AIRLESS PAINT SPRAYER SERVICE/OPERATION MANUAL

AIRLESSCO HSS 9000 / HSS 11000

001-771 DEC 08

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SECTION

FIGURE

Airlessco
5397 N. Commerce Ave, Moorpark, CA 93021
www.airlessco.com • (805) 523-0211

INTRODUCTION

The Airlessco HSS series is designed with the features painters have come to expect from the Speedflo® PowerTwin™ Series, while raising the bar in in hydraulic and paint pump performance. We also substantially enhanced the overall durabillity. The HSS series is offered with a variety of available power options that let you take advantage of the greater performance and value potential inherent with the HSS series of pumps.

A careful look at these machines will show we have designed in the very best quallity components available, including an American made Vickers hydraulic pump. This pump has been proven for years on heavy construction equipment used around the world.

HSS9000 power modules mount on their own subframe for quick "No Tools" installation and removal for transportaion and storage. Just pivot the fan belt cover out of the way, slip off the drive belt, and lift off the power unit.

	HSS9000	HSS11000
Max Pressure	3300 PSI	3300 PSI
Output (FreeFlow)	2.70 GPM	3.30 GPM
Output (At Pressure)	2.40 GPM	3.00 GPM
Tip Size (1 Gun)	0.052 in.	0.057 in.
Tip Size (2 Guns)	0.038 in.	0.041 in.
Tip Size (3 Guns)	0.027 in.	0.031 in.
Motor	Honda GX200 Durotech 6.5HP	Honda GX270 Durotech 9.0HP
Weight (w/o motor)	140 lbs	232 lbs

WARNING

HANDLE THIS UNIT AS YOU WOULD A LOADED FIREARM! HIGH PRESSURE SPRAY CAN CAUSE EXTREMELY SERIOUS INJURY. OBSERVE ALL WARNINGS!

MANUAL NOTATIONS

WARNING - Alerts user to avoid or correct conditions that could cause bodily injury.

CAUTION - Alerts user to avoid or correct conditions that could cause damage to or destruction of equipment.

IMPORTANT - Alerts users to steps or procedures that are essential to proper equipment repair and maintenance.

NOTE - Identifies essential procedures or extra information.

BEFORE OPERATING THIS UNIT, READ AND FOLLOW ALL SAFETY WARNINGS AND INSTRUCTIONS RELATED TO THE USAGE OF THIS EQUIPMENT ON PAGES 2, 3 & 4. READ, LEARN, AND FOLLOW THE PRESSURE RELIEF PROCEDURE ON PAGE 9 OF THIS MANUAL.

All Service Procedures to be performed by an Authorized Airlessco Service Center ***ONLY***.
NO MODIFICATIONS or alterations of any ***AIRLESSCO*** Equipment or part is allowed.

WARNINGS

MEDICAL ALERT - Airless Spray Wounds

If any fluid appears to penetrate your skin, get EMERGENCY MEDICAL CARE AT ONCE. DO NOT TREAT AS A SIMPLE CUT. Tell the doctor exactly what fluid was injected. Have him read the following "NOTE TO PHYSICIAN".

NOTE TO PHYSICIAN: Injection in the skin is a traumatic injury. It is important to treat the injury surgically as soon as possible. DO NOT DELAY treatment to research toxicity. Toxicity is a concern with some exotic coatings injected directly into the blood stream. Consultation with a plastic surgeon or reconstructive hand surgeon may be advisable.

WARNING ***HIGH PRESSURE SPRAY CAN CAUSE EXTREMELY SERIOUS INJURY. OBSERVE ALL WARNINGS. THIS SPRAYER IS FOR PROFESSIONAL USE ONLY.***

INJECTION HAZARD

FLUIDS UNDER HIGH PRESSURE FROM SPRAY OR LEAKS CAN PENETRATE THE SKIN AND CAUSE EXTREMELY SERIOUS INJURY, INCLUDING THE NEED FOR AMPUTATION.

NEVER point the spray gun towards anyone or at any part of the body.

NEVER put hand or fingers over the spray tip. Do not use rag or other materials over your fingers. Paint will penetrate through material and into the hand.

NEVER try to stop or deflect leaks with your hand or body.

ALWAYS have gun tip guard in place when spraying.

ALWAYS lock gun trigger when you stop spraying.

ALWAYS remove tip from the gun to clean it.

NEVER try to "blow back" paint, it's not an air sprayer.

ALWAYS follow the ***PRESSURE RELIEF PROCEDURE,*** as shown on page 9, before cleaning or removing the spray tip or servicing any system equipment.

Be sure equipment safety devices are operating properly before each use.

ALWAYS tighten all fluid connections before each use.

MEDICAL TREATMENT

If any fluid appears to penetrate your skin, get ***EMERGENCY CARE AT ONCE.***

DO NOT TREAT AS A SIMPLE CUT.

- Go to an emergency room immediately.
- Tell the doctor you suspect an injection injury.
- Tell him what kind of material you were spraying with and have him read ***NOTE TO PHYSICIAN*** above.

GENERAL PRECAUTION

NEVER alter equipment in any manner.

NEVER smoke while in spraying area.

NEVER spray highly flammable materials.

NEVER use around children.

NEVER allow another person to use sprayer unless he is thoroughly instructed on its' safe use and given this operators manual to read.

ALWAYS wear a spray mask, gloves and protective eye wear while spraying.

ALWAYS ensure fire extinquishing equipment is readily available and properly maintained.

NEVER LEAVE SPRAYER UNATTENDED WITH PRESSURE IN THE SYSTEM. FOLLOW PRESSURE RELIEF PROCEDURES ON PAGE 9.

ALWAYS INSPECT SPRAYING AREA

Keep spraying area free from obstructions.

Make sure area has good ventilation to safely remove vapors. ***NEVER*** keep flammable material in spraying area.

NEVER spray in vicinity of open flame or other sources of ignition. Spraying area must be at least 20 ft. away from spray unit.

SPRAY GUN SAFETY

ALWAYS set safety lock on the gun in "***LOCKED***" position when not in use and before servicing or cleaning.

DO NOT remove or modify any part of gun.

ALWAYS remove spray tip when cleaning.

Flush unit with ***LOWEST POSSIBLE PRESSURE.***

CHECK operation of all gun safety devices before each use. Be very careful when removing the spray tip or hose from gun. A plugged line contains fluid under pressure. If the tip or line is plugged, follow the ***PRESSURE RELIEF PROCEDURE*** as outlined on page 9.

TIP GUARD

ALWAYS have the tip guard in place on the spray gun while spraying. The tip guard alerts you to the injection hazard and helps prevent accidentally placing your fingers or any part of your body close to the spray tip.

SPRAY TIP SAFETY

USE EXTREME CAUTION when cleaning or changing spray tips. If the spray tip clogs while spraying, engage the gun safety latch immediately.

ALWAYS follow the ***PRESSURE RELIEF PROCEDURE*** before removing the spray tip to clean it.

NEVER wipe off build up around the spray tip.

ALWAYS remove tip & tip guard to clean ***AFTER*** pump is turned off and the pressure is relieved by following the ***PRESSURE RELIEF PROCEDURE.***

LABELING

Keep all labels on the unit clean and readable.

Replacement labels are available from manufacturer.

WARNINGS CONTINUED ON NEXT PAGE.....

WARNINGS - CONTINUED

HOSES

Tighten all fluid connections securely before each use. High pressure fluid can dislodge a loose coupling or allow high pressure spray to be emitted from the coupling and result in an injection injury or serious bodily injury.

Only use a hose that has a spring guard. The spring guard helps protect the hose from kinks or other damage which could result in hose rupture and cause an injection injury.

NEVER use a damaged hose, which can result in hose failure or rupture and cause in injection injury or other serious bodily injury or bodily damage. Before each use, check entire hose for cuts, leaks, abrasion or bulging of cover, or damage or movement of couplings. If any of these conditions exist, replace the hose immediately.

NEVER use tape or any device to try to mend the hose as it cannot contain the high pressure fluid. ***NEVER ATTEMPT TO RECOUPLE THE HOSE.*** High pressure hose is not recoupleable.

Help prevent damage to the hose by handling and routing it carefully. Do not move the sprayer by pulling it with the hose.

TOXIC FLUID HAZARD

Hazardous fluid or toxic fumes can cause serious injury or death if splashed in eyes or on skin, inhaled or swallowed. Know the hazards of the fluid you are using. Store & dispose of hazardous fluids according to manufacturer, local, state & national guidelines.
ALWAYS wear protective eyewear, gloves, clothing and respirator as recommended by fluid manufacturer.

KEEP CLEAR OF MOVING PARTS

Keep clear of moving parts when starting or operating the sprayer. Do not put your fingers into any openings to avoid amputation by moving parts or burns on hot parts.Precaution is the best insurance against an accident.

When starting the engine, maintain a safe distance from moving parts of the equipment.

Before adjusting or servicing any mechanical part of the sprayer, follow the ***PRESSURE RELIEF PROCEDURE*** on page 9, and remove the ignition cable from the spark plug to prevent accidental starting of sprayer.

GROUNDING

Ground the sprayer and other components in the system to reduce the risk of static sparking, fire or explosion which can result in serious bodily injury and property damage.

ALWAYS GROUND ALL OF THESE COMPONENTS:
1. Sprayer: Connect a ground wire and clamp (supplied) to a true earth ground.
2. Fluid Hose: use only grounded hoses.
3. Spray gun or dispensing valve: grounding is obtained through connection to a properly grounded fluid hose and pump.
4. Object being sprayed: according to your local code.
5. All solvent pails used when flushing should only be metal pails which are conductive.

Once each week, check electrical resistance of hose (when using multiple hose assemblies, check overall resistance of unpressurized hose must not exceed 29 megohms (max) for any coupled length or combination of hose lengths. If hose exceeds these limits, replace it immediately.

Never exceed 500 Ft. (150 m.) overall combined hose length to assure electrical continuity.

PREVENT STATIC SPARKED FIRE/ EXPLOSIONS

ALWAYS be sure all equipment and objects being sprayed are properly grounded. ***ALWAYS*** ground sprayer, paint bucket and object being sprayed. See "grounding" above, for detailed grounding information.
Vapors created when spraying can be ignited by sparks. To reduce the risk of fire, always locate the sprayer at least 20 feet (6 m.) away from the spray area. ***DO NOT*** plug in or unplug any electrical cords in the spray area, which can create sparks, when there is any chance of igniting vapors still in the air. Follow the coating & solvent manufacturers safety warnings and precautions.
Use only conductive fluid hoses for airless applications. Be sure gun is grounded through hose connections. Check ground continuity in hose & equipment. Overall (end to end) resistance of unpressurized hose must not exceed 29 megohms for any coupled length or combination of hose length. Use only high pressure airless hoses with static wire approved for 3300 psi.

WARNINGS CONTINUED ON NEXT PAGE.....

WARNINGS - CONTINUED

AVOID COMPONENT RUPTURE

This sprayer operates at 3300 psi (225 bar). ***ALWAYS*** be sure that all components and accessories have a maximum working pressure of at least 3000 psi to avoid rupture which can result in serious bodily injury including injection and property damage.
NEVER leave a pressurized sprayer unattended to avoid accidental operation of it which could result in serious bodily injury.
ALWAYS follow the ***PRESSURE RELIEF PROCEDURE*** whenever you stop spraying and before adjusting, removing or repairing any part of the sprayer.
NEVER alter or modify any part of the equipment to avoid possible component rupture which could result in serious bodily injury and property damage.
NEVER use weak or damaged or non-conductive paint hose. Do not allow kinking or crushing of hoses or allow it to vibrate against rough or sharp or hot surfaces. Before each use, check hoses for damage and wear and ensure all fluid connections are secure.
REPLACE any damaged hose. ***NEVER*** use tape or any device to mend the hose.
NEVER attempt to stop any leakage in the line or fittings with your hand or any part of the body. Turn off the unit and release pressure by following ***PRESSURE RELIEF PROCEDURE.***
ALWAYS use approved high pressure fittings and replacement parts.
ALWAYS ensure fire extinquishing equipment is readily available and properly maintained.

WARNING: Do not use halogenated solvents in this system. The prime valve, 2 gun manifold and most airless guns have aluminum parts and may explode. Cleaning agents, coatings, paints or adhesives may contain halogenated hydrocarbon solvents. DON"T TAKE CHANCES! Consult your material suppliers to be sure. Some of the most common of these solvents are: Carbontetrachloride, Chlorobenzene, Dichloroethane, Dichloroethyl Ether, Ethylbromide, Ethylchloride, Tethrachloethane. Alternate valves and guns are available if you need to use these solvents.

