



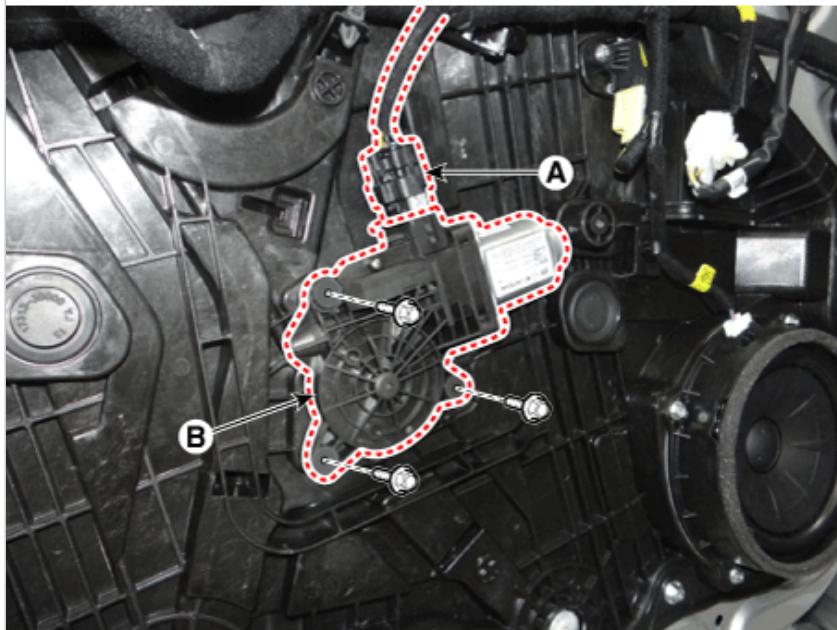
## Removal

### ▲ CAUTION

- When removing with a flat-tip screwdriver or remover, wrap protective tape around the tools to prevent damage to components.
- When removing the interior trim pieces, use a plastic panel removal tool not to damage the surface.
- Be careful to store and handle the trim when removing/installing because lubricant and oil can leave a stain on the trim.

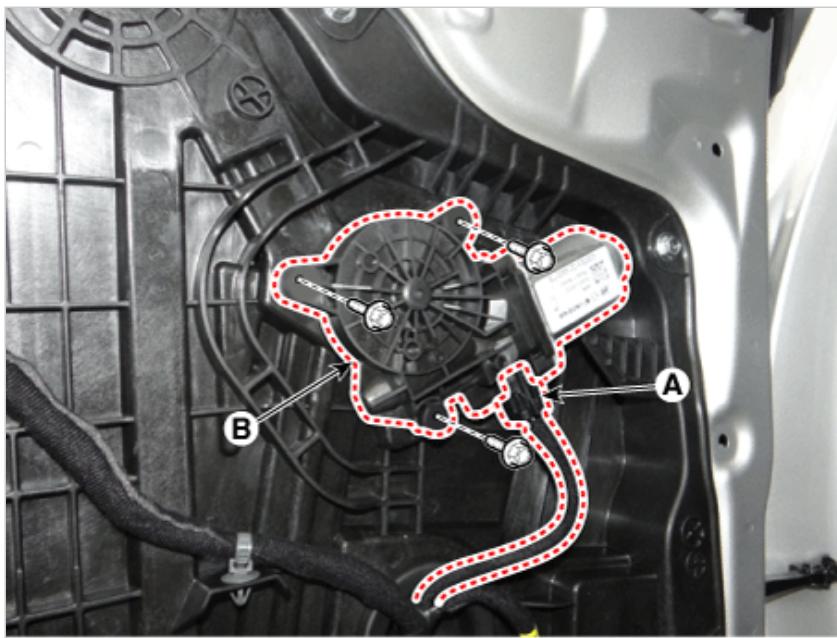
## Front Power Window Motor

1. Disconnect the negative (-) battery terminal.
2. Remove the front door trim.  
**(Refer to Body - "Front Door Trim")**
3. Disconnect the front power window motor connector (A).
4. Remove the front power window motor (B) after loosening the mounting bolts.



## Rear Power Window Motor

1. Disconnect the negative (-) battery terminal.
2. Remove the rear door trim.  
**(Refer to Body - "Rear Door Trim")**
3. Disconnect the rear power window motor connector (A).
4. Remove the rear power window motor (B) after loosening the mounting bolts.



