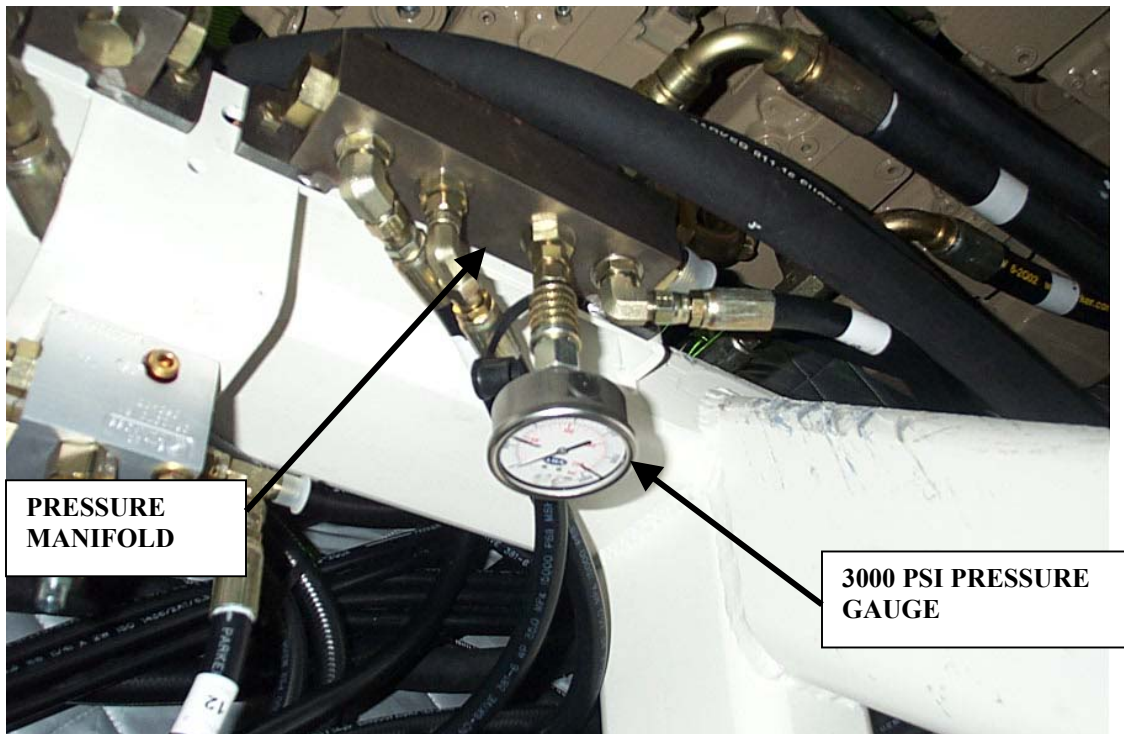


SB-2500C SHUTTLE BUGGY PRESSURE SETTINGS

The SB-2500C Shuttle Buggy has a number of hydraulic pumps and valves that require certain pressure settings be maintained. This procedure will provide an instructional illustration of the proper methods for maintaining these particular pressure settings. NOTE: if a particular pressure setting cannot be maintained then further testing of the component should determine the cause of failure. **NOTE- BEFORE CHECKING PUMP PRESSURES, BRING HYDRAULIC OIL TO OPERATING TEMPERATURE BY ENGAGING THE CONVEYORS FOR ABOUT 15 MINUTES.**

PUMP PRESSURE

1. AUXILIARY PUMP



(FIGURE 1)

