

PACKED BY
JULIE T.

OWNERS MANUAL

**Model No.
45-02911**



15 GALLON "HOME OWNER" TOW SPRAYER

CAUTION:
Read Rules for
Safe Operation
and Instructions
Carefully

- Assembly
- Operation
- Maintenance
- Repair Parts

RULES FOR SAFE OPERATION

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 operating equipment.

1. Read this owners manual carefully before attempting to assemble or operate this sprayer.
2. Read your vehicle owners manual for operating and safety rules before using this equipment.
3. Never allow children to operate this sprayer, and do not allow adults to operate without proper instructions.
4. Do not allow anyone to ride on or sit on this sprayer. Do not allow passengers on the towing vehicle.
5. Keep the area of operation clear of all persons, particularly small children. Also keep area clear of pets.
6. Read the chemical label carefully for instructions and caution notes on handling and mixing of chemicals.
7. Wear eye and hand protection and wear protective clothing when handling and applying lawn chemicals.
8. Do not spray on windy days.
9. 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.**
10. Operate at reduced speed on rough terrain, along ditches and on hillsides to prevent loss of control.
11. Follow maintenance and lubrication instructions as outlined in this manual.



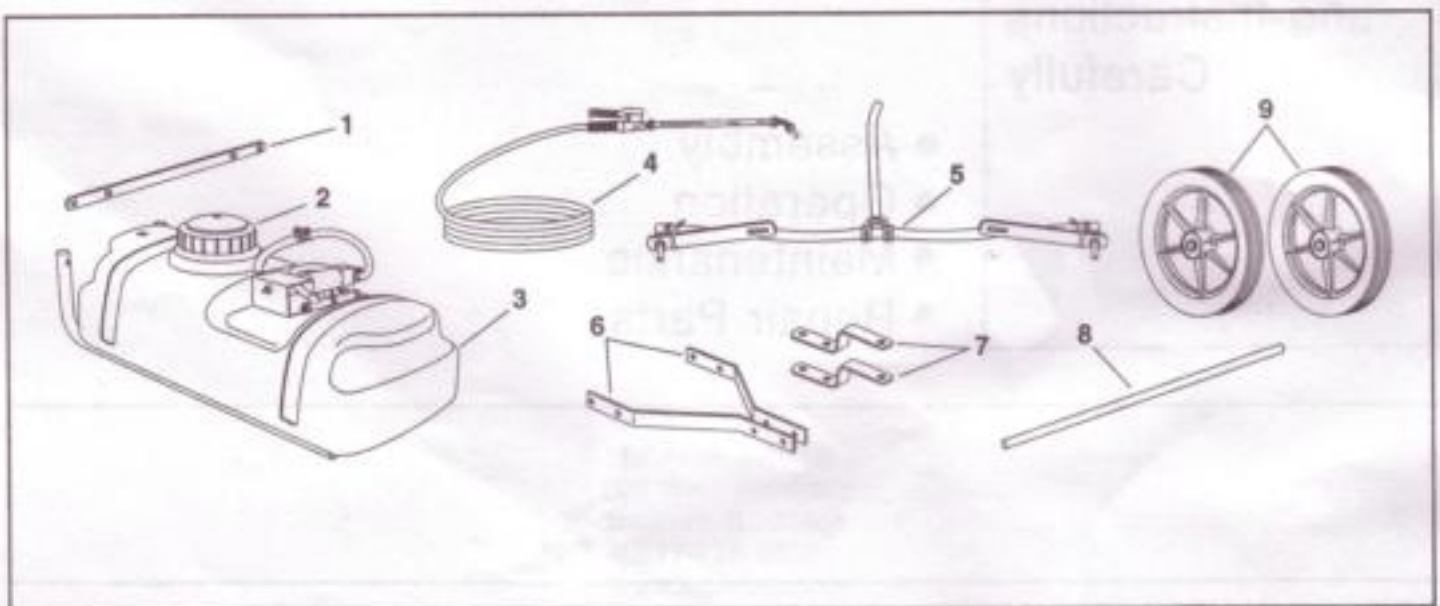
LOOK FOR THIS SYMBOL TO POINT OUT IMPORTANT SAFETY PRECAUTIONS. IT MEANS--ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED.

