



Tools/Equipment Required:

- 4mm Allen wrench
- 3mm Allen wrench
- two M8 teflon-coated set screws (Linde Part Number 0009033195)
- two M6 orifices (Linde Part Numbers presented in table below)
- torque wrench capable of setting 10 N-m (7.4 ft-lb)



Procedure to Exchange Response Orifices in HPV-02 Pump Controls

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Note:

The *Reponse Orifices* are used to control the rate of displacement change on the HPV-02 pump. They restrict the oil flowing into and out of the actuator piston chambers. Decreasing the diameter of the orifice results in greater restriction, thus the pump will be slower when changing displacement. Likewise, increasing the diameter of the orifice results in less restriction, thus the pump will change displacement more rapidly.

Note:

Linde does NOT recommend using *Response Orifices* smaller than 0.7mm. There are no restrictions on the maximum size of the *Response Orifices*, but be warned that increasing the orifice size too much will lead to abrupt displacement changes in the HPV-02.

List of M6 Orifices Available from Linde:

<u>Linde Part Number</u>	<u>Orifice Diameter</u>
0009037005	0.6mm [Note: Not Recommended to Use]
0009037052	0.7mm
0009037047	0.8mm
0009037059	0.9mm
0009037045	1.0mm
0009037050	1.2mm
0009037515	1.3mm
0009037074	1.4mm
0009037046	1.5mm
0009037073	1.6mm
0009037511	1.8mm
0009037099	1.9mm
0009037510	2.1mm

Procedure to Exchange Response Orifices:

- Using the illustration on page one of this Conversion Bulletin, locate the HPV-02 control type and the location of the *Response Orifices*.
- Remove the two outer M8 set screws with the 4mm Allen wrench. Discard them once removed.
- Remove the two existing *Response Orifices* with the 3mm Allen wrench and replace them with the two new *Response Orifices*. Tighten them until snug.
- Install two new teflon-coated M8 set screws (P/N 0009033195) and torque each one to 10 N-m (7.4 ft-lb).

Reviewed By: Woods / Zivkovic

Reviewed On: 8/26/2004



*******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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