

# AUTOMATIC TRANSMISSION

## CONTENTS OF THIS SECTION

SUBJECT	PAGE	SUBJECT	PAGE
Description . . . . .	7F-1	Neutralizer Switch, Adjust or Replace - Floor Shift . . . . .	7F-3
Linkage Adjustment - Column Shift . . . . .	7F-2	Driveline Damper . . . . .	7F-3
Linkage Adjustment - Floor Shift . . . . .	7F-3	Design, Operation, Service and Repairs . . .	7F-3
Neutralizer Switch, Adjust or Replace - Column Shift . . . . .	7F-3		

### GENERAL DESCRIPTION

The Firebird automatic transmission, a two-speed combination torque converter with planetary geared transmission, is available as an option with all Firebird engine models except 400 engine options. The transmission used with six cylinder engines is air-cooled; the transmission used with all other models is water-cooled.

Transmission identification data is located on the right side of the transmission. Transmission model

number, year and assembly date code appear on the low servo cover. Whenever the servo cover is replaced, stamp the data from the old cover onto the replacement cover.

Model numbers are as follows:

LF (air-cooled)	6 cyl. 1 bbl. engine
LG (air-cooled)	6 cyl. 4 bbl. engine
LH (air-cooled)	6 cyl. with Air Conditioning

