



Direction-Plus Transmission Cooler Installation Guide for Nissan Navara NP300 D23 2015-2023

This document is to be used as a guide for the installation of the **Direction-Plus Transchill Transmission Cooler Kit (TCB630DPK)** to a **2015-onward Nissan Navara D23 NP300** with automatic transmission.

It is recommended that the installation of the product be carried out by a competent qualified mechanic.

Included in the kit



<i>Loose</i>	<i>Bagged</i>	<i>Cooler Mounting Hardware</i>
1 x 32mm Transmission Cooler (TCC14DP)	4 x 12-14mm Clamps (FMC12)	8 x M6x16 Bolts (SSSS304M616)
1 x Upper Mounting Bracket (TCB630-BR)	8 x Cable Ties - 802078	16 x M6 Flat Washers (FMW6)
1 x Lower Mounting Bracket	2 x -6 to M16x1.5 Adaptors (DP816-6-M1615)	8 x M6 Nyloc Nuts (FMN6)
1x 3m of 5/16" Hose – (27060)	2 x M16 Alloy Washers (PLFW16)	1 x 14mm Insulated P Clip (PCL14)
	1 x -6 to 5/16" Straight Tail (DPP0001-06-516)	
	1 x -6 to 5/16" 90° Tail (DPP0090-06-516)	

Mounting Location

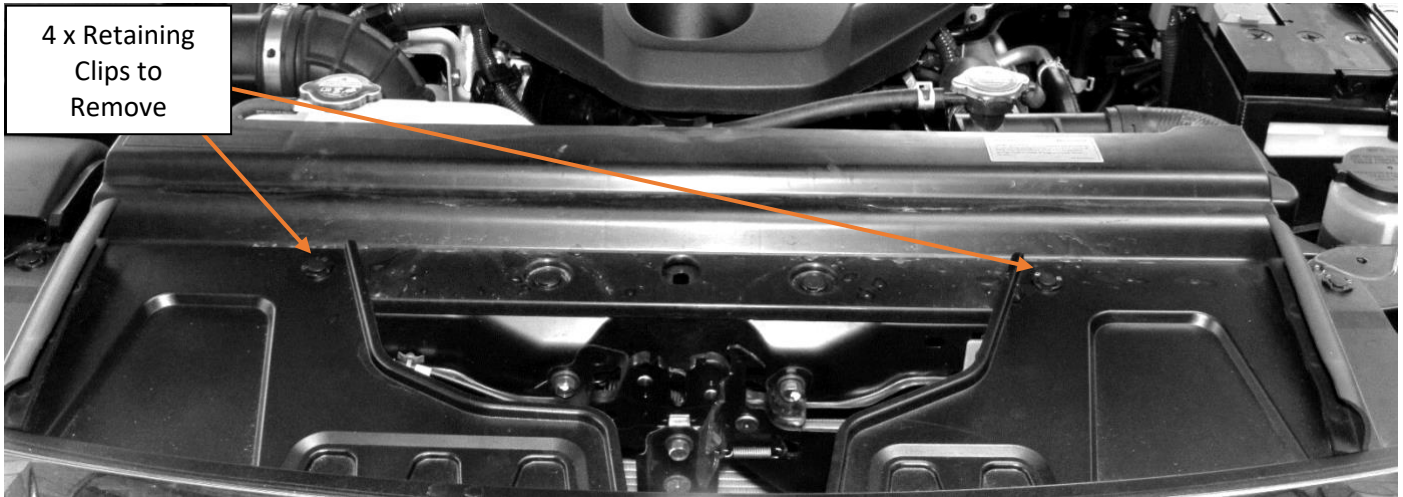


Tools Required:

