



Accessory Control Kit

Groundsmaster® 3200 or 3300 Series Traction Unit

Model No. 31994

Installation Instructions

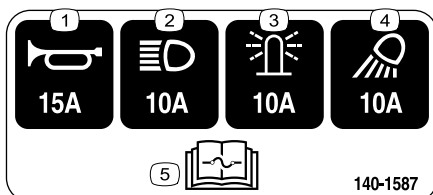
Note: Models 31900, 31901, 31902, and 31907 require the additional Power Harness Kit (Part No. 140-1559). Models with cabs do not use the Power Harness Kit.

Safety

Safety and Instructional Decals



Safety decals and instructions are easily visible to the operator and are located near any area of potential danger. Replace any decal that is damaged or missing.



decal140-1587

140-1587

1. Horn—15 A
2. Headlights—10 A
3. Beacon—10 A
4. Work lights—10 A
5. Read the *Operator's Manual* for fuse information.

Installation

Loose Parts

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

Procedure	Description	Qty.	Use
1	No parts required	–	Prepare the machine.
2	Switch mount Clip (1/4 inch) Speed nut Fuse mount plate U-type speed nut Fuse block Screw (#10 x 3/4 inch)	1 6 2 1 4 1 2	Install the clips, speed nuts, and fuse block.



Procedure	Description	Qty.	Use
3	Mount bracket	2	Install the switch mount.
	Carriage bolt (1/4 x 2 inches)	4	
	Locknut (1/4 inch)	2	
	Hex-head screw (1/4 x 3/4 inch)	2	
	Flange nut (1/4 inch)	2	
	Flasher	1	
	Relay	1	
	Wire harness	1	
	Cable tie	2	
	Fuse cover	1	
	Thumb screw	2	
	Push nut	2	
	Decal	1	
	Screw (#10 x 3/8 inch)	2	
	Multi-function switch	1	
	Hole plug	3	
	Rocker switch	1	
	Control cover	1	
Hex-head screw (1/4 x 3/4 inch)	6		
Switch clip	2		
Push rivet	2		
4	No parts required	–	Route the wire harness.

1

Preparing the Machine

No Parts Required

Procedure

1. Park the machine on a level surface.
2. Shift to the NEUTRAL position.
3. Lower all attachments (if equipped).
4. Engage the parking brake.
5. Shut off the engine and remove the key.
6. Disconnect the battery; refer to your machine *Operator's Manual*.

2

Installing the Clips, Speed Nuts, and Fuse Block

Parts needed for this procedure:

1	Switch mount
6	Clip (1/4 inch)
2	Speed nut
1	Fuse mount plate
4	U-type speed nut
1	Fuse block
2	Screw (#10 x 3/4 inch)

Procedure

1. Install the 6 clips and 2 speed nuts to the switch mount (Figure 1).

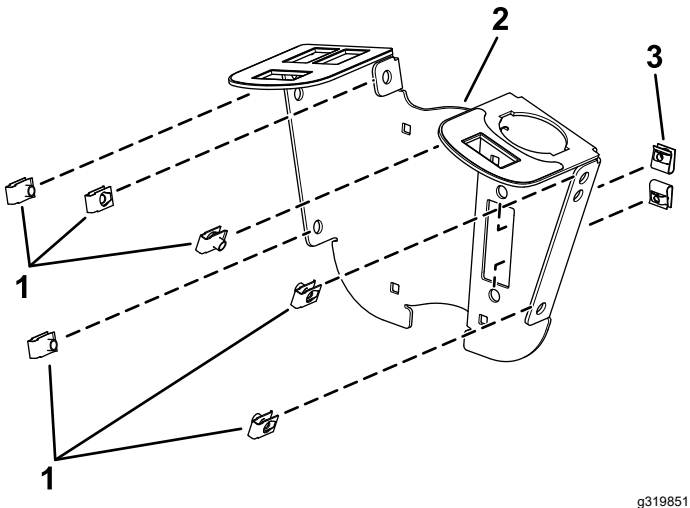


Figure 1

g319851

1. Clip
2. Switch mount
3. Speed nut

2. Install the U-type speed nuts to the fuse-mount plate (Figure 2).

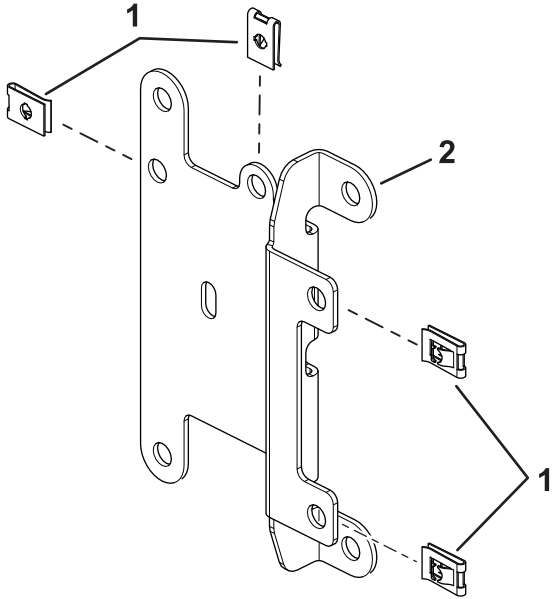


Figure 2

g304335

1. U-type speed nuts
2. Fuse-mount plate

3. Install the fuse block on the wire harness to the fuse-mount plate using 2 screws (#10 x 3/4 inch) as shown in Figure 3.

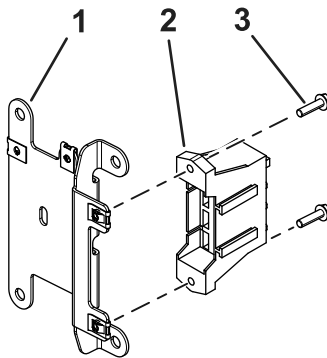


Figure 3

g304300

1. Fuse-mount plate
2. Fuse block on the wire harness
3. Screw (#10 x 3/4 inch)

3

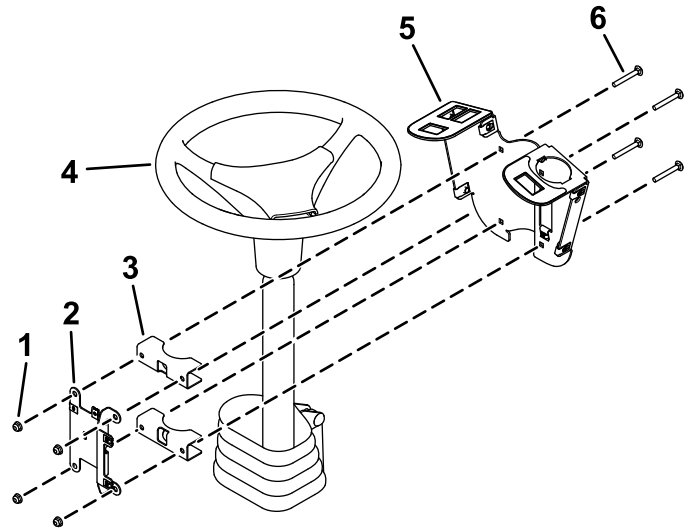
Installing the Switch Mount

Parts needed for this procedure:

2	Mount bracket
4	Carriage bolt (1/4 x 2 inches)
2	Locknut (1/4 inch)
2	Hex-head screw (1/4 x 3/4 inch)
2	Flange nut (1/4 inch)
1	Flasher
1	Relay
1	Wire harness
2	Cable tie
1	Fuse cover
2	Thumb screw
2	Push nut
1	Decal
2	Screw (#10 x 3/8 inch)
1	Multi-function switch
3	Hole plug
1	Rocker switch
1	Control cover
6	Hex-head screw (1/4 x 3/4 inch)
2	Switch clip
2	Push rivet

Procedure

1. Loosely install the switch mount around the steering column using 4 carriage bolts (1/4 x 2 inches), 2 mounting brackets, fuse-mount plate, and 4 locknuts (1/4 inch) as shown in [Figure 4](#).



g319856

Figure 4

- | | |
|------------------------|-----------------------------------|
| 1. Locknuts (1/4 inch) | 4. Steering column |
| 2. Fuse-mount plate | 5. Switch mount |
| 3. Mounting brackets | 6. Carriage bolt (1/4 x 2 inches) |

2. Install the multi-function switch to the switch mount and secure it using the switch clips under the hole for the switch (Figure 5).

