

XGEN AND XGEN5 REGULATORS have the same simple installation procedure. The only difference is XGEN5 is a larger, heavy duty unit designed for the higher output of hub generators. XGEN is for tyre driven dynamos. The Regulator is connected to each side of the circuit (FIG. 1)

KIT CONTENTS:

- XGEN or XGEN5 REGULATOR each with two wires
- 4 Lucas brass bullet terminals and 2 bullet connectors
- Two cable ties
- Instruction leaflet

BULLET CONNECTIONS

To connect an XGEN/XGEN5 Regulator wire to a Generator Supply Wire, cut the Supply Wire at the connection point. Two wires are then inserted into one end of a connector, and a single wire is inserted into the other end of the connector (FIG. 3).

For the Supply Wire and Regulator Wire, strip 20mm of insulation off each wire, twist the strands just enough to keep them together, insert the strands into a bullet and bend them over (FIG. 2). Push the bullet and wires into a connector, using pliers. For the single Generator Supply Wire, strip 15mm of insulation, and follow the same procedure to insert into the other end of the connector (FIG. 3)

NOTE: It is necessary to establish if the system has a SINGLE Supply Wire (A) or TWIN Supply Wires (B).

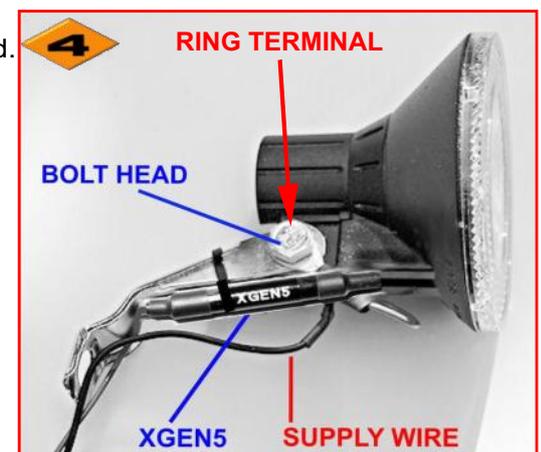
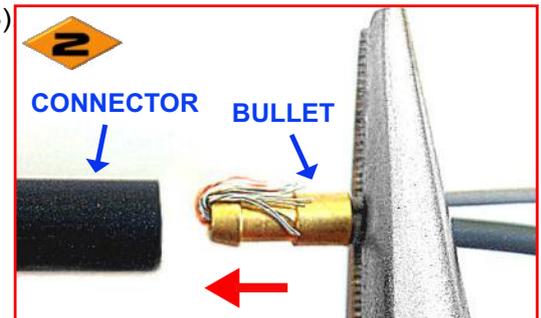
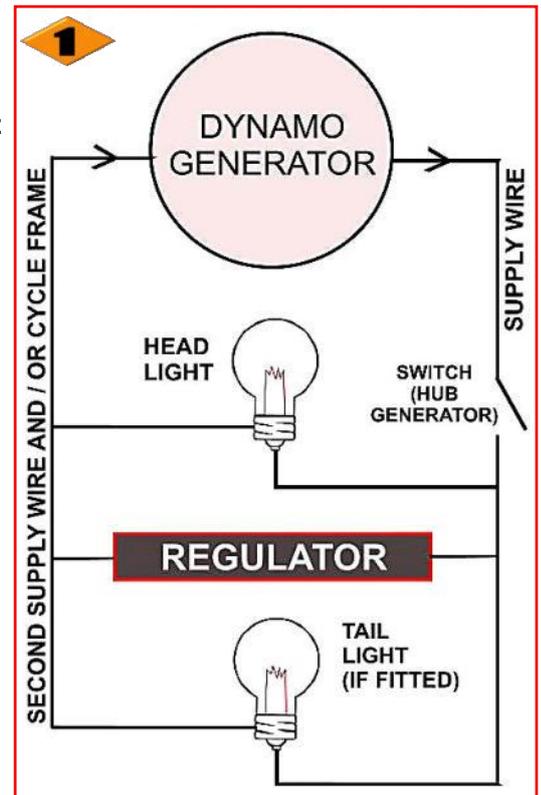
A. SINGLE SUPPLY WIRE INSTALLATION

This section is for a system with a single supply wire between the dynamo-generator and each light.

1. Remove the headlamp bolt. Eliminate any corrosion where the bracket meets the headlamp and apply light oil. **NOTE:** If the headlamp has an integral bracket and no bolt, you can make a similar connection at the fork centre bolt.
2. Slide the Regulator Ring Terminal onto the headlamp bolt, flat side facing the bracket. Replace nut and bolt finger tight (FIG. 4).
3. Attach the Regulator body under the headlight bracket using one or two cable ties. Ties cannot be loosened, so before pulling tight and trimming excess, ensure the Regulator is positioned as required.

NOTE: In Paragraph 4 (below) - If the headlight has a switch, it is preferable to connect the plain Regulator Wire to the Supply Wire leading from the headlight to the tail light, or connect directly to the tail light terminal on the headlight.

4. Connect the plain Regulator Wire to the Supply Wire, following the procedure in "BULLET CONNECTIONS" The resulting 3-way connection is shown in FIG. 3.
5. Adjust the headlamp angle and tighten the bolt.
6. Installation is now complete, and the whole circuit is regulated.



B. TWIN SUPPLY WIRE INSTALLATION

This is where the generator system has two Supply Wires between the dynamo-generator and the headlight.

XGEN or XGEN5 is installed with bullet connectors to form a bridge between the Generator Supply Wires (as shown in FIG. 1, 5 and 6) at any convenient point.

NOTE: Please check the connections at the headlight. If there are twin wires leading from the headlight to the tail light, select **FIG. 5** for the connection procedure. Otherwise follow the **FIG. 6** diagram.

1. Cut the Ring Terminal off the XGEN or XGEN5 Regulator, leaving the maximum wire on the Regulator.
2. Connect each Regulator wire to one of the Supply Wires, using the procedure in "BULLET CONNECTIONS" on page 1, producing 3-way junctions, as shown in **FIG. 3, 5 and 6**. It may be necessary to carefully separate the Supply Wires if they are attached in a "figure of 8" cable.
3. Secure the Regulator and Generator Supply Wires with the cable ties, as required.
4. Installation is complete and the whole circuit is now regulated.



XGEN AND XGEN5 REGULATORS protect all types of bulbs, including Vacuum, Krypton, Halogen, and Nicelite LED dynamo bulbs (regulated 1W white headlight bulbs and 1W red tail light bulbs).

The high output from increasingly popular hub generators can overload factory fitted regulators in headlights and LED standlights, causing eventual failure or mal-function.

XGEN5 is a heavy duty unit with a 10W capability, which is far more than any bicycle hub generator can produce.



NICELITE LED INFORMATION: www.reflectalite.com/LEDpage.html.