

Portfolio

INSTALLATION INSTRUCTIONS

IMPORTANT: READ CAREFULLY BEFORE INSTALLING FIXTURE.
RETAIN FOR FUTURE REFERENCE.

MA6xT6, MA6xT4, MA6CPxT6 and MA6CPxT4
Commercial Recessed Housings

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WARNING

Risk Of Electrical Shock

Disconnect power at fuse or circuit breaker before installing or servicing.

WARNING

Risk Of Fire

Supply conductors (power wires) connecting the fixture must be rated minimum 90°C. If uncertain, consult an electrician.

WARNING

Risk Of Fire.

Do not install insulation within 3 inches (76 mm) of any part of the fixture or in a way that may entrap heat.

CAUTION: To avoid possible electrical shock, be sure that power supply is turned off before installing or servicing this fixture.

CAUTION: Metal halide lamps have arc tubes that operate at extremely high temperatures and may shatter unexpectedly as a result of misapplication, system failure or internal factors. **This violent failure could cause extremely hot glass and lamp parts to discharge into the surrounding environment, creating a risk of personal injury, fire or property damage.** Therefore, it is incumbent on the user to use common sense and good judgment in anticipation of these potential violent failures. Never use or operate this fixture without safety glass or lens properly installed and secured in place.

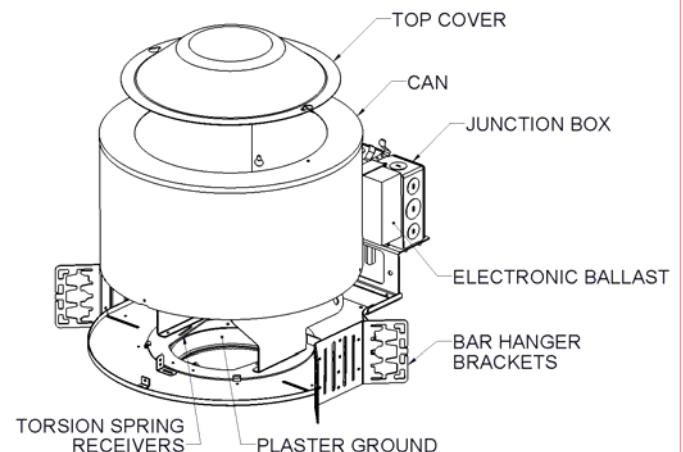
Reduction of Risk

The potential of violent failure can be significantly reduced by relamping at or before the rated end of life. In applications where the lamps burn continuously, the lamps should be turned off for a period of 15 minutes at least once per week which will cause lamps nearing their end of life to fail passively upon relighting. Careful adherence to the above precautions may not eliminate all possible risks associated with the use of Metal Halide lamps, but it will reduce the likelihood of personal injury or property damage.

Rough-In Mounting

- This fixture should be supported by main runners or other structure that is capable of supporting the fixture weight.
- The junction box will accept both ½" and ¾" trade size metal conduit.
- Review fixture labeling to make sure it is rated for the voltage being used.
- The housing is designed for installation where it will not come in contact with insulation. Thermal insulation must be kept a minimum of three inches (3") away from the housing sides, top and junction box.

Step 1. Install fixture into ceiling cavity using ½" electrical conduit, ¾" channel, 1½" channel or ½" x ½" bar stock as mounting rails (furnished by others) by inserting them into hanger brackets at both ends of the fixture as shown.



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Step 2. Secure mounting rails to support structures.

Step 3. Adjust fixture so bottom of plaster ring is flush with finished ceiling line, using screws securing hanger brackets. Hanger bracket is reversible for a total adjustment of 5".

Electrical Connection

CAUTION: Make certain no bare wires are exposed outside of wire nut connectors.

Step 4. Provide electrical service according to the "National Electrical Code" or your local electrical code to the junction box (located on the plaster frame). Supply wire insulation must be rated for at least 90° C. The junction box is also rated for a maximum of 12 No. 12 AWG Branch Circuit conductors suitable for at least 90°C.

Step 5. Remove junction box cover.

Step 6. Remove appropriate round pryout and connect conduit to junction box with proper connector (not included).

Step 7. Connect supply lead wires to junction box lead wires (line, neutral and ground) in fixture using properly sized wire nuts (not included). Be careful not to leave any bare conductors outside of the wire nut connectors.

Step 8. 120V or 277V AC Supply: Connect white to white, black to black and green (from electrical service) to the bare copper wire in the junction box. See the appropriate wiring diagram for more detail.

Place all connections and excess wiring into the junction box and replace cover.

