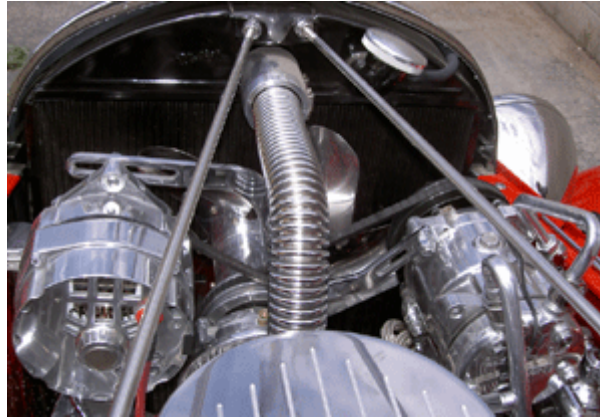




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## Riser Water Pump Kit Instructions



**Use stock Chevrolet crank pulley; for double groove use GM part# 37744043. We use early (5/8"cc) groove spacing on pulleys.**

1. **Straight up thermostat housings work the best for most installations.**
  - a) Murray # 277689 (54-72 GMC & Chevy light trucks)
  - b) Super Sunny #S6002 straight up billet aluminum housing
2. **Engine driven fans:**
  - a) Permacool 15" or 17" fan: this is polished, stainless steel.
  - b) Blades may have to be trimmed slightly

Note: most fans will require the use of a special fan spacer; they are available from us
3. **The following hoses work well with this kit:**
  - a) Dayco 70-477 upper hose
  - b) Dayco 70-457 lower hose
4. **Water pump to Riser housing gasket: GM Part# 90190983**  
**\*use ULTRA BLUE silicone if you do not have a gasket**
5. **Pump furnished with kit is German Opal, with 7mm mounting holes clearance drilled to 11/32 or "R" size**
6. **Rear fins on pump housing must be clearanced slightly when used with some manifolds that have their thermostat housing pushed forward. ie; 48 IDA Weber or dual four BBL manifolds**

**IMPORTANT NOTES:** some engines trap air in the top of the Riser pump housing when the radiator is initially filled with water. Bleed trapped air through 1/8" brass air bleed at the top of Riser housing...run engine for a minute and rebleed. We do not use a bypass hole on the Riser pump; bypass is used for fast car heater warm-up and to circulate water in the block when the thermostat is closed. You must provide a means for water to circulate in the engine with a closed thermostat.

**Drill bypass holes in thermostat: (SEE Below)**

- a) Drill one to three 1/16" holes in thermostat plate
- b) OR: knock out center valve and use the plate only
- c) If you do not have a car heater; run a hose from one of the front 1/2" holes on intake manifold to the heater hose nipple on the water pump inlet, however you must: Restrict the flow of water to the pump by placing a restrictor plug in the hose with a 3/16 or 1/4 inch hole.

**BEFORE YOU GET INTO HOT WATER WE STRONGLY RECOMMEND:**

1. **USE A RECOVERY TANK AND PRESSURE CAP:**
  - a) Pressure cap should be as high as radiator tank will stand.
2. **USE RUST INHIBITOR: EITHER OR BOTH:**
  - a) Antifreeze 25% solution.
  - b) Soluble oil and water solution.
3. **DRILL BYPASS HOLES IN THERMOSTAT:**

We Do Not Use a Bypass Hole on The Riser Pump; Bypass is Used In Passenger Car Heater Warm Up, and to Circulate Water In the Block When the Thermostat Is Closed; You Must Provide a Means For Water to Circulate In The Engine With a Closed Thermostat:  
*(See Instruction Sheet Also)*

  - a) Drill three 1/16" holes in thermostat plate.
  - b) OR: knock out center valve and use the plate only
  - c) If You Have No Car Heater: Run a Hose From One of the Front 1/2" Holes On Intake Manifold To the Heater Hose Nipple On the Water Pump Inlet, However, you must:
  - d) Restrict the flow of water to the pump by soldering a plug in the hose fitting or inserting a plug in the hose with a 3/16 or 1/4 inch hole.
4. **USE ENGINE DRIVEN FAN ---> IF AT ALL POSSIBLE:**
  - a) Electric fan is a poor second choice in most cases.

