# **Inerkules**

**G200** 



### **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** 





#### **Herkules Patent Numbers**

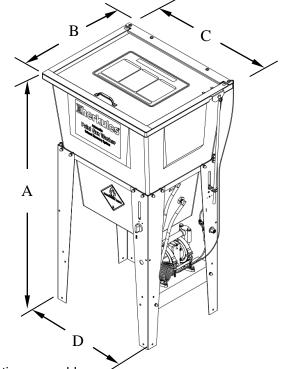
These products have patent protection under one or more of the following patent numbers:

9422142, 8733508, 8714524, 866247,8052120, 7070167, 5485860, 5193561, 5174317, 4960142, 4793369 and Patents Pending

### **Model Information**

### Parts bag contents

Part #	Description	Quantity
001-702	Hex Bolt 1/4-20 x 1/2	2 EA.
002-161	Flat Washer #10	2 EA.
008-244	Acorn Nut 1/4-20	2 EA.
001-705	Flat Washer 1/4	2 EA.
6	Ball Valve	1 EA.
83	Hex Bolt 1/4-20 x 1	2 EA.
84	Hex Nut 1/4-20	2 EA.
85	Lock Washer 1/4	4 EA.
1000652	Clevis Pin 1/4 dia.	1 EA.
1000252	Cotter Pin	1 EA.
11957	Actuator	1 EA.
C9A	Nipple 1/8 NPT X 4-1/2	2 EA.
53B	Stem Support Female	2 EA.
M5	Tube 5/32 Blue	30 IN.
M5-BLACK	Tube 5/32 Black	9 IN.
M5-NEUTRAL	Tube 5/32 Clear	13 IN.
005-131	Screw 10-24 x 1/2	2 EA.
005-137	Nylock Nut 10-24	2 EA.
12024	Bracket Lid Mount	1 EA.
338	Pump	1 EA.



<sup>\*</sup>Customer should review and verify all parts are present before starting assembly

NOTE: Dimensions listed below are overall measurements.

Model	Description	Weight		Dimensions	s in./(mm)	
		lbs/(kg)	Α	В	С	D
	Two gun, two cup paint gun washer equipped with	68	46	20.625	24.5	21.25
G200	diaphragm pump, filter-regulator and timer.	(31)	(1168)	(524)	(622)	(540)
	Cleans exclusively either solvent or water based paints.					

### Warning Symbol

### **WARNING**

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 wet 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 section (page 10) for grounding procedure.
- Provide fresh air ventilation to avoid the build up of flammable fumes from the cleaning solution.
- 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 cleaning solutions, 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 Instructions**

### Stand and tub connections [Figures 1-4]

### STEP 1

Remove stand from box.

Loosen all (16) nuts that attach the legs to the upper frame of the Gun Washer stand.

### STEP 2

Position the pump mount bracket between the timer leg assembly and the filter/regulator leg assembly. (These legs have oblong openings on one side) Attach the pump mount bracket to the stand using (2) 1/4-20 x 3/4" hex bolts, (2) 1/4" lock washers and (2) 1/4" acorn nuts per leg. Hand tighten, then place stand on floor. Verify all (4) legs are sitting flush with the floor, and tighten.

### STEP 3

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.2].

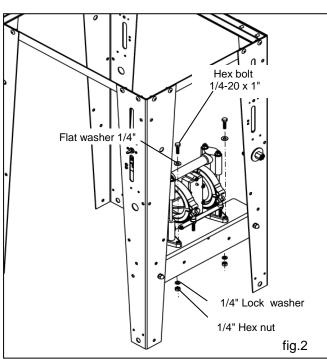
### STEP 4

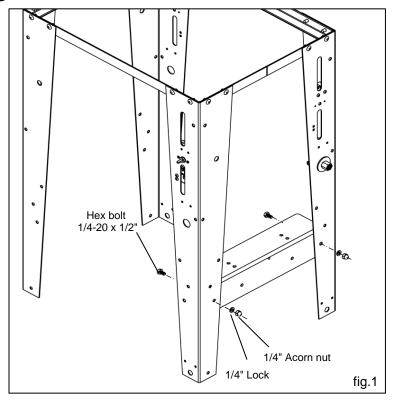
Attach the ball valve to the reducing nipple on the bottom of the tub. Teflon tape is recommended for a water-tight seal. Hand tighten [see fig.3].

