



## Rear Roller Brush Service Tips

**Product: Reelmaster 5010 Series Roller Brushes**

**May 14, 2007**

**Affected Units:**

**All 5010 Series Roller Brushes**

**Models:**

03663

03683

**Serial Numbers:**

Any

Any

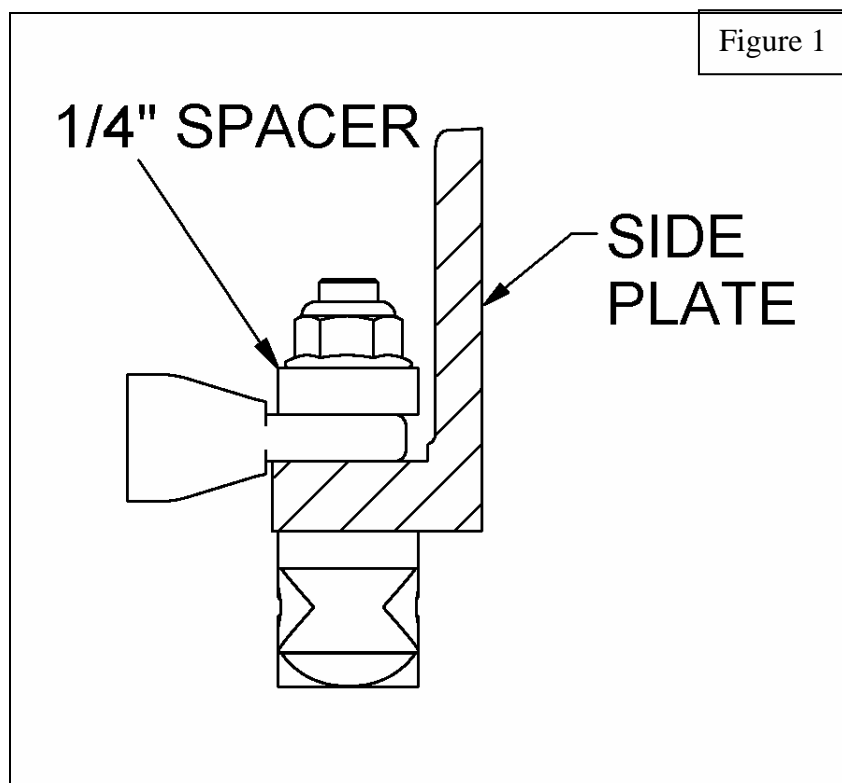
### **Situation:**

Due to the nature of the Rear Roller brush, durability and belt life is highly dependent on setup procedures and accuracy of adjustment. Failure to follow Operator's Manual instructions or improper adjustment can result in reduced belt life and other service complaints related to durability. Most of the complaints received to date have been traced to setup or adjustment issues.

