Form No. 3397-358 Rev A



## Center Boom Extension Kit 2015 and After Multi Pro® WM, 1750, or 5800 Turf Sprayer Model No. 131-3755

Installation Instructions

**Note:** Install this kit before installing the sonic boom kit or foam marker kit.

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

### **A** 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.

## **A WARNING**

Chemical substances used in the spray system may be hazardous and toxic to you, bystanders, animals, plants, soils or other property.

- Carefully read and follow the chemical warning labels and Material Safety Data Sheets (MSDS) for all chemicals used and protect yourself according to the chemical manufacturer's recommendations. For example, use appropriate Personal Protective Equipment (PPE), including face and eye protection, gloves, or other equipment to guard against personal contact with the chemical(s).
- Keep in mind that there may be more than 1 chemical used and that information on each should be assessed.
- Refuse to operate or work on the sprayer if this information is not available.
- Before working on a spray system, make sure that the system has been triple rinsed and neutralized according to the recommendations of the chemical manufacturer(s) and that all of the valves have been cycled 3 times.
- Verify that there is an adequate supply of clean water and soap nearby, and immediately wash off any chemicals that contact you.



## Installation

#### **Loose Parts**

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

Procedure	Description	Qty.	Use
1	No parts required	_	Remove the boom assembly.
2	Bolt (3/8 x 1 inch)	2	Installing the center-boom extension.
	Nut (3/8 inch)	2	
	Center-boom extension	1	
	Right boom hose	1	
	Nozzle-mount bracket	1	
	Nut (5/16 inch)	1	
	Hose (9-1/8 inch)	2	
	Rivet	2	
3	Carriage bolt (1/2 x 1-1/4 inches)	4	Install the boom assembly to the machine.
	Locknut (1/2 inch)	4	
	Mount plate	1	
	Channel stiffener	1	
	Hydraulic hose	4	
	Supply hose	2	



## **Removing the Boom Assembly**

#### No Parts Required

## **Removing the Wing Booms**

**Note:** Except where noted, retain all hardware that you remove; you will use the hardware to install the center-boom extension.

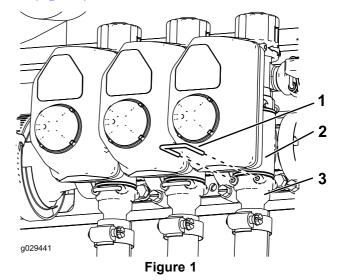
## **A WARNING**

Lifting heavy machines and attachments improperly could result in serious injury or even death.

When lifting heavy machines and attachments, use lifting equipment, such as chains and straps, that is rated for the weight of the equipment.

- 1. Extend the booms to the spray position.
- 2. Move the sprayer to a level surface, set the parking brake, stop the pump, stop the engine, and remove the ignition key.
- 3. Support the booms using lifting equipment.

4. On the right side of the machine, behind the tank, remove the forks from the 3 hose fittings and disconnect the hose fittings from the section valves (Figure 1).

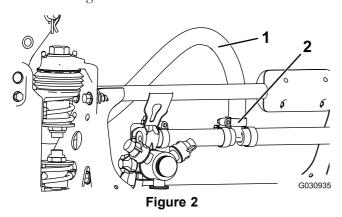


1. Fork

- 3. Hose fitting
- 2. Section-valve manifold

5. Loosen the hose clamps of the 2 hoses attached to the left and right booms and remove the hoses (Figure 2).

**Note:** Discard the hoses and retain the hose clamps and fittings.



1. Hose

2. Hose clamp

6. Remove the 4 hydraulic hoses from the boom-lift valve assembly and from the hydraulic cylinders.

**Note:** Discard the hydraulic hoses.

7. Remove the bolt and nut securing the pivot pin to the right-wing-boom assembly (Figure 3).

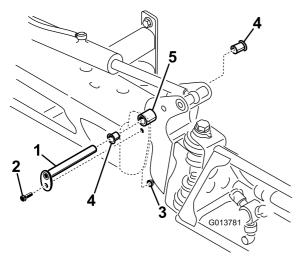


Figure 3

- 1. Pivot pin
- 4. Nylon bushing

2. Bolt

5. Pivot bracket

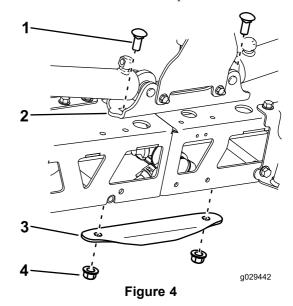
- 3. Nut
- 8. Remove the pivot pin (Figure 3).
- 9. Remove the boom and pivot-bracket assembly from the center frame.
- 10. Repeat step 7 through 9 for the left-wing-boom assembly.

