

# FIXTURE MAINTENANCE

## INSTRUCTIONS



### WARNING:

- Caution – Risk of Shock: This product must be installed in accordance with the applicable installation code by a person familiar with the construction and operation of the product and the hazards involved.
- Make sure all electrical power is turned off while installing the fixture.
- This luminaire must be adequately grounded for protection against shock hazards and to assure proper operation.
- Disconnect power before servicing.
- LEDs are ESD (Electro Static Discharge) sensitive devices that can be easily damaged if the proper ESD mitigating steps are not taken.
- LEDs are very sensitive to mechanical damage. Caution must be taken to avoid damage to the LEDs.
- ESD or mechanical damage voids all warranties.

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### CLEANING

Use an antistatic cloth and warm water to clean the visible parts of the luminaire. If a cleaner is needed, use a mild and non-abrasive soap/detergent or rubbing alcohol. See Compatibility with Acrylic & Polycarbonate section for acceptable and not acceptable solutions.

Test the cleaner on a small, unseen portion of the fixture. Apply the cleaner onto a clean towel and test the cleaner in a small unnoticeable area. Let the subject area dry and inspect the finish of the luminaire. If the finish is unharmed, the cleaner should be safe to use.

### LED BOARD REPLACEMENT

#### DISCONNECT POWER TO LUMINAIRE BEFORE SERVICE

**NOTE:** Replacing any of the electrical components in the luminaire should only be done by a qualified and licensed electrician. Tampering with the internal wiring could result in shock or possibly void any warranty associated with the product. Before replacing any electrical components, the installer or responsible party should contact the factory prior to servicing the luminaire.

**LEDS ARE VERY SENSITIVE TO MECHANICAL DAMAGE. CAUTION MUST BE TAKEN TO AVOID DAMAGE TO THE LEADS. ESD OR MECHANICAL DAMAGE VOIDS ALL WARRANTIES.**

- DO NOT use power tools to fasten the boards into the fixture. Over torquing the LED board fasteners will damage the boards. Recommended torque is 5 in-lbs (0.6 Nm). Do not exceed 9 in-lbs (1 Nm.)
- All LED boards are secured to the fixture with T20 Torx head screws. If board screws need to be substituted, use #8 machine screws and ensure that the screw head OD does not exceed .0310" (8mm). Oversized screws will damage the LED board.

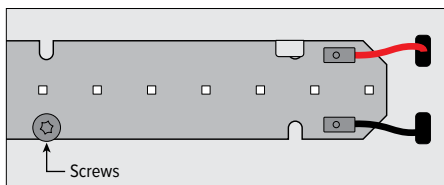
**STEP 1:** Turn off power to the light fixture at the breaker panel or disconnect the driver plug located inside the wireway.

**STEP 2:** Disconnect EM pack battery (if applicable).

**STEP 3:** Remove damaged LED board.

Using a T-20 bit, remove screws attaching the LED boards to the fixture. Keep screws to install the new board.

FIG 3.1

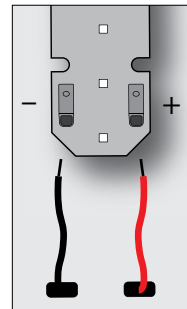


**STEP 4:** Remove the wires from the LED board.

Gently pull just enough wire out of the wireway to allow you to firmly grasp the wires and board. Pull on the wires and rotate until they pop out of the LED board.

**NOTE:** Wires may break off in the LED board.

FIG 4.1



**STEP 5:** Install new LED board.

**NOTE:** Carefully observe wire polarity: red to + and black to -

**A.** Gently push the leads back in the fixture.

**B.** Reinstall the screws.

**STEP 6:** Reconnect light fixture to line voltage or energize light fixture at the breaker panel.

**STEP 7:** Reconnect EM pack battery (if applicable).

#### TROUBLESHOOTING

If the light fixture does not turn on:

- Check LED board polarity
- Fixtures with a dimming driver: check dimming leads
- Row mount fixtures with a dimming driver: reversed polarity anywhere in the row will affect the entire row
- If the fixture has a photocell or occupancy sensor, bypass and try again

