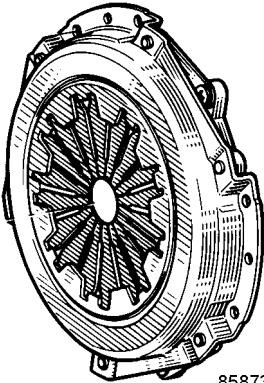
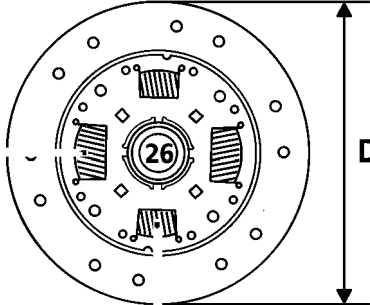



# CLUTCH

## Identification

20

VEHICLE TYPE	ENGINE TYPE	MECHANISM	PLATE
XL0B XL0C	F9Q	 <p>85873S</p> <p>215 CPOE 4400</p>	<p><b>21 splines</b> D = 240 mm E = 7.1 mm</p>  <p>90693-2R7</p>  <p>76906R</p>

# CLUTCH

## Mechanism - Plate

### REPLACEMENT

This operation is carried out after the gearbox has been disconnected from the engine.

#### SPECIAL TOOLING REQUIRED

Mot. 1677 - 01 Locking tool

#### TIGHTENING TORQUE (in daNm)



Mechanism mounting bolt

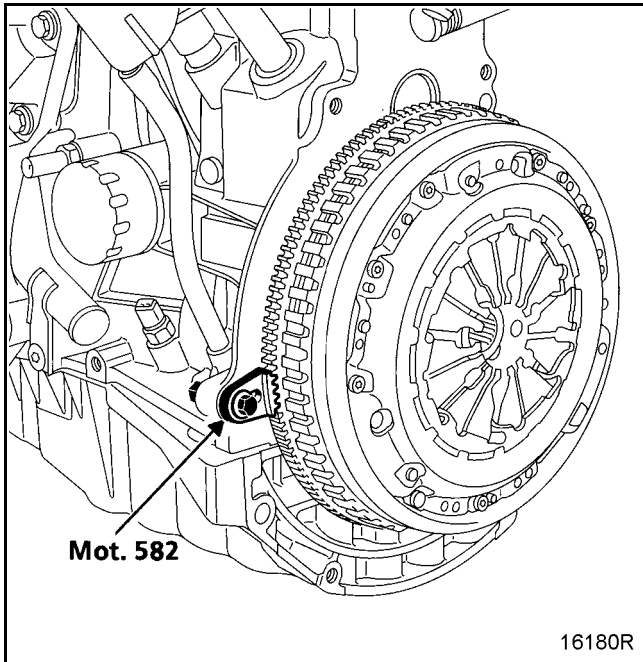
2

### REMOVAL

Fit flywheel locking tool **Mot. 1677-01**.

Remove the mechanism mounting bolts and the mechanism along with the clutch plate.

Check and replace any faulty parts.

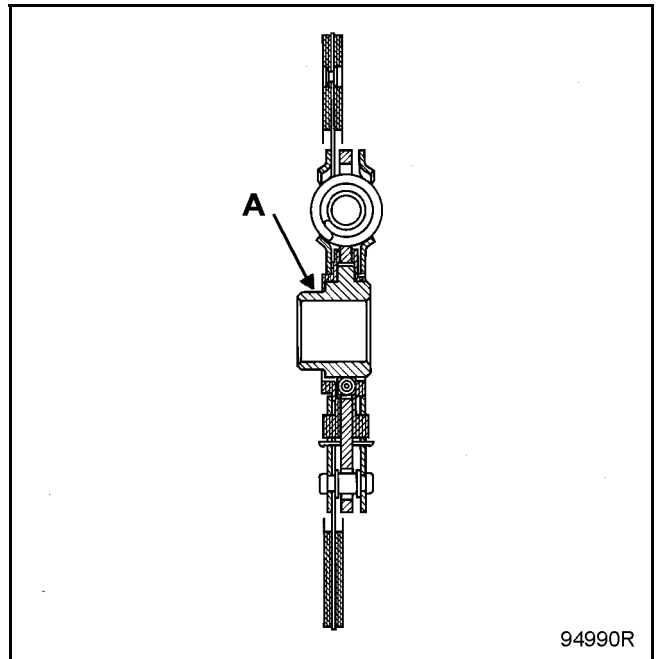


### REFITTING

Precautions that must be taken when repairing the clutch:

