

# INSTALLATION GUIDE

ATTENTION: READ BEFORE PROCEEDING



## IMPORTANT INFORMATION

Installing this product indicates your acceptance of the responsibility and liability associated with the fitment and use of this product. Please ensure the owner and drivers of the vehicle are aware of their responsibilities and liabilities as indicated below.

Thank you for purchasing this Harrop Engine Oil Cooler Kit which has been designed and made with pride. The owner and drivers of the enhanced vehicle must be aware that fitment of this product may affect:

- The vehicle's factory warranty.
- Insurance cover and associated liabilities.

Please follow the instructions accordingly and ensure the safe operation of all tools and equipment are adhered to in accordance with the vehicle and equipment manufacturer's recommendations.



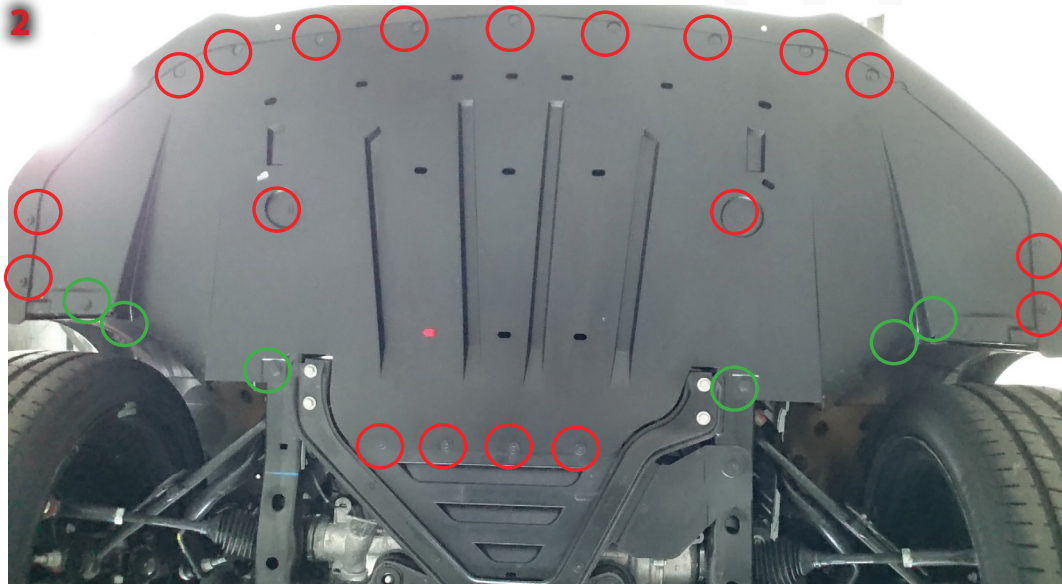
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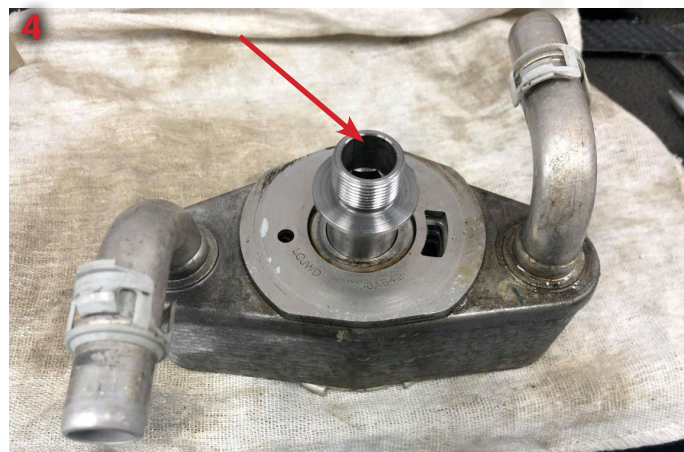
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1. Place the car on a hoist or on some ramps.
2. Remove the front under tray and place aside.



