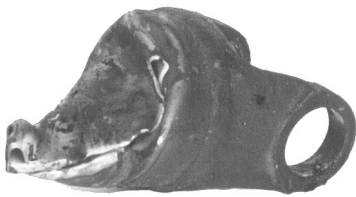


Drive Shaft Failures & Their Causes



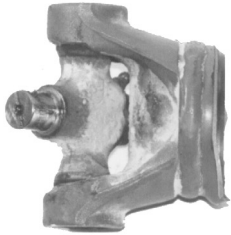
Twisted Tube

This twisted, broken tube shows excessive load or undersized shaft. Stock tubes are usually very weak.



Circumferential Crack

To find a twisted tube like this, look for cracks in the paint or scaling of the surface oxide.



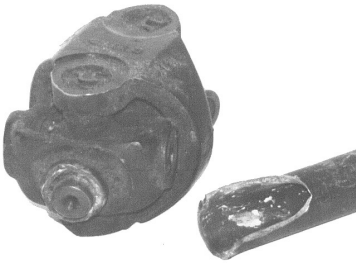
Sheared Tube

Here is a clean tear in a tube. This was caused by something rubbing on the shaft creating stress risers. When installing drive shaft make sure nothing will touch the tube through it's range of motion.



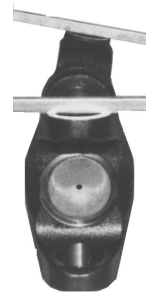
Dented Tube

Road hazards or tire lifts can injure your drive shaft. Once the damage is done replace the tube.



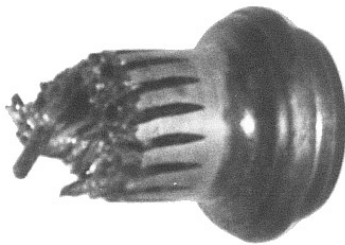
Broken Weld

This might have been caused by a defective weld or even by inconsistent properties in the tube. Welded to hot.



Phasing

Phasing/exact alignment of the joints is important. This drive shaft is out of phase. Joints/yokes should remain parallel within 1.5 degrees.



Broken Spline

This broken spline stub could have happened because of excessive load, fatigue failure, shock load or a defective part. Make sure the parts you use can stand up to the intended use.



Torsional Play

With the drive shaft removed check for excessive twisting play. Anything that can be felt is probably too much. This is also a good way to check for excessive lateral play.



Broken Weld Yoke

Excessive load or angle caused this broken bearing bore. *See also damaged End Yoke.



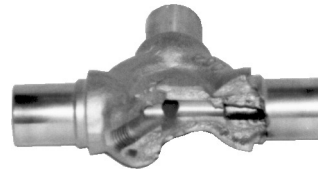
Burned U-Joint

This is almost always caused by a damaged attaching yoke or lack of lube.



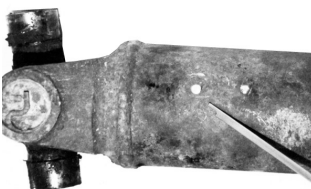
Damaged End Yoke

Always inspect your attaching yokes for any nicks or gouges that will cause the bearing caps to mis-align.



Broken U-Joint

This is usually a result of excessive angles, shock load or poor quality.



Missing Weight

Balance weights will sometimes fall off. 1 oz. Of imbalance on a 1 in. Radius will create nearly 16 pounds of centrifugal force.



Broken Stud

Excessive drive shaft angles caused this CV to bind and fail. Remember that Cv's bind at different points, the amount of articulation will vary between about 20 & 35 degrees.