

# STEERING

XM 444-3/1

Custumer Service 0870606 9000

TOOLS TO BE USED

4034-T: Hydraulic test rig.

Tool to be manufactured using MR diagram on page 8

MR. 630-64/80 • A: 1 "U" shaped threaded rod M7 x 100

- B: 1 ground hacksaw blade
- C: 4 hydraulic union blanking plugs 6,35 mm dia.

OVERHAULING A FLOW DISTRIBUTOR

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# OVERHAULING A FLOW DISTRIBUTOR





The procedures for overhauling the flow distributors of both CITROEN BX vehicles and CITROEN XM vehicles are identical. The flow distributors differ only by their flow rates (restrictors and springs) and by their operating pressure limits.

Operating pressure limits on the vehicle

CITROËN BX = 140 + 5 bars

CITROEN XM = 160 + 5 bars

### DISMANTLING

**Seal** the orifices and clean the flow distributor especially in the areas around the caps.

Manufacture the MR tools A and B (see page 8).

# Removing the caps: Fig. I, II and III

- fit the MR tool (A) to the flow distributor
- fully depress the cap with a screwdriver and maintain it in this position with the MR tool (A)
- insert the ground end of the hacksaw blade into the bore of the limiter and slide it between the circlip and the distributor body.
  Lift and remove the circlip with a small screwdriver
- remove MR tool (A) and withdraw the cap.

### STRIPPING

Proceed in the order shown. Mark the position of the springs.

### Remove:

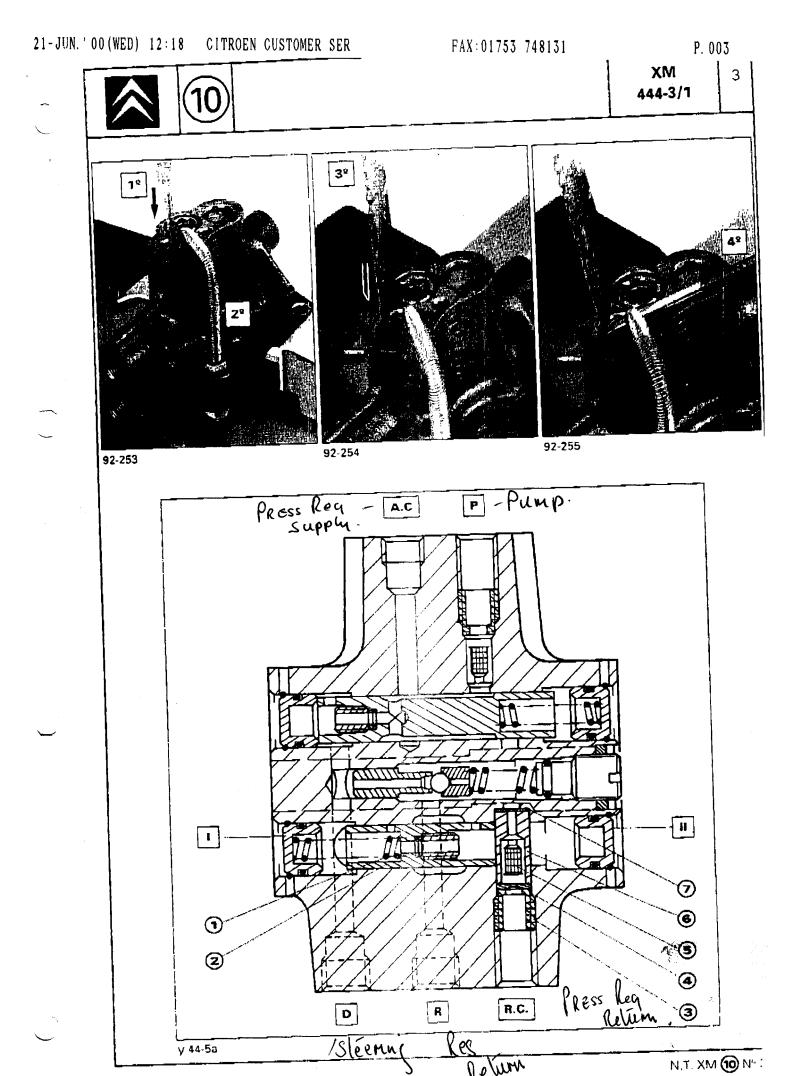
- the cap I : place a cloth beneath the cap and blow compressed air into orifice D (steering) 4.5 mm dia.
- the spring (1)
- the regulating slide valve (2)

