



Power Steering System Diagnostic Chart

Symptom	Cause
Chirping or squeal upon start up	Loose belt, dry or worn belt, bent or misaligned pulley
Rattling sound	Worn tensioner bearing, defective power steering pump, loose power steering pump mounting bolts.
Whining/Groaning	Low fluid, worn cam pack internal to the pump, contaminated fluid, restriction or air in the system, oversized wheels and tires, incorrect tire pressure or binding steering components.
Hard steering or lack of steering assist	Weak pump, damaged pump, seized front end components, stuck flow control valve (in pump), kinked, collapsed or restricted hoses, low tire pressure, oversized wheels and tires, loose power steering pump belt.
Steering wheel will not return to center	Incorrect front end alignment (caster angle), seized front end components.
Steering wheel skipping/jerking	Loose power steering pump belt, air in the system, incorrect fluid, low fluid, loose or worn rack and pinion mount, defective power steering pump.
Steering wheel turns on its own side to side	Pressure and return lines installed in the incorrect locations at the steering gear.
Steering Free Play	Worn suspension components, worn intermediate shaft (column to gear), worn steering gear.
Foaming or aerated fluid	Low fluid, faulty sealing o-rings, leaking seals, incorrect bleeding procedure used.
External Fluid leaking	Worn or damaged steering component seals, fluid contamination causing premature wear, loose connection on return hose.
Fluid over flowing from reservoir	Steering system overfilled, air in the system which will cause trapped air to belch out through the reservoir (bringing fluid with it) when the engine is stopped.
Improper return flow	Key indicator pointing to a restriction in the system. Return flow should look like a garden hose, high flow, very low pressure.