/EGR provision at rear port, wheat shield
5.7L/350	V8	1987-94	G-series Van, Cab & Chasis w/700R4, 4L60E, 4L80E auto transmissions	EMG199	(Right)w/heat shield & EGR provision,3-stud flange
				EMG162	(Right) w/or w/o EGR provision, wheat shield
				EMG200	(Left)w/oxy sensor & EGR hole prov, 3-stud flange
				EMG199	(Right)w/heat shield & EGR provision,3-stud flange
5.7L/350	V8	1995	G-series Van, Cab & Chasis w/4L60E(A.Trans)	EMG162	(Right) w/or w/o EGR provision, wheat shield
				EMG200	(Left)w/oxy sensor & EGR hole prov, 3-stud flange
				EMG199	(Right)w/heat shield & EGR provision,3-stud flange
				EMG194	(Left) w/EGR provision at rear port, wheat shield
5.7L/350	V8	1996	G-series Van, Cab & Chasis	EMG200	(Left)w/oxy sensor & EGR hole prov, 3-stud flange
				EMG199	(Right)w/heat shield & EGR provision,3-stud flange
				EMG194	(Left) w/EGR provision at rear port, wheat shield
				EMG159	(Right&Left)Cast Iron, center dump w/or w/o A.I.R.
5.7L/350	V8	1997-02	G-series Van, Cab & Chasis	EMG166	(Left) angle back center dump w/or w/o A.I.R.
				EMG167	(R.)Cast Iron,ctr.dump angle back w/or w/o A.I.R
				EMG182	(Left)w/or w/o AIR or oxygen sensor, 3-stud flange
				EMG179	(Left)w/or w/o AIR or oxy sensor 3-stud male flange
5.7L/350	V8	1975-90	Medium Duty Truck to incl. NO7 emissions option where applicable (incl. School Buses)	EMG183	(Right)w/or w/o A.I.R., wheat shield, 3-stud flange
				EMG200	(Left)w/oxy sensor & EGR hole prov, 3-stud flange
				EMG199	(Right)w/heat shield & EGR provision,3-stud flange
				EMG182	(Left)w/or w/o AIR or oxygen sensor, 3-stud flange
5.7L/350	V8	1969-72	P-Series Truck, Motorhome, Step Van	EMG179	(Left)w/or w/o AIR or oxy sensor 3-stud male flange
				EMG183	(Right)w/or w/o A.I.R., wheat shield, 3-stud flange
				EMG200	(Left)w/oxy sensor & EGR hole prov, 3-stud flange
				EMG199	(Right)w/heat shield & EGR provision,3-stud flange
5.7L/350	V8	1973-87	P-Series Truck, Motorhome, Step Van (1987 Engine code M)	EMG182	(Left)w/or w/o AIR or oxygen sensor, 3-stud flange
				EMG179	(Left)w/or w/o AIR or oxy sensor 3-stud male flange
				EMG183	(Right)w/or w/o A.I.R., wheat shield, 3-stud flange
				EMG200	(Left)w/oxy sensor & EGR hole prov, 3-stud flange
5.7L/350	V8	1987-90	P-Series Truck, Motorhome, Step Van (1987-88 Engine code K)	EMG199	(Right)w/heat shield & EGR provision,3-stud flange
				EMG182	(Left)w/or w/o AIR or oxygen sensor, 3-stud flange
				EMG179	(Left)w/or w/o AIR or oxy sensor 3-stud male flange
				EMG183	(Right)w/or w/o A.I.R., wheat shield, 3-stud flange
5.7L/350	V8	1973-81	VIN C/K/R/V Trucks, Blazer, Jimmy, Suburban	EMG182	(Left)w/or w/o AIR or oxygen sensor, 3-stud flange
				EMG179	(Left)w/or w/o AIR or oxy sensor 3-stud male flange
				EMG183	(Right)w/or w/o A.I.R., wheat shield, 3-stud flange
				EMG197	(Right)3-bolt dump w/or w/o A.I.R., has heat shield
5.7L/350	V8	1981-82	VIN C/K/R/V Trucks, Blazer, Jimmy, Suburban, (Engine VIN code L)	EMG179	(Left)w/or w/o AIR or oxy sensor 3-stud male flange
				EMG183	(Right)w/or w/o A.I.R., wheat shield, 3-stud flange
				EMG197	(Right)3-bolt dump w/or w/o A.I.R., has heat shield
				EMG198	(Right) w/or w/o one E.G.R. hole, 3-stud flange
5.7L/350	V8	1982	VIN C/K/R/V Trucks, Blazer, Jimmy, Suburban, (Engine VIN code M)	EMG197	(Right)3-bolt dump w/or w/o A.I.R., has heat shield
				EMG198	(Right) w/or w/o one E.G.R. hole, 3-stud flange
				EMG197	(Right)3-bolt dump w/or w/o A.I.R., has heat shield
				EMG198	(Right) w/or w/o one E.G.R. hole, 3-stud flange
5.7L/350	V8	1983-84	VIN C/K/R/V Trucks, Blazer, Jimmy, Suburban	EMG197	(Right)3-bolt dump w/or w/o A.I.R., has heat shield
				EMG198	(Right) w/or w/o one E.G.R. hole, 3-stud flange
				EMG197	(Right)3-bolt dump w/or w/o A.I.R., has heat shield
				EMG198	(Right) w/or w/o one E.G.R. hole, 3-stud flange
5.7L/350	V8	1985-86	VIN C/K/R/V Trucks, Blazer, Jimmy, Suburban, (Engine VIN code L)	EMG197	(Right)3-bolt dump w/or w/o A.I.R., has heat shield
				EMG198	(Right) w/or w/o one E.G.R. hole, 3-stud flange
				EMG197	(Right)3-bolt dump w/or w/o A.I.R., has heat shield
				EMG198	(Right) w/or w/o one E.G.R. hole, 3-stud flange
5.7L/350	V8	1985-86	VIN C/K/R/V Trucks, Blazer, Jimmy, Suburban, (Engine VIN code M)	EMG197	(Right)3-bolt dump w/or w/o A.I.R., has heat shield
				EMG198	(Right) w/or w/o one E.G.R. hole, 3-stud flange
				EMG197	(Right)3-bolt dump w/or w/o A.I.R., has heat shield
				EMG198	(Right) w/or w/o one E.G.R. hole, 3-stud flange
5.7L/350	V8	1988-95	VIN C/K Trucks, Blazer, Jimmy, Suburban	EMG163	(L.)w/or w/o oxy sensor or EGR prov w/heat shield
				EMG162	(Right) w/or w/o EGR provision, w/heat shield
				EMG195	(Left) w/or w/o oxygen sensor & EGR hole provisions, male dump, 3-stud flange
				EMG161	(Right) w/or w/o one EGR hole provision, w/heat shield, male dump, 3-stud flange
5.7L/350	V8	1987-91	VIN R/V Trucks, Blazer, Jimmy, Suburban	EMG161	(Right) w/or w/o one EGR hole provision, w/heat shield, male dump, 3-stud flange
				EMG194	(Left) w/EGR provision at rear port, wheat shield
				EMG193	(Right) Cast Iron
				EMG194	(Left) w/EGR provision at rear port, wheat shield
5.7L/350	V8	1996-00	VIN C/K/R/V Trucks, Blazer, Jimmy, Suburban, Tahoe, Yukon	EMG193	(Right) Cast Iron
				EMG194	(Left) w/EGR provision at rear port, wheat shield

GM Trucks

Liter/Ci	Eng.	Year	Application (Reference Only)	Part#	Comments
6.0L/366	V8	1983-90	Forward Control Cab, Medium Duty	EMG172	(Left) w/ or w/o A.I.R. holes in top of ports
				EMG171	(Right) w/ or w/o A.I.R. holes in top of ports
		1991-00	Forward Control Cab, Medium Duty	EMG173	(Left)
				EMG174	(Right)
		1978-90	Medium Duty Truck (incl. School Buses)	EMG172	(Left) w/ or w/o A.I.R. holes in top of ports
6.5L/396-402	V8	1978-90	Medium Duty Truck (incl. School Buses)	EMG171	(Right) w/ or w/o A.I.R. holes in top of ports
				EMG173	(Left)
				EMG174	(Right)
		1991-00	Medium Duty Truck, Kodiak, Topkick (incl. School Buses)	EMG173	(Left)
				EMG174	(Right)
6.6L/400SB	V8	1997-00	Tilt Cab Trucks Medium Duty	EMG173	(Left)
				EMG174	(Right)
		1968-69	Blazer, Jimmy, Truck, Suburban	EMG164	(Right) w/ or w/o A.I.R. in top of ports
		1970-72	Blazer, Jimmy, Truck, Suburban	EMG168	(Left) w/ or w/o A.I.R. & oxy. sensor hole provisions
				EMG164	(Right) w/ or w/o A.I.R. in top of ports
7.0L/427	V8	1975-80	G-series Van, Cab & Chasis	EMG182	(Left) w/ or w/o A.I.R. & oxygen sensor, 3-stud flange
				EMG179	(Left) w/ or w/o AIR or oxy sensor, 3-stud male flange
		1989-72	P-Series Truck, Motorhome, Step Van	EMG166	(Left) angle back center dump w/ or w/o A.I.R.
				EMG167	(R.) Cast iron, ctr. dump angle back w/ or w/o A.I.R.
		1975-80	VIN C/K/R/V Trucks, Blazer, Jimmy, Suburban	EMG182	(Left) w/ or w/o AIR or oxygen sensor, 3-stud flange
7.4L/454	V8			EMG179	(Left) w/ or w/o AIR or oxy sensor, 3-stud male flange
				EMG183	(Right) w/ or w/o A.I.R. w/ heat shield, 3-stud flange
		1983-90	Forward Control Cab Medium Duty	EMG172	(Left) w/ or w/o A.I.R. holes in top of ports
				EMG171	(Right) w/ or w/o A.I.R. holes in top of ports
				EMG173	(Left)
7.4L/454	V8	1991-00	Forward Control Cab Medium Duty	EMG174	(Right)
		1978-90	Medium Duty Truck (incl. School Buses)	EMG172	(Left) w/ or w/o A.I.R. holes in top of ports
				EMG171	(Right) w/ or w/o A.I.R. holes in top of ports
				EMG173	(Left)
				EMG174	(Right)
7.4L/454	V8	1991-00	Medium Duty Truck, Kodiak, Topkick (incl. School Buses)	EMG173	(Left)
				EMG174	(Right)
		1997-00	Tilt Cab Trucks Medium Duty	EMG168	(Left) w/ or w/o A.I.R. & oxy. sensor hole provisions
				EMG170	(Right) w/ or w/o A.I.R. hole provisions w/ heat shield
		1989-91	G-series Van, Cab & Chasis	EMG164	(Right) w/ or w/o A.I.R. in top of ports
7.4L/454	V8	1973-87	P-Series Truck, Motorhome, Step Van	EMG168	(Left) w/ or w/o A.I.R. & oxy. sensor hole provisions
				EMG168	(Left) w/ or w/o A.I.R. & oxy. sensor hole provisions
				EMG170	(Right) w/ or w/o A.I.R. hole provisions w/ heat shield
		1990-97	P-Series Truck, Motorhome, Step Van	EMG168	(Left) w/ or w/o A.I.R. & oxy. sensor hole provisions
				EMG168	(Left) w/ or w/o A.I.R. & oxy. sensor hole provisions
7.4L/454	V8	1973-86	Vin C/K Trucks,	EMG164	(Right) w/ or w/o A.I.R. in top of ports
				EMG168	(Left) w/ or w/o A.I.R. & oxy. sensor hole provisions
				EMG170	(Right) w/ or w/o A.I.R. hole provisions w/ heat shield
		1987-91	VIN R/V Trucks, Suburban	EMG229	(Left) w/ or w/o AIR or oxy sensor hole w/ heat shield
				EMG231	(Right) w/ or w/o A.I.R. hole provisions, w/ heat shield

