

C4 Corvette Courtesy Lights Dimmer Module

Repair Instructions

The Courtesy Light Delay Module is a small module, about 2" square, located behind the passenger side dash panel (*bread box*) and typically taped to the harness. The old 1985 module part number is **1408-0625**. A GM specified alternate part number is **1009-8435**. However, neither of these parts are readily available.

These modules can be somewhat difficult to locate. If you do a search, there are many posts here on [Corvette Forum](http://www.corvetteforum.com) about how to bypass your timer if it is bad (*it'll work the lights just fine, but without the delay*), and how to repair these units by replacing the circuitry components inside using Radio Shack parts.

You could also get a replacement circuit board from Ecklers or Wilcox.

<http://www.ecklerscorvette.com/corvette-circuit-board-interior-light-delay-by-pass-timer-1984-1989.html>

Original part # - **1408-0625** (*discontinued*)

Alternate part # - **1009-8435** (*no longer available*)

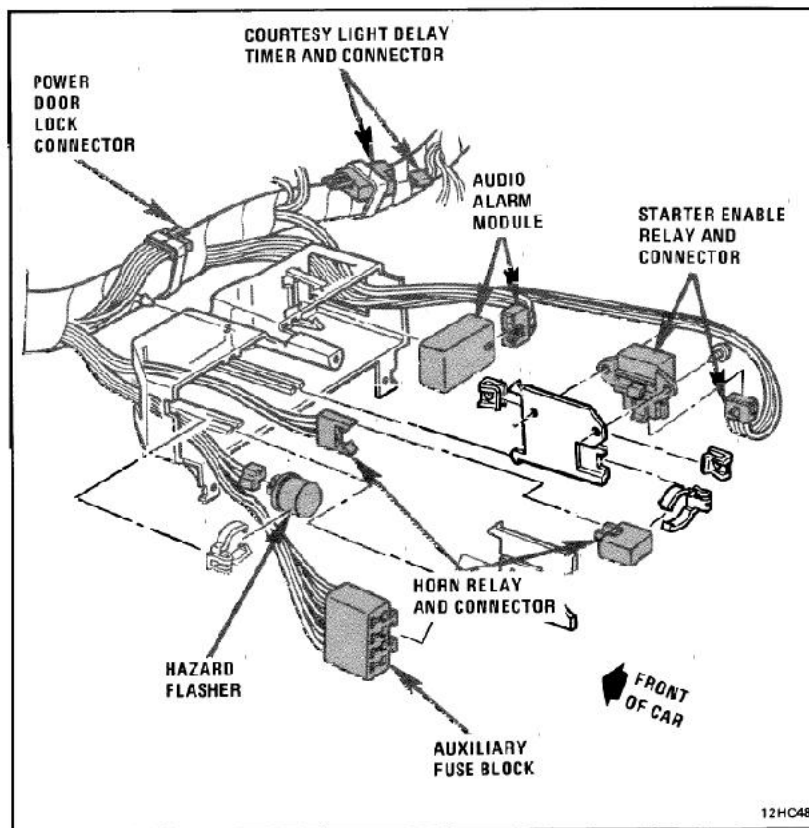


Figure A - Behind Center Of I/P

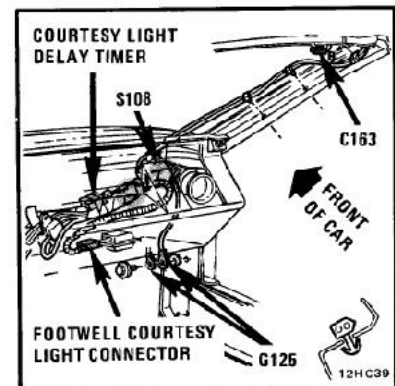


Figure B - Behind RH Side Of I/P

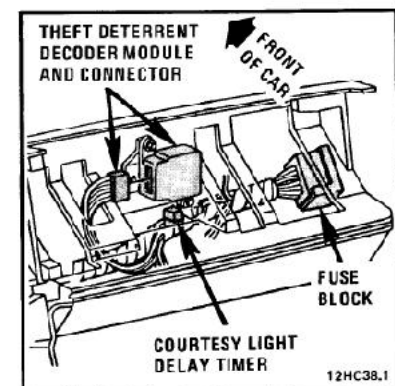
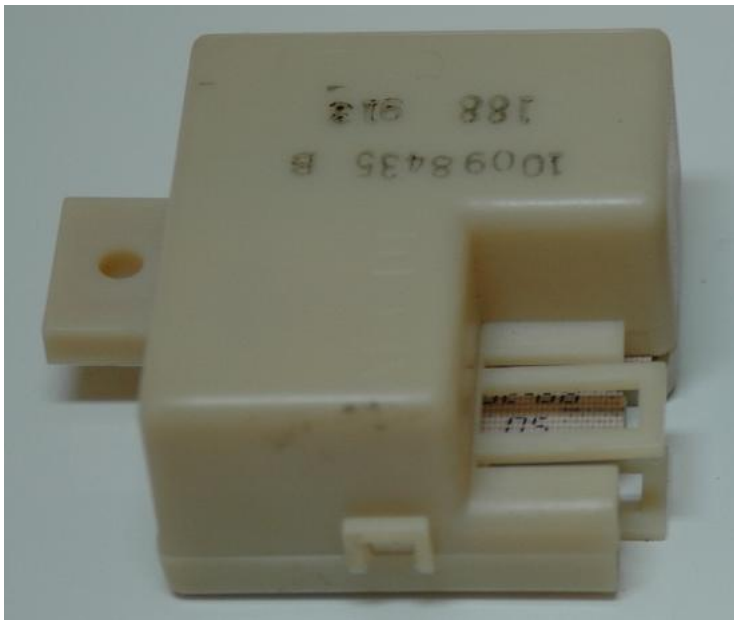


Figure C - Behind RH Side Of I/P

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If your courtesy lights don't go on when either door is opened, the dimmer module may have failed.

Signs that the module has failed are:

The hatch door switches don't work, but the console hatch switch does.

The interior lights come on by turning the light switch but not when you open the door, or they may stay on all the time.

Test by grounding the thick white wire at the module - door hatch switches should work.

Check the black wire is connected to ground. If so, then dimmer module is not connecting these two wires together and making a circuit when the doors open.

Check that the dimmer is receiving a ground at the yellow wire when either door is open. (This yellow wire may be thin white for some years.)

The dimmer module is no longer available as a replacement part. Also one of the main electronic components is no longer available.

My module was fixed by an electronics expert who examined the circuit and found a suitable replacement part.

Here is all the info I have - I've listed most of the parts, in case it can help anyone else.

Location: The dimmer module is in a small 2"x2"x.5" black plastic box, taped to the wiring loom behind the centre dash. **(In my converted to Right Hand Drive Vette, the module was midway behind the passenger crash pad.)**

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The module is wired:

"A" White wire goes to all of the lamps and supplies negative

"B" Black is Ground. Shorting White to Black will turn the lights on.

"C" Pink/White is 12 volts from the Ctsy/Clk fuse which is hot all of the time.

