



Dual External Transmission Oil Cooler Kit Suitable for:



**Toyota 200 Series LandCruiser
Lexus 570 Series
with 6 & 8 Speed Transmission**

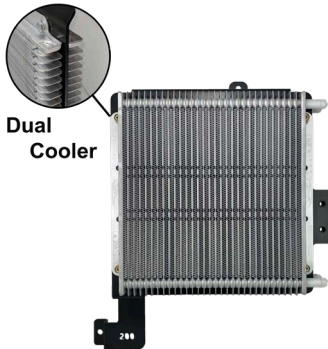
WITH THE FOLLOWING ENGINES:
3UR-FE 5.7L V8 Petrol
2UZ-FE 4.7L V8 Petrol
1UR-FE 4.6L V8 Petrol

Please read through all of the instructions carefully before proceeding. If any of the information does not appear correct or the diagrams don't match your vehicle, please contact Wholesale Automatic Transmissions on +61 3 9762 8004.

Safety First

Hot engines and hot transmissions can cause serious injury.
Before removing the hoses and parts from the vehicle,
allow sufficient time for engine and auto to cool.

Parts List



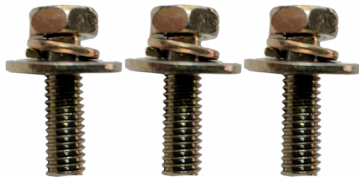
2x 3/8" Oil Coolers
Preinstalled on Bracket



6 x 14-16mm Stainless
Steel Screw Clamps



3.5m x 3/8" Cooler Line
Hose with Conduit



3 x M6x20mm
SEMS Bolts



2 x NON DPF Brackets
1 x DPF Bracket



5 x 300mm Cable Ties



0.5m x 3/8" Cooler Link
Hose with Conduit

Expected Installation Time: 2 Hours

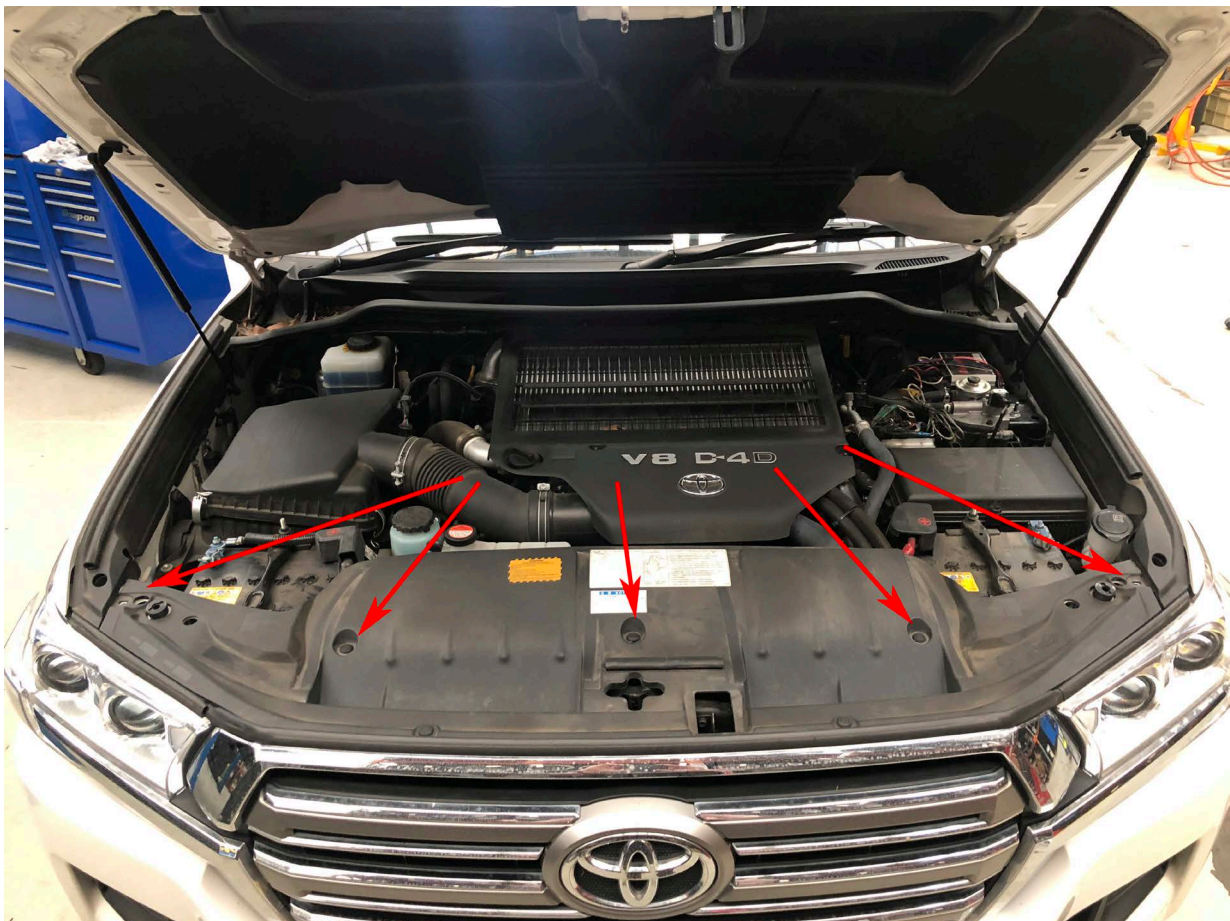
Summary of Installation - For Experienced Fitters

- Ensure you have enough transmission fluid to top up your transmission at the end.
- Remove the plastic cover above the radiator by removing the plastic clips and screws.
- Remove the chrome headlight fascias (if fitted).
- Remove grill from the front of the vehicle.
- Install Dual Cooler Link Hose between the bottom barbed fitting of the front cooler and the top barbed fitting of the rear cooler. Secure with two (2) screw clamps.
- Fit the longer cooler line to the remaining barbed fittings on the coolers but do not cut yet. Leave it looped. FIT IT DRY - DO NOT use lubricant. Secure with two (2) screw clamps.
- Unbolt horn bracket on passenger side and lower bolt in the center grill support.
- Slide the cooler bracket and hoses down in front of the radiator.
- Mount the top of the cooler and the passenger side horn by attaching back to the original horn mounting bolt hole. Horn goes behind cooler.
- Bolt bottom of bracket to lower part of the center grill support using the factory bolt.
- Locate the last remaining bolt hole on the passenger side of the cooler bracket. Insert only one of the 2 x DPF or 1 x NON-DPF bracket and tighten the bolt into the bolt hole.
- Tighten all cooler bracket bolts.
- Remove foam cube where power steering cooler feed and return lines are insulated.
- Remove lower bash plate on driver's side, below the front of the vehicle.
- Pass feed and return hose from new cooler through void created by removing foam.
- Connect hose from new cooler to the factory cooler steel line located below the drivers side battery (it is the lower of the two steel lines).
- Connect hose from new cooler to return steel line under the vehicle.
- Secure all hoses away from hot or moving parts.
- Check transmission fluid level.
- Road test vehicle then re-check transmission fluid level. Also inspect cooler and fittings for leaks. Tighten fittings if necessary.
- Refit any previously removed pieces.
- Clean up any transmission fluid from the vehicle.

