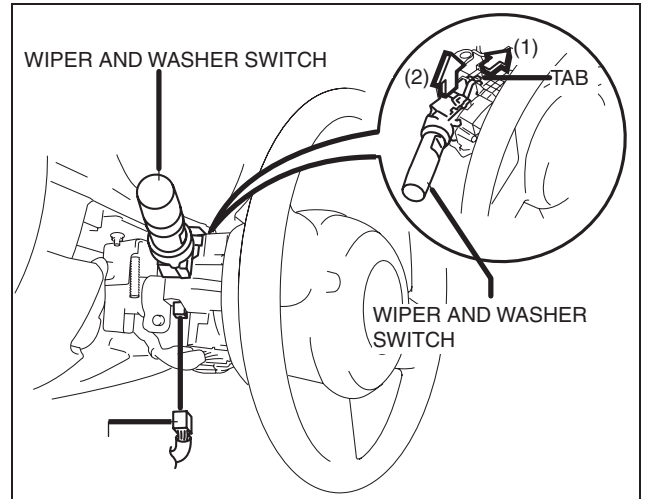


WIPER/WASHER SYSTEM

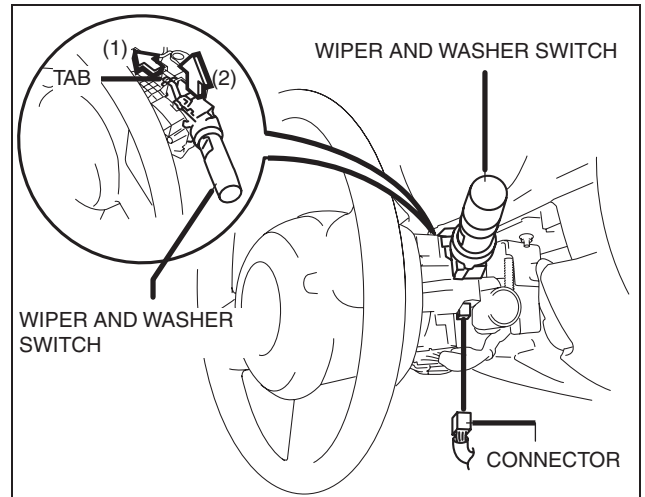
3. Disconnect the connector.
4. Release the tab in the direction of the arrow (1) shown in the figure, pull up the wiper and washer switch in the direction of the arrow (2), and remove it.
5. Install in the reverse order of removal.



adejjw00002490

Vehicles With Wiper and Washer Switch on Right Side

1. Disconnect the negative battery cable.
2. Remove the column cover. (See 09-17-25 COLUMN COVER REMOVAL/INSTALLATION.)
3. Disconnect the connector.
4. Release the tab in the direction of the arrow (1) shown in the figure, pull up the wiper and washer switch in the direction of the arrow (2), and remove it.
5. Install in the reverse order of removal.



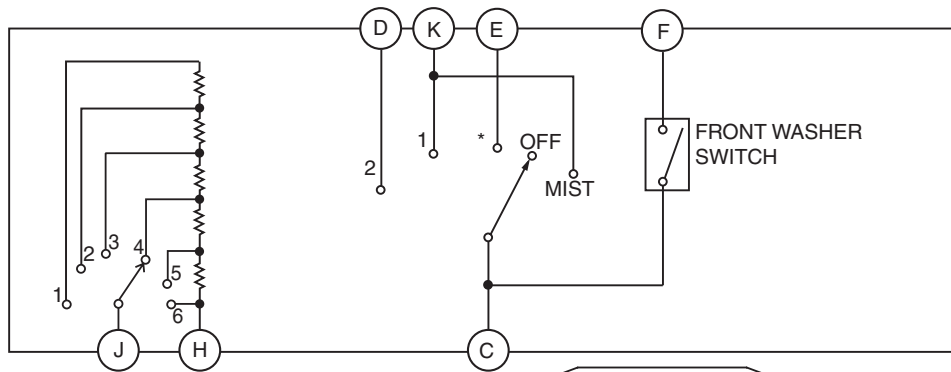
am2zzw0000050

WINDSHIELD WIPER AND WASHER SWITCH INSPECTION

id091900910400

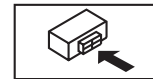
1. Disconnect the negative battery cable.
2. Remove the column cover. (See 09-17-25 COLUMN COVER REMOVAL/INSTALLATION.)
3. Remove the wiper and washer switch. (See 09-19-24 WIPER AND WASHER SWITCH REMOVAL/INSTALLATION.)
4. Verify that the resistance and continuity between the windshield wiper and washer switch terminals as indicated in the table.
 - If the continuity is not as indicated in the table, or if the resistance is not within the specification, replace the windshield wiper and washer switch.

Vehicles With Wiper and Washer Switch on Left Side



- * VEHICLES WITH AUTO LIGHT• WIPER SYSTEM• AUTO
- VEHICLES WITHOUT AUTO LIGHT• WIPER SYSTEM• INT














K	*	*	E	C	*
*	J	H	F	D	*



am2zzw0000226

SWITCH POSITION		TERMINAL				
		C	D	E	F	K
WINDSHIELD WIPER SWITCH	OFF					
	MIST	○	○			
	AUTO/INT	○	○			
	1	○	○			
	2	○	○			
WINDSHIELD WASHER SWITCH	ON	○	○			

am2zzw0000226

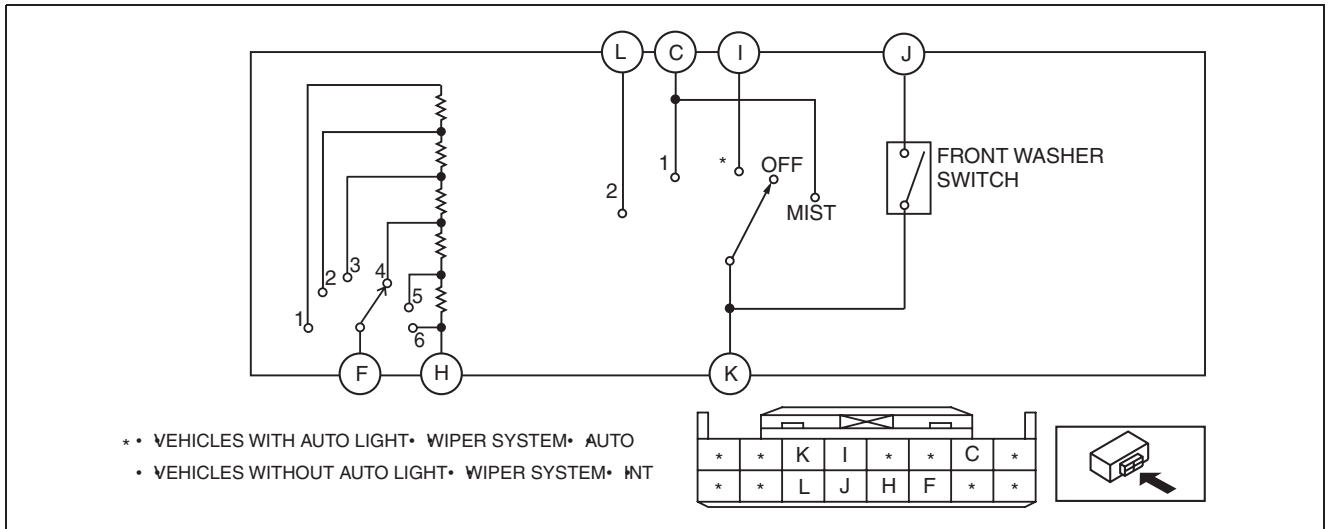
 : RESISTANCE		
SWITCH POSITION	TERMINAL	
	J	H
1		
2		
3		
4		
5		
6		

R ₁ : 4010 • •	R ₄ : 300 • •
R ₂ : 1310 • •	R ₅ : 120 • •
R ₃ : 630 • •	

am2zzw0000226

WIPER/WASHER SYSTEM

Vehicles With Wiper and Washer Switch on Right Side



am2zzw0000038

○—○ : CONTINUITY

SWITCH POSITION		TERMINAL				
		C	I	J	K	L
WINDSHIELD WIPER SWITCH	OFF					
	MIST	○	—	○		
	AUTO/INT		○	—	○	
	1	○	—	○		
	2				○	○
WINDSHIELD WASHER SWITCH	ON			○	○	

am2zzw0000038

○—○ : RESISTANCE

SWITCH POSITION	TERMINAL	
	F	H
1	○	○ R ₁
2	○	○ R ₂
3	○	○ R ₃
4	○	○ R ₄
5	○	○ R ₅
6	○	○

R₁: 4010 • • R₄: 300 • •
R₂: 1310 • • R₅: 120 • •
R₃: 630 • •

am2zzw0000038

REAR WIPER AND WASHER SWITCH INSPECTION

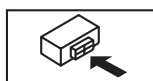
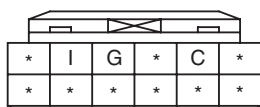
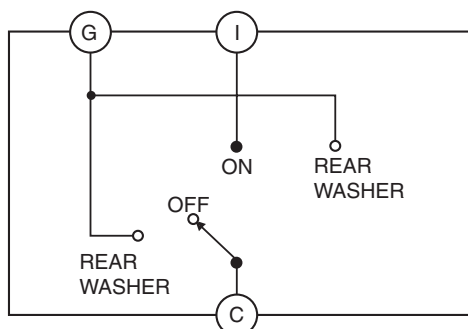
id091900910500

1. Disconnect the negative battery cable.
2. Remove the column cover. (See 09-17-25 COLUMN COVER REMOVAL/INSTALLATION.)
3. Remove the wiper and washer switch. (See 09-19-24 WIPER AND WASHER SWITCH REMOVAL/INSTALLATION.)
4. Verify that the continuity between the rear wiper and washer switch terminals is as indicated in the table.

WIPER/WASHER SYSTEM

- If not as indicated in the table, replace the wiper and washer switch.

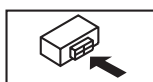
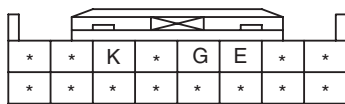
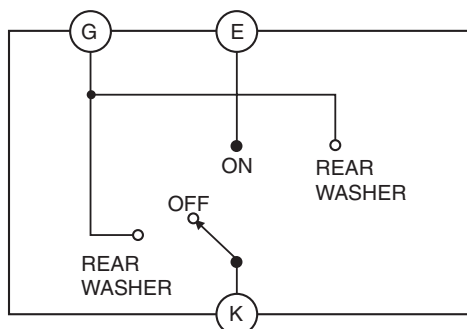
VEHICLES WITH WIPER AND WASHER SWITCH ON LEFT SIDE



○—○ : CONTINUITY

SWITCH POSITION		TERMINAL		
		C	G	I
REAR WIPER SWITCH	OFF			
	ON	○—○		
REAR WIPER AND WASHER SWITCH	ON	○—○		

VEHICLES WITH WIPER AND WASHER SWITCH ON RIGHT SIDE



○—○ : CONTINUITY

SWITCH POSITION		TERMINAL		
		E	G	K
REAR WIPER SWITCH	OFF			
	ON	○—○		
REAR WIPER AND WASHER SWITCH	ON		○—○	

am2zzw0000431

RAIN SENSOR REMOVAL/INSTALLATION

id091900474200

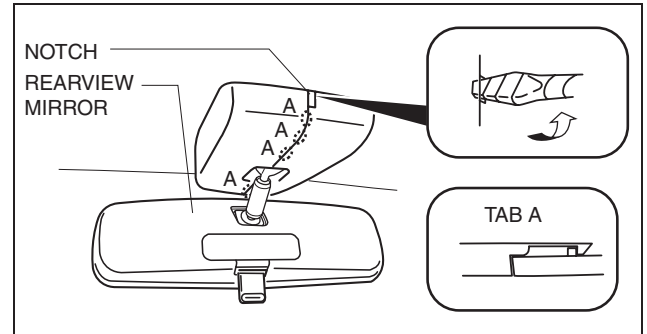
Caution

- The reflection rate at the moment the ignition switch is first turned to the ON position after replacing the rain sensor with a new one is stored as the condition indicating no precipitation on the windshield. Therefore, remove water and dirt from the windshield before turning on the ignition switch.
- Perform the rain sensor initialization in the following cases: (See 09-19-31 RAIN SENSOR INITIAL SETTING.)
 - The windshield is replaced and the rain sensor is reused
 - The auto wiper system operates incorrectly

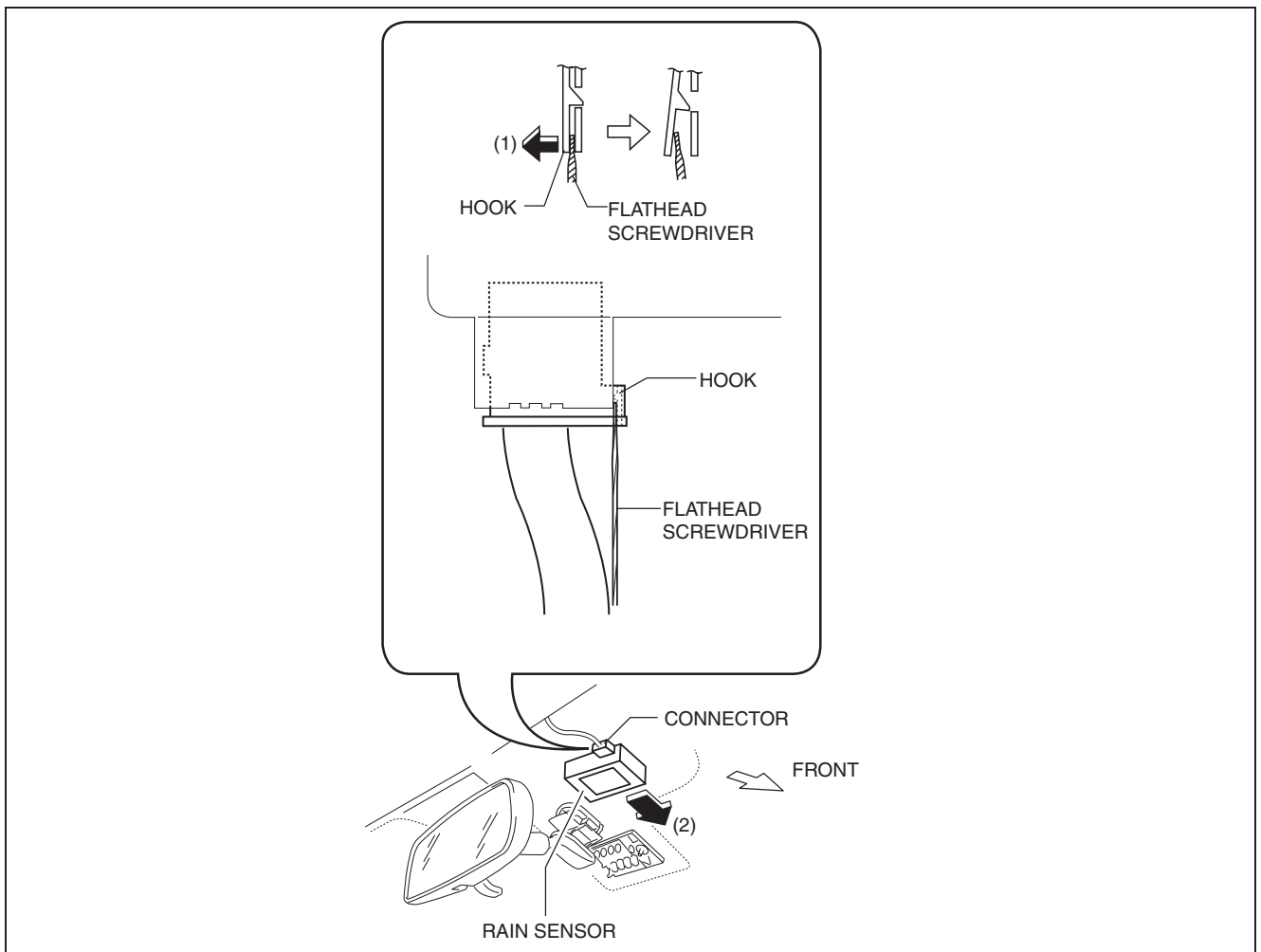
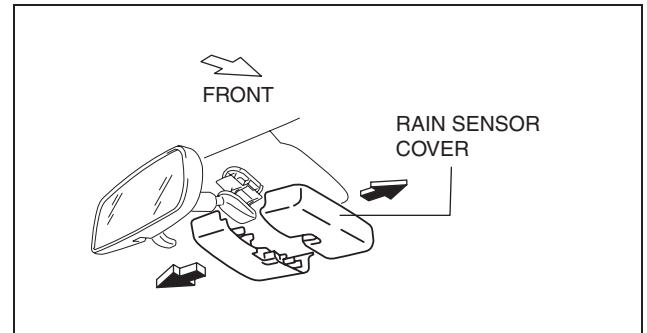
1. Disconnect the negative battery cable.

WIPER/WASHER SYSTEM

2. Insert a tape-wrapped flathead screwdriver into the notch on the rain sensor cover, turn it in the direction of the arrow shown in the figure, and detach the tab A.



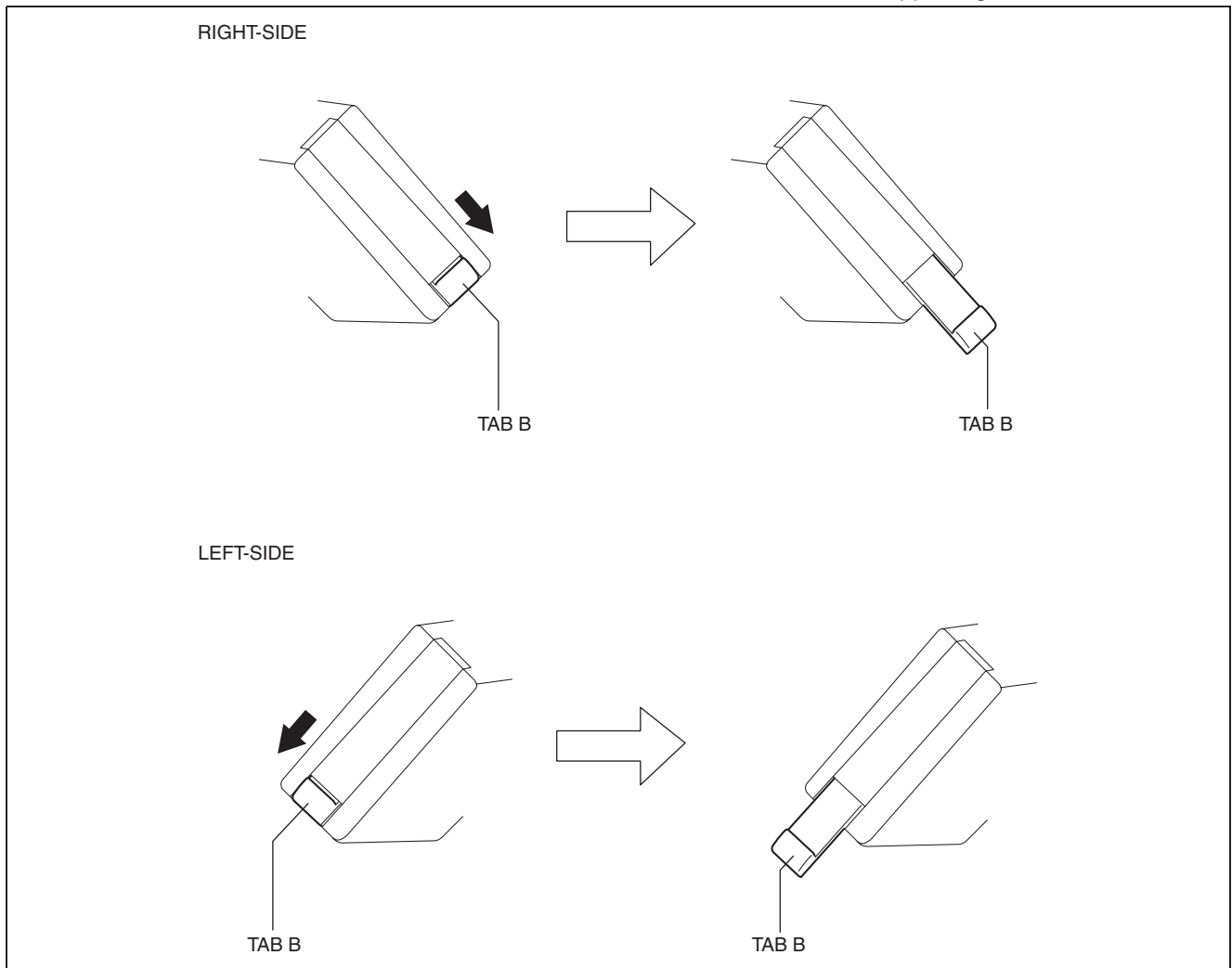
3. Remove the rain sensor cover in the direction shown in the figure.
4. Disconnect the rain sensor connector.



am2zzw0000363

WIPER/WASHER SYSTEM

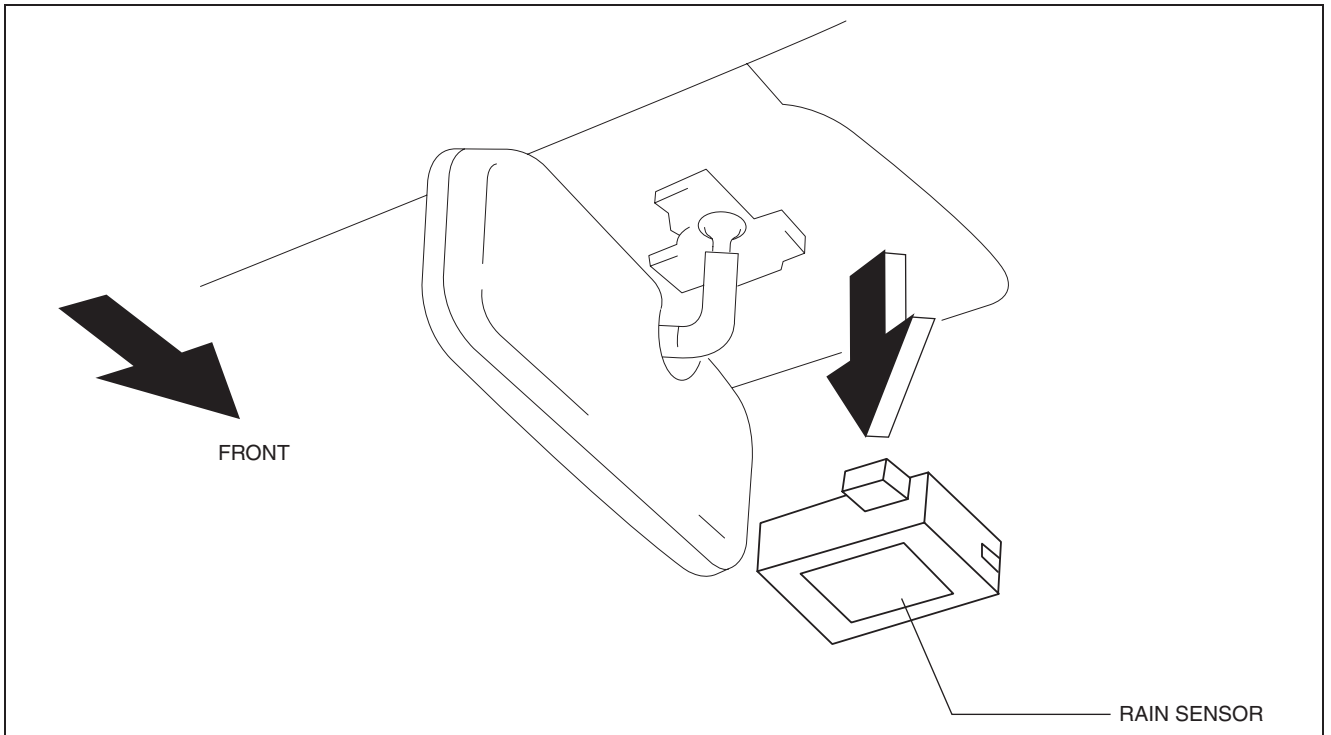
5. Slide the tab B in the direction of the arrow and remove the rain sensor while supporting it with the hand.



am2zzw0000262

WIPER/WASHER SYSTEM

6. Remove the rain sensor in the direction of the arrow shown in the figure.



am2zzw0000262

7. Install in the reverse order of removal.

RAIN SENSOR INITIAL SETTING

id091900474300

Caution

- Rain sensor initialization is performed when it is newly replaced and when its previously programmed setting is modified due to the reflection rate change caused by the replacement of the windshield.

Rain Sensor Initialization

- The reflection rate at the moment the ignition switch is first turned to the ON position after replacing the rain sensor with a new one is stored as the condition indicating no precipitation on the windshield. Therefore, remove water and dirt from the windshield before turning on the ignition switch.

Rain Sensor Re-initialization

1. Remove water and dirt from the windshield surface.
2. Turn the ignition switch off.
3. Move the windshield wiper switch to the AUTO position.
4. Perform the windshield wiper switch operation (AUTO→OFF→AUTO) five times within 10 s after turning the ignition switch to the ON position. The windshield wiper will operate once at low speed when the reinitialization setting is performed correctly.

Caution

- If the operation is too fast, the windshield wiper switch position cannot be detected and the initialization may not be performed. Operate the windshield wiper switch one cycle every 1 s.

09-20 ENTERTAINMENT

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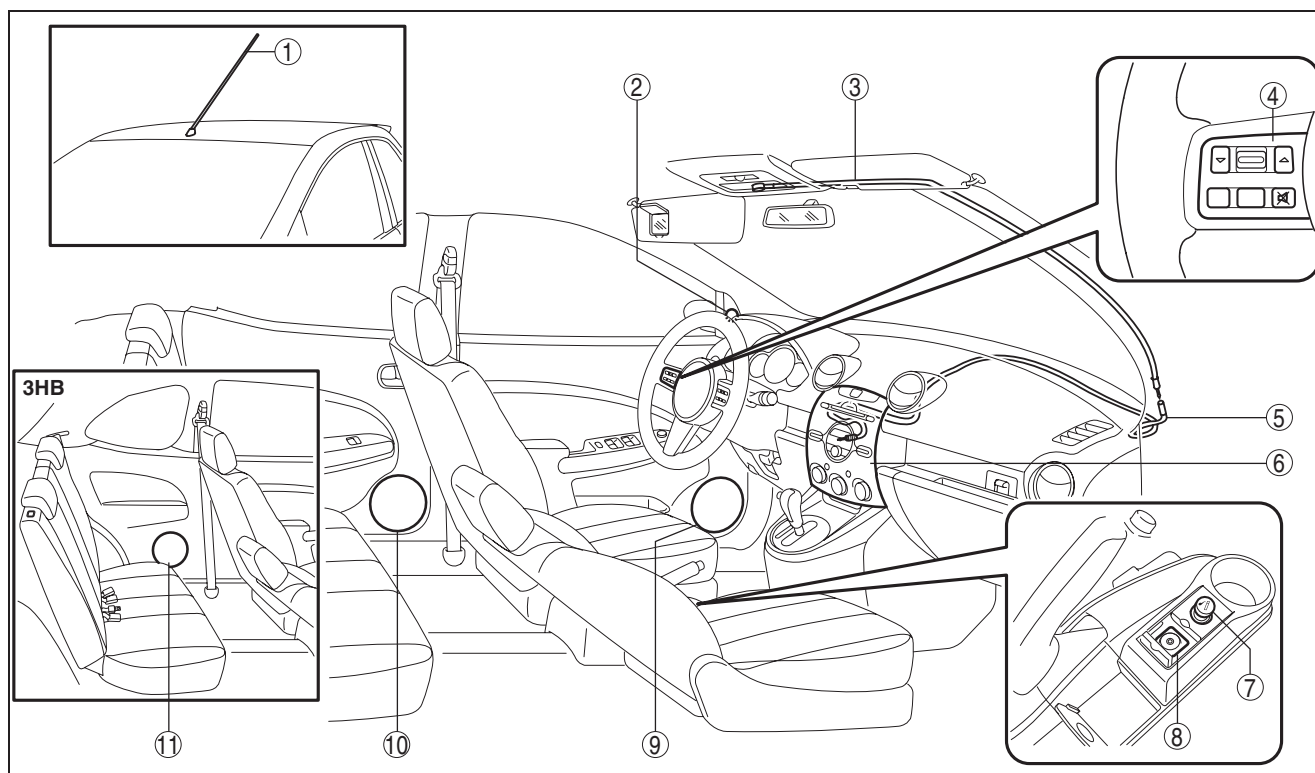
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ENTERTAINMENT

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id092000800100



am2zzw0000328

1	Center roof antenna (See 09-20-13 CENTER ROOF ANTENNA REMOVAL/INSTALLATION.) (See 09-20-15 CENTER ROOF ANTENNA INSPECTION.)
2	Tweeter (See 09-20-12 TWEETER REMOVAL/INSTALLATION.) (See 09-20-12 TWEETER INSPECTION.)
3	Antenna feeder No.2 (See 09-20-16 ANTENNA FEEDER LOCATION.) (See 09-20-20 ANTENNA FEEDER NO.2 REMOVAL/INSTALLATION.) (See 09-20-21 ANTENNA FEEDER NO.2 INSPECTION.)
4	Audio control switch (See 09-20-23 AUDIO CONTROL SWITCH REMOVAL/INSTALLATION.) (See 09-20-24 AUDIO CONTROL SWITCH INSPECTION.)
5	Antenna feeder No.1 (See 09-20-16 ANTENNA FEEDER LOCATION.) (See 09-20-17 ANTENNA FEEDER NO.1 REMOVAL/INSTALLATION.) (See 09-20-19 ANTENNA FEEDER NO.1 INSPECTION.)
6	Center panel unit (See 09-20-3 CENTER PANEL UNIT REMOVAL/INSTALLATION.) (See 09-20-4 CENTER PANEL UNIT DISASSEMBLY/ASSEMBLY.)

7	Accessory socket (See 09-20-25 ACCESSORY SOCKET REMOVAL/INSTALLATION.) (See 09-20-27 ACCESSORY SOCKET INSPECTION.)
	Cigarette lighter (See 09-20-29 CIGARETTE LIGHTER REMOVAL/INSTALLATION.) (See 09-20-30 CIGARETTE LIGHTER INSPECTION.)
8	Auxiliary jack (See 09-20-27 AUXILIARY JACK REMOVAL/INSTALLATION.) (See 09-20-27 AUXILIARY JACK INSPECTION.)
9	Front door speaker (See 09-20-6 FRONT DOOR SPEAKER REMOVAL/INSTALLATION.) (See 09-20-7 FRONT DOOR SPEAKER INSPECTION.)
10	Rear door speaker (See 09-20-8 REAR DOOR SPEAKER REMOVAL/INSTALLATION.) (See 09-20-9 REAR DOOR SPEAKER INSPECTION.)
11	Rear speaker (3HB) (See 09-20-10 REAR SPEAKER REMOVAL/INSTALLATION [3HB].) (See 09-20-11 REAR SPEAKER INSPECTION [3HB].)

