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## **Document—**

# **Instructions for Retrofit Kit KYSSPPR001: Installing the Prefill Valve Pressure Regulator**



## Instructions for Retrofit Kit KYSSPPR001: Installing the Prefill Valve Pressure Regulator

These instructions cover installing and setting a pressure regulator block between the cast iron prefill valve and the prefill pilot valve. The regulator protects the prefill valve from damaging system pressure spikes.



**DANGER 1: Crush and Sever Hazard**—Moving can and ram will crush or sever body parts caught between closing gaps. Raised can and/or ram can drift down even with power off.

- Do not service machine unless qualified and authorized.
- Before reaching into any of these gaps, lock out and tag out power to the machine.
- Before working under a raised can, install factory-supplied safety stands.
- Know how to use factory-supplied emergency stop switches and where they are located.
- Ensure personnel are clear of the press before operating it in manual or automatic mode. The can and/or ram may move automatically when certain controls are used, such as when ① is pressed or cake data is entered.



**WARNING 2: Puncture Wound and Poison Hazards**—Oil leaking out under high pressure can easily puncture skin causing serious injury,

- Observe gauges to verify hydraulic system is not pressurized before working on hydraulics.
- If injured, seek emergency medical help. Immediate surgery is required to remove oil.



**CAUTION 3: Burn Hazard**—Hot oil can cause serious burns

- Allow oil to cool before working on hydraulic system.

Before starting procedure, understand the crush and sever hazards associated with the can and ram. During movement of these components, gaps can form, then close between the following components:

- The ram and press bed (ram descending).
- The can and press bed (can descending).
- The raised can and lowered ram (can descending and/or ram ascending).
- The raised ram and lowered can (ram descending and/or can ascending).
- The can and press top plate (can ascending).

### 1. Assembling and Installing the Regulator

This procedure requires two qualified service technicians who fully understand the safety precautions described in this section and know how to actuate manual functions from the keypad. See “MANUALLY OPERATING THE SINGLE STAGE PRESS” in the reference manual.

Figure 1: Retrofit Kit KYSSPPR001

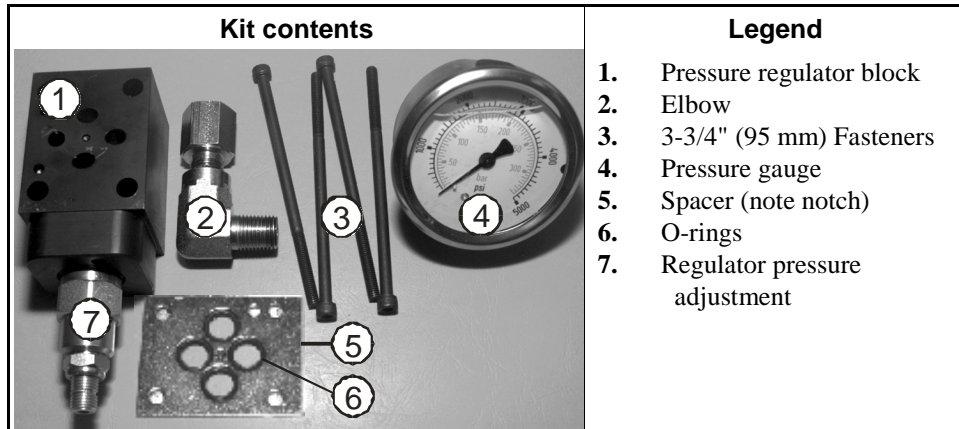
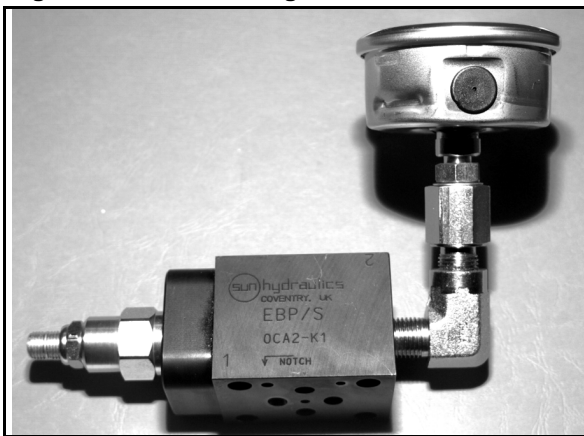


