

Owner's Manual

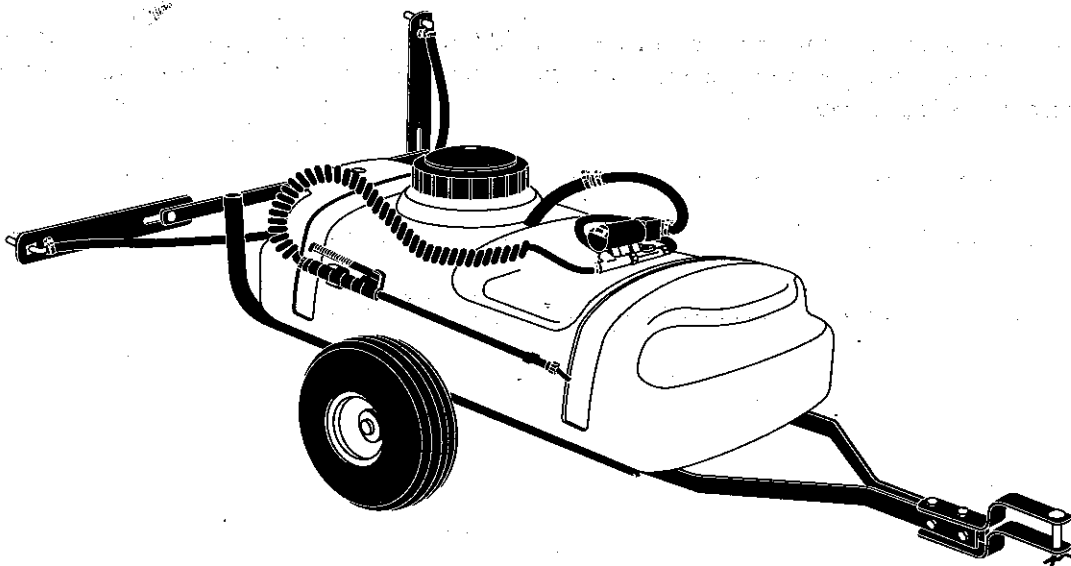
CRAFTSMAN®

15 GALLON 35 PSI SPRAYER

Model No. 486.245313



DO NOT RETURN TO STORE
For Missing Parts or Assembly
Questions Call 1-866-576-8388



CAUTION:

Before using this product, read this manual and follow all Safety Rules and Operating Instructions.

- Safety
- Assembly
- Operation
- Maintenance
- Parts

Sears, Roebuck and Co., Hoffman Estates, IL 60179 U.S.A.
www.sears.com/craftsman

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FORM NO. 41054 (03/07/08)

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WARRANTY

ONE YEAR FULL WARRANTY

When operated and maintained according to the instructions supplied with it, if this Sprayer fails due to a defect in material or workmanship within one year from the date of purchase, call 1-800-4-MY-HOME® to arrange for free repair (or replacement if repair proves impossible).

If this product is used for commercial or rental purposes, this warranty applies for only 90 days from the date of purchase.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Sears, Roebuck and Co., D817WA, Hoffman Estates, IL 60179

<p>The model number and serial numbers will be found on a decal attached to the sprayer.</p> <p>You should record both the serial number and the date of purchase and keep in a safe place for future reference.</p>	<table border="0" style="width: 100%;"> <tr> <td style="width: 60%;">MODEL NUMBER:</td> <td style="width: 40%;">486.245313</td> </tr> <tr> <td>SERIAL NUMBER:</td> <td>_____</td> </tr> <tr> <td>DATE OF PURCHASE:</td> <td>_____</td> </tr> </table>	MODEL NUMBER:	486.245313	SERIAL NUMBER:	_____	DATE OF PURCHASE:	_____
MODEL NUMBER:	486.245313						
SERIAL NUMBER:	_____						
DATE OF PURCHASE:	_____						



SAFETY



Any power equipment can cause injury if operated improperly or if the user does not understand how to operate the equipment. Exercise caution at all times when using power equipment.