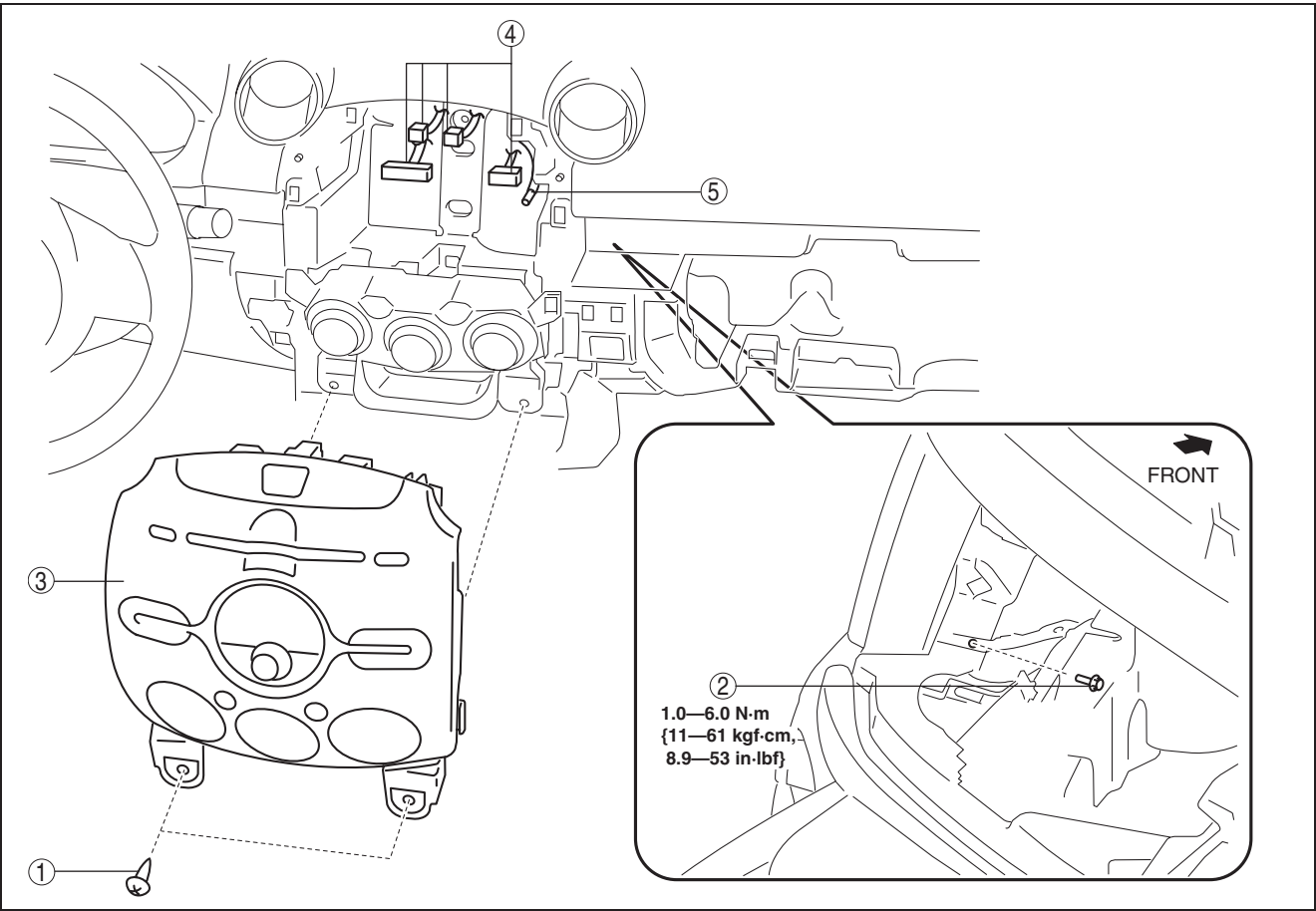
CENTER PANEL UNIT REMOVAL/INSTALLATION

id092000800600

1. Disconnect the negative battery cable.
2. Remove the following parts:
 - (1) Shift lever knob (MTX) (See 05-16A-1 MANUAL TRANSAXLE SHIFT MECHANISM REMOVAL/INSTALLATION [F35M-R].) (See 05-16B-2 MANUAL TRANSAXLE SHIFT MECHANISM REMOVAL/INSTALLATION [B65M-R].)
 - (2) Side wall (See 09-17-33 SIDE WALL REMOVAL/INSTALLATION.)
 - (3) Front console component (See 09-17-36 FRONT CONSOLE COMPONENT REMOVAL/INSTALLATION.)
 - (4) Glove compartment (See 09-17-26 GLOVE COMPARTMENT REMOVAL/INSTALLATION.)
3. Remove in the order indicated in the table.
4. Install in the reverse order of removal.

Caution

- If the wiring harness or the antenna feeder is caught between the center panel unit and dashboard, it could cause a malfunction. When installing the center panel unit, make sure that the wiring harness and antenna feeders are not caught between the center panel unit and dashboard.



am2zzw0000030

1	Screw
2	Bolt
3	Center panel unit (See 09-20-4 Center Panel Unit Removal Note.)

4	Connector
5	Antenna feeder plug

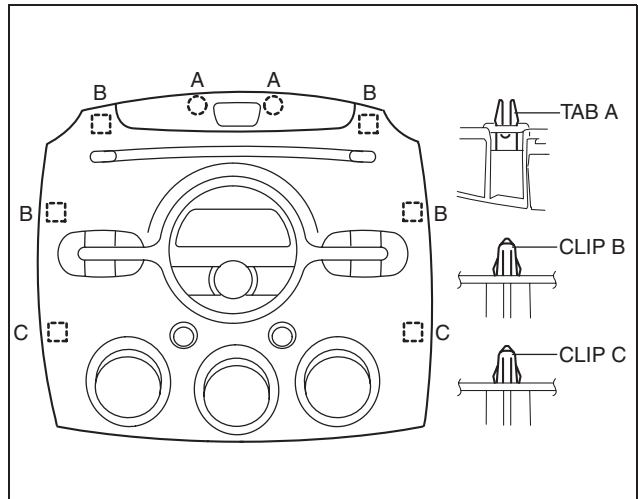
ENTERTAINMENT

Center Panel Unit Removal Note

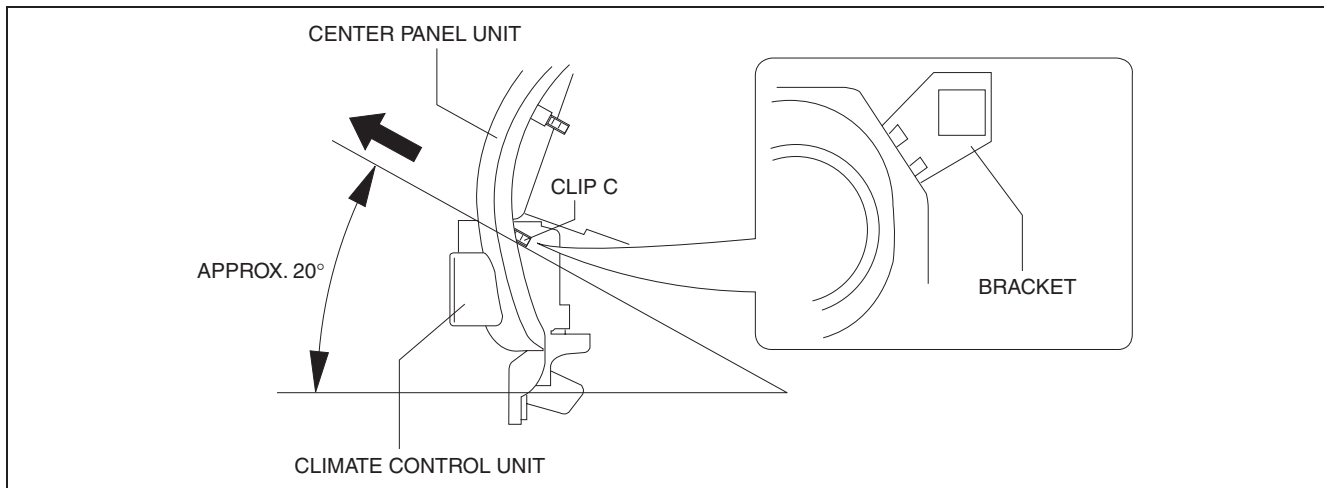
1. Remove the center panel unit tabs A and clips B, C from the dashboard.

Caution

- When the center panel unit is removed, clips C could interfere with the climate control unit bracket and cause damage. Pull the center panel unit in the direction of the arrow shown in the figure (upward at a approx. 20 °angle) when removing it.



am2zzw0000277



am2zzw0000318

CENTER PANEL UNIT DISASSEMBLY/ASSEMBLY

id092000800700

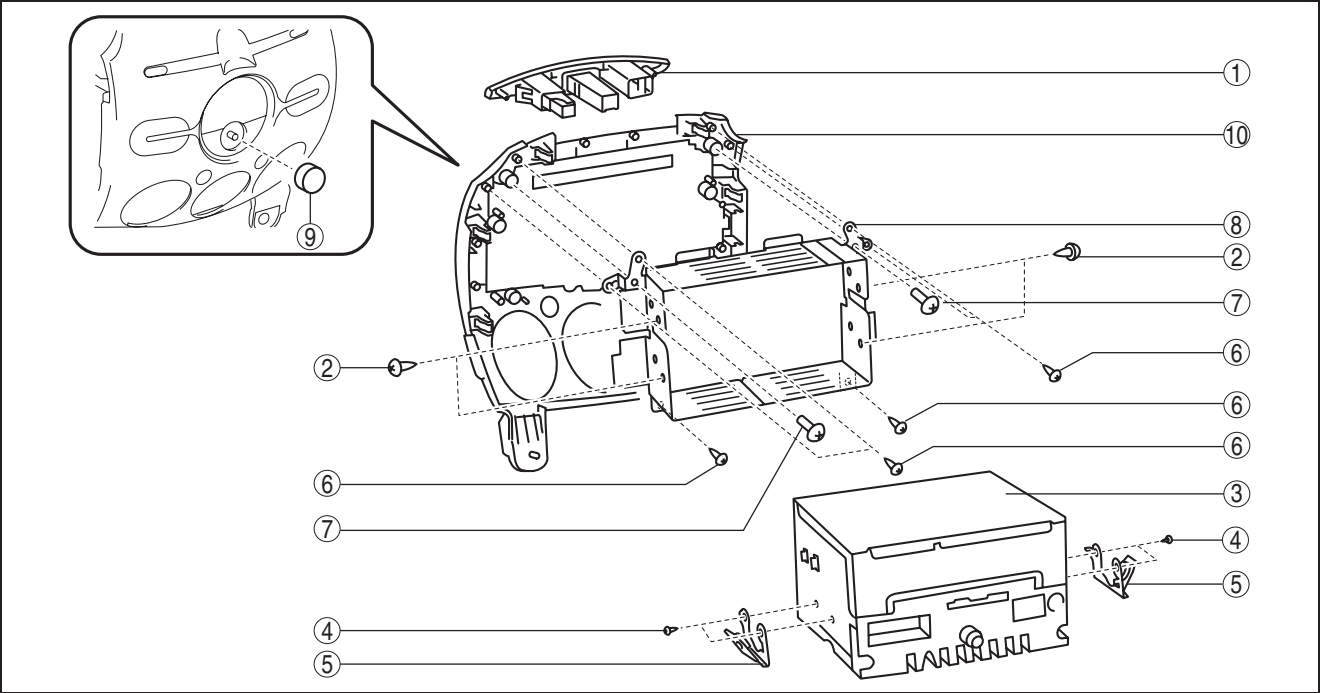
Note

- When disassembling the center panel unit, it could get scratched if it is placed directly on the ground. When disassembling the center panel unit, spread a soft cloth underneath to perform the work.

1. Disassemble in the order indicated in the figure.

ENTERTAINMENT

2. Assemble in the reverse order of disassembly.



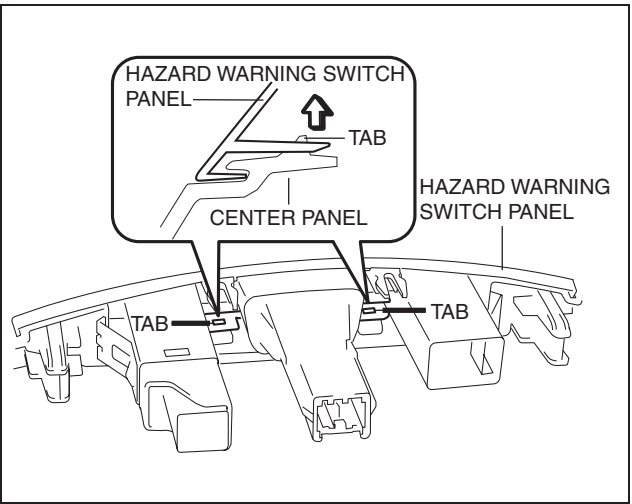
am2zzw0000331

1	Hazard warning switch panel (See 09-20-5 Hazard Warning Switch Panel Removal Note.)
2	Screw
3	Audio unit
4	Screw
5	Bracket A

6	Screw
7	Screw
8	Bracket B
9	Knob
10	Center panel

Hazard Warning Switch Panel Removal Note

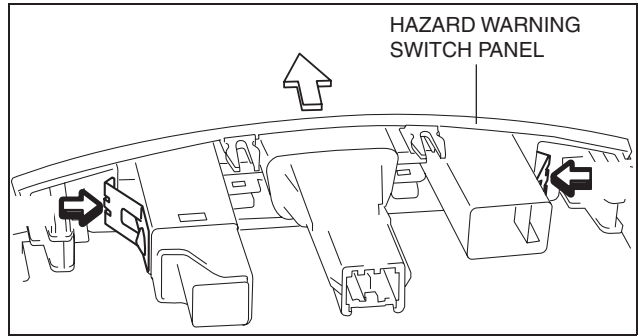
1. Press the hazard warning switch panel upward in the direction of the arrow shown in the figure using a tape-wrapped fastener remover while avoiding the center panel tabs.



am2zzw0000039

ENTERTAINMENT

2. Remove the hazard warning switch panel in the direction of the arrow (2) shown in the figure while pressing the hazard warning switch panel clips indicated by the arrow (1).



am2zzw0000039

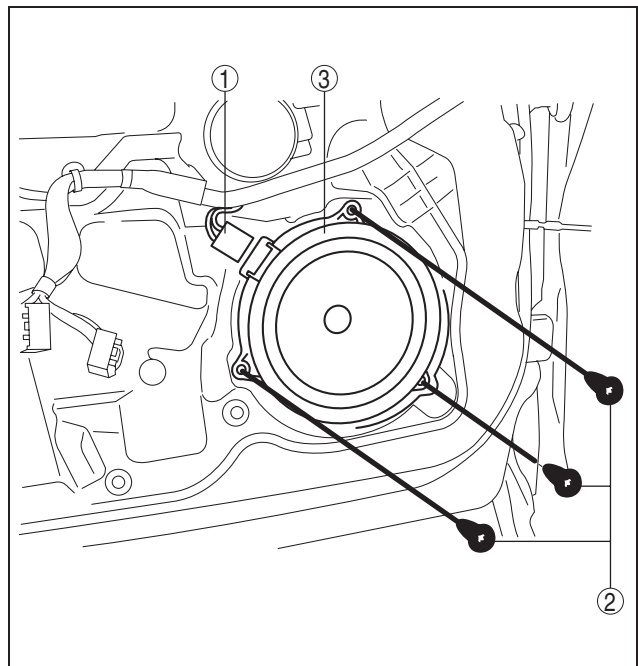
FRONT DOOR SPEAKER REMOVAL/INSTALLATION

id092000802200

1. Disconnect the negative battery cable.
2. Remove the inner garnish. (See 09-17-34 INNER GARNISH REMOVAL/INSTALLATION.)
3. Remove the front door trim. (See 09-17-58 FRONT DOOR TRIM REMOVAL/INSTALLATION.)
4. Remove in the order indicated in the table.

1	Connector
2	Screw
3	Front door speaker (See 09-20-7 Front Door Speaker Removal Note.)

5. Install in the reverse order of removal.

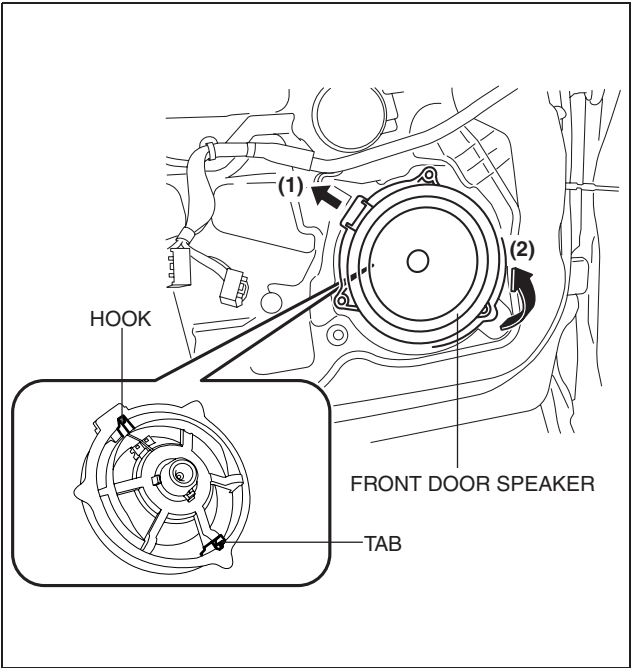


am2zzw0000029

ENTERTAINMENT

Front Door Speaker Removal Note

1. Remove the front door speaker in the direction of the arrow shown in the figure.

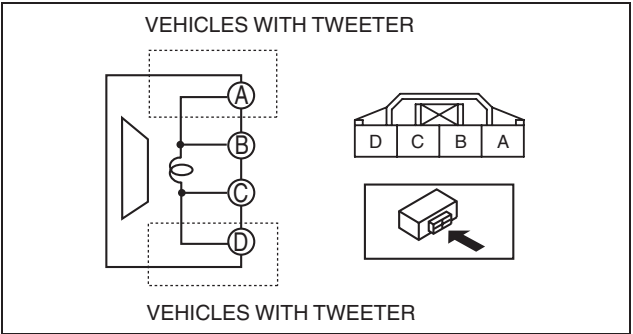


am2zzw0000035

FRONT DOOR SPEAKER INSPECTION

id092000802300

1. Disconnect the negative battery cable.
2. Remove the inner garnish. (See 09-17-34 INNER GARNISH REMOVAL/INSTALLATION.)
3. Remove the front door trim. (See 09-17-58 FRONT DOOR TRIM REMOVAL/INSTALLATION.)
4. Remove the front door speaker. (See 09-20-6 FRONT DOOR SPEAKER REMOVAL/INSTALLATION.)
5. Verify the resistance between the front door speaker terminals.



am2zzw0000035

- If not within the specification, replace the front door speaker.

Resistance
3.4—4.6 ohms

6. Have a 1.5 V battery ready.

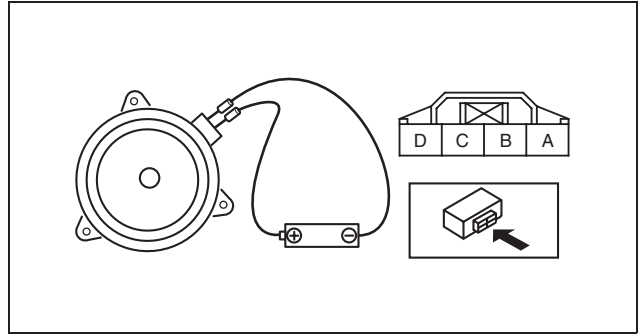
Resistance				
Test condition	Terminal			
	A	B	C	D
Under any condition	○	○	○	○ *

*: VEHICLES WITH TWEETER

am2zzw0000035

ENTERTAINMENT

7. Connect the battery positive (+) pole to front door speaker terminal C, and the negative (-) pole to terminal B.
8. Verify that sound is output from the front door speaker.
 - If sound is not output, replace the front door speaker.



adejjw00004089

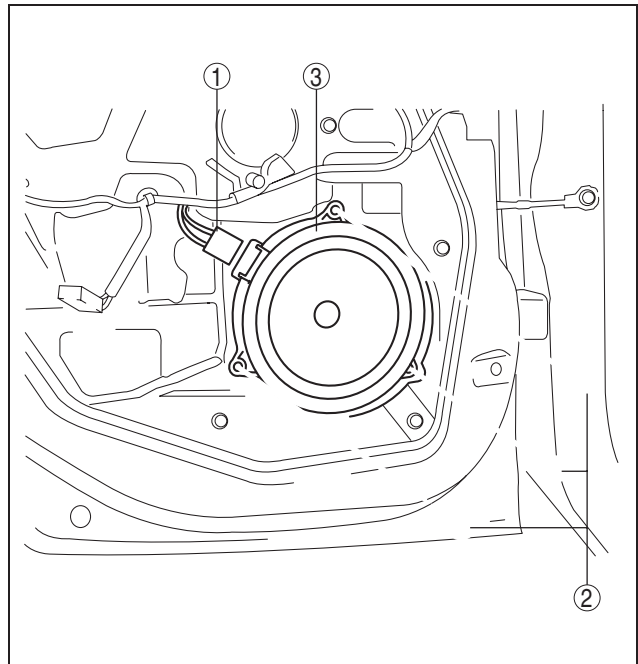
REAR DOOR SPEAKER REMOVAL/INSTALLATION

id092000805000

1. Disconnect the negative battery cable.
2. Remove the sail inner garnish. (See 09-17-53 SAIL INNER GARNISH REMOVAL/INSTALLATION.)
3. Remove the rear door trim. (See 09-17-65 REAR DOOR TRIM REMOVAL/INSTALLATION.)
4. Remove in the order indicated in the table.

1	Connector
2	Screw
3	Rear door speaker (See 09-20-9 Rear Door Speaker Removal Note.)

5. Install in the reverse order of removal.

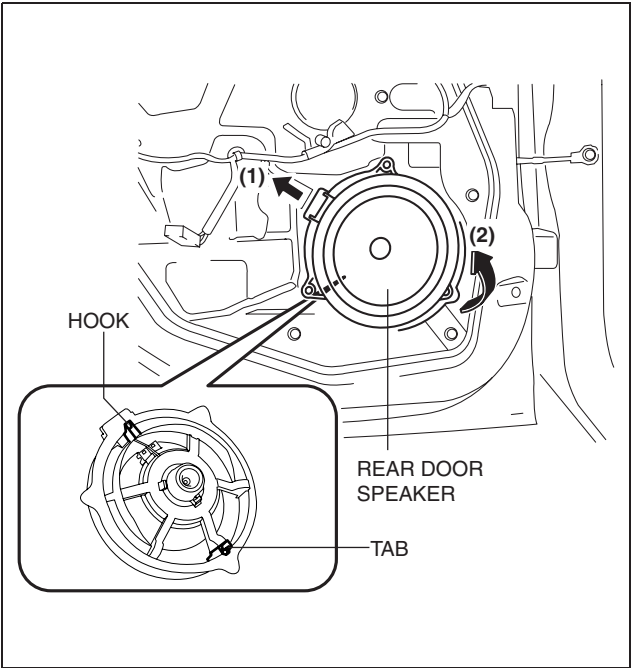


am2zzw0000029

ENTERTAINMENT

Rear Door Speaker Removal Note

1. Remove the rear door speaker in the direction of the arrow shown in the figure.

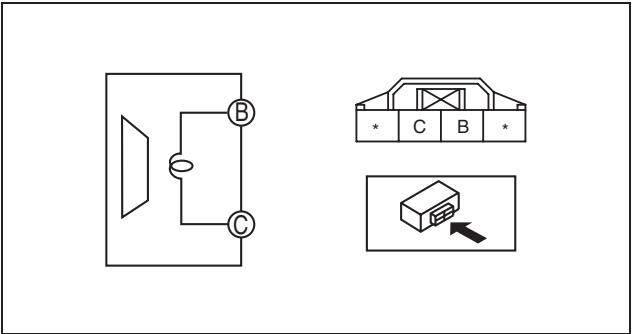


am2zzw0000035

REAR DOOR SPEAKER INSPECTION

id092000804900

1. Disconnect the negative battery cable.
2. Remove the sail inner garnish. (See 09-17-53 SAIL INNER GARNISH REMOVAL/INSTALLATION.)
3. Remove the rear door trim. (See 09-17-65 REAR DOOR TRIM REMOVAL/INSTALLATION.)
4. Remove the rear door speaker. (See 09-20-8 REAR DOOR SPEAKER REMOVAL/INSTALLATION.)
5. Verify the resistance between the rear door speaker terminals.



adejiw00001161

- If not within the specification, replace the rear door speaker.

Resistance
3.4—4.6 ohms

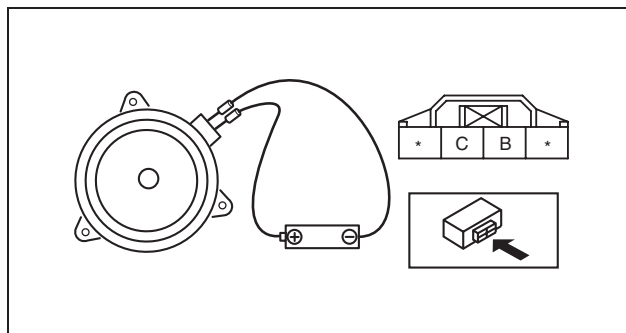
6. Have a 1.5 V battery ready.

Resistance	
Test condition	Taeminal
	B C
Under any condition	

am2zzw0000497

ENTERTAINMENT

7. Connect the battery positive (+) pole to rear door speaker terminal C, and the negative (-) pole to terminal B.
8. Verify that sound is output from the rear door speaker.
 - If sound is not output, replace the rear door speaker.



adejjw00004090

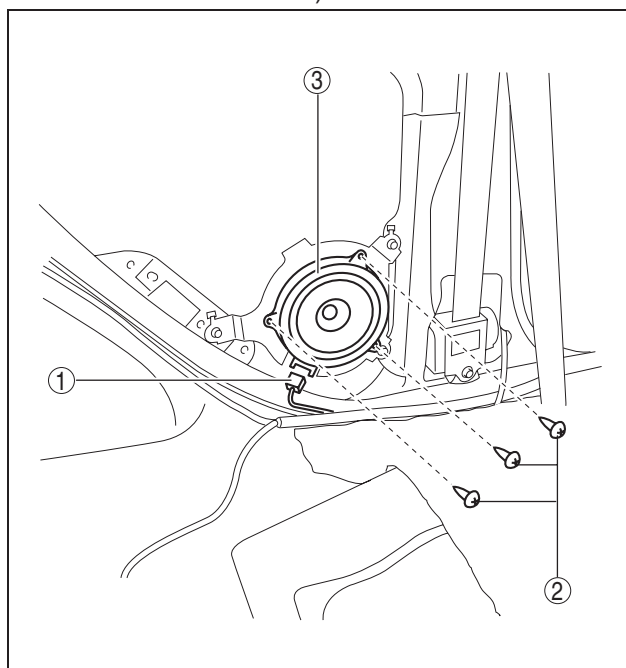
REAR SPEAKER REMOVAL/INSTALLATION [3HB]

id0920008024z3

1. Disconnect the negative battery cable.
2. Remove the following parts:
 - (1) Front scuff plate (See 09-17-57 FRONT SCUFF PLATE REMOVAL/INSTALLATION [3HB].)
 - (2) Rear seat cushion (See 09-13-31 REAR SEAT CUSHION REMOVAL/INSTALLATION.)
 - (3) Rear seat back (See 09-13-26 REAR SEAT BACK REMOVAL/INSTALLATION [AutoAlliance (AAT) Thailand manufactured vehicles].) (See 09-13-27 REAR SEAT BACK REMOVAL/INSTALLATION [Except AutoAlliance (AAT) Thailand manufactured vehicles].)
 - (4) Trunk end trim (See 09-17-75 TRUNK END TRIM REMOVAL/INSTALLATION.)
 - (5) Trunk side trim (See 09-17-70 TRUNK SIDE TRIM REMOVAL/INSTALLATION.)
3. Remove in the order indicated in the table.

1	Connector
2	Screw
3	Rear speaker (See 09-20-11 Rear Speaker Removal Note.)

4. Install in the reverse order of removal.

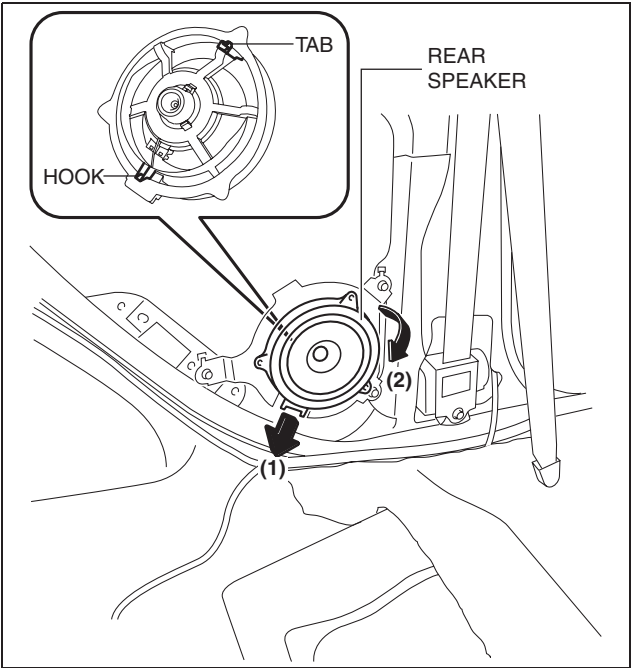


am2zzw0000328

ENTERTAINMENT

Rear Speaker Removal Note

1. Remove the rear speaker in the direction of the arrow shown in the figure.

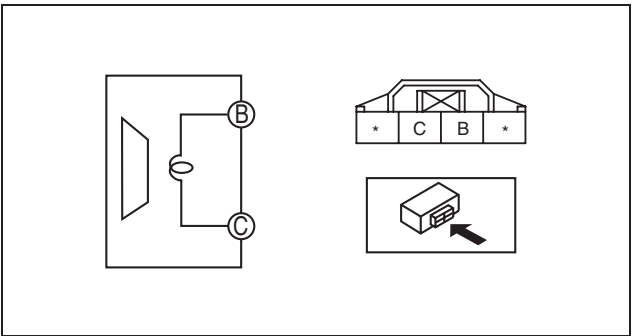


am2zzw0000328

REAR SPEAKER INSPECTION [3HB]

id0920008025z3

1. Disconnect the negative battery cable.
2. Remove the following parts:
 - (1) Front scuff plate (See 09-17-57 FRONT SCUFF PLATE REMOVAL/INSTALLATION [3HB].)
 - (2) Rear seat cushion (See 09-13-31 REAR SEAT CUSHION REMOVAL/INSTALLATION.)
 - (3) Rear seat back (See 09-13-26 REAR SEAT BACK REMOVAL/INSTALLATION [AutoAlliance (AAT) Thailand manufactured vehicles].) (See 09-13-27 REAR SEAT BACK REMOVAL/INSTALLATION [Except AutoAlliance (AAT) Thailand manufactured vehicles].)
 - (4) Trunk end trim (See 09-17-75 TRUNK END TRIM REMOVAL/INSTALLATION.)
 - (5) Trunk side trim (See 09-17-70 TRUNK SIDE TRIM REMOVAL/INSTALLATION.)
 - (6) Rear speaker (See 09-20-10 REAR SPEAKER REMOVAL/INSTALLATION [3HB].)
3. Verify the resistance between the rear speaker terminals.



adejjw00001161

- If not within the specification, replace the rear speaker.

