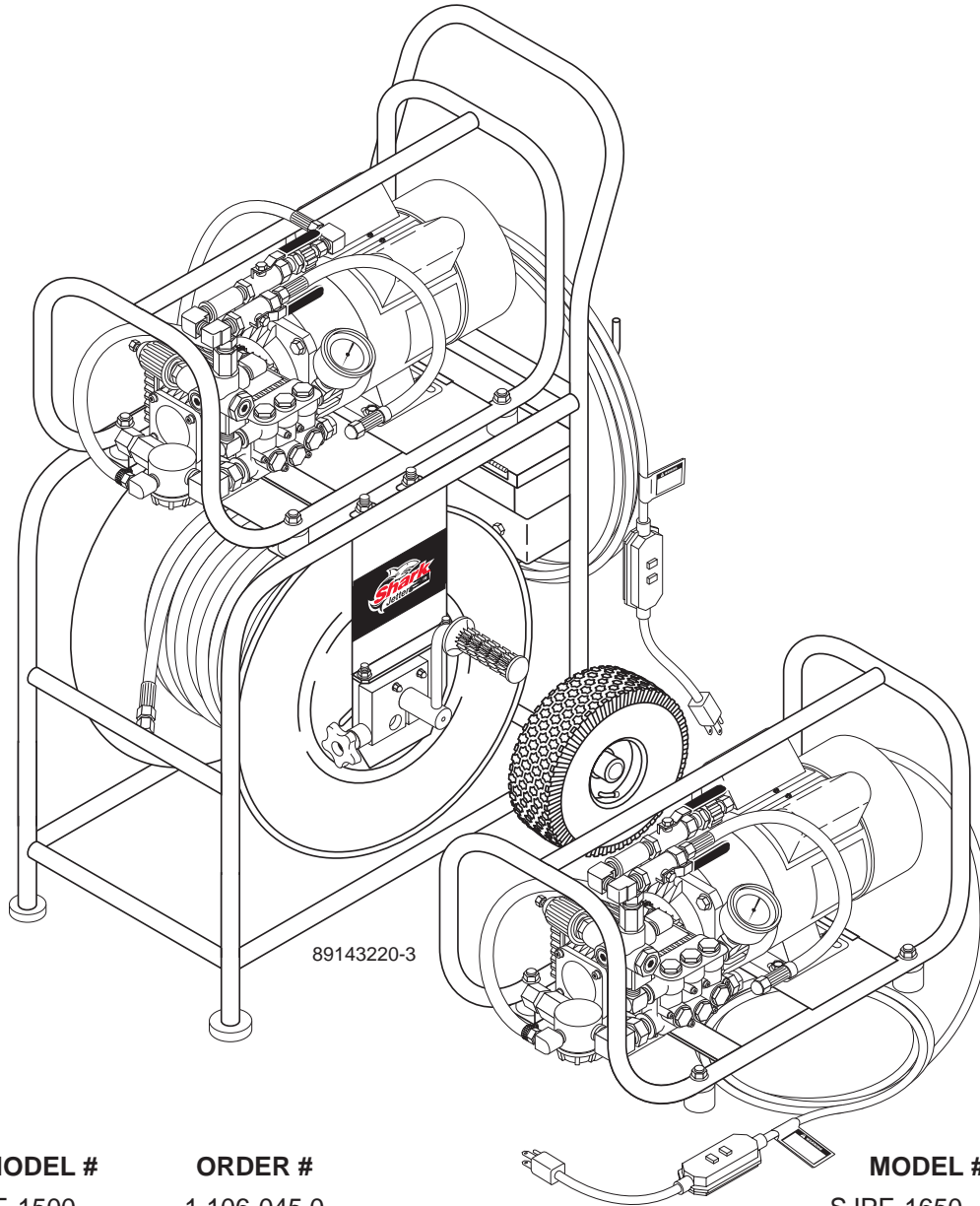




SJHE-1500 SJPE-1650

OPERATOR'S MANUAL



MODEL #	ORDER #
SJHE-1500	1.106-045.0
SJHE-1500-B	1.107-199.0
SJHE-1500-C	1.107-200.0

MODEL #	ORDER #
SJPE-1650	1.106-048.0
SJPE-1650-B	1.107-203.0
SJPE-1650-C	1.107-204.0

To locate your local Shark Commercial Pressure Washer Dealer nearest you,
visit www.sharkpw.com

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Model Number _____

Serial Number _____

Date of Purchase _____

The model and serial numbers will be found on a decal attached to the machine. You should record both serial number and date of purchase and keep in a safe place for future reference.

INTRODUCTION

Thank you for purchasing a Shark® Jetters

This manual covers the operation and maintenance of models SJHE-1500 and SJPE-1650. All information in this manual is based on the latest product information available at the time of printing.

Shark® Pressure Washers reserves the right to make changes at any time without incurring any obligation.

Owner/User Responsibility:

The owner and/or user must have an understanding of the manufacturer's operating instructions and warnings before using this machine. Warning information should be emphasized and understood. If the operator is not fluent in English, the manufacturer's instructions and warnings shall be read to and discussed with the operator in the operator's native language by the purchaser/owner, making sure that the operator comprehends its contents.

Owner and/or user must study and maintain for future reference the manufacturers' instructions.

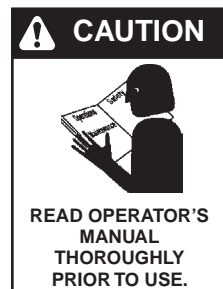
SAVE THESE INSTRUCTIONS

This manual should be considered a permanent part of the machine and should remain with it if machine is resold.

When ordering parts, please specify model and serial number. Use only identical replacement parts.

This machine is to be used only by trained operators.

MACHINE SAFETY



CAUTION: To reduce the risk of injury, read operating instructions carefully before using.

1. Read the owner's manual thoroughly. Failure to follow instructions could cause malfunction of the unit and result in death, serious bodily injury and/or property damage.
2. All installations must comply with local codes. Contact your electrician, plumber, utility company or the selling distributor for specific details. To comply with the National Electrical code (NFPA 70) and provide additional protection from risk of electric shock, the machines are equipped with a UL approved ground fault circuit interrupter (GFCI) power cord.



WARNING: Flammable liquids can create fumes which can ignite causing property damage or severe injury.

WARNING: Risk of explosion -- do not spray flammable liquids.

3. Risk of explosion - do not spray flammable liquids or operate in an area where flammable or explosive materials are used or stored.



WARNING: Keep water spray away from electric wiring or fatal electric shock may result.

4. To protect the operator from electrical shock. The machine is equipped with a Ground Fault Circuit Interrupter (GFCI). The use of an additional extension cord by the operator should not

be used as it will not provide protection to the operator of electrical shock. The machine must be electrically grounded. It is the responsibility of the owner to connect this machine to a UL grounded receptacle of proper voltage and amperage ratings. Do not spray water on or near electrical components. Do not touch machine with wet hands or while standing in water. Always disconnect power before servicing.

5. Grip cleaning wand or hose securely with both hands before starting the cleaner. Failure to do this could result in injury from a whipping wand or hose.



WARNING: High pressure stream of fluid that this equipment can produce can pierce skin and its underlying tissues, leading to serious injury and possible amputation.

6. High pressure developed by these machines will cause personal injury or equipment damage. Use caution when operating. Do not direct discharge stream at people, or severe injury or death will result.
7. Never make adjustments on machine while in operation.



WARNING: High pressure spray can cause paint chips or other particles to become airborne and fly at high speeds.

8. Eye safety devices, foot protection and protective clothing must be worn when using this equipment.

9. Do not operate with the valve in the off position for extensive periods of time as this may cause damage to the pump.
10. The best insurance against an accident is precaution and knowledge of the machine.
11. Shark® will not be liable for any changes made to our standard machines or any components not purchased from Shark®.
12. Be certain all fittings are secured before using pressure washer.
13. Never run pump dry.
14. Inlet water supply must be cold and clean fresh water.
15. Do not allow children to operate the Shark® Jetters machine at any time.
16. Protect from freezing.
17. When the machine is working, do not cover or place in a closed space where ventilation is insufficient.

ASSEMBLY

Upon arrival, inspect the shipping crate for damages. Uncrate and examine all parts. Note any damage to machine or components for claims against freight carrier.

Jetters have antifreeze in the pump to protect it from freezing conditions during shipment and storage. If machine will be stored and operated in a cold climate, follow Freeze Protection instructions on page 9.

PRE-OPERATION CHECK

- Pump oil (SAE 30W non-detergent oil)
- Cold clean fresh water supply (6 gpm • 5/8" (15.875 mm) • 20 psi)
- Hose, nozzle
- Water filter (intact, non-restrictive)

SET-UP PROCEDURES

These machines are meant to be used at or near the working area and under operator supervision. If machine must be located out of sight of the operator, special controls may be required for proper machine operation and operator safety.

Locate equipment on a solid level area with slopes for drainage. Avoid areas where water can be sprayed at machine. Before using the jet, make sure there are no impurities in the incoming water supply. Turn the water source on for at least 15 seconds, to remove any possible debris in the water before connecting hose to water inlet swivel.

The inlet screen located inside the filter should be cleaned before each use. To clean the inlet screen, unscrew cap beneath the filter, remove the screen and rinse thoroughly with water. Then replace screen.

Connect one end of a garden hose (not included) to the water faucet — water supply not to exceed 100 psi (6.9 Bar) and the other end to the water inlet of the jet machine. (See component identification drawings on next pages.) Use heavy duty 3/4" hose of no more than 50 ft. (15m) in length. If run without an adequate water supply, the pump will cavitate. Cavitation causes the pump to vibrate, causing damage to the pump. **Note:** Lack of water supply can lead to seal damage, causing a loss of pressure and will void the warranty to the pump.

