

COOLMASTER *OFFROAD*

External Transmission Oil Cooler Kit Suitable for:



**Toyota Tundra with
AB60 6 Speed Automatic Transmission
WITH 3UR-FE 5.7L V8 ENGINE**

*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 your local ALLTRANZ branch.*

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:

*Cross Flow Oil Cooler
Pre-Mounted to Bracket
Plus Retainer Bracket*



*4 x 8-16mm Stainless
Steel Cooler Line Screw
Clamps*



*2.5m x 10mm High
Temp Cooler Line Hose
with Conduit*



*2 x M6x20mm
SEMS Bolts and
1 x M6 Nut*



*1 x M8x20mm
SEMS Bolt and
1x M8 Nut*



5 x 300mm Cable Ties



Expected Installation Time: ~ 2 Hours

Summary of Installation - For Experienced Fitters

- Ensure you have enough transmission oil to top up your transmission.
- Remove the plastic cover above the radiator by removing the plastic clips.
- Remove grill from the front of the vehicle.
- Remove the following from the vehicle:
 - Drivers right horn - keep OEM bolt
 - The bolt holding the centre condenser bracket to the lower support panel
 - Small OEM transmission fluid hose connection (see page 6)
- Fit each end of the cooler hose to each connection on the cooler using supplied clamps. FIT IT DRY - DO NOT use lubricant.
- Slide the cooler bracket and hoses down in front of the radiator.
- Mount the lower inner cooler mount to the lower support panel using the bolt removed holding the centre condenser bracket.
- Mount the top of the cooler using the M8 bolt into the factory horn mount
- Locate the bolt hole at the outside lower mount of the cooler. Bolt the cooler to the lower support panel using supplied M6 or M8 Bolt and Nut.
- Tighten all cooler bracket bolts.
- Connect the open ends of the transmission cooler to the exposed ends of the factory steel lines. Orientation of lines do not matter as new cooler is bi-directional.
- Use supplied cable ties to secure hoses as required.
- Refill/Check Transmission with appropriate fluid.
- Refit any previously removed pieces.
- Road test vehicle then re-inspect cooler and fittings for leaks. Tighten if necessary.

1. Detailed Installation Instructions

Before Commencing work, please ensure that you have sufficient transmission fluid to top up at the end of the job.

1.1. Open bonnet.

1.2. Remove upper radiator cowl by removing the plastic clips and bolts holding in the upper support panel.



1.3. Ensure all bolts are removed, they are located not only on the radiator support bar but also on each side headlight.



- 1.4.** Gently pull the grille forward to access the clips located on the bottom. These are plastic so do not apply too much force, maneuverer the grille forward enough to access the clips from behind.

