Form No. 3358-287 Rev B

Switch Adapter Kit

For Groundsmaster© 220 Series Traction Unit

Model No. 114–4111

Installation Instructions

Installation

Loose Parts

Use the chart below to verify that all parts have been shipped.

Procedure	Description	Qty.	Use
1	Switch	1	Install the Seat Switch
	Adapter harness	1	
	Bracket	1	
	Screw (1/4 x 3/4 inch)	2	
	Nut (1/4 inch)	2	
2	Switch	1	Install the PTO Switch
	Adapter harness	1	
	Bracket	1	
	Screw (1/4 x 3/4 inch)	3	
	Nut (1/4 inch)	3	
	Bracket	1	

1

Replace the Seat Switch

Parts needed for this procedure:

1	Switch
1	Adapter harness
1	Bracket
2	Screw (1/4 x 3/4 inch)
2	Nut (1/4 inch)

Procedure

1. Park the machine on a level surface, lower the cutting unit, stop the engine, engage the parking brake and remove the key from the ignition switch.
2. Unlatch and raise the hood.
3. Disconnect the negative battery cable from the battery.
4. Remove the knob from lift lever.
5. Remove the cap screws securing the seat support cover to the frame (Figure 1).

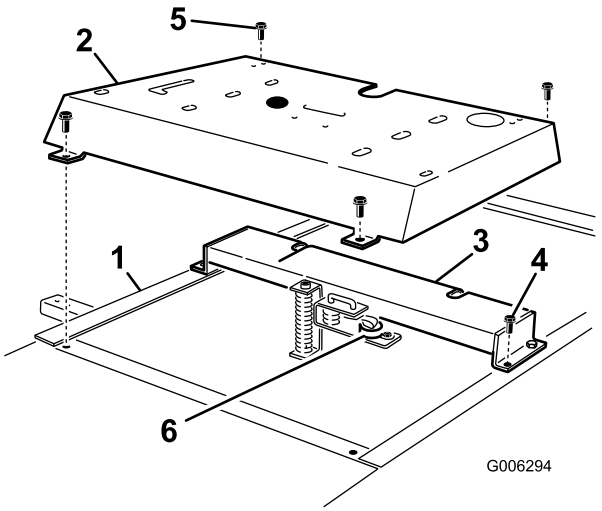

Figure 1

1. Frame
2. Seat support cover
3. Seat support
4. Cap screw
5. Cap screw
6. Switch

6. Pivot the seat forward and secure it to prevent it from falling accidentally. Lift the seat support cover off the frame.
7. Disconnect the seat switch wire connector from the traction unit main wire harness connector (Figure 1).

8. Remove the cap screw and nut securing the seat switch to the seat support mounting bracket and remove the switch (Figure 1).
9. Remove the cap screws securing the seat support to the frame and remove the seat support (Figure 1).
10. Using the dimensions shown in Figure 2, locate, mark and drill (2) .281 inch diameter holes in the front of the seat support.

    Note: When locating the holes in the front of the seat support, measure from the side of the bracket not the pin.

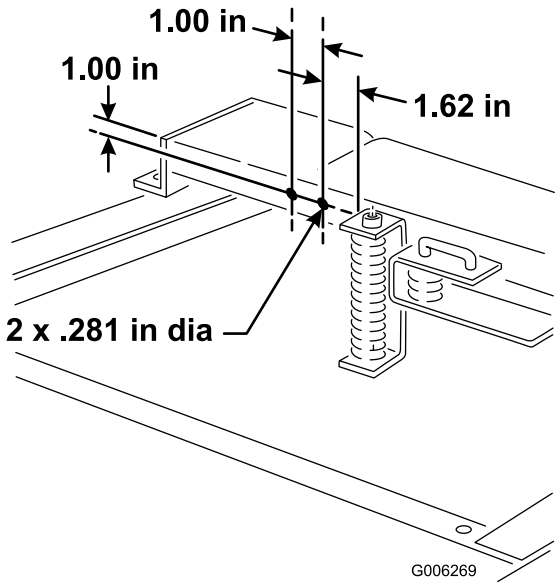

Figure 2

11. Mount the new seat switch bracket to the front of the seat support with (2) cap screws and nuts. Position the bracket as shown in Figure 3.

