



Power Harness Kit

Reelmaster® 3000 Series Traction Unit

Model No. 138-2993

Installation Instructions

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	No parts required	–	Disconnect the battery.
3	No parts required	–	Access the machine.
4	Power harness Relay Fuse	1 1 1	Assemble the relay and fuse to the power harness.
5	Harness adapter	1	Connect the harness adapter to the power harness (Reelmaster 3100 series traction units only).
6	No parts required	–	Route the wire harness.
7	No parts required	–	Assemble the ring terminals to the battery cables.
8	No parts required	–	Connect the brake switch to the power harness (Reelmaster 3550-D, 3555-D, and 3575-D series traction units only).
9	No parts required	–	Connect the key switch to the power harness/harness adapter (Reelmaster 3100 series traction units only).
10	Cable tie	1	Connect the power harness to the sunshade wire harness.
11	Cable tie	5	Secure the power harness to the machine.
12	No parts required	–	Connect the battery.
13	No parts required	–	Install the Inner battery cover.
14	No parts required	–	Install the console cover and close the hood.
15	No parts required	–	Install the outer battery cover.



1

Preparing the Machine

No Parts Required

Procedure

⚠ CAUTION

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

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

1. Park the machine on a level surface.
2. Engage the parking brake.
3. Lower the cutting units.
4. Shut off the engine and remove the key.

2

Disconnecting the Battery

No Parts Required

Procedure

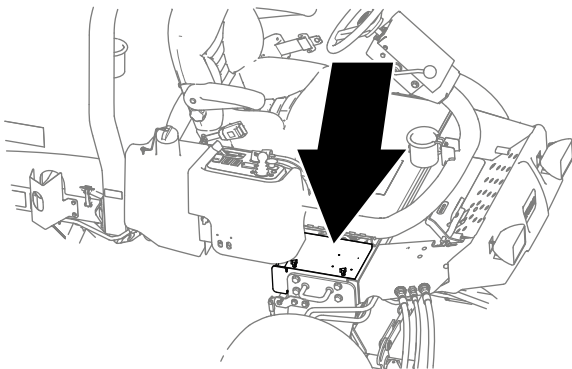


Figure 1

g251830

⚠ WARNING

Electrical sparks can cause the battery gasses to explode, resulting in personal injury.

Incorrect battery cable routing could damage the machine and cables, causing sparks.

- Always disconnect the negative (black) battery cable before disconnecting the positive (red) cable.
- Always connect the positive (red) battery cable before connecting the negative (black) cable.

⚠ WARNING

Battery terminals or metal tools could short against metal components, causing sparks.

- When removing or installing the battery, do not allow the battery terminals to touch any metal parts of the machine.
- Do not allow metal tools to short between the battery terminals and metal parts of the machine.
- Always keep the battery strap in place to protect and secure the battery.

