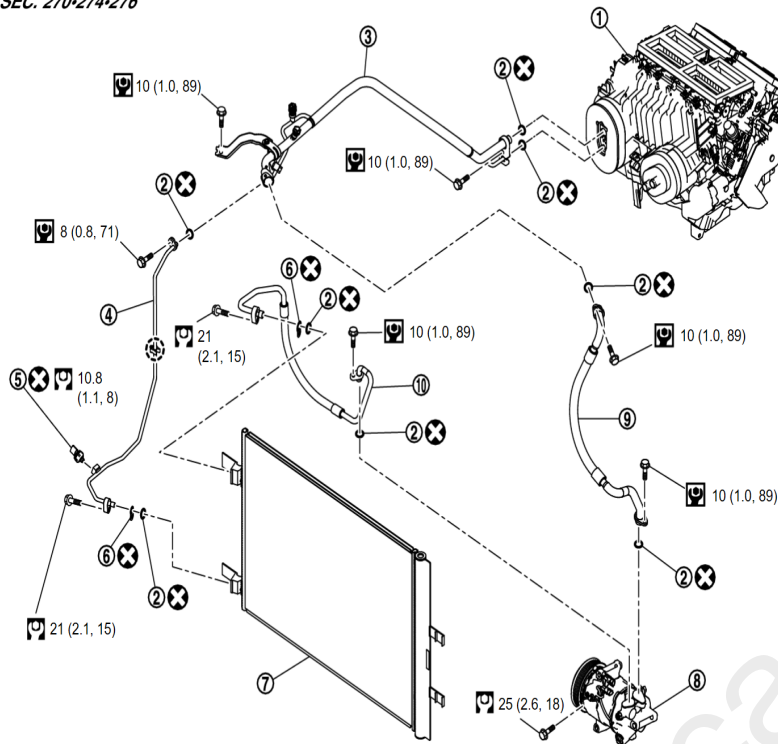


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Exploded View

SEC. 270-274-276

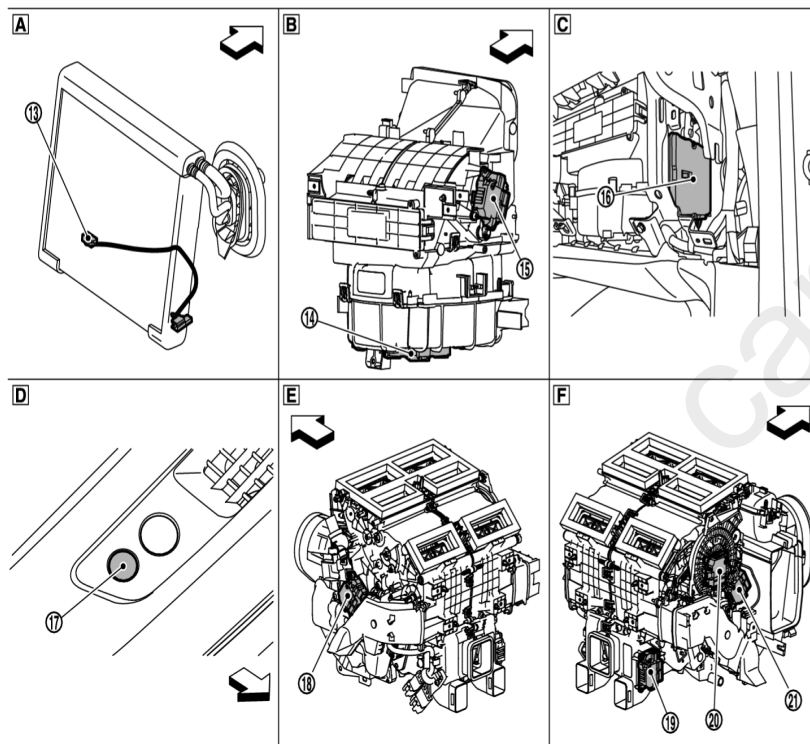
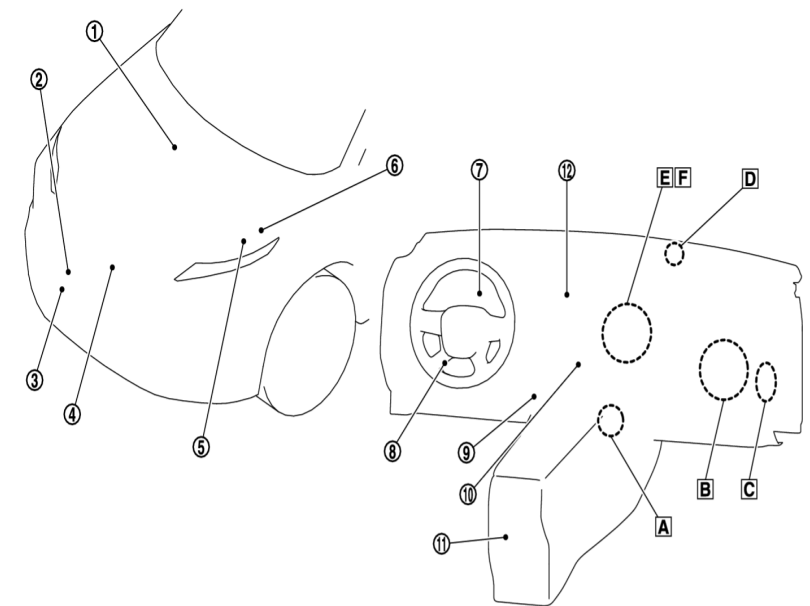


①	Heater & cooling unit assembly	②	O-ring	③	Internal heat exchanger pipe
④	High-pressure pipe	⑤	Refrigerant pressure sensor	⑥	Washer seal
⑦	Condenser & liquid tank assembly	⑧	A/C compressor	⑨	Low-pressure flexible hose
⑩	High-pressure flexible hose				
○	: Clip				
⊗	: Always replace after every disassembly.				
Ⓜ	: N·m (kg-m, in-lb)				
Ⓜ	: N·m (kg-m, ft-lb)				



