



Installation Guide

Engine oil cooler

Toyota GR86/Subaru BRZ 2021-present



Aug 24 Rev 0

ENGINEERING PERFORMANCE SINCE 1955

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ATTENTION

Installing the engine oil cooler kit indicates your acceptance of the liability associated with the fitment and use of this product.

Thank you for purchasing this Harrop Engine Oil Cooler Kit. The owner of the vehicle must be aware that fitment of a Harrop Engine Oil Cooler may affect the vehicle's factory warranty.

This document is meant only as a guide, as any vehicle modification should be completed by a certified technician who has the relevant experience and equipment to be competent of a safe and effective installation.

The following notes will highlight most of the primary steps needed during the installation of a GR86 Harrop Engine Oil Cooler kit. Some images may vary from kit supplied and instructions may be omitted or irrelevant due to variations between vehicle models and applications.

- Please ensure the safe operation of all tools and equipment are adhered to in accordance with the vehicle and equipment manufacture's recommendation.
- By installing the engine oil cooler kit you acknowledge that all conditions pertaining to this Kit and its operation have been read, understood and accepted.

For over 65 years Harrop Engineering has been at the forefront of designing, developing and manufacturing precision performance components. Today our innovative and logical approach is applied to low volume automotive OEMs and the performance aftermarket through a dedicated team of 65 staff. Core performance products include Superchargers, Engine Components, Brakes, Differentials and we are also the exclusive Australian Distributor for Forgeline Motorsport Wheels.

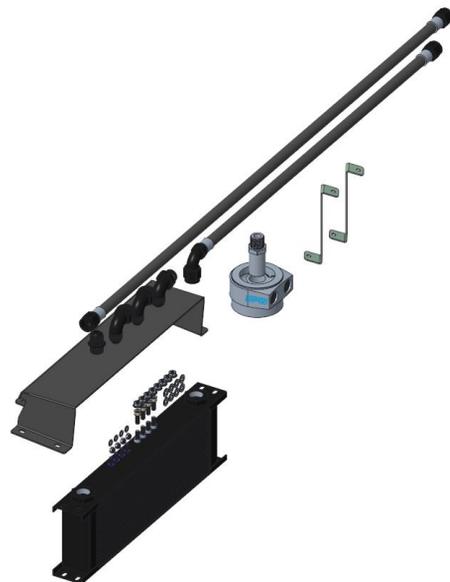
Harrop are also the preferred supplier of Eaton Supercharger and Traction Control technology including dual branded product designed and manufactured in-house. There are currently over 4,000 components in our portfolio and this is growing daily as we continually develop more Harrop Performance Products.

Our high profile car manufacturing customers have included Holden, HSV, FPV, Ford, Roush, Toyota, TRD and Lotus.

We also supply to race teams from categories including F1, NASCAR and V8 Supercars and an extensive range of drag, circuit and off-road competitors. Just as importantly, a large portion of our customers are performance enthusiasts and weekend warriors who are highly passionate about their ride.

Thank you for choosing Harrop and enjoy your Harrop Enhanced ride.

- Team **HARROP**



References to left and right in the instructions are made to the vehicles side and NOT the installer

1. Remove the engine oil filter and clean the sealing face where the filter would seal on the engine.



2. Assemble the dash 8 ORB to dash 8 fitting to the sandwich plate as shown. Apply lubrication to the o'ring and ensure fitting is fully seated.



3. Apply oil to large o'ring on sandwich plate. Install the sandwich plate o'ring down where the oil filter was removed from. Thread female end of the sandwich plate fitting through sandwich plate into the male thread on the engine. Ensure sandwich plate ports face towards the left edge of the air box. Tighten sandwich plate fitting to 30 Nm torque.
4. Refit oil filter.



