



# Owner's Manual

*A message from Roger and Deb Rosebush:*

Thank you for your purchase of a Be Cool Power Cooling radiator. In an effort to ensure that you receive the maximum benefit from your new purchase we have developed this owner's manual. In it you should find all of the information that you need to care for your new cooling system. We want you to receive the maximum benefit possible from your investment.

For additional tech support, please feel free to check out [www.becool.com](http://www.becool.com) or call our Toll-Free Tech Line, 800-691-2667. We appreciate your purchase and strive every day to make Be Cool products the best available.

Roger & Deb, Founders of Be Cool

You can download a detailed instruction sheet for your application at [www.becool.com](http://www.becool.com).

You can **double your new radiator's warranty** with the use of earth-friendly, biodegradable, Be Coolant Super Duty Antifreeze. Be sure to redeem the enclosed \$25 rebate coupon for maximum savings.



# Important: Read This First

## **Cooling System Trouble Shooting Tips**

### **If Vehicle Runs Hot AT IDLE After Installing a Be Cool Radiator:**

1. Put a powerful (i.e. squirrel cage) fan or blower in front of grill and force extra air through the radiator at idle.
2. If this lowers the temperature, you may need a better mechanical fan & shroud or an auxiliary electric fan.
3. Your water flow speed through the radiator may be too slow. Increase RPM to 1500-2000. If this lowers the temperature, you can increase water flow at idle with a different water pump, pulleys, restrictor plates, etc.
4. Water flow speed may be too fast. Try slowing down the flow with pulleys or restrictor plates.

### **If Vehicle Runs Hot AT SPEED Check for:**

1. Possible airflow obstruction. Air is coming in faster than you can move air through the radiator and out of the engine compartment. *Common causes:* Electric fan engaged is slowing airflow or you may have incorrect mechanical fan position in relation to shroud. A fully shrouded radiator does not allow air through the core if the incoming air rate is higher than the fan's CFM rating.
2. Radiator hose to water pump could be getting sucked closed at high RPM.

### **Other problems causing either of the above could be:**

- |                           |   |                                    |
|---------------------------|---|------------------------------------|
| 1. Air in cooling system. | 3. Timing too far advanced or retarded. | 5. Improper spark plug heat range. |
| 2. Improper coolant mix.  | 4. Air/fuel mixture too lean.           | 6. Vacuum leaks.                   |

If you still have problems after checking all of the above, contact Be Cool's toll-free Tech Support at 800-691-2667.

# Radiator Filling Instructions

## **IMPORTANT TIP:**

It may help to jack up the front of your vehicle. The front of a car should be elevated if the mounting position of the radiator is low in the vehicle. Damage to your engine or radiator can happen if the system contains any trapped air. You must be sure that all air is out of the system. Air pockets in the engine can produce steam pockets that are as hot as 400° - 500° F and can cause radiator damage when they return to the radiator. Most radiator failures are due to either improper filling which leads to hot spots or to improper mounting which leads to fatigue of the radiator tubes due to flexing. Please also see mounting instructions.

1. Always flush the entire cooling system as well as you can. You can flush the system by putting water in the thermostat housing or through the heater hoses. By going through the heater hoses, with the heater control on the "High" setting, you will be putting water directly into the engine behind the thermostat. While the old radiator is out of the car, residue in the block can be flushed out the bottom hose connection. You can also plug the bottom hose, fill the heater and engine block, then release the bottom hose plug and get the block reasonably clean.
2. Always use a mixture of 50% deionized water and 50% OEM-approved antifreeze that is compatible with aluminum. Pre-mixed Be Coolant Super Duty Antifreeze uses deionized water and provides maximum protection. Use of Be Coolant also **DOUBLES** your Be Cool Radiator's warranty. Following these recommendations will give you maximum corrosion resistance.
3. Always use a good thermostat. A factory original replacement thermostat is minimally acceptable.
4. While filling your cooling system wear proper safety equipment, gloves, glasses, etc.



