Inerkules

G100

OWNERS MANUAL



This manual contains important information concerning the installation and operation of the gun washers listed above. Read manual thoroughly and keep for future reference

INSTRUCTIONS

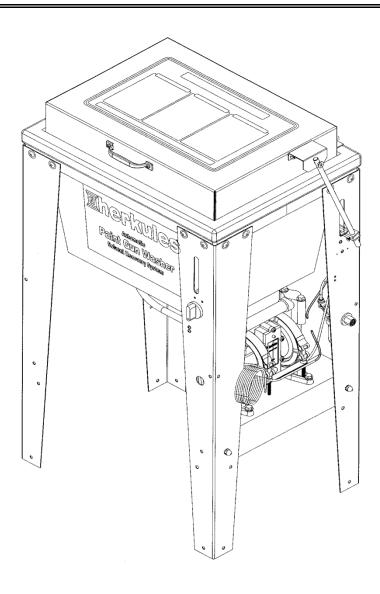


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Warning Symbol



This symbol alerts you to the possibility of serious injury or death if you do not follow the instructions.

Caution Symbol



This symbol alerts you to the possibility of damage to or destruction of equipment if you do not follow the instructions.

WARNING



EQUIPMENT MISUSE HAZARD

Equipment misuse can cause the equipment to rupture, malfunction, or start unexpectedly and result in serious injury.

- This equipment is for professional use only.
- Read all instruction manuals, tags, and labels before operating the equipment.
- Use the equipment only for its intended use.
- Do not alter or modify this equipment.
- Do not exceed the maximum working pressure of the lowest rated system component.
- Do not operate the gun washer at a pressure above the maximum working pressure rating of the gun(s) being cleaned.
- Route the hoses away from traffic areas, sharp edges, moving parts, and hot surfaces.
- Do not use the hoses to pull the equipment.
- Do not move pressurized equipment.
- Use fluids or solvents that are compatible with the equipment wetted parts. Read the fluid and solvent manufacturer's warnings
- Comply with all applicable local, state and national fire, electrical and other safety regulation.



PRESSURIZED EQUIPMENT HAZARD

Spray from hose leaks, ruptured components, or from operating the gun washer with an open lid can splash fluid in the eyes or on the skin and cause serious injury.

- A safety device has been installed to shut off the pump when the gun washer lid is opened.
 Do not tamper with or alter this device.
- Open the gun washer lid slowly.
- Do not prop the gun washer lid open with an object or by any other means.
- Do not stop or deflect fluid leaks with your hand, body, glove, or rag.
- Tighten all fluid connections before operating the equipment.
- Replace worn, damaged, or loose parts immediately.

WARNING



FIRE AND EXPLOSION HAZARD



Improper grounding, poor air ventilation, open flames, or sparks can cause a hazardous condition and result in fire or explosion and serious injury.

- Ground the equipment. See Installation for grounding procedure.
- Provide fresh air ventilation to avoid the build up of flammable fumes from the solvent.
- Extinguish all open flames or pilot lights in the gun washer area.
- Disconnect all electrical equipment in the gun washer area.
- Keep the gun washer area free of debris, including solvent, rags, and gasoline.
- Do not turn on any light switch in the gun washer area while operating or if fumes are present.
- Do not smoke in the gun washer area.
- Do not operate a gasoline engine in the gun washer area.
- Follow the gun manufacturer's solvent and other cleaning recommendations.
- Use solvent with the highest possible flash point.
- If there is any static sparking while using the equipment, **stop operation immediately.** Identify and correct the problem.
- Drain the cleaning solution into a proper storage container when gun washer(s) is not in use.



TOXIC FLUID HAZARD

Hazardous fluids or toxic fumes can cause serious injury or death if splashed in eyes or on the skin, swallowed, or inhaled.

- Know the specific hazards of the fluid you are using. Read the fluid manufacturer's warnings.
- Store hazardous fluid in an approved container. Dispose of hazardous fluid according to all local, state and national guidelines.
- Wear the appropriate protective clothing, gloves, eyewear and respirator.
- Pipe and dispose of the exhaust air safely. If diaphragm fails, the fluid may be exhausted along with the air.

Assembly

Stand and tub connections

STEP 1

Position the pump mount bracket between the timer leg and the filter/regulator leg of the stand assembly. Attach the pump mount bracket to the stand using (2) 1/4-20 x 1/2 hex bolts, (2) #10 flat washers, (2) 1/4" lock washers and (2) 1/4" acorn nuts per leg (see fig.1).

