

Transchill Arctic Black Transmission Cooler Kit Installation Guide for Toyota Land Cruiser 200 Series 2008-2022

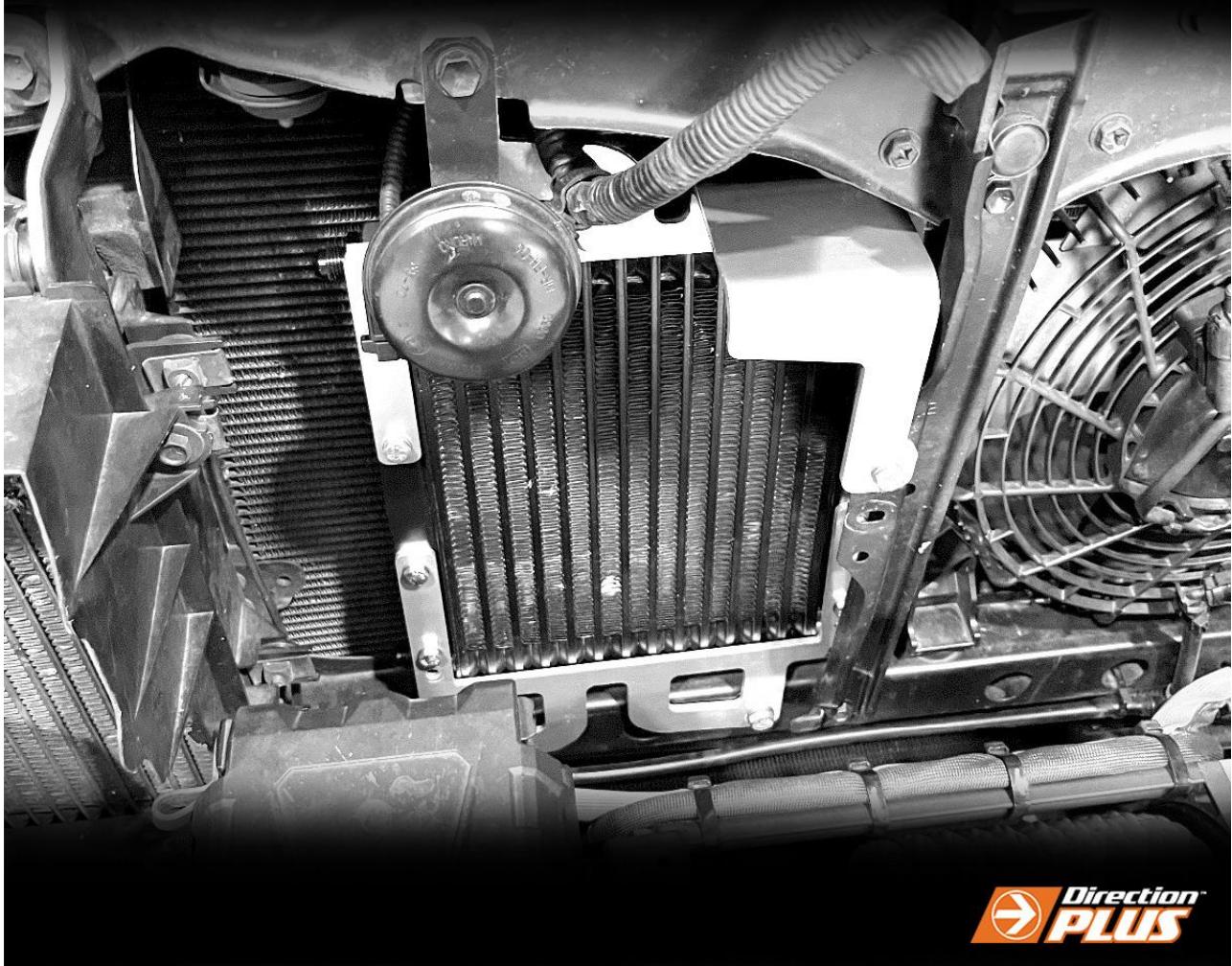
This document is to be used as a guide for the installation of the Direction Plus Transchill Arctic Black Transmission Cooler Kit (TCB615DPK) to a 2008-2022 Toyota Land Cruiser 200 Series with automatic transmission. **It is recommended that the installation of the product be carried out by a competent qualified mechanic.**