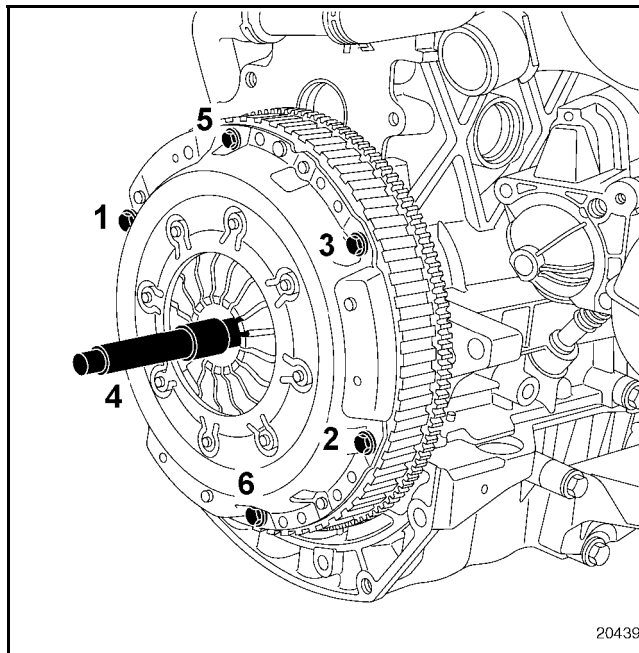
De-grease the friction face of the flywheel.

Insert the disc (offset (A) from the hub on the flywheel side).



### ALIGNMENT

Use the plastic centring tool found in the clutch kit.



Gradually tighten the bolts in the order indicated in the diagram above, then lock the mechanism securing bolts to torque.

Remove flywheel locking tool **Mot. 582-01**.

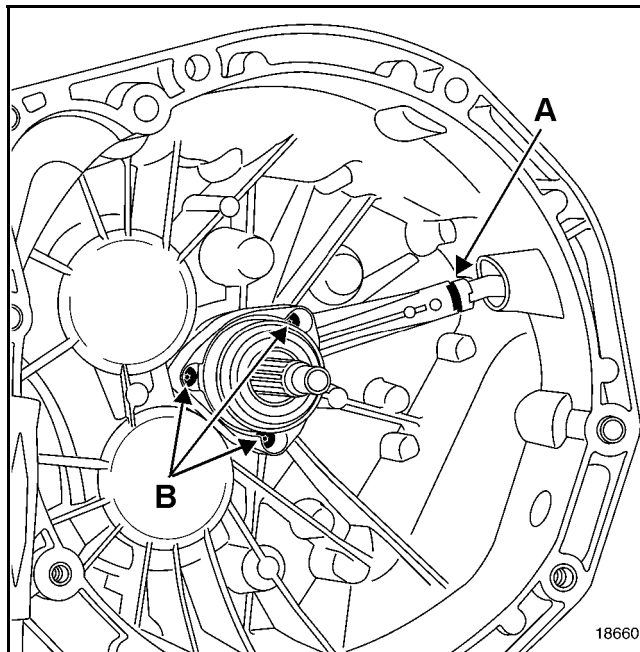
### REPLACEMENT

This operation is carried out after the gearbox has been disconnected from the engine.

### REMOVAL

Remove:

- the bleed screw (screw A),
- the thrust bearing (screw B).



### REFITTING

Refit:

- the thrust bearing,
- the bleed screw.

Ensure the thrust bearing slides correctly.

## REPLACEMENT

This operation is carried out after the gearbox has been uncoupled from the engine and after the clutch has been removed.

## SPECIAL TOOLING REQUIRED

Mot. 582 - 01 Locking tool

## TIGHTENING TORQUE (in daNm)



Steering wheel bolt

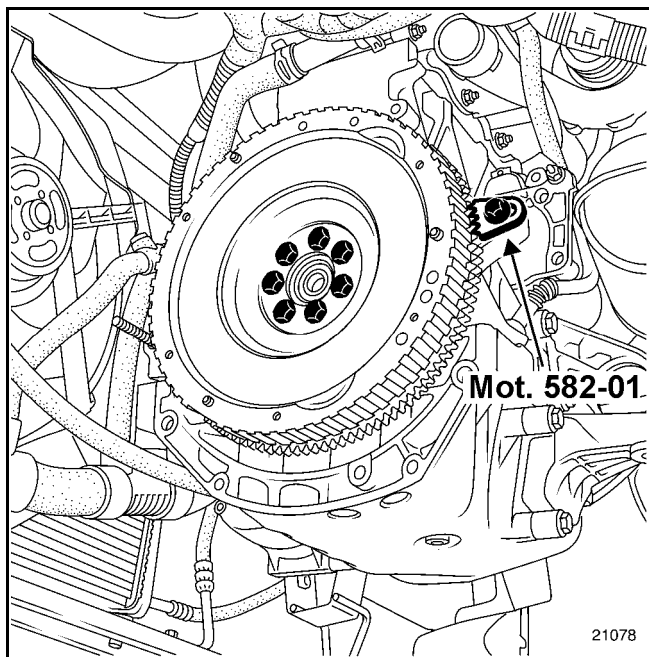
6

## REMOVAL

Fit flywheel locking tool **Mot. 582-01**.

Loosening the flywheel mounting bolts is not permitted.

Replace the flywheel if it has been damaged.



## REFITTING

Clean the crankshaft mounting bolt threads.

Degrease the bearing face of the flywheel on the crankshaft.

Cement the flywheel bolts using **Loctite FRENETANCH** and tighten them to the recommended torque.