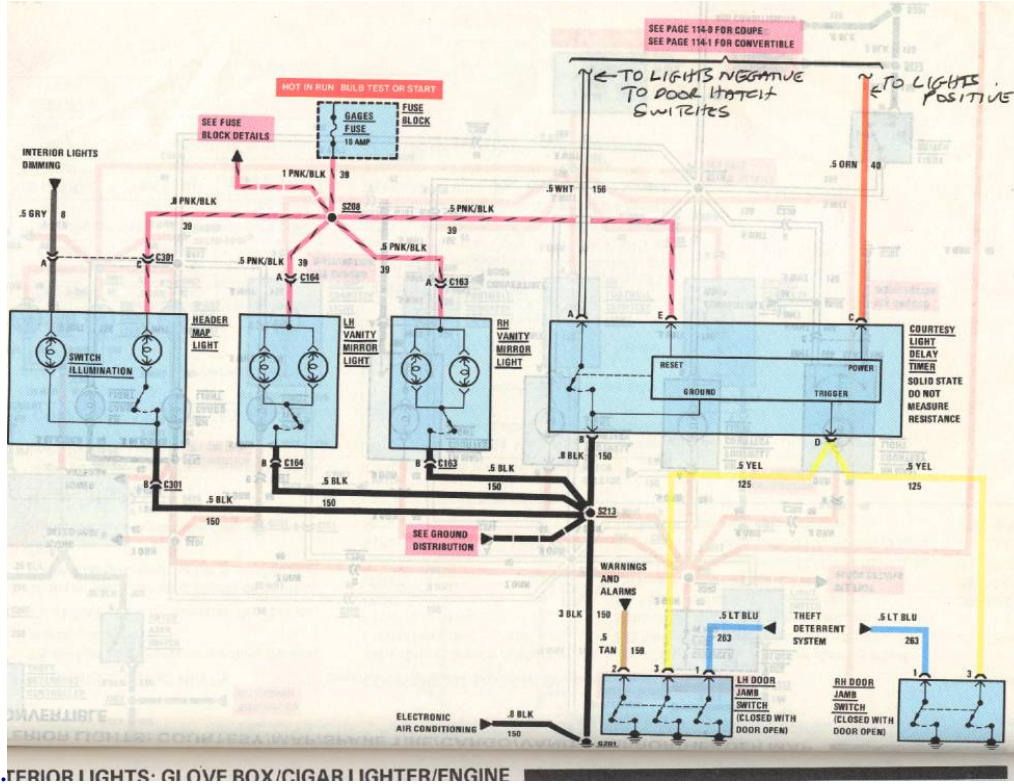
"D" 2 Yellow wires - (**these may be white for some years**) come from the Door switches. The switches close when the door is open and provides a ground on the Yellow (**or white**) wire/wires depending on what door is open.

"E" is the Reset signal used by the Delay Module to turn the Module off when you turn the ignition key to on. So the lights go off.

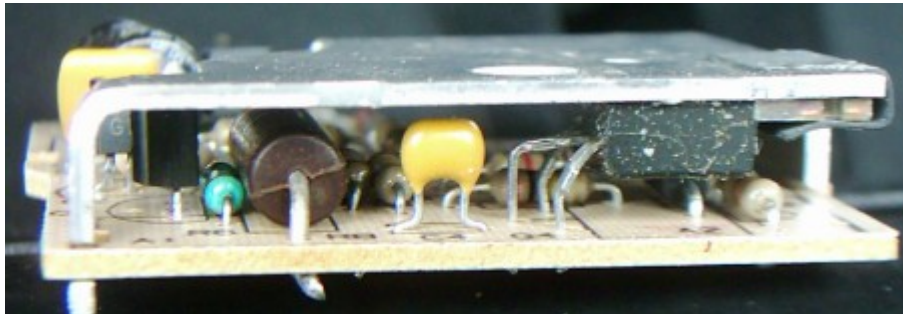
Here's the circuit diagram in the GM Manual for my 1988 Corvette:

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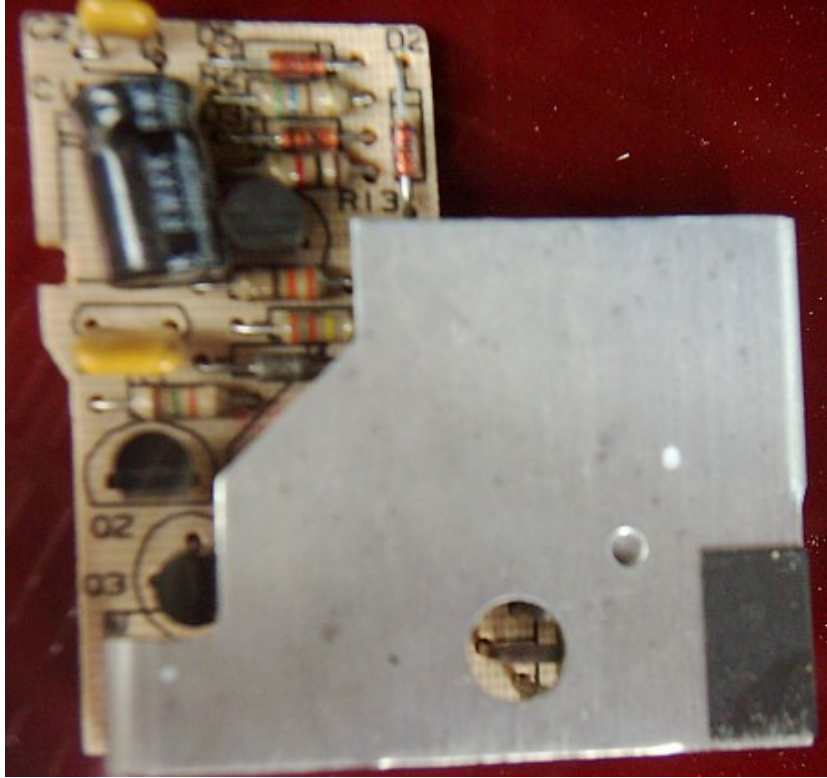


The dimmer module is thin and the circuit is not very complicated -



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The metal piece is a heat sink on a large transistor.