STEP 2

Attach the pump to the stand using the $(2) 1/4-20 \times 1$ hex bolts, (2) 1/4" flat washers, (2) 1/4" lock washers and (2) 1/4" hex nuts per leg (see fig.1).

Fluid hose connections

STEP 3

Connect the drain hose assembly to the flare connector on the bottom of the tub and tighten. This can easily be disconnected when inserting into a 5-gallon can. (see fig.2).

Ensure bulkhead DOES NOT TURN when tightening.

STEP 4

Attach the siphon filter to the 23" length of black hose by inserting the barb into the end of the hose. Slide the white plastic plug over the opposite end of the hose so that the threads are in the direction of the filter (see fig.2).

STEP 5

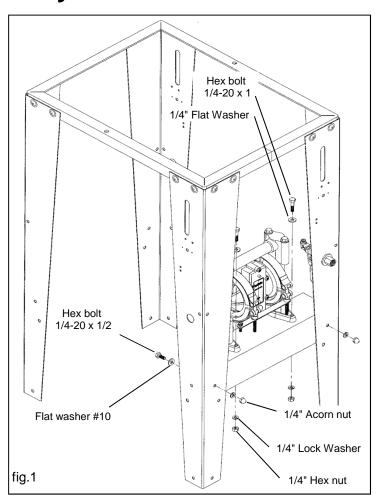
Attach the other end of the 23" hose to the lower (IN) 90° barb on the pump (see fig.2)

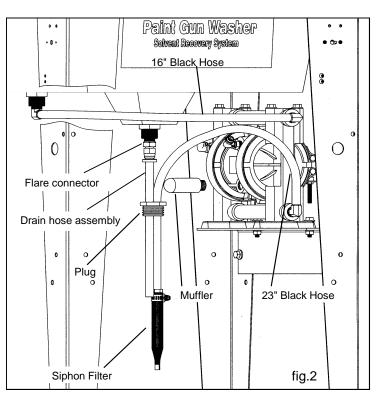
STEP 6

Run the 16" black hose from the upper (OUT) 90° barb on the pump to the 90° barb at the rear-left corner on the underside of the tub (see fig.2)

STEP 7

Attach the white plastic muffler to the exhaust port of the pump (see fig.2).





Assembly

Air hose connections

STEP 8

Connect the black 5/32" air hose between the regulator and the air in port of the limit valve located on the rear leg of the gun washer. Press tubing in through the collar until seated. Pull firmly on hose to test for a tight connection. (see fig.3).

Note: Air-in port of limit valve is the port opposite the roller.

STEP 9

Connect the blue 5/32" air hose between the air in port of limit valve located on the front leg and the air out port of the limit valve located on the rear leg of the gun washer. Press tubing in through the collar until seated. Pull firmly on hose to test for a tight connection (see fig.3).

STEP 10

Connect the clear 5/32" air hose between the pump and the air out port of the limit valve located on the front leg of the gun washer. Press tubing in through the collar until seated. Pull firmly on hose to test for a tight connection. (see fig.3).

Lid assembly and attachment

STEP 11

Attach the handle to the front of the lid using (2) 10-24 x 1/2 stainless screws, (2) #10 nylon washers, and (2) 10-24 stainless nuts (see fig.4).

STEP 12

Attach the actuator bracket to the right side of the lid using (2) 10-24 x 1/2 stainless screws, (2) #10 nylon washers, and (2) 10-24 stainless nuts (see fig.4).

STEP 13

Attach the (2) hinges to the rear of the lid using (1) 10-24 x 1/2 stainless screw, (1) #10 nylon washer and (1) 10-24 stainless nut for each hinge (see fig.4).

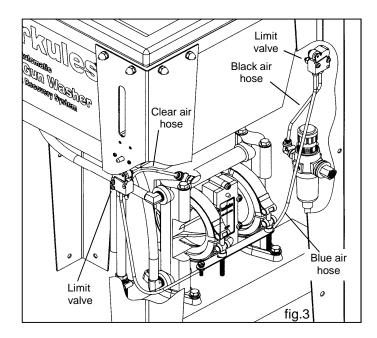
Note: Install the internal ground wire while attaching the hinge on the actuator side of the lid (see fig.5).

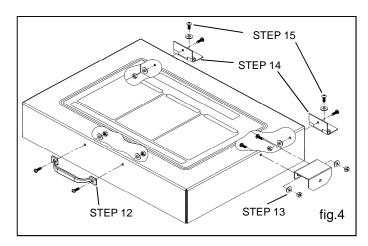
STEP 14

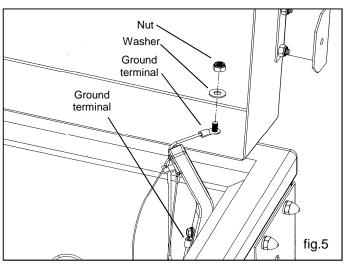
Place the lid on the tub and align the holes in the hinges with the inserts in the lip of the tub. Use (2) 10-32 x 3/8 black screws and (2) #10 flat washers to secure the hinges to the tub. Finger tighten screw closest to the actuator bracket.

