



External Transmission Oil Cooler Kit

Suitable for:



Mitsubishi Triton MN 4sp, 5sp auto
Mitsubishi Triton MR 6sp auto
Mitsubishi Pajero Sport 6sp & 8sp auto

WITH THE FOLLOWING ENGINES:
4D56 - 2.5L Turbo Diesel
4N15 - 2.4L Turbo Diesel

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

Cross Flow Oil Cooler
Pre-installed on Bracket



2 x M8 20mm
SEMS Bolt



4 x 8-16mm Stainless
Steel Screw Clamps



1 x M6 20mm
SEMS Bolt



1.5m x 10mm Cooler
Line Hose with Conduit



3 x M10 Flat Washers



5 x 300mm
Cable Ties



Expected Installation Time: 2 Hours

Summary of Installation - For Experienced Fitters

- Ensure you have enough transmission oil as per manufacturers specification to top up your transmission. You will also need a pump to get the fluid into the transmission.
- Remove top grill cover and lower front bash plate.
- Cooler assembly fits to passenger side of the centre support.
- MN Only - Remove top intercooler pipe for ease of access. Loosen (don't remove) two bolts on passenger side of lower radiator support holding OEM cooler and OEM intercooler.
- Slide cooler assembly over loosened bolts. Secure top mount with supplied M6 bolt and tighten bolts.
- MR/Pajero Sport Only - Fit two (2) M8 Bolt to the drivers side lower radiator support threaded holes.
 - Slide the assembly into place with the slotted holes fitting over the M8 Bolts.
 - Fit the M6 Bolt through the top of the bracket and into threaded hole in upper support panel.
 - If spacer required between bracket and radiator support use supplied M10 washers. Tighten bolts.
- MN Only - Remove OEM cooler hose from passenger side of OEM cooler.
 - Fit new cooler hose between upper connection of OEM cooler and lower connection of new cooler.
 - Fit a length of cooler hose between upper connection on new cooler assembly and factory steel line.
- MR/Pajero Sport Only - Remove OEM cooler hose from drivers side of OEM cooler. Using a #3 Phillips screwdriver to manipulate the steel line towards drivers side for clearance.
 - Route upper cooler line along front crash bar and connect to OEM cooler port.
 - Route lower cooler line hose above the cooler and connect to OEM steel line.
- Secure hoses with the supplied cable ties.
- Triton MN Only
 - Locate dipstick and a clean rag, then remove dipstick and remove any fluid from dipstick with rag
 - Insert dipstick for 30 seconds then remove and check fluid level on stick.
 - If low, add fluid to the filler tube while regularly re-checking fluid level with dipstick
 - When fluid level is correct, re-install dipstick into filler tube.
- MR/Pajero Sport Only
 - Start engine and check transmission fluid by removing the check bolt in the pan.
 - Top up fluid if necessary until fluid comes out of check bolt.
 - When check bolt fluid slows to a dribble, refit check bolt.
- Run vehicle on a test drive to get the transmission fluid up to temperature. On completion of the test drive visually check for any leaks.
- With the engine still running, recheck transmission fluid level is correct.
- If low, top up levels as per previous instructions.
- Check again for any transmission fluid on the vehicle and clean off.
- Refit bash plates and top grill cover

Detailed Installation Instructions

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

For Triton MR models with the 6 Speed Auto, and the Pajero Sport, you will need either a pump or some way to push fluid up into the transmission. There is no gravity feed option with this transmission.

1. Before commencing ensure the car is fully switched off. It is recommended that the vehicle is cold prior to installation.
2. While this Cooler Assembly fits both the MN 4 & 5 Speed Triton as well as the MR 6 Speed Triton and the Pajero Sport, there are some differences in the way they are installed. We have separated the models with a note at the top of each page as to which model that page applies to.

If for some reason your vehicle does not match these instructions please contact where you purchased the kit from for further information.

Please note this cooler assembly does NOT fit the Mitsubishi MQ Triton (the model in between the MN and MR).

This page applies to Triton MN 4 & 5 Speed Models

3. Open the bonnet and remove the four retaining clips from the grill cover. Remove the grill cover from the vehicle.

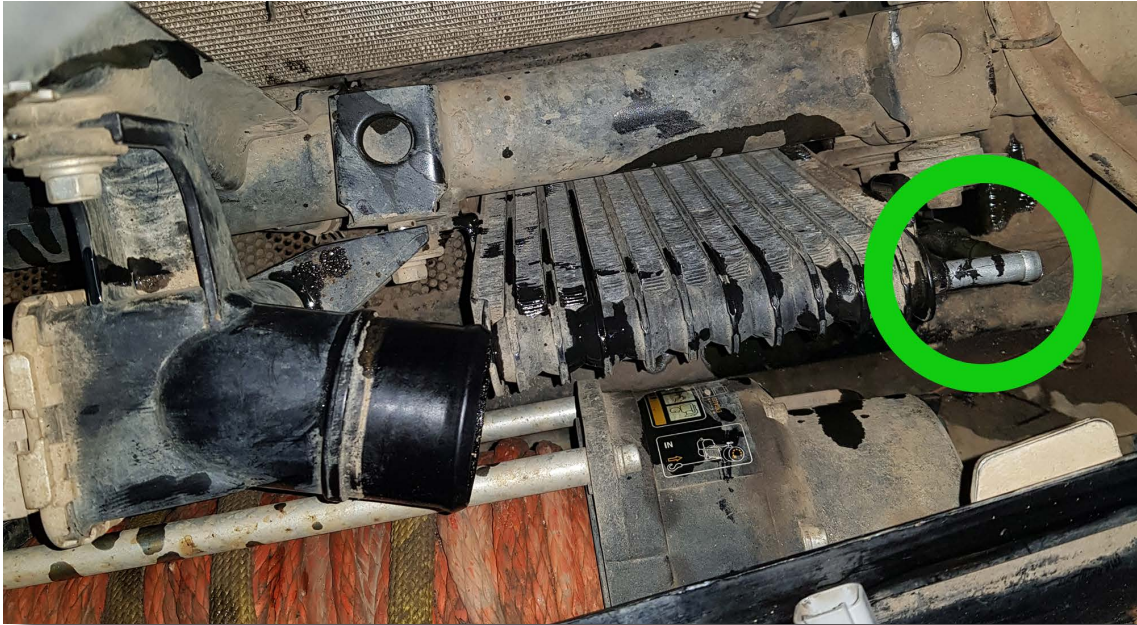


4. Loosen the factory hose clamp and remove the intercooler hose from the top right of the intercooler. Move the hose out of the way to make access easier.



This page applies to Triton MN 4 & 5 Speed Models

5. Remove the hose from the upper fitting of the factory transmission cooler. Trace this hose to the steel hard line below the factory cooler and remove the factory rubber hose from the vehicle.

