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< BASIC INSPECTION >

BASIC INSPECTION DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:000000004240955

DETAILED FLOW

1.OBTAIN INFORMATION ABOUT SYMPTOM

Interview the customer to obtain the malfunction information (conditions and environment when the malfunction occurred) as much as possible when the customer brings the vehicle in.

>> GO TO 2.

2.REPRODUCE THE MALFUNCTION INFORMATION

Check the malfunction on the vehicle that the customer describes. Inspect the relation of the symptoms and the condition when the symptoms occur.

>> GO TO 3.

3. IDENTIFY THE MALFUNCTIONING SYSTEM WITH "SYMPTOM DIAGNOSIS"

Use "Symptom diagnosis" from the symptom inspection result in step 2. Then identify where to start performing the diagnosis based on possible causes and symptoms.

>> GO TO 4.

4. IDENTIFY MALFUNCTIONING PARTS WITH "COMPONENT DIAGNOSIS"

Perform the diagnosis with "Component diagnosis" of the applicable system.

>> GO TO 5.

5.REPAIR OR REPLACE THE MALFUNCTIONING PARTS

Repair or replace the specified malfunctioning parts.

>> GO TO 6.

6.FINAL CHECK

Is the malfunctioning part repaired or replaced?

(Check that malfunctions are not reproduced when obtaining the malfunction information from the customer, referring to the symptom inspection result in step 2.)

YES or NO

YES >> Trouble diagnosis is completed.

NO >> GO TO 2.

< SYSTEM DESCRIPTION > SYSTEM DESCRIPTION POWER SEAT

System Description

BCM can operate regardless of the ignition switch position, because battery power is supplied at all times to power seat switch.

SLIDING OPERATION

While operating the sliding switch located in power seat switch, sliding motor operates and makes possible the seat front and back position adjustment.

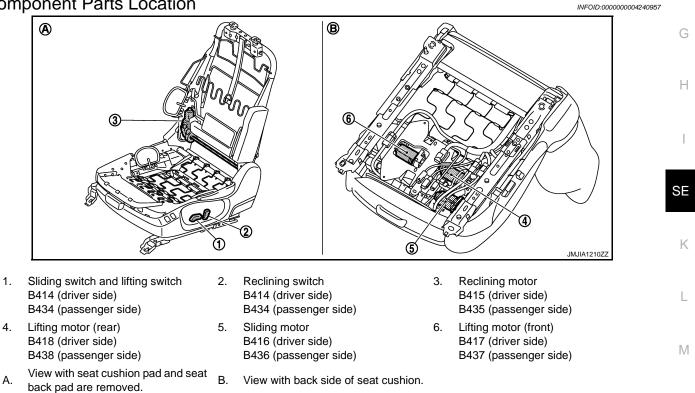
RECLINING OPERATION

While operating the reclining switch located in power seat switch, reclining motor operates and makes possible the seat back forward and backward position adjustment.

LIFTING OPERATION

While operating the lifting switch located in power seat switch, lifting motor operates and makes possible the seat cushion up and down position adjustment.

Component Parts Location



Component Description

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INFOID:000000004240958

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Item	Function	
BCM	Supplies at all times the power received from battery to power seat switch.	
Power seat switch	Built-in reclining switch, sliding switch and lifting switch, controls the power supplied to each motor.	
Reclining motor	With the power supplied to power seat switch, operates the forward and backward movement of seatback.	
Sliding motor	With the power supplied to power seat switch, operates the forward and backward slide of seat.	
Lifting motor (front/rear)	ng motor (front/rear) With the power supplied to power seat switch, operates the up and down movement of seat custion.	

< SYSTEM DESCRIPTION >

TILT&TELESCOPIC SYSTEM

System Description

INFOID:000000004240959

Power from battery is supplied at all times to automatic driver positioner control unit, tilt and telescopic system can operate regardless of the ignition switch position.

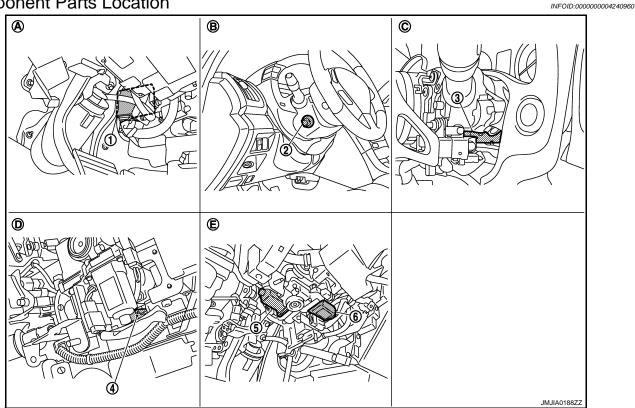
TILT OPERATION

- While operating the tilt and telescopic switch, tilt motor operates, and allows up or down position adjustment of steering wheel.
- During tilt motor operation tilt sensor detects the position of steering wheel and automatically cuts the power when the operation limit is reached.

TELESCOPIC OPERATION

- Operating the tilt and telescopic switch, telescopic motor operates and allows forward and backward position regulation of steering wheel.
- During telescopic motor operation telescopic sensor detects the position of steering wheel and automatically cuts the power when the operation limit is reached.

Component Parts Location



- 1. Automatic drive positioner control unit M51, M52
- 4. Tilt sensor M48
- A. View with instrument driver lower panel is removed.
- D. View with steering column cover is removed.
- 2. Tilt & telescopic switch M31
- 5. Telescopic motor M49
- B. Steering column cover
- E. View with instrument lower cover is removed.
- 3. Telescopic sensor M48
- 6. Tilt motor M49
- C. View with steering column cover is removed.

TILT&TELESCOPIC SYSTEM

< SYSTEM DESCRIPTION >

Component Description

INFOID:000000004240961

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Item	Function	
Automatic drive positioner control unit	Detects data input signal of tilt and telescopic switch and tilt and telescopic sensor, per- forms tilt and telescopic motor control.	
Tilt and telescopic switch	Tilt switch and telescopic switch, as a unit, transmit switch operation signal to automation drive positioner control unit.	
Tilt and telescopic motor	Operates with the power received from automatic drive control unit.	
Tilt and telescopic sensor	Detects the position of steering, send signal to automatic drive positioner control unit.	

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SIDE SUPPORT

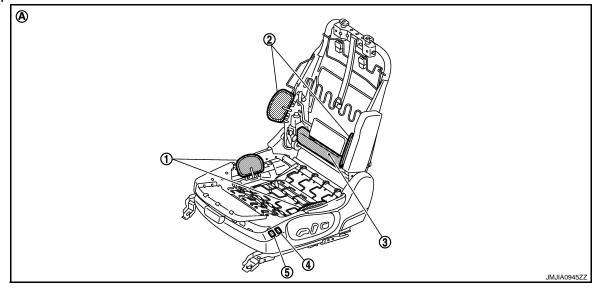
< SYSTEM DESCRIPTION >

SIDE SUPPORT

System Description

- While operating the side support switch, the pump located inside side support unit operates and adjust the air pressure in seat cushion and seatback side support.
- It is possible to soften the side support, by allowing some air to escape, by deflating the solenoid located inside side support.
- It is possible to adjust seat cushion and seatback differently while inflating or deflating solenoid located in side support unit.

Component Parts Location



- 1. Side support (seat cushion) (Side support unit B465)
- Side support (seat back)
 Side support unit B465)
 Side support unit B465)
- Side support unit B465) (Side supp Side support switch (seat back side) 5. Side support
 - n (seat back side) 5. Side support switch (cushion side) B464
- A. View with seat cushion pad and seat back pad are removed.

Component Description

4.

B464

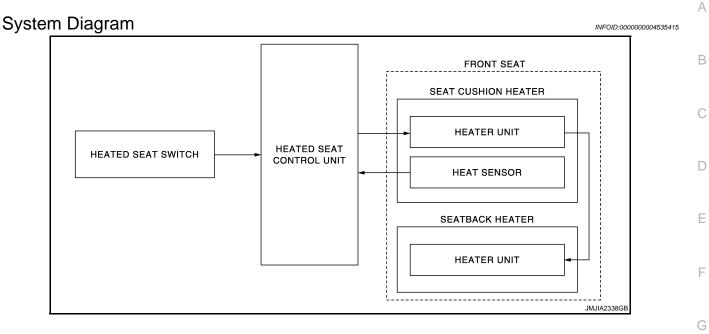
INFOID:000000004240964

Item	Function	
Side support switch	With a built-in cushion side and seat back side, controls the power supplied to pump and to each solenoid.	
Side support unit	Built-in pump, pump relay and solenoid, operates when pressing ON/OFF on side support switch.	

INFOID:000000004240962

HEATED SEAT

< SYSTEM DESCRIPTION > HEATED SEAT



System Description

INFOID:000000004535416

- Heated seat is activated by heated seat switch while ignition switch is ON, and has the function to warm seat

 cushion and seatback.
- Heated seat equips the 6-stage temperature adjustment function that adjusts temperature by operating heated seat switch to the optimal position.
- Heated seat equips a thermostat in heater unit to prevent heater unit overheating.

OPERATION DESCRIPTION

- When operating heated seat switch to any position between 1 and 6 while ignition switch is ON, indicator illuminates, heated seat control unit supplies power supply to heater unit, and warms seat cushion and seatback.
- Heat sensor that is built in seat cushion heater detects seat cushion heater temperature and outputs to heated seat control unit.
- Heated seat control unit monitors the heated seat switch position and heater sensor temperature, and interrupts power supply to heater unit when the heat sensor temperature reaches preset temperature.
- Heated seat control unit adjusts temperature to preset temperature by supplying or interrupting power supply to heater unit.

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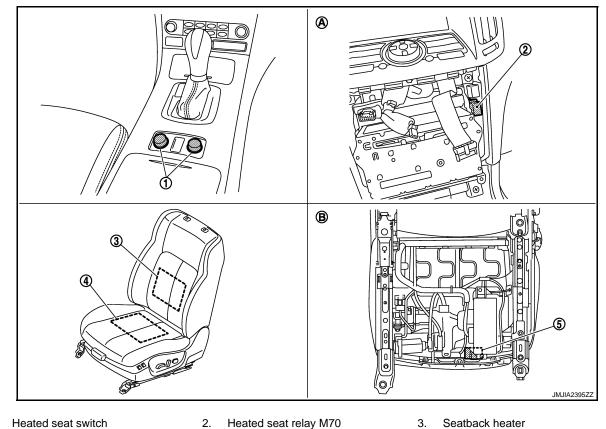


HEATED SEAT

< SYSTEM DESCRIPTION >

Component Parts Location

INFOID:000000004535417



- 1. Heated seat switch
 - Driver side
 - With A/T M141
 - With M/T M175
 - · Passenger side
 - With A/T M142
 - With M/T M176
- 4. Seat cushion heater
 - Driver side B467, B424
 - Passenger side B441, B444
- A. Behind cluster lid C

Component Description

5. Heated seat control unit • Driver side B466

- Passenger side B440
- B. Backside of seat cushion

INFOID:000000004535418

Driver side B425

• Passenger side B445

Item	Function	
Heated seat switch	 Adjusts heated seat temperature and deactivates heated seat Equips indicator that indicates the operating condition 	
Seat cushion heater	 Warms seat cushion Contains heater sensor that outputs seat cushion temperature to heated seat control unit 	
Seatback heater	Warms seatback	
Heated seat control unit	Controls heated seat temperature and is independently placed in each seat cushion (driver seat and passenger seat)	

LUMBAR SUPPORT

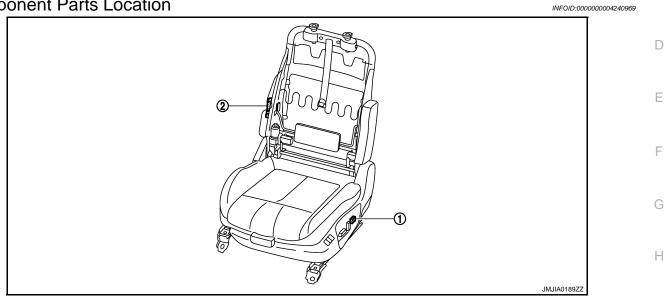
< SYSTEM DESCRIPTION >

LUMBAR SUPPORT

System Description

- Lumbar support can operate regardless of the ignition switch position because battery power is supplied to it В at all times.
- · While operating the lumbar support switch, lumbar support motor operates which allows forward and backward operation of seatback support.

Component Parts Location



- Lumbar support switch B457 1.
- Lumbar support motor B458 2.

Component Description

INFOID:000000004240970

Item	Function	
Lumbar support switch	Controls the power supplied to lumbar support motor.	K
Lumbar support motor	With the power supplied to lumbar support switch, operates the forward and backward movement of seatback support device.	
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< DTC/CIRCUIT DIAGNOSIS >

DTC/CIRCUIT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

AUTOMATIC DRIVE POSITIONER CONTROL UNIT : Diagnosis Procedure

INFOID:000000004535423

1.CHECK FUSE AND FUSIBLE LINK

Check that the following fuse and fusible link are not fusing.

Terminal No.	Signal name	Fuse and fusible link No.
39	Battery power supply	K (40 A)
34		10 (10 A)

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace the blown fuse and fusible link after repairing the affected circuit if fuse and fusible link are blown.

2. CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.

- 2. Disconnect automatic drive positioner control unit connector.
- 3. Check voltage between automatic drive positioner control unit harness connector and ground.

(+) Automatic drive positioner control unit		()	Voltage (V) (Approx.)	
Connector	Terminal		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
M52	34	Ground	Battory voltago	
IVI52	39	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 3.

NO-1 >> Repair or replace harness.

NO-2 >> Check circuit breaker, and replace if NG.

3.CHECK GROUND CIRCUIT

Check continuity between automatic drive positioner control unit harness connector and ground.

Automatic drive	Automatic drive positioner control unit		Continuity
Connector	Terminal	Terminal Ground	
M52	40	Ground	Existed
WIJZ	48		Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair or replace harness.

HEATED SEAT CONTROL UNIT

HEATED SEAT CONTROL UNIT : Diagnosis Procedure

INFOID:000000004535424

1.CHECK FUSE

Check that the following fuses is not fusing.

Signal name	Fuse No.
Battery power supply	35 (15A)

< DTC/CIRCUIT DIAGNOSIS >

<u> </u>							_
	the inspection res						
	ES >> GO TO	2. e the blown fuse a	ofter repairing the	affected circui	t if a fuse is blown		A
-	CHECK POWER			anected circui		1.	
							B
1. 2.	Turn ignition sw	vitch OFF. ited seat control u	nit connector				
3.	Turn ignition sw						
4.	Check voltage b	petween heated s	eat control unit ha	arness connec	tor and ground.		С
-		(+)					
-		Heated seat cor	atrol unit		(-)	Voltage (V)	D
-		Connector		minal	()	(Approx.)	
-			B466				_
-	Passenger side	B440	1	14	Ground	Battery voltage	E
ls i	the inspection res	sult normal?					
_	ES >> GO TO						F
-	IO >> GO TO						
3.	CHECK POWER	SUPPLY CIRCU	IT 1				
1.	Turn ignition sw	vitch OFF.					– G
2.	Disconnect hea						
3.	nector.	y between neated	I seat control unit	namess conne	ector and neated	seat relay terminal con	I- Н
_	ŀ	Heated seat control ur	iit	Hea	ted seat relay	Continuity	
_	Conr	nector	Terminal	Connector	Terminal	Continuity	
	Driver side	B466	67	M70	3	Existed	
	Passenger side	B440	14		5	Existed	SE

4. Check continuity between heated seat control unit harness connector and ground.

	Heated seat control unit		Continuity	ĸ	
Connector		Terminal	Ground	Continuity	
Driver side	B466	67	Ground	Not existed	
Passenger side	B440	14		NOT EXISTED	

Is the inspection result normal?

YES >> Repair or replace harness between heated seat relay and fuse holder.

NO >> Repair or replace harness between heated seat control unit and heated seat relay.

4.CHECK POWER SUPPLY 2

Check voltage between heated seat control unit harness connector and ground.

Ц	(+) Heated seat control unit			Con	Condition		
-	nector	Terminal	()	Con	Condition		
Driver side	B466	60	Cround		ON	Battery voltage	
Driver side	D400	69		Cround	Heated seat	OFF	0
Desserverside		switch	switch	switch	ON	Battery voltage	
Passenger side B	D44U	B440 16			OFF	0	

Is the inspection result normal?

YES >> GO TO 7. NO >> GO TO 5. SE

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< DTC/CIRCUIT DIAGNOSIS >

5. CHECK POWER SUPPLY CIRCUIT 2

- 1. Turn ignition switch OFF.
- Disconnect heated seat switch connector. 2.
- Check continuity between heated seat control unit harness connector and heated seat switch harness 3. connector.

I	Heated seat control unit		Heated seat switch		
Coni	nector	Terminal	Connector	Terminal	Continuity
Driver side	B466	69	A/T models: M141 M/T models: M175	1	Existed
Passenger side	B440	16	A/T models: M142 M/T models: M176	I	LXISIEU

4. Check continuity between heated seat control unit harness connector and ground.

Heated seat control unit				Continuity	
Со	Connector		Ground	Continuity	
Driver side	B466	69	Giouna	Not existed	
Passenger side	B440	16		NOL EXISIED	

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

6.CHECK HEATED SEAT SWITCH

Check heated seat switch.

Driver side: Refer to <u>SE-18, "DRIVER SIDE : Component Inspection"</u>.
Passenger side: Refer to <u>SE-20, "PASSENGER SIDE : Component Inspection"</u>.

Is the inspection result normal?

YES >> GO TO 8.

NO >> Replace heated seat switch. Refer to SE-133, "Removal and Installation".

1.CHECK GROUND CIRCUIT

Turn ignition switch OFF. 1.

Check continuity between heated seat control unit harness connector and ground. 2.

Heated seat control unit				Continuity
Cor	nector	Terminal	Ground	Continuity
Driver side	B466	48	Giouria	Existed
Passenger side	B440	2		Existed

Is the inspection result normal?

>> INSPECTION END YES

NO >> Repair or replace harness.

8.CHECK INTERMITTENT INCIDENT

Check intermittent incident. Refer to GI-41, "Intermittent Incident".

>> INSPECTION END HEATED SEAT SWITCH

HEATED SEAT SWITCH : Diagnosis Procedure

1.CHECK FUSE

Check that the following fuses is not fusing.

< DTC/CIRCUIT DIAGNOSIS >

	al No.		Signal name			Fuse No.
5		Ig	nition power sup	oply		3 (10A)
the inspection result (ES >> GO TO 2 NO >> Replace .CHECK POWER	2. the blown fuse a	fter repairi	ng the affecte	ed circuit i	f a fuse is blown	
Turn ignition swit Disconnect heat Turn ignition swit	tch OFF. ed seat switch co		harness conr	nector and	ground.	
	(+)					
	Heated seat switch				()	Voltage (V) (Approx.)
C	onnector		Terminal			(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Driver side	A/T models: N M/T models: N	M175	5		Ground	Battery voltage
Passenger side	A/T models: N M/T models: N					
	tch OFF. block (J/B) conne between heated		ch harness co	nnector a	nd fuse block (J	/B) harness conn
Check continuity			ch harness co		nd fuse block (J, block (J/B)	
Check continuity	block (J/B) conne between heated Heated seat switch					/B) harness conn Continuity
Check continuity	block (J/B) conner between heated Heated seat switch ector A/T models: M141 M/T models: M175	seat switc		Fuse	block (J/B)	
Check continuity	block (J/B) conner between heated Heated seat switch ector A/T models: M141	seat switc		Fuse	block (J/B)	Continuity
Check continuity Conne	block (J/B) conner between heated Heated seat switch ector A/T models: M141 M/T models: M175 A/T models: M142 M/T models: M176	seat switc	nal C	Fuse onnector	block (J/B) Terminal 2A	Continuity
Check continuity Conne Driver side Passenger side	block (J/B) conner between heated Heated seat switch ector A/T models: M141 M/T models: M175 A/T models: M142 M/T models: M176	seat switc Termir 5 seat switc	nal C	Fuse onnector	block (J/B) Terminal 2A	Existed
Check continuity Conne Driver side Passenger side Check continuity	block (J/B) conner between heated Heated seat switch ector A/T models: M141 M/T models: M175 A/T models: M142 M/T models: M176 v between heated	seat switc Termir 5 seat switc	nal C	Fuse onnector	block (J/B) Terminal 2A	Continuity
Check continuity Conne Driver side Passenger side Check continuity	block (J/B) conner between heated Heated seat switch ector A/T models: M141 M/T models: M175 A/T models: M176 M/T models: M176 between heated Heated seat st onnector A/T models: M	seat switc Termir 5 seat switc witch ////////////////////////////////////	nal C ch harness co Terminal	Fuse onnector	block (J/B) Terminal 2A	Existed
Check continuity Conne Driver side Passenger side Check continuity C	block (J/B) conner between heated Heated seat switch ector A/T models: M141 M/T models: M175 A/T models: M176 v between heated Heated seat s onnector A/T models: M	seat switc Termir 5 seat switc witch 1141 1175 1142	nal C	Fuse onnector	block (J/B) Terminal 2A nd ground.	Continuity Existed Continuity
Check continuity Conne Driver side Passenger side Check continuity Continuity Check continuity Check continuity Check continuity	block (J/B) conner between heated Heated seat switch ector A/T models: M141 M/T models: M175 A/T models: M176 / between heated Heated seat s onnector A/T models: M M/T models: M M/T models: M	seat switc Termir 5 seat switc witch 1141 1175 1142	nal C ch harness co Terminal	Fuse onnector	block (J/B) Terminal 2A nd ground.	Continuity Existed Continuity
Check continuity Conne Driver side Passenger side Check continuity C Driver side Passenger side Passenger side the inspection resu (ES >> GO TO 4	block (J/B) conner between heated Heated seat switch ector A/T models: M141 M/T models: M175 A/T models: M175 A/T models: M176 between heated Heated seat s onnector A/T models: M M/T models: M A/T models: M M/T models: M M/T models: M	seat switc Termin 5 seat switc witch 1141 1175 1142 1176	nal C ch harness co Terminal	Fuse onnector	block (J/B) Terminal 2A nd ground.	Continuity Existed Continuity
Check continuity Conne Driver side Passenger side Check continuity C Driver side Passenger side Passenger side the inspection resu (ES >> GO TO 4	block (J/B) conner between heated Heated seat switch ector A/T models: M141 M/T models: M175 A/T models: M176 between heated Heated seat s connector A/T models: M Heated seat s connector A/T models: M M/T models: M M/T models: M M/T models: M M/T models: M	seat switc Termir 5 seat switc witch 1141 1175 1142 1176	nal C ch harness co Terminal	Fuse onnector	block (J/B) Terminal 2A nd ground.	Continuity Existed Continuity

Turn ignition switch ON.
 Check voltage between fuse block (J/B) connector (fuse block side) and ground.

