

**NOTE:** Installation instructions may be included in the transmission oil cooler kit you purchase. If so, follow those instructions first and use this information only if needed.

#### **TOOLS NEEDED:**

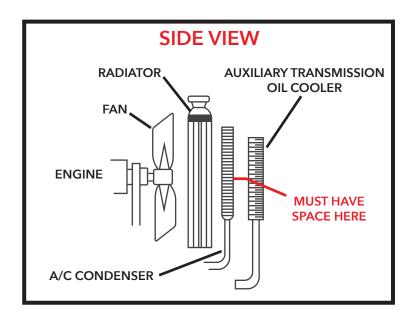
- Screwdriver for hose clamps
- Pliers
- · Hand Drill and a selection of drill bits
- Razor knife to cut rubber cooler hose
- Hacksaw or small pipe cutter to cut cooler lines
- · A drain pan or small container to catch fluid

### **BEFORE YOU BEGIN**

- 1. Cut hoses so they are a couple of inches longer than your rough measurements.
- 2. The cooler must mount no closer than 1/2" in front of the radiator or A/C condenser. The secondary transmission cooler must be securely mounted so that it does not come in contact with any moving parts.

# **MOUNTING THE COOLER**

1. The transmission cooler kit you purchased will include the mounting hardware needed to mount the cooler. The cooler should be mounted  $\frac{1}{2}$  to 1 inch in front of the radiator or A/C condenser for vehicles with air conditioning.



2. Find the two steel tubes (transmission cooler lines) running from the transmission to the original equipment cooler/radiator.

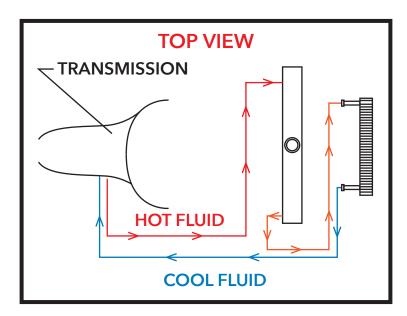
- 3. Position the auxiliary transmission cooler so its outlets face toward the existing transmission cooler lines entering the radiator.
- 4. With the mounting hardware provided with the oil cooler kit, mount the cooler 1/2 to 1 inch in front of the radiator or A/C condenser.

**NOTE:** The cooler may be mounted in a different location, but doing so may reduce the cooler's effectiveness.

### **CONNECTING THE COOLER**

- 1. Connect the cooler using the illustration below as a guide. On all automatic transmissions, the transmission oil flows from the transmission through the original equipment cooler, installed inside the radiator, and back to the transmission. For the auxiliary cooler to work properly (in series) it must be connected so the transmission oil flows through the auxiliary cooler after it flows through the original equipment cooler. Here's a simple method for determining which direction the transmission oil flows in and out of the original equipment cooler.
- 2. Place a catch pan under the radiator. Using an open-end wrench, disconnect one of the two steel lines (transmission cooler lines) where it enters the radiator. Now, ensure that the vehicle cannot start during cranking. Have a have a helper crank the engine for just a few seconds. The transmission oil will flow either from the radiator (where you removed the cooler line) or from the disconnected cooler line. If the oil flows from the radiator, this is the outlet. If the oil flows from the disconnected cooler line, it means the oil flows out of the radiator at the other cooler line, making it the outlet. Now that you know which is the outlet, install the hose connector adapter that came with the auxiliary cooler kit to the outlet neck on the radiator.

**NOTE:** The auxiliary cooler kit you purchase includes the most common fittings for installation, however, some vehicles may require fittings not included with the kit. If additional fittings are required, contact the auto parts store where you purchased the kit for assistance.



- 1. Hot transmission fluid flows from the transmission to the engine's radiator.
- 2. The cooled fluid flows out of the radiator to and through the auxiliary cooler.
- 3. The cooled fluid leaves the auxiliary cooler and travels back to the transmission.

- 3. Attach the rubber hose to either of the outlets on your new auxiliary cooler. Slip a hose clamp over the connection point. Run the other end of the hose to the adapter you placed on the radiator in the previous step. Mark the needed hose length and cut hose accordingly. Slip the hose over the adapter fitting and secure with a hose clamp. Tighten hose clamps to 15 to 20-inch pounds of torque.
- 4. Repeat these same hose fitting instructions for the second hose being certain to torque the clamps at 15 to 20-inch pounds.

## **CHECK THE INSTALLATION**

- 1. Check the auxiliary cooler to be sure it is mounted securely and that there is some space between the cooler and the radiator or A/C condenser.
- 2. Check the hose clamps for proper tightness.
- 3. Check to be sure the rubber hoses are not touching any other parts and that there are no sharp bends or kinks.
- 4. Start your engine and allow it to warm up to normal operating temperature. Check for leaks as the engine is warming.
- 5. Check transmission fluid level and add fluid if necessary. The installation of the auxiliary cooler should require some additional fluid to be added.

IMPORTANT: During the first week after installing a transmission oil cooler and then periodically from the on, check connections for leaks and check hose clamps to be certain they remain tight. Also, don't forget to check the fluid level and condition periodically.