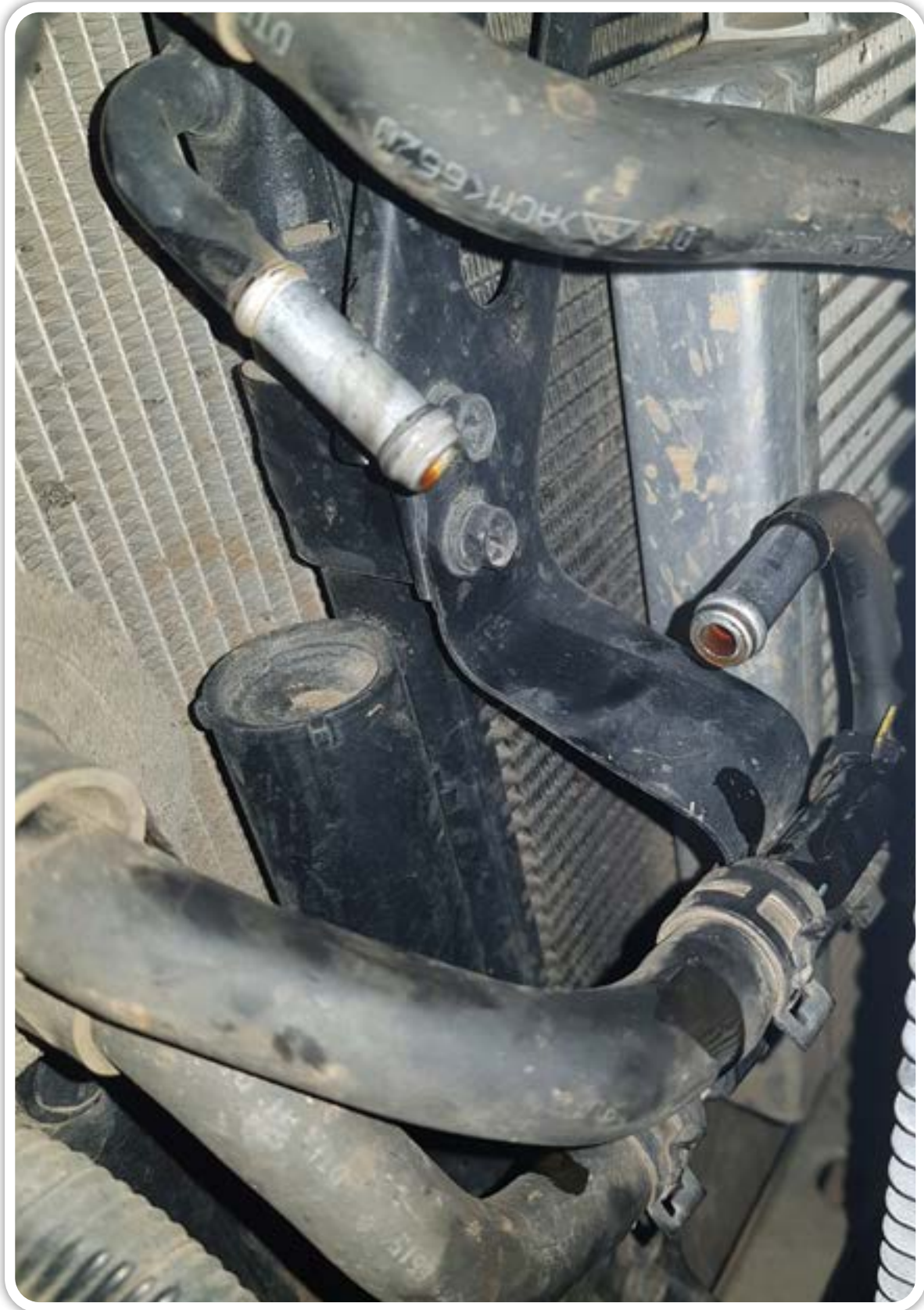


- 1.5.** With grille now removed and stored safely, the lower grille mount must be removed. This will require removal of six (6) 10mm nuts.



- 1.6.** Unbolt the right side horn (drivers perspective) from the upper support panel. Horn will be remounted to the cooler bracket. Keep the factory M8 bolt for use later.

