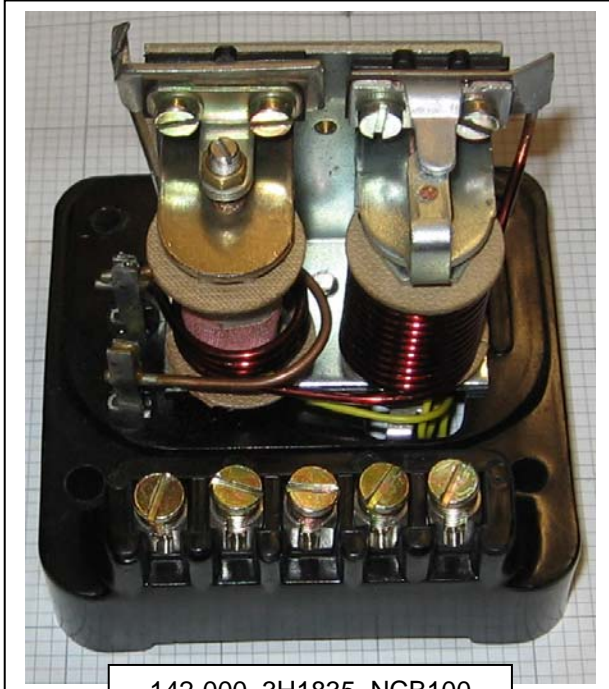
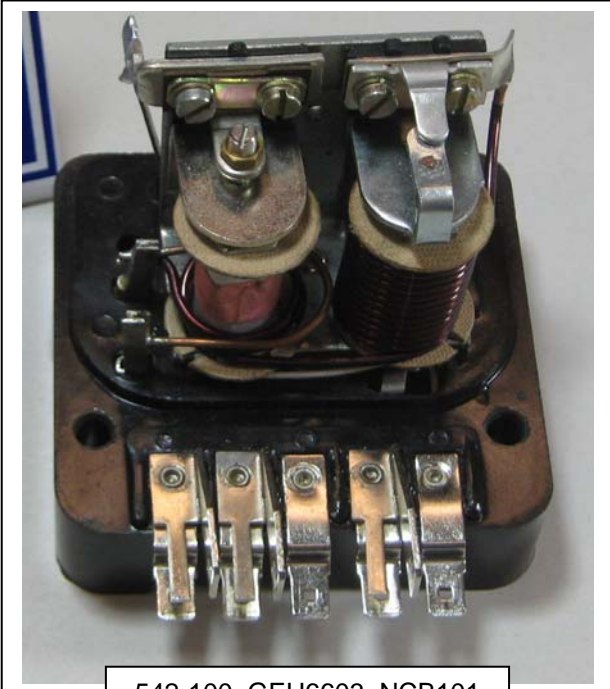


1 **Supplemental Information & Instructions**
2 **for**
3 **142-000 or 3H1835 Voltage Regulator, 5-Post, Screw Terminals**
4 **542-100 or GEU6603 Voltage Regulator, 5-Post, Spade Terminals**
5
6



142-000, 3H1835, NCB100



542-100, GEU6603, NCB101

29 ***What Is the Problem?***

30 A growing number of customers expect these to be “plug & play”. They never were. Shops buying and
31 installing original Lucas voltage regulators back in the 60s and 70s will remember the “Contacts to be
32 cleaned prior to fitment on vehicle” sticker on the cover. Cleaning the contacts and adjusting them has
33 always been part of the installation process. If they are simply installed, they will not work properly and
34 the generator and wiring harness may be damaged. ***The damage is serious enough that we will not***
35 ***sell one until the customer has had a chance to read this document.***

36 ***Why Not Just Buy Pre-Adjusted Regulators?***

37 We tried. We bought samples from other suppliers, and although boxed differently, they appeared
38 ***identical in every respect***, right down to the paint used to mark the terminals under the cover. It would
39 appear that there is only one company actually making these regulators, and they all need to be cleaned
40 and adjusted to work properly.

