## 1963-1982 Corvette Power Steering Box Installation Instructions

### **ADDITIONAL INSTALLATION PARTS AVAILABLE:**

Part #	Description	
Rag Joints, Drag Link Adapter.		
055043	1967-1982 Rag joint 1"-48 x 8-DD. Connects new power box to 1"-48 spline column shaft.	
055034	1963-1966 Rag joint <sup>3</sup> / <sub>4</sub> "-36 x 8-DD Rag joint. Connects new power box to <sup>3</sup> / <sub>4</sub> "-36 spline column shaft.	
990002	1963-1982 Drag Link Adapter for cars with factory installed power steering.	
	Power Steering Pumps, Pump Brackets, Pulleys and Hoses.	
925103	OEM Style rubber power steering hose set to connect new box to P/S Pump.	
800310	GM Saginaw self-contained power steering pumps available in black or chrome. (Part # for black listed)	
802400	Power Steering Pump Bracket for SBC/SWP	

#### **REMOVAL:**

- *Cars with manual steering.* Disconnect column coupler at steering box. Remove Pitman arm from steering box and relay rod. Remove bolts holding original steering box and remove it from car.
- *Cars with power steering.* Disconnect column coupler at steering box. Remove Pitman arm from steering box and relay rod. Remove bolts holding original steering box and remove it from car. **Remove** factory ram assembly, control valve, and hoses. (Once flushed clean your original pump may be used.)
- *Steering column removal.* Depending on available space and access to a lift you may want to remove your steering column for ease of installation. Loosen or remove the bolts attaching the steering column to dash and floor. Disconnect factory wiring from column. Slide column back and remove from the car. The column will need to be modified to complete the installation. (Detailed Below)

**NOTE:** Borgeson Universal will purchase your used original '63-'82 Corvette steering box.

#### **INSTALLATION:**

# NOTE: Manual steering Relay-Rod or Drag Link Adapter #990002 will be required on cars with factory ram assist style power steering.

NOTE: Slight modifications are required to original steering column. (Detailed Below)

- Bolt the new steering box to the frame. Check that the front of the steering box is not making contact with the frame, or any surrounding brake lines. 1968-1973 Will require modification / relocation of brake lines and brake proportioning valve for installation. *Do not grind or alter the steering box.*
- Connect the proper Rag Joint coupler to the new steering box. At this point the steering column shaft must be shortened for a proper fit. Measure from the rag joint to the center of the hole on the steering column mount, add 3/4" to that measurement to allow for steering shaft engagement in to rag joint. Modify column as follows:
- **1963-1966 Column modifications.** Using the measurement from the rag joint to the column mount, measure from the center of the mounting holes on the column to the end of the column shaft; subtract this measurement from the one you obtained above. You will either need to trim the column shaft this amount or mount the column further into the car. **Be sure to leave enough spline for rag joint if trimming the column shaft**.
- **1967-1982** Column modifications. Using the measurement from the rag joint to the column mount, measure from the center of the mounting holes on the column to the end of the column shaft; subtract this measurement from the one you obtained above. You will need to gently tap the collapsible column shaft in to the column this amount. Do not collapse the shaft to far; it can be difficult to get back out.

#### **INSTALLATION CONT.**

- Reinstall your modified column and be sure to securely fasten all original mounting bolts and hardware. Securely tighten all setscrews and then loc nuts on the rag joint. The existing flat spot on the steering column shaft is not intended to be used for the set screw. Use of this flat spot can cause the steering wheel to be crooked after installation. It will be necessary to file a small flat for the set screw to seat into when installing.
- Original Power steering cars will need to install #990002 Drag Link Adapter or Manual steering relay rod at this point.
- Connect Pitman arm to steering box and relay rod and tighten both connections. With the front tires off the ground slowly move the steering through its full range of motion to insure there is no binding or interference.
- Connect new power steering hoses (The low pressure line is the 16MM port closest to the rag joint), pump, bracket and pulleys. Insure fittings are sealed and properly tightened and then slowly fill the pump with power steering fluid. *Do not use transmission fluid.*
- With the engine running check new system for leaks and bleed off any air trapped in the system by slowly turning the wheel full left to full right with the wheels off the ground. *Be sure to keep fluid full.*
- It is recommended to get a complete alignment. We recommend increasing caster to 3-4 degrees positive.