



Wheel Horse® Lawn Tractor

For Tractors with 44in Mowers

Form No. 3351-304 Rev A

Setup Instructions

Loose Parts

Note: Use the chart below to verify that all parts have been shipped.

Description	Qty.	Use
Front wheels	2	Installing the front wheels
Shim washers (as required)	2	
Flat washers	2	
Cotter pins	2	
Hub caps	2	
Spacers	2	Installing the rear wheels
Shim washers (as required)	2	
Rear wheels	2	
Square keys	2	
Flat washers	4	
E-rings	2	
Hub caps	2	
Steering wheel	1	Installing the steering wheel
Spirol pin	1	
Seat	1	Installing the seat
Knobs	2	
Flat washers	2	
Bolts—1/4 x 3/4 in.	2	Installing the battery cables
Wing nuts	2	
Spring hook	1	Installing the lift assist spring
Keys	2	Using in the ignition and KeyChoice® switches
Operator's Manual	1	Reading before operating the tractor
Engine operator's manual	1	
Certificate of Conformance	1	
Noise certificate	1	
Registration card	1	Filling out and mailing the card to Toro

Installing the Front Wheels

Note: If the wheels are already installed, refer to Checking the Tire Pressure (below).

1. Install the shim washers onto the axle.
2. Install the wheel onto the axle with the valve stem facing out.
3. Slide the flat washer onto the axle.
4. Insert the cotter pin through the axle and bend the ends of the pin apart (Fig. 1).

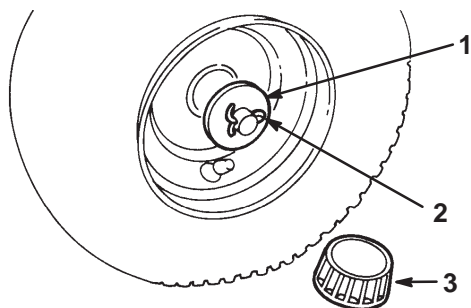


Figure 1

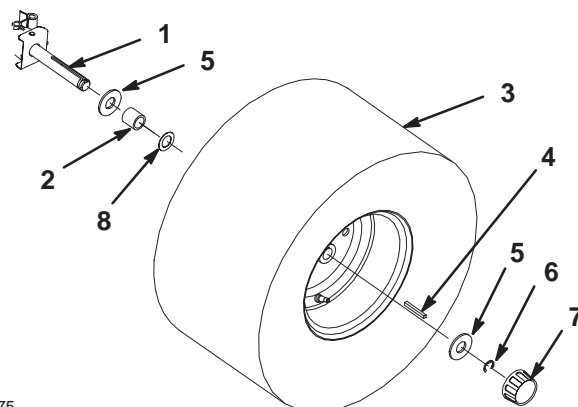
1. Flat washer
2. Cotter pin
3. Hub cap

Note: If the cotter pin does not fit, remove the shim washer(s) as needed.

5. Push the hub cap (Fig. 1) onto the end of the axle.
6. Repeat steps 1 through 5 on the opposite side of the tractor.
7. Grease the wheel bearings until grease comes out of the bearing seal area.

Installing the Rear Wheels

1. Grease the axle.
2. Slide a flat washer, a spacer, and a shim washer onto the axle (Fig. 2).



m-5075

Figure 2

1. Axle
2. Spacer
3. Wheel
4. Key
5. Flat washer
6. E-ring
7. Cap
8. Shim washer

3. Slide the wheel onto the axle.

Note: Ensure that the valve stem is facing out (Fig. 2).

4. Slide the key into the keyway of the axle and the wheel hub (Fig. 2).
5. Slide another flat washer onto the axle and secure it with the E-ring (Fig. 2).

Note: If the E-ring does not fit, remove the shim washer.

6. Press the hub cap over the washer (Fig. 2).

Checking the Tire Pressure

Check the tires to ensure that that are inflated to the recommended pressure. Refer to Checking the Tire Pressure in the *Operator's Manual*.

