

JOHN DEERE
WORLDWIDE COMMERCIAL & CONSUMER
EQUIPMENT DIVISION

Tractor Trunk Mounted Sprayers
15 and 25 Gallon

OMM137621 G2

OPERATOR'S MANUAL



JOHN DEERE

North American Version
Litho in U.S.A.



INTRODUCTION

Thank You for Purchasing a John Deere Product

We appreciate having you as a customer and wish you many years of safe and satisfied use of your machine.

Using Your Operator's Manual

This manual is an important part of your machine and should remain with the machine when you sell it.

Reading your operator's manual will help you and others avoid personal injury or damage to the machine. Information given in this manual will provide the operator with the safest and most effective use of the machine. Knowing how to operate this machine safely and correctly will allow you to train others who may operate this machine.

If you have an attachment, use the safety and operating information in the attachment operator's manual along with the machine operator's manual to operate the attachment safely and correctly.

This manual and safety signs on your machine may also be available in other languages (see your John Deere dealer to order).

Sections in your operator's manual are placed in a specific order to help you understand all the safety messages and learn the controls so you can operate this machine safely. You can also use this manual to answer any specific operating or servicing questions. A convenient index located at the end of this book will help you to find needed information quickly.

The machine shown in this manual may differ slightly from your machine, but will be similar enough to help you understand our instructions.

RIGHT-HAND and LEFT-HAND sides are determined by facing in the direction the machine will travel when going forward. When you see a broken line (-----), the item referred to is hidden from view.

Before delivering this machine, your dealer performed a predelivery inspection to ensure best performance.

Special Messages

Your manual contains special messages to bring attention to potential safety concerns, machine damage as well as helpful operating and servicing information. Please read all the information carefully to avoid injury and machine damage.



CAUTION: Avoid injury! This symbol and text highlight potential hazards or death to the operator or bystanders that may occur if the hazards or procedures are ignored.

IMPORTANT: Avoid damage! This text is used to tell the operator of actions or conditions that might result in damage to the machine.

NOTE: General information is given throughout the manual that may help the operator in the operation or service of the machine.

PRODUCT IDENTIFICATION

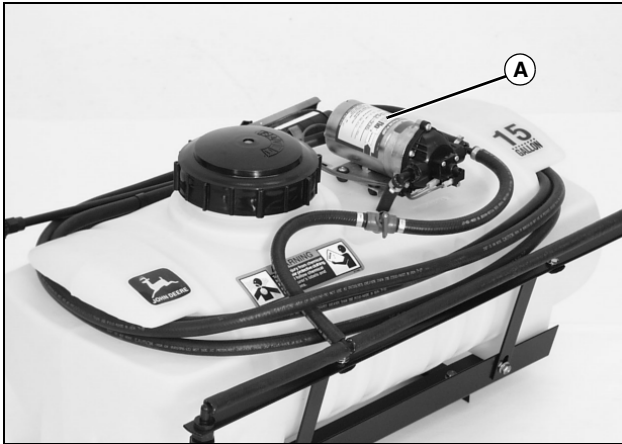
Record Identification Numbers

15 and 25 Gallon Tractor Trunk-Mounted Sprayer

Serial No. (010001-)

If you need to contact an Authorized Service Center for information on servicing, always provide the product model and serial number.

You will need to locate the model and serial number for the mower deck and record the information in the spaces provided below.



M94141

DATE OF PURCHASE:

DEALER NAME:

DEALER PHONE:

PRODUCT SERIAL NUMBER (A):

TABLE OF CONTENTS

Safety	1
Preparing the machine	5
Installing	6
Removing	9
Operating	10
Replacements Parts	13
Service	14
Using Troubleshooting Chart	16
Storage	17
Assembly	18
Specifications	24
Index	25

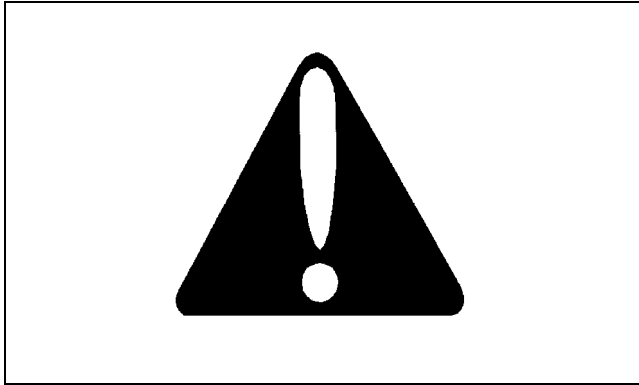
All information, illustrations and specifications in this manual are based on the latest information at the time of publication. The right is reserved to make changes at any time without notice.

COPYRIGHT© 2002
Deere & Co.
John Deere Worldwide Commercial and
Consumer Equipment Division
All rights reserved
Previous Editions
COPYRIGHT© 1998, 1997

OMM137621 G2 - English

SAFETY

Understanding Machine Safety Labels

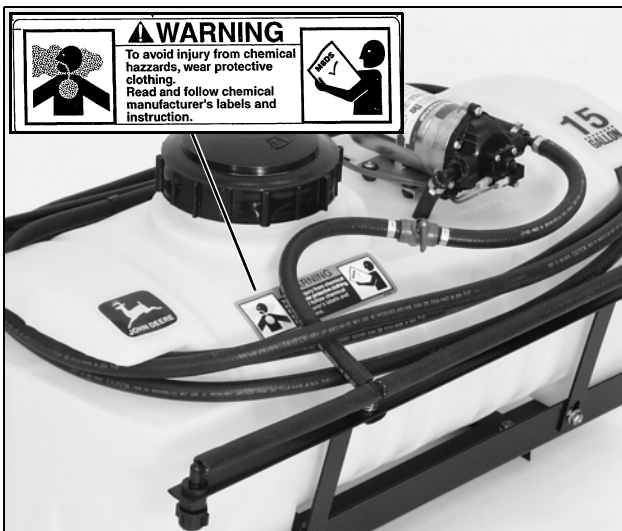


Safety-Alert Symbol

Read and recognize safety information. Be alert to potential for personal injury when you see this safety-alert symbol.

On your machine safety labels, the words DANGER, WARNING, and CAUTION are used with this safety-alert symbol. DANGER identifies most serious hazards. In this manual, the word CAUTION and this symbol call attention to safety messages.

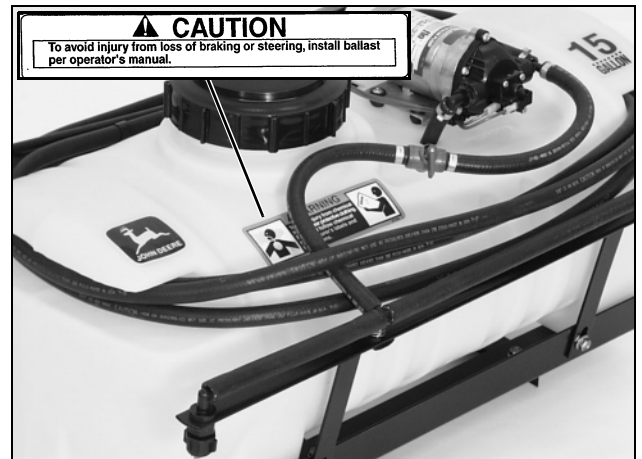
Warning



M94141/M147249

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

Caution



M94141/M147249

To avoid injury from loss of braking or steering, install ballast per operator's manual.

Park Machine Safely

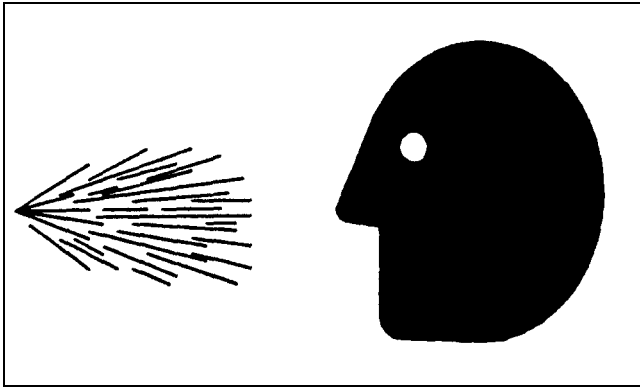
- Stop machine on a level surface, not on a slope.
- Disengage PTO.
- Lock park brake.
- Stop engine.
- Remove key.
- Before leaving operator's seat, wait for engine and all moving parts to stop.

Operate Safely

- Read the machine and attachment operator manuals 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.
- Check machine brake action before you operate. Adjust or service brakes as necessary.
- Inspect machine before you operate. Be sure hardware is tight. Repair or replace damaged, badly worn, or missing parts. Be sure guards and shields are in good condition and fastened in place. Make any necessary adjustments before you operate.
- Make repairs before you operate. Keep machine properly maintained and in good working order.
- Keep children away from spraying area.
- Do not leave machine unattended when it is running.
- Only operate during daylight or with good artificial light.

SAFETY

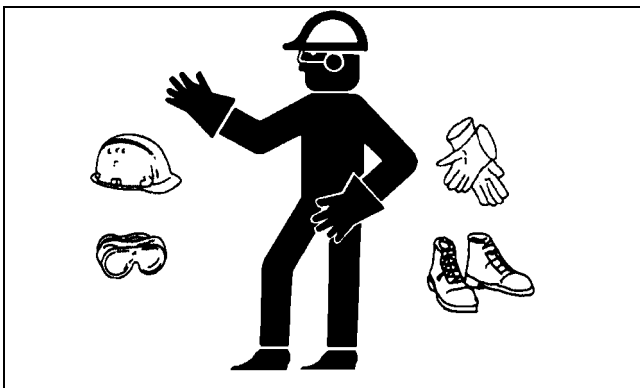
- Do not let anyone ride on sprayer or machine.
- Do not let children or untrained person operate machine.



M41998

- Do not direct spray toward bystanders or allow anyone near sprayer while in operation.
- If spray comes in contact with your body, immediately follow directions on chemical container pertaining to spray material.
- Do not spray during extreme heat or windy weather.
- Do not put nozzle tip or other parts to your lips to blow out dirt.
- Do not wear radio or music headphones while operating machine. Safe operation requires your full attention.

Wear Appropriate Clothing



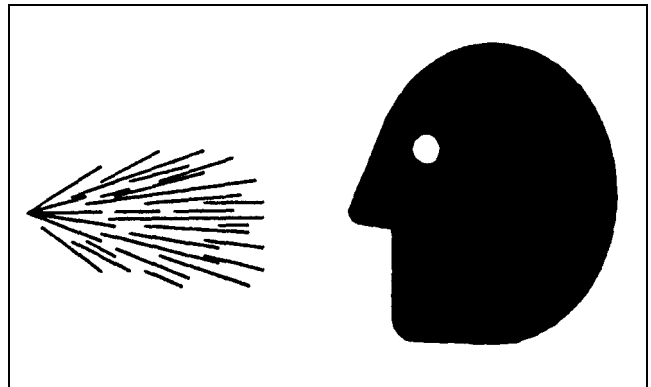
TS206tr

- Wear proper clothing and safety equipment while handling chemicals or using sprayer.
- It is best to wear full cover clothing and always wear protective goggles and rubber gloves to protect yourself while handling chemicals or using sprayer.
- Wash exposed skin areas frequently. Do not leave chemical residue on your skin.
- It is a good practice to take a good soapy shower immediately after daily usage.

