

Operation number	DESCRIPTION
XB. 390	Recommended tools
XB. 390-000	Working on the hydraulic system - Precautions to take on refitting
XB. 390-00	Characteristics and special features of the source and reserve of pressure
XB. 390-0	Draining the hydraulic system. Checking the hydraulic units. <ol style="list-style-type: none"> I. Draining the hydraulic circuit. II. Checking the hydraulic units of the main circuit. III. Checking the hydraulic units of the power steering. IV. Checking a suspension sphere or an accumulator, off the vehicle. V. Pressure regulator test on bench.
XB. 391-1	Working on the source and reserve of pressure <ol style="list-style-type: none"> I. Removing and refitting : <ul style="list-style-type: none"> - A high pressure pump - A pressure regulator (<i>manual steering</i>) II. Removing and refitting : <ul style="list-style-type: none"> - A flow distributor III. Removing and refitting : <ul style="list-style-type: none"> - A pressure regulator } <i>power steering</i>



TOOLS AVAILABLE FOR SALE**4034-T : Fig. I**

Test bench for checking the hydraulic components.

3657-T. bis

Set of pipe connections to check the hydraulic circuits.

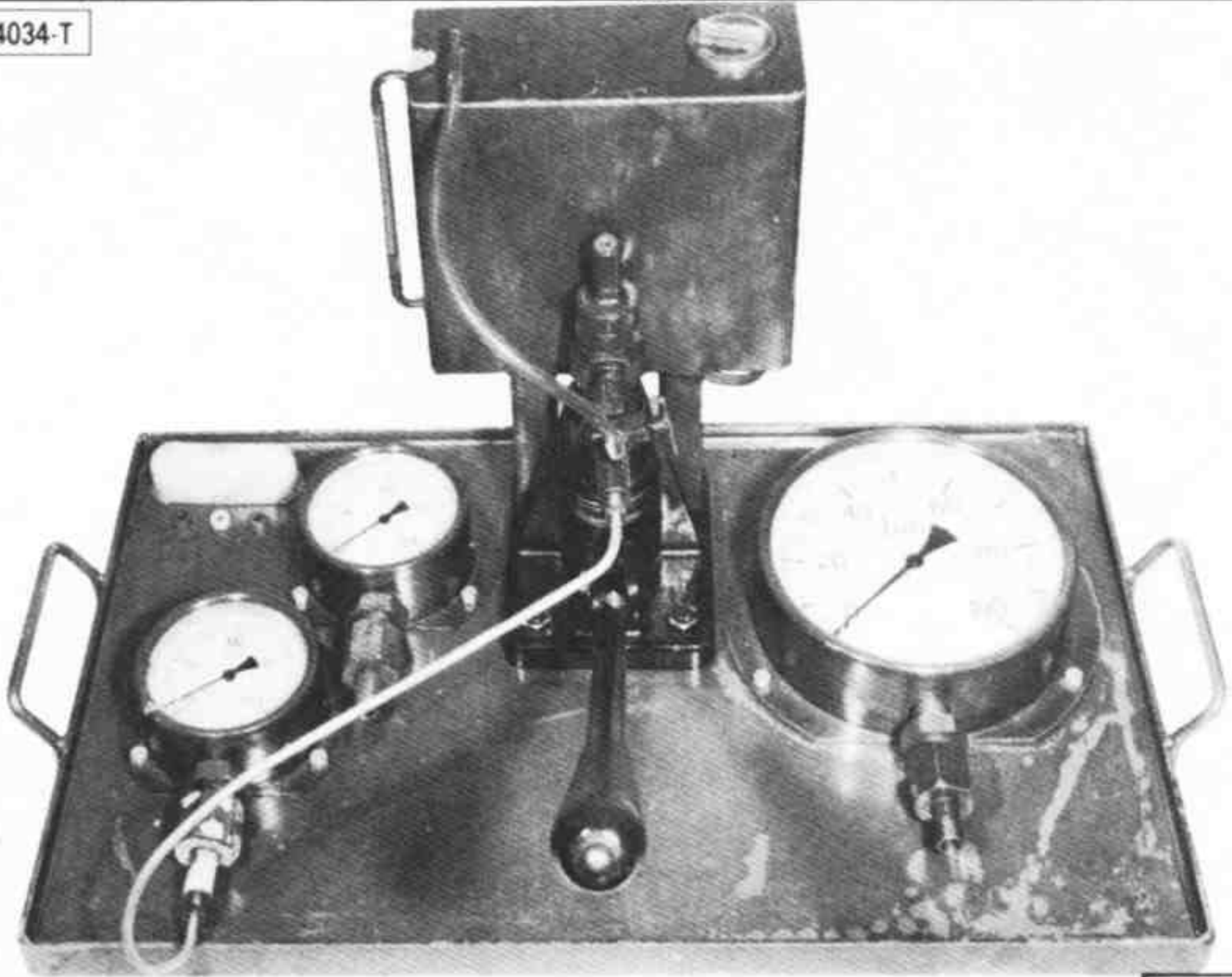
STANDARD SIZE TOOL**Chain wrench : Fig. II**

To remove the accumulator or a hydropneumatic sphere.

Checking the hydraulic system, on the vehicle :

Use a connecting pipe 4.5 mm dia., RP No. 95 596 578, pressure regulator to safety valve.

4034-T



82-1297



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CITROËN 

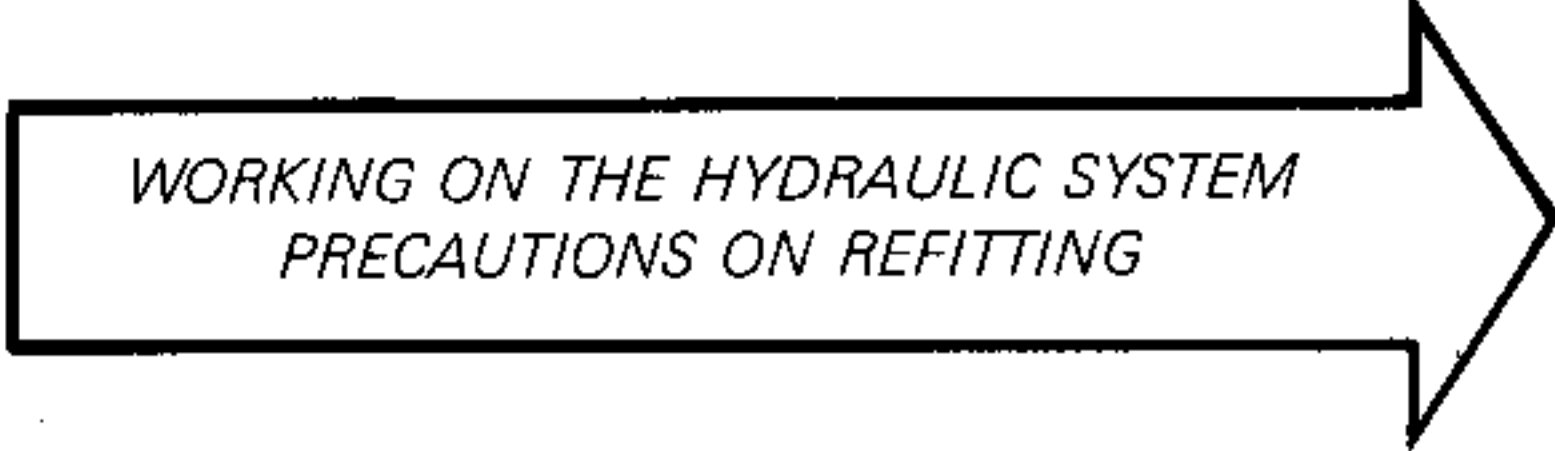
6

SOURCE AND RESERVE OF PRESSURE

XB
390-000

1

*WORKING ON THE HYDRAULIC SYSTEM
PRECAUTIONS ON REFITTING*



PRECAUTIONS TO BE TAKEN WHEN WORKING ON THE HYDRAULIC UNITS OR THE SYSTEM

The correct functioning of the entire system presupposes perfect cleanliness of the fluid and the hydraulic units. Stringent precautions must therefore be taken when working on the hydraulic system and during the storage of the fluid and components.

1. HYDRAULIC FLUID :

Mineral hydraulic fluid (LHM) is the only suitable type and must be used to the exclusion of all others in the hydraulic system of the car.

This LHM fluid is green in colour and similar to engine oil.

The use of any other would ruin the rubber rings and seals in the system.

2. RUBBER UNITS AND PARTS :

Suitable components are identified by their green colour and may only be replaced by genuine replacement components painted or marked in green.

All rubber components (joints, hoses, diaphragm, etc...) are of a special quality for use with LHM fluid and are identified by their white or green colour.

3. STORAGE :

Components must be stored full of fluid and blanked off. Like the piping they must be protected against shock and the ingress of dust.

Rubber tubing and joints must be stored away from dust, air, light and heat.

LHM hydraulic fluid must be stored in its original containers carefully sealed. We advise the use of one litre (for topping up) or five litre containers (for refilling) to avoid having to keep opened containers.

4. CHECKS BEFORE CARRYING OUT WORK :

Before working on the hydraulic system in case of correct operation, ensure the following :

a) *That the controls or the mechanical linkages of the units or the group of hydraulic units involved are not stiff in operation.*

b) and that the *HP circuit is under pressure*, as follows :

With the engine at idling speed :

- Unscrew the pressure-release screw on the pressure regulator by one turn to one turn and a half : a sound of leakage should be heard from the regulator.
- Retighten the release screw : cut-out must occur which results in a reduction in the running noise emitted by the H.P. pump.

If not, check in the following sequence :

- that there is sufficient fluid in the reservoir,
- that the reservoir filter is clean and in good condition,
- that the H.P. pump is primed and there is no air leak on the suction side of the pump,
- that the release screw of the pressure regulator is correctly tightened.
- that sealing ball (2) is in position (**see Fig. I and II, page 5**).

5. PRECAUTIONS TO BE TAKEN BEFORE WORKING ON THE HYDRAULIC SYSTEM :

- a) *Carefully clean* the area of work, the unions and the unit to be removed.
- Disconnect the lead from the negative terminal of the battery.
 - Only use petrol or lead-free petrol for cleaning.
- b) *Release the pressure* in the circuits.
- Place the vehicle in the « *low* » position.
 - Slacken the pressure regulator release screw (*by one turn to one turn and a half, do not remove the screw : the sealing ball (2), see Fig. I and II page 5, could get lost*).
 - Wait until the front of the car has reached the low position.

6. PRECAUTIONS TO BE TAKEN DURING REMOVAL.

- a) *Blank off the metal pipes* with plugs, and rubber tubes with round pins of the correct diameter.
- b) *Blank off the openings* of components with plugs of the correct diameter.

NOTE : Plugs and pins must be carefully cleaned before insertion.

7. CHECK OR TEST OF HYDRAULIC UNITS :

- Use *4034-T test bench* equipped and designed for use with LHM fluid.
- This bench is *painted green* and its accessories are marked in green.
- Never use the bench with another fluid or for testing components operating with another fluid (units of a « D » car using LHS 2 for instance).

NOTE : The « *Le Bozec* » pump used on test benches for checking DIESEL injectors can be resorted to for testing components operating with LHM mineral fluid provided that the bench is cleaned first.

8. PRECAUTIONS TO BE TAKEN DURING REFITTING :

- a) *Cleaning* :
- steel pipes must be blown through with compressed air,
 - rubber tubes and joints must be washed in petrol or lead-free petrol and then dried with compressed air,
 - hydraulic units must also be cleaned with petrol or lead-free petrol and blown through with compressed air.
- NOTE : Renew all joints and seals during refitting.

- b) *Lubrication* :
- Follow the indications as stated in the operations in the Manual.
 - Joints and internal parts must be lightly oiled before fitting (use mineral fluid LHM only).
 - If parts in contact with hydraulic units have to be greased use a mineral grease only (as employed for cardan shafts or bearings).

c) *Fitting :*

Only use joints of a quality compatible with LHM mineral fluid.

To connect a union, proceed as follows : **Fig. III**

- Position sleeve-seal « **a** » lightly coated with LHM fluid ; this sleeve must not reach the extremity of pipe « **b** ».
- Centre the pipe in the housing by lining it up with the axis of the hole, avoiding all stress. (Ensure that the end « **b** » of the pipe enters into the small bore « **c** »).
- **Start screwing in the union-nut by hand.** Slacken the unit fixings, *if necessary*, to make this operation easier.
- Tighten nut moderately : excessive force could cause a leak because of the deformation of the pipe.

Tightening torques :

3.5 mm dia. pipe	0.8 à 0.9 m.daN
4.5 mm dia. pipe	
6.0 mm dia. pipe	0.9 to 1.1 m.daN

The design of the various seals ensures that their sealing action increases with fluid pressure. **In the case of a leak, check the tightening torque of the union-nut. If the leak does not stop, replace the sleeve-seal.**

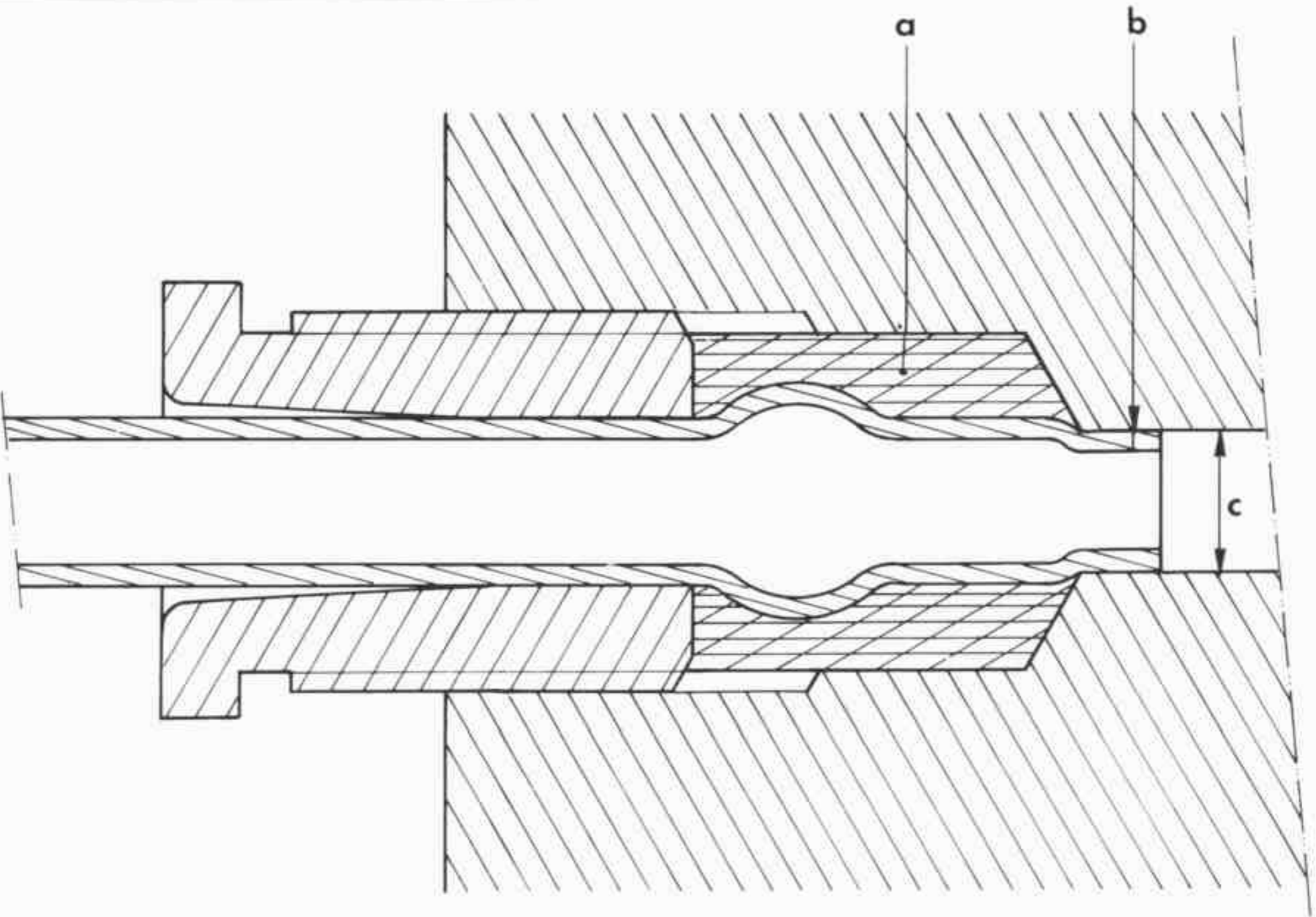
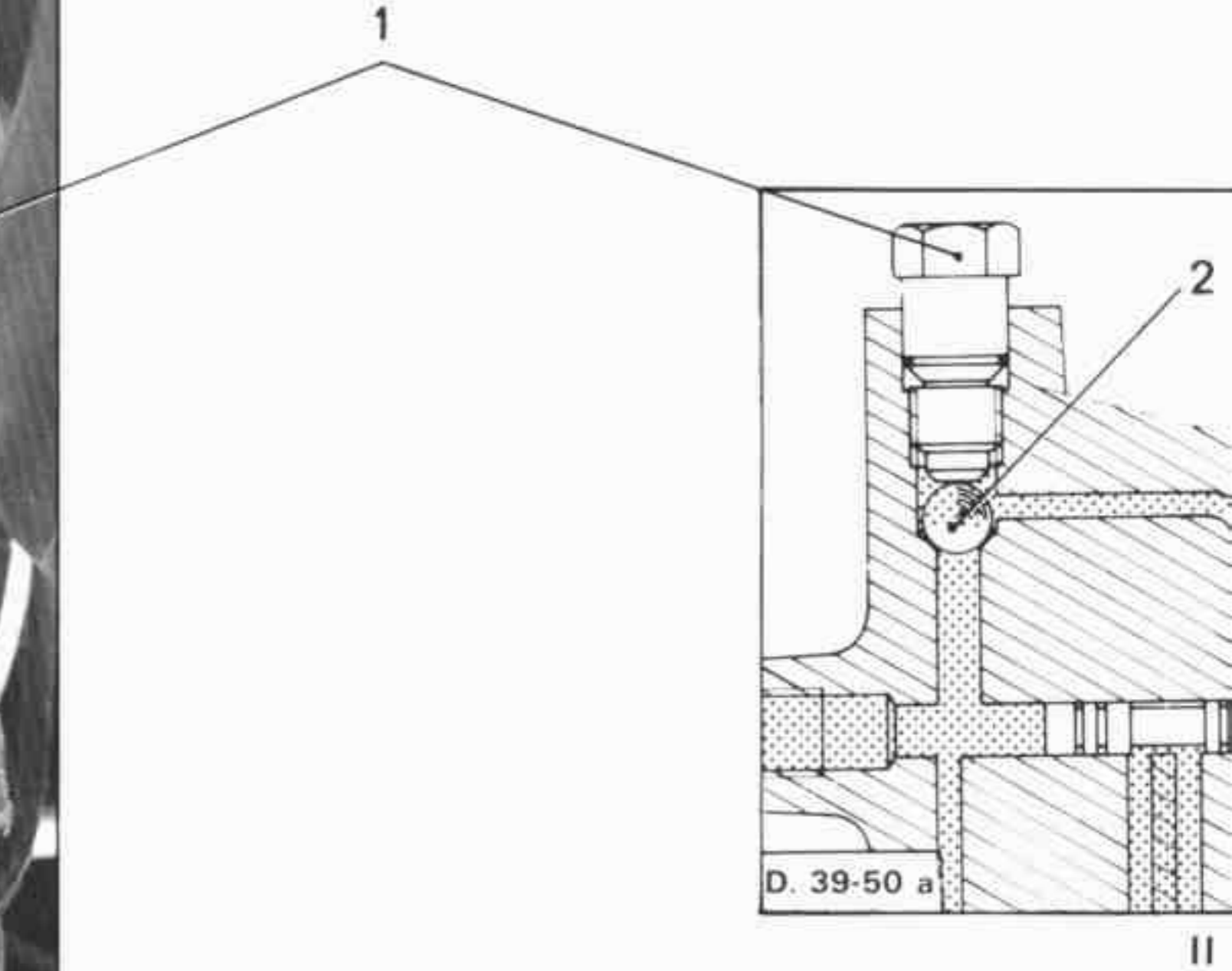
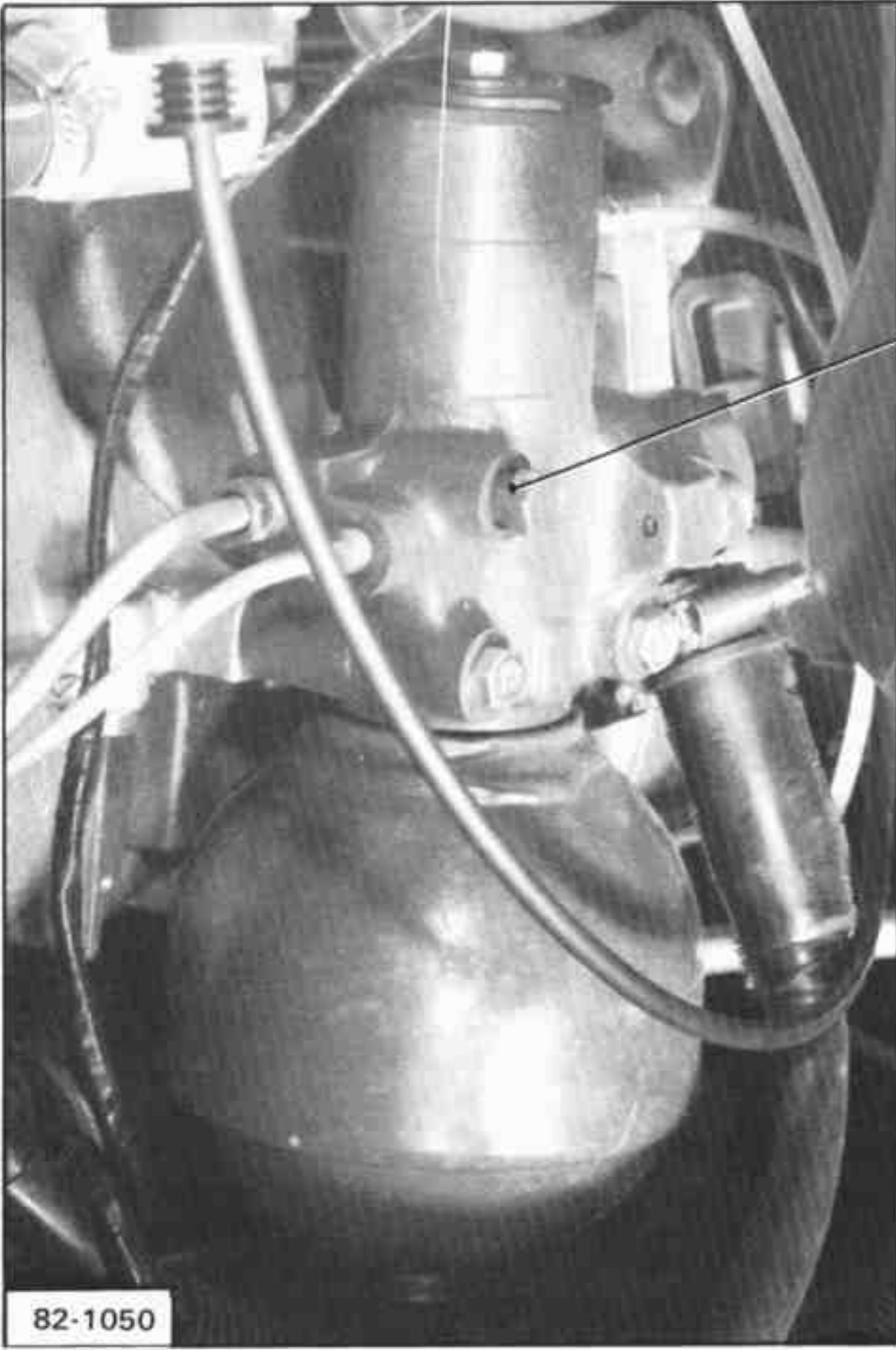
To connect a rubber tube, a rubber ring of suitable diameter has to be positioned between the tube and the hose clip.

