

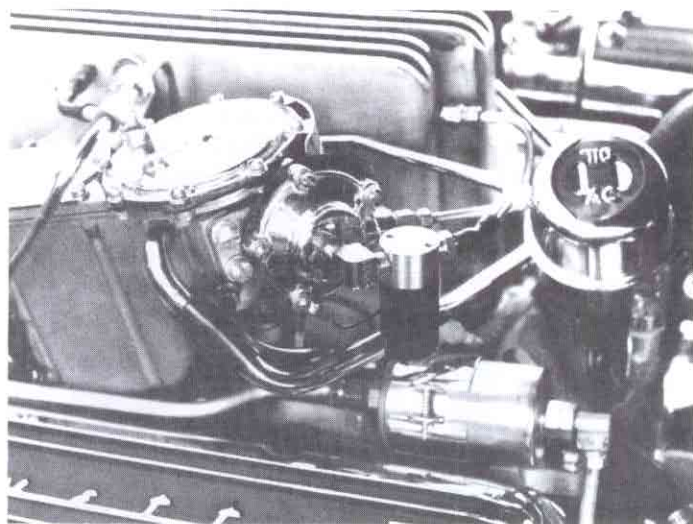
# 12 VOLT DC SKINNER VALVE

By Tom Parsons

On my 1956 Corvette, I have an F.I. unit that is somewhat modified. Basically, it is a '62 unit but with an early finned top air plenum that was cut in half at one time, ported out and welded back together again. After many hours of tinkering, tuning, disassembling, re-assembling and experimenting, I just could **not** get it to work right or calibrated satisfactorily unless I disconnected the cranking signal valve. Then it worked beautifully! I have tried NOS and rebuilt cranking signal valves but still at times they leaked. It has always seemed that there must be a better way, and there is! I have discovered that my idea for replacing the cranking signal valve with some sort of electric solenoid has been in use by F.I. owners for some time. But none of the literature I have read gives this information, so for those of you who want a sure fix for that expensive and leaking CSV, here is what you need: a 12 volt DC Skinner Valve, part no. B2DA1026 (this electric solenoid valve looks identical to some valves used with the smaller nitrous oxide kits -- probably is). If you can't find it in your local area, contact Skinner Valve Divd., Honeywell, Inc., 95 Edgewood Avenue, New Britain, Conn. 06051, (203) 827-2300.

Some CSV's are mounted directly to the plenum and others are mounted to the enrichment diaphragm housing. The above valve has 1/8 inch pipe threads, same as a CSV. You can find the necessary brass fittings at a hardware or auto parts store that stocks a good selection of brass fittings.

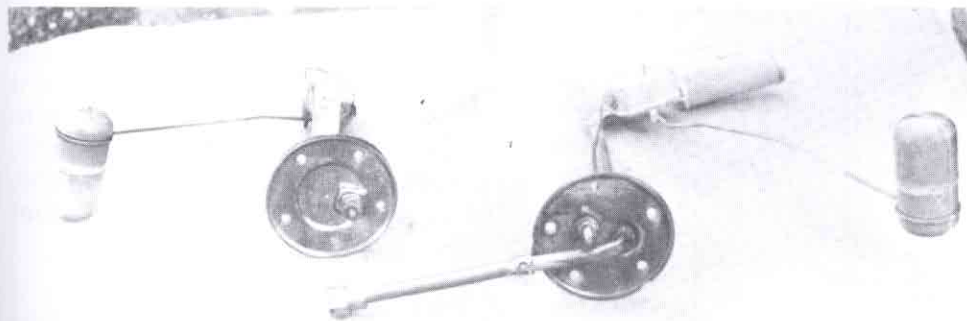
Once you have determined which fitting suits your need, coat the threads with sealer or use teflon tape to seal the threads. Now, replace the CSV with the new solenoid, making sure all connections are tight. The solenoid has two wires. I crimped a wire terminal to one wire and attached it to one of the screws on the fuel meter for a ground (either wire will work). The other wire is a hot wire. It needs to have a length of



wire added to it to reach the starter. I ran my wire through the temp wire insulation, down the back of the engine and attached it to the starter solenoid terminal that is hot **only** when the ignition switch is in the start position. When you turn the key to start, the Skinner Valve is opened and manifold vacuum is applied to the main diaphragm for starting. Release the key, the valve closes -- **NO LEAKS**. These valves are quality mechanisms because they are made of stainless steel. Since the valve is energized only during starting, it should last indefinitely because it remains in the closed position by spring pressure at all times, unlike the CSV which is open at all times until vacuum is applied -- maybe the diaphragm will seal, maybe not.

I paid \$31.25 plus tax and shipping for my valve, less that \$5.00 for the necessary fittings and took my time installing it in about 2 hours. Now I can install one in less than 30 minutes.

Compare the price of this permanent fix for a leaking CSV to the price of a NOS or rebuilt CSV which may leak when you get it, or someday will leak, especially if your engine ever backfires. This is just one of the modifications I have made to my non stock F.I. unit and now, finally, it works as sure as the sun rises every day. I thank John Eyestone for telling me about the Skinner Valve



GAS TANK SENDING UNIT  
Left '53-'55 Right '57-'60