Included in the kit



Loose	Bagged	Cooler Mounting Hardware
1 x 32mm Transmission Cooler (TCC14DP)	4 x 15-17mm Clamps (FMC10)	9 x M6x16 Bolts (SSSS304m616)
1 x Upper Mounting Bracket (TCB615-BR)	8 x Cable Ties (802078)	17 x M6 Flat Washers (FMW6)
1 x Lower Mounting Bracket	2 x M8x16 Bolts (SSSS304M816)	8 x M6 Nyloc Nuts (FMN6)
1x 3m of 3/8" Hose (7212-381BK)	4 x M8 Flat Washers (FMW8)	
	2 x M8 Nuts (FMN8)	
	2 x M8 Spring Washers (FMSW8)	
	4 x M6 Flat Washer (FMW6)	
	2 x -6 to M16x1.5 Adaptors (DP816-6-M1615)	
	2 x M16 Alloy Washers (PLFW16)	
	2 x -6 to 3/8" 90° Tail (DPP0090-06)	

MOUNTING LOCATION
TRANSCHILL TRANSMISSION OIL COOLER KIT
TCB615DPK

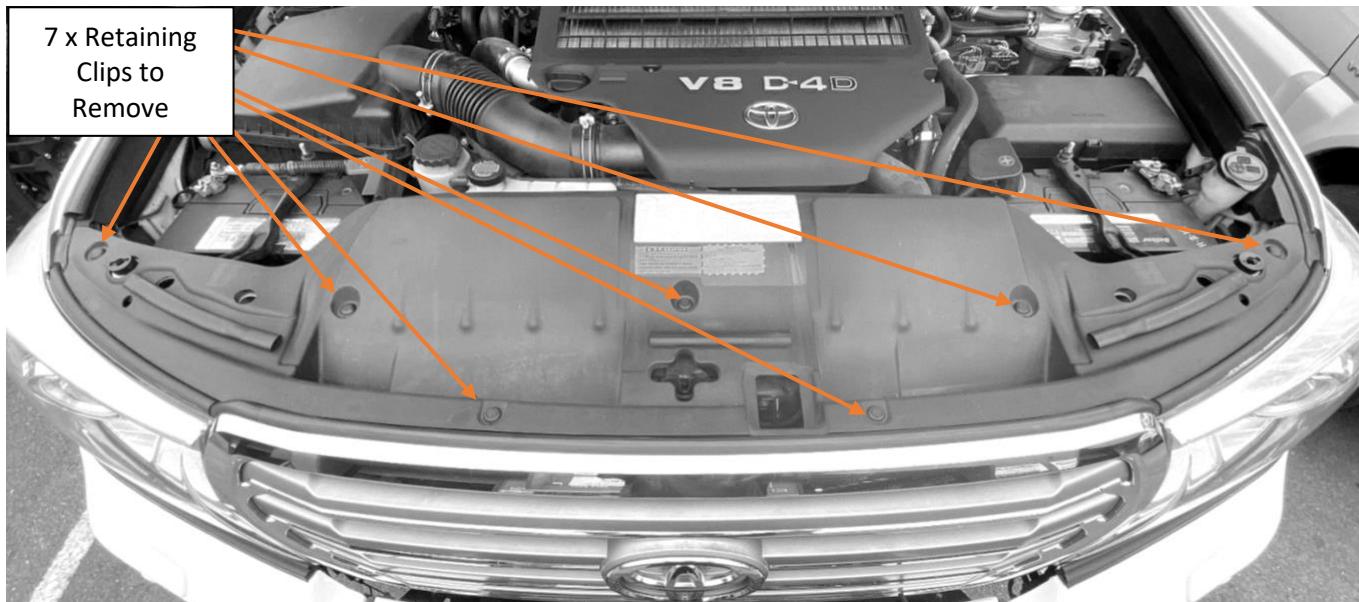


Tools Needed:

- Spanners
- Sockets
- Screw Drivers
- Pliers
- Snips/Cutter
- Rags
- Small container for catching oil drips.