Detailed Installation Instructions

Before commencing work, please ensure that you have at least 2L of transmission fluid to top up at the end of the job.

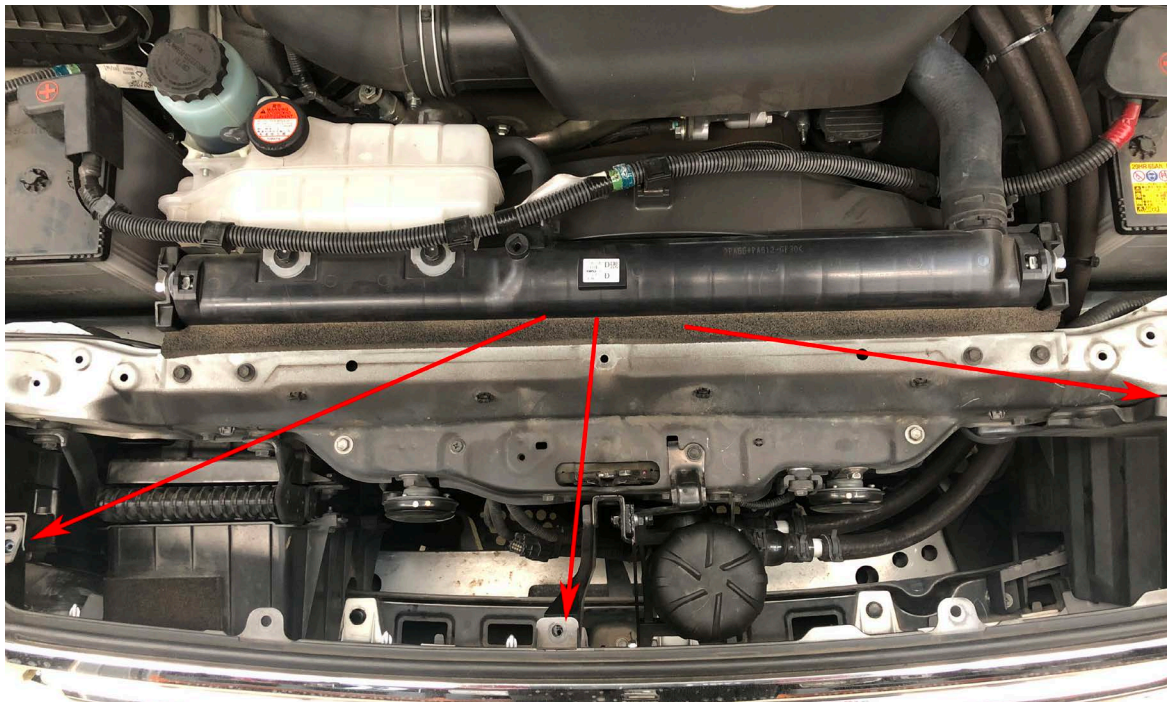
1. Open bonnet.
2. Remove upper radiator cowl by removing the five (5) plastic clips holding the radiator cowl in place.



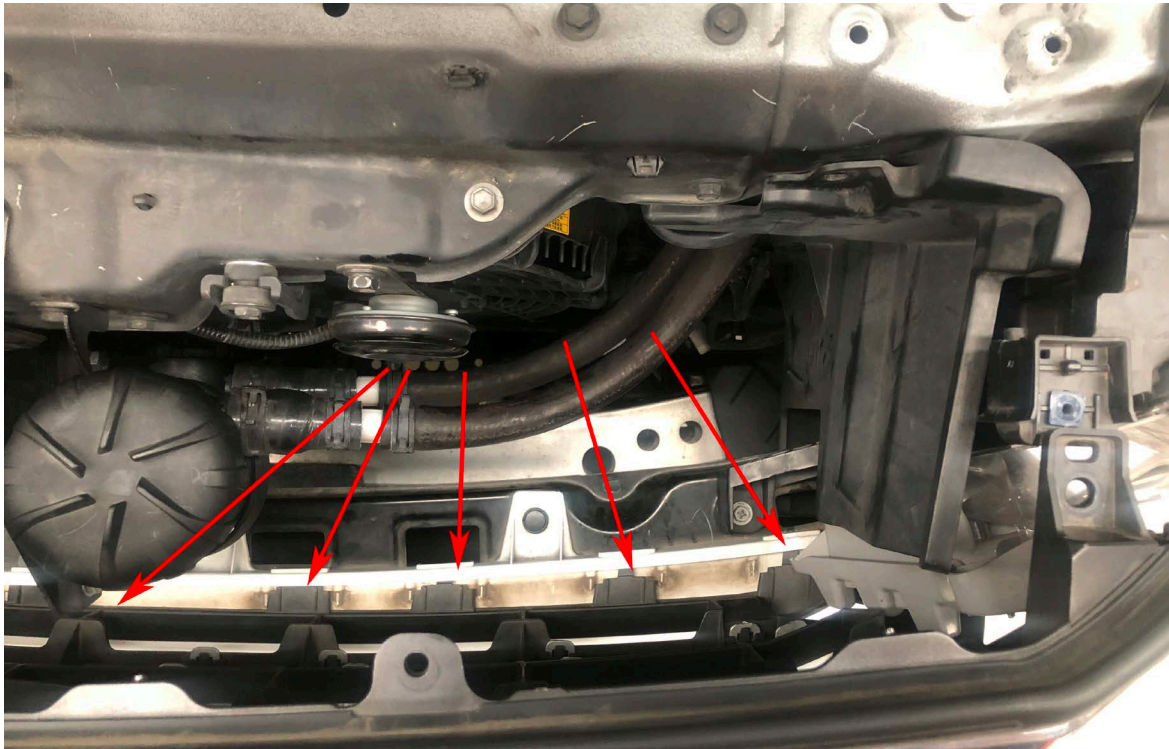
3. If applicable, remove the chrome headlight fascias by gently applying pressure behind chrome fascia. There are five (5) push rivets that hold the fascias in place. The fascias can be removed by hand but a pry tool can also be used. Be careful not to damage the paintwork while using the pry tool.