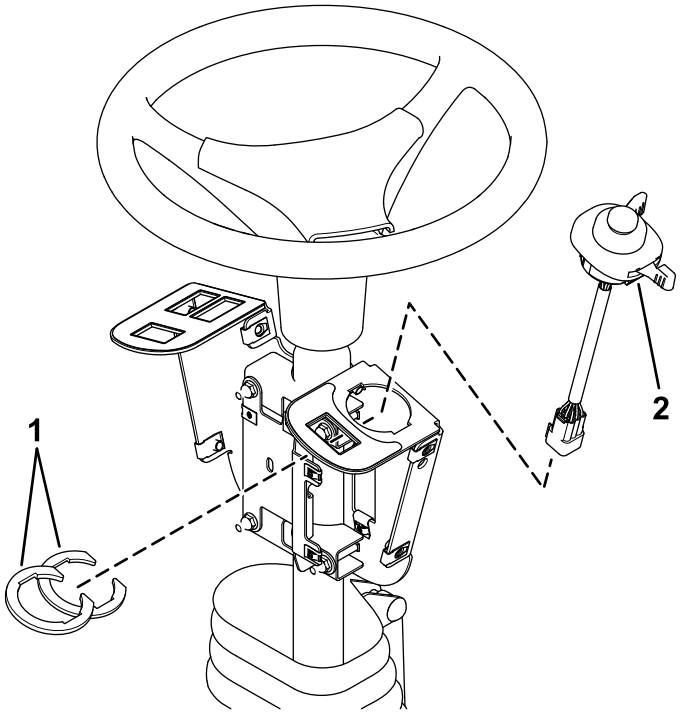


Figure 5

g319854

1. Switch clips
2. Multi-function switch

3. Install the rocker switch and hole plugs into the switch mount (Figure 6).

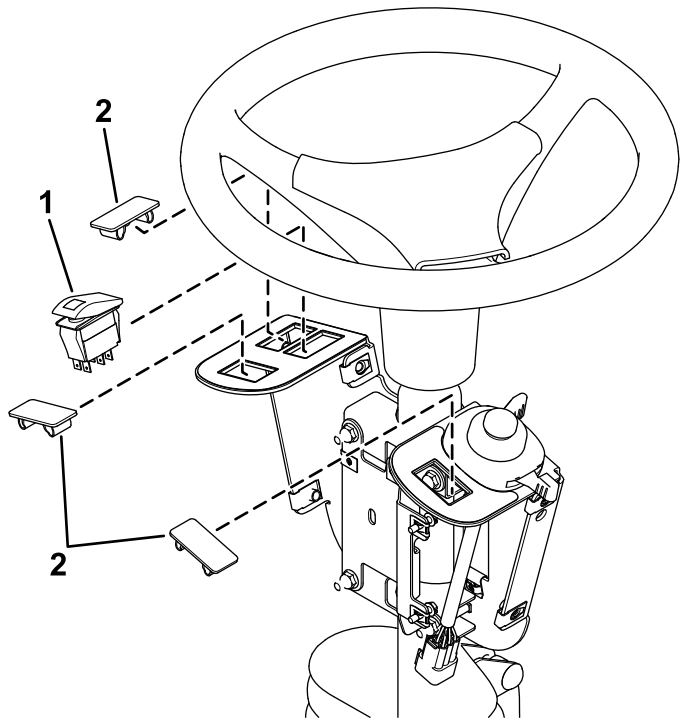


Figure 6

g319855

1. Rocker switch
2. Hole plug

4. Install the flasher and relay to the fuse-mount plate using 2 screws (#10 x 3/8 inch) as shown in [Figure 7](#).

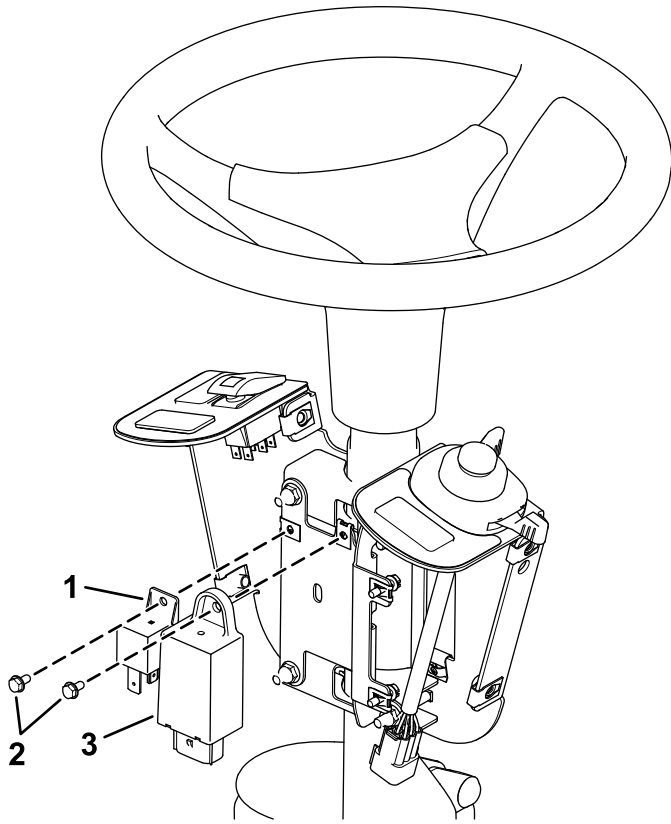


Figure 7

g319853

1. Relay
2. Screw (#10 x 3/8 inch)
3. Flasher

5. Secure the flasher using a cable tie ([Figure 8](#)).
