

PROPELLER SHAFT ANGLE

ONE PIECE PROPELLER SHAFT

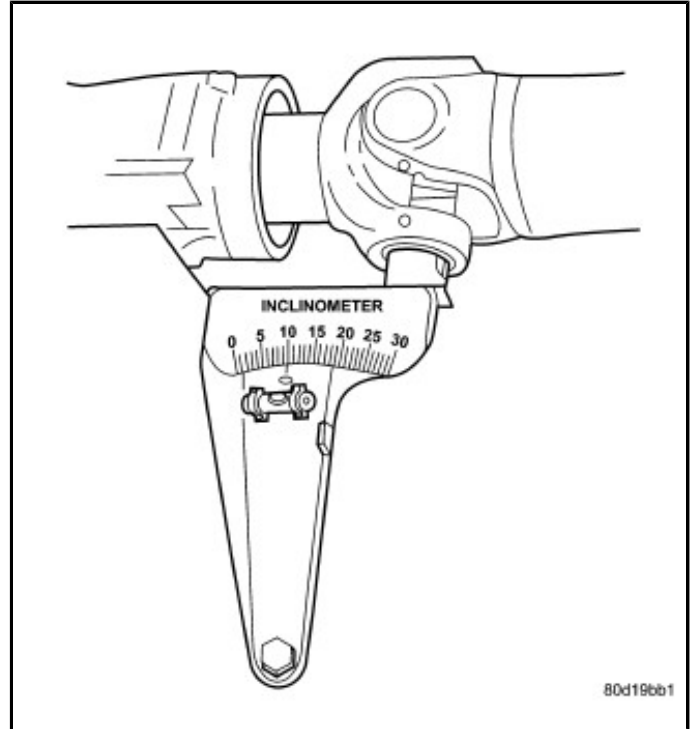
This procedure applies to front and rear propeller shafts.

NOTE: To obtain output angle (A) on the front propeller shaft equipped with a C/V joint, place inclinometer on machined surface of the C/V joint.

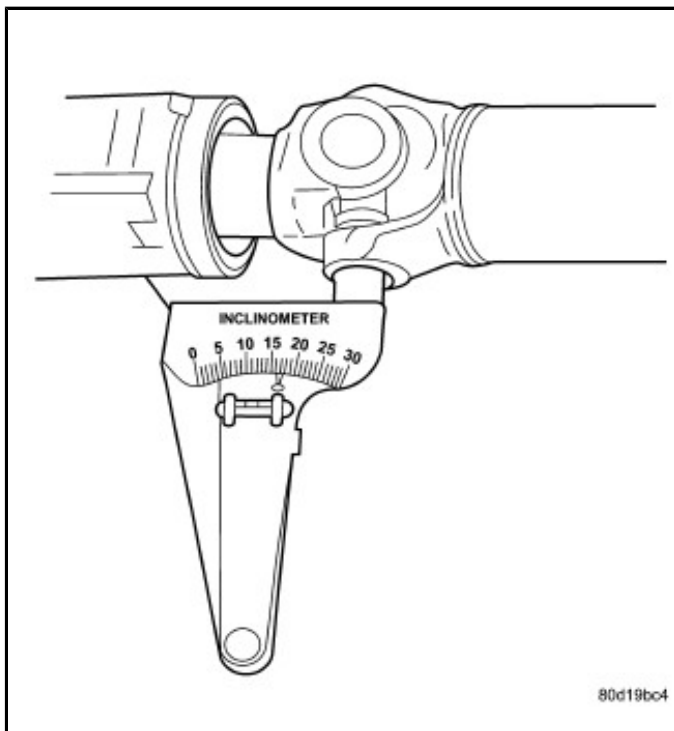
1. Raise vehicle and support the axles as level as possible, allowing the wheels and propeller shaft to turn.
2. Remove universal joint snap rings if equipped, so inclinometer base sits flat.
3. Rotate shaft until transmission/transaxle output yoke bearing is facing downward.

NOTE: Always take measurements from front to rear and on the same side of the vehicle.

4. Place Inclinometer 7663 on yoke bearing cap or pinion flange ring parallel to the shaft. Center bubble in sight glass and record measurement (A).