9. CHECKS ON COMPLETION OF WORK.

On completion of work on hydraulic units or the system itself check the following :

a) *The union for leaks.*

b) *The clearance between the pipes :* **pipes must not touch one another or any component, nor may any other unit, whether fixed or movable, exert any stress on them.**



*CHARACTERISTICS AND SPECIAL FEATURES OF
THE SOURCE AND RESERVE OF PRESSURE*

● **Reservoir : Fig. I**

The reservoir is located in the right-hand front section of the engine compartment. Its breather, situated on the filler cap, is connected to a filter-capsule placed between the wheelarch and the suspension sphere.

Note : → 06/85 : the filter capsule was situated under the reservoir bracket.

TOTAL LHM
Green mineral hydraulic fluid
Capacity of the hydraulic circuit : 3.9 litres

The hydraulic fluid level should be checked with the system under pressure and the vehicle in the HIGH position.

Key to reservoir diagram :

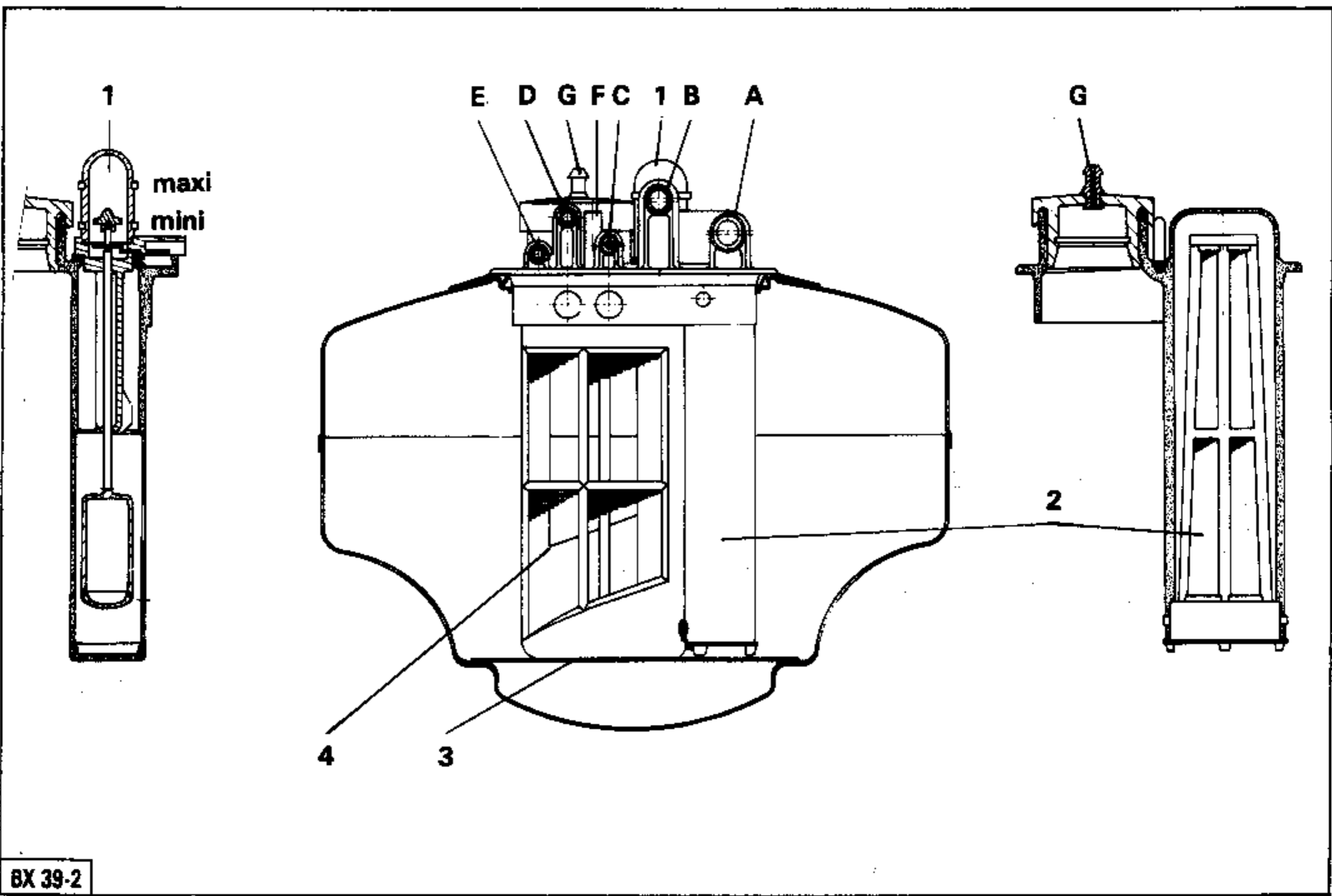
- 1 :** Fluid level indicator.
- A :** Suction line for HP pump.
- B :** Operational return from :
 - the pressure regulator of the manual steering,
 - the flow distributor of the power steering,
 - the power steering control valve,
 - the front and rear suspension height correctors.
- C :** Operational return from the brake control valve (lower end),
Overflow return from the brake control valve (upper end),
Operational return from the ABS hydraulic unit.
- D :** Overflow return from :
 - the security valve,
 - the front and rear suspension height correctors,
 - the pressure regulator of the power steering, and the operating cylinder (→ 1987 Model Year).
- E :** Overflow return from the front and rear suspension cylinders.
- F :** Venting pipes for the front suspension cylinders.
- G :** Venting of the reservoir and overflow return from the operating cylinder (1987 Model Year →).
- 2 :** Filter on HP pump suction line.
- 3 :** Deflector.
- 4 :** Overflow and return line filters.

● **High pressure pump : Fig. II**

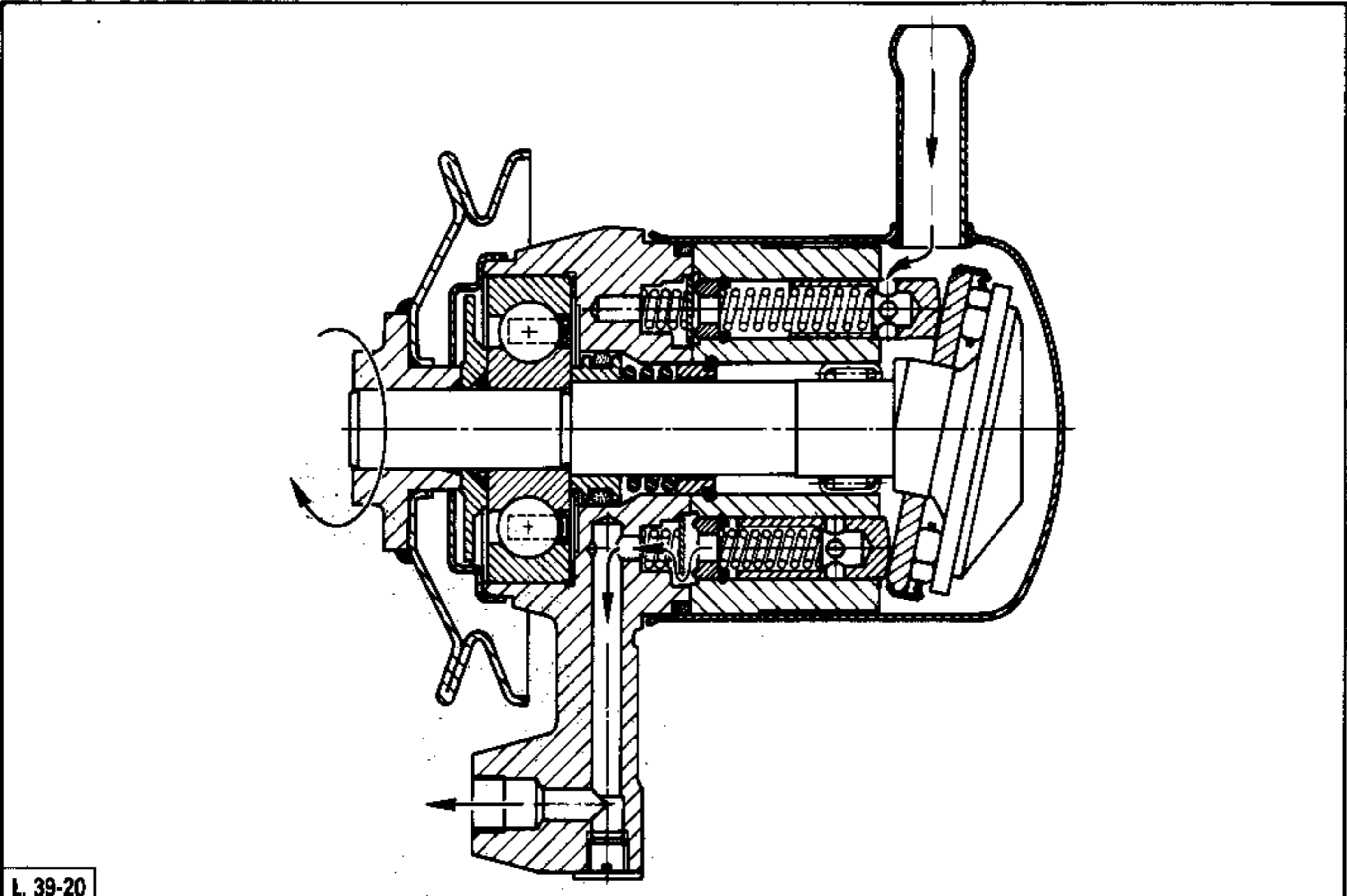
- Five-piston volumetric-type pump.
- The pump rotates at half engine speed.
- Output for each pump cycle (*for information*) : **4 cm³**
- Maximum pressure : there is no theoretical limit to the maximum pressure. Actually, the maximum pressure is limited by means of the pressure regulator. Priming the five-piston HP pump can only be carried out when the pressure-release screw of the regulator is **open**.

● **Driving pulley :**

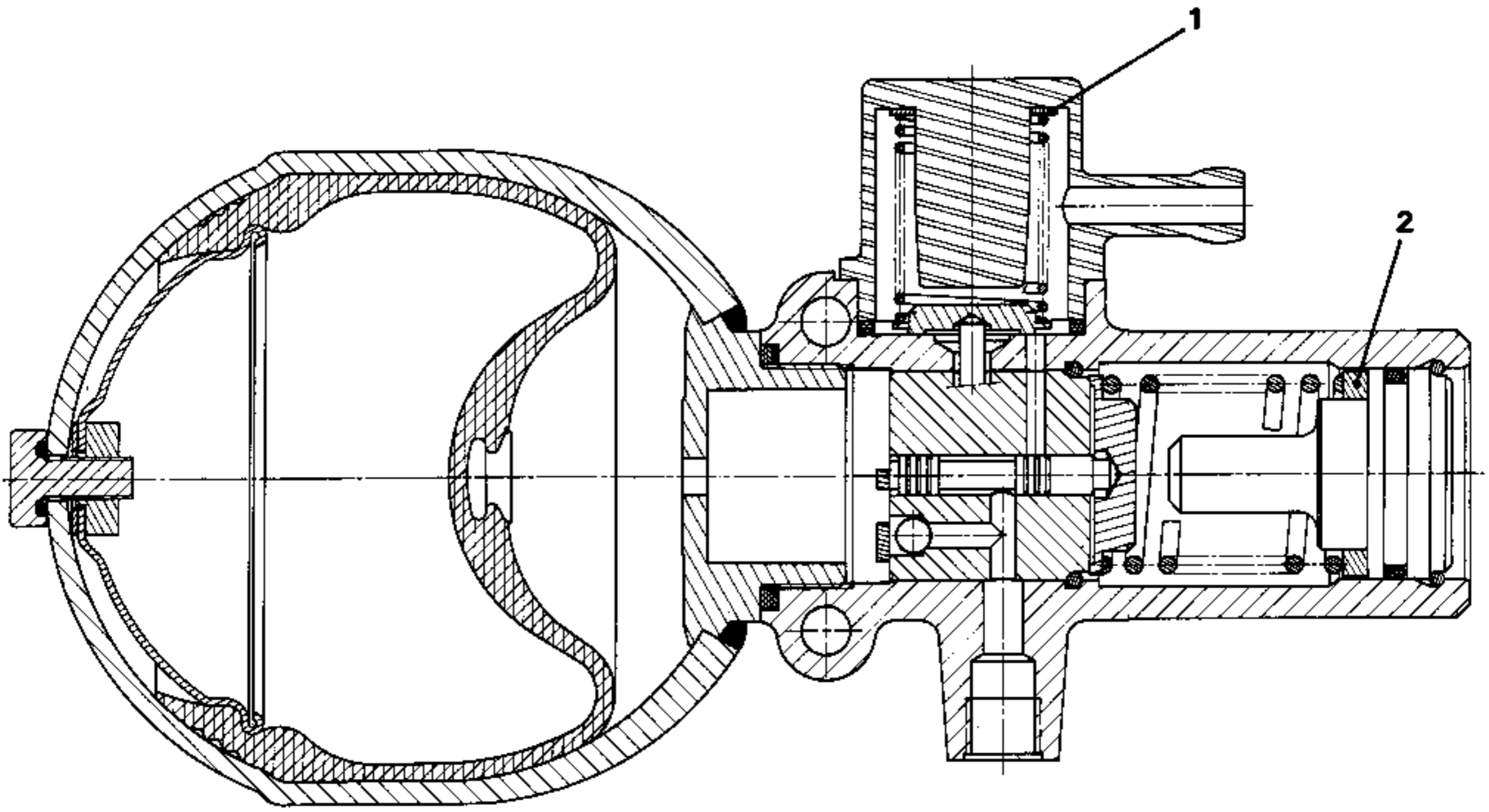
- Petrol BX : 120 mm dia.
- Diesel BX : 90 mm dia.
- GTI 16 valves : 100 mm dia.



