



## Customer Service Bulletin Commercial Business Group

### Groundsmaster® 3000-D

Date 4/1/2002

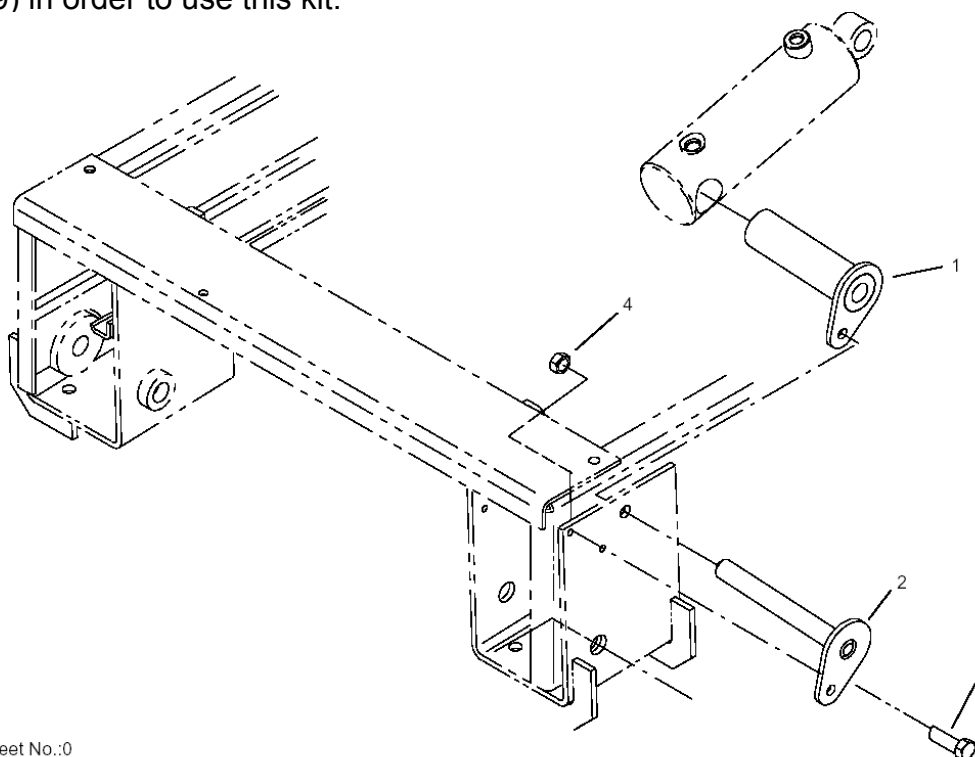
**Model/Serial Range:    Model Number:    Serial Numbers:**

|         |                 |
|---------|-----------------|
| 30300   | 60001-99999     |
| 30301   | 60001-210009999 |
| 30301TC | 60001-210009999 |
| 30302   | 60001-210009999 |
| 30302TC | 60001-210009999 |

**Subject:    Damage to Lift Cylinder Pivot Area.**

The Lift Cylinder pivot support area may experience wear or damage due to influences from operating in severe conditions, added weight, or operator care. To strengthen the area against these influences, Lift Cylinder Pivot Kit (104-0180) is now available through your regular Toro Parts supplier. Two kits are required to upgrade both pivot areas. Installation Instructions and a Parts List are included in the kit and are attached to this bulletin for your convenience. The installation of this kit requires a special 5/8" (15.9mm) drill bit that is 6" (150mm) long due to access limitations.

Note: Models with serials 60001-69999 also require replacement Lift Cylinder (95-5699) in order to use this kit.



Sheet No.:0

### Lift Cylinder Pivot Assembly

| Ref. No. | Part No.  | Qty. | Description | Ref. No. | Part No. | Qty. | Description |
|----------|-----------|------|-------------|----------|----------|------|-------------|
| 1        | 104-0175  | 1    | Spacer ASM  |          |          |      |             |
| 2        | 104-0176  | 1    | Pin ASM     |          |          |      |             |
| 3        | 33104-030 | 1    | Screw-HHF   |          |          |      |             |
| 4        | 33024-00  | 1    | Nut-Lock    |          |          |      |             |



# Lift Cylinder Pivot Kit

## Groundsmaster® 3000-D Traction Unit

Part No. 104-0180

Form No. 3326-922

### Installation Instructions

1. Position the machine on a level surface. Lower the cutting unit, turn the ignition off, and remove the key. Chock rear wheels.



