



PRK-144

For 3.0 Twin Turbo S55 engines found in...
BMW M3 (F80)
BMW M4 (F82/83)



Before starting any work on the vehicle please ensure that there are no existing engine management issues.

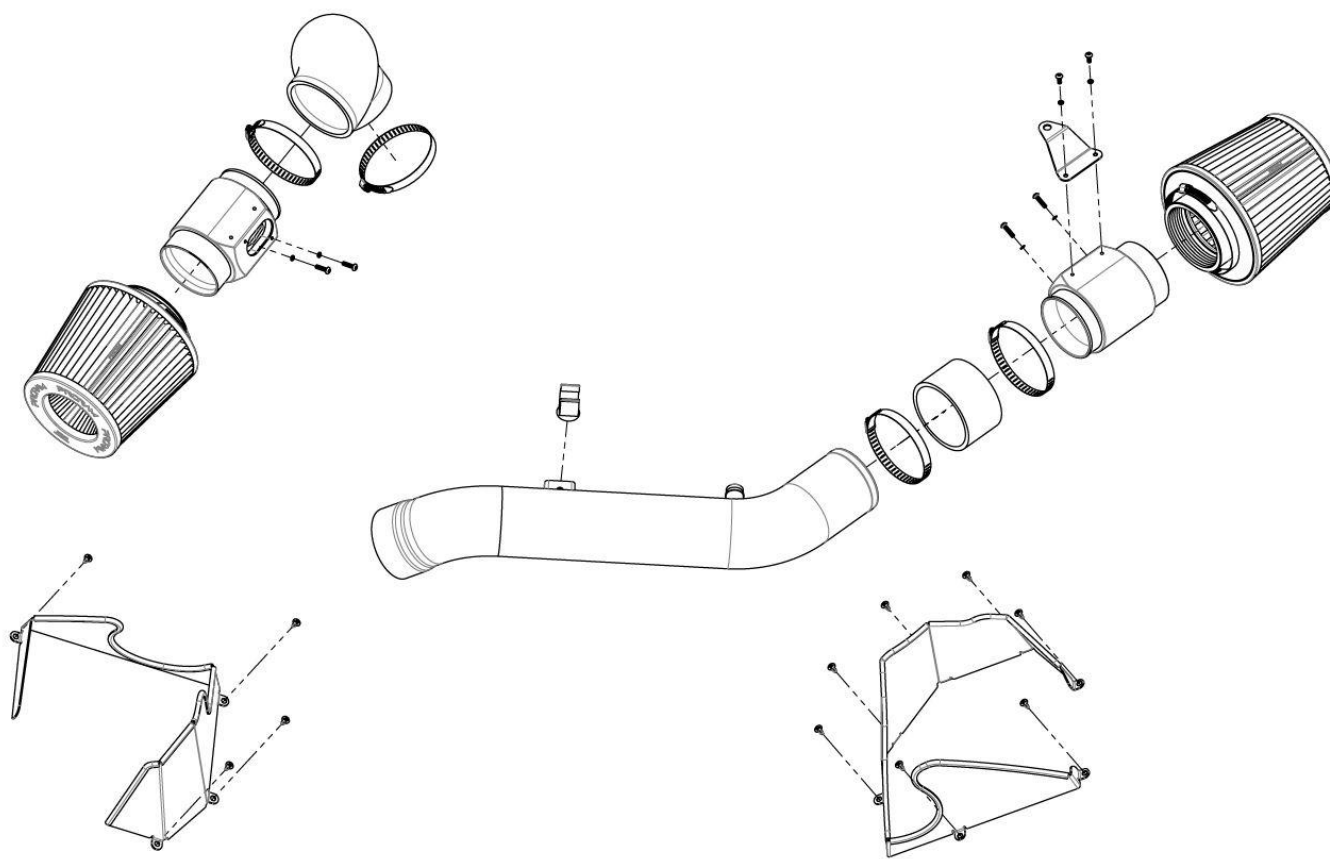
It is recommended that you read and understand these instructions in their entirety before beginning the installation.