BLACK →> LINE
WHITE →> NEUTRAL
GREEN/BARE COPPER →> GROUND

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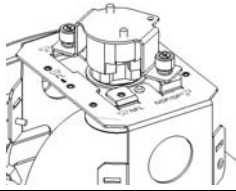

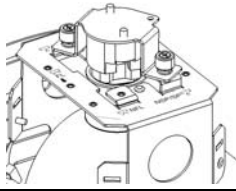

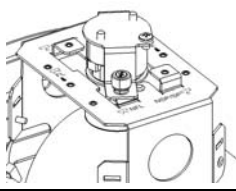

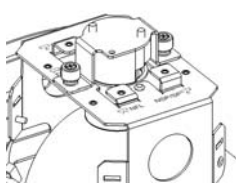

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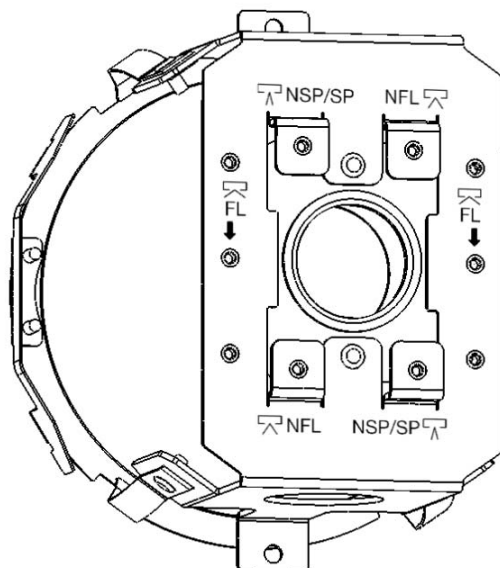
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Distribution Selection

This housing allows for the selection of four different light distributions at the time of installation. This is achieved with a combination of three different lamp positions, and two lens choices. See the table below for details.

Distribution	Lamp Position	Lens
Narrow Spot	NSP/SP 	Partial Sandblasted 
Spot	NSP/SP 	Solite 
Narrow Flood	NFL 	Solite 
Flood	FL 	Solite 



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Lamping Information

- The electronic ballast has a very important shutdown timing feature that turns off the ballast output after time periods ranging from 2 minutes up to 30 minutes if a lamp does not start or operate properly or if the fixture wiring is improper. For proper system diagnosis and at lamp replacement time, the INPUT POWER TO THE BALLAST MUST BE RESET (turn power off, wait 10 seconds, turn power back on) to start a new lamp.
- Take proper care in handling and disposing of the old lamp. Do not touch glass bulb with bare hands.
- Lamp contains Mercury. Manage in accordance with disposal laws. See www.lamprecycle.org or 1-866-666-6850.
- This housing/trim is designed to be used with T6/T4.5 Ceramic Metal Halide lamps for the specified wattages only. These lamps can cause serious skin burn and eye inflammation from shortwave ultraviolet radiation if the envelope of the lamp is broken or punctured.

Ceramic Metal Halide Lamp

MA6xT6G12 Housings

G12 socket for one 20W, 39W, 70W or 150W lamp.

Generic lamp designations (lamp by others):

M156/E (20W)

M130/E (39W)

M98/E, M139/E (70W)

M102/E, M142/E (150W)

MA6xT4G85 Housings

G8.5 socket for one 20W, 39W, or 70W lamp. Generic

lamp designations (lamp by others):

M156/E (20W)

M130/E (39W)

M98/E, M139/E (70W)

MA6xT4G65 Housings

GU6.5 socket for one 20W or 39W lamp. Generic

lamp designations (lamp by others):

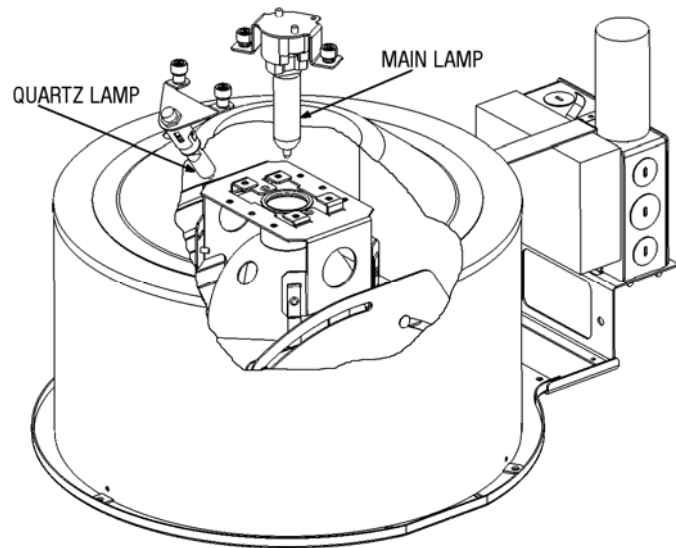
M156/E (20W)

M130/E (39W)

Quartz Restrike Lamp

The Quartz lamp is a 100W, 120V, T4 Bulb with a DC Bayonet base.

This housing may be re-lamped either from below or above the ceiling. Allow sufficient time for the lamp to cool.