Your sprayer carton contains parts as shown in figure 1. The hardware package contains parts as shown in figure 2. Identify all parts and layout as shown in figures 1 and 2.

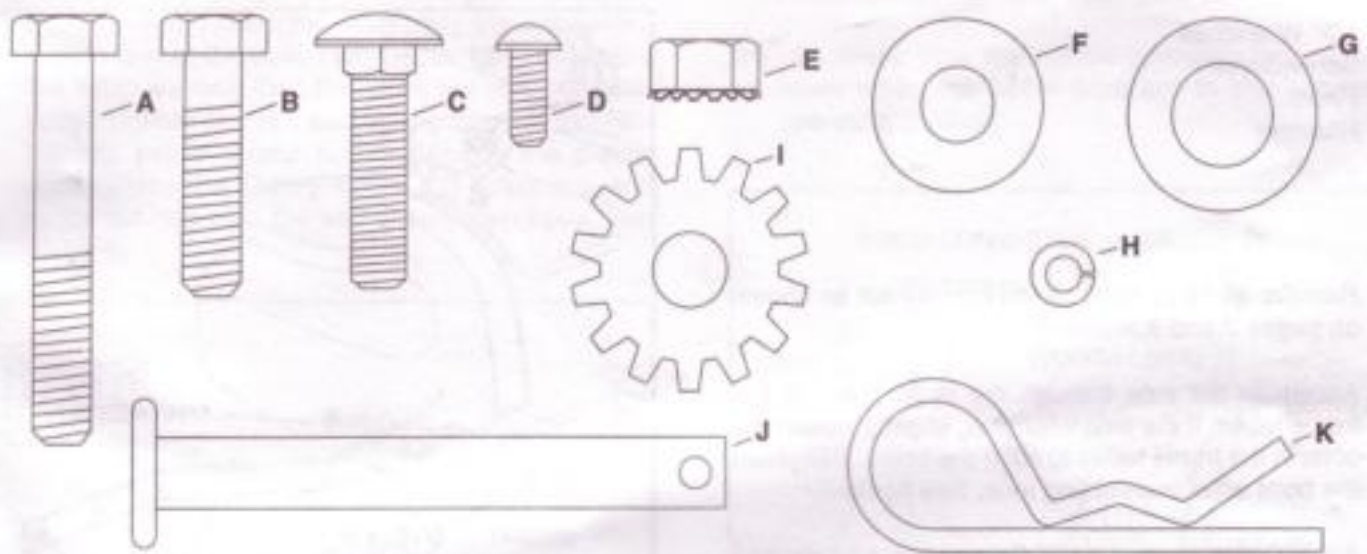
CARTON CONTENTS

LOOSE PARTS IN CARTON

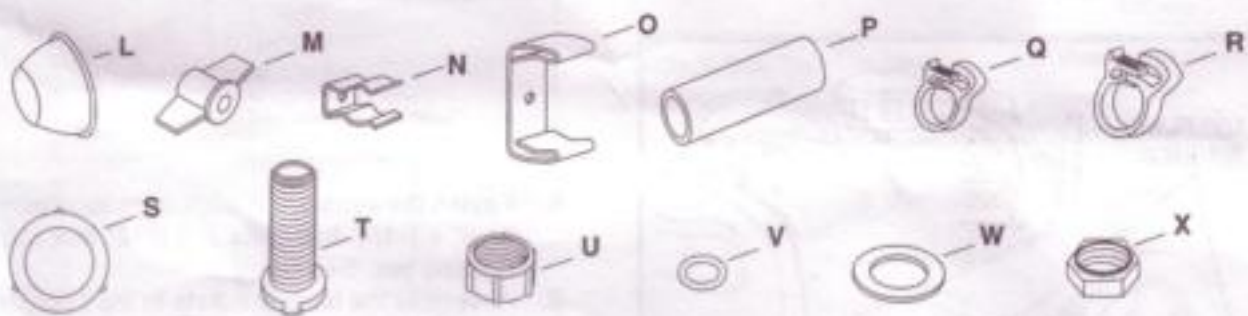
- | | |
|--------------------------|-----------------------|
| 1. Boom Mount Bracket | 5. Boom Assembly |
| 2. Lid | 6. Hitch Arms (2) |
| 3. Tank with Frame Tubes | 7. Hitch Brackets (2) |
| 4. Spray Gun Assembly | 8. Axle |
| | 9. Wheels (2) |



