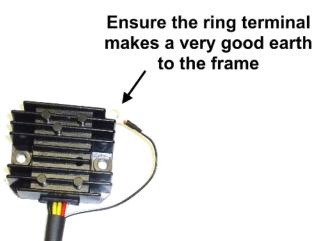
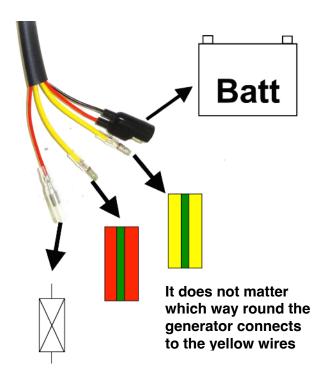


RR12V-31 T500 Solid State Regulator Rectifier Fitting Guide





Fuse

Our combined regulator/rectifier **RR12V-31** is designed for the Suzuki T500 models originally fitted with separate regulator and rectifier units. It automatically regulates voltage whether the lights are on or off. Suitable for use with lead-acid, sealed, AGM batteries, or in battery-less setups when used with our **Battery Eliminator (part no. BE1). Cannot be used with Lithium batteries.**

Note: Not suitable for GT250A models, as the generator is too weak to support a regulator. For these, use **part BR4** instead.

1. Mounting the Unit

The new RR12V-31 does **not** fit the original mounting points. The installer will need to fabricate a suitable bracket and ensure the unit is securely and safely mounted to the bike.

2. Remove Old Components

Disconnect and remove both the original regulator and rectifier from the bike. **Important:** The orange wire that previously connected to the regulator must be insulated, as it may be live when the ignition is on. This wire is **not used** with the new unit.

3. Connect the New Unit

Plug the new combined regulator/rectifier into the **rectifier** wiring connections. The **regulator wires are no longer used** and must be insulated.

4. Earth Connection

The black wire with a ring terminal is the earth (ground). It must be connected to the **wiring loom earth** — Suzuki typically uses **black with a white trace** for this. Secure this ring terminal under the bolt where the wiring loom or rectifier was previously earthed to the frame. **A clean, solid earth connection is essential.**

5. Testing

With the unit connected, start the engine and measure the charging voltage at the battery using a reliable digital multimeter. When the engine is revved, the voltage should read **between 13.8V and 14.5V**. Switch the lights on and off to check that the voltage stays within this range. At idle, the voltage may drop below this level – this is normal.