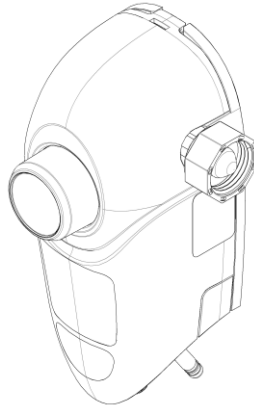


Fusion One

Housekeeping Chemical Dispensing System



Installation and Setup Guide

Fusion One accurately blends proportioned chemical with water for cleaning, sanitizing and other related needs. The dispensing system uses a pilot driven water valve designed for easy maintenance. Fusion One comes equipped with an ASSE 1055 approved backflow preventer to meet all plumbing codes.

Warnings



WARNING: INSTALLATION OF DEMA PRODUCTS MUST MEET ALL APPLICABLE PLUMBING CODES AND REGULATIONS ESTABLISHED BY NATIONAL, CITY, COUNTY, PARISH, PROVINCIAL OR OTHER AGENCIES. IT IS POSSIBLE THAT PLUMBING CODES AND REGULATIONS REQUIRE THAT A CERTIFIED INSTALLATION CONTRACTOR OR ENGINEER PERFORM THE PLUMBING INSTALLATION.

FOR UNITS INSTALLED IN AUSTRALIA:

THIS UNIT MUST BE INSTALLED IN ACCORDANCE WITH THE PLUMBING CODE OF AUSTRALIA (PCA) AS/NZS 3500.

ALWAYS TURN OFF THE WATER TO THE DISPENSER WHEN NOT IN USE.



READ ALL PRODUCT SAFETY DATA SHEETS (SDS) AND USE PERSONAL PROTECTIVE EQUIPMENT AS DIRECTED BEFORE INSTALLING OR DISPENSING ANY CHEMICAL FROM THIS DISPENSER.

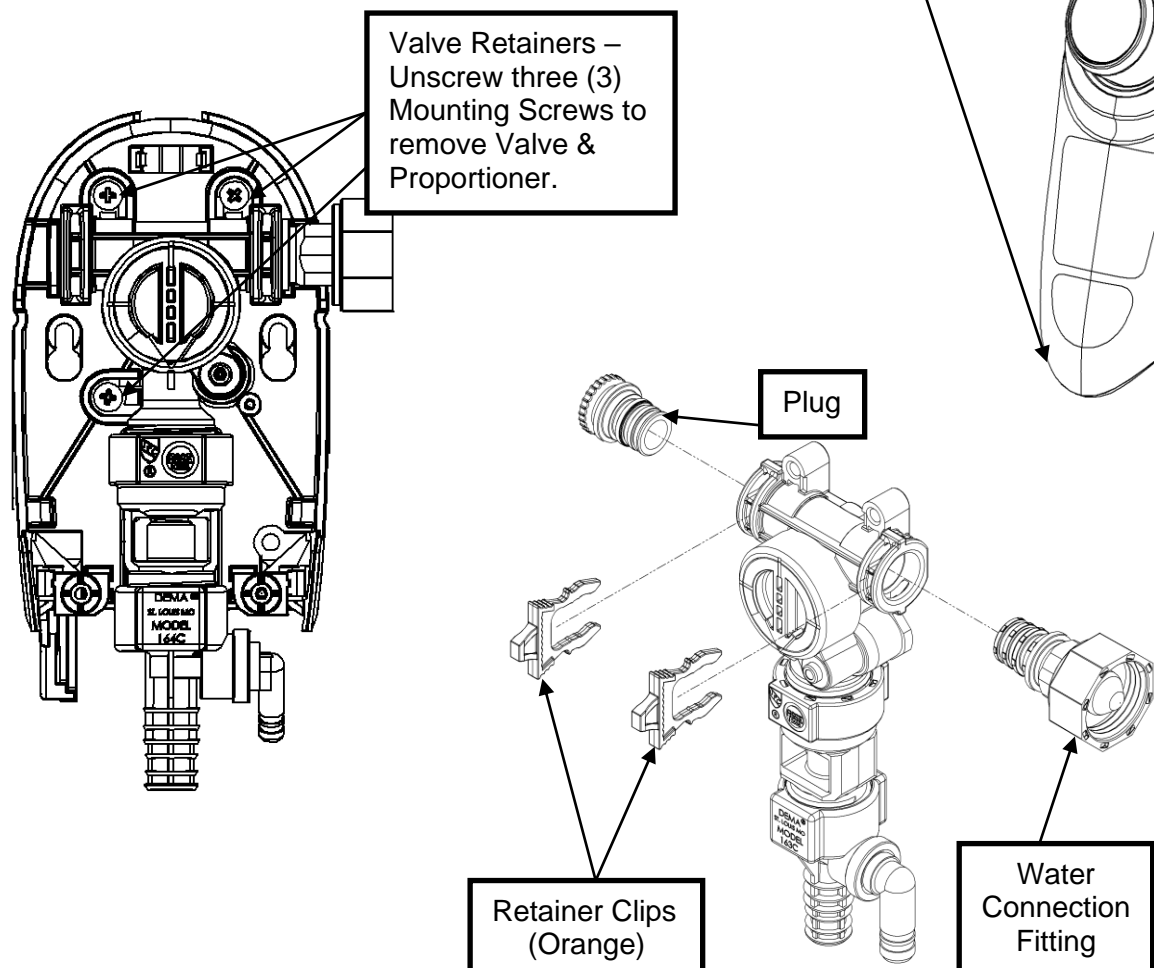
Operational Requirements

| | Minimum | Maximum |
|-------------------|-------------------|-------------------|
| Water Pressure | 20 psi (1.38 bar) | 95 psi (6.55 bar) |
| Water Temperature | - | 150°F (65.5°C) |

**** Recommended water pressure is between 20 psi (1.38 bar) and 80 psi. (5.52 bar). If pressure exceeds 80 psi, it is recommended that a P/N 66.43 regulator is used.**

