

800 Poertner Drive
Berea, OH 44017
1-800-648-8022

TECHNICAL BULLETIN # 1005

WARRANTY: ONE (1) YEAR FROM DATE OF PURCHASE. REPLACEMENT OF PRODUCT DEEMED DEFECTIVE BY THE FACTORY. *ANY LABOR INCURRED IS SPECIFICALLY EXCLUDED.*

STEERING BOX INSTALLATION INSTRUCTIONS – Corvette 1963-1982 – FR1513-36 (63-68), FR1513-30 (69-82)

Kit includes

NEW Corvette steering box

Tools Required: Pitman arm puller, 3/8" drive socket set, Needle-nosed pliers, Open/Closed box wrench set, torque wrench, red threadlocker, floor jack, 4 jack stands

Needed Parts (not included): Cotter pin

IMPORTANT: Make sure the front wheels are straight ahead before beginning and the vehicle is properly supported on jack stands. With the wheels straight ahead, mark the top center of the steering wheel with a piece of around the grip to assure the wheel is centered.

NOTE: Flaming River recommends replacement of the stock rag-joint coupler with a Flaming River universal joint for precise steering and performance. Use part numbers FR1711 (3/4"-36 x 3/4"-36) for 63-68 Corvettes or FR1734 (1"-48 x 3/4"-30) for 69-82 Corvettes.

NOTE: All boxes are pre-lubricated and pre-adjusted to factory specifications.
DO NOT ADJUST THE STEERING BOX!!!

Steering Box Removal

(For Corvettes equipped with power steering, refer to Flaming River Technical Bulletins 1007/1008 to properly remove and reinstall the power assist cylinder and power valve.)

1. Remove the coupler that connects the steering column shaft to the gearbox by one of the following methods:
 - a. **63-66 Corvette:** Remove the lower coupler clamp bolt. Spread the clamp slightly.
 - b. **67 Corvette:** Loosen the lower clamp bolt. Slide the flange upward on the steering shaft.
 - c. **68-72 Corvette:** Remove the bolts, nuts, washers connecting the steering coupler to the flange.
 - d. **73-82 Corvette:** Remove the upper and lower clamp bolts. Spread each side slightly and slide up the steering shaft.
2. Disconnect the pitman arm from the steering drag link. (SAVE BOLT, NUT AND WASHER, DISCARD THE COTTER PIN)
3. Remove the pitman arm nut and washer from the gearbox.
4. Using a pitman arm puller, remove the pitman arm
5. Remove the three mounting bolts from the steering box and remove the box. (SAVE MOUNTING BOLTS)

Steering Box Installation

IMPORTANT! Before installing, center the box! Refer to the attached enclosed Technical Bulletin #1006 before proceeding.

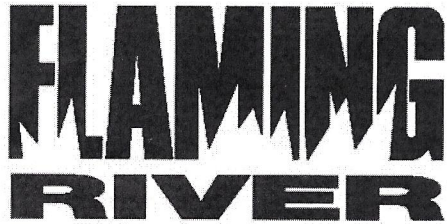
1. To install the new Flaming River Industries gearbox, attach the box to the frame, using the saved mounting bolts. Using a torque wrench, tighten bolts to 50-65 ft-lb.
2. Attach the pitman arm to the sector arm. Install the nut and washer.
3. Using a torque wrench, torque the pitman arm nut to 140 ft. lbs.
4. Reinstall the coupler to the input shaft of the steering box and the steering column.
5. Using the torque wrench, tighten the coupler bolts to 20 ft. lbs.
6. Reattach the pitman arm to the steering drag link arm. Tighten the nut to 40-45 ft-lb. Install cotter pin, bend over ends.

NOTE: Front-end alignment by a service professional following installation is advised.

NOTE: Flaming River recommends periodic inspection of all u-joint setscrews for tightness.

Warranty Disclaimer

Because of their intended usage, the manufacturer makes no warranties whatsoever expressed or implied, oral or written, to purchasers of their products regarding performance, safety, fit, merchantability, or length of service. Purchasers are responsible for selection of proper goods and must rely on their own skill or judgment that such goods are suitable for the purchaser's application.



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TECHNICAL BULLETIN # 1006

STEERING BOX CENTERING INSTRUCTIONS – FR1513-36, FR1513-30 CORVETTE STEEL MANUAL STEERING BOX

WARRANTY: ONE (1) YEAR FROM DATE OF PURCHASE. REPLACEMENT OR REPAIR OF PRODUCT DEEMED DEFECTIVE BY THE FACTORY. *ANY LABOR INCURRED IS SPECIFICALLY EXCLUDED.*

WEIGHT: 16 LBS

NOTE: IMPORTANT!!! It is critical that the steering box be at the center position **BEFORE** installation. Incorrect centering will cause loose steering and premature wear. You should feel the box tighten when at center.

NOTE: All boxes are pre-lubricated and pre-adjusted to factory specifications.
DO NOT ADJUST THE STEERING BOX!!!

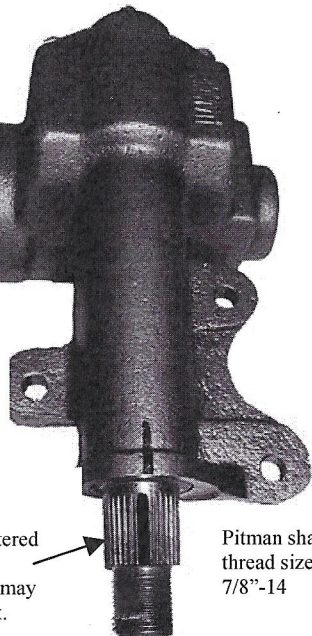
16:1 RATIO GEAR BOX FR1513-36, FR1513-30

- 1) Place the steering box in a bench vise and be certain the box is held securely
- 2) Place a 3/4"-30 (for FR1513-30) or 3/4"-36 (for FR1513-36) u-joint on the pinion input shaft
- 3) Turn the shaft to the right (clockwise) all the way to the right lock.
- 4) Turn the shaft to the left (counter clockwise) all the way to the left lock (approx. 4 turns)
- 5) Turn the shaft to the right (clockwise) half the number of turns. (approx. 2 turns) *You should feel the box tighten when at the center.*
- 6) The wide spline on the output shaft will align with the center of the box casting.

FR1513-36
 3/4"-36
 pinion size

FR1513-30
 3/4"-30
 pinion size

Paint stripe
 indicates centered
 shaft.
 Paint may or may
 not be on box.



Pitman shaft
 thread size
 7/8"-14

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