# CLUTCH

## Clutch shaft bearing

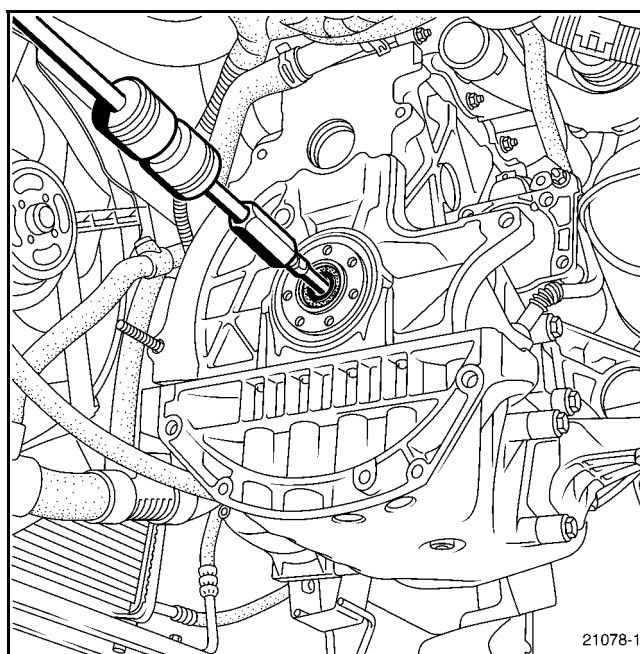
### REPLACEMENT

This operation is carried out after the gearbox has been uncoupled and after the clutch and flywheel have been removed.

EQUIPMENT REQUIRED
Bearing extractor

### REMOVAL

Use a general purpose puller to remove the bearing.



### REFITTING

Fit the new bearing. The bearing is lubricated, so only clean the external diameter.

Coat the external bearing diameter with **loctite FRENBLOC**.

Fit the bearing with a tube applying pressure on the outer cage.

# MECHANICAL ELEMENT CONTROLS

## Clutch master cylinder

37

### REMOVAL

Disconnect the battery.

#### *In the passenger compartment*

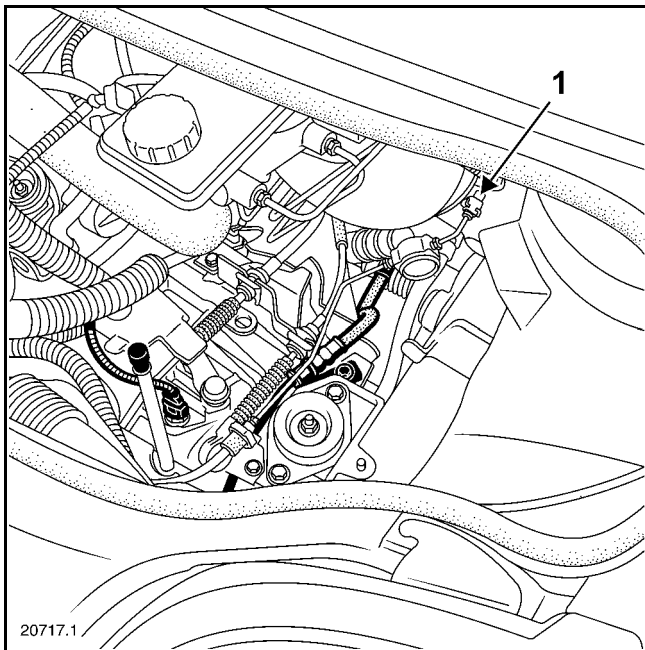
Disconnect the master cylinder ball joint from the clutch pedal.

#### *In the engine compartment*

Drain the brake fluid reservoir until the level is below the master cylinder supply port.

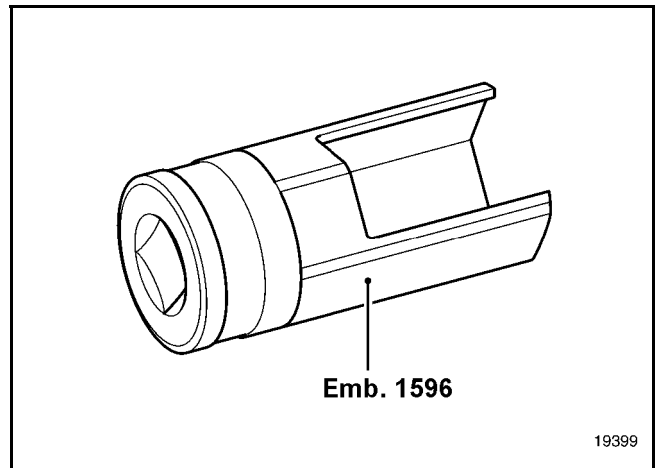
Place a cloth under this port then disconnect the pipe from the brake fluid reservoir and fit plugs.

Remove the master-slave connecting pipe holding clip (1) on the master cylinder.



Place a cloth under the master cylinder then disconnect the master cylinder connection pipe and fit plugs to each port.