1. Loosen the 2 knobs that secure the outer battery cover to the frame of the machine, and remove the cover (Figure 2).

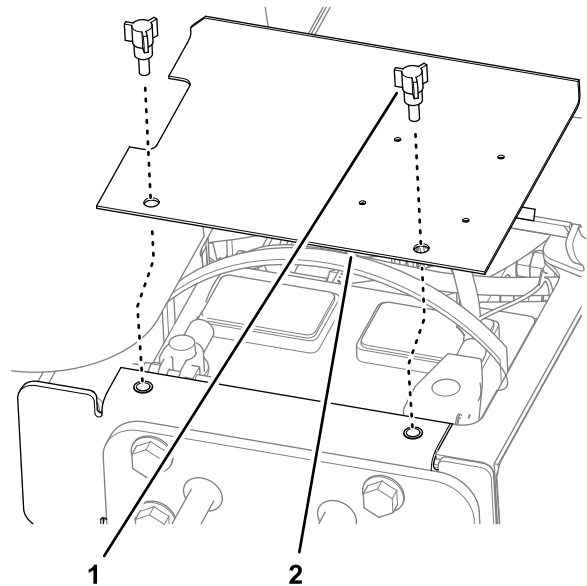


Figure 2

g251829

1. Knob
2. Outer battery cover

2. Remove the negative battery cable from the battery post (Figure 3).

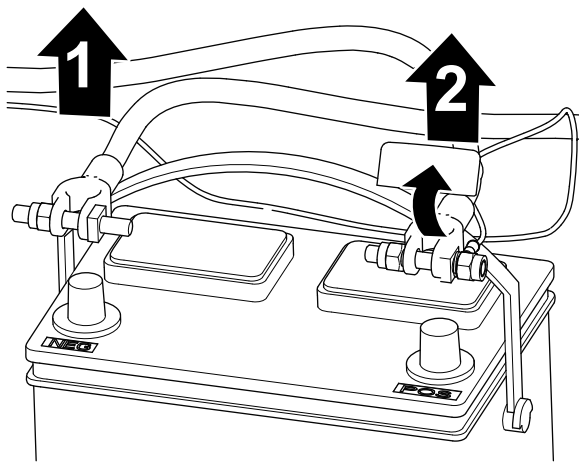


Figure 3

g251831

1. Negative battery cable
2. Positive battery cable

3. Remove the positive battery cable from the battery post (Figure 3).

3

Accessing the Machine

No Parts Required

Opening the Hood

Unlatch and open the hood (Figure 4).

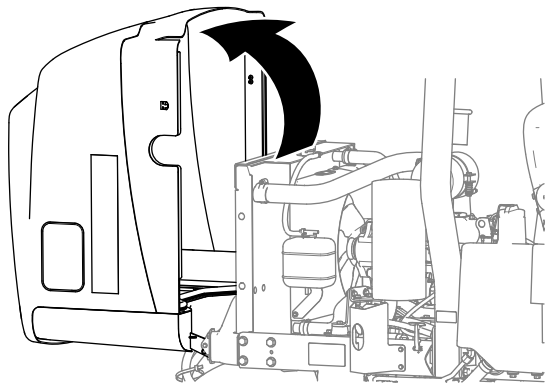


Figure 4

g251881

Removing the Console Cover

1. Ensure that the parking brake is engaged (Figure 5).

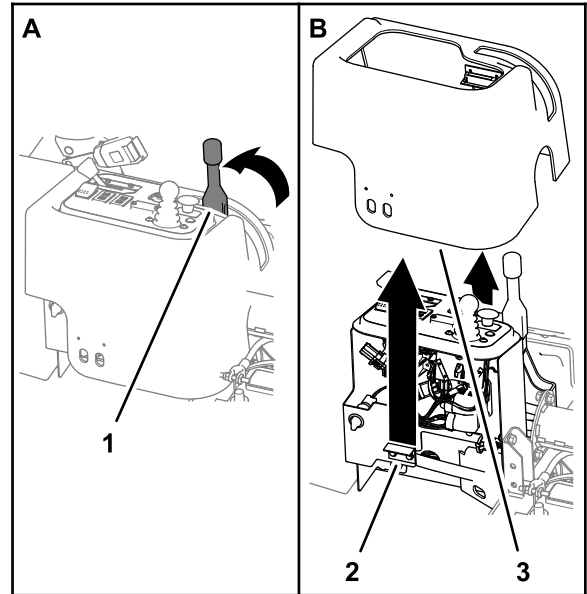


Figure 5

g251882

1. Parking brake lever (engaged position)
2. Magnet strike bracket
3. Console cover

2. Pull up the console cover to free the magnetic catch of the cover from the strike bracket on the console support (Figure 5).
3. Remove the cover from the machine.

Removing the Inner Battery Cover

1. Remove the 2 flange head bolts (1/4 x 5/8 inch) that secure the inner battery cover to the frame of the machine (Figure 6).

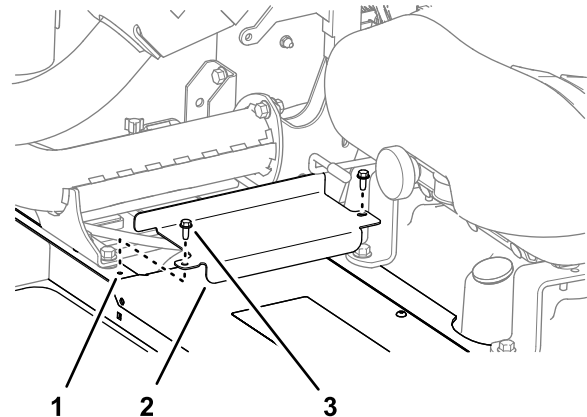


Figure 6

g251883

1. Frame of the machine
2. Inner battery cover
3. Flange-head bolt (1/4 x 5/8 inch)

- Remove the inner battery cover from the machine (Figure 6).

