

## **Pressure Relief Valve Adjustment LAY-TSB-15-003**

**Date:** April 02, 2015

**Model:** SM300

**Product Issue:**

Laymor has identified that the current hydraulic pressure at the pressure relief valve is incorrect. In order to prolong the life and efficiency of the broom motor the pressure relief valve will require to be adjusted to **1650 PSI** cracking pressure, **1900 PSI** Max Operating Pressure **2100 (± 100) PSI** dead Head pressure.

**Units affected:**

SM300 units delivered between the dates of March 1, 2014 through March 24, 2015.

**Approved SRT:**

The Laymor approved standard repair time for this service bulletin is .50 hours.

**04-02-15**



**Tools needed:**

- SAE ½" box wrench or socket
- 4 MM Allen head wrench or bit driver
- 15/16" SAE offset wrench
- 7/8" socket or wrench
- Pressure gauge
- Face seal Plug - 08
- Paint marker
- Cleaning Solvent



## **Tools available for purchase**

- 1000033 Pressure gauge ¼ NPT
- 1000034 ¼ NPT Female SAE -08 FORFS Swivel hose
- 1000035 ¼ NPT Female SAE-06 FORFS Swivel hose
- 1000038 plug face seal - 08
- 1000039 plug face seal – 06



## Adjustment Instructions:

Clean off Hydraulic Manifold to access pressure relief valve







## **Adjustment Instructions:**

Place a reference mark on the pressure relief valve and adjustment stem



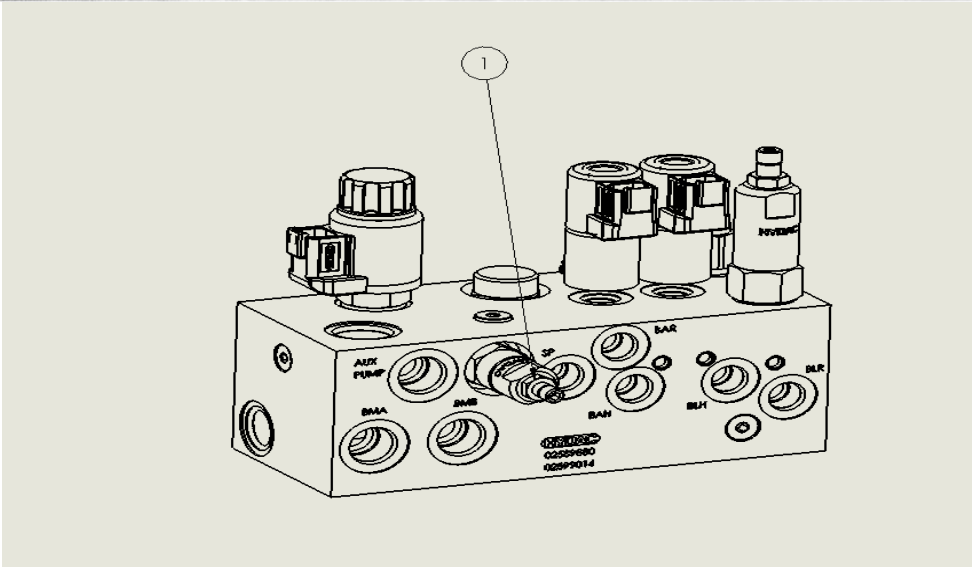


## Instructions:

Loosen jam nut on the pressure relief valve counter clockwise using a  $\frac{1}{2}$ " socket or wrench.







### Instructions:



# SERVICE BULLETIN

Loosen the valve stem one complete revolution counter clockwise using a 4 MM Alan wrench or drive bit. Make sure to use your paint mark from before as a reference.