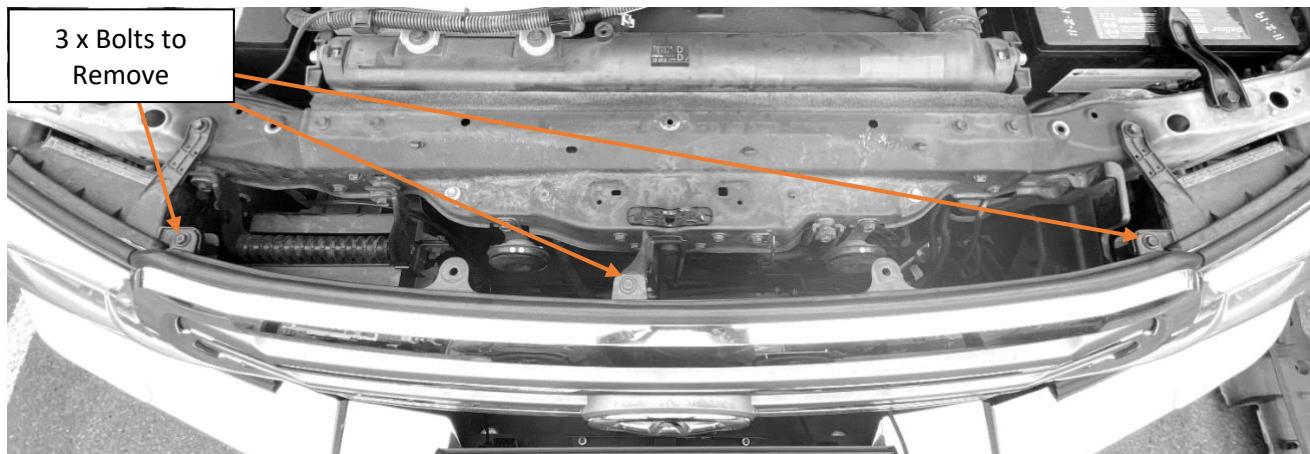
Installation Guide

1. Begin by removing the top trim panel between the radiator support and. It is held in place at the top by seven clips. Once the clips are removed it can be lifted and removed.