Import/Other

Honda

1.6L/1590cc VTEC	L4	1997-98	Acura EL	EMH220	Cast iron, no pre-cat converter, w/ heat shield
		1992-95	Civic hatchback (3dr), sedan (4dr)	EMH220	Cast iron, no pre-cat converter, w/ heat shield
		1993-95	Civic coupe (2dr)	EMH220	Cast iron, no pre-cat converter, w/ heat shield
		1996-98	Civic VTEC	EMH220	Cast iron, no pre-cat converter, w/ heat shield
		1993-97	Civic Del Sol	EMH220	Cast iron, no pre-cat converter, w/ heat shield

Hyundai

1.5L/1488cc	L4	1990-92	Excel, Scoupe	EMM111	Cast iron
		1993-94	Excel, Federal & Canadian emissions	EMM111	Cast iron

International

2.5L/152	L4	1965-68	Scout, non-turbo	EMI206	(L.&R.) w/ or w/o EGR, 2-bolt flange, ctr. exh. dump
3.3L/196	L4	1967-80	Scout	EMI206	(L.&R.) w/ or w/o EGR, 2-bolt flange, ctr. exh. dump
3.9L/232	L6	1969-72	Scout	EMJ101	Cast iron
4.3L/258	L6	1969-74	Scout, Travelall, Truck	EMJ101	Cast iron
4.4L/266	V8	1967-68	Scout	EMI206	(L.&R.) w/ or w/o EGR, 2-bolt flange, ctr. exh. dump
5.0L/304	V8	1965-80	Scout, Travelall, Truck	EMI206	(L.&R.) w/ or w/o EGR, 2-bolt flange, ctr. exh. dump
5.7L/345	V8	1965-83	Med. Duty Truck, Pick-up, Scout, Travelall	EMI206	(L.&R.) w/ or w/o EGR, 2-bolt flange, ctr. exh. dump
		1965-75	Pick-up, Travelall	EMI206	(L.&R.) w/ or w/o EGR, 2-bolt flange, ctr. exh. dump
6.6L/392	V8	1965-83	Medium Duty Truck, Pick-up, Travelall	EMI207	(L.&R.) w/ or w/o EGR, 3-bolt flange, ctr. exh. dump
6.6L/400	V8	1974	Travelall	EMJ244	(Right) Cast iron w/ or w/o A.I.R.
6.8L/404	V8	1975-83	All	EMI208	(Left & Right) center exhaust dump, 2-bolt flange
7.3L/446	V8	1975-83	All	EMI208	(Left & Right) center exhaust dump, 2-bolt flange



Import/Other

liter/CI	Eng.	Year	Application (Reference Only)	Part#	Comments
Isuzu					
1.5L/1471cc	L4	1987-89	I-Mark non-turbo	EMG202	Cast Iron
1.6L/1588cc	L4	1991-93	Stylus	EMG203	Cast Iron
2.6L/2559cc	L4	1988-92	Amigo, P'up, Rodeo, Trooper	EMI209	Cast Iron w/heat shield
4.3L/262	V6	1997-00	Hombre	EMG185	(Left)Cast Iron w/heat shield & EGR prov. w/o AIR
				EMG187	(Right)Cast Iron. w/o EGR or oxygen sensor prov.
Mazda					
1.5L/1490cc	L4	1995-98	Protège	EMM212	Cast Iron w/heat shield
Mitsubishi					
		1987-89	Mirage	EMD111	Cast Iron
		1991-92	Mirage	EMD112	Cast Iron
1.5L/1468cc	L4	1993-94	Mirage (California/Federal engine)	EMD222	Cast Iron, wheat shields, w/oxygen sensor prov.
		1995-96	Mirage (Federal engine emissions)	EMD222	Cast Iron, wheat shields, w/oxygen sensor prov.
		1990-94	Precis	EMD111	Cast Iron
Nissan					
1.6L/1597cc	L4	1987-88	Pulsar, Sentra	EMN213	Cast Iron
		1981-83	Pick-up	EMN214	Cast Iron w/four EGR provisions, can be plugged.
2.2L/2187cc	L4	1983	200SX	EMN214	Cast Iron w/four EGR provisions, can be plugged.
		1984-89	D21, Pathfinder, Pick-up, Van	EMN214	Cast Iron w/four EGR provisions, can be plugged.
2.4L/2389cc	L4	1989-94	Maxima	EMN216	(Rear) Tubular design w/heat shield
		1986-97	D21, Pathfinder, Pick-up	EMN215	(Rear) Cast Iron w/heat shield
Toyota					
1.6L/1587cc	L4	1990-93	Celica	EMT219	Cast Iron w/ dust exhaust dump outlet
		1990-93	Celica, (California emission)	EMT204	Cast Iron w/heat shield, oxygen sensor in exh pipe
		1988-89	Corolla	EMT218	Cast Iron w/oxygen sensor provision in manifold
		1990-97	Corolla	EMT204	Cast Iron wheat shield, oxygen sensor in exh pipe
1.7L/1762cc	L4	1996-97	Celica (ST)	EMT204	Cast Iron wheat shield, oxygen sensor in exh pipe
		1993-97	Corolla	EMT204	Cast Iron wheat shield, oxygen sensor in exh pipe
		1981-83	Celica, Corona, Pick-up (22R)	EMT226	Cast Iron w/front heat shield, universal
2.4L/2366cc	L4	1984	4 Runner, Pick-up non-turbo (22R)	EMT226	Cast Iron w/front heat shield, universal
		1985	Celica (22REC)	EMT226	Cast Iron w/front heat shield, universal
		1985-95	4 Runner, Pick-up non-turbo (22REC)	EMT226	Cast Iron w/front heat shield, universal

MANIFOLD STUDS

SIZE	APPLICATION	PART #
5/16 - 18-24 x 1.88	225 Slant 6 Dodge	6403
3/8 - 16 x 1-1/2	AMC	6408
3/8 - 16 x 2-1/4	GM	6410
3/8 - 16 x 50mm	GM	6412
7/16 - 14 x 2-9/16	Ford, Chrysler	6414
7/16 - 14 x 4	Ford	6416
M8 - 1.25 x 47mm	Datsun, VW, Honda	6400
M8 - 1.25x1.25x52.7mm	3.0L Chry./Mitsu."In-take"	6417
M10 - 1.25 x 44mm	Toyota	6427
M10 - 1.25 x 50mm	Honda Accord, & Toyota	6402
M10 - 1.25 x 54mm	Toyota	6423
M10 - 1.50 x 50mm	Mazda	6404
M12 - 1.75 x 63mm	Ford	6406
5/16-18 x 5/16-24	Water Pump Stud	6430



































STANDARD MANIFOLD NUTS

Size	Description	Part #
5/16-18 1/2 Hex	USS Coarse Thread	6420
3/8-16 9/16 Hex	USS Coarse Thread	6422
7/16-14 5/8 Hex	USS Coarse Thread	6424

BRASS MANIFOLD NUTS

Size	Description	Part#
3/16-16 9/16 Hex	USS Coarse Thread	6426
7/16-14 5/8" Hex	USS Coarse Thread	6428

Exhaust Manifold (Part #EMD100 - EMF133)

EMD100 	EMD102 	EMD105 	EMD106 
EMD107 	EMD108 	EMD109 	EMD111 
EMD112 	EMD222 	EMD225 	EMD227 
EMD232 	EMD245 	EMF115 	EMF116 
EMF117 	EMF118 	EMF119 	EMF120 
EMF121 	EMF122 	EMF123 	EMF124 
EMF125 	EMF126 	EMF127 	EMF128 
EMF129 	EMF130 	EMF132 	EMF133 



Exhaust Manifold (Part #EMF134 - EMG168)

EMF134



EMF135



EMF136



EMF138



EMF139



EMF143



EMF144



EMF145



EMF146



EMF147



EMF148



EMF149



EMF150



EMF151



EMF152



EMF153



EMF154



EMF155



EMF157



EMF158



EMF233



EMF235



EMF236



EMG159



EMG160



EMG161



EMG162



EMG163



EMG164



EMG166



EMG167



EMG168



Exhaust Manifold (Part #EMG170 - EMG203)

