dRock's '95+ Panther LCM flasher bypass page

The following describes how to bypass the 1995 to current Lighting Control Module (LCM) internal flasher relay on Crown Victoria, Grand Marquis, Marauder and Lincoln Town Car using a standard 2 prong automotive electronic flasher. This is done to eliminate the fast turn signal flash condition experienced when using low current draw LED replacement bulbs in the turn / hazard / and stop lamps.
The LCM purposely flashes the turn signal at a higher rate if the current draw/resistance is below the expected value to alert the driver a lamp is out.

LED's provide extended service life, better vibration tolerance, cooler running temperature, reduced current draw and near instant turn on (beneficial for brake lamps, alerting driver's behind faster)
Even with current technology they are NOT, however, brighter than the stock incandescent lamps in our stock lamp housings, which are designed for the broad light dispersion of an incandescent bulb. So keep that in mind before you decide to switch.

I never cared about having LED lamps so I didn't bother researching a solution for the fast flash condition everyone will experience using them. After reading a fellow CVN member's solution, which does completely work, I thought there must be a better way that is easy to do.
Some mentioned having the LCM reprogrammed but this is not a realistic possibility, and can't be done even with dealer-level equipment.
It sparked my interest enough to spend a minute looking at the diagram and I found there is a better solution that is even easier, anyone can do, and requires no extra bulbs, pigtails, etc.

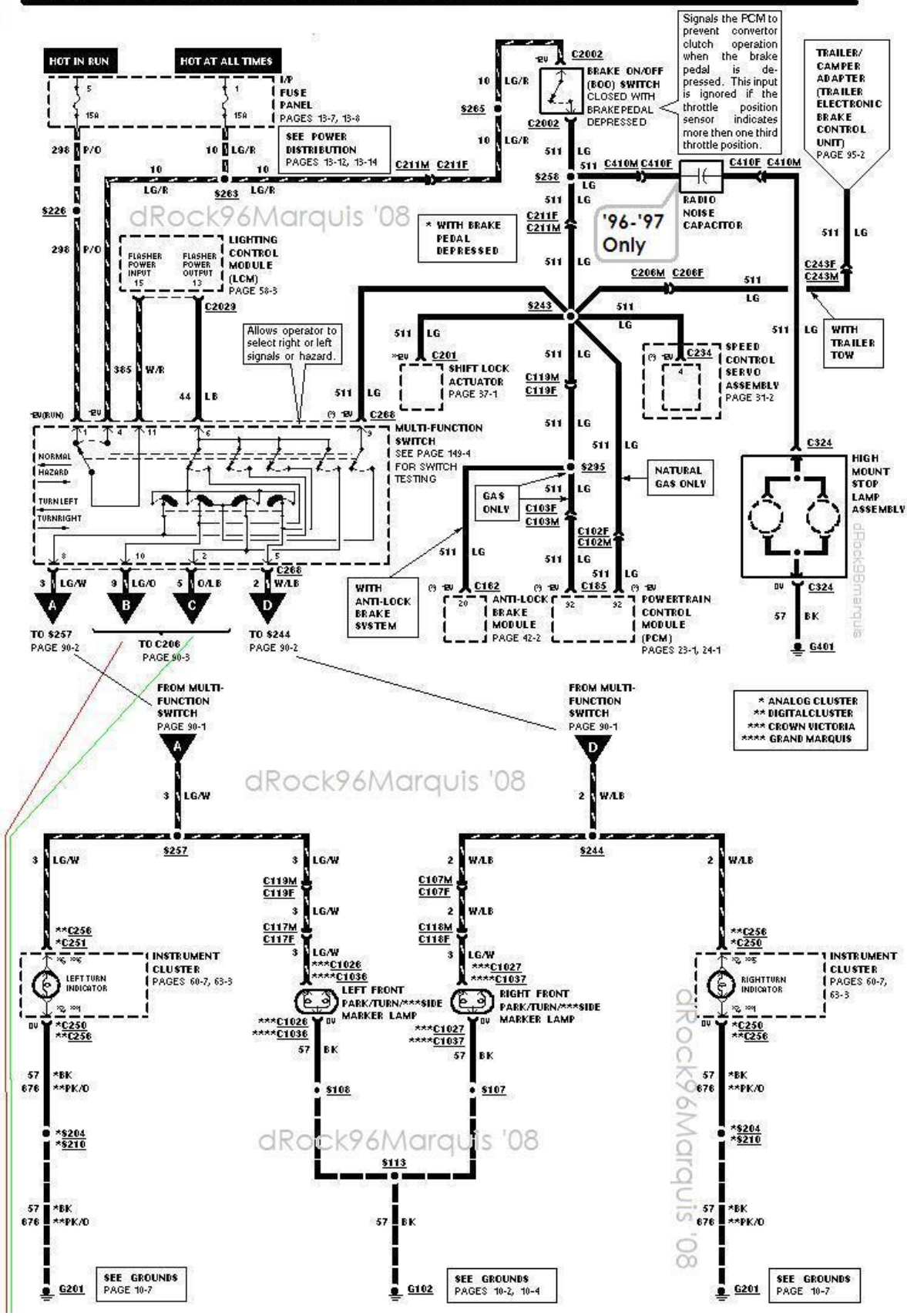
I'll start with a diagram of the turn/stop/hazard lamps. This one is for '95-'97 but other than the fuse locations the wiring is the same for what I will be explaining;