Maximum temperature from water source should not exceed 140°F (60°C). Using water hotter than 140°F (60°C) can cause damage to pump and void the warranty. If jet is being used to clear ice blockages, see instructions on page 8.

Remove oil plug on top of pump and replace with dipstick supplied.

Hose Selection Guide

Select the proper hose diameter for the line to be cleaned. When using new hose, run water through it to clean it out before attaching the nozzle.

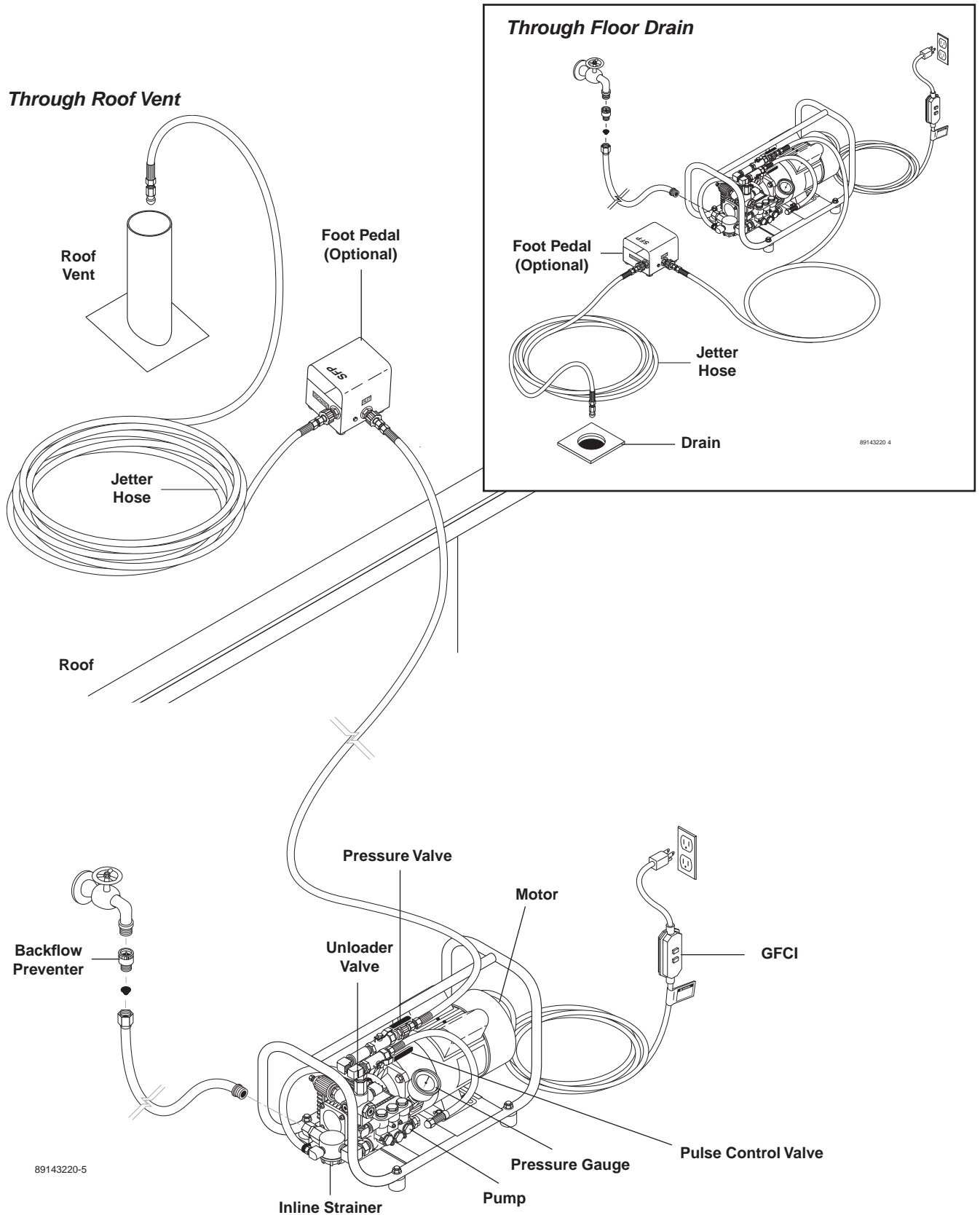
Hose Size (ID)*	Pipe Size	Typical Applications
3/8" or 5/16" (9.925mm Or 7.938mm)	4" to 8" (102mm to 203mm)	Floor drains, septic lines long runs
1/4" (6.35mm)	2" to 4" (51mm to 102mm)	Kitchen sinks, laundry drains, clean outs
1/8" (3.175mm)	1-1/2" to 2" (38mm to 51mm)	Small lines, bathroom sinks, tight bends

* Inside Diameter

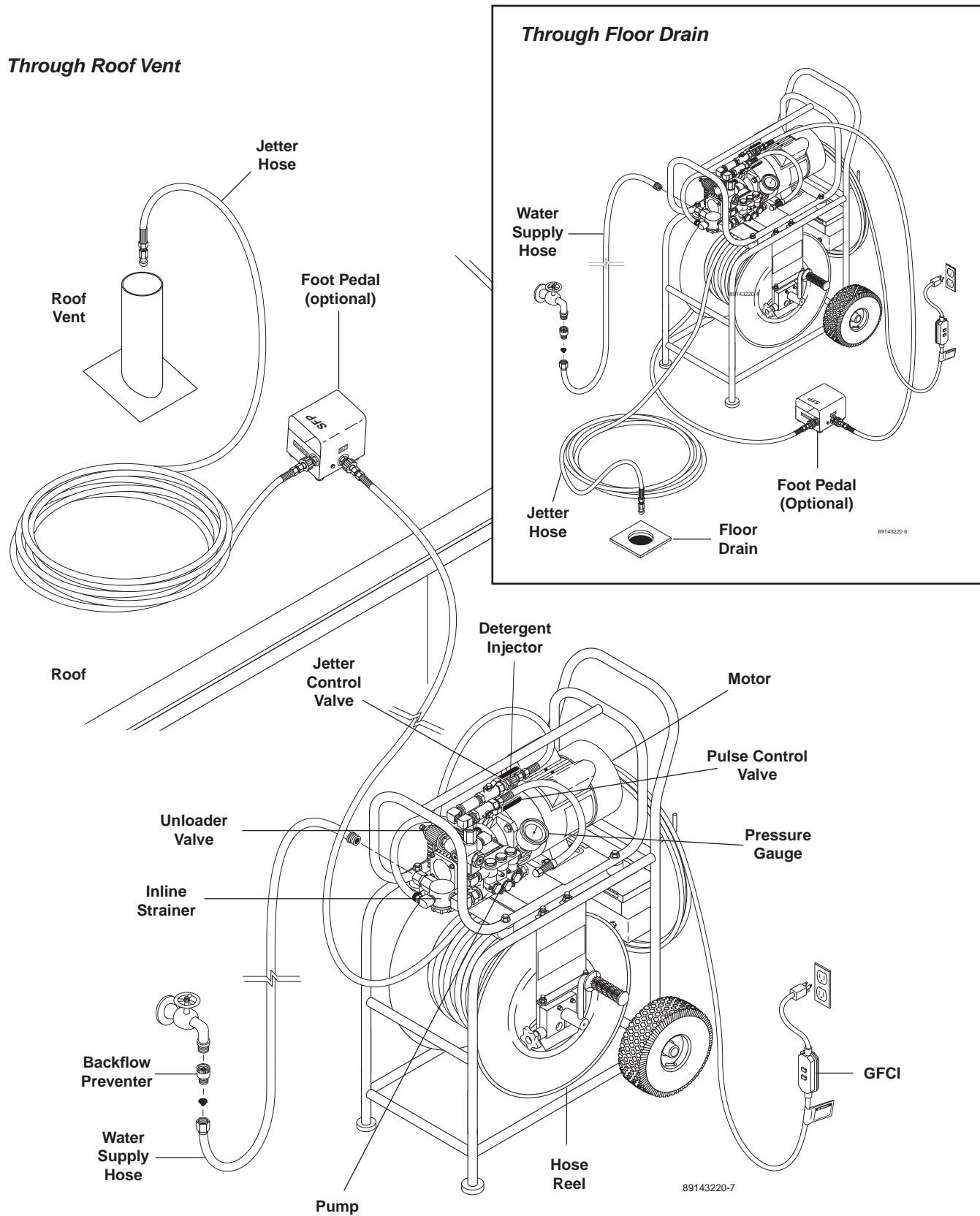
When selecting hose size, consider that pressure is lost as the water travels down the length of the hose. As the length increases, the pressure decreases. In addition, the smaller the diameter of the hose, the greater the loss of pressure per foot will be. As an example, at 2 GPM (.13L/sec) a 1/4" (6.350 mm) hose will lose 180 lbs. (12.4 bar) of pressure over 100 ft. (30.5m) of hose, yet a 3/8" (9.925mm) hose will only lose 25 lbs. (1.7 bar) of pressure over the same length and at the same flow rate. At 4 GPM, a 3/8" hose will lose 90 lbs. (6.2 bar) of pressure over a 100 ft. (30.5m) length. The gauge reflects pressure from the pump only, not pressure at the end of the hose. It is important to select the largest possible hose size in order to have as much pressure as possible at the end of the hose.

Hoses of the same diameter may be coupled together using a screw coupling, but it is not recommended for use in lines smaller than 8" (203mm) in diameter. The long length of the hose connectors and coupling together can get caught in bends in the line.

SJHE-1500 COMPONENT IDENTIFICATION AND USE
DRAIN CLEANING



SJPE-1650 COMPONENT IDENTIFICATION AND USE DRAIN CLEANING



PART NUMBER	ADAPTER SIZE (FPT)
8.705-364.0	1/4" x 1/4"
8.705-366.0	3/8" x 3/8"
8.705-369.0	1/2" x 1/2"
8.705-371.0	3/4" x 3/4"

Coupling two different size hoses can be done through the spray wand trigger or foot pedal.