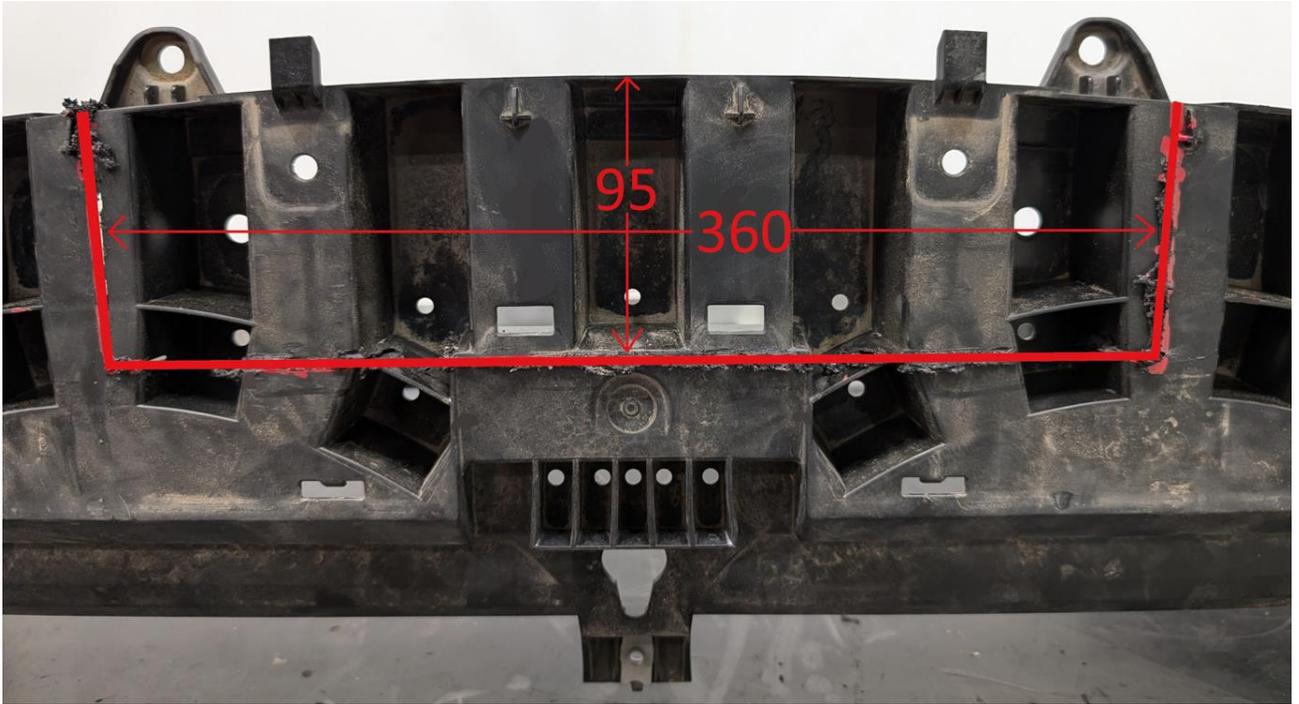
5. Remove the front undertray from the car.
6. Trim a 407mm wide section from the bottom lip of the front grille, central to the car. Trim up to the honeycomb of the grille.



7. Trim the undergrille support piece as per the image below, ensuring the cut is centred.



8. Trim rear support piece as per images below, ensuring cut is centred.



9. Assemble brackets onto oil cooler using the M6 screws and nuts supplied. Ensure that the brackets are fitted as per image.



10. Assemble the M22 to dash 8 90 degree fittings to the oil cooler as shown, applying oil to the o'rings.



11. Connect short hose to left hand side of the oil cooler and long hose to right hand side of the cooler as per image.



12. Place oil cooler on rear support panel and drill holes through using the circled holes using a 6mm drill bit for the front holes and 5mm drill for the rear holes. Using the provided M6 fasteners for the front and M5 fasteners for the rear, fasten the oil cooler to the rear support panel.



13. Remove left hand side infill panel and trim it as per image to allow oil lines to pass through. Attach pinch weld to the exposed edge.



14. Drill air exit holes in lower under tray using a 60mm hole saw as per image. Ensure that the middle hole of the top row is centred on the undertray.



15. Refit infill panel.
16. Refit all lower under panels to the car, feeding the hoses through the hole in the infill panel up into the engine bay.
17. Connect oil hoses to the sandwich plate as per image.
18. Start the engine and thoroughly check all connection points for possible leaks and along the hose route to ensure no damage has occurred to the hoses during the install.
19. Add engine oil as required.

