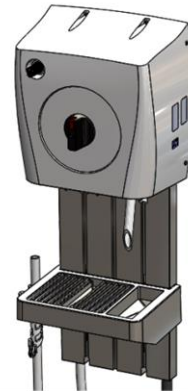


1060GAPRF



With dilution selector



1060GAP

OVERVIEW

DEMA'S MPD is a multiple product and dilution dispenser designed for use with SafeLink closed loop inserts. With its innovative patent pending QuickDock and SimpleSelect dial, it's built for easy, fast and safe change over from one product to another. MPD features a one hand fill for spray bottles, adjustable drip tray shelf, and standard bucket fill hose or remote fill gun for bucket fill applications.

SafeLink is DEMA's unique closed loop insert and dock system. SafeLink inserts are designed eliminate access and exposure to chemical concentrates, improving health and safety of end users.

WARNINGS

This product is designed only to be used as described in this instruction sheet. Adhere to all warnings and cautions identified in this document.



WARNING: Installations must conform to all local and national plumbing codes and use approved backflow prevention and pressure relief devices where required.

ALWAYS DISCONNECT DISPENSER FROM WATER SOURCE WHEN DISPENSER IS NOT IN USE.



Always read MSDS for all chemicals used and follow personal protective guidelines.

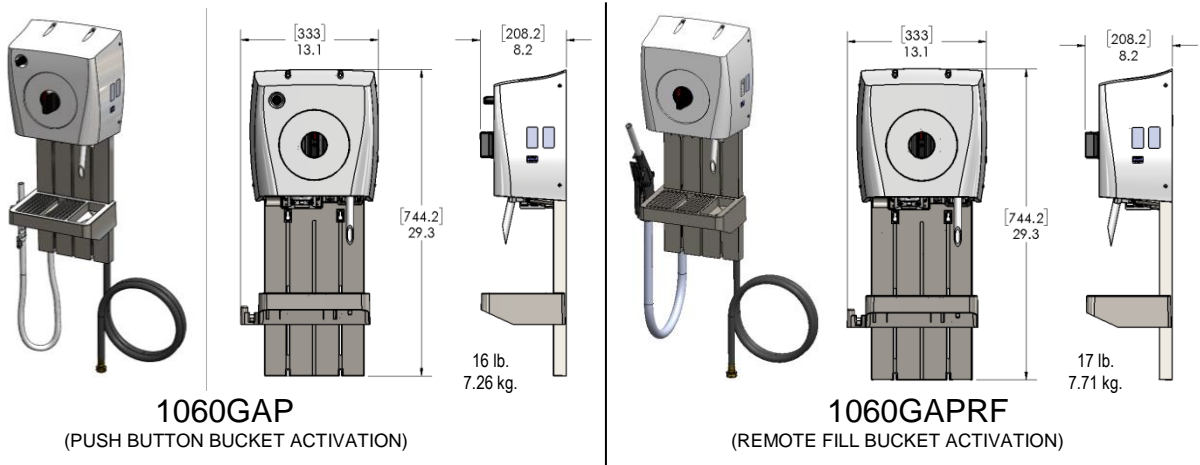
OPERATING SPECIFICATIONS

Water Supply Requirements

	Minimum	Maximum
Water Pressure	30 psi (2.07 bar)	90 psi (6.2 bar)**
Water Temperature	-	150°F (66 °C)

** Recommended water pressure for accurate dilutions is between 30 psi (2.07 bar) and 70 psi (4.83 bar). If pressure exceeds 70 psi, it is recommended that a DEMA #66.43 regulator is used.

BASE MODEL DESCRIPTION, SIZE AND WEIGHT



DISPENSER SET-UP – DILUTION DIAL MODIFICATION

The 1060GAP and 1060GAPRF come with a pre-tipped dilution dial with factory settings based on the most common chemicals used in Housekeeping or Food Service. DEMA recommends testing chemicals against these pre-tipped setting to ensure accurate dilution of chemicals. To change metering tips, follow the method described below. Page 5 contains metering tip dilution information.

1. Removal of dilution disc from dispenser:

- Remove dispenser cover and knob (4 screws on side, 1 at dial knob).
- Remove dial cover (4 screws), pull dilution disc and dial cover away from dispenser.
- Slide disc out of housing, setting it on a clean surface.