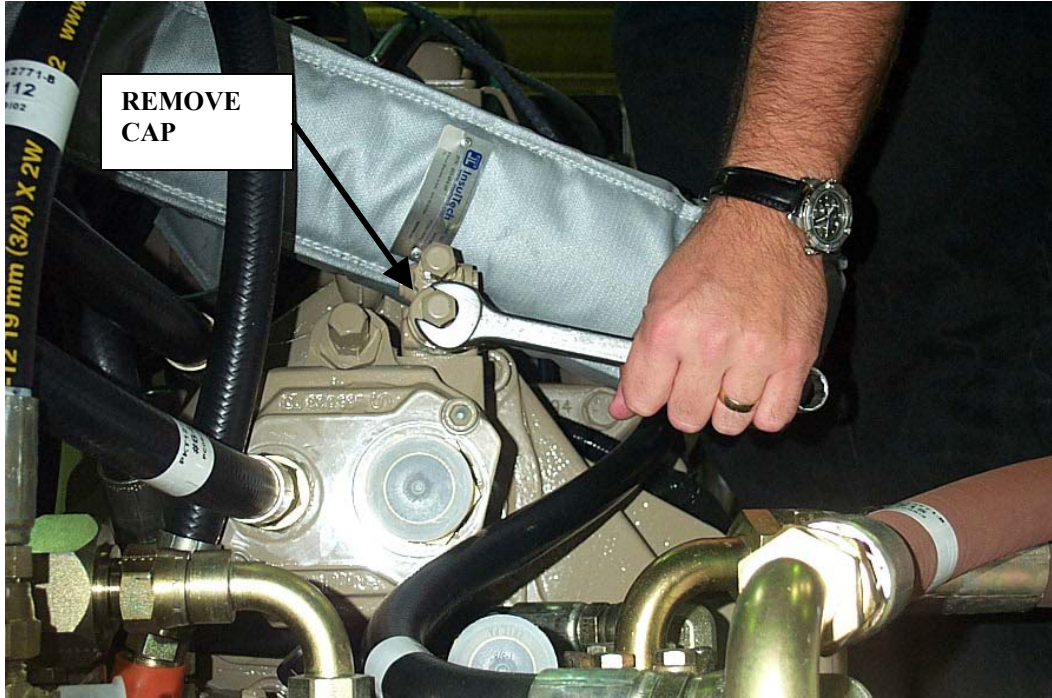
The auxiliary systems pump is a Rexroth variable displacement pump. The auxiliary system pressure is pre set at the factory at 2700 psi. This pressure can be tested using a 3000 psi gauge equipped with a female quick disconnect fitting. **With the machine engine turned off**, connect the gauge to the male quick disconnect fitting found on the pressure manifold of the machine (figure 1). The pressure manifold is located on the left hand side of the machine mounted just above and in front of the left rear tire to the frame just below the engine pumps. With the test gauge attached to the manifold, crank the engine, observing the pressure reading on the gauge.

If the auxiliary pressure needs to be adjusted, raise the engine compartment hood to gain access to the auxiliary pump. With the test gauge still attached to the pressure manifold, and the engine running. Follow these next steps to adjust the pressure on the pump.

A. Using a 17mm open-end wrench, remove the cap to the pressure adjustment screw (figure 2).

B. With a 3mm Allen wrench adjust the pressure by turning the screw clockwise to increase pressure and counter clockwise to decrease pressure (figure 3).

C. Once pressure is adjusted to the 2500 psi., replace the adjustment screw cap and remove the gauge from the pressure manifold.



