



Windshield Wiper Kit

Groundsmaster® or Reelmaster® Series Traction Unit with 2 Post
ROPS Extension Kit

Model No. 31311

Installation Instructions

⚠ WARNING

CALIFORNIA Proposition 65 Warning

This product contains a chemical or chemicals known to the State of California to cause cancer, birth defects, or reproductive harm.

Installation

Loose Parts

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

Procedure	Description	Qty.	Use
1	Wiper motor	1	Install the wiper motor.
	Wiper arm	1	
	Wiper blade	1	
2	Wiper arm	1	Install the wiper arm.
	Wiper blade	1	
3	Reservoir	1	Install the reservoir.
	Bracket	1	
	Bolt (5/16 x 3/4 inch)	6	
	Flange nut (5/16 inch)	6	
	Hose	1	
	Hose barb	1	
	Cable tie	2	
4	Switch	1	Install the switch.



1

Installing the Wiper Motor

Parts needed for this procedure:

1	Wiper motor
1	Wiper arm
1	Wiper blade

Procedure

1. Park the machine on a level surface, shut off the engine, engage the parking brake, and remove the key from the ignition switch.
2. Remove the bolt and lock washer from the shaft assembly (Figure 2).
3. Remove the plastic caps, jam nut, washer, shaft assembly, and gasket from the wiper motor (Figure 2).
4. Remove the front panel (Figure 1).

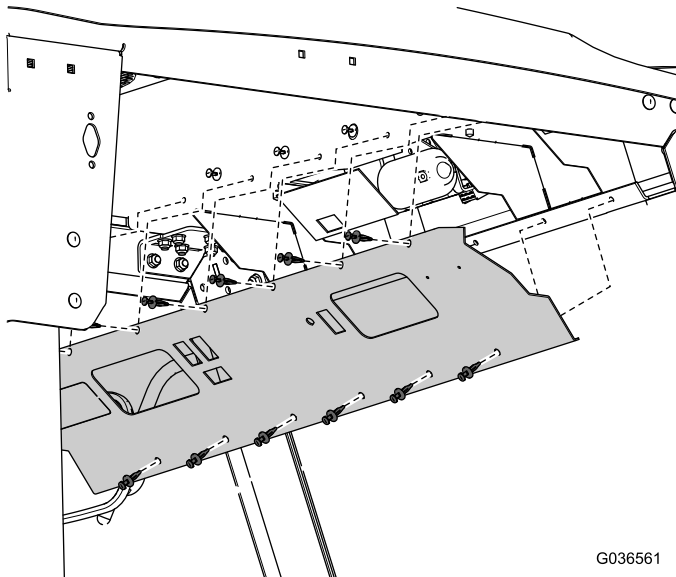


Figure 1

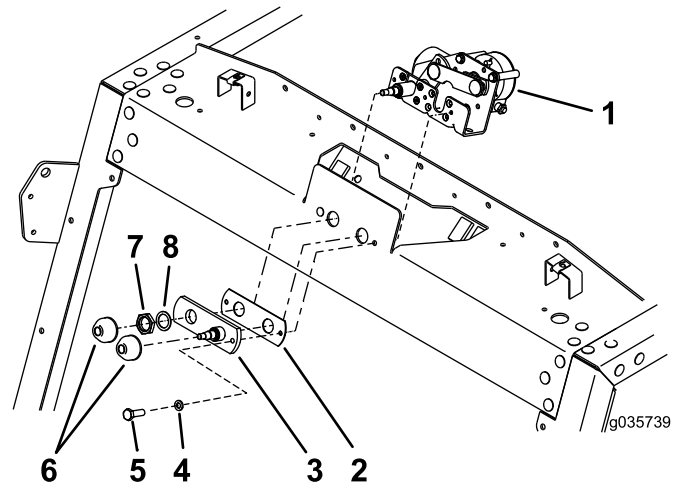


Figure 2

1. Motor
2. Gasket
3. Shaft assembly
4. Lock washer
5. Bolt
6. Plastic cap
7. Jam nut
8. Washer
9. Connect the existing wire harness to the wiper motor.
10. Install the front panel.