Resistance
3.4—4.6 ohms

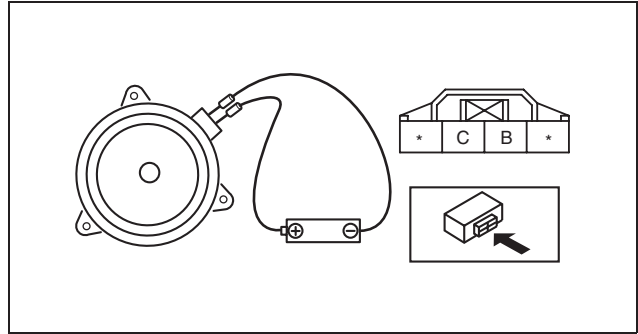
4. Have a 1.5 V battery ready.

		○⎓○ : Resistance	
Test condition	Taeminal		
	B		C
Under any condition	○	⎓	○

am2zzw0000468

ENTERTAINMENT

5. Connect the battery positive (+) pole to rear speaker terminal C, and the negative (-) pole to terminal B.
6. Verify that sound is output from the rear speaker.
 - If sound is not output, replace the rear speaker.

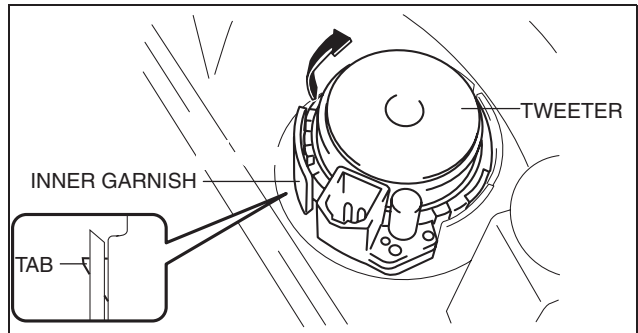


adejjw00004090

TWEETER REMOVAL/INSTALLATION

id092000808000

1. Disconnect the negative battery cable.
2. Remove the inner garnish. (See 09-17-34 INNER GARNISH REMOVAL/INSTALLATION.)
3. Remove the tweeter in the direction of the arrow shown in the figure.
4. Install in the reverse order of removal.

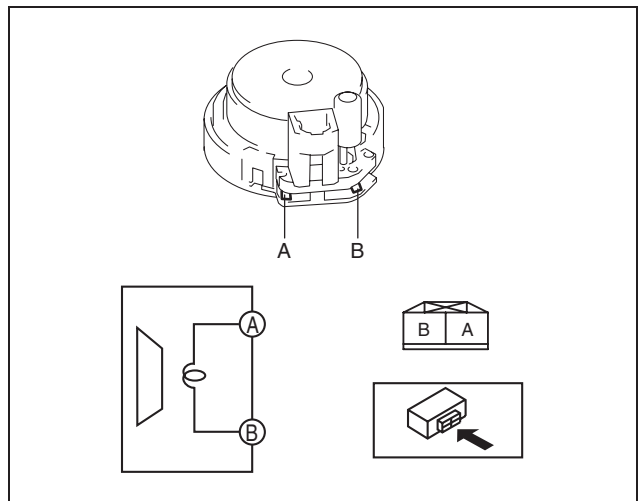


am2zzw0000030

TWEETER INSPECTION

id092000808100

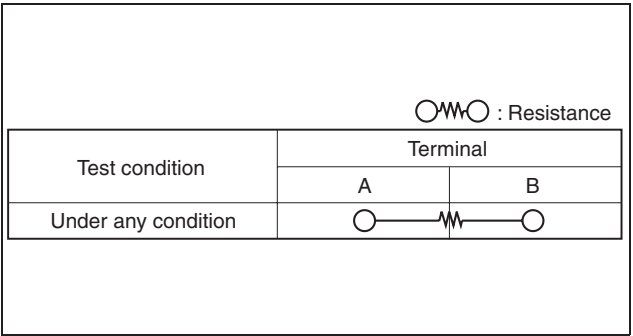
1. Disconnect the negative battery cable.
2. Remove the inner garnish. (See 09-17-34 INNER GARNISH REMOVAL/INSTALLATION.)
3. Remove the tweeter. (See 09-20-12 TWEETER REMOVAL/INSTALLATION.)
4. Verify the resistance between tweeter terminals.
 - If not within the specification, replace the tweeter.



adejjw00000750

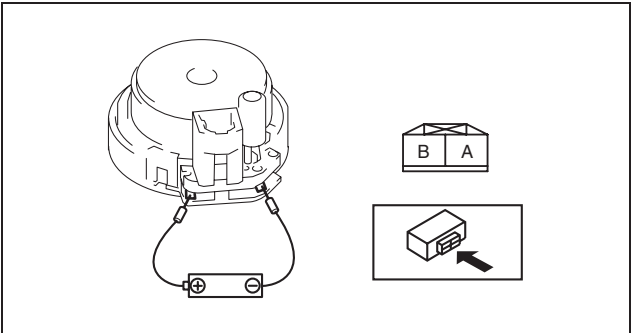
Resistance
3.4—4.6 ohms

5. Have a 1.5 V battery ready.



am2zzw0000030

6. Connect the battery positive (+) pole to tweeter terminal B, and the negative (-) pole to terminal A.
7. Verify that sound is output from the tweeter.
- If sound is not output, replace the tweeter.



adejiw00004091

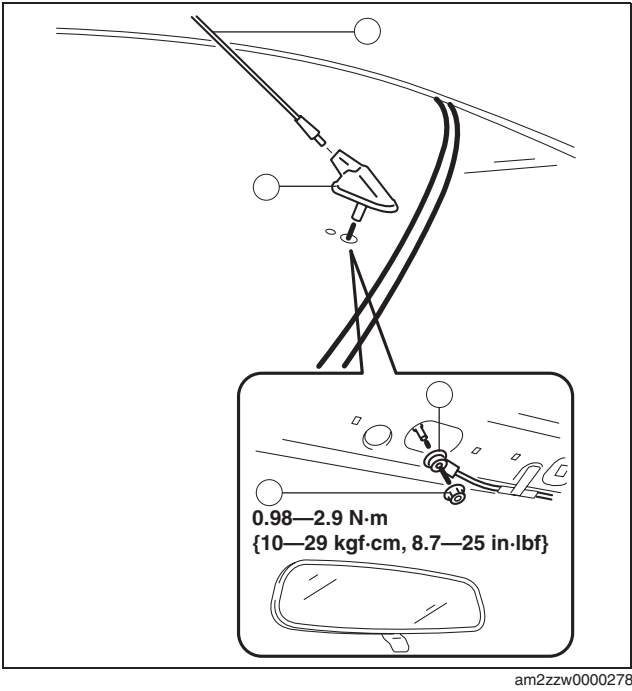
CENTER ROOF ANTENNA REMOVAL/INSTALLATION

id092000801600

1. Disconnect the negative battery cable.
2. Remove the following parts:
 - (1) A-pillar trim (See 09-17-42 A-PILLAR TRIM REMOVAL/INSTALLATION.)
 - (2) Sunvisor (See 09-17-80 SUNVISOR REMOVAL/INSTALLATION.)
 - (3) Assist handle (See 09-17-80 ASSIST HANDLE REMOVAL/INSTALLATION.)
 - (4) Front scuff plate (See 09-17-56 FRONT SCUFF PLATE REMOVAL/INSTALLATION.)
 - (5) Rear scuff plate (5HB,4SD) (See 09-17-58 REAR SCUFF PLATE REMOVAL/INSTALLATION.)
 - (6) B-pillar lower trim (5HB,4SD) (See 09-17-46 B-PILLAR LOWER TRIM REMOVAL/INSTALLATION.)
 - (7) Rear seat cushion (3HB) (See 09-13-31 REAR SEAT CUSHION REMOVAL/INSTALLATION.)
 - (8) Rear seat back (3HB) (See 09-13-26 REAR SEAT BACK REMOVAL/INSTALLATION [AutoAlliance (AAT) Thailand manufactured vehicles].) (See 09-13-27 REAR SEAT BACK REMOVAL/INSTALLATION [Except AutoAlliance (AAT) Thailand manufactured vehicles].)
 - (9) Trunk end trim (3HB) (See 09-17-75 TRUNK END TRIM REMOVAL/INSTALLATION.)
 - (10) Trunk side trim (3HB) (See 09-17-73 TRUNK SIDE TRIM REMOVAL/INSTALLATION [3HB].)
 - (11) C-pillar trim (3HB) (See 09-17-52 C-PILLAR TRIM REMOVAL/INSTALLATION [3HB].)
 - (12) Front seat belt adjuster anchor cover.
 - (13) Front seat belt upper anchor installation bolt
 - (14) B-pillar upper trim (See 09-17-44 B-PILLAR UPPER TRIM REMOVAL/INSTALLATION.) (See 09-17-45 B-PILLAR UPPER TRIM REMOVAL/INSTALLATION [3HB].)
 - (15) Rain sensor cover (Vehicles with auto light / wiper system) (See 09-19-28 RAIN SENSOR REMOVAL/INSTALLATION.)
3. Disconnect the rain sensor connector. (vehicles with auto light/wiper system) (See 09-19-28 RAIN SENSOR REMOVAL/INSTALLATION.)
4. Partially peel back the seaming welt.
5. Partially peel back the headliner.
6. Remove in the order indicated in the table.

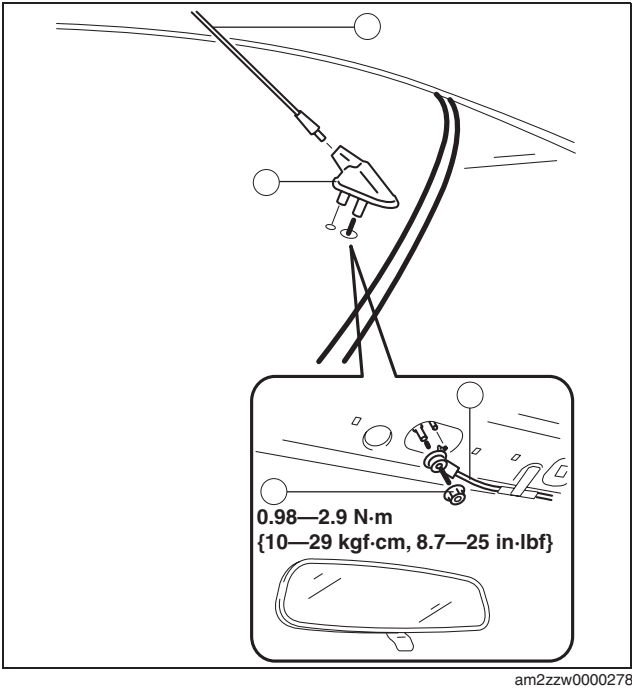
ENTERTAINMENT

TYPE A



1	Nut
2	Antenna feeder No.2
3	Antenna rod
4	Center roof antenna

TYPE B



1	Nut
2	Antenna feeder No.2
3	Antenna rod
4	Center roof antenna (See 09-20-15 Center Roof Antenna (Type B) Installation Note.)

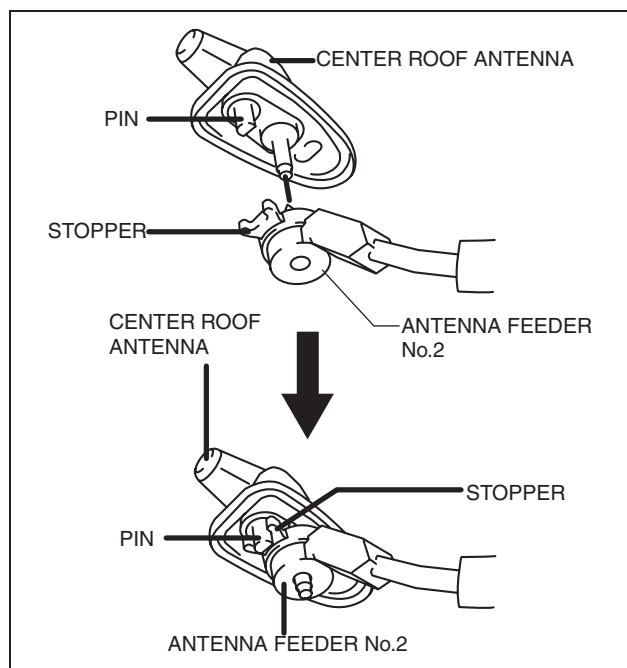
7. Install in the reverse order of removal.

ENTERTAINMENT

8. After installation, verify that the rubber of the center roof antenna is installed to the roof panel with no space between the two.

Center Roof Antenna (Type B) Installation Note

1. Install the antenna feeder No.2 stopper to the pin of the center roof antenna.



am2zzw0000373

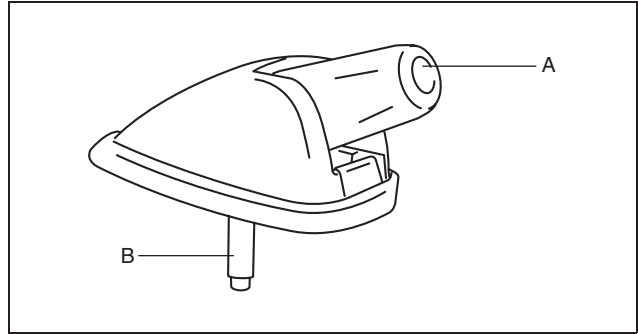
CENTER ROOF ANTENNA INSPECTION

id092000801700

1. Disconnect the negative battery cable.
2. Remove the following parts:
 - (1) A-pillar trim (See 09-17-42 A-PILLAR TRIM REMOVAL/INSTALLATION.)
 - (2) Sunvisor (See 09-17-80 SUNVISOR REMOVAL/INSTALLATION.)
 - (3) Assist handle (See 09-17-80 ASSIST HANDLE REMOVAL/INSTALLATION.)
 - (4) Front scuff plate (See 09-17-56 FRONT SCUFF PLATE REMOVAL/INSTALLATION.)
 - (5) Rear scuff plate (5HB,4SD) (See 09-17-58 REAR SCUFF PLATE REMOVAL/INSTALLATION.)
 - (6) B-pillar lower trim (5HB,4SD) (See 09-17-46 B-PILLAR LOWER TRIM REMOVAL/INSTALLATION.)
 - (7) Rear seat cushion (3HB) (See 09-13-31 REAR SEAT CUSHION REMOVAL/INSTALLATION.)
 - (8) Rear seat back (3HB) (See 09-13-26 REAR SEAT BACK REMOVAL/INSTALLATION [AutoAlliance (AAT) Thailand manufactured vehicles].) (See 09-13-27 REAR SEAT BACK REMOVAL/INSTALLATION [Except AutoAlliance (AAT) Thailand manufactured vehicles].)
 - (9) Trunk end trim (3HB) (See 09-17-75 TRUNK END TRIM REMOVAL/INSTALLATION.)
 - (10) Trunk side trim (3HB) (See 09-17-73 TRUNK SIDE TRIM REMOVAL/INSTALLATION [3HB].)
 - (11) C-pillar trim (3HB) (See 09-17-52 C-PILLAR TRIM REMOVAL/INSTALLATION [3HB].)
 - (12) Front seat belt adjuster anchor cover.
 - (13) Front seat belt upper anchor installation bolt.
 - (14) B-pillar upper trim (See 09-17-44 B-PILLAR UPPER TRIM REMOVAL/INSTALLATION.) (See 09-17-45 B-PILLAR UPPER TRIM REMOVAL/INSTALLATION [3HB].)
 - (15) Rain sensor cover (Vehicles with auto light / wiper system) (See 09-19-28 RAIN SENSOR REMOVAL/INSTALLATION.)
 - (16) Center roof antenna (See 09-20-13 CENTER ROOF ANTENNA REMOVAL/INSTALLATION.)

ENTERTAINMENT

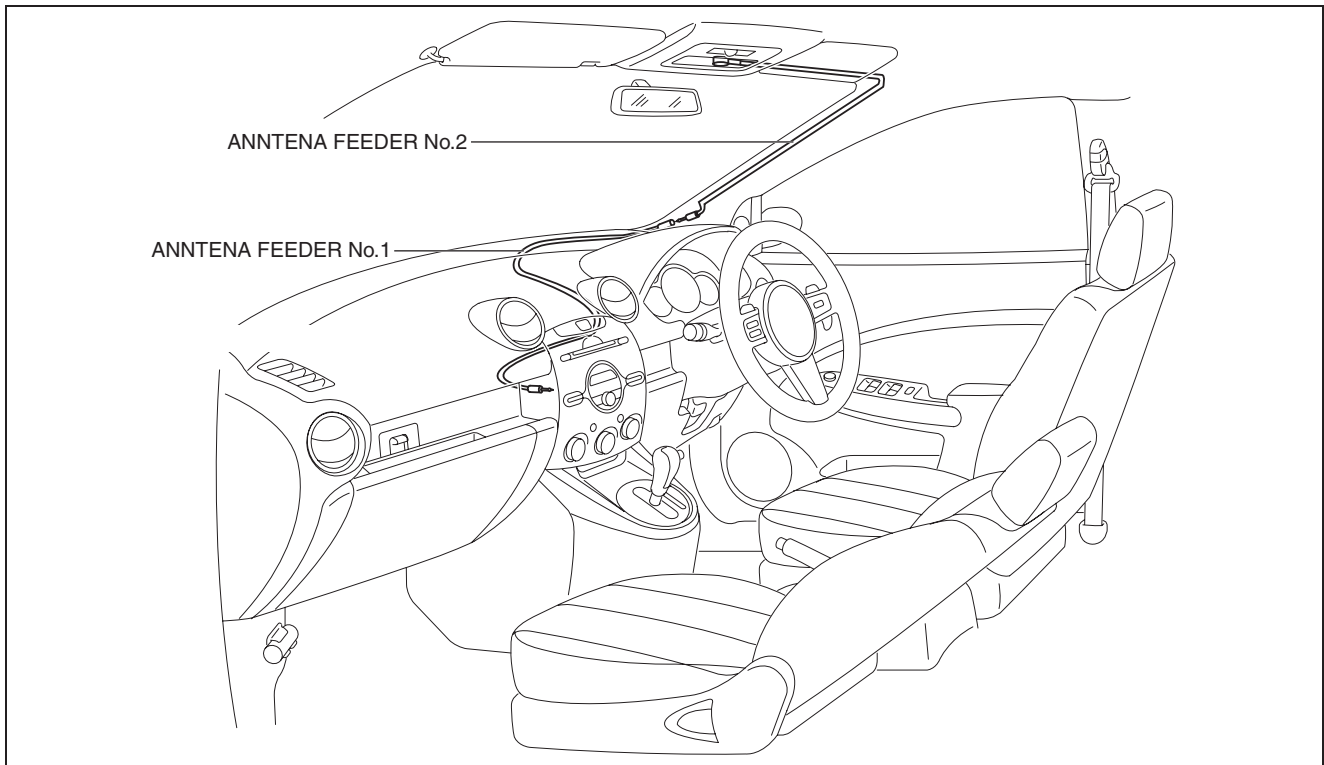
3. Inspect for continuity between center roof antenna sections A and B.
- If there is no continuity, replace the center roof antenna.



adejjw00001376

ANTENNA FEEDER LOCATION

R.H.D.



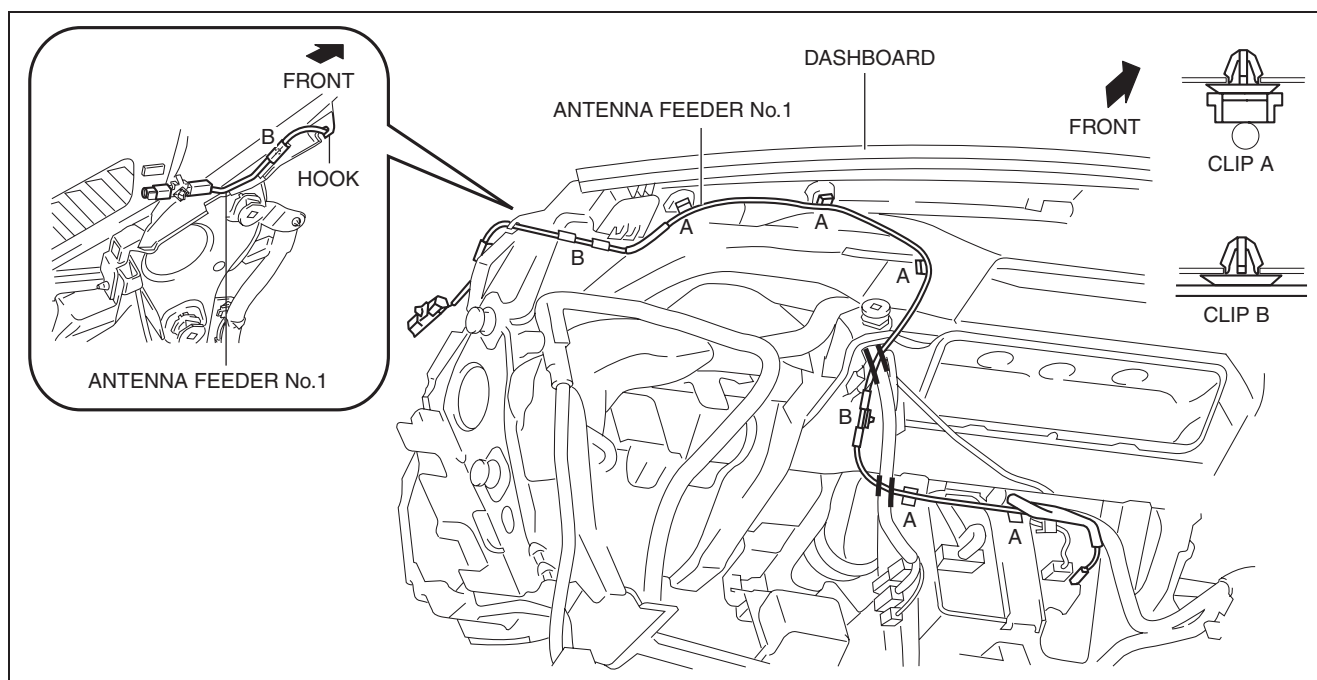
am2zzw0000059

ANTENNA FEEDER NO.1 REMOVAL/INSTALLATION

1. Disconnect the negative battery cable.
2. Remove the following parts:
 - (1) Glove compartment (See 09-17-26 GLOVE COMPARTMENT REMOVAL/INSTALLATION.)
 - (2) Glove compartment cover (See 09-17-28 GLOVE COMPARTMENT COVER REMOVAL/INSTALLATION.)
 - (3) Dashboard under cover (See 09-17-35 DASHBOARD UNDER COVER REMOVAL/INSTALLATION.)
 - (4) Heat duct (passenger side).
 - (5) Shift lever knob (MTX) (See 05-16A-1 MANUAL TRANSAXLE SHIFT MECHANISM REMOVAL/INSTALLATION [F35M-R].) (See 05-16B-2 MANUAL TRANSAXLE SHIFT MECHANISM REMOVAL/INSTALLATION [B65M-R].)
 - (6) Side wall (See 09-17-33 SIDE WALL REMOVAL/INSTALLATION.)
 - (7) Front console component (See 09-17-36 FRONT CONSOLE COMPONENT REMOVAL/INSTALLATION.)
 - (8) Front scuff plate (See 09-17-56 FRONT SCUFF PLATE REMOVAL/INSTALLATION.)
 - (9) Front side trim (See 09-17-53 FRONT SIDE TRIM REMOVAL/INSTALLATION.)
 - (10) Bonnet release lever (See 09-14-28 BONNET LATCH AND RELEASE LEVER REMOVAL/INSTALLATION.)
 - (11) Driver-side lower panel (See 09-17-29 LOWER PANEL REMOVAL/INSTALLATION.)
 - (12) Driver-side air bag module.
 - (13) Steering wheel (See 06-13-10 STEERING WHEEL AND COLUMN REMOVAL/INSTALLATION [R.H.D.].)
 - (14) Column cover (See 09-17-25 COLUMN COVER REMOVAL/INSTALLATION.)
 - (15) Meter hood (See 09-17-24 METER HOOD REMOVAL/INSTALLATION.)
 - (16) Instrument cluster (See 09-22-5 INSTRUMENT CLUSTER REMOVAL/INSTALLATION.)
 - (17) Combination switch (See 09-18-32 COMBINATION SWITCH REMOVAL/INSTALLATION.)
 - (18) Center panel unit (vehicles with audio unit) (See 09-20-3 CENTER PANEL UNIT REMOVAL/INSTALLATION.)
 - (19) Center panel (vehicles without audio unit) (See 09-17-35 CENTER PANEL REMOVAL/INSTALLATION.)
 - (20) Climate control unit (See 07-40A-32 CLIMATE CONTROL UNIT REMOVAL/INSTALLATION [FULL-AUTO AIR CONDITIONER].) (See 07-40B-24 CLIMATE CONTROL UNIT REMOVAL/INSTALLATION [MANUAL AIR CONDITIONER].)
 - (21) Shift lever (MTX) (See 05-16A-1 MANUAL TRANSAXLE SHIFT MECHANISM REMOVAL/INSTALLATION [F35M-R].) (See 05-16B-2 MANUAL TRANSAXLE SHIFT MECHANISM REMOVAL/INSTALLATION [B65M-R].)
 - (22) Selector lever (ATX/CVT)
 - (23) Interlock cable (ATX/CVT).
 - (24) Passenger-side lower panel (See 09-17-29 LOWER PANEL REMOVAL/INSTALLATION.)
 - (25) Side panel (See 09-17-34 SIDE PANEL REMOVAL/INSTALLATION.)
 - (26) A-pillar trim (See 09-17-42 A-PILLAR TRIM REMOVAL/INSTALLATION.)
 - (27) Windshield wiper arm and blade (See 09-19-7 WINDSHIELD WIPER ARM AND BLADE REMOVAL/INSTALLATION.)
 - (28) Cowl grille (See 09-16-5 COWL GRILLE REMOVAL/INSTALLATION.)
 - (29) Sail garnish (See 09-16-7 SAIL GARNISH REMOVAL/INSTALLATION.)
 - (30) Windshield wiper motor (L.H.D.)
 - (31) Steering shaft cover (See 06-13-10 STEERING WHEEL AND COLUMN REMOVAL/INSTALLATION [R.H.D.].)
 - (32) Steering shaft (See 06-13-10 STEERING WHEEL AND COLUMN REMOVAL/INSTALLATION [R.H.D.].)
 - (33) Dashboard (See 09-17-14 DASHBOARD REMOVAL/INSTALLATION [AutoAlliance (AAT) Thailand manufactured vehicles].) (See 09-17-18 DASHBOARD REMOVAL/INSTALLATION [Except AutoAlliance (AAT) Thailand manufactured vehicles].) (See 09-17-10 DASHBOARD REMOVAL/INSTALLATION [3HB].)
3. Remove clips A and B.
4. Remove the antenna feeder No.1 from the dashboard hook.
5. Remove antenna feeder No.1.
6. Install in the reverse order of removal.

ENTERTAINMENT

R.H.D.

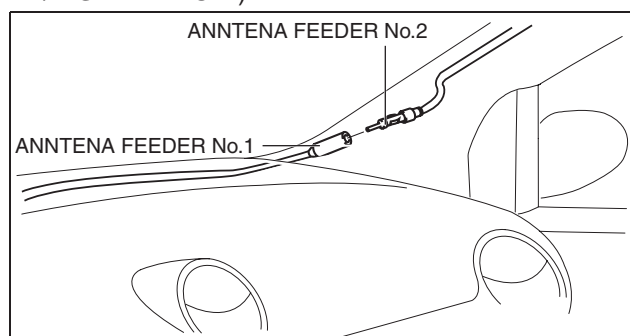


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ANTENNA FEEDER NO.1 INSPECTION

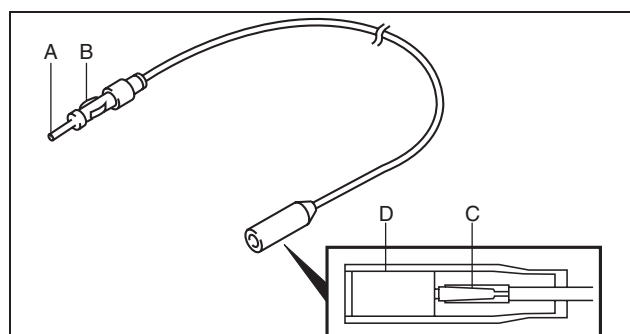
id092000812400

1. Disconnect the negative battery cable.
2. Remove the following parts:
 - (1) Shift lever knob (MTX) (See 05-16A-1 MANUAL TRANSAXLE SHIFT MECHANISM REMOVAL/INSTALLATION [F35M-R].) (See 05-16B-2 MANUAL TRANSAXLE SHIFT MECHANISM REMOVAL/INSTALLATION [B65M-R].)
 - (2) Side wall (See 09-17-33 SIDE WALL REMOVAL/INSTALLATION.)
 - (3) Front console component (See 09-17-36 FRONT CONSOLE COMPONENT REMOVAL/INSTALLATION.)
 - (4) Glove compartment (See 09-17-26 GLOVE COMPARTMENT REMOVAL/INSTALLATION.)
 - (5) Center panel unit (See 09-20-3 CENTER PANEL UNIT REMOVAL/INSTALLATION.)
 - (6) A-pillar trim (See 09-17-42 A-PILLAR TRIM REMOVAL/INSTALLATION.)
3. Disconnect antenna feeder No.2.



am2zzw0000159

4. Verify that the continuity between antenna feeder No.1 terminals is as indicated in the table.
 - If not as indicated in the table, replace antenna feeder No.1.