Remove the master cylinder from the bulkhead, turning it clockwise a quarter of a turn (bayonet-type fixing) using tool **Emb. 1596**.

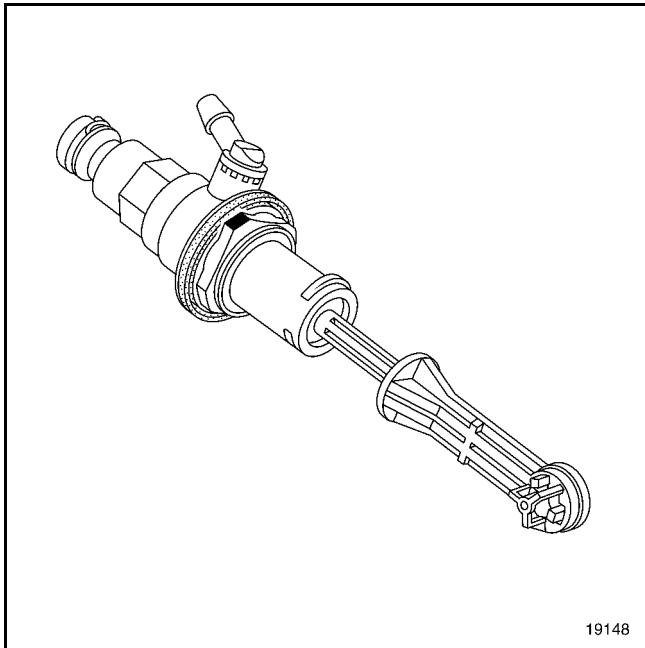


### REFITTING

Check the condition of the seals.

Proceed in the reverse order to removal.

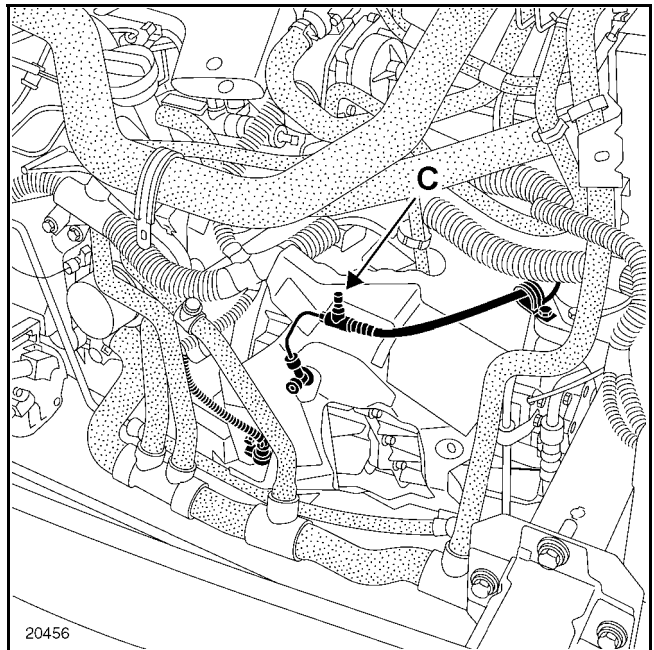
The master cylinder is fitted with a foolproofing device.



Add brake fluid to the reservoir.

Bleed the hydraulic circuit:

- connect a pipe linked to a reservoir containing brake fluid to port (C),
- fit the bleeding device,
- operate the bleeding device,
- wait until the air is completely expelled from the hydraulic circuit.



Top up the brake fluid reservoir.

Check that the clutch system is operating correctly.