2. Tipping dilution disc:

- Remove incorrect metering tips with long nose pliers. Tips will pull straight out. DO NOT grab anything other than the tip itself. DO NOT reuse old metering tips.
- Identify proper location for new metering tips using diagram below. Numbers on disc correspond to numbers on dial label (Fig. 1 & 2). Circle is bottle fill, square is bucket fill.
- With tips identified, place metering tip into tool with threads sticking out. Alternative you can use a flat washer (or similar object) to push tip into disc.
- Place threads onto disc location and press firmly into location. Metering tip should have a complete seal around location and not be uneven.

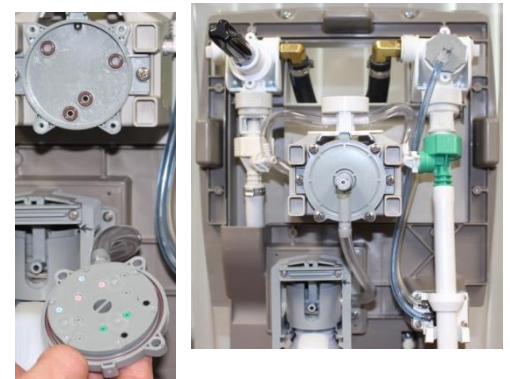


Fig. 1
Disc is marked 1-6 indicating positions on the dial label

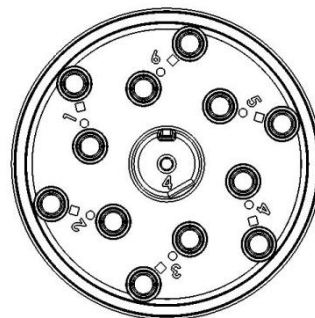
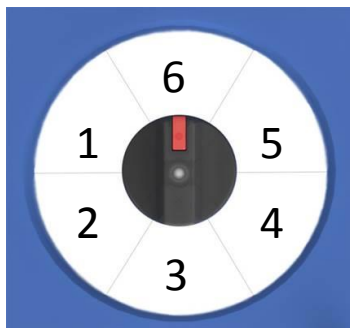


Fig. 2
6 = 12:00

□ = Bucket fill

○ = Bottle fill

DISPENSER SET-UP – DILUTION DIAL MODIFICATION CONT'D.

3. Installing dilution disc in dispenser:

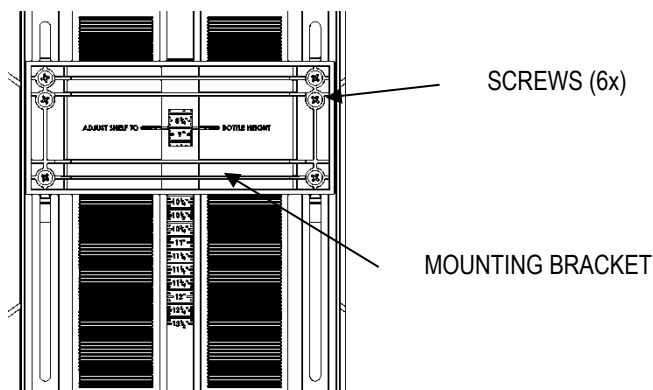
- a. Place a small amount of silicone grease on the back of the disc, coating entire surface with a thin layer.

Note: Make sure o-rings from dial covers are in place. Slide disc into housing, reattach dial cover (4 screws)

DISPENSER SET-UP – SHELF AND DRIP TRAY MODIFICATION

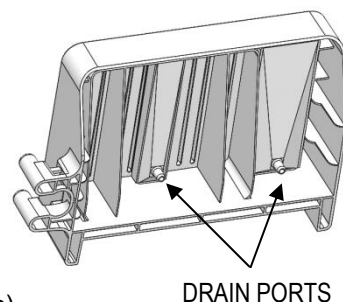
The chemical bottle shelf may require height adjustment depending on height of bottle used. Adjust the height (if required) by following these steps.