6. Plug the harness into the rocker switch and multi-function switch ([Figure 8](#)).

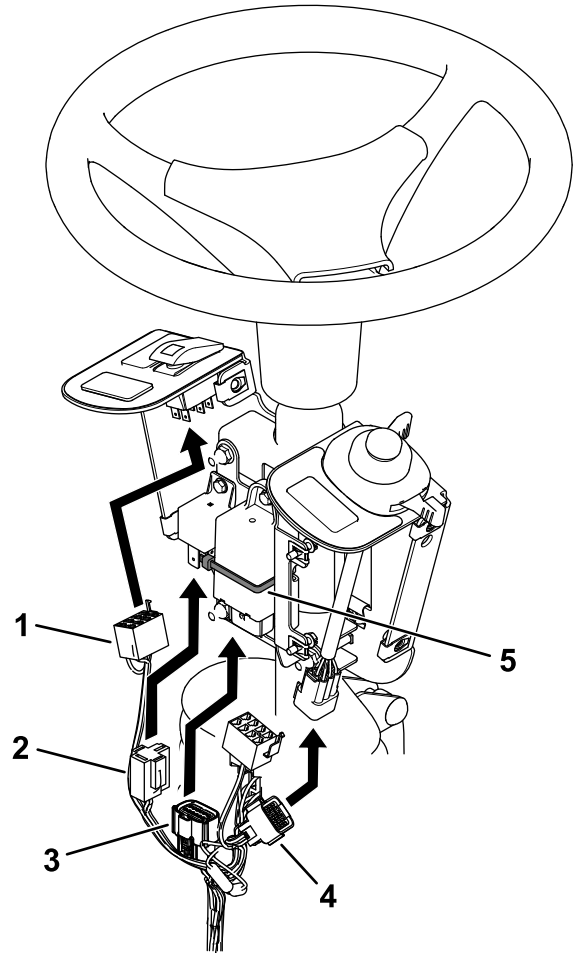


Figure 8

g319850

1. Rocker switch connector
2. Relay connector
3. Flasher connector
4. Switch connector
5. Cable tie

7. Plug the wire harness into the relay and flasher ([Figure 8](#)).
8. If the machine is used in North America, connect the bullet connectors as shown in [Figure 9](#).

Note: Do not connect the bullet connectors if the machine is used outside of North America.

This connection sets the flasher rate required for North America vs. non-North America road regulations.