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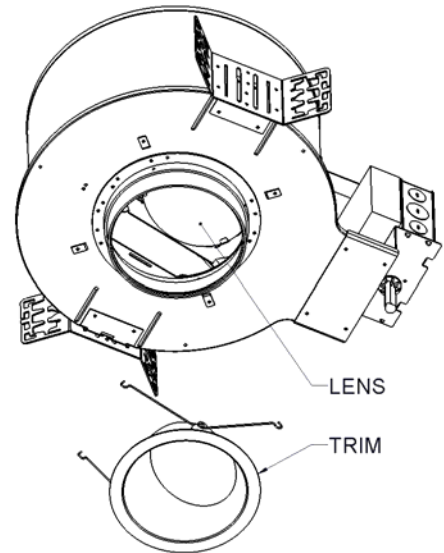
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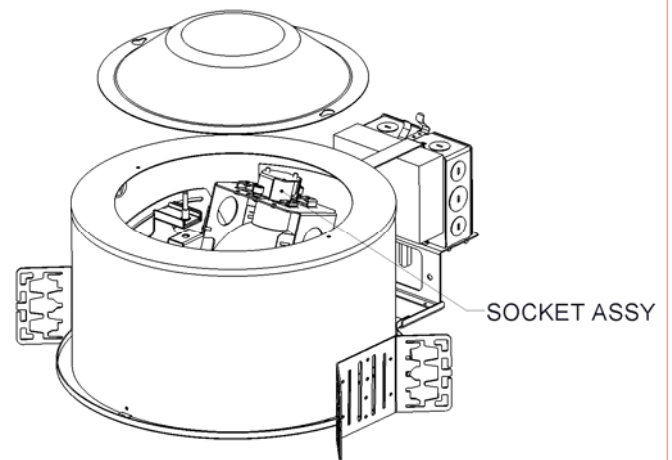
To re-lamp from below the ceiling:

- Step 1.** Remove the lower trim by gently pulling the trim down until the torsion spring stops are reached. Remove the trim from the torsion spring receivers.
- Step 2.** Remove the lens which is attached to the upper reflector.
- Step 3.** Remove the lamp from its socket. Dispose the old lamp according to local recycling code.
- Step 4.** Install the new lamp. Make sure the new lamp does not have any fingerprints, dust or lint.
- Step 5.** Re-install the lens back in place. The lens must be in place to operate the fixture. The lamp requires the containment the lens provides.
- Step 6.** Install the trim back into the housing using the torsion springs.



To re-lamp from above the ceiling:

- Step 1.** Remove the top cover by un-screwing the two screws.
- Step 2.** Remove the socket assembly from the top of the upper reflector bracket using the two thumbscrews. Use gloves if the assembly is still warm. Gently remove the old lamp. Dispose the old lamp according to local recycling code.
- Step 3.** Install the new lamp. Make sure the new lamp does not have any fingerprints, dust or lint.
- Step 4.** Re-assemble the socket assembly back onto the supporting bracket. Secure with the two thumbscrews.
- Step 5.** Install the top cover.



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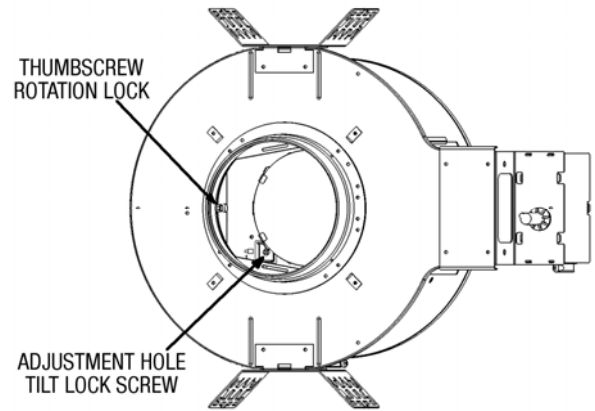
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Aiming – Rotation and Tilt

The internal aiming mechanism can be rotated through more than 360°, and tilted from 0° to 40°.

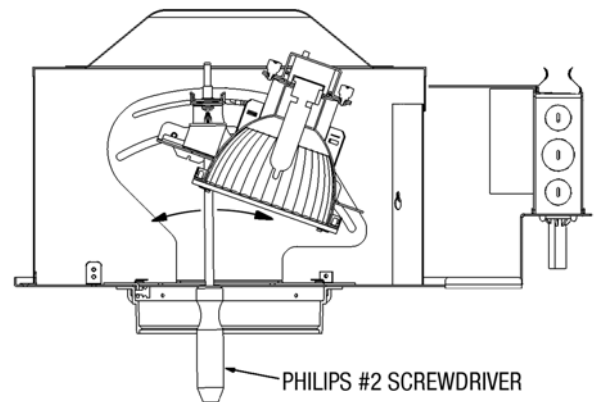
To Rotate:

- Step 1.** Loosen the Thumbscrew for Rotation Lock
- Step 2.** Rotate internal lamp assembly to the desired position
- Step 3.** Re-tighten the locking thumbscrew



To Tilt:

- Step 1.** Insert a #2 Philips screwdriver into the adjustment hole as shown. Once the internal locking screw is engaged, turn counter-clockwise to release the friction lock.
- Step 2.** The whole upper assembly can be pushed to the desired tilt angle, either with the screwdriver or by grasping the upper assembly by hand.
- Step 3.** Once the desired tilt angle is achieved, lock the tilt mechanism with a clockwise turn of the screwdriver.



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Ballast Replacement

The ballast should be replaced by a qualified electrician. The ballast may be replaced either from below or above the ceiling. The steps below outline the process required when replacing the ballast from below the ceiling. Only use ballasts included on the approved list below.