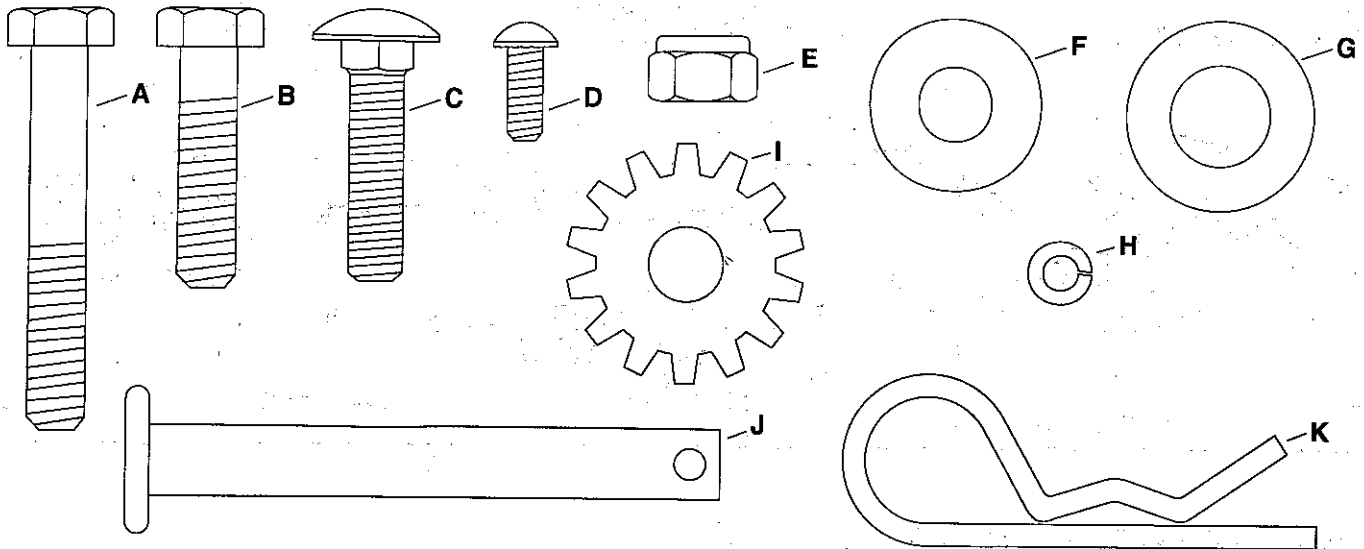
- Read this owners manual carefully before attempting to assemble or operate this sprayer.
- Read your vehicle owners manual for operating and safety rules before using this equipment.
- Never allow children to operate this sprayer, and do not allow adults to operate without proper instructions.
- Do not allow anyone to ride on or sit on this sprayer.
- Do not allow passengers on the towing vehicle.
- Keep the area of operation clear of all persons, particularly small children. Also keep area clear of pets.
- Read the chemical label carefully for instructions and caution notes on handling and mixing of chemicals.
- Wear eye and hand protection and wear protective clothing when handling and applying lawn chemicals.
- Do not spray on windy days.
- Attachment of this sprayer may affect your tractor's braking and stability. Be aware of your tractor's capabilities. Refer to the safety rules in the vehicle owner's manual concerning safe operation on slopes. Be aware of changing conditions on slopes. **STAY OFF OF STEEP SLOPES.**
- Operate at reduced speed on rough terrain, along ditches and on hillsides to prevent loss of control.
- Follow maintenance and lubrication instructions as outlined in this manual.



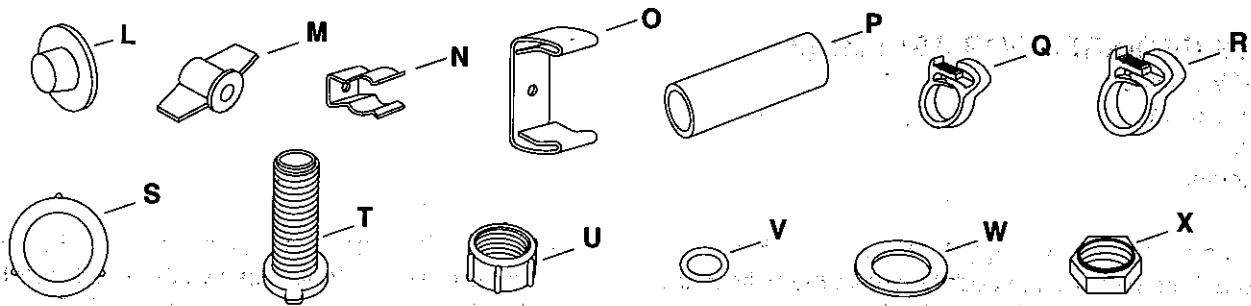
Look for this symbol to point out important safety precautions. It means — **Attention!! Become alert!! Your safety is involved.**