## Installation

### Front Power Window Motor

1. Install the front power window motor.
2. Connect the front power window motor connector.
3. Install the front door trim.
4. Connect the negative (-) battery terminal.

### Rear Power Window Motor

1. Install the rear power window motor.
2. Connect the rear power window motor connector.
3. Install the rear door trim.
4. Connect the negative (-) battery terminal.

## Inspection

### [Safety Window Motor]

#### Diagnosis With KDS

1. In the body electrical system, failure can be quickly diagnosed by using the vehicle diagnostic system (KDS).
  - (1) Self diagnosis : Checking failure and code number (DTC)
  - (2) Current data : Checking the system input/output data state
  - (3) Actuation test : Checking the system operation condition
  - (4) Additional function : Controlling other features including system option setting and zero point adjustment
2. Select the "Car model" and the system to be checked in order to check the vehicle with the tester.
3. Select the "Driver seat or Assistant seat door module (DDM/ADM)" to check the driver seat or assistant door module (DDM/ADM).
4. Select the "Current Data" menu to search the current state of the input/output data.
 

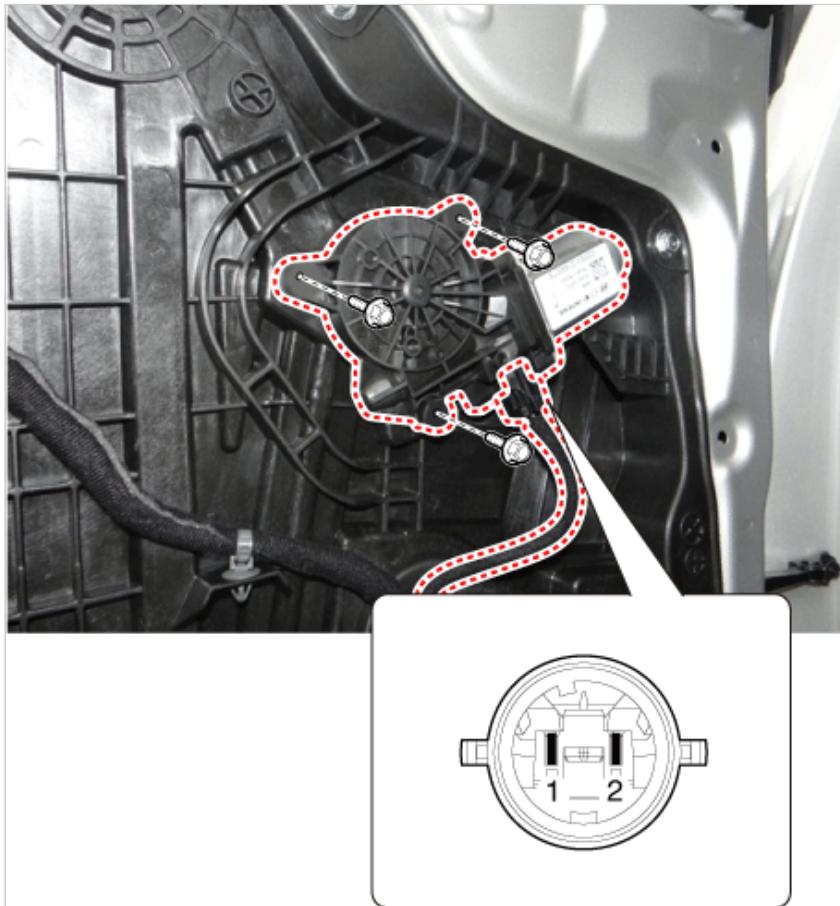
The input/output data for the sensors corresponding to the driver seat or assistant door module(DDM/ADM) can be checked.
5. To check the power window motor operation by force, select "Actuation test".

### [Standard Window Motor]

1. Disconnect the negative (-) battery terminal.
2. Remove the rear door trim.

(Refer to Body - "Rear Door Trim")

3. Disconnect the motor connector (A) from the motor.



4. Connect the motor terminals directly to battery voltage (12V) and check that the motor operates smoothly. Next, reverse the polarity and check that the motor operates smoothly in the reverse direction. If the operation is abnormal, replace the motor.

Position		Terminal	1	2
Left	Up	Clockwise	⊕	⊖
	Down	Counter-clockwise	⊖	⊕
Right	Up	Counter-clockwise	⊕	⊖
	Down	Clockwise	⊖	⊕