

protect the hydraulic pump 52<sup>a</sup> from high pressure. When the relief valve 32 is not open the fluid flow goes out the power-beyond port 16 to the front auxiliary valve 11. The hydraulic pump 52<sup>b</sup> is protected from high pressure by the relief valve 12. With the selective valve 13 energized the fluid joins the fluid from the front auxiliary valve 9 and goes to the high flow quick couplers 17. Return fluid goes back to the front auxiliary valve 9 and to the hydraulic filter 36.

## 853H HYDRAULIC PRESSURE CHECK

**NOTE: All flow and pressure checks to be made with the engine running at 2750-2850 RPM.**

1. Lift and block the loader.
2. To check the hydraulic pump 52<sup>a</sup> and main relief valve 35, connect the hydraulic tester to the quick couplers 16 or 17.
3. Engage the front auxiliary electrical switch.
4. The free flow should be 18.0 GPM (68,1 L/min.). When the free flow is restricted, the flow will drop to "0" GPM and the main relief valve 35 pressure should be 2550-2600 PSI (17582-17927 kPa). If not, adjust the main relief valve 35. If the relief valve can not be adjusted, do a direct check on the hydraulic pump 52<sup>a</sup>.
5. While the hydraulic tester is connected to the quick couplers 16 or 17, check the high flow relief valve 32 as follows:
  - a. Disconnect the electric solenoid 13.
  - b. Engage the high flow electrical switch.
  - c. Repeat Step 3 & 4, but relief valve pressure should be 3250-3350 PSI (22409-23098 kPa). If not, adjust the relief valve 32.
6. To check the hydraulic pump 52<sup>b</sup> and high flow relief valve 12, connect the hydraulic tester as follows:
  - a. Connect the hydraulic tester inlet to the small female coupler 16 and the outlet to the case drain quick coupler 15.
  - b. Disconnect the two electrical solenoids 11.
  - c. Reconnect the electric solenoid 13.
7. Engage the high flow electrical switch.
8. The free flow should be 6.0 GPM (22,7 L/min.). When the free flow is restricted, the flow will drop to "0" GPM and the high flow main relief 12 should be 3250-3350 PSI (22409-23098 kPa). If not, adjust the relief valve 12. If the relief valve can not be adjusted, do a direct check on the hydraulic pump 52<sup>b</sup>.