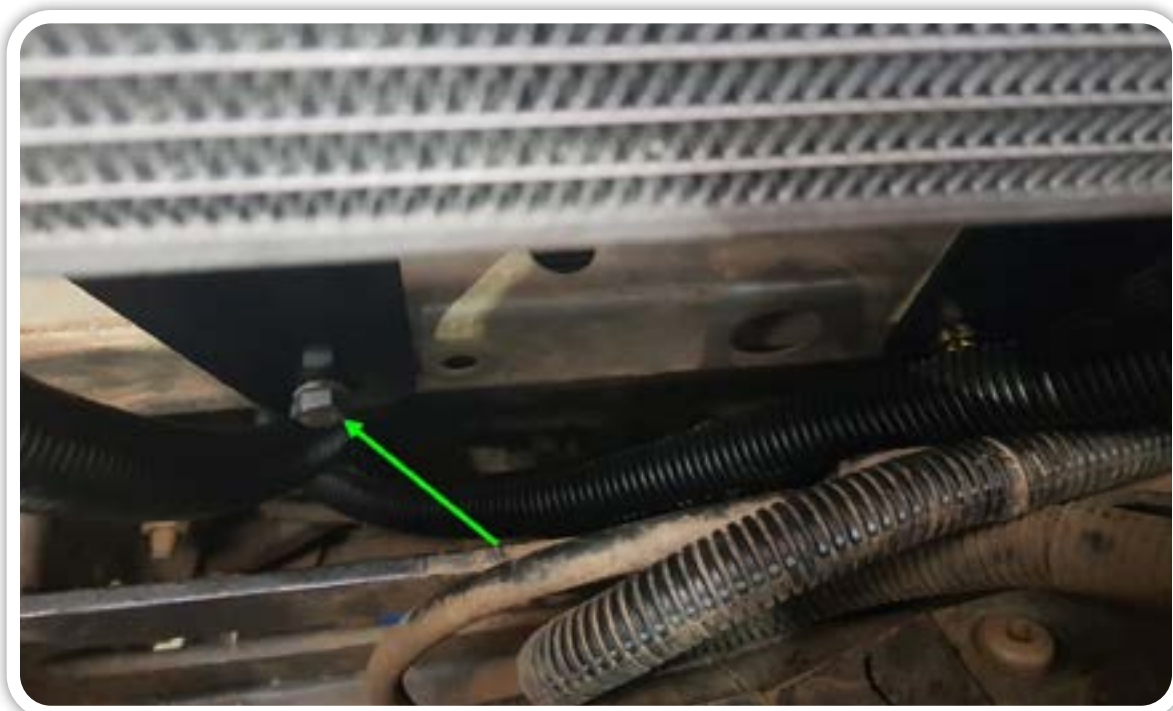
- 1.7. Remove the factory transmission fluid line located above the factory bracket. This will be slightly hidden by the new cooler once installed.



- 1.8. *Ensure you have installed the supplied transmission fluid hose to both unions on the cooler. Do not cut the hose at this point. Secure both connections with clamps.*
- 1.9. *Locate and remove the factory M8 bolt in the lower support panel holding the condenser bracket. Position the cooler bracket so the lower right mount aligns with the M8 bolt hole in the lower support panel. Re-install M8 bolt finger tight.*



- 1.10. *Slide the cooler in to position carefully and attached supplied M8 Bolt and Nut (M6 also supplied if necessary) through the vacant hole in the lower support panel that aligns with the lower left bracket mount.*



- 1.11.** Using the factory M8 Bolt from the horn, fix the top of the cooler bracket to the factory horn position.