**THE FOLLOWING PERTAINS TO RISER WATER PUMP KITS ONLY:**

1. **BEFORE STARTING ENGINE: READ THIS: READ THIS: READ THIS:**
2. **BLEED AIR FROM 1/8" ALLEN PLUG AT TOP OF RISER HOUSING:**
  - a) Air will be trapped in RISER PUMP HOUSING during initial radiator fill up.
3. **RUN ENGINE FOR A FEW MINUTES:**
  - a) Rebleed to expel any possible remaining air trapped in top of RISER PUMP HOUSING.
  - b) Check that radiator tank is completely filled----  
use recovery tank and cap.

OK, SHORTIE PUMP OWNERS, I KNOW WHAT THE NEXT QUESTION IS: BUT NO PROBLEM, SHORTIE PUMPS WILL SELF BLEED IF HOLES ARE DRILLED IN THERMOSTAT PLATE: (SEE YOUR INSTRUCTION SHEET)

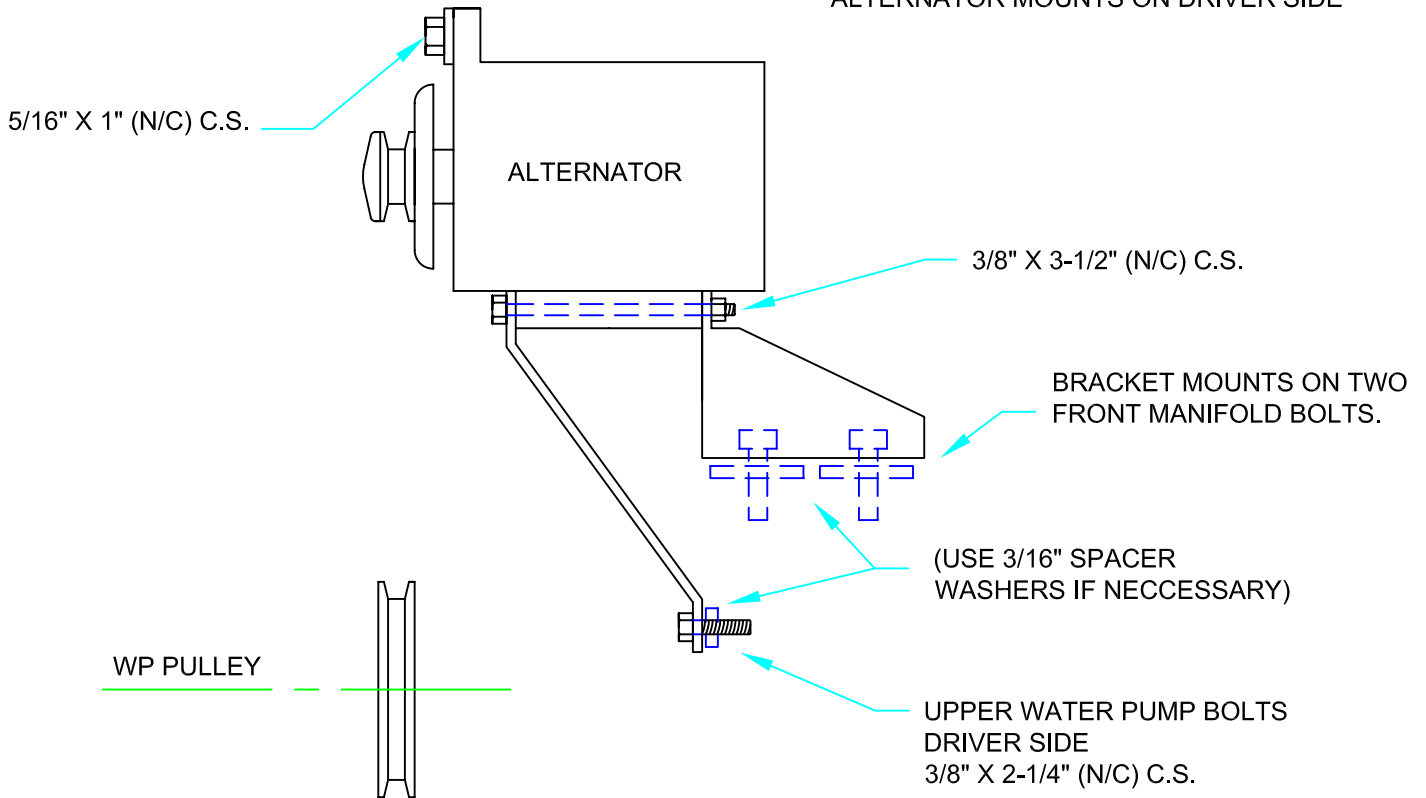
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- ① ALTERNATOR BRACKET DETAIL
- ② AIR CONDITIONER BRACKET DETAIL