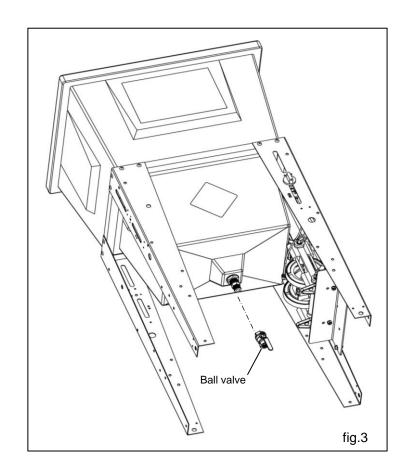
### Ensure bulkhead DOES NOT TURN when tightening.

### STEP 5

Connect the 16" long fluid outlet tube between the fluid outlet port of the pump and the upper bulkhead on the tub. DO NOT HEAT HOSE [see fig.4].







### **Assembly Instructions**

### Connecting fluid and air hoses

### STEP 6

Connect the 17" long fluid inlet tube between the fluid inlet port of the pump and the lower bulkhead on the tub. DO NOT HEAT HOSE [see fig.4].

### STEP 7

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.4].

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

### STEP 8

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.

NOTE: If these hoses are not correctly connected, the paint gun washer will not start [see fig. 4].

### STEP 9

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.4].

### Connecting lid, lid rod, and actuator linkage

### STEP 10

Mount the lid bracket underneath the lid; mount bracket to lid as shown [see fig. 5].

### STEP 11

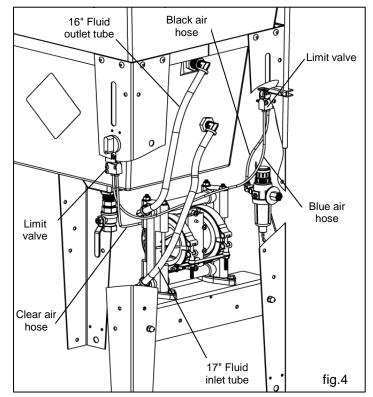
Mount the lid actuator rod to the bracket. Slide the actuator over the lid rod opposite the drilled end, and hand tighten approximately 4" from end of rod. Then insert the actuator into the large slot in the right rear leg [see fig. 6].

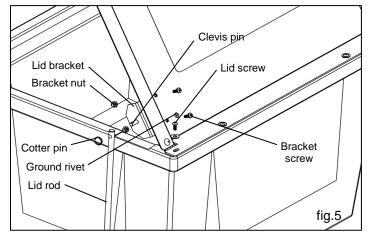
#### STEP 12

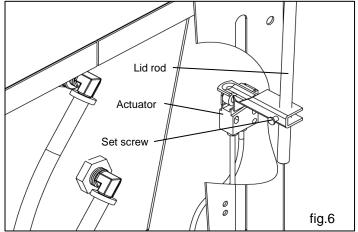
Attach the lid rod to the lid bracket using the 1/4" clevis pin and circular cotter pin supplied [see fig. 5].

#### STEP 13

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. 6].







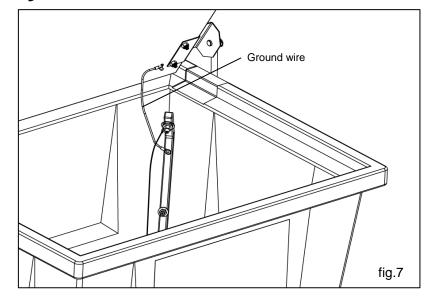


### **Assembly Instructions**

### Grounding the lid

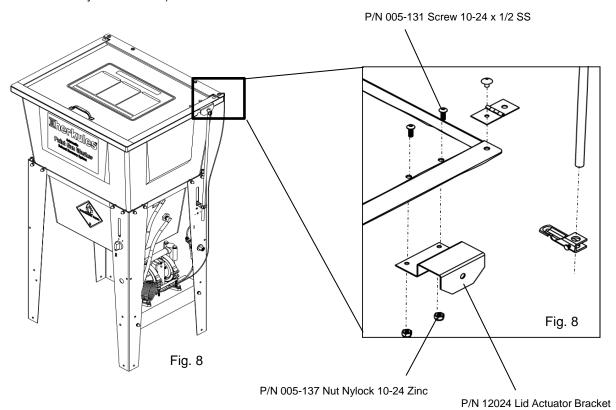
STEP 14

Verify the ground wire is attached to lid rivet and the other end is attached to the tub [see fig. 7].