## **Removing the Center-Boom Assembly**

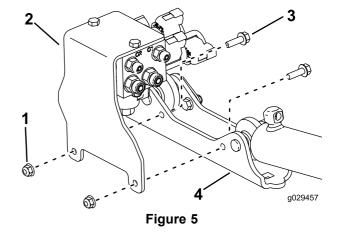
Remove the center-boom assembly.

1. Remove the stiffener plate and the cylinder-mount plate (Figure 4).

**Note:** Discard the stiffener plate.



- 1. Carriage bolt
- 3. Stiffener plate
- 2. Cylinder-mount plate
- 4. Locknut
- 2. Remove the valve mount from the cylinder-mount plate (Figure 5).



1. Nut

- Bolt
- 2. Valve mount
- 4. Cylinder-mount plate

3. Remove the hydraulic cylinders from the cylinder-mount plate (Figure 6).

**Note:** Discard the cylinder-mount plate.

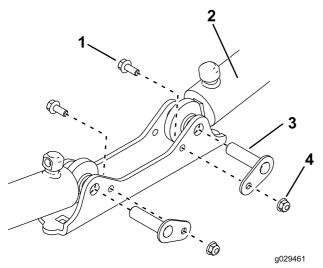
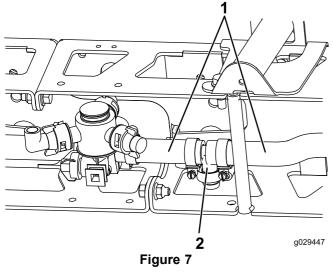


Figure 6
Front view

1. Bolt

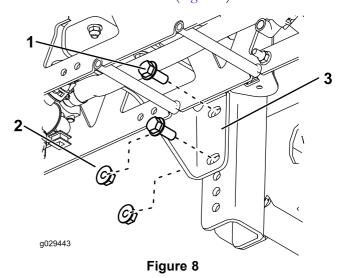
- 3. Pivot pin
- 2. Hydraulic cylinder
- 4. Nut
- 4. Remove the tee and its surrounding hoses (Figure 7).



1. Hose

2. Tee

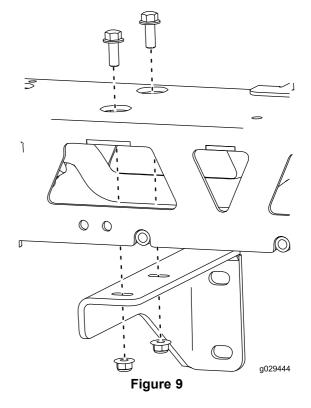
5. Mark the holes where the mounting brackets are attached to the machine (Figure 8).



1. Bolt

3. Mounting bracket

- 2. Nut
- 6. Remove the 2 nuts and 2 bolts from both mounting brackets and remove the boom assembly from the machine (Figure 8).
- 7. With the boom assembly off the machine, remove the 2 mounting brackets (Figure 9).



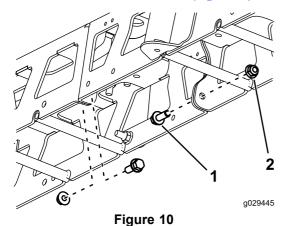
# Installing the Center-Boom Extension

### Parts needed for this procedure:

2	Bolt (3/8 x 1 inch)
2	Nut (3/8 inch)
1	Center-boom extension
1	Right boom hose
1	Nozzle-mount bracket
1	Nut (5/16 inch)
2	Hose (9-1/8 inch)
2	Rivet



1. Remove and retain the 2 bolts and 2 nuts and separate the 2 halves of the center boom (Figure 10).



1. Bolt

- 2. Nut
- 2. Using 2 nuts (3/8 inch), 2 bolts (3/8 x 1 inch), and the nuts and bolts you removed in step 1, install the center-boom extension between the 2 boom halves.
- 3. Install the mount plate and channel stiffener using 4 carriage bolts, 4 locknuts, 2 previously removed carriage bolts, and 2 previously removed locknuts (Figure 11).

