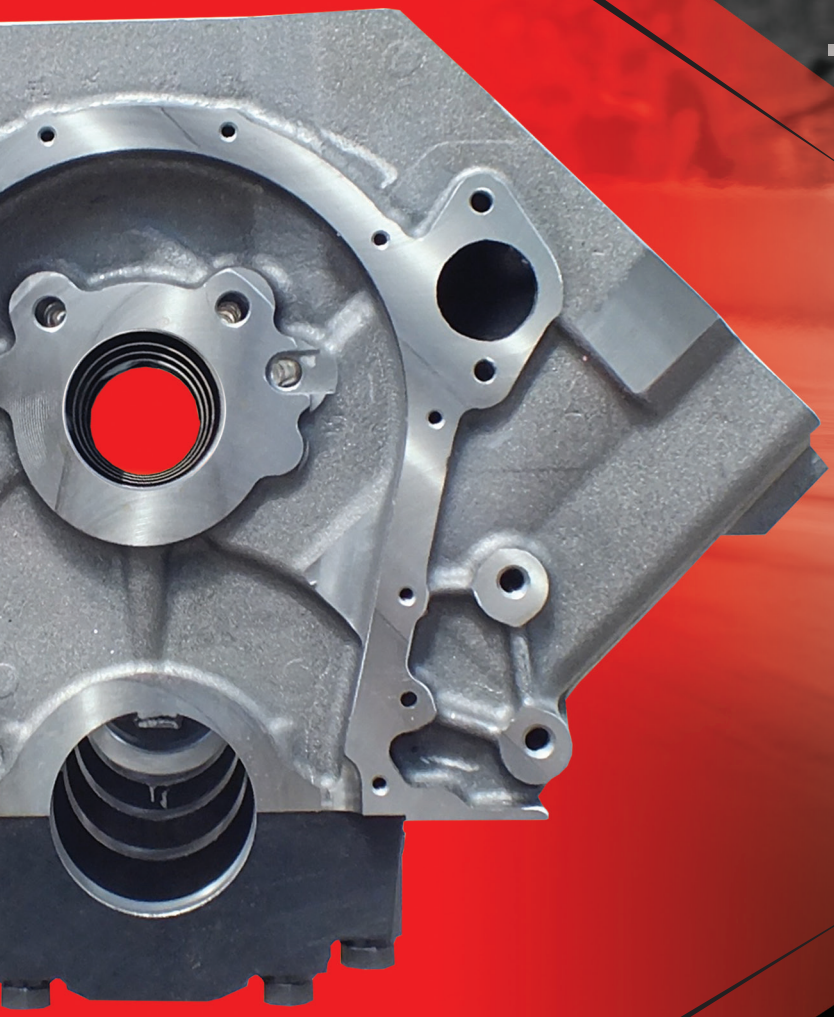
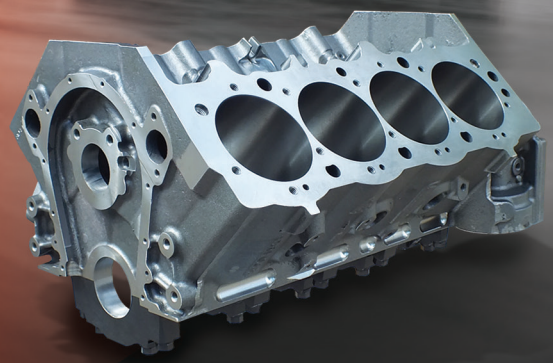
DART

