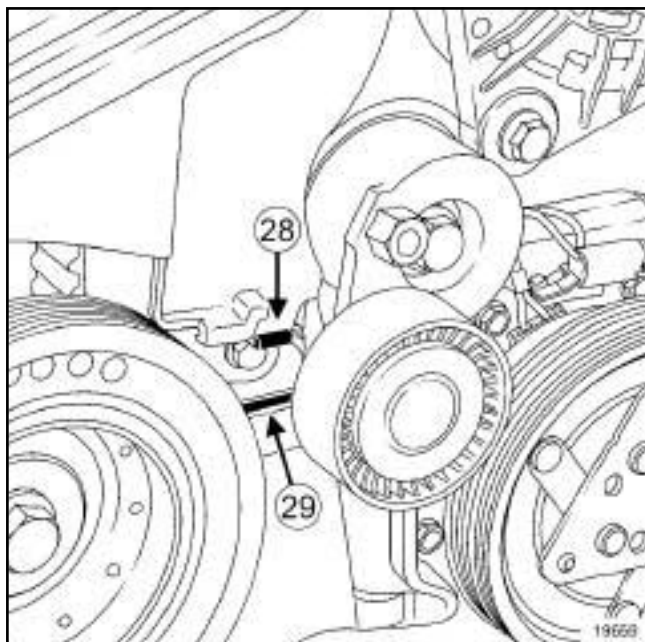


TOP AND FRONT OF ENGINE

Timing belt: Removal - Refitting

11A

K9K, and 796



19659

- ☐ Refit the lower timing cover, positioning the tab (28) in the opening (29) on the inner cover.
- ☐ Clip on the lower timing cover.
- ☐ Refit:
 - the upper timing cover,
 - the upper timing cover bolt.
- ☐ Clip on the upper timing cover.
- ☐ Refit:
 - the camshaft position sensor (see **13B, Diesel injection, Camshaft position sensor: Removal - Refitting**, page **13B-7**),
 - the accessories belt (see **11A, Top and front of engine, Accessories belt: Removal - Refitting**, page **11A-2**),
 - the right-hand suspended engine mounting (see **19D, Engine mounting, Right-hand suspended engine mounting: Removal - Refitting**, page **19D-4**), observing the marks made during removal.
- ☐ Remove the engine support tool (**Mot. 1453**).
- ☐ Refit the front right-hand wheel (see **Wheel: Removal - Refitting**) (35A, Wheels and tyres).
- ☐ Connect the battery (see **Battery: Removal - Refitting**) (80A, Battery).

TOP AND FRONT OF ENGINE

Rocker cover: Removal - Refitting

11A

K4M

Tightening torques 	
rocker cover bolts 22, 23, 20 and 13	8 N.m
rocker cover bolts 1 to 12, 14 to 19, 21 to 24	15 N.m
rocker cover bolts 22, 23, 20 and 13	15 N.m
flywheel end lifting eye bolts on the rocker cover	11 N.m

REMOVAL

I - REMOVAL PREPARATION OPERATION

- ☐ Position the vehicle on a two-post lift (see **Vehicle: Towing and lifting**) (02A, Lifting equipment).
- ☐ Disconnect the battery (see **Battery: Removal - Refitting**) (80A, Battery).
- ☐ Remove:
 - the front right-hand wheel (see **Wheel: Removal - Refitting**) (35A, Wheels and tyres),
 - the accessories belt (see **11A, Top and front of engine, Accessories belt: Removal - Refitting**, page 11A-2) ,
 - the air resonator (see **12A, Fuel mixture, Air resonator: Removal - Refitting**, page 12A-2) ,
 - the timing belt (see **11A, Top and front of engine, Timing belt: Removal - Refitting**, page 11A-17) ,
 - the air filter unit (see **12A, Fuel mixture, Air filter unit: Removal - Refitting**, page 12A-6) ,
 - the throttle valve (see **12A, Fuel mixture, Throttle valve: Removal - Refitting**, page 12A-11) ,
 - the inlet distributor (see **12A, Fuel mixture, Inlet distributor: Removal - Refitting**, page 12A-12) ,
 - the timing end camshaft seals (see **11A, Top and front of engine, Camshaft seal, timing end: Removal - Refitting**, page 11A-56) ,
 - the ignition coils (see **17A, Ignition, Coils: Removal - Refitting**, page 17A-1) ,
 - the oil decanter (see **11A, Top and front of engine, Oil decanter: Removal - Refitting**, page 11A-68) ,
 - the flywheel end lifting eye on the rocker cover.