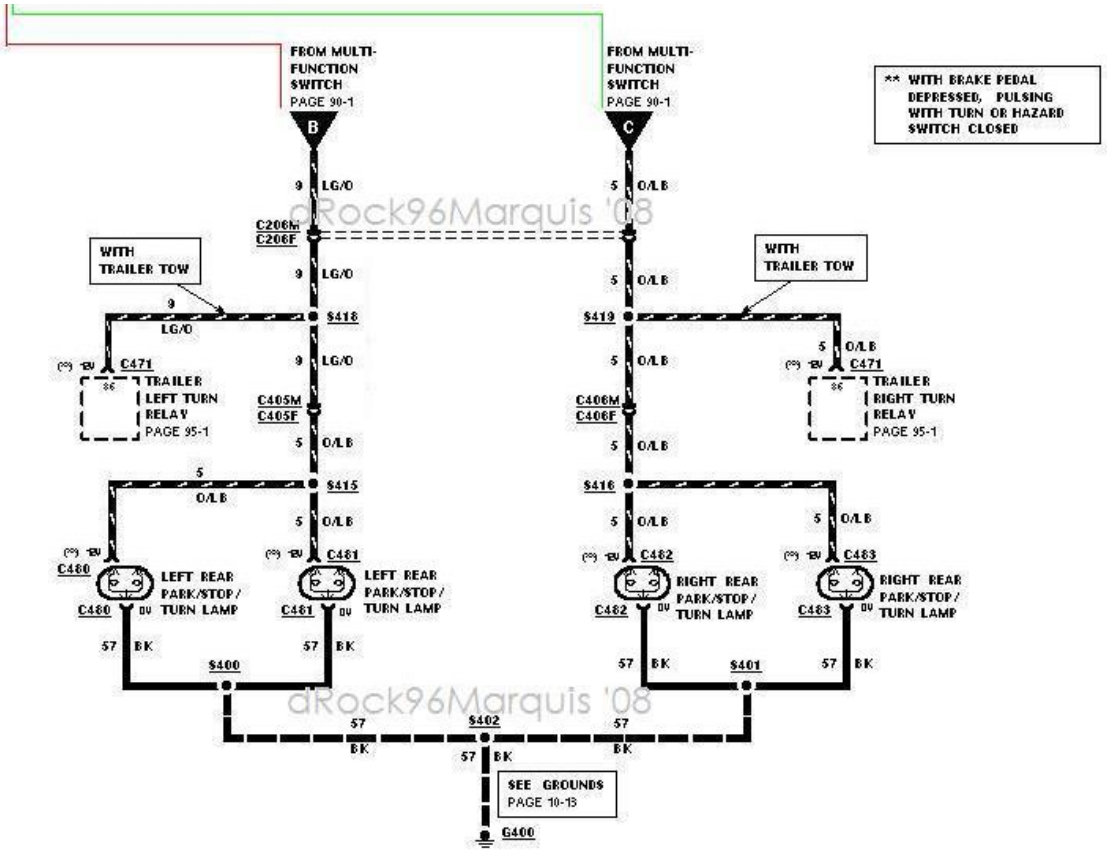
1995-1997 Crown Victoria / Grand Marquis

