# **Groundsmaster** <sup>®</sup> 455-D

Model/Serial Range: Model Number: Serial Numbers:

30450 20101 - 230000118 30455 20101 - 230000128 30455TS 20101 - 220000210

**Date: July 28, 2003** 

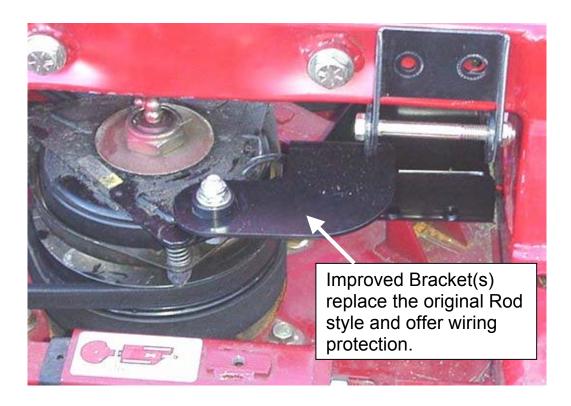
## **Subject:** Deck Clutch Retainer Bracket Improvements

During normal operation, a wing deck belt may fail or jump out of the drive pulley. If this occurs, the belt can become tangled in the Deck Clutch wires and/or the Clutch Torque Rod (86-2590). This could result in enough damage that would require the replacement of the Deck's electric Clutch assembly, deck wire harness and Clutch Rod.

Improved Deck Clutch Retainer Brackets are now available that can replace the original Torque Rod style. These brackets offer protection to the deck and clutch wiring in the event of drive belt jump or failure.

The improved Brackets (left and right) come as a Wire Harness Shield Kit. This kit is also included in replacement Wing Deck Belt Drive Clutch Kits as well.

For additional information on this subject or to order parts, contact your local authorized Toro Commercial Products Distributor.



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#### Installation Instructions

Note: Determine the left and right sides of the machine from the normal operating position.

## **Loose Parts**

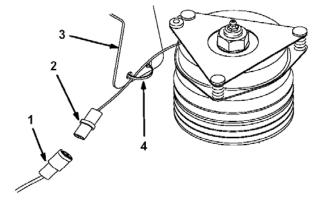
Note: Use the chart below to identify parts used for assembly.

Description	Qty.	Use
Clutch Bracket–L.H.	1	
Clutch Bracket–R.H.	1	Install the Wire Harness Shield Kit
Capscrew-5/16-18 x 3-1/4 inch	4	
Washer-11/32 x 11/16	8 4 2	
Lock nut-5/16-18		
Capscrew-7/16-20 x 1-1/2 inch		
Spacer	6	
Washer	1	
Lock nut	2	
Cable Tie	2	

- Lower the cutting unit, engage the parking brake, stop the engine, and remove the ignition key.
- Remove the deck cover from the top of the center cutting unit.
- Unplug the main wire harness connector from the clutch wire harness (Fig. 1).

Note: All figures show the left clutch bracket

- **4.** Cut and remove the cable tie securing the clutch wire to the existing wire harness shield (Fig. 1)
- Remove the hair pin cotter securing the clutch rod to deck (Fig. 2). Unhook the clutch rod from the deck. Remove and discard the grommet from the hole in the deck and in the clutch plate.



### Figure 1

- 1. Wire harness
- 2. Clutch wire harness
- 3. Wire harness shield
- 4. Cable tie

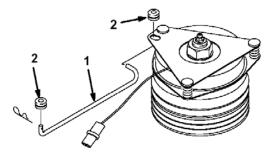


Figure 2

- 1. Clutch rod
- 2. Grommet
- **6.** Remove the 2 screws securing the wire harness shield and cover hinge to the deck frame tube (Fig. 3). Discard the wire harness shield.

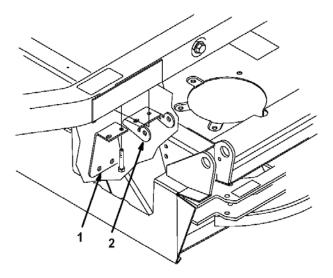


Figure 3

- 1. Wire harness shield
- 2. Hinge
- 7. Using the dimensions shown in figure 4, locate, mark and drill (2) 11/32 inch holes thru both the walls of the deck frame tube. The new top holes should align with the current hinge mounting holes in the bottom of the tube.

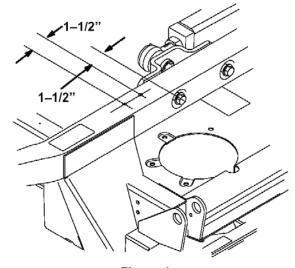


Figure 4

8. Mount the new clutch bracket and the previously removed hinge to the frame tube with (2) capscrews (5/16–18 x 3–1/4 inch), 4 washers (11/32 x 11/16) and 2 locknuts (5/16–18). Position the washers next to the screw head and the nut (Fig. 5). Make sure to use the correct bracket.

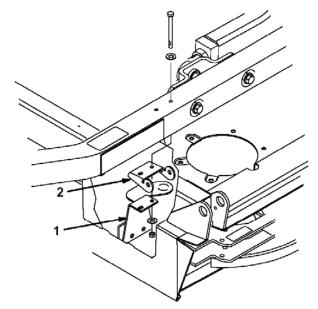


Figure 5

- 1. Clutch bracket (L.H.)
- 2. Hinge

9. Secure the top of the clutch to the clutch bracket with a capscrew (7/16–20 x 1–1/2 inch), 3 washers, a spacer and a lock nut (7/16–20). Position the components as shown in figure 6.

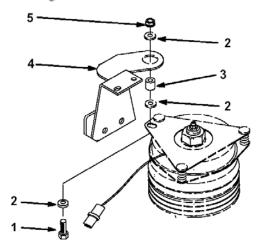


Figure 6

- 1. Capscrew
- 2. Washer
- 3. Spacer

- 4. Clutch bracket (L.H.)
- 5. Locknut

**10.** Secure the clutch wire harness to clutch bracket with a cable tie as shown in figure 7.

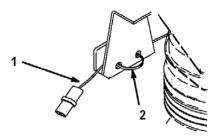


Figure 7

- 1. Clutch wire harness
- 2. Cable tie
- 11. Plug the clutch wire harness into the traction unit wire harness.
- 12. Repeat the procedure on opposite side the of cutting unit.
- 13. Reinstall the belt cover.