### Lid Bracket to the Lid Assembly

- 1) Remove the lid, lid actuator bracket, and hardware from bag.
- 2) Lid bracket mounts underneath the lid (see Fig. 7)
- Mount bracket to the lid as shown, then Actuator Rod can be mounted to the Lid Actuator Bracket (see Page 14 G200 Lid Layout in manual).



### Installation

### Installing the Gun Washer

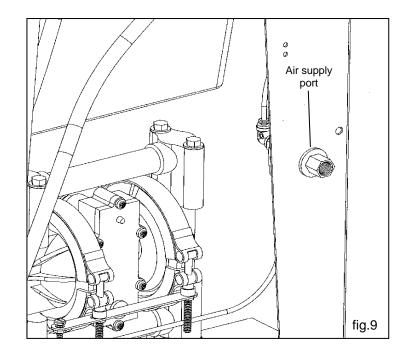
 Place gun washer on a level surface in a properly ventilated paint mixing room or paint booth.

### **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 supply 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.



### **Operation**

#### Filling the Gun Washer with Fluid

- 1) Close ball valve located on the bottom of the tank.
- Unit is designed to clean EITHER solvent or waterborne EXCLUSIVELY. Pour five gallons (18.9 liters) of high quality cleaning solution into the tub.

#### Preparing the Equipment to be washed

- 1) 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) Screw on Air Cap Assembly to end of gun [see fig. 10].
- Lock the gun trigger in the open position by placing the trigger lock around the gun handle and trigger [see fig. 10].

### Placing Equipment in the Gun Washer

To clean guns not mentioned here, use the long or short stem supports as needed [see Fig. 10]. 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 long stem support over one of the short stem supports. Place paint inlet of gun on long stem support. Place the air cap assembly over the air inlet of the gun to keep out cleaning solution.

#### **Pressure Feed Guns**

Place long stem support over one of the shorter stem supports. Place paint inlet of gun on long stem support.

#### **Pots and Cups**

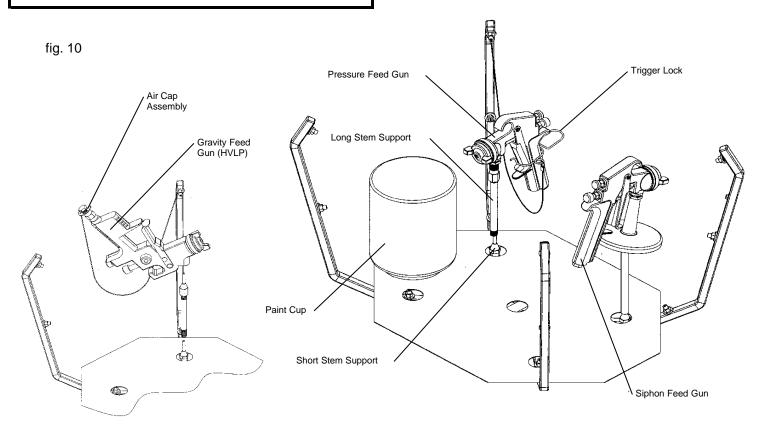
Place pots and/or cups on divider platform over front spray nozzles.



### **Operation**

### **A** CAUTION

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



### **Operating the Gun Washer**

- Make sure all wire trigger locks and other accessories are inside the gun washer tub.
- If washing only one set of equipment, place empty cans over the unused nozzles and/or stem supports to prevent spray from hitting the underside of the gun washer lid.
- 3) Close the gun washer lid.
- 4) 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.

5) 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.

