



RACINGLINE

DQ250 Gearbox Cooler

Golf 7 / Audi S3

VWR29DQ250

FITTING INSTRUCTIONS



WHAT'S IN THE KIT?

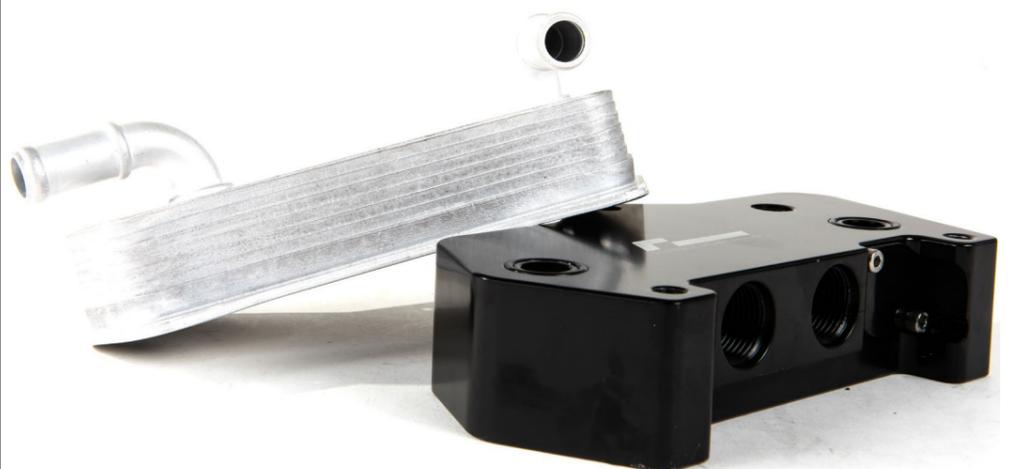
- ▷ 1 x RacingLine Thermostatic Adaptor Block
- ▷ 1 x RacingLine Heat Exchanger
- ▷ 1 x Silicone Hose
- ▷ 1 x -10AN 10 Row Oil Cooler Core
- ▷ 1 x Coolant Pump Relocation Bracket
- ▷ 2 x 210 Series Braided Hose
- ▷ 1 x Braided Hose Separator
- ▷ 2 x Oil Core End Brackets
- ▷ 2 x Golf 7 / 7.5 / Universal Brackets
- ▷ 2 x Audi S3 Brackets
- ▷ 4 x Rubber Bobbins
- ▷ 8 x M6 Flange Button Screw
- ▷ 4 x M6 Jack Nuts (S3 Kit)
- ▷ 16 x Nyloc Nut and Washers
- ▷ 3 x M8 Cap Head Screws
- ▷ 2 x Hose Clips

REQUIRED TOOLS AND PARTS

- ▷ T25 & T30 Torx Bits
- ▷ 4mm & 5mm Allen Bits
- ▷ M10 Spline
- ▷ 1" - 1/16 Spanner
- ▷ 1" Spanner
- ▷ 10mm Spanner
- ▷ Screwdriver / 7mm Hex Socket
- ▷ OEM / Large Hose Clip Remover
- ▷ 2 x Coolant Hose Clamps
- ▷ VW DQ250 Oil (G 052 182 A2)
- ▷ 2 x O-Ring WHT 008 226 (15 x 2.5mm)

FITTING NOTES

- ▷ This is a complex install, and any mistakes on the oil system will be critical to gearbox longevity.
- ▷ Therefore we highly recommend professional fitment for all modification to the car's gearbox oil system.
- ▷ We also advise that you carry out an oil service once kit is installed to ensure correct oil levels.
- ▷ A clean environment is vital for any oil system modification.
- ▷ Ensure you understand how to refill and check oil levels of a DQ250 gearbox, do not attempt install if you are not confident you can complete this task.
- ▷ RacingLine Performance will not be liable for any damage caused by mis-installation.



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 2a*. Once all T25 screws are removed, pull bumper forward gently until both sides are detached. At this point locate the electrical connector on the left hand side of the bumper and disconnect as shown in *figure 2b*. You have the choice of removing the headlamp washer jet nose on the right hand side of the bumper to fully remove the bumper. Alternatively rotate the whole bumper assemble and place it on stands out of the way.

