

**JOHN DEERE**  
**AG & TURF DIVISION**

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**45 Gallon Sprayer**  
**LP20840, LP22886**

OMLVU23003 J1

**OPERATOR'S MANUAL**



**JOHN DEERE**

**Original Instruction**

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# Introduction

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## Table of Contents

Introduction.....	1
Product Identification.....	1
Safety Labels.....	2
Safety.....	3
Assembly.....	4
Installing.....	8
Preparing Vehicle.....	10
Removing and Storing.....	15
Operating.....	17
Service.....	20
Troubleshooting.....	21
Specifications.....	22
Getting Quality Service.....	22

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## Introduction

### Using Your Operator's Manual

Read this entire operator's manual, especially the safety information, before operating.

This manual is an important part of your machine. Keep all manuals in a convenient location so they can be accessed easily.

Use the safety and operating information in the attachment operator's manual, along with the machine operator's manual, to operate and service the attachment safely and correctly.

If your attachment manual has a section called Preparing the Machine, it means that you will have to do something to your tractor or vehicle before you can install the attachment. The Assembly and Installation sections of this manual provide information to assemble and install the attachment to your tractor or vehicle. Use the Service section to make any needed adjustments and routine service to your attachment.

If you have any questions or concerns with the assembly, installation, or operation of this attachment, see your local John Deere dealer or call the John Deere Customer Contact Center at 1-800-537-8233 for assistance.

Warranty information on this John Deere attachment can be found in the warranty that came with your John Deere tractor or vehicle.

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## Product Identification

### Product Compatibility

This Category 1, Three-Point Hitch Mounted Sprayer is compatible with Compact Utility Tractors, and X400, X500 and X700 Ultimate Series Garden Tractors.

Contact your John Deere dealer for compatibility and installation information for any Compact Utility Tractor not included in this manual.

# Safety Labels

## Safety Labels



### Understanding The Machine Safety Labels

The machine safety labels shown in this section are placed in important areas on your machine to draw attention to potential safety hazards.

On your machine safety labels, the words DANGER, WARNING, and CAUTION are used with this safety-alert symbol. DANGER identifies the most serious hazards.

The operator's manual also explains any potential safety hazards whenever necessary in special safety messages that are identified with the word, CAUTION, and the safety-alert symbol.

There can be additional safety information contained on parts and components sourced from suppliers that is not reproduced in this operator's manual.

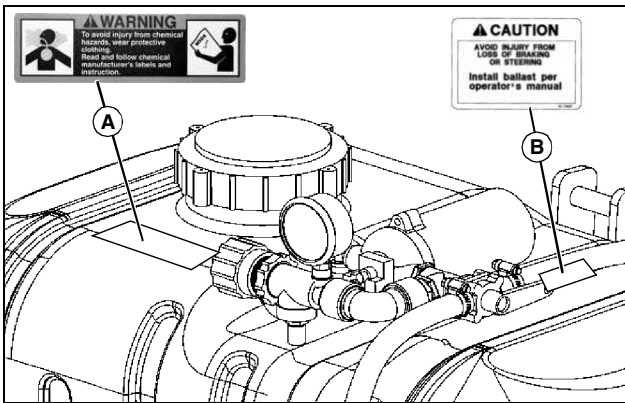
### CAUTION M117627



M117627

- Avoid injury from loss of braking or steering. Install ballast per operator's manual.

## Safety Label Location



MX44576

A- WARNING M147712

B- CAUTION M117627

### WARNING M147712



M147712a

- To avoid injury from chemical hazards, wear protective clothing. Read and follow chemical manufacturer's labels and instructions.

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# Safety

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## Safety

### Read Safety in Machine Operator's Manual

Read the general safety operating precautions in your machine operator's manual for additional safety information.

### Operate Safely

- Read the machine and attachment operator's manual carefully. Be thoroughly familiar with the controls and the proper use of the equipment. Know how to stop the machine and disengage the controls quickly.
- Do not let children or an untrained person operate machine.
- Make any necessary adjustments before you operate. Never attempt to make any adjustments while the engine is running, unless if recommended in adjustment procedure.
- Take all possible precautions when leaving the machine unattended. Shut off the engine before making any repairs, adjustments, or inspections. Lower the attachment, lock the parking brake, stop the engine, and remove the key.
- Look behind machine before you back up. Back up carefully.
- Do not let anyone, especially children, ride on machine or attachment. Riders are subject to injury such as being struck by foreign objects and being thrown off. Riders may also obstruct the operator's view, resulting in the machine being operated in an unsafe manner.
- Use only attachments and accessories approved by the manufacturer of this product.
- If the machine vibrates abnormally, stop the engine and check immediately for the cause. Vibration is generally a warning of trouble.
- Always refer to the Storage section of the operator's manual for important details if storing this product for a long period of time.
- Keep people and pets out of the work area. Stop machine if anyone enters the area.
- If you hit an object, stop the machine and inspect it. Make repairs before you operate. Keep machine properly maintained and in good working order. Keep all shields and guards in place.
- Always inspect the sprayer completely before and after each use. Before pressurizing the system, check to be sure all fittings and hoses are tightly installed. Be sure guards and shields are in good condition and fastened in place. Make any necessary adjustments before you operate.
- Never use the sprayer during windy conditions.
- Always release pressure in the system before filling, cleaning or servicing the sprayer.
- Do not put nozzle tip or other sprayer parts to your lips to blow out dirt. Use compressed air.
- If the sprayer is mounted to the bed of a utility vehicle, never raise the bed with the sprayer installed. Empty the sprayer and remove it from the bed if you need to raise the bed for any reason.