## Radiator Filling Instructions (Continued)

5. To properly fill your cooling system, take these steps:

- a. If you have an electric fan(s) instead of an engine driven fan, you must do the following: On initial warm-up temporarily wire fan(s) to run all the time. When your thermostat opens, the fan(s) will be running to instantly cool the hot water from the engine block.
- b. Fill the new radiator to capacity. Turn heater on high.
- c. Start the vehicle with radiator cap installed in the **loose** position to prevent spillage and personal injury. **Do Not** Pressurize the System.
- d. Run vehicle until the top radiator hose is hot.
- e. When your vehicle reaches the point of thermostat opening, you may experience some overflow out of the radiator filler neck. As the fluid fluctuates and then suddenly drops in the radiator, you must be ready to add more fluid or you will experience overheating since the system doesn't have adequate fluid. After your thermostat opens, carefully remove filler cap and add an additional 2-3 quarts of fluid.
- f. Let the vehicle warm up until thermostat fully opens and slowly finish filling. Then increase your engine RPM to about 1000 and top off radiator.
- g. With your engine running at 1000-1500 rpm install a 13-15 psi radiator cap tightly.
- h. Re-wire the electric fan(s) to run as intended. If the system has been filled correctly the temperature should come up, the fan(s) will turn on, the temperature will drop and fan(s) will turn off. This tells you that the system is full and ready to go.

## Radiator Filling Instructions (Continued)

6. When you are satisfied that the system is full and hot, check the following:
  - a. Turn heater on to see if it is giving off hot air. If heater is hot and system is full you have no air left in your system.
  - b. If you have a coolant recovery system, it should be filled to about 1/2 capacity. A coolant recovery tank will help maintain proper coolant level.
  - c. There are two types of cooling systems, closed (coolant recovery) or open. An open type system requires a different type radiator cap than a closed system. An open system has only one seal on the radiator pressure cap. A closed system has two rubber seals, one that seats in the bottom of the radiator filler neck and another under the cap to seal the top of the filler neck. Make sure that you have the correct cap for your system.
7. Let motor cool down and check coolant level.
8. On a closed system the fluid in the coolant recovery bottle will drop after 3-4 complete heat up and overnight cool down cycles. This is normal as the system has eliminated any remaining air and gradually purged itself of air pockets. After three or four hot/cool cycles, the bottle will maintain consistent hot and cold levels if everything is the way it is supposed to be.



**WARNING!**

## Do Not Open Cooling System While Hot

***You must return your completed warranty card to validate your warranty. Read instructions carefully prior to installation.***

The following steps must be observed when installing a Be Cool Radiator. If these steps are not followed, the warranty of the radiator is void.

- Make sure that your engine, transmission, and electric fan(s) (if applicable) are properly grounded via a braided copper wire ground strap, Be Cool Part #72092. Ensure that any paint is removed from the grounding area.
- Properly flush your engine's cooling system with an approved OEM radiator cleaner (available from an authorized automotive dealer) prior to installation. This ensures maximum efficiency of your new radiator.
- Do not use coolant additives of any kind, especially alcohol based.
- The preferred coolant for your system is **Be Coolant Super Duty Antifreeze**. A pre-mixed coolant or a mixture of 50% deionized water and 50% OEM-approved coolant that is compatible with aluminum, can also be used. Never mix different brands or types of coolant other than Be Coolant. Be Coolant is compatible with all types and colors of antifreeze. Use of Be Coolant will **DOUBLE** your new Be Cool radiator's warranty.
- Properly purge all air from your cooling system. In some cases the front of the vehicle may need to be raised to ensure proper purging. A recovery tank is highly recommended to keep the radiator full.
- Do not alter the radiator in any way. A small amount of BENT FINS do not affect the cooling capacity of the radiator.
- Your old radiator cap may not seal correctly. This can cause air/coolant leaks and create coolant contamination that limits the performance of your new radiator. To maximize the peak efficiency of your cooling system Be Cool strongly recommends the use of a new Be Cool radiator cap.

# Warranty

Be Cool, Inc. warrants its radiators to be free from defects in materials and workmanship for a period of one (1) year from the date of purchase at retail by the original purchaser. Use of Be Coolant Super Duty Antifreeze will double this warranty to two (2) years from the date of purchase at retail.