< DTC/CIRCUIT DIAGNOSIS >

(+) Fuse block (J/B)		(-)	Voltage (V) (Approx.)	
Connector	Terminal			
M1	2A	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace fuse block (J/B).

5. CHECK INTERMITTENT INCIDENT

Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u>

>> INSPECTION END

HEATED SEAT SWITCH

< D	TC/CIRCUIT DIA		HEATED	SEAT SWI	ГСН				
DR	RIVER SIDE						А		
DR	DRIVER SIDE : Description								
Adj	Adjusts heated seat temperature and deactivates heated seat.								
DRIVER SIDE : Component Function Check									
1.0		N							
tion			set tempera	ture when opera	nting heated seat sw	itch to the optimal posi-	D		
		at switch functi		nosis Procedur	<u>e"</u> .		E		
	NVER SIDE : D	•				INFOID:000000004535428	F		
1. 1.	CHECK HEATED S		L UNIT INPL	JT SIGNAL					
2.	Disconnect heated	d seat control u	nit connecto	r.			G		
3. 4.	Turn ignition switc Check voltage bet		eat control u	nit harness conr	nector and ground.		Н		
	(+) Heated seat c				Condition	Voltage (V)			
	Connector	Terminal	()		Condition	(Approx.)	I		
					OFF	0			
					1 (Min. temperatur	e) 12.24	SE		
				Heated seat	2	12.33			
	B466	68	Ground	switch position		12.49			
					4	12.63	K		
					6 (Max. temperatu				
ls tł	ne inspection result	normal?			o (max. temperatu	12.30	L		
YE NC	ES >> Heated se	at switch circui	t is OK.						
2.0	CHECK HEATED S	EAT SWITCH	CIRCUIT				M		
1. 2. 3.	Turn ignition switc Disconnect heated	h OFF. d seat switch co	onnector.	h harness conn	ector and heated se	eat control unit harness	N		
_	Heated	seat switch		Heated seat	control unit	Continuity	0		
_	Connector	Terminal		Connector	Terminal				
_	A/T models: M141 M/T models: M175	2		B466	68	Existed	Ρ		

4. Check continuity between heated seat switch harness connector and ground.

HEATED SEAT SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Heated seat	switch		Continuity Not existed	
Connector	Terminal	minal Ground		
A/T models: M141 M/T models: M175	2			
Is the inspection result normal?	-			
YES >> GO TO 3.				

NO >> Repair or replace harness.

3.CHECK HEATED SEAT SWITCH

Check heated seat switch.

Refer to <u>SE-18</u>, "DRIVER SIDE : Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace heated seat switch. Refer to <u>SE-133</u>, "Removal and Installation".

4.CHECK INTERMITTENT INCIDENT

Check intermittent incident. Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

DRIVER SIDE : Component Inspection

INFOID:000000004535429

1.CHECK HEATED SEAT SWITCH

1. Turn ignition switch OFF.

2. Disconnect heated seat switch connector.

3. Check resistance between heated seat switch terminals.

Heated se	at switch				Resistance
Connector	Terr	ninal	Condi	tion	(KΩ) (Approx.)
		4		ON	0
		1		OFF	∞
			-	1 (Min. temperature)	2.400
A/T models: M141	5		Heated seat switch position	2	1.800
M/T models: M175	5	2		3	1.200
				4	0.910
				5	0.620
				6 (Max. temperature)	0.348

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace heated seat switch. Refer to <u>SE-133, "Removal and Installation"</u>. PASSENGER SIDE

PASSENGER SIDE : Description

Adjusts heated seat temperature and deactivates heated seat.

PASSENGER SIDE : Component Function Check

1.CHECK FUNCTION

Check that heated seat warms to preset temperature when operating heated seat switch to the optimal position.

INFOID:000000004535430

HEATED SEAT SWITCH

< [DTC/CIRCUIT DI	IAGNOSI	S >						
	he inspection res			OK				Δ	А
			ch function is PASSENGE		Diagnosis Proced	lure	<u>e"</u> .	P	A
PA	SSENGER S	SIDE : D	iagnosis l	Procedu	re			INFOID:000000004535432	D
	CHECK HEATED		-					E	В
1.	Turn ignition sw				SIGNAL				
2.	Disconnect hea	ted seat o	control unit co	onnector.				C	С
3. 4.	Turn ignition sw Check voltage b		neated seat o	ontrol unit	harness connec	tor	and ground.		
-	()	<u>۱</u>					-		D
-	(+) Heated seat			()	C	Conc	dition	Voltage (V)	
-	Connector	Termir	al	()		, one		(Approx.)	E
-							OFF	0	
							1 (Min. temperature)	12.24	F
							2	12.33	
	B440	15	C	Ground	Heated seat switch position	ו	3	12.49	
							4	12.63	G
							5	12.76	
			10				6 (Max. temperature)	12.90	Н
	he inspection res								
	ES >> Heated O >> GO TO		ch circuit is C	JK.				1	1
2.	CHECK HEATED	D SEAT S	WITCH CIRC	CUIT					
1.	Turn ignition sw								
2.	Disconnect hea							SE	F
3.	connector.	ly betwee	n neated se	at switch r	narness connect	or	and neated seat of	control unit harness	
-	11							k	K
-		ed seat swit	Terminal	C	Heated seat co	ntro	Terminal	Continuity	
-	Connector A/T models: M142	2		C				L	L
_	M/T models: M17		2		B440		15	Existed	
4.	Check continuit	y betweei	n heated sea	t switch ha	arness connector	r ar	nd ground.	 N	M
-		Heated se	at switch						
-	Connector	-	Tern	ninal	Gro	und		Continuity	N
-	A/T models: M M/T models: N		:	2				Not existed	N
<u>ls t</u>	he inspection res	sult norma	12						0
	ES >> GO TO							C)
-	O >> Repair (
	CHECK HEATED		WITCH					P	Ρ
	eck heated seat s fer to <u>SE-20, "PA</u>		R SIDE : Co	mponent Ir	nspection".				
	he inspection res								
	ES >> GO TO		and available 1		400 IID		al la stalla Carall		
	O >> Replace CHECK INTERM			keter to <u>SE</u>	<u>-133, "Removal</u>	an	ia installation".		
-T .									

< DTC/CIRCUIT DIAGNOSIS >

Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u>.

>> INSPECTION END

PASSENGER SIDE : Component Inspection

INFOID:000000004535433

1.CHECK HEATED SEAT SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect heated seat switch connector.
- 3. Check resistance between heated seat switch terminals.

Heated seat switch					Resistance	
Connector	Terr	minal	Conditi	on	(KΩ) (Approx.)	
				ON	0	
		1	_	OFF	∞	
				1 (Min. temperature)	2.400	
A/T models: M142	F		Lipsted cost switch position	2	1.800	
M/T models: M176	5		Heated seat switch position	3	1.200	
		2		4	0.910	
				5	0.620	
				6 (Max. temperature)	0.348	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace heated seat switch. Refer to <u>SE-133, "Removal and Installation"</u>.

HEATED SEAT RELAY

< DTC/CIRCUIT DIAGNO				
HEATED SEAT RE	LAY			
Description				INFOID:00000004535434
Power is supplied to the he	eated seat using i	gnition power supp	ly control.	
Component Functior	Check			INFOID:00000004535435
1. CHECK FUNCTION				
	arms to preset ter	mperature when op	erating heated sea	t switch to the optimal posi-
tion. Is the inspection result nor	mal?			
YES >> Heated seat re		۲.		
NO >> Refer to <u>SE-2</u>				
Diagnosis Procedure)			INFOID:00000004535436
1.CHECK HEATED SEAT	RELAY POWER	SUPPLY		
 Turn ignition switch Of Disconnect heated set Turn ignition switch Of Check voltage between 	at relay. N.	ay terminal connect	or and ground.	
	(.)	-	-	
Heate	(+) ed seat relay		()	Voltage (V)
Connector	Termin	al		(Approx.)
M70	2		Ground	Battery voltage
Is the inspection result nor YES >> GO TO 3. NO >> GO TO 2.	mal?			
2.CHECK HEATED SEAT	RELAY POWER		-	
 Turn ignition switch Ol Disconnect fuse block Check continuity betw 	FF. (J/B) connector. een heated seat r	elay terminal conne	ector and fuse block	(J/B) harness connector.
Heated seat	-		block (J/B)	Continuity
Connector M70	Terminal 2	Connector M1	Terminal 2A	Existed
4. Check continuity betw				Existed
	ed seat relay			Continuity
Connector M70	Termin 2	al	Ground	Not evisted
Is the inspection result nor				Not existed
YES >> GO TO 5. NO >> Repair or repla 3.CHECK HEATED SEAT 1. Turn ignition switch O	ace harness. 「RELAY GROUN	D CIRCUIT		

1. Turn ignition switch OFF.

2. Check continuity between heated seat relay terminal connector and ground.

HEATED SEAT RELAY

< DTC/CIRCUIT DIAGNOSIS >

	Heated seat re	lay			Continuity	
Connect	or	Terminal	Grou	nd	Continuity	
M70		1			Existed	
<u>s the inspection re</u> YES >> GO TC NO >> Repair 1. CHECK HEATE) 4. or replace har					
	omponent Insp sult normal? d seat relay is 0 e heated seat MITTENT INCI incident.	DK. relay. DENT				
Component Ins 1.CHECK HEATE . Turn ignition so 2. Disconnect he	D SEAT RELA witch OFF. ated seat relay		19		INFOID:00000000453543	
heated seat relay Terminal	_	Condition	Continuity	3		
3 5	12 V direct cur nals 1 and 2. No current sup	rrent supply between termi-	Existed Not existed		5	
s the inspection re		۲·٦	Het existed			
YES >> INSPE	CTION END	rolov		2 0	2 🗙 1	

				HEAT S	ENSOR			
	TC/CIRCU		IOSIS >					-
HE	AT SEN	ISOR						^
DR	IVER SI	DE						А
DR	IVER SI	DE : De	scription				INF01D:00000004535438	B
Dete	ects seat cu	ushion hea	ater temperature	and outputs to	o heated se	eat control unit.		
DR	IVER SI	DE : Co	mponent Fur	ction Cheo	ck		INFOID:00000004535439	
	CHECK FU							С
		ated seat	warms to preset	temperature v	when opera	ating heated sea	at switch to the optimal posi-	D
tion.			10					
<u>is th</u> YE	ie inspectio		function is OK.					_
NC			23, "DRIVER SI	<u> DE : Diagnosi</u>	s Procedur	<u>e"</u>		E
DR	IVER SI	DE : Dia	ignosis Proce	edure			INFOID:00000004535440)
			-					F
1.0	CHECK HE	AT SENS	OR INPUT SIGN	AL				-
	Turn ignitic		ON. en heated seat (control unit be	arness conr	ector and group	nd	G
۷.	Check volt	age betwe	sen nealed seal			lector and grou	nu.	0
_	(-	+)					Voltage (V)	
	Heated sea	t control unit	(-)		Condit	ion	(Approx.)	Н
	Connector	Termina				Γ		
						OFF	0	
						1 (Min. temperatu		
	B466	71	Ground	Heated seat sv	witch position	3	10.93 - 11.07	SE
	D400	71	Clound	Tieated Seat Sv	Mon position	4	11.13 – 11.26	0L
						5	11.22 – 11.34	
						6 (Max. temperat		Κ
<u>Is th</u> YE NC	ie inspectio S >> he D >> GC	on result n at sensor D TO 2.	<u>ormal?</u> is OK.	shown as per	the above I	ist depending o	n heater unit temperature.	L
2.0	CHECK HE	AT SENS	OR CIRCUIT					
2. 3.		t heated s	eat control unit c				ector. seat cushion heater harness	N
	F	leated seat	control unit		Seat cush	ion heater	Continuity	0
_	Connec	ctor	Terminal	Conr	nector	Terminal	Continuity	
	B466	3	71	B4	467	71	Existed	Ρ
4.	Check con	tinuity bet	ween heated sea	at control unit	harness co	nnector and gro	bund.	
		Heated	l seat control unit					
	Con	nector	Ter	minal	(Ground	Continuity	

B466 Is the inspection result normal? 71

Not existed

< DTC/CIRCUIT DIAGNOSIS >

- YES >> GO TO 3.
- NO >> Repair or replace harness.

3.CHECK HEAT SENSOR POWER SUPPLY

- 1. Turn ignition switch ON.
- 2. Heated seat switch ON.

3. Check voltage between seat cushion heater harness connector and ground.

(+) Seat cushion heater		()	Voltage (V) (Approx.)	
Connector	Terminal			
B467	B467 69		Battery voltage	

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4.CHECK HEAT SENSOR POWER SUPPLY CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect heated seat switch connector.
- 3. Check continuity between heated seat control unit harness connector and seat cushion heater harness connector.

Heated seat control unit		Seat cush	Continuity	
Connector	Terminal Connector Ter		Terminal	Continuity
B466	69	B467	69	Existed

4. Check continuity between heated seat control unit harness connector and ground.

Heated sea	t control unit		Continuity	
Connector	Terminal	Ground	Continuity	
B466	69		Not existed	

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

5.CHECK HEAT SENSOR

Check heat sensor. Refer to <u>SE-24, "DRIVER SIDE : Component Inspection"</u>.

Is the inspection result normal?

- YES >> GO TO 6.
- NO >> Replace seat cushion heater. Refer to <u>SE-112, "Exploded View"</u>.

6.CHECK INTERMITTENT INCIDENT

Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u>

>> INSPECTION END

DRIVER SIDE : Component Inspection

1.CHECK HEAT SENSOR

1. Turn ignition switch OFF.

2. Disconnect seat cushion heater connector.

3. Check resistance between seat cushion heater terminals.

< DTC/CIRCUIT DIAGNOSIS >

S	eat cushion heat	er		Resistance
Connector	Terr	ninal	Condition	(KΩ) (Approx.)
B467	69	71	When heat sensor temperature is 25°C (77°F)	9.9 – 10.1
NOTE: Resistance v	alue changes	according to	temperature.	
ls the inspection		_		
NO >> Repl			efer to <u>SE-112, "Exploded View"</u> .	
PASSENGE	RSIDE			
PASSENGER	SIDE : De	escription		INFOID:000000004535442
Detects seat cusl	nion heater te	mperature and	d outputs to heated seat control unit.	
PASSENGER	SIDE : Co	omponent F	Function Check	INFOID:000000004535443
1.CHECK FUNC	CTION			
	d seat warms	s to preset terr	nperature when operating heated seat swi	tch to the optimal posi-
tion. Is the inspection	result normal'	2		
YES >> Heat	sensor functi	on is OK.		
			SIDE : Diagnosis Procedure"	
PASSENGER	SIDE : Di	agnosis Pr	ocedure	INFOID:000000004535444
1. СНЕСК НЕАТ	SENSOR IN	PUT SIGNAL		
 Turn ignition Check voltag 		eated seat con	trol unit harness connector and ground.	
(+)				

(+) Heated seat control unit		(–) Condition		on	Voltage (V) (Approx.)
Connector	Terminal				(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
				OFF	0
				1 (Min. temperature)	10.87 – 11.02
				2	10.93 – 11.07
B440	18	Ground	Heated seat switch position	3	11.04 – 11.17
				4	11.13 – 11.26
				5	11.22 – 11.34
				6 (Max. temperature)	11.31 – 11.43

NOTE:

Voltage is repeated within the value shown as per the above list depending on heater unit temperature. <u>Is the inspection result normal?</u>

YES >> heat sensor function is OK.

NO >> GO TO 2.

2. CHECK HEAT SENSOR CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect heated seat control unit connector and seat cushion heater connector.

3. Check continuity between heated seat control unit harness connector and seat cushion heater harness connector.

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< DTC/CIRCUIT DIAGNOSIS >

Heated sea	t control unit	Seat cush	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
B440	18	B441	18	Existed

4. Check continuity between heated seat control unit harness connector and ground.

Heated sea	t control unit		Continuity
Connector	Terminal	Ground	Continuity
B440	18		Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

$\mathbf{3}.$ CHECK HEAT SENSOR POWER SUPPLY

1. Turn ignition switch ON.

2. Heated seat switch ON.

3. Check voltage between seat cushion heater harness connector and ground.

(+) Seat cushion heater		(-)	Voltage (V) (Approx.)	
Connector	Terminal			
B441	B441 16		Battery voltage	

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4.CHECK HEAT SENSOR POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect heated seat switch connector.

3. Check continuity between heated seat control unit harness connector and seat cushion heater harness connector.

Heated sea	Heated seat control unit		Seat cushion heater		
Connector	Terminal	Connector	Terminal	Continuity	
B440	16	B441	16	Existed	

4. Check continuity between heated seat control unit harness connector and ground.

Heated sea	t control unit		Continuity
Connector	Terminal	Ground	Continuity
B440	16		Not existed

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

5.CHECK HEAT SENSOR

Check heat sensor. Refer to SE-27, "PASSENGER SIDE : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.

NO >> Replace seat cushion heater. Refer to <u>SE-112, "Exploded View"</u>.

6.CHECK INTERMITTENT INCIDENT

Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u>

>> INSI	PECTION EN	D			А
PASSENGE	R SIDE : C	omponent	Inspection	INFOID:00000004535445	5
1.снеск неа	T SENSOR				В
2. Disconnect	switch OFF. seat cushion l ance betwee		ctor. n heater terminals.		С
Connector	eat cushion heat	ter minal	Condition	Resistance (KΩ) (Approx.)	D
B441	16	18	When heat sensor temperature is 25°C (77°F)	9.9 – 10.1	_
<u>Is the inspection</u> YES >> INSI	result normal	<u> ?</u> D	o temperature. Refer to <u>SE-112, "Exploded View"</u> .		F
					G
					Η
					SE

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< DTC/CIRCUIT DIAGNOSIS >

SEAT CUSHION HEATER DRIVER SIDE

DRIVER SIDE : Description

Warms the seat cushion.

DRIVER SIDE : Component Function Check

1.CHECK FUNCTION

Check that heated seat warms to preset temperature when operating heated seat switch to the optimal position.

Is the inspection result normal?

- YES >> Seat cushion heater function is OK.
- NO >> Refer to <u>SE-28, "DRIVER SIDE : Diagnosis Procedure"</u>.
- **DRIVER SIDE : Diagnosis Procedure**

INFOID:000000004535448

INFOID:000000004535446

INFOID:000000004535447

1. CHECK SEAT CUSHION HEATER INPUT SIGNAL

1. Turn ignition switch OFF.

- 2. Disconnect seat cushion heater connector.
- 3. Turn ignition switch ON.
- 4. Check voltage between seat cushion heater harness connector and ground.

	(+) Seat cushion heater		Condition		Voltage (V) (Approx.)	
Connector	Terminal					
P/67	70	Ground	Heated seat	Operated	0 – Battery voltage	
6407	B467 70	Ground	nealeu Seal	Other than above	0	

NOTE:

Voltage is repeated within the value shown as per the above list depending on heater unit temperature. <u>Is the inspection result normal?</u>

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK SEAT CUSHION HEATER CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect heated seat control unit connector.

3. Check continuity between seat cushion heater harness connector and heated seat control unit harness connector.

Seat cush	Seat cushion heater		Heated seat control unit		
Connector	Terminal	Connector	Terminal	Continuity	
B467	70	B466	70	Existed	

4. Check continuity between seat cushion heater harness connector and ground.

Seat cush	nion heater		Continuity
Connector	Terminal	Ground	Continuity
B467	70		Not existed

Is the inspection result normal?

YES >> Replace heated seat control unit. Refer to <u>SE-128, "Removal and Installation"</u>.

NO >> Repair or replace harness.

3.CHECK SEAT CUSHION HEATER

SEAT CUSHION HEATER

< DTC/CIRCUIT		S >			
Check seat cush Refer to <u>SE-29,</u>		E : Componer	nt Inspectio	<u>n"</u> .	
Is the inspection		<u>?</u>			
YES >> GO NO >> Rep		nion heater. Re	efer to <u>SE-</u>	112, "Exploded View".	
4.CHECK SEA	T CUSHION H	EATER GRO	UND CIRC	UIT	
Check continuity	v between seat	t cushion heat	er harness	connector and ground.	
	Seat cushio	n heater			Continuity
Conn	ector	Termin	al	Ground	Continuity
B46		48			Existed
Is the inspection YES >> GO		<u>?</u>			
	air or replace	harness.			
5. CHECK INTE		NCIDENT			
Check intermitte Refer to <u>GI-41,</u> "		cident"			
		_			
	PECTION ENI				
DRIVER SID	E : Compo	nent Inspe	ction		INFOID:000000004535449
1. CHECK SEA	T CUSHION H	IEATER			
	switch OFF.				
	seat cushion h tance betweer			tback heater connector.	
	Seat cushion heat	-	-	Condition	Resistance (Ω)
Connector		ninal	14/1 1 /	· · · · · · · · · · · · · · · · · · ·	(Approx.)
B467	48	70	When heat	sensor temperature is 20°C (68°F)	2.6 - 3.0
	value changes	according to	temperatu	re.	
Is the inspection		_			
	PECTION ENI		ofor to SE-	112, "Exploded View"	
PASSENGE					
PASSENGE		ecription			
FASSLINGLI		escription			INFOID:00000004535450
Warms the seat					
PASSENGE	R SIDE : Co	omponent	Functior	n Check	INFOID:00000004535451
1.CHECK FUN					
Check that heat tion.	ed seat warms	s to preset ten	nperature	when operating heated seat	switch to the optimal posi-
Is the inspection					
	t cushion heat			anosis Procedure"	
PASSENGE				<u>gnosis Procedure"</u> .	INF0ID:000000004535452
1.CHECK FRO	NT SEAT CUS	SHION HEATE	ER INPUT	SIGNAL	
			SE	-20	

SEAT CUSHION HEATER

< DTC/CIRCUIT DIAGNOSIS >

1. Turn ignition switch OFF.

- 2. Disconnect seat cushion heater connector.
- 3. Turn ignition switch ON.
- 4. Check voltage between seat cushion heater harness connector and ground.

	(+) Seat cushion heater		Condition		Voltage (V) (Approx.)	
Connector	Terminal	*				
B441	17	Ground	Heated cost	Operated	0 – Battery voltage	
D441	B441 17	Ground	Ground Heated seat		0	

NOTE:

Voltage is repeated within the value shown as per the above list depending on heater unit temperature. Is the inspection result normal?

YES >> GO TO 3. NO >> GO TO 2.

2. CHECK SEAT CUSHION HEATER CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect heated seat control unit connector.

 Check continuity between seat cushion heater harness connector and heated seat control unit harness connector.

Seat cush	Seat cushion heater		Heated seat control unit		
Connector	Terminal	Connector	Terminal	Continuity	
B441	17	B440	17	Existed	

4. Check continuity between seat cushion heater harness connector and ground.

Seat cush	iion heater		Continuity
Connector	Terminal	Ground	Continuity
B441	B441 17		Not existed

Is the inspection result normal?

YES >> Replace heated seat control unit. Refer to <u>SE-128, "Removal and Installation"</u>.

NO >> Repair or replace harness.

3.CHECK SEAT CUSHION HEATER

Check seat cushion heater.