### Parking Safely

1. Stop vehicle on a level surface, not on a slope.
2. Lock park brake.
3. Stop engine.
4. Remove key.
5. Before you leave the operator's seat, wait for engine and all moving parts to stop.

6. Disconnect the negative battery cable or remove the spark plug wire (for gasoline engines) before servicing the machine.

### Mix and Handle Chemicals Safely

- It is best to wear full cover clothing and always wear protective goggles and rubber gloves to protect yourself while handling chemicals.
- Follow instructions on chemical container labels.
- Open all chemical containers carefully, using proper tools.
- Open, pour, weigh and mix chemicals in a well-ventilated area.
- Reserve all equipment used for the application of chemicals exclusively for that purpose.
- Prohibit all smoking, drinking and eating food in chemical-handling area.
- It is a good practice to take a soapy shower immediately after the using the sprayer to apply chemicals.
- Wash all clothing worn when using chemicals separately in the laundry after spraying is completed.

### Read Chemical Container Label

- Chemicals can be dangerous. Improper selection or use can injure persons, animals, plants, soils or other property. Select the right chemical for the job and handle and apply with care.
- Read the instructions, precautions, and warnings on the container label before opening. Use the product strictly according to label directions for specific applications, in the amounts specified, at the times specified and only when needed.
- Keep the container closed tightly except when preparing the mix.
- Do not remove labels from chemical containers. Store all chemicals in their original containers.
- Do not mix chemicals unless stated on the container label.
- Store chemicals when not in use according to the container label.

### Handle Chemical Products Safely

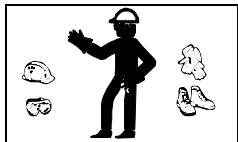
- Direct exposure to hazardous chemicals can cause serious injury. Potentially hazardous chemicals used with John Deere equipment include pesticides, herbicides and fungicides.
- A Material Safety Data Sheet (MSDS) provides specific details on chemical products: physical and health hazards, safety procedures, and emergency response techniques.
- The MSDS should be obtained from the chemical dealer at the time of the chemical purchase.
- Check the MSDS before beginning any job using a hazardous chemical. Know exactly what the risks are and how to do the job safely. Always wear recommended personal protection equipment.

### Practice Safe Maintenance

- Only qualified, trained adults should service this machine.
- Understand service procedure before doing work. Keep area clean and dry.
- Do not operate the engine in a confined space where dangerous carbon monoxide fumes can collect.
- Never lubricate, service or adjust the machine or attachment while it is moving. Keep safety devices in place and in working condition. Keep hardware tight.
- Keep hands, feet, clothing, jewelry, and long hair away from any moving parts, to prevent them from getting caught.

# Assembly

- Lower any attachment completely to the ground or to an existing attachment mechanical stop before servicing the attachment. Disengage all power and stop the engine. Lock park brake and remove the key. Let machine cool.
- Disconnect battery or remove spark plug wire (for gasoline engines) before making any repairs.
- Before servicing machine or attachment, carefully release pressure from any components with stored energy, such as hydraulic components and springs.
- Release hydraulic pressure by lowering attachment or cutting units to the ground or to a mechanical stop and move hydraulic control levers.
- Securely support any machine or attachment elements that must be raised for service work. Use jack stands or lock service latches to support components when needed.
- Never run engine unless park brake is locked.
- Keep all parts in good condition and properly installed. Fix damage immediately. Replace worn or broken parts. Replace all worn or damaged safety and instruction decals.
- Check all hardware at frequent intervals to be sure the equipment is in safe working condition.
- Do not modify machine or safety devices. Unauthorized modifications to the machine or attachment may impair its function and safety.



## Wear Appropriate Clothing

- Wear close fitting clothing and safety equipment appropriate for the job.
- Certain operating conditions may dictate that the operator and any passenger wear

appropriate safety equipment while operating the vehicle. Be prepared for any existing and potential conditions before operating machine.

- Local safety or insurance regulations may require additional safety equipment such as eye protection or a hard hat.
- Always wear substantial footwear and long trousers. Do not operate the equipment when barefoot or wearing open sandals.
- Wear proper clothing and safety equipment while handling chemicals or using the sprayer. Refer to the MSDS for the chemicals being used to be sure the proper personal protection equipment is being used.



## Avoid High Pressure Fluids

- Hydraulic hoses and lines can fail due to physical damage, kinks, age, and exposure. Check hoses and lines regularly. Replace damaged hoses and lines.

- Hydraulic fluid connections can loosen due to physical damage and vibration. Check connections regularly. Tighten loose connections.
- Escaping fluid under pressure can penetrate the skin causing serious injury. Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure.
- Search for leaks with a piece of cardboard. Protect hands and body from high pressure fluids.
- If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result. Doctors unfamiliar with this type of injury should reference a knowledgeable medical source. Such information is available from Deere & Company Medical Department in Moline, Illinois, U.S.A. Information may be obtained in the United States and Canada only by calling 1-800-822-8262.