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

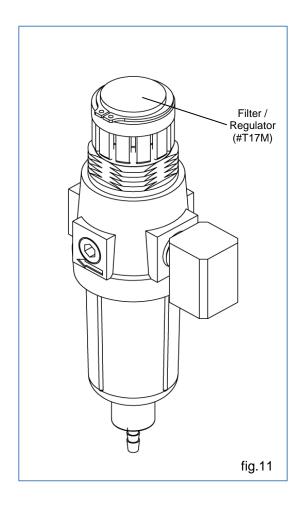
### **Preventive Maintenance**

To keep your machine working efficiently, please follow these directions.

- 1) ALWAYS drain excess paint from cup or pot before placing in gun washer.
- 2) Drain paint sludge from gun washer tank weekly. Do this after a weekend so that it has settled. Open ball valve and drain until clear solution flows. Add cleaning solution to fill 1" above intake filter.
- 3) Replace Filter/Regulator yearly. (#T17M)
- 4) Change cleaning solution completely when objects being cleaned become tacky to the touch.
- 5) Clean inside of tub and intake filter before filling with cleaning solution.



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.	1	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).
pumpo diomy 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 5 gallons of clean solution in the gun washer.  The cleaning solution should be an inch above the intake filter.
	5	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.
	6	Make sure manifold nozzles and stem supports are not clogged.
Gun washer will not shut off	1	Make sure timer cam is moving. If its 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.
	3	Make sure air hoses are connected correctly. (Refer to assembly steps 8-9 for detailed information.)

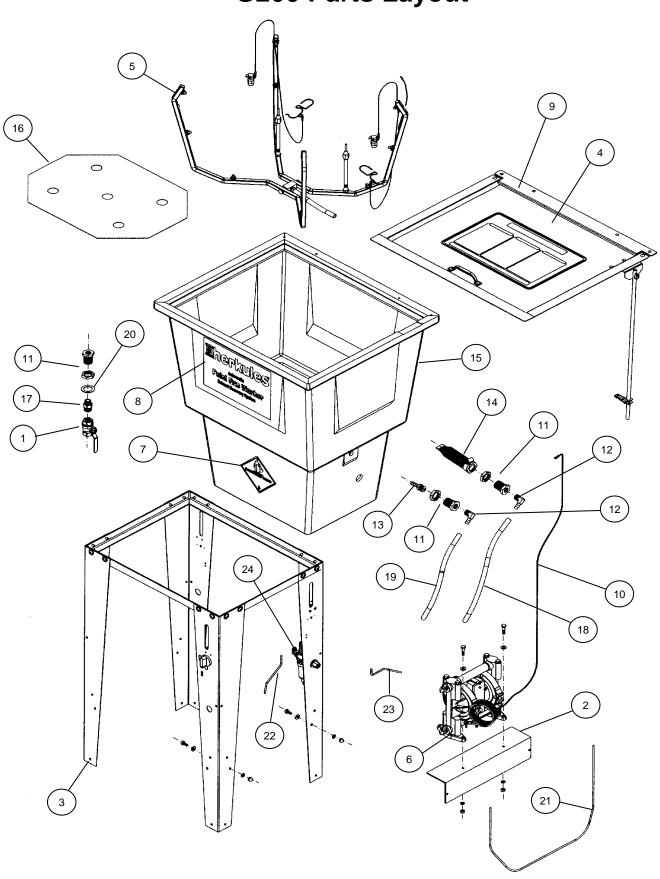
### **G200 Replacement Parts**

	Part #	Description	Quantity	
1	15171	G200 Maintenance Kit	1 EA.	
	Kit Inc	ludes:		
1	53A	Stem Support Male	4 EA.	See pg. 18
2	53B	Stem Support Female	4 EA.	See pg. 18
3	1007592	Timer Mechanical w/o Knob	1 EA.	See pg. 20
4	M230-002	Knob for Mechanical Timer	1 EA.	See pg. 20
5	11345	Regulator Assy T17M w/Nut 75psi	1 EA.	
6	12491	Filter Assy w/SS Clamp	1 EA.	See pg. 16
7	M5-BLACK	Tube 5/32 Black	36 IN.	See pg. 16
8	M5	Tube 5/32 Blue	36 IN.	See pg. 16
9	1001441	Muffler 3/8 NPTZ	1 EA.	See pg. 20
10	C9A	Nipple 1/8 NPT x 4-1/2 Brass	2 EA.	See pg. 18
11	54P1	Nozzle Fulljet 65Deg 1/8 NPTM Kynar	12 EA.	See pg. 18
12	1001372	Sticker 1-800 Black Small	1 EA.	
13	M1C	Valve Limit Bottom Ports	1 EA.	See pg. 20
14	1005368	Box Plastic Organizer	1 EA.	
15	22BA	Wire Trigger Lock Assy	2 EA.	See pg. 18
16	1002651	E-Ring 1/2 Shaft SS Clip	2 EA.	See pg. 18
17	12509	Air Cap Assembly w/SS Clip	2 EA.	See pg. 18