HARDWARE PACKAGE CONTENTS

SHOWN FULL SIZE



NOT SHOWN FULL SIZE

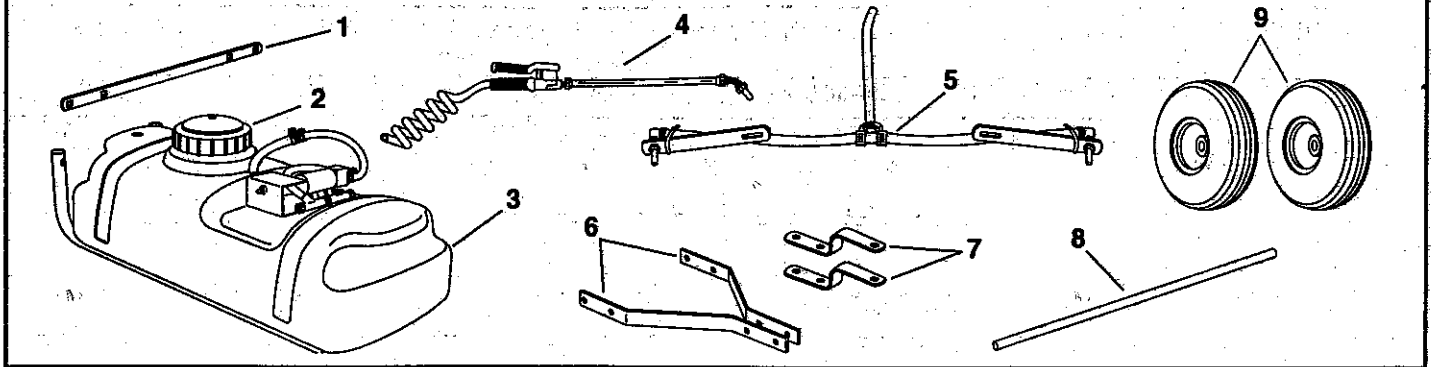


KEY	QTY.	DESCRIPTION	KEY	QTY.	DESCRIPTION
A	8	Hex Bolt, 5/16" x 2"	M	2	Knob
B	2	Hex Bolt, 5/16" x 1-1/4"	N	1	Spray Gun Clip, Small
C	2	Carriage Bolt, 5/16" x 1-1/4"	O	1	Spray Gun Clip, Large
D	2	Screw, #10 x 1/2"	P	2	Spacer
E	10	Nylock Nut, 5/16"	Q	1	Coiled Hose Clamp
F	2	Flat Washer, 5/16"	R	2	Hose Clamp, 3/8"
G	4	Flat Washer, 1/2"	S	1	Gasket, 3/4" Garden Hose
H	2	Lock Washer, #10	T	1	Drain Body
I	2	Washer, 5/16" Tooth Lock	U	1	Nylon Cap
J	1	Hitch Pin	V	1	O-Ring
K	1	Hair Cotter Pin	W	1	Nylon Washer, 11/16"
L	2	Palnut	X	1	Nylon Nut

ASSEMBLY

CARTON CONTENTS

- | | | |
|--------------------------|-----------------------|-----------------------|
| 1. Boom Mount Bracket | 4. Spray Gun Assembly | 7. Hitch Brackets (2) |
| 2. Lid | 5. Boom Assembly | 8. Axle |
| 3. Tank with Frame Tubes | 6. Hitch Arms (2) | 9. Wheels (2) |



REMOVAL OF PARTS FROM CARTON

- Remove all parts and hardware packages from the carton. Lay out all parts and hardware and identify using the illustrations on pages 3 and 4.

TOOLS REQUIRED FOR ASSEMBLY

- (2) 1/2" Wrenches
- (1) Screwdriver
- (1) Pliers
- (1) Hammer

- Assemble the axle through the holes in the frame tubes. You may need to slightly loosen the bolts in the frame tubes to make the axle fit. Retighten the bolts only enough to flatten the lockwashers. See figure 1.
- Assemble a spacer, a 1/2" flat washer, a wheel and another 1/2" flat washer onto the axle. Lightly tap a palnut onto the end of the axle. Repeat on other end of axle. See figure 1.

- Assemble a hitch arm to the inside of a frame tube underneath the tank. Use two 5/16" x 2" hex bolts and 5/16" nylock nuts as shown in figure 2. Do not tighten yet. Repeat for other side.

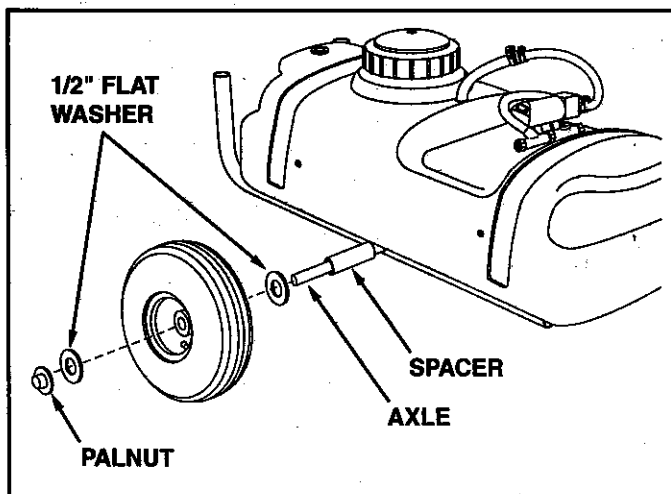


FIGURE 1

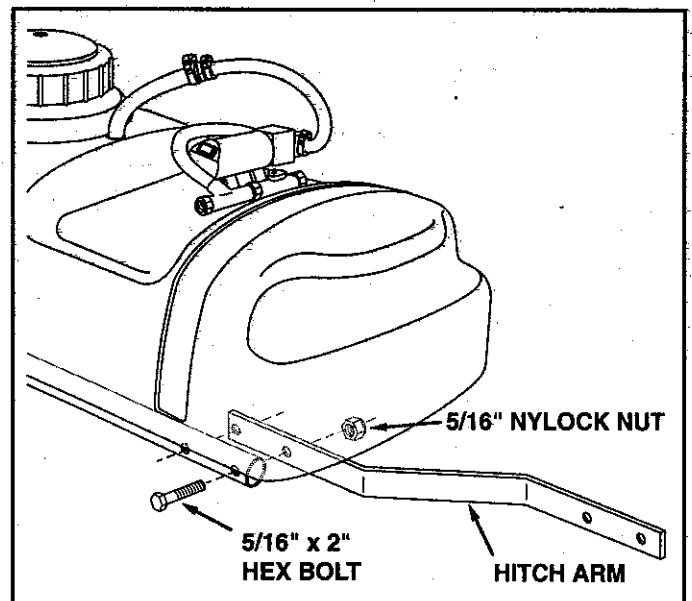


FIGURE 2

- Fasten the ends of the hitch arms together using two 5/16" x 1-1/4" hex bolts and 5/16" nylock nuts. **Do not tighten yet.** See figure 3.
- Assemble the hitch brackets to the hitch arms using two 5/16" x 2" hex bolts and 5/16" nylock nuts. Position each bolt behind one of the cross bolts in the hitch arms. **Do not tighten yet.** See figure 3.