## Dispose of Chemicals Properly

- Proper disposal of excess spray material is very important. If you have excess tank solution, it is best to dilute it with water and apply it to the area you previously treated.
- Never dump solution into a drain or near a lake or stream.
- Chemicals containers should be triple-rinsed, with the rinse water added to the sprayer tank. Do not burn empty chemical containers. Dispose of containers at recycling centers.

## Handling Waste Product and Chemicals

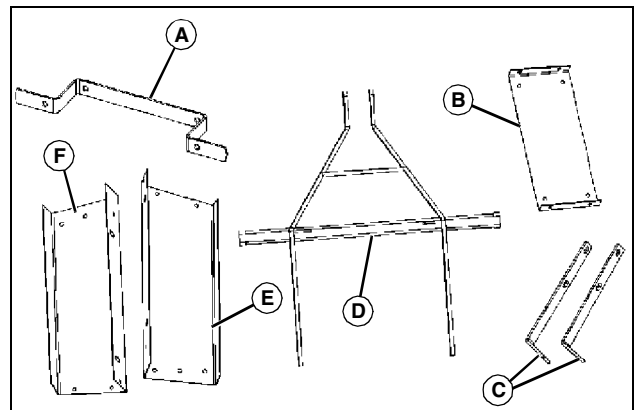
Waste products, such as, used oil, fuel, coolant, brake fluid, and batteries, can harm the environment and people:

- Do not use beverage containers for waste fluids - someone may drink from them.
- See your local Recycling Center or authorized dealer to learn how to recycle or get rid of waste products.
- A Material Safety Data Sheet (MSDS) provides specific details on chemical products: physical and health hazards, safety procedures, and emergency response techniques. The seller of the chemical products used with your machine is responsible for providing the MSDS for that product.

## Assembly

### Parts

#### Sprayer Frame



MX44561

Qty.	Description
1	Hose Tender Bracket (A)
1	Rear Frame Member (B)
2	Spray Boom Support (C)
1	Support Frame Weldment (D)
1	Right Tank Support Channel (E)
1	Left Tank Support Channel (F)
1	Spray Boom Assembly (Not Shown)

# Assembly

## Hardware

Qty.	Description
2	Draft Pin, Lower Link
1	Pin, 3-point Top Link
3	Quick-Lock Pin, 3-Point
2	U-bolt, 5/16 in.
6	Bolt, 3/8 x 1 in.
6	Nut, Flange, 3/8 in.
2	Cable Lanyard
4	Washer, 3/8 in.
6	Bolt, Flange, 5/16 x 5/8 in.
16	Nut, Flange, 5/16 in.
8	Bolt, Flange, 5/16 x 3/4 in.
2	Jam Nut, Lower Link Draft Pin
2	Bolt, J-Shaped, 7 in.
2	Screw, 10/24 x 5/8 in. (Standard 3-Point only)
1	Pin, Hand Gun Mount (High Performance 3-Point only)
1	Hose Clamp (High Performance 3-Point only)
1	Hand Wand Clip (Large) (Standard 3-Point only)
1	Hand Wand Clip (Small) (Standard 3-Point only)

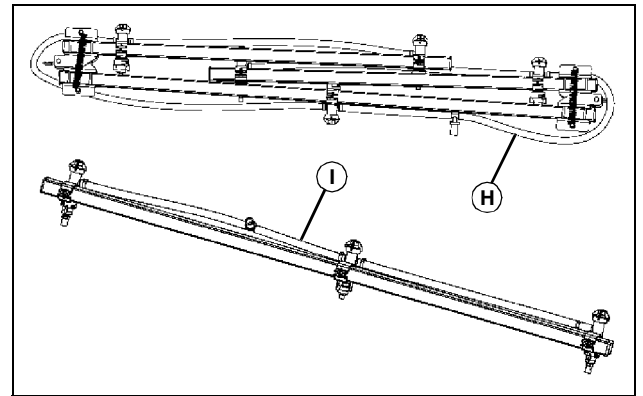
## Wire Harness

Qty.	Description
1	Harness Extension, 24 in.
1	Harness Extension, 8 ft.
8	Tie Wrap
1	Switched Harness
1	Auxiliary Power Connector

## Boom Assembly

Qty.	Description
1	Folding Boom Assembly, Standard 120 in.

## Optional LP22886 High Performance Spray Boom Assembly

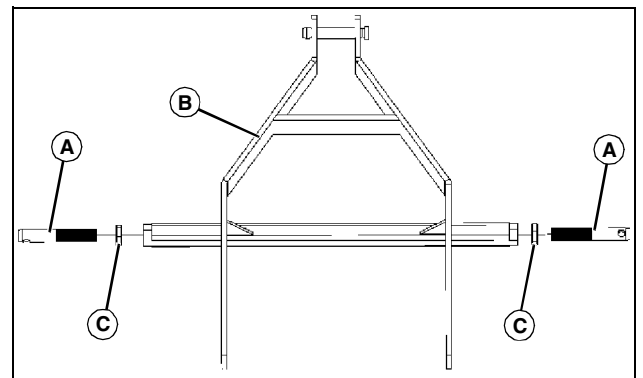


MX44562

Qty.	Description
1	Folding Boom Assembly, Precision 150 in. (H) (High Performance 3-Point only)
1	Spray Nozzles, Boomless (I) (High Performance 3-Point only)

