

ENGINE AND LOWER ENGINE ASSEMBLY

Accessories belt: Removal

10A

I - RECOMMENDATIONS FOR REPAIR

IMPORTANT

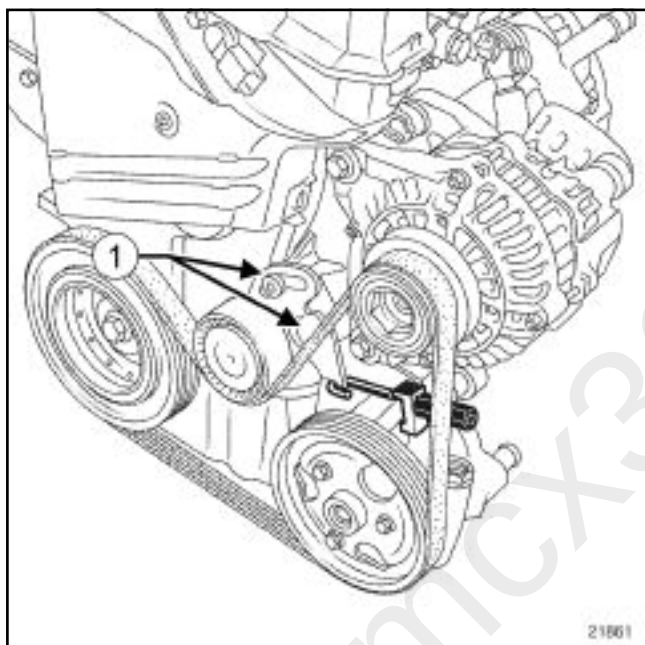
Wear protective gloves during every operation.

II - EQUIPMENT REQUIRED

- Protective gloves.

III - REMOVAL

1 - Engine without air conditioning

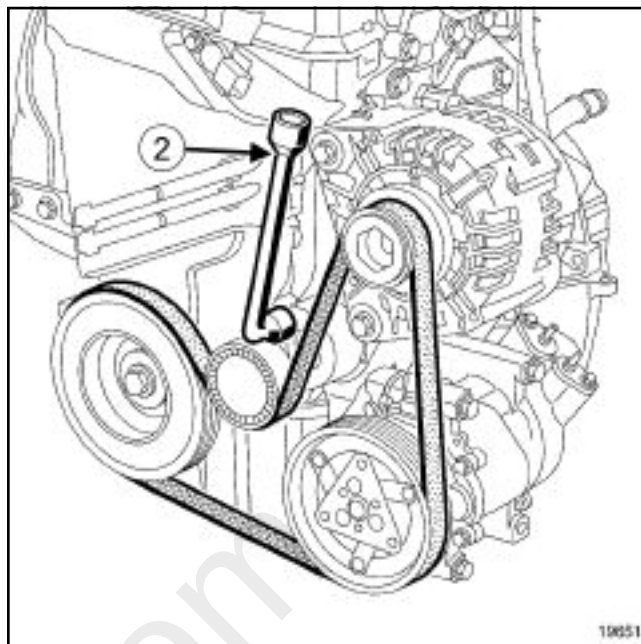


Undo the tensioning roller mounting bolts (1) .

Remove:

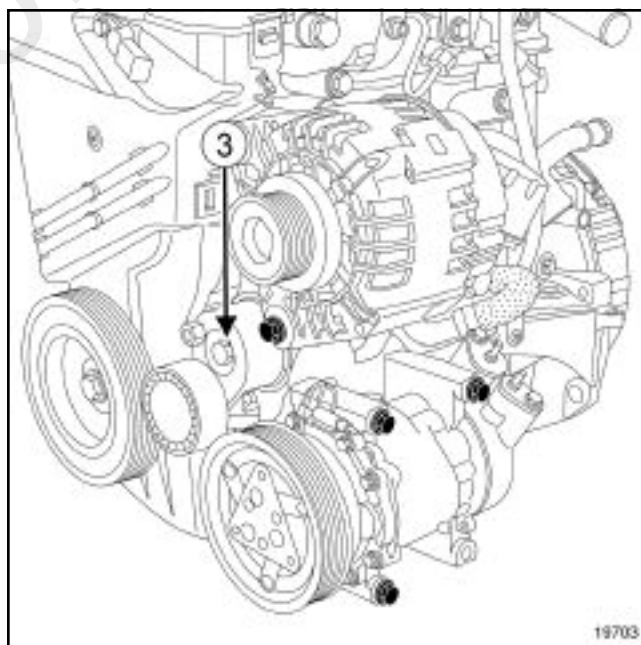
- the accessories belt,
- the accessories belt tensioning roller.

2 - Engine with air conditioning



Rotate the tensioning roller using a wrench (2) to slacken the belt.

Remove the accessories belt.



Remove:

- the accessories belt tensioning roller mounting bolt (3) ,
- the accessories belt tensioning roller.

Timing - cylinder head: Removal

K9K, and 260 or 270 or 272 or 700 or 702 or 704 or 706 or 710 or 712 or 722 or 724 or 728 or 729 or 750 or 752 or 760 or 762 or 790

Special tooling required	
Mot. 1489	TDC locating pin.
Mot. 1430	Set of 5 crankshaft and camshaft pulley timing pins.
Mot. 582-01	Flywheel locking tool.
Mot. 1677	Flywheel locking tool.
Mot. 1573	Cylinder head support

I - TIMING GEAR REMOVAL

II - GUIDELINES FOR REPAIRS TO THE TIMING GEAR

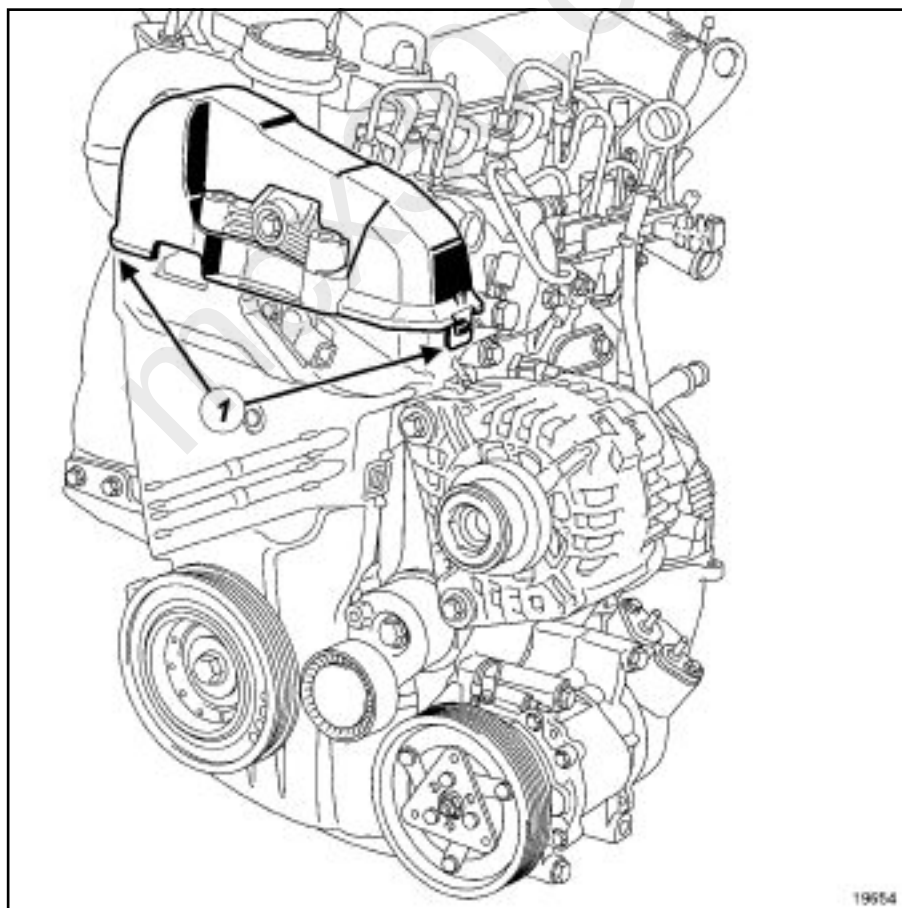
IMPORTANT

Wear protective gloves during every operation.

III - EQUIPMENT REQUIRED FOR THE TIMING GEAR

- Protective gloves,
- Large screwdriver,
- Allen key (**6mm**),
- Female torx socket (**14**).

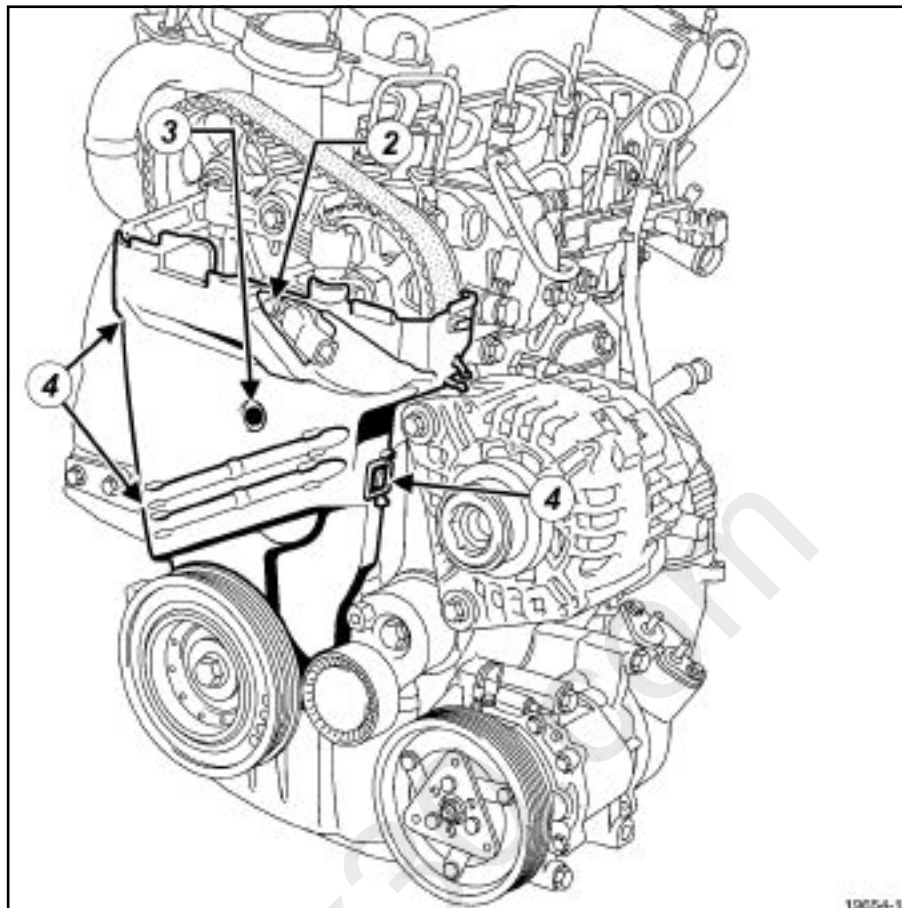
IV - REMOVAL



Remove the upper timing cover by unclipping both tabs (**1**) .