FLUSHING

Reduce the risk of injection injury, static sparking or splashing by following the specific cleaning procedure on page 7 and 9.
ALWAYS follow the ***PRESSURE RELIEF PROCEDURE*** on page 9.
ALWAYS remove the spray tip before flushing. Hold a metal part of the gun firmly to the side of a metal pail and use the lowest possible fluid pressure during flushing.
NEVER use cleaning solvents with flash points below 140 degress F. Some of these are: acetone, benzene, ether, gasoline, naphtha. Consult your supplier to be sure.
NEVER SMOKE IN THE SPRAYING/CLEANING AREA.

GAS ENGINE PRECAUTIONS

Locate unit 25 feet away from spray area in well ventilated area. ***NEVER*** operate in closed building unless exhaust is piped outside. ***NEVER*** allow hose to lay against engine mufflers or hot parts. ***NEVER*** refill fuel tank while engine is hot or is running.

IMPORTANT: United States Government safety standards have been adopted under the Occupational Safety & Health Act. These standards, particularly the General Standards, Part 1910, & the Construction Standards, part 1926 should be consulted.

WHEN SPRAYING & CLEANING WITH FLAMMABLE PAINTS OR THINNERS:

1. When spraying with flammable liquids, the unit must be located a minimum of 25 feet away from the spraying area in a well ventilated area. Ventilation must be sufficient enough to prevent the accumulation of vapors.
2. To eliminate electrostatic discharge, ground the spray unit, paint bucket and spraying object. Use only high pressure airless hoses approved for 3300 psi which is conductive.
3. Remove spray tip before cleaning gun and hose. Make contact of gun with bucket and spray without the tip in a well ventilated area, into the grounded steel bucket.
4. Never use high pressure in the cleaning process. ***USE MINIMUM PRESSURE.***
5. Do not smoke in spraying/cleaning area.

SETTING UP

1. CONNECT THE HOSE AND GUN

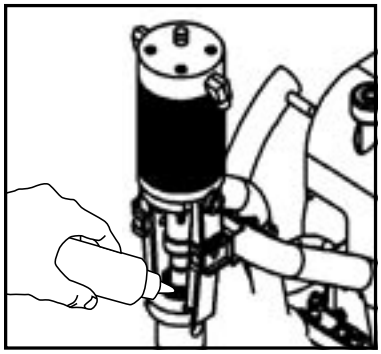
a. Remove the plastic cap plug from the outlet and screw a conductive or grounded 3000 psi spray hose onto fluid outlet.
b. Connect an airless spray gun to the other end of the hose, but do not install the spray tip yet!

NOTE: Do not use thread sealer on swivel unions as they are made to self seal.

2. FILL THE PACKING NUT/WET CUP

FIG. 1

Fill the Packing Nut/Wet Cup with 5 drops of Airlessco Throat Seal Oil (TSO).



3. CHECK THE ENGINE OIL LEVEL

a. Unscrew the oil fill plug. The dipstick is attached to the plug.
b. Without threading the plug into place, check to be sure the oil is up to the top mark on the dipstick.
c. If oil is needed, refer to engine manual.

4. FILL THE FUEL TANK

WARNING

WARNING: Fuel spilled on a hot surface can cause a fire or explosion and cause serious bodily injury and property damage. Always shut off the engine and let it cool before filling the tank, and carefully follow steps a - c below being sure not to spill any fuel.

a. Close the fuel shutoff valve.
b. Use only clean, fresh, well-known brands of unleaded regular grade gasoline.
c. Remove the fuel cap and fill tank. Be sure the air vent in the fill cap is not plugged so fuel can flow to the carburetor, then replace the cap.

FLUSHING

1. NEW SPRAYER

Your unit was factory tested in an oil solution which was left in the pump. Before using oil-base paint, flush with mineral spirits only.
Before using water-base paint flush with mineral spirits, followed by soapy water, then a clean water flush.

2. CHANGING COLORS

Flush with a compatible solvent such as mineral spirits or water.

3. CHANGING FROM WATER-BASE TO OIL-BASE PAINT

Flush with soapy water, then mineral spirits.

4. CHANGING FROM OIL-BASE TO WATER-BASE PAINT

Flush with mineral spirits, followed by soapy water, then a clean water flush.

5. STORAGE

Oil-base paint: Flush with mineral spirits.

Water-base paint: Flush with water, then mineral spirits and leave the pump, hose and gun filled with mineral spirits.

For longer storage, use mixture of mineral spirits and motor oil (half & half). Shut off the sprayer, follow ***PRESSURE RELIEF PROCEDURE*** on page 9 to relieve pressure and make sure prime valve is left open.

6. START UP AFTER STORAGE

Before using water-base paint, flush with soapy water and then a clean water flush.
When using oil-base paint, flush out the mineral spirits with the material to be sprayed.

HOW TO FLUSH

FLUSHING PROCEDURE

1. Be sure the gun safety latch is engaged and there is no spray tip in the gun. Refer to Fig. 2. Refer to your separate instruction manual provided with your gun on its safety features and how to engage safety latch.
2. Pour enough clean, compatible solvent into a large, empty metal pail to fill the pump and hoses.
3. Place the suction tube into the pail or place the pail under the pump.
4. Turn the pressure control knob to low pressure. Refer to Fig. 3.
5. Open the prime valve to the open - "Priming Position". This will allow an easy start. Refer to Fig. 3.
6. Turn the engine ON/OFF switch to ON.
7. Move the choke toward the closed position as per Fig.4.
8. Move the throttle lever slightly to the left as per Fig.4.
9. Turn the fuel valve ON as per Fig. 4. Pull the start rope. Pull the engine over against compression stroke and then let the rope rewind slowly into the starter. Pull firmly and rapidly to start the engine. Do NOT drop the rope. Hold on to the handle while rewinding, or the rope may rewind improperly and jam the assembly. If the engine does not start, open the choke a little more. If the engine floods, open the choke all the way and continue cranking.
10. After the engine is warm, gradually close the choke lever, increase the RPM of engine slightly by moving throttle to the left. Close the prime valve. Refer to Fig. 3
11. Point the gun into the metal pail and hold a metal part of the gun firmly against the pail Refer to fig.5
12. Disengage the gun safety latch and squeeze the gun trigger. At the same time, slowly turn the pressure control knob (Fig. 3) clockwise just enough to move liquid at low pressure.
13. Allow the pump to operate until clean solvent comes from the gun.
14. Release the trigger and engage the gun safety latch.
15. If you are going to start spraying, place the pump or suction tube into the supply container. Release the gun safety latch and trigger the gun into another empty, metal container, holding a metal part of the gun firmly against the metal pail (Fig. 5), forcing the solvent from the pump and hose. When paint starts coming from gun, turn pressure control knob to minimum pressure, place prime valve in prime (open) position and engage the gun safety latch.
16. If you are going to store the sprayer, remove the suction tube or pump from the solvent pail force the solvent from the pump and hose. Engage the gun safety latch and refer to the "Storage" Procedure on page 5. Step 5.
17. Whenever you shut off the sprayer follow the ***PRESSURE RELIEF PROCEDURE*** warning on page 9.

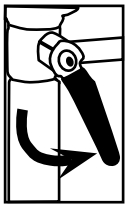
FIG. 2

REMOVE SPRAY TIP. ENGAGE GUN SAFETY LATCH.

FIG. 3

PRIME VALVE

CLOSED
(Pressure)



OPEN
(Priming &
Pressure Relief

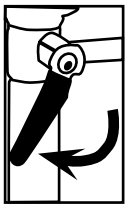
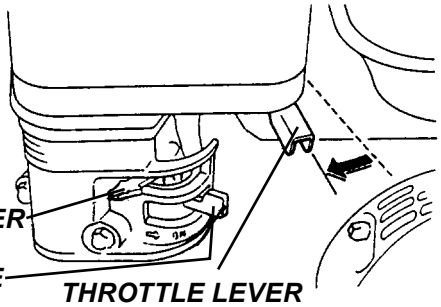
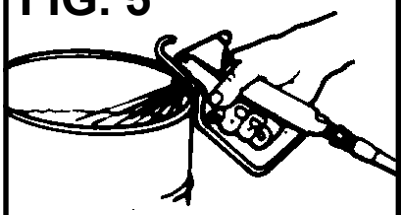


FIG. 4



WARNING: To reduce the risk of static sparking which can cause fire or explosion, always hold a metal part of the gun firmly against the metal pail when flushing. This also reduces splashing. Refer to figure 3

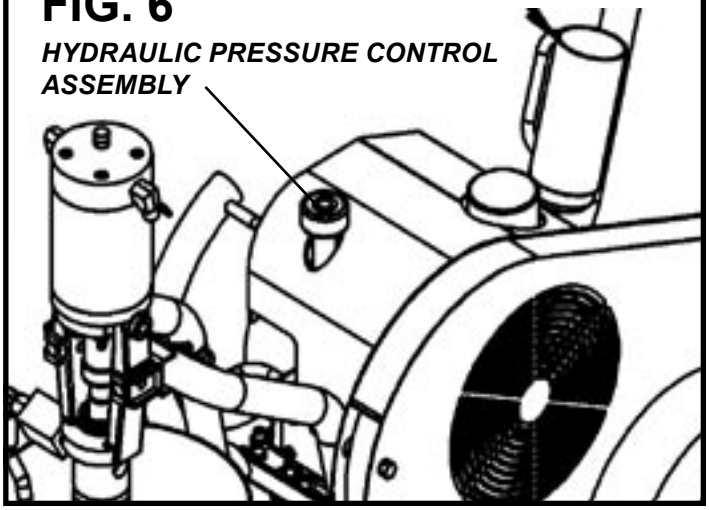
FIG. 5



MAINTAIN FIRM METAL TO METAL CONTACT BETWEEN GUN AND CONTAINER

FIG. 6

HYDRAULIC PRESSURE CONTROL ASSEMBLY



STARTING UP

1. LEARN THE CONTROLS

PRESSURE CONTROL KNOB - used to adjust pressure only. Turn clockwise to increase pressure and counterclockwise to decrease pressure. (See Fig. 6)
PRIME & PRESSURE RELIEF VALVE - Turn to ***OPEN*** position (see Fig. 3) to prime the pump. Turn to the ***CLOSED*** position to spray.

FOLLOW "PRESSURE RELIEF PROCEDURES" ON PAGE 9 WHENEVER YOU:

- are instructed to relieve pressure
- stop spraying
- checking or servicing any of the system equipment.
- or installing or cleaning the spray tip.

HANDLE SPRAY SYSTEM AS YOU WOULD A LOADED FIREARM!

CAUTION: Do not start engine without fluid pump having enough fluid so that it can be primed. Running fluid pump dry will decrease life of the pumps packings.

2. PREPARE THE MATERIAL

a. Prepare the material according to the material manufacturer's recommendations.
b. Place pump or suction tube into material container.

3. STARTING THE SPRAYER

SEE FIGURE 3 & 6 ON PREVIOUS PAGE

a. Prime Valve must be open - priming position.
b. Pressure Control Knob must be in low pressure.
c. Follow the procedure under "How to Flush", page 6, steps 6 through 12.

WARNING

To stop the unit in an emergency or before performing any service or maintenance procedure follow the ***PRESSURE RELIEF PROCEDURE*** on page 9 to relieve the fluid pressure.

4. PRIME THE PUMP

a. Allow pump to operate until paint comes from gun.
b. Release the trigger and engage the gun safety latch.
c. Turn Prime Valve ***OPEN*** to the prime position ensuring the pressure is released from the system.
d. Turn Pressure Control Knob to minimum pressure.
e. Install spray tip onto gun.
f. Close the prime valve to the pressure position.
g. Turn the pressure control knob to desired spray pressure.
h. Disengage the gun safety lock and you are ready to start spraying.

WARNING

If you spray into the paint bucket, always use the lowest spray pressure and maintain firm metal to metal contact between gun and container. See page 6, Fig 5.

5. ADJUSTING THE PRESSURE

a. Turn the Pressure Control Knob Clockwise to increase pressure and counterclockwise to decrease pressure.
b. Always use the lowest pressure necessary to completely atomize the material.

NOTE: Operating the sprayer at higher pressure than needed, wastes material, causes early tip wear, and shortens sprayer life.

c. If more coverage is needed, use a larger tip rather than increasing the pressure.
d. Check the spray pattern. The tip size and angle determines the pattern width and flow rate.

WARNING

Follow the ***"PRESSURE RELIEF PROCEDURE"***. To reduce the risk of injection, never hold your hand, body, fingers or hand in a rag in front of the spray tip when cleaning or checking for a cleared tip. Always point the gun toward the ground or into a waste container when checking to see if the tip is cleared or when using a self-cleaning tip.