M² BLOCKS, A NEW GENERATION



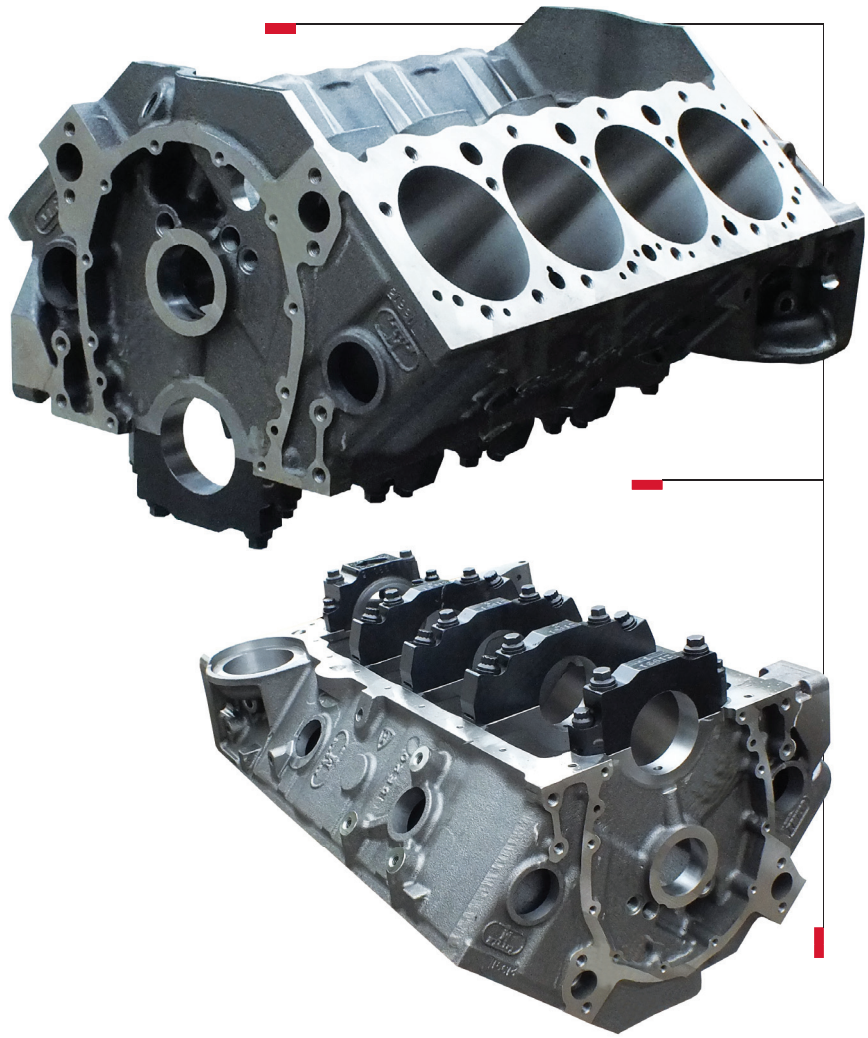


2020 NEW PRODUCT BROCHURE

CHAMPIONSHIP ENGINE COMPONENTS

LITTLE M²

SMALL BLOCK CHEVY
CAST IRON ENGINE BLOCKS



QUICK INFO »»

True race block which will work with most standard components. Provisions for wet or dry sump oiling systems. Great for power adders and maximum effort engines.

The Dart Little M² is designed from the ground up as a true racing engine block which can be used with standard off the shelf small block components.

The Little M² is cast from premium high strength Iron and beefed up in all the critical areas. A competition oiling system ensures adequate lubrication to the main bearings at high RPM.

FEATURES

- Uses standard small block parts, including cam, oil pump, oil pan, oil filter, motor mounts, mechanical fuel pump, and clutch linkage.
- Priority main oiling system feeds main bearings first.
- Center lifter oil crossover for improved lifter oiling.
- Siamese cylinder bores with extra thick walls resist cracking and improve ring seal for more power (minimum .275" thick with 4.185" bore).
- Open lifter valley improves oil return to pan.
- Enlarged lifter bosses accommodate offset and oversize lifters.
- Blind head bolt holes don't go through to water jacket.
- Billet steel 4-bolt main bearing caps on all 5 mains.
- Standard oil pan rail width
- Oil gallery holes machined for o-ring plugs.
- Parts kit included (PN 32000001).

Dart blocks can be special ordered with a wide array of special machining options to suit your specific requirements.