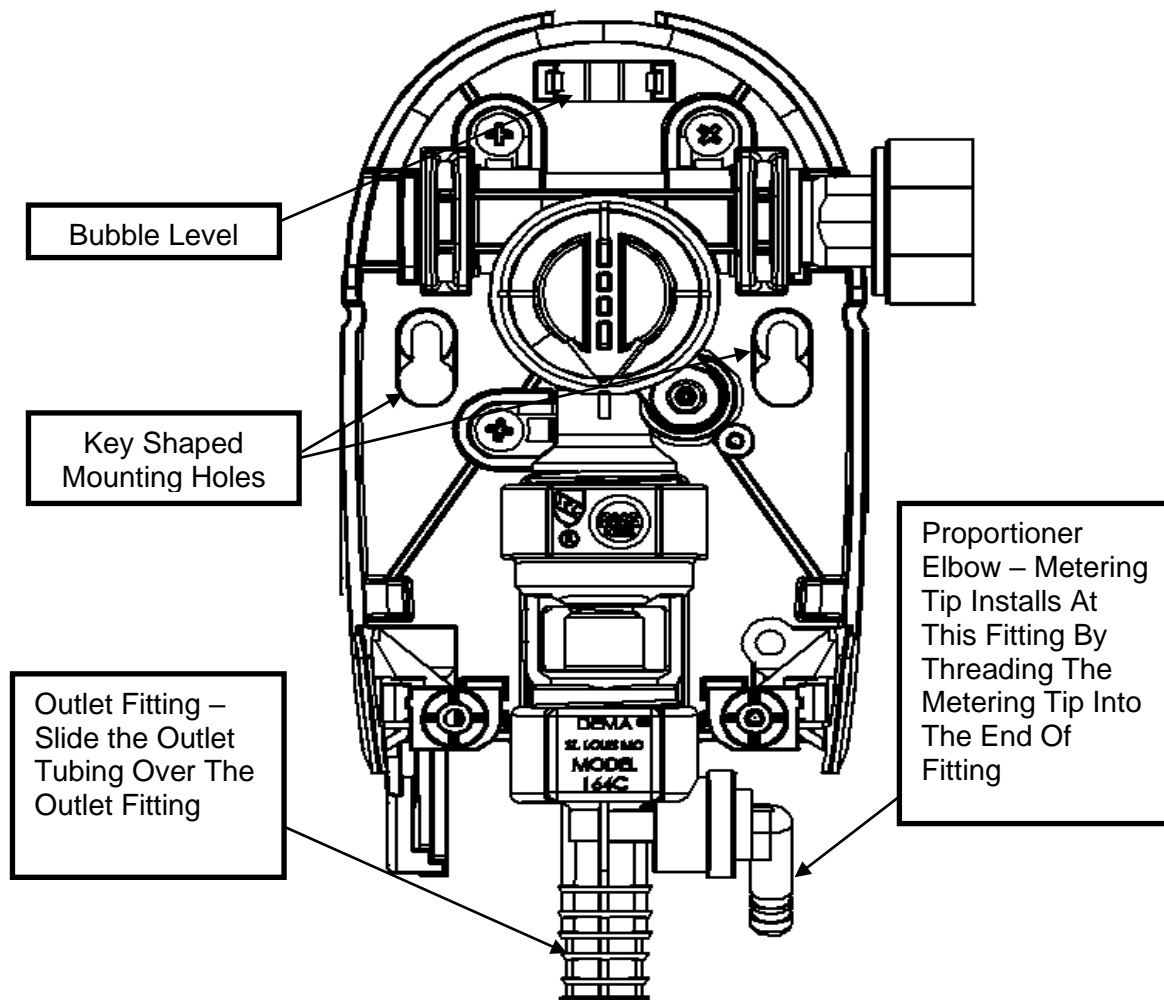
Installation and Servicing

1. Locate an easily accessible spot to install the Fusion One dispenser. Keep the following in mind
 - a. Mount near or over a mop sink.
 - b. Best access to water hookup.
2. Remove the Fusion One cover by pressing the plastic tabs on the side of the unit and swing the bottom away from the mounting bracket.
3. Determine if the water supply connection should be on the right or left-hand side of the dispenser.
 - a. The entire valve and proportioner assembly can be removed from the mounting bracket (see illustration on this page).
 - b. The water supply connection can be moved to either side by removing the plastic, orange retainer clips, the plug and the water connection fitting. Then replace the retainer clips.



Installation and Servicing Continued...

4. Locate the 2 key shaped mounting holes in the back plate. Mount the Fusion One using the 2 mounting screws and anchors that are included in the installation kit; with the aid of the integrated bubble level.
5. Install the desired metering tip by threading tip into the proportioner chemical pick-up elbow.
6. Cut the chemical supply tube to the length allows the foot valve to rest on the bottom of the chemical container. Slide the ceramic weight onto the chemical supply tube until it is against the foot valve. This will keep the foot valve at the bottom of the chemical container.
 - a. Note: Chemical containers cannot be greater than eight [8] feet (2.4m) below the Fusion One dispenser.
7. Install the Fusion One cover by positioning the top of the cover near the top of dispenser back plate and push the cover back over the valve assembly until the tab latches on side of the unit.
8. Connect the water line to the inlet of the Fusion One.
 - a. Note: The water pressure must be between 20psi and 95psi. Optimum chemical induction occurs between 30psi – 60psi.
 - b. The water inlet options for the Fusion One are:
 - i. Garden Hose (female)
 - ii. 3/8" Brass Compression Fitting (suitable for 3/8" OD soft copper water line, **NOT SUITABLE** for plastic tubing)
 - iii. 3/8" John Guest Push-on Water Fitting (suitable for 3/8" OD soft copper or LDPE tubing)
 - iv. 3/8" Brass Barb Water Fitting (suitable for 3/8" LDPE tubing)
 - c. The Fusion One can be used in conjunction with a pressure indicating tee, P/N 68.6