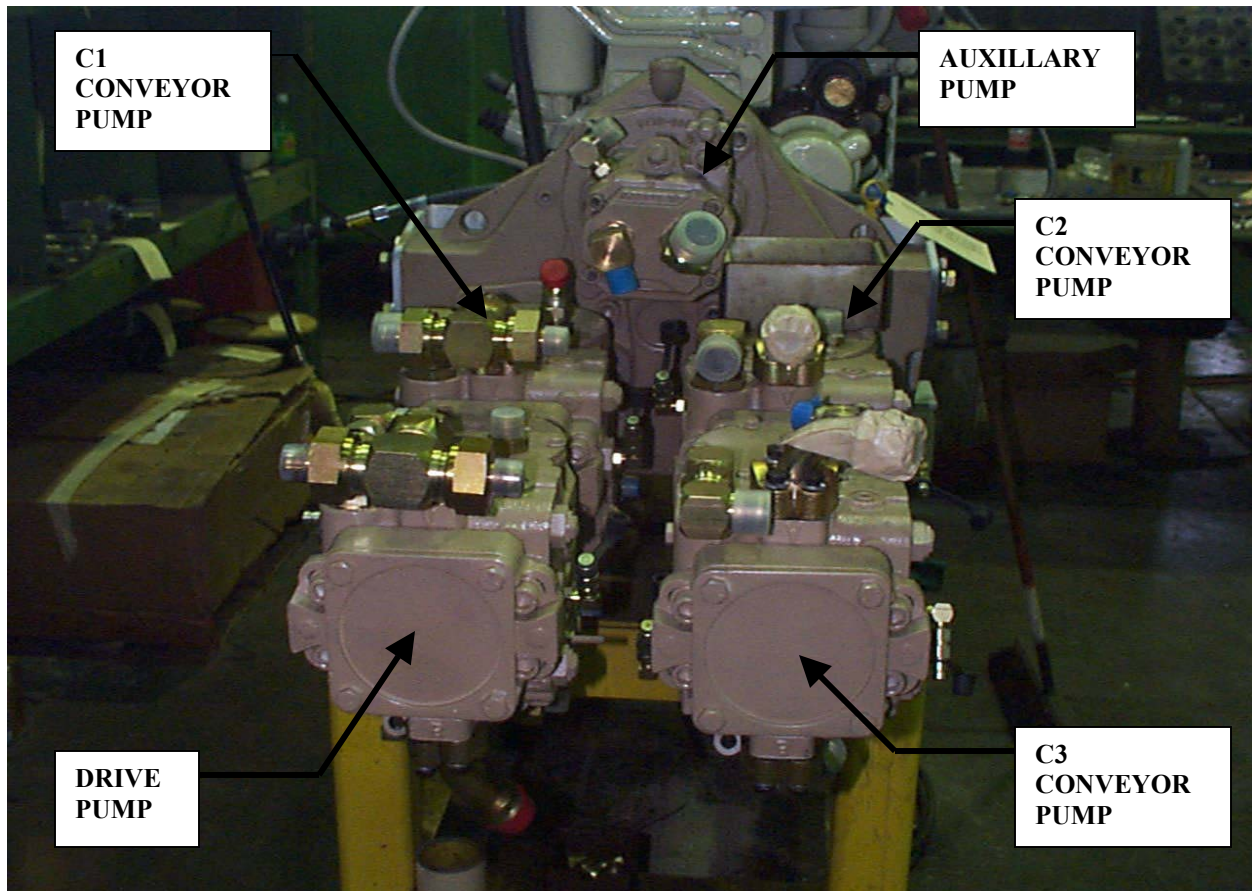
(FIGURE 2)



(FIGURE 3)

2. TRAVEL AND CONVEYOR PUMPS

The travel and conveyor pumps are all series 90 Sauer Danfoss axial piston variable displacement pumps (figure 4). The system pressure for travel, C-1, C-2, & C-3 pumps are all factory pre-set at 6500 psi. The following steps should be taken to check and adjust pump pressure.

