

## Transchill Arctic Black Installation Guide for Toyota N80

This document is to be used as a guide for the installation of the **Transchill Arctic Black TCB628DPK for Toyota Hilux N80 and Fortuner 1GD-FTV (2015-on) with automatic transmission**. It fits both 4.0L V6 1GR-FE and 2.8L 1GD-FTV diesel versions. 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 15-17mm Clamps (FMC10)	8 x M6x16 Bolts (SSSS304M616)
1 x Upper Mounting Bracket (TCB628-BR)	8 x Cable Ties (802078)	16 x M6 Flat Washers (FMW6)
1 x Lower Mounting Bracket	3 x M8x16 Bolt (SSSS304M816)	8 x M6 Nyloc Nuts (FMN6)
1x 3m of 3/8" Hose (27061)	4 x M8 Flat Washer (FMW8)	
	1 x M8 Nut (FMN8)	
	3 x M8 Spring Washer (FMSW8)	
	2 x M16x1.5 to -6 Male Adaptors (DP816-6-M1615)	
	2 x M16 Alloy Washers (PLFW16)	
	2 x 3/8" Tail to -6 90° Adaptors (DPP0090-06)	
1 x 32mm Transmission Cooler (TCC14DP)	4 x 15-17mm Clamps (FMC10)	8 x M6x16 Bolts (SSSS304M616)

## Mounting Location

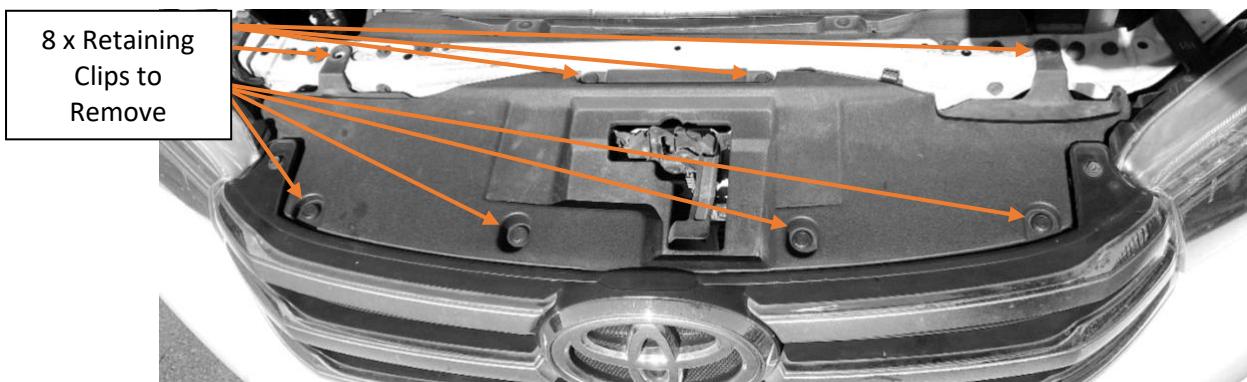


### Tools Needed:

- Spanners
- Sockets
- Screw Drivers
- Pliers
- Snips/Cutter
- Rags
- Small container for catching oil drips
- We suggest using a thread sealant like Loctite 567 or equivalent.