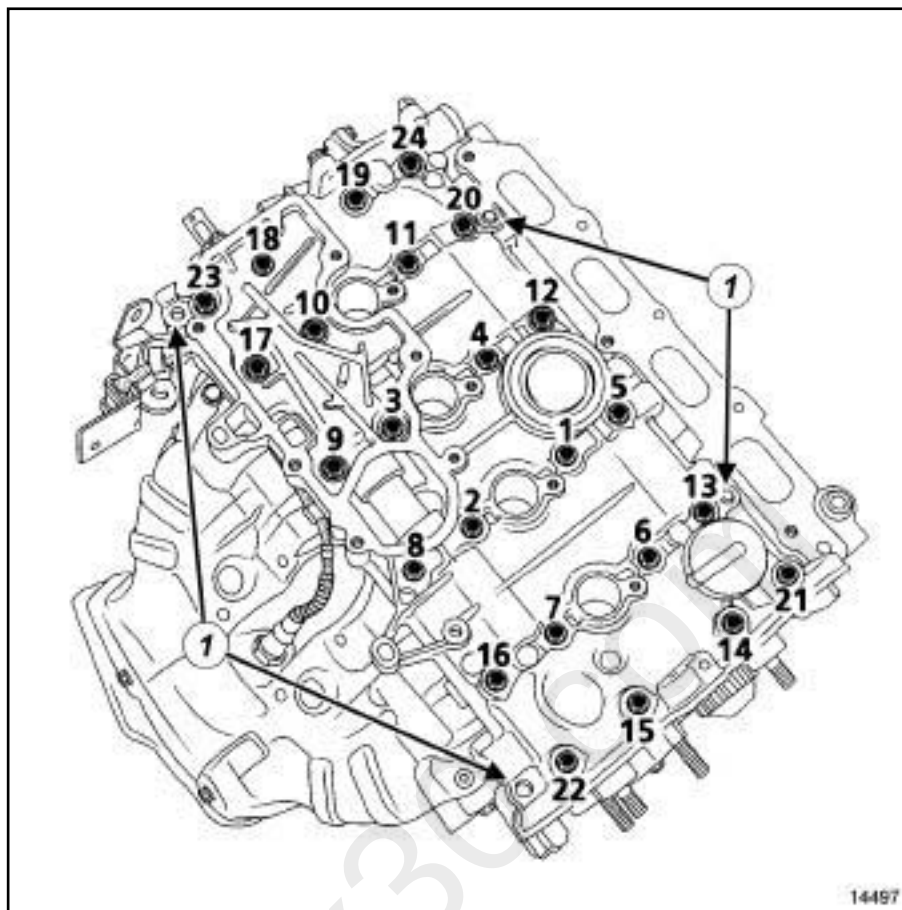
TOP AND FRONT OF ENGINE

Rocker cover: Removal - Refitting

11A

K4M

II - REMOVAL OPERATION



14497

- ☐ Remove the rocker cover bolts.
- ☐ Remove the rocker cover vertically by tapping the lugs (1) with a copper hammer.
- ☐ Remove the rocker cover.

TOP AND FRONT OF ENGINE

Rocker cover: Removal - Refitting

11A

K4M

REFITTING

I - REFITTING PREPARATION OPERATION



IMPORTANT

Wear cut-resistant gloves during the operation.

IMPORTANT

Wear goggles with side protectors for this operation.

WARNING

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

WARNING

Do not allow this product to drip onto the paintwork.

Clean the cylinder head carefully to prevent foreign bodies from entering the oil supply and return galleries.

Failure to follow this advice could lead to the blocking of the various oil inlet galleries, which would quickly result in engine damage.

Note:

The gasket faces on the rocker cover must be clean, dry and free from grease (avoid finger marks).

- ☐ Clean the gasket face of the rocker cover and cylinder head with **SUPER CLEANING AGENT FOR JOINT FACES** (see **Vehicle: Parts and consumables for the repair**) (04B, Consumables - Products) to dissolve any pieces of seal that are still attached.
- ☐ Apply the product to the section to be cleaned.
- ☐ Wait approximately fifteen minutes, then remove any residue with a wooden spatula.
- ☐ Lubricate the cylinder head camshaft bearings with engine oil.