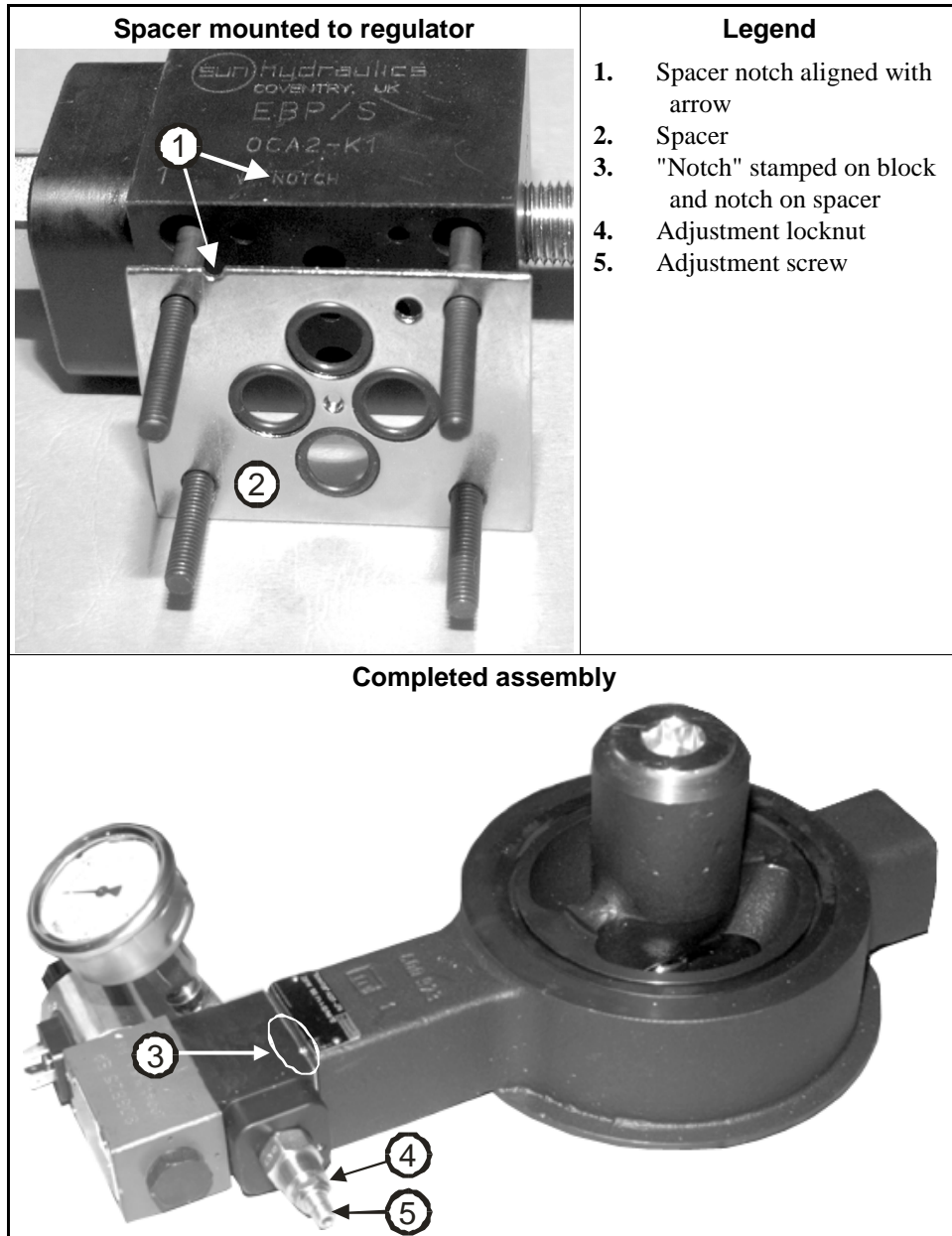
Figure 2: Assembled Regulator Block



**Note 1:** See system schematics BMP970014 (MP1601 and MP1602 machines) or BMP010007 (MP1603 and MP1604 machines) to locate hydraulic components.

1. Lock off and tag off power to the machine at the wall disconnect.
2. Verify kit contains all the items shown in Figure 1.
3. Coat gauge and elbow pipe threads with hydraulic sealant (Loctite 569 or similar).
4. Assemble the gauge and elbow then install in regulator block as shown in Figure 2.
5. Locate the prefill pilot valve at base of the prefill pipe on top of machine.
6. Remove and discard the four fasteners holding the prefill pilot to the prefill valve.
7. Remove prefill pilot.

Figure 3: Spacer and Regulator Mounting Details



8. Verify new fasteners are 3-3/4" (95 mm) long. Shorten fasteners if needed.
9. Insert the four new fasteners through the prefill pilot and through the regulator block.
10. Install O-rings in spacer.
11. Carefully install the spacer on the regulator block (Figure 3). Note notch in the spacer. Align this notch with the arrow stamped on regulator block.
12. Carefully mount the prefill pilot and regulator block on prefill valve (Figure 3). Take care not to dislodge spacer O-rings during assembly. Tighten fasteners to 6.5 foot-pounds (29 N-n).
13. Turn power on and look for oil leaks around pilot and regulator.

## 2. Setting Regulator Pressure

1. Using manual functions, raise the ram and lower the can.
2. Lock out and tag out power.
3. Open a side door and load approximately 130 pounds (60 Kg.) of goods into can.
4. Wet down the sides of the diaphragm and the inside of the can to reduce friction.
5. Close and lock door then restore power.
6. Station one technician at the keyboard and the other on top of machine at the regulator adjustment.
7. Have the technician at the keypad use manual function **9** to lower the ram under pressure, while the other technician loosens the adjustment locknut and adjusts the regulator adjustment screw (Figure 3) until the pressure gauge reads 2000 psi (138 bar). Turn the screw in (CW) to raise the pressure or out (CCW) to lower the pressure.

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