



CAUTION

In order to ensure that the bolts are correctly tightened, use a syringe to remove any oil which may be in the cylinder head mounting holes.



Note:

Do not oil the new bolts. Always lubricate the bolts if they are being reused.



CAUTION

Do not retighten the cylinder head bolts after applying this procedure.

Refit ([see 11A, Top and front of engine, Cylinder head assembly: Exploded view](#)) :

-
- the new cylinder head gasket,
- the cylinder head,
- the new cylinder head bolts.

3. FINAL OPERATION

Proceed in the reverse order to removal.



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CYLINDER HEAD: REMOVAL-REFITTING



Note, one or more warnings are present in this procedure



Equipment required

component support



parts always to be replaced:



[Cylinder head gasket](#)

[cylinder head bolts](#)



WARNING

Before carrying out any operation on a vehicle fitted with the Stop & Start system, always follow the safety instructions [Vehicle: Precautions for the repair](#) .

Location and specifications (tightening torques, parts always to be replaced) ([see 11A, Top and front of engine, Cylinder head assembly: Exploded view](#)) .

REMOVAL

1. REMOVAL PREPARATION OPERATION

WARNING



To avoid all risk of damage to the systems, apply the safety and cleanliness instructions and operation recommendations before carrying out any repair:



[Engine: Precautions for the repair](#) ,



[Vehicle: Precautions for the repair](#) .





WARNING

Wear goggles with side protectors for this operation.

CAUTION



It is strictly forbidden to apply any pressure to the engine oil sump. Damage to the sump will irreparably damage the engine by:



blocking the strainer,



raising the oil level above maximum, with a risk of engine racing.



Remove the "engine and gearbox" assembly [Engine - gearbox assembly: Removal - Refitting](#) .



Separate the automatic gearbox from the engine [Automatic gearbox: Removal - Refitting](#) .



Position the engine on the component support [Engine support equipment: Use](#) .



Drain the engine [Engine oil - Oil filter : Draining - Filling](#) .



Remove:



the accessories belt [\(see 11A, Top and front of engine, Engine accessories assembly: Exploded view\)](#) ,



the ignition coils [\(see 11A, Top and front of engine, Cylinder head assembly: Exploded view\)](#) ,



the cylinder head cover [\(see 11A, Top and front of engine, Cylinder head assembly: Exploded view\)](#) ,

the crankshaft accessories pulley [\(see 11A, Top and front of engine, Engine accessories assembly:](#)

[Exploded view \)](#) ,

the crankshaft seal on timing end([see 11A, Top and front of engine, Timing assembly: Exploded view](#)) ,

the timing chain([see 11A, Top and front of engine, Timing assembly: Exploded view](#)) ,

the camshaft timing sprockets([see 11A, Top and front of engine, Timing assembly: Exploded view](#)) ,

the camshafts([see 11A, Top and front of engine, Cylinder head assembly: Exploded view](#)) ,

the catalytic pre-converter[Exhaust assembly in engine compartment: Exploded view](#) ,

the air conditioning compressor([see 11A, Top and front of engine, Engine accessories assembly: Exploded view](#)) ,

the alternator([see 11A, Top and front of engine, Engine accessories assembly: Exploded view](#)) ,

the engine oil dipstick[Engine oil circuit assembly: Exploded view](#) ,

the engine oil dipstick guide[Engine oil circuit assembly: Exploded view](#) ,

the multifonction support([see 11A, Top and front of engine, Engine accessories assembly: Exploded view](#)) ,

the turbo-manifold oil pipe[Exhaust assembly in engine compartment: Exploded view](#) .

2. REMOVAL OPERATION

Remove ([see 11A, Top and front of engine, Cylinder head assembly: Exploded view](#)) :

the cylinder head bolts,

the cylinder head,

the cylinder head gasket.

1. REFITTING PREPARATION OPERATION



CAUTION

Protect the oilway so that foreign bodies do not enter the oil pipes in the cylinder head.

Failure to follow this instruction could lead to the blocking of the oilways, resulting in a rapid deterioration of the camshaft.



CAUTION

Do not scrape the joint faces of the aluminium, any damage caused to the joint face will result in a risk of leaks.

Use SUPER CLEANING AGENT FOR JOINT FACES [Vehicle: Parts and consumables for the repair](#) to clean:

-
- the cylinder block gasket face,
- the cylinder head joint face.

Remove the residue using a plastic spatula.

Finish cleaning the joint faces using a GREY ADHESIVE PAD [Vehicle: Parts and consumables for the repair](#) .



CAUTION

To ensure proper sealing, the gasket surfaces must be clean, dry and not greasy (avoid any finger marks).

Use SURFACE CLEANER [Vehicle: Parts and consumables for the repair](#) to clean:

the cylinder block gasket face,

the cylinder head joint face.



parts always to be replaced: Cylinder head gasket.



parts always to be replaced: cylinder head bolts.

Position the pistons at mid-stroke.

Check for the cylinder head centring dowels on the cylinder block Cylinder block assembly: Exploded view.

Refit a new cylinder head gasket (see 11A, Top and front of engine, Cylinder head assembly: Exploded view).

2. REFITTING OPERATION



CAUTION

In order to ensure that the bolts are correctly tightened, use a syringe to remove any oil which may be in the cylinder head mounting holes.



Note:

Do not oil the new bolts. Always lubricate the bolts if they are being reused.