EMG170

EMG171

EMG172

EMG173

EMG174

EMG175

EMG176

EMG177

EMG178

EMG179

EMG180

EMG182

EMG183

EMG184

EMG185

EMG186

EMG187

EMG188

EMG189

EMG190

EMG191

EMG192

EMG193

EMG194

EMG195

EMG197

EMG198

EMG199

EMG200

EMG201

EMG202

EMG203




silver seal

EXHAUST MANIFOLDS

Exhaust Manifold (Part #EMG228 - EMT226)

EMG228



EMG229



EMG230



EMG231



EMG246



EMG255



EMH220



EMI206



EMI207



EMI208



EMI209



EMI101



EMJ103



EMJ104



EMJ210



EMJ211



EMJ244



EMM212



EMN213



EMN214



EMN215



EMN216



EMT204



EMT218



EMT219



EMT226



FREEZE PLUG KITS

MADE IN THE USA, AVAILABLE IN BRASS OR STEEL

Make	Applications	Brss Part #	Steel Part #
American Motors	6 cyl. 186,199,232,258	FPE116-BR	FPE116-R
Cadillac	8 cyl. 368,425,472,500	FPE120-BR	FPE120-R
Chevrolet	4 cyl. 151 (2.5) Citation	FPE163-BR	FPE163-R
Chevrolet	4 cyl. 151 2.5 liter (' 86 & Up)	FPE163-BR	FPE163-R
Chevrolet	6 cyl. 153,194,230,250,292	FPE104-BR	FPE104-R
Chevrolet	8 cyl. 173 (2.8) Citation	FPE165-BR	FPE165-R
Chevrolet	6 cyl. 200,229,262 85 only	FPE169-BR	FPE169-R
Chevrolet	6 cyl. 235,261	FPE103-BR	FPE103-R
Chevrolet	6 cyl. 262 4.3 liter (' 86-93)	FPE185-BR	FPE185-R
Chevrolet	8 cyl. 366,427,454 (' 91-95)	FPE102-BR	FPE102-R
Chevrolet	8 cyl. 400 w/2BC	FPE101-BR	FPE101-R
Chevrolet	8 cyl. 366,396,400w/4BC,402,427,454	FPE102-BR	FPE102-R
Chrysler	4 cyl. 135,153 2.2 & 2.5 liter	FPE176-BR	FPE176-R
Chrysler	4 cyl. 148 ci DOHC L4, Vin B,S,X. 2.4L 95-08	FPE167-BR	FPE167-R
Chrysler	4 cyl. 167 ci Vin R,T,U 2.7L 98-05	FPE164-BR	FPE164-R
Chrysler	6 cyl. 201 3.3 liter		FPE253-R
Chrysler	6 cyl. 255ci SOH CV6. 12V 3.7L 02-07	FPE166-BR	FPE166-R
Chrysler	6 cyl. B series. 5.9L 98-06	FPE163-SS	
Chrysler	6 cyl. 230 3.9 liter	FPE256-BR	FPE256-R
Chrysler	6 cyl. 170,196,225	FPE112-BR	FPE112-R
Chrysler	6 cyl. 161,182 3.0 liter		FPE254-R
Chrysler	6 cyl. 242 4.0 liter	FPE256-BR	FPE256-R
Chrysler	6 cyl. 273,318,340,360	FPE113-BR	FPE113-R
Chrysler	8 cyl. 361,383,400,413,426,440	FPE114-BR	FPE114-R
Chrysler	8 cyl. 265, 287ci Vin N,J,P SOHC 16V	FPE165-BR	FPE165-R
Ford	4 cyl. 140 (2300cc) Exc. H.S.C.	FPE128-BR	FPE128-R
Ford	4 cyl. 79ci. 1295cc SOHC Vin K,H 1.3L 88-97	FPE172-BR	FPE172-R
Ford	4 cyl. 1490cc SOHC GLC 1.5L 81-85	FPE171-BR	FPE171-R
Ford	4 cyl. 2606cc SOHC B2600, MPV 12V,G6 2.6L 89-94	FPE170-BR	FPE170-R
Ford	4 cyl. 153 2.5 liter H.S.C.		FPE246-R
Ford	4 cyl. 98 1.6 liter & 116 1.9 liter	FPE167-BR	FPE167-R
Ford	6 cyl. 144,170,200,250w/1-3/4"Block Plugs	FPE105-BR	FPE105-R
Ford	6 cyl. 171 (2600cc, 2800cc)	FPE129-BR	FPE129-R
Ford	6 cyl. 179 2.9 liter		FPE250-R
Ford	6 cyl. 180,182 3.0 liter	FPE252-BR	FPE252-R
Ford	6 cyl. 232 3.8 liter	FPE177-BR	FPE177-R
Ford	6 cyl. 240,300	FPE107-BR	FPE107-R
Ford	6 cyl. 244 4.0 liter	FPE278-BR	FPE278-R
Ford	6 cyl. 300 4.9 liter	FPE107-BR	FPE107-R
Ford	6 cyl. 1991cc, 2497cc DOHC, V6, FS, FSDE, MX6, Millenia 2.0L 93-01	FPE169-BR	FPE169-R
Ford	8 cyl. 221,255,260,289,302,351W	FPE108-BR	FPE108-R
Ford	8 cyl. 445ci Truck Diesel 7.3L 88-03	FPE173-BR	FPE173-R
Ford	8 cyl. 330,332,352,360,361,390,406,427,428	FPE110-BR	FPE110-R
Ford	8 cyl. 351C,351M,400	FPE109-BR	FPE109-R
Ford	8 cyl. 370,429,430,460,462	FPE125-BR	FPE125-R
GM	4 cyl. 134ci SOHV 2.2L 90-93	FPE175-BR	FPE175-R
GM	4 cyl. 138ci VINA DOHC 2.3L 87-95	FPE174-BR	FPE174-R
GM	4 cyl. 99ci 4XEL, 1W, 1WT, SOHC VIN 6 1.6L 90-93	FPE168-BR	FPE168-R
GM	6 cyl. 181,196,231,252	FPE137-BR	FPE137-R
GM	6 cyl. 186 3.1 liter	FPE276-BR	FPE276-R
GM	6 cyl. 231 3.8 liter	FPE137-BR	FPE137-R
GM	8 cyl. 265,267,283,302,305,307,350 (' 66-85)	FPE100-BR	FPE100-R
GM	8 cyl. 305 5.0 liter & 350 5.7 liter (' 86-98)	FPE100-BR	FPE100-R
GM	8 cyl. 381 6.2 liter diesel	FPE180-BR	FPE180-R
International	8 cyl. 266,304,345,392	FPE122-BR	FPE122-R
Oldsmobile	8 cyl. 330,350B,N,R,400(x75),425,455	FPE124-BR	FPE124-R
Pontiac	8 cyl. 326,350P,389,400,421,428,455	FPE115-BR	FPE115-R
Toyota	4 cyl. 20R,22R,22REC (2200cc)	FPE140-BR	FPE140-R
Toyota	4 cyl. 2693cc 2.7L 84-04	FPE161-BR	FPE161-R
Toyota	6 cyl. 2759, 2954 2.8L, 3.0L	FPE162-BR	FPE162-R

Silver Seal is proud to offer a full line of Freeze Plug Kits for all of your engine needs. Over 150 applications! Call for availability. Bulk kits are also available.



Part #FPE100-R



Part #FPE104-BR



Part #FPE107-BR

Rebuilders Freeze Plug Driver

- Use with Dead Blow Hammer for best results.
- Does not damage or mark freeze plug.
- Save your sockets.
- Easy to use.

Plug Size	4" Driver	6" Driver
1-3/8"	EP1375S	EP1375L
1-1/2"	EP1500S	EP1500L
1-5/8"	EP1625S	EP1625L
1-3/4"	EP1750S	EP1750L
2"	-	EP2000L





Silver Seal Camshaft Bearing Sets

- Twice the fatigue strength of standard bearings.
- All-round design eliminates bearing surface interruptions.
- Surface burnished to remove micro-fissures.
- Nearly 6 decades of U.S. manufacturing expertise.



A.M.C. - Jeep (Reference Only)				
Liter/Ci	Cyl.	Year	Bearing Set #	Comments
2.46L/150	4	1983-98	SN7	Jeep Eagle(88-89)
NEW		1989-01	SN10	Chrysler-Jeep Inline 4
2.5L/151	4	1980-83	SCH16	Pontiac "R" Engine
3.3L/199	6	1965-70	SN7	
3.8L/232	6	1964-79	SN7	
4.0L/242	6	1987-99	SN7	AMC-Jeep Engine
NEW		2001-Up	SN10	Chrysler-Jeep Inline 6
4.23L/258	6	1971-91	SN7	
4.7L/290	8	1966-69	SN9	
5.0L/304	8	1970-79	SN9	Jeep
5.6L/343	8	1967-69	SN9	
5.9L/360	8	1970-91	SN9	
6.4L/390	8	1968-70	SN9	Jeep
6.6L/401	8	1971-76	SN9	

