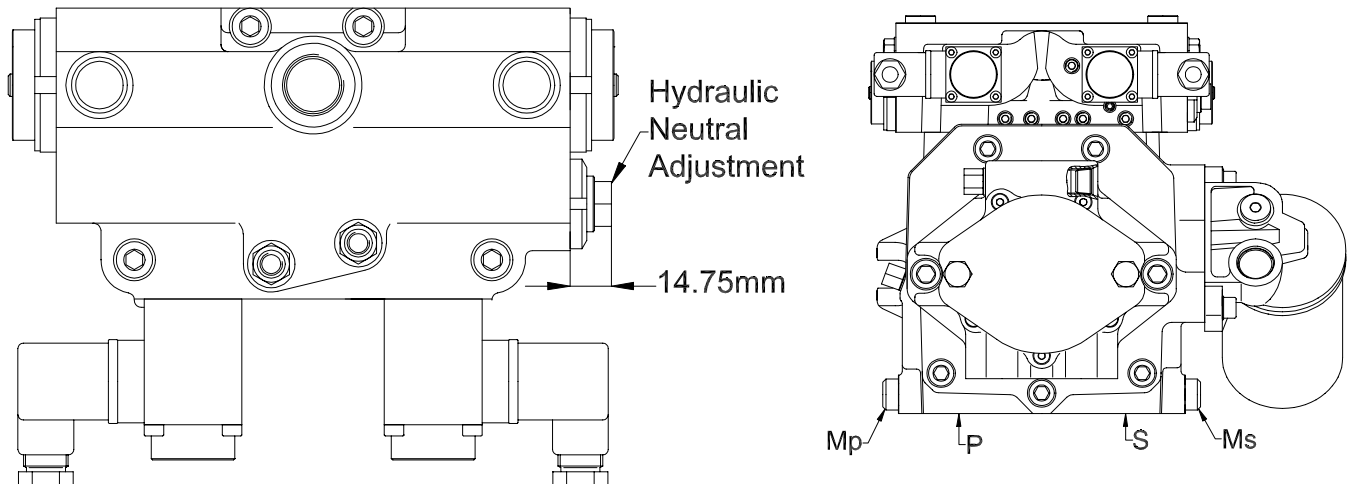


NOTE: This Service Bulletin is valid for HPV-02 pumps with "H" (Hydraulic Remote) or "E" (Electro-Hydraulic Remote) Controls. For HPV-02 pumps with "M" (Cam Lever) Control, refer to Service Bulletin HPV-CAM-NEUTRAL.doc for the hydraulic neutral adjustment instructions.

NOTE: The drawing below illustrates an "E" Control, but the information is also valid for an "H" Control.



Tools/Equipment Required:

- Two (2) 0-100 psi pressure gauges or transducers
- 16mm wrench (optional: adjustable wrench)
- Digital calipers (optional: depth micrometers)

Adjustment Procedure:

1. Install the 0-100 psi pressure gauges into gauge ports "Mp" and "Ms" to measure workport pressures "P" and "S".
2. Set the input speed to 2000 RPM (1800 RPM if using an electric motor).
3. With the pump in neutral (no control pressure supplied), 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 #4.

4. Using a 16mm wrench and the digital calipers, adjust the *Hydraulic Neutral Adjustment* to 14.75mm as illustrated in the sketch above.
5. Repeat steps #2 and #3. Continue to make small adjustments to the *Hydraulic Neutral Adjustment* until the pressure difference between workports "P" and "S" is less than 29 psi.
6. Secure the *Hydraulic Neutral Adjustment* once all settings are final. Remove all gauges from the pump.