

**Source:** Prestolite Electric Leece Neville Heavy Duty Systems

**Bulletin No:** TWB-0120 **Date:** December 2, 2024

**Models:** BLP / BLD 24V 4000 Series

**Subject:** Wiring Diagram



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## Single Alternator Wiring

**Grounding:** Insulated return.

**Excitation:** Self Excite

### L terminal: Optional Connections.

Lamp rating: 3W (.25A) Max.

Lamp circuit can operate a relay not exceeding a current draw of 100mA from the relay coil.

The lamp feature is a dual function high side / low side switch.

### S terminal: Optional Connection when used in a single wiring configuration.

⚠ When connected in a dual alternator configuration the sense terminals **must** be connected. Either a direct connection from the sense terminal to the B+ terminal or the sense terminal to the battery will be required.

⚠ Not compatible with diode type battery isolators.

⚠ **Do Not** ground sense terminal.  
Regulator will be damaged.

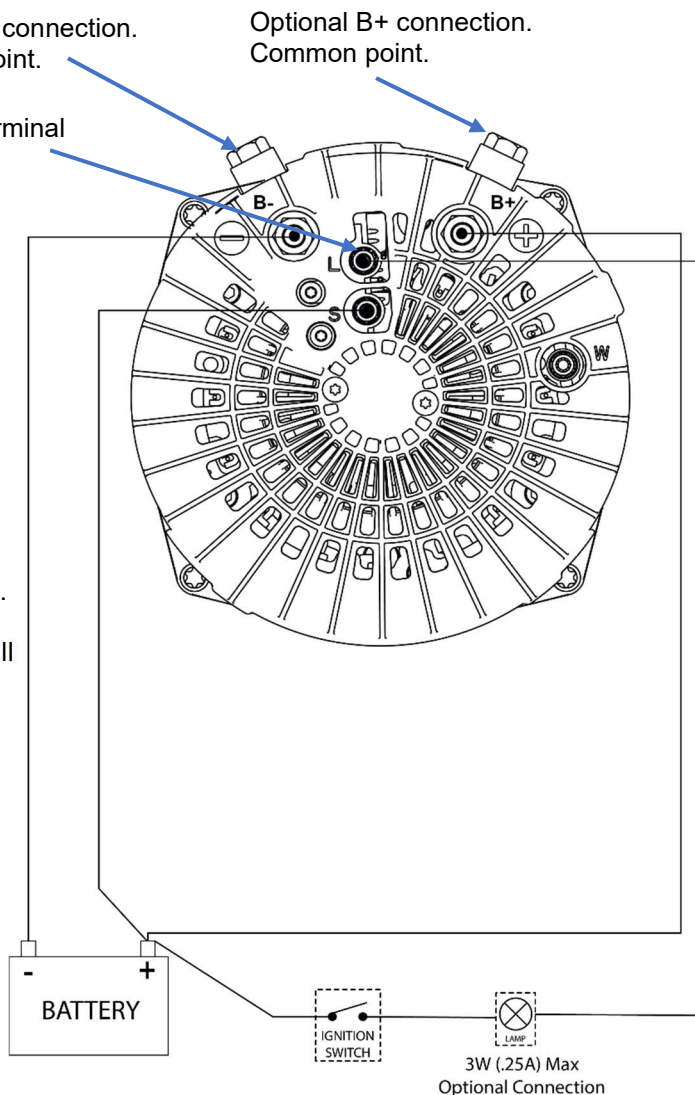
Voltage setpoint 28.4V with or without sense terminal connected.

**W terminal:** Optional connection. 16 poles.  
Maximum current draw 3 amps.

Optional B- connection.  
Common point.

Optional B+ connection.  
Common point.

Optional L terminal  
connection



Terminal	Torque
B+ B- (M8)	11.25 +/- 2.25 Nm
S, L, W (M5)	2.0 - 2.5 Nm

**Important:** The information contained in this bulletin is intended for use by trained, professional technicians who have the proper tools, equipment, and training to perform the required maintenance described above. This information is NOT intended for 'do-it-yourselfers', and you should not assume that this information applies to your equipment. If you have any questions regarding this information please visit our website at [www.prestolite.com](http://www.prestolite.com), or contact our technical service department at:

**Technical Service:** [techservice@prestolite.com](mailto:techservice@prestolite.com)



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## Dual Alternator Wiring

**!** Determine correct revision level to determine if model can be used in a dual alternator configuration. See fig 1 and chart below. If model is not capable then the regulator can be replaced with part number R214107437S.

