

Torque tighten:

- the earth nuts on the body 8 N.m,

- the earth wiring bolt on the automatic gearbox 21 N.m.

Refill:

- and bleed the cooling system ([see 19A, Cooling, Cooling system: Draining - Refilling](#)) ,

- the automatic gearbox [Automatic gearbox oil: Draining - Filling](#) ,

- the engine oil if necessary ([see 10A, Engine and cylinder block assembly, Engine oil - Oil filter : Draining - Filling](#)) .



Repair-10x01x01-01x37-2-210-1.xml



XSL version : 3.02 du 22/07/11

ENGINE - GEARBOX ASSEMBLY: REMOVAL - REFITTING



Note, one or more warnings are present in this procedure



Special tooling required

Remote operation pliers for hose clips.

Mot. 1448

Support for removal - refitting of engine - gearbox assembly

Mot. 1390

Equipment required

refrigerant charging station



parts always to be replaced:



seal between catalytic converter and exhaust downpipe hose



WARNING

Wear protective gloves during the operation.



CAUTION

In order to avoid any refrigerant leaks, do not damage (deform, twist, etc.) the pipe.



CAUTION

To prevent moisture from entering the system, place plugs on the cold loop components which are open to the air.

Locations and specifications (tightening torques, parts always to be replaced, etc.) [Engine-gearbox unit support assembly: Exploded view](#) .

1. REMOVAL PREPARATION OPERATION

■ Position the vehicle on a two-post lift [Vehicle: Towing and lifting](#) .



Remove:



the battery [Battery: Removal - Refitting](#) ,



the air filter unit [Air inlet assembly: Exploded view](#) ,



the front wheels [Front hub carrier assembly: Exploded view](#) ,



the front wheel arch liners [Exterior body front trim assembly: Exploded view](#) ,



the engine undertray bolts,

the engine undertray.



Drain:



the cooling circuit [Cooling system: Draining - Refilling](#) ,



the automatic gearbox [Automatic gearbox oil: Draining - Filling](#) ,



the engine oil if necessary [\(see 10A, Engine and cylinder block assembly, Engine oil - Oil filter : Draining - Filling\)](#) .



Remove:



the turbocharger air outlet pipe [Air inlet assembly: Exploded view](#) ,



the intercooler air outlet pipe [Air inlet assembly: Exploded view](#) ,

the air inlet pressure sensor from the turbo-manifold air inlet pipe(see **10A, Engine and cylinder block assembly, Engine and transmission assembly sensors: List and location of components**, page) ,

the petrol vapour rebreather pipe from the turbo-manifold air inlet pipe.

Remove using the toolRemote operation pliers for hose clips.(**Mot. 1448**) [Coolant circuit assembly: Exploded view](#) :

the upper cooling hose clip from the cooling radiator,

the bottom cooling hose clip from the cooling radiator.

Disconnect [Coolant circuit assembly: Exploded view](#) :

the upper cooling hose from the cooling radiator,

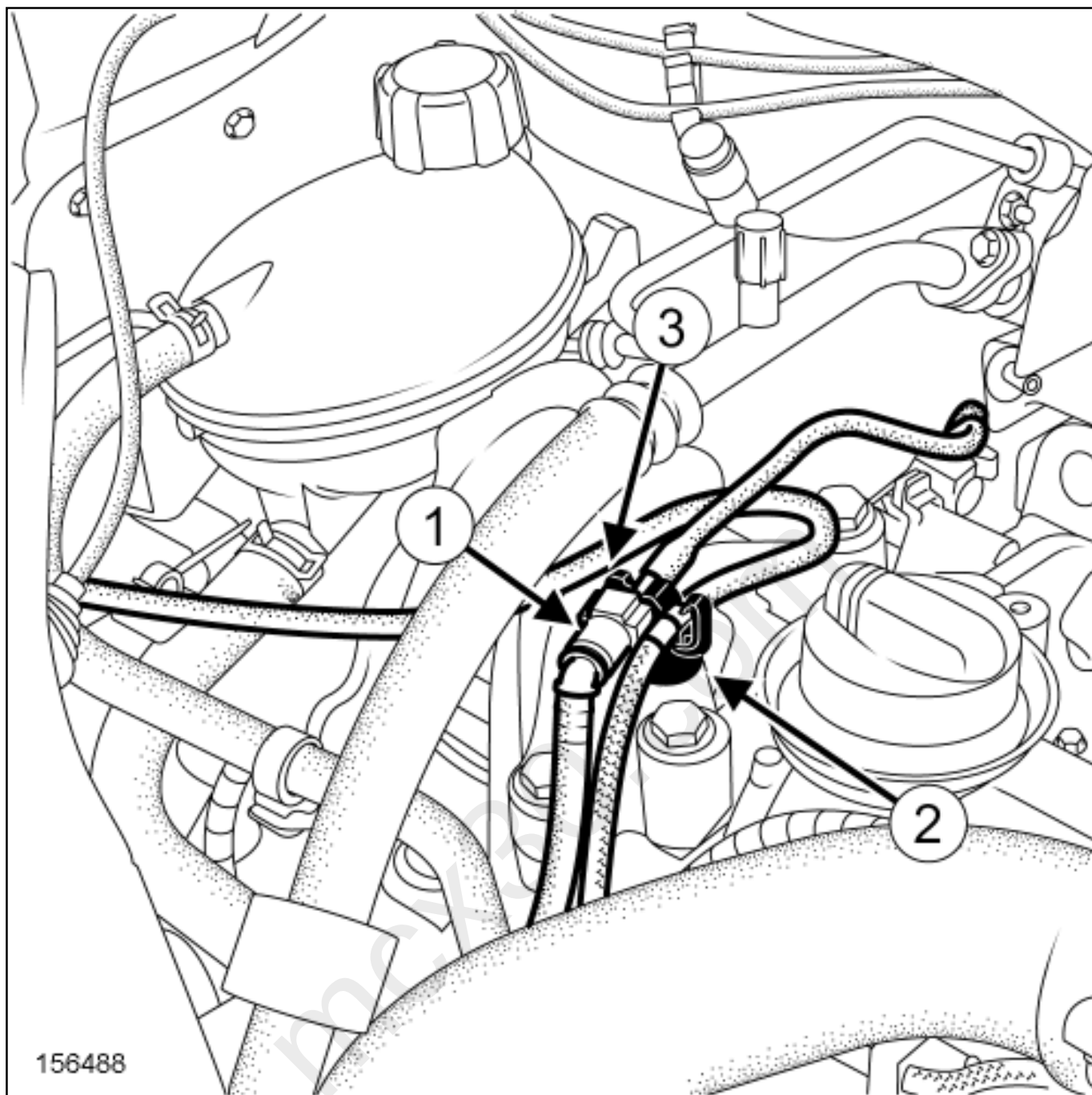
the bottom cooling hose from the cooling radiator.

Remove:

the engine tie-bar[Engine-gearbox unit support assembly: Exploded view](#) ,

the front left-hand wheel driveshaft[Front hub carrier assembly: Exploded view](#) ,

the front right-hand wheel driveshaft[Front right-hand driveshaft: Removal - Refitting](#) .



