ALPINE 65 - 75 - 85

TRAINING MANUAL
P/N 3676095M1 - EDITION 03-2005

Landini

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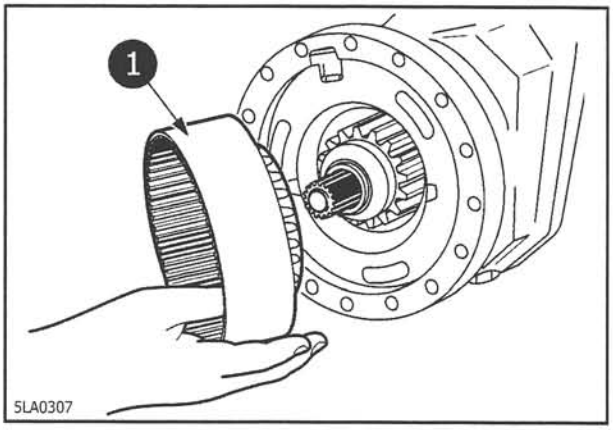
5. Remove the crown (1) with the help of a lever.



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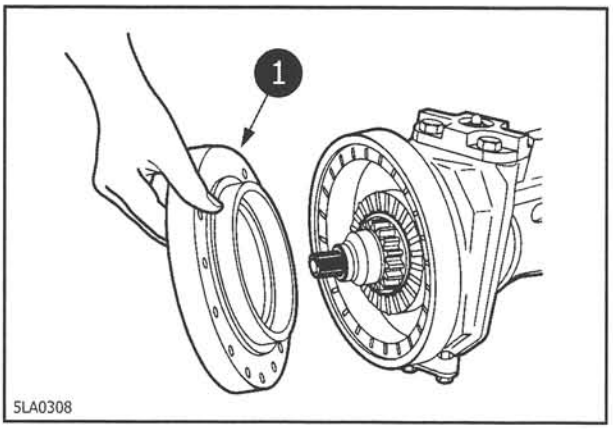
6. Remove the ring (1).



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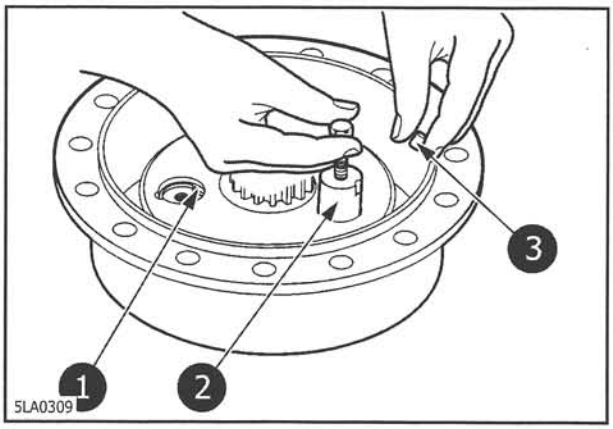
7. Remove the three circlips (1) using a 8 MA screw, remove the three pins (2) with stop rollers from the cover (3).



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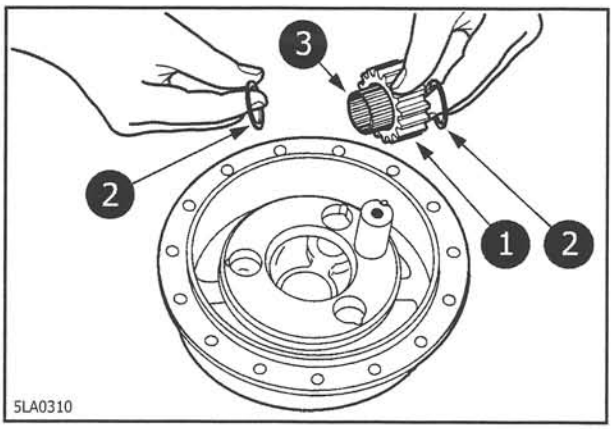
8. Remove from the central hole the three satellites (1), the slewing bearings (2) and the respective roller bearings (3).



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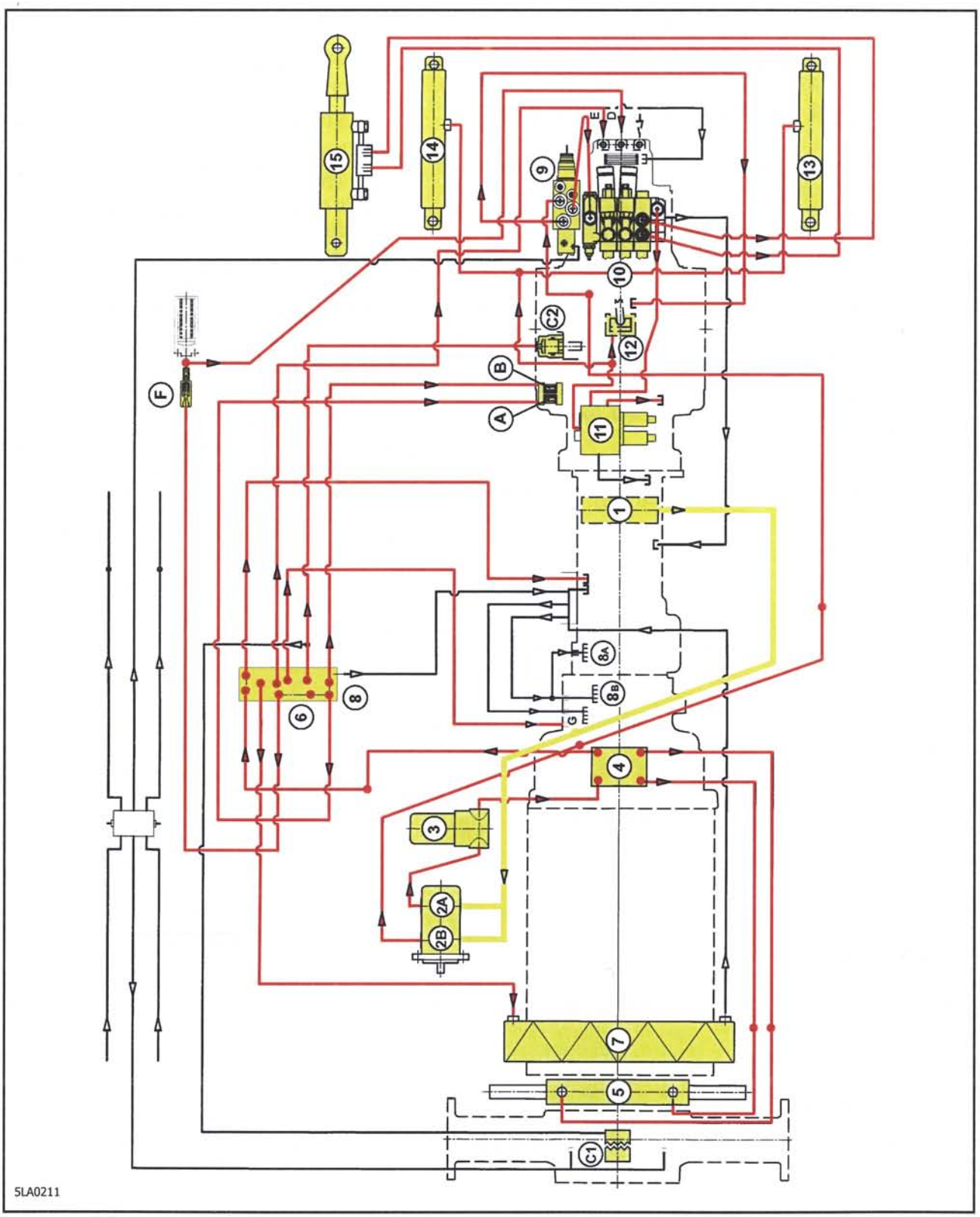

