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Revision Number: 01

Revision Date: 01/12/2021

Transmission Drive Belts Replacement

Document Number	Model	Serial Number Range	Part Number
12-80019	520M / 520Y	All Units	81-0178

⚠ WARNING

Before making repairs or adjustments set the parking brake, turn off the engine, and remove the ignition key.

Always disconnect the negative battery cable from the battery when working with electrical components. Always work in a manner that does not put safety at risk!

⚠ WARNING

Safety glasses must be worn during installation. Ear (hearing) protection must be worn when using air or power tools.

Installation Notes: Right and left hand orientation referred to in these instructions is determined as if facing forward from the operator station.

Installation Time (estimated)

1 Hour

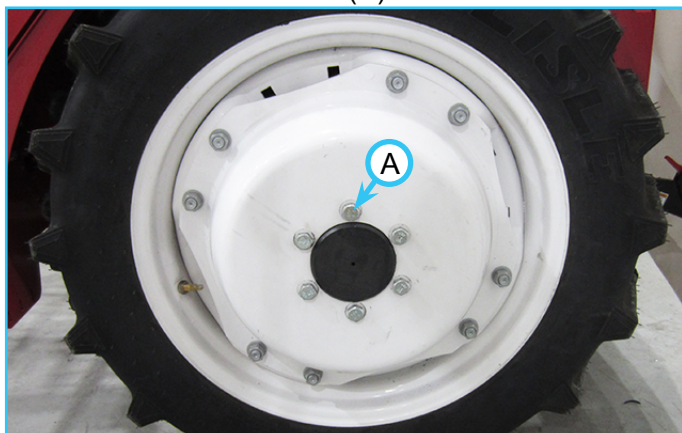
Tools Required: 9/16" wrench, 9/16" socket, 13/16" socket, Ratchet, Torque wrench, Pry bar



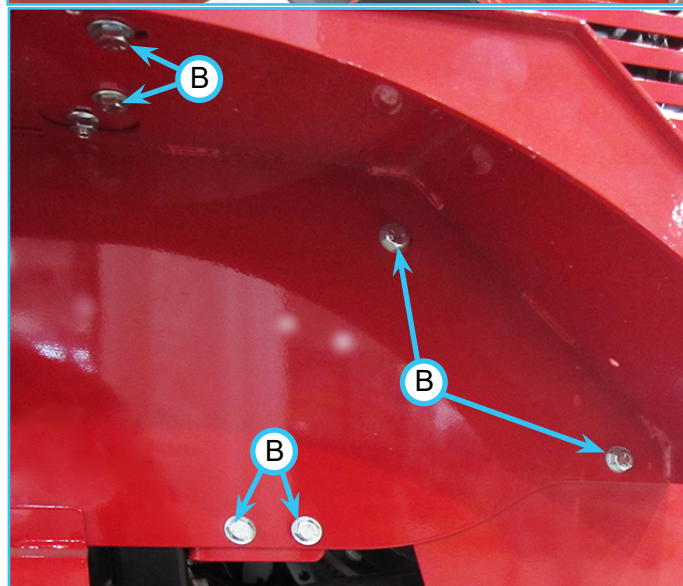
Attention

Tilmor recommends that service be performed by a qualified technician. If you are unsure how to perform the service procedure(s), contact Tilmor at 1-844-255-5864 or visit www.tilmor.com for additional information.