Turn / Stop / Hazard lamp wiring

dRock96Marquis '08

1995 same but lacks radio noise capacitor on CHMSL feed





Disregard the number and bulbs and such, focus on the multi-function switch. (I have the diagrams for other years in that folder if you want to see your's)

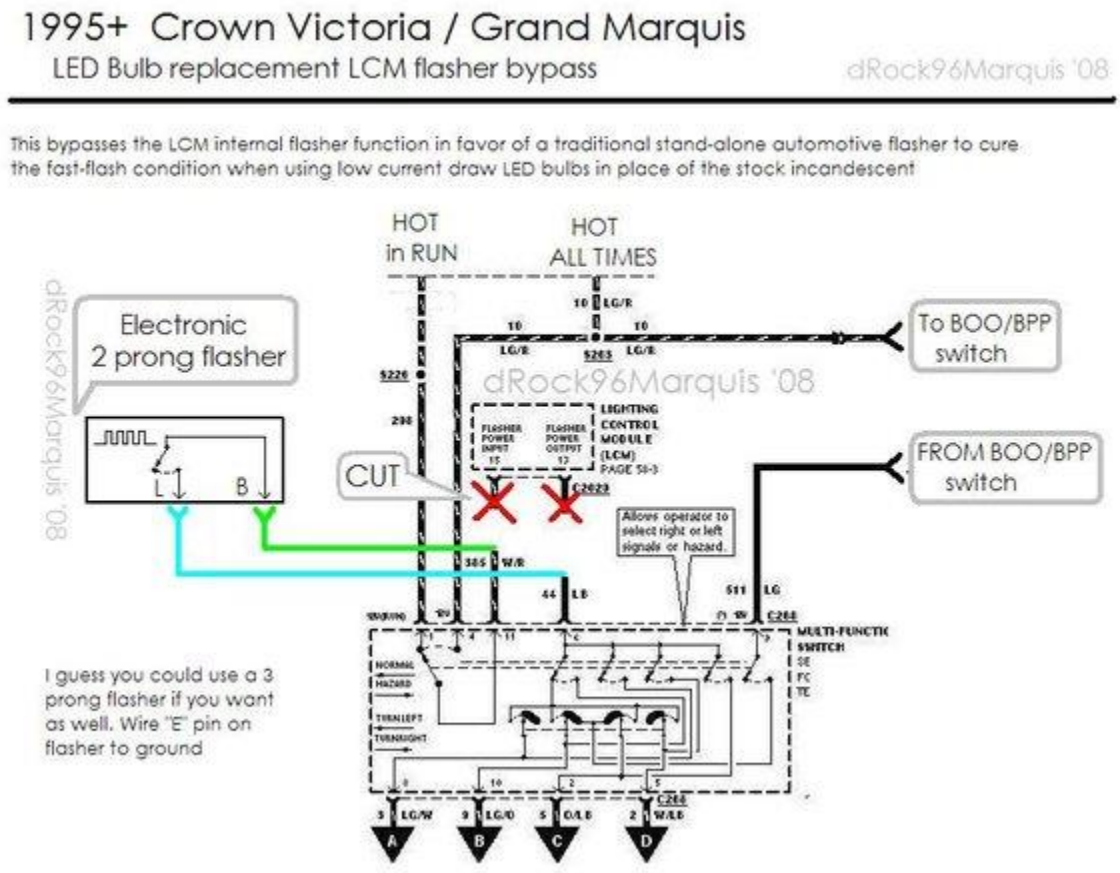
It has 2 power inputs, one switched and one constant. The constant is used for the BOO and to feed the MFS to power the hazards w/ car off. The switched input goes through the MFS, and to the LCM. This is the W/R wire (wire color for the MFS->LCM same '95 to current) and it supplies power for the LCM flasher.
Note the description on the LCM for this wire, flasher INPUT.
Note the adjacent description and wire, flasher OUTPUT.
This is the light blue (color correct for all '95 to current) (flashing) output from the LCM to feed the MFS for turn signal functions.