Component Parts Location

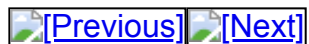
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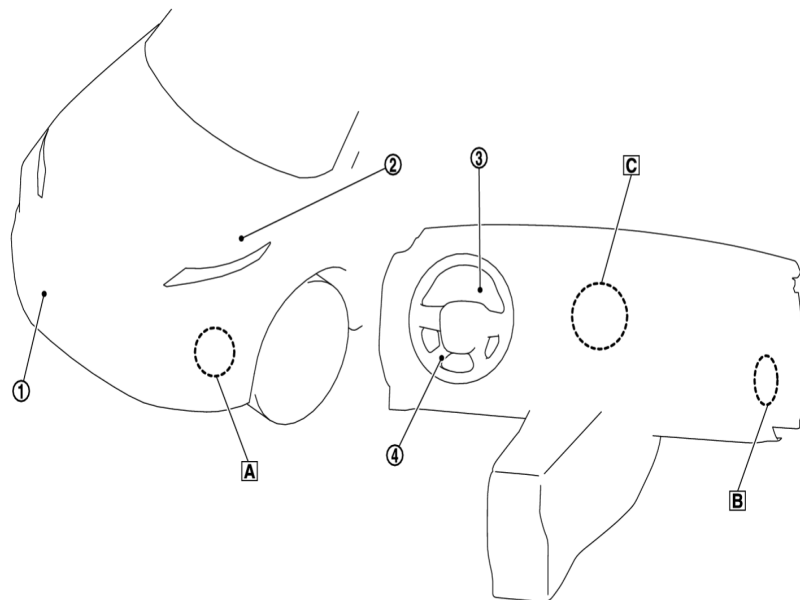
① ABS actuator and electric unit (control unit) Refer to Component Parts Location for detailed installation location.	② Refrigerant pressure sensor	③ Ambient sensor
④ A/C compressor	⑤ ECM Refer to Component Parts Location for detailed installation location.	⑥ IPDM E/R Refer to Component Parts Location for detailed installation location.
⑦ Combination meter	⑧ BCM Refer to Component Parts Location for detailed installation location.	⑨ In-vehicle sensor
⑩ A/C switch assembly	⑪ Rear air control*	⑫ AV control unit Refer to Component Parts Location for detailed installation location.
⑬ Intake sensor	⑭ Front blower motor	⑮ Intake door motor
⑯ A/C amp.	⑰ Sunload sensor	⑱ Air mix door motor LH
⑲ Air mix door motor (rear)*	⑳ Mode door motor	㉑ Air mix door motor RH
A Evaporator	B Right side of blower unit assembly	C Glove box is removed
D Right side of instrument garnish	E Left side of heater & cooling unit assembly	F Right side of heater & cooling unit assembly
↶ Vehicle front		

*: With rear air control

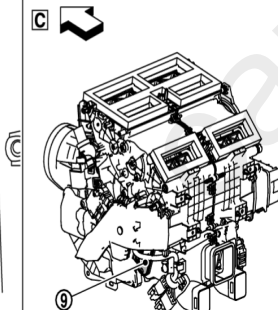
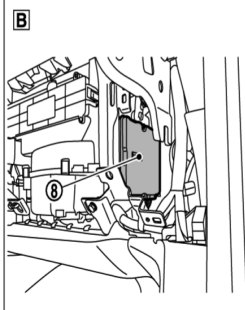
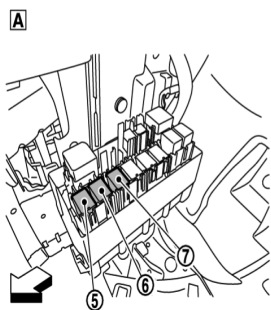
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Component Parts Location



① Ambient sensor	② ECM Refer to Component Parts Location for detailed installation location.	③ Combination meter
④ BCM Refer to Component Parts Location for detailed installation location.	⑤ PTC heater relay 3	⑥ PTC heater relay 2
⑦ PTC heater relay 1	⑧ A/C amp.	⑨ PTC heater
A Relay box (behind of front bumper)	B Glove box is removed	C Left side of heater & cooling unit assembly
← : Vehicle front		



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DTC Index

Self Diagnostic Result

×: Applicable

DTC	Items (M.U.T.-III SE screen terms)	Fail-safe	Reference
B2480-93	Rear air mix door motor	—	DTC Description 
B2490-13	Blower motor assembly FL	—	DTC Description 
B2490-19	Blower motor assembly FL	—	DTC Description 
B2492-13	Blower motor assembly FR	—	DTC Description 
B2492-19	Blower motor assembly FR	—	DTC Description 
B2495-13	Blower motor assembly RL	—	DTC Description 
B2495-19	Blower motor assembly RL	—	DTC Description 
B2496-13	Blower motor assembly RR	—	DTC Description 
B2496-19	Blower motor assembly RR	—	DTC Description 
B24A0-49	A/C AUTO AMP.	—	DTC Description 
B24A1-16	A/C AUTO AMP. POWER SUPPLY	—	DTC Description 
B24A1-17	A/C auto AMP.	—	DTC Description 
B24A2-55	Configuration not implement	—	DTC Description 
B24A4-11	INTAKE SENSOR	—	DTC Description 
B24A4-15	INTAKE SENSOR	—	DTC Description 

DTC	Items (M.U.T.-III SE screen terms)	Fail-safe	Reference
B24A6-11	IN-VEHICLE SENSOR	×	DTC Description ➡
B24A6-15	IN-VEHICLE SENSOR	×	DTC Description ➡
B24B4-02	A/C CONTROL COMM	—	DTC Description ➡
B24F4-12	Heated steering wheel relay	—	DTC Description ➡
B24F4-14	Heated steering wheel relay	—	DTC Description DTC Description ➡
B24F5-93	Mode door motor	—	DTC Description ➡
B24F6-93	Intake door motor	—	DTC Description ➡
B24F7-93	Air mix door motor 1	—	DTC Description ➡
B24F8-93	Air mix door motor 2	—	DTC Description ➡
U1CA1-08	LIN communication 2	—	DTC Description ➡
U1CA2-08	LIN communication 3	—	DTC Description ➡
U1CA3-08	LIN communication 4	—	DTC Description ➡
U1CA6-02	Blower motor assembly FR comm	—	DTC Description ➡
U1CA7-02	Blower motor assembly FL comm	—	DTC Description ➡
U1CA8-02	Blower motor assembly RR comm	—	DTC Description ➡
U1CA9-02	Blower motor assembly RL comm	—	DTC Description ➡
U1CAA-02	Mode door motor	—	DTC Description ➡
U1CAB-02	Intake door motor	—	DTC Description ➡
U1CAC-02	Air mix door motor 1	—	DTC Description ➡

DTC	Items (M.U.T.-III SE screen terms)	Fail-safe	Reference
U1CAD-02	Air mix door motor 2	—	DTC Description 
U1CAE-02	Rear air mix door motor	—	DTC Description 
U1CB1-02	A/C control 2 communication	—	DTC Description 

Network-DTC

×: Applicable

DTC	Items (M.U.T.-III SE screen terms)	Fail-safe	Reference
U2140-87	CAN comm err (ECM)	—	DTC Description 
U2148-87	CAN comm err (brake control unit)	—	DTC Description 
U214E-87	CAN comm err (combination meter)	—	DTC Description 
U214F-87	CAN comm err (BCM)	—	DTC Description 
U2154-87	CAN comm err (MIU)	—	DTC Description 
U215B-87	CAN comm err (IPDM E/R)	—	DTC Description 

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Fail-safe

FAIL-SAFE FUNCTION

- A/C amp. performs fail-safe control when any DTC are detected.