1. Shelf height is determined by the overall height of the bottle.
 - a. Measure height of the bottle from the top to the bottom, record height measurement and save for step 2.
2. Adjust drip tray shelf by loosening (do not remove) the 6 screws on the back side of unit.
 - a. Lift mounting bracket to clear the locking teeth.
 - b. Slide drip tray shelf up or down, as required. Bottle height corresponds to graduated markings on back of dispenser.
 - c. Using the window on mounting bracket, locate proper height base on bottle height. Graduated markings on back of dispenser are written in $\frac{1}{4}$ " (6.3mm) increments and the shelf can be precisely within a $\frac{1}{16}$ " (1.5mm).
 - d. Tighten the 6 screws. DO NOT overtighten.



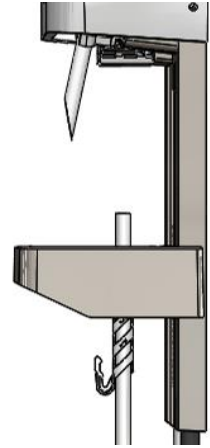
The bottle shelf is integrated with two drip trays, both with plugged drain ports. If desired, these ports can be drilled out to route run off chemical into a sink basin.

1. If you want to install a drain line on the drip tray shelf, use a $\frac{3}{16}$ " (5mm) drill bit max.
 - a. Using the barb on the underside of drip tray shelf as a guide, drill through.
 - b. Once drilled, attach drain line(s) to the drip tray shelf barb(s).



DISPENSER MOUNTING AND INSTALLATION

1. Position the dispenser on the wall and mark the 6 screw locations.
 - a. Use mounting template supplied with this instruction sheet to double check holes and to level dispenser.
2. Install the supplied anchors in the wall at the marked locations.
3. Mount the dispenser to the wall with the supplied screws.
4. Connect water supply hose to approved water outlet connection.
5. Install chemical container in the dispenser by pushing the bottle until it will go no further.
6. Slowly turn water supply on, pressurizing the unit with water and making it ready for use.
7. Test all chemicals according to proper use at selector locations following the method described below in **Dispenser Operation** section.



DISPENSER OPERATION

To begin the operation of the dispenser, a chemical bottle must be connected to the QuickDock.

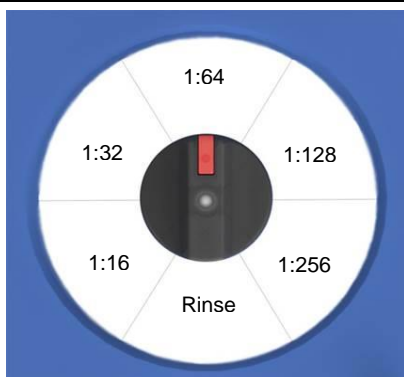
1. Push the chemical bottle, mating it to the QuickDock until it will go no further. The QuickDock will hold the bottle in place when fully engaged.
2. Once the bottle is docked, select the corresponding product/dilution label on the dial. The dial should be pointing at the correct product label that matches the docked chemical bottle.
3. With the product selected, the dispenser is ready to dispense diluted chemical using either the bottle fill or bucket fill activation.
4. **Bottle fill activation:** To dispense with the bottle fill feature, push the spray bottle up until the lever activates the valve. Once you are finished, lower the bottle until the lever falls and deactivates the valve.
5. **Bucket fill activation** (two configurations):
 - a. **Push button:** Press button to activate valve and release when finished. For continuous flow, while button is pressed, turn clockwise to lock. When finished, turn counterclockwise and release the button to deactivate valve. Allow chemical to drain and return hose to hanger on the side.
 - b. **Remote fill:** Squeeze the trigger and release it when finished. For continuous flow, squeeze the trigger and rotate the red lever downward. When finished, squeeze trigger to disengage trigger lock and then release trigger to stop flow. Allow chemical to drain and return hose to hanger on the side.
6. To change product, pull the bottle away from the QuickDock once chemical has drained back into the bottle. Insert new chemical bottle into dock and choose product on the selector dial. Repeat steps 2-5 as needed.
7. ALWAYS DISCONNECT DISPENSER FROM WATER SOURCE WHEN DISPENSER IS NOT IN USE.

DILUTION INFORMATION – PRE-SET DILUTION DIALS

MPD units out of the box are in either a designated “Housekeeping” or “Food Service” configuration, designed to provide the most commonly required dilutions in these applications. Dials can be configured to your required dilutions by following the instructions on Page 2.

