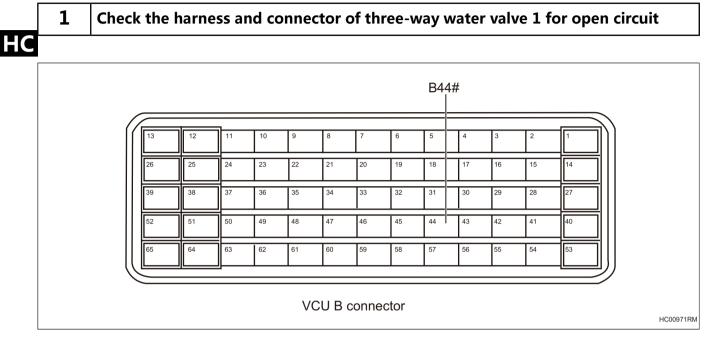
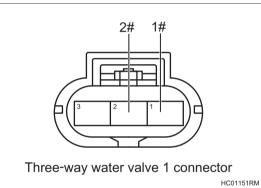


1	Wear	<ul><li>Wear clean work clothes.</li><li>Always wear a safety helmet and safety shoes.</li></ul>
2	Vehicle protection	• Put the radiator cover, mudguard cover, seat cover and floor mat properly before operation.
3	Safe operation	<ul> <li>Secure the vehicle with wheel stoppers.</li> <li>When two or more operators are involved in the operation, they should confirm the safety of each other.</li> <li>Prevent personal injury caused by high temperature, rotation, movement and vibration during operation.</li> <li>After the vehicle is jacked up, place the brackets at the specified positions to support the vehicle.</li> <li>Use safety devices to support the lifted vehicle.</li> </ul>
4	Preparation of tools and measuring instruments	• Prepare the working bench, SST, measuring instruments, grease, cotton yarn and replacement parts before operation.
5	Removal, disassembly, and reassembly	<ul> <li>Be sure to perform effective operations after fully confirming the fault symptom.</li> <li>When the structure is complicated, write a note or make an assembly mark without affecting the function.</li> <li>Clean the removed parts as needed, and reassemble them after inspection.</li> </ul>

#### **Inspection procedures**





- (a) Set the ignition switch to "OFF"
- (b) Disconnect the negative terminal of the battery.
- (c) Disconnect the connector of the VCU.
- (d) Disconnect the three-way water valve 1 connector.
- (e) Measure the resistance according to the table below.

#### Standard value

Detector connection	Detection condition	Specified status
Three-way water valve 1 connector 2# – VCU connector B44#	Remain connected	< 1Ω
Three-way water valve 1 connector 1# – body ground	Remain connected	< 1Ω

Abnormal

## Repair or replace the harness and connector

Normal

#### MC-89

### Description

When the communication between the RWD electric drive system inverter (160KW) and other controllers is abnormal or interrupted, the RWD electric drive system inverter (160KW) will record the DTC.

