



RACINGLINE

OIL COOLER KIT

MQB 2.0 TSI

FITTING INSTRUCTIONS



WHAT'S IN THE KIT?

- 1 x -10AN 10 Row oil cooler
- 4 x Steel mounting brackets
- 1 x Oil Cooler Base Plate
- 1 x Oil Line Separator
- 1 x Oil filter housing adaptor
- 1 x Female to Male Adaptor
- 1 x Sandwich plate
- 1 x Oil filter housing with internal oil filter
- 2 x -10AN 210 Series Braided Hose
- 4 x Rubber bobbins
- 8 x M6 button washer-head screw
- 4 x M6 jack nuts (S3 kit)
- 16 x M6 Nyloc nuts and washers

REQUIRED TOOLS AND PARTS

- T25 & 4mm Allen Bits
- 4mm Allen
- 1" - 1/16 Spanner
- 1" Spanner
- 10mm Spanner
- 27mm Deep Socket
- 32mm Socket
- 1 litre of Synthetic Engine Oil (plus enough for oil change)

FITTING NOTES

- This is a complex install, and any mistakes on the oil system will be critical to engine longevity.
- Therefore we recommend professional fitment for all modifications to the car's oil system.
- We advise that you carry out oil service.
- A clean environment is vital for any oil system modification.

TO CHECK BEFORE YOU START

If your vehicle is pre-2015 it's essential that you verify that the oil filter stem has been upgraded to the 06L 115 678Q, available from VWG dealers.

This is a running update from dealers so most cars will have had this part updated during earlier oil changes.



Non-fitment of this part risks low oil pressure and potential engine failure.

Step 1:

Front grill removal – Remove the two T25 screws shown in *figure 1* below. Once removed pull the grille forwards in the direction shown until all retaining clips are detached (for Golf 7.5 & other models with adaptive cruise in the grille detach the electrical connector from the rear of the VW emblem).



Step 2:

Remove front bumper – Using a T25 bit remove **seven** T25 screws from along lower front lip and three screws from both the nearside and offside arch shown in *figure 2*. Once all T25 screws are removed, pull bumper forward gently until both sides are detached. At this point locate the electrical connector on the offside of the bumper and disconnect as shown in *figure 2a*.



Step 3:

Remove engine cover – pull up on the engine cover on both sides to release the rubber grommets that hold it in place. Once loosened, pull upwards on the left side of the cover and remove it from the vehicle (*figure 1*. above)

Step 4:

Now remove oil filter housing, *figure 3* – using a 32mm socket remove factory oil filter housing (use cloth or paper roll to catch any spillage as you remove filter and housing).



Step 5:

Once oil filter housing is removed, an inspection is required. If your vehicle is pre-2015 (and has not been updated) the oil filter stem must be upgraded to the 06L 115 678Q (*figure 4*), available from VWG dealers.

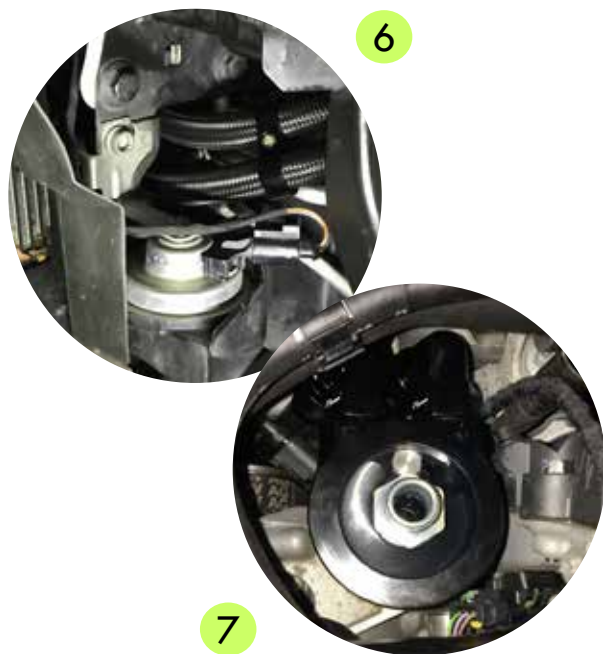


Step 6:

Oil Filter Housing Adaptor installation – insert 06L 115 678Q as shown in *figure 5*. Lubricate O-ring with fresh engine oil. By hand, now screw the Oil Filter Housing Adaptor into place, then tighten with deep 27mm socket.



For reference, the order of assembly of Oil Filter Housing Adaptor and Oil Filter Housing.

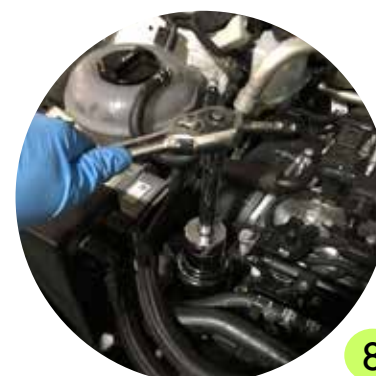


Step 7:

Sandwich plate and oil line installation. Route the -10 AN oil hose down the chassis leg to exit next to the horn at the front right of the vehicle (*figure 6*), ensuring the forged hose end is in the position for the sandwich plate. Once oil lines are in place, screw forged hose end into sandwich plate at a approximately 30° from vertical towards the front of the vehicle using a 1" - 1/16 Spanner.