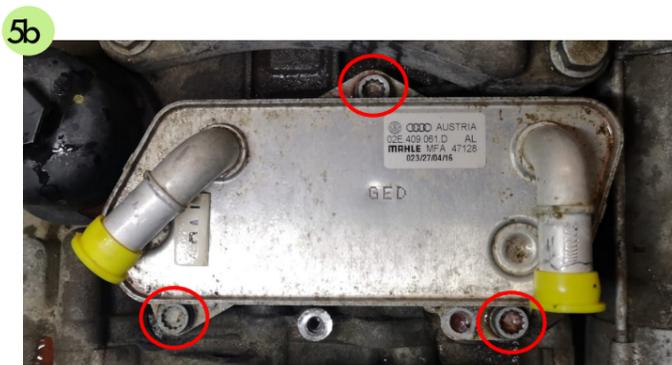


Step 3:

Air Intake Removal – Using the OEM / Large hose clip remover and 7mm hex socket, loosen the front & rear hose clips and remove intake hose which is highlighted in *figure 1*. Next remove the intake duct by removing the T25 torx screws on the front slam panel, once removed pull the air filter box up and remove from the vehicle. Set duct, air box and hose aside ready for refit at the end of the installation.

Step 4:

Turbo Muffler to Intercooler In Boost Pipe Removal – Remove engine under tray using a T20 torx bit, once removed detach hose clip from intercooler-in end of the boost pipe and retaining bolt using a T30 torx bit. Now loosen turbo muffler end hose clips, then finally remove T30 retaining screw, and manoeuvre boost hose to remove from engine bay. This will give more room for the DSG cooler kit installation.



Step 5:

Heat Exchanger Removal and Install of Coolant Pump Relocation Bracket – First remove the 2 bolts that hold the coolant pump bracket so the coolant hose can be moved freely, then attach the coolant hose clamps 150mm and downstream of the OEM coolant pump, now release both hose clips and pull hose from the heat exchanger, place the coolant lines away from the heat exchange. Plug the heat exchanger outlets to limit excess coolant flow. (Do not get coolant in gearbox oil outlets when removing heat exchanger – this will be detrimental to the gearbox). Now remove OEM heat exchanger via the 3 x M10 spline screws (keep heat exchanger in place while all screws are removed to minimise oil spillage), once detached remove and flip onto its back to reduce oil spillage. Clean any oil and coolant left on the gearbox before starting step 6.

Step 6:

Coolant Pump Relocation Bracket – Using 10mm spanner remove OEM bracket from coolant pump and replace with RacingLine bracket, then replace OEM outlet hose with RacingLine silicone hose. Bolt RacingLine bracket into place.



Step 7:

(We advise to replace OEM O-Rings on gearbox outlets at this point with VW part No. WHT 008 226 – 15 x 2.5mm O-Ring)

Thermostatic Adaptor Block, Heat Exchanger & Coolant Line Install – Pre assemble thermostatic adaptor block by screwing the forged hose ends into the 2 x -10AN outlets, offer adaptor block onto gearbox and place RacingLine heat exchanger on top of adaptor block. Using 3 x M8 cap head bolts & washers, bolt into place. Once in place route the braided oil lines down past the chassis leg and out of the front of the vehicle. Finally attach RacingLine silicone hose and OEM hose to heat exchanger, using OEM hose clips, to ensure no leaks are present.

Step 8:

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+)



Step 9:

Offer the full assembly up to the main crash bar. Audi S3 (*figure 9a*) 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 9b*) 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 $\varnothing 11$ mm holes through the bar on the S3 kit and $\varnothing 6.5$ mm 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 using a 1" spanner. Finally fit the oil line separator as shown in *figure 11* to keep hoses neatly mounted.

Step 10:

Refit front bumper then front grill (reverse of Step 5 then step 4) ensuring plug connectors are connected and washer fluid lines are in place before bolting the front bumper up. Reinstall boost pipe and then air intake in reverse of step 4 and then step 3.

Step 11:

DSG oil fill up and recirculation – We strongly recommend that a full gear box oil change is carried out at the time of installation. Expect to add approximately 1 extra litre of G 052 182 A2 oil more than the standard system. Then use the correct OEM protocol to ensure oil levels are correct, if you are not confident with the OEM protocol, then it should be preformed by trained technician. (Do not drive vehicle with underfilled or overfilled fluid levels) Finally reinstall engine bottom tray.