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ENTERTAINMENT

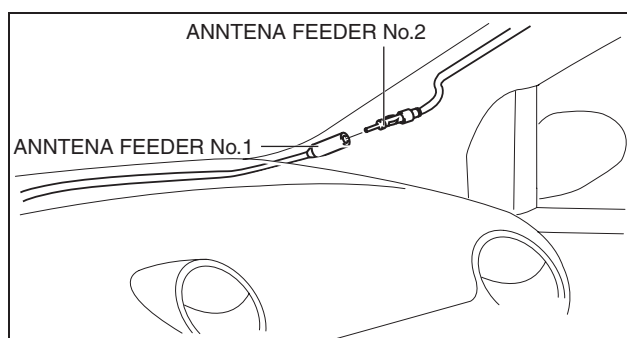
○—○ : Continuity				
Test condition	Terminal			
	A	B	C	D
Under any condition	○—	○—	○—	○—

am2zzw000031

ANTENNA FEEDER NO.2 REMOVAL/INSTALLATION

id092000812300

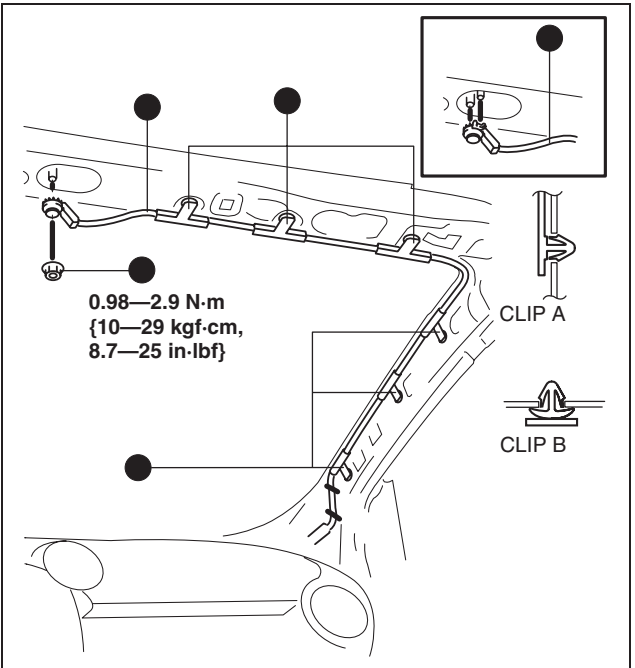
1. Disconnect the negative battery cable.
2. Remove the following parts:
 - (1) A-pillar trim (See 09-17-42 A-PILLAR TRIM REMOVAL/INSTALLATION.)
 - (2) Sunvisor (See 09-17-80 SUNVISOR REMOVAL/INSTALLATION.)
 - (3) Assist handle (See 09-17-80 ASSIST HANDLE REMOVAL/INSTALLATION.)
 - (4) Front scuff plate (See 09-17-56 FRONT SCUFF PLATE REMOVAL/INSTALLATION.)
 - (5) Rear scuff plate (5HB,4SD) (See 09-17-58 REAR SCUFF PLATE REMOVAL/INSTALLATION.)
 - (6) B-pillar lower trim (5HB,4SD) (See 09-17-46 B-PILLAR LOWER TRIM REMOVAL/INSTALLATION.)
 - (7) Rear seat cushion (3HB) (See 09-13-31 REAR SEAT CUSHION REMOVAL/INSTALLATION.)
 - (8) Rear seat back (3HB) (See 09-13-26 REAR SEAT BACK REMOVAL/INSTALLATION [AutoAlliance (AAT) Thailand manufactured vehicles].) (See 09-13-27 REAR SEAT BACK REMOVAL/INSTALLATION [Except AutoAlliance (AAT) Thailand manufactured vehicles].)
 - (9) Trunk end trim (3HB) (See 09-17-75 TRUNK END TRIM REMOVAL/INSTALLATION.)
 - (10) Trunk side trim (3HB) (See 09-17-73 TRUNK SIDE TRIM REMOVAL/INSTALLATION [3HB].)
 - (11) C-pillar trim (3HB) (See 09-17-52 C-PILLAR TRIM REMOVAL/INSTALLATION [3HB].)
 - (12) Front seat belt adjuster anchor cover.
 - (13) Front seat belt upper anchor installation bolt.
 - (14) B-pillar upper trim (See 09-17-44 B-PILLAR UPPER TRIM REMOVAL/INSTALLATION.) (See 09-17-45 B-PILLAR UPPER TRIM REMOVAL/INSTALLATION [3HB].)
 - (15) Rain sensor cover (Vehicles with auto light / wiper system) (See 09-19-28 RAIN SENSOR REMOVAL/INSTALLATION.)
3. Disconnect the rain sensor connector. (vehicles with auto light/wiper system) (See 09-19-28 RAIN SENSOR REMOVAL/INSTALLATION.)
4. Partially peel back the seaming welt.
5. Partially peel back the headliner.
6. Disconnect antenna feeder No.1.



am2zzw0000159

ENTERTAINMENT

7. Remove in the order indicated in the table.



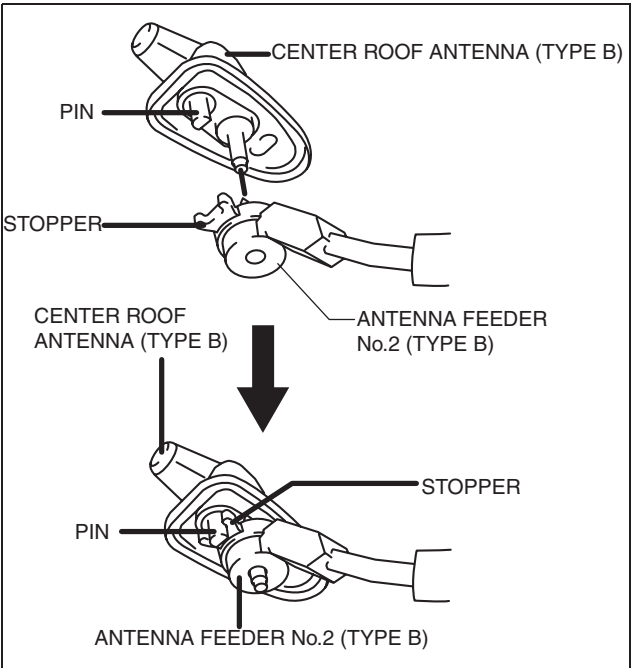
am2zzw0000278

1	Clip A
2	Clip B
3	Nut
4	Antenna feeder No.2 (Type A)
5	Antenna feeder No.2 (Type B) (See 09-20-21 Antenna Feeder No.2 (Type B) Installation Note.)

8. Install in the reverse order of removal.

Antenna Feeder No.2 (Type B) Installation Note

1. Install the antenna feeder No.2 (Type B) stopper to the pin of the center roof antenna (Type B).



am2zzw0000277

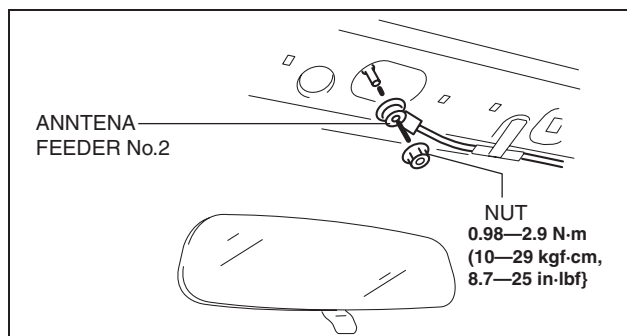
ANTENNA FEEDER NO.2 INSPECTION

1. Disconnect the negative battery cable.
2. Remove the following parts:
 - (1) A-pillar trim (See 09-17-42 A-PILLAR TRIM REMOVAL/INSTALLATION.)

id092000812500

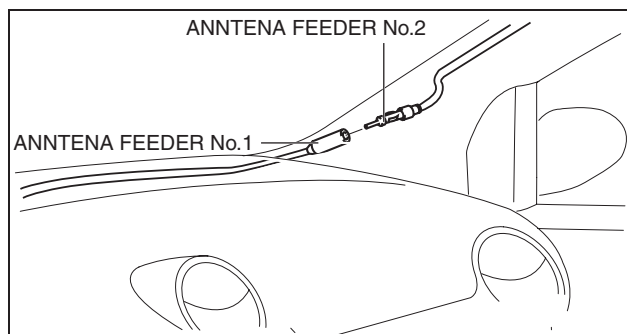
ENTERTAINMENT

- (2) Sunvisor (See 09-17-80 SUNVISOR REMOVAL/INSTALLATION.)
 - (3) Assist handle (See 09-17-80 ASSIST HANDLE REMOVAL/INSTALLATION.)
 - (4) Front scuff plate (See 09-17-56 FRONT SCUFF PLATE REMOVAL/INSTALLATION.)
 - (5) Rear scuff plate (5HB,4SD) (See 09-17-58 REAR SCUFF PLATE REMOVAL/INSTALLATION.)
 - (6) B-pillar lower trim (5HB,4SD) (See 09-17-46 B-PILLAR LOWER TRIM REMOVAL/INSTALLATION.)
 - (7) Rear seat cushion (3HB) (See 09-13-31 REAR SEAT CUSHION REMOVAL/INSTALLATION.)
 - (8) Rear seat back (3HB) (See 09-13-26 REAR SEAT BACK REMOVAL/INSTALLATION [AutoAlliance (AAT) Thailand manufactured vehicles].) (See 09-13-27 REAR SEAT BACK REMOVAL/INSTALLATION [Except AutoAlliance (AAT) Thailand manufactured vehicles].)
 - (9) Trunk end trim (3HB) (See 09-17-75 TRUNK END TRIM REMOVAL/INSTALLATION.)
 - (10) Trunk side trim (3HB) (See 09-17-73 TRUNK SIDE TRIM REMOVAL/INSTALLATION [3HB].)
 - (11) C-pillar trim (3HB) (See 09-17-52 C-PILLAR TRIM REMOVAL/INSTALLATION [3HB].)
 - (12) Front seat belt adjuster anchor cover.
 - (13) Front seat belt upper anchor installation bolt.
 - (14) B-pillar upper trim (See 09-17-44 B-PILLAR UPPER TRIM REMOVAL/INSTALLATION.) (See 09-17-45 B-PILLAR UPPER TRIM REMOVAL/INSTALLATION [3HB].)
 - (15) Rain sensor cover (Vehicles with auto light / wiper system) (See 09-19-28 RAIN SENSOR REMOVAL/INSTALLATION.)
3. Disconnect the rain sensor connector. (vehicles with auto light/wiper system) (See 09-19-28 RAIN SENSOR REMOVAL/INSTALLATION.)
 4. Partially peel back the seaming welt.
 5. Partially peel back the headliner.
 6. Remove the nut.



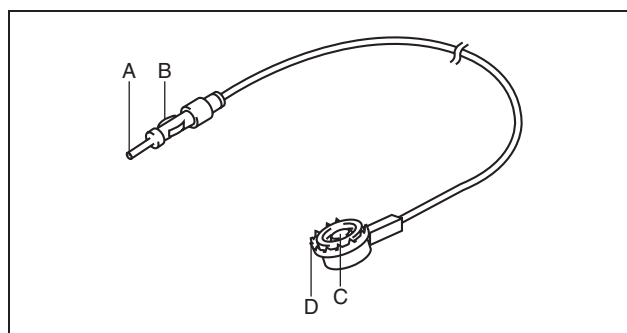
am2zzw0000159

7. Disconnect antenna feeder No.1.



am2zzw0000159

8. Verify that the continuity between antenna feeder No.2 terminals is as indicated in the table.
 - If not as indicated in the table, replace antenna feeder No.2.



adejjw00000960

○—○ : Continuity

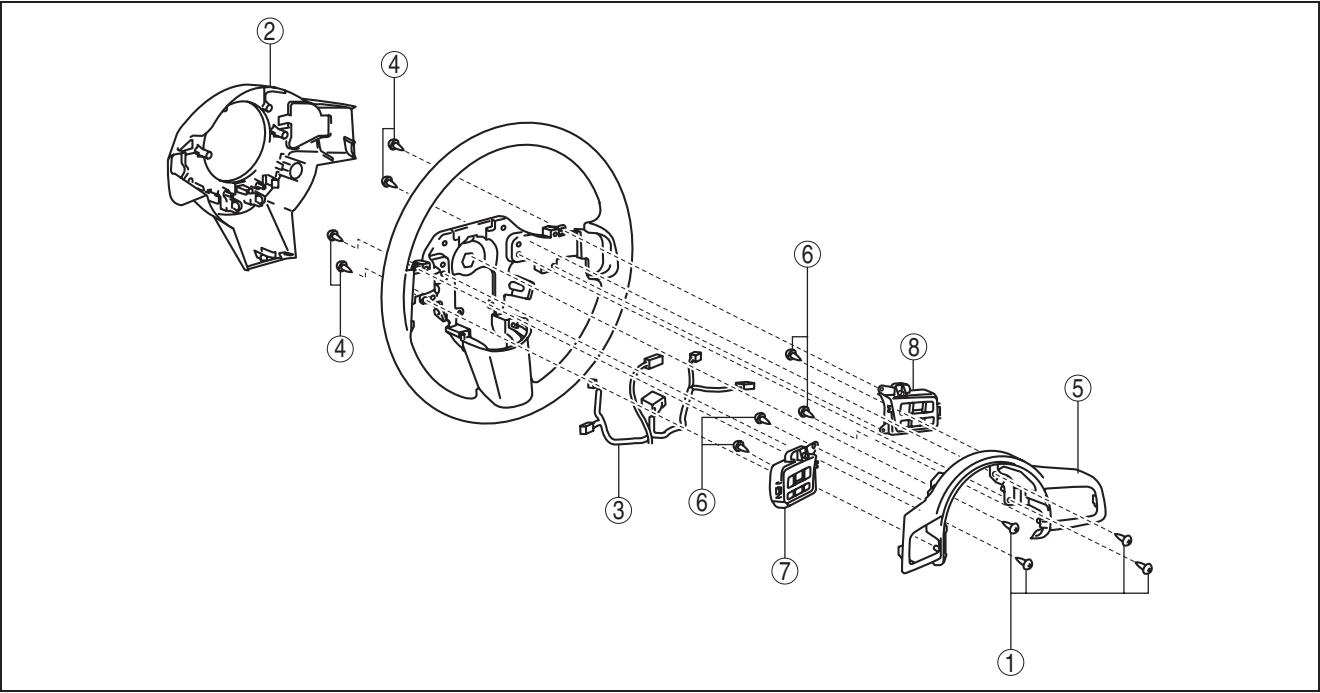
Test condition	Terminal			
	A	B	C	D
Under any condition	○—○		○—○	
		○—○		○—○

am2zzw0000031

AUDIO CONTROL SWITCH REMOVAL/INSTALLATION

id092000800200

1. Disconnect the negative battery cable and wait for **1 min or more**.
2. Remove the driver-side air bag module.
3. Remove the steering wheel. (See 06-13-10 STEERING WHEEL AND COLUMN REMOVAL/INSTALLATION [R.H.D.].)
4. Remove in the order indicated in the table.
5. Install in the reverse order of removal.



am2zzw0000024

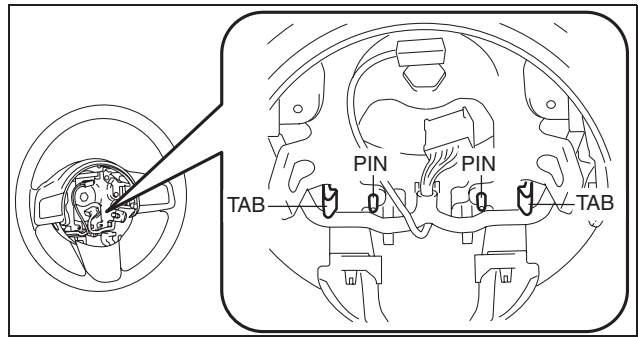
1	Screw
2	Cover (See 09-20-24 Cover Removal Note.) (See 09-20-24 Cover Installation Note.)
3	Wiring harness
4	Screw

5	Panel
6	Screw
7	Audio control switch
8	Cruise control switch (vehicles with cruise control system)

ENTERTAINMENT

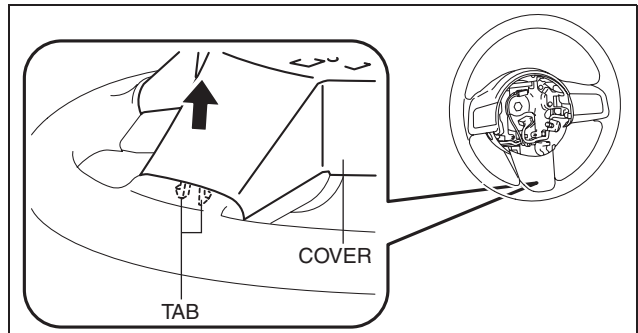
Cover Removal Note

1. Remove the cover tabs and pins from the steering wheel.



am2zzw0000024

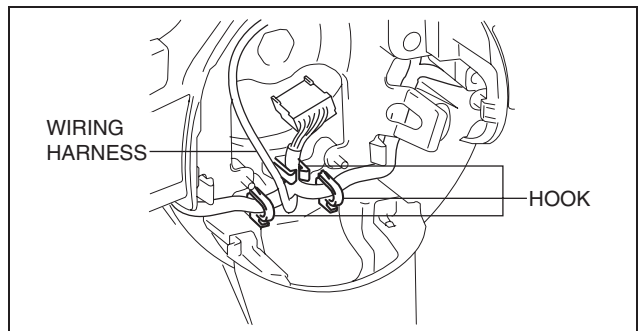
2. Remove the cover in the direction of the arrow shown in the figure.



am2zzw0000024

Cover Installation Note

1. Secure the audio control switch wiring harness to the cover hooks.



am2zzw0000024

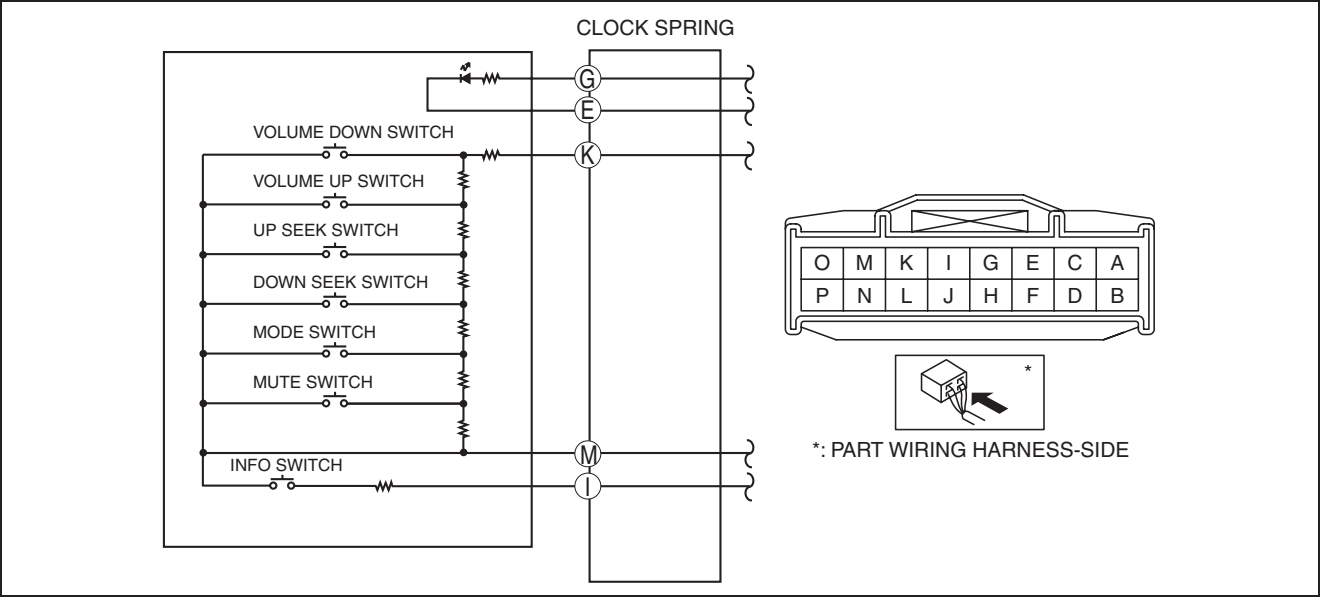
AUDIO CONTROL SWITCH INSPECTION

id092000800300

1. Disconnect the negative battery cable and wait for **1 min or more**.
2. Remove the driver-side air bag module.
3. Disconnect the clock spring connector.

ENTERTAINMENT

4. Inspect for resistance and continuity between clock spring connector terminals M—K/I using a tester.



am2zzw0000497

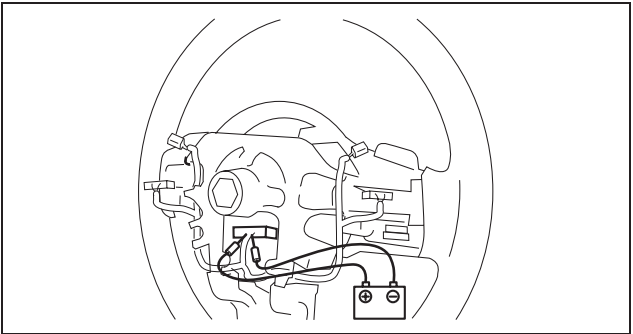
- If not within the specification, replace the audio control switch.

Ω : Resistance

Switch Position	Terminal			Resistance (ohm)
	M	K	I	
Volume Down Switch ON	○—Ω—○			50.9—56.3
Volume Up Switch ON	○—Ω—○			139—155
Up Seek Switch ON	○—Ω—○			285—316
Down Seek Switch ON	○—Ω—○			533—590
Mode Switch ON	○—Ω—○			984—1,089
Mute Switch ON	○—Ω—○			1,934—2,139
Info Switch ON	○—Ω—○		○	50.9—56.3
OFF	○—Ω—○			4,794—5,300

am2zzw0000445

5. Apply battery positive voltage to audio control switch terminal G, and connect terminal E to ground.
6. Verify that the LED illuminates.
 - If the LED does not illuminate, replace the audio control switch.



am2zzw0000445

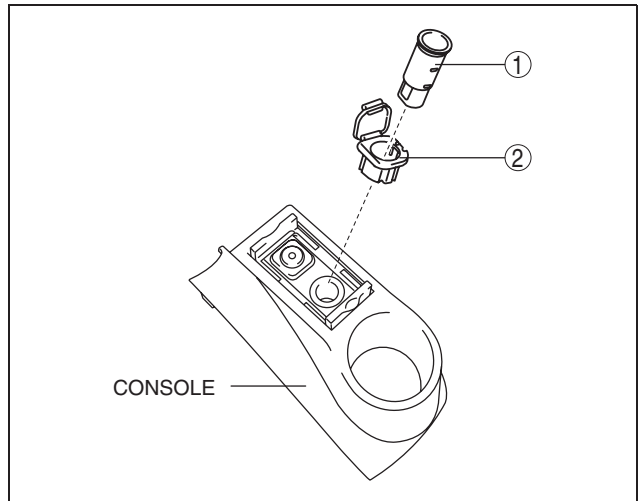
ACCESSORY SOCKET REMOVAL/INSTALLATION

id092000800400

1. Disconnect the negative battery cable.
2. Remove the console. (See 09-17-41 REAR CONSOLE REMOVAL/INSTALLATION.)
3. Remove in the order indicated in the table.

ENTERTAINMENT

Type A

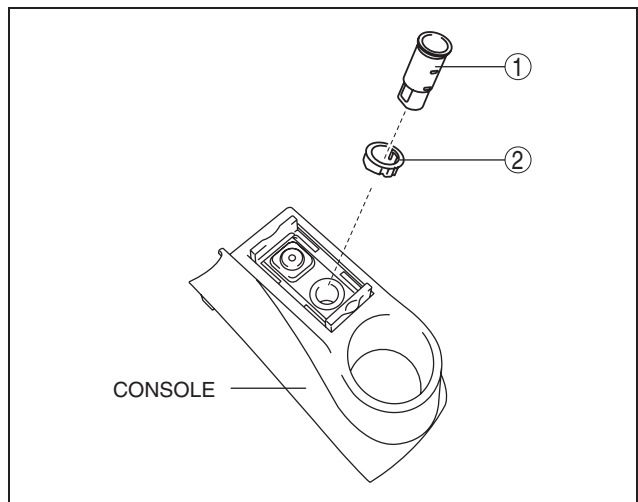


am2zzw0000432

Type B

1	Accessory socket (See 09-20-26 Accessory Socket Removal Note.)
2	Cap (See 09-20-27 Cap Removal Note.)

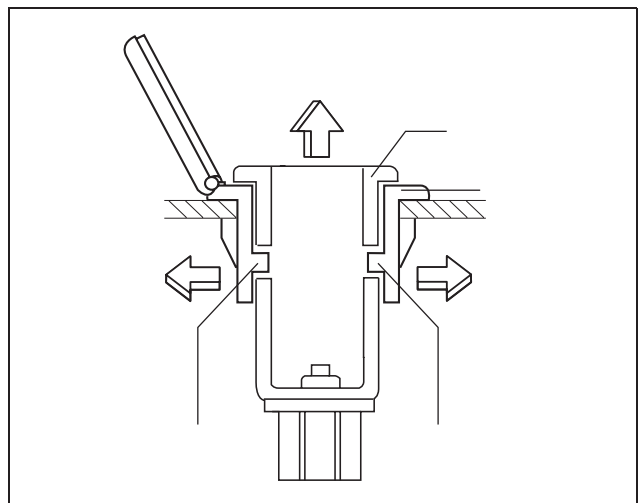
4. Install in the reverse order of removal.



am2zzw0000433

Accessory Socket Removal Note

1. Remove the socket in the direction of the arrow (2) shown in the figure while opening the caps in the direction of the arrow (1) using a tape-wrapped fastener remover.

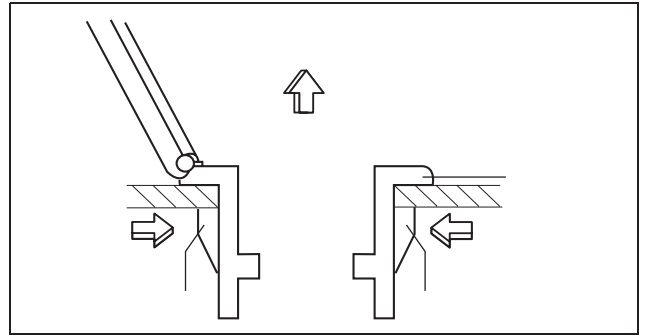


am6zzw0000136

ENTERTAINMENT

Cap Removal Note

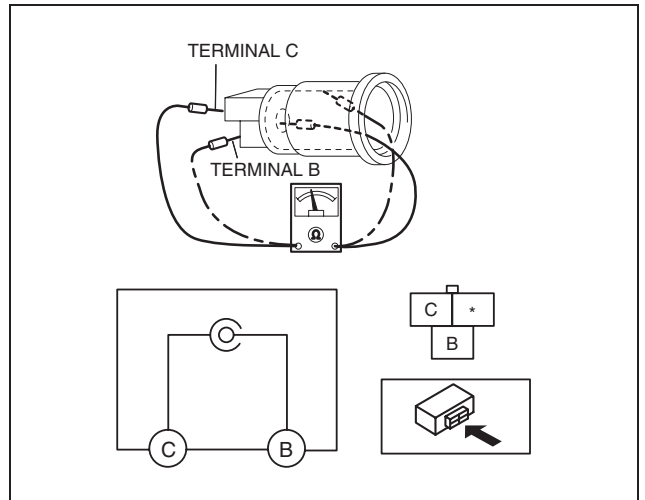
1. Remove the cap in the direction of the arrow (2) shown in the figure while pressing the cap tabs in the direction of the arrow (1).



am6zzw0000136

ACCESSORY SOCKET INSPECTION

1. Connect a tester as shown in the figure and verify that there is continuity.
 - If the continuity cannot be verified, replace the accessory socket.

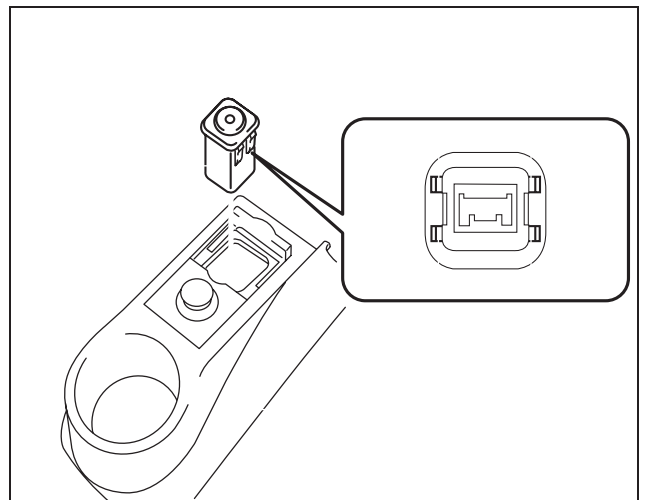


id092000800500

B6U0920W005

AUXILIARY JACK REMOVAL/INSTALLATION

1. Disconnect the negative battery cable.
2. Remove the console. (See 09-17-41 REAR CONSOLE REMOVAL/INSTALLATION.)
3. Remove the auxiliary jack in the direction of the arrow (2) shown in the figure while pressing the auxiliary jack tabs in the direction of the arrow (1).
4. Install in the reverse order of removal.



id092000809900

am2zzw0000022

AUXILIARY JACK INSPECTION

Except Auto Alliance Thailand (AAT) Manufactured Vehicles

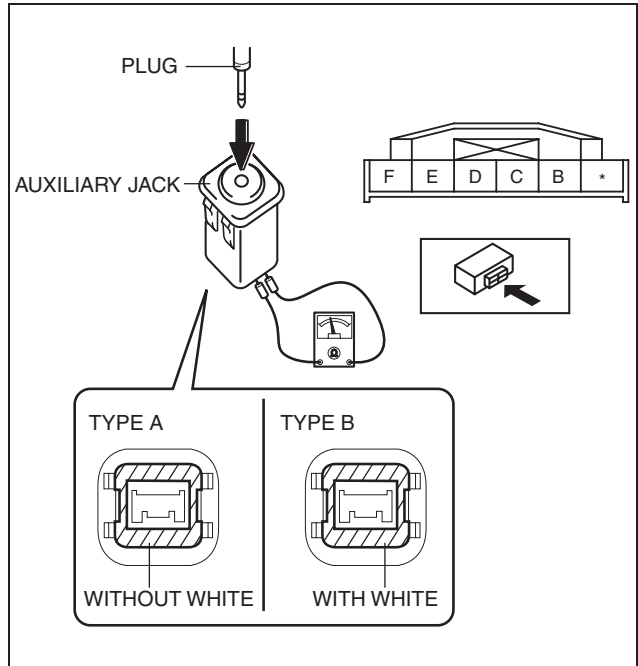
1. Disconnect the negative battery cable.
2. Remove the console. (See 09-17-41 REAR CONSOLE REMOVAL/INSTALLATION.)
3. Remove the auxiliary jack. (See 09-20-27 AUXILIARY JACK REMOVAL/INSTALLATION.)

id092000812600

ENTERTAINMENT

4. Connect a commercially-available nonresistant plug to the auxiliary jack.
5. Verify that the continuity between the auxiliary jack terminals is as indicated in the table.

Type A



am2zzw0000492

Test condition	Terminal			
	C	D	E	F
Plug is connected		○—○		○—○
Plug is not connected				

am2zzw0000202

Type B

- If not as indicated in the table, replace the auxiliary jack.

Test condition	Terminal					
	A	B	C	D	E	F
Plug is connected		○—○				○—○
Plug is not connected						

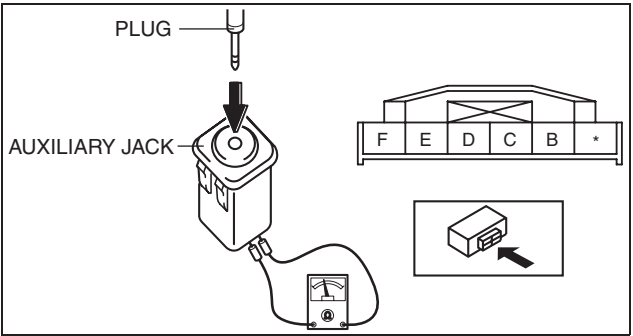
acxuww00003306

Auto Alliance Thailand (AAT) Manufactured Vehicles

1. Disconnect the negative battery cable.
2. Remove the console. (See 09-17-41 REAR CONSOLE REMOVAL/INSTALLATION.)
3. Remove the auxiliary jack. (See 09-20-27 AUXILIARY JACK REMOVAL/INSTALLATION.)

