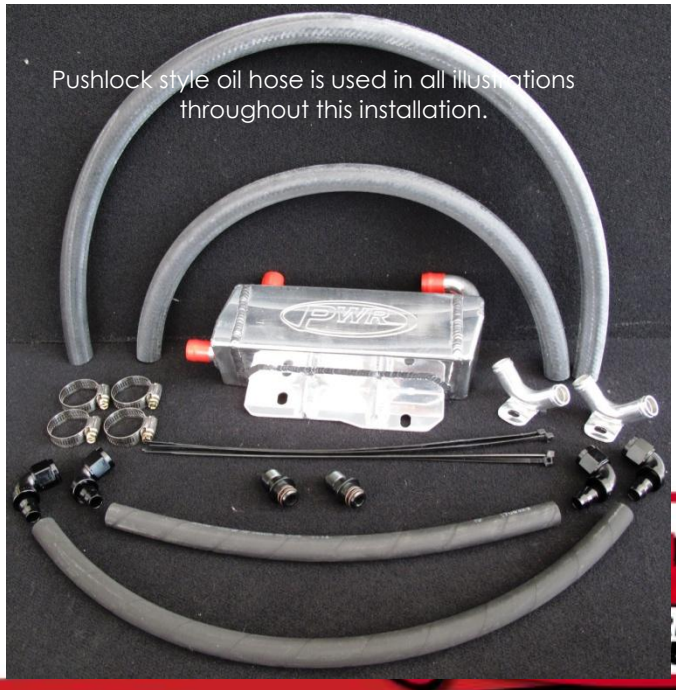
PWO52900-8 (Braided Hose option)
Fitting instructions for PWR Transmission Heat Exchanger Kit for Ford Falcon BF & FG 6-Cylinder ZF 6-speed transmission models.

The PWR Transmission Heat Exchanger kit is designed to be mounted beneath the transmission crossmember on the passenger side of the car and is intended to replace the factory OEM heat exchanger and associated lines to the transmission.

Tools & additional items required:

- 10mm open end spanner.
- 14mm open end spanner.
- 7/8" open end spanner.
- 13mm ratchet socket.
- Flat blade screwdriver.
- Bench vice for hose assembly.
- Line clamping tools.
- Approximately 500ml of transmission fluid.
- Approximately 500ml of coolant.

PWR Transmission Heat Exchanger Kit components list	Qty	Part No
PWR inline transmission heat exchanger	1	PWO52900
Heater hose joiner (19mm 90° bend with bracket)	2	PWO52900
Transmission adapter to male dash -8	2	15417
Transmission adapter O'Rings	4	BS014VITON
Hose clamps	4	HS012
Zip ties	4	ZIPSTRAP
Oil hose end 90° dash -8	4	103-08-BLK
Heater hose 19mm x 955mm long	1	28402
Heater hose 19mm x 760mm long	1	28402
Braided Dash -8 oil hose x 545mm long	1	100-08
Braided Dash -8 oil hose x 370mm long	1	100-08



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Ideally ensure engine coolant and oil temps are low – preferably cold.

1. Begin by using suitable line clamping tools to clamp off and seal both coolant lines to the OEM Heat Exchanger to minimise coolant loss during removal.

2. Proceed to remove the coolant lines to the OEM Heat Exchanger and keep the hose clamps to be re-used.

3. Using a 13mm socket, remove all 3 bolts securing the heat exchanger to the engine. Two of these bolts will be re-used.

4. Next, using a 10mm spanner, remove the bolt and oil line retaining plate on the transmission. The oil lines can now be removed from the transmission, along with the entire OEM Heat Exchanger assembly. The bolt and retaining plate will be re-used.

5. Remove the tape from the hose, remove the socket from the hose end and secure in a bench vice. Insert the hose into the socket with a twisting pushing motion until the hose is just short of the socket threads. Take the socket and hose from the vice, install the hose end into the vice and liberally coat the threads and centre nipple with oil. Insert the hose on the centre nipple and engage the threads of the socket to the hose end being careful not to cross thread. Hand tighten as far as possible. Tighten with a 7/8" spanner until there is approximately 1mm gap between the socket and hose end.

6. Thread the transmission adapters into the hose end of each assembled oil hose and tighten them using 7/8” & 14mm spanners.

7. Attaching the hoses onto the PWR Heat Exchanger is best done off the car, due to the tight confines when mounted. The longer oil hose is to be tightened onto the top fitting and the shorter hose is tightened onto the lower fitting using a 7/8” spanner, ensuring the hoses are parallel to the heat exchanger.