- Wash all clothing worn when using chemicals separately in laundry after work is complete.

Practice Safe Maintenance

- Understand service procedure before doing work. Keep area clean and dry.
- Never lubricate, service, or adjust machine while it is moving. Keep safety devices in place and in working condition. Keep hardware tight.
- To prevent them from getting caught, keep hands, feet, clothing, jewelry, and long hair away from any moving parts.
- Before you service, adjust, clean or inspect sprayer:
- Stop machine engine.
- Turn sprayer switch off.
- Disconnect pump connection.
- Securely support any machine elements that must be raised for service work.
- Keep all parts in good condition and properly installed. Fix damage immediately. Replace worn or broken parts. Remove any buildup of grease, oil, or debris.
- Unauthorized modifications to machine may impair its function and safety.

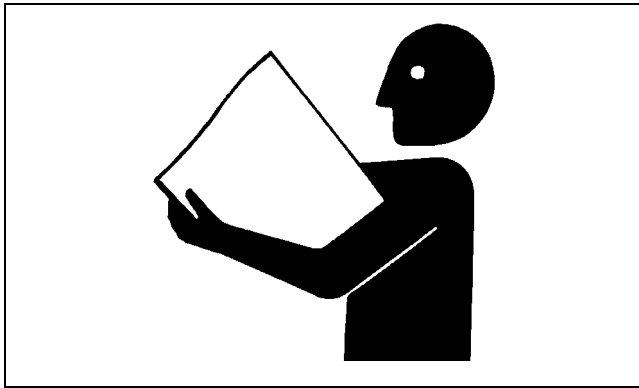


M41998

- If spray comes in contact with your body, immediately follow directions on chemical container pertaining to spray material.
- Keep spare filters available for replacement.

SAFETY

Handle Chemical Products Safely



TS1132X

Direct exposure to hazardous chemicals can cause serious injury. Potentially hazardous chemicals used with John Deere equipment include pesticides, coolants, and lubricants.

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 chemical dealer at time of chemical purchase.

Check MSDS before you start any job using a hazardous chemical. That way you will know exactly what risks are and how to do job safely. Then follow procedures and use recommended equipment.

Read Chemical Container Label

Chemicals can be dangerous. Improper selection or use can injure persons, animals, plants, soils or other property. Select right chemical for job, and handle and apply with care.

Read instructions, precautions and warnings on container label before opening. Use product strictly according to label directions for specific applications, in amounts specified, at times specified and only when needed.

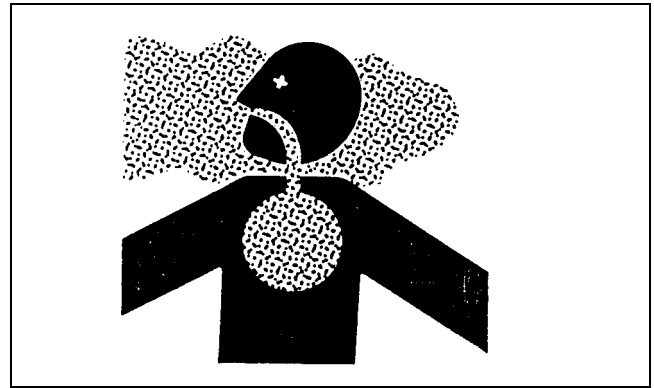
Keep container closed tightly except when preparing mix.

Do not remove labels from chemical containers. Store all chemicals in their original containers.

Do not mix chemicals unless stated on container label.

Store chemicals when not in use according to container label.

Use Chemicals Safely



M61022

NOTE: Your spray dealer can tell you which sprays need to be followed by a spray neutralizer material.

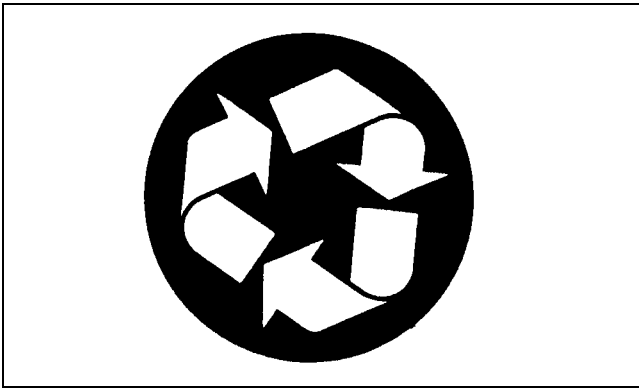
- DO NOT use flammable liquids.
- Chemicals can be dangerous. Improper selection or use can injure persons, animals, plants, soil or other properties.
- Follow directions for each specific chemical.
- Add chemicals to water—not water to chemicals.
- Never allow water hose that is used to fill tank to actually reach down into spray mix. You may contaminate end of hose.

Mix And Handle Chemicals Safely

- Follow instructions on chemical container labels.
- Open all chemical containers carefully, using proper tools.
- Open, pour, and mix in a well-ventilated area.
- Reserve all equipment used for application of chemicals exclusively for that purpose.
- Do not smoke, drink or eat food in chemical-handling area.

SAFETY

Dispose Of Chemicals Safely



M73469

- 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 area you previously treated.
- Never dump solution in a drain or near a lake or stream.
- Empty chemical containers should be triple-rinsed, with rinse water added to sprayer tank. Do not burn empty chemical containers. Dispose of containers at recycling center.

Transporting Sprayer Safely

- Use caution when transporting sprayer to help prevent possible injury.
- When filled with liquid, 15 Gallon Sprayer weighs 69 kg (153 lb); 25 Gallon Sprayer weighs 108 kg (237 lb) filled. This extra weight on back of a machine can change stability of machine.

PREPARING THE MACHINE

Machine Requirements

Tractor Trunk Support Frame

The 15 and 25 gallon tractor trunk mounted sprayers must be installed using specific tractor trunk support frames.

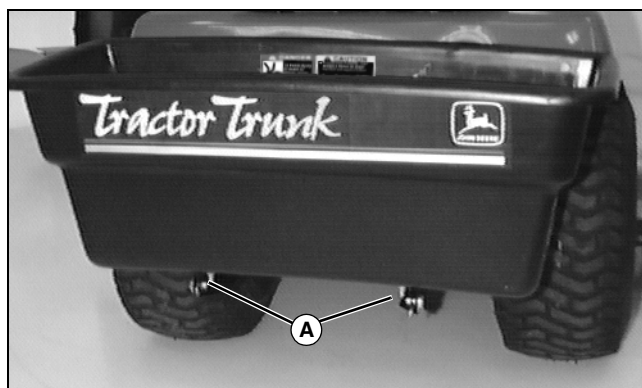
- 15 gallon sprayer requires a 2 cubic foot tractor trunk support frame.
- 25 gallon sprayer requires a 3 cubic foot tractor trunk support frame.

Tire Pressure

Make sure tractor tire pressure is correct. (See your machine operator's manual for correct pressure.)

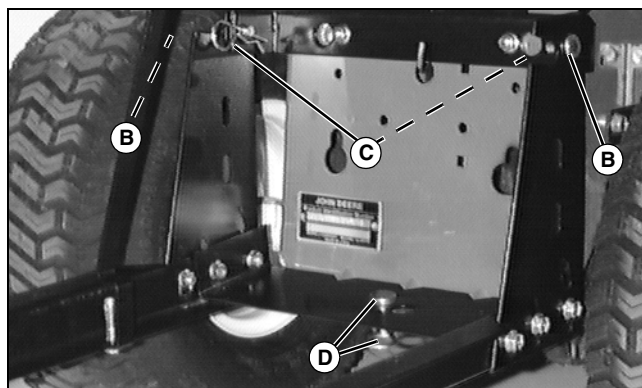
Remove Tractor Trunk

NOTE: To prevent loss of mounting pins upon removal of trunk, install pins through holes in support frame.



M88512

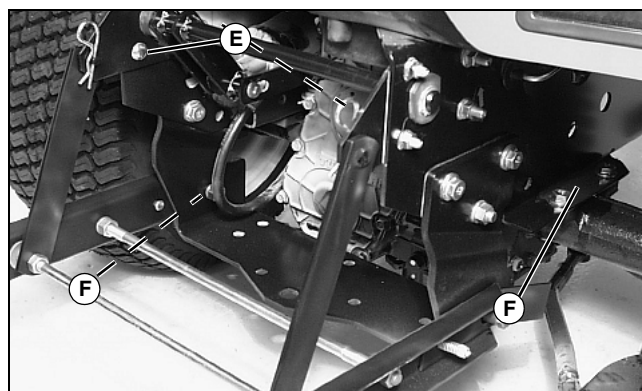
1. Remove two 3/8 x 3/4 in. drilled pins, flat washers, and small spring locking pins (A). Lift trunk box off support frame.



M88516

Picture Note: STX Model Shown.

2. For machines using 15 gallon sprayer, install mounting pins (B, C, and D).



M96813

Picture Note: 445 model shown.

3. For machines using 25 gallon sprayer, install mounting pins (E) and secure support frame latches around mounting studs (F).

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.

NOTE: Ballast weights can be purchased from your John Deere dealer.

All machines using 15 gallon sprayer require installation of one of the following:

- Mid-mount mower
- Front attachment
- Two front suitcase weights, or two front wheel weights.

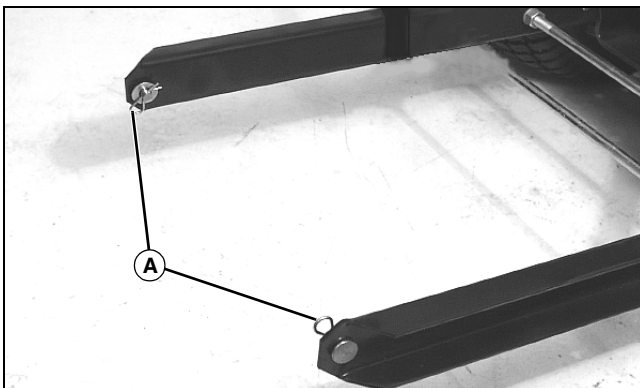
All machines using 25 gallon sprayer require installation of one of the following:

- Mid-mount mower
- Front attachment
- Four front suitcase weights, or two front wheel weights.

