

COOLMASTER

Fitting Instructions

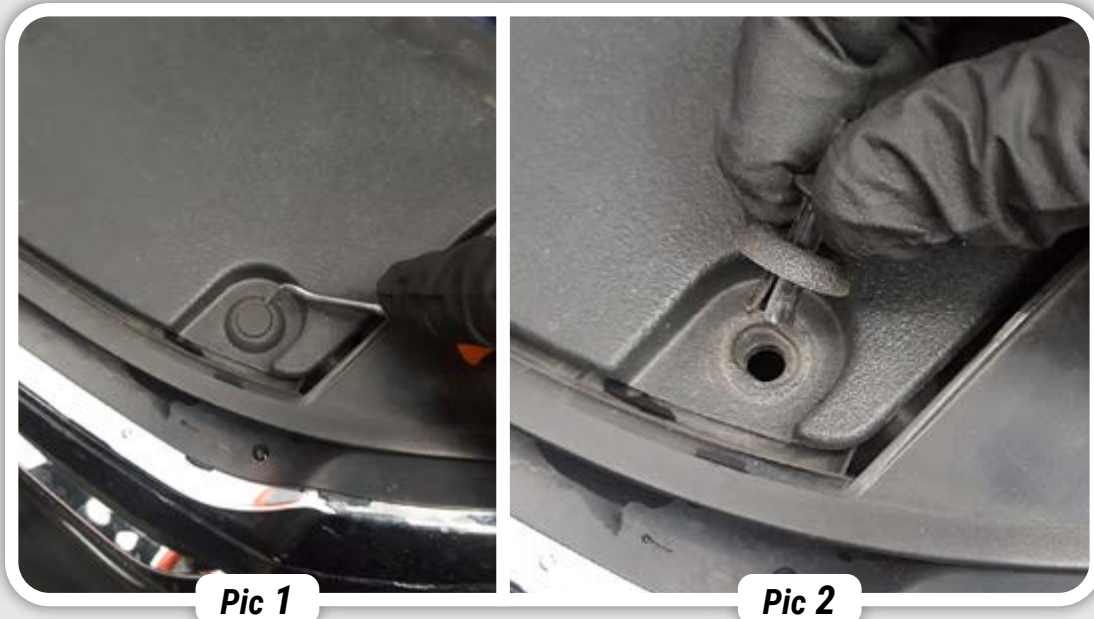
Part Nº **49497K**



Kit contains:

- *Cross Flow Oil Cooler Pre-mounted to Bracket*
- *2.5m x High Temp Cooler Line Hose*
- *4 x Stainless Steel Screw Clamps*
- *M6x20 SEMS Bolt for Bracket*
- *Instructions*

1. Ensure the car is fully switched off. It is recommended that the vehicle is cold prior to installation.
2. Open bonnet.
3. Using a seal pick tool or very fine flat blade screwdriver, carefully lift the center of the clips holding down the plastic trim above the gill as shown below. **(Pic 1)**



4. Once the centers are lifted, carefully grasp the clip with your hand and wiggle the clip out. **(Pic 2)**
5. Using a Phillips head screwdriver or 10mm socket or spanner remove the 2 screws located at the top of either end of the gill.
6. Once the 8 clips and 2 screws have been removed, carefully lift off the plastic grill cover. **(Pic 3)**

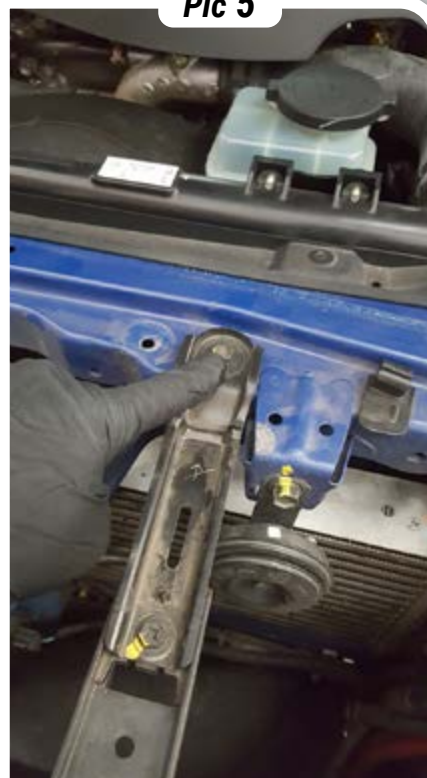


7. Remove the two braces that support the grill by attaching it to the radiator support. To complete this remove the 2 x 10mm bolts that attach each of the braces to the radiator support and remove the braces. **(Pic 4 to 7)**

