Driver Knee Airbag Installation

What is the driver knee airbag and how does it work?
The driver knee airbag is a part of the 4Front frontal collision protection system by IMMI -- the leading provider of advanced safety systems for fire apparatus. During a frontal crash, the knee airbag is inflated. The inflated knee airbag provides a cushion for the driver’s knees during a frontal impact.

Important Facts

PLEASE READ THIS ENTIRE GUIDE BEFORE INSTALLING THE DRIVER KNEE AIRBAG.

1. The driver knee airbag is to be used in a specific vehicle and seating position. Check the part number on the module to ensure correct application.

2. Always follow the vehicle manufacturer’s installation guide. Use this guide in addition to the vehicle manufacturer’s guide.

![Driver knee airbag location](image)

**WARNING**

DISCONNECT THE BATTERY

With battery disconnect in the OFF position, disconnect and isolate the battery negative cable before beginning knee airbag installation. Allow system capacitor to discharge for two minutes before beginning installation. Failure to disconnect the battery could result in accidental airbag deployment and could cause serious injury or death.

3. **DO NOT PUNCTURE, DRILL OR APPLY HEAT** to the driver knee airbag. This may result in accidental knee airbag deployment which could cause serious injury or death.

4. **DO NOT MOUNT ANYTHING NEAR** the driver knee airbag that could interfere with the inflation of the airbag. Obstructions to the airbag deployment could reduce the airbag’s effectiveness.

5. The driver knee airbag is only designed to activate once. If the driver knee airbag is activated or damaged, unit must be replaced by authorized personnel.

![Deployed](image)

**WARNING**

DO NOT APPLY HEAT

Temperatures over 150° C (257° F) could cause the unit to deploy. The deploying knee airbag could cause serious injury or death.
Unpacking the driver knee airbag

1. Remove unit from main carton. There are 2 units per carton. See Figure 1.

2. If parts need to be returned, they must be returned in the original packaging.

Product Identification

1. Locate the product identification labels on driver knee airbag system (A103303). See Figure 2.

2. Verify your unit is the proper part number for your configuration.

3. Scan or manually record unit serial number located on the product identification label. Retain this record for 20 years.

Electrical Connection, Installation, and Test

WARNING
DISCONNECT THE BATTERY
With battery disconnect in the OFF position, disconnect and isolate the battery negative cable before beginning driver knee airbag installation. Allow system capacitor to discharge to two minutes before beginning installation. Failure to disconnect the battery could result in accidental airbag deployment and could cause serious injury or death.

1. With the vehicle battery OFF, make connection between the vehicle wiring harness and the driver knee airbag. See Figure 3.

2. Verify that the electrical connectors are latched together.

3. Position the driver knee airbag assembly with the inflator located at the bottom right corner and positioned toward the instrument panel (Figure 4).

4. Interlock the center upper tabs (Figure 4) to the existing steering column bracketry; assuring that the tabs of the airbag assembly are located behind the steering column brackets. Align the two holes at the bottom of the airbag assembly (Figure 5) with the two 3/8-16 J-nuts which are attached to the steering column bracketry.

5. Secure the driver knee airbag to the steering column brackets with two 3/8-16 x 3/4 long socket head cap screws, torqued to 27-30 lbf.

6. EXIT VEHICLE AND ENSURE NO ONE IS IN VEHICLE AND EVERYONE IS CLEAR OF OCCUPANT PROTECTIVE DEVICES.

7. After verifying that no one is in vehicle, connect the battery negative terminal cable. Turn the battery disconnect switch to the ON position.

8. Lower vehicle side window and turn ignition key/vehicle switch to ON position.

9. The warning light on the dashboard should illuminate and then go out within 6-10 seconds.