

TORO®

PART NO. 95—4350

INSTALLATION INSTRUCTIONS

PERFORMANCE KIT GROUNDMASTER® 455D



CAUTION

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



WARNING

Before disconnecting or performing any work on the hydraulic system, all pressure in the system must be relieved by stopping the engine and lowering the cutting units to the ground.

Keep body and hands away from pin hole leaks or nozzles that eject high pressure hydraulic fluid. Use cardboard or paper to find hydraulic leaks. Hydraulic fluid escaping under pressure can penetrate skin and cause injury. Fluid accidentally injected into the skin must be surgically removed within a few hours by a doctor familiar with this form of injury or gangrene may result.

1. Raise seat and remove access panel below seat.
2. Place a drain pan under hydraulic oil reservoir.
3. Remove drain plug from rear of reservoir and hydraulic line from front of reservoir and let oil flow into drain pan. Reinstall plug and line when oil stops draining.
4. Disconnect steering, lift and suction hoses from gear pump (Fig. 1).
5. Disconnect other end of lift hose from lift valve. Discard hose.
6. Remove capscrews securing gear pump to traction pump (Fig. 1). Discard pump but retain fasteners.
7. Remove capscrew and nut securing damper pivot to pivot plate (Fig. 1). Retain fasteners.



CAUTION

Damper lever is spring loaded, use caution when disassembling components.

8. Remove nut securing neutral switch arm assembly to bottom of neutral bracket (Fig. 1).
9. Remove capscrews securing neutral bracket to traction pump. Remove neutral bracket from traction pump and neutral switch arm assembly (Fig. 1).
10. Remove capscrew and nut securing R-clamp and hose to underside of seat rod bracket (Fig. 1). Remove clamp from hose, rotate clamp upward, reinstall on hose and secure to top of bracket with capscrew and nut removed (Fig. 2).

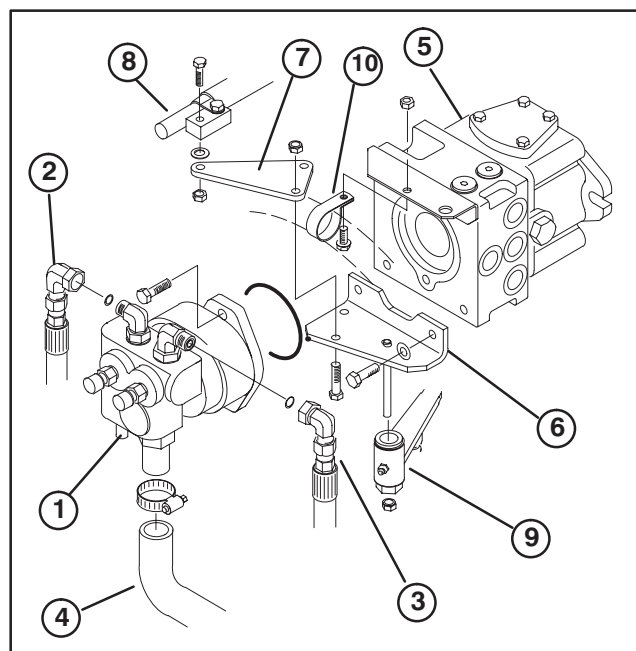


Figure 1

- | | |
|------------------|-----------------------|
| 1. Gear pump | 6. Neutral bracket |
| 2. Steering hose | 7. Pivot plate |
| 3. Lift hose | 8. Damper |
| 4. Suction hose | 9. Neutral switch arm |
| 5. Traction pump | 10. R-clamp |

11. Install new pivot plate to new neutral bracket with fasteners previously removed (Fig. 2).
12. Install neutral bracket to traction pump and neutral switch arm assembly with fasteners previously removed (Fig. 2).
13. Secure damper pivot to pivot plate with fasteners previously removed (Fig. 2).

IMPORTANT: Before installing hydraulic fittings, make sure O-rings are lubricated with hydraulic oil and positioned correctly. Use a backup wrench to tighten fittings.

14. Install (2) new 90° fittings and new barb fitting to new gear pump. Position fittings as shown in figure 2.
15. Install new gear pump w/fittings to traction pump with fasteners previously removed (Fig. 2).
16. Connect suction hose to barb fitting on bottom of gear pump (Fig. 2). Secure hose to fitting with hose clamp.