LITTLE M2

LITTLE M2 .391 RAISED CAM:	DECK	BORE	MAINS	CAM	CAPS
31181115	9.025"	4.000"	350	Raised .391"	Steel
31182115	9.025"	4.000"	400	Raised .391"	Steel
31182215	9.025"	4.125"	400	Raised .391"	Steel
31181125	9.325"	4.000"	350	Raised .391"	Steel
31181135	9.500"	4.000"	350	Raised .391"	Steel
31181225	9.325"	4.125"	350	Raised .391"	Steel
31181235	9.500"	4.125"	350	Raised .391"	Steel
31182125	9.325"	4.000"	400	Raised .391"	Steel
31182135	9.500"	4.000"	400	Raised .391"	Steel
31182225	9.325"	4.125"	400	Raised .391"	Steel
31182235	9.500"	4.125"	400	Raised .391"	Steel

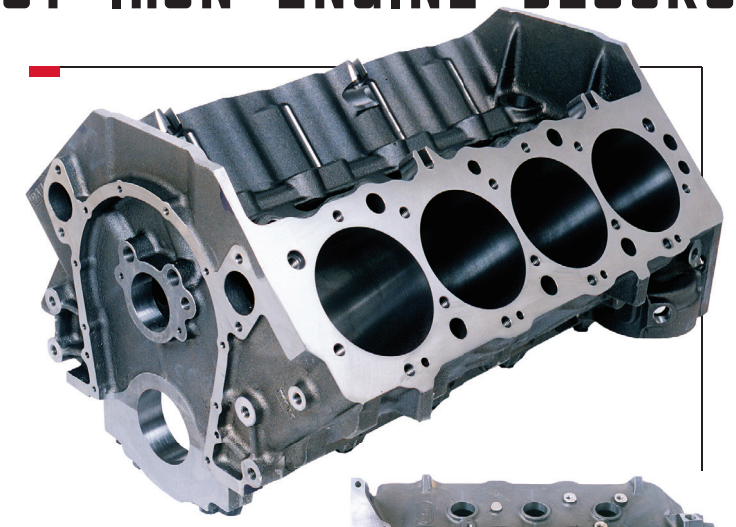
LITTLE M SPECS

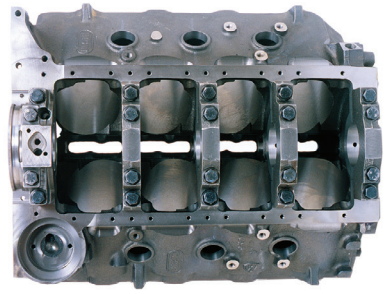
Material:	220 BHN Cast Iron
Deck Height:	9.025, 9.325" & 9.500" (stock)
Cylinder Bores:	4.000" or 4.125" 4.185"(max)
Main Bearings:	350 or 400
Main Caps:	Steel 4-bolt
Cam Location:	Raised .391"
Lifter Bores:	Stock .842"
Freeze Plugs:	Press fit
Rear Seal:	2-Piece
Weight:	197-205 lbs.

Not intended for sale or use with pollution controlled vehicles.

BIG M²

BIG BLOCK CHEVY
CAST IRON ENGINE BLOCKS





QUICK INFO >>>

Dart engineered the Big M to be the strongest, most reliable, and easiest to build big block on the market.

The Dart Big M² is designed from the ground up as a true racing engine block which can be used with standard off the shelf big block components.

The Big M² is cast from premium high strength Iron and beefed up in all the critical areas. A competition oiling system ensures adequate lubrication to the main bearings at high RPM.

FEATURES

- Standard 9.800" and tall 10.200" deck heights.
- Standard 4.250", 4.500", 4.560", or 4.600" bore sizes with siamesed extra thick cylinder walls to resist cracking and improve ring seal (minimum .300" thick with 4.625" bore).
- Uses +.300" tall Gen VI style lifters. Modification for Gen IV style available.
- 4-bolt main bearing caps in steel or ductile iron have splayed outer bolts for extra strength.
- True priority main oil system lubricates the main bearings before the lifters. Our stepped main oil gallery (9/16" to 1/2" to 7/16") increases the flow of oil to the crank at high RPM, and our front oil crossover eliminates internal oil leaks around the distributor shaft.
- Lifter valley head stud bosses prevent blown head gaskets.
- Dual oil pan bolt patterns fit standard and notched oil pans.
- Oil gallery holes machined for o-ring plugs
- Big M² Sportsman parts kit sold separately (PN 32000002).
- Big M² parts kit included.

BIG M SPECS

Material:	220 BHN Cast Iron
Deck Height:	9.800" to 10.400"
Cylinder Bores:	4.250" to 4.600"
Main Caps:	Ductile or Steel
Cam Location:	.400" Raised
Lifter Bores:	.842"
Freeze Plugs:	Press fit
Rear Seal:	2-Piece
Weight:	250-280 lbs.