DTC number	DTC detection conditions	Fault location	MC
U005588	(a) The communication is abnormal or interrupted.	<ul><li>Harness and connector</li><li>Related controller</li></ul>	
U029387	(a) The communication is abnormal or interrupted.	<ul><li>Harness and connector</li><li>Related controller</li></ul>	
U029887	(a) The communication is abnormal or interrupted.	<ul><li>Harness and connector</li><li>Related controller</li></ul>	
U029A87	(a) The communication is abnormal or interrupted.	<ul><li>Harness and connector</li><li>Related controller</li></ul>	
U014687	(a) The communication is abnormal or interrupted.	<ul><li>Harness and connector</li><li>Related controller</li></ul>	
U112187	(a) The communication is abnormal or interrupted.	<ul><li>Harness and connector</li><li>Related controller</li></ul>	
U115587	(a) The communication is abnormal or interrupted.	<ul><li>Harness and connector</li><li>Related controller</li></ul>	
U114087	(a) The communication is abnormal or interrupted.	<ul><li>Harness and connector</li><li>Related controller</li></ul>	
U115187	(a) The communication is abnormal or interrupted.	<ul><li>Harness and connector</li><li>Related controller</li></ul>	
U041582	(a) The communication is abnormal or interrupted.	<ul><li>Harness and connector</li><li>Related controller</li></ul>	
U041583	(a) The communication is abnormal or interrupted.	<ul><li>Harness and connector</li><li>Related controller</li></ul>	
U059982	(a) The communication is abnormal or interrupted.	<ul><li>Harness and connector</li><li>Related controller</li></ul>	
U059983	(a) The communication is abnormal or interrupted.	<ul><li>Harness and connector</li><li>Related controller</li></ul>	
U059B82	(a) The communication is abnormal or interrupted.	<ul><li>Harness and connector</li><li>Related controller</li></ul>	
U059B83	(a) The communication is abnormal or interrupted.	<ul><li>Harness and connector</li><li>Related controller</li></ul>	
U045282	(a) The communication is abnormal or interrupted.	<ul><li>Harness and connector</li><li>Related controller</li></ul>	
U045283	(a) The communication is abnormal or interrupted.	<ul><li>Harness and connector</li><li>Related controller</li></ul>	
U059482	(a) The communication is abnormal or interrupted.	<ul><li>Harness and connector</li><li>Related controller</li></ul>	
U059483	(a) The communication is abnormal or interrupted.	<ul><li>Harness and connector</li><li>Related controller</li></ul>	
P1D2700	(a) The communication is abnormal or interrupted.	<ul><li>Harness and connector</li><li>Related controller</li></ul>	

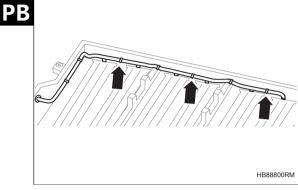
- 6. Remove the high-voltage power battery module assembly. ( PB-183 )
- 7. Remove the high-voltage power battery cooling water inlet pipe assembly (only for vehicles equipped with 160 KW RWD electric drive system)
  - (a) Remove 3 water pipe clamps fixed on the nuts of the liquid cooling plate fixing pins.

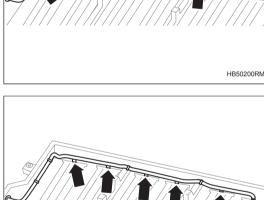
- battery cooling water inlet pipe assembly.

(b) Remove 4 fixing clamps of high-voltage power

(c) Disconnect 7 connectors of high-voltage power battery cooling water inlet pipe assembly.

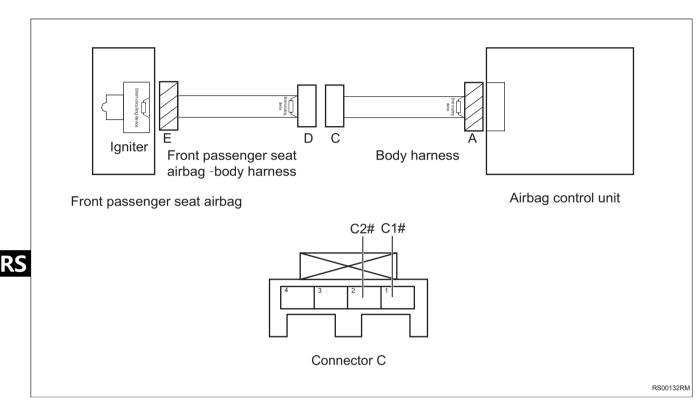
- (d) Remove the high-voltage power battery cooling water inlet pipe assembly.
- 8. Remove the high-voltage power battery cooling water outlet pipe assembly (only for vehicles equipped with 160 KW RWD electric drive system)





HB50211RM

# Check the harness and connector of front passenger side airbag for short circuit to each other (body harness)



- (a) Set the ignition switch to "OFF"
- (b) Disconnect the negative terminal of the battery.
- (c) Disconnect the connector A and connector C.
- (d) Discharge the built-in short-circuiting device of the connector A.
- (e) Measure the resistance according to the values the table below.