Timing - cylinder head: Removal

K9K, and 260 or 270 or 272 or 700 or 702 or 704 or 706 or 710 or 712 or 722 or 724 or 728 or 729 or 750 or 752 or 760 or 762 or 790



19654-1

Remove:

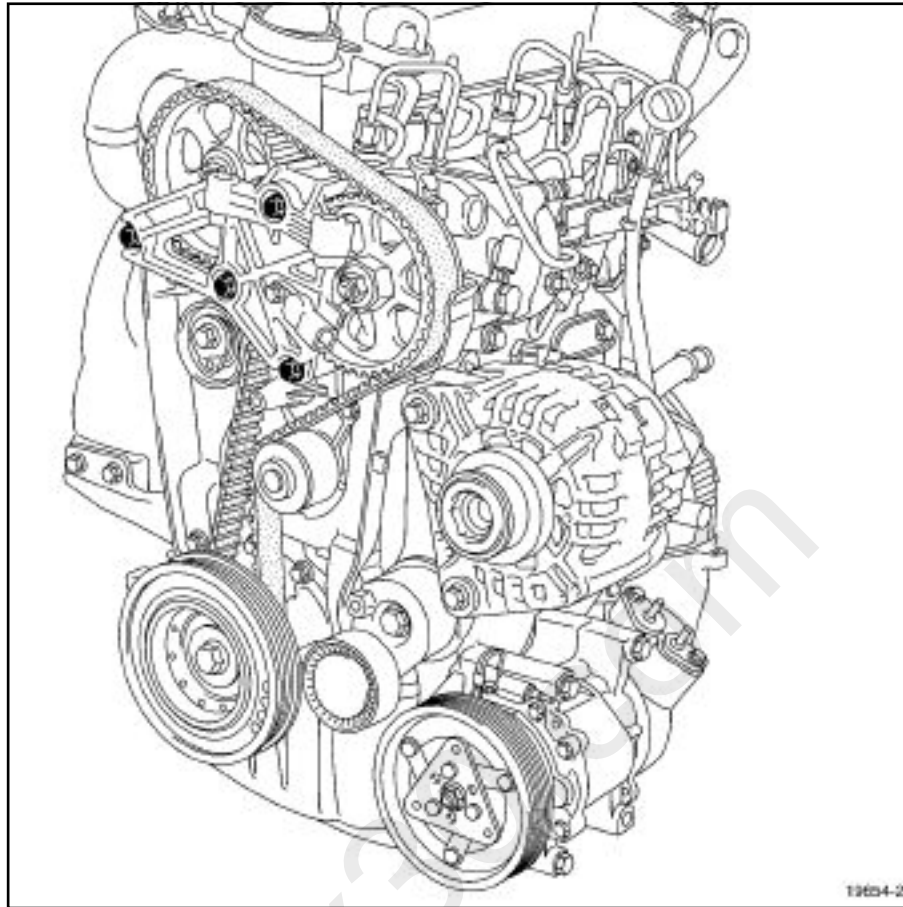
- the high pressure pump position sensor (2) ,
- the plastic bolt (3) .

Unclip the three tabs (4) .

Remove the lower timing cover.

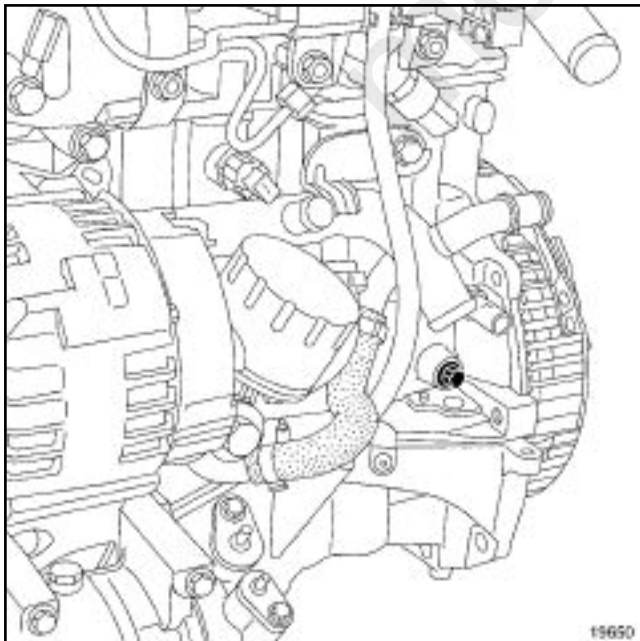
Timing - cylinder head: Removal

K9K, and 260 or 270 or 272 or 700 or 702 or 704 or 706 or 710 or 712 or 722 or 724 or 728 or 729 or 750 or 752 or 760 or 762 or 790



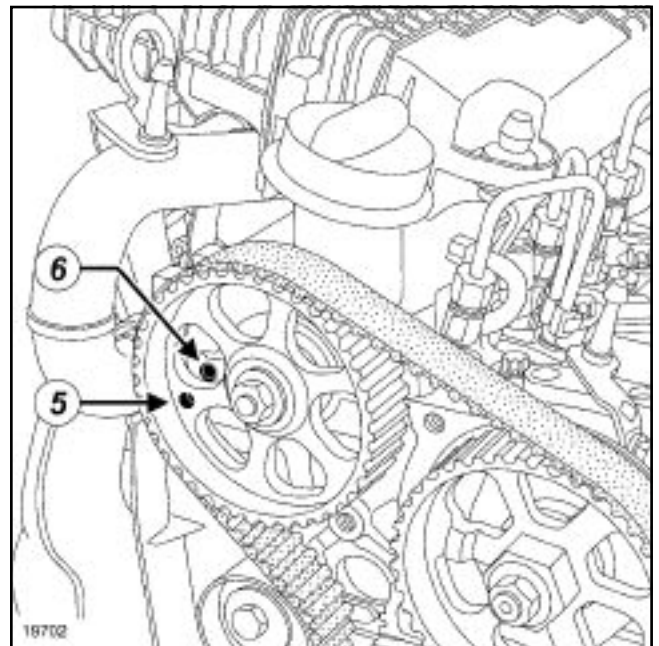
19654-2

Remove the cylinder head suspended mounting.



19650

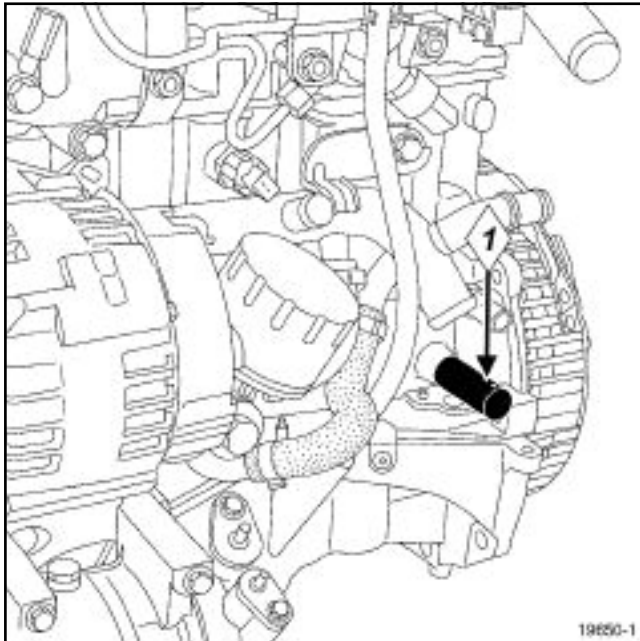
Remove the TDC setting pin plug using a number **14** female torx socket.



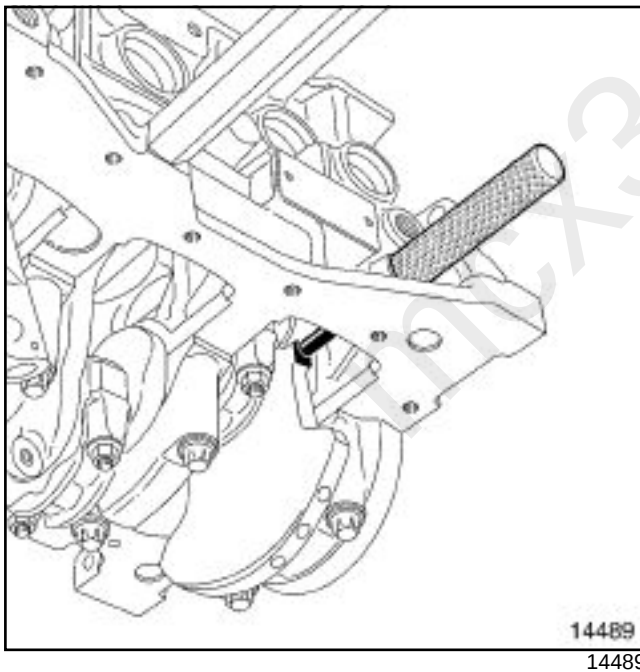
19702

Turn the crankshaft to position the hole (5) of the camshaft pulley almost opposite the hole (6) in the cylinder head.

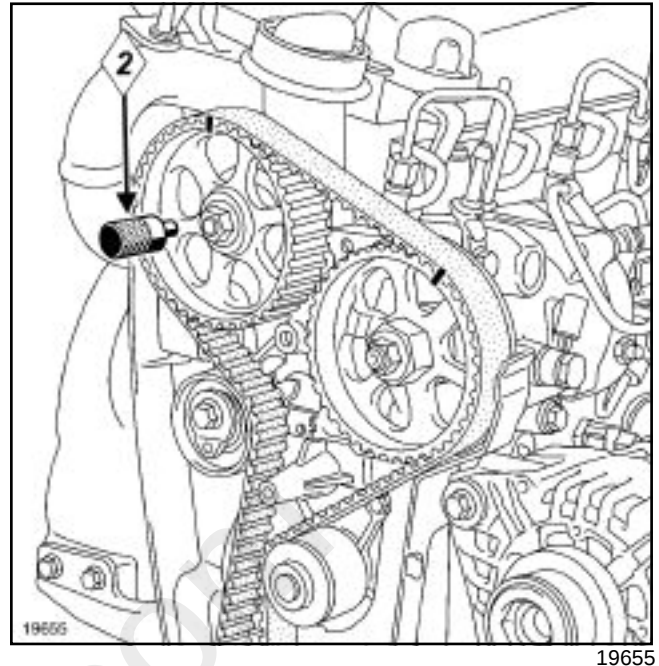
K9K, and 260 or 270 or 272 or 700 or 702 or 704 or 706 or 710 or 712 or 722 or 724 or 728 or 729 or 750 or 752 or 760 or 762 or 790



Screw in the TDC setting pin (1) **(Mot. 1489)** .



Turn the crankshaft clockwise (timing end) smoothly until the crankshaft comes into contact with the TDC setting pin.



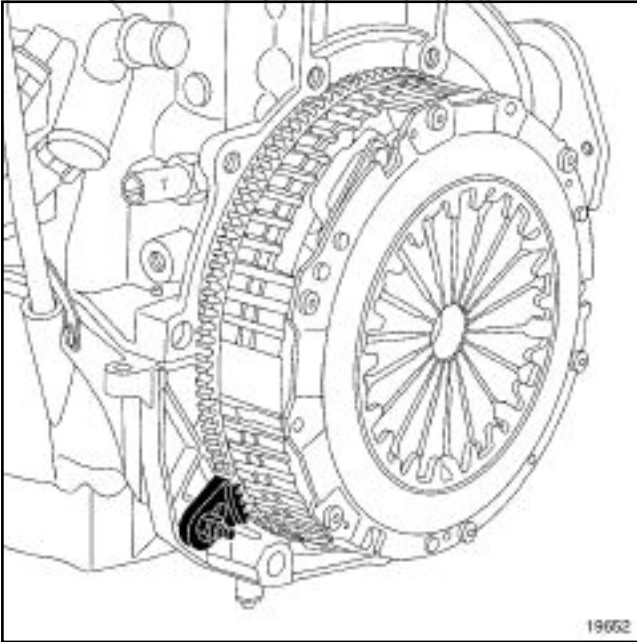
Insert the pin **(Mot. 1430)** (2) in the camshaft pulley and cylinder head holes.

Remove:

- the camshaft pulley timing pin **(Mot. 1430)** ,
- the TDC setting pin **(Mot. 1489)**

Timing - cylinder head: Removal

K9K, and 260 or 270 or 272 or 700 or 702 or 704 or 706 or 710 or 712 or 722 or 724 or 728 or 729 or 750 or 752 or 760 or 762 or 790



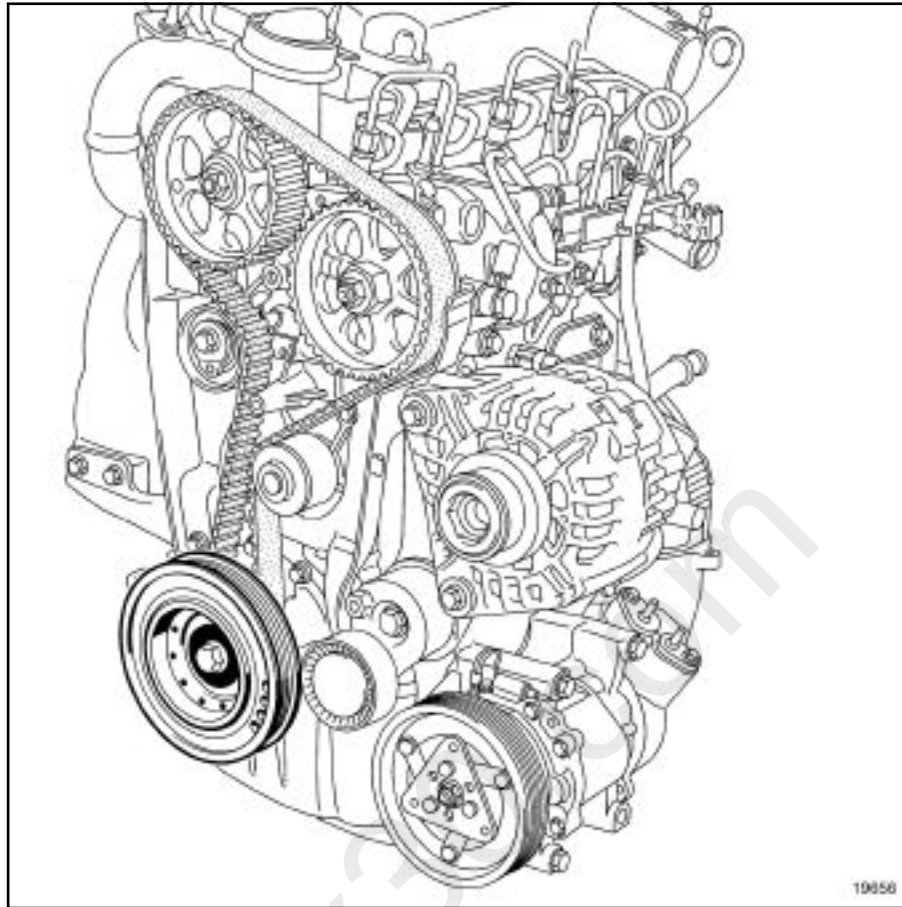
19652

Fit flywheel locking tool (**Mot. 582-01**) or (**Mot. 1677**)

Note:

For engines that have already had the flywheel removed, screw two used flywheel bolts into the crankshaft to lock it using a large screwdriver.