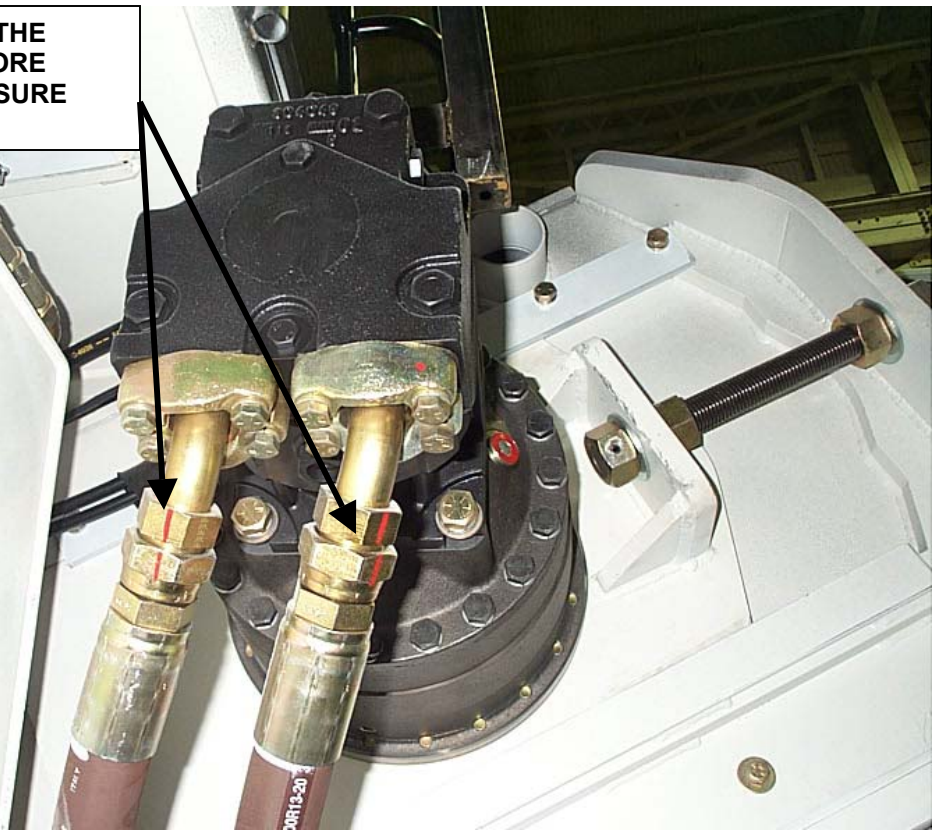


(FIGURE 4)