#### Standard value

Detector connection	Detection condition	•
Connector C1# – connector C2#	Remain connected	≥10 KΩ

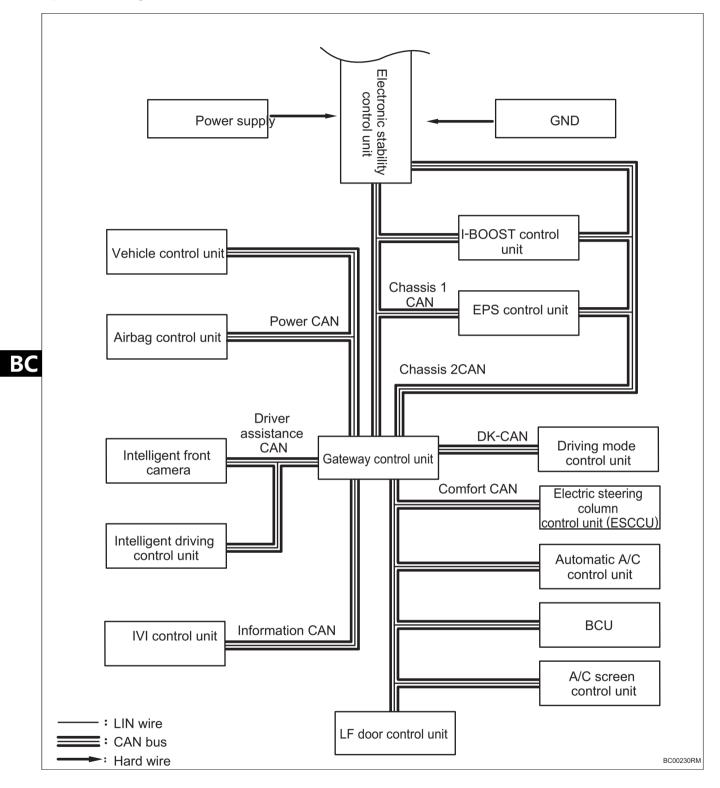
Abnormal

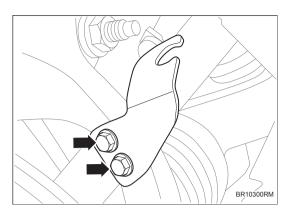
Repair or replace the harness and connector

Normal

5

#### System diagram





(f) Remove 2 bolts to detach the front brake hose bracket.

**21.** Remove the rear brake hose assembly Tip:

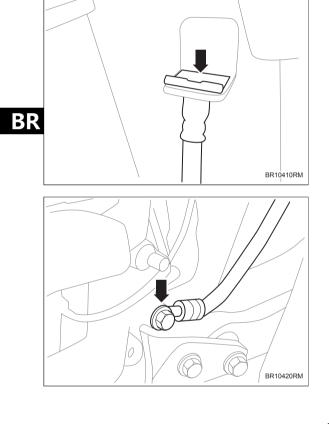
The removal sequence for the right side is the same as the left side.

(a) Remove 1 clamping piece, and disengage the rear brake hose assembly.

(b) Remove one bolt to detach the rear brake hose assembly.

- Installation
- **1.** Install the rear brake hose assembly Tip:

The installation sequence for the right side is the same as the left side.