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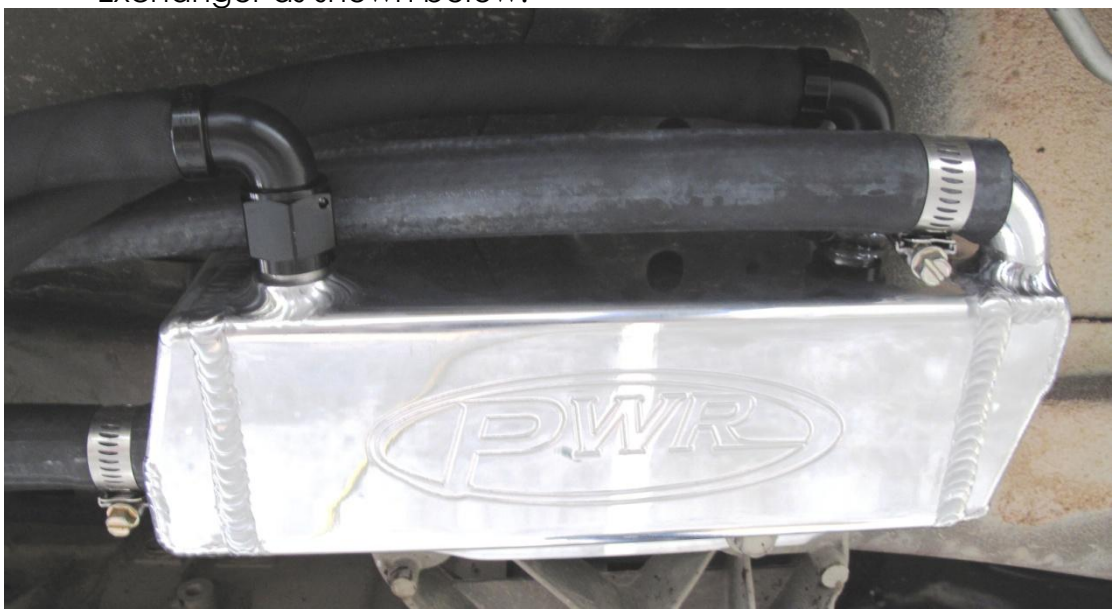
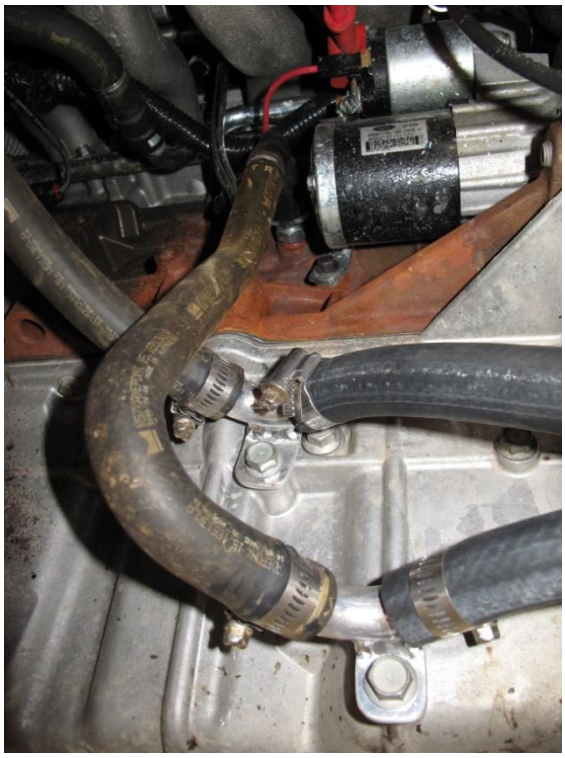
8. Fit the heater hoses onto the heat exchanger using the hose clamps provided. The longer of the two heater hoses is to be pushed onto the 90° hose barb on the end of the PWR Heat Exchanger as shown below.



9. Bolt the joiners to the side of the engine re-using the original bolts.



10. Fit both the original heater hoses coming from the engine and the heater hoses from the heat exchanger to the joiners on the side of the engine and tighten the hose clamps, paying close attention to the orientation of the hoses. The shorter hose coming from the engine block is to be connected to the front of the heat exchanger as shown.