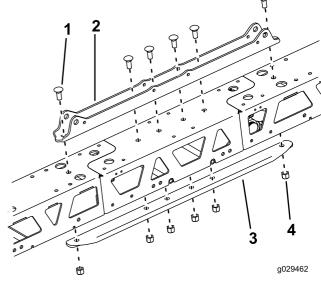


Figure 11

- 1. Carriage bolt
- 2. Locknut
- 3. Plate mount
- 4. Channel stiffener
- 4. Install the mounting brackets, using the hardware previously used to mount the brackets, as shown in Figure 12.

**Note:** Install the mounting brackets on the opposite sides of the boom assembly than they were previously installed.

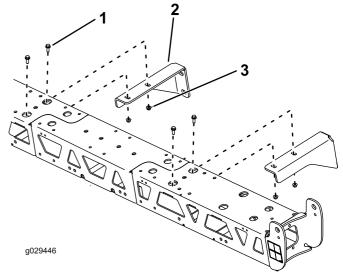


Figure 12

1. Bolt

- 3. Nut
- 2. Mounting bracket

5. Install the right-boom hose to the double-turret body of the center-boom extension and the right, single-turret body (Figure 13).

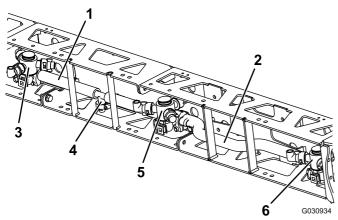


Figure 13

- 1. Hose (9-1/8 inch)
- 4. Tee
- 2. Right-boom hose
- 5. Double-turret body
- 3. Left, single-turret body
- 6. Right, single-turret body
- 6. Install the tee that you previously removed and the 2 remaining hoses (9-1/8 inch) as shown in Figure 13.



# Installing the Boom Assembly to the Machine

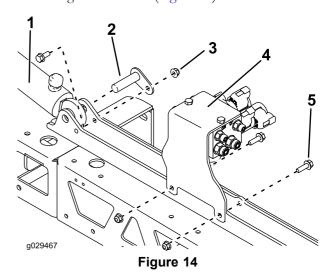
#### Parts needed for this procedure:

4	Carriage bolt (1/2 x 1-1/4 inches)
4	Locknut (1/2 inch)
1	Mount plate
1	Channel stiffener
4	Hydraulic hose
2	Supply hose

#### **Procedure**

1. Install the brackets to the machine at the marked locations using the original hardware.

2. Install the hydraulic cylinders and valve mount using the original hardware (Figure 14).

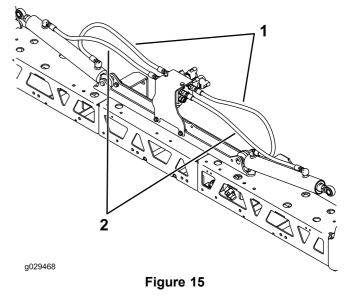


- 1. Left hydraulic cylinder
- 4. Valve mount
- 2. Pivot pin
- 5. Bolt

- 3. Nut
- 3. Install the hydraulic hoses (Figure 15).

**Note:** Install the hoses attached to the extending ports to ports marked "C1" and "C3" in the valve assembly; install the hoses attached to the retracting ports into ports marked "C2" and "C4."

**Note:** Ensure that all of the hydraulic fittings are tight and check for leaks.



- 1. Hose—attached to extending port
- 2. Hose—attached to retracting port
- 4. Replace the plastic bushings for the pins of the wing booms.
- 5. Grease the pins using a No. 2 lithium grease.
- 6. Install the wing booms (see Figure 3).

7. Check the O-rings of the hose fittings for wear or damage and replace as necessary.

**Note:** Grease any replacement O-rings before installing them.

- 8. Install the 2 new supply hoses with hose clamps for the left and right booms (see Figure 2).
- 9. Install the hoses to the section valves (see Figure 1).
- 10. Install the center hose of the section valves to the tee in the center boom.