The Transistor is in a TO 220 case, and in mine tested faulty.

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It's no longer available.

Mine was replaced with an MJE 3055 and it worked again!!!!

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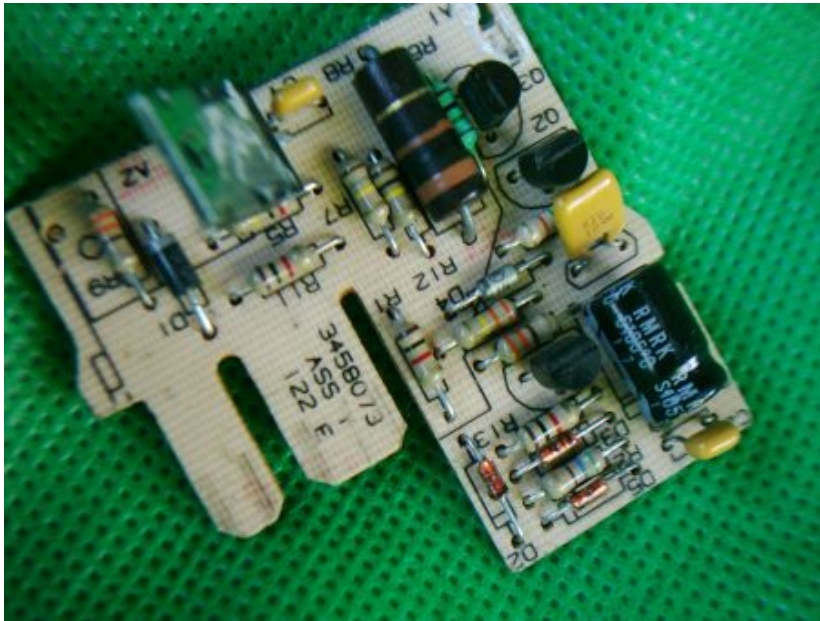
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I suspect that it fails because it takes the most heat/power. The heat sink begins to get warm to the touch within a few seconds.

A test of the amp draw showed my courtesy lights draw 2.8 amps and pressing the rear hatch release increased the draw momentarily to somewhere between 3 and 4 amps.

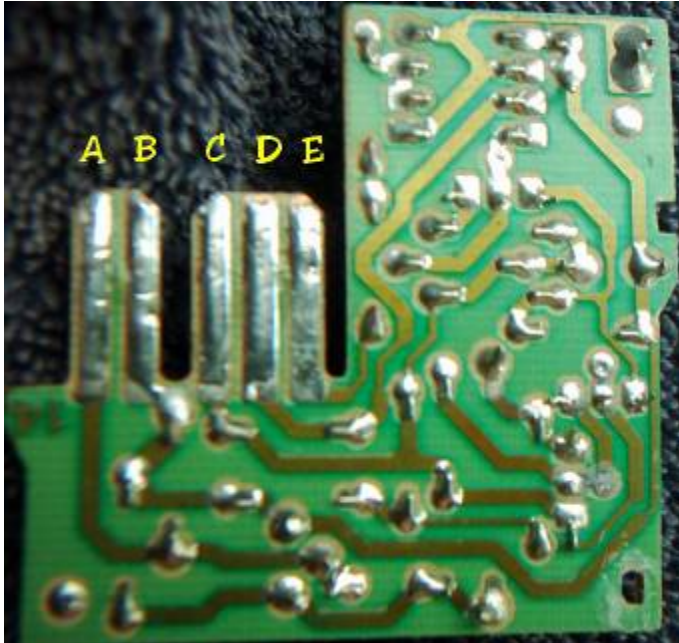
All parts in the module from my 1988 Coupe look brand new.

