



# RE11

## Seat Belt, Motorized

**Uniform  
Procedures For  
Collision Repair  
UPCR**

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v.4.0



### 1. Description

This procedure describes methods for the replacement, inspection, and testing of motorized seat belt systems.



### 2. Purpose

The purpose of this procedure is to provide industry-accepted requirements for performing high-quality repair of motorized seat belt systems. This procedure is intended for use by professionals who are qualified through training and experience.



## 3. Referenced Documents

The following documents are considered part of this procedure by reference.

### 3.1 Procedures

- EL01 Wire Repair
- EL11 Troubleshooting
- EL21 Self-Diagnostics
- ME01 Three-Dimensional Measuring
- PS01 Personnel Safety
- RE01 Seat Belt
- RE41 Knee Bolster

### 3.2 Other Information

- Equipment-specific information
- Vehicle-specific diagnostic information
- Vehicle-specific repair information



## 4. Equipment And Material Requirements

### 4.1 Electronic Equipment

The use of this equipment is included in this procedure:

- digital volt-ohm meter (DVOM)
- universal or vehicle-specific scan tool
- universal or vehicle-specific breakout box



## 5. Damage Analysis

### 5.1 General Damage

Inspect motorized seat belt parts for these types of damage:

- damaged drive belt or cable
- visible damage to the drive track or cable housing
- damaged knee bolster, if equipped (see **RE41**)
- damaged or non-functioning buckles (see **RE01**)
- damaged or non-functioning retractor (see **RE01**)
- worn, torn, or deformed seat belt webbing (see **RE01**)

Replace damaged or non-functioning parts as required. Determine which seat belts were in use during the collision. Some vehicle makers require replacement of all seat belts in use during a collision of specified severity. Follow the vehicle maker's recommendations.

### 5.2 Electrical Parts

Inspect motorized seat belt electrical parts for these types of damage:

- blown fuses
- cut, pinched, or corroded wiring harness
- damaged or binding drive motor
- damaged switches
- loose or corroded grounds or connectors
- damaged control module
- dash lamp that stays lit after self-test

If electrical parts do not function correctly, troubleshoot the motorized seat belt circuits to isolate the cause. See **EL11**. See **EL21** for troubleshooting self-diagnostic systems. Determine the parts to be replaced and the wiring to be repaired. See **EL01** for wire repair procedures.

On some vehicles, the motorized seat belt assemblies are part of the inertia-switch circuit. Reset the switch to restore power.



## 6. Personnel Safety

### 6.1 General Safety

General safety information is in **PS01**.



## 7. Environmental Safety

Does not apply.



## 8. Vehicle Protection

### 8.1 Drive-Track Assembly

To prevent damage to the drive-track assembly:

- Make sure upperbody dimensions are restored before using or attempting repairs.
- Avoid twisting the track.
- Avoid the use of shims for alignment.
- Follow the vehicle maker's torque recommendations and sequence for fasteners.
- Lubricate the track using a Teflon™ type lubricant. Do not allow the lubricant to contact trim or seat belt webbing.
- Keep the assembly free of dirt.



## 9. Repair Procedure

Do not attempt to repair damaged tracks or retractors.

### 9.1 Removal

Refer to the vehicle maker's recommendations for fastener sequences and other specific replacement information. To remove a motorized seat belt assembly:

1. Disconnect and isolate the negative battery terminal.
2. Remove seats and trim panels for access, if necessary.
3. Make sure the shoulder belt is in the correct position.
4. Remove the seat belt mounting fasteners.
5. Remove the drive track.
6. Remove the motor and drive assembly.

**(cont'd)**



## 9. Repair Procedure (cont'd)

### 9.2 Installation

To install a motorized seat belt assembly:

- 1. Install the motor and drive assembly. Use thread-locking lubricants if applicable. Torque the fasteners to the vehicle maker's recommendations.
- 2. Install the drive track. Lubricate the track, if required. Make sure that the webbing is not twisted and properly routed.
- 3. Reinstall the seat belt mounting fasteners. Torque the fasteners to the vehicle maker's recommendations.
- 4. Reinstall trim panels and seats.
- 5. Reconnect the battery.
- 6. Check for normal operation. See 11.1.



## 10. Use Of Recycled (Salvage) Parts

Do not use salvage motorized seat belt parts, such as drive tracks and motors, that show visible damage or wear.

Do not use salvage seat belt webbing, buckles, or mounting fasteners.



## 11. Inspection And Testing

### 11.1 Proper Operation

To verify proper operation of a motorized seat belt system:

- Check to see that the belts are in the forward position with the ignition switch OFF and the doors open.
- Check to see that the belts travel rearward when the doors are closed and the ignition switch is ON.
- Make sure the dash lamp lights and then goes out.

Correct any defects.