Note: If the lid does not sit flat, extra washers should be added beneath the hinges at either side to ensure the lid sits flat on the tub.

Refer to the parts call-out for the lid assembly on pg.14 for descriptions and placements of parts.







Assembly

Grounding the lid

STEP 15

Using an 1/8" allen wrench, remove the back right lid screw. Connect the ground wire (with the aluminum terminal attached) from the pump to the lid screw and reconnect it to the tub (see fig.6).

Connecting lid rod and actuator linkage

STEP 16

Slide the actuator over the lid rod and hand tighten approx. 2" from the end of the rod. Insert the actuator into the large slot in the right rear leg (see fig.7).

STEP 17

Attach the lid rod to the lid bracket using the 1/4" clevis pin and circular cotter pin supplied (see fig.6).

STEP 18

To adjust the actuator, close the lid and loosen the set screw on the actuator. Slide the actuator down until it completely closes the limit valve and retighten the set screw (see fig.7).

Note: It is necessary for the roller switch to be completely engaged for the pump to operate properly. Be sure that the actuator is absolutely secure and at the lowest possible point.

If the pump is operating slowly, check the actuator first.

Final Assembly

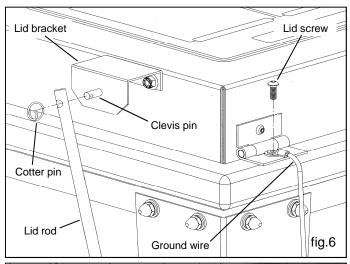
STEP 19

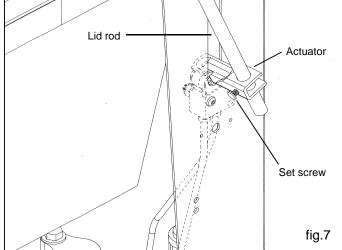
Using a 3/8" hex socket with either a ratchet or power drill, drive the (2) #14 screws through the two holes in the frame and into the underside of the tub's lip(see fig.8).

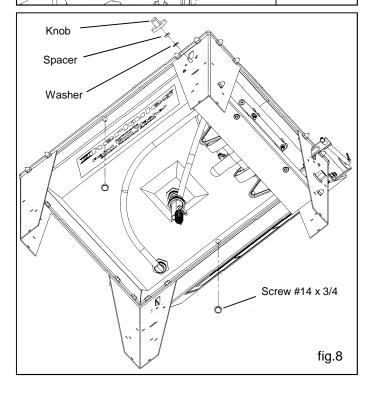
Note: Be sure to provide pressure down from the top of the tub while driving the screws. Do NOT over-tighten.

STEP 20

Install the timer knob on the protruding shaft on the front right leg by first using (1) #10 flat washer, followed by (1) 1/2" OD nylon spacer, then slide the knob over the shaft (see fig.8).

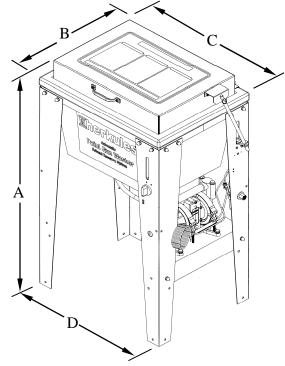






Model Information

Parts bag co	ontents	woaei	Into
001-702	Bolt Hex 1/4-20 x 1/2 Z		2 ea.
001-705	Flat washer 1/4"		2 ea.
002-158	Screw #14 x 3/4 - zinc		2 ea.
002-160	Nut Hex 10-32 Z		2 ea.
002-161	Flat washer #10		5 ea.
005-131	Screw 10-24 x 1/2 - stainless		6 ea.
005-132	Nut hex 10-24 - stainless		6 ea.
005-155	Screw 10-32 x 3/8 - black		2 ea.
008-244	Acorn nut 1/4-20 - nickle		2 ea.
10A	Handle		1 ea.
1000132	Hinge		2 ea.
1000252	Cotter pin		1 ea.
1000652	Clevis pin 1/4 dia.		1 ea.
1002423	Owner's Manual		1 ea.
1002656	Flat washer #10 - nylon		6 ea.
11130	Slotted plug - nylon		1 ea.
11957	Actuator		1 ea.
12131	Actuator bracket		1 ea.
53B	Stem support female		1 ea.
83	Hex bolt 1/4-20 x 1 - zinc		2 ea.
84	Hex nut 1/4-20 - zinc		2 ea.
85	Lock washer 1/4"		4 ea.
C9A	Nipple 1/8 NPT x 4-1/2		1 ea.
M5	Tube 5/32 blue plastic		27 in.
M5-BLACK	Tube 5/32 black plastic		9 in.
M5-NEUTRAL	Tube 5/32 clear plastic		11 in.
M230-002	Knob for timer		1 ea.
M230-005	Spacer 1/8" thick - nylon		1 ea.



