

Tools/Equipment Required:

- 5mm Allen wrench
- 4mm Allen wrench
- 3mm Allen wrench
- one teflon-coated M8 set screw (Linde Part Number 0009033195)
- two rivets (Linde Part Number 0009515127)
- commercially available, heavy-duty rivet gun
- torque wrench capable of setting 3.8 N-m (2.8 ft-lb) and 10 N-m (7.4 ft-lb)
- Green Loctite No. 648 (Linde Part Number 7379200106)

WARNING:

This is a permanent conversion to the HMR-02 motor. Once complete, the conversion cannot be reversed without involving special machining and complete disassembly of the HMR-02 motor. Please make sure that this conversion is required prior to using any instructions in this Conversion Bulletin.

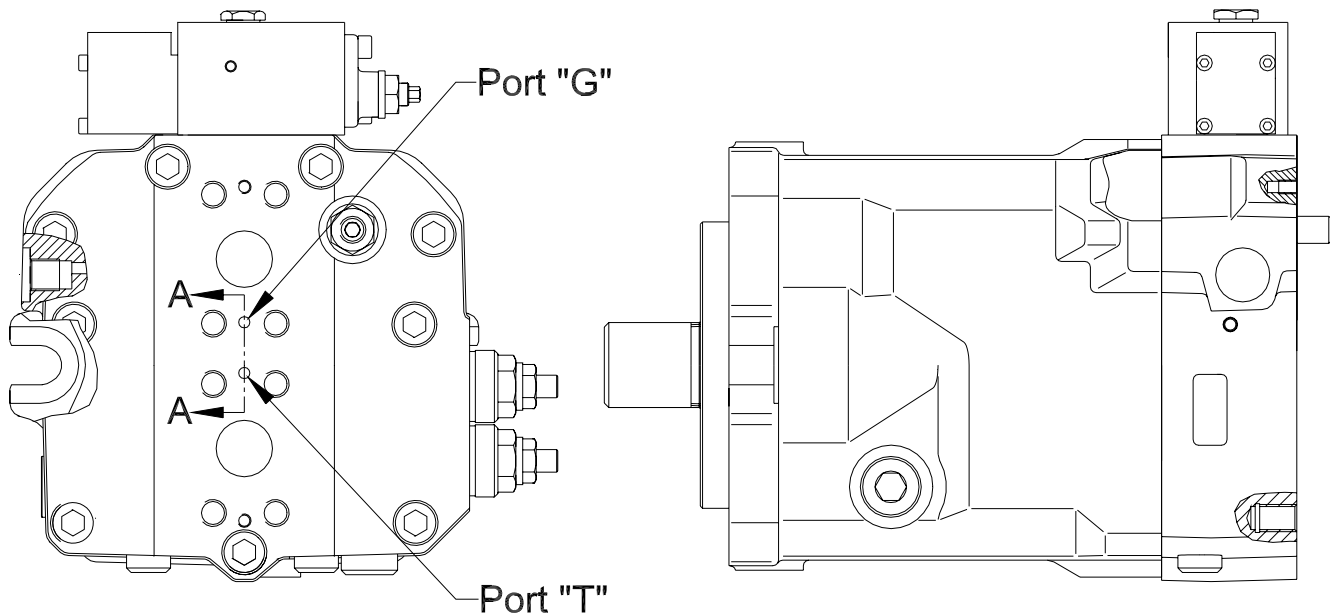
Note:

This is a three part conversion. The first part of the conversion involves removing the counter-balance valve (CBV) from the motor. The second part involves permanently blocking a couple of passages in the motor rear head. The third part of the conversion involves removing a plug from the motor control to allow proper operation of the motor.

(Part 1) Procedure to Remove the CBV from the Motor Rear Head:

1. As illustrated on page #1, remove the two *S.H.C.S.* with the 5mm Allen wrench.
2. Remove the *-02 Series CBV* from the motor. Make sure to remove the two *Small O-Rings* and the two *Large O-Rings* with the CBV.
3. Keep all removed parts together as an assembly for re-stocking.

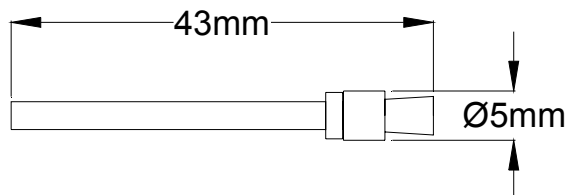
(Part 2) Procedure to Modify Passages in the Motor Rear Head:

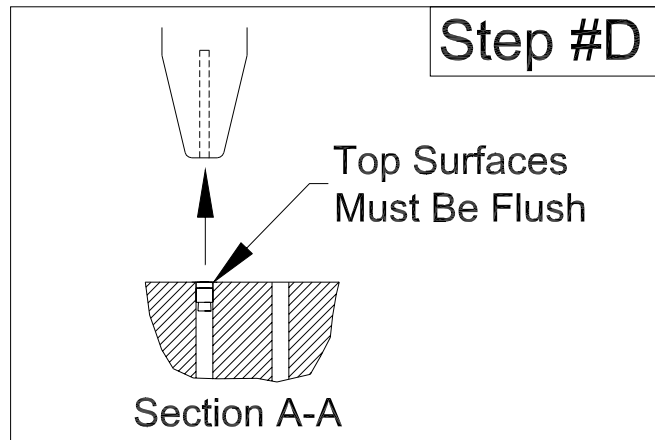
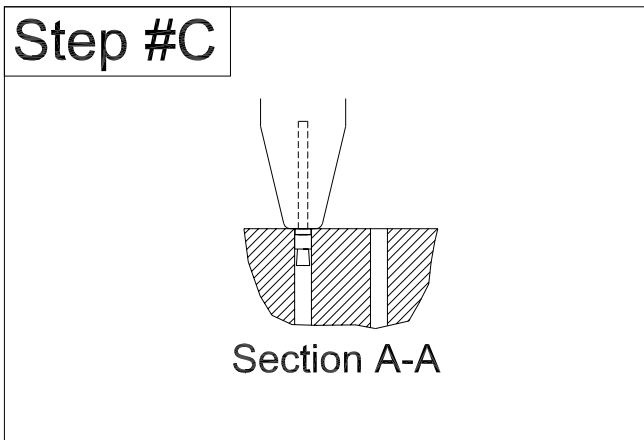
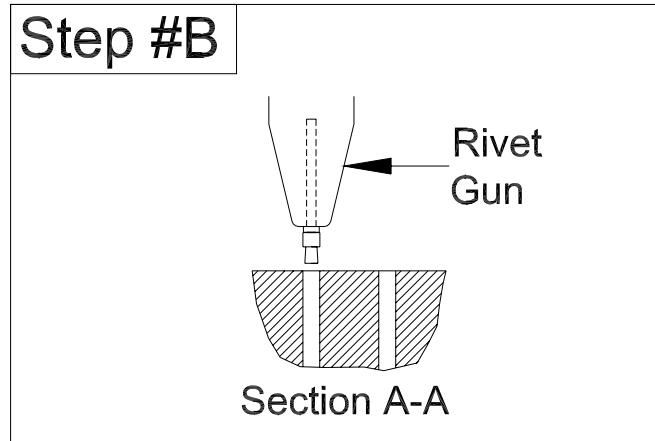
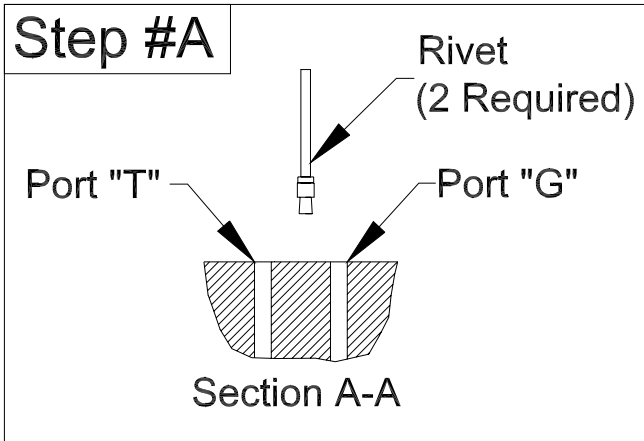


Note:

Once the CBV is remove, refer to the illustration above. *Port "G"* and *Port "T"* are the two passages that must be blocked. *Port "G"* is connected to workport pressure (both Workports "A" and "B"). *Port "T"* is connected to the motor case.

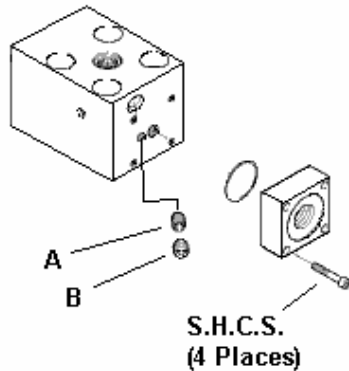
To do this part of the conversion, you will need two rivets (P/N 0009515127). For assistance, the following sketch illustrates what the rivets look like:





1. (Refer to "Step #A" above) Acquired the two rivets and rivet gun, and confirm that you have properly located *Port "G"* and *Port "T"*.
2. (Refer to "Step #B" above) Apply Green Loctite No. 648 to the sealing area of the rivet, then insert the rivet into the rivet gun.
3. (Refer to "Step #C" above) Insert the sealing portion of the rivet into *Port "T"*. Make sure that the sealing portion of the rivet is completely inserted into the *Port "T"* passage.
4. (Refer to "Step #D" above) Actuate the rivet gun and pull away the stem of the rivet. As illustrated above, make sure that the top surface of the rivet and the top surface of the rear head are flush with each other. This will insure that the rivet was installed deep enough as to prevent it from migrating out of the passage.
5. Repeat steps #1 through #4 for the *Port "G"* passage.

(Part 3) Procedure to Modify the Motor Control:



Note:

The sketch above illustrates the HMR-02 motor control partially disassembled.

1. Follow steps #1 and #2 on Linde Conversion Bulletin "HMR-DOR" for instructions on how to remove the *DOR Block* from the motor control.
2. Remove the M8 set screw (item "B") from the motor control with the 4mm Allen wrench. Please note that this set screw is located in the angle drilled passage, as illustrated above. Discard it once removed.
3. Remove the M6 set screw (item "A") from the motor control with the 3mm Allen wrench. Discard it once removed.
4. Replace item "B" with a new M8 set screw (P/N 0009033195) and install it into the motor control with the 4mm Allen wrench. Torque it to 10 N-m (7.4 ft-lb).
5. Follow steps #3 and #4 on Linde Conversion Bulletin "HMR-DOR" for instructions on how to reinstall the *DOR Block* onto the motor control. Be sure to torque the four *S.H.C.S.* as specified in the Conversion Bulletin.



*******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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