SHOWN FULL SIZE



NOT SHOWN FULL SIZE



HARDWARE PACKAGE - 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	Hex Nut, 5/16"	Q	1	Hose Clamp, 1/4"
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	Hub Cap	X	1	Nylon Nut

ASSEMBLY INSTRUCTIONS

TOOLS REQUIRED FOR ASSEMBLY

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

1. Remove all items from carton and lay out as shown on pages 2 and 3.
2. Assemble the axle through the large holes in the frame tubes. If the axle will not fit, slightly loosen the bolts in the frame tubes to align the holes. Retighten the bolts after assembling axle. See figure 1.
3. Assemble a spacer, a 1/2" flat washer, a wheel and another 1/2" flat washer onto the axle. Lightly tap a hub cap onto the end of the axle. Repeat on other end of axle. See figure 1.

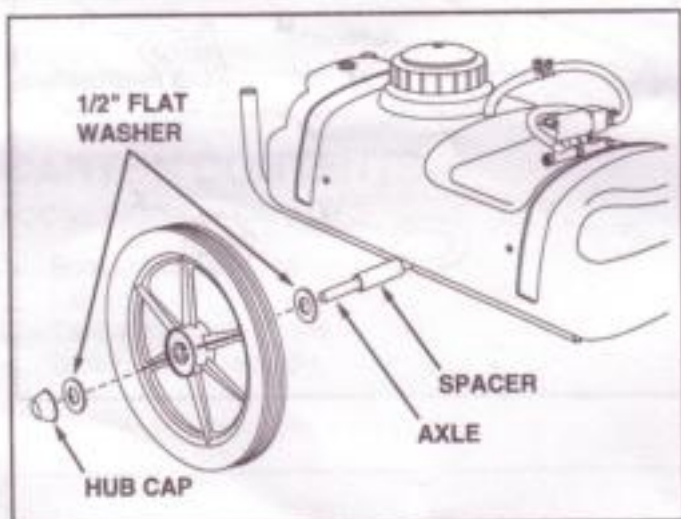


FIGURE 1

4. 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" hex nuts as shown in figure 2. **Do not tighten yet.** Repeat for other side.

