



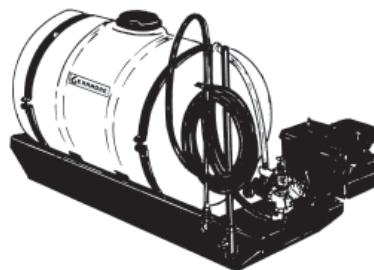
HANDGUN & BOOM SPRAYERS

Operation / Parts / Service
Manual For

Trailer Models:
LSR30-XS & LS55-XS



Skid Model:
S55



October 2004

TABLE OF CONTENTS

SECTION	DESCRIPTION	PAGE
1	Introduction	1
2	Safety	2
2.1	Training & Preparation	3
2.2	Safety Wear	3
2.3	Operating Safety	4
2.4	Operating Procedure	5
2.5	Repair & Maintenance Safety	5
2.6	Safety Decals	6
3	Operation	7
3.1	Pre-operation Checklist	7
3.2	Operating	8
3.3	Operation - Engine Models	8
4	Calibration	9
4.1	Tractor Speeds	9
4.2	Application Rates	9
5	General Maintenance	10
6	Cleaning & Storage	10
7	Parts Breakdown	11
7.1	Parts List LSR30-XS Sprayer	11-12
7.2	Parts List LS55-XS Sprayer	13-14
7.3	Parts List S55 Sprayer	15-16
8	Options Breakdown	17
8.1	Parts List 4101C & 4101XL Pump Assy	17
8.2	Parts List Handgun Assemblies	18
8.3	Parts List SB7 Boom Assy	19
8.4	Parts List FB10 Boom Assy	20-21
8.5	Parts List FB14 Boom Assy	22-23
9	Limited Warranty	24

1 INTRODUCTION

Congratulations on your choice of Handgun & Boom Sprayers. This equipment has been designed and manufactured to meet the needs of a discriminating buyer for their spraying needs.

These sprayers are designed for ease of operation at affordable quality prices.

Safe, efficient and trouble free operation of your Sprayer requires that you and anyone else who will be operating or maintaining the machine, read and understand the Safety, Operation, and Maintenance information contained within the Operator's Manual.

Keep this manual handy for frequent reference and to pass on to new operators or owners. Call your dealer, or us if you need assistance, information or additional copies of the manuals.

Model No: _____

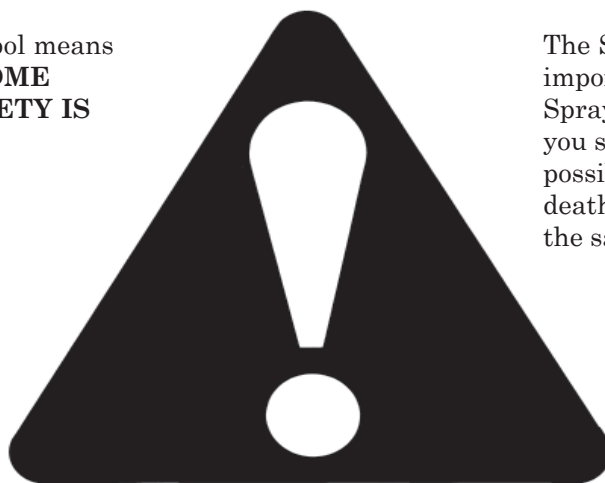
Serial No: _____

Date of Purchase: _____

2 SAFETY

SAFETY ALERT SYMBOL

This Safety Alert symbol means **ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!**



The Safety Alert symbol identifies important safety messages on the Sprayer and in the manual. When you see this symbol, be alert to the possibility of personal injury or death. Follow the instructions in the safety message.

Why is SAFETY important to you?

3 Big Reasons

Accidents Disable and Kill
Accidents Cost
Accidents Can Be Avoided

SIGNAL WORDS:

Note the use of the signal words **DANGER**, **WARNING** and **CAUTION** with the safety messages. The appropriate signal word for each message has been selected using the following guide-lines:

DANGER - Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations typically for machine components which, for functional purposes, cannot be guarded.

WARNING - Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

CAUTION - Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

If you have any questions not answered in this manual or require additional copies or the manual is damaged, please contact your dealer.

2.1 TRAINING & PREPARATION

Before operating this Sprayer, read and understand this manual completely. Become familiar with it for your own safety. To fail to do so may cause serious injury. **DO NOT** allow anyone to operate this Sprayer who has not read this manual.



NEVER use your Sprayer for any other purposes than its intended use. Any other use may cause an injury.

NEVER allow children to operate your Sprayer, nor adults lacking proper instructions. Keep them away from your work area. Your Sprayer is not a toy. Only the operator is to be near your Sprayer during use. Keep all others, including pets a minimum of 10 feet away from your work zone.

NEVER operate your Sprayer when under the influence of alcohol, drugs or medication. A clear mind is essential for safety.

NEVER allow a person who is tired or otherwise not alert to use your Sprayer.

2.2 SAFETY WEAR

NEVER wear loose clothing or jewelry that can be caught by moving parts of your Sprayer and pull you into it. Keep clothing away from all moving parts of your Sprayer. Wear proper head gear to keep hair away from moving parts.

ALWAYS wear safety shoes.

ALWAYS wear safety glasses. Chemicals or other herbicides can irritate the eyes



If you wear gloves, be sure they are tight fitting without loose cuffs or draw strings.

Have a first aid kit available should the need arise and learn how to use it.



ALWAYS wear protective hearing devices as needed.



PROLONGED EXPOSURE TO LOUD NOISE MAY CAUSE PERMANENT HEARING LOSS!

Tractors with or without equipment attached can often be noisy enough to cause permanent, partial hearing loss. We recommend that you wear hearing protection on a full-time basis if the noise in the Operator's position exceeds 80db. Noise over 85db on a long-term basis can cause severe hearing loss. Noise over 90db adjacent to the Operator over a long-term basis may cause permanent, total hearing loss. **NOTE:** Hearing loss from loud noise (from tractors, chain saws, radios, and other such sources close to the ear) is cumulative over a lifetime without hope of natural recovery.

2.3 OPERATING SAFETY

YOU are responsible for the **SAFE** operation and maintenance of your Sprayer. **YOU** must ensure that you and anyone else who is going to operate, maintain or work around the Sprayer be familiar with the operating and maintenance procedures and related **SAFETY** information contained in this manual. This manual will take you step-by-step through your working day and alerts you to all good safety practices that should be adhered to while operating the Sprayer.

Remember, **YOU** are the key to safety. Good safety practices not only protect you, but also the people around you. Make these practices a working part of your safety program. Be certain that **EVERYONE** operating this equipment is familiar with the recommended operating and maintenance procedures and follows all the safety precautions. Most accidents can be prevented. Do not risk injury or death by ignoring good safety practices.

