



Three-Wheel Drive Kit for Greensmaster 3250-D Model No. 04475

Form No. 3361-872 Rev A

Installation Instructions

Removing the Existing Wheel

1. Park the tractor on a level surface and set the parking brake. Turn the ignition key to Off to stop the engine. Remove the key.



Accidental starting of the engine could seriously injure you or other bystanders.

Remove the key from the ignition switch before you do any maintenance.

2. Lift the rear of the traction unit and remove the tire assembly from the castor fork.
3. Remove the wheel hub assembly from the tire assembly. Retain the lug nuts.
4. Remove the adapter plates from the castor fork.
5. Remove the grease fitting from the motor and hub assembly (Figure 1).

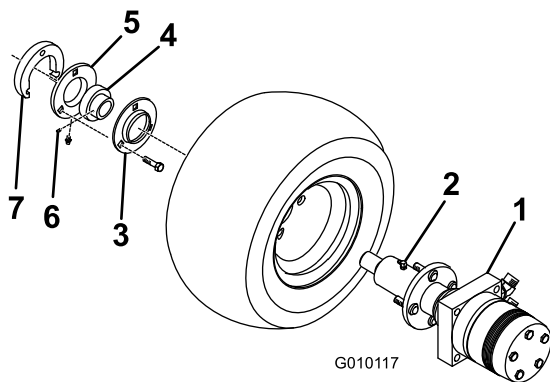


Figure 1

- | | |
|---------------------------|---------------------|
| 1. Motor and hub assembly | 5. Relube flangette |
| 2. Grease fitting | 6. Setscrew |
| 3. Standard flangette | 7. Adapter Plate |
| 4. Bearing | |

Modify the Castor Fork

Note: If the traction unit has a serial number prior to 269999999, the castor wheel fork must be modified. If the modification is required, a Drill Guide, Toro Part No. 112-0256-01 must be obtained from your local authorized Toro Distributor. If a modification is not required, proceed to Install Motor and Hub Assembly.

1. Mount the drill guide to the right side of the castor fork with (2) 5/16 x 3 inch bolts, (4) 3/8 x 7/8 washers and nuts. Position the components as shown in Figure 2.

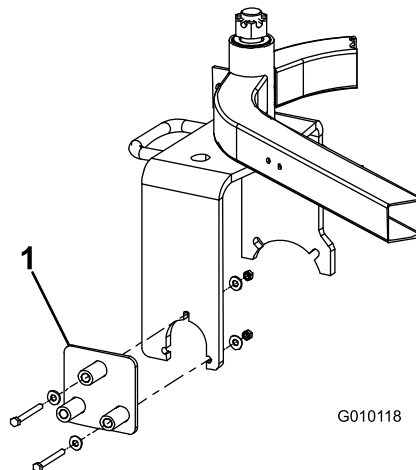


Figure 2

1. Drill guide

2. Using remaining hole in drill guide, enlarge hole in castor fork to 9/16 inch.

Important: It is highly recommended that a new or recently sharpened 9/16 inch drill bit be used. Proceed slowly when drilling. Do not use excessive force when drilling as jamming may occur.

3. Move the fasteners to the other holes in the drill guide and repeat the process until all (3) holes are enlarged.

Installing the Motor and Hub Assembly

1. Remove the grease fitting from the new motor and hub assembly (Figure 3).
2. Mount the tire assembly to the motor and hub assembly with 4 lug nuts. Torque lug nuts to 70 to 90 ft-lb (95 to 122 N-m).
3. Re-install the grease fitting to the hub assembly, pointing it away from tire.
4. Insert flangettes and bearing onto end of motor shaft as shown in Figure 3.