1060GAP.6HK, 1060GAPRF.6HK - TIP CONFIGURATION			
Position	Housekeeping	Bottle	Bucket
2	16	Yellow	Gray
1	32	Green	Lt. Orange
6	64	Dk. Green	Lt. Purple
5	128	Royal Blue	Red
4	256	Tan	Pink
3	Rinse	Blank	Blank

1060GAP.6FS, 1060GAPRF.6FS - TIP CONFIGURATION			
Position	Food Service	Bottle	Bucket
2	32	Green	Lt. Orange
1	64	Dk. Green	Lt. Purple
6	128	Royal Blue	Red
5	256	Tan	Pink
4	512	N/A	Tan
3	Rinse	Blank	Blank



DILUTION INFORMATION – METERING TIP DILUTION RATES*

REGULAR DILUTION TIPS						
Tip Color	Bottle Fill 1gpm / 3.8lpm			Bucket Fill 4gpm / 15.1lpm		
	Ratio	oz/Gal	ml/L	Ratio	oz/Gal	ml/L
Tan	223.86	0.57	4.45	531.83	0.24	1.88
Orange	158.67	0.81	6.33	489.21	0.26	2.03
Turquoise	145.89	0.88	6.88	436.73	0.29	2.27
Royal Blue	111.90	1.14	8.91	361.14	0.35	2.73
Charcoal	102.73	1.25	9.77	299.12	0.43	3.36
Pink	75.97	1.69	13.20	232.91	0.55	4.30
Dark Green	67.07	1.92	15.00	202.88	0.63	4.92
Lt. Blue	57.32	2.24	17.50	165.54	0.77	6.02
Brown	56.70	2.26	17.66	162.90	0.79	6.17
Red	41.30	3.10	24.22	126.64	1.01	7.89
White	36.14	3.54	27.66	108.22	1.18	9.22
Green	32.88	3.89	30.39	102.32	1.25	9.77
Blue	24.83	5.15	40.24	77.72	1.65	12.89
Lt. Purple	19.98	6.41	50.08	58.73	2.18	17.03
Yellow	17.60	7.27	56.80	51.98	2.46	19.22
Black	14.83	8.63	67.42	45.76	2.80	21.88
Lt. Orange	10.27	12.47	97.42	30.16	4.25	33.20
Purple	9.26	13.83	108.05	26.38	4.85	37.89
Gray	7.53	16.99	132.74	22.83	5.61	43.83
None	5.13	24.96	195.00	13.59	9.42	73.60