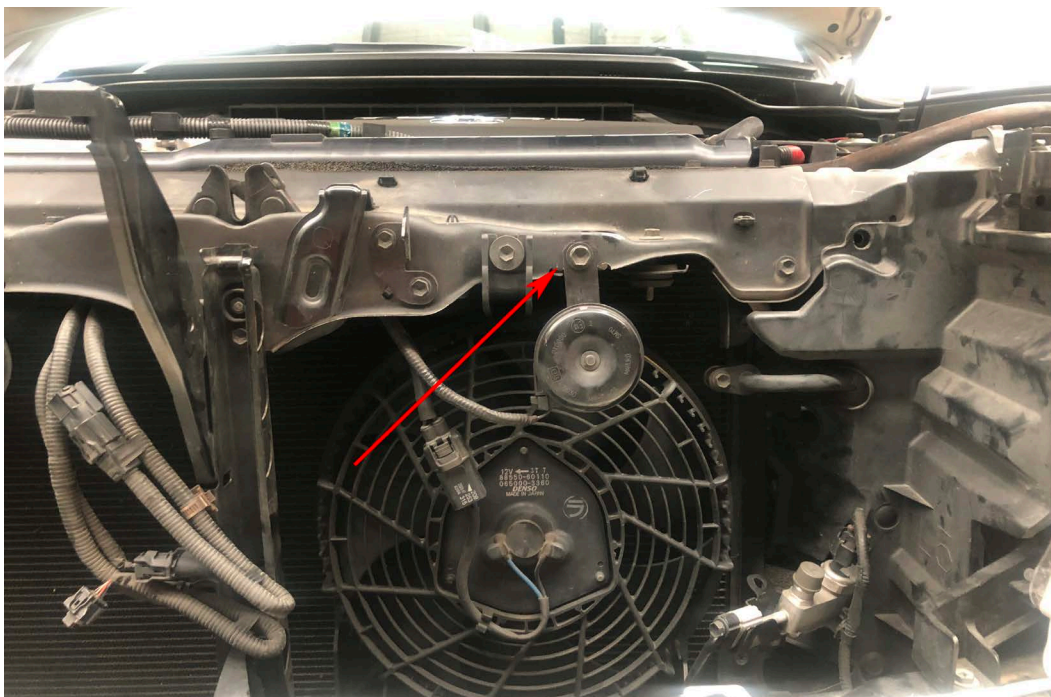
4. Use a 10mm socket to remove the three (3) upper fixings for the grill. These are made from hard ABS plastic - it is advisable to use hand tools only.



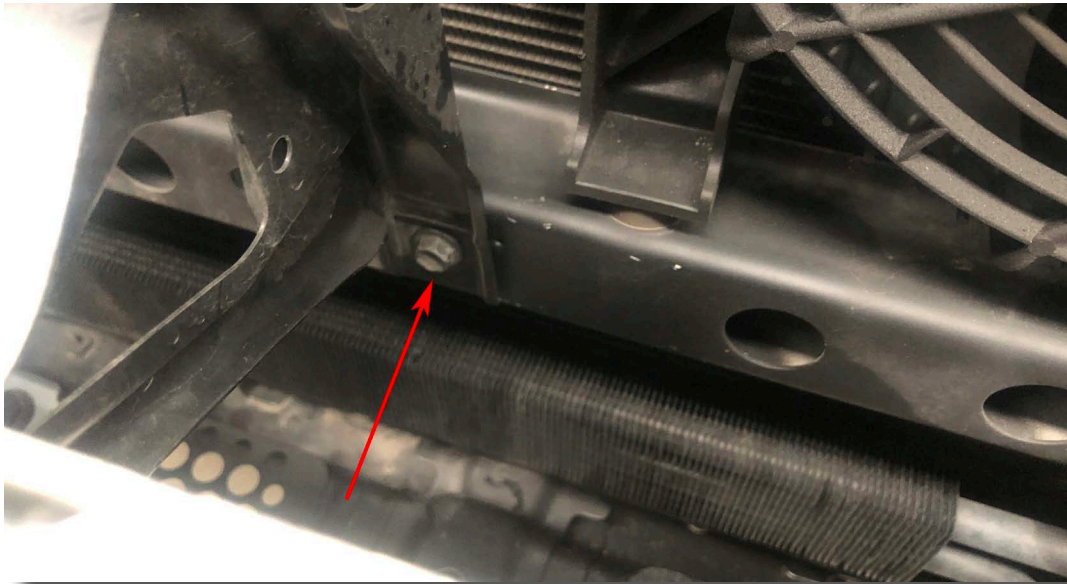
5. Remove the grill by gently maneuvering the tabs forward, working from one side to the other.



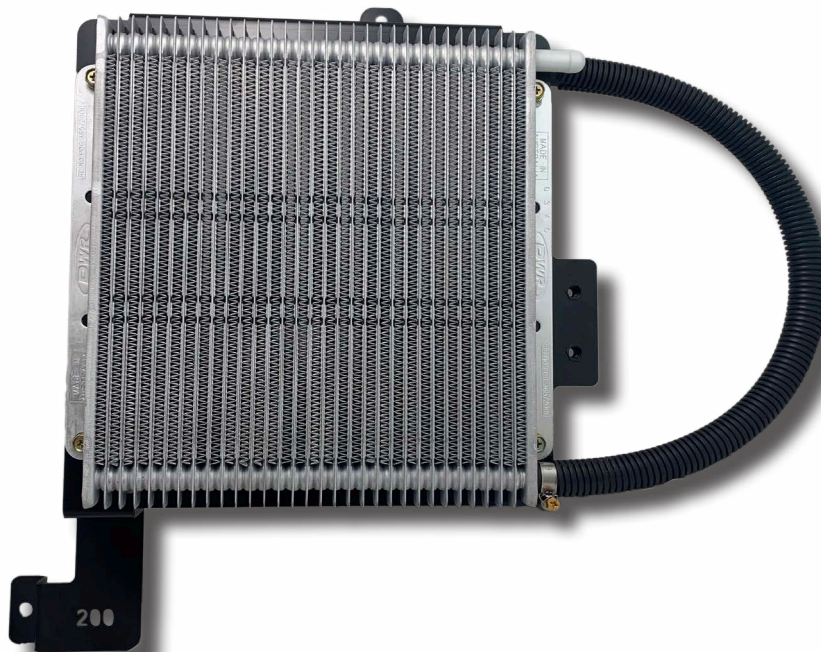
6. Remove the horn bracket on passenger side fixed to upper radiator support. Do not discard this bolt.



7. Remove the bolt holding the center grill support to the lower radiator support. Do not discard this bolt.



8. Cut the Dual Cooler Link Hose to be exactly 45cm long. Fit between the bottom barbed fitting of the front cooler and the top barbed fitting of the rear cooler. Secure with two (2) screw clamps. Fit the longer length of Cooler Line Hose to the remaining two (2) fittings on the coolers. Do not cut yet - leave looped. Secure with two (2) screw clamps.



9. Lower the cooler assembly into place. Insert the factory horn bracket bolt through the top cooler mounting hole and then through the factory horn bracket. Fix into the original horn bracket thread and finger tighten.



10. Insert the factory lower radiator centre support bolt through the lower mount in the cooler bracket and into the original thread in the lower support panel. Tighten both mounting bolts.



11. Install only one (1) of the following mounting brackets after confirming if your vehicle model has a DPF (Diesel Particulate Filter) or not.



12. Fix the correctly selected bracket to the grill support panel using one (1) of the supplied M6x20 SEMS bolts. The two threaded holes on the side of the cooler bracket will match up to the two holes on the brackets. Secure using two (2) M6x20 SEMS bolts.