4

Assembling the Relay and Fuse to the Power Harness

Parts needed for this procedure:

1	Power harness
1	Relay
1	Fuse

Procedure

- Assemble the relay into the 4-contact connector of the power harness (Figure 7).

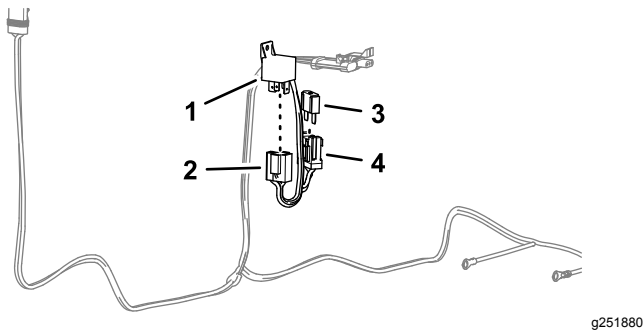


Figure 7

- | | |
|--|--------------------------------|
| 1. Relay | 3. Fuse (60 A) |
| 2. 4-contact connector (power harness) | 4. Fuse holder (power harness) |

- Insert the fuse (60 A) into the socket of the fuse-holder for the power harness (Figure 7).

5

Connecting the Harness Adapter to the Power Harness

Reelmaster 3100 Series Traction Units Only

Parts needed for this procedure:

1	Harness adapter
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Procedure

- Connect the 3-socket connector of the harness adapter into the 3-pin connector of the power harness (Figure 8).

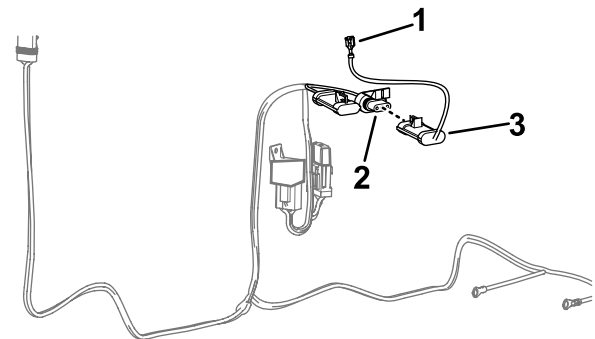


Figure 8

- | | |
|-------------------------------------|---|
| 1. Spade terminal (harness adapter) | 3. 3-socket connector (harness adapter) |
| 2. 3-pin connector (power harness) | |

6

Routing the Power Harness

No Parts Required

Procedure

1. Route the 2 ring terminals of the power harness through the opening where you removed the inner battery cover (Figure 9)

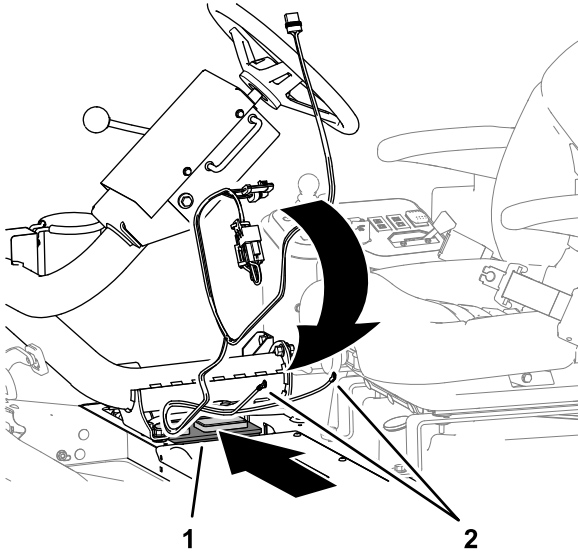


Figure 9

1. Opening (inner battery cover)
2. Ring terminals (power harness)

2. Route the rest of the power harness along the wire harness of the machine and through the support channel (Figure 10).