BX 39-2

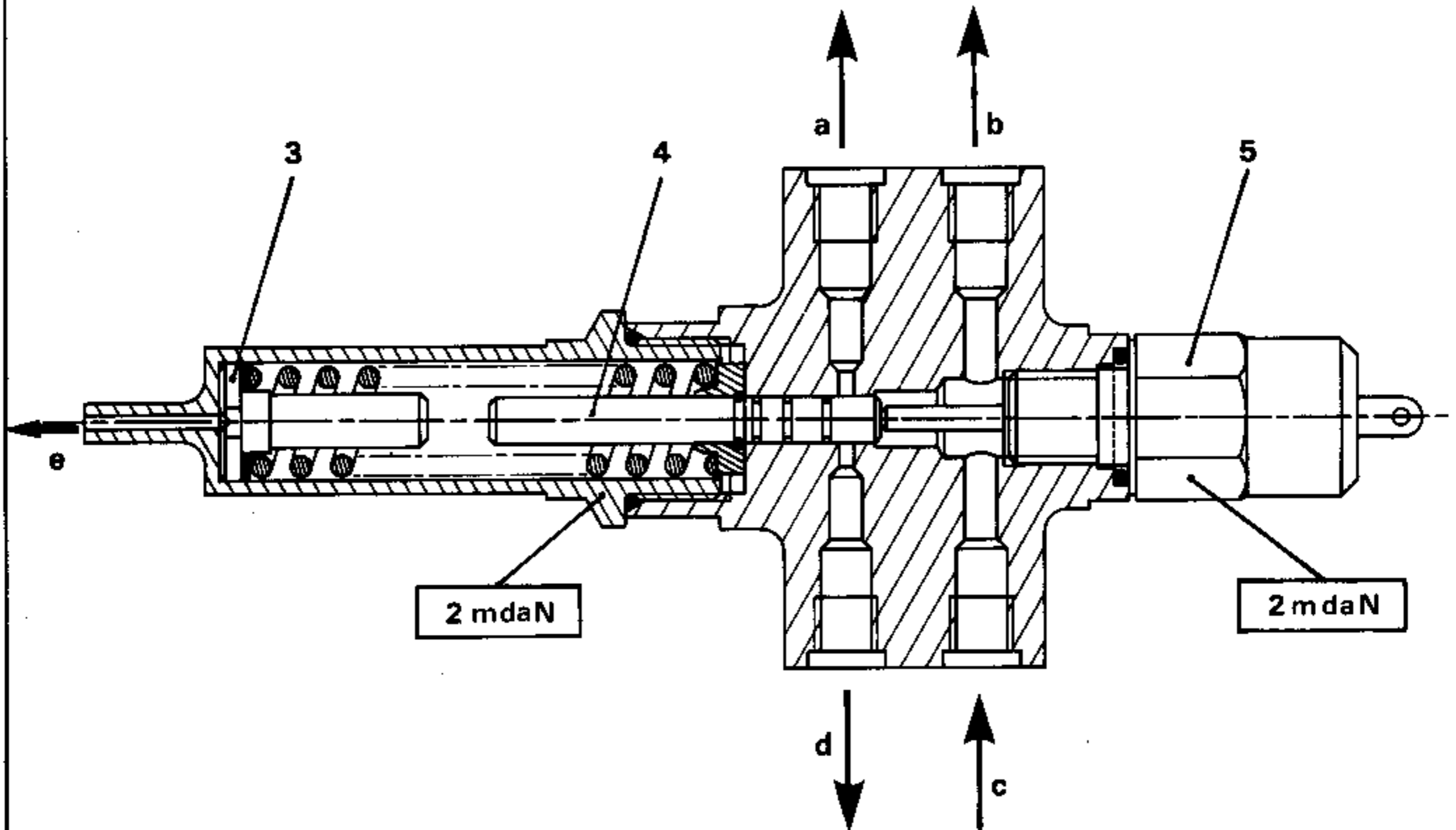


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G. 39-9

II



BX 45-9

● **Pressure regulator with pilot slide-valve : Fig. I**

- Cut-out pressure :	170 ± 5 bars
- Cut-in pressure :	145 ± 5 bars
- Thickness of shims (1) for cut-out adjustment :	0.3 mm
- Thickness of shims (2) for cut-in adjustment :	0.3 and 0.7 mm
- One 0.3 mm shim brings about a change in pressure by :	approx. 3 bars
- One 0.7 mm shim brings about a change in pressure by :	approx. 7 bars

● **Main accumulator : Fig. I**

- Capacity :	0.4 litres
- Calibration pressure :	62 ± $\frac{2}{32}$ bars

● **Security valve : Fig. II**

Calibration pressures for slide valve return spring (4)

- Pressure for isolation (<i>no supply to suspension at A and D</i>) :	80 bars min.
- Pressure for supply to suspension (<i>delivery at A and D</i>) :	80 to 100 bars

Key to diagram :

- a** : Supply to front corrector (outlet dia. 3.5)
- b** : Supply to brake control valve (outlet dia. 3.5)
- c** : Pressure supply (inlet dia. 4.5)
- d** : Supply to rear corrector (outlet dia. 3.5)
- e** : Security valve leakage return

(3) : Adjusting shims (*calibration of slide valve return spring*).

Thickness of adjusting shims : **0.9 mm**

(4) : Slide valve.

(5) : Fault detector (**mechanically operated through shifting of slide-valve (4)**).

HYDRAULIC CIRCUITS

Manual steering : D.M.

Power steering : D.A.

Piping identification :

Metal pipes _____
 Rubber pipes _____
 Plastic pipes _____

HYDRAULIC CIRCUITS	D.M.	D.A.
General circuit without ABS	p. 7	p. 10
General circuit with ABS	p. 8	p. 11
Return circuit to reservoir	p. 9	p. 12

Each hydraulic equipment bears the same number on the various diagrams. This number serves to indicate the starting point for each circuit on the return circuit diagrams.

Key to the circuits :

1 : Reservoir :

- A** : HP pump suction line.
- B** : Operational return :
 - from the DM pressure regulator.
 - from the DA flow distributor.
 - from the DA control valve.
 - from the front and rear suspension height correctors.
- C** : Operational return from the brake control valve (lower end).
 Overflow return from the brake control valve (upper end).
 Operational return from the ABS hydraulic unit.
- D** : Overflow return : - from the security valve.
 - from the front and rear suspension height correctors.
 - from the DA pressure regulator and the operating cylinder
 (→ 1987 Model Year)
- E** : Overflow return - from the front and rear suspension cylinders.
- F** : Venting pipe for the front suspension cylinders (venting).
- G** : Venting of the reservoir,
 Overflow return from the DA operating cylinder (1987 Model Year →).

2 : HP pump.

3 : DA flow distributor.

4 : Pressure regulator.

5 : Security valve.

6 : Set of operational and return pipes (on the lower front crossmember).

7 : Compensator - brake control valve.

8 : ABS hydraulic unit.

9 : LH front brake caliper.

10 : RH front brake caliper.

11 : Front suspension height corrector.

12 : LH front suspension cylinder.

13 : RH front suspension cylinder.

14 : Power steering control valve.

15 : Power steering assistance operating cylinder.

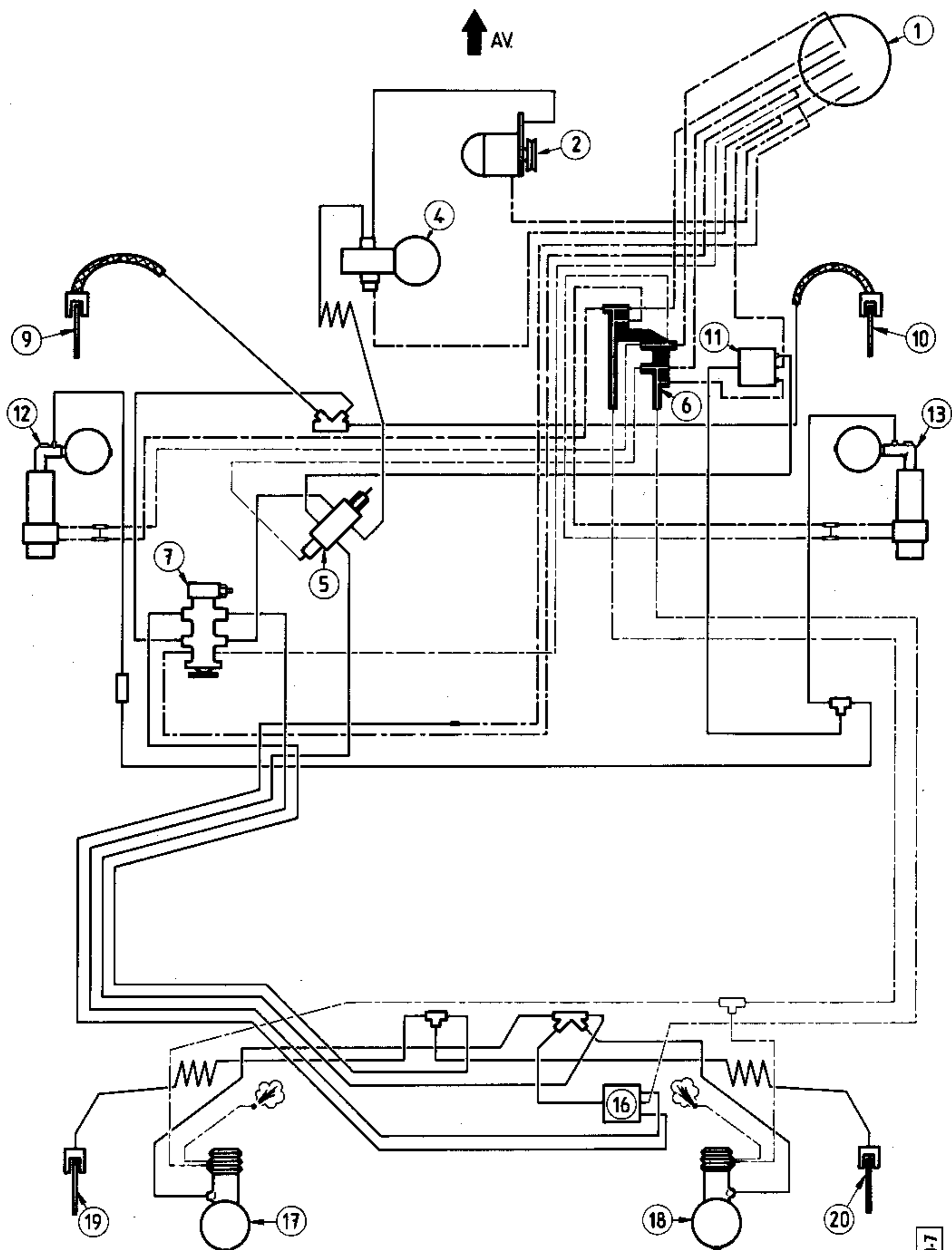
16 : Rear suspension height corrector.

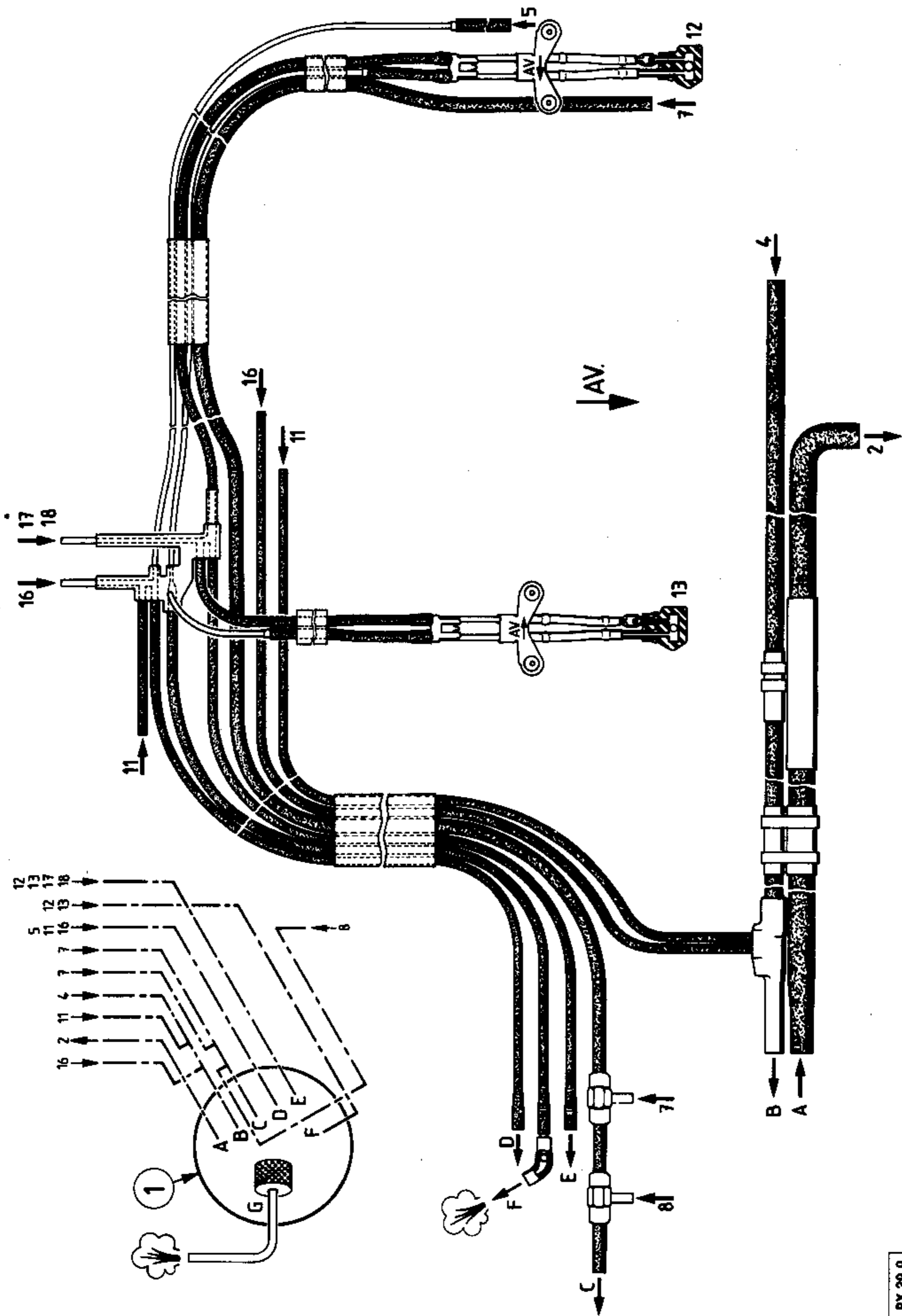
17 : LH front suspension cylinder.

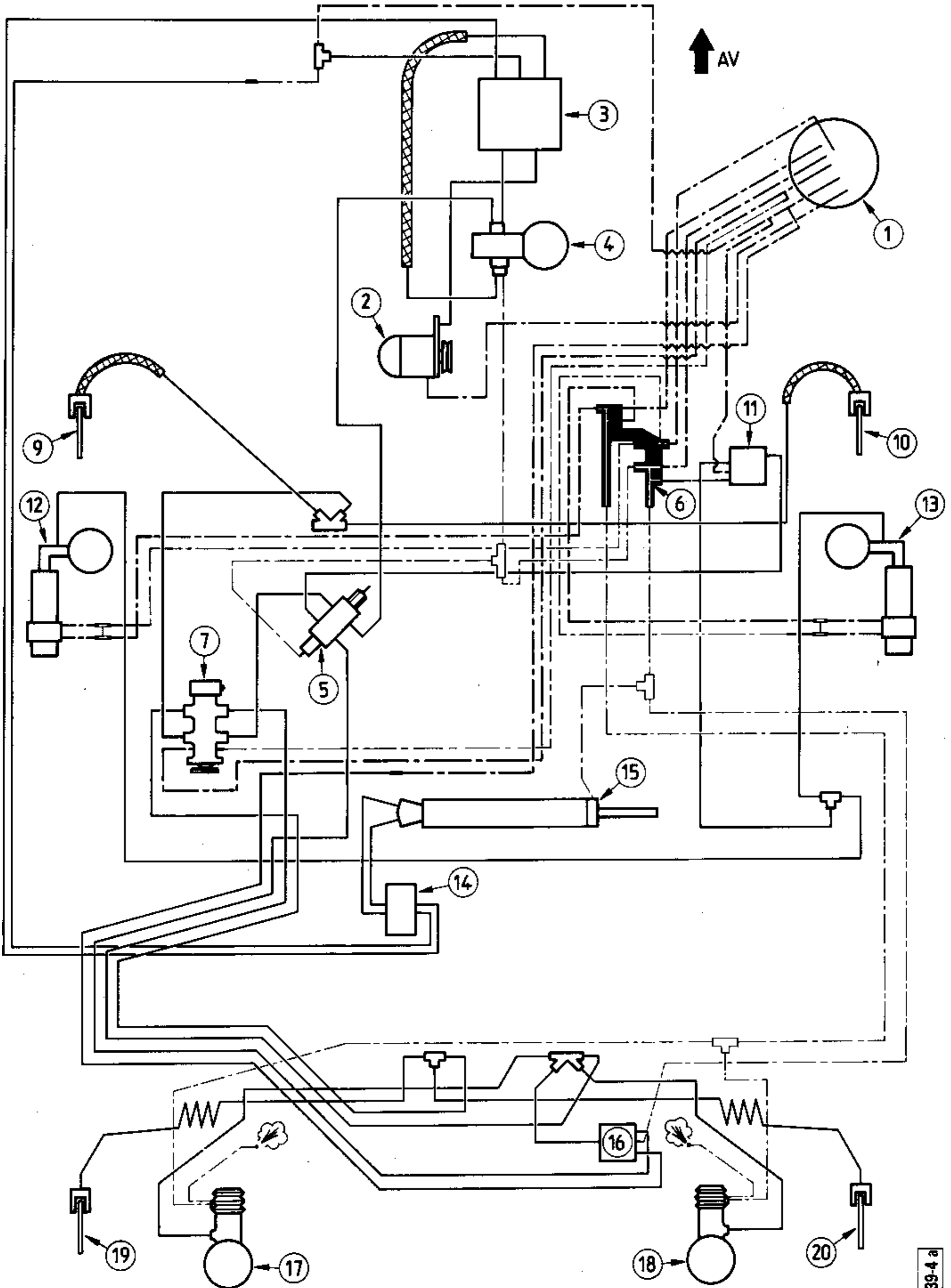
18 : RH front suspension cylinder.

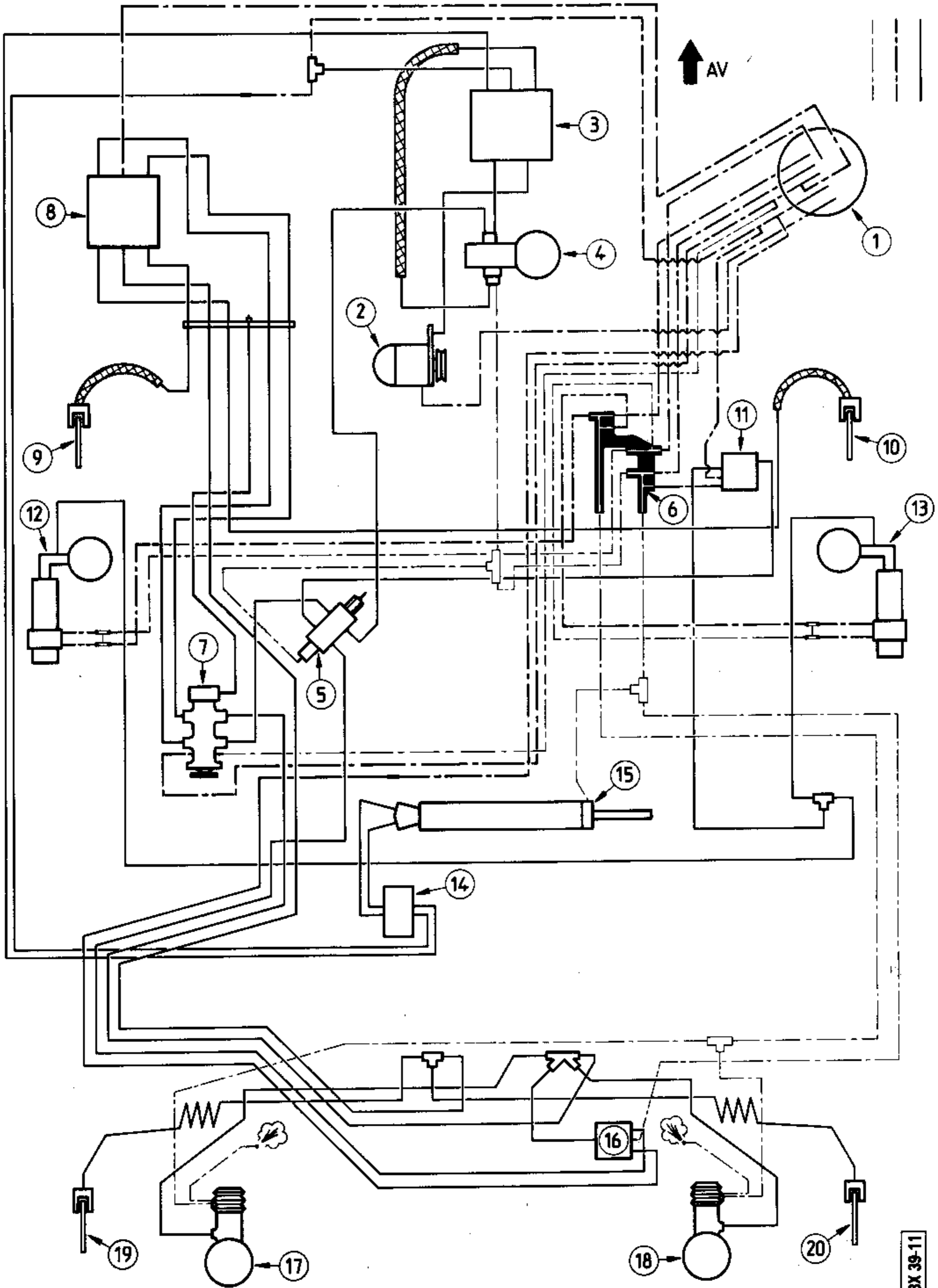
19 : LH front brake caliper.

