



Laguna Safrane

Type

S/Section

X56 9 W

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B54 F G L

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This note cancels and replaces Technical Note n° 3153A

37 PROCEDURE FOR REMOVING THE HYDRAULIC CONCENTRIC CLUTCH

Other sub-sections concerned:

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- Engines: F9Q - G8T - N7Q - N7U
- Gearbox: PK1 - VM1

Basic manuals:
Repair Manuals 302 and 307

Special features of vehicles fitted with "hydraulic concentric" clutch control system.

- LAGUNA fitted with G8T/F9Q engines and a PK1 gearbox,
- SAFRANE fitted with G8T engine and PK1 gearbox,
N7Q/N7U engines and a VM1 gearbox.

"The repair methods given by the manufacturer in this document are based on the technical specifications current when it was prepared.

The methods may be modified as a result of changes introduced by the manufacturer in the production of the various component units and accessories from which his vehicles are constructed."

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TIGHTENING TORQUES (in daN.m)	
Transmitter support screw	2.1
Bleed screw	1

REMOVAL

Disconnect the battery.

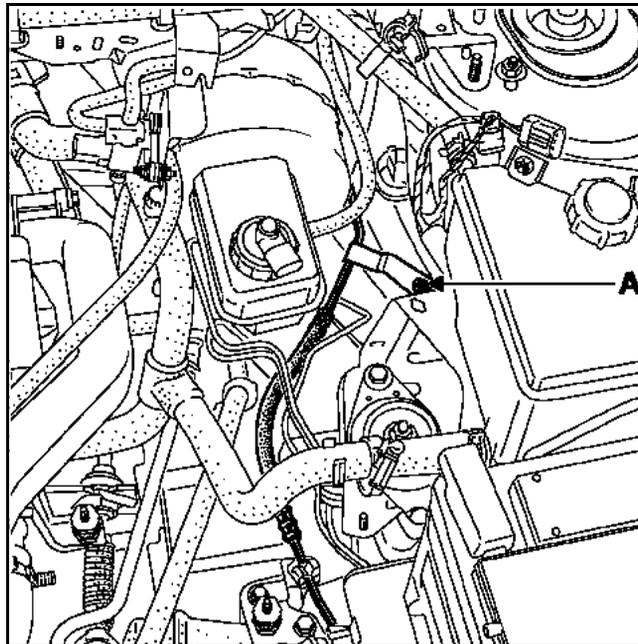
In the engine compartment

Bleed the brake fluid reservoir until the level is under the transmitter supply port.

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

Remove the mounting screw (A) of the transmitter-receiver connecting pipe on the bodywork.

Disengage the transmitter-receiver connecting pipe holding clip (1) (refer to diagram on following page) on the transmitter.



Place a cloth under the transmitter then disconnect the connecting pipe on the transmitter and place plugs at each port.