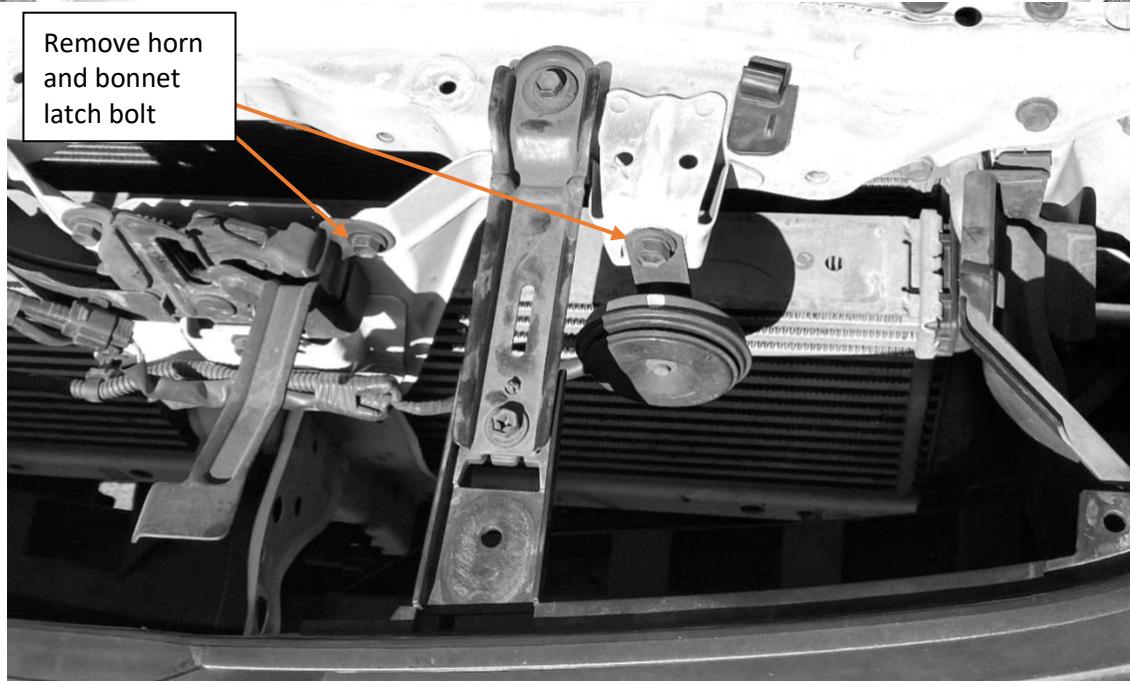
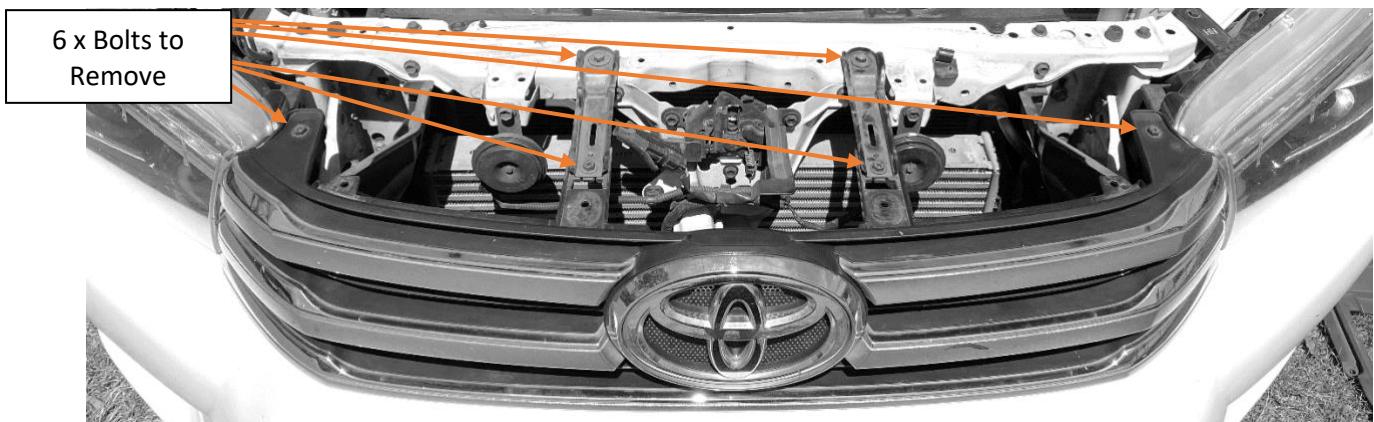
## Installation Guide

