

# FMOC12 Fitting Instructions for Toyota Yaris GR



Please thoroughly read through and familiarise yourself with these instructions in their entirety prior to beginning any part of the installation process of any component. Please also ensure the vehicle and engine has cooled down sufficiently to avoid risking possible skin burns or other injury.

### **TOOLS NEEDED:**

Flat blade screwdriver or trim removal tool
7/10/12/26mm Socket & Ratchet Drive with extension
13/22mm spanner
Hack saw or sharp knife
Axle Stands & car jack or car ramp
5mm Allen key
Oil filter removal tool
Oil Pan or bucket
½ litre of appropriate engine oil

1. Park the vehicle securely. Use a 10mm socket and ratchet to remove the 2X M6 fasteners and a trim tool or flat blade screwdriver to remove the 2X plastic fasteners which attach the top of the bumper to the vehicle.

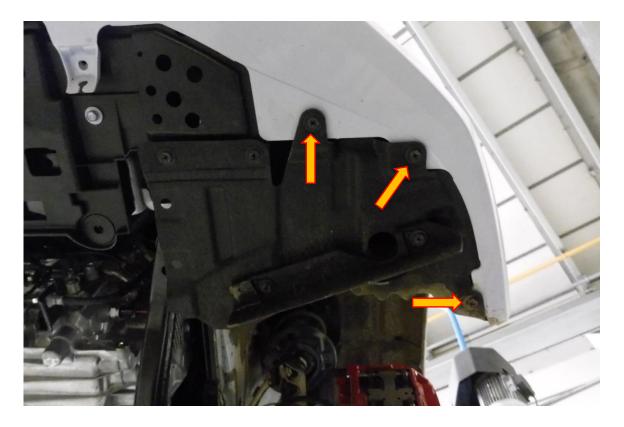


2. Un-plug the wiring loom going to the bumper.

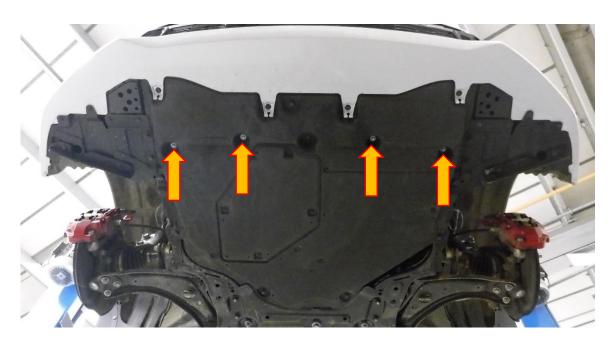


3. Using a car ramp or jack and axle stand raise the vehicle off the ground, looking up from below use a 10mm socket and ratchet to remove 10X M6 fasteners at the front of the bumper.

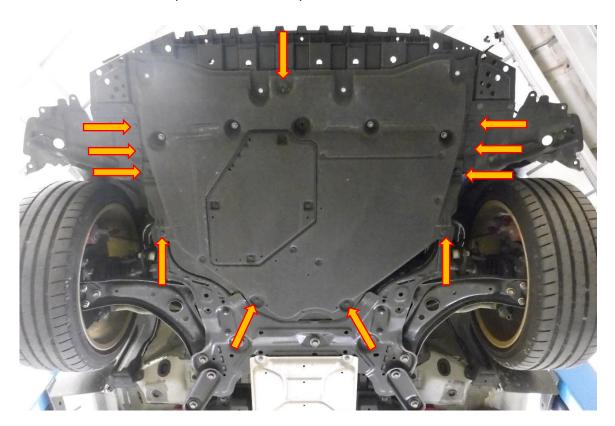




4. Using a 10mm socket and ratchet remove the 4x M6 fasteners from the under tray.



5. Using a plastic trim tool or a flat blade screwdriver remove the 11x plastic fasteners attaching the undertray to the vehicle. The undertray will now come away from the vehicle.



6. Using a plastic trim tool or flat blade screwdriver press the tab in the centre of the splash guard retaining clips. Using the same tool remove the plastic fastener attaching the top of the splash guard. You will now be able to peel the splash guard back to reveal the fasteners at the top of the bumper. You don't have to remove the wheels to do this.

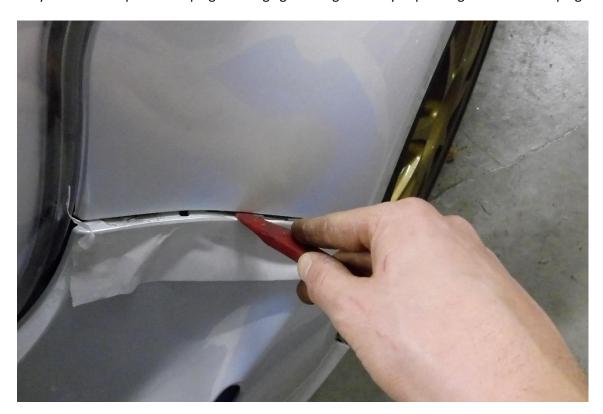




7. Using a 10mm socket and ratchet remove the M6 fastener on both sides of the bumper, the plastic retaining clip also needs to be removed. This simply pushes out of its housing. The bumper can now be pulled away from the vehicle.