This warranty does not cover any labor or materials not furnished by the manufacturer or any shipping charges. It also does not cover any radiator repaired or altered in any way, misuse and/or misapplication of the product and the effects of physical or chemical properties of water, steam or other liquids used in the radiators. Nor does it cover radiators used without an adequate proportion of premium quality antifreeze/coolant. (Aluminum radiators require a correct proportion of premium quality coolant with aluminum corrosion inhibitors in their formula.) This warranty is extended only to the first retail purchaser of any radiator. A dated purchase receipt or invoice must be presented with any and all claims. IF MANUFACTURER'S DATE CODING IS REMOVED FROM RADIATOR, WARRANTY IS VOID. IF PRODUCTS, SUCH AS TRANSMISSION COOLERS OR ELECTRIC FANS, ARE ATTACHED WITH CABLE TIES OR SIMILAR FASTENERS THAT RUN THROUGH THE RADIATOR CORE, THE WARRANTY IS VOIDED.

This warranty does not cover claims of internal damage or damage to the engine assembly, its components, or to the vehicle due to overheating. All vehicles should be equipped with warning lights and/or gauges to warn of overheating and user discretion must be observed.

Be Cool, Inc. EXPRESSLY DISCLAIMS any liability for tube damage, "ballooning" or bursting from excessive engine operating temperature or pressure, internal corrosion due to inadequate proportions of antifreeze/coolant, or damage to radiator resulting from collision, such as crushing or other damage due to any accident. Be Cool, Inc. also EXPRESSLY DISCLAIMS any liability for damages due to a radiator or the vehicle to which it was attached or injury to persons or others using and/or operating the vehicle to which the radiator was attached due to the improper opening of the radiator pressure cap and/or bursting of hoses and other connections. Be Cool, Inc. also EXPRESSLY DISCLAIMS any warranty and any liability for damages caused by its product when used in any competition event.

Some states may not allow a limitation on the duration of any implied warranty. The above warranty may not apply to you. This warranty grants you specific legal rights, and you may have other rights which vary from state to state.

The remedy for breach of this warranty, exclusive of all other warranties provided by law, is expressly limited to the repair or replacement of any radiator within one (1) 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 any consequential damages or other damages, such as the cost of removal and reinstallation of the radiator.



**IMPORTANT! Warranty Registration Card Must be returned within 30 days of purchase to validate warranty.  
Register online at [www.becool.com](http://www.becool.com) or simply mail in this pre-addressed postcard.**

---

**Name**

---

**Address**

---

**City State Zip**

---

**E-mail Address**

---

**Phone**

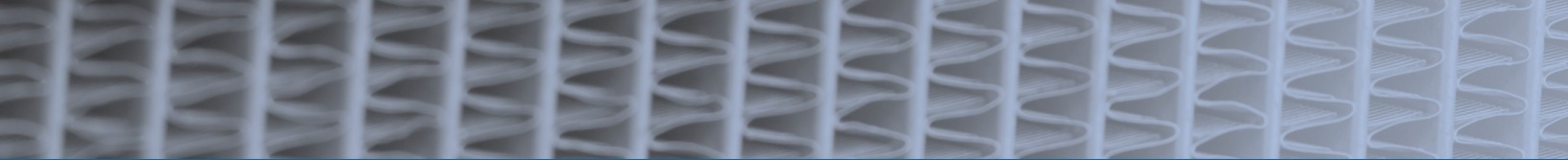
***Purchase Information:***

**Purchase Date** \_\_\_\_\_ **Purchased From** \_\_\_\_\_ **Product Part Number** \_\_\_\_\_

***Vehicle Information:***

**Year** \_\_\_\_\_ **Make** \_\_\_\_\_ **Model** \_\_\_\_\_

**Engine Type** \_\_\_\_\_ **Engine Size** \_\_\_\_\_ **Estimated H.P.** \_\_\_\_\_



---

---

---



Register online at  
*[www.becool.com](http://www.becool.com)*  
or SEND TO:



BE COOL, INC  
310 WOODSIDE AVENUE  
ESSEXVILLE MI 48732



# BE COOLANT COOL CASH REBATE



Purchase three or more gallons of Be Coolant Super Duty Antifreeze and receive a \$25 Cool Cash rebate check for your Be Coolant purchase. Please complete and submit the form below, along with your proof of purchase (copy of your receipt). *Form must be received before December 31, 2010. Not to be combined with any other offer.*