# MECHANICAL ELEMENT CONTROLS

## Clutch slave cylinder

37

### TIGHTENING TORQUES (in daNm)



Retaining bolt of the slave cylinder on the clutch housing

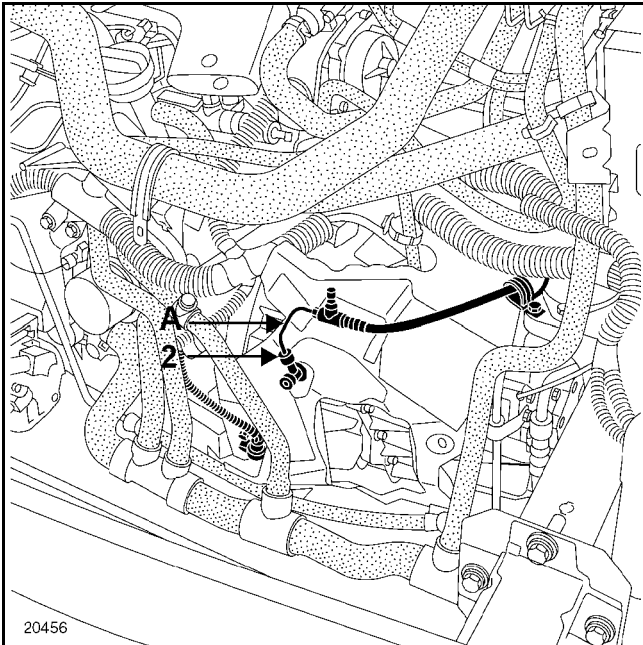
0.8

### REMOVAL

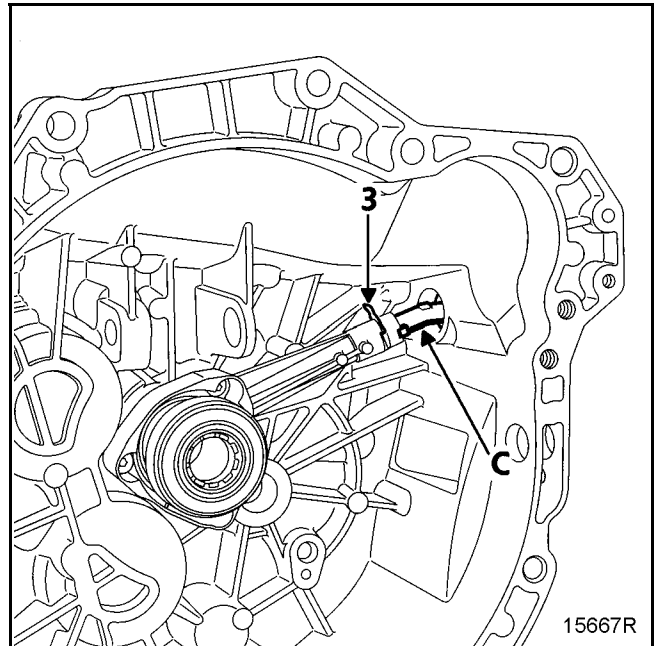
The clutch slave cylinder can only be removed after the gearbox has been removed.

Disconnect:

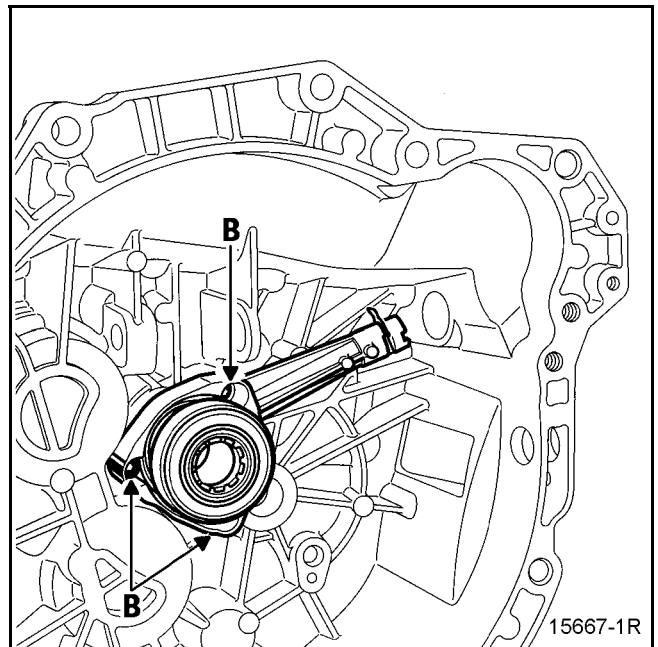
- the master-slave connecting pipe, disconnecting clip (2) on the union (A),



- the union (C) of the clutch slave cylinder, removing clip (3).



Remove the three clutch slave cylinder mounting bolts (B), then remove the cylinder.



### WARNING:

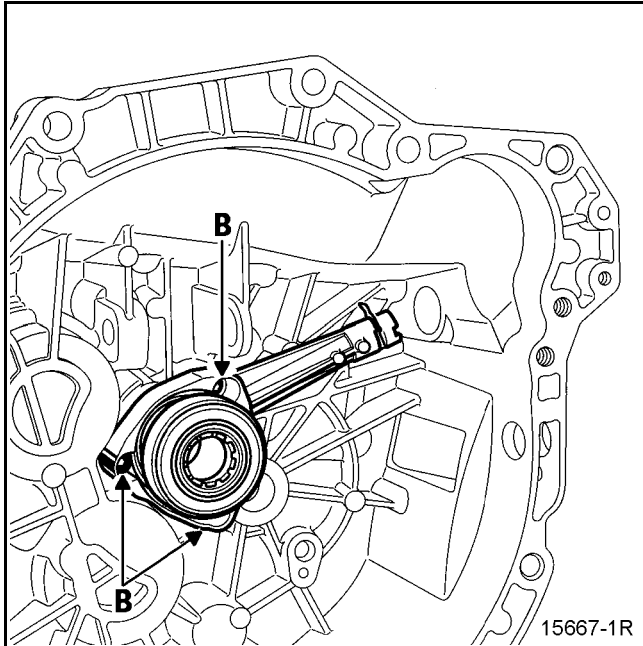
Never operate the system when the slave cylinder is removed (even if it is connected to the clutch pedal). There is a risk that the hydraulic piston and the stop will be ejected from the slave cylinder.

### REFITTING

Check the condition of the seals.

Proceed in the reverse order to removal.

Tighten the two slave cylinder mounting bolts to a torque of **0.8 daNm**.



