

## PRODUCT DESCRIPTION

Enclosed Self-contained Emergency Eyewash Station designed to provide a 15-minute eyewash flush without external force. Unit will offer freeze protection when supplied with power and properly wall mounted.

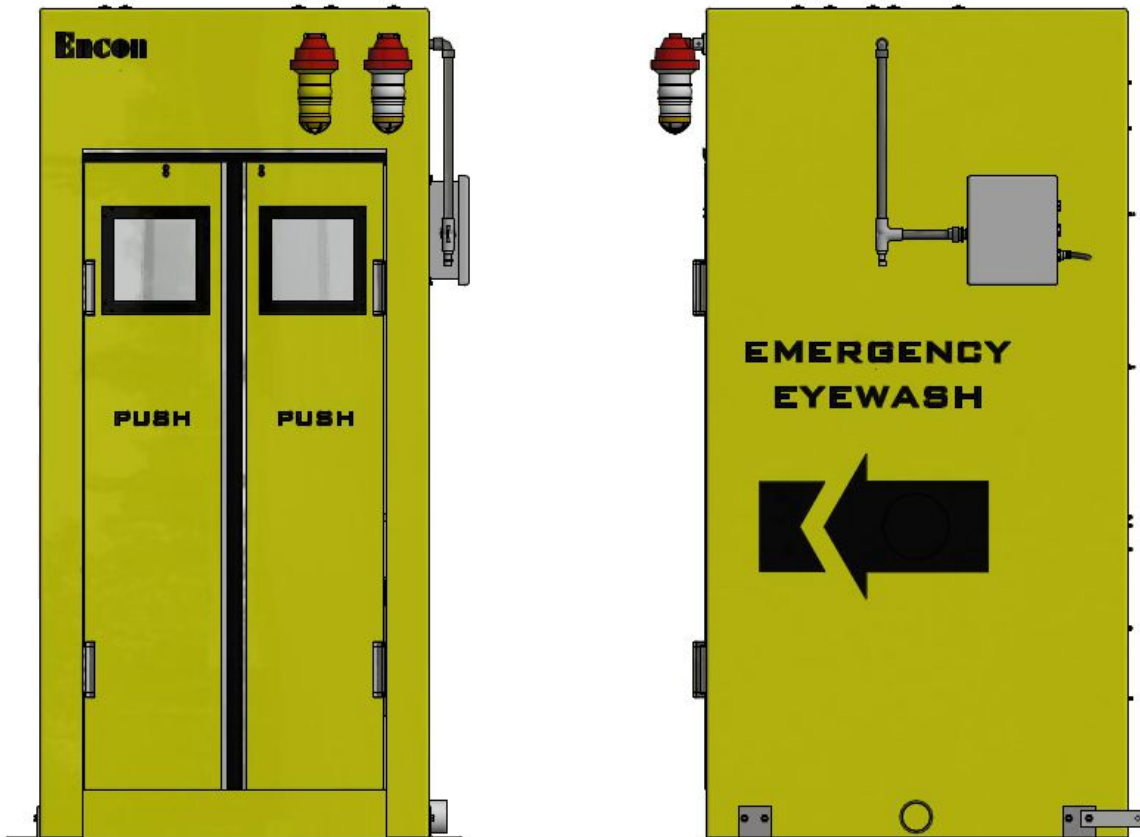


FIGURE 1

## KEY FEATURES INCLUDE:

- Aquarion® self contained eyewash station
- Mapswitch® activated alarm
- Indicator and alarm lights
- Double swinging door entrance
- Floor grate and right side drain

## INSTALLATION

Complete these steps to install the Enclosed Heated Aquarion® Unit as described in this section.

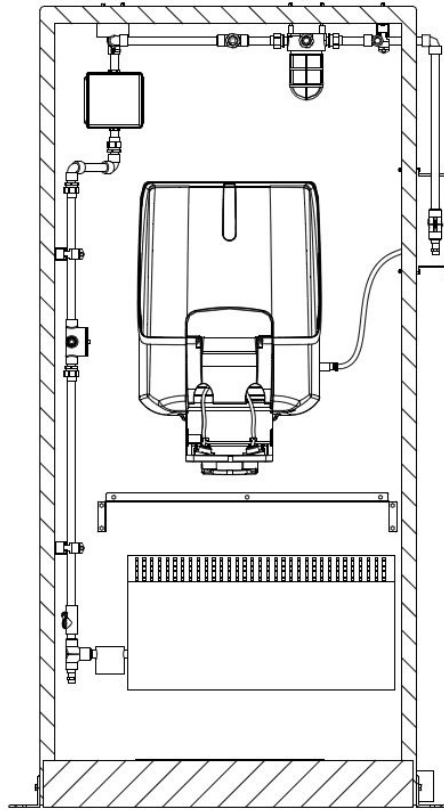
1. Ensure the installation requirements are met.
2. Unpack and secure the unit.
3. If applicable, connect the drain
4. If applicable, install the area locator and alarm lights.
5. Connect the electrical supply.
6. Adjust the enclosure doors.

## INSTALLATION REQUIREMENTS

Ensure the following requirements are met before installing the Enclosed Heated Aquarion® Unit.

- Location – The foundation must be level and capable of supporting a 2.5 psi load. Ensure the location has enough space to fit the unit. Ensure the placement of the unit is such that the area meets the latest American National Standards Institute Standard Z358.1 for emergency shower and eyewash equipment.
- Electrical- A 120 VAC single phase electrical connection is required. Ensure the electrical classification matches the area classification (for example, Class 1, Div 2). The voltage and the electrical classification specified on your system can be found on the Encon® label located on the main Junction Box.
- Drain (if applicable) – Minimum 4" O.D. drain to accommodate discharge of eyewash station.

***WARNING: NEVER ALTER OR MODIFY THE CERTIFIED CONSTRUCTION OF THE ENCLOSED HEATED AQUARION® UNIT OR ITS COMPONENTS, OR BYPASS ANY SAFETY FEATURES.***



**FIGURE 2**

## UNPACKING AND SECURING THE UNIT

Upon receipt of the equipment, verify the packaging and unit are received in good order. Inspect the pipe connections and electrical unions to ensure they are securely connected. Vibrations during shipment can loosen pipes and electrical fittings.

Using a forklift, lift the unit from the rear (opposite the swing doors). The load must be balanced and transported low to the ground. Use care to prevent damage to decals or hardware on the unit.

