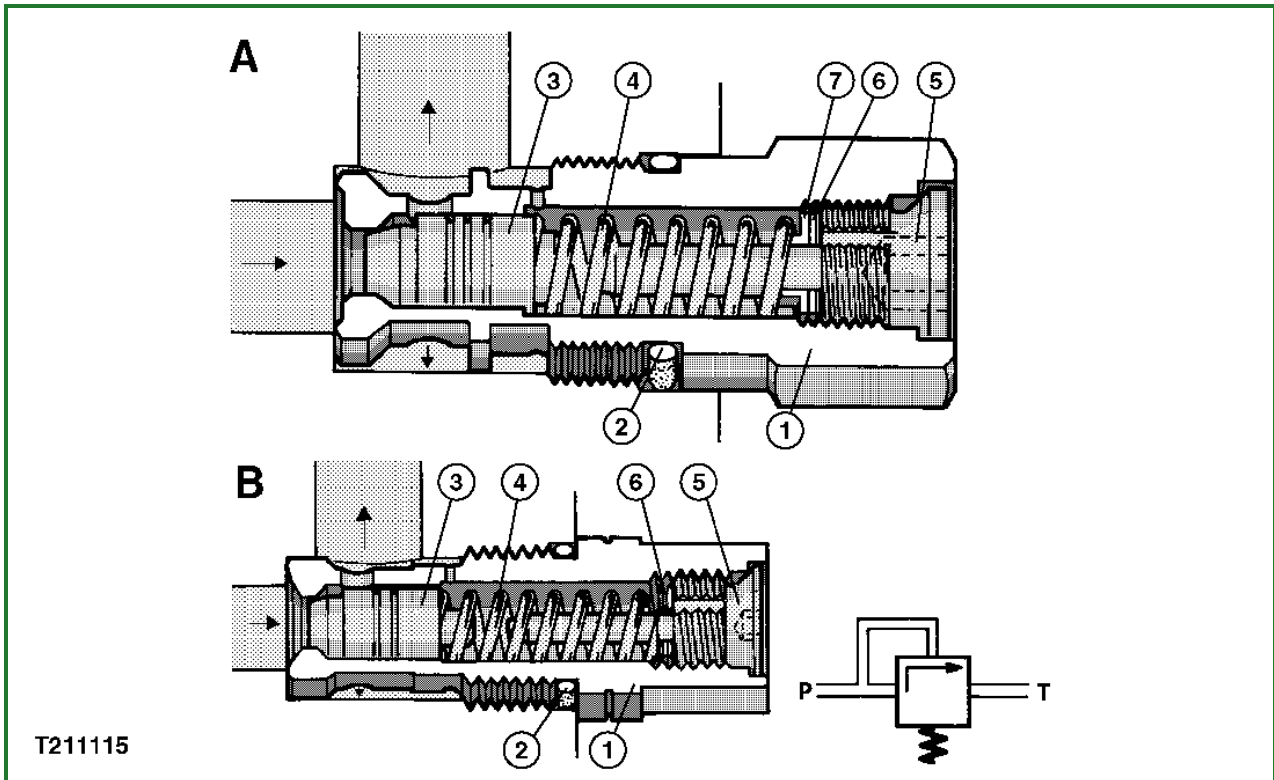


Charge Oil Pressure Regulating Valve Operation



T211115

T211115-UN: Charge Relief

LEGEND:

- A - Size 8 Version
- B - Size 6 Version
- 1 - Piston Sleeve
- 2 - O-Ring
- 3 - Piston
- 4 - Spring
- 5 - Plug with guide pin
- 6 - Shim
- 7 - Spring Washer

This metal-to-metal seal relief is used to regulate charge oil pressure. This relief valve is direct acting and nonadjustable. This valve is available in two sizes, but components function the same way.