## Assemble Sprayer

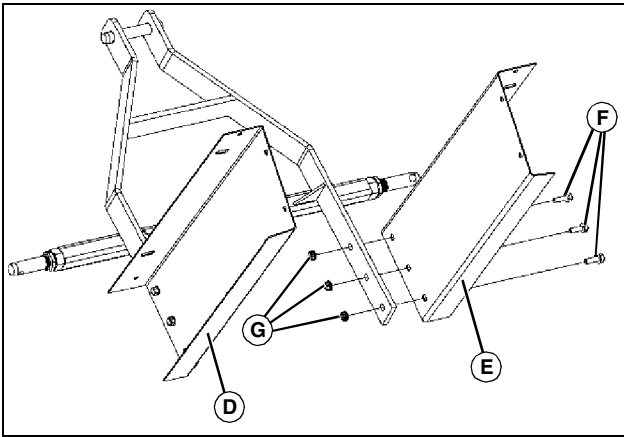
### Assemble Frame and Secure Tank



MX44563

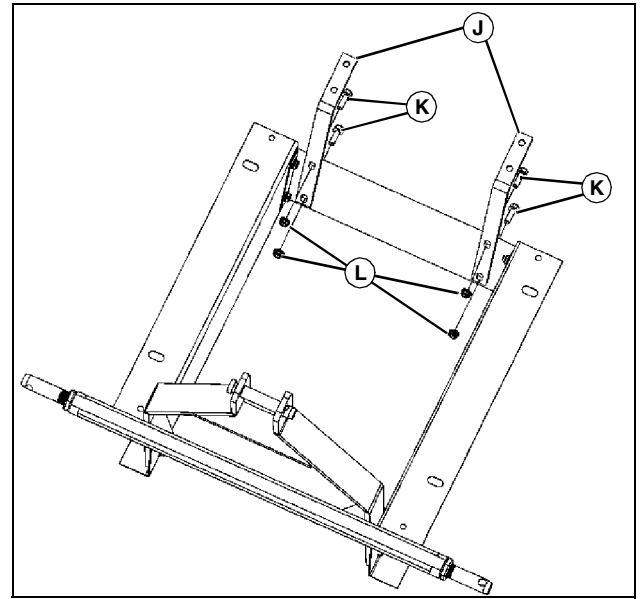
1. Install the draft pins (A) into the crossbar (B) and secure with jam nuts (C).

# Assembly



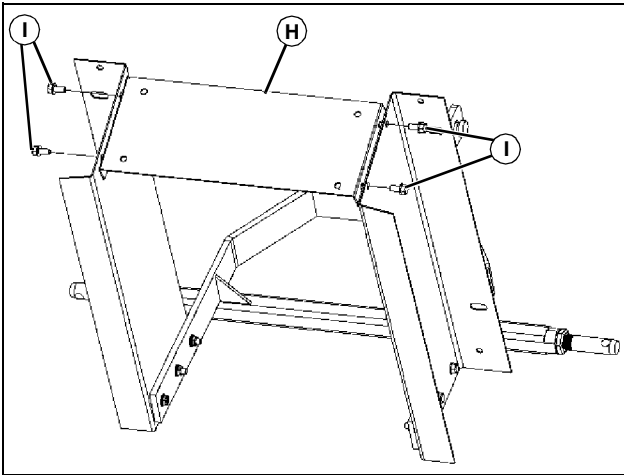
MX44564

2. Loosely install left (D) and right (E) tank support channels with six 3/8 x 1 in. bolts (F) and 3/8 in. flange nuts (G).



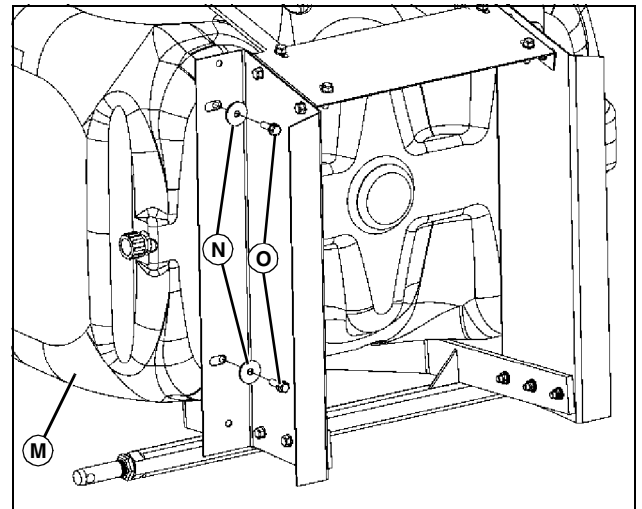
MX44566

4. Loosely install two boom supports (J) to rear frame member with four 5/16 x 3/4 in. flange head bolts (K) and 5/16 in. flange nuts (L).



MX44565

3. Loosely install rear frame member (H) between tank support channels with four 5/16 x 3/4 in. flange head bolts (I) and 5/16 in. flange nuts.