### IMPORTANT:

To avoid damaging the slave cylinder, do not coat the gearbox output shaft with grease.

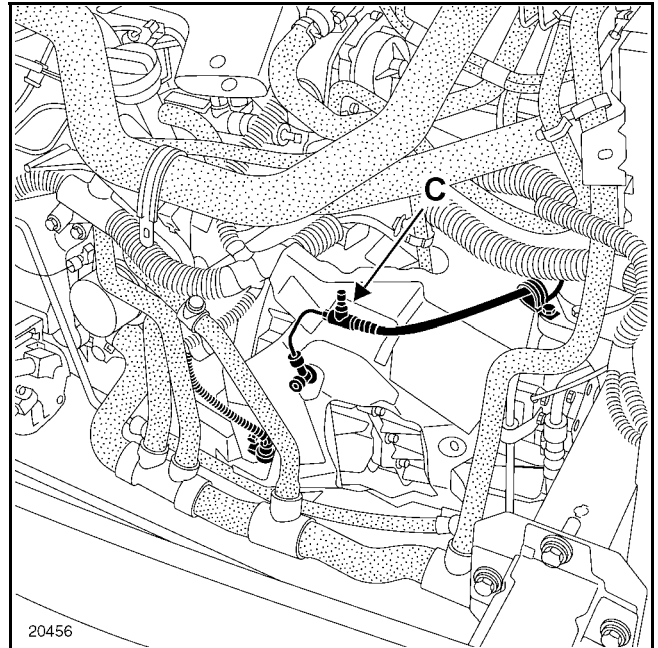
### NOTE:

To prevent leaks, replace the slave cylinder after replacing the clutch mechanism.

Add brake fluid to the reservoir.

Bleed the hydraulic circuit:

- connect a pipe linked to a reservoir containing brake fluid to port (C),
- fit the bleeding device,
- operate the bleeding device,
- wait until the air is completely expelled from the hydraulic circuit.



Top up the brake fluid reservoir.

Check that the clutch system is operating correctly.

### REMOVAL

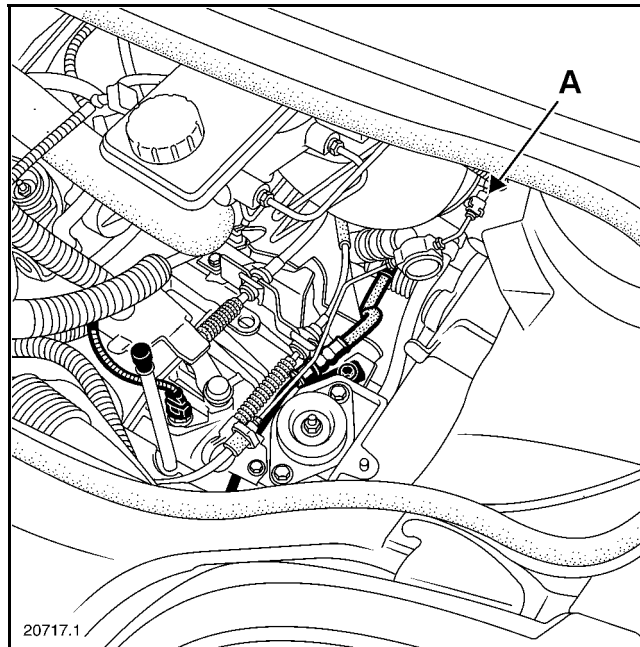
Disconnect the battery.

Drain the brake fluid reservoir until the liquid level is below the master cylinder supply port.