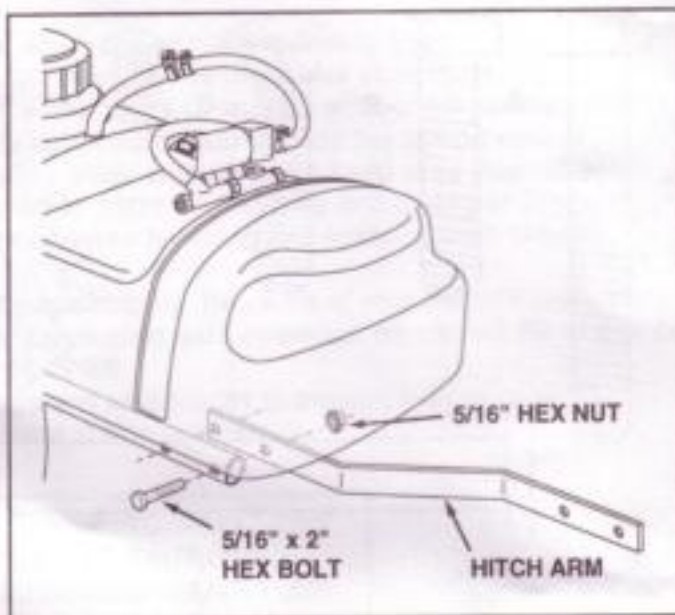


FIGURE 2

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

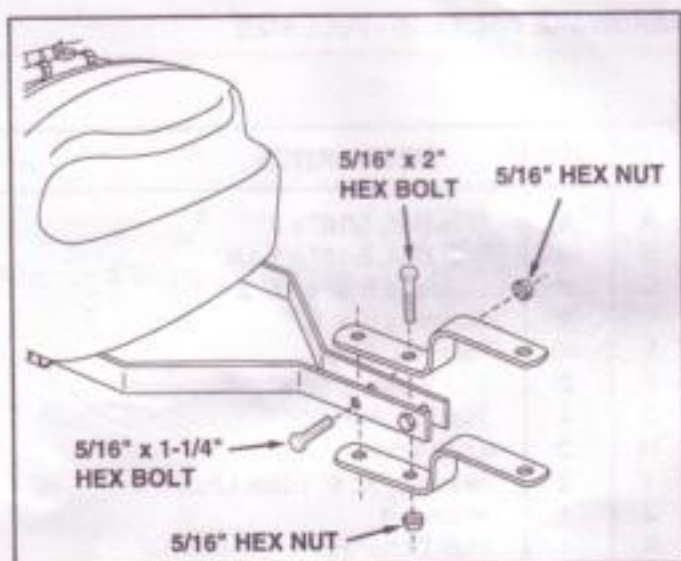


FIGURE 3

- 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, 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. See figure 4.

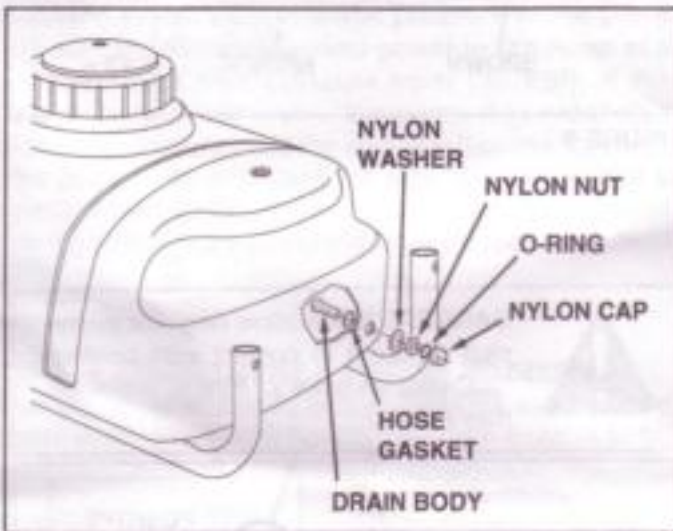


FIGURE 4

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

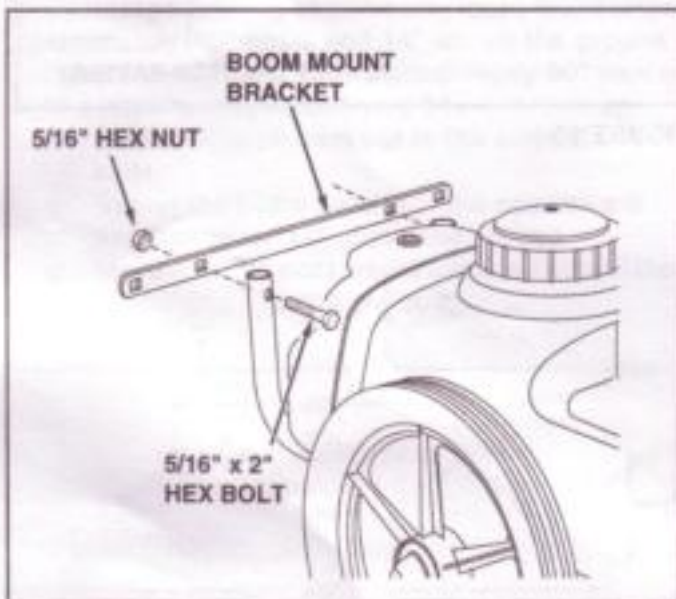


FIGURE 5

- 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.