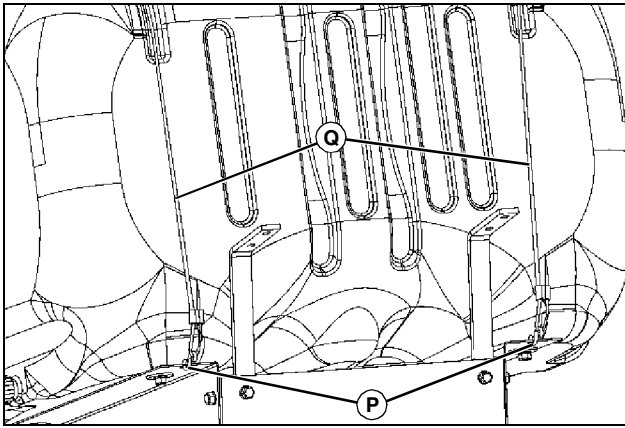


MX44567

5. With spray wand facing front of sprayer, loosely install tank (M) to frame with four 3/8 in. flat washers (N) and four 5/16 x 5/8 in. flange head bolts (O). Tighten bolts.

6. Tighten remaining hardware.

# Assembly

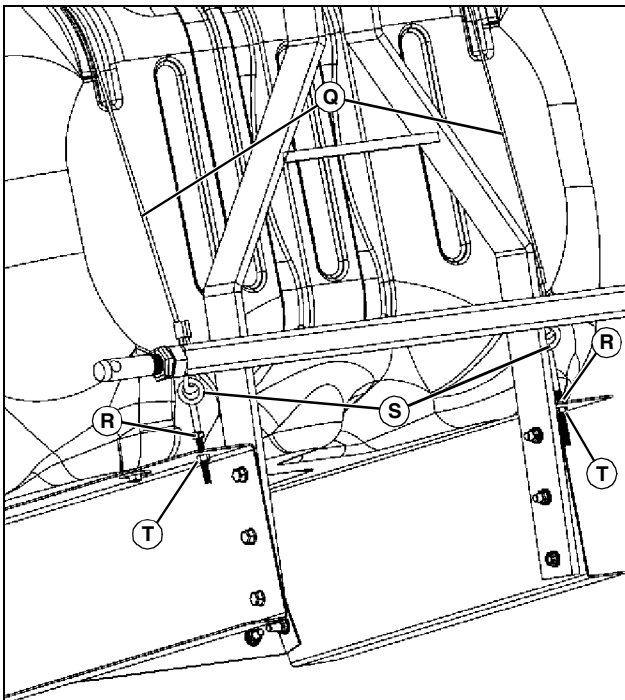


MX44569

7. Install two S-hooks (P) into frame holes on bottom of sprayer assembly.

**NOTE:** In some cases the cable lanyard may be pre-installed.

8. Install two cable lanyards (Q), with loop ends onto S-hooks. Route lanyard around top of sprayer tank and under the hoses.

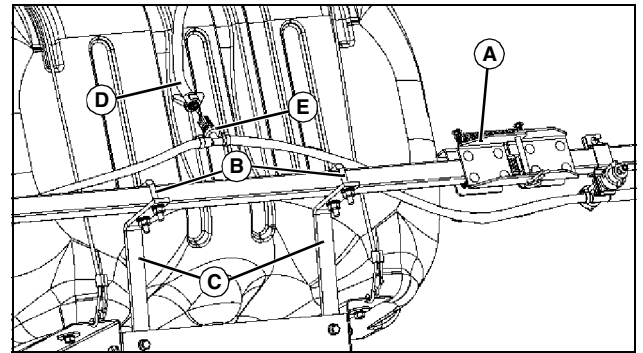


MX45510

9. Install nut (R) all the way onto eye bolt (S) and install eye bolt on hitch side of the sprayer, as shown. Install second nut (T) on bottom threads. Do not tighten. Repeat on opposite side of sprayer.

