Form No. 3422-409 Rev B

Track Completion Kit

TX 1000 Narrow Track Compact Tool Carrier

Model No. 136-4840

Installation Instructions

Installation

1

Preparing the Machine

No Parts Required

Procedure

⚠ WARNING

Mechanical or hydraulic jacks may fail to support the machine and cause serious injury.

Use jack stands when supporting the machine.

1. Remove any attachments from the machine.
2. Park the machine on a level surface.
3. Engage the parking brake.
4. Raise the loader arms and secure them with the cylinder locks.
5. Shut off the engine, remove the key, and wait for the machine to cool.
6. Raise the machine off the ground so that you can access underneath the machine. Support the machine using jack stands.

   Note: Use jack stands rated for your machine. Refer to the *Operator's Manual* for your machine to determine the weight.

2

Removing the Covers

No Parts Required

Removing the Front Screen

1. Open the hood and secure the hood prop.
2. Loosen the 2 top bolts and remove the 2 front bolts.

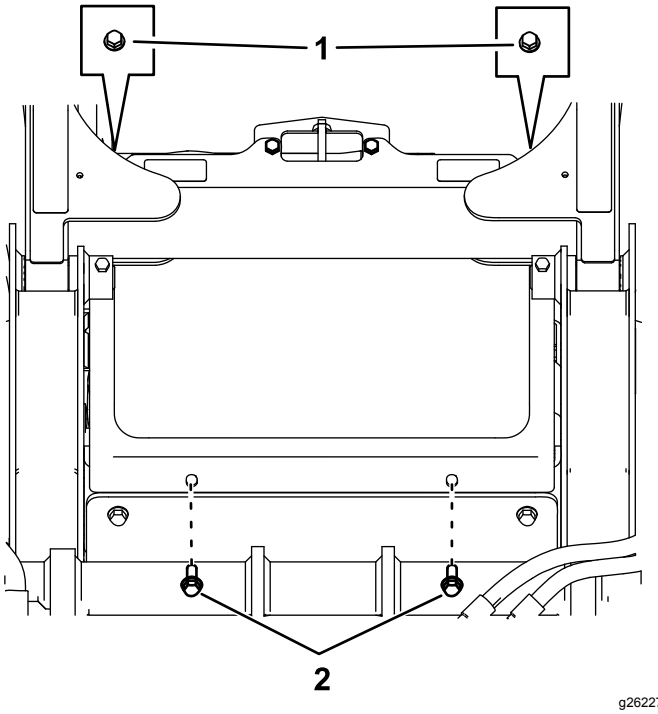

Figure 1

1. Top bolt
2. Front bolt

3. Remove the screen.

Removing the Front Cover

1. Remove the 2 upper bolts (3/8 x 1 inch), 2 washers, and 2 lower bolts (5/16 x 5/8 inch) from the front cover.
2. Remove the front cover (Figure 2).

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Original Instructions (EN)
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3422-409 B