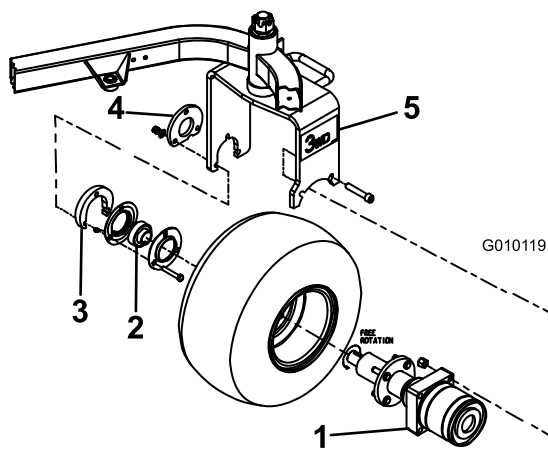


Figure 3

- | | |
|---------------------------|-----------------|
| 1. Motor and hub assembly | 4. Spacer mount |
| 2. Flangettes w/bearing | 5. Decal (2) |
| 3. Adapter plate | |

- Mount the (2) straight fittings to the side of the motor assembly (Figure 3).

Note: Make sure all O-rings are lubricated and in position before installing fittings.

- Position the motor hub, flangettes with bearing, adapter plate and tire assembly into caster fork. Ensure that ports on motor face rearward (Figure 3).
- Loosely secure motor to the inside of caster fork with (2) socket-head screws and (2) nuts (Figure 3).
- Tighten motor screws to 100 ft-lbs (135 N-m).
- Loosely assemble flangettes with bearing to inside of caster fork with (3) new 3/8 x 2 inch screws, adapter plate, spacer mount, (3) 13/32 x 13/16 hardened washers and (3) 3/8 inch locknuts.

Important: Make sure no radial load is put on the motor shaft.

Note: The grease fitting must be in the downward position on the flange (Figure 3).

- Tighten the flange screws to 40 ft-lbs (55 N-m).

Note: Failure to carefully follow the above assembly sequence may result in premature motor seal and bearing failure.

- Apply a thread-locking adhesive (such as Loctite®) to bearing setscrews and torque to 80 to 100 in-lb (9 to 11 N-m).
- Verify overrunning bearing operation: The tire should roll freely forward, but engage wheel motor when rolled backward.
- Lower rear of traction unit to ground.
- Grease all fittings with No. 2 general purpose lithium-based grease.
- Apply a decal to each side of caster fork (Figure 3).

Installing the Hoses

- Using the dimensions shown in Figure 4, locate, mark, and drill 4 holes (9/32 inch diameter) into the right-hand frame tube.

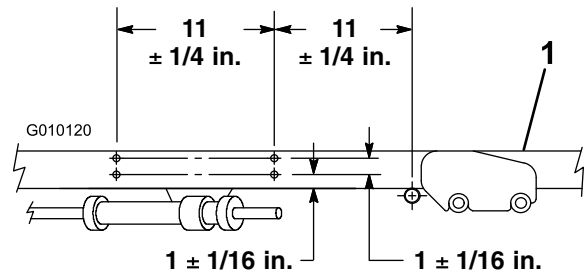


Figure 4

- Right-hand frame tube

- Secure the hose clamp brackets to the frame as shown in Figure 5 with 4 self tapping screws.

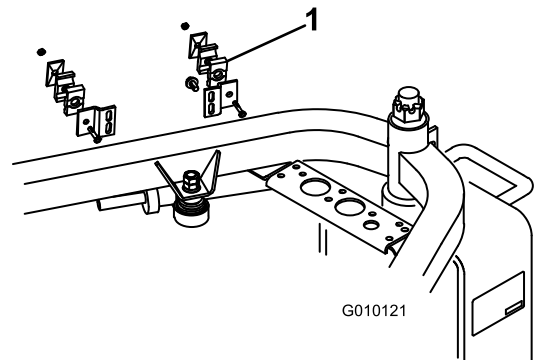


Figure 5

- Hose clamp bracket

- Disconnect the lower hydrostat hose from the hydrostat (Figure 6) and from the upper bulkhead tee fitting to the front wheel motors (Figure 7). Remove and discard it.