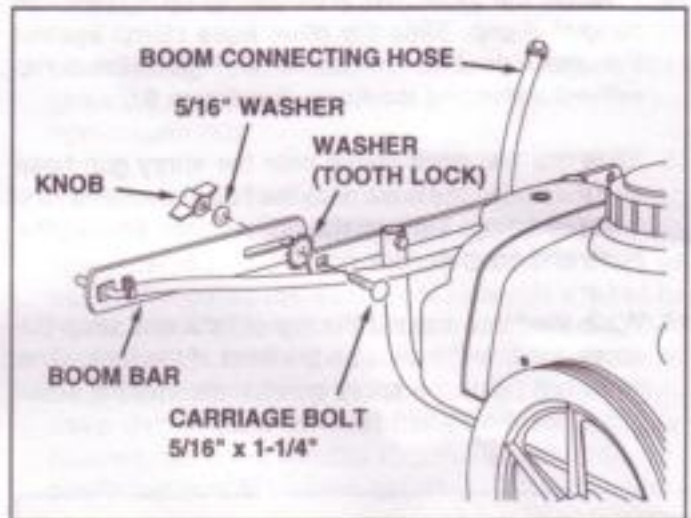


FIGURE 6

- 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.

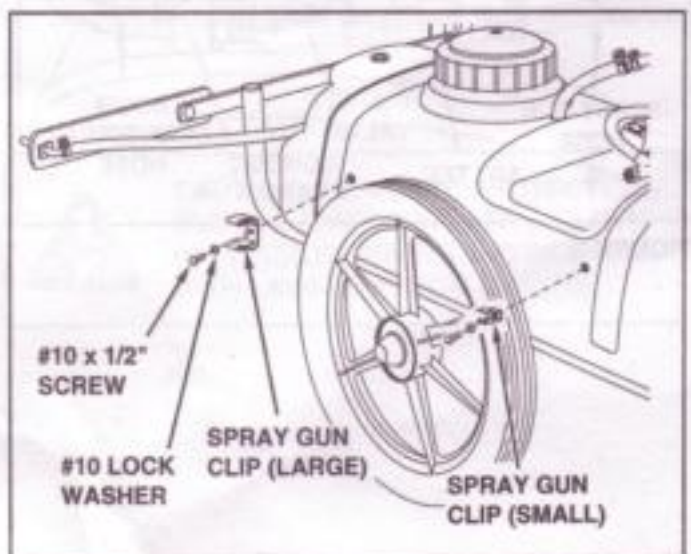


FIGURE 7

VIEWED FROM REAR

12. 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, then slide a second 3/8" hose clamp onto the hose. Leave hose clamps loose for now. See Figure 8.
13. 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.
14. 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.
15. Slide the 1/4" 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.
16. Wrap the hose around the top of tank and 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.

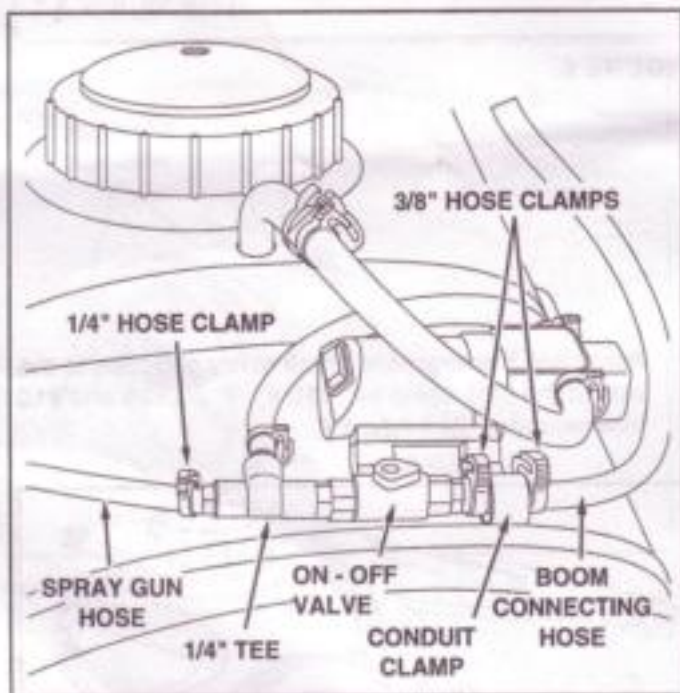


FIGURE 8

17. 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!