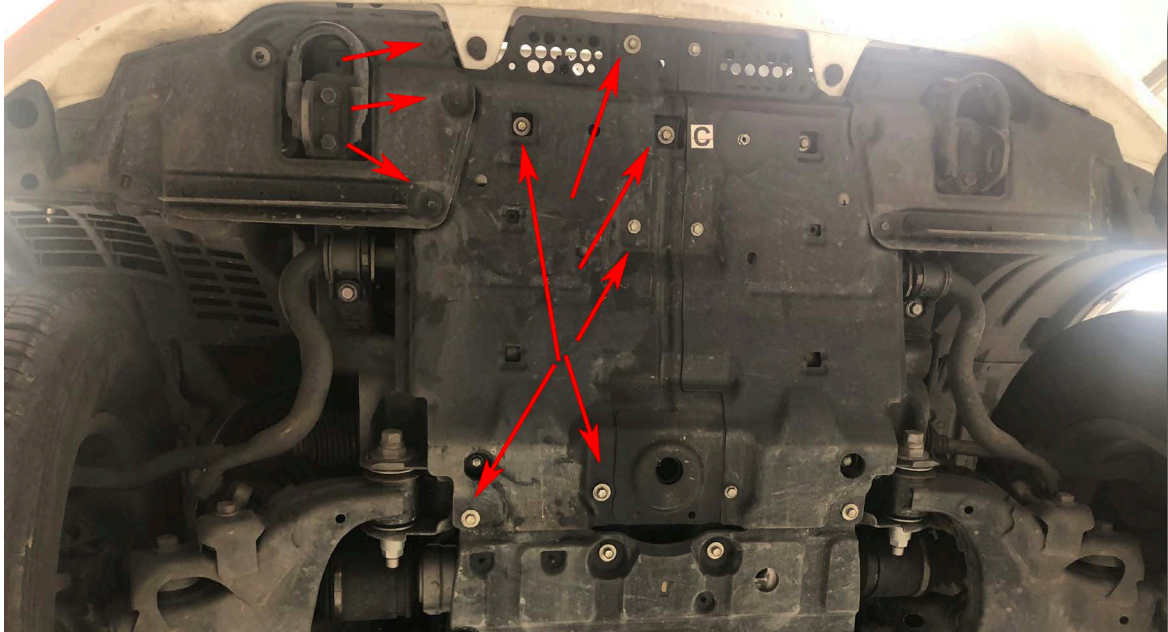
DPF Models



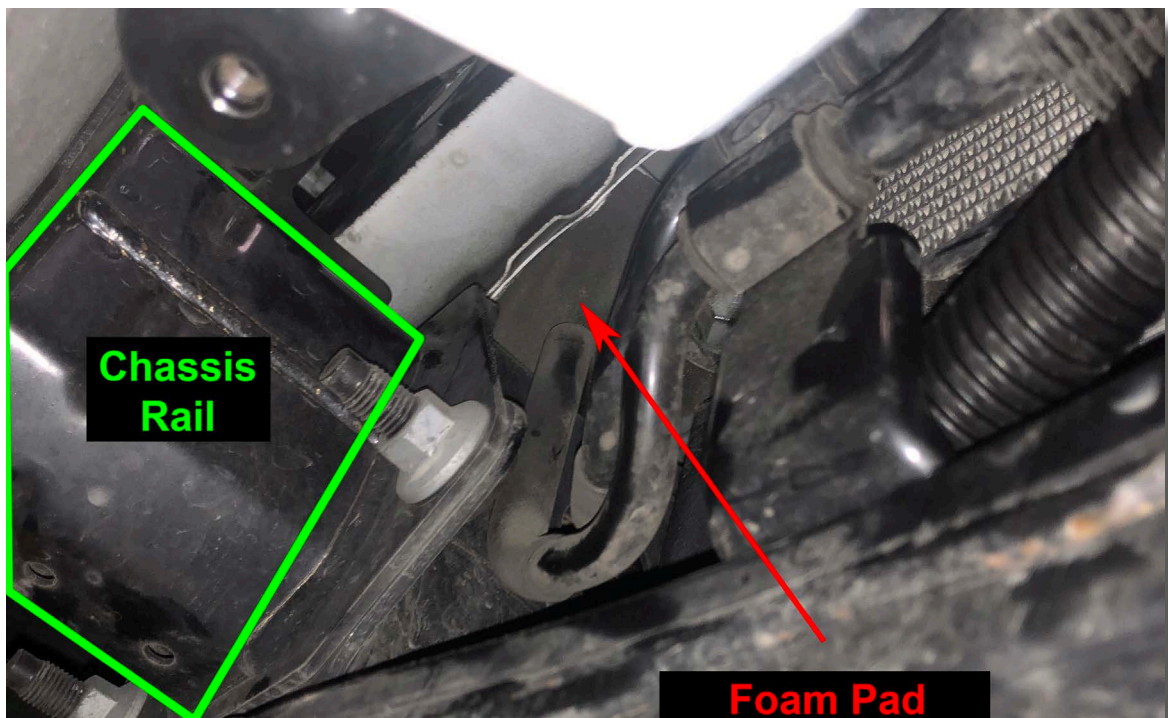
Non DPF Models



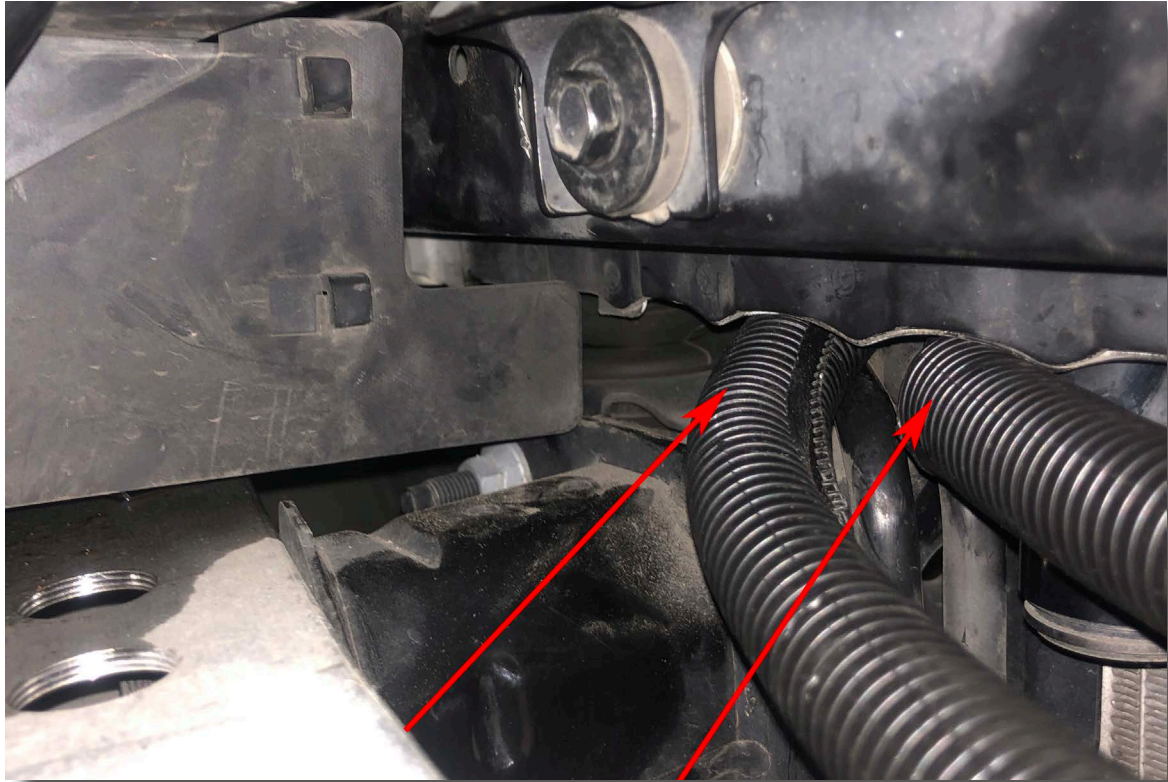
13. Under the vehicle, remove the three (3) 10mm plastic fasteners holding right (driver) side forward cover. Remove six (6) 12mm bolts and lower the metal bash guard.