- Sprayer owners must give operating instructions to operators or employees before allowing them to operate the machine, and at least annually thereafter per OSHA (Occupational Safety and Health Administration) regulation 1928.57.
- The most important safety feature on this equipment is a **SAFE** operator. It is the operator's responsibility to read and understand **ALL** Safety and Operating instructions in the manual and to follow these. Most accidents can be avoided.
- A person who has not read and understood all operating and safety instructions is not qualified to operate the machine. An untrained operator exposes himself and bystanders to possible serious injury or death.
- Do not modify the equipment in any way. Unauthorized modification may impair the function and/or safety and could affect the life of the equipment.
- **Think SAFETY! Work SAFELY!**

2.4 OPERATING PROCEDURE

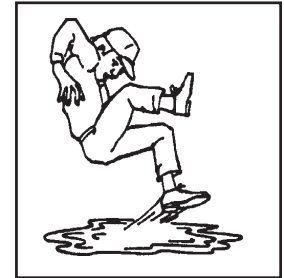
- ◆ Be sure all tips are in good condition and nozzle caps are tight.
- ◆ Know how to stop the unit and disengage the controls.
- ◆ After seeing that your pump is primed, turn your sprayer on. Be sure all tips are functioning.
- ◆ Make sure the lid on your tank is secured.
- ◆ Check to be sure your controls are functioning properly. (If electric controls are used, reference the manufacturers manual provided for installation, operating and troubleshooting if problems arise.)
- ◆ Be sure that the pump is secured to power source (i.e. PTO shaft of tractor) as recommended by the pump manufacturer.
- ◆ **ALWAYS** follow directions of the chemical manufacturer when mixing or handling all chemicals.
- ◆ Be sure your pump is capable of pumping your chemicals. For example, cast iron roller pumps are not recommended for pumping acid base or abrasive chemicals as the pump will be ruined within a few short hours of use.
- ◆ **NEVER** leave your Sprayer unattended. Shut off the engine if you are leaving your Sprayer even for a short period of time.
- ◆ **DON'T** run the engine in an enclosed area. Exhaust gases contain carbon monoxide. This odorless gas can be deadly when inhaled.

2.5 REPAIR & MAINTENANCE SAFETY

Good maintenance is your responsibility. Poor maintenance is an invitation to trouble.

Follow good shop practices.

- Keep service area clean and dry.
- Be sure electrical outlets and tools are properly grounded.
- Use adequate light for the job at hand.



Make sure there is plenty of ventilation. Never operate engines in a closed building. The exhaust fumes may cause asphyxiation.

A fire extinguisher and first aid kit should be kept readily accessible while performing maintenance on this equipment.



DON'T operate your Sprayer in poor mechanical condition or when in need of repair.

PERIODICALLY check that all nuts, bolts, fittings, clamps, hoses, and screws are tightened and properly installed.

DON'T alter your Sprayer in any manner. Such alterations may cause your Sprayer to be unsafe.

PERFORM all recommended maintenance procedures before you use your Sprayer.

REPLACE all damaged or worn parts such as hydraulic hoses and fittings immediately.

All replacement parts must meet manufacturer's specifications. The manufacturer will not be responsible for injuries or damages caused by use of unapproved parts and/or accessories.

2.6 SAFETY DECALS



ALWAYS REPLACE
MISSING OR
DAMAGED DECALS



3 OPERATING INSTRUCTIONS

Be sure you are familiar with and confident of your knowledge on how to operate your sprayer. Read and familiarize yourself with all procedures and safety instructions included in this manual and the manual provided with your tractor.

3.1 PRE-OPERATION CHECKLIST



STEP 1: Be sure all tips are in good condition and nozzle caps are tight.



STEP 2: After seeing that your pump is primed, turn your sprayer on. Make sure all tips are functioning properly.



STEP 3: Make sure line strainer is free of debris.



STEP 4: Make sure the lid on your tank is secured.



STEP 5: Check to be sure your controls are functioning properly.



STEP 6: Be sure that the pump is secured to power source.



STEP 7: Always follow directions of the chemical manufacturer when mixing or handling all chemicals.



STEP 8: Be sure your pump is capable of pumping your chemicals. For example, cast iron roller pumps are not recommended for pumping acid base or abrasive chemicals as the pump will be ruined within a few short hours of use.

IMPORTANT:

Before spraying chemicals, fill the tank half full of water to allow familiarization with the sprayer and to prevent waste of expensive chemicals.

3.2 OPERATING



BEFORE YOU PUT CHEMICAL INTO YOUR SPRAYER TANK

1. Be sure you are familiar with and confident of your knowledge on how to operate your sprayer. Ask your dealer if in doubt.
2. Re-check all bolts, screws, fittings, clamps, hoses, etc. to be certain they are tight and properly installed.
3. **DO NOT** remove any safety shields from pumps or any other safety equipment. Be sure it is installed according to manufacturer's recommendations.
4. Handle all chemicals with extreme caution, wear protective clothing, and mix your chemicals only as recommended by your chemical dealer.
5. Check to see that the tank, tank fittings and gaskets are compatible with the chemicals to be used.
6. Check to be certain that the chemicals to be used are compatible with the pump. Check on the chemical compatibility with not only the overall composition, i.e. cast iron, but the kind of seals that should be used. Is it a corrosive or abrasive chemical? Some chemicals can give off toxic vapors when they come in contact with the material it is not compatible with, which will not only ruin your pump, but could cause personal injury.
7. **USE CAUTION** and common sense for your own safety! Take time to read all literature, warnings, cautions, and operation manuals provided!

- **Think SAFETY! Work SAFELY!**

3.3 OPERATION - ENGINE MODELS

1. Connect sprayer to the tractor hitch.
2. Check strainer screen to make sure it is clean.
3. Check strainer shut-off valve, making sure the handle is in the open position.
4. Start engine.
5. Set spraying pressure as required.
6. If using a handgun to spray, connect the hose. If using a boom, connect the hose for boom.

USE CAUTION and common sense for your own safety!

Take time to read all literature, warnings, cautions, and operation manuals provided!

4 CALIBRATION

4.1 TRACTOR SPEEDS - TO OBTAIN MILES PER HOUR

$$\text{GPM (Per Nozzle)} = \frac{\text{GPA} \times \text{MPH} \times \text{W}}{5940}$$

$$\text{GPA} = \frac{5940 \times \text{GPM (Per Nozzle)}}{\text{MPH} \times \text{W}}$$

- GPM - Gallons Per Minute
- GPA - Gallons Per Acre
- MPH - Miles Per Hour
- W - Nozzle spacing in inches for broadcast spraying
- Spray width in inches for single nozzles, band spraying or boomless spraying
- Row spacing in inches divided by the number of nozzles per row for directed spraying

Speed in MPH (Miles Per Hour)	Time Required in SECONDS to Travel a Distance of:		
	100 Feet	200 Feet	300 Feet
3.0	23	45	68
3.5	20	39	58
4.0	17	34	51
4.5	15	30	45
5.0	14	27	41
6.0	-	23	34
7.0	-	19	29
7.5	-	18	27
8.0	-	17	26
9.0	-	15	23

4.2 APPLICATION RATES - FOR 7, 10, & 14 FOOT FLOOD BOOMS

SIZE	LIQUID PRESSURE (P.S.I.)	CAPACITY GAL. / MIN.	APPLICATION RATE: GALLONS PER ACRE AT MILES PER HOUR							
			4 MPH	6 MPH	8 MPH	10 MPH	12 MPH	14 MPH	16 MPH	20 MPH
AN2 Red	10	0.20	7.4	5.0	3.7	3.0	2.5	2.1	1.9	1.5
	20	0.28	10.5	7.0	5.3	4.2	3.5	3.0	2.6	2.1
	30	0.35	12.9	8.6	6.4	5.1	4.3	3.7	3.2	2.6
	40	0.40	14.9	9.9	7.4	5.9	5.0	4.2	3.7	3.0
	50	0.45	16.6	11.1	8.3	6.6	5.5	4.7	4.2	3.3
	60	0.49	18.2	12.1	9.1	7.3	6.1	5.2	4.5	3.6
AN2.5 Brown	10	0.25	9.3	6.2	4.6	3.7	3.1	2.7	2.3	1.9
	20	0.35	13.1	8.8	6.6	5.3	4.4	3.8	3.3	2.6
	30	0.43	16.1	10.7	8.0	6.4	5.4	4.6	4.0	3.2
	40	0.50	18.6	12.4	9.3	7.4	6.2	5.3	4.6	3.7
	50	0.56	21.0	13.8	10.4	8.3	6.9	5.9	5.2	4.2
	60	0.61	23.0	15.2	11.4	9.1	7.6	6.5	5.7	4.5
AN3* Grey	10	0.30	11.1	7.4	5.6	4.5	3.7	3.2	2.8	2.2
	20	0.42	15.8	10.5	7.9	6.3	5.3	4.5	3.9	3.2
	30	0.52	19.3	12.9	9.6	7.7	6.4	5.5	4.8	3.9
	40	0.60	22.0	14.9	11.1	8.9	7.4	6.4	5.6	4.5
	50	0.67	25.0	16.6	12.5	10.0	8.3	7.1	6.2	5.0
	60	0.73	27.0	18.2	13.6	10.9	9.1	7.8	6.8	5.5