NOTE: Dimensions listed are overall measurements.

Model	Description	Weight (lbs/kg)		Dimension B	ns (in/mm) C	D
	One gun, one cup paint gun washer equipped	44.5	35.625	16.75	22.5	20.375
G100	with diaphragm pump, filter-regulator and timer.	20.2	(905)	(425.5)	(571.5)	(517.5)
	Capable of cleaning solvent and water base paints.					

Installation

Installing the Gun Washer

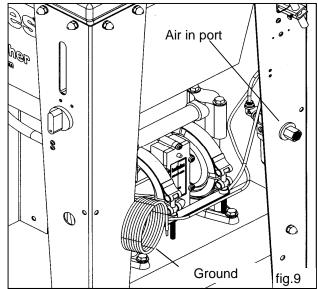
1) Place gun washer on a level surface in a properly ventilated paint mixing room or paint booth.

Grounding the Gun Washer

- Connect the ground wire on the gun washer's pump to a true earth ground.
- Ground all equipment used or located in the gun washer area.

Connecting the Air Line

- Install a 1/4 in. npt male coupler, that is compatible with the quick disconnect of your air supply line, into the air-in port of the filter/regulator located on the right rear leg (see fig.9).
- Connect air line with at least 75 psi to the coupler.
 Filter/regulator is preset. Do not adjust.



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Operation

Connecting the Cleaning Solution to the Washer

- Disconnect the drain hose from the flare connector on the bottom of the tank.
- 2) Insert the drain hose and siphon tube into a fresh 5 gallon cleaning solution can and secure the plug in the opening.
- 3) Reconnect the drain hose and tighten.
- 4) The can must contain at least 4 gallons of solution to pump properly. Use a high quality cleaning solution.

Preparing the Equipment to be washed

- Remove paint cup or paint line and the air line from the paint gun.
- 2) Drain excess paint from cup and gun.
- 3) Remove all gauges and regulators.
- 4) Lock the gun trigger in the open position by placing the trigger lock around the gun handle and trigger (see fig.10).

A CAUTION

All pressure gauges must be removed before placing the equipment in the gun washer to avoid damaging the gauges.

Placing Equipment in the Gun Washer

To clean guns not mentioned here, use the long or short stem supports as needed (see pg.15). For questions or adapter kits contact your paint gun washer distributor.

Siphon Feed Guns

Place the gun siphon tube on the short stem support.

Gravity Feed Guns (HVLP)

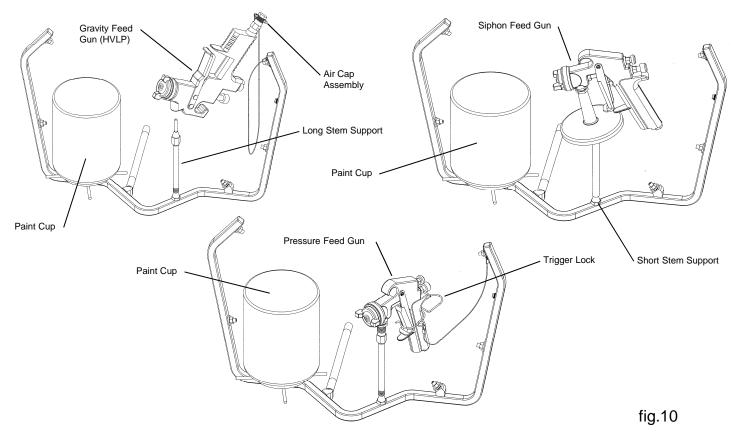
Place the long stem support over the short stem support. Place paint inlet of gun on long stem support. Place the air cap assembly over the air inlet of the gun to prevent solution from entering the passage.

Pressure Feed Guns

Place long stem support over the short stem support. Place paint inlet of gun on long stem support.

Pots and Cups

Place a pot or a cup on the 4-armed platform.