In the passenger compartment

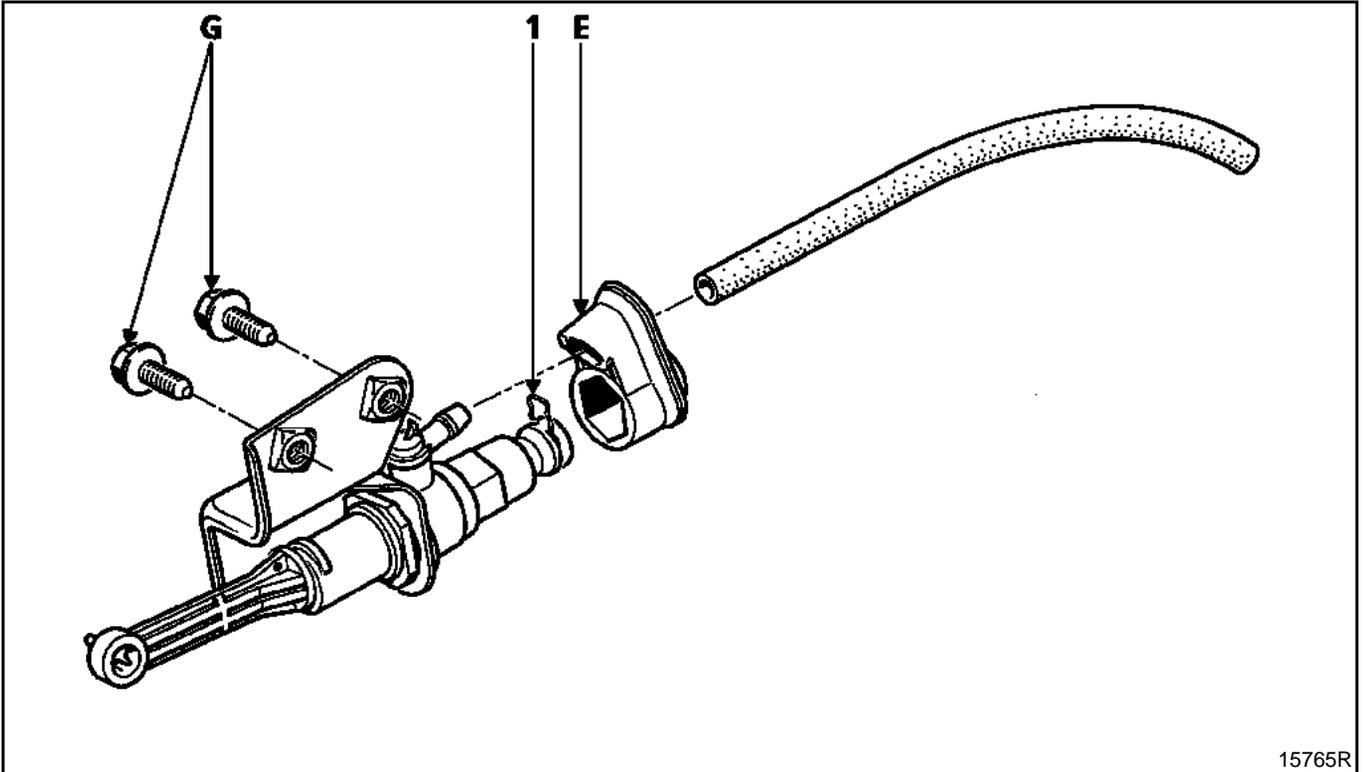
Disconnect the ball joint from the transmitter on the clutch pedal.

Remove:

- the two transmitter support mounting screws (G) on the pedal mounting,
- the transmitter with its support.

Remove the sheath grommet (E) from the transmitter.

Remove the transmitter from its support by turning it a quarter turn in a clockwise direction (bayonet type fitting).



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REFITTING

Check the condition of the seals.

In the passenger compartment

Refit:

- the transmitter on its support,
- the sheath grommet (E).

Move the support mounting bolts towards the clutch pedal.

Clip the transmitter ball joint on the clutch pedal.

Lean the clutch pedal on the floor.

Tighten the bolts (G) of the unit to torque **(2.1 daN.m)**.

IMPORTANT: follow the assembly procedure exactly to avoid any risk of leaks and difficulty in changing gear.

In the engine compartment

Clip (1) the transmitter-receiver connecting pipe on the transmitter.

Refit the transmitter-receiver connecting pipe mounting screw (A) on the bodywork.

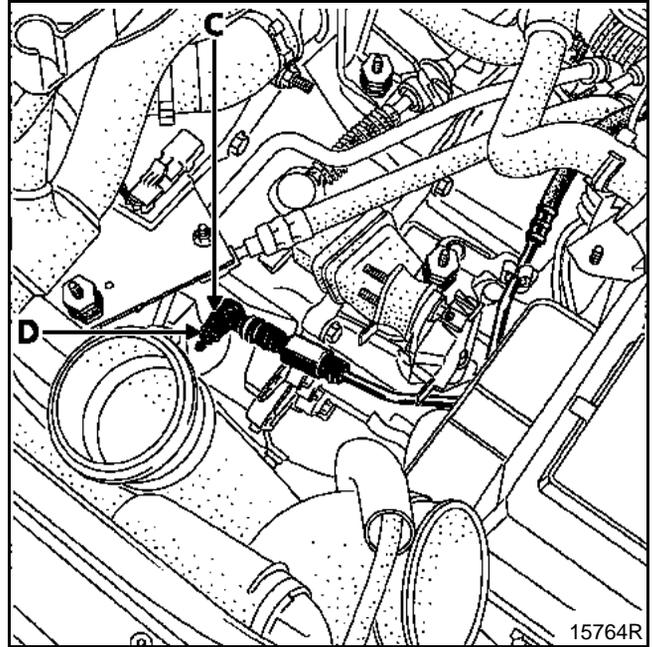
Add brake fluid to the reservoir.