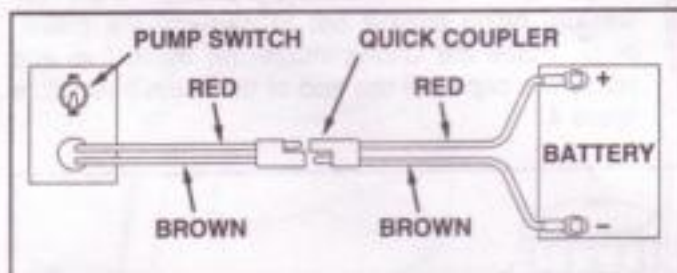


FIGURE 9

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

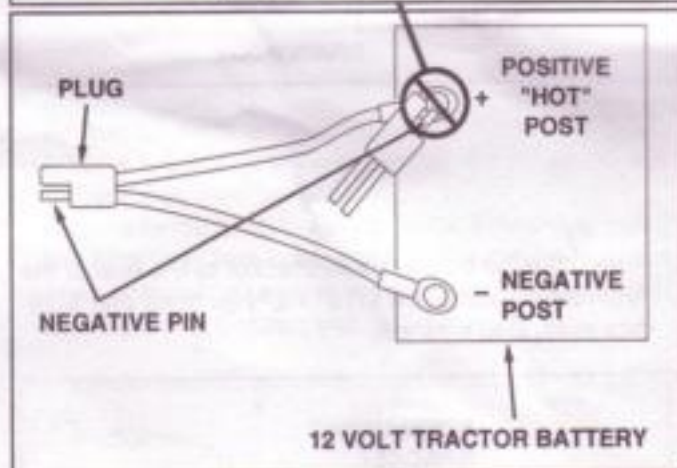


FIGURE 10

OPERATION

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 spray gun pressure is attained when the ON-OFF valve is 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.

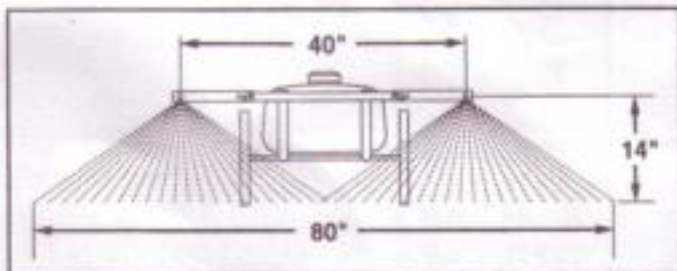


FIGURE 11

USING THE 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 the ground speed that 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 step 4. 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.



CAUTION: WEAR EYE PROTECTION, GLOVES AND PROTECTIVE CLOTHING WHEN HANDLING AND WORKING WITH LAWN CHEMICALS.

MAINTENANCE

1. Do not store sprayer with any solution left in tank.
2. 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.
3. Periodically clean the strainers in the boom nozzles. Remove the nozzle, pull out the screen and flush it with clear water.

AFTER EACH USE

4. After use, fill the sprayer 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.
5. 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 manufacturer's instructions for disposal of all wash or rinsing water.

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. Follow the procedures in the AFTER EACH USE instructions for flushing and disposal.

WINTER STORAGE

6. 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.
7. 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

