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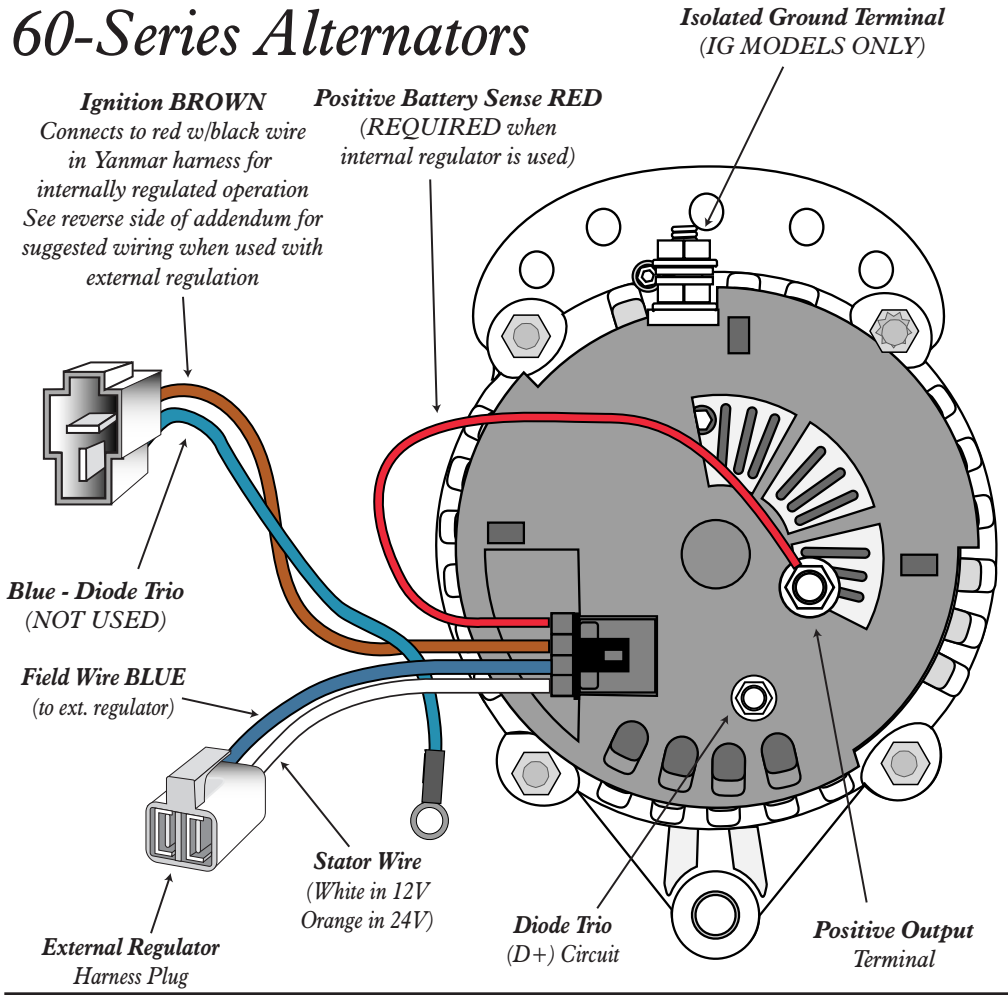
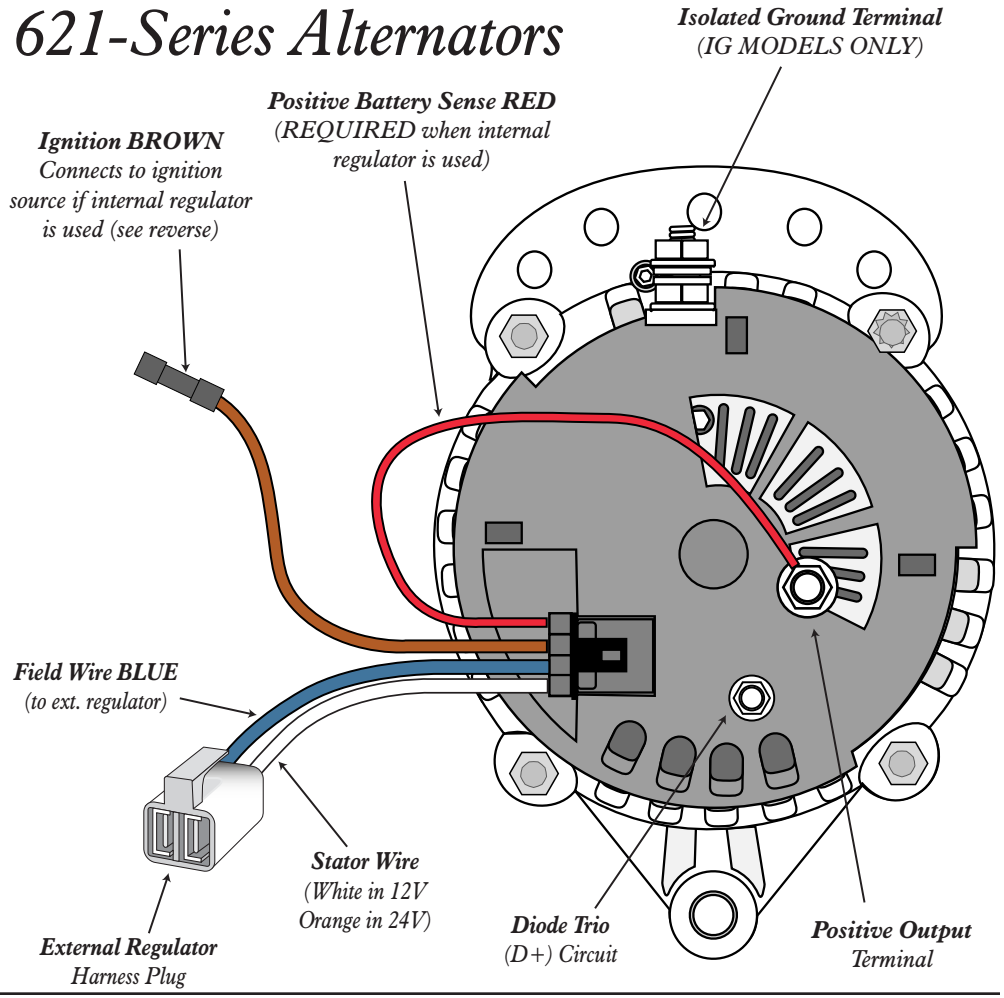
6-Series Alternator Wiring Addendum