Refer to <u>SE-31, "PASSENGER SIDE : Component Inspection"</u>.

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace seat cushion heater. Refer to <u>SE-112, "Exploded View"</u>.

4.CHECK SEAT CUSHION HEATER GROUND CIRCUIT

1. Turn ignition switch OFF.

2. Check continuity between seat cushion heater harness connector and ground.

Seat cush	nion heater		Continuity	
Connector	Terminal	Ground	Continuity	
B441	2		Existed	

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness.

5.CHECK INTERMITTENT INCIDENT

Check intermittent incident.

SEAT CUSHION HEATER

< DTC/CIRCUIT DIAGNOSIS >

Refer to GI-41, "Intermittent Incident"

>> INSPECTION END

PASSENGER SIDE : Component Inspection

INFOID:000000004535453

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1.CHECK SEAT CUSHION HEATER

1. Turn ignition switch OFF.

2. Disconnect seat cushion heater connector and seatback heater connector.

3. Check resistance between seat cushion heater terminals.

	Seat cushion heater			Resistance	
Connector	Tern	ninal	Condition	(Ω) (Approx.)	
B441	2	17	When heat sensor temperature is 20°C (68°F)	2.6 - 3.0	E

NOTE:

Resistance value changes according to temperature.

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace seat cushion heater. Refer to <u>SE-112, "Exploded View"</u>.

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SEATBACK HEATER

< DTC/CIRCUIT DIAGNOSIS >

SEATBACK HEATER DRIVER SIDE

DRIVER SIDE : Description

Warms the seat cushion.

DRIVER SIDE : Component Function Check

1.CHECK FUNCTION

Check that heated seat warms to preset temperature when operating heated seat switch to the optimal position.

Is the inspection result normal?

- YES >> Seatback heater function is OK.
- NO >> Refer to SE-32, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

1.CHECK SEATBACK HEATER

1. Turn ignition switch OFF.

- 2. Disconnect seatback heater connector.
- 3. Check resistance between seatback heater terminals.

	Seatback heater			Resistance
Connector	Terr	minal	Condition	(Ω) (Approx.)
B425	1	2	When heat sensor temperature is 20°C (68°F)	4.0 - 4.7

NOTE:

Resistance value changes according to temperature.

Is the inspection result normal?

YES >> Replace seat cushion heater. Refer to <u>SE-112, "Exploded View"</u>.

NO >> Replace seatback heater. Refer to <u>SE-112, "Exploded View"</u>.

PASSENGER SIDE

PASSENGER SIDE : Description

Warms the seat cushion.

PASSENGER SIDE : Component Function Check

1.CHECK FUNCTION

Check that heated seat warms to preset temperature when operating heated seat switch to the optimal position.

Is the inspection result normal?

YES >> Seatback heater function is OK.

NO >> Refer to <u>SE-32, "PASSENGER SIDE : Diagnosis Procedure"</u>.

PASSENGER SIDE : Diagnosis Procedure

1.CHECK SEATBACK HEATER

1. Turn ignition switch OFF.

- 2. Disconnect seatback heater connector.
- 3. Check resistance between seatback heater terminals.

INFOID:000000004535459

INFOID:000000004535454

INFOID:000000004535455

INFOID:000000004535456

INFOID:000000004535457

SEATBACK HEATER

< DTC/CIRCUIT DIAGNOSIS >

Definition Terminal (Approx.) B445 1 2 When heat sensor temperature is 20°C (68°F) 4.0 – 4.7 DTE: sistance value changes according to temperature.	Definition Terminal (Approx.) B445 1 2 When heat sensor temperature is 20°C (68°F) 4.0 – 4.7 DTE: sistance value changes according to temperature.	onnector Terminal (Approx.) B445 1 2 When heat sensor temperature is 20°C (68°F) 4.0 – 4.7 OTE: esistance value changes according to temperature. nspection result normal? > >> Replace seat cushion heater. Refer to SE-112, "Exploded View". (Approx.)	Seatback heater			Condition	Resistance	
DTE: sistance value changes according to temperature. <u>hspection result normal?</u> >> Replace seat cushion heater. Refer to <u>SE-112, "Exploded View"</u> .	DTE: sistance value changes according to temperature. <u>nspection result normal?</u> >> Replace seat cushion heater. Refer to <u>SE-112, "Exploded View"</u> .	DTE: esistance value changes according to temperature. <u>nspection result normal?</u> >> Replace seat cushion heater. Refer to <u>SE-112, "Exploded View"</u> .	Connector	Termin	nal	Condition	(Ω) (Approx.)	
sistance value changes according to temperature. <u>nspection result normal?</u> >> Replace seat cushion heater. Refer to <u>SE-112, "Exploded View"</u> .	sistance value changes according to temperature. <u>nspection result normal?</u> >> Replace seat cushion heater. Refer to <u>SE-112, "Exploded View"</u> .	esistance value changes according to temperature. <u>nspection result normal?</u> >> Replace seat cushion heater. Refer to <u>SE-112, "Exploded View"</u> .	B445	1	2	When heat sensor temperature is 20°C (68°F)	4.0 - 4.7	
			inspection re >> Repla	<u>esult normal?</u> ice seat cushio	on heater. F	Refer to <u>SE-112, "Exploded View"</u> .		

Р

DRIVER SIDE **DRIVER SIDE : Description** INFOID:000000004535460 Illuminates the indicator that indicates the operating status of heated seat. **DRIVER SIDE : Component Function Check** INFOID:000000004535461 1. CHECK FUNCTION Check that the related indicator lamp illuminates when heated seat switch is set to ON. Is the inspection result normal? YES >> Heated seat switch indicator function is OK. NO >> Refer to SE-34, "DRIVER SIDE : Diagnosis Procedure". DRIVER SIDE : Diagnosis Procedure INFOID:000000004535462 1. CHECK HEATED SEAT SWITCH INDICATOR GROUND CIRCUIT Turn ignition switch OFF 1. 2. Disconnect heated seat switch connector. 3. Check continuity between heated seat switch harness connector and ground. Heated seat switch Continuity Connector Terminal Ground A/T models: M141 6 Existed M/T models: M175 Is the inspection result normal? >> Replace heated seat switch. Refer to SE-133, "Removal and Installation". YES NO >> Repair or replace harness. PASSENGER SIDE PASSENGER SIDE : Description INFOID:000000004535463 Illuminates the indicator that indicates the operating status of heated seat. **PASSENGER SIDE : Component Function Check** INFOID:00000004535464 **1.**CHECK FUNCTION Check that the related indicator lamp illuminates when heated seat switch is set to ON. Is the inspection result normal? YES >> Heated seat switch indicator function is OK. >> Refer to SE-34, "PASSENGER SIDE : Diagnosis Procedure". NO PASSENGER SIDE : Diagnosis Procedure INFOID:000000004535465 1. CHECK HEATED SEAT SWITCH INDICATOR GROUND CIRCUIT 1. Turn ignition switch OFF 2. Disconnect heated seat switch connector. 3. Check continuity between heated seat switch harness connector and ground. Heated seat switch Continuity Connector Terminal Ground A/T models: M142 6 Existed M/T models: M176

HEATED SEAT SWITCH INDICATOR

Is the inspection result normal?

< DTC/CIRCUIT DIAGNOSIS >

HEATED SEAT SWITCH INDICATOR

	HEATED SEAT SWITCH INDICATOR	
< DTC	/CIRCUIT DIAGNOSIS >	
YES NO	>> Replace heated seat switch. Refer to <u>SE-133. "Removal and Installation"</u> . >> Repair or replace harness.	A
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< DTC/CIRCUIT DIAGNOSIS >

TILT&TELESCOPIC SWITCH

Description

Tilt switch and telescopic switch as a unit, transmit switch operation signal to automatic drive positioner control unit.

Component Function Check

1. CHECK TILT AND TELESCOPIC SWITCH FUNCTION

Check tilt and telescopic operation with tilt and telescopic switch.

Is the inspection results normal?

YES >> Tilt and telescopic switch is OK.

>> Refer to SE-36, "Diagnosis Procedure". NO

Diagnosis Procedure

1. CHECK TILT AND TELESCOPIC SWITCH FUNCTION

Check voltage between tilt and telescopic switch and ground.

Tilt and tele	scopic switch	()	Switch condition	Voltage (V)
Connector	Terminal	(-)	Switch condition	Approx.
	2		Forward position	0
	2		Other than above	5
	3		Backward position	0
M31	4	Ground	Other than above	5
10131			Upward position	0
	4	Other than above		5
	-	-	Downward	0
	5		Other than above	5

Is the inspection result normal?

YES >> Tilt and telescopic switch is OK.

NO >> GO TO 2.

2.CHECK TILT AND TELESCOPIC SWITCH SIGNAL CIRCUIT

1. Turn ignition switch OFF.

Disconnect tilt and telescopic switch and automatic drive positioner control unit connectors. 2.

Check continuity between tilt and telescopic switch and automatic drive positioner control unit. 3.

Tilt and telescopic switch connec- tor	Terminal	Automatic drive positioner control unit	Terminal	Continuity
	2		11	
M31	3	M51	27	Existed
IVIS I	4		1	EXISTED
	5		17	

Check continuity between tilt and telescopic switch and ground. 4.

INFOID:000000004240975

INFOID:000000004240973

TILT&TELESCOPIC SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Tilt and telescopic switch connector	Terminal		Continuity
	2		· · ·
	3	Ground	
M31	4		Not existed
	5		
the inspection result normal?			
YES >> GO TO 3.			
NO >> Repair or replace circuit			
CHECK TILT AND TELESCOPIC	SWITCH GROUND	CIRCUIT	
check continuity between tilt and tel	escopic switch and g	ground.	
Tilt and telescopic switch connector	Terminal		Continuity
M31	1	Ground	Existed
the inspection result normal?	1	ц. — — — — — — — — — — — — — — — — — — —	
YES >> GO TO 4.			
NO >> Repair or replace circuit			
CHECK TILT AND TELESCOPIC	SWITCH		
heck tilt and telescopic switch.			
efer to <u>SE-37, "Component Inspec</u>	<u>tion"</u> .		
s the inspection result normal?			
YES >> GO TO 5. NO >> Replace tilt and telescor	oic switch		
CHECK AUTOMATIC DRIVE PO			
 Connect automatic drive position Check voltage between automatic 			
-			
Tilk and talagaphic quit	tab	-	
Tilt and telescopic swit		()	Voltage (V)
Tilt and telescopic swit	Terminal	(-)	
· · · · · · · · · · · · · · · · · · ·	Terminal 1	()	Voltage (V)
· · · · · · · · · · · · · · · · · · ·	Terminal 1 11	(–) Ground	Voltage (V)
Connector	Terminal 1 11 17		Voltage (V) Approx.
Connector M51	Terminal 1 11		Voltage (V) Approx.
Connector M51	Terminal 1 11 17		Voltage (V) Approx.
Connector M51 the inspection result normal? YES >> GO TO 6.	Terminal 1 11 17 27	Ground	Voltage (V) Approx. 5
Connector M51 <u>s the inspection result normal?</u> YES >> GO TO 6. NO >> Replace automatic drive	Terminal 1 1 11 17 27 e positioner control u	Ground	Voltage (V) Approx. 5
Connector M51 Sthe inspection result normal? YES >> GO TO 6. NO >> Replace automatic drive CHECK INTERMITTENT INCIDE	Terminal 1 1 11 17 27 e positioner control u	Ground	Voltage (V) Approx. 5
Connector M51 Sthe inspection result normal? YES >> GO TO 6. NO >> Replace automatic drive CHECK INTERMITTENT INCIDE Check intermittent incident.	Terminal 1 1 17 27 Positioner control u	Ground	Voltage (V) Approx. 5
Connector M51 Sthe inspection result normal? YES >> GO TO 6. NO >> Replace automatic drive CHECK INTERMITTENT INCIDE	Terminal 1 1 17 27 27 e positioner control u	Ground	Voltage (V) Approx. 5
Connector M51 Sthe inspection result normal? YES >> GO TO 6. NO >> Replace automatic drive CHECK INTERMITTENT INCIDE Check intermittent incident.	Terminal 1 1 17 27 27 e positioner control u	Ground	Voltage (V) Approx. 5
Connector M51 Sthe inspection result normal? YES YES >> GO TO 6. NO >> Replace automatic drive CHECK INTERMITTENT INCIDE Check intermittent incident. Stefer to GI-41. "Intermittent Incident >> INSPECTION END	Terminal 1 1 17 27 27 e positioner control u	Ground	Voltage (V) Approx. 5 Removal and Installation".
Connector M51 Sthe inspection result normal? YES YES >> GO TO 6. NO >> Replace automatic drive CHECK INTERMITTENT INCIDE Check intermittent incident. Sefer to GI-41, "Intermittent Incident	Terminal 1 1 17 27 27 e positioner control u	Ground	Voltage (V) Approx. 5
Connector M51 Sthe inspection result normal? YES YES >> GO TO 6. NO >> Replace automatic drive CHECK INTERMITTENT INCIDE Check intermittent incident. Stefer to GI-41. "Intermittent Incident >> INSPECTION END	Terminal 1 1 17 27 27 e positioner control u	Ground	Voltage (V) Approx. 5 Removal and Installation".

- 2. Remove tilt and telescopic switch.
- 3. Check continuity between tilt and telescopic switch terminals.

TILT&TELESCOPIC SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Terminal		Switch condition	Continuity
0		Forward	Existed
2		Other than above	Not existed
		Backward	Existed
3		Other than above	Not existed
4	1	Upward	Existed
		Other than above	Not existed
_		Downward	Existed
5		Other than above	Not existed

Is the inspection result normal?

YES >> Tilt and telescopic switch is OK.

NO >> Replace tilt and telescopic switch. Refer to <u>SE-132</u>, "Removal and Installation".

TILT&TELESCOPIC MOTOR

< DTC/CIRCUIT DIAGNO		ELESCOPIC MC	TOR				
TILT&TELESCOPI							
Description				INF01D:000000004240977			
Tilt and telescopic motor op	perates with the po	ower received from aut	omatic drive posi	itioner control unit.			
Component Function	Check			INFOID:000000004240978			
1.CHECK TILT AND TELE	ESCOPIC MOTOR	R FUNCTION					
Check tilt and telescopic op Is the inspection results no YES >> Tilt and telesco NO >> Refer to <u>SE-39</u>	<u>rmal?</u> ppic motor are OK						
Diagnosis Procedure				INFOID:00000004240979			
1.CHECK MALFUNCTION	NING PART						
Check malfunctioning part. Is it tilt operation or telesco Tilt >> GO TO 2. Telescopic>>GO TO 3. 2.CHECK TILT MOTOR P 1. Turn ignition switch OF 2. Disconnect tilt motor and 3. Check continuity between	OWER SUPPLY	e positioner control unit					
Tilt and telescopic motor connector	Terminal	Power seat switch con- nector	Terminal	Continuity			
M49	3	M52	42 35	Existed			
Is the inspection result normYES>> GO TO 4.NO>> Repair or replation 3. CHECK TELESCOPIC I1.Turn ignition switch OF2.Disconnect telescopic3.Check continuity between	ice circuit. MOTOR POWER F. motor and automa	tic drive positioner cor	ntrol unit.				
Tilt and telescopic motor connector	Terminal	Power seat switch con- nector	Terminal	Continuity			
M49 1 M52 44 Existed							
Is the inspection result norm YES >> GO TO 4. NO >> Repair or replation 4.CHECK TILT AND TELE Check tilt and telescopic m Refer to SE-40, "Compone Is the inspection result norm YES >> GO TO 5. NO >> Replace tilt and 5.CHECK ADP CONTROL	<u>mal?</u> ice circuit. ESCOPIC MOTOF otor. <u>nt Inspection"</u> . <u>mal?</u> d telescopic motor						

TILT&TELESCOPIC MOTOR

< DTC/CIRCUIT DIAGNOSIS >

- 1. Connect automatic drive positioner control unit connector.
- 2. Check voltage between automatic drive positioner control unit and ground.

Tilt and tele	Tilt and telescopic switch		Tilt and telescopic switch	Voltage (V)	
Connector	Terminal	()	condition	Approx.	
	35		Upward	Battery voltage	
			Other than above	0	
	36		Forward	Battery voltage	
M51	50	Ground	Other than above	0	
1013 1	42	Ground	Downward	Battery voltage	
	42		Other than above	0	
	44		Backward	Battery voltage	
	44		Other than above	0	

Is the inspection result normal?

NO >> Replace automatic drive positioner control unit. Refer to <u>SE-127, "Removal and Installation"</u>.

6.CHECK INTERMITTENT INCIDENT

Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u>

>> INSPECTION END

Component Inspection

INFOID:000000004240980

1.CHECK TILT AND TELESCOPIC MOTOR-I

Check visually the tilt and telescopic motor to see if any foreign object is not disturbing the functionment or if the tilt and telescopic motor is not broken.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace tilt and telescopic motor.

2. CHECK TILT AND TELESCOPIC MOTOR-II

- 1. Turn ignition switch OFF.
- 2. Disconnect tilt and telescopic motor connector.
- 3. Supply tilt and telescopic motor terminals with battery voltage and check operation.

ltem	Terr	ninal	Operation	
nem	(+)	(-)	Operation	
Telescopia motor	1	2	Backward	
Telescopic motor	2	1	Forward	
Tilt motor	3	4	Downward	
	4	3	Upward	

Is the inspection result normal?

YES >> Tilt and telescopic motor is OK.

NO >> Replace tilt and telescopic motor.

TILT&TELESCOPIC SENSOR

M48	SENSOR FL ith tilt and tele r is OK. sis Procedure SENSOR CI nsor and auto telescopic s erminal	UNCTION lescopic switch re". IRCUIT comatic drive positioner control unit M51 M52	ositioner control	INFOID:00000004240982 INFOID:00000004240983 unit connector.
Tilt and telescopic sensor detects the oner control unit. Component Function Check .CHECK TILT AND TELESCOPIC Check tilt and telescopic operation with the inspection results normal? YES >> Tilt and telescopic sensor NO >> Refer to SE-41, "Diagnos Diagnosis Procedure .CHECK TILT AND TELESCOPIC .Turn ignition switch OFF. .Disconnect tilt and telescopic sensor connector Tilt and telescopic sensor connector .Turn ignition switch OFF. .Disconnect tilt and telescopic sensor contector .Check continuity between tilt and M48 .M48 .M48 .M48	SENSOR FL ith tilt and tele r is OK. sis Procedure SENSOR CI nsor and auto telescopic s erminal	UNCTION lescopic switch re". IRCUIT comatic drive positioner control unit M51 M52	ositioner control omatic drive pos Terminal 33 23 7	ignals to automatic drive posi- INFOID:00000004240982
oner control unit. Component Function Check CHECK TILT AND TELESCOPIC Check tilt and telescopic operation with the inspection results normal? YES >> Tilt and telescopic sensor NO >> Refer to SE-41, "Diagnos Diagnosis Procedure CHECK TILT AND TELESCOPIC Turn ignition switch OFF. Disconnect tilt and telescopic sensor Check continuity between tilt and Tilt and telescopic sensor connector M48	SENSOR FL ith tilt and tele r is OK. sis Procedure SENSOR CI nsor and auto telescopic s erminal	UNCTION lescopic switch re". IRCUIT comatic drive positioner control unit M51 M52	ositioner control omatic drive pos Terminal 33 23 7	INFOID:00000004240982
.CHECK TILT AND TELESCOPIC Check tilt and telescopic operation wish the inspection results normal? YES >> Tilt and telescopic sensor NO >> Refer to SE-41, "Diagnos Diagnosis Procedure .CHECK TILT AND TELESCOPIC .CHECK TILT AND TELESCOPIC .CHECK TILT AND TELESCOPIC .Turn ignition switch OFF. Disconnect tilt and telescopic sersor connector Tilt and telescopic sensor connector M48 M48 M48 M48	ith tilt and tele r is OK. sis Procedure SENSOR CI nsor and auto telescopic s erminal	Iescopic switch <u>e"</u> . IRCUIT comatic drive po sensor and aut Automatic drive positioner control unit M51 M52	ositioner control omatic drive pos Terminal 33 23 7	unit connector. sitioner control unit.
Check tilt and telescopic operation wish the inspection results normal? YES >> Tilt and telescopic sensor NO >> Refer to SE-41, "Diagnos Diagnosis Procedure .CHECK TILT AND TELESCOPIC . CHECK TILT AND TELESCOPIC . . Turn ignition switch OFF. . . Disconnect tilt and telescopic ser . . Check continuity between tilt and . Tilt and telescopic sensor connector Te . M48 .	ith tilt and tele r is OK. sis Procedure SENSOR CI nsor and auto telescopic s erminal	Iescopic switch <u>e"</u> . IRCUIT comatic drive po sensor and aut Automatic drive positioner control unit M51 M52	ositioner control omatic drive pos Terminal 33 23 7	unit connector. sitioner control unit. Continuity
s the inspection results normal? YES >> Tilt and telescopic sensor NO >> Refer to SE-41, "Diagnos Diagnosis Procedure .CHECK TILT AND TELESCOPIC . Turn ignition switch OFF. Disconnect tilt and telescopic ser Check continuity between tilt and Tilt and telescopic sensor connector M48 M48 M48 M48 M48	r is OK. sis Procedure SENSOR CI nsor and auto telescopic s minal	IRCUIT tomatic drive positioner control unit M51 M52	ositioner control omatic drive pos Terminal 33 23 7	unit connector. sitioner control unit. Continuity
YES >> Tilt and telescopic sensor NO >> Refer to SE-41, "Diagnos Diagnosis Procedure . .CHECK TILT AND TELESCOPIC . . Turn ignition switch OFF. . Disconnect tilt and telescopic ser . Check continuity between tilt and . Tilt and telescopic sensor connector Te M48 . . Check continuity between tilt and M48 . . . M48 . .	SENSOR CI nsor and auto telescopic s rminal	IRCUIT tomatic drive po sensor and aut Automatic drive positioner control unit M51 M52	Terminal 33 23 7	unit connector. sitioner control unit. Continuity
NO >> Refer to SE-41, "Diagnos Diagnosis Procedure .CHECK TILT AND TELESCOPIC . Turn ignition switch OFF. Disconnect tilt and telescopic ser Check continuity between tilt and Tilt and telescopic sensor connector M48 Tilt and telescopic sensor connector M48 M48 M48 Sthe inspection result normal?	SENSOR CI nsor and auto telescopic s rminal	IRCUIT tomatic drive po sensor and aut Automatic drive positioner control unit M51 M52	Terminal 33 23 7	unit connector. sitioner control unit. Continuity
CHECK TILT AND TELESCOPIC Turn ignition switch OFF. Disconnect tilt and telescopic ser Check continuity between tilt and Tilt and telescopic sensor con- nector M48 M48 tor M48 the inspection result normal?	erminal	comatic drive po sensor and aut Automatic drive positioner control unit M51 M52	Terminal 33 23 7	unit connector. sitioner control unit. Continuity
CHECK TILT AND TELESCOPIC Turn ignition switch OFF. Disconnect tilt and telescopic ser Check continuity between tilt and Tilt and telescopic sensor con- nector M48 Check continuity between tilt and Tilt and telescopic sensor connec- tor M48 the inspection result normal?	erminal	comatic drive po sensor and aut Automatic drive positioner control unit M51 M52	Terminal 33 23 7	Continuity
Turn ignition switch OFF. Disconnect tilt and telescopic ser Check continuity between tilt and Tilt and telescopic sensor connector M48 Check continuity between tilt and Tilt and telescopic sensor connector M48 M48 M48 Tilt and telescopic sensor connector tor M48	erminal	comatic drive po sensor and aut Automatic drive positioner control unit M51 M52	Terminal 33 23 7	Continuity
Disconnect tilt and telescopic ser Check continuity between tilt and Tilt and telescopic sensor connector M48 Check continuity between tilt and Tilt and telescopic sensor connector M48 Tilt and telescopic sensor connector tor M48 M48	rminal 1 2 3 4	Automatic drive positioner control unit M51 M52	Terminal 33 23 7	Continuity
nector Term M48	1 2 3 4	M51 M52	33 23 7	
. Check continuity between tilt and Tilt and telescopic sensor connec- tor M48 s the inspection result normal?	2 3 4	M52	23 7	Existed
Check continuity between tilt and Tilt and telescopic sensor connec- tor M48 the inspection result normal?	3 4	M52	7	Existed
Tilt and telescopic sensor connec- tor M48 the inspection result normal?	4			_
Tilt and telescopic sensor connec- tor M48 			41	
Tilt and telescopic sensor connec- tor M48 Sthe inspection result normal?		5	und.	
M48 tor M48 tor M48				
s the inspection result normal?	Terminal			Continuity
s the inspection result normal?	1		Ground	
-	2			Not existed
	4			
NO >> Repair or replace circuit. CHECK TILT AND TELESCOPIC	SENSOR PO		Y	
. Connect automatic drive position			1	
. Check voltage between automati			nit and ground.	
Tilt and telescopic sens	or			
Connector	Terminal	Gro	ound	Voltage
M52	33			Approx. 5V

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Check continuity between automatic drive positioner control unit and ground.