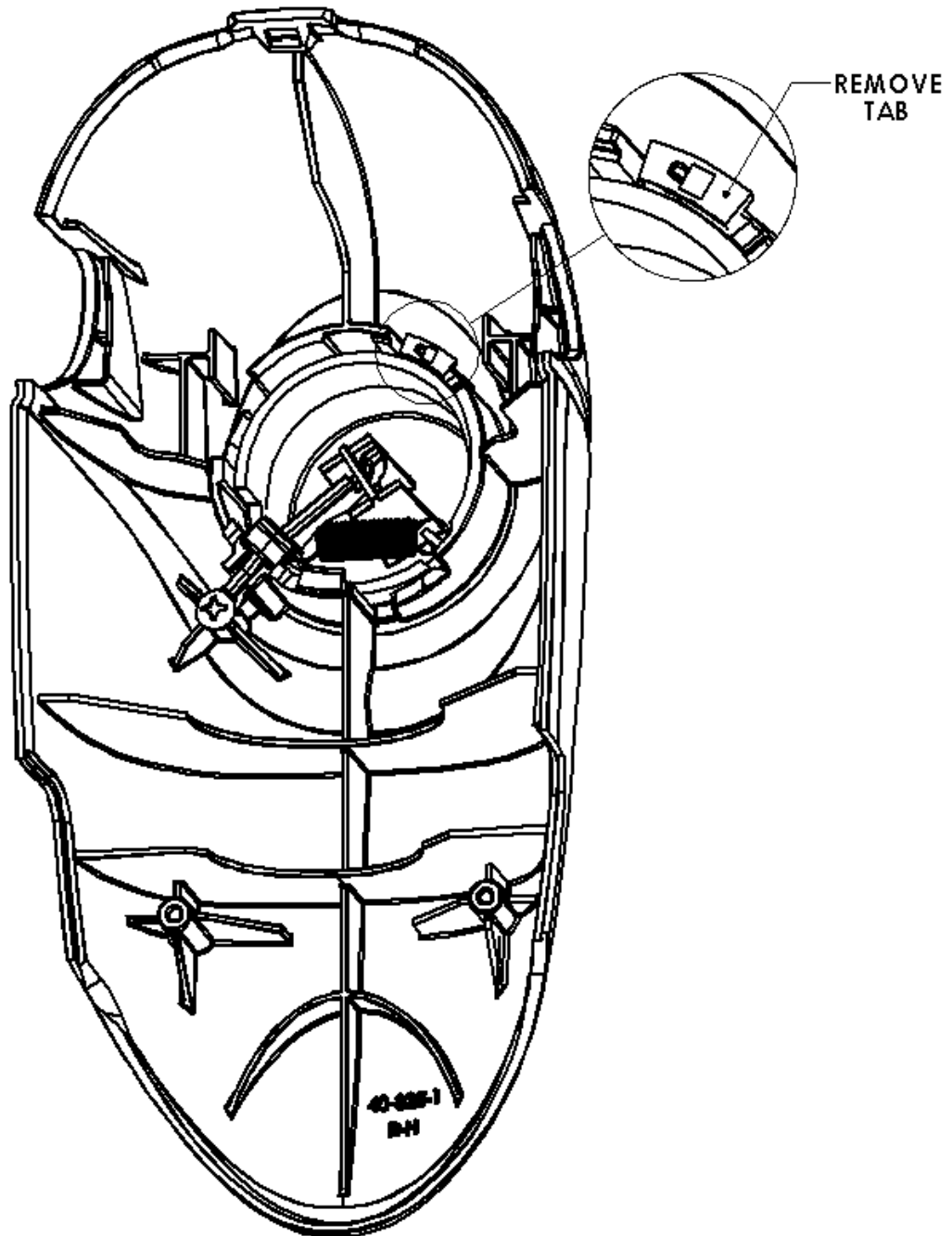


Installation and Servicing Continued...

9: Removal of Button Tab to engage Locking Activation feature (for 4GPM Proportioners).

Step 1: Remove Fusion One cover (see #2 above).

Step 2: Break off tab with pliers.



FUSION COVER – REAR VIEW

Metering Tip Kits

| Table 1: Fusion Metering Tips 100.15K (Provided) | | | | | | |
|--|----------------------------|--------|-----------|----------------------------|-------|-----------|
| Metering Tip Color | 1 GPM Air Gap Proportioner | | | 4 GPM Air Gap Proportioner | | |
| | Oz./gal | ml/L | Ratio : 1 | Oz./gal | ml/L | Ratio : 1 |
| Tan | 1.37 | 10.57 | 93.65 | 0.37 | 2.91 | 343.19 |
| Orange | 1.67 | 12.91 | 76.48 | 0.44 | 3.45 | 289.14 |
| Turquoise | 1.74 | 13.44 | 73.43 | 0.49 | 3.83 | 260.27 |
| Pink | 3.45 | 26.28 | 37.06 | 0.92 | 7.12 | 139.38 |
| Light Blue | 4.47 | 33.73 | 28.65 | 1.10 | 8.49 | 116.74 |
| Brown | 5.04 | 37.87 | 25.41 | 1.40 | 10.80 | 91.62 |
| Red | 6.89 | 51.08 | 18.58 | 1.78 | 13.70 | 72.01 |
| White | 7.43 | 54.87 | 17.23 | 1.90 | 14.60 | 67.48 |
| Green | 7.46 | 55.06 | 17.16 | 1.98 | 15.26 | 64.53 |
| Blue | 9.14 | 66.63 | 14.01 | 2.54 | 19.44 | 50.45 |
| Yellow | 14.07 | 99.07 | 9.09 | 4.29 | 32.46 | 29.81 |
| Black | 17.36 | 119.45 | 7.37 | 4.53 | 34.19 | 28.25 |
| Purple | 31.36 | 196.81 | 4.08 | 7.67 | 56.53 | 16.69 |
| Gray | 34.95 | 214.51 | 3.66 | 8.77 | 64.15 | 14.59 |
| No Tip | 35.95 | 219.31 | 3.56 | 10.54 | 76.05 | 12.15 |

INDUCTION RATES BASED ON WATER THIN PRODUCTS (1 cps)

INDUCTION RATES VARY PRODUCT TO PRODUCT. FIELD TESTS ARE RECOMMENDED.

| Table 2: Ultra Lean Metering Tips 100.15KU (Not Provided) | | | | | | |
|---|----------------------------|------|-----------|----------------------------|------|-----------|
| Metering Tip Color | 1 GPM Air Gap Proportioner | | | 4 GPM Air Gap Proportioner | | |
| | Oz./gal | ml/L | Ratio : 1 | Oz./gal | ml/L | Ratio : 1 |
| Copper | 0.47 | 3.70 | 269.58 | 0.14 | 1.10 | 904.85 |
| Pumpkin | 0.75 | 5.80 | 171.35 | 0.22 | 1.71 | 585.42 |
| Burgundy | 0.87 | 6.75 | 147.10 | 0.25 | 1.98 | 503.37 |
| Lime Green | 1.07 | 8.26 | 120.14 | 0.31 | 2.44 | 408.69 |

Metering Tip Kits Continued...