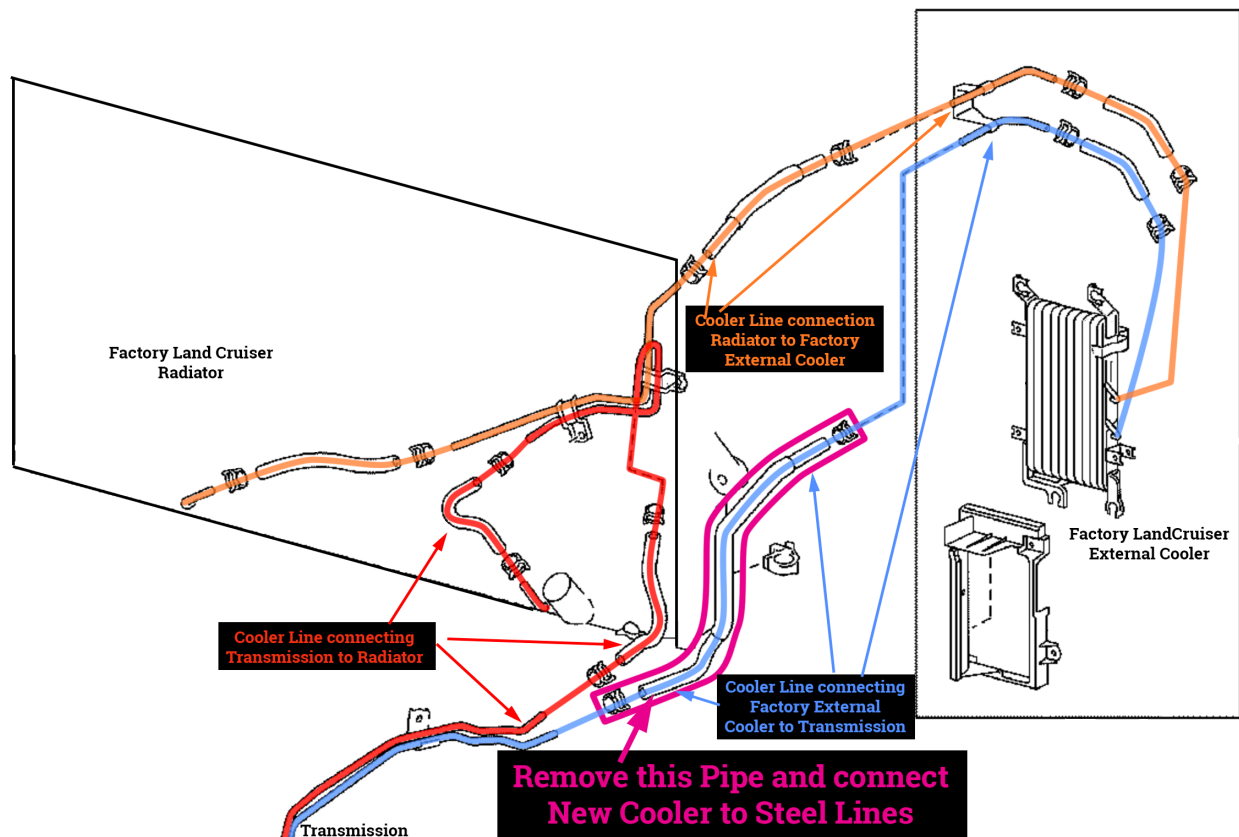
14. Remove the factory foam cube on the drivers side (RHD) of the radiator just above the chassis rail. This can be discarded as does not need to be refit.