TILT&TELESCOPIC SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Tilt and telescop	pic sensor		Continuity	
Connector	Terminal	Ground	Continuity	
M48	4		Existed	

Is the inspection result normal?

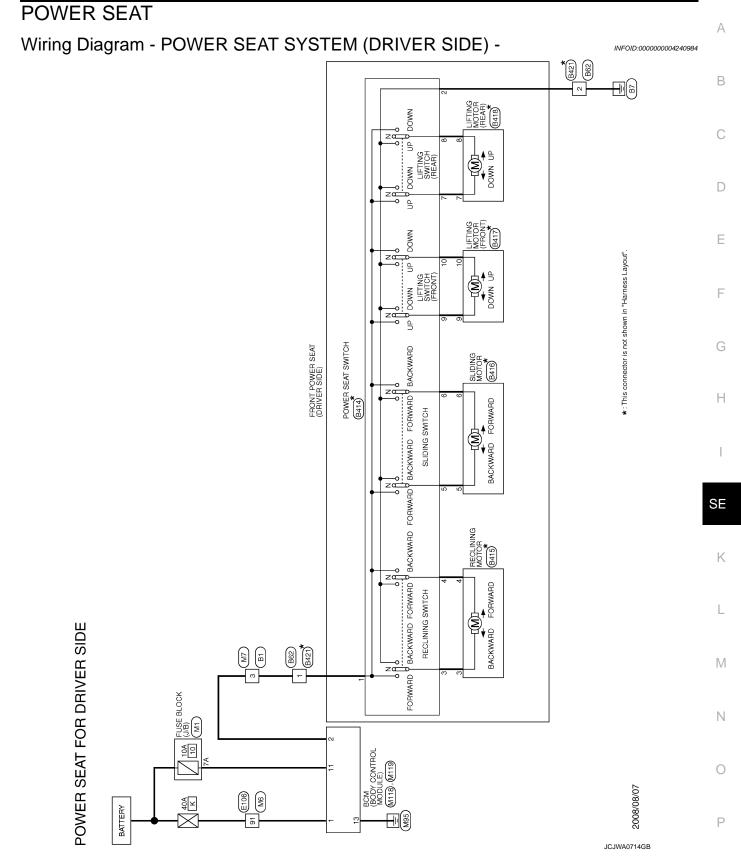
YES >> GO TO 4.

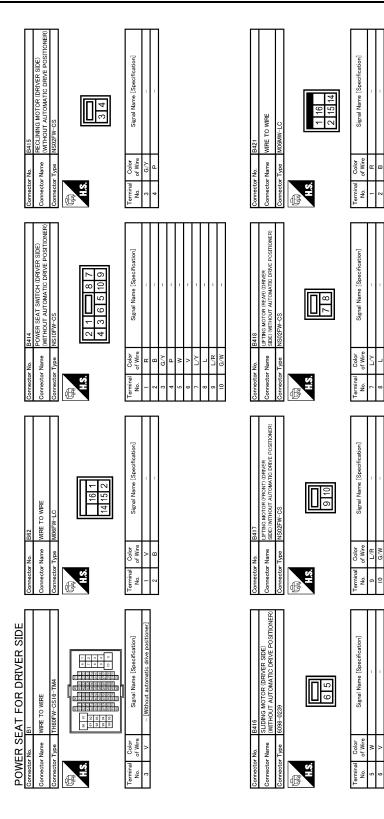
NO >> Replace automatic drive positioner. Refer to <u>SE-127, "Removal and Installation"</u>.

4.CHECK INTERMITTENT INCIDENT

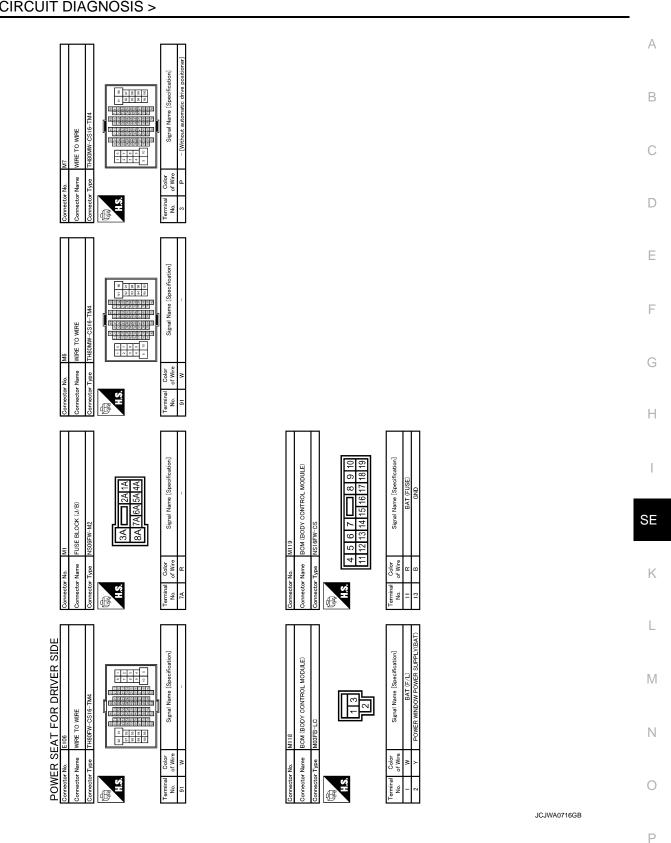
Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u>.

>> INSPECTION END





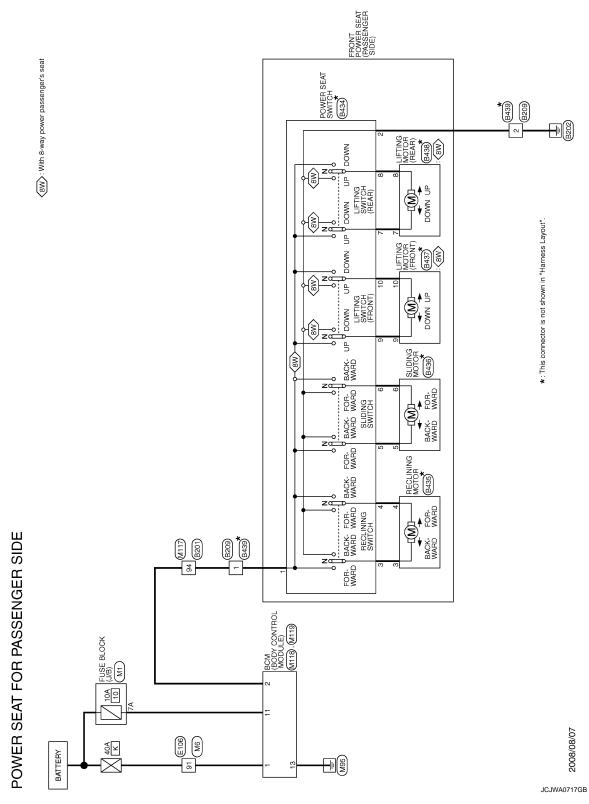
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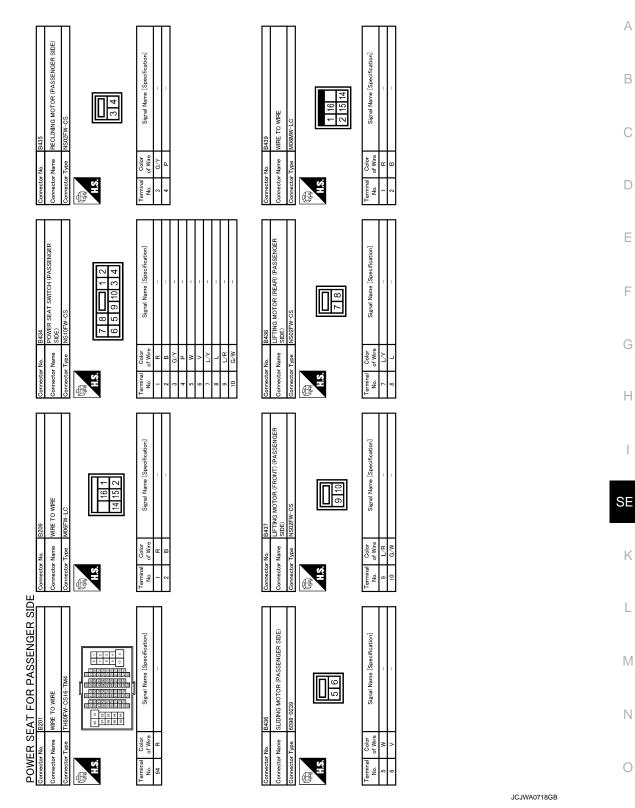




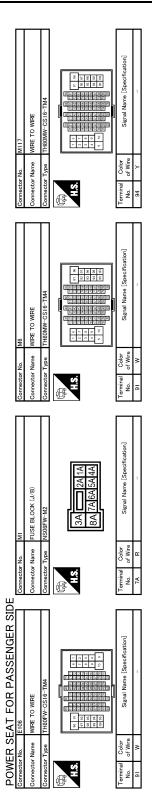


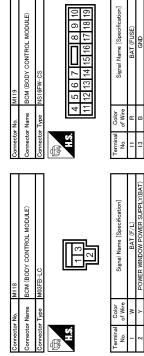
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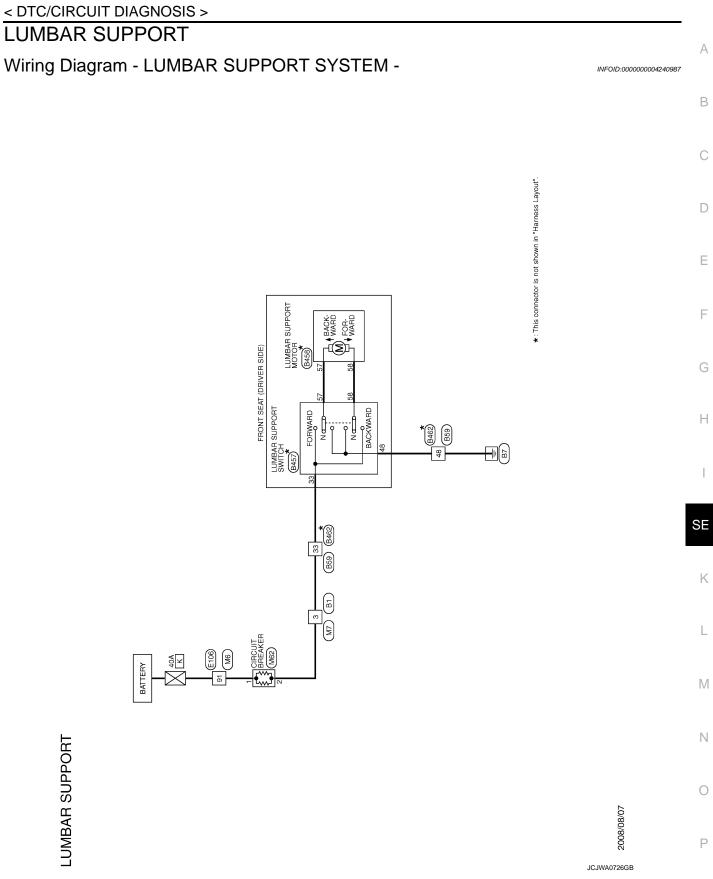


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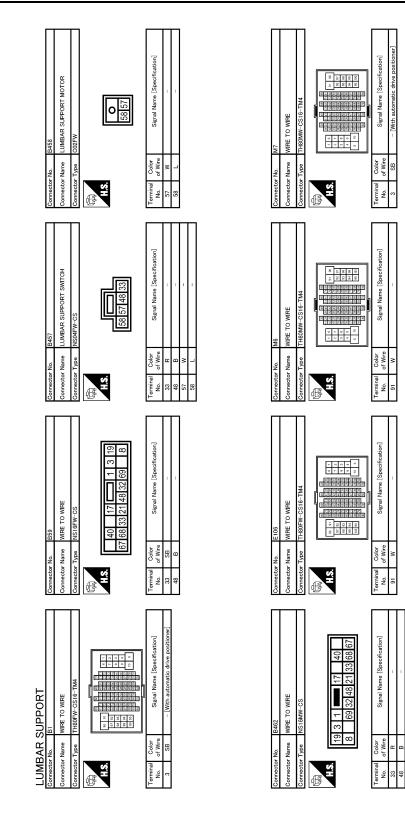
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LUMBAR SUPPORT

< DTC/CIRCUIT DIAGNOSIS >



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LUMBAR SUPPORT

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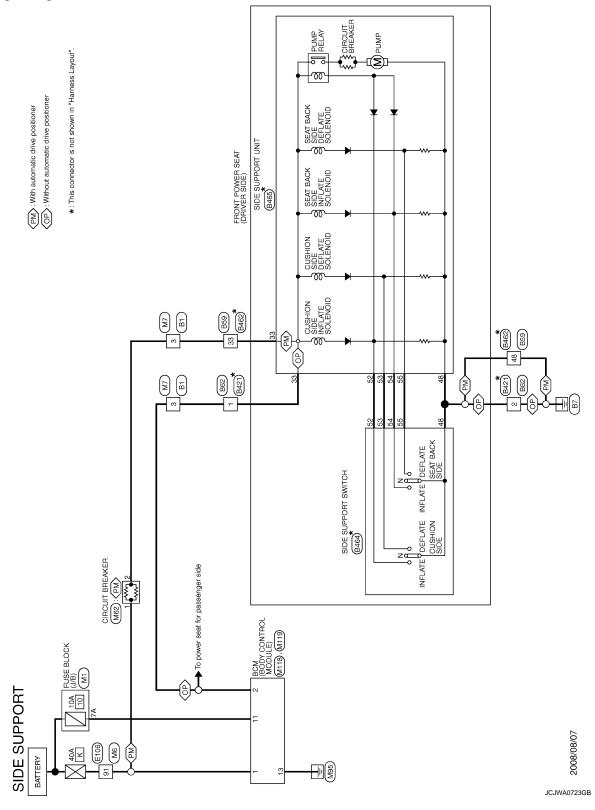
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PORT III BREAKER Signal Name (Specification) Signal Name (Specification)		Μ
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LUMBAR Connector Name Connector Type No. 1 of Wire 2 BB	JCJWA0728GB	0
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< DTC/CIRCUIT DIAGNOSIS >

SIDE SUPPORT

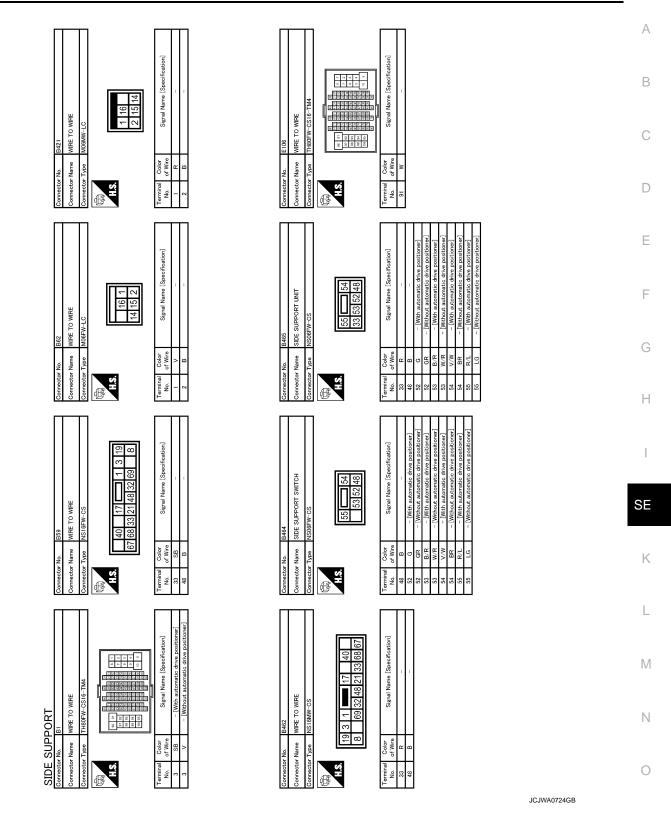
Wiring Diagram - SIDE SUPPORT SYSTEM -

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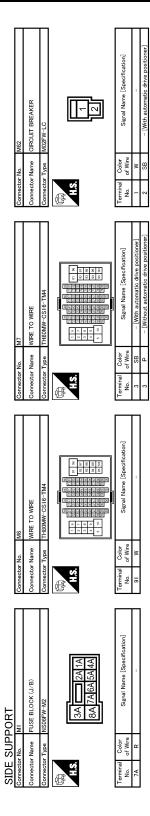
SIDE SUPPORT

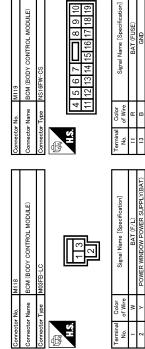
< DTC/CIRCUIT DIAGNOSIS >



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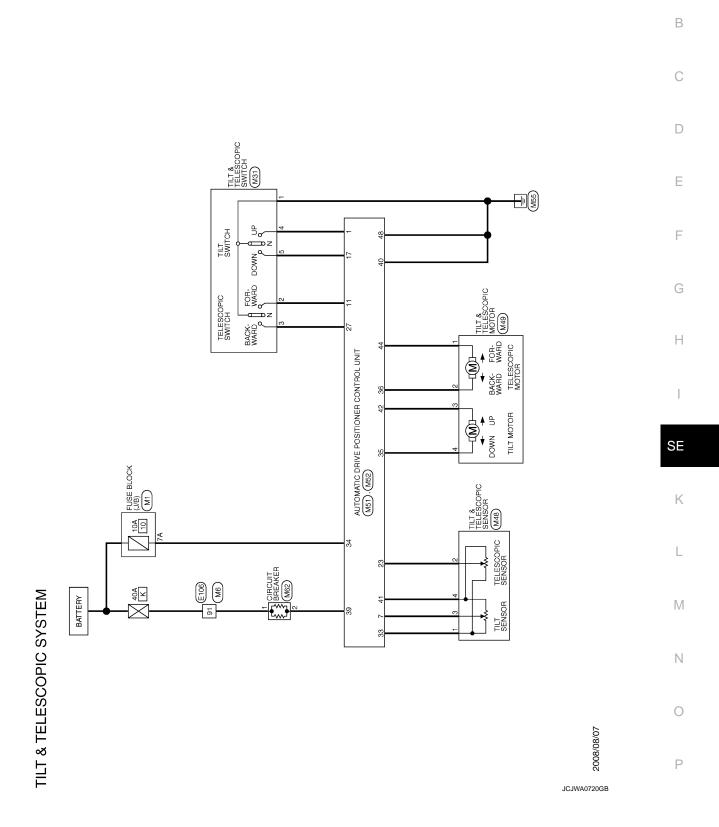
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Wiring Diagram - TILT&TELESCOPIC SYSTEM -

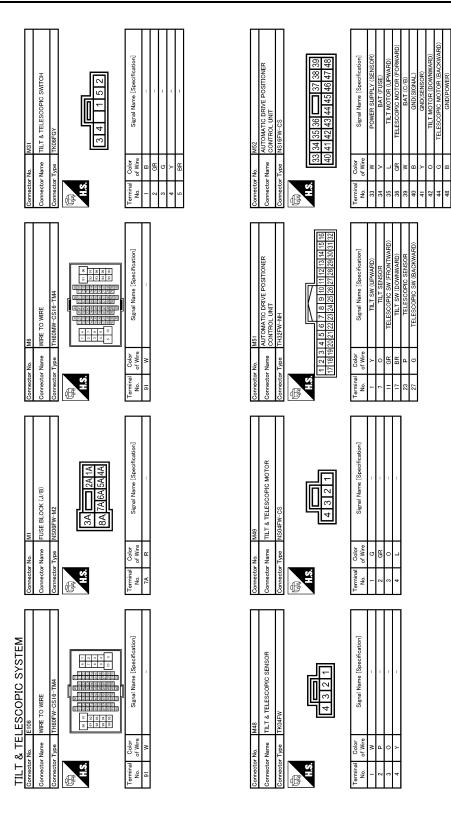


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INFOID:000000004684671

TILT & TELESCOPIC SYSTEM

< DTC/CIRCUIT DIAGNOSIS >



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TILT & TELESCOPIC SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

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TILI & TELESCOPIO SYSTEM Connector Name MC Connector Name Carolin BREAKER Connector Name Carolin BREAKER </td <td>Μ</td> <td>ļ</td>	Μ	ļ
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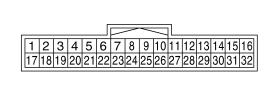
< ECU DIAGNOSIS INFORMATION >