ENTERTAINMENT

4. Connect a commercially-available nonresistant plug to the auxiliary jack.



am2zzw0000432

5. Verify that the continuity between the auxiliary jack terminals is as indicated in the table.
- If not as indicated in the table, replace the auxiliary jack.

○—○: Continuity

Test condition	Terminal					
	A	B	C	D	E	F
Plug is connected		○—○				○—○
Plug is not connected						

acxuuv00003306

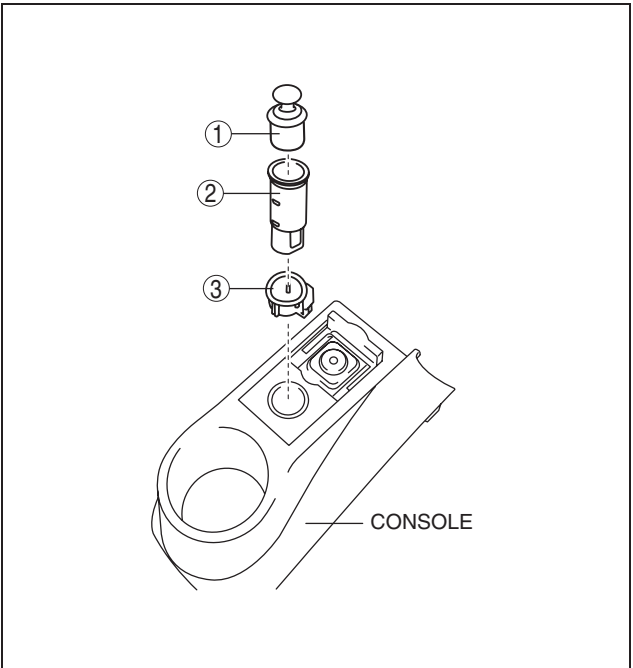
CIGARETTE LIGHTER REMOVAL/INSTALLATION

id092000803100

1. Disconnect the negative battery cable.
2. Remove the console. (See 09-17-41 REAR CONSOLE REMOVAL/INSTALLATION.)
3. Remove in the order indicated in the table.

1	Cigarette lighter plug
2	Socket (See 09-20-30 Socket Removal Note.)
3	Ring (See 09-20-30 Ring Removal Note.)

4. Install in the reverse order of removal.

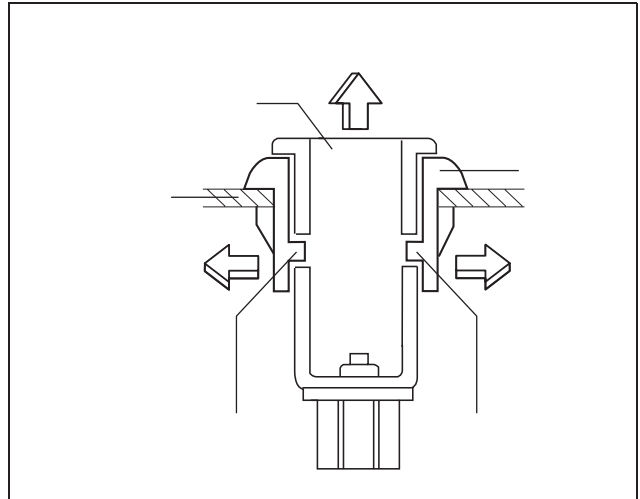


am2zzw0000022

ENTERTAINMENT

Socket Removal Note

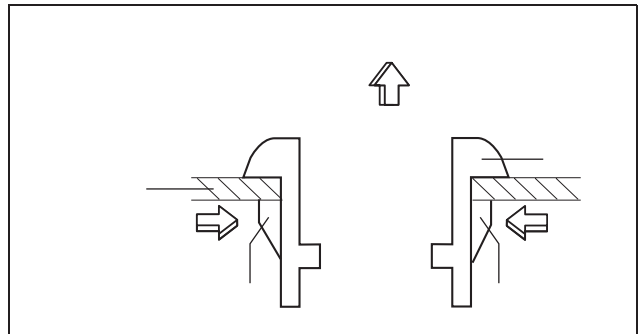
1. Remove the socket in the direction of the arrow (2) shown in the figure while opening the caps in the direction of the arrow (1) using a tape-wrapped fastener remover.



am2zzw0000023

Ring Removal Note

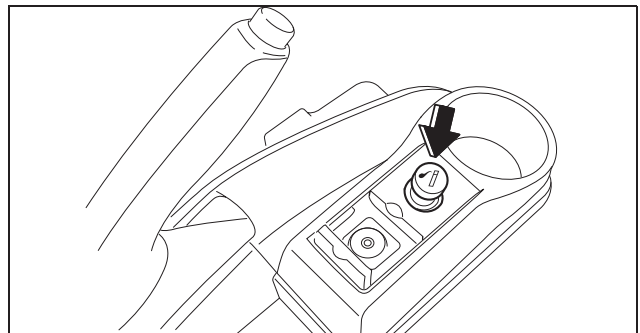
1. Remove the ring in the direction of the arrow (2) shown in the figure while pressing the ring tabs in the direction of the arrow (1).



am2zzw0000023

CIGARETTE LIGHTER INSPECTION

1. Turn the ignition switch to the ACC position.
2. Press the cigarette lighter into the socket and verify that it returns to its original position in **10—20 s.**
 - If the cigarette lighter does not operate normally, replace the cigarette lighter and the socket.



am2zzw0000023

POWER SYSTEMS

09-21 POWER SYSTEMS

POWER SYSTEM LOCATION

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Terminal Voltage Table (Reference) . . .	09-21-6

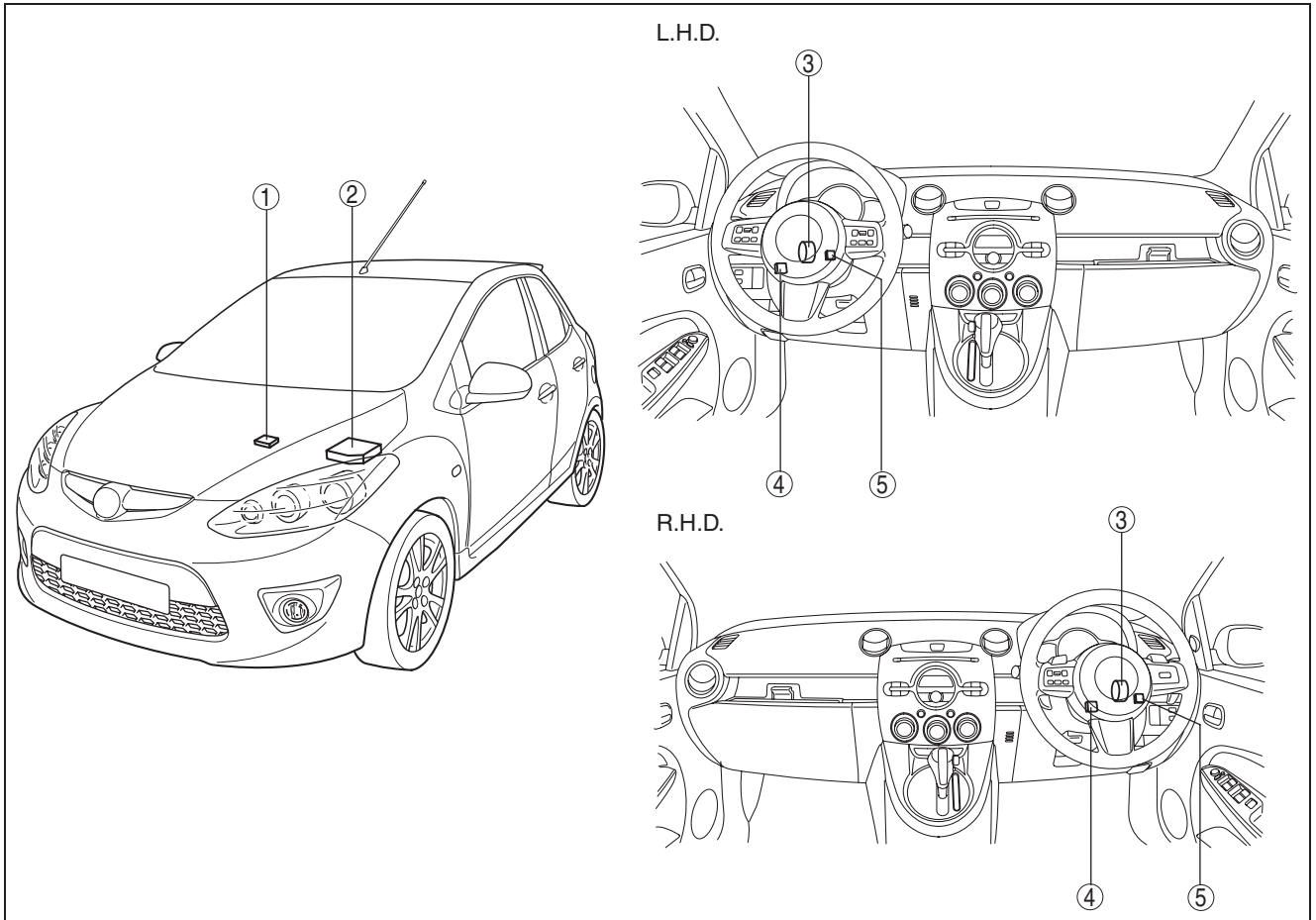
IGNITION SWITCH

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POWER SYSTEMS

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id092100800700



am2zzw0000404

1	Main fuse (See 09-21-3 MAIN FUSE REMOVAL/ INSTALLATION.)
2	Relay and fuse block (See 09-21-8 RELAY LOCATION.) (See 09-21-10 RELAY INSPECTION.)
3	Ignition switch (See 09-21-6 IGNITION SWITCH REMOVAL/ INSTALLATION.) (See 09-21-7 IGNITION SWITCH INSPECTION.)

4	Steering lock unit (with advanced keyless and start system) (See 09-21-6 STEERING LOCK UNIT INSPECTION [WITH ADVANCED KEYLESS AND START SYSTEM].)
5	Key reminder switch (without advanced keyless and start system) (See 09-21-5 KEY REMINDER SWITCH REMOVAL/INSTALLATION [WITHOUT ADVANCED KEYLESS AND START SYSTEM].) (See 09-21-5 KEY REMINDER SWITCH INSPECTION [WITHOUT ADVANCED KEYLESS AND START SYSTEM].)

POWER SYSTEMS

FUSE SERVICE CAUTIONS

id092100801500

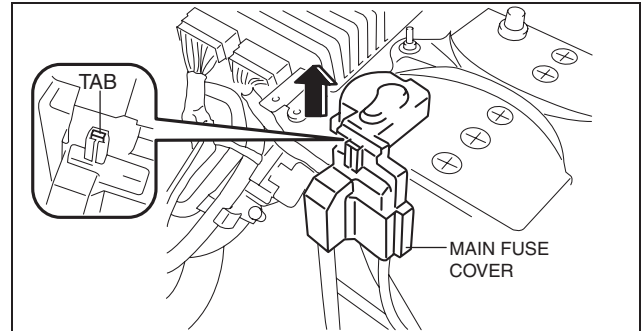
Caution

- If a fuse is burnt out, inspect the cause and repair the malfunctioning part, then replace the fuse with the specified value. If the fuse is replaced before doing this, it could burn again.

MAIN FUSE REMOVAL/INSTALLATION

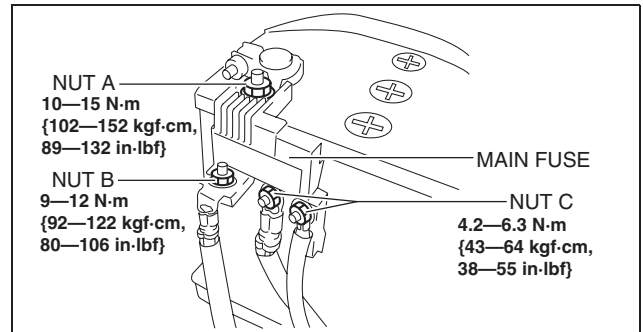
id092100801500

1. Disconnect the negative battery cable.
2. Remove the main fuse cover in the direction of the arrow while pressing the tab indicated in the figure.



am2zzw0000199

3. Remove nuts A, B, and C shown in the figure.
4. Remove the main fuse.
5. Install in the reverse order of removal.



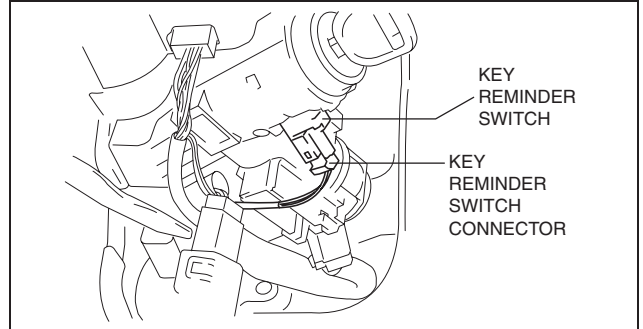
am2zzw0000199

POWER SYSTEMS

KEY REMINDER SWITCH REMOVAL/INSTALLATION [WITHOUT ADVANCED KEYLESS AND START SYSTEM]

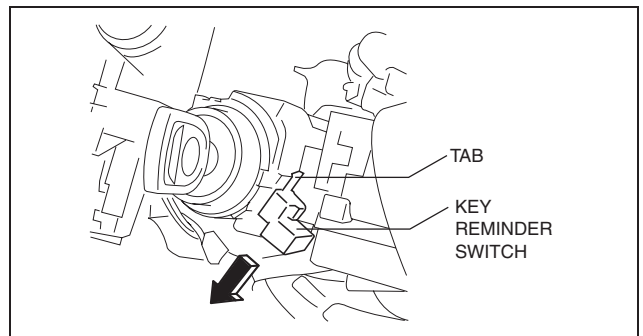
id092100491900

1. Disconnect the negative battery cable.
2. Remove the column cover. (See 09-17-25 COLUMN COVER REMOVAL/INSTALLATION.)
3. Remove the coil antenna. (See 09-14-133 COIL ANTENNA REMOVAL/INSTALLATION [KEYLESS ENTRY SYSTEM].)
4. Insert the key into the key cylinder and turn the ignition switch to the ACC position.
5. Disconnect the key reminder switch connector.



am2zzw0000199

6. Detach the key reminder switch tab.
7. Install the key reminder switch in the direction of the arrow.
8. Install in the reverse order of removal.

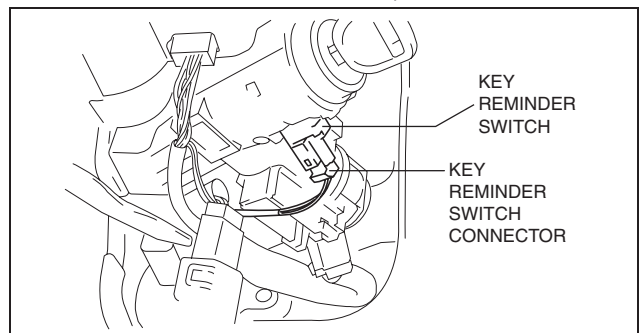


am2zzw0000193

KEY REMINDER SWITCH INSPECTION [WITHOUT ADVANCED KEYLESS AND START SYSTEM]

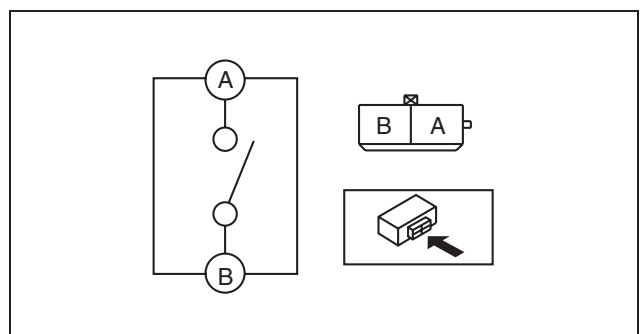
id092100492000

1. Disconnect the negative battery cable.
2. Remove the column cover. (See 09-17-25 COLUMN COVER REMOVAL/INSTALLATION.)
3. Disconnect the key reminder switch connector.



am2zzw0000193

4. Verify that the continuity between the key reminder switch terminals is as indicated in the table.



adejiw00000710

POWER SYSTEMS

- If not as indicated in the table, replace the key reminder switch.

○—○ : CONTINUITY		
KEY POSITION	TERMINAL	
	A	B
KEY INSERTED	○—○	○—○
KEY REMOVED		

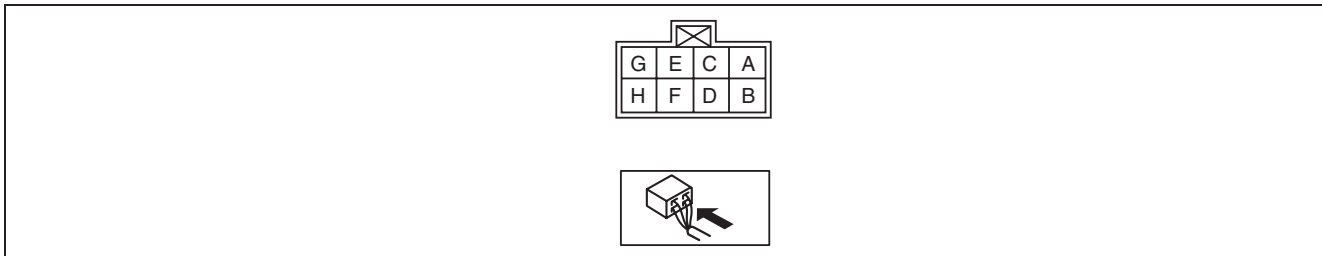
am2zzw0000194

STEERING LOCK UNIT INSPECTION [WITH ADVANCED KEYLESS AND START SYSTEM]

id092100491800

1. Remove the column cover. (See 09-17-25 COLUMN COVER REMOVAL/INSTALLATION.)
2. Measure each terminal voltage under the measurement condition.
 - If the voltage is not as specified in the terminal voltage table, inspect the parts under "Inspection item(s)".
 - If the system does not work normally even though the inspection items are normal, replace the steering lock unit.

Terminal Voltage Table (Reference)



adejjw00000721

Terminal	Signal name	Connected to	Measurement condition	Voltage (V)	Inspection item(s)
A	Push switch signal	Keyless control module	Start knob is pressed	B+	<ul style="list-style-type: none"> • Keyless control module • Related wiring harness
			Start knob is not pressed	1.0 or less	
B	Power supply	Fuse	Under any condition	B+	<ul style="list-style-type: none"> • Fuse • Related wiring harness
C	Key reminder switch signal	Keyless control module	Key is inserted	B+	<ul style="list-style-type: none"> • Keyless control module • Related wiring harness
			Key is not inserted	1.0 or less	
D	—	—	—	—	—
E	Power supply	Fuse	Under any condition	B+	<ul style="list-style-type: none"> • Fuse • Related wiring harness
F	—	—	—	—	—
G	Serial communication	Keyless control module	Terminal used for communication therefore determination based on terminal voltage inspection not possible.		
H	Ground	Body ground	Under any condition	1.0 or less	<ul style="list-style-type: none"> • Related wiring harness

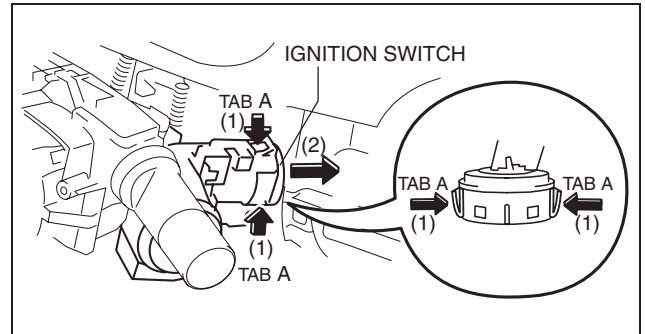
IGNITION SWITCH REMOVAL/INSTALLATION

id092100800200

1. Disconnect the negative battery cable.
2. Remove the column cover. (See 09-17-25 COLUMN COVER REMOVAL/INSTALLATION.)

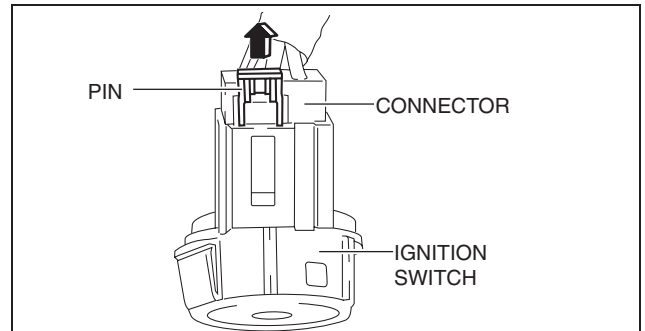
POWER SYSTEMS

- Press tabs A in the direction of the arrow (1) shown in the figure and pull the ignition switch in the direction of the arrow (2).



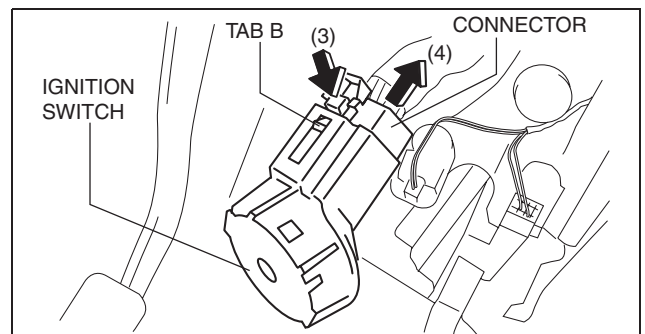
am2zzw0000199

- Pull the pin in the direction of the arrow shown in the figure and release the lock.



am2zzw0000200

- Pull the connector in the direction of the arrow (4) shown in the figure and remove it while pressing tab B in the direction of the arrow (3).
- Install in the reverse order of removal.

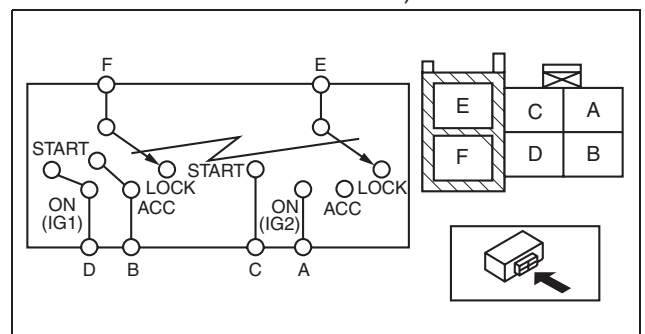


am2zzw0000200

IGNITION SWITCH INSPECTION

id092100800100

- Disconnect the negative battery cable.
- Remove the column cover. (See 09-17-25 COLUMN COVER REMOVAL/INSTALLATION.)
- Remove the ignition switch. (See 09-21-6 IGNITION SWITCH REMOVAL/INSTALLATION.)
- Verify that the continuity between the ignition switch terminals is as indicated in the table.
 - If not as indicated in the table, replace the ignition switch.



adejiw00003501

POWER SYSTEMS

○—○: CONTINUITY

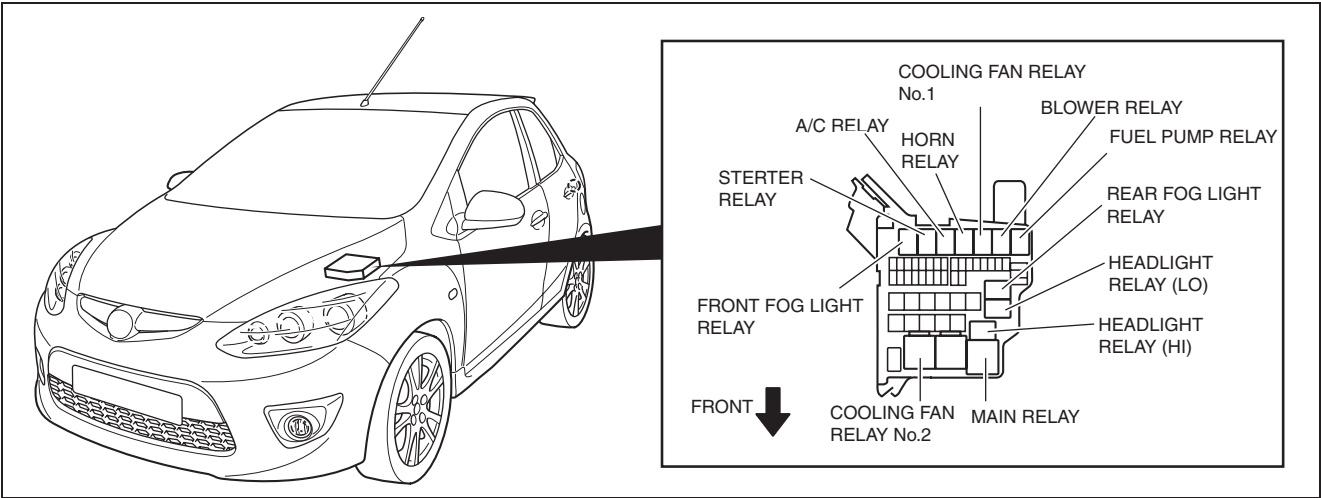
IGNITION KEY POSITION	TERMINAL					
	F	E	D	C	B	A
LOCK						
ACC	○	—	—	—	○	
ON	○	○	○	—	○	○
START	○	○	○	○		

am2zzw0000200

RELAY LOCATION

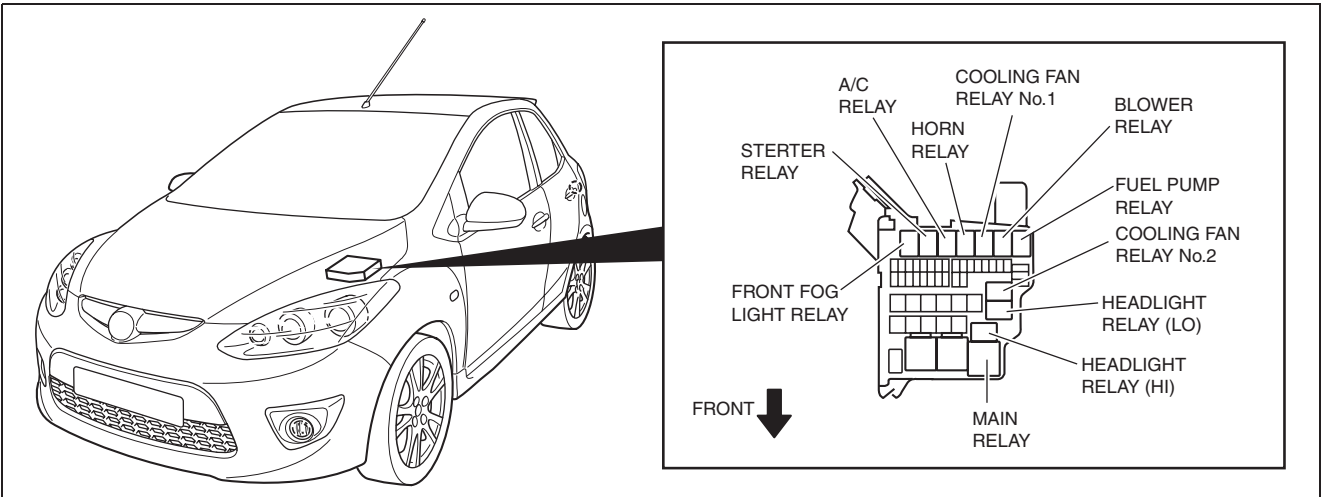
id092100800600

Except AutoAlliance Thailand (AAT) manufactured vehicles
Except Hong Kong specs.



am2zzw0000200

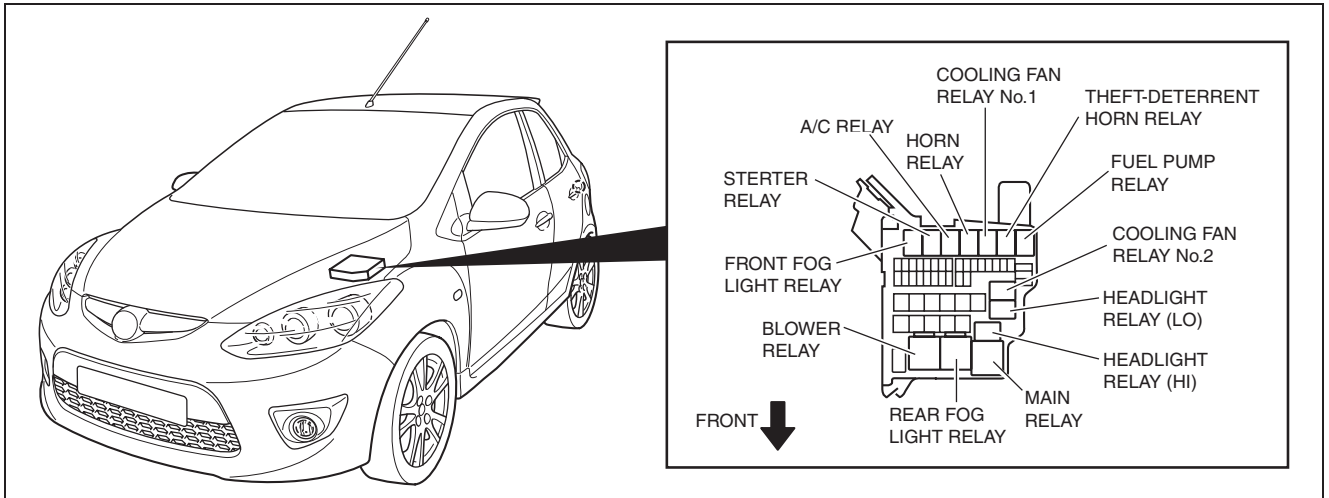
Hong Kong specs.



am2zzw0000432

POWER SYSTEMS

AutoAlliance Thailand (AAT) manufactured vehicles



am2zzw0000432

RELAY INSPECTION

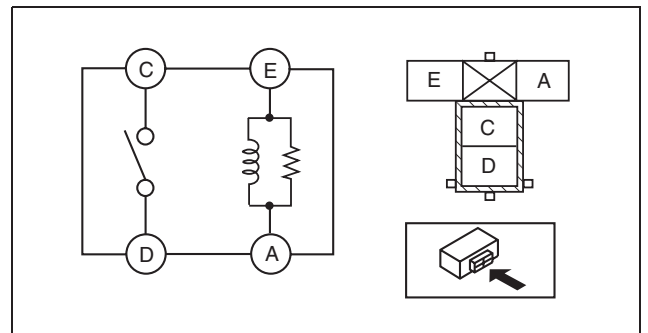
id092100800300

Relay Type (Except AutoAlliance Thailand (AAT) manufactured vehicles) Except Hong Kong specs.

