

1969 THRU 1979 CORVETTE STANDARD (NON-ADJUSTABLE) STEERING COLUMN DISASSEMBLY & REPAIR INSTRUCTIONS PAPER #3

Disassembly and Repair Instructions Addressed in this Paper

	Degree of Difficulty	Page
REPLACE UPPER BEARING	Difficult	2
REPLACE THE WASH/WIPE SWITCH (1977 ONLY)	Difficult	2
REPLACE THE DIMMER PIVOT (1977 THRU 1979)	Difficult	2
REPLACE KEY RELEASE LEVER, RACK, & SECTOR	Difficult	2
CHECK STEERING SHAFT LENGTH	Moderate	3

How the Paper is Setup

There are a limited number of steering column service procedures that are addressed in this paper. This paper starts at the point where the steering wheel, horn parts, shaft lock, ignition lock cylinder, key warning buzzer, turn signal switch, and ignition switch have been removed from a standard steering column. The column has been removed from the car and is on a work surface. All of the above operations were described in detail in Papers #1 & #2.

This paper makes reference to various line drawing descriptions. They are included on several pages entitled Corvette C3 Standard Steering Column - Page #1 & #2.

The steering column installation parts are called out on Corvette C3 Steering Column Installation Diagrams.

There are two schematic drawings. One entitled Std Column 69-76 Blowup Pic. And the other Std Column with Headlamp Dimmer 77-79 Blowup Pic. The frustrating part is that even though the drawings look similar, the call outs for the parts do not use the same numbers between the two drawings. I will call out numbers from the 1969-76 blowup drawing first then a dash and then the 1977-79 numbers.

The drawings are all available from the author or from the host websight. You will find these pictures and descriptions to be most helpful when working on your steering column.

Types of Steering Columns Addressed in this Paper

This is a generic paper for all C3 standard steering columns except 1968.

The steering columns from 1969 through 1976 are called “round” columns because the column head is completely circular in shape. Starting in 1977, a characteristic bulge appeared on the left side of the column head. This bulge housed the headlight dimmer pivot which actuated a rod which tripped the dimmer switch now mounted on the steering column jacket down under the dash.

Replace Upper Steering Shaft Bearing (1969 through 1976)

Remove the four screws #10 attaching the housing #23 to the jacket #29. On 1969-76 steering columns the upper steering shaft bearing was installed into the die cast bearing housing from the driver side and the housing lip was spun over to retain it.



Zip Products 1-800-962-9632 has the Corvette Lock Housing Assembly still available with the bearing and plastic sector. The Zip part number is SC-447. Also Dr. Rebuild 1-800-866-9362 has the same assembly. The Doc's part number is 6521512

According to the Saginaw service literature, the bearing was not serviceable. However, until recently a service bearing was available through GM dealers (part number 7800269.) If your local dealer does a search, it still might be found on dealer's shelves. The Dr. Rebuild websight lists a 1969-76 Upper Steering Column Shaft Bearing 6521108.

As a service procedure, take the housing and grind the spun lip away, then remove the bearing from the instrument panel side. The new bearing can be carefully glued or epoxied into place. However, it isn't going anywhere once the column is reassembled.

Upper Steering Shaft Bearing Replace (1977 through 1979)

These steering columns have the bearing #20 installed from the instrument panel side of the housing #17 and the bearing is retained by a retainer #23 with three screws. Remove the screws and retainer to replace the bearing. The bearing number is 7819517 and is still available through GM dealers.

Remove the Wash/Wipe Switch (1977 only) or the Dimmer Pivot (1978 & 1979)

Remove the four housing screws #12. On 1977 and later columns the cover will also contain a dimmer pivot assembly #24, and the wash/wipe switch (1977 only). As you remove the housing be careful of the end cap #28.

Guide the wash/wipe wires out of the column as you remove the housing.

The wash/wipe switch/dimmer pivot is held to the inside of the cover by a pivot pin #33. On 1977 columns remove the wash/wipe switch by feeding wires back through the cover. Then use a punch to remove the pin. The switch can be pulled from the cover.