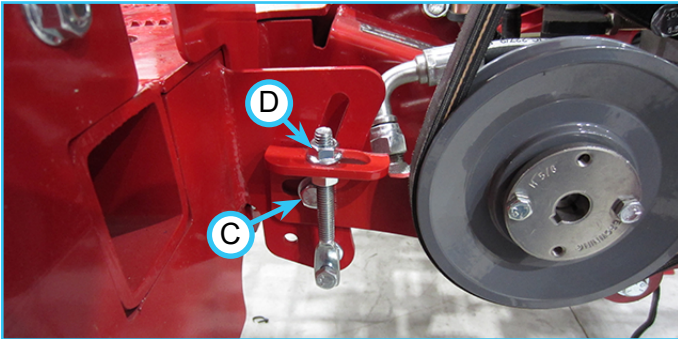
1. Park the tractor on a level surface.
2. Engage the parking brake and shut off the engine.
3. Remove the key from the ignition switch.
4. Place wheel chocks in front of the tractors front tires.
5. Using a jack and jack stands lift the rear of the tractor, raising the rear wheel approximately 2 inches off of the ground.
6. Remove the left rear wheel by removing the six 9/16" wheel stud bolts (A).



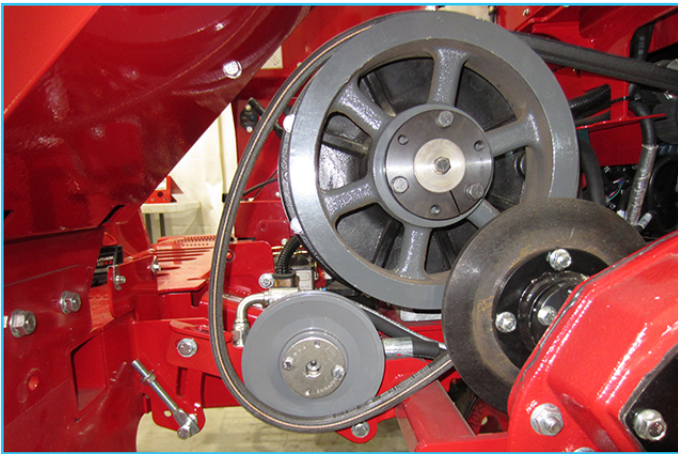
7. Remove the fender assembly by removing the eight 3/8" bolts (B) and washers.



8. Loosen the tension from the hydraulic pump drive belt by loosening the 3/8" bolt (C) and removing the 3/8" flange nut (D). The hydraulic drive pulley bracket can be lifted off the hangar bolt.

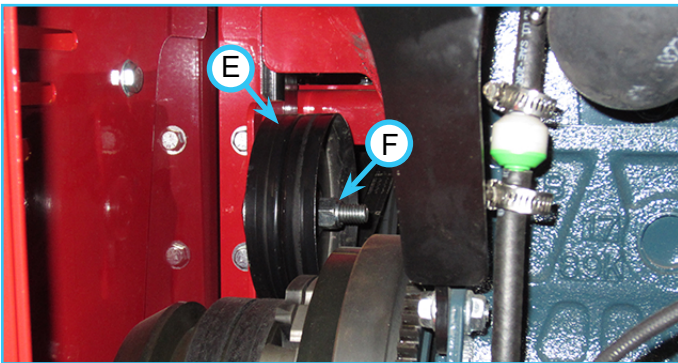


9. With the tension removed from the belt, the belt can now be removed from the pulleys.



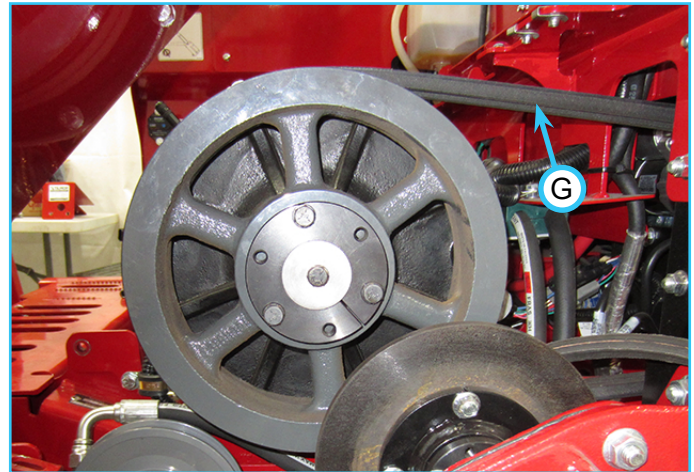
10. Open the rear engine access panel.