* Nozzle shipped as standard on all booms

5 GENERAL MAINTENANCE

Carefully follow all instructions as stated in this operator's manual. This includes safety, maintenance and operation of the sprayer. The sprayer was designed and built for years of reliable service if properly cared for. However, a sprayer is a high R.P.M. machine, thus, daily attention is required.

1. Check all bolts for tightness
2. Check sprayer for leaks
3. Check hose connections

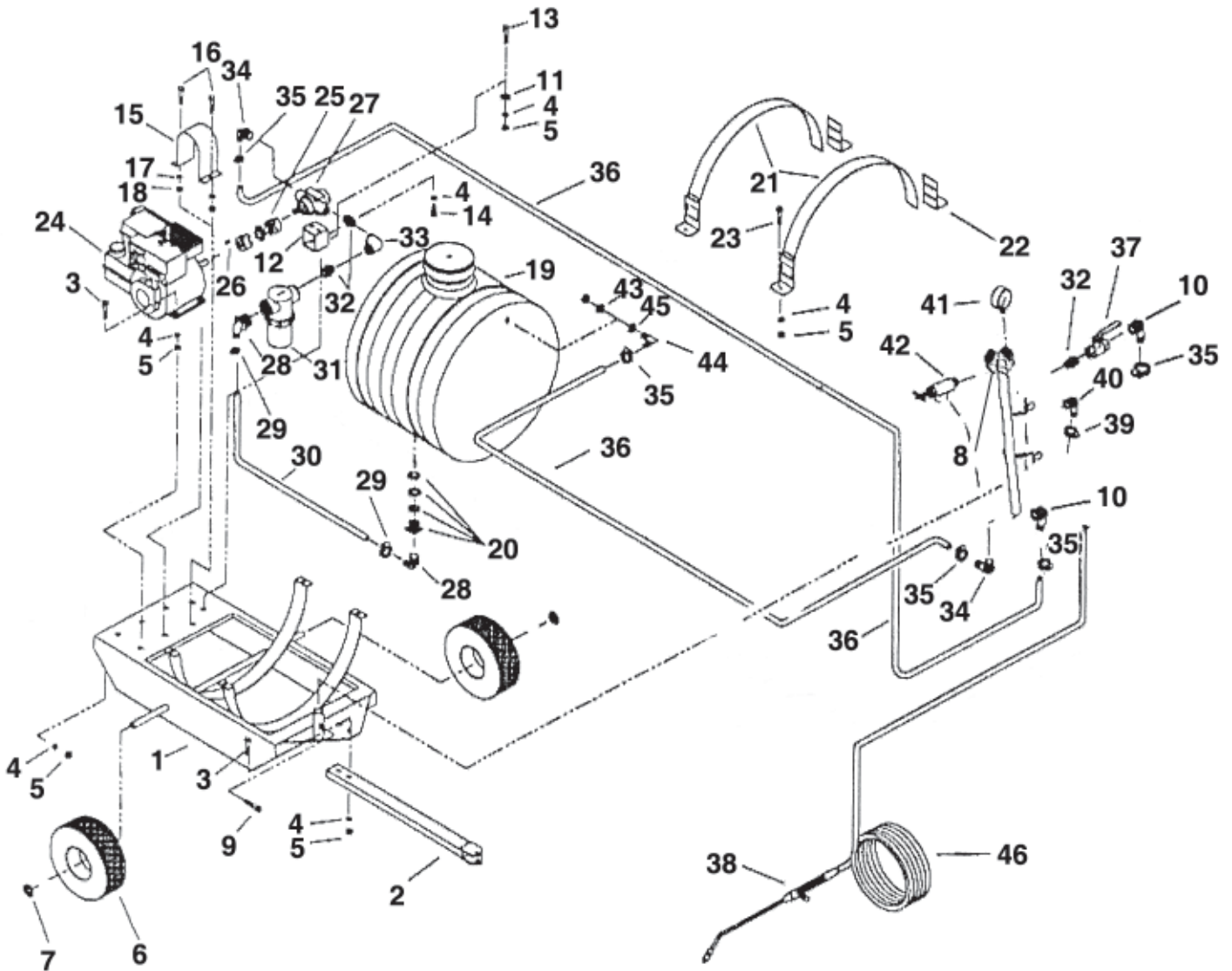
6 CLEANING & STORAGE

The most effective cleaning method is to pump several rinses of clean water through the tank, pump, hoses, boom, spray gun, etc. A neutralizing agent such as a solution of Nutra-Sol, a detergent or household ammonia as recommended by the chemical manufacturer can assist in removal of a persistent chemical. When the system is thoroughly cleaned, drain the tank, suction line, pump, hoses, etc.

- Wash and flush out sprayer after completion of each phase of your spraying program.
- Flush out sprayer when changing chemicals, if there is a possibility of incompatibility.
- Clean sprayer very thoroughly before storing at the end of the spraying season. If you are in a cold climate, final rinse should be with a sufficiently concentrated anti-freeze to prevent freeze-up in areas that were not thoroughly drained.
- Check sprayer over for needed repairs before time to spray again.
- Preparing the sprayer for use in the Spring means completion of all needed repairs, installation of all drain plugs and checking sprayer for leaks with a tank of water.
 1. Store the unit in an area away from human activity
 2. Do not permit children to play on or around the stored machine.
 3. Store the unit in a dry, level area. Support the frame with planks if required.