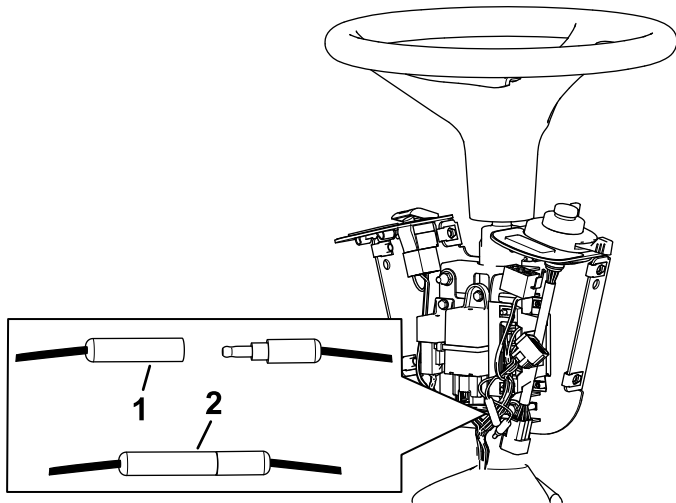


Figure 9

g319849

1. Not connected—for non-North America machines
2. Connected—for North America machines

9. Apply the decal to the fuse cover as shown in [Figure 10](#).

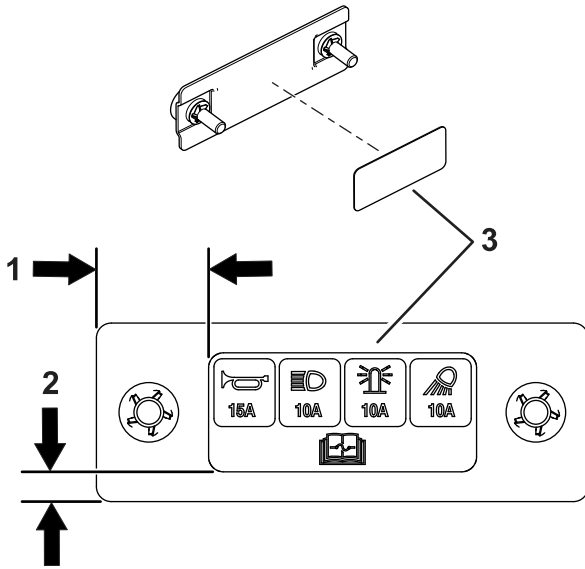


Figure 10

g304374

1. 25 mm (1 inch)
2. 6 mm (1/4 inch)
3. Decal—inside of fuse cover

10. Install the fuse cover to the switch mount using 2 thumb screws and 2 push nuts ([Figure 11](#)).

Note: Ensure that the push nuts are installed on the inside of the fuse cover ([Figure 11](#)).

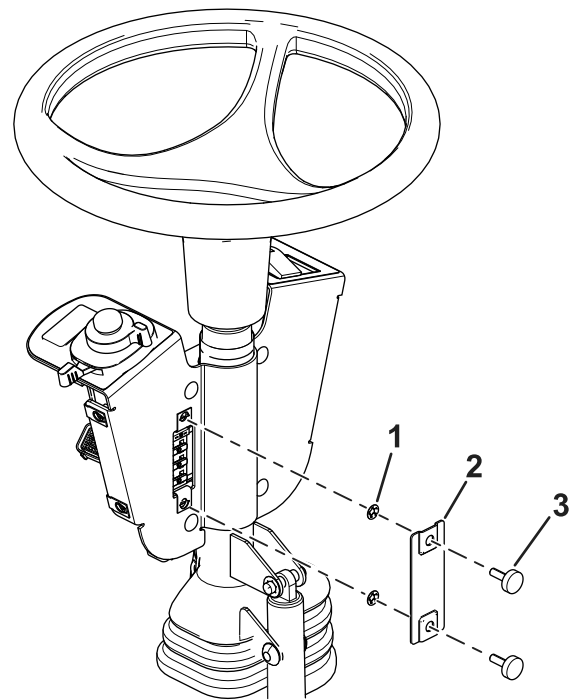


Figure 11

g304295

1. Push nut
2. Fuse cover
3. Thumb screw

11. Adjust the control assembly so that the switches are accessible.
12. Tighten all the fasteners.
13. Install the control cover to the switch mount using 2 push rivets and 6 hex-head screws (1/4 x 3/4 inch) as shown in [Figure 12](#).