2

Installing the Wiper Arm

Parts needed for this procedure:

1	Wiper arm
1	Wiper blade

Procedure

Note: Ensure the front-windshield glass is installed before installing the wiper motor.

5. Push the motor shaft through the overhead hole (Figure 2).
6. Install the gasket and shaft assembly with the bolt and lock washer to hold the motor in place (Figure 2).
7. Install the jam nut and washer onto the motor shaft and torque the jam nut to 11 N·m (100 in-lb).
8. Assemble the plastic caps onto the shafts.
1. Run the wiper motor for at least 1 cycle and allow it to return to its normal position before assembling the wiper arm.
2. Install the wiper arm to the motor by spacing the wiper blade 76 mm (3 inches) away from the side of the windshield trim (Figure 4).
3. Secure the wiper arm with the 2 large locknuts and torque the nuts between 23 to 25 N·m (17 to 18 ft-lb) as shown in Figure 3.

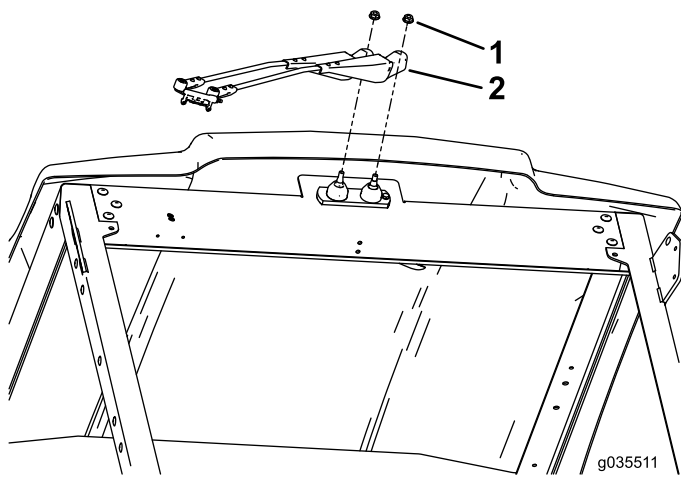


Figure 3

1. Large locknut 2. Wiper arm

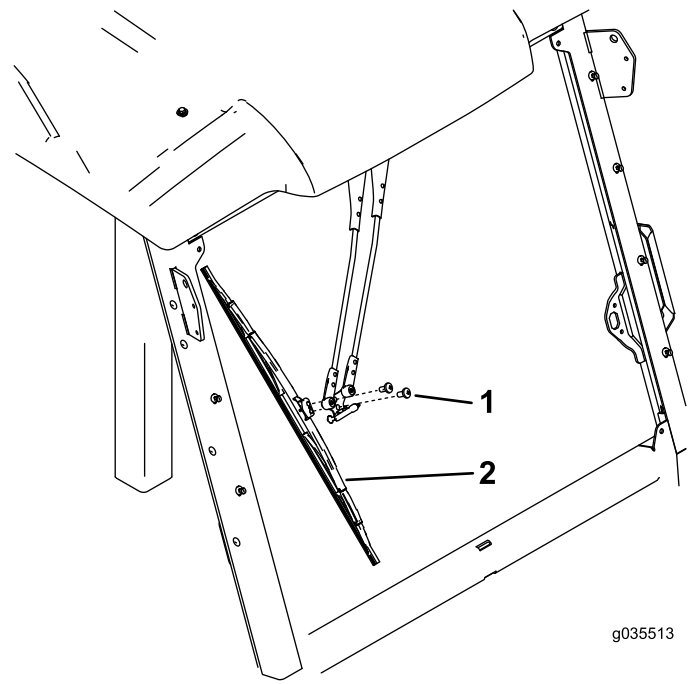


Figure 5

1. Screws 2. Wiper blade

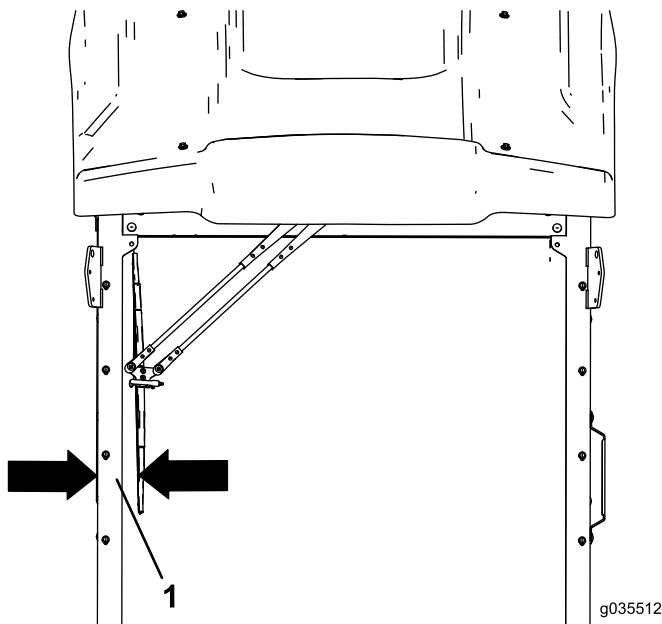


Figure 4

1. 76 mm (3 inches)

4. Install the wiper blade as shown in [Figure 5](#).

3

Installing the Reservoir

Parts needed for this procedure:

1	Reservoir
1	Bracket
6	Bolt (5/16 x 3/4 inch)
6	Flange nut (5/16 inch)
1	Hose
1	Hose barb
2	Cable tie

Procedure

1. Install the bracket to the frame with 4 bolts (5/16 x 3/4 inch) and 4 flange nuts (5/16 inch) as shown in [Figure 6](#).

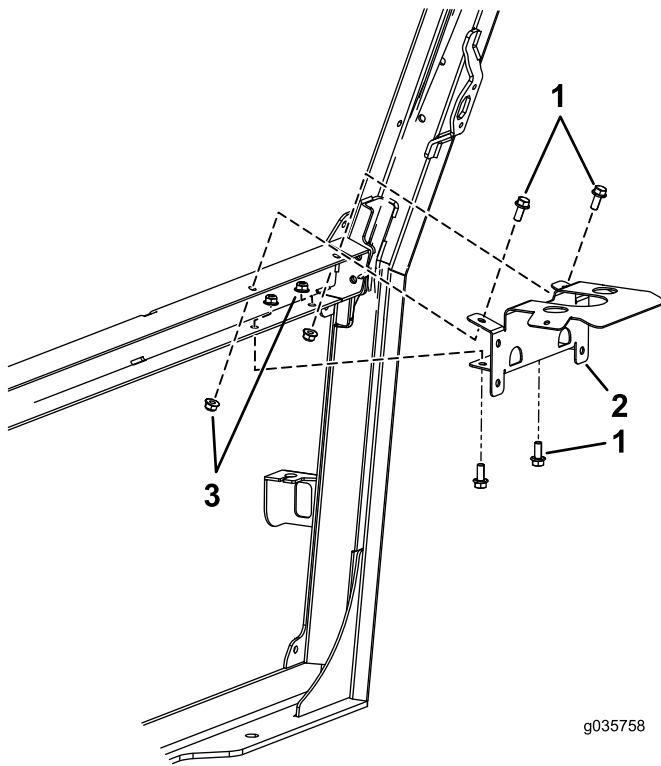


Figure 6

1. Bolt (5/16 x 3/4 inch)
2. Bracket
3. Flange nut (5/16 inch)

2. Install the tank to the bracket with 4 bolts (5/16 x 3/4 inch) and 4 flange nuts (5/16 inch) as shown in [Figure 7](#).