7 PARTS BREAKDOWN

7.1 LSR30-XS SPRAYER ASSEMBLY

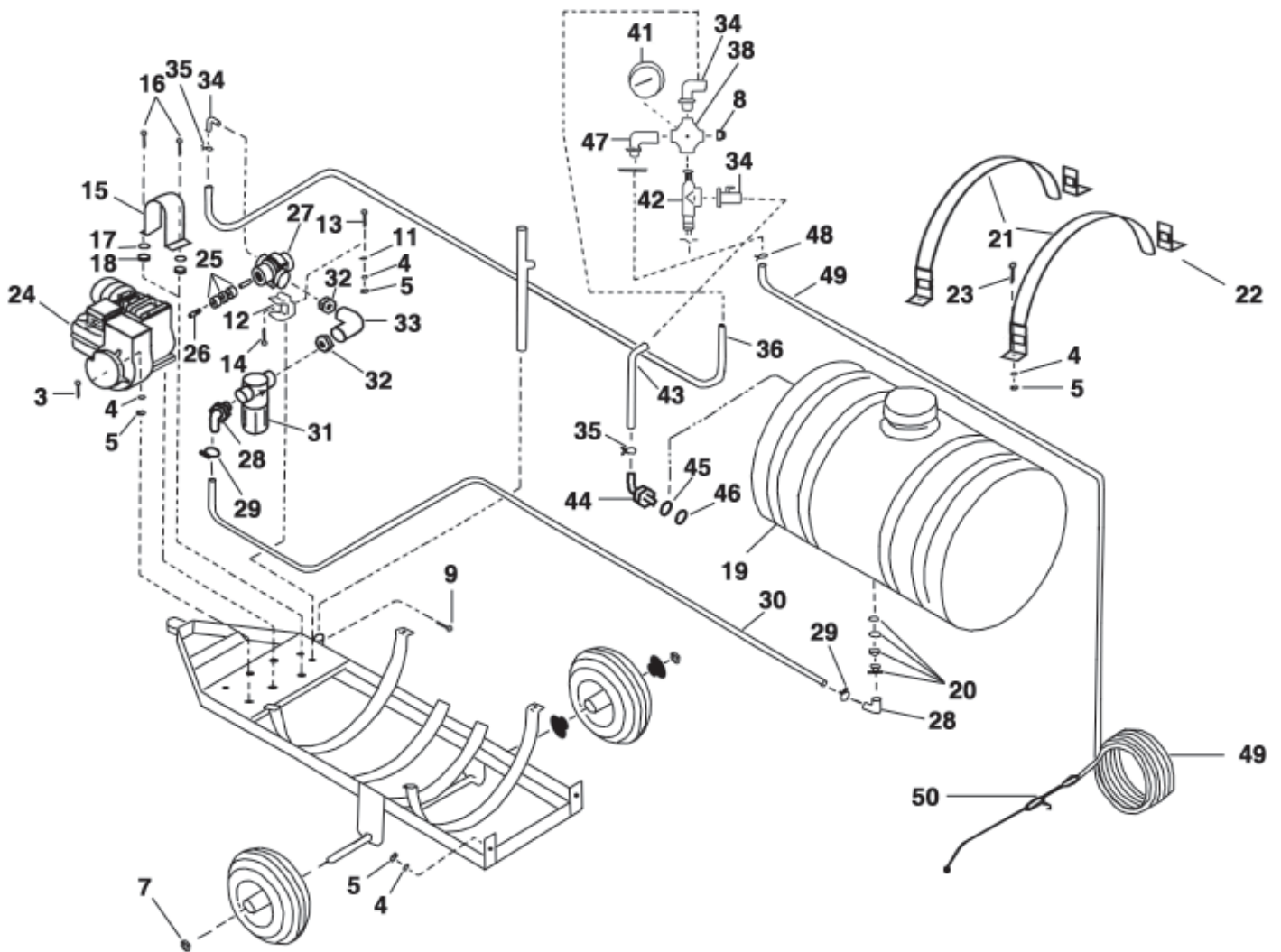


<u>REF #</u>	<u>QTY.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	LSR30-FO	Frame
2	1	201-21-011	Tongue
3	6	5034004	Bolt $\frac{5}{16}$ " x $1 \frac{3}{4}$ "
4	16	5016026	Lock Washer $\frac{5}{16}$ "
5	14	5006040	Nut $\frac{5}{16}$ "
6	2	LSRFT25	Tire & Wheel
7	2	T/C	Locking Clip
8	1	LSRTREE	Tee, Liquid
9	1	90-018	Bolt $\frac{3}{8}$ " x $\frac{3}{4}$ "
10	2	K-3412	Elbow $\frac{3}{4}$ " MNPT x $\frac{1}{2}$ " HB
11	6	5/16"FWZP	Flat Washer $\frac{5}{16}$ "
12	1	FSO-8	Mount, Pump

7.1 LSR30-XS SPRAYER ASSEMBLY

<u>REF #</u>	<u>QTY.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
13	4	O/L	Bolt $5/16$ " x $3/4$ "
14	2	O/L	Bolt $5/16$ " x $1/2$ "
15	1	FSR211	Shield
16	2	5034026	Bolt $1/4$ " x $3/4$ "
17	2	5016025	Lock Washer $1/4$ "
18	2	5006041	Nut $1/4$ "
19	1	TOP25	Tank 30 Gallon
20	1	WF34	Fitting Assembly
21	2	TANKSTRAP	Strap
22	4	FSM-67-1	Bracket
23	4	O/L	Bolt $5/16$ " x $1 3/4$ "
24	1	BS912020144-01	Engine
25	1	LJ-5/8	Coupler $5/8$ " x $5/8$ "
26	1	BE10542-1	Key
27	1	4101C	Pump (Standard Cast Iron)
27	1	4101XL	Pump (Optional Silver Cast)
28	2	K-3434	Elbow $3/4$ " MNPT x $3/4$ " HB
29	2	SSC12	Hose Clamp $3/4$ "
30	As Req'd	GA32040820	Hose $3/4$ " Per Foot
31	1	122-3/4-PP5	Filter Assembly
32	2	NN34	Nipple, Close $3/4$ " NPT
33	1	NSE34	Elbow, $3/4$ " NPT
34	4	5300106	Elbow, $3/4$ " MNPT x $1/2$ " HB
35	5	5380124	Hose Clamp $1/2$ "
36	As Req'd	GA32040720	Hose $1/2$ " Per Foot
37	1	BV34	Ball Valve $3/4$ "
38	1	275-190	Handgun, Poly
39	1	SCF	Hose Clamp $3/8$ "
40	1	K-3438	Elbow $1/2$ " MNPT x $1/2$ " HB
41	1	GA200	Gauge
42	1	2066-05-58	Relief Valve
43	1	5380216	Washer, Nylon
44	1	5056023	Elbow, Nylon
45	1	GHWASHER	Grommet
46	1	CH-3/8X15'	Hose $3/8$ " x 15', Handgun

