



APPLICATION NOTE

APP #076

Revision History

Date	Author	Description
04-05-12	Michael Schreiber	Created Application Note
10-14-14	Daniel Bonessi	Revision B
09-26-16	Daniel Bonessi	Draft Revision C
04-19/24/25-17	DEW	Revision C changes
04-07-2020	DEW	Corrections to page 5 change to 75%

Hanbell RC2 Series ***Infinite Capacity Loading*** ***to Step Loading***

CONVERSION KIT

Parts included:

3142 -1003B x 1 - Load Gasket

3101-1003B x 3 - Gaskets

4301-804012 x 8 - Screws (shorter)

3101-1039C x 1 - Load Plate

used only for RC-100, 140 and 180



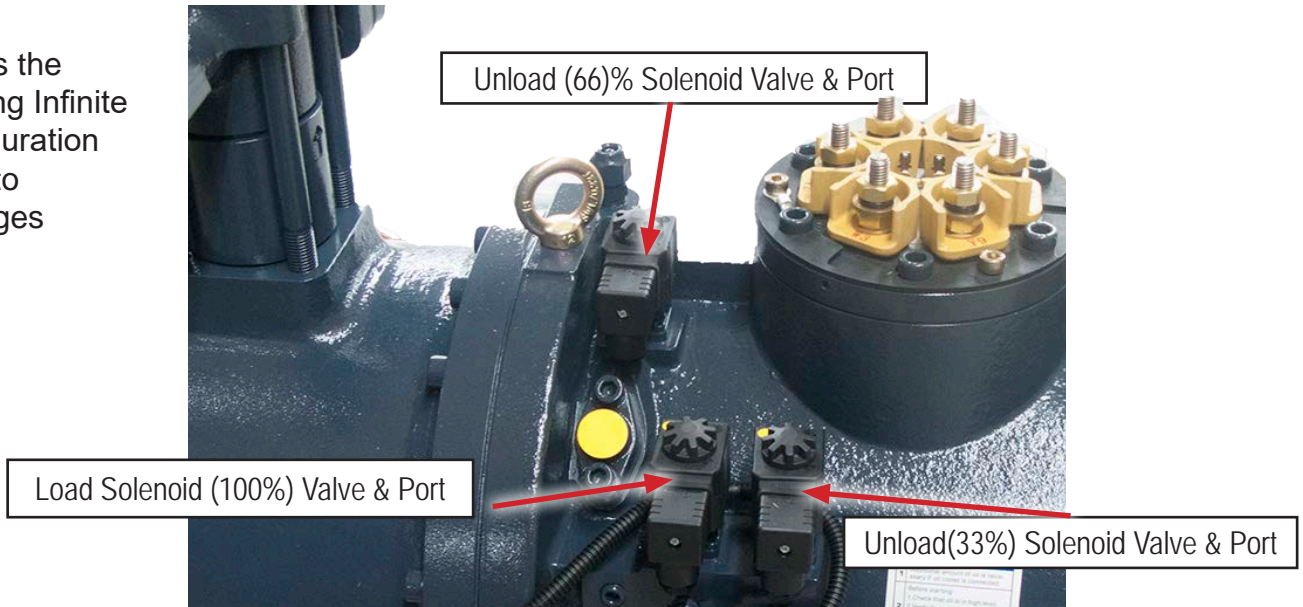
Any questions regarding this release, contact: support@mcscontrols.com

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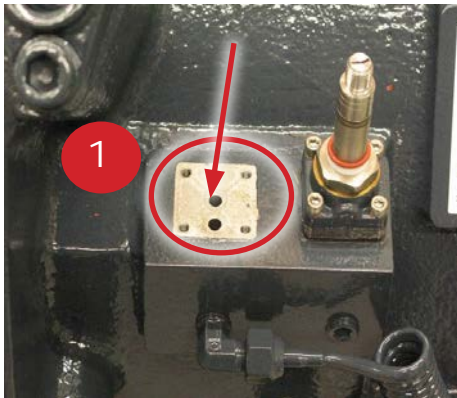
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Infinite Capacity Loading to Step Loading Models RC2-100B, RC2-140B and RC2-180B