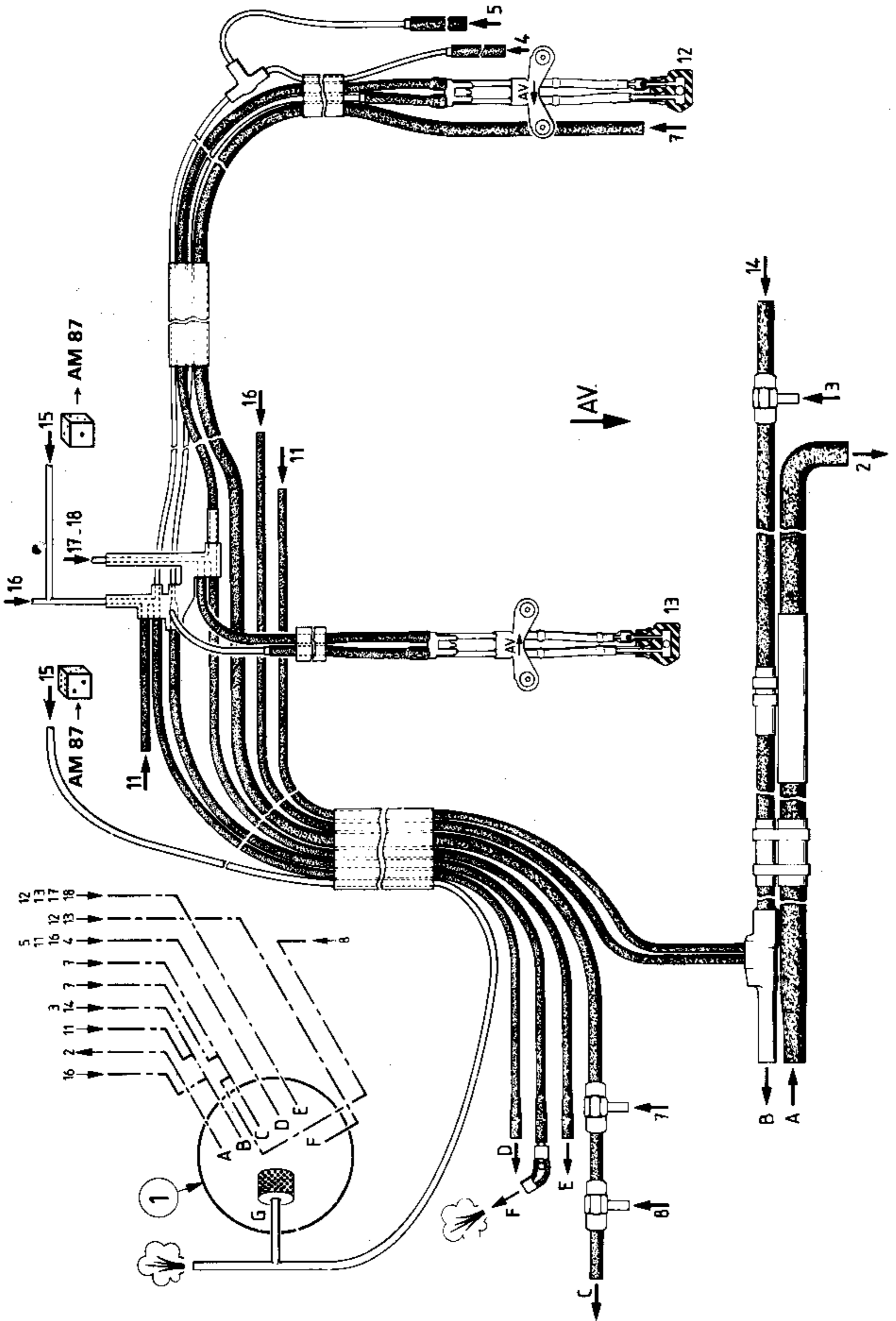
20 : RH front brake caliper.











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- DRAINING THE HYDRAULIC SYSTEM
 - CHECKING THE HYDRAULIC COMPONENTS

I – DRAINING THE HYDRAULIC CIRCUIT

DRAINING

Depressurize the circuits :

- Screw out the pressure regulator release screw (8) *by one turn.*
- Set the manual height adjustment control to the low position.
- Wait until the front of the car has reached the low position.

Remove reservoir securing pin (4).

Take out central unit (2).

Remove :

- HP pump suction filter (5), after having unclipped pin (6).
- return pipe (7) filter.

Remove the reservoir, empty it and disengage the deflector (*separation plate at bottom of the reservoir*).

Clean filters (5) and (7), reservoir and deflector *with petrol, then blow off with compressed air.*

Re-assemble the parts:

FILLING UP

Pour 2.5 litres, approximately, of LHM hydraulic fluid into the reservoir.

Prime the HP pump :

- Loosen the pressure regulator release screw (8).
- Fill up the pump with hydraulic fluid via the suction pipe (3).
- Start the engine.
- Quickly connect suction pipe (3) as soon as the pump seems to be priming.
- Tighten the pressure regulator release screw (8) when a pulsation is felt in return pipe (9).
- After the vehicle has been stabilized IN THE HIGH POSITION, top up the fluid level in the reservoir until the mobile index of level indicator is settled between the red marks.

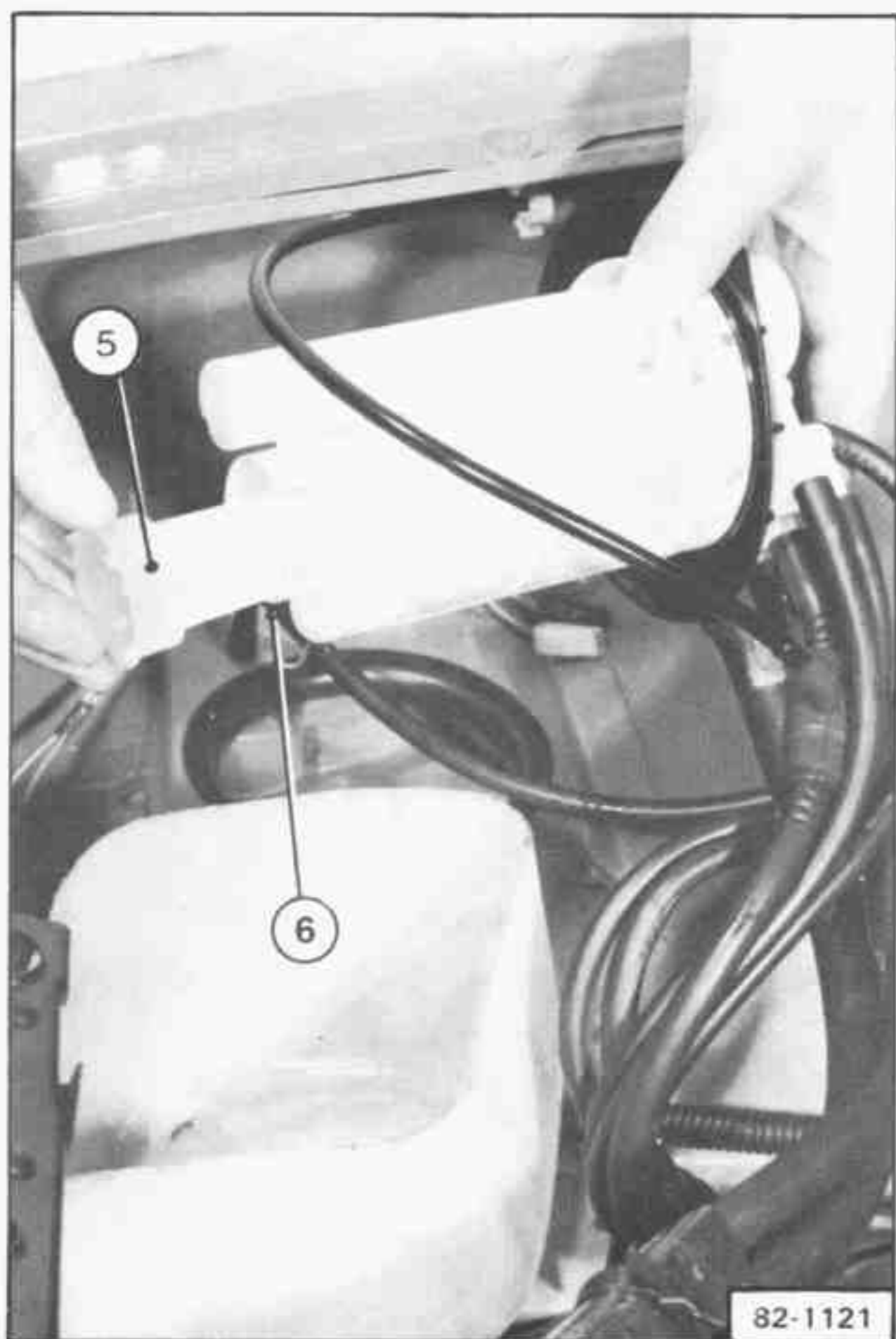


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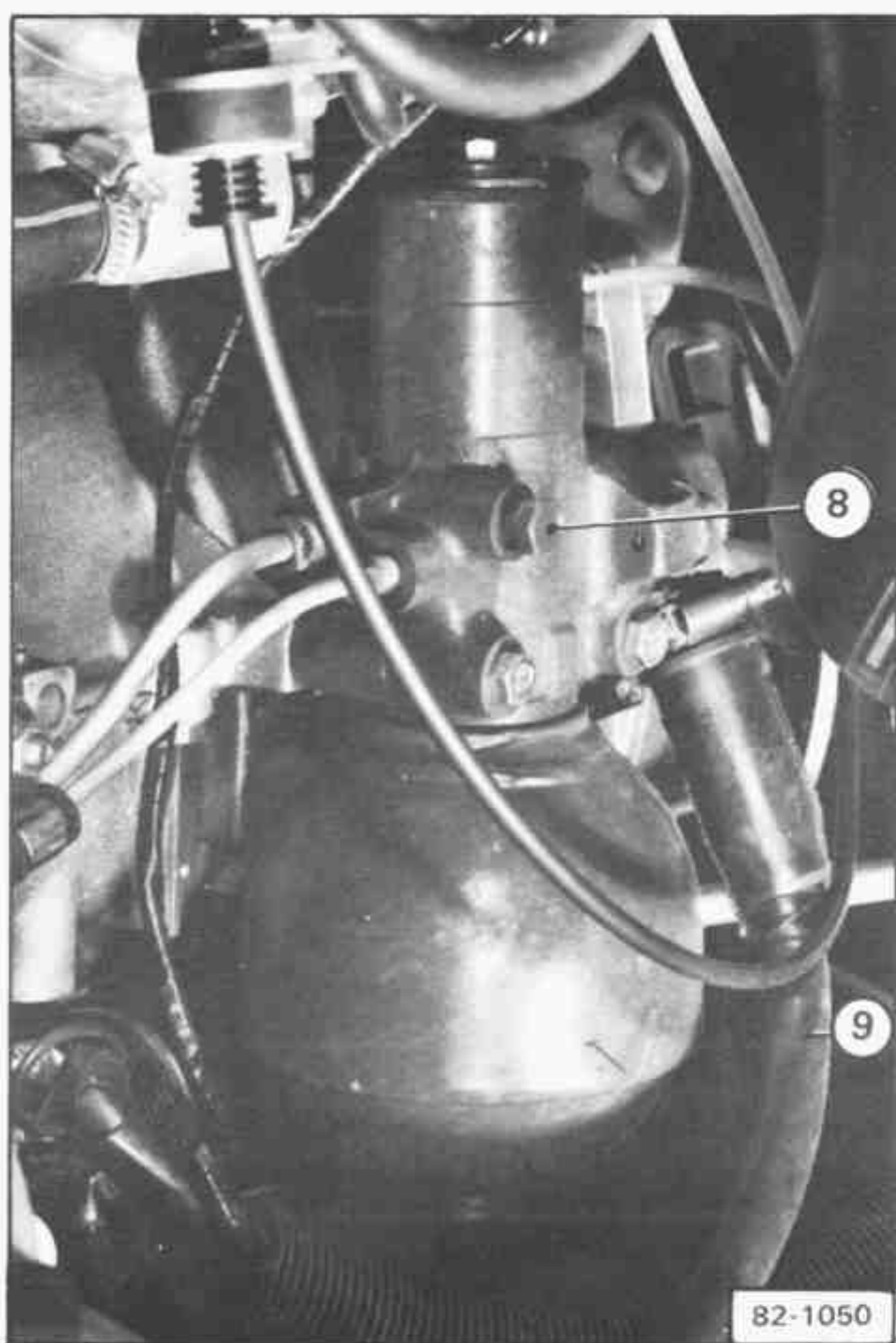
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III



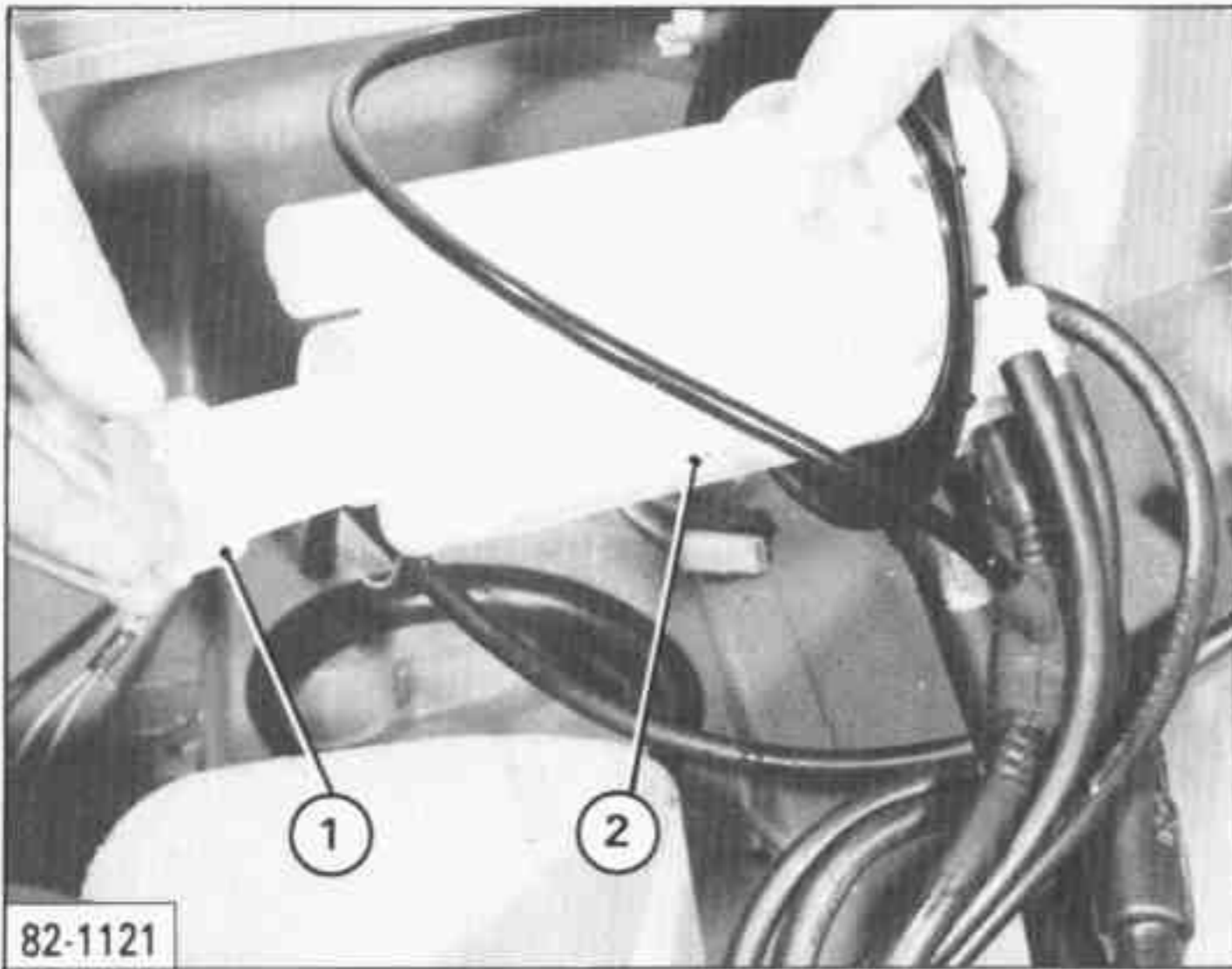
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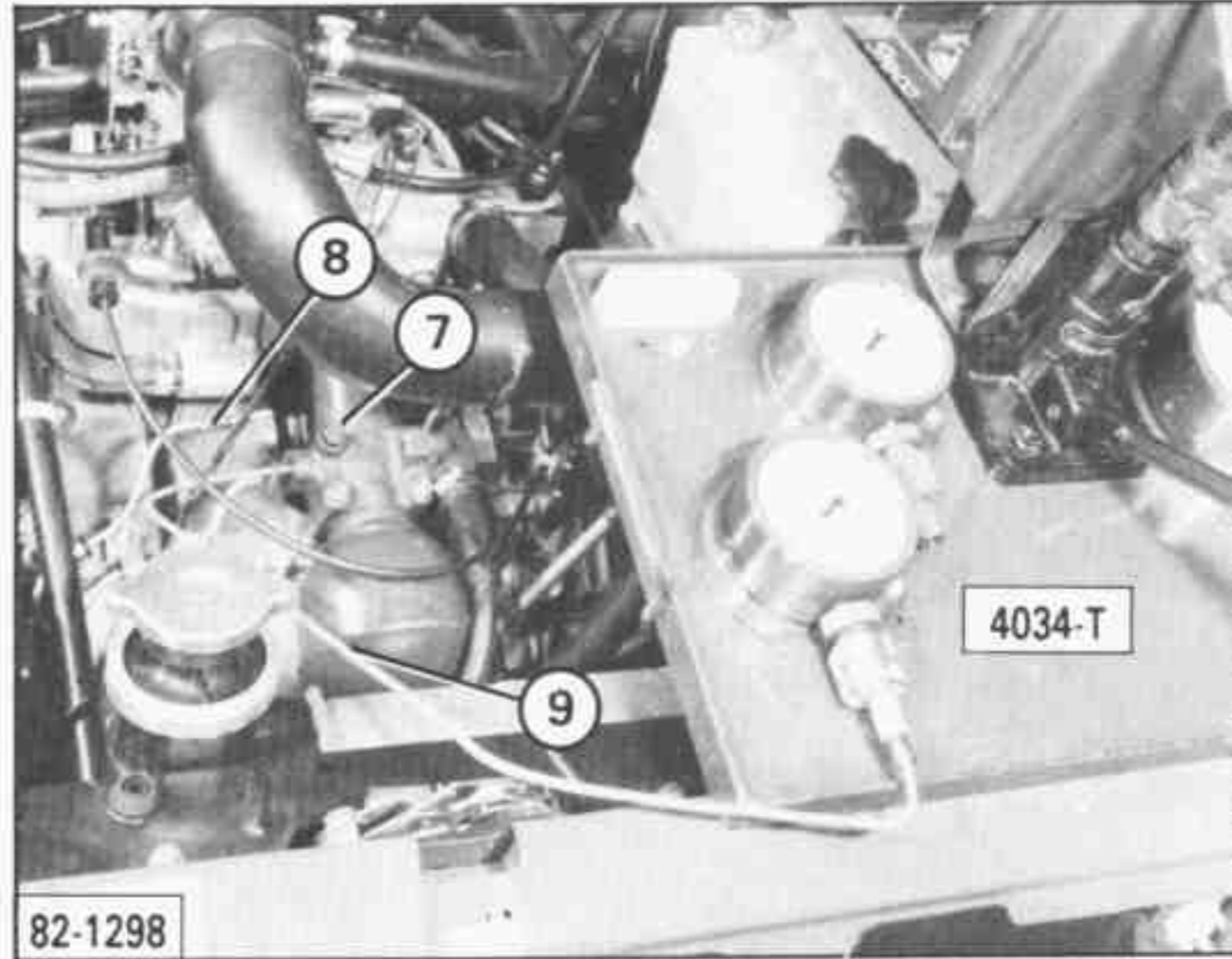