Attach Sprayer to Tractor Trunk Support Frame (15 Gallon Sprayer)

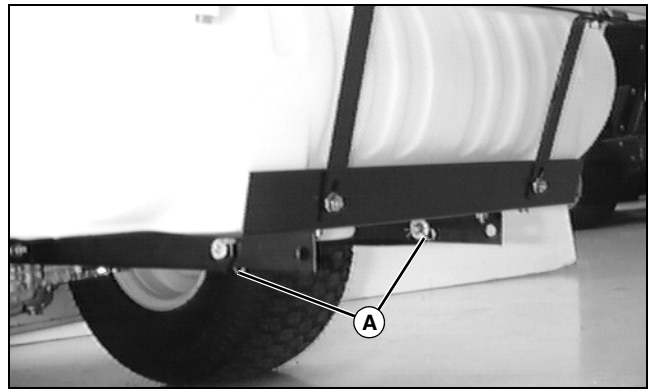
1. Park machine safely. (See Parking Safely in the Safety section.)

NOTE: For best performance, make sure tractor trunk support frame is level before installing sprayer.



M96814

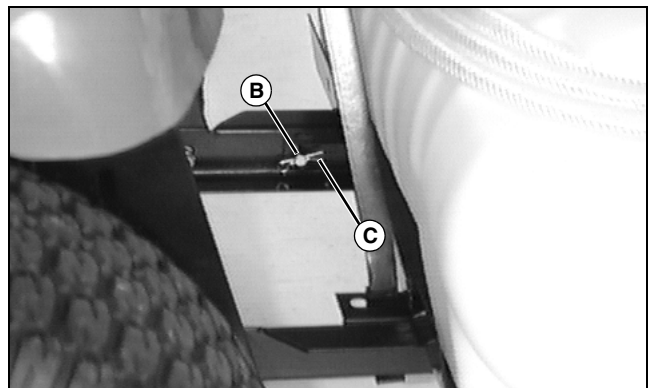
2. Remove two spring locking pins, flat washers, and 3/8 x 3/4 in. drilled pins (A) from support frame arms. Retain hardware.



M88546

3. Install sprayer onto support frame arms. Align holes in sprayer mount angles with holes in support frame arms. Install 3/8 x 3/4 in. drilled pins, flat washers, and spring locking pins (A) that were previously removed.

IMPORTANT: Avoid damage! Avoid equipment damage caused by inadvertently dumping sprayer. Sprayer must be locked to support frame with drilled pin (B) and spring locking pin (C) at all times when installed.



M88544

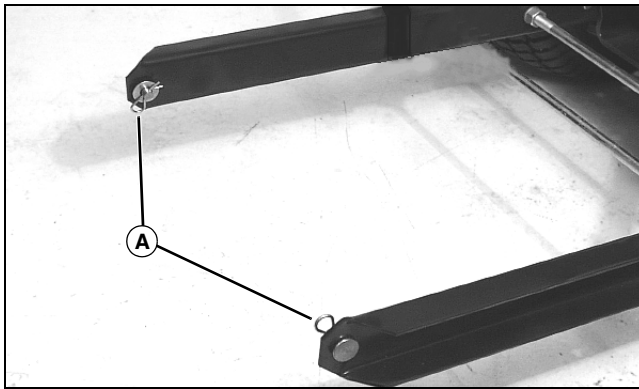
4. Install 3/8 x 3/4 in. drilled pin (B) through hole in right side support frame arm and hole in sprayer mount angle. Secure with spring locking pin (C).

Attach Sprayer to Tractor Trunk Support Frame (25 Gallon Sprayer)

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

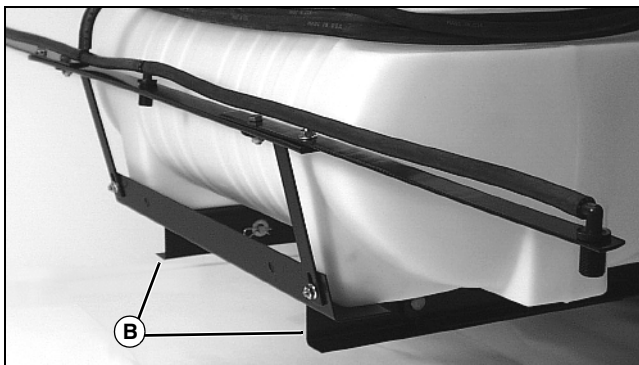
INSTALLING

NOTE: For best performance, make sure tractor trunk support frame is level before installing sprayer.



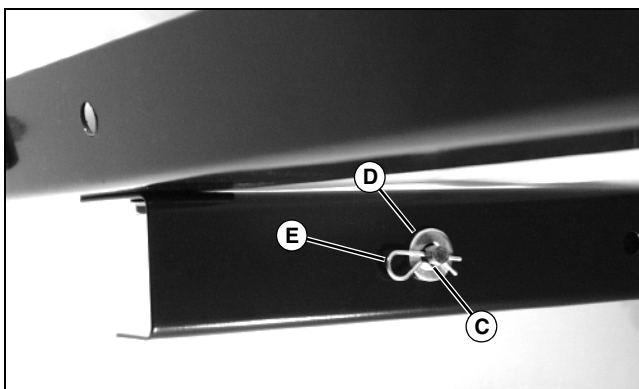
M96814

2. Remove two spring locking pins, flat washers, and 3/8 x 3/4 in. drilled pins (A) from support frame arms. Retain hardware.



M96810

3. Install sprayer onto support frame by sliding sprayer mount angles (B) to inside and over tractor trunk support frame arms.

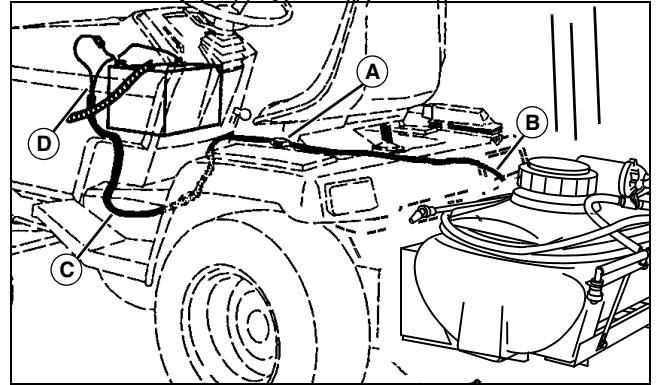


M96815

4. Align mounting holes and install previously removed drilled pin (C) at both sides of support frame. Secure each drilled pin with flat washer (D) and spring locking pin (E).

Install Wiring Harness (For Machines With Mid-Mounted Battery)

NOTE: Switch (A) is not located at center of main wiring harness. Harness plug connector nearest to switch gets connected to pump leads.



MIF

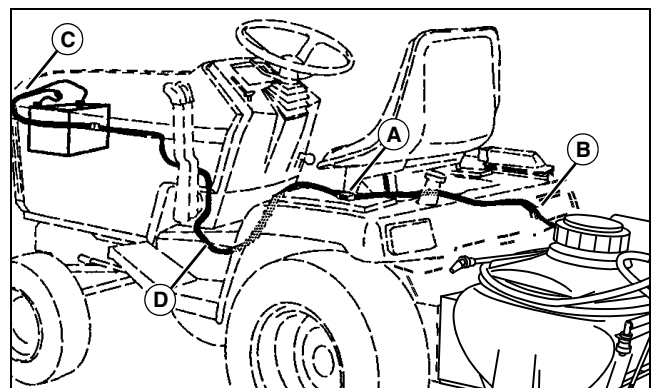
1. Open hood.
2. Connect main wiring harness to pump leads (B).
3. Route main harness as shown and clip in place at foot rest side panel (C). On some units route harness on right side of fuel tank filler neck.
4. Connect other end of main harness to battery lead plug (D).

IMPORTANT: Avoid damage! Make sure hood does not close on wiring harness.

5. Close hood.

Install Wiring Harness (For Machines With Upper Front-Mounted Battery)

NOTE: Switch (A) is not located at center of main wiring harness. Harness wiring connector nearest to switch gets connected to pump leads.



MIF

1. Open hood.

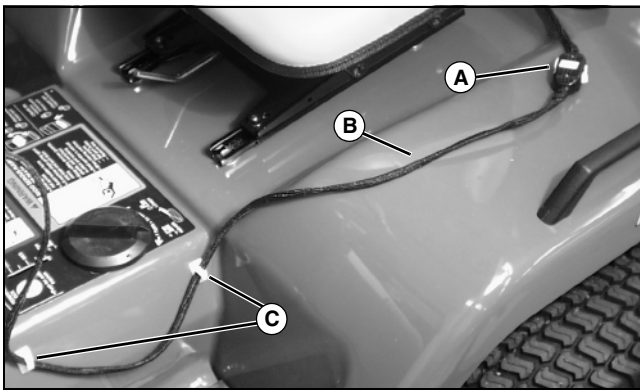
INSTALLING

2. Connect main wiring harness to pump leads (B).
3. Route main harness as shown. Make sure harness end (C) passes between left side hood rods. Clip harness in place at foot rest side panel (D). On some machines, route harness on right side of fuel tank filler neck.
4. Connect harness end (C) to wiring harness extension.

Install Wiring Harness (For Machines with Lower Front-Mounted Battery)

1. Open hood.

NOTE: Switch (A) is not located at center of main wiring harness. Harness wiring connector nearest to switch gets connected to pump leads.



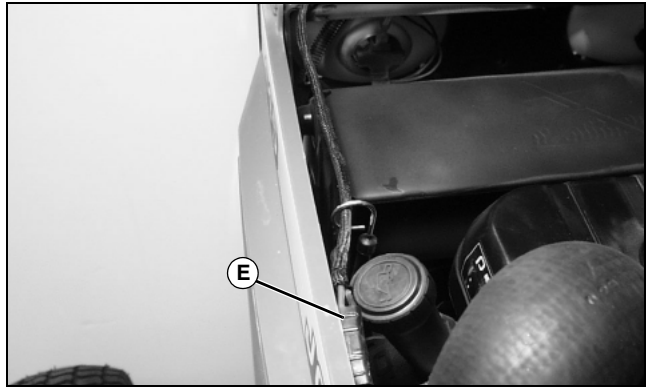
M96960

2. Connect main wiring harness (B) to pump leads.
3. Route main harness along fender as shown and clip in place at foot rest side panel (C).



M96961

4. Route main harness under side panel mounting flanged (D) and along top of side panel.



M96962

5. Connect main harness plug (E) to connector at dipstick.

REMOVING

Remove Sprayer

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



CAUTION: Avoid injury! To avoid chemical injury:

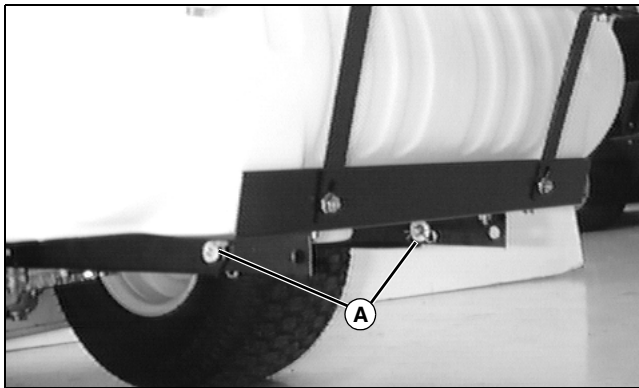
- Wear protective clothes, gloves and goggles when handling sprayer.
- If spray comes in contact with your body, immediately follow directions on chemical container pertaining to spray material.

