AIRLESSCO®

AIRLESS PAINT LINESTRIPER SERVICE/OPERATION MANUAL

SURE STRIPE 9500

001-813 NOV08

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INTRODUCTION

Our most powerful line striper is the hydraulic powered SURE STRIPE 9500, combining the power to stripe with the heaviest coatings and the sturdiest, easiest to handle chassis available on a pavement striper. You can stripe rings around the competition! Perfect balance, easy rolling, plenty of room to carry oversized containers, are just a part of owning the most versatile line striper available today.

The hydraulically powered piston pump gives precise control of pressure for consistent atomization, and the high suction required for the heavy coatings typical for pavement striping.

You will appreciate convenient design features like spray guns that can quickly be moved to any corner of the machine. Handlebar releasable swivel wheels have turnbuckle based RADIUS MEMORY™ for consistently smooth arcs & circles.

Like all Airlessco stripers and sprayers, they are ***BUILD TO LAST....BUILT TO PERFORM.***

	SS9500 Durotech	SS9500 Honda
Part Number	305-306	305-308
Max Pressure	3300 PSI	3300 PSI
Output (FreeFlow)	2.70 GPM	2.70 GPM
Output (At Pressure)	2.40 GPM	2.40 GPM
Tip Size (1 Gun)	0.049 in.	0.049 in.
Tip Size (2 Guns)	0.038 in.	0.038 in.
Motor	Durotech 6.5HP	Honda GX200
Weight	243 lbs	243 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

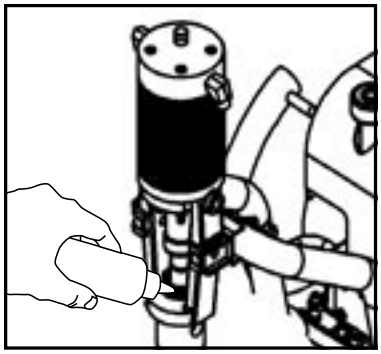
a. Remove the plastic cap plug from the outlet and screw a conductive or grounded 3000 psi spray hose onto fluid outlet.
b. Connect an airless spray gun to the other end of the hose, but do not install the spray tip yet!

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.

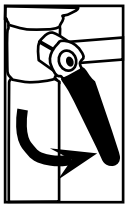
FIG. 2

REMOVE SPRAY TIP. ENGAGE GUN SAFETY LATCH.

FIG. 3

PRIME VALVE

CLOSED
(Pressure)



OPEN
(Priming &
Pressure Relief

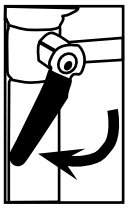
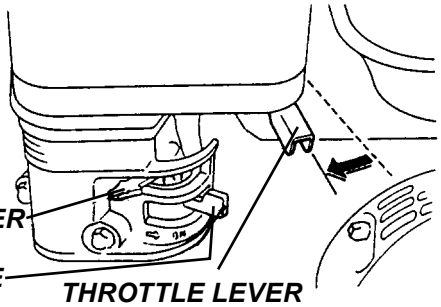
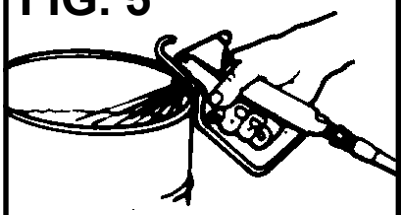


FIG. 4



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

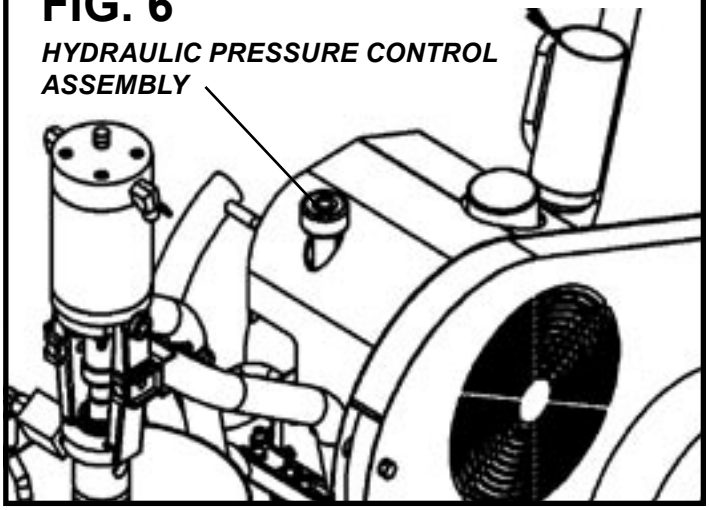
FIG. 5



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!

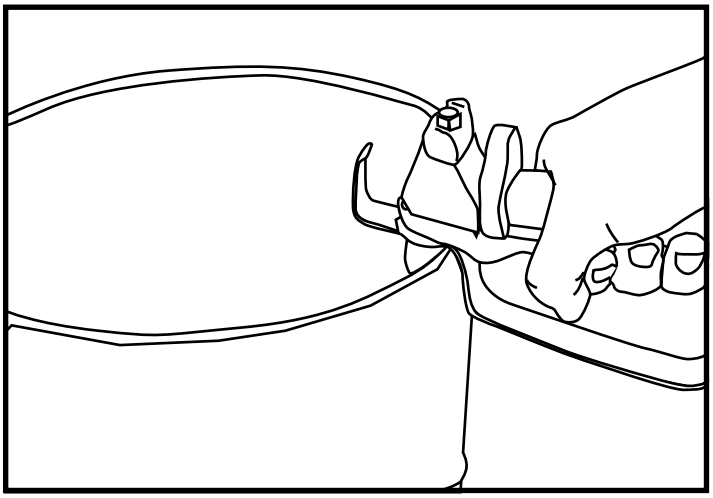
TO AVOID POSSIBLE SERIOUS BODY INJURY, ALWAYS FOLLOW THIS PROCEDURE WHENEVER THE SPRAYER IS SHUT OFF, WHEN CHECKING IT, WHEN INSTALLING, CHANGING OR CLEANING TIPS, WHENEVER YOU STOP SPRAYING, OR WHEN YOU ARE INSTRUCTED TO RELIEVE THE PRESSURE.

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

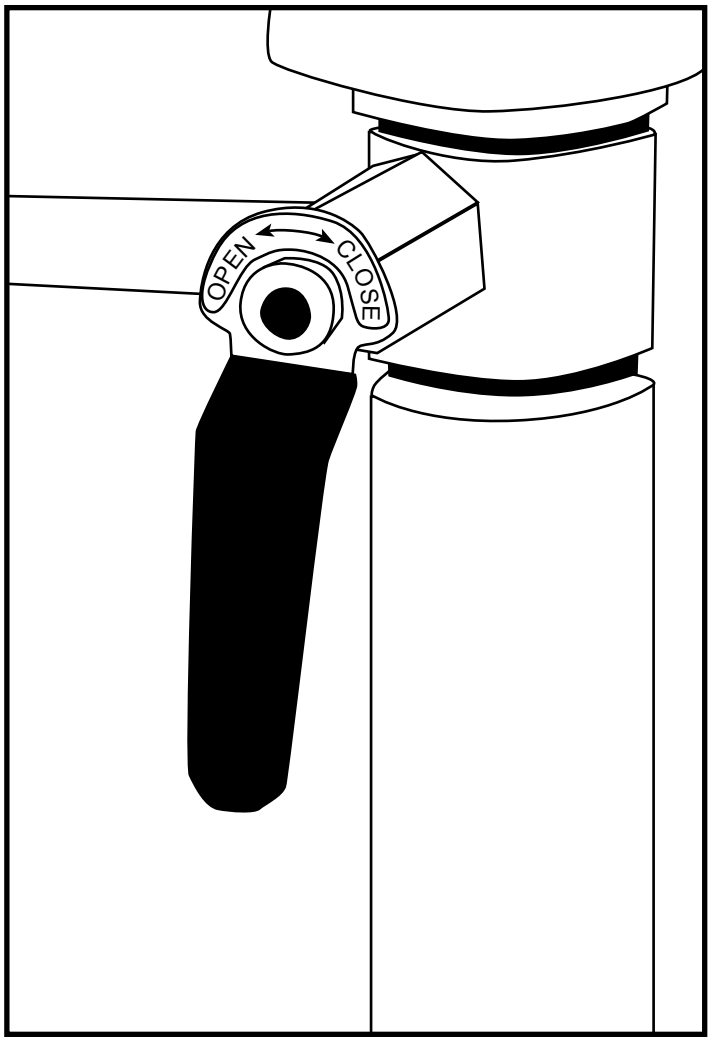
NEVER leave pump unattended while under pressure!

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.