10. Tighten bottom nuts (T) until lanyard (Q) is snug. Do not over tighten. Tighten top nuts (R) to secure position.

## Assemble Spray Boom and Secure Hoses



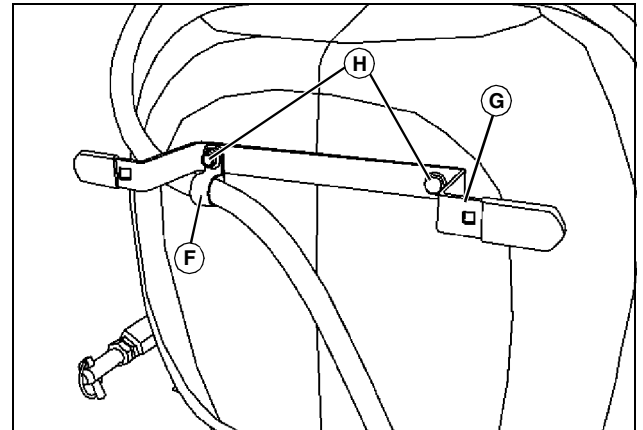
MX44571

1. Center and install spray boom (A) with U-bolts (B) and 5/16 in. flange nuts.

**NOTE:** For high performance booms, be certain that center spraying tip is centered between boom supports (C).

2. Install hose (D) from pump to spray boom center fitting (E).

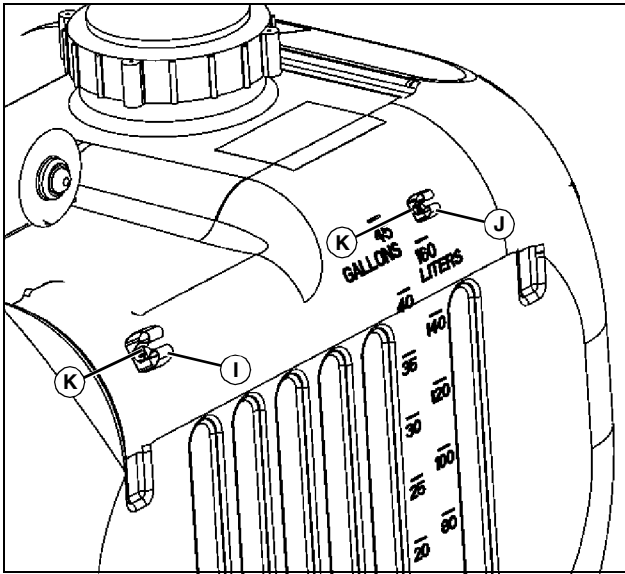
**NOTE:** For high performance sprayers only, install hose clamp (F) onto hose and mounting hardware before installing hose bracket (G).



MX44572

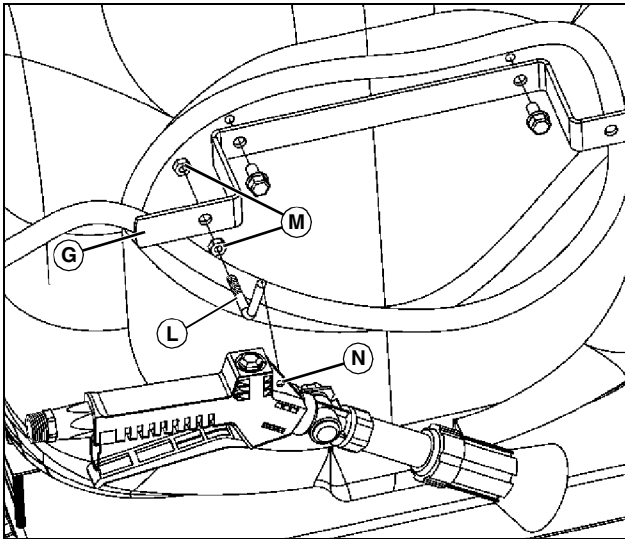
3. Attach hose tender bracket (G) to the end of the tank using two 5/16 x 5/8 in. bolts (H).

# Installing



MX44573

- For standard 3-point hitch sprayers, install large wand clip (I) and small wand clip (J) with two 10/24 x 5/8 in. screws (K).
- For LP22886 high performance sprayers only:



MX44574

- Attach hand gun holding pin (L) to hose tender bracket (G) with two nuts (M).
- Secure hand gun to holding pin (L) using hole (N) on hand gun.

## Installing

### Installing Ballast



**CAUTION:** Avoid injury! Machine can become unstable when operating with attachment. Ballast is required when the attachment is installed.

When the attachment is removed, also remove any ballast that was added to the machine.

Use only attachments and accessories recommended by the manufacturer.

#### Garden Tractors

##### Required ballast:

- Four front suitcase weights, 18kg (40 lb) each.

##### Recommended ballast:

**NOTE:** Certain working conditions may be improved by increasing front ballast.

- Install additional front suitcase weights.
- Install wheel weights on front wheels.

#### Compact Utility Tractors

See Ballasting Machine in your tractor operator's manual to determine the number of front weights required to ballast the tractor.

Add ballast for an implement code of 19.

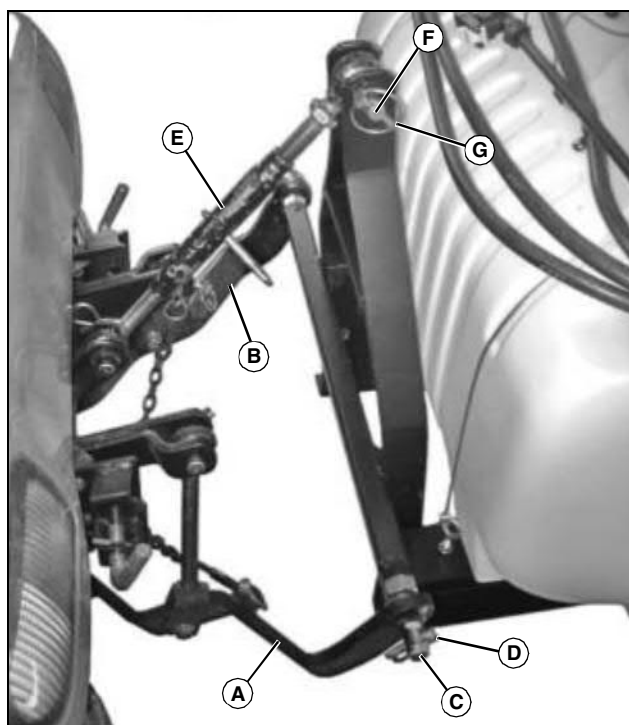
Use the following table to ballast these tractor models:

Tractor Model	Number of 42 lb. (20 kg) Weights
2305 with 3-Point Hitch	4
2305 with I-Match Hitch	5
2320 with 3-Point Hitch	1
2320 with I-Match Hitch	2
2520 with 3-Point Hitch	0
2520 with I-Match Hitch	0

### Attaching Sprayer to Tractor

- Park machine safely. (See Parking Safely in Safety section.)
- Lower the 3-point hitch.