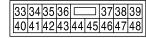
ECU DIAGNOSIS INFORMATION AUTOMATIC DRIVE POSITIONER CONTROL UNIT

Reference Value

INFOID:000000004730974

TERMINAL LAYOUT







JMJIA0199ZZ

PHYSICAL VALUES

	nal No. e color)	Description		Condition		Voltage (V)
+	-	Signal name	Input/ Output			(Approx.)
1	Ground	Tilt switch upward signal	Input	Tilt switch	Operate (upward)	0
(Y)	Ground	The Switch upward Signal	input		Other than above	5
2		Changeover switch RH		Changeover	RH	0
(LG)	Ground	signal	Input	switch position	Neutral or LH	5
3	Ground	Mirror switch upward sig-	Input	Mirror switch	Operated (upward)	0
(G)	Giouna	nal	input		Other than above	5
4	Ground	Mirror switch leftward sig-	Innut	Mirror switch	Operated (leftward)	0
(V)	Ground	nal	Input		Other than above	5
5 (R)	Ground	Door mirror sensor (RH) upward/downward signal	Input	Mirror face (door mirror RH)		Change between 3.4 (close to peak) 0.6 (close to valley)
6 (GR)	Ground	Door mirror sensor (LH) upward/downward signal	Input	Mirror face (door mirror LH)		Change between 3.4 (close to peak) 0.6 (close to valley)
7 (O)	Ground	Tilt sensor signal	Input	Tilt position		Change between 1.2 (close to top) 3.8 (close to bottom)
9					Press	0
(BR)	Ground	Memory switch 1 signal	Input	Memory switch 1	Other than above	5
10 (V)	Ground	UART communication (TX)	Output	Ignition switch ON		2mSec/div

< ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description		Condition		Voltage (V)
+	-	Signal name	Input/ Output	Condition		(Approx.)
11	Ground	Telescopic switch forward	Input	Telescopic switch	Operate (forward)	0
(GR)	Ground	signal	input	Telescopic switch	Other than above	5
12		••••••		••••••	Illuminate	1
(O)	Ground	Memory indictor 1 signal	Output	Memory indictor 1	Other than above	Battery voltage
13	Cround	Mamon indiator 2 aignal	Output	Moreon (indictor Q	Illuminate	1
(P)	Ground	Memory indictor 2 signal	Output	Memory indictor 2	Other than above	Battery voltage
14	Ground	Door mirror motor (RH)	Output	Door mirror RH	Operate (upward)	Battery voltage
(W)	Cround	upward output	Output		Other than above	0
15	Ground	Door mirror motor (RH)	Output	Door mirror RH	Operate (leftward)	Battery voltage
(O)	Ground	leftward output	Output		Other than above	0
		Door mirror motor (LH) downward output			Operate (down- ward)	Battery voltage
16	Ground	downward output	Output Door mirror (LH)		Other than above	0
(Y)		Door mirror motor (LH)			Operate (rightward)	Battery voltage
		rightward output			Other than above	0
17 (BR)	Ground	Tilt switch downward sig- nal	Input	Tilt switch	Operate (down- ward)	0
					Other than above	5
18		Changeover switch LH		Changeover	LH	0
(P)	Ground	signal	Input	switch position	Neutral or RH	5
19 (SB)	Ground	Mirror switch downward signal	Input	Mirror switch	Operate (down- ward)	0
(36)		Sigirai			Other than above	5
20		Mirror switch rightward			Operate (rightward)	0
(BR)	Ground	signal	Input	Mirror switch	Other than above	5
21 (L)	Ground	Door mirror sensor (RH) leftward/rightward signal	Input	Door mirror RH po	sition	Change between 3.4 (close to left edge) 0.6 (close to right edge)
22 (G)	Ground	Door mirror sensor (LH) leftward/rightward signal	Input	Door mirror LH pos	sition	Change between 0.6 (close to left edge) 3.4 (close to right edge)
23 (P)	Ground	Telescopic sensor signal	Input	Telescopic position	1	Change between 0.8 (close to top) 4.4 (close to bottom)

< ECU DIAGNOSIS INFORMATION >

	nal No. color)	Lieccription			Voltage (V)			
+	_	Signal name	Input/ Output	Conditio		(Approx.)		
24 (R)	Ground	Set switch signal	Input	Set switch	Press Other than above	0 5		
25 (V)	Ground	Memory switch 2 signal	Input	Memory switch 2	Press Other than above	0 5		
26 (P)	Ground	UART communication (RX)	Input	Ignition switch ON		10mSec/div		
27 (G)	Ground	Telescopic switch back- ward signal	Input	Telescopic switch	Operate (backward) Other than	0		
(0)					above	5		
		Door mirror motor (RH) downward output			Operate (down- ward)	Battery voltage		
30 (SB)	Ground	downward output	Output	Output	Output	Door mirror (RH)	Other than above	0
(65)		Door mirror motor (RH)				Operate (rightward)	Battery voltage	
		rightward output			Other than above	0		
31	Ground	Door mirror motor (LH)	Output	Door mirror (LH)	Operate (upward)	Battery voltage		
(G)	Ground	upward output	Output		Other than above	0		
32	Ground	Door mirror motor (LH)	Outrout		Operate (leftward)	Battery voltage		
(L)	Giouna	leftward output	Output	Door mirror (LH)	Other than above	0		
33 (W)	Ground	Sensor power supply	Input			5		
34 (V)	Ground	Power source (Fuse)	Input			Battery voltage		
35	Ground	Tilt motor upward output	Outrout	Steering tilt	Operate (upward)	Battery voltage		
(L)	Giouna		Output	Steering th	Other than above	0		
36	Ground	Telescopic motor forward	Outout	Steering telescop-	Operate (forward)	Battery voltage		
(GR)	Giouna	output signal	Output	ic	Other than above	0		
39 (W)	Ground	Power source (C/B)	Input			Battery voltage		
40 (B)	Ground	Ground				0		

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Voltage (V)
+	-	Signal name	Input/ Output	Condition	UII	(Approx.)
41 (Y)	Ground	Sensor ground	_	_		0
42 (O)	Ground	Tilt motor downward out- put	Output	Steering tilt	Operate (down- ward)	Battery voltage
(0)					Other than above	0
44 (G)	Ground	Telescopic motor back- ward output	Output	Steering telescop- ic	Operate (backward)	Battery voltage
					Other than above	0
48 (B)	Ground	Ground	_	_		0

G

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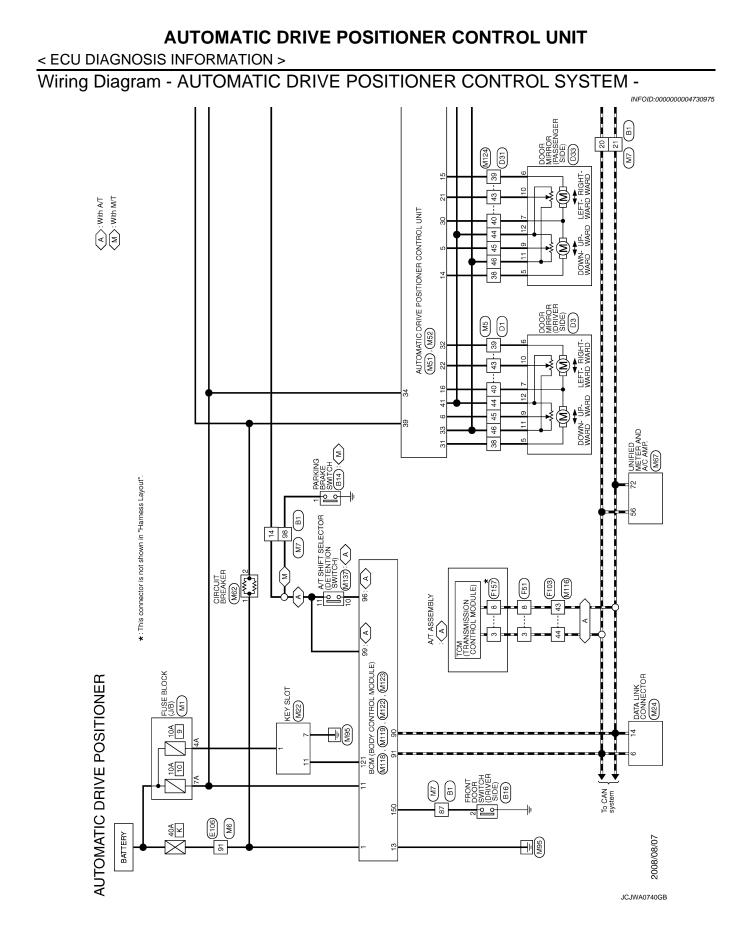
L

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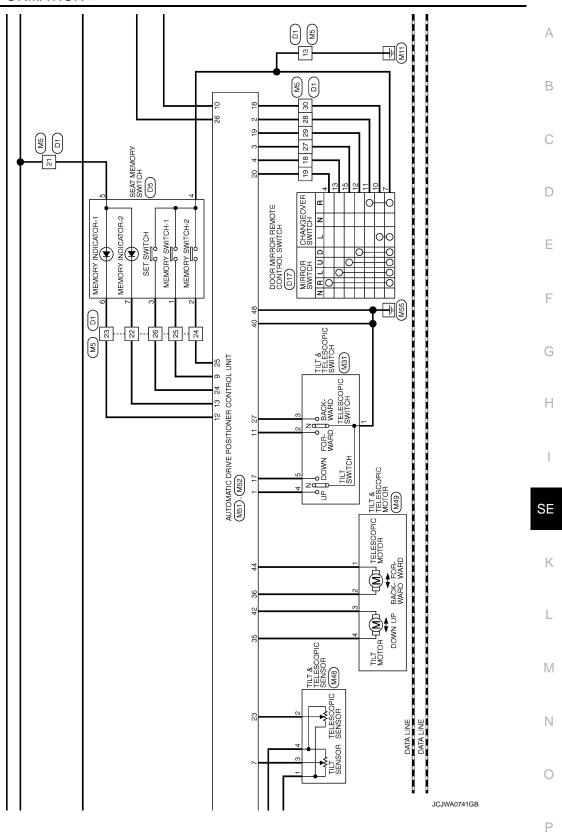
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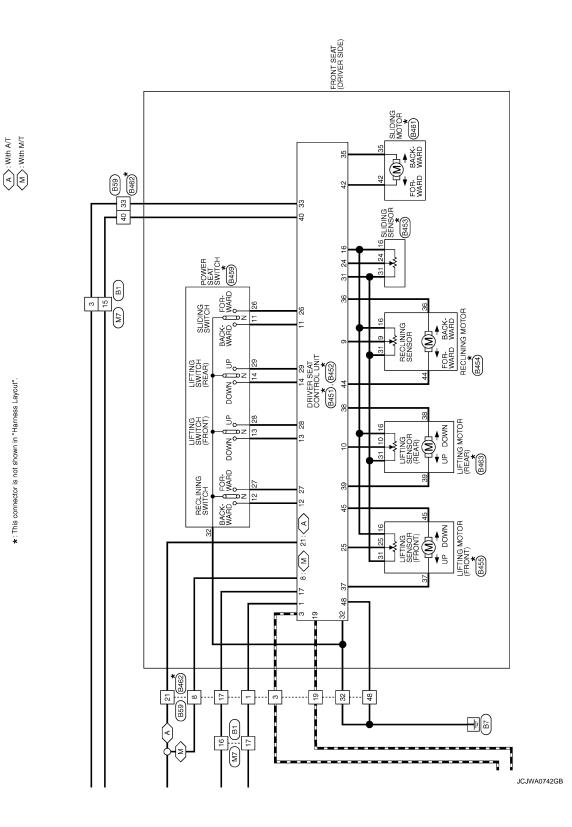
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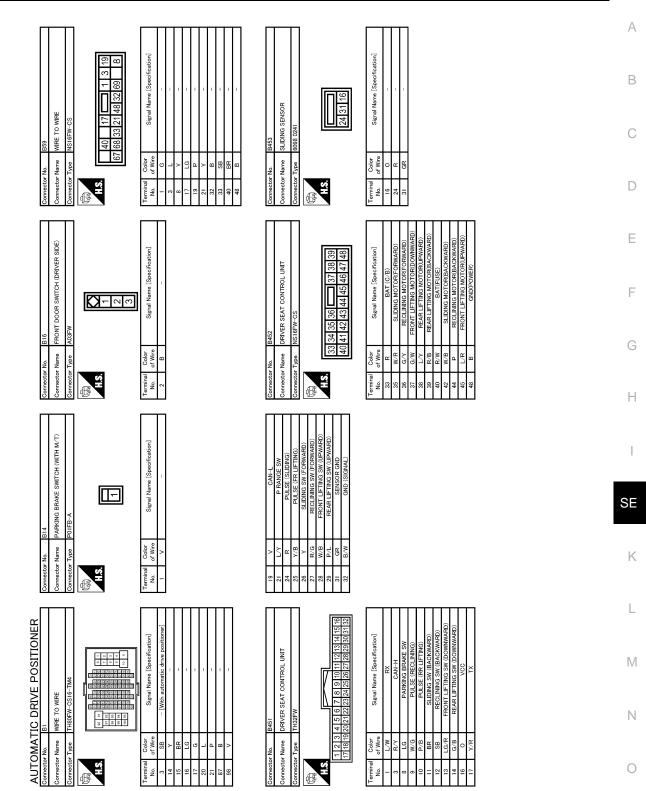
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AUTOMATIC DRIVE POSITIONER CONTROL UNIT < ECU DIAGNOSIS INFORMATION >



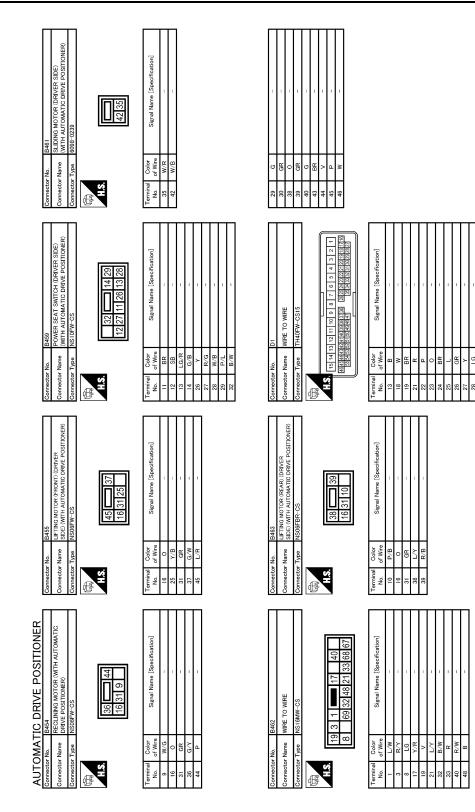
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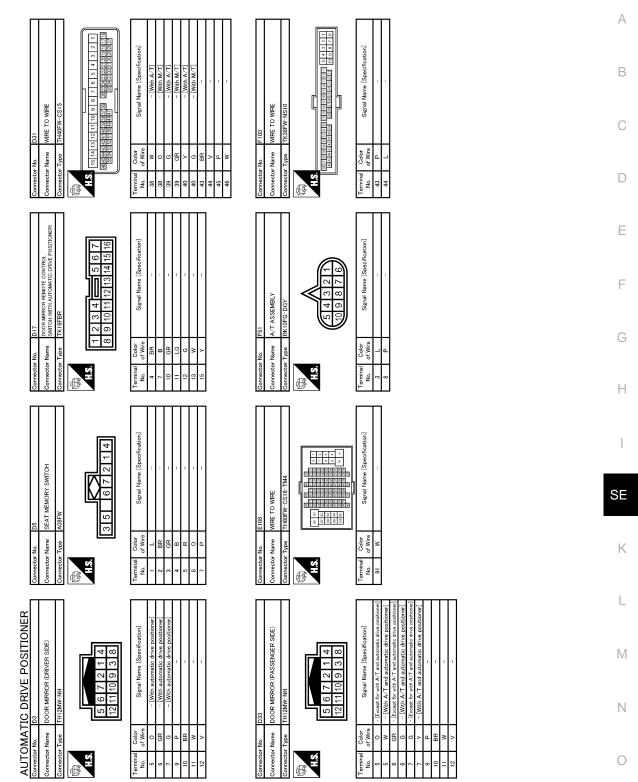
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JCJWA0744GB



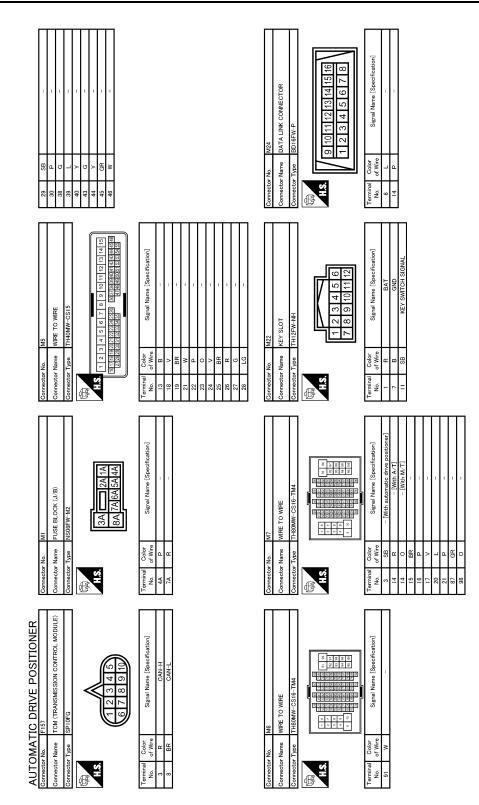
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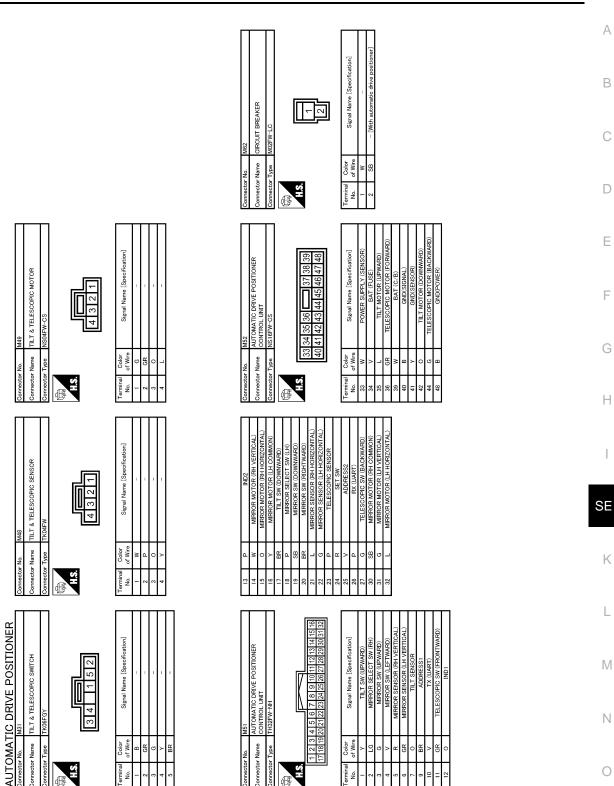
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< ECU DIAGNOSIS INFORMATION >



JCJWA0746GB



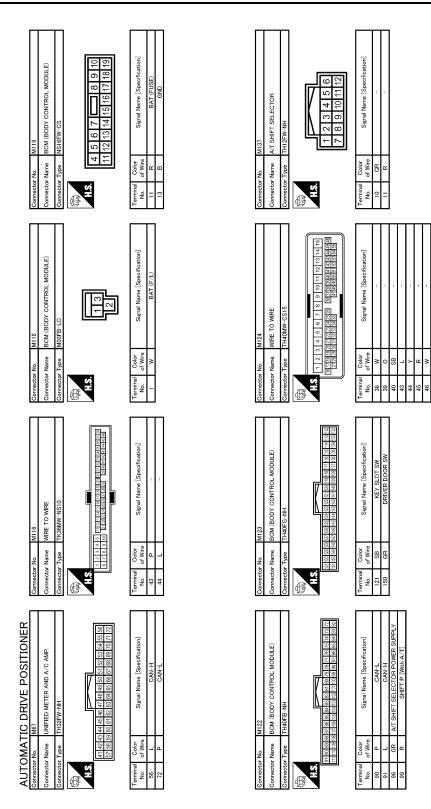
JCJWA0747GB

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AUTOMATIC DRIVE POSITIONER CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

< ECU DIAGNOSIS INFORMATION >



JCJWA0748GB

HEATED SEAT CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

HEATED SEAT CONTROL UNIT DRIVER SIDE

DRIVER SIDE : Reference Value

INFOID:000000004535489

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TERMINAL LAYOUT





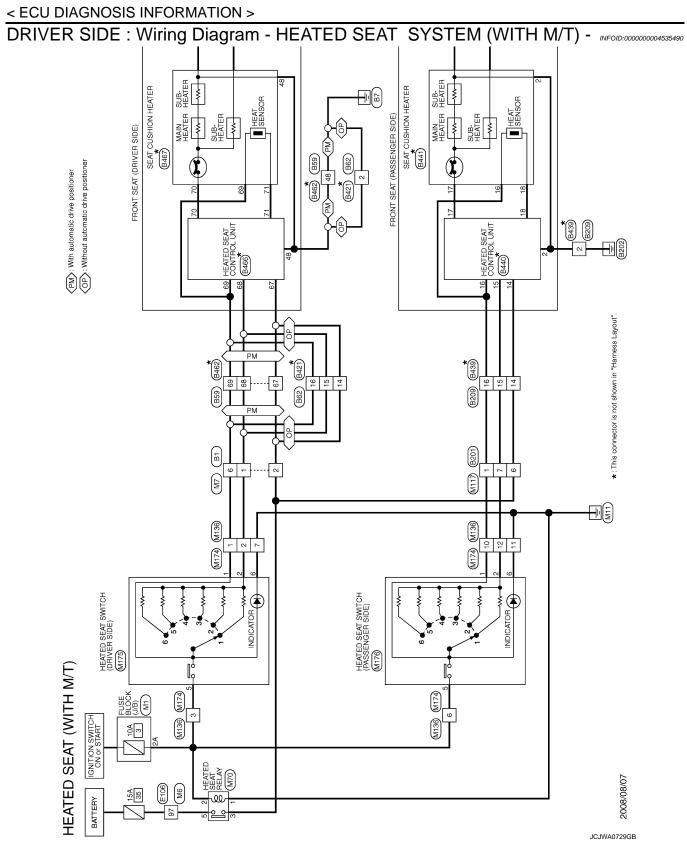
Terminal No. Description (Wire color) Voltage (V) Condition (Approx.) Input/ (+) (-) Signal name Output 48 Ignition switch ON 0 Ground Ground Н _ (B) OFF or ACC 0 67 Ground IGN power supply Input Ignition switch (R) ON Battery voltage OFF 0 1 (Min. temperature) 12.24 SE 2 12.33 68 Heated seat (L)*¹ 3 12.49 Ground Heated seat switch signal Input switch (L/W)*2 4 12.63 Κ 5 12.76 6 (Max. temperature) 12.90 69 Operate Battery voltage L Heated seat operation sig-(BR/W)*1 Ground Input Heated seat nal Other than above 0 (R/W)*2 Μ 70 Operate 0 - Battery voltage* (L/W)*1 Ground Heater unit power supply Output Heated seat Other than above 0 (R/L)*2 Ν OFF 0 1 (Min. temperature) 10.87 - 11.02* 2 10.93 - 11.07* 71 Heated seat 3 11.04 - 11.17* Ground Heat sensor signal Input (R/B) switch 4 11.13 - 11.26* Ρ 5 11.22 - 11.34* 11.31 - 11.43* 6 (Max. temperature)

*: Voltage is repeated within the value shown as per the following list depending on heater unit temperature.

