

## STEERING COLUMN TROUBLE SHOOTING

CONDITION & POSSIBLE CAUSE	CONDITION & POSSIBLE CAUSE
<p><b>Standard Columns</b></p> <p><b>Noise in Steering Column</b></p> <ul style="list-style-type: none"> <li>● Coupling pulled apart, or bolts not tightened.</li> <li>● Column not correctly aligned.</li> <li>● Broken lower joint.</li> <li>● Horn contact ring not lubricated.</li> <li>● Lack of grease on bearings or bearing surface.</li> <li>● Lower or upper shaft bearing worn or broken.</li> <li>● Shaft lock snap ring not properly seated.</li> <li>● Plastic spherical joint not lubricated.</li> <li>● Shroud or housing loose.</li> <li>● Lock plate retaining ring not seated.</li> <li>● Loose sight shield.</li> <li>● Loose cover.</li> <li>● Coupling bottoming.</li> <li>● Sheared input shaft plastic joint.</li> <li>● Improper gear meshload.</li> </ul> <p><b>High Steering Shaft Effort</b></p> <ul style="list-style-type: none"> <li>● Column assembly misaligned.</li> <li>● Improperly installed or defective dust shield.</li> <li>● Damaged upper or lower bearing.</li> <li>● Flashing on inside diameter of shift tube from plastic joint.</li> <li>● Tight steering universal joint.</li> </ul> <p><b>High Shift Effort (Man. &amp; Auto. Trans.)</b></p> <ul style="list-style-type: none"> <li>● Column not aligned correctly.</li> <li>● Improperly installed or defective dust shield.</li> <li>● Lack of grease on seals or bearings.</li> <li>● Improper size screws used for ignition switch, neutral start switch or mounting bracket.</li> <li>● Burrs on upper or lower end of shift tube.</li> <li>● Lower bowl bearing assembled wrong.</li> <li>● Shift tube bent or broken.</li> <li>● Improper adjustment of shift levers.</li> <li>● Relay lever loose on shift tube.</li> <li>● Loose lower shift lever.</li> </ul> <p><b>Improper Transmission Shifting</b></p> <ul style="list-style-type: none"> <li>● Sheared shift tube joint or lower shaft lever weld joint.</li> <li>● Improper transmission shift lever adjustment.</li> <li>● Improper gate plate adjustment.</li> </ul> <p><b>Excess Play in Mounted Column Assembly</b></p> <ul style="list-style-type: none"> <li>● Instrument panel-to-column bracket mounting bolts loose.</li> <li>● Broken weld nut on jacket.</li> <li>● Instrument panel bracket capsule sheared.</li> <li>● Column bracket-to-jacket bolts loose.</li> </ul> <p><b>Steering Locks in 2nd Gear (Man. Trans.)</b></p> <ul style="list-style-type: none"> <li>● Shift lever mechanism damaged.</li> <li>● Defective shift lever gate.</li> <li>● Loose relay lever on shift tube.</li> </ul>	<p><b>Tilt Columns</b></p> <p><b>NOTE</b> — Information for standard columns will generally apply to tilt columns. Tilt column information is supplied in addition to and specifically for tilt columns.</p> <p><b>Steering Wheel Loose</b></p> <ul style="list-style-type: none"> <li>● Too much clearance between holes in support or housing and pivot pin diameters.</li> <li>● Damaged or missing anti-lash spring in centering spheres.</li> <li>● Upper bearing inner race seal missing, or upper bearing not seated in housing.</li> <li>● Improperly adjusted tilt and telescopic locking knobs.</li> <li>● Loose support screws.</li> <li>● Bearing preload spring missing or broken.</li> <li>● Housing loose on jacket.</li> </ul> <p><b>Excess Play in Mounted Column Assembly</b></p> <ul style="list-style-type: none"> <li>● Loose shoes in housing, or loose support screws.</li> <li>● Loose tilt head pivot pins, or loose shoe lock pin in support.</li> </ul> <p><b>High Shift Effort</b></p> <ul style="list-style-type: none"> <li>● Wave washer burred.</li> </ul> <p><b>Housing Scraping on Bowl</b></p> <ul style="list-style-type: none"> <li>● Bowl bent or not concentric with hub.</li> </ul> <p><b>Steering Wheel Loose in Every Other Tilt Position</b></p> <ul style="list-style-type: none"> <li>● Loose fit between shoe and shoe pivot pin, or shoe not free in slot.</li> </ul> <p><b>Steering Wheel Will Not Lock in Any Tilt Position</b></p> <ul style="list-style-type: none"> <li>● Shoe seized on its pivot pin.</li> <li>● Shoe grooves may have burrs or dirt in them.</li> <li>● Shoe lock spring weak or broken.</li> </ul> <p><b>Steering Wheel Fails to Return to Top Position</b></p> <ul style="list-style-type: none"> <li>● Pivot pins are bound up.</li> <li>● Wheel tilt spring is damaged.</li> <li>● Turn signal switch wires too tight.</li> </ul> <p><b>Noise When Tilting Column</b></p> <ul style="list-style-type: none"> <li>● Upper tilt bumpers worn.</li> <li>● Tilt spring rubbing in housing.</li> </ul> <p><b>Hard Steering</b></p> <ul style="list-style-type: none"> <li>● Incorrect tire pressure.</li> <li>● Lack of lubricant in ball joints, steering gear and steering linkage.</li> <li>● Improper front end alignment.</li> <li>● Improper steering gear adjustment.</li> </ul>