If you are lifting the unit with a cherry picker or crane, spreader bars and slings are recommended to prevent cracking the side walls. To pack and secure the unit:

1. Remove the ½" lag bolts from the mounting brackets that were used to secure the unit to the wooden pallet.
2. Using a forklift carefully insert the forklift prongs between the wooden skid runners and lift the building off of the wooden pallet.
3. Place the Building at the desired location for installation. Set the unit on a pad, structural grate, or other suitable surface. Carefully and slowly remove the forklift prongs.
4. Bolt the unit down using U-clamps (steel grate) or bolts (concrete) through the pad eyes.

## CONNECTING THE DRAIN

The Enclosed Heated Aquarion® Unit may require a drain pipe that will accommodate a 3" I.D. PVC drain fitting extension for Right or Left Drain, or a 3" I.D. or 4" O.D. for a Center Drain.

An external drainage system should be designed for a zero PSI drop gravity drain with a 2 GPM flow rate.

Ensure the drain connection is:

- Free flowing.
- Freeze protected (if applicable to the environment).
- Meets local and federal codes regarding water drainage.

Also consider that the water runoff may contain a substance or material which may have the potential to cause harm to the environment. Choose an appropriate location to drain the runoff according to the type of hazard being irrigated.

## INSTALLING AREA LOCATOR AND ALARM LIGHTS (if applicable)

Your unit may have area and alarm light fixtures. These lights help a user locate the emergency station and provide constant illumination inside the unit. Typically, light bulbs are not shipped with the unit by Encon®. However, the glass globe and protective light guard are shipped with the unit and require installation. Install the bulbs into the exterior and interior light fixtures, then install the color or clear glass globe over the bulb by screwing it into the fixture grooves

## CONNECTING THE ELECTRICAL POWER SUPPLY (For schematic see next page.)

Refer to your local, state, provincial or federal regulations for the proper grounding and electrical power connection.

To connect electrical power to the Enclosed Heated Aquarion® Unit:

1. Switch off the main electrical power supply.
2. It is highly recommended you install a circuit breaker at the electrical power source for the incoming supply.
3. Insert the electrical power supply wires into the junction box and connect them to the positive, negative, and neutral (ground) wires. Refer to electrical schematics to make the proper connections.
4. Secure the electrical power supply inlet wires at the junction box fitting.
5. Switch on the main electrical power supply and test the unit.

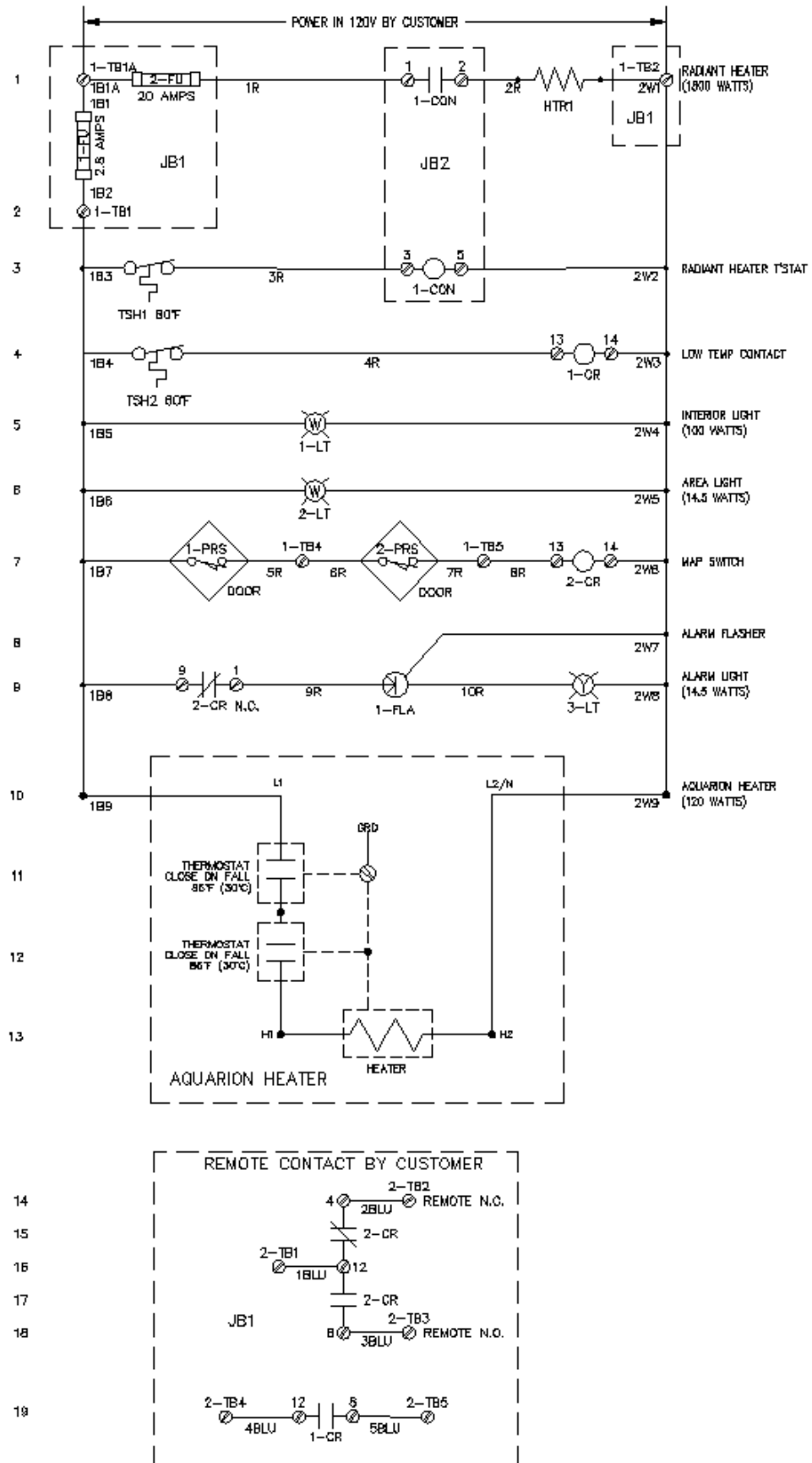


FIGURE 3

## ADJUSTING THE ENCLOSURE DOORS

Before shipping the unit to your location, Encon® sets the door springs to maximum tension to prevent damage to the enclosure. You can adjust the spring tension so that the doors will open and close easily. When you adjust the doors, ensure they remain closed and there is enough resistance to prevent the wind from opening them.

To adjust the door spring tension:

1. Insert a tension rod or 1/8" spring steel in the tension hole of the double acting hinge.
2. Tighten the spring tension so that you can remove the tension pin.
3. Using the tension rod or drill bit, rotate the hinge in the direction of the arrow as shown. When you get the desired tension, re-insert the tension pin and remove the tension rod or drill bit.
4. Repeat the procedure on all eight (8) adjustment pins (four per door).