BIG M2

BIG M2 .400 DUCTILE CAP:	DECK	BORE	MAINS	CAM	CAPS	BIG M2 .400 STEEL CAP:	DECK	BORE	MAINS	CAM	CAPS
31223345	9.800"	4.250"	STD	Raised .400"	Ductile	31213345	9.800"	4.250"	STD	Raised .400"	Steel
31223355	10.200"	4.250"	STD	Raised .400"	Ductile	31213355	10.200"	4.250"	STD	Raised .400"	Steel
31223395	10.400"	4.250"	STD	Raised .400"	Ductile	31213395	10.400"	4.250"	STD	Raised .400"	Steel
31223445	9.800"	4.500"	STD	Raised .400"	Ductile	31213445	9.800"	4.500"	STD	Raised .400"	Steel
31223455	10.200"	4.500"	STD	Raised .400"	Ductile	31213495	10.200"	4.500"	STD	Raised .400"	Steel
31223495	10.400"	4.500"	STD	Raised .400"	Ductile	31213455	10.400"	4.500"	STD	Raised .400"	Steel
31223545	9.800"	4.560"	STD	Raised .400"	Ductile	31213545	9.800"	4.560"	STD	Raised .400"	Steel
31223555	10.200"	4.560"	STD	Raised .400"	Ductile	31213555	10.200"	4.560"	STD	Raised .400"	Steel
31223595	10.400"	4.560"	STD	Raised .400"	Ductile	3123595	10.400"	4.560"	STD	Raised .400"	Steel
31223645	9.800"	4.600"	STD	Raised .400"	Ductile	31213645	9.800"	4.600"	STD	Raised .400"	Steel
31223655	10.200"	4.600"	STD	Raised .400"	Ductile	31213655	10.200"	4.600"	STD	Raised .400"	Steel
31223695	10.400"	4.600"	STD	Raised .400"	Ductile	31213695	10.400"	4.600"	STD	Raised .400"	Steel

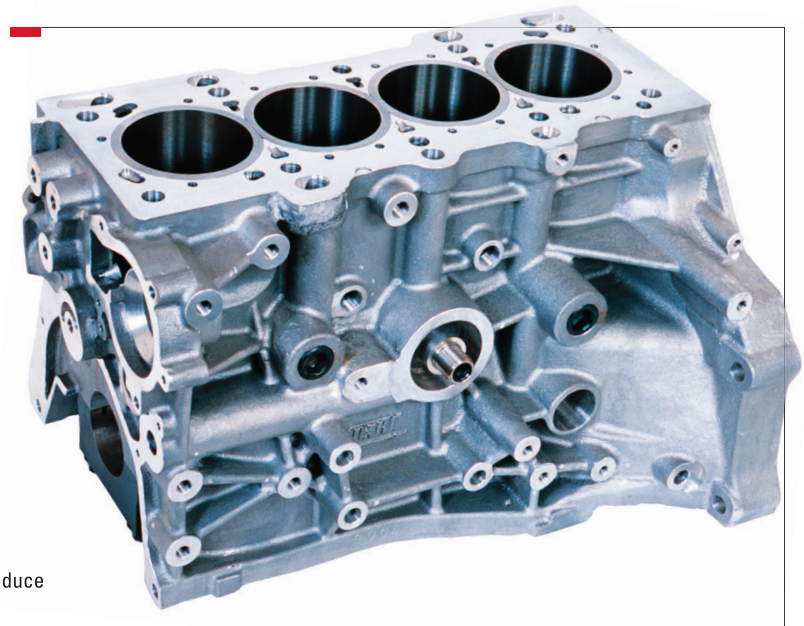
Not intended for sale or use with pollution controlled vehicles.