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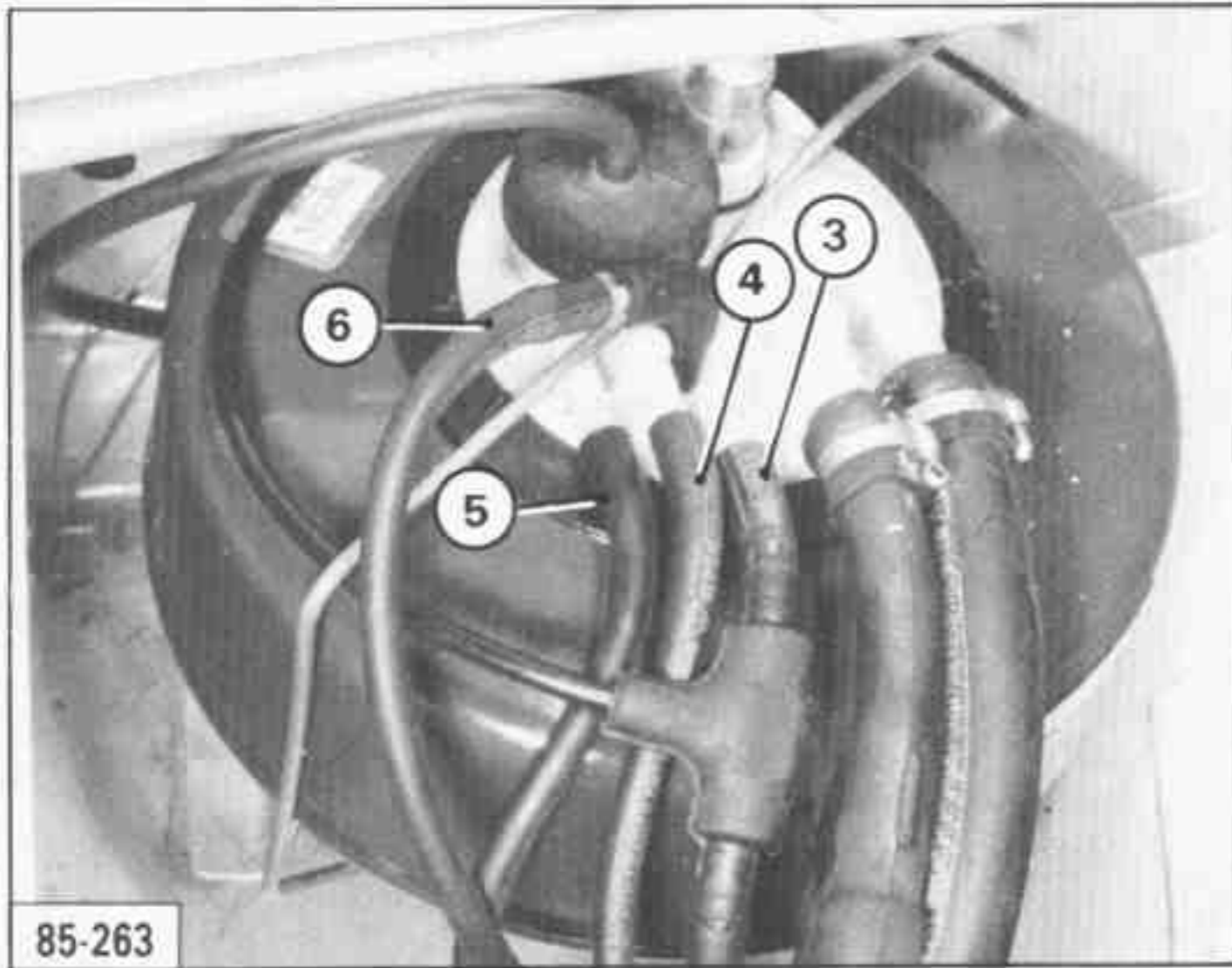
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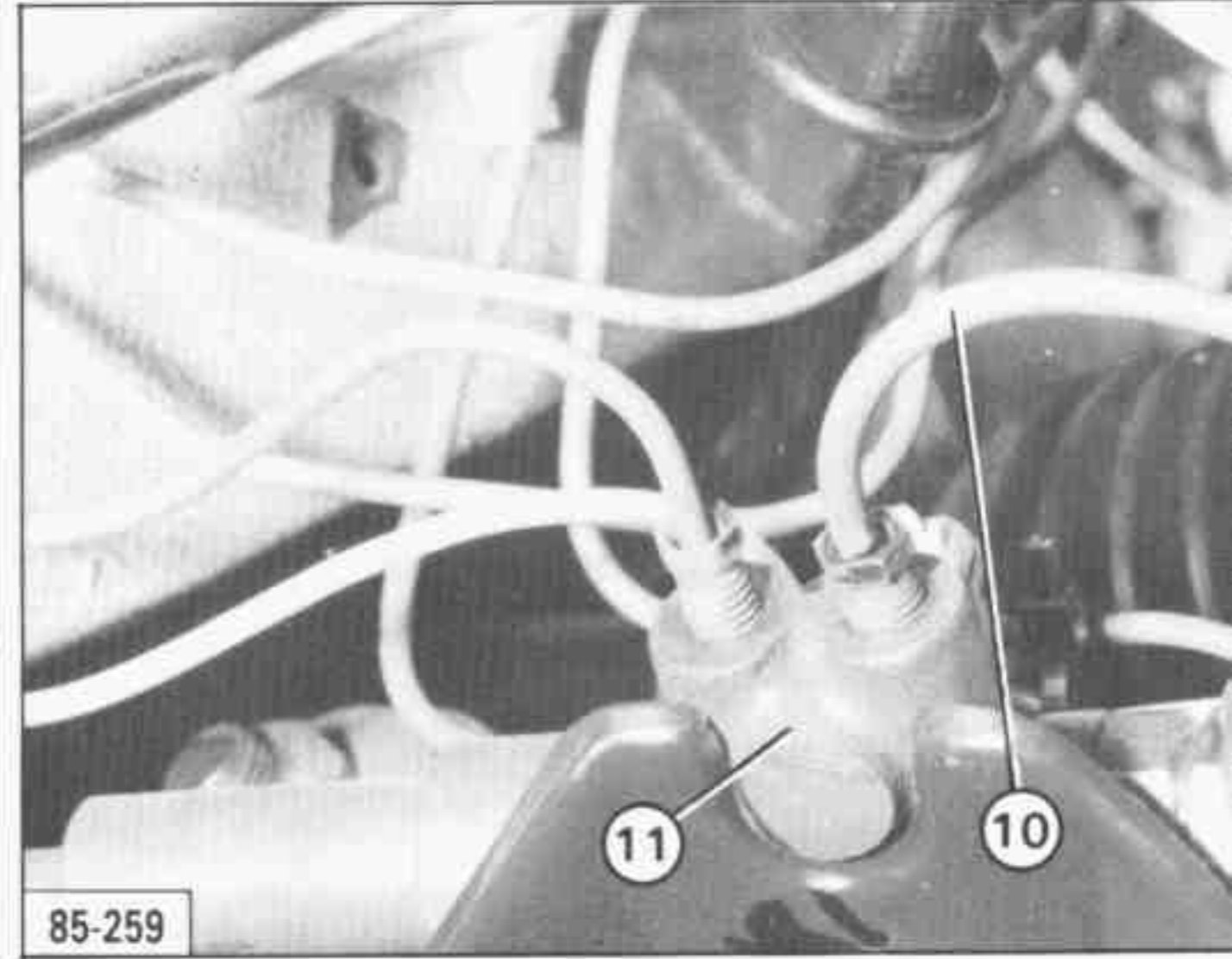
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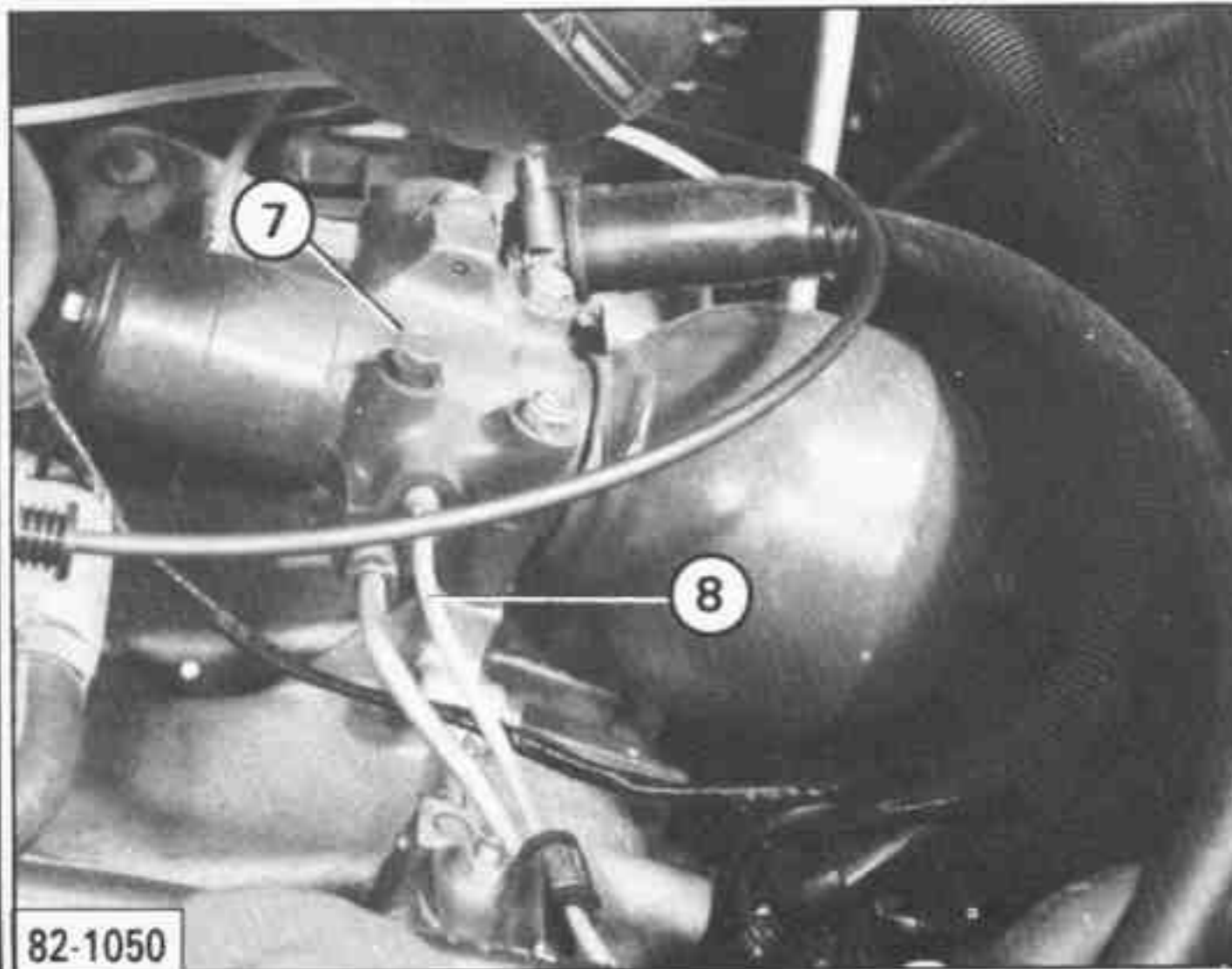
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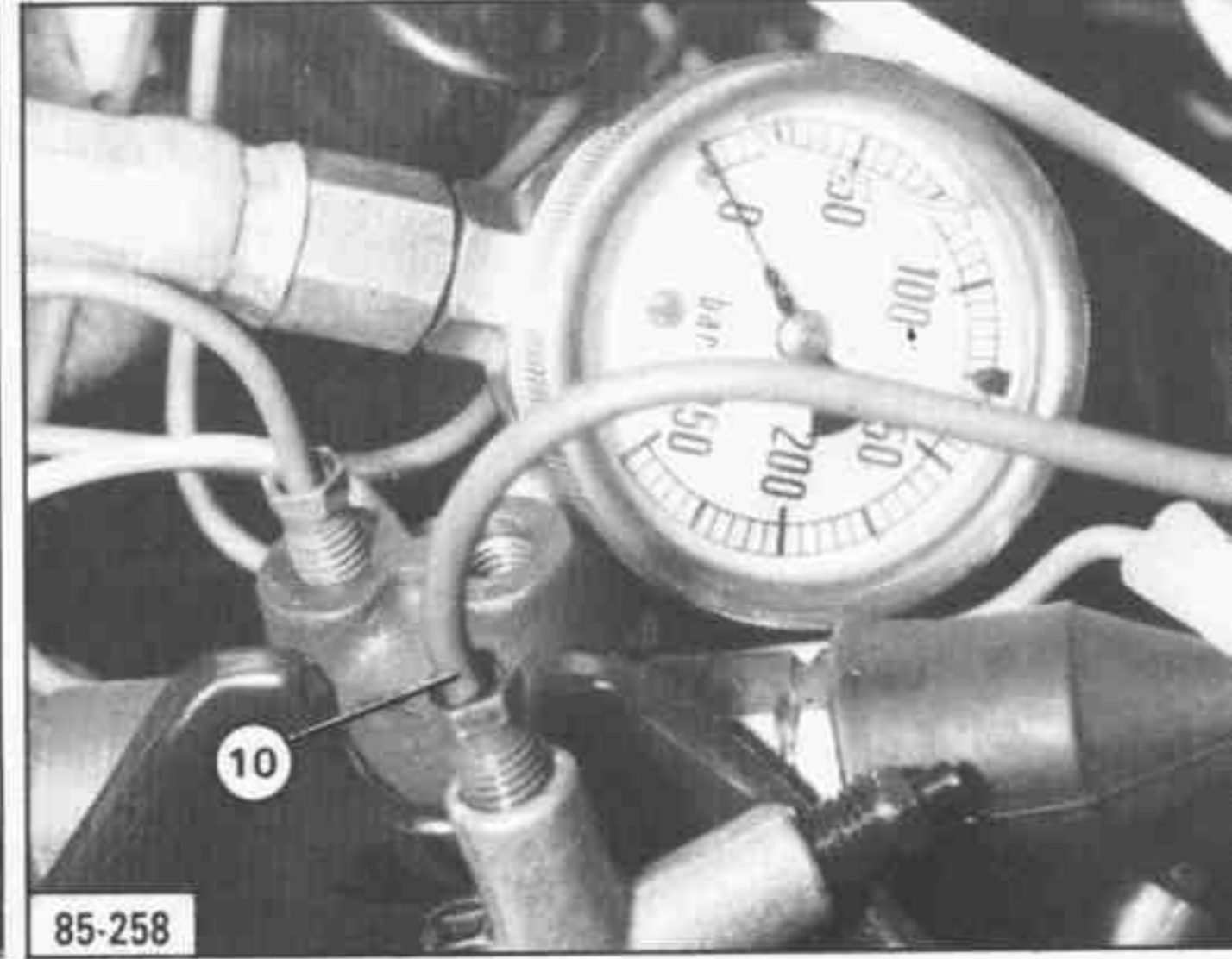
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85-259



82-1050



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I

IV

II

III

V

II – CHECKING THE HYDRAULIC COMPONENTS OF THE MAIN CIRCUIT

PREPARATION :

In order to facilitate the checking operations, place the vehicle over a car lift.

Ensure that the hydraulic reservoir filters (1) and (2) are clean, **Fig. I**.

Pressurize the hydraulic circuits ; set the height adjustment control to the "normal driving position", with the engine running.

Check the tank return pipes for leaks, **Fig. II** :

- (3) : operational and overflow return from the compensator-brake control valve.
- (4) : overflow return from the security valve, height correctors, pressure regulator (*power steering*).
- (5) : overflow return from the front and rear suspension cylinders.
- (6) : venting pipe for front suspension cylinders : *there is no oil dripping* ; if oil leaks, check the connection sequence at the front suspension cylinders outlet.

When the system is new : there is almost no fluid running out of returns (3), (4) and (5).

When testing, a seepage is allowed ; a fluid overflow requires replacing the part concerned.

If a return pipe leaks, check the outlet of the components concerned by this set of pipes.

INSPECTION :

Set the manual height control lever to the "low position".

Slacken the pressure regulator release screw (7).

Use check bench **4034-T** or a **0 to 250 bars** pressure gauge.

CHECKING THE PRESSURE REGULATOR AND THE MAIN ACCUMULATOR :

BX 14 TT, Fig. III and IV : Disconnect operational pipe (8) from the pressure regulator outlet. Couple up the pipe (9) connected with the pressure gauge, to the pressure regulator outlet.

BX 16 – BX 19 All types, Fig. V and VI : Disconnect feed pipe (10) from the security valve (11) and connect it up to the pressure gauge.

- *Checking the cut-out pressure :*

- Tighten the pressure regulator release screw (7) ; start the engine, with a slight acceleration.
- Examine the pressure gauge : when pressure stops rising, reading indicates the cut-out pressure : **170 ± 5 bars**

- *Checking the cut-in pressure :*

- When the cut-out takes place, slacken the pressure regulator release screw (7) a little.
- Maintain a slight engine acceleration.
- The pressure should drop gently, then rise as soon as the HP pump begins to operate.
- The minimum reading indicated on the pressure gauge corresponds to the cut-in pressure : **145 ± 5 bars**.

- *Checking the main accumulator :*

- When the cut-in or cut-out pressure has been reached, stop the engine.
- Slightly slacken the pressure regulator release screw (7) to create a slow and regular drop in pressure.
- When a certain reading is reached, the pressure drops suddenly : this reading is the inflation pressure of the main accumulator. This pressure must equal **62 ± $\frac{2}{32}$ bars**.

- *Checking the pressure regulator for leaks :*

- Tighten the pressure regulator release screw (7) ; start the engine.
- When the cut-out pressure is reached, leave the engine running for a few moments to stabilize the pressure, then stop the engine.

- Check the pressure gauge ; note the drop in pressure *for a period of 3 minutes*. If the drop exceeds by 10 bars the cut-in pressure reading, the pressure regulator is defective.

Note. D.A. (Power steering) : There should not be any fluid overflow at the plastic overflow return pipe, except seepages.

CHECKING THE SECURITY VALVE, Fig. I

Use hydraulic test bench **4034-T**.

Slacken the pressure regulator release screw.

Disconnect the feed pipe (2) from the security valve (3).

Couple up test bench **4034-T** to the security valve, using pipe (4).

Set the manual height control lever to the "*NORMAL DRIVING*" position.

- Turn off the tap ; operate the test bench pump until the pressure stabilizes : the reading indicated on the pressure gauge shows that the slide valve starts moving.

This pressure should be between **80 and 100 bars**.

Set the manual height control lever in the "*LOW*" position.

- Switch ignition on, examine the hydraulic fluid warning lamp located in the instrument panel.
- Slowly actuate the test bench pump : the hydraulic fluid warning lamp should go out when the reading indicated on the pressure gauge exceeds the previous reading by 5 bars.
- Before carrying out any operation on the pressure gauge (1), ensure that it is not the oil level switch, represented by the *same warning lamp* on the dashboard, which is concerned.

CHECKING THE FRONT SUSPENSION, Fig. II

Utilize hydraulic test bench **4034-T**.

Slacken the pressure regulator release screw.

Set the manual height control lever to the "*LOW*" position.

Disconnect feed pipe (6) from the suspension cylinder.

Connect the hydraulic test bench to the suspension cylinder via pipe (5).

Turn off the tap and operate the test bench pump until the pressure has settled : the reading indicated on the pressure gauge corresponds to the pressure of the hydropneumatic sphere. This pressure should be :

$55 \pm \frac{5}{10}$ bars.

Note the drop in pressure for the next *3 minutes* ; a drop in pressure exceeding 10 bars means that a cylinder is leaking.

Carry out the same testing operation with the other front cylinder.

CHECKING THE REAR SUSPENSION, Fig. III

Use hydraulic test bench **4034-T**.

Slacken the pressure regulator release screw.

Set the manual height corrector lever to the "*LOW*" position.

