

D1 XL-Series Draper Headers KNIFE DRIVE TIMING BELT SERVICE KIT (MD #253797)

IMPORTANT: When replacing a knife drive timing belt (MD #253064), remember that you must

1. Adjust the knife timing
2. Check and adjust the belt tension
3. Check and adjust the belt alignment

Highlights are provided below. Instructions for replacing the belt are NOT provided. For more information, refer to the header operator's manual.



DANGER

To avoid bodily injury or death from unexpected start-up of machine, always stop engine and remove key from ignition before leaving operator's seat for any reason.

NOTE: Right- and left-hand are determined from the operator's position. The front of the header is the side that faces the crop; the back of the header is the side that connects to the windrower.

Adjusting Knife Timing

NOTE: The operator's manual says to remove the right-hand belt to adjust timing. Timing can be done with whichever belt is being replaced, but is easier on the right-hand side.

1. Rotate the left knife drive box driven pulley **CLOCKWISE** until the left knife (A) is at the center of the inboard stroke (B) (moving towards the center of the header).

NOTE: The center of the stroke is where the knife sections (C) are centered between the guard points.

2. Rotate the right knife drive box pulley **COUNTERCLOCKWISE** until the right knife (D) is at the center of the inboard stroke (E) (moving towards the center of the header).

NOTE: To maintain knife timing, ensure the knife drive box driver and driven pulleys do **NOT** rotate during installation.

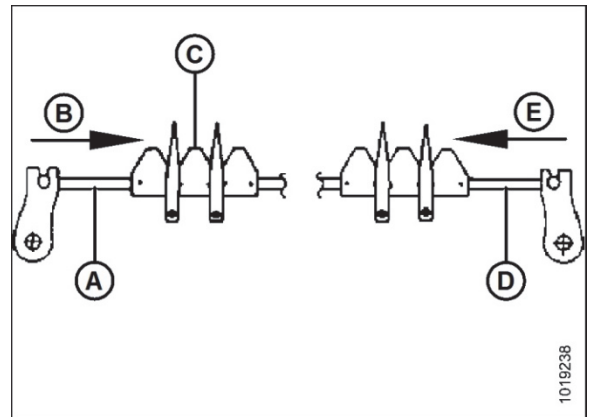


Figure 1: Adjusting Timing

Checking and Setting Belt Tension

1. Turn the adjuster bolts (B) clockwise to tighten the V-belt (C). A properly tensioned V-belt should deflect 4 mm (5/32 in.) when 52-77 N (12-17 lbf) is applied at the mid-span.
2. Tighten the two bolts (A) on the endsheet.

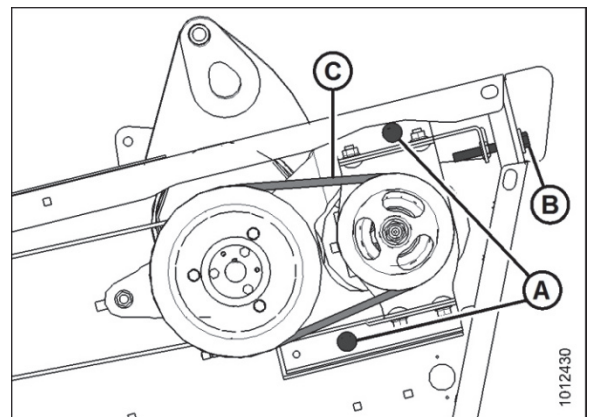


Figure 2: Knife Drive V-Belt

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3. If not already done, loosen hex nuts (D) enough to allow the idler pulleys (A) to pivot.
4. Position the idler pulleys (A) as high as possible by hand.
5. Thread flange nut (B) down adjuster bolt (C) to achieve final tension.
6. Check tension at mid-span of the belts. The belts should deflect 18–22 mm (11/16–14/16 in.) with 89 N (20 lbf) of force applied.
7. Tighten hex nuts (D) on idler pulleys (A).
8. Loosen flange nut (B) until adjuster bolt (C) is just snug, then tighten jam nut (E) to prevent loosening of the bolt.