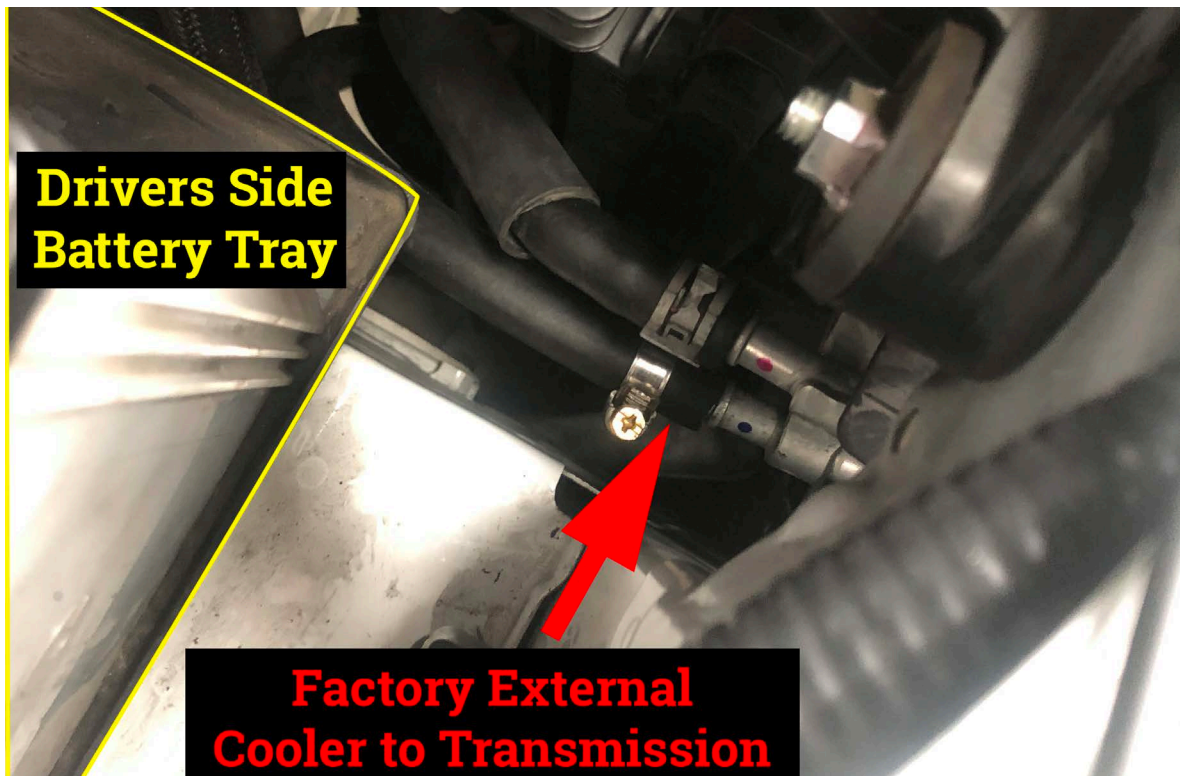
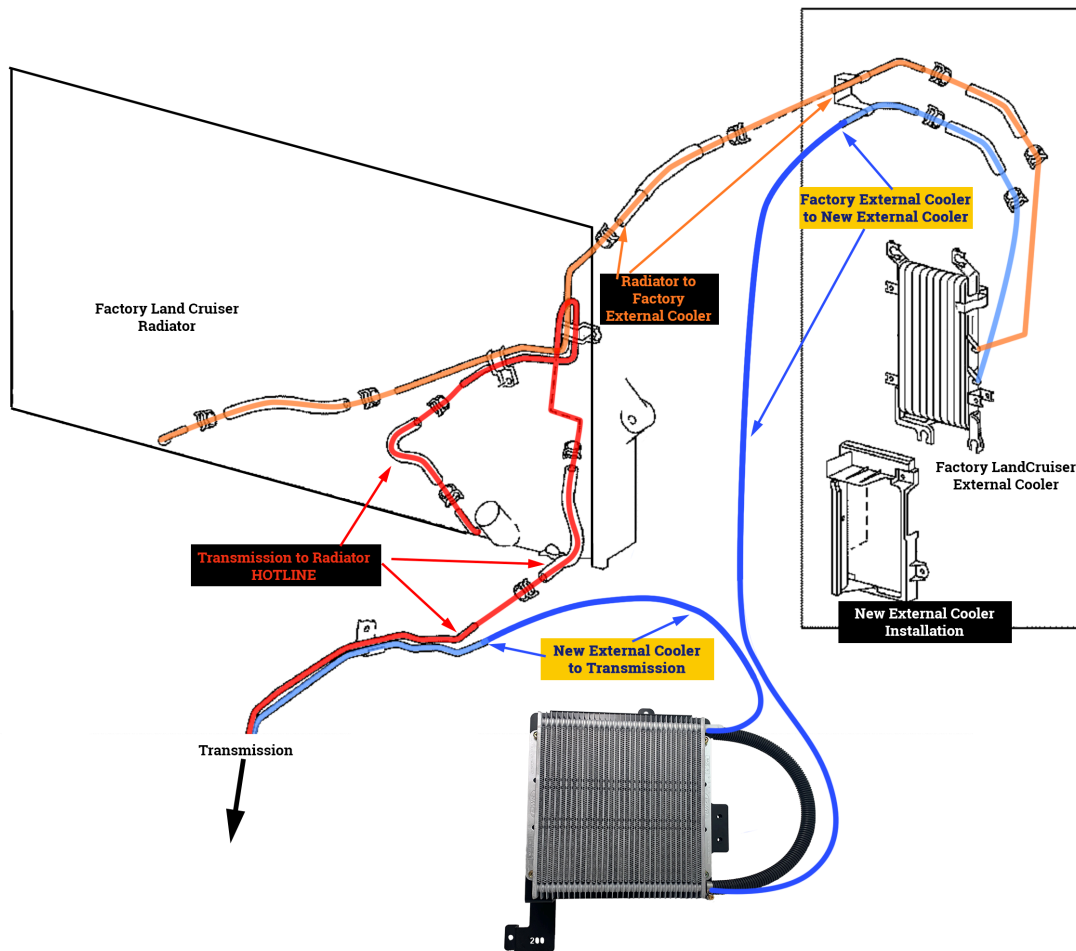
15. Route the cooler hoses along the radiator support panel to the hole now made by removing the foam pad. Secure the hose with cable ties as you go. Allow a gradual loop of the cooler lines near the coolers so they are not tight or pulling on the fittings.



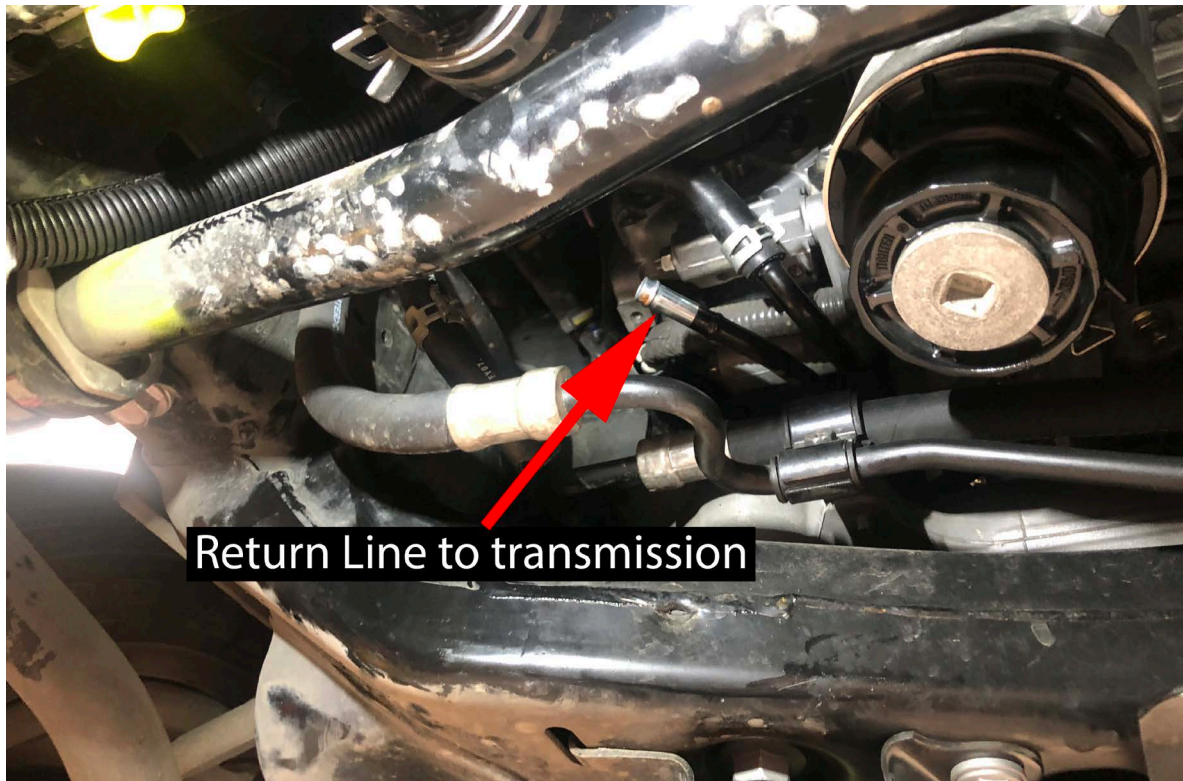
16. Remove the factory cooler hose (outlined in pink below) that joins the Toyota external cooler to the return line for the transmission. We will use these two connections for the new external cooler.