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

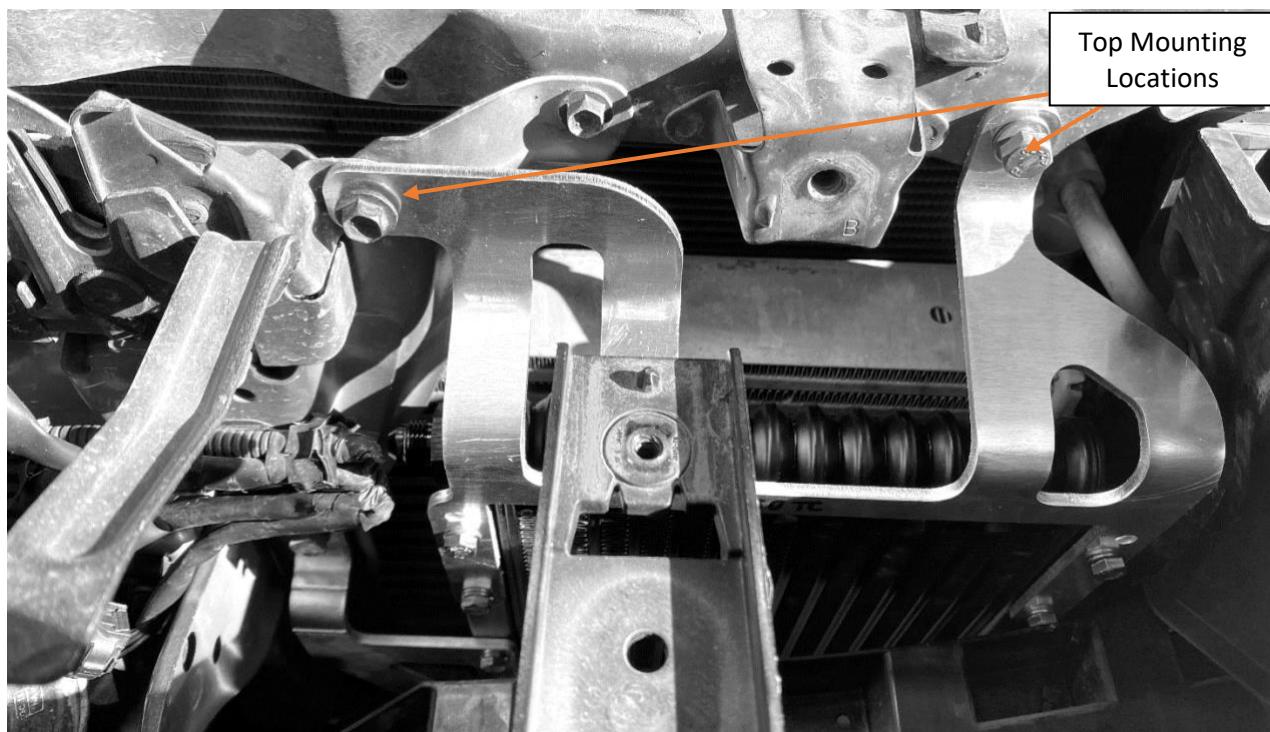


N80 Hilux Front of Engine Bay

2. Remove the top six bolts that help support the grille. Next separate the grille 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. Remove the M8 bolt that retains the horn on the passenger side and lift the horn up of the way.