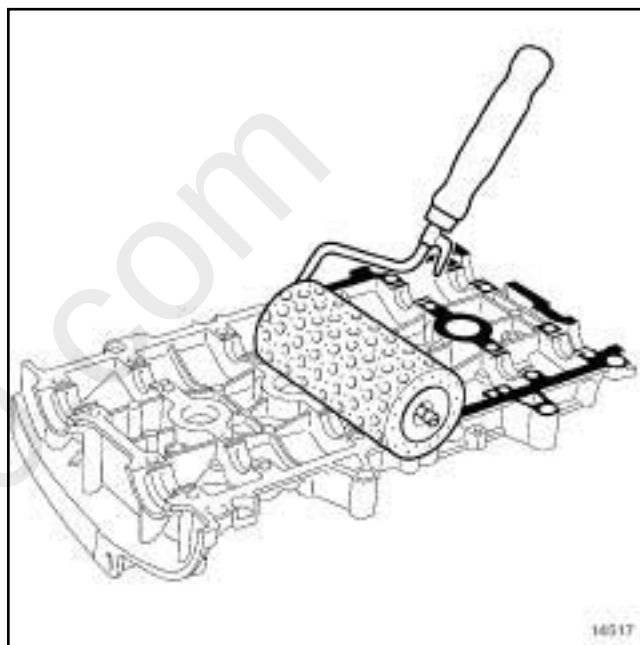


WARNING

Applying excess sealant could cause it to be squeezed out when parts are tightened. A mixture of sealant and fluid could damage certain components (engine, radiator, etc.)

Note:

Do not put oil on the gasket face of the cylinder head cover.



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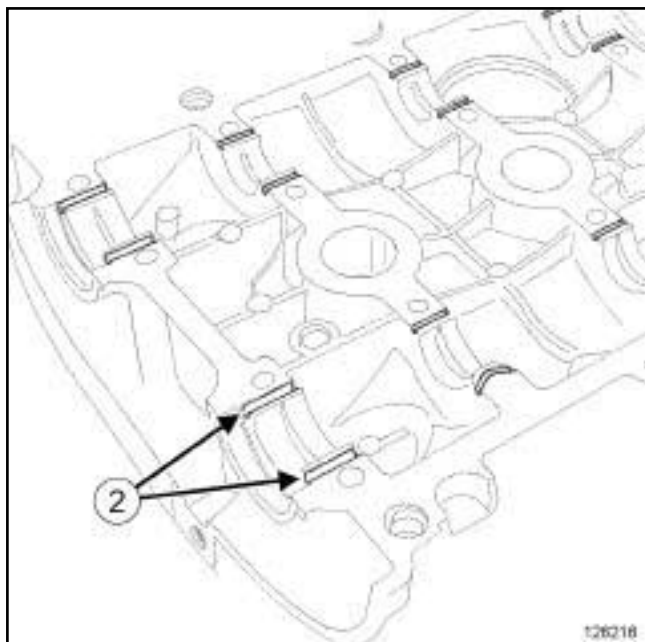
- ☐ Using a stipple roller, apply **RESIN ADHESIVE** (see **Vehicle: Parts and consumables for the repair**) (04B, Consumables - Products) to the gasket face until it is well coated.

TOP AND FRONT OF ENGINE

Rocker cover: Removal - Refitting

11A

K4M



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- ❑ Use a cloth to remove any **RESIN GLUE** in the bearing channels (2) on the rocker cover.