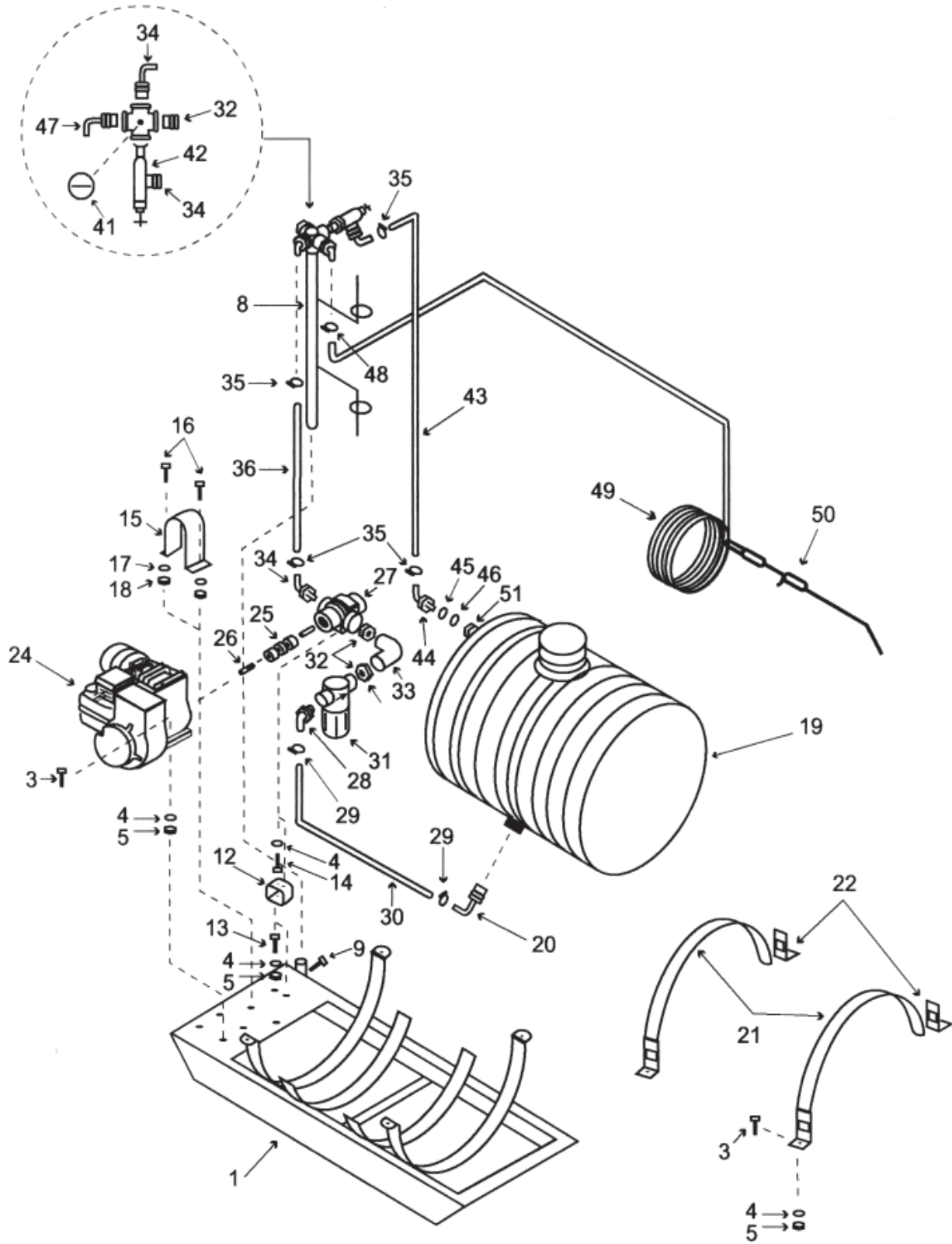
7.2 LS55-XS SPRAYER ASSEMBLY



7.2 LS55-XS SPRAYER ASSEMBLY

<u>REF #</u>	<u>QTY.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	LS55-FO	Frame, 55 Gallon
3	6	5034004	Hex Screw, $\frac{5}{16}$ "x1- $\frac{3}{4}$ "
4	20	5016026	Lock Washer, $\frac{5}{16}$ "
5	18	5006040	Hex Nut, $\frac{5}{16}$ "
6	2	LSRFT 55	Wheel & Tire
7	2	T/C	Tinnerman Nut, $\frac{3}{4}$ "
8	1	K-3412	Nipple, $\frac{3}{4}$ " MNPT x $\frac{1}{2}$ "
9	1	90-018	Hex Screw, $\frac{3}{8}$ " x $\frac{3}{4}$ "
11	2	5/16"FWZP	Flat Washer, $\frac{5}{16}$ "
12	1	FSO-8	Pump Mount
13	2	O/L	Bolt $\frac{5}{16}$ " x $\frac{3}{4}$ "
14	2	O/L	Bolt $\frac{5}{16}$ " x $\frac{1}{2}$ "
15	1	FSR211	Shaft Shield
16	2	5034026	Hex Screw, $\frac{1}{4}$ " x $\frac{3}{4}$ "
17	2	5016025	Lock Washer, $\frac{1}{4}$ "
18	2	5006041	Hex Nut, $\frac{1}{4}$ "
19	1	TOP-55	Tank, 55 Gallon, Ace poly with 5"
20	1	WF34	$\frac{3}{4}$ " Withdrawal Fitting
21	2	099-36-270	Tank Strap, 40"
22	4	098-40-421	Bracket
23	4	5034004	Bolt $\frac{5}{16}$ " x 1 - $\frac{3}{4}$ "
24	1	BS912020144-01	Engine, $\frac{5}{8}$ " Shaft, 2600
25	1	LJ-5/8"	Shaft Coupling, $\frac{5}{8}$ " x $\frac{5}{8}$ " with Set Screws
26	2	BE10542-1	Square Key, $\frac{3}{16}$ " x $\frac{3}{16}$ " x 1"
27	1	4101C	Pump (Standard Cast Iron)
27	1	4101XL	Pump (Optional Silver Cast)
28	2	K-3434	Nylon Hose Insert Ell, $\frac{3}{4}$ " MNPT x $\frac{3}{4}$ " Hose Barb
29	2	KO-20SS	Hose Clamp, SS $\frac{3}{4}$ "
30	1	GA32040820X28	Hose, $\frac{3}{4}$ " x 28"
31	1	122-3/4-PP50	Line Strainer, $\frac{3}{4}$ ", 50 Mesh
32	2	NN34	Close Nipple, Nylon $\frac{3}{4}$ " NPT
33	1	NSE34	Nylon Elbow, $\frac{3}{4}$ " NPT
34	2	5300106	Nylon Hose Insert
35	3	5380124	Nylon Hose Clamp $\frac{1}{2}$ "
36	1	GA3204-720X15	Hose, 1 Brd., $\frac{1}{2}$ " x 15'
38	1	MPST-4	Tee $\frac{3}{4}$ " NPT with Valve
39	4	SCG	Hose Clamp
41	1	GA200	Gauge, Brass 2 $\frac{1}{2}$ " Dia., $\frac{1}{4}$ " NPT
42	1	2066-05-58	Relief Valve
43	1	GA3204 0720X14	Hose, 1 Brd. $\frac{1}{2}$ " x 14"
44	3	5056023	Nylon Hose Shank Body
45	1	GWASHER	Grommet
46	1	5380216	Nylon Washer
47	1	K-3438	Nylon Hose Insert
48	1	SCF	Nylon Hose Clamp $\frac{3}{8}$ "
49	1	CH-3/8x25'	Hose 1 Brd., $\frac{3}{8}$ " x 25'
50	1	275-190	Handgun Poly

