

About this product

- Universal regulator rectifier with MOSFET technology for 12V magnetic flywheel based charging systems.
- Compatible with 3-phase (3 wires) and single phase (2 wires) stator, isolated from GND.
- Output currents up to 50A.

Before you begin

- This procedure requires some technical skills about electrical systems. If you are not sure, please ask for technical support.
- Check battery level and integrity. If not in good shape, please recharge / replace before you proceed with installation.
- Check stator integrity. None of the wires should have continuity to ground.
- Recommended tool set: wire pliers, cutter / stripper. Soldering iron. Multimeter. Crimping tool (optional)

Installation Steps

1. Unplug all connectors from existing regulator and remove it. Be sure to keep the bolts. It is also highly recommended to remove battery positive terminal.
2. Proceed to identify wires related to your charging system (refer to **figure 1**). You shall find up to 6 lines:
 - AC Input from generator (2 or 3 wires)
 - Battery positive (+) wire
 - Battery negative (GND) wire
 - Ignition voltage wire (not all bikes / ATVs have it)
3. Wire colors vary according to manufacturer design. Table below is a reference for some of the most common colors.

Brand	Battery (+)	Battery (-) GND	AC Input	Ignition line
Honda	Red	Green	Yellow	Black
Yamaha	Red	Black	White	Brown
Kawasaki	White/Red	Black/ Yellow	Yellow	Brown
Suzuki	Black/Red	Black/White	Black	Orange

Your brand new mosfet regulator has the following color coding:
Red : Battery (+) **Green** : Battery (-) / GND **Yellow** : AC Inputs

Note: Mosfet regulators do not use the "Ignition line" input as many old regulators do. If you have this wire, just cut it loose and isolate with duct tape

4. Place new regulator into position and fasten tight with previously removed bolts.

5. Trim regulator's wires according to desired length and strip insulation off the cable ends (about 5 mm). Perform same action on original bike's harness wires, but this time pay special attention to copper status: it must be bright and clean. If dark or rusted, try cutting behind.

6. Regulator conversion kit contains all connectors and terminals you need to join regulator's wires to your bike's harness. It is very important that you properly match wire colors and functions. Pay special attention to positive and negative wires. AC input wires have no specific order.

7. Plug corresponding connectors, checking proper fitment and locking. Also check for exposed copper on wire terminations. If necessary, use duct tape or shrinking tube to fix it. Connect back the battery's positive terminal.

8. Start the engine. Use a multimeter (20 Vdc range) to test voltage directly on battery leads. Rev up the engine @ 3500 rpm approximately and confirm voltage reading is between 14,1 and 14,7 Vdc. If battery is low, it may take a while to reach the acceptance threshold.

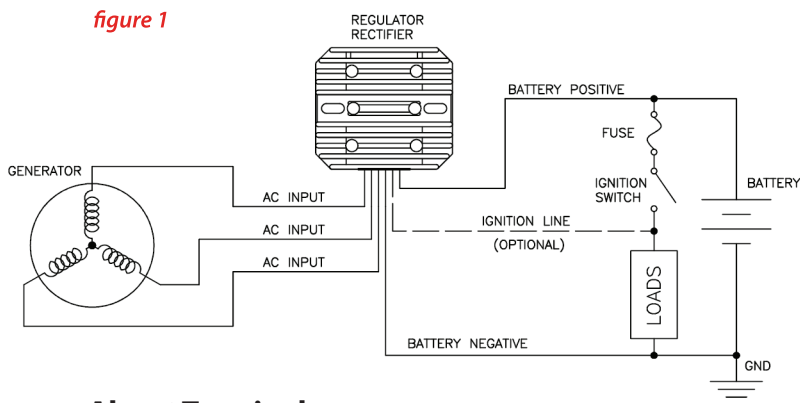


figure 1

About Terminals:

It is very important to attach correctly wires and terminals. If you don't have a crimping tool, you still can get excellent results by using a soldering iron. Check **figure 2**.

figure 2



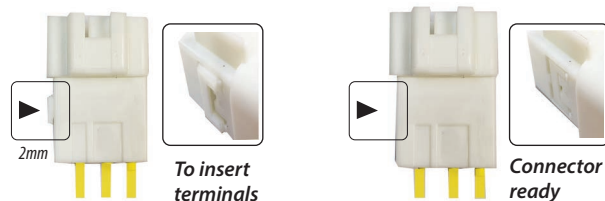
About Connectors:

3 POSITION CONNECTORS

Unclip the sliding locking tab on the connector with a small screwdriver. Only lift it out about 2mm.

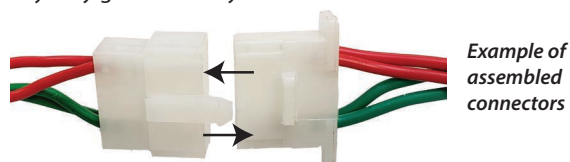
Insert terminals as shown in **figure 3** until you hear a "Click". They only go in one way round, if they cannot be inserted try moving the locking tab in or out.

figure 3



4 & 6 POSITION CONNECTORS

Insert terminals as shown in figure until you hear a "Click". They only go in one way round.



Troubleshooting

If your battery is not charging properly

- Check if stator is either open and short-circuited to ground.
- Check Fuses.
- Double check wires and connectors.
- Contact us: ingenieria@dze.com.ar