**Note**: Herkules Paint Gun Washers are designed to be easily maintained and repaired. As a minimum sales order is required when purchasing parts, Herkules recommends purchasing a 15171 Maintenance Kit to keep spare parts on hand for quick replacement when needed.



# **G200 Parts Layout**

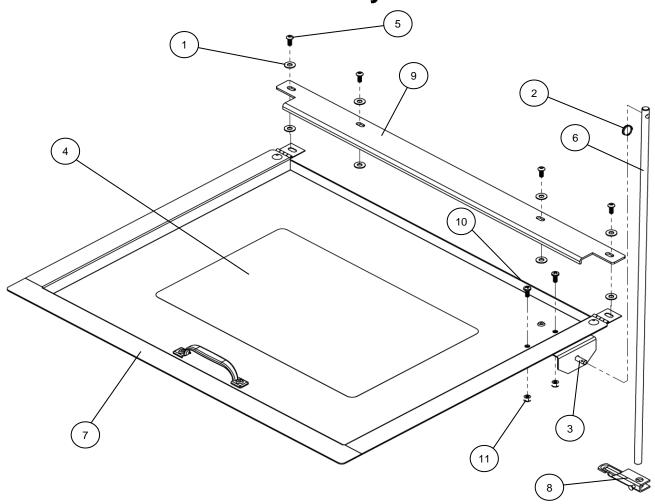


# **G200 Parts Layout**

	Part #	Description	Quantity	
1	6	Ball Valve	1 EA.	
2	1007865	Pump Mounting Bracket	1 EA.	
3	13844	Stand Assembly	1 EA.	See pg. 16
4	19196	Lid Assembly	1 EA.	See pg. 14
5	12490	Manifold Assembly	1 EA.	See pg. 15
6	12517	Pump Assembly	1 EA.	See pg. 16
7	1000651	Flammable Caution Sticker	1 EA.	
8	1001706	Front Decal	1 EA.	
9	12321	Lid Stop	1 EA.	
10	002-120A-72	Ground Wire	2 EA.	
11	1002644	Bulkhead with Nut - Brass	3 EA.	
12	1006470	Hose Barb 3/8 x 3/8 NPT 90° - Brass	2 EA.	
13	1002654	Hose Barb 3/8 x 3/8 NPT - Brass	1 EA.	
14	12491	Filter for Pump Inlet	1 EA.	See pg. 14
15	13242	Tub	1 EA.	
16	25D	Divider	1 EA.	
17	62	Reducing Nipple - Brass	1 EA.	
18	64PE	Hose Inlet	17 IN.	
19	64PE	Hose Outlet	16 IN.	
20	85B	Washer 1-1/2 x 1 - Nylon	2 EA.	
21	M5	Tube 5/32 Plastic - Blue	30 IN.	See pg. 14
22	M5-BLACK	Tube 5/32 Plastic - Black	9 IN.	See pg. 14
23	M5-NEUTRAL	Tube 5/32 Plastic - Neutral	13 IN.	
24	T17M	Filter / Regulator	1 EA.	