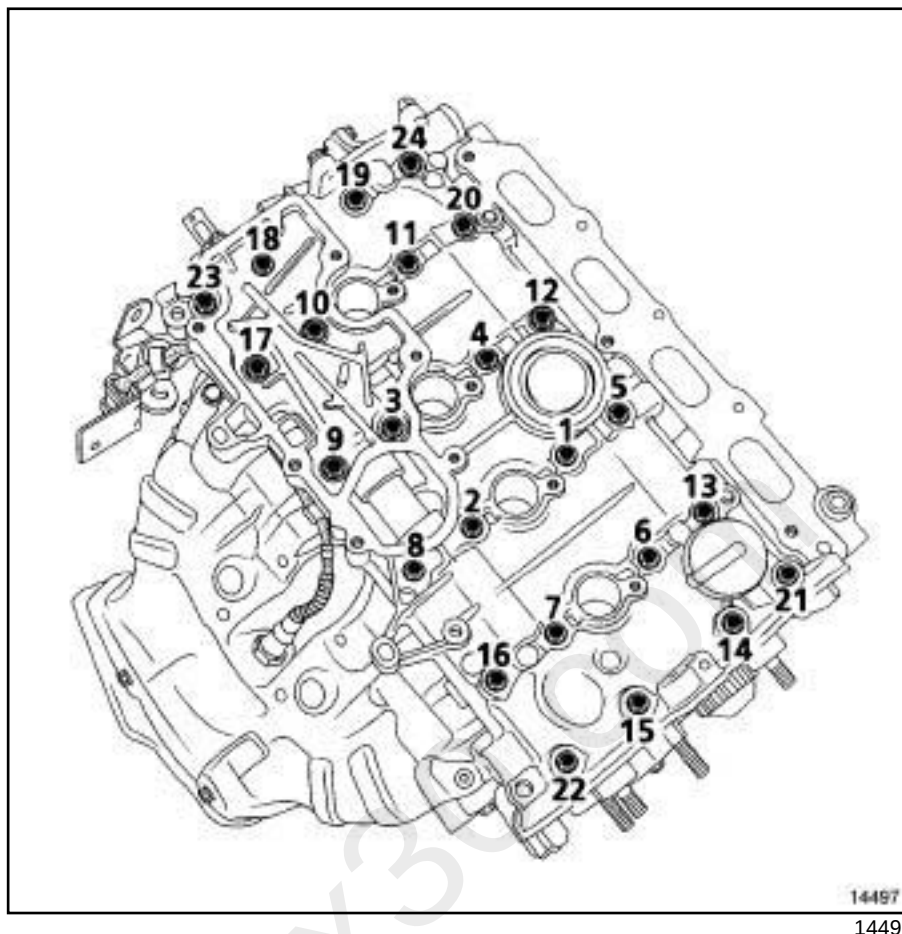
TOP AND FRONT OF ENGINE

Rocker cover: Removal - Refitting

11A

K4M

II - REFITTING OPERATION



- ☐ Refit the rocker cover.
- ☐ Tighten to torque and in order:
 - **rocker cover bolts 22, 23, 20 and 13 (8 N.m),**
 - **rocker cover bolts 1 to 12, 14 to 19, 21 to 24 (15 N.m).**
- ☐ Loosen bolts 22, 23, 20 and 13, in order.
- ☐ Torque tighten in order **rocker cover bolts 22, 23, 20 and 13 (15 N.m).**

III - FINAL OPERATION

- ☐ Refit the flywheel end lifting eye.
- ☐ Torque tighten the **flywheel end lifting eye bolts on the rocker cover (11 N.m).**
- ☐ Refit:
 - the oil decanter (see **11A, Top and front of engine, Oil decanter: Removal - Refitting, page 11A-68**) ,
 - the ignition coils (see **17A, Ignition, Coils: Removal - Refitting, page 17A-1**) ,

- the camshaft seals (see **11A, Top and front of engine, Camshaft seal, timing end: Removal - Refitting, page 11A-56**) ,
- the inlet distributor (see **12A, Fuel mixture, Inlet distributor: Removal - Refitting, page 12A-12**) ,
- the throttle valve (see **12A, Fuel mixture, Throttle valve: Removal - Refitting, page 12A-11**) ,
- the air filter unit (see **12A, Fuel mixture, Air filter unit: Removal - Refitting, page 12A-6**) ,
- the timing belt (see **11A, Top and front of engine, Timing belt: Removal - Refitting, page 11A-17**) ,
- the air resonator (see **12A, Fuel mixture, Air resonator: Removal - Refitting, page 12A-2**) ,
- the accessories belt (see **11A, Top and front of engine, Accessories belt: Removal - Refitting, page 11A-2**) ,
- the front right-hand wheel (see **Wheel: Removal - Refitting**) (35A, Wheels and tyres).

- ☐ Connect the battery (see **Battery: Removal - Refitting**) (80A, Battery).

TOP AND FRONT OF ENGINE

Rocker cover: Removal - Refitting

11A

K9K

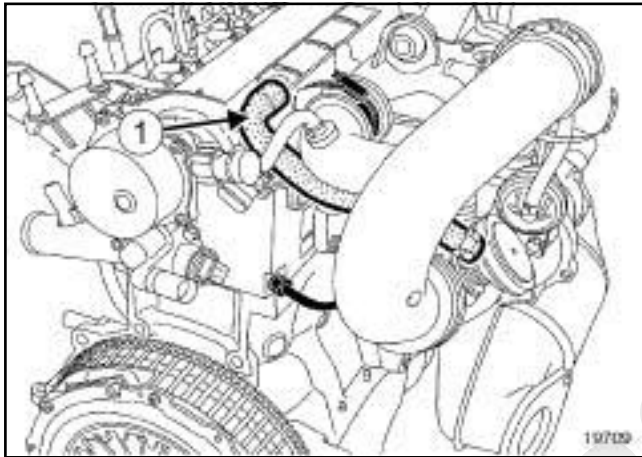
Tightening torques

rocker cover bolts	12 N.m
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REMOVAL