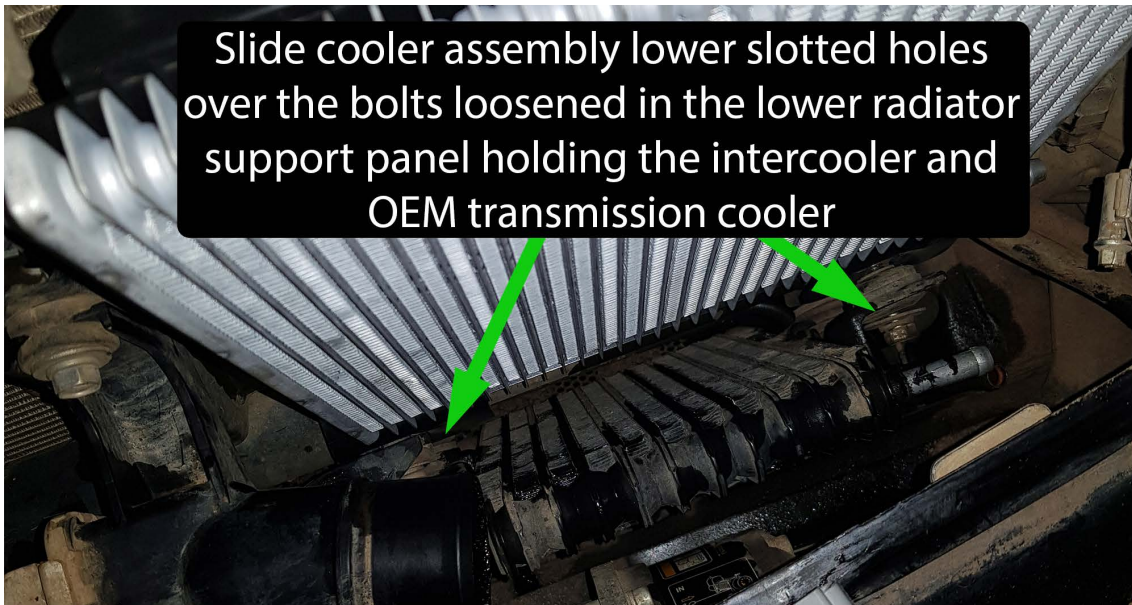


6. Loosen the bolts indicated in the photo below, but do not remove them. One bolt attaches the intercooler to the lower radiator support panel. The second bolt attaches the OEM oil cooler to the lower radiator support panel.



This page applies to Triton MN 4 & 5 Speed Models

- Lower the cooler assembly into place so that the two bottom slotted holes in the bracket slide in between the lower radiator support panel and the brackets holding the intercooler and OEM oil cooler that you loosened in the previous step. Do not tighten these bolts yet.

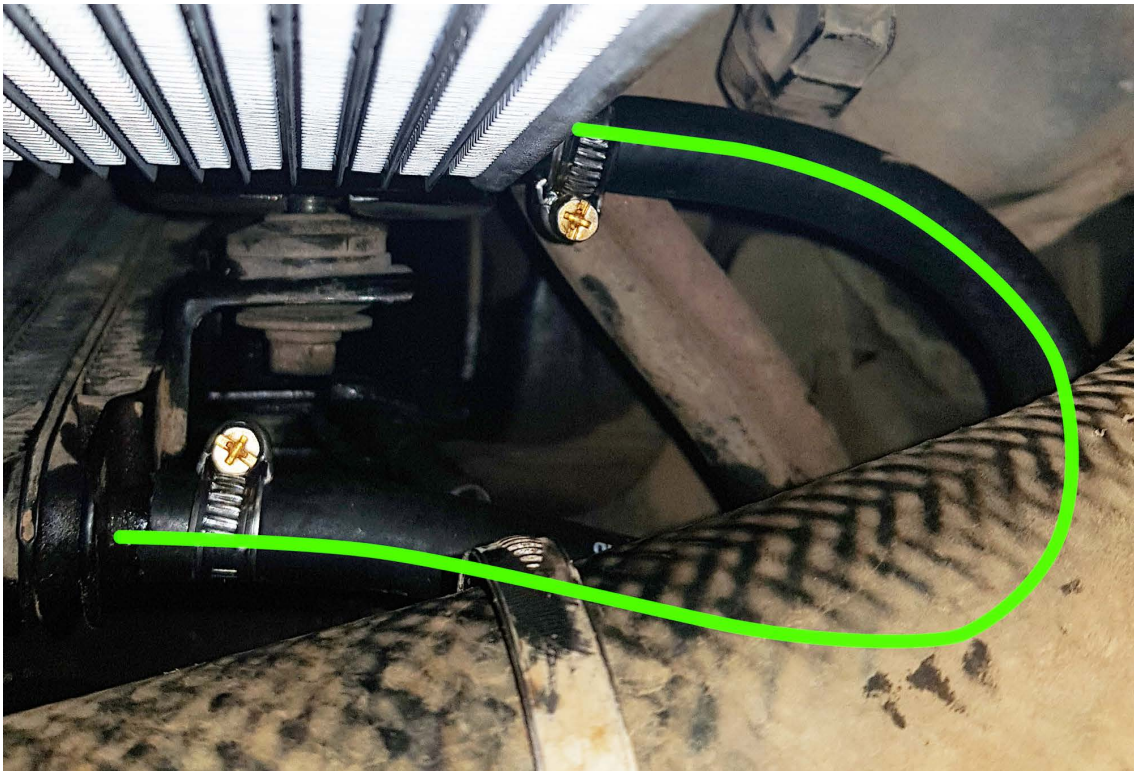


- Insert one M6 SEMS bolt through the top mounting hole and into the upper radiator support panel and tighten to secure the top of the cooler assembly. Now you can tighten the two bolts holding the bottom of the cooler assembly to the lower radiator support panel.



This page applies to Triton MN 4 & 5 Speed Models

9. Install one of the supplied hose clamps onto one end of the cooler hose and secure it to the lower fitting of the cooler assembly. Don't tighten the hose clamp yet.
10. The other end of the cooler hose will connect to the top fitting of the OEM oil cooler. Cut the hose to length and install one of the supplied hose clamps into place prior to pushing onto the OEM oil cooler fitting.
11. Adjust the cooler hose to ensure there are no kinks and it is not restricting flow, then tighten both hose clamps to secure it in place.

