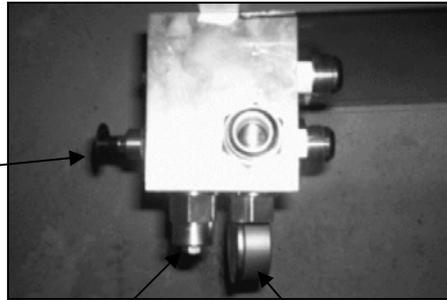


# Setting the System Pressures

- 1) **Oil temperature 100° F.** Before the system pressures can be set the hydraulic oil temperature should be at least 100° F. The oil temperature can be checked with the thermometer that is in the sight gauge. The oil temperature can be increased by letting the machine run with the inbound table raised for a while (The detented valve handle should be engaged). **Caution:** if the handle is left in the detented position for long periods of time the hydraulic system will over heat and the oil will need to be replaced.
- 2) **Set main system pressure to 2100 PSI.** Loosen the retaining nut and turn the hex head set screw on the pressure relief cartridge at the control valve all the way in. With the machine running and the inbound table in the raised position adjust the pressure relief cartridge on the High/Low valve to 2200 PSI and lock it in place. Then adjust the pressure relief cartridge on the control valve to a pressure of 2100 PSI and lock it in place.

**High/Low Valve  
(Top View)**

Pressure Relief Cartridge RPGC-LAN



Counter Balance Cartridge CBGA-LHN

System Pressure Gauge

**Control Valve  
(Front View)**

Pressure Relief Cartridge

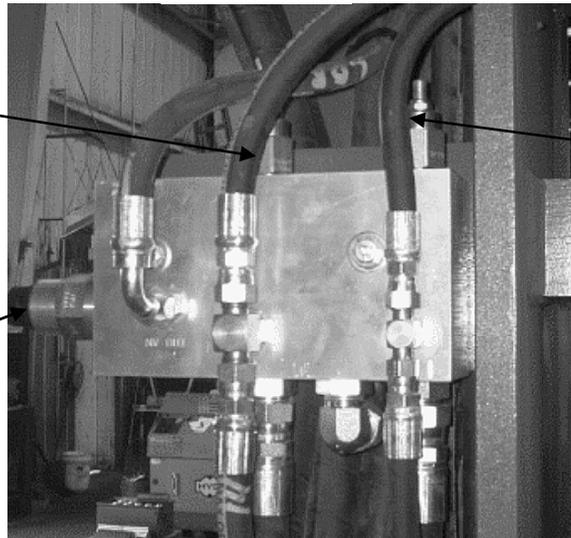


- 3) **Set the tooth lock and unlock pressures.** At the cross port relief valve, adjust the left pressure relief cartridge (SUN RDFA-LBN) to 750 PSI with the inbound table in the raised position (Valve handle detent engaged). This cartridge controls the pressure to the inbound table cylinders, the pressure to extend the teeth and raise the veneer gauges if applicable. Adjust the right pressure relief cartridge (SUN RDFA-LEN) all the way out. This cartridge controls the pressure that is applied to lock the teeth and lower the veneer gauges if applicable.

**Cross port Relief Valve  
(Front View)**

Pressure Relief Cartridge RDFA-LBN

Needle Valve NFFC-LGN



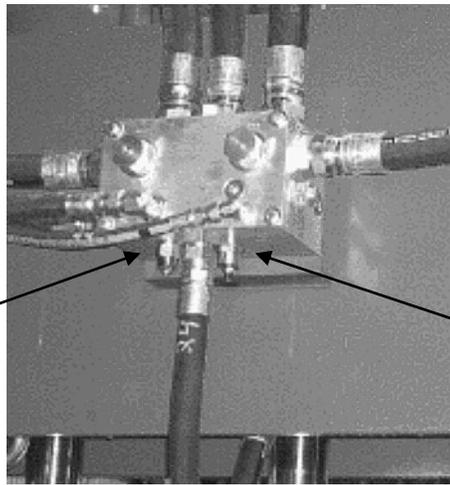
Pressure Relief Cartridge RDFA-LEN

- 4) **Setting the Sequence Valve.** Loosen the lock nut on the counter balance valve (CBEA-LIN) and screw the set screw all the way in and retighten the lock nut. This valve will open to allow the outside cylinders to return excess fluid to the tank due to the difference in volume between the top and bottom of the cylinder due to rod displacement. To adjust the sequence valve (CBEA-LEN) you need to bring the top jaw all the way down while watching the pressure gauge. As the system builds pressure the needle on the gauge will start to climb. At a set point, the system will start to apply pressure to the outside cylinders for increased tonnage. You will see the pressure gauge suddenly drop and then continue to build to full system pressure (2100 PSI). This is when the sequence valve opens. If you raise the head a little bit and then bring it back down you will notice that it does the same thing. Adjust the sequence valve so that this pressure is about 1200 PSI. There is no hard and fast rule about what the pressure should be set at but 1200 PSI is a good place to start.

If the Sequence Valve is all the way out, the system will take a long time to build pressure.

If the Sequence Valve is all the way in, the system will not apply any pressure to the outside cylinders, full tonnage will not be reached and the machine will not cut thick or hard stone.

**Sequence Valve**  
(Front View)

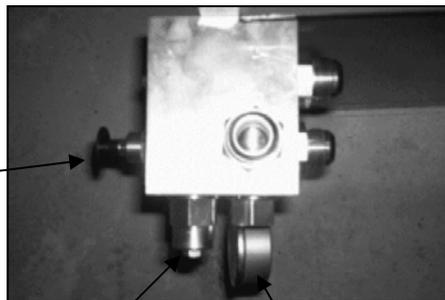


Counter Balance Valve  
CBEA-LIN

Sequence Valve  
SQHB-LAN

- 5) **Setting the counter balance Valve.** The Counter Balance Valve (SUN CBGA-LHN) on the power unit needs to be set in the field due to inconsistent power sources. On diesel power units you should not have to adjust it. The only requirement on the Counter Balance Valve is that it must be set to open after the Sequence Valve or the machine will run slow. To set the Counter Balance Valve on an electric power unit you must attach an Amp Meter around the wires to the motor at the control box. You should adjust the counter balance valve so that the current is the full load motor amperage when the head is moving up. Turning the screw in will reduce the pilot cracking pressure and reduce the load at which the valve will dump to tank.

**High/Low Valve**  
(Top View)



Pressure Relief Cartridge  
RPGC-LAN

Counter Balance Cartridge  
CBGA-LHN

System Pressure Gauge

**Electric Control Panel**  
(Front View)



Ammeter

Electric Wires to the Motor