Intake manifold / gasket, replacing

Note! As the illustrations in this service information are used for different model years and / or models, some variation may occur. However, the essential information is always correct.

Replacing the intake manifold and gasket

Removing the intake manifold and gasket

Disconnect the battery negative lead. First read Note when disconnecting/connecting the battery lead.

Drain the fuel injection system. See Draining the fuel system.

Remove
- the control module box air baffle
- the cover plate over the connectors from the injectors
- the connectors for the sensors in the charge air pipe between the charge air cooler (CAC) and the throttle module.

Separate the throttle body (TB) connector.
Separate the charge air pipe at the hose / plastic pipe.
Remove the plastic charge air pipe.
Seal the openings.
Mark up and remove the vacuum hoses from the intake manifold.
Remove the oil filler cap.
Remove the cover over the ignition coils.
Remove the hose from the flame trap to the cam cover at the terminal in the cam cover.

Remove the mounting screws from the fuel rail.
Separate the fuel line quick-release connector. Use tool 9512666.
Spray universal oil or similar around the injector nozzle at the terminal on the intake manifold.
Gently work the fuel rail and injector nozzles loose.

Remove
- the dipstick bracket
- the lower screws for the intake manifold a few turns.

Remove
- the mounting screws in the upper row and the outer screws in the lower row
- the intake manifold by lifting it approximately 20 mm.
Allow the crankcase ventilation hose to run through the intake manifold without disconnecting it from the flame trap.

**Transferring components when replacing the intake manifold**

- Transfer the electronic throttle module. Use a new gasket. Tighten to 10 Nm.

**Installing the intake manifold and gasket**

_Note! Ensure that the gasket faces are clean._

Install:

- a new gasket held in position by the lower screws for the intake manifold. Do not forget the clamp for the fuel line at the screw in the lower row.
- the intake manifold. Do not forget the crankcase ventilation hose. The hose must be inserted up through the gap between the second and third ducts.
- the three upper screws. Tighten all the screws (starting from the centre). Tighten to 20 Nm.

**Finishing**

Install:

- the fuel rail. Press together the quick-release connector. Use new screws. Tighten to 10 Nm
- the connectors for the injectors and the cover plate
- the vacuum hoses according to the earlier markings
- the plastic charge air pipe
- the connectors for the sensors in the plastic charge air pipe
- the connectors to the throttle body (TB)
- the air baffle from the control module box at the engine cooling fan (FC)
- the dip stick in the intake manifold.

Final check

Test drive the car. Check the following:
- that there is no fuel leakage
- that the engine operates normally.

Check that everything is in position. Clean the engine compartment.