K9K, and 260 or 270 or 272 or 700 or 702 or 704 or 706 or 710 or 712 or 722 or 724 or 728 or 729 or 750 or 752 or 760 or 762 or 790

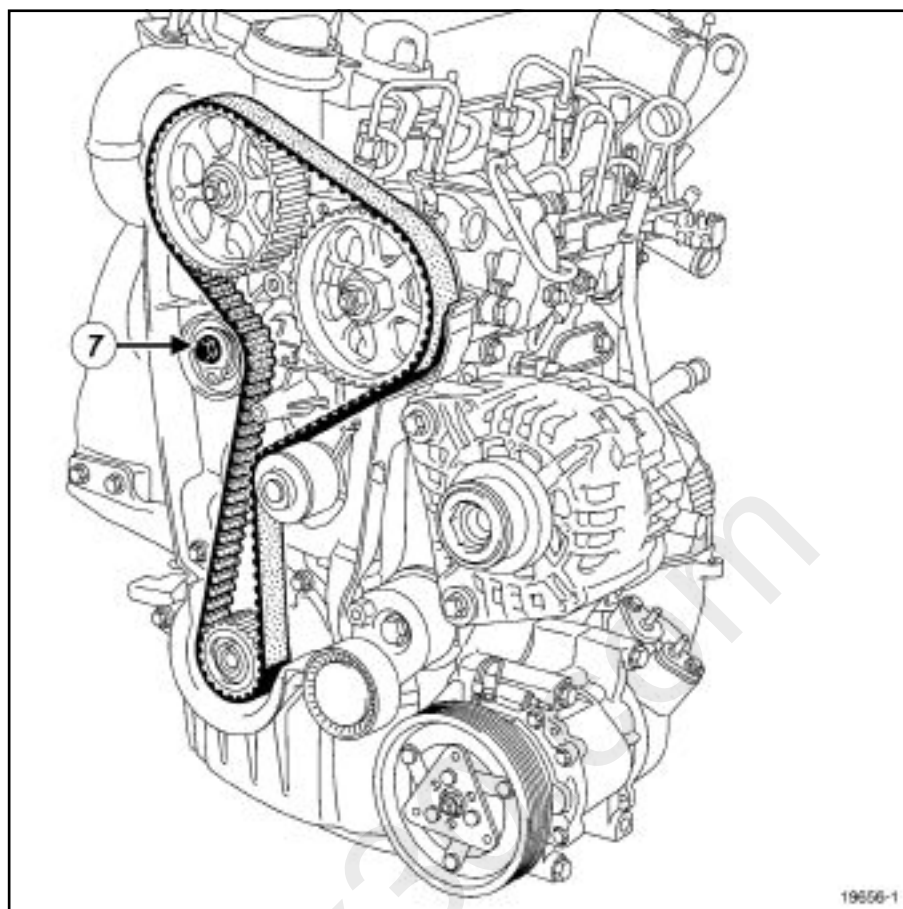


Remove the crankshaft accessories pulley.

|

Timing - cylinder head: Removal

K9K, and 260 or 270 or 272 or 700 or 702 or 704 or 706 or 710 or 712 or 722 or 724 or 728 or 729 or 750 or 752 or 760 or 762 or 790



19656-1

Slacken the tensioning roller bolt (7) .

Loosen the timing tensioning roller by turning the eccentric cam using a **6mm** Allen key.

Remove:

- the timing belt taking care not to let the crankshaft timing sprocket fall out,
- the timing tensioning roller.

- Female torx socket.

V - CYLINDER HEAD REMOVAL**VI - GUIDELINES FOR REPAIRS TO THE CYLINDER HEAD****IMPORTANT**

Wear protective gloves during every operation.

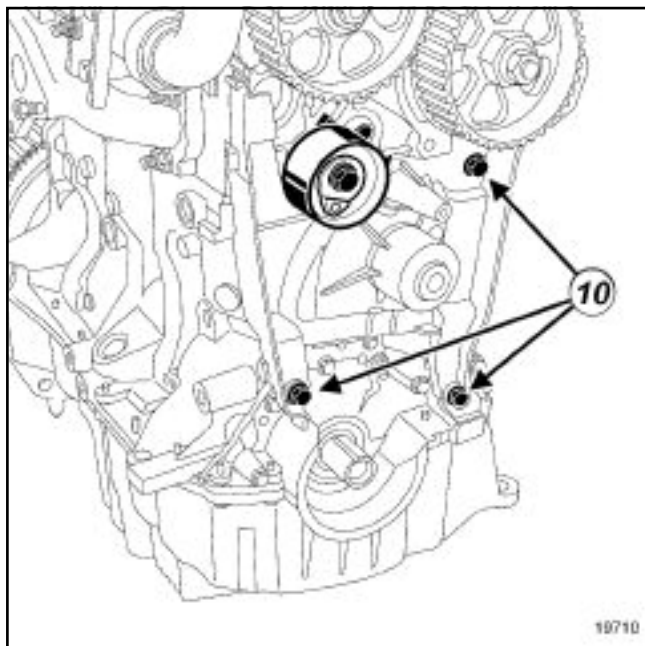
VII - EQUIPMENT REQUIRED FOR THE CYLINDER HEAD

- Male torx socket,

Timing - cylinder head: Removal

K9K, and 260 or 270 or 272 or 700 or 702 or 704 or 706 or 710 or 712 or 722 or 724 or 728 or 729 or 750 or 752 or 760 or 762 or 790

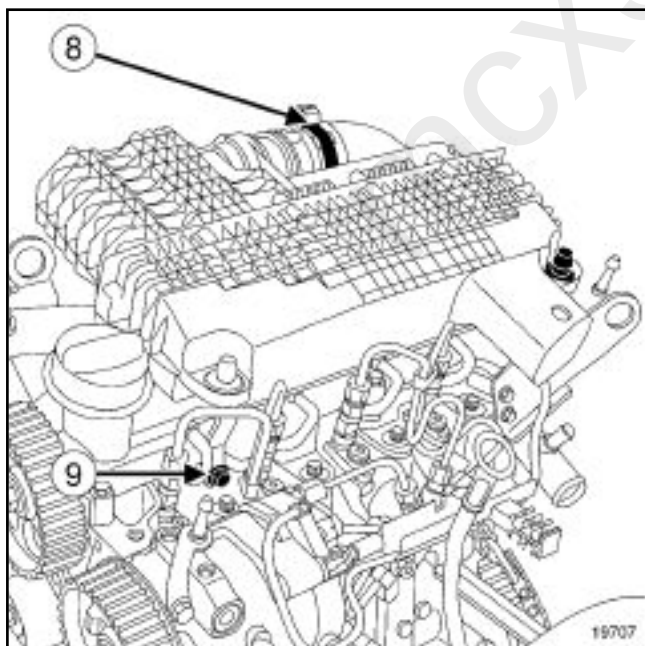
VIII - REMOVAL



19710

Remove:

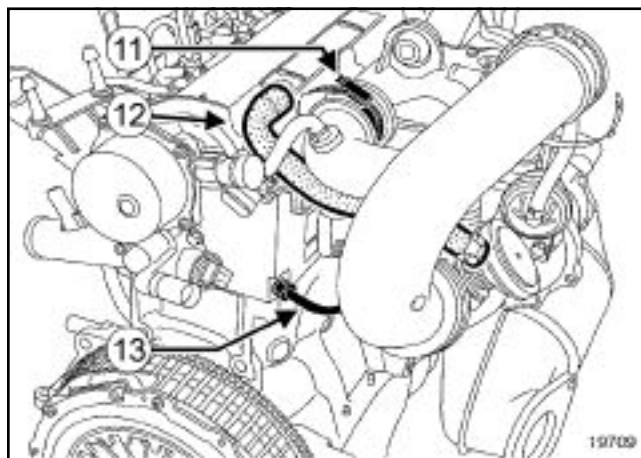
- the inner timing cover mounting bolts (10) ,
- the inner timing cover (by tilting the alternator if necessary).



19707

Remove:

- the clip (8) ,
- the air filter unit mounting bolt (9) ,
- the air filter unit.

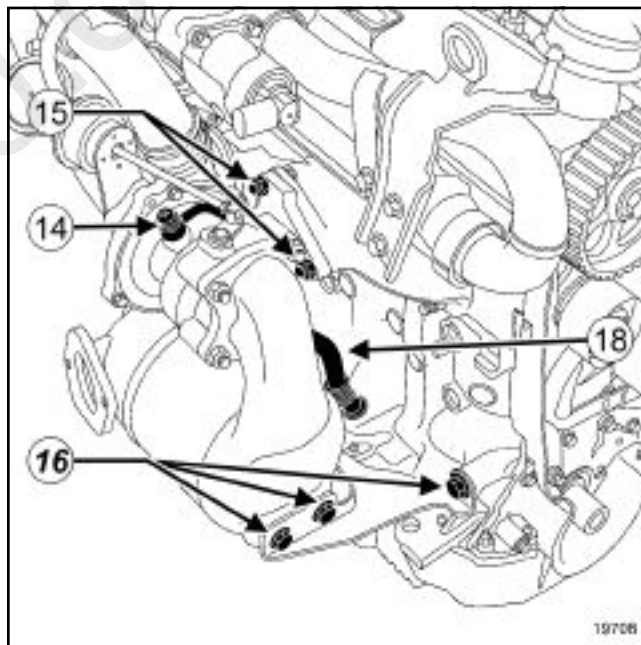


19709

Loosen the clip (11) .

Remove the oil vapour rebreathing pipe (12) from the rocker cover.

Undo the turbocharger oil supply pipe nut (13) .



19708

Remove:

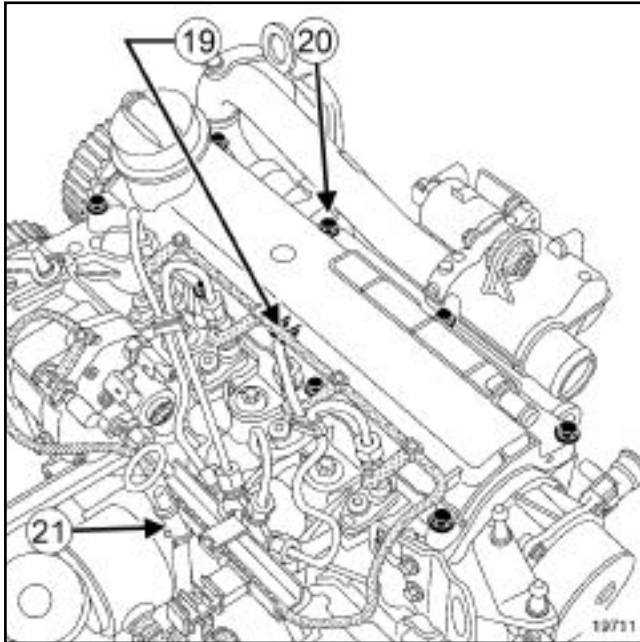
- the turbocharger oil supply pipe bolt (14) using a male torx socket,
- the turbocharger oil supply pipe.