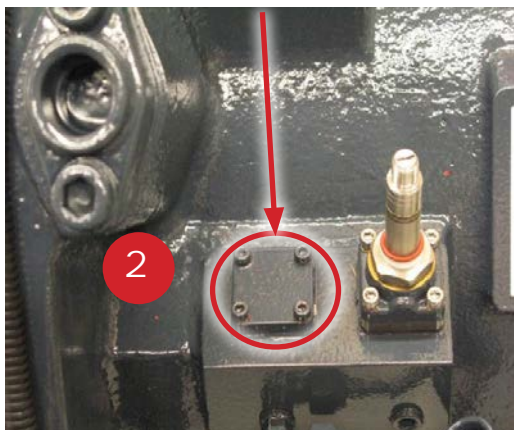
This is the existing Infinite configuration Prior to Changes



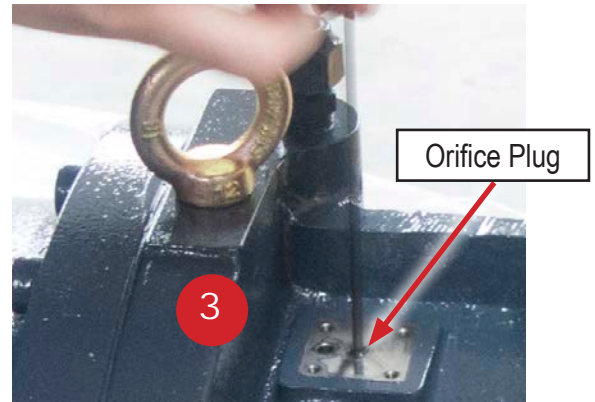
Step 1. Remove (100%) Load Solenoid Valve and gasket.



Step 2. Place new gasket 3142 -1003B on Load Valve, making sure gasket holes are aligned, Install Blank Plate 3101-1039C.



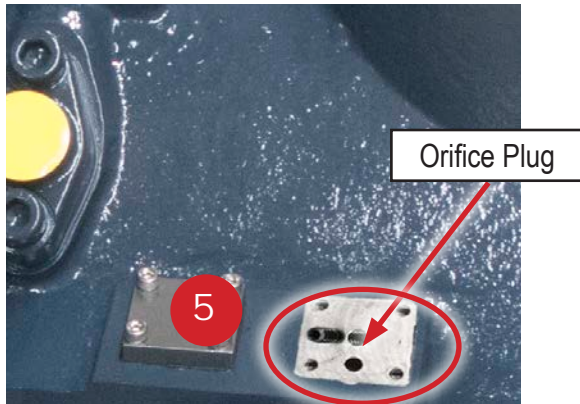
Step 3. Remove (33%) Load Solenoid Valve, gasket and Orifice Plug from port.



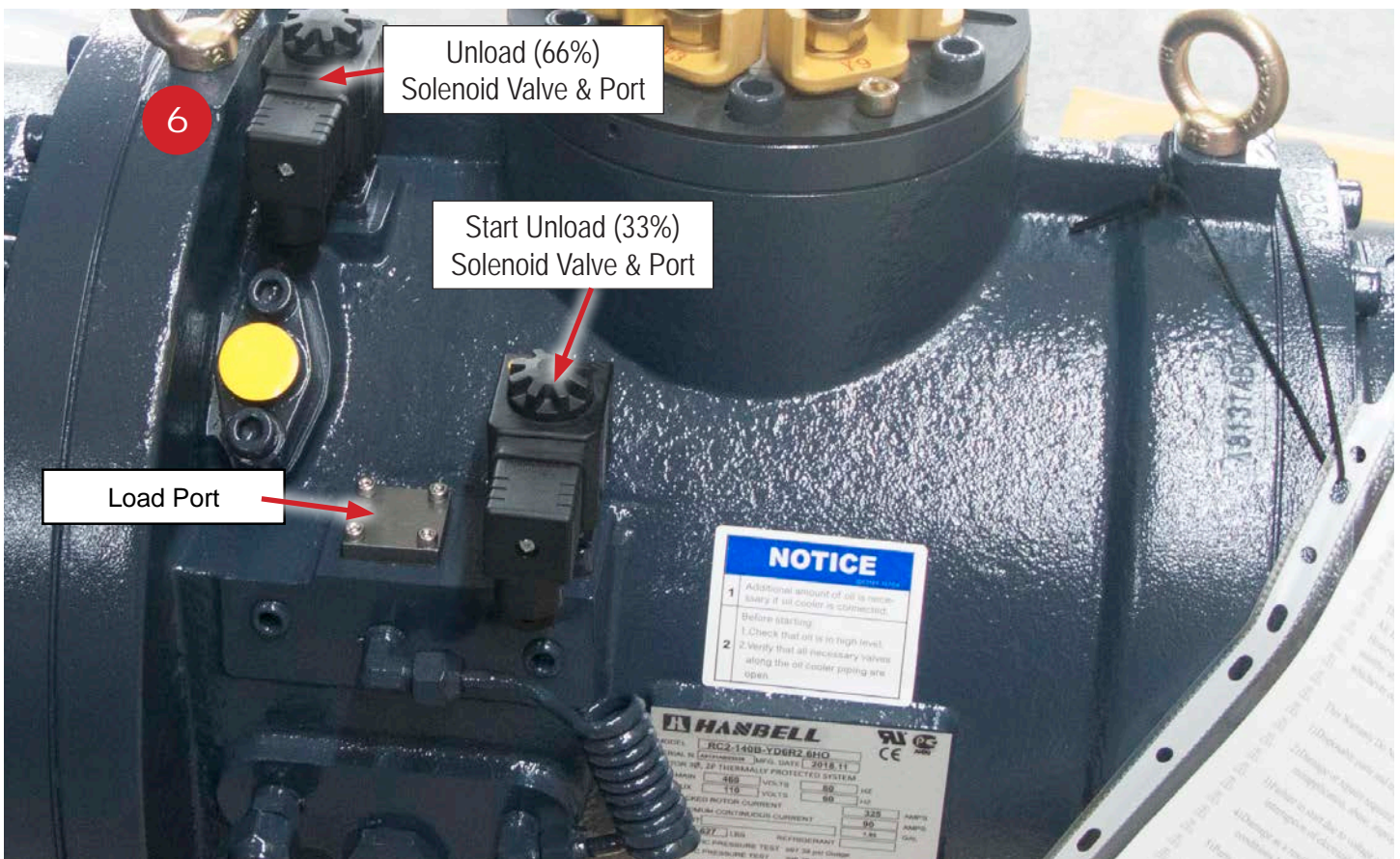
Step 4. Install gasket 3101-1003B, reinstall Load Solenoid Valve (33%).