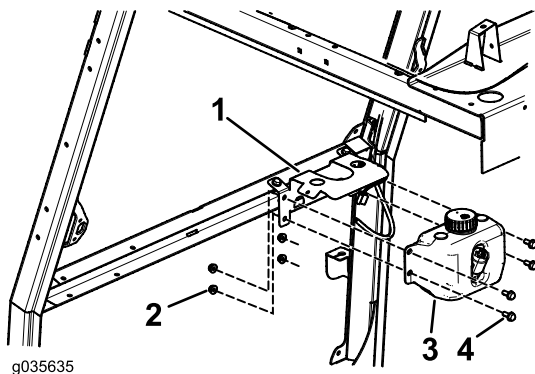


Figure 7

1. Bracket installed
2. Flange nut (5/16 inch)
3. Reservoir
4. Bolt (5/16 x 3/4 inch)

3. Remove the cover from the post ([Figure 8](#)).
4. Install the hose to the pump in the reservoir and route it to the wiper motor ([Figure 8](#)).
5. Connect the harness connector to the reservoir pump ([Figure 8](#)).

Note: [Figure 9](#) shows the tank installed.

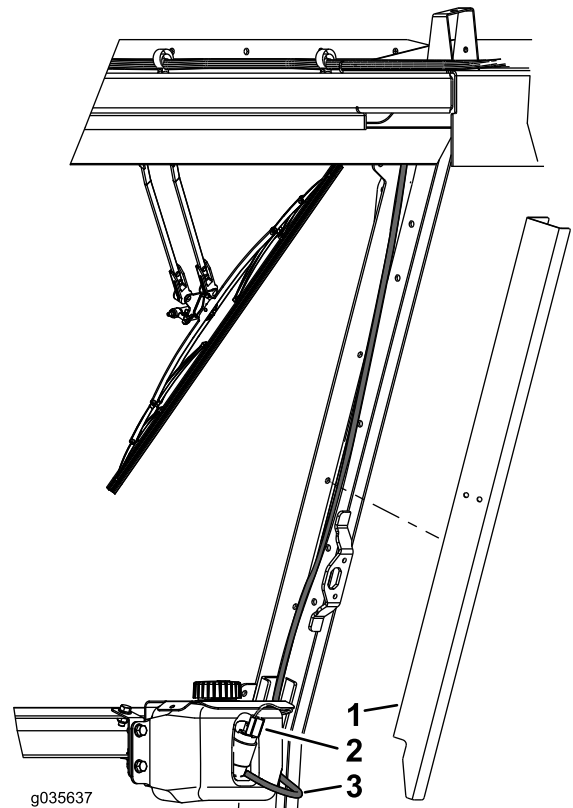


Figure 8

1. Cover
2. Harness connector
3. Hose

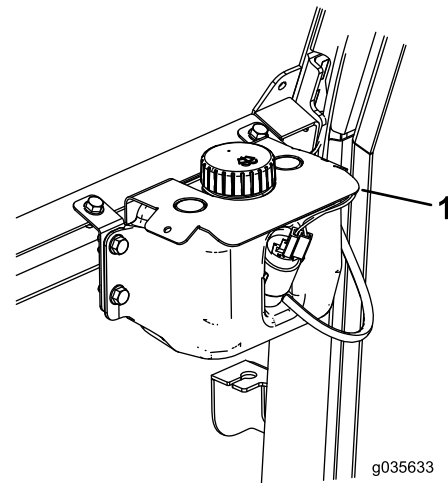


Figure 9

1. Reservoir installed

6. Trim the hose to length.
7. Install the hose barb into the hose at the pump motor and connect it to the wiper arm ([Figure 10](#) and [Figure 11](#)).