41 ***Why Not Offer Cleaned, Tested, and Pre-Adjusted Regulators?***

42 We do. We take these regulators and have them professionally cleaned, tested and adjusted. They are
43 available as 142-001 (screw terminals) and 542-101 (spade terminals). They are reasonably priced
44 considering the time and skill required to do the work.

45 ***What Needs to be Done?***

46 First, the contacts need to be cleaned. This is relatively simple.
47 Second, the regulator needs to be adjusted. This is much more complicated.

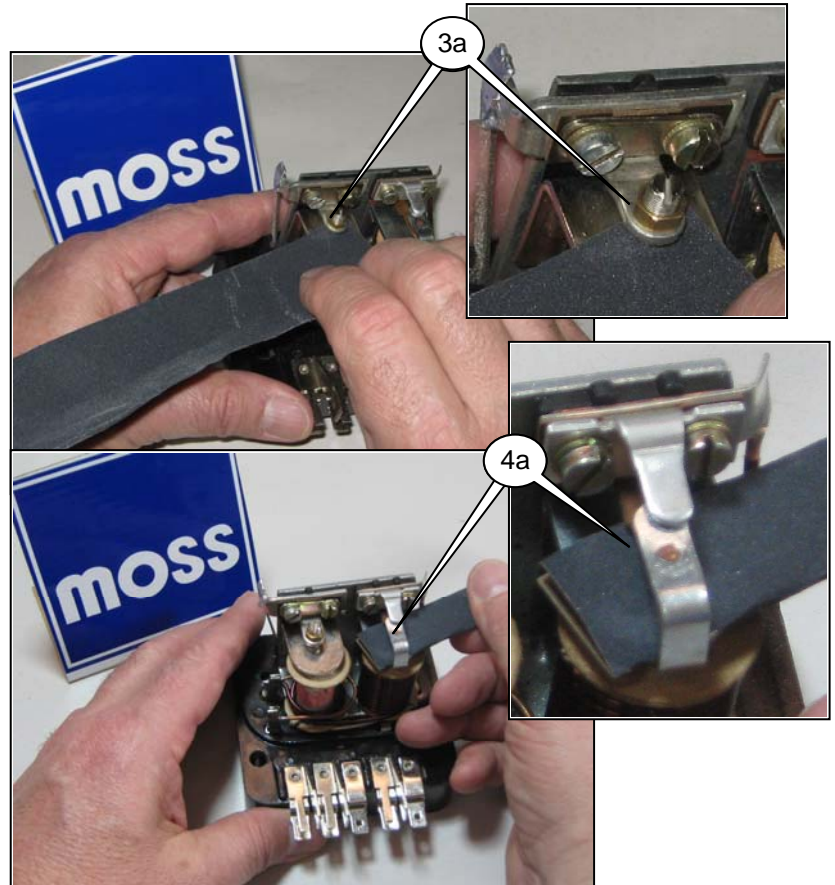
48 **Cleaning the Contacts**

49 Start with the regulator contacts (3a).
50 Fold a piece of fine grit sandpaper and
51 drag it through the contacts once.
52 Clean the contacts and surrounding area
53 with a rag and some rubbing alcohol.
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55 *Use sandpaper with non conductive grit.*

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Next, clean the cutout contacts (4a).
Fold a piece of fine grit sandpaper and
drag it through the contacts once.
Clean the contacts and surrounding area
with a rag and some rubbing alcohol.