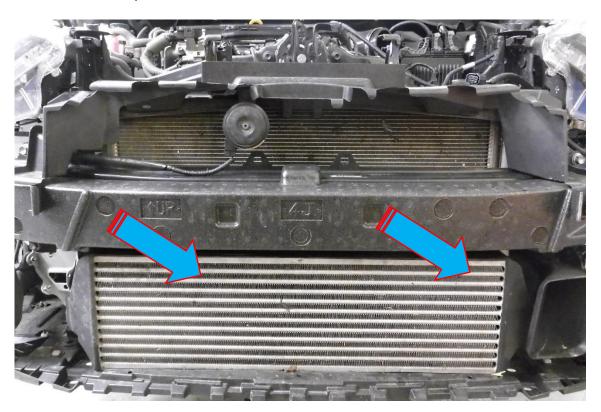


8. Using a plastic trim tool open up the black retaining clips to allow the edge of the bumper to come away from the wing. Use masking tape to avoid marking the paint work. When both sides are free from the wings carefully rest the bumper and unplug both fog light wiring looms by depressing the tab on the plug.





9. Pull the foam crash bar protector towards to remove from situ.



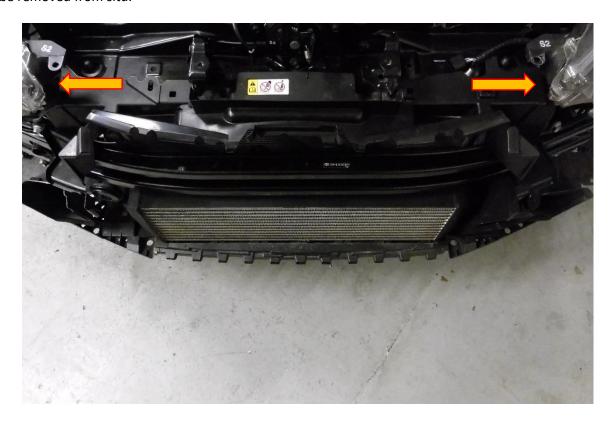
10. Using a hack saw or sharp knife cut off the centre retaining lug as shown in the picture below.



11. Using a 12mm socket and ratchet remove the M8 fastener attaching the Horn to the slam panel. Un plug the horn and remove the horns wiring loom from the crash bar by pressing in the tabs on the retaining clip, ready to relocate the horn into it new position.

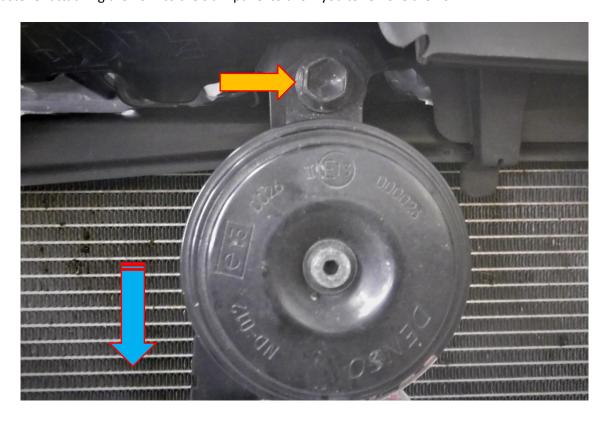


12. Using a trim tool remover or flat bladed screwdriver remove the 2 X plastic retaining fasteners attaching the plastic slam panel trim using a trim tool or flat blade screwdriver.. With both fasteners removed the trim can be removed from situ.