Disconnect the fuel supply pipe(1) .

Insert the blanking plugs.

Unclip:

the fuel vapour pipe(2) ,

the fuel supply pipe(3) .

Disconnect:



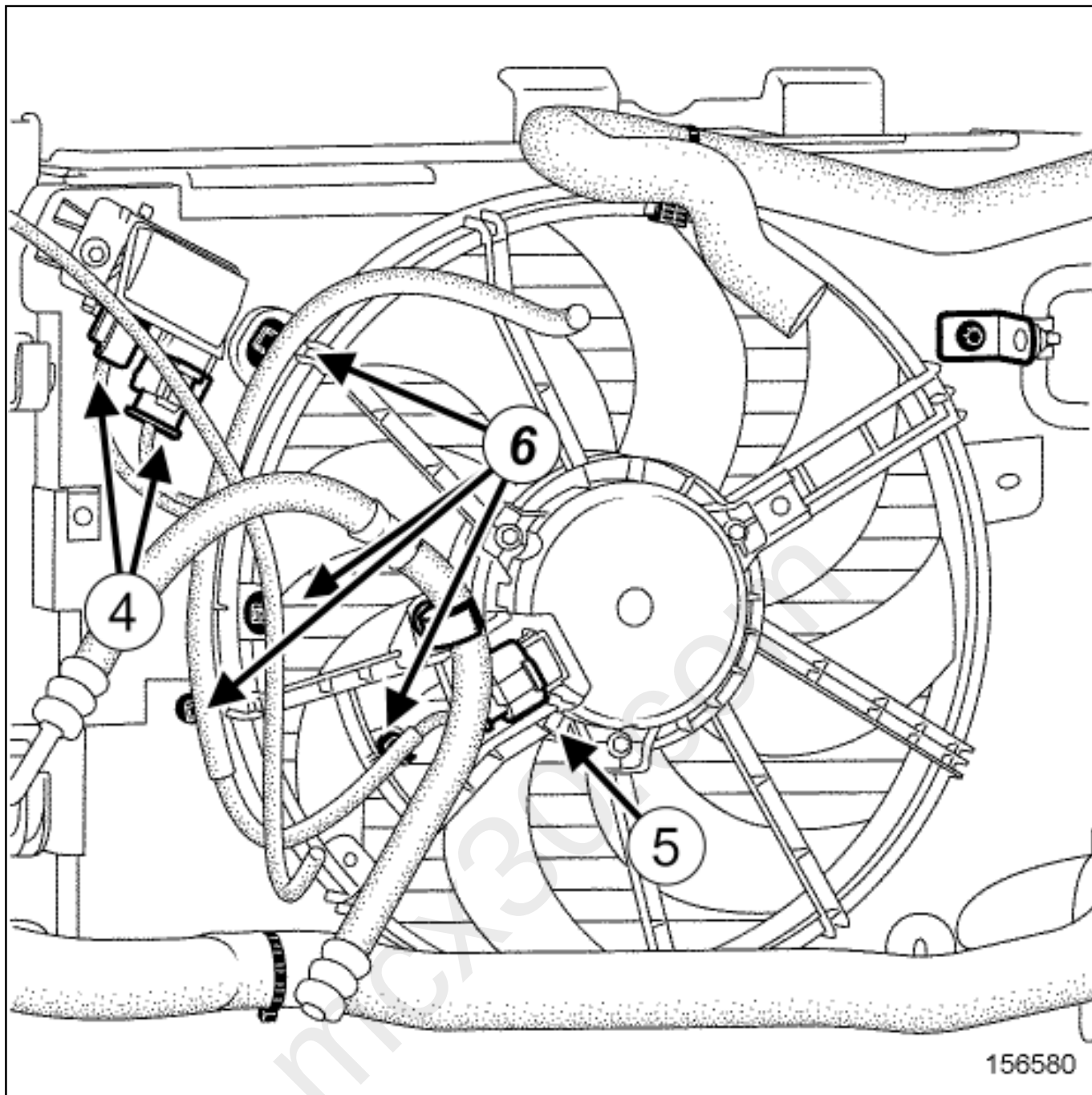
the fuel vapour absorber pipe,



the solenoid valve connector.

Unclip the fuel vapour absorber wiring from the support.

Move aside the wiring.

