

# Installation Instruction

Performance Radiator



BMW 1/2/3/4 Series Fxx B48 / B46 / B58

PART NUMBER: WC - 420



#### Description

This instruction shows how to replace the OEM Radiator with do88 performance Radiator.

At this type of installation, we always recommend that you have mechanical experience and knowledge about safety during work on vehicles.

This installation instruction is performed on a BMW 340 F31 and the procedure for removal of panels and covers will differ a bit if the install is carried out on any other model this product fit

#### Parts List

- 1pc do88 Performance Radiator
- 2pc Brackets for cars with extra oil cooler
- 5pc Screws for cars with extra oil cooler
- Ipc Nut for cars with extra oil cooler (Not in Picture)
- 2pc Caps (Not in Picture)





Remove the rubber sealing strip and remove the 6 x T30 and 2 x T20 screws marked in picture.

### Step 2

Remove the 3 x 8mm hex screws circled in the picture then pull the wheel liner back to reveal 2 x 8mm hex screws that holds the bumper cover to the front fender where the black arrow points. Remove these screws. Same procedure on the right side.





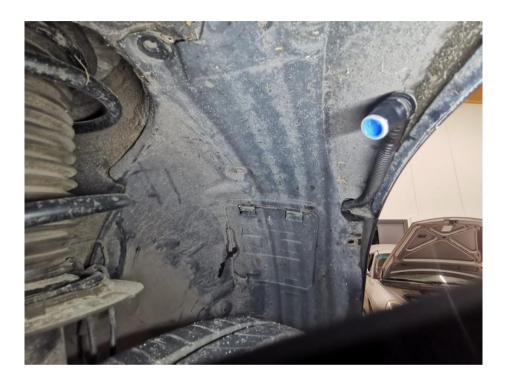
Remove the 8 x 8mm hex screws circled in the picture.



#### Step 4

Now pull the side of the bumper out and disconnect the electrical connectors going to the bumper cover, this differs depending on the equipment of the car. Same procedure on the right side.





We recommend to perform the following bumper removal steps with the help of an assistant.

Pull the bumper slightly forwards and disconnect the washer fluid line.

#### Step 6

You can tuck the washer fluid line in the wheel arch to minimize the amount of fluid that leaks out.







When the bumper cover is pulled out a bit you can reach the radar electrical connection and separate the wire from the bumper cover where the right break cooling duct is located.

Then you can remove the bumper cover.

We recommend you remove the foam from the bumper beam.

#### Step 8

Remove the 2 x T45 screws in the middle and the 4 x T30 screws on the front of the radiator support.







Remove the 2 x T40/13mm Hex screws and the T25 screw holding the headlight. Do the same on the right side. Remove the plastic lid and disconnect the radiator pack upper support pin on both sides.

Now you can loosen the 4 x T30 same on both side and lift the core support frame and twist the hood latch to pass it through the frame and remove it from the car.

#### Step 10

Remove the lower support brace screws, 2 x T 45. Then you can remove the top radiator shroud and support brace together by pushing the shroud inwards to release it from the bottom part.







Remove the T25 screw holding the upper radiator support plastic on the left side .

## Step 12

Remove the T25 screw holding the upper plastic radiator support (circled) and the T25 locking the fan shroud in place (arrow). Then press the retainer clip on eht eleft side of fan and lift the fan about 2cm upwards, in this position remove plastic the top radiator support.

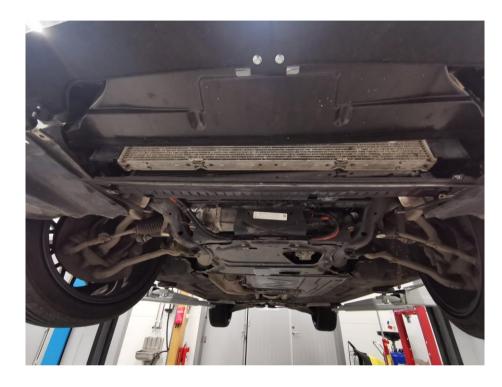




Now remove the 18 x 8mm hex screws that holds the underfloor and then remove underfloor.

#### Step 14

Remove the lower air guide by loosening the 2 screws holding the radar support. Then remove the lower part of the radiator shroud by lifting it up and disconnecting it from the frame rails, then remove downwards.





Remove the plastic lower radiator support by removing the 2 x T25 screws and releasing the clips from the radiator side supports.

#### Step 16

Pinch the coolant hoses on booth sides of the radiator and remove the connections, cap the radiator connections with the included silicone caps to minimize the coolant spillage.







Now support the main radiator with a strap so you can remove the water-to-air intercooler radiator safely.

#### Step 18

Undo the lower radiator supports, one T25 screw on each side. Then lift up the radiator and side supports about 3cm, move it a bit in forward direction, then remove them together downwards.





Transfer the radiator side supports to the do88 Performance radiator. To ease the bleeding process we recommend you pre-fill the radiator and block of the connections with the included silicone caps.



#### Step 20

Install the do88 radiator in the car and make sure the main radiator seats correctly in the radiator side supports.

Install all other parts in reverse order.



Bleed cooling system according to this instruction:

- -Switch ignition on without starting engine.
- -Switch low-beam light on.

-Set climate control to max temp and lowest fan speed.

-Press accelerator pedal to the floor for 10 seconds.

-Bleeding procedure starts and take about 10-15 minutes. In the end of the

procedure the intercooler coolant pump runs on full power and at this stage you should feel the coolant flowing thru the intercooler coolant hoses when you gently squeeze them.

-Top off coolant again.

-If there is still air in the system this will result in higher IAT due to reduced or no circulation in the intercooler cooling system.



Thank you for purchasing another do88 product.

Please check our website frequently for new product releases. If you have any questions or concerns about this product please do not hesitate to contact us: <u>do88.se/contact</u>