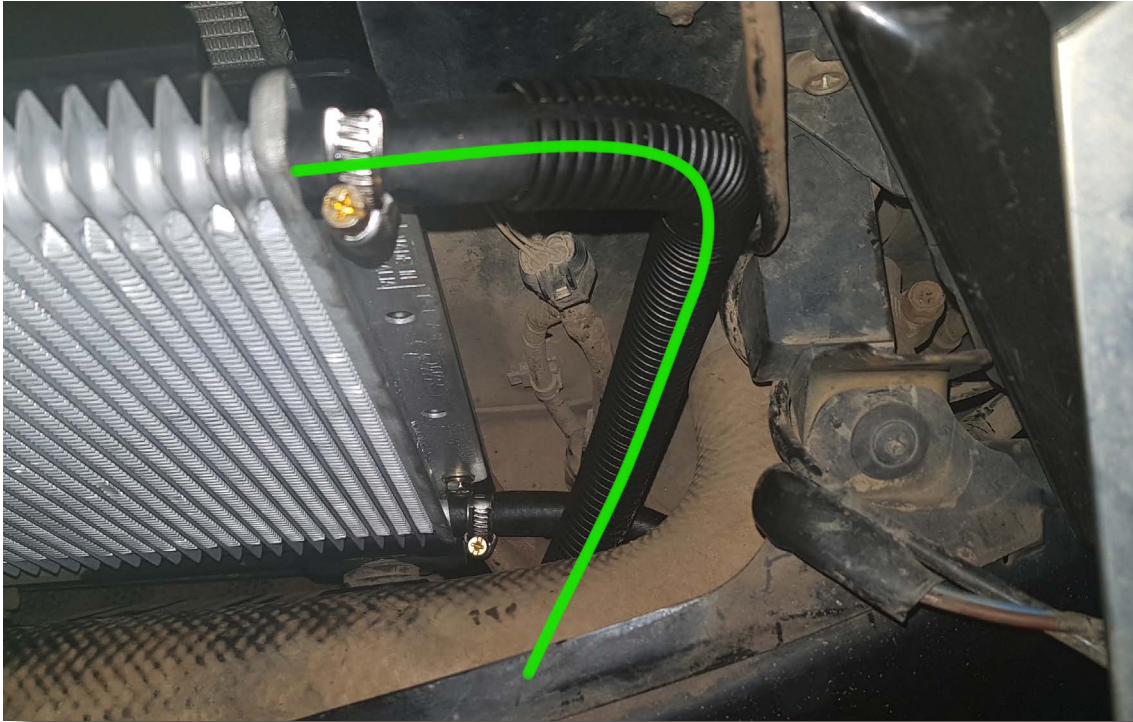


12. Install one of the supplied hose clamps onto one end of the remaining length of cooler hose and push onto the upper fitting of the cooler assembly. Don't tighten the hose clamp yet.
13. The other end of this hose connects to the steel line below the OEM oil cooler. Cut the cooler line hose to length and install one of the supplied hose clamps into place before pushing it onto the steel line.

This page applies to Triton MN 4 & 5 Speed Models

14. Adjust the cooler hose to ensure it is not restricting flow, then tighten both hose clamps to secure hose in place.

Top view:



Lower view:



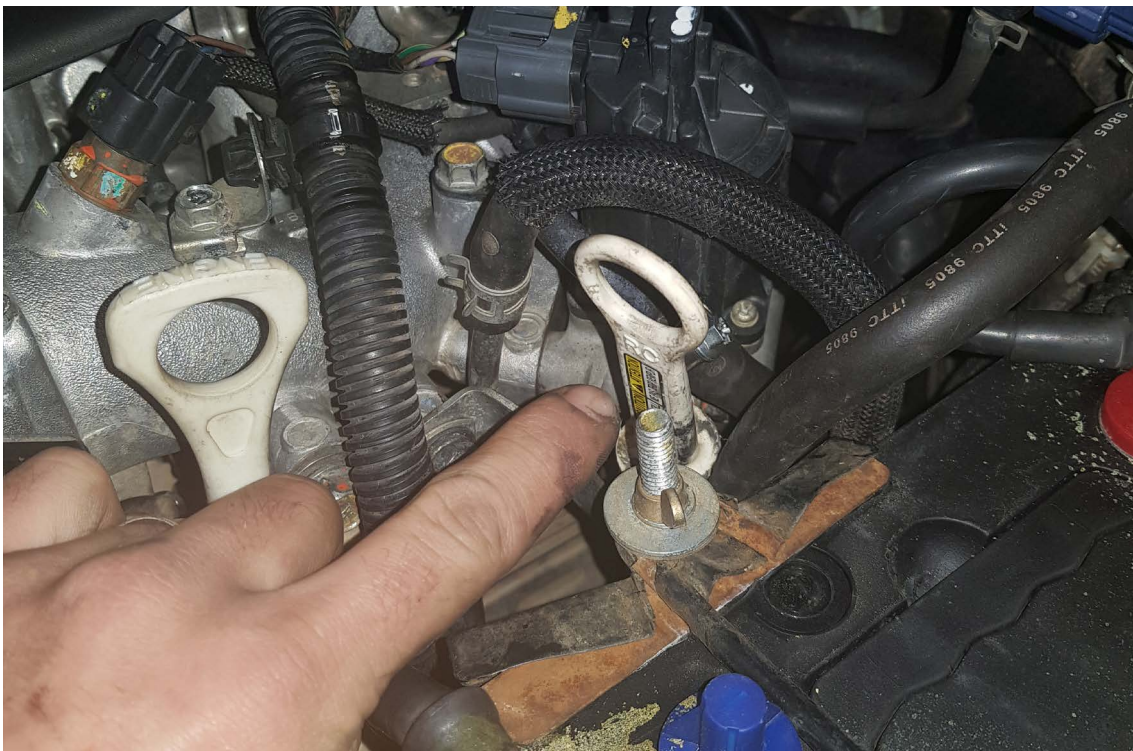
This page applies to Triton MN 4 & 5 Speed Models

15. With installation of the cooler assembly complete we now need to check the transmission fluid level is correct.

You may have lost some fluid during the installation, plus there is the extra capacity of the new cooler system. There is also the possibility the transmission fluid was not at the correct level to begin with.

Whatever the situation is, it is vital now that you check the transmission fluid is at the correct level to ensure the correct operation of the transmission.

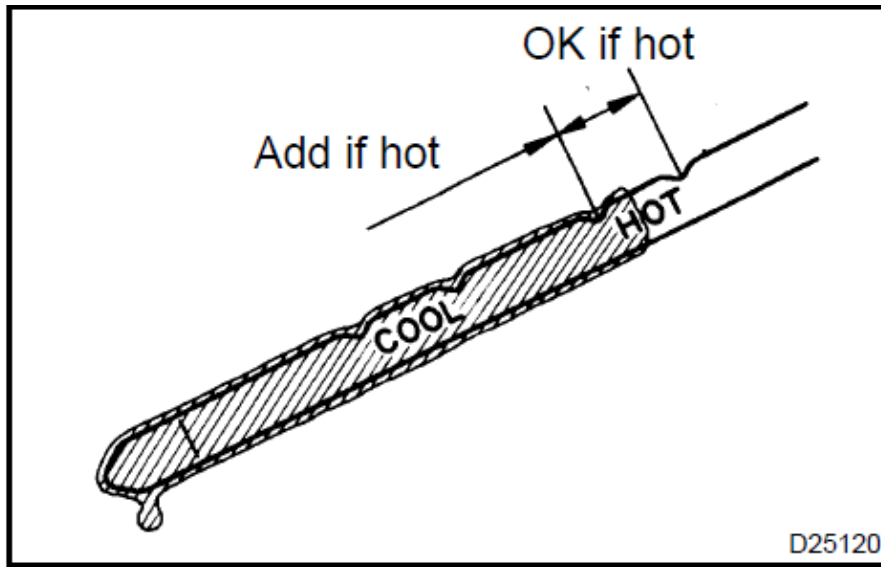
16. Firstly, whenever you check the transmission fluid on ANY automatic transmission the engine **MUST** be running. Don't switch the engine off until you have completely finished checking the fluid level.
17. With the engine running locate the transmission dipstick and filler tube in the engine bay.