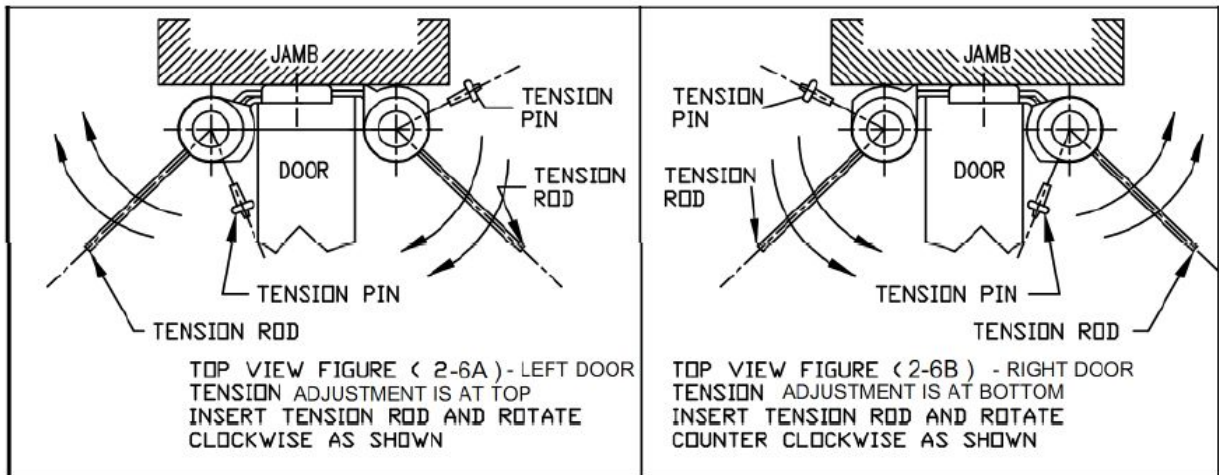


FIGURE 4

## MAINTENANCE AND REPAIR

### MAGNETIC ACTIVATED PROXIMITY SWITCH (MAP® SWITCH)

The Enclosed Heated Aquarion® Unit includes a magnetically activated proximity switch (MAP® switch) that operate local and/or remote alarms when the enclosure door is opened. When the magnetic field is broken, the switch closes or opens the circuit to operate the alarm.

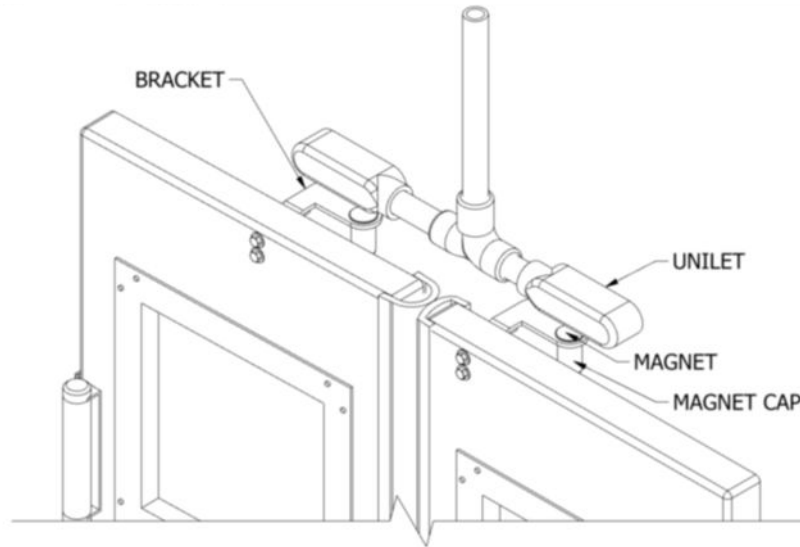


FIGURE 5

### TO FIX A MAP® SWITCH

If the MAP® switch does not operate the alarm or shut off the alarm when it is reset, do the following procedure.

1. Adjust the switch and magnet so that they are aligned properly and there is not more than one (1") inch (2.5cm) gap between the magnet and switch.
2. Ensure the switch is clean and nothing is obstructing the contacts and magnetic field.
3. Check the relay and other potential problems in the electrical circuit.
4. Replace the MAP® switch as described below if the above does not resolve the issue.

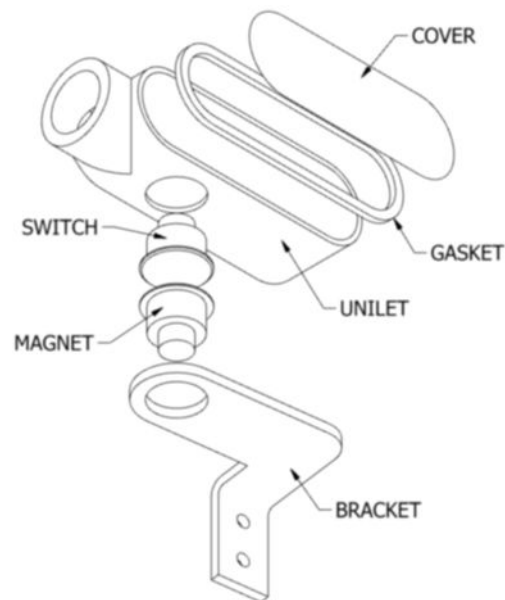


FIGURE 6

## TO REPLACE THE MAP® SWITCH:

1. Switch off the electrical power supply to the Enclosed Aquarion® Unit.
2. Remove the screws and switch box cover.
3. Make note of the wiring and disconnect the wires to the switch.
4. Remove the defective switch and install the new switch using silicone or acceptable caulking and in reverse order of removal.
5. Ensure the switch and the magnet on the door are aligned and there is no more than a one inch gap between the magnet and the switch.
6. Test the map® switch by pushing the swing door(s).