DTC	M.U.T.-III SE screen terms (Trouble diagnosis content)	Fail-safe
B24A6-11	IN-VEHICLE SENSOR	In-vehicle temperature is calculated as 25°C (77°F) and air conditioning system is controlled.
B24A6-15	IN-VEHICLE SENSOR	

- If a CAN communication error exists between the A/C amp., ECM, IPDM E/R, BCM and combination meter for 2 seconds or longer, air conditioning is controlled under the following conditions:

A/C compressor : OFF

- If a LIN communication error exists between the A/C amp. and A/C switch assembly for 30 seconds or longer, air conditioning is controlled under the following conditions:

A/C compressor : ON

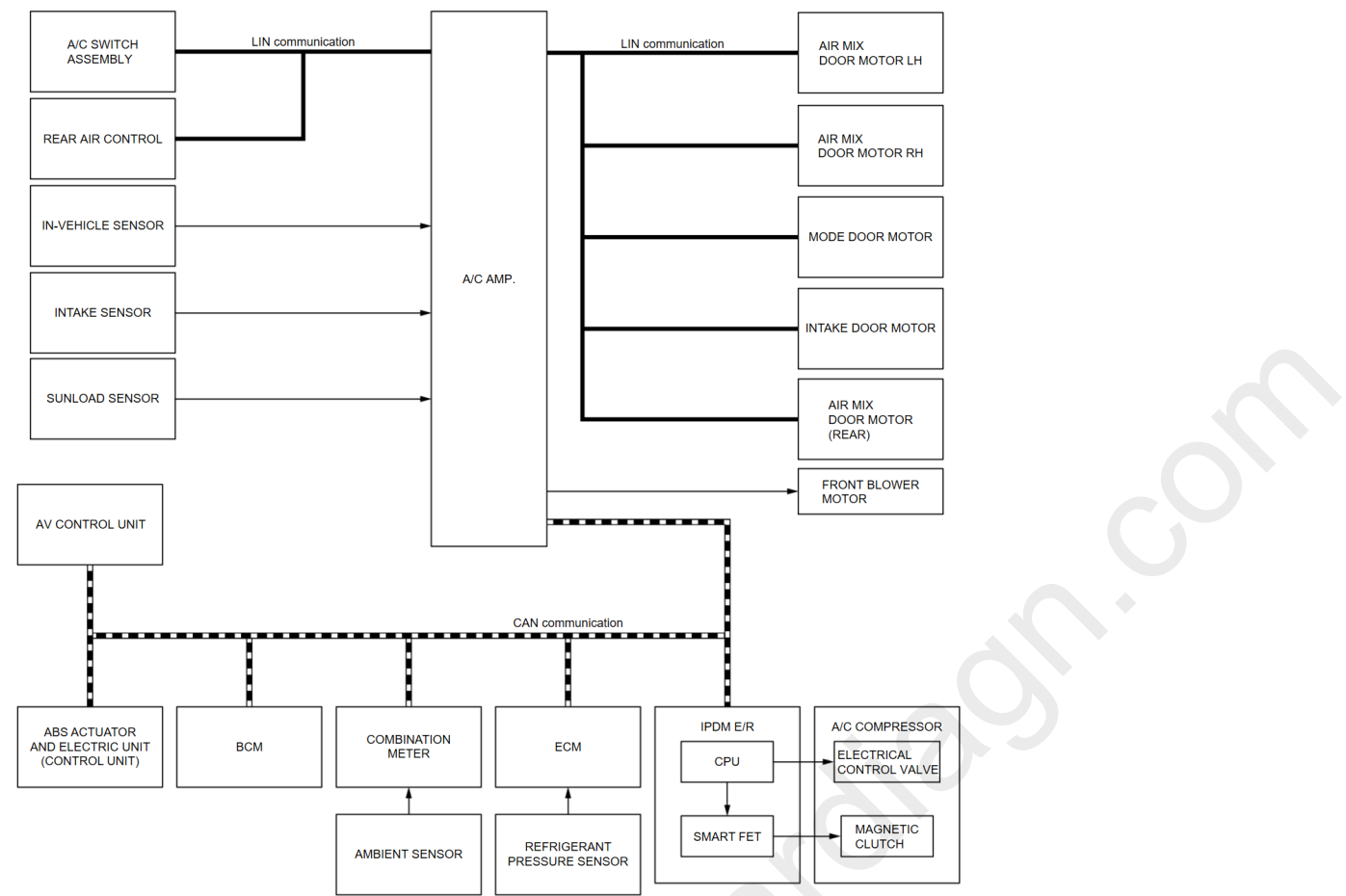
Air outlet	: AUTO
Air inlet	: FRE (fresh air intake)
Front blower fan speed	: AUTO
Set temperature	: Setting before communication error occurs



System Description

SYSTEM DIAGRAM

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Component	Function
ABS actuator and electric unit (control unit)	ABS actuator and electric unit (control unit) transmits vehicle speed signal to A/C amp. via CAN communication line.
AV control unit	AV control unit transmits blower reduction request signal to A/C amp. via CAN communication line.
A/C amp.	A/C Amp. ➡
BCM	BCM transmits remote engine start status signal to A/C amp. via CAN communication line.