It is not advisable to have two different hose sizes coupled in a drain line. There is a tremendous loss of pressure when combined, aside from the difficulty of getting around bends.

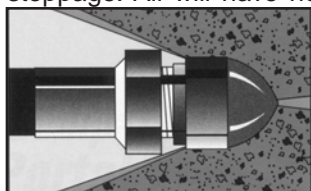
The 3/8" (9.925 mm) and 1/4" (6.35mm) hoses may be attached to the fitting in the core of the hose reel using the swivel at one end of the hose. The 3/8" hose may also be attached directly to the accessory outlet by using a twist connect. The 1/4" and 1/8" (3.175mm) hoses may be connected directly to the accessory outlet if an adapter fitting is used between the hose and quick connect. Adapters may be ordered separately.

Often, the 1/8" hose is used in conjunction with the spray wand trigger to give the operator finger tip control. Remove the spray wand from the trigger and attach the 1/8" hose using the appropriate adapter.

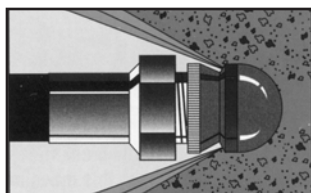
A SFP valve is available that can be used as a safety shut-off valve for all hose sizes. See foot pedal section for installation and operating instructions.

Nozzles

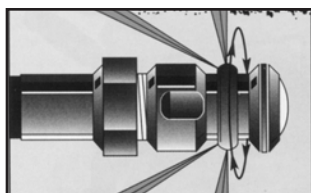
A number of types of nozzles are available for drain cleaning. Each has a different spray pattern. Some nozzles may have a hole in the front to cut through the stoppage. All will have holes in the back to drive the



Powerful penetrating nozzle cuts through grease and ice.



Wide spray flushing nozzle cleans inside of pipe thoroughly.



Optional: Rotary nozzle scours walls of pipe crystal clear

hose down the line and clean the walls of the pipe. A combination of nozzles may be required to clear a line.

Always turn off the machine and shut off valve before changing nozzles.

Make sure the nozzle you are using matches the pump size. A 3000 psi (207 bar) pump requires a different nozzle orifice than a 1500 psi (104 bar) pump. Mismatching nozzles with pump size will either cause too little pressure which may not clear the drain, or too much pressure which may damage the machine.

Check nozzles before and after each use for clogged holes which can cause pressure to increase to dangerously high levels and damage the pump. A clogged hole can be cleared by simply using the a nozzle cleaning tool.

Use the nozzle selection guide to determine what nozzle you will need for various applications.

NOZZLE SELECTION GUIDE

	1/8"	1/4"	3/8"
No Forward Jet	8.751-944.0	8.751-946.0	8.751-948.0
1 Fwd / 3 Back	8.751-945.0	8.751-947.0	8.751-949.0
Rotating Nozzle	8.710-899.0	8.710-898.0	-

Rotary nozzles can be adapted using the nozzle adapters and bushings below:

Rotary Nozzles

Rotary nozzles are useful as a finishing tool. After the line has been cleared, you may switch to the rotary nozzle to more thoroughly clean the walls of the pipe. Use these nozzles only in a predominantly straight run since they are longer than regular nozzles and may get caught in tight bends.

NOZZLE ADAPTERS AND BUSHINGS

Part Number	FPT x MPT
9.803-054.0	1/4" x 1/8"
8.705-185.0	3/8" x 1/8"
9.804-007.0	3/8" x 1/4"
9.803-564.0	1/8" x 1/4"
8.705-129.0	1/4" x 3/8"

Pre-Operation Checklist

Be sure you understand all safety precautions and ___ have been trained to use the machine.

Wear goggles or a face shield to protect your eyes from spray or from any product of the spray. ___

Wear gloves, rubber boots and other protective clothing as required. ___

Be sure you understand all safety precautions for the detergent use. ___

- ___ Check the labels of any substance you will spray. If the label recommends any antidote or treatment, be ready to use it.
- ___ Check that all lines and hoses are clear.
- ___ Check that the machine is connected to an adequate water supply and that the water supply is on.
- ___ Check that traffic has not made the hose weak, worn or damaged. Check the hose for pinching or kinking. Replace any damaged hose.
- ___ Tighten all fluid connections securely.

OPERATING INSTRUCTIONS

- Check all hoses for wear and damage. Tighten all connections securely.
- Check oil level of pump.
- To begin, turn the water faucet on fully and purge air from system.
- Insert end of the jet hose 2 to 3 feet into the drain line. Then open Jetter control valve.

WARNING: Never point the end of the jet hose at a person while operating.

Start-Up

1. Make sure that the Jetter control valve is turned on and water is flowing through the nozzle.
2. Plug in GFCI power cord to proper receptacle and voltage. **CAUTION: Do not use additional extension cord with machine to avoid electrical shock to the operator.**
3. Hold Jetter hose firmly to prevent it from whipping around.
4. Turn motor switch on.

Pulse Technology

Pulsation makes the hose vibrate, helping the jet go longer distances and around tight bends easier.

The Pulse Technology control valve is located on the front of the pump. Simply turn the valve on to engage the Pulse Technology.

The Pulsation causes a pressure drop when it's engaged. Pulse Technology is most effective in a 1/8" hose. You'll note less vibration with a 1/4" hose and almost none with a 3/8" hose. However the Pulse is still effective, causing the water to burst from the nozzle hundreds of times per second.

If you are still having difficulty getting a hose around a tight bend, switch to a smaller diameter hose.

Turn the pulse valve off before turning machine off.

Shut Down Instructions

After drain cleaning or spray washing is completed, run clear water through the system. Always leave the control valve in open position when turning off motor. Turn off water supply and drain as much water from pump as possible. Remove water supply hose from inlet. If you are in a cold climate, see Freeze Protection.

SHR-200 Hose Reel (Optional)

Position the reel at the drain site. Connect the jet machine to the inlet on the reel. Select and attach a nozzle to the hose on the reel. Put the hose 2 to 3 feet into the drain. Open the ball valve on the reel. Follow the start up procedures.

SFP Foot Pedal (Optional)

The foot pedal is used with any Jetter manufactured by Shark® (see page 5 or 6). It interrupts the flow of water between the pump and the nozzle while leaving both hands free to guide the hose. The pump will continue to run in by-pass mode. Do not leave pump in by-pass for more than a few minutes or the pump can be damaged. (See Regulating Pressure Unloader on Page 9).

The foot pedal may be hooked up either at the machine or remotely at the drain site. To use the foot pedal at the machine, remove the hose going to the swivel on the hose reel and attach it to the inlet side of the foot pedal. Then, connect the accessory hose (8.711-599.0) between the outlet of the pedal and the swivel on the hose reel. Some jet models may need the added length of the accessory hose on the inlet side of the pedal.

For remote hookup, pull the hose from the hose reel to the drain site. Attach the hose to the inlet of the pedal. The pedal is designed for 3/8" hose fittings. If using a 1/4" hose, use the adapter part #8.705-129.0 as well. Then attach the smaller hose (1/8" or 1/4") to the outlet side of the pedal. Use the smaller hose to clear the drain line.

Spray Wand (Optional)

Follow the same procedures listed previously for safety, set-up, operation and maintenance. To operate the spray wand, connect the high pressure hose and trigger to the machine. Turn on the water supply, then squeeze the trigger to purge air from the system. Continue to squeeze trigger as you start the machine.

Use caution when pressure washing. Wear goggles and rubber gloves and boots. Do not point spray at anyone including yourself. Do not put your hand in front of water spray. It can penetrate the skin and cause a need for amputation. Direct spray at close range can be powerful enough to cause damage.

NOTE: Typical industry standard stipulates you hold the high pressure spray nozzle approximately 6-8" from the

surface to be cleaned. When cleaning with a detergent, apply from bottom up with an even left to right movement. Rinse from top down with a similar motion. This will help reduce potential streaking.

Detergent Injector (Optional)

Refer to Component Identification for placement of injector. The detergent injector is an option with the SJHE-1500 and SJPE-1650.

To use the detergent injector, attach one end of siphon hose to the injector and put the filter end in the detergent solution. Be sure the end of the hose is at the bottom of the container or bucket. Some models have adjustable valves to control the amount of detergent drawn through the hose. Turn the nozzle on the end of the wand counterclockwise.

REMEMBER: Do not use corrosive material. See warning previously listed.

Adjusting Pressure Unloader Valve

The machine is equipped with an adjustable pressure unloader to prevent pressure overload in the event that the nozzle is plugged or the Jetters control valve or trigger gun is shut off. When the machine is in the by-pass mode, the pump will continue to run. However running in by-pass mode for extended periods will cause damage to the pump; no more than 5 minutes with the SJHE-1500 and SJPE-1650 pump. Excessive temperatures will damage the pump and void the warranty.

The machine also comes with thermal overload protection. When water temperature in pump increases to 140°F (60°C), the thermal relief valve will release hot water and allow cool water to enter pump from fresh water supply.

To adjust pressure unloader turn the knob clockwise to increase pressure and counterclockwise to decrease pressure. **Caution:** Do not exceed operating pressure.

Ice Blockages

High pressure water can be used to clear an ice blockage. A 3000 psi (207 bar) gas Jetter can clear a 4" (102mm) line at an approximate rate of one foot per minute. The smaller electric jet will take twice as long. Ambient air temperature will effect these times. Use a nozzle with a forward jet. DO NOT allow the incoming water supply to exceed 140°F (60°C) or it could cause damage to the pump. Remember to follow the cold weather precautions found in the freeze protection section.