This supplies ALL the flashing/turn lamps for turn signal and hazard functions.

Now, if you're thinking like me - can the fix really be this simple?

I'll elaborate for those who didn't catch it already.
It's the two wires. Flasher in, flasher out, at the LCM.
One can easily just snip these two wires near the LCM connector, cap them, and wire a 2 prong [b]electronic[/b] flasher (must be electronic, can't be standard thermal. Available at all autoparts stores) right there with two spade terminals on the existing wires. Load side to the flasher OUT wire (LB), power to the flasher IN wire (W/R)
The flashers are still be powered by the same circuit, and will still switch to the constant hot circuit w/ hazards. But, this eliminates the LCM involvement.
Rather than having the LCM pulse the power to work as the flasher, you're just using a standard automotive flasher with the existing wiring and bypassing the LCM.

Here's a quick diagram to show:

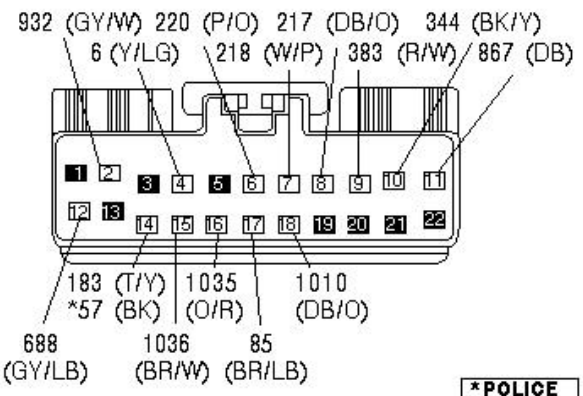


I cropped out the rest but what you see in this diagram is applicable for all

1995 to current models (the wiring colors / functions)
Use this diagram for your LCM pinouts to make sure you snip the correct wires:

1995-2004 Crown Victoria / Grand Marquis / Marauder Lighting Control Module Pinouts

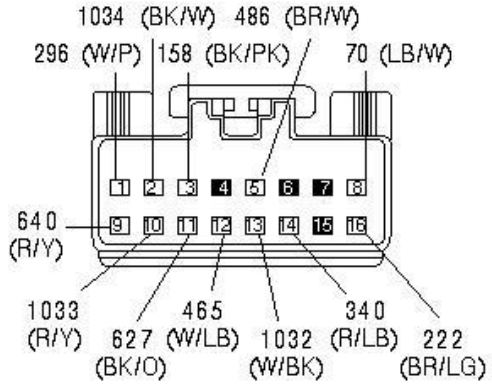
Set 1: 1995-2002



C2026F (BLACK)
LIGHTING CONTROL MODULE (LCM)