#### Caution



If you leave the key in the ignition switch, someone could accidentally start the engine and seriously injure you or other bystanders.

Remove the key from the ignition switch before you do any maintenance.

2. Raise seat and open needle valve. This allows lift arms to float freely.
3. Remove cutting unit from traction unit. Refer to Cutting Unit Operator's Manual for procedure

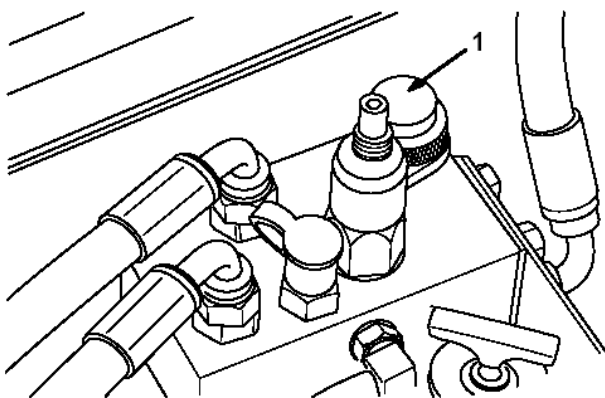


Figure 1

1. Needle valve

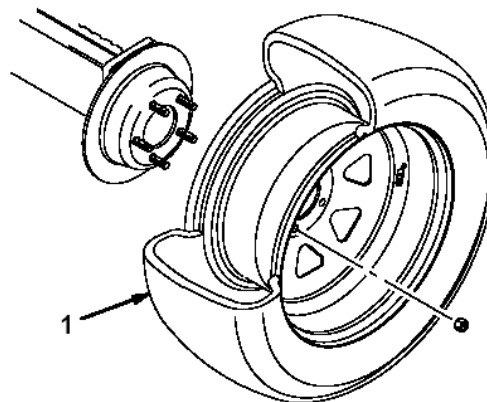


Figure 2

1. Wheel and tire assembly

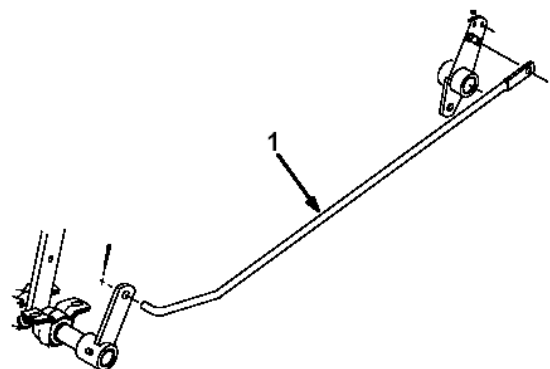


Figure 3

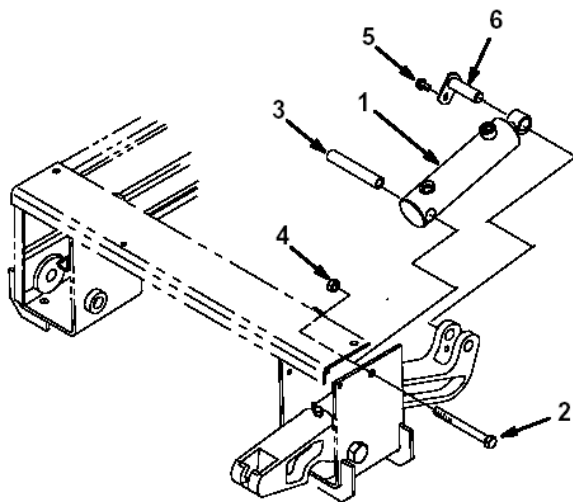
1. Brake rod

4. Close needle valve. Do not overtighten needle valve when closing.
5. Jack up the machine until a front wheel is off the ground. Use jack stands or block the machine to prevent it from falling.
6. To gain access to the lift cylinder pins, the wheel and tire assembly (Fig. 2) and brake rod (Fig. 3) must be removed.