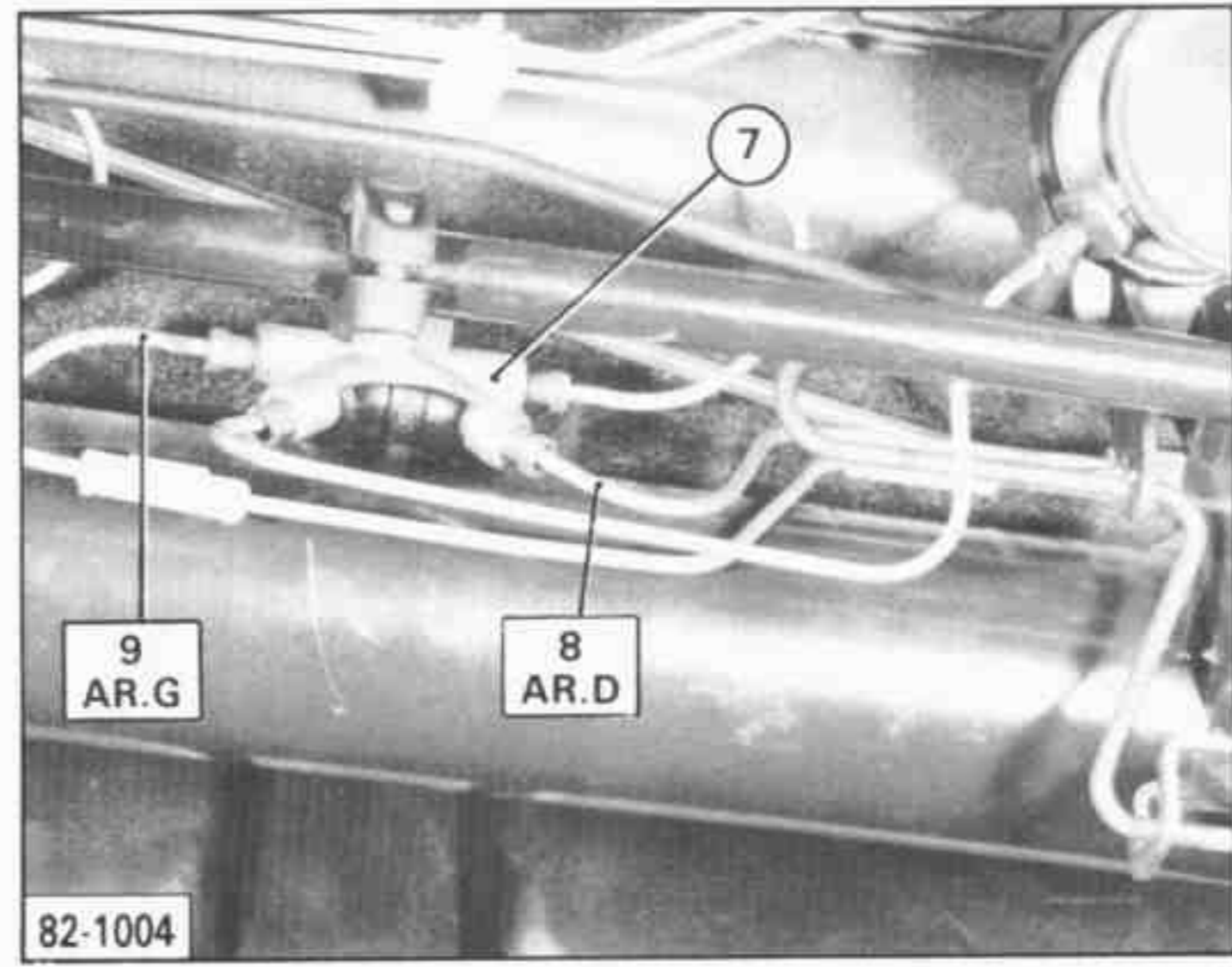
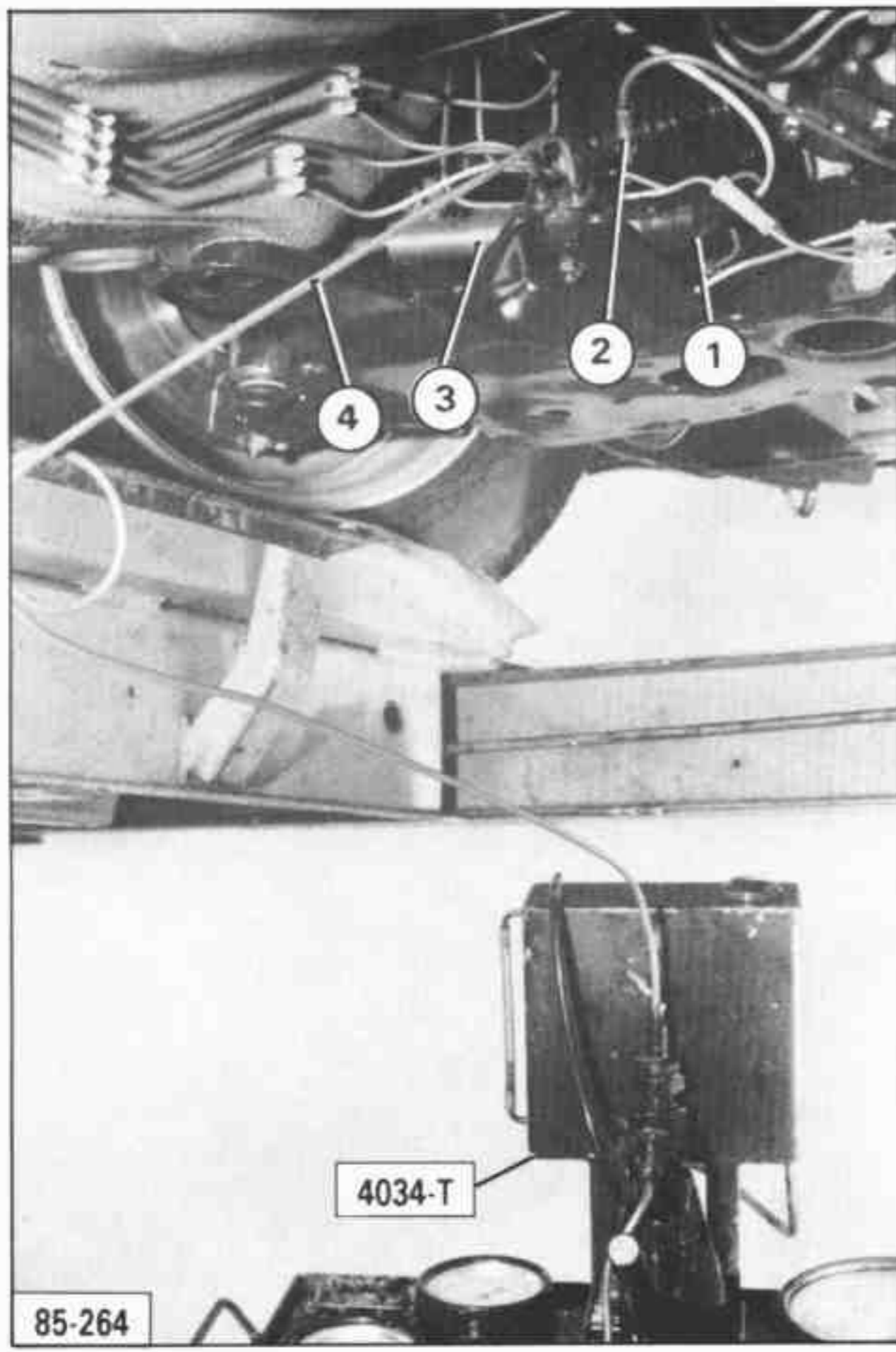
Disconnect from the 4-way union (7), the feed pipe (8) of the RH rear cylinder.

Couple up the hydraulic test bench with feed pipe (8).

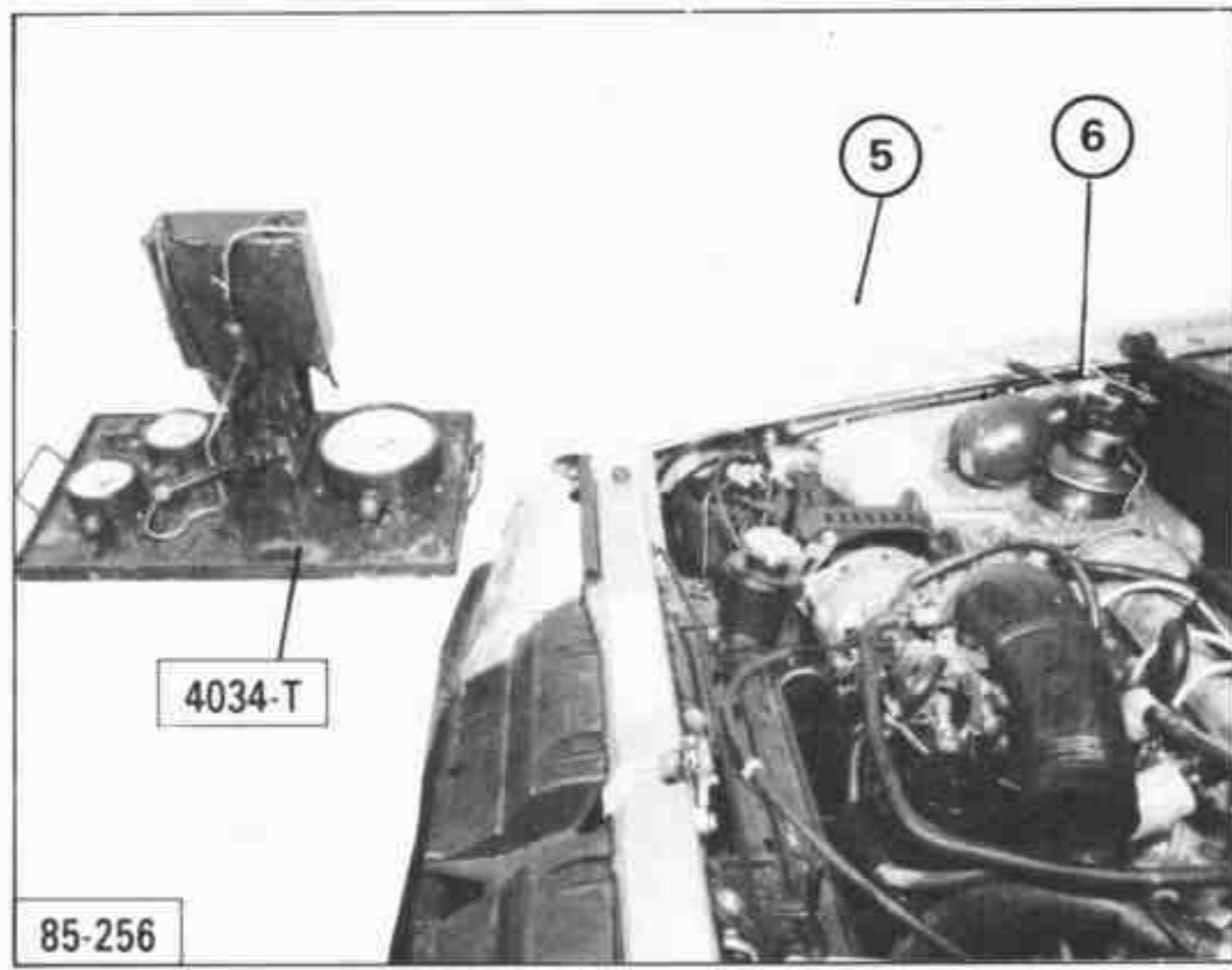
Turn off the tap. Operate the test bench pump until the pressure stabilizes. The reading indicated on the pressure gauge corresponds to the pressure of the hydropneumatic sphere. This pressure must be : **$40 \pm \frac{5}{10}$ bars.**

Note the drop in pressure for a period of time of *3 minutes* ; if the drop in pressure exceeds 10 bars, the cylinder is leaking.

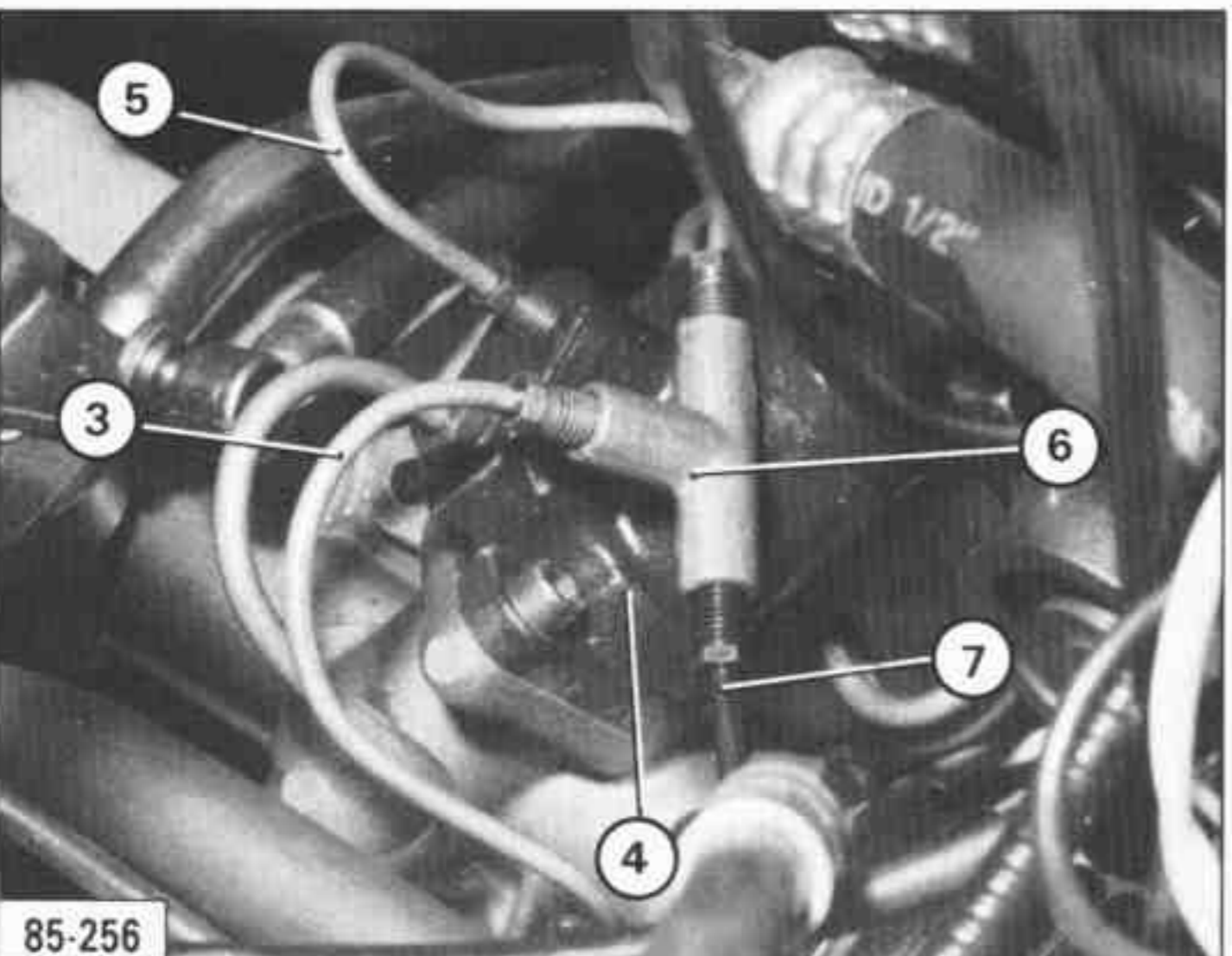
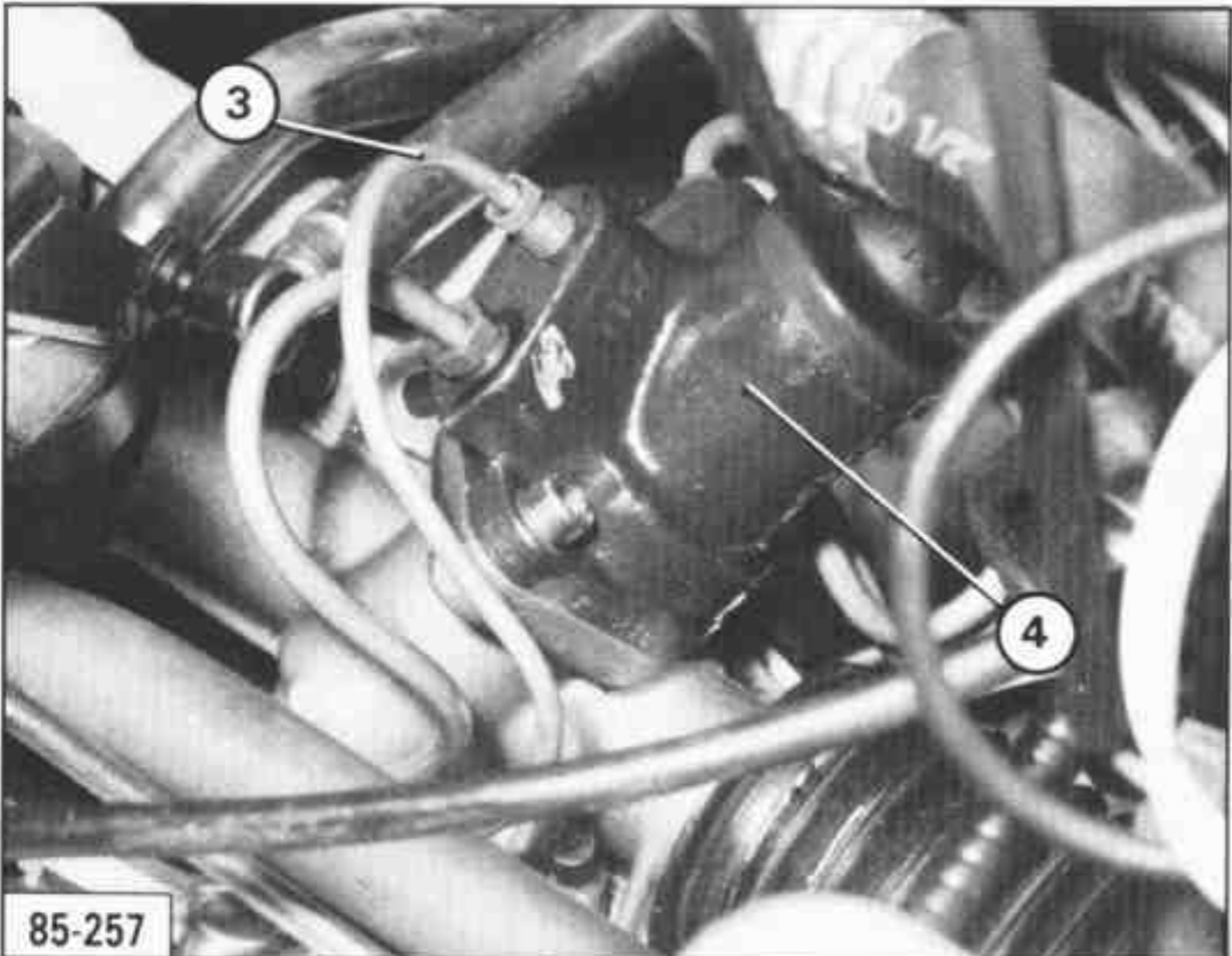
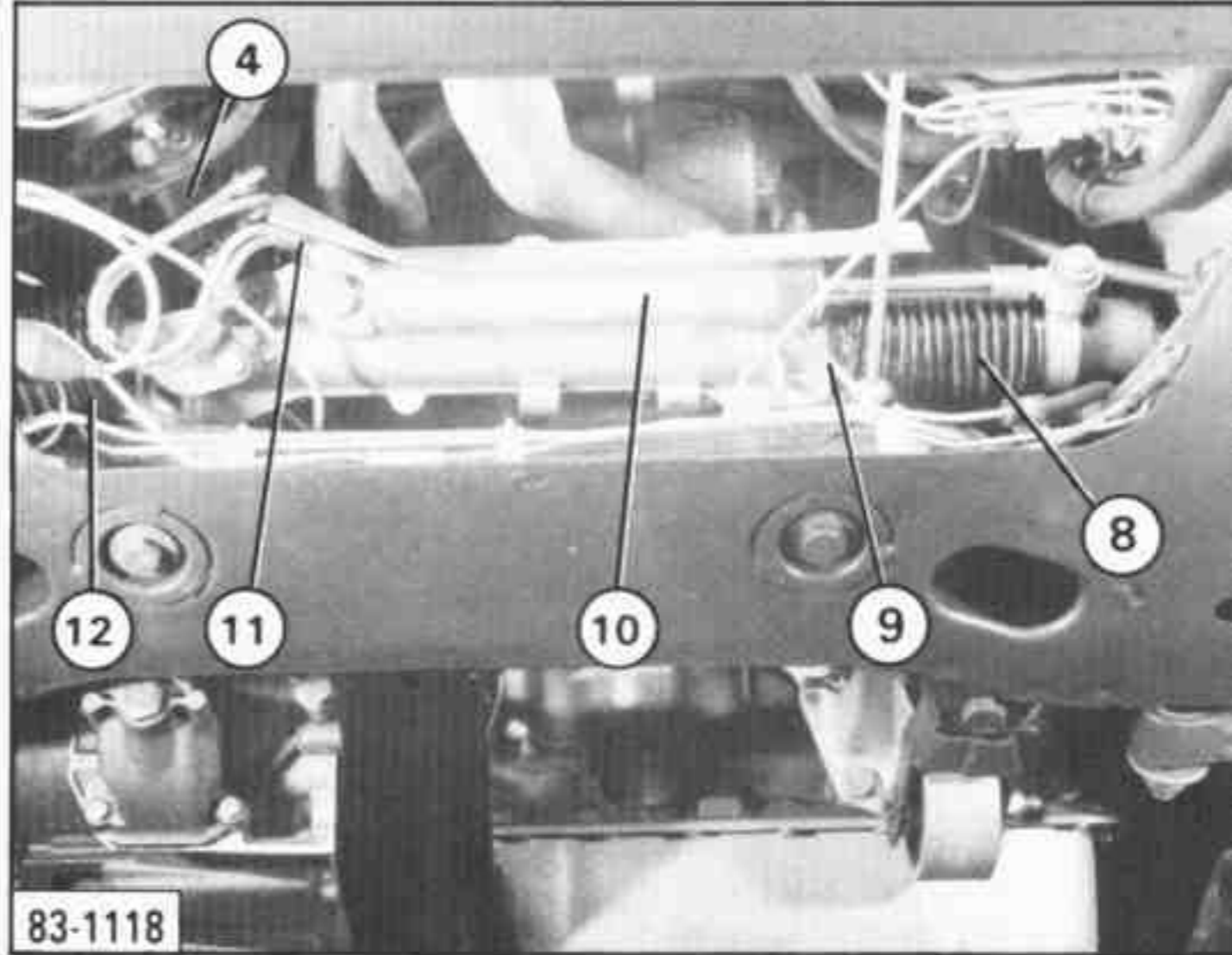
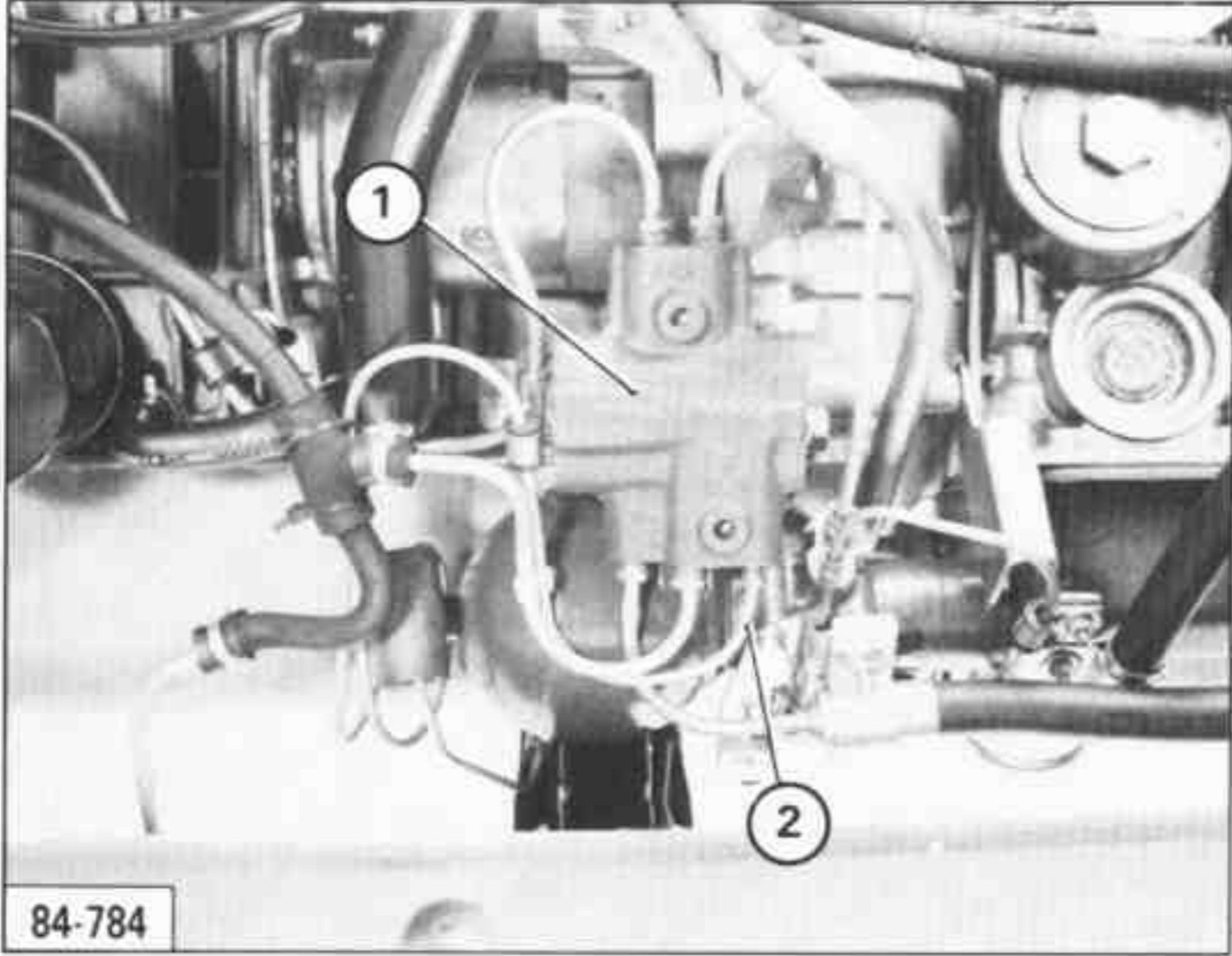
Apply the same test procedure to the LH rear cylinder, with the hydraulic test bench connected to the LH cylinder feed pipe (9).