**Note:** For parts shown but not identified refer to assembly layouts on pages 13-17

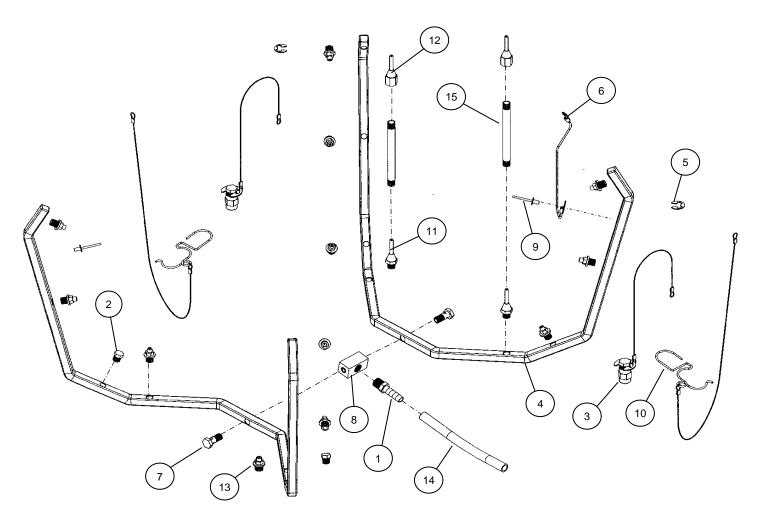
# **G200 Lid Layout**



	Part #	Description	Quantity
1	002-161	Washer Flat #10 USS - Zinc	8 EA.
2	1000252	Actuator Clip Ring	1 EA.
3	1000652	Actuator Pin	1 EA.
4	1001708	Lid Sticker	1 EA.
5	1002546	Screw 10-24 x 1/2	4 EA.
6	1002572	Actuator Rod	1 EA.
7	19196	Lid Assembly	1 EA.
8	11957	Actuator Bracket Notched	1 EA.
9	12321	Lid Stop	1 EA.
10	005-131	Screw 10-24 x 1/2 - Stainless	2 EA.
11	005-137	Nylock Nut 10-24	2 EA.

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

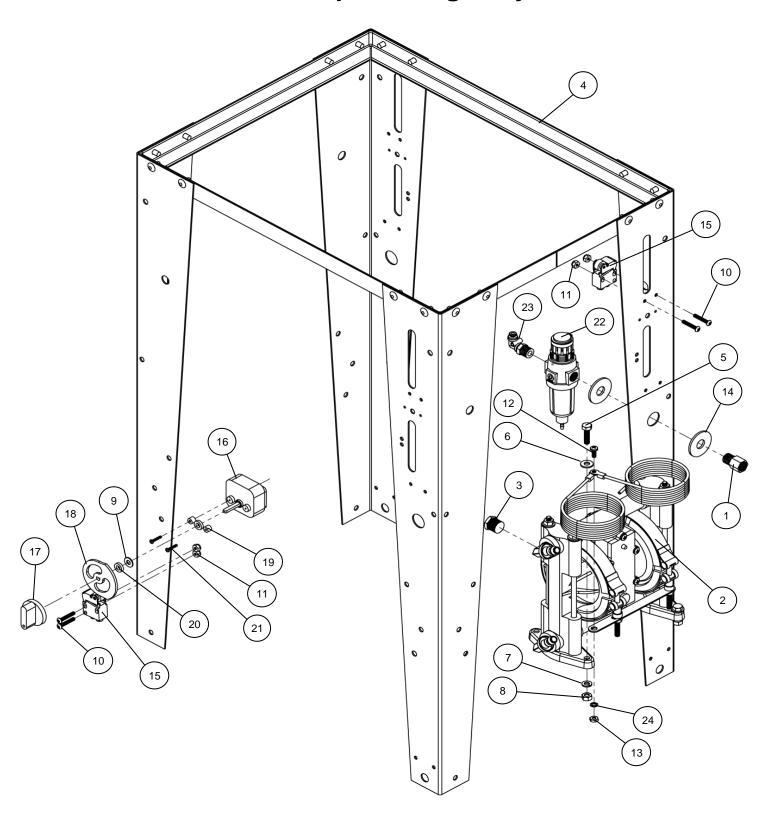
# **G200 Manifold Layout**



	Part #	Description	Quantity	
1	57	Hose Barb 3/8 x 1/4 NPT - Brass	1 EA.	
2	59	Hex Plug 1/8 NPT - Brass	2 EA.	
3	12509	Air Cap Assembly - Brass and Stainless	2 EA.	See pg. 14
4	1002321	Manifold Half - Stainless	2 EA.	
5	1002651	E-ring - Stainless	2 EA.	See pg. 14
6	002-121A-6	Manifold Ground Wire	1 EA.	
7	002-136S	Manifold Bolt - Stainless	2 EA.	
8	002-137	Manifold Block	1 EA.	
9	002-192	Ground Wire Rivet	2 EA.	
10	22BA	Trigger Lock Assembly	2 EA.	See pg. 14
11	53A	Stem Support Male	2 EA.	See pg. 14
12	53B	Stem Support Female	2 EA.	See pg. 14
13	54P1	Full jet Nozzle - White	12 EA.	See pg. 14
14	64PE	Manifold Hose	6.5 IN.	
15	C9A	Nipple 4-1/2" - Brass	2 EA.	See pg. 14