RACE SERIES HONDA B18 & B20 SERIES CAST ALUMINUM ENGINE BLOCKS

QUICK INFO >>>

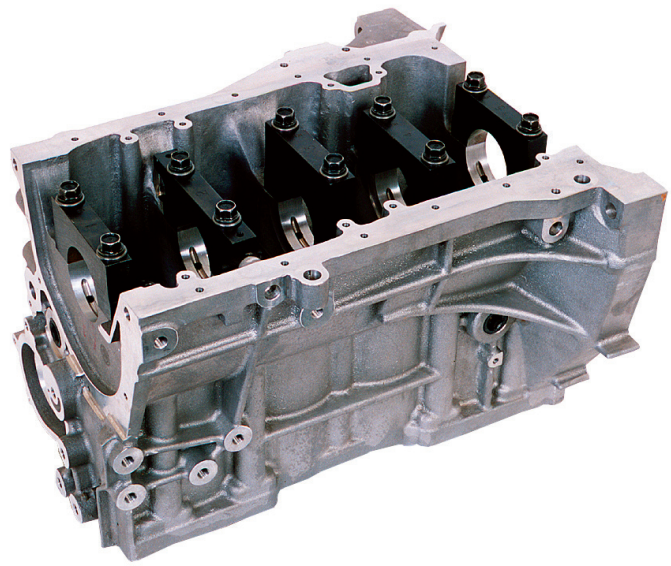
Dart offers the Honda block in two versions that replace B18 and B20 castings. Both are built to withstand the extreme cylinder pressures created by turbochargers and nitrous oxide injection.

We increased wall thickness in all critical areas and we beefed up the bottom end with steel main bearing caps. Best of all, Dart blocks are compatible with production Honda cylinder heads, internal components and accessories.



FEATURES

- Dart B18 and B20 blocks are available in 212mm and 226mm deck heights. Bore options include 81.5mm and 84.5mm.
- Replaceable Ductile Iron dry sleeves are fully supported to reduce bore distortion and enhance ring seal.
- Closed deck design increases rigidity and improves head gasket sealing.
- Steel main caps with high strength bolts increase bottom end strength and minimize bearing bore distortion.
- Strengthened main webs increase rigidity and improves head gasket and sleeve life.
- Extra large water jackets enhance coolant circulation around cylinder barrels.
- Machined for piston oil sprayers (not included) to reduce piston temperatures and prevent detonation.
- Uses stock components, including oil pan, oil pump, water pump, alternator, and timing belt tensioner.



HONDA B20 SERIES

PART NO.	DESCRIPTION	CAPS	MAINS	DECK	BORE
31496701	B18 Block	Steel	Std	212mm	81.5mm
31496801	B18 Block	Steel	Std	212mm	84.5mm
31496702	B20 Block	Steel	Std	226mm	81.5mm
31496802	B20 Block	Steel	Std	226mm	84.5mm

HONDA B-SERIES SPECS

Material:	RMR Cast Aluminum Alloy
Deck Height:	212mm or 226mm
Cylinder Bores:	81.5mm or 84.5mm
Main Bearings:	Std.
Main Caps:	Steel
Weight:	67 lbs.

Not intended for sale or use with pollution controlled vehicles.

CALICO COATINGS
The Performance Advantage.

CT-1 DRY FILM LUBRICANT

Description
CT-1 is a Dry Film Lubricant coating that helps reduce friction and abrasive wear. It provides intermittent dry lubrication and is not affected by dust or dirt. CT-1 is specifically engineered to withstand the extreme conditions of today's high performance engines. Professional engine builders enjoy a higher level of confidence with increased embedability, strength and durability.

Substrate(s)
Copper
Tin
Lead
Aluminum
Steel
Stainless Steel
Some Plated Materials
Temp. Ratings
Process Temp: 350°(176°C)
Max Temp: 500°(260°C)
Int. Temp: 600°(315°C)
Thickness
Thickness (mil): 0.2 - 0.4
Color(s)
Gray

Process
CT-1 Dry Film Lubricant coating is applied as a spray process. Different surface preparation methods appropriate for the substrates will be used prior to the coating process. Coating thickness is varied to suit the application. Typical coating thickness for engine bearings is 0.00025" to 0.00030" inch (6 to 7.5 microns).

Advantages
Provides intermittent dry lubrication, Not affected by dust or dirt, Low coefficient of friction, Increases load carrying capacity, Thin coating to accommodate assembly constraints, Chemical resistance, Corrosion protection, Reduced friction and drag resulting in decreased parasitic load

- Corrosion Protection
- Increased Lubricity
- Low Coefficient of Friction
- Oil and Fuel Resistan

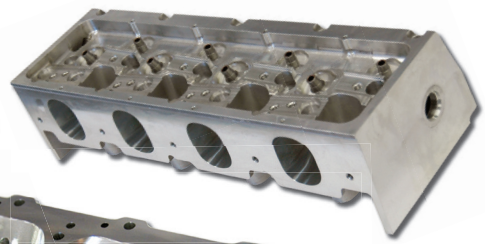
Not intended for sale or use with pollution controlled vehicles.