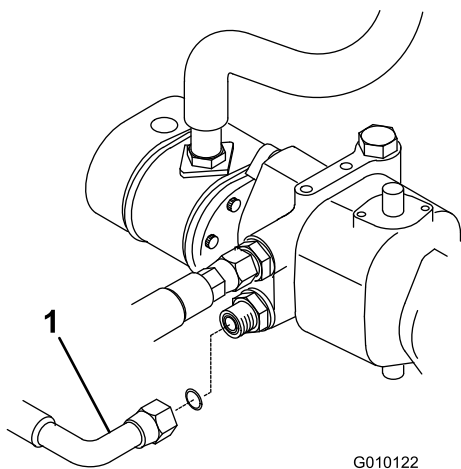


Figure 6

1. Hydrostat hose (upper)

4. Connect the 90 degree fitting end of the new (shortest) hose to the lower port of the hydrostat. Route the hose through the lower position in the hose clamps, behind castor fork, and to the lower port of the rear wheel motor.

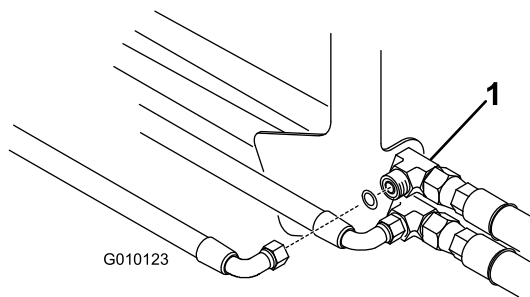


Figure 7

1. Upper bulkhead tee fitting

5. Connect the 90 degree fitting end of the new hydraulic hose (longest hose) to the open upper bulkhead tee fitting. Route the hose through the upper position in the hose clamps, behind the castor fork, and to the upper port in the rear wheel motor.
6. Secure the hose ends to the fittings.
7. Secure the hoses together at the rear of the unit with a cable tie.
8. Turn the steering fork fully side to side to check for proper hose flex and position. The hoses should not rub on the tanks, steering fork, or steering hoses. Note that the hose clamp brackets are slotted vertically to allow for adjustment. Secure the hoses in the brackets.
9. Grease all fittings with No. 2 General Purpose Lithium Based grease.

Installing the Seat Belts

1. Install each end of the seat belt to the holes in the back of the seat with screws (7/16 x 1 inch) and lock washers (7/16 inch) (Figure 8). Tighten them securely. The latch side of the belt should be mounted to the left side of the seat.

Note: When operating the machine, always use the seat belt and ROPS together.

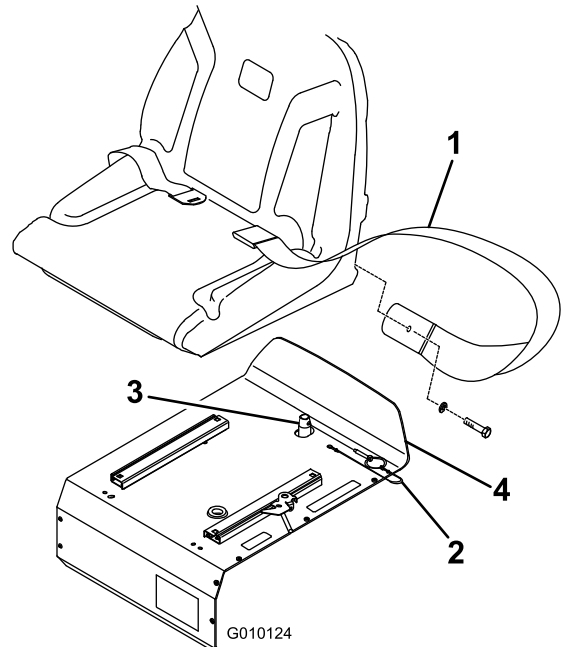


Figure 8

- | | |
|--------------|-----------------|
| 1. Seat belt | 3. Seat pin |
| 2. Lynch pin | 4. Seat support |

2. Install the lynch pin into the seat pin to secure the seat support (Figure 8).

Installing the ROPS

1. Lower the ROPS frame onto the mounting brackets, aligning the mounting holes as shown in Figure 9.

Note: To allow installation of the ROPS mounting nut on the right side of the machine, the double clamp holding the steering cylinder hoses next to the ROPS support must be rotated 180 degrees.

