

# Walker Rider Lawnmowers

## OWNER'S & ILLUSTRATED PARTS MANUAL

Model SP6641 25- Gallon Sprayer Attachment

### TABLE OF CONTENTS

Section 1	Safety Information & Warranty
Section 2	Assembly Instructions
Section 3	Specifications
Section 4	Operation
Section 5	Trouble Shooting
Section 6	Service Parts List



#### **Please read and save these instructions**

For safety, Read all safety and operating instructions prior to operating the machine.

# Section 1 - Safety Information & Warranty

Read and recognize safety information. Be alert to the potential for personal injury when you use this machine.



## LIMITED WARRANTY FOR WALKER SPRAYER ATTACHMENT

### 1. *What does this warranty covers, and for how long?*

Walker Manufacturing Company will, at its option, repair or replace, without charge, any part covered by this warranty that is found to be defective in material or workmanship within one (1) year after date of sale to the original retail purchaser unless the product is used for rental purposes, in which case this warranty is limited to ninety (90) days. At Walker's request, customer will make the defective part available for inspection by Walker and/or return the defective part to Walker, transportation charges prepaid. All parts and components of the sprayer are covered by this warranty.

### 2. *What this warranty does not cover?*

**A.** This warranty does not cover defects caused by depreciation or damage caused by normal wear, accidents, improper maintenance, improper use or abuse of the product, alterations, or failure to follow the instructions contained in the owner's manual for operation and maintenance.

**B.** The customer shall pay any charges for making service calls and/or transporting the sprayer to and from the place where the inspection and/or warranty work is performed.

### 3. *How to obtain service under this warranty?*

Warranty service can be arranged by contacting the dealer where you purchased the mower or by contacting Walker Manufacturing Company, 5925 East Harmony Road, Ft Collins CO 80525 Proof of date of purchase may be required to verify warranty coverage.

### 4. *Warranty limitation*

**A.** There is no other express warranty. Any warranty that may be implied from this purchase including merchantability, and fitness for a particular purpose, is hereby limited to the duration of this warranty and to the extent permitted by law any and all implied warranties are excluded. Some states do allow limitations on how long an implied warranty lasts, so the above limitations may apply to you.

**B.** Walker will not be liable for any incidental, consequential, or special damages and/or expenses in connection with the purchase or use of this sprayer. Some states do allow the exclusion or limitation of incidental or consequential damages, so the above limitation(s) or exclusion(s) may not apply to you.

**C.** Only the warranty expressed in this limited warranty shall apply, and no dealer, distributor, or individual is authorized to amend, modify, or extend this warranty in any way. Accordingly, additional statements such as dealer advertising or presentations, whether oral or written, do not constitute warranties by Walker, and should not be relied upon.

**D.** This warranty gives you specific legal rights, and you may also have other rights that may vary from state to state. Walker Manufacturing Co. is continually striving to improve the design and performance of its products.

**Walker Manufacturing Co. is continually striving to improve the design and performance of its products.  
We reserve the right to make changes in specifications and design without thereby incurring any  
obligation relative to previously manufactured products.**

## Section 2 - Assembly Instructions

**IT IS IMPORTANT TO NOTE that left and right side relates to looking forward from the operator's seat of the mower. (See Section 6 – Service Parts List for assembly drawings.)**