WARNING

When you spray into the paint bucket, always use the lowest spray pressure and maintain firm metal to metal contact between gun and container.

WARNING

To stop the unit in an emergency, turn the motor off. Then relieve the fluid pressure in the pump and hose as instructed in the ***PRESSURE RELIEF PROCEDURE.***

CONTINUED ON NEXT PAGE.....

STARTING UP CONTINUED

6. CLEANING A CLOGGED TIP

a. Follow ***PRESSURE RELIEF PROCEDURE*** on page 9.
b. Clean the front of the tip frequently (with toothbrush only) during the day to keep material from building up and clogging the tip.
c. To clean and clear a tip if it clogs, refer to the separate instruction manual received with your gun and nozzle.

IMPORTANT WARNING

Always follow the ***PRESSURE RELIEF PROCEDURE*** on page 9 before perfoming any service or maintenance procedure.

WARNING

Never hold your body, fingers, or hand in a rag in front of the spray tip when cleaning or checking it for a cleared tip. Always point the gun toward the front or into a waste container when checking to see if the tip is cleared or when using a self-cleaning tip.

THERE IS AN EASY WAY TO KEEP THE OUTSIDE OF THE TIP CLEAN FROM MATERIAL BUILD-UP:

Every time you stop spraying, for even a minute, lock the gun and submerge the gun into a small bucket of thinner comparable with the material sprayed. Thinner will dissolve the build up of paint on the outside of tip, tip guard and gun much more effectively than if the paint dries out completely.

WARNING

Be sure to relieve pressure in the pump after filling with Airlessco Pump Conditioner.

WARNING

Clogged standard flat tip - clean only after the tip is removed from the gun. Follow the ***PRESSURE RELIEF PROCEDURE*** Warning on Page 9.

7. WHEN SHUTTING OFF SPRAYER

a. Whenever you stop spraying, even for a short break, follow the "***PRESSURE RELIEF PROCEDURE***".
b. Clean the tip & gun as recommended it the spray gun instruction manual.
c. Flush the sprayer at the end of each work day, if the material you are spraying is water-based, or if it could harden in the sprayer overnight. See "Flushing". Use a compatible solvent to flush, then fill the pump and hoses with an oil based solvent such as mineral spirits.
d. For long term shutdown or storage, refer to the "Flushing" section of this manual.

PRESSURE RELIEF PROCEDURE

IMPORTANT!

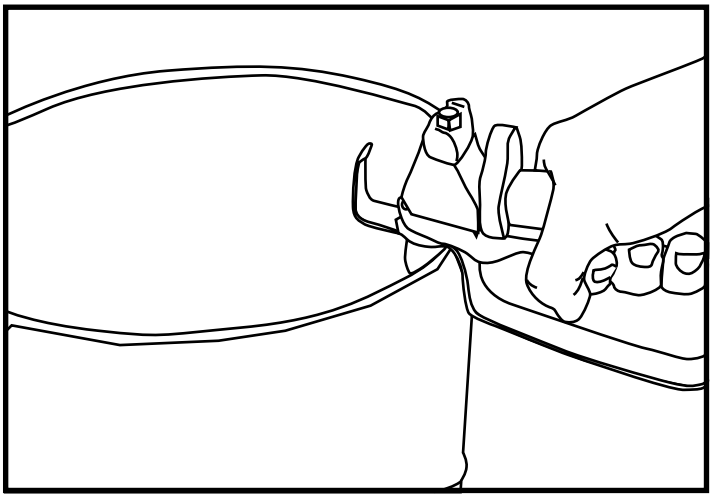
TO AVOID POSSIBLE SERIOUS BODY INJURY, ALWAYS FOLLOW THIS PROCEDURE WHENEVER THE SPRAYER IS SHUT OFF, WHEN CHECKING IT, WHEN INSTALLING, CHANGING OR CLEANING TIPS, WHENEVER YOU STOP SPRAYING, OR WHEN YOU ARE INSTRUCTED TO RELIEVE THE PRESSURE.

1. Engage the gun safety latch. Refer to the separate instruction manual provided with your gun on its safety features and how to engage safety latch.

2. Turn the unit off.

3. Disengage the gun safety latch and trigger the gun to relieve residual fluid pressure.

HOLD METAL PART OF THE GUN IN CONTACT WITH GROUNDED METAL PAIL. USE MINIMUM PRESSURE !



WARNING

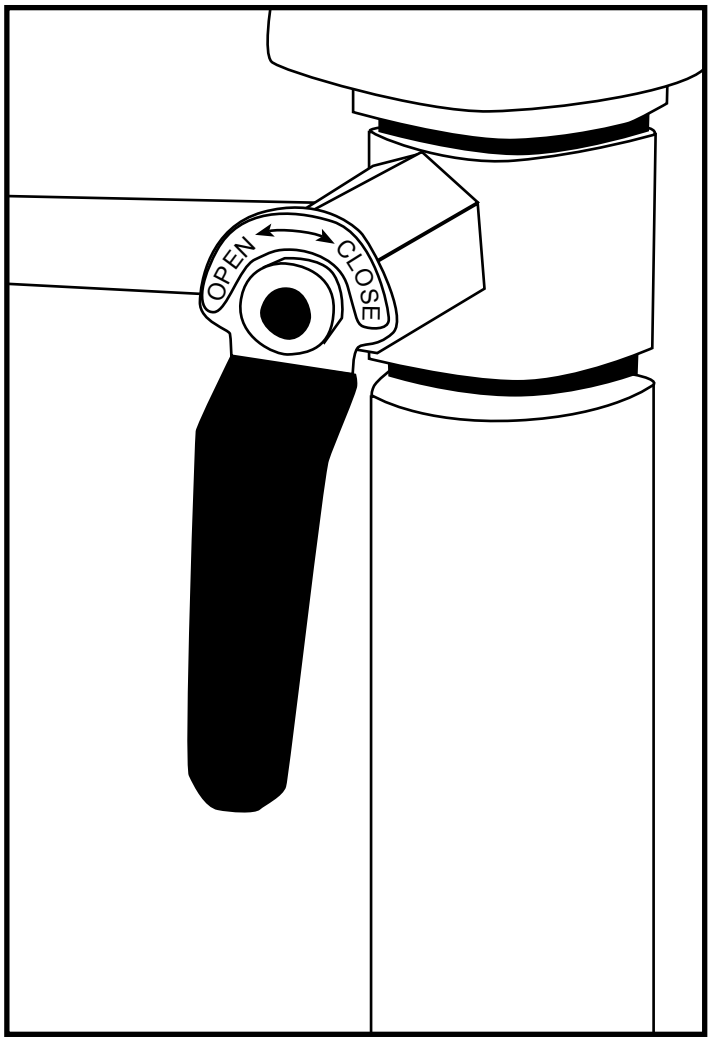
NEVER leave pump unattended while under pressure!

4. Turn Prime/Pressure Relief Valve to the open (priming) position to relieve residual fluid pressure.

5. Re-engage gun safety latch and close Prime/Pressure Relief Valve.

If the ***SPRAY TIP OR HOSE IS CLOGGED***, follow Step 1 through 5 above. Expect paint splashing into the bucket while relieving pressure during Step 4.

If you suspect that pressure hasn't been relieved due to damaged Prime/Pressure Relief Valve or other reason, engage the gun safety latch and take your unit to an authorized Airlessco Service Center.



AIRLESS SPRAY GUN OPERATION

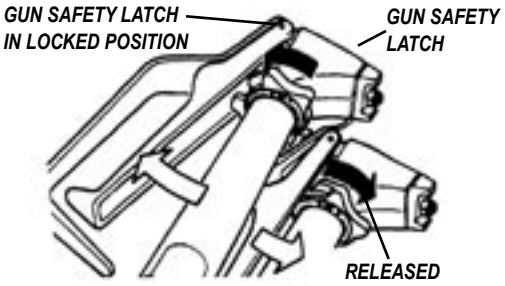
SPRAY

Attach spray gun to airless unit and tighten fittings securely. Set the gun safety latch. (Also may be called gun safety lock, or trigger lock)

* The gun safety latch should always be set when the gun is not being triggered.

Read all warnings and safety precautions supplied with the spray gun and in product manual.

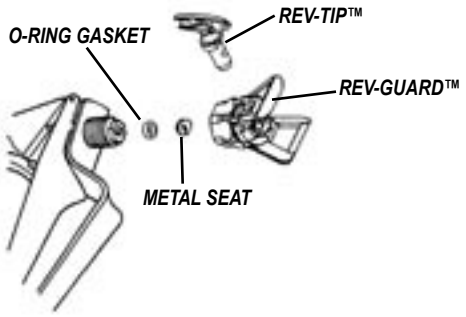
FIG. 7



MAJOR COMPONENTS OF SPRAY GUN AND REVERSIBLE SPRAY TIP

FIG. 8

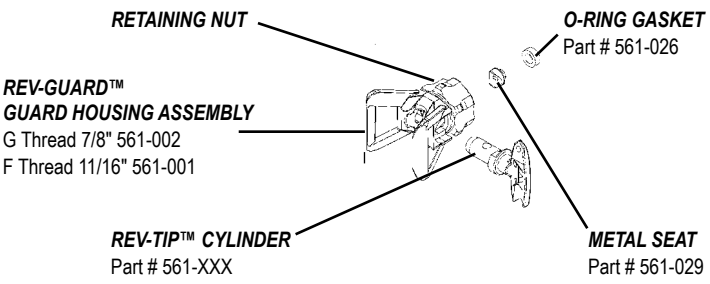
FIG. 9



SPRAY TIP ASSEMBLY

1. Be sure ***PRESSURE RELIEF PROCEDURE*** is followed before assembling tip and housing to the gun.
2. Lock gun safety latch.
3. Insert **REV-TIP™** cylinder into the **REV-GUARD™** (guard housing assembly).
4. Guide metal seat into **REV-GUARD™** (guard housing assembly) through retaining nut & turn until it seats against the cylinder.
5. Insert O-Ring gasket on metal seat so it fits in the grooves.
6. Finger tighten **REV-GUARD™** retaining nut on gun.
7. Turn guard in the desired position.
8. Completely tighten the retaining nut.

FIG. 10



CLEANING SPRAY GUN

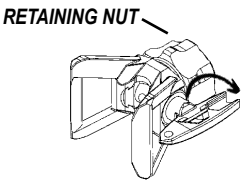
Immediately after the work is finished, flush the gun out with a solvent. Brush pins with solvent and oil them lightly so they will not collect dried paint.

CLEANING FILTER IN GUN HANDLE

To clean the filter, use a brush dipped in an appropriate solvent. Change or clean filters at least once a day. Some types of latex may require a filter change after four hours of operation.

TO REMOVE CLOGS FROM SPRAY TIP

1. Lock gun safety latch.
2. Turn **REV-TIP™** handle 180 degrees.
3. Disengage trigger lock & trigger gun into pail.
4. If the **REV-TIP™** handle appears locked (resists turning), loosen the retaining nut. The handle will now turn easily.
5. Engage gun safety latch & return handle to the spray position.



Spray Position Shown

CLOGGED FLAT TIP

Should the spray tip become clogged, relieve pressure from hose by following the ***PRESSURE RELIEF PROCEDURE.*** Secure gun with the safety latch, take off guard, take out the tip, soak in appropriate solvent & clean with a brush. (Do not use a needle or sharp pointed instrument to clean the tip. The tungsten carbide is brittle and can chip.)