(Note: For FG applications this shorter hose should be trimmed back to 635mm long for a perfect fit.)

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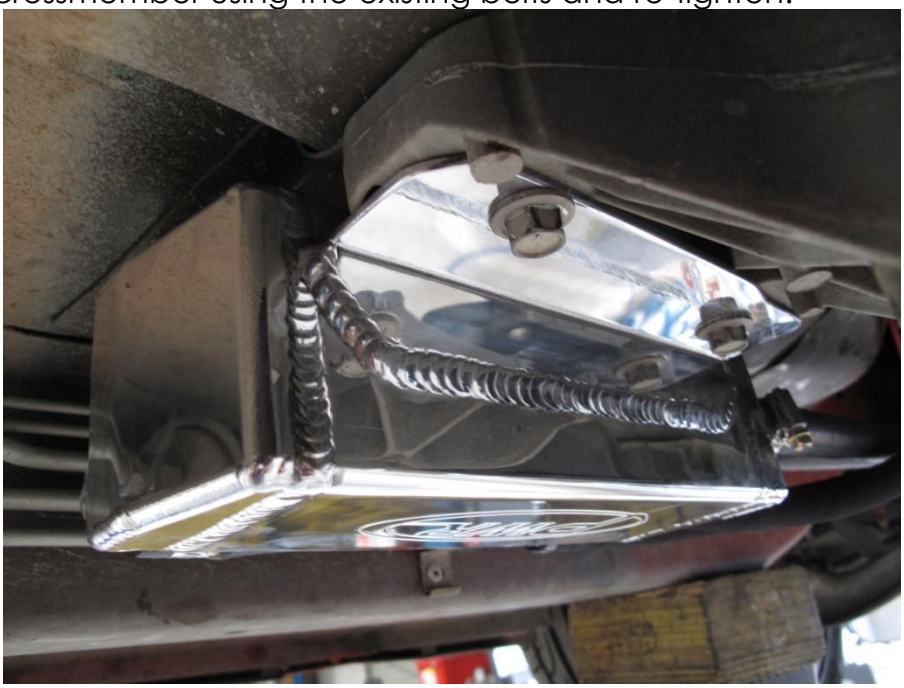
11. Pre-filling the transmission oil into the lines of the heat exchanger is recommended to minimise any possible air locks or bubbles inside the heat exchanger. A hand operated oil pump/syringe may assist in this procedure.

12. Using a 13mm socket, remove both bolts on the passenger side transmission crossmember. The transmission will lower down very slightly, but it will be supported by the remaining bolts on the other side of the crossmember. Supporting the weight of the transmission with a jack is recommended.

13. Attach the heat exchanger to the underside of the transmission crossmember using the existing bolts and re-tighten.



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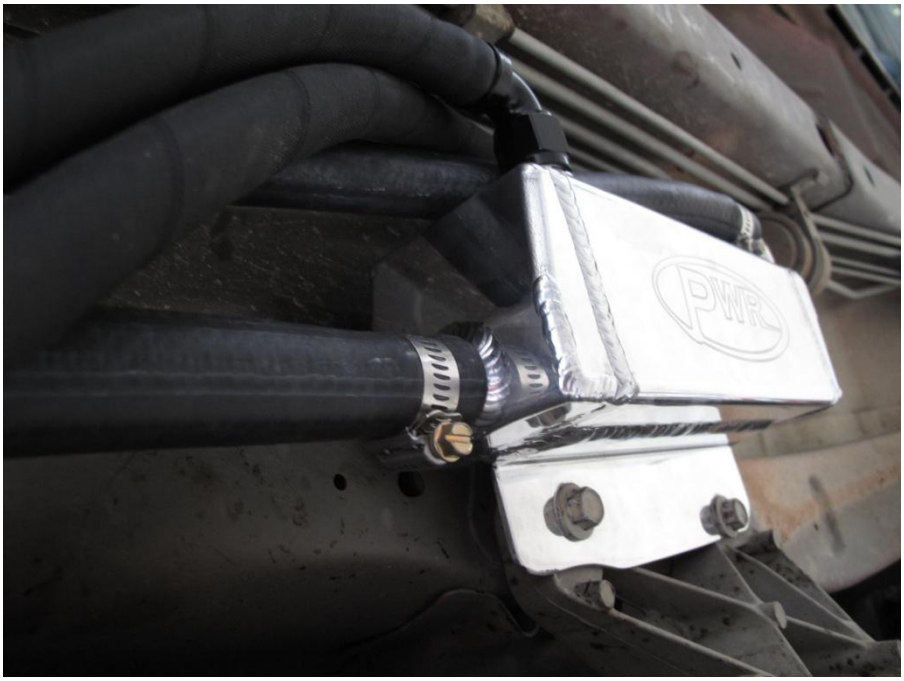

14. Ensure that the oil lines are above the heater hoses and press the adapters into the side of the transmission, noting that the longer hose goes into the top port of the transmission. Angle the hose ends downwards approximately 45° to allow adequate clearance around the shifter linkage, as shown below.