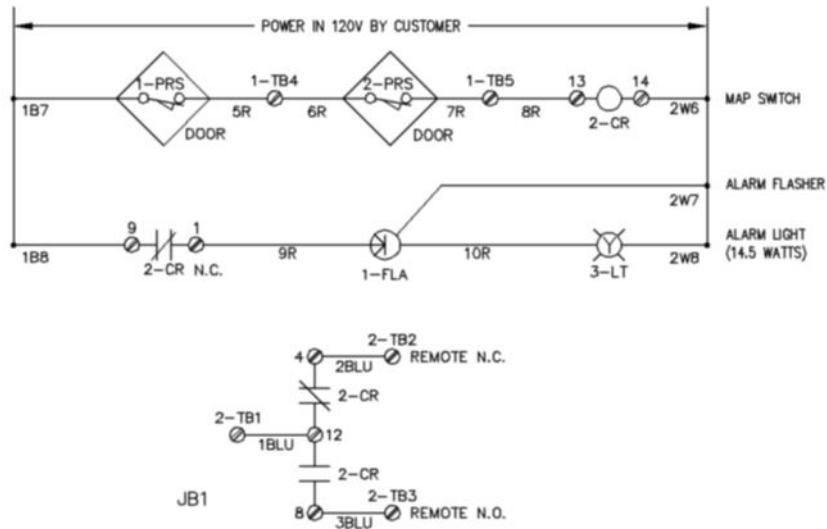


FIGURE 7

## ENCLOSURE

The enclosure is constructed of Gelcote®, glass fiber, and urethane foam insulation that requires minimal maintenance.

**WARNING: DO NOT STEAM CLEAN THE ENCLOSURE AS SEVERE STRUCTURAL AND COSMETIC DAMAGE WILL OCCUR**

The enclosure surface can be cleaned using acetone, however, avoid contact with the graphics and the Plexiglas® windows. Acetone will dissolve graphic decals and glaze Plexiglas. Use soft soap and water to clean the graphics and windows.

When repairs to the enclosure are required, consult with a local glass fiber repair contractor. For Technical Information contact Encon Safety Products (see Contact Information section).

Enclosure heater equipped units have a factory set non-adjustable thermostat. The heater automatically starts if the ambient temperature falls below 80°F (26°C).

## REPLACING THE ENCLOSURE DOOR RUBBER SEALS

The rubber door seals may deteriorate over time and need replacing. Rubber seals are located on the nose and between the hinges of the shower door. To replace the enclosure door rubber seals:

1. If you are replacing the rubber seal between the hinges, loosen the tension on the door hinges. (See Figure 4). You don't need to remove the door if replacing the nose side seals.
2. Replace the seals by doing the following:
3. For the hinge side, remove the old door seal including the remnants of glue and other material. Remove the self-adhesive protective backing and apply the new rubber seal to the door.
4. For the nose side, remove the seal by removing the screws. Install the new nose seal using the same screws.

## WINDOWS

Windows are expected to last the life of the enclosure. However, if replacement is necessary, contact Encon Safety Products (see Contact Information section) to order the part.

To replace a window:

1. Using a Phillips screw driver, remove the screws from the window frame.
2. Remove the window frame and the window.
3. Install the new window in reverse order of removal.

## ENCLOSURE HEATER

Heater equipped units have a factory set non-adjustable thermostat built into the main junction box. The thermostat automatically starts the heater when the enclosure temperature falls below 80°F (26.7°C).

***WARNING: NEVER OPERATE THE HEATER WITH THE FRONT PANEL OFF. AIR FLOW ACROSS THE HEATING ELEMENTS REQUIRES THE FRONT PANEL IN PLACE. INJURY FROM HOT HEATING ELEMENTS IS POSSIBLE WITH THE FRONT PANEL REMOVED.***

**To replace the enclosure heater:**

1. Switch off the main electrical power supply to Enclosed Aquarion® Unit.
2. Remove the unilet cover adjacent to the heater by turning it counter-clockwise to access the wire connections.
3. Make note of the wire connections and disconnect the wires.
4. Remove the old heater and install the new heater in reverse order of removal.
5. Switch the electrical power on and ensure the heater starts when the temperature goes below the thermostat setting.

***WARNING: ALWAYS DISCONNECT THE HEATER FROM THE ELECTRICAL POWER SOURCE BEFORE PERFORMING ANY SERVICE OR MAINTENANCE.***

**To maintain the heater:**

1. Keep the heater clean, especially the heating elements. Ensure the heater is off and cool to the touch, then remove dust, lint and accumulation of other material.
2. Never allow the heater to operate with restriction to the free circulation of air through it. Check that the heater has not been damaged or deformed and that all conduit joints are secure.
3. Check that the heater has not been damaged or deformed and that all conduit joints are secure.

## Enclosure Heater Thermostat

The heater thermostat is located directly above the radiant heater (see Figure 8). When the thermostat reaches the set cold set point, the circuit to the contactor closes or opens to start or stop the heater. The thermostat is preset at 80°F (26.7°C).



**FIGURE 8**

**To test the enclosure heater thermostat:**

1. Apply ice to the tip of the thermostat to simulate cold air temperature.
2. Determine if the heater starts. If the heater does not start, first check the circuitry, then replace the thermostat if necessary.



**To replace the enclosure heater thermostat:**

1. Switch off the main electrical power supply to the Enclosed Aquarion® Unit.
2. Open the thermostat unilet located above the enclosure heater.
3. Make note of the wire connections and disconnect the wires.
4. Remove the fitting that attaches the thermostat to the unilet
5. Remove the thermostat and replace it with the new thermostat.
6. Wire the new thermostat in reverse order of removal.
7. Switch the electrical power on and test the thermostat by checking if the heater starts when the temperature goes below the thermostat setting.

**ENCLOSURE HEATER CONTACTOR**

The heater contactor is in the junction box located inside the enclosure. When the thermostat reaches the set cold set point the contactor closes the circuit to start the heater. When the thermostat reaches the set hot point, the contactor opens the circuit to stop the heater. If the contactor does not close or open, the heater will not start or remains on indefinitely: if this happens the contactor may need to be replaced. Verify the heater thermostat is working properly before replacing the contactor.

