



Connecting your high output alternator

PARTS

GENERAL: Your new high output alternator is internally regulated with a single output terminal, very similar to the original 35 amp Motorola. The output should be connected to the large battery terminal on the starter solenoid in the same way that your original single output alternator was connected; usually by an orange 8 gauge wire that was routed to the ammeter, then to the ignition switch, and then back to the battery terminal on the starter. You can choose to bypass the ammeter (and the long charging circuit to, and from the cockpit) by connecting the output terminal directly to the big battery cable on the starter solenoid. When connected in this fashion, you can monitor the alternator performance by installing a volt meter in th cockpit (in place of the ammeter) and simply connecting the voltmeter to the same positive circuit which powers the other gauges (usually from the "Ign" terminal of the ignition switch).

DESCRIPTION OF TERMINALS:

OUTPUT TERMINAL: The output terminal is located on the back of the alternator and identified by the letters BAT engraved in the case.

CAUTION! : As in the case of most alternators, care must be taken when connecting the ring terminals to the output post on the alternator so that the end of the terminals do not touch the housing of the alternator and cause a short circuit.

EXC LEAD (Black lead from the removable plug, spliced to a purple wire): All alternators require 12 volts to be applied to the field windings to get the alternator to come on line initially. The black EXC lead is provided with an inline diode so that it can be run to the positive terminal of the coil in the same manner as did the original Motorola or the replacement Mando alternator. The EXC lead will have a butt splice installed for convenience.

REGULATOR SENSING LEAD (Red lead from the removable plug): This lead is pre-wired directly to the output terminal so that the internal regulator will be able to sense the alternator output, and maintain the designed line voltage of 14.2 volts.

GROUNDING TERMINAL (optional): It's rather common for alternators to rely on their mounts for a connection to ground. In the case of high output alternators, it's sometimes beneficial to provide a more positive connection to ground through the grounding terminal on the case of the alternator. The grounding lead should be of the same gauge wire as the positive lead from the output terminal, and should be connected to one of the starter mounting bolts, or directly to one of the negative posts of the battery bank if convenient.