Freeze Protection

To protect your machine from severe damage caused by water freezing inside the components, it is important to winterize it whenever it is subjected to freezing temperatures.

The best way to protect the system is to keep it out of the cold. Barring that, the next best way is to flush the system with anti-freeze. To do so, simply attach a short garden hose (not to exceed four feet) to inlet on the pump and put other end into the anti-freeze container. Be sure to remove the nozzle from the hose. Turn the machine on to draw anti-freeze into the system. When anti-freeze flows out of the end of the hose, turn the machine off. With optional spray wand and trigger gun follow above procedure. Cycle trigger on/off so that the anti-freeze will flow into unloader and detergent injector section of machine.

When preparing to operate equipment the next time, remove the anti-freeze. To do so, reconnect water source, turn pump on and direct flow of anti-freeze back into container. Be careful not to dilute anti-freeze with incoming water supply. Anti-freeze, if kept relatively undiluted can be used again and again.

Hoses can also be protected from freezing by using compressed air to clear them of residual water. Remember to remove nozzle from jet hose and hold trigger of spray wand in open position.

MAINTENANCE

Regular inspection is the key to preventing breakdowns and prolonging the life of the equipment. Follow this simple procedure religiously.

DAILY

Check that the water supply is adequate.

Check that the nozzle on the spray wand is not clogged or worn out.

Check that the PUMP OIL LEVEL is within operating range on dipstick or sight glass.

Check the INLET FILTER.

Check GFCI function.

WEEKLY

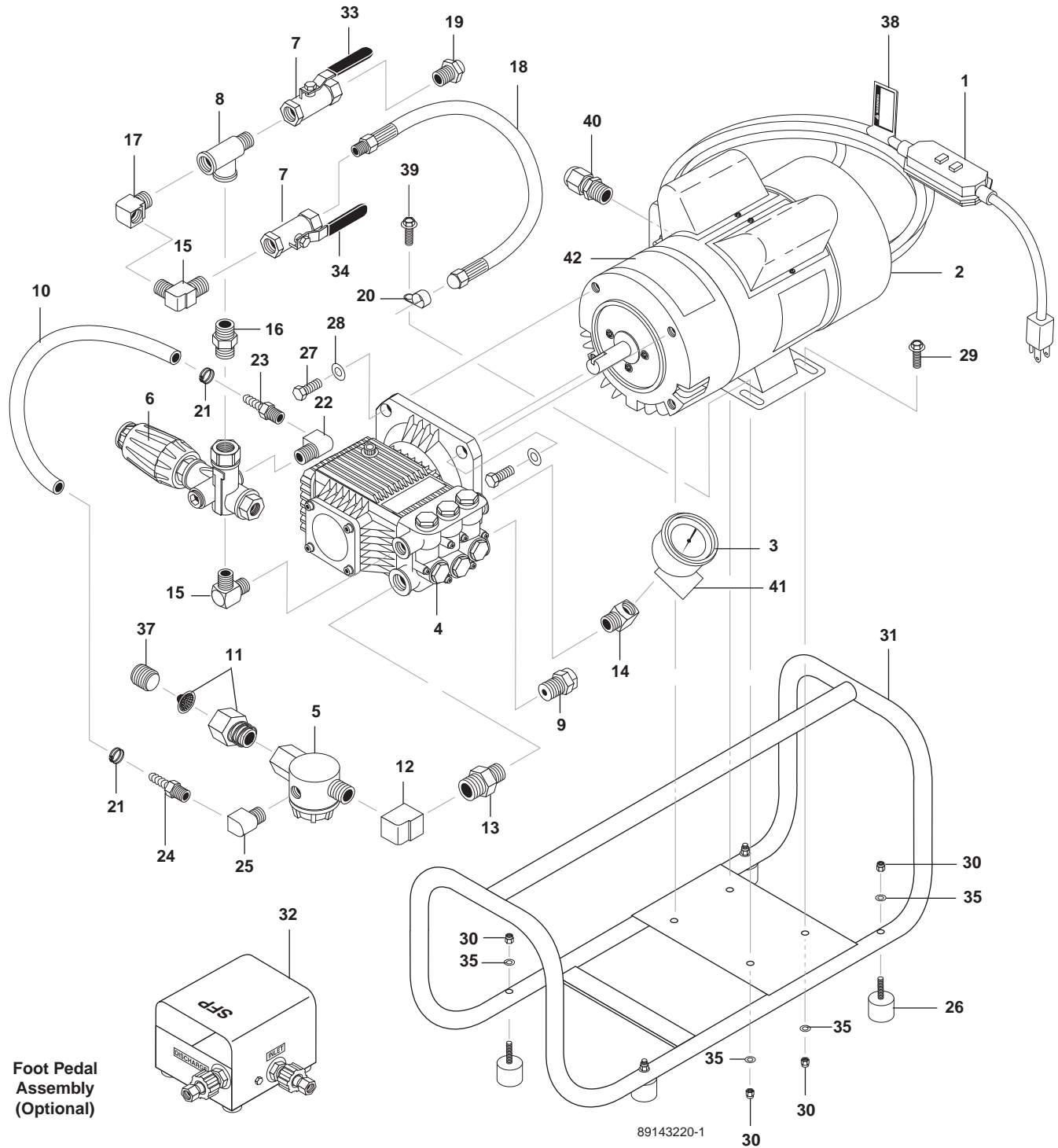
Check PRESSURE HOSE for wear and damage. Damaged hose can be repaired at a local service dealer or by your equipment dealer.

Maintenance Schedule

Use the following maintenance schedule at the stated intervals or when your routine turns up a problem.

Pump Crankcase Oil Change: Service after the 1st month or after 50 Hours. Then service every year or 500 hours. Use SAE 30W Non-Detergent Pump Oil to full mark on dipstick or to center of sight glass.

EXPLODED VIEW
SJHE-1500



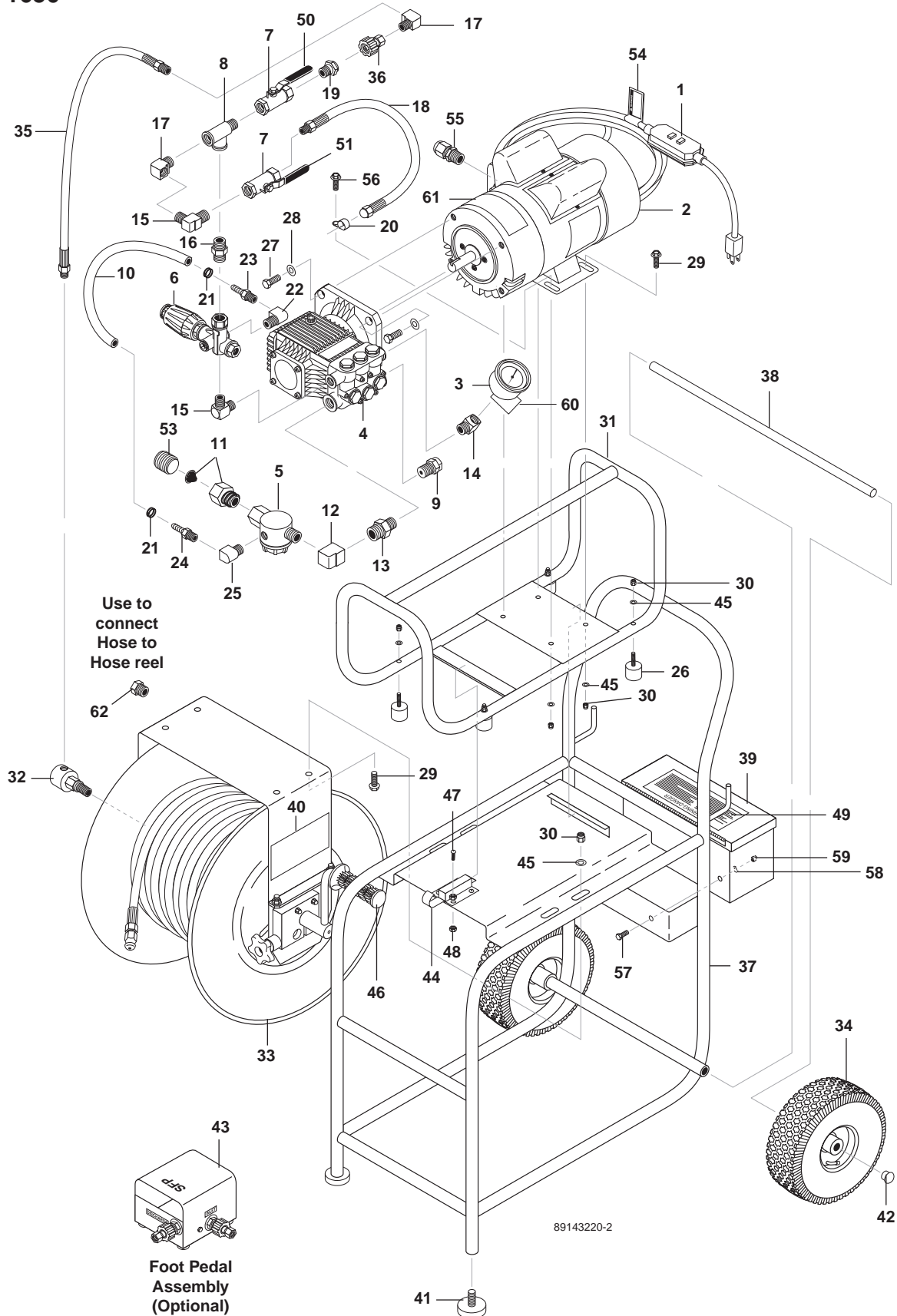
Foot Pedal
 Assembly
 (Optional)