Remove:

- the turbocharger oil return pipe bolts (18) ,
- the catalytic convertor stay bolts (16) ,
- the exhaust flange bolts (15) on the turbocharger.

K9K, and 260 or 270 or 272 or 700 or 702 or 704 or 706 or 710 or 712 or 722 or 724 or 728 or 729 or 750 or 752 or 760 or 762 or 790

Remove the turbocharger-catalytic converter assembly, taking care **not to damage the turbocharger oil return pipe (18)** .

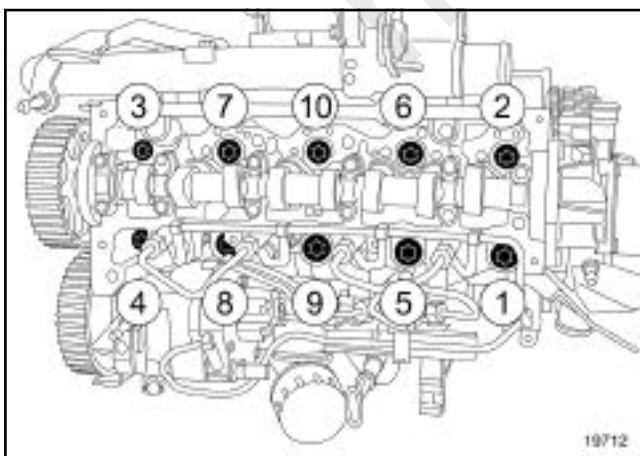


19711

Unclip the fuel return pipe from the rocker cover (19) .

Remove:

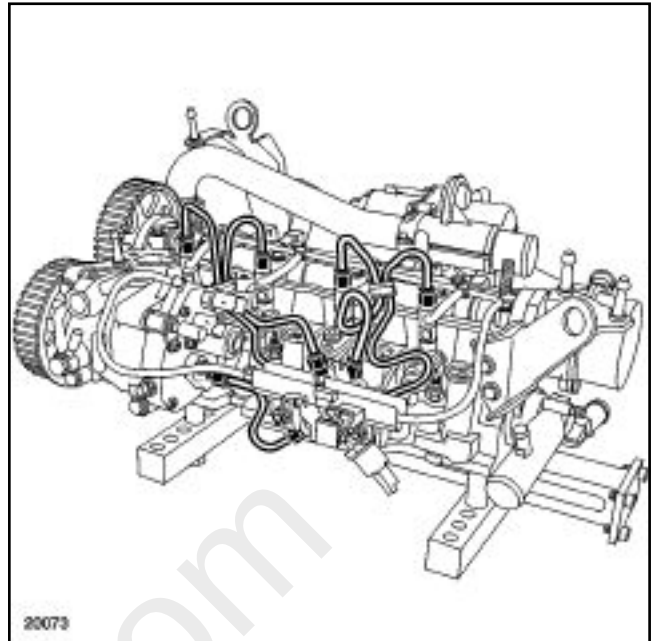
- the dipstick guide tube (21) ,
- the rocker cover mounting bolts (20) ,
- the rocker cover.



19712

Remove:

- the cylinder head bolts in the order specified using a female torx socket,
- the cylinder head.



20073

Fit the cylinder head onto the cylinder head support (Mot. 1573) .

Remove the cylinder head gasket from the cylinder block.

Timing - cylinder head: Removal

K9K, and 274 or 276 or 714 or 716 or 718 or 766 or 768

Special tooling required	
Mot. 1489	TDC locating pin.
Mot. 1430	Set of 5 crankshaft and camshaft pulley timing pins.
Mot. 582-01	Flywheel locking tool.
Mot. 1677	Flywheel locking tool.
Mot. 1573	Cylinder head support

I - TIMING GEAR REMOVAL

II - GUIDELINES FOR REPAIRS TO THE TIMING GEAR

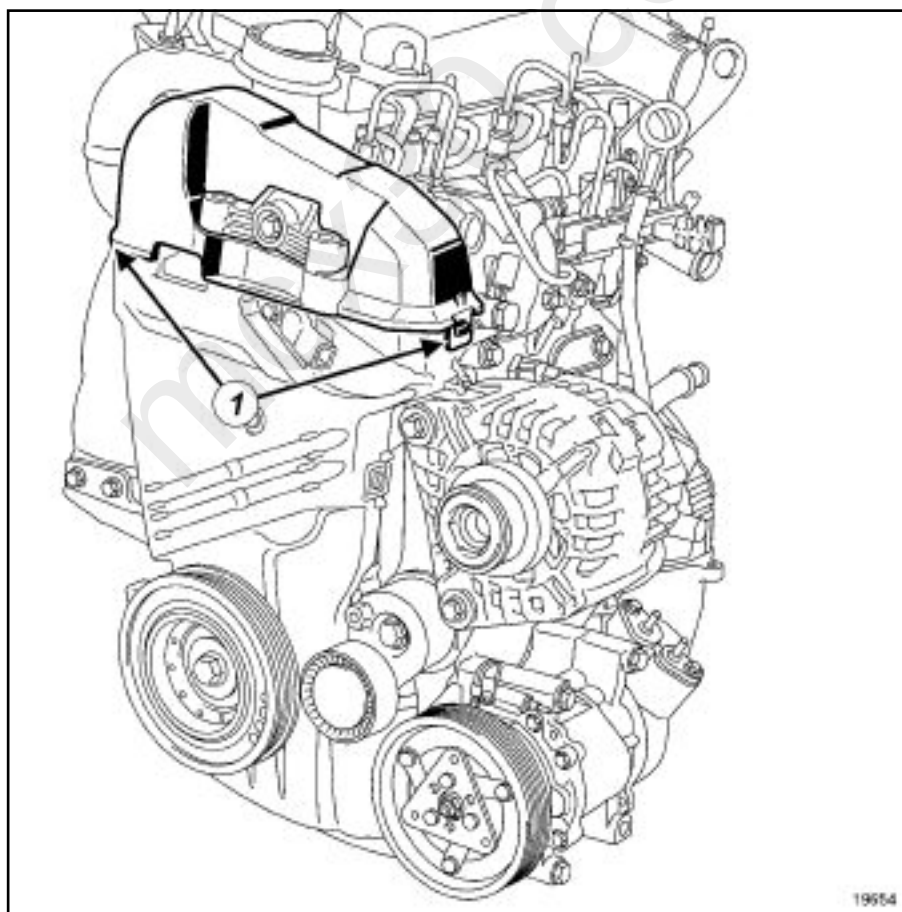
IMPORTANT

Wear protective gloves during every operation.

III - EQUIPMENT REQUIRED FOR THE TIMING GEAR

- Protective gloves,
- Large screwdriver,
- Allen key (**6mm**),
- Number **14** torx socket.

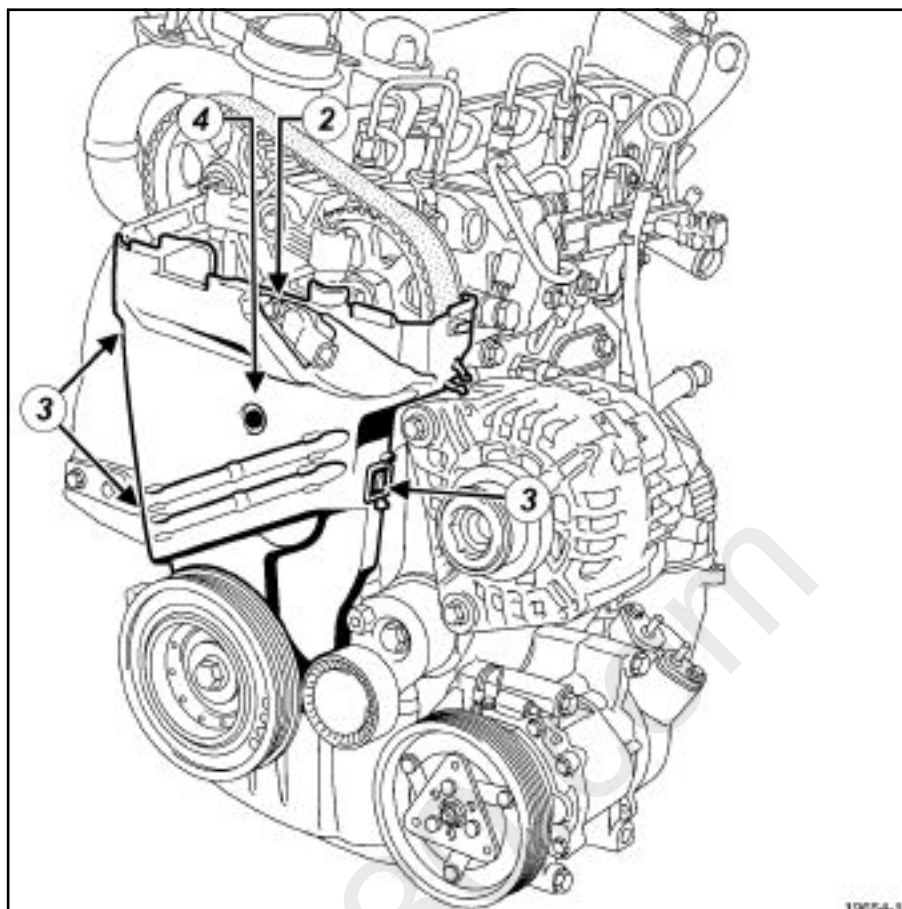
IV - REMOVAL



Remove the upper timing cover by unclipping both tabs (1) .

Timing - cylinder head: Removal

K9K, and 274 or 276 or 714 or 716 or 718 or 766 or 768



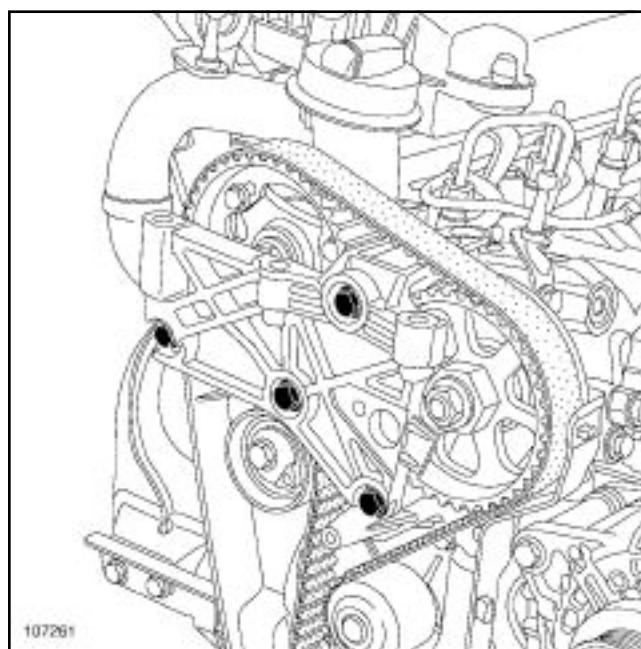
19654-1

Remove:

- the high pressure pump position sensor (2) ,
- the plastic bolt (4) .

Unclip the three tabs (3) .

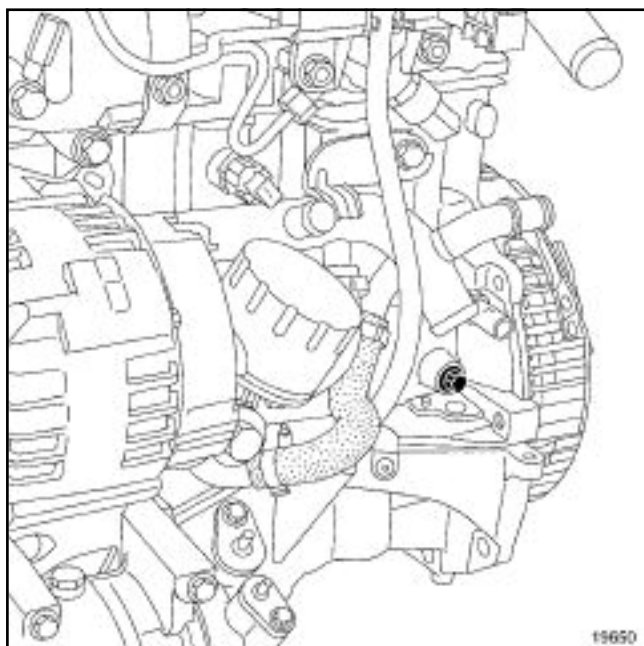
Remove the lower timing cover.