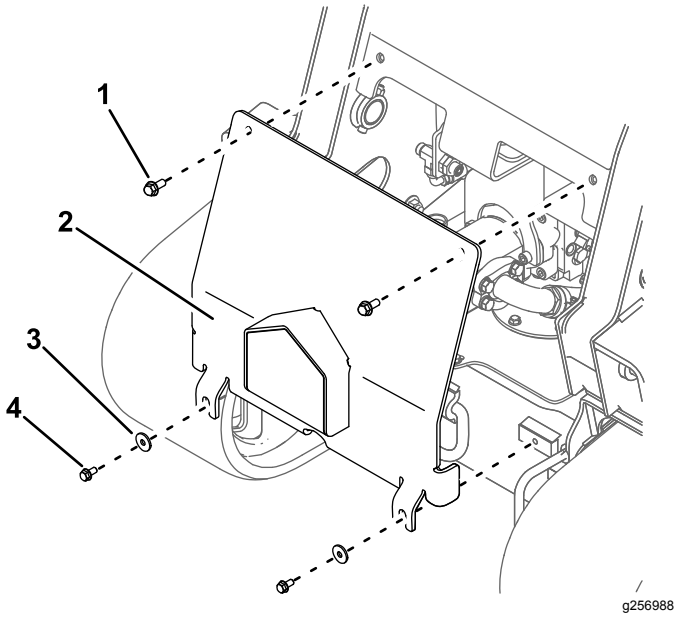

Figure 2

1. Upper bolt—3/8 x 1 inch (2)
2. Front cover
3. Washer (2)
4. Lower bolt—5/16 x 5/8 inch (2)

Removing the Bottom Cover Plate

1. Remove the 2 bolts (3/8 x 1 inch) that secure the bottom cover plate to the frame plate (Figure 3).

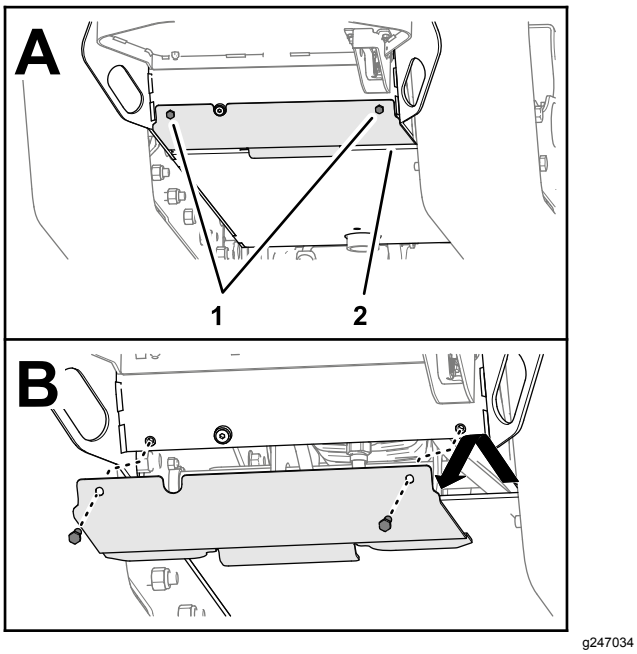

Figure 3

1. Bolts (3/8 x 1 inch)
2. Bottom cover

2. Remove the bottom cover plate from the machine (Figure 3).

3

Removing the Existing Track Assemblies

No Parts Required

Procedure

1. Place rags or a container under the track motor hydraulic ports to catch any fluid as you complete this procedure (Figure 4).
2. Mark the hoses connected to the motors with their port locations (i.e., left front, left rear, right front, right rear).

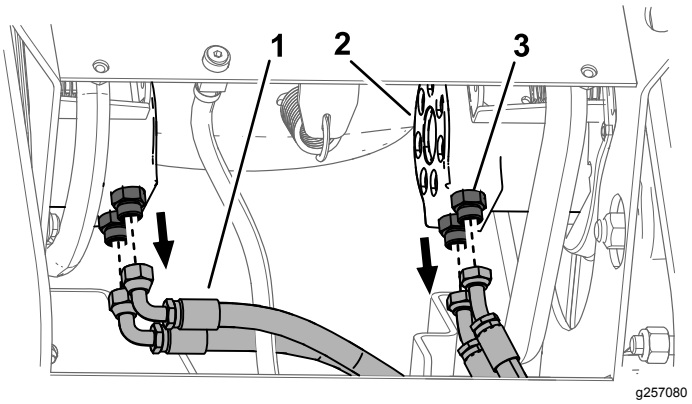

Figure 4

1. Hose (4)
2. Track motor (2)
3. Port (4)

3. Remove the hose from 1 track motor and install protective covers over the hose openings.
4. Remove the hydraulic fittings from the motor.

5. Remove the nut from the front track pin shown in Figure 5.

   Note: Do not remove the pin at this time.

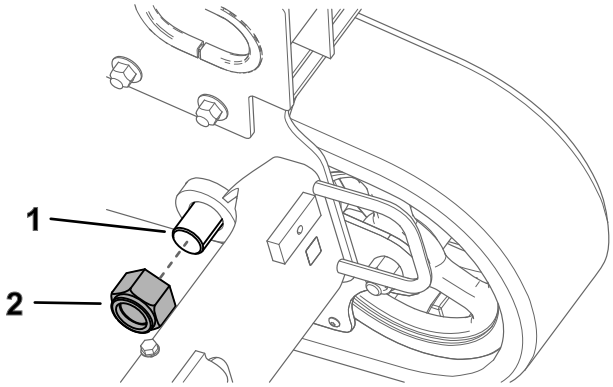

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Figure 5

1. Track pin
2. Nut

6. Loosen the rear bolt securing the rear track frame to the machine (Figure 6).

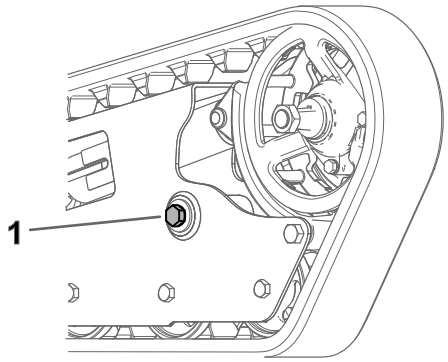

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Figure 6

1. Rear bolt

7. Using a hoist or forklift capable of lifting 181 kg (400 lb), slide the track assembly from the frame about 15 cm (6 inches) as shown in Figure 7.