Component	Function
Combination meter	Combination meter transmits ambient temperature signal to A/C amp. via CAN communication line.
ECM	- ECM, when receiving A/C ON signal and blower fan ON signal from A/C amp., transmits A/C compressor request signal to IPDM E/R via CAN communication line according to status of the engine and refrigerant pressure. - ECM transmits engine coolant temperature signal and refrigerant pressure sensor signal to A/C amp. via CAN communication line. - ECM controls the cooling fan based on the cooling fan request signal received from the A/C amp.
IPDM E/R	- Smart FET is integrated in IPDM E/R. - IPDM E/R operates smart FET when receiving A/C compressor request signal from ECM via CAN communication line. - IPDM E/R controls ECV when receiving ECV control signal from A/C amp. via CAN communication line.
A/C switch assembly	A/C Switch Assembly 
Rear air control*	Rear Air Control 
Ambient sensor	Ambient Sensor 
Intake sensor	Intake Sensor 
In-vehicle sensor	In-vehicle Sensor 
Refrigerant pressure sensor	Refrigerant Pressure Sensor 
Sunload sensor	Sunload Sensor 

Component	Function
Air mix door motor LH	Air Mix Door Motor LH 
Air mix door motor RH	Air Mix Door Motor RH 
Air mix door motor (Rear)*	Air Mix Door Motor (Rear) 
Front blower motor	Front Blower Motor 
Intake door motor	Intake Door Motor 
Mode door motor	Mode Door Motor 
A/C compressor	A/C Compressor 

*: With rear air control

INPUT/OUTPUT SIGNAL

Control unit	Signal status
ABS actuator and electric unit (control unit)	Transmits the vehicle speed signal to A/C amp. via CAN communication.
AV control unit	Transmits the blower reduction request signal to A/C amp. via CAN communication.
BCM	Transmits the remote engine start status signal to A/C amp. via CAN communication.
Combination meter	Transmits the ambient temperature signal to A/C amp. via CAN communication.
ECM	- Transmits the following signal to A/C amp. via CAN communication. - Engine coolant temperature signal - Refrigerant pressure sensor signal - Transmits the A/C compressor request signal to IPDM E/R via CAN communication.

Control unit	Signal status
	- Receives mainly the following signal from A/C amp. via CAN communication. - A/C ON signal - Blower fan ON signal - Cooling fan request signal
IPDM E/R	Receives mainly the ECV control signal from A/C amp. via CAN communication.
A/C switch assembly	- Transmits the A/C control signal to A/C amp. via LIN communication. - Receives mainly the A/C display signal from A/C amp. via LIN communication.
Rear air control*	- Transmits the rear A/C control signal to A/C amp. via LIN communication. - Receives mainly the rear A/C display signal from A/C amp. via LIN communication.
Air mix door motor LH	- Transmits the door position feedback signal to A/C amp. via LIN communication. - Receives mainly the door motor request signal to A/C amp. via LIN communication.
Air mix door motor RH	
Air mix door motor (Rear)*	
Intake door motor	
Mode door motor	

*: With rear air control

DESCRIPTION

- Automatic air conditioning system is controlled by each function of A/C amp., ECM and IPDM E/R.
- Each operation of air conditioning system can be controlled by the A/C switch assembly.

CONTROL BY A/C amp.

- [Temperature Control](#) →
 - [Air Outlet Control](#) →
 - [Air Inlet Control](#) →
 - [Door Control](#) →
 - [Air Flow Control](#) →
 - [A/C Compressor Control](#) →
 - [Cooling Fan Operation Request Control](#) →
 - [Remote Engine Start Control](#) →
-

CORRECTION FOR INPUT VALUE

- Ambient temperature correction
 - A/C amp. inputs the temperature detected by ambient temperature signal received from combination meter via CAN communication as the ambient temperature.
 - A/C amp. performs the correction of the temperature detected by ambient sensor for air conditioning control.
 - A/C amp. selects and uses the initial value of ambient temperature data depending on the engine coolant temperature when turning the ignition switch from OFF to ON. The detection temperature of the ambient sensor is used when engine coolant temperature is low [less than approximately 56°C (133°F)]. The memory data (before the ignition switch is OFF) when the engine is warmed up [approximately 56°C (133°F) or more].
 - The correction of the ambient temperature is not performed when the detection temperature of the ambient temperature is less than approximately -20°C (-4°F).
- In-vehicle temperature correction
 - A/C amp. inputs the temperature detected by in-vehicle sensor as the in-vehicle temperature.
 - A/C amp. performs the correction of the temperature detected by in-vehicle sensor for air conditioning control.
 - A/C amp. performs the correction so that the recognition passenger room temperature changes depending on the difference between the detected passenger room temperature and the recognition passenger room temperature. If the difference is large, the changing is

early. The changing becomes slow as the difference becomes small.

- Intake temperature correction
 - A/C amp. inputs the temperature detected by intake sensor as the intake temperature (evaporator temperature).
 - A/C amp. performs the correction of the temperature detected by intake sensor for air conditioning control.
 - A/C amp. performs the correction so that the recognition intake temperature changes depending on the difference between the detected intake temperature and the recognition intake temperature. If the difference is large, the changing is early. The changing becomes slow as the difference becomes small.
 - Sunload amount correction
 - A/C amp. inputs the sunload amount detected by sunload sensor.
 - A/C amp. performs the correction of the sunload amount detected by sunload sensor for air conditioning control.
 - When the sunload amount suddenly changes, for example when entering a tunnel, perform the correction so that the recognition sunload amount of the A/C amp. changes slowly.
 - Set temperature correction
 - A/C amp. performs the correction to the target temperature set by the A/C switch assembly so as to match the temperature felt by the passengers depending on the ambient temperature detected by ambient sensor and controls it so that the in-vehicle temperature is always the most suitable.
-

CONTROL BY ECM

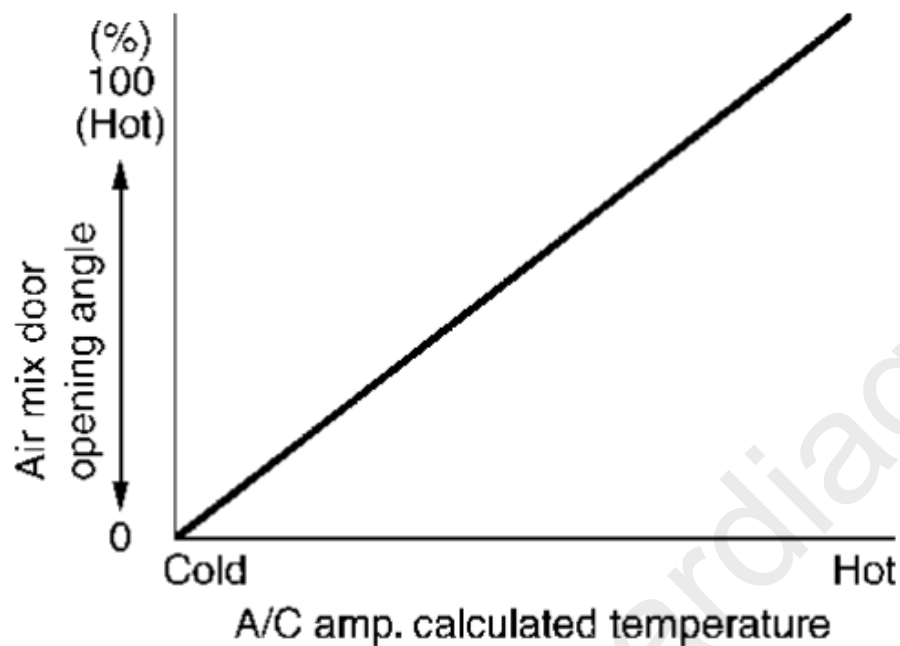
[A/C Compressor Control](#) 

