

Diagnosis and Testing

Inspection and Verification

NOTE: New front drive halfshafts should not be installed unless disassembly and inspection reveals unusual wear.

1. Verify the customer concern.
2. Visually inspect for obvious signs of mechanical damage.

VISUAL INSPECTION CHART

Mechanical
• Constant velocity (CV) joint boot • CV joint • Front halfshaft • Intermediate shaft bearing • Intermediate shaft
3. If an obvious cause for an observed or reported concern is found, correct the cause (if possible) before proceeding to the next step. 4. If the cause is not visually evident, verify the symptom and refer to the Symptom Chart.

Symptom Chart

The table provides all possible Front Drive halfshafts symptoms. For a detailed diagnostics, proceed to the **Ford diagnostic equipment**.

Symptom	Possible Sources
Clicking, Popping or Grinding Noises While Turning	Inadequate or contaminated lubricant in the inner or outer front drive halfshaft constant velocity (CV) joint
	Another component contacting front drive halfshaft assembly
	Wheel bearings, brakes, suspension or steering components
Vibration at Highway Speeds	Out of balance front wheels or tires
	Out-of-round tires
	Incorrectly seated outer constant velocity (CV) joint in front wheel hub
	Wearing in the constant velocity (CV) joint, due to grease degradation
Shudder Vibration During Acceleration	Excessively high CV joint operating angles caused by incorrect ride height
	Excessively worn or damaged inner or outer front drive halfshaft constant velocity (CV) joint
Halfshaft Joint Pullout	Outer front drive halfshaft retainer circlip missing or not correctly seated differential side
	Front suspension components worn or damaged
	Engine/transaxle assembly misalignment
	Frame rail or strut tower out of position or damaged