11. Locate the drive belt tension pulley (E).



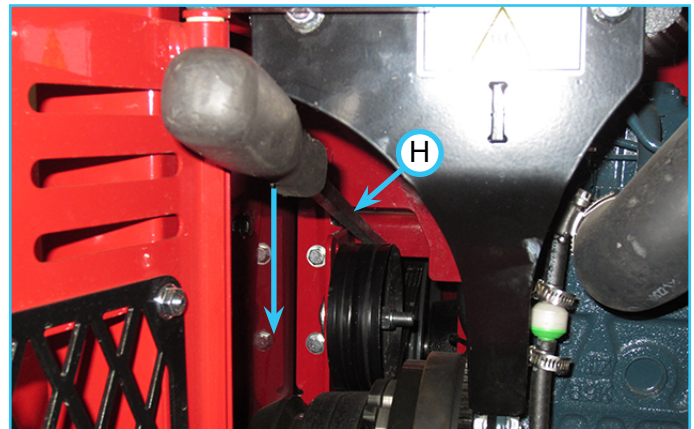
12. Loosen the tension pulley by loosening the 1/2" locknut (F).

13. With the tension removed from the drive belts (G) can be removed from the pulleys.



14. Install the new belts over the pulleys.

15. Use a long pry bar (H) to put downward pressure on the tension pulley.



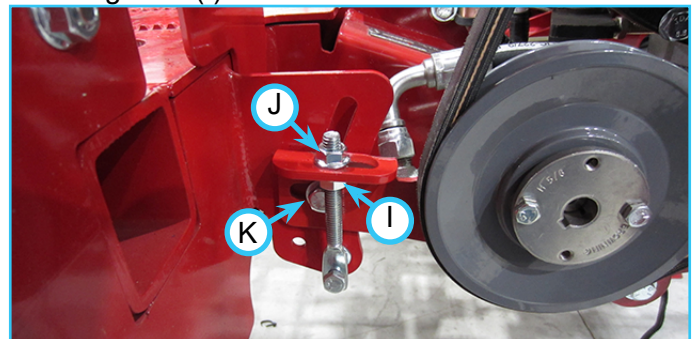
16. When the pulley is at the desired tension tighten the 1/2" lock nut.

17. Check the drive belt tension if the tension is incorrect adjust the drive belt tension. A deflection of 5/16" to 3/8" (7.9 to 9.5 mm) under a load of 13.6 lbs (6.2 kgf) pressed in the middle of the span.

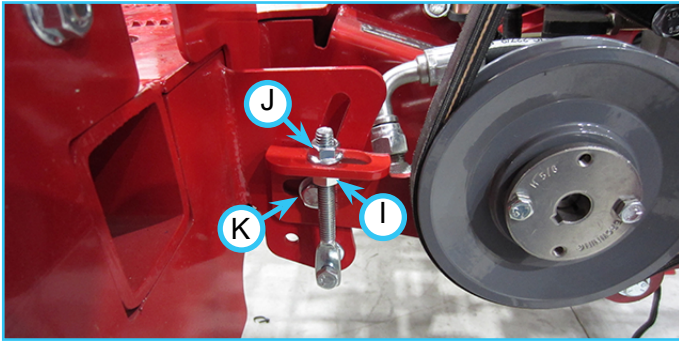
18. Install the hydraulic pump belt.

19. With the hydraulic pump belt installed, install the mounting bracket on to the hangar bolt. Secure the bracket in place with the 3/8" flange nut.