To access the bleed screw, you should remove the air filter unit and its support.

Bleed the circuit using the bleed screw (D) located on the link on the receiver.



When bleeding, use a ring spanner to immobilise the rotating union (C) while tightening and loosening the bleed screw so as not to damage it.



Refill the brake fluid.

IMPORTANT: tighten the bleed screw to torque **(1 daN.m)**.

REMOVAL

Disconnect the battery.

In the passenger compartment

Disconnect the ball joint from the transmitter on the clutch pedal.

In the engine compartment

To gain better access to the transmitter, partially remove the expansion bottle and release it from the engine.

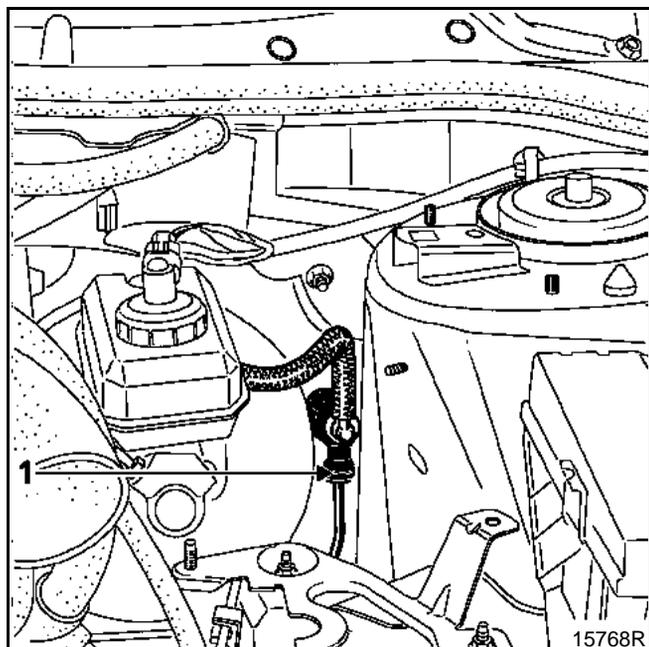
Bleed the brake fluid reservoir until the liquid level is under the transmitter supply port.

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

Remove the transmitter-receiver connecting pipe holding clip (1) on the transmitter.

Place a cloth under the transmitter then disconnect the connecting pipe on the transmitter and position plugs at each port.

Remove the transmitter by turning it a quarter turn in a clockwise direction (bayonet type fitting).



NB: when using a tool (pliers, screwdrivers, ...) to remove the transmitter, you should use some kind of protection (e.g. cloth) to protect it.

REFITTING

Check the condition of the seals.

Refitting is the reverse of removal.

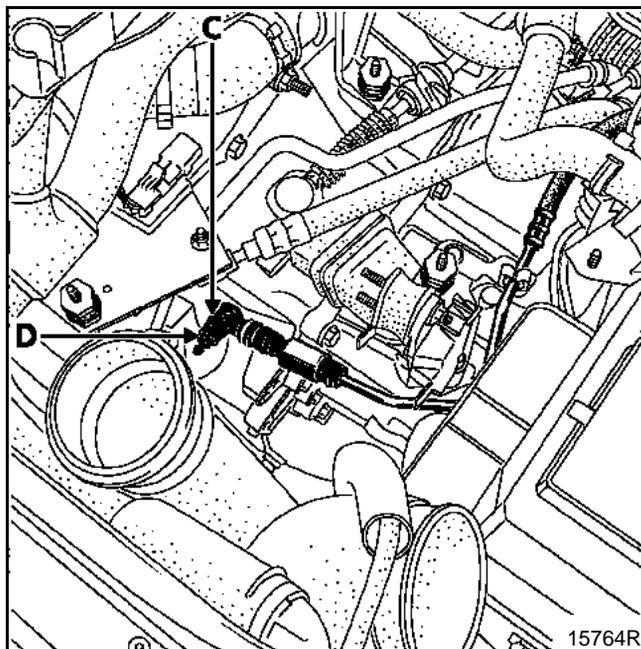
Add brake fluid to the reservoir.