Chrysler - Dodge - Plymouth (Reference Only)				
Liter/Ci	Cyl.	Year	Bearing Set #	Comments
2.0L/199cc	4	1974-82	SMIG2	Bal. Shaft Set (Mits. G52)
2.2L/135.1	4	1981-94	SPDG26	Bal. Shaft Set, A-F, J, K, 8
2.3L/2348cc	4	1983-86	SMIG2	Bal. Shaft Set T-Diesel Mits.
2.46L/150	4	1983-98	SN7	Jeep Eagle(88-89)
NEW		1989-01	SN10	Jeep Inline 4
2.6L/2555cc	4	1978-92	SMIG2	Bal. S. Set, Mits. G54B-F.W
2.8L/170	6	1960-71	SPD18	Slant 6 Engine
3.2L/198	6	1970-76	SPD18	Slant 6 Engine
3.3L/201	6	1990-99	SPD28	Eagle Concorde, Vision
3.7L/225	6	1979-87	SPD21	Slant 6 Eng (late series)
		1960-78	SPD18	Slant 6 Eng (early series)
3.8L/231	6	1991-99	SPD28	
3.9L/239	6	1986-99	SPD27	
4.0L/242	6	1987-89	SN7	AMC/Chrysler Eng
NEW		2001-Up	SN10	Jeep Inline 6
4.5L/273	8	1962-69	SPD16	
			SPDP16	Hi-Performance Set
4.5L/277	8	1956-57	SPD16	
			SPDP16	Hi-Performance Set
4.9L/301	6	1957	SPD16	
			SPDP16	Hi-Performance Set
5.0L/303	8	1956-58	SPD16	Including Canadian Engine
			SPDP16	Hi-Performance Set
5.1L/313	8	1957-66	SPD16	Including Canadian Engine
			SPDP16	Hi-Performance Set
		1980-96	SPD25	
			SPDP25	Hi-Performance Set
5.2L/316	8	1957-79	SPD16	
			SPDP16	Hi-Performance Set
			SPD16	Canadian Engine
			SPDP16	Hi-Performance Set
5.6L/340	8	1968-73	SPD16	
			SPDP16	Hi-Performance Set
5.7L/350	8	1958	SPD17	
			SPDP17	Hi-Performance Set
		1980-99	SPD25	
			SPDP25	Hi-Performance Set
5.9L/360	8	1971-79	SPD16	
			SPDP16	Hi-Performance Set
5.9L/361	8	1957-77	SPD17	
			SPDP17	Hi-Performance Set
6.3L/383	8	1959-72	SPD17	
			SPDP17	Hi-Performance Set

Chrysler - Dodge - Plymouth (Reference Only)				
Liter/Ci	Cyl.	Year	Bearing Set #	Comments
6.6L/400	8	1972-79	SPD17	
			SPDP17	Hi-Performance Set
8.7L/413	8	1959-77	SPD17	
			SPDP17	Hi-Performance Set
7.0L/426	8	1963-71	SPD17	
			SPDP17	Hi-Performance Set
7.2L/440	8	1966-79	SPD17	
			SPDP17	Hi-Performance Set
7.2L/446	8	1979-80	SIN17	IHC-Navistar Engine
7.8L/478	8	1969-74	SIN10A	IHC-Navistar Engine
9.0L/549	8	1969-77	SIN10A	IHC-Navistar Engine

Ford - Lincoln - Mercury (Reference Only)				
Liter/Ci	Cyl.	Year	Bearing Set #	Comments
1.6L/98	4	1976-80	SFG29	Aux/Bal. Shaft Set (Fiesta)
2.0L/121.7	4	1971-74	SFG29	Aux. Shaft Set (Pinto/Capri)
			SF34	WB Engine
2.3L/140	4	1974-97	SF34B	Special Oil Control Set
			SF34B	.020 Oversize O.D. Set
			SFG34	Auxiliary Shaft Set
2.3L/143	4	1985-87	SMIG2	Bal. Shaft Set(Mits.T.Diesel)
2.4L/144	6	1960-65	SF32	D. 3 Engine
2.5L/153	4	1986-91	SF46	HSC Engine
2.8L/170	6	1974-79	SF31	"Z" Engine
		1961-72	SF32	"U" Series Engine
			SF47	"S" Engine
2.8L/171	6	1983-87	SF47B	Special Oil Control Set
			SF47B	Special Oil Control Set
2.9L/177	6	1986-92	SF48	Ford Vulcan Engine
3.0L/183	6	1986-00	SF48	Ford Vulcan Engine
3.3L/200	6	1963-83	SF32	B. T. X Engine
			SF18	"L" Engine
3.6L/221	8	1982-88	SFP18	Hi-Performance Set
			SF52	C, R, 3, 4 Engine
3.8L/232	6	1988-00	SFG51	Auxiliary Shaft Set
		1982-87	SF45	
3.9L/240	6	1965-75	SF23A	A, B, E, J, 1 Engine
			SF23B	Special Oil Control Set
			SF50	OHV Series "X" Engine
			SF50A	Set w/Special Wide #4 Brq.
4.0L/244	6	1990-99	SFG53	SOHC Series "E" Engine
		1997-99	SF32	C, L Engine
4.1L/250	6	1969-80	SF18	"D" Engine
4.2L/255	8	1980-82	SFP18	Hi-Performance Set
			SF52	Series 2 Engine
4.2L/256	6	1997-99	SFG51	Auxiliary Balance Shaft Set
4.3L/260	8	1962-66	SF18	"F" Engine
			SFP18	Hi-Performance Set
4.7L/289	8	1963-68	SF18	
			SFP18	Hi-Performance Set
			SF49	Series "Y" Engine
		1985-97	SF49B	Special Oil Control Set
4.9L/300	6	1965-85	SF23A	Series "B", "C", "E" Engine
			SF23B	Special Oil Control Set
5.0L/302	8	1968-99	SF18	D,E,F,G,J,M,P,Y Engine
			SFP18	Hi-Performance Set
			SF33	
5.4L/330	8	1964-78	SFP33	Hi-Performance Set
			SF33	B, G Engine
5.4L/332	8	1958-59	SFP33	Hi-Performance Set

Ford - Lincoln - Mercury (Reference Only)

Liter/CI	Cyl.	Year	Bearing Set #	Comments
5.8L/351	8	1969-98	SF18	351W Windsor Engine
			SFP18	Hi-Performance Set
		1975-82	SF26	351M Engine Vin "G", "H"
			SFP26	Hi-Performance Set
5.8L/352	8	1970-74	SF26	351C, C.J. Cleveland Engine
			SFP26	Hi-Performance Set
5.9L/359	8	1958-67	SF33	D, H, R Engine
			SFP33	Hi-Performance Set
5.9L/360	8	1973-78	SF33	Hi-Performance Set
			SFP33	Hi-Performance Set
5.9L/361	8	1968-76	SF33	Hi-Performance Set
			SFP33	Hi-Performance Set
6.1L/370	8	1958-79	SF33	Hi-Performance Set
			SFP33	Hi-Performance Set
6.4L/389	8	1979-91	SF30	Hi-Performance Set
			SFP30	Hi-Performance Set
6.4L/390	8	1973-78	SF33	Hi-Performance Set
			SFP33	Hi-Performance Set
6.4L/391	8	1961-76	SF33	G - Z Engine
			SFP33	Hi-Performance Set
6.4L/400	8	1964-78	SF33	Hi-Performance Set
			SFP33	Hi-Performance Set
6.6L/401	8	1971-82	SF26	S, Z Engine
			SFP26	Hi-Performance Set
6.6L/406	8	1958-76	SF16	B, G Engine
			SFP33	Hi-Performance Set
6.7L/410	8	1966-67	SF33	M Engine
			SFP33	Hi-Performance Set
6.9L/420	8	1963-65	SF33	Hi-Performance Set
			SFP33	Hi-Performance Set
7.0L/427	8	1966-75	SF33	P, Q, R Engine
			SFP33	Hi-Performance Set
7.0L/428	8	1968-97	SF30	J - R Engine
			SFP30	Hi-Performance Set
7.3L/445	8	1988-02	SIN17	IHC-Navistar Engine
			SFP30	Hi-Performance Set
7.5L/460	8	1972-79	SF16	A, C, G, J, L Engine
			SFP30	Hi-Performance Set
7.8L/475	8	1958-81	SF16	Hi-Performance Set
			SFP30	Hi-Performance Set
8.0L/534	8	1963-65	SF33	Hi-Performance Set
			SFP33	Hi-Performance Set

General Motors (Reference Only) (Buick, Cadillac, Chevrolet, GMC, Oldsmobile, Pontiac)

1.5L/89.7	4	1985-89	SCHG14	Aux. Shaft Set (Isuzu Engine)
1.8L/110.8	4	1972-75	SCHG14	Aux. Shaft Set (Isuzu Engine)
1.8L/112	4	1981-82	SCH19	Chevy "G" Engine
1.9L/119	4	1982-86	SCHG14	Aux. Shaft Set (Isuzu Engine)
2.0L/121	4	1983-89	SCH19	Chevy Y, N, P, 1 Engine
2.0L/122	4	1975-77	SCH13	Cosworth Vega
2.2L/134	4	1990-00	SCH19	Chevy G, 4 Engine
2.3L/140	4	1971-77	SCH13	Chevy A, B Engine
			SCH16	Pontiac A, E Engine
2.5L/151	4	1985-91	SCH20	Pontiac "U" Engine
			SCH16	Pontiac R, 2 Engine
2.5L/153	4	1962-70	SCH6	Chevy Eng. (U.S. & Canada)
			SCH18	Chevy LL2 Engine
2.8L/173	6	1980-93	SCH18A	Sp. Brg. Setw/wide#2&3 pos.
			SB13	Buick "L" Eng. w/20 bolt pan.
3.0L/181	6	1985-89	SBP13	Hi-Performance Set
			SB12	Buick "E" Eng. w/14 bolt pan.
3.1L/189	6	1982-85	SB12B	Special Oil Control Set
			SCH18	Chevy D, M, T, W, V Engine
3.2L/194	6	1988-98	SCH18A	Sp. Brg. Setw/wide#2&3 pos.
			SCH7	Chevy Eng. (U.S. & Canada)
3.2L/195	4	1963	SP4	Pontiac Engine
			SPP4	Hi-Performance Set

General Motors (Reference Only)