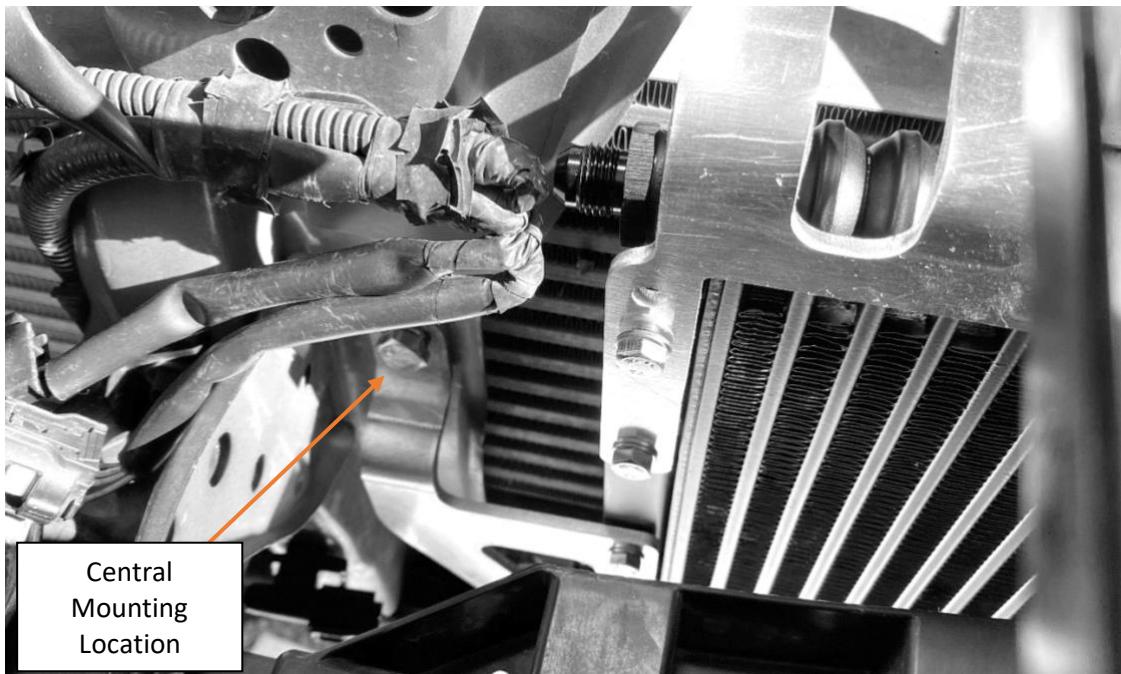


3. Remove horn mounting bolt and M6 bolt on the passenger side of the bonnet latch only.
4. Secure the M16x1.5 threaded adaptors to the ports of the transmission cooler, making sure to use an aluminium 16mm washer under each and Loctite 567 (or similar) to secure them in place.
5. Assemble the transmission cooler to the brackets in the kit. The assembly will use all 8xM6 bolts, 16xM6 flat washers and 8xM6 nyloc nuts.
6. Bolt the new transmission cooler and bracket assembly into the vehicle locating the top off the M8 threaded boss next to the horn mounting location and the bolt that was previously removed from the bonnet latch. Use an M8x16 bolt, M8 spring washer and M8 flat washer in the new location and the original bolt in the bonnet latch.