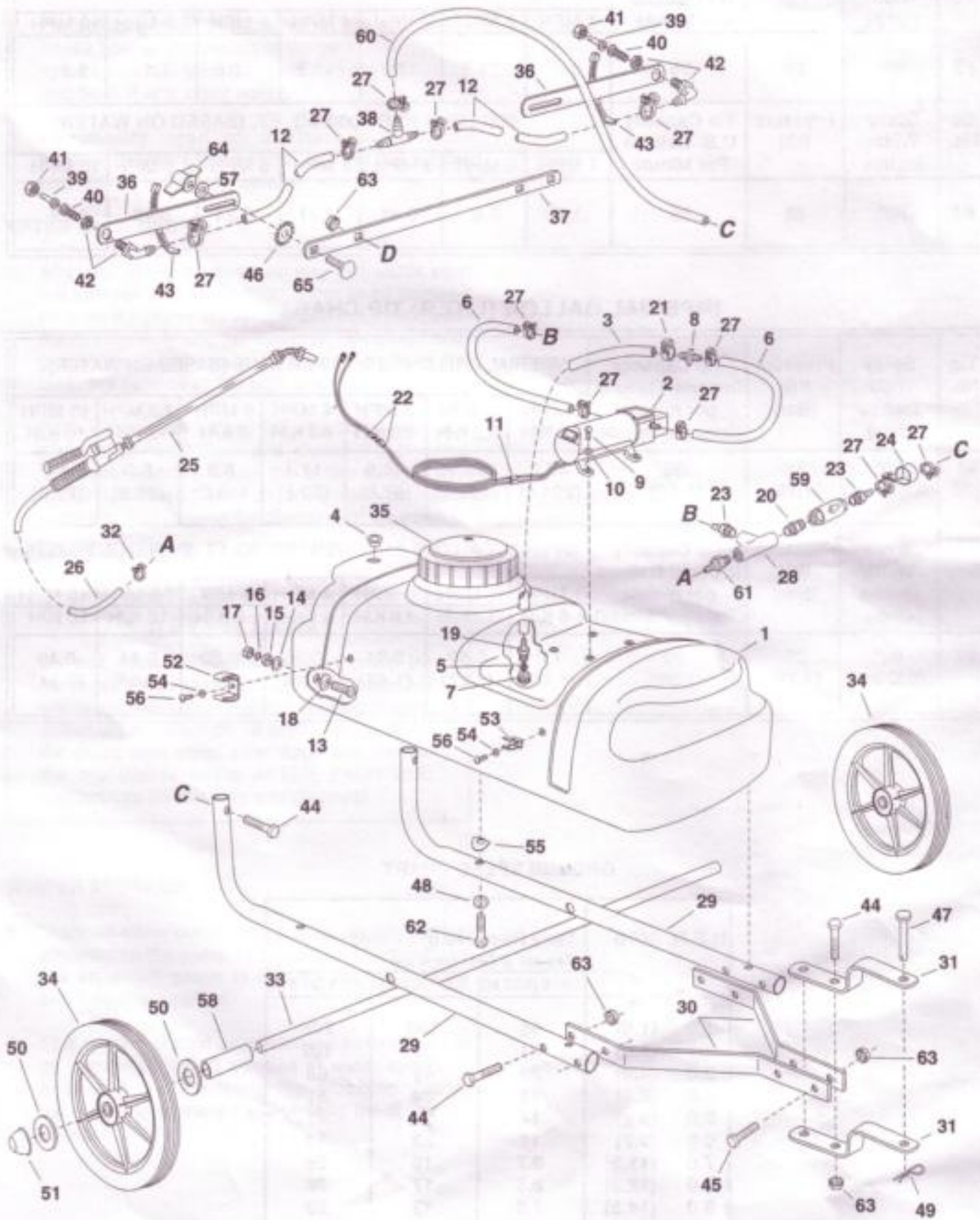
IMPERIAL GALLON (LITER) TIP CHART

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 45-02911



REPAIR PARTS LIST FOR 15 GALLON SPRAYER MODEL 45-02911

REF. NO.	PART NO.	QTY.	DESCRIPTION	REF. NO.	PART NO.	QTY.	DESCRIPTION
1	47752	1	Tank (15 Gal.)	34	46575	2	Wheel
2	48297	1	Pump and Motor	35	46700	1	Lid
3	45022	1	Hose, 1/2" ID (14" Lg.)	36	24122	2	Boom Bar
4	46287	1	Caplug Plug	37	24585	1	Bracket, Boom Mount
5	45024	1	Strainer, Cap Type 1"	38	47394	1	Tee, Plastic 3/8" Hose
6	47002	2	Hose, 3/8" ID (10" Lg.)	39	45028	2	Nozzle, SS Floodjet
7	45032	1	Nut, Swivel 3/4" Garden Hose	40	45029	2	Strainer, Screen Type
8	47005	1	Reducer, Hose Mender 1/2" x 3/8"	41	45037	2	Nut, Screen Body
9	47078	4	Screw, Pan Hd. 10-24 x 3/4" Lg.	42	47396	2	Elbow, Plastic 11/16" Thd.
10	43910	4	Washer, Flat #10 SAE	43	726-0178	2	Nylon Tie
11	46075	2	Terminal	44	44180	8	Bolt, Hex 5/16-18 x 2"
12	47392	2	Hose, 3/8" ID (20" Lg.)	45	43840	2	Bolt, Hex 5/16-18 x 1-1/4"
13	47399	1	Drain Body	46	44732	2	Washer, Tooth Lock 5/16"
14	47398	1	Washer, Nylon	47	47623	1	Hitch Pin
15	47402	1	Nut, Nylon 11/16" Thd.	48	43086	4	Lock Washer, 5/16"
16	47206	1	O-Ring	49	43343	1	Pin, Hair Cotter #4 (1/8")
17	47403	1	Cap, Nylon 11/16" Thd.	50	R19171616	4	Washer, 17/32" x 1"
18	45072	1	Gasket, 3/4" Garden Hose	51	44663	2	Hub Cap (1/2" Push Nut)
19	46276	1	Adapter, 3/4" GH x 1/2" Barb	52	47397	1	Clip (Large), Spray Gun
20	47411	1	Nipple (nylon) 1/4"	53	45180	1	Clip (Small), Spray Gun
21	45025	1	Clamp, 1/2" Hose	54	736-0722	2	Lock Washer, #10
22	45018	1	Connector with Wire	55	44695	4	Washer, Bowed
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	2	Washer, 5/16" Std. Wrt.
25	47406	1	Spray Gun	58	46578	2	Spacer
26	47393	1	Hose, 1/4" ID (12' 6" Lg.)	59	47416	1	Valve, Nylon 1/4"
27	45026	11	Clamp, 3/8" Hose	60	47421	1	Hose, 3/8" ID (28" Lg.)
28	47415	1	Tee, Nylon 1/4" NPT.	61	47414	1	Adapter, 1/4" NPT x 1/4" Barb
29	48296	2	Frame Tube	62	43085	4	Bolt, Hex 5/16-18 x 1-1/2"
30	24860	2	Hitch Arm	63	46980	10	Nut, Hex 5/16-18 (SEMS)
31	23014	2	Hitch Bracket	64	712-0421	2	Knob
32	47405	1	Clamp, 1/4" Hose	65	43682	2	Bolt, Carriage 5/16-18 x 1-1/4"
33	24584	1	Axle, 1/2"		48299	1	Owners Manual

AGRI-FAB® LIMITED WARRANTY