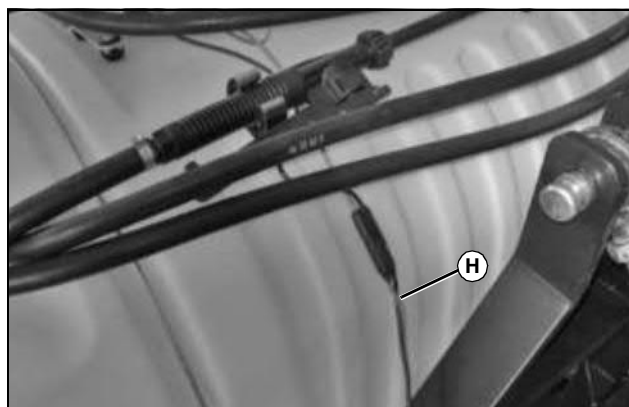
## Installing



MX26345

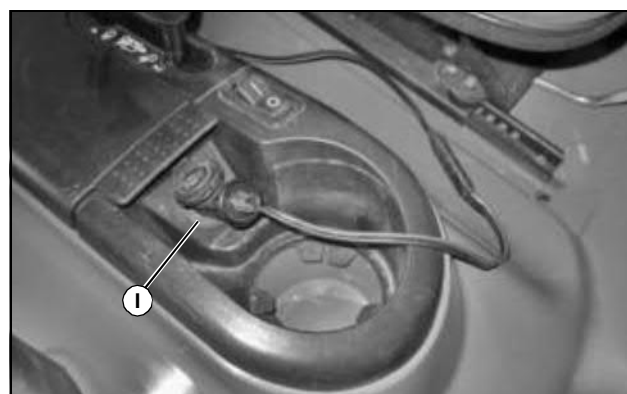
3. Slide the lower 3-point hitch arms (A and B) over the lower link draft pins (C). Secure using two quick-lock pins (D).

4. Connect the center link (E) to the sprayer upper mounting point using the top link pin (F) and one quick-lock pin (G).



MX26346

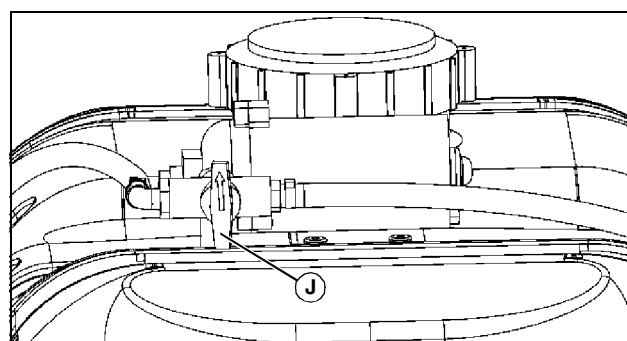
5. Connect the wiring harness (H) to the pump.



MX26347

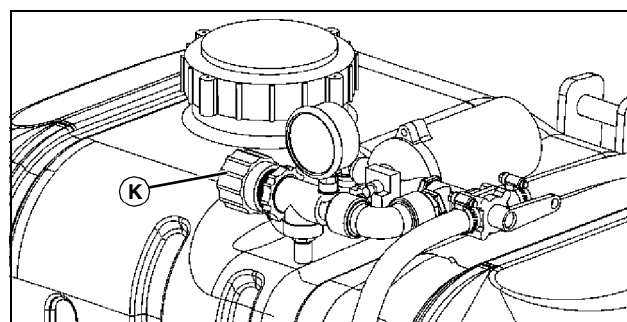
6. Connect the wiring harness plug to the 12-volt electrical outlet (I) on the machine if equipped. If not, connect wire harness to harness extension routed during installation.

7. Turn flow control valve off:



MX44575

- For standard controls, turn the selector lever (J) to close the valve.



MX44576

- For high performance model controls, turn knob (K) clockwise or counterclockwise to adjust spray pressure.

8. Start the machine and raise the 3-point hitch.



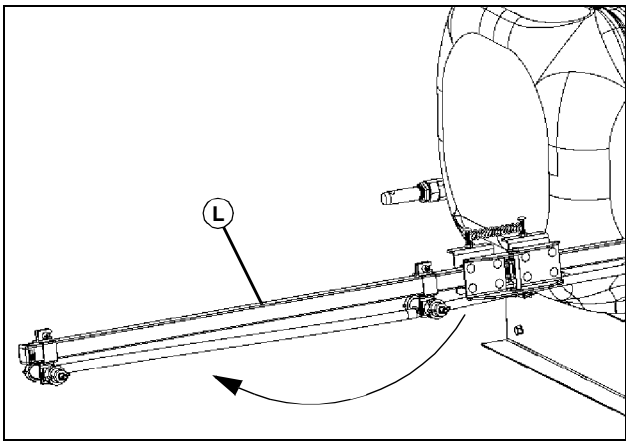
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# Preparing Vehicle