Pic 4



Pic 5

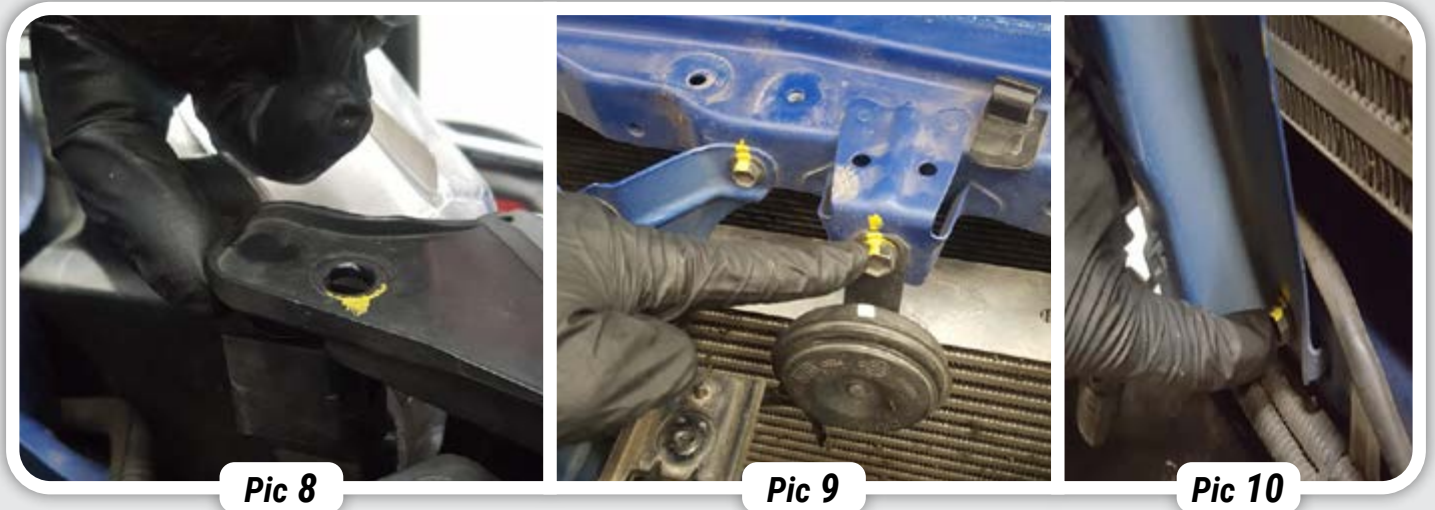


Pic 6



Pic 7

8. Carefully lift the ends and gently pull back on the grill to create a more comfortable work space. **(Pic 8)**
9. Remove the single 12mm bolt holding the horn on the passenger side of the car and gently hang the horn out of the way. **(Pic 9)**

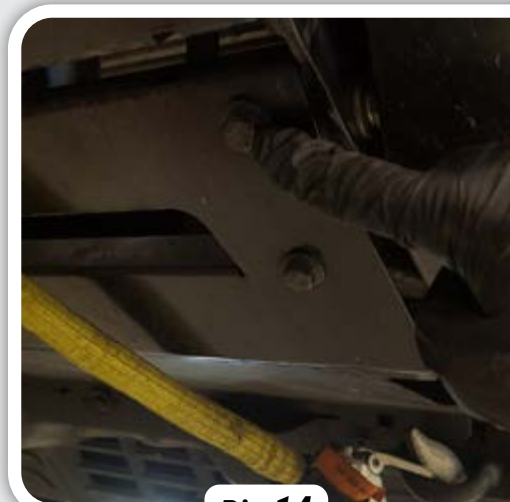


10. Remove the 10mm bolt located at the bottom of the center brace of the radiator support. Remove the ambient temperature sensor from where it is attached near the bottom of the center brace and allow it to hang down - see photo. **(Pic 10)**
11. Remove the first bash plate located under the front bar. Start by using your seal pick or flat blade screwdriver to remove the clip located in the center of the bottom of the bash plate. **(Pic 11 & 12)**



12. Remove the 2x 10mm bolts located at either side of the bottom of the bash plate. **(Pic 13)**

- 13.** Remove the 4 x 13mm bolts located at either end of the top of the bash plate then carefully remove the bash plate from the car. **(Pic 14 & 15)**



