



## Mereen-Johnson Machine Co.

Service Bulletin #GRS-1-01/06

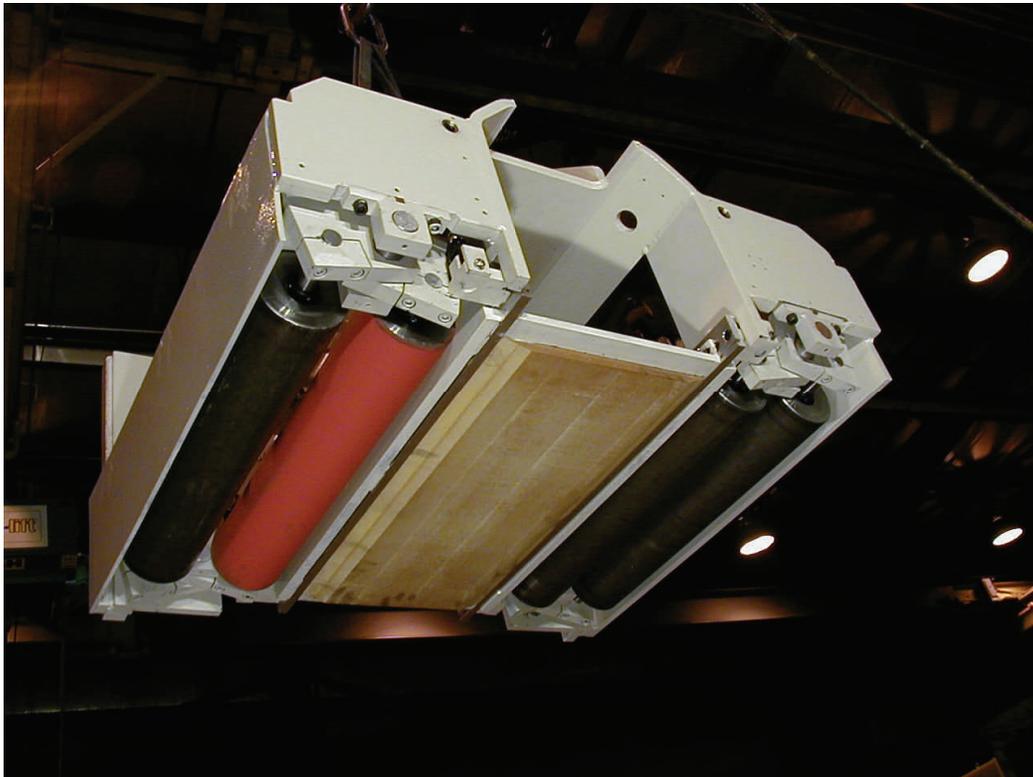
Machine Type - Gang Rip Saws

Subject - Pressure Heads

### Summary:

One aspect for maintaining machine accuracy and glue joint quality on the gang rip saw is proper calibration and function of the pressure head.

This service bulletin provides information for identifying and checking the most common wear items and provides answers to many frequently asked questions.



Note: Be sure to set all pressure head settings and adjustments as described in your machine manual. If you do not have the manual for your machine, please contact our Customer Service Department for a replacement.

Although part numbers are provided in this bulletin for reference purposes, make sure to confirm proper part numbers with your Mereen-Johnson Customer Service Representative before ordering



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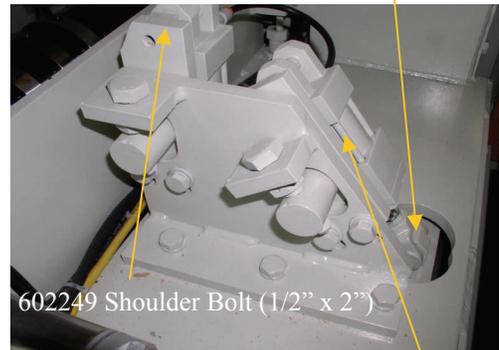
Since the late 1980's most Mereen-Johnson gang rip saws have been equipped with air loaded press rolls. Air loaded press rolls are easily adjusted from the top side of the pressure head.

Typically pressure rolls are set at the factory for processing surfaced material and are designed to yield 1/8". Press rolls can also be set for processing rough stock material, in which case, each roll is set to yield 1/4" while on top of material.

Check to be sure that there is not free play in any of the cylinder clevis'.

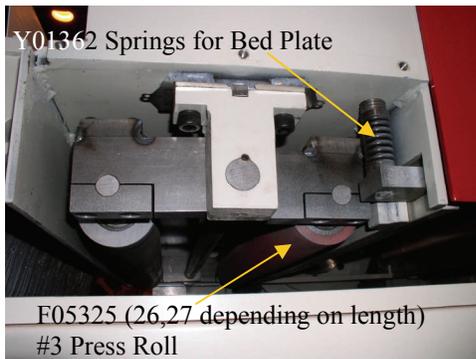
You should be able see each roll yield in sequence when a board is run through the machine.

602944 Rod Clevis Pin w/Retaining Rings



602249 Shoulder Bolt (1/2" x 2")

610759 Air Cylinder



Y01362 Springs for Bed Plate

F05325 (26,27 depending on length)  
#3 Press Roll

Alignment of each roll is set at the factory and pinned in the proper location. Check the pivot shaft and mount as well as the press roll shaft and bearings for any free play.