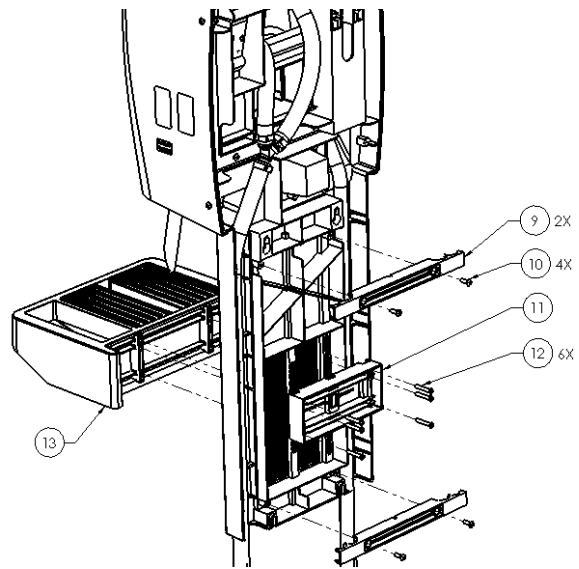
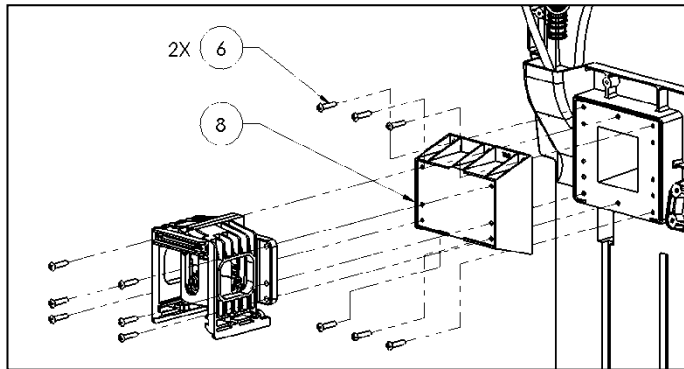
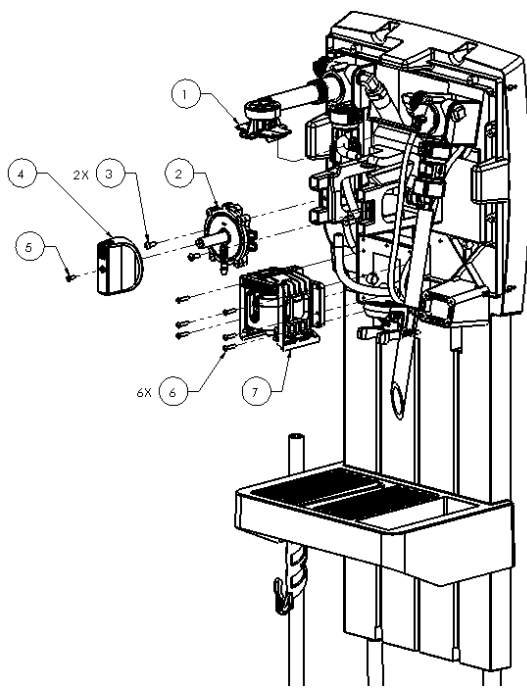
ULTRA LEAN DILUTION TIPS						
Tip Color	Bottle Fill 1gpm / 3.8lpm			Bucket Fill 4gpm / 15.1lpm		
	Ratio	oz/Gal	ml/L	Ratio	oz/Gal	ml/L
Amber	398.57	0.32	2.50	1850.39	0.07	0.55
Burgundy	289.90	0.44	3.44	1143.33	0.11	0.86
Lime	280.59	0.46	3.60	895.84	0.14	1.09

*All testing done with water (1cps) and at 40psi. DEMA recommends dilution testing dispensers for accuracy. Use these charts only as a general guide when choosing metering tips.