Pic 14



Pic 15

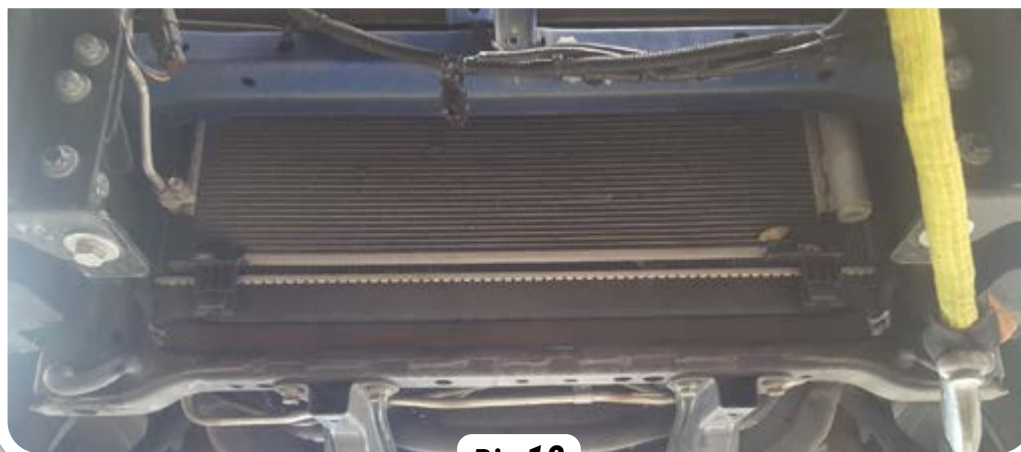
- 14.** Remove the 6x 12mm bolts holding the second bash plate and carefully remove the second bash plate from the car. **(Pic 16 to 18)**



Pic 16



Pic 17



Pic 18

- 15.** Remove the transmission rubber line located alongside the inter-cooler hose lines by undoing the squeeze type hose clamps at either end of the line with a pair of pliers. **(Pic 19)**



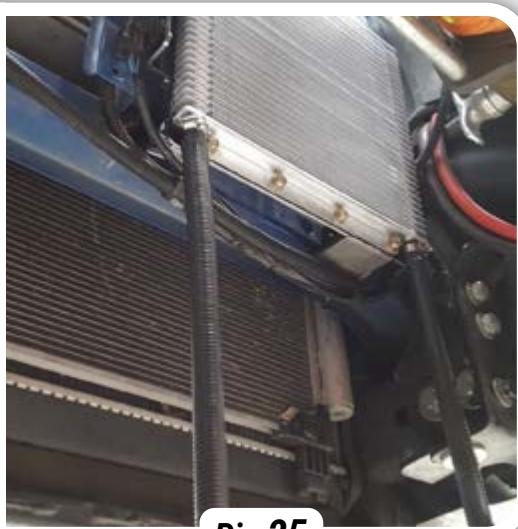
- 16.** Once the clamps are removed, twist the rubber line to break its seal on the steel line and pull back while twisting. Have a drain tray ready as excess oil in the line will flow out. **(Pic 20)**
- 17.** Take your new transmission cooler from the box and remove the 2 rubber socks carefully from the fittings. **(Pic 21)**
- 18.** Cut the supplied cooler hose in half.
- 19.** Pull back the ribbed plastic sheath on the cooler hose to fit 1 of the supplied hose clamps. Slide the cooler hose onto the fitting **DRY** - do not use lubricant. Ensure that the hose touches the base of the cooler. Repeat this process for the other half of the supplied hose. **(Pic 22 & 23)**