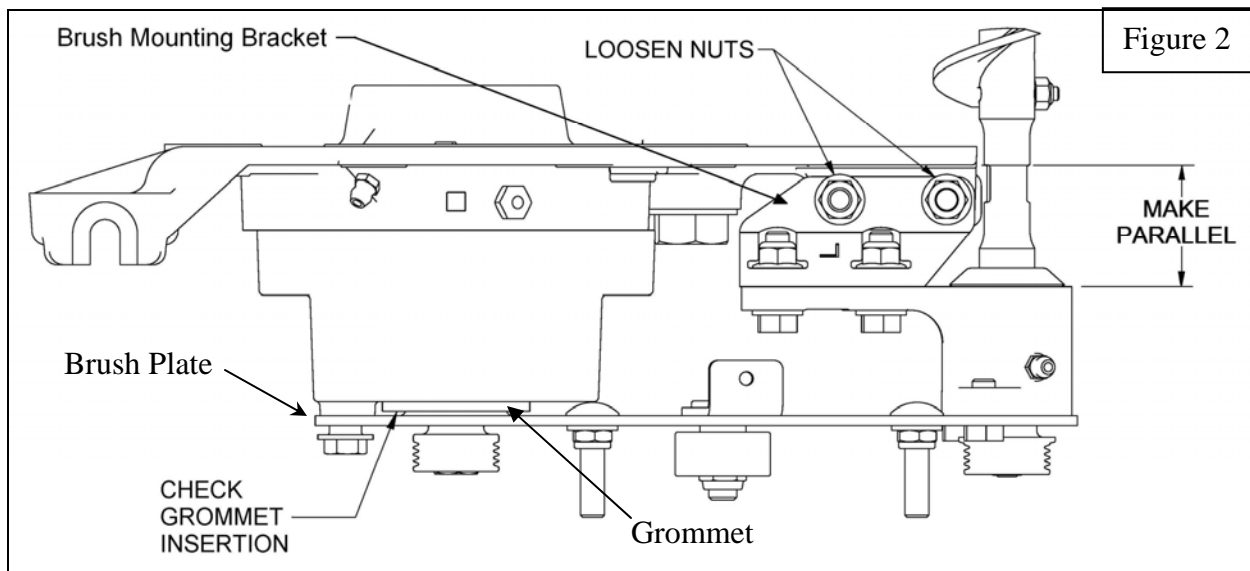
### **Instructions:**

The following areas are critical to long term belt life and overall durability of the Roller Brushes. Verify these items as part of your setup process and any time service is performed on the Rear Roller Brush.

1. Verify that the brush Mounting Bracket is mounted directly to the top surface of the cutting unit Side Plate flange. There should never be spacers between the Side Plate flange and the Roller Brush Mounting Bracket. Any unused Spacers should be at the top of the assembly. (figure 1)