EXPLODED VIEW PARTS LIST SJHE-1500

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1	8.715-944.0	GFCI, 120V 15A W/36' 12-3 Cord	1	20	9.802-207.0	Clip, Round, 0.56 I.D.	1
2	9.804-516.0	Motor, 1.5 HP 1 PH, 1725 RPM, Magnetek TEFC	1	21	9.802-201.0	Clamp, Screw, #6	2
3	8.712-135.0	Gauge, Pressure Panel Mount, 0-2000 PSI	1	22	8.706-828.0	Elbow, 3/8" Street	1
4	8.715-297.0	Pump, AR XTA2G15EBA-F8, Elect 1725 RPM	1	23	8.706-337.0	Hose Barb, 1/2" Barb x 3/8" MNPT, Steel	1
5	8.707-063.0	Strainer, 1/2" Inline	1	24	8.706-338.0	Hose Barb, 1/2" Barb x 1/4" MNPT, Steel	1
6	8.750-297.0	Unloader, VRT 3, 8 GPM @2320 PSI	1	25	8.706-827.0	Elbow, 1/4" Street	1
7	8.707-204.0	Valve, 3/8" Ball, Steel	2	26	9.802-058.0	Bumper, Rubber 1" w/Bolt, 5/16" x 1-1/4"	4
8	8.706-234.0	Tee, 3/8" Street	1	27	9.802-722.0	Bolt, 3/8" x 1", NC HH	4
9	8.707-256.0	Pump Protector, 1/2" ,140°	1	28	9.802-814.0	Washer, 3/8", Lock, Split Ring	4
10	9.802-259.0	Hose, 1/2" Push-On	13"	29	9.803-551.0	Screw, 5/16" x 3/4" Whiz Loc	3
11	9.802-146.0	Swivel, 1/2" MP x 3/4" GHF w/Strainer	1	30	9.802-776.0	Nut, 5/16" Flange, Whiz Loc	8
	9.802-179.0	▲ Valve, Anti-Siphon	1	31	8.911-641.0	Frame, Welded Assy	1
12	8.706-820.0	Elbow, 1/2" Female, Brass	1	32	8.902-986.0	Foot Pedal	1
13	8.706-797.0	Nipple, 1/2" Hex	1	33	8.725-410.0	Cap, Orange, On/Off	1
14	9.803-995.0	Elbow, 3/8" MNPT x 1/4" FNPT, Steel	1	34	8.725-419.0	Cap, On/Off	1
15	8.706-168.0	Elbow, 3/8", Male Pipe	2	35	8.718-980.0	Washer, 5/16" Flat	8
16	8.705-974.0	Nipple, 3/8" Hex Steel	1	36	8.914-322.0	▲ Manual, Shark® Jetters SJHE-1500 and SJPE-1600	1
17	8.706-207.0	Elbow, 3/8" Street	1	37	8.706-742.0	Plug, Garden Hose Adapter	1
18	8.711-803.0	Hose, Pulsation, 24"	1	38	8.932-969.0	Label, Warning, Service Cord	1
19	8.707-185.0	Plug, QDISC 3/8" M x 22 mm	1	39	9.802-756.0	Screw, 5/16" x 1", Whiz Loc	1
				40	9.802-514.0	Strain Relief, Small	1
				41	8.901-120.0	Tag, Water Temp to Pump	1
				42	8.900-862.0	Label, Shark® Jetter	1

▲ Not Shown

EXPLODED VIEW
SJPE-1650

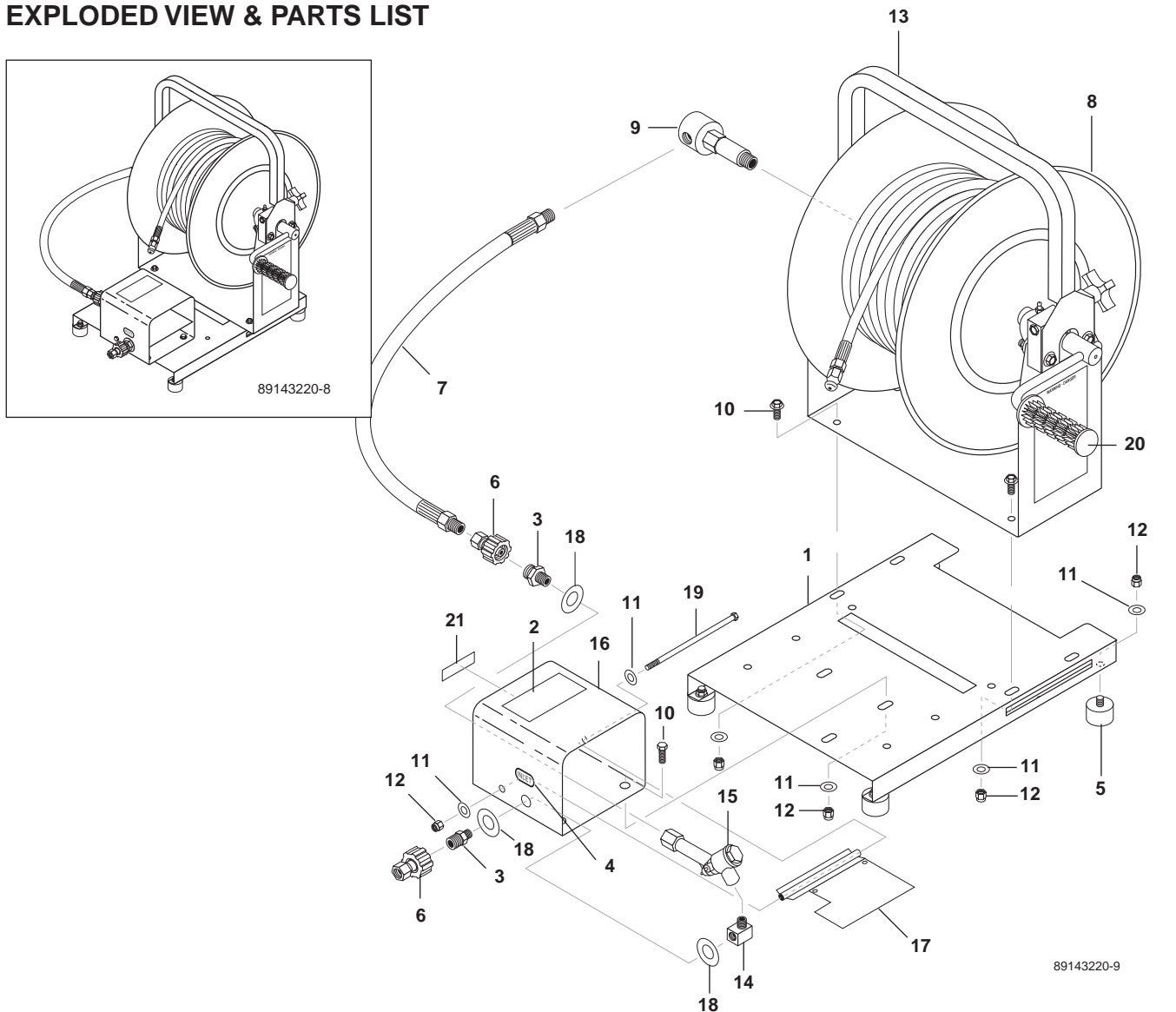


EXPLODED VIEW PARTS LIST SJPE-1650

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1	8.715-944.0	GFCI, 120V 15A W/36' 12-3 Cord	1	29	9.803-551.0	Screw, 5/16" x 3/4" Whiz Loc	7
2	9.804-516.0	Motor, 1.5 HP 1 PH 1725 RPM, Magnetek TEFC	1	30	9.802-776.0	Nut, 5/16", ESNA	12
3	8.712-135.0	Gauge, Pressure Panel Mount, 0-2000 PSI	1	31	8.911-641.0	Frame, Welded Assy, SJPE-1600	1
4	8.715-297.0	Pump, AR XTA2G15EBA-F8, Electric 1725 RPM	1	32	8.711-874.0	Swivel, 3/8" x 3/8"	1
5	8.707-063.0	Strainer, 1/2"	1	33	8.711-866.0	Hose Reel, 13", Shark® Jetter	1
6	8.750-297.0	Unloader, VRT 3, 8 GPM @2320 PSI	1	34	4-0303	Wheel & Tire Assy, 4" Tubeless, Silver Rim, 5/8" HUB	2
7	8.707-204.0	Valve, 3/8" Ball, Steel	2	35	8.918-197.0	Hose, 3/8" x 28", 1 Wire, 3/8" MPT x 3" MPTS	1
8	8.706-234.0	Tee, 3/8" Street	1	36	8.707-182.0	Coupler, 3/8" Female Screw-Type 7640	1
9	8.707-256.0	Pump Protector, 1/2" 140°	1	37	8.911-649.0	Assy, Frame, J-1600	1
10	9.802-259.0	Hose, 1/2" Push-On	13'	38	8.911-650.0	Axle, 21.75", J-1600	1
11	9.802-146.0	Swivel, 1/2" MP x 3/4" GHF w/Strainer	1	39	8.911-665.0	Assy, Tool Box, Black	1
	9.802-179.0	▲ Valve, Anti-Siphon	1	40	8.901-068.0	Label, SJPE-1600 w/Pulse Technology	1
12	8.706-820.0	Elbow, 1/2" Female, Brass	1	41	8.706-511.0	Foot, Rubber (Crutch)	2
13	8.706-797.0	Nipple, 1/2" Hex	1	42	9.802-783.0	Cap, 5/8" Axle	2
14	9.803-995.0	Elbow, 3/8 MNPT x 1/4 FNPT, Steel	1	43	8.902-986.0	Foot Pedal	1
15	8.706-168.0	Elbow, 3/8", Male Pipe	2	44	8.719-075.0	Latch, Finger	1
16	8.705-974.0	Nipple, 3/8" Hex Steel	1	45	8.718-980.0	Washer, 5/16", Flat	12
17	8.706-207.0	Elbow, 3/8" Street	2	46	9.802-069.0	Grip, 1", Handle (Waffle)	1
18	8.711-803.0	Hose, Pulsation	2 ft.	47	9.804-566.0	Screw, 10/32" x 1/2", Slot	4
19	8.707-185.0	Plug, Q-Disc, 3/8" x 22mm	1	48	8.718-860.0	Nut, 10/32", ESNA, SS	4
20	9.802-207.0	Clip, Round, 0.56 I.D.	1	49	8.900-865.0	Label, Elec Warning	1
21	9.802-201.0	Clamp, Screw, #6	2	50	8.706-690.0	Cap, On/Off	1
22	8.706-828.0	Elbow, 3/8" Street	1	51	8.725-419.0	Cap, On/Off	1
23	8.706-337.0	Hose Barb, 1/2" Barb x 3/8" MNPT, Steel	1	52	8.914-322.0	▲ Manual, Shark® Jetters SJHE-1500 and SJPE-1650	1
24	8.706-338.0	Hose Barb, 1/2" Barb x 1/4", MNPT Steel	1	53	8.706-742.0	Plug, Garden Hose Adapter	1
25	8.706-827.0	Elbow, 1/4" Street	1	54	8.932-969.0	Label, Warning, Service Cord	1
26	9.802-058.0	Bumper, Rubber 1" w/Bolt, 5/16" x 1-1/4"	4	55	9.802-514.0	Strain Relief, Small	1
27	9.802-722.0	Bolt, 3/8" x 1-1/4", NC HH	4	56	9.802-756.0	Screw, 5/16" x 1", Whiz-Loc	1
28	9.802-814.0	Washer, 3/8", Lock, Split Ring	4	57	9.802-754.0	Screw, 1/4" x 1/2" HH, NC, Whiz Loc	2
				58	9.802-802.0	Washer, 1/4" Flat, SAE	2
				59	90-2000	Nut, 1/4" Esna, NC	2
				60	8.901-120.0	Tag, Water Temp to Pump	1
				61	8.900-862.0	Label, Shark® Jetter	1
				62	8.706-297.0	Bushing 3/8" x 1/4" Steel Yellow Chrome	1