18. Locate a clean rag, then remove and clean the dipstick taking note of the indications on the stick. You are aiming for the highest 'hot' notch.

This page applies to Triton MN 4 & 5 Speed Models

19. Re-insert the dipstick into the filler tube all the way and wait for 30 seconds.
20. Remove the dipstick and check the fluid level. If the dipstick is showing low (or no transmission fluid) on the level indicator, you will need to add transmission fluid. Please use fluid as per the manufacturers specification.



21. To add fluid insert a clean funnel into the top of the filler tube and slowly pour the fluid down the filler tube. Add small amounts at a time.



This page applies to Triton MN 4 & 5 Speed Models

22. Wait 60 seconds before re-inserting the dipstick to avoid false readings from the fluid running down the filler tube.
23. Wipe the dipstick with the clean rag then re-insert the dipstick into the filler tube all the way.
24. Repeat the check, fill, wait, check process until the fluid is at the full line.
25. Once the fluid has reached the full level, re-insert the dipstick and clean any spilled fluid around the engine bay or under the vehicle.
26. Road test the vehicle. You are looking for anomalies such as high transmission fluid temperatures indicating that the fluid level is not correct or possibly an air lock or cooler line blockage. If transmission operates as expected then return to the workshop.
27. With the engine still running, visually check for leaks and re-tighten any fittings as required.
28. With the engine still running recheck fluid level by repeating the fluid level checking steps.
29. If the fluid is at the correct level check for any spilled or leaked transmission fluid in or around the engine bay and clean it off.
30. Re-install any bash plates, the grill cover and any other removed panels.
31. Check for any dirty marks or finger prints left on the vehicle during installation and clean them off.

This page applies to Triton MN 4 & 5 Speed Models

This completes the installation of the
External Transmission Oil Cooler Kit to suit:

Mitsubishi Triton MN with 4 and 5 Speed
Automatic Transmissions

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

This page applies to Triton MR 6sp, Pajero Sport

32. Open the bonnet and remove the retaining clips from the grill cover. Then remove the grill cover from the vehicle.

Some vehicles have 11 clips, some 12, holding the grill cover in place, with either 3 or 4 clips long the back edge.

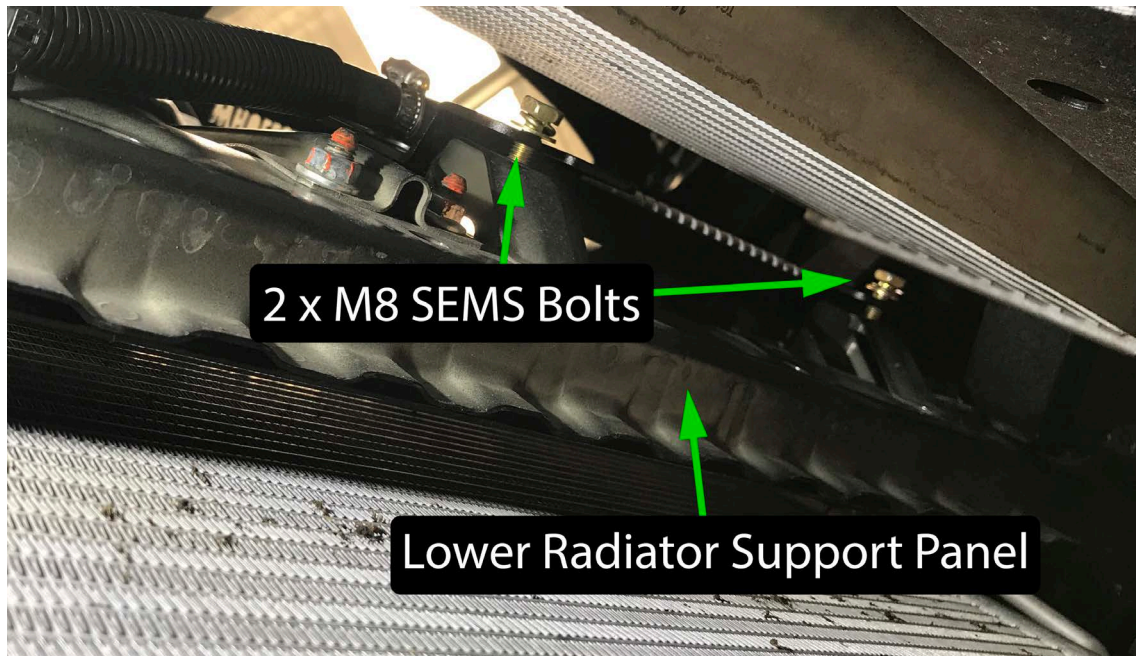


33. Remove any bash plates from under the radiator for ease of access during fitment of the cooler kit.



This page applies to Triton MR 6sp, Pajero Sport

34. On the passenger side of the vehicle locate the two M8 threaded holes in the lower radiator support panel. Fit the two (2) supplied M8 Bolts loosely into the threaded holes.



35. Lower the cooler assembly into place while sliding the slotted holes over the M8 bolts in the lower radiator support panel.