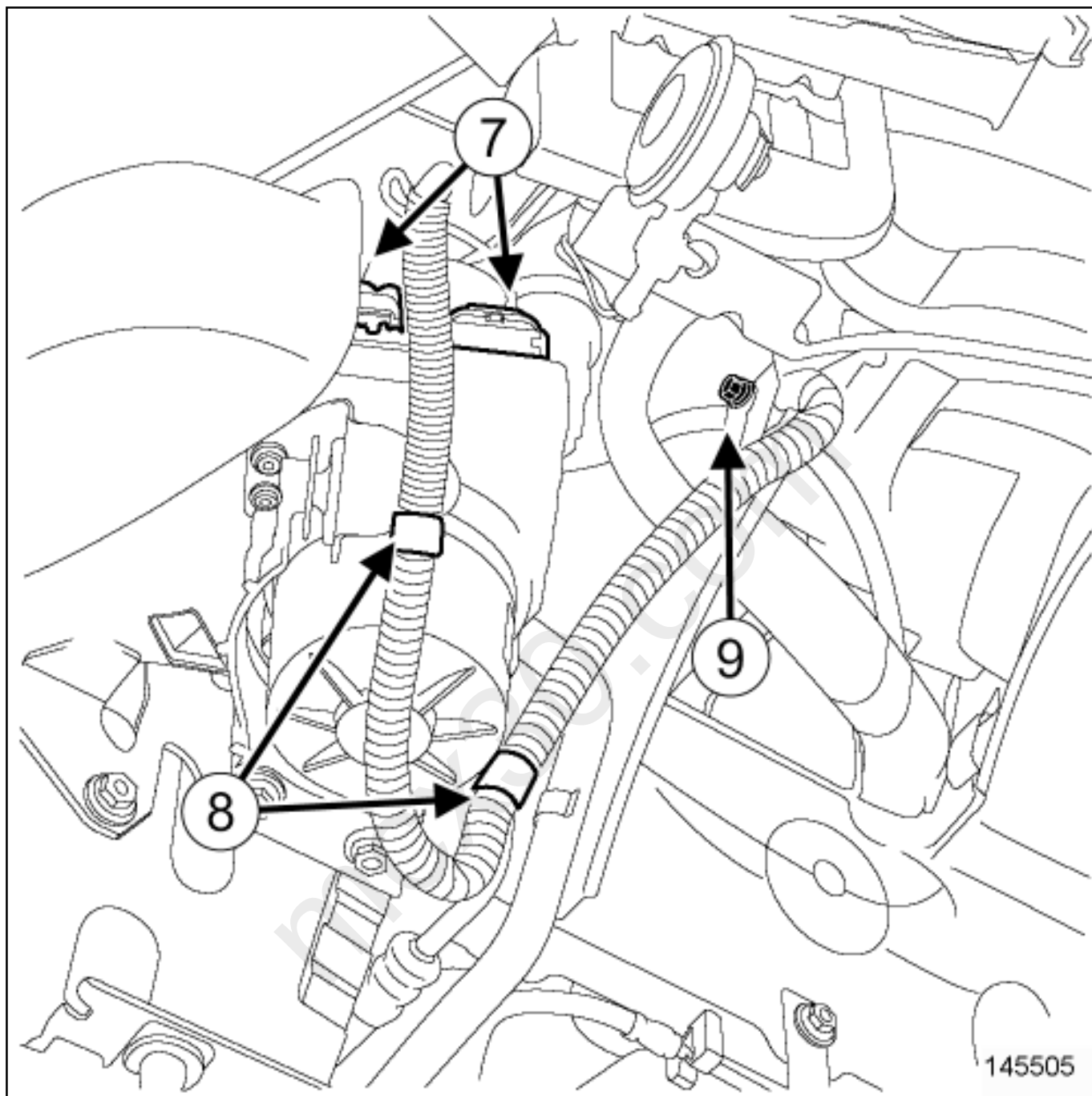


Disconnect from the cooling fan assembly:

- the engine cooling fan assembly resistor connector(4) ,
- the fan connector(5) of the engine cooling fan assembly.

Unclip the cooling fan assembly wiring at(6) .

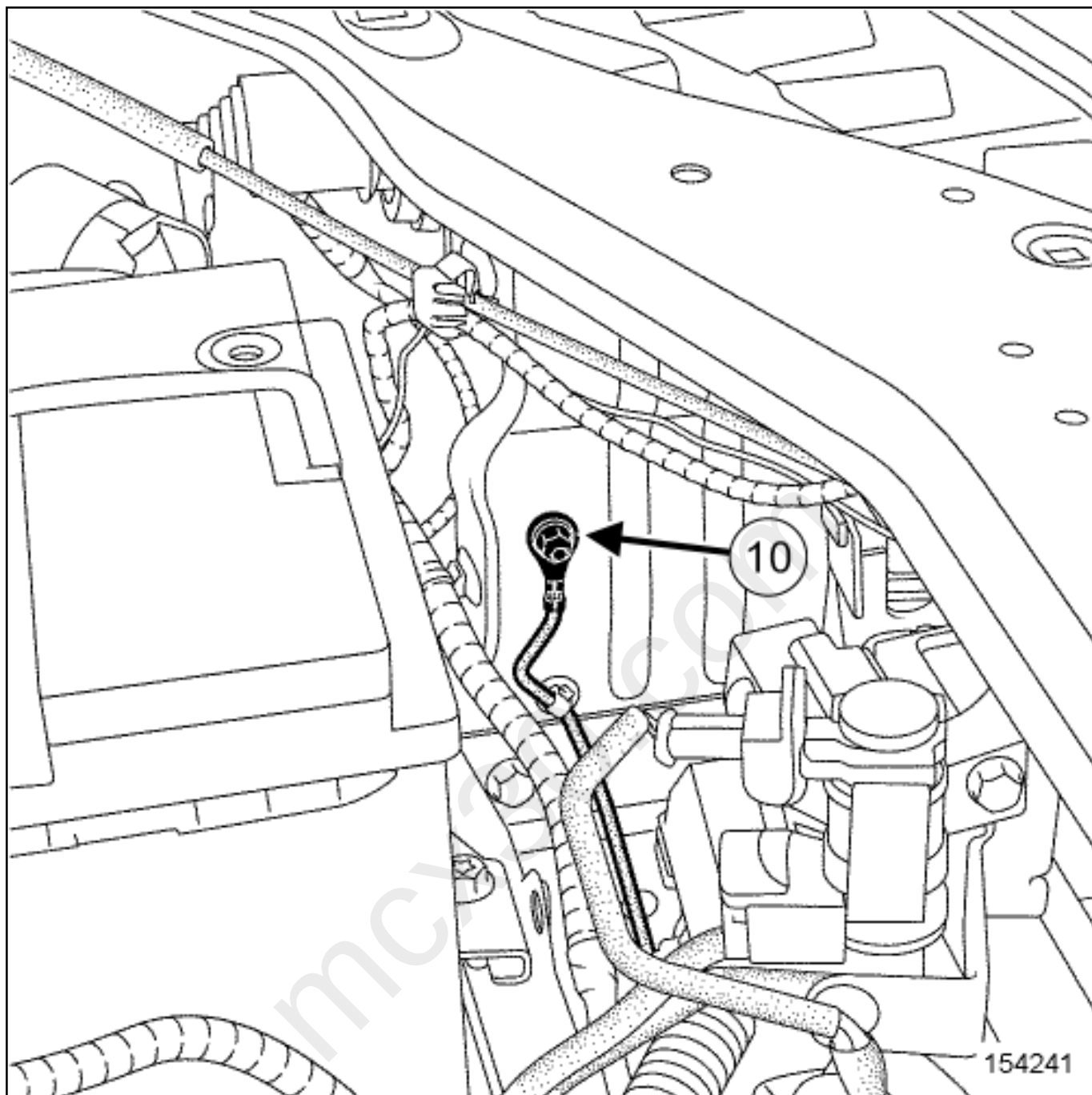
Move aside the cooling fan assembly wiring.