**To replace the enclosure heater contactor:**

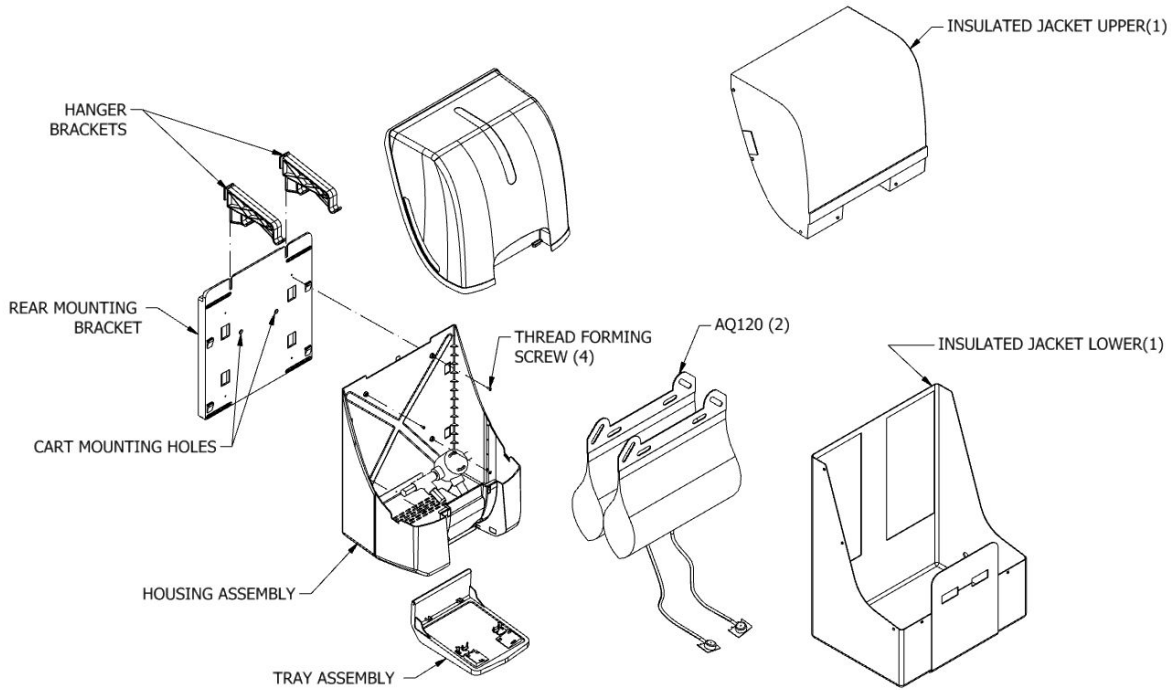
1. Switch off the main electrical power supply to the Heated Aquarion® Unit.
2. Open the junction box located inside the enclosure.
3. Make note of the wire connections and disconnect the wires.
4. Remove the defective contactor and install the new contactor in reverse order of removal.
5. Switch on the electrical power supply to the Enclosed Aquarion® Unit.
6. Test the contactor by checking if the heater starts and shuts off when the temperature goes below and above the thermostat setting 80° (26.7°C). Apply ice to the thermostat to simulate cold air temperature (see Figure 9).



**FIGURE 9**

# AQUARION® HEATED SELF CONTAINED EYEWASH STATION

The Aquarion® heated self-contained eyewash station offers freeze protection when supplied with power and properly wall mounted.



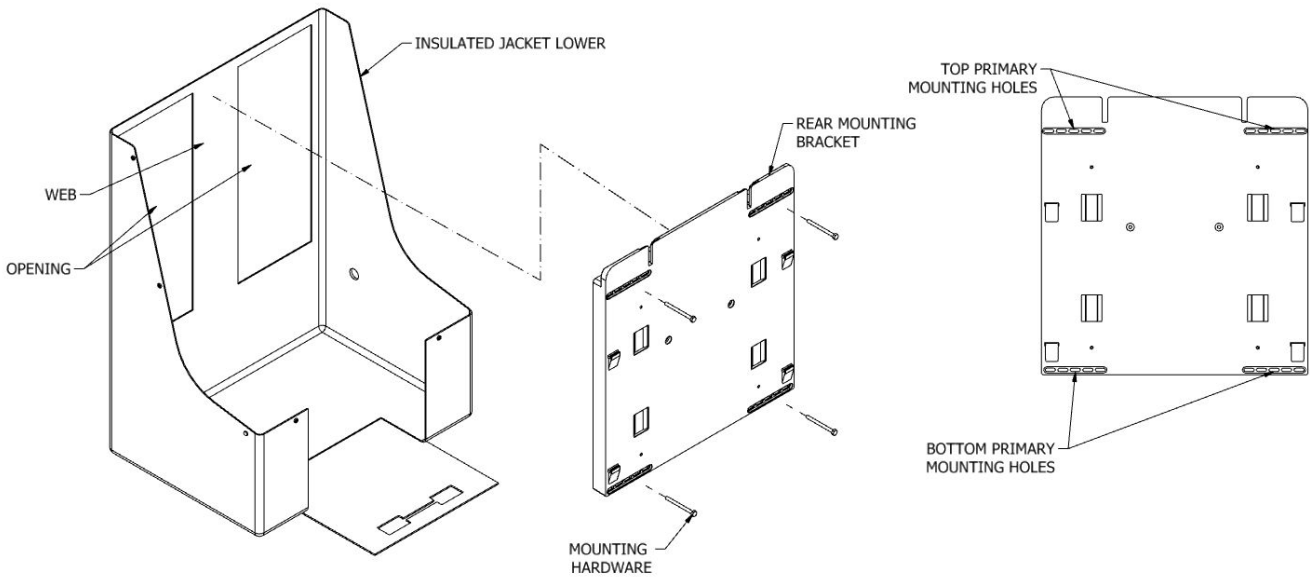
**FIGURE 10**

## ASSEMBLY AND INSTALLATION INSTRUCTIONS (AQUARION® UNIT ALREADY INSTALLED INSIDE ENCLOSURE)

Step 1. Rear Mounting Bracket (Ref Figure 11)

Note: Bottom of bracket should be 45" to 52" from standing level

A: Rear Mounting Bracket attaches to wall through two openings in Lower Insulated Jacket. Use four (4) Primary Mounting Holes on Rear Mounting Bracket and mounting hardware to attach to wall. Web on Lower Insulated Jacket must be trapped flat in channel on back of bracket and wall. Note: Mounting hardware supplied by others, shall be 1/4" diameter and of suitable type for surface unit is to be mounted on.



**FIGURE 11**

Step 2. Housing Assembly (Ref Figure 12)

- A. Place Housing Assembly on Rear Mounting Bracket utilizing Mounting Tabs and holes in rear of housing.
- B. Route Power Input through corresponding access port in Lower Insulated Jacket (Ref "A").
- C. Secure Housing using Thread Forming Screw (4) provided.