Proceed to Paper #2 for reassembly instructions if these parts are all that required service.

Remove Key Release Lever and Spring, Replace Rack and/or Sector

On key release columns, remove the wave washer, release lever, and spring first. Note: Key release parts are not shown on the blowup drawing nor are they shown on the line drawing pages. Make careful note as to how the spring is installed and the other parts assembled as you remove them.

Remove the switch actuator rod and rack assembly #18-27 and the lock bolt #17-25. If required, pull the rack away from the lock bolt to separate. Remove the rack preload spring #16-26. Remove the sector #15-18 through the lock cylinder hole by pushing firmly on the block tooth of the sector with a blunt punch.

Steering Shaft Length

It is a good idea to check the length of the steering shaft #38-47. There are two dimensions that can be checked; one is the overall length, the other is the amount that extends out from the lower bearing retainer #34-59. It is possible that the shaft could be compressed during handling or when the steering column was removed from the car.

	Complete Shaft Length	Length of Shaft Extending from Column
1968	37.5 inches	2.7 inches to edge of clamp
1969 thru 76	39.7 inches	4.5 inches to bearing face
1977	37.8 inches	4.5 inches to bearing face
1978 & 79	38.0	4.8 inches to bearing face

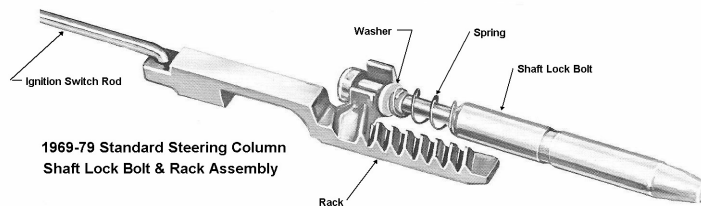
The following procedures address reinstallation of parts and reassembling the steering column.

Reassembly – Sector, Rack, & Bolt

Insert the new sector through the housing lock cylinder hole and assemble it onto the pin. Orient the sector so that the tang end will be toward the lock cylinder when it is installed. Press the sector over the pin with a blunt tool. The sector should turn freely.

Insert the rack preload spring into the housing from the bottom side. The long section should be toward the steering wheel and hook on the edge of the housing. The bow of the spring should be against the rack. Later springs may be symmetrical

Assemble the bolt to the rack cross-arm.



Insert the rack and lock bolt into the housing. Assemble the rack to the sector so that the teeth match. Make sure that the large tooth on the sector matches the large tooth cutout on the rack.

Reassembly – Housing and Shroud (Columns with Key Release Lever)

Position the key release lever spring over the tapped post. Insert the key release lever finger into the rack slot with the hole over the tapped housing post. Make sure that the inner end of the spring contacts the lever. Raise the lever slightly. Slip the end of the spring between the lever and the boss, and then down and secure.

Coat the wave washer with grease and place on the tapped boss over the release lever.

Carefully position the shroud into the housing so as not to unseat the wave washer. Drive three screws (washer screw first) and tighten to 18 inch-lbs.

Place the ignition switch actuator rod into the rack. (Short end of the rod into the rack).

Position the housing and shroud assembly onto column jacket and drive screws. Tighten to 50 inch-lbs.

Reassembly - Columns with Wiper and/or Dimmer Switch

Assemble the washer/wiper switch and pivot assembly into the housing and feed the connector down through the bowl.

Continue with Reassembly Instructions Contained in Papers #2 and #1.

Final Words of Caution:

To maintain the energy absorbing function of the steering column, always replace screws, bolts, and nuts as specified.

When a steering column assembly is removed from the car, special care must be taken in handling it. A sharp blow on the end of the steering shaft, leaning on the assembly, or dropping the assembly could shear or loosen the plastic fasteners that maintain column rigidity.

Plastic parts that are 25 years old can be very brittle! Handle your steering column parts with care.

JIML82@aol.com

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