AIRLESS SPRAY TROUBLESHOOTING

DEFECTS	CAUSE	CORRECTION
Coarse spray	Low pressure	Increase the pressure
Excessive fogging (overspray)	High pressure Material too thin	Reduce the pressure to satisfactory pattern distrabution Use less thinner
Patten too wide	Spray angle too large	Use smaller spray angle tip
Pattern too narrow	Spray angle too small	Use larger spray angle tip (if coverage is OK, try tip in same nozzle group)
Too much material	Nozzle too large Material too thin Pressure too high	Use smaller nozzle Reduce pressure
Too little material	Nozzle too small	Use next larger nozzle Material too thick
Thin distribution in center of pattern “horns”	Worn tip Wrong tip	Change to new tip Use nozzle with narrow spray angle
Thick skin on work	Material too viscous Application too heavy	Thin cautiously Reduce pressure and/or use tip in next smaller nozzle group
Coating fails to close & smooth over	Material too viscous	Thin cautiously
Spray pattern irregular, deflected	Orifice clogged Tip damaged	Clean carefully Replace with new tip
Craters or pock marks, bubbles on work	Solvent balance	Use 1 to 3% “short solvents remainder “long” solvents (this is most likely to happen with material of low viscosity, lacquers, etc.)
Clogged screens	Extraneous material in paint Course pigments Poorly milled pigments (paint pigments glocculate)	Clean screen Use coarse screen if orifice size allows. Use courser screen, larger orifice tips. Obtain ball milled paint. If thinner has been added, test to see if a cover screen. Incompatible drop placed on top of paint mixes or flattens out on the paint mixture & thinners on the surface. If not, try different thinner in fresh batch of paint.
Excess paint builds on tip guard	Spray gun too close to surface Pressure setting too high	Hold gun further from surface sprayed Reduce pressure setting
Drips, spits from tip	Valve seat and/or ball in gun head damaged or worn	Service spray gun, replace valve assembly
Tip clogs continually	Debris in paint Gun filter missing Coarse filter mesh	Thouroughly strain the paint before use Do not operate without inlet strainer

TEST THE PATTERN

GOOD, FULL ***SPOTTY PATTERN, INCREASE PRESSURE***

TIP SELECTION GUIDE

Spray tip selection is based on paint viscosity, paint type, & job needs. For light viscosities (thin paints), use a smaller tip; heavier (thicker paints), use a larger tip size. Spray tip size is based on how many gallons of paint per minute can be sprayed through the tip. Do not use a tip larger than maximum pump flow rate or capacity the sprayer can accommodate. Pump flow rate is measured in gallons per minute (GPM).

REV-TIP™ for Painting Fan Width (12" from surface)		**SPRAY TIP - ORIFICE SIZE (INCHES)**														
in.	mm	.007	.009	.011	.013	.015	.017	.019	.021	.023	.025	.027	.029 .031	.035	.039	.041
4-6	102-152		209	211	213	215	217	219	221	223	225	227	229			
6-8	152-203	307	309	311	313	315	317	319	321	323	325	327		335		
8-10	203-254		409	411	413	415	417	419	421	423	425	427	431			
10-12	254-305			511	513	515	517	519	521	523	525	527	531	535		
12-14	305-356				613	615	617	619	621	623	625	627	631	635	639	641
14-16	356-406					715	717		721						739	741, 754
16-18	406-457					815		819	821				831			
20-24	508-610					***NEW WIDE TIPS:***			W21	W23	W25	W28	W29	W31		
Gun Filter	C=course-60 mesh F=Fine-100 mesh	F	F	F	F,C	C	C	C	C	C	REMOVE FILTER					
Wood Interior	Lacquer, Varnish, Stain, Sealer, Enamel	• •	• •	•	•	•										
Wood Exterior	Exterior Stain, Vinyl, Acrylic, Latex				•	•	•	•								
Masonry	Vinyl, Oil Base, Alkyd, Latex, Acrylic, Block Filler, Elastomer					• •	• •	• •	• • •	• •	• •	• •	• •	• •	• •	•
Ceiling	Hi Build, Mil White								•	•						
Structural Steel	Heaviy Coatings								•	•	•	•	•	•	•	•
Water Flow Rate @ 2000psi, 138 bar	(gpm) (lpm)			.12 .49	.18 .69	.24 .91	.31 1.17	.38 1.47	.47 1.79	.57 2.15	.67 2.54	.77 2.96	1.03 3.90	1.31 4.98	1.63 6.17	1.80 6.81
Paint Flow Rate latex paint @ 2000psi, 138 bar/1.36 spec. gr.	(gpm) (lpm)			.10 .38	.15 .57	.21 .79	.27 1.02	.33 1.25	.40 1.51	.49 1.85	.58 2.20	.66 2.50	.88 3.33	1.12 4.24	1.39 5.26	1.54 5.83
Pump Minimum Output*	(gpm) (lpm)			.25 1.0	.25 1.0	.33 1.25	.40 1.5	.50 1.9	.60 2.3	.75 2.8	.88 3.3	1.0 3.8	1.25 4.7	1.5 5.7	2.0 8.2	2.2 8.2

*Pump will support tip worn to next larger size.

Thickness of the paint coat per stroke is determined by spray tip "fan width", rate of the spray gun movement, and distance to surface. Two tips having the same tip size, but different pattern widths will deliver the same amount of paint over a different area (wider or narrower strip).
A spray tip with a narrow pattern width makes it easy to spray in tight places.
During use, especially with latex paint, high pressure will cause the orifice to grow larger. This destroys the pattern. Replace tips before they become excessively worn. Worn tips waste paint, cause overspray, make cutting-in difficult, and decreases sprayer performance.

FINE FINISH REV-TIP™

New double orifice design for lower pressure airless spraying when you need finer atomization for a smoother finish on interior trim, cabinetry, shutters, and doors

Fan Width		Orifice Size	
Inches	(mm)	.012	.014
4-6	102-152	212	214
6-8	152-203	312	314
8-10	203-254	412	414

FIELD TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION
There is spitting from the gun.	The fluid supply is low or empty Air entrapped in the fluid pump or hose	• Refill the supply container. • Check for loose connections ont he siphon assembly, tighten, then reprime pump.
Paint leaks into the wet cup	The packing nut/wet cup is loose. The upper packings are worn or damaged. Worn piston rod.	• Tighten just enough to stop leakage. • Replace the packings. See pages 16-17. • Replace piston rod.
The engine operates, but the paint pump doesn't cycle.	The pressure setting is too low. The displacement pump is seized.	• Increase the pressure. See page 7. • Service the pump. See page 14-17.
The displacement pump operates, but paint pressure is too low or none.	The pressure setting is too low. The tip or gun filter is clogged. The tip is worn. The fluid displacement pump filter is clogged There is a large pressure drop in the fluid hose.	• Increase the pressure. See page 7. • Remove the tip and/or filter and clean them. • Replace tip. • Clean the filter. • Use a larger diameter hose.
The displacement pump operates, but the output is too low on the downstroke or both strokes.	The inlet valve ball is not seating properly.	• Service the inlet valve. See page 15.
The displacement pump operates, but the output is too low on the upstroke.	The outlet valve ball is not seating properly. The lower packings are worn or damaged.	• Service the outlet valve. See page 15. • Replace the packings. See page 16-17.
Engine stops.		• Refer to engine manual.

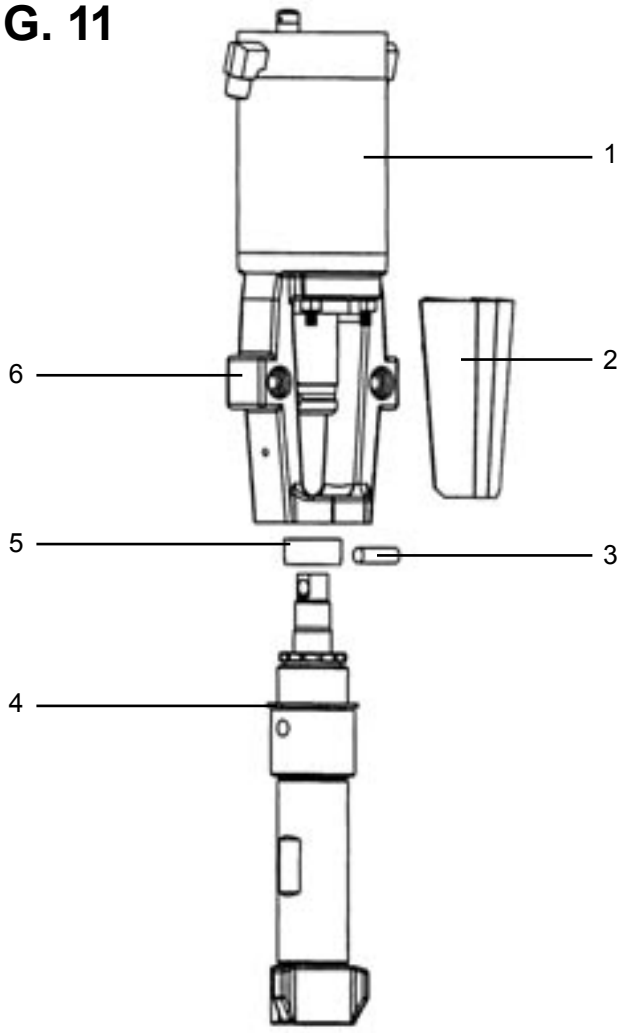
SERVICING THE FLUID PUMP

FLUID PUMP REMOVAL

REFER TO FIGURE 11

1. Follow the ***PRESSURE RELIEF PROCEDURE*** page 9.
2. Flush the material you are spraying out of the machine.
3. Remove the Front Cover.
4. Slip Retaining Ring down to expose the Piston Pin.
5. Push Piston Pin out of the piston pinhole.
6. Loosen Jam Nut until the Fluid Pump can unthread from the Yoke.

FIG. 11



PARTS LIST FIGURE 11		
Item No.	Part No.	Description
1	186-100	Hydraulic Motor
2	119-099	Front Cover
3	119-025	Piston Pin
4	187-088	Jam Nut
5	116-106	Retaining Clamp
6	186-078	Yoke

DISASSEMBLY OF THE FLUID PUMP

REFER TO FIGURE 14

1. Remove Fluid Pump from machine.
2. Remove Inlet Valve Assembly - Refer to Servicing Inlet Valve, Page 15.
3. Remove Upper Packing Adjustment nut from Outlet Housing.
4. Remove Pump Cylinder from Extension Tube, pulling Displacement Rod out through bottom of Outlet Housing. Discard O-ring.
5. Remove Outlet Housing from Extension Tube. Discard O-ring.
6. Remove all old packings and glands from Outlet Housing; retain Male Gland and Female Gland, they will be re-used unless damaged.
7. Remove Piston End from Rod Extension.
8. Remove Jam Nuts from Piston End. Remove all old packings, glands and Scraper from Piston End; retain Male Gland and Female Gland, they will be re-used unless damaged.
9. Disassemble Outlet Valve - Refer to Servicing Outlet Valve, Page 15.
10. Inspect Displacement Rod and Cylinder inside surface for wear or damage; thoroughly clean all parts to be reused.

FLUID PUMP REINSTALLATION

REFER TO FIGURE 11

1. With the Retaining Ring loosely in place around the pump piston, thread the Fluid Pump in to the Yoke until the top edge of the Outlet Housing is one thread above the inside edge of the Yoke threaded bore.
2. Tighten the Jam Nut until it stops against the bottom edge of the Yoke.
3. Line up the Displacement Rod pin hole with the Hydraulic Piston pin hole; insert the Piston Pin.
4. Slip the Retaining Ring up around the piston pin bore on the Hydraulic Piston.
5. Run the machine at full pressure for several minute and check for leaks. Release the pressure by following the ***PRESSURE RELIEF PROCEDURE*** & readjust the packing nut per step 7 in the Packing Replacement Procedures on page 16.
6. Reinstall Front Cover

SERVICING OUTLET VALVE ASSEMBLY

DISASSEMBLY OF THE OUTLET VALVE

REFER TO FIGURE 12

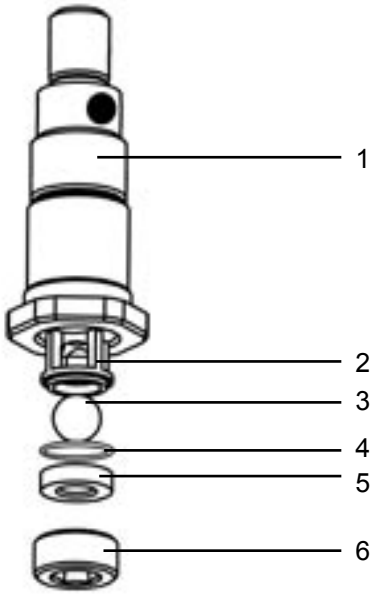
1. Remove Fluid Pump from machine - Refer to Fluid Pump Removal, Page 14.
2. Remove Outlet Valve Assembly - Follow steps 1-9, Disassembly of the Fluid Pump, Page 14.
3. Hold Piston End in vise bottom up to access 7/16" Hex in Retainer. Remove Retainer.
4. Remove Outlet Seat. Do not pry, it will chip the edges.
5. Remove PTFE O-Ring, Outlet Ball and Outlet Ball Guide.
6. Remove all old packings and glands from Outlet Housing; retain Male Gland and Female Gland, they will be re-used unless damaged.
7. Clean and inspect parts for wear or damage, replace parts as necessary. PTFE O-Ring will always be replaced in this procedure.

RE-ASSEMBLY OF THE OUTLET VALVE

REFER TO FIGURE 12

1. Install Ball Guide, Ball, Seat and O-Ring into Piston End.
2. Install Retainer into Piston End. Torque Retainer to 30 Ft-Lb.
3. Install new packings, glands and scraper - Refer to Packing Replacement Procedures, Page 16.