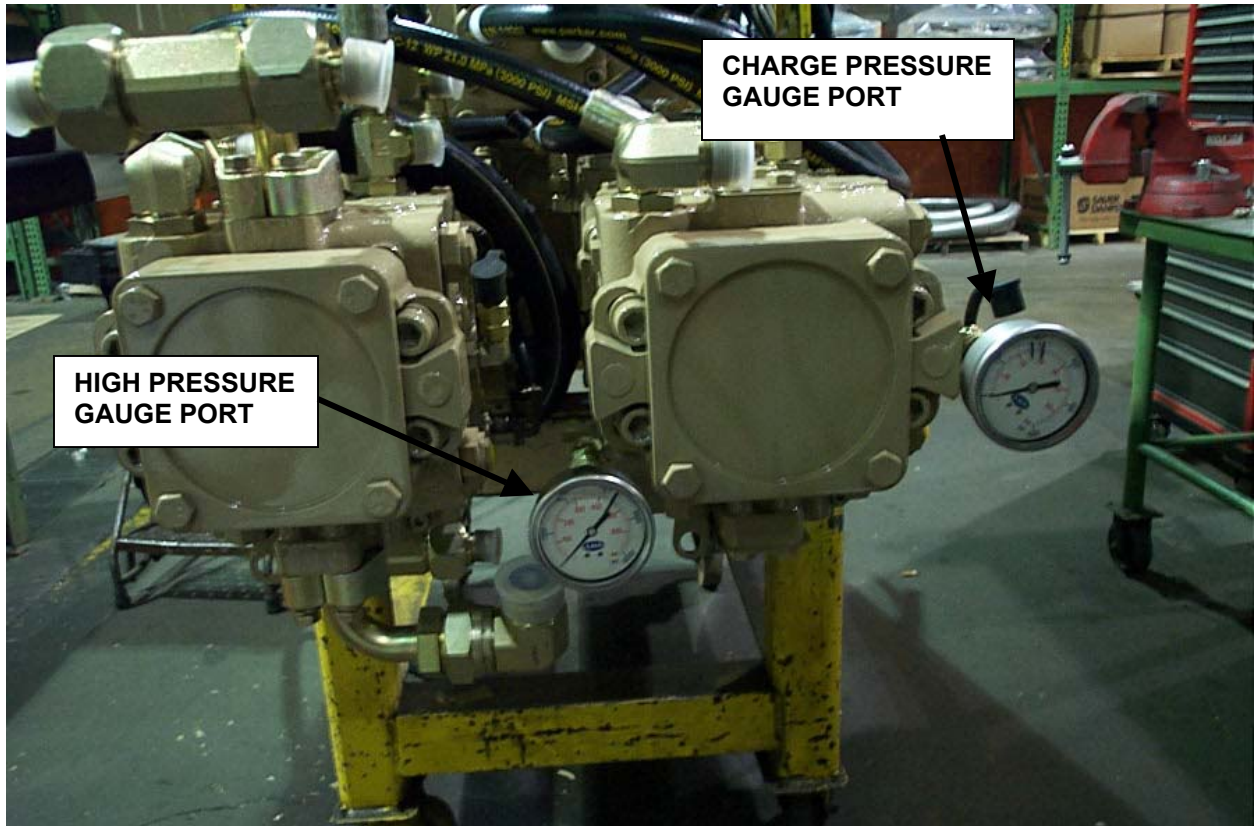
CHECKING PUMP PRESSURES

- A. Install a 1000 psi. pressure gauge into the charge pressure gauge port (figure 6).
- B. Also install a 10,000 psi. pressure guage into each high pressure gauge ports (figure 6).
- C. Disconnect and Cap the pressure hoses at the hydraulic motors. If your going to test only one pump then disconnect and cap the hoses at that particular hydraulic motor (figure 5).
- D. Start engine allowing RPM to settle at normal operating range, the charge pressure gauge should read 350 psi, the high pressure gauges should read 6500 psi.
- E. If the pressures are not correct then follow the next set of instructions to properly adjust them.

**DISCONNECT AND CAP THE
PRESSURE HOSES BEFORE
TESTING SYSTEM PRESSURE**



(FIGURE 5)

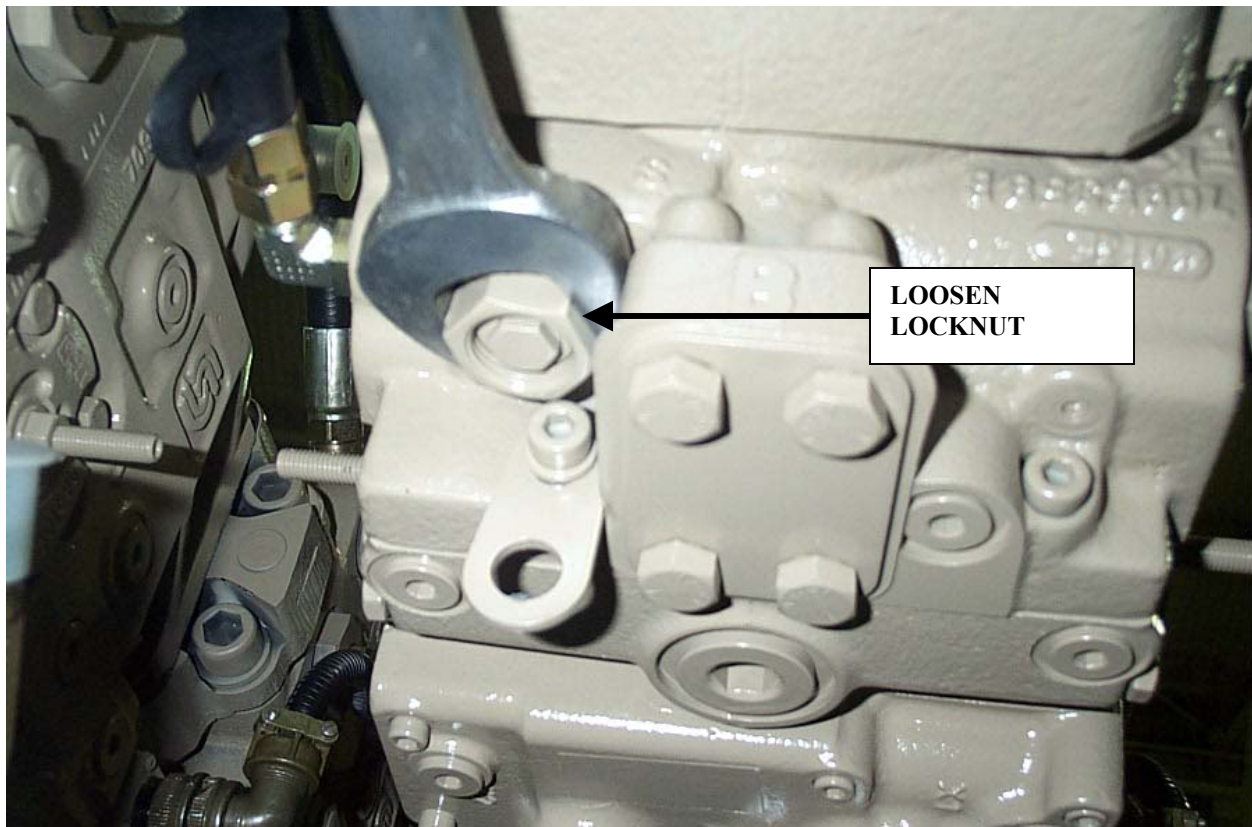


(FIGURE 6)