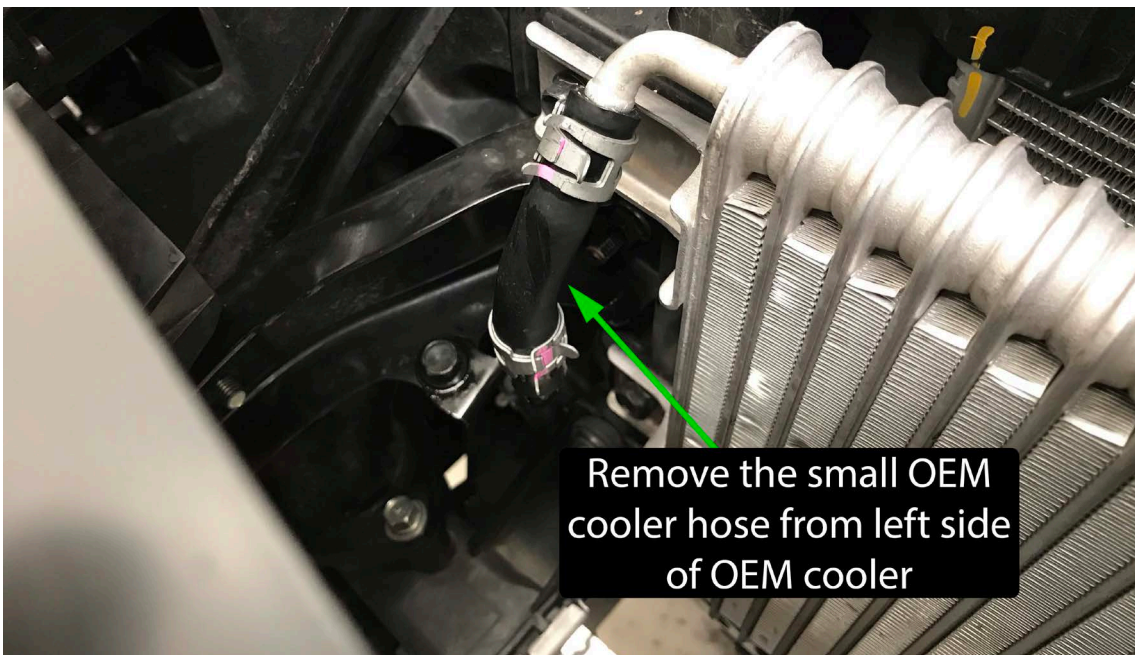


This page applies to Triton MR 6sp, Pajero Sport

36. Fit the supplied M6 bolt through the top mounting point and into the threaded hole in the upper radiator support panel. We have supplied three (3) flat washers to space the top mount from radiator support panel to avoid bending the lower lip. Tighten all bolts to secure bracket.



37. Remove the short OEM transmission cooler hose on the top of the factory cooler and discard.



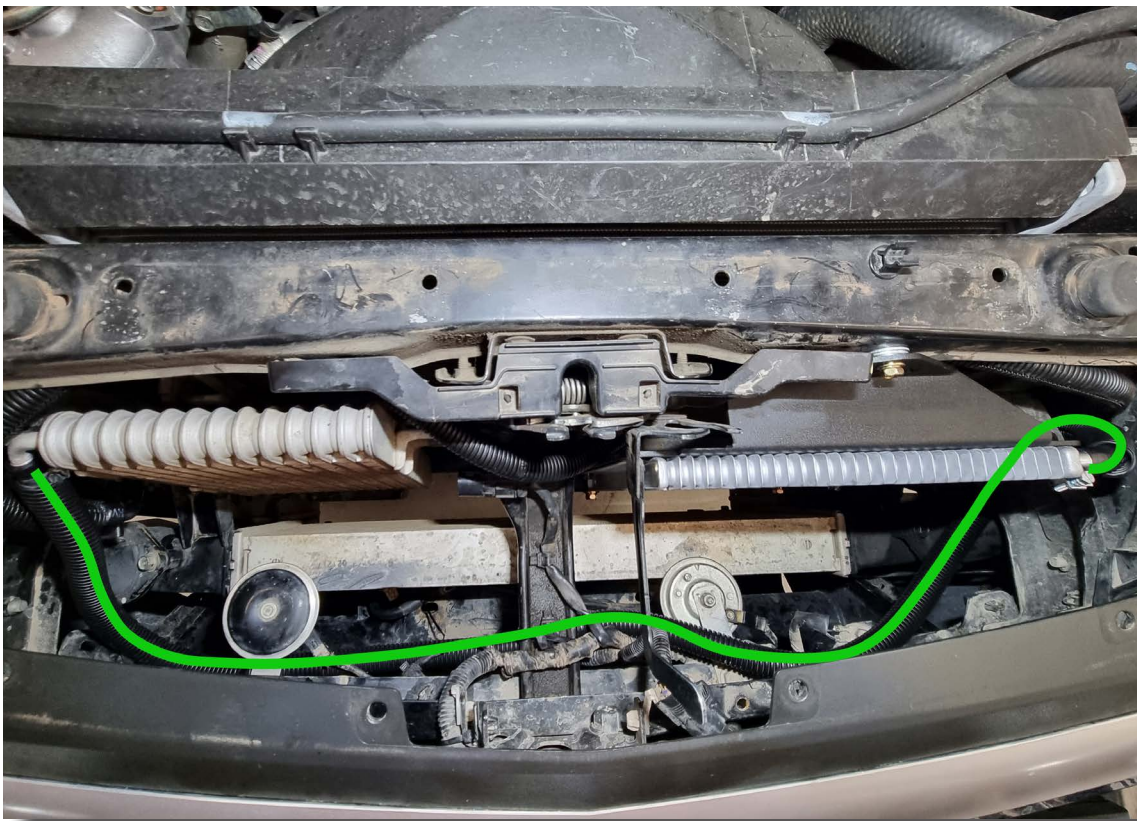
This page applies to Triton MR 6sp, Pajero Sport

38. Place a #3 Phillips screwdriver into the OEM steel cooler line and gently manipulate the outlet towards the drivers side. This is to gain clearance for new cooler hose and screw clamp.



This page applies to Triton MR 6sp, Pajero Sport

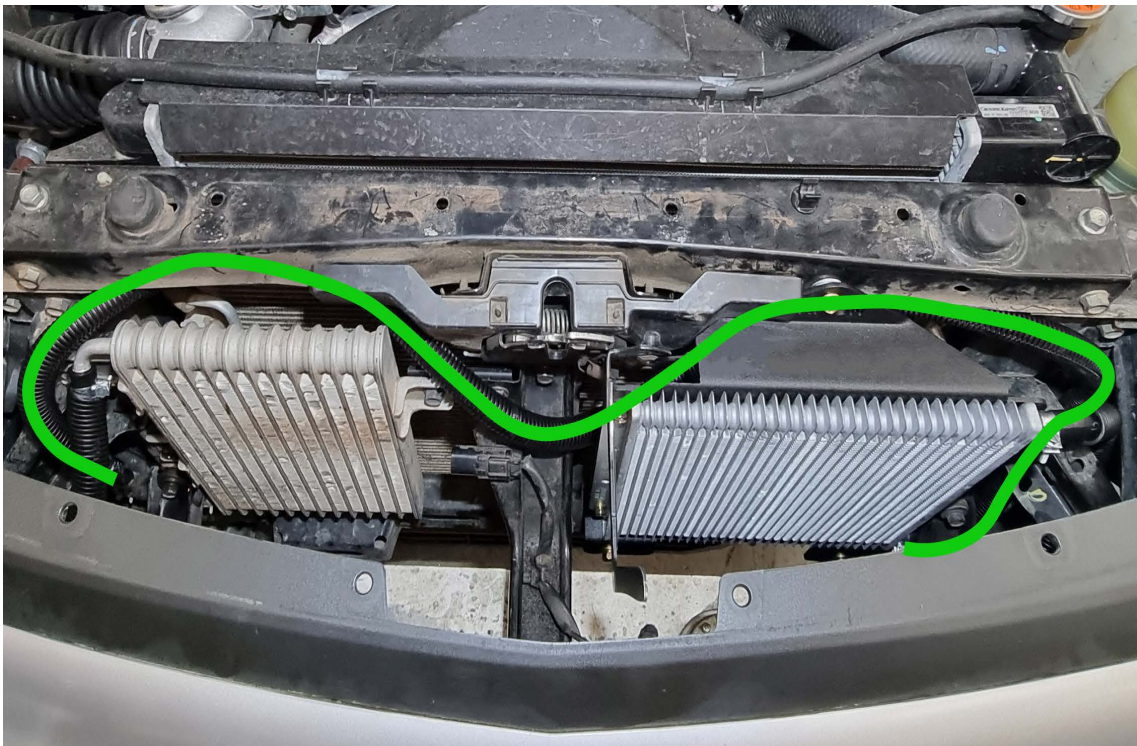
39. Cut the supplied hose in half. Connect one of the halves to the top connection on the supplied cooler and secure with one of the supplied hose clamps.
40. Route this hose down the side of the cooler core and around the crash bar mounting brackets. Run it across the front of the vehicle and under the centre support. Cut it to length and connect it to the upper port of the factory cooler and secure with one of the supplied hose clamps.