1. Invert the tank assembly.
2. Install the left and right tank supports, marked # 29 & 30 on the parts drawing. Be sure to install them with the single hole on the side of the channel facing toward the front, and to the outside. This should be the same side of the tank that has the boom hose on it. (The handgun should be opposite these holes on the tank supports.) Use 4 5/16 x 5/8" flange head bolts. **DO NOT TIGHTEN ANY HARDWARE UNTIL DIRECTED**
3. A. Install the rear support brackets, marked # 28 the parts drawing, using 2 5/16 x 3/4" flange bolts and nuts in each one.  
B. The model SP-6641 25 gallon sprayer can be fitted to the 52" and 62" mower frames. To mount the sprayer you must do the following:
  1. Order two BO-37 rear sprayer supports from service parts. (Part number BO-28 rear support that comes with the sprayer will not be used.)
  2. The basic assembly of the unit is identical to the assembly directions in section two of the owner's manual with the following exceptions.  
The rear support bracket, part # BO-37 is installed the same as part # BO-28. For the 52" frame, install the support tube, part # BO-25, with 3" Extending past the left side of the tank support, part # BO-29. The tubular support is installed in the rear set of holes on the tank supports, part# BO-29 & 30. The telescoping tubular supports are installed with the right on fully extended, and the left one in the center hole. Installation on the 62" frame is the same except the left hand telescoping tube is in the fully extended position and the support tube should be installed with 1" extending past the left tank support.C. The model SP-6641 25 gallon sprayer can be fitted to the Super B, 60" mower frame. To mount the sprayer you must do the following:
  1. Order two # BO-28-1 rear sprayer supports and one # BO-05-1 wire harness extensions from service parts. (Part number # BO-28 rear support that comes with the sprayer will not be used.)
  2. Install the rear support brackets in the rear set of holes on the support channel.
  3. Install the center tank support in the rear set of holes on the channel. Center the tube and secure all hardware. The support tubes will be locked in the widest position.
4. Install the Center tube marked #25 on the parts drawing, using the two u-bolts and 5/16" flange nuts. This tube must be installed in the rear set of holes for the 42 and 48" mower frames. The tube is installed in the front set of holes for the 52" mower frame the tube should be installed with the holes in the vertical position. The tube should be positioned with 2 1/8" extending past the tank support channels on each end. **TIGHTEN ALL HARDWARE INSTALLED**
5. Invert the unit, slide the left (Short) support tube, marked #27, into the end of the lateral support tube. Do the same for the right tube (Long). Install # 26 locking pins into the tubes.
6. Install boom supports, marked # 31, using 2 5/16 x 1" bolts, and nylock nuts.
7. Install the boom assembly. Install two 5/16 x 1/2" carriage head bolts and nuts in the center holes of the boom extensions, marked # 33.
8. Install the booms, the center boom rests on the boom supports, and the side extensions are placed on top of the center boom. They are held in place with a 5/16 x 1" machine bolt and two 5/16" elastic lock nuts. Tighten these bolts so the boom can be moved by hand. Be sure to install the boom extensions with the head of the 5/16" carriage head bolt down so it engages the large hole in the end of the main boom.
9. Install windscreen support using 5/16 x 3/4" flange bolt, nut and 3/8 flat washers as shown on page 6. Use S hooks to support the windscreen – squeeze the S hooks shut.
10. Install the hose assembly into the holes in the boom assembly. The spray nozzles are held in place with the lock nut, then the cap nut with the spray tip and the strainer. The spray tip must be positioned with the slot parallel to the spray boom.
11. Install the wire harness battery connection. The red wire has to be connected to the positive terminal, and the black wire to the negative. The wire harness can now be connected from the battery to the pump. Be sure to place the wire in a position where it will not be cut by a moving part. The harness should be located with the switch next to the operator's hand so the unit can be easily controlled
12. Test the unit by putting about 5 gallons of water in the tank. Operate the unit and check the boom spray pattern for coverage and overlap of spray. The base of the spray tips should be about 17" from the ground for a good spray pattern. Also check to see that the spray tips are installed correctly so the spray pattern is parallel to the spray boom.
13. To install the unit, remove both spring pins, slide the supports in as far as they will go, and set the unit on the sprayer, then move the supports out so they engage the mower frame, and install the two spring pins. Removal is the reverse of the mounting procedure.

# Section 3 - Specifications

## Specifications - model SP6641 boom sprayer

Tank capacity	25 gallons
Pump	
Type	12 volt electric diaphragm
Manufacturer	SHURflo Company
Current draw	7 amps
Fuse size	15 amp
System pressure	100 PSI
Spray tip size	11008EVS
Spray boom width	96"
Sprayer weight-empty	50#
Mounting compatible with	42, 48, 52, and 62" mower frames

# Section 4 - Operation

## Recommended Dress

You should wear close fitting clothes that cover your arms and legs. ALWAYS WEAR PROTECTIVE EYE-WEAR (GOGGLES) WHEN SPRAYING.