To access the bleed screw, you should remove the air filter unit and its support (G8T engine).

Bleed the circuit using the bleed screw (D) located on the link on the receiver.



When bleeding, use a ring spanner to immobilise the rotating union (C) while tightening and loosening the bleed screw so as not to damage it.



Refill the brake fluid.

IMPORTANT: tighten the bleed screw to torque (1 daN.m).

TIGHTENING TORQUES (in daN.m)

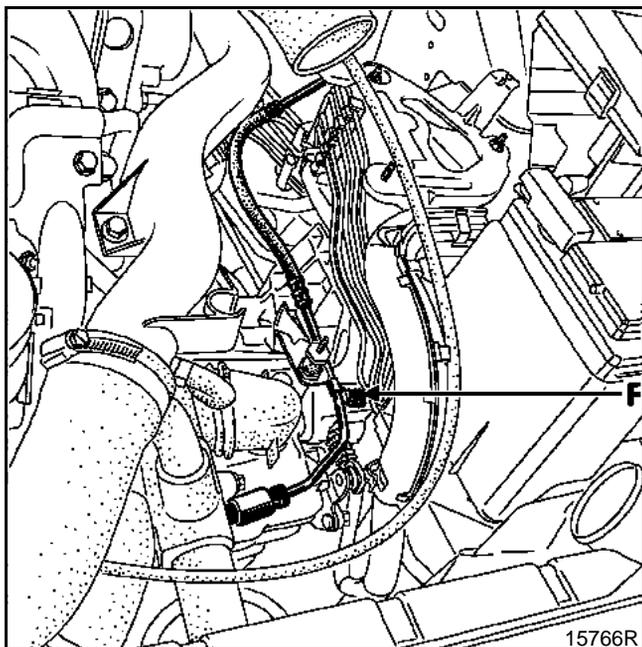


Receiver retaining bolt on the PK1 gearbox clutch cloche	0.9
Receiver retaining bolt on the VM1 gearbox clutch cloche	1.1
Bleed screw on union	1

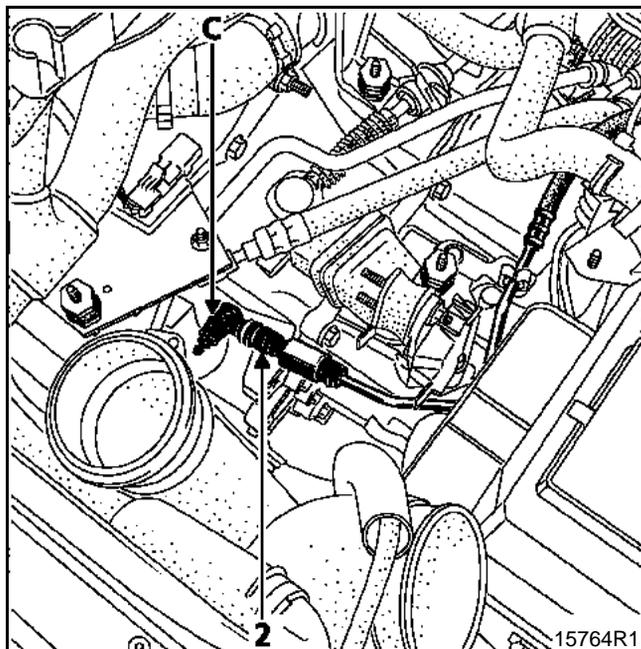
REMOVAL

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

Remove the transmitter-receiver connecting pipe mounting bolt (F) on the gearbox mounting (on SAFRANE - G8T engine).