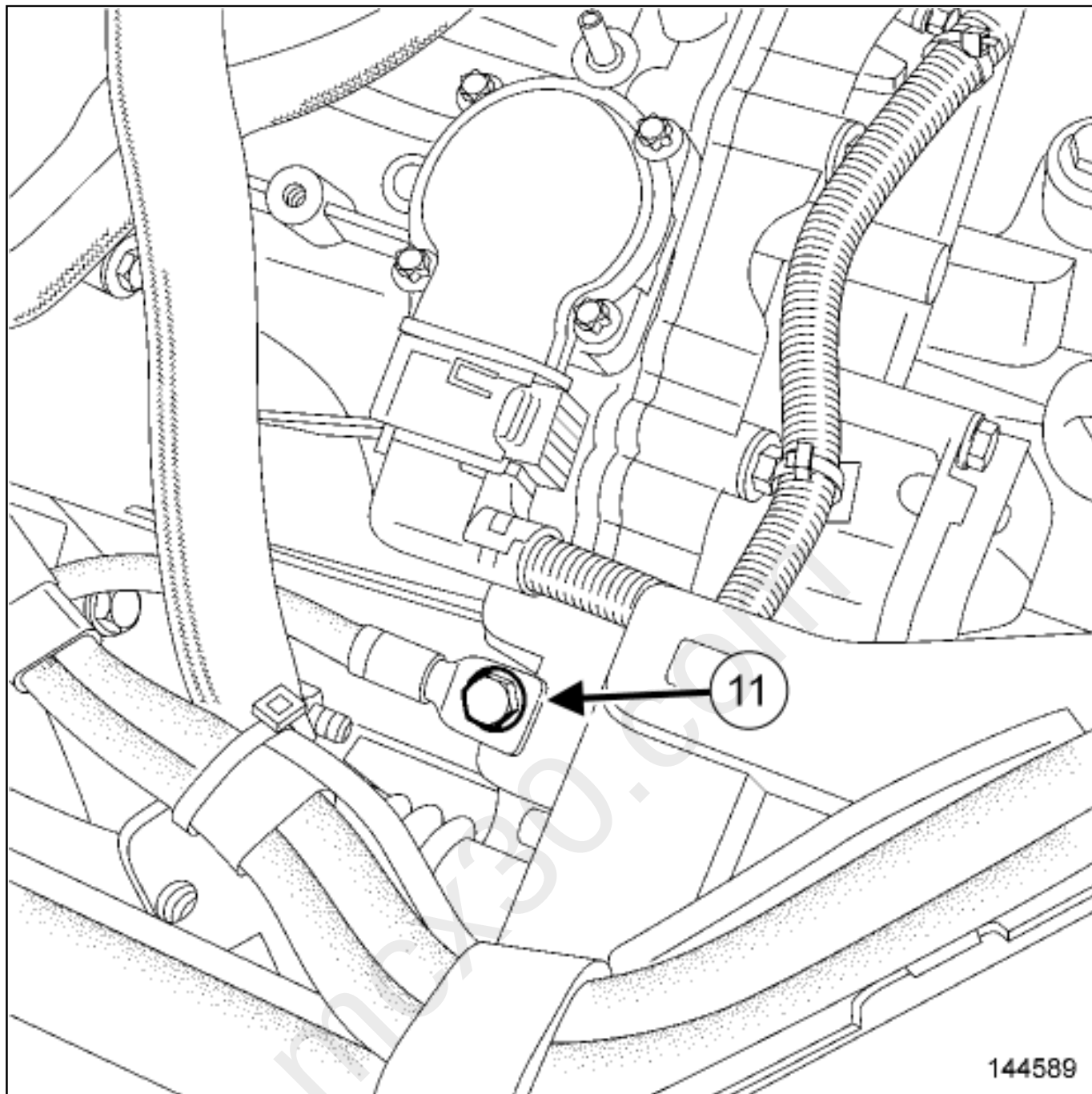
Disconnect the pump assembly connectors(7) .

Unclip the pump assembly wiring at(8) .

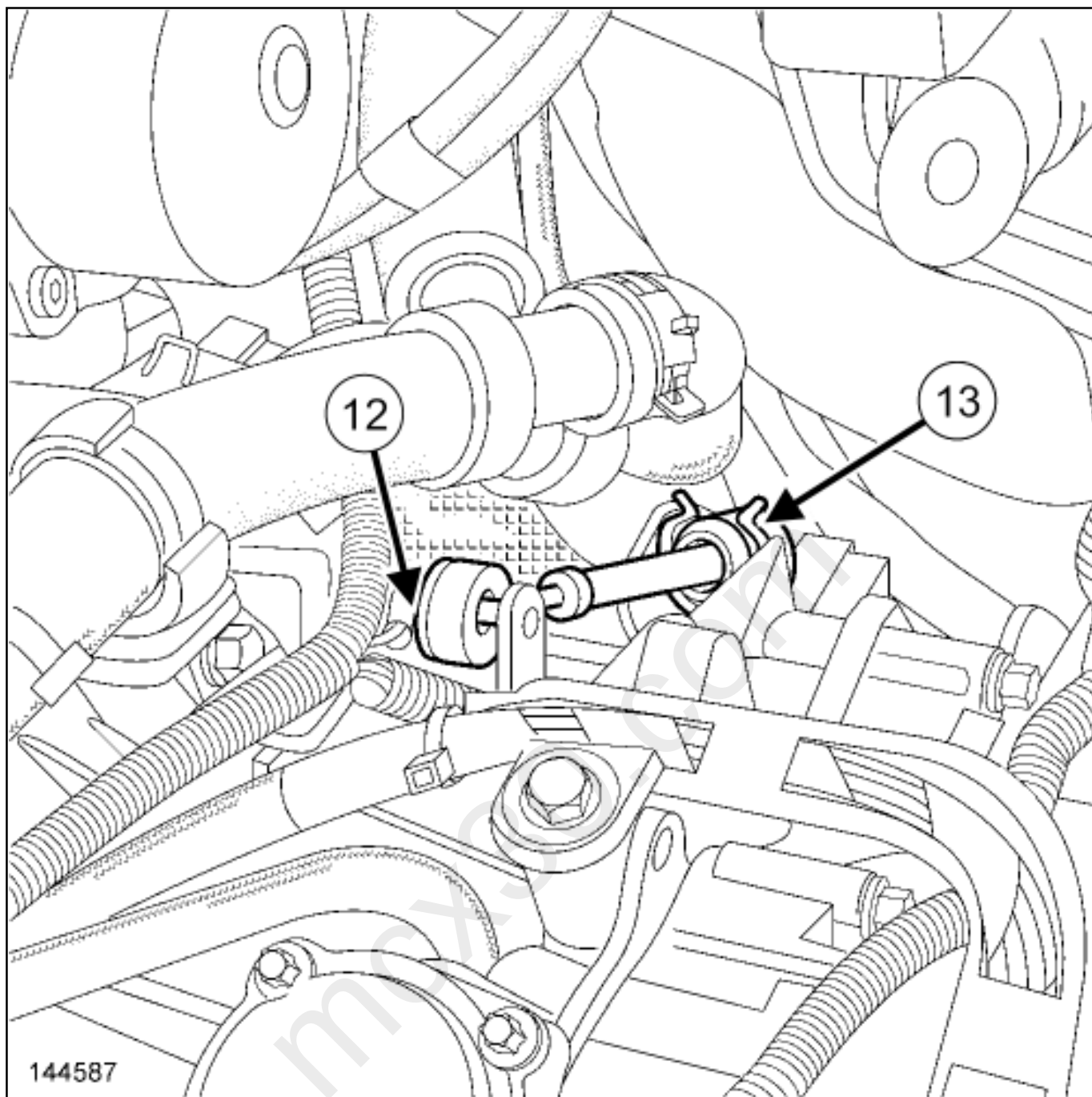
Remove the nut(9) from the earth strap on the body.



Remove the nut(10) from the earth strap on the body.



Remove the earth wire bolt(11) on the automatic gearbox.