## Use Chemicals Safely

- DO NOT use any flammable materials in this sprayer.
- Follow spray material manufacturers directions for each spray material.
- Never allow the water hose that is used to fill the tank to reach down into the mixed spray solution. You may contaminate the end of the spray hose.
- Your spray chemical dealer can tell you which sprays need to be followed with spray neutralizer materials to clean the sprayer system.
- A material safety data sheet (MSDS) provides specific details on any spray material being used. Your spray chemical dealer will provide this information for you.

## Dispose of Chemicals Safely

Proper disposal of excess material is very important. It is best to dilute left over material with water, and then spray this diluted mixture on the area that was sprayed.

## Understanding pump operating pressures

1. The SHURflo pump pressure switch is adjusted to turn the pump on and off at 100 PSI. At this setting the pump flow will be 1 gallon per minute.
2. This setting allows the pump to operate the spray wand at 60-65 PSI on a continuous basis. This operating pressure gives excellent spray wand performance.
3. The spray boom has three 11008 EVS spray tips that have a total flow rate of 2.4 GPM. At this flow rate the pump operating pressure will be about 30 PSI because you have reduced the flow restriction. At this pressure there will be less drift and better spray coverage of plants.

## General Spraying Tips

- Check spray tip height and spray pattern before spraying. Tips should be about 17" from the ground to the base of the tip. Spray tips should be aligned so the spray pattern is perpendicular to the direction of travel.
- Never let the sprayer operate in one spot, always turn the pump off.
- Turn sprayer off during turns to avoid double spraying.
- Fill sprayer where spills cannot harm grass.
- If you are using a wettable powder be sure to mix the material well before spraying. This can be done by using the handgun to recalculate the material for a period of time to make sure it is thoroughly mixed.

## Calibrating the Application Rate

Understanding the following information about your sprayer will help you to calibrate the application rate. The sprayer operates at a fixed pressure of 100 PSI. This results in actual spraying time of 42 minutes for the 25 gallon sprayer using the handgun. It takes 20 minutes to empty the 25 gallon tank through the spray boom. When you are spraying with the spray boom plan on driving about 2.5 MPH, or 220 feet per minute. That gives you 33,000 square ft. of application per tank. Plan on about 10% overlap, so place enough chemical material in the tank to cover 30,000 square ft. of area.

# Section 4 - Operation, continued

## Using the Sprayer

It is necessary to release the air pressure in the handgun before using the spray boom. To do this, open the handgun valve until spray material flows from the handgun. The check valves in the spray boom will then operate properly.

## Installing the Windscreen

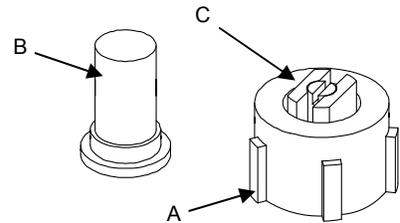
Depending on the wind condition you may or may not want to install the windscreen to prevent spray drift. Remove the windscreen when the sprayer is not in use to protect it from damage.



## Cleaning Strainers

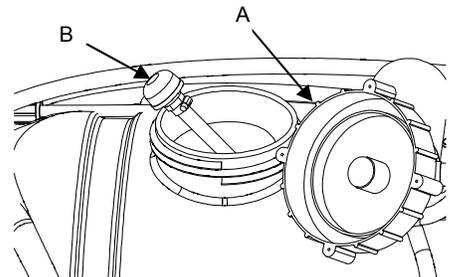
### Spray nozzles

1. Remove complete assembly (A) from nozzle body.
2. Disassemble filter (B), and spray tip (C).
3. Wash filter and spray tip under a water faucet.
4. Reassemble and install.