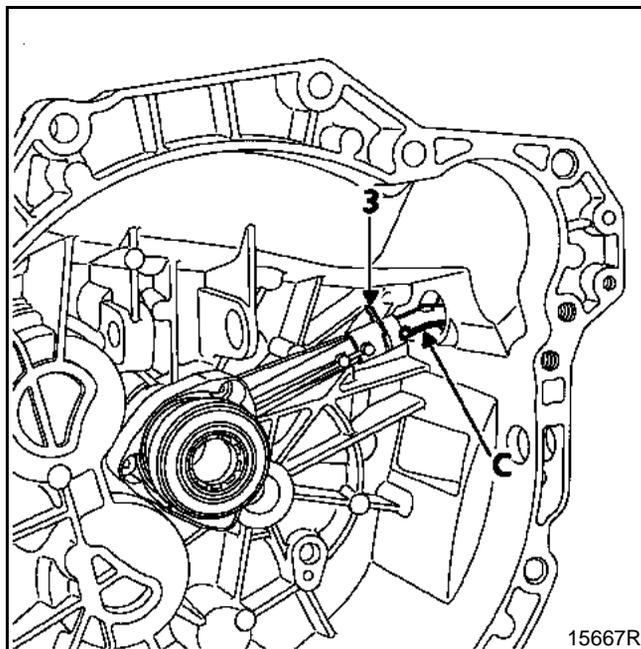


Disconnect the connecting pipe transmitter-receiver by releasing the clip (2) located on the union (C).

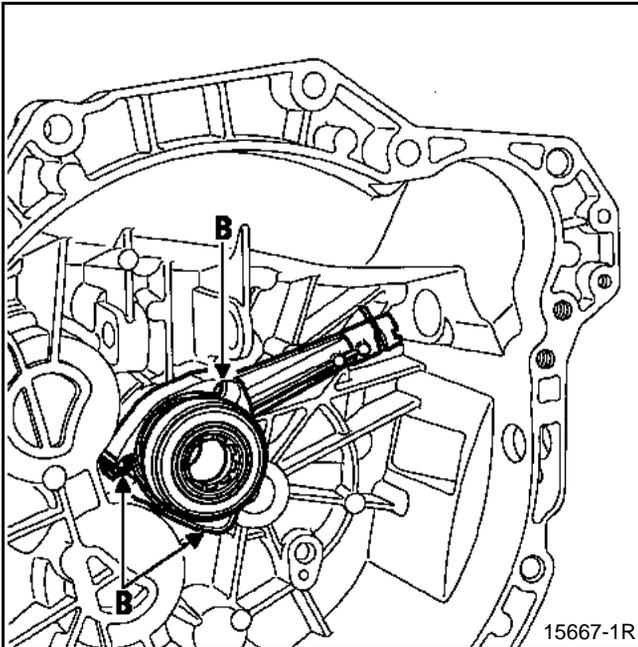


Remove the gearbox.

Disconnect the clutch slave cylinder union (C) by removing the clip (3).

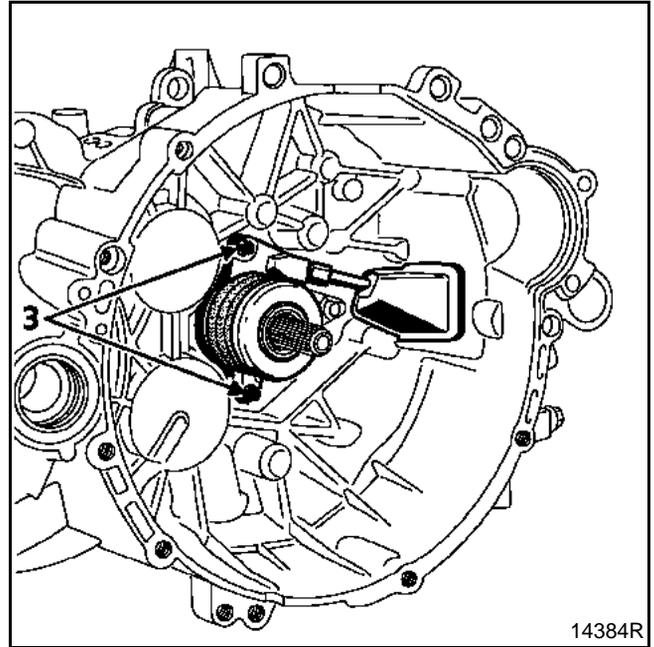


Remove the clutch slave cylinder three mounting bolts (B) then remove it.



SPECIAL FEATURES OF THE SAFRANE - N7Q and N7U engines

Remove the receiver by removing the two mounting bolts (3).