2. Secure each side of the roll bar to the mounting brackets with 2 bolts (5/8 x 4-1/2 inch) and locknuts. Torque the fasteners to 135-165 ft-lb (183-224 N-m).

Note: When operating the machine, always use the seat belt and ROPS together.

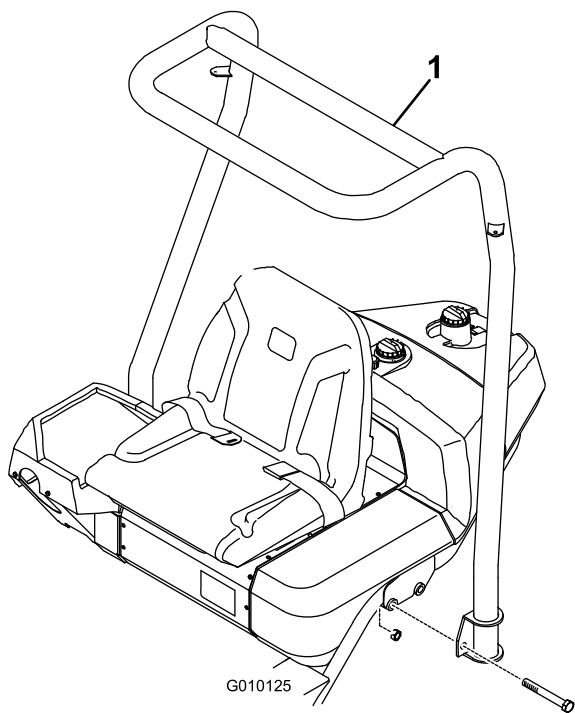
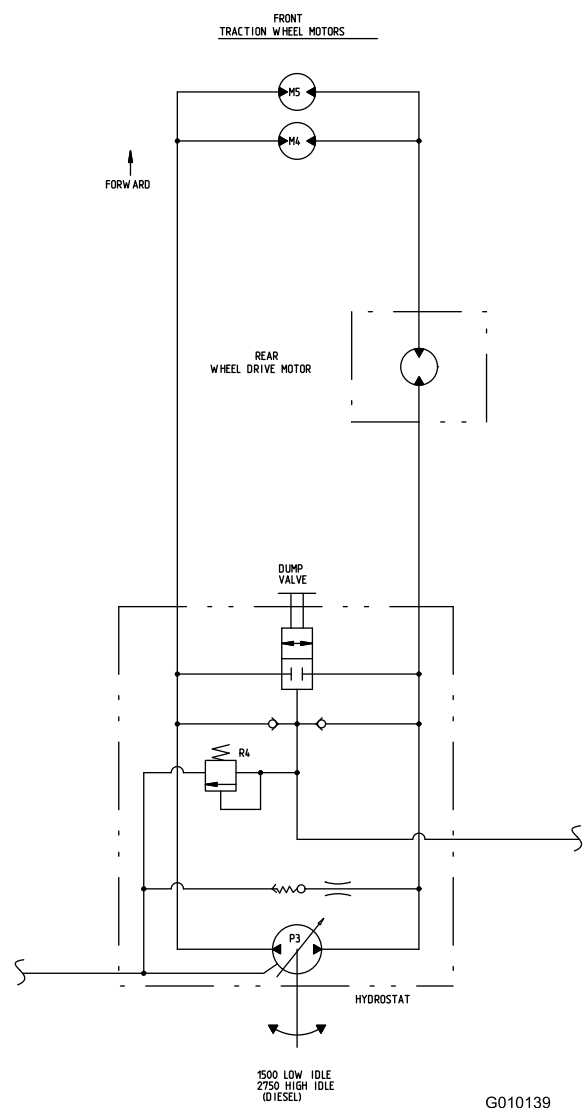


Figure 9

1. ROPS

Schematics



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Hydraulic Schematic (Rev. B)

Notes:

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Count on it.