



Tools/Equipment Required:

- 5mm Allen wrench (HMF55-02 Motors ONLY)
- 6mm Allen wrench (HMF75-02 and HMF105-02 Motors ONLY)
- 0-500 psi Δp -gauge (Optional: Two, 0-600 psi pressure gauges or transducers)
- For HMF55-02 Motors:
 - P/N 000.914.5495, 0.8mm shim (as required)
 - P/N 000.914.5496, 1.0mm shim (as required)
 - P/N 000.914.5497, 1.4mm shim (as required)
- For HMF75-02 and HMF105-02 Motors:
 - P/N 9289.003.470, 0.1mm shim (as required)
 - P/N 9289.003.472, 0.3mm shim (as required)
 - P/N 9289.003.473, 0.5mm shim (as required)
 - P/N 000.914.5492, 0.8mm shim (as required)
 - P/N 000.914.5493, 1.0mm shim (as required)
 - P/N 000.914.5494, 1.4mm shim (as required)

NOTE:

Use the following Linde Service Bulletins in the order listed below when setting up or adjusting the HMF-02 Priority Swing Motor: (1) 1121, (2) 1117, (3) 1106 and (4) 1118.

WARNING:

If performing this procedure on a vehicle, care must be taken. The pump will be put on stroke during this procedure, hence all personnel should be removed from the area of the machine.

Adjustment Procedure for the Motor Regulation Begin Pressure:

1. Connect the "HI" side of the Δp -gauge to *Port "X"*.
2. Connect the "LO" side of the Δp -gauge to *Port "Y"*.
3. Slowly supply pilot pressure into *Port "X"*. Simultaneously monitor the Δp -gauge and the function the HMF-02 motor is actuating.
4. Record the pressure on the Δp -gauge when the function just starts to move. This is the regulation begin pressure for *Workport "A"*.
5. To adjust the regulation begin pressure:
 - a. Remove the *End Cap* on the opposite side of *Workport "A"* (the end cap containing the *"B" Side Shims*) by removing the two socket-head cap screws (*SHCS*).
 - b. Make sure that the *O-Ring* remains in the end cap o-ring groove.
 - c. Remove the *Spool Cap* and the *Spool Centering Spring* from the end cap.
 - d. As required, **ADD** shims to the end cap to **increase** the regulation begin pressure or **REMOVE** shims to **decrease** the regulation begin pressure.

Note:

Refer to the end of this Service Bulletin for some useful shim data.

Note:

Reference the section above titled "Tools/Equipment Required" for the part numbers corresponding to the HMF-02 motor you are working with. Please note that each size motor has multiple shim thicknesses available.

- e. Reinstall all of the parts removed in steps b and c. Make sure that the *O-Ring* is properly installed into the end cap o-ring groove to avoid damaging it.
 - f. Reinstall the two *SHCS* from step a. The proper torque for each *SHCS* is:
 - (For HMF55-02 Motors).....9.5 N-m (7 ft-lb)
 - (For HMF75-02 and HMF105-02 Motors).....25 N-m (18 ft-lb)
 - g. Repeat steps #3 and #4 to verify that the desired regulation begin pressure has been acquired.
6. Connect the "HI" side of the Δp -gauge to *Port "Y"*.
 7. Connect the "LO" side of the Δp -gauge to *Port "X"*.
 8. Slowly supply pilot pressure into *Port "Y"*. Simultaneously monitor the Δp -gauge and the function the HMF-02 motor is actuating.
 9. Record the pressure on the Δp -gauge when the function just starts to move. This is the regulation begin pressure for *Workport "B"*.
 10. To adjust the regulation begin pressure:
 - a. Remove the *End Cap* on the opposite side of *Workport "B"* (the end cap containing the "*A*" *Side Shims*) by removing the two socket-head cap screws (*SHCS*).
 - b. Make sure that the *O-Ring* remains in the end cap o-ring groove.
 - c. Remove the *Spool Cap* and the *Spool Centering Spring* from the end cap.
 - d. As required, **ADD** shims to the end cap to **increase** the regulation begin pressure or **REMOVE** shims to **decrease** the regulation begin pressure.

Note:

Refer to the end of this Service Bulletin for some useful shim data.

Note:

Reference the section above titled "Tools/Equipment Required" for the part numbers corresponding to the HMF-02 motor you are working with. Please note that each size motor has multiple shim thicknesses available.

- e. Reinstall all of the parts removed in steps b and c. Make sure that the *O-Ring* is properly installed into the end cap o-ring groove to avoid damaging it.

******* ATTENTION *******

You have been provided information on conversion, repair and/or service of Linde components. Proper application of the information requires specific training and may require use of specialized tooling and equipment. If you choose to proceed with the conversion, repair and/or service of the Linde component(s) absent the necessary training and/or these specialized tools, you do so at your risk.

Linde Hydraulics Corporation will accept no claim for warranty or other consideration resulting from deficiencies in the conversion, repair and/or service done in accordance with the guidance offered herein when the necessary training has not been conducted and/or required specialized tooling and equipment has not been utilized.

All requests for training must be coordinated through your Linde Account Manager. He can also provide you price and availability of any specialized tooling.

Questions regarding the information provided or this disclaimer should be addressed to the Warranty & Service Department, Linde Hydraulics Corporation.

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