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

# **G200 Pump and Legs Layout**

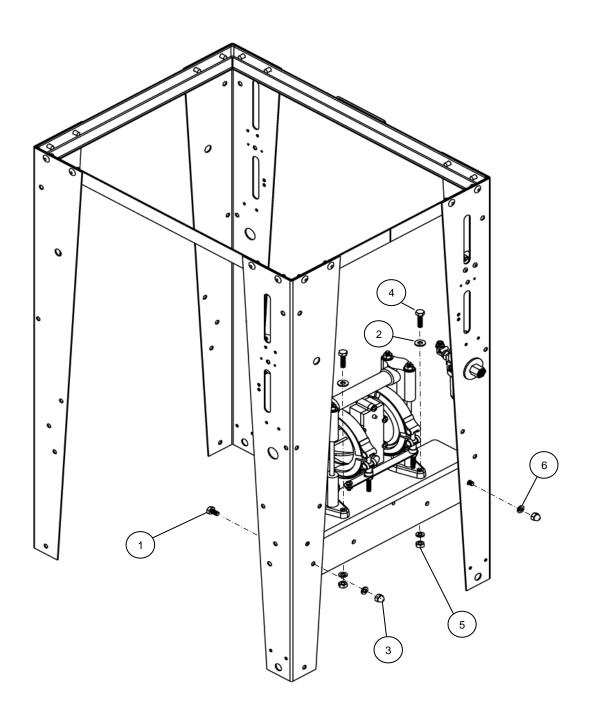


## **G200 Pump and Legs Layout**

	Part #	Description	Quantity	
1	67	Adaptor 1/4 NPT - Brass	1 EA.	
2	12517	Pump Assembly	1 EA.	
3	1001441	Muffler	1 EA	See pg. 14
4	13844	Stand Assembly	2 EA.	
5	83	Bolt Hex Full 1/4-20 x 1 GD5 Z	2 EA.	
6	001-705	Washer Flat 1/4 USS	2 EA	
7	85	Washer Lock 1/4 Z	2 EA.	
8	84	Nut Hex 1/4-20 Z	2 EA.	
9	002-161	Washer Flat #10 USS - Zinc	1 EA.	
10	002-171	Screw 8-32 x 1 - Black	4 EA.	
11	002-172	Nut Nylock 8-32 - Zinc	4 EA.	
12	005-131	Screw 10-24 x 1/2 - Stainless	1 EA.	
13	005-132	Nut Hex 10-24 - Stainless	1 EA.	
14	85I	Washer Flat 1/2 USS Z	2 EA.	
15	M1C	Limit Valve - Gold	2 EA.	See pg. 14
16	1007592	Timer	1 EA.	See pg. 14
17	M230-002	Knob for Timer	1 EA.	See pg. 14
18	M230-003	Cam For Timer	1 EA.	
19	M230-004	Spacer 1/4" Thick - Nylon	2 EA.	
20	M230-005	Spacer 1/8" Thick - Nylon	2 EA.	
21	M230-006	Timer Screw #4 x 5/8	2 EA.	
22	T17M	Filter / Regulator	1 EA.	
23	24E	Washer Lock Int Tooth #10 Z	1 EA.	

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

# **G200 Hardware Layout**



	Part #	Description	Quantity
1	001-702	Bolt Hex 1/4-20 x 1/2 - Zinc	2 EA.
2	001-705	Washer Flat 1/4 USS - Zinc	2 EA.
3	008-244	Acorn Nut 1/4-20 - Nickel	2 EA.
4	83	Bolt Hex 1/4-20 x 1 - Zinc	2 EA.
5	84	Nut Hex 1/4-20 - Zinc	2 EA.
6	85	Washer Lock 1/4 - Zinc	4 EA.