*POLICE OPTION ONLY

PIN	CIRCUIT	CIRCUIT FUNCTION
1	—	NOT USED
2	932 (GY/W)	High Beam Switch Input
3	—	NOT USED
4	6 (Y/LG)	Horn Relay Output
5	—	NOT USED
6	220 (P/O)	Autolamp On/Off Switch
7	218 (W/P)	Autolamp Enable
8	217 (DB/O)	Autolamp Delay Potentiometer
9	383 (R/W)	Hazard Warning Indicator
10	344 (BK/Y)	Door Ajar Lamp Output (LO)
11	867 (DB)	Driver's Door Ajar Switch
12	688 (GY/LB)	Heated Backlight Relay Output
13	—	NOT USED
14	183 (T/Y) *57 (BK)	ToneRequest Ground
15	1036 (BR/W)	Panel Dim Down Switch
16	1035 (O/R)	Panel Dim Up Switch
17	85 (BR/LB)	Seatbelt Fastened Switch
18	1010 (DB/O)	Heated Backlight Switch
19	—	NOT USED
20	—	NOT USED
21	—	NOT USED
22	—	NOT USED

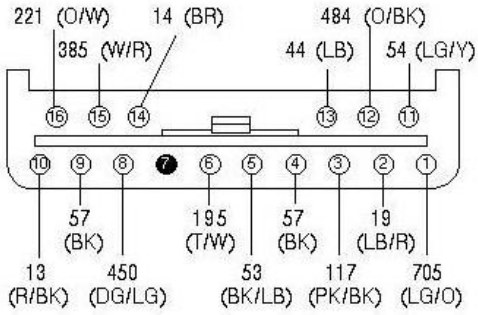


C2027F (BLACK)
LIGHTING CONTROL MODULE (LCM)

PIN	CIRCUIT	CIRCUIT FUNCTION
1	296 (W/P)	Ignition (Hot in ACC or RUN)
2	1034 (BK/W)	Dome Lamp Switch
3	158 (BK/PK)	Key in Ignition Switch
4	—	NOT USED
5	486 (BR/W)	Decklid Ajar Switch
6	—	NOT USED
7	—	NOT USED***GROUND 98+ CVPI
8	70 (LB/W)	Module Data Link Connector (DLC)
9	640 (R/Y)	Ignition (Hot in Start or Run)
10	1033 (R/Y)	Headlamp Switch
11	627 (BK/O)	Passenger's Doors Ajar Switch
12	465 (W/LB)	Door Handle Switches
13	1032 (W/BK)	Parklamp Switch
14	340 (R/LB)	Panic Alarm Input
15	—	NOT USED
16	222 (BR/LG)	Autolamp Indicator Output

Set 1: 1995-2002
Set 2: 2003-2004

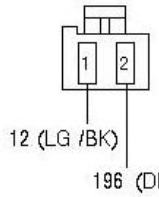
dRock96Marquis '08



C2029F (BLACK)
LIGHTING CONTROL MODULE (LCM)

PIN	CIRCUIT	CIRCUIT FUNCTION
1	705 (LG/O)	Demand Lighting Output
2	19 (LB/R)	Variable Voltage Dimming Output
3	117 (PK/BK)	All Doors Lock Input
4	57 (BK)	Ground
5	53 (BK/LB)	Courtesy Lamps Output
6	195 (T/W)	B+ to Module
7	—	NOT USED
8	450 (DG/LG)	Seatbelt Indicator Output
9	57 (BK)	Ground
10	13 (R/BK)	Low Beams Output
11	54 (LG/Y)	B+ to Module
12	484 (O/BK)	Pulse Width Modulator Dimming Output
13	44 (LB)	Flasher Output
14	14 (BR)	Parklamp Output
15	385 (W/R)	Flasher Power Input
16	221 (O/W)	B+ to Module

1995-1997 ONLY



C2028F (BLACK)
LIGHTING CONTROL MODULE

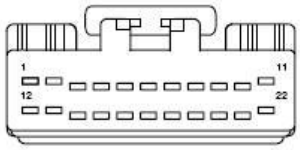
PIN NUMBER	CIRCUIT	CIRCUIT FUNCTION
1	12 (LG/BK)	High Beams Output
2	196 (DB/O)	B+

