

# External Transmission Oil Cooler Kit Suitable for:



Holden Colorado 7 / Colorado RG & Trailblazer 6 Speed Automatic Transmission

WITH THE FOLLOWING ENGINES: 2.8L TURBO DIESEL - 06/2012 TO PRESENT

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

3/8" Oil Cooler Preinstalled on Bracket



6 x 14-16mm Stainless Steel Hose Clamps



2.5m x 3/8" High Temp Cooler Line Hose with Conduit



3 x M6x20mm SEMS Bolt

2 x M6 Nuts

2 x 3/8" Hose Joiners







Expected Installation Time: 2 Hours





### Summary of Installation - For Experienced Fitters

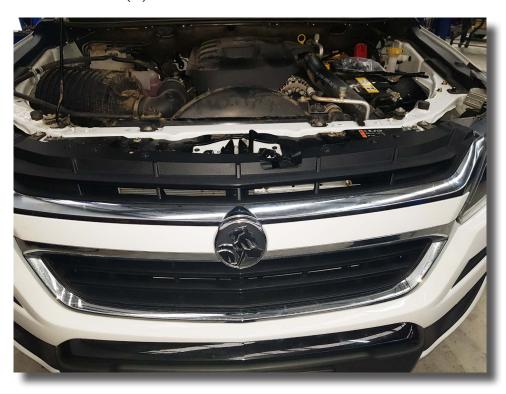
- Ensure you have enough transmission oil to top up your transmission.
- Remove the top radiator support panel cover by removing the (8) x 10mm headed bolts and the (8) x Torx screws. Remove the passenger side radiator support panel brace.
- Remove the horn. Retain the bolt for later remounting of the horn.
- Remove the (2) lower clips retaining the lower part of the passenger side air chute. These clips are located underneath the chute so it is best to use a clip remover.
- Cut the air chute to allow the cooler bracket to fit. Refer to photo if necessary.
- Cut the supplied cooler hose in half. Affix one half to each union on the bottom of the cooler and secure using one of the supplied stainless steel hose clamps.
- Position yourself under the front of the car. Remove the front lower splash cover by removing (4) x 10mm headed bolts and the (2) x clips.
- Fit the cooler and bracket by feeding the cooler hoses attached to the supplied cooler down between the lower radiator support and the air conditioner condenser.
- When the hose has been fully fed down, lower the cooler bracket into place making sure that the locating tab is positioned into the hole in the lower radiator support.
- Align the bracket on existing holes and studs so it is ready to mount.
- Attach the top of the bracket through the existing hole using M6 bolt supplied.
- Attach the left side of cooler to the vehicle using supplied (2) x M6 nuts. Use provided M6 bolts if required.
- Re-install the horn to original location. It must be flipped around to clear the bracket.
- Locate the lower cooler line from the transmission. Follow the line from the transmission until you reach the rubber hose near the radiator.
- Cut the line you have followed in the middle of the rubber section.
- Take the (2) supplied joiners. Mount one in each side of the cut hose. Secure with (2) supplied clamps.
- Cut the supplied cooler hoses running from the cooler to length and attach to either joiner. Clamp with supplied hose clamps. Cable tie hoses to secure as required.
- Re-install the covers you have removed.
- Top up transmission with transmission fluid meeting the manufacturer specification. Remove the black plastic fill plug located on the driver side of the transmission. Start the vehicle with the transmission in park. Remove the 14mm head bolt in bottom of transmission that covers the "level hole".
- Top up transmission fluid until fluid begins to come out of the level hole in the transmission pan. Once the oil is coming out of the level hole refit the 14mm bolt, you can now turn the car off and refit the black plastic fill plug.
- Road test vehicle. Check for leaks, re-tighten fittings as required. With the engine still running, recheck transmission fluid is full. Top up levels as per previous instructions. Check again for any transmission fluid on the vehicle and clean off. Road test vehicle then re-inspect cooler and fittings for leaks.
- This completes the installation.



### **Detailed Installation Instructions**

### Before commencing work, please ensure that you have at least 1L of transmission fluid to top up at the end of the job.