7. Remove and discard capscrew, spacer and lock nut securing lift cylinder to frame (Fig. 4).

**Note:** Hydraulic connections to lift cylinder do not need to be disconnected.

8. Remove and retain screw securing lift cylinder pin to lift arm (Fig. 4).
9. Remove lift cylinder pin from rear of lift arm (Fig. 4). Move lift cylinder out of the way. Retain lift cylinder pin.

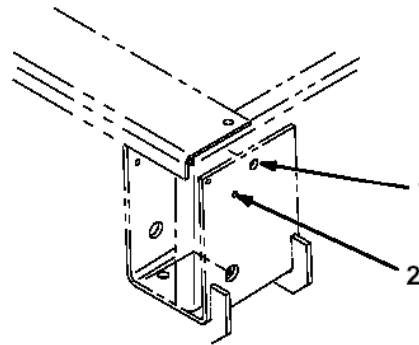


**Figure 4**

- |                  |                      |
|------------------|----------------------|
| 1. Lift cylinder | 4. Locknut           |
| 2. Capscrew      | 5. Screw             |
| 3. Spacer        | 6. Lift cylinder pin |

**Note:** If machine is equipped with a hydraulic kit for the contour deck, hose and fitting may be removed from the bottom of the manifold to gain additional clearance.

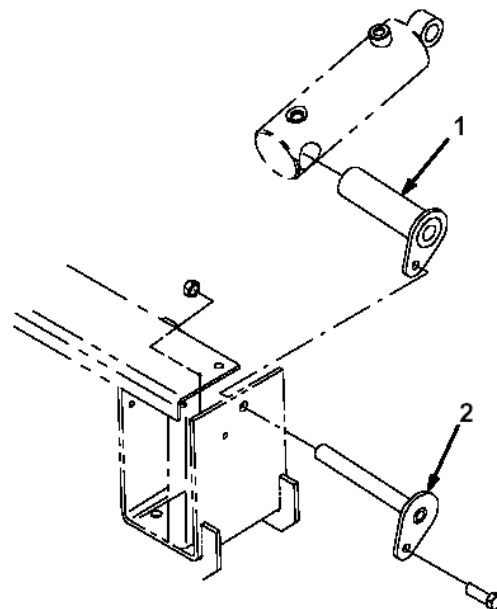
10. Using a 5/8" drill bit, at least 6" long, enlarge top hole in both walls of frame to accommodate new cylinder pin (Fig. 5).
11. Insert new cylinder pin into hole as shown in figure 6. Using pin as a template, locate and mark hole location in frame (Fig. 5). Rotate pin approximately 45 degrees forward to gain added clearance.
12. Remove pin and drill a 11/32" dia. hole thru one wall of frame at location marked.



**Figure 5**

- |   |                                      |
|---|--------------------------------------|
| 1. Enlarge to 5/8" dia. hole (both walls) | 2. Drill 11/32" dia. hole (one wall) |
|---|--------------------------------------|

13. Apply never seize to cylinder pivot and insert it into lift cylinder as shown in figure 6.
14. Position lift cylinder and cylinder pivot between frame walls while aligning mounting holes (Fig. 6).
15. Secure lift cylinder and cylinder pivot to frame walls with cylinder pin (Fig. 6). Apply never seize to cylinder pin before installation.
16. Secure cylinder pivot and cylinder pin to frame wall with flange head capscrew and lock nut (Fig. 6).
17. Secure cylinder to lift arm with pin assembly previously removed. Secure pin to lift arm with capscrew previously removed.



**Figure 6**

- |                   |                 |
|-------------------|-----------------|
| 1. Cylinder pivot | 2. Cylinder pin |
|-------------------|-----------------|

18. Reinstall the brake rod (Figs. 3) and wheel and tire assembly (Figs. 2).