FIG. 12



PARTS LIST FIGURE 12		
Item No.	Part No.	Description
1	187-078	Piston End
2	187-079	Outlet Ball Guide
3	187-091	Outlet Ball
4	106-015	O-Ring
5	187-081	Outlet Seat
6	187-082	Retainer

SERVICING INLET VALVE ASSEMBLY

DISASSEMBLY OF THE INLET VALVE

REFER TO FIGURE 13

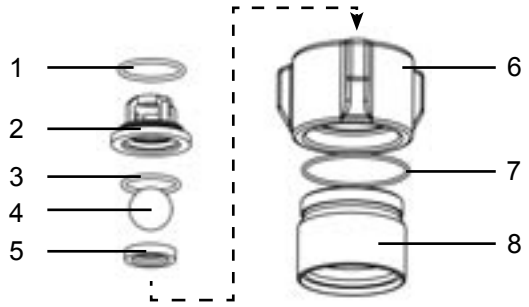
1. Relieve pressure following ***PRESSURE RELIEF PROCEDURE*** steps on page 9.
2. Remove Inlet Valve Housing.
3. Remove Ball Guide, O-Rings and Inlet Ball. Remove Inlet Seat.
7. Clean and inspect parts for wear or damage, replace parts as necessary. PTFE O-Ring and Viton O-Ring will always be replaced in this procedure.

DISASSEMBLY OF THE INLET VALVE

REFER TO FIGURE 13

1. Reinstall inlet parts in correct order. Reverse inlet seat if necessary.
2. Run the machine at pressure for several minutes, inspect for leaks and proper operation.

FIG. 13



PARTS LIST FIGURE 13		
Item No.	Part No.	Description
1	106-013	O-Ring, Viton
2	187-087	Inlet Ball Guide
3	106-088	O-Ring, PTFE
4	187-092	Inlet Ball
5	187-086	Inlet Seat
6	187-084	Inlet Valve Housing
7	119-110	O-Ring, Viton
8	119-092	Inlet Filter

PACKING REPLACEMENT PROCEDURES

DISASSEMBLY

REFER TO FIGURE 14

1. Soak all Leather Packings in oil for 5-10 minutes before assembly.
2. Install Scraper open edge downwards, and metal Female Gland open side up on Piston End.
3. Install five UHMWPE Packings and three Leather Packings on Piston End, open side up, in this order from bottom: Plastic, Leather, Plastic, Leather, Plastic, Leather, Plastic, Plastic. Finish with metal Male Gland rounded edge downwards.
4. Install Jam Nut on Piston End: Don't Tighten.
5. Carefully insert assembled Piston End downward into top of Cylinder until only the metal Male Gland is exposed.
6. Use a Packing Tool through the Piston End Outlet holes to hold the Piston End from spinning while tightening the Jam Nut until there are ***FOUR*** full threads exposed on Piston End.
7. Place ***TWO*** drops of ***BLUE LOCTITE*** on the Piston End Jam Nut threads, and install second Jam Nut. Tighten it until it stops without moving the first Jam Nut.
8. Install metal Male Gland rounded edge upwards in the Outlet Housing.
9. Install four UHMWPE Packings and three Leather Packings in the Outlet Housing, open side downward in this order: Plastic, Leather, Plastic, Leather, Plastic, Leather, Plastic. Finish with metal Female Gland open side downwards.
10. Install brass Packing Adjustment Nut until it contacts Female Gland; Do Not Tighten.

REASSEMBLY

REFER TO FIGURE 14

1. Intall PTFE O-Ring and Extension Tube into bottom of Outlet Housing and tighten until the Extension Tube stops; Do Not Over-tighten.
2. Apply ***BLUE LOCTITE*** to Piston End top threads and install Rod Extension, tighten. Use Packing Tool through Piston End Outlet holes to prevent Piston End from spinning in Pump Cylinder while tightening Rod Extension.
3. Apply ***BLUE LOCTITE*** to Rod Extension top threads and install Displacement Rod, tighten. Use appropriate size open end wrenches on wrench flats of Extension Rod and Displacement Rod; Do Not place in vise or use pipe wrenches.
4. Install PTFE O-Ring into bottom of Extension Tube.
5. Lubricate Displacement Rod with oil, and carefully insert the Pump Cylinder/Rod/Piston Assembly through bottom of Extension Tube/Outlet Housing Assembly, making sure to guide the Displacement Rod Top through the upper packings without damaging the packings.
6. Thread the Pump Cylinder into the bottom of the Extension Tube, tighten until Pump Cylinder stops; Do Not Over-tighten.
7. Tighten brass Packing Adjustment Nut until there is one thread left showing.
8. Install Inlet Valve Assembly - Refer to Servicing Inlet Valve, Page 15.
9. Reinstall Fluid Pump - Refer to Fluid Pump Reinstallation, Page 14.

PARTS LIST FIGURE 14

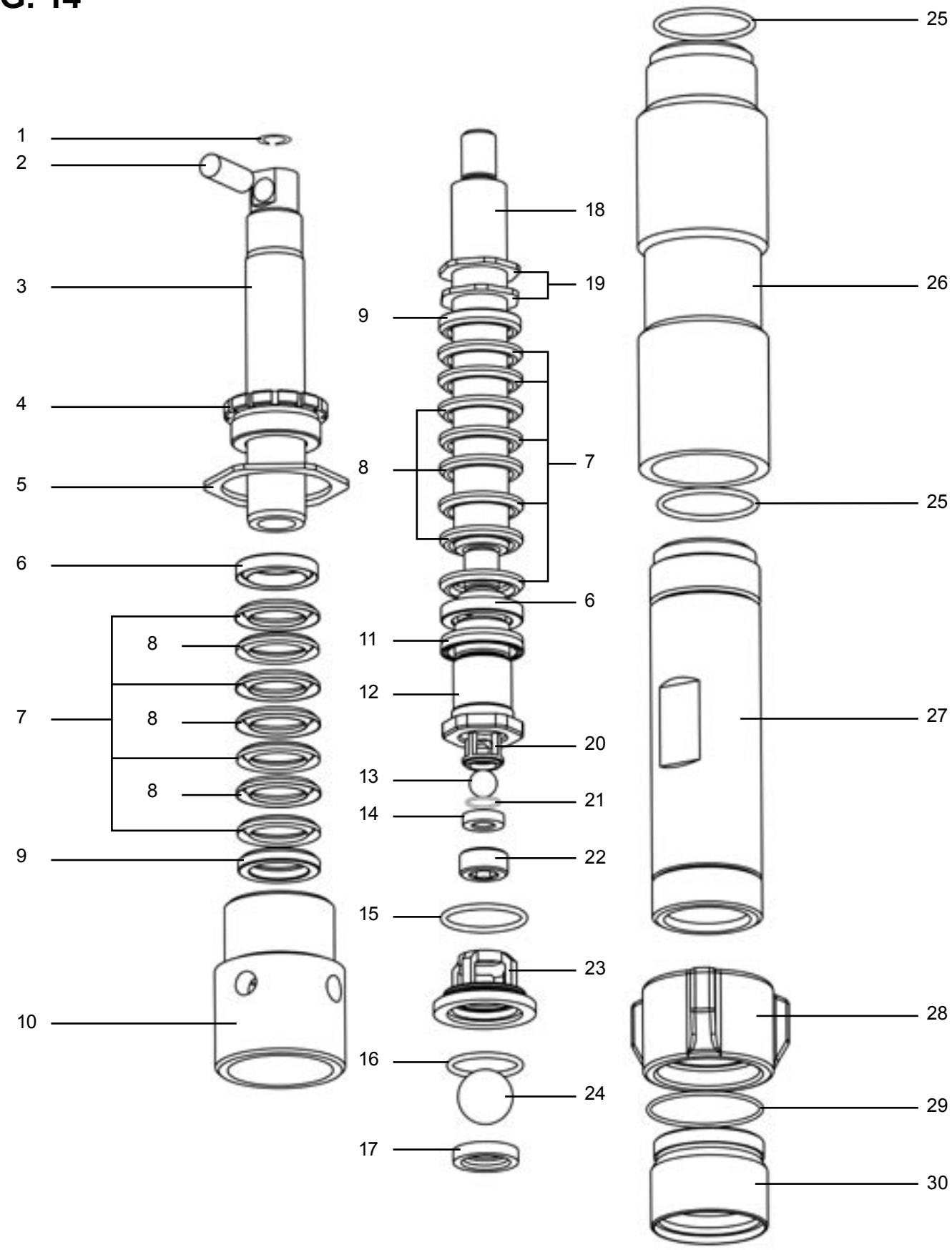
Item No.	Part No.	Description
1	116-106	Retaining Ring
2	119-025	Piston Pin
3	187-070	Displacement Rod
4	187-071	Packing ADJ Nut
5	187-088	Jam Nut
6	187-072	Female Gland
7	187-075**	Packing UHMWPE
8	187-074**	Packing Leather
9	187-073	Male Gland
10	187-076	Outlet Housing
11	187-083**	Scraper
12	187-078	Piston End
13	187-091**	Outlet Ball
14	187-081	Outlet Seat
15	106-012**	O-Ring

PARTS LIST FIGURE 14 CONT

Item No.	Part No.	Description
16	106-008**	O-Ring
17	187-086	Inlet Seat
18	187-101+	Rod Extension
19	187-089	Jam Nut
20	187-079	Outlet Ball Guide
21	106-015**	O-Ring
22	187-082	Retainer
23	187-087	Inlet Retainer
24	187-092**	Inlet Ball
25	106-004**	O-Ring Seal
26	187-102+	Extension Tube
27	187-077	Pump Cylinder
28	187-084	Inlet Valve Nut
29	119-110	O-Ring
30	119-092+	Intake Filter Assy

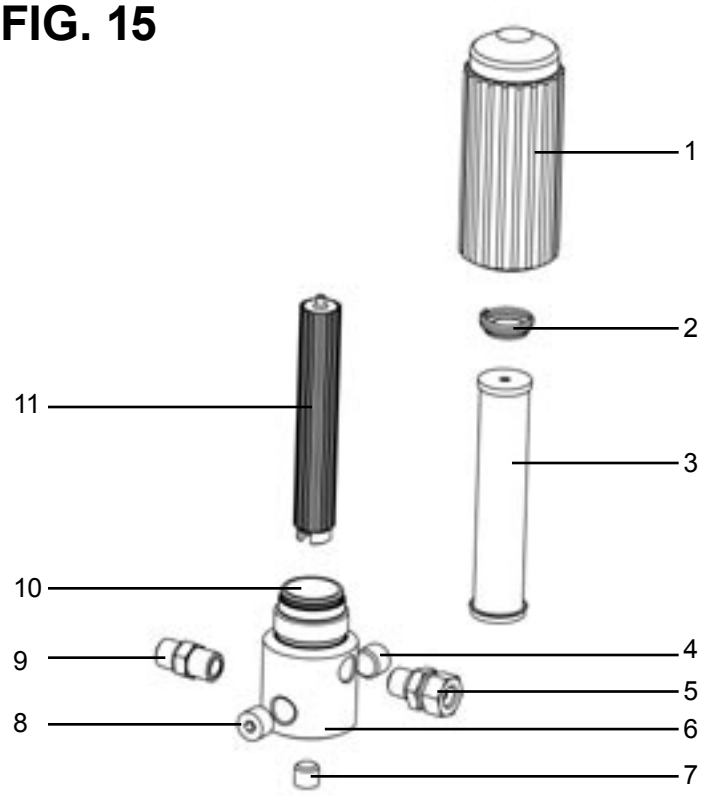
FLUID PUMP ASSEMBLY

FIG. 14



MANIFOLD FILTER (119-084)