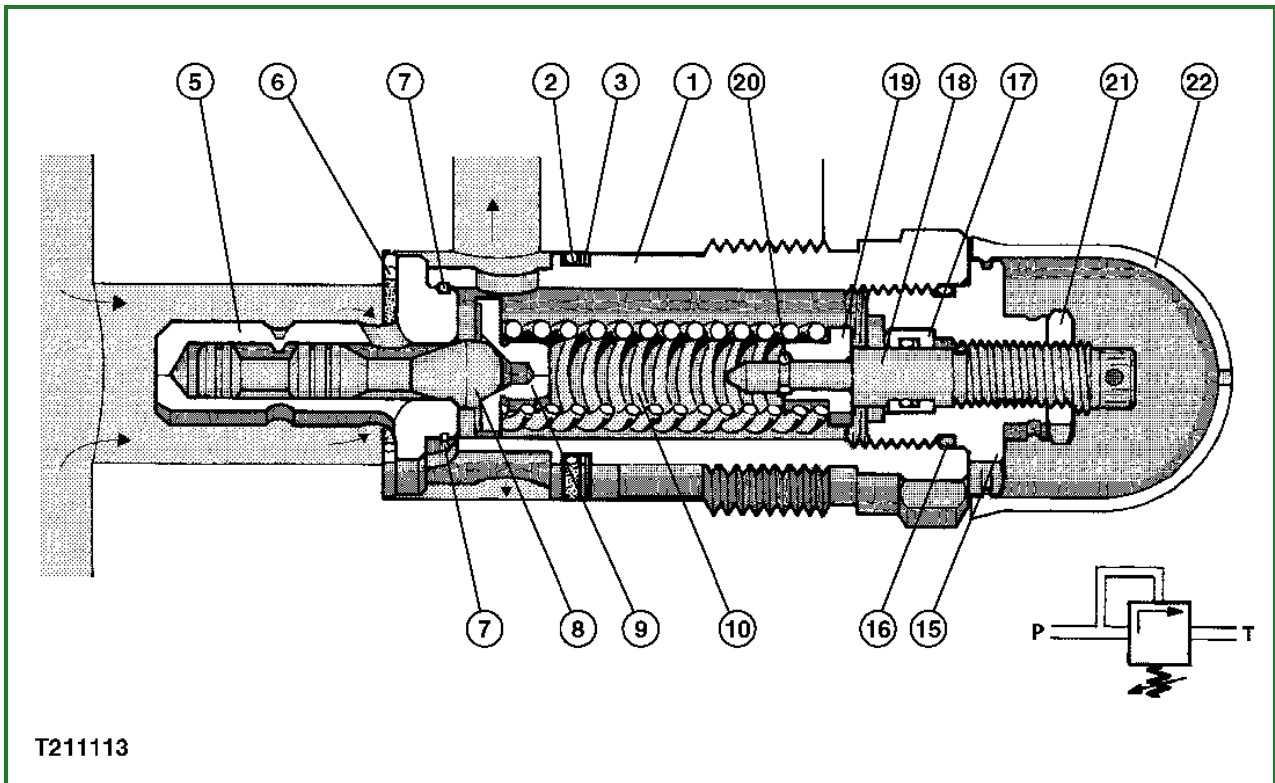
Valves are preset at factory and should be replaced if not maintaining pressure setting. The factory pressure setting is stamped on valve housing. In relief operation, pressure oil overcomes main piston (3) and oil flows from the pressurized port to tank.

The cold start relief valve is used in series with this valve. If charge oil pressure is below specifications, the cold start relief has to be tested and adjusted before replacing this valve.

Go to [Section_9026:Group_05](#)

JC89288,0000018-19-20051004

Cold Start Relief Valve Operation



T211113-UN: Cold Start Relief

LEGEND:

- 1 - Valve Housing
- 2 - O-Ring
- 3 - Seal Ring
- 5 - Valve Insert
- 6 - Seal Ring
- 7 - Retainer Clip (2 used)
- 8 - Valve Poppet
- 9 - Spring Washer
- 10 - Spring
- 15 - End Housing
- 16 - O-Ring
- 17 - Bushing
- 18 - Adjustment Screw
- 19 - Spring Washer
- 20 - Retaining Clip
- 21 - Lock Nut
- 22 - Cap

This is a direct acting adjustable relief valve. The function of this valve is to protect the charge system at cold hydraulic startup. It is in series with the charge relief, which regulates charge oil system pressure. Cold start relief is set approximately 500 kPa (5 bar) (72 psi) higher than charge relief. This setting is obtained by adjusting this valve 1/2 turn in, after charge relief pressure is measured.

Go to [Section_9026:Group_05](#)

JC89288,0000016-19-20051003