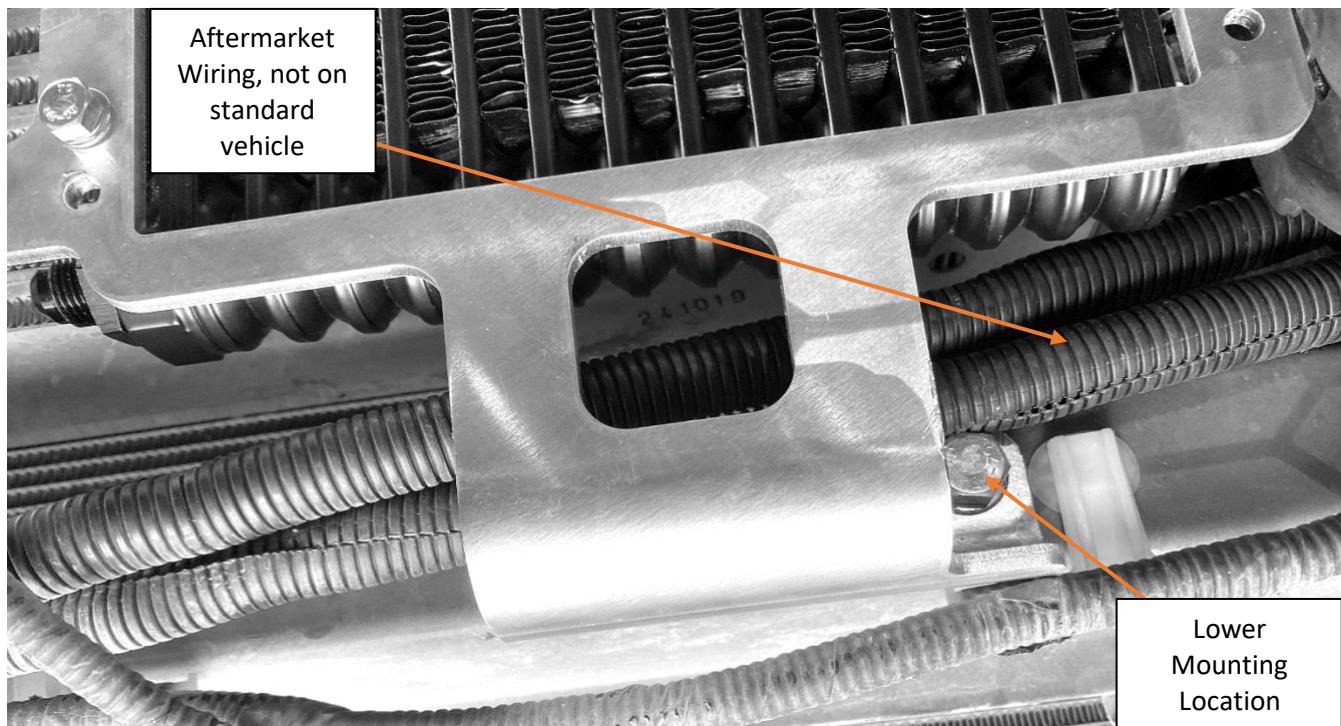


*Transmission Cooler Assembly Bolted in Place. Note: Cooler sits on rear face of brackets.*

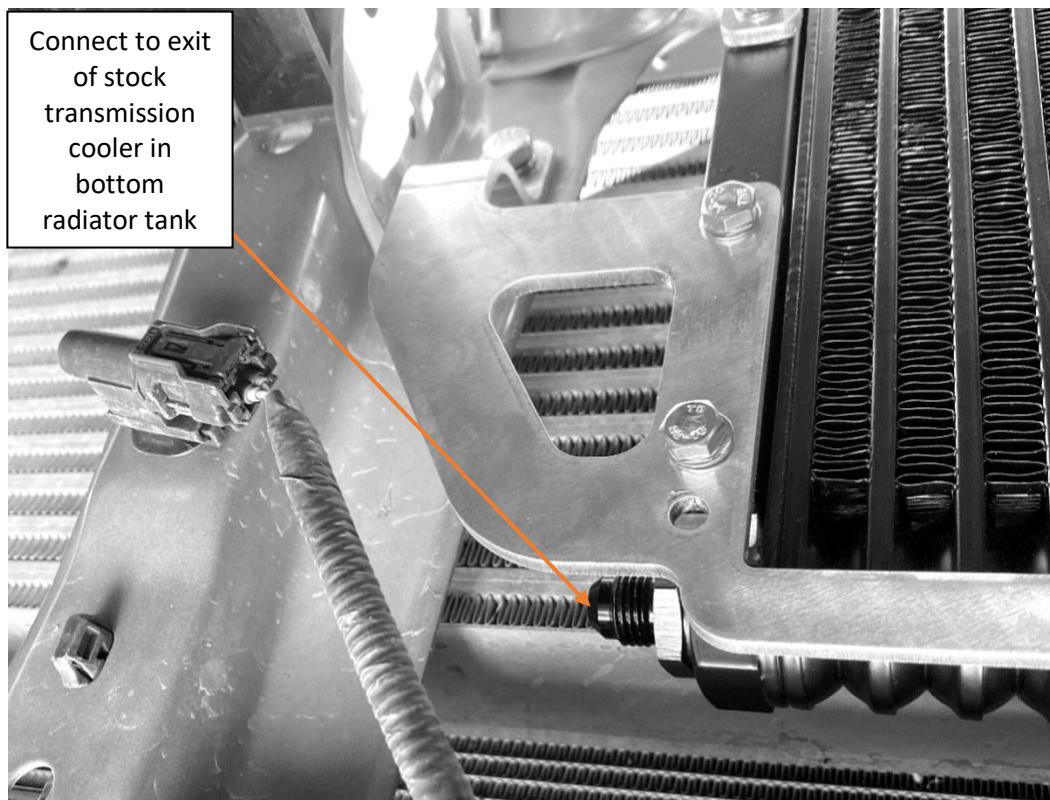
7. Use another M8x16 bolt, M8 spring washer and M8 flat washer to secure the central mounting tab to the spare M8 threaded hole in the centre bonnet release support.



8. Use the final M8x16 bolt, with an M8 flat washer under its head and insert the bolt from the front through the lower mounting hole and bottom radiator support panel. Use the last M8 flat washer, M8 spring washer and M8 nut to secure from the back side. Connect the one end of the supplied hose to the lower port on the transmission cooler, secure in place with a clamp.