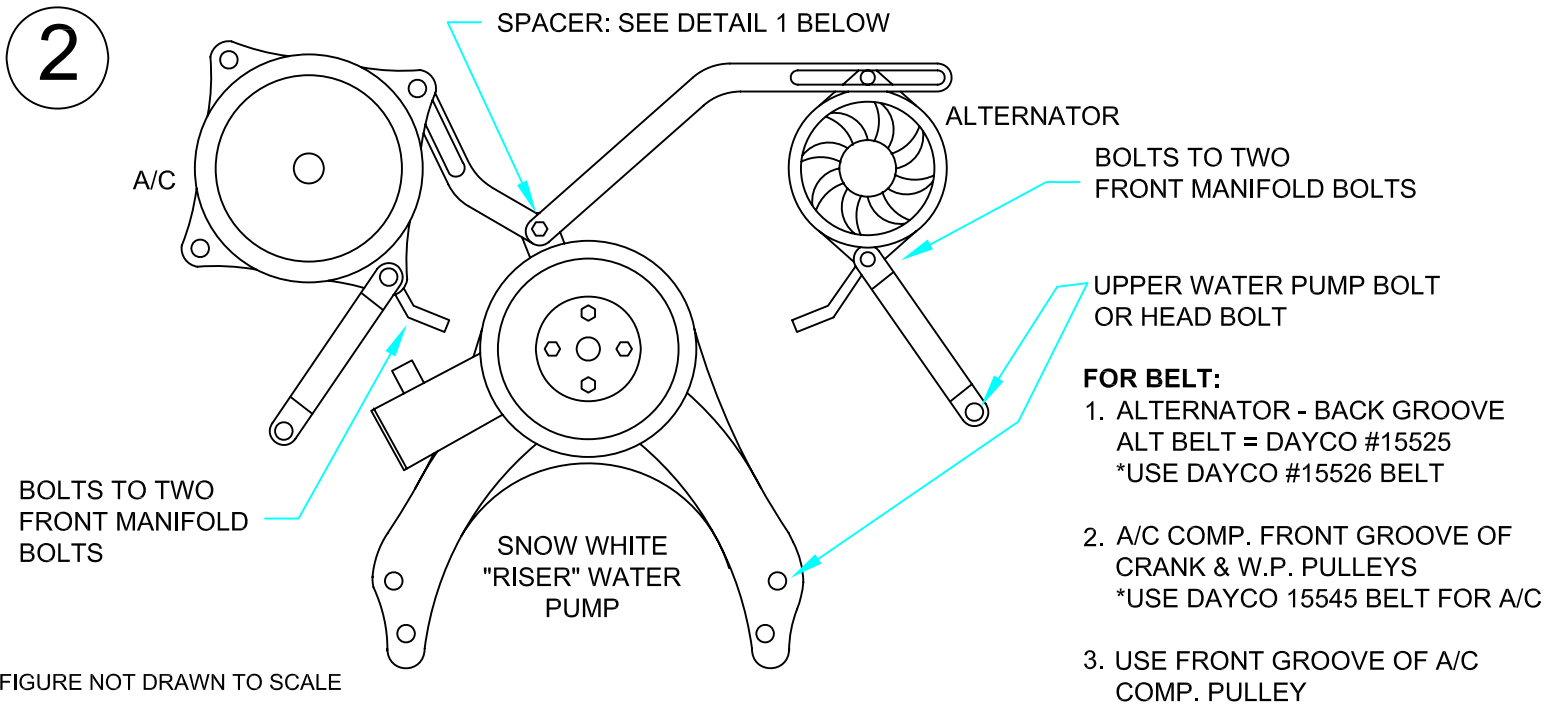
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\* ALTERNATOR MOUNTS ON DRIVER SIDE

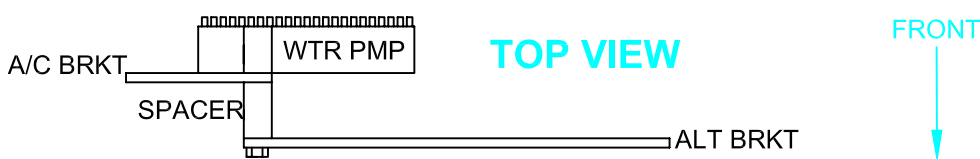


\* FIGURE NOT DRAWN TO SCALE

2



\* FIGURE NOT DRAWN TO SCALE



DETAIL 1

WATER PUMP HOUSING  
ACCESSORY BRACKET DETAIL  
ADJ. SETUP