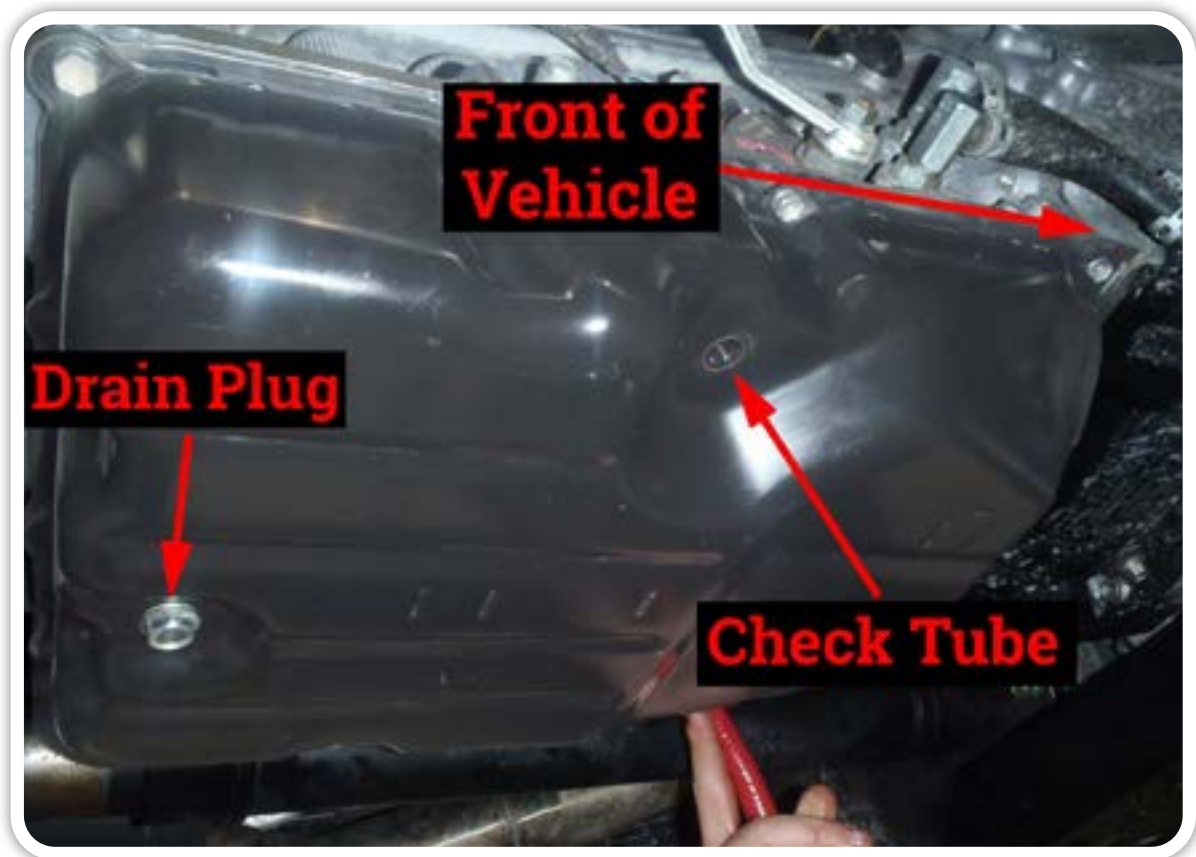


- 1.12.** Now that the bracket is in place, tighten all mounting bolts.
- 1.13.** Cut the pre-attached cooler line to suit the factory steel lines. The new cooler is non-directional so there is no specific side for each hose. Ensure you place a hose clamp over each end prior to fitting.
- 1.14.** Cable tie the cooler hoses to ensure the hose is not rubbing on anything along the route.
- 1.15.** Reinstall the grille, mounts and covers in reverse order from the removal instructions.