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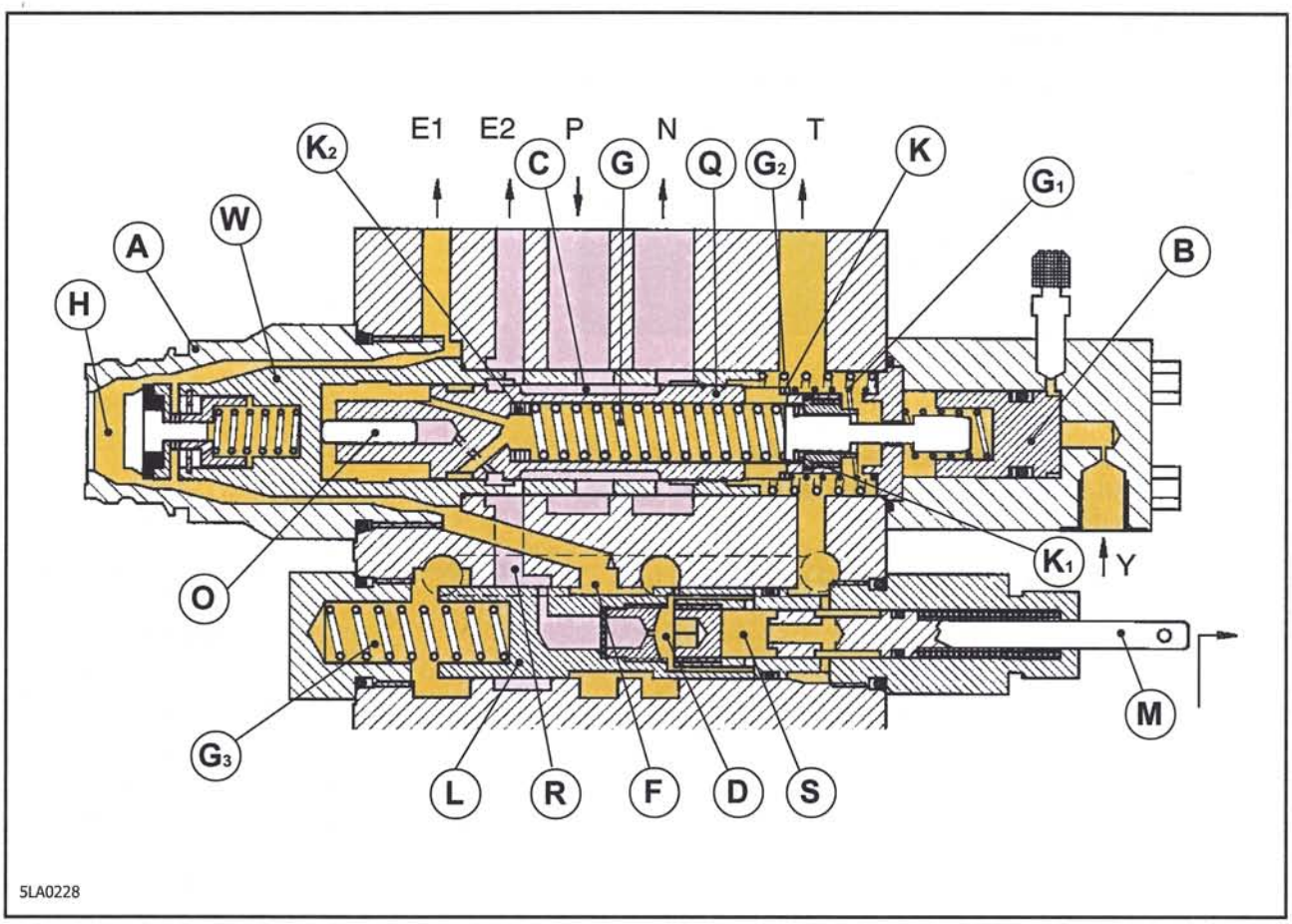
General hydraulic circuit

Step with parking brake applied and brake pedals released

By activating the parking brake via the tie-rod "M", communication is effected between the exhaust "T" and the chamber "S" inside the tie-rod; being the latter connected to the chamber "H" which feeds the trailer, has practically no pressure. The automatic trailer braking device is released in this way. The oil from the pump, in addition to being conveyed into chamber "D", feeds the hydraulic power lift via the pipe "N" put into communication by groove "C".