It is recommended that a competent mechanic carries out or at very least inspects the installation of the kit.

If you are at all unsure about any aspect of the installation process, please contact RAMAIR Filters before proceeding.

Irreversible modification (cutting, grinding, bending, gluing, etc) of any component of the kit is not required for installation to a standard vehicle, doing so may affect your warranty

Kit Overview



In the box...

1x LH Heatshield
1x RH Heatshield
2x Cone Air Filters
2x MAF Sensor Housings
1x LH Intake Pipe
1x RH Silicone Hose
1x Silicone Coupler
1x Length of Edge U Channel
1x Fitting Kit

Tools Required...

- Socket Set
- Torx Bits
- Trim Removal Tool
- Screwdriver
- Allen Key
- Sharp Knife

Removal of Strutbrace

01

Remove plastic clips from RH side by removing the central pins.



02

Quarter turn 3 plastic bolts (10mm) to release from RH side.



03

Remove plastic clips from LH side by removing the central pin.



04

Quarter turn 3 plastic bolts (10mm) to release from LH side.



05

Remove the rubber & plastic covers from both sides.



06

Unbolt the coolant reservoir from the strutbrace (10mm).



07

Unbolt and remove the strutbrace (8x 13mm).



Removal of RH Intake

08

Disconnect the MAF sensor by pressing the tab and wiggling the connector off.



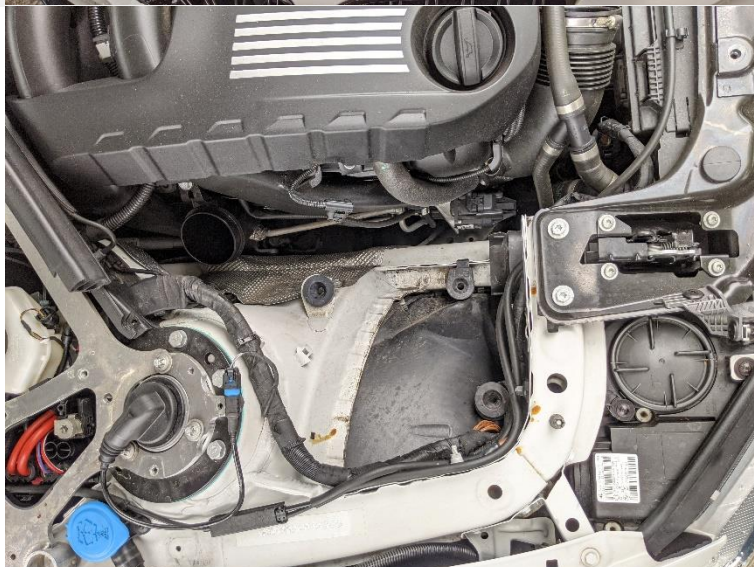
09

Undo the rear hose clamp on the intake hose.



10

Remove the airbox, complete with MAF sensor and intake hose.



11

Separate the two halves of the air box and remove the sensor by undoing the torx screws.



Removal of LH Intake

12

Disconnect the MAF sensor by pressing the tab and wiggling the connector off.



13

Disconnect the vacuum hose by squeezing the tabs on each side of the connector.



14

Remove the supporting bracket between the slam panel and the airbox. Rotate the rubber insert 90 degrees to release it.



15

Undo the hose clamp between the airbox and turbo inlet hose.



16

Remove the airbox from the car.



17

Separate the two halves of the air box and remove the sensor by undoing the torx screws.



Installation of RH Intake

18

Line the edge of the heat shield with the supplied rubber u-channel and cut to length.



19

Install the RH heat shield onto the RH air box base using the supplied screws.



20

Install the assembly back into the engine bay.



21

Remove the MAF sensor from the RH OEM air box and install it into one of the supplied MAF housings and secure with two M4x16 bolts and washers.