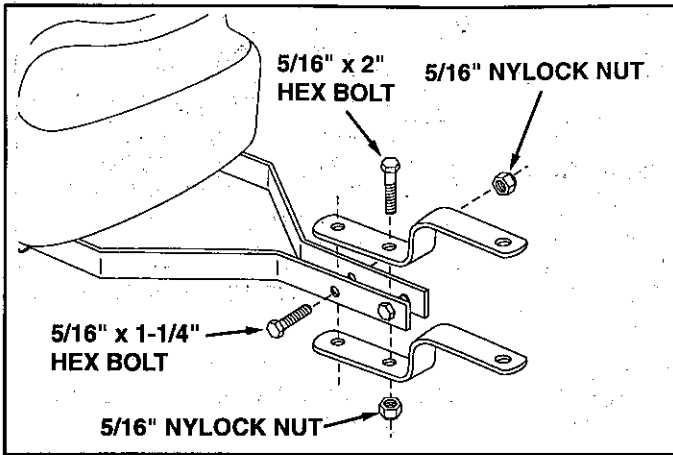


FIGURE 3

- At this time **tighten all bolts** starting with the bolts in figure 2, then the bolts in figure 3.
- Install the drain in the rear of the tank as shown in figure 4. Place a 3/4" garden hose gasket onto the drain body and insert the drain body out through the hole in rear of the tank. Outside the tank, assemble the nylon washer and then the nylon nut onto the drain body. Tighten the nut securely enough to prevent leaking, being careful not to damage the plastic parts. Place the O-ring inside the nylon cap and screw the cap onto the end of the drain body.

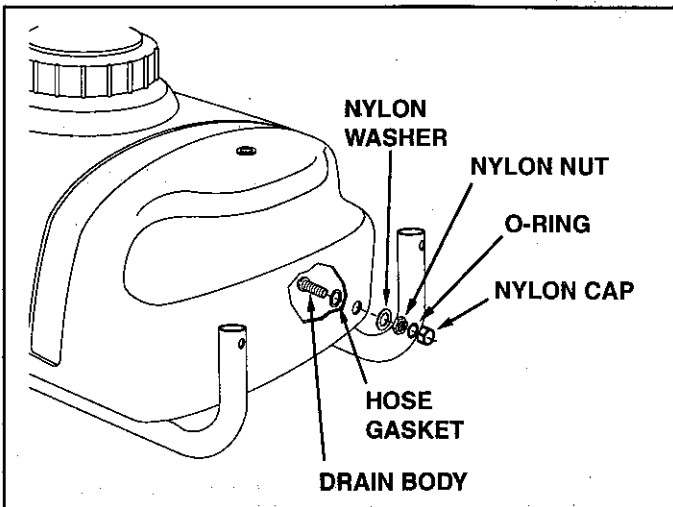


FIGURE 4

- Assemble the boom mount bracket to the rear of the hitch tubes using two 5/16" x 2" hex bolts and 5/16" nylock nuts. See figure 5.

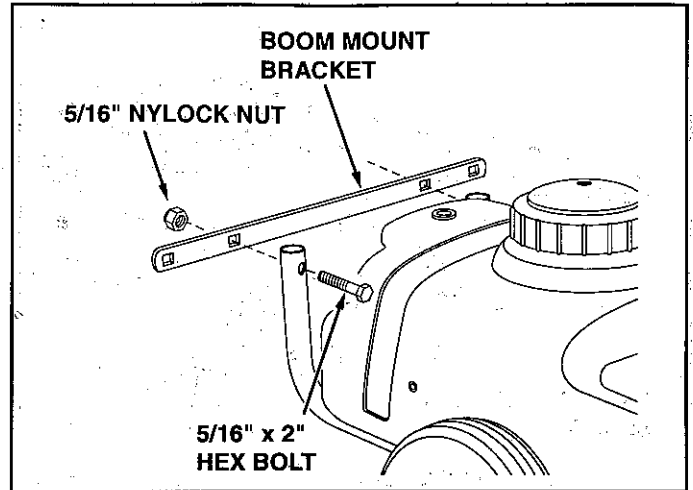


FIGURE 5

- Assemble the boom bars to the boom mount bracket using two 5/16" x 1-1/4" carriage bolts, tooth lock washers (between the bar and bracket), 5/16" flat washers and knobs. The boom connecting hose should extend upward. See figure 6.

NOTE: Make sure the nozzle openings face straight down when the boom bars are in the horizontal operating position.

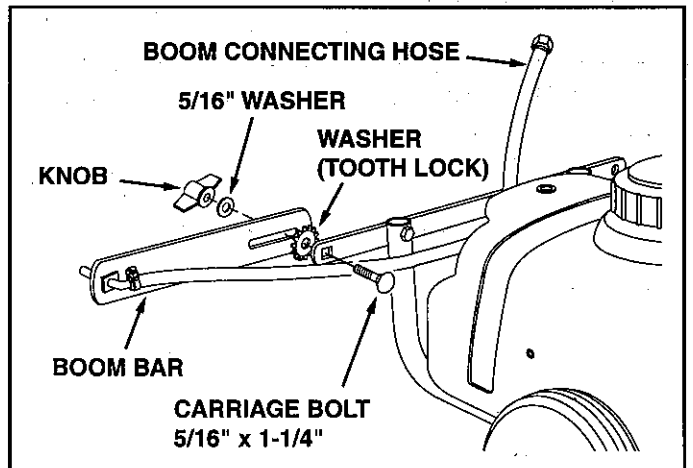


FIGURE 6

- Assemble the large and small spray gun clips to the side of the tank using two #10 x 1/2" screws and #10 lock washers. See figure 7.