Liter/CI	Cyl.	Year	Bearing Set #	Comments
3.2L/196	6	1978-79	SB12	Buick Engine
			SB12B	Special Oil Control Set
3.2L/198	6	1962-64	SB6	Buick Engine
			SCH17	Chevy "M" Engine
3.3L/200	6	1978-79	SCHP17	Hi-Performance Set
			SB13	Buick "N" Engine
3.3L/204	6	1989-93	SBP13	Hi-Performance Set
			SCH18	Chevy E, S Engine
3.4L/207	6	1993-99	SCH18A	Sp. Brg. Setw/wide#2&3 pos.
			SCH7	Pontiac Engine
3.5L/215	6	1964-67	SB6	Buick Engine
			SCH17	Chevy K, 9 Engine
3.7L/225	6	1980-84	SCHP17	Hi-Performance Set
			SCH7	Chevy Engine
3.8L/229	6	1982-70	SCH11	Chevy Engine (Mexico)
			SB14	Buick Series II "K" Engine
3.8L/230	6	1995-00	SB13	Buick C, E, K, Lw/20 bolt pan.
			SBP13	Hi-Performance Set
3.8L/231	6	1985-95	SB12	Buick A, C, G, 2, 3, 8, 9 Engine
			SB12B	Special Oil Control Set
3.8L/235	6	1975-87	SCH3	Chevy Engine
			SCH11	Chevy Engine (Incl. Mexico)
4.1L/250	6	1954-63	SCH7	Chevy Engine
			SC4	Cadillac 7, 8 Engine
4.1L/252	8	1971-84	SC4A	Special Set w/wide #5 pos.
			SB12	Buick "4" Eng. w/14 bolt pan.
4.1L/252	6	1966-70	SB12B	Special Oil Control Set
			SO7	Olds F, 8 Gas & P Diesel
4.3L/260	8	1982-88	SO6	Olds "F" Engine
			SCH3	Chevy Eng. (U.S. & Canada)
4.3L/261	6	1977-85	SCH21	Chevy "T" Engine
			SCH17	Chevy B, N, W, X, Z Engine
4.3L/262	6	1992-98	SCHP17	Hi-Performance Set
			SO8	Olds T, V Diesel Engine
4.3L/262	8	1985-03	SCH8	Chevy "G" Engine
			SCHP8	Hi-Performance Set
4.3L/265	8	1975-76	SCH8	Chevy "W" Engine
			SCHP8	Hi-Performance Set
4.3L/265	8	1994-96	SP4	Pontiac "S" Engine
			SPP4	Hi-Performance Set
4.4L/267	8	1980-81	SCH4	Chevy Eng. (U.S. & Canada)
			SCH8	Chevy "J" Engine
4.5L/273	8	1955-57	SCHP8	Hi-Performance Set
			SC4	Cadillac 3, 5, 8 Engine
4.6L/283	8	1987-92	SC4A	Special Set w/wide #5 pos.
			SCH8	Chevy Eng. (U.S. & Canada)
4.8L/292	6	1964-67	SCHP8	Hi-Performance Set
			SCH4	Chevy Eng. (U.S. & Canada)
4.9L/299	8	1971-89	SCH11	Chevy "T" Engine
			SCH7	Chevy Engine
4.9L/301	8	1963-70	SC4	Cadillac "B" Engine
			SC4A	Special Set w/wide #5 pos.
5.0L/302	8	1991-96	SP4	Pontiac "W" Engine
			SPP4	Hi-Performance Set
5.0L/305	8	1977-81	SCH8	Chevy Camaro Z-28&Hi-Perf.
			SCHP8	Hi-Performance Set
5.0L/307	8	1967-70	SCH8	Chevy E-H, Q, M, S, U, X Eng.
			SCHP8	Hi-Performance Set
5.3L/325	8	1976-00	SO7	Oldsmobile "Y" Engine
			SCH8	Chevy A, F Engine
NEW	8	1980-90	SCHP8	Hi-Performance Set
			SCH10	Chevy "T" Engine
5.3L/326	8	1988-73	SCHP10	Hi-Performance Set
			SP4	Pontiac Engine
5.3L/327	8	1963-67	SPP4	Hi-Performance Set
			SCH8	Chevy Engine
5.3L/327	8	1964-69	SCHP8	Hi-Performance Set
			SCH4	Chevy Engine
5.3L/327	8	1962-63	SCH4	Chevy Engine



General Motors (Reference Only)
(Buick, Cadillac, Chevrolet, GMC, Oldsmobile, Pontiac)

Table with columns: Liter/Ci, Cyl., Year, Bearing Set #, Comments. Lists various GM engine specifications and bearing part numbers.

IMC (Navistar) Truck (Reference Only)

Table with columns: Liter/Ci, Cyl., Year, Bearing Set #, Comments. Lists IMC truck engine specifications and bearing part numbers.

ISUZU (Reference Only)

Table with columns: Liter/Ci, Cyl., Year, Bearing Set #, Comments. Lists Isuzu engine specifications and bearing part numbers.

Mazda (Reference Only)

Table with columns: Liter/Ci, Cyl., Year, Bearing Set #, Comments. Lists Mazda engine specifications and bearing part numbers.

Mitsubishi (Reference Only)

Table with columns: Liter/Ci, Cyl., Year, Bearing Set #, Comments. Lists Mitsubishi engine specifications and bearing part numbers.



Balance Shaft Eliminator Kits

Increase Pressure and Oil Flow

All 3 kits enable the engine to be repaired without the use of balance shafts. This will increase power and decrease friction and heat.

Chrysler/Mitsubishi 1.8L, 2.0L, 2.4L

G62B, G63B, 4G63B,
G64B, G64B, 4G64B
(Belt Drive Applications)
Kit Includes: Upper and
Lower Bushings, Oil Plug
Pin Bushing, and Oil
Galley Block-Off Plug.



Part #6642

Brand New GMLS1, LS2 and LS7 Coil Bars and Coil Packs



Part# D514A
Brand New Coil
1 Coil Pack. GM LS1,
LS2, LS7.

Part# D514A-BRK
Brand New Coil
4 Coil Packs and
Brackets.
GM LS1, LS2, LS7.

Jet Valve Eliminator Kits

Chrysler/Mitsubishi 2.6L



Replaces jet valves in cylinder heads for use in non jet valve applications. Fits many other applications where OEM Jet Valve #MD009440 is used.

Description	Part #
Early Model (Short)	6644

Ford Fuel Pump Eccentric Kit

Fits Ford SB & BB 255, 302, 351M, 351W, 400M, 429, & 460.

Kit Includes: Inner & Outer Eccentric, Bolt & Washer. Replacement parts sold individually. Replaces the following OEM numbers: D5AZ-6287-B & DOAZ-6287-A.

Part #6557



Replacement Parts

Description	Part #	Description	Part #
Inner Eccentric	6557A	Outer Eccentric	6557B
Eccentric Washer	6557C	Eccentric Bolt	6557D

Ford Lash Caps

Fits Ford 302-351W, 1969-77. Sold Individually.

Part #6510



Smog Plugs

Fits Ford V8 255, 302, 351C, 351M, 351W, 400. (5/8"-11 OD x 7/16"-14 ID)

Part#
6556



Press-In Rocker Arm Studs

Description	Part #
3/8"-24 x 2-1/2" (on size)	6437
3/8"-24 x 2-1/2" (.003 oversize) Until supplies last	6438
5/16"-24 x 2-3/4" (on size)	6440



Main Cap Bolts

7/16"-14 x 2", Fits: Chevy 366, 396, 400-4 bolt 402, 427, 454.

Part #6461



Connecting Rod Bolts

Description	Part #
9mm - Fits 2.8L (173) Chevy	6042





Fuel Pump Block-Off Plates (Gasket Included)

Make	Description	Part #
Universal	Chevy BB, Buick V8, Pontiac V8, Dodge V8, All Ford 302 & 351W, AMC V6 & V8	TW6592
Chevy	Small Block (No Center Hole)	TW6590
GM	All 4.3L V6	TW6594
Chevy	SB Fuel Pump Mounting Plate	TW6597



Push Rod Guide Plates

Type	Application (Reference Only)	Diameter	Part #
Flat	GM 173 (2.8L)	5/16"	6516
Flat	SB Chevy 305-350	5/16"	6530
Step	SB Chevy 305-350	5/16"	6531
Step	SB Chevy 305-350	3/8"	6532
Step	BB Chevy 396, 427, 454	3/8"	6533
Step	BB Chevy 396, 427, 454	7/16"	6534
Flat	SB Ford 289, 302, 351W	5/16"	6545
Flat	SB Ford 289, 302, 351W	3/8"	6546
Adjustable	SB Chevy V8 & 90 V6	5/16"	7005



Oil Filter Adaptors

Make	Application (Reference Only)	OE #	Part #
Ford	302(5.0L), 351(5.7L) 1968-96	D7AZ6890A	FA302
GM	262(4.3L) 1986-98	14081300	FA262
GM	V6 & SB V8 w/Bypass Valve	3952301	FA350
GM	SB GM, Performance Version w/Welded Bypass Valve		FA350HP



Oil Dipstick Conversions

Convert heavier early model blocks for late model rebuilds.

Description	Part #
Chevy	
Convert Early Style Chevy 305/350 Pre-80 to 80-Up	
Bolt-On w/Bolt Holes (Bolts Included)	6549
Bolt-On w/Dipstick & Bolt Holes (Bolts Included)	6551
Weld-On w/o Dipstick Hole	6548
Weld-On w/Dipstick Hole	6550
Drill Jig Fixture (Pan Rail)	6551P
Ford	
Convert 240/300 Ford Dipstick From Pre-81 to 81-Up	
Bolt-On w/Dipstick & Bolt Holes (Bolts Included)	6552
Drill Jig Fixture (Pan Rail)	6552J



Chevrolet Conversion Plate

Convert early style Chevy heads to late model applications without changing exhaust manifolds. Requires one unit per head. Easy to install. Use HI-Temp silicone and standard gaskets.