Set 2: 2003-2004

C2145a (GY) * Police

14401

Lighting control module



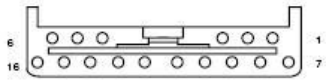
F22017

Pin	Circuit	Circuit function
1	–	not used
2	–	not used
3	165 (TN/WH)	Headlamps, Off, monitor
4	1 (DB)	Horn relay, control
5	679 (GY/BK)	Vehicle Speed Sensor (VSS) +
6	220 (VT/OG)	Autolamp On/Off signal
7	218 (WH/VT)	Autolamp sensor, control
	*296 (WH/VT)	Voltage in Run or Accessory (overload protected)
8	–	not used
9	383 (RD/WH)	Emergency warning flasher, control
10	344 (BK/YE)	Door ajar indicator
11	867 (DB)	left front door, Open, signal
12	688 (GY/LB)	Rear window defrost relay, control
13	–	not used
14	183 (TN/YE)	tone driver
15	–	not used
16	1036 (BN/WH)	Headlamp dimmer switch, input
17	1083 (LB/BK)	Air bag, tone driver, signal
18	1010 (DB/OG)	Rear window defrost switch (18578), input
19	–	not used
20	–	not used
21	–	not used
22	163 (RD/OG)	driver door, Unlock, output

C2145b (BK) * electronic cluster

14401

Lighting control module



F16113

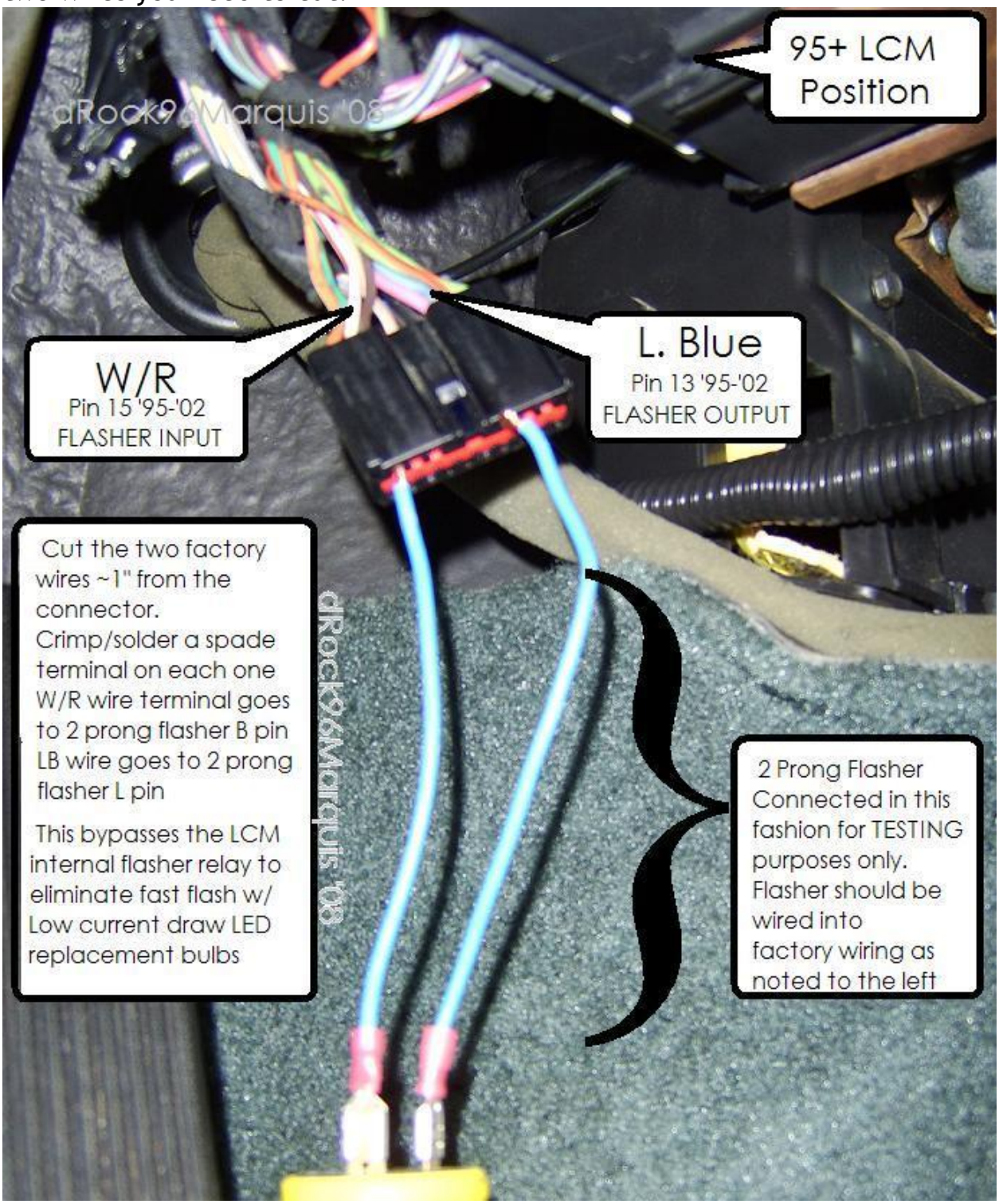
Pin	Circuit	Circuit function
1	54 (LG/YE)	Voltage supplied at all times (overload protected)
2	484 (OG/BK)	Interior lamps, feed
3	44 (LB)	Turn lamps, feed
4	14 (BN)	Power, Exterior lamps
5	385 (WH/RD)	Park lamps, Hazard, Power
6	221 (OG/WH)	Voltage supplied at all times (overload protected)
7	705 (LG/OG)	Interior lamps Power feed
8	19 (LB/RD)	Instrument illumination, feed
9	117 (PK/BK)	Door lock, output
10	57 (BK)	Ground
11	53 (BK/LB)	courtesy lamps, Switched, Power, feed
12	195 (TN/WH)	Voltage supplied at all times (overload protected)
13	1092 (PK/OG)	Luggage compartment lamp (13A756), Power, feed
14	450 (DG/LG)	Safety belt indicator, feed