- 20.** Ensure hoses are all the way on and the clamps are tight. **(Pic 24)**

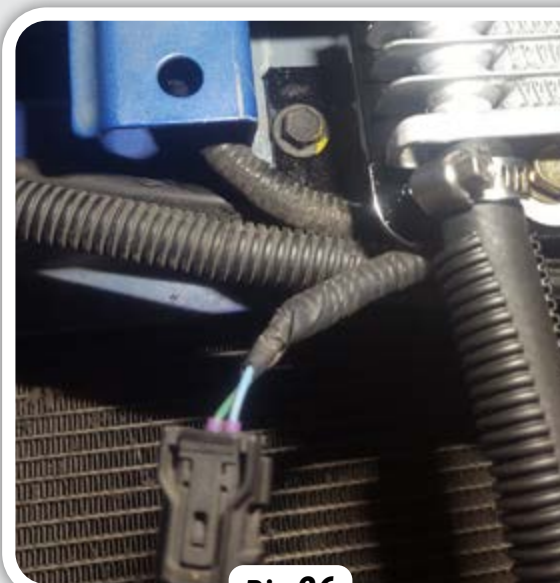


Pic 24

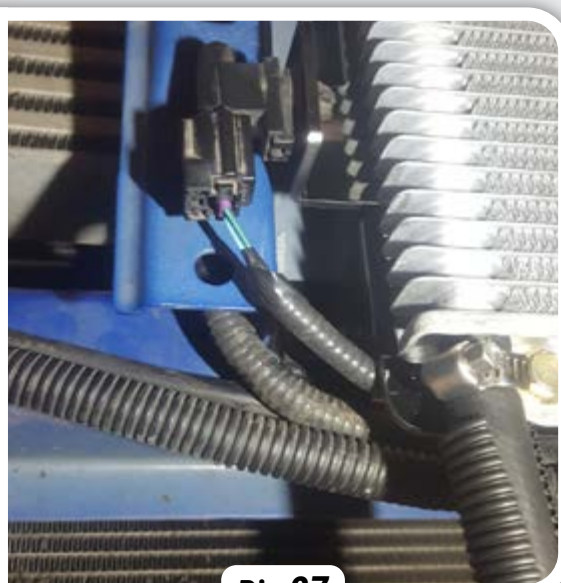


Pic 25

- 21.** Carefully fit the cooler bracket, cooler and hoses as one from underneath of car into position and let the hoses hang. **(Pic 25)**
- 22.** Once cooler is set in position, refit the original 10mm bolt through the cooler bracket and center brace into the bottom of the radiator support.
- 23.** Relocate ambient temperature sensor into notch in cooler bracket. **(Pic 26 & 27)**



Pic 26

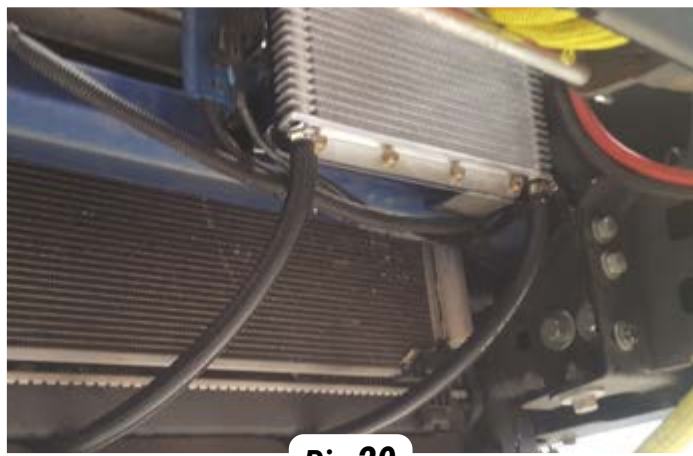


Pic 27

- 24.** Fit the 13mm bolt and spring washer through the back of the bottom of the radiator support into the nut sert located in the cooler bracket (**Pic 28**), or use M6 bolt, nut & washer if no nutsert is fitted to your bracket.



Pic 28



Pic 29

- 25.** Carefully feed the cooler lines between the foam and bottom of the A/C condenser. (**Pic 29**)
- 26.** Run the cooler line closest to the driver side to the fitting on the bottom of the radiator (refer to photos in 27) and cut the excess hose to suit.
- 27.** Once desired length is achieved, pull back sheath, fit hose clamp and fit onto the fitting on the bottom of the radiator where the original transmission cooler hose was attached. (**Pic 30 & 31**)