   Important: **Ensure that the hydraulic lines are out of the way.**

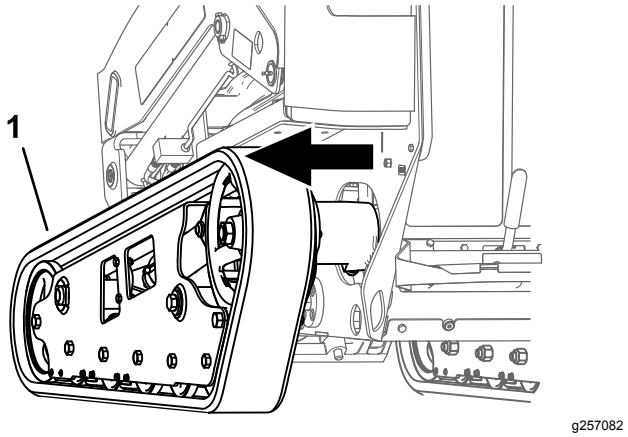

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Figure 7

1. Track assembly

8. Remove the brake mount assembly from the motor as follows:

   A. Remove and retain the 2 bolts securing the brake mount to the track motor casting (Figure 8).

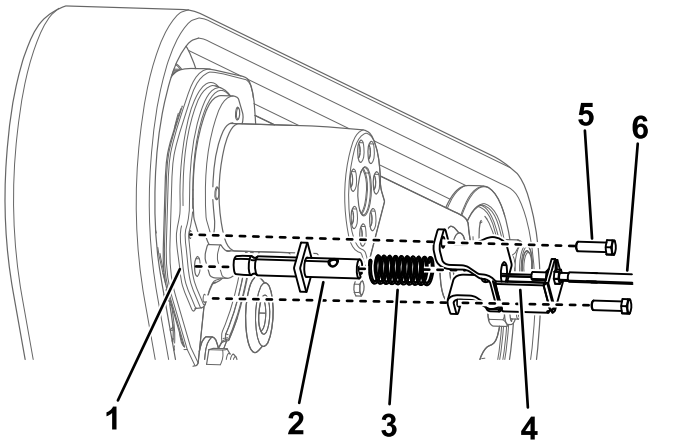

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Figure 8

1. Track motor casting
2. Brake-shaft pin
3. Compression spring
4. Brake mount
5. Bolt—3/8 x 1-1/4 inches (2)
6. Brake cable

   B. Loosen the nuts securing the brake cable to the brake mount (Figure 8). Remove the brake cables.

   C. Remove and retain the compression spring (Figure 8).

9. Completely remove the track assembly from the machine.
10. Repeat the procedure for the other track.

4

Installing the New Track Assemblies

Parts needed for this procedure:

2	Track assembly (sold separately)
2	Brake mount
2	Brake-shaft pin
1	Brake kit (sold separately)

Procedure

1. Using a hoist or forklift capable of lifting 181 kg (400 lb), lift the track assembly to approximately 15 cm (6 inches) away from the machine.
2. If you are installing a separate brake kit, refer to the *Installation Instructions* for the kit (see *Service Bulletin 110*), then continue to step 3.

   Important: **Use the brake mounts and pins provided in this track kit. Do not use the brake mounts and pins provided in the Brake Kit.**

   If you are **not** installing a separate brake kit, continue as follows.

   A. Insert the brake cable through the brake mount and spring, and insert the barrel fitting into the slot of the brake-shaft pin (Figure 9).

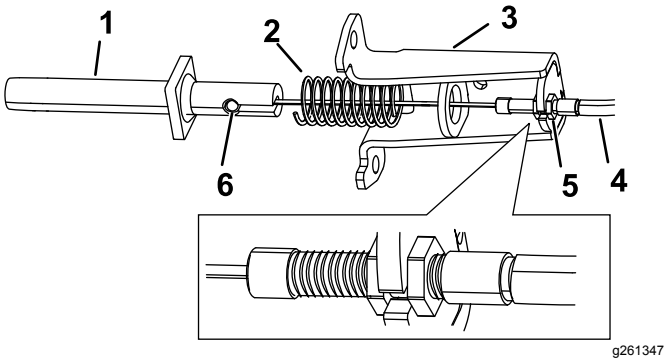

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Figure 9

1. Brake-shaft pin
2. Compression spring
3. Brake mount
4. Brake cable
5. Nut
6. Barrel fitting

   B. Insert the brake-shaft pin into the spring and then into the brake mount (Figure 9). Push in the pin to compress the spring, insert the barrel fitting of the brake cable into the slot in the pin, slide the cable into the mount notch so that the notch is between the 2 cable nuts, and slowly release the pin and spring.

   C. Adjust the nuts on the brake cable so that only 2 threads show toward the cable (Figure 9).

   D. Tighten the nuts.

   E. Secure the brake mount to the motor mount, with the open side facing toward the track motor, using the 2 bolts you removed previously (Figure 10).

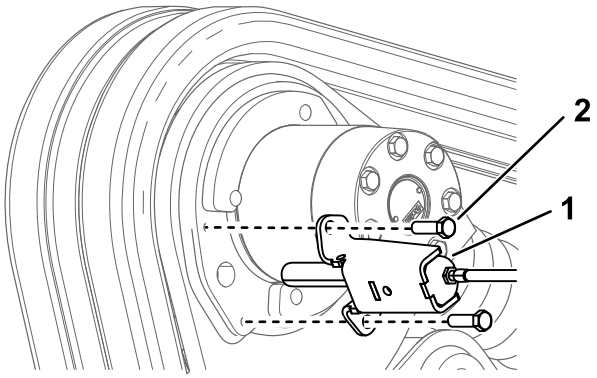

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Figure 10

1. Brake mount
2. Bolt—3/8 x 1-1/4 inches (2)

3. Install the track assembly and secure it to the main frame using the bolt, washer, pin, and nut removed from the track assemblies (Figure 11).

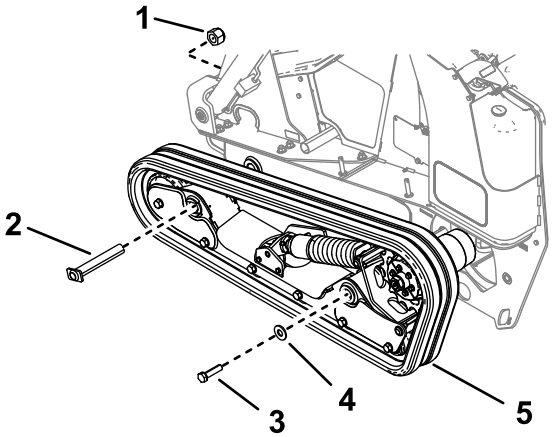

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Figure 11

1. Nut
2. Pin
3. Bolt
4. Washer
5. Track assembly

4. Torque the front nut to 244 to 298 N·m (180 to 220 ft-lb) and torque the rear bolt to 305 to 373 N·m (225 to 275 ft-lb).