3. Drain the coolant from the radiator, drain cock is located on the RH side.
4. Remove the oil filter and discard. Disconnect the two coolant hoses from the standard factory cooler, remove the lower radiator hose completely. Install the supplied new lower radiator hose, now remove the factory oil cooler assembly using a hex key that fits inside the centre of the oil filter bolt

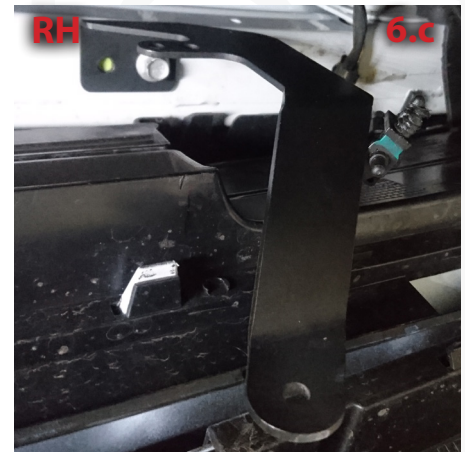
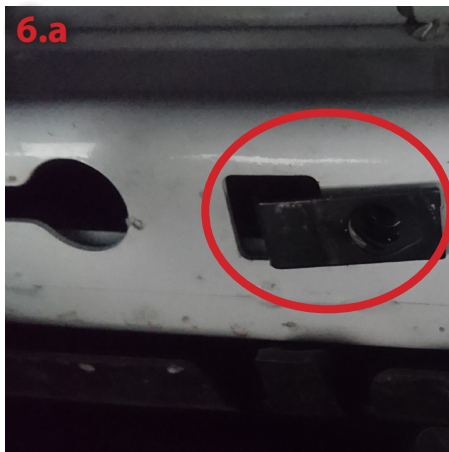


5. Oil cooler mounting, remove the ambient air temp sensor and bracket. Separate the sensor from the bracket.
6. Fit the front RH bracket using the far right hole where the ambient air sensor was mounted and the extreme right hole of the bracket using one self-drilling screw supplied (Note you can open hole up with drill bit supplied, when screwing screw in add some anti seize as lubricant), (Image 6.C) fit the U nut into the slot on the left hand side (Image 6.a) and using 1 M6 cap screw mount the left hand bracket (Image 6.b).

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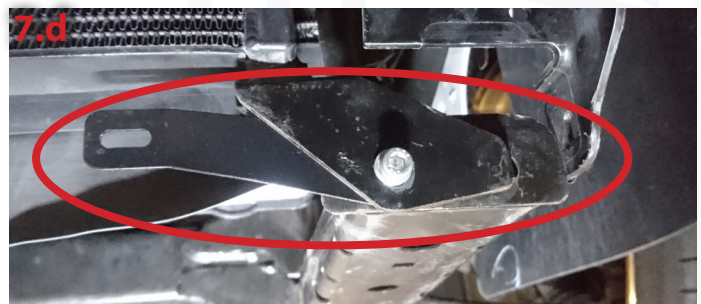
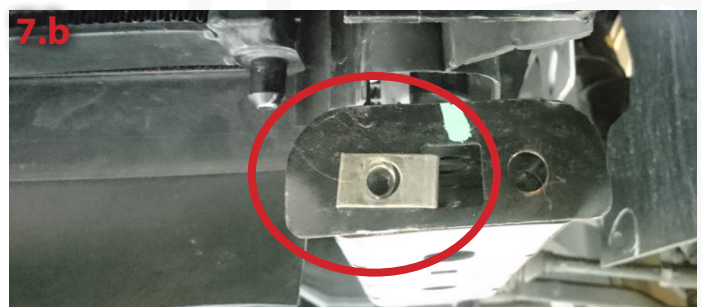
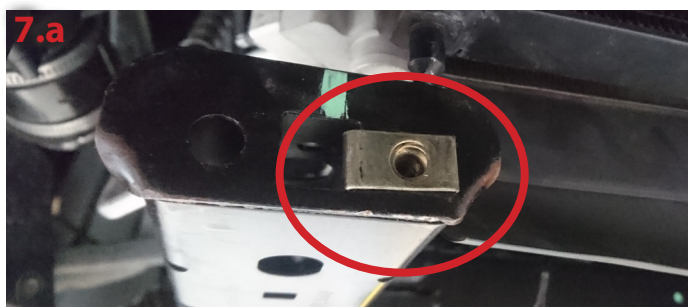
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Note - MY18 cars and onwards mount the LH bracket on top of the radar mount.