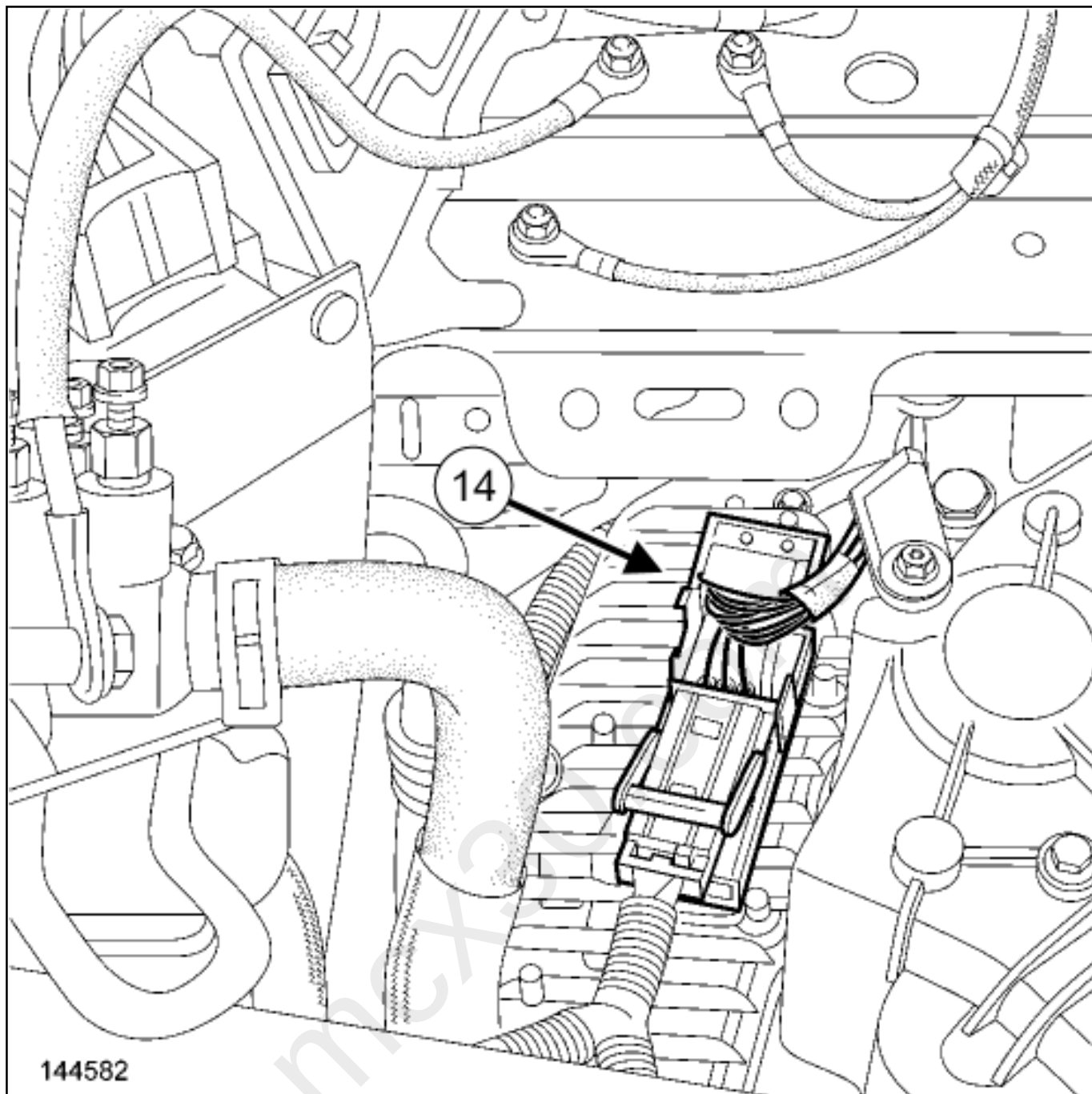


Unclip:

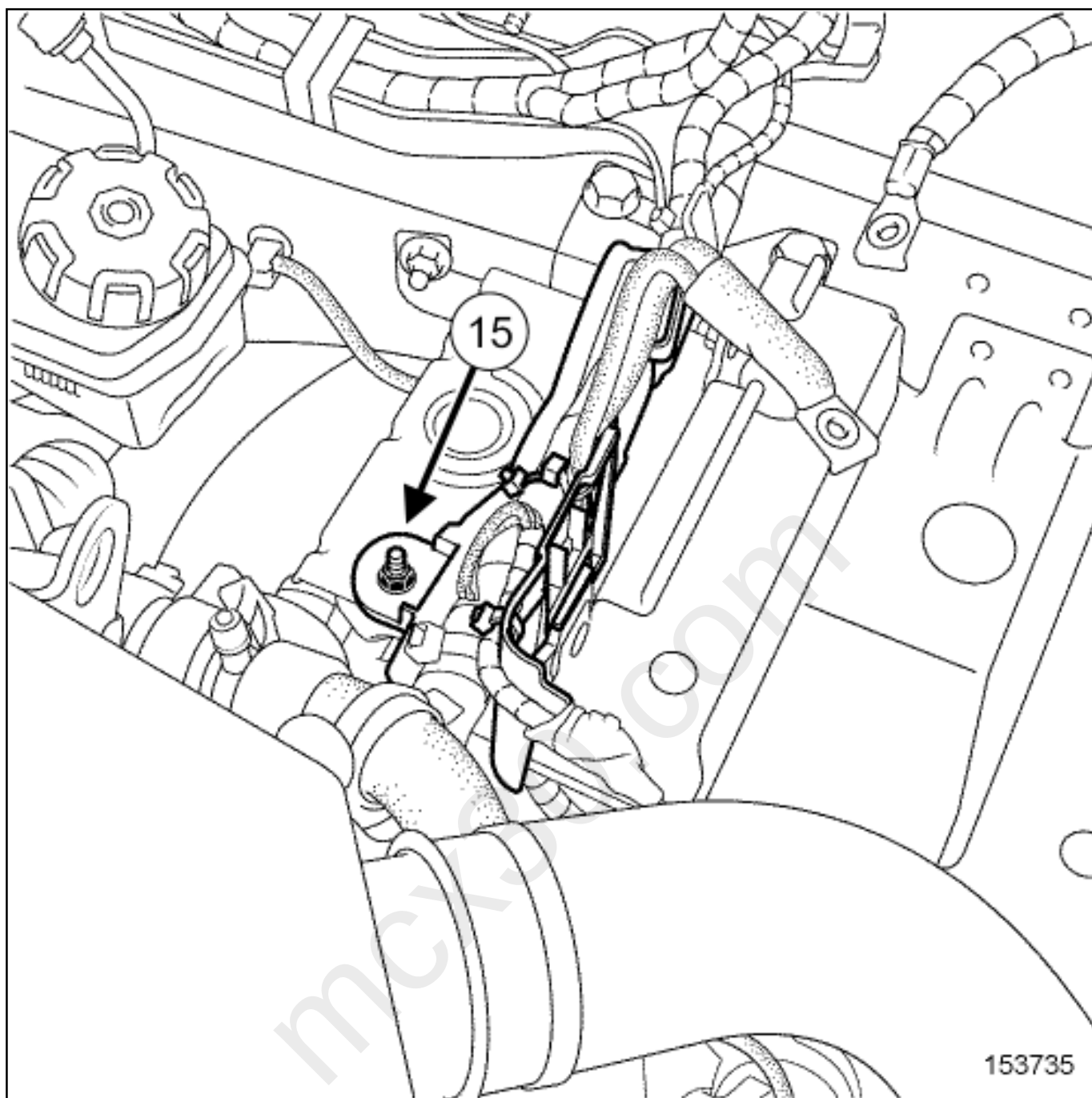
the gear control cable(12) from the selector ball joint using an open-jawed spanner,

the gear control cable(13) from the support.