5. Place rags or a container under the track motor hydraulic ports to catch any fluid. Remove the plugs from track motor.
6. Inspect and replace any damaged O-rings on the hydraulic fittings.
7. Install the hydraulic fittings into the new track motors (Figure 12). Torque them to 136 to 163 N·m (100 to 120 ft-lb).

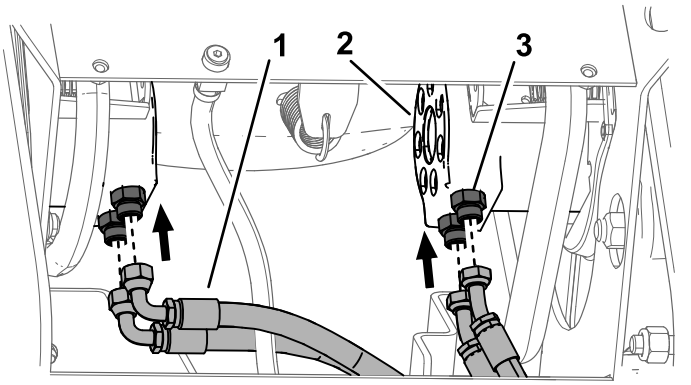

Figure 12

1. Hose (4)
2. Fitting installed into the port (4)
3. Track motor (2)

8. Install the hoses to the ports that you marked (Figure 12).
9. Torque the hoses to 50 to 64 N·m (37 to 47 ft-lb).
10. Repeat the procedure for the other track.
11. In the front of the machine, remove the 2 hoses on the tandem pump and install them to the opposite ports (Figure 13). Torque the fittings to 24 to 30 N·m (18 to 22 ft-lb).

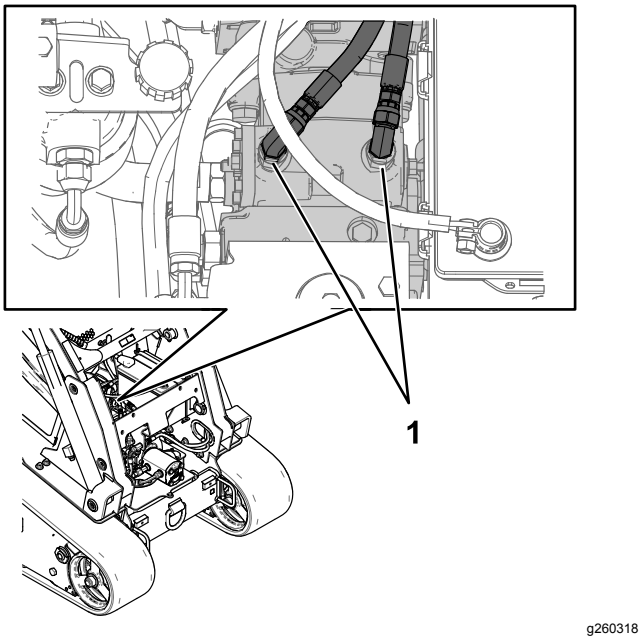

Figure 13

1. Hoses

5

Replacing the Relief Valves

Parts needed for this procedure:

4	Relief valve

Procedure

1. Use pressurized air to clean the cavities of each relief valve before removing them.
2. Use a 15 mm socket to remove the existing top relief valves from the tandem pump (Figure 14).