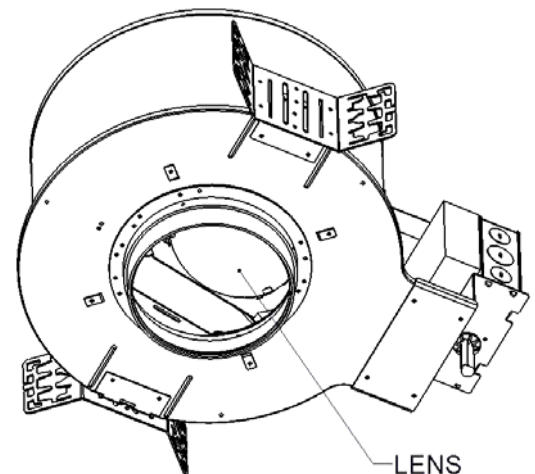
Wattage	Ballast
20	Vossloh-Schwabe M2012/27CK-5EU-JT3
39	Advance IMH-39-A-BLS-ID
70	Advance IMH-70-A-BLS-ID
150	Advance IMH-150-H-BLS (120V) Advance IMH-150-H-BLS (277V)

- Step 1.** Remove the trim assembly.
- Step 2.** The upper reflector can be tilted and rotated. Move it to a convenient position to allow access to the ballast.
- Step 3.** Inside the housing, remove the access door to provide access to the ballast and junction box.
- Step 4.** Remove the existing ballast and replace with the new ballast. Refer to the applicable wiring diagram at the end of this document.
- Step 5.** Re-install the access door.
- Step 6.** Re-install the trim.

Lens Maintenance & Replacement

Do not operate without the trim in place. These lamps require the containment provided by the lens. These lamp types can only be used in enclosed luminaires, for which the lens is required.

- Step 1.** Remove the trim assembly from the housing.
- Step 2.** Carefully remove the lens from the upper reflector. The lens-holding spring clips can be pushed back with a finger.
- Step 3.** To Clean Lens: Gently wipe with a soft, clean, dry, lint free cloth to remove dust. Use mild detergent solution on a soft cloth to remove fingerprints and stains. Rinse with clean water and dry with lint free cloth.



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Step 4. Install the new/clean lens, holding it by the edges while snapping the lens-holding spring clips in place.

If the lensed directional trim (64xx) is used, this clear lens may also be cleaned. Like the upper reflector's lens, this lens may be replaced with a suitable beam modifying lens (supplied by others).

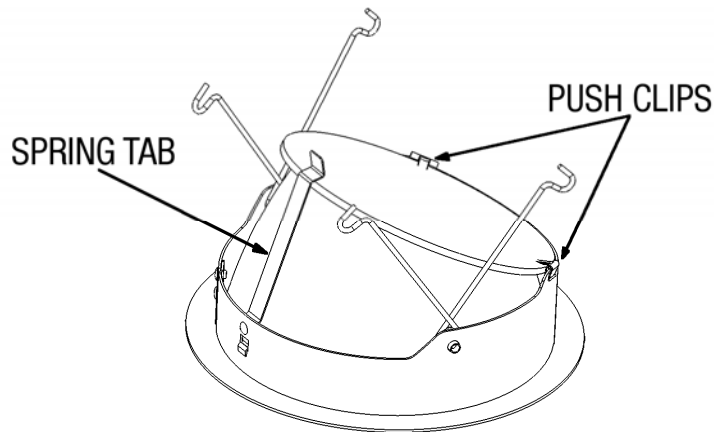
Step 1. Remove the trim assembly from the housing.

Step 2. Remove the push-clips, and press forward on the spring tab. This should allow the lens to be removed freely.

Step 3. To Clean Lens: Gently wipe with a soft, clean, dry, lint free cloth to remove dust. Use mild detergent solution on a soft cloth to remove fingerprints and stains. Rinse with clean water and dry with lint free cloth.

Step 4. Re-assemble the lens back onto the trim. Use the same push-clips to secure the lens in place.

Step 5. Replace the trim into the housing.



Insulation Detector Replacement

The insulation detector may be replaced from above or below the ceiling.

Step 1. Open the Junction Box.

Step 2. Remove the existing Insulation Detector, and replace with the new one.

Step 3. Wire the new Insulation Detector as before. For reference, see the wiring diagrams contained in this document.

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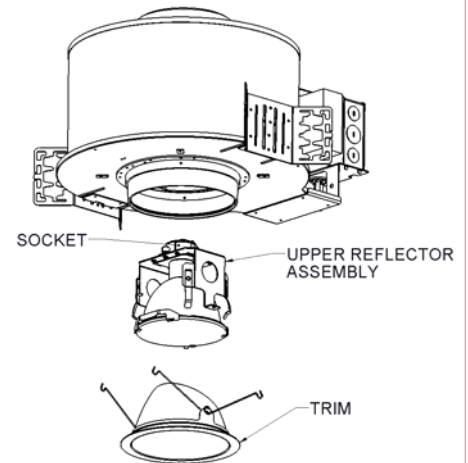
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Socket Replacement

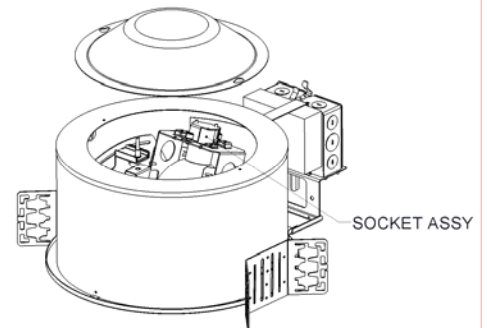
If replacing from below the ceiling:

- Step 1.** Remove the trim assembly from the housing.
- Step 2.** Remove the upper reflector assembly. It may be easiest to tilt this assembly to the vertical position prior to removal.
- Step 3.** Remove the socket bracket assembly by removing the two Philips thumb-screws which secure it in place.
- Step 4.** Remove the old socket and lamp. Install the new socket using the original screws.
- Step 5.** Re-install or replace the lamp. Re-install the socket bracket assembly using the two Philips thumb-screws.
- Step 6.** Re-install the upper reflector assembly into the housing.
- Step 7.** Install the trim back into the housing using the torsion springs.



