



Gear Pump Kit

Greensmaster® 3100 with Power Steering

Part No. 107-2577

Form No. 3353-931 Rev A

Installation Instructions

1. Position 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. Drain the hydraulic fluid from the reservoir and the system. Refer to the Traction Unit Operator's Manual for the draining instructions.
3. Remove the capscrews, flat washers and nuts securing each end of the gear pump guard to the frame (Fig. 1).
4. Remove the hose clamps securing the pump inlet hoses to the gear pump (Fig. 1). Disconnect the hoses from the pump.
5. Disconnect the hydraulic hoses from the pump fittings (Fig. 1).

Important Label the hoses and the fittings to assure they are reinstalled correctly to the pump.

6. Disconnect and remove the hydraulic hose from the control valve, as shown in figure 1. Install the new hydraulic hose to the control valve (Fig. 2).

Note: Make sure the O-ring is lubricated and in place when assembling hose.

7. Remove the fittings from the pump (Fig. 1).

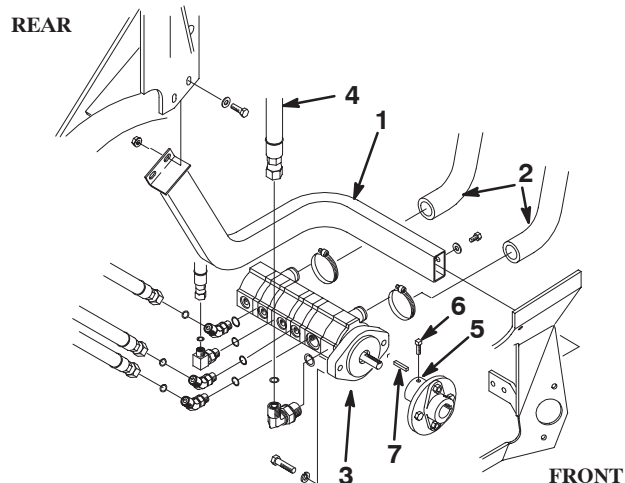


Figure 1

- | | |
|--|---------------|
| 1. Gear pump guard | 5. Pump hub |
| 2. Pump inlet hoses | 6. Set screw |
| 3. Gear pump | 7. Square key |
| 4. Remove this hydraulic hose from the control valve | |

8. Loosen the set screw securing the pump shaft to the pump hub (Fig. 1).
9. Remove the two capscrews and lock washers securing the gear pump flanges to the pump adapter (Fig. 1).
10. Remove the gear pump. Make sure to account for the square key on the pump shaft (Fig. 1).
11. Install the new gear pump and previously removed square key to the pump hub (Fig. 2).
12. Using the two new capscrews (included in kit) and old lockwashers, secure the gear pump to the pump adapter (Fig. 2).
13. Tighten the set screw securing the gear pump shaft to the pump hub (Fig. 2).

Important Make sure pump shaft and hub are properly aligned and rubber coupler is not deformed.

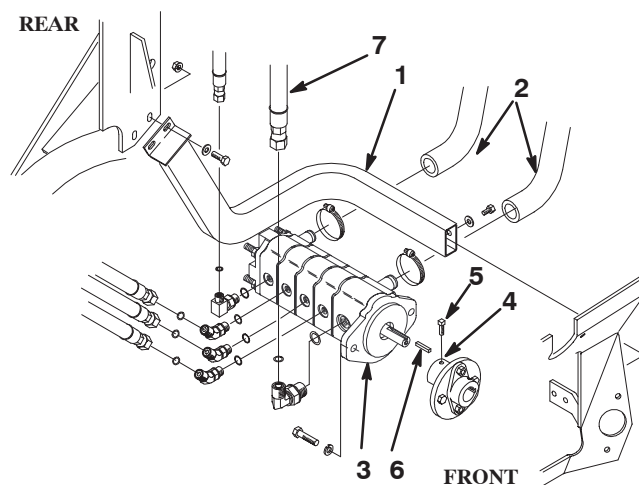


Figure 2

- | | |
|---------------------|--|
| 1. Gear pump guard | 5. Set screw |
| 2. Pump inlet hoses | 6. Square key |
| 3. Gear pump | 7. New hydraulic hose to control valve |
| 4. Pump hub | |

Note: Make sure O-rings are lubricated and in place when assembling fittings and hoses.

14. Install the fittings to the pump **reversing the location of the two rear fittings** (Fig. 2 & 3).

15. Install the hydraulic hoses to the fittings **reversing the location of the two rear hoses** (Fig. 2 & 3).

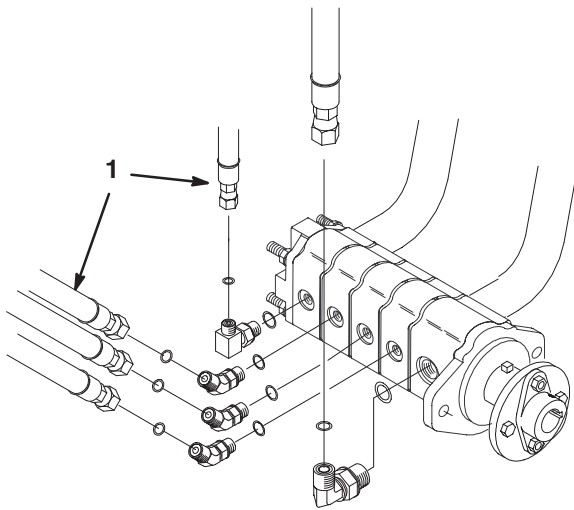


Figure 3

1. Reverse these fittings and hoses

16. Mount the inlet hoses to the pump with the previously removed clamps (Fig. 2).
17. Mount the new pump guard to the frame with the capscrews, flat washers and nuts previously removed. Rear mounting flange of guard is to be positioned to the outside of the frame plate (Fig. 2).
18. Tighten all the fasteners, fittings and hoses.
19. Fill the hydraulic reservoir with the correct hydraulic fluid. Refer to Traction Unit Operator's Manual for fluid requirements.
20. Operate the machine, check the hydraulic fluid level and add fluid as required.



Warning



Hydraulic fluid escaping under pressure can penetrate skin and cause injury.

- **Make sure all hydraulic fluid hoses and lines are in good condition and all hydraulic connections and fittings are tight before applying pressure to the hydraulic system.**
- **Keep your body and hands away from pin hole leaks or nozzles that eject high pressure hydraulic fluid.**
- **Use cardboard or paper to find hydraulic leaks.**
- **Safely relieve all pressure in the hydraulic system before performing any work on the hydraulic system.**
- **Seek immediate medical attention if fluid is injected into skin.**