107261

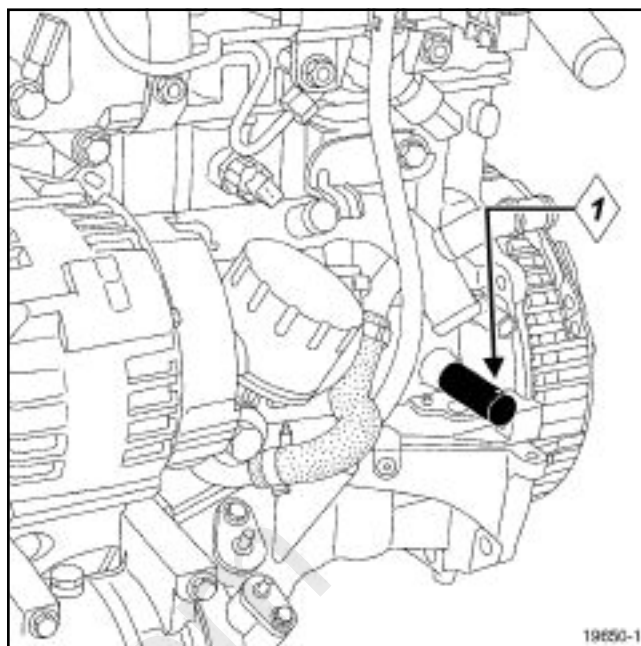
Remove the cylinder head suspended mounting.

K9K, and 274 or 276 or 714 or 716 or 718 or 766 or 768



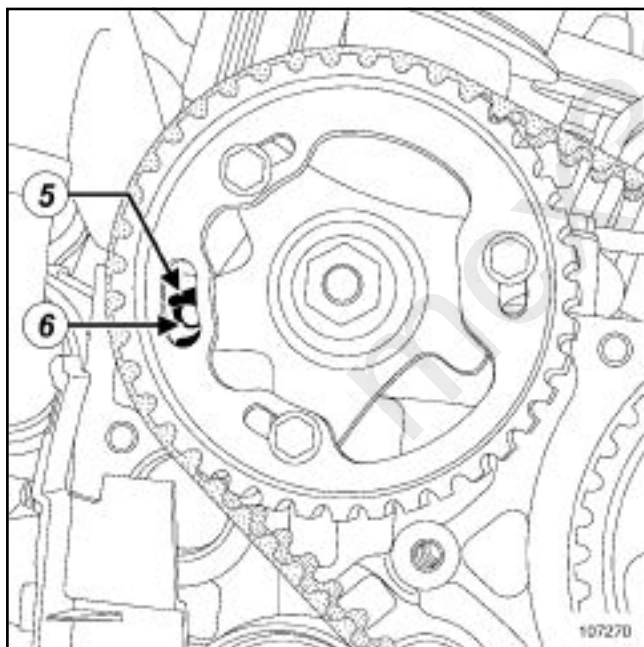
19650

Remove the TDC setting pin plug using a female torx socket (**14**).



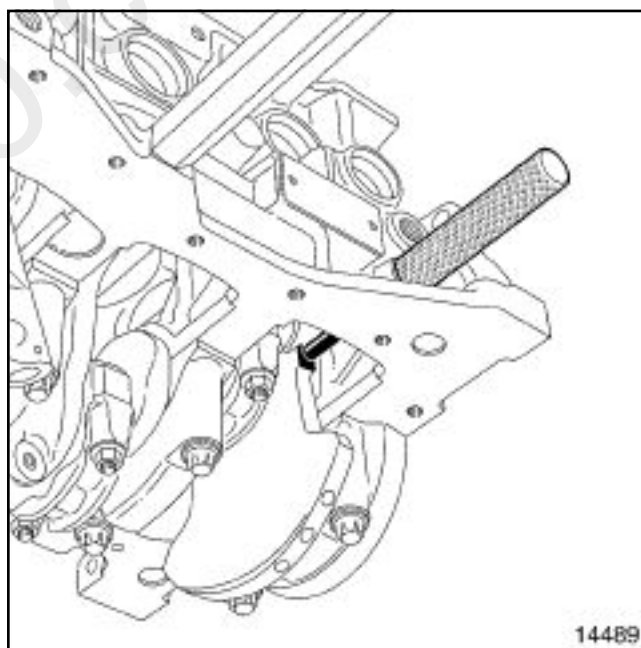
19650-1

Screw in the TDC setting pin (**1**) (**Mot. 1489**) .



107270

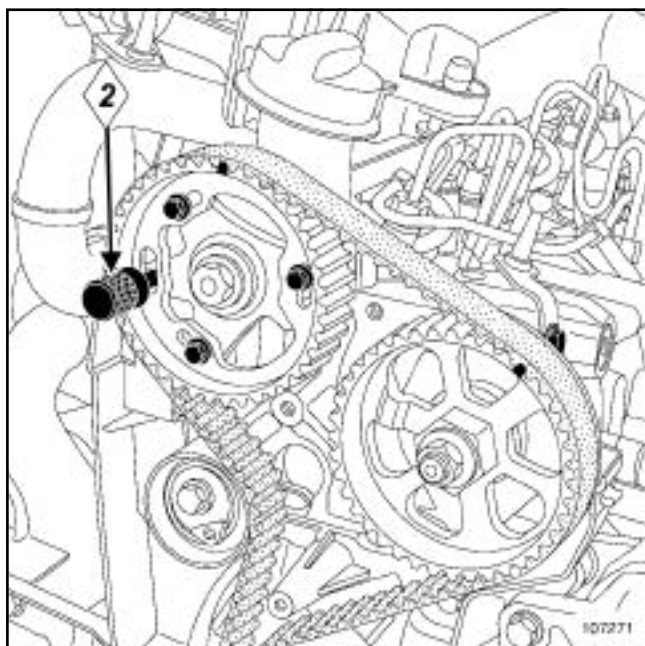
Turn the crankshaft to position the hole (**5**) of the camshaft pulley almost opposite the hole (**6**) in the cylinder head.



14489

Turn the crankshaft clockwise (timing end) smoothly until the crankshaft comes into contact with the TDC setting pin.

K9K, and 274 or 276 or 714 or 716 or 718 or 766 or 768

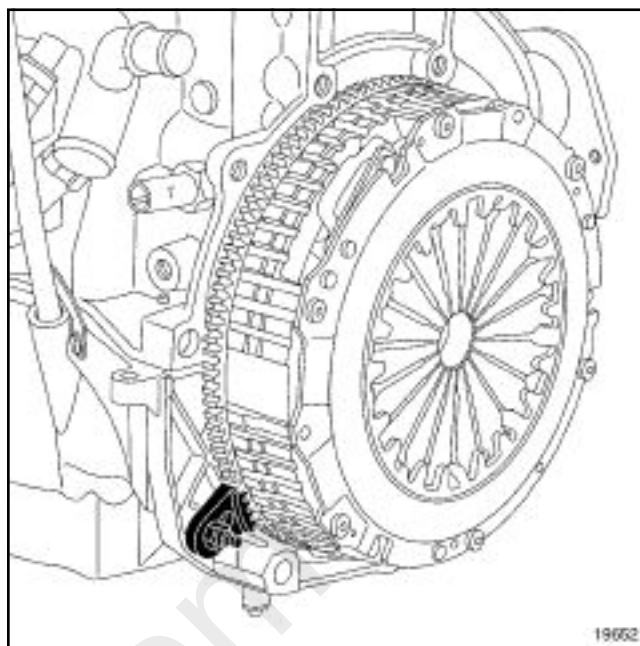


107271

Insert the pin **(Mot. 1430)** (2) in the camshaft pulley and cylinder head holes.

Remove:

- the camshaft pulley timing pin **(Mot. 1430)** ,
- the TDC setting pin **(Mot. 1489)** .

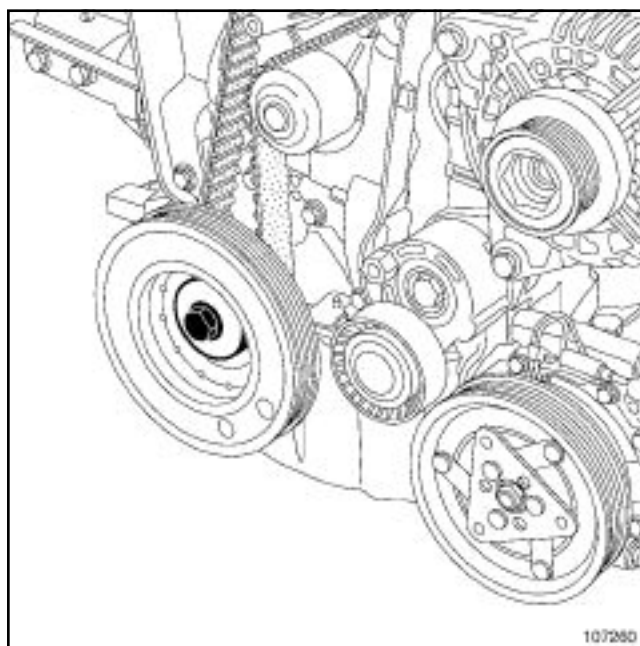


19652

Fit the flywheel locking tool **(Mot. 582-01)** or **(Mot. 1677)** .

Note:

For engines that have already had the flywheel removed, screw two used flywheel bolts into the crankshaft to lock it using a large screwdriver.

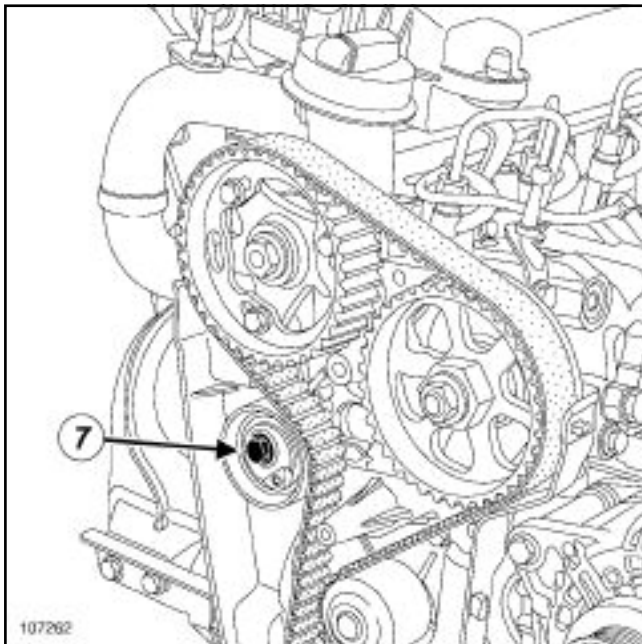


107260

107260

Remove the crankshaft accessories pulley.

K9K, and 274 or 276 or 714 or 716 or 718 or 766 or 768



107262

Slacken the tensioning roller bolt (7) .

Loosen the timing tensioning roller by turning the eccentric cam using a **6mm** Allen key.

Remove:

- the timing belt,
- the timing tensioning roller.

V - CYLINDER HEAD REMOVAL

VI - GUIDELINES FOR REPAIRS TO THE CYLINDER HEAD

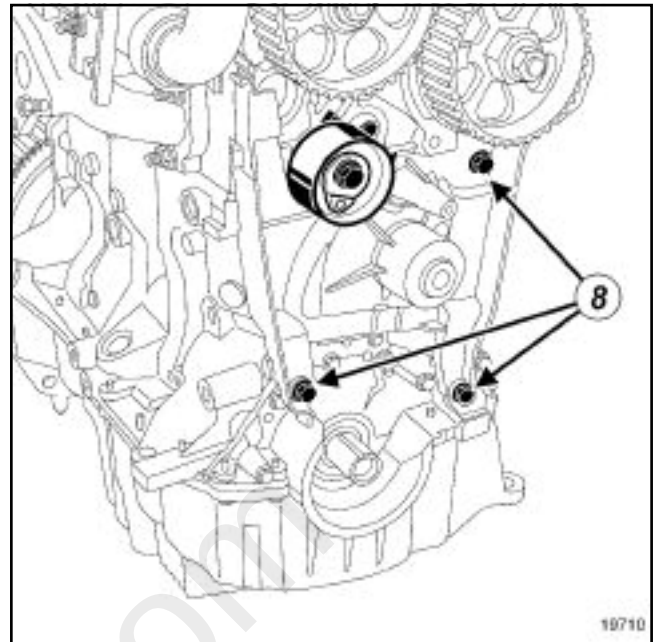
IMPORTANT

Wear protective gloves during every operation.