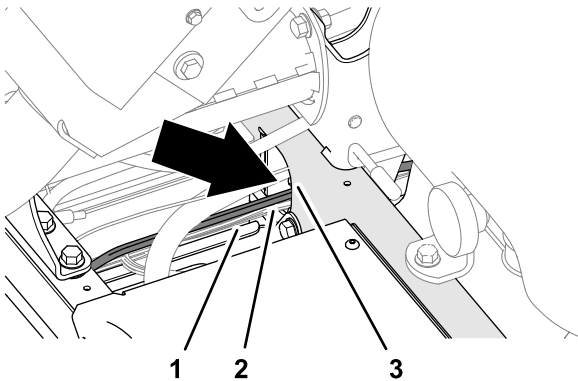


Figure 10

1. Machine wire harness
2. Power harness
3. Support channel

3. Route the wire harness along the bottom of the control console and rearward to the roll bar (Figure 11).

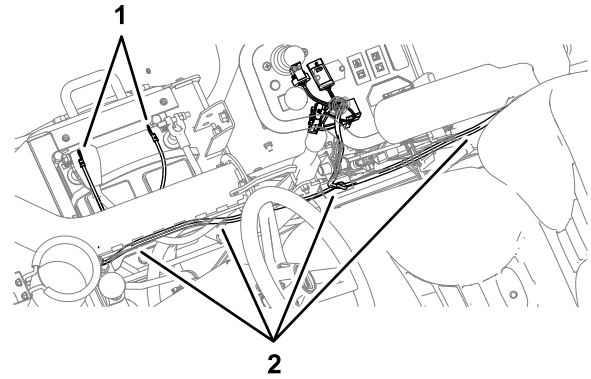


Figure 11

1. Ring terminals
2. Power harness

4. Route the power harness along the bottom of the fuel tank and up the right roll-bar tube (Figure 12).

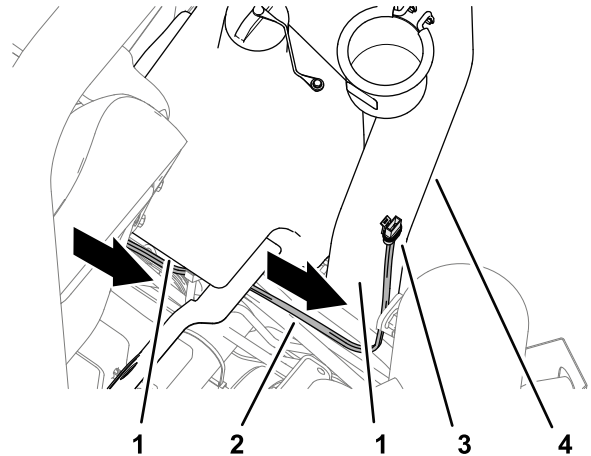


Figure 12

1. Fuel tank
2. Power harness
3. 2-socket connector
4. Right roll-bar tube

7

Assembling the Ring Terminals to the Battery Cables

No Parts Required

Procedure

1. At the positive and negative battery cables, remove the battery-clamp nuts from the short side of the battery clamp bolts.
2. Assemble the ring terminal of the power harness for the wire labeled BATTERY (-) onto the battery clamp bolt for the negative battery cable with a battery-clamp nut (Figure 13).

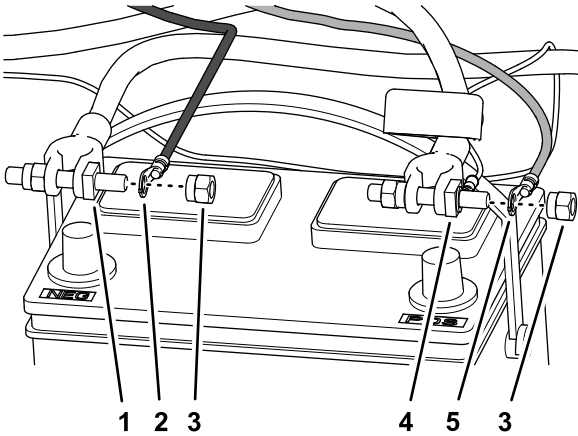


Figure 13

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- | | |
|--|--|
| 1. Battery clamp bolt (negative battery cable) | 4. Battery clamp bolt (positive battery cable) |
| 2. Ring terminal—power harness BATTERY (-) | 5. Ring terminal—power harness BATTERY (+) |
| 3. Battery-clamp nuts | |

3. Assemble the ring terminal of the power harness for the wire labeled BATTERY (+) onto the battery clamp bolt for the positive battery cable with a battery-clamp nut (Figure 13).