Here's a picture of the circuit board, heat sink removed -



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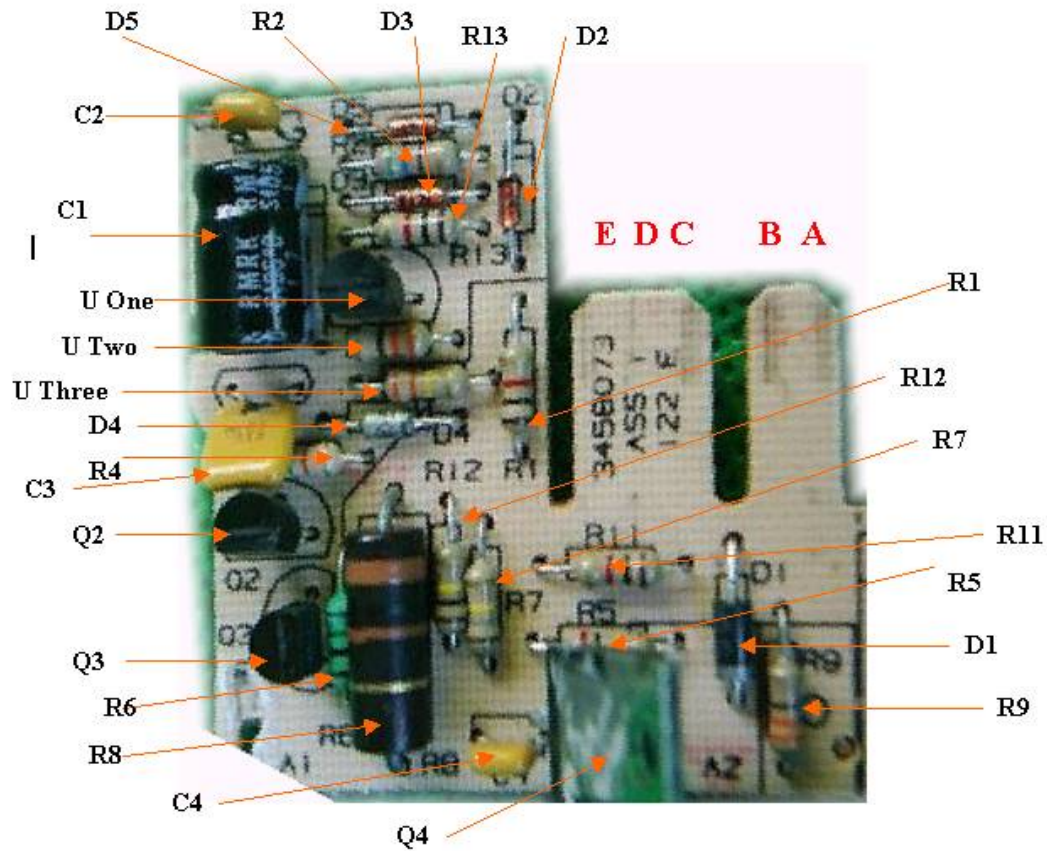


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Here's a parts list - only one signal diode was unreadable.

Part Numbers for 1988 Corvette Dimmer Module



3 parts were not given a number so I've called them U (Unknown) One, Two, Three

R1	Br Bl Rd	C1	25v 100uf
R2	Gr Blue Br	C2	K5Z 104
R3		C3	K 1 U 104m
R4	Br Gr Or	C4	K5Z 104
R5	Rd Bl Ye		