4

Installing the Switch

Parts needed for this procedure:

1	Switch
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Procedure

1. Remove the existing plug in the control panel.
2. Locate the plug in the existing wire harness and connect the switch to the plug ([Figure 12](#)).

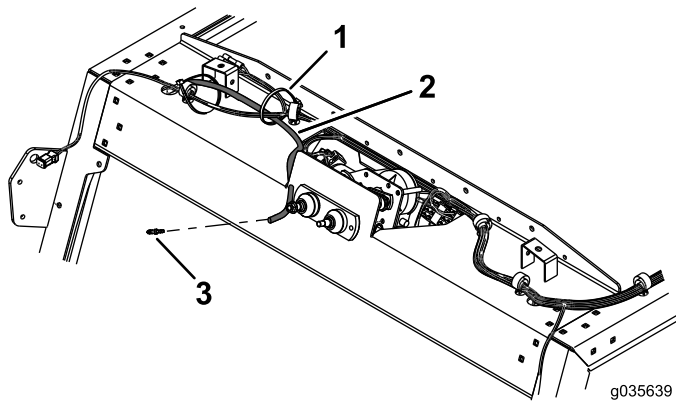


Figure 10

1. Cable tie
2. Hose
3. Hose barb

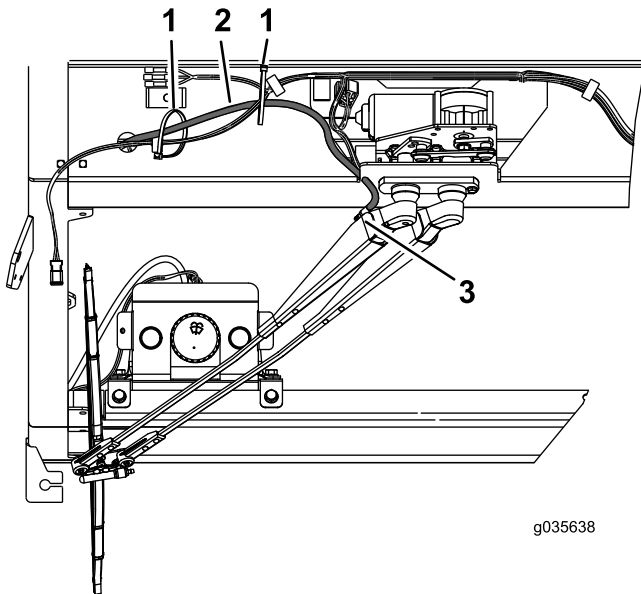


Figure 11

1. Cable tie
2. Hose
3. Hose barb

8. Secure the hose to the wire harness with the cable ties as shown in [Figure 11](#).
9. Install the cover to the post ([Figure 8](#)).

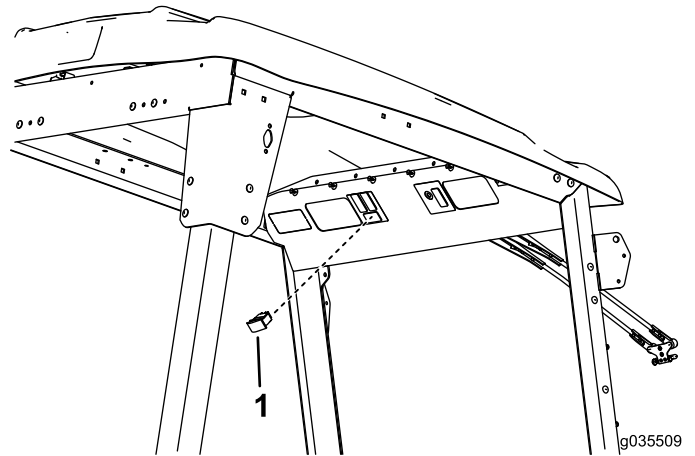


Figure 12

1. Switch

Notes:

Notes:



Count on it.