Ron Davis Racing Products

Ver 4.2

Shipping Claims/Limited Warranty/Returns and Exchanges

SHIPPING CLAIMS

Notice of Shortages or discrepancies must be made to Ron Davis Racing Products within 5 working days of the receipt of merchandise. Our shipping cartons, packing materials and merchandise leave our factory in perfect condition. Ron Davis Racing Products is not responsible for any damage incurred in shipping. All items are F.O.B. Glendale Plant Dock and UPS is the preferred carrier unless otherwise specified when ordered on the invoice. Inspect the condition of the shipping carton. If there appears to be any type of damage, inspect the merchandise carefully. If any damage is found, contact the carrier (UPS 1-800-(PICK-UPS) 742-5877) and request a damage inspection. Keep the shipping carton and all packing material for the carrier to inspect. After calling the carrier, contact Ron Davis Racing Products to report the damaged shipment.

LIMITED WARRANTY

For a period of 90 days, Ron Davis Racing Products warrants that the products sold here under shall be free of defects in workmanship or materials. THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR OTHER WARRANTY OF QUALITY, WHETHER EXPRESS OR IMPLIED. Ron Davis Racing Products does not warrant or guarantee installation or adjustment of the part. This warranty does not cover damage due to misuse, abuse, negligence, improper installation, acts of God or other causes beyond the control of Ron Davis Racing Products. Any alteration or Misuse of the product after manufacture voids this warranty in its entirety. In no event shall Ron Davis Racing Products be responsible for any indirect, incidental or consequential damages. In the event of a defect in workmanship or materials, purchaser's or other user's sole and exclusive remedy is for repair or replacement of the part without charge.

RETURN / EXCHANGES

Packages sent C.O.D. will be refused. Shipments must be sent/delivered to Ron Davis Racing Products at 7334 North 108^{tt} Avenue Glendale, Arizona 85307. Custom items cannot be returned or exchanged. **Items Suspected Of Defect:** Call Ron Davis Racing Products, explain your problem and acquire a Return Goods Authorization number (RGA number). Complete the form below and enclose it in the return package with the original invoice. The RGA number must be written on the package in large numbers next to the address label. Any package not having a RGA number will be refused**.** Do not reuse the original box and packing material to return merchandise. We recommend you insure the return package with the carrier for its purchased value. An uninsured and or improperly packaged return item received by Ron Davis Racing Products with damage sustained during return shipping will result in Ron Davis Racing Products not receiving an allowable return or exchange due to shipping damage. All returns must be clean and oil free. Any package that appears to be oil soaked or stained will be refused. Goods returned may be subject to a restocking fee up to 20%**.** The RGA number does not guarantee replacement. In our opinion, an item indicating improper handling, packaging, or installation may not be eligible for return or exchange.

For Ron Davis Fan-Equipped Models

FAN INSTALLATION AND WIRING

When installing your new Ron Davis Racing Products fan, securely mount the fan by the four mounting ears provided and the fan grille should be against the core for best results.

For easy wiring of our fans, we offer 185 degree or a 195 degree fan harness kits with built-in relay and fuse. The kit includes high quality wire with labels, a 3/8 NPT stainless steel thermostatic switch, 40 Amp relay, fuse holder and supporting hardware and instructions. Call and order now at (623-877-5000). One kit needed per fan.

To get maximum life and performance out of your new fan, use 14 gauge wire, a 30 amp fuse or circuit breaker, a 30 amp relay, a quality on-off switch. Wire each fan on its own circuit from the battery. **DO NOT WIRE BOTH FANS ON THE SAME CIRCUIT!!**

CAUTION! When wiring your new Ron Davis Racing Products fan, keep in mind that a low amp draw will cause the motor to run hot, damaging your fan motor. If undersized wire, a poor quality switch, or inadequate breaker is used, or the fans are not wired individually or are on a circuit with another device, the motor can run hot. This heat will ruin the fan motor.
All fans are tested at the factory prior to shipping.

All returns must have a Return Goods Authorization on the box and have the original invoice enclosed in the box.

If you have any questions, comments or concerns call us at 623-877-5000. We will be happy to help.

Ron Davis Racing Products

MOUNTING, MAINTENANCE AND INSTALLATION SHEET

If you have any questions, comments or concerns about the following information, call us at 623-877-5000 we will be happy to help.

