

DRIVE AXLE TROUBLE SHOOTING

CONDITION & POSSIBLE CAUSE	CONDITION & POSSIBLE CAUSE
<p>General Knocking or Clunking</p> <ul style="list-style-type: none"> Excessive differential side gear clearance. Worn rear axle pinion shaft. Worn case, or differential cross shaft in case. Excessive end play of axle shafts-to-differential cross shaft. Gear teeth mutilated. Improper axle shaft spline fit. Total axle backlash too great. Incorrect driveline angle. <p>Clunking During Initial Engagement</p> <ul style="list-style-type: none"> Excessive differential side gear clearance. Excessive ring and pinion backlash. Worn or loose pinion shaft. Worn or damaged inboard joint. <p>Gear Howl or Whine</p> <ul style="list-style-type: none"> Improper pinion depth Improper ring gear backlash adjustment. Improper ring gear runout. Improper bearing preload. Excessive pinion bearing wear. <p>Clicking or Chatter on Turns</p> <ul style="list-style-type: none"> Wrong lubricant in differential. Clutch plates worn. Worn or damaged outboard joints. Differential side gears or pinion worn. <p>Knock or Click Approximately Every Second Revolution</p> <ul style="list-style-type: none"> Brinelled rear wheel bearing. <p>Grunt Noise on Steps</p> <ul style="list-style-type: none"> Lack of lubricant in propeller shaft slip yoke. <p>Groan in Forward or Reverse</p> <ul style="list-style-type: none"> Wrong lubricant in differential. <p>Knock in Drive Line in High Gear at 10 MPH</p> <ul style="list-style-type: none"> Worn or damaged universal joints. Side gear hub counterbore in differential worn oversize. <p>Ping, Snap or Click in Drive Line</p> <ul style="list-style-type: none"> Loose upper or lower control arm bushing bolts. Loose companion flange. 	<p>Scraping Noise</p> <ul style="list-style-type: none"> Slinger, companion flange or end yoke rubbing on rear axle carrier. <p>Car Will Not Move</p> <ul style="list-style-type: none"> Broken axle shaft. Broken pinion stem. Broken welds. Axle lock up. Broken gear teeth. Broken wheel bearing. <p>Axle Backlash</p> <ul style="list-style-type: none"> Excessive ring and pinion clearance. Loose fitting differential pinion shaft. Excessive side gear-to-case clearance. <p>Leakage at Differential or Driveshaft</p> <ul style="list-style-type: none"> Rough outside surface on splined yoke. Defective transmission rear oil seal. Drive pinion seal or nut. Axle cover gasket, or axle shaft seal. Bad welds, or improper axle vent hose. Casing porosity. <p>Roughness at Low Speeds</p> <ul style="list-style-type: none"> U bolt clamp nuts too tight. <p>Roughness, Shudder or Vibration Upon Heavy Acceleration</p> <ul style="list-style-type: none"> Double cardan joint ball seats worn, and ball seat spring may be broken. Excessive joint angle. Sticking inboard joint assembly. Worn or damaged inboard or outboard joints. <p>Roughness, Vibration or Body Boom Experienced at Any Speed</p> <ul style="list-style-type: none"> Rough rear wheel bearings. Unbalanced or damaged propeller shaft. Unbalanced or damaged tires. Worn or damaged universal joints. Excessive U bolt torque. Bent or damaged drive shaft, or undercoating on drive shaft. Tight universal joints. Burrs or gouges on companion flange. Drive shaft or companion shaft runout too great. Drive shaft or companion flange unbalanced. Excessive looseness at slip yoke spline. Mis-indexed propeller shaft at companion flange.