Propeller Shaft Alignment

AMERICAN MOTORS PROPELLER SHAFT ALIGNMENT

American Motors

DESCRIPTION

Measurement of front and rear universal joint angle is accomplished by means of an inclinometer (tool J-22910) with the vehicle at usual load and curb height. Angles formed by the intersection of the centerlines of the crankshaft, propeller shaft and drive pinion must fall below the propeller shaft centerline. Angles formed above the centerline are negative and must be avoided.

CHECKING & ADJUSTING ANGLES

CHECKING

1) Shift transmission into neutral and raise vehicle on axle tubes or rear springs. Rear wheels must be free to rotate.

2) Clean yoke bearing caps and install inclinometer magnet with tool parallel to propeller shaft and record readings as follows:

- Rear Axle Yoke Bearing Cap
- Rear Propeller Shaft Yoke Bearing Cap
- Front Propeller Shaft Yoke Bearing Cap
- Front Slip-Yoke Bearing Cap

3) The Difference between rear axle yoke bearing and rear propeller shaft bearing readings will give rear universal joint angle. Rear "U" joint angle is $+2\frac{1}{2}° \pm \frac{1}{2}°$.

4) Difference between angles measured at front propeller shaft yoke bearing and slip yoke bearing is front universal joint angle. No NEGATIVE angle is permitted.

ADJUSTMENT

1) To adjust rear universal joint angle, install wedge-shaped shims between rear springs and rear axle tube spring pads.

2) To increase angle, install shim so the thick end faces the rear of car. To decrease angle, install shim so thick end faces front of car.

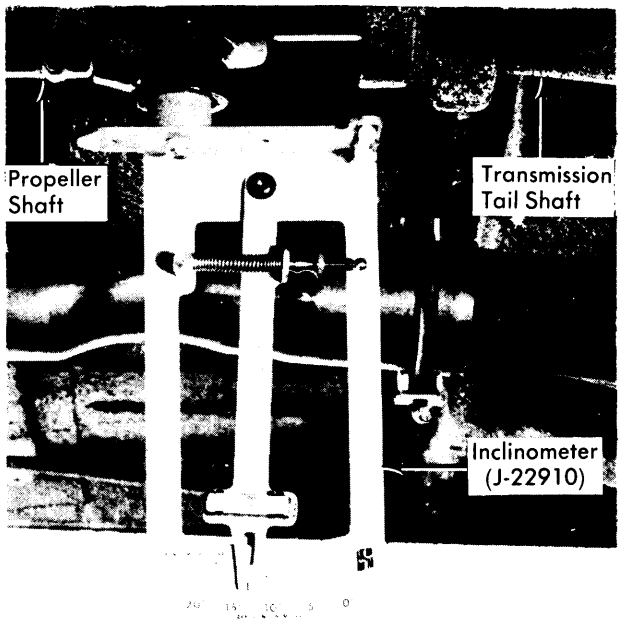

Fig. 2 Measuring Front Universal Joint Angle

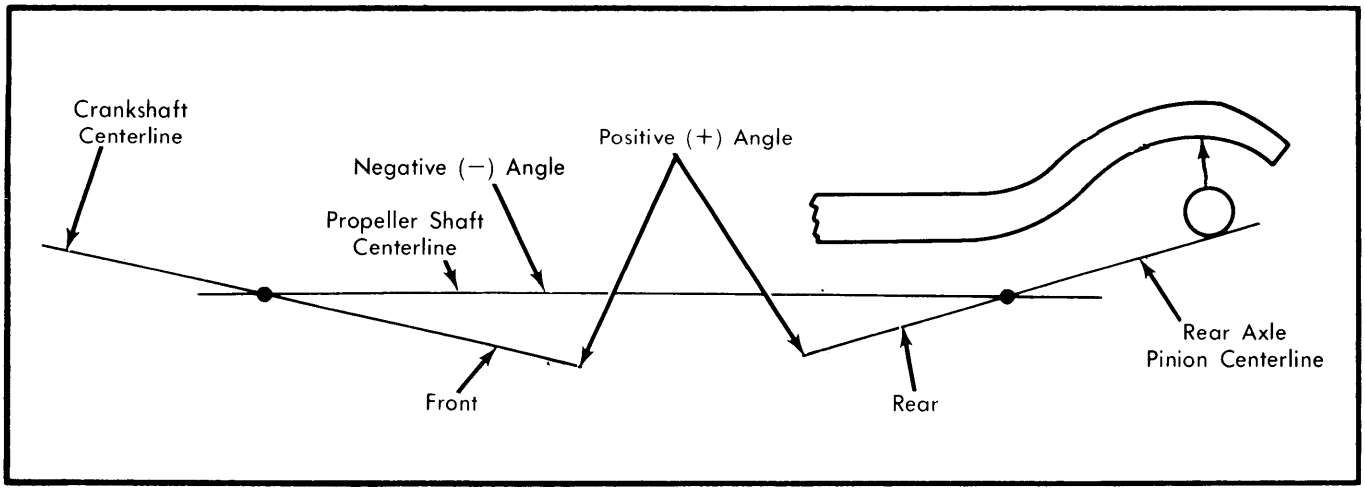

Fig. 1 Front and Rear Universal Joint Angles