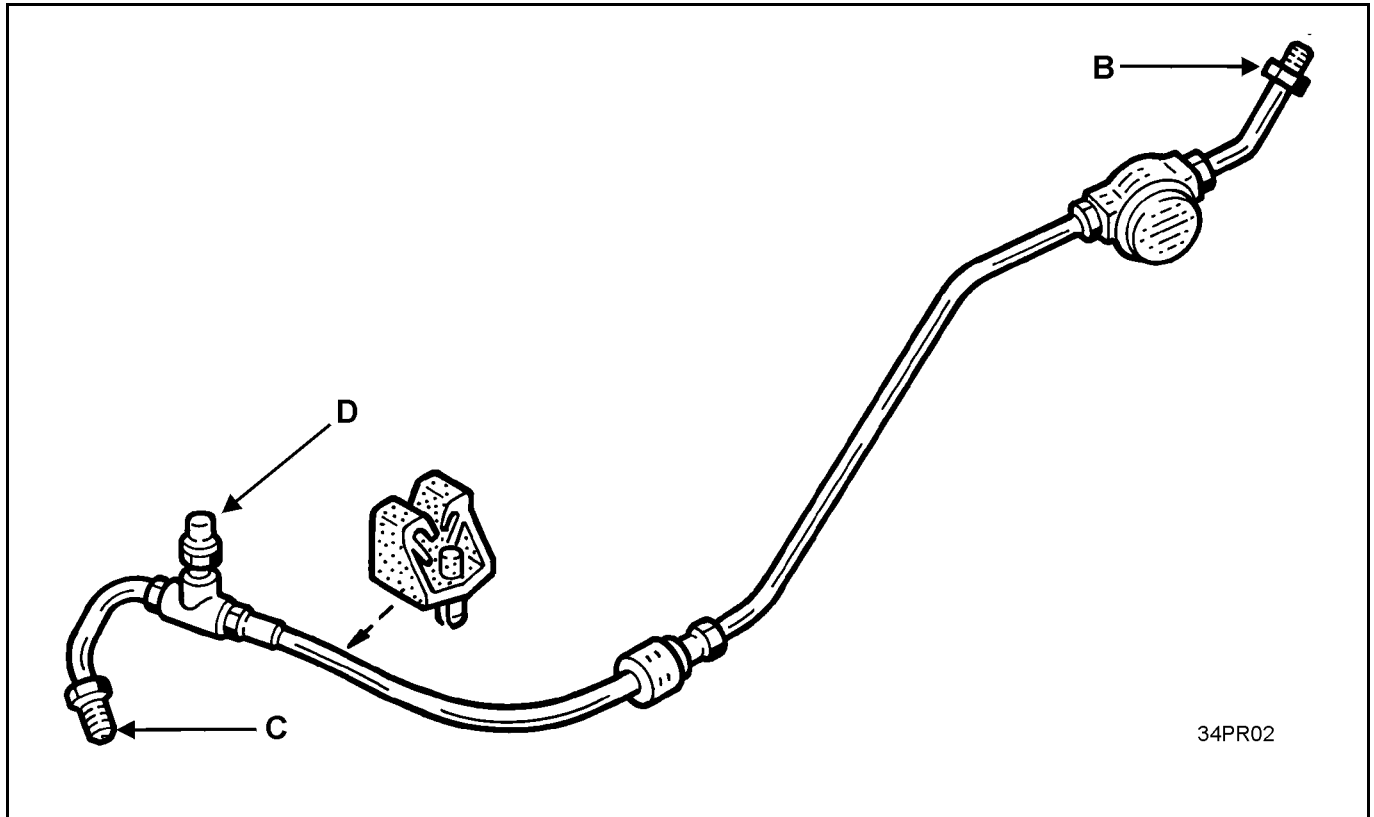
Place a cloth under this port then disconnect the pipe from the brake fluid reservoir and fit plugs.

Remove the master-slave connecting pipe holding clip (A) on the master cylinder.

Place a cloth under the master cylinder then disconnect the master cylinder connection pipe and fit plugs to each port.



CLUTCH PIPEWORK SYSTEM

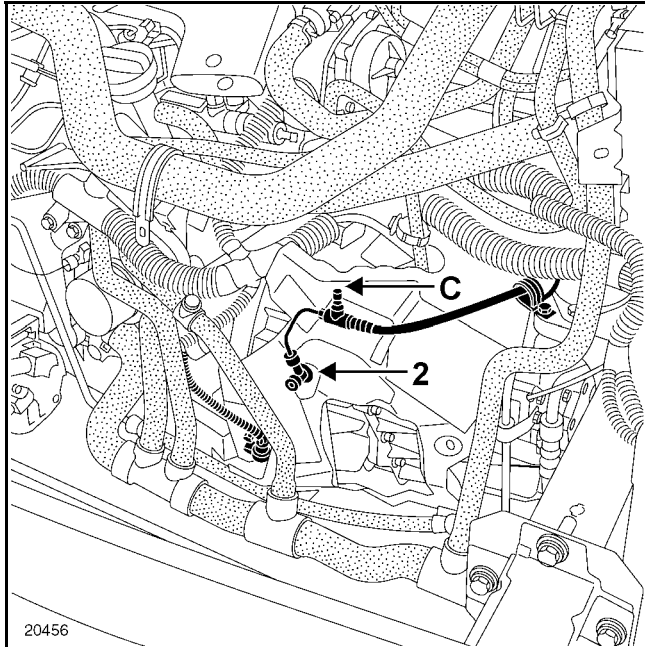


# MECHANICAL ELEMENT CONTROLS

## Clutch control pipework

37

Remove the master-slave connecting pipe holding clip (2) on the slave.



Place a cloth under the slave cylinder then disconnect the slave cylinder connection pipe (C) and fit plugs to each port.

Carefully remove the master-slave connecting pipe taking care not to damage anything.

### REFITTING

Check the condition of the seals.

Proceed in the reverse order to removal.