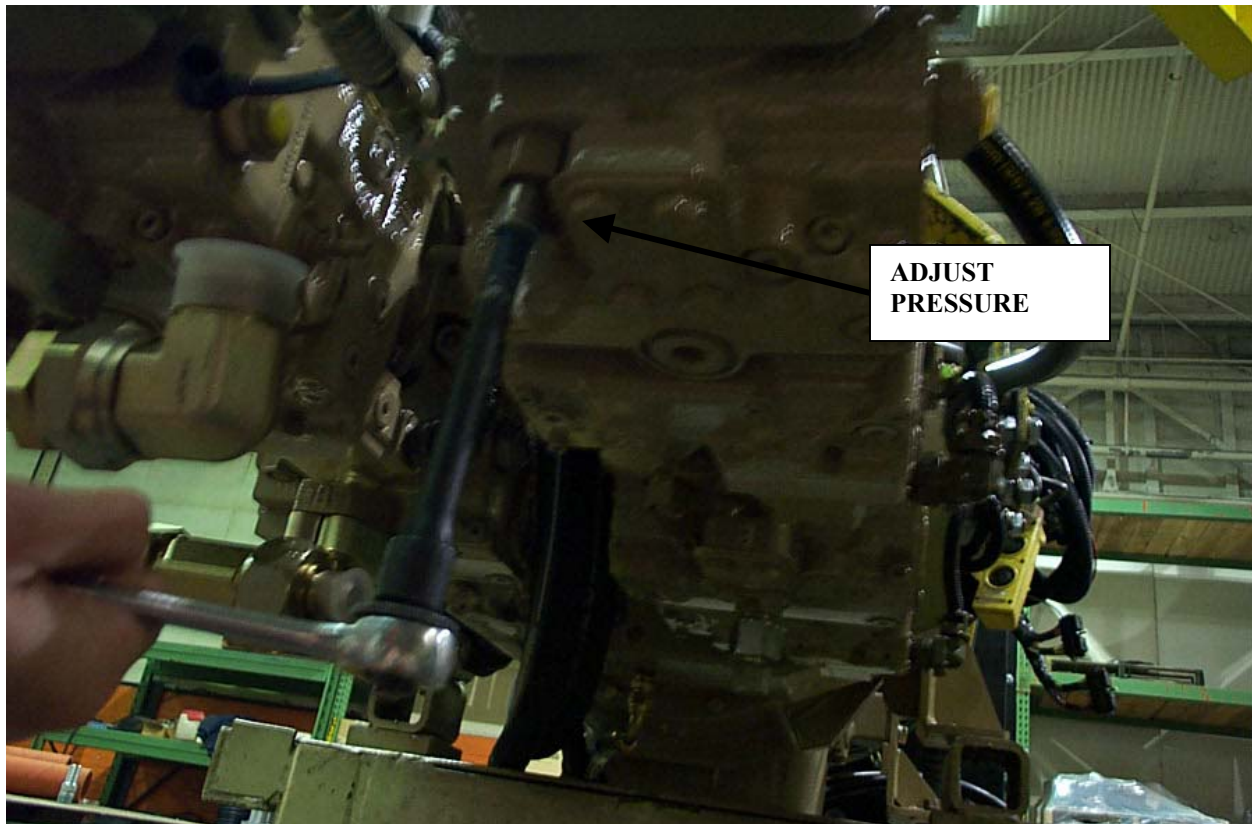
ADJUSTING PUMP PRESSURES

CHARGE PRESSURE ADJUSTMENT

1. With the engine running and gauge installed Use a 1 1/16 open end wrench to break loose the locknut surrounding the charge pressure adjustment bolt located on the under side of the pump (figure 7).
2. Next use a ½ inch socket wrench to rotate the charge pressure adjustment bolt clockwise to increase pressure setting, or counter clockwise to decrease pressure setting (figure 8).
3. While holding the pressure adjusting bolt stationary with the socket wrench, simultaneously use the open-end wrench to re-tighten the locknut , thus securing pressure setting.