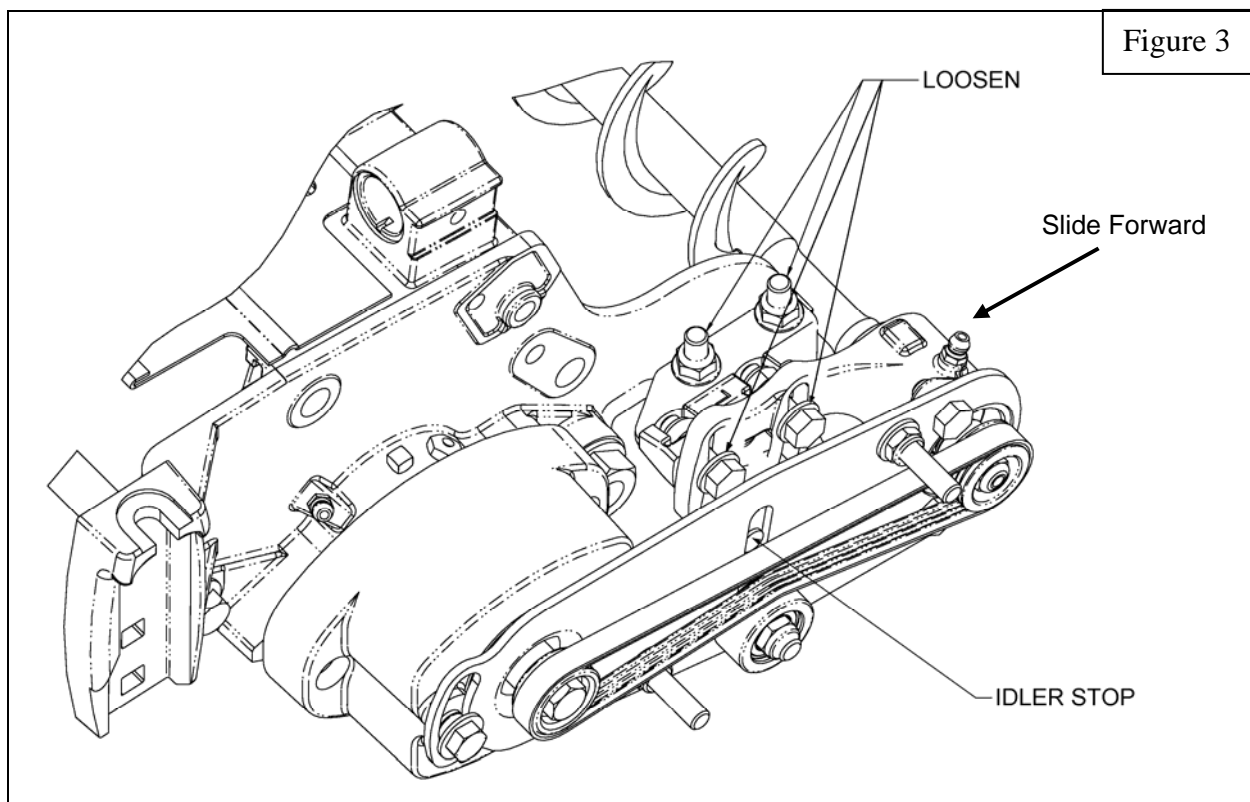


2. Verify the Brush Plate is correctly inserted into the rubber grommet on the drive assembly. The Brush Plate should naturally set nestled against the drive assembly. If the Brush Plate does not remain fully engaged with the drive assembly as pictured below (figure 2):
  - a. Verify the Brush Plate is fully inserted into the grommet.
  - b. Loosen Brush Mounting Bracket Nuts (both sides).
  - c. Adjust Brush Mounting Brackets by pushing in and forward until the Brush plate remains fully inserted into the grommet. (The Brush Mounting Brackets should be parallel to the cutting unit Side Plate).
  - d. Tighten Brush Mounting Bracket Nuts.

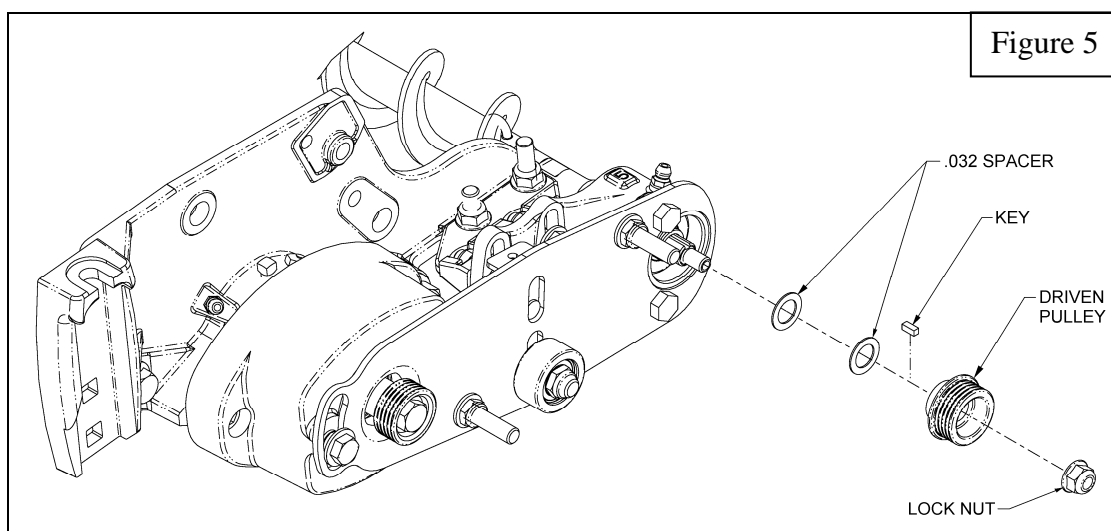
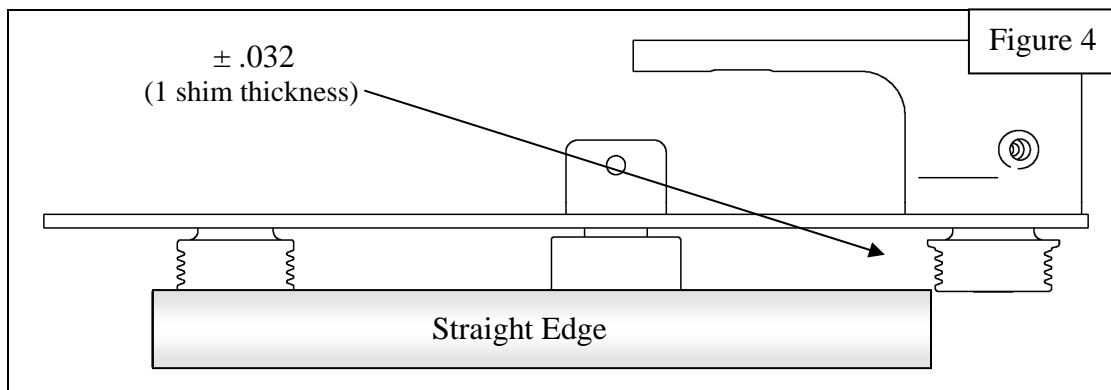