Note: Do not assemble the battery cables to the battery posts. You will connect the battery in a later step.

8

Connecting the Parking-Brake Switch to the Power Harness

Reelmaster 3550-D, 3555-D, and 3575-D Series Traction Units Only

No Parts Required

Procedure

1. Disconnect the 3-socket connector of the parking-brake switch from the 3-pin connector of the machine wire harness (Figure 14).

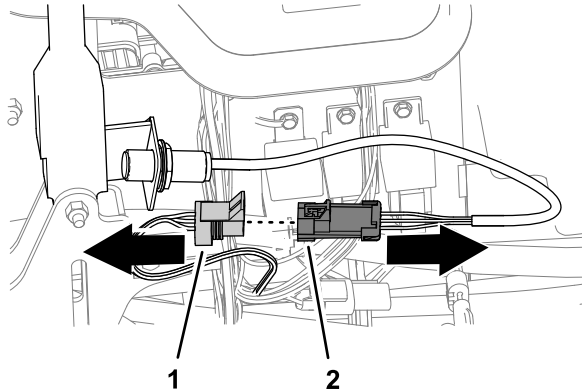


Figure 14

g251958

- | | |
|---|--|
| 1. 3-pin connector (machine wire harness) | 2. 3-socket connector (parking-brake switch) |
|---|--|

2. Connect the 3-socket connector of the parking-brake switch into the 3-pin connector of the power harness (Figure 15).

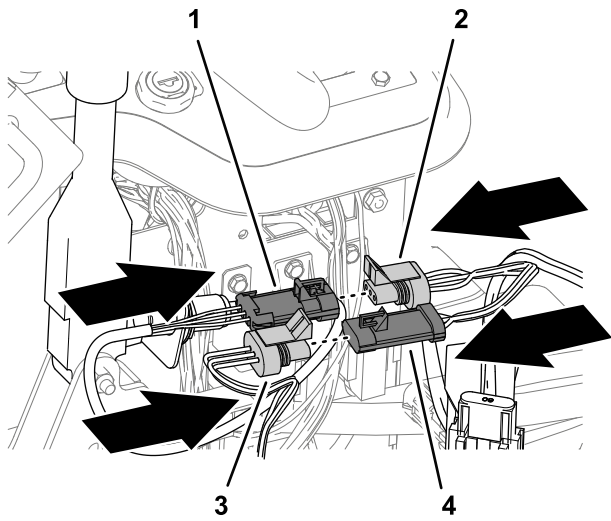


Figure 15

g251957

1. 3-socket connector (parking-brake switch)
 2. 3-pin connector (power harness)
 3. 3-pin connector (machine wire harness)
 4. 3-socket connector (power harness)
-
3. Connect the 3-pin connector of the machine wire harness into the 3-socket connector of the power harness (Figure 15).

9

Connecting the Key Switch to the Power Harness/Harness Adapter

Reelmaster 3100 Series Traction Units Only

No Parts Required

Procedure

1. Disconnect the spade terminal of the machine wire harness from Terminal C of the key switch (Figure 16).

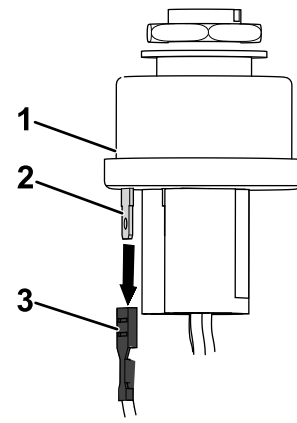


Figure 16

g312391

1. Key switch
2. Terminal C (key switch)
3. Spade terminal (machine wire harness)

-
2. Connect the spade terminal of the harness adapter to Terminal C of the key switch (Figure 17).

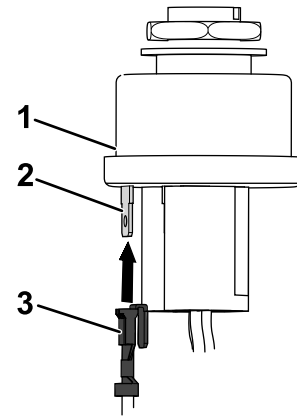


Figure 17

g312394

1. Key switch
2. Terminal C (key switch)
3. Spade terminal (harness adapter)

-
3. Connect the spade terminal of the machine wire harness to the piggy back terminal of the harness adapter (Figure 18).