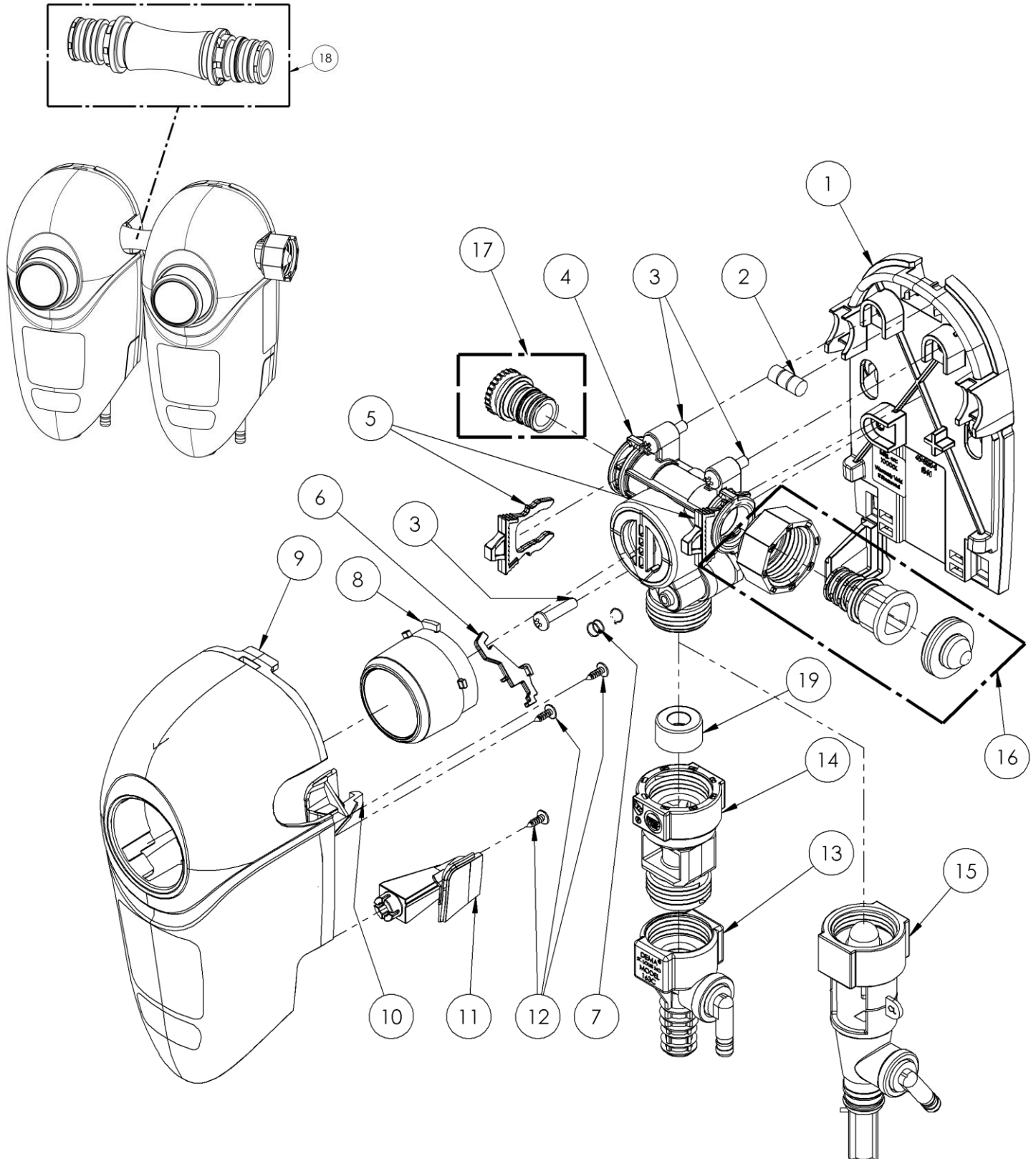
| Table 3: Fusion Metering Tips 100.15K (Provided) | | | | | | |
|--|-------------------------------|--------|-----------|-------------------------------|--------|-----------|
| Metering Tip Color | 1 GPM Action Gap Proportioner | | | 4 GPM Action Gap Proportioner | | |
| | Oz./gal | ml/L | Ratio : 1 | Oz./gal | ml/L | Ratio : 1 |
| Tan | 0.96 | 7.46 | 133.12 | 0.32 | 2.49 | 399.99 |
| Orange | 1.20 | 9.30 | 106.51 | 0.38 | 2.97 | 335.84 |
| Turquoise | 1.43 | 11.01 | 89.81 | 0.45 | 3.50 | 285.06 |
| Pink | 2.26 | 17.36 | 56.62 | 0.79 | 6.15 | 161.72 |
| Light Blue | 2.87 | 21.95 | 44.56 | 1.01 | 7.81 | 127.09 |
| Brown | 3.40 | 25.86 | 37.68 | 1.20 | 9.30 | 106.48 |
| Red | 4.10 | 31.08 | 31.18 | 1.42 | 10.99 | 89.99 |
| White | 4.67 | 35.18 | 27.43 | 1.67 | 12.86 | 76.79 |
| Green | 4.85 | 36.54 | 26.38 | 1.79 | 13.81 | 71.40 |
| Blue | 6.96 | 51.58 | 18.39 | 2.46 | 18.83 | 52.10 |
| Yellow | 10.27 | 74.31 | 12.46 | 3.79 | 28.79 | 33.74 |
| Black | 12.90 | 91.59 | 9.92 | 4.86 | 36.59 | 26.34 |
| Purple | 26.69 | 172.54 | 4.80 | 11.31 | 81.19 | 11.32 |
| Gray | 30.36 | 191.72 | 4.22 | 13.76 | 97.10 | 9.30 |
| No Tip | 45.48 | 262.17 | 2.81 | 24.77 | 162.15 | 5.17 |

INDUCTION RATES BASED ON WATER THIN PRODUCTS (1 cps)
INDUCTION RATES VARY PRODUCT TO PRODUCT. FIELD TESTS ARE RECOMMENDED.