If replacing from above:

- Step 1.** Remove the top cover.
- Step 2.** Remove the socket bracket assembly by removing the two Philips thumb-screws which secure it in place.
- Step 3.** Remove the old socket and lamp. Install the new socket using the original screws.
- Step 4.** Re-install the lamp. Re-install the socket bracket assembly back in place, using the two thumb-screws.
- Step 5.** Re-install the top cover.



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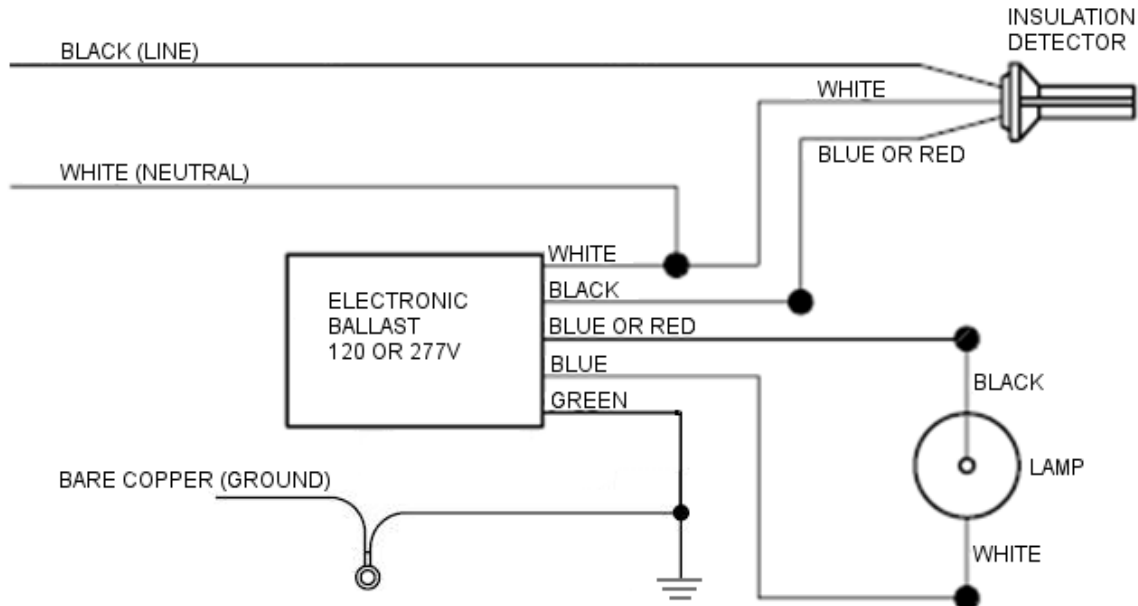
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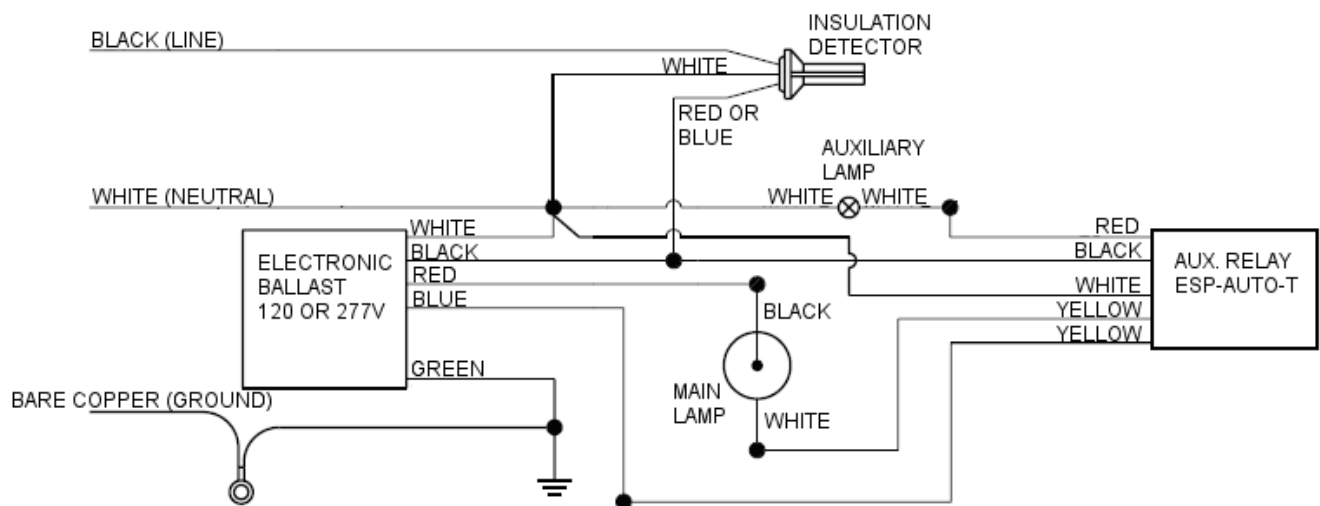
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Wiring Diagrams

1. For Housings with Ballasts requiring dedicated voltage input. Includes Catalog Numbers MA6xxx1E and MA6xxx2E.



2. For Housings with Ballasts requiring dedicated voltage input, and a Quartz Restrike System. Includes Catalog Numbers MA6xxx1EQ and MA6xxx2EQ.