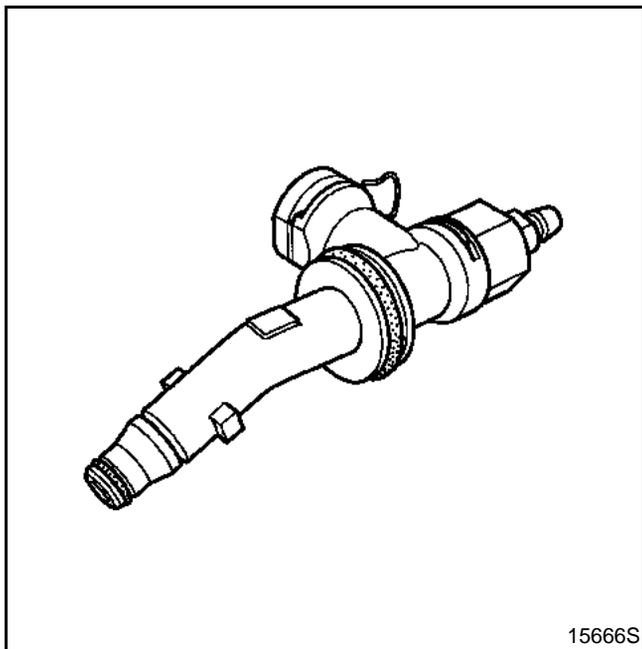
ALL TYPES

NB: never operate the system when the receiver is removed (even if it is connected to the clutch pedal). There is a risk that the hydraulic piston and the receiver stop will be ejected.

REFITTING

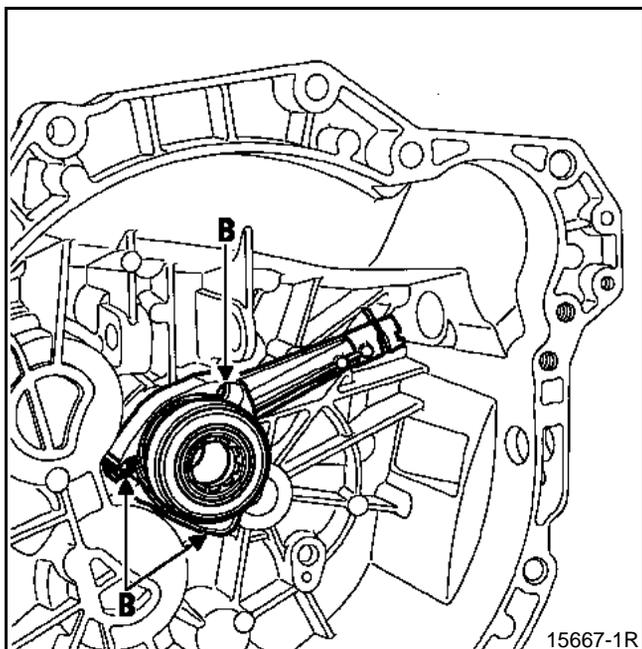
Check the condition of the seals.

When refitting, connect the union to the receiver before tightening the three receiver mounting bolts on the clutch housing, to allow the union to be inserted into the bore of the clutch housing at the O-ring level.



PK1 gearbox

Tighten the three mounting bolts (B) of the receiver to torque (0.9 daN.m).



VM1 gearbox

Tighten the two mounting bolt of the receiver on the clutch cloche to 1.1 daN.m.

Refitting is the reverse of removal.

ALL TYPES

NB: to avoid damaging the receiver, do not coat the gearbox output shaft with grease.

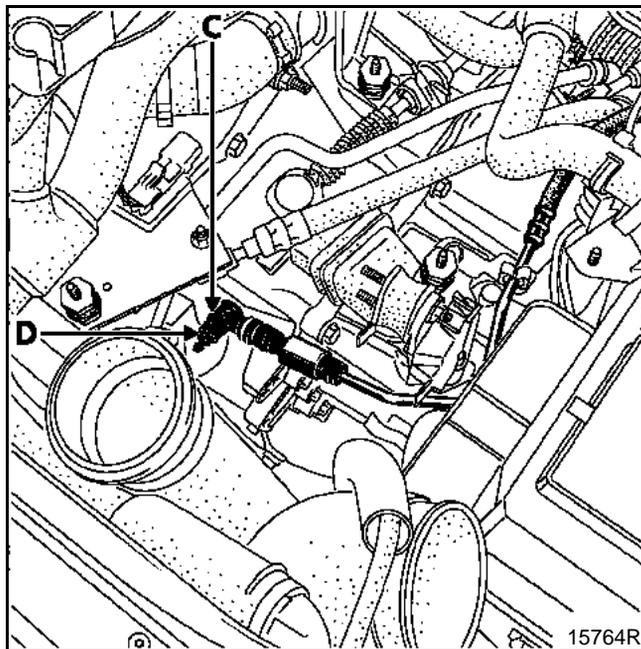
NB: to avoid leaks, replace the receiver after replacing the clutch mechanism.