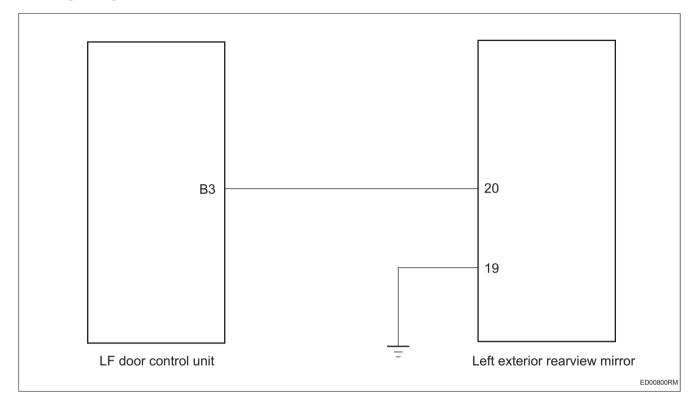


## **DTC table**

DTC	Test items	Reference page number
C120801	Battery voltage too high	( AS-52 )
C120901	Battery voltage too low	( AS-52 )
C121001	Left front height sensor power supply failure	( AS-56 )
C121101	Right front height sensor power supply failure	( AS-61 )
C121201	Left rear height sensor power supply failure	( AS-66 )
C121301	Right rear height sensor power supply failure	( AS-71)
C121401	Left front height sensor signal failure	( AS-56 )
C121501	Right front height sensor signal failure	( AS-61)
C121601	Left rear height sensor signal failure	( AS-66 )
C121701	Right rear height sensor signal failure	( AS-71)
C121801	Solenoid valve pressure sensor power supply failure	( AS-76)
C121901	Solenoid valve pressure sensor signal failure	( AS-76)
C121A01	Compressor temperature sensor power supply failure	( AS-24 )
C121B01	Compressor temperature sensor signal failure	( AS-24 )
C125001	Compressor relay failure	( AS-94 )
C125101	Solenoid valve failure - left front airbag	( AS-98 )
C125201	Solenoid valve failure - right front airbag	( AS-102 )
C125301	Solenoid valve failure - left rear airbag	( AS-106)
C125401	Solenoid valve failure - right rear airbag	( AS-110)
C125B01	Compressor boost valve fault	( AS-48 )
C125501	Compressor exhaust valve failure	( AS-114)
C125601	Solenoid valve failure - air reservoir	( AS-118)
C121C01	Acceleration sensor power supply failure	( AS-28 )
C121D01	Left front acceleration sensor signal failure	( AS-32 )
C121E01	Right front acceleration sensor signal failure	( AS-36 )
C121F01	Left rear acceleration sensor signal failure	( AS-40 )
C125701	Left front vibration damper solenoid valve failure	( AS-122 )
C125801	Right front vibration damper solenoid valve failure	( AS-126)
C125901	Left rear vibration damper solenoid valve failure	( AS-130)
C125A01	Right rear vibration damper solenoid valve failure	( AS-44 )
U008188	Digital key CAN bus off	( AS-135 )

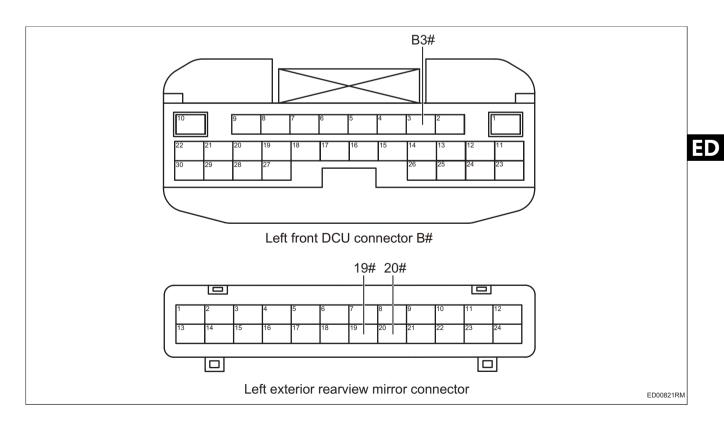
AS

### Wiring diagram



## Inspection procedures

Check the harness and connector of the left exterior rearview mirror for open circuit
circuit





Repair or replace the harness and connector

Normal

 4
 Replace the left rear door handle induction switch (DL-19)

 (a)
 Replace the left rear door handle induction switch.

 (b)
 Connect the HQ-VDS scan tool.

 (c)
 Clear the DTC.

 (d)
 Re-read the DTC.

 Standard:
 No DTC output.

 Abnormal
 Replace the left rear door control unit.

 ( ED-203 )

ED	DTC	B118B18	The output current from the left rear door self-priming lock motor is too low
	DTC	B118B19	The output current from the left rear door self-priming lock motor is too high

#### Description

When the output current of the left rear door lock (electric priming) motor is out of the normal range, the left rear DCU will record the DTC.

