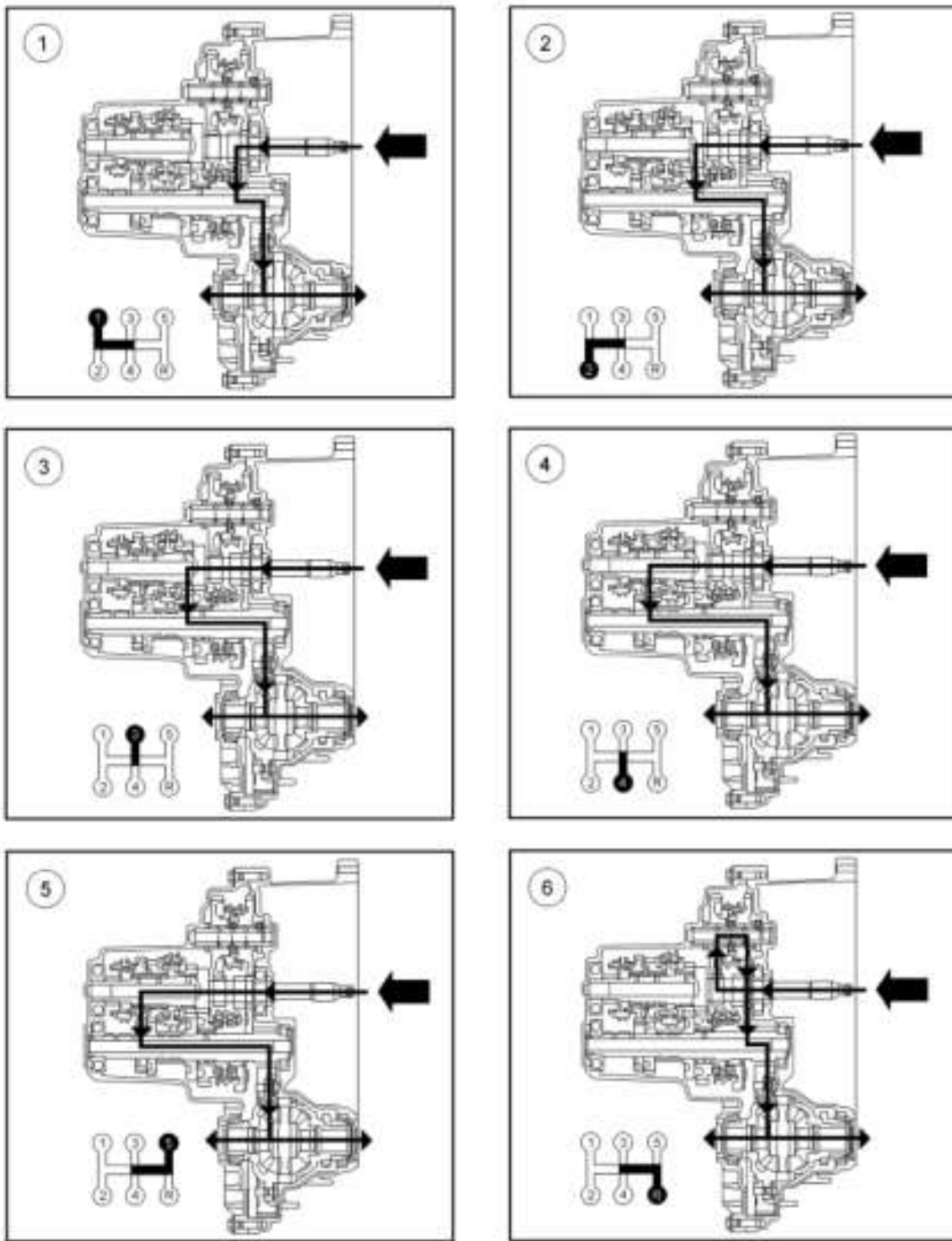


DESCRIPTION AND OPERATION

MANUAL TRANSAXLE

The manual transaxle is a fully synchronized 5-speed transaxle. The forward gears are selected by a synchronizer mechanism. The 3rd gear, 4th gear and 5th gear synchronizers are mounted on the input shaft. First gear and 2nd gear synchronizers are mounted on the mainshaft. The helical-cut forward gears are in constant mesh with the corresponding gears on the opposing shaft. The manual transaxle features a synchronized reverse gear. The reverse gears have helical-cut teeth and are engaged through a synchronizer.

Power Flow



A0002137

Fig. 1: Manual Transaxle - Power Flow Diagram
 Courtesy of FORD MOTOR CO.

ITEM DESCRIPTION

Item	Description
1	1st gear
2	2nd gear
3	3rd gear
4	4th gear
5	5th gear

External Shift Linkage

The manual transaxle is controlled by a floor-mounted gearshift lever located in the floor console. Connection between the floor-mounted gear shift lever and the manual transaxle gear shift control mechanism is made through 2 shift cables. For shift cable adjustment, refer to **GEARSHIFT CABLE ADJUSTMENT** .

Internal Shift Linkage

The manual transaxle is shifted internally by 4 shift forks. The 1st/2nd gears shift fork, 3rd/4th gears shift fork and the 5th gear shift fork control all forward gear shifts. The reverse gear shift fork controls reverse.

Reverse Gear

The reverse idler gears are mounted on a reverse idler gear shaft supported at one end in the flywheel housing and at the other in the transaxle case. Because the reverse idler gears rotate on the reverse idler gear shaft, they are supported by 2 sets of reverse idler gear needle bearings to prevent metal-to-metal contact and wear.

When the reverse idler coupling sleeve and hub engage the reverse idler gear, it reverses the power flow to the mainshaft.

Differential

The ends of the differential are supported on tapered roller differential bearings. The cups for these differential bearings are seated in the transaxle case and the flywheel housing. Differential bearing preload is set using a selective differential bearing shim that is installed under the differential bearing cup in the transaxle case.

The differential includes the differential side gears and the shaft mounted differential pinion gears. Direct contact between the gears and the differential case is prevented by the differential side gear thrust washers installed under the gears. The differential pinion shaft is held in position by a differential pinion shaft lock pin that extends through the end of the differential pinion shaft and the differential case.

The speedometer drive gear is also mounted on the differential case. It is located between the tapered roller differential bearing and the differential case. A tab on the speedometer drive gear and a matching slot in the differential case prevent the speedometer drive gear from spinning on the differential case.