2. Empty sprayer tank.

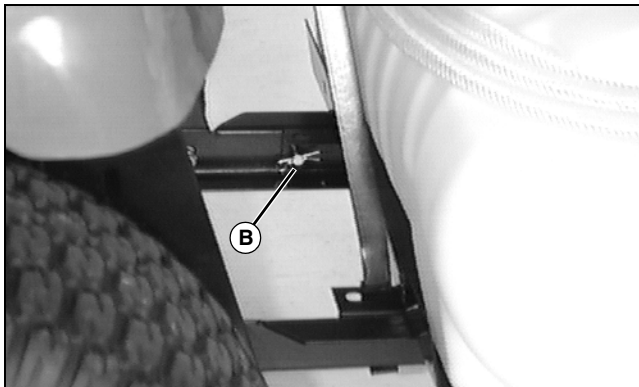
NOTE: Battery harness with fuse, and harness extension if used (25 gallon sprayer only), should not be removed.

3. Disconnect main wiring harness only. Leave all other harnesses installed on machine.

4. Roll up main harness and store with sprayer.



5. Remove spring locking pins, flat washers, and drilled pins (A).



6. Remove drilled pin and spring locking pin (B) at right side of support frame (15 gallon sprayer only). Store pins with sprayer for future use.

7. Slide sprayer off machine trunk support frame.

8. Install drilled pins, flat washers, and spring locking pins (A) in machine trunk support frame arms.

OPERATING

Checking Machine Ground Speed

1. Check ground speed in an open area.
2. Measure a test area that is 30.5 m (100 ft) in length.
3. Operate machine at wide open throttle. Operate machine at a low speed and drive machine test distance. Record time needed to travel that distance.
4. Make three passes, recording time for each pass. The average time should be 23 to 27 seconds to achieve recommended operating speed range:
 - 15 Gallon Sprayer – recommended operating speed is 4.8 km/h (3 mph). At this speed, average time traveling test distance should be 23 seconds.
 - 25 Gallon Sprayer – recommended operating speed is 4.0 km/h (2.5 mph). At this speed, average time traveling test distance should be 27 seconds.

NOTE: Adjust accordingly to achieve recommended speed range.

General Spraying Information

15 GALLON SPRAYER APPLICATION: The 15 Gallon Sprayer operates at a fixed pressure of 620 kPa (90 psi). This yields 12 minutes of spraying time using spray boom or 25 minutes of spraying time using handgun. When operating spray boom, plan on driving about 4.8 km/h (3 mph) or 80 m/min. (264 fpm). That provides 1472 m² (15,840 sq ft) of spray coverage per tank. Plan on about 10 percent overlap, so put enough chemical in tank for 1301 m² (14,000 sq ft) of spray coverage.

25 GALLON SPRAYER APPLICATION: The 25 Gallon Sprayer operates at a fixed pressure of 620 kPa (90 psi). This yields 16 minutes of spraying time using spray boom or 42 minutes of spraying time using handgun. When operating spray boom, plan on driving about 4.0 km/h (2.5 mph) or 67 m/min. (220 fpm). That provides 2453 m² (26,400 sq ft) of spray coverage per tank. Plan on about 10 percent overlap, so put enough chemical in tank for 2230 m² (24,000 sq ft) of spray coverage.

Filling the Tank



CAUTION: Avoid injury! Chemicals are dangerous:

- Wear protective clothes, gloves and goggles when handling chemicals and using the sprayer.
- Read additive or chemical container label for mixing and handling instructions. A Material Safety Data Sheet (MSDS) should be supplied by the chemical dealer and provides proper safety information.
- Prohibit all smoking, drinking and eating food in chemical-handling area.

IMPORTANT: Avoid damage! Refer to the chemical or additive container label for application rates and turf use.

Equivalent Measures

Measurement	Equivalent
3 teaspoons	15mL (1 tablespoon)
2 tablespoons	1 ounce
16 tablespoons	250mL (1 cup)
64 tablespoons	0.95L (1 qt)
2 cups	500 mL (1 pint)
4 cups	0.95L (1 qt)
4 quarts	3.8L (1 gal)
8 oz	1 cup
16 oz	1 pint
32 oz	1 qt
128 oz	1 gal

1. Follow instructions on the chemical manufacturer's container label for mixing directions and application rates to add chemical to the tank.
2. Add clean water to the tank.

OPERATING

Emptying the Tank



CAUTION: Avoid injury! Dispose of chemicals safely.

Proper disposal of spraying chemicals is very important to you and the environment. It is best to dilute excess solution and apply it to the area you previously treated.

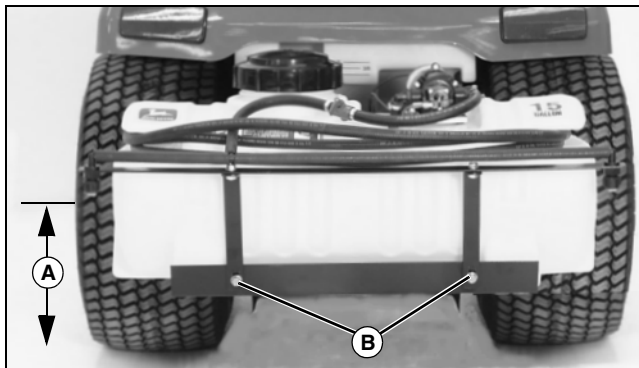
Never dump chemicals in a drain or near a lake or stream.

NOTE: Always empty the tank before removing the tank or storing the sprayer.

1. Empty the sprayer by spraying all solution from the tank onto an area to be treated.
2. Triple rinse the tank to clean.

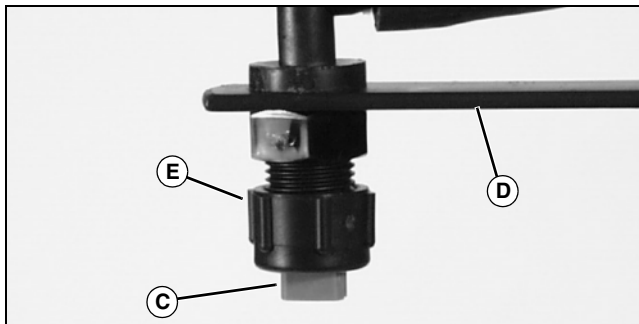
Adjusting Tip Height and Width

1. Install sprayer on machine.



M94139

2. Measure from spray tip to ground. Distance to ground (A) should be approximately 43.2 cm (17 in.).
3. If necessary, adjust boom height by raising or lowering boom on slotted boom supports (B).



M94109

4. Check spray tips (C). Tips should be aligned with boom (D) as shown. If necessary, loosen spray tip cap nut (E).

Align spray tip (C) and tighten cap nut.

NOTE: Each spray tip pattern should spread out to right and left sides, rather than to front and back of boom. There should be some spray overlap between each tip, and spray patterns should be consistent.

5. Test spray pattern with water on driveway or sidewalk.

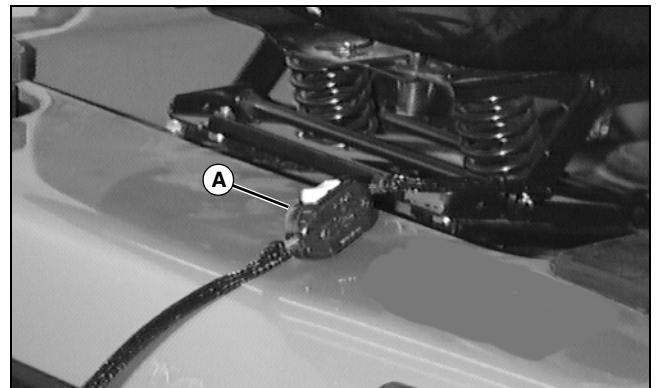
Starting and Stopping Sprayer



CAUTION: Avoid injury! Avoid accidental spraying! Sprayer pump will operate even with machine engine off. Before leaving sprayer, disconnect pump connection.

IMPORTANT: Avoid damage! Operate sprayer with machine running to avoid draining down battery.

1. Start machine.



M77139

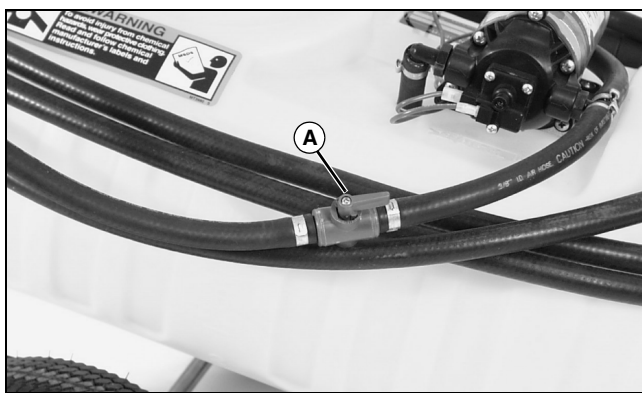
2. Push switch (A) to on or off position to start or stop sprayer.

Using Handgun or Boom Nozzles

NOTE: Shut-off valve lever (A) has two positions:

- **ON POSITION** – Lever is parallel with hose. Pump flow is directed to sprayer boom.
- **OFF POSITION** – Lever is perpendicular with hose. Pump flow is directed to handgun.

OPERATING



M94111

Using Handgun

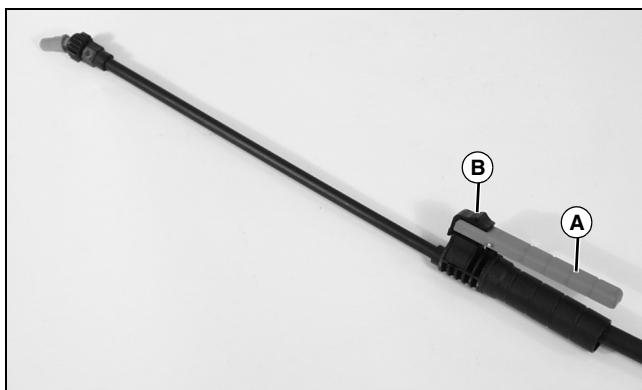
Turn lever (A) so that it is perpendicular with hose. The handgun is now for spraying.

Using Boom Nozzles

Turn lever (A) so that it is perpendicular with hose. Turn pump on and operate handgun to remove all air from hose. After handgun sprays liquid, turn pump off. Turn lever (A) so that it is parallel with hose. The boom nozzles are now ready for spraying.