LINE STRIPING OPERATION

1. CHOOSE THE GUN ARM POSITION

There are 4 holes in the frame on the 9500. In a standard set up, the gun arm would be mounted in the right hand near the swivel wheel. This allows for an easier visual check for straight line striping and for basic arc striping.

2. SETTING UP THE GUN

a. Ensure that striping tips are in the guns.
b. Pick a tip size for the desired line width.
EXAMPLE: a 317ST tip for a four inch line.
c. Place gun into the gun holder, so that the top of the taper on the gun handle is flush with the edge of the gun holder.
d. Set gun height for the desired line width. Adjust height by loosening the small black handle on the gun holder assembly and slide the gun arm to the correct height. Now tighten the handle. This will require some experimentation to find the correct height. It is suggested that tape, or some other method is used to mark the height of commonly used settings.
e. Set spacing between the two guns by loosening the black handle on the gun arm. Slide to the desired width and tighten.
f. Attach the swivel heads to the guns if painting curbs or wide stripes.
g. Angle the guns slightly forward. This allows the spray pressure from the guns to help blow dirt and debris out of the path of the new stripes.

3. CABLE TENSION ADJUSTMENT

Once the handle and gun arm assemblies are set up to the preferred positions, pressurize the unit and trigger each gun to ensure that they activate and release correctly. If not, adjust the cable tension as follows:

a. Locate the adjustment knobs on the base of the gun trigger, where the cable connects to the gun trigger assembly.
b. Loose the locking nut and move the adjusting screw until the slack has been removed from the cable.
c. Tighten locking nut and retest gun triggers for proper function.

NOTE: THERE IS AN ADDITIONAL CABLE ADJUSTMENT WHERE THE CABLE ATTACHES TO THE GUN HOLDER ASSEMBLY. USE ONLY IF THE GUN TRIGGER ADJUSTMENT IS INSUFFICIENT.

4. ALIGN SWIVEL WHEEL ASSEMBLY

STRAIGHT LINES

a. Loosen the two ratchet handles on the swivel wheel assembly, just enough to be able to move the assembly by hand. Lift the ratchet handle to move the handle without turning the attached bolts, then press down and turn handle counterclockwise to loosen.
b. Place the turnbuckle over the two mounting nubs on the frame.
c. Pressurize the unit with water and Airlessco's Pump Conditioner and spray out several lines with the swivel assembly in the locked position. Use the turnbuckle to fine tune the alignment of the wheels, until the stripes are straight.

IMPORTANT: Loosen ratchet handles prior to any turnbuckle adjustment.

d. Tighten the jam nuts on the turnbuckle to affix the turnbuckle length for future reference.
e. Tighten the ratchet handles.

CURVES AND ARCS

Basically the same as above, except the swivel wheel assembly is set at angle. The swivel assembly can be adjusted to 30 degrees either side of straight ahead. If you have arcs that you paint regularly, purchase additional turnbuckles (PN. 136-231) and keep them set to those arc sizes.

5. MISCELLANEOUS OPERATIONS

A.CURBS: Adjust gun to desired height and turn swivel head towards curb.
B.WIDE STRIPES: Install wider fan striping tips and raise the gun height to achieve the desired width line. Also angle guns slightly towards each other to get an even coat of paint.
C.STENCILS: Install standard spray tip on the outer gun. Remove this gun from the gun holder and spray out the stencils.
D.STANDARD PAINTING: Same as stencils, but use additional paint hose as required.

AIRLESS SPRAY GUN OPERATION

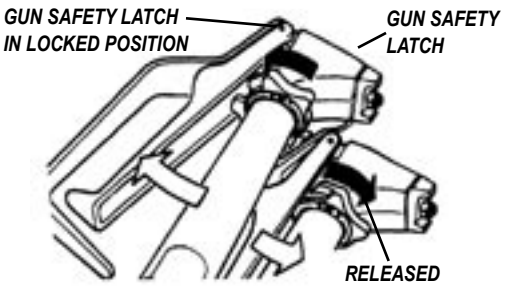
SPRAY

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.

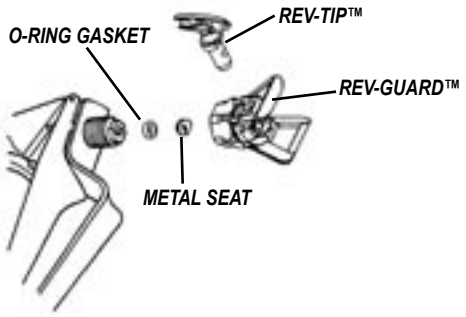
FIG. 7



MAJOR COMPONENTS OF SPRAY GUN AND REVERSIBLE SPRAY TIP

FIG. 8

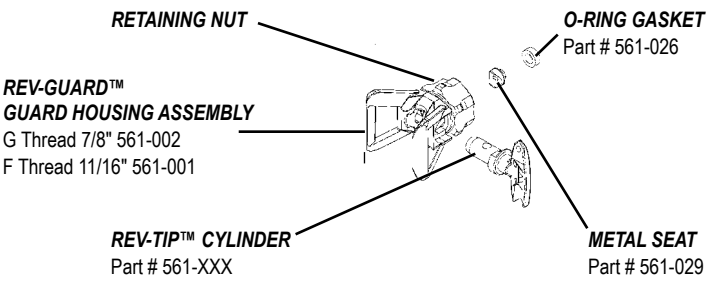
FIG. 9



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

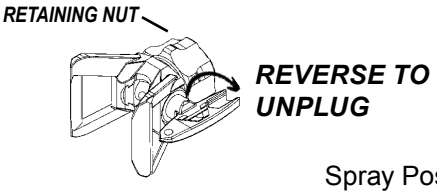
Immediately after the work is finished, flush the gun out with a solvent. Brush pins with solvent and oil them lightly so they will not collect dried paint.

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.



