



Note:

The following steps are **ONLY** to be carried out by those individuals trained on this particular procedure.

WARNING:

If performing this procedure on a vehicle, care must be taken. The pump will be put on stroke during this procedure, hence the vehicle must be safely elevated to allow the motor to free-wheel. If this is **NOT** possible, then the pump workports "P" and "S" must be short circuited to each other to avoid movement of the motor.

Tools/Equipment Required:

- Two (2) high pressure gauges or transducers
- 16mm wrench (optional: adjustable wrench)
- Special pointing device provided by LFH
- Digital calipers (optional: depth micrometers)

Adjustment Procedure:

1. Install the two high pressure gauges to measure workport pressure "P" and "S".
2. Orient the *alignment marks* so that they are parallel with the centerline of the *hydraulic neutral adjustment* as illustrated above.
3. Set the input speed to 2000 RPM (1800 RPM if using an electric motor).
4. Measure the pressure difference between workports "P" and "S".
 - If the maximum pressure difference is 29 psi (2 bar) or less, then adjustment to the hydraulic neutral is NOT required - Remove all gauges from the pump.
 - If the maximum pressure difference is greater than 29 psi (2), then go to step #5.
5. Using a 16mm wrench and the digital calipers, adjust the *hydraulic neutral adjustment* to 14.75mm as illustrated in the sketch above.
6. Install the special pointing device onto the cam lever.
7. With the pump aligned in neutral (as described in step #2), make a small mark on the pump control (either with a pen or a magic-marker) where the pointer of the pointing device is pointing.
8. Move the control lever in one direction until the pressure difference between the workports "P" and "S" is 580 psi (40 bar). Make a small mark where the pointer is.
9. Move the control lever in the opposite direction until the pressure difference is 580 psi (40 bar). Make a small mark where the pointer is.
10. The initial mark made in step #7 should be directly in the middle of the other two marks made in steps #8 and #9. If not, make a very small adjustment to the *hydraulic neutral adjustment*. Erase all previous marks and repeat steps #7 through #10 until the initial mark is directly in the middle of the other two marks.
11. Repeat steps #1 through #4 and verify that the maximum pressure difference between workports "P" and "S" is 29 psi (2 bar) or less. If not, confirm gauges (or transducers) are calibrated and functioning correctly. You may need to repeat the entire procedure to insure the hydraulic neutral is set correctly.