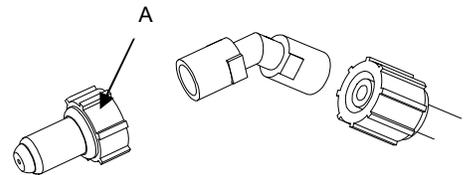
### Pump suction screen

1. Remove tank cover (A).
2. Lift suction hose and unscrew sump strainer (B).
3. Wash under a faucet and reinstall in tank sump.



### Handgun nozzle

The adjustable spray nozzle (A), can be unscrewed from the handgun and cleaned.



## Winter Storage

Clean the sprayer and rinse with clean water. Operate the unit until all water is out of the system. Clean the sump and the tip strainers. Store the unit dry. It is best to prevent it from freezing weather.

# Section 5 - Troubleshooting Problems

## **Pump loses suction**

1. Clean pump inlet strainer in bottom of tank.
2. Check for loose or cracked fitting on the suction side of the pump.

## **Pump capacity decreased**

1. Clean spray nozzles and spray nozzle strainers.
2. Selector valve to boom may be partially closed.
3. Hose may have a "kink" restricting flow.

## **Poor spray pattern**

1. Adjust spray tip height.
2. Adjust spray tip direction.
3. Check spray tip strainers.

## **Pump vibrates, or switches on and off**

Adjust the allen screw in the top of the pump. Turning the screw in will increase the pump pressure and alleviate the pump turning on and off. This condition will exist when the handgun is being used in the fine mist spray pattern where flow is restricted. The condition of the pump turning on and off will not hurt the pump.

## **Pump does not run**

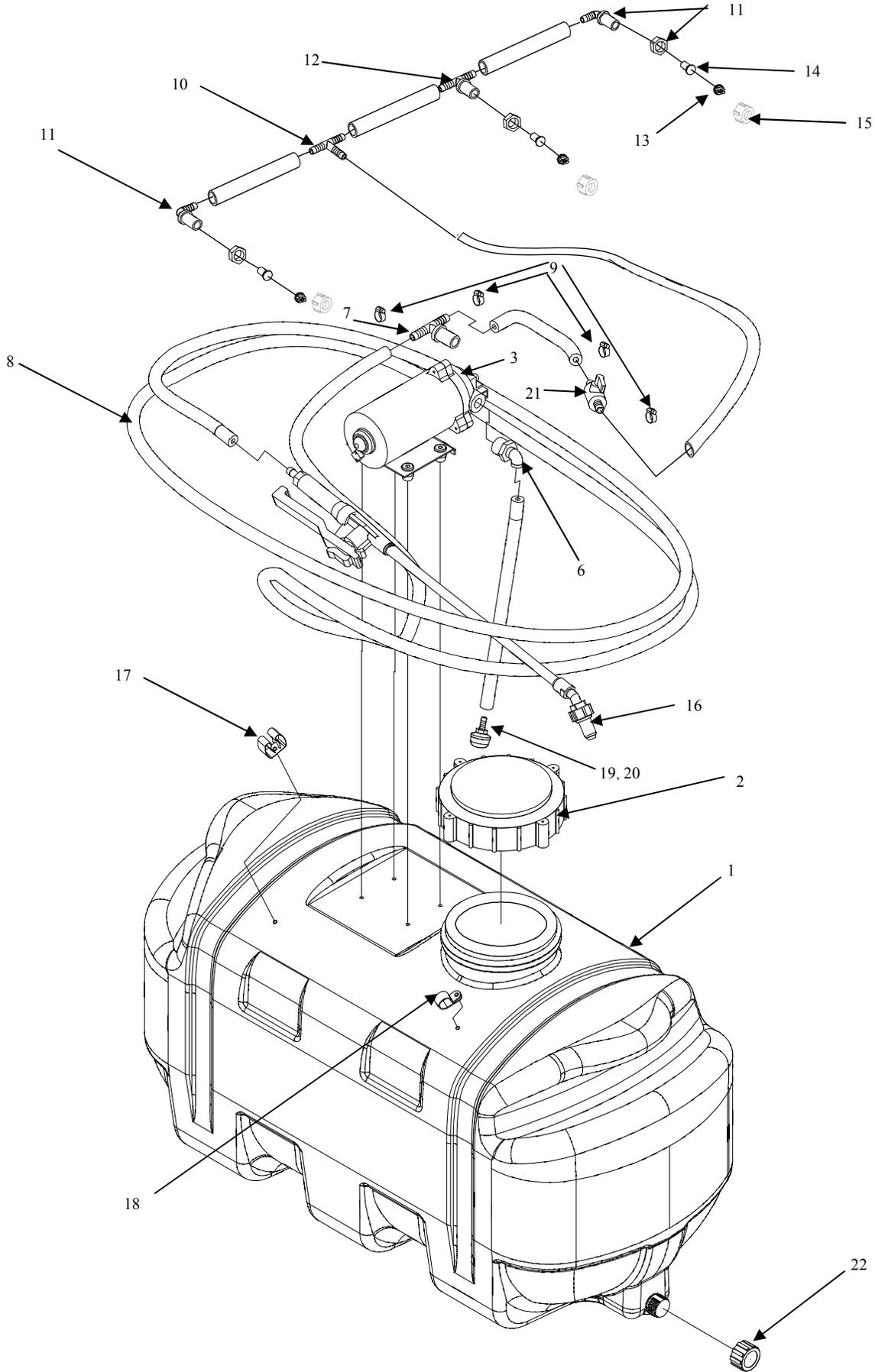
1. Check condition of battery.
2. Check wire harness connections and switch.
3. Check fuse in wire harness.
4. Be sure handgun, or spray boom valve is open allowing the pump to operate.