VII - EQUIPMENT REQUIRED FOR THE CYLINDER HEAD

- Female torx socket.

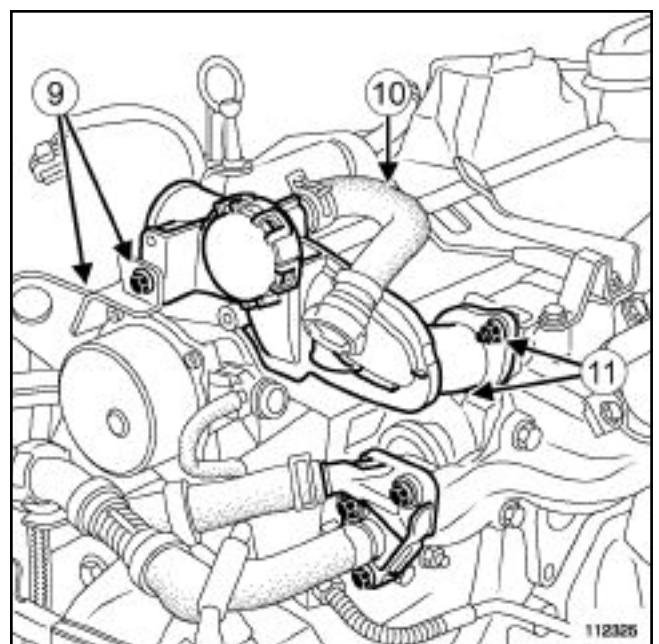
VIII - REMOVAL



19710

Remove:

- the inner timing cover mounting bolts (8) ,
- the inner timing cover (by tilting the alternator if necessary).



112325

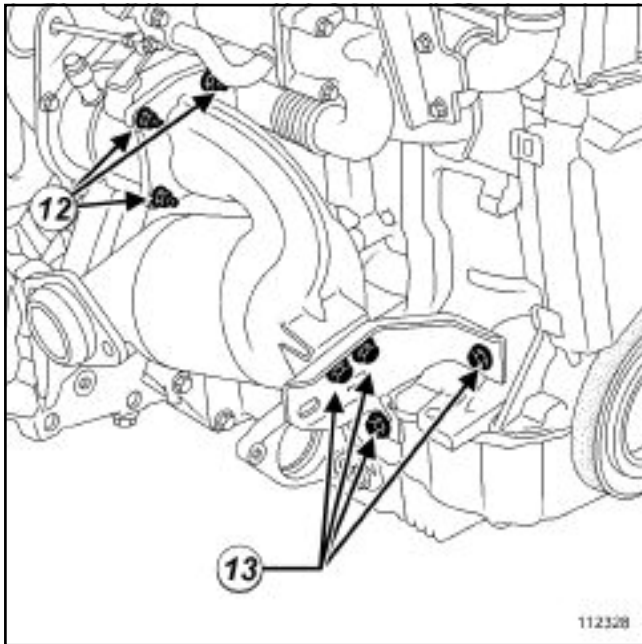
Disconnect the oil vapour recirculation pipe (10) .

Remove:

- the oil vapour recirculation valve bolts (11) ,
- the oil vapour recirculation valve mounting bracket bolts (9) ,

K9K, and 274 or 276 or 714 or 716 or 718 or 766 or 768

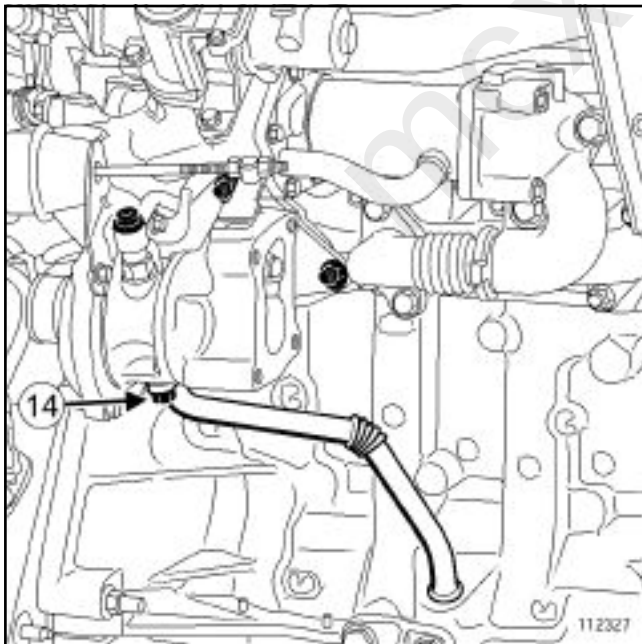
- the oil vapour recirculation valve.



112328

Remove:

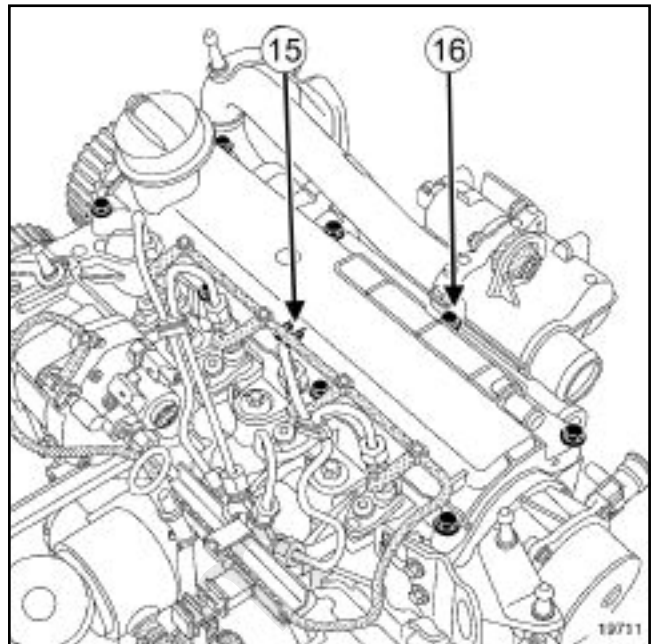
- the catalytic convertor stay bolts (13) ,
- the catalytic convertor nuts (12) on the turbocharger,
- the catalytic converter.



112327

Remove:

- the turbocharger oil return pipe mounting bolts (14)
- ,
- the turbocharger oil return pipe.

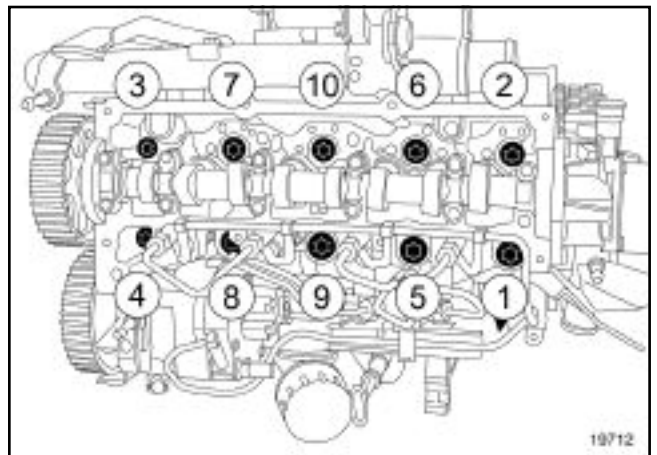


19711

Unclip the fuel return pipe from the rocker cover (15)

Remove:

- the dipstick guide,
- the rocker cover mounting bolts (16) ,
- the rocker cover.

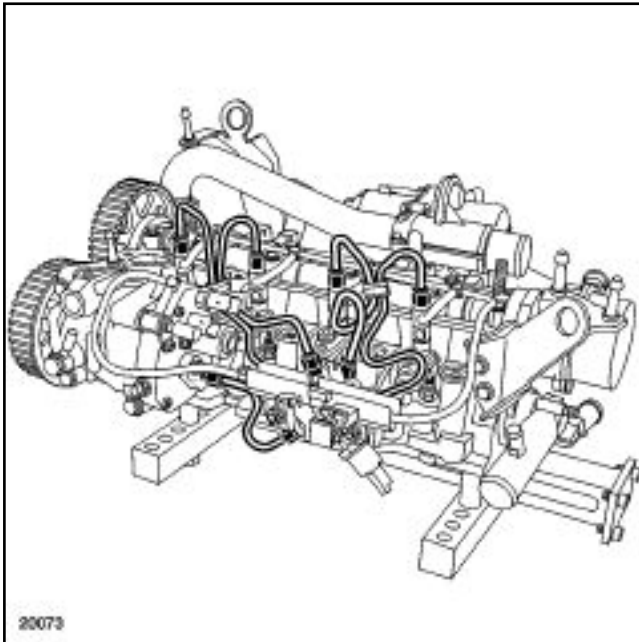


19712

Remove:

- the cylinder head bolts in the order specified using a female torx socket,
- the cylinder head.

K9K, and 274 or 276 or 714 or 716 or 718 or 766 or 768



20073

Fit the cylinder head onto the cylinder head support
(Mot. 1573) .

Remove the cylinder head gasket from the cylinder
block.

K9K, and 732 or 764

Special tooling required

Mot. 1489	TDC locating pin.
Mot. 1430	Set of 5 crankshaft and camshaft pulley timing pins.
Mot. 1677	Flywheel locking tool.
Mot. 1573	Cylinder head support

I - TIMING GEAR REMOVAL**II - GUIDELINES FOR REPAIRS TO THE TIMING GEAR****IMPORTANT**

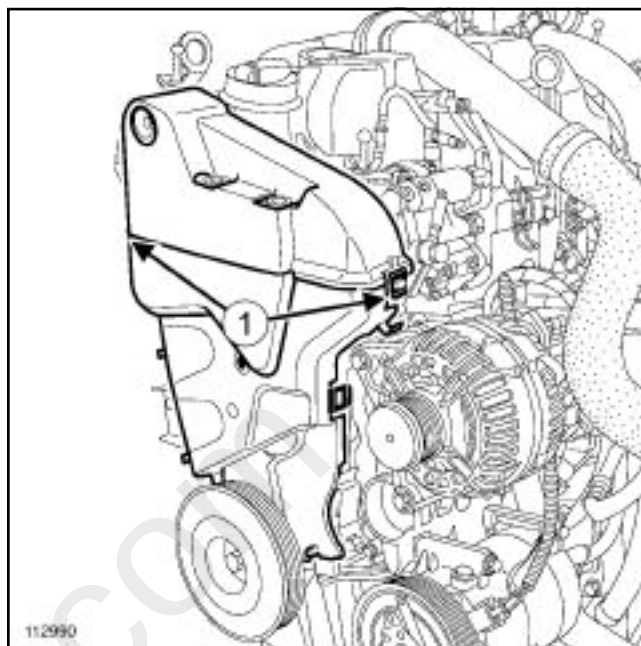
Wear protective gloves during every operation.

III - EQUIPMENT REQUIRED FOR THE TIMING GEAR

- Protective gloves,
- Large screwdriver,
- Allen key (**6mm**),
- Torx socket (**14**).