▲ Not Shown

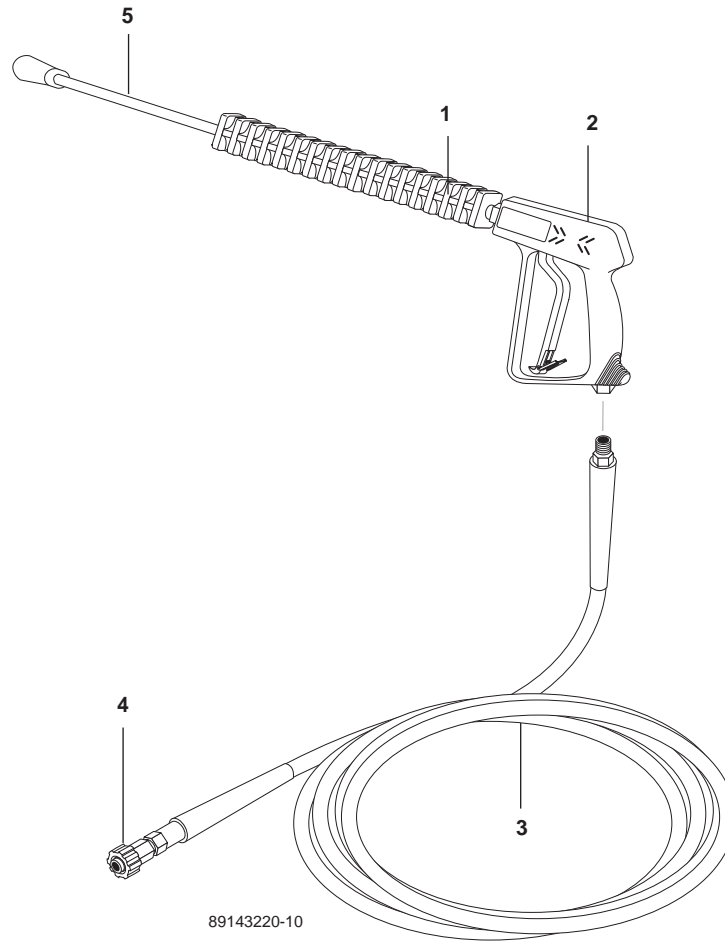
**OPTIONAL SHR-200FP HOSE REEL WITH FOOT PEDAL
EXPLODED VIEW & PARTS LIST**



ITEM	PART NO.	DESCRIPTION	QTY
1	8.911-637.0	Bracket, Hose Reel Mount	1
2	8.940-374.0	Label, SHR-200	1
3	8.707-186.0	Nipple, 1/4" x M22, Twist	2
4	8.940-349.0	Label, Inlet	1
5	8.706-519.0	Foot, Rubber	4
6	8.707-182.0	Coupler, 3/8" Female Screw Type 7640	2
7	8.918-190.0	Hose, 3/8" x 17.5", 1 Wire, 3/8" MNPT(SLD) x 3/8" MNPT(SWL)	1
8	8.711-866.0	Hose Reel, 13"	1
9	8.711-874.0	Swivel, 3/8" x 3/8"	1
10	9.803-551.0	Screw, 5/16" x 3/4" Whiz Loc	7
11	8.718-980.0	Washer, 5/16"	13

ITEM	PART NO.	DESCRIPTION	QTY
12	9.802-776.0	Nut, 5/16" ESNA	12
13	8.911-636.0	Hose Reel Guard	1
14	8.706-827.0	Elbow, 1/4" Street	1
15	8.718-436.0	Valve Assy, Complete	1
16	8.911-654.0	Cover, Welded Assy. Foot Valve	1
17	8.911-655.0	Plate, Foot Valve Assy	1
18	9.802-800.0	Washer, 1/2" Flat	3
19	8.718-640.0	Bolt, 5/16" x 6-1/2" HH, NC	1
20	9.802-069.0	Grip, 1" Handle, Waffle	1
21	8.940-343.0	Label, Discharge	1

**HOSE AND SPRAY GUN ASSEMBLY (OPTIONAL)
SJHE-1500 & SJPE-1650**



ITEM	PART NO.	DESCRIPTION	QTY
1	8.711-311.0	Lance, 18" Molded Grip AL-3929.11	1
2	8.710-384.0	Gun, ST-1500, 5000 PSI, 10.4 GPM	1
3	8.739-030.0	Hose, 3/8" x 25', 1 Wire, TS, Legacy 50 x SW	1

ITEM	PART NO.	DESCRIPTION	QTY
4	8.707-182.0	Coupler, 3/8" Female Screw Type 7640	1
5	8.712-421.0	Nozzle Holder, Adjustable AL-TR9-4701.12	1
	8.711-368.0	▲ Nozzle Only, SA 1/4", MEG 1502.5	1

▲ Not Shown

SPECIFICATIONS

NOZZLES

JETTING NOZZLES						
Part Number	Size	Thread Size	Forward Jet	Rear Jets	Max PSI	Available In Set
8.710-877.0	6.0	1/4"	1	4	4200	9.803-321.0
8.710-878.0	4.5	1/4"	1	3	4200	9.803-319.0
8.710-879.0	8.0	1/4"	1	3	4200	9.803-322.0
8.710-886.0	8.5	3/8"	1	4	4200	9.803-322.0
8.751-944.0	3.0	1/8"	0	3	5100	9.803-318.0
8.751-945.0	3.0	1/8"	1	3	5100	9.803-318.0
8.751-946.0	3.0	1/4"	0	3	5100	9.803-318.0
8.751-947.0	3.0	1/4"	1	3	5100	9.803-318.0
8.751-951.0	4.5	3/8"	1	3	4100	9.803-319.0
8.751-952.0	6.0	1/4"	0	3	5100	9.803-321.0
8.751-953.0	6.0	1/4"	1	3	5100	9.803-321.0
8.751-956.0	6.0	3/8"	0	3	5100	9.803-320.0
8.751-957.0	6.0	3/8"	1	3	5100	9.803-320.0
8.751-958.0	6.0	3/8"	1	9	3650	

ROTATING NOZZLES					
Part Number	Size	Thread Size	Forward Jet	Rear Jets	Max PSI
8.710-899.0	5.5	1/8"	0	3	4000
8.710-898.0	5.5	1/4"	0	3	4000
8.710-900.0	8.0	1/4"	0	3	4000

DUCT CLEANER ROTATING NOZZLES					
Part Number	Size	Thread Size	Forward Jet	Side Jets	Max PSI
8.710-887.0	5.5	1/4"	0	2	4000

NOZZLE SETS			
Part Number	Size	Description	Number of Nozzles
9.803-318.0	3.0	Nozzle Kit, 1/8" and 1/4"	4
9.803-319.0	4.5	Nozzle Kit, 1/8" and 1/4"	2
9.803-320.0	6.0	Nozzle Kit, 3/8"	2
9.803-321.0	6.0	Nozzle Kit, 1/4"	3
9.803-322.0	8.0	Nozzle Kit, 1/4" and 3/8"	2