7.3 S55 SPRAYER ASSEMBLY

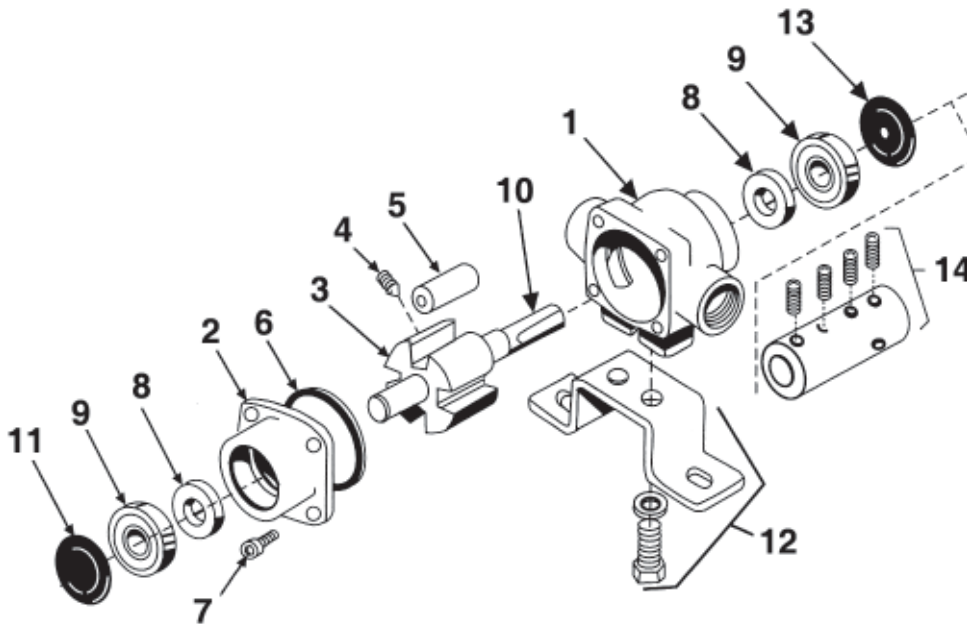


7.3 S55 SPRAYER ASSEMBLY

<u>REF #</u>	<u>QTY.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	S30-F0/S55-F0	Frame
3	8	5034004	Bolt ⁵ / ₁₆ " x 1 ³ / ₄ "
4	12	5016026	Lockwasher ⁵ / ₁₆ "
5	10	5006040	Nut ⁵ / ₁₆ "
8	1	LSRTREE	Tee
9	1	90-018	Bolt ³ / ₈ " x ³ / ₄ "
12	1	FS0-8	Mount, Pump
13	4	O/L	Bolt ⁵ / ₁₆ " x ³ / ₄ "
14	2	O/L	Bolt ⁵ / ₁₆ " x ¹ / ₂ "
15	1	FSR-211	Shaft Shield
16	2	5034026	Bolt ¹ / ₄ " x ³ / ₄ "
17	2	5016025	Lockwasher ¹ / ₄ "
18	2	5006041	Nut ¹ / ₄ "
19	1	TOP25/TOP55	Tank 30/55 Gallon w/ 5" Lid
20	1	WF34	Drain Fitting Assembly
21	2	TANKSTRAP	Strap, Tank 30 Gal.
21	2	099-36-270	Strap, Tank 55 Gal.
22	4	FSM-67	Bracket, Tank Strap 30 Gal.
22	4	098-40-421	Bracket, Tank Strap 55 Gal.
24	1	BS912020144-01	Engine, 3 ¹ / ₂ HP, ⁵ / ₈ " Shaft
25	1	LJ-5/8"	Coupler ⁵ / ₈ " x ⁵ / ₈ "
26	1	BE10542-1	Key ³ / ₁₆ " x ³ / ₁₆ " x 1"
27	1	4101C	Pump
28	2	K-3434	Elbow ³ / ₄ " MNPT x ³ / ₄ " Barb
29	2	K0-20SS	Clamp ³ / ₄ "
30	As Req'd	GA32040820x16	Hose ³ / ₄ " Per Foot
31	1	122-3/4-PP-40	Strainer ³ / ₄ "
32	2	NN34	Nipple ³ / ₄ " NPT
33	1	SE-34	Elbow ³ / ₄ " NPT
34	3	5300106	Elbow ³ / ₄ " MNPT x ¹ / ₂ " HB
35	4	5380124	Clamp ¹ / ₂ "
36	As Req'd	GA32040720x68	Hose ¹ / ₂ " Per Foot
41	1	GA200	Gauge ¹ / ₄ " NPT x 200 PSI
42	1	2066-05-58	Valve, Relief ¹ / ₂ " NPT x ³ / ₄ " NPT
43	1	GA32040720x14	Hose ¹ / ₂ " Per Foot
44	3	5056023	Nylon Hose Shank Body
45	1	GHWASHER	Grommet
46	1	5380216	Nylon Washer
47	1	K-3438	Nylon Insert Ell
48	1	SCF	Nylon Hose Clamp ³ / ₈ "
49	1	CH-3/8X25	Hose, Handgun - 25 feet
50	1	275-190	Handgun, Poly
51	1	5006102	Nozzle Thread Nut ¹¹ / ₁₆ " - 16

8 OPTIONS BREAKDOWN

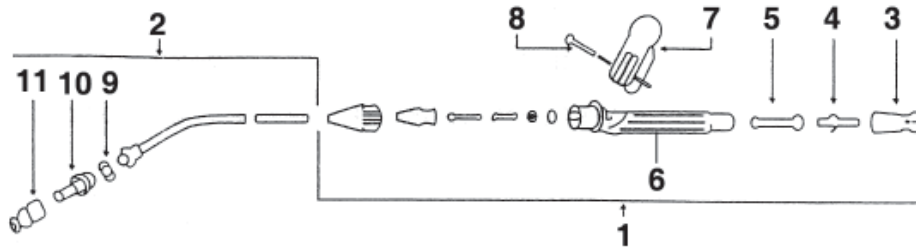
8.1 4101C & 4101XL PUMP ASSEMBLY



<u>REF #</u>	<u>QTY.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	0100-4101C	Body (Cast Iron)
1	1	0100-4101X	Body (Silver Cast)
2	1	0200-4101C	End Plate (Cast Iron)
2	1	0200-4101X	End Plate (Silver Cast)
3	1	0300-4101C	Rotor & Shaft (Cast Iron)
3	1	0300-4101X	Rotor & Shaft (Silver Cast)
4	1	2230-0002	Set Screw (Cast Iron)
4	1	2230-0016	Set Screw (Silver Cast)
5	4	1005-0002	Roller (Standard)
5	4	1002-0002	Roller, Poly (Optional)
5	4	1001-0002	Buna-N Roller (Optional)
5	4	1055-0002	Teflon Roller (Optional)
6	1	1720-0104	O-Ring
7	4	2220-0018	Allen Bolt
8	2	2107-0002	Seal, Viton (Standard)
8	2	2102-0001	Seal, Buna-N (Optional)
8	2	2103-0001	seal, Leather (Optional)
9	2	2000-0010	Bearing
10	1	0500-6600	Shaft Only
11	1	2300-0021	Cover, Rear
12	1	3420-0024	Base Kit
13	1	2300-0023	Cover, Front
14	1	1320-0016	Coupler $\frac{5}{8}$ " x $\frac{5}{8}$ "

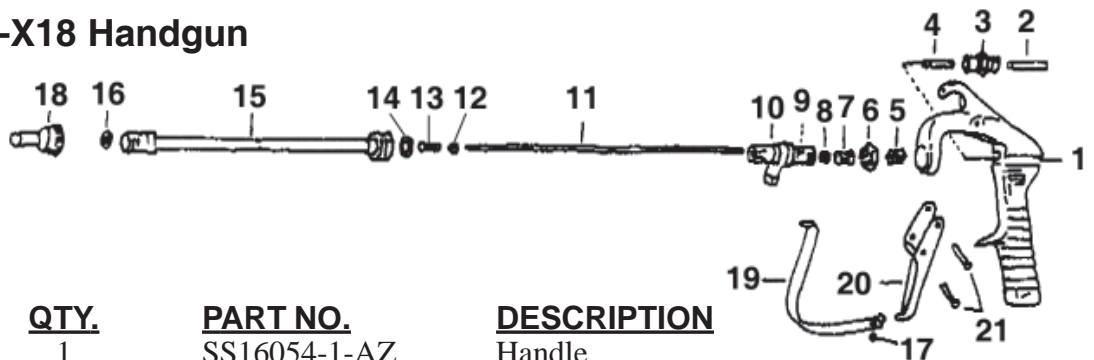
8.2 HANDGUN ASSEMBLY

275-190 Handgun



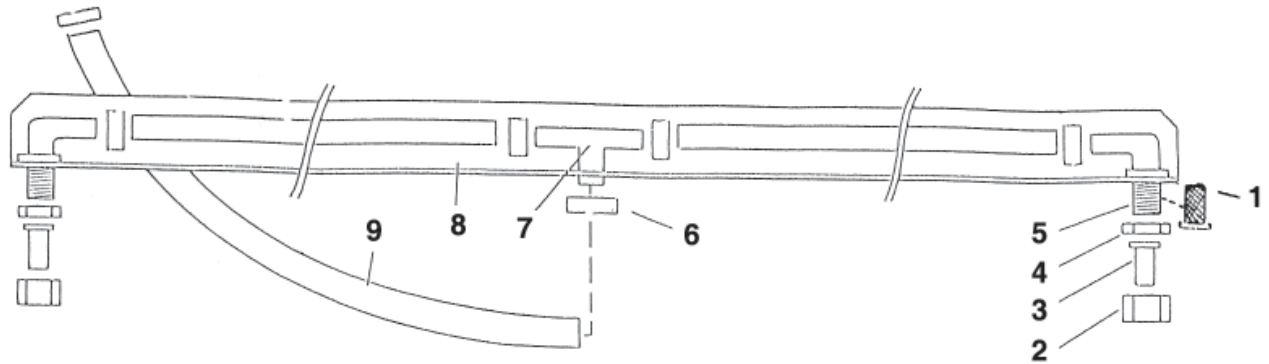
<u>REF #</u>	<u>QTY.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	S2-16-53	Handle Assembly
2	1	S2-13-15	Pipe Assembly
3	1	S2-15-32	Connector
4	1	S2-15-42	Hose Barb
5	1	S2-15-51	Filter
6	1	S2-15-62	Handle Only
7	1	S2-15-12	Trigger
8	1	S2-14-81	Pin
9	1	S2-12-31	Gasket
10	1	S2-12-13	Body
11	1	S2-12-23	Cap