22

Install one of the air filters onto the smooth end of the MAF housing and secure with the hose clamp.



23

Install the silicone hose onto the opposite end with the lip.



24

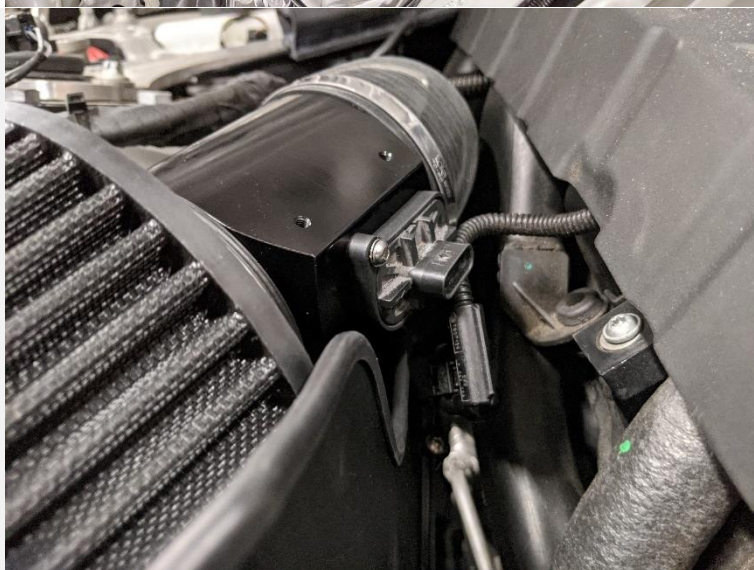
Install it onto the RH turbo inlet so that the assembly sits in the heatshield cut-out.

If you are having trouble getting it fit in the space, flip the hose around as the ends are slightly different lengths.



25

Rotate the hose and MAF housing so that sensor is horizontal, and the filter sits nicely in the air box base.



25

Do up the clamps, using an extension bar to reach the rearmost one.

Be careful not to crush the OEM plastic intake pipe you are connecting to.



26

Reconnect the MAF sensor plug.



Installation of LH Intake

27

Line the edge of the heat shield with the supplied rubber u-channel and cut to length.



28

Install the LH heat shield onto the LH air box base using the supplied screws.



29

Install the assembly back into the engine bay.



30

Remove the MAF sensor from the RH OEM air box and install it into one of the supplied MAF housings and secure with two M4x16 bolts and washers.



31

Install one of the air filters onto the smooth end of the MAF housing and secure with the hose clamp.



32

Join the end of the MAF housing with the lip, to the hard pipe using the silicone coupler and two hose clamps.



33

Install the assembly in the turbo inlet hose and secure with the factory clamp.



34

Connect the vacuum hose to the hard pipe.



35

Rotate the MAF housing so that the sensor is horizontal.



36

Reconnect the MAF sensor plug.



37

Install the supplied bracket onto the side of the MAF housing using the supplied M4x10mm bolts and washers.



38

Use the supplied plastic clip to secure the coolant hose to the intake hose.



Installation of Strutbrace

39

Reinstall the strutbrace and secure with the factory bolts (8x 13mm).

Check to see that it is not touching the new intake pipes.

If it is, adjust their position to suit.



40

Re-attach the coolant reservoir to the strutbrace bolting through the bracket on the LH MAF housing.



41

Reinstall the plastic and rubber covers to each side.



Finishing Up

42

Installation is now complete.

In the first few weeks after installation you should periodically check your installation. If there are signs of wear on the filter or its surroundings you should adjust its position as per the installation instructions.



43

At normal air filter service intervals, you should remove the air filters for cleaning...

1. Remove the filter from the vehicle.
2. Shake loose any larger debris from the filter.
3. Clean the filter material with cleaning solution or warm soapy water.
4. Allow the filter to air dry naturally, do not use a heater or compressed air
5. Reinstall the filter.



