

## Troubleshooting U-Joints

U-Joint problems, as a rule, are of the progressive nature. They generally accelerate rapidly and result in ruined components.

Some recognizable signs of u-joint deterioration are:

- Vibration
- U-joint looseness
- U-joint discoloration due to excessive heat buildup
- Inability to purge all four trunnion seals
- An audible noise or squeal from the driveline

### PROBLEM - Vibration

- Low gear shudder
- At certain speeds under full drive or full coast
- Under light loaded conditions

Causes	Solutions
Secondary couple load reaction at shaft support bearing	Reduce u-joint continuous running angle
Improper phasing	Replace u-joint
Incompatible driveshaft	Install two piece driveshaft with shaft support bearing
Driveshaft weight not compatible with engine-transmission mounting	Use large diameter tube
Driveshaft too long for speed	Shim drivetrain components to equalize u- joint angles
Loose outside diameter fit on slip spline	Straighten and balance shaft
Excessively loose u-joint for speed	Check with transmission or axle manufacture - replace shaft bearing
Driveshaft out of balance; not straight	Inspect u-joint flex effort for looseness - torque to specification
Unequal u-joint angles U-joint angle too large for continuous running Worn u-joint Inadequate Torque on bearing plate cap screws Torsional and/or inertia! excitation	Check driveshaft for correct yoke