

Mid - Year Instrument Cluster Removal

by Bill Schroeder

Not being able to find a really clean cut tech article in the Corvette periodicals, brings me to write this “How to” article. Just the thought of removing 30 different connections to just the cluster, gave me the shudders. Then discussion groups with “never again” opinions and many different methodologies prompted me to provide an article for anyone to follow EASILY.



Our NCRS - [Adirondack Chapter](#) did this as a tech session one Saturday morning (I did very little -- just watched the process so I could edit an accurate article) This will take you 2 + ½ hours to complete. Even if you only use this as a guide (as many of us are mechanically inclined) pay note to underlined sections as these were stumbling blocks. First off, purchase colored adhesive dots and number 2 sets 1 to 30 (there are 30 connections on the back of the cluster and you will remove a connection and number co-ordinate each one for re-assembly. Purchase an ignition switch wrench and a light switch wrench, 5 - 6 inch lengths of ¼” x 20 threaded rod. Also purchase speedometer and tachometer cables.

Disconnect the battery at this point.

Now step 1. Remove the 12 point nut that holds the steering column spline to the rag joint assembly. Use a dab of paint on the mating surfaces of the shaft rag joint. Use a 7/16 12 point socket to remove the bolt. Now loosen the hose-type clamp near the firewall on the steering column and let it slide down the column. Tape the spring to the shaft so the bearings stay in place. Remember in the removal of the steering column the rag joint stays in the car. Now remove the two bolts that hold the steering column collar. Remove the three steering column bolts under the dash. Unhook the harness and mark with tape for proper re-assembly. Sit in the seat and pull the steering column back (pull the column ---not on the wheel) Remove the column and set aside. To remove the ignition key cylinder, insert a paper clip in the hole in the cylinder face and while pushing in on the wire turn the key counter clockwise past the accessory position until the cylinder releases and can be pulled out. Now remove the ignition switch retaining ring with the special wrench you purchased. Remove the screws to the headlight switch and the screws that hold the hood release. Pull on the knob release button (located on the bottom of the headlight switch) while depressing the button (on the body) and the knob will come out of the switch.



Use the special wrench to remove the headlight switch retaining nut. Use needle nose pliers to remove the reset knob from the trip odometer cable ---remove

retainer nut and push the cable up to free it. Now very carefully (with a screwdriver that fits exactly) remove the five Philips head screws that secure the cluster. Use 5- 6" lengths of ¼ x 20 threaded rod to replace the mounting screws to support the cluster. Disconnect the oil pressure tube first then the knurled connectors to the speedometer and tachometer.

Remember disconnect oil pressure first and last upon re-assembly. The cluster can now be moved to disconnect bulb connectors --- use the numbered dots to label the bulbs and connectors you remove from the cluster. All the gray wires are cluster illumination lamps.



This is a **BIG TIP**--- prepare paper dots ahead and tag as you remove --- Send the cluster out, or if only one gauge needs service such as the speedometer you can of course opt to send out only the piece --- the best bang for your buck for the cluster seems to be auto instruments.com --- they will rebuild the tach and speedometer and recalibrate small instruments for \$140 (this includes return shipping)

Other sources are speedometerservice.com and corvetteinstruments.com Corvette Specialties of MD is also recommended. A link to the actual :”restoration of the gauges by Zip is available here: [Restoration- Gauges](#)

Note: In my humble opinion you saved enough money already pulling the cluster --- don't risk botching up the pieces you'll have to view every time you get in your Vette. Tachometer and speedometer cables are available at Dr. Rebuild.

[Adirondack NCRS](#)