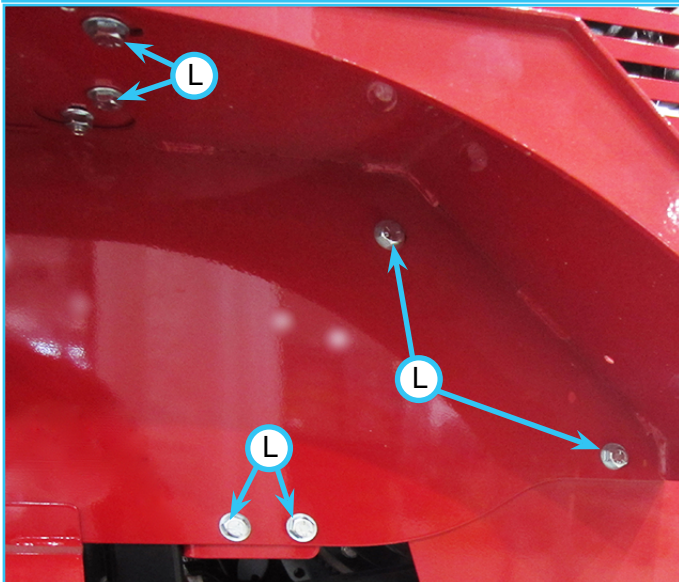
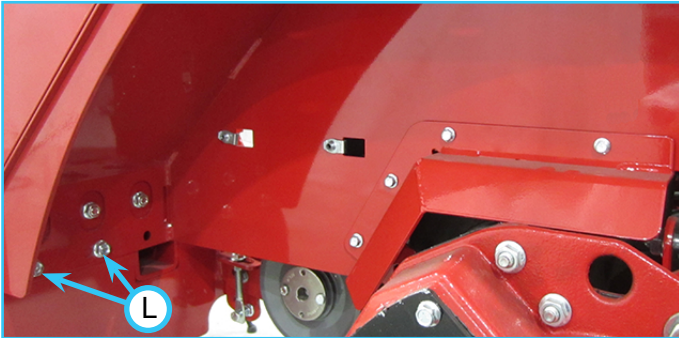
20. To increase the belt tension, loosen the 3/8" flange nut (I).



21. Tighten the 3/8" flange nut (J) until the belt reaches the desired tension.

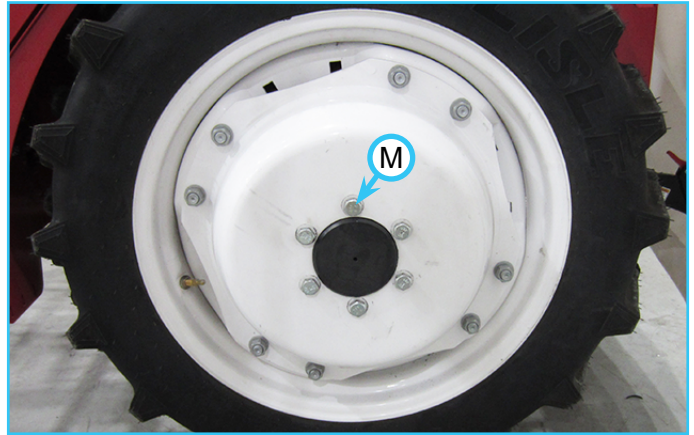


22. Tighten the 3/8" flange bolt (I) against the bracket.
23. Tighten the 3/8" flange nut (K) to hold the bracket securely in place.
24. Check the hydraulic belt tension if the tension is incorrect adjust the drive belt tension. A deflection of 1/8" to 3/16" (3.2 to 4.8 mm) under a load of 13.6 lbs (6.2 kgf) pressed in the middle of the span.
25. Install the fender assembly by installing the eight 3/8" bolts (L) and washers.



26. Torque the 3/8" bolts to 31 ft-lbs (42 Nm).

27. Install the left rear wheel by installing the six 9/16" wheel stud bolts (M).



28. Torque the 9/16" wheel stud bolts 109 ft-lbs (148 Nm).

Installation Complete