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Operation

Operating the Gun Washer

- Make sure wire trigger locks and other accessories are inside the gun washer tank.
- Place equipment in the tank according to the diagrams shown in fig.10.
- Close the gun washer lid.
- Turn the timer knob clockwise 90 degrees to start the gun washer. The gun washer will run for 90 seconds. Turning the timer knob less than 90 degrees will reduce the timing cycle. Paint equipment will clean in 60 to 90 seconds.
- If the lid is opened prior to the end of the timing cycle, the safety air cutoff switch will stop the gun washer. The gun washer will start again when the lid is closed if time remains on the timer.

Note: Open the lid slowly to minimize vapor escape.

Remove the equipment from the gun washer and wipe off any remaining cleaning solution.

Preventive Maintenance

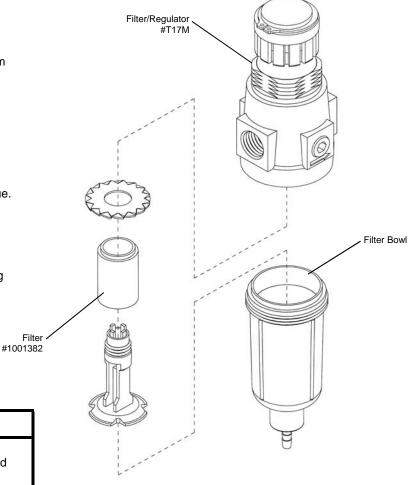
- Drain excess paint from cup or pot before placing in gun washer.
- Drain paint sludge from 5 gallon can weekly. Do this after a weekend so the sludge has settled.

Access the 5 gallon can by removing the black hose from the nylon plug and remove the plug from the can.

Pour the solution into a second container and drain the sludge into a disposal container. Refill can from the second container and add solution to reach the 4 gallon minimum, or 3" from the top of can.

Clean siphon tube with cloth and brush to remove residue.

- Remove the filter bowl and check the filter inside the regulator for excess buildup approx. every 6 months.
- Change cleaning solution completely when objects being cleaned become tacky to the touch.
- Clean inside of tub and internal manifold.





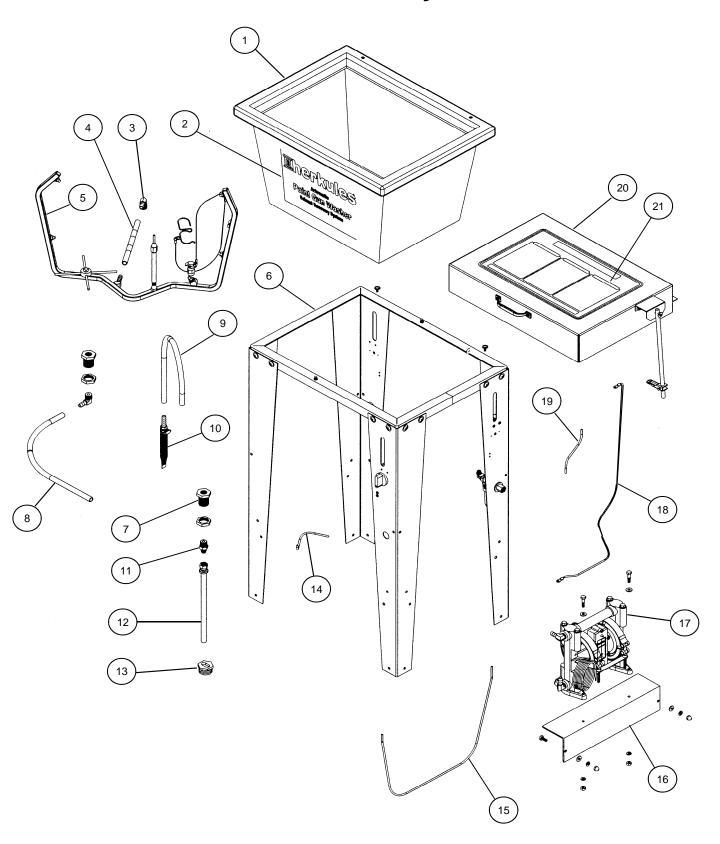
CAUTION

Do not change the setting of the filter/regulator. This could damage the filter/regulator or pump

