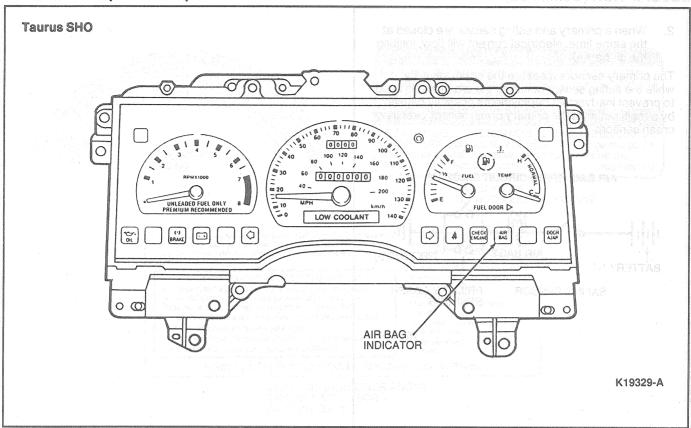
DESCRIPTION (Continued)



Steering Column Wheel and Clockspring

The steering column has a clockspring assembly to carry electrical signals from the steering column through the steering wheel and to the driver air bag, horn, and speed control (if equipped). Refer to Section 11-04.

The steering wheel has a stepped, four spoke design to accommodate the air bag module assembly.

Electrical System

The air bag system is powered directly from the battery. The system can function with the ignition switch in any position, including OFF and LOCK. The system can also function when the driver's seat is unoccupied. The electrical system performs three main functions:

- Detects an impact
- Switches electric power to the igniter
- Monitors the system to determine readiness

The electrical system components include:

- Electronic diagnostic monitor with integrated backup power supply
- Air bag system readiness indicator

- Wiring harness and contact clockspring assembly
- Sensors
- Igniter assembly

Sensors

The primary crash sensor assembly is an electrical switch which reacts to impacts according to direction and force. It discriminates between impacts that require air bag inflation and impacts that do not require air bag inflation. When an impact occurs that requires air bag inflation, the sensor contacts close, completing the electrical circuit necessary for system operation.

The air bag system is designed to operate in frontal or front-angled collisions. The air bag(s) should activate in a crash with severe frontal deceleration, more severe than hitting a parked car of similar size and weight head-on at about 45 km/h (28 mph). Because the system senses the severity of the crash rather than vehicle speed, some frontal collisions at speeds above 28 mph may not be severe enough to require air bag inflation.

The sensors in the vehicle determine if air bag inflation is required in the following manner:

 During severe frontal deceleration caused by an impact that decelerates the vehicle in the forward direction, both a primary crash sensor and a safing sensor will activate.