#### **WARNING:**

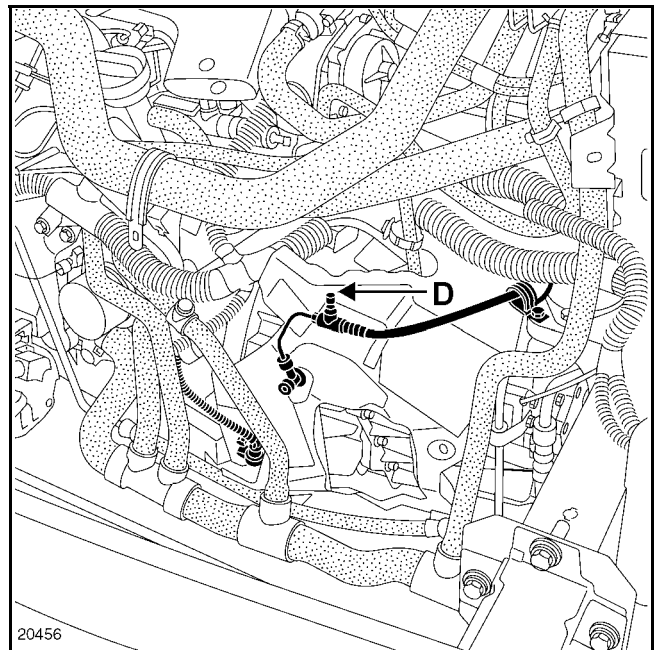
**When refitting:**

- do not damage the various pipes,
- take care to connect them correctly,
- position the various mounting clips correctly.

Add brake fluid to the reservoir.

Bleed the hydraulic circuit:

- connect a pipe linked to a reservoir containing brake fluid to port (D),
- fit the bleeding device,
- operate the bleeding device,
- wait until the air is completely expelled from the hydraulic circuit.



# MECHANICAL ELEMENT CONTROLS

## Declutching pedal

37

### TIGHTENING TORQUE (in daNm)



Clutch pedal pump mounting bolts

4.4

### REMOVAL

The clutch pedal is removed without removing the steering elements.

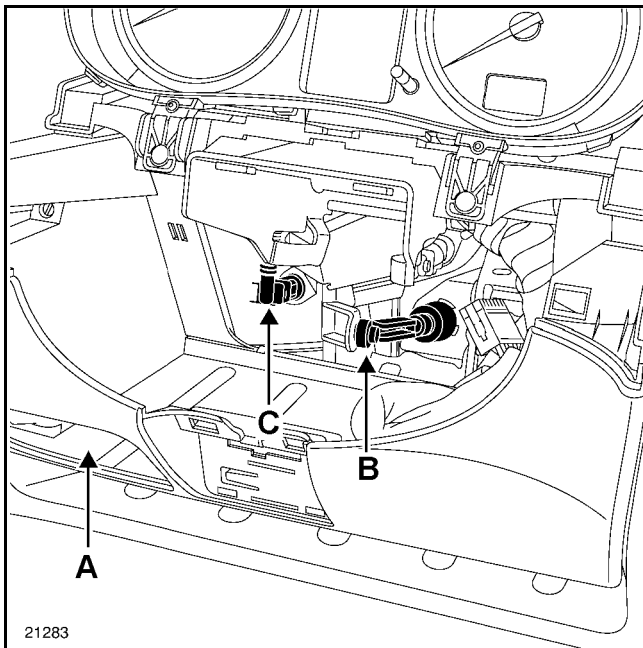
Set the vehicle wheels straight.

Remove support (A) of the lighting rheostat control to gain access to the master cylinder ball joint and the clutch pedal sensor.

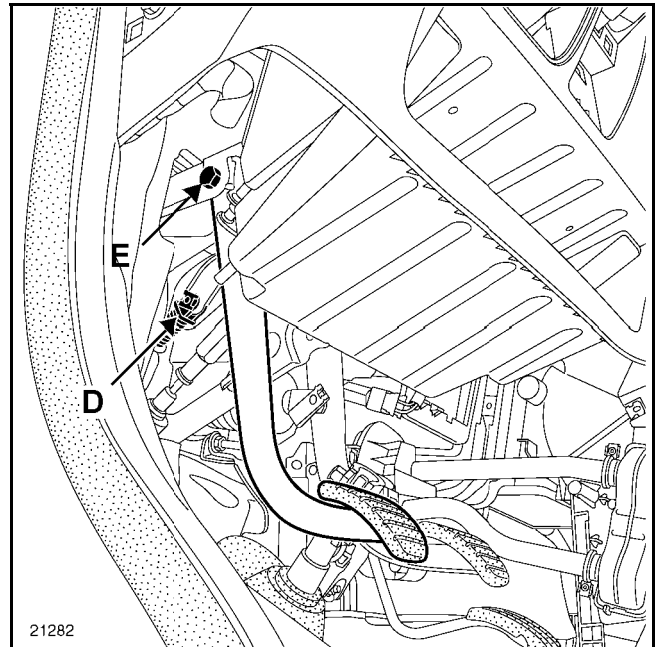
Disconnect the master cylinder ball joint (B) from the clutch pedal.

Remove:

- the connector (C) of the clutch pedal sensor, turning a quarter of a revolution,



- the clutch pedal return spring clip (D) and withdraw the retaining pin,
- the pedal retaining bolt (E),
- the pedal.



### REFITTING

Proceed in the reverse order to removal.

### WARNING:

Do not forget to replace the clutch pedal sensor support plate when replacing the pedal.

Tighten the bolt to a torque of **4.4 daNm**.