| Table 4: Ultra Lean Metering Tips 100.15KU (Not Provided) | | | | | | |
|---|-------------------------------|------|-----------|-------------------------------|------|-----------|
| Metering Tip Color | 1 GPM Action Gap Proportioner | | | 4 GPM Action Gap Proportioner | | |
| | Oz./gal | ml/L | Ratio : 1 | Oz./gal | ml/L | Ratio : 1 |
| Copper | 0.34 | 2.67 | 373.60 | 0.12 | 0.94 | 1060.18 |
| Pumpkin | 0.56 | 4.33 | 230.23 | 0.19 | 1.50 | 665.14 |
| Burgundy | 0.77 | 6.00 | 165.66 | 0.24 | 1.85 | 539.29 |
| Lime Green | 0.84 | 6.52 | 152.39 | 0.28 | 2.21 | 451.24 |

Replacement Parts: Fusion Unit

Fusion One units can be connected using the Fusion Valve Connector (41.186.1). It would replace the Plug Adapter (40.926.1) on one of the units, and the Inlet Adapter Assembly (40.925.1 & 40.925.2) of the other units. Please use the orange retainer clips (40.854.1), to secure the connector in place.



Replacement Part: Fusion Unit Continued...

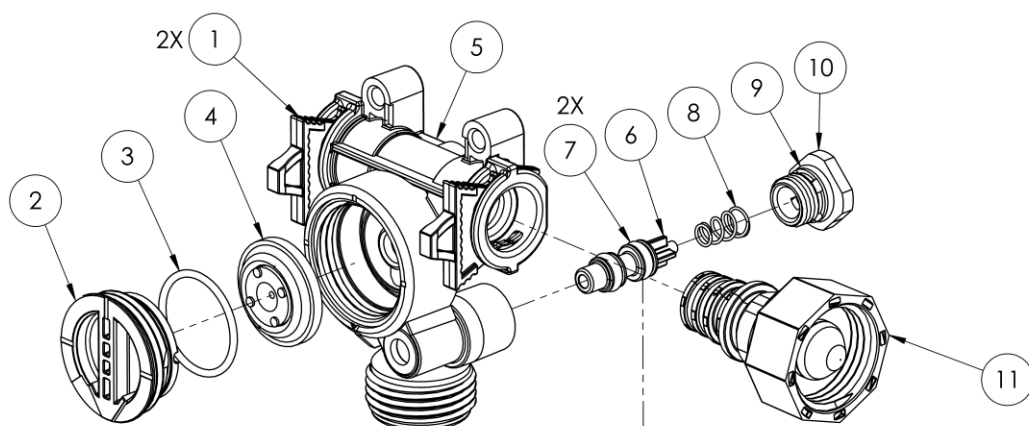
| FUSION REPLACEMENT PARTS | | | |
|--------------------------|--------------|-----|--|
| Item No. | DEMA No. | QTY | DESCRIPTION |
| 1 | 40.826.1 | 1 | BASE, FUSION HK |
| 2 | 40.970.1 | 1 | FUSION BUBBLE LEVEL |
| 3 | 44.116.3 | 3 | #8 HI-LO SCREW X 1" LONG |
| 4 | 64.4.2 | 1 | FUSION VALVE ASSEMBLY (LESS ADAPTERS) |
| 5 | 40.854.1 | 2 | RETAINING CLIP PILOT ACTIVATED VALVE |
| 6 | 40.931.1 | 1 | BOTTOM LEVER, FUSION HK |
| 7 | 40292.1 | 1 | EXTENSION SPRING |
| 8 | 40.929.1 | 1 | BUTTON, (BLACK) |
| | 40.929.1.B | 1 | BUTTON, (BLUE) |
| | 40.929.1.G | 1 | BUTTON, (GREEN) |
| | 40.929.1.P | 1 | BUTTON, (PURPLE) |
| | 40.929.1.R | 1 | BUTTON, (RED) |
| | 40.929.1.W | 1 | BUTTON, (WHITE) |
| | 40.929.1.Y | 1 | BUTTON, (YELLOW) |
| 9 | 41.185.1 | 1 | FRONT COVER, FUSION, W/LABELS |
| 10 | 41389.1 | 1 | RETENTION LATCH (LEFT) |
| 11 | 40.930.1 | 1 | RETENTION LATCH (RIGHT) |
| 12 | 81.20.2 | 3 | #4 X 3/8" HI LO SCREW |
| 13 | 61.22.3 | 1 | ACTION GAP [WHITE] PROPORTIONER ASSY. (4 GPM) w/1/4" INLET BARB |
| | 61.99.2 | 1 | ACTION GAP [GREEN] PROPORTIONER ASSY. (1 GPM) w/ 1/4" INLET BARB |
| 14 | 16.30 | 1 | ACTION GAP |
| 15 | 61.22.3BAG.3 | 1 | AIR GAP PROPORTIONER ASSEMBLY (4GPM) w/1/4" INLET BARB |
| | 61.32AGP | 1 | AIR GAP PROPORTIONER ASSY. (1GPM) w/1/4" INLET BARB |
| 16 | 64.70.11 | 1 | SMALL VALVE INLET ADAPTER W/GHT (BRASS) |
| | 64.70.12 | 1 | SMALL VALVE INLET ADAPTER W/BSPP (BRASS) |
| | 64.70.13 | 1 | SMALL VALVE INLET ADAPTER W/GHT, (PLASTIC) |
| | 64.70.14 | 1 | SMALL VALVE INLET ADAPTER W/BSPP, (PLASTIC) |
| 17 | 40.926.1.KIT | 1 | FUSION VALVE PLUG ADAPTER, ASSEMBLY |
| 18 | 64.70.19 | 1 | FUSION VALVE CONNECTOR |
| 19 | 89.20.1.KIT | 1 | FLOW DISC ASSY. KIT – 1 GPM |
| | 89.20.3.KIT | 1 | FLOW DISC ASSY. KIT – 4 GPM |

