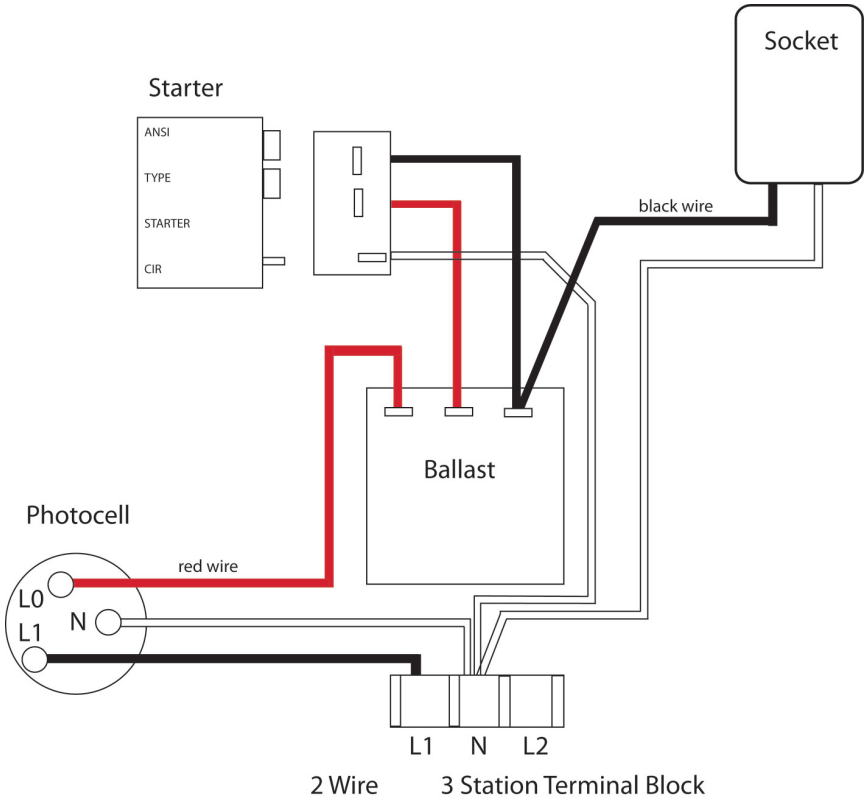
Technical Bulletin

TB20090922.1

Wiring Around the Ballast of a NEMA dusk-till-dawn HPS fixture.

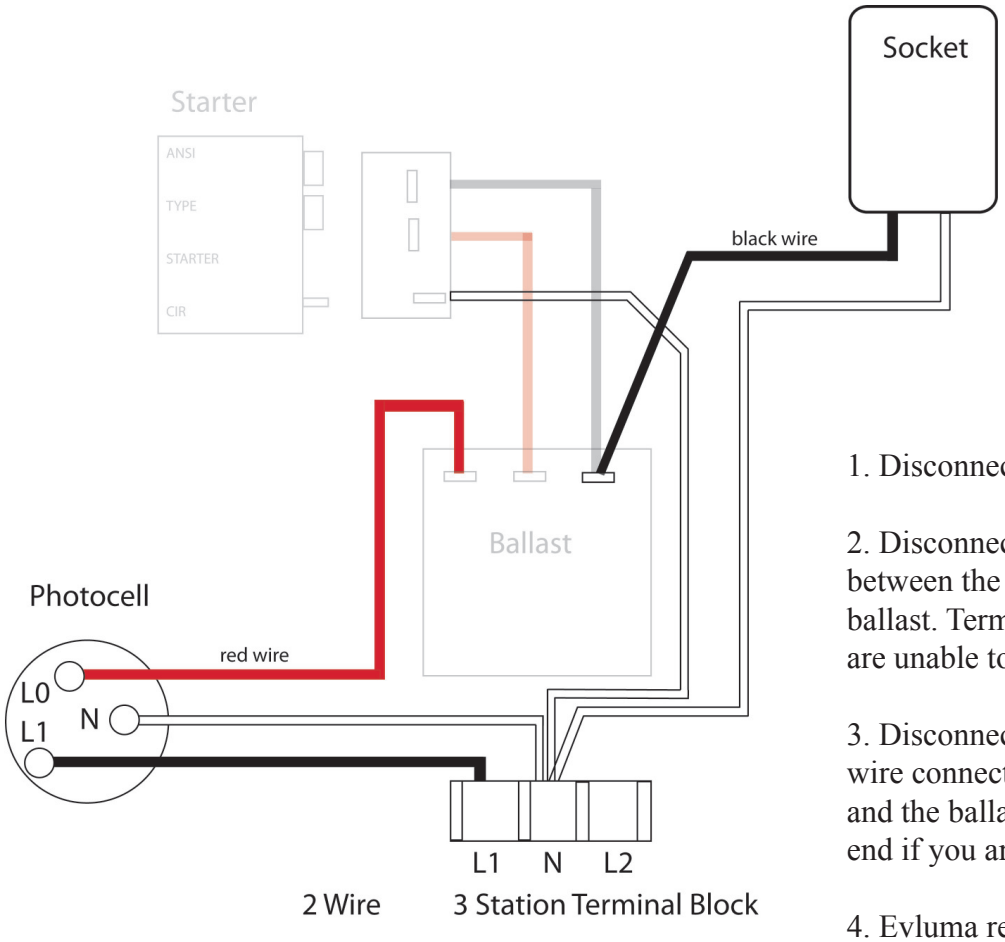
Wire around the legacy ballast to gain the greatest amount of energy efficiency when using the Evluma Clearlight 40W Replacement Lamp / Luminaire for NEMA dusk-till-dawn area lights. While this is not required for operation, wiring around the ballast and eliminating the starter will prevent the lamp from going out should the ballast fail and the flow of current to the luminaire be cut. The Clearlight has its own internal LED driver that acts as a ballast. Leaving the legacy ballast in place will draw unnecessary current and will require a maintenance call when it fails.