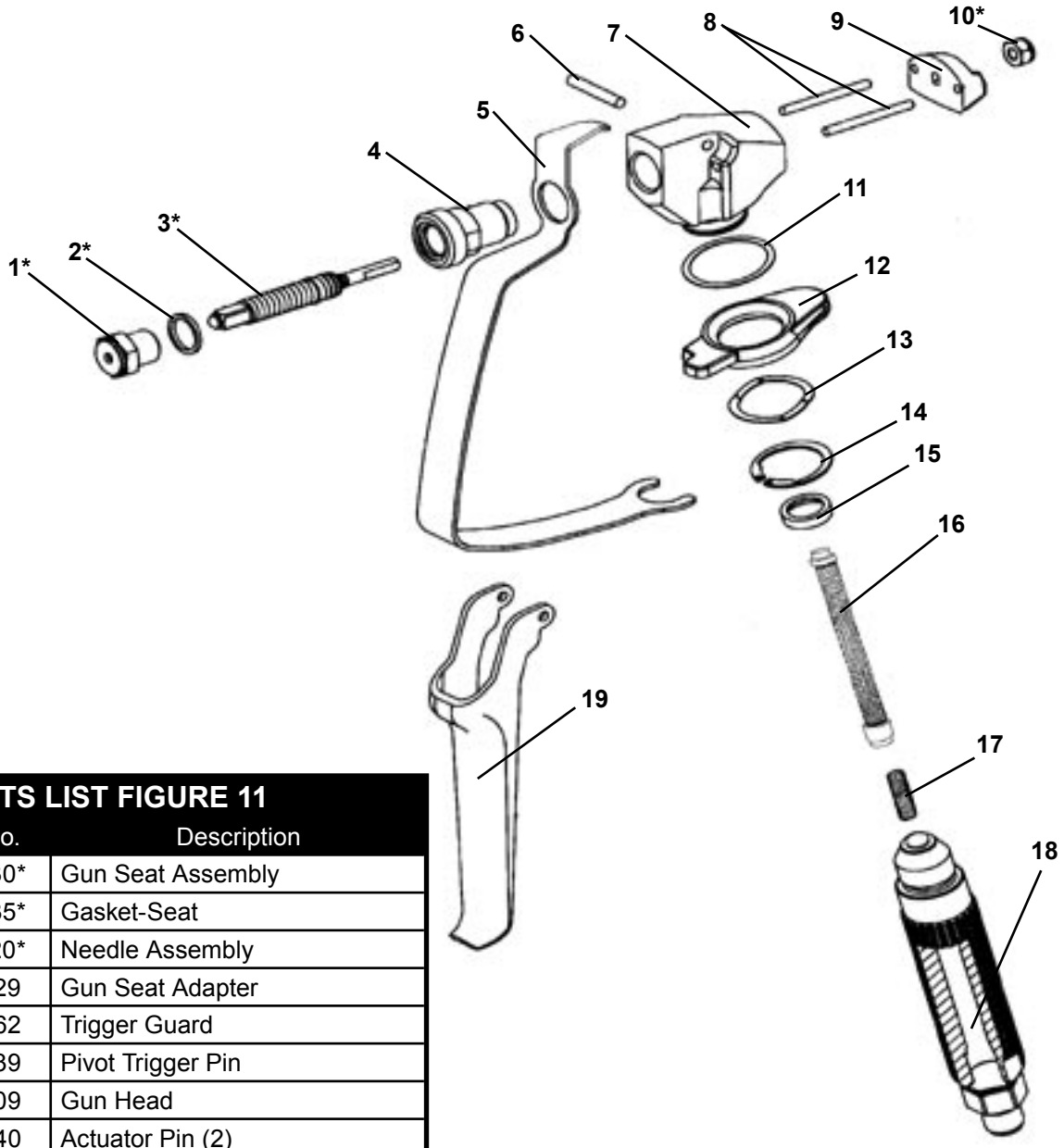
Spray Position Shown

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 GUN

FIG. 11



PARTS LIST FIGURE 11		
Item No.	Part No.	Description
1	120-530*	Gun Seat Assembly
2	120-535*	Gasket-Seat
3	120-520*	Needle Assembly
4	120-529	Gun Seat Adapter
5	120-562	Trigger Guard
6	120-539	Pivot Trigger Pin
7	120-509	Gun Head
8	120-540	Actuator Pin (2)
9	120-536	Gun Plate
10	120-038*	Nut
11	120-056	Plastic Washer
12	120-538	Gun Trigger Lock
13	120-055	Wave Washer
14	120-049	Retaining Ring
15	120-082	Handle Seal
16	120-090CX 120-090FX	Gun Filter-Coarse Gun Filter-Fine
17	120-088	Spring
18	120-099	Gun Handle Assembly
19	120-506	Gun Trigger
*	120-534	Gun Repair Kit

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***

LINE STRIPING TIP CHART

NOTE: STRIPING TIPS SHOULD NOT BE USED FOR REGULAR SPRAYING.

REV-TIP™ for Striping, Part Number 562-xxxST

TIP IDENTIFICATION

- 1st 3-digits identifies it as a **REV-TIP™** for airless line striping (Part Number 562-xxxST).
- 4th digit is the fan width - the number is half the fan width, e.g., 2means a 4" line width.
- 5th and 6th digits are for the orifice size and is measured in thousandths of an inch, e.g., 17 = 0.017 inch.

The higher the number, the larger the tip.

REVERSIBLE STRIPING TIP SIZE CHART

REV-TIP™ FOR STRIPING 562-XXXST						
FAN WIDTH (6" FROM SURFACE)		**ORIFICE SIZE (INCHES)**				
INCHES	**MILLIMETERS**	**.013**	**.015**	**.017**	**.019**	**.021**
1-2	25-51	113ST	115ST	117ST		
2-4	51-102		215ST	217ST	219ST	221ST
4-6	102-152		315ST	317ST	319ST	321ST
6-8	152-203		415ST	417ST	419ST	421ST
Striping paint		Oil Base	Oil Base	Latex	Latex	Latex

REV-TIP™ protected By U.S. Patent No. 6,264,115. Other U.S. & foreign patents applied for.

TIP REPLACEMENT

During use, high pressure will cause the orifice to grow larger. This destroys the pattern or will leave tailing or two heavy lines on the outside of the pattern. ***REPLACE SPRAY TIP FREQUENTLY!***

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 18-19. • 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 16-19.
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 17.
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 17. • Replace the packings. See page 18-19.
Engine stops.		• Refer to engine manual.

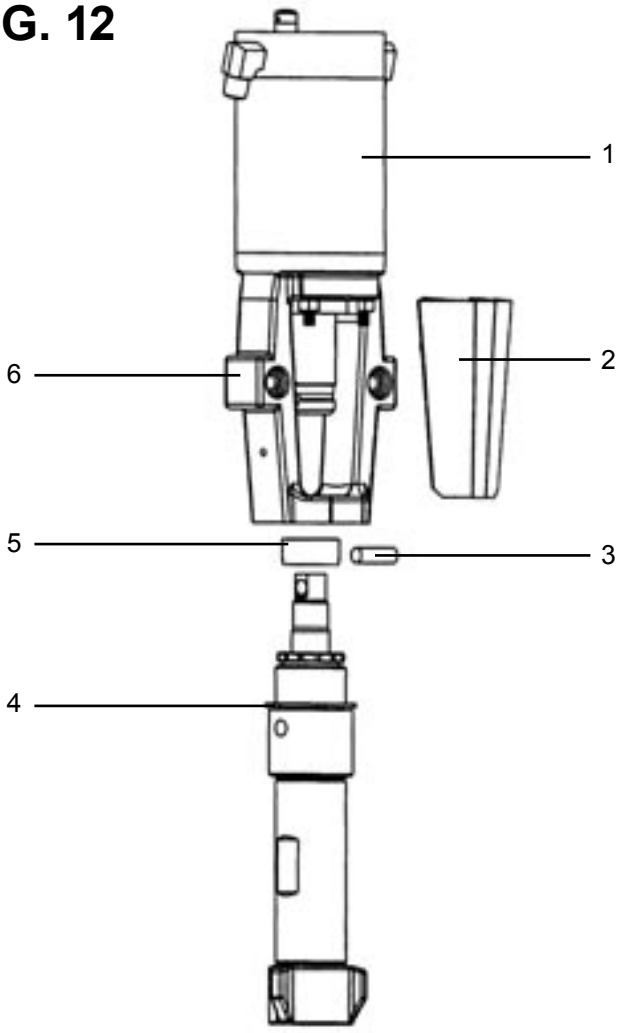
SERVICING THE FLUID PUMP

FLUID PUMP REMOVAL

REFER TO FIGURE 12

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. 12



PARTS LIST FIGURE 12

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 15

1. Remove Fluid Pump from machine.
2. Remove Inlet Valve Assembly - Refer to Servicing Inlet Valve, Page 17.
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 17.
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 12

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 18.
6. Reinstall Front Cover

SERVICING OUTLET VALVE ASSEMBLY

DISASSEMBLY OF THE OUTLET VALVE

REFER TO FIGURE 13

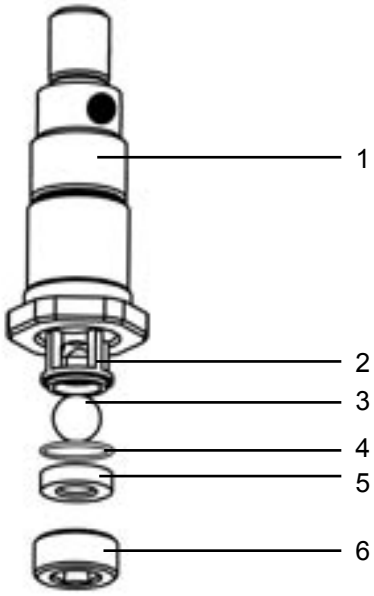
1. Remove Fluid Pump from machine - Refer to Fluid Pump Removal, Page 16.
2. Remove Outlet Valve Assembly - Follow steps 1-9, Disassembly of the Fluid Pump, Page 16
3. Hold Piston End in vise bottom up to access 7/16" Hex in Retainer. Remove Retainer.
4. Remove Outlet Seat. Do not pry, it will chip the 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 13

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 18.

FIG. 13



PARTS LIST FIGURE 13

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 14

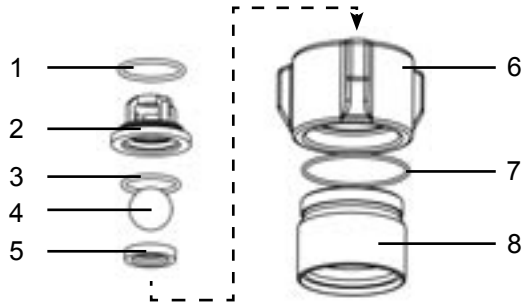
1. Relieve pressure following ***PRESSURE RELIEF PROCEDURE*** steps on page 9.
2. Remove Inlet Valve Housing.
3. Remove Ball Guide, O-Rings and Inlet Ball. Remove Inlet Seat.
7. Clean and inspect parts for wear or damage, replace parts as necessary. PTFE O-Ring and Viton O-Ring will always be replaced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

DISASSEMBLY OF THE INLET VALVE

REFER TO FIGURE 14

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. 14



PARTS LIST FIGURE 14

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 15

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 15

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 17.
9. Reinstall Fluid Pump - Refer to Fluid Pump Reinstallation, Page 16.