(FIGURE 7)



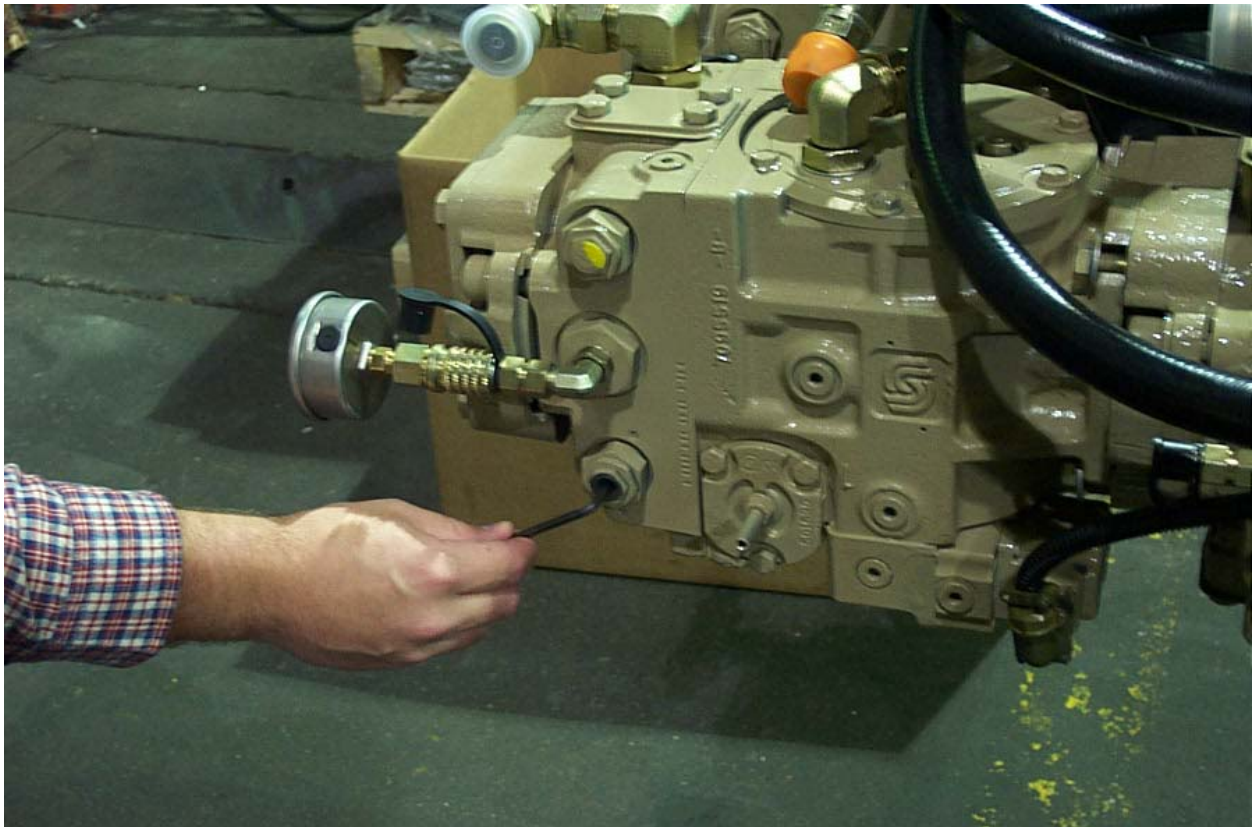
(FIGURE 8)

HIGH PRESSURE ADJUSTMENT

1. Leave engine running and high pressure gauges installed
2. Remove plastic dust cap covering adjustment screw
3. Loosen locknut surrounding adjustment screw using a $\frac{3}{4}$ " open-end wrench(Figure 9).
4. With a 5mm Allen wrench rotate the adjustment screw clockwise to increase pressure or counter clockwise to decrease pressure (Figure 10).
5. While holding the pressure adjusting screw stationary with the hex wrench, simultaneously use the open-end wrench to re-tighten the locknut , thus securing pressure setting (DO NOT OVERTORQUE).



(FIGURE 9)



(FIGURE 10)