



PART NO. 55-8110

**INSTALLATION  
INSTRUCTIONS****STEERING GEAR CONVERSION KIT**

(GROUNDMASTER® 52 MODELS 30550 &amp; 30760)

1. Remove steering tower cover and gauges from steering tower. Retain gauges for later use.
2. Remove brake cables from brake pedals and anchor bracket located below floor panel (Fig. 1).
3. Disconnect steering tie rod end from lower pitman arm.
4. Remove brake pedals, park brake latch assembly, steering wheel, steering shaft, steering gear and post weldment. Retain brake pedal foot pads, grease zerks, pedal latch and fasteners, steering wheel and roll pin, and park brake control and hardware for later use.
5. Cover or otherwise protect brake cables and wiring harness from possible damage.

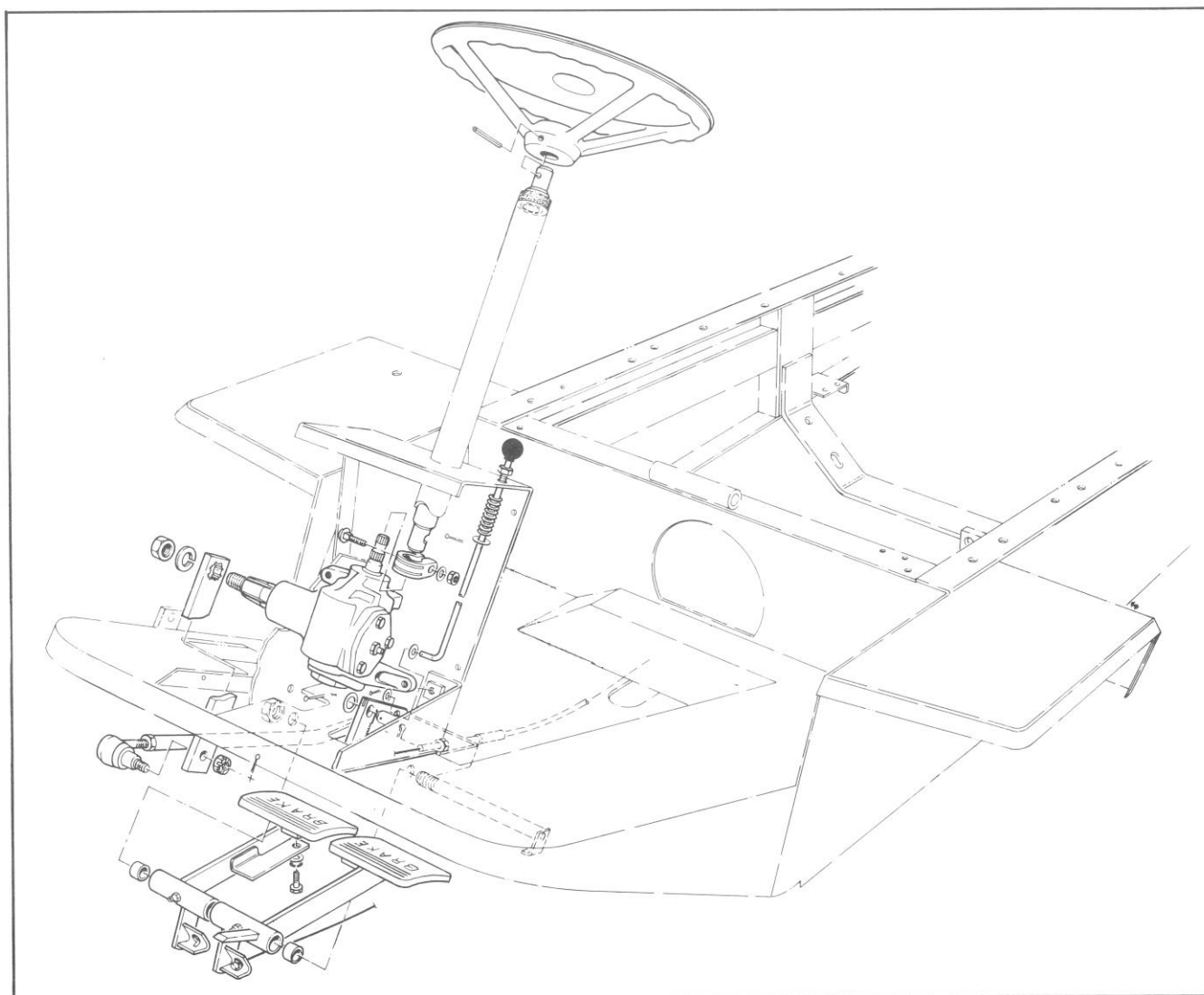


Figure 1

6. Using a grinder, air chisel or torch, remove the welds retaining the steering gear support weldment. Remove and discard weldment (Fig. 2).
7. Grind all welds flush with frame and floor plate.
8. Position and tack weld new support weldment to main frame and floor plate. To ensure the steering column will be vertical when assembled, adjust the position of the support weldment to be square with the main frame. Weld the support weldment in place as shown in Fig. 3.