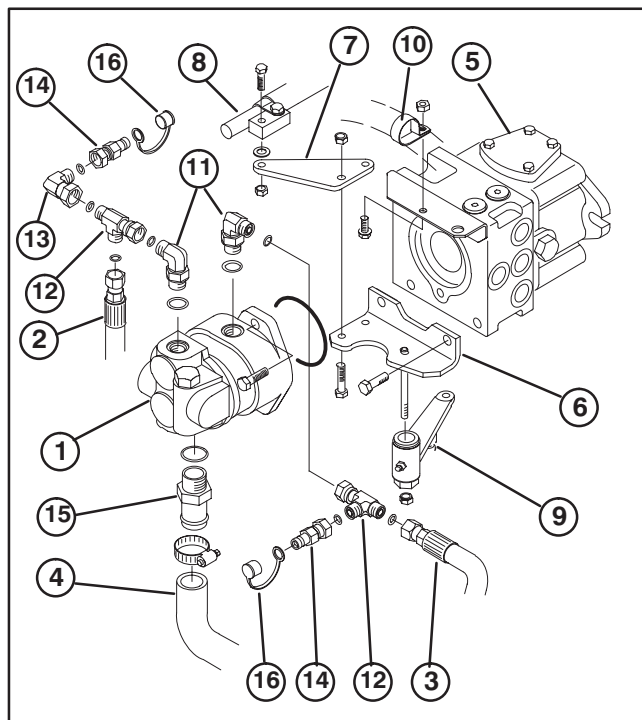


Figure 2

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|--------------------|------------------------|
| 1. Gear pump | 9. Neutral switch arm |
| 2. Steering hose | 10. R-clamp |
| 3. Lift hose | 11. 90° fittings |
| 4. Suction hose | 12. Tee fitting |
| 5. Traction pump | 13. 90° fitting |
| 6. Neutral bracket | 14. Diagnostic fitting |
| 7. Pivot plate | 15. Plastic cap |
| 8. Damper | |

17. Connect a Tee fitting, 90° fitting and diagnostic fitting to front 90° fitting on gear pump. Position fittings as shown in figure 2.
18. Connect steering hose to Tee fitting (Fig. 2).
19. Connect a Tee fitting and diagnostic fitting to rear 90° fitting on gear pump. Position fittings as shown in figure 2.
20. Connect new lift hose to Tee fitting and lift valve (Fig. 2).
21. Install plastic caps on diagnostic fittings (Fig. 2).
22. Disconnect rear of steering return line from check valve in hydraulic tank and at from rear return line (Fig. 3).

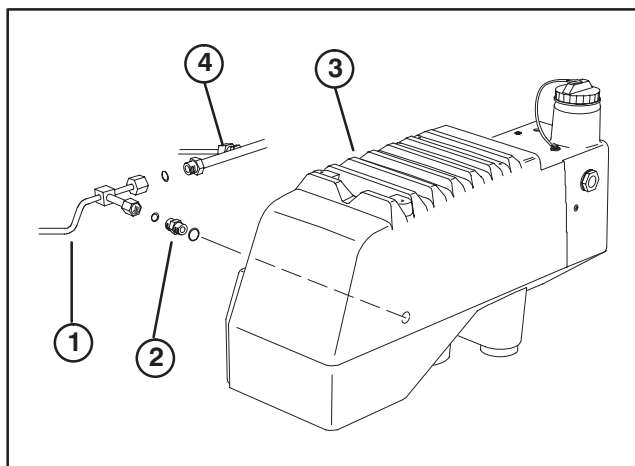


Figure 3

1. Steering return line
2. Check valve
3. Hydraulic tank
4. Rear return line

23. Disconnect front of steering return line from fitting at bulkhead bracket located below steering tower.
24. Install cap fitting on rear return line (Fig. 4).
25. Install new straight fitting to hydraulic tank (Fig. 4).
26. Connect new return line to straight fitting in hydraulic tank and fitting at bulkhead bracket.

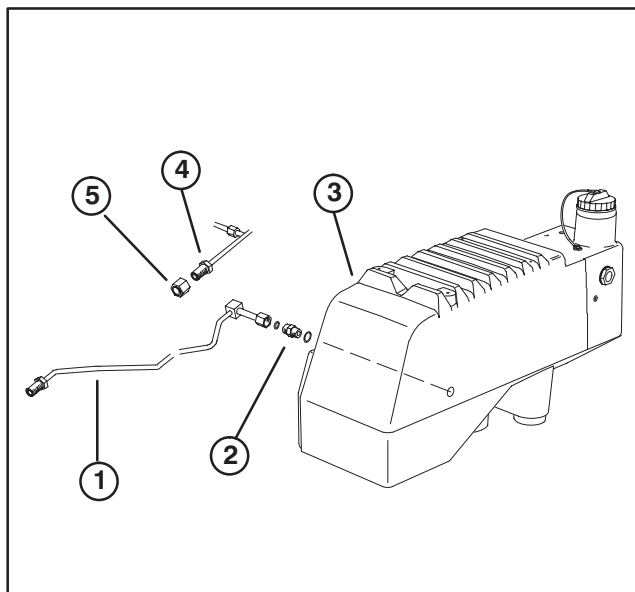


Figure 4

1. Steering return line
2. Straight fitting
3. Hydraulic tank
4. Rear return line
5. Cap fitting

27. Tighten all fittings.
28. Fill hydraulic tank.
29. Reinstall front access panel and make sure it does not interfere with new components. Lower seat.