

# The Chrysler CU/CV Starter System

by Stan Block

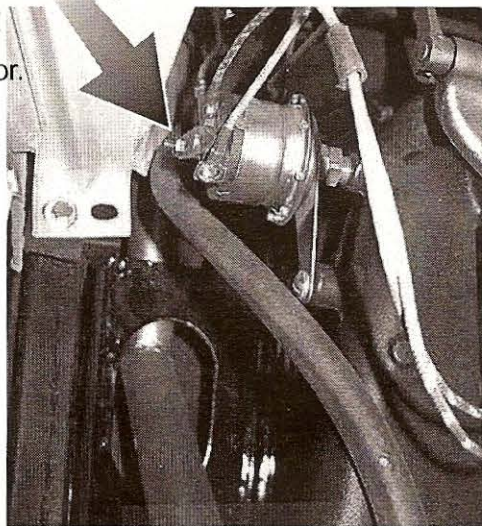
My current Airflow project is a 1934 CV coupe, CV 7011398 ,engine # CV 1738. During the restoration process the subject of the "Automatic Starter" feature of the 1934 Airflows sparked my interest. Most 34s seem to have abandoned this rather clever (for the time ) item in favor of a simple push button connection to the starter solenoid . Holes in the dash were drilled just about anywhere and fitted with a variety of push button switches. The reason for this revision of the Chrysler Cutting edge convenience of operation was, it just didn't work very well.

Here is how it should work. Get in and turn on the ignition switch, place the shift lever in neutral, depress the accelerator pedal and SHAZAM the engine starts and the starter stops cranking! Pretty cool huh...

To accomplish this wonder of starting ease the following components in the electrical system were required:

1. A vacuum switch that is normally closed in the absence of manifold vacuum then opens as vacuum develops. The switch

Linkage to accelerator keeps the vacuum switch open when engine is idling to prevent false engagement of the starter motor.

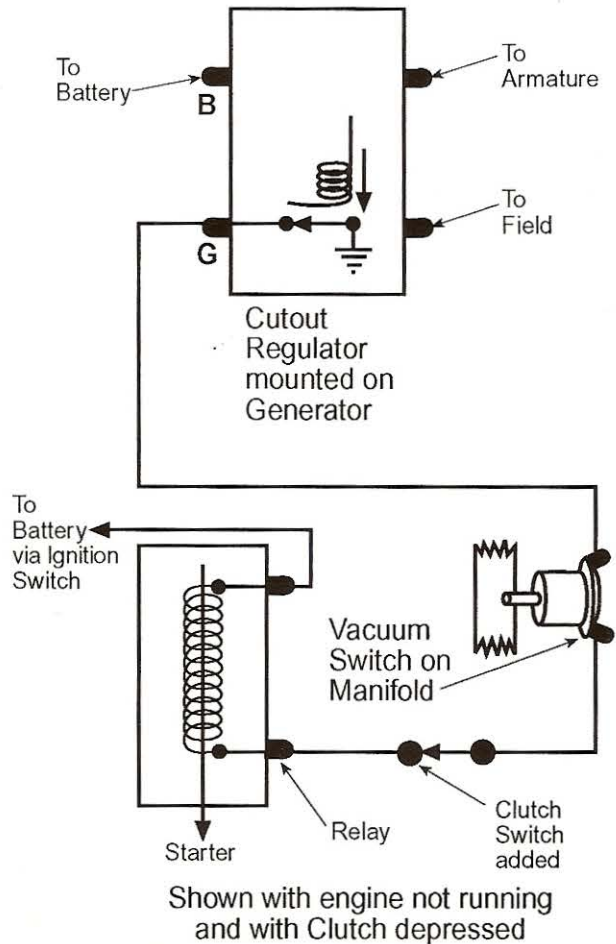


also incorporates an additional position lever linked to the accelerator that holds the circuit open during idle .

2. A fail safe switch incorporated in the cut out regulator box located on the generator. This Switch remains closed and provides the ground circuit connection until the generator develops sufficient voltage to open the circuit, thus stopping the starter, this prevented sudden drops in manifold vacuum that would try to engage the starter while the engine was running.

3. A relay activated starter solenoid .  
4. Interconnecting wiring of these components .

Was all this a good idea? Failure of any of these elements could cause the starter motor to engage while the engine was running, or not engage the starter at all.



Any type of generator failure or low output would result in unwanted starter engagement during brief periods of low vacuum (long uphill in 3rd gear) .

The practical modification...drill a hole ,wire a push button , save a starter, problem solved forever.

I seem to like to fly in the face of disaster and was convinced to try to make it work anyway. I hated to drill a hole where none had gone before. Both my coupe and the CV parts car were never "drilled." Finding an original vacuum switch was difficult, most had been trashed I was able to get one that needed the diaphragm replaced. These are crimp sealed and difficult to repair. It was opened, cleaned, diaphragm replaced and resealed. This repair was successful and the original generator regulator grounding relay worked well. Interconnecting wiring was made and so far it works just as Walter (I feel We are on a first name basis by now) wished it to be.

One other non-original fail safe switch really needs to be added to the already complex starting circuits. The addition of a normally open clutch activated switch to prevent accidental starts while in gear. In addition to the safety issues, that would provide another fail safe link for all the other possible system screw ups that might engage the starter while the engine is running. I have installed such a switch on my coupe.

Are there any CV/CU Chryslers out there that still retain this original starter system? Do they still work? I have never seen one. Packard, Pontiac, Auburn, Cord, and others of that era were equipped with "starterators" or "Startix" by Bendix, and they all had problems. Does anyone know the name Chrysler gave to its system ? I cannot find such a name in any of my material.