41. Connect the second half of the cooler hose to the bottom port of the cooler core and secure it with one of the supplied hose clamps.

This page applies to Triton MR 6sp, Pajero Sport

42. Route the hose from the lower cooler port up the side of the cooler core, behind the hose coming from the upper port. Route it across the front of the vehicle underneath the upper radiator support, behind the cooler mounting bracket. Cut this hose to length and connect it to the OEM steel cooler line that was previously bent outwards. Secure with one of the supplied hose clamps.



43. Secure the cooler hose to the radiator support panel using the supplied cable ties.
44. Hold off on refitting the top grill cover and bash plate so that you can easily check for leaks after the test drive.
45. Next is to check the transmission fluid level and top up the fluid if necessary.

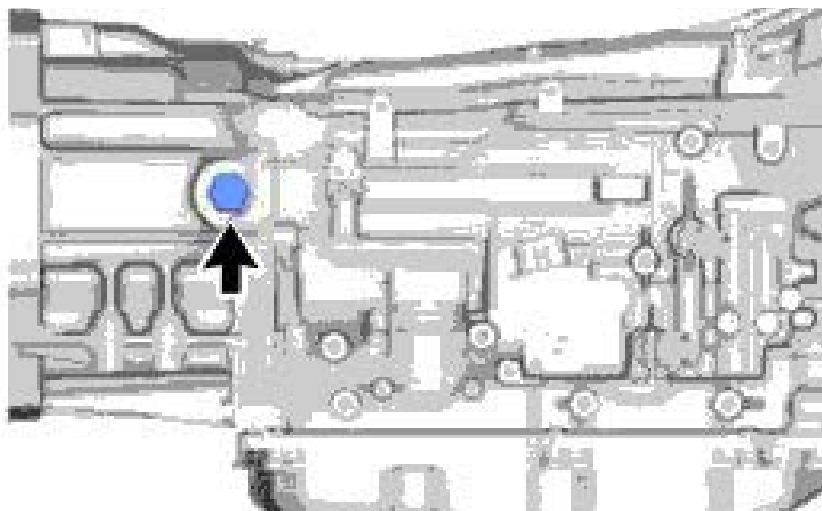
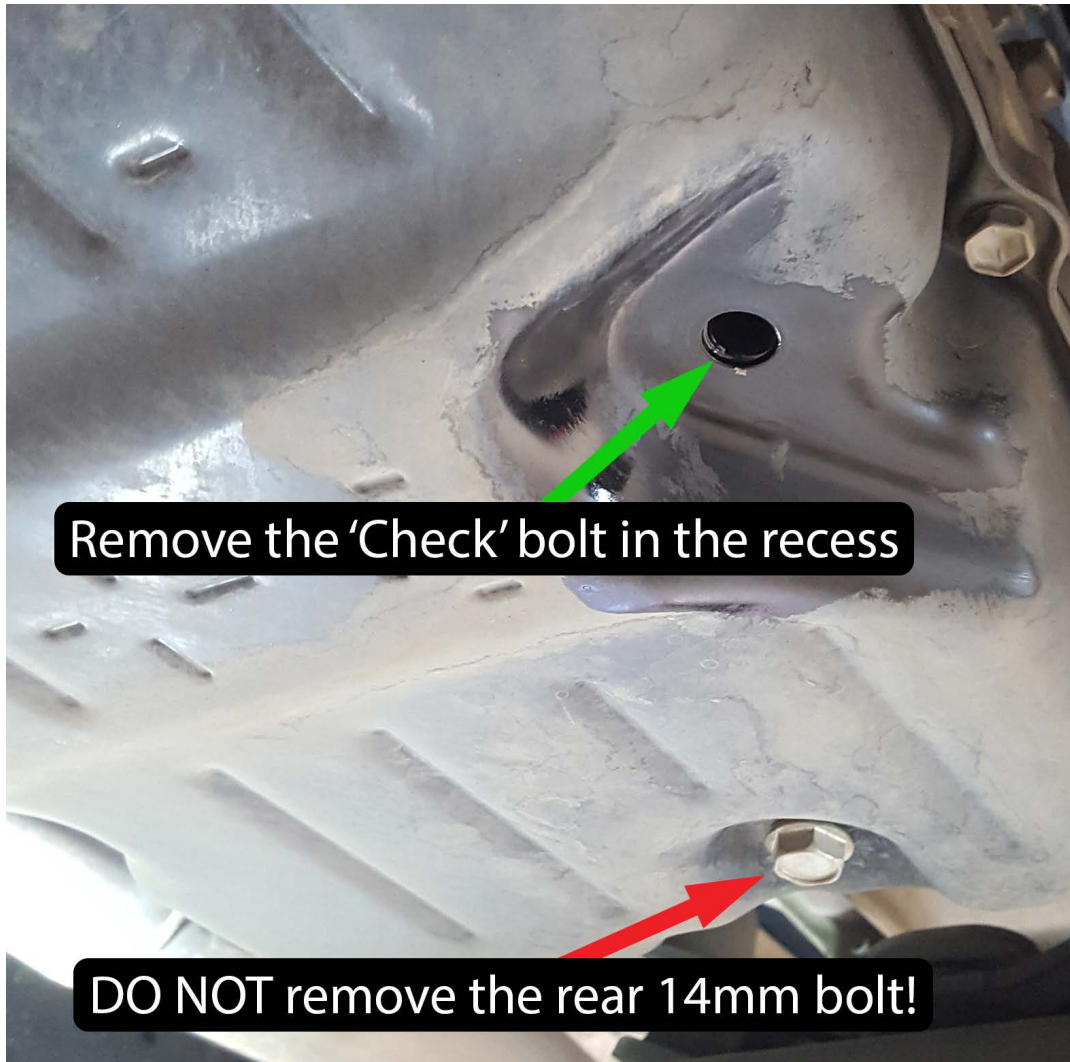
This page applies to Triton MR 6sp, Pajero Sport 6sp

46. For Pajero Sport 8 speed models see the section from page 24 for the fluid checking instructions. This section applies to 6 speed models only!
47. The engine must be running while checking the transmission fluid.
48. Before checking the transmission fluid level allow the engine to run for at least 1 minute. This pumps the fluid that has drained into the pan back into the torque converter, cooler lines, and valve body.
49. In the transmission sump or pan, locate the check bolt - the bolt will have "Check" engraved into it.



