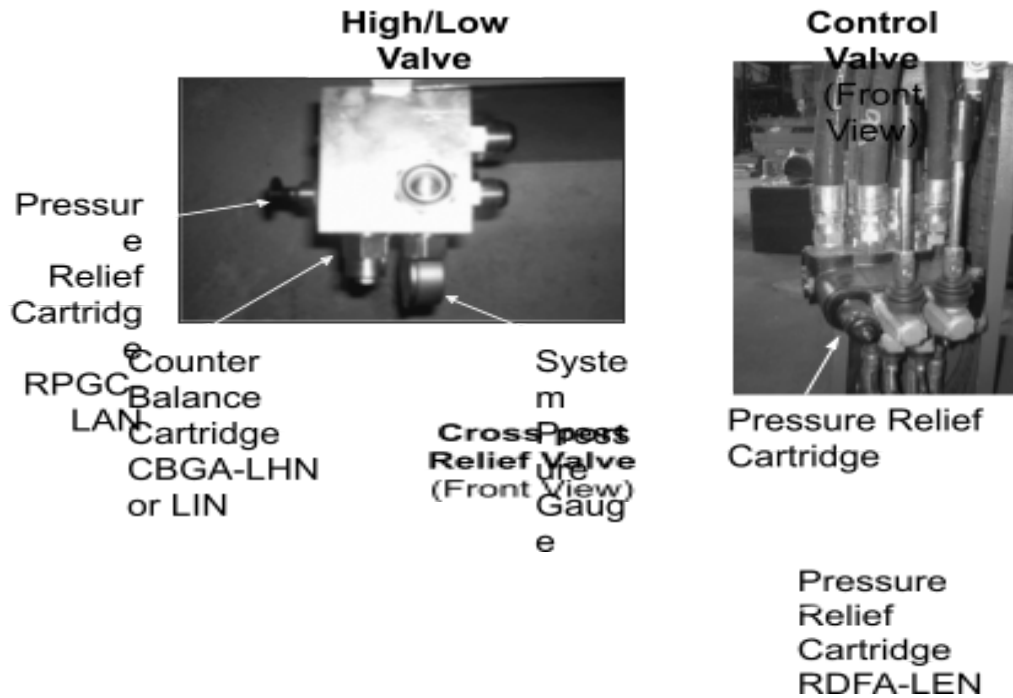


- 1) **Oil temperature 100° F.** Before the system pressures can be set the hydraulic oil temperature should be at least 100° F. The oil temperature can be checked with the thermometer that is in the sight gauge on the side of the hydraulic tank. The oil temperature can be increased by letting the machine 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 2400 PSI.** Loosen the retaining nut and turn the set screw on the pressure relief cartridge at the control valve all the way in. With the machine running and the cutting area clear, lower the top jaw all the way down and hold the lever in the down position. This will “deadhead” the top jaw cylinders and climb to the set system pressure. Adjust the pressure relief cartridge RPGC-LAN on the High/Low valve to 2400 PSI and lock it in place. Then adjust the pressure relief cartridge on the control valve to a pressure of 2300 PSI and lock it in place. Move the jaw up and deadhead it again to verify the setting.

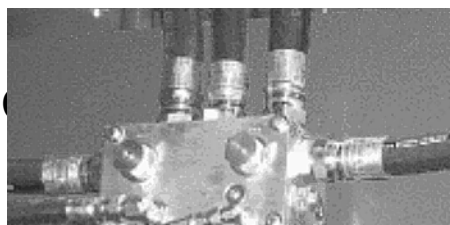


- 3) **Set the tooth lock and unlock pressures.** At the cross port relief valve, adjust the left pressure relief cartridge (SUN RDFA-LBN) to 750 PSI with the inbound table in the raised position (Valve handle detent engaged). This cartridge controls the pressure to the inbound table cylinders, the pressure to extend the teeth and also 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).

Needle  
Valve  
NFFC-L  
GN



Pressure  
Relief  
Cartridge  
RDFA-LB  
N



- 4) **Setting the Sequence Valve.** The sequence valve is the large aluminum block with valve cartridges located on the top of the cutter frame with several large hoses attached. Loosen the lock nut on the counter balance valve (CBEA-LIN) and turn the set screw all the way in, back it out  $\frac{1}{4}$  to  $\frac{1}{2}$  turn, then retighten the lock nut. To adjust the sequence valve (SQHB-LAN) 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 resume build to full system pressure. This is when the sequence valve opens and happens very quickly. Adjust the sequence valve so that this pressure is about 1200 PSI. Raising the jaw up a small amount and deadheading it again will run through the sequence again. It will take a few times for you to get used to what to look for and find the sequence point where the gauge needle dips and starts climbing again. There is no hard and fast rule about what the pressure should be set at but 1200 PSI is a good place to start.

Sequence  
Valve  
(Front  
View)

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

Sequence  
Valve  
SQHB-LAN

Counter  
Balance Valve  
CBEA-LIN

pressure to the outside cylinders, full tonnage will not be reached and the machine will not cut thick or hard stone

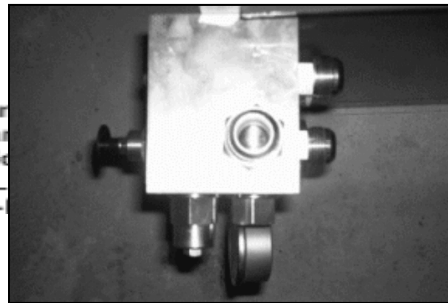
- 5) **Setting the counterbalance valve on the high/low block.** The Counter Balance Valve (CBGA) on the power unit needs to be set in the field due to inconsistent power sources. On diesel power units you should not have to adjust it. The only requirement on the high/low block Counter Balance Valve is that it must be set to open before the Sequence Valve or the machine will run slow. This will typically be from 800 to 1000 PSI. To set the Counter Balance Valve on an electric power unit you must attach a

clamp style 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 (FLA) while the top jaw head is moving up. This should be 56 amps for 25HP at 240V, 28 amps for 25HP at 480V, 92 amps for 40HP at 240V, or 46 amps for 40HP at 480V. Turning the screw in (clockwise) will reduce the pressure setting at which the valve will dump to tank and reduce the ampere load on the motor.

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

Pressure Relief Cartridge RPGC-L AN

Counter Balance Cartridge CBGA-L or -



**Electric Control Panel**  
(Front View)



**Ammeter**

**Electric Wires to the Motor**