- 1. Ensure the car is fully switched off. It is recommended that the vehicle is cold prior to installation.
- 2. Open bonnet.
- 3. Remove the top radiator support panel cover by removing the (8) x 10mm headed bolts and the (8) x Torx screws.







4. Remove the passenger side grill cover panel brace.







5. Remove the horn mounted to the top of the radiator support panel located on the passenger side of the vehicle (retain the bolt as it is required to remount the horn later).







6. Remove the (2) lower clips retaining the lower part of the passenger side air chute. These clips are located underneath the chute so it is best to use a clip remover.



7. Cut the air chute to allow the cooler bracket to fit. Use a cutting tool such as a hack saw or knife to cut the air chute as indicated by the photo below.





8. Looking where the chute was cut, locate the hole on the passenger side of the lower radiator support. You will locate the tab on the back of the cooler bracket in this hole later in this instruction.



- 9. Remove protective cove from the (2) unions on the bottom of the supplied cooler.
- 10. Cut the supplied cooler hose in half. Affix one half to each union on the bottom of the cooler and secure using one of the supplied stainless steel hose clamps.
- 11. Position yourself under the front of the car. Remove the front lower splash cover by removing (4) x 10mm headed bolts and the (2) x clips.

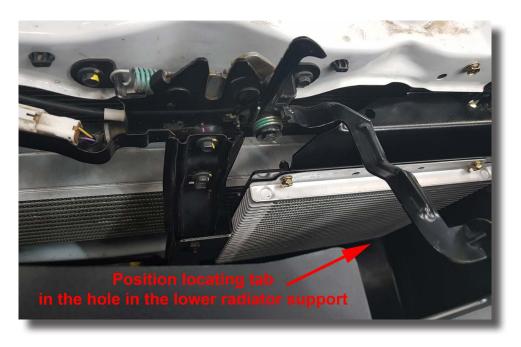




12. Fit the cooler and bracket. This is done by feeding the cooler hoses that are attached to the bottom of the supplied cooler down between the lower radiator support and the air conditioner condenser (refer to photo below).



13. When the hose has been fully fed down, lower the cooler bracket into place making sure that the locating tab (refer earlier photo) is positioned into the hole in the lower radiator support.



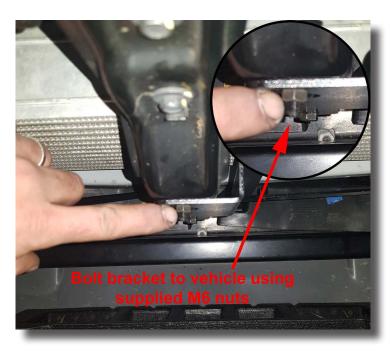




- 14. Line up the bracket mounting holes with the vehicle's existing OEM holes and studs. Some models don't have studs so use provided M6 bots instead.
- 15. Taking the supplied M6 bolt, attach the top of the bracket through the existing hole in the upper radiator support panel.



16. Taking the (2) x M6 nuts supplied, bolt the mounting tab on the left of the cooler bracket to the center upright brace. Refer photo below.



17. Re-install the horn to original location. It will need to be flipped around to clear the bracket.





18. Locate the lower cooler line from the transmission. Follow the line from the transmission until you reach the rubber hose near the radiator.



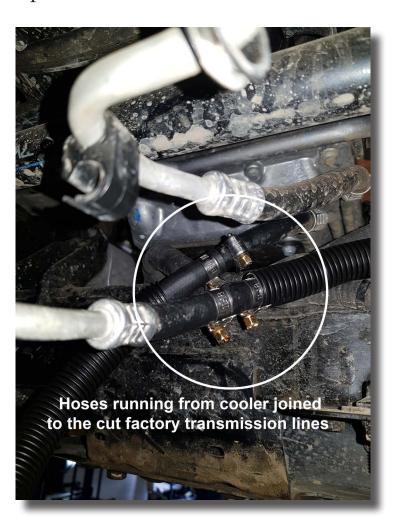
19. Cut the line you have followed in the middle of the rubber section. See photo below.