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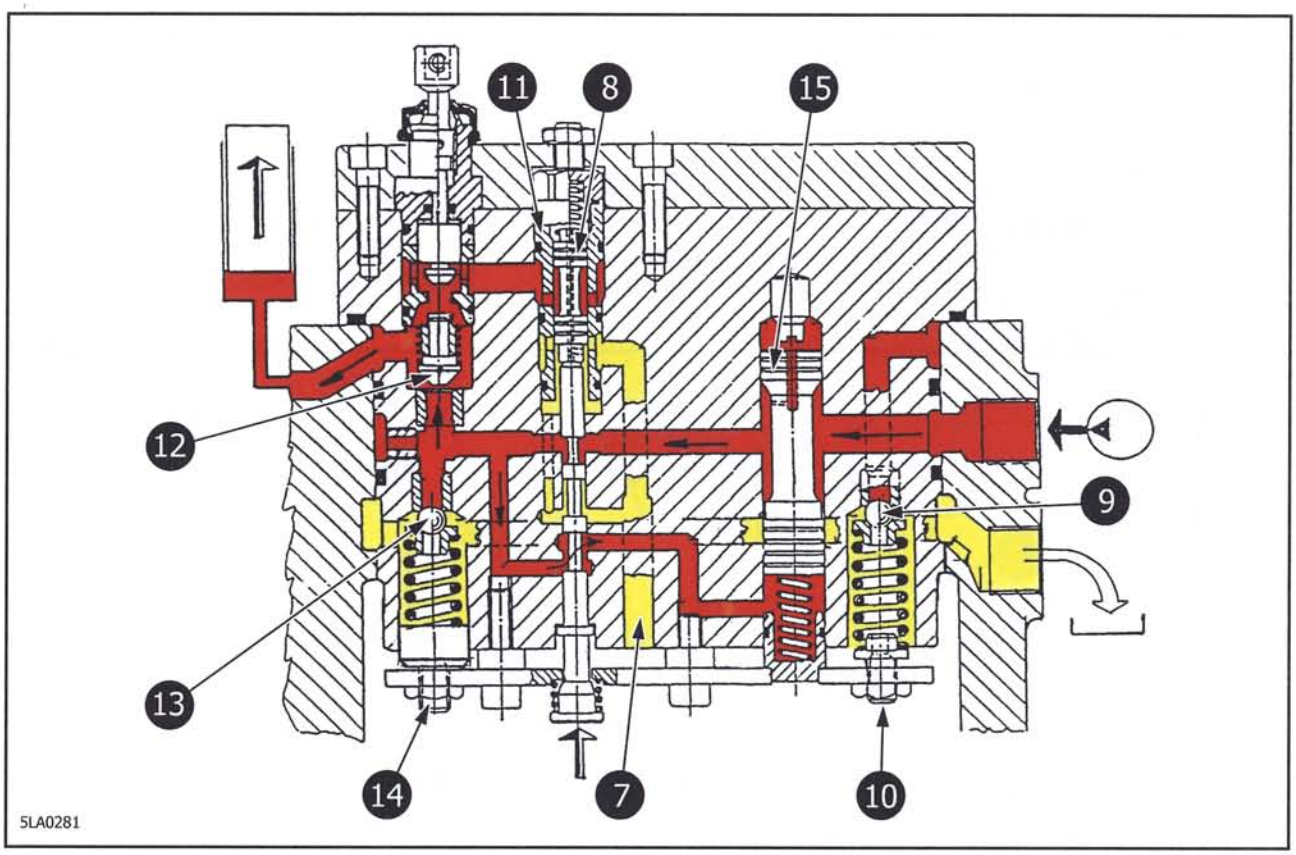
A. Trailer brake connection quick connection
B. Distributor activation piston
C. Pump-power lift connection groove
D. Chamber
E1. Pressure switch
E2. Pressure switch
F. Chamber
G. 140 bar pressure hold spring
G1. 10-15 bar pressure hold spring
G2. Sleeve return spring (W)
G3. Piston spring (L)
H. Trailer brake outlet chamber
K. 10-15 bar pressure adjustment shims
K1. Piston stroke adjustment shims (Q)
K2. 140 bar pressure adjustment shims
L. Trailer brake feeding command piston
M. Parking brake connection tie-rod
N. Power lift feeding
O. Return piston
P. Pump feed
Q. Main piston
R. Trailer brake feeding channel
S. Brake tie-rid inner channel
T. Discharge channel
W. Sleeve
Y. Tractor brake feed



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Check valve leakage inspection

Another cause of leakage may be the check valve (12). To facilitate location and to define the entity of the leakage, remove the maximum valve (13) which is in direct communication with the check valve delivery pipe (12). Oil cannot be let out from the respective pipe directly in this way.

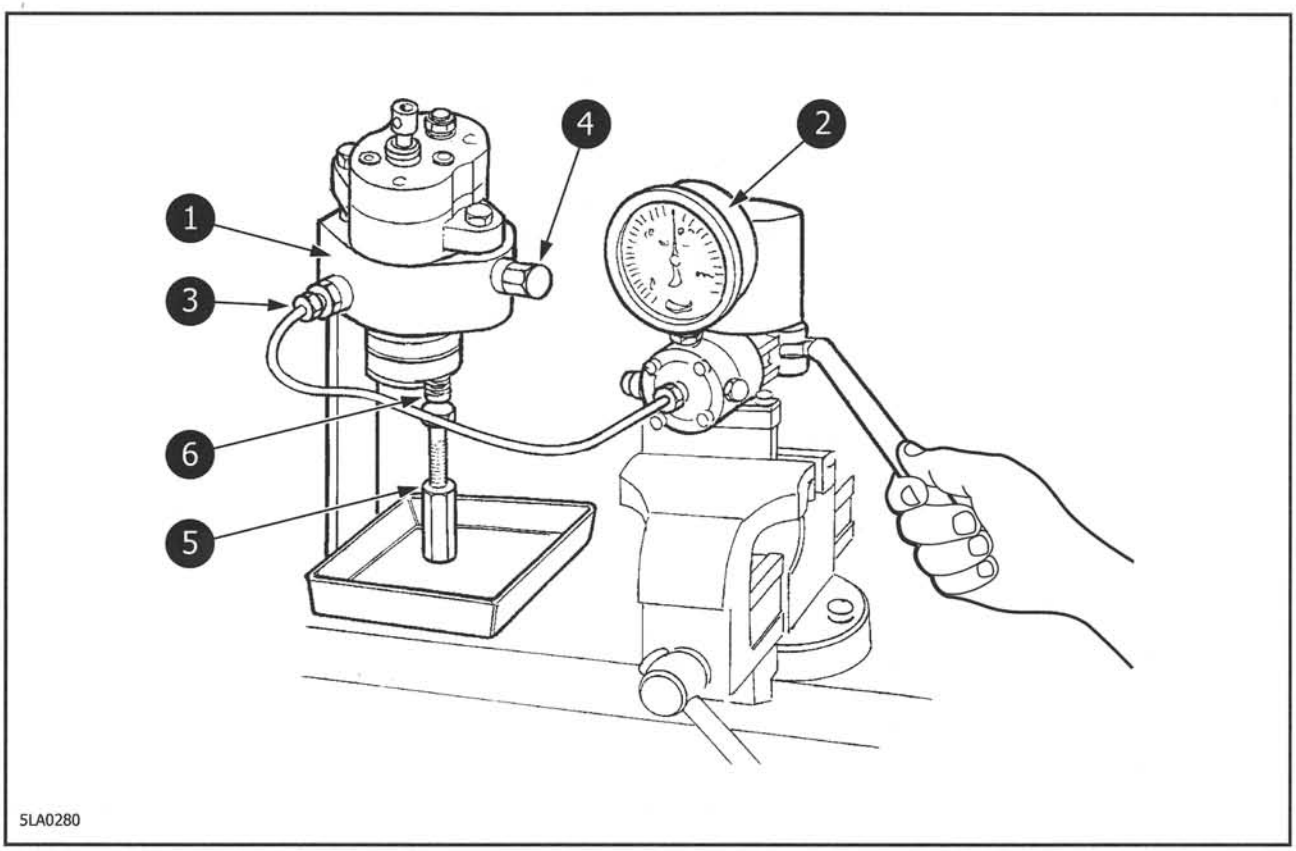
If this occurs, lap the seat with fine emery to recreate tightness.