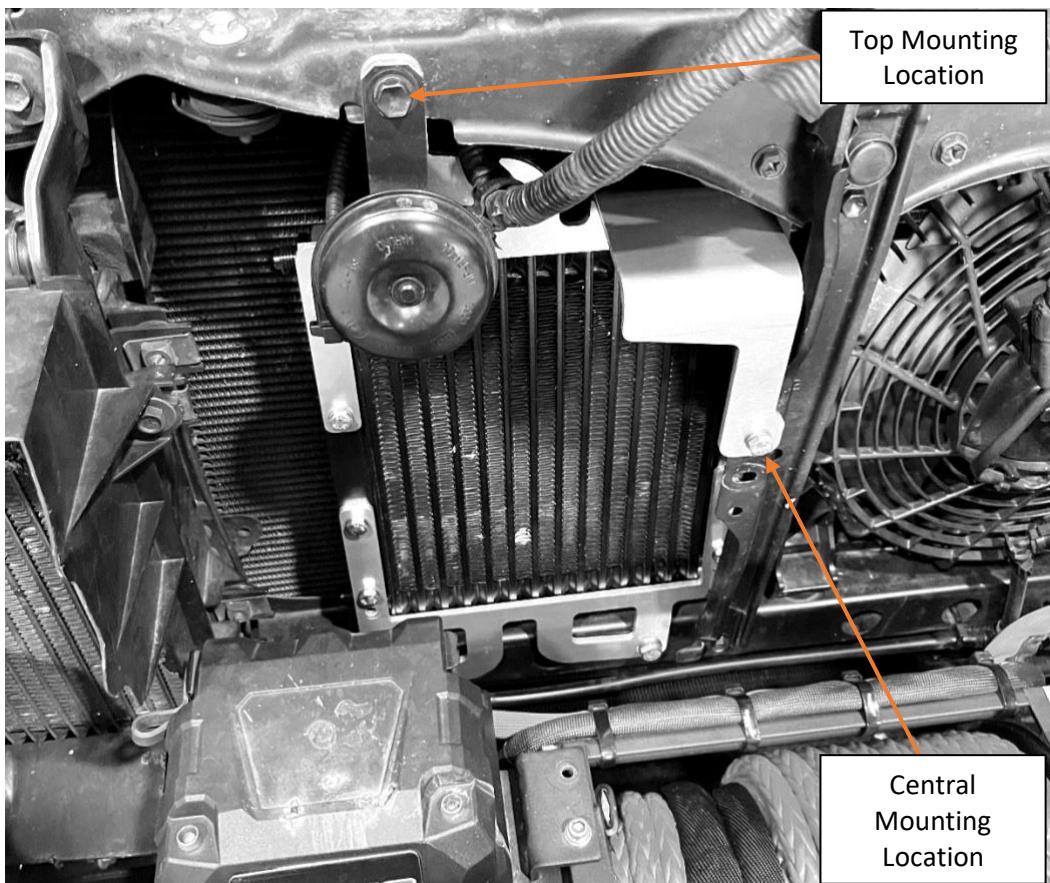


Land Cruiser 200 Series Front of Engine Bay

2. Remove the top three bolts that help support the grille. Next separate the grille from the clips that hold it to the headlights in the top corners. From the inside of the grille push the tabs towards the headlight to free to the top of the grille. Next is to separate the grille from stock front bumper. Pry down on the clips gently behind the grill so each one pops out. Remove the M8 bolt that retains the horn on the driver side and lift the horn up of the way.

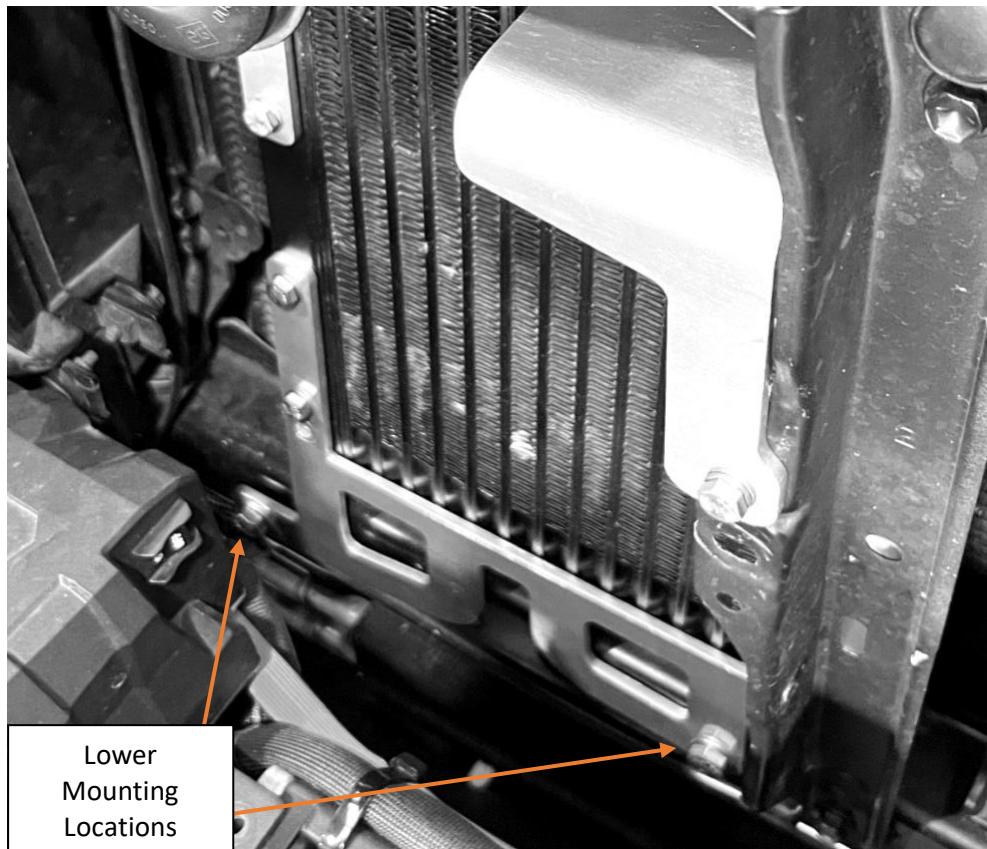


3. Assemble the transmission cooler to the brackets in the kit. The assembly will use all 8xM6 bolts, 16xM6 flat washers and 8xM6 nyloc nuts. The cooler mounts to the rear face of the brackets.
4. Using Loctite 567 or similar, secure the M16x1.5 fittings into the cooler, making sure to use an alloy washer on each.
5. Bolt the new transmission cooler and bracket assembly into the vehicle locating the top off the M8 threaded boss the horn uses as a mounting location. Sandwich between the horn and mounting face. Use the original bolt here.

