

Ignition coil, 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 in the illustrations is always correct.

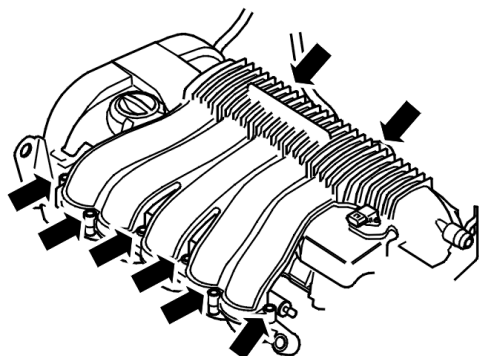
Removal

Removing upper intake manifold

Caution! Seal the openings in the lower part of the intake manifold. Use tape or similar.

Remove

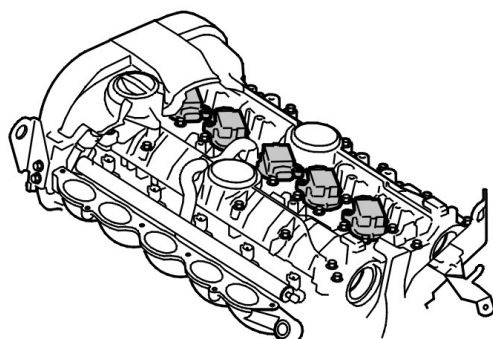
- the hose clamp for the hose between the intake manifold and the mass air flow (MAF) sensor
- the 6 screws for the upper intake manifold, closest to the front cover plate, and the 2 screws against the firewall. Lift up the intake manifold and place to one side.



Removing ignition coils

Note! The upper belt cover must be removed in order to replace the ignition coil on cylinders 1 and 2.

Disconnect the ignition coil connector. Remove the screw for the ignition coil. Lift out the ignition coil.



Installation

Note! For tightening torques, see: [Tightening torque](#).

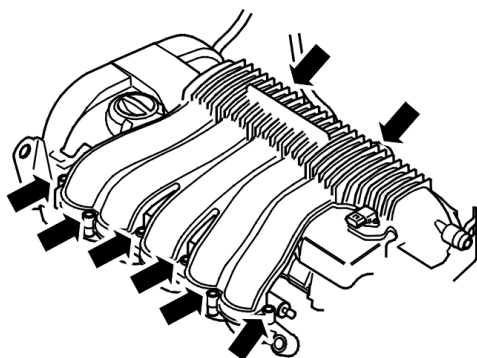
Installing ignition coils

Install the ignition coil. Tighten. See: [Tightening torque](#). Connect the connector for the ignition coil.

Installing components

When replacing the ignition coil on cylinders 1 and 2.

Install the upper timing belt cover.



Caution! Ensure that the guides for the lower section are in the correct position.

Install:

- new gasket for the upper section of the intake manifold
- the upper intake manifold. Tighten the screws alternately. Tighten the intake manifold screws. Tighten. See: [Tightening torque](#) . Tighten the hose clamp to the mass air flow (MAF) sensor. Connect the connector for the pressure sensor on the intake manifold
- new tie strap for the cable harness.

Finishing

Checks

Start the engine and check the function.

Spark plugs, replacing

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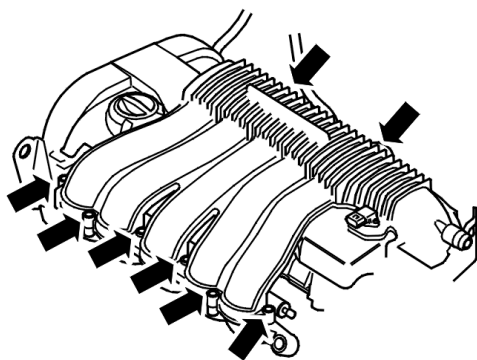
Removal

Removing upper intake manifold

Caution! Seal the openings in the lower part of the intake manifold. Use tape or similar.

Remove:

- the hose clamp for the hose between the intake manifold and the mass air flow (MAF) sensor
- the 6 screws for the upper intake manifold, closest to the front cover plate, and the 2 screws against the firewall. Lift up the intake manifold and place it on the battery box.

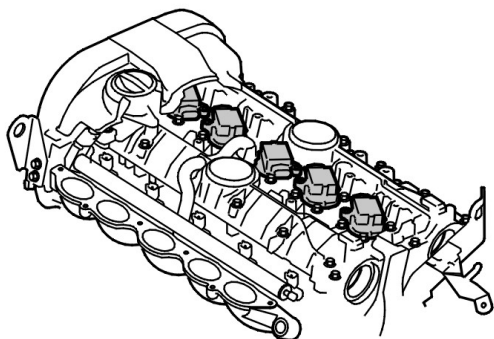


Removing components

Caution! Lift up the ignition coils. Mark the position and the direction of the screw. Bend the ignition coils to one side.

Remove:

- the upper belt cover. Disconnect the connector for the variable valve timing



solenoid

- the screws for the ignition coils
- the 2 screws for the ground terminals
- the spark plugs.

Installation

Note! For tightening torques, see: [Tightening torque](#) .

Installing spark plugs

Install:

- the spark plugs. Tighten. See: [Tightening torque](#)
- the ignition coils according to the earlier markings
- the screws for the ignition coils and the ground terminals. Tighten. Connect the connector for the variable valve timing solenoid
- the upper belt cover. Remove the seals on the lower part of the intake manifold.

Installing components

Caution! Ensure that the guides for the lower section are in the correct position.

Install:

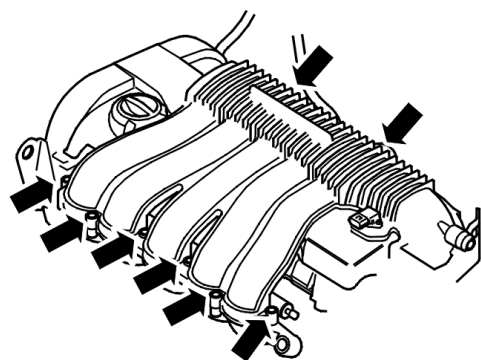
- new gaskets for the upper section of the intake manifold
- the upper intake manifold. Tighten the screws alternately.

Tighten the intake manifold screws. See [Tightening torque](#) .

Tighten the hose clamp to the mass air flow (MAF) sensor. Connect the connector to the pressure sensor on the intake manifold. Install a new tie strap for the cable harness.

Finishing

Checking function



Start the engine and check the function.