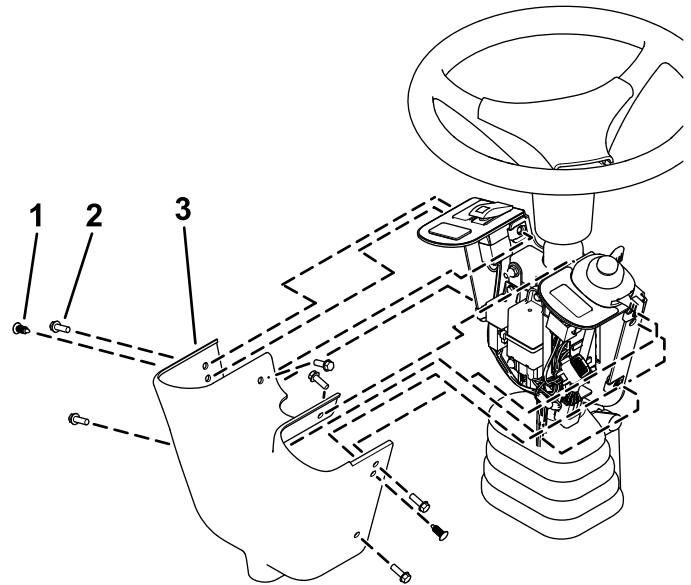


Figure 12

g319852

1. Push rivet
2. Hex-head screw
3. Control cover

4

Routing the Wire Harness

No Parts Required

Procedure

1. Loosen the bolts around the steering-column base (Figure 13)
2. Raise the base up and drill a 22 mm (7/8 inch) hole as shown in Figure 13.