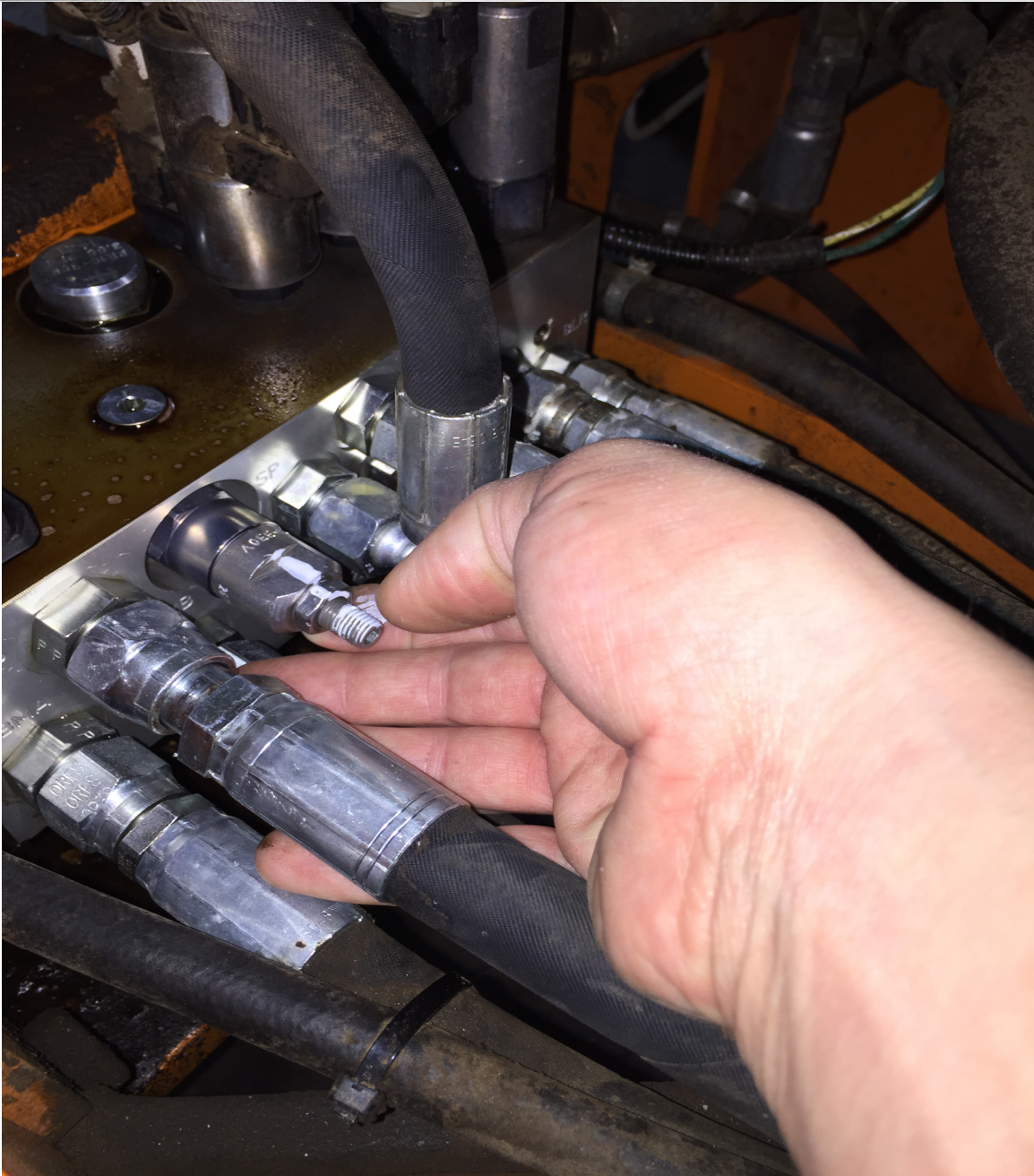


## Instructions:

Tighten the jam nut up using your fingers







## Instructions:

Stabilize the valve stem with the 4 MM drive bit or Alan wrench. Turn the jam nut clockwise with the ½" box wrench until firmly snug.