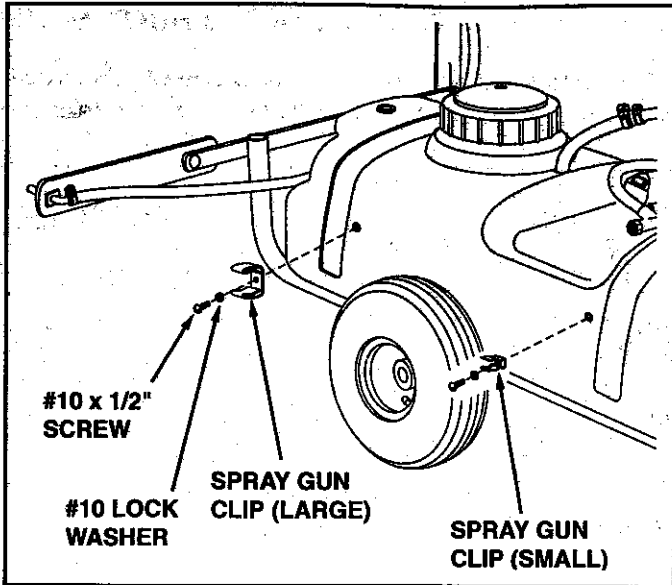


FIGURE 7

- Slide a 3/8" hose clamp onto the boom connecting hose. Place the end of the hose through the conduit clamp (attached to the pump) and then slide a second 3/8" hose clamp onto the hose. Leave hose clamps loose for now. See Figure 8.
- Push the hose onto the hose adapter in the end of the "On-Off" valve. Tighten the hose clamp around the hose and adapter. See figure 8.
- Position the valve and hose clamp up against the conduit clamp. Slide the other hose clamp against the other side of the conduit clamp. Tighten the clamp without collapsing the hose. See figure 8.
- Slide the coiled hose clamp onto the spray gun hose and then push the hose onto the hose adapter on the 1/4" tee fitting. Tighten the hose clamp around the hose and adapter. See figure 8.
- Snap the spray gun into the clips on the front of the tank. (The large clip holds the spray gun handle and the small clip holds the wand.) Refer to figure 7.

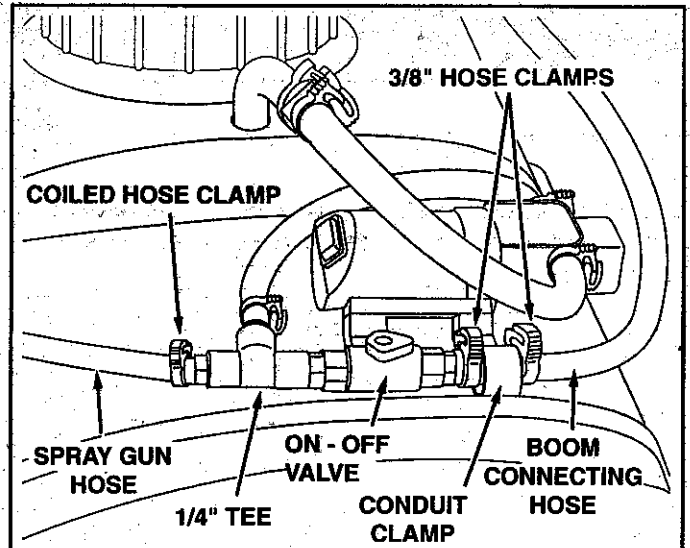


FIGURE 8 VIEWED FROM FRONT

- To connect the wire harness to the tractor, attach the red wire to the positive post on the battery or to the "HOT" connection on a tractor switch or ammeter. The brown wire may be grounded or connected to the negative battery post. See figures 9 and 10.

IMPORTANT: This sprayer should be connected to 12 volt batteries only!

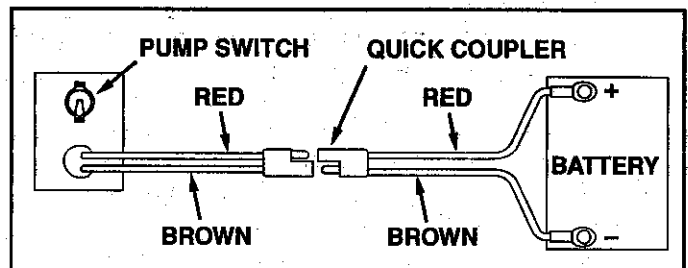


FIGURE 9



DANGER! Never allow negative pin on plug to come in contact with positive "hot" post on battery. Fire or explosion may result!