PARTS LIST FIGURE 15

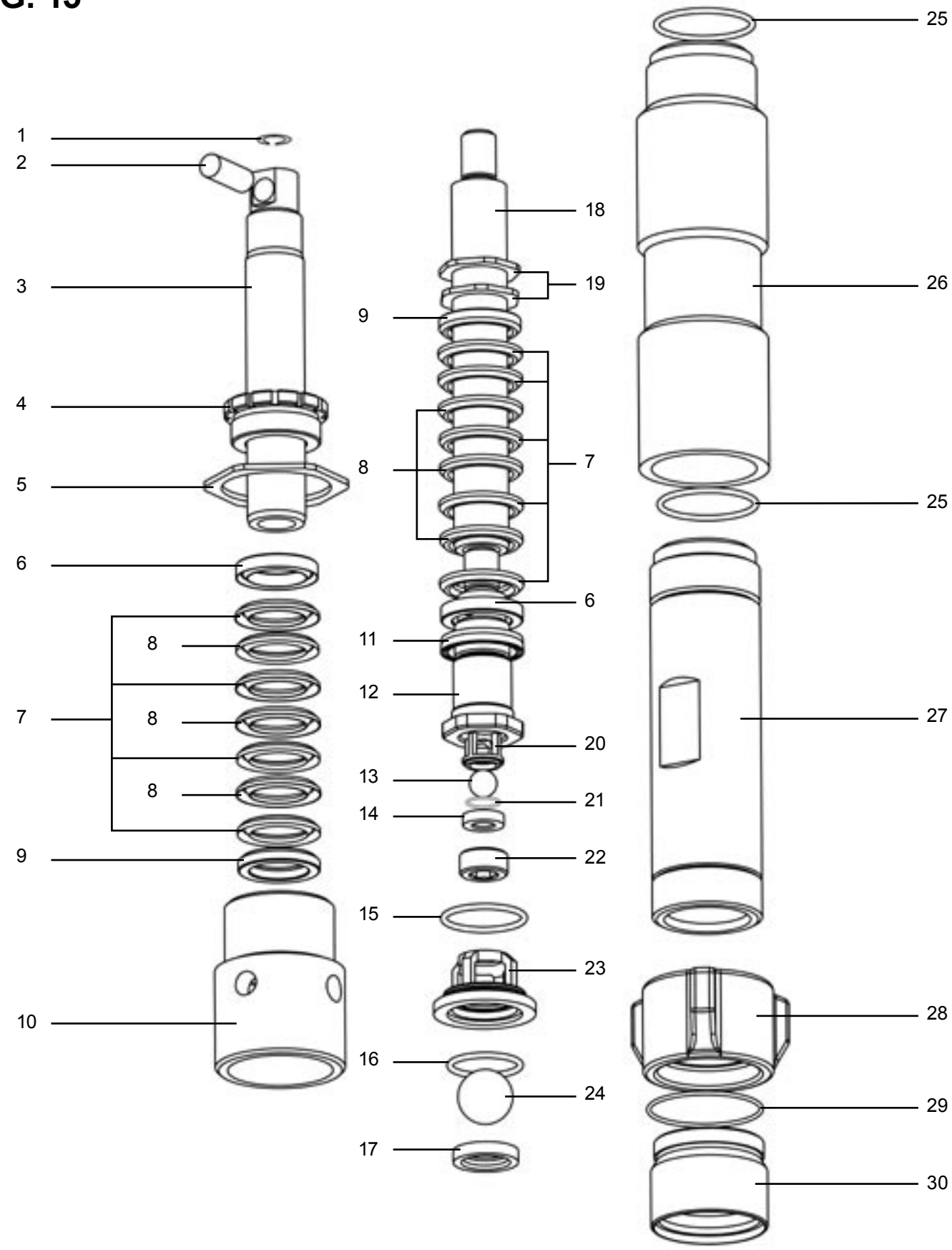
Item No.	Part No.	Description
1	116-106	Retaining Ring
2	119-025	Piston Pin
3	187-070	Displacement Rod
4	187-071	Packing ADJ Nut
5	187-088	Jam Nut
6	187-072	Female Gland
7	187-075**	Packing UHMWPE
8	187-074**	Packing Leather
9	187-073	Male Gland
10	187-076	Outlet Housing
11	187-083**	Scraper
12	187-078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