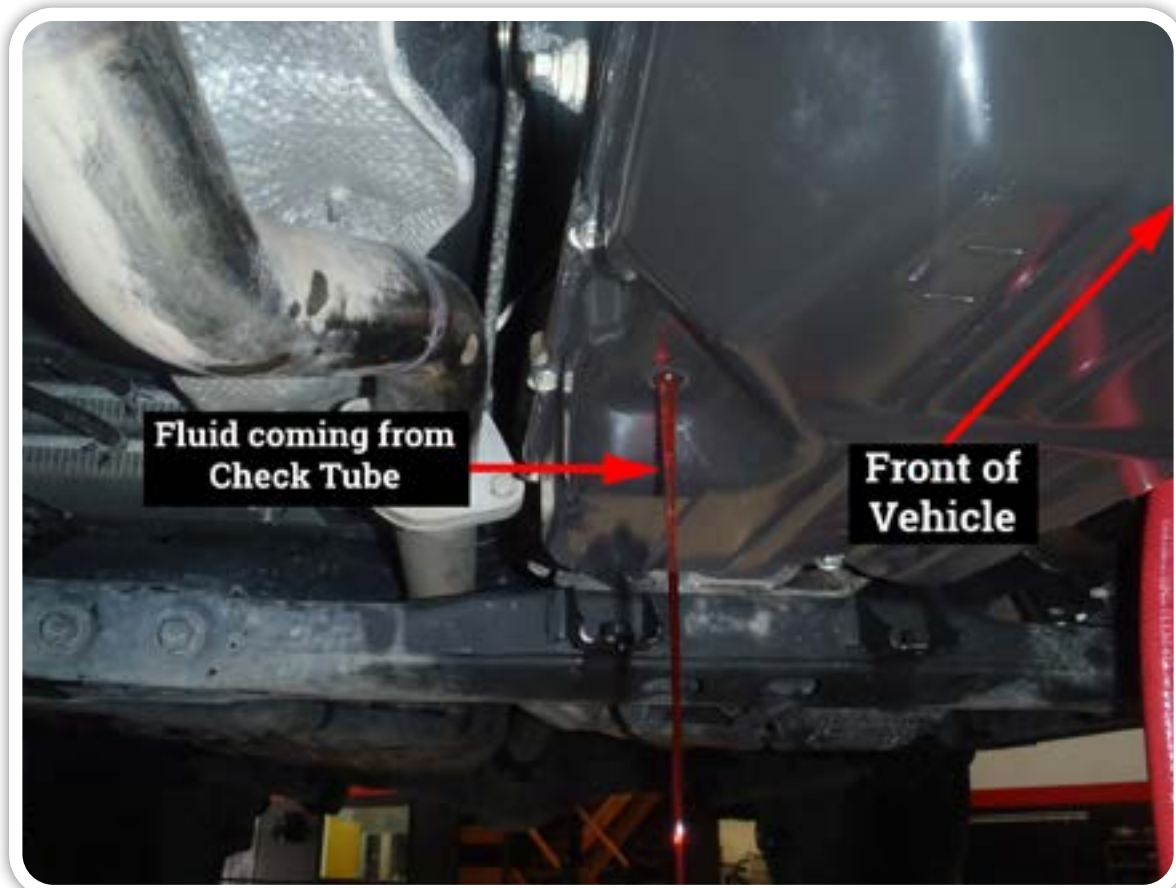
2. Checking Transmission Fluid Level

- 2.1. Ideally with two people - Start the car and allow to run for 1min. All automatic transmission fluid levels **MUST** be checked with the engine running.
- 2.2. Please ensure handbrake is on and your foot is firmly on the brake.
- 2.3. Under the vehicle the second person - Locate and remove the 5mm Allen key bolt labeled "Check" located in the sump of the transmission. **DO NOT** remove the 14mm bolt located nearby as this is the transmission drain plug.

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



- 2.4.** *If there is a lot of fluid streaming from the check tube, then the transmission is overfull, please allow the fluid to drain until it slows to a light stream - just before it slows to a dribble, then re-insert 'Check' bolt and tighten.*



- 2.5.** *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.*
- 2.6.** *Once fluid slows to a light stream - just before it slows to a dribble, then re-insert 'Check' bolt and tighten.*
- 2.7.** *If removed, re-fit the 24mm fill plug and tighten.*
- 2.8.** *Road test the vehicle for at least 15 minutes. Try to shift through all gears and through up and down hill scenarios.*
- 2.9.** *With the engine still running, recheck fluid level by removing the check tube bolt and checking if fluid lightly streams out. If no fluid is present please add more fluid.*
- 2.10.** *Repeat road test and check again until fluid level is correct.*

- 2.11.** *Once fluid level is correct and test driving is complete, visually check for leaks and re-tighten any fittings as required.*

- 2.12.** *Reinstall and bash plates, grilles, or panels removed during fitment.*

***This completes the installation of the
Dual External Transmission Oil Cooler Kit to Suit
Toyota Tundra with AB60 6 Speed Automatic Transmission***

***PLEASE REMEMBER ALL AUTOMATIC TRANSMISSIONS HAVE A SERVICE INTERVAL OF
2 YEARS OR 40,000KM TO IMPROVE THE LONGEVITY OF THE TRANSMISSION.***