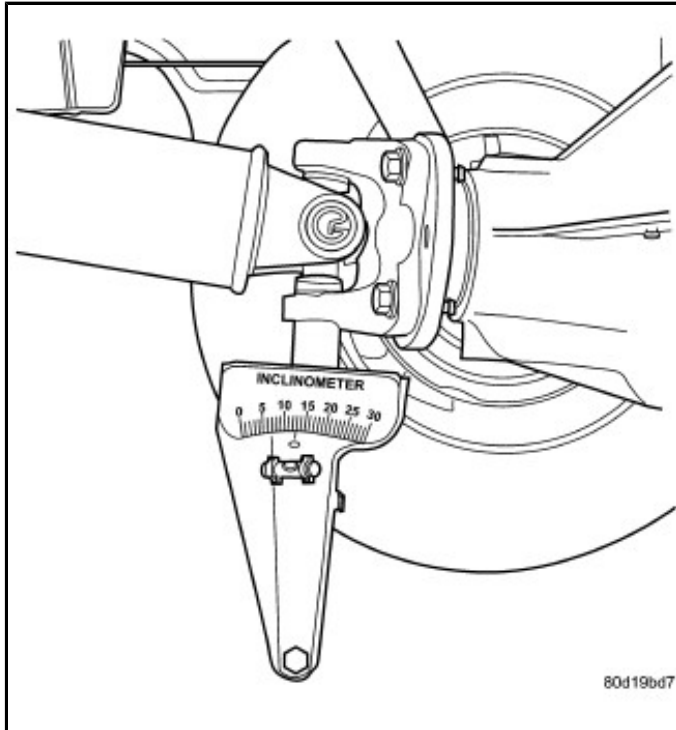


This measurement will give you the transmission yoke Output Angle (A).



5. Rotate propeller shaft 90 degrees and place Inclinator on yoke bearing parallel to the shaft. Center bubble in sight glass and record measurement. This measurement can also be taken at the rear end of the shaft.

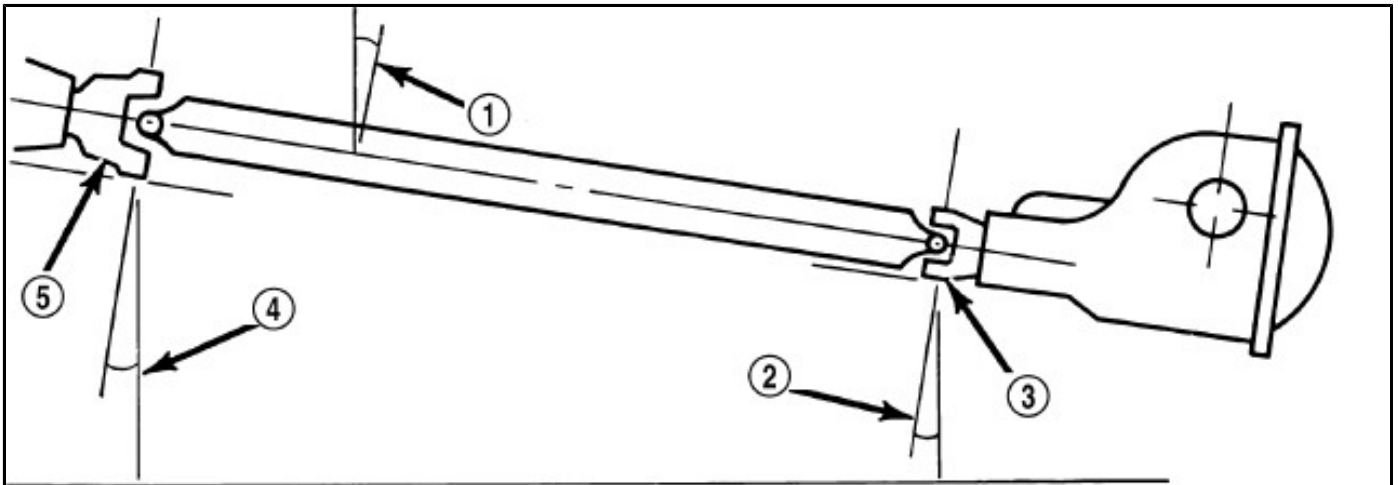
This measurement will give you the Propeller Shaft Angle (C).