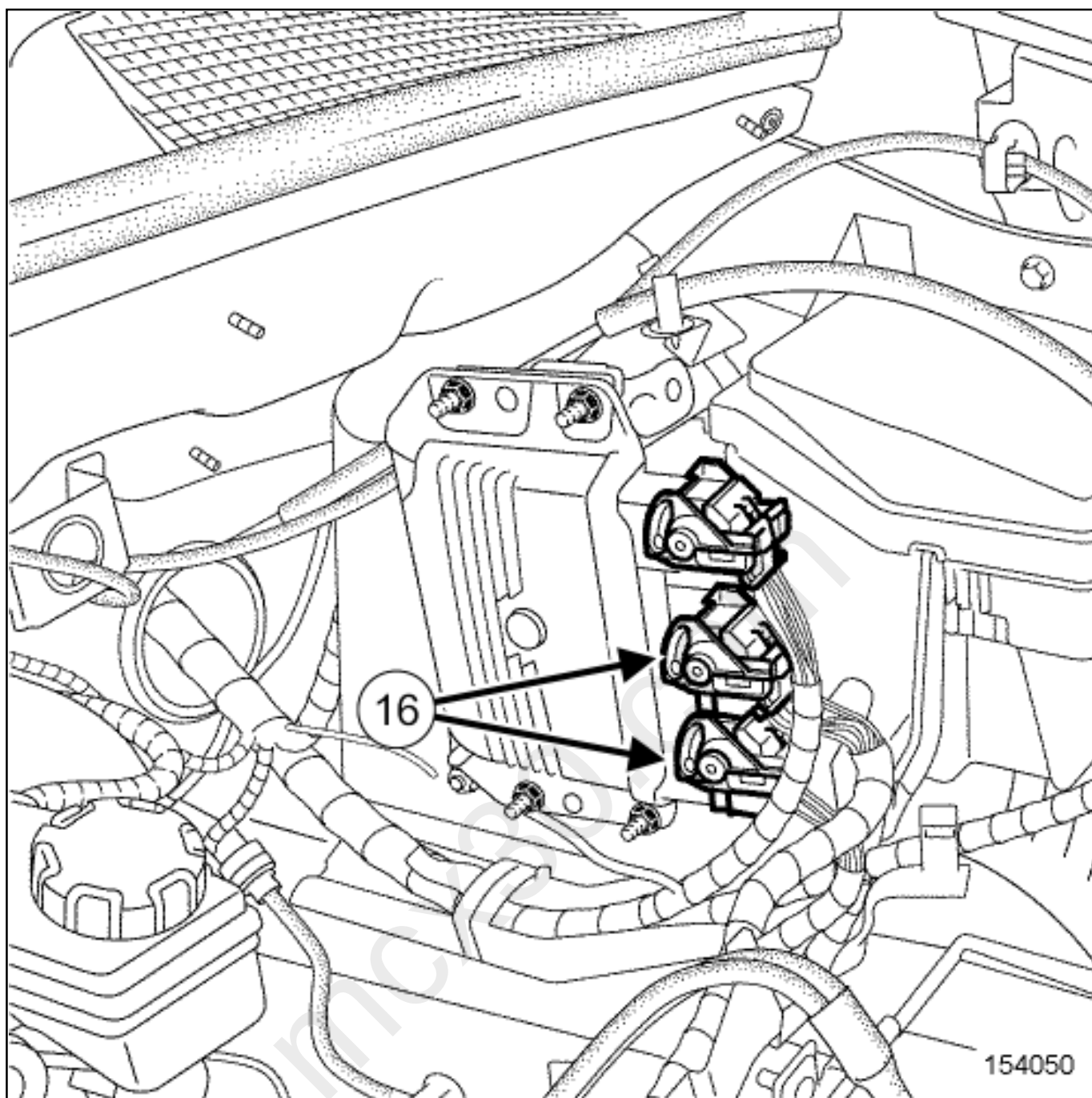
Move aside the gear control cables.



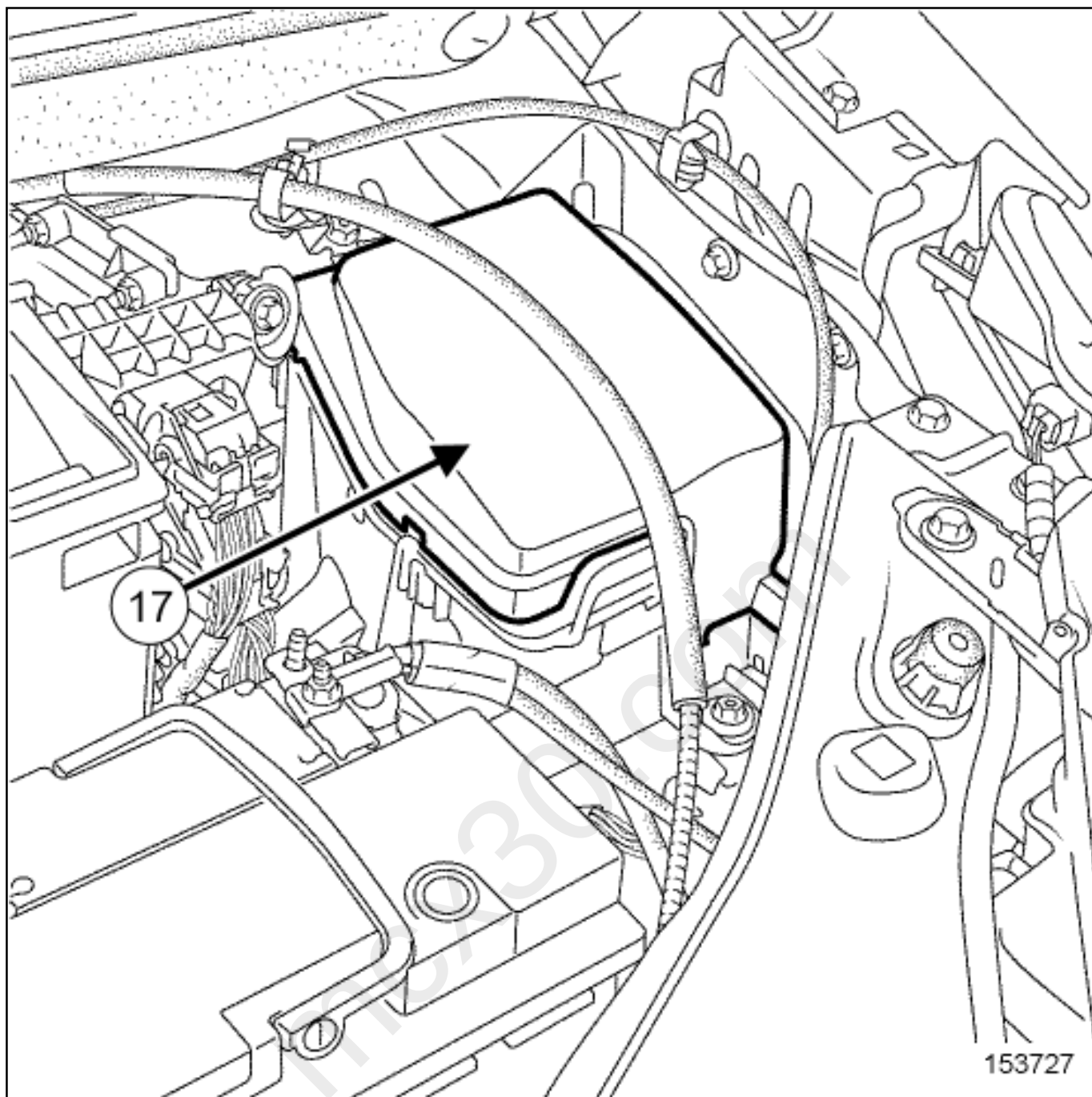
Disconnect the connector(14) from the gearbox computer.