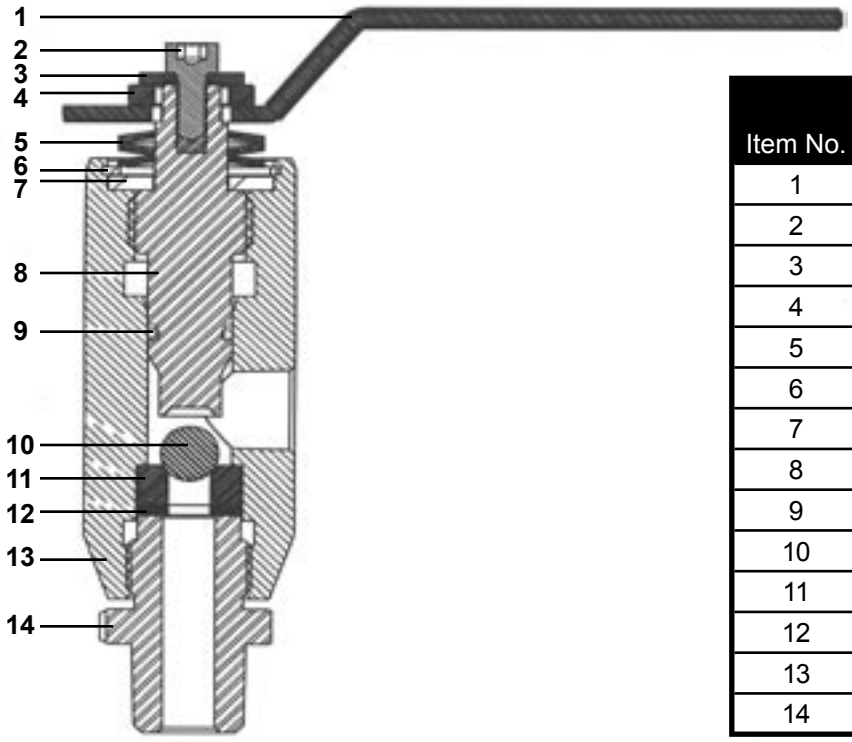
FIG. 15



PARTS LIST FIGURE 15		
Item No.	Part No.	Description
1	111-202	Housing Bowl
2	301-356	Spring
3	111-204	60 Mesh Filter
4	100-005	Swivel
5	100-003	Swivel
6	111-201	Housing Base
7	100-028	Plug
8	100-129	Plug
9	169-010	Nipple
10	106-007	O-Ring, PTFE
11	111-203	Filter Support

PRIME VALVE (119-083)

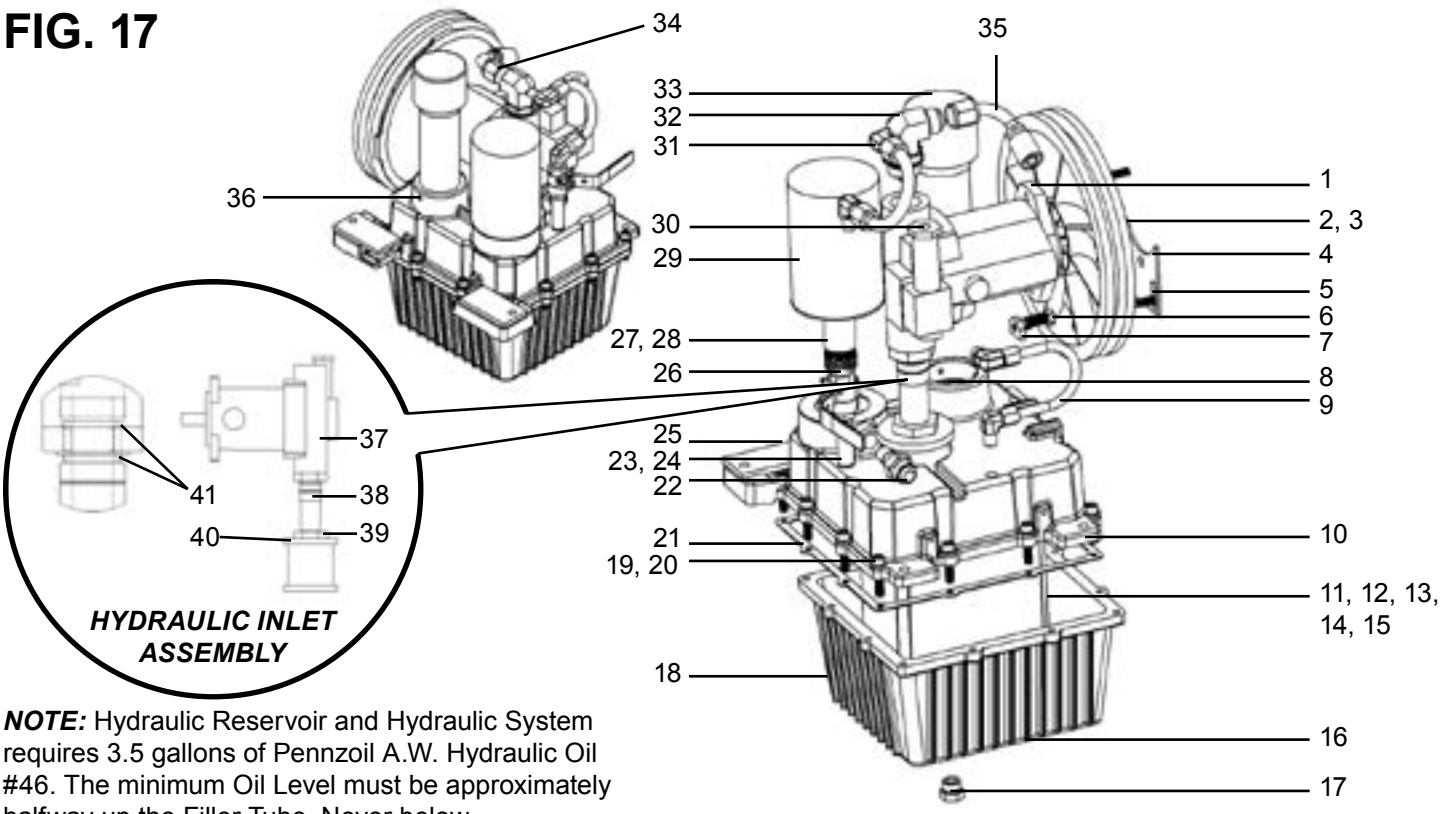
FIG. 16



PARTS LIST FIGURE 16		
Item No.	Part No.	Description
1	115-303	Handle with Label
2	117-046	Screw
3	115-063	Washer
4	115-072	Spacer
5	115-064	Belleville Spring (3)
6	115-065	Retaining Ring
7	115-067	Washer
8	115-071	Valve Stem
9	115-068	O-Ring Black
10	115-069	Ball
11	115-029	Valve Seat
12	115-012	Washer
13	115-073	Valve Body
14	115-074	Inlet Fitting

HYDRAULIC PUMP AND RESERVOIR (189-571)

FIG. 17



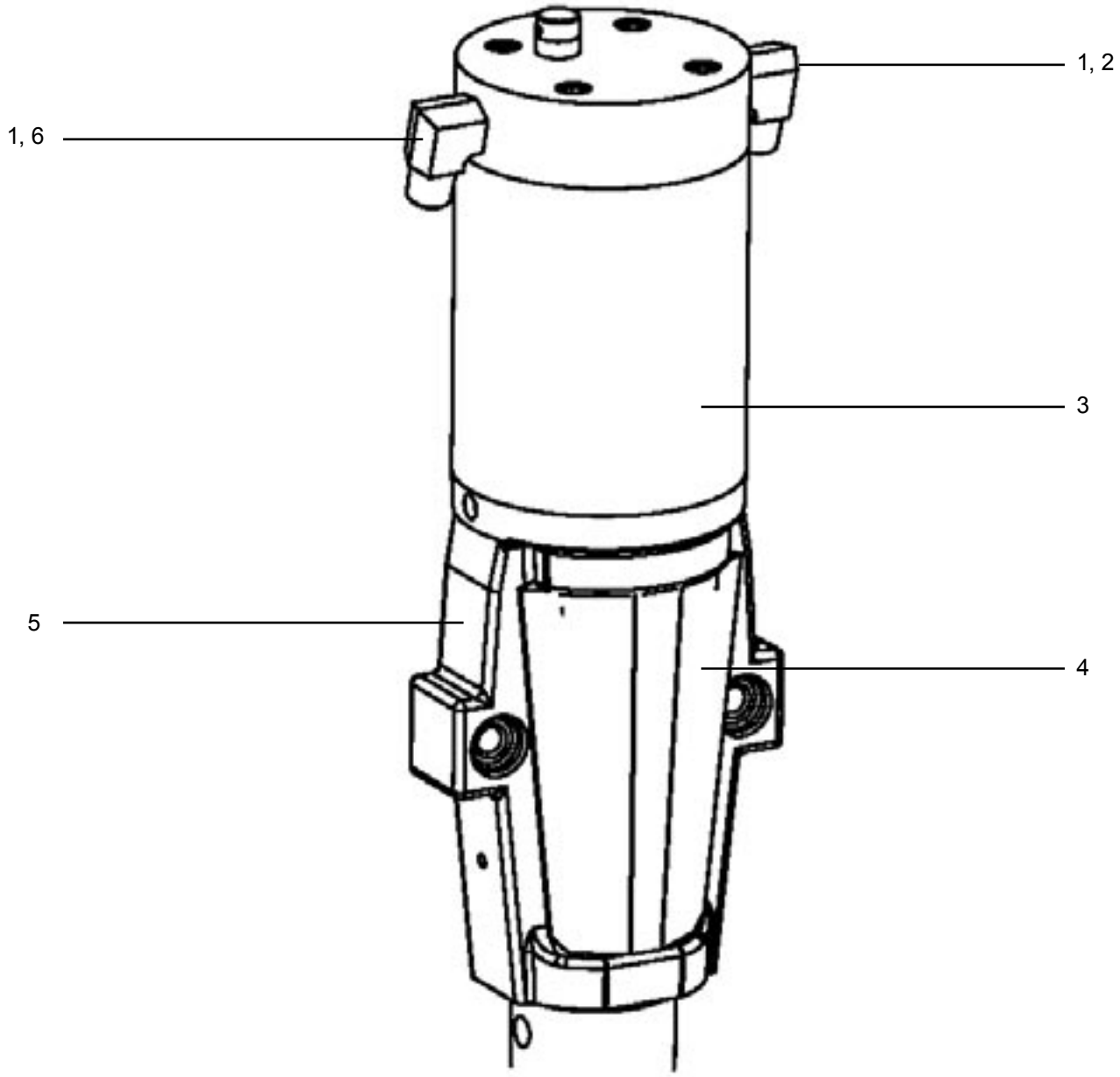
NOTE: Hydraulic Reservoir and Hydraulic System requires 3.5 gallons of Pennzoil A.W. Hydraulic Oil #46. The minimum Oil Level must be approximately halfway up the Filler Tube. Never below.

PARTS LIST FIGURE 17		
Item No.	Part No.	Description
1	189-605	Pump Assy
2	100-662	Set Screw
3	189-579	Pully Assembly
4	189-567	Pump Bracket
5	100-173	Screw (2)
6	100-653	Bolt
7	136-235	Nut
8	106-032	Filler O-Ring
9	189-609	Hydraulic Bypass Tube
10	189-569	Reservoir Top
11	189-556	Baffle
12	189-583	Baffle Plate
13	189-549	Baffle Stopper
14	136-134	Rivet (4)
15	140-042	Washer
16	189-560	Pump Fitting Nut
17	189-505	Reservoir Plug
18	189-566	Reservoir Bottom
19	143-021	Cap Screw (12)
20	113-023	Lockwasher (12)
21	119-074	Reservoir Gasket

PARTS LIST FIGURE 17 CONT		
Item No.	Part No.	Description
22	189-527	Hydraulic Fitting
23	169-010	Nipple
24	100-005	Swivel
25	189-581	Hold Down Plate
26	119-066	Ball Valve
27	189-557	Fitting
28	119-093	Oil Filler Tube
29	189-563	Oil Filter
30	189-548	Hydraulic Pressure Adjustment
31	119-067	Hydraulic Press Tube
32	189-528	Elbow
33	189-564	Filler/Breath Cap
34	100-227	3/4” Swivel
35	189-546*	Hydraulic Return Hose
36	136-074	Set Screw (2)
37	189-570	Hydraulic Pump (Bare)
38	189-535	Pump Inlet Tube
39	189-560	Hex Nut
40	189-565	Suction Strainer
41	189-562	O-Ring (2)