CONTROL BY IPDM E/R

[A/C Compressor Control](#) 

Temperature Control

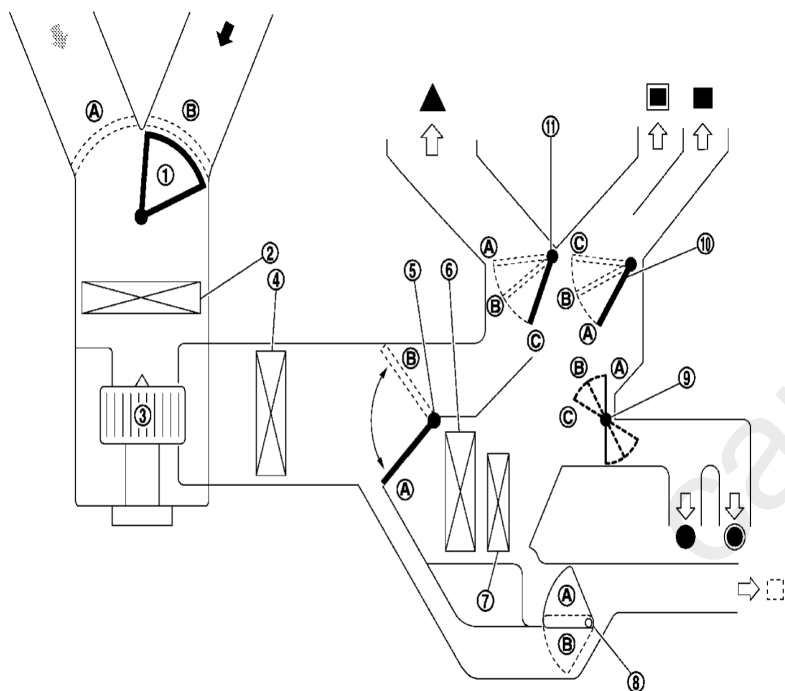
- When ignition switch is in the ON position, A/C amp. always automatically controls temperature regardless of air conditioner operational state.



- A/C amp. calculates the target air mix door opening angle depending on set temperature, in-vehicle temperature, ambient temperature, and sunload.
- Air mix door is controlled depending on the comparison of current air mix door opening angle and target air mix door opening angle.
- Regardless of in-vehicle temperature, ambient temperature, and sunload, air mix door is fixed at the fully cold position when set temperature is "Lo", and at the fully hot position when set temperature is "Hi".

Door Control

SWITCH AND THEIR CONTROL FUNCTION



① Intake door	② In-cabine microfilter	③ Front blower motor
④ Evaporator	⑤ Front air mix door (driver side/passenger side)	⑥ Heater core
⑦ PTC heater	⑧ Rear air mix door*	⑨ Foot door
⑩ Ventilator door	⑪ Defroster door	
← Fresh air	← Recirculation air	← Discharge air
▲ Defroster	■ Center ventilator	■ Side ventilator
□ Rear ventilator	● Front foot	● Rear foot

*: With rear air control

Switch/dial position			Door position						
			Mode door			Intake door	Front air mix door		Rear air mix door ^{*2}
			Ventilator door	Foot door	Defroster door		Driver side	Passenger side	
AUTO switch			AUTO			—	—	—	—
MODE switch			(A)	(A)	(A)				
			(B)	(B)	(A)				
			(C)	(C)	(B) ^{*4} or (A) ^{*5}				
			(C)	(B)	(B)				
DEF switch			(C)	(A)	(C)				

Switch/dial position				Door position						
				Mode door			Intake door	Front air mix door		Rear air mix door ^{*2}
				Ventilator door	Foot door	Defroster door		Driver side	Passenger side	
Intake switch ^{*1, *3}	REC			—	—	—	Ⓐ			
	FRE		Ⓑ							
REC switch ^{*1, *2}							Ⓐ			
FRE switch ^{*1, *2}							Ⓑ			

Switch/dial position			Door position									
			Mode door			Intake door	Front air mix door		Rear air mix door*2			
			Ventilator door	Foot door	Defroster door		Driver side	Passenger side				
Temperature control dial (driver side)	SYNC switch: ON	Full cold "Lo"	—				Ⓐ					
		18.0°C – 32.0°C (61°F – 89°F)					AUTO					
		Full hot "Hi"					Ⓑ					
Temperature control dial (driver side)	SYNC switch: OFF	Full cold "Lo"					Ⓐ		—	—		
		18.0°C – 32.0°C (61°F – 89°F)					AUTO					
		Full hot "Hi"					Ⓑ					
Temperature control dial (passenger side)		Full cold "Lo"					Ⓐ		—			
		18.0°C – 32.0°C (61°F – 89°F)					AUTO					
		Full hot "Hi"					Ⓑ					
Temperature control switch (rear side)*2		Full cold "Lo"					Ⓐ		—	—		
		18.0°C – 32.0°C (61°F – 89°F)					AUTO					
		Full hot "Hi"					Ⓑ					
ON·OFF switch		OFF					Ⓒ	Ⓒ	(Ⓑ)*4 or (Ⓐ)*5			—

*1: Air inlet status is displayed by indicator during activating automatic control

*2: With rear air control

*3: Without rear air control

*4: Default setting

*5: It can be changed using "BLOW SET" in "Work support" mode of M.U.T.-III SE. Refer to M.U.T.-III SE Function [CONSULT Function](#) .