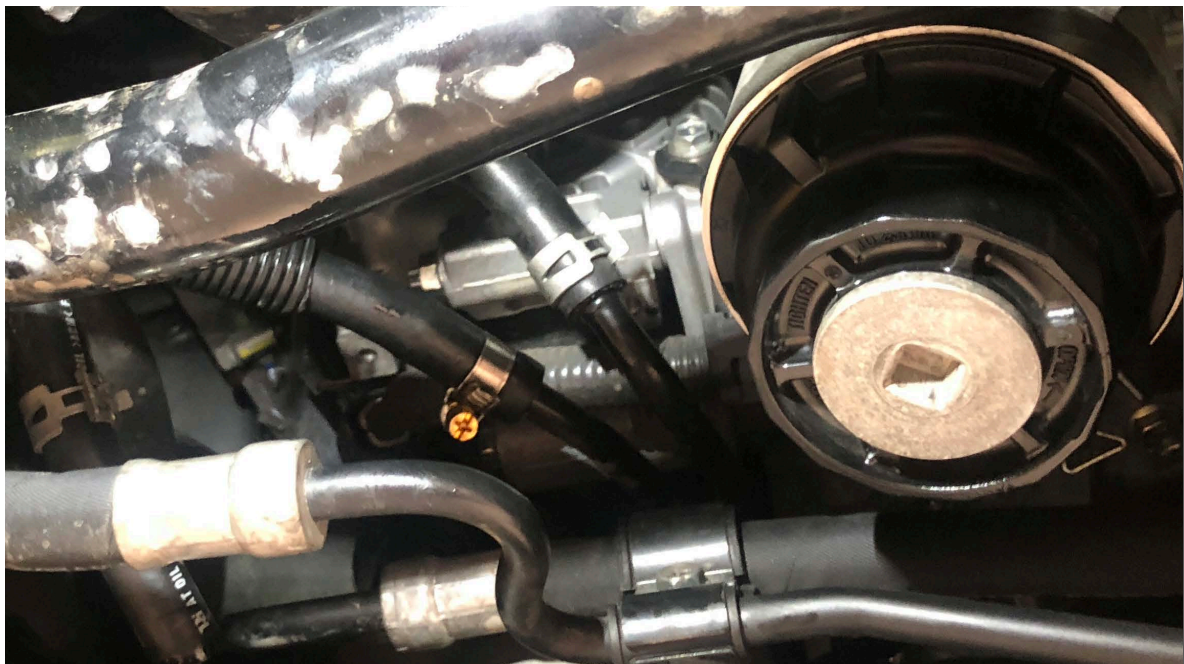
17. The connection at the factory external cooler end is located just under the drivers side battery tray. If it is too difficult to access with battery in place, disconnect all batteries in the vehicle before removing the battery. The line you want to remove is the lower of two lines. Cut the first connection to the factory external cooler connection to length. Secure with one (1) supplied hose clamp.



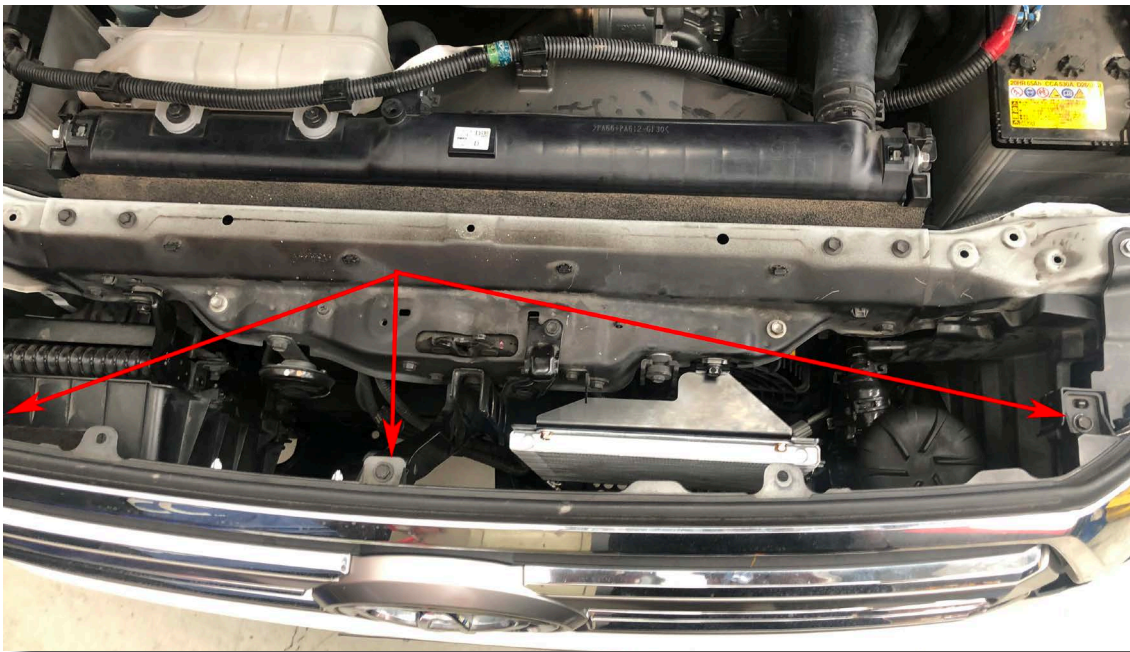
18. Route the other end of the cooler hose to the steel line under the vehicle that returns to the transmission.



19. Cut the cooler hose to length and install onto the steel line. Secure with one (1) supplied screw clamp. Cut the conduit to length.



20. Check that the cooler hoses are properly secured and located away from direct heat and moving parts.
21. We recommend not refitting bash plates yet in case you need to tighten the screw clamps after test driving the vehicle.
22. Refit the grill by gently working the tabs in to their mounting slots.
23. Refit the three (3) upper fasteners for the grill using a 10mm socket. We recommend using hand tools on these fasteners.



24. If applicable, refit the chrome headlight fascias by lining up the push rivets and applying pressure until they are seated.