Troubleshooting

Problem	Possible Solution
Gun washer will not turn on.	Make sure the air line is properly connected with at least 75 psi. Air pressure is regulated at 75 psi.
	2 Make sure lid is fully closed. Make sure the lid rod actuator is making full contact with the limit valve on the right rear leg.
	3 Check all air connections to ensure that there are no leaks.
	4 Make sure timer cam is engaging the limit valve on the right front leg.
	5 Make sure timer is on and functioning correctly.
Gun washer turns on but pumps slowly or not at all.	1 Make sure intake filter is not clogged (Clean or replace).
pumps slowly of flot at all.	2 Make sure the air line is properly connected with at least 75 psi. Air pressure is regulated at 75 psi.
	3 Check all air connections to ensure that there are no leaks.
	4 Make sure there is at least 4 gallons of cleaning solution in the can.
	5 Make sure the siphon hose is far enough into the can to draw cleaning solution.
	6 Make sure lid is fully closed. Make sure the lid rod actuator is making full contact with the limit valve on the right rear leg.
	7 Make sure manifold nozzles and stem supports are not clogged.
Gun washer will not shut off	Make sure timer cam is moving. If it's not, slightly loosen the nuts holding the limit valve on the right front leg of the stand. Reposition valve and tighten nuts.
	2 Make sure limit valves located on the right front leg or right rear leg of the stand are not stuck in closed position.

G100 Parts Layout

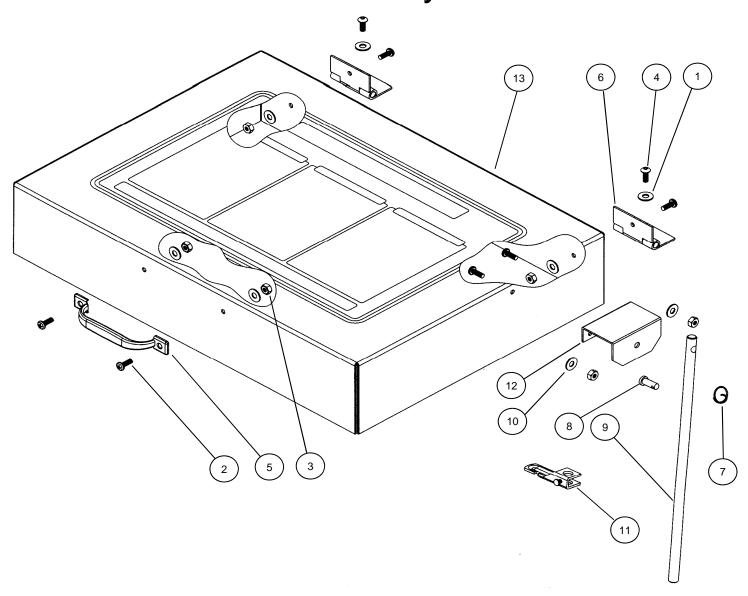


G100 Parts Layout

	Part #	Description	Quantity	
1	1-MINI-BLUE	Tub	1 ea.	
2	1001706	Front Decal	1 ea.	
3	1002650	Hose Barb 90° - Brass	2 ea.	
4	64PE	Hose 1/2 OD x .062 Black PE	5.75 in.	
5	12129	Manifold Assembly	1 ea.	See pg.15
6	13981	Stand Assembly for G100	1 ea.	
7	1002644	Bulkhead with Nut - Brass	2 ea.	
8	64PE	Hose 1/2 OD x .062 Black PE	16 in.	
9	64PE	Siphon Hose 1/2 OD x .062 Black PE	23 in.	
10	11243	Filter Assembly	1 ea.	
11	1002791	Connector Flare - Brass	1 ea.	
12	12865	Drain Hose Assembly	1 ea.	
13	11130	Plug Slotted - Nylon	1 ea.	
14	M5-NEUTRAL	Tube 5/32 Plastic - Neutral	11 in.	
15	M5	Tube 5/32 Plastic - Blue	27 in.	
16	11958	Pump Mounting Bracket	1 ea.	
17	12018	Pump Assembly	1 ea.	See pg.16-17
18	002-120A-72	Ground Wire	2 ea.	
19	M5-BLACK	Tube 5/32 Plastic - Black	9 in.	
20	12132	Lid (Parts Breakdown)	1 ea.	See pg.14
21	1001708	Lid Sticker	1 ea.	

Note: For parts shown but not identified refer to assembly layouts on pages 14-18.