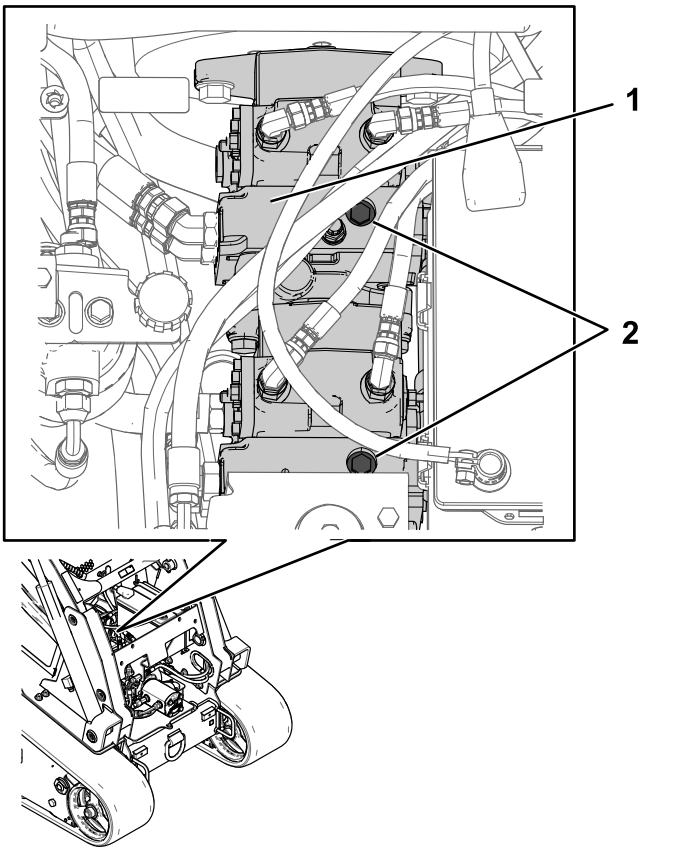

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Figure 14

1. Tandem pump
2. Top relief valve (2)

3. Install 2 new relief valves in their place and torque them to 34 to 39 N·m (25 to 29 ft-lb).

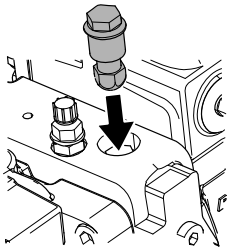

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Figure 15

4. Place rags or towels under the tandem pump to catch fluid from the hoses and fitting.
5. Loosen the 2 hose clamps and remove the hoses from the fitting (Figure 16).

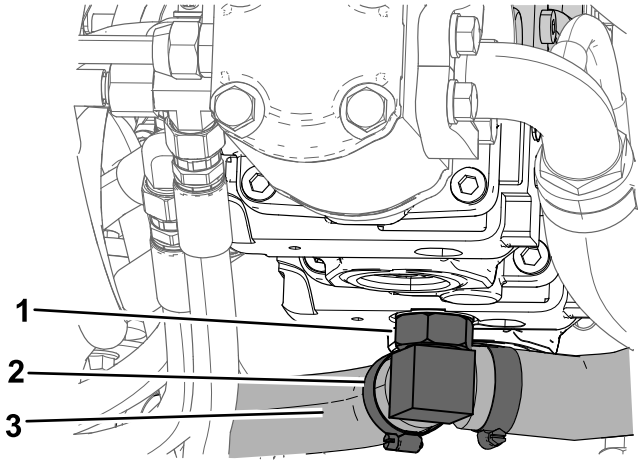

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Figure 16

1. Nut
2. Hose clamp (2)
3. Hose (2)

6. Clean the area around the fitting.
7. Use a 1-1/4 inch crowfoot or open-end wrench to loosen the nut on the fitting shown in Figure 16.

8. Rotate the fitting counterclockwise so that the flat side of the fitting aligns with the relief valve port opening (Figure 17).

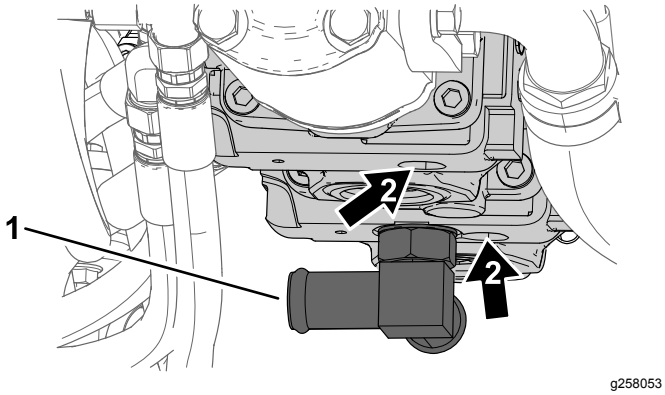

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Figure 17

1. Fitting
2. Lower relief valve (2)

9. Remove the 2 lower relief valves (Figure 17).
10. Install 2 new valves in their place and torque them to 34 to 39 N·m (25 to 29 ft-lb).
11. Rotate the fitting to the original orientation (Figure 16). Torque the nut to 182 to 222 N·m (134 to 164 ft-lb).
12. Install the hoses and hose clamps (Figure 16).

6

Installing the Covers

No Parts Required

Installing the Bottom Cover Plate

1. Align the tab of the bottom cover plate with the frame plate of the machine (Figure 18).

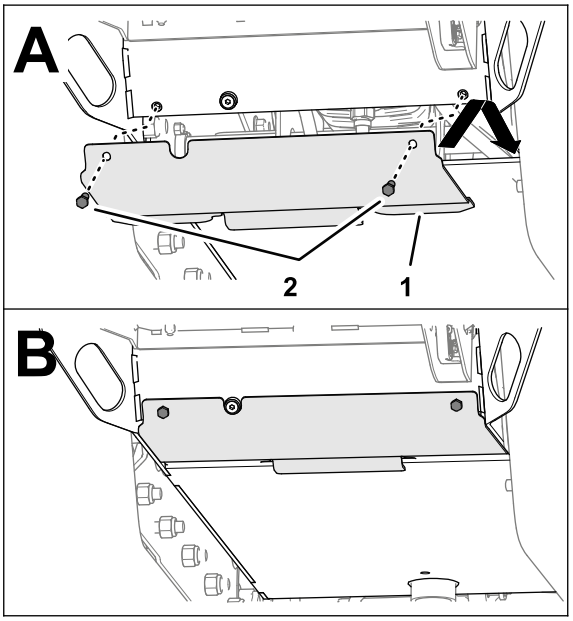

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Figure 18

1. Bottom cover plate
2. Capscrew (3/8 x 1 inch)

2. Align the holes in the bottom cover plate with the frame plate (Figure 18).
3. Assemble the bottom cover plate to the frame plate (Figure 18) with the 2 capscrews (3/8 x 1 inch) that you removed previously.