III



II



I

IV

II

III

III - CHECKING THE HYDRAULIC COMPONENTS OF THE POWER STEERING

**Checking the pressure of
the flow distributor, Fig. 1, II and III :**

Slacken the pressure regulator release screw.

Remove the air filter and the battery.

Disconnect feed pipe (3) from the steering rotary valve (4) ; or pipe (2) at the flow distributor outlet, (access is uneasy).

Connect to the 3-way union (6) :

- pipe (7) attached to the pressure gauge,
- pipe (3) supplying the rotary valve,
- pipe (5) between 3-way union (6) and rotary valve (4).

Refit the battery.

Retighten the pressure regulator release screw.

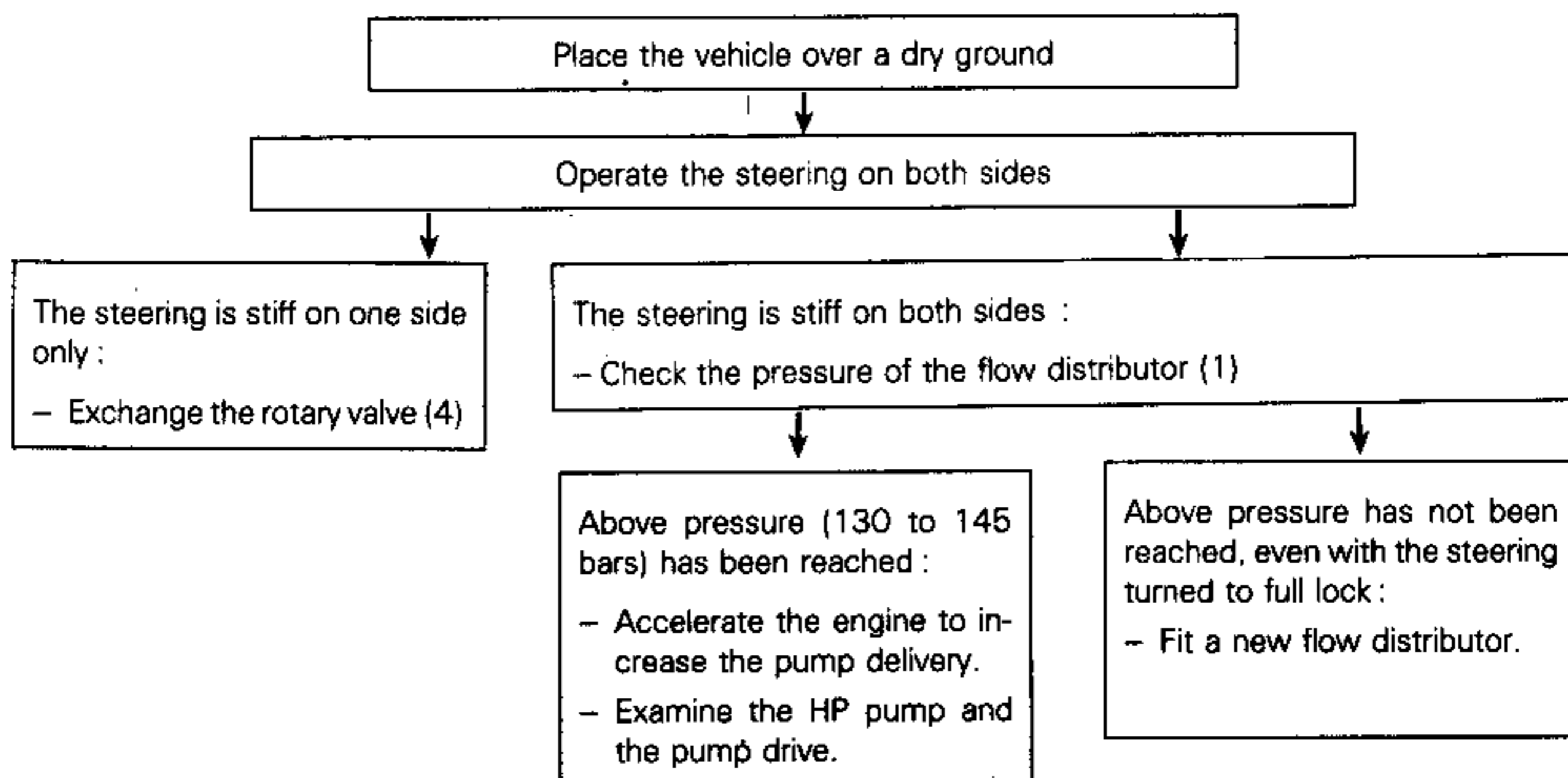
Start the engine, maintaining a slight acceleration.

Turn the steering. When the steering is turned, the pressure increases according to the resistance coming in from the road wheels.

Keep the steering turned to full lock : the pressure obtained must be between **130 and 145 bars**.

Steering external leakages :

- Leaks at connections (11) : either retighten the connections or change the pipes.
- Leaks at the steering ram leakage return pipe (9) : check that pipe (9) is not pinched along its routing to the reservoir.
- External leaks at steering ram (10) : replace the ram.
- Hydraulic oil leaks from the rock protection bellows (8) and (12), or external leak at rotary valve (4) : renew the rotary valve.

Static check of the steering system : (vehicle not moving)

IV – CHECKING A HYDROPNEUMATIC SPHERE OR AN ACCUMULATOR, AFTER REMOVAL

Use test bench **4034-T** and its accessories.

Connect the pump to pressure gauge **M 1** (graduated 0 to 100 bars). **Fig. I**

Screw on the union **A** fitted with a seal, into the hydropneumatic sphere or the accumulator.

Read the figure stamped nearby or on plug **C**, **Fig. II**.

This figure corresponds to the nominal inflation pressure of the hydropneumatic sphere or the accumulator.

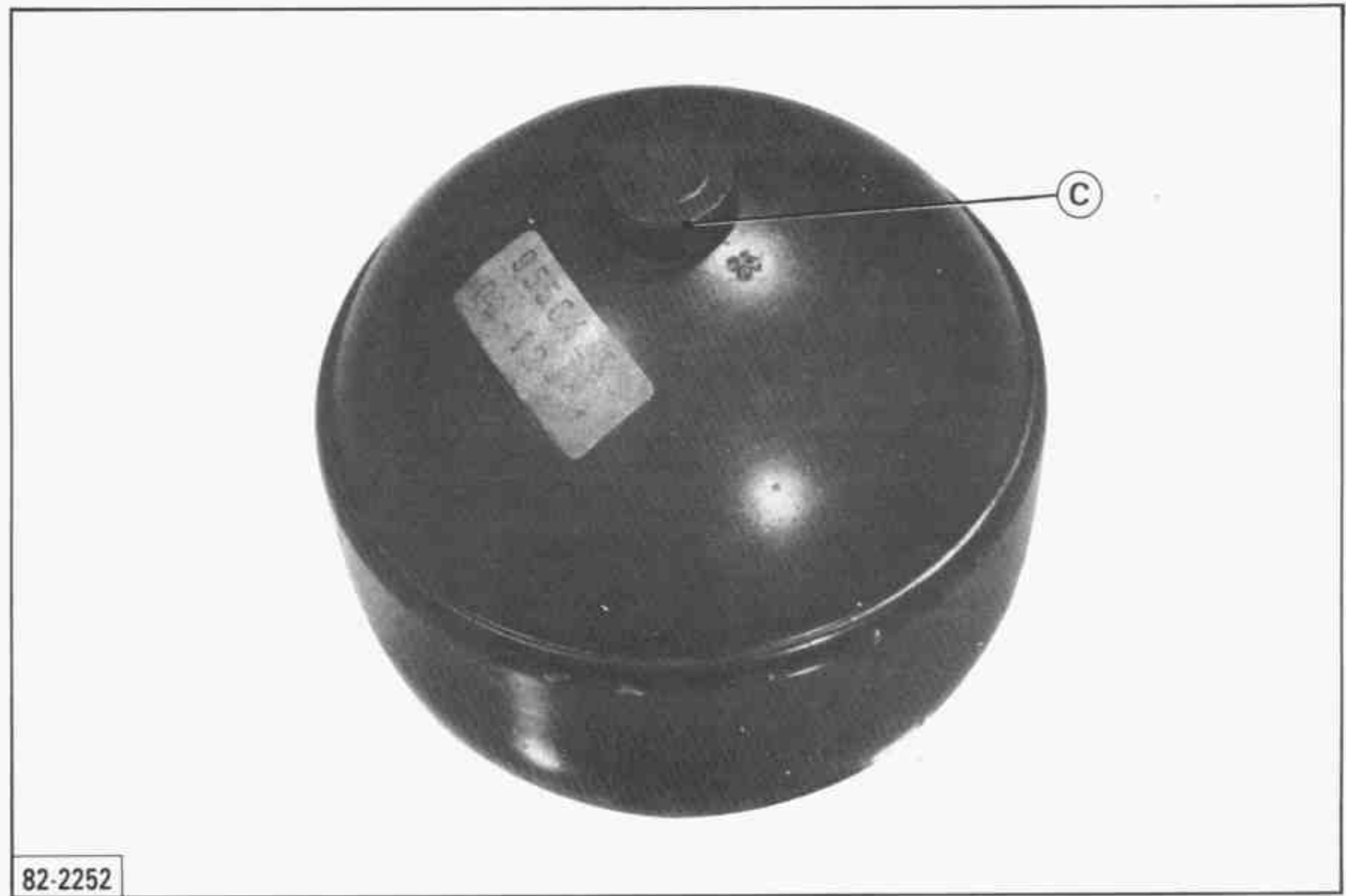
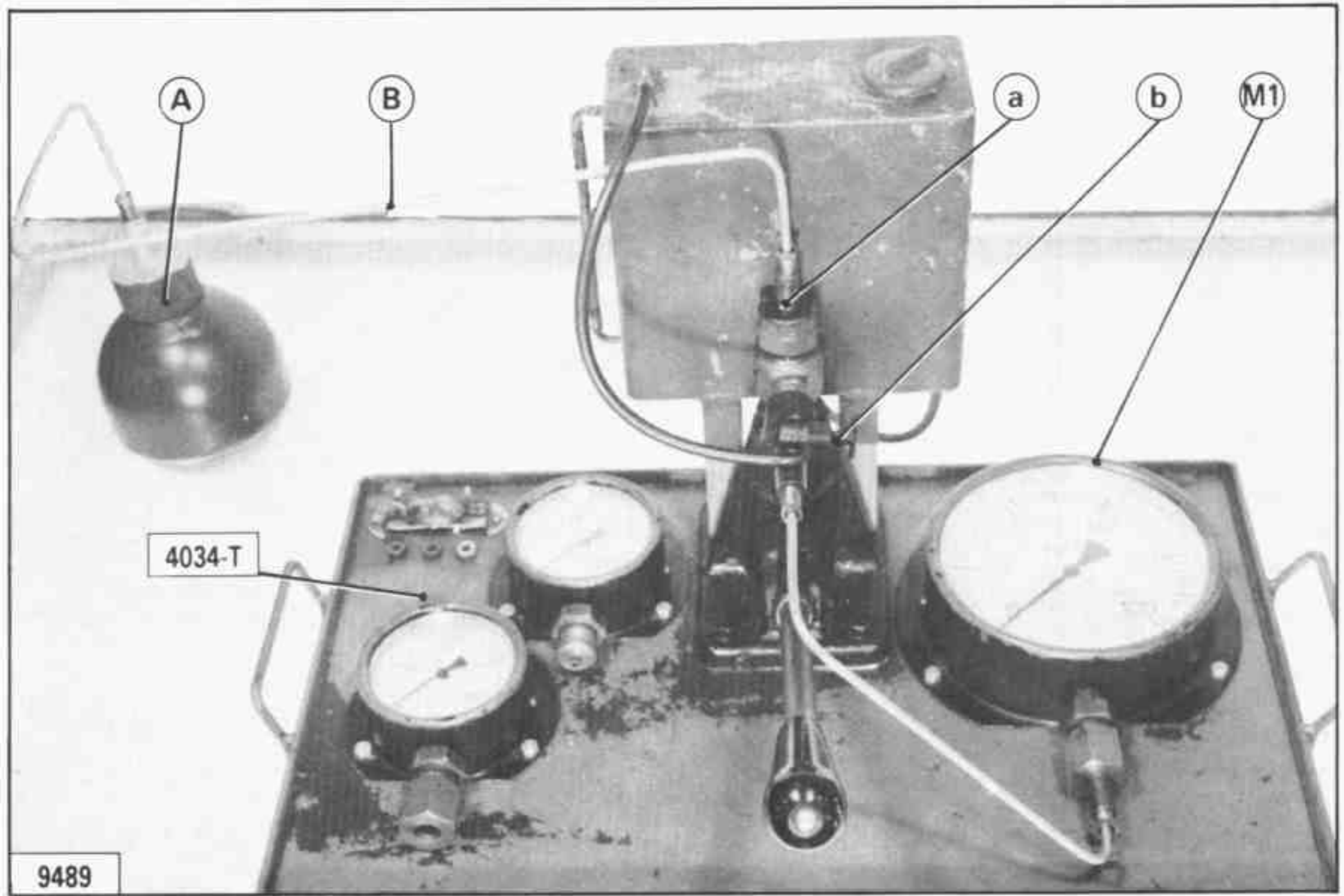
Connect union **A** to orifice **a** of the pump, using pipe **B**.