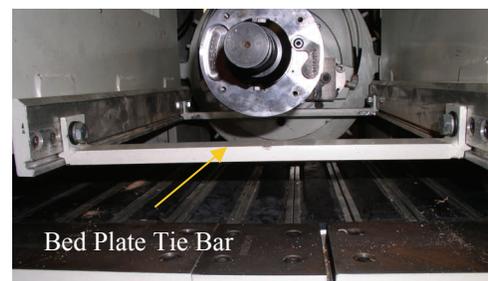
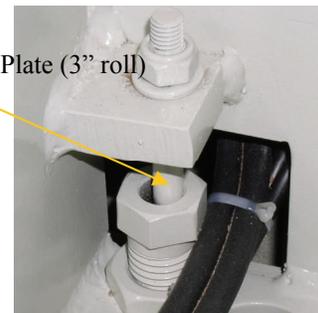
Also check the condition of the outer roll surface. The roll directly after the saw arbor is rubber covered to provide greater friction and containment of material that might have thickness variations or surface irregularities.

The bed plate is spring tensioned and designed to contain material while in the cut and yield 1/16" during actuation. The springs and rods are common wear items.

Check that both inboard and outboard bed plate tie bars are straight and into their mounting positions between the bed plate rails.

Sometimes pressure heads are inadvertently raised beyond the elevation of the arbor which will bend the bed plate tie bars. Cracked paint in the center of the tie bar is a good indicator that this has happened.

57041C01 Rods for Bed Plate (3" roll)



Bed Plate Tie Bar



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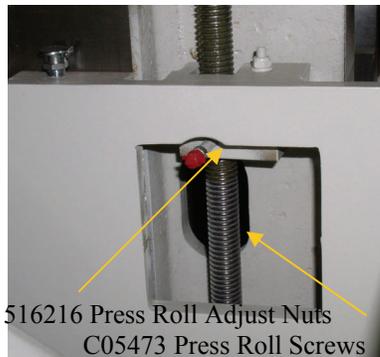
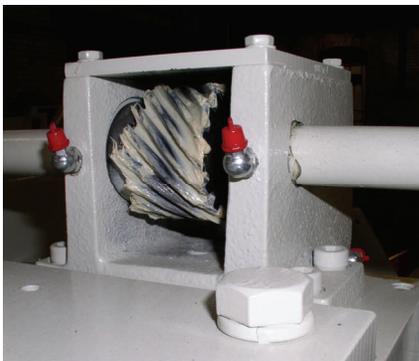
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The pressure is vertically actuated through a handwheel and dual spiral gears.

The pressure head rides on a gibbed flat slide. The tension gibs should be checked on a regular basis to assure smooth operation, as described in your manual. Regular lubrication is the key to the longevity of these components.

The vertical adjust nuts and screws are common wear items. If the pressure head unit lifts while a board is introduced into the machine, it is likely that these items should be replaced



Hold down pressure should be set at 30 - 40 PSI.

One of the most common operator mistakes is to try to compensate for worn or improperly adjusted pressure heads by increasing the air pressure.

Should you find that greater than 30- 40 PSI is required to properly contain material, it is a good indicator that the components outlined in this service bulletin should be inspected, adjusted, or replaced as required.

Excess hold down pressure leads to premature part failure. For more information on hold down settings, maintenance, and replacement parts, contact the Mereen-Johnson Customer Service Department.

Press roll pressure regulator





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#### **Frequently Asked Questions:**

**Q—** Can't vertical adjusting nuts be made stronger?

**A—** The vertical adjusting bosses are intentionally designed to be the weakest point of the pressure head adjust system. This design reduces the potential for expensive machine damage in the case the machine were jammed with overthick or tapered lumber.

**Q—** Why does my pressure head shutter during adjustment.

**A—** Loose gibs or lack of lubrication can cause this symptom. Gibs should be adjusted by loosening the gib screw jam nut, turning the gib screw until tension is placed on the gib and then backing the gib screw out one flat of the allen wrench. Oiling the cups at the top of the pressure head slide should be part of daily maintenance and the spiral gears should be greased on a regular basis.

**Q—** We have an older machine with spring loaded press rolls. Can we convert them to the newer air loaded design? What are the benefits?

**A—** Air loaded rolls provide more consistence hold down pressure, are easier to adjust then spring loaded rolls. Conversion kits are readily available from Mereen-Johnson to convert your machine to air loaded press rolls. Contact the Parts Department with your machine model and serial number for a quotation.

**Q—** Should press rolls be set differently when processing surfaced material or rough stock?

**A—** Yes. When processing surfaced material, it is recommended that the press rolls yield 1/8". When processing rough stock material it is recommended that the press rolls be set to yield 1/4". This setting procedure is described your manual.

**Q—** Our lumber is really rough. Even with the rough stock setting lumber still hangs up in the saw on a regular basis. Is there anything else we can do?

**A—** For applications where lumber thickness variations exceed 1/4" on a regular basis, Mereen-Johnson can offer a replacement pressure head which can accommodate thickness variations up to 3/4". Contact your Mereen-Johnson Sales Representative for details.

**Q—** Are there more durable materials available for bed plate use?

**A—** Yes. Standard bed plate material is segmented maple. For applications requiring greater durability, we offer phenolic and in some specialty application alloy materials. Contact our customer service department for details.