



## TECH TIPS

### CLUTCH/TRANSMISSION INSTALLATION TIPS

#### 1986 and newer V8 Mustangs

The flywheel-to-crankshaft bolts must be hand-torqued to 75-85 lb-ft (302/351W) and 54-64 lb-ft (4.6L).

The 10.5" pressure plate bolts must be torqued to 12-24 lb-ft and 11" pressure plate bolts to 33 lb-ft + 1/4 turn.

Be sure to use the alignment dowels in the flywheels.

Pressure plate bolts and alignment dowels for the 10.5" clutch can be purchased using PN M-6397-A302. Pressure Plate Bolts N808969-S100 and Alignment Dowels PN D1FZ-6397-B are for the 11" pressure plate.

Evenly tighten bolts in a circular direction one turn at a time.

Bellhousing alignment is crucial for proper clutch and transmission function.

Due to production tolerances of engine blocks and bellhousings, it is possible for the transmission centerline and crankshaft centerline to be misaligned. Misalignment can cause transmission gear wear, transmission jumping out of gear, driveline vibration, clutch pedal vibration, pilot bearing noise, release bearing noise or excessive clutch spin time. It may also damage the pilot bearing, transmission mainshaft bearing and clutch hub. It will also cause harsh shifting.

Before installing the bellhousing, check the block mounting surface and bellhousing surfaces for nicks, dents, paint debris, etc. These are some things that could affect the accuracy of your measurements.

### HOW TO CHECK BELLHOUSING ALIGNMENT

The first step is to check bellhousing face runout. You are checking for parallelism of the back of the bellhousing to the back of the block. Install the dial indicator (as shown in Fig. 1). Rotate the crankshaft and mark down the reading. Be sure to push the crankshaft against the thrust bearing for an accurate reading. Maximum runout is .010. The next step is checking bellhousing bore runout. You are checking to see if the bellhousing bore centerline is aligned with crankshaft centerline. Reposition the dial indicator in the bellhousing bore (as shown in Fig. 2). Rotate the crankshaft and mark down the readings. Maximum out of concentricity is .015. If the bore runout is out of spec, install appropriate offset dowels.

Offset alignment dowels can be purchased from Lakewood®.

.007 PN 15950

.014 PN 15960

.021 PN 15970

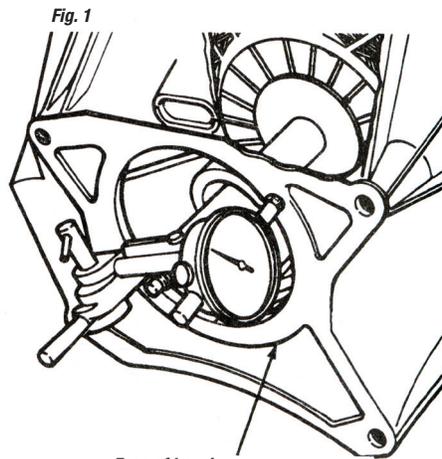


Fig. 1

Face of housing  
(must be clean and free of nicks,  
burrs or foreign material).

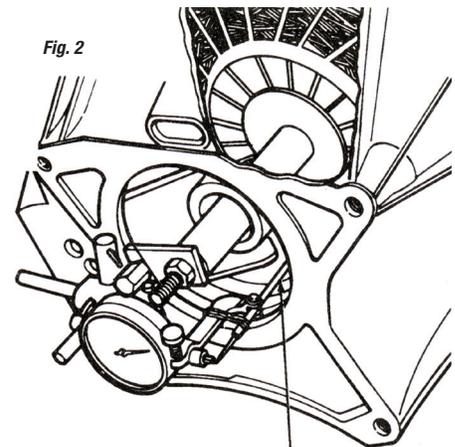


Fig. 2

Level tip rides on bore surface.  
This surface must be clean  
and free of nicks, burrs  
or foreign material.