PARTS LIST FIGURE 15

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

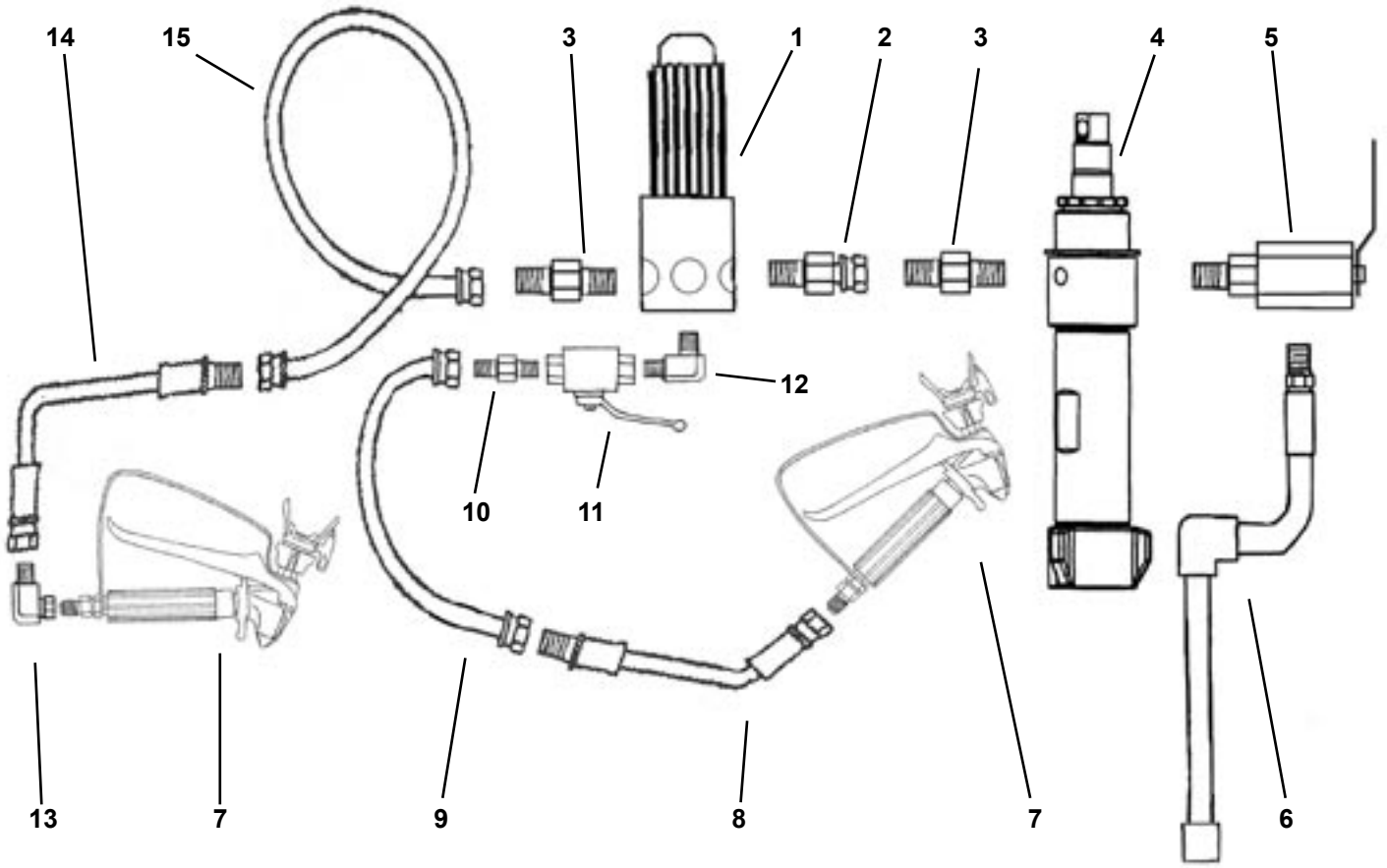
FLUID PUMP ASSEMBLY

FIG. 15



PAINT SYSTEM

FIG. 16

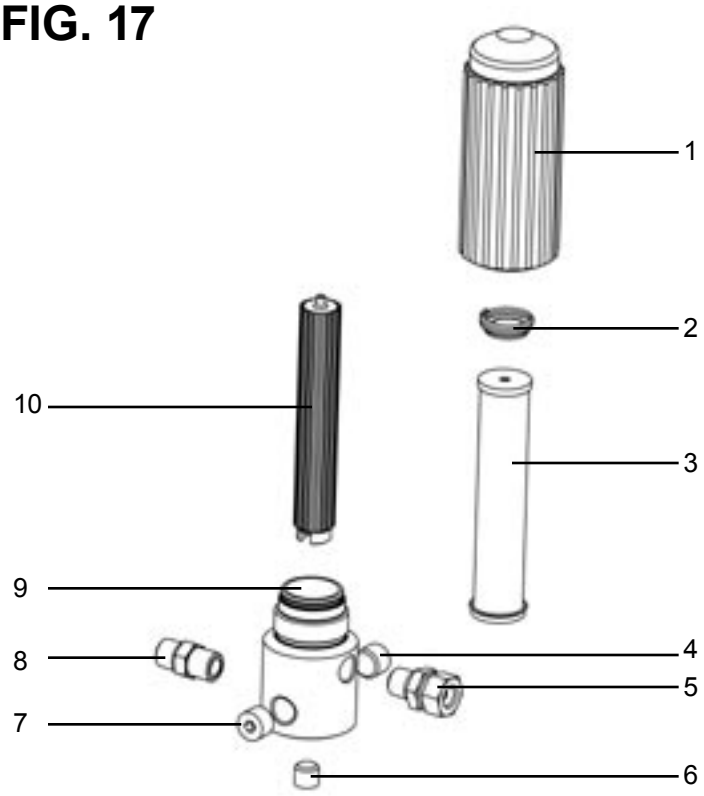


PARTS LIST FIGURE 16		
Item No.	Part No.	Description
1	305-394	Manifold Filter Assy
2	100-005	Swivel Nut
3	169-010	Nipple 3/8” M
4	187-100	Fluid Pump
5	119-083	Prime Valve
6	119-086	Bypass Hose Assy
7	120-554	008 Airless Gun
8	100-204	Hose 1/4” x 5’

PARTS LIST FIGURE 16		
Item No.	Part No.	Description
9	100-199	Hose 3/8” x 6’
10	115-019	Connector 1/4”
11	100-119	Ball Valve
12	169-013	Elbow 3/8” M x 3/8” F
13	100-177	Swivel Elbow 1/4”
14	100-011	Hose 1/4” x 50’
15	100-023	Hose 3/8” x 50’

MANIFOLD FILTER (305-394)

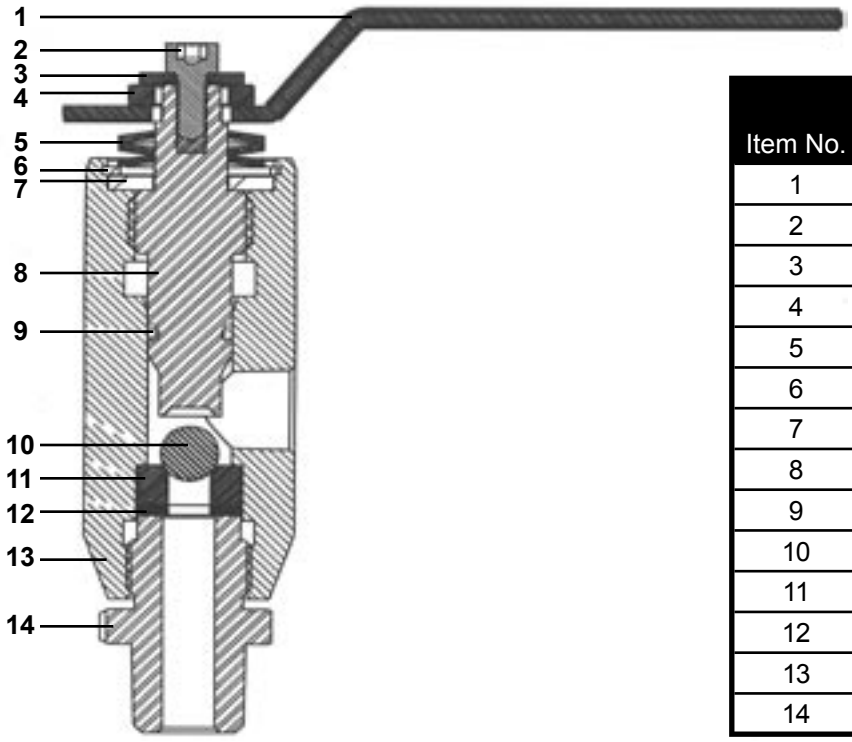
FIG. 17



PARTS LIST FIGURE 17		
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	111-201	Housing Base
6	100-028	Plug
7	100-129	Plug
8	169-010	Nipple
9	106-007	O-Ring, PTFE
10	111-203	Filter Support

PRIME VALVE (119-083)