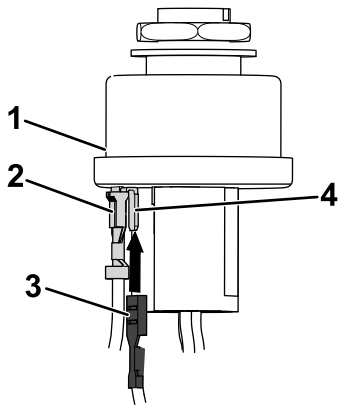


Figure 18

g312397

- | | |
|-------------------------------------|--|
| 1. Key switch | 3. Spade terminal (machine wire harness) |
| 2. Spade terminal (harness adapter) | 4. Piggy back terminal (harness adapter) |

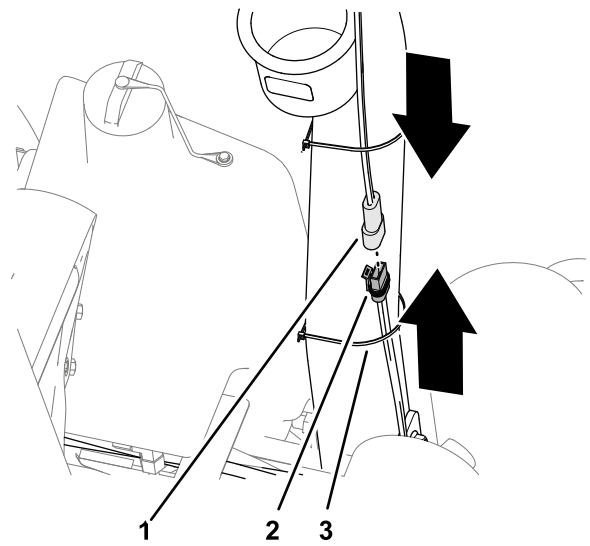


Figure 19

g252045

- | | |
|--|--------------|
| 1. 2-pin connector (sunshade wire harness) | 3. Cable tie |
| 2. 2-socket (power harness) | |

- Secure the power harness to the roll-bar tube with a cable tie (Figure 19).

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Connecting the Power Harness to the Sunshade Wire Harness

Parts needed for this procedure:

1	Cable tie
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Procedure

- Plug the 2-socket connector of the power harness into the 2-pin connector for the sunshade wire harness (Figure 19).

11

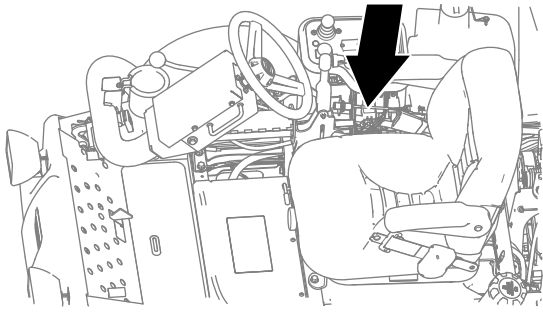
Securing the Power Harness to the Machine

Parts needed for this procedure:

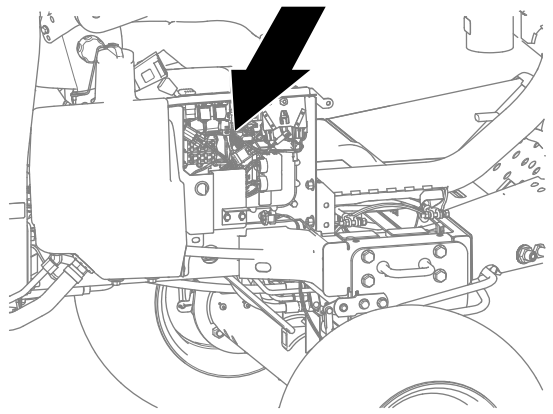
5	Cable tie
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Procedure

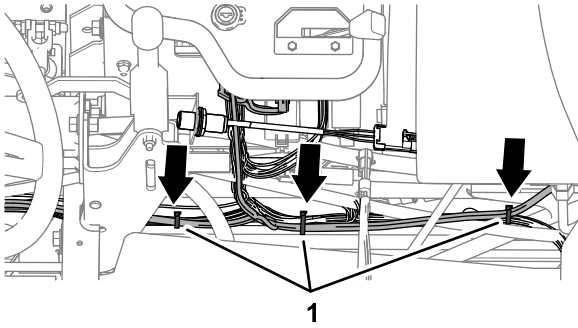
- Between the control console and the operator's seat, secure the power harness to the wire harness of the machine with cable ties as shown in Figure 20.