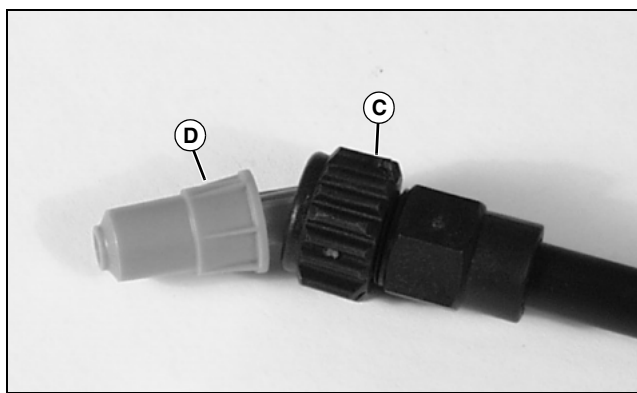
Using Handgun

1. Turn shut-off valve lever perpendicular to hose.



M94112

2. Squeeze handle (A) to spray.
3. Push lock (B) forward to lock handle in on position.



M94113

4. Adjust nozzle:

- Nozzle Angle - Loosen locknut (C). Turn nozzle (D) as desired and tighten locknut.
- Nozzle Spray Pattern - To change spray pattern, tighten or loosen nozzle (D) as desired.

Spraying Tips

- Check sprayer tip height. Dimension should be 43.2 cm (17 in.). If not, adjust sprayer tip height before operating.
- Do not let sprayer run in one spot.
- Do not over spray when you use weed killers.
- Liquid spray material is recommended. Sprayer does not agitate wettable powders.
- Timely applications of a smaller dosage are better than large applications.
- Turn sprayer off during turns to avoid double spraying.
- Fill sprayer where spills cannot harm grass.
- Follow manufacturer's recommendations for application of specific chemicals.
- Stop sprayer when tank is empty.

REPLACEMENTS PARTS

Service Literature

If you would like a copy of Parts Catalog or Technical Manual for this machine, call:

- **U.S. and Canada:** 1-800-522-7448.
- **All Other Regions:** Your John Deere dealer.

Parts

We recommend John Deere quality parts and lubricants, available at your John Deere dealer.

Part numbers may change, use part numbers listed below when ordering. If a number changes, your dealer will have latest number.

When ordering parts, your John Deere dealer needs your machine serial number and engine serial number. These are numbers that you recorded in Product Identification section of this manual.

Part Numbers

Item	Part Number
Tip Strainer	AM106667
Fuse (15 amp)	AT39227

(Part numbers are subject to change without notice. Part Numbers may be different outside U.S.A.)

SERVICE

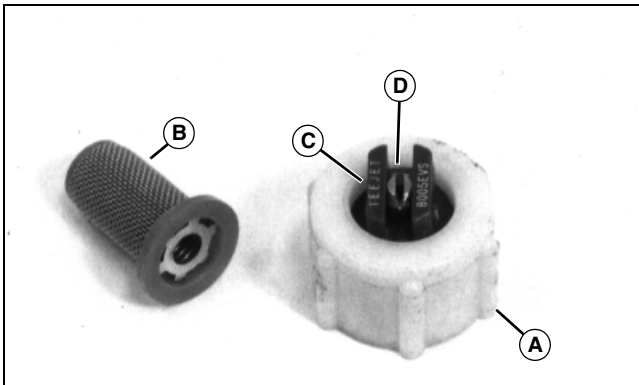
Servicing Sprayer Safely



CAUTION: Avoid injury! To avoid chemical injury:

- Wear protective clothes, gloves and goggles when handling sprayer.
- Do not put the nozzle tips or other parts to your lips to blow out dirt.
- If spray comes in contact with your body, immediately follow directions on chemical container pertaining to spray material.

Cleaning Spray Nozzle



M61039

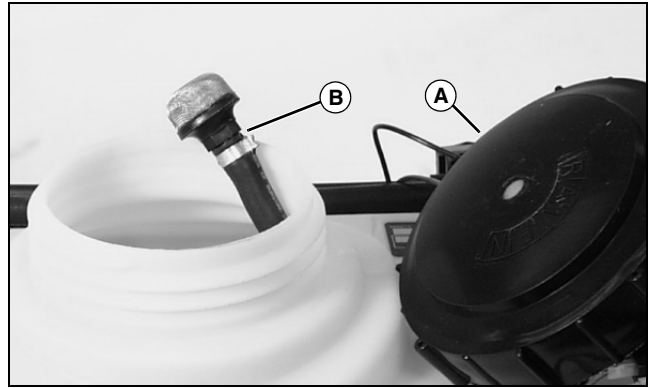
1. Remove spray nozzle (A) from sprayer.
2. Disassemble filter (B) and spray tip (C).

NOTE: Do not use a wire to clean opening (D) in spray tip.

3. Wash filter and spray tip in a non-flammable solvent.
4. Put spray tip in spray nozzle.
5. Put flat side of filter in spray nozzle.
6. Install assembly on sprayer and tighten nozzle.

Cleaning Pump Suction Screen

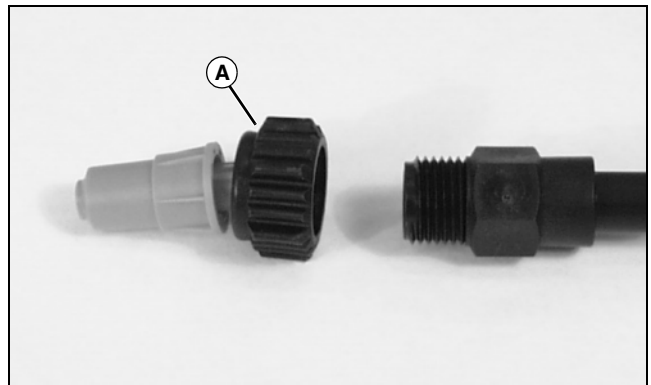
1. Empty sprayer tank.



M94117

2. Remove tank cover (A).
3. Locate suction screen (B) inside sprayer tank.
4. If necessary, unscrew suction screen and clean with liquid detergent and warm water.
5. If suction screen was removed, install on suction hose and position in the lowest depression inside sprayer tank.
6. Install and tighten tank cover.

Cleaning Handgun Nozzle



M94125

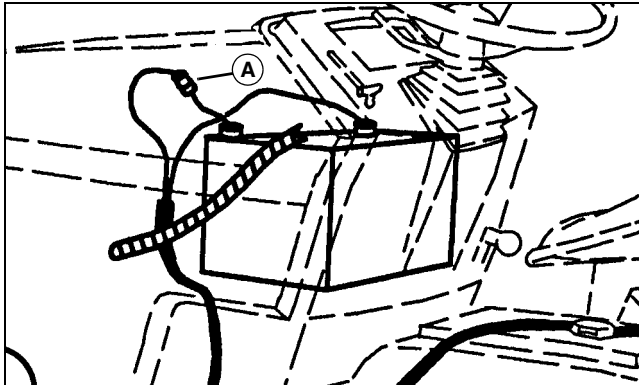
1. Unscrew nozzle (A) from handgun.
2. Wash nozzle with liquid detergent and warm water.
3. Install and tighten nozzle.

SERVICE

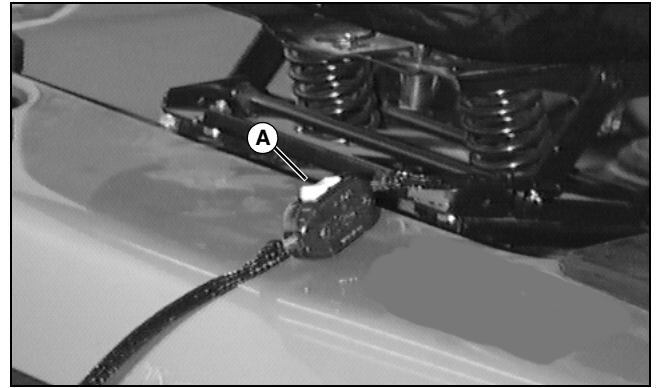
Changing Fuse

IMPORTANT: Avoid damage! When replacing a blown fuse, it is important to use only a fuse having correct amperage rating. Using a fuse with a rating other than indicated can result in a dangerous electrical system overload. If a properly rated fuse continues to blow, it indicates a problem in circuit that must be corrected.

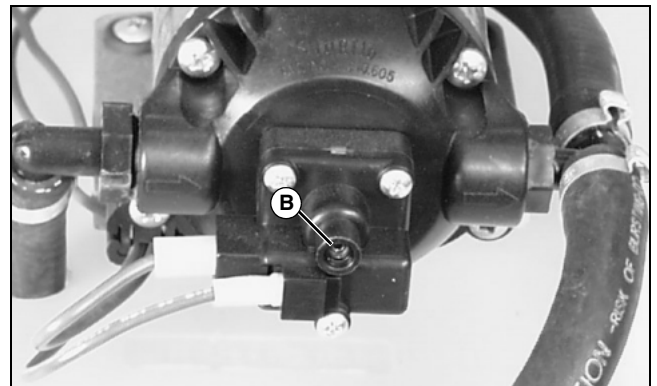
1. Open hood.



2. Hold each end of fuse holder (A) located on positive battery terminal.
3. Twist holder open.
4. Remove fuse.
5. Install new 15 amp fuse.
6. Twist holder closed.
7. Close hood.



3. Push switch (A) to on.



4. Using a hex wrench, turn set-screw (B) clockwise until pump runs smoothly.

Adjusting Pump

IMPORTANT: Avoid damage! Stop turning wrench as soon as pump runs smoothly, or pump damage can result.

Start machine when using sprayer to avoid battery run-down.

1. Park machine where spray will not do damage.
2. Stop engine.

USING TROUBLESHOOTING CHART

Using Troubleshooting Chart

If you are experiencing a problem that is not listed in this chart, see you John Deere dealer for service.

When you have checked all possible causes listed and are still experiencing problem, see you John Deere dealer.

IF	CHECK
Pump Loses Suction	Clean pump suction screen. Check tank fill level. Clean or replace pump. Check for loose pump fittings.
Pump Capacity Decreased	Clean pump suction screen. Clean spray nozzle(s). Selection lever is not completely turned on, or is in off position.
Poor Spray Pattern	Clean spray nozzle(s). Adjust nozzle height. Adjust spray tip - parallel with boom.
Pump Vibrates or Spray Pulsates	Adjust pump.
Pump Does Not Work	Check wiring connections. Check machine battery. Clean debris from pump. Check pump switch. Check pump motor. Check fuse at battery. Adjust pump.