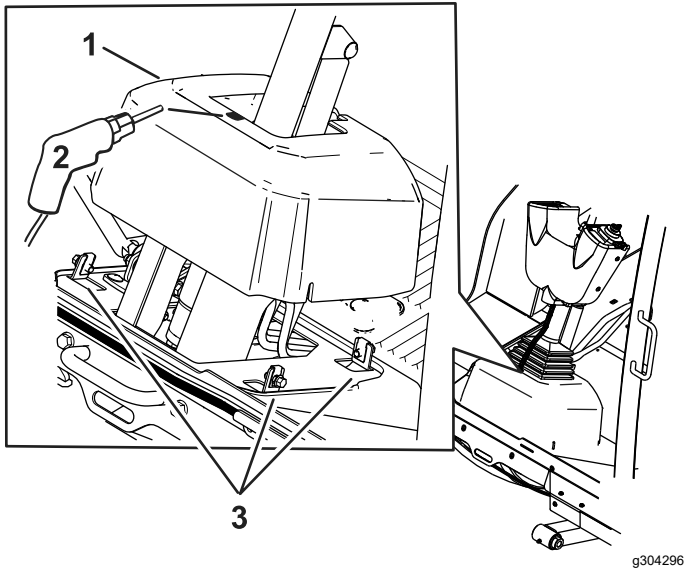


Figure 13

1. Steering-column base
2. Drill a 22 mm (7/8 inch) hole
3. Bolts

3. Route the harness through the hole you drilled in the base.

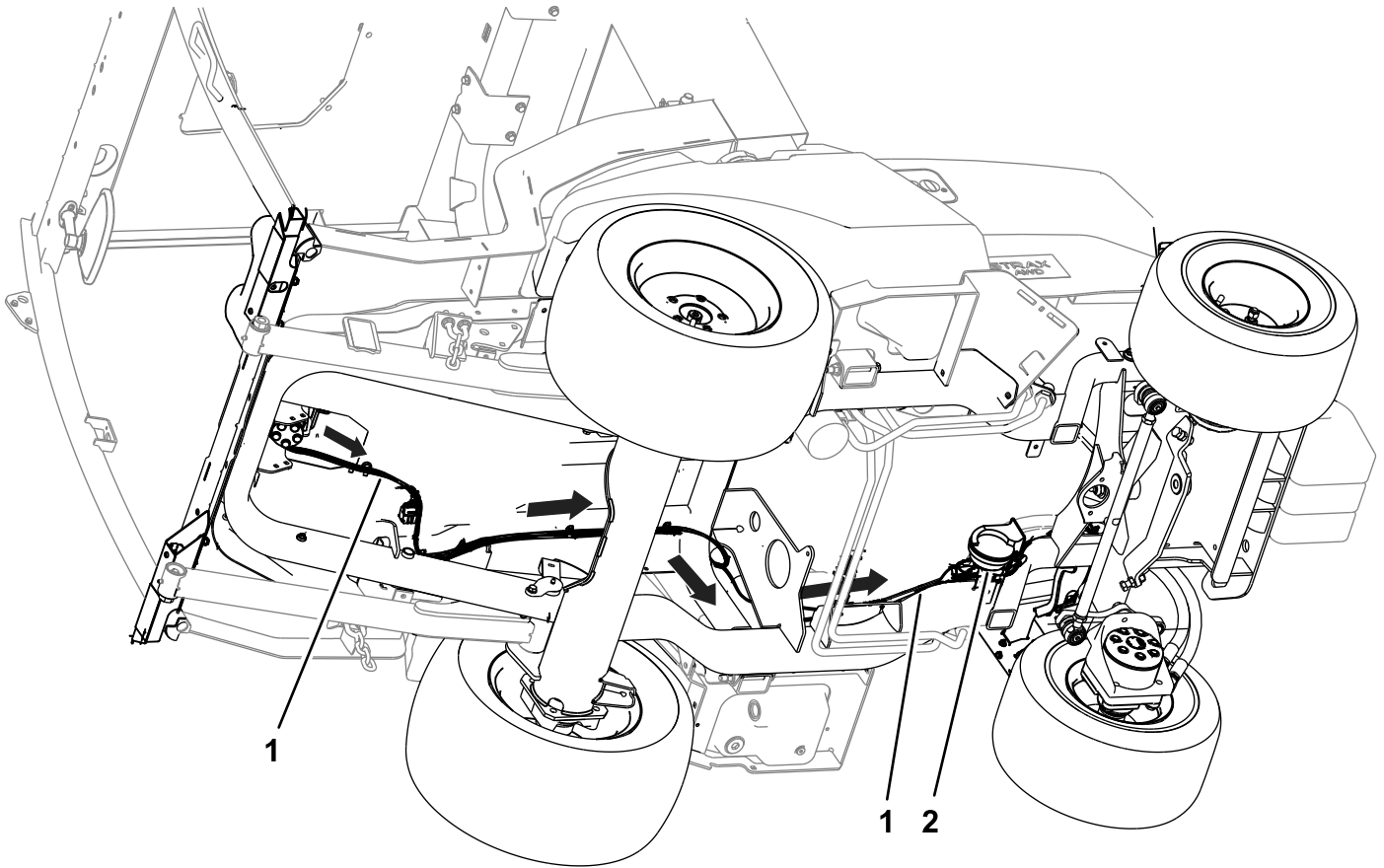
4. Route the control wire-harness connector (P05) to the right side of the machine (Figure 14).
5. Connect the harness.
 - A. For cab units:

Connect the control wire-harness connector labeled TO POWER HARNESS (P05) to the cab wire-harness connector labeled POD CONTROL HARNESS (P04); refer to Figure 15.
 - B. For ROPs units:

Note: Ensure the additional power harness kit (Part No. 140-1559) is installed.

Connect the control wire-harness connector labeled TO POWER HARNESS (P05) to power wire-harness connector labeled POD CONTROL HARNESS (P04); refer to Figure 15.

6. When optional horn or light kits are installed, connect the wire harness to the optional kits (Figure 14).

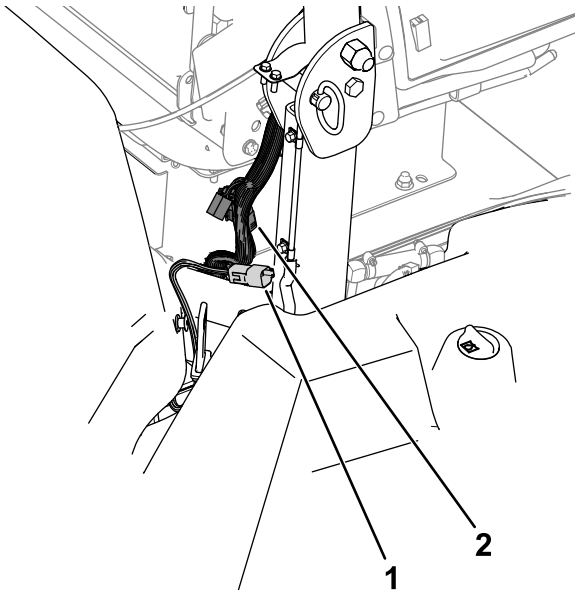


g350514

Figure 14

1. Wire harness

2. Horn connection



g304373

Figure 15

1. P05 (control wire-harness connector)

2. P04 (pod control harness connector)

7. Connect the battery; refer to your machine *Operator's Manual*.

Notes:

Notes:



Count on it.