

TRX WHEEL MOTOR

TRX Wheel Motor Replacement

TRX Wheel Motor Removal

Note: Cleanliness is a key factor in a successful repair of any hydraulic system. Thoroughly clean all exposed surfaces prior to any type of maintenance. Cleaning all parts by using a solvent wash and air drying is usually adequate. As with any precision equipment, all parts must be kept free of foreign material and chemicals. Protect all exposed sealing areas and open cavities from damage and foreign material.

Upon removal, all seals, o-rings, and gaskets should be replaced. During installation, lightly lubricate all seals, o-rings, and gaskets with clean petroleum jelly prior to assembly.

Protect the inner diameter of seals and o-rings from damage during assembly by covering the shaft machined features with plastic wrap or equivalent.

1. Stop the engine, remove the key, and wait for all moving parts to stop before leaving the operating position.
2. Lift and support the unit so that the track is 3" to 4" (7.6 to 10cm) off of the ground (Fig. 001).



Fig 001

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3. Using a 9/16" socket, remove the 2 front cover plate bolts (Fig. 002).



Fig 002

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4. Using a 9/16" wrench, loosen the rear cover plate bolt and remove the cover plate (Fig. 003).



Fig 003

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5. Using a 15/16" wrench, loosen the tensioning bolt jam nut (Fig. 004).



Fig 004

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6. Using a 15/16" socket, back out the tensioning bolt (Fig. 005 and Fig. 006).



Fig 005

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Fig 006

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7. Using a 3/4" socket and 3/4" wrench, remove the front clamp bolt and nut (Fig. 007).



Fig 007

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8. Using a 3/4" socket and 3/4" wrench, loosen the rear clamp bolt and nut (Fig. 008).



Fig 008

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10. Remove the snap ring from the wheel bearing cap (Fig. 010).



Fig 010

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9. Slide the track tensioner rearward as far as it will go (Fig. 009).



Fig 009

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11. Remove the wheel bearing cap and gasket from the track wheel (Fig. 011).



Fig 011

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12. Using a 15/16" socket, remove the bolt from the center of the wheel and remove the road wheel from the track frame assembly (Fig. 012 and Fig. 013).



Fig 012

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13. Remove the track from the road wheels; then lift it up over the drive wheel (Fig. 014).



Fig 014

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Fig 013

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14. Use a piece of round stock in the drive wheel to prevent it from turning. Using a 1-1/2"socket, loosen the nut securing the drive wheel to the wheel motor shaft (Fig. 015).

Note: Leave the nut installed on the wheel motor shaft to retain the drive wheel.



Fig 015

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15. Install an appropriate puller and break the drive wheel free from the wheel motor shaft (Fig. 016).



Fig 016

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17. Remove the drive wheel from the wheel motor shaft (Fig. 018).



Fig 018

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16. Remove the nut from the wheel motor shaft. Remove the piece of round stock from the drive wheel (Fig. 017).



Fig 017

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18. Using a 15/16" wrench, disconnect the 2 hydraulic lines from the wheel motor (Fig. 019).



Fig 019

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19. Position a floor jack with a board underneath the track frame assembly (Fig. 020).

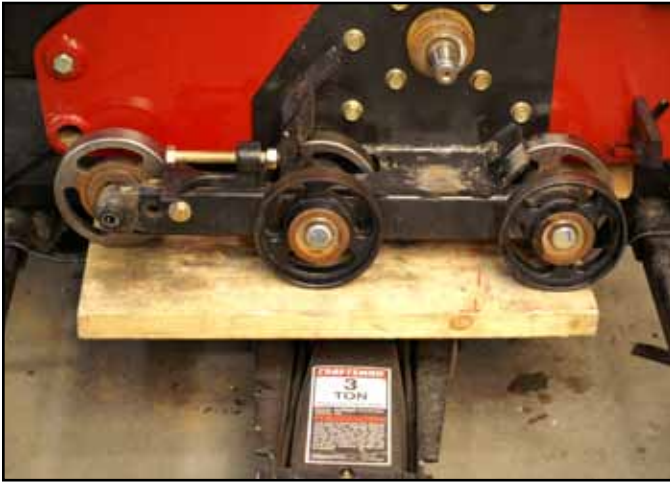


Fig 020

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21. Using a 3/4" socket and wrench, remove the 2 rear bolts and nuts securing the track frame assembly to the frame (Fig. 022).



Fig 022

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20. Using a 3/4" socket, loosen the 4 wheel motor mounting bolts (Fig. 021).

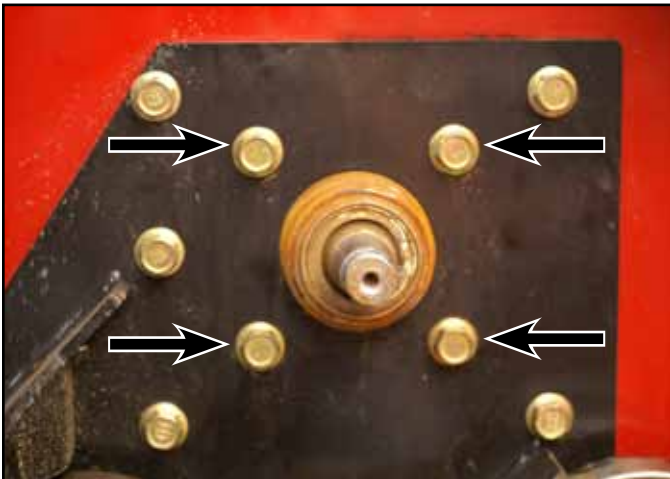


Fig 021

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22. Using a 3/4" socket, remove the 3 front bolts and threaded bar (located inside the frame) securing the track frame assembly to the frame (Fig. 023).



