

Assembly instruction 2-wire regulator with charge control 14V 47A

R4112 / F4112 (C)17.05.2008

ASSEMBLY INSTRUCTION alternator-regulator 2-wire with charge control 14V 47A

The electronic box is a solid-state regulator and a power rectifier in one housing.

The modern design using micro chips allows connection to all common generators run by permanent magnets. The special voltage control permits the use of lead batteries from 7Ah to 37Ah.

The batteries must however be of adequate type which is designed for the vehicle intended

Safety precautions

read the assembly instruction carefully and completely and follow the instructions

-only carry out work on vehicle when the engine is stopped

-only connect or disconnect the cable from the ignition system when the ignition is turned off

-when electric-welding disconnect the ignition module from the wiring system

-starting aid should not be operated more than 1 minute with a maximum of 15 V

-disconnect the plus-pole from the wiring system when charging the battery

-operating without battery or without cooling causes failure

-the tension of the alternator-regulator may amount up to 80 V -> mortal danger!

-to install the regulator specialized knowledge and special tools are required

-guarantee, replacement or claim for compensation only in reference to the module supplied

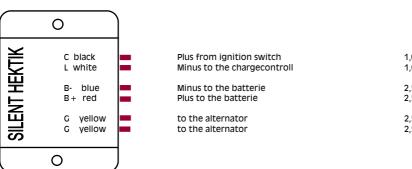
Cooling

During operation of the alternator-controller creates up to 45W heat. To ensure a safe continuous operation allow the heat to be dissipated by wind. Without wind or in the lee leads it failure. Under all operating conditions 55 ° C should not be exceeded in the long term. In no case, the controller must be mounted to the original holder next to an exhaust manifold or in the seat be, as there's already too much electronics heats up.

Battery - on-board voltage - charge control

The size of the battery has no significant impact on the control of the on-board voltage. The full tension of 14,2 V - 14,5 V is only achieved in the event of sufficient engine speed and an optimally charged battery and is to be checked with a quality voltmeter following the installation. Batteries getting aged as well as inadequate types (cheap items) mostly do not achieve full on-board voltage. Damaged batteries mostly lead to over-voltage. Several injection models only reach full battery charging over 3000 rpm.

Connections of the R4112 Version with cables



1,0 - 1,5 sqmm 1,0 - 1,5 sqmm

2,5 sqmm max. 50cm 2.5 sqmm max. 50cm

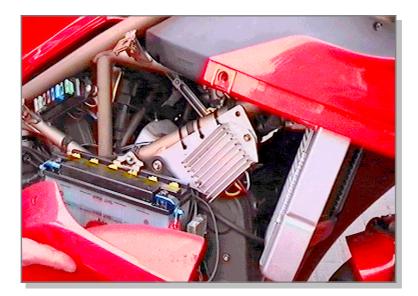
2,5 sqmm 2 5 sqmm

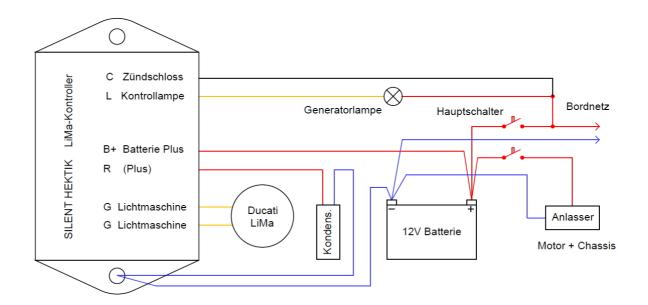
A safety fuse between alternator-regulator and battery plus leads to total failure in the case of insulate contact. The crimp connectors must be well finished by means of high-grade pliers. Soldered crimp connectors lead to hairline cracks and breakdown with engine vibration.

Only protect all plug-in connectors with plug grease (order no. M5103). Do not use battery pole grease! Do not use copperfilled grease!

Guarantee-, replacement or claim for compensation only in reference to the supplied electronic. Mistakes and changes in future to be accepted. The 748/916 holding plate is fastened with the upper screw of the battery box in front above the battery and then tightened to the frame with four cable ties.

Never install the alternator-regulator with 748/916 in the original place next to the exhaust pipe. Use always the holding plate with alternator-regulator for the 748-916 -> ordering number R4114.





Connection of the **F4112** on 912 aircraft engines, a capacitor should be mounted with 33000µF with 40V direct to the controller The max. length of the plus and minus cables is 50cm with NO fuses, schwitches or shunts. In operation, the alternator controller is hot and must be cooled by the wind.