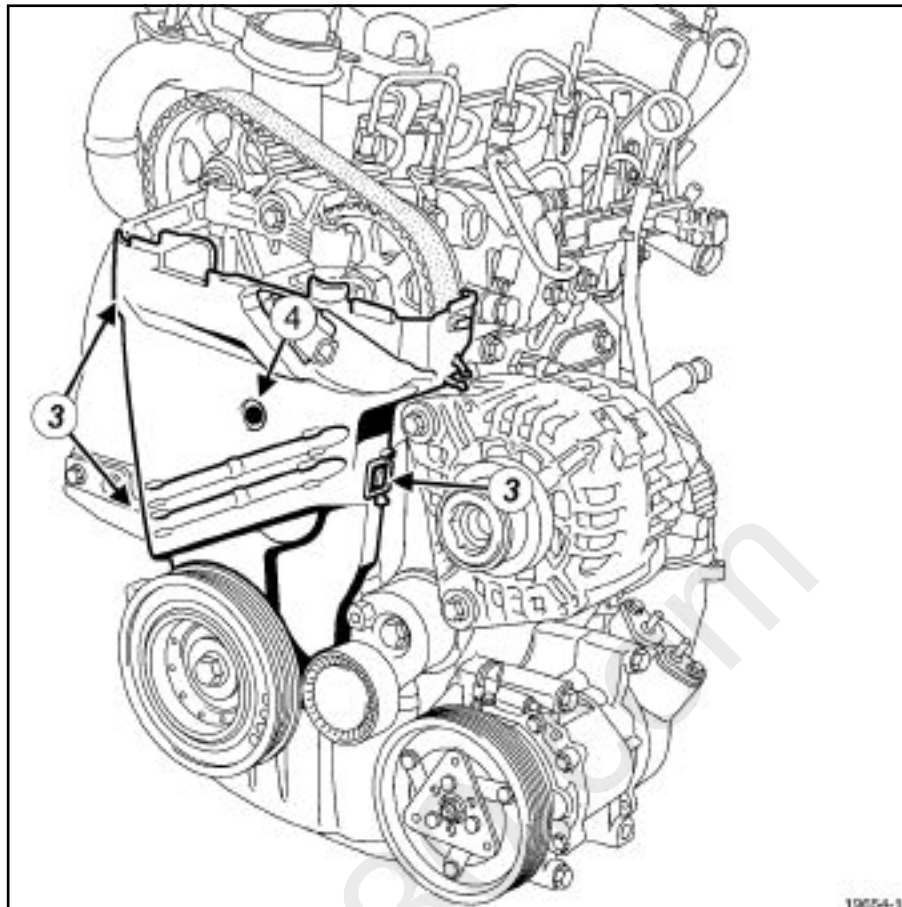
IV - REMOVAL

K9K, and 732



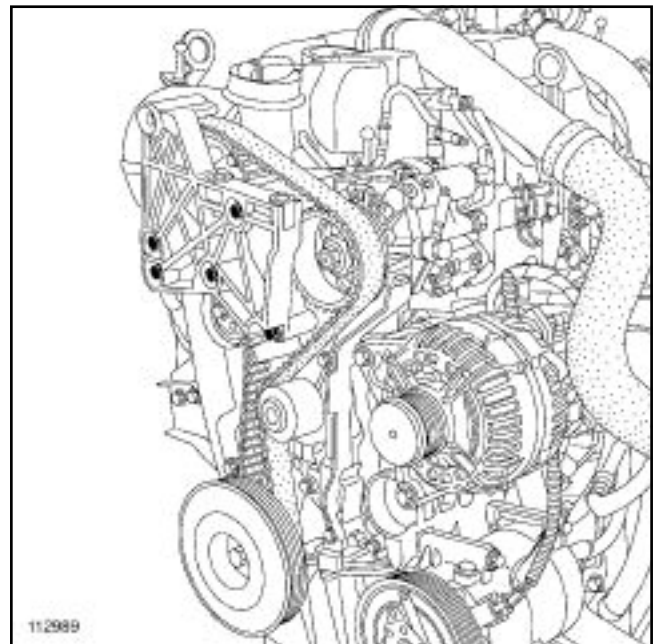
Remove the upper timing cover by unclipping both tabs (1) .

K9K, and 732 or 764



19654-1

- Remove the plastic bolt (4) .
- Unclip the three tabs (3) .
- Remove the lower timing cover.

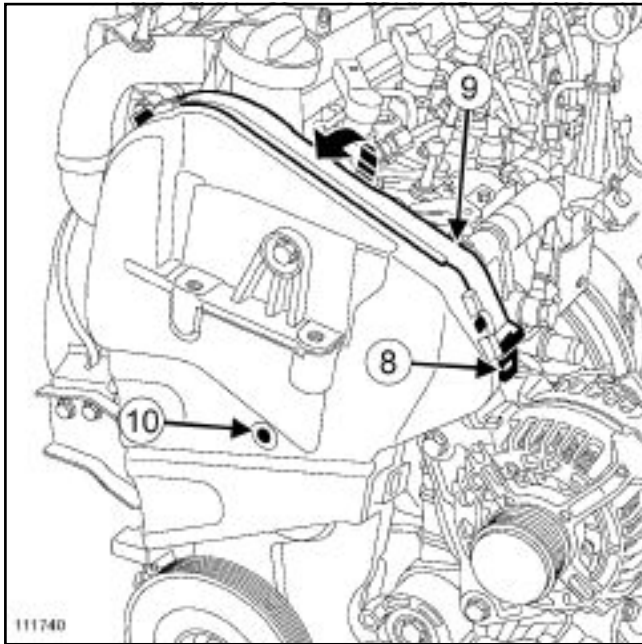


112989

Remove the cylinder head suspended mounting.

K9K, and 732 or 764

K9K, and 764

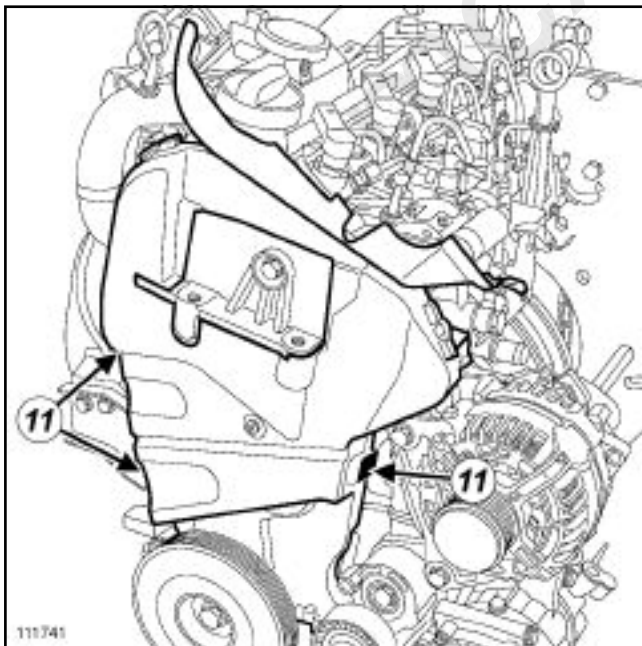


111740

Unclip the tab (8) .

Rotate the timing cover (9) in the direction of the arrow.

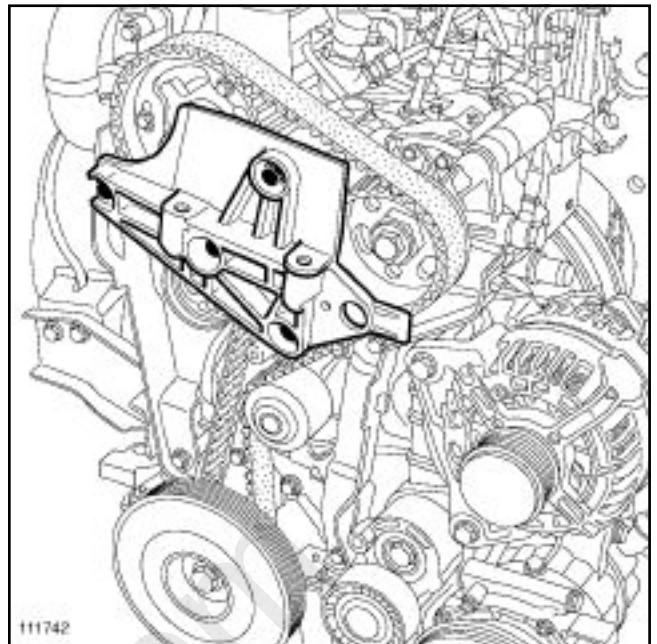
Remove the plastic bolt (10) .



111741

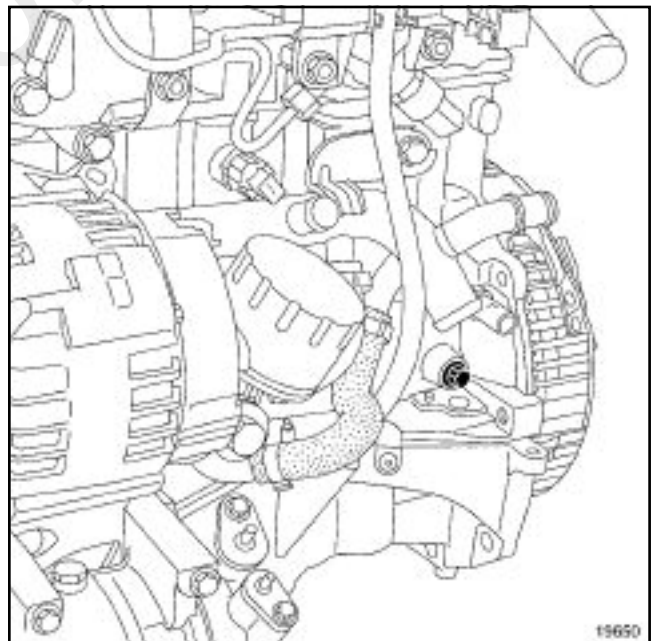
Unclip the three tabs (11) .

Remove the timing cover.



111742

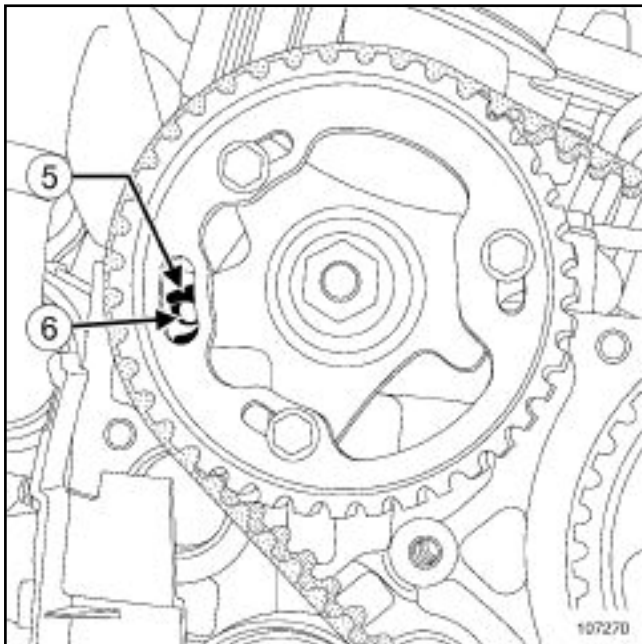
Remove the cylinder head suspended mounting.



19650

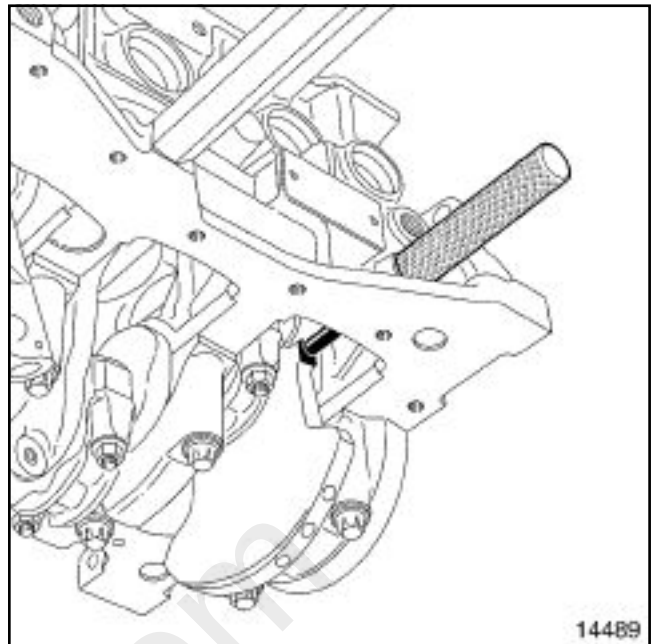
Remove the TDC setting pin plug using a female torx socket (14).

K9K, and 732 or 764



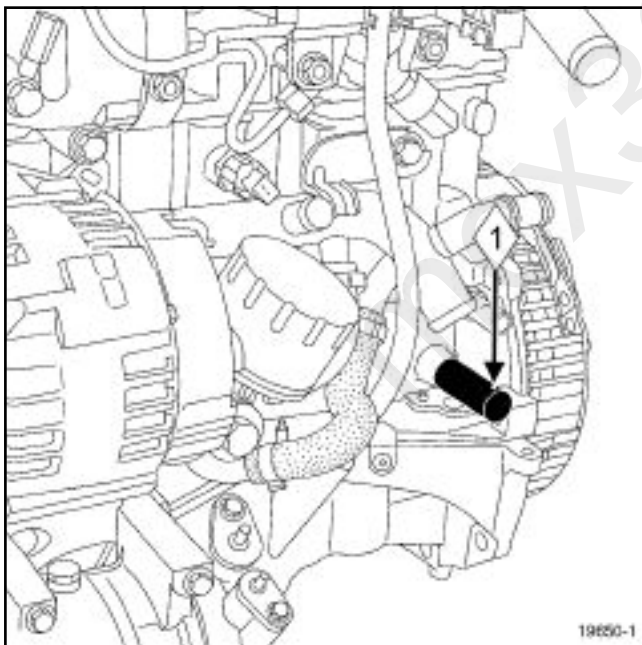
107270

Turn the crankshaft to position the hole (5) of the camshaft pulley almost opposite the hole (6) in the cylinder head.