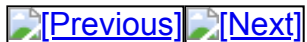
AIR DISTRIBUTION

With rear air control

Discharge air flow						
MODE position	Air outlet/distribution					
	Ventilator			Foot		Defroster
	Front		Rear	Front	Rear	
	Center	Side				
	44%	44%	12%	—	—	—
	23%	23%	15%	30%	9%	—
	—	11%	9%	43%	12%	25%
	—	9%	9%	34%	11%	37%
	—	9%	10%	—	—	81%

Without rear air control

Discharge air flow						
MODE position	Air outlet/distribution					
	Ventilator			Foot		Defroster
	Front		Rear	Front	Rear	
	Center	Side				
	45%	43%	12%	—	—	—
	23%	27%	14%	30%	6%	—
	—	9%	18%	36%	12%	25%
	—	8%	15%	30%	11%	36%
	—	6%	15%	—	—	79%



A/C Compressor Control

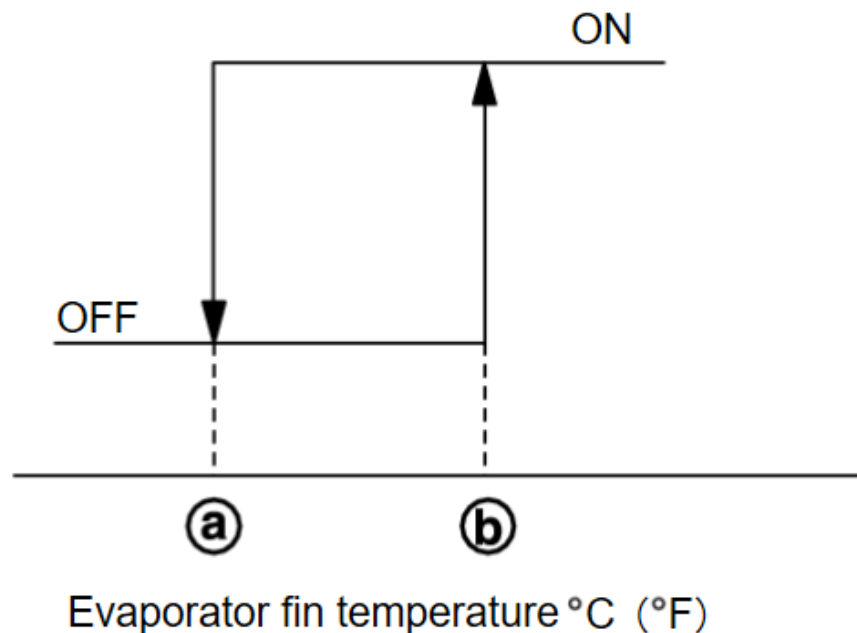
DESCRIPTION

- When the A/C compressor activation condition is satisfied while front blower motor is activated, A/C amp. transmits A/C ON signal and blower fan ON signal to ECM.
- ECM judges the conditions of each sensor (Refrigerant pressure sensor signal, accelerator position signal, etc.), and transmits the A/C compressor request signal to IPDM E/R via CAN communication line.
- By receiving the A/C compressor request signal from ECM, IPDM E/R turns the smart FET to ON, and activates the A/C compressor. Refer to [System Description](#) .

CONTROL BY A/C amp.

Low Temperature Protection Control

When intake sensor detects that evaporator fin temperature is ^(a) $[-5.0^{\circ}\text{C} (23.0^{\circ}\text{F})]$ or less, A/C amp. requests ECM to turn the A/C compressor OFF, and stops the A/C compressor.



When the air temperature returns to ⑥ [−2.0°C (28.4°F)] or more, the A/C compressor is activated.

Refrigerant Discharge Amount Control

- A/C amp. transmits the ECV control signal via CAN communication. IPDM E/R transmits the control signal to ECV according to the received ECV control signal.
- ECV is controlled according to change in the duty ratio of the transmitted control signal.
- Except when temperature setting is full cold or outlet is DEF, A/C amp. controls the refrigerant discharge amount according to the required cooling capacity.
- A/C amp. increases the refrigerant discharge amount when evaporator temperature is higher than the target temperature upper limit, and reduces the refrigerant discharge amount when evaporator temperature is at or below the target temperature upper limit.

note

Target temperature upper limit value of evaporator can be changed using “TARGET EVAPORATOR TEMP UPPER LIMIT SETTING” in “Work support” mode of M.U.T.-III SE. Refer to M.U.T.-III SE Function [CONSULT Function](#) .

A/C Compressor Oil Circulation Control

When the engine starts, A/C amp. activates the A/C compressor for a few seconds and circulates the A/C compressor oil once.

CONTROL BY ECM

A/C Compressor Protection Control at Pressure Malfunction

The high-pressure side value that is detected by refrigerant pressure sensor is excessively low or high, ECM requests IPDM E/R to turn smart FET OFF and stop the A/C compressor.

Air Conditioning Cut Control

When the engine condition is high load, ECM transmit smart FET OFF request to IPDM E/R, and stops the A/C compressor.

[\[Previous\]](#) [\[Next\]](#)

Reference Value

M.U.T.-III SE DATA MONITOR REFERENCE VALUES

note

The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to M.U.T.-III SE display items.

Monitor item	Condition	Value/Status
IN-VEH TEMP	Ignition switch ON	Equivalent to in-vehicle temperature (Display range: -40 - 215° C)
INT TEMP SEN	Ignition switch ON	Equivalent to evaporator fin temperature (Display range: -40 - 215° C)
SUNLOAD SEN	Ignition switch ON	Equivalent to sunload amount (Display range: 0 - 1045 W/m ²)
AMB SEN CAL	Ignition switch ON	Equivalent to ambient temperature (Display range: -40 - 215° C)
IN-VEH CAL	Ignition switch ON	Equivalent to in-vehicle temperature (Display range: -40 - 215° C)

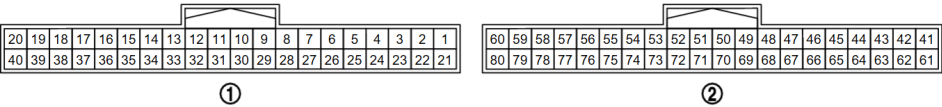
Monitor item	Condition		Value/Status
PASS IN CAL	Ignition switch ON		Equivalent to passenger side in-vehicle temperature (Display range: -40 - 215° C)
INT TEMP CAL	Ignition switch ON		Equivalent to evaporator fin temperature (Display range: -40 - 215° C)
SUNL SEN CAL	Ignition switch ON		Equivalent to sunload amount (Display range: 0 - 1045 W/m ²)
XM	Ignition switch ON		Value according to target air flow temperature (driver side) (Display range: -100 - 150)
FAN REQ SIG	Engine: Run at idle after warming up	Front blower motor: ON	On
		Front blower motor: OFF	Off
COMP REQ SIG	Engine: Run at idle after warming up	A/C switch: ON	On
		A/C switch: OFF	Off
A/C comp clutch status	Engine: Run at idle after warming up	A/C switch: ON	On
		A/C switch: OFF	Off
RR XM	Ignition switch ON		Value according to target air flow temperature (rear) (Display range: -100 - 150° C)
Assist seat target air temperature	Ignition switch ON		Value according to target air flow

