



30A Chargers Range : Installation Instructions

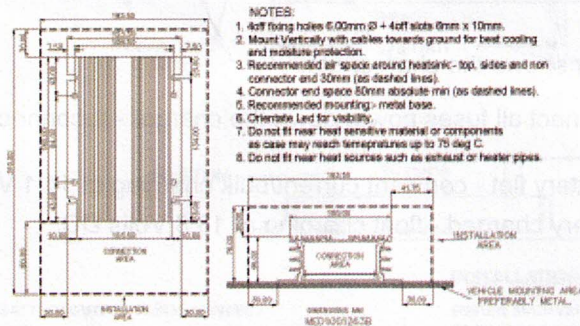
The Jacksons Leisure 12 Volt DC 30 Amp Battery to Battery Charger is designed & manufactured in the UK specifically for Leisure vehicles allowing for optimised & controlled three stages, DC charging of a Lead Acid leisure vehicle Auxiliary Battery's from a Vehicle Starting Battery & vehicle alternator.

This charger is vehicle Ignition controlled ON/OFF & designed specifically for Constant Voltage Alternators, Euro 5 & Euro 6 vehicles including those with Eco technology - STOP/START, Smart Alternators & Vehicles with Regenerative Braking. (Mercedes Blue Efficiency Vehicles, VW Blue Motion Vehicles, Ford ECONetic Vehicles, Vauxhall ecoFlex vehicles to name a few). The unit is configured for optimum operation with no programming required & is suitable for use with any Lead Acid, AGM, GEL auxiliary leisure vehicle battery's up to a maximum of 300 amp in capacity.

The charger also utilises an advanced Trickle Charge facility to maintain the vehicle starter battery, most helpful if the Leisure vehicle is left for extended periods without driving. When the vehicle Ignition is OFF, the vehicle Leisure battery must be greater than 13.06VDC & the vehicle starter battery must be less than 12.35V for the function to operate.

The trickle charge function will then run for 15s off 6s on & is indicated by a (Green LED – ON) located on the front face of the charger, If the vehicle battery is between 12.1VDC & 11.5VDC & if the vehicle leisure battery is greater than 0.25VDC or above the vehicle starter batter it will turn on for 6s (Green LED - ON) & 15s OFF (Green LED- OFF) & works well if the vehicle is connected to AC mains electric hook up charge & or the vehicle is fitted with solar panels.

Mechanical: This unit should be mounted as the drawing subject to guidelines below .

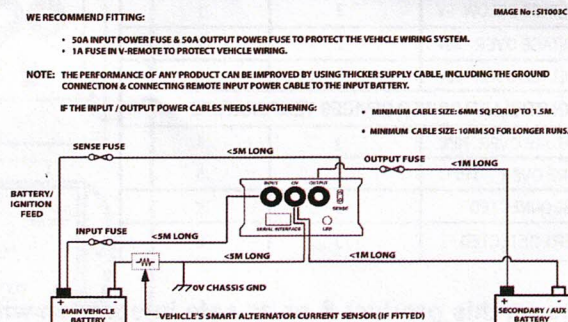


Electrical:

The charger should be mounted as close to the leisure vehicle battery being charged as possible & connected as the diagram below.

The charger can be installed in any orientation and must be firmly fixed using self-tapping screws to a flat surface that is heat resistant, Fixing the charger to a metal surface of the vehicle such as the vehicle floor will act as an increased heat sink for the charger and help with increased cooling of the charger.

The charger ignition control Sense Input switches the charger ON/Off & should be connected to the vehicle ignition system vehicle key ACC – engine running that is + 12 volts DC when the vehicle engine is running -ON and OFF when the vehicle engine is OFF.



Connection Procedure / Power up Sequence:

To ensure normal operation:

1. The leisure battery must be connected first to the charger output & common negative ground.
2. The vehicle starter battery can then be connected along with the charger ignition control Sense Input.
3. A 50-amp fuse & fuse holder must be fitted to the 12-volt DC input to the charger from the vehicle starter battery & located as close the vehicle starter battery as possible to protect both the charger & cable length, the maximum length of the cable should be no more than 5 meters & Capable of handling 30-amp 12-volt DC current.
4. A 2-amp fuse & fuse holder must be fitted to the 12-volt DC input to the charger vehicle ignition sense & located as close it its pickup point as possible to protect both the charger & cable length, the maximum length of the cable should be no more than 5 meters & Capable of handling 5-amp 12-volt DC current.
5. 3. A 50-amp fuse & fuse holder must be fitted to the 12-volt DC output from the charger to the vehicle axillary leisure battery & located as close to the charger as possible to protect both the charger & cable length, the maximum length of the cable should be no more than 1 meters & Capable of handling 30-amp 12-volt DC current.

Complete all wiring to the charger – install all fuses in order – ignition sense fuse – charger output fuse – charger input fuse.

Start & run the vehicle engine – wait 30 seconds & observe the charger LED to indicate the operation & charge cycle. The charger operates with an input voltage between 9V & 32V DC. The vehicle ignition sense Input wire controls the charger to turn on/off- via the vehicle ignition key when the vehicle engine is running (ON) & when the vehicle engine is not running (OFF).

The charger output current is limited at 30-Amps. In case of a low input voltage (<9V), the output voltage is reduced to prevent damage to the charger. The charger is automatically protected against overheating & utilises advanced heatsink design to effectively cool the charger via radiant heat transfer to the surrounding ambient air.

NOTE:

The LED on the front face of the charger shows the charger state:

- Flashing Red - In fault mode - Disconnect all fuses power down the charger - reconnect all fuses to the charger to rest.
- Flashing Amber - Axillary leisure Battery flat - constant current/bulk charging at 14.1 Volts DC.
- Flashing Green - Axillary leisure Battery charged - float charging at 13.8 Volts DC.

Trouble Shooting:

Axillary leisure battery - flat.

Check Led flashes status when the vehicle engine is running If unit flashes AMBER but battery voltage is not increasing wait 10 minutes & recheck.

Check all fuses within the charger wiring installation.

Ensure the vehicle engine is running for the charger to provide output current.

| IMAGE No: SW1002A | | |
|---|--------------------|--------------|
| FAULT MODE | FAULT CODE RED LED | |
| | SHORT FLASHES | LONG FLASHES |
| ENGINEER MODE | 3 | 0 |
| LOCAL INPUT VOLTAGE BELOW 9V | 3 | 1 |
| LOCAL INPUT VOLTAGE OVER 36V | 3 | 2 |
| LOCAL INPUT VOLTAGE OVER 33V | 3 | 3 |
| CHARGE CONTROLLER POWER DEVICES TEMPERATURE | | |
| MICRO TEMPERATURE OVER 70°C | 3 | 4 |
| FET TEMPERATURE OVER 115°C | 3 | 5 |
| THERMISTOR DISCONNECTED | 3 | 7 |
| DAMAGED BATTERY DETECTED | 3 | 8 |

If you require any assistance or advice on this product & or its safe integration with other electrical equipment, Please contact : Jacksons Leisure Supplies