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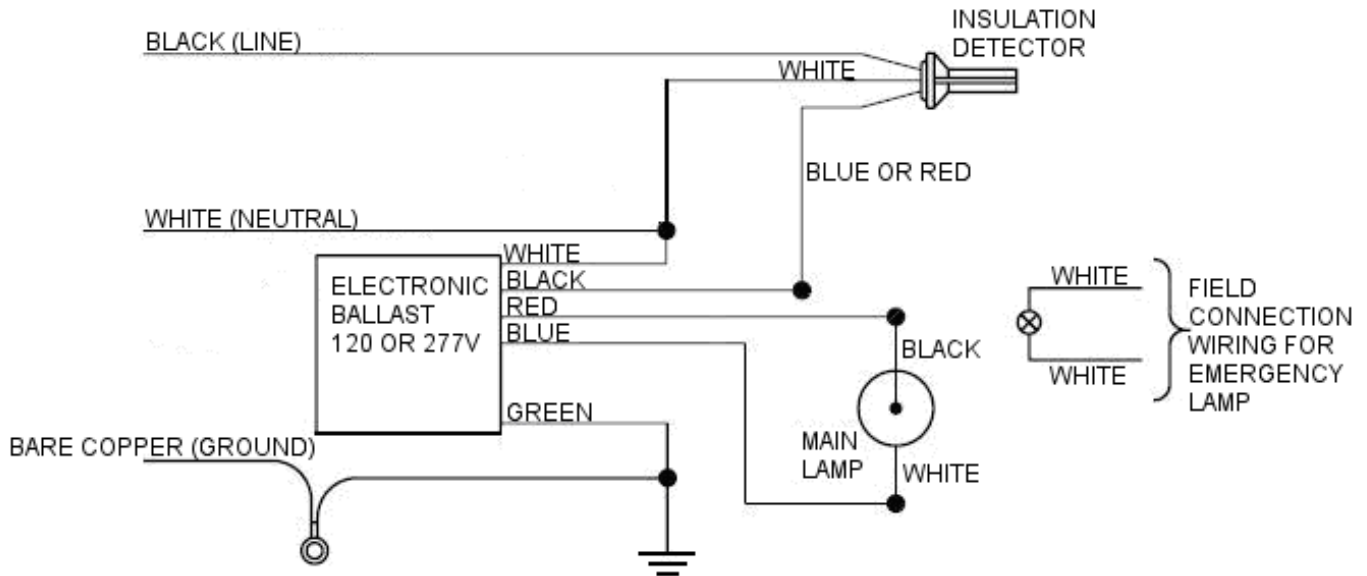
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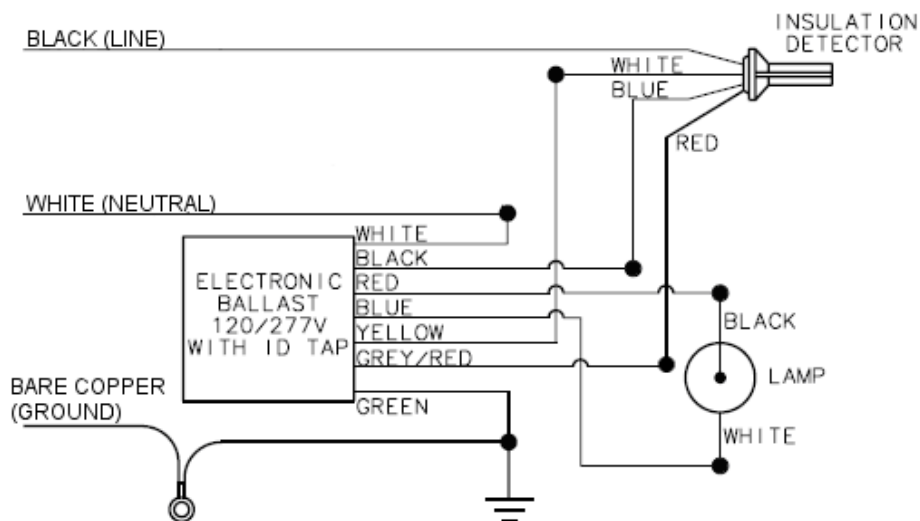
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3. For Housings with Ballasts requiring dedicated voltage input, and an Emergency Circuit Quartz Lamp. Includes Catalog Numbers MA6xxx1EX and MA6xxx2EX.



4. For Housings with Universal voltage input, 120-277V, with Advance Ballast (39W or 70W). Includes Catalog Numbers MA6xxxG12E, MA6xxxG85E and MA6xxxG65E.