Connector type		Part name
4-pin	Type A	<ul style="list-style-type: none"> • Front fog light relay • Rear fog light relay • Starter relay • A/C relay • Horn relay • Cooling fan relay No.1 • Headlight relay (LO) • Headlight relay (HI) • Blower relay
	Type B	Cooling fan relay No.2
	Type C	Main relay
	Type D	Fuel pump relay

Type A

1. Verify that the continuity is as indicated in the table.
 - If not as indicated in the table, replace the relay.



am2zzw0000262

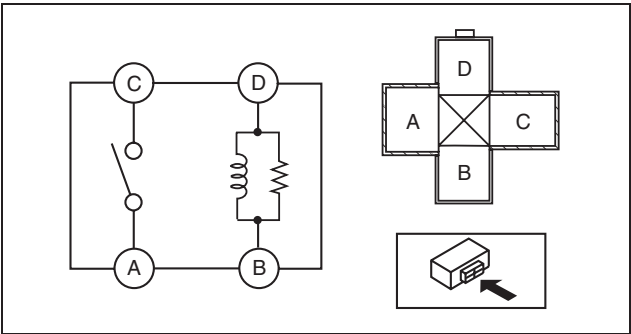
○—○ : CONTINUITY				
STEP	TERMINAL			
	E	A	C	D
1	○	○		
2	B+	GROUND	○	○

am2zzw0000195

POWER SYSTEMS

Type B

1. Verify that the continuity is as indicated in the table.
- If not as indicated in the table, replace the relay.



adejjw00003060

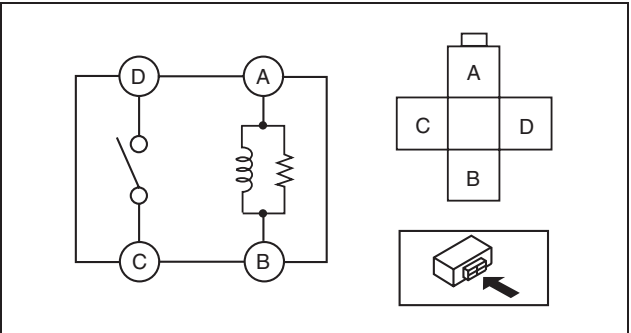
○—○ : CONTINUITY

STEP	TERMINAL			
	D	B	A	C
1	○—○			
2	B+	GROUND	○—○	

am2zzw0000195

Type C

1. Verify that the continuity is as indicated in the table.
- If not as indicated in the table, replace the relay.



am2zzw0000432

○—○ : CONTINUITY

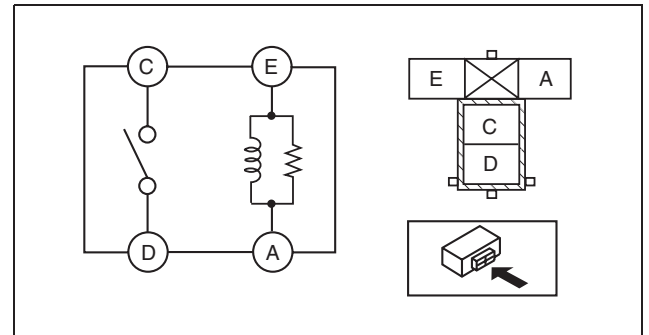
STEP	TERMINAL			
	A	B	C	D
1	○—○			
2	B+	GROUND	○—○	

am2zzw0000195

POWER SYSTEMS

Type D

- Verify that the continuity is as indicated in the table.
 - If not as indicated in the table, replace the relay.



am2zzw0000262

○—○ : CONTINUITY

STEP	TERMINAL			
	E	A	C	D
1	○—○			
2	B+	GROUND	○—○	

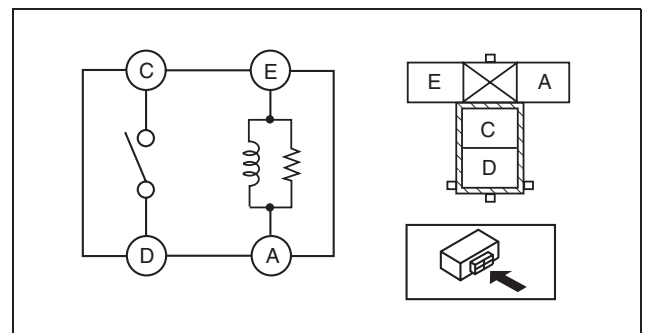
am2zzw0000195

Relay Type (Except AutoAlliance Thailand (AAT) manufactured vehicles) Hong Kong specs.

Connector type		Part name
4-pin	Type A	<ul style="list-style-type: none"> Front fog light relay Cooling fan relay No.1 Cooling fan relay No.2 Starter relay A/C relay Horn relay Headlight relay (LO) Headlight relay (HI) Blower relay Fuel pump relay
	Type B	Main relay

Type A

- Verify that the continuity is as indicated in the table.
 - If not as indicated in the table, replace the relay.



am2zzw0000262

○—○ : CONTINUITY

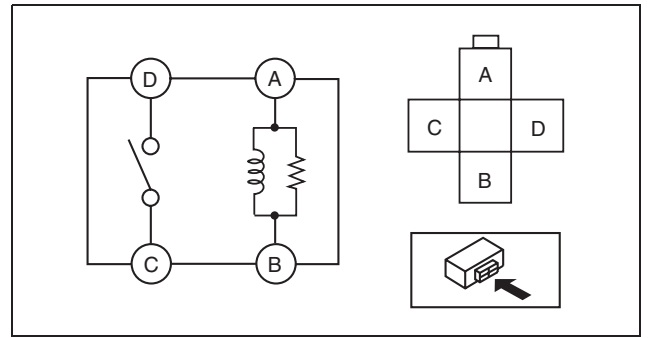
STEP	TERMINAL			
	E	A	C	D
1	○—○			
2	B+	GROUND	○—○	

am2zzw0000195

POWER SYSTEMS

Type B

- Verify that the continuity is as indicated in the table.
 - If not as indicated in the table, replace the relay.



am2zzw0000432

○—○ : CONTINUITY

STEP	TERMINAL			
	A	B	C	D
1	○—○			
2	B+	GROUND	○—○	

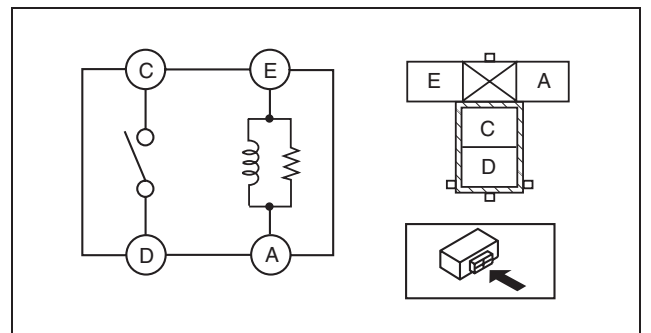
am2zzw0000195

Relay Type (AutoAlliance Thailand (AAT) manufactured vehicles)

Connector type		Part name
4-pin	Type A	<ul style="list-style-type: none"> Front fog light relay Starter relay A/C relay Horn relay Cooling fan relay No.1 Cooling fan relay No.2 Headlight relay (LO) Headlight relay (HI) Theft-deterrent horn relay Fuel pump relay
	Type B	<ul style="list-style-type: none"> Blower relay Rear fog light relay
	Type C	Main relay

Type A

- Verify that the continuity is as indicated in the table.
 - If not as indicated in the table, replace the relay.



am2zzw0000262

POWER SYSTEMS

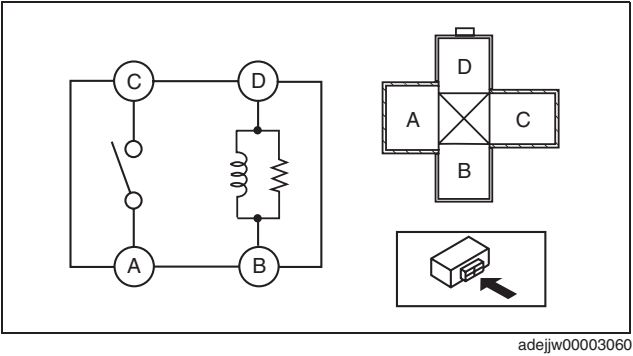
○—○ : CONTINUITY

STEP	TERMINAL			
	E	A	C	D
1	○—○			
2	B+	GROUND	○—○	

am2zzw0000195

Type B

1. Verify that the continuity is as indicated in the table.
- If not as indicated in the table, replace the relay.



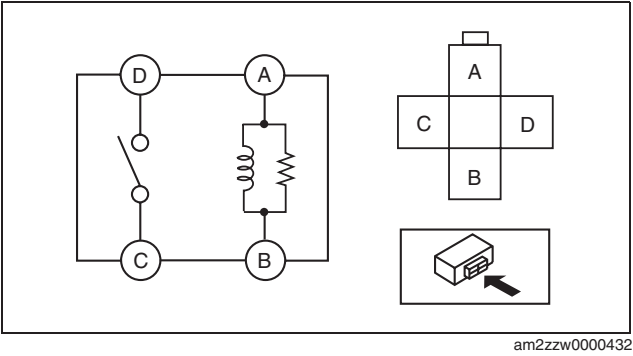
○—○ : CONTINUITY

STEP	TERMINAL			
	D	B	A	C
1	○—○			
2	B+	GROUND	○—○	

am2zzw0000195

Type C

1. Verify that the continuity is as indicated in the table.
- If not as indicated in the table, replace the relay.



○—○ : CONTINUITY

STEP	TERMINAL			
	A	B	C	D
1	○—○			
2	B+	GROUND	○—○	

am2zzw0000195

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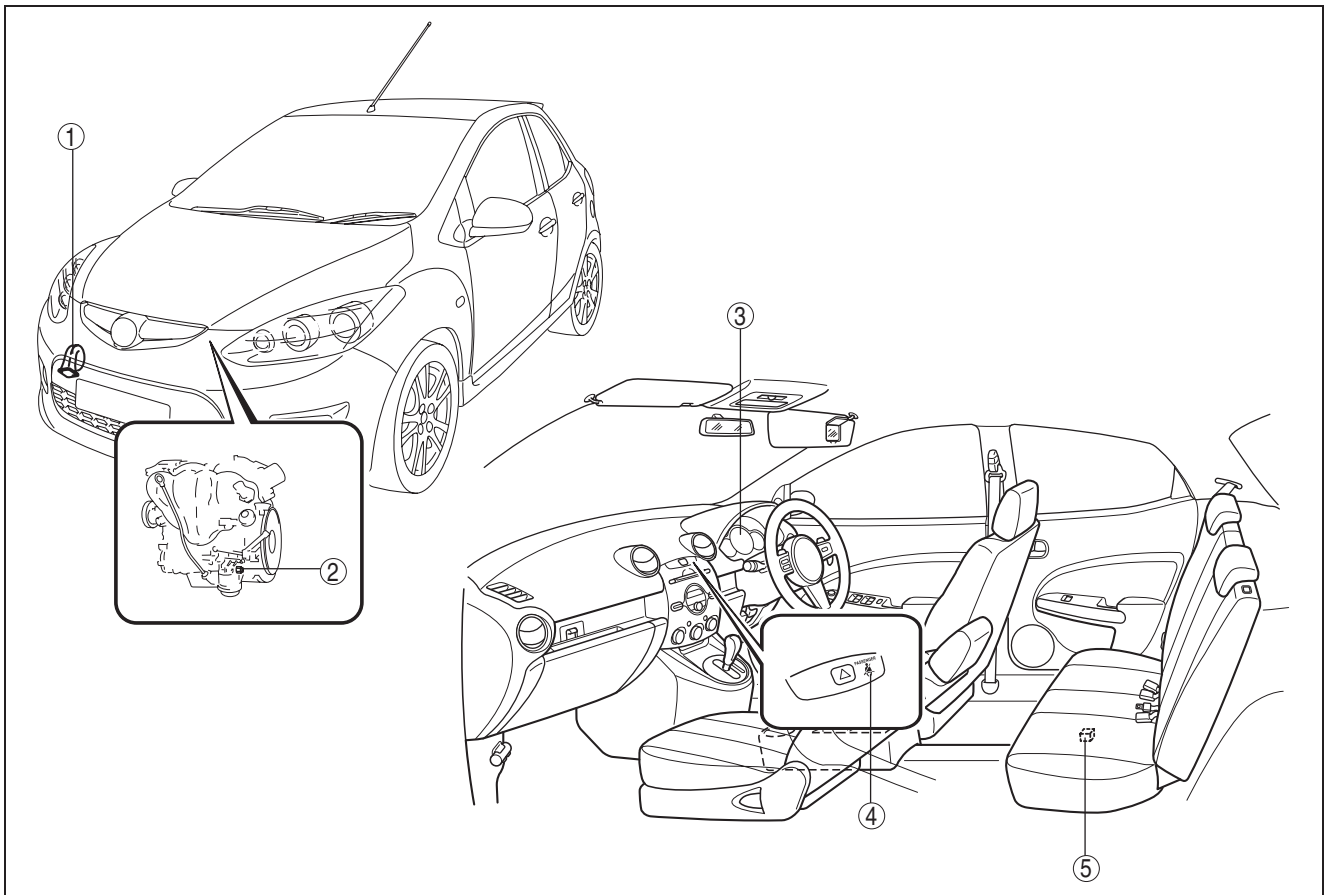
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id092200495000

R.H.D.



am2zzw0000086

1	Horn (See 09-22-20 HORN REMOVAL/INSTALLATION.)
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3	Instrument cluster (See 09-22-5 INSTRUMENT CLUSTER REMOVAL/INSTALLATION.) (See 09-22-7 INSTRUMENT CLUSTER CONFIGURATION.) (See 09-22-8 INSTRUMENT CLUSTER DISASSEMBLY/ASSEMBLY.) (See 09-22-8 INSTRUMENT CLUSTER INSPECTION.) (See 09-22-14 INSTRUMENT CLUSTER CUSTOMIZED FUNCTION SETTING PROCEDURE.)

4	Passenger seat belt reminder (See 09-22-19 PASSENGER SEAT BELT REMINDER REMOVAL/INSTALLATION.) (See 09-22-19 PASSENGER SEAT BELT REMINDER INSPECTION.)
5	Fuel gauge sender unit (See 09-22-15 FUEL GAUGE SENDER UNIT REMOVAL/INSTALLATION.) (See 09-22-18 FUEL GAUGE SENDER UNIT INSPECTION.)

INSTRUMENT CLUSTER REMOVAL/INSTALLATION

id092200496

Caution

- When replacing the instrument cluster, always perform the configuration procedure before removing the instrument cluster. Replacing the instrument cluster without performing the configuration procedure will result in system malfunction.

INSTRUMENTATION/DRIVER INFO.

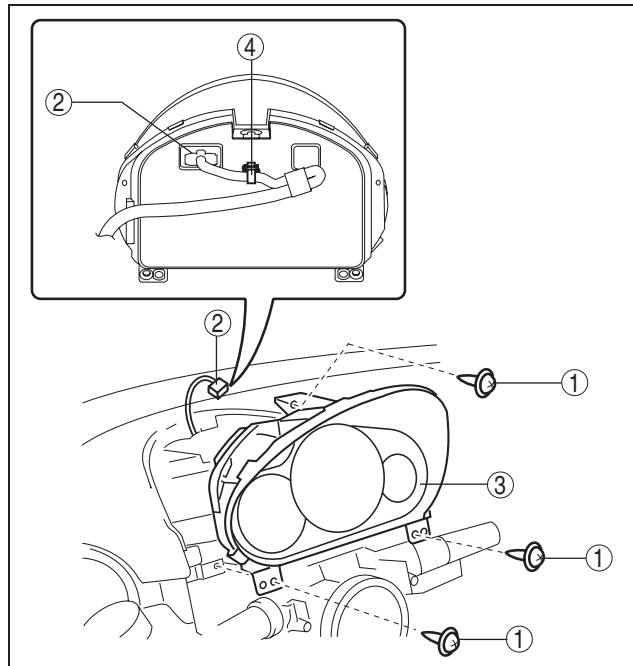
1. When replacing the instrument cluster, always perform the configuration procedure. (See 09-22-7 INSTRUMENT CLUSTER CONFIGURATION.)
2. Disconnect the negative battery cable.
3. Remove the meter hood. (See 09-17-24 METER HOOD REMOVAL/INSTALLATION.)
4. Remove in the order indicated in the table.

1	Screw
2	Connector
3	Instrument cluster
4	Wiring harness clip

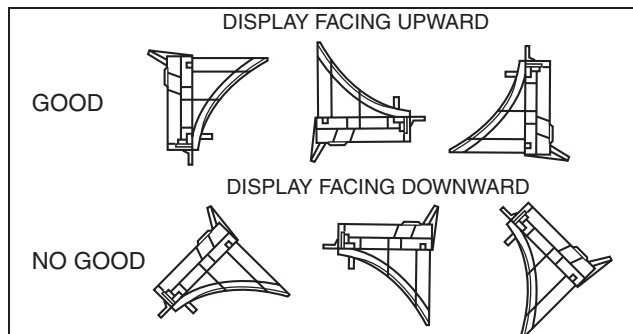
5. Install in the reverse order of removal.
6. Program the immobilizer system-related parts when replacing the instrument cluster. (With keyless entry system) (See 09-14-150 IMMOBILIZER SYSTEM-RELATED PARTS PROGRAMMING [KEYLESS ENTRY SYSTEM].)

Caution

- Place the removed instrument cluster with the display surface facing upward. Otherwise grease could leak from the meter unit.



am2zzw0000260



am2zzw0000189

INSTRUMENT CLUSTER CONFIGURATION

id092200496200

Note

- Use the IDS (laptop PC) because the PDS (Pocket PC) does not support the INSTRUMENT CLUSTER CONFIGURATION.

Note

- If all the following conditions are met, the odometer data (total traveled distance) in the previous instrument cluster is automatically transferred to a new instrument cluster during the configuration. If any of the conditions are not met, odometer-data transfer cannot be performed.

Previous instrument cluster

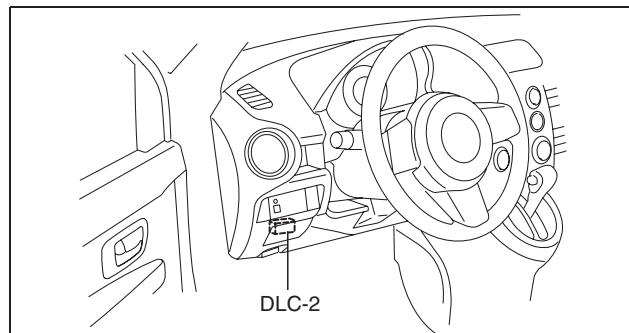
- No malfunction (Configuration data can be read using the M-MDS)

New instrument cluster

- Odometer display is less than 100 km
- Odometer has no malfunction

INSTRUMENTATION/DRIVER INFO.

1. Connect the M-MDS to the DLC-2.
2. After the vehicle is identified, select the following items from the initialization screen of the M-MDS.
 1. Select "Module Programming".
3. Then, select items from the screen menu in the following order.
 1. Select "Programmable Module Installation".
 2. Select "IC".
4. Perform the configuration according to the directions on the screen.
5. Select "Programmable Parameters" from the menu.
6. Select "Odometer Write", and perform the procedure following the screen.
7. Retrieve DTCs by the M-MDS, then verify that there is no DTC present.
 - If a DTC (s) is detected, perform the applicable DTC inspection. (See 09-02F-2 DTC TABLE [INSTRUMENT CLUSTER].)



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INSTRUMENT CLUSTER DISASSEMBLY/ASSEMBLY

id092200496300

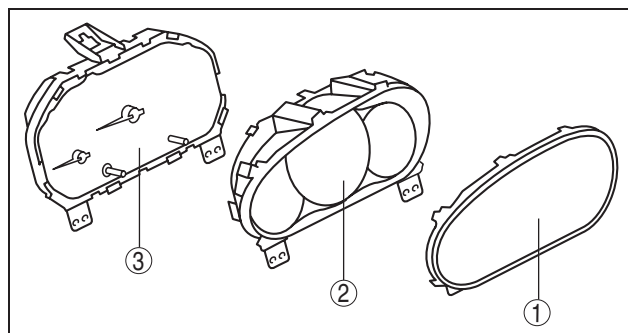
Caution

- Do not drop the instrument cluster or damage the printed board. This will lead to a system malfunction.

1. Disconnect the negative battery cable.
2. Remove the meter hood. (See 09-17-24 METER HOOD REMOVAL/INSTALLATION.)
3. Remove the instrument cluster. (See 09-22-5 INSTRUMENT CLUSTER REMOVAL/INSTALLATION.)
4. Disassemble in the order indicated in the figure.

1	Lens
2	Cover
3	Instrument cluster unit

5. Assemble in the reverse order of disassembly.



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INSTRUMENT CLUSTER INSPECTION

id092200496400

Speedometer (Except AutoAlliance Thailand (AAT) manufactured vehicles)

1. Adjust the tire pressure to the specification.
2. Using a speedometer tester, verify that the tester reading is as indicated in the table.
 - If the speedometer does not operate or the indication is not within the allowable range, inspect the PCM, ABS HU/CM or DSC HU/CM, and related wiring harnesses.
 - If the PCM, ABS HU/CM or DSC HU/CM, and related wiring harnesses do not have any malfunction, replace the instrument cluster.

INSTRUMENTATION/DRIVER INFO.

Hong Kong specs.

Speedometer tester indication (km/h)	Allowable range (km/h)
20	20—25
40	40—45
60	61—66
80	81—87
100	102—108
120	122—129
140	143—150

U.K. specs.

Speedometer tester indication (mph)	Allowable range (mph)
10	10—13
20	20—23
30	30—33
40	40—43
50	50—54
60	60—64
70	70—75
80	80—85

Speedometer (AutoAlliance Thailand (AAT) manufactured vehicles)

1. Adjust the tire pressure to the specification.
2. Using a speedometer tester, verify that the tester reading is as indicated in the table.
 - If the speedometer does not operate or the indication is not within the allowable range, inspect the PCM, ABS HU/CM or DSC HU/CM, and related wiring harnesses.
 - If the PCM, ABS HU/CM or DSC HU/CM, and related wiring harnesses do not have any malfunction, replace the instrument cluster.

INSTRUMENTATION/DRIVER INFO.

Arab Gulf Cooperation Council, Australian specs.

Speedometer tester indication (km/h)	Allowable range (km/h)
20	20—25
40	40—44
60	60—65
80	80—86
100	100—107
120	121—127
140	141—148

Except Arab Gulf Cooperation Council; General (L.H.D. R.H.D.) specs., and Thailand

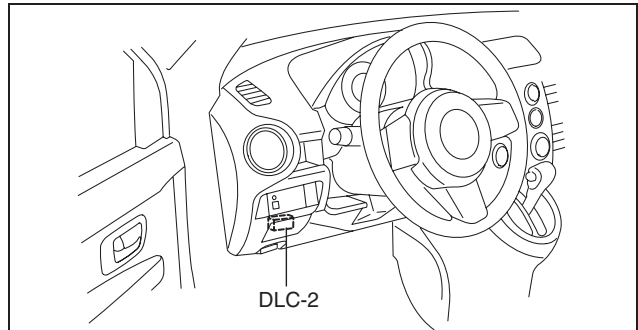
Speedometer tester indication (km/h)	Allowable range (km/h)
20	18—22
40	38—42
60	58—62
80	77—83
100	97—103
120	117—123
140	138—144

Tachometer

Caution

- If the engine speed exceeds the allowable range, the engine could be damaged. Therefore, when inspecting the tachometer, do not allow the engine speed to exceed the allowable range indication on the tachometer.

1. Connect the M-MDS to the DLC-2.
2. After vehicle identification, the following can be selected from the M-MDS initialization screen.
 - Using an IDS (laptop PC):
 1. "Data logger"
 2. "Module"
 3. "IC"
 - Using a PDS (Pocket PC):
 1. "Module test"
 2. "IC"
 3. "Data logger"
3. Select "TACHOMTR" from PID/DATA Monitor Table.
4. Verify the monitored value according to the directions on the screen.



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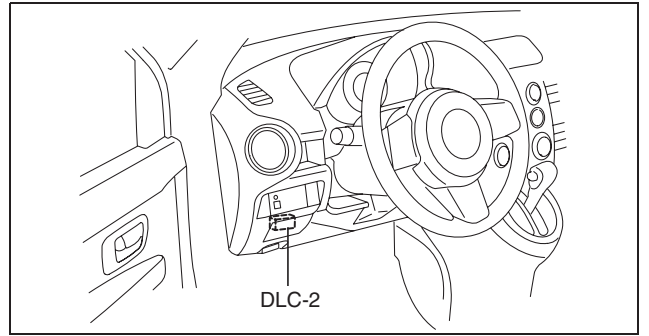
Note

- The PID data screen function is used for monitoring the calculated value of input/output signals in the module. Therefore, if the monitored value of the output parts is not within the specification, it is necessary to inspect the monitored value of input parts corresponding to the applicable output part control. In addition, because the system does not display an output part malfunction as an abnormality in the monitored value, it is necessary to inspect the output parts individually.

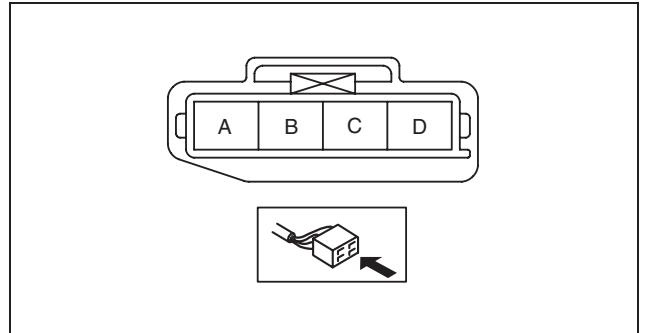
INSTRUMENTATION/DRIVER INFO.

Fuel gauge

1. Connect the M-MDS to the DLC-2.
2. After vehicle identification, the following can be selected from the M-MDS initialization screen.
 - Using an IDS (laptop PC):
 1. "Data logger"
 2. "Module"
 3. "IC"
 - Using a PDS (pocket PC):
 1. "Module test"
 2. "IC"
 3. "Data logger"
3. Verify that all the segments are displayed using "LCD_SEG".
 - If any of the segments are not displayed, replace the instrument cluster. (See 09-22-5 INSTRUMENT CLUSTER REMOVAL/INSTALLATION.)
4. Disconnect the negative battery cable.
5. Remove the rear seat cushion. (See 09-13-31 REAR SEAT CUSHION REMOVAL/INSTALLATION.)
6. Remove the service hole cover.
7. Disconnect the fuel pump connector.
8. Connect the negative battery cable.
9. Connect the **SST** (Fuel and thermometer checker) to fuel pump unit connector terminals C and D.
10. Verify the fuel gauge reading is as indicated in the table using the **SST** (Fuel and thermometer checker).
 - If not as indicated in the table, inspect the wiring harness.
 - If there is any malfunction, repair or replace the wiring harness.
 - If the wiring harness is normal, replace the instrument cluster.












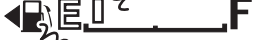
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INSTRUMENTATION/DRIVER INFO.

Except Hong Kong specs.

Fuel gauge indication (instrument cluster)	Resistance of SST (Fuel and thermometer checker) (ohm)
	Approx. 60 or less
	Approx. 61—93
	Approx. 94—128
	Approx. 129—160
	Approx. 161—192
	Approx. 193—226
	Approx. 227—260
	Approx. 261—277
	Approx. 278—293
	Approx. 294 or more

Hong Kong specs.

Fuel gauge indication (instrument cluster)	Resistance of SST (Fuel and thermometer checker) (ohm)
	Approx. 71 or less
	Approx. 71—104
	Approx. 105—136
	Approx. 137—166
	Approx. 167—196
	Approx. 197—229
	Approx. 230—262
	Approx. 263—277
	Approx. 278—293
	Approx. 294 or more

INSTRUMENT CLUSTER CUSTOMIZED FUNCTION SETTING PROCEDURE

id092200555500

Note

- Use the IDS (laptop PC) because the PDS (pocket PC) does not support the customized functions setting procedure of the instrument cluster.

INSTRUMENTATION/DRIVER INFO.

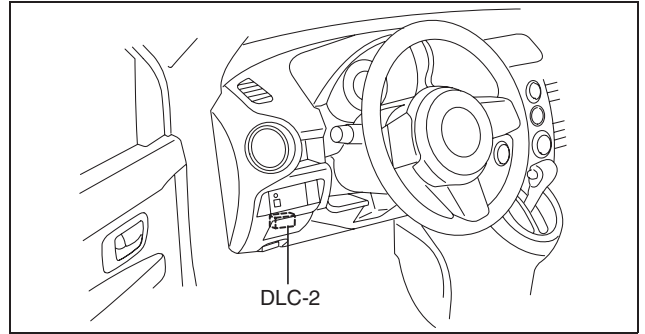
1. Connect the M-MDS to the DLC-2.
2. After vehicle identification, the following can be selected from the M-MDS initialization screen.
 1. "Module Programming"
3. Then, select the following from the screen menu.
 1. "Programmable Parameters"
 2. "Warning Lamps/Chimes"
4. Select the following items and change the setting according to the directions on the screen.

Supported items

- DIS Correction (0%, 5%, 10%, 15%, -15%, -10%, -5%)
- Distance to Empty Response Data (1.50—5.25)
- Driver Beltminder Status (Disabled/Enabled)
- Passenger Beltminder Status (Disabled/Enabled)

Caution

- The M-MDS screen displays the following items, however, do not change the setting. If the setting is changed, a difference occurs between the instrument cluster indication and actual fuel level leading to unexpected fuel shortage.
 - Fuel response data (level 1—16)



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FUEL GAUGE SENDER UNIT REMOVAL/INSTALLATION

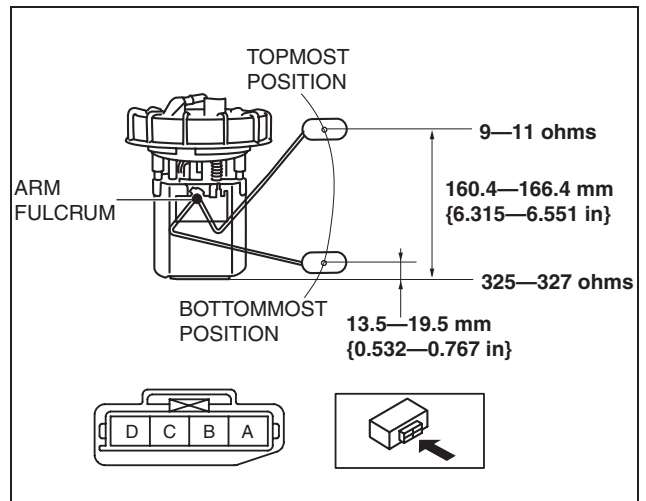
id092200497000

(See 01-14A-15 FUEL PUMP UNIT DISASSEMBLY/ASSEMBLY [ZJ, ZY].)