Installing the Steering Wheel

1. Move the front wheels so that they face straight ahead.
2. Slide the steering wheel over the steering shaft and line up the hole in the steering wheel with the hole in the shaft (Fig. 3).

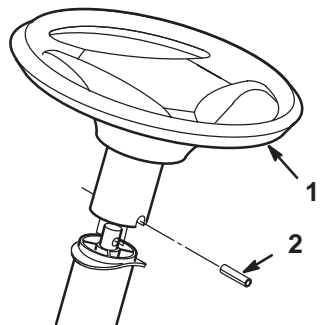


Figure 3

1. Steering wheel 2. Spirol pin

Note: From the seat you should be able to read the brand logo on the steering wheel.

3. Align the holes by inserting a punch or a long nail partially through the holes in the steering wheel and shaft.
4. Insert the spirol pin into the hole on the opposite side.
5. Using a hammer, drive the spirol pin in until it is flush with the outside of the steering wheel (Fig. 3).

Installing the Seat

Note: If the seat is already installed, go to Activating the Battery below.

1. Position the seat onto the seat base by inserting 2 shoulder bolts through the key hole openings at the end of both slots (Fig. 4).

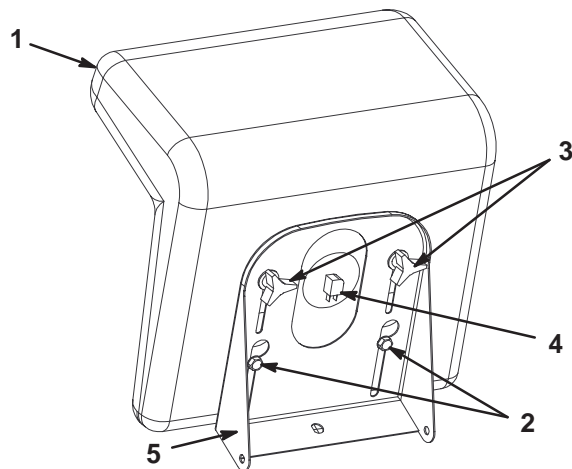


Figure 4

1. Seat 4. Seat switch
2. Shoulder bolts 5. Seat base
3. Knobs and flat washers

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2. Thread the knobs and flat washers through the slots and into the rear center holes in the seat (Fig. 4).
 3. Adjust the seat and tighten the knobs.
 4. Connect the seat switch (Fig. 4) to the wire harness connector.

Note: Ensure that the wiring is not pinched in the seat brackets.

Activating the Battery



Warning



CALIFORNIA

Proposition 65 Warning

Battery posts, terminals, and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. Wash hands after handling.

Purchase bulk electrolyte with 1.260 specific gravity from a local battery supply outlet.

Important Never fill the battery with electrolyte while the battery is installed in the tractor. Electrolyte could be spilled on other parts and corrode them.

1. Remove the battery and battery box from the tractor; refer to Removing the Battery in the *Operator's Manual*.



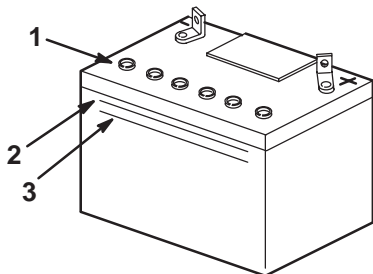
Danger



Battery electrolyte contains sulfuric acid, a deadly poison that can severely burn you.

- Do not drink electrolyte and avoid contact with skin, eyes or clothing. Wear safety glasses to shield your eyes and rubber gloves to protect your hands.
- Fill the battery where clean water is always available for flushing the skin.
- Follow all instructions and comply with all safety messages on the electrolyte container.

2. Remove the vent caps from the battery. Slowly pour electrolyte into each battery cell until the electrolyte level is up to the Upper line on the battery case (Fig. 5).



m-5004

Figure 5

1. Vent caps
2. Upper line
3. Lower line

Important Do not overfill the battery because electrolyte (sulfuric acid) can severely corrode and damage the chassis.