Part #6553



Ford Escort Conversion Plate

Convert 1987-95 Escort EFI engines to carbureted applications. Kit includes 1 plate, 1 ea. Inner & Outer gaskets. (Replaces OE#E-2AE-6881-BC)

Part #6553A



Quality Valve Keepers

Our Keepers Meet or Exceed OEM Specifications

Stem Size	Applications	Part #	Keeper Style
11/32"	AMC, GM, Ford, Studebaker, Det. 71, Continental	VK555	 Single Groove - Single Bead
11/32"	AMC, GM, Ford, Studebaker, Det. 71, Continental	VK555HD*	
3/8"	AMC, GM, Ford, IHC, Cummins, J. Deere, A. Chalmers	VK613	
3/8"	AMC, GM, Ford, IHC, Cummins, J. Deere, A. Chalmers	VK613HD*	
5/16"	Chrysler, Ford, GM, Det. Diesel	VK614HD*	
7mm	GM Quad 4 138 L4 (2.3L)	VK138	 Single Groove - Top Bead
5/16"	GMC 4 Cyl. & 6 Cyl.	VK217	
11/32"	Cadillac 4.5L	VK273	
.315	Chrysler 2.6L (85-Up)	VK232	
8mm	AMC 4.0L	VK242	
3/8"	Chrysler, Cummins	VK746HD*	 Double Groove - 2 Bead
7mm	Ford 4.6L SOHC/DOHC (92-98)	VK281	 Multiple Groove - 3 or 4 Bead
.312	Chrysler 2.2L, (86-91) Exh.	VK237	
5/16"	Ford 1.6L, 1.9L, 3.0L	VK241	
.315	Ford 2.8L, 3.8L, Chrysler 1.7L	VK619	
11/32"	Ford	VK620	
3/8"	AMC, Chrysler	VK766HD*	

SEE PRICE SHEET FOR PACKAGE QUANTITY/PRICE DISCOUNTS

*Heat Treated/Hardened

Magnetic Valve Keeper Installers

Use with compressor to install keepers. Attach keepers to magnet. Align with groove. Release compressor until spring retainer locks keepers in place.



Size	Part #
6mm & 6.6mm	4291
7mm	4292
8mm & 5/16"	4293
11/32"	4294
3/8"	4295

Twin Magnetic Valve Keeper Tool

A great tool for removing or installing valve keepers. Works in half the time compared to a regular valve keeper tool. When installing keepers and retainers, put probe in handle, place on retainer, and strike with a mallet. Comes complete with Mercedes Benz adaptor.



Part #4290

Dowel Pins

(10 Per Pack)

Make	Engine Size	Location	Dimensions	Part #
AMC	V6 232 and 258	Head to Block	1/2" x .625 long	DP258
GM	112 (1.8), 122 (2.0), & 173 OE #14024244	Head to Block	.598" x .482" long	DP173
Ford	2.3L & 3.8L OE #D4FZ6A008A	Head to Block	.685" x .755" long	DP232
Ford	Big Block V8 OE #B9AE6A008A	Head to Block	.743" x .431" long	DP460





CHEVY HIGH PERFORMANCE MAIN CAPS

These newer style caps are manufactured from alloy billet steel on C.N.C. machining centers. A great fit every time. This alloy steel provides superb strength with ease of honing. Material stock is left in bore (.030) to accommodate off center bores and seats. Line boring and honing is required. Bearing tang notches are machined on the caps. Register (step) on caps are machined to fit tight in stock bulkhead seats. On splayed caps, the outer bolt holes are angled towards the oil pan, fitting the cap to the strongest part of the block, thus improving reliability in high stress racing motors. Angled bolt holes also reduce main bearing bore distortion by increasing the cap's resistance to closing up under high stress conditions.



SMALL BLOCK STOCK REPLACEMENT

(SET OF 3 INTERMEDIATE CAPS WITH BOLTS & DRILL BUSHING)

PART #
MSC100S



Four-bolt cap replaces O.E. cast or nodular iron. Fits small block Chevy four bolt block with 2.45 journal dia. bulkhead seat register 6.200.

SMALL BLOCK REBUILDER

(SET OF 3 INTERMEDIATE CAPS WITH BOLTS & DRILL BUSHING)

PART #
MSC101S



Four-bolt conversion cap with straight outer holes, convert two bolt block to a heavy duty four bolt block. Fits small block Chevy with 2.45 journal dia. bulkhead seat register 4.486. Great for truck application. Preferred by production engine rebuilders for it's ease of installation.

400CI TRACK

(SET OF 3 INTERMEDIATE CAPS WITH BOLTS & DRILL BUSHING)

PART #
MSC103S



Splayed four bolt high performance cap converts two bolt Chevy 400ci to four bolt motor. Has 18° angle on outer bolt holes. Fits all 2.650 journal dia. bulkhead seat register 6.200.

MAIN CAP DRILL BUSHING

PART #
MCB100



SMALL BLOCK PERFORMANCE

(SET OF 3 INTERMEDIATE CAPS WITH BOLTS & DRILL BUSHING)

Splayed high performance cap converts two bolt to



four bolt racing application. Has 22° angle on outer bolt holes. Fits small block Chevy with 2.45 journal dia. bulkhead seat register 4.486.

PART #
MSC102S

GM REPLACEMENT - ALUMINUM BLOCK

(SET OF 3 INTERMEDIATE CAPS WITH BOLTS & DRILL BUSHING)

This splayed performance four bolt cap is a direct replacement on all Chevy aluminum



performance blocks with journal dia. of 2.45. Replaces GM Part #14011072. Has 12° angle outer bolt hole, can also be retrofitted on all cast iron blocks. The block bulkhead seat must be machined to fit stock two or four bolt blocks. This cap is preferred by performance rebuilders for it's wide range of applications and can be fitted individually to each block.

PART #
MSC105S

STOCK REPLACEMENT CAST MAINCAPS

(SOLD INDIVIDUALLY)

PART #
MSC108S



4 Bolt Main Small Block Chevy 1996 and up.

Cylinder Head Bolt Kits

Torque to Yield Applications

Silver Seal Cylinder Head Bolts are manufactured to meet or exceed OEM design specifications. For proper use, OEM installation instructions must be followed. Applications designated as "torque-to-yield" (TTY) require new head bolts and should be replaced.



Chrysler					
Eng.	Liter/CI	Year	Qty.	OEM #	Kit Part#
L4	2.2L/135 (10mm)	1981-85	10	6500754	CB010
L4	2.2L/135 & 2.5L/153	1985-up	10	6501433	CB011
L4	2.8L/156 (Mitsubishi)	1978-90	10	MD025730	CB156
V6	3.0L/181 (Mitsubishi)	1986-96	16	MD065959	CB180
V6	3.3L/201 & 3.6L/230	1990-97	16	6501433	CB201
V6	3.5L/215	1993-95	2	6101631	CB201
V6	3.5L/215	1993-95	16	6502665	CB215
Ford					
L4	1.8L/98 & 1.9L/116	1981-94	10	E4FZ6065A	CB016
L4	2.3L/140 O.H.C.	1974-95	10	D4FZ6065A	CB140
V6	2.9L/177	1988-90	16	E6TZ6065A	CB177
V6	4.0L/244	1990-up	16	E6TZ6065A	CB177
V6	3.0L/183 (Exc. SHO)	1986-95	16	E8DZ6065A	CB183
V6	3.8L/232	1982-88	8	E9DZ6065B	CB232
V6	3.8L/232	1982-88	8	E2DZ6065D	CB232
V6	3.8L/232	1989-95	8	E9DZ6065B	CB036
V6	3.8L/232	1989-95	8	E9SZ6065B	CB036
V8	4.6L/281	1991-94	20	F3AZ6065A	CB281
L6	4.9L/300 Truck	1985-94	14	391414	CB049
V8	5.0L/302	1970-98	10	F3ZZ6065B	CB302
V8	5.0L/302	1970-98	8	F3ZZ6065C	CB302
V8	5.0L/302	1970-98	2	F3ZZ6065D	CB302
V8	5.8L/351W	1973-97	10	C9OZ6065A	CB351
V8	5.8L/351W	1973-97	10	C9OZ6065B	CB351
V8	7.5L/460 Truck	1986-97	12	E7TZB	CB460
V8	7.5L/460 Truck	1986-97	8	C65ZB	CB460
General Motors					
L3	1.0L/61 Geo Metro/Sprint	1989-93	10	9606992	CB061
L4	1.6L/98 Geo Storm (Vin 5 & 6) & Nova (Vin 4 & 5)	1985-94	5	94844882	CB160
L4	1.6L/98 Geo Storm (Vin 5 & 6) & Nova (Vin 4 & 5)	1985-94	5	94844883	CB160
L4	1.6L/98 Pontiac Lemans	1988-93	10	96051591	CB098
L4	1.8L/112		4	10031213	CB018
L4	Brazil O.H.C. Aluminum Head	1982-86	4	10031214	CB018
L4	Brazil O.H.C. Aluminum Head	1982-86	2	10031210	CB018
L4	Brazil O.H.C. Aluminum Head	1982-86	2	10031213	CB018
L4	Brazil O.H.C. Aluminum Head	1987-93	7	10031214	CB020
L4	Brazil O.H.C. Aluminum Head	1987-93	1	10031210	CB020
L4	1.8L/112 & 2.0L/121 OHV Cast Iron Head	1982-86	2	476572	CB121
L4	1.8L/112 & 2.0L/121 OHV Cast Iron Head	1982-86	8	476543	CB121
L4	1.8L/112 & 2.0L/121 OHV Cast Iron Head	1982-86	5	10101245	CB121
L4	2.2L/134 OHV	1990-94	4	10101247	CB134
L4	2.2L/134 OHV	1990-94	1	10170485	CB134
L4	2.3L/138 Quad 4 Vin "A", "D", "3"	1988-95	2	22531281	CB138
L4	2.3L/138 Quad 4 Vin "A", "D", "3"	1988-95	6	22531282	CB138
L4	2.5L/151 Vin "R"	1985-93	1	12338010	CB151
L4	2.5L/151 Vin "R"	1985-93	8	12337818	CB151