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g252096

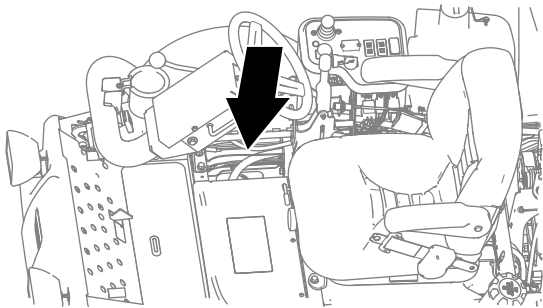


g252091

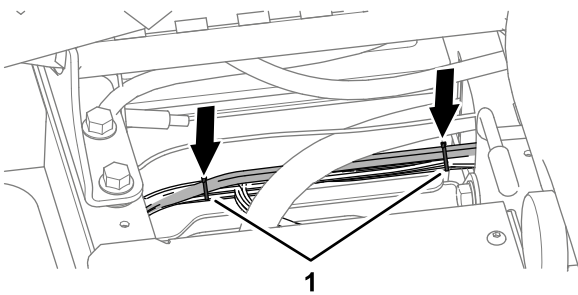
Figure 20

1. Cable ties

2. At the opening where you removed the inner battery cover, secure the power harness to the wire harness of the machine with cable ties as shown in [Figure 21](#).



g252094

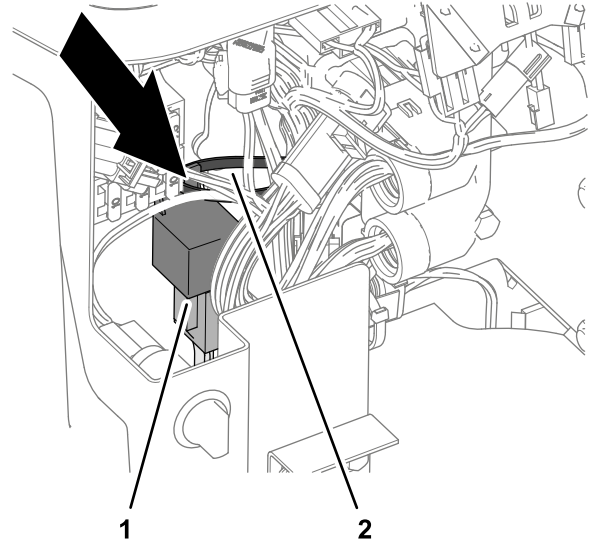


g252093

Figure 21

1. Cable ties

3. Inside the control console, secure the solenoid to the wire harness of the machine with a cable tie ([Figure 22](#)).



g252092

Figure 22

1. Solenoid
2. Cable tie

12

Connecting the Battery

No Parts Required

Procedure

⚠ WARNING

Electrical sparks can cause the battery gasses to explode, resulting in personal injury.

Incorrect battery cable routing could damage the machine and cables, causing sparks.

- Always disconnect the negative (black) battery cable before disconnecting the positive (red) cable.
- Always connect the positive (red) battery cable before connecting the negative (black) cable.

