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# Planer Segmented Infeed Roller Adjustment & Calibration

## 1.0 Maintenance Objective & Frequency

The objective of this procedure is to adjust and calibrate the segmented infeed roller on a wood planer to ensure uniform feed pressure across the full width of the workpiece. Proper adjustment prevents snipe, reduces roller wear, and maintains consistent feed rate. This PM is required every 200 operating hours or whenever feed inconsistency or snipe is observed.

## 2.0 Lockout/Tagout (LOTO) & Safety

- Electrical Isolation: Disconnect main power to the planer at the disconnect switch and apply a personal lockout tag.
- Pneumatic Isolation: Close the compressed air supply valve and bleed residual air from the infeed roller pressure line.
- Mechanical Lockout: Ensure the cutterhead is fully stopped and the feed drive is disengaged.
- PPE: Wear safety glasses, cut-resistant gloves, and hearing protection. Use a dust mask if debris is present.

## 3.0 Required Tools, Parts & Lubricants

- Feeler gauge set (0.001-0.030 inch)
- Torque wrench (0-150 in-lbs)
- 10mm combination wrench
- 13mm combination wrench
- Dial indicator with magnetic base (0.001 inch resolution)
- Straightedge (36 inch minimum)
- Medium-strength threadlocker (Loctite 242 or equivalent)
- Clean lint-free rags
- Replacement segmented roller segments (if worn beyond spec)

## 4.0 Step-by-Step Maintenance Procedure

1. Perform LOTO as per Section 2.0. Verify zero energy state by attempting to start the planer.
2. Remove the infeed roller access cover and the chip deflector shield using a 10mm wrench. Set hardware aside in a labeled container.
3. Visually inspect all segmented roller sections for cracks, missing teeth, or excessive wear. Replace any segment that has less than 50% of original tooth height or shows visible damage.
4. Clean the roller surface and the mounting shaft with a lint-free rag to remove pitch, dust, and debris.
5. Using a straightedge placed across the roller segments, check for flatness. The gap between the straightedge and any segment must not exceed 0.010 inch. If gaps exceed this, loosen the segment mounting bolts and reposition the segment to achieve flatness, then torque bolts to 45 in-lbs with threadlocker.

6. Set the dial indicator on the planer bed with the plunger contacting the top of the infeed roller. Zero the indicator. Manually rotate the roller one full revolution. Record the total indicated runout (TIR). Maximum allowable TIR is 0.015 inch. If exceeded, check roller bearings and shaft for wear.
7. Adjust the infeed roller pressure using the pneumatic regulator (if equipped) or mechanical spring tensioners. Set pressure to OEM specification (typically 40-60 psi for pneumatic systems). For mechanical systems, adjust spring compression to achieve a feed force of 50-70 lbs as measured with a push-pull gauge at the roller center.
8. Using a feeler gauge, check the gap between the infeed roller and the planer bed. The gap should be 0.005-0.010 inch less than the nominal workpiece thickness. Adjust the roller height using the eccentric bushings or shims as per OEM manual. Torque all adjustment fasteners to 80 in-lbs.
9. Reinstall the chip deflector shield and access cover. Torque all cover bolts to 25 in-lbs.
10. Remove LOTO tags and restore power and pneumatic supply.

## 5.0 Verification & Return to Service

1. Run the planer at idle for 2 minutes. Listen for unusual noises from the infeed roller area. Verify smooth rotation without binding.
2. Feed a test workpiece (scrap wood of typical production thickness) through the planer. Observe for consistent feed without slipping or stalling. Check the exit end for snipe (depth of cut variation at the trailing edge). Snipe should not exceed 0.005 inch.
3. Measure the thickness of the test piece at three points along its length using calipers. Variation should be within 0.010 inch. If out of spec, repeat adjustment steps 5.5 through 5.8.
4. Document the adjustment values (roller height, pressure, TIR) in the PM work order within ServiceGrid. Sign off and close the work order.

**Regulatory Disclaimer:** This document is a generic maintenance template provided for educational and informational purposes only. It does not constitute professional engineering or reliability advice. The end-user assumes all liability for validating all step sequences, torque specs, and LOTO protocols against specific machinery OEM manuals before deployment to a live production floor.