15	57 (BK)	Ground
	*676 (PK/OG)	Ground
16	502 (GY)	Headlamps, Power, feed

(*05+ LCM pinouts are a little different but the wiring colors remained the same for these two functions*)

So, no fast flash when using low current draw LED bulbs. Likewise, there won't be a fast flash warning when any bulbs actually do go out so check them once in a while :tongue:
The important note is to use an electronic flasher. If you use a thermal flasher with the low current it will be an extremely weak flash, if at all. The electronic flasher solves this, and is all of $6 last I bought one. Look for one that says "LED compatible" if possible (some say it)

Does it work?
Well, I got a chance to wire it up and test it. Works great! No adverse effects noted. ;)

Wire it in just like the diagram and use a 2 prong electronic flasher.
I took a picture while I was testing it so you can see the connector and the two wires you need to cut:



As mentioned in that picture, you need to cut the wiring before the LCM

connector for your installation. The wiring/flasher setup in that picture was temporary for testing purposes only.
You could use an actual flasher base if you want, but two spade terminals will suffice. Secure the flasher to the wiring harness so it doesn't smack around (just tape it)

Again, refer above for the pinouts for your year.

If you have a '95-'00 you can do a REALLY trick, clean install - our years have a provision for a can-style flasher in the factory dash fuse block. You could extend these wires, pop in the terminals and have a totally OEM-like flasher installation ;)

Email me at dRock96Marquis@crownvic.net

Page last updated: 12-06-2008