# Section 6 - Service Parts List

## Sprayer Parts List - Sprayer

Key	Part #	Description	Qty. used
1.	B001-1	25 gallon tank	1
		5/16 x 5/8" flange cap screw	4
2.	B002	tank cap	1
	B002-1	tank cap rubber gasket	1
3.	B003	PUMP	1
		10/24 x 1" phillips truss head screw	4
	B003-1	replacement pump head	
4.	B004	wire harness, complete	1
5.	B005	wire harness, battery connection (included in 43187) fuse-15 amp automotive	1
6.	B007	3/8" poly elbow	1
7.	B008	3/8" poly tee	1
8.	B009	3/8" x 20' black hose	AR
9.	B010	3/8" airplane type hose clamp	AR
10.	B011	3/8" poly hose tee	1
11.	B012	end tip fitting w/nut	2
12.	B013	tee tip fitting w/nut	1
13.	B014-1	spray tip 11008EVS	3
14.	B015	tip strainer-check valve	3
15.	B016	tip fitting cap nut	3
16.	B017	handgun w/tip	1
	B017-2	replacement handgun tip-brass	
17.	B018	handgun holder	1
		10/24 x 3/8" phillips head screw	1
18.	B019	hose clip	1
		10/24 x 3/8" phillips head screw	1
19.	B020	sump strainer	1
20.	B021	3/8" poly straight fitting	1
21.	B022	in-line valve	1
	B022-1	caution decal	1
22.	B002-2	tank drain cap with gasket	1
	B022-2	Walker identification decal	1