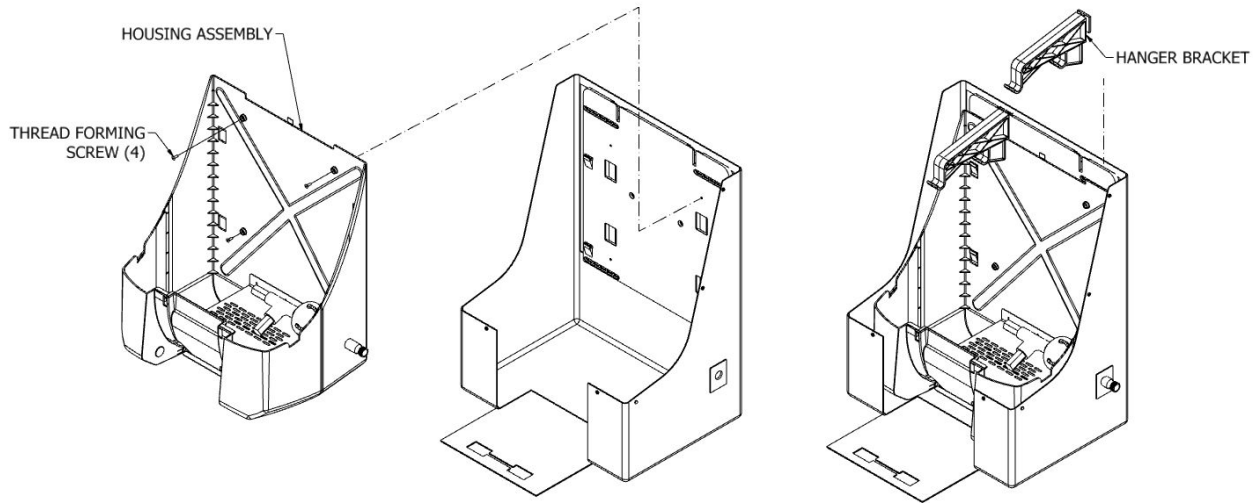


FIGURE 12

Step 3. Hanger Brackets (Ref Figure 12)

- A. Insert Hanger Brackets in slots on Rear Mounting Bracket, 2 places, as shown.

Step 4. Tray Assembly (Ref Figure 13) *Lower Insulated Jacket not shown for clarity.*

- A. With Tray Assembly in horizontal position, insert Pivot Post fully into Pivot Socket (both sides). Tray Assembly should swing freely if post is fully engaged.

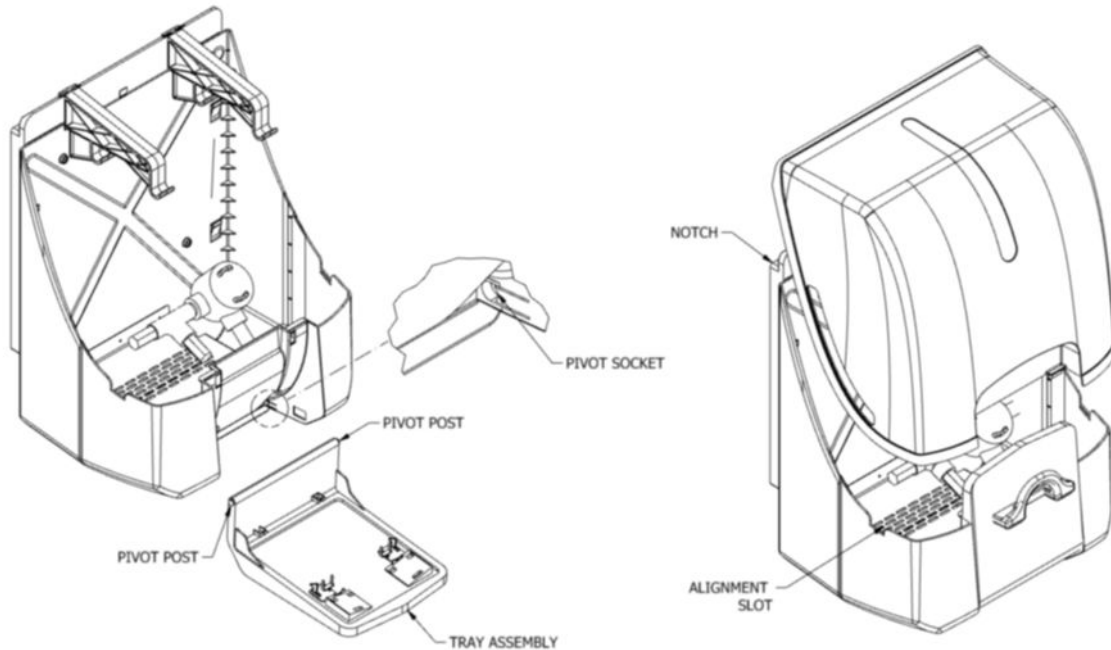


FIGURE 13

Step 5. Lid Assembly (Ref Figure 13) *Lower Insulated Jacket not shown for clarity.*

- A. Lid Assembly fits over Housing Assembly as shown. Note: For proper fit the back of the Lid Assembly fits over notch in rear mounting bracket. Locking Tabs inside Lid Assembly will lock into Alignment Slot (part of Housing Assembly).

Step 6. Upper Insulated Jacket (Ref Figure 14)

- A. Secure Upper Insulated Jacket to Lower Insulated Jacket utilizing snaps (8 places).
- B. Place handle of Tray Assembly through provided notch in Front Flap, part of Lower Insulated Jacket.
- C. Top edge of Front Flap must be positioned under Protective Flap, part of Upper Insulated Jacket.

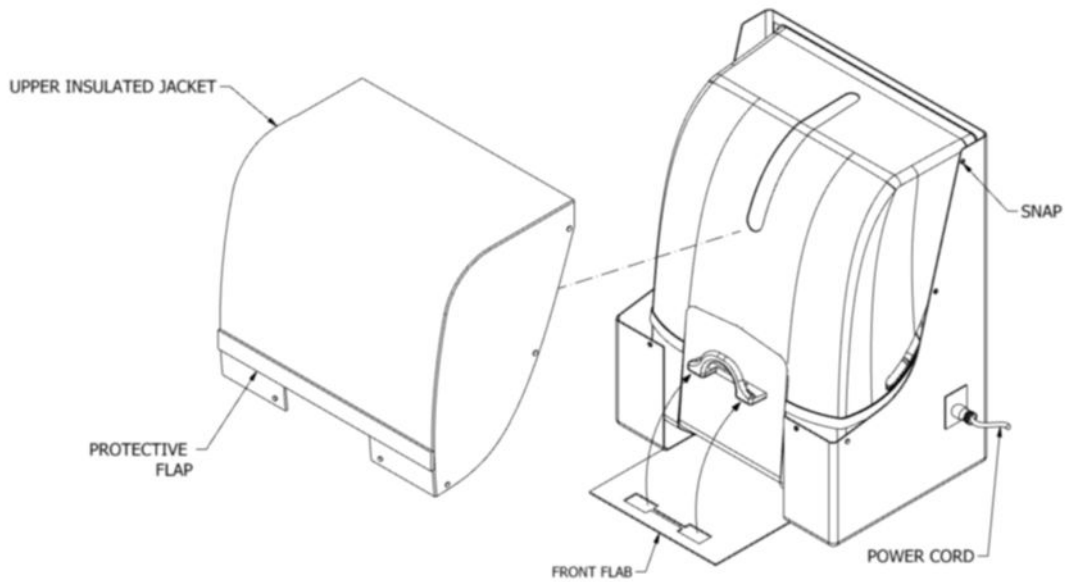


FIGURE 14

Step 7. Remove Lid Assembly (Ref Figure 15)

- A. To remove the Lid Assembly, a slight pressure must be applied to both sides of the Lid (Ref Figure 15). This will disengage the Locking Tab inside lid assembly. While pressing in, lift upward and cover will come off.