Step 5. Remove (66%) Load Solenoid Valve, gasket and Orifice Plug from port.

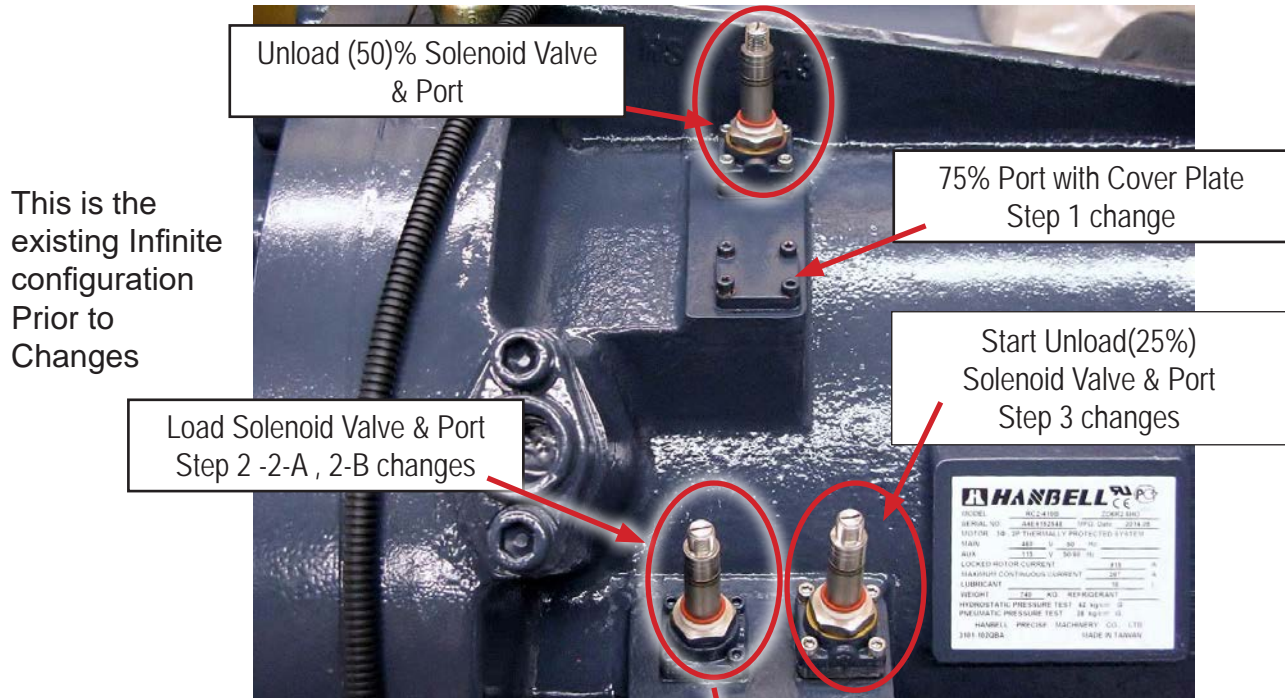


Step 6. Install gasket 3101-1003B, reinstall Load Solenoid Valve (66%). Photo shows finished conversion.