MX44577

9. Swing the outer booms (L) out.

**NOTE:** In order for the sprayer to completely empty the tank, the sprayer frame should be as level as possible.

10. Check the tank for level. Adjust the 3-point hitch center link as needed.

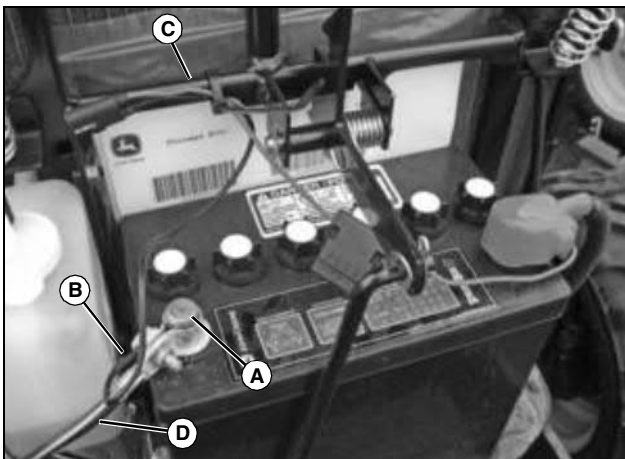
11. Check the sprayer tip height. The tip should be 43 cm (17 in.) from the ground. Adjust the 3-point hitch stop as needed.

## Preparing Vehicle

### Open SCV Lockout Valve (Lawn and Garden Tractors)

- If a front hitch is installed without a front attachment, open the SCV lockout valve.
- If a front attachment is installed, open the SCV lockout valve and disconnect all front hydraulic hose connections at the coupler outlets.

### Connect Harness to Battery (Compact Utility Tractors)

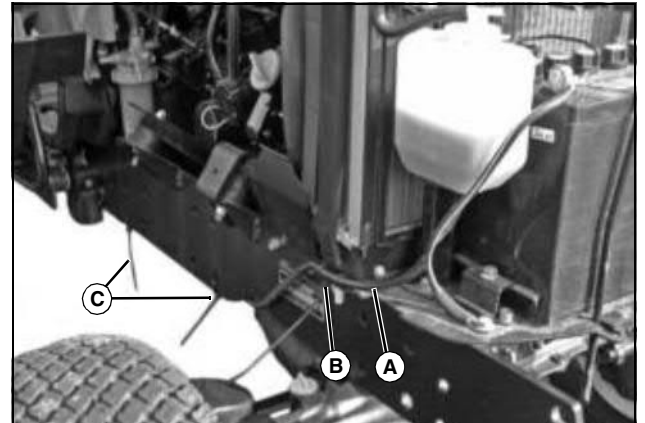


MX26351

1. Remove bolt securing connector to positive (+) battery terminal (A).
2. Place ring terminal (B) on bolt, insert bolt through battery connector and secure with nut.
3. For units with a latch support over the battery, secure lead to latch support (C) so it is clear of any moving parts.
4. For units without a latch support over the battery, secure terminating end of fuse connector to negative (-) wire (D) coming from battery.

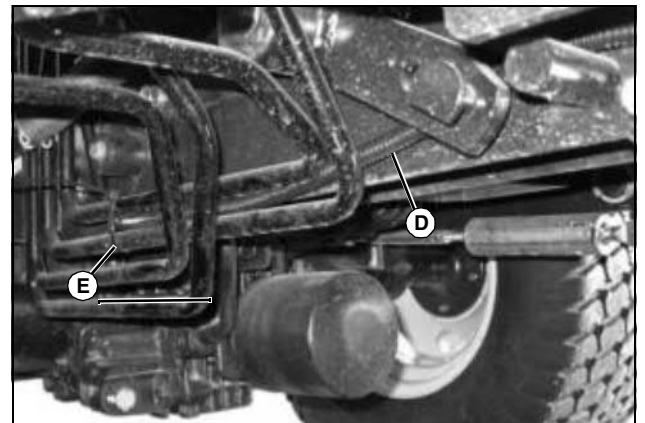
## Tractor Model 2305

1. Park machine safely. (See Parking Safely in Safety section.)



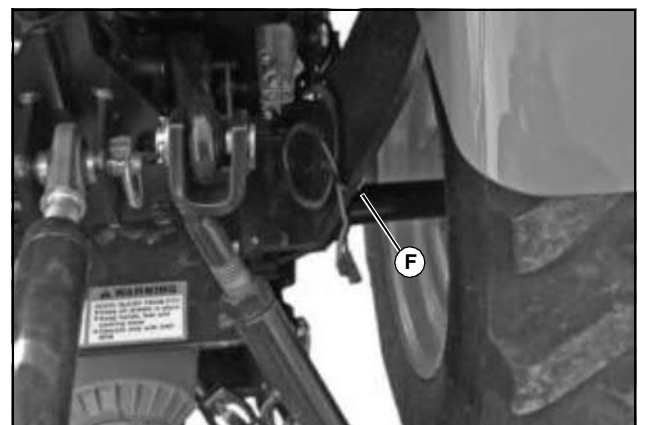
MX26352

2. Route harness (A) under radiator and secure in place with tie wrap (B), passing through opening where radiator drain passes.
3. Secure harness to tractor frame with tie wraps (C).



MX26914

4. Route harness (D) along frame and secure between hydraulic lines with tie wrap (E) at rear of tractor.



MX26915

5. Loop excess wire and secure to fender mount with tie wrap (F).

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