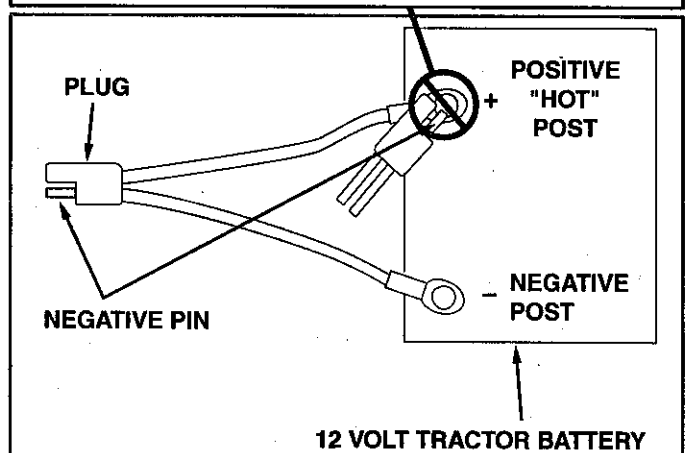


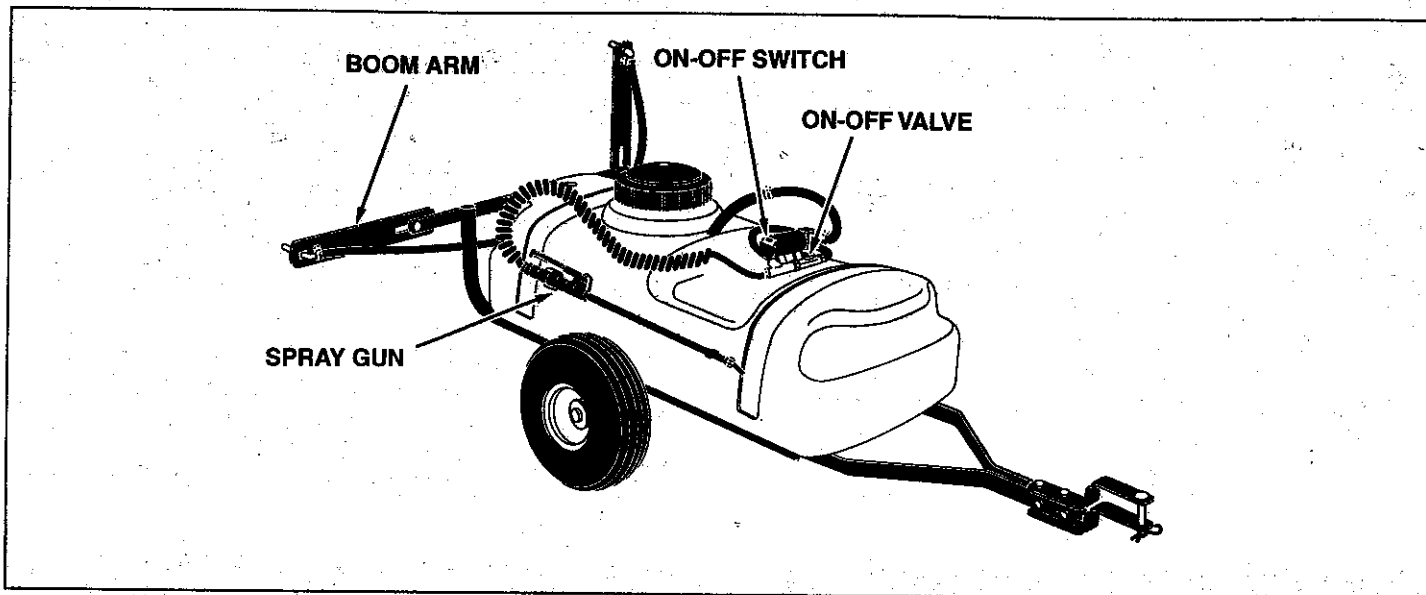
FIGURE 10

OPERATION

KNOW YOUR SPRAYER

Read this owner's manual and safety rules before operating your sprayer.

Compare the illustration below with your sprayer to familiarize yourself with the various controls and their locations.



ON-OFF SWITCH Turns pump/motor on or off.

ON-OFF VALVE Turns the flow on or off from the pump to the boom nozzles.

BOOM ARM Swivels up and down and adjusts in and

out to obtain proper nozzle positioning.

SPRAY GUN Unhooks from tank for spraying shrubs, small trees or areas inaccessible to the towed sprayer.

BEFORE STARTING

It is **important** to test the boom and spray gun with plain water before attempting actual spraying. This will enable you to check the sprayer for leaks and to set the spray pattern and nozzle pressure. If a leak should occur, thread tape may be used to better seal the fitting.

PUMP PRESSURE SWITCH

The pump is equipped with a pressure switch. The pressure switch senses outlet pressure of the pump and will turn off the electrical power to the pump at a predetermined high pressure point (35 PSI). If the flow demand is very low, the pump may reach this high pressure point and the switch will cause "cycling" (the pump cycles on and off rapidly). This is not a problem unless the pump is subject to continuous cycling within one second intervals for long periods of time.

ON-OFF ADJUSTMENT OF BOOM NOZZLES

The sprayer is equipped with an "On-Off" valve for the boom which allows the flow to the boom nozzles to be shut off.

ADJUSTING SPRAY GUN NOZZLE

Turn the nozzle on the spray gun to adjust the spray from a cone shaped fine mist to a straight stream. Maximum gun pressure is attained with the ON-OFF valve shut off.

SETTING THE BOOM FOR SPRAYING

The correct positioning of the boom places the nozzles approximately 40" apart and 14" above the ground. This gives a spray width of approximately 80" with a slight center overlap. See figure 11.

- Slide the boom bars out to the ends of the slots.
- Swivel the boom bars until the nozzles are approximately 14" above the ground.
- Make sure the nozzles are adjusted so that the openings point straight down.