Add brake fluid to the reservoir.

Bleed the circuit using the bleed screw (D) located on the link on the receiver.



When bleeding, use a ring spanner to immobilise the rotating union (C) while tightening and loosening the bleed screw so as not to damage it.



Refill the brake fluid.

IMPORTANT: tighten the bleed screw to torque (1 daN.m).

REMOVAL

Disconnect the battery.

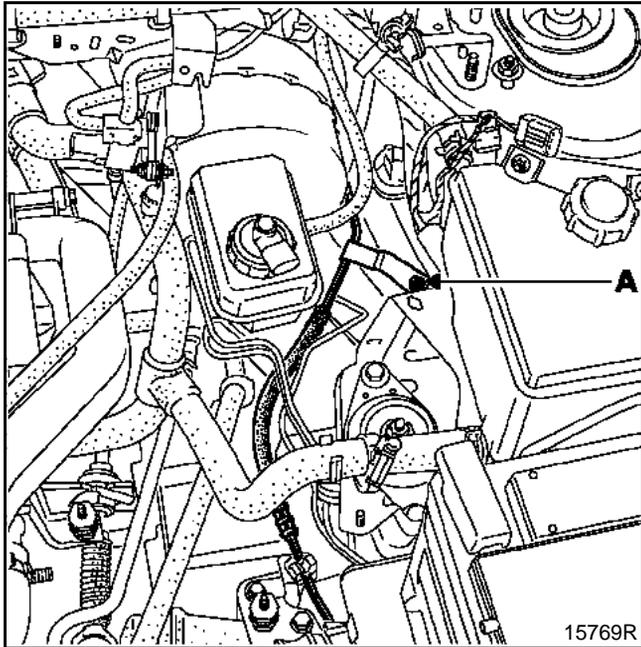
Bleed the brake fluid reservoir until the liquid level is under the transmitter supply port.

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

For better access to the transmitter, partially remove the expansion bottle and place on the engine (**SAFRANE G8T**).

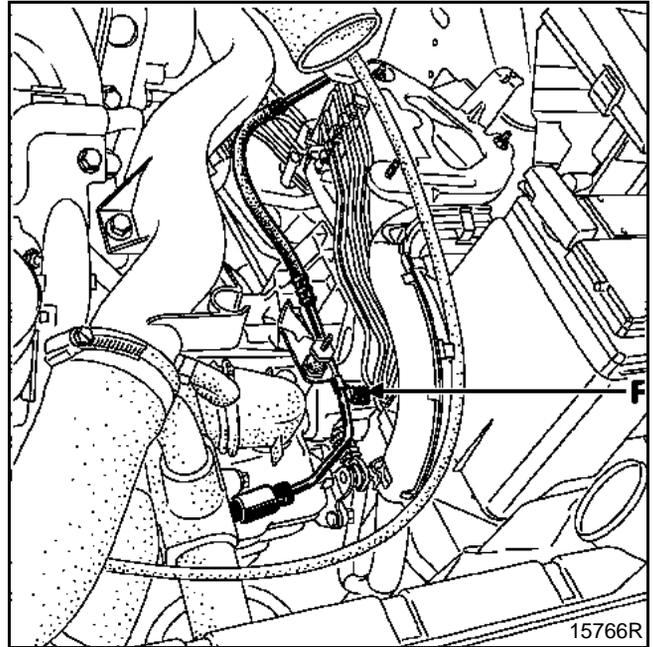
SPECIAL FEATURES LAGUNA - G8T ENGINE

Remove the transmitter-receiver connecting pipe mounting screw (A) on the body.



