

### PRIOR TO INSTALLATION OF FITTINGS:

Lubricate threads with an anti-seize compound or white lithium grease to reduce galling. For tapered pipe threads apply Teflon<sup>®</sup> tape.

## COOLANT:

C&R encourages the use of distilled water in all aluminum radiators. Failure to use distilled water may void the warranty.

Tap and well water contain harmful minerals that coat the internal surfaces of your radiator, reducing its ability to dissipate heat. In extreme cases, the deposits can restrict or totally block the flow of coolant through the radiators cooling tubes. Certain minerals can also create corrosion that can eat through the aluminum.

Upon installation of all radiators and/or heat exchangers the coolant in the system must be circulated and mixed by running the engine at operating temperature for a minimum of five (5) minutes. This allows for proper mixing of coolant and corrosion protection.

The raw materials used in aluminum core construction can be susceptible to corrosion. If a new radiator has been exposed to moisture internally, it is vital that the radiator is dried prior to storage (oven, pressurized air, etc.) Used radiators are not as susceptible to this corrosion. Once a radiator is put into service and heat cycled, the internal surfaces of the radiator become passivated. In the context of corrosion, passivation is the spontaneous formation of a hard, non-reactive surface film that inhibits corrosion. It is imperative that all radiators that have not been heat cycled or passivated are stored in a "dry" state as a precaution.

For racing applications we recommend using an additive or corrosion inhibitor to be used in the cooling system. An anti-corrosive additive works well. Anti-freeze will raise the temperature of your race engine, do not use it unless racing (or transporting) in conditions where outside temps will be below freezing. For all other applications follow your OEM recommended anti-freeze/coolant.

Failure to use proper coolant/antifreeze will result in damage. C&R is not responsible for damage caused by use of improper coolant in C&R Radiators.

## USE OF PROPER RADIATOR CAP:

We recommend using a 28-32 lb. cap for most racing applications. For all other applications please follow your OEM recommended rate.

CAUTION! Always remove the radiator cap slowly and carefully. Removing the radiator cap from a hot pressurized system can cause serious burns from escaping steam and coolant.

#### **STOP LEAK ADDITIVES:**

C&R recommends Dike by Conklin, a non-ceramic stop leak. The non-ceramic formula stays suspended in water therefore leaving no residue when drained.

#### CLEANING YOUR C&R RADIATOR:

Ensure that solvent does not enter the inside of the radiator. Solvent damages the seal of the double pass baffle.

# **ADDITIVES:**

C&R has extensively tested many additives that claim to lower water temps. We have yet to find any that reduce temperature. NEO Keep Cool, Joe Gibbs CSP, or Conklin SAFE does have good anti-corrosive properties that will help keep mineral deposits and rust residue to a minimum. This will help keep your cooling system working efficiently for more race miles.



## **RETURNING A C&R PRODUCT:**

To return a radiator, please contact your sales representative for a RGA number. Please contact the retailer who you purchased the item from directly to start the return process. Once you have contacted the retailer to start your claim process, include the RGA number, name, address, and phone number with the radiator.

C&R will contact you upon receipt of the radiator.

# LIMITED WARRANTY:

C&R Racing Inc warrants its products to be free from defects in materials and workmanship for a period of one year from date of purchase. This warranty is extended only to the first purchaser of any product at retail who has retained ownership of the vehicle on which the product was originally installed. A dated purchase receipt or invoice must be presented with all claims.

This warranty does not cover labor, materials not manufactured by C&R, or damages caused in shipping. Radiators repaired or altered by those other than C&R, components attached (such as fans or condensers by means of cable ties or similar fasteners that run through the radiator core), or radiators used in racing applications, will not apply to this warranty.

This warranty does not cover claims of internal damage or damages to the engine assembly, its components or to the vehicle due to overheating. All vehicles should be equipped with some form of warning device for overheating.

This warranty does not cover damages caused by excessive engine operating temperature or pressure, internal corrosion due to inadequate proportions of antifreeze/coolant or damages resulting from collision, such as crushing or other damage due to any accident.

C&R Racing, Inc. disclaims all liability for damages to its product or injury to persons using the product when improperly opening radiator pressure caps and/or bursting hoses and other connections.

The remedy for breach of this warranty, exclusive of all other warranties provided by law, is expressively limited to the repair or replacement of any radiator within one (1) calendar year of date of original retail purchase by the original purchaser. All radiators returned for warranty consideration must be returned with transportation charges prepaid. Purchaser's remedy is limited to the repair or replacement of the radiator and shall not include consequential damages or other damages, such as the cost of removal and reinstallation of the radiator.

Radiators received which are damaged in shipping, should immediately be reported to the shipping carrier as damaged, and claims of damage filed accordingly. Contact the transport carrier for procedures in filing a damage claim with the carrier or their agent. C&R Racing, Inc. will not accept product returned for damages caused in shipping.

## PROTECT YOUR INVESTMENT AND YOUR COOLING SYSTEM:

-When capping oil heat exchangers, oil coolers, or transmission coolers during dyno runs, the oil must be drained from the heat exchanger.

-Failure to drain the oil can result in a fracture to the heat exchanger core.

-C&R Racing, Inc. is not responsible for damage caused by improper maintenance of C&R Radiators. Although we take every pre- caution to ensure that no foreign material has entered this part, we STRONGLY ENCOURAGE our customers check for contaminates before installation.