

VISUAL AIDS

You could have problems in your steering system if any of the following conditions exist.

- ◆ The steering wheel is off center with the front wheel pointed straight ahead.
- ◆ The frame rail flexes when turning against the axle stops.
- ◆ The axle stops are bent, broken or missing.
- ◆ The power steering fluid is brown or black.
- ◆ The drag link and/or tie rod ends are screwed too far in or too far out.
- ◆ You have crossmember, and/or gusset problems. If rivets or bolts shear off, particularly on the cross member behind the cab.
- ◆ If the system hoses are hard and/or brittle.
- ◆ If you have seal leakage at the input or sector shaft.

Essentials for Proper Installation

Geometric setup - always set up the front axle assembly when working on the front axle or steering system.

Timing - always properly time the steering gear and check the timing marks on the sector shaft and pitman arm. Never misalign these marks.

Bleed the System - follow the air bleeding procedures provided with the unit.

Hose clamps - always use band type hose clamps on the steering system.

Poppet Valves - it is **always** necessary to adjust the poppet or comp valves when replacing a gear with these valves.

Fluid - always use the fluid recommended by the manufacturer of the steering gear box. Never mix fluids.

Flush the System - always flush the power steering system with the recommended fluid after replacing a gear, pump, hose or steering cylinder.

Clean - always clean the fluid reservoir to remove all contaminants and any burnt fluid residue. Be sure the canister is completely dry before re-assembling.

Vent - always check the vent to insure that it is kept clean and open.

Paper - never use paper towels to check the fluid level of your power Steering system. The fibers in the paper can damage the system.

Filters - with the exception of Saginaw, every power steering system has A filter which should be changed at each service interval.

Hoses - always use the correct grade, size, length and type of hose. Replace all hoses every three years. If you replace **one** hose replace **every** hose. Check all connections and fittings for tightness and leakage.