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## Pantera Electronics Installation Manual for Replacement Signal Flasher BF256 or BF256A

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REV 1

The BF256 is a board level flasher relay that is a direct replacement for the Bosch 336 256 002 relay flasher used in many 1960's through 1970's Volkswagen and other European cars.

The Bosch case is opened, Bosch mechanical is removed and the Pantera Electronics replacement electronics is installed.

This replacement flasher relay board will operate incandescent light bulbs or LEDs lamps or any combination of both without the need of additional resistors or loads.

— This replacement flasher relay also has an adjustable rate flashing control that sets the flashing rate. This may be needed for sequential or scrolling LED turn signals.

The KBL terminal is an additional terminal for a turn signal indicator the same as any Bosch flasher of that period.

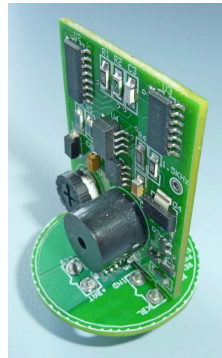
The BF256A version simulates a tick sound as an audio indication that the flasher is operating.

Functional equivalent of the [Bosch flasher 336 256 002](#).

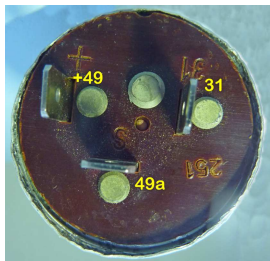
Pantera Electronics stocks a compatible socket with terminals for the Bosch replacement flasher. P/N: BFS. (see page 4)



Bosch P/N:  
336 256 002



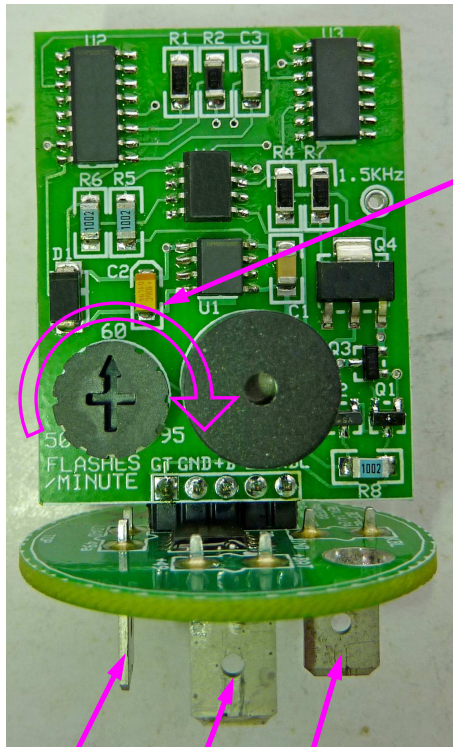
Pantera Electronics  
P/N: BF256A



Original  
terminal  
layout



KBL terminal  
added to the  
original terminal  
layout.

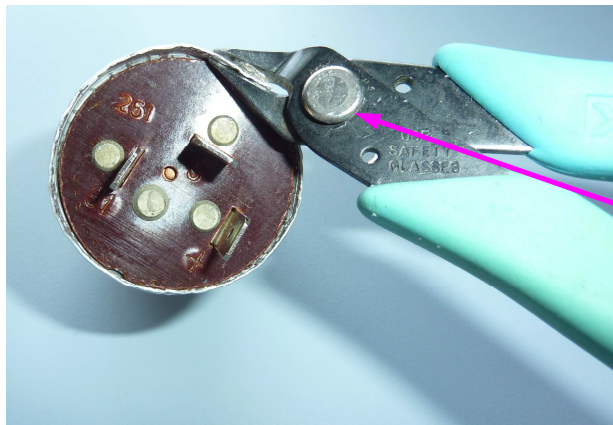


Before installing the replacement board the flash rate adjustment can be set by connecting to the wire harness and operating the flasher.

While the flasher is active rotate the "FLASHES / MINUTE" adjustment control. Counter-clockwise rotation causes the flash rate to be slower. Clockwise rotation causes the flash rate to be faster.

After adjusting the flash rate disconnect from the wire harness and proceed with the flasher replacement.

