

Airbag and Seatbelt Pretensioner Supplemental Restraint System (SRS) - Raptor - Overview

Overview

The RCM continually receives and monitors inputs from the OCSM and various other hard-wired switches and sensors. If the RCM detects a sudden vehicle deceleration and/or lateral deceleration based on the information received from the various sensors, and determines that deployment is necessary, the RCM applies voltage and current to deploy the appropriate SRS components.

The SRS utilizes Connector Position Assurance (CPA) tabs on deployable component connectors. The tabs disengage the shorting bars of the deployable component from its electrical pins and keep the harness connector securely attached to the deployable component.

If the connector is attached to the deployable component yet the tab is not fully seated, the pins of the connector still make contact with the deployable component pins. However, because the tab is not fully seated and the shorting bars are still applied to the deployable component pins, the RCM detects a fault (circuit resistance below threshold) during self-diagnostics when the vehicle is powered on (airbag warning indicator is illuminated).