- 20. Take the (2) supplied joiners. Mount one in each side of the cut hose. Secure with (2) of the supplied hose clamps.
- 21. Cut the supplied cooler hoses (running from the cooler) to length and attach them to either of the (2) supplied joiners. It does not matter which hose joins to which as the cooler is not directional. Clamp each join you have just completed securely using (2) supplied hose clamps. Cable tie hoses to secure as required. See photo below.



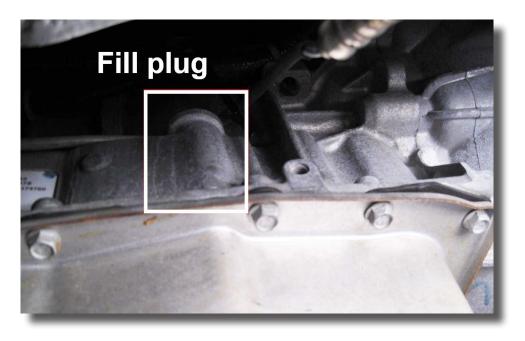




22. Re-install the covers you have removed. Start with the lower cover then reinstall the top metal cover. Do not reinstall the passenger side radiator support panel brace as this is no longer required.

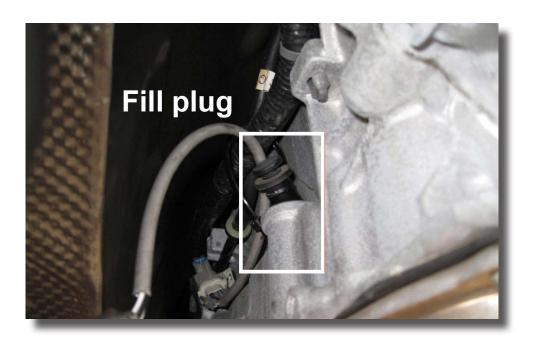


23. The transmission now must be topped up with transmission fluid that meets the specification of the manufacturer. Remove the black plastic fill plug located on the driver side of the transmission. Refer photos below.

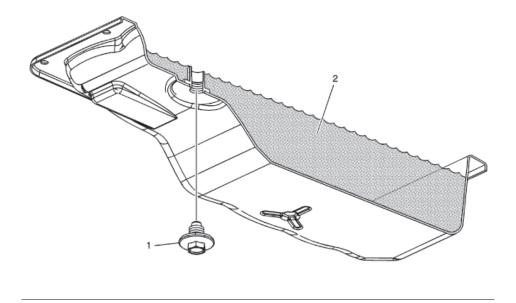








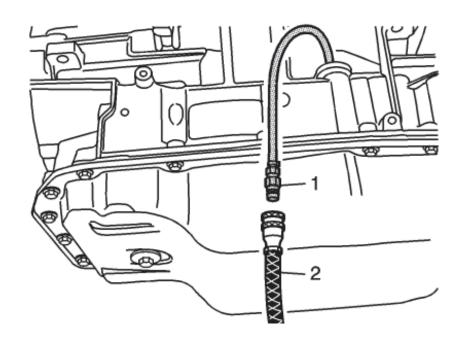
- 24. Start the car in park.
- 25. Remove the 14mm head bolt from the bottom of the transmission pan that covers the "level hole". Refer bolt indicated by 1 in the diagram below.







26. Using a short hose fill the transmission through the hole where the fill plug was removed. Continue filling until the fluid begins to come out of the level hole in the transmission pan. Once the oil is coming out of the level hole refit the 14mm bolt, you can now turn the car off and refit the black plastic fill plug.



- 27. Road test then visually check for leaks and re-tighten any fittings as required.
- 28. With the engine still running, recheck transmission fluid is full. Top up levels as per previous instructions.

### PLEASE NOTE: THE TRANSMISSION FLUID MAY BE QUITE HOT.

- 29. Check again for any transmission fluid on the vehicle and clean off.
- 30. Road test vehicle then re-inspect cooler and fittings for leaks. Tighten if necessary.



### This completes the installation.

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

### Please Provide us with Feedback

If you have a minute to provide us with some feedback about your experience with Wholesale Automatic Transmissions and our products, that would be greatly appreciated.

Using your smart phone or device's camera app, point at the QR code below to take you straight to our feedback page for you to choose the most appropriate feedback method.