Do not attempt to recreate the seats by hitting the balls or the valves because this would only cause stretching and possible oil leakage.

Maximum valve inspection and calibration

This test must be performed with tool (1) **120 IDR GL**. Move the pump delivery pipe (2) to the lower union (3) and fasten the closing plug on the union (4) used for the previous test.

1. Fit the previously removed maximum valve (13) on the distributor.
2. Extend the tool (5) **121 IDR GL** turning it by one turn and a half with respect to the previous condition to take the distributor to delivery step.
3. Operate the pump and make the maximum valve (13) open. This opening must occur at 180 bars.
   If you need to adjust the valve, turn the adjustment screw (14) to increase the pressure and loosen it to decrease it.



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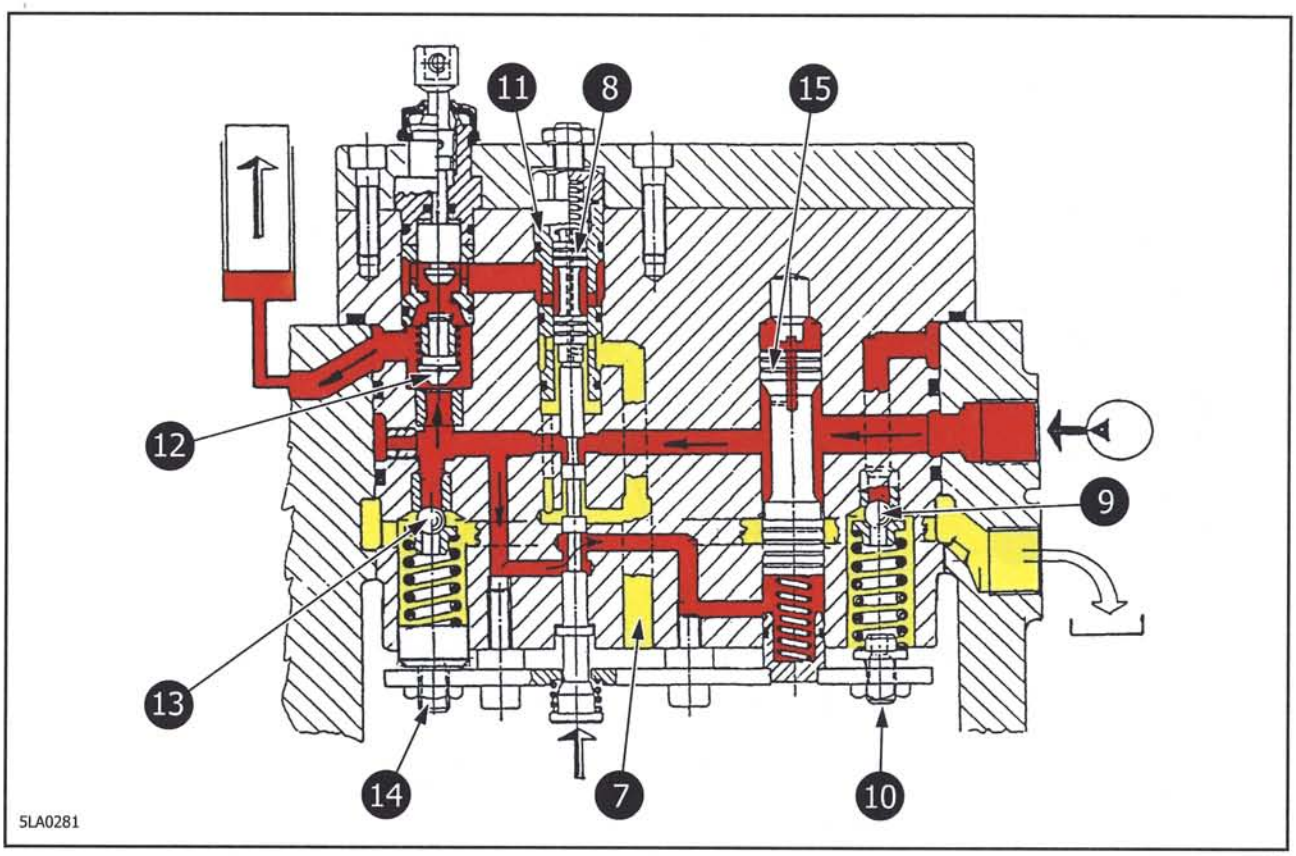