6. Rotate propeller shaft 90 degrees and place inclinometer on companion flange yoke bearing parallel to the shaft. Center bubble in sight glass and record measurement.

This measurement will give you the pinion Companion Flange Input Angle (B).

7. Subtract smaller figure from larger (C minus A) to obtain Transmission/Transfer Case **Output Operating Angle**.
8. Subtract smaller figure from larger (C minus B) to obtain axle **Input Operating Angle**.



Horizontal Level

(A) Output Yoke = 3.0° or 4.9°
 (C) Prop. Shaft = 4.9° or -3.0°

(B) Axle Input Yoke = 3.2° or 4.9°
 (C) Prop. Shaft = 4.9° or -3.2°

Transmission Output
 Operating Angle 1.9°

Axle Input
 Operating Angle 1.7°

Trans. Output Operating Angle 1.9°
 Axle Input Operating Angle -1.7°

Amount of U-Joint Cancellation 0.2°

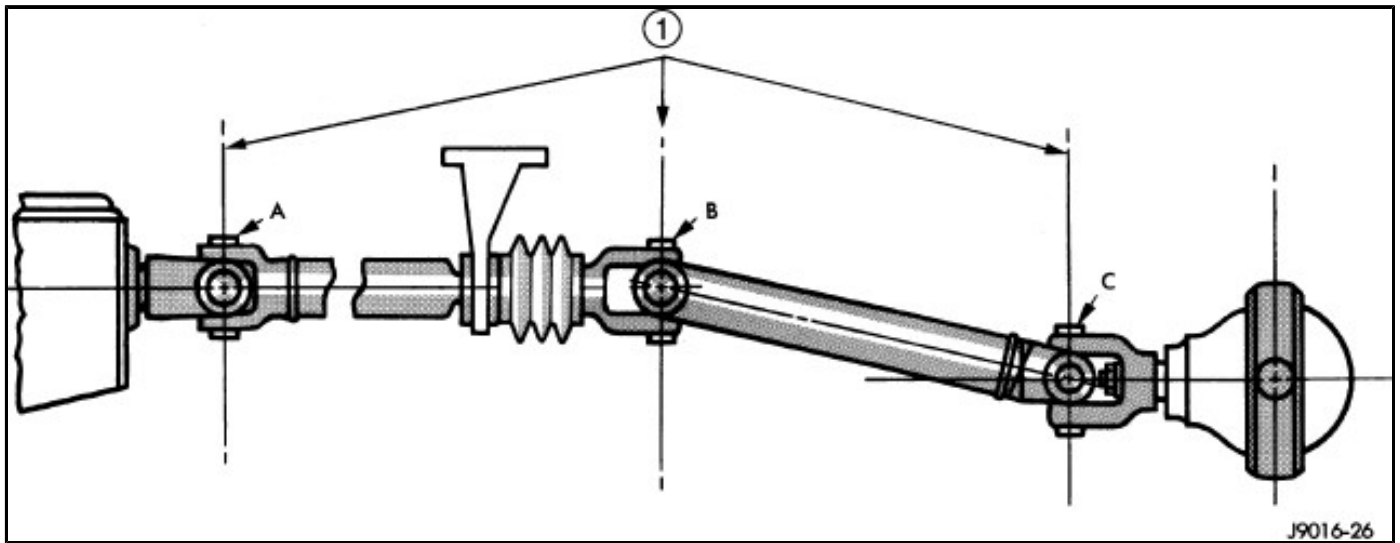
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Refer to rules and example for additional information.

RULES

- Good cancellation of U-joint operating angles should be within 1 degree.
- Operating angles should be less than 3 degrees.
- Operating angles less than 10 degrees for double cardan U-joint.
- At least 1/2 of one degree continuous operating propeller shaft angle.

TWO PIECE PROPELLER SHAFT



Two piece propeller shaft angles measurement is the same as a one-piece propeller shaft.