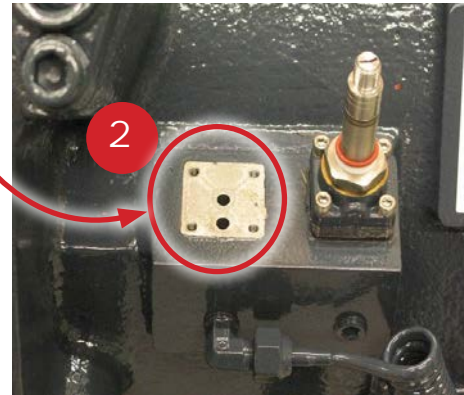
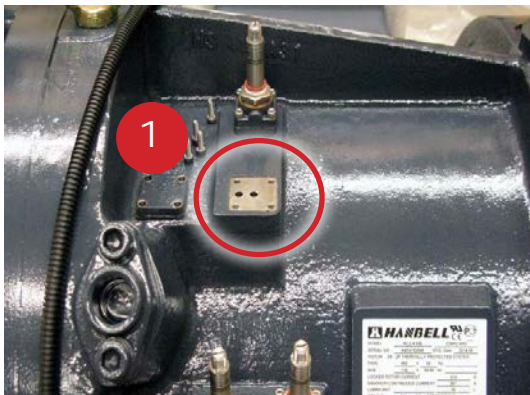
Installation Directions for Compressors

Models RC2-200B thru RC2-930 - Using Orifice Plates



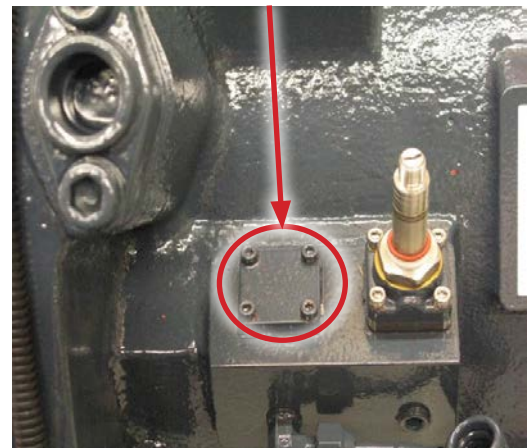
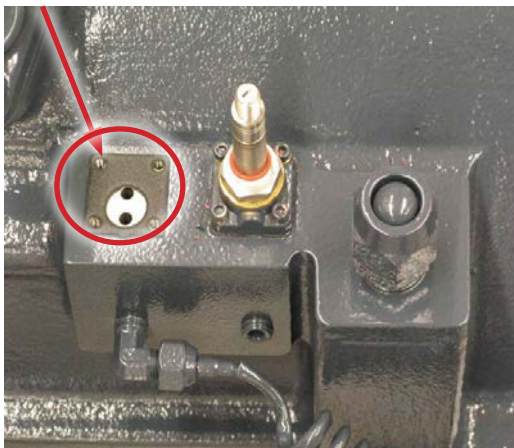
Step 1. Remove 75% port cover plate and gasket.

Step 2. Remove Load Solenoid Valve and gasket.

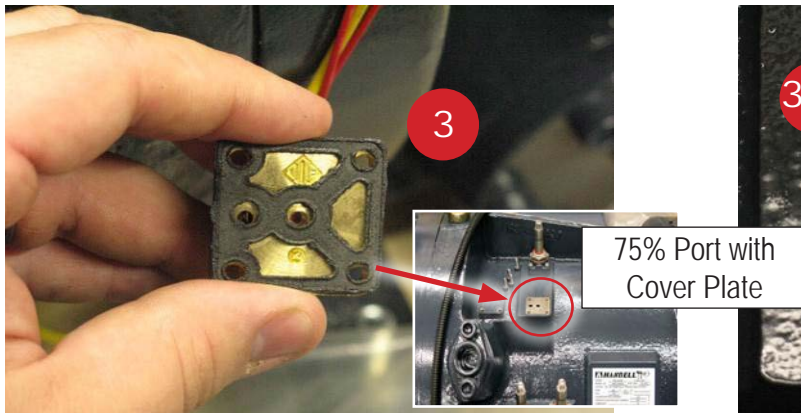


Step 2-A. Place new gasket 3142 -1003B where Load Solenoid valve was removed.

