Pressure Setting Procedures

Allied Wagner SW100F Steelworker

NOTE: ALL PRESSURE SETTING MUST BE MADE WITH THE ENGINE AND TRANSMISSION AT OPERATING TEMPERATURES, AND HYDRAULIC OIL IS AT LEAST 70° F (21.1° C).

- 1. Engine Off.
- 2. Fill pump cases with oil.
- Back off three main pump relief cartridges (steering, hoist & tilt and implement) located in manifolds on high pressure filters to minimum settings.
 See Figure 1. Minimum setting 500 psi, maximum setting 3000 psi, one turn clockwise increases pressure setting by 500 psi.
- Increase remote compensator relief setting to above 3000 psi (two & one half turns above minimum setting). See Figure 1. Minimum setting 150 psi, maximum setting 6000 psi, one turn clockwise increases pressure setting by 1200 psi.
- Increase relief valve setting in Load Sense Manifold (located on the bulkhead, under the machine, and ahead of the converter) to above 3000 psi (two & one half turns above minimum setting).
 See Figure 2. Minimum setting 150 psi, maximum setting 6000 psi, one turn clockwise increases pressure setting by 1200 psi.

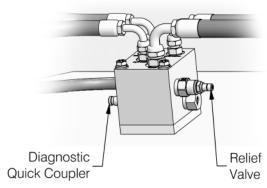


Figure 2 - Load Sense Manifold

Increase cross over reliefs in hoist and tilt manifolds maximum setting of 3000 psi. See Figure 3.
 Minimum setting 100 psi, maximum setting 3000 psi, one turn clockwise increases pressure setting by 600 psi.

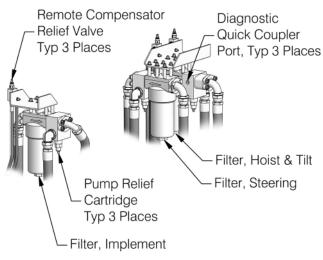


Figure 1 - High Pressure Filters

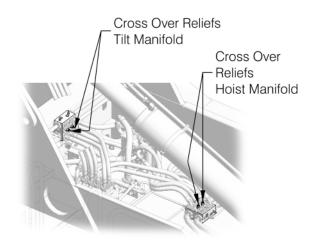


Figure 3 - Cross Over Relief Manifolds

- 7. Preset pressure compensator on steering, implement and hoist pump above 3000 psi (one turn clockwise increases compensator setting by 1200 psi). See Figures 4 & 5. Pump pressures will not increase to 3000 psi as the flow will pass over the relief valves on the filter manifolds set at minimum setting.
- 8. Connect a jumper hose from the diagnostic quick coupler on Load Sense Manifold to the steering pump diagnostic quick coupler on the Steering Filter Manifold (will require tee for gauge connection). See Figures 1 & 2. This will provide steering pump pressure to the load sense ports of all three pumps (the converter mounted steering pump, the right hand side engine mounted implement pump and the left hand engine mounted hoist/tilt pump).
- 9. Start engine, idle.
- Set steering pump relief cartridge on the steering filter manifold to 3300 psi, with the engine at idle. Minimum setting 800 psi, maximum 4500 psi, one turn clockwise increases pressure setting by 750 psi.
- 11. Remove jumper hose between load sense manifold and steering pump diagnostic quick coupler.
- 12. Adjust the implement & hoist / tilt pump relief cartridges to maximum setting, approximately 3000-3300 psi with the engine at idle.
- With the engine off, set pump compensator settings to 3000 +/- 100 psi. Check and readjust if necessary.
- With the engine running, set the remote pump compensator cartridges to: Steering System......2800 +/- 50 psi.

Implement & Hoist/Tilt.......2600 - 2800 psi.

- 15. Set the implement pump relief cartridge to 2500 +/- 50 psi and the hoist / tilt pump relief cartridge to 2500 +/- 50 psi, with the engine at idle. See Figure 1.
- 16. Set the cross over relief cartridges in the hoist & tilt manifolds per ANSI schematic 585395 (+/- 50 psi). See Figure 3.
- 17. With the engine running, set the remote pump compensator cartridges for implement & hoist / tilt to 2200 psi +/- 50 psi. See Figure 1.
- 18. With the engine off, set the load sense relief valve to provide steering pump pressure of 2200 psi. See Figure 2. Check and readjust if necessary.
- 19. With the engine off, set all three pumps to standby pressure, 300 +/- 25 psi. See Figure 4. Minimum setting 180 psi, maximum setting 700 psi, one turn clockwise increases pressure setting by 170 psi. Start engine and check pressures, readjust setting if necessary. Repeat until settings are achieved.

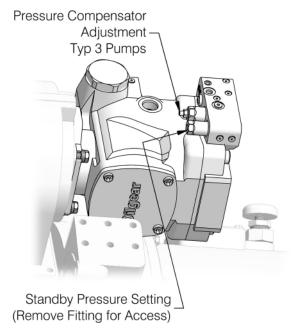


Figure 4 - Pressure Comp Adjustment



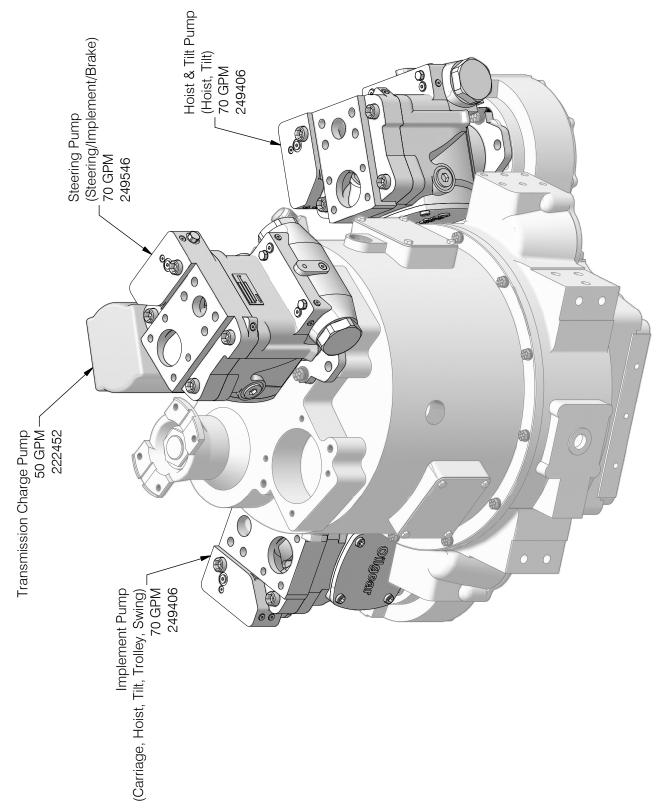


Figure 5 - Hydraulic Pump Locations