MOUNTING & MAINTENANCE INSTRUCTIONS

1. **Mounting: recommended for all Ron Davis radiators**
   - A. Lower mount(s)- saddle mount your radiator only, and line the inside of the mounts with a material that will keep the mounts from rubbing through the radiator causing a leak. Saddle mounts absorb chassis flex; which can ruin your radiator. Lower mounts should be under tanks only, it the strongest part of the radiator.
   - B. Upper- mount(s) should be at the ends of the core, as close to the tanks as possible or close to the ends of the tank for downflow units.
   - C. To ensure maximum cooling efficiency, seal front perimeter of radiator to air inlet. Air will take the path of least resistance. This forces all incoming air through the core.
   - D. Install a screen or air box in front of the radiator to keep debris from damaging the core or obstructing the airflow.
   - E. A pressure release cap should be installed that will hold 17 lbs. to 19 lbs for street use, and for racing use only 19 lbs to 24lbs.
   - F. 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.
2. **Maintenance: recommended for all Ron Davis radiators**
   - A. Install a quality coolant and follow the manufactures directions. The correct coolant and distilled water mixture prescribed by the coolant manufacture of choice must be maintained.
   - B. This radiator will not work without a good airflow. Plenty of air must be able to enter the core or overheating may occur.
   - C. Keep the core clean. A high-pressure washer may bend the fins. The fins may be straightened very carefully. Use water only to wash the core.

INSTALLATION INFORMATION

CAUTION! Never open, drain or disassemble a hot cooling system. The coolant is under pressure and hot enough to cause serious injury. Wait at least three hours to for it to cool down. Completely flush the cooling system before installing your new radiator; this will help keep foreign matter in your system out of your radiator at 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 coolant and follow the manufactures directions. Do not use brass parts anywhere 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. We also recommend attaching a ground strap from the radiator to the frame to help control electrolysis. 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 is strongly recommended. If you have any questions regarding your cooling system or your new radiator, please call us at (623) 877-5000.

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

Improper Flush - 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 creating a deadly cocktail for the cooling system.

Corrosion – The correct coolant and distilled 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.

Electrolysis – 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 on street applications.
Any brass components in the cooling system are to be avoided, because brass promotes electrolysis.

Testing for electrolysis in cooling systems
An electrical current passing through the coolant can cause engine and cooling system components failures, due to problems in the cooling system from electrical ground problems and the generation of static electricity elsewhere in the vehicle. This can destroy an engine and other cooling system components regardless of the quality of cooling system maintenance. The only way it can be stopped is to correct the electrical problem causing the current. Damage resulting from an electrical current can be pitted liners, oil coolers, radiators, extreme aluminum corrosion, and abnormal water pump and head gasket failure. A multimeter or voltmeter capable of reading both AC and DC currents is required to test cooling systems. The meter needs to read zero to the maximum voltage of the system being tested in tenths of a volt. The meter leads must be long enough to reach between the coolant and the groundside of the battery. An ohm function of a multimeter is very helpful to pinpoint areas of resistance in as electrical system that will cause an electrical current to ground through the coolant rather than the engineered electrical circuit.

1. Attach the proper meter lead to the groundside of the battery, negative-to-negative or positive-to-positive.

2. Install the second lead in the coolant touching the coolant only.

3. Read the DC and AC voltage with all systems off. If a block heater is present, also take a reading with the heater turned on. If an automatic battery charger is present as a standby system, also take a reading with this system running.

4. Read the DC and AC voltage with the electrical starter engaged.

5. Read the DC and the AC voltage with the engine running and all systems turned on: lights, coolers, fans, heaters, air conditioning, cell phone, two-way radio, including the phone and radio on both standby and transmit.

The above procedure will test a complete system except for an electrical current, which 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 is strongly recommended.

Voltage of zero to .3 is normal in a coolant of cast iron engine. Such an engine will be destroyed with time by .5 volts, and engine manufacturers are reporting .15 volts will destroy an aluminum engine.

The current will be AC if the problem is due to static electricity.
If the coolant shows an electrical problem with all the equipment turned on, turn off one system at a time until you finally turn off the system that stops the electrical current. When the current stops, this will indicate the electrical system causing the problem.

Be particularly careful of starters. They can cause as much damage to an engine as a direct connection to an arc welder due to the amperage present.

4130 is a poor conductor for a chassis ground, wire to the battery.

Always change the coolant if a current is detected. The electrical current will destroy the protecting chemicals in a properly inhibited coolant.