BILLET

TRUSTED BY THE BEST OF THE BEST!

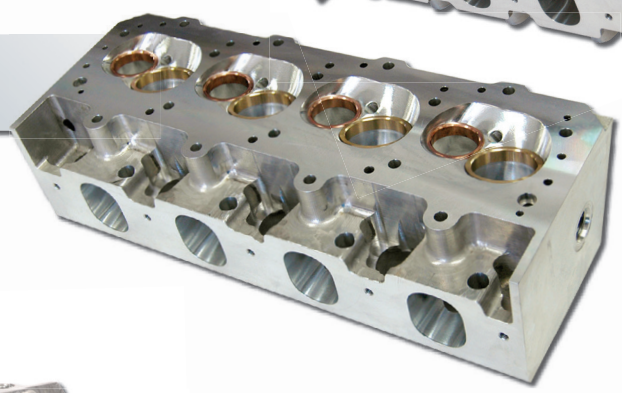
BBC BILLET BLOCKS

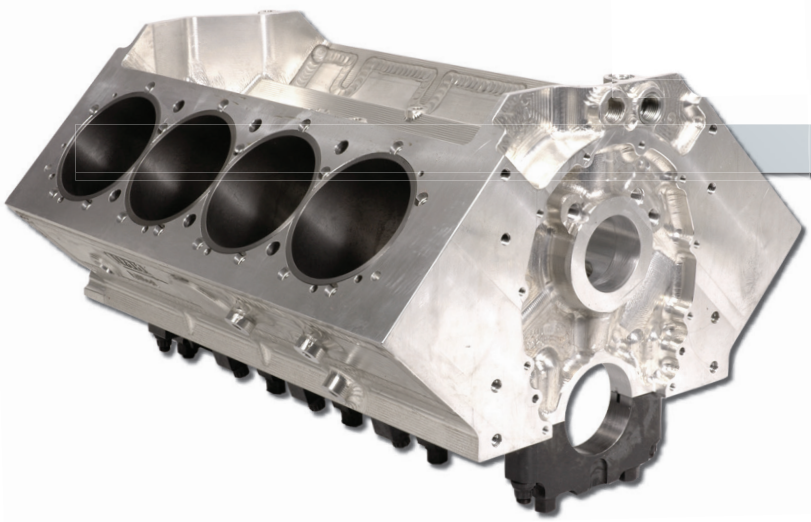
- 4.840", 5.000", 5.200" & 5.300" bore space
- Deck heights up to 12.500"
- High capacity water jackets
- Custom lifter options
- Cam tunnel options up to 70mm
- Raised cam locations up to +1.915"



BBC BILLET ALUMINUM HEADS

- 5.000", 5.200" & 5.300" bore space
- Spread port or symmetrical port
- High capacity water jackets
- Copper seats





SBC BILLET BLOCKS

- Forged 6061 Aerospace Alloy
- Custom machined for your application
- Custom deck height options
- Cylinder bore spacing: standard or 4.500"
- Raised camshaft locations
- Cam tunnel options up to 60mm
- Custom lifter diameters and locations
- Steel or optional Aluminum main caps
- Full water jackets