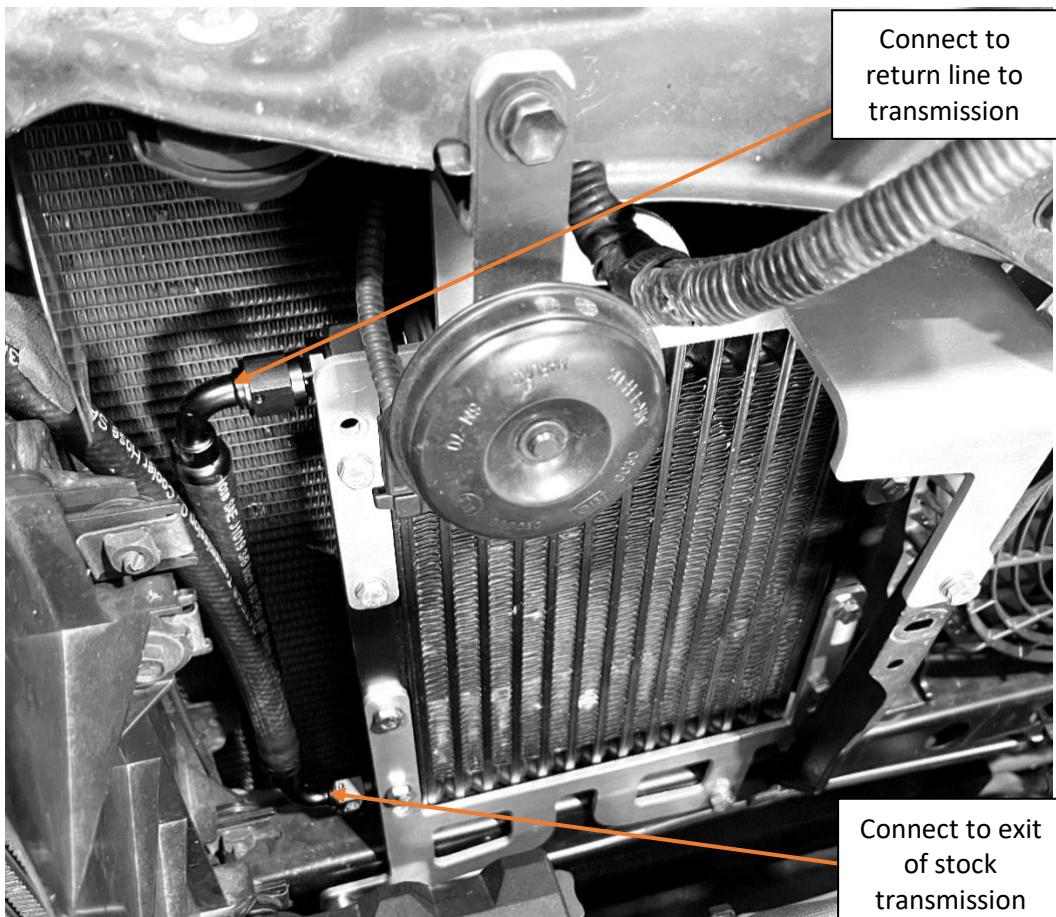


Transmission Cooler Assembly Bolted in Place.