STORAGE

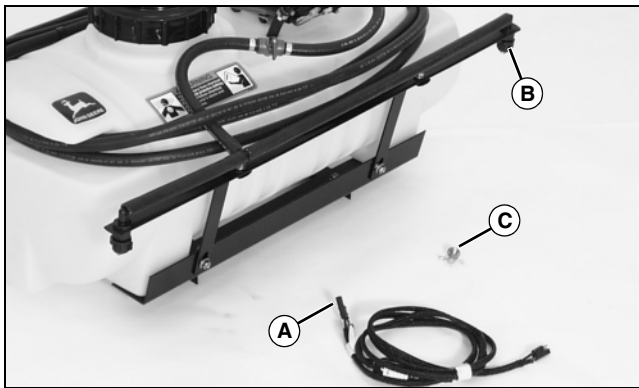
Store Sprayer Safely



CAUTION: Avoid injury! To avoid chemical injury:

- **Wear protective clothes, gloves and goggles when handling sprayer.**
- **Do not store sprayer with chemicals in tank. Triple rinse all sprayer components.**
- **If spray comes in contact with your body, immediately follow directions on chemical container pertaining to spray material.**

1. Pump all spray material from tank.
2. Rinse tank, pump, handgun and all hoses thoroughly with fresh clean water.
 - Repeat rinsing of components several times.
3. Wipe out sump with a clean cloth or paper towel.
4. Drain hoses and pump filter.

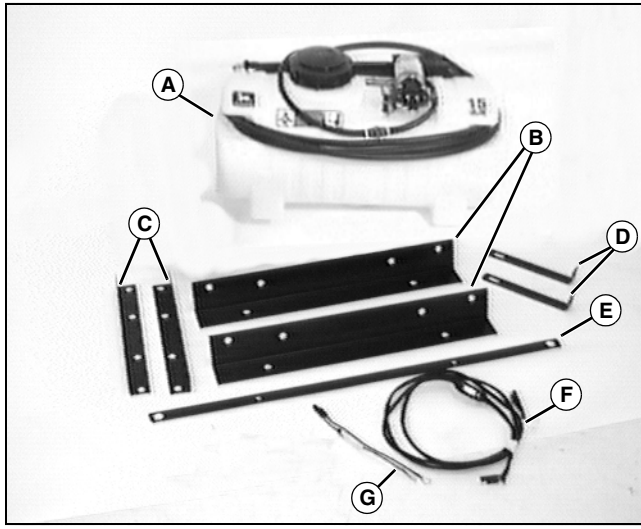


M94140

5. Remove wiring harness (A) and sprayer (B) from machine.
6. Check sprayer for worn or damaged parts. Replace parts as needed.
7. Tighten loose hardware.
8. Store sprayer in a place where it will not freeze.

ASSEMBLY

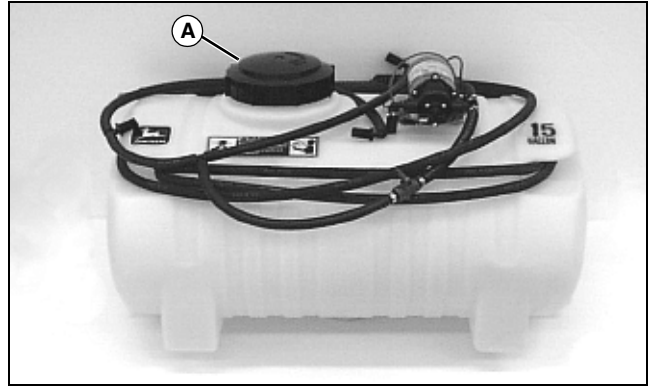
Identify Parts - 15 Gallon Sprayer



M88543A

completed. Use this hardware to lock out support frame dumping feature after sprayer is attached to tractor trunk support frame.

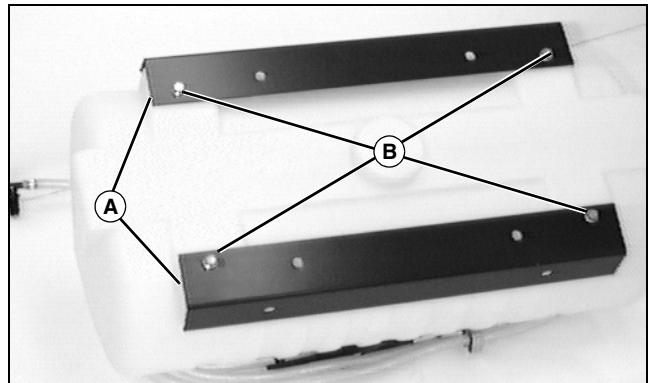
Clean Sprayer Tank



M96817

1. Remove filler cap (A).
2. Spray over all inside surfaces of tank with low pressure garden hose. Then fill tank with water.
3. Skim all plastic shavings or other debris from water.
4. Once clean, empty tank and install filler cap.

Install Tank Supports to Sprayer



M88549

1. Install two tank supports (A) to bottom of spray tank assembly using four 5/16 x 5/8 in. flanged bolts (B). Do not tighten at this time.

Qty.	Description
1	15 Gallon Sprayer Base Unit (A)
2	Tank Support (B)
2	Tank Mount Angle (C)
2	Boom Support (D)
1	Spray Boom (E)
1	Main Wiring Harness (F)
1	Wiring Harness with Fuse (G)
1	Bag of Parts (Not Shown)

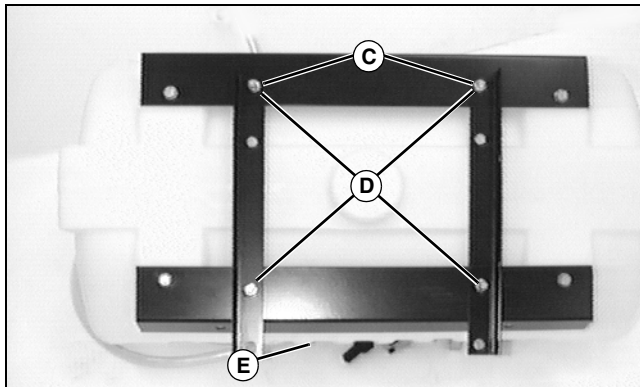
Bag of Parts

Qty.	Description	Size
12	Flanged Bolt	5/16 x 5/8 in.
8	Flanged Nut	5/16 in.
1	Drilled Pin	3/8 x 3/4 in.
1	Spring Locking Pin	
2	Spray Tip Fitting Locknut	
2	Spray Tip Fitting Capnut	
2	Spray Tip Screen	
2	Spray Tip	
2	Wire Clip	

NOTE: There should be a 3/8 x 3/4 in. drilled pin and a spring locking pin remaining after assembly is

ASSEMBLY

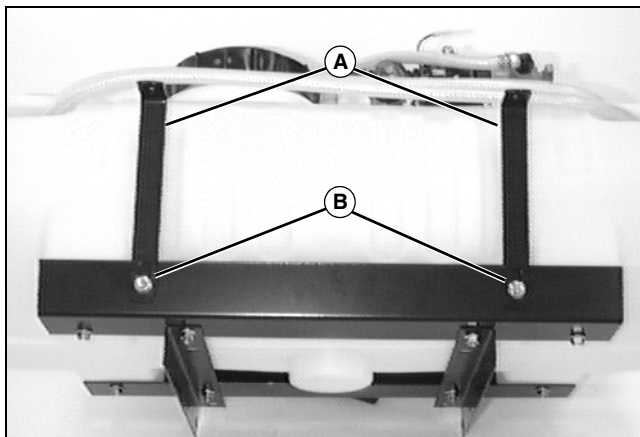
NOTE: The ends that extend past tank support should be on same side as handgun on front of tank.



M88550

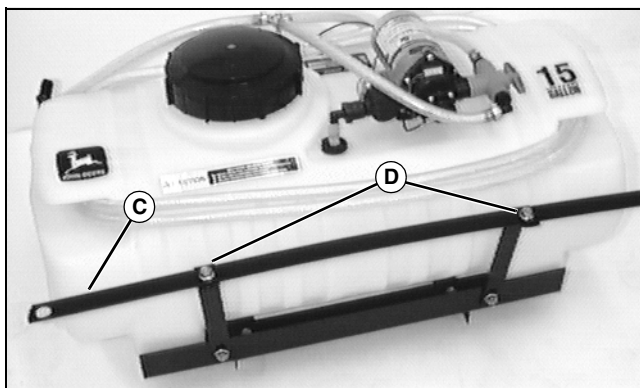
2. Install two mount angles (C) using four 5/16 x 5/8 in. flanged bolts and four 5/16 in. flanged nuts (D).
3. Tighten all hardware.

Install Boom Supports and Main Boom



M88551

1. Install two boom supports (A) using two 5/16 x 5/8 in. flanged bolts and two 5/16 in. flanged nuts (B).

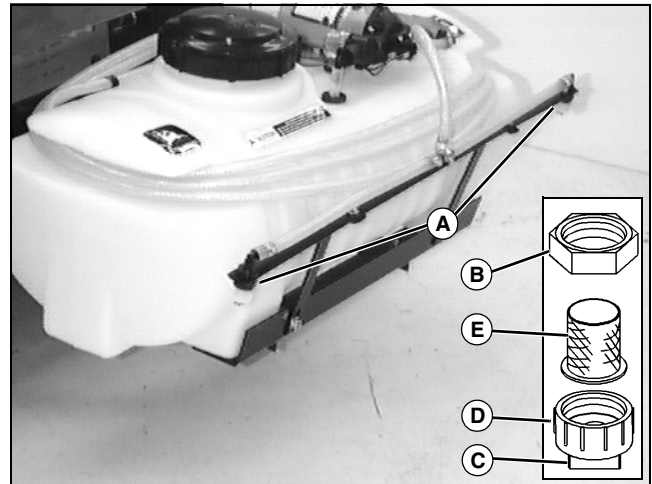


M88547

2. Install spray boom (C) to boom supports using two 5/16

- x 5/8 in. flanged bolts and two 5/16 in. flanged nuts (D).
3. Tighten nuts (D) completely.

Install Boom Hose Assembly



M88548M72996a

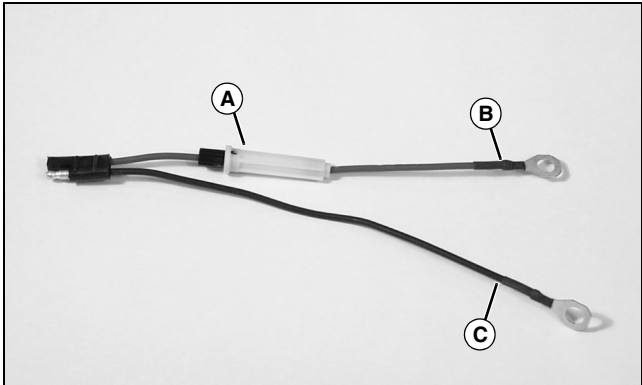
1. Position hose assembly across boom. Insert hose fittings (A) through holes.
2. Tighten hex nut (B) on threaded ends of fittings (A).
3. Seat spray tip (C) in spray tip cap nut (D). Put flat side of spray tip screen (E) on top of spray tip.
4. Tighten spray tip cap nut (D) on hose fitting. Repeat for other fittings.
5. Adjust tip height and width.