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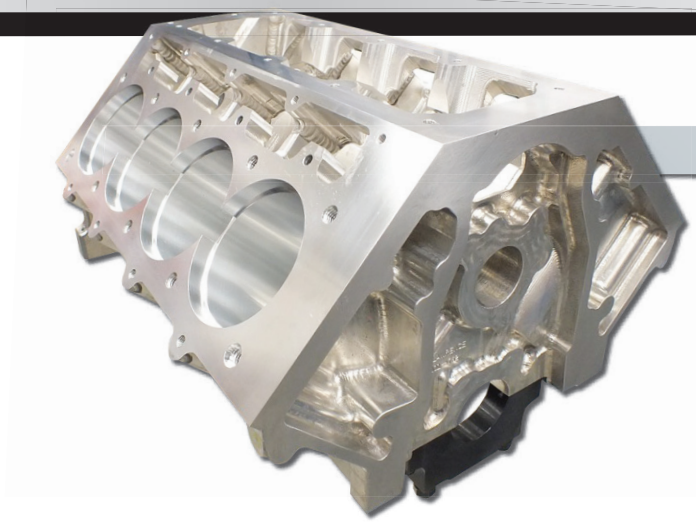
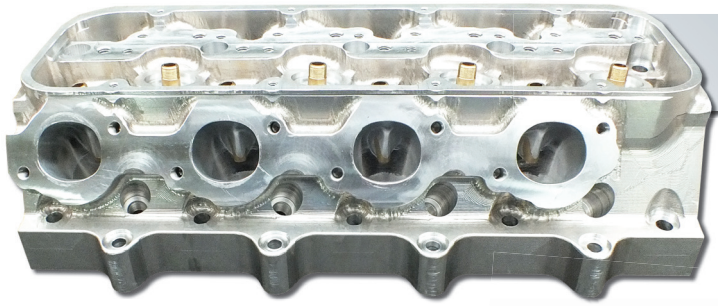
Follow our **BLOG** and **SOCIAL MEDIA** channels for the latest **DART NEWS** and **TECHNICAL INFORMATION**:

248.362.1188 / DARTHEADS.COM



LS / LS NEXT BILLET BLOCKS

- Forged 6061 Aerospace Alloy
- Custom machined for your application
- Custom deck height options
- Raised camshaft locations
- Cam tunnel options up to 60mm
- Custom lifter diameters
- Steel or optional Aluminum main caps
- Available with LS NEXT² upgrade
- Full water jackets



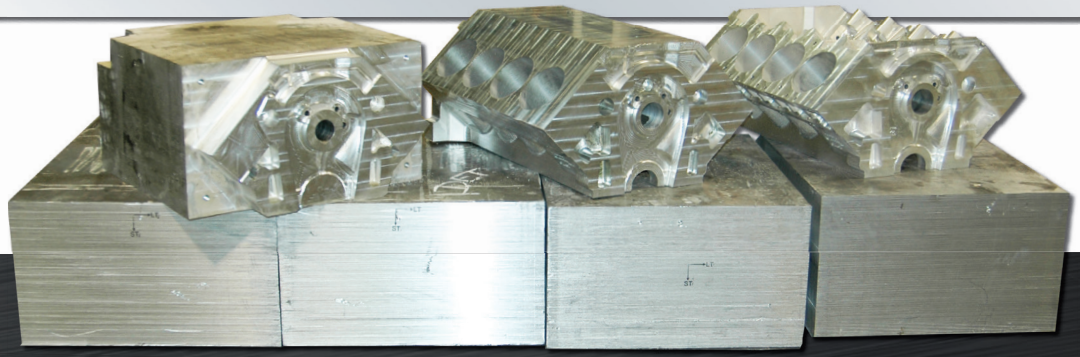
LS BILLET ALUMINUM HEADS

- 4.400" bore space
- Symmetrical ports
- High capacity water jackets or solid
- Copper seats
- 6 bolt per cylinder
- 6061 Billet Alloy

SBF BILLET BLOCKS

- Forged 6061 Aerospace Alloy
- Custom machined for your application
- Custom deck height options
- Raised camshaft locations
- Cam tunnel options up to 60mm
- Custom lifter diameters and locations
- Steel or optional Aluminum main caps
- Full water jackets

CUSTOM BILLET BLOCKS CAN BE ENGINEERED TO CUSTOMER SPECIFICATION.



Precision machined from a solid Billet of Aerospace Aluminum, Dart Billet blocks offer virtually unlimited choices in bore centerline, deck height, bore diameter, lifter and cam options.

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START YOUR CUSTOM BUILD TODAY BY CALLING 248-362-1188.

DART

STEVE MORRIS ENGINE-POWERED

BACKED BY DART

BILLET BLOCK TECHNOLOGY

SICK 2.0 SECOND CAMARO

Congratulations

Congratulations to Tom Bailey and Steve Morris Racing Engines, 2019 Drag Week Unlimited Class Winner.

FASTEST PASS IN DRAG WEEK HISTORY

5.99 @250.46

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