CHILTON LIBRARY

YOUR CURRENT VEHICLE

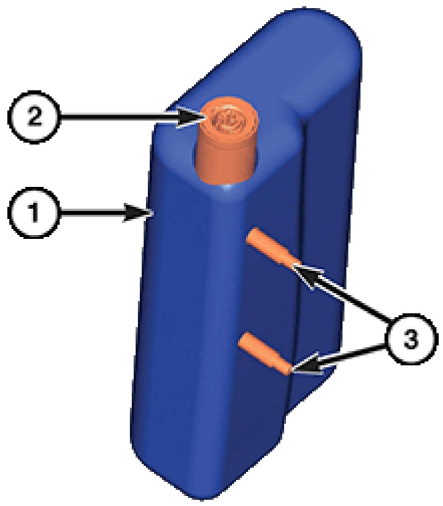
2018 Chrysler Pacifica

Description & Operation

DESCRIPTION AND OPERATION

DESCRIPTION

The Seat AirBags (SAB) are standard equipment on all models of this vehicle in North America except Mexico and export markets in which some models are not equipped with SAB. Vehicles with this equipment can be readily identified by a sewn tag with the **AIRBAG** logo located on the outboard side of the front seat back trim cover. These airbags are completely concealed beneath the seat back trim cover on the upper outboard sides of both front seat backs.



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The SAB (1) are secured to the seat back frame by nuts on two studs (3). The two studs are integral to the airbag inflator. The airbag cushion is constructed of a white coated nylon fabric.

The airbag inflator is a self-contained, single-initiator, non-azide, pyrotechnic-type unit that is secured to the seat back frame and sealed to the airbag cushion. The SAB is connected to the vehicle electrical system through a dedicated take out of the seat wire harness with a connector insulator that connects directly to the inflator initiator (2). The connector insulators are uniquely keyed and color-coded to ensure they can only be connected to the airbag initiator.

The SAB cannot be repaired, and must be replaced if deployed, ineffective, or in any way damaged. If the SAB is deployed, the seat back frame, the seat back foam cushion, the seat back trim cover and the seat airbag jumper wire harness must also be replaced.

OPERATION

Each SAB is deployed individually by an electrical signal generated by the Occupant Restraint Controller (ORC) to which it is connected through left or right SAB line 1 and line 2 (or squib) circuits. When the ORC sends the proper electrical signal to the pyrotechnic-type Micro Gas Generator (MGG) inflator, the electrical energy generates enough heat to initiate a small pyrotechnic charge which ignites chemical pellets within the inflator.

Once ignited, these chemical pellets burn rapidly and produce a large quantity of inert gas. The inflator is sealed to the SAB cushion and a diffuser in the inflator directs all of the inert gas into the folded SAB cushion, causing the cushion to inflate. As the cushion inflates it will split the outboard side of the seat back trim cover. The cushion expands into the area between the outboard side of the front seat and the front door, protecting the front seat occupant during a side impact collision.

Following the airbag deployment, the SAB cushion rapidly deflates by venting the inert gas through a vent hole in the cushion fabric, and the deflated cushion hangs down loosely from the outboard side of the front

seat back.

The ORC monitors the condition of the seat airbags through circuit resistance. If any fault is detected the ORC will illuminate the airbag indicator in the instrument cluster and store a Diagnostic Trouble Code (DTC). Proper diagnosis of the SAB inflator and squib circuits requires the use of a diagnostic scan tool and may also require the use of the SRS Load Tool special tool along with the appropriate Load Tool Jumpers and Adapters. Refer to the appropriate diagnostic information.