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_

Zip \_\_\_\_\_

Expires 12/31/2010

---

---

---



BE COOLANT COOL CASH REBATE  
5489 32ND AVENUE  
HUDSONVILLE MI 49426

## Extensive Quality Control

***Every Be Cool radiator is***  
***100%***  
***pressure tested***  
***before it is***  
***packaged to ensure***  
***you receive a***  
***leak-free radiator.***





# Be Coolant Super-Duty Antifreeze



**USE OF  
BE COOLANT SUPER DUTY  
ANTIFREEZE  
WILL DOUBLE YOUR  
NEW BE COOL RADIATOR'S  
WARRANTY!**

Be Coolant features a new generation propylene glycol formula that has low toxicity and is biodegradable. It's totally compatible with all colors and brands of antifreeze.

- Pre-Mixed, Ready-to-Use
- 7-Year Extended Life
- 300,000 Mile Protection
- 267°F Boiling Point (@15 PSI)
- Protects to -26°F Below Zero



*Ideal for all radiators and for all performance and severe duty applications including:*

- All Factory Muscle Cars & Hot Rods
- All Domestic Cars & Trucks
- All European & Asian Vehicles
- All Diesel/Tow Vehicles/RVs
- All Powersports Applications
- Select Race Vehicles



# Protect Your Engine Investment

## ***DOUBLE Your Be Cool Radiator's Warranty!***

Be Cool, America's leader in power cooling technology, has done it again with Be Coolant, an Extended-Life, Super Duty Coolant & Antifreeze that is ideal for all applications. Be Coolant features a new-generation earth-friendly biodegradable, propylene glycol formula that protects cooling systems and aluminum components down to -26° (F).

Be Coolant is pre-mixed and provides 7-years or 300,000 miles of extended-life coolant protection that is ideal for all performance and severe duty applications including American, European, and Asian high performance cars, powersports applications as well as diesel-powered tow vehicles and RVs.

Additionally, Be Coolant features a self-sealing capability that is ideal for sealing hairline cracks in your cooling system. Its unique proprietary stop-leak protection formula chemically bonds to all metals.

Be Coolant is made in the USA, is compatible with all colors of coolant and all types of radiators, comes ready to use in recyclable gallon jugs, and can be shipped via UPS.

A convenient twin 1-gallon master pack is the easiest way to purchase Be Coolant's extended protection. Best of all, Be Coolant doubles a Be Cool radiator's factory warranty.



## Available Be Cool Accessories



Chrome Fan Modules



Single Fan Modules



Chrome Fans



Single Fan Wiring Kits



Dual Fan Modules



Dual Chrome Fans



Dual Fans



Dual Fan Wiring Kits

## Contact Your Dealer for More Information



Billet Radiator Caps



Billet Overflow Tanks



Overflow Tanks



Expansion Tanks



Fan Mounting Brackets



Fan Mounting Brackets



Fan Mounting Brackets



Fan Mounting Brackets

## Available Be Cool Accessories



A/C Condenser Modules



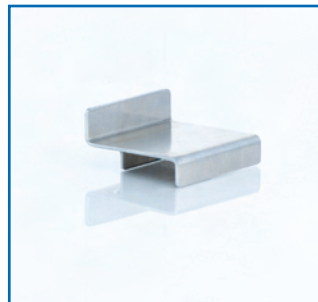
A/C Condenser Frame



Mounting Brackets



Billet Radiator Hold Down



Aluminum Hold Down



Tri-Five Accessories



Tri-Five Accessories



Tri-Five Accessories



## Contact Your Dealer for More Information



Rubber Mounting Kits



Stainless Bolt Kits



Rubber Mounting Kits



Fan Mounting Bumpers



Brass Fittings



Heater Fittings



Auxiliary Petcocks



Brass Petcocks



# **America's Leader In Power Cooling Technology**

***Be Cool Incorporated***

Phone: 989-895-9699

Fax: 989-892-9213

Technical Support: 800-691-2667

310 Woodside Avenue, Essexville, Michigan 48732

***[www.becool.com](http://www.becool.com)***