Fig 023

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23. Slide the track frame assembly and wheel motor out from the frame (Fig. 024).



Fig 024

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25. Using a 3/4" socket, remove the 4 wheel motor bolts securing the wheel motor to the track frame assembly (Fig. 026).



Fig 026

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24. Support the wheel motor and track frame assembly (Fig. 025).



Fig 025

PICT-5815

26. While supporting the wheel motor and track frame assembly, separate the wheel motor from the track frame assembly (Fig. 027).



Fig 027

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27. If replacing the wheel motor, remove the fittings from the old wheel motor and transfer them to the new wheel motor (Fig. 028).

Note: Refer to the Parker/Ross Wheel Motor Service Manual, Toro p/n 492-4753, for repair of the wheel motor.



Fig 028

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TRX Wheel Motor Installation

1. Position a floor jack near the track frame. Place the wheel motor on the floor jack and raise the floor jack to align the wheel motor mounting holes with the holes in the track frame.
2. Slide the track frame assembly and wheel motor together (Fig. 029).



Fig 029

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3. Apply thread locking compound to the 4 wheel motor mounting bolts (Fig. 030).



Fig 030

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5. Slide the wheel motor and track frame assembly into the frame and align the track frame assembly mounting holes with the mounting holes in the frame (Fig. 032).



Fig 032

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4. Loosely install the 4 wheel motor bolts (Fig. 031).



Fig 031

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6. Position the threaded bar inside the frame and install 3 mounting bolts securing the track frame assembly to the frame and threaded bar (Fig. 033).



Fig 033

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7. Install 2 bolts and nuts securing the rear of the track frame assembly to the frame (Fig. 034).



Fig 034

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9. Using a 3/4" socket and wrench, tighten and torque the 2 rear mounting bolts to 75 ± 8 ft-lbs (101.68 ± 10.8 Nm) (Fig. 036).



Fig 036

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8. Using a 3/4" socket, torque the 4 wheel motor mounting bolts and the front 3 mounting bolts to 75 ± 8 ft-lbs. (101.68 ± 10.8 Nm) (Fig. 035).



Fig 035

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10. Using a 15/16" wrench, install the 2 wheel motor hydraulic lines (Fig. 037).



Fig 037

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11. Ensure the key is installed in the wheel motor shaft keyway (Fig. 038).



Fig 038

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13. Install a new nut onto the wheel motor shaft (Fig. 040).



Fig 040

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12. Slide the drive wheel onto the wheel motor shaft (Fig. 039).



Fig 039

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14. Use a piece of round stock in the drive wheel to prevent it from turning. Using a 1-1/2" socket, torque the wheel motor nut to 300 to 350 ft-lbs. (406.7 to 474.5 Nm). Remove the piece of round stock from the drive wheel (Fig. 041).



Fig 041

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15. Install the track by lifting it up over the drive wheel and then onto the road wheels (Fig. 042).



Fig 042

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17. Position the road wheel and install the bolt into the tensioner arm (Fig. 044).



Fig 044

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16. Apply thread locking compound to the road wheel bolt (Fig. 043).



Fig 043

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18. Using a 15/16" socket, torque the road wheel bolt to 150 ± 15 ft-lbs. (203.37 + 20.3 Nm) (Fig. 045).



Fig 045

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19. Grease and install the dust cap onto the road wheel (Fig. 046 and Fig. 047).



Fig 046

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20. Install the snap ring (Fig. 048).



Fig 048

PICT-5840



Fig 047

PICT-5838

21. Slide the track tensioner forward as far as it will go.

22. Using a 15/16" socket, torque the tensioning bolt to 24 to 30 ft-lbs. (32.5 to 40.6 Nm) (Fig. 049).



Fig 049

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23. Ensure that the track deflects less than 1/4" to 3/8" (0.6 to 1cm) when 45 lbs. (40.6kg) of force is applied to the track span (Fig. 050). Adjust the torque on the tensioning bolt as needed.

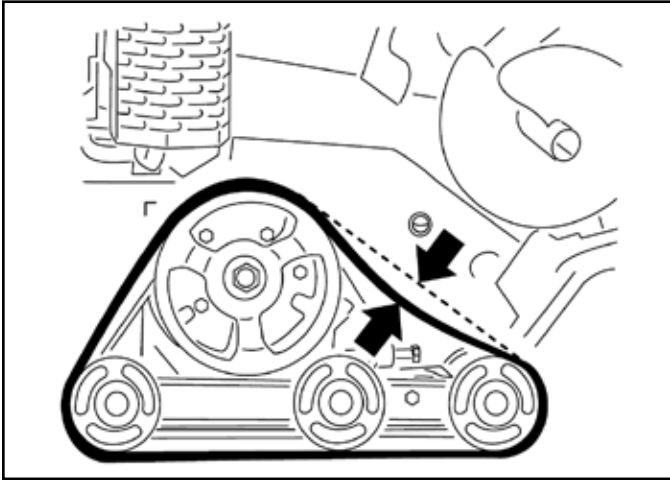


Fig 050

fig. 46 G007833

23. Using a 15/16" socket and wrench, tighten the jam nut while holding the tensioner bolt (Fig. 051).



Fig 051

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24. Install the front clamp bolt and nut (Fig. 052).



Fig 052

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25. Using a 3/4" socket, torque both clamp bolts and nuts to 75 ft-lbs. (101.68 Nm) (Fig. 053).



Fig 053

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26. Install the rear cover plate. Using a 9/16" wrench, tighten the rear cover plate bolt (Fig. 054).



Fig 054

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27. Using a 9/16" socket, install the 2 front cover plate bolts (Fig. 055).



Fig 055

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28. Lower the machine to the ground.

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