

Drive Axles

TROUBLE SHOOTING

CONDITION	POSSIBLE CAUSE	CORRECTION
General Knocking or Clunking	Excessive differential side gear clearance	See Overhaul in DRIVE AXLES
	Worn rear axle pinion shaft	See Overhaul in DRIVE AXLES
	Worn case or differential cross shaft in case	See Overhaul in DRIVE AXLES
	Excessive end play of axle shafts-to-differential cross shaft	See Overhaul in DRIVE AXLES
	Gear teeth mutilated	See Overhaul in DRIVE AXLES
	Improper axle shaft spline fit	See Overhaul in DRIVE AXLES
	Total axle backlash too great	See Overhaul in DRIVE AXLES
	Incorrect driveline angle	See Adjustment in PROPELLER SHAFT ALIGNMENT
Clunking During Initial Engagement	Excessive differential side gear clearance	See Overhaul in DRIVE AXLES
	Excessive ring and pinion backlash	See Overhaul in DRIVE AXLES
	Worn or loose pinion shaft Worn or damaged inboard joint	See Overhaul in DRIVE AXLES See Overhaul in DRIVE AXLES
Gear Howl or Whine	Improper pinion depth	See Overhaul in DRIVE AXLES
	Improper ring gear backlash adjustment	See Overhaul in DRIVE AXLES
	Improper ring gear runout	See Overhaul in DRIVE AXLES
	Impropr bearing preload	See Overhaul in DRIVE AXLES
	Excessive pinion bearing wear	See Overhaul in DRIVE AXLES
Clicking or Chatter on Turns	Wrong lubricant in differential	Drain and refill differential
	Clutch plates worn	See Overhaul in POSITIVE TRACTION DIFFERENTIALS
	Worn or damaged outboard joints Differential side gears or pinion worn	See Overhaul in DRIVE AXLES See Overhaul in DRIVE AXLES
Knock or Click Approximately Every Second Revolution	Flat spot on rear wheel bearing	See Overhaul in DRIVE AXLES
Grunt Noise on Stops	Lack of lubricant in propeller shaft slip yoke	See UNIVERSAL JOINTS
Groan in Forward or Reverse	Wrong lubricant in differential	Replace lubricant
Knock in Drive Line in High Gear at 10 MPH	Worn or damaged universal joints	See UNIVERSAL JOINTS
	Side gear hub counterbore in differential worn oversize	See Overhaul in DRIVE AXLES
Ping, Snap or Click in Drive Line	Loose upper or lower control arm bushing bolts	See Replacement in FRONT SUSPENSION
	Loose companion flange	See Overhaul in DRIVE AXLES
Scraping Noise	Slinger, companion flange or end yoke rubbing on rear axle carrier	See Overhaul in DRIVE AXLES
Car Will Not Move	Broken axle shaft	See Overhaul in DRIVE AXLES
	Broken pinion stem	See Overhaul in DRIVE AXLES
	Broken welds	See Overhaul in DRIVE AXLES
	Axle lock up	See Overhaul in DRIVE AXLES
	Broken gear teeth	See Overhaul in DRIVE AXLES
	Broken wheel bearing	See Overhaul in DRIVE AXLES
Axle Backlash	Excessive ring and pinion clearance	See Overhaul in DRIVE AXLES
	Loose fitting differential pinion shaft	See Overhaul in DRIVE AXLES
	Excessive side gear-to-case clearance	See Overhaul in DRIVE AXLES
Leakage at Differential or Driveshaft	Rough outside surface on splined yoke	See Overhaul in DRIVE AXLES
	Drive pinion seal or nut	See Overhaul in DRIVE AXLES
	Axle cover gasket, or axle shaft seal	See Overhaul in DRIVE AXLES
	Bad welds or improper axle vent hose	See Overhaul in DRIVE AXLES
	Case porosity	Apply heat resistant silicone sealer to case

TROUBLE SHOOTING (Cont.)

CONDITION	POSSIBLE CAUSE	CORRECTION
Roughness, Shudder or Vibration Upon Heavy Acceleration	Double cardan joint ball seats worn, and ball set spring may be broken	See UNIVERSAL JOINTS
	Excessive joint angle	See Propeller Shaft Alignment in DRIVE AXLES
	Sticking inboard joint assembly	See UNIVERSAL JOINTS
	Worn or damaged inboard or outboard joints	See UNIVERSAL JOINTS
Roughness, Vibration or Body Boom Experienced at Any Speed	Rough rear wheel bearings	See Overhaul in DRIVE AXLES
	Unbalanced or damaged propeller shaft	Check and/or balance propeller shaft
	Unbalanced or damaged tires	Check and/or balance tires
	Worn or damaged universal joints	See UNIVERSAL JOINTS
	Bent or damaged drive shaft, or undercoating on drive shaft	Check drive shaft balance
	Tight universal joints	Lubricate or replace as necessary
	Burrs or gouges on companion flange	Resurface or replace flange
	Drive shaft or companion shaft runout too great	Repair or replace as necessary
Excessive looseness at slip yoke spline	See Overhaul in DRIVE AXLES	