75 **Before You Do Anything Else...**

76 *You probably bought the regulator to cure a problem with your charging system. Before you proceed,*
77 *there are a couple of things that you should do to maximize the chance of a successful voltage regulator*
78 *installation. Assuming that everything else in the charging system is OK can lead to serious problems.*

79

80 **Generator**

81 Have your generator checked by a professional with the necessary testing equipment. Many auto parts
82 stores have this capability, but calling ahead would be a good idea as diagnostic equipment sold in the
83 last 7-10 years will only test alternators. If you are installing a new generator, **you must polarize it, or it**
84 **will not work.** [The Moss Tech Video on polarizing and testing the generator is available on the Moss](http://www.mossmotors.com/Shop/ViewProducts.aspx?PlateIndexID=28917&SortOrder=1)
85 [Web Site: http://www.mossmotors.com/Shop/ViewProducts.aspx?PlateIndexID=28917&SortOrder=1](http://www.mossmotors.com/Shop/ViewProducts.aspx?PlateIndexID=28917&SortOrder=1)

86

87 **Electrical Connections**

88 The Lucar (spade) connectors at the generator should be checked carefully. They often get hot, and over
89 time the individual wire strands will break. Because this connection is covered by an insulating boot, most
90 people will not notice the problem.

91 Clean the battery terminals and the battery cable ends. We suggest using a commercial battery terminal
92 anti-corrosion treatment, or coating the battery posts with copper impregnated grease. These will prevent
93 corrosion and that will help maintain maximum contact between cables and the battery terminals.

94 Remove the ground cables and thoroughly clean the terminal on the cable and the metal where the
95 ground cable is connected to the engine or chassis.

96

97 **Battery**

98 Check your battery. If it is not charged, put it on a charger. When checked with a voltmeter, a fully
99 charged 12 volt battery at rest will show 12.6 volts. Check the specific gravity with a hydrometer.

100 **Adjusting the Regulator**

101 The regulator relay should be adjusted so that the points open at 13 to 14 volts.
102 The cut-out relay should be adjusted to open at about 10 to 12 volts.

103
104 We realize that these are not the specifications in the workshop manuals for cars equipped with these
105 regulators. They are more conservative, and perfectly functional. Using these setting will minimize the
106 chance of a problem with your new regulator and extend the life of your battery.

107
108 **The procedure for adjusting the two relays in the voltage regulator are covered in the workshop**
109 **manual for your car.** The procedure is somewhat complicated, and it takes some specialized equipment.
110 Because new tools are available, the instructions are a little dated. Most voltmeters today are digital, not
111 analog. If you are not familiar with the procedure, and are not comfortable doing this yourself, there are a
112 couple of options.

113 **Having it Done by a Professional**

114 If there is a shop in your area that has experience working on British cars (or other older cars with
115 generators), they can install and adjust the regulator for you. You may also find that there is an
116 automotive electrical system specialist that can help. **Be sure to give them the specifications provided**
117 **above.**

118 **Buying a Pre-Tested & Adjusted Regulator**

119 We realize that not everyone will want to deal with a regulator that needs to be cleaned and adjusted, and
120 that in many areas finding a professional to do the job can be a challenge. For these reasons, we offer
121 voltage regulators that have been professionally cleaned, tested and pre-adjusted to our specifications.

122
123 **142-001 Voltage Regulator, 5-Post, Screw Terminals, Pre-Tested & Adjusted**
124 **542-101 Voltage Regulator, 5-Post, Spade Terminals, Pre-Tested & Adjusted**

125
126 Since we introduced the cleaned, adjusted and tested voltage regulators

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142 *Although every effort has been made to ensure the accuracy and clarity of this information, errors and/or omissions on our part are*
143 *almost inevitable. Any suggestions that you may have that will improve the information (especially detailed installation notes) are*
144 *welcome. Please use the simple email form on the "Contact Us" page on the Moss website:*
<http://www.mossmotors.com/AboutMoss/ContactUs.aspx>
If you prefer, you may call our Technical Services Department at 805-681-3411. So many people call us for help that we are often not
able to answer the calls as fast as we'd like, and you may be asked to leave a message. We apologize in advance for the
inconvenience. We will get back to you within 2 business days.



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