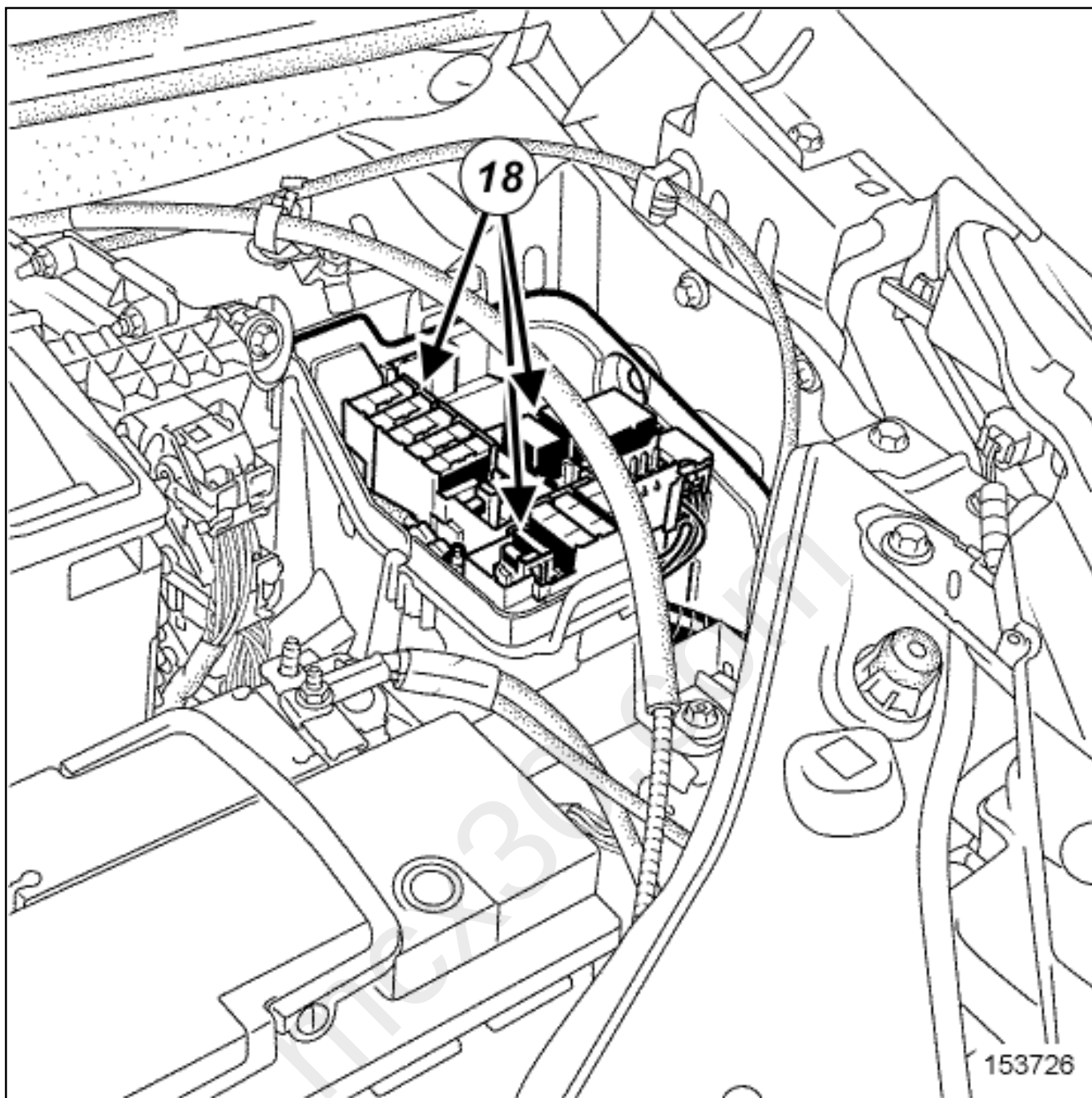
Remove the nut(15) .



Disconnect the injection computer connectors(16) .



Remove the engine compartment connection unit cover(17) .



Unclip the fuse holders and relays(18) from their mountings on the fuse and relay box in the engine compartment.



Position the engine harness, fuses and relays on the engine.



Disconnect the vacuum pipe from the brake servo.

Remove using the tool Remote operation pliers for hose clips. (Mot. 1448) [Coolant circuit assembly: Exploded view](#) :



the clip of the expansion bottle outlet hose,



the clips of the heater matrix hoses.



Disconnect [Coolant circuit assembly: Exploded view](#) :



the expansion bottle outlet hose,



the heater matrix hoses,



the degassing hose from the water chamber.



Remove [Exhaust assembly under body: Exploded view](#) :