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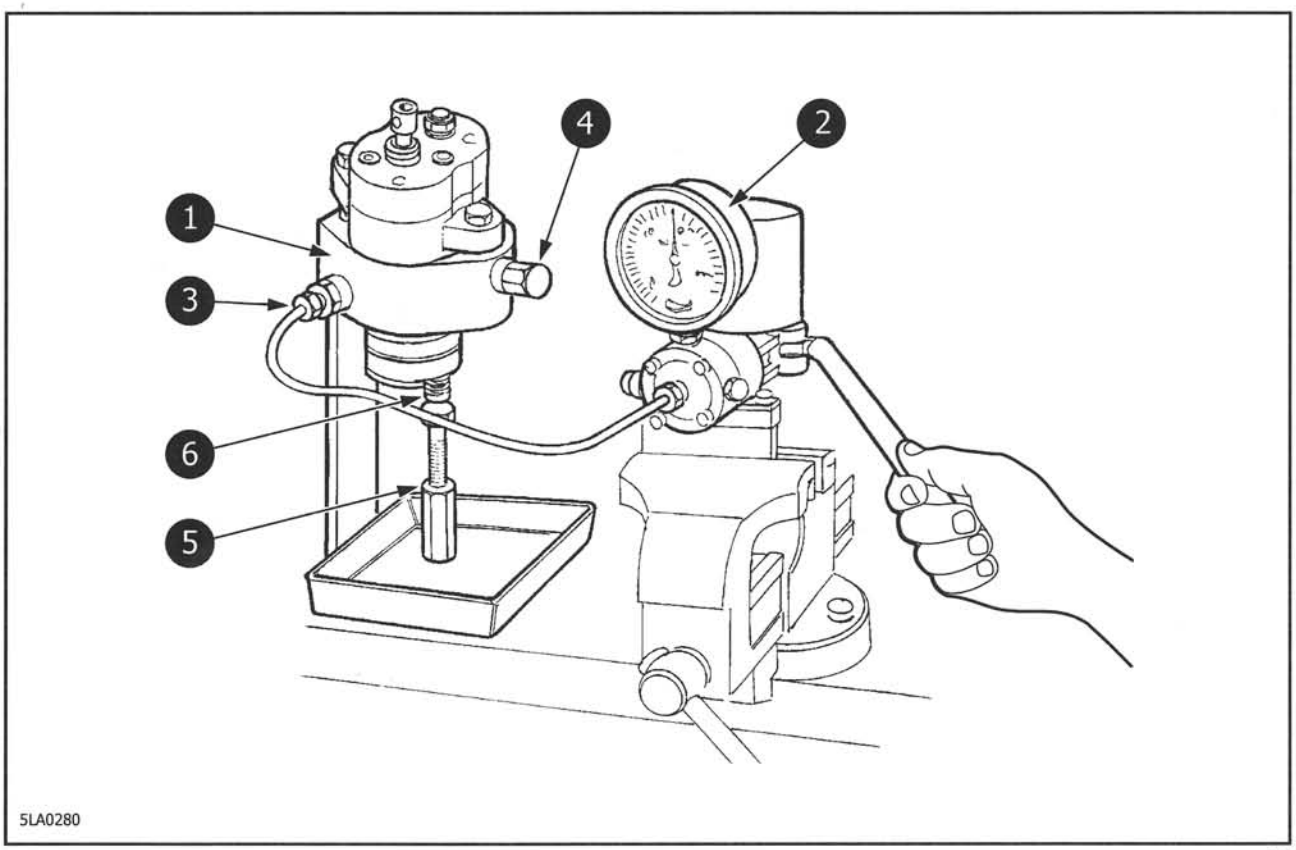
Delivery pipe leakage inspection

1. Keeping the distributor in the previous conditions, operate the pump and take the pressure in the circuit to 120 bars.
2. Check tightness of the valve (13): there must be no oil leakage. If this does not occur, lap with fine emery the seat to provide perfect tightness again.
3. Check tightness of the regulator piston (15). The maximum admitted leakage is 15 cm3 in 1 minute. If oil leaks from pipe (7), this is due to the play between the upper part (6) of the rod (7) and the distributor body. It will not be due to the discharge valve (8) as this has already been checked. The maximum leakage is 10 cm3 in 1 minute.



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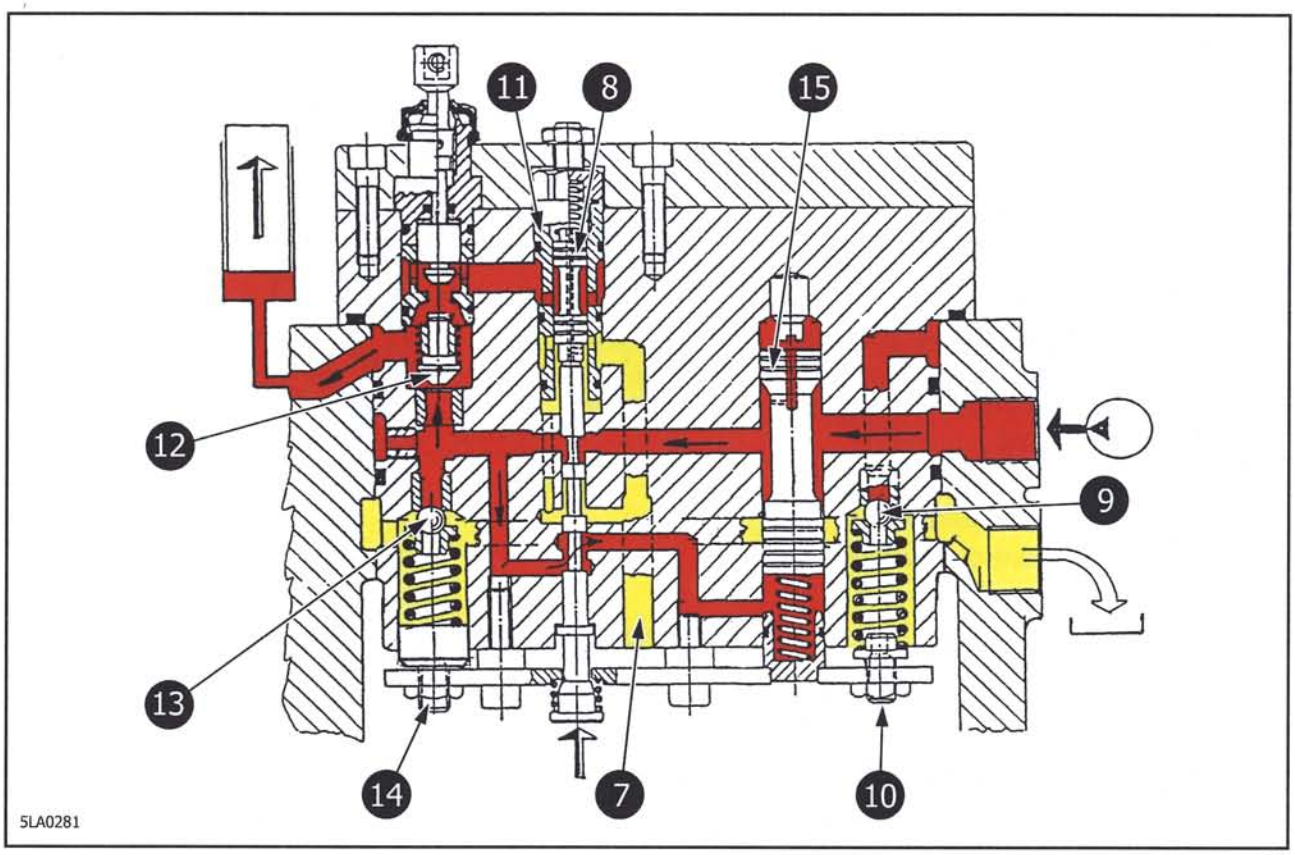