FUEL GAUGE SENDER UNIT INSPECTION

id092200497100

1. Disconnect the negative battery cable.
2. Remove the fuel pump unit.
3. Move the float to the topmost and bottommost positions, and verify that the resistance between terminals C and D of the fuel gauge sender unit and the position of the float are as shown in the figure.
 - If they are not as shown in the figure, replace the fuel gauge sender unit.



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OIL PRESSURE SWITCH INSPECTION

id092200495300

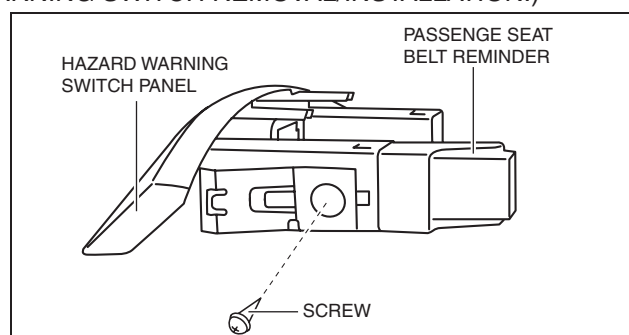
1. Turn the ignition switch to the ON position and verify that the oil pressure warning light illuminates.
2. Start the engine and verify that the oil pressure warning light turns off.
 - If the oil pressure warning light does not illuminate or remains illuminated, inspect the BCM and the related wiring harnesses. (See 09-02G-2 DTC INSPECTION [BCM].)
 - If the related wiring harnesses are normal, inspect the oil pressure.

INSTRUMENTATION/DRIVER INFO.

PASSENGER SEAT BELT REMINDER REMOVAL/INSTALLATION

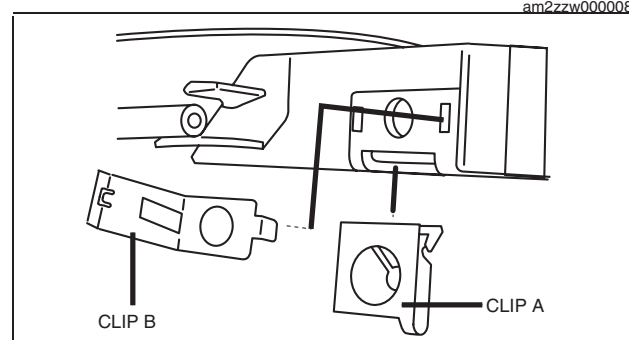
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1. Disconnect the negative battery cable.
2. Remove the following parts:
 - (1) Shift lever knob (MTX) (See 05-16A-1 MANUAL TRANSAXLE SHIFT MECHANISM REMOVAL/INSTALLATION [F35M-R].) (See 05-16B-2 MANUAL TRANSAXLE SHIFT MECHANISM REMOVAL/INSTALLATION [B65M-R].)
 - (2) Side wall (See 09-17-33 SIDE WALL REMOVAL/INSTALLATION.)
 - (3) Front console component (See 09-17-36 FRONT CONSOLE COMPONENT REMOVAL/INSTALLATION.)
 - (4) Glove compartment (vehicles with audio unit) (See 09-17-28 GLOVE COMPARTMENT COVER REMOVAL/INSTALLATION.)
 - (5) Center panel unit (vehicles without audio unit) (See 09-20-3 CENTER PANEL UNIT REMOVAL/INSTALLATION.)
 - (6) Center panel (vehicles without audio unit) (See 09-17-35 CENTER PANEL REMOVAL/INSTALLATION.)
 - (7) Hazard warning switch (See 09-18-40 HAZARD WARNING SWITCH REMOVAL/INSTALLATION.)
3. Remove the screw from the hazard warning switch panel.



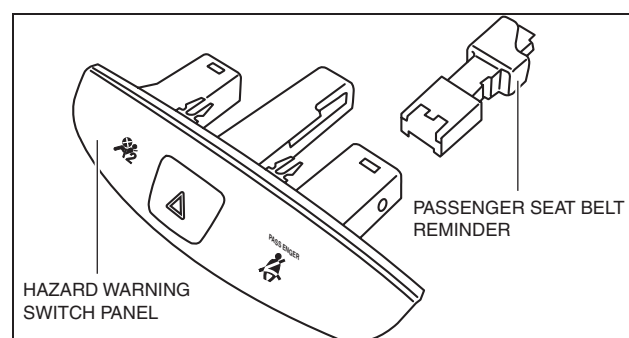
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4. Remove the clips A and B.



am2zzw0000088

5. Remove the seat belt reminder from the hazard warning switch panel.
6. Install in the reverse order of removal.



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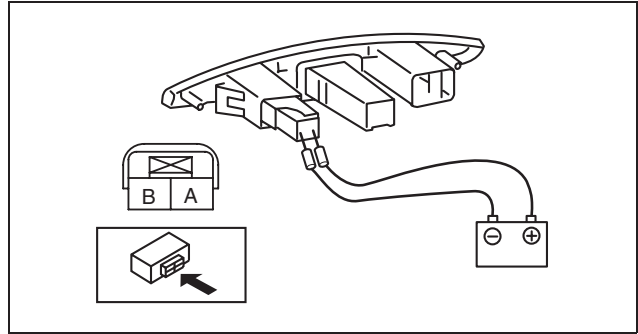
PASSENGER SEAT BELT REMINDER INSPECTION

id092200997600

1. Disconnect the negative battery cable.
2. Remove the following parts:
 - (1) Shift lever knob (MTX) (See 05-16A-1 MANUAL TRANSAXLE SHIFT MECHANISM REMOVAL/INSTALLATION [F35M-R].) (See 05-16B-2 MANUAL TRANSAXLE SHIFT MECHANISM REMOVAL/INSTALLATION [B65M-R].)

INSTRUMENTATION/DRIVER INFO.

- (2) Side wall (See 09-17-33 SIDE WALL REMOVAL/INSTALLATION.)
 - (3) Front console component (See 09-17-36 FRONT CONSOLE COMPONENT REMOVAL/INSTALLATION.)
 - (4) Glove compartment (vehicles with audio unit) (See 09-17-28 GLOVE COMPARTMENT COVER REMOVAL/INSTALLATION.)
 - (5) Center panel unit (vehicles without audio unit) (See 09-20-3 CENTER PANEL UNIT REMOVAL/INSTALLATION.)
 - (6) Center panel (vehicles without audio unit) (See 09-17-35 CENTER PANEL REMOVAL/INSTALLATION.)
 - (7) Hazard warning switch (See 09-18-40 HAZARD WARNING SWITCH REMOVAL/INSTALLATION.)
 - (8) Passenger seat belt reminder (See 09-22-19 PASSENGER SEAT BELT REMINDER REMOVAL/INSTALLATION.)
3. Apply battery positive voltage to passenger seat belt reminder terminal A, and connect terminal B to ground.
 4. Verify that the LED illuminates.
 - If the LED does not illuminate, replace the passenger seat belt reminder.

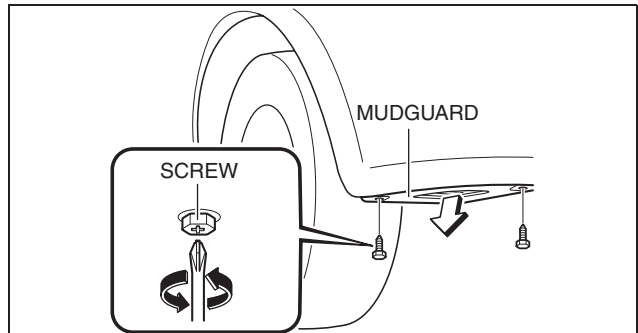


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HORN REMOVAL/INSTALLATION

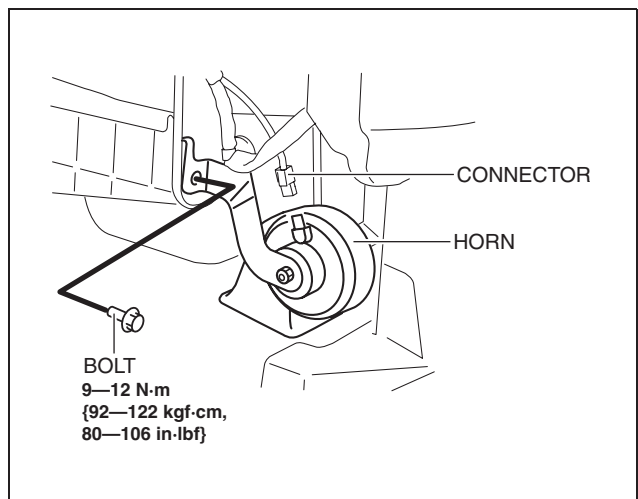
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1. Disconnect the negative battery cable.
2. Remove the screws.
3. Slightly bend back the mudguard.



am2zzw0000192

4. Disconnect the connector.
5. Remove the bolt.
6. Remove the horn.
7. Install in the reverse order of removal.



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CONTROL SYSTEM

09-40 CONTROL SYSTEM

CONTROL SYSTEM LOCATION

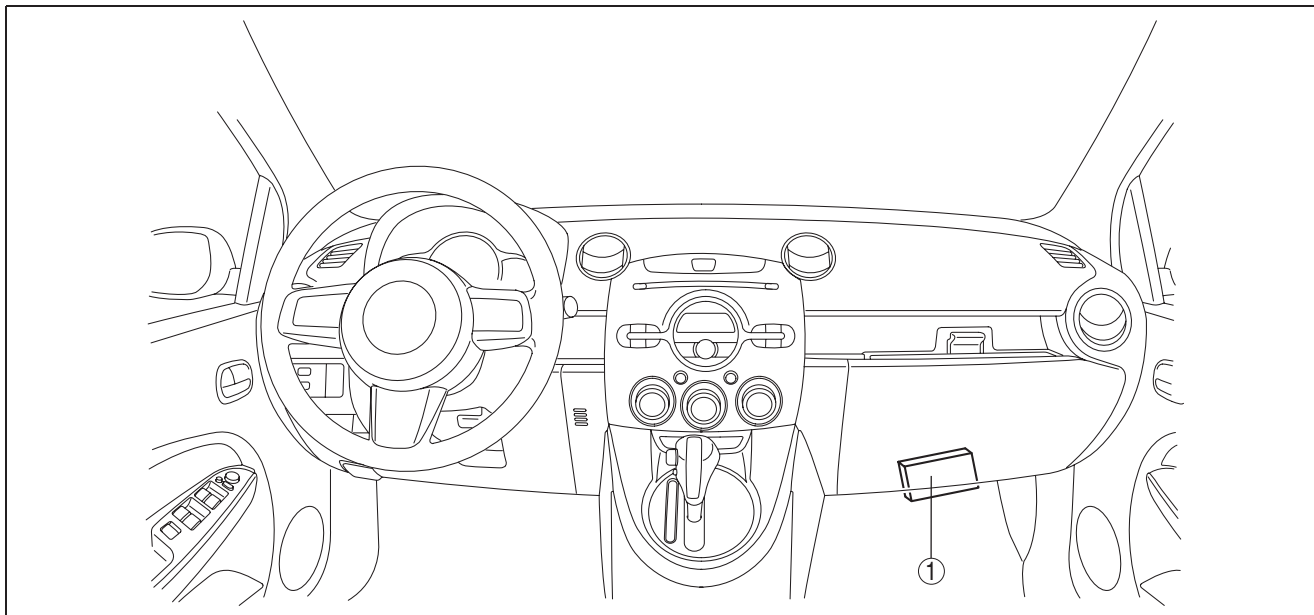
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CONTROL SYSTEM

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id094000801000



am2zzw0000025

1	BCM (body control module) (See 09-40-1 BODY CONTROL MODULE (BCM) REMOVAL/INSTALLATION.) (See 09-40-4 BODY CONTROL MODULE (BCM) INSPECTION.) (See 09-40-16 BODY CONTROL MODULE (BCM) CONFIGURATION.) (See 09-40-16 BODY CONTROL MODULE (BCM) BRACKET REMOVAL/INSTALLATION.)
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BODY CONTROL MODULE (BCM) REMOVAL/INSTALLATION

id094000800400

R.H.D.

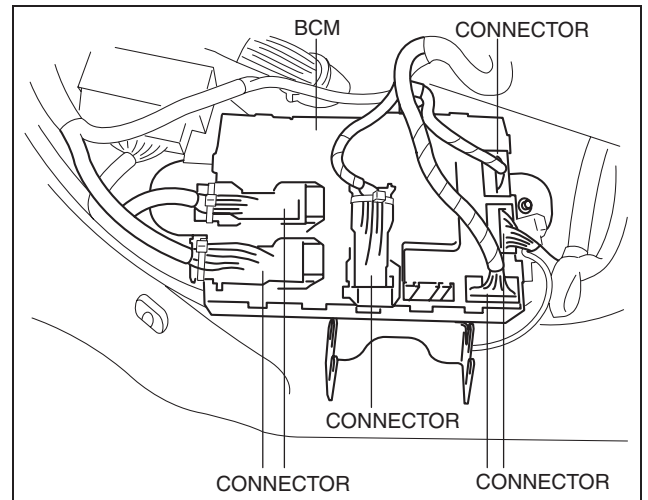
Caution

- When replacing the BCM, the configuration procedure must be performed before removing the BCM. Replacing the BCM without performing the configuration procedure will result in system malfunction.

1. Perform the BCM configuration when replacing it. (See 09-40-16 BODY CONTROL MODULE (BCM) CONFIGURATION.)
2. Disconnect the negative battery cable.
3. Remove the dashboard under cover. (See 09-17-35 DASHBOARD UNDER COVER REMOVAL/INSTALLATION.)
4. Remove the front scuff plate. (passenger's side) (See 09-17-56 FRONT SCUFF PLATE REMOVAL/INSTALLATION.)
5. Remove the front side trim. (passenger's side) (See 09-17-53 FRONT SIDE TRIM REMOVAL/INSTALLATION.)

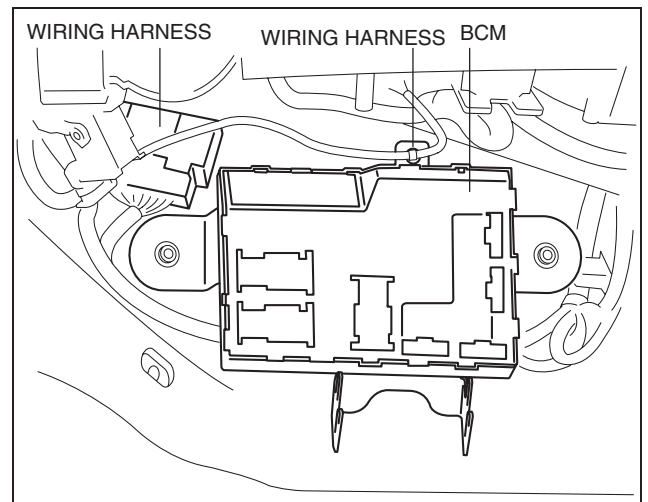
CONTROL SYSTEM

6. Disconnect the connectors at the position shown in the figure.



am2zzw0000177

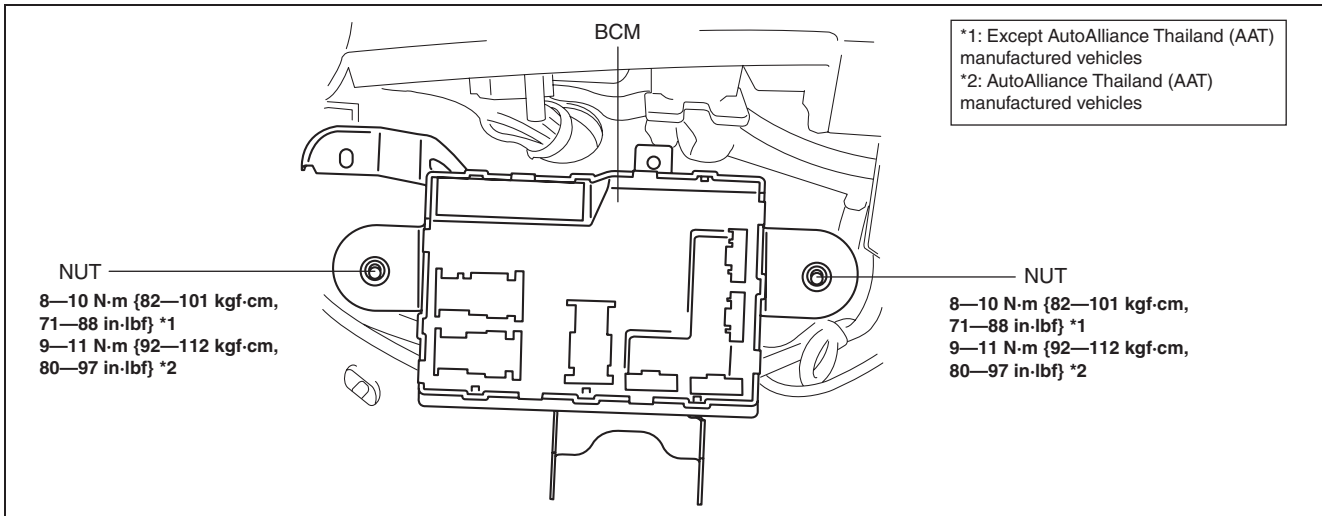
7. Disconnect the wiring harness at the position shown in the figure.



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CONTROL SYSTEM

8. Remove the nuts.



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9. Remove the BCM.

10. Install in the reverse order of removal.

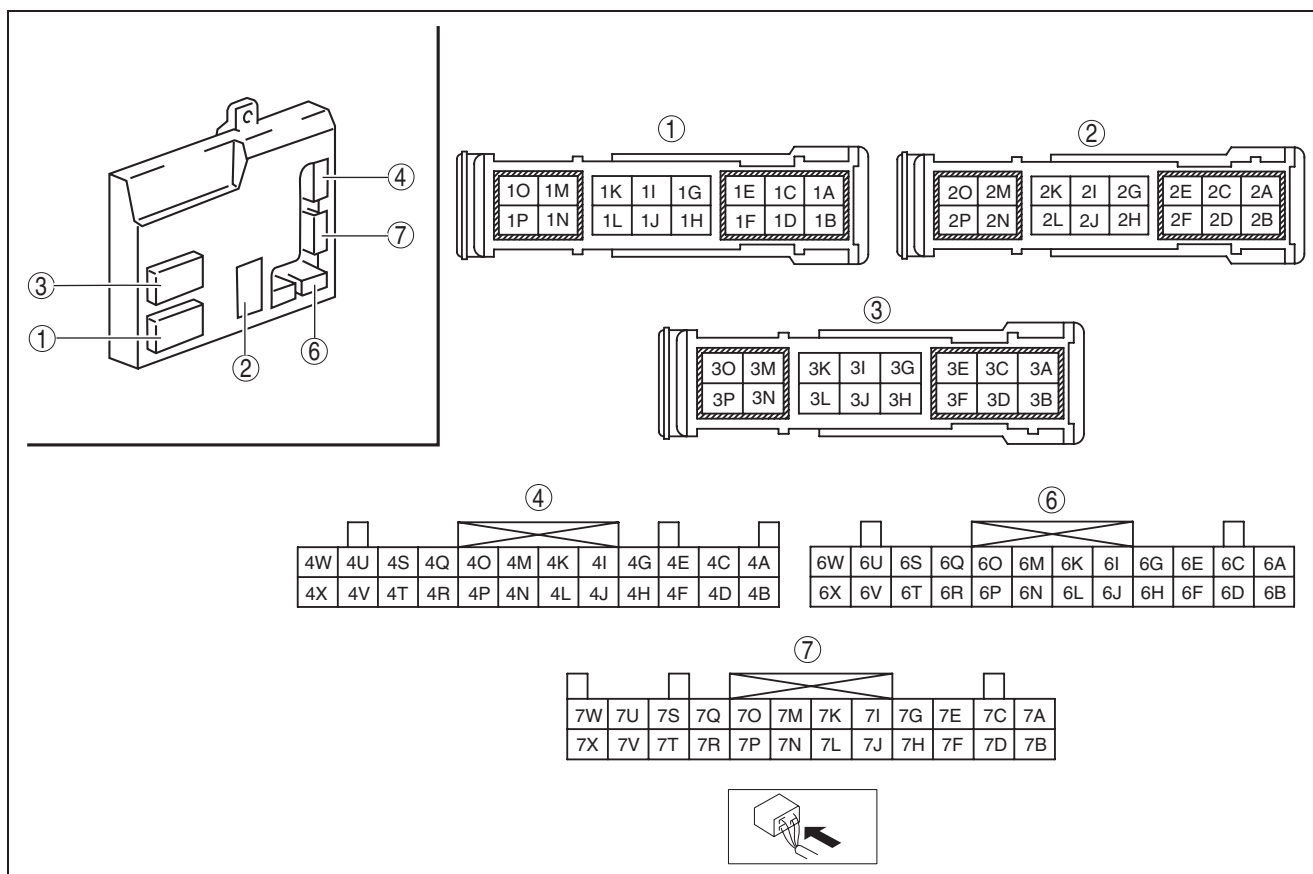
BODY CONTROL MODULE (BCM) INSPECTION

id094000800300

1. Remove the dashboard under cover. (See 09-17-35 DASHBOARD UNDER COVER REMOVAL/ INSTALLATION.)
2. Measure the voltage at each terminal and inspect for the continuity between the terminals and ground is as indicated in the Terminal Voltage Tables (Reference).
 - If the voltage or continuity is not as specified in the Terminal Voltage Table (Reference), inspect the parts under “Inspection item (s)”.
 - If the system does not work properly even though the parts or related wiring harnesses do not have any malfunction, replace the BCM.

CONTROL SYSTEM

Terminal Voltage Table (Reference)



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Terminal	Signal	Connected to	Measurement condition		Voltage (V)	Inspection item (s)
1A	Windshield wiper signal	Windshield wiper motor	Ignition switch at ON	Windshield wiper operating at low	B+	<ul style="list-style-type: none"> Windshield wiper motor Related wiring harness
				OFF	1.0 or less	
1B	Windshield wiper signal	Windshield wiper motor	Ignition switch at ON	Windshield wiper operating at high	B+	<ul style="list-style-type: none"> Windshield wiper motor Related wiring harness
				OFF	1.0 or less	
1C	Rear window defroster power supply	R.DEF 20 A fuse	Under any condition		B+	<ul style="list-style-type: none"> R.DEF 20A fuse Related wiring harness
1D	Windshield wiper power supply	Windshield wiper motor	Ignition switch at ON		B+	<ul style="list-style-type: none"> Windshield wiper motor Related wiring harness
			Ignition switch is off.		1.0 or less	
1E	TNS power supply	TAIL 15 A fuse	Under any condition		B+	<ul style="list-style-type: none"> TAIL 15A fuse Related wiring harness
1F	Windshield wiper auto stop signal	Windshield wiper motor	Ignition switch at ON	Windshield wiper operating	B+	<ul style="list-style-type: none"> Windshield wiper motor Related wiring harness
				Windshield wiper not operating	1.0 or less	
1G	Front TNS inhibited	Parking light	TNS ON		B+	<ul style="list-style-type: none"> Parking light Related wiring harness
			TNS OFF		1.0 or less	
1H	Rear window washer motor control	Washer motor	Ignition switch at ON	Rear washer motor operating	B+	<ul style="list-style-type: none"> Washer motor Related wiring harness
				Rear washer motor not operating	1.0 or less	

CONTROL SYSTEM

Terminal	Signal	Connected to	Measurement condition		Voltage (V)	Inspection item (s)
1I	Windshield washer motor control	Washer motor	Ignition switch at ON	Windshield washer motor operating	B+	<ul style="list-style-type: none">Washer motorRelated wiring harness
				Windshield washer motor not operating	1.0 or less	
1J	Hazard power supply	HAZARD 10A fuse	Under any condition		B+	<ul style="list-style-type: none">HAZARD 10A fuseRelated wiring harness
1K	Front turn light (RH) control	<ul style="list-style-type: none">Front turn light (RH)Front side turn light (RH)	Turn switch (RH) on	Front turn light (RH) flashes	Alternates between 1.0 or less and B+	<ul style="list-style-type: none">Front turn light (RH)Front side turn light (RH)Related wiring harness
			Hazard warning switch on			
			Front turn light (RH) not illuminated		1.0 or less	
1L	Front turn light (LH) control	<ul style="list-style-type: none">Front turn light (LH)Front side turn light (LH)	Turn switch (LH) on	Front turn light (LH) flashes	Alternates between 1.0 or less and B+	<ul style="list-style-type: none">Front turn light (LH)Front side turn light (LH)Related wiring harness
			Hazard warning switch on			
			Front turn light (LH) not illuminated		1.0 or less	
1M	—	—	—		—	—
1N	—	—	—		—	—
1O	Interior light power supply	ROOM 15 A fuse	Under any condition		B+	<ul style="list-style-type: none">ROOM 15 A fuseRelated wiring harness
1P	Door lock power supply	D/L 20 A fuse	Under any condition		B+	<ul style="list-style-type: none">D/L 20 A fuseRelated wiring harness
2A	—	—	—		—	—
2B	—	—	—		—	—
2C	—	—	—		—	—
2D	—	—	—		—	—
2E	—	—	—		—	—
2F	Windshield wiper power supply (IG 2)	<ul style="list-style-type: none">F.WIP 20 A fuseIgnition switch	Ignition switch at ON		B+	<ul style="list-style-type: none">F.WIP 20A fuseIgnition switchRelated wiring harness
			Ignition switch at off.		1.0 or less	
2G	Meter power supply (IG 1)	<ul style="list-style-type: none">METER 10 A fuseIgnition switch	Ignition switch at ON		B+	<ul style="list-style-type: none">METER 10A fuseIgnition switchRelated wiring harness
			Ignition switch is off.		1.0 or less	
2H	Windshield washer switch signal	Wiper and washer switch	Ignition switch at ON	Windshield washer switch on	1.0 or less	<ul style="list-style-type: none">Wiper and washer switchRelated wiring harness
				Windshield washer switch off	B+	
2I	—	—	—		—	—
2J	—	—	—		—	—
2K	—	—	—		—	—
2L	Rear window washer switch signal	Wiper and washer switch	Ignition switch at ON	Rear window washer switch on	1.0 or less	<ul style="list-style-type: none">Wiper and washer switchRelated wiring harness
				Rear window washer switch off	B+	
2M	Signal ground	Body ground	Under any condition		1.0 or less	Related wiring harness
2N	Rear window wiper power supply (IG 2)	<ul style="list-style-type: none">R.WIP 10 A fuseIgnition switch	Ignition switch at ON		B+	<ul style="list-style-type: none">R.WIP 10 A fuseIgnition switchRelated wiring harness
			Ignition switch at off.		1.0 or less	
2O	Illumination output	<ul style="list-style-type: none">ILLUMI 7.5 A fuseIllumination light	TNS ON		B+	<ul style="list-style-type: none">ILLUMI 7.5 A fuseIllumination lightRelated wiring harness
			TNS OFF		1.0 or less	

CONTROL SYSTEM

Terminal	Signal	Connected to	Measurement condition		Voltage (V)	Inspection item (s)
2P	Power ground	Body ground	Under any condition		1.0 or less	Related wiring harness
3A ^{*7}	Liftgate opener actuator ground	Liftgate latch and lock actuator	Under any condition		1.0 or less	<ul style="list-style-type: none">Liftgate latch and lock actuatorRelated wiring harness
3B	Rear window defroster output	Filament	Ignition switch at ON	Rear window defroster on	B+	<ul style="list-style-type: none">FilamentRelated wiring harness
				Rear window defroster off	1.0 or less	
3C	Liftgate opener actuator power supply	Liftgate latch and lock actuator	Liftgate opener actuator switch pressed, lock release operation		B+	<ul style="list-style-type: none">Liftgate latch and lock actuatorRelated wiring harness
			Other		1.0 or less	
3D	Rear window wiper power supply	Rear wiper motor	Ignition switch at ON		B+	<ul style="list-style-type: none">Rear wiper motorRelated wiring harness
			Ignition switch is off.		1.0 or less	
3E ^{*6}	Door lock control	Door lock actuator	Double locking system activated		1.0 or less → B+ → 1.0 or less	<ul style="list-style-type: none">Door lock actuatorRelated wiring harness
			Other		1.0 or less	
3F	Rear window wiper control	Rear wiper motor	Ignition switch at ON	Rear wiper activated	1.0 or less	<ul style="list-style-type: none">Rear motorRelated wiring harness
				Rear wiper not activated	B+	
3G	—	—	—		—	
3H	Rear TNS light signal	<ul style="list-style-type: none">Tail lightLicense plate light	TNS ON		B+	<ul style="list-style-type: none">Tail lightLicense plate lightRelated wiring harness
			TNS OFF		1.0 or less	
3I	Interior light control	Interior light	Interior light at DOOR position	Any door is open	1.0 or less	<ul style="list-style-type: none">Interior lightRelated wiring harness
				Within 5 seconds after all doors closed	5	
				Five seconds after all doors closed	B+	
3J	Rear turn light (RH) control	Rear turn light (RH)	Turn switch (RH) on	Rear turn light (RH) flashes	Alternates between 1.0 or less and B+	<ul style="list-style-type: none">Rear turn light (RH)Related wiring harness
			Hazard warning switch on			
			Rear turn light (RH) not illuminated		1.0 or less	
3K	—	—	—		—	—
3L	Rear turn light (LH) control	Rear turn light (LH)	Turn switch (LH) on	Rear turn light (LH) flashes	Alternates between 1.0 or less and B+	<ul style="list-style-type: none">Rear turn light (LH)Related wiring harness
			Hazard warning switch on			
			Rear turn light (LH) not illuminated		1.0 or less	
3M	Door lock control	Door lock actuator	Door lock actuator locking (without double locking system)		B+	<ul style="list-style-type: none">Door lock actuatorRelated wiring harness
			Door lock actuator locking (with double locking system)		1.0 or less	
			Other		1.0 or less	
3N	—	—	—		—	—
3O	Door unlock control	Door lock actuator	Door lock actuator unlocking		B+	<ul style="list-style-type: none">Door lock actuatorRelated wiring harness
			Other		1.0 or less	

CONTROL SYSTEM

Terminal	Signal	Connected to	Measurement condition		Voltage (V)	Inspection item (s)
3P	Power supply	<ul style="list-style-type: none"> Climate control unit Instrument cluster Audio unit Keyless receiver Steering lock unit Theft-deterrent control module 	Under any condition		B+	<ul style="list-style-type: none"> Climate control unit Instrument cluster Audio unit Keyless receiver Steering lock unit Theft-deterrent control module Related wiring harness
4A	Brake fluid level signal	Brake fluid level sensor	Ignition switch at ON	Brake fluid level less than MIN Brake fluid level above MIN.	1.0 or less 5	<ul style="list-style-type: none"> Brake fluid level sensor Related wiring harness
4B*4	Oil pressure switch signal	Oil pressure switch	Engine running Engine not running		B+ 1.0 or less	<ul style="list-style-type: none"> Oil pressure switch Related wiring harness
4C*3	Back-up light signal	Back-up light switch	Shift lever is in R position Shift lever is not in R position		B+ 1.0 or less	<ul style="list-style-type: none"> Back-up light switch Related wiring harness
4D	—	—	—		—	—
4E	Rear fog light control	Rear fog light relay	Headlight ON	Rear fog light switch ON Rear fog light switch OFF	1.0 or less B+	<ul style="list-style-type: none"> Rear fog light relay Related wiring harness
4F	—	—	—		—	—
4G	Headlight low control (4-Beam Type Headlight)	Headlight low relay	Headlights on Headlights off		1.0 or less B+	<ul style="list-style-type: none"> Headlight low relay Related wiring harness
4H	—	—	—		—	—
4I	Front fog light control	Front fog light relay	Headlights on or TNS ON	Front fog light switch ON Front fog light switch OFF	1.0 or less B+	<ul style="list-style-type: none"> Front fog light relay Related wiring harness
4J	—	—	—		—	—
4K	—	—	—		—	—
4L	—	—	—		—	—
4M	Headlight low control (2-Beam Type Headlight)	Headlight relay (LO)	Headlights on Headlights off		1.0 or less B+	<ul style="list-style-type: none"> Headlight relay (LO) Related wiring harness
4N	—	—	—		—	—
4O	Headlight high control	Headlight relay (HI)	High beam during passing or lights on Other		1.0 or less B+	<ul style="list-style-type: none"> Headlight relay (HI) Related wiring harness
4P	—	—	—		—	—
4Q	—	—	—		—	—
4R	—	—	—		—	—
4S	—	—	—		—	—
4T	—	—	—		—	—
4U	CAN_H	<ul style="list-style-type: none"> PCM ABS HU/CM (with ABS) DSC HU/CM (with DSC) 	Terminal used for communication therefore determination based on terminal voltage inspection not possible.			
4V*8	CAN_H	TCM	Terminal used for communication therefore determination based on terminal voltage inspection not possible.			