TROUBLESHOOTING – ALWAYS SHUT OFF WATER SUPPLY BEFORE TROUBLESHOOTING

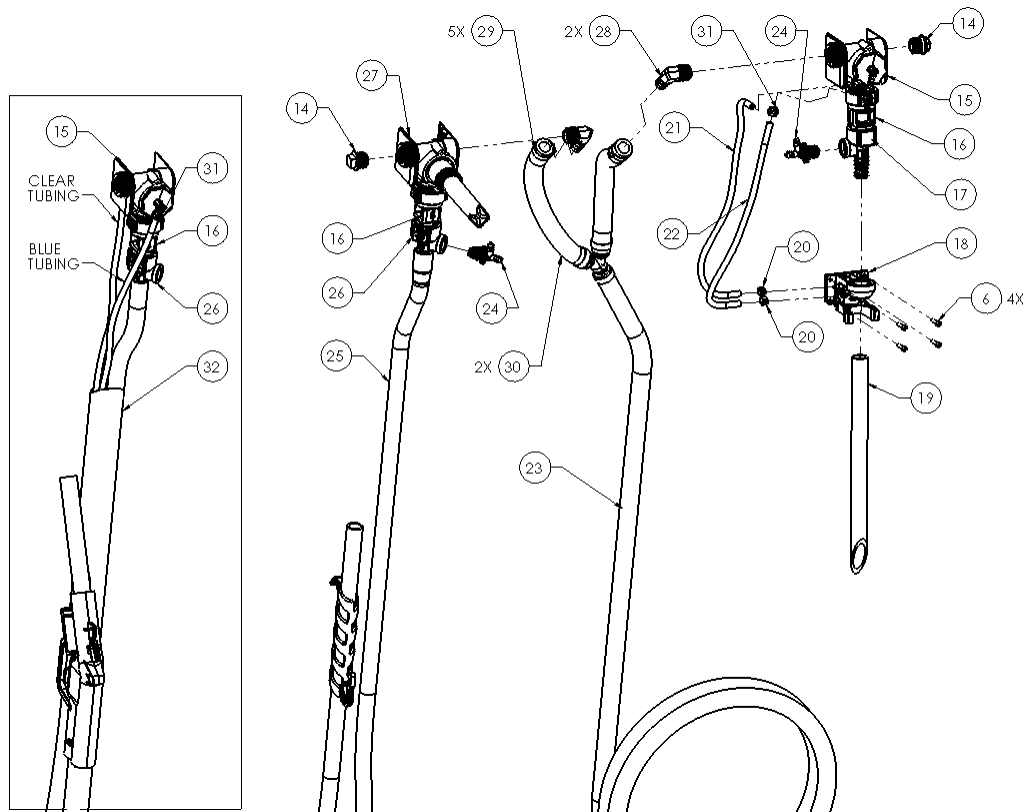
Symptom	Probable Cause	Remedy
Proportioner fails to draw chemical properly.	<ol style="list-style-type: none"> 1. Insufficient water supply pressure. 2. Excessive water supply pressure. 3. Metering tip in bottle is clogged. 	<ol style="list-style-type: none"> 1. 30 PSI is the minimum allowable pressure. Consult with building maintenance for options. 2. 90PSI is the maximum allowable pressure. 70PSI is the recommended maximum pressure. 3. Replace bottle with new one and dispense product.
Water valve is not shutting off completely.	<ol style="list-style-type: none"> 1. Bottle fill valve will not shut off, actuator arm is stuck in fill position. 2. Bucket fill valve will not shut off, water valve button is locked on. NON RF ONLY 3. Diaphragm in water valve cannot seat properly, debris in valve. 4. Lever return spring may be missing on Remote fill gun. RF ONLY 	<ol style="list-style-type: none"> 1. Cycle the bottle valve actuator to ensure actuator arm is fully resetting after each use, replace components as needed. DO NOT rest bottles on actuator when not in use. 2. Cycle the bucket valve button to make sure it's not stuck in lock-on position. 1/4 turn counter clockwise to move to lock-off position. 3. Disassemble water valve diaphragm cover and remove internal components, clearing out debris. Reassemble components in order removed. 4. RF ONLY - Visually check for lever lock return spring. Replace if missing.
Water valve is leaking.	<ol style="list-style-type: none"> 1. Clamped fittings are loose. 	<ol style="list-style-type: none"> 1. Inspect clamps for leakage, replace as needed.
Threaded connections are leaking water.	<ol style="list-style-type: none"> 1. Backflow prevention devices and/or proportioners are loose. 	<ol style="list-style-type: none"> 1. Tighten loose connection(s) with tools if necessary. Do not over tighten if using tools.
Chemical is not draining back into chemical container.	<ol style="list-style-type: none"> 1. Vent assembly is sticking. 	<ol style="list-style-type: none"> 1. Replace vent assembly.

PARTS LIST AND DIAGRAM – UNIT ASSEMBLY



No.	Part No.	Description
1	56-46	Vent Assembly
2	64-60-6	Dilution Dial Assembly (House Keeping)
	64-60-7	Dilution Dial Assembly (Food Service)
3	44-116-1	#8 x 1/2" Long Hi-Lo Screw
4	40-200-5	Knob Assembly
5	81-18-1	#6 x 3/8" Long Hi-Lo Screw
6	81-18-3	#6 x 5/8" Long Hi-Lo Screw
7	56-25-4	Docking Assembly (Key 0)
8	40-206-1	Spacer (Round Bottle)
9	40-199-1	Hose Bracket
10	44-116-1	#8 x 1/2" Long Hi-Lo Screw
11	40-204-1	Drip Tray Shelf Bracket
12	44-116-3	#8 x 1" Long Hi-Lo Screw
13	40-203-1	Drip Tray Shelf