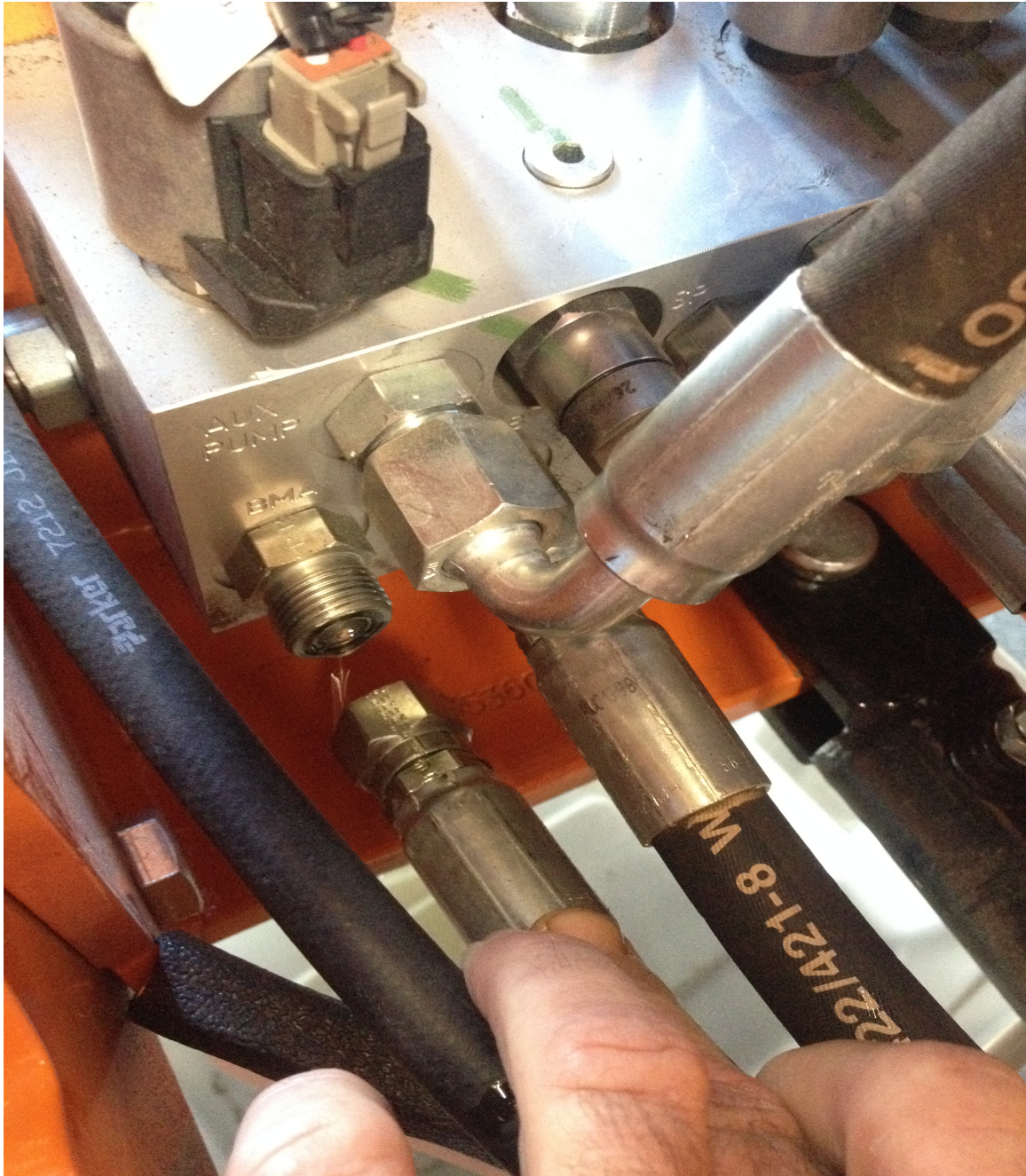
## Manifold pressure check instructions:





# SERVICE BULLETIN

Next remove hydraulic hose at BMA located on manifold using a 15/16" SAE off set wrench



**Manifold pressure check instructions:**





# SERVICE BULLETIN

Install pressure gauge at BMA using 15/16" SAE offset wrench. Cap off existing hose from broom motor to BMA using a 08 face seal plug using 15/16" and 7/8" SAE wrenches.



**Manifold pressure check instructions:**

**LAYMOR**

LAYMOR | 401 Capacity Drive; Longview, TX 75604 | PH (800) 458-3238 | FAX (903) 297-7903

## Step 1.

With everything tight and in place start the engine. Set the throttle at low idle. Engage the broom motor switch for no more than 5 seconds and record PSI reading. The reading should read between **1700 (± 100 PSI)** at low idle.

## Step 2.

With engine still running and broom motor switch off increase the throttle to the max position. Engage the broom motor for no more than 5 seconds and record PSI reading. The reading should read **2100 (± 100) PSI**

## Step 3.

If the readings are not within specification shut the engine off and adjust the pressure relief valve. Rotate clockwise to increase and counter clockwise to reduce pressures. Adjusting in quarter turns is best practice.



## REVISION HISTORY

REVISION	DATE	DESCRIPTION OF CHANGE
0	04-02-15	NEW PROCEDURE

APPROVALS	AUTHOR	DATE
Design Engineer	Kapil Ayyawar	04-02-15
Director of Engineer	Jim Keough	04-02-15
Director of Quality	Barbara McCullough	04-02-15