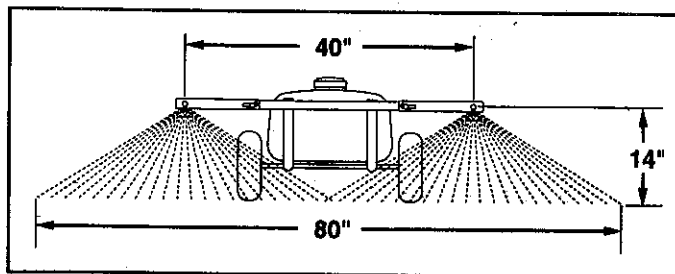


FIGURE 11

HOW TO USE YOUR SPRAYER

- Determine the approximate square footage of the area to be sprayed. Use this amount to estimate the number of gallons that will be required, based on product recommendations. This can help avoid unneeded solution left in the tank.
- Determine the application rate (gallons per 1,000 sq. feet or gallons per acre) based on the chemical manufacturers recommendations.
- Use the tip chart on page 9 to determine what ground speed will achieve the recommended application rate.
- To determine the throttle setting for attaining the desired ground speed, mark off 100, 200 and 300 feet intervals. The speed chart at the bottom of page 9 indicates the number of seconds it takes to travel these distances. Set the throttle and, with a running start, travel the distances in the number of seconds indicated by the speed chart. Once you have determined the throttle and gear settings needed, mark the throttle location so that you can easily resume the same speed after stopping.
- Add the chemical solution to the tank, following the product instructions.

- Drive to the starting place for spraying.
- Set the boom in position for spraying.
- Set the throttle at the position determined in the 4th step. Reach back and flip the pump/motor switch to the "ON" position to start spraying.
- Stay clear of flowers, shrubs and evergreen trees when spraying weed control solutions to prevent contact of the solution with these sensitive plants.

ATTENTION!

Do not allow chemicals to sit in pump for extended times of idleness. Some chemicals will damage the pump valve if allowed to soak untreated for a length of time. Always flush the pump with water after each use. See the instructions for cleaning the tank in the maintenance section for flushing and disposal of chemicals.



CAUTION: Wear eye protection, gloves and protective clothing when handling and working with lawn chemicals.

MAINTENANCE/STORAGE

CUSTOMER RESPONSIBILITIES

- Read and follow the maintenance schedule and the maintenance procedures listed in this section.

MAINTENANCE SCHEDULE Fill in dates as you complete regular service.	Service Dates											
	Before each use	After each use	Every season	Before storage								
Check for loose fasteners	X											
Clean tank		X										
Lubrication			X									

CHECK FOR LOOSE FASTENERS

- Before each use make a thorough visual check of the sprayer for any bolts and nuts which may have loosened. Retighten any loose bolts and nuts.

CLEANING TANK

- After use, fill the tank part way with water, start the sprayer and allow clear water to be pumped through the plumbing system and out through the boom assembly and the handgun. Use the handgun to thoroughly wash all internal parts of the tank, the outside of the tank and the boom.
- Refill the tank about half full with plain water and a chemical neutralizer and repeat the cleaning instructions above. Flush the entire sprayer with the neutralizing agent. Follow the chemical manufacturers instructions for disposal of all wash or rinsing water.

LUBRICATION

- Oil the wheels at least once a season.

CLEANING STRAINERS

- Periodically clean the strainer in the end of the intake hose at the bottom of the tank. Remove the nylon swivel nut from the hose, pull out the screen and flush it with clear water.
- Periodically clean the strainers in the boom nozzles. Remove the nozzle, pull out the screen and flush it with clear water.

STORING

- Drain all water out of the sprayer, paying special attention to the pump and handgun. These items are especially prone to damage from chemicals and freezing weather.
- The sprayer should be winterized before storage by pumping a 50-50 solution of water and R. V. antifreeze through the entire plumbing. Proper care and maintenance will prolong the life of the sprayer.

U.S. GALLON TIP CHART

Tip No.	Spray Width Inches	Pressure PSI	Tip Capacity US Gallons Per Minute	GALLONS PER ACRE (BASED ON WATER)						
				1 MPH	2 MPH	3 MPH	4 MPH	5 MPH	7.5 MPH	10 MPH
#3	80"	25	.36	53	26.5	17.7	13.3	10.6	7.1	5.3
Tip No.	Spray Width Inches	Pressure PSI	Tip Capacity U.S. Gallons Per Minute	GALLONS PER 1000 SQ. FT. (BASED ON WATER)						
				1 MPH	2 MPH	3 MPH	4 MPH	5 MPH	7.5 MPH	10 MPH
#3	80"	25	.36	1.22	0.6	0.41	0.31	0.24	0.16	0.12