Step 2-B. Install Blank Plate from 75% Port onto Load Port.



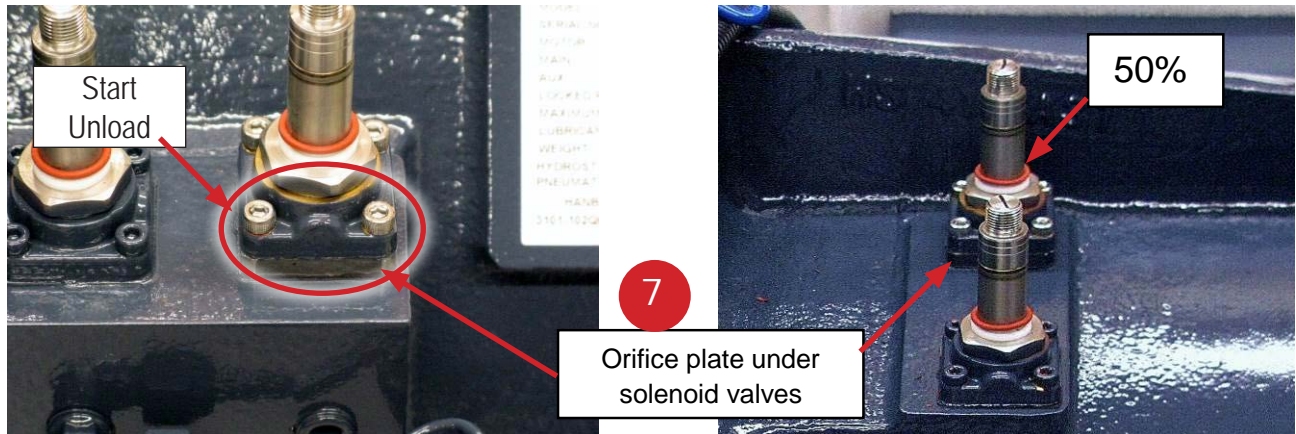
Step 3. Install solenoid valve that was on Load Port (step 2) onto the 75% port with gasket 3101-1003B as shown.



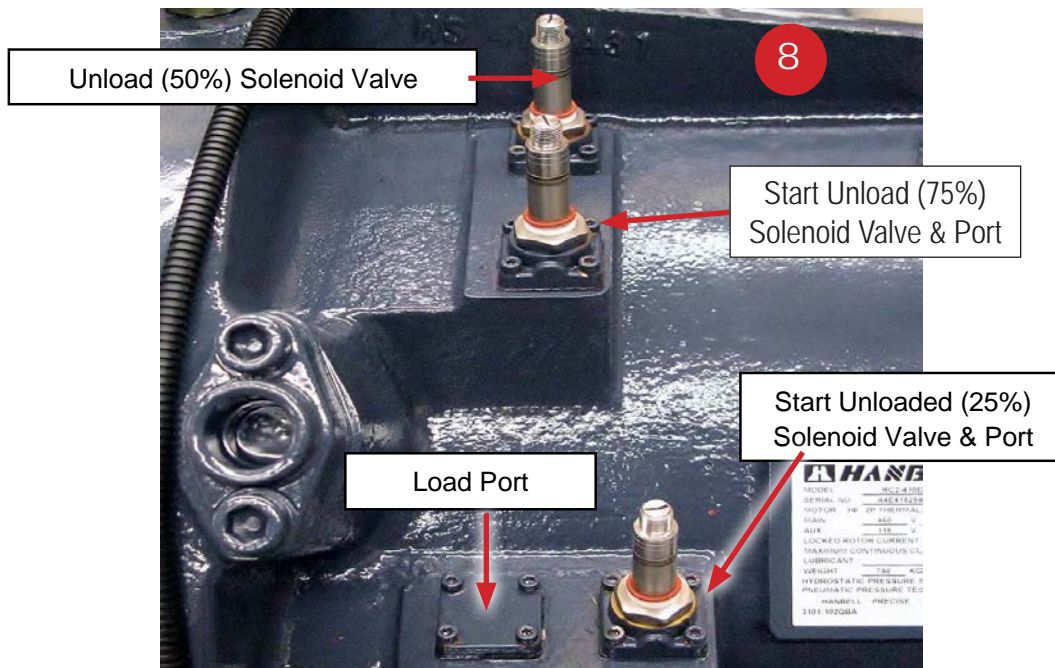
Step 3-A. Be sure to align holes on solenoid valve and gasket with port holes.