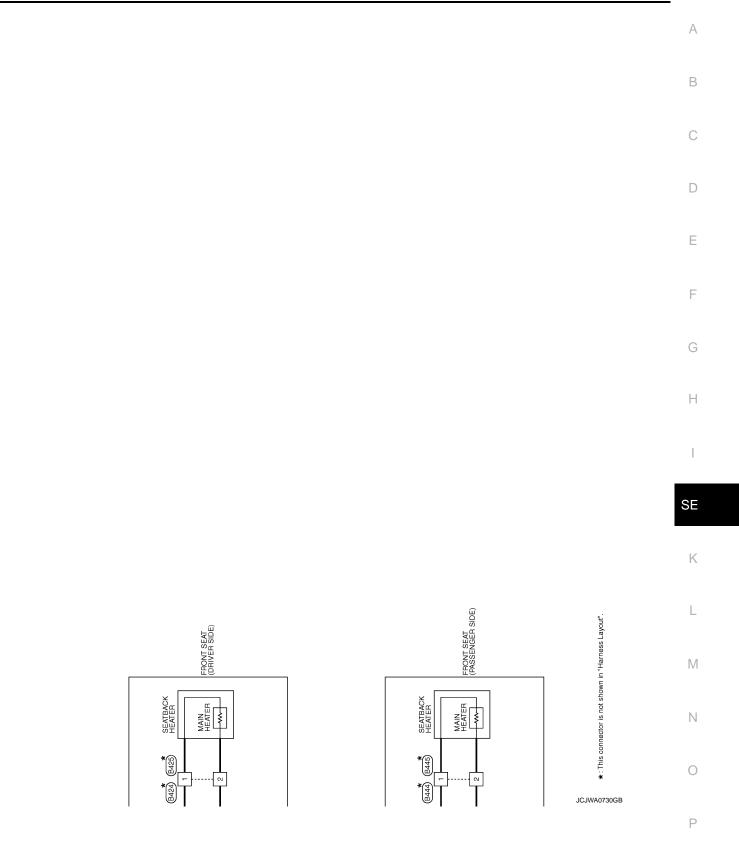
*1: With automatic drive positioner

*2: Without automatic drive positioner

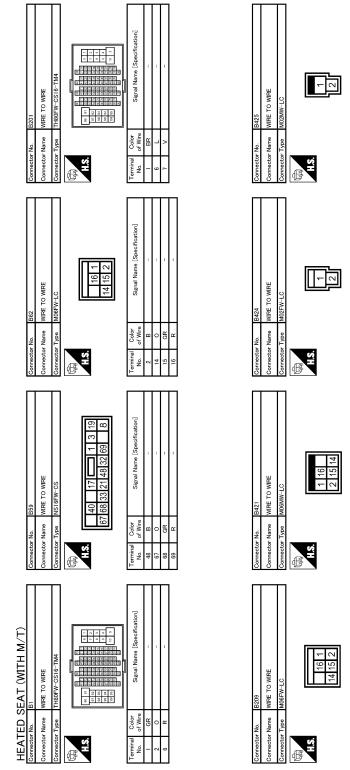
HEATED SEAT CONTROL UNIT



< ECU DIAGNOSIS INFORMATION >



< ECU DIAGNOSIS INFORMATION >



Signal Name [Specification] Color of Wire Terminal No. Signal Name [Specification] Color of Wire ≊ ¤ ≧ erminal No. Signal Name [Specification]

Signal Name [Specification]

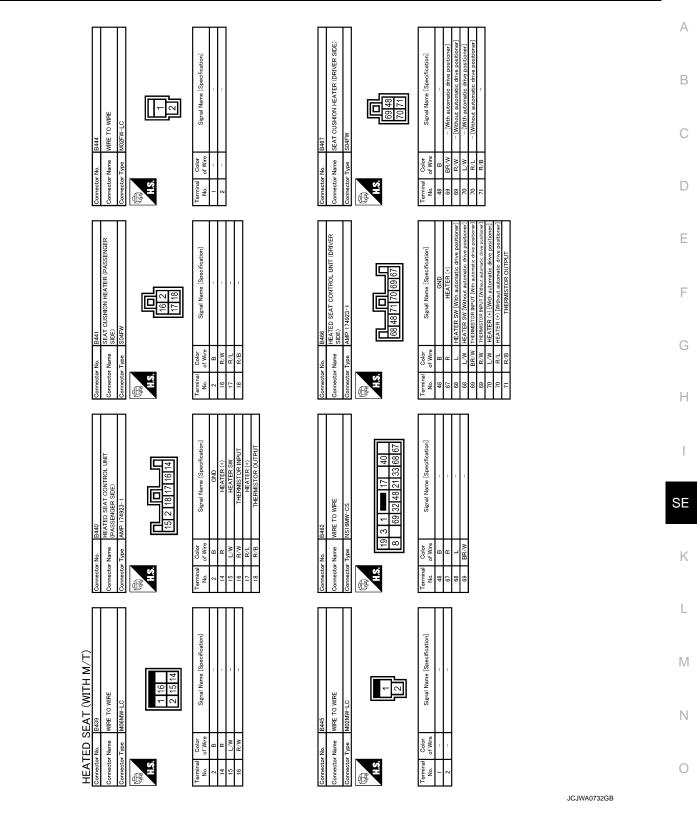
Color of Wire

Terminal No.

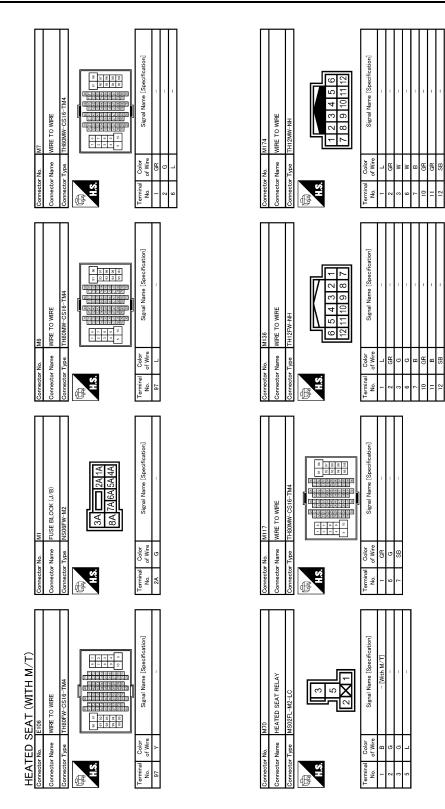
Color of Wire erminal No.

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< ECU DIAGNOSIS INFORMATION >



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TCH (PASSENGE

EATED SEAT SWITCH (DRIVER SIDE)

HEATED SEAT (WITH M/T)

S.H

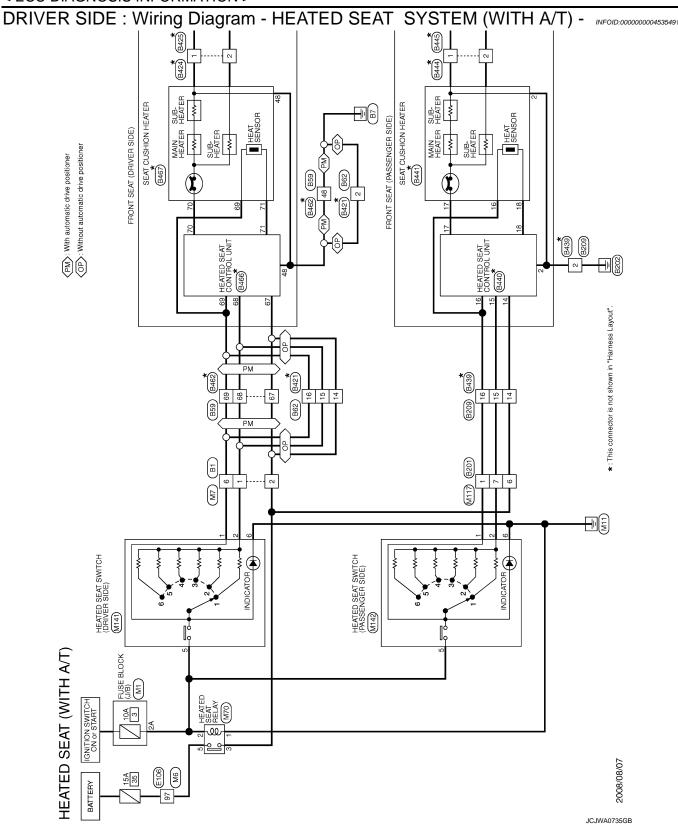
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Peolification]		Ι
Signal Name [Speoification]		SE
		SE K
Terminal No. of Wire 6 S.B. S.B. 8 A 8 A 8 A 8 A 8 A 8 A 8 A 8 A 8 A 8 A		
Terminal No. of Wire 6 S.B. S.B. 8 A 8 A 8 A 8 A 8 A 8 A 8 A 8 A 8 A 8 A		К
Signal Name (Specification) 1 1 1 1 2 3 3 1		K L
Signal Mame Specification)	JCJWA0734GB	K L M

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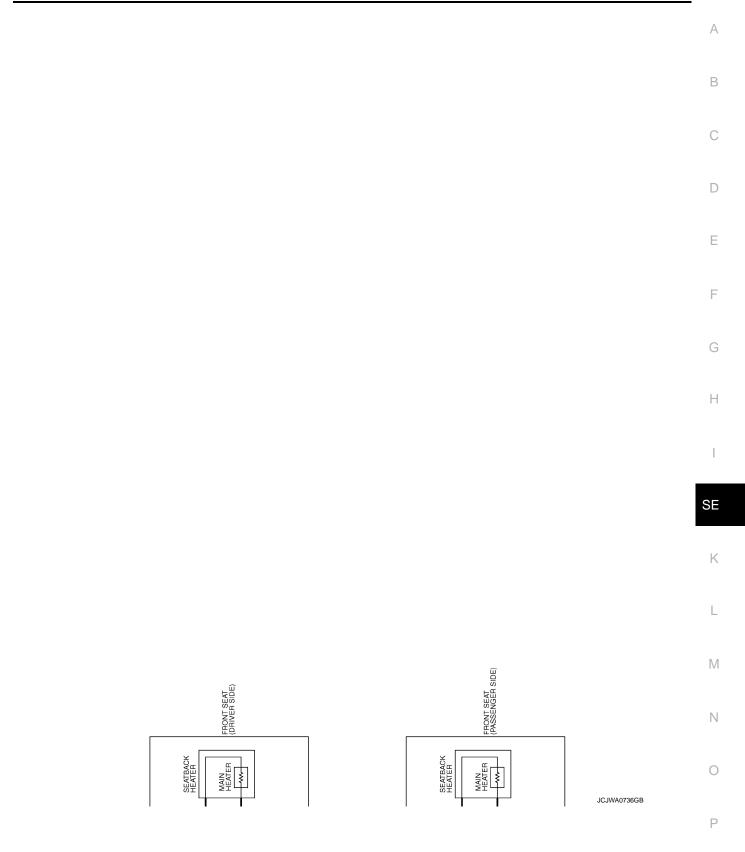
В



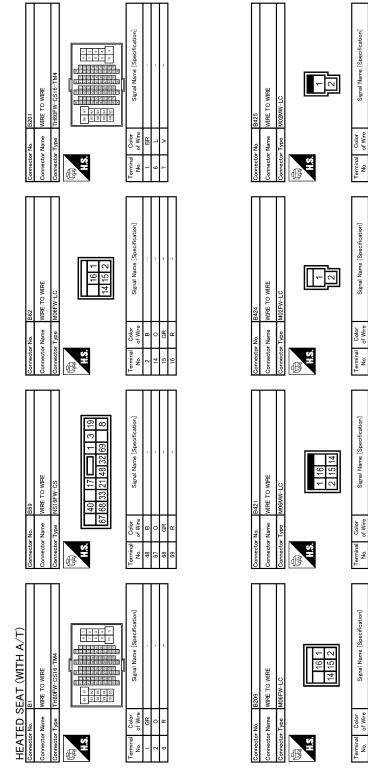




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Terminal No. Signal Name [Specification] Color of Wire ≊ ¤ ≧ erminal No. Signal Name [Specification] Color of Wire

erminal No.

Signal Name [Specification]

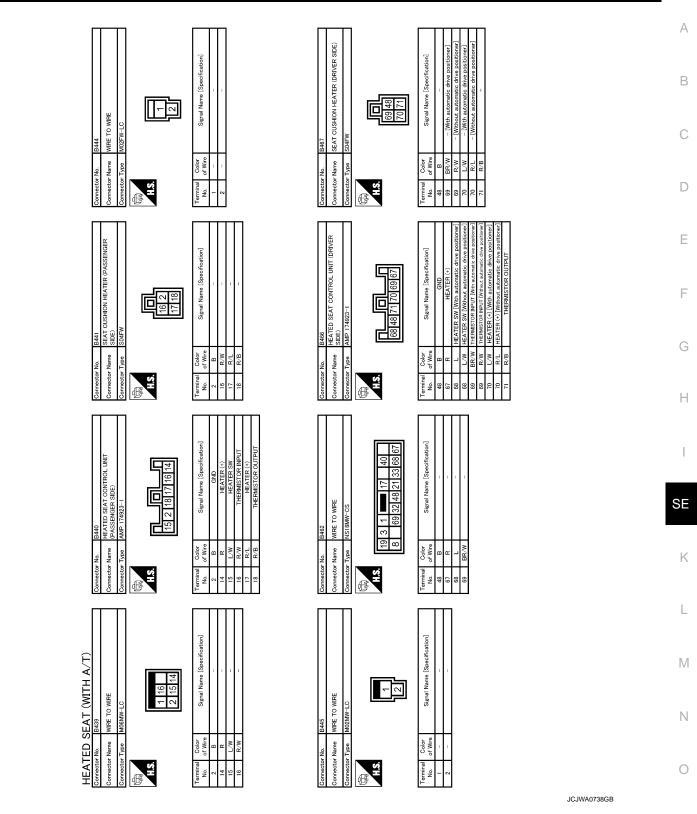
Color of Wire

Signal Name [Specification]

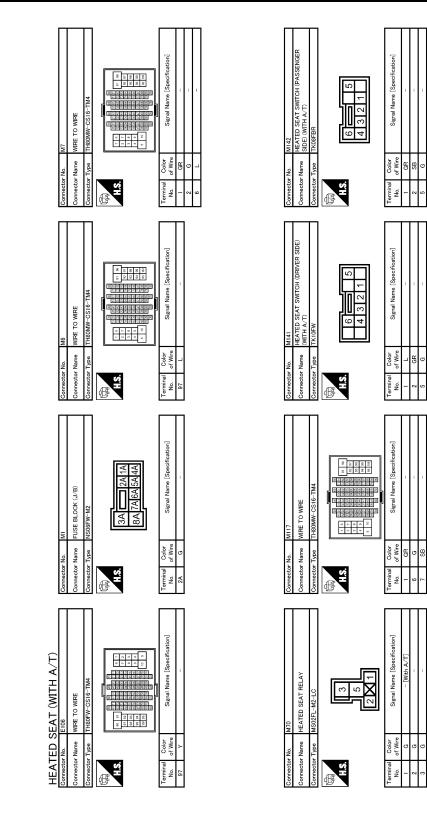
Color of Wire

JCJWA0737GB

< ECU DIAGNOSIS INFORMATION >



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PASSENGER SIDE

JCJWA0739GB

< ECU DIAGNOSIS INFORMATION >

PASSENGER SIDE : Reference Value

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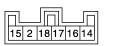
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TERMINAL LAYOUT





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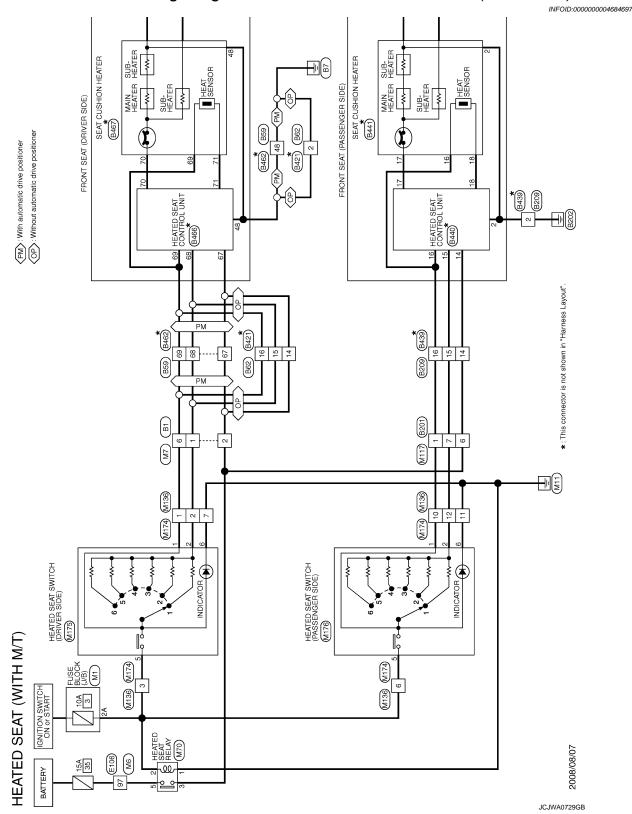
PHYSICAL VALUES

	nal No. e color)	Description				Voltage (V)	-
(+)	()	Signal name	Input/ Output		Condition	(Approx.)	
2 (B)	Ground	Ground	_	Ignition switch O	N	0	
14	Ground	IGN power supply	Input	Ignition switch	OFF or ACC	0	-
(R)	Ground	IGN power suppry	mput	Ignition Switch	ON	Battery voltage	_
					OFF	0	-
					1 (Min. temperature)	12.24	-
					2	12.33	-
15 (L/W)	Ground	Heated seat switch signal	Input	Heated seat switch	3	12.49	
()					4	12.63	
					5	12.76	- 0
					6 (Max. temperature)	12.90	
16	Cround	Heated seat operation sig-	المعربة	Heated seat	Operate	Battery voltage	-
(R/W)	Ground	nal	Input	Healed Seal	Other than above	0	-
17	Oneveral	l la stan unit a succe sur shu	Output		Operate	0 – Battery voltage*	-
(R/L)	Ground	Heater unit power supply	Output	Heated seat	Other than above	0	-
					OFF	0	-
					1 (Min. temperature)	10.87 – 11.02*	
					2	10.93 – 11.07*	-
18 (R/B)	Ground	Heat sensor signal	Input	Heated seat switch	3	11.04 – 11.17*	-
(100)				C	4	11.13 – 11.26*	-
					5	11.22 – 11.34*	-
					6 (Max. temperature)	11.31 – 11.43*	-

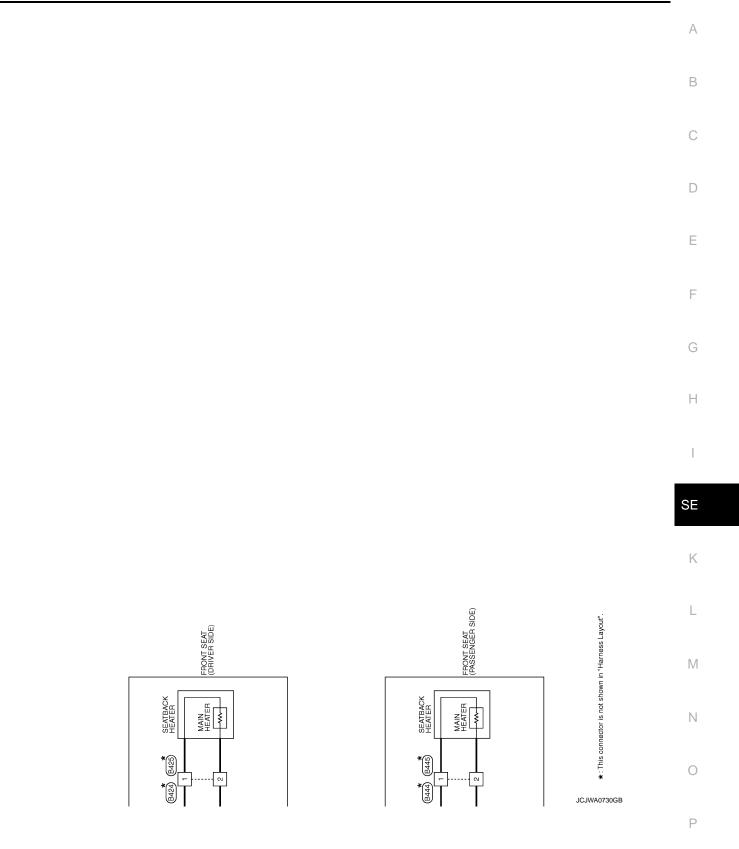
*: Voltage is repeated within the value shown as per the following list depending on heater unit temperature.

< ECU DIAGNOSIS INFORMATION >

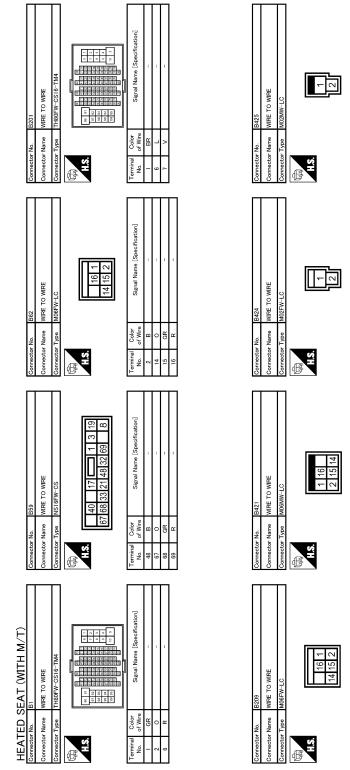
PASSENGER SIDE : Wiring Diagram - HEATED SEAT SYSTEM (WITH M/T) -



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Signal Name [Specification] Color of Wire Terminal No. Signal Name [Specification] Color of Wire ≊ ¤ ≧ erminal No. Signal Name [Specification] Color of Wire

erminal No.