I - REMOVAL PREPARATION OPERATION

- ❑ Remove the air filter unit (see **12A, Fuel mixture, Air filter unit: Removal - Refitting**, page 12A-6) .



- ❑ Remove the oil vapour rebreathing hose (1) .

II - REMOVAL OPERATION

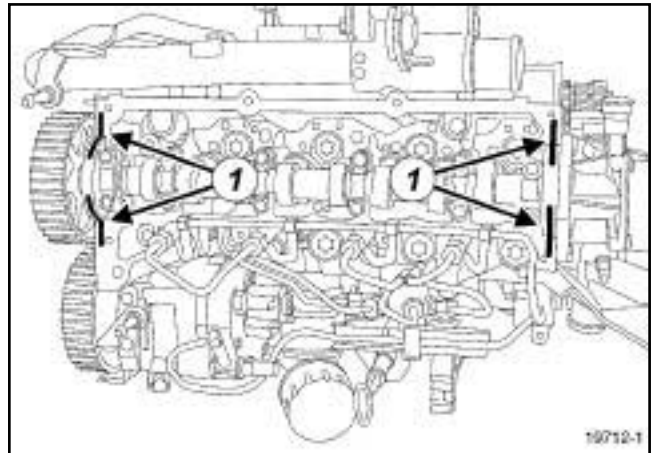
- ❑ Remove:
 - the rocker cover bolts,
 - the rocker cover,
 - the rocker cover seal.

REFITTING

I - REFITTING PREPARATION OPERATION

- ❑ Clean the cylinder head joint face using **GREY ABRASIVE PADS** (see **Vehicle: Parts and consumables for the repair**) (04B, Consumables - Products).
- ❑ Use **SURFACE CLEANER** (see **Vehicle: Parts and consumables for the repair**) (04B, Consumables - Products) to degrease:
 - the cylinder head joint face,
 - the housing of the rocker cover seal, if reusing.
- ❑ **parts always to be replaced: rocker cover seal.**

II - REFITTING OPERATION



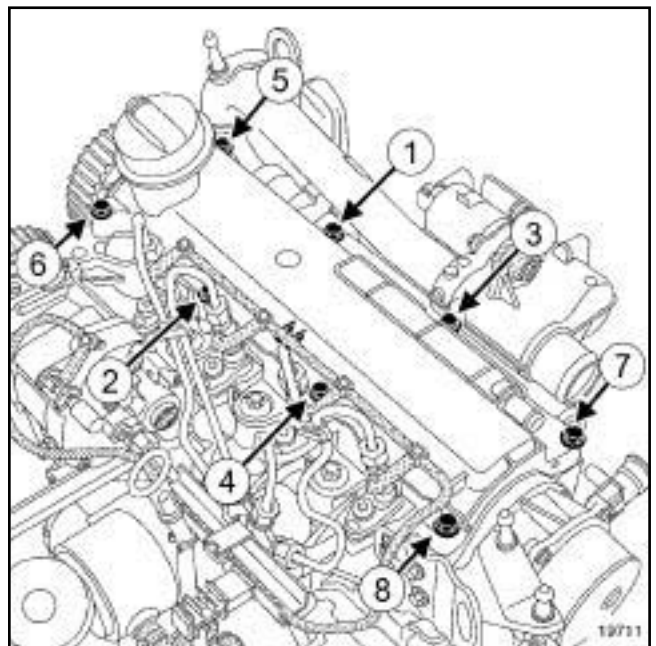
19712-1

❑

WARNING

Applying excess sealant could cause it to be squeezed out when parts are tightened. A mixture of sealant and fluid could damage certain components (engine, radiator, etc.).

- ❑ Deposit four beads (1) of **SILICONE ADHESIVE SEALANT** that are **2 mm** in diameter and **10 mm** long.
- ❑ Refit:
 - the rocker cover,
 - the rocker cover bolts.



19711

- ❑ Torque tighten in order the **rocker cover bolts (12 N.m)**.