Model	Revision Level
BLD4102H	B and higher.
BLD4102M	B and higher.
BLD4104C	D and higher.
BLD4105M	A and higher.
BLD4108M	A and higher.
BLD4114M	A and higher.
BLP4101H	C and higher.
BLP4110M	A and higher.
BLP4111M	B and higher.
BLP4112M	A and higher.

**L terminal:** Optional connection.

**!** Independent lamps are required in this circuit. Using one lamp to monitor the two alternators will **damage the voltage regulator**.

**S terminal:** Mandatory connection.

**!** A direct connection from the sense terminal to the B+ terminal or the sense terminal to the battery **will be required**.

**!** Not compatible with diode type battery isolators.

**!** **Do Not** ground sense terminal. Regulator will be damaged.

Voltage setpoint 28.4V.

**W terminal:** Optional connection. 16 poles. Maximum current draw 3 amps.

**!** When using in a dual configuration match cable size and lengths for optimal load sharing.

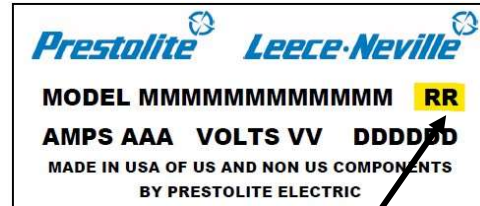
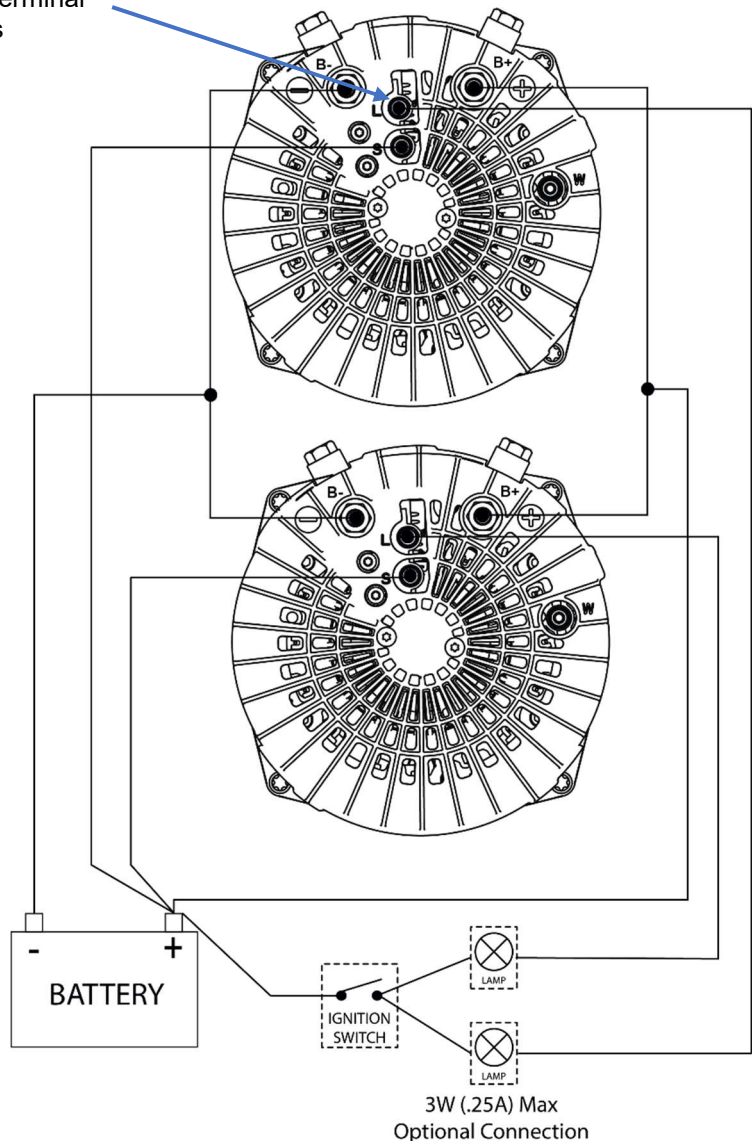


Fig 1 Revision Level

Optional L terminal connections



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