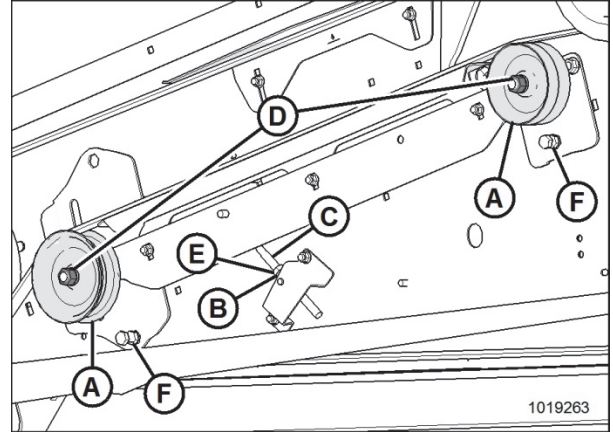


Figure 3: LH Knife Drive

NOTE: If flange nut (B) and adjuster bolt (C) are not loosened, the lower guide will not be parallel to the belt.

Checking Belt Alignment



CAUTION

Exercise extreme care when operating the header with the endshields open.

1. Operate the header and observe the belt tracking on both the drive pulley and the knife drive box pulley on both sides of the header. Shut down the windrower and remove the key from the ignition before making any adjustments.

If the belt is tracking towards the inboard side of the drive pulley, the likely cause is a toe-out problem (A, B) (belt tends to move towards the low tension [inboard] side of the pulley). To fix it, slide the cross shaft support tube rearwards.

If the belt is tracking towards the outboard side of the drive pulley, the likely cause is a toe-in problem (C, D) (belt tends to move towards the low tension [outboard] side of the pulley). To fix it, slide the cross shaft support tube forward.

NOTE: Cross shaft supports are located at grease fittings on bottom of back tube on each side.

2. If the belt (A) is tracking to one side of the idler pulley (C), the likely cause is an out-of-position idler pulley. To fix it, adjust the idler position using the push bolts (F in Figure 3) on the idler supports.

NOTE: Belt should not ride against idler pulley flanges, and should not be off the edge of the knife drive box pulley (B).

For more details, or if further adjustment is required, refer to the header operator's manual.

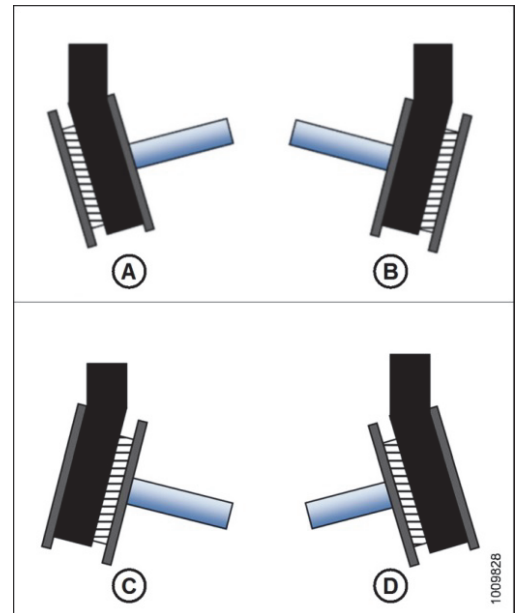


Figure 4: Knife Drive Pulleys

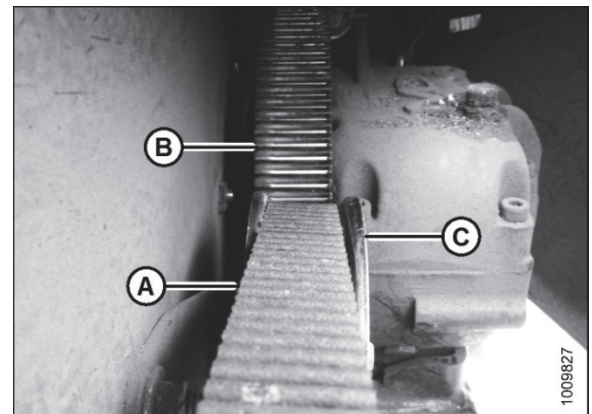


Figure 5: Knife Drive Belt