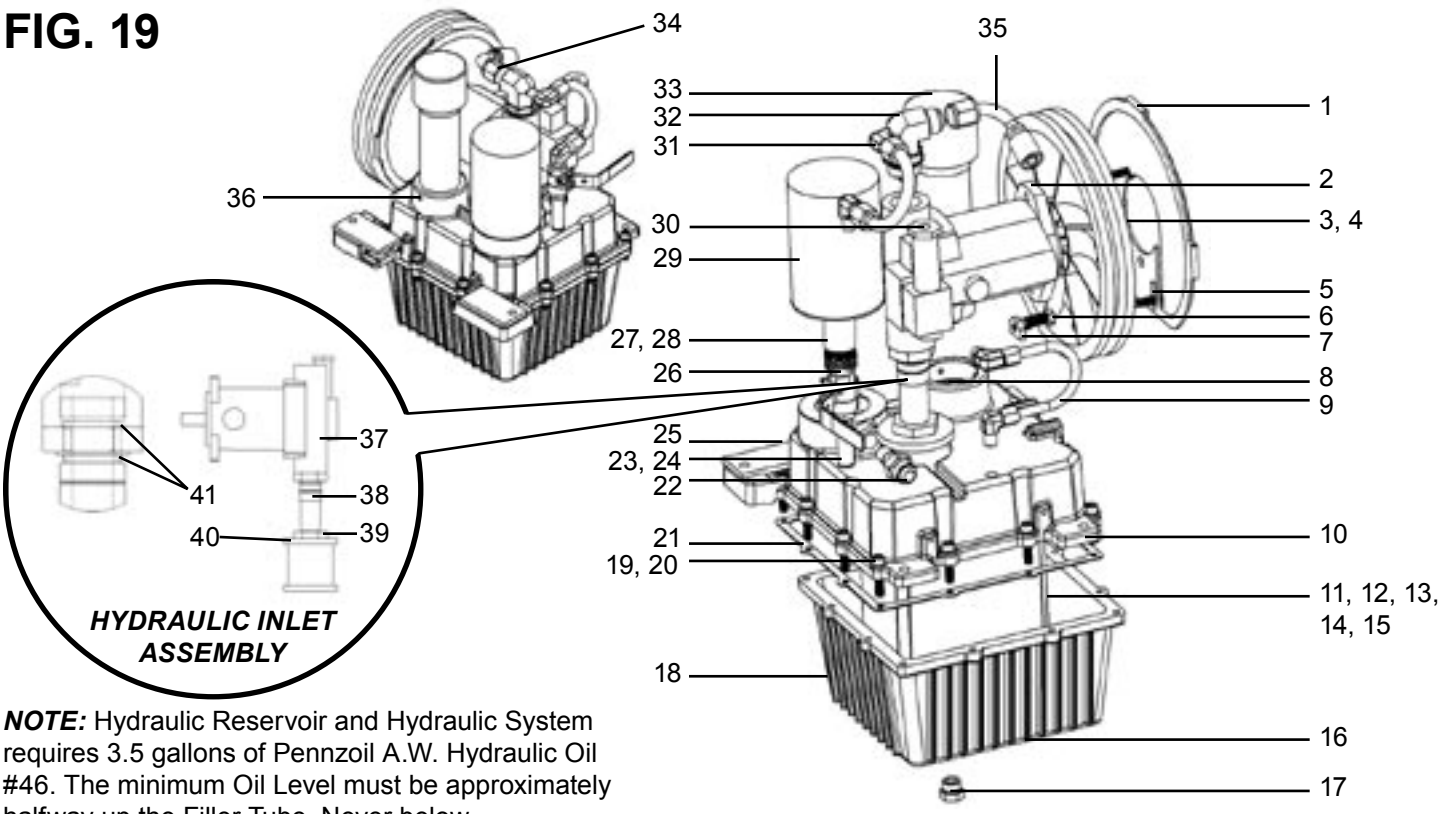
FIG. 18



PARTS LIST FIGURE 18		
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. 19



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 19

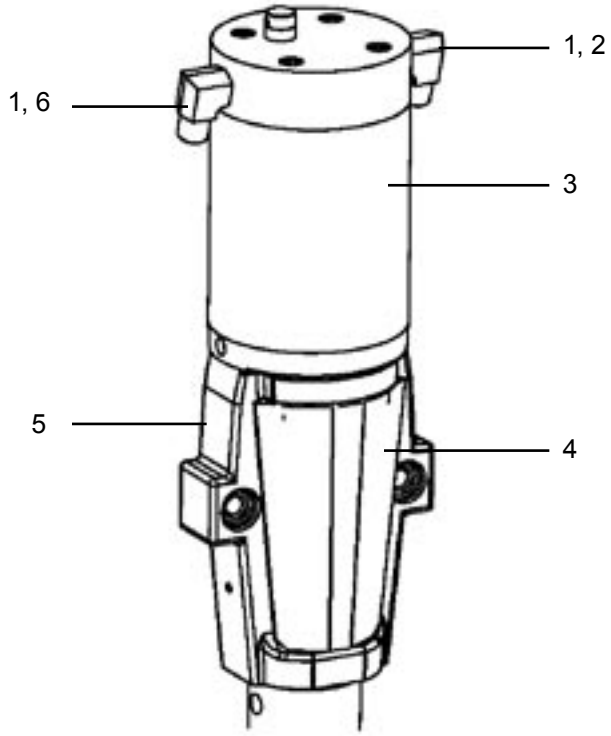
Item No.	Part No.	Description
1	189-567	Pump Bracket
2	189-605	Pump Assy
3	100-662	Set Screw
4	189-579	Pully Assembly
5	100-173	Screw (2)
6	100-653	Bolt
7	136-235	Nut
8	106-032	Filler O-Ring
9	189-609	Hydraulic Bypass Tube
10	189-569	Reservoir Top
11	189-556	Baffle
12	189-583	Baffle Plate
13	189-549	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 19

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

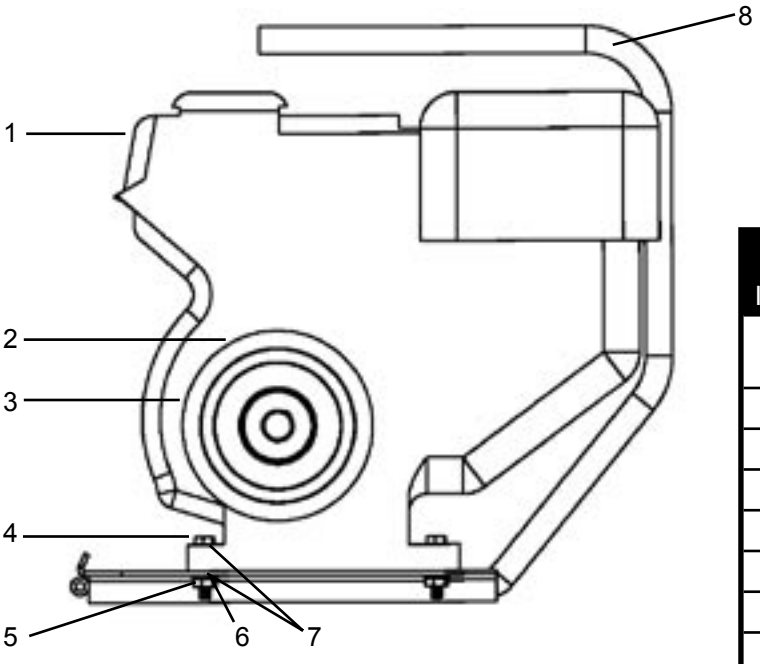
FIG. 20



PARTS LIST FIGURE 20		
Item No.	Part No.	Description
1	100-133	Elbow (2)
2	189-545	High Pressure Hose
3	186-100	Hydraulic Motor
4	119-099	Front Cover
5	186-078	Yoke
6	189-546	Hydraulic Return Hose

POWER UNIT (189-597 HONDA) (189-621 DURO)

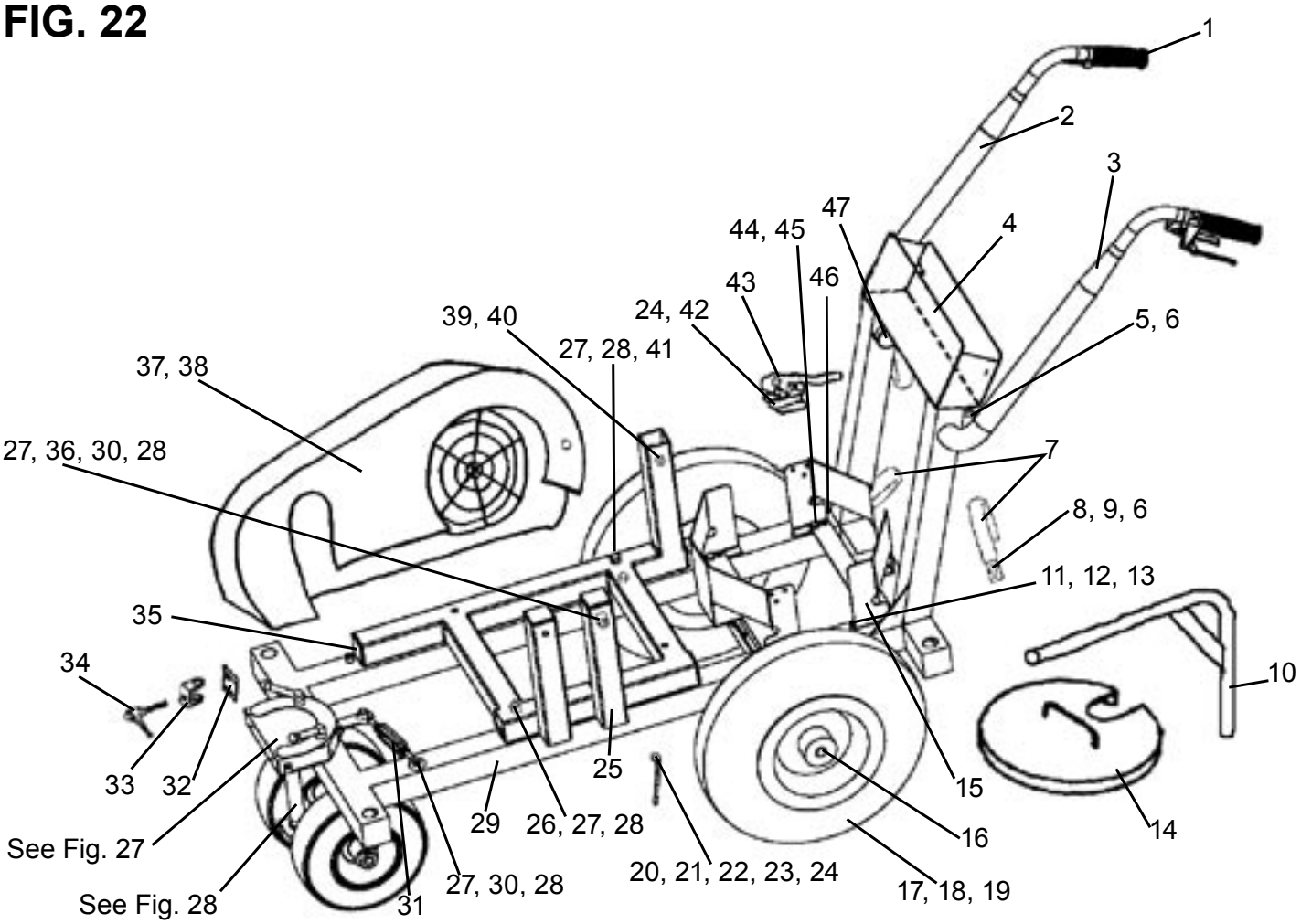
FIG. 21



PARTS LIST FIGURE 21		
Item No.	Part No.	Description
1	175-025 175-034	GX200 Honda Gas Engine 6.5HP Durotech Gas Engine
2	112-029	Key
3	189-531	Pully
4	136-123	Screw (4)
5	113-022	Nut (4)
6	113-023	Lock Washer (4)
7	140-029	Washer (8)
8	189-593	Lifting Handle/Plate Assy
9	189-524	V-Belt (Not Shown)
10	101-006A	Warning Decal (Not Shown)

FRAME ASSEMBLY (305-010)