23L-7676-X18 Handgun



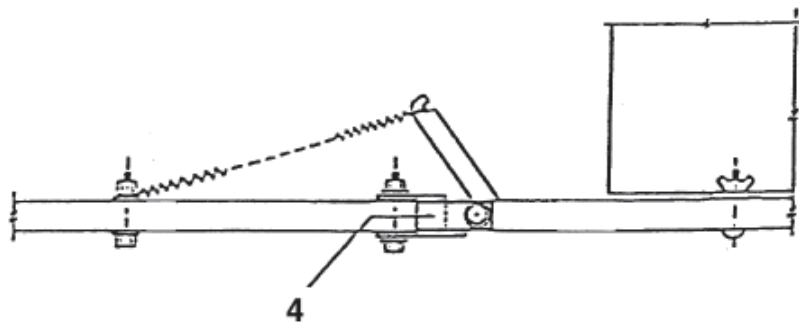
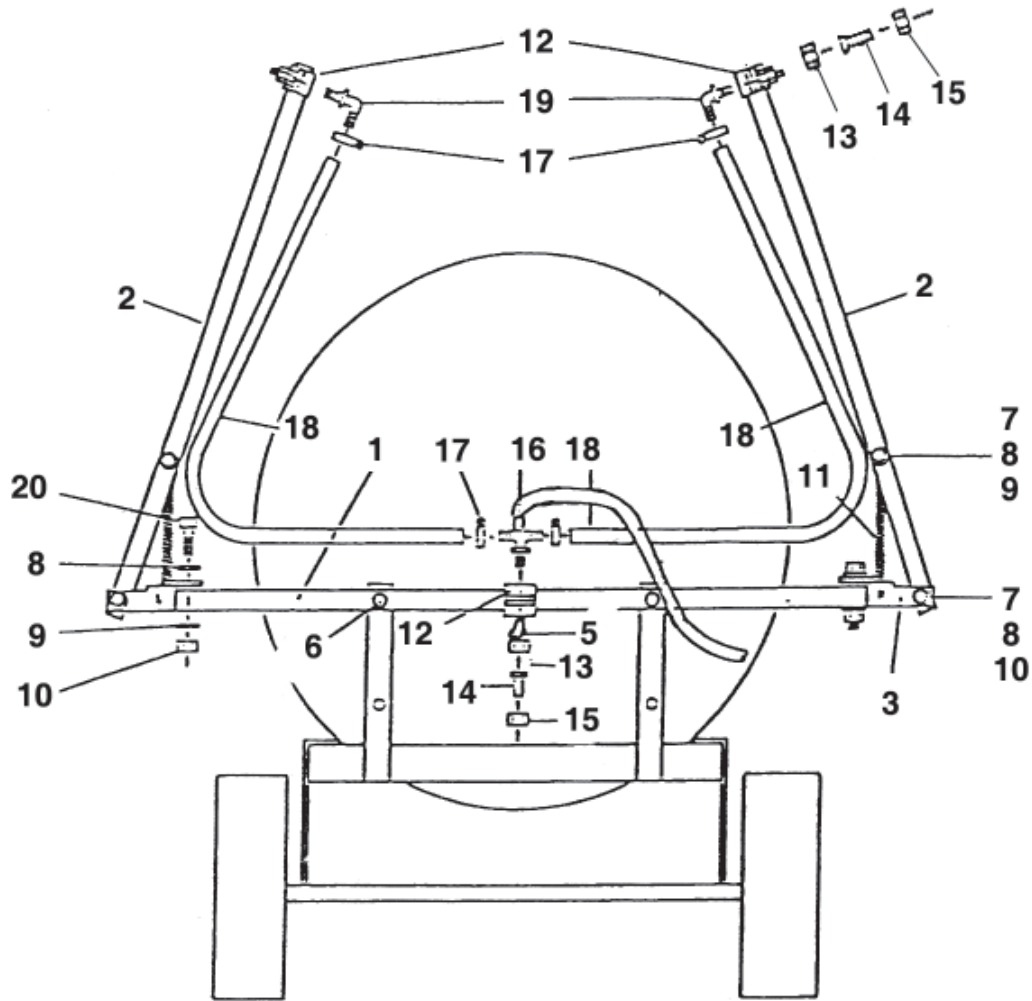
<u>REF #</u>	<u>QTY.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	SS16054-1-AZ	Handle
2	1	SS16053-1-SS	Spring 125 PSI
2	1	SS16053-2-S	Spring 800 PSI
3	1	SS7480-IZP	Spring Screw
4	1	SS7491-ALEF	Stud, Spring
5	1	SS8591-IZF	Guide
6	1	SS7486-SS	Lock Nut
7	1	SS16071-SS	Screw, Packing
8	1	SS14255-1-BN	Cap
9	1	SS7892-IZP	Key
10	1	SS16074	Body, Inlet
11	1	7677-18-SS	Stem
12	1	SS7679-1-SS	Nut
13	1	SS7678	Stem End
14	1	SS4743-TEF	Gasket
15	1	SS13206-18	Extension
16	1	SS23437-PP	Seat
17	1	SS9697-INP	Screw
18	1	SS5500-PPB-X12	Nozzle
19	1	SS9539-INP	Guard
20	1	SS14252-INP	Trigger
21	2	SS8038-IZP	Rivet

8.3 SB7 BOOM ASSEMBLY



<u>REF #</u>	<u>QTY.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	2	5116019	Filter
2	2	5046052	Cap, Nozzle
3	2	AN3	Nozzle 3
4	2	5006102	Nut
5	2	5056023	Elbow
6	6	SCG	Hose Clamp
7	1	5350126	Tee 1/2" x 1/2"
8	1	217-13-011	Boom
9	1	AM1/2"X.125	Hose 1/2" x 40"

