BUICK PROPELLER SHAFT ALIGNMENT

Buick, All Models (Exc. Skyhawk)

DESCRIPTION

Measurements of front and rear universal joints is accomplished by means of an inclinometer. Readings must be made with car at curb height and with a full tank of gasoline. Jounce car up and down to assure curb height.

CHECKING & ADJUSTING

CHECKING

Angle at Rear Universal Joint (Single Joint) – 1) Place inclinometer on rear propeller shaft bearing cup. Center bubble in sight glass and record measurement. Bearing cup must be straight up and down and free of dirt.

2) Rotate propeller shaft 90° and place inclinometer on rear drive yoke bearing cup. Center bubble in sight glass and record measurement. Subtract figures to obtain existing rear joint angle.

Angle at Front Universal Joint (Single Joint) – 1) Place inclinometer on front propeller shaft bearing cup. Center bubble in sight glass and record measurement.

2) Rotate propeller shaft 90° and place inclinometer on front slip spline yoke bearing cup. Center bubble in sight glass and record measurement. Subtract figures to obtain existing front universal joint angle.

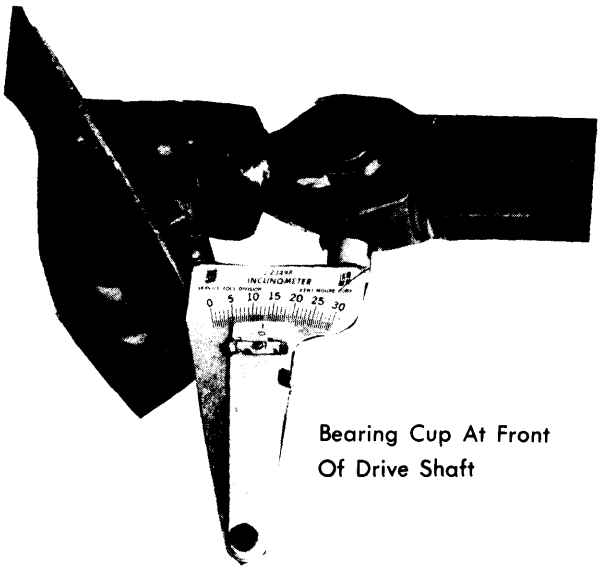

Fig. 1 Measuring Angle at Front of Propeller Shaft

ADJUSTMENT

Front Universal Joint Angle – To correct angle between engine/transmission centerline and propeller shaft, add or remove shims between transmission rear bearing retainer and transmission mount. Tighten bolts to 53 ft. lbs.

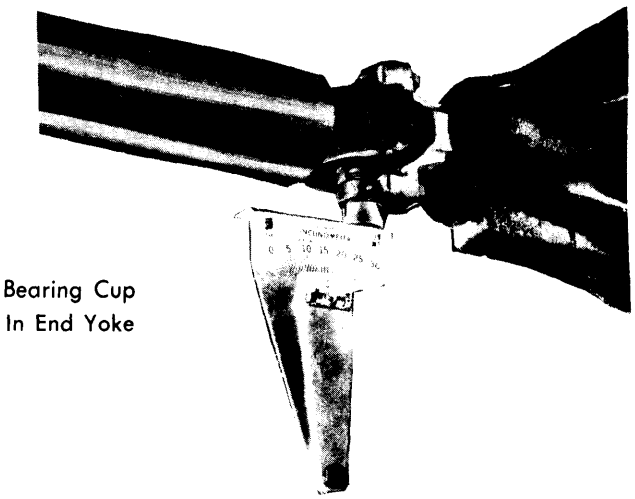

Fig. 2 Measuring Angle at Rear of Propeller Shaft

Rear Universal Joint Angle (All Exc. Skylark) Corrections of ±1° can be made by loosening all of the rear suspension control arm bolts and repositioning pinion nose up or down.

Rear Universal Joint Angle Adjustment on LeSabre, Riviera & Electra Models – Corrections of ±2° can be made by changing the rear upper control arm. There are two control arms available, an "A" and a "F" control arm. For correct control arm usage for angle change wanted, refer to Universal Joint Angle Change with Rear Upper Control Arm chart below.

Universal Joint Angle Change with Rear Upper Control Arm

Application	Control Arm "A"	Control Arm "F"
Rear Joint Angle Change		
LeSabre		
7½" Axle	−2°10′	+2°5′
8½" Axle	−2°17′	+1°54′
Rivera	−2°6′	+2°9′
Electra	−2°19′	+1°54′
Front Joint Angle Change		
Lesabre		
7½" Axle	+0°21′	−0°21′
8½" Axle	+0°25′	−0°20′
Riviera	+0°25′	−0°14′
Electra	+0°27′	−0°16′

Correct Universal Joint Angle

Application	Front Joint	Rear Joint
Skylark	1°	2½°
Century, Regal	3°	2¾°
Century Wagon	3°	3°
LeSabre		
7½" Axle	1¾°	2½°
All Others	1¾°	2°
Riviera	1¾°	2°
Electra	1¾°	2°