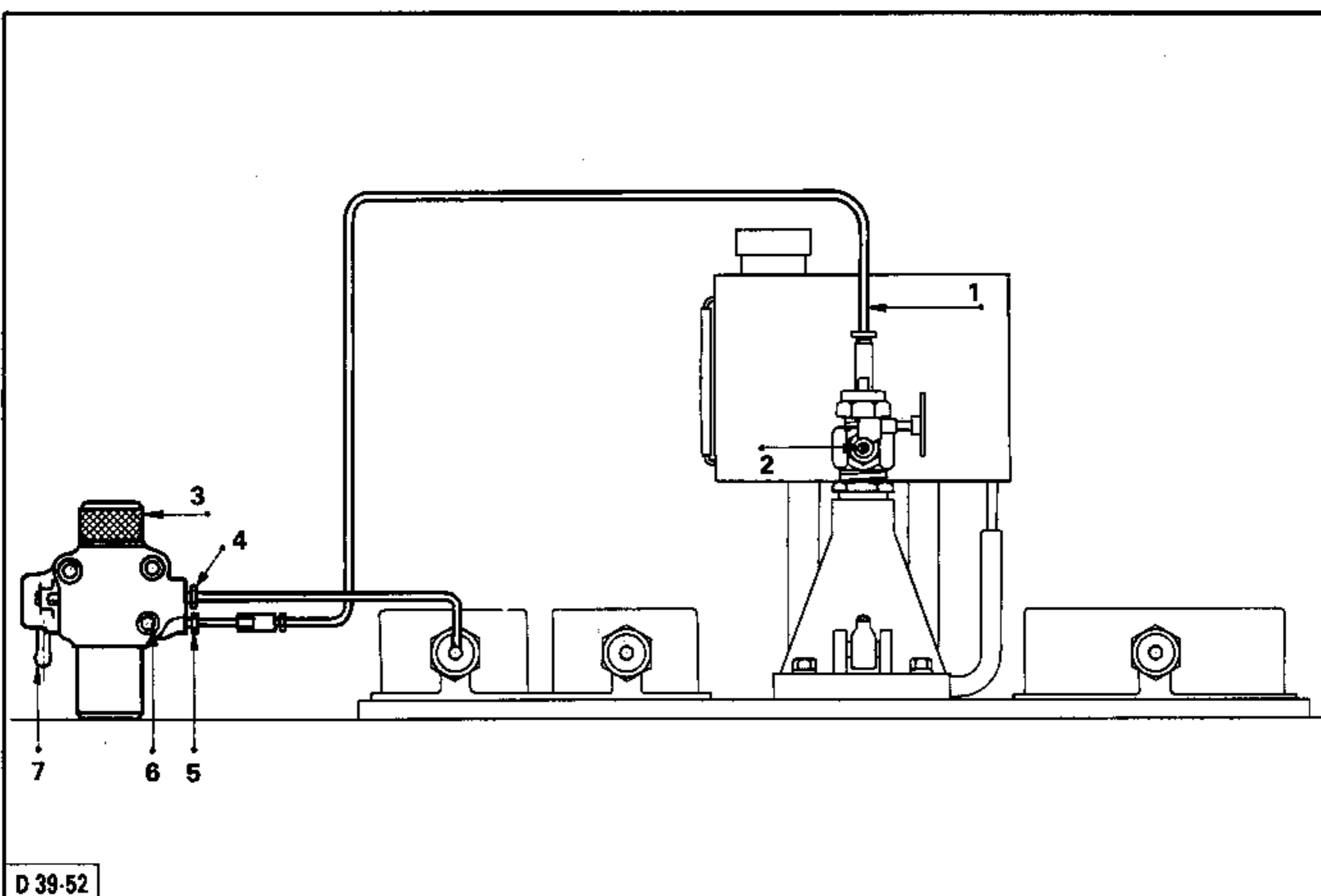
Turn off the tap « **b** » of the hydraulic test bench.

Actuate the pump to build up the pressure.

Check the pressure gauge **M 1** : the needle seems to remain quite still (filling phase of the hydraulic circuit) then the needle rises rapidly and after having operated the pump a few times, stabilizes at a reading corresponding to the inflation pressure.

Loosen tap « **b** » to lower the pressure.





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V – TESTING THE PRESSURE REGULATOR ON THE BENCH

Use test bench **4034-T** and accessories **3657-T-bis** (painted green).

Preparing the test bench :

- Fit a plug (3) where the main accumulator was removed ; insert a seal.
- Block-up the pump orifice with plug (2).
- Connect the pressure regulator inlet hole (5) to the orifice (1) of the bench pump.
- Connect the pressure regulator outlet orifice (4) to the 200 bar pressure gauge of the test bench.

Checking the cut-out pressure :

- Actuate the pump to build up pressure until the cut-out pressure is obtained. At that moment, the hydraulic fluid splashes up through the reservoir return hole and the pump lever can be operated easily.
- Read the pressure value at the exact moment when the cut-out pressure is obtained. (The needle of the pressure gauge drops immediately after). The pressure reading should be of between **165 and 175 bars**.
- If the pressure regulator is defective, the needle will not stabilize ; hydraulic fluid will flow through the opening and the pump lever will be stiff.

Checking the cut-in pressure :

- Slightly undo the pressure regulator release screw (6) to lower the needle of the pressure gauge slowly, while pumping. The pump lever can be easily operated and hydraulic fluid starts flowing continuously via the return pipe.
- Read the pressure value indicated on the pressure gauge as soon as the fluid stops running out. At this point, the pump lever becomes stiff again.
- The pressure reading should be of between **140 and 150 bars**.

*WORKING ON THE SOURCE
AND RESERVE OF PRESSURE*

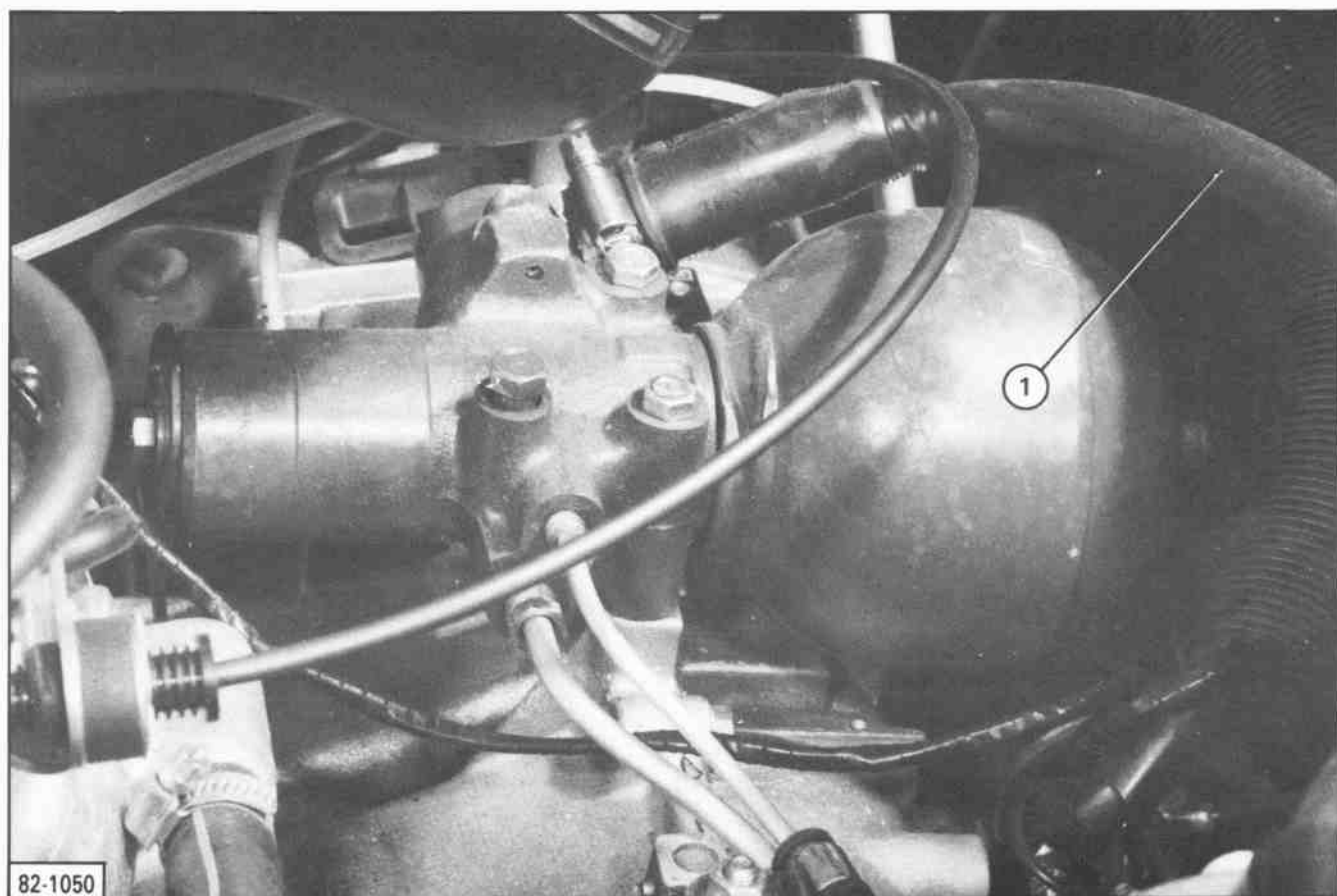
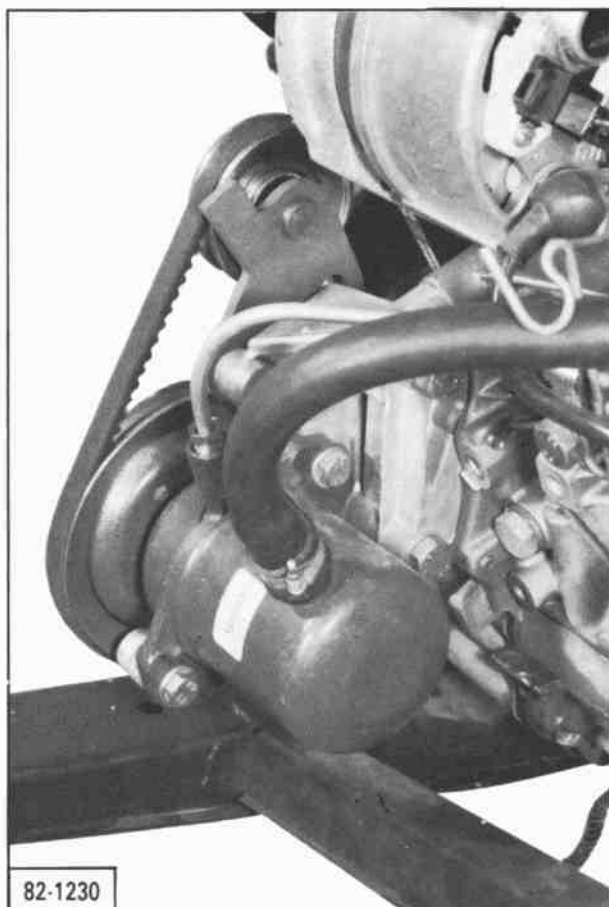
Manual steering**I – REMOVING AND REFITTING THE H.P. PUMP
OR THE PRESSURE REGULATOR**

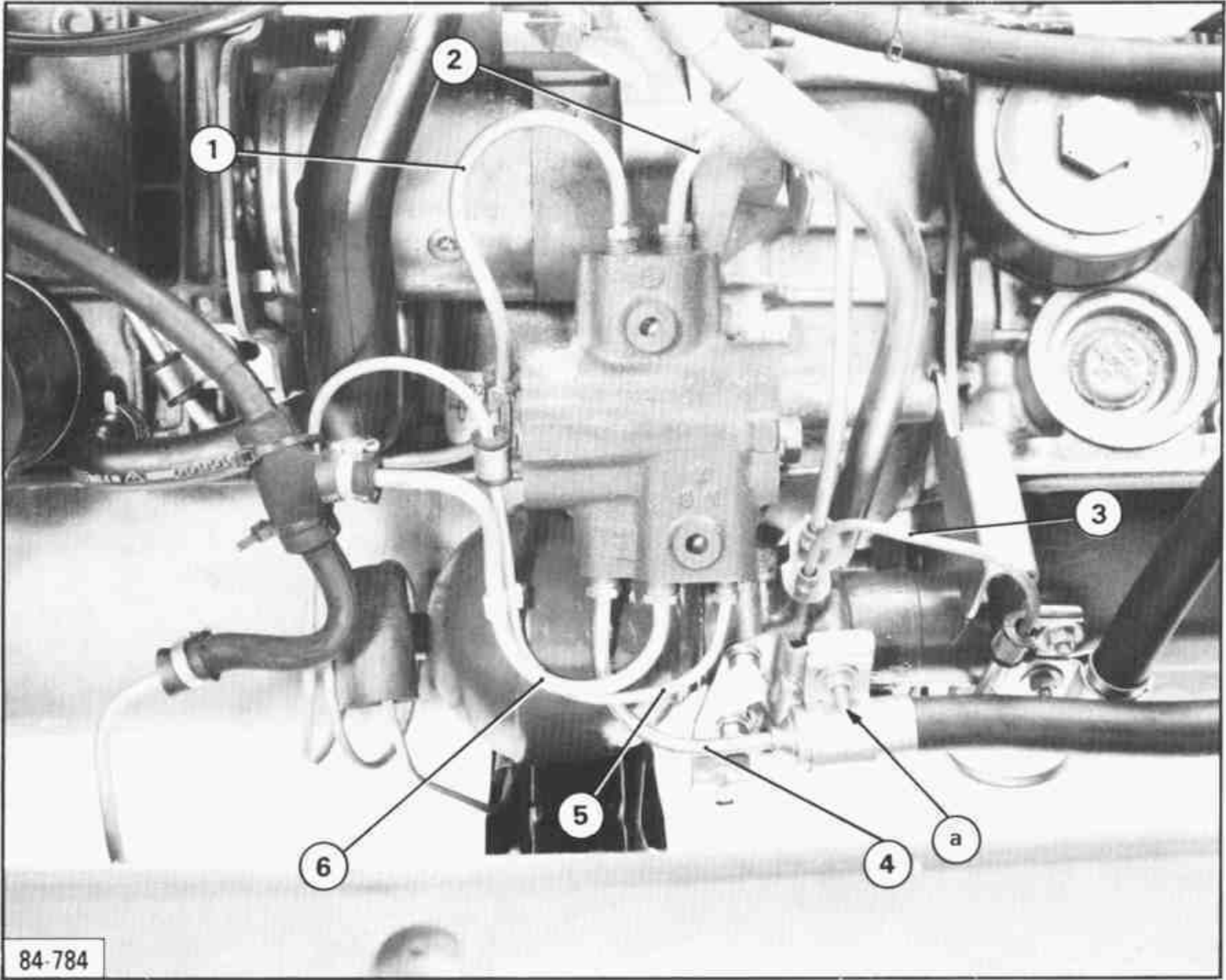
There are no special difficulties for these operations, but the following precautions **must be taken** :

Rules to be observed when carrying out any operation on a hydraulic component (see Op. XB. 390-00).

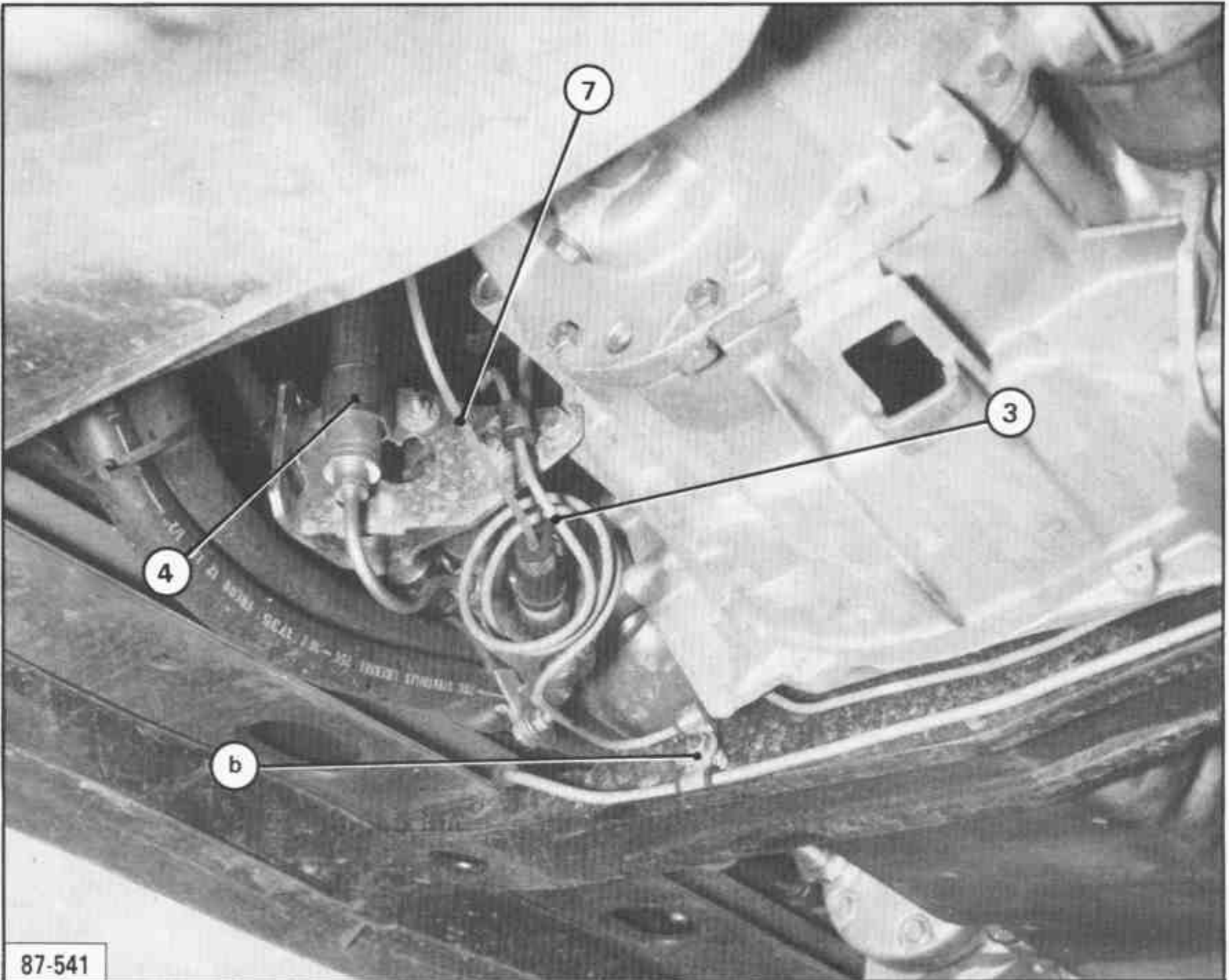
Priming the H.P. pump :

- Slacken the pressure-regulator release screw.
- Fill the pump with hydraulic fluid through the suction pipe, and start the engine.
- Quickly connect the suction pipe.
- Tighten the pressure-regulator release screw as soon as a pulsation is felt in the return pipe (1) : **Fig. II.**





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Power steering

II. - REMOVING AND REFITTING
A FLOW DISTRIBUTOR

REMOVAL

- Remove the air filter.
- Slacken the pressure regulator release screw.
- Protect the radiator (with a sheet of cardboard for example).
- Unclamp and uncouple HP inlet pipe (1).
- Remove the pipe which is in connection with pressure regulator (2).
- Unclamp and remove the three pipes in the following order : (5), (6), (4).
- Remove the two flow distributor securing screws.

REFITTING

- Fit the flow distributor.
- Recouple and tighten the three lower pipe connecting nuts in the order : (4), (6), (5), (fitting new seals).
- Recouple and tighten the two upper pipe connecting nuts (fitted with new seals).
- Clamp all the pipes.
- Refit the air filter.

III. - REMOVING AND REFITTING
A PRESSURE REGULATOR

REMOVAL

Above the vehicle, Fig. I :

- Remove the air filter.
- Undo the pressure regulator release screw.
- Protect the radiator (with a sheet of cardboard for example).
- Remove pipe (2).
- Unclamp and uncouple the main feed pipe (3).
- Unclamp the flexible pipe (4) at « a ».

Under the vehicle, Fig. II :

- Unclamp the flexible pipe (4) and disconnect it from the pressure regulator.
- Unclamp the pipe (3) at « b ».
- Uncouple the overflow return pipe (7).
- Unclamp the air conditioning pipes.
- Remove the three pressure regulator holding screws.

REFITTING

- Fit the pressure regulator.
- Recouple the overflow return pipe.
- Couple up and clamp the pipes (fitted with new seals).
- Refit the air filter.

Starting the engine :

- Screw out and screw in several times the pressure regulator release screw in order to bleed the circuit.