Fusion Accessories

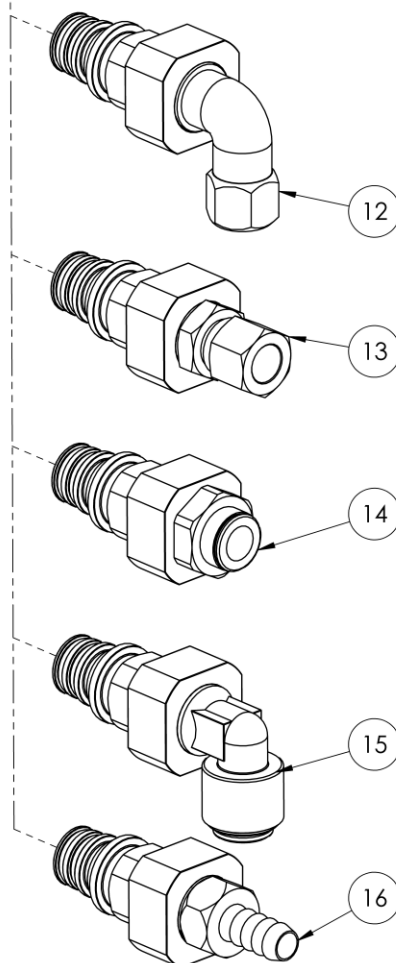
| FUSION ACCESSORIES | |
|--------------------|--------------------------------------|
| DEMA No. | DESCRIPTION |
| 89.30.GAP | HOSE HANGER ASSY. – .GAP MODELS ONLY |
| 89.30.AG | HOSE HANGER ASSY. – .AG MODELS ONLY |
| 98.42.1 | BOTTLE FILL HOSE – .GAP MODELS |
| 98.43.1 | BOTTLE FILL HOSE – .AG MODELS |
| 100.15K | METERING TIP KIT – REGULAR |
| 100.15KU | METERING TIP KIT – ULTRA LEAN |
| 100.16E.1 | TUBING & FOOT VALVE ASSEMBLY - 8' |
| 61.107.2 | CHEMICAL INLET HOSE WEIGHT |
| L1915 | CHEMICAL LABELS |
| 63.180 | 3/8" METERING BARB CONVERSION KIT |

NO IMAGE(S) SHOWN FOR THIS TABLE

Replacement Parts Valve Body



| VALVE REPLACEMENT PARTS | | | |
|-------------------------|---------------|-----|--|
| Item No. | DEMA No. | QTY | DESCRIPTION |
| 1 | 40.854.1 | 2 | RETAINING CLIP PILOT ACTIVATED VALVE |
| 2 | 41.058.1 | 1 | DIAPHRAGM CAP |
| 3 | 619.21 | 1 | O-RING SEAL EPDM (15/16" X 1/16") |
| 4 | 98.26.1 | 1 | 1-1/16" DIAPHRAGM |
| 5 | 40.824.1 | 1 | VALVE BODY |
| 6 | 40.849.1 | 1 | BUTTON, PILOT ACTIVATED VALVE |
| 7 | 640.106 | 2 | O-RING SEAL (3/16"ID X 3/8"OD X 3/32"NOM.) |
| 8 | 98.39.2 | 1 | RETURN SPRING |
| 9 | 63.78 | 1 | O-RING-SEAL EPT (7/16"I.D. X 9/16"O.D. X 1/16 NOM.) |
| 10 | 40.851.1 | 1 | BOTTOM CAP |
| 11 | 64.70.11 | 1 | FUSION INLET ADAPTER WITH GHT |
| | 64.70.12 | 1 | FUSION INLET ADAPTER WITH BSPP |
| | 64.70.13 | 1 | FUSION INLET ADAPTER WITH GHT, PLASTIC |
| | 64.70.14 | 1 | FUSION INLET ADAPTER WITH BSPP, PLASTIC |
| 12 | 64.70.1 | 1 | 3/8" ELBOW COMPRESSION INLET FITTING ONLY USE W/ SOFT COPPER PIPE |
| 13 | 64.70.2 | 1 | 3/8" STRAIGHT COMPRESSION INLET FITTING ONLY USE W/ SOFT COPPER PIPE |
| 14 | 64.70.3 | 1 | 3/8" JOHN GUEST PUSH-ON INLET FITTING |
| 15 | 64.70.4 | 1 | 3/8" ELBOW JOHN GUEST PUSH-ON INLET FITTING |
| 16 | 64.70.5 | 1 | 3/8" BARB INLET FITTING |
| 17 | ***41535.1*** | 1 | STRAINER (ONLY USED WITH INLET ADAPTERS ITEMS 12-16) |
| 18 | 64.4.2 | 1 | VALVE ASSY. COMP. LESS ADAPTERS (INCLUDES ITEMS 2-10) |