HYDRAULIC MOTOR ASSEMBLY

FIG. 18

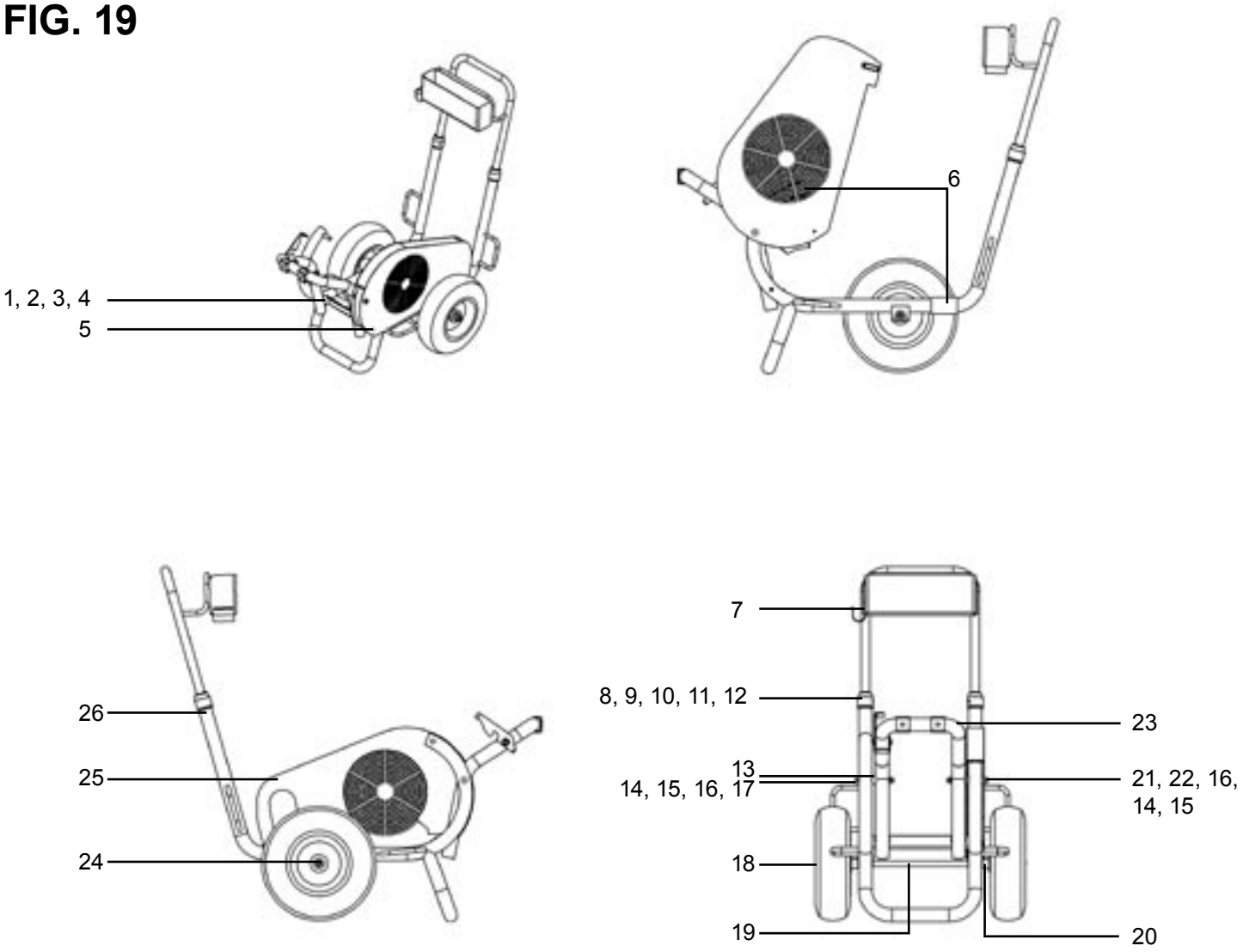


PARTS LIST FIGURE 18		
Item No.	Part No.	Description
1	100-133	Elbow (2)
2	189-545	High Pressure Hose
3	186-100	Hydraulic Motor

PARTS LIST FIGURE 18 CONT		
Item No.	Part No.	Description
4	119-099	Front Cover
5	186-078	Yoke
6	189-546	Hydraulic Return Hose

FRAME ASSEMBLY

FIG. 19

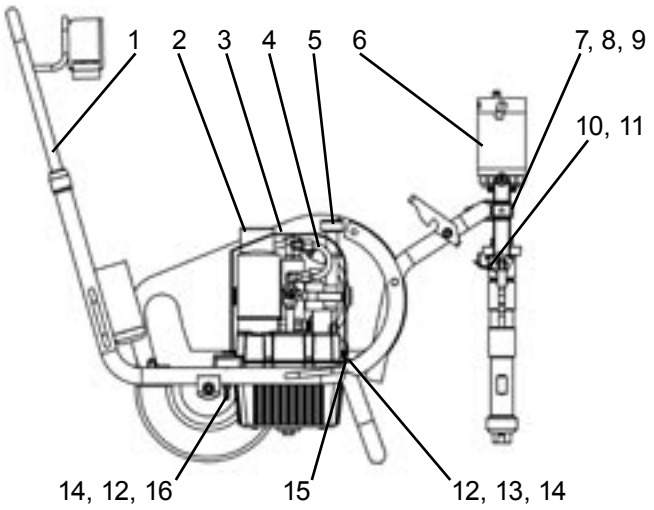


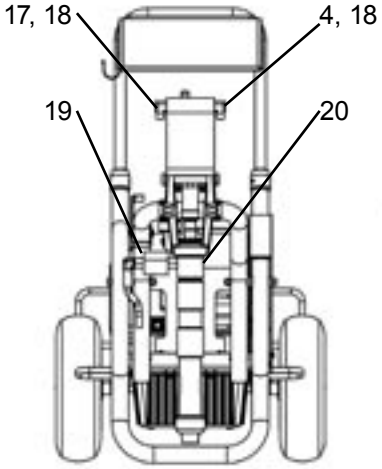
PARTS LIST FIGURE 19		
Item No.	Part No.	Description
1	140-029	Washer
2	136-217	Nylok Nut
3	100-377	Screw
4	189-558	Stop Bumper
5	136-233	Riv-Nut
6	119-082	Bumper
7	189-530	Handle Assy
8	189-450	Guide
9	189-451	Slide
10	331-222	Roll Pin
11	121-024	Snap Button
12	189-452	Cover
13	119-077	Spacer

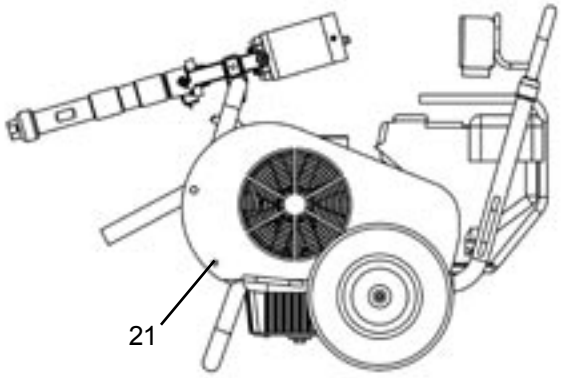
PARTS LIST FIGURE 19 CONT		
Item No.	Part No.	Description
14	189-576	Pivot Tube
15	100-656	Washer
16	140-051	Nut
17	100-655	Hex Bolt
18	301-165	Wheel
19	119-079	Axle
20	113-030	Spacer
21	119-080	Washer
22	119-081	Hex Bolt
23	189-559	H Support Assy
24	143-029	Set Collar
25	189-596	Belt Cover
26	189-599	Frame

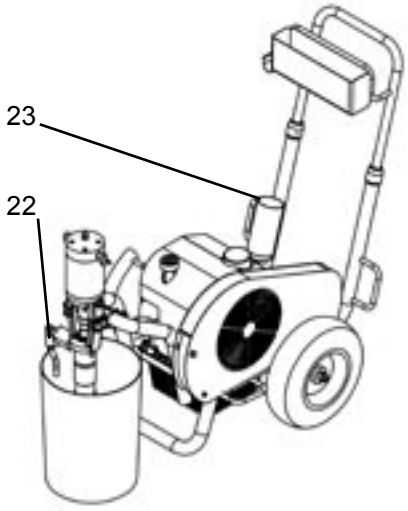
DIRECT IMMERSION ASSEMBLY

FIG. 20







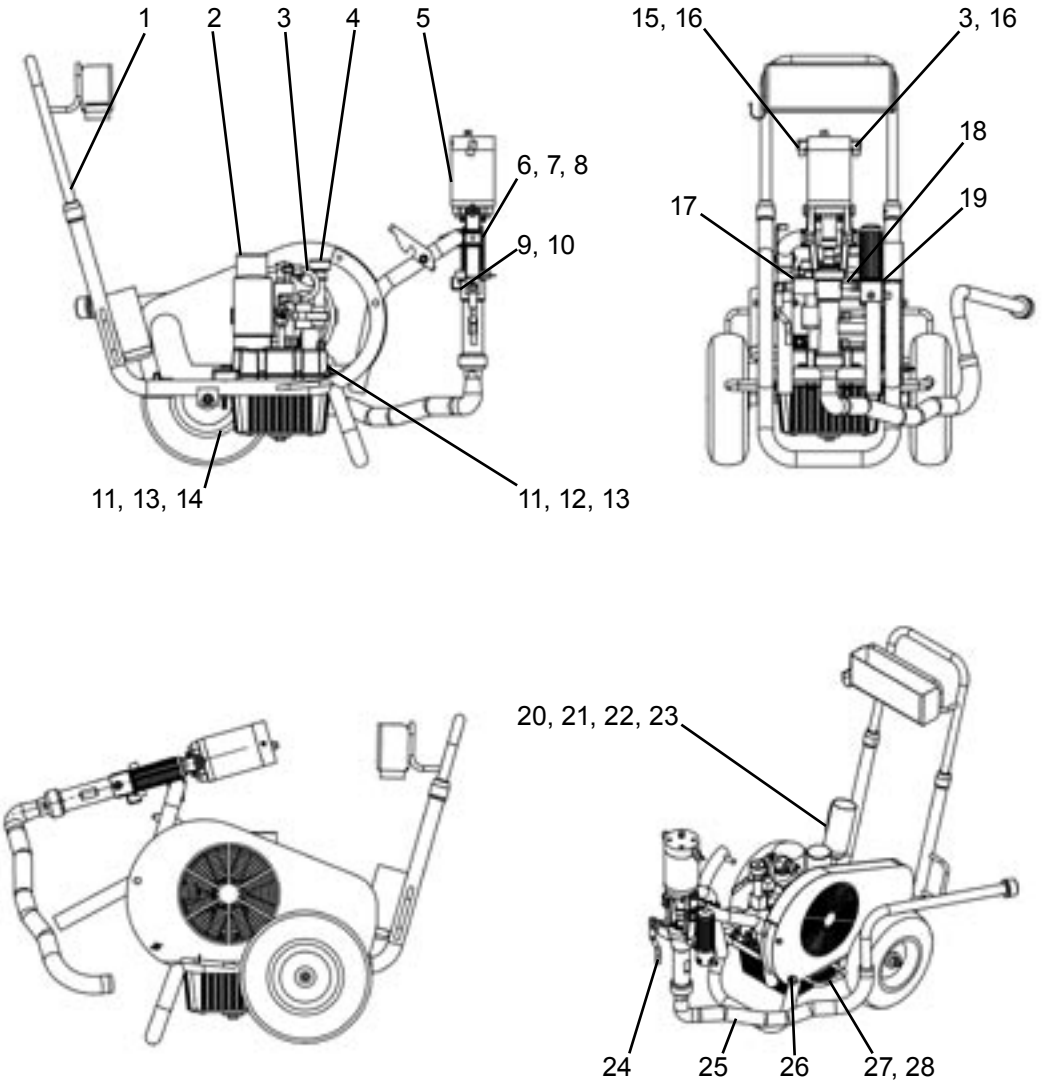


PARTS LIST FIGURE 20		
Item No.	Part No.	Description
1	189-554	Frame Assy
2	189-571	Hydraulic Assy
3	189-580	Pump Shroud
4	189-545	Hydraulic Pressure Hose
5	189-548	Pressure Control
6	189-606	Paint Pump Assy
7	100-307	Screw
8	188-118	Nut
9	100-344	Flat Washer
10	111-014	Pressure Gauge
11	100-004	Elbow
12	140-051	Nut

PARTS LIST FIGURE 20 CONT		
Item No.	Part No.	Description
13	188-125	Screw
14	140-035	Flat Washer
15	100-390	Screw
16	100-655	Screw
17	189-546	Hydraulic Return Hose
18	100-133	Elbow
19	119-083	Prime Valve
20	119-084	Manifold Filter
21	136-234	Screw
22	119-086	Bypass Assy
23	100-170R	Optional Holder