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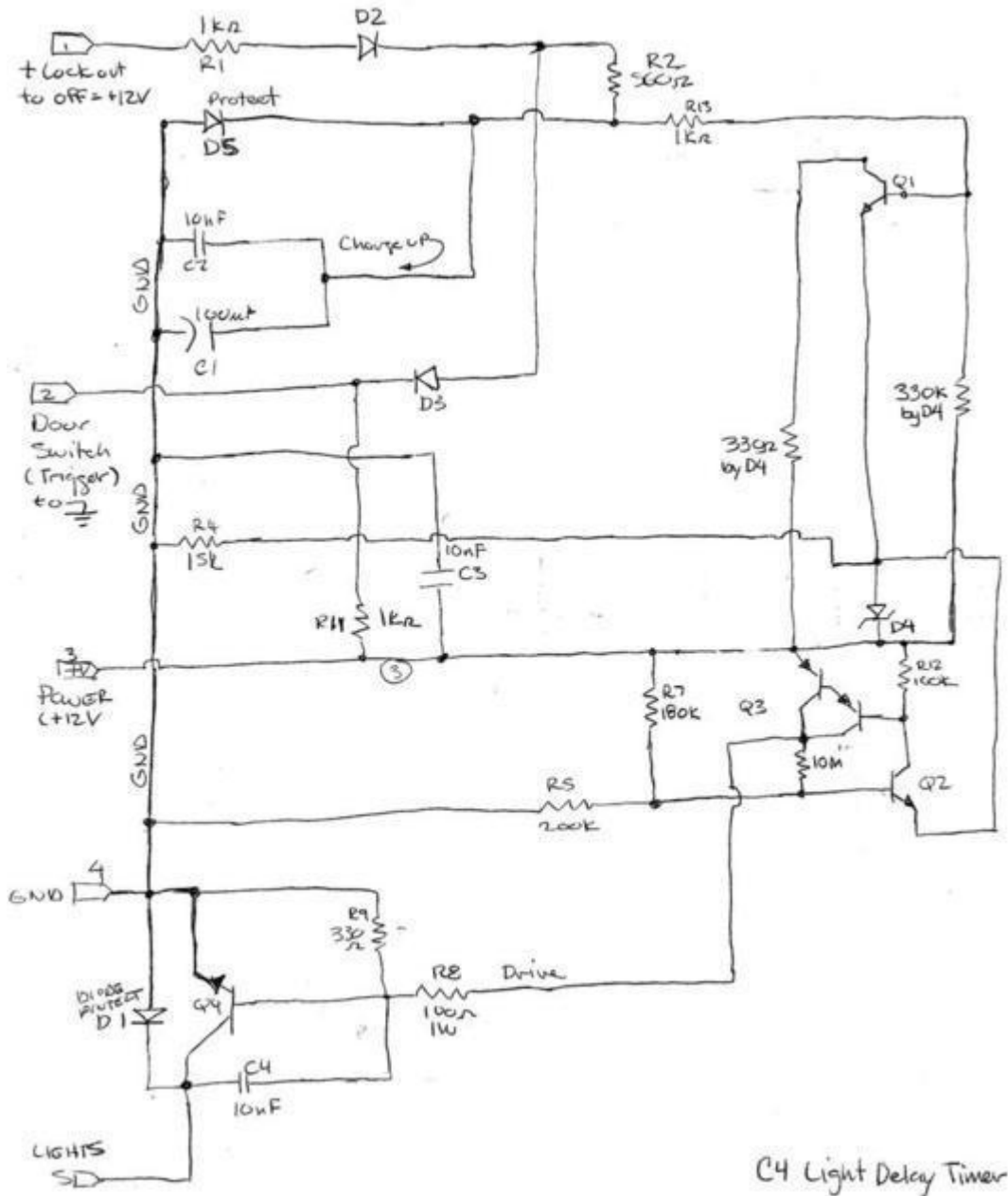
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R6	Br Bl Gr	D1	IN 400... (obscured)
R7	Br Grey Ye	D2	48f
R8	Br Bl Br	D3	unreadable
R9	Or Or Br	D4	IN 704
R10		D5	48F
R11	Br Bl Rd		
R12	Br Bl Ye	Q1	(Listed here as Unknown Three)
R13	Br Bl Rd	Q2	022 GE
U One	Or Or Ye	Q3	R 066 EBC
U Two	Or Or Br	Q4	047 GE 8708 - <u>replaced with MJE 3055</u>
U Three	022 GE - Probably Q1		
	All Resistors 5%		
	Br = Brown Bl = Black Or = Orange		Ye = Yellow Gr = Green

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Here is a diagram drawn up to work out how the circuit works:



A - to Lamps

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B - To Battery negative

C - To Battery positive

D - To door switches (a negative volts signal here will turn lights on, including a 15 seconds delay after low is removed)

E - to positive of dash lights (a positive voltage signal here will turn lights off)

I hope the information here will help someone else repair their module - mine has been working since August 2005.