

# **Component Procedures: Transmission Cooler**

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# Component Procedures: Transmission Cooler

## Components (itype\_392)

TRANSMISSION OIL  
COOLER

All models equipped with an  
automatic transmission

are equipped with a transmission oil cooler (water-to-oil) mounted internally within the radiator tank. This  
internal cooler is supplied as standard equipment on all models equipped with an automatic transmission.

Transmission oil is cooled when it passes through this separate cooler. In  
case

of a leak in the internal radiator mounted transmission oil cooler, engine coolant may become mixed with  
transmission fluid

or transmission fluid may enter the cooling system. Both cooling system and transmission should be drained and  
inspected if the internal radiator mounted

transmission cooler  
is leaking.

These models do not come equipped with "auxiliary" transmission air-to-oil coolers.

## Flushing Coolers and Tubes (Article 2085022)

When a transmission failure has contaminated the fluid, the oil cooler(s) must be flushed. The  
torque converter

must also be replaced. This will insure that metal particles or sludged oil are not later transferred back  
into the reconditioned (or replaced) transmission.

The only recommended procedure for flushing coolers and lines is to use Tool 6906 Cooler Flusher.

**WARNING: WEAR PROTECTIVE EYE-WEAR THAT MEETS THE REQUIREMENTS OF OSHA AND ANSI Z87.1-1968. WEAR STANDARD  
INDUSTRIAL RUBBER GLOVES.**

**KEEP LIGHTED CIGARETTES, SPARKS, FLAMES AND OTHER IGNITION SOURCES AWAY FROM THE AREA TO PREVENT THE IGNITION  
OF COMBUSTIBLE LIQUIDS AND GASES. KEEP A CLASS (B) FIRE EXTINGUISHER IN THE AREA WHERE THE FLUSHER WILL BE  
USED.**

**KEEP THE AREA WELL VENTILATED.**

**DO NOT LET FLUSHING SOLVENT COME IN CONTACT WITH YOUR EYES OR SKIN: IF EYE CONTAMINATION OCCURS, FLUSH EYES  
WITH WATER FOR 15 TO 20 SECONDS. REMOVE CONTAMINATED CLOTHING AND WASH AFFECTED SKIN WITH SOAP AND WATER.  
MEDICAL ATTENTION.**

**COOLER FLUSH USING TOOL 6906**

1. Remove cover plate filler plug on Tool 6906. Fill reservoir

1/2 to 3/4 full

of fresh flushing solution. Flushing solvents are petroleum based solutions generally used to clean  
automatic transmission

components. **DO NOT** use solvents containing acids, water, gasoline, or any other corrosive liquids.

2. Reinstall filler plug on Tool 6906.

3. Verify pump power switch is turned OFF. Connect red alligator clip to positive (+) battery post. Connect  
black (-) alligator clip to a good ground.

4. Disconnect the cooler lines at the transmission.

**NOTE:**

When flushing

transmission cooler

and lines, **ALWAYS** reverse flush.

The

converter drainback valve

must be removed and an appropriate replacement hose installed to bridge the space between the transmission  
cooler line and the cooler fitting. Failure to remove the drainback valve will prevent reverse flushing the  
system.

5. Connect the BLUE pressure line to the OUTLET (From) cooler line.

6. Connect the CLEAR return line to the INLET (To) cooler line

7. Turn pump ON for two to three minutes to flush cooler(s) and lines. Monitor pressure readings and clear  
return lines. Pressure readings should stabilize below

20 psi.

for vehicles equipped with a single cooler and

30 psi.

- for vehicles equipped with dual coolers. If flow is intermittent or exceeds these pressures, replace cooler.
8. Turn pump OFF.
  9. Disconnect CLEAR suction line from reservoir at cover plate. Disconnect CLEAR return line at cover plate, and place it in a drain pan.
  10. Turn pump ON for 30 seconds to purge flushing solution from cooler and lines. Turn pump OFF.
  11. Place CLEAR suction line into a one quart container of MOPAR ATF +4, type 9602 automatic transmission fluid.
  12. Turn pump ON until all transmission fluid is removed from the one quart container and lines. This purges any residual cleaning solvent from the transmission cooler and lines. Turn pump OFF.
  13. Disconnect alligator clips from battery. Reconnect flusher lines to cover plate, and remove flushing adapters from cooler lines.

### **Cooler Replacement (Article 2084829)**

#### **AUTOMATIC TRANSMISSION OIL COOLER**

The internal transmission oil cooler located within the radiator is not serviceable. If it requires service, the radiator must be replaced. Once the repaired or replacement radiator has been installed, fill the cooling system and inspect for leaks. If the transmission operates properly after repairing the leak, drain the transmission oil pan.

. Inspect for sludge. Inspect for a dirty or plugged inlet filter. If none of these conditions are found, the transmission and torque converter may require reconditioning.