SIPHON UNIT ASSEMBLY

FIG. 21

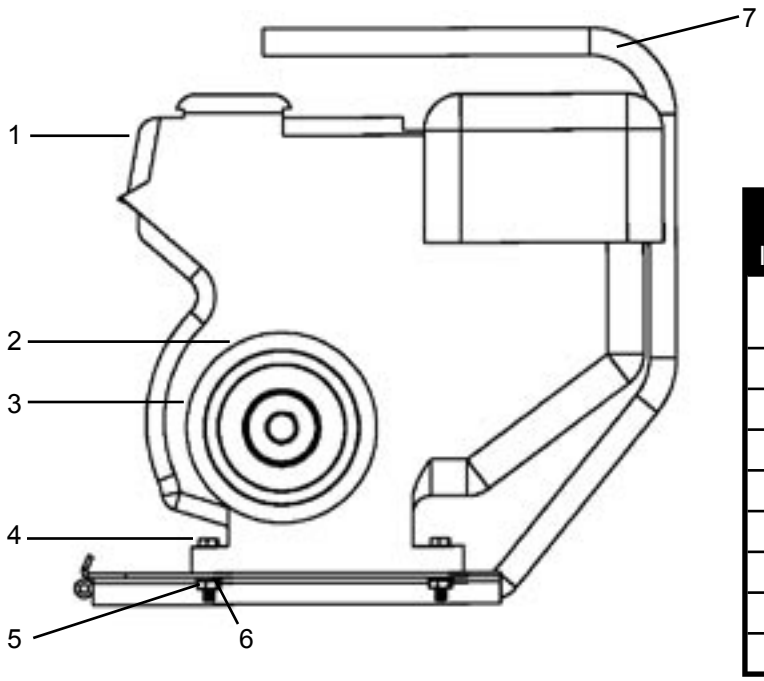


PARTS LIST FIGURE 21		
Item No.	Part No.	Description
1	189-554	Frame Assy
2	1879-571	Hydraulic Assy
3	189-545	Hydraulic Pressure Hose
4	119-060	Pressure Control
5	189-608	Paint Pump Assy
6	100-307	Screw
7	188-118	Nut
8	100-344	Flat Washer
9	111-014	Presure Gauge
10	100-004	Elbow
11	140-035	Flat Washer
12	188-125	Screw
13	140-051	Nut
14	100-655	Screw

PARTS LIST FIGURE 21 CONT		
Item No.	Part No.	Description
15	189-546	Hydraulic Return Hose
16	100-133	Elbow
17	119-083	Prime Valve
18	119-089	Nipple
19	119-084	Manifold Filter
20	120-021	Nylok Nut
21	331-342	Screw
22	111-036	Spring Clip
23	100-170R	Optional Holder
24	119-086	Bypass Assy
25	119-087	Suction Assy
26	119-088	Spring Loaded Pin
27	136-133	Chain Ring
28	136-131	Grounding Chain

POWER UNIT - HSS 9000

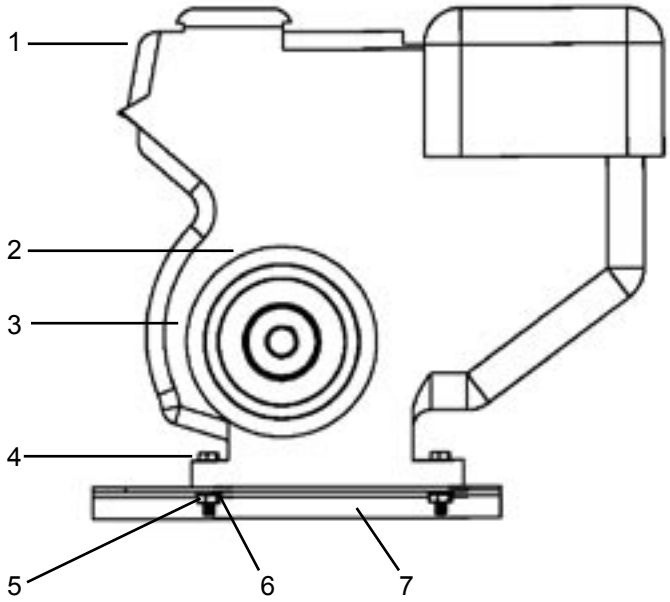
FIG. 22



PARTS LIST FIGURE 22		
Item No.	Part No.	Description
1	175-025 175-034	GX200 Honda Gas Engine 6.5HP Durotech Gas Engine
2	100-361	Set Screw
3	189-531	Pully
4	136-123	Screw
5	113-022	Nut
6	113-023	Lock Washer
7	189-593	Lifting Handle/Plate Assy
8	189-524	V-Belt (Not Shown)
9	101-434	Warning Decal (Not Shown)

POWER UNIT - HSS 11000

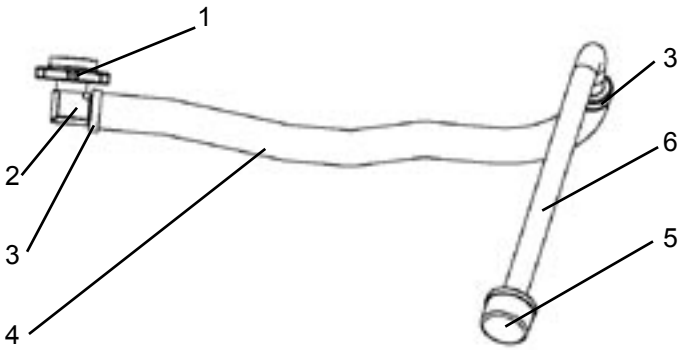
FIG. 23



PARTS LIST FIGURE 23		
Item No.	Part No.	Description
1	175-101	GX270 Honda Gas Engine
2	100-361	Set Screw
3	189-579	Pully
4	136-123	Screw
5	113-022	Nut
6	113-023	Lock Washer
7	189-513	Plate Assy
8	189-514	V-Belt (Not Shown)
9	101-434	Warning Decal (Not Shown)

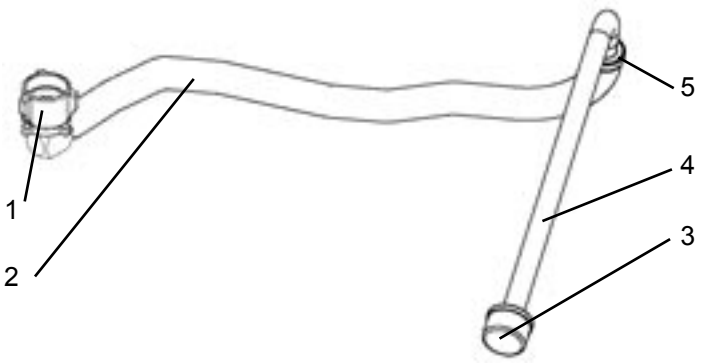
OPTIONAL SUCTION ASSEMBLIES

FIG. 24



PARTS LIST FIGURE 24		
Item No.	Part No.	Description
1	189-587	Suction Nut
2	100-668	Suction Elbow
3	100-664	1” ID Suction Hose
4	301-514	5 Gal Suction Tube
5	141-008	Filter Basket
6	250-116	Clamp

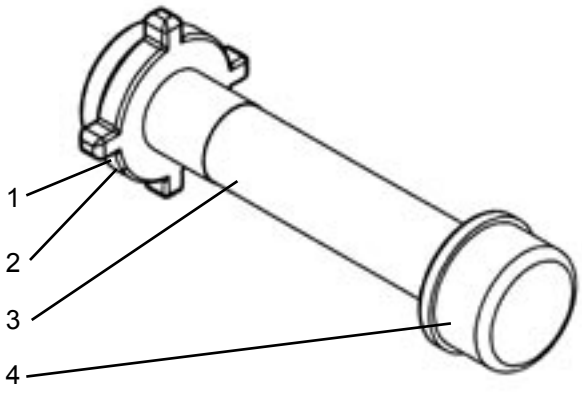
FIG. 25



PARTS LIST FIGURE 25		
Item No.	Part No.	Description
1	119-107	Swivel Assy
2	100-664	1” ID Suction Hose
3	141-008	Filter Basket
4	301-514	5 Gal Suction Tube
5	250-116	Clamp

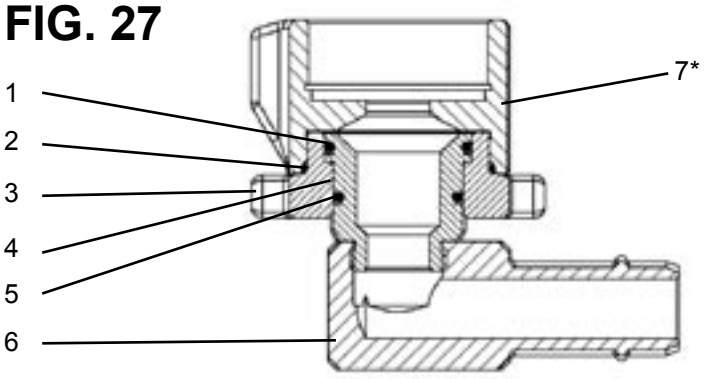
INLET SUCTION ASSEMBLIES

FIG. 26



PARTS LIST FIGURE 26		
Item No.	Part No.	Description
1	119-110	O-Ring
2	189-587	Suction Nut
3	301-572	Suction Tube
4	119-094	Filter Basket

FIG. 27

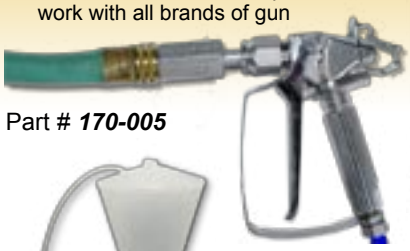


PARTS LIST FIGURE 27		
Item No.	Part No.	Description
1	119-095	O-Ring, Viton
2	119-110	O-Ring, Viton
3	189-584	Swivel Nut
4	189-574	Swivel Body
5	119-096	O-Ring- Viton
6	189-573	Suction Elbow
7	187-084*	Inlet Valve Housing

AIRLESSCO ACCESSORIES

Quick Flush™

- The only clean water flushing system
- Cuts sprayer clean-up time in half!
- Connects to standard garden hose to backflush sprayer through gun
- Includes "F" and "G" adapters to work with all brands of gun



Part # ***170-005***

PAINT HOPPER

For use on small jobs where paint is kept in smaller than 5 gallon containers. Threads onto pick-up tube of carry or LoBoy framed Airlessco sprayers.

331-775 6 Liter Paint Hopper

PUMP CONDITIONER

Should be used on piston pumps between uses to prevent paint from drying on the piston & causing packing wear.

010-001 Display of 48 - 1 oz. bottles
010-009 1 quart bottle
010-019 1 Gallon bottle

Case quantity: 12 on quarts, 4 on gallons

PAINT STRAINERS

Pre-filter your paint using strainer bags. One dozen per pack.

100-064 Used to cover suction filter
100-065 5 Gallon strainer

HOSE COVER

4 mil poly protects your airless hose from paint and abrasion damage. Comes in 1000' roll with perforations each 50'.

100-219 Hose Cover Roll
100-426 Case of 6 Rolls

HIGH PRESSURE AIRLESS HOSE

Strong yet flexible, for airless sprayers up to 3300 PSI

Part No:	Hose Description
100-012	3/16" Whip Hose, 4 Ft.
100-040	1/4" Whip Hose, 3 Ft.
100-204	1/4" Whip Hose, 5 Ft.
100-199	3/8" Whip Hose, 6 Ft.
100-011	1/4" Hose, 50 Ft.
100-023	3/8" Hose, 50 Ft.
100-037	1/2" Hose, 50 Ft.
100-010	1/4" Hose Connector
100-009	3/8" Hose Connector

STAY CLEAN™

Spray protectant for machine to prevent paint from sticking to it. Keeps your sprayer looking new for years!

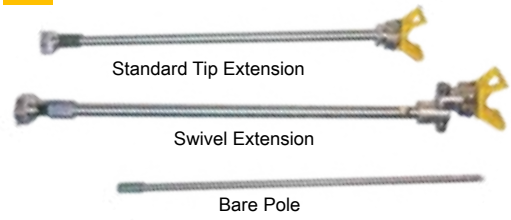
114-030 20 oz. can
Case quantity: 12 cans

THROAT SEAL OIL

Used in the wet cup of a piston pump to prevent paint from drying on the piston & causing damage to the upper packing. Use with all piston pumps.

188-187 6 oz. Bottle
188-392 1 qt. Bottle

XTEND-A-POLE SYSTEM



STANDARD TIP EXTENSION, "G" Thread

032-170 6" Long
032-171 12" Long
032-172 18" Long
032-173 24" Long

SWIVEL EXTENSION, "G" Thread

032-184 36" Long

BARE POLE

Add Tip Extension or Swivel Extension to create desired length

032-053 24" Long
032-054 36" Long

SWIVEL "G" THREAD

032-035 7/8" x 14 Swivel

ADAPTERS

90° Pole to Gun Adapter
032-042

Gun Nut "F" Thread 11/16-16
032-010

Gun Nut "G" Thread 7/8-14
032-011

"F to G" Gun adapter to attach Graco® tips to Airlessco guns.
032-012