

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

# **INSTALLATION BULLETIN # 1014**

**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 - 1962-66 Chevy II/Nova Quick Ratio Gear Box FR1513-36

#### Kit Includes:

NEW FR1513-36 steering box, FR20000MCSS Micro-Tilt steering shaft, Flaming River Performance Shaft kit (FR1504PLP), stainless steel DD shaft, mounting bracket, fasteners

#### **Tools Required:**

Pitman arm puller, steering wheel puller, 3/8" drive socket set, Open/Closed box wrench set, torque wrench, red threadlocker, floor jack, 4 jack stands, straight blade screwdriver, Phillips head screwdriver, 3/8" drill, ¼" high-speed twist drill bit, permanent marker ("Sharpie" pen)

**NEEDED PARTS** (not supplied): None

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

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

### Removal of Steering Box & Steering Column

- 1) Disconnect the ground (-) terminal from the battery.
- 2) Slide the front seat to the rearmost position.
- 3) Disconnect all electrical connectors from the steering column
- 4) Remove the pitman arm nut from the sector shaft
- 5) Using the pitman arm puller, remove the pitman arm
- 6) Remove the lower two (2) steering gear box retaining bolts
- 7) Remove horn button by prying or pulling upward.
- 8) Remove the three (3) receiving cup screws and remove the cup and spring (IMPORTANT! DO NOT DISCARD! THESE WILL BE REUSED!)
- 9) Remove the steering wheel retaining nut
- 10) Remove the steering wheel using the steering wheel puller
- 11) Remove the screws that retain the floor seal plate to the floorboard. (IMPORTANT! DO NOT DISCARD! THESE WILL BE REUSED!)
- 12) Remove the column support bracket from under the dash by removing the two bolts on each side of the column.
- 13) Pivot column downward, away from the dash.
- 14) Pull the column rearward until the column tube clears the steering box shaft.
- 15) Remove the remaining steering box bolt
- 16) Slide the box down and forward to remove the shaft through the firewall opening

## Mounting the steering box

<u>IMPORTANT!</u> Center the steering box before installation. Refer to Instruction Bulletin #1006 (enclosed) and follow the procedures to center the steering box's sector (output) shaft.

- 1) Install the steering box-mounting plate by sliding the long stud through the frame rail
- 2) Place the 3" bolt through the frame rail from the inside
- 3) Slide the 3-1/2" bolt through the frame rail from the outside
- 4) Install the new steering gearbox to the three inner studs
- 5) Install all nuts/lock washers and torque to 40 ft-lbs.
- 6) Install the pitman arm to the sector shaft
- 7) Apply red threadlocker to the sector shaft threads. Torque pitman arm nut to 120 ft-lbs
- 8) Reattach the center link to the pitman arm. Install washer and nut. Tighten nut to 40-45 ftlb, install new cotter pin, and bend over ends.

### **Installing Column**

- 1) Separate the billet dash mount bracket included in the kit into two pieces
- 2) Locate the 3/8" hole in the steel dash brace
- 3) Attach the dash mount bracket to the brace using the 3/8" X 2" bolt. Use the spacer washers (supplied) to correctly position the bracket. Secure firmly, using the supplied 3/8" self-locking (Nyloc) nut.
- 4) Attach the remaining section of the mounting bracket to the attached portion. Leave the fasteners loose.
- 5) Slide the column into the aluminum mount bracket
- 6) Attach the OEM mounting bracket, using the original bolts.
- 7) Tighten the fasteners in the aluminum under-dash bracket.

### Installing steering shaft

- 1) Install the lower u-joint (FR1925 ¾ "-30 x ¾" DD) over the steering box input shaft.
- 2) On the tapered tongue shaft (the one with the hole in the tapered end, measure and mark 7/8" in from the square end. Mark with a permanent marker.
- 3) Insert the tapered "tongue" shaft into the hollow end of the steering column
- 4) Install the upper u-joint (FR1920 ¾" DD x ¾" DD) onto the tongue shaft.
- 5) Measure and mark 7/8" in from the end of the DD shaft included in the kit. Use a permanent marker.
- 6) Install the DD shaft included in the kit into each of the u-joints.
- Position both shafts with the yoke shoulder at each mark. Tighten each setscrew to create a mark on the shafts.
- 8) Remove the shafts and u-joints.
- 9) Using a 1/4" high speed twist drill, dimple each setscrew mark
- 10) Install the original floor plate and install the new seal included with the kit using the original screws.
- 11) Apply red threadlocker to all setscrews
- 12) Reassemble the shafts and u-joints, tightening the setscrews to 25 ft-lbs. Tighten all jam nuts.

**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.