

LOSE THE RASH ON YOUR DASH

Mid-year Corvette restoration

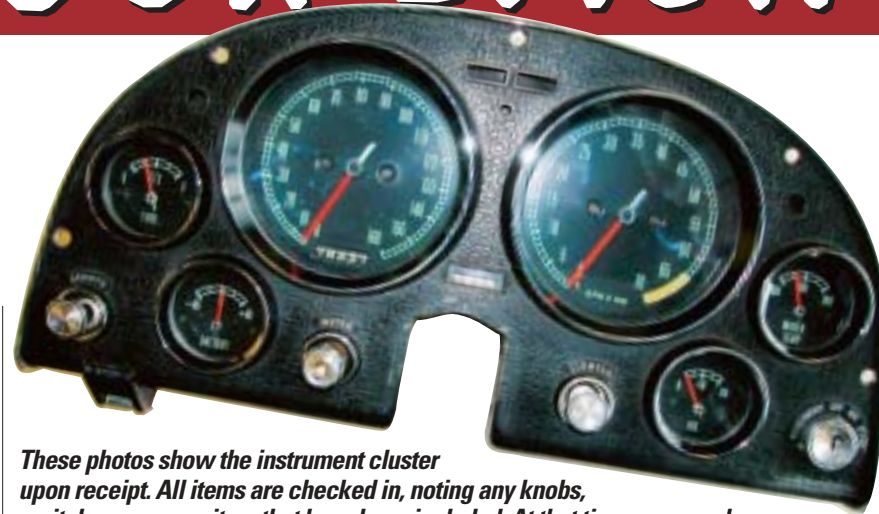
by Dick Moritz

The most rewarding part of Corvette ownership may well be the pride in a do-it-yourself job done right. Home projects can range from a wash, wax, and detail job all the way to a full engine rebuild. But even the most capable homebuilder knows when a task is best left to experts who have the special tools and expertise to do your Corvette proud. Such is the case with instrument-panel overhaul.

Many Corvette owners are able to remove individual gauges, clocks, and radios, and perform basic tasks like bulb and fuse replacement. But often instrument clusters are well beyond such simple repairs. Corvettes are notorious for leaking rain and wash water, which can collect in the floors and carpet, creating a perfect environment for rust and corrosion to form. Add in prolonged exposure to sunlight, which can cause gauge faces to fade, and you've got the perfect setting for an instrument cluster in need of serious restoration.

For a behind-the-scenes look at what an experienced shop goes through in gauge/cluster restoration, we were invited into the service department of Corvette Specialties, one of the most experienced full-service Corvette restoration shops in the country. Owner Brian Tilles walked us through the restoration of a '65 gauge cluster.

Service begins with an analysis of



These photos show the instrument cluster upon receipt. All items are checked in, noting any knobs, switches, or capacitors that have been included. At that time, a general assessment is made of condition (cracks, gauge-face rust, or any visible damage).

the cluster as it is received to assess the condition of the various gauges, and verification of the year and horsepower of the car the gauges are destined for. Assessing the year and horsepower are important to ensure the finished gauges will be correct for the application, since many Corvettes have received gauge or cluster transplants over the years. Knowing the exact application allows Corvette Specialties to provide gauges with the correct tach redline, oil-pressure-gauge face (60/80 pounds), and temperature-gauge range (240/250 degrees).

Corvette Specialties offers two levels of instrument-cluster service: "Survivor," in which gauges receive mechanical/functional overhaul while maintaining their original appearance, and "Show" restoration, which adds full cosmetic restoration as well. Because this '65 is receiving a full body-off restoration, the owner opted for the Show restoration.

Follow us along.



Karl Burl, Restoration Department manager, disassembles the cluster assembly.



The Product Assembly Broadcast Label is removed with a razor blade and carefully preserved for reinstallation later. The ink stamp is covered with tape to preserve during the restoration process.

The instrument panel contains a huge number of small parts.



Paint is media-blasted from faces. Extra care is taken to prevent distortion of faces during the paint-removal process.



The worn bushings on the speedometer and tachometer frames are removed and replaced with new bushings. Shown is a view of a restored tach/speedometer frame after bushing installation.



Here are the rebuilt speedometer and tachometer assemblies. After reassembly is complete, magnets are "charged." Restored faces and pointers are installed and units are attached to a special calibration machine that's been carefully maintained, since such machines have not been manufactured since the '60s.



The internal part of the housing is specially painted to ensure original reflective qualities when the cluster is illuminated. The lens retainer plate is repainted black in front and two-tone green per factory patterns to assist with illumination.

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The visible chrome surfaces of the cluster are polished and black paint is applied. After the cluster housing is dry, black paint is carefully removed from all edges to expose the chrome as required. Great attention to detail is important so inks are properly applied in their correct positions. A

high-powered magnifying light is used for this. The speedometer magnet is charged with a magnetizer. The speedo and tach are individually hooked to a calibration machine to demagnetize and make hairspring adjustments as needed to obtain proper calibration.

Final assembly takes place when the main gauge retainer plate and completed gauges on their back plates are reinstalled. Finally, the Product Assembly Broadcast Label is reaffixed. ▶



SOURCE

CORVETTE SPECIALTIES OF
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The completely restored '65 cluster.

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