

# Radiator Mounting, Maintenance and Installation Sheet

CAUTION! Never open, drain or disassemble a hot cooling system.

### 1. Non-Racing Radiators (Street Rod Use)

- A. **Custom radiators.** Saddle type mounts absorb chassis flex, which can ruin your radiator. The lower mount should be under the channeled beam nearest to the side tanks; this is the strongest part of the radiator. The upper mounts should be at the ends of the core or where the tanks weld to the core. Rubber mounting grommets must be used between the mounting surface and the radiator side tank welded mounting bungs.
- B. **Factory Fit Type Radiators** Your chassis may have flanges that bolt the radiator in solidly. Rubber grommets or vibration isolators should be incorporated into the mounting of the radiator to absorb chassis flex, which can ruin your radiator.
- C. Coolant- Install a quality coolant and follow the manufactures directions. If using additives in your cooling system, follow the manufacturers and installation instructions. Not following their instructions could ruin your radiator.
- D. A pressure release cap should be installed that will hold 17 lbs. to 19 lbs. for street use. For racing use only 19 lbs. to 24 lbs.

## 2. Racing Radiators Only (Track Use)

- A. Install a screen or air box in front of the radiator to keep debris from damaging the core or obstructing the airflow.
- B. Straight water is the best medium for transferring heat. Use distilled water for racing applications, if using additives in your cooling system. Always read and follow manufactures instructions.
- c. Pipe thread fittings should be wrapped in Teflon tape and straight thread fittings should have a good quality anti-seize compound added to the threads prior to installation.
- D. Radiators will not work without the proper airflow. Air will take the path of least resistance, so seal front perimeter of the radiator to the inlet to force all the incoming air through the radiator.

#### 3. Maintenance: Recommended for all PRW Radiators

- A. Change coolant per manufactures instructions.
- B. Keep the core clean. A high-pressure washer will bend the fins. Use only water to wash the outside of the core.
- C. Bent fins restrict air flow reducing, cooling performance. The fins may be straightened very carefully with a small pocket screwdriver.

#### **INSTALLATION INFORMATION:**

Caution! Never remove the cap on a hot radiator. The coolant is under pressure and is hot enough to cause serious injury. Wait at least three hours for it to cool down. Completely flush the cooling system before installing your new radiator; this will help keep foreign matter out of your system at radiator installation. Cooling systems require a through flush of the radiator, engine, overflow tank, hoses and heater core. Failure to do so will lead to mixing coolants and contaminates and creates a corrosive cocktail for the radiator. Do not ruin your new radiator by improper filling! Aluminum radiators must not be subject to pressure surges that result from air pockets in the engine. When air surrounds a cylinder or area next to a combustion chamber, the metal becomes very hot. When water comes in contact with the hot metal, a volume of steam is produced that is larger in pressure than the cap can release. The resulting pressure bulges the tubes in the radiator and reduces the airflow and cooling capacity.

It is very important that your engine be completely full. Use a quality coolant and follow the manufacturer's instructions.

If possible avoid brass parts in the cooling system. Brass and aluminum react to each other and cause electrolysis. Electrolysis strips away metal at the inside of your radiator and eventually creates leaks. Dissimilar metals, contaminates and improper maintenance of the cooling system lead to failure in the radiator. An electrical current can be generated by the rear-end transmission. This is particularly true with air bag suspensions, rubber pad suspensions and rubber-mounted transmissions. Any current generated will travel up to the drive shaft to ground through the engine coolant. Grounding rear-ends and transmissions are strongly recommended. If you have any questions related to mounting, installing, or maintaining your radiator, please call us at (888) 377-9779.

#### **SPECIAL NOTES:**

The following are failures that are not manufacturer defects and therefore not covered under warranty.

- <u>Improper Flush</u> Cooling systems require a through flush of the radiator, engine, overflow tank, hoses and heater core, failure to do so will lead to mixing coolants and contaminates and creating a deadly cocktail for the cooling system.
- <u>Corrosion</u> The correct coolant and <u>distilled</u> water mixture prescribed by the coolant manufacture of choice must be maintained. Water with high trace elements of minerals will create problems for aluminum radiators not normally seen in copper radiators.
- <u>Electrolysis</u> Electrolysis is the systematic removal of the protective layer on the inside
  of the radiator tubes due to improper grounding. Electrical grounding problems can stem
  from poor installation of aftermarket accessories or incorrect vehicle collision damages.