Installation Instructions

This guide covers the following:

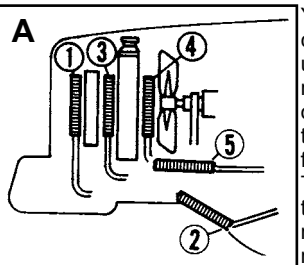
Transmission Fluid Cooler System

Congratulations, you have made a wise decision. Thank you for purchasing our product.

Transmission Fluid Cooler System

IMPORTANT! READ ALL INSTRUCTIONS BEFORE BEGINNING INSTALLATION.

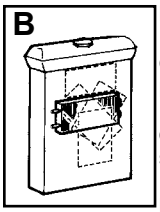
A



No. 1
In front of the radiator; 100% efficient.
No. 2
Placed at an angle between the frame, in front of the bumper; 85% efficient.
No. 3
Between A/C condenser and radiator; 75% efficient.
No. 4
Between radiator and fan; 65% efficient.
No. 5
Under fan in engine compartment; 60% efficient.

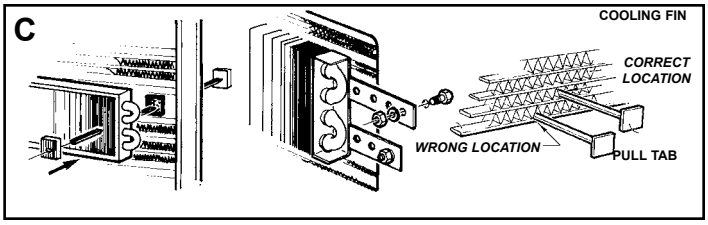
Your cooler coil relies upon air moving over and through its fins. Therefore, the coil must be mounted in the air flow. This can be either fan air or ram air. It can be placed in front of or behind the radiator, although the two should not touch each other, 1/4" (6.35mm) clearance is adequate. The coil may be mounted in any other location where it receives air flow, such as directly below the fan and/or behind the front bumper (see illustration A).

B



Naturally it should be protected from flying objects and contact with any other moving parts. The coil can be placed vertically or horizontally (see illustration B).
Now mount the coil to the vehicle. Consider the length of the hose supplied. Attach the coil with the nylon tie straps and secure with a nylon button on the other end. If the coil has mounting brackets, you may use nuts, bolts, screws, and metal straps to attach. Place a foam pad between the two coils. If additional hose is required, use hose suitable for 300°F (149°C) and 250 lb. pressure rated oil hose.

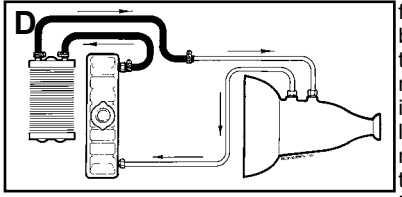
C



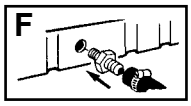
THINLINE COOLERS (3/4" thick) MUST BE INSTALLED IN SERIES ONLY! HEAVY DUTY COOLERS MAY BE INSTALLED IN SERIES OR BYPASS METHOD.

SERIES METHOD (see illustration D)
Locate the transmission fluid lines. These will be steel tubes, 5/16" or 3/8" (8mm or 10mm) in outside diameter. They can be found running from the transmission to the bottom or the side of the radiator. Determine which is the return line. To assist you in identifying which is the return line, do the following: disconnect the electrical coil wire from the coil. Disconnect BOTH transmission lines at the radiator, not the transmission. Note which line is attached to which fitting. Place a plastic bag over the ends of each line, secure in place with a rubber band. Crank engine over once or twice-the disconnected coil wire will prevent the engine from starting. Observe the two transmission lines; the one with the fluid is the pressure (supply) line. The other line is the return line. Install the brass fitting supplied into radiator return line (see illustration F). Use back up wrench on fitting in radiator to avoid damage to radiator.

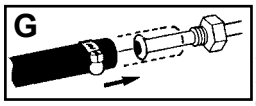
D



F



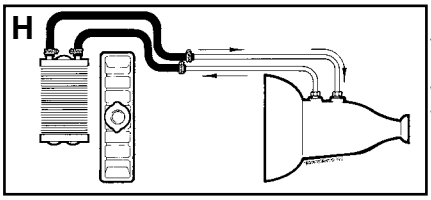
G



Use the special high pressure/temperature hose supplied. Route hose from one end of the coil to the brass fitting in the radiator. Then route from the coil to the end of the transmission tube, if there is a nut on the transmission tube push it back out of the way(see illustration G). Hoses should not be loose or hanging. Avoid sharp edges and bends.
Secure with the hose clamps. Do not over tighten the clamps. Clamps are the proper tension when the hose surface bulges up slightly through the slots in the clamp bands. Position 1/8" (3mm) from end of hose . Reconnect the coil wire to the electrical coil. Start engine and immediately check for leaks. Check transmission fluid level. Add fluid to bring up to manufacturer specified operating level.
CAUTION: Avoid hot exhaust pipes, manifolds, or headers. DO NOT BEND the hose sharper than a 5 inch radius. Secure hoses with clamps or tie-straps if necessary.

BYPASS METHOD (see illustration H)
Locate the transmission oil lines. These will be steel tubes that are 3/8" or 5/16" outside diameter (10mm or 8mm) and run from the transmission to the bottom or side of the radiator. Unscrew the lines from the radiator. It may be necessary to use a back-up wrench on the radiator fittings to avoid damaging the radiator. Use the special high pressure/temperature hose supplied and connect the coil to the transmission oil lines. Secure with hose clamps. Do not over tighten the clamps. Clamps are the proper tension when the hose surface bulges up slightly through the slots in the clamp bands. Position 1/8" (3mm) from end of hose. Hoses should not be loose or hanging. Avoid sharp edges and bends. Start engine and immediately check for leaks. Check transmission fluid level. Add fluid to bring up to manufacturer specified operating level.

H



CAUTION: Avoid hot exhaust pipes, manifolds, or headers. DO NOT BEND the hose sharper than a 5 inch radius. Secure hoses with clamps or tie-straps if necessary. After installation, operate the vehicle in a normal manner for a day or so. Recheck all fittings and clamps for proper tension. Retighten if necessary.

Additional accessories available:

P/N 103 Metal Mounting Strap System
P/N 109 Heavy Duty Metal Mounting System
P/N 105 Nylon Tie Mounting System
P/N 130 Replacement Hose 11/32" I.D. x 4'
P/N 1060 Transmission Fluid Thermostat
P/N 15106 Temperature Gauge System
P/N 15146 Roll Teflon Tape 1/2" x 310"
P/N 15152 Brass Fittings (2) 3/8" Hose Barb x 3/8" NPT

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