

DATE: November 18, 2004

PAGE: 1 of 2

REVISED: November 1, 2011

BULLETIN NO. _____ WSB0378

SECTION: _____ 4-1 (Brake System)

MODEL(S): All Wagner Heavy Lift Units
with hydraulic brake systems

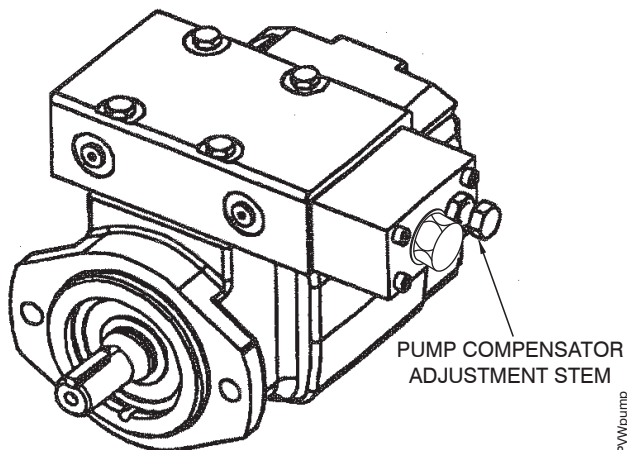
ATTENTION: WAGNER DEALERS, PARTS AND SERVICE MANAGERS

SUBJECT: Brake Pump Replacement - ASC P/N 239790, P/N 248990, P/N 257073
P/N 253482 (part of Kit 583103).

COMMON CAUSES OF PUMP FAILURE

- Contamination – Ensure hydraulic system is free of contamination.
- Loss of accumulator nitrogen precharge, causing pump control to continuously cycle. Check and adjust nitrogen charge as required in accumulators (See WSB0360A).
- The system relief is set too close to the pump compensator causing the pump controller to continuously cycle. Adjust the system relief to 500 psi above the compensator setting. See adjustment procedure on next page.
- If a problem is with the shaft seal leaking, then closely inspect the case drain line. This line must be unrestricted and the same size as the port on the pump (full size), from pump to the reservoir. Case drain lines must be terminated below the hydraulic oil level in the tank.
- Visually inspect the case drain hose and fittings to ensure there is no debris lodged inside causing a restriction.
- If pump has experienced a shaft failure, it has typically been found to be an alignment problem. Pump alignment must be 0.005" TIR or less. Inspect pump mount and gasket for defects.
- Make sure the pump housing is flooded with oil before starting the engine (new installation).

ASC P/N 239790 or P/N 257073



ASC P/N 248990

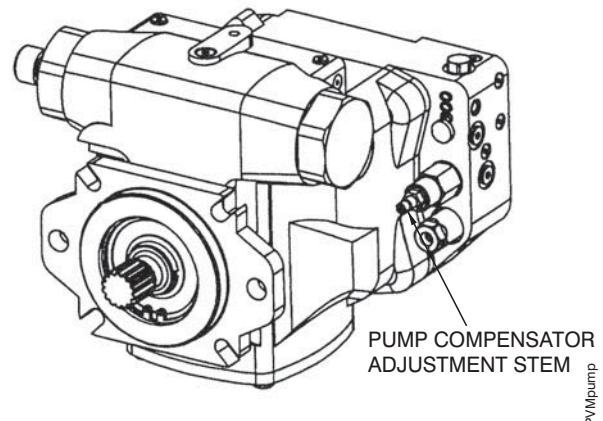


Figure 1. Pump Compensator Adjustment Stem Location

PUMP PRESSURE SETTING PROCEDURE

1. Turn the engine off.
2. Locate the pilot/ brake pump compensator adjustment stem. Loosen the jam nut and rotate the adjustment stem counter clockwise (CCW) to the minimum setting.
3. Locate the system relief valve at the outlet of the brake/ pilot high pressure filter. Loosen the jam nut and rotate the adjustment stem clockwise (CW) fully to maximum adjustment, and then CCW 1/2 revolution.
4. Install a 5,000 psi hydraulic gauge at the pressure check point located at the inlet of the brake/ pilot high pressure filter.
5. Start the engine. Operate the engine at low idle while making the following adjustments.

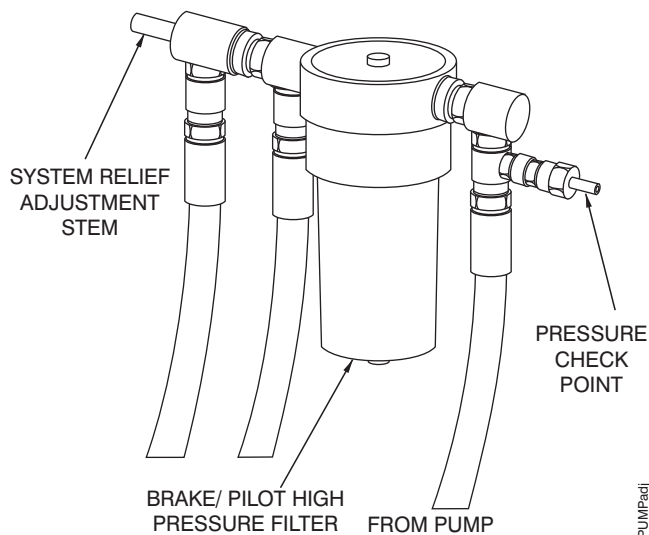


Figure 2. Hydraulic Filter and System Relief Stem

6. Rotate the pump compensator adjustment stem CW until pressure is increased to 500 psi above system pressure (compensator setting). Example: system pressure setting as detailed on the specific unit hydraulic schematic is 2,750 psi; then temporarily adjust the compensator to 3,250 psi.
7. Rotate the system relief adjustment stem CCW until you see the pressure at the gauge begin to decrease or you hear the relief begin to open. Rotate the adjustment CW slightly until the gauge is again at the desired pressure. Tighten jam nut. The system relief is now properly set at 500 psi above system pressure.

NOTE: Consult the hydraulic schematic for the proper system pressure. The relief pressure should ALWAYS be set at 500 psi higher than the proper system pressure, regardless of what the schematic suggests.

8. Rotate the pump compensator adjustment stem CCW until the pressure gauge reads the desired system pressure (2,750 psi for this example). Tighten jam nut. The pump compensator is now properly set and all adjustments are complete.
9. Shut off the engine and remove the hydraulic gauge.

If you have any further questions or concerns, please contact your local Wagner dealer or the Allied Systems Company Service Department at 503-625-2560.