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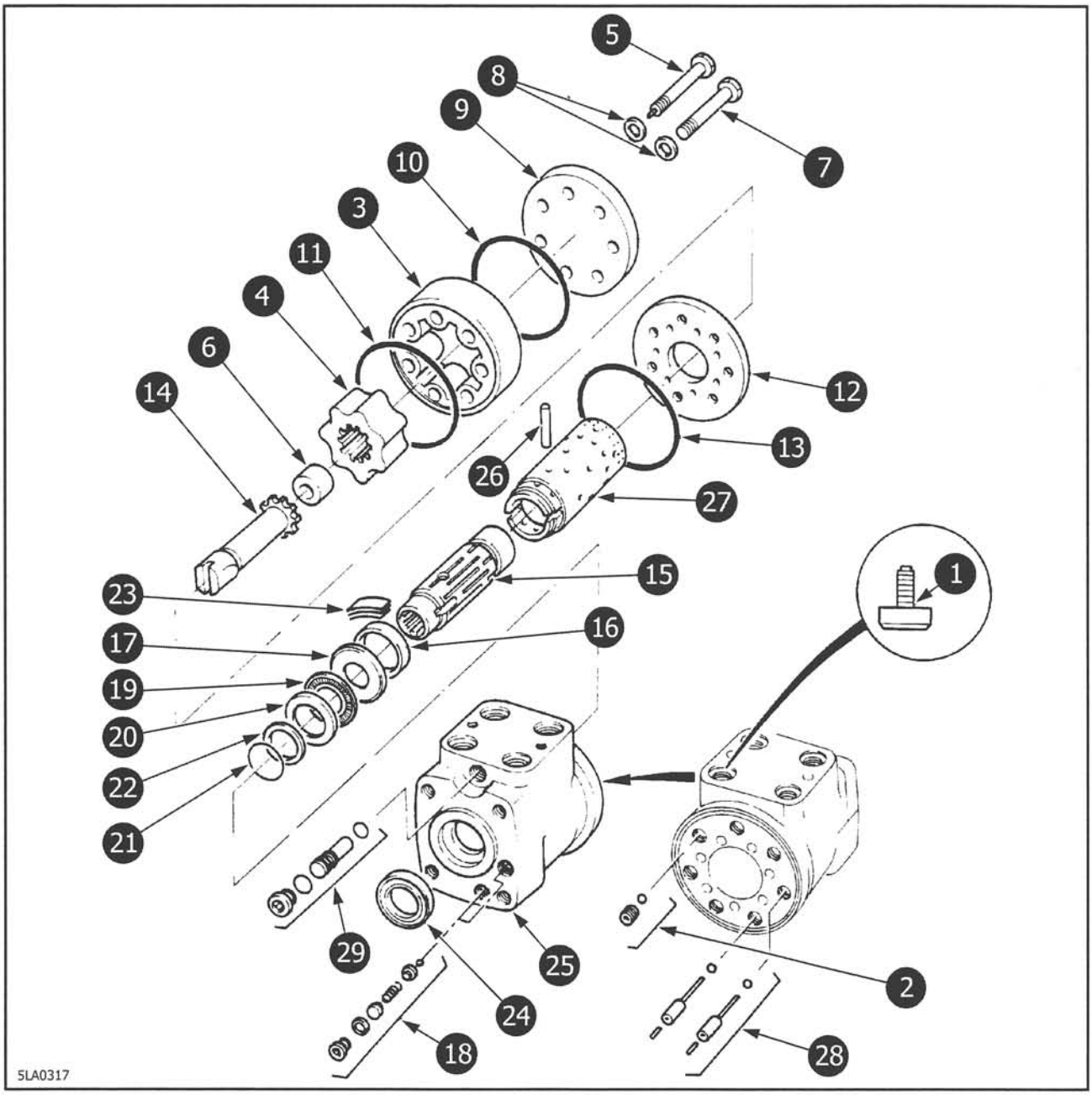
1. Check valve
2. One-way valve
3. Stator
4. Rotor
5. Screw
6. Spacer
7. Screw
8. Seal
9. Closing plate
10. O-ring
11. O-ring
12. Distributor plate
13. O-ring
14. Connection shaft
15. Drum
16. Ring
17. Washer
18. Anti-shock valve
19. Roller bearing
20. Washer
21. O-ring
22. Ring
23. Centring springs
24. O-ring
25. "Orbitrol" distributor
26. Pin
27. Sleeve
28. Anti-cavitation valve
29. Safety valve



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ORBITROL distributor prospective view

1. Check valve
2. One-way valve
3. Stator
4. Rotor
5. Screw
6. Spacer
7. Screw
8. Seal
9. Closing plate
10. O-ring
11. O-ring
12. Distributor plate
13. O-ring
14. Connection shaft
15. Drum
16. Ring
17. Washer
18. Anti-shock valve
19. Roller bearing
20. Washer
21. O-ring
22. Ring
23. Centring springs
24. O-ring
25. "Orbitrol" distributor
26. Pin
27. Sleeve
28. Anti-cavitation valve
29. Safety valve

Operation - neutral position

In this position, the drum (1) is centred with respect to the sleeve (2) by the springs.