FIG. 22



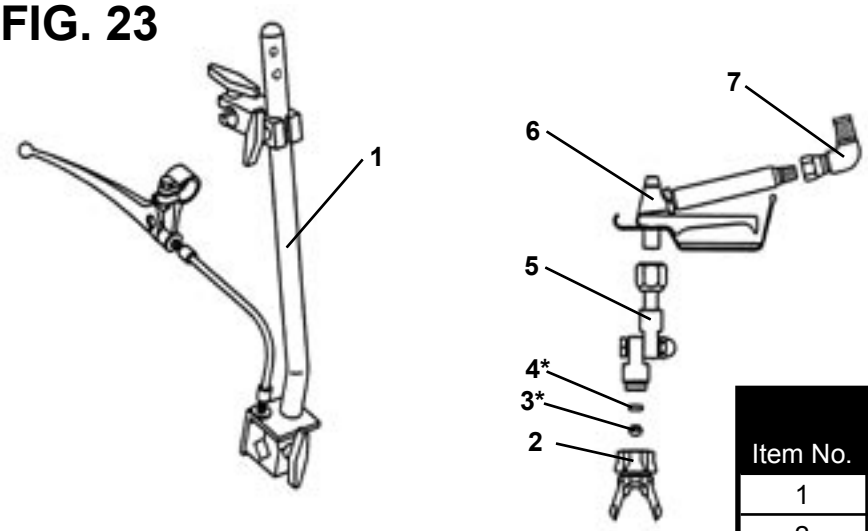
FRAME ASSEMBLY (305-010)

PARTS LIST FIGURE 22		
Item No.	Part No.	Description
1	305-058	Rubber Grips (2)
2	305-315	Handle (Right)
3	305-314	Handle (Left)
4	101-764	Sure Stripe Label
5	301-547	Screw (2)
6	113-022	Nut (4)
7	100-686	Hook (4)
8	100-360	Screw (4)
9	100-344	Washer (4)
10	305-076	Gun Arm (Long, 2 Gun)
11	100-687	Cable Retainer (3)
12	100-688	Screw (3)
13	100-317	Nut (3)
14	301-533	Bucket Lid
15	305-144	Bucket Holder (2)
16	305-052	Axle
17	305-056	Wheel (2)
18	305-054	Cotter Pin (2)
19	305-055	Nut (2)
20	188-163	Terminal Ring
21	136-133	Key Ring
22	136-132R	Chain 10”
23	117-009	Screw
24	188-042	Nut (5)

PARTS LIST FIGURE 22		
Item No.	Part No.	Description
25	189-510	Bracket Weldment
26	100-321	Screw (5)
27	140-051	Nut (8)
28	140-035	Washer (8)
29	305-050	Frame Weldment
30	100-678	Screw (2)
31	136-231	Turnbuckle
32	305-108	Plate
33	305-051M	Clamp
34	305-044	Adjustable Handle
35	100-602	Plug 1.75” Sq (4)
36	100-683	Spacer (6)
37	101-431	Belt Cover Label
38	189-596	Belt Cover
39	100-682	Screw
40	100-680	Nut
41	119-081	Screw
42	100-390	Screw (4)
43	305-185	Brake Assembly
44	111-044	Screw (8)
45	139-327	Rivnut (12)
46	100-621	Cap 2” Sq.
47	100-601	Plug (2)

FIRST GUN ASSEMBLY (305-391)

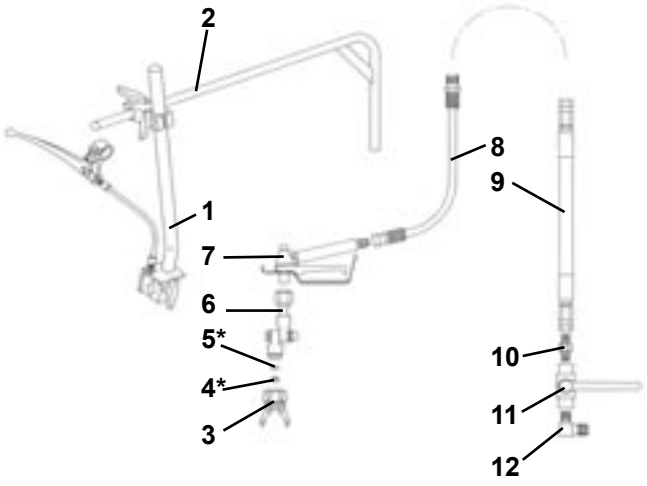
FIG. 23



PARTS LIST FIGURE 23		
Item No.	Part No.	Description
1	305-393	Gun Holder
2	561-002	RevGuard (G Thread)
3	561-025*	Metal Seal
4	561-026*	Plastic Seal
5	032-028	Swivel Assy
6	120-554	008 Airless Gun
7	100-177	Elbow
*	561-029	Seal Kit

SECOND GUN ASSEMBLY (305-392)

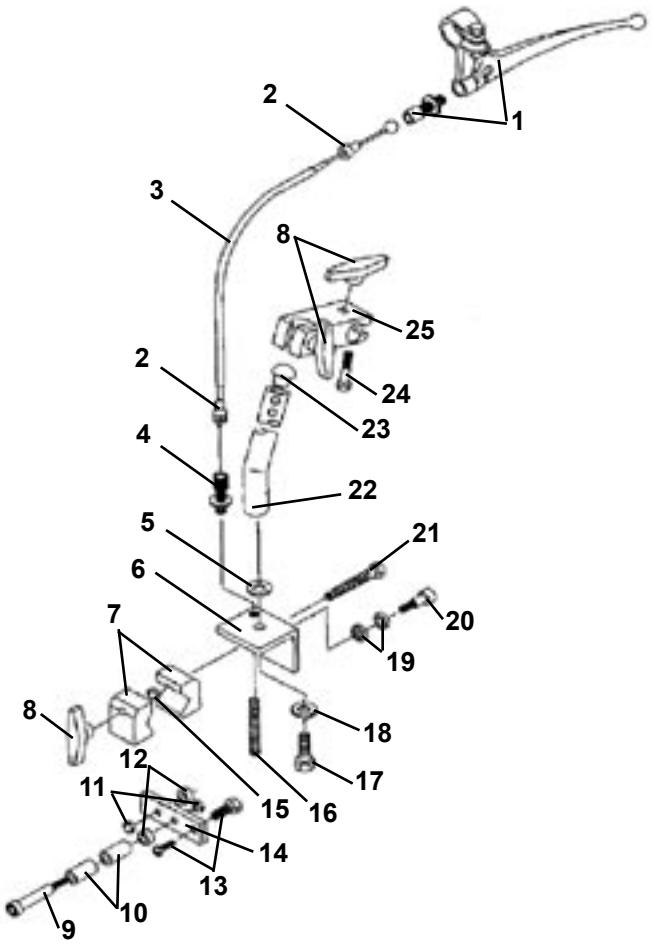
FIG. 24



PARTS LIST FIGURE 24		
Item No.	Part No.	Description
1	305-393	Gun Holder
2	305-076	Gun Arm (Long)
3	561-002	RevGuard (G Thread)
4	561-025*	Metal Seal
5	561-026*	Plastic Seal
6	032-028	Swivel Assy
7	120-554	008 Airless Gun
8	100-204	Hose 1/4” x 5’
9	100-199	Hose 3/8” x 6’
10	115-019	Connector
11	100-119	Ball Valve
12	100-141	Elbow
*	561-029	Seal Kit

GUN HOLDER ASSEMBLY (305-393)

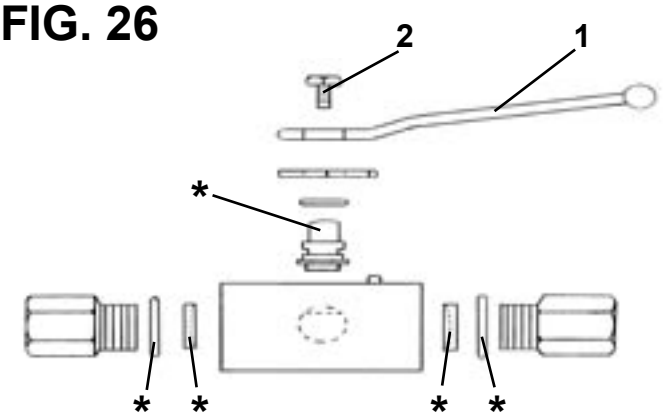
FIG. 25



PARTS LIST FIGURE 25		
Item No.	Part No.	Description
1	305-142	Lever Assy
2	305-089	Cable Insert
3	100-685	Gun Cable Assy
4	305-141	Cable Adjuster
5	111-052	Tube Connector
6	305-154	Bracket
7	305-152	Clamp (2)
8	305-157	Knob (3)
9	100-342	Screw
10	305-159	Sleeve Bearing (2)
11	140-045	Jam Nut (2)
12	305-161	Spacer (2)
13	305-079	Wire Swivel Assy
14	305-155	Lever
15	140-051	Nut
16	116-100	Spring
17	169-050	Screw
18	113-027	Lock Washer
19	305-156	Thrust Washer (2)
20	305-158	Shoulder Screw
21	100-673	Screw
22	305-297	GS Holder
23	143-027	Ball Guide
24	171-008	Screw (2)
25	136-019P	Swivel Clamp Assy

BALL VALVE (100-119)

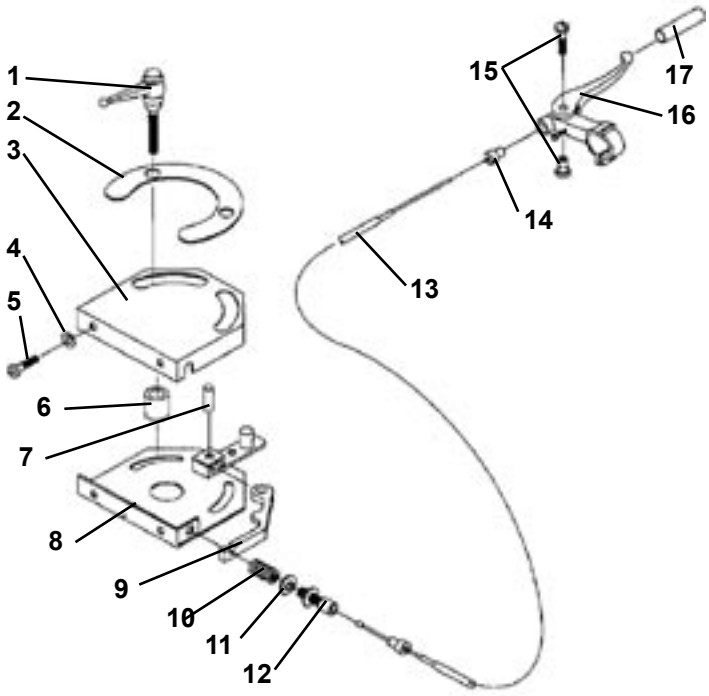
FIG. 26



PARTS LIST FIGURE 26		
Item No.	Part No.	Description
1	100-162	Handle
2	100-163	Screw
*	Kit-119	Rebuild Kit

SWIVEL LOCK ASSEMBLY (305-390)

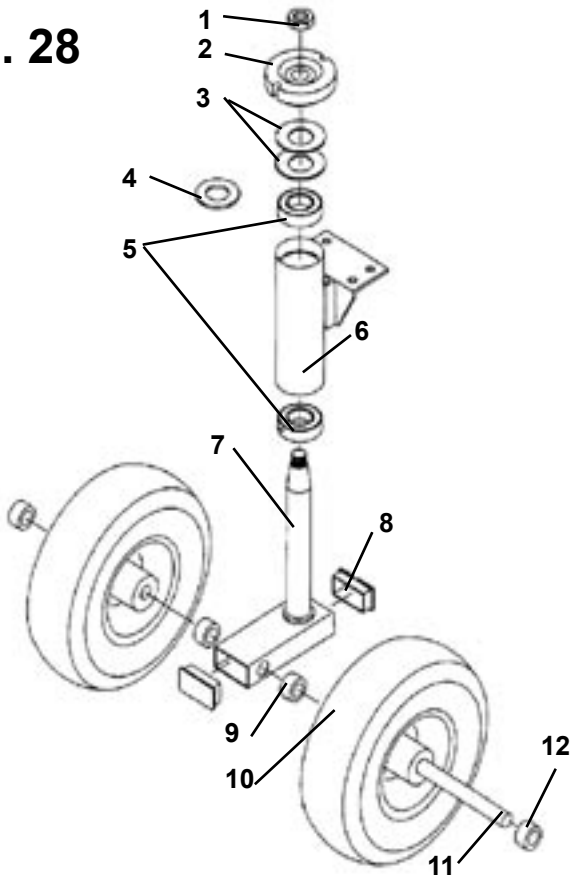
FIG. 27



PARTS LIST FIGURE 27		
Item No.	Part No.	Description
1	305-020	Adjustable Handle (2)
2	305-091	Seal
3	305-049	Cover-Lock
4	140-042	Washer (3)
5	331-138	Screw (3)
6	305-027	Spacer (2)
7	119-028R	Dowel Pin
8	305-031	Base Lock Weldment
9	305-081	Lever
10	305-032	Spring
11	119-019	Washer (2)
12	305-141	Cable Adjuster
13	100-684	Cable Assy Swivel
14	305-089	Cable Insert (2)
15	136-023	Cable End Lug
16	305-105	Lever
17	301-335	Heat Shrink

SWIVEL WHEEL ASSEMBLY (305-022)

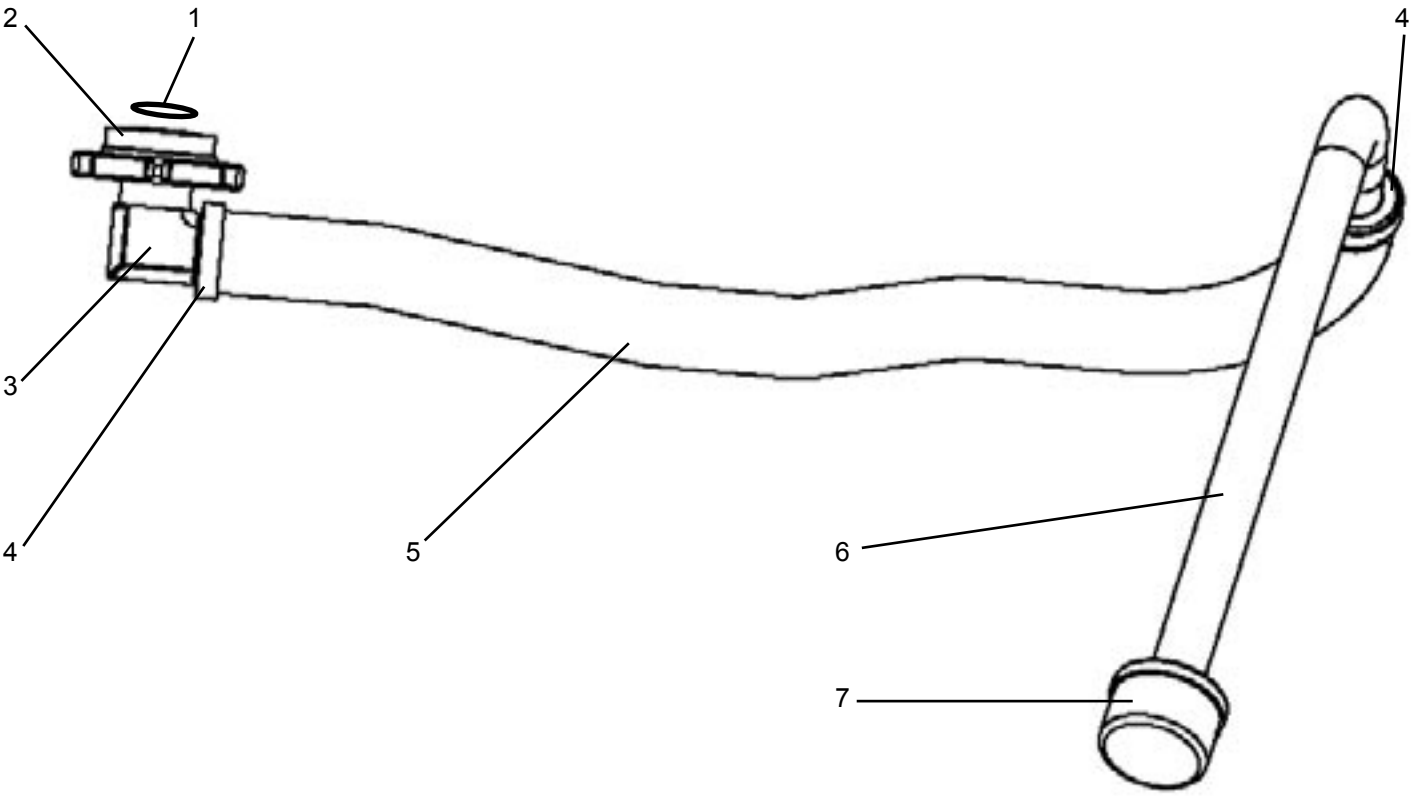
FIG. 28



PARTS LIST FIGURE 28		
Item No.	Part No.	Description
1	301-227	Jam Nut
2	305-025	Swivel Lock
3	305-028	Belleville Springs (2)
4	305-179	Shim
5	301-036	Bearing (2)
6	305-023	Swivel Body
7	305-024	King Pin
8	305-037	Plug (2)
9	113-030	Spacer (2)
10	139-337A	Wheel (2)
11	305-038	Axle
12	143-029	Set Collar (2)

SUCTION ASSEMBLY (305-387)

FIG. 29



PARTS LIST FIGURE 29		
Item No.	Part No.	Description
1	119-110	O-Ring
2	189-587	Suction Nut
3	100-668	Suction Elbow
4	100-664	1” ID Suction Hose

PARTS LIST FIGURE 29		
Item No.	Part No.	Description
5	301-514	5 Gal Suction Tube
6	141-008	Filter Basket
7	250-116	Clamp (2)