ASSEMBLY

Install Wiring Harness to Battery

IMPORTANT: Avoid damage! To help prevent electrical spark, install red wire to positive (+) battery terminal first. Then install black wire to negative (-) battery terminal.

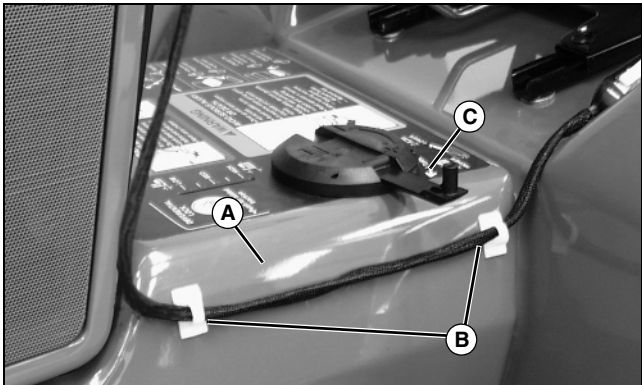
To prevent damage, make sure hood does not close on wires or connectors.



M94108

1. Open fuse holder (A). Fuse holder should contain a 15A/32V fuse. Make sure fuse filament is not broken. Install fuse and close holder.
2. Open hood. If battery is mounted low and behind grille, carefully unsnap top of grille to provide access to battery terminals.
3. Remove nut from positive (+) battery cable clamp. Install red lead (B) on clamp bolt. Install and tighten nut completely.
4. Remove nut from negative (-) battery clamp. Install black lead (C) on clamp bolt. Install and tighten nut completely.

Install Wire Clips

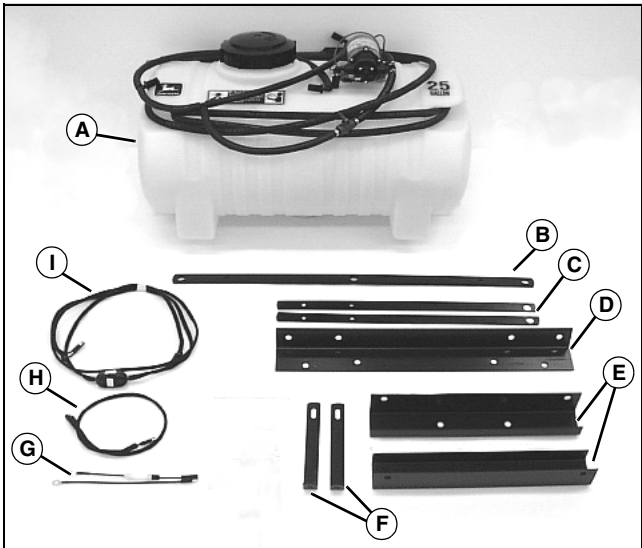


M96811

1. Clean foot rest side panel (A) at left side of machine with mild detergent or isopropyl alcohol. Dry thoroughly.

2. Affix wire clips (B) to panel. Position clips as shown so when sprayer main wiring harness is installed (harness shown installed), it will not interfere with deck height adjustment crank (C).
3. Proceed with Installing section.

Identify Parts - 25 Gallon Sprayer



M96804

Qty.	Description
1	25 Gallon Sprayer Base Unit (A)
1	Main Boom (B)
2	Boom Extension (C)
1	Tank Support (D)
2	Tank Mount Angle (E)
2	Boom Support (F)
1	Main Wiring Harness (G)
1	Wiring Harness Extension (H)
1	Wiring Harness with Fuse (I)
1	Bag of Parts (Not Shown)

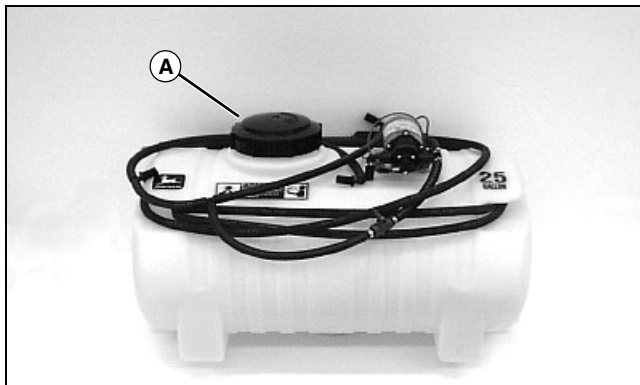
Bag of Parts

Qty.	Description	Size
2	Hex Head Bolt	5/16 x 1 in.
6	Flanged Head Bolt	5/16 x 5/8 in.
2	Pan Head Machine Screw	5/16 x 1/2 in.

ASSEMBLY

Qty.	Description	Size
4	Flanged Nut	5/16 in.
2	Locknut	5/16 in.
3	Spray Tip Fitting Hex Nut	
3	Spray Tip Fitting Cap Nut	
3	Spray Tip Screen	
3	Spray Tip	
2	Wire Clip	

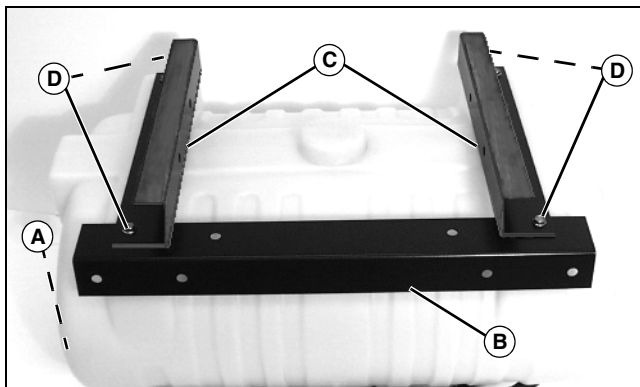
Clean Sprayer Tank



M96816

1. Remove tank filler cap (A).
2. Spray over all inside surfaces of tank with low pressure garden hose. Then fill tank with water.
3. Skim all plastic shavings or other debris from water.
4. Once clean, empty tank and install filler cap.

Install Tank Supports to Sprayer

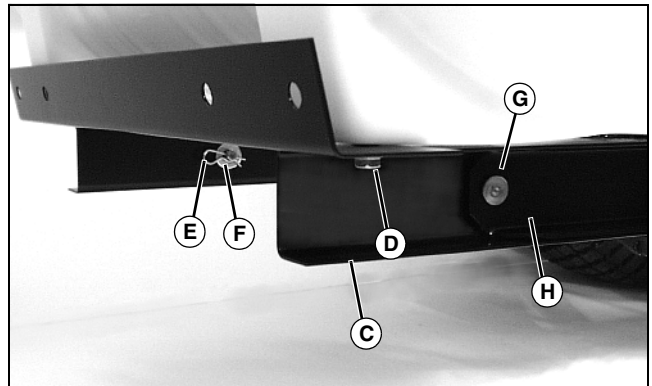


M96805

1. Carefully set tank bottom side up so 25 gallon label (A)

is at location shown.

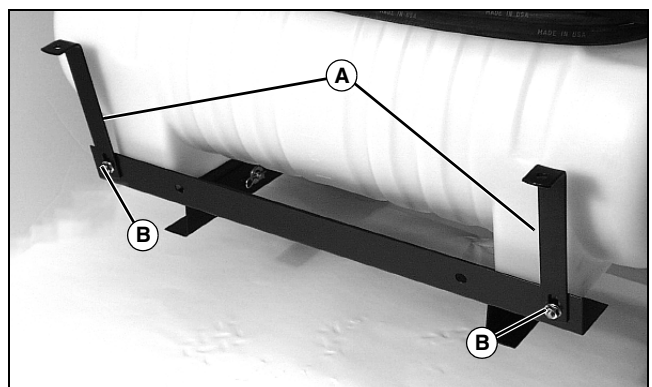
2. Position tank support (B) onto tank and align mounting holes with threaded inserts in tank.
3. Position mount angles (C) as shown and align holes with threaded inserts. Secure support (B) and mount angles (C) to tank with 5/16 x 5/8 in. flanged bolts (D). Do not tighten completely.
4. Remove spring locking pin (E), flat washer (F) and drilled pin (G) from each side of support frame.



M96806

5. Install sprayer onto machine trunk support frame by sliding mount angles (C) over frame support arms (H).
6. Align holes and install drilled pin (G) at each side. Secure each pin with flat washer (F) and spring locking pin (E).
7. Tighten four bolts (D) completely to secure tank.

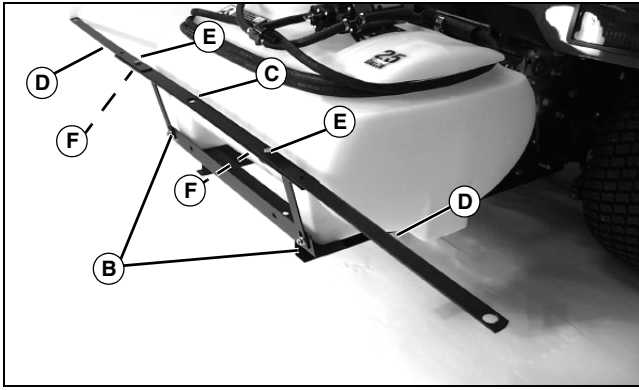
Install Boom Supports and Main Boom



M96807

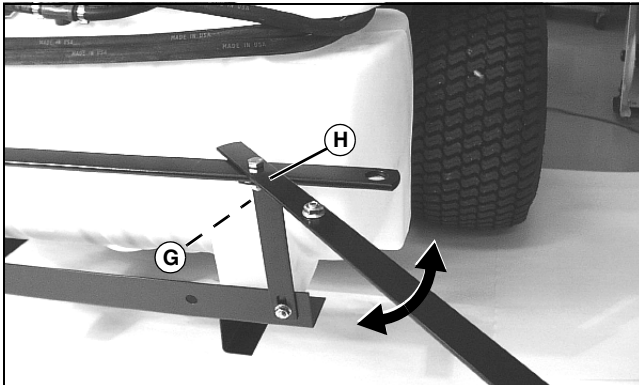
1. Attach boom supports (A) to tank support with two 5/16 x 5/8 in. flanged bolts and flanged nuts (B). Do not tighten nuts (B) completely.