3. Verify the Idler Stop is at the bottom of the slot after belt tensioning. Push the Brush bearing housings forward prior to tightening the hardware. This ensures proper pulley spacing so that the Idler Stop will not be lodged at the bottom of the adjustment slot, resulting in an over tensioned belt (figure 3).
  - a. Loosen the hardware securing the Bearing Housing.
  - b. Slide the Bearing Housing forward in the mounting holes.
  - c. Retighten Bearing Housing hardware.
  - d. Tension Belt as described in the Operator's Manual.

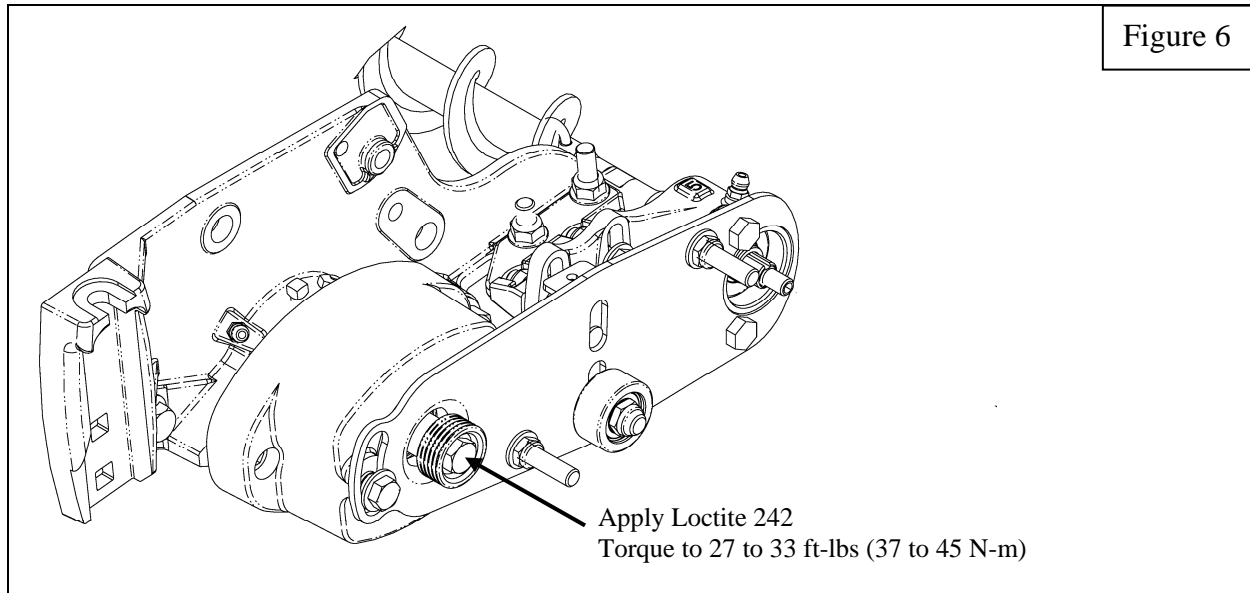
Note: Ensure Brush Plate position as described in item 2. Idler Pulley Snap Ring should face IN (away from you).