60-Series Alternators



621-Series Alternators



Installation Notes

Balmar's Smart Ready alternators feature a simple, single-stage regulator that can be used as a stand alone unit or as an emergency back-up unit in conjunction with a smart external regulator. When used with an external regulator, it is necessary that the brown ignition wire in the alternator plug be disconnected from ignition voltage. We recommend the use of a double-throw toggle switch, as discussed on reverse, to control regulator activity.

On Case Ground (non-IG) alternators, the ground wire(s) in the regulator wiring harness can be connected to one of the unused threaded holes in the alternator's tensioning arm with an 8mm bolt. To ensure proper grounding, screw in and unscrew the bolt a few times before securing the bolt with the ground wires attached. This will help remove any paint which could compromise grounding to the alternator case.

The function of the D+ circuit is to provide a low voltage DC source in applications where lamp functions are driven by that source. This function is typical in many Volvo engines. The D+ circuit should NOT be used unless required to drive your engine's charge lamp circuit. DO NOT attempt to use the D+ terminal as a connection point for your ground wires. Doing so could damage both the alternator and regulator.

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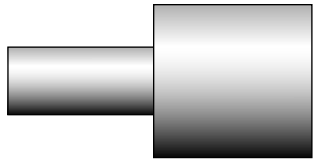
621-Series Alternators

Include a 1-inch spacer with an integrated bushing. This spacer can be used to modify the alternator's 1-inch mounting foot to be compatible with 2-inch mounting configurations. This is a push-in spacer that's designed to fit tightly inside the mounting foot's 1/2-inch bore. To ensure a proper fit, the bushed spacer should be compressed into place with a C-clamp or bench vise.



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Suggested Smart Ready Back Up Regulator Wiring

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The 6-Series alternator is designed for use with Balmar's Max Charge MC-612 (12-volt) or MC-624 (24-volt) multi-stage voltage regulators. The diagram below provides a guideline for wiring connections between the MC-624 and the 6-Series alternator.

In addition to its ability to be externally regulated, this alternator features an internal "Smart Ready" regulator that's intended to provide an immediate back-up in the event of the loss of the external regulator. When connecting the "Smart Ready" regulator in conjunction with the external multi-stage regulator, we recommend the use of a double throw switch to direct switched voltage to the brown (ignition) wires in the regulator wiring harness and in the alternator wiring plug.

The addition of the double throw switch enables the user to quickly switch from external regulation to internal regulation in the event of a failure of the external regulator. DO NOT connect both Ignition (switch) wires to separate sources of switched voltage.

For additional wiring details, see reverse side of this addendum.

On non isolated-ground models, ground wires and grounding cable should be connected at the mounting bolt at the pivot point of the alternator. DO NOT attempt to connect the ground wires or grounding cable to the D+ terminal at the back of the alternator. Doing so could result in serious damage to the alternator and voltage regulator(s).