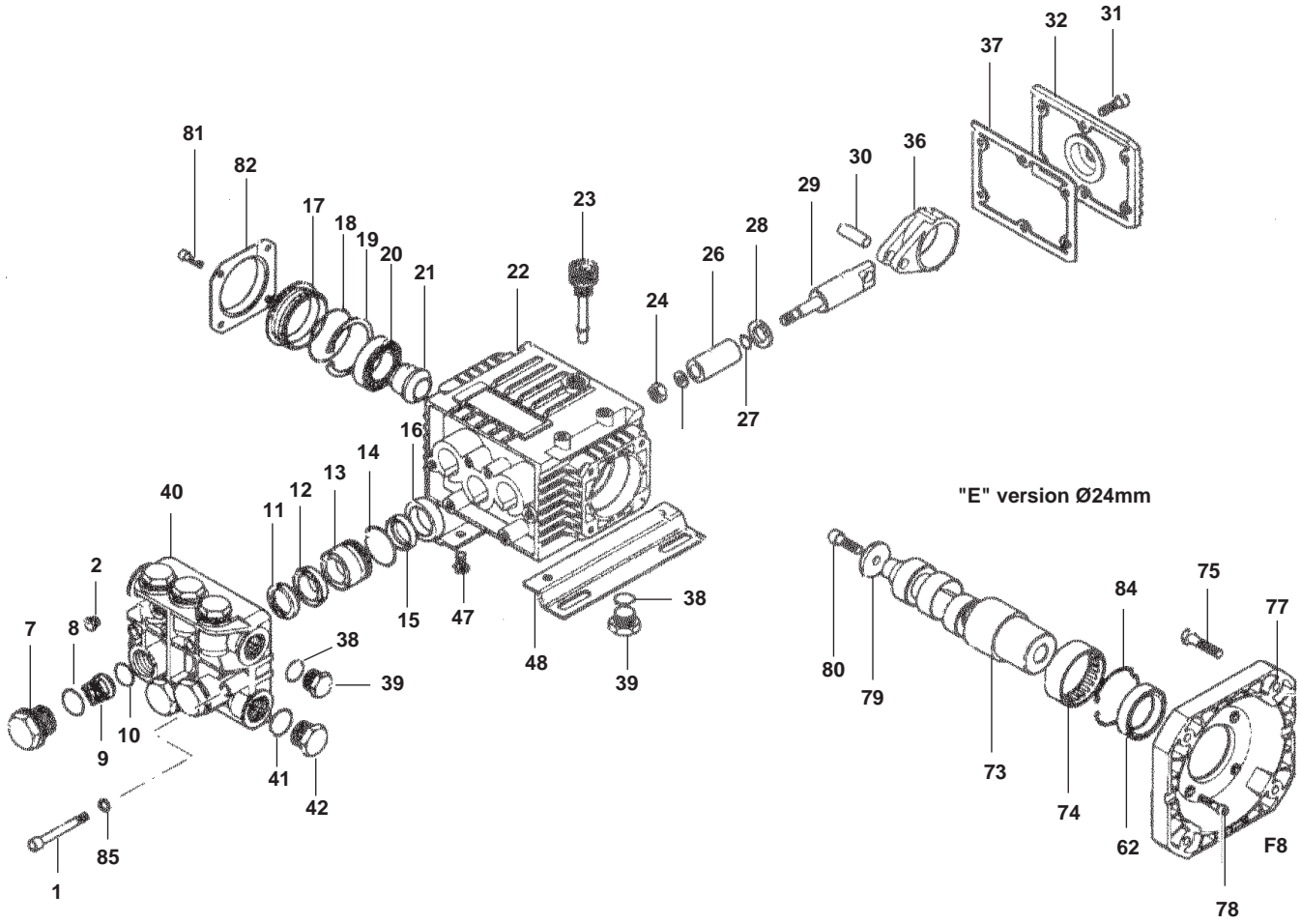
SPECIFICATIONS

JETTER HOSES, ADAPTERS AND BUSHINGS

JETTER HOSES					
Part Number	Diameter	Length (ft)	Max PSI	End 1	End 2
8.751-927.0	1/8"	25	4800	1/8" MPT	1/8" MPT
8.751-927.0	1/8"	50	4800	1/8" MPT	1/8" MPT
8.751-929.0	1/8"	75	4800	1/8" MPT	1/8" MPT
8.705-601.0	1/8"	25	4800	1/4" MPT	1/8" MPT
8.705-602.0	1/8"	50	4800	1/4" MPT	1/8" MPT
8.705-603.0	1/8"	100	4800	1/4" MPT	1/8" MPT
8.705-607.0	1/4"	50	2600	1/4" MPT	1/4" MPT
8.705-608.0	1/4"	100	2600	1/4" MPT	1/4" MPT
8.705-610.0	1/4"	50	4400	1/4" MPT	1/4" MPT
8.795-611.0	1/4"	100	4400	1/4" MPT	1/4" MPT
8.751-930.0	1/4"	150	4400	1/4" MPT	1/4" MPT
8.751-931.0	1/4"	200	4400	1/4" MPT	1/4" MPT
8.751-932.0	3/8"	50	4000	3/8" MPT	3/8" MPT
8.751-933.0	3/8"	100	4000	3/8" MPT	3/8" MPT
8.751-934.0	3/8"	150	4000	3/8" MPT	3/8" MPT
8.751-935.0	3/8"	200	4000	3/8" MPT	3/8" MPT
8.751-936.0	3/8"	250	4000	3/8" MPT	3/8" MPT
8.751-937.0	3/8"	300	4000	3/8" MPT	3/8" MPT
8.751-938.0	1/2"	100	4000	1/2" MPT	1/2" MPT
8.751-939.0	1/2"	150	4000	1/2" MPT	1/2" MPT
8.751-940.0	1/2"	200	4000	1/2" MPT	1/2" MPT
8.751-941.0	1/2"	250	4000	1/2" MPT	1/2" MPT
8.751-942.0	1/2"	300	4000	1/2" MPT	1/2" MPT
8.751-943.0	1/2"	400	4000	1/2" MPT	1/2" MPT

ADAPTERS & BUSHINGS	
Part Number	Description
9.803-054.0	1/4" X 1/8" FPT X MPT
8.705-185.0	3/8" X 1/8" FPT X MPT
9.804-007.0	3/8" X 1/4" FPT X MPT
9.803-564.0	1/8" X 1/4" FPT X MPT
8.705-129.0	1/4" X 3/8" FPT X MPT
8.705-364.0	1/4" X 1/4" FPT X FPT
8.705-366.0	3/8" X 3/8" FPT X FPT
8.705-369.0	1/2" X 1/2" FPT X FPT
8.705-371.0	3/4" X 3/4" FPT X FPT

PUMP MODEL NO. AR XTVA2G15EBA-F8
JET SET MODEL SJHE-1500& SJPE-1650 PART #8.702-504.0



PUMP MODEL NO. AR XTVA2G15EBA-F8 JET SET MODEL SJHE-1500 & SJPE-1650 PART #8.702-504.0

ITEM	PART NO.	DESCRIPTION	QTY
1	83-680570	Head Bolt TCEI M6x60 Brass	6
2	83-620301	Tap Plug 1/8" G (Optional)	1
7	83-1260160	Valve Cap	6
8	83-960160	O-Ring Ø17.86 x 2.62	6
9	83-1269050	Complete Valve	6
10	83-880830	O-Ring Ø15.54 x 2.62	6
11	83-1260140	Support Ring Ø15	3
12	83-1260130	Packaging Gasket Ø15	3
13	83-1260151	Piston Guide Ø15	3
14	83-1260420	O-Ring Ø26.70 x 1.78	3
15	83-1260440	Packaging Seal Gasket Ø15	3
16	83-1260460	Piston Oil Seal 15 x 24 x 5	3
17	83-1320320	Shaft Side Plug	1
18	83-1320360	O-Ring Ø47.35 x 1.78	1
19	83-1260790	Circlip Ø ₁ .52	1
20	83-1320370	Bearing 25 x 52 x 15 6205	1
21	83-1320330	Bushing	1
22	83-1320010	Pump Body	1
23	83-880130	Dip Stick	1
24	83-1260110	Screw M83	
25	83-1260100	Copper Washer 8 x 13 x 0.5	3
26	83-1260120	Piston Ø15	3
27	83-480480	O-Ring Ø4.48 x 1.78	3
28	83-1260091	Disc Separator	3
29	83-1260070	Piston Guide	3
30	83-1260080	Piston Pin Ø _E .7 x 24	3
31	83-1260760	Screw TCEI M5 x 20	6
32	83-1321030	Rear Cover, Low	1

ITEM	PART NO.	DESCRIPTION	QTY
36	83-1320140	Con Rod, Bronze	3
37	83-1260040	Rear Gasket Cover	1
38	83-740290	O-Ring Ø14 x 178	3
39	83-880530	Oil Drain Tap Bolt 3/8" G	2
40	83-1320020	Pump Head-Without Hole, 18mm Brass	1
41	83-180101	O-Ring Ø17.5 x 2	1
42	83-820360	Head Tap Bolt 1/2"G	1
47	83-1260470	Mounting TE M8 x 10	4
48	83-1263890	Base Plate	2
81	83-1321780	Bolt TCEI M6 x 12	4
82	83-1321420	Side Cover	1
83	83-1260790	Circlip Ø ₁ .52	1

Crankcase Oil Capacity, 14 oz.

E VERSION:

ITEM	PART NO.	DESCRIPTION	QTY
62	83-480671	Seal Ring 40 x 52 x 7	1
73	83-1321110	Shaft 2 GPM Ø5/8"	1
74	83-1321190	Ring Bearing HK 4516	1
75	83-650610	Bolt, 3/8" 16 UNC x 1"	4
77	83-1320060	Type F8 Flange, Nema C	1
78	83-1200430	Bolt/Flange-Motor TCEI M6 x 16	4
79	83-780230	Washer Ø ₁ .6.5 x 28 x 4	1
80	83-780060	Bolt TCEI M6 x 25	1
84	83-1321080	Snap Ring	1

KIT 83-1860 OIL SEALS (E Ver.)		KIT 83-1864 VALVES		KIT 83-1866 WATER SEALS		KIT 83-1866 OIL SEALS	
Pos.	Qty.	Pos.	Qty.	Pos.	Qty.	Pos.	Qty.
16	3	9	6	11	3	16	3
18	1	10	6	12	3	18	1
37	1			14	3	37	1
62	1			15	3	46	1

TROUBLESHOOTING

These troubleshooting procedures cover pump malfunctions, delivery problems and charge system malfunction.