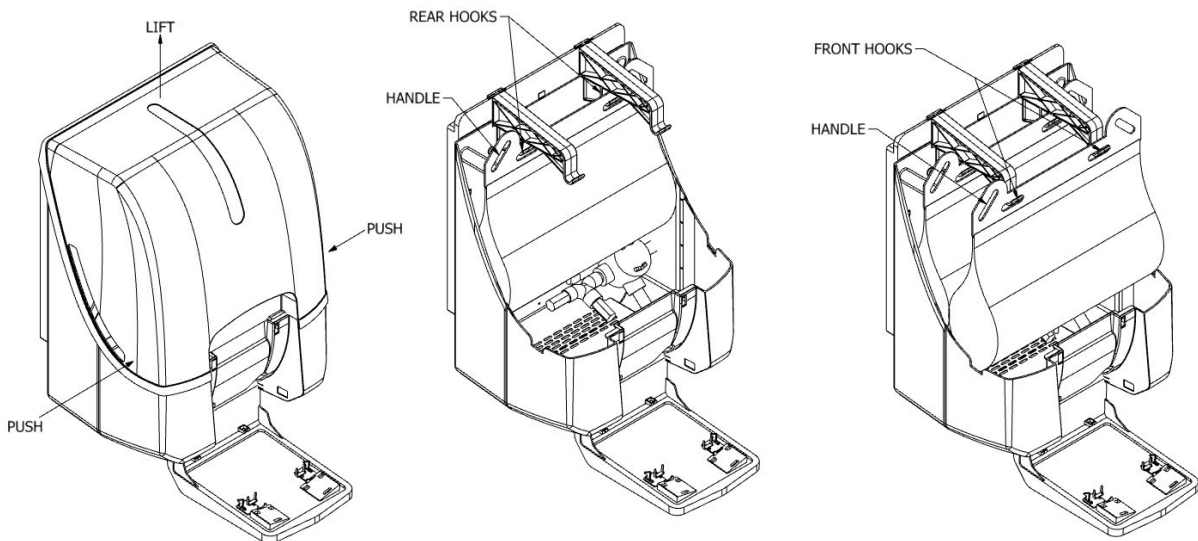


FIGURE 15

Step 8. Load Fluid Cartridges

- A. Lift first Cartridge by handle provided and place on rear hooks of Hanger Bracket (Ref Figure 15).
- B. Lift second Cartridge by handles provided and place on front hooks of Hanger Bracket (Ref Figure 15).

### Step 9. Nozzle installation

- A. With Lid Assembly removed and Tray Assembly in the open position, feed the first Nozzle Assembly (part of Fluid Cartridge Assembly) through the Access Port on the Housing Assembly. (Ref Figure 16)
- B. After securing Cartridge tube with Tube Clamp, Tilt Nozzle Assembly to insert alignment lip into guide slot on Tray Assembly. (Ref Figure 16)
- C. Insert Snap Locks on Nozzle Assembly into mating slots on Tray Assembly. **NOTE:** Both locks must fully engage with slots. During installation, the Safety Collar will snap off the assembly. This collar must be discarded.
- D. Repeat Steps 10B and 10C for second Cartridge.

### Step 10 Closing unit

- A. Return Lid Assembly (Ref Step 5) and Close Tray Assembly.
- B. Place easy Break Away Tag through hole provide on right side of handle. (Ref Figure 16)

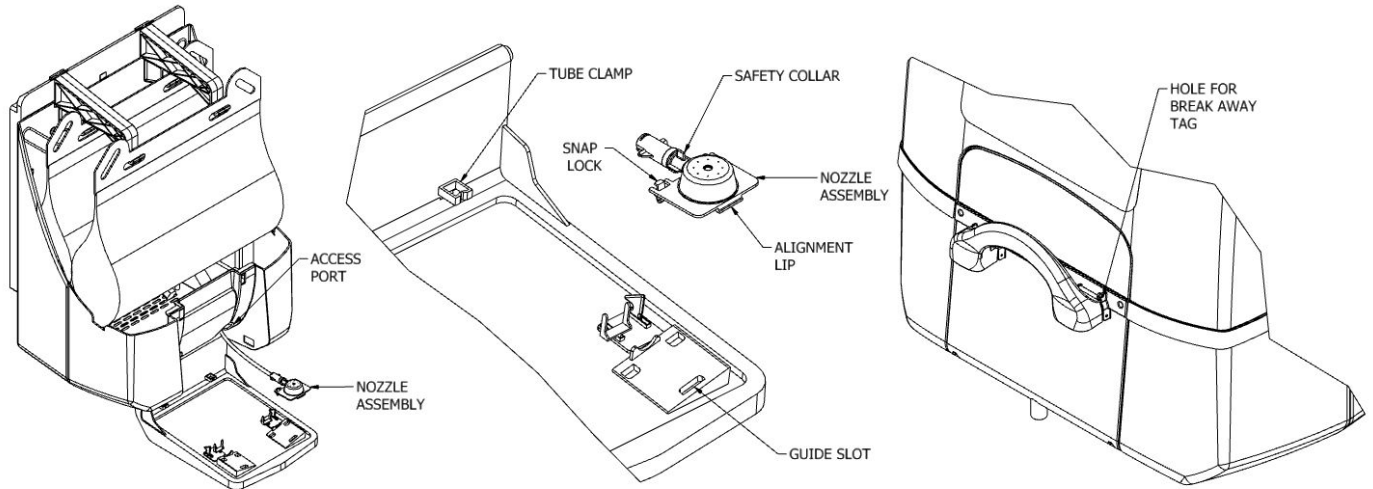


FIGURE 16

## OPERATION

To operate unit, simply pull downward on tray handle. Tray Assembly will swing forward into open position. Once opened in this manner the Tray Assembly will pierce Fluid Cartridge beginning 15 minutes of flow.

