



Replacement Steering Valve Kit

Reelmaster® 3100-D & Groundsmaster® 3500-D

Part No. 107-7802

Form No. 3351-894

Installation Instructions

1. Park the machine on a level surface, lower the cutting units, stop the engine, engage the parking brake and remove the key from the ignition switch.
2. Remove the pan head screws and the steering wheel cap from the steering wheel.

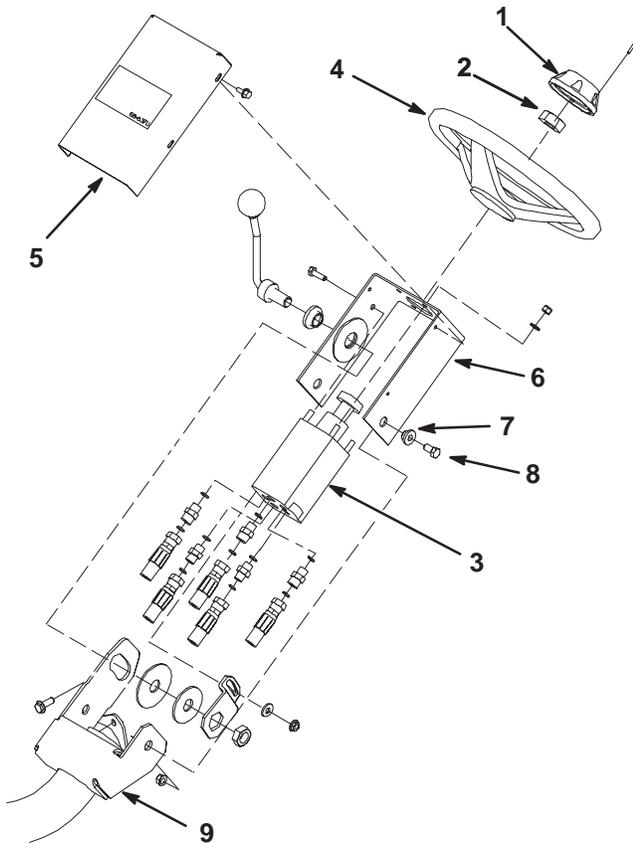


Figure 1

- | | |
|-------------------------|---------------------------|
| 1. Steering wheel cap | 6. Steering valve bracket |
| 2. Steering wheel nut | 7. Pivot hub |
| 3. Steering valve | 8. Capscrew |
| 4. Steering wheel | 9. Steering arm |
| 5. Steering valve cover | |

3. Remove the steering wheel nut from the steering control valve. Pull the steering wheel from the control valve. Discard steering wheel and nut.
4. Remove the steering valve cover from the steering control valve bracket.
5. Remove the (4) lock nuts and flat washers securing the steering control valve to the steering control valve bracket.

6. Remove the capscrew, flat washer and nut securing the top of the tilt bracket to the steering valve cover.
7. Remove the jam nut, tilt bracket, flat washer, friction discs, boss and tilt steering lever secured to steering arm and steering valve bracket.
8. Remove both hex flange nuts, capscrews, and pivot hubs securing the steering control valve bracket to the steering arm. Slide the bracket from the steering control valve and steering arm.
9. Disconnect the hydraulic hoses from the steering valve and remove the valve. Mark the hoses with the steering valve ports to simplify installation onto new steering valve. Use the chart below to identify steering valve ports.

| Hose From: | Old Port Ref: | New Port Ref: |
|------------------------|---------------|---------------|
| Gear pump section 2 | In | P (Pressure) |
| Manifold ST port | Out | T (Tank) |
| Lift valve | Aux | E (Excess) |
| Steering cylinder base | L | L (Left) |
| Steering cylinder rod | R | R (Right) |

10. Connect hydraulic hoses to new steering valve. Use the chart to identify the new steering valve ports.
11. Mount the new steering control valve bracket to the steering arm with the pivot hubs, capscrews, and hex flange nuts previously removed.
12. Mount the tilt steering lever, boss, friction discs, flat washer, tilt bracket and jam nut to the steering arm and steering valve bracket. Make sure the components are assembled as shown in figure 1.
13. Mount the top of the tilt bracket to the steering valve cover with the capscrew, flat washer and nut previously removed.
14. Secure the steering control valve to the steering control valve bracket with (4) screws.
15. Secure the steering cover to the steering control valve bracket with capscrews previously removed.
16. Install the new steering wheel onto the steering control valve. Secure the new steering wheel nut to the steering control valve. Torque the nut to 35 ft.-lb.
17. Secure the steering wheel cap to the steering wheel with the pan head screws previously removed.