SPECIAL FEATURES SAFRANE - G8T engine

Remove the transmitter-receiver connecting pipe mounting bolt (F) on the gearbox mounting.



SPECIAL FEATURES OF THE SAFRANE - N7Q and N7U engines

Put the vehicle on a two post lift.

Remove:

- the engine undertray,
- the side left mudguard,
- the power steering pipes mountings in order to provide more freedom.

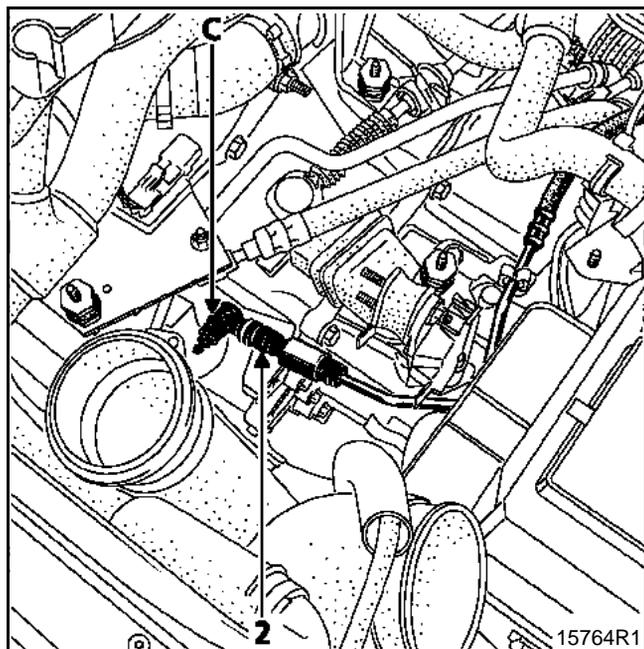
Clutch control pipes

ALL TYPES

Remove the transmitter-receiver connecting pipe mounting clip on the transmitter.

Place a cloth under the transmitter then disconnect the connecting pipe on the transmitter and position plugs at each port.

Disconnect the connecting pipe transmitter-receiver by releasing the clip (2) located on the union (C).



Place the plugs on the ports.

Gently remove the transmitter-receiver connecting pipe taking care not to damage anything.

REFITTING

Check the condition of the seals.

Refitting is the reverse of removal.

IMPORTANT:**When refitting:**

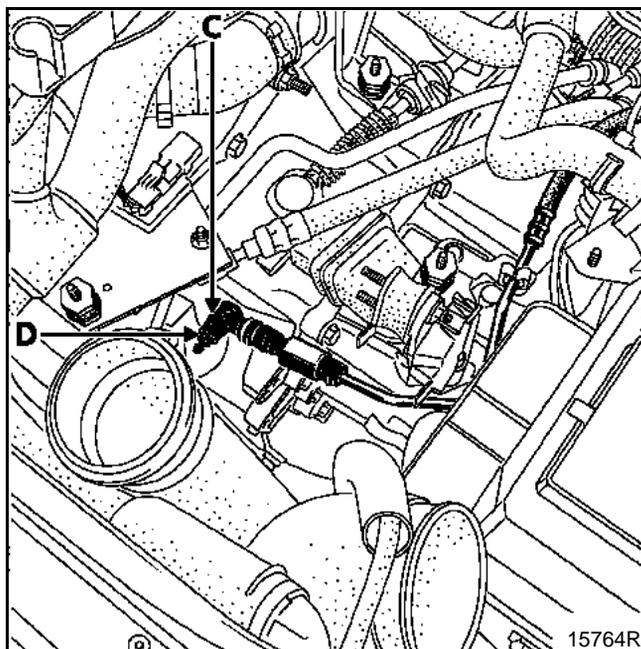
- do not damage the various pipes,
- take care to connect them correctly,
- position the various mounting clip correctly.

Add the brake fluid to the brake fluid reservoir.

Bleed the circuit using the bleed screw (D) located on the link on the receiver.



When bleeding, use a ring spanner to immobilise the rotating union (C) while tightening and loosening the bleed screw so as not to damage it.



Refill the brake fluid.

IMPORTANT: tighten the bleed screw to torque (1 daN.m).