Hi- power 50amp Regulator Rectifier - RR88

See our YouTube video and online photos to show how to connect your RR88 and what can happen if the connections are not correctly made.

Description

MOSFET type hi-power regulator rectifier with quality waterproof sealed connector system. Direct replacement for original Shindegan unit of the same type, or using the opposite connectors provided for alternative applications with a 3 phase permanent magnet alternator.

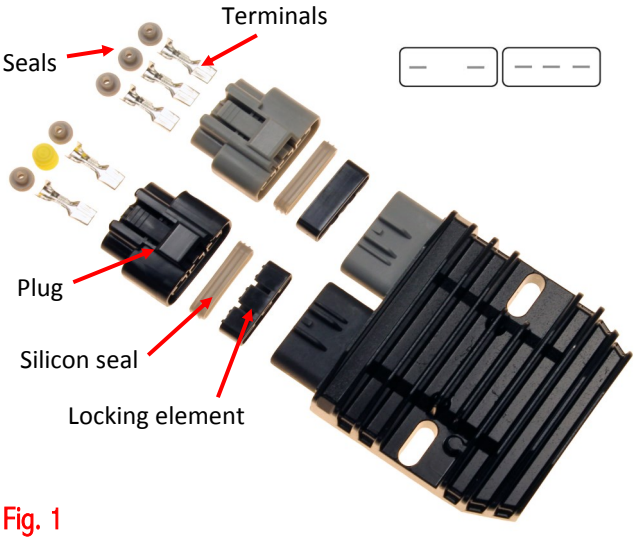


Fig. 1

Fitting Instructions [important read before fitting]

Fitment must only be carried out by trained technicians or competent persons.

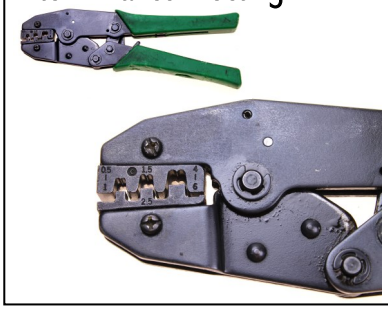
1. Remove the original regulator connector system from the harness by cutting the cables near to the connector blocks.

2. Strip the insulation off the cable ends at a distance of about 6mm. inspect the bare copper, it must be bright and clean, if not cut the cables further back and re-strip. It may also be possible to clean the bare copper ends with fine emery paper.

3. Fit the supplied seal onto the cable. Ensure the seal is the correct way round so that it can engage with the terminal, place cable into terminal as shown in **Fig 2.** Using the correct type of tool as shown opposite, crimp the terminal - **See Fig 3.**
VERY IMPORTANT As the exact tool is not always available to crimp the terminal to the correct tightness, the terminal **must also be soldered - see Fig 4.** **NOTE:** if the stripped cable end is not 'clean' it will not be possible to solder it and the result will be a 'dry' joint and a poor connection. See our YouTube video and online photos to show how to connect your RR88 and what can happen if the connections are not correctly made.

4. Insert the terminals into the connector block. **NOTE:** The x3 terminals from the alternator fit into the 'grey' connector block. These are fitted in any order. The red 'positive' and black 'negative' fit into the 'black' connector block - Check the red & black are in the correct order - **See Fig 5.** When the terminals are inserted the correct way up a click will be heard, a small tug on the cable will ensure the terminal is secure.

