

**\*\*Paper copies of solutions may not be the most current solutions\*\***

**Complaint or Symptom :**

- May not be able to adjust bedknife to reel clearance evenly across full width of a QA5 cutting unit.

**Note: Right and Left are designated from the operator's platform**

- Right bedknife adjustment tower nut may be loose after recommended clearance of 0.001-0.002 inches (0.025-0.050 mm) is achieved.

- Rotating right bedknife adjustment tower nut by one notch may not move the bedknife by 0.0005 inch (0.012 mm)

**Problem or Situation :**

Cutting unit frame is not square, causing bedknife/shoe assembly to not be parallel to reel.

**Solution :**

**CAUTION: Avoid injury. Wear protective gloves when servicing cutting units.**

1. Remove cutting unit from machine if attached.
2. Place rear of cutting unit on a flat surface or workbench so that the bedknife is facing you.
3. Inspect bedknife pivot cam on each side of cutting unit. Cam must be oriented in one of the two positions shown on both sides of cutting unit. See Photo: [83734\\_1.jpg](#)

**NOTE: Position pivot cams to orient smooth edge (A) facing up as shown when using new reels (A1). Rotate pivot cams to orient smooth edge facing down when reel diameter is 4.8 inches (122 mm) or less (A2). This will promote longer useful life of reel. .**

4. On either side of cutting unit, loosen, but do not remove rear roller clamp screws (B). See Photo: [83734\\_2.jpg](#)
5. On same side of cutting unit, loosen, but do not remove jam nut and screw (C) used to secure front roller to bracket. See Photo: [83734\\_3.jpg](#)
6. On both sides of cutting unit, loosen the top cross bar mounting nuts (D) ½ to ¾ turn. See Photo: [83734\\_4.jpg](#)

**NOTE: Avoid damage. Use 5 mm hex tool to loosen the front cross rod mounting screw.**

7. On either side of cutting unit, loosen the front cross rod mounting screw (E). See Photo: [83734\\_5.jpg](#)

**NOTE: If cutting unit is installed on a 220 E-Cut™ Hybrid Walk Greens Mower, lift yoke mounting nuts on both sides of the cutting unit must be loosened. See Photo: [83734\\_6.jpg](#)**

8. Rotate reel so that the maximum number of blades will be in contact with the bedknife during Step 9.

**NOTE: Perform bedknife position adjustments gradually and alternately from side to side to prevent shoe from binding in pivot bushings. Do not rotate bedknife adjustment tower nut more than half of a full rotation per side at one time unless both are no longer contacting their bases.**

9. Rotate bedknife adjustment tower nuts (F) on both sides of the cutting unit counter-clockwise until they turn freely and the bedknife springs (G) are no longer pulling the tower nuts against their bases (H). See Photo: [83734\\_7.jpg](#)

10. Using a 0.001 inch (0.025 mm) gauge, confirm that the bedknife is now contacting the reel across the full width of the cutting unit.

**NOTE: When completing steps 11 and 12, securely support or hold the side plate of the cutting unit only where the hardware is being tightened. Do not support or hold the opposite side plate, or efforts to square the cutting unit frame may not be successful.**

11. Alternately tighten the four top cross bar mounting nuts (D) incrementally from side-to-side to a final torque of 35 lb-ft (47 Nm).

12. Tighten the front cross rod mounting screw (E) to 20 lb-ft (27 Nm).

13. Rotate both bedknife adjustment tower nuts clockwise until they contact their base and springs start to compress.

**IMPORTANT: Once the bedknife adjustment tower nuts have contacted their bases, do not rotate more than half of a full rotation per side at one time. Make sure that the final adjustment for clearance is pulling the bedknife away from the reel.**

14. Alternating from side-to-side, gradually rotate bedknife adjustment tower nuts clockwise until the bedknife begins to pull away from the reel, and the reel can be freely rotated by hand.

15. Adjust bedknife to reel clearance to optimize performance. Proper clearance is 0.001-0.002 inches (0.025-0.050 mm) depending on application.

**If complaint has been resolved, go to Step 16. If complaint is still evident, repeat Steps 8 thru 15 with:**

**The addition of the following step:**

10a. Rotate left bedknife adjustment tower nut clockwise until clearance of 0.006 inches (0.15 mm) is achieved as measured with feeler gauge on left side of cutting unit.

**Note: Do not remove feeler gauge at this time. Do not rotate right tower nut.**

***The replacement of steps 13 and 14 for the following:***

13 Rotate right bedknife adjustment tower nut clockwise until proper bedknife to reel clearance of 0.001-0.002 inches (0.025-0.050 mm) is achieved depending on application.

14 Remove feeler gauge and rotate left bedknife adjustment tower nut counter-clockwise until bedknife contacts reel.

14a Rotate left bedknife adjustment tower nut clockwise until proper bedknife to reel clearance of 0.001-0.002 inches (0.025-0.050 mm) is achieved depending on application.

***If complaint has been resolved, go to Step 16. If complaint is still evident, contact DTAC for further assistance.***

***NOTE: Verify screw engages surface of front roller shaft before tightening. Screw must not be aligned with hole at end of front roller shaft.***

16. Tighten front and rear roller clamping hardware.

***NOTE: If cutting unit is installed on a 220 E-Cut™ Hybrid Walk Greens Mower, tighten lift yoke mounting nuts on both sides of the cutting unit.***

17. Check front roller parallelism. Adjust as necessary.

18. Check height of cut and rear roller parallelism. Adjust as necessary.

**Additional Information :**

Please enter a report only DTAC Case if the following occurs:

- There is a quality of cut complaint due to the unit being out of square.
- There is abnormal wear of the bedknife and/or reel.

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2500E Hybrid Dsl, 8500 E-Cut Hybrid, 2500B Diesel, 7500 E-Cut Hybrid, 8500, 7500, 2500E Gas, 220 E-Cut Hybrid, 8000 E-Cut Hybrid, 2500B Gas, 2500E Diesel, 2500E Hybrid Gas

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INTERFERENCE, BAR, PERFORM, CLEARANCE, SPRING, ALIGN, ERRATIC, CHECK, FRAME, BLADE, SETUP, CONTACT, SHOE, OFF, BIND, BENT, LEVEL, ADJUST, BEDKNIFE, REEL, TWIST, KNIFE, SPEC, UNEVEN, ANGLE, HOUSING, PIVOT, FIT, CCE Misc 5610, 5612