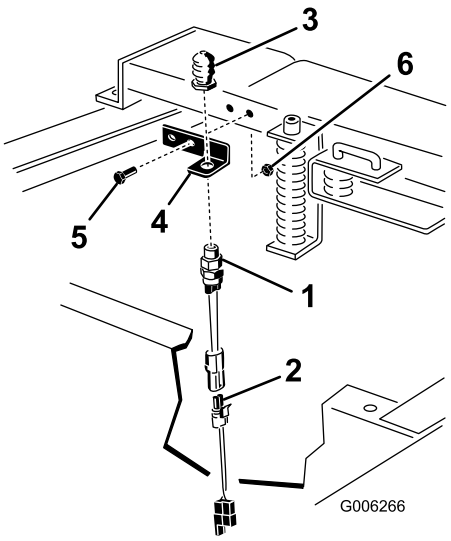

Figure 3

1. Switch
2. Harness adapter
3. Rubber boot
4. Bracket
5. Cap screw
6. Nut

12. Remove the rubber boot and the top jam nut from the button end of the new seat switch (Figure 3).
13. Insert the button end of the seat switch up through the hole in the new seat switch bracket and loosely secure it to the bracket with the jam nut (Figure 3).

    Important: The switch threads will be damaged if the jam nuts are over tightened.
14. Adjust the jam nuts until the top of the switch button is 3/32 inch lower than the top of the spring pin (Figure 4). Tighten the jam nuts to 75 in-lbs.

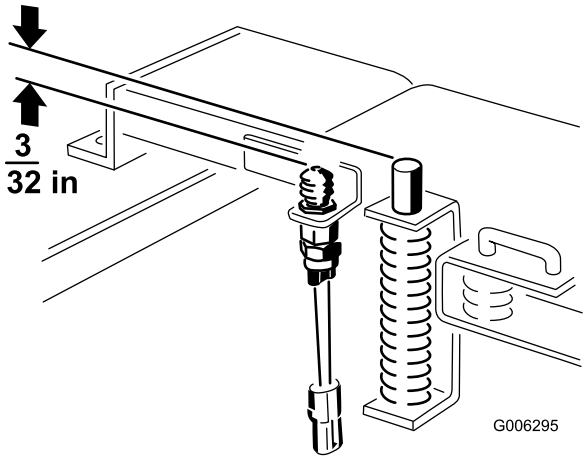

Figure 4

1. 3/32 inch

15. Reinstall the rubber boot to the top of the switch.
16. Connect the wire harness adapter to the switch wire harness (Figure 3).
17. Reinstall the seat support to the frame with the fasteners previously removed.

18. Carefully release the seat to its normally down position, but do not sit or apply pressure to the seat. There should be a slight gap between the seat and the seat plate.
19. Connect a continuity tester or ohm meter to the seat switch connector. With the seat in the down position and no one on the seat, the switch circuit should not have any continuity. If there is continuity, recheck switch installation. If there is no continuity, proceed to the next step.
20. Sit on the seat. The seat switch should have continuity. If there is no continuity, recheck switch installation. If there is continuity, disconnect the continuity tester or ohm meter from the seat switch connector and proceed to the next step.
21. Connect the wire harness adapter to the traction unit main wire harness connector.
22. Using the dimensions shown in Figure 5, locate, mark and drill a 1.25 inch diameter hole in the top of the seat support cover.

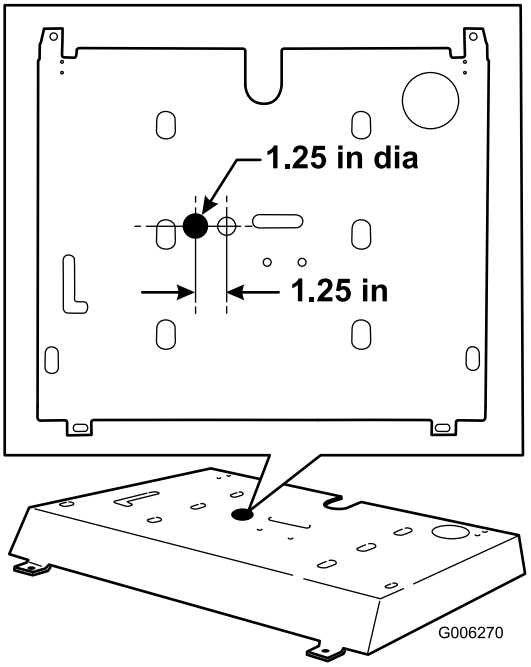

Figure 5

23. Reinstall the seat support cover to the frame with the fasteners previously removed.
24. Install the knob onto the lift lever.