# Section 6 - Service Parts List, continued

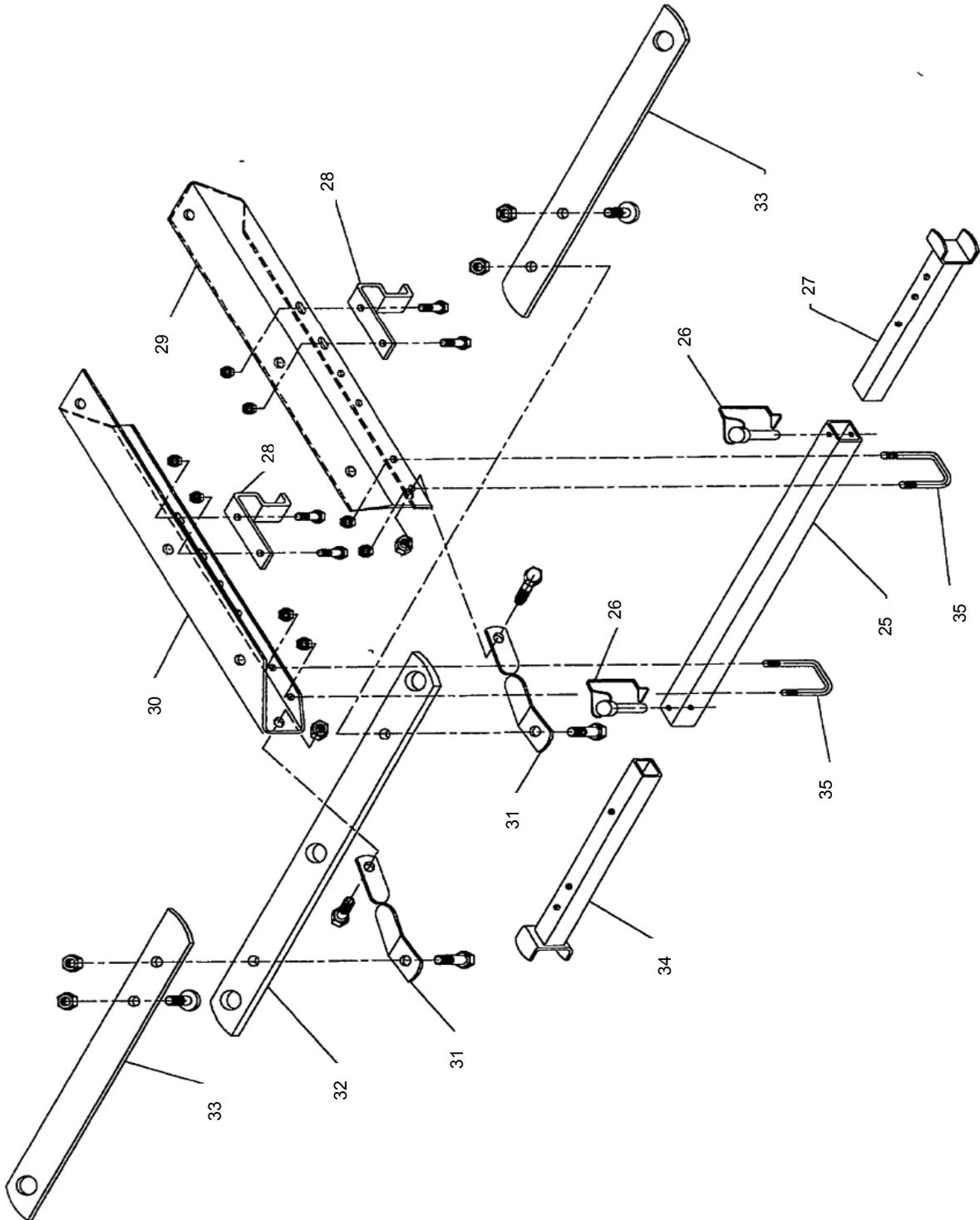


## Section 6 - Service Parts List, continued

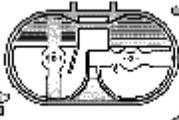
### Sprayer Parts List - Metal frame

Key	Part #	Description	Qty. Used
25.	B025	lateral support tube	1
26.	B026	locking pins	2
27.	B027	support tube-weld assembly left	1
28.	B028	rear support bracket	2
		5/16 x 3/4" flange head bolts	4
		5/16" flange nuts	4
29.	B029	left tank support	1
30.	B030	right tank support	1
31.	B031	boom supports	2
32.	B032	main boom	1
33.	B033	boom extensions	2
		5/16 x 1" bolt	2
		5/16" elastic lock nut	2
		5/16 x 1/2" carriage head bolt	2
		5/16" flange nut	2
34.	B034	support tube, weld assembly right	1
35.	B035	U-bolt	2
		5/16" flange nut	4

# Section 6 - Service Parts List, continued



**Notes:**

**WALKER  MOWERS**

**WALKER MFG. CO. – 5925 E. HARMONY ROAD, FORT COLLINS, CO 80528 – (970) 221-5614**