

TORO®

PART NO. 98-7095

PART NO. 98-7096

**INSTALLATION
INSTRUCTIONS****SPINDLE KIT**
For Groundsmaster® 3000**CAUTION**

Before servicing or making adjustments to the machine, stop engine and remove key from the switch.

1. Slightly loosen the wheel lug nuts. Jack up the rear of the machine until the tire is off the floor. Support the machine with jack stands or blocks to prevent it from falling. Remove the wheel (Fig. 1).

2. Remove the hubcap from the end of the wheel spindle.

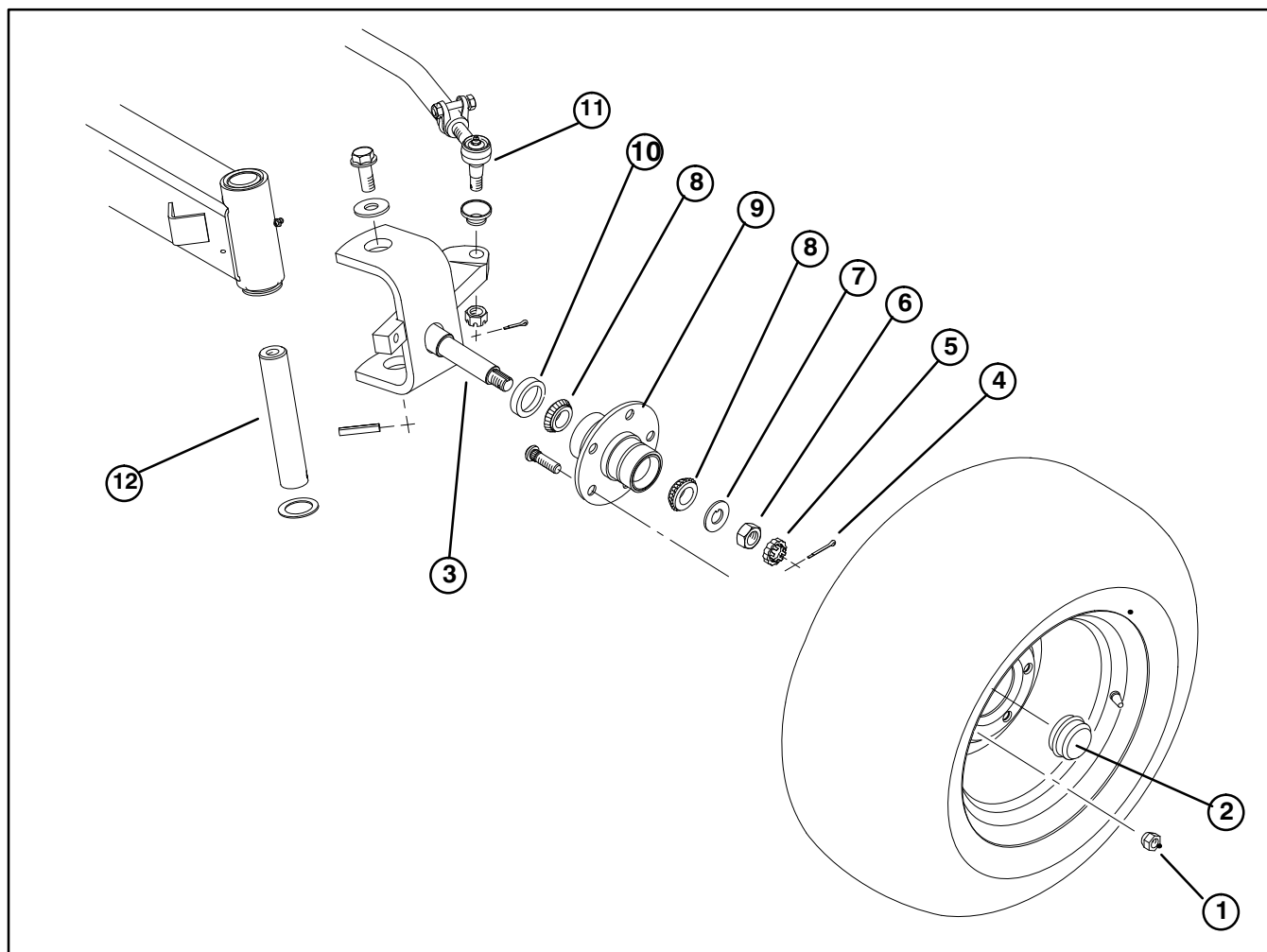
3. Remove the cotter pin, retainer, jam nut, and washer. Slide the hub off of the spindle shaft.

4. Remove cotter pin and nut securing tie rod end to spindle.

5. Remove screw, washer and spindle pivot pin securing spindle assembly to rear axle. Remove spindle.

6. Install new spindle assembly with spindle pivot pin, washer and screw removed. Torque screw to 150 ft-lb.

7. Secure tie rod end to spindle with nut and cotter pin removed. Grease spindle pivot pin and tie rod end.

**Figure 1**

- 1. Lug nut
- 2. Hub cap
- 3. Spindle
- 4. Cotter pin
- 5. Retainer
- 6. Jam nut

- 7. Tab washer
- 8. Bearing cone
- 9. Wheel hub
- 10. Hub seal
- 11. Rod end
- 12. Spindle pivot

8. Pull the seal out of the hub and discard.
 9. Remove the bearing cones from both sides of the hub assembly and discard. **Do not reuse seal or bearing cones.**
 10. Check the bearing cups for wear, pitting or other noticeable damage. Replace worn or damaged parts.
 11. Pack new bearing cones with grease. Install one bearing cone into the cup on inboard side of the hub assembly. Lubricate the inside of the new lip seal and press it into the hub assembly.
- IMPORTANT:** The lip seal must be pressed in so it is flush with the end of the hub.
12. Pack inside of hub assembly with some grease (not full). Install remaining bearing cone into the bearing cup.

13. Slide the hub onto the spindle shaft and secure it in place with the tab washer, jam nut, and retainer. **DO NOT** tighten the nut or install the cotter pin.
14. Adjust preload on the wheel bearings.
 - A. Tighten the jam nut to 75 – 80 in-lb while turning the hub to seat the bearings and remove all end play.
 - B. Loosen the jam nut until it is away from the tab washer and the hub has end play. Tighten the jam nut to 15–20 in-lb while rotating the hub.
 - C. Put the retainer over the jam nut. If the cotter pin hole is not aligned with a retainer slot, remove the retainer and orient it until alignment occurs.
 - D. Insert the cotter pin. Bend both legs of the cotter pin and tap out of the way. Install the cap.
15. Install hub cap and wheel.