DTC number	DTC detection conditions	Fault location
B118B18	(a) The output current from the left rear door self-priming lock motor is too low.	<ul> <li>LR door control unit</li> <li>Harness and connector</li> <li>Left rear door lock (electric suction)</li> </ul>

DTC Nun	nber	DTC detection conditions	Fault location
U02528	U025287 (a) The node of the right front seat massage air pump is missing.		<ul> <li>Front passenger seat lumbar support adjustment motor</li> <li>Harness and connector</li> <li>Seat climate controller</li> </ul>
U02498	37 (a) The no missing.	de of the left front seat backrest ventilation fan i	<ul> <li>Seat ventilation motor</li> <li>Harness and connector</li> <li>Seat climate controller</li> </ul>
U024A	87 (a) The no missing.	de of the left front seat cushion ventilation fan is	<ul> <li>Seat ventilation motor</li> <li>Harness and connector</li> <li>Seat climate controller</li> </ul>
U024B	87 (a) The no missing.	de of the right front seat backrest ventilation far	<ul> <li>Seat ventilation motor</li> <li>Harness and connector</li> <li>Seat climate controller</li> </ul>
U024C	87 (a) The no missing.	de of the right front seat cushion ventilation fan	<ul> <li>Seat ventilation motor</li> <li>Harness and connector</li> <li>Seat climate controller</li> </ul>
U024D	87 (a) The no missing.	de of the left rear seat backrest ventilation fan is	<ul> <li>Seat ventilation motor</li> <li>Harness and connector</li> <li>Seat climate controller</li> </ul>
U024E	37 (a) The no missing.	de of the left rear seat cushion ventilation fan is	<ul><li>Seat ventilation motor</li><li>Harness and connector</li><li>Seat climate controller</li></ul>
U024F8	37 (a) The no missing.	de of the right rear seat backrest ventilation fan	<ul> <li>Seat ventilation motor</li> <li>Harness and connector</li> <li>Seat climate controller</li> </ul>
U0250	37 (a) The no missing.	de of the right rear seat cushion ventilation fan i	<ul> <li>Seat ventilation motor</li> <li>Harness and connector</li> <li>Seat climate controller</li> </ul>
U03408	86 (a) The lef	t front massage air pump is faulty.	<ul> <li>Driver seat lumbar support adjustment motor</li> <li>Harness and connector</li> <li>Seat climate controller</li> </ul>
U0341	86 (a) The rig	ht front massage air pump is faulty.	<ul> <li>Front passenger seat lumbar support adjustment motor</li> <li>Harness and connector</li> <li>Seat climate controller</li> </ul>
<b>SE</b> 003598	86 (a) The lef	t front seat fan is faulty.	<ul><li>Seat ventilation motor</li><li>Harness and connector</li><li>Seat climate controller</li></ul>
U035A	86 (a) The rig	ht front seat fan is faulty.	<ul><li>Seat ventilation motor</li><li>Harness and connector</li><li>Seat climate controller</li></ul>
U035B	86 (a) The lef	t rear seat fan is faulty.	<ul><li>Seat ventilation motor</li><li>Harness and connector</li><li>Seat climate controller</li></ul>
U035C	86 (a) The rig	ht rear seat fan is faulty.	<ul> <li>Seat ventilation motor</li> <li>Harness and connector</li> <li>Seat climate controller</li> </ul>

Abnormal

#### Repair according to the fault

#### Normal

2

B26#

A21#

Normal

13 12

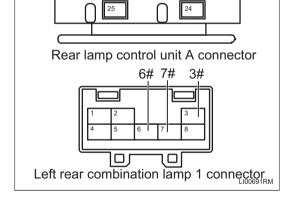
19

#### Check the harness and connector of left rear combination lamp 1 for open circuit

- (a) Set the ignition switch to "OFF"(b) Disconnect the negative terminal of the battery.
  - (c) Disconnect the connector of the rear lighting control unit.
  - (d) Disconnect the left rear combination lamp 1 connector.
  - (e) Measure the resistance according to the values the table below.