- Spanners
- Sockets
- Screw drivers
- Pliers
- Snips/Cutters
- Rags

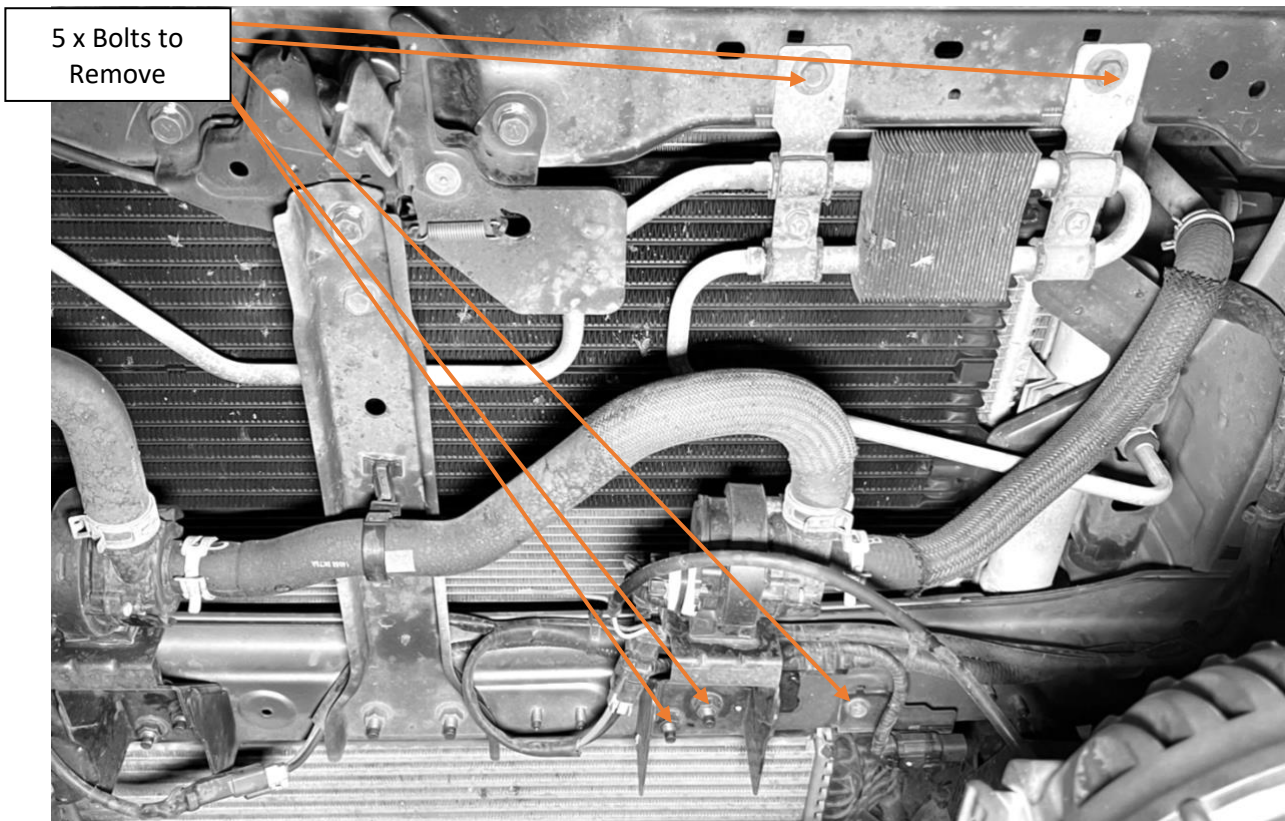
Installation Guide

1. Begin by removing the grille between the headlights. It is held in place at the top by two or four clips at the top (depending on year model) and four clips down the sides next to the headlights (release by rotating 90° with a screwdriver). Once the clips are removed it needs to be carefully removed from the clips that hold it to the stock front bumper. Pry down on the clips gently behind the grill so each one pops out.

