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John Deere Horicon Works

MOWER DECK TIMING BELT SLIPS; BLADES CONTACT

Freedom 42 Mower Deck

Complaint or Symptom:

- 42-in. deck belt stretched, blades not in time.
- Blades contacting.
- Need to know how to tension timing belt.

Situation:

- Belt tension not adjusted correctly.
- Mower blade hit object while mowing.

Solution:

1. Remove mower deck.
2. Check to see if blades are damaged or bent. Sharpen or replace blades as required.

IMPORTANT: Even if you do not remove the blades be sure blade bolts are tightened to 57 N•m (42 lb-ft).

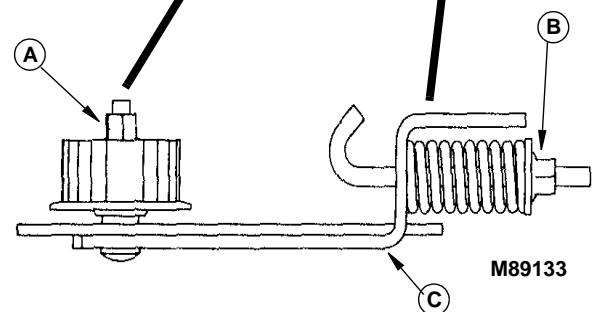
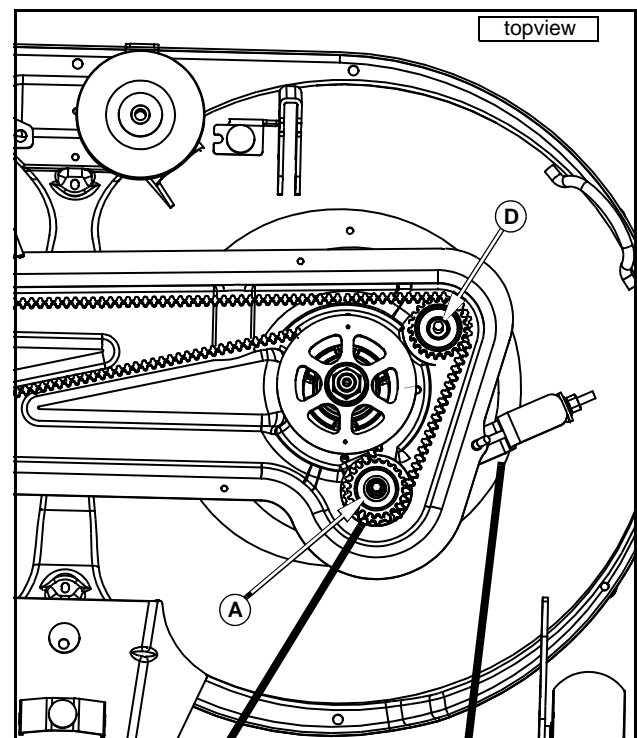
NOTE: There are two different blades. Install per instructions in the Operator's Manual.

3. Remove brake assembly.
4. Remove top cover.

IMPORTANT: Do not loosen fixed idler (D).

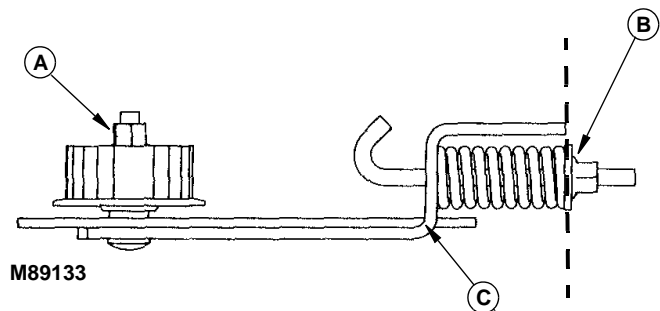
IMPORTANT: Loosening tensioning idler (A) less than one full turn or more than one full turn will effect final belt tension.

5. Loosen nut (A) on tensioning idler one full turn.



6. Back adjusting nut (B) all the way to the end of the threads to completely remove tension from idler bracket (C).

NOTE: If tension spring rod bracket (C) is bent, bend back to original position or replace.



7. Check condition of timing belt. Replace if required.

8. Adjust blade timing (index blades $90^\circ \pm 10^\circ$ apart). Timing holes on top of the right spindle sheave and left spindle sprocket marks can be used to determine blade position.

9. Tighten adjusting nut (B) until the washer is aligned with the end of the idler arm.

10. Tighten tensioning idler nut (A) to 27 N•m (20 lb-ft). Rotate belt 2 full revolutions and be sure belt is tracking on sprocket and idlers.

IMPORTANT:

**HANDLE TIMING BELTS WITH CARE !
DO NOT Crimp, Fold, or Twist**



If belt does not track straight, it indicates damage to spindle shaft or idlers. Repair as necessary.

11. Install top cover.

12. Install brake assembly, if equipped.

13. Install mower deck.

Additional Information:

The pre-tensioning system was designed using a visual adjustment of the tension spring to provide an easy, accurate means to adjust the belt tension.

The tension spring system used on this mower deck is designed to work as a pretensioner when making adjustments. Therefore, it is **critical** that the procedure of loosening tensioning idler nut exactly one turn and then adjusting tension by aligning washer with the bracket and finally tightening the tensioning idler nut to 27 N•m (20 lb-ft) is followed. Once the tensioning idler nut is tightened, the spring tensioner has no effect on belt tension.

When the tensioning idler nut is loosened, the adjusting spring sets the initial belt tension. Then as the idler nut is tightened, the bolt straightens up and completes the tensioning process. The spring and the bolt combine to provide proper belt tension. The amount of belt tension provided by tightening the idler nut will vary depending on how loose the nut is during the adjustment process. Therefore, the idler nut must be loosened **EXACTLY** one full turn before the tensioning spring is adjusted.