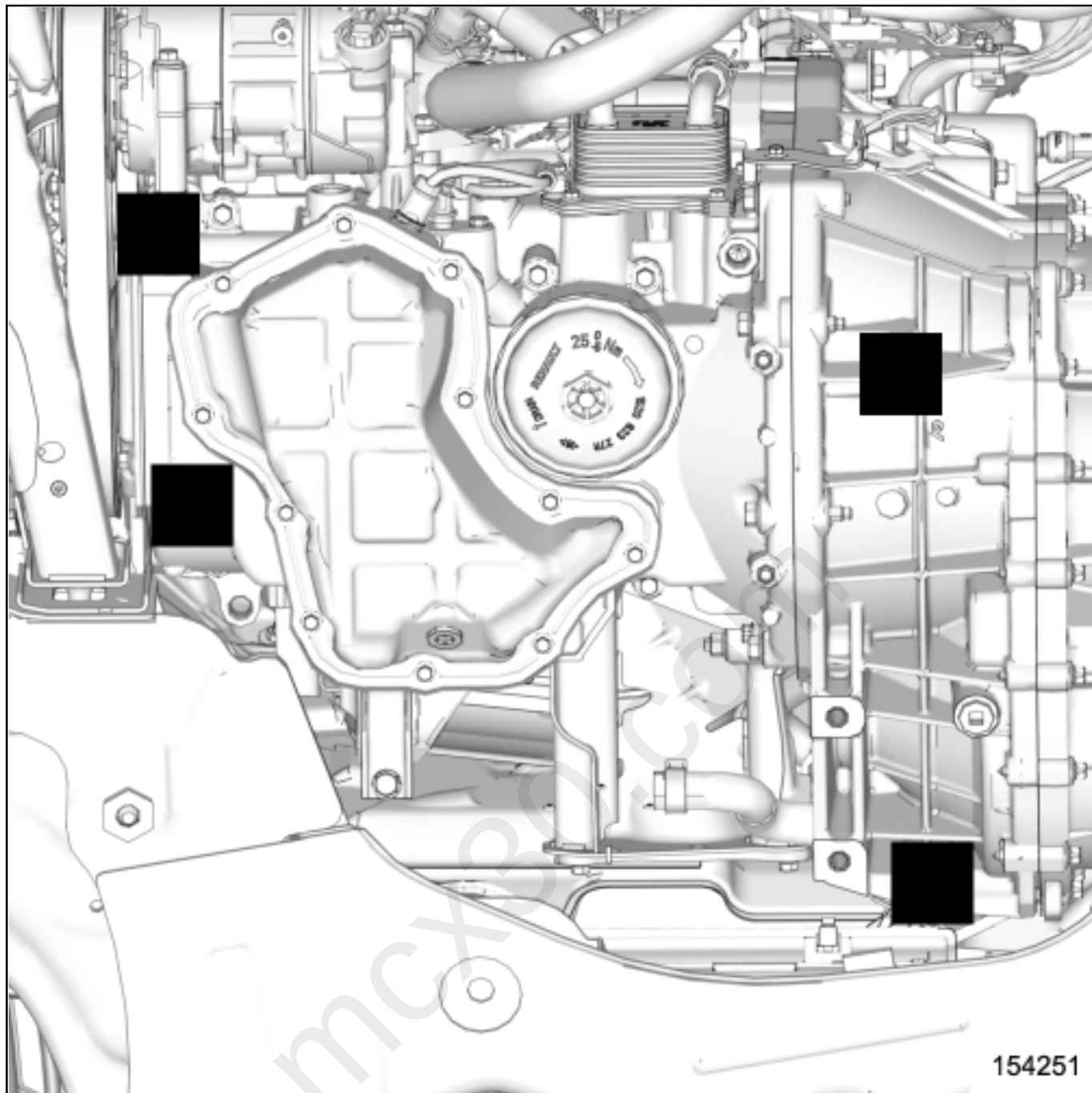


the exhaust flange nuts,

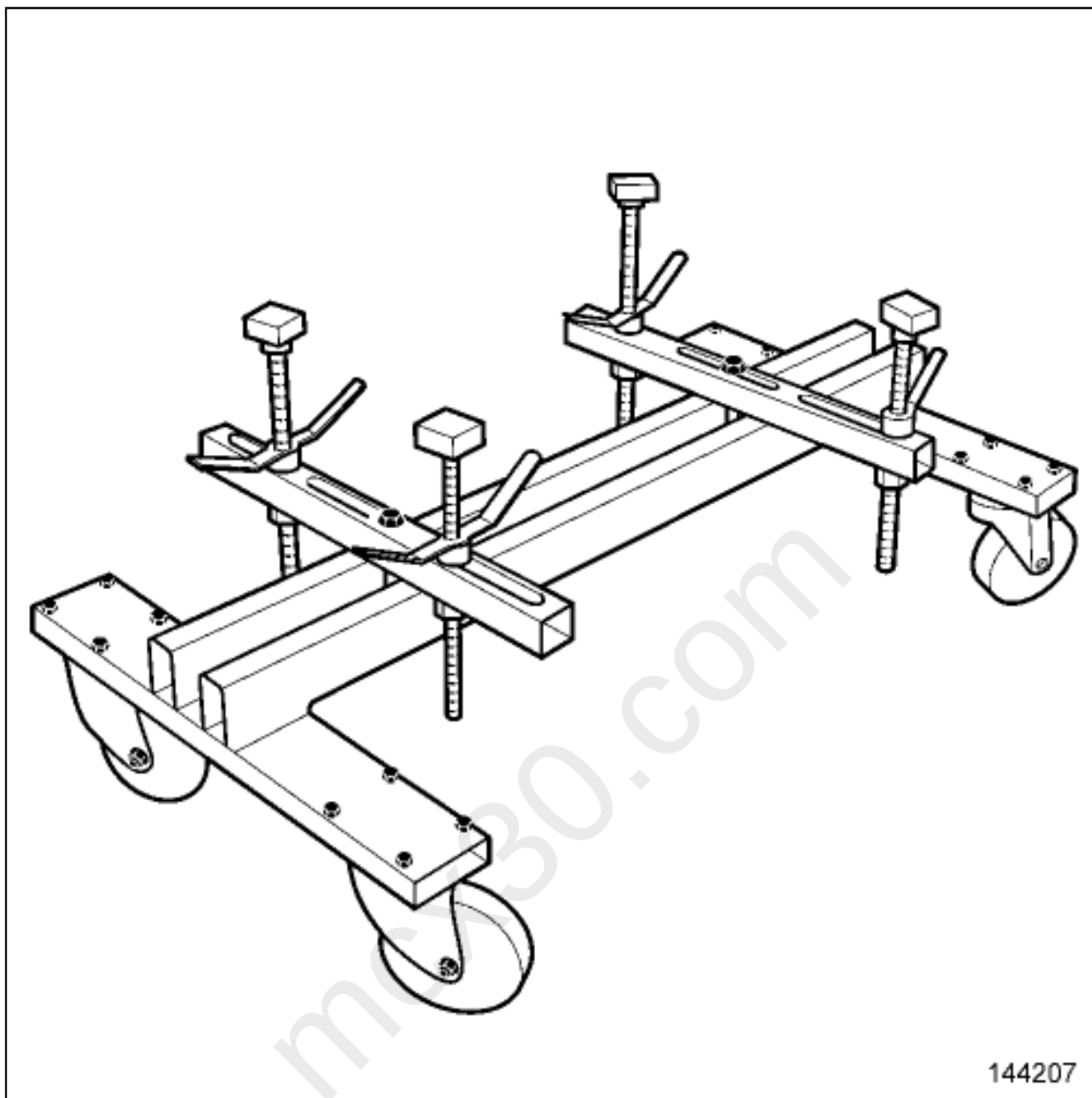


the seal between the catalytic pre-converter and the connecting hose.

2. REMOVAL OPERATION



Mark the position of the suspended engine mountings on the body.



Support the "engine - gearbox" assembly on the engine marks with the toolSupport for removal - refitting of engine - gearbox assembly([Mot. 1390](#)) .



Remove [Engine-gearbox unit support assembly: Exploded view](#) :



the right-hand suspended engine mounting bolts,



the central nut of the left-hand suspended engine mounting rubber pad,



Note:

Check no component obstructs the movement of the body around the engine - gearbox assembly.

Lift the vehicle to remove the "engine and gearbox" assembly.

Remove the "engine and gearbox" assembly.

REFITTING

1. REFITTING PREPARATION OPERATION

parts always to be replaced:



seal between catalytic converter and exhaust downpipe



hose

CAUTION



Do not remove the blanking plugs from each component until the last moment.

Also, do not remove the components from their packaging until they are to be fitted to the vehicle.

2. REFITTING OPERATION

Proceed in the reverse order to removal.