Preventive Maintenance
Driveshaft inspection should be performed as part of your regular maintenance. Normal vehicle maintenance and recognition of component discrepancies are necessary to prevent serious mechanical problems and avoid driver discomfort. Failure to perform normal maintenance may also void the vehicle warranty.

Routine Inspection Steps
1. Check the output and input end yokes for looseness.
2. Check for excessive radial looseness of output/input shaft.
3. Check for looseness across ends of u-joint.
4. Check the slip spline for excessive radial movement.
5. Check the shaft for damage, bent tubing, or missing balance weights.
6. Check for a loose or missing slip yoke plug.

Failure Analysis
Component failures can result from improper maintenance, installation, or assembly procedures. This quick reference guide assists service technicians in recognizing some possible component failures.

Spicer Parts.
Spicer® service parts deliver the same quality used by major original equipment manufacturers. Each component is engineered to work together to offer quality and reliability. Specify genuine Spicer parts for all of your driveshaft repairs.

For detailed servicing instructions, refer to the Spicer Driveshaft Service Manuals available at SpicerParts.com/Literature.

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Learn how to identify failed driveshaft components.

Spicer® Ultra-Premium Synthetic Grease
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DANGER
Rotating shafts can be dangerous. You can snag clothes, skin, hair, hands, etc. This can cause serious injury or death. Do not go under the vehicle when the engine is running.
How to Identify Failure and Probable Cause

**Tube Shafts**

- Excessive torque loads
- Shock loads
- Improper application

**Tubing**

- Excessive torque
- Driving into immovable object under power
- Spinning tires that suddenly grab hold

**Failed Tubing**

- Shock loads
- Improper welding procedures
- Excessive vibration
- Possible torsional vibration problem

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SpicerParts.com

Dana Aftermarket Group

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**Tubing**

- Excessive torque
- Driving into immovable object under power
- Spinning tires that suddenly grab hold

**Twisted Tubing**

- Excessive torque
- Driving into immovable object under power
- Spinning tires that suddenly grab hold

**Failed Tubing**

- Shock loads
- Improper welding procedures
- Excessive vibration
- Possible torsional vibration problem

**Fractured Spline**

- Excessive torque loads
- Shock loads
- Improper application

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**Universal Joints**
- Burned U-Joint Cross
  - Lack of lubrication (improper maintenance)
- Excessive u-joint operating angles
- Improper assembly procedures
- Sprung or bent yoke
- Lack of lubrication (improper maintenance)

**Universal Joints**
- End Galling
  - Excessive continuous torque loads
  - Seized slip yoke splines
  - Excessive driveline angles
  - Sprung or bent yoke
  - Overtightened u-bolts

**Universal Joints**
- Brinelling
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  - Shock loads
  - Improper application
  - U-joint kit failure

**Yoke**
- Fractured Yoke
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**Universal Joints**
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  - Shock loads
  - Improper application

**Universal Joints**
- Spalling
  - Water contamination
  - Improper lube type
  - Lubrication failure

**Yoke**
- Bent Yoke
  - Excessive torque
  - Improper application
  - Improper u-joint removal

**Yoke**
- Broken Tang Half Round
  - Improper bearing retainer bolt torque
  - Improper installation
  - Strap was reused instead of replaced
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