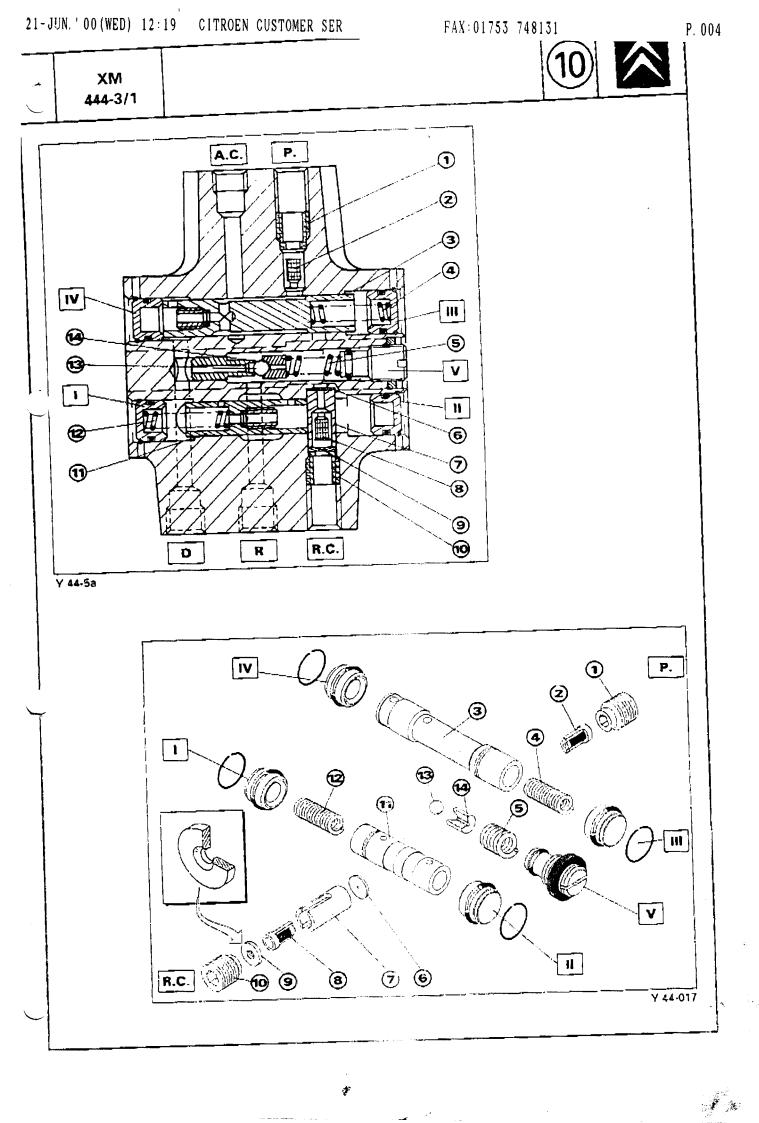
Remove through orifice R.C. (pressure regulator return):

- the threaded sleeve (3)
- the restrictor (4)
- the stop (6) with the filter (5)
- the restrictor (7)

Remove the cap II; insert a screwdriver into the disbributor body and push out the cap.









# **OVERHAULING A FLOW** DISTRIBUTOR

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### Remove:

- the cap III; depress the opposing cap IV to extract it
- the spring (4)
- the distribution slide valve (3).

### Remove cap IV.

# Remove through orifice P (pump)

- the threaded sleeve (1)
- the filter (2).

# Slacken the collar and remove the adjusting screw V

### remove:

- the spring (5)
- the spacer (14)
- the ball (13).

# Clean and blow out the components without removing the restrictors from the slide valves.

### REASSEMBLY

- new seals to the four caps and the adjusting screw
- new filters.

# Lubricate the new components with LHM Plus before refitting.

Proceed in the order shown.

### Refit through orifice R.C.

- the narrow restrictor (6) on its seat
- the fitter (8) in the stop (7)
- the wide restrictor (9), entry cone towards the exterior
- the threaded sleeve (10); tighten to 1.3 mdaN.

# Refit through orifice I:

- the regulating slide valve (11)
- the spring (12)
- the cap and the circlip, fully depress the cap and maintain it in this position with MR tool (A). Refit the circlip in its locating groove with a small screwdriver. Fig. III.

### Refit cap II.

### Refit cap IV.

# Refit through orifice III:

- the regulating slide valve (3)
- the spring (4)
- the cap III.

# Refit through orifice P:

- the filter (2)
- the threaded sleeve (1); tighten to 1.3 mdaN.

# Refit through orifice V:

- the ball (13) on its seat
- the spacer (14)
- the spring (5)
- the adjusting screw V with its collar, tighten lightly against the pressure of the spring.

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# OVERHAULING A FLOW DISTRIBUTOR





# Adjusting the pressure limiter

Use test rig 4034-T with a 200 bars pressure gauge Fig. I.

Fit 6.35 mm dia, blanking plugs to the following orifices, Fig. II:

- A.C. (pressure regulator supply)
- \_ P. (H.P. pump)
- **H.C.** (pressure regulator return).

Connect the distributor to the test rig 4034-T via 4.5 mm dia. orifice D (steering).

Orifice R (reservoir return) remains open to allow fluid flow.

Close the tap on the test rig.

**Operate** the pump with a regular action. The pressure increases and stabilises at the value determined by the setting of the screw (1). Fluid flows from orifice R  $\hookrightarrow$ 

Open the tap on the test rig.

Tighten the threaded sleeve (2) with thinnosed pliers while preventing the adjusting screw (1) from turning Fig. III.

Tighten to 1.5 mdaN.

Pressure setting using test rig 4034-T (ball off its seat)

CITROËN BX = 125 - 130 bars

CITROËN XM = 135 - 140 bars.

# Checking for leaks:

- Fit a blanking plug to orifice R.
- Close the tap on the test rig.
- Subject the flow distributor to a pressure of 150 bars.
- There should be no leaks from the caps or the adjusting screw.
- Open the tap on the test rig.
- Remove the flow disbributor.