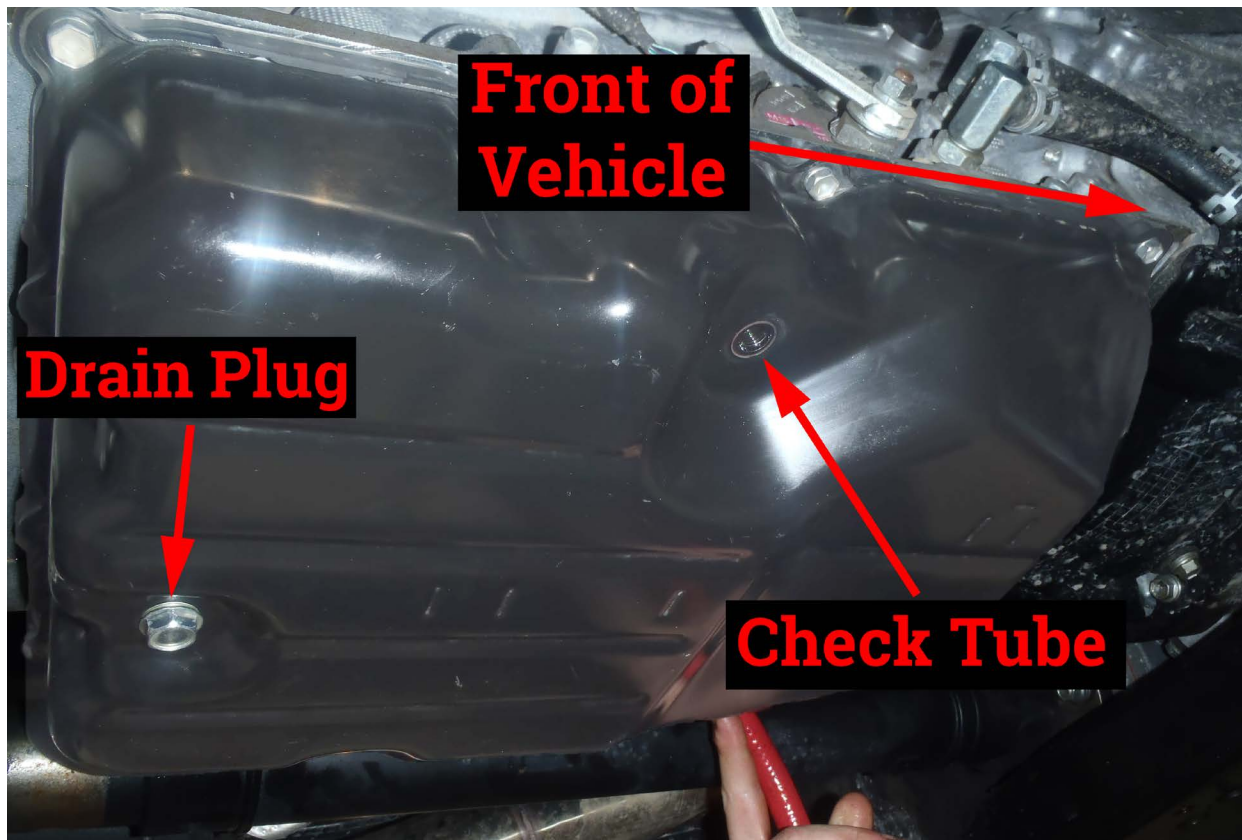
25. Refit upper radiator cowl by resetting the five (5) push rivets by pulling the head up from the body of the fixing. Insert into place and push down on the head to secure it in place.



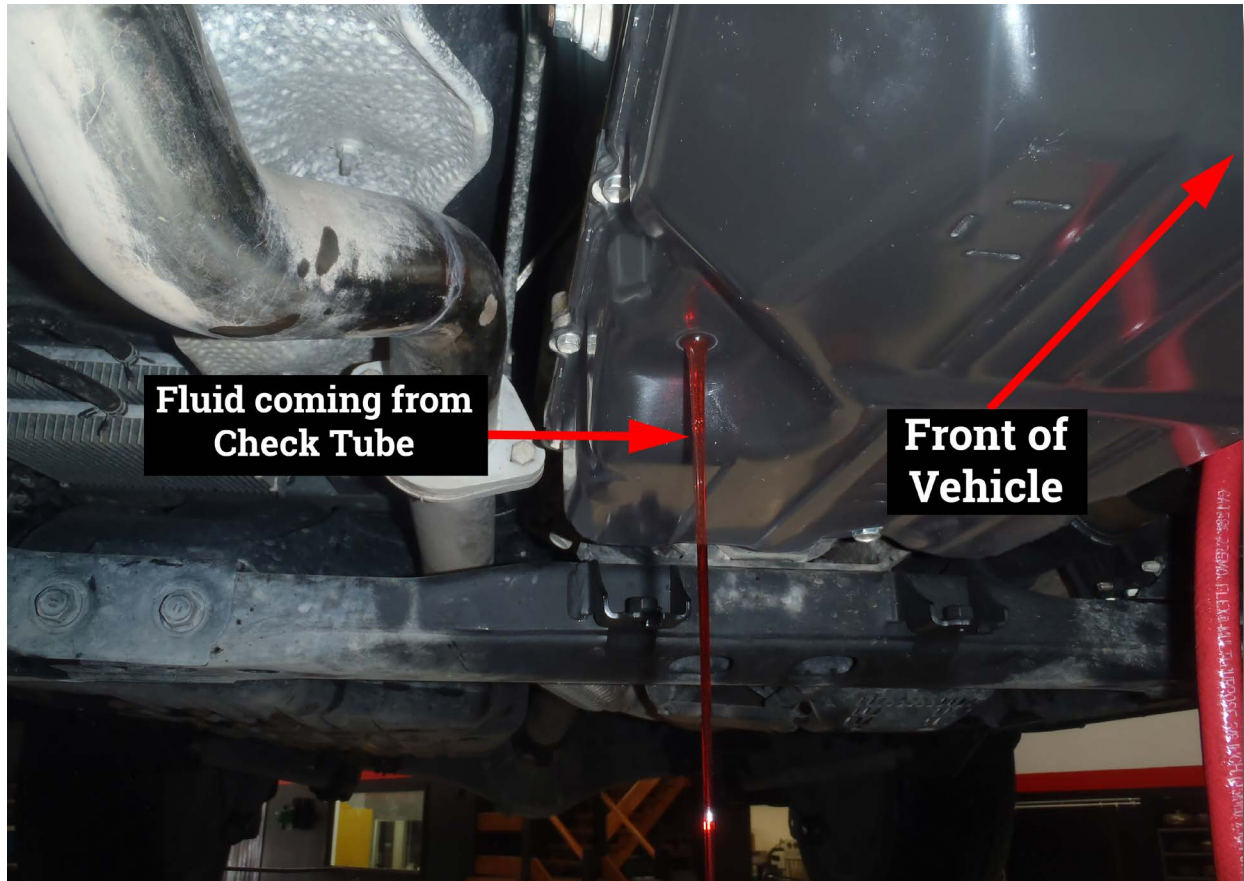
Checking Transmission Fluid Level

26. Ideally with two people - Start the car. Please ensure the handbrake is on and your foot is firmly on the brake.
27. Under the vehicle the second person - Locate and remove the 5mm Allen key head labeled "Check" located in the sump of the transmission. DO NOT remove the 14mm bolt located nearby as this is the transmission drain plug.

PLEASE NOTE: THE TRANSMISSION FLUID MAY BE QUITE HOT.
PLEASE TAKE CARE WHEN UNDOING CHECK TUBE BOLT.



28. If there is a lot of fluid streaming from the check tube the transmission is over filled. Please allow the fluid to drain until it slows to a light stream, then re-insert 'Check' bolt and tighten.



29. If there is no fluid coming out of the check tube, locate and remove the 24mm fill plug on the passenger side of the transmission and add compatible transmission fluid until the fluid starts to stream out of the check tube.
30. Once fluid slows to a light stream re-insert the 'Check' bolt and tighten.
31. If removed, re-fit the 24mm fill plug and tighten.
32. Road test the vehicle for at least 15 minutes. Try to shift through all gears and through up and down hill scenarios.

33. With the engine still running recheck the fluid level by removing the check tube bolt and checking if fluid lightly streams out. If no fluid comes out please repeat steps 26 to 33.
34. Once the fluid level is correct and test driving is complete visually check for leaks and re-tighten any fittings as required.
35. Check again for any transmission fluid on the vehicle and clean off.
36. Reinstall the bash plates under the vehicle.

This completes the installation of the Dual External Transmission Oil Cooler Kit

To suit:

Toyota LandCruiser 200 Series & Lexus 570, with 6 and 8 Speed Automatic

Please remember ALL automatic transmissions have a service interval of
2 years or 40,000km to improve the longevity of the transmission.