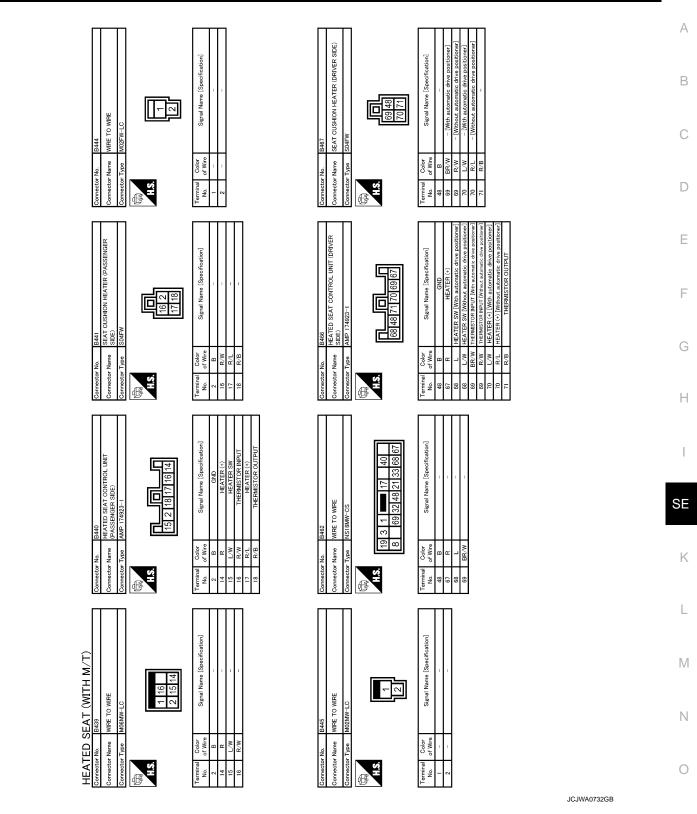
Signal Name [Specification]

Color of Wire

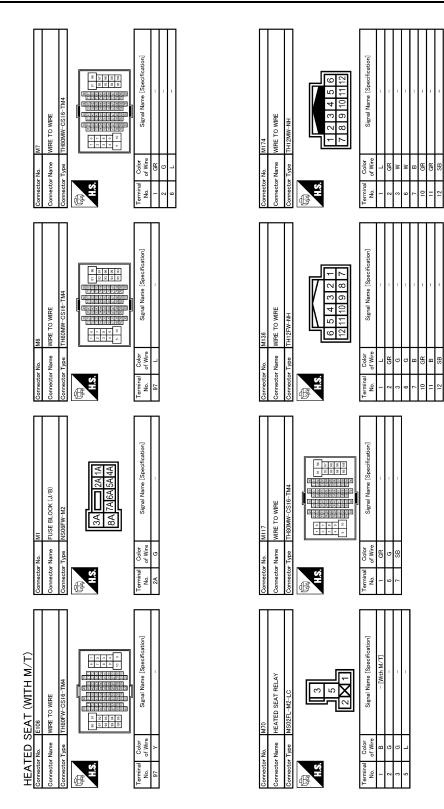
Terminal No.

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ICH (PASSENGFI

EATED SEAT SWITCH (DRIVER SIDE)

Vame

HEATED SEAT (WITH M/T)

H.S.

S.

Signal Name [Specification

Signal Name [Specification]

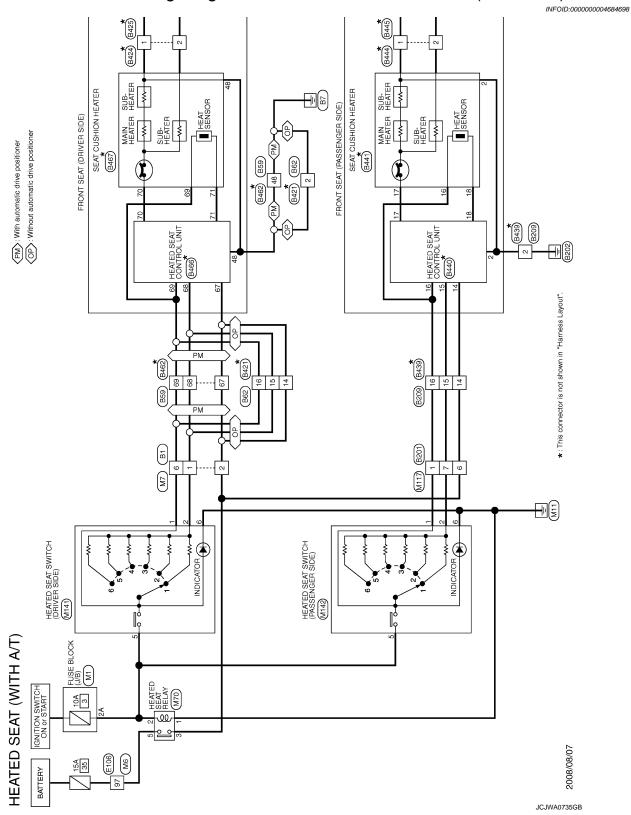
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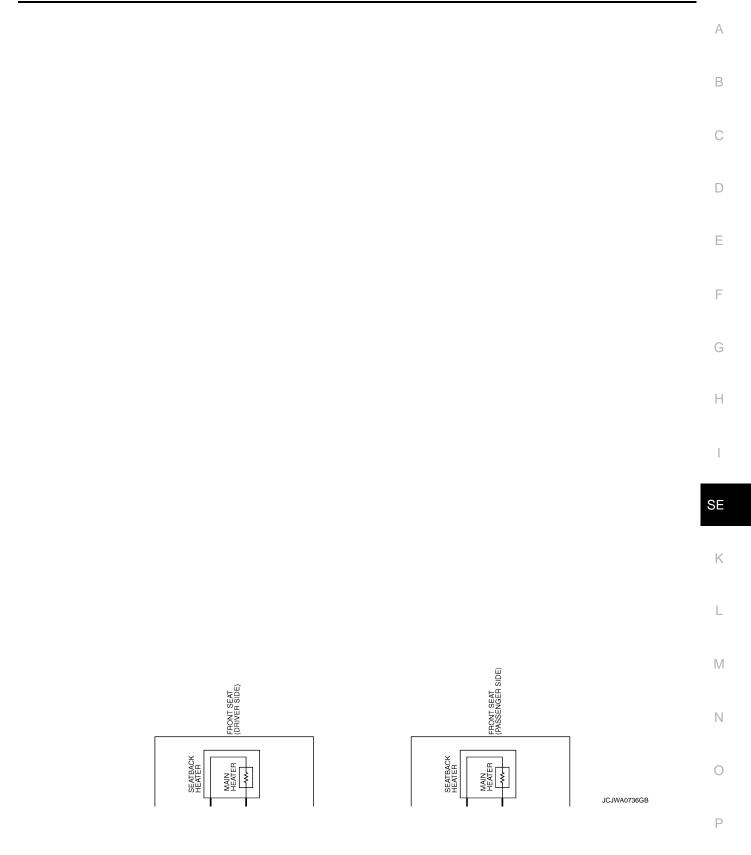
В

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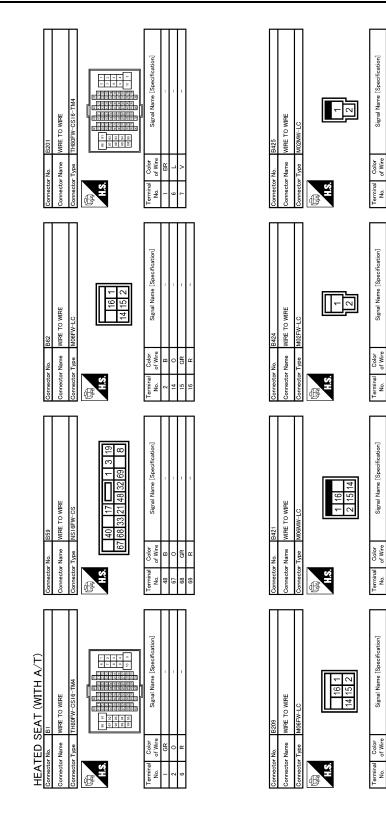
PASSENGER SIDE : Wiring Diagram - HEATED SEAT SYSTEM (WITH A/T) -



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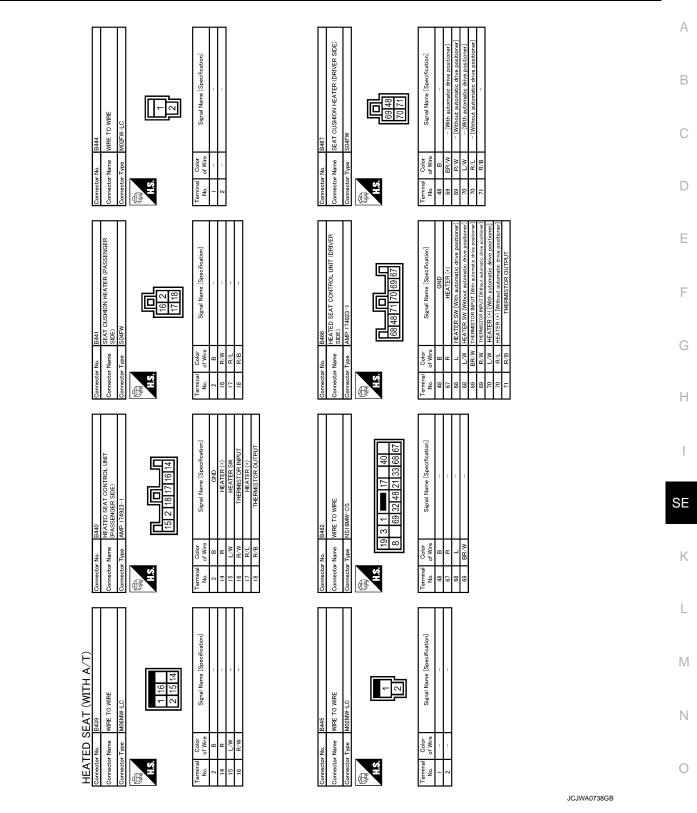
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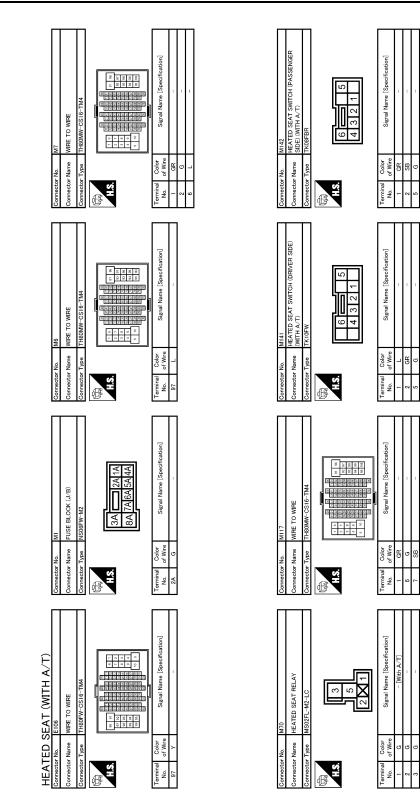
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< ECU DIAGNOSIS INFORMATION >



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HEATED SEAT DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >	
SYMPTOM DIAGNOSIS	
HEATED SEAT DOES NOT OPERATE	A
BOTH SIDES	D
BOTH SIDES : Diagnosis Procedure	D000004535500
1.CHECK HEATED SEAT SWITCH POWER SUPPLY	С
Check heated seat switch power supply. Refer to <u>SE-14, "HEATED SEAT SWITCH : Diagnosis Procedure"</u> .	
Is the inspection result normal?	D
YES >> GO TO 2.	
NO >> Repair or replace the malfunctioning parts.	E
2.CHECK HEATED SEAT RELAY	
Check heated seat relay. Refer to <u>SE-21, "Component Function Check"</u> .	F
Is the inspection result normal?	I
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	
3. CHECK HEATED SEAT CONTROL UNIT POWER SUPPLY AND GROUND CIRCUIT	G
Check heated seat switch power supply and ground circuit.	
Refer to SE-12, "HEATED SEAT CONTROL UNIT : Diagnosis Procedure".	Н
Is the inspection result normal?	
YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts.	
4.CONFIRM THE OPERATION	
Confirm the operation again.	SE
Is the inspection result normal?	
YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u> . NO >> GO TO 1.	
DRIVER SIDE	K
DRIVER SIDE : Diagnosis Procedure	0000004535501
1.CHECK HEATED SEAT SWITCH POWER SUPPLY	
Check heated seat switch power supply. Refer to <u>SE-14, "HEATED SEAT SWITCH : Diagnosis Procedure"</u> .	M
Is the inspection result normal?	
YES >> GO TO 2.	Ν
NO >> Repair or replace the malfunctioning parts. 2.CHECK HEATED SEAT CONTROL UNIT POWER SUPPLY AND GROUND CIRCUIT	
	0
Check heated seat switch power supply and ground circuit. Refer to <u>SE-12, "HEATED SEAT CONTROL UNIT : Diagnosis Procedure"</u> .	-
Is the inspection result normal?	Р
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	Ľ
3. CHECK HEATED SEAT SWITCH	
Check heated seat switch.	
Refer to <u>SE-17, "DRIVER SIDE : Component Function Check"</u> .	

Is the inspection result normal?

HEATED SEAT DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

- YES >> GO TO 4.
- NO >> Repair or replace the malfunctioning parts.

4.CHECK SEAT CUSHION HEATER

Check seat cushion heater.

Refer to SE-28, "DRIVER SIDE : Component Function Check".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

5.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41. "Intermittent Incident".

NO >> GO TO 1.

PASSENGER SIDE

PASSENGER SIDE : Diagnosis Procedure

INFOID:000000004535502

1.CHECK HEATED SEAT SWITCH POWER SUPPLY

Check heated seat switch power supply. Refer to <u>SE-14, "HEATED SEAT SWITCH : Diagnosis Procedure"</u>.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK HEATED SEAT CONTROL UNIT POWER SUPPLY AND GROUND CIRCUIT

Check heated seat switch power supply and ground circuit.

Refer to <u>SE-12, "HEATED SEAT CONTROL UNIT : Diagnosis Procedure"</u>.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CHECK HEATED SEAT SWITCH

Check heated seat switch.

Refer to SE-18, "PASSENGER SIDE : Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4.CHECK SEAT CUSHION HEATER

Check seat cushion heater.

Refer to SE-29, "PASSENGER SIDE : Component Function Check".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

5.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

NO >> GO TO 1.

SEATBACK HEATER ONLY DOES NOT OPERATE	
< SYMPTOM DIAGNOSIS >	
SEATBACK HEATER ONLY DOES NOT OPERATE DRIVER SIDE	A
DRIVER SIDE : Diagnosis Procedure	В
1.CHECK SEATBACK HEATER	
Check seatback heater. Refer to <u>SE-32, "DRIVER SIDE : Component Function Check"</u> . Is the inspection result normal?	С
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.	D
2.CONFIRM THE OPERATION Confirm the operation again.	Е
Is the inspection result normal? YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u> . NO >> GO TO 1. PASSENGER SIDE	F
PASSENGER SIDE : Diagnosis Procedure	G
1.CHECK SEATBACK HEATER Check seatback heater.	Н
Refer to <u>SE-32, "PASSENGER SIDE : Component Function Check"</u> . Is the inspection result normal?	
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.	I
2.CONFIRM THE OPERATION	SE
Confirm the operation again. <u>Is the inspection result normal?</u>	
YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u> . NO >> GO TO 1.	K

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CANNOT ADJUST HEATED SEA	T TEMPERATURE
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< SYMPTOM DIAGNOSIS >

CANNOT ADJUST HEATED SEAT TEMPERATURE DRIVER SIDE

DRIVER SIDE : Diagnosis Procedure

INFOID:000000004535505

1.CHECK HEATED SEAT SWITCH

Check heated seat switch. Refer to <u>SE-17, "DRIVER SIDE : Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. CHECK HEAT SENSOR

Check heat sensor.

Refer to SE-23, "DRIVER SIDE : Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3. CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u>.

NO >> Replace heated seat control unit. Refer to <u>SE-128, "Removal and Installation"</u>.

PASSENGER SIDE

PASSENGER SIDE : Diagnosis Procedure

1.CHECK HEATED SEAT SWITCH

Check heated seat switch.

Refer to SE-18, "PASSENGER SIDE : Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. CHECK HEAT SENSOR

Check heat sensor.

Refer to <u>SE-25, "PASSENGER SIDE : Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3. CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u>.

NO >> Replace heated seat control unit. Refer to <u>SE-128, "Removal and Installation"</u>.

INFOID:000000004535506

ATED SEAT SWITCH INDICATOR DOES NOT THRN ON . .

HEATED SEAT SWITCH INDICATOR DOES NOT TURN ON	
< SYMPTOM DIAGNOSIS > HEATED SEAT SWITCH INDICATOR DOES NOT TURN ON	
DRIVER SIDE	А
DRIVER SIDE : Diagnosis Procedure	B
1.CHECK HEATED SEAT SWITCH INDICATOR	D
Check heated seat switch indicator. Refer to <u>SE-34, "DRIVER SIDE : Component Function Check"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 2.	С
NO >> Repair or replace the malfunctioning parts. 2.CONFIRM THE OPERATION	D
Confirm the operation again. Is the inspection result normal?	E
YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u> . NO >> GO TO 1. PASSENGER SIDE	F
PASSENGER SIDE : Diagnosis Procedure	G
1. CHECK HEATED SEAT SWITCH INDICATOR	
Check heated seat switch indicator. Refer to <u>SE-34, "PASSENGER SIDE : Component Function Check"</u> .	Η
Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.	I
2.CONFIRM THE OPERATION Confirm the operation again.	SE
Is the inspection result normal?	
YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u> . NO >> GO TO 1.	Κ
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STEERING POSITION FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

STEERING POSITION FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000004240991

1. CHECK AUTOMATIC DRIVE POSITIONER CONTROL UNIT POWER SUPPLY AND GROUND CIRCUIT

Check automatic drive positioner control unit power supply and ground circuit. Refer to ADP-66, "AUTOMATIC DRIVE POSITIONER CONTROL UNIT : Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. CHECK TILT AND TELESCOPIC SWITCH

Check tilt and telescopic switch. Refer to <u>SE-36, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CHECK TILT AND TELESCOPIC SENSOR

Check tilt and telescopic sensor. Refer to <u>SE-41, "Component Function Check"</u>.

Is the inspection result normal?

- YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u>.
- NO >> Repair or replace the malfunctioning parts.

TILT FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >	
TILT FUNCTION DOES NOT OPERATE	A
Diagnosis Procedure	INFOID:000000004240992
1. CHECK TILT AND TELESCOPIC SWITCH	В
Check tilt switch. Refer to <u>SE-36, "Component Function Check"</u> .	
<u>Is the inspection result normal?</u> YES >> GO TO 2.	C
NO >> Repair or replace the malfunctioning parts. 2.CHECK TILT AND TELESCOPIC MOTOR	D
Check tilt motor. Refer to <u>SE-39, "Component Function Check"</u> . <u>Is the inspection result normal?</u>	E
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	F
3. CHECK TILT AND TELESCOPIC SENSOR	
Check tilt sensor. Refer to <u>SE-41. "Component Function Check"</u> . <u>Is the inspection result normal?</u>	G
YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u> . NO >> Repair or replace the malfunctioning parts.	Н

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TELESCOPIC FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

TELESCOPIC FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000004240993

1.CHECK TILT AND TELESCOPIC SWITCH

Check telescopic switch. Refer to <u>SE-36</u>, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. CHECK TILT AND TELESCOPIC MOTOR

Check telescopic motor. Refer to <u>SE-39, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CHECK TILT AND TELESCOPIC SENSOR

Check telescopic sensor. Refer to <u>SE-41, "Component Function Check"</u>.

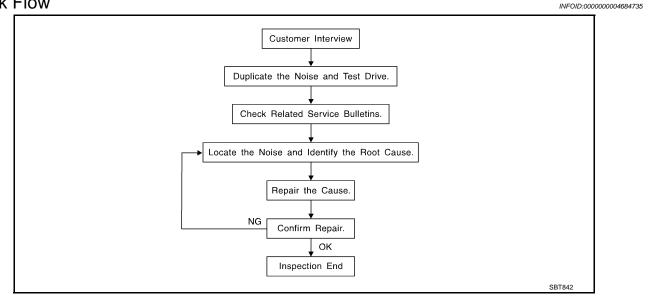
Is the inspection result normal?

- YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u>.
- NO >> Repair or replace the malfunctioning parts.

< SYMPTOM DIAGNOSIS >

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow



CUSTOMER INTERVIEW

Interview the customer if possible, to determine the conditions that exist when the noise occurs. Use the Diagnostic Worksheet during the interview to document the facts and conditions when the noise occurs and any of customer's comments; refer to <u>SE-107</u>, "Diagnostic Worksheet". This information is necessary to duplicate the conditions that exist when the noise occurs.

- The customer may not be able to provide a detailed description or the location of the noise. Attempt to obtain all the facts and conditions that exist when the noise occurs (or does not occur).
- If there is more than one noise in the vehicle, perform a diagnosis and repair the noise that the customer is concerned about. This can be accomplished by performing a cruise test on the vehicle with the customer.
- After identifying the type of noise, isolate the noise in terms of its characteristics. The noise characteristics SE are provided so the customer, service adviser and technician are all speaking the same language when defining the noise.
- Squeak (Like tennis shoes on a clean floor)
 Squeak characteristics include the light contact/fast movement/brought on by road conditions/hard surfaces
 a higher pitch noise/softer surfaces = lower pitch noises/edge to surface = chirping
- Creak (Like walking on an old wooden floor)
 Creak characteristics include firm contact/slow movement/twisting with a rotational movement/pitch dependent on materials/often brought on by activity.
- Rattle (Like shaking a baby rattle) Rattle characteristics include the fast repeated contact/vibration or similar movement/loose parts/missing clip or fastener/incorrect clearance.
- Knock (Like a knock on a door)
 Knock characteristics include hollow sounding/sometimes repeating/often brought on by driver action.
- Tick (Like a clock second hand)
 Tick characteristics include gentle contacting of light materials/loose components/can be caused by driver action or road conditions.
- Thump (Heavy, muffled knock noise) Thump characteristics include softer knock/dead sound often brought on by activity.
- Buzz (Like a bumblebee)
 Buzz characteristics include high frequency rattle/firm contact.
- Often the degree of acceptable noise level will vary depending up on the person. A noise that a technician may judge as acceptable may be very irritating to the customer.
- Weather conditions, especially humidity and temperature, may have a great effect on noise level.

DUPLICATE THE NOISE AND TEST DRIVE

If possible, drive the vehicle with the customer until the noise is duplicated. Note any additional information on the Diagnostic Worksheet regarding the conditions or location of the noise. This information can be used to duplicate the same conditions when the repair is reconfirmed.

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< SYMPTOM DIAGNOSIS >

If the noise can be duplicated easily during the test drive, to help identify the source of the noise, try to duplicate the noise with the vehicle stopped by doing one or all of the following:

- 1) Close a door.
- 2) Tap or push/pull around the area where the noise appears to be coming from.
- 3) Rev the engine.
- 4) Use a floor jack to recreate vehicle "twist".
- 5) At idle, apply engine load (electrical load, half-clutch on M/T models, drive position on A/T models).
- 6) Raise the vehicle on a hoist and hit a tire with a rubber hammer.
- Drive the vehicle and attempt to duplicate the conditions the customer states exist when the noise occurs.
- If it is difficult to duplicate the noise, drive the vehicle slowly on an undulating or rough road to stress the vehicle body.