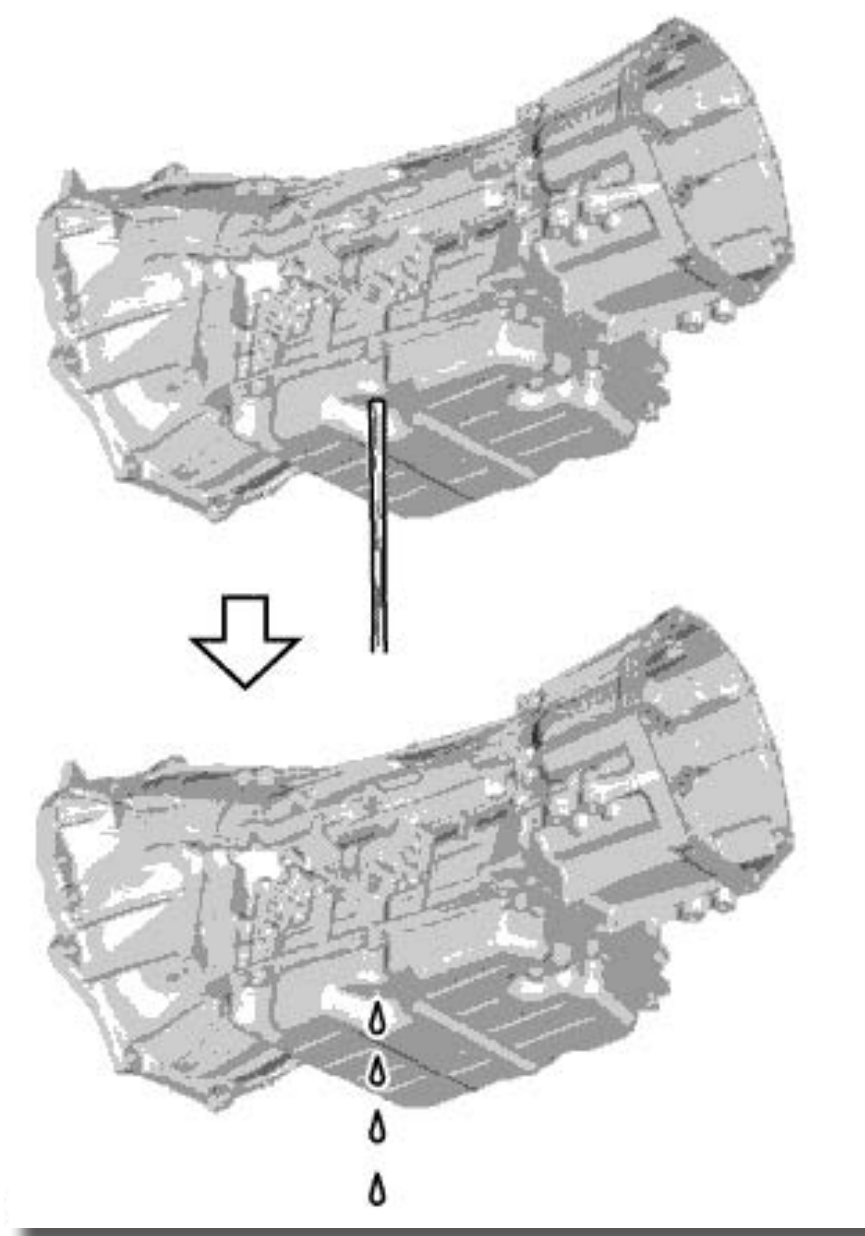
50. With the engine running, remove using a 5mm Allen key. DO NOT remove the 14mm bolt located at the rear of the transmission pan as this is the drain plug.
51. If there is no oil dribbling out of the check plug, locate and remove the 24mm fill plug on the drivers side of the transmission.

This page applies to Triton MR 6sp, Pajero Sport 6sp



This page applies to Triton MR 6sp, Pajero Sport 6sp

52. Carefully top up the transmission fluid through the fill plug until the fluid is flowing out of the check plug hole. Once the flow drops to a dribble, quickly put the check plug back in and tighten. Re-install the 24mm fill plug.



This page applies to Triton MR 6sp, Pajero Sport 6sp

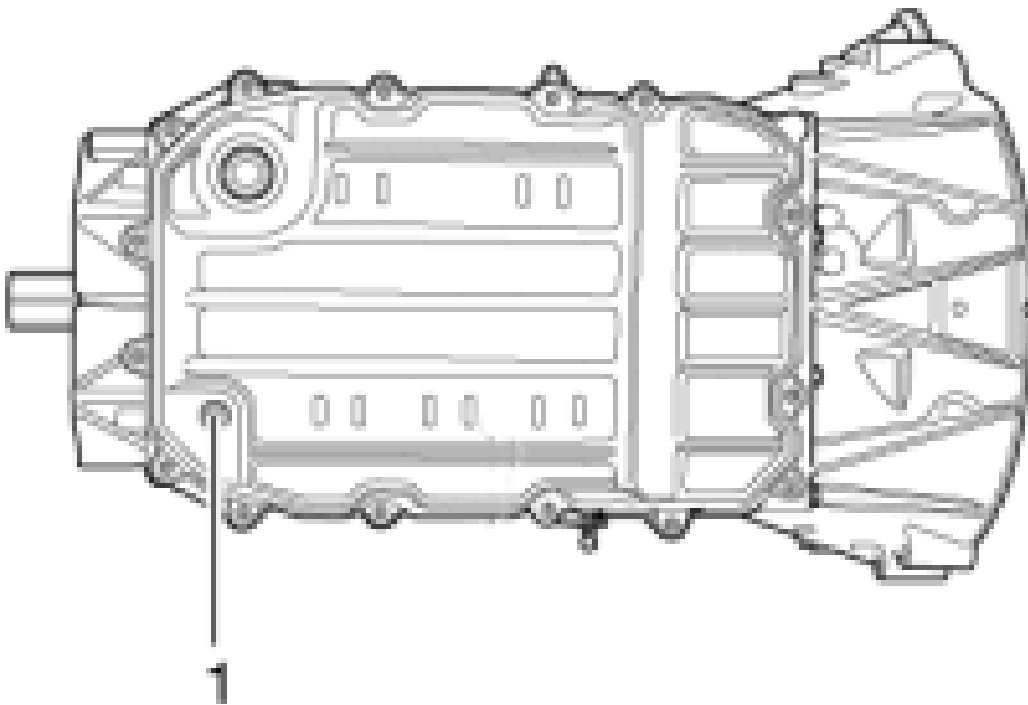
53. Clean all areas of the engine/underneath where transmission fluid may have spilled.
54. Road test the vehicle. You are looking for anomalies such as high transmission fluid temperatures indicating fluid level is still too low / high or possibly an air lock or cooler line blockage. If transmission operates as expected then return to the workshop.
55. With engine still running, visually check for leaks and re-tighten any fittings as required.
56. Recheck fluid level by repeating the steps suitable for you model of vehicle. The engine MUST be running while performing a fluid level check.