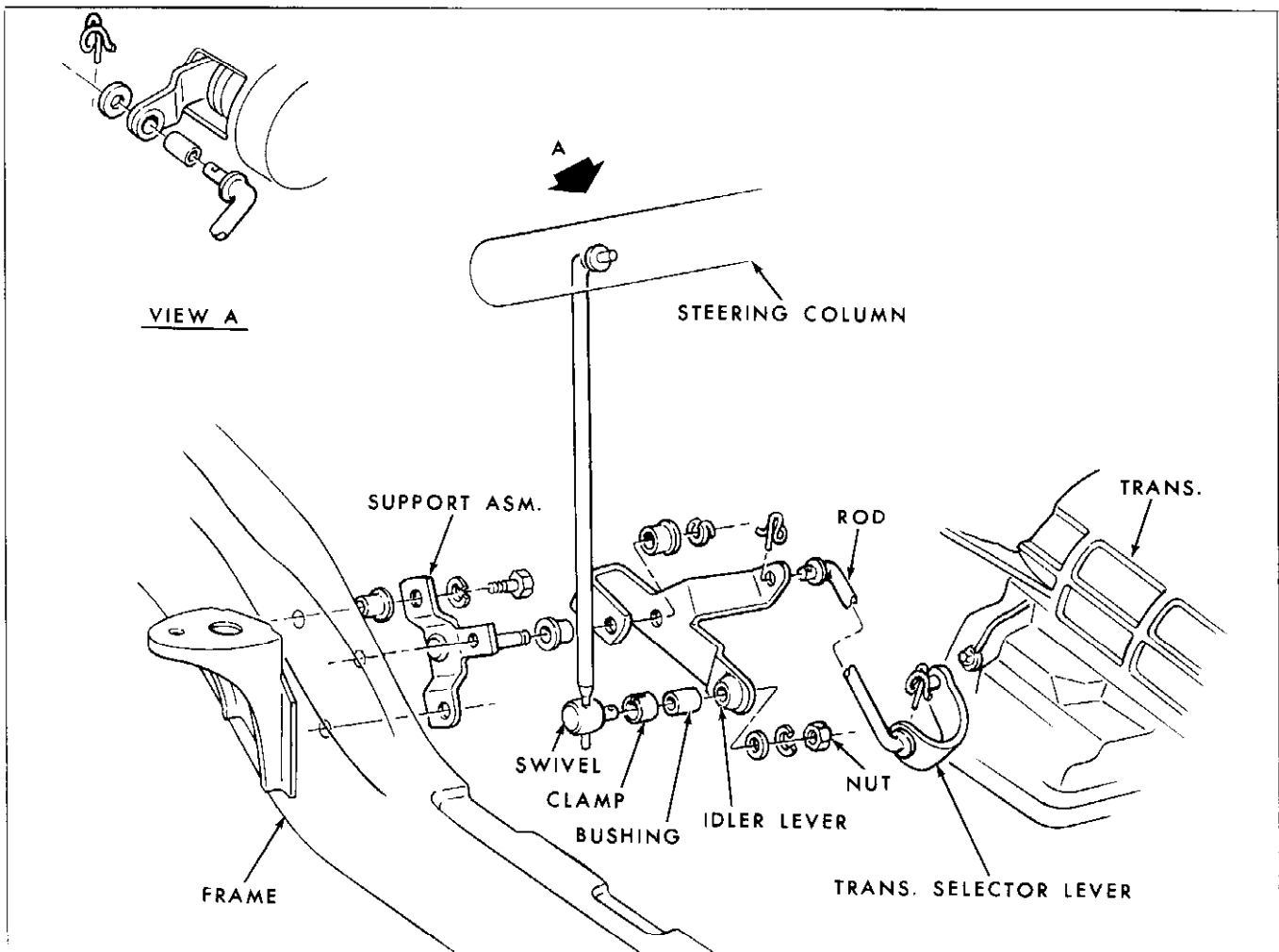


Fig. 7F-1 Lower Gearshift Controls - Column Shift

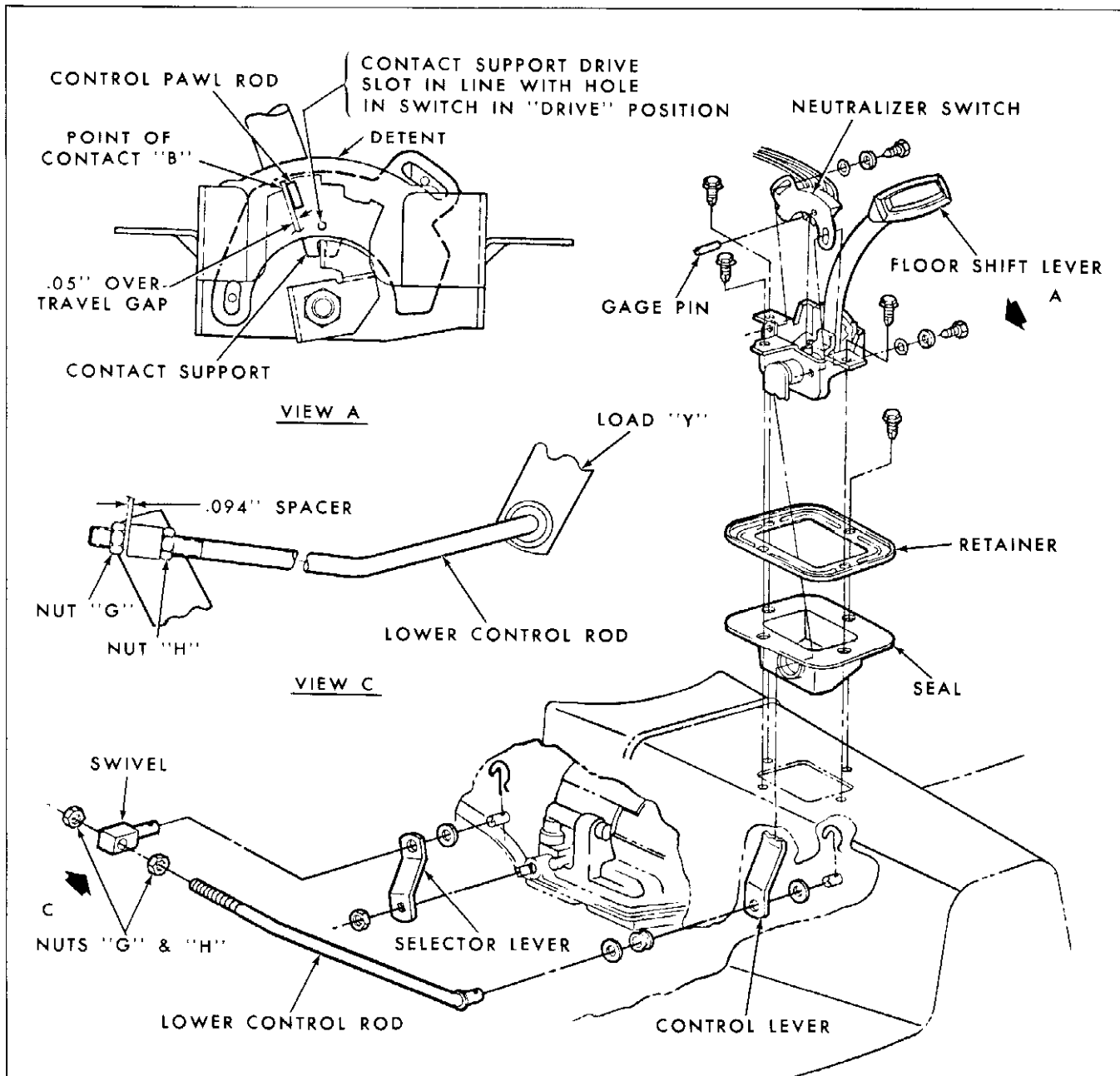


Fig. 7F-2 Gearshift Controls - Floor Shift

MA (water-cooled)	326 2 bbl. engine
MB (water-cooled)	326 HO 4 bbl. engine
MC (water-cooled)	326 with Air Conditioning

These transmissions are available with either column shift or floor mounted (with console) shift controls.

#### LINKAGE ADJUSTMENT - COLUMN SHIFT (Fig. 7F-1)

1. Loosen nut on adjusting swivel and clamp.
2. Position gearshift upper lever in the "D" (Drive) position.
3. Set transmission outer selector lever in "D" (Drive) position.

*NOTE: Obtain "D" (Drive) position by moving outer selector lever counter-clockwise to L detent, then clockwise one detent position to "D" (Drive) position.*

4. With gearshift upper lever and outer selector lever in "D" (Drive) positions, tighten nut on adjusting swivel and clamp to 25 lb. ft. torque.

