

## ***Installation Instructions for 51171-79 Universal Radiators***

***Important: Some cars require varying instructions for proper installation.  
Please refer to your owner's or maintenance manual for further details***

### **CAUTION:**

Never open while hot. Radiator coolant can be very hot and under pressure.  
Always use extreme caution when removing the radiator cap.

### **MOUNTING:**

1. Construct mounts to support the radiator tanks tightly. Foam rubber or weather stripping can be used between mounts and tanks to reduce damage from vibration.  
**Do NOT support radiator under the core area!**  
**It may cause damage to tubes or fins.**
2. Carefully place radiator in vehicle taking care not to damage the radiator fins.
3. Tighten brackets to chassis and radiator so that the radiator is clamped in place.
4. Install coolant hoses using proper hose clamps.

### **FILLING:**

1. Flush cooling system completely. Check all cooling components for failures (thermostat, pressure cap, hoses).
2. Use a 50/50 mix of premium coolant and water (distilled preferred) to maximize corrosion resistance.
3. Use proper safety equipment: gloves, glasses, etc.  
(Please refer to owner's or maintenance manual - following directions may vary)
4. Fill the JEG'S radiator to capacity. Turn heater on high.
5. **Loosely** put the radiator cap on; do NOT twist on tightly. Start vehicle.
6. Run vehicle until top radiator hose is hot. Coolant may overflow out the filler neck. When the level drops, add more fluid.
7. When thermostat fully opens, remove the filler cap and refill radiator to capacity.
8. Replace cap and tighten.



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## **PROPER MAINTENANCE & CARE TIPS**

To ensure long-lasting, high-quality results from your JEG'S radiator, follow these tips and guidelines:

### **Use an electric fan**

When you need a fan the most (at idle or cruising speeds), an electric fan delivers maximum flow independent of engine RPM. Preference is also given to a "pull" fan vs. a "push" fan because a pull fan does not interfere with air flow at highway speeds and is more efficient. All shrouded fans should be on the engine side of the radiator and curved for more efficiency.

### **Shroud your radiator when using a fan**

A fan without a shroud is better than no fan at all. But consider this, an unshrouded fan is moving air through only that portion of the radiator equal to the surface area of the fan, not the entire radiator. For example, on a normal '32 Ford radiator, the area of a 15.50" fan is approximately 189 sq. in.; the core of the radiator is approximately 371 sq. in. This means that almost 49% of the unshrouded radiator is not receiving any benefits from the fan. Shrouding your radiator permits the fan to pull air through the entire core of the radiator.

### **Use the proper water pump pulley ratio**

To obtain the optimum operating efficiency rate for your water pump at street speeds, you should over drive the pump by 20-25%. Check your pulley selection. Most after market pulleys are a 1:1 ratio. For example, for a 20-25% over drive of the water pump, the crank pulley should be approximately 7 1/4" and the water pump pulley approximately 5 3/4". Contact your water pump manufacturer for exact requirements.

### **Consider the effects of the pressure cap**

The higher pressure a radiator cap allows, the hotter the water has to get to boil. One pound of pressure raises the boiling temperature 3° F. A 16 lb cap raises the 212° boiling point to 260° F. If your engine is designed to run at 200° F, a 14-16 lb cap should be sufficient. Higher pressure places additional stress on the entire engine system and increases the potential of hoses bursting and possible injury.

### **Use a good thermostat**

Engine coolant temperature is controlled by the thermostat. It stops the flow of coolant through the radiator until the coolant reaches the thermostat's preset temperature. Operating your engine within its temperature parameters will reduce wear and keep efficiency high.

### **Protect with recommended coolant**

It is essential to use a premium coolant that protects all metal parts and seals. Use of coolant that contains no silicate (example: Texaco DEX-COOL) is recommended. A 50/50 mix of coolant and water (distilled preferred) provides the best over all cooling efficiency and minimizes corrosion. Proper maintenance of the cooling system (flushing and changing of coolant) will extend the life of your system.

### **Keep your radiator clean of foreign materials**

This includes bugs, dirt, etc. which can clog your radiator and lessen air flow. A screen may be installed to provide extra protection. It is also advisable to prevent air from traveling around the radiator by sealing the gap between the radiator and the ducting.

**WARNING: Improper wiring can cause electrolysis and destroy the radiator.  
Please make sure radiator is not used as a ground.**

For more details, refer to

"Electrolysis: What it is; How to Test for it; and Ways to Prevent it"



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