Step 4. Remove the orifice plate from both start unload (25%) solenoid valve and the 50% unload valve and reinstall valves using new gaskets and the shorter screws 4301-804012 provided in kit. **Do not re-install orifice plates!**



The finished Step Loading Configuration should appear as below. When controlling using step loading, the 25% solenoid should be energized for no more than 30-60 seconds at start up and shutdown only.

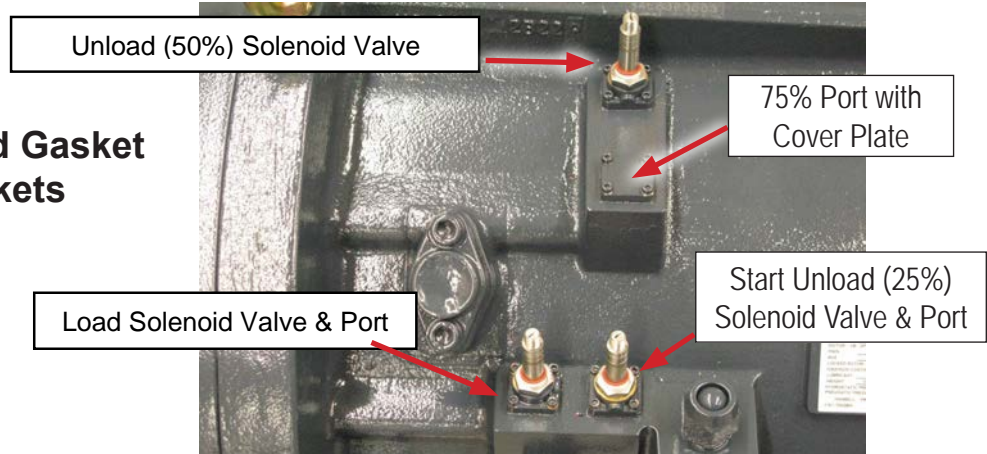


Installation Directions for 4 Solenoid Compressors Not Using Orifice Plates. RC2-170B~930B Except 100, 140 & 180

Note: This is for compressors manufactured after April 2013.

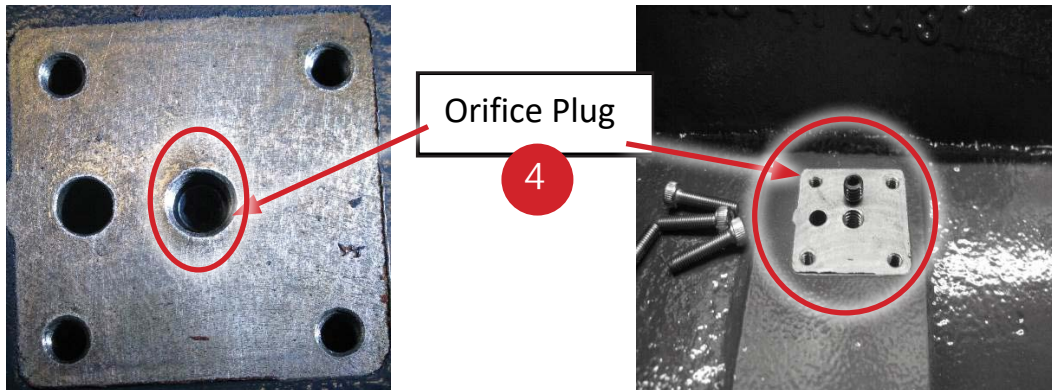
Parts Needed:

- 3142-1003B x 1 - Load Gasket**
- 3101-1003B x 3 - Gaskets**



Follow steps 1-3 on preceding pages, step 4 will be different. See below.

Step 4. Remove 25% and 50% solenoid valves and remove the orifice plugs from both using the same hex tool used to remove the valves. Reinstall solenoid valves with new gaskets 3101-1003B. Do not reinstall orifice plugs.



The finished Step Loading Configuration should appear as below. When controlling using step loading, the 25% solenoid should be energized for no more than 30-60 seconds at start up and shutdown only.