Installing the Front Cover

Install the front cover using the 2 bolts (3/8 x 1 inch), 2 washers, and 2 bolts (5/16 x 5/8 inch) that you removed previously (Figure 19).

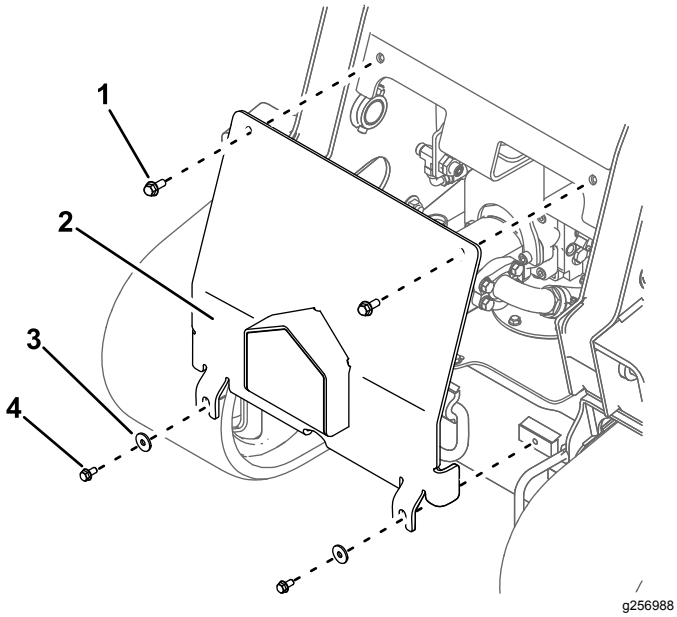

Figure 19

1. Upper bolt—3/8 x 1 inch (2)
2. Front cover
3. Washer (2)
4. Lower bolt—5/16 x 5/8 inch (2)

Installing the Front Screen

1. Install the front screen using the 4 bolts (3/8 x 1 inch) you removed previously (Figure 20).

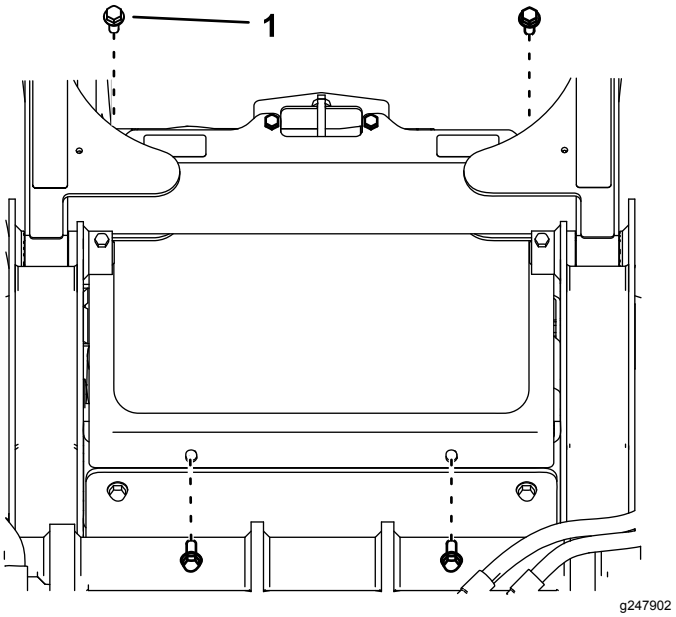

Figure 20

1. Bolt—3/8 x 1 inch (2)

2. Lower the machine to the ground.

7

Installing the Handle

Parts needed for this procedure:

1	Handle
2	Bolt
2	Nut

Procedure

1. Open the rear-access cover.
2. Remove and retain the 4 bolts and nuts securing the control panel cover to the machine (Figure 21).