8.4 FB10 10' FOLDING BOOM ASSEMBLY

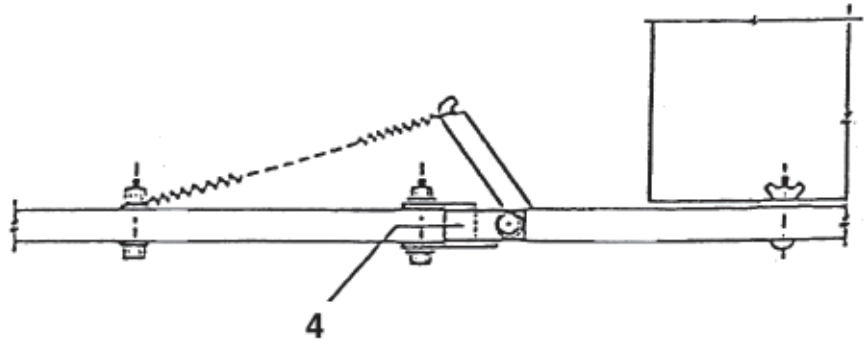
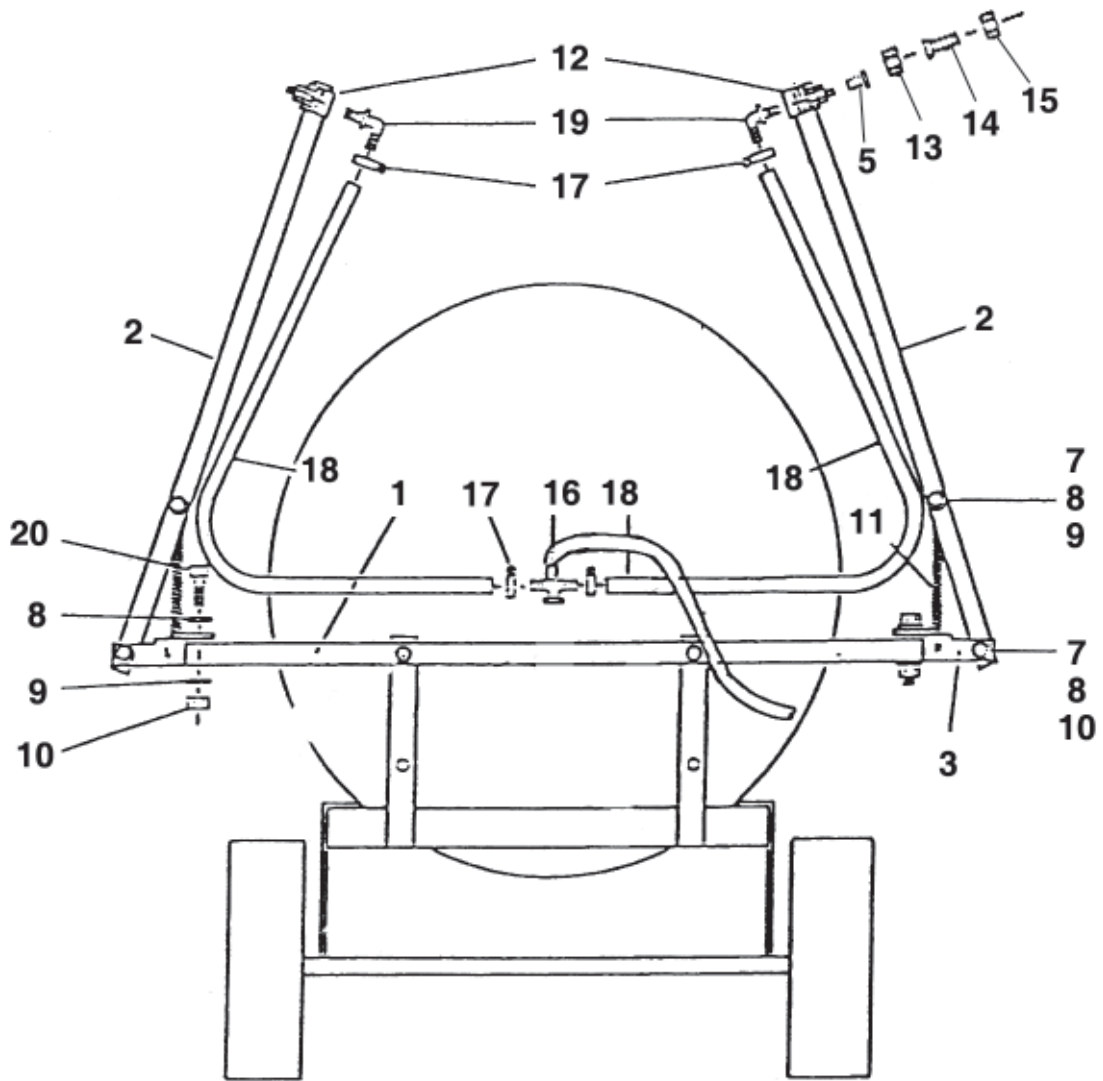


Top View
Left Hinge Det.

8.4 FB10 10' FOLDING BOOM ASSEMBLY

<u>REF #</u>	<u>QTY.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	217-03-002	Boom Center Section
2	2	217-03-003	Boom Outer Wing
3	1	217-03-004	Boom Hinge Bracket (Right)
4	1	217-03-005	Boom Hinge Bracket (Left)
5	3	5116019	Nozzle Strainer
6	2	5006038	Boom Wing Nut
7	6	5034004	H. H. Bolt
8	14	5/16"FWZP	Flat Washer
9	4	5016026	Lock Washer
10	6	5006035	H. H. Lock Nut
11	2	217-03-010	Breakaway Spring
12	3	111SQ-1	Nozzle Clamp Body
13	3	5006102	Nozzle Nylon Lock Nut
14	3	AN3	Flood Nozzle 3
15	3	5046052	Nozzle Cap
16	1	K50TS-NY	Cross w/Nozzle Body
17	4	SCG	Hose Clamp 1/2"
18	2	EVA1/2"	Plastic Hose 1/2" x 40"
19	2	5056023	Nozzle Body Elbow 1/2"
20	2	5034040	H. H. Bolt

8.5 FB14 14' FOLDING BOOM ASSEMBLY



**Top View
Left Hinge Det.**

8.5 FB14 14' FOLDING BOOM ASSEMBLY

<u>REF #</u>	<u>QTY.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	217-03-006	Boom Center Section
2	2	217-03-003	Boom Outer Wing
3	1	217-03-004	Boom Hinge Bracket (Right)
4	1	217-03-005	Boom Hinge Bracket (Left)
5	4	5116019	Nozzle Strainer
7	6	5034004	H. H. Bolt
8	14	5/16"FWZP	Flat Washer
9	2	5016026	Lock Washer
10	6	5006035	H. H. Lock Nut
11	2	217-03-010	Breakaway Spring
12	4	111SQ-1	Nozzle Clamp Body
13	4	5006102	Nozzle Nylon Lock Nut
14	4	AN3	Flood Nozzle 3
15	4	5046052	Nozzle Cap
16	2	K50TS-NY	Tee, Threaded
17	9	SCG	Hose Clamp 1/2"
18	1	EVA1/2"	Plastic Hose 1/2" x 160"
19	2	5056023	Nozzle Body Elbow 1/2"
20	2	5034040	H. H. Bolt

9 LIMITED WARRANTY



GEARMORE, INC., warrants each new Gearmore product to be free from defects in material and workmanship for a period of twelve (12) months from date of purchase to the original purchaser. This warranty shall not apply to implements or parts that have been subject to misuse, negligence, accident, or that have been altered in any way.

Our obligation shall be limited to repairing or replacement of any part, provided that such part is returned within thirty (30) days from date of failure to Gearmore through the dealer from whom the purchase was made, transportation charges prepaid.

This warranty shall not be interpreted to render us liable for injury or damages of any kind or nature, direct, consequential or contingent, to person or property. This warranty does not extend to loss of crops, loss because of delay in harvesting or any other expenses, for any other reasons.

Gearmore in no way warrants engines, tires, or other trade accessories, since these items are warranted separately by these respective manufacturers.

Gearmore reserves the right to make improvements in design or changes in specification at any time, without incurring any obligations to owners or units previously sold.

GEARMORE, INC.
13477 Benson Ave.
Chino, CA 91710

Always refer to and heed machine operating warning decals on machine.

The serial number of this product is stored in our computer database, thus submitting a warranty registration card is not required.