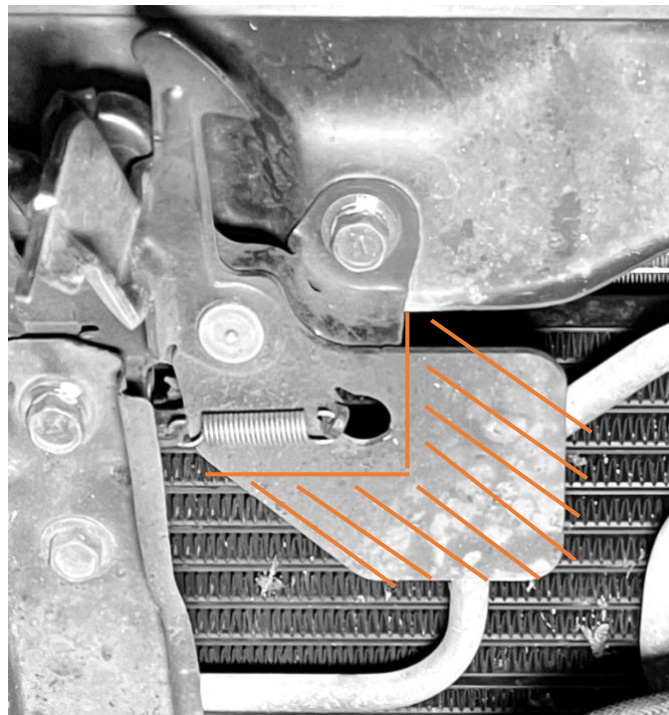


NP300 Front of Engine Bay

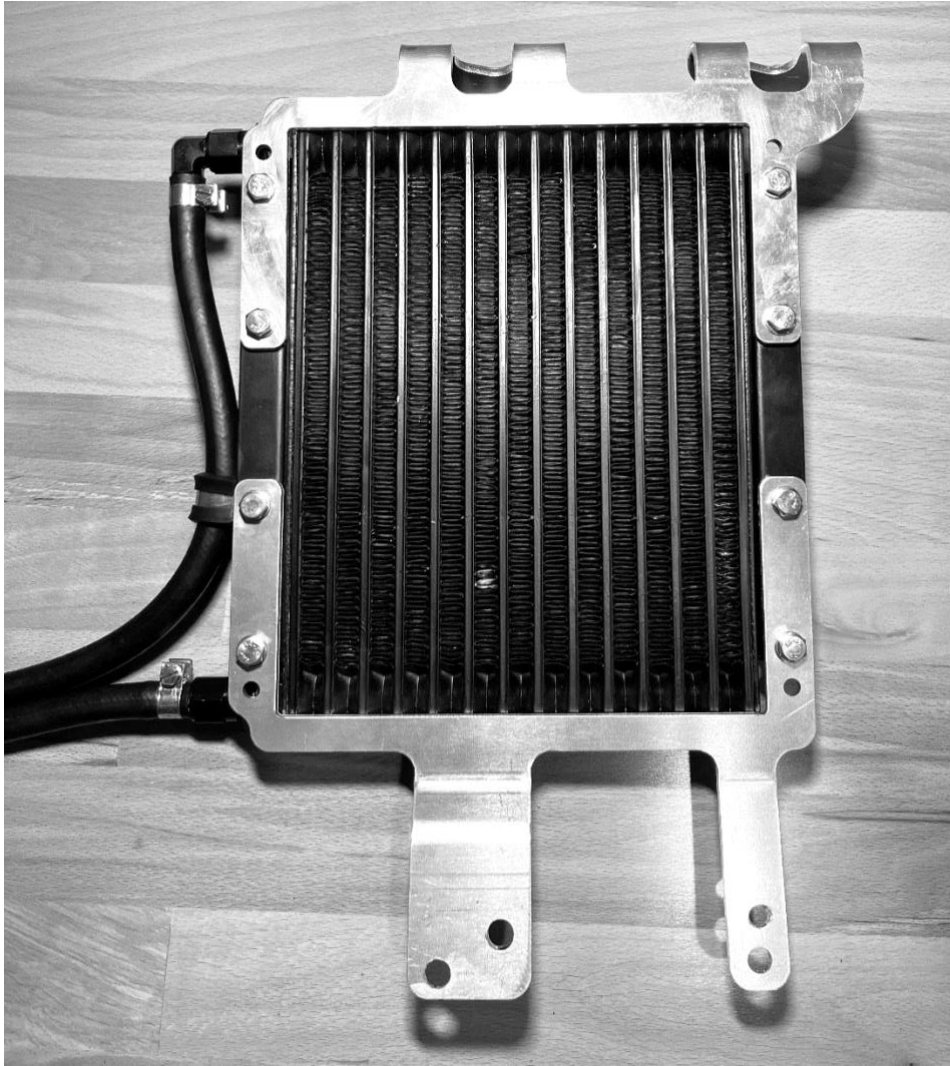
2. Remove the top two bolts on the passenger side steering cooler. These are the new top transmission cooler bracket mounting locations. Remove the lower M6 bolt that secures the external temperature sensor. Remove the two nuts that secure the bracket the passenger side coolant pump it bolted to. These are the new lower transmission cooler bracket mounting locations.