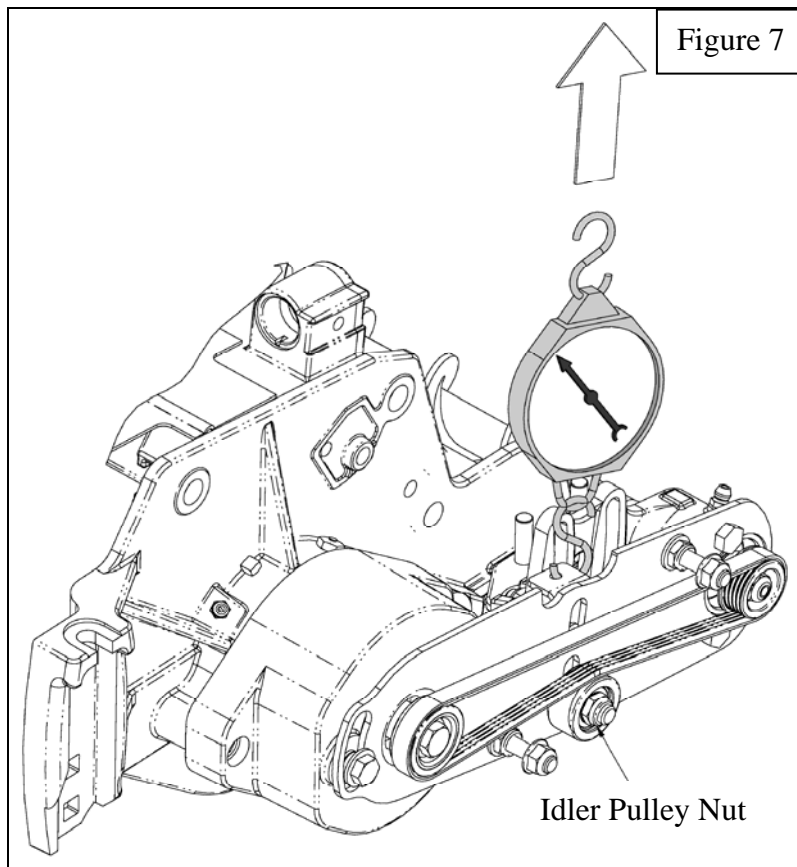
4. Verify Pulleys are aligned properly. This should be done as part of setup and any time service is performed on the Roller Brush Assembly.
  - a. Release Idler and remove belt.
  - b. Lay a straight edge across the outer face of the **Drive Pulley**. Do not contact any other pulley (figure 4).
  - c. Use the straight edge to verify position of Driven Pulley. The outer face of the Driven Pulley should be inline within  $\pm .032$  (shim thickness) of straight edge (figure 4).
  - d. If the pulley is not inline, make note of which way the pulley needs to move (figure 4).
  - e. Remove the Driven Pulley and key (figure 5).
  - f. Add a Shim (112-6957) to move the pulley OUT or away from the Brush Plate.
  - g. Remove Shim (112-6957) to move pulley IN or towards the Brush Plate.
  - h. Reinstall the Pulley and Key (be careful that the key does not get pushed or fall out during pulley installation) (figure 5).
  - i. While holding the Roller Brush Shaft with a  $\frac{1}{2}$ " wrench, torque the nut to 17-21 ft-lbs (23-28 Nm).
  - j. Verify Pulley alignment. Readjust if necessary (figure 4).



5. Verify the tangs (teeth) of the Drive Pulley are fully seated. Apply Loctite 242 or equivalent to the Bolt threads and torque to 27 to 33 ft-lbs (37 to 45 N-m) (figure 6).



6. Verify Belt is tensioned properly (Figure 7).
  - a. Loosen Idler Pulley Nut.
  - b. Use **SPRING FORCE GAUGE** to apply 15 lbs of vertical force to the idler pulley bracket.  
Note: A used belt (having run more than two hours) should have 10 lbs of force applied.
  - c. While holding tension, tighten Idler Pulley Nut.



#### Best Practice Tool List

- 1) Spring force gauge (doesn't have to be elaborate – can be acquired from a fishing supply store)
- 2) Straight edge or steel ruler
- 3) Torque Wrench
- 4) Loctite 242 or equivalent
- 5) Basic set of SAE sockets or wrenches.