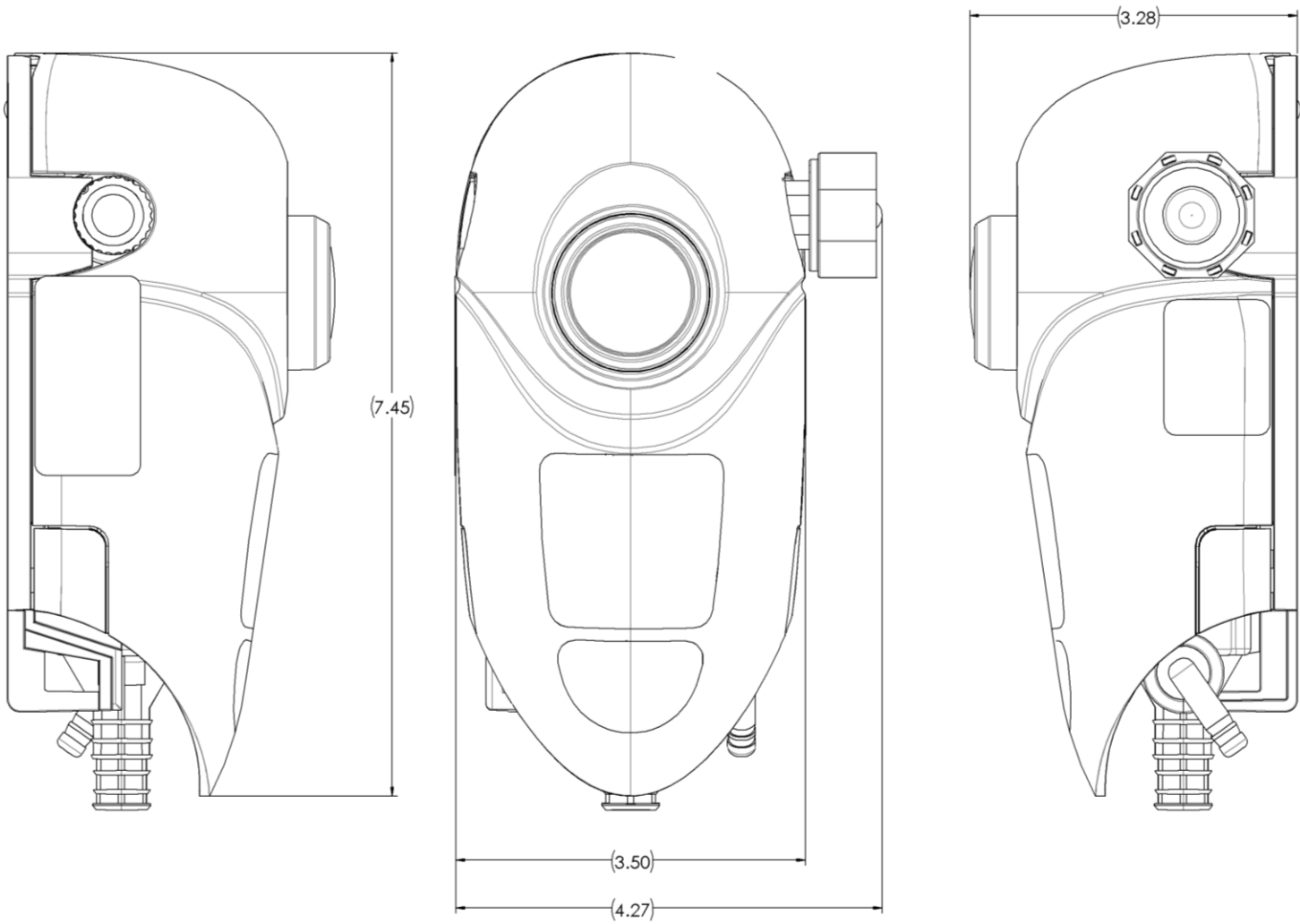


NOT SHOWN ON IMAGE

Trouble Shooting

| Symptom | Probable Cause | Remedy |
|---|--|--|
| Water Valve Does Not Shut Off After Use | Water pressure is above recommended range | Recommended water pressure is 30-70psi (2-5bar), install #66.43 pressure regulator |
| | Hole in the diaphragm | Replace the diaphragm |
| | Debris on the diaphragm or the valve actuation button | Rinse the diaphragm or button assembly |
| Proportioner Continues To Draw Chemical After Water Valve Is Shut Off | Concentrated chemical is positioned higher than the proportioner and is siphoning chemical | Move chemical container so it is lower than the proportioner |
| Activation Button Does Not Return To Off Position | Spring is missing from button | Replace spring, #64.50.1 |
| Proportioner Does Not Draw Chemical Properly | Insufficient water pressure | Minimum allowable water pressure is 20psi (1.38bar) |
| | Foot valve/SafeLink cap is clogged | Soak in hot water to clean |
| | Metering tip is clogged | Soak in hot water to clean |
| | Mineral deposits are located on air gap nozzle | Soak nozzle and inlet screen in hot water or in a mineral deposit removal chemical |
| | Proportioner elbow is loose, or O-ring seal has failed, allowing air in | Tighten seal, inspect O-ring condition, replace if needed, #63.78 |
| Air Gap Is Spraying Or Dripping | Mineral deposits are located on air gap nozzle | Soak nozzle and inlet screen in hot water or in a mineral deposit removal chemical |
| Leaking At Action Gap | Bucket fill tube is raised higher than proportioner | Do not raise bucket fill tube higher than proportioner, ensure dispenser is mounted a minimum of 4' (1.2m) off floor |
| Leaking At Water Valve Fittings | Retainer clip (orange) is not present | Replace retainer clip, #40.854.1 |
| Leaking At Threaded Connections | Connection between dispenser and water supply is too loose or strainer washer is missing | Inspect connection, verify strainer washer is present, tighten fittings |
| Leaking At Threaded Connections | Connection between dispenser and water supply is too loose or strainer washer is missing | Inspect connections, tighten fittings |
| | Proportioner and/or backflow preventer is too loose | Inspect connections, tighten fittings |

