

# SECTION 4B

## REAR AXLE

**CAUTION:** This vehicle is equipped with a Supplemental Inflatable Restraint System (SIR). Refer to **CAUTIONS** in Section 9J under "ON-VEHICLE SERVICE" and the SIR Component and Wiring location view in Section 9J before performing service on or around SIR components or wiring. Failure to follow **CAUTIONS** could result in possible air bag deployment, personal injury or otherwise unneeded SIR repairs.

**NOTICE:** Always use the correct fastener in the proper location. When you replace a fastener, use **ONLY** the exact part number for that application. General Motors will call out those fasteners that require a replacement after removal. General Motors will also call out the fasteners that require thread lockers or thread sealant. **UNLESS OTHERWISE SPECIFIED**, do not use supplemental coatings (paints, greases, or other corrosion inhibitors) on threaded fasteners or fastener joint interfaces. Generally, such coatings adversely affect the fastener torque and joint clamping force, and may damage the fastener. When you install fasteners, use the correct sequence and tightening specifications. Following these instructions can help you avoid damage to parts and systems.

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### GENERAL DESCRIPTION

#### REAR AXLE ASSEMBLY

**Figure 1**

The rear axle assembly contains two rigid axle shafts which transfer engine torque to the rear wheels. These axle shafts are supported in the rear axle housing by bearings at both outer ends, and driven by the differential assembly which is mounted in the center of the rear axle housing. A propeller shaft turns the differential assembly and transfers power to the rear axle shafts. The rear axle housing is sealed and contains a synthetic gear lubricant which lubricates the differential assembly and axle shafts bearings. The rear axle housing is also vented to prevent excessive heat buildup (Figure 1).

Rear trailing rods connect the rear axle housing to the frame and act as pivot points for the housing as it moves up and down with the rear suspension. Coil springs support the rear of the vehicle and are seated into the frame and rear axle housing axle. Shock absorbers are fitted between the rear axle housing and the frame to help to reduce road vibration and rough pavement. An upper control arm is fitted to the body by bushings, and to the rear differential carrier by a rear control arm ball joint to prevent the rear axle housing from moving in a lateral direction.

#### DIFFERENTIAL ASSEMBLY

**Figure 2**

The differential assembly uses a hypoid, beveled ring and pinion gear set. It consists of a ring gear which is mounted to the differential case and a pinion















































