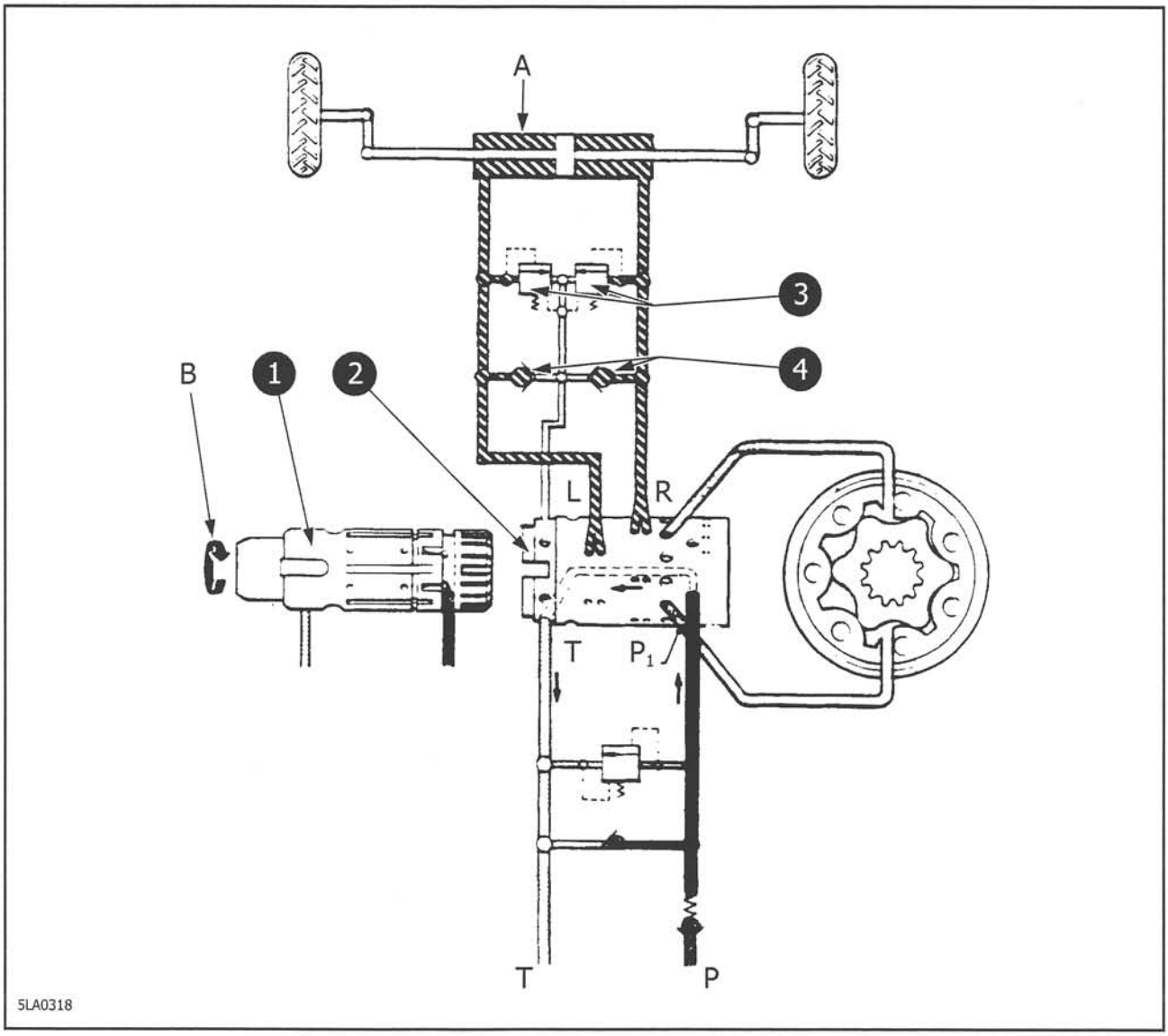
Pipes P1-L-R are not supplied.

The oil from the pipe P passes directly to the pipe T to feed the hydraulic unit. The circuit is of the open centre type.

Two anti-shock valves (3) and two anti-cavitation valves (4) are placed in the holes L and R of the distributor.

The anti-shock valves (3) protect the circuit between the steering cylinder and the distributor from shocks on the wheels.

The anti-cavitation valves (4) let the oil discharged from the anti-shock valves (3) to cross from the right pipe to the left pipe and vice versa, according to the shift of the piston in the steering cylinder.



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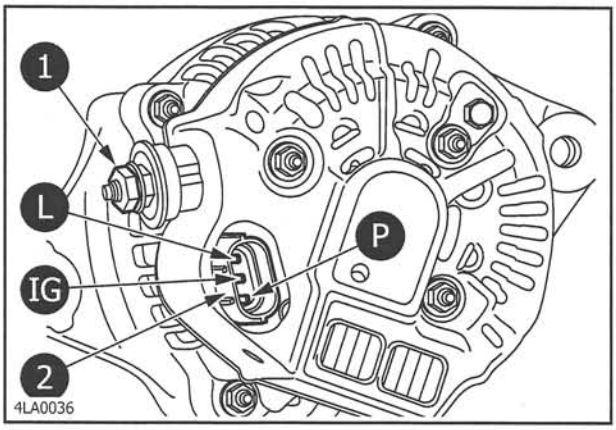
A. Steering cylinder
B. Steering column position
L. Feed to left union of steering cylinder
P. Low flow rate feed from hydraulic pump
P1. Feed to metering device
R. Feed to right union of steering cylinder
T. Discharge to hydraulic unit

Charge current and regulated voltage tests

Make sure that all the tractor's electrical users are off and that the ignition key is in the OFF position.

1. Disconnect negative battery terminal and terminal (1) of the alternator.
2. Connect an ammeter between the detached cable and alternator terminal (1).
3. Connect a voltmeter between terminal (1) of the alternator and ground.
4. Re-connect the battery. Start the engine and accelerate to 2000 RPM. Check the voltmeter and ammeter readings.



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The voltmeter must give a higher value than the battery voltage and, when the ammeter reading drops below 10 A, the voltmeter reading must stabilize between 13.6 V 14 V.

5. Slowly increase the current charge (lowering the value of the resistance) until the ammeter reading becomes 40 A.
6. Check the voltmeter reading, which must not drop below 13.6 V.

A reading of less than 13.6 means that there is a defective component in the alternator. Test the alternator components as described in this chapter.