Example of Crimping tool required for uninsulated terminal connecting



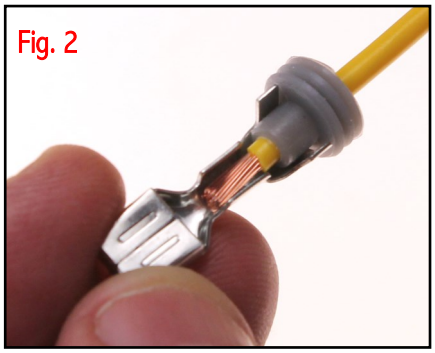


Fig. 2

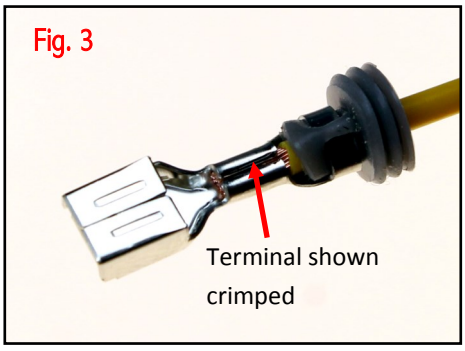


Fig. 3

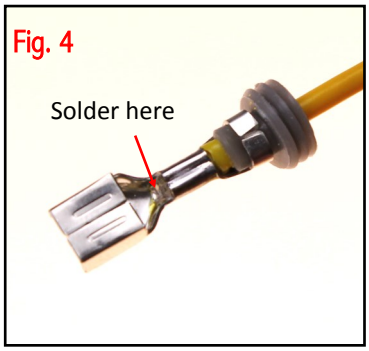


Fig. 4

5. Finally insert locking element into the front of each connection followed by the grey silicon seal **Fig 1.** If the connectors are not inserted the locking element won't push in. The black connector requires the yellow blanking seal plug to be inserted in the centre hole at the back, see **Fig 5.**

Fig. 5

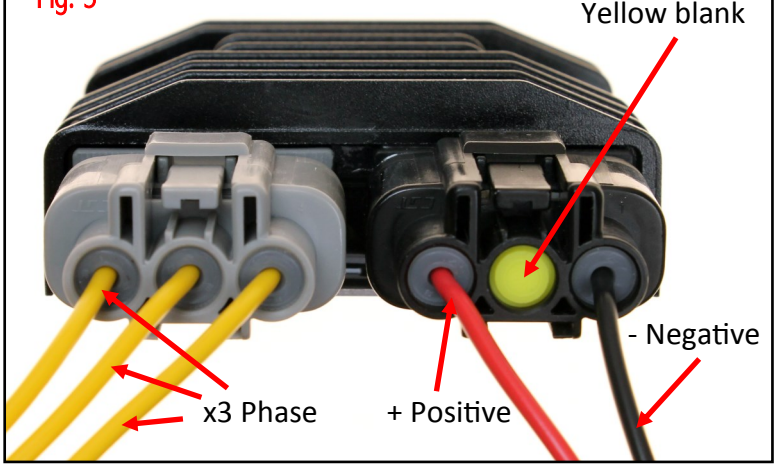


Fig. 6

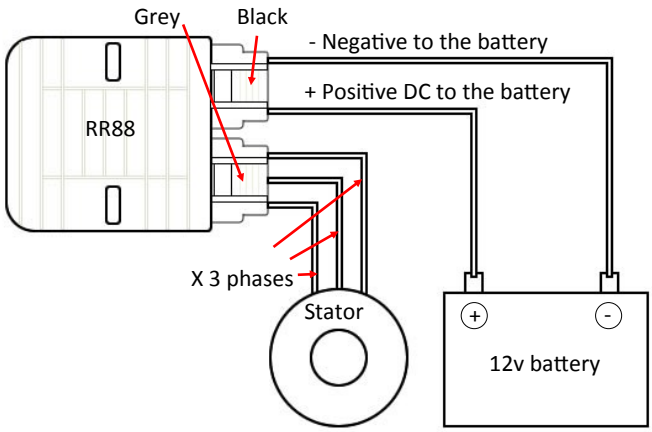
Terminal removal. If a terminal has been located in the wrong position it can be removed by inserting a small screwdriver in the position shown in **Fig 6.** And lifting the plastic tab at the same time pulling on the appropriate cable.

Cable colours

3 phase cables can be yellow, black or white depending on manufacturer.

+ Positive to battery is usually red.

- Negative to battery is usually black except for Honda where it is green.



TESTING - The RR88 **must** be connected to the battery before testing. Measure the DC voltage across the + ve and – ve terminals on the battery with the engine running, it should be 13.8 –14.8v depending on model, RPM & load.

TROUBLE SHOOTING

1 **Symptom** - Poor charging voltage at the battery 12.5 –13.5v
Cause - Bad connections between regulator/rectifier & battery.
Solution – Make a direct connection to the battery from the reg/rec +ve and – ve with heavy gauge cable 2mm²

2 **Symptom** - Alternator failure
See Trouble Shooting on our website for further detail.

WARNING

This is an example of what could happen if you do not fit terminals correctly