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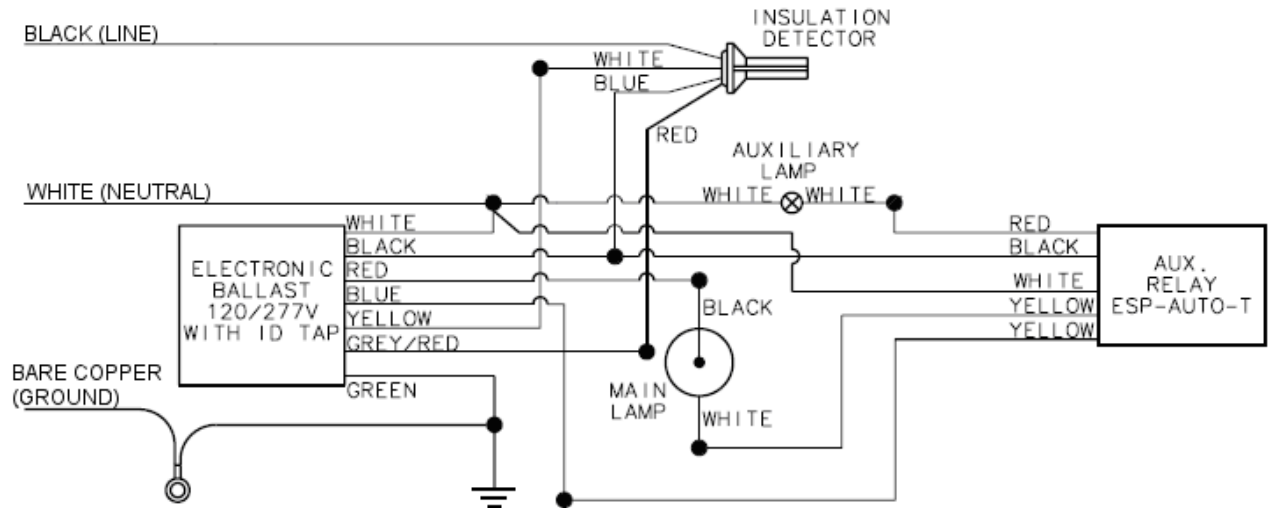
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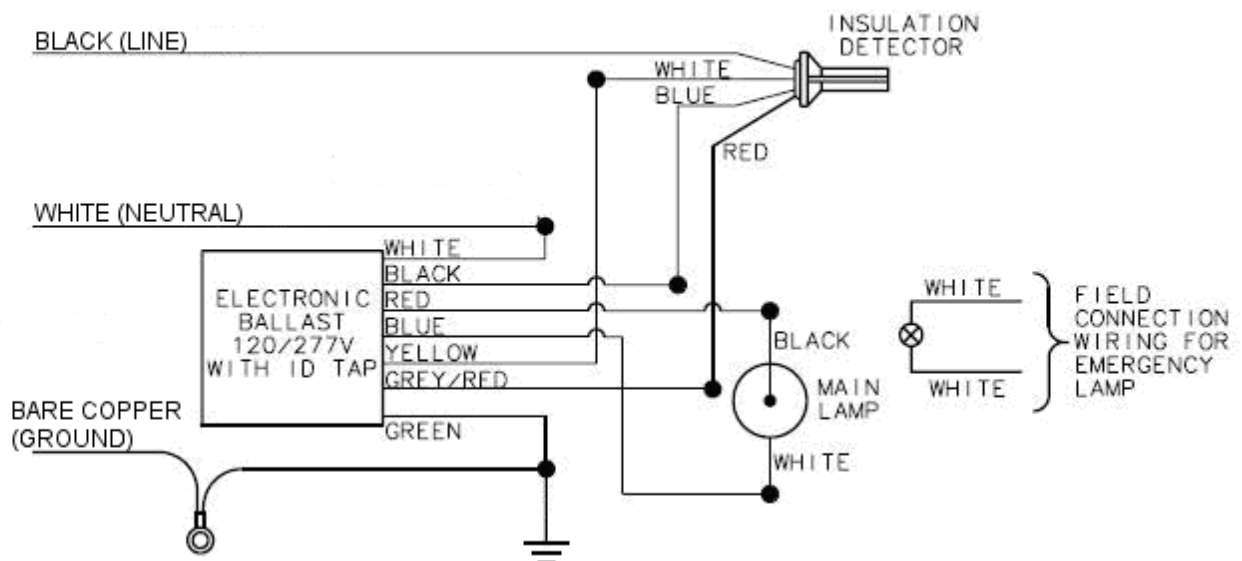
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5. For Housings with Universal voltage input, 120-277V, with Advance Ballast (39W or 70W) and a Quartz Restrike System. Includes Catalog Numbers MA6xxxG12EQ, MA6xxxG85EQ and MA6xxxG65EQ.



6. For Housings with Universal voltage input, 120-277V, with Advance Ballast (39W or 70W) and an Emergency Circuit Quartz Lamp. Includes Catalog Numbers MA6xxxG12EX, MA6xxxG85EX and MA6xxxG65EX.