2

Replace the PTO Switch

Parts needed for this procedure:

1	Switch
1	Adapter harness
1	Bracket
3	Screw (1/4 x 3/4 inch)
3	Nut (1/4 inch)
1	Bracket

Procedure

1. Remove the fasteners securing the controls, switches and buttons to the instrument panel (Figure 6).

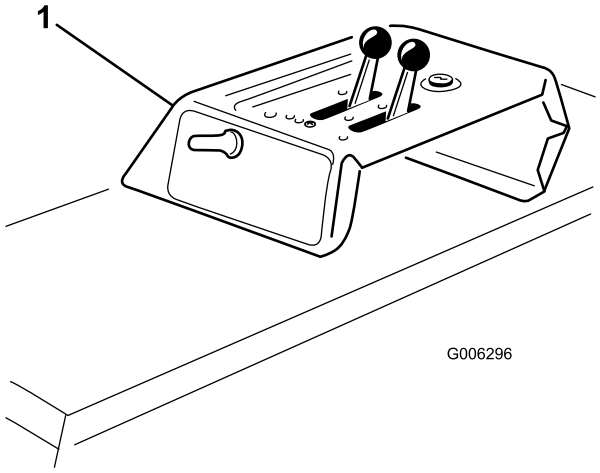

Figure 6

1. Instrument panel

2. Remove the (2) instrument panel mounting cap screws and lift off the instrument panel.
3. Trim away the bottom front portion of the instrument panel, as shown in Figure 7.

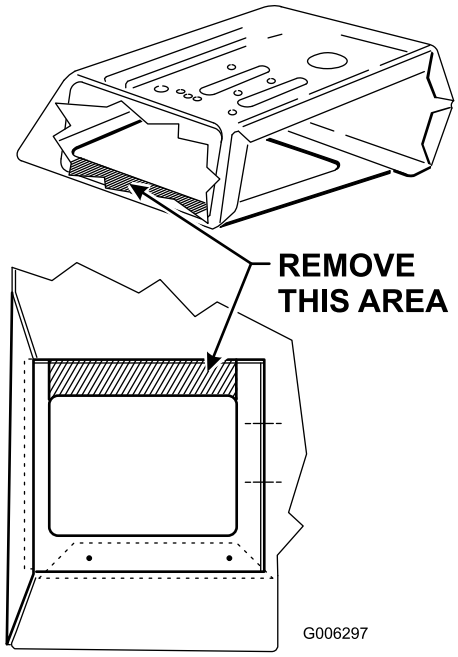

Figure 7

4. Disconnect the PTO switch wire connector from the traction unit main wire harness connector (Figure 8).
5. Remove the cap screw securing the PTO switch to the frame mounting bracket and remove the switch Figure 8

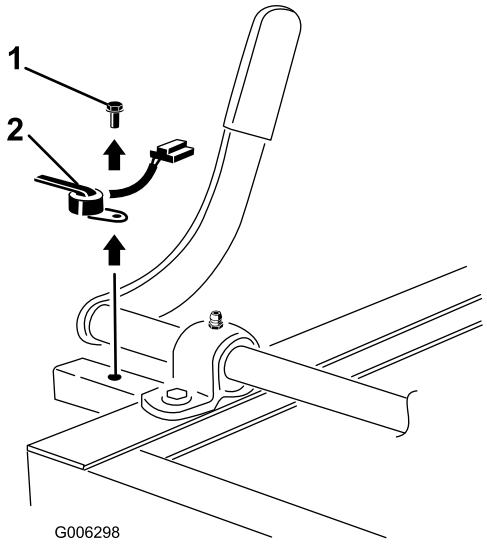

Figure 8

1. Cap screw
2. PTO switch

6. On the frame mounting bracket, enlarge the switch mounting holes to .281 inch diameter (Figure 9).

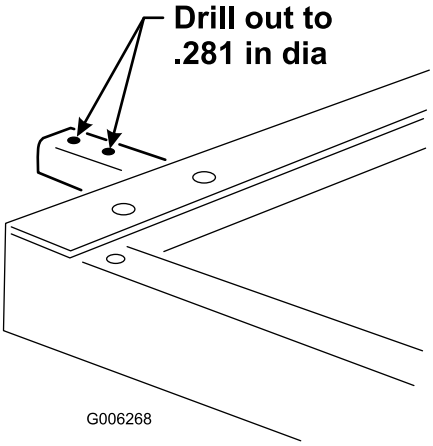

Figure 9

7. Use the dimension shown in Figure 10 and the bracket to locate, mark and drill a .281 inch diameter hole in the PTO lever.

