



FACT SHEET

Module 4.1

Steering System

The **steering system** controls the position of the front wheels in order to permit the driver to change the direction of the vehicle.

Basic components of the steering wheel system:

Steering wheel—driver control that controls the position of the front wheels; may be adjustable (i.e. tilt steering wheel).

Steering column—connects the steering wheel to the steering gear box. This is collapsible on impact to protect the driver.

Steering gearbox—converts the rotary motion of the wheel into linear motion of the steering linkage.

Power steering—hydraulic pump impelled by a belt connected to the engine that facilitates steering (most vehicles today have power steering).

- Avoid turning the steering wheel when the vehicle is not moving.
- This causes wear on the steering system.
- Never force the steering at the limit of travel.
- Back off slightly the wheels will still be fully turned.
- Forcing causes early failure.

Avoid deep potholes, curbs, and any other sudden or hard impacts that may cause damage to the steering components.

Have the steering aligned at least once a year and after any serious impacts.

Periodically inspect the belt at the power steering pump and check power steering fluid (consult the owner's manual for exact locations).

Steering problems often develop gradually rather than suddenly. Any steering problem is serious and should be repaired immediately.

Common indications of problems include:

- Play or excess movement in the steering wheel.
- Steering difficulty, even though the tires are properly inflated.
- Shimmying or wobbling or shaking or pulling to one side under normal driving conditions.
- Squealing sounds when making turns.

Note: Keep hands in the steering position between the 9 and 3 o'clock and the 7 and 5 o'clock position to avoid injury from an air bag. Injuries from the airbag include serious hand, arm, head, or eye injuries.