

Exhaust System - Chassis Cab - Overview

Overview

NOTICE: Do not use leaded fuel in a vehicle equipped with a Catalytic converter. In a vehicle that is continually misfueled, the lead in the fuel will be deposited in the Catalytic converter and completely blanket the catalyst. Lead reacts with platinum to "poison" the catalyst. Continuous use of leaded fuel can destroy the catalyst and render the Catalytic converter useless. The addition of lead to the Catalytic converter can also solidify the catalyst, causing excessive back pressure in the Exhaust system and possibly causing engine damage.

NOTICE: Extremely high temperatures of 1,100°C (2,012°F) or above due to misfiring or an over-rich fuel/air mixture will cause the ceramic substrate to sinter or burn, destroying the Catalytic converter. Do not continue to operate the vehicle if the engine is misfiring, there is a power loss or other unusual operating conditions, such as engine overheating and backfiring.

NOTICE: Do not use oil or grease-based lubricants on the isolators. These lubricants may cause deterioration of the rubber. This can lead to separation of the isolator from the Exhaust hanger bracket during vehicle operation.

The Exhaust system will vary by wheelbase. The Exhaust system provides an exit for exhaust gases and reduces engine noise by passing exhaust gases through the Catalytic converters and a muffler assembly.

The Exhaust system consists of:

- the collector pipes leading to an underbody Catalytic converter.
- an underbody Catalytic converter.
- an Exhaust intermediate pipe (if equipped).
- a muffler and tailpipe assembly.

The Catalytic converters play a major role in the emission control system by operating as a gas reactor. Their function is to speed up the heat-producing chemical reaction of components in the exhaust gases in order to reduce air pollutants.

The catalyst material inside the Catalytic converters consists of a ceramic substrate.

The Catalytic converters are designed to provide a long life. No maintenance is necessary.

Sound insulators and shields, attached to the underbody and Exhaust system to protect the vehicle from Exhaust system heat and should be inspected at regular intervals to make sure they are not dented or out of position. If a sound insulator and shield is damaged or shows evidence of deterioration, install a new insulator and shield. The sound insulators and shields for the muffler, muffler pipe, resonator and Catalytic converter pipe are installed separately.

Some Exhaust fasteners must be discarded and new ones installed as indicated in the procedures. Discard any damaged or heavily corroded fasteners and install new ones as necessary. Some Exhaust fasteners are of a prevailing torque design. Use only new fasteners with the same part number as the original. Tighten the fasteners to the specified torque during reassembly to make sure of correct retention of Exhaust components.