CONTROL SYSTEM

Terminal	Signal	Connected to	Measurement condition	Voltage (V)	Inspection item (s)
4W	CAN_L	<ul style="list-style-type: none"> PCM ABS HU/CM (with ABS) DSC HU/CM (with DSC) 	Terminal used for communication therefore determination based on terminal voltage inspection not possible.		
4X ⁸	CAN_L	TCM	Terminal used for communication therefore determination based on terminal voltage inspection not possible.		
6A	Turn switch input (RH)	Turn switch	Turn switch at RH position	1.0 or less	<ul style="list-style-type: none"> Turn switch Related wiring harness
			Turn switch at off position	Wave pattern (See 09-40-13 Pattern 1.)	
6B	Turn switch input (LH)	Turn switch	Turn switch at LH position	1.0 or less	<ul style="list-style-type: none"> Turn switch Related wiring harness
			Turn switch at off position	Wave pattern (See 09-40-13 Pattern 1.)	
6C	Rear wiper switch input (ON)	Wiper and washer switch	Rear wiper at on position	1.0 or less	<ul style="list-style-type: none"> Wiper and washer switch Related wiring harness
			Rear wiper at off position	Wave pattern (See 09-40-13 Pattern 1.)	
6D	Rear window defroster switch input	Climate control unit (rear window defroster switch)	Rear window defroster switch pressed	1.0 or less	<ul style="list-style-type: none"> Climate control unit (rear window defroster switch) Related wiring harness
			Rear window defroster switch not pressed	Wave pattern (See 09-40-13 Pattern 1.)	
6E	Headlight switch input (ON)	Light switch	Light switch in ON position	1.0 or less	<ul style="list-style-type: none"> Light switch Related wiring harness
			Light switch not at ON position	B+	
6F	Windshield wiper switch input (HI)	Wiper and washer switch	Wiper switch in HI position	1.0 or less	<ul style="list-style-type: none"> Wiper and washer switch Related wiring harness
			Wiper switch not at HI position	B+	
6G	Rear window defroster indicator signal	Climate control unit (rear window defroster indicator)	Ignition switch at ON	1.0 or less	<ul style="list-style-type: none"> Climate control unit (rear window defroster indicator) Related wiring harness
			Rear window defroster indicator illuminated	B+	
6H	Wiper speed volume ground	Wiper and washer switch	Under any condition	1.0 or less	<ul style="list-style-type: none"> Wiper and washer switch Related wiring harness
6I	Headlight switch input (HI)	Light switch	HI beam at passing position or lights on status	1.0 or less	<ul style="list-style-type: none"> Light switch Related wiring harness
			Except above	B+	
6J	TNS switch signal	Light switch	TNS ON	1.0 or less	<ul style="list-style-type: none"> Light switch Related wiring harness
			TNS OFF	B+	
6K	Headlight switch input (front fog light)	Light switch	Front fog light switch in on position	1.0 or less	<ul style="list-style-type: none"> Light switch Related wiring harness
			Front fog light switch in off position	B+	
6L	Headlight switch input (vehicles with auto light/wiper system)	Light switch	Light switch in AUTO position	1.0 or less	<ul style="list-style-type: none"> Light switch Related wiring harness
			Light switch not at AUTO position	Wave pattern (See 09-40-13 Pattern 1.)	
6M	Headlight switch input (rear fog light)	Light switch	Rear fog light switch in on position	1.0 or less	<ul style="list-style-type: none"> Light switch Related wiring harness
			Rear fog light switch in off position	B+	

CONTROL SYSTEM

Terminal	Signal	Connected to	Measurement condition		Voltage (V)	Inspection item (s)
6N	Windshield wiper switch input (Lo)	Wiper and washer switch	Ignition switch at ON	Windshield wiper LO operation	1.0 or less	<ul style="list-style-type: none"> Wiper and washer switch Related wiring harness
				Windshield wiper not operation	B+	
6O	Headlight switch input (LO)	Light switch	Light switch at headlight position and low beam		1.0 or less	<ul style="list-style-type: none"> Light switch Related wiring harness
			Light switch at OFF or TNS position		B+	
6P	Wiper speed volume signal	Wiper and washer switch	Voltage decreases when speed control volume is turned from - position to + position	Switch position 1 position	0.72	<ul style="list-style-type: none"> Wiper and washer switch Related wiring harness
				Switch position 2 position	0.48	
				Switch position 3 position	0.32	
				Switch position 4 position	0.18	
				Switch position 5 position	0.08	
				Switch position 6 position	0	
6Q	Hazard warning switch signal	Hazard warning switch	Hazard warning switch on		1.0 or less	<ul style="list-style-type: none"> Hazard warning switch Related wiring harness
			Hazard warning switch off		Wave pattern (See 09-40-14 Pattern 6.)	
6R	Key reminder switch	<ul style="list-style-type: none"> Steering lock unit (Advanced keyless and start system) Key reminder switch (Keyless entry system) 	Key inserted		B+	<ul style="list-style-type: none"> Steering lock unit (Advanced keyless and start system) Key reminder switch (Keyless entry system) Related wiring harness
			Key removed		1.0 or less	
6S	Windshield wiper switch input	Wiper and washer switch	<ul style="list-style-type: none"> Wiper switch in AUTO position (vehicles with auto light/wiper system) Wiper switch in INT position (vehicles without auto light/wiper system) 		1.0 or less	<ul style="list-style-type: none"> Wiper and washer switch Related wiring harness
			Except above		Wave pattern (See 09-40-13 Pattern 1.)	
6T	—	—	—		—	—
6U*2	Liftgate opener switch input	Liftgate opener switch	Wave pattern (See 09-40-15 Liftgate Opener Switch Input Signal Pulse (Reference).)			<ul style="list-style-type: none"> Liftgate opener switch Related wiring harness
6V	CAN_L	<ul style="list-style-type: none"> CAN system related module (L.H.D.) Keyless control module (R.H.D.) 	Terminal used for communication therefore determination based on terminal voltage inspection not possible.			

CONTROL SYSTEM

Terminal	Signal	Connected to	Measurement condition	Voltage (V)	Inspection item (s)
6W	Serial communication	<ul style="list-style-type: none"> Keyless control module (with advanced keyless and start system) Keyless receiver (vehicles with keyless entry system) 	Terminal used for communication therefore determination based on terminal voltage inspection not possible.		
6X	CAN_H	<ul style="list-style-type: none"> CAN system related module (L.H.D.) Keyless control module (R.H.D.) 	Terminal used for communication therefore determination based on terminal voltage inspection not possible.		
7A	Liftgate opener switch	Liftgate opener switch	Liftgate opener switch not pressed	1.0 or less	<ul style="list-style-type: none"> Liftgate opener switch Related wiring harness
			Liftgate opener switch pressed	Wave pattern* ² (See 09-40-13 Pattern 2.)	
				approx. 3* ¹	
7B	Parking brake switch signal	Parking brake switch	Parking brake applied	1.0 or less	<ul style="list-style-type: none"> Parking brake switch Related wiring harness
			Parking brake not applied	Wave pattern (See 09-40-13 Pattern 3.)	
7C	Key cylinder switch signal	Door key cylinder switch	Driver's door key cylinder rotated to lock direction	Wave pattern (See 09-40-14 Pattern 4.)	<ul style="list-style-type: none"> Door key cylinder switch Related wiring harness
			Driver's door key cylinder rotated to unlock direction	1.0 or less	
			Driver's door key cylinder at neutral position after rotating in lock or unlock direction	Wave pattern (See 09-40-14 Pattern 5.)	
7D	—	—	—	—	—
7E	All outer door handles	Power window main switch	Any door open	1.0 or less	<ul style="list-style-type: none"> Power window main switch Related wiring harness
			All doors closed	B+	
7F	—	—	—	—	—
7G* ⁵	Rear door latch switch (LH)	Rear door latch switch (LH)	Rear door (LH) open	Wave pattern (See 09-40-14 Pattern 6.)	<ul style="list-style-type: none"> Rear door latch switch (LH) Related wiring harness
			Rear door (LH) closed	1.0 or less	
7H	—	—	—	—	—
7I	Front door latch switch (driver side)	Front door latch switch (driver side)	Front door (driver side) open	Wave pattern (See 09-40-14 Pattern 6.)	<ul style="list-style-type: none"> Front door latch switch (driver side) Related wiring harness
			Front door (driver side) closed	1.0 or less	
7J	—	—	—	—	—

CONTROL SYSTEM

Terminal	Signal	Connected to	Measurement condition		Voltage (V)	Inspection item (s)
7K	Lock input (door lock-link switch)	Door lock-link switch	Driver's door locked		Wave pattern (See 09-40-14 Pattern 6.)	<ul style="list-style-type: none">• Door lock-link switch• Related wiring harness
			Driver's door unlocked		Wave pattern (See 09-40-14 Pattern 7.)	
7L	—	—	—		—	—
7M	Front door latch switch (passenger side)	Front door latch switch (passenger side)	Front door (passenger side) open		Wave pattern (See 09-40-14 Pattern 6.)	<ul style="list-style-type: none">• Front door latch switch (passenger side)• Related wiring harness
			Front door (passenger side) closed		1.0 or less	
7N	—	—	—		—	—
7O*5	Rear door latch switch (RH)	Rear door latch switch (RH)	Rear door (RH) open		Wave pattern (See 09-40-14 Pattern 6.)	<ul style="list-style-type: none">• Rear door latch switch (RH)• Related wiring harness
			Rear door (RH) closed		1.0 or less	
7P	—	—	—		—	—
7Q	Unlock input (door lock-link switch)	Door lock-link switch	Driver's door locked		Wave pattern (See 09-40-14 Pattern 6.)	<ul style="list-style-type: none">• Door lock-link switch• Related wiring harness
			Driver's door unlocked		1.0 or less	
7R	—	—	—		—	—
7S	Liftgate switch signal	Liftgate switch	Liftgate opened		1.0 or less	<ul style="list-style-type: none">• Liftgate switch• Related wiring harness
			Liftgate closed		B+	
7T	—	—	—		—	—
7U	LIN communication	Rain sensor	Terminal used for communication therefore determination based on terminal voltage inspection not possible.			
7V	CAN_L	<ul style="list-style-type: none">• CAN system related module• DLC-2	Terminal used for communication therefore determination based on terminal voltage inspection not possible.			
7W	Windshield wiper auto stop signal	Rain sensor	Ignition switch at ON	Wipers moving	B+	<ul style="list-style-type: none">• Rain sensor• Related wiring harness
				Wipers not moving	1.0 or less	
7X	CAN_H	<ul style="list-style-type: none">• CAN system related module• DLC-2	Terminal used for communication therefore determination based on terminal voltage inspection not possible.			

*1 : Vehicles with advanced keyless and start system

*2 : Vehicles without advanced keyless and start system

*3 : MZ-CD 1.4 DI Turbo, MZ-CD 1.6 (Y6)

*4 : Except MZ-CD 1.4 DI Turbo, MZ-CD 1.6 (Y6)

*5 : 5HB

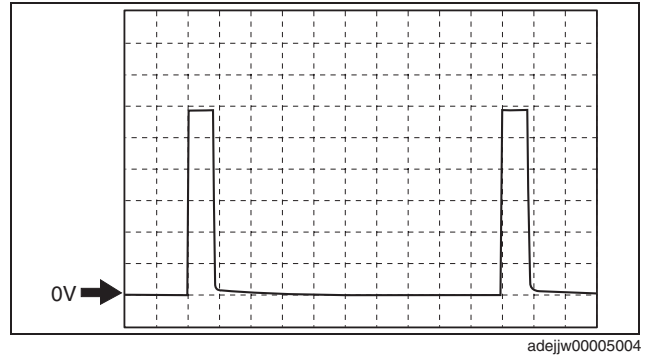
*6 : With double locking system

*7 : With terminal 3A

*8 : CVT

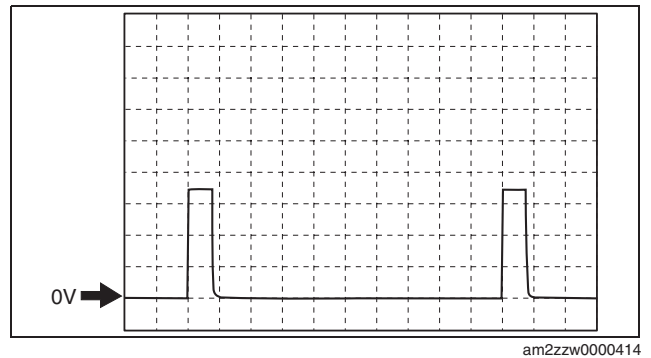
CONTROL SYSTEM

Generated pulse (reference) Pattern 1



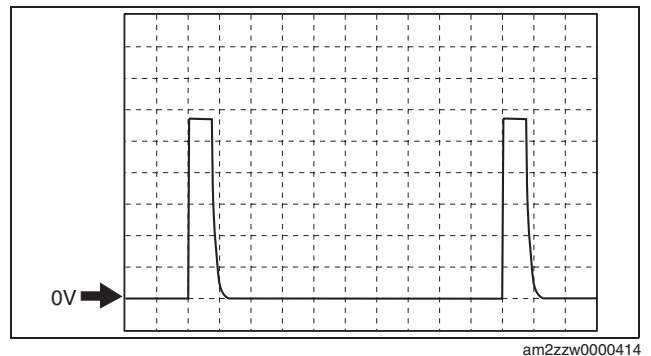
- Terminal:
 - Turn switch input (RH): 6A (+) \Leftrightarrow body ground (-)
 - Turn switch input (LH): 6B (+) \Leftrightarrow body ground (-)
 - Rear wiper switch input (ON): 6C (+) \Leftrightarrow body ground (-)
 - Rear defroster switch input: 6D (+) \Leftrightarrow body ground (-)
 - Headlight switch input: 6L (+) \Leftrightarrow body ground (-)
 - Windshield wiper switch input: 6S (+) \Leftrightarrow body ground (-)
- Oscilloscope setting: 2 V/DIV (Y), 1 ms/DIV (X), DC range

Pattern 2



- Terminal: 7A (+) \Leftrightarrow body ground (-)
- Oscilloscope setting: 2 V/DIV (Y), 1 ms/DIV (X), DC range

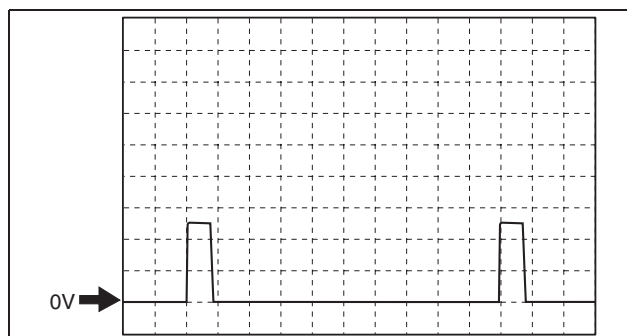
Pattern 3



- Terminal: 7B (+) \Leftrightarrow body ground (-)
- Oscilloscope setting: 2 V/DIV (Y), 1 ms/DIV (X), DC range

CONTROL SYSTEM

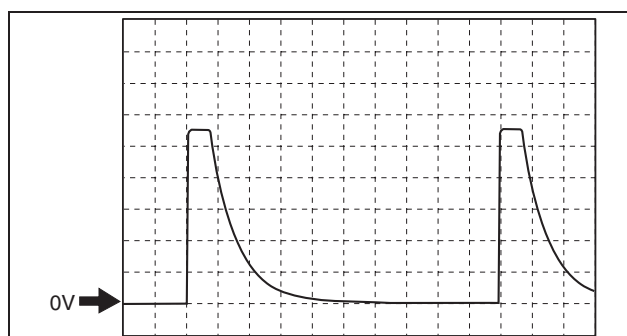
Pattern 4



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- Terminal: 7C (+) \Leftrightarrow body ground (-)
- Oscilloscope setting: 2 V/DIV (Y), 1 ms/DIV (X), DC range

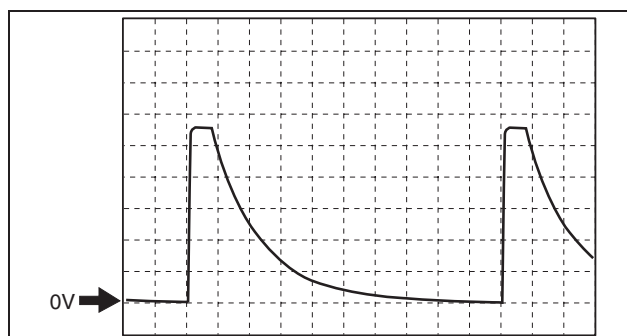
Pattern 5



am2zzw0000414

- Terminal: 7C (+) \Leftrightarrow body ground (-)
- Oscilloscope setting: 2 V/DIV (Y), 1 ms/DIV (X), DC range

Pattern 6



am2zzw0000414

- Terminal:
 - Hazard warning switch signal: 6Q (+) \Leftrightarrow body ground (-)
 - Rear door latch switch (LH): 7G (+) \Leftrightarrow body ground (-)
 - Front door latch switch (driver side): 7I (+) \Leftrightarrow body ground (-)
 - Lock input (door lock-link switch) (vehicles without advanced keyless and start system): 7K (+) \Leftrightarrow body ground (-)
 - Front door latch switch (passenger side): 7M (+) \Leftrightarrow body ground (-)
 - Rear door latch switch (RH): 7O (+) \Leftrightarrow body ground (-)
 - Unlock input (door lock-link switch): 7Q (+) \Leftrightarrow body ground (-)
- Oscilloscope setting: 2 V/DIV (Y), 1 ms/DIV (X), DC range

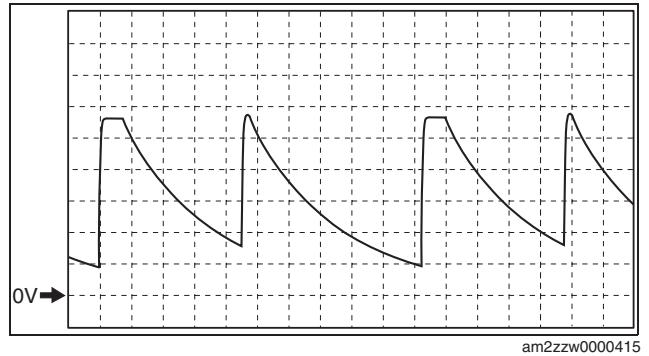
Pattern 7

Note

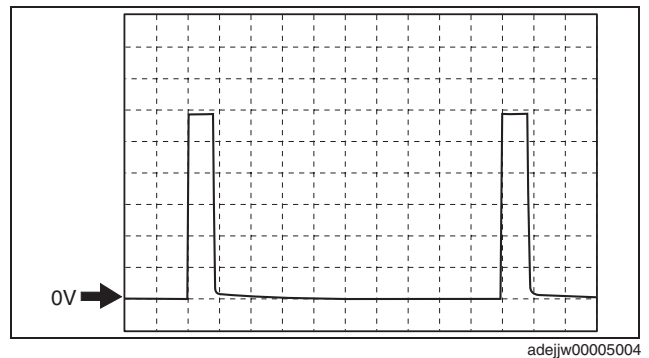
- The output signals from BCM terminal 7K and keyless control module terminal 3P are displayed simultaneously and the wave patterns may overlap each other.

CONTROL SYSTEM

- Terminal: 7K (+) \leftrightarrow body ground (-)
- Oscilloscope setting: 2 V/DIV (Y), 1 ms/DIV (X), DC range

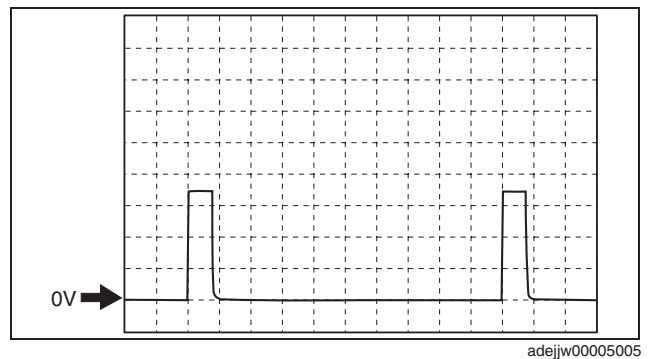


Liftgate Opener Switch Input Signal Pulse (Reference) Liftgate opener switch not pressed



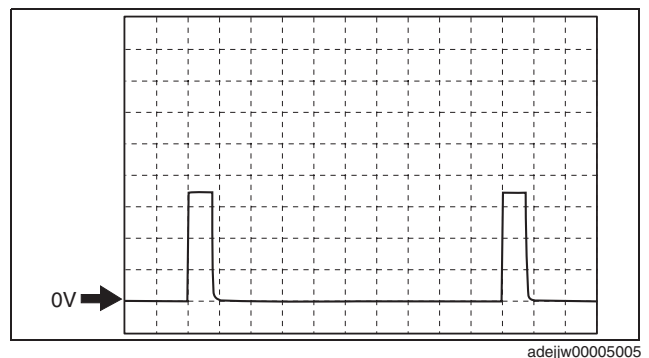
- Terminal: 6U (+) \leftrightarrow body ground (-)
- Oscilloscope setting: 2 V/DIV (Y), 1 ms/DIV (X), DC range
- Measurement condition: Liftgate opener switch not pressed

Liftgate opener switch pressed



- Terminal: 6U (+) \leftrightarrow body ground (-)
- Oscilloscope setting: 2 V/DIV (Y), 1 ms/DIV (X), DC range
- Measurement condition: Liftgate opener switch pressed

Liftgate Opener Switch Signal Pulse (Reference)



- Terminal: 7A (+) \leftrightarrow body ground (-)

CONTROL SYSTEM

- Oscilloscope setting: 2 V/DIV (Y), 1 ms/DIV (X), DC range
- Measurement condition: Liftgate opener switch pressed

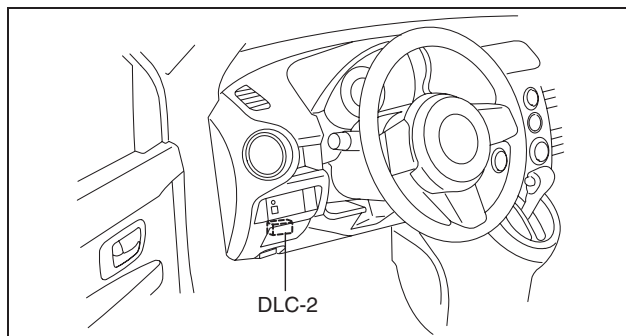
BODY CONTROL MODULE (BCM) CONFIGURATION

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Note

- Use the IDS (laptop PC) because the PDS (Pocket PC) does not support the BCM CONFIGURATION.

1. Connect the M-MDS to the DLC-2.
2. After the vehicle is identified, select the following items from the initialization screen of the M-MDS.
 - When using the IDS (laptop PC)
 1. Select "Module Programming".
3. Then, select items from the screen menu in the following order.
 1. Select "Programmable Module Installation".
 2. Select "BCM/GEM".
4. Perform the configuration according to the directions on the screen.
5. Retrieve DTCs by the M-MDS, then verify that there is no DTC present.
 - If a DTC (s) is detected, perform the applicable DTC inspection. (See 09-02G-3 DTC TABLE [BCM].)



am2zzw0000251

BODY CONTROL MODULE (BCM) BRACKET REMOVAL/INSTALLATION

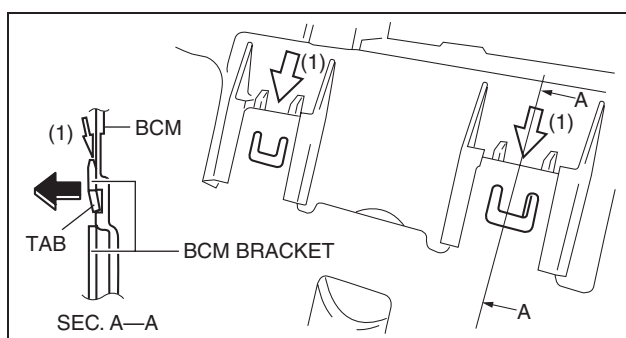
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Removal

1. Disconnect the negative battery cable.
2. Remove the dashboard under cover. (See 09-17-35 DASHBOARD UNDER COVER REMOVAL/INSTALLATION.)
3. Remove the front scuff plate. (passenger's side) (See 09-17-56 FRONT SCUFF PLATE REMOVAL/INSTALLATION.)
4. Remove the front side trim. (passenger's side) (See 09-17-53 FRONT SIDE TRIM REMOVAL/INSTALLATION.)
5. Remove the BCM. (See 09-40-1 BODY CONTROL MODULE (BCM) REMOVAL/INSTALLATION.)
6. Insert a fastener remover in the direction of the arrow (1) shown in the figure and release the tabs.

Caution

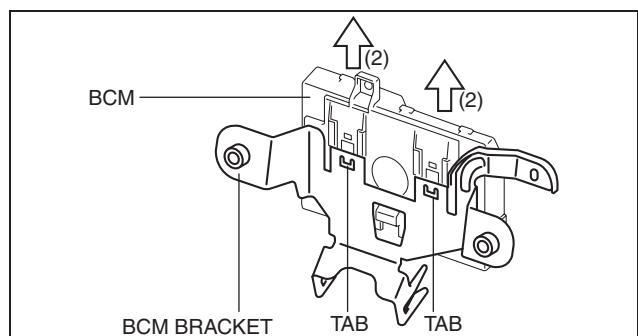
- Because the tabs will break if they are bent excessively, bend the tabs only so far as to allow them to release from the BCM.



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CONTROL SYSTEM

7. Pull the BCM in the direction of the arrow (2) as shown in the figure and remove the BCM bracket.



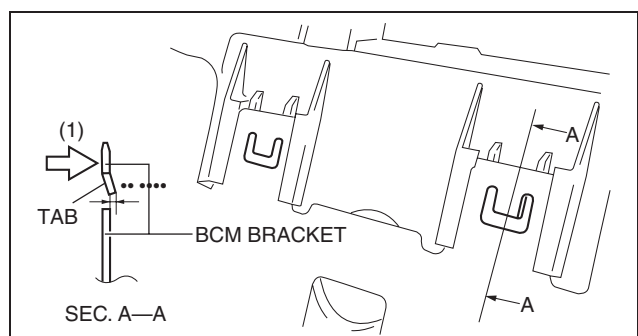
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Installation

1. Bend the tabs in the direction of the arrow (1) so that clearance (a) indicated in the figure is within the specification.

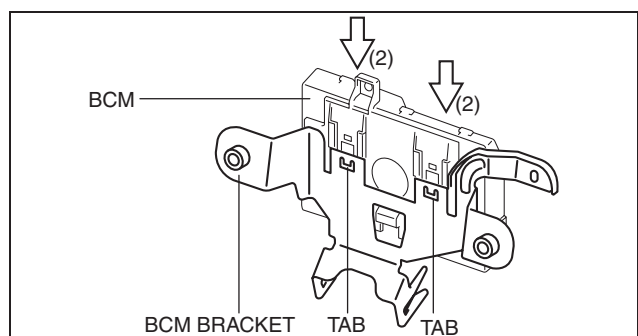
Clearance

a: 0.8—1.2 mm {0.032—0.047 in}



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2. Press the BCM in the direction of the arrow (2) as shown in the figure and install it.
3. Install the BCM. (See 09-40-1 BODY CONTROL MODULE (BCM) REMOVAL/INSTALLATION.)
4. Install the front scuff plate. (passenger's side) (See 09-17-56 FRONT SCUFF PLATE REMOVAL/INSTALLATION.)
5. Install the front side trim. (passenger's side) (See 09-17-53 FRONT SIDE TRIM REMOVAL/INSTALLATION.)
6. Install the dashboard under cover. (See 09-17-35 DASHBOARD UNDER COVER REMOVAL/INSTALLATION.)



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09-50 TECHNICAL DATA

BODY AND ACCESSORIES

TECHNICAL DATA 09-50-2

TECHNICAL DATA

BODY AND ACCESSORIES TECHNICAL DATA

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Item		Specifications (W) X number	
Exterior light bulb capacity	Headlight bulb (HI)		60 × 2
	Headlight bulb (LO)		55 × 2
	Parking light bulb		5 × 2
	Front fog light bulb	Except AutoAlliance Thailand (AAT) manufactured vehicles	55 × 2
		AutoAlliance Thailand (AAT) manufactured vehicles	51 × 2
	Rear fog light bulb		21 × 1
	Front turn light bulb		21 × 2
	Front side turn light bulb		5 × 2
	Brake/taillight bulb		21/5 × 2
	Rear turn light bulb		21 × 2
	Back-up light bulb (5HB/3HB)		16 × 2
	Back-up light bulb (4SD)		21 × 2
	License plate light bulb		5 × 2
	High-mount brake light (LED) (5HB/3HB)		2.4 × 1
	High-mount brake light bulb (4SD)		18 × 1
Interior light bulb capacity	Interior light bulb (Vehicles with intruder sensor)		8 × 2
	Interior light bulb (Vehicles without intruder sensor)		10 × 1
	Cargo compartment light bulb (5HB/3HB)		5 × 1
	Trunk compartment light bulb (4SD)		5 × 1

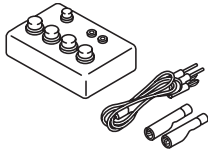


09-60 SERVICE TOOLS

BODY AND ACCESSORIES SST 09-60-2

SERVICE TOOLS

BODY AND ACCESSORIES SST

id096000800100

<p>49 N088 0A0</p> <p>Fuel and Thermometer Checker</p> 	<p>49 F042 001*</p> <p>Wrench</p> 	
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* : MZ-CD 1.4 DI Turbo, MZ-CD 1.6 (Y6)