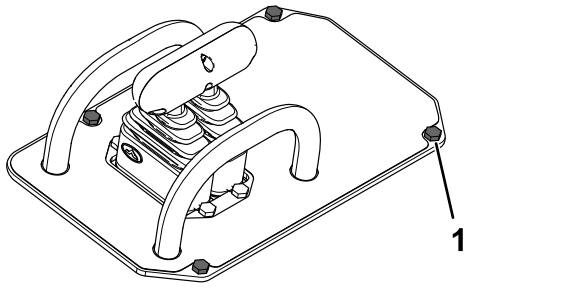

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Figure 21

1. Bolt and nut (4)

3. Lift up the control panel cover and remove the front handle (Figure 22).

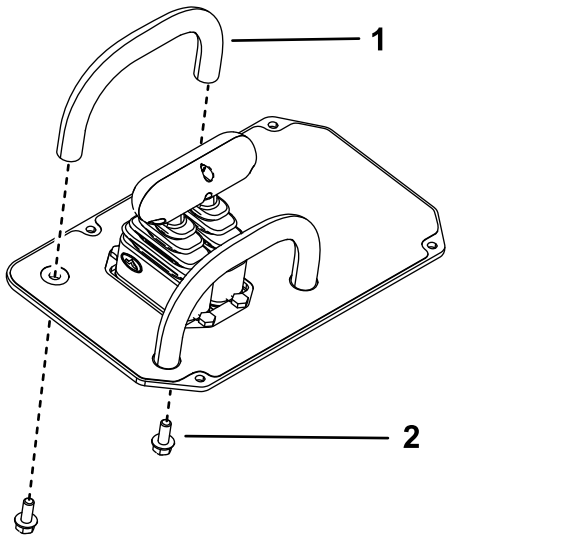

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Figure 22

1. Handle
2. Bolt

4. Install the new handle using 2 bolts and 2 nuts (Figure 23).

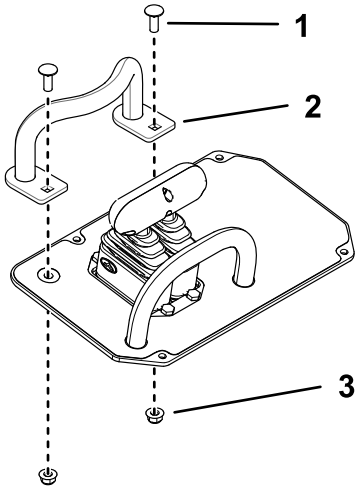

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Figure 23

1. Bolt (2)
2. Handle
3. Nut (2)

5. Secure the control panel cover using the 4 bolts and 4 nuts you removed previously.
6. Close the rear-access cover.

Maintenance

Adjusting the Track Tension

Lift/support 1 side of the machine and using the weight of the track, verify that the gap between the bottom of the lip of the road wheel and the track is 13 mm (1/2 inch) as shown in Figure 24. If it is not, adjust the track tension using the following procedure.

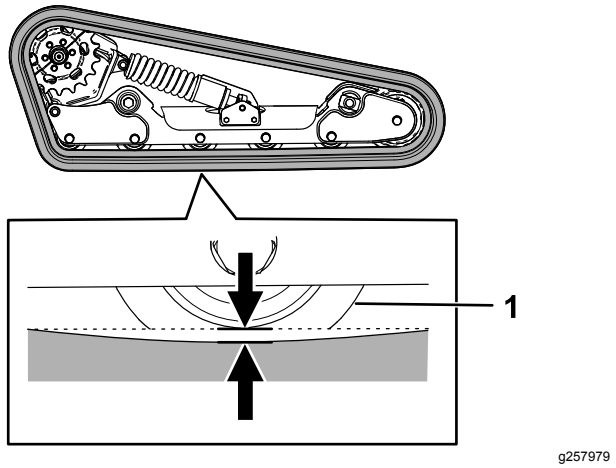

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Figure 24

1. Road wheel

1. Park the machine on a level surface, engage the parking brake, and lower the loader arms.
2. Shut off the engine and remove the key.
3. Raise the side of the machine that you are adjusting so that the track is off the ground.
4. Remove the locking bolt, spacer, and nut (Figure 25).

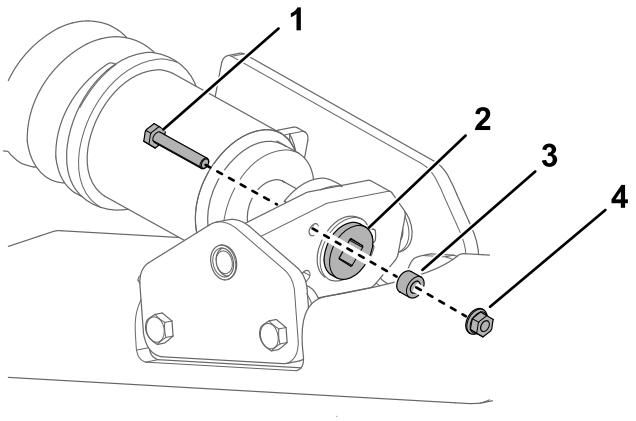

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Figure 25

1. Locking bolt
2. Tensioning screw
3. Spacer
4. Nut

5. Using a 1/2 inch drive ratchet, turn the tensioning screw until the track gap is 13 mm (1/2 inch) as shown in Figure 24.

   Note: Turning the screw counter-clockwise tightens the track; turning the screw clockwise loosens the track.
6. Align the closest notch in the tension screw to the locking-bolt hole and secure the screw with the locking bolt and nut (Figure 25).
7. Repeat the procedure for the other track.
8. Drive the machine, then park the machine on a level surface, engage the parking brake, shut off the engine, and remove the key.
9. Verify that the track deflection is 13 mm (1/2 inch) as shown in Figure 24. Adjust if necessary.

Replacing the Tracks

Replace the tracks when they are badly worn.

Removing the Tracks

1. Remove any attachments.
2. Park the machine on a level surface, ensuring that only 1 sprocket half is engaged with the track (Figure 26).

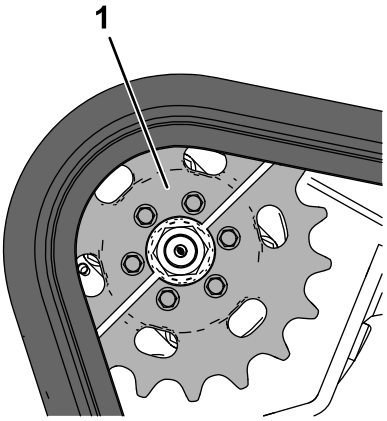

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Figure 26

1. Sprocket half

3. Engage the parking brake.
4. Lower the loader arms so that they are approximately 20 to 25 cm (8 to 10 inches) above the frame.
5. Shut off the engine and remove the key.
6. Lift the side of the machine with the track you are replacing. Support the machine using jack stands.

