



TSB090908-013

## TECHNICAL SERVICE BULLETIN

**SUBJECT:** Improved Hydraulic Cylinder Mounting Bushings and Pins for Second Conveyor and Net Feed Valve Adjustment

**MODELS AFFECTED: SR, SRA AND AR SERIES HARVESTERS**

On some models, excessive wear can occur at the rear conveyor hydraulic cylinder lower mounting perch (**Figure 1**).

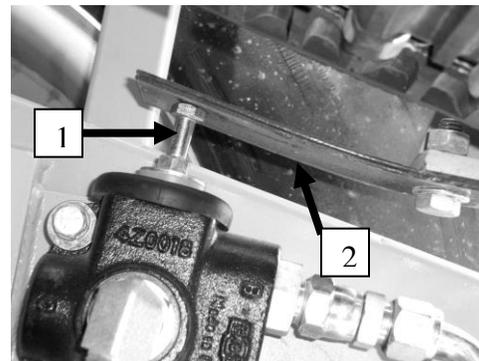


**Figure 1—Cylinder Lower Mount**

Excessive wear in this area will allow the conveyor to travel too far downward and possibly result in net feed valve failure.

To check for excessive wear, raise and lower the rear conveyor while observing for play where the cylinders mount to the frame. Also, fully lower the conveyor and check the spring deflection

as the leaf spring activates the net feed valve. See **Figure 2**.



**Figure 2—Net Feed Valve (1) and Leaf Spring (2)**

The leaf spring should deflect approximately ½ in. (12.7 mm) when the conveyor is fully down. If spring deflection exceeds ½ in. (12.7 mm), the cylinder mounts may be excessively worn. Be aware, however, that excessive deflection can also be caused by a misadjusted net feed valve.

**NOTE:**

**The leaf spring that activates the net feed valve must not contact the conveyor frame during operation or valve damage will occur. Correct**

**adjustment is essential for proper net feed operation.**

New spring steel bushings and mounting pins are available to correct this situation. The pins are cross-drilled and tapped to accept a grease zerk.

The bushings consist of four  $\frac{3}{4}$  in. (19.05 mm) bushings and two 1 in. (25.4 mm) bushings. **Contact Bucyrus Equipment Company Inc (800-330-0857) to obtain the parts necessary to perform this update.**

- $\frac{3}{4}$  in. bushing—part No. 100075075 (four required)
- 1 in. bushing—part No. 100075100 (two required)
- Pin—SC219-2 (two required)

#### **WARNING**

**Only disconnect one cylinder at a time and engage the cylinder stop (Figure 3) on the opposite side to prevent the conveyor from falling.**



**Figure 3—View Showing Cylinder Safety Stop Engaged**

1. Raise the rear conveyor as necessary to disconnect the lower mount.
2. Remove the pin and lower the cylinder stop on the opposite side that you are working on. See **Figure 3**. Secure the stop in place using the pin.
3. Remove the lower mounting pin and bushings from the cylinder and frame perch.
4. Install the short bushings into each mounting lug on the cylinder. Install the long bushing into the frame mounting perch. Note that the bushings are a slight interference fit.
5. Attach the cylinder to the frame and install the mounting pin with the grease zerk facing outward.
6. Repeat this procedure for the remaining cylinder.
7. Next, check net feed valve adjustment as follows:
  - a. Slowly lower the rear conveyor while observing leaf spring deflection as the spring activates the net feed valve.
  - b. Spring deflection should be approximately  $\frac{1}{2}$  in. (12.7 mm) with the rear conveyor in the fully down position.
  - c. If adjustment is necessary, loosen the jam nut and turn the adjustment bolt (**2, Figure 2**) in or out as necessary to obtain the correct spring deflection. Securely tighten the jam nut and recheck the adjustment.
  - d. With the conveyor fully lowered, turn on the rear conveyor and make sure the net feed rollers activate normally.