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### COMPATIBILITY WITH ACRYLIC & POLYCARBONATE

NOT ACCEPTABLE	
Acetaldehyde, 100%	Ethylene Oxide (Moist)
Acetates	Glass Cleaners
Acetic Acid, Glacial, 100%	Glycol
Acetic Anhydride	Hydrogen Peroxide, 28%
Acetone	Hydrogen Peroxide, 3%
Acetonitrile	Iron Perchloride
Acetophenone	Isoctane
Acrylic Paints	Isopropyl Alcohol
Alcohol, Allyl	Lacquer Thinner
Alcohol, Amyl	Lactic Acid Butyl Ester
Alcohol, Benzyl	Mercury Chloride
Alcohol, Ethyl, 100%	Meta-Cresol
Alcohol, Ethyl, 50%	Methanol, 15%
Alcohol, Isopropyl, 100%	Methanol, Concentrated
Alcohol, Methyl, 10%	Methyl Benzoate
Alcohol, Methyl, 100%	Methyl Chloride
Alcohol, Methyl, 50%	Methyl Cyclohexanol
Alcohol, N-Butyl	Methyl Ethyl Ketone
Amyl Acetate	Methyl Naphthalene
Aniline	Methyl Salicylate
Aviation Fuel (100 Octane)	Methylamine
Benzaldehyde	Methylene Dichloride
Benzene	Mineral Oil
Benzoic Aldehyde	Motor Fuel Mixture,
Brake Fluid	Nail Polish
Bromine Gas	Naphtha
Butanol	N-Butyric Acid, 100%
Butraldehyde	Nitric Acid, 40%
Butyl Acetyl Ricinoleate	Nitric Acid, 70%
Butyl Stearate	Nitrobenzene
Carbolic Acid	N-Octane
Carbon Disulfide	Organic Solvents
Carbon Disulfide	Paint Removers
Cellulose Paints	Paint Thinner
Chlorinated Hydrocarbons	Perchloroethylene
Chlorinated Solvents	Petroleum Ether (100-120C)
Chlorine Gas	Phenois
Chlorophenol	Phenol, Aqueous, 5%
Chromic Acid, 40%	Phosphoric Acid, 95% @ 20C
Cloves	Phthalates
Cosmoline Removers	Polyalkylene Glycol
Cresol	Pyridine
Cyclohexane	Sodium Carbonate, 2%
Cyclohexanone	Sodium Carbonate, 20%
Cyclohexene	Sodium Phosphate
Detergent Solution	Sulfur Dioxide, Liquid
Diacetone Alcohol	Sulfuric Acid, 98%
Diamyl Phthalate	Sulfurous Acid, Concentrated
Dibutyl Sebacate	Tincture of Iodine, 5%
Diethyl Ether	Toluene
Dimethyl Formamide	Transformer Oil
Dioctyl Sebacate	Trichloroethane
Dioxane	Trichloroacetic Acid
Ether	Trichloroethylene
Ethyl Acetate	Triethanolamine
Ethyl Alcohol, Concentrated	Turpentine
Ethyl Bromide	Unleaded Gasoline
Ethyl Butyrate	Vegetable Oil
Ethylene Bromide	Xylene
Ethylene Dibromide	

ACCEPTABLE	
2-Ethylhexyl Sebacate	Nitrogen Dioxide Gas
Acetic Acid 5%	Nitrogen Monoxide Gas
Ammonia-based Cleaners	Olefinic Carboxylic Acids
Ammonia Gas	Oleic Acid
Ammonium Hydroxide, 28%	Olive Oil
Ammonium Nitrate	Oxalic Acid, 100%
Ammonium Phosphate	Oxygen Gas
Aniseed, Bay Leaves, Nutmeg	Ozone Gas
Anti-freeze	Paraffin, Medicinal
Beer	Pepper, Cinnamon, Onions
Bleaching Power Paste	Phosphoric Acid, 10% @ 20C
Bleaching Powder Solution, 2%	Photographic Baths
Calcium Hypochlorite	Polishing Compounds
Car Wash Detergent	Potassium Chlorate
Carbon Dioxide Gas	Potassium Cyanide
Carbon Monoxide Gas	Potassium Dichromate, 10%
Caustic Potash	Potassium Hydroxide @ 20C
Chlorine Based Cleaners	Potassium Permanganate
Chlorine, Aqueous, 2%	Potassium Sulfite
Citric Acid, 10%	Power Steering Fluid
Coffee	Propylene
Cooking Oil	Pure-oil Paints
Cottonseed Oil	Silicone Oil
Diethylene Glycol	Silver Nitrate
Epoxy Adhesives	Soap Suds
Ethyl Alcohol, 15%	Soda
Ethylene Glycol E	Sodium Chloride, 10%
Ethylene Oxide (Dry)	Sodium Cyanide
Ferric Chloride, Aqueous, 10%	Sodium Fluoride
Formaldehyde, Aqueous, 40%	Sodium Hydroxide, 60%
Fruit Juice	Sodium Nitrate
Glycerol	Sodium Thiosulphate, 40%
Heptane	Stearic Acid
Hexane	Sulfur Dioxide, Dry Gas
Hydrochloric Acid, 38%	Sulfuric Acid, 30%
Kerosene	Sulfurous Acid, 5%
Lactic Acid	Tararic Acid, 50%
Metal Carbonates	Transmission Fluid
Metal Chlorides	Tricresyl Phosphate
Metal Sulfates	Triethyl Amine
Methane Gas	Vinegar
Milk	Water, Mineral Water
Milk, Chocolate	Wax Polish
Motor Fuel Mixture, without Benzene	White Spirit
Motor Oil	Whitewash
Natural Gas	Wine
Nitric Acid, 10%	