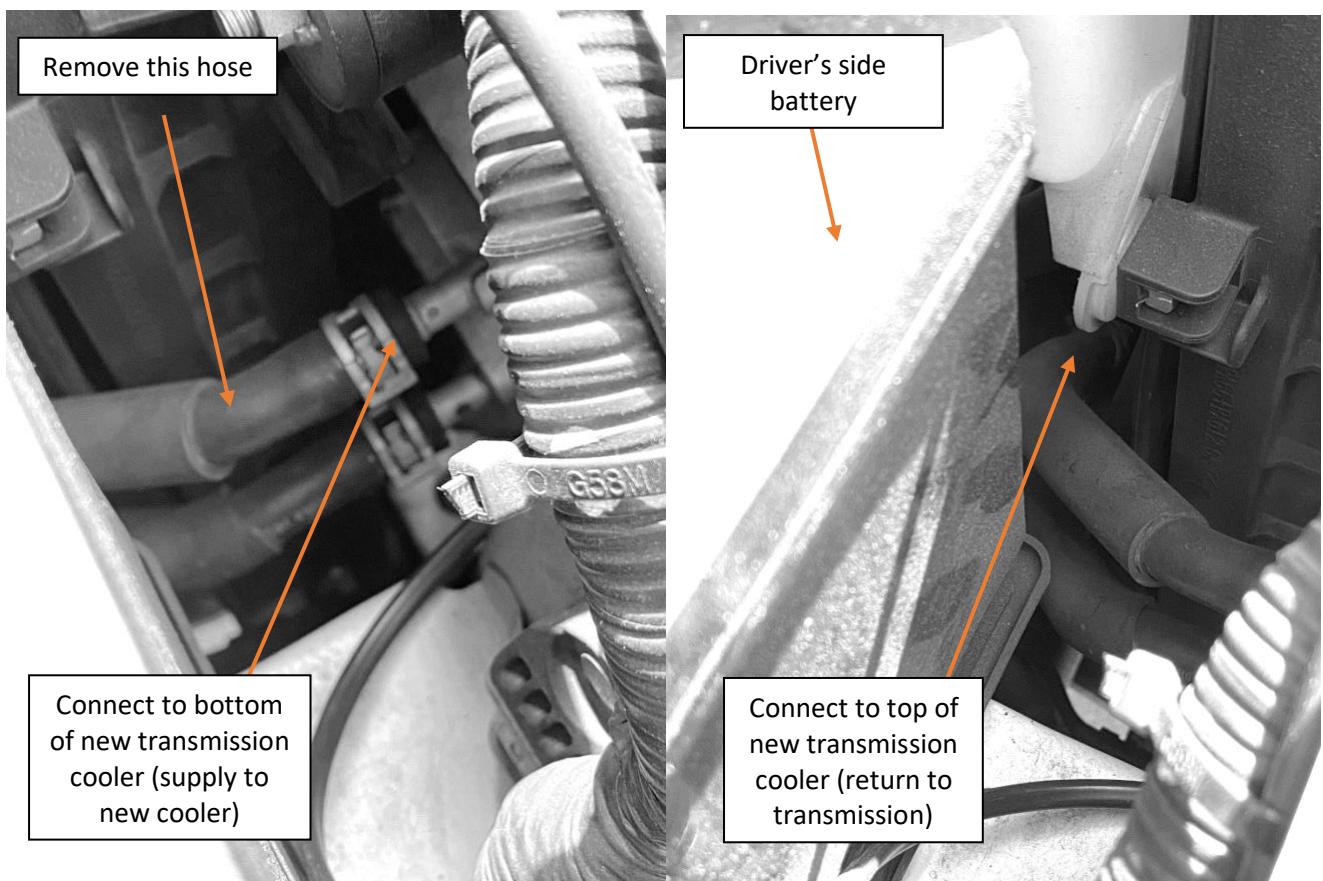
6. Use a M6x16 bolt, M8 spring washer and M8 flat washer to secure the central mounting tab to the spare M6 threaded hole in the center bonnet release support.
7. Use the two M8x16 bolt, with an M8 flat washer under each head and insert the bolts from the front through the lower mounting hole and bottom radiator support panel. Use an M8 flat washer, M8 spring washer and M8 nut to secure from the back side. NOTE: If the cooler is too close to the center support, remove the M6 bolt that secures it to the lower radiator panel and space out the support with between 1-3 M6 washers from the kit, this will provide additional clearance.



8. Cut the 3/8" hose in half and push one end of each onto the two 90° -6 fittings.
9. Use the 90° fittings on each of the ports, again using Loctite 567 or similar to secure in place. The 90° fittings should be aiming at each other. Do not tighten yet!
10. From the lower port fitting, run the hose on the driver's side of the vehicle. Measure and cut the hose to length and connect the other end to the outlet port on the stock transmission cooler (located under the power steering reservoir in the engine bay), secure in place with a clamp.



Finished Cooler Assembly in Place





Stock transmission cooler lines under power steering reservoir, the top line is removed.

11. From the top port fitting, run the hose on the driver's side of the vehicle. Measure and cut the hose to length and connect the other end to the hard steel return line to the transmission that used to connect to the stock transmission cooler, secure in place with a clamp.
12. Tighten down the -6 90° fittings now the hoses are connected and use cable ties to secure any loose cooler line to prevent rubbing.
13. The cooler itself holds 500mL of fluid, plus 70mL per 1m of hose, calculate the total amount and top up the transmission using the correct factory specified transmission fluid.
14. Reinstall the grille and cowl panel in reverse as how it was removed in step 1 & 2.

End of Installation Guide