WARNING: Before attempting any repairs or maintenance, make sure machine is shut off.

PROBLEM	POSSIBLE CAUSE	REPAIR
LOW PRESSURE	Worn or oversized nozzle	Replace worn nozzle. Check nozzle size.
	Clogged water supply hose, inlet strainer or kinked hose	Clean or replace strainers.
	Worn or damaged piston cups	Replace piston cups.
	Worn or damaged inlet or discharge valve	Replace worn valve poppets or valve springs.
	Improper adjustment of unloader valve	Adjust as necessary.
	Dirt or foreign particles in valve assembly	Remove any dirt particles
	Pulse valve on	Turn off pulse valve.
	Air leak in inlet plumbing or inaccurate gauge	Locate air leak. Re-seal connection or replace damaged valve.
ROUGH OPERATION WITH LOSS OF PRESSURE	Restricted inlet plumbing or air leak in inlet plumbing	Replace clogged inlet fittings. Check supply hose and ensure adequate water supply.
	Damaged piston, cup or pump valve	Replace any damaged pump parts and clean out any foreign particles.
	Clogged nozzles	Clean or replace nozzles.
WATER LEAKAGE AT INTAKE MANIFOLD OR CRANKCASE	Worn manifold seals, pistons or O-rings. Or condensation inside crankcase	Replace seals, sleeves or O-rings. Change oil at regular intervals.
OIL LEAKS	Worn pistons and/or leaking crank seals, crankcase cover seal or drain plugs	Replace seals, sleeves or O-rings.
SHORT PISTON CUP LIFE	Scored cylinders from pumping acids	Replace cylinders. DO NOT PUMP ACID SOLUTIONS. For acid application, ask your dealer for a Pump Saver Injector.
	Abrasive particles in fluid being pumped	Replace water and detergent strainers if damaged or missing. Install additional filter if fine abrasives are still evident.
	Operator(s) running pump without water supply	Do not allow washer to be run without proper water supply.
	Hot water in pump	Do not run in bypass for more than 5 minutes. Do not let water supply exceed 140°F (60°C).

TROUBLESHOOTING

Detergent System Malfunction

PROBLEM	POSSIBLE CAUSE	REPAIR
WASHER FAILS TO DRAW DETERGENT	Detergent metering valve close, clogged or defective	Open detergent metering valve, following procedure in operating instructions.
	Back pressure in hose (when using additional lengths of pressure hose)	Contact dealer for proper injector size when adding lengths of hose.
	Back pressure in pressure hose (when using dual lance wand)	Use proper size detergent nozzle in dual lance wand (refer to parts breakdown).
	Suction tube not below liquid surface	Completely submerge suction tube and strainer in detergent solution.
DETERGENT SOLUTION TOO WEAK	Clogged detergent strainer	Clean or replace strainer.
	Air leak in detergent suction tube or inlet plumbing	Find air leak and clean or replace parts as necessary.
	Clogged or damaged suction strainer	Clean or replace strainer.
DETERGENT SOLUTION TOO CONCENTRATED	Original detergent too concentrated	Dilute product as necessary to achieve proper concentration.
DETERGENT IN RINSE CYCLE	Dual lance wand or adjustable nozzle holder in open position or detergent metering valve open	Close dual lance wand adjustable lance holder to achieve high pressure. Close detergent metering valve.
DILUTION OF DETERGENT CONCENTRATE DURING CYCLE	Worn or defective internal check valve	Repair or replace check valve or injector parts as necessary.
	Defective check valve in detergent tank	Replace parts as necessary.

TROUBLESHOOTING

Unloader Valve Malfunction

PROBLEM	POSSIBLE CAUSE	REPAIR
UNLOADER CYCLES	Fitting leaking downstream	Tighten/replace fitting.
	Piston or valve spring broken or worn	Replace parts as necessary.
	Clogged nozzle	Clean or replace.
FLUID LEAKING FROM BODY	O-ring worn or cut	Replace part as necessary.
UNLOADER WILL NOT COME TO PRESSURE	Foreign particle in valve	Replace or clean.
	Nozzle worn or wrong size	Replace part as necessary.
	Piston or valve worn	Replace part as necessary.
EXTREME PRESSURE SPIKES	Adjusting nut turned completely into unloader	Back off adjusting nut.
	Clogged nozzle	Clean or replace

**LIMITED NEW PRODUCT
WARRANTY
SHARK JETTERS**



Phone: 800-771-1881

Fax: 877-526-3246

www.sharkpw.com

WHAT THIS WARRANTY COVERS

All Shark Jetters are warranted by Shark to the original purchaser to be free from defects in materials and workmanship under normal use, for the periods specified below. This Limited Warranty, subject to the exclusions shown below, is calculated from the date of the original purchase, and applies to the original components only. Any parts replaced under this warranty will assume the remainder of the pressure washer's warranty period.

FIVE YEAR PARTS AND ONE YEAR LABOR WARRANTY

Components manufactured by Shark, such as frames, handles, float tanks, and fuel tanks. Shark crankshaft pumps have a 7 year warranty on non-wear parts.

ONE YEAR PARTS AND ONE YEAR LABOR WARRANTY

All other components, excluding normal wear items as described below, will be warranted for one year on parts and labor. Parts and labor warranty on these parts will be for one year regardless of the duration of the original component manufacturer's part warranty.

WARRANTY PROVIDED BY OTHER MANUFACTURERS

Motors, generators, and engines, which are warranted by their respective manufacturers, are serviced through these manufacturers' local authorized service centers. Shark is not authorized and has no responsibility to provide warranty service for such components.

WHAT THIS WARRANTY DOES NOT COVER

This warranty does not cover the following items:

1. Normal wear items, such as nozzles, spray guns, discharge hoses, wands, quick couplers, seals, filters, gaskets, O-rings, packings, pistons, pump valve assemblies, strainers, fuses, pump protectors.
2. Any components or other devices incorporated into a Shark product that are not manufactured by Shark, including, but not limited to gasoline engines, pumps, etc.
3. Defects caused by improper or negligent operation or installation, accident, abuse, misuse, neglect, unauthorized modifications, repair or maintenance of the product by persons other than authorized representatives of Shark, including, but not limited to, the failure of the Customer to comply with recommended product maintenance schedules.
4. Shark products that have been returned by the original Customer and are ultimately re-sold by an Authorized Servicing Dealer or other sales or service outlet to another purchaser.
5. Shark products that are sold by any distributor or retailer that is not an official authorized dealer or retailer of Shark products.
6. Defects caused by acts of nature and disaster including, but not limited to, floods, fires, wind, freezing, earthquakes, tornadoes, hurricanes and lightning strikes.
7. Defects caused by water sediments, rust corrosion, thermal expansion, scale deposits or a contaminated water supply (such as water in the unit with chloride content higher than that of 80 mg/liter or use of chemicals not approved or recommended by Shark).
8. Defects caused by improper voltage, voltage spikes or power transients in the electrical supply.
9. Devices or accessories not distributed or approved by Shark.
10. Any cost of labor arising from the removal and reinstallation of the alleged defective part by Customer.
11. Transportation of the product to an Authorized Servicing Dealer, field labor, replacement rental and any freight charges.

Any components, accessories or other devices provided with the product but not manufactured by Shark (such as engines, pumps, etc.) are subject to warranties and service through their respective manufacturers authorized service centers and according to the applicable terms and conditions of such manufacturers warranties. Such components or other devices not manufactured by Shark should be referred by the Customer to an authorized service center or their respective manufacturers for repair or replacement.

THE FOREGOING WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES OF ANY KIND, WHETHER ARISING BY LAW, CUSTOM OR CONDUCT. SHARK MAKES NO ADDITIONAL WARRANTIES, EITHER EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY EXPRESSED OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS OF EQUIPMENT FOR A PARTICULAR PURPOSE AND ANY SUCH WARRANTIES ARE EXPRESSLY DISCLAIMED. SHARK FURTHER DISCLAIMS ANY WARRANTY THAT THE PRODUCT PURCHASED BY CUSTOMER WILL MEET ANY PARTICULAR REQUIREMENT OF CUSTOMER EVEN IF SHARK HAS BEEN ADVISED OF SUCH REQUIREMENT.

THE RIGHTS AND REMEDIES PROVIDED UNDER THIS WARRANTY ARE EXCLUSIVE AND IN LIEU OF ANY OTHER RIGHTS OR REMEDIES OF CUSTOMER. SHARK SHALL NOT UNDER ANY CIRCUMSTANCES BE LIABLE TO ANY PERSON OR ENTITY INCLUDING, BUT NOT LIMITED TO, THE CUSTOMER OR ANY END USER OF THE PRODUCT FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR ECONOMIC LOSS, LOSS OF PROFITS OR LOSS OF USE OF THE PRODUCT, ARISING IN CONNECTION WITH THE SALE, DELIVERY, INSTALLATION, TRAINING OR USE OF PRODUCT.

SHARK'S LIABILITY, WHETHER IN CONTRACT OR IN TORT, ARISING OUT OF ANY WARRANTIES OR REPRESENTATIONS, INSTRUCTIONS OR DEFECTS FROM ANY CAUSE, SHALL BE LIMITED EXCLUSIVELY TO THE COST OF REPAIR OR REPLACEMENT PARTS UNDER AFORESAID CONDITIONS.

The purpose of the foregoing limitations on liability and Customer remedies is to protect Shark from unknown or undeterminable risks. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to the Customer.

Shark sales and service representatives are not authorized to waive or alter the terms of this warranty, or to increase the obligations of Shark under the warranty.

Shark reserves the right to make design changes in any of its products without prior notification to the Customer.