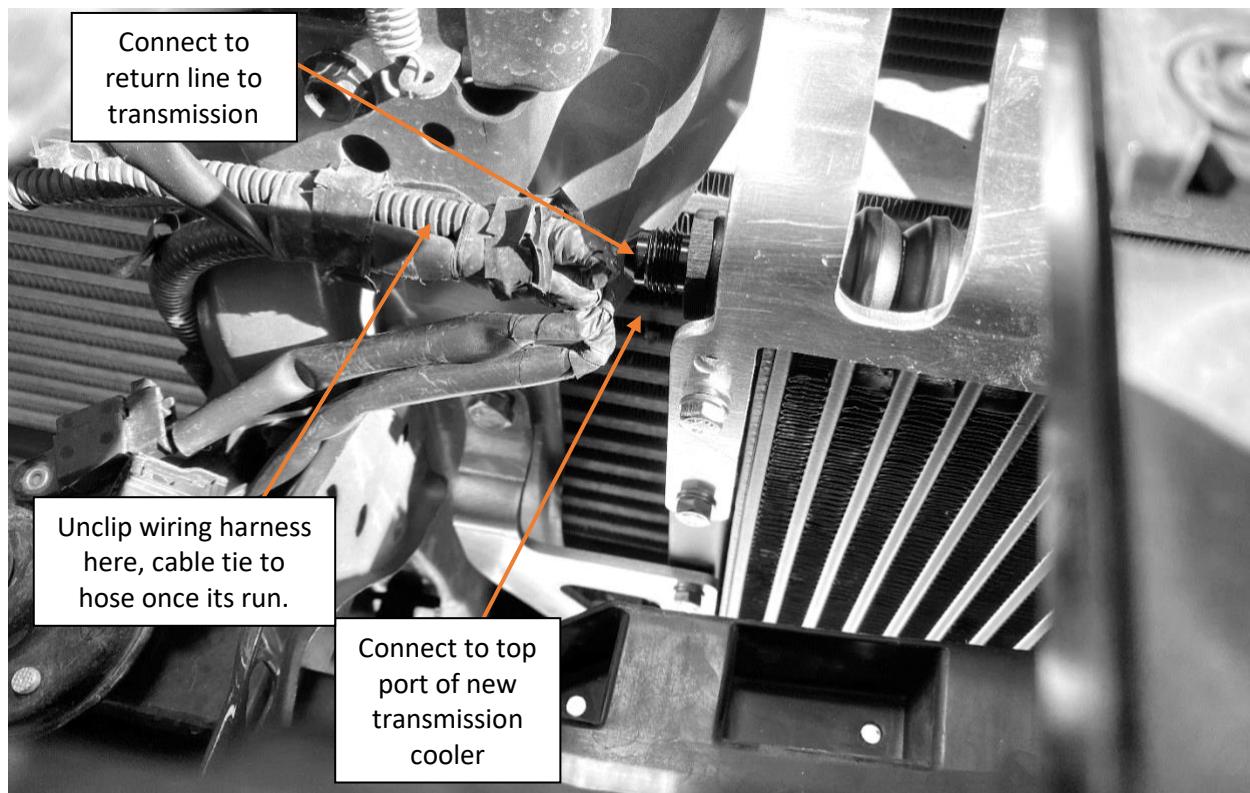
9. Connect the one end of the 3/8" hose to -6 90° fitting and secure the lower port on the transmission cooler, using Loctite 567 (or similar) on the -6 threads to ensure sealing.