CHECK RELATED SERVICE BULLETINS

After verifying the customer concern or symptom, check ASIST for Technical Service Bulletins (TSBs) related to that concern or symptom.

If a TSB relates to the symptom, follow the procedure to repair the noise.

LOCATE THE NOISE AND IDENTIFY THE ROOT CAUSE

- 1. Narrow down the noise to a general area. To help pinpoint the source of the noise, use a listening tool (Chassis ear: J-39570, Engine ear and mechanics stethoscope).
- 2. Narrow down the noise to a more specific area and identify the cause of the noise by:
- Removing the components in the area that is are suspected to be the cause of the noise. Do not use too much force when removing clips and fasteners, otherwise clips and fastener can be broken or lost during the repair, resulting in the creation of new noise.
- Tapping or pushing/pulling the component that is are suspected to be the cause of the noise. Do not tap or push/pull the component with excessive force, otherwise the noise will be eliminated only temporarily.
- Feeling for a vibration by hand by touching the component(s) that is are suspected to be the cause of the noise.
- Placing a piece of paper between components that are suspected to be the cause of the noise.
- Looking for loose components and contact marks. Refer to <u>SE-105</u>, "Inspection Procedure".

REPAIR THE CAUSE

- If the cause is a loose component, tighten the component securely.
- If the cause is insufficient clearance between components:
- Separate components by repositioning or loosening and retightening the component, if possible.
- Insulate components with a suitable insulator such as urethane pads, foam blocks, felt cloth tape or urethane tape. A Nissan Squeak and Rattle Kit (J-43980) is available through the authorized Nissan Parts Department.

CAUTION:

Never use excessive force as many components are constructed of plastic and may be damaged. NOTE:

Always check with the Parts Department for the latest parts information.

The following materials are contained in the Nissan Squeak and Rattle Kit (J-43980). Each item can be ordered separately as needed.

URETHANE PADS [1.5 mm (0.059 in) thick]

Insulates connectors, harness, etc.

76268-9E005: 100 \times 135 mm (3.94 \times 5.31 in)/76884-71L01: 60 \times 85 mm (2.36 \times 3.35 in)/76884-71L02:15 \times 25 mm (0.59 \times 0.98 in)

INSULATOR (Foam blocks)

Insulates components from contact. Can be used to fill space behind a panel.

73982-9E000: 45 mm (1.77 in) thick, 50×50 mm (1.97 \times 1.97 in)/73982-

50Y00: 10 mm (0.39 in) thick, 50×50 mm (1.97 \times 1.97 in)

INSULATOR (Light foam block)

80845-71L00: 30 mm (1.18 in) thick, $30 \times 50 \text{ mm}$ (1.18 \times 1.97in)

FELT CLOTHTAPE

Used to insulate where movement does not occur. Ideal for instrument panel applications. 68370-4B000: $15 \times 25 \text{ mm}$ (0.59 \times 0.98 in) pad/68239-13E00: 5 mm (0.20 in) wide tape roll The following materials, not found in the kit, can also be used to repair squeaks and rattles.

UHMW (TEFLON) TAPE

< S	YMPTOM DIAGNOSIS >	
	ulates where slight movement is present. Ideal for instrument panel applications.	
Use	ICONE GREASE ed in place of UHMW tape that is be visible or does not fit. Will only last a few months. ICONE SPRAY	A
Use	ed when grease cannot be applied.	В
	CT TAPE ed to eliminate movement.	D
	INFIRM THE REPAIR	
Co	nfirm that the cause of a noise is repaired by test driving the vehicle. Operate the vehicle under the same	С
cor	nditions as when the noise originally occurred. Refer to the notes on the Diagnostic Worksheet.	
Ins	spection Procedure	D
Ref	fer to Table of Contents for specific component removal and installation information.	
INS	STRUMENT PANEL	Ε
	st incidents are caused by contact and movement between:	
1.	The cluster lid A and instrument panel	_
2.	Acrylic lens and combination meter housing	F
3.	Instrument panel to front pillar garnish	
4.	Instrument panel to windshield	G
5.	Instrument panel mounting pins	0
6.	Wiring harnesses behind the combination meter	
7.	A/C defroster duct and duct joint	Н
	These incidents can usually be located by tapping or moving the components to duplicate the noise or by pressing on the components while driving to stop the noise. Most of these incidents can be repaired by	
	applying felt cloth tape or silicon spray (in hard to reach areas). Urethane pads can be used to insulate wiring harness. CAUTION:	I
	Never use silicone spray to isolate a squeak or rattle. If the area is saturated with silicone, the	
	recheck of repair becomes impossible.	SE
CE	NTER CONSOLE	
Co	mponents to pay attention to include:	
1.	Shifter assembly cover to finisher	Κ
2.	A/C control unit and cluster lid C	
3.	Wiring harnesses behind audio and A/C control unit	1
The	e instrument panel repair and isolation procedures also apply to the center console.	
	ORS	
Pay	y attention to the following:	M
1.	Finisher and inner panel making a slapping noise	
2.	Inside handle escutcheon to door finisher	
3.	Wiring harnesses tapping	Ν
4.	Door striker out of alignment causing a popping noise on starts and stops	
ma	pping or moving the components or pressing on them while driving to duplicate the conditions can isolate ny of these incidents. The areas can usually be insulated with felt cloth tape or insulator foam blocks from Nissan Squeak and Rattle Kit (J-43980) to repair the noise.	0
TR	UNK	_
	nk noises are often caused by a loose jack or loose items put into the trunk by the customer. addition look for the following:	Ρ
1.	Trunk lid dumpers out of adjustment	
2.	Trunk lid striker out of adjustment	

- 3. The trunk lid torsion bars knocking together
- 4. A loose license plate or bracket

< SYMPTOM DIAGNOSIS >

Most of these incidents can be repaired by adjusting, securing or insulating the item(s) or component(s) causing the noise.

SUNROOF/HEADLINING

Noises in the sunroof/headlining area can often be traced to one of the following:

- 1. Sunroof lid, rail, linkage or seals making a rattle or light knocking noise
- 2. Sunvisor shaft shaking in the holder
- 3. Front or rear windshield touching headlining and squeaking

Again, pressing on the components to stop the noise while duplicating the conditions can isolate most of these incidents. Repairs usually consist of insulating with felt cloth tape.

SEATS

When isolating seat noise it's important to note the position the seats in and the load placed on the seat when the noise occurs. These conditions should be duplicated when verifying and isolating the cause of the noise. Cause of seat noise include:

- 1. Headrest rods and holder
- 2. A squeak between the seat pad cushion and frame
- 3. The rear seatback lock and bracket

These noises can be isolated by moving or pressing on the suspected components while duplicating the conditions under which the noise occurs. Most of these incidents can be repaired by repositioning the component or applying urethane tape to the contact area.

UNDERHOOD

Some interior noise may be caused by components under the hood or on the engine wall. The noise is then transmitted into the passenger compartment.

Causes of transmitted underhood noise include:

- 1. Any component mounted to the engine wall
- 2. Components that pass through the engine wall
- 3. Engine wall mounts and connectors
- 4. Loose radiator mounting pins
- 5. Hood bumpers out of adjustment
- 6. Hood striker out of adjustment

These noises can be difficult to isolate since they cannot be reached from the interior of the vehicle. The best method is to secure, move or insulate one component at a time and test drive the vehicle. Also, engine RPM or load can be changed to isolate the noise. Repairs can usually be made by moving, adjusting, securing, or insulating the component causing the noise.

< SYMPTOM DIAGNOSIS >

Diagnostic Worksheet



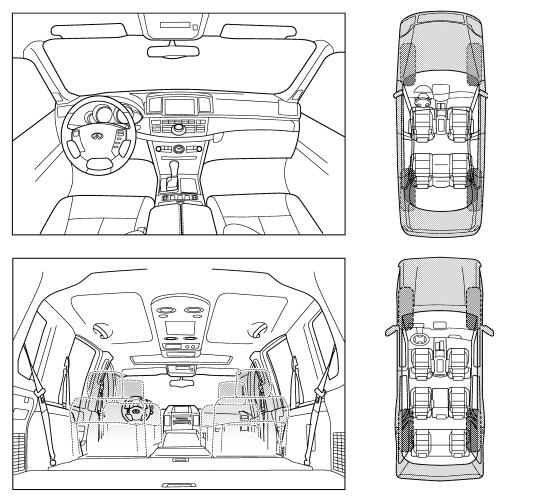
SQUEAK & RATTLE DIAGNOSTIC WORKSHEET

Dear Infiniti Customer:

We are concerned about your satisfaction with your Infiniti vehicle. Repairing a squeak or rattle sometimes can be very difficult. To help us fix your Infiniti right the first time, please take a moment to note the area of the vehicle where the squeak or rattle occurs and under what conditions. You may be asked to take a test drive with a service consultant or technician to ensure we confirm the noise you are hearing.

I. WHERE DOES THE NOISE COME FROM? (circle the area of the vehicle)

The illustrations are for reference only, and may not reflect the actual configuration of your vehicle.



Continue to page 2 of the worksheet and briefly describe the location of the noise or rattle. In addition, please indicate the conditions which are present when the noise occurs.

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< SYMPTOM DIAGNOSIS >

SQUEAK & RATTLE DIAGNOSTIC WORKSHEET - page 2

Briefly describe the location where the noise occurs:

II. WHEN DOES IT OCCUR? (please chec	k the boxes that apply)
 anytime 1st time in the morning only when it is cold outside only when it is hot outside 	 after sitting out in the rain when it is raining or wet dry or dusty conditions other:
III. WHEN DRIVING:	IV. WHAT TYPE OF NOISE
 through driveways over rough roads over speed bumps only about mph on acceleration coming to a stop on turns: left, right or either (circle) with passengers or cargo other: after driving miles or minu 	 squeak (like tennis shoes on a clean floor) creak (like walking on an old wooden floor) rattle (like shaking a baby rattle) knock (like a knock at the door) tick (like a clock second hand) thump (heavy, muffled knock noise) buzz (like a bumble bee)

TO BE COMPLETED BY DEALERSHIP PERSONNEL

Test Drive Notes:

	YES	NO	Initials of person performing
Vehicle test driven with customer - Noise verified on test drive - Noise source located and repaired - Follow up test drive performed to confirm repair			
		me:	

< PRECAUTION > PRECAUTION PRECAUTIONS

Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the "SRS AIR BAG" and "SEAT BELT" of this Service Manual.

WARNING:

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the "SRS AIR BAG".
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

PRECAUTIONS WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

WARNING:

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the ignition OFF, disconnect the stattery, and wait at least 3 minutes before performing any service.

Service Notice

- When removing or installing various parts, place a cloth or padding onto the vehicle body to prevent scratches.
- Handle trim, molding, instruments, grille, etc. carefully during removing or installing. Be careful not to oil or damage them.
- Apply sealing compound where necessary when installing parts.
- When applying sealing compound, be careful that the sealing compound does not protrude from parts.
- When replacing any metal parts (for example body outer panel, members, etc.), be sure to take rust preven-

Precaution for Work

- When removing or disassembling each component, be careful not to damage or deform it. If a component may be subject to interference, be sure to protect it with a shop cloth.
- When removing (disengaging) components with a screwdriver or similar tool, be sure to wrap the component with a shop cloth or vinyl tape to protect it.
- Protect the removed parts with a shop cloth and keep them.
- Replace a deformed or damaged clip.
- If a part is specified as a non-reusable part, always replace it with new one.
- Be sure to tighten bolts and nuts securely to the specified torque.
- After re-installation is completed, be sure to check that each part works normally.
- Follow the steps below to clean components.
- Water soluble foul: Dip a soft cloth into lukewarm water, and wring the water out of the cloth to wipe the fouled area.

Then rub with a soft and dry cloth.

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PRECAUTIONS

< PRECAUTION >

- Oily foul: Dip a soft cloth into lukewarm water with mild detergent (concentration: within 2 to 3%), and wipe the fouled area.

Then dip a cloth into fresh water, and wring the water out of the cloth to wipe the detergent off. Then rub with a soft and dry cloth.

- Never use organic solvent such as thinner, benzene, alcohol, and gasoline.
- For genuine leather seats, use a genuine leather seat cleaner.

PREPARATION

< PREPARATION >

PREPARATION PREPARATION

Special Service Tool

The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.

Tool number (Kent-Moore No.) Tool name		Description	0
(J39570) Chassis ear	SIIA0993E	Locates the noise	E
(J43980) NISSAN Squeak and Rattle Kit		Repairs the cause of noise	
	SIIA0994E		
Commercial Service		INFOID:000000004684	1742
Commercial Service		INFOID:000000004684	4742 SE
Commercial Service	Tool		_

Hook and pick tool

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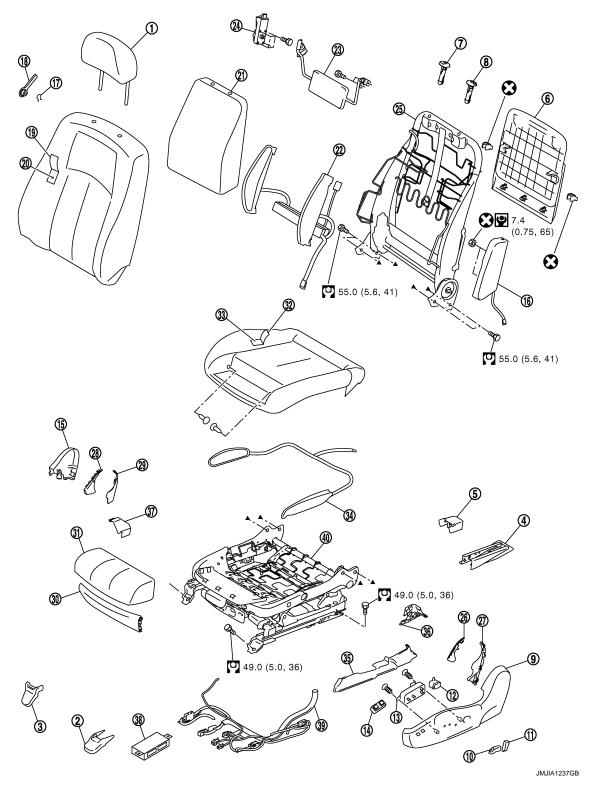
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REMOVAL AND INSTALLATION FRONT SEAT

Exploded View

DRIVER'S SEAT

SEC. 870



< REMOVAL AND INSTALLATION >

- 1. Headrest
- 4. Rear outer slide cover
- 7. Headrest holder (free)
- 10. Seat slide and lifter switch knob
- 13. Seat control switch
- 16. Side air bag module
- 19. Seatback trim
- 22. Seatback side support bag and unit
- 25. Seatback frame
- 28. Reclining device inner cover (front)
- 31. Thigh extension pad
- 34. Seat cushion side support bag
- 37. Seat slide inner finisher

40. Seat cushion frame

Refer to GI-4, "Components" for symbols in the figure.

PASSENGER'S SEAT

- 2. Front outer slide cover
- 5. Rear inner slide cover
- 8. Headrest holder (locked)
- 11. Seat reclining switch knob
- Side support switch 14.
- 17. Snap ring
- 20. Seatback pad
- 23. Lumbar support unit
- 26. Reclining device outer cover (front)
- 29. Reclining device inner cover (rear)
- 32. Seat cushion trim
- 35. Seat slide outer finisher (outside)
- 38. Seat control unit

- Front inner slide cover Seatback board Seat cushion outer finisher 12. Lumbar support switch В Seat cushion inner finisher 15. 18. Lumbar support lever knob 21. Seatback silencer 24. Lumbar support motor 27. Reclining device outer cover (rear) Seat cushion front finisher D
- 30. 33. Seat cushion pad

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- 36. Seat slide outer finisher (inside)
- 39. Seat harness

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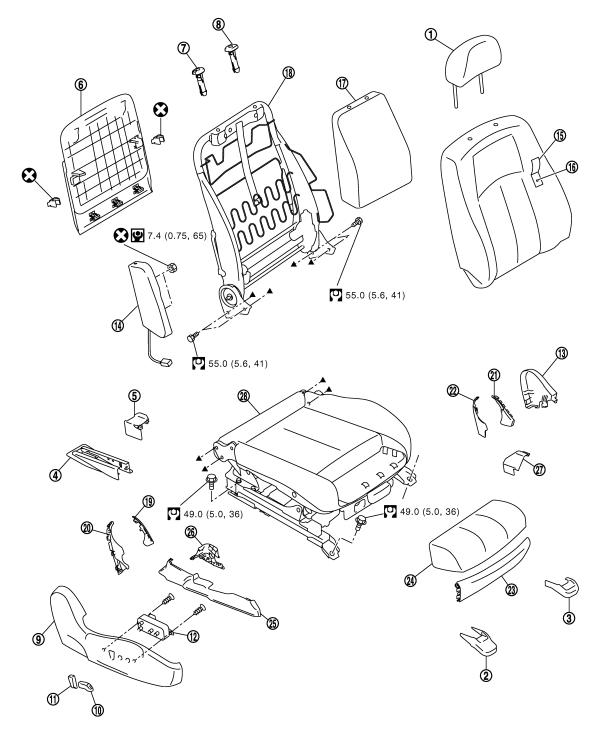
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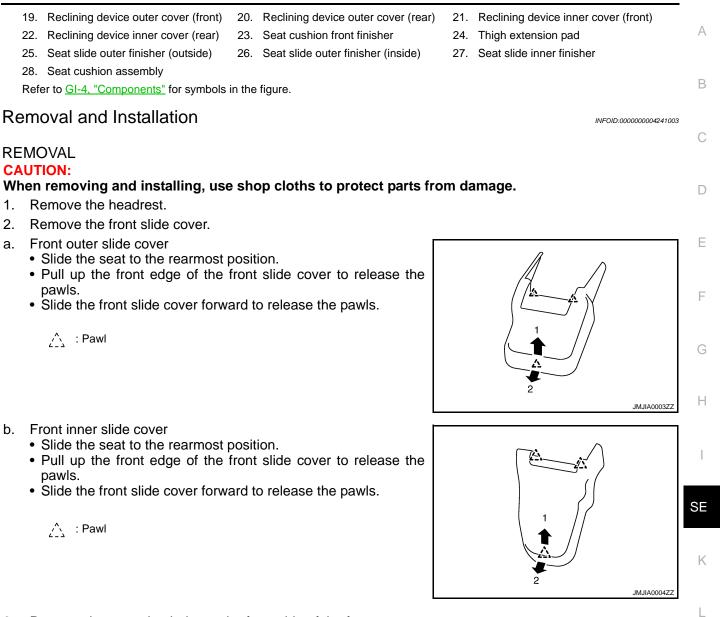
- 1. Headrest
- 4. Rear outer slide cover
- 7. Headrest holder (free)
- 10. Seat slide and lifter switch knob
- 13. Seat cushion inner finisher
- 16. Seatback pad

- 2. Front outer slide cover
- 5. Rear inner slide cover
- 8. Headrest holder (locked)
- 11. Seat reclining switch knob
- 14. Side air bag module
- 17. Seatback silencer

- JMJIA1238GB
- 3. Front inner slide cover
- 6. Seatback board
- 9. Seat cushion outer finisher
- 12. Seat control switch
- 15. Seatback trim
- 18. Seatback frame

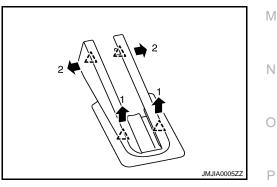
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< REMOVAL AND INSTALLATION >



- 3. Remove the mounting bolts on the front side of the front seat.
- 4. Remove the rear slide cover.
- a. Rear outer slide cover
 - Slide the seat to the foremost position.
 - Pull up the rear edge of the rear outer slide cover to release the pawls.
 - Open the front end of the rear outer slide cover to release the pawls.

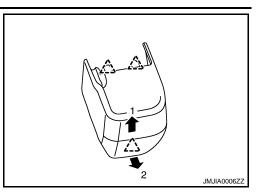
2 : Pawl



< REMOVAL AND INSTALLATION >

- b. Rear inner slide cover
 - Slide the seat to the foremost position.
 - Pull up the rear edge of the rear inner slide cover to release the pawls.
 - Slide the rear inner slide cover rearward to release the pawls.

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: Pawl
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- 5. Remove the mounting bolts on the rear side of the front seat.
- 6. Set seatback in a standing position.
- 7. Disconnect harness connector under the seat and remove harness securing clips. CAUTION:

Before removal, turn ignition switch OFF, disconnect battery negative terminal and then wait for at least 3 minutes.

8. Remove seat from the vehicle. CAUTION:

When removing and installing, use shop cloths to protect parts from damage.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- Before installation, turn ignition switch OFF, disconnect battery negative terminal and then wait for at least 3 minutes.
- Clamp the harness in position.

NOTE:

After installing the driver seat, perform additional service when removing battery negative terminal.(Automatic drive positioner model only) Refer to <u>ADP-9</u>, "<u>ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGA-</u><u>TIVE TERMINAL</u> : <u>Special Repair Requirement</u>".

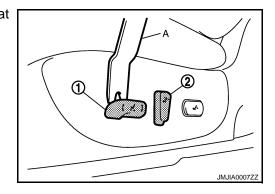
Disassembly and Assembly

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SEATBACK

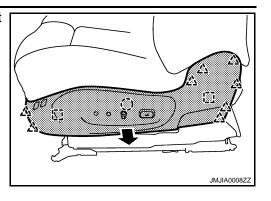
Disassembly

- 1. Remove the seat cushion outer finisher.
 - Remove the seat slide and lifter switch knob (1) and seat reclining switch knob (2). Using a remover tool (A).



< REMOVAL AND INSTALLATION >

- · Remove the metal clips, clips and pawls, and then pull out seat cushion outer finisher.
 - () : Clip
 - : Metal clip
 - 八 :Pawl



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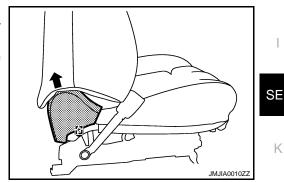
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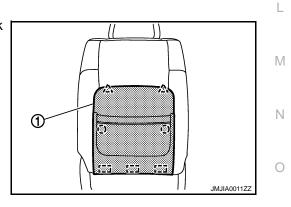
· Disconnect the seat control switch, lumbar support switch and side support switch harness connectors.

- Remove the reclining device outer cover (front, rear).
- 2. Remove the seat cushion inner finisher.
 - Remove the reclining device inner covers (front, rear) by releasing the metal clip and pull it up together with the cover.
 - Remove the relining device inner covers (front, rear) from the seat cushion inner finisher by releasing the pawls.
 - : Metal clip



- 3. Remove the back board.
 - Remove the metal clips and clips, and then pull out seatback board (1).
 - Pull down the seatback board to release the upper pawls.

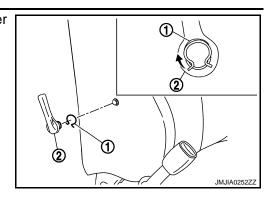