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.
4. Using Loctite 567 or similar, secure the M16x1.5 fittings into the cooler, making sure to use an alloy washer on each.
5. Use the 90° fitting on the top port and the straight fitting on the lower port, again using Loctite 567 or similar to secure in place. The 90° fitting should be facing down towards the lower fitting.
6. Cut the supplied 5/16" hose in half pushing one end of each onto the fittings, and secure in place with a clamp.
7. Secure the top line to the side of the cooler with an insulated P clip as shown.
8. **Optional But Highly Recommended**, trim the bonnet release latch of excess material to provide more clearance to the cooler. Ensure raw/exposed metal is painted to stop rust.

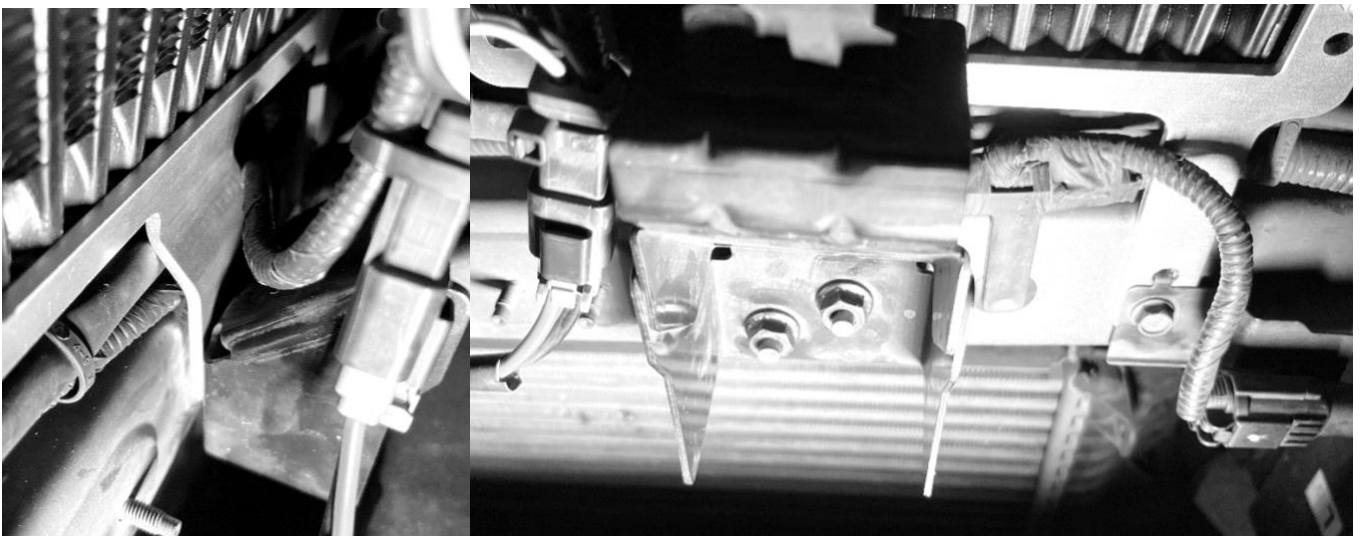


Trim along lines and remove the piece with the hatching

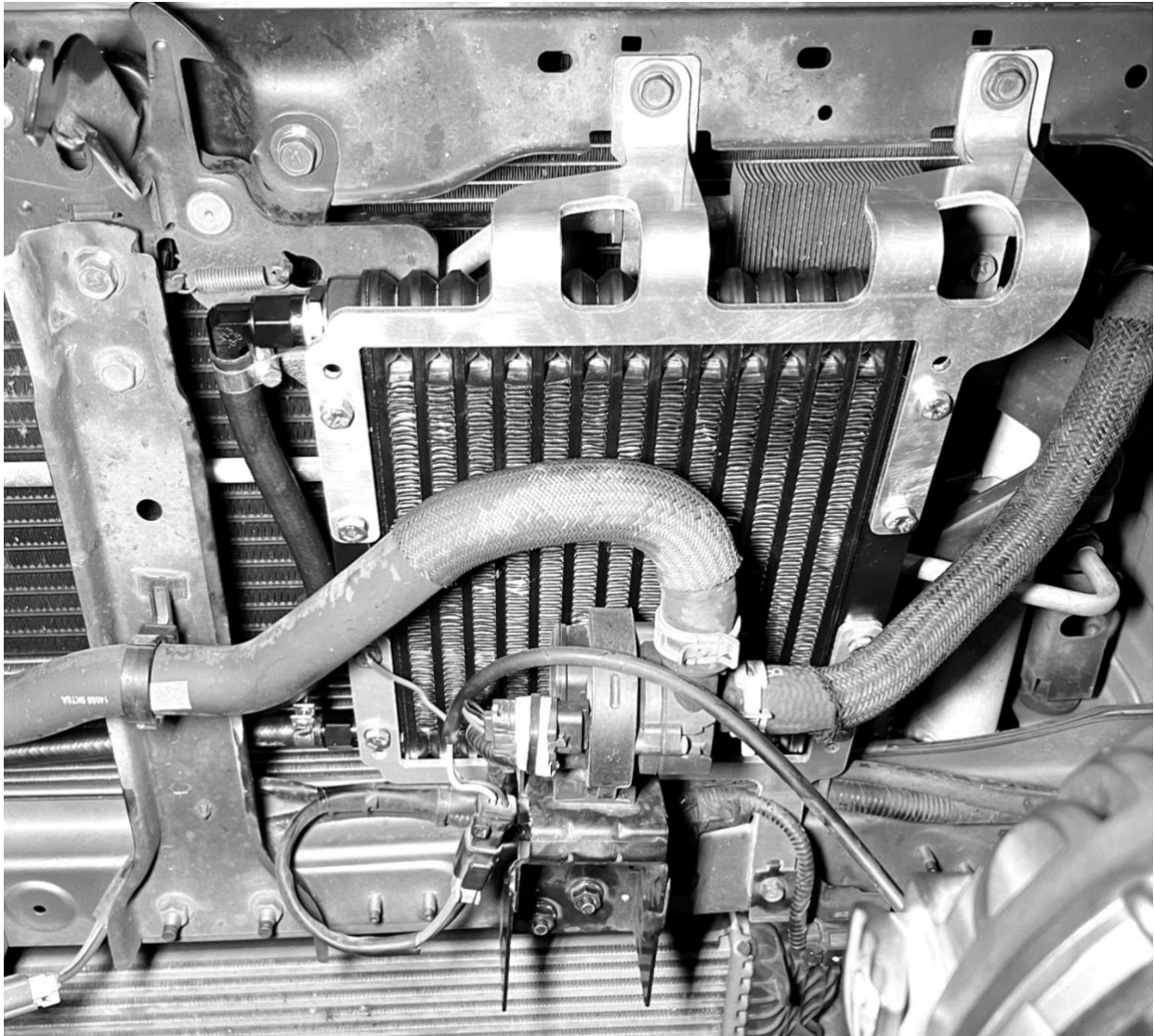


Cooler sits on rear face of brackets, with nuts towards the rear, bolts to the front.