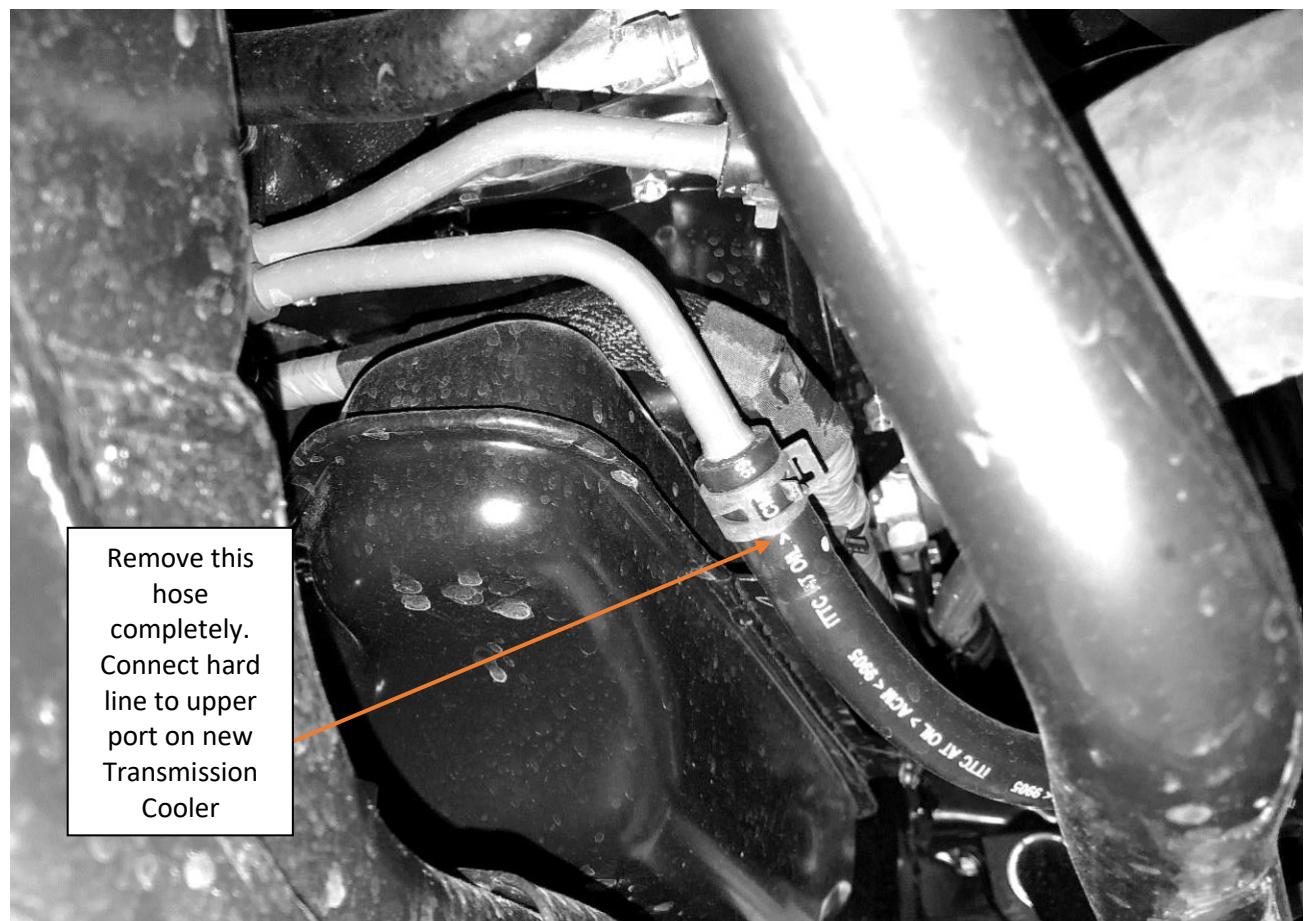
10. Run the hose between the body mount and the radiator on the driver's side of the vehicle. Measure and cut the hose to length and connect the other end to the outlet port on the stock transmission cooler (located in the bottom of the radiator), secure in place with a clamp.



11. Connect the one end of the remaining hose to the second 3/8" hose to -6 90° fitting and secure to the top port on the transmission cooler, using Loctite 567 or similar on the -6 threads to ensure sealing.



12. Connect the other end of this hose to the hard steel return line to the transmission that used to connect to the stock transmission cooler, secure in place with a clamp.



*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 70mL per 1m of hose, calculate the total amount and top up the transmission using the correct factory specified transmission fluid.
15. Bolt the horn back to the vehicle after bending the bracket slightly to clear the new cooler and bracket.



16. Reinstall the grille in reverse as how it was removed in step 1 & 2.

### End of Installation Guide