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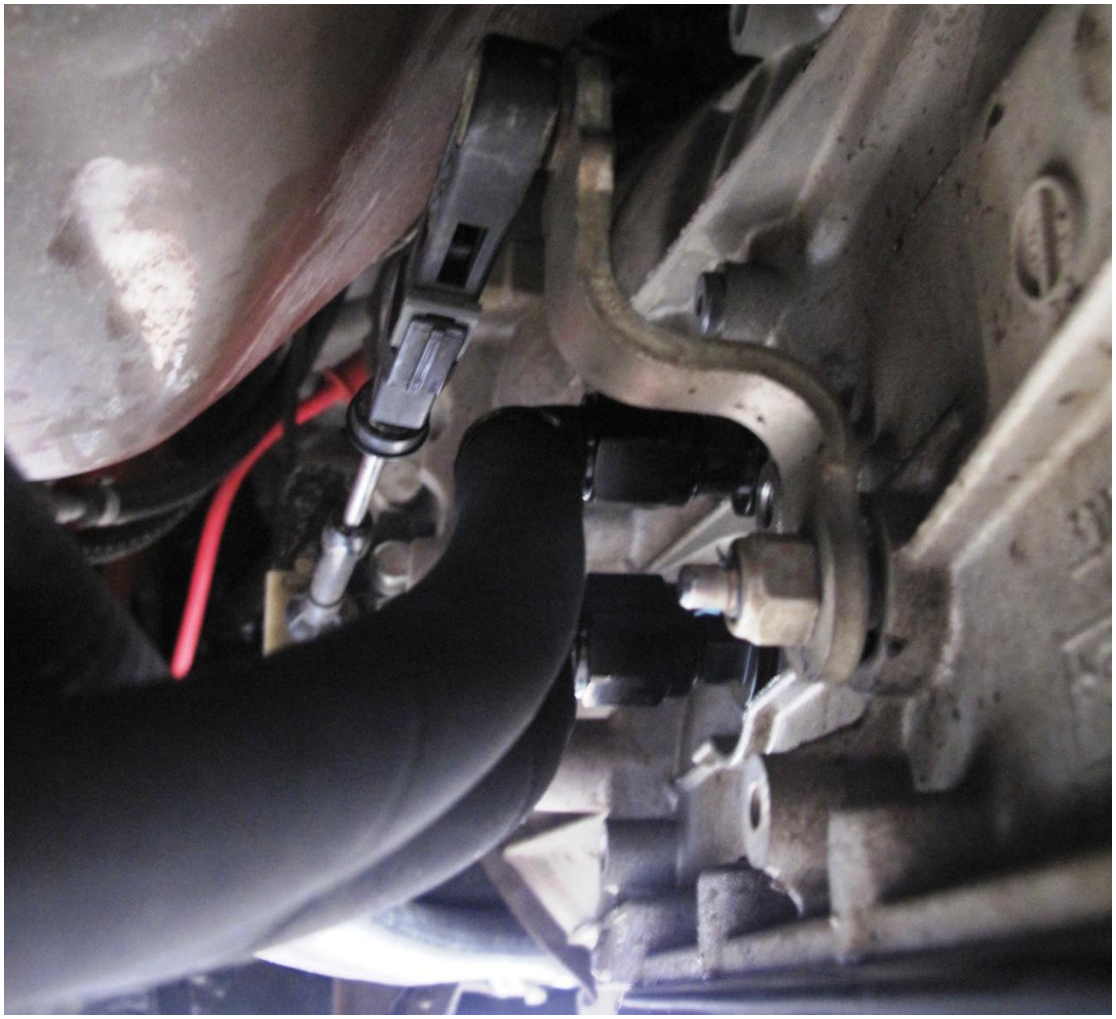

15. Re-attach the oil line retainer plate and tighten up the bolt using a 10mm spanner. Use the supplied zip ties to pull the hoses together and tidy up any slack. The line clamping tools can now be released.