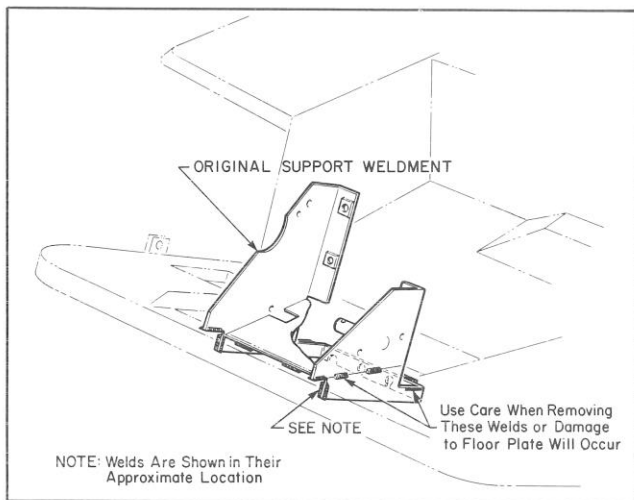


Figure 2

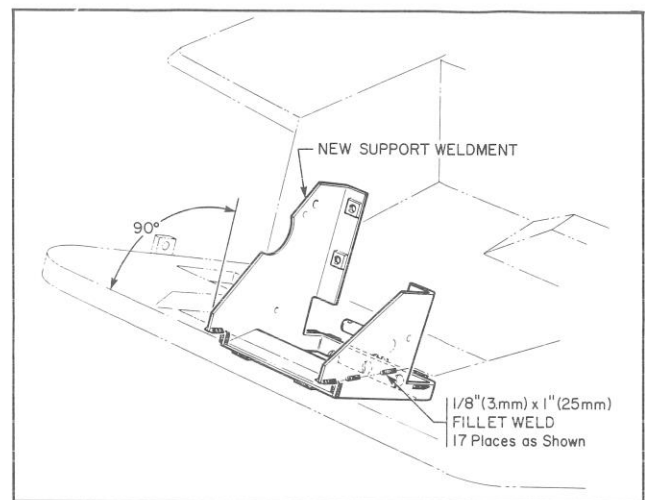


Figure 3

9. Install park brake latch assembly using new latch and original control shaft and fasteners.

10. Install new brake pedals, steering post welded assembly steering gear and steering shaft included in kit (Fig. 4).

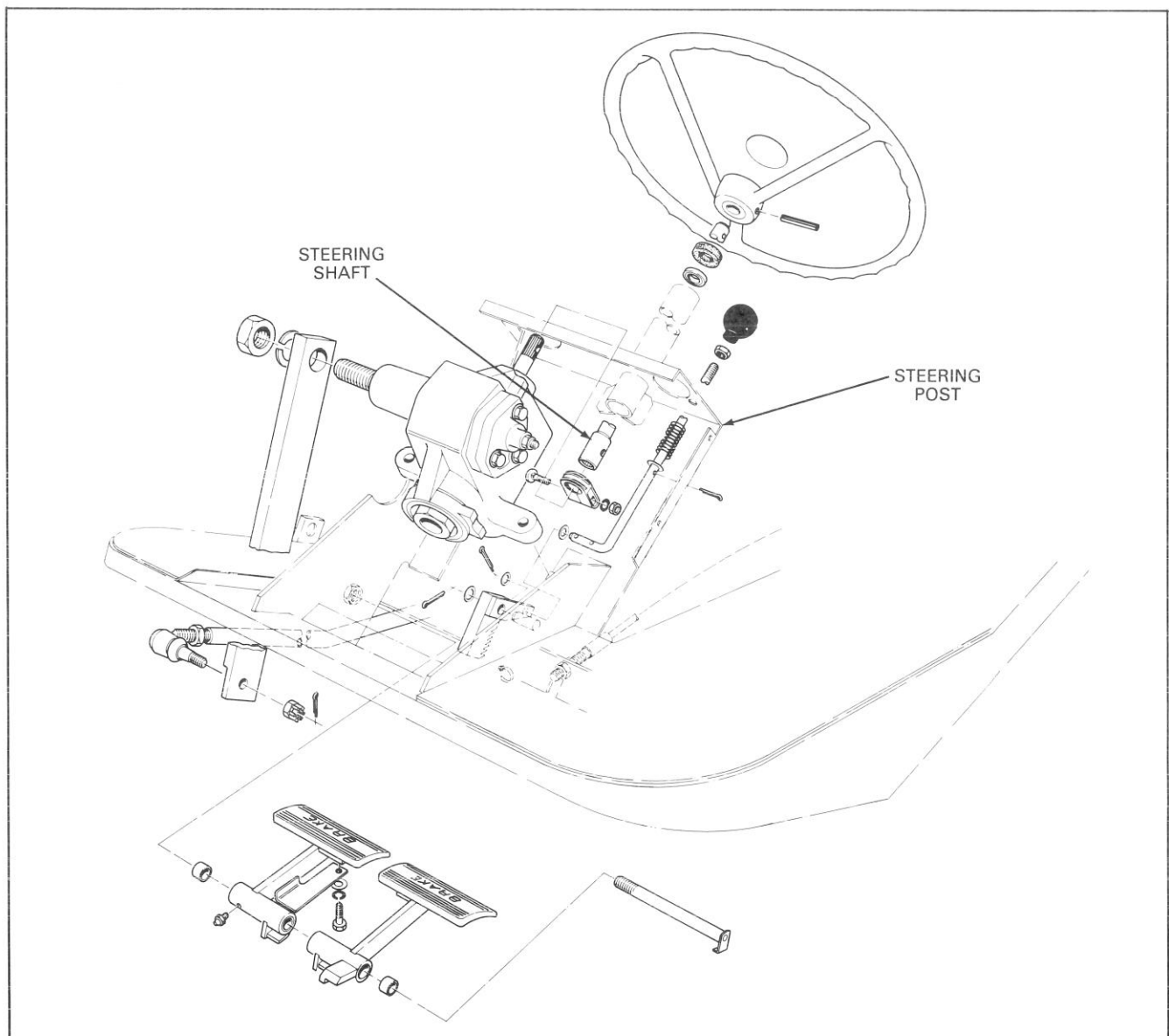


Figure 4

**Note:** Grease brake pedal pivot bushings and check oil level in steering gear. To check oil level, remove top side-cover capscrew. The oil should be level with the bottom of the capscrew hole. Use General Motors #1051052 lubricant only.

11. Install new steering panel decal. Reinstall gauges to steering panel and connect wiring. Ensure wiring will not interfere with rotation of steering shaft clamp.

12. Connect steering wheel to steering shaft with original roll pin. Turn wheel in both directions to find the center position of the steering gear.

13. Position the pitman arm on the output shaft of the "centered" steering gear. The machined lower end of the pitman arm must face the tie rod end. Install lockwasher and nut and torque to 185 ft-lb. (Fig. 4).

14. With the wheels positioned straight ahead, adjust the rear wheels for zero toe-in, by adjusting the length of the rear wheel spindle tie rods.