#### Standard value

Detector connection	Detection condition	Specified status
Rear lighting control unit connector B26# - left rear combination lamp 1 connector 6#	Remain connected	< 1Ω
Rear lighting control unit connector A21# - left rear combination lamp 1 connector 3#	Remain connected	< 1Ω
Left rear combination lamp 1 connector 7# – body ground	Remain connected	< 1Ω



Rear lamp control unit B connector

Abnormal

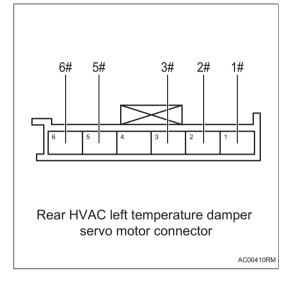
Repair or replace the harness and connector

LI

system

## 3

## Check the harness and connector of rear HVAC left temperature damper servo motor for short circuit to power supply



- (a) Connect the negative terminal of the battery.
- (b) Set the ignition switch to "ON" .
- (c) Measure the voltage according to the table below.

#### Standard value

Detector connection	Detection condition	Specified status
Rear HVAC left temperature damper servo motor harness connector 1# – body ground	Turn the ignition switch to "ON".	<1 V
Rear HVAC left temperature damper servo motor harness connector 2# – body ground	Turn the ignition switch to "ON".	<1 V
Rear HVAC left temperature damper servo motor harness connector 3# – body ground	Turn the ignition switch to "ON".	<1 V
Rear HVAC left temperature damper servo motor harness connector 5# – body ground	Turn the ignition switch to "ON".	<1 V
Rear HVAC left temperature damper servo motor harness connector 6# – body ground	Turn the ignition switch to "ON".	<1 V

Abnormal

Repair or replace the harness and connector

#### Normal

AC

4	Replace
---	---------

#### place rear HVAC left temperature damper servo motor

- (a) Replace rear HVAC left temperature damper servo motor.
- (b) Connect the HQ-VDS scan tool.
- (c) Clear the DTC.
- (d) Re-read the DTC.

Standard:

No DTC output.

## Installation

1. Install the HP hose assembly from condenser to electronic expansion valve (cooling) Tip:

Fully apply compressor oil (ND-OIL 11) to the new O-ring and assembly surface. Do not use other oil products to avoid the decline of insulation of electric compressor caused by oil mixing.

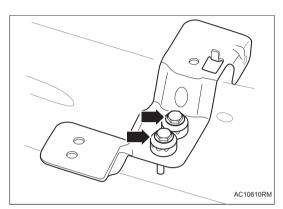
(a) Install the pipeline bracket III assembly with 2 bolts.

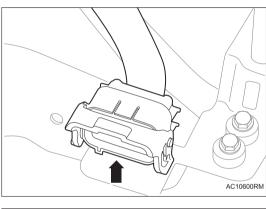
#### Torque: 8-12N•m

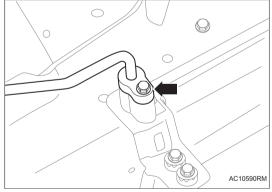
(b) Install the harness connector retaining clip.

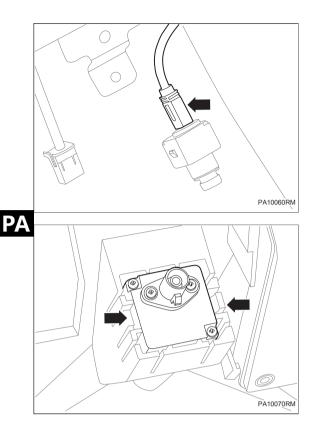
(c) Install the HP hose line assembly from the condenser to the electronic expansion valve (cooling) with one bolt.

Torque: 4-6N•m







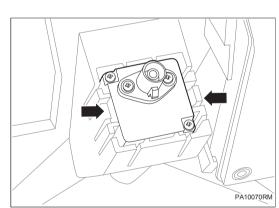


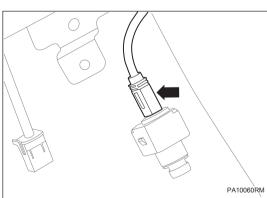
(a) Disconnect the front camera assembly harness connector.

(b) Disengage 2 claws, and remove the FCV assembly.

## Installation

- 1. Install the FVC assembly.
  - (a) Install the FVC assembly with 2 claws.





(b) Connect the front camera assembly harness connector.

2. Install the trim cover of the rain sensor. ( CC-27 )