3. Wait 5 to 10 minutes after filling the battery cells.
4. Add electrolyte, if necessary, until the electrolyte level is up to the Upper line (Fig. 5) on the battery case.
5. Install the battery vent caps.
6. Charge the battery for 1 hour at 25 to 30 amps or 6 hours at 4 to 6 amps (Fig. 6). **Do not overcharge the battery.**

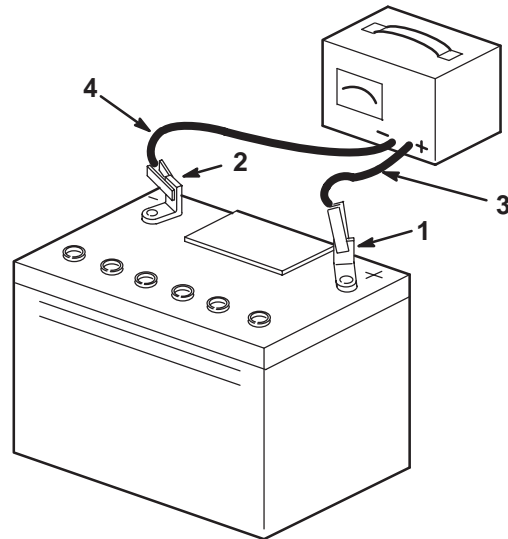


Figure 6

1. Positive post
2. Negative post
3. Charger red (+) wire
4. Charger black (-) wire



Warning



Charging the battery produces gasses that can explode.

Never smoke near the battery and keep sparks and flames away from the battery.

7. When the battery is fully charged, unplug the charger from the electrical outlet, then disconnect the charger leads from the battery posts (Fig. 6).
8. Install the battery and battery box in the tractor and connect the battery cables; refer to Installing the Battery in the *Operator's Manual*.

Checking the Oil Level

The tractor comes from the factory with oil in the engine crankcase; however, you may need to add oil. Refer to Servicing the Engine Oil in the *Operator's Manual* for oil type, viscosity, and crankcase capacity. Add only enough oil to raise the level to the Full mark on the dipstick.

Lubricating the Tractor

Ensure all of the necessary points on the tractor are lubricated; refer to Greasing and Lubrication in the *Operator's Manual*.

Checking the Safety System

Refer to Testing the Safety System in the *Operator's Manual*.

Purging the Hydro Transaxle

During shipping and handling, air can enter into the hydro transaxle. To achieve proper performance, remove all the trapped air.

1. Move the tractor onto a flat, level surface.
2. Set the drive control to the Push position (Fig. 7).

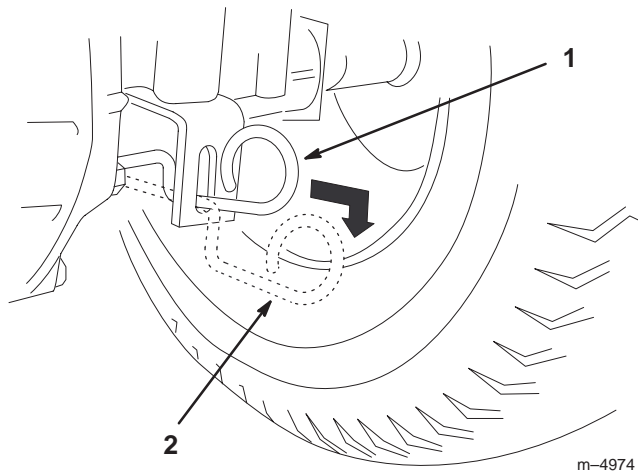


Figure 7



1. Operate position
 2. Push position
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3. Run the engine at a low idle and move the traction control pedal forward for 5 seconds, then reverse for 5 seconds. Repeat 3 times.
 4. Place the drive control in the Operate position (Fig. 7).
 5. Drive the tractor forward then reverse approximately five feet. Repeat 3 times.