9. Bolt the new transmission cooler and bracket assembly into the vehicle locating off the factory bolts that were removed in step 2. Leave the lower nuts off at this stage.

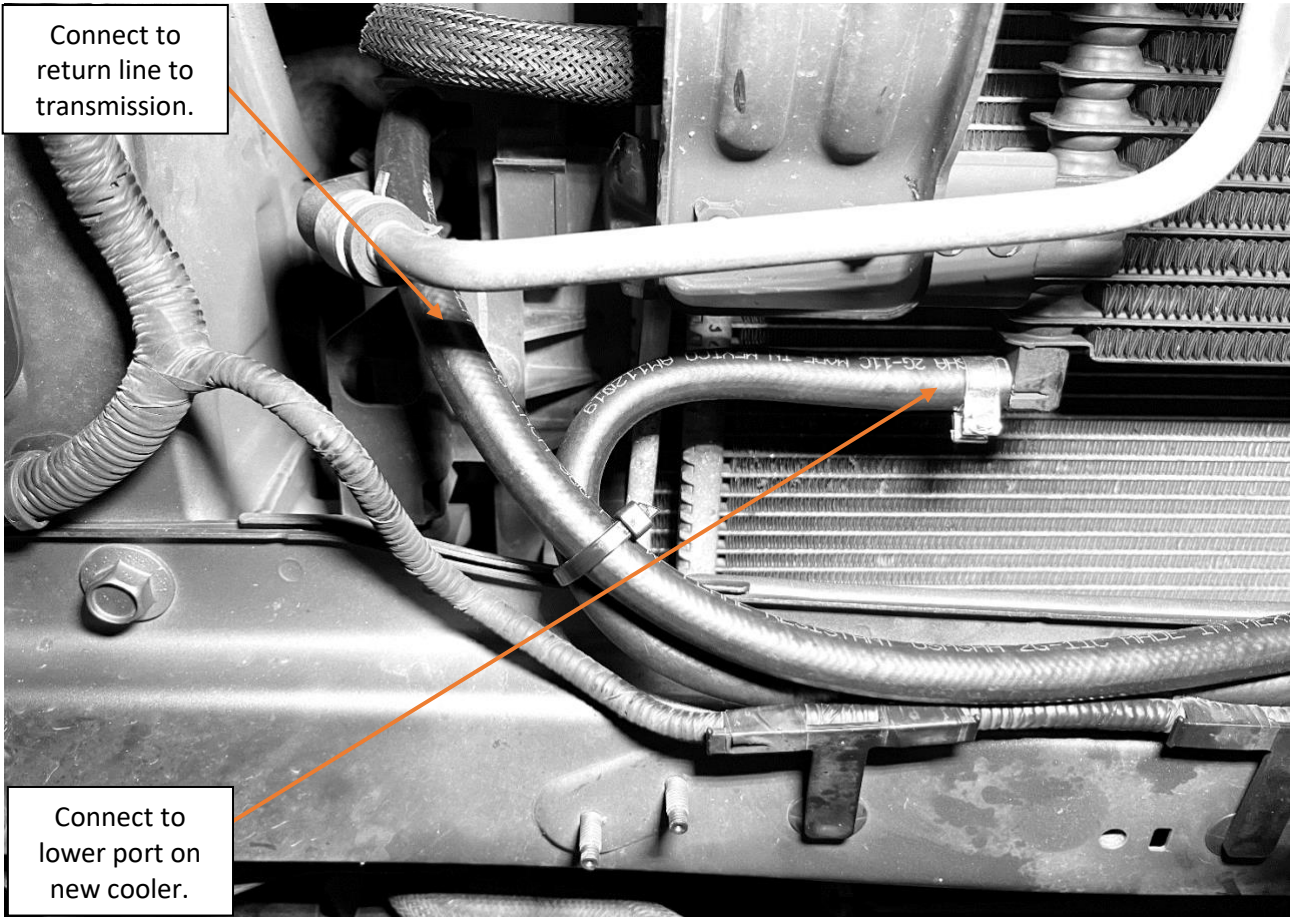


Wiring layout around lower mounting location. There is enough clearance for all factory wires with no pinching.