IMPERIAL GALLON (LITER) TIP CHART

Tip No.	Spray Width Inches (mm)	Pressure PSI (Bar)	Tip Capacity Imperial Gallons per minute (liters per minute)	IMPERIAL GALLONS (Liters) PER ACRE (BASED ON WATER)						
				1 MPH 1.6 K/H	2 MPH 3.2 K/H	3 MPH 4.8 K/H	4 MPH 6.4 K/H	5 MPH 8 K/H	7.5 MPH 12 K/H	10 MPH 16 K/H
#3	80" (2032 mm)	25 (1.75)	.30 (1.36)	44.2 (201.0)	22.1 (100.5)	14.8 (67.8)	11.1 (50.5)	8.9 (40.5)	5.9 (26.8)	4.4 (20.0)
Jet Size	Spray Width Inches (mm)	Pressure PSI (Bar)	Tip Capacity Imperial Gallons per minute (liters per minute)	IMPERIAL GALLONS (Liters) PER 1000 SQ. FT. (BASED ON WATER)						
				1 MPH 1.6 K/H	2 MPH 3.2 K/H	3 MPH 4.8 K/H	4 MPH 6.4 K/H	5 MPH 8 K/H	7.5 MPH 12 K/H	10 MPH 16 K/H
#3	80" (2032 mm)	25 (1.75)	.30 (1.36)	1.0 (4.54)	0.50 (2.27)	0.34 (1.55)	0.26 (1.18)	0.20 (0.91)	0.14 (0.64)	0.10 (0.54)

GROUND SPEED CHART

M.P.H. (K/H)	Time Required in Seconds to Travel a Distance of:		
	100 ft (30.5 M)	200 ft (61 M)	300 ft (91.5 M)
1.0 (1.6)	68	136	205
2.0 (3.2)	34	68	102
3.0 (4.8)	23	45	68
4.0 (6.4)	17	34	51
5.0 (8.0)	14	27	41
6.0 (9.7)	11	23	34
7.0 (11.3)	9.7	19	29
8.0 (12.9)	8.5	17	26
9.0 (14.5)	7.6	15	23
10.0 (16.1)	6.8	14	20

REPAIR PARTS FOR 15 GALLON SPRAYER MODEL 486.245313

REF.	PART NO.	QTY.	DESCRIPTION	REF.	PART NO.	QTY.	DESCRIPTION
1	49725	1	Tank (15 Gal.)	33	24584	1	Axle, 1/2"
2	48297	1	Pump and Motor	34	46503	2	Wheel
3	45022	1	Hose, 1/2" ID (14" Lg.)	35	46700	1	Lid
4	46287	1	Caplug Plug	36	24122	2	Boom Bar
5	45024	1	Strainer, Cap Type 1"	37	24585	1	Bracket, Boom Mount
6	47002	2	Hose, 3/8" ID (10" Lg.)	38	47394	1	Tee, Plastic 3/8" Hose
7	45032	1	Nut, Swivel 3/4" Garden Hose	39	45028	2	Nozzle, SS Floodjet
8	47005	1	Reducer, Hose Mender 1/2" x 3/8"	40	45029	2	Strainer, Screen Type
9	47078	4	Screw, Pan Hd. 10-24 x 3/4" Lg.	41	45037	2	Nut, Screen Body
10	43910	4	Washer, Flat #10 SAE	42	47396	2	Elbow, Plastic 11/16" Thd.
11	46075	2	Terminal (not shown)	43	726-0178	2	Nylon Tie
12	47392	2	Hose, 3/8" ID (20" Lg.)	44	44180	8	Bolt, Hex 5/16-18 x 2"
13	47399	1	Drain Body	45	43840	2	Bolt, Hex 5/16-18 x 1-1/4"
14	47398	1	Washer, Nylon	46	44732	2	Washer, Tooth Lock 5/16"
15	47402	1	Nut, Nylon 11/16" Thd.	47	47623	1	Hitch Pin
16	47206	1	O-Ring	48	43086	4	Lock Washer, 5/16"
17	47403	1	Cap, Nylon 11/16" Thd.	49	43343	1	Pin, Hair Cotter #4 (1/8")
18	45072	1	Gasket, 3/4" Garden Hose	50	R19171616	4	Washer, 17/32" x 1"
19	46276	1	Adapter, 3/4" GH x 1/2" Barb	51	44166	2	Hub Cap (1/2" Palnut)
20	47411	1	Nipple (nylon) 1/4"	52	47397	1	Clip (Large), Spray Gun
21	45025	1	Clamp, 1/2" (For Black Hose)	53	45180	1	Clip (Small), Spray Gun
	45026	1	Clamp, 3/8" (For Clear Hose)	54	736-0722	2	Lock Washer, #10
22	45018	1	Connector with Wire	55	43682	2	Bolt, Carriage 5/16-18 x 1-1/4"
23	47412	2	Adapter (nylon) 1/4" x 3/8"	56	45040	2	Screw, Phillips Hd. #10-24 x 1/2"
24	47413	1	Clamp, Conduit	57	43081	18	Washer, 5/16" Std. Wrt.
25	47406	1	Spray Gun	58	46578	2	Spacer
26	49761	1	Hose, 1/4" ID (15' Lg)	59	47416	1	Valve, Nylon 1/4"
27	45026	11	Clamp, 3/8" (For Black Hose)	60	47421	1	Hose, 3/8" ID (28" Lg.)
	47405	11	Clamp, 1/4" (For Clear Hose)	61	47414	1	Adapter, 1/4" NPT x 1/4" Barb
28	47415	1	Tee, Nylon 1/4" NPT.	62	43084	4	Bolt, Hex 5/16-18 x 1-3/4"
29	48296	2	Frame Tube	63	47810	10	Nut, Nylock Hex 5/16-18
30	24860	2	Hitch Arm	64	712-0421	2	Knob
31	23014	2	Hitch Bracket		41054	1	Owners Manual
32	49779	1	Coiled Hose Clamp				

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