*NOTE: When the above procedure is adhered to, the following conditions must be met by manual operation of the gearshift upper lever:*

- a. From "R" (Reverse) to "D" (Drive) position travel, the transmission detent feel must be noted and related to indicated positions on dial.

b. When in "D" (Drive) and "R" (Reverse) positions, pull gearshift upper lever upward (toward steering wheel) and then release. It must drop back into position with no restrictions.

#### LINKAGE ADJUSTMENT - FLOOR SHIFT (Fig. 7F-2)

1. Loosen both swivel nuts (G and H) on lower control rod.

2. Set transmission outer selector lever in "D" (Drive) position.

*NOTE: Obtain "D" (Drive) position by moving outer selector lever counter-clockwise to L detent, then clockwise one detent position to "D" (Drive) position.*

3. Using floor shift lever, set control pawl rod in "D" (Drive) notch of shifter detent (see view A).

4. Apply a load Y to control lever (see view C) until control pawl rod contacts detent at point of contact B (see view A).

5. Place a .094" spacer between nut G and lower control rod swivel. Tighten nut until it touches .094" spacer. Release load Y, remove spacer and tighten nut H to maximum of 40 lb. in. torque (see view C).

*NOTE: The foregoing will provide a .05" over-travel gap in the notches of the shifter detent.*

#### NEUTRALIZER SWITCH, ADJUST OR REPLACE - COLUMN SHIFT

Service procedure for the Firebird neutralizer switch, column shift, are the same as shown in Section 7F of the 1967 Pontiac Service Manual.

#### NEUTRALIZER SWITCH, ADJUST OR REPLACE - FLOOR SHIFT

After gearshift linkage is properly adjusted, the neutralizer switch must be so positioned that the car will start only in Park and Neutral positions. If it is possible to crank the engine in another detent position, the switch must be adjusted (or replaced) as follows:

1. Position floor shift lever in the "D" (Drive) position.

2. Remove ash tray, trim plate, indicator lens and housing from console, disconnect bulbs from housing and disconnect multiple connector from wiring harness at in-line connector.

3. Loosen two screws attaching neutralizer switch to shift lever bracket (or remove and install new switch).

4. Insert a gage pin (3/32" dia.) in drive hole in left side of switch to a minimum depth of 1/4", to hold switch in position (see Fig. 7F-2, view A).

*NOTE: If floor shift lever is in "D" (Drive) position, gage pin will hold switch contact in "D" (Drive) position while switch is properly aligned to shift lever.*

5. Tighten screws to 25 lb. in. torque, remove gage pin, connect wiring and check operation of switch.

6. Install indicator lamps, housing, lens, ash tray and trim assembly.

#### DRIVELINE DAMPER (Fig. 7F-3)

A driveline damper, used to reduce power train vibration is mounted on the transmission rear bearing retainer of all six cylinder engine Firebird models. This damper consists of a weight retained by a mounting assembly which, in turn, is attached to the underside of the transmission rear bearing retainer through an adapter.

#### DESIGN, OPERATION, SERVICE AND REPAIRS

Design, operation and service procedures for the Firebird Automatic Transmission are the same as shown in Section 7F of the 1967 Pontiac Service Manual.

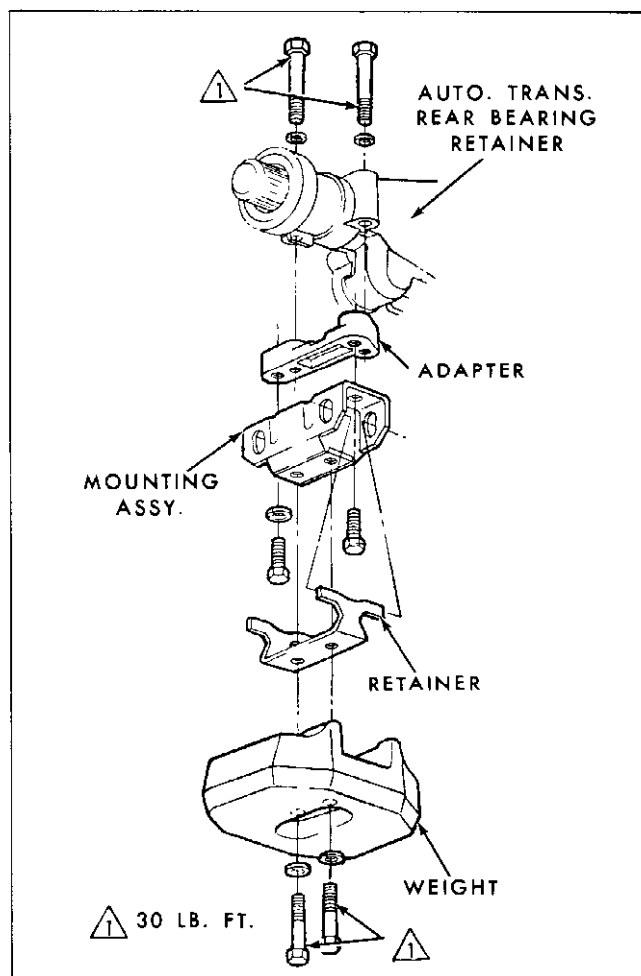


Fig. 7F-3 Driveline Damper