ASSEMBLY



M96808

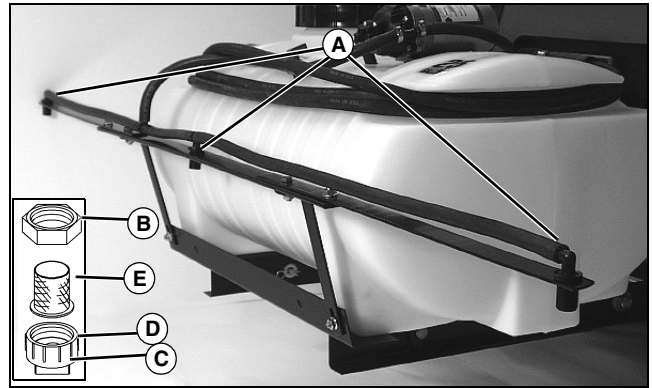
2. Attach main boom (C) and boom extensions (D) to boom supports with 5/16 x 1 in. hex head bolts (E). Secure with lock nuts (F). Do not overtighten locknuts. Boom extensions must be able to swing outward.
3. Adjust boom supports to equal heights and tighten flanged nuts (B) completely.



M96809

4. Swing out both boom extensions and install 5/16 x 1/2 in. pan head machine screw (G) and flanged nut (H). Tighten nuts completely.
5. Swing boom extensions back to original position.

Install Boom Hose Assembly



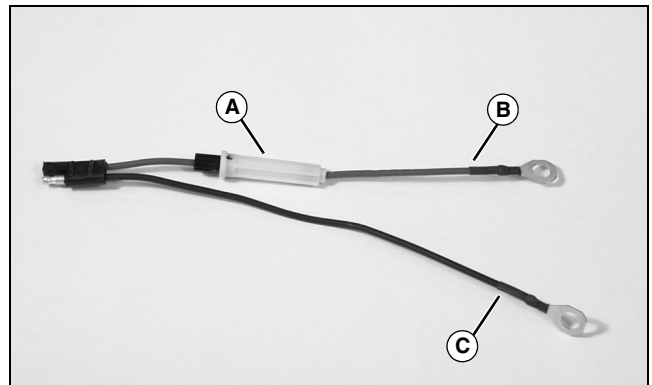
M96810/M72996a

1. Position hose assembly across boom. Insert hose fittings (A) through holes.
2. Tighten hex nut (B) onto threaded ends of fittings (A).
3. Seat spray tip (C) in spray tip cap nut (D). Put flat side of spray tip screen (E) on top of spray tip.
4. Tighten spray tip cap nut (D) onto hose fitting. Repeat for other fittings.
5. Adjust tip height and width.

Install Wiring Harness to Battery

IMPORTANT: Avoid damage! To help prevent electrical spark, install red wire to positive (+) battery terminal first. Then install black wire to negative (-) battery terminal.

To prevent damage, make sure hood does not close on wires or connectors.



M94108

1. Open fuse holder (A). Fuse holder should contain a 15 A / 32 V fuse. Make sure fuse filament is not broken. Install fuse and close fuse holder.
2. Open machine hood. If battery is mounted low and behind grille, carefully unsnap top of grille to provide

ASSEMBLY

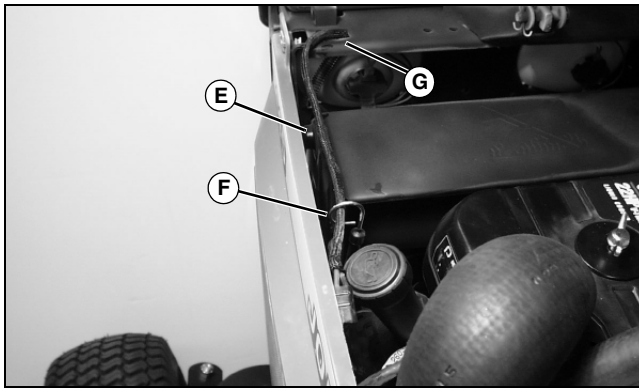
access to battery terminals.

3. Remove nut from positive (+) battery cable clamp. Install red lead (B) onto clamp bolt. Install and tighten nut completely.

4. Remove nut from negative (-) battery cable clamp. Install black lead (C) onto clamp bolt. Install and tighten nut completely.

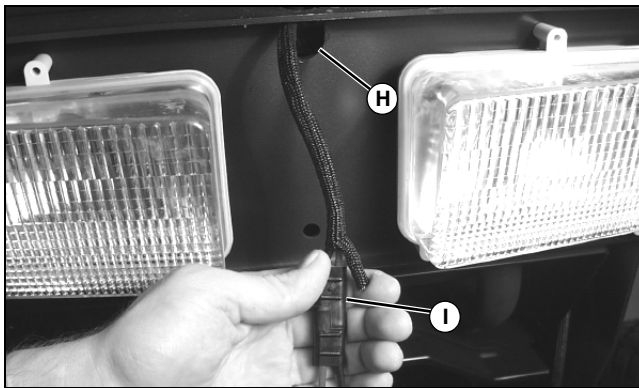
Install Wiring Harness Extension

NOTE: If battery is mounted low and behind machine grille, short wiring harness extension will be used. This harness is not needed for other battery mounting configurations.



M96818

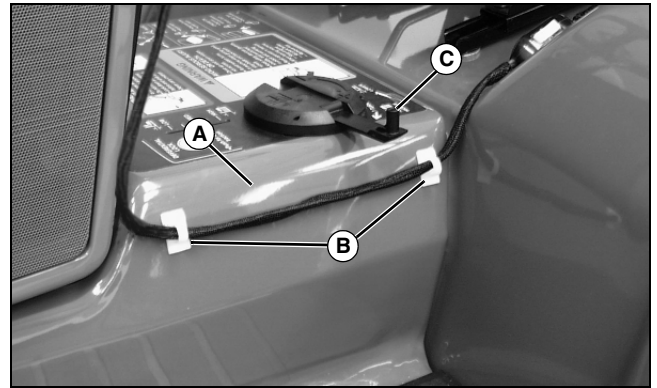
1. Route wiring harness extension (E) through dipstick (F) and hole (G).



M96819

2. Bring other end of extension through hole (H) and connect it to battery lead plug (I). Then snap grille in place.

Install Wire Clips



M96811

1. Clean foot rest side panel (A) at left side of machine with mild detergent or isopropyl alcohol. Dry thoroughly.

2. Affix wire clips (B) to panel. Position clips as shown so that when sprayer main wiring harness is installed, it will not interfere with deck height adjustment crank (C).

SPECIFICATIONS

Model 15 Sprayer

Tank	57 L (15 gal)
Pump	Electric Motor/Diaphragm
Current Draw	7 amp
Fuse	15 amp
System Pressure	620 kPa (90 psi)
Spray Rate	4.8 L/min. (1.25 U.S. gal/min)
Suction Hose Strainer	Stainless Steel
Spray Tip Material	Two 90° Stainless Steel
Handgun Material	Plastic
Handgun Adjustment	Fan to Stream
Weight (Empty)	15 kg (35 lb)
Weight (Full)	69 kg (153 lb)

Model 25 Sprayer

Tank	95 L (25 gal)
Pump	Electric Motor/Diaphragm
Current Draw	7 amp
Fuse	15 amp
System Pressure	620 kPa (90 psi)
Spray Rate	5.9 L/min. (1.56 U.S. gal/min)
Suction Hose Strainer	Stainless Steel
Spray Tip Material	Three 90° Stainless Steel
Handgun Material	Plastic
Handgun Adjustment	Fan to Stream
Weight (Empty)	17 kg (37 lb)
Weight (Full)	108 kg (237 lb)

INDEX

A		Sprayer, Storing	17
Assembly, Sprayer	18	Sprayer, Transporting Safely	4
B		Spraying Information	10
Ballast, Installing	6	Spraying Tips	12
Battery Connection	22	Starting and Stopping Sprayer	11
Boom Hose Assembly, Install	22	Storage	17
Boom Nozzles or Handgun, Selecting	11	T	
Boom Supports and Main Boom, Install	21	Tank Supports to Sprayer, Install	21
C		Tank, Clean Sprayer	21
Chemicals Safely, Using	3	Tank, Filling	10
Chemicals, Disposing of	4	Tip Height and Width, Adjusting	11
Chemicals, Handling	3	Transporting Sprayer Safely	12
Chemicals, Safety	3	Troubleshooting Chart	16
Clean Sprayer Tank	21	W	
E		Wire Clips, Install	23
Extension, Install Wiring Harness	23	Wiring Harness Battery Connection, Install	22
F		Wiring Harness Extension, Install	23
Fuse, Changing	15	Wiring Harness, Installation	7
H			
Handgun or Boom Nozzles, Selecting	11		
Handgun, Using	12		
I			
Install Boom Supports and Main Boom	21		
Install Tank Supports to Sprayer	21		
Install Wiring Harness Extension	23		
M			
Machine Ground Speed, Checking	10		
Main Boom and Boom Supports, Install	21		
Measurements, Equivalent	10		
N			
Nozzle, Cleaning Handgun	14		
Nozzles, Cleaning Spray	14		
P			
Parts in Kit	18, 20		
Pump, Adjusting	15		
S			
Safety, Removing	1		
Safety, Service	2		
Screen, Cleaning Pump Suction	14		
Specifications	24		
Sprayer Tank, Clean	21		
Sprayer, Install	6		
Sprayer, Installing	6		
Sprayer, Removing	9		
Sprayer, Servicing Safely	14		

NOTES

NOTES

JOHN DEERE QUALITY

John Deere Quality



MIF

John Deere equipment is more than just a purchase, it's an investment in quality. That quality goes beyond our equipment to your John Deere dealer's parts and service support. This support is needed to keep you a satisfied customer.

That's why your John Deere has initiated a process to handle your questions or problems, should they arise. The following three steps will help guide you through the process.

Step 1

Refer to your operator's manual

- | | |
|---|---|
| A. It has many illustrations and detailed information on the safe and proper operation of your equipment. | C. It gives ordering information for parts catalogs, service and technical manuals. |
| B. It gives troubleshooting procedures, and specification information. | D. If your questions are not answered in the operator's manual, then go to Step 2. |

Step 2

Contact your dealer (Call 1-800-537-8233 to locate your nearest your John Deere dealer)

- | | |
|---|---|
| A. Your John Deere dealer has the responsibility, authority, and ability to answer questions, resolve problems, and fulfill your parts and service needs. | C. If the parts and service people are unable to resolve your problem, see the dealership manager or owner. |
| B. First, discuss your questions or problems with your dealer's trained parts and service staff. | D. If your questions or problems are not resolved by the dealer, then go to Step 3. |

Step 3

Call the your John Deere Customer Communications Center

- | | |
|--|--|
| A. Your John Deere dealer is the most efficient source in addressing any concern, but if you are not able to resolve your problem after checking your operator's manual and contacting your dealer, call the Customer Communications Center. | |
| B. For prompt, effective service, please have the following ready before you call: | |
| The name of the dealer with whom you've been working. | Your 13-digit serial number which you recorded on the inside front cover of this manual. |
| Your equipment model number. | If the problem is with an attachment, your attachment identification number. |
| Number of hours on machine (if applicable). | |
| C. Then call 1-800-537-8233 and our advisor will work with your dealer to investigate your concern. | |