Step 8:

Oil Filter Housing installation – Lubricate O-Ring with fresh oil and screw onto the male end of the Male to Female adaptor by hand. Before placing the oil filter housing adaptor, lubricate the two O-Rings with fresh oil. Using the Male to Female adaptor, screw down until tight using a deep 27mm socket as *figure 8*.



Step 9:

Oil cooler bracket/mount installation. We have included two drop bracket sets in your kit (4x pieces), plus 2x end-brackets. Please see the uses in *figure 8*. Assemble the two end-brackets and two drop brackets to suit your car type using 4 of the button washer head screws with nyloc nuts. Then, bolt the bobbins to the cooler with nyloc nuts. Finally, bolt the bobbins into the base, to give the full assembly.

Note that the cooler can operate with outlets facing either up for Golf 7 applications or downwards for Audi S3.

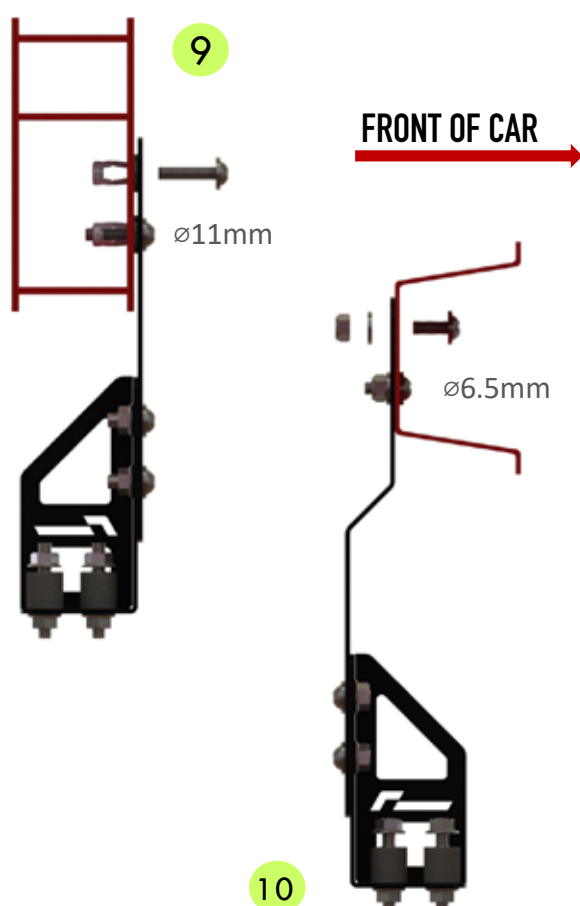
OPTION ONE:
GOLF 7 & ALL OTHER MQB



OPTION TWO:
AUDI S3 8V (2014+)



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Step 10:

Offer the full assembly up to the main crash bar. Audi S3 (*figure 9*) models have a closed-section crash bar which will require the 4x M6 Jack Nuts to be inserted through the front of the bar to act as captive nuts for the button washer head screws. Golf 7 and other MQB applications use an open-section crash bar (*figure 10*) which after drilling will use the 4x button washer head screws with nyloc nuts & washers on the back of the bar.

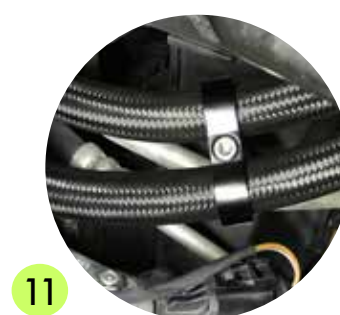
Once you are confident that you have the correct assembly for your car, trial fit the location carefully (taking into account other components such as the radar cruise sensor). Then mark hole locations and carefully drill \varnothing 11mm holes through the bar on the S3 kit and \varnothing 6.5mm on the Golf 7/MQB kit.

Now tighten all the bolts fully on the assembly, and fix it into the crash bar.

Next attach 90° hose ends to the oil cooler by hand until they are fully seating on the oil cooler core, then using a 1" spanner tighten until a hydraulic seal is achieved. Finally fit the oil line separator as shown in *figure 11* to keep hoses neatly mounted.

Step 11:

Oil fill up and recirculation – we strongly recommend that a full oil change is carried out at the time of installation. Top up the engine oil as usual, expect to add approximately 1 litre of high quality Synthetic Oil more than the standard system. Unplug coil packs and turn the engine over for 20-30 seconds, after which check oil level is correct. Once oil levels are correct, using OEM protocol, plug coil packs back in.



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Step 12:

Refit front bumper then front grill (reverse of Step 5 then step 4). Finally reattach engine cover. Recheck engine oil level after driving.