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

57. If the fluid is at the correct level clean any spilled transmission fluid off the vehicle.
58. Re-install the bash plates, grill cover and any other removed panels.

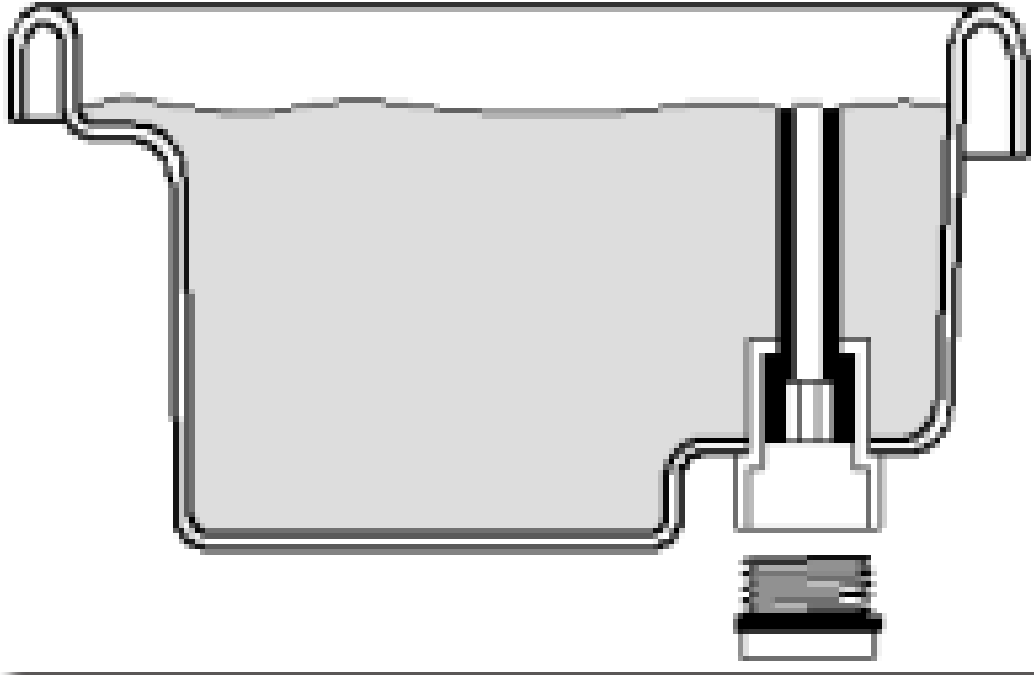
This page applies to Pajero Sport 8sp

59. This section applies to the Pajero Sport 8 Speed variant only.
60. The engine must be running while you are checking the transmission level.
61. Before checking the transmission fluid level allow the engine to run for at least 1 minute. This pumps the fluid that has drained into the pan back into the torque converter, cooler lines, and valve body.
62. Move the shift lever through all positions, stopping for a few seconds in each position, to ensure all the clutches are full of oil. Return the shifter to the Park position, but leave the engine running.
63. Remove the small check plug at the rear of the transmission on the passenger side - labeled 1 in the image below. This plug is at the bottom of the Check Tube, so it is likely there will be a small amount of transmission fluid escaping even if the fluid level is low.

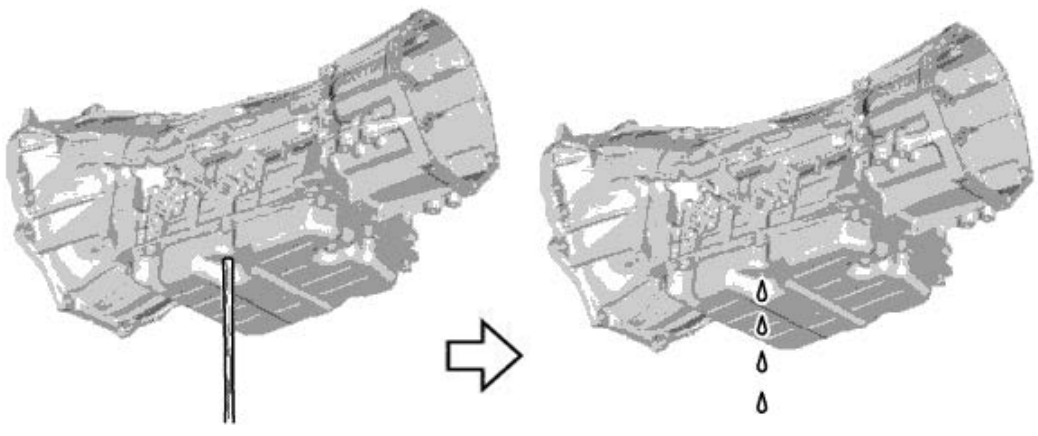


This page applies to Pajero Sport 8sp

64. After the initial transmission fluid has drained out from the Check Tube, observe the fluid coming out of the check tube. If no further transmission fluid drains out this hole you will need to pump new transmission fluid up through the check tube - you can see the internal layout of the check tube below.



65. Once the transmission fluid starts to dribble out the Check Tube the level is correct. If the fluid is coming out as a stream, wait until it slows to a dribble. Reinstall the Check bolt and clean any spilled transmission fluid from the pan.



This page applies to Pajero Sport 8sp

66. Road test the vehicle. You are looking for anomalies such as high transmission fluid temperatures indicating fluid level is still too low / high or possibly an air lock or cooler line blockage. If transmission operates as expected then return to the workshop.
67. With engine still running, visually check for leaks and re-tighten any fittings as required.
68. Recheck fluid level by repeating the steps suitable for you model of vehicle. The engine MUST be running while performing a fluid level check.

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

69. If the fluid is at the correct level clean any spilled transmission fluid off the vehicle.
70. Re-install the bash plates, grill cover and any other removed panels.

This completes the installation of the
External Transmission Oil Cooler Kit to suit:

Mitsubishi Triton MR with 6sp Automatic
Mitsubishi Pajero Sport

Please remember ALL automatic transmissions 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.



