

## 200/700 Lock-Up Wiring Kit

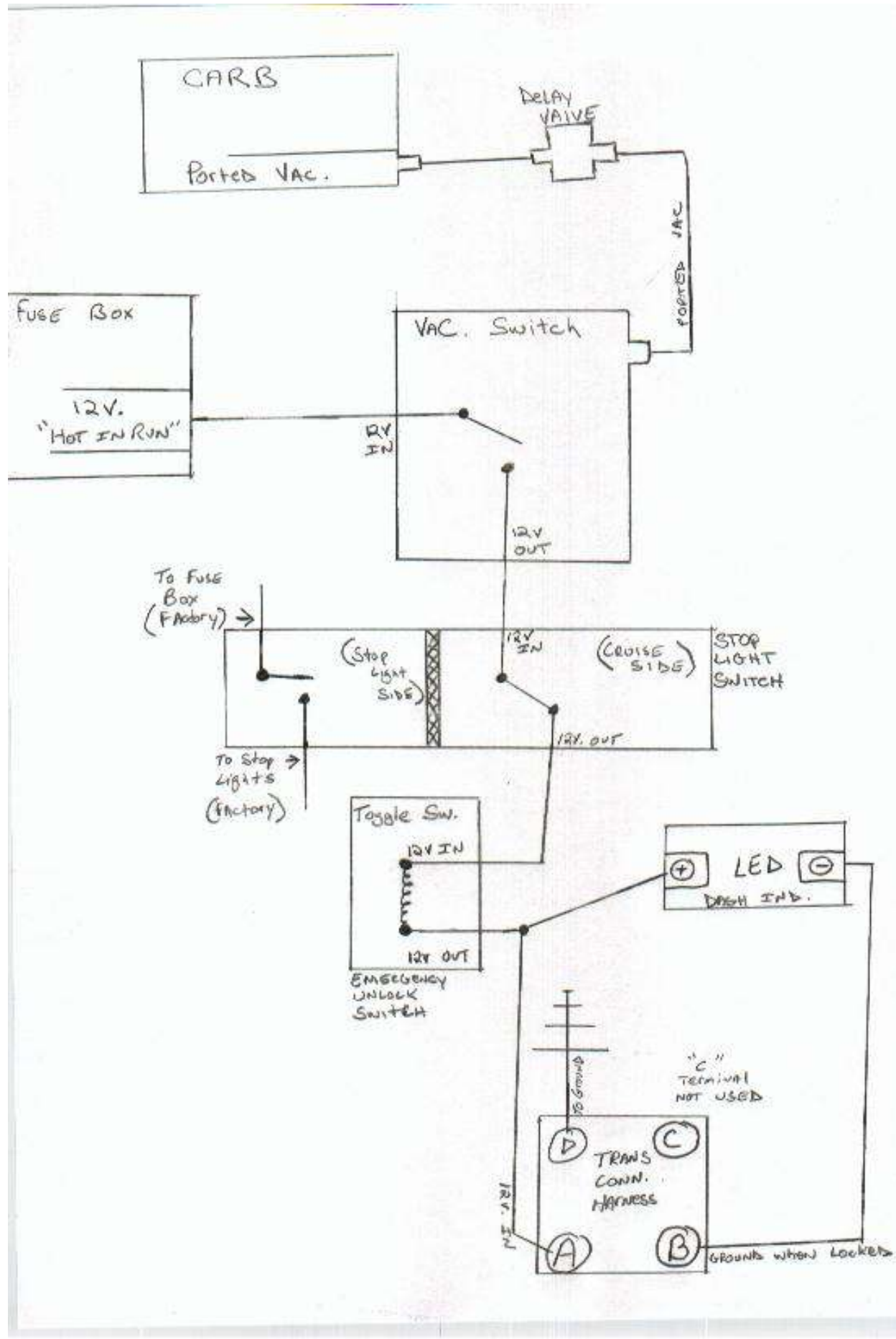
### Parts List:

1. Delay Valve GM# 14020691
2. Vacuum Switch GM# 14014519
3. Stop Light Switch GM# 25524848
4. Toggle Switch (optional)
5. LED Light (optional)
6. Transmission Connector Plug GM# 12085533
7. Vacuum Switch Connector Plug GM# 12101914
8. Miscellaneous 14g. Wire and Terminals

### Set up:

1. Ported Vacuum (zero at idle) is applied through a delay valve, then to the vacuum switch.
2. A 12v. "hot in run" wire is fed to vacuum switch.
3. The 12v. out of the vacuum switch, is fed to the cruise control side of the stop light switch. The brake light side remains the same as factory.
4. The 12v. out of the stop light switch is then fed to the A terminal on the transmission connector.
5. Optional, A toggle switch may be placed between the output of the stop light switch and the A terminal on the trans. This can be used as a manual lock up DISCONNECT, if a parts failure causes the converter to stay locked or as a manual unlock for racing. Use a high quality switch rated at least 10 amps.
6. Optional, A LED light may be placed in the circuit, this would be used as an indicator that the converter is locked. The LED will only light if power is applied to the TCC solenoid, AND when the solenoid is switched properly. The failure of the LED to light would indicate either a problem with the power circuit, or a problem with the TCC solenoid. To wire the positive leg of the LED would be tapped off the 12v. wire going to the A terminal. Take this from the point in the circuit after all other items. The negative side of the LED will be wired directly to the B terminal on the transmission. This B terminal is only grounded when the TCC solenoid is activated.
7. A ground circuit is fed to the D terminal on the transmission connector.
8. The C terminal on the transmission connector is not used.
9. See Diagram

[img]<http://www.chevelles.com/showroom/onabudget/onabudgetlockup1.jpg>[/img]



## Operation:

1. At idle there is no vacuum to the vacuum switch, and therefore no power through the A circuit. The converter is unlocked.
2. At stable engine speeds, Vacuum will rise, at 10 inches of vacuum the switch will close allowing 12v. power to flow through the A circuit, locking the converter.
3. When cruising with the converter locked, it will unlock when “heavy” throttle is applied. This is accomplished when the vacuum switch senses a vacuum reading at or below 7 inches.
4. When cruising with the converter locked, it will unlock when the brakes are applied. This is accomplished when the power flowing through the A circuit is cut off at the stop light switch when the brakes are applied.
5. The converter will also unlock when you let up completely off the throttle. This will give no vacuum reading to the vacuum switch, cutting off power to the A circuit, unlocking the converter to aid in engine braking to slow the vehicle.
6. The toggle switch, although optional is recommended. This will let you keep the converter unlocked in the event of a part failure in this system. You can run with the trans unlocked, but can't run if its stuck locked. So it's a good idea.

## AMMENDMENT

### NOTE:

#1. It has come to my attention, that with some TCC Solenoids in both 200's and 700's the LED ground as listed above will not work. You will have to run a regular chassis ground on the negative side of the LED. The only way to know for sure, is to wire it like the diagram and if it don't work, change the ground for the LED. (I just had to do that in my own swap)

#2. The lockup delay as listed is correct with the valve in place. BUT, due to individual vehicle characteristics the amount of vacuum produced will differ. For this reason the lock-up event may occur too early or too late. If this happens, you can try to use different EGR or spark delay valves, its a trial and error process. To delay lockup I recently used two of the valves listed above (one after the other).