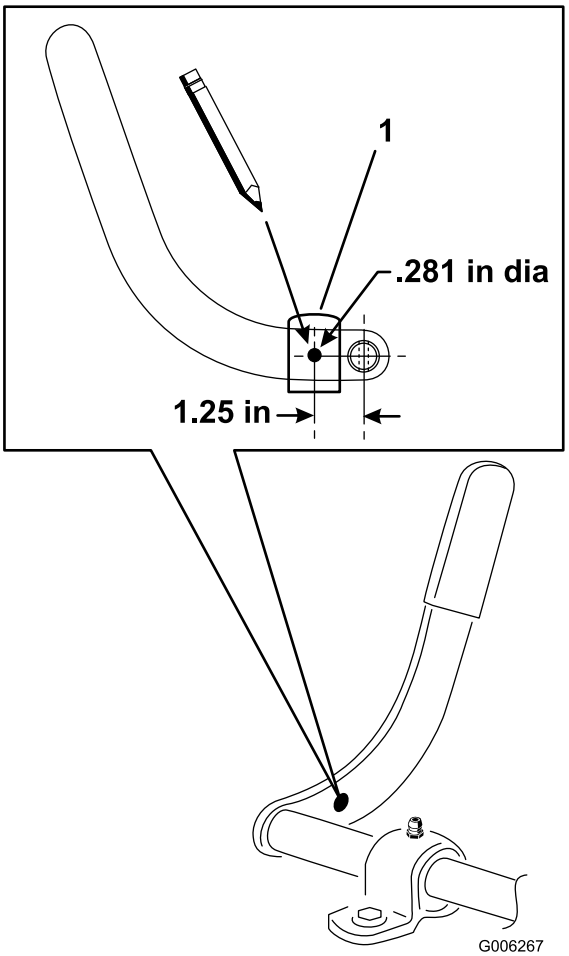

Figure 10

1. Bracket

8. Remove the rubber boot and the top jam nut from the button end of the new PTO switch (Figure 11).
9. Insert the button end of the PTO switch up through the hole in the PTO switch bracket and loosely

secure it to the bracket with the jam nut. Position the switch as shown in Figure 11.

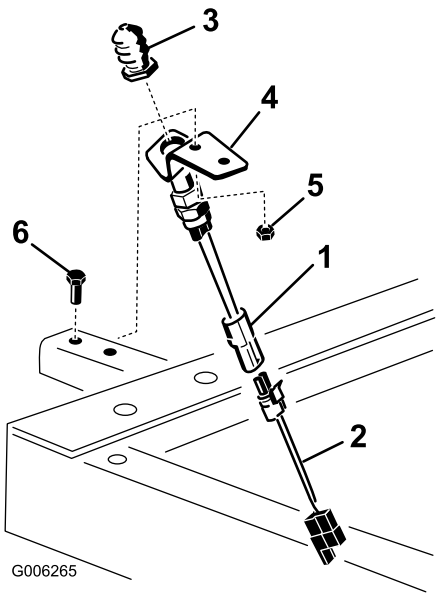

Figure 11

1. Switch
2. Harness adapter
3. Rubber boot
4. Bracket
5. Nut
6. Cap screw

10. Mount the switch bracket to the underside of the frame mounting bracket with (2) cap screws and nuts. Position the bracket as shown in Figure 11.

11. Mount the PTO switch actuator bracket to the PTO lever with a cap screw and nut. Position the bracket as shown in Figure 12.

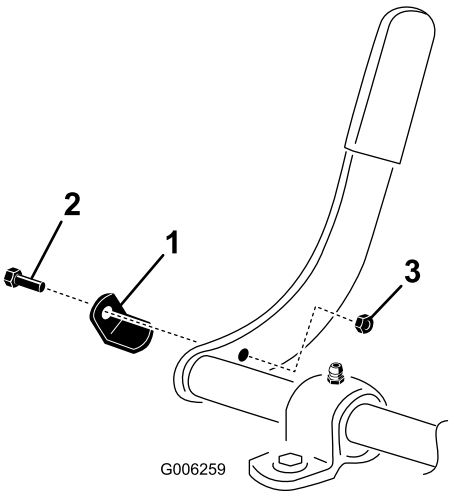

Figure 12

1. Bracket
2. Cap screw
3. Nut

12. Adjust the jam nuts so the switch button is depressed 1/2 inch when the PTO lever is moved to the OFF position. Tighten the jam nuts to 75 in-lbs.

Important: The switch threads will be damaged if the jam nuts are over tightened.

13. Connect the wire harness adapter to the switch wire harness (Figure 11).

14. Reinstall the rubber boot to the top of the switch (Figure 11).

15. Connect a continuity tester or ohm meter to the switch connector. With the PTO lever in the ON position the switch circuit should not have any continuity. If there is continuity, recheck switch installation. If there is no continuity, proceed to the next step.

16. Move the PTO lever to the OFF position. When the PTO lever is in its normal, released position, the PTO switch should have continuity. If there is no continuity, recheck switch installation. If there is continuity, disconnect the continuity tester or ohm meter from the switch connector and proceed to the next step.

17. Connect the wire harness adapter to the traction unit main wire harness connector.

18. Reinstall the instrument panel to the frame with the fasteners previously removed.

19. Install the controls to the instrument panel.

Notes:

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Count on it.