Checking the Hydro Neutral Position

Ensure that the neutral position is set properly. Adjust it if the tractor moves when you do not press on the traction control pedal.

1. Run the engine at a low idle and move the traction control pedal forward, then release it.
2. Move the traction control pedal to reverse, then release it. If the tractor moves, proceed as follows:
3. Run the tractor for 5 to 10 minutes to warm up the transaxle.
4. Disengage the PTO, set the parking brake, stop the engine, and remove the ignition key.
5. Raise the right rear wheel off of the ground and support it with a jack stand.

Note: Ensure that the left rear wheel stays on the ground.

**Danger**

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

- Use jack stands when supporting the machine.
- Do not use hydraulic jacks.

Note: To gain access to the adjusting puck (Fig. 8), you may need to remove the tire.

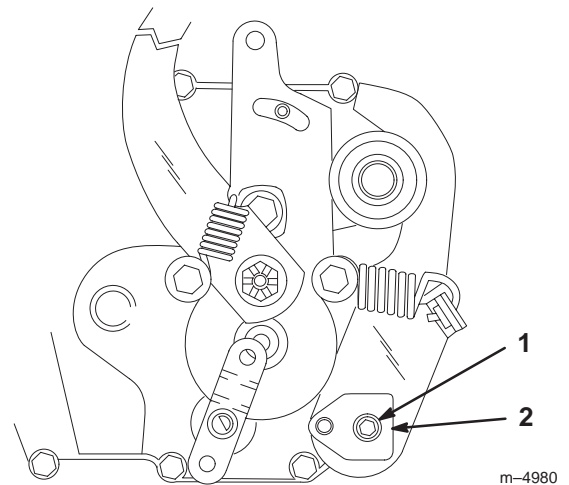


Figure 8

1. Adjusting puck screw
 2. Adjusting puck
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6. Loosen the adjusting puck screw (Fig. 8).
 7. Start the engine and run it at full throttle.

8. Rotate the adjusting puck (Fig. 8) in both directions until you find the midpoint where the axle no longer rotates forward or reverse.
9. Hold the puck with an adjustable wrench so that it will not move; then tighten and torque the adjusting puck screw to 21 to 27 ft-lb (28 to 36 N·m).
10. Stop the engine and remove the ignition key.
11. Lower the tractor from the jack stand.
12. Check the adjustment again by repeating step 1.

Checking the Traction Control Pedal

You can adjust the traction control pedal for optimum forward and reverse speeds.

1. Loosen the screws below the right footrest.
2. Slide the pedal forward for faster reverse speed or backward for faster forward speed (Fig. 9).

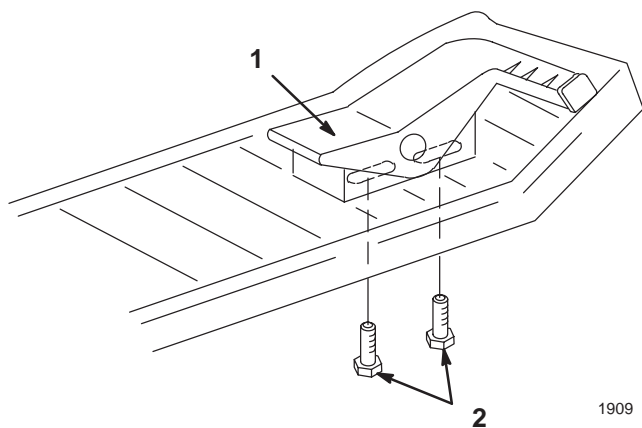


Figure 9

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|---------------------------|---------------------|
| 1. Traction control pedal | 2. Adjusting screws |
|---------------------------|---------------------|

3. Tighten the screws and check the traction control pedal.

Test Drive the Tractor

Ensure that all electrical and mechanical systems are operating properly. See the *Operator's Manual* for proper control function.