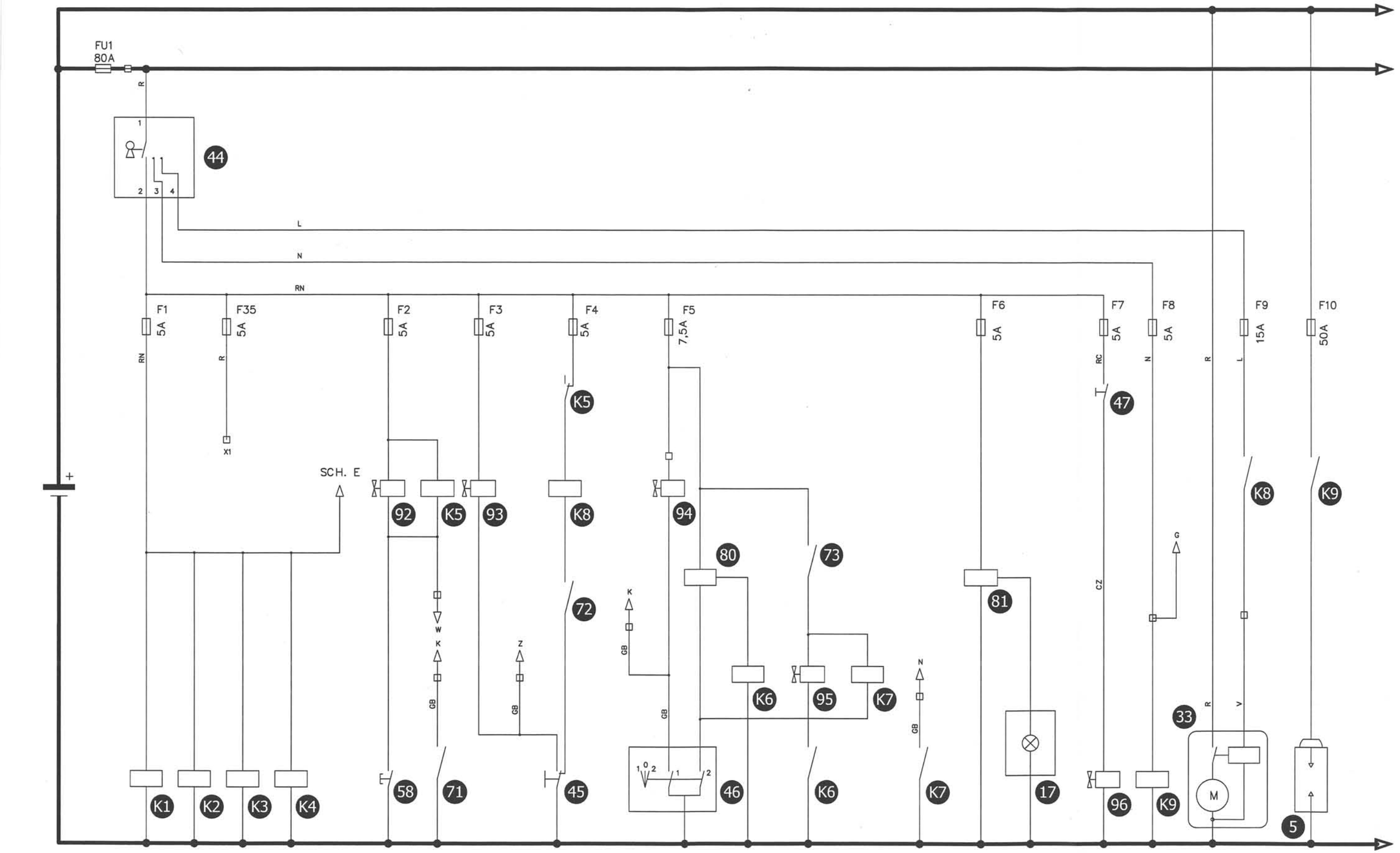
Alternator component tests

The component tests, which must only be carried out if the INITIAL TESTS have identified a defective component in the alternator, allow you to check:

- the governor;
- the no-break condition of the rotor field windings;
- the brushes, springs and contact rings of the rotor.

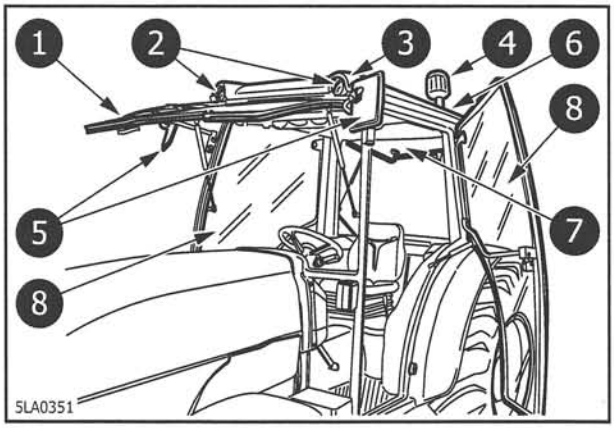
> The previously described component tests can be conducted with the alternator installed in the tractor. To test the other components, the alternator must be removed from the tractor.

REAR PTO IGNITION, 4WD, BY SPEED SYSTEM, IGNITION SWITCH POWER RELAY CIRCUIT - Diagram A



External cab components

1. Opening front window
2. Front working lights
3. Clear top and sun blinds
4. Rotating light
5. Adjustable rearview mirrors
6. Rear field lights
7. Opening rear window
8. Opening left and right side doors



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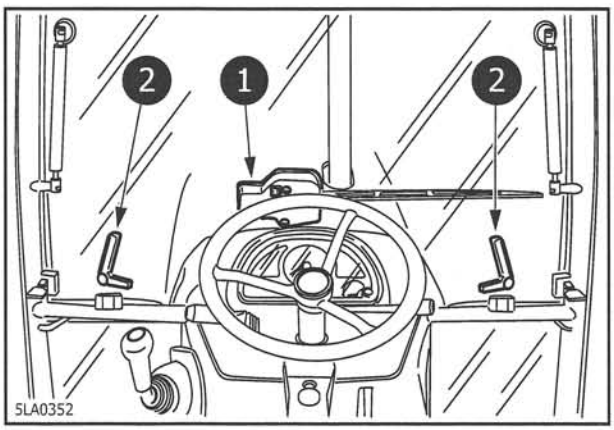
Interior cab components

1. Front windscreen wiper
2. Front window locks



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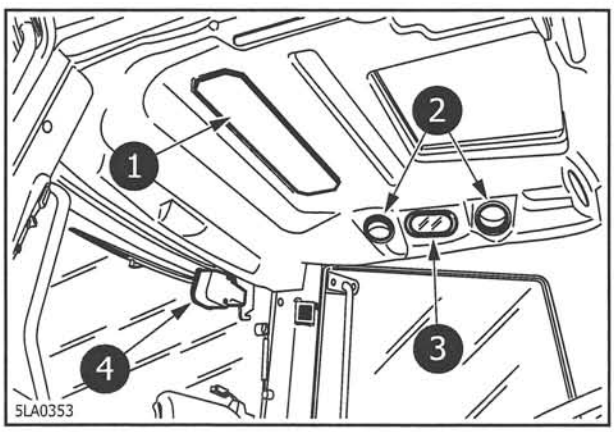
1. Cab air recirculation
2. Ventilation vents
3. Ceiling light
4. Rear window wiper



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