BLEEDING BRAKES

Turn bleed screws out two turns. Start engine. Depress brake pedals for two minutes. With brake pedals still depressed, tighten bleed screws. Stop engine. Depress each pedal once. Solid pedal feel should be obtained on first application. See "Specifications." If necessary, repeat bleeding operation.

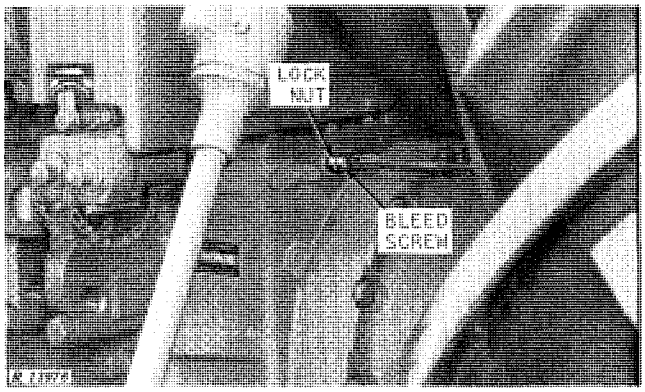


Fig. 9–Brake Bleed Screw

BRAKE ACCUMULATOR

GENERAL INFORMATION

The accumulator will provide pressure oil to the brakes for emergency application immediately after the engine has stopped.

REMOVAL

Relieve the oil pressure in the accumulator by opening the bleed screw and pumping the brake pedals.

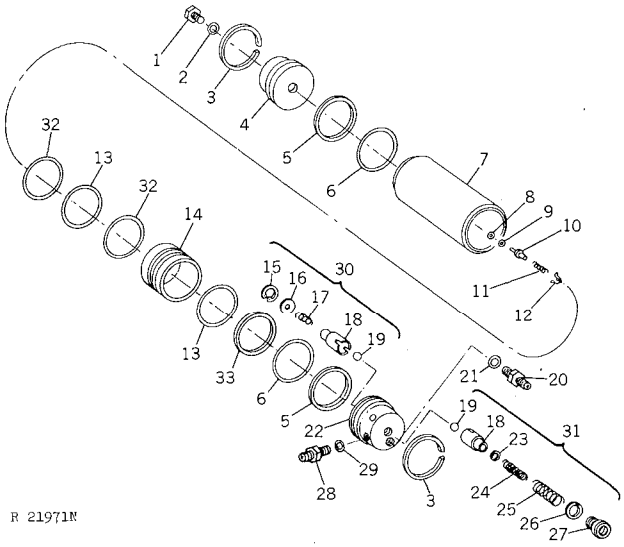
Remove the necessary parts to get to the accumulator.

Remove oil lines from the accumulator and remove accumulator from tractor.

REPAIR

⚠ CAUTION: Bleed nitrogen gas from accumulator before attempting to disassemble. Bleed by removing plug over charging valve and pressing charging valve in until gas has escaped.

Remove retaining rings on the accumulator caps. Remove accumulator caps and piston from cylinder.



1 – Plug
2 – O-Ring
3 – Retaining Ring (2 used)
4 – End Cap
5 – Backup Ring (2 used)
6 – O-Ring (2 used)
7 – Cylinder
8 – Packing
9 – Washer*
10 – Charge Valve
11 – Spring
12 – Guide
13 – Packing***
14 – Piston
15 – Retaining Ring
16 – Washer
17 – Spring
18 – Guide (2 used)
19 – Ball (2 used)
20 – Connector
21 – O-Ring
22 – End Cap
23 – O-Ring
24 – Spring
25 – Spring
26 – O-Ring
27 – Plug
28 – Connector
29 – O-Ring
30 – Thermal Relief** Valve
31 – Check Valve**
32 – Backup Ring (2 used)****
33 – Backup Ring****

Fig. 10–Exploded View of Brake Accumulator

The following changes, as shown in Fig. 10, have been made to the accumulator:

**Approximately (T235492-)—Washer (9) added to gas charging valve assembly.*
***Approximately (T256224-)—Thermal Relief Valve and Inlet Check Valve (30 and 31) added to end cap.*
****Approximately (T256817-)—Two O-ring packings (13) added to piston.*
*****Parts—Three backup rings, (2) single-coil (32) and (1) double-coil (33) added to piston.*

Check all parts for wear or damage.

Check piston and cylinder walls for scoring.

Check thermal relief valve and inlet check valve springs for damage.

Inspect accumulator charging valve, spring, valve guide, and packing for damage.

Replace all parts as necessary.

ASSEMBLY

Install accumulator parts as applicable and as shown in Fig. 10.

PRE-CHARGING ACCUMULATOR

CAUTION: Use only dry nitrogen to pre-charge the accumulator. Dry nitrogen does not mix with oil. It is non-combustible. It will not cause oxidation or condensation within the accumulator and is not harmful to the piston seal. DO NOT use air or any combustible gas as these may cause oxidation and condensation. Oxidation and condensation are harmful to the oil piston seal and the accumulator.

If ND-925 Accumulator Charging Kit is used to charge the accumulator, convert it to this application and charge the accumulator as follows:

1. Remove ND-925-1 gas cock at the union and install R27346 connector.

2. Install a 1/4-inch high pressure hose, such as AR36561, to the connector.

3. Remove the accumulator plug and install R27272 connector in its place.

4. Attach the high pressure hose to the connector on the accumulator. Attach the charging kit hose to the dry nitrogen charging tank.

5. Open the charging tank control valve until 500 ± 25 psi is registered on the pressure gauge. Shut control valve.

6. Remove high pressure hose from the accumulator and reinstall the plug.

NOTE: If the accumulator is over-charged, remove the connector from the accumulator. Depress the valve in the accumulator to allow excess gas to escape.

TESTING THE ACCUMULATOR

Install the accumulator on tractor.

Start and run the tractor engine at 1900 rpm to pressurize the hydraulic system.

Bleed the brakes.

Stop the engine and immediately depress each brake pedal with a force of 50 to 100 lbs. A solid pedal feel should be obtained and pedal travel should not exceed 3 inches.

If travel is excessive, bleed the brakes again. If this does not correct the problem, there is a malfunction of the brake valve or accumulator.