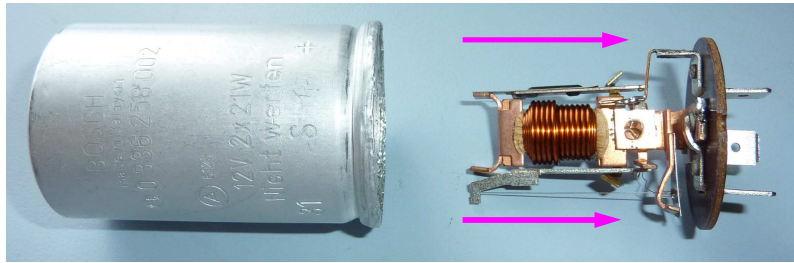
Connect the wire harness terminals to these tabs in the same order as the Bosch factory flasher.



Carefully pry the edge of the Bosch flasher can so the flange is up. Do not pry too far, only enough to remove the internal part.

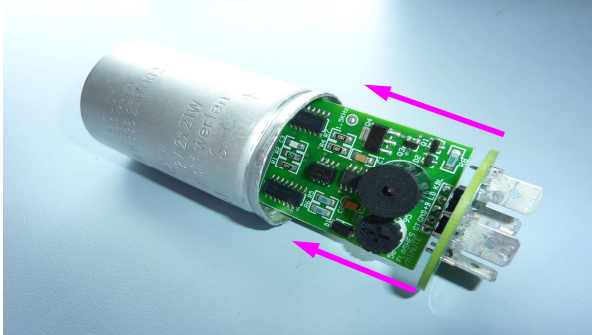
A pair of small wire cutters with a sharp edge can be used to carefully pry up the flange.

Alternately a small thin screwdriver blade can be used as well.

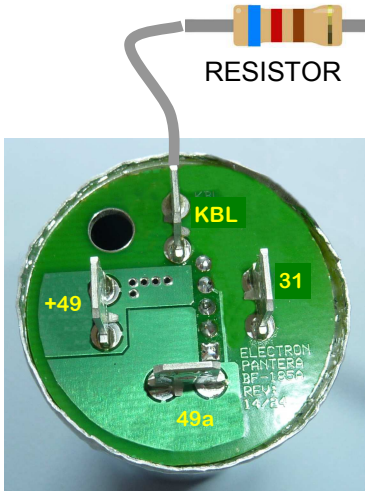
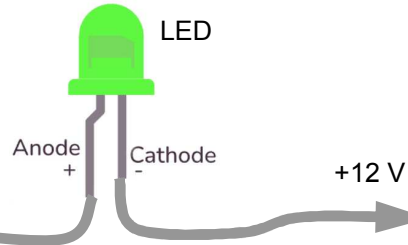
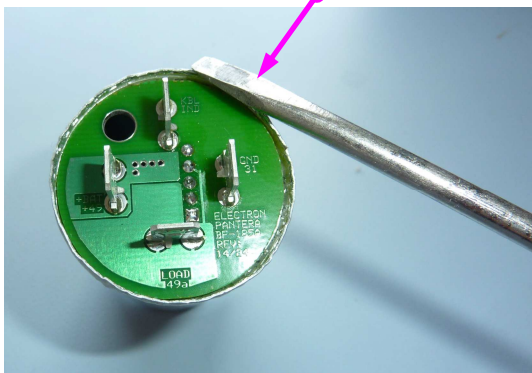


Slide the Bosch internal flasher part out of the can.

Replace with the Pantera Electronics flasher assembly by sliding into position.



Roll the flange back down onto the board using a screwdriver or any tool of preference. Do this for the entire diameter of the can.



Connect the wire harness wires to the bottom tabs.  
 The KBL tab can be used for any light indicator either incandescent or LED.

Note, LED indicators usually have current limiting resistors built into them, but not always.

If the indicator does not have an internal resistor one can be added.  
 12 Volt electrical systems require a 620 ohm resistor. (BLUE, RED, BROWN)  
 6 Volt electrical systems require a 270 ohm resistor. (RED, VIOLET, BROWN)

Pantera Electronics compatible socket with terminals for replacement flasher  
P/N: BF256

Compatible flasher socket P/N: BFS.