Pic 30



Pic 31



Pic 32

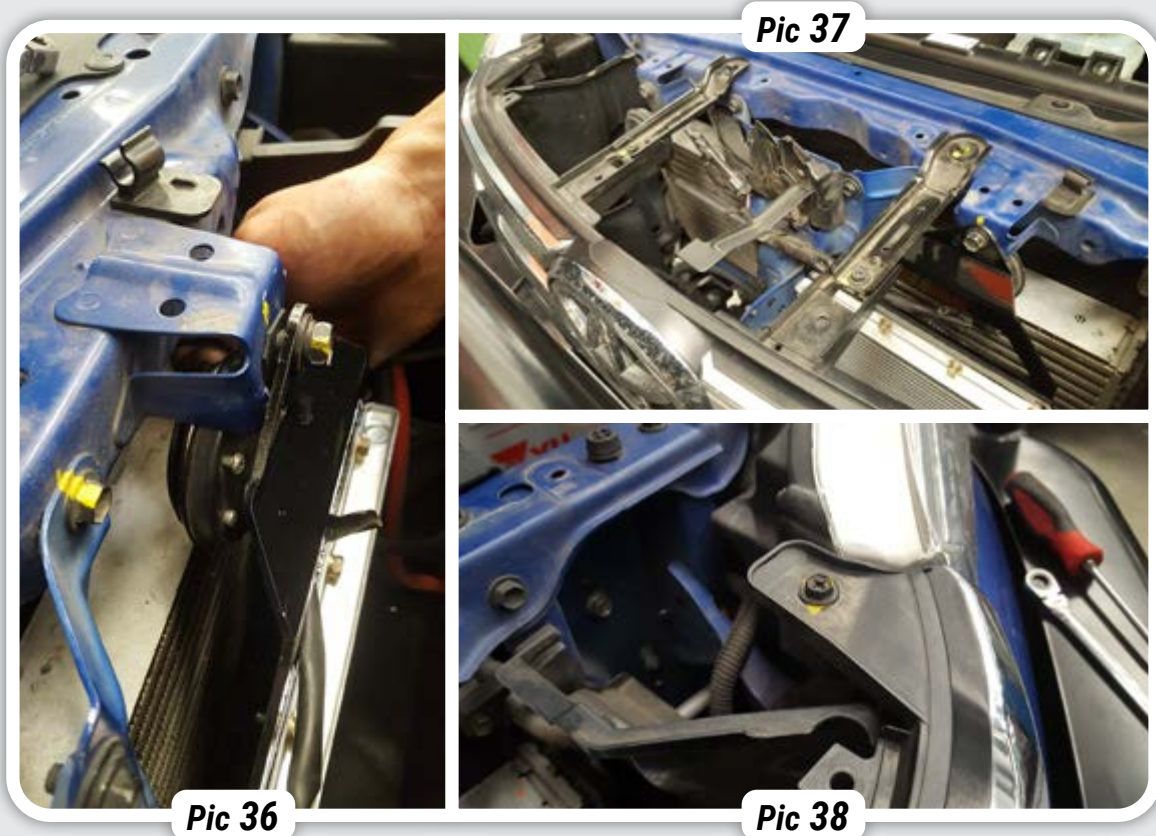
- 28.** Tighten hose clamp and put 2 zip ties on the line to ensure it is secure. (**Pic 32**)

- 29.** Take the other hose coming off the cooler and run it to the steel line that the original transmission cooler line was attached to. See photo. Cut the line to length, attach to the fitting, pull back protective sheath and use provided stainless steel hose clamp to attach it to the fitting. Attach cable ties as required to secure the cooler lines. **(Pic 33 & 34)**

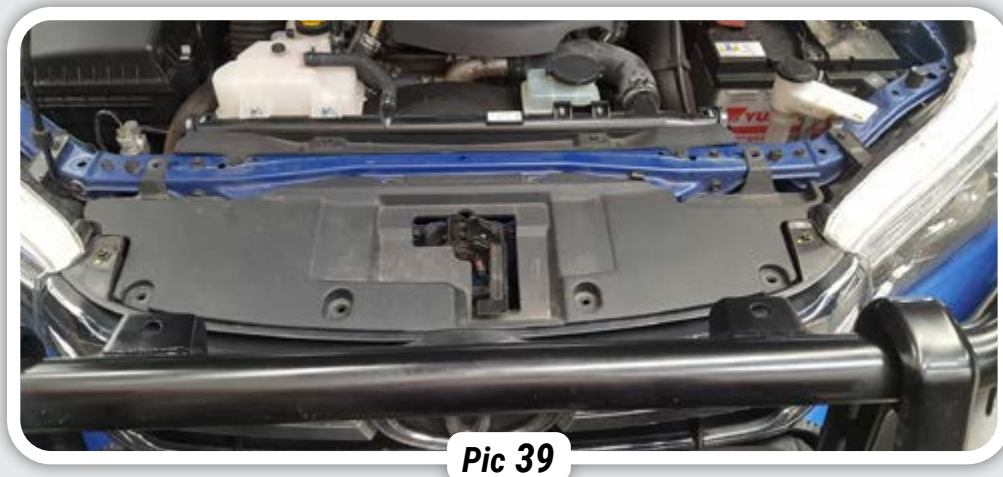


- 30.** Repeat step 14 in reverse to refit the second bash plate removed earlier.
- 31.** Repeat step 11, 12 and 13 in reverse to refit the first bash plate removed earlier. **(Pic 35)**