1. Connect the positive cable to the battery and tighten the battery-clamp nut (Figure 23).

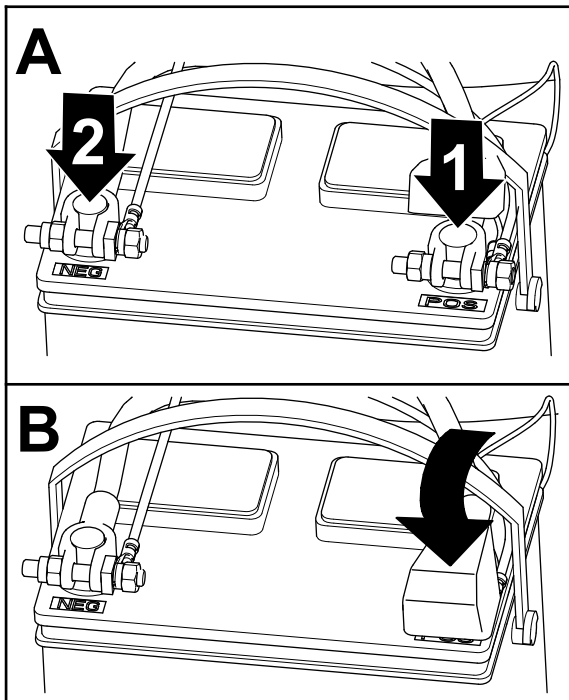


Figure 23

g252090

1. Positive battery cable
2. Negative battery cable

2. Connect the negative cable to the battery and tighten the battery-clamp nut (Figure 23).

3. Assemble the insulator over the positive battery terminal (Figure 23).

13

Installing the Inner Battery Cover

No Parts Required

Procedure

1. Align the holes in the inner battery cover with the holes in the frame of the machine; refer to Figure 6 in Removing the Inner Battery Cover (page 3).
2. Assemble the inner battery cover to the frame of the machine (Figure 6) with the 2 flange head bolts (1/4 x 5/8 inch).
3. Torque the bolts to 10.2 to 12.4 N·m (90 to 110 in-lb).

14

Installing the Console Cover and Closing the Hood

No Parts Required

Installing the Console Cover

1. Align the console cover over the console (Figure 24).

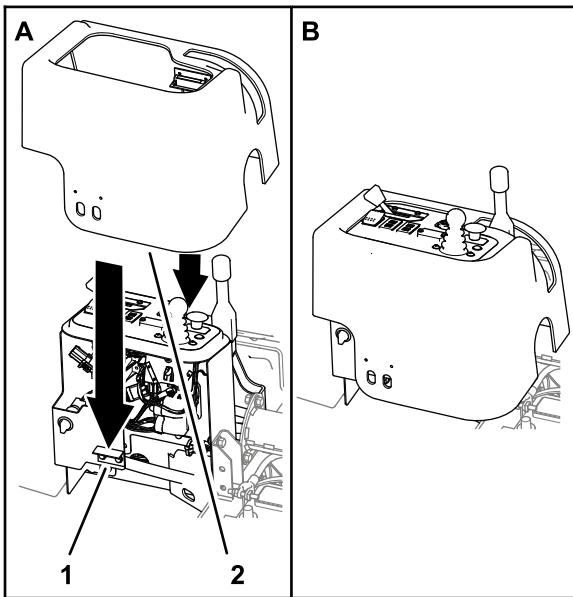


Figure 24

g252108

1. Magnet strike bracket 2. Console cover

2. Align the slot in the cover with the parking brake handle (Figure 24).
3. Lower the cover onto the console until the magnetic catch of the cover aligns with the strike bracket on the console support (Figure 24).

Closing the Hood

1. Rotate the hood forward and carefully lower it to the machine (Figure 25).

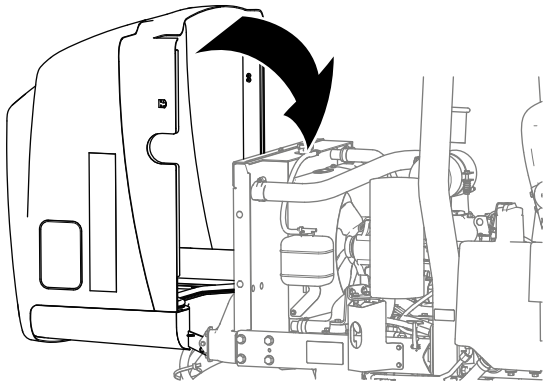


Figure 25

g252107

2. Secure the hood with the latches.

15

Install the Outer Battery Cover

No Parts Required

Procedure

1. Align the holes in the outer battery cover with the holes in the frame of the machine; refer to [Figure 2 in 2 Disconnecting the Battery \(page 2\)](#).
2. Assemble the outer battery cover to the machine with the 2 knobs, and tighten the knobs by hand ([Figure 2](#)).



Count on it.