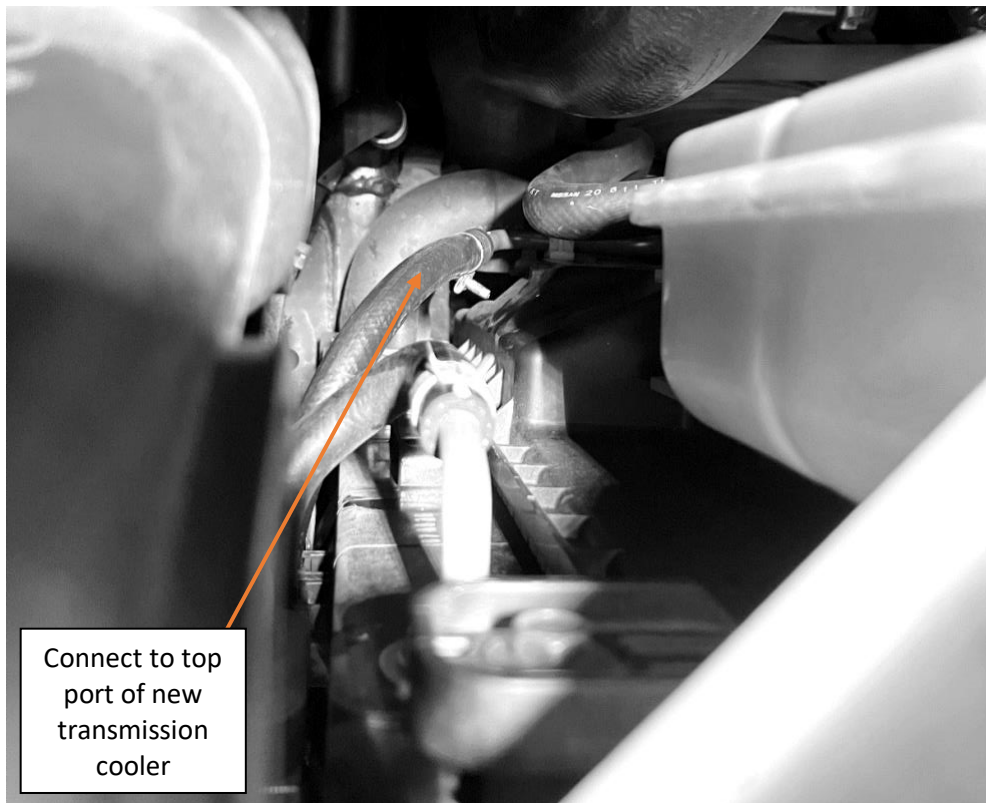


Transmission Cooler Assembly Bolted in Place. Note, Hoses already installed in photo.

10. Use M8 Flat washers to space out the coolant pump bracket so the coolant pump clears the new cooler. It should be between 1 and 3. Once clearance is achieved secure the original nuts to secure the bracket back in place.
11. This guide routes the new cooler last in the series after the factory coolers. From the lower port on the new cooler, measure and cut the hose to length and connect the other end to the outlet port on the stock transmission cooler (located in the front of the radiator), secure in place with a clamp.
12. From the top port on the new cooler, 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.



Transmission cooler line connections



Factory transmission cooler hard lines connect return hose as marked



13. Use cable ties to secure any loose cooler line to prevent rubbing.
14. The cooler itself holds 500mL of fluid, plus 50mL per 1m of hose, calculate the total amount and top up the transmission using the correct factory specified transmission fluid. Ensure oil levels are rechecked the next day while vehicle is cold.
 - a. (Length of hose x 50ml = + Cooler 500ml)
15. Reinstall the grille in reverse as how it was removed in step 1.

End of Installation Guide