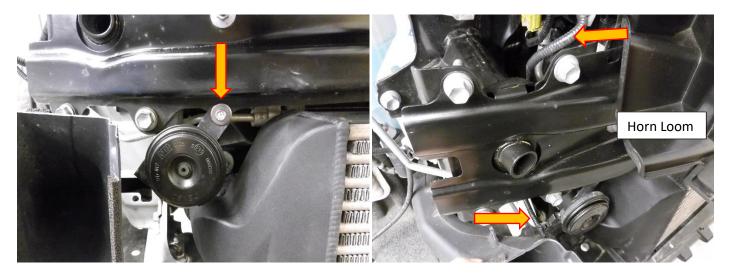




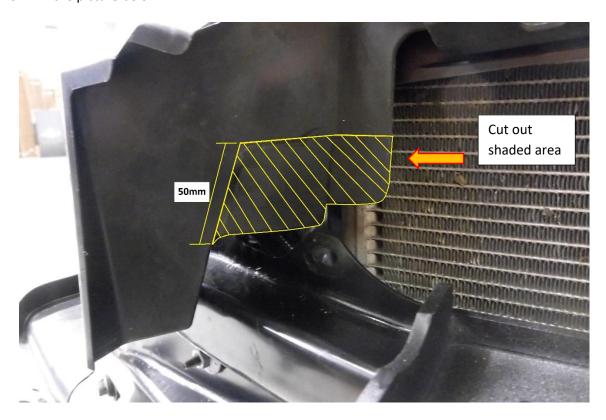
**13**. Unplug the wiring loom connected to the horn. Using a 12mm socket and suitable ratchet remove the m8 fastener attaching the horn to the slam panel to allow you to remove the horn.



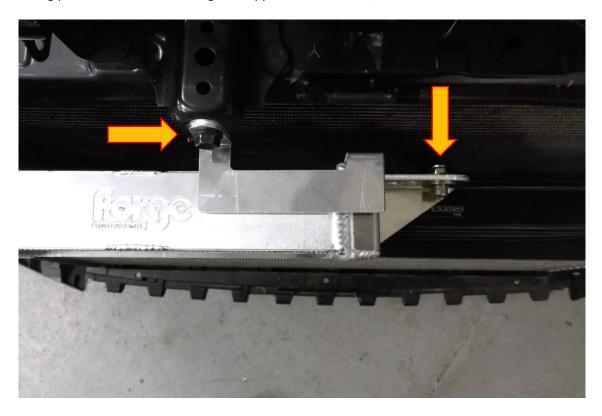
14. Using a 5mm Allen key and 13mm spanner attach the horn onto the lower part of the crash bar next to the intercooler with the supplied M6 fastener, nut and washer. Run the wiring loom to the horns new position and re-connect it ensuring there is a positive click.



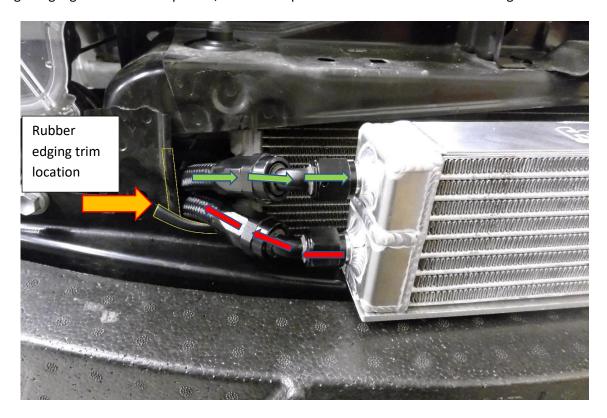
15. Using a hacksaw or sharp knife cut out the marked out section of the plastic slam panel trim shown in the picture below. Using a hacksaw or sharp knife cut out the marked-out section of the plastic slam panel trim shown in the picture below.



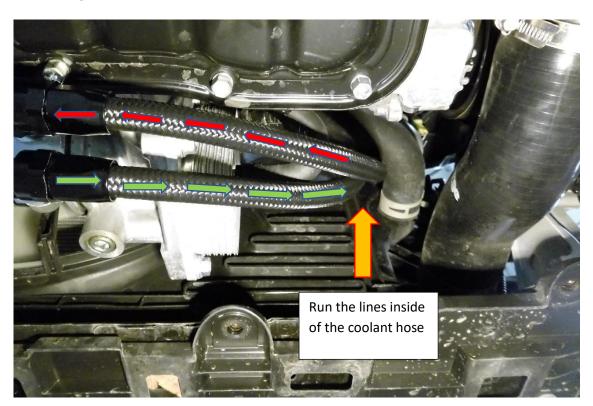
16. Using a 13mm socket and ratchet attach the top bracket of the Forge Motorsport oil cooler using the M8 fastener removed from step 13 in the same location. Using a 5mm Allen key and 13mm spanner attach the remaining part of the oil cooler using the supplied M6 fastener, nut and 2x washers.



17. Take both the supplied braided oil lines and using a 22mm spanner fit the 45-degree angled ends of the line to the oil cooler. Run the lines down to the oil filter. Fit two of the supplied rubber edging trims over the edges highlighted in the first picture, as this is to protect the braded lines from chafing.