7. Insert the 2 U nuts into the lower front rails as per images 7.a and 7.b below. Mount the rear oil cooler mounting brackets as per image below but leave them loose. Note 'S' bend is to point forward - see image 8.a.



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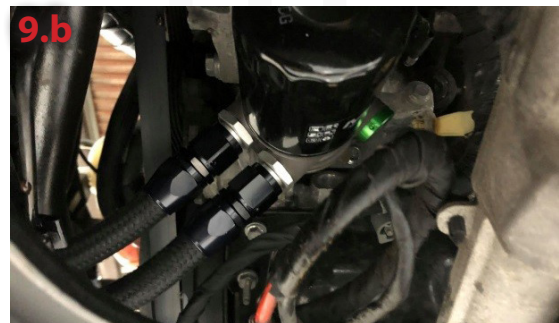
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8. Temporarily install the oil cooler as per image below. Confirm acceptance of fitment and mark the inner holes in the front brackets so that they can be drilled (with drill bit supplied) and screwed (use anti seize as lubricant on screws). Once the brackets are fully secured mount the ambient air sensor to RH bracket. Reinstall/mount the oil cooler.



9. Install the Harrop supplied sandwich plate adaptor by firstly installing the double ended threaded fitting where the factory oil cooler was. Once the fitting has been installed, fit the sandwich plate adaptor ensuring the seal is lightly lubricated, tighten into rotational position (approximately 45deg downward and forward) as per image below. Hose should be able to run as per the 3rd image below. Install the 2 AN10 fittings into the adaptor block ensuring you lubricate the O rings on the fittings.



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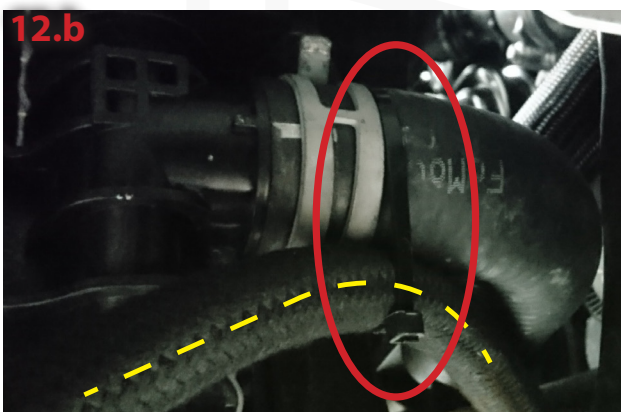
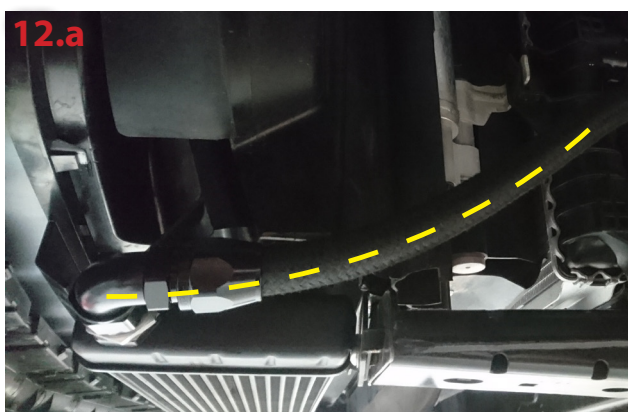


10. Screw the upper hose first to the adaptor block followed by the lower one, it does not matter which hose connects to the upper or lower fitting.

11. Install the 2 raw aluminium AN10 fittings into the oil cooler ensuring the O rings are in place and lubricated prior to tightening, a spanner must be placed on hex fitting on oil cooler to stop the torque distorting the cooler tank when completing the final tightening.



12. Route and connect the hoses onto the AN10 fittings as per image below, and cable tie off the hoses to the radiator and radiator hose.



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13. Install/fit a new oil filter, the installation of this oil cooler system will add about 0.8 of a quart (800ml) of oil to total system volume. Check and top up with manufacturers specified oil approximately to this amount and any additional that may have been lost when removing the old oil cooler. Top up/fill the radiator with the manufacturers specified coolant.

14. Run the engine and thoroughly check for oil and coolant leaks and let the engine warm up to temperature. Check hose routings to ensure they have been tethered securely so that they will not vibrate or chafe through on any sharp edges. Once satisfied that there are no leaks reinstall the front undertray.



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