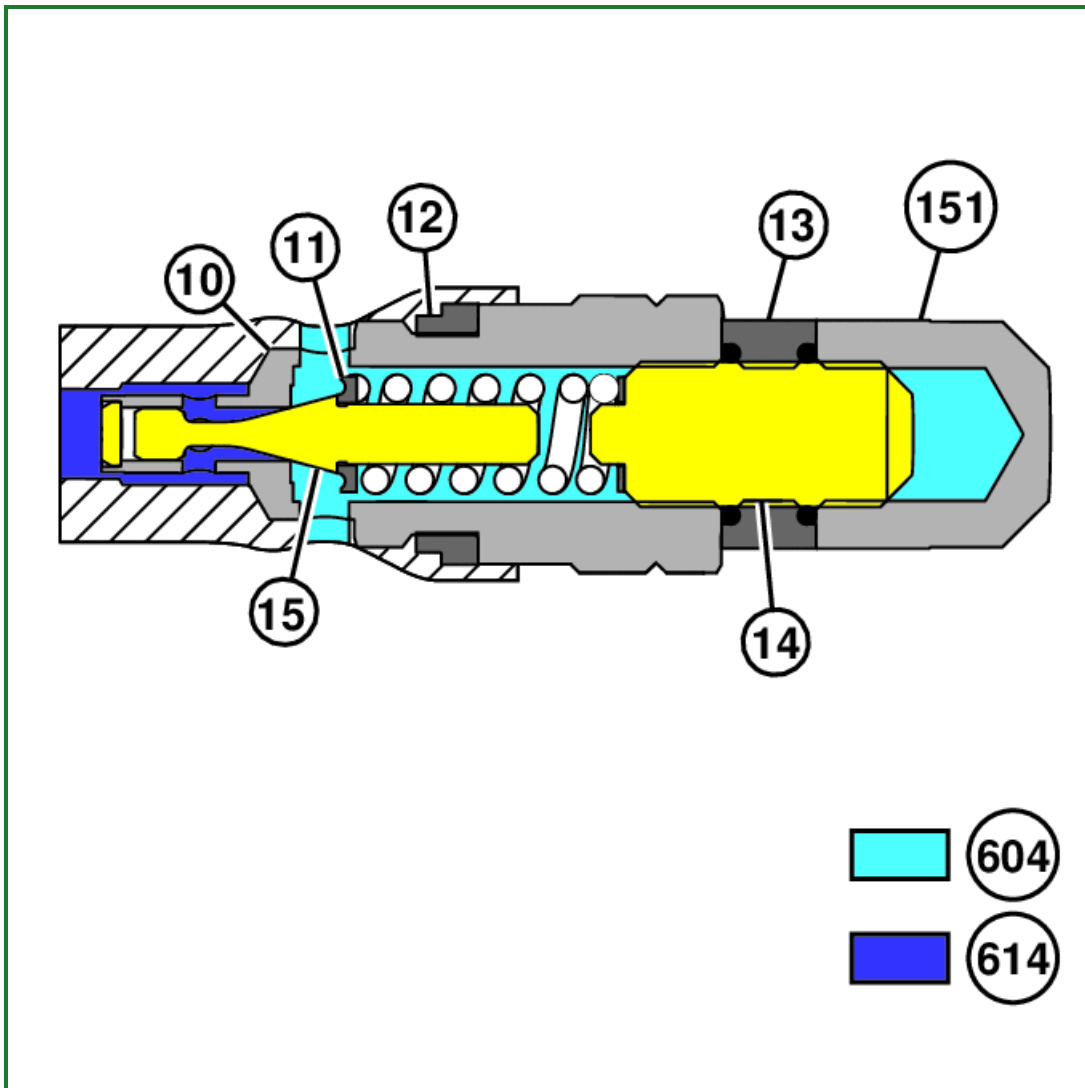


System and Circuit Relief Valve Operation

Load Sense System Relief Valve



TX1185920-UN: Load Sense System Relief Valve

LEGEND:

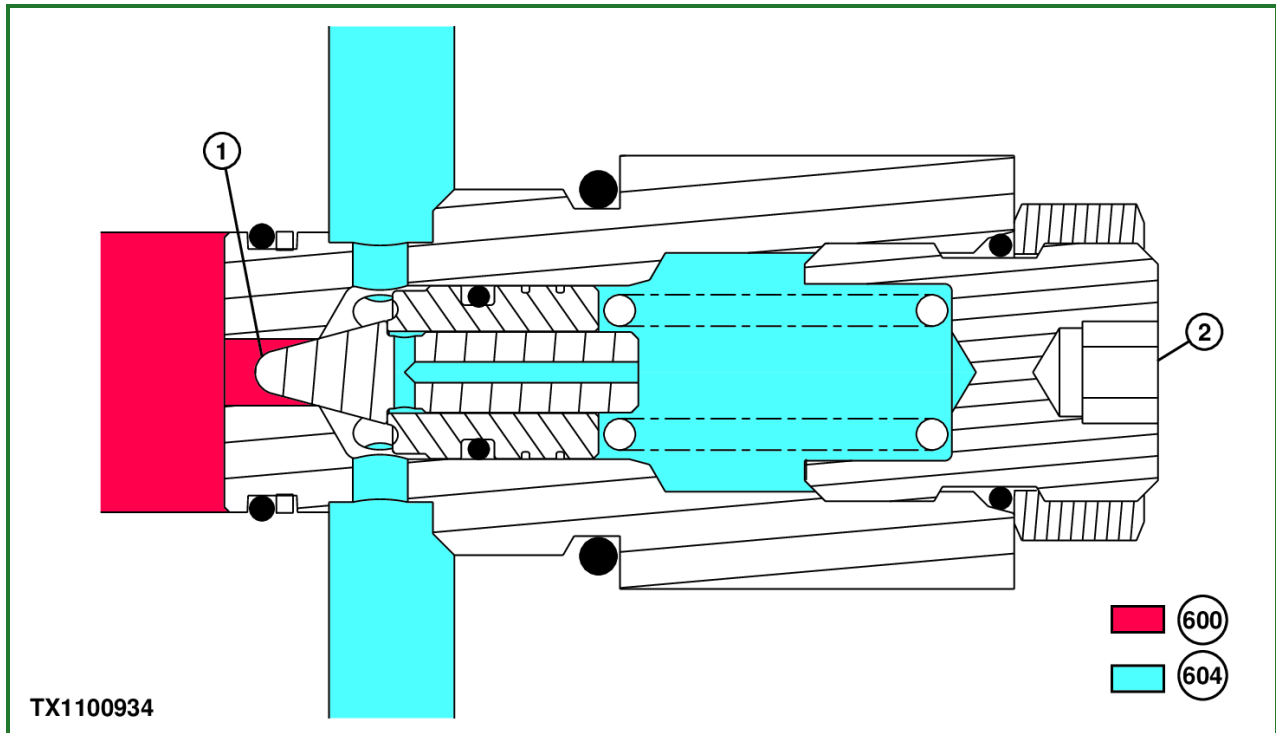
- 10 - Relief Poppet Housing
- 11 - Spring Seat
- 12 - Seal
- 13 - Lock Nut
- 14 - Adjustment Screw
- 15 - Relief Poppet
- 151 - Load Sense System Relief Valve
- 604 - Return Oil
- 614 - Load Sense Oil

The load sense system relief valve (151) is used in the backhoe control valve inlet section. The relief valve is direct acting, screw adjustable, and does not have anticavitation operation.

The pressure set point is adjustable by loosening the lock nut (13) and turning adjustment screw (14). Turning in adjustment screw increases pressure setting.

In relief operation, load sense pressure oil (614) overcomes set pressure forcing relief poppet (15) against spring seat (11), allowing oil to flow from the pressurized port to tank. For more information, see [Backhoe Control Valve Operation](#) . (Group 9025-05.)

Circuit Relief Valve Without Anticavitation—Loader



TX1100934-UN: Circuit Relief Valve Without Anticavitation (26 mm [1.06 in.] port size shown)

LEGEND:

- 1 - Main Poppet
- 2 - Adjustment Screw
- 600 - High-Pressure Oil
- 604 - Return Oil

The 26 mm (1.06 in.) port size O-ring seal relief is used on loader control valve boom up and bucket curl.

These reliefs are direct acting, screw adjustable, and do not have anticavitation operation.

The pressure set point is adjustable by turning the adjustment screw at the end of the relief. Turning the screw in increases the pressure setting.

In relief operation, high-pressure oil (600) acting on main poppet (1) overcomes spring pressure and oil flows from the pressurized port to tank.

Circuit Relief Valve With Anticavitation—Loader Auxiliary and Boom Down