15. Disconnect and remove the rear steering tube ball joint from the rear steering control arm (Fig. 5).

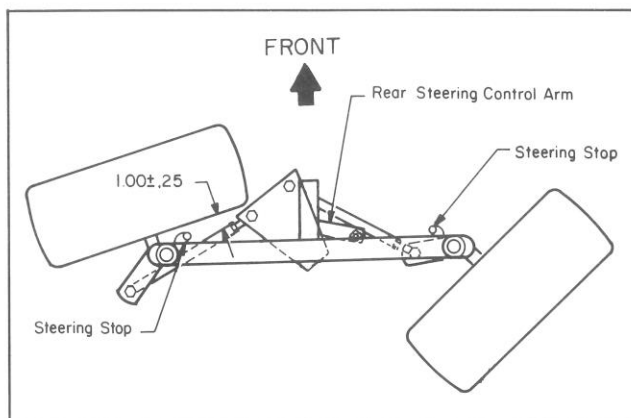


Figure 5

16. Rotate the rear steering control arm until the clearance between the left rear tire and left rear tie rod is  $1'' \pm \frac{1}{4}''$  (Fig. 5).

17. Bend right side steering stop as needed to achieve the specified dimension at the left wheel.

18. Rotate the rear steering control arm until the clearance between the right rear tire and the right rear tie rod is  $1'' \pm \frac{1}{4}''$  (Fig. 5). Bend the left side steering stop as needed to achieve the specified dimension at the right wheel.

19. Reconnect the rear steering tube to the control arm and secure the ball joint with the slotted nut and a new cotter pin.

20. Adjust the front steering tube ball joints so the ball joint end is 2" from the end of the tube as shown in Fig. 6. Install front steering tube.

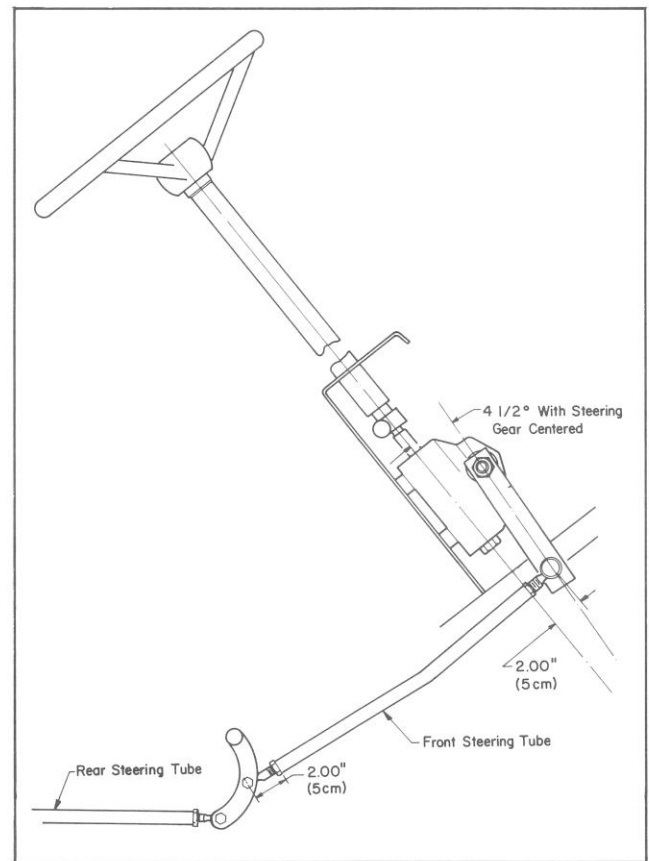


Figure 6

21. Turn the steering wheel counterclockwise (left-hand turn).

22. Release the rear steering tube jam nuts that secure the ball joints (Fig. 6).

23. Adjust the length of the rear steering tube until the right rear wheel's spindle arm contacts the steering stop located on right hand side of the rear axle and the pitman arm contacts the front frame (Fig. 5).

24. Retighten the jam nuts on the rear steering tube ball joints.

25. Attach the brake cables and adjust the cables or brake shoes for  $\frac{1}{2}''$ -1" free pedal travel.

26. Install new steering tower cover using original self tapping screws.

27. Install the Toro decal to the front of the steering tower.