   Note: Use jack stands rated for your machine.

⚠ WARNING

Mechanical or hydraulic jacks may fail to support the machine and cause serious injury.

Use jack stands when supporting the machine.

7. Remove the locking bolt, spacer, and nut (Figure 25).
8. Using a 1/2-inch drive ratchet, release the drive tension by turning the tensioning screw clockwise (Figure 25 and Figure 27).

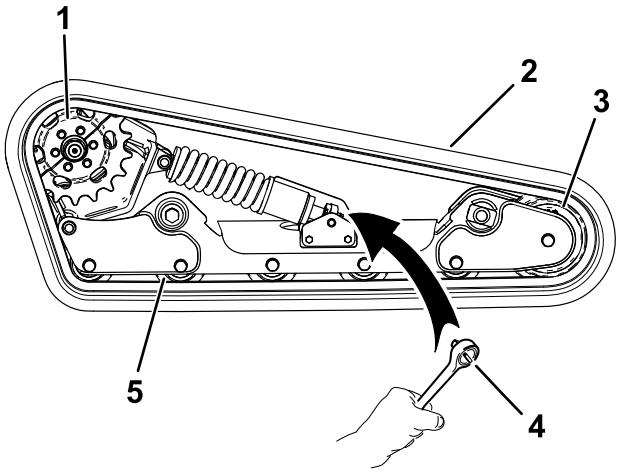

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Figure 27

1. Sprocket
2. Track
3. Front wheel
4. Ratchet (1/2 inch)
5. Road wheel (5)

9. Remove the 3 bolts securing the sprocket half that is not engaged with the track (Figure 28).

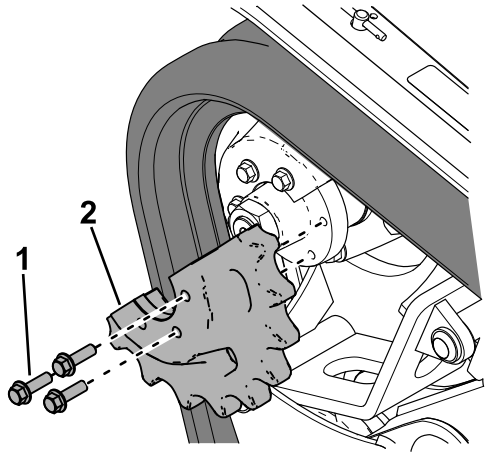

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Figure 28

1. Bolt (3)
2. Sprocket half

10. Start the machine and disengage the parking brake.
11. Move the traction control forward until the other half of the drive sprocket is not engaged with the track (Figure 29).

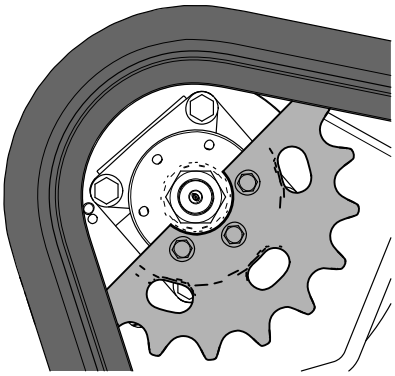

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Figure 29

12. Engage the parking brake, shut off the engine, and remove the key.
13. Remove the track from the track frame, drive hub, then front wheel.

Installing the Tracks

1. Wrap the new track around the front wheel, then wrap the track around the drive hub on the side without the sprocket (Figure 27).
2. Push the track under and between the road wheels and wrap it around the lower frame (Figure 27).

   Note: Ensure that the road wheels are centered on the track.
3. Start the engine and disengage the parking brake.
4. Move the traction control forward until the drive sprocket half engages with the track (Figure 30).

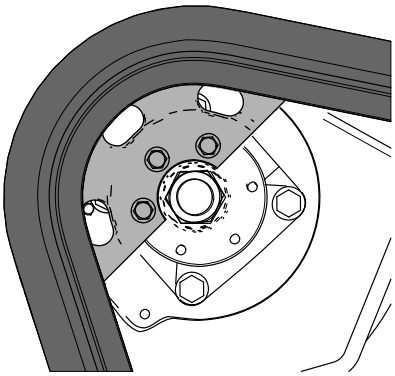

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Figure 30

5. Engage the parking brake, shut off the engine, and remove the key.
6. Apply thread-locking compound to the bolts of the drive sprocket half that you removed and

install the sprocket half (Figure 28). Torque the bolts to 95 to 115 N·m (70 to 85 ft-lb).

7. Using a 1/2 inch drive ratchet, turn the tensioning screw counter-clockwise until the track deflection is 13 mm (1/2 inch) as shown in Figure 24.
8. Align the closest notch in the tension screw to the locking bolt hole and secure the screw with the locking bolt, spacer, and nut.
9. Lower the machine to the ground.
10. Repeat the procedure to replace the other track.
11. Drive the machine, then park the machine on a level surface, engage the parking brake, shut off the engine, and remove the key.
12. Verify that the track deflection is 13 mm (1/2 inch) as shown in Figure 24.