A. Remove power to the fixture. Review the existing wiring.



Note: Not all NEMA dusk-till-dawn area lights are wired the same, however a majority will adhere to this same basic layout. Drawing based on American Electric 100W HPS 120v 11PK10SRN120R5BAECDPC with 16 gauge wire. Evluma Clearlight 40W LED replacement lamp / luminaire (PN 83125148 or 46505625) is to be used with 50-175W Mercury Vapor or 70-150W High Pressure Sodium NEMA dusk-till-dawn fixtures ONLY.

B. Remove the Ballast and the Starter from the electrical circuit.



1. Disconnect the starter and remove.

2. Disconnect, or remove the red wire between the starter receptacle and the ballast. Terminate the loose end if you are unable to remove wire.

3. Disconnect, or remove the black wire connecting the starter receptacle and the ballast. Terminate the loose end if you are unable to remove wire.

4. Evluma recommends removing and recycling the starter receptacle and the ballast if possible. Fixture and lamp will function with or without the ballast removed.

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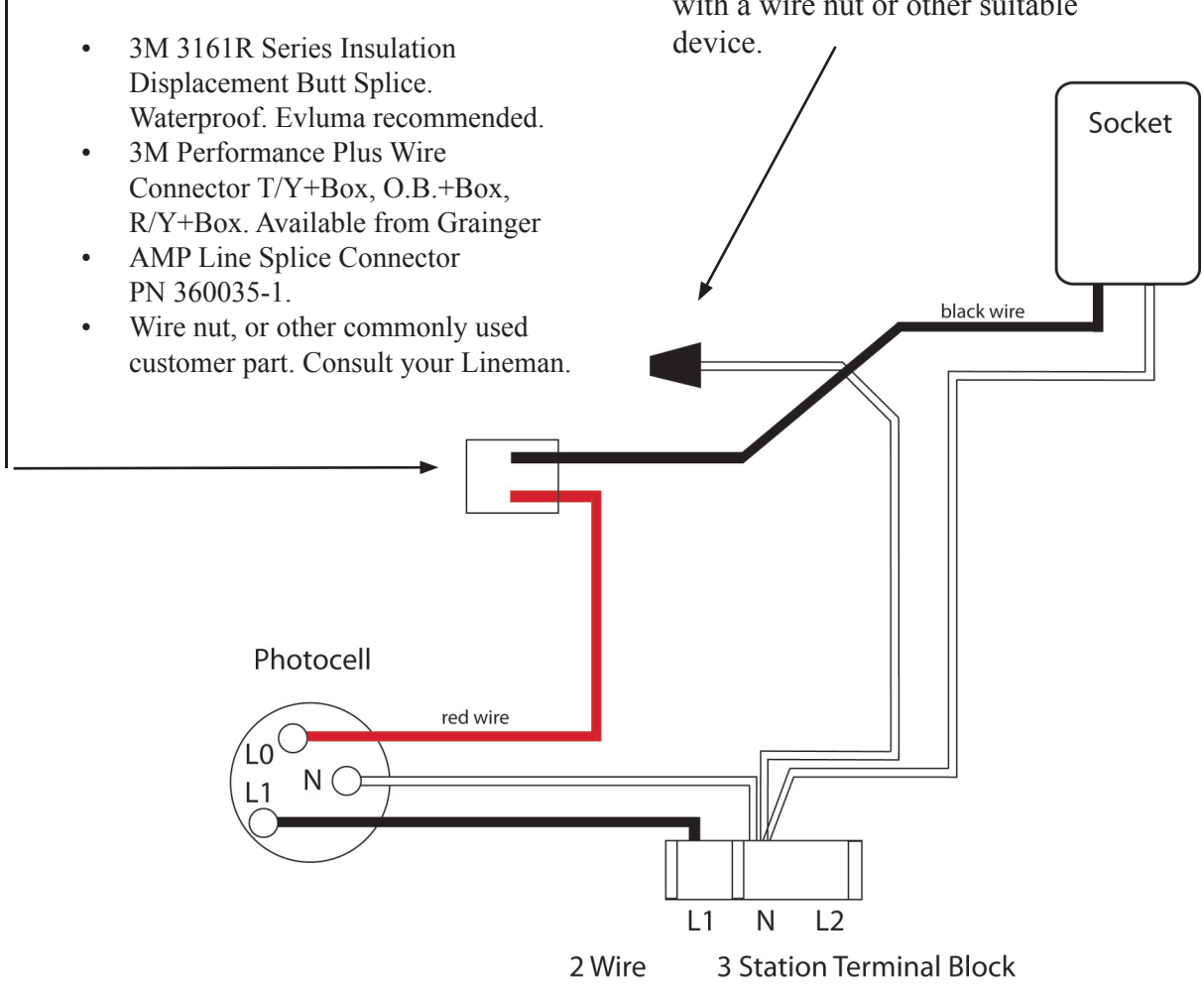
C. Connect the red photocell wire to the black socket wire.

1. Connect the red wire from the photocell to the black wire coming from the socket. Use one of the following devices to connect the wires. Use appropriate device for wire gauge.

- 3M 3161R Series Insulation Displacement Butt Splice. Waterproof. Evluma recommended.
- 3M Performance Plus Wire Connector T/Y+Box, O.B.+Box, R/Y+Box. Available from Grainger
- AMP Line Splice Connector PN 360035-1.
- Wire nut, or other commonly used customer part. Consult your Lineman.

2. Remove white neutral wire if connected to terminal block with a faston connector. If unable to remove, terminate with a wire nut or other suitable device.



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