16. Top up any additional coolant and transmission oil to the manufacturer's filling procedures. Actual amounts may vary depending on how much oil and coolant was lost upon removal of the OEM heat exchanger, but on our installation 500ml was required for both the transmission and the cooling system.

17. Start the vehicle and check for any leaks and top up any fluids where necessary. Then test drive and re-check.

Your PWR Transmission Heat Exchanger kit is now fully installed.

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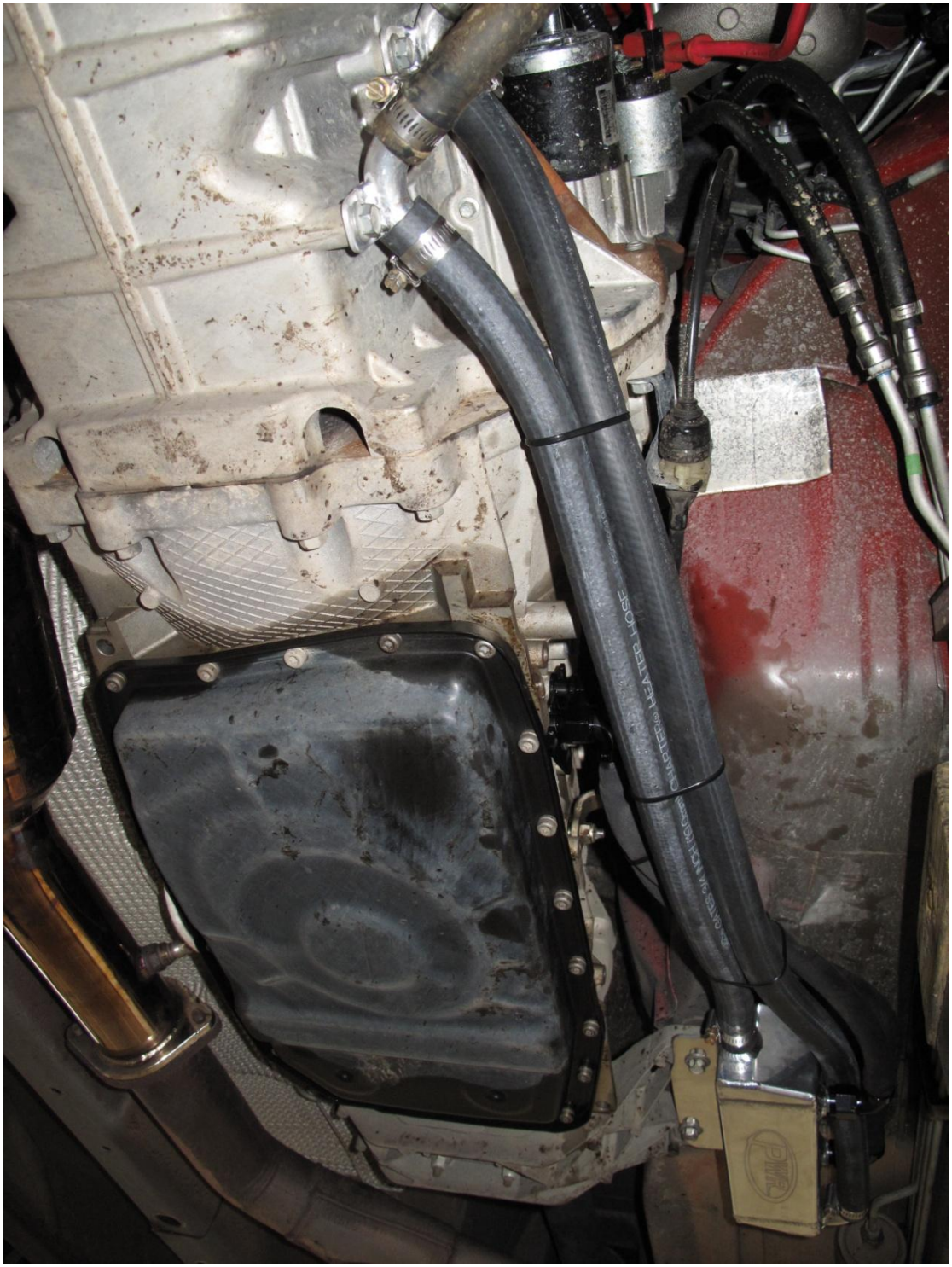

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