

Source: Prestolite Electric Leece Neville Heavy Duty Systems
Bulletin No: TWB-0075 **Date:** April 11, 2022
Models: AVI147 & AVI150 Hinge mount alternators (sense enabled)
Subject: Wiring Diagram



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Wiring diagram for AVI147 & AVI150 with voltage sense regulator. (See listing below)

Regulator reference 1861908, 1861940.

The alternator is earth return (grounded).

The alternator is an ignition excite machine, via Pin3. **This is a required connection.**

Pin1 = Phase (W), Tacho (Optional connection)

Pin2 = Warning lamp (Optional connection)

Pin3 = Ignition (Required connection)

Pin4 = Voltage sense (see Page 2)

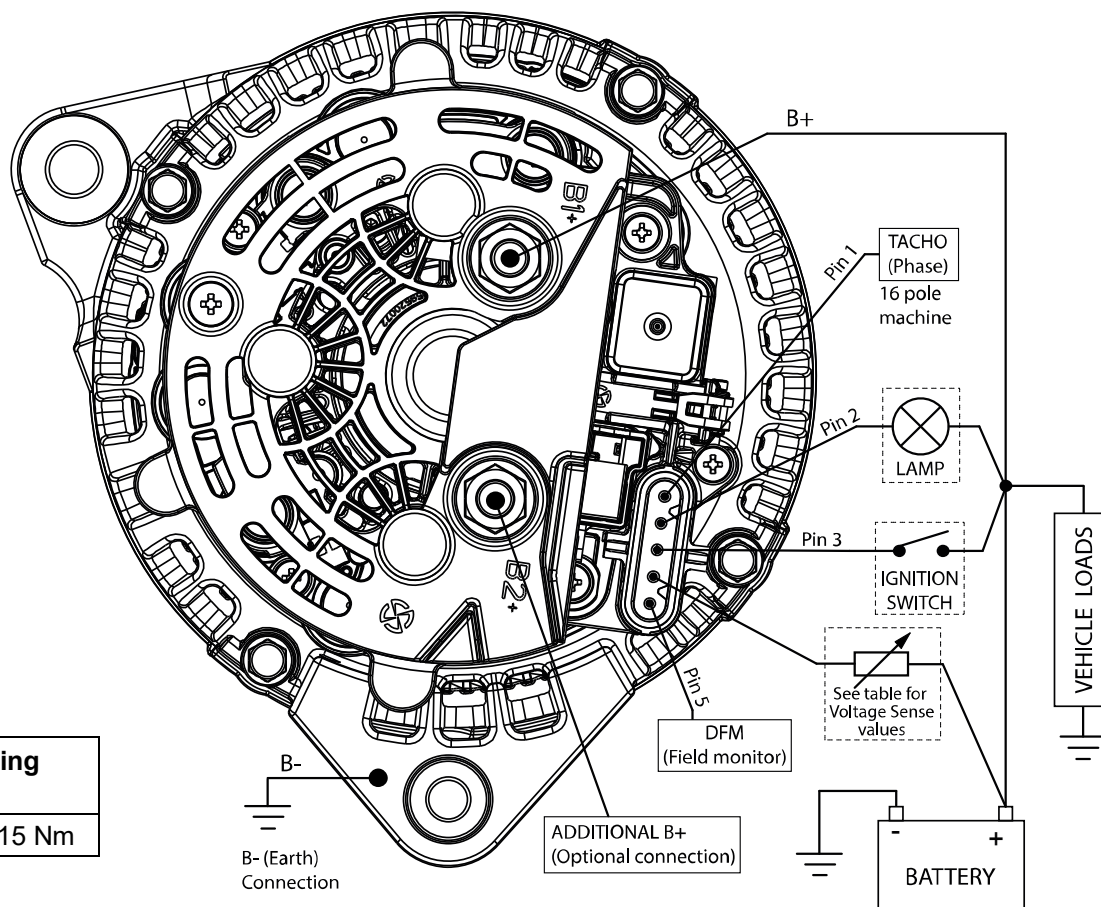
Pin5 = Digital field monitor / DFM (Optional connection)

AVI147S3222HD

AVI150S1111HP

AVI150S1142HP

AVI150S1156HP



Terminal tightening torque values

B+	13 - 15 Nm
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Voltage set point control, via (Voltage Sense connection (pin4))

Regulator 1861908, 1861940 allows for voltage setpoint control (26.0V – 31.0V) by connecting a resistor between Voltage sense (pin4) and batter positive terminal. See table below for values.
Resistor power rating >10mW.

If Voltage Sense (pin4) is left open circuit the alternator voltage will default to 28.5V

If Voltage Sense (pin4) is 0Ω, the alternator will regulate at 26.0V

Resistance value	Voltage setpoint
0Ω	26.0V
1kΩ	26.15V
1.5kΩ	26.25V
2.7kΩ	26.5V
3.9kΩ	26.7V
5.6kΩ	27.0V
6.8kΩ	27.25V
8.2kΩ	27.5V
10kΩ	27.8V
11kΩ	28.0V
12.7kΩ	28.28V
14kΩ	28.5V
15.4kΩ	28.73V
16.9kΩ	29.0V
17.8kΩ	29.12V
18.7kΩ	29.27V
20.5kΩ	29.5V
24kΩ	30.08V
27kΩ	30.5V
30kΩ	31.0V

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