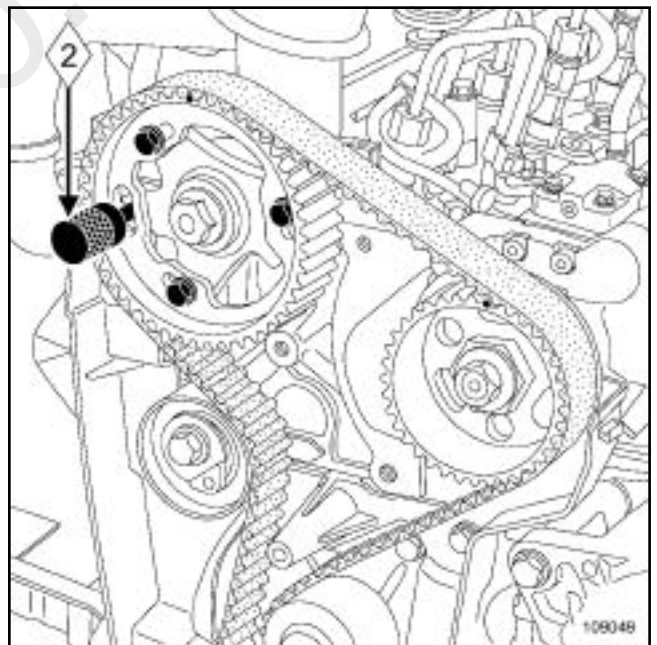
14489

Turn the crankshaft clockwise (timing end) smoothly until the crankshaft comes into contact with the TDC setting pin.



19650-1

Screw in the TDC setting pin (1) (Mot. 1489) .



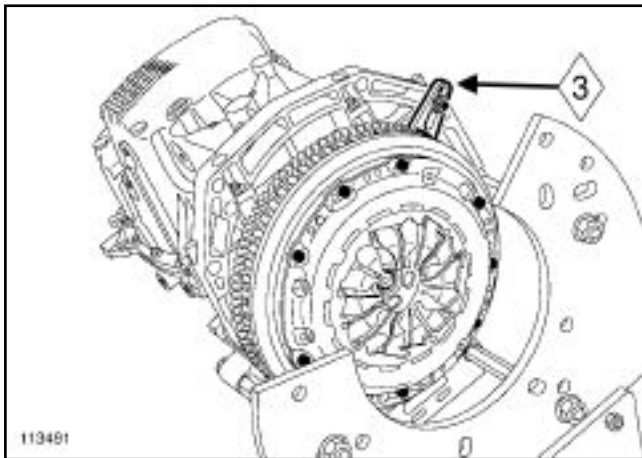
109049

Insert the pin (Mot. 1430) (2) in the camshaft pulley and cylinder head holes.

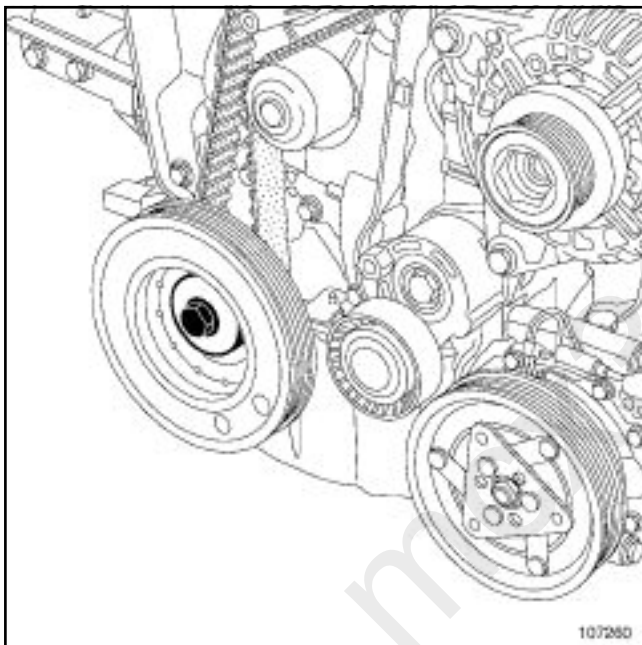
Remove:

- the camshaft pulley timing pin (Mot. 1430) ,
- the TDC setting pin (Mot. 1489) .

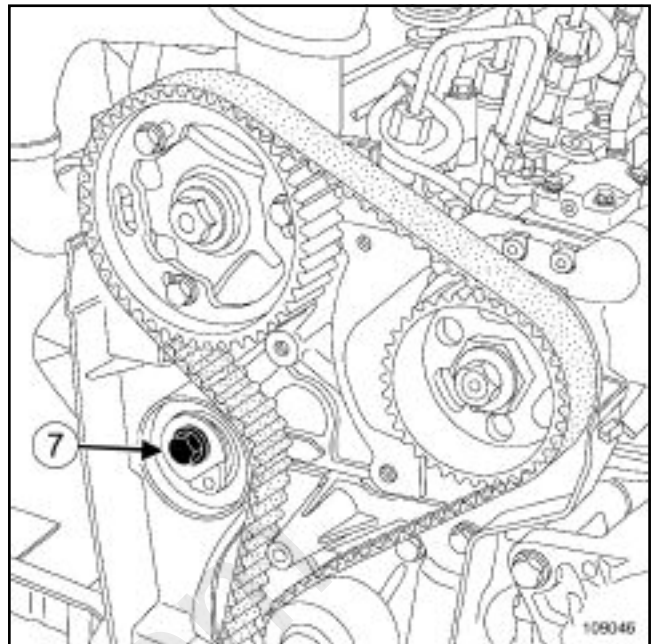
K9K, and 732 or 764



Fit the flywheel locking tool (3) (Mot. 1677) .



Remove the crankshaft accessories pulley.



Slacken the tensioning roller bolt (7) .

Slacken the timing tension wheel by turning the eccentric cam using a **6mm** allen key

Remove:

- the timing belt,
- the timing tensioning roller.

V - CYLINDER HEAD REMOVAL

VI - GUIDELINES FOR REPAIRS TO THE CYLINDER HEAD

IMPORTANT

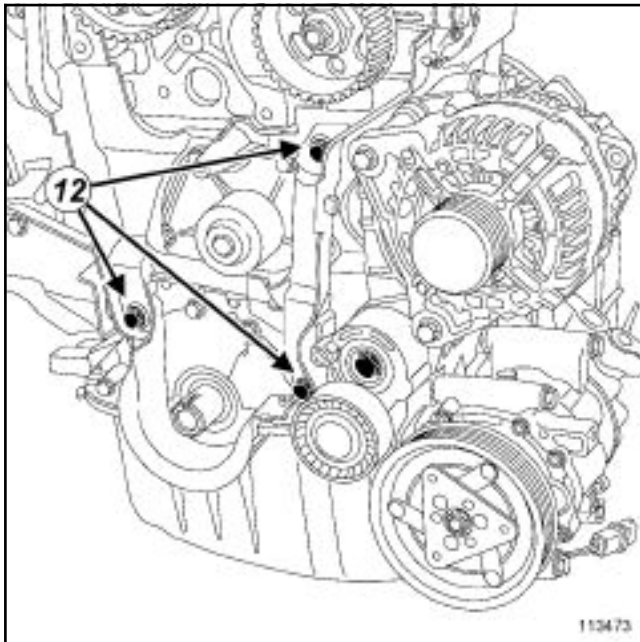
Wear protective gloves during every operation.

VII - EQUIPMENT REQUIRED FOR THE CYLINDER HEAD

- Female torx socket.

K9K, and 732 or 764

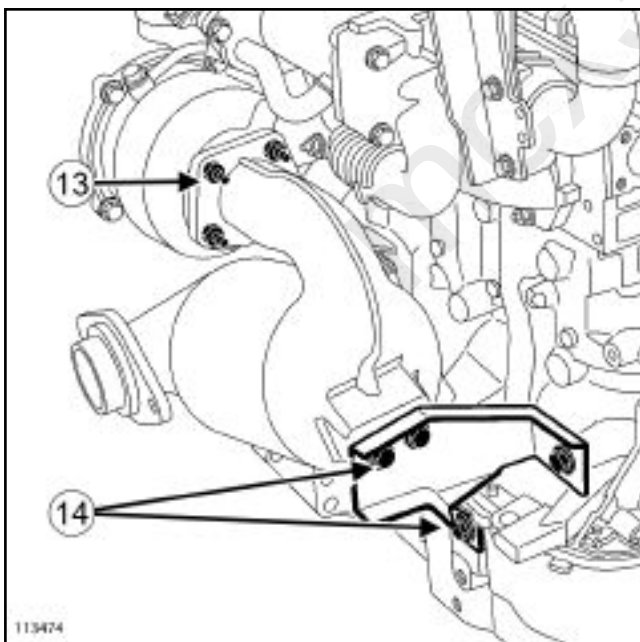
VIII - REMOVAL



113473

Remove:

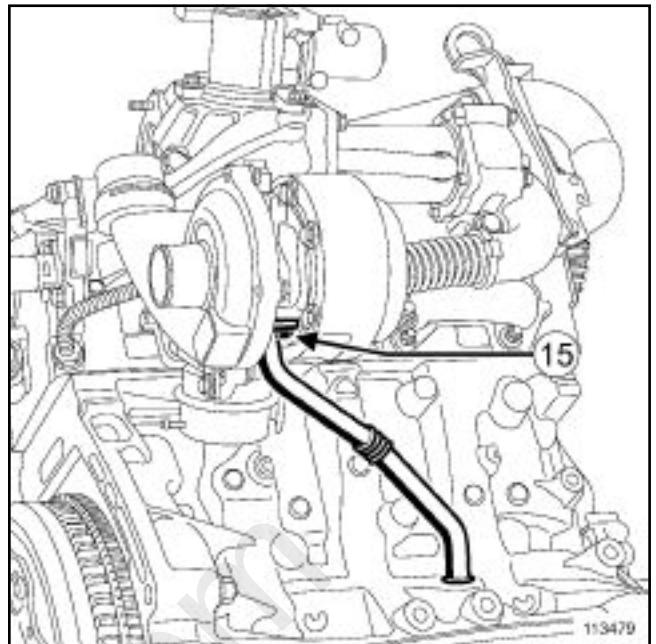
- the inner timing cover mounting bolts (12) ,
- the inner timing cover (by tilting the alternator if necessary).



113474

Remove:

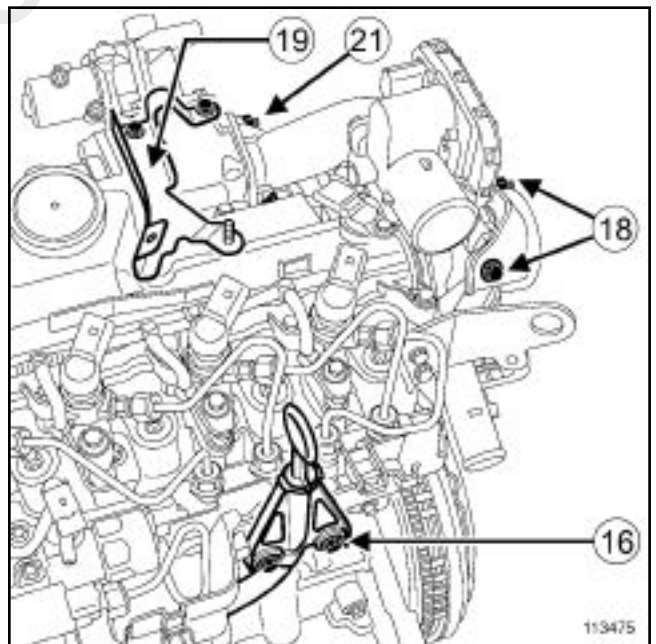
- the catalytic convertor mounting bolts (14) ,
- the catalytic convertor nuts (13) on the turbocharger,
- the catalytic converter.



113479

Remove:

- the turbocharger oil return pipe mounting bolts (15) ,
- the turbocharger oil return pipe.



113475

Remove:

- the dipstick guide mounting nuts (16) ,
- the dipstick guide,
- the damper valve mounting bracket bolts (18) ,
- the damper valve mounting bolts (21) ,
- the damper valve,