**NOTE: ONCE ACTIVATED FLOW CANNOT BE STOPPED AND CARTRIDGE MUST BE REPLACED.**

## MAINTENANCE

### Primary Inspection

1. Visually inspect Cartridge status through Side Windows on Lid Assembly (Ref Figure 15).
2. Visually inspect easy Break Security Tag is intact (Ref Figure 17).

### Secondary Inspection

1. To inspect the interior of unit, remove Lid Assembly per step 6-A
2. To inspect Nozzle Assembly, open Tray Assembly utilizing Supervisory Override Latch. Override Latches are located on underside of handle (Ref Figure 17). Both latches must be depressed to allow tray to open. **Note:** The only way to open Tray Assembly without breaking easy Break Security Tag and activating Fluid Cartridge is to use the Override Latch.

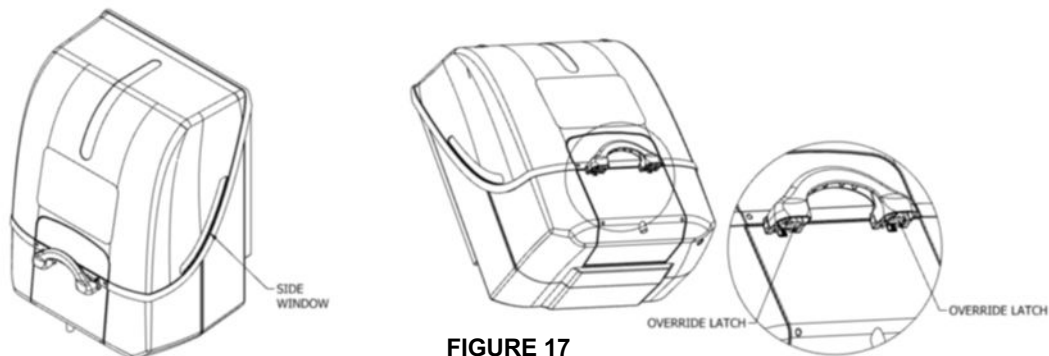


FIGURE 17

## TRAINING

All employees who might be exposed to hazardous material shall be instructed in the location and proper use of emergency shower and eye/facewash units. Experiences have shown that initial first-aid treatment for irritates should be to wash the eyes and face for 15 minutes prior to medical treatment. It is important to hold the eyelids open and roll the eyes so water will flow on all surfaces and in the folds surrounding the eyes.

## CONTACT INFORMATION

Contact Encon Safety Products (Encon) for inquiries, customer service, or suggestions.

**Toll Free** 1-800 AT ENCON (1-800-283-6266)  
**Web Site** <http://www.enconsafety.com>  
**Email** [customerservice@enconsafety.com](mailto:customerservice@enconsafety.com)  
**Address** Encon Safety Products  
Houston, Texas 77041  
USA

## SPARE PART LIST

<b>NOMENCLATURE</b>	<b>PART NO.</b>
ALARM FLASHER 120 VOLT	00-0135-75
MAGNET CAP FOR MAP® SWITCH	00-0130-07
MAGNET ONLY FOR MAP® SWITCH	00-0133-24
MAGNET & SWITCH FOR MAP® SWITCH	00-0133-19
SWITCH ONLY FOR MAP® SWITCH	00-0133-25
BRACKET FOR MAP SWITCH	00-0147-15
LOW TEMP ALARM THERMOSTAT	00-0146-41
RELAY FOR ALARM 120 VOLT, 5 AMP	00-0133-93
LIGHT GLOBE (INTERIOR)	00-0134-60
THERMOSTAT (RADIANT HEATER)	00-0136-00
WHITE DIAL LIGHT FIXTURE	00-0180-07
YELLOW DIAL LIGHT FIXTURE	00-0180-06
REAR MOUNTING BRACKET	01-1304-00
HANGER BRACKET(2)	01-1305-00
TRAY ASSEMBLY	01-1334-00
LID ASSEMBLY	01-1336-00
THREAD FORMING SCREW(4)	01-1340-00
INSULATED JACKET	01-1400-70
HOUSING ASSEMBLY	01-1335-00
EYEWASH CARTRIDGES(2)	AQ110
SWING DOOR SEAL (3 FT) <i>TOP</i>	01-3601-84
SWING DOOR SEAL (14 FT) <i>SIDE</i>	01-3601-84
DOOR WAY SEAL (14 FT)	01-3601-78A
RADIANT HEATER	00-0144-78
HINGES	00-0130-47
GROUNDING LUG	55005650SP2
CONTACTOR FOR RADIANT HEATER	00-0144-74
AIR HEATER FOR AQUARION	01-1400-78
THERMOSTAT (SET AT 86° F)	00-0137-97

## PROPOSITION 65

WARNING: This product can expose you to BPA, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

## WARRANTY STATEMENT

ENCON HEREBY DISCLAIMS ALL WARRANTIES EXPRESSED OR IMPLIED INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT OF THIRD-PARTY RIGHTS, EXCEPT AS HEREINAFTER PROVIDED.

Encon Safety Products warrants that for one year from the date of purchase of any Encon products, the product will be free of defects in materials and workmanship if properly used and cared for or cleaned under normal conditions in accordance with Encon's use and care instructions and properly installed, if applicable, in accordance with Encon's installation instructions. With respect to the product, Encon's only obligation and purchaser's exclusive remedy under this warranty is to repair or replace such product; provided that:

1. Encon is notified of the defect within one year of shipment, and
2. the product is determined by Encon to be defective.

Encon requires proof of original ownership as proof of warranty coverage, and Encon must receive any claim under this Limited Warranty within one year of purchase of the product.

NOTWITHSTANDING ANYTHING TO THE CONTRARY CONTAINED HEREIN, ENCON SHALL NOT BE LIABLE FOR LOSS, DAMAGE, OR EXPENSE ARISING DIRECTLY OR INDIRECTLY AS A CONSEQUENCE OF USE OF THE EQUIPMENT WITH OTHER PRODUCTS OR FROM ANY OTHER CAUSE, INCLUDING ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL OR EXEMPLARY DAMAGES, EXCEPT FOR ENCON'S OBLIGATION TO REPAIR OR REPLACE DEFECTIVE PRODUCTS AS EXPRESSLY PROVIDED IN THIS STATEMENT.

Replacement parts purchased from Encon are warranted for one year following the shipment of such replacement part, or until the expiration of the warranty period for the product, whichever is less. No warranty is given in connection with products that are altered without Encon's expressed written consent. The same warranty limitations and the obligations of Encon as set out herein above shall apply to replacement parts.

Encon's total liability arising out of this warranty (including, but not limited to, warranty claims) regardless of forum and regardless of whether such action or claim is based on tort, contract or otherwise will not exceed the total purchase price of the product.



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