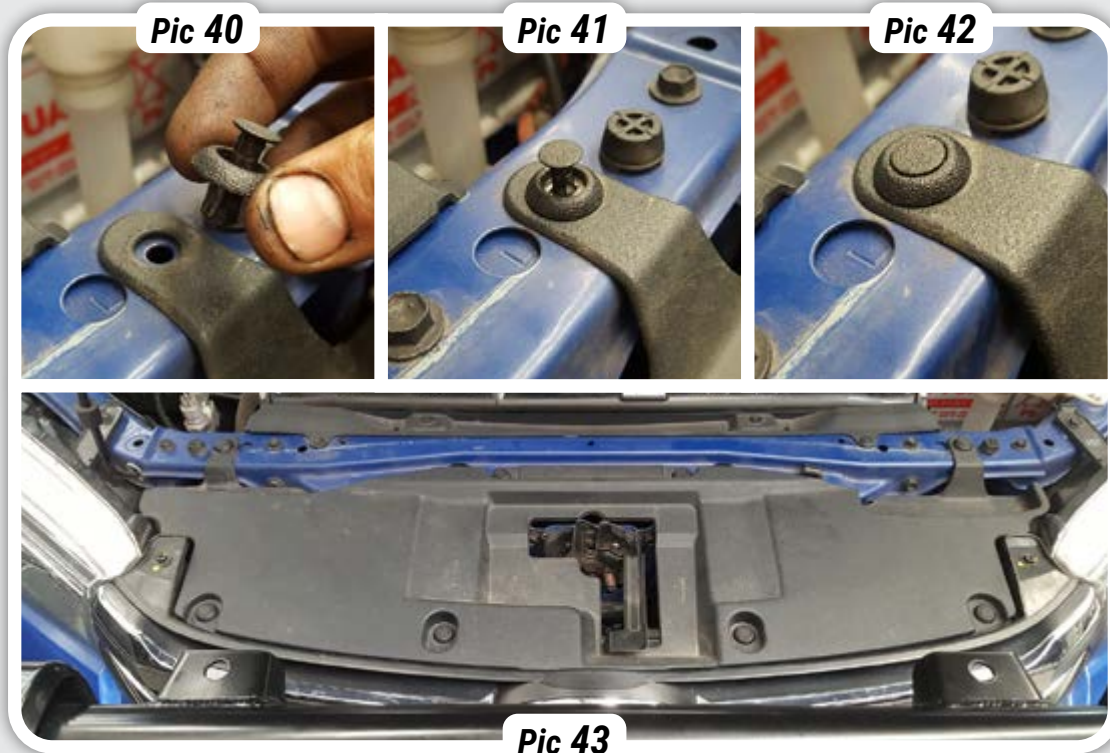
32. Carefully feed the horn through the front of the cooler bracket and face it backwards then fit the original bolt through the cooler bracket, horn and tighten into the top radiator support. **(Pic 36)**
33. Carefully push the front grill back into position and repeat step 7 in reverse to fit and tighten the 2 grill braces. **(Pic 37)**



34. Refit and tighten the 2 Phillips head screws at either end of the top of the grill. **(Pic 38)**
35. Carefully place the plastic grill cover back in position. **(Pic 39)**



- 36.** Gently refit the 8 plastic clips into the grill cover whilst centers are still open. Once all clips are sitting in the grill cover, gently push the centers down until they are flush. **DOT NOT PUSH THEM BELOW FLUSH.** If pushed too far and they go below flush then carefully lift the clip out and try again. **(Pic 40 to 43)**



- 33.** Start the car. While the car is running locate and remove the 24mm fill plug on the driver side of the transmission. **(Pic 44)**



- 38.** Locate and remove the 5mm alan key head check plug located in the sump of the transmission. DO NOT remove the 14mm bolt located nearby as this is the transmission drain plug. **(Pic 45 to 48)**



- 39.** Carefully top up the transmission fluid through the fill plug until the fluid is fully flowing out of the check plug hole.
- 40.** Carefully watch the fluid flowing out of the check plug hole and once the flow flickers, quickly put the check plug back in and tighten. Return the 24mm fill plug and tighten.
- 41.** Check all hoses and fittings for sufficient clearance to any vehicle part and clean any spilled transmission fluid.
- 42.** Road test vehicle then re-inspect cooler and fittings for leaks. Tighten if necessary.