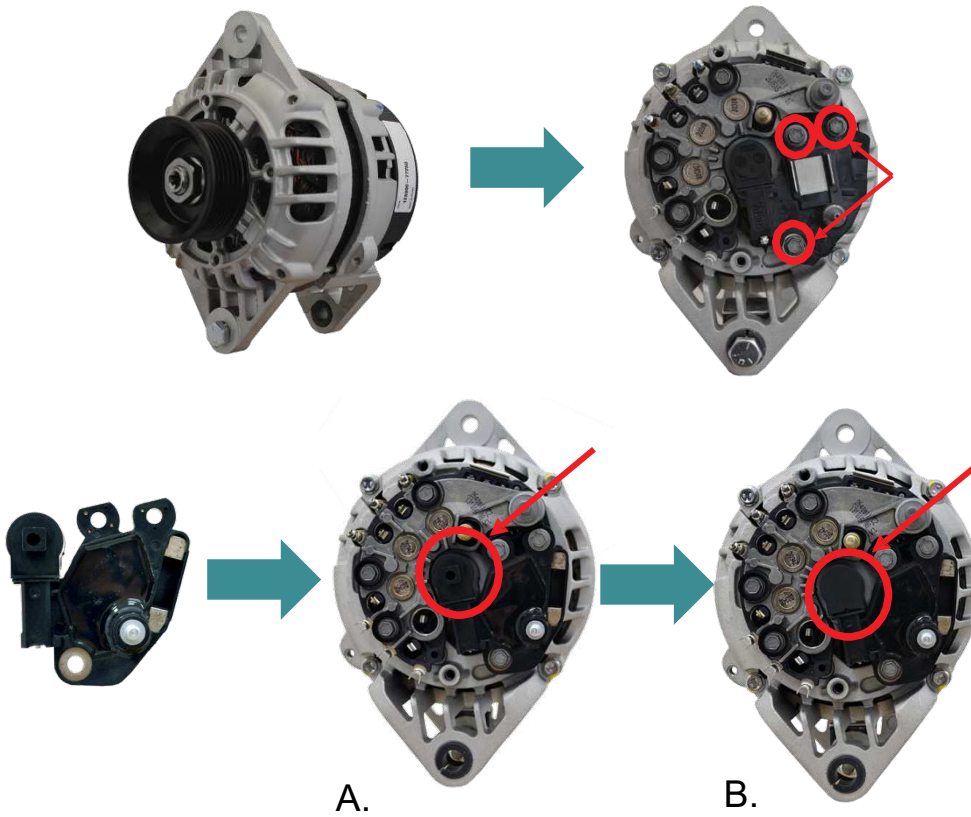


# Installation and Troubleshooting Guide

## Internal Regulator Retrofit for 24V Valeo



Remove the two screws and remove Back Cover.

If clearance is available, the Alternator can stay on the engine.

Remove the Standard Internal Regulator (3 screws).

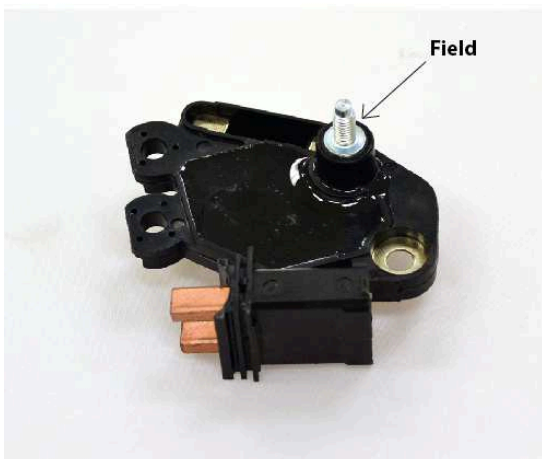
A. Install the Balmar Internal Regulator with the same 3 screws. Remove Brush Retainer.

B. Replace the Brush Cover with new one provided in kit.

**Tools Needed:**

- 8mm nut driver for the "W" terminal nut.
- 13mm wrench for the B+ terminal.
- 7mm nut driver for the cover and regulator screws.

**Connections:**



**Figure 1**



Re-install the Back Cover using the original 2 screws.



### Wiring Instructions:

#### Wiring the Balmar Internal Dummy Regulator to connect with the Balmar MC-624 External Multi-Stage Regulator:

Follow the installation and programming instructions provided with your MC-624 Regulator. The following modifications are required when connecting to the Dummy Internal Regulator:

- 1) Connect the ignition switch wire to the Balmar regulator harness brown "ignition wire".
- 2) Connect the blue "field wire" to the field terminal on the Internal Regulator (see Figure 1).
- 3) The orange "tach wire" on the Balmar wiring harness is normally used to connect the tachometer to a Balmar alternator. In this case the orange tach wire is not used (as the Valeo alternator connects to the tach independently), so you may fold it back and tape it off.



This terminal is only required if you own an existing Balmar MC-624 and need to convert the blue field wire to a ring connection.

**#10 Ring Terminal  
Connector**

Contact Balmar Technical Support at +1-360-435-6100x3 from 8:30 am – 7:30 pm EST with any questions.