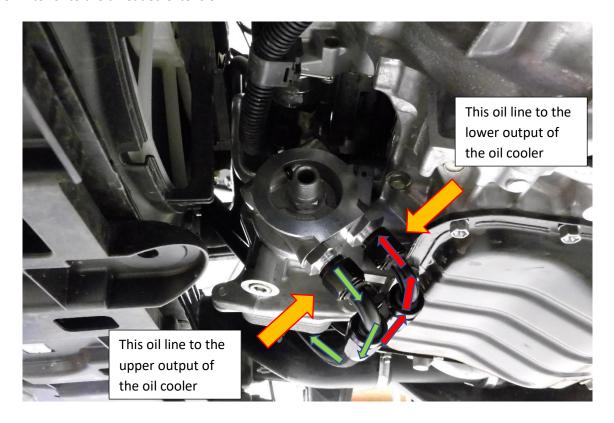
The arrows in green show the feed direction and the red arrows show the return.



18. Using an oil filter removal tool remove the oil filter by turning it anti-clockwise.



19. Offer up the oil take off plate where the oil filter used to be in the orientation illustrated below, make sure the rubber O ring side is facing towards the engine and secure it in place with the threaded extension supplied. Clean the sealing face for the oil filter, smear a small amount of clean oil on to the sandwich plate O -ring. Use a 26mm extended socket or 26mm spanner to tighten the threaded extension fully, now fit the oil filter onto the threaded extension.



20. Using a 22mm spanner tighten the oil lines to the oil take off and re fit the oil filter. Make sure the oil thermostat housing and oil lines are installed in this orientation and use the remaining piece of rubber edging strip and fit it to the edge of the sump as shown in the picture below.

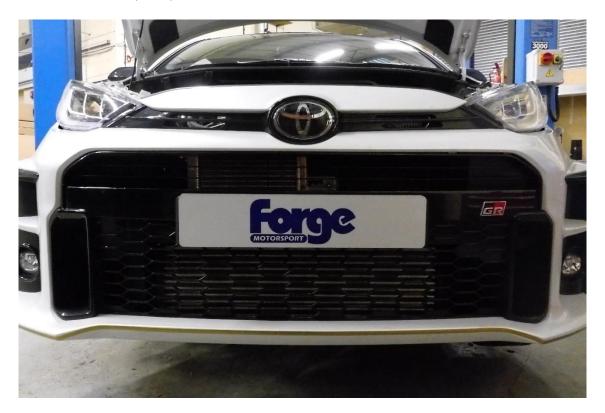


**21**. Re install the plastic slam panel trim and adjust the oil lines if needed.



22. Add half a litre of the appropriate grade engine oil to your vehicle to compensate for your new Forge oil cooler. Now start the engine, get it to full running temperature and check for oil leaks, if you do find any leaks; wait for it to cool down and tighten fittings accordingly.

When you are happy with your installation put the rest of the car back together by following steps 1-7 in reverse order to complete your installation of FMOC12.



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If you have any questions or concerns about this product or anything else, please feel free to contact your local or preferred Forge Motorsport Dealer/Installer or you may contact us directly.

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### **Important Information Regarding Your New Forge Cooling Product**

Thank you for purchasing a Forge Motorsport cooling product. You now have a product that simply leaves the competition behind – made in Great Britain, with a lifetime warranty. All you need to do now is install and maintain the product correctly to maximise its full potential.

All Forge products are tested before leaving our facility to ensure you 100% satisfaction and reliability.

### General information and care for your Forge cooling product:

On installing your intercooler/radiator, be sure that all hose clamps and fittings are tightened to prevent any
leakage.
Ensure that the intercooler/radiator and the associated plumbing components are not rubbing on any body
parts. This can cause premature failure and warranty invalidation from Forge.
Do not use any car cleaning products, particularly traffic film remover solutions or shampoos to clean your
intercooler, radiator or oil cooler. The use of these products can damage the Forge cooling systems and
invalidate your warranty.
Any cleaning should be done with hot soapy water and well rinsed.
We recommend that you should inspect your product on a regular basis for bent and/or crushed fins. Any bent
fins should be carefully straightened to allow ambient air to pass through the core face.
At the time of installing your Forge product, an approved coolant must be used and added to the coolant
system. Be sure you never mix coolant and always use distilled water.
On Forge Oil Coolers, please ensure all hose clamps and fixings are tightened and secured to prevent leakage.
Do not exceed 9 bar (130 psi) rating on your oil cooler.

### What should you do if a fault develops?

If you suspect that you have an issue, you should take your vehicle back to where the installation of your Forge product was carried out, or to a suitable and qualified tuner for investigation of the problem.

If you suspect that the problem has occurred due to faulty manufacture, please contact your Forge dealer or Forge Motorsport UK, Forge Motorsport USA or Forge Motorsport Asia, depending on your geographical location, to discuss the issue.

#### How to get the Best from your Forge cooling products

Ensure the fitting is carried out by a reputable and competent garage, tuner, or mechanic.
Carry out regular visual checks, inspections, and servicing.
Only fit the Forge cooling product for the application that it was designed for.
Do not fit other parts that could detrimentally affect the efficiency of your Forge cooling product.



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