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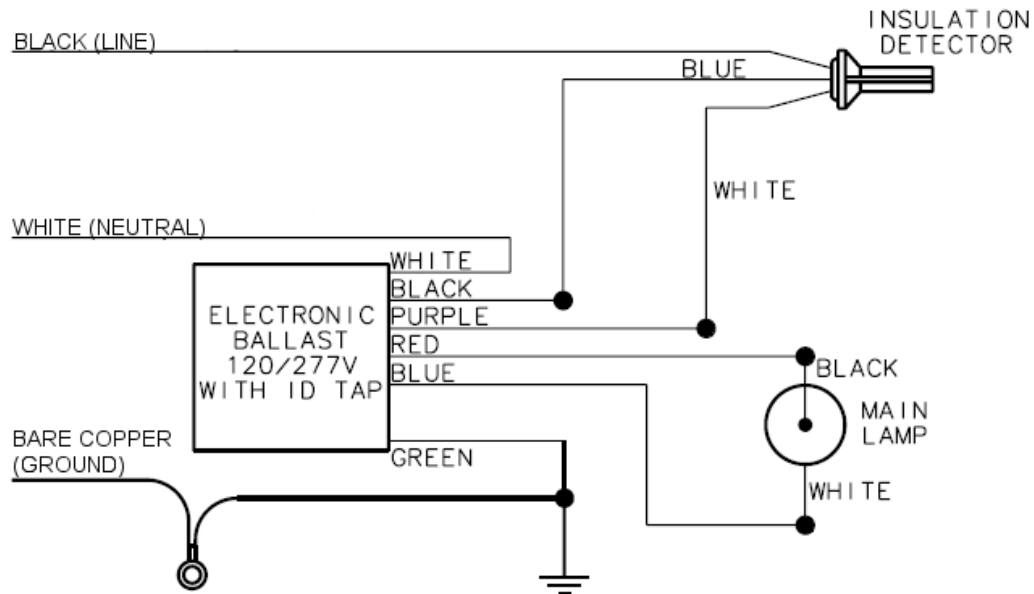
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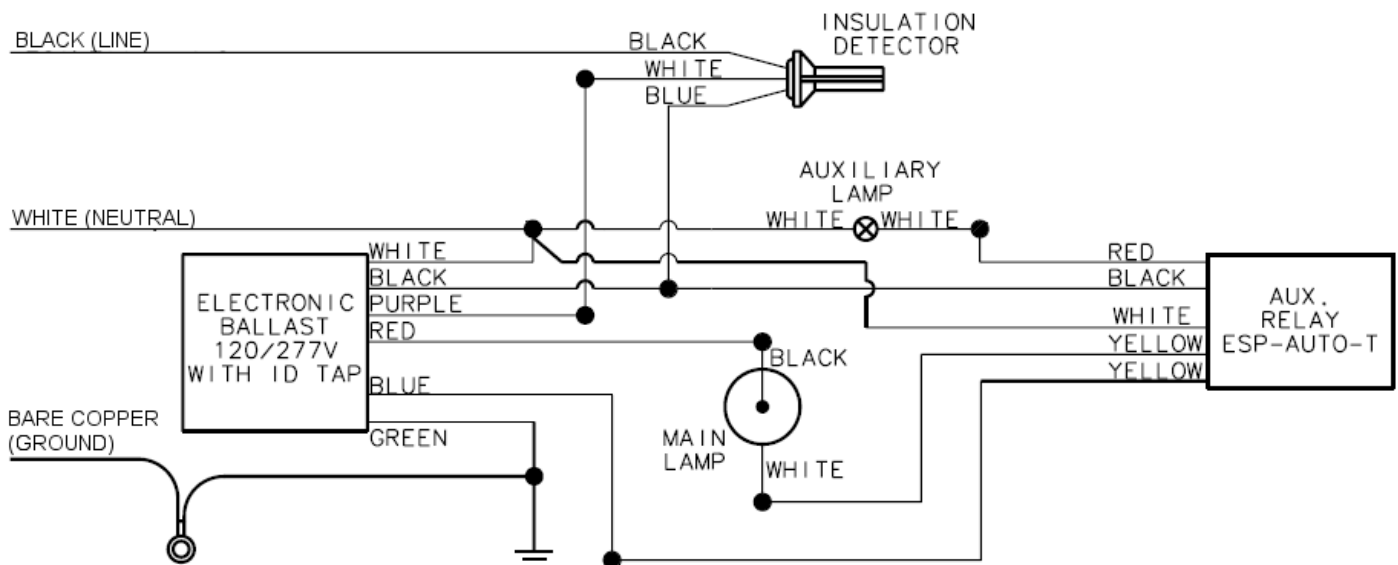
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7. For Housings with Universal voltage input, 120-277V, with Vossloh Schwabe Ballast (20W). Includes Catalog Numbers MA6xxxG12E, MA6xxxG85E and MA6xxxG65E.



8. For Housings with Universal voltage input, 120-277V, with Vossloh Schwabe Ballast (20W) and a Quartz Restrike System. Includes Catalog Numbers MA6xxxG12EQ, MA6xxxG85EQ and MA6xxxG65EQ.



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9. For Housings with Universal voltage input, 120-277V, with Vossloh Schwabe Ballast (20W) and an Emergency Circuit Quartz Lamp. Includes Catalog Numbers MA6xxxG12EX, MA6xxxG85EX and MA6xxxG65EX.