WHO IS COVERED: This Warranty covers only the original retail purchaser of an AGRI-FAB® product or part. It is not transferable.

HOW LONG DOES COVERAGE LAST: This Warranty remains in force for 1 year from the date of purchase.

WHAT IS COVERED: Any defect in material or workmanship of your AGRI-FAB® product or part.

WHAT IS NOT COVERED:

1. This warranty does not apply to the engine or components parts thereof. Please refer to the applicable manufacturer's warranty on these items
2. Transportation charges for the movement of any power equipment unit or attachment are the responsibility of the purchaser. Transportation charges for any parts submitted for replacement under this warranty must be paid by the purchaser unless such return is requested by AGRI-FAB®.
3. This Warranty applies only to products, which have been properly assembled, adjusted, operated, and maintained in accordance with the instructions furnished. This Warranty does not apply to any product, which has been subjected to alteration, misuse, abuse, improper assembly or installation, delivery damage, or to normal wear of the product.
4. Exclusions: Excluded from this Warranty are belts, blades, blade adapters, normal wear, normal adjustments, standard hardware and normal maintenance.
5. AGRI-FAB® does not extend any warranty for products sold or exported outside of the United States of America, its possessions and territories, except those sold through AGRI-FAB's authorized channels of export distribution.

WHAT AGRI-FAB® WILL DO: Repair or replace your AGRI-FAB® product or part.

HOW TO GET SERVICE: Deliver the AGRI-FAB® product or part to AGRI-FAB's local authorized service dealer or distributor. If you do not know the dealer or distributor in your area, please write to the Customer Service Department of AGRI-FAB, Inc. at P.O. BOX 903, SULLIVAN, ILLINOIS 61951. The return of a product or part to AGRI-FAB® will not be accepted unless prior written permission has been extended by AGRI-FAB®.

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This Warranty gives you specific legal rights, and you may also have other rights, which vary from state to state. Agri-Fab, Inc., 303 West Raymond St., Sullivan, Illinois 61951 - (217) 728-8388 - www.Agri-Fab.com

REPAIR PARTS
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