General Motors (Cont.)					
Eng.	Liter/CI	Year	Qty.	OEM #	Kit Part#
L4	2.5L/151 Vin "U"	1985-91	1	12338022	CB025
L4	2.5L/151 Vin "U"	1985-91	1	12337925	CB025
L4	2.5L/151 Vin "U"	1985-91	8	12338006	CB025
V6	2.8L/173 Aluminum Head w/FWD Vin "W" (front head)	1985-89	8	10227594	CB189
V6	2.8L/173 Aluminum Head w/FWD Vin "W" (front head)	1985-89	6	10227593	CB189
V6	2.8L/173 Aluminum Head w/FWD Vin "W" (front head)	1985-89	2	10100093	CB189
V6	2.8L/173 Aluminum Head w/RWD Vin W (rear head)	1985-89	8	10227594	CB031
V6	2.8L/173 Aluminum Head w/RWD Vin W (rear head)	1985-89	8	10227593	CB031
V6	2.8L/173 Aluminum Head w/RWD Vin S,X,Z,1	1982-89	8	476543	CB173
V6	2.8L/173 Aluminum Head w/RWD Vin S,X,Z,1	1982-89	8	476572	CB173
V6	3.0L/181	1985	4	25523852	CB300
V6	3.0L/181	1985	8	25523853	CB300
V6	3.0L/181	1985	4	25523854	CB300
V6	3.0L/181	1985	4	25529869	CB300
V6	3.0L/181	1986-88	8	25527831	CB181
V6	3.0L/181	1986-88	4	25525953	CB181





Diesel Injector Tubes & O-Rings

GMC

Description	OE #	Part #
Injector Tube Std. Nose Model 53,71,92	8925981	719531
Injector Tube +.015 Thick Nose Model 53,71,92		719571
Buna "O" Ring Nitrile Model 53,71,92	1966415	719532
Tube Seat Shimms .010 Model 53,71,92		719534
4 Valve Copper Water Director Model 71	511332	719150
Injector Tube Model 60	2350158	719834
Silicone "O" Ring Model 60	2350	719835

Caterpillar

Water Director Model D7, D8 (G, Short or Extra Short)	5H7071	719071
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International

Brass Injector Tube Model DT466,414,436	675442-C1	719461
Brass Injector Tube Model DT239,259 (.422 Tip Dia.)		719240



Detroit Diesel Injector Tube Tools

53, 71, & 92 Series Engines



Complete Kit - Part #716100

Description	Part #	Description	Part #
Tube Removal Tool	716210	Tube Flaring Tool	716310
Tube Installation Tool w/Handle	716250	Tube End Facer	716410
Installation Tool Handle	716251	Split-Sleeve Seat Cutter Holder	716430
Pilot for Tube Installation Tool	716260	Tube Seat Cutter - Carbide	716450
Dowel Pin for Pilot & Tip Reamer	716265	Seat Cutter Depth Gauge w/Handle	716455
Tube Tip Reamer	716300	Parallels	716480

Heat Tabs

For Diesel Engines

When an engine reaches 225-230°F (107-110°C) the center will melt out, providing fast visual evidence of misuse!



Quantity	Part #
1 Bag (100 Tabs)	HT1L
5 Bags (500 Tabs)	HT5L
10 Bags (1000 Tabs)	HT10L
Heat Tab Adhesive (3 oz.)	HTA

Note: See page 4 for complete info.

Air Powered Diesel Valve Guide Drivers

Drive guides in from the shoulder to prevent guide damage. Installing drivers are recessed to insure correct installed height.



Complete Kit		4625
(Includes parts marked with *)		
Application	Installer	Remover
Caterpillar 3406-3408	4637	4634
Cummins	4629*	4628*
Cummins L10	4639	.
Detroit GMC 53	4633*	4632*
Detroit GMC 71/92	4631*	4630*
International DT466	4635	4634
Mack	4627*	4626*
Mack (4 Valve Late)	4638	.

A		Aluminum		Boring Bar Tools	
Abrasives		Crack Repair Plugs	55	Boring Bushings	41
Bands	68-69	Cutting Files	70	Boring Reamer	41
Bench Grinding Wheels	121	Cutting Fluid	82-83	Boss Cutter	35
Camshaft Grinding Wheels	108	Timing Covers	190-193	Bounce Springs	12-13
Cartridge Rolls	68-69	Wire Brushes	79	Bowl Hogs	22
CBN Inserts	49	A N Hex Wrenches	118	Boxes, Crankshaft & Head	85
Chamfering Cones	92	Angle Seat Cutters	12-13	Brake	
Cleaning Pads	77	Anti-Chatter Silencer	122-123	Cleaner	84
Crankshaft Grinding Wheels	108	Aprons, Shop	72	Cylinder Flex Hone	91
Flap Wheels	68-69	Arbors, Knurling	32	Diamond Dressing Tools	112-113
Flex-Hone	90	Assortment, Valve Spring Inserts	7	Disc, Prep Kit	122-123
Flywheel Grinding Wheels	110-111	Assortment, Valve Stem Seals	138	Lathe Bits	122-123
Gasket Removal Discs	78	Auto Installer	42	Silencers & Pads	122-123
Honing Stones	88	B		Spindle Boot	122-123
Mounted Points	70-71	Bags (Engine, Head, Small Parts)	85	Breather Grommets	188
PCD Inserts	49	Balance Shaft Elimination, Mitsu.	218	Broaches, Ball	43
Plateau Brushes	88	Balancer Stand, Rod	96	Bronze	
Polishing Belts	107	Balance Weight Flex plate, GM	110-111	Guide-Liners	40-43
Port and Polish Kit	68-69	Ball Broaches	43	Guide Reaming Oil	82-83
Resurfacing Belts	50-51	Ball Cones, Tumbling Media	73	Reamers	29
Rod & Cap Grinding Wheels	96	Bands, Abrasive	68-69	Brushes	79-81
Shop Rolls	77	Baskets, Parts	76	Burrs	70
Surface Grinding Segments	48	Bear, Brake Lathe Bits/Holders	122-123	Butterfly Brushes	78
Surface Grinding Wheels	48	Belt Grease	107	C	
Valve Seat Wheels	18-19	Belts, Crankshaft Polishing	107	Cabinet Assortments	
Valve Refacer Wheels	26-27	Belts, Head Resurfacing	50-51	OHC Cutter System	100-103
X-Buffs	68-69	Bench Grinding Wheels	121	Valve Stem Seals	138
Adapter, Oil Dipstick	219	Black & Decker		VSI	7
Adhesive, Heat Tab	10-11	Diamond Dressing Tools	112-113	Callipers	117
Adhesive, Thread Locker	58	Pilots	23-25	Cam Eccentric Kit, Ford	218
Aerosol		Valve Refacer Wheels	26-27	Camshaft	
Crack Dye	53	Valve Seat Run out Gauge	116	Bearing Installation Tools	104
Hylomar	55-57	Valve Seat Wheels	18-19	Checking Fixture	118
Layout Fluid	19	Black Lights	52	Degree wheels & Kits	118
Paint	84	Blast Cabinet Gloves	72	Flex-Hone	90-91
Shop Chemicals	84	Block Seal	58	Grinding Coolant	82-83
Air Tools		Blow Guns	76	Grinding Wheels	108
Air Hammer / Peening Tools	22, 54	Bolt Hole Cleaner	35	Half-Shell Bearings	100-103
Die Grinders	71	Bolt Hole Counter Sink	35	Installation Tool	104
Glass Bead Guns	73	Bore Gauge	116	Installation/Removal Tool	104
Align Bore OHC	100-103			Lobe Lift Gauge	118



Lube	61	Clover Compound	20	Inspection Powder	53
OHC Cutters	100-103	Clutch, Diamond Dressing Tools	112-113	Penetrant Dye	53
Carb Cleaner	84	Coil, Magnetic	52	Portable Magnets	53-54
Carbide Tools		Coiled Thread Repair Inserts	62-67	Repair Kits	54-55
Boring Bar Holders / Inserts	86-87	Cold Fusion Repair Pins	54	Crankshaft	
Brake Lathe Bits/Holders	122-123	Collets, Dowel Pin	98	Bags	85
Cutter Blades (Neway)	16	Collets, Valve Refacer Chuck	30	Boxes	85
Guide Top Cutters	35	Compression Testers	119	Diamond Dressing Tools	112-113
Mira Bits	17	Cone, Chamfering	92	Grinding Coolant	82-83
OHC Cutters	100-103	Connecting Rod		Grinding Wheels	108
O-Ring Cutter Bits	86-87	Balancer Scale, Stand	96	Heavy Metal	96
Reamers	29	Bolt, GM	218	Hole Brushes	78
Rotary Broach Bits	49	Bolt Installation Block	96	Instant Key Way	109
Stud Boss Cutter	35	Bolt Protectors	96	Journal Radius Gauge	114
Valve Guide O.D. Machining Tool	36	Bolt Stretch Gauge	96	Mag-Coil	52
Valve Guide Top Cutter	35	Guide Shoes	96	Plastigage	109
Valve Seat Cutters	22	Heater	93	Polishing Belts	106
Valve Spring Seat Cutters	45	Honing Stones	96	Polishing Machine	107
Carbon Removal Brushes	78	Installer/Remover Guide	96	Repair Sleeves	126-132
Carbon Welding Plugs	109	Safety Pins	96	Steady Rest Shoes	107
Cartridge Rolls	68-69	Splitting Fixture	96	Turning Nuts/Sockets	109
Cast Iron, Reamers	28	Vise	96	Welding Plugs	109
CBN Flywheel Grinding Wheel	110-111	Conversion Plate, Exhaust Manifold	219	Woodruff Keys	109
CBN Inserts	49	Coolant		Cross-Buffer	68-69
CC Kit (Cylinder Head)	118	Aluminum Cutting	82-83	Cutters	
Ceramic Resurfacing Belts	50-51	Crankshaft Grinding	82-83	Blades Neway	16
Chains, Engine Lifting	120	Flywheel Grinding	110-111	Brake Lathe	122-123
Chamfering Cones	92	Multi-Purpose	82-83	Boring Bar	86-87
Circle Track, Oil Pans	185	Odor Control	82-83	Boss	35
Cleaning		Resurfacing Belt	82-83	Bowl Hog	22
Baskets (Parts)	76	Surface Grinding	49	Mira	17
Brushes	76	Cooling System		Neway, Seat	16
Chemicals, Jet Spray, Hot Tank	74-75	Block Seal	58	OHC (Over-Head-Cam)	100-103
Glass Bead	73	Engine Tabs	58	O-Ring	86-87
Gloves	72	Leak Prevention Tabs	58	Rotary Burrs	70
Hand	74	Leak Stop	59	Valve Guide Top	35
Hot Tank Gloves	72	Core Drills & Reamers	33	Valve Seat	22
Media	73	Covers - Timing	190-193	Valve Spring Seat	45
Cleaning Baskets	76	Covers - Valve	186-189	Cylinder	
Cleaning Pads, Abrasive	77	Crack Detection & Repair		Bore Gauge	116
Clearance Disks	99	Alum./Cast Iron Repair Plugs	54-55	Chamfering Cones	92
		Electro Mag	52-53	De-glazer	92