Monitor item	Condition		Value/Status
			temperature (passenger side) (Display range: -100 - 150)
Blower fan duty	Engine: Run at idle after warming up	Front blower motor: ON	• 16 – 61%^{*1} • 16 – 66%^{*2} (Display range: 0 - 100%)
		Front blower motor: OFF	0
AMB TEMP SEN	Ignition switch ON		Equivalent to ambient temperature (Display range: -50 - 70° C)
Vehicle speed	When driving the vehicle		Equivalent to speedometer reading
ODO/TRIP METER	Ignition switch ON		Equivalent to odometer reading
Engine RPM	Engine: Running		Equivalent to tachometer reading
ENG COOL TEMP	Ignition switch ON		Equivalent to engine coolant temperature

*1: With rear air control

*2: Without rear air control

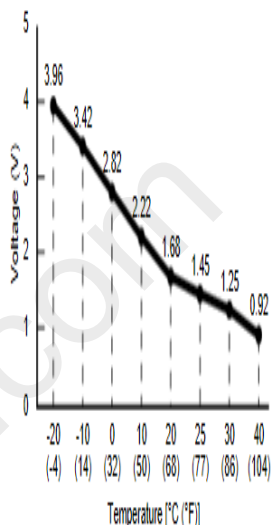
TERMINAL LAYOUT



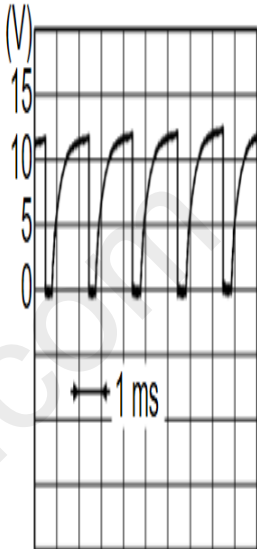
Gray Black

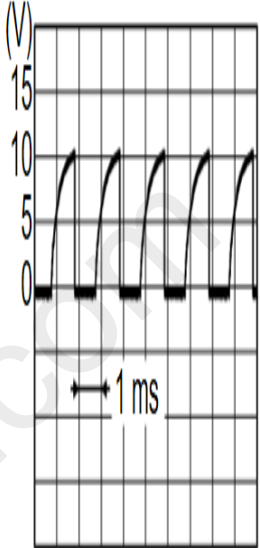
PHYSICAL VALUES

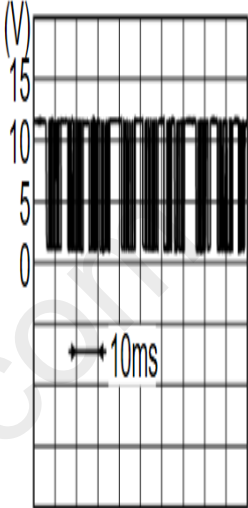
Terminal No. (Wire color)		Description		Condition	Value
+	-	Signal name	Input/Output		
1 (LA/LG)	58 (B)	Door motor power supply	Output	Ignition switch ON	10.5 – 16 V
2 (LA/G)	58 (B)	LIN (door motor)	Input/Output	Ignition switch ON	

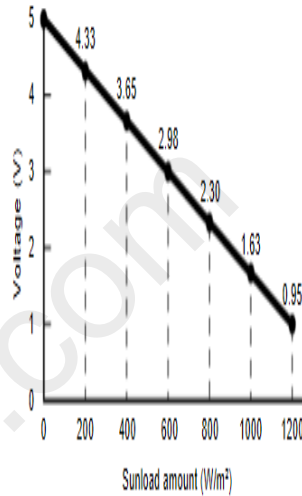
Terminal No. (Wire color)		Description		Condition	Value
+	—	Signal name	Input/Output		
23 (LA/SB)	26 (BR)	Intake sensor signal	Input	Ignition switch ON	
26 (BR)	Ground	Sensor ground (intake)	—	Ignition switch ON	0 – 0.1 V
27 (LA/B)	Ground	Door motor ground	—	Ignition switch ON	0 – 0.1 V

Terminal No. (Wire color)		Description		Condition		Value
+	-	Signal name	Input/Output			
34 (G)	58 (B)	Blower motor control	Output	Ignition switch ON	Front blower motor: OFF	10.5 – 16 V
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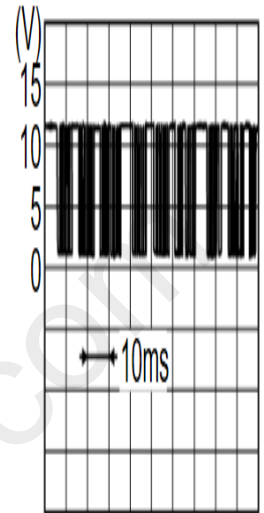
Terminal No. (Wire color)		Description		Condition	Value
+	-	Signal name	Input/Output		
				Front blower motor: 1st speed (manual)	

Terminal No. (Wire color)		Description		Condition	Value
+	-	Signal name	Input/Output		
				Front blower motor: 7th speed (manual)	

Terminal No. (Wire color)		Description		Condition	Value
+	-	Signal name	Input/Output		
45 (LA/G)	58 (B)	LIN (heated seat)	Input/Output	Ignition switch ON	

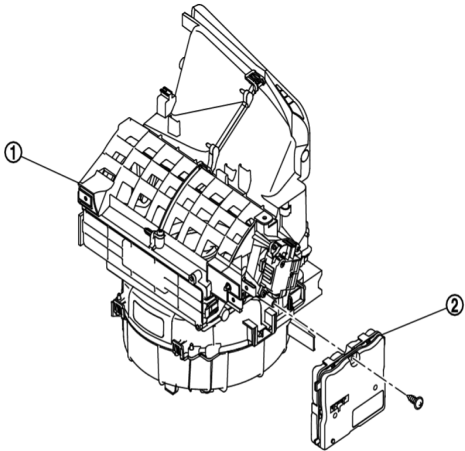
Terminal No. (Wire color)		Description		Condition	Value																
+	-	Signal name	Input/Output																		
47 (G)	78 (W)	Sunload sensor signal	Input	Ignition switch ON	 <table><caption>Sunload Sensor Characteristic Data</caption><thead><tr><th>Sunload amount (W/m²)</th><th>Voltage (V)</th></tr></thead><tbody><tr><td>0</td><td>5.00</td></tr><tr><td>200</td><td>4.33</td></tr><tr><td>400</td><td>3.65</td></tr><tr><td>600</td><td>2.98</td></tr><tr><td>800</td><td>2.30</td></tr><tr><td>1000</td><td>1.63</td></tr><tr><td>1200</td><td>0.95</td></tr></tbody></table>	Sunload amount (W/m²)	Voltage (V)	0	5.00	200	4.33	400	3.65	600	2.98	800	2.30	1000	1.63	1200	0.95
Sunload amount (W/m²)	Voltage (V)																				
0	5.00																				
200	4.33																				
400	3.65																				
600	2.98																				
800	2.30																				
1000	1.63																				
1200	0.95																				