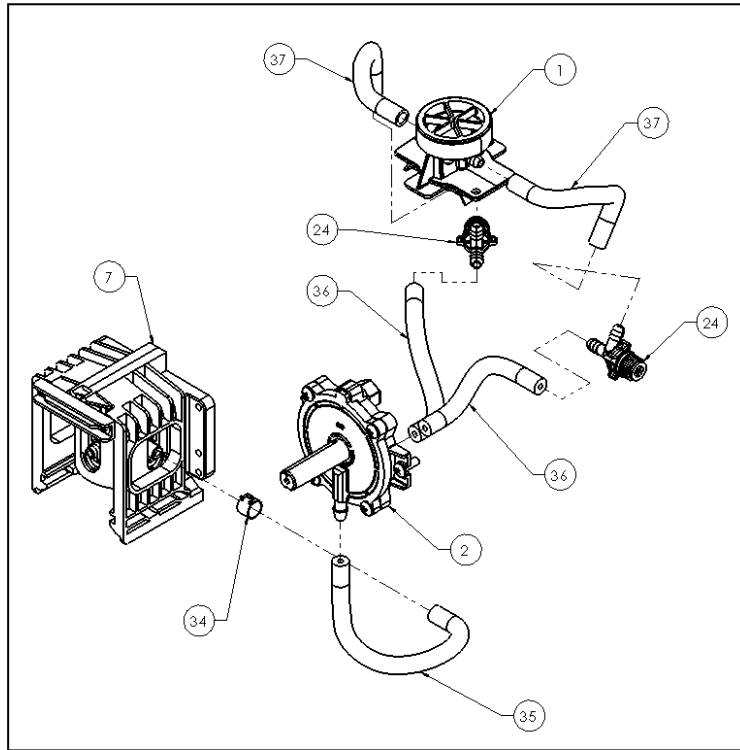
PARTS LIST AND DIAGRAM – VALVE MANIFOLD ASSEMBLY



Remote Fill Assembly

No.	Part No.	Description
14	66-153	Pipe Plug/ O-Ring Assembly
15	40-196-1	Valve Assembly (Remote Fill)
16	16-30	Action Gap
17	61-99-4	1 GPM Proportioner Assembly
	163CHA-NB	2.5 GPM Proportioner Assembly
18	98-58-1	Lever Assembly
19	86-1-3	Bottle Tubing
20	52-2-4	Hose Clamp
21	98-36-16	Clear Tubing
22	98-36-15	Blue Tubing
23	44-3-7FCO	Hose Assembly 1/2" ID x 7' Lg. (1.3cm x 2.1m)
24	56-38	Barb Check Valve Assembly
25	89-30-GAP	Hose With Hanger Assembly
26	61-22-4	4-GPM Proportioner Assembly
	163CHA-NB	2.5-GPM Proportioner Assembly
27	40-197-5	Valve Assembly (Push Button; Black)
28	66-241	Elbow, NPT x Barb
29	14-20-1	Removable Clamp
30	40-208-1	Hose 1/2" ID x 8" Lg. (1.3cm x 2.4m)
31	98-12-1	Hose Clamp, Plastic
32	40-736-8	Remote Fill Gun/ Hose Assembly

PARTS LIST AND DIAGRAM – CHEMICAL INDUCTION TUBE ROUTING



No.	Part No.	Description
34	40-397-2	Spring Hose Clamp
35	25-172-2	Supertube 6" (15cm)
36	25-171-1	Supertube 4" (10cm)
37	100-61	Vinyl Tubing 4" (10cm)
38	66-500-1	Wye Connector 3/16" (4.76mm)

WARRANTY

Merchandise Returns

No Merchandise will be returned for credit without DEMA's written permission. Returned merchandise authorization number is required in advance of return.

Product Warranty

DEMA products are warranted against defective material and workmanship under normal use and service for one year from the date of manufacture. This limited warranty does not apply to any products that have a normal life shorter than one year or failure and damage caused by chemicals, corrosion, physical abuse, or misapplication. Rubber and synthetic rubber parts such as "o"-rings, diaphragms, PVC tubing, and gaskets are considered expendable and are not covered under warranty. This warranty is extended only to the original buyer of DEMA products. If products are altered or repaired without prior approval, this warranty is void.

Defective units or parts should be returned to the factory with transportation prepaid. If inspection shows them to be defective, they will be repaired or replaced without charge, F.O.B. factory. DEMA assumes no liability for damages. Return merchandise authorization number must be granted in advance of returned units for repair or replacement (See "Merchandise Returns" above).