Flex-Hone	90-91	Diamond Laps	86-87	Face Shield	72
Honing Oil	82-83	Die Grinders	71	Feed Line Brushes	78
Honing Stone Sets	88	Diesel		Feeler Gauges	114
Plateau Brushes	88	Heat Tabs	10-11	Flap Wheels	68-69
Portable Hones/Stones	88	Injector Cleaning Brushes	78	Flex-Hones	90-91
Ridge Reamer	92	Valve Guide Drivers	34	Flex plate Balance Weight, GM	110-111
Washing Brush	78	Dip Basket	76	Fluid Weld	58
Cylinder Head		Dipstick Conversions	219	Fluorescent Mag Powder	53
Adaptor Plate, Ford	219	Dipsticks	183	Flywheel	
Bags	85	Dowel Pin Puller Kits	98	Balance Weight, GM	110-111
Bolt Kits	222	Dressers, Flywheel	110-111	CBN Grinding Wheel	110-111
Boss Cutter	35	Dressers, Surface Grinding	48	Grinding Coolant	110-111
Boxes	85	Dust Masks	72	Grinding Wheels	110-111
CC Kit	118	Dye, Bluing Ink	19	Pin Puller	98
Cleaning Brushes	76	Dye, Crack Detection	52-53	Shims	110-111
Dowel Pins	220	E		Straight Edge	114
Heat Tabs	10-11	Eliminator Valve, Mitsubishi	218	Wheel Dressers	110-111
Holders	71	Engine		Foam Control	74
Milling Adapters	71	Assembly Lube	61	Engine Paint	84
Port and Polish Kit	68-69	Bags, Storage	85	Torque Plates	92
Resurfacing Belts	50-51	Block Straight Edge	114	Freeze Plug Drivers	120
Seal-All Sealer	58	Cleaning Brush Kit	78	Friction Master Assembly Lube	61
Stands	71	Cooling System Tabs	58	Fuel Pump Block Off Plates	219
Straight Edge	114	Heat Tabs	10-11	G	
Stud Puller	98	Lifting Eye/Chain	120	Gap Tool, Piston Ring	94
Stud Spacer	71	Main Caps	220	Gas Rod Heaters	93
Work Center	71	Paint	84	Gasket	
D		Pre-Lube Tank	61	Hylomar	56-57
Dampers, Harmonic	196-201	Rollover Stand	71	Peeler/Scrapers	121
Datsun, Shims	99	Seal-All Sealer	58	Removal Kits	78
Dead Blow Hammers	120	Sealers	58	RTV Silicone	60
Deburring Tool	121	Tabs	58	Glass Bead	
Deck Bridges	118	Epoxy Putty	60	Gloves	72
DeGlazer, Cylinder Wall	92	Exhaust Manifolds	202-213	Guns	73
Degree Wheels	118	Conversion Plate, GM	219	Media	73
Deodorizing Tablets	82-83	Spreading Tool	119	Window Film	73
Depth Micrometer	117	Studs	209	Glasses, Safety	72
Dial Calipers	117	Expandable Pilots	23-25	Gloves	72
Dial Indicator Magnetic Base	116	Extractor Set, Piston Pin	93-94	Graphite Lube	84
Dial Indicators	116	Evapo-Rust	74	Grease, White Lithium	61
Diamond Dressing Tools	112-113	F		Grinding	
Diamond Lap Oil	82-83			Bench Wheels	121



Crankshaft Wheels	108
Surface Wheels/Sgments	48
Valve Refacer Wheels	26-27
Valve Seat Wheels	18-19
Grommets	188
Guide-Liner Tooling	38-39
Guide-Liners, Bronze	38-39
Guides, Valve	34
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Hall, Diamond Dressing Tools	112-113
Hammer, Air	22,54
Hammers, Dead Blow	120
Hand Cleaner	74
Harmonic Balancer	196-201
Dampers	196-201
Head Resurfacing Belts	50-51
Heat Tabs & Adhesive	10-11
Heaters, Rod	93
Heavy Duty	
Block Sealer	58
Flex-Hones	90-91
Hones	88
Honing Oil	82-83
Spring Compressors	46
Heavy Metal	96
Height Gauges	44
High Performance	
Coated Guide-Liners	38-39
Main Caps	220
Oil Pans	184-185
Piston Ring Compressors(- Fixed)	95
Spring Tester	45
Tools	118
Valve Spring Compressor	46
Valve Spring Inserts	7-9
High-Temp Engine Paint	84
Honing	
Flex-Hone	90-91
Oil	82-83
Plateau Brushes	88
Portable Hones	88
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Stop Assembly	88
Plates	92
Hot Tank Cleaners	75
Hot Tank Gloves	72
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I	
Import Car Tools	99
Injector Tubes & Kits	223
Inspection Gloves	72
Instant Keyway	109
Insulation Varnish	84
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Jet Spray Cleaners	75
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Keeper, Cleaner	76
Keepers, Valve	220
Knotted Brushes	79
Knurling, Oil	32
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Lapping Compound	20
Lapping Tools	20
Lash Caps, Ford	218
Latex Gloves	72
Layout Fluid	19
Leak Detection	59
Leakdown Testers	119
Leak-Stopper	59
Letter Stamps	119
Levels, Starret	114
Lifter	
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Bore Brushes	78
Bore, Flex-Hone	90-91
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Lubricants	82-83
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Crack Repair	52-55

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Indicator Base	118
Inspection Powder	53
Pick Up Tools	121
Portable Magnets	53
Valve Keeper Installers	47
Main Caps	220
Mandrels	
Chamfering Cone	92
Port & Polishing	68-69
Marine Heat Tabs	10-11
Markers, Paint	84
Marking Stamps	119
Measuring Tools	114
Mechanics Wire	84
Media Cleaning	73
Mercedes, Head Shims	99
Metal Paint Markers	84
Metal Stamps	119
Micrometers	117
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Mounted Points	70-71
N	
Neway, Cutter Blades/Bodies/ Pilots	16
Number Stamps	119
Nut, Crankshaft Turning	109
O	
OHC	
Cam Cutters	100-103
Camshaft Flex-Hone	90-91
Clearance Disks/Pliers	99
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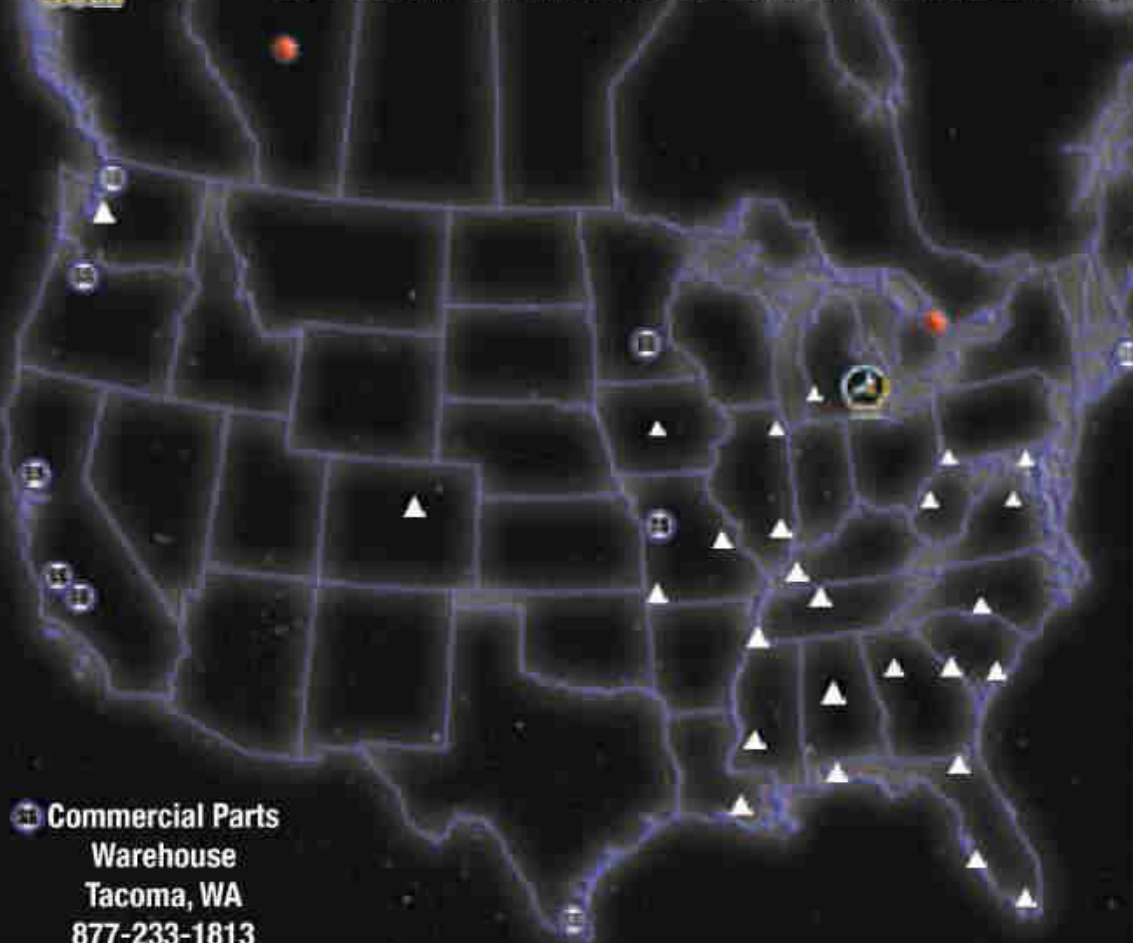


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