## WAKESPEED WS100/12 REGULATOR WIRING DIAGRAM



## NOTES:

Black wire must be connected to system ground. Ensure that case ground alternators are augmented with an additional ground cable, and that all bare metal surfaces connecting the alternator to the engine are clean and free of contaminants.

Red wire must have a direct connection to the battery being charged. Connect to the positive output of the alternator or to the positive post of the battery. If a diode isolator is being used, connect to the output going to the house battery bank.

Brown wire should be connected to the ON side of the engine ignition switch, or to an oil pressure switch. This will ensure that the regulator is only applying field current to the alternator when the engine is running.

Blue wire is connected to the alternator's positive field brush. The WS100/12 is designed for use with P-type externally regulated alternators. If your alternator already has an internal voltage regulator, it will need to be modified for external regulation. A good marine or automotive electrical shop should be able to modify your alternator for external P-type regulation.

Orange wire is provided to complete a lamp or audible alarm circuit to indicate if the charging system has failed. The orange wire will go to ground if one of the following occurs: high voltage (15.5V+), low voltage (<12.8V), high alternator temperature, high battery temperature.

BLACK (Ground) – Connect to alternator ground terminal
RED (Power) – Connect to alternator B+ terminal
BROWN (Ignition) – Connect to switched 12V source
BLUE (Field) – Connect to alternator positive field terminal
ORANGE (Lamp) – Connect to negative side of charge lamp