Product Dimension



Warranty

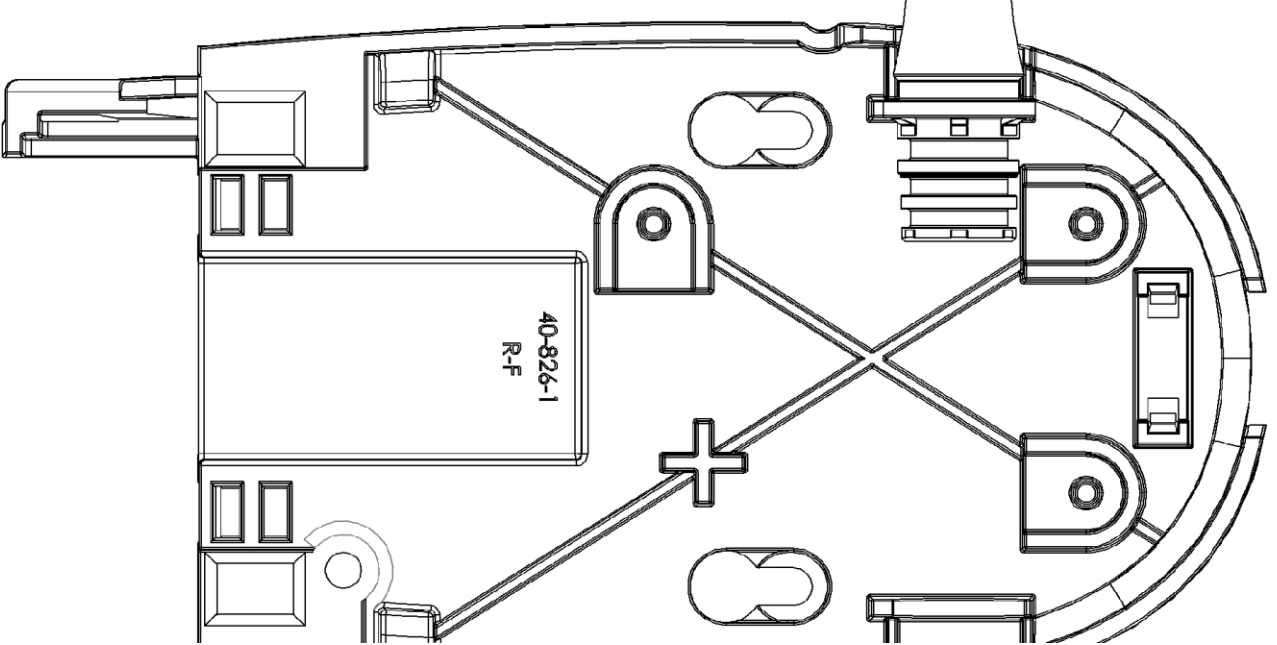
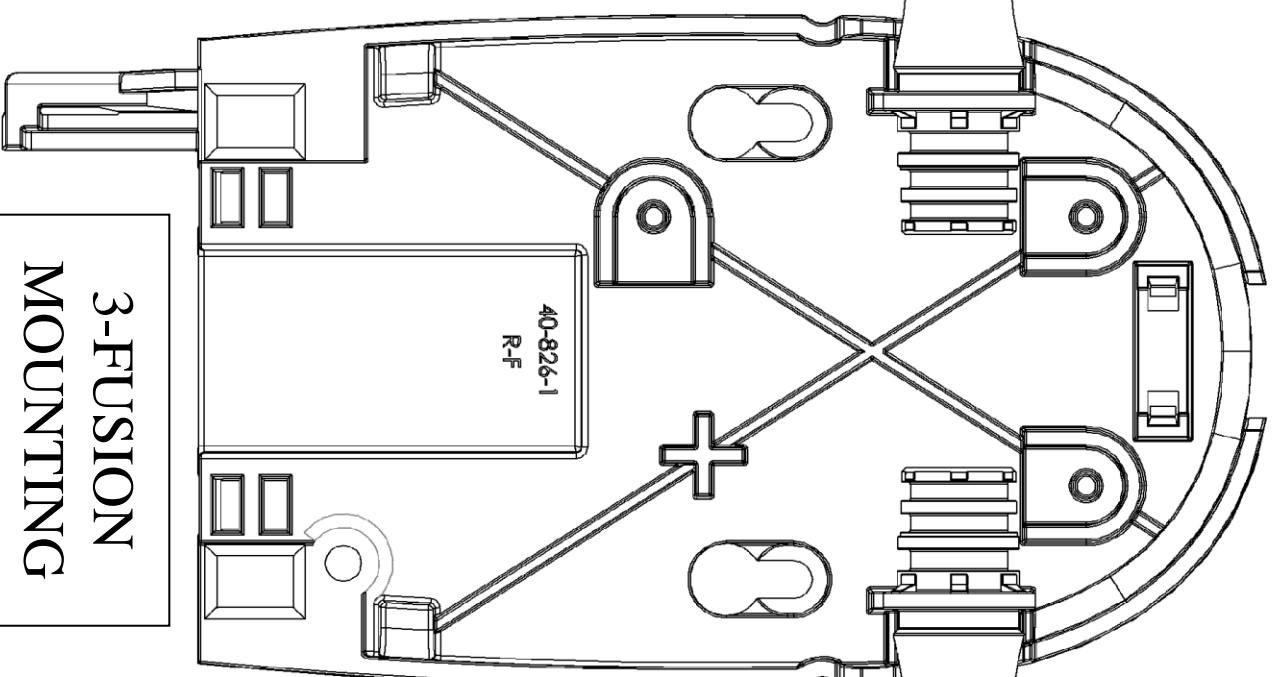
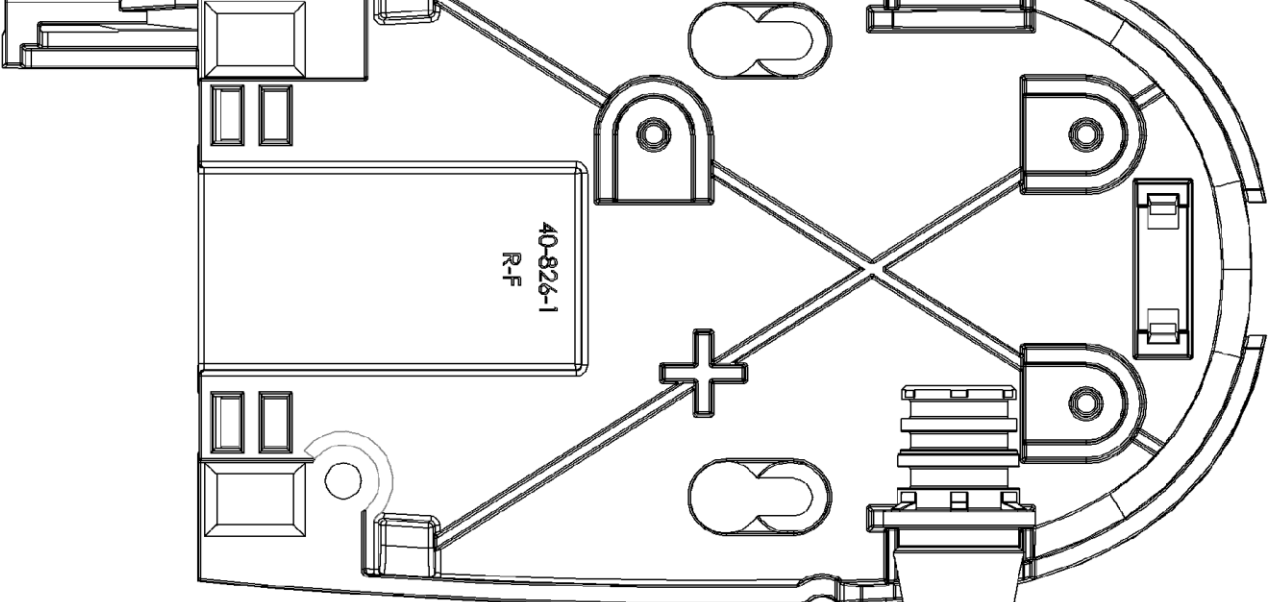
Merchandise Returns

***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 DEMA, 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 return units for repair or replacement (See "Merchandise Returns" above).



3-FUSION
MOUNTING
TEMPLATE