Terminal No. (Wire color)		Description		Condition		Value
+	—	Signal name	Input/Output			
48 (Y)	78 (W)	In-vehicle sensor signal	Input	Ignition switch ON		
50 (LA/L)	—	CAN-H	Input/Output	—		—
56 (BG)	58 (B)	Heated steering wheel relay control signal	Output	Engine running	Heated steering wheel switch: ON	0 – 0.1 V
					Other than the above	10.5 – 16 V
58 (B)	Ground	Ground	—	Ignition switch ON		0 – 0.1 V
60 (LA/R)	58 (B)	Accessory power supply	Input	Ignition switch OFF (auto ACC status) or ON	10.5 – 16 V	
				Ignition switch OFF (not auto ACC status)	0 – 0.1 V	

Terminal No. (Wire color)		Description		Condition	Value
+	—	Signal name	Input/Output		
68 (LA/P)	58 (B)	LIN (A/C control)	Input/Output	Ignition switch ON	
70 (LA/P)	—	CAN-L	Input/Output	—	—
78 (W)	Ground	Sensor ground (in-vehicle, sunload)	—	Ignition switch ON	0 – 0.1 V

Exploded View

SEC. 270-272



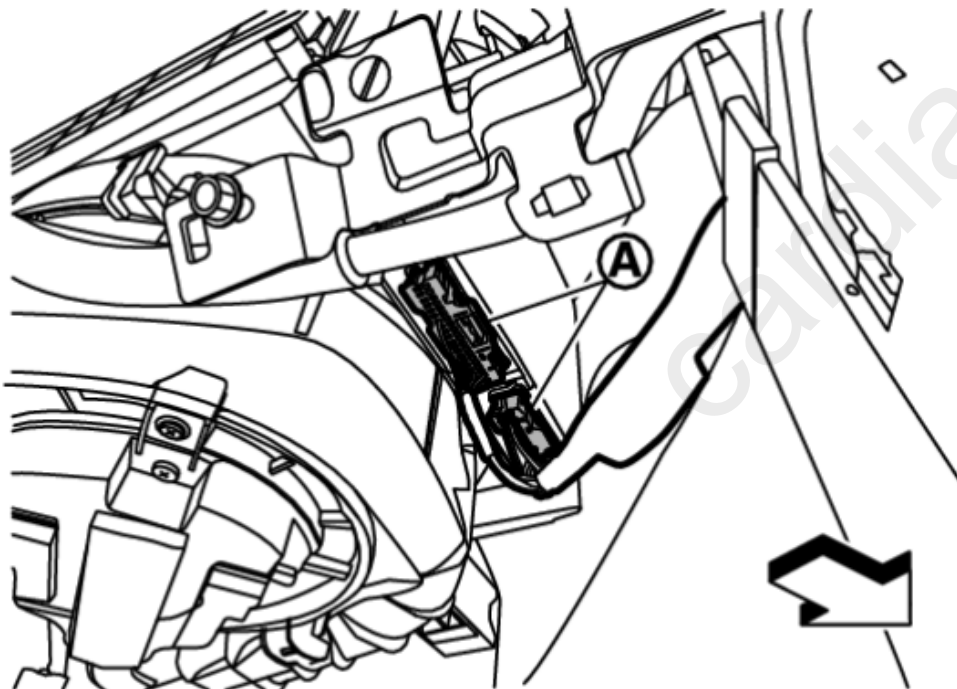
①	Blower unit	②	A/C amp.		
←	: Vehicle front				

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Removal and Installation

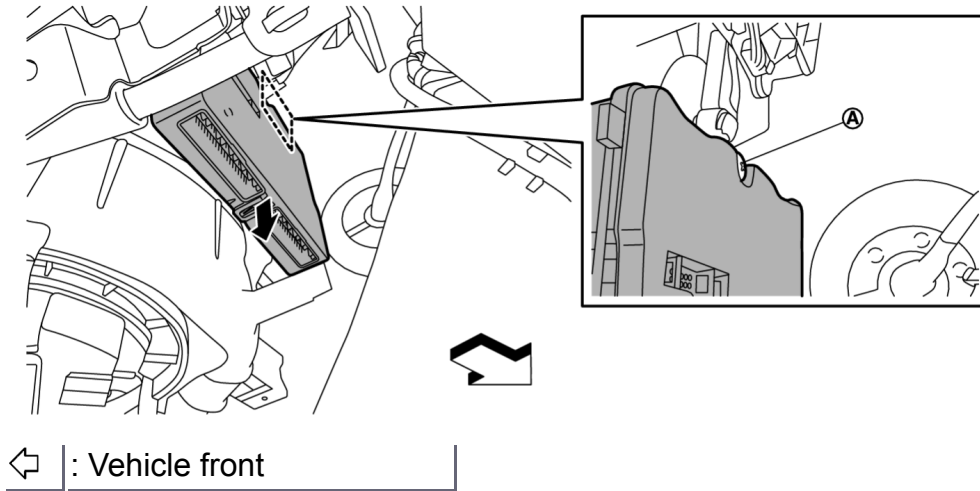
REMOVAL

1. Remove glove box. Refer to [Removal and Installation](#) .
2. Disconnect A/C amp. harness connectors .



 : Vehicle front

3. Remove fixing screw (A), and then slide A/C amp. in the direction indicated by arrow as shown in the figure and remove it.



INSTALLATION

Note the following item, and then install in the reverse order of removal.

caution

Be sure perform ADDITIONAL SERVICE WHEN REPLACING A/C AMP. when replacing A/C amp. Or not doing so, A/C amp. control function does not operate normally. Refer to [Description](#) ➡.