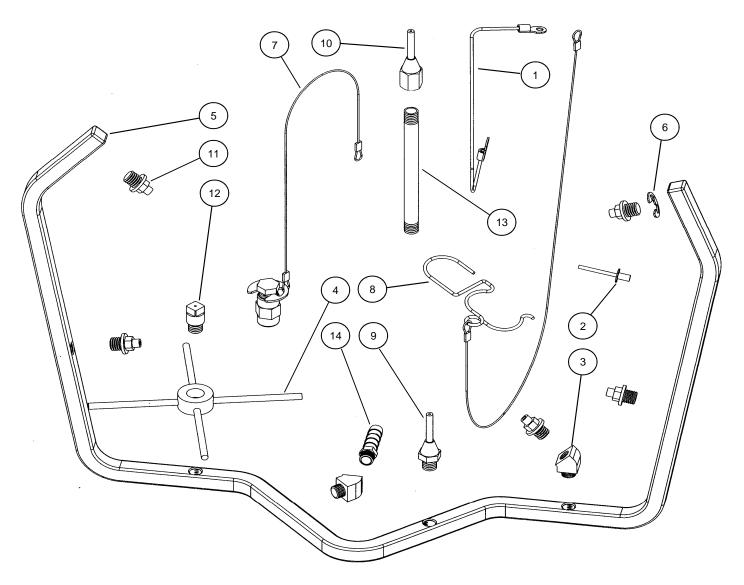
G100 Lid Layout



	Part #	Description	Quantity
1	002-161	Washer Flat #10 USS - Zinc	2 ea.
2	005-131	Screw 10-24 x 1/2 - Stainless	6 ea.
3	005-132	Hex Nut 10-24 - Stainless	6 ea.
4	005-155	Screw 10-32 x 3/8 - Black	2 ea.
5	10A	Handle	1 ea.
6	1000132	Hinge	2 ea.
7	1000252	Cotter Pin	1 ea.
8	1000652	Clevis Pin 1/4 dia.	1 ea.
9	1002571	Actuator Rod	1 ea.
10	1002656	Washer Flat #10 - Nylon	6 ea.
11	11957	Actuator	1 ea.
12	12131	Lid Bracket	1 ea.
13	12132	Lid	1 ea.

Note: Parts are shown for reference purposes only and are not necessarily part of a Herkules assembly.

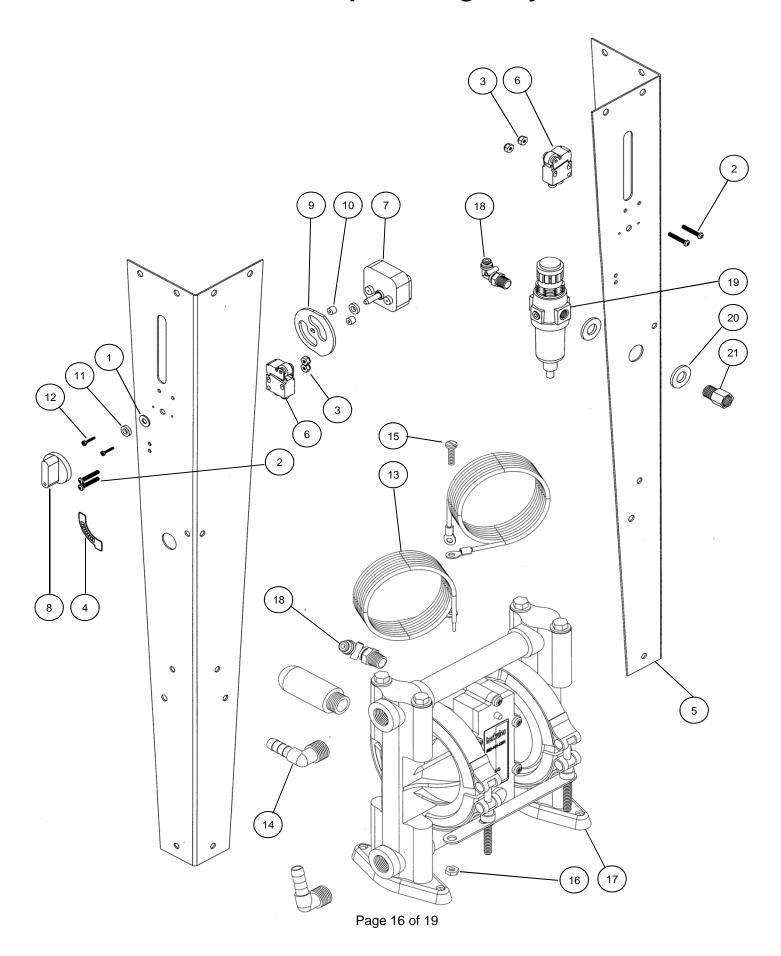
G100 Manifold Layout



	Part #	Description	Quantity
1	002-121A-6	Manifold Ground Wire	1 ea.
2	002-192	Ground Wire Rivet	1 ea.
3	005-107A	Elbow 45° 1/8 NPT - Brass	2 ea.
4	1002422	Cup Holder	1 ea.
5	1002529	Manifold - Stainless	1 ea.
6	1002651	E-ring - Stainless	1 ea.
7	12509	Air Cap Assembly w/ SS Clip	1 ea.
8	22BA	Trigger Lock Assembly	1 ea.
9	53A	Stem Support Male	1 ea.
10	53B	Stem Support Female	1 ea.
11	54P1	Full jet Nozzle - White	5 ea.
12	54	Full jet Nozzle - Brass	1 ea.
13	C9A	Nipple 4-1/2" - Brass	2 ea.
14	M27	Hose Barb - Brass	1 ea.

Note: Parts are shown for reference purposes only and are not necessarily part of a Herkules assembly.

G100 Pump and Legs Layout

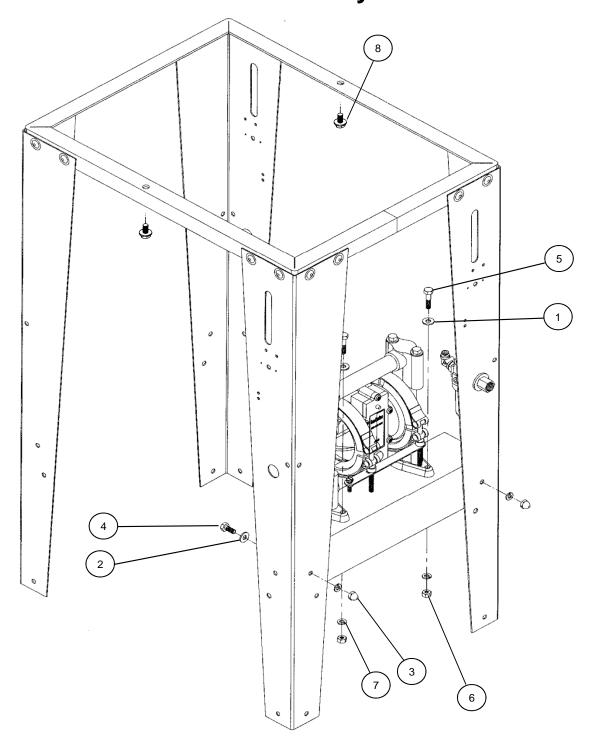


G100 Pump and Legs Layout

	Part #	Description	Quantity
1	002-161	Washer Flat #10 USS - Zinc	1 ea.
2	002-171	Screw 8-32 x 1 - Black	4 ea.
3	002-172	Nut Nylock 8-32 - Zinc	4 ea.
4	1002414	ON/OFF Sticker	1 ea.
5	13844	Stand Assembly	1 ea.
6	M1C	Limit Valve - Gold	2 ea.
7	M230-001A	Timer	1 ea.
8	M230-002	Knob for Timer	1 ea.
9	M230-003	Cam For Timer	1 ea.
10	M230-004	Spacer 1/4" Thick - Nylon	2 ea.
11	M230-005	Spacer 1/8" Thick - Nylon	1 ea.
12	M230-006	Timer Screw #4 x 5/8	2 ea.
13	002-120A-72	Ground Wire	2 ea.
14	1002650	Hose Barb 90° 3/8 NPT - Brass	2 ea.
15	005-131	Screw 10-24 x 1/2 - Stainless	1 ea.
16	005-132	Nut Hex 10-24 - Stainless	1 ea.
17	338	Pump	1 ea.
18	T25	5/32 Hose fitting 90° Swivel	2 ea.
19	T17M	Filter / Regulator	1 ea.
20	85I	Washer Flat 1/2 USS Z	1 ea.
21	67	Adaptor 1/4 NPT - Brass	1 ea.

Note: Parts are shown for reference purposes only and are not necessarily part of a Herkules assembly.

G100 Hardware Layout



Description	Quantity
Washer Flat 1/4 USS - Zinc	2 ea.
Washer Flat #10 USS - Zinc	2 ea.
Acorn Nut 1/4-20 - Nickel	2 ea.
Bolt Hex 1/4-20 x 1/2 - Zinc	2 ea.
Bolt Hex 1/4-20 x 1 - Zinc	2 ea.
Nut Hex 1/4-20 - Zinc	2 ea.
Washer Lock 1/4 - Zinc	4 ea.
Screw #14 x 3/4 - Zinc	2 ea.
	Washer Flat 1/4 USS - Zinc Washer Flat #10 USS - Zinc Acorn Nut 1/4-20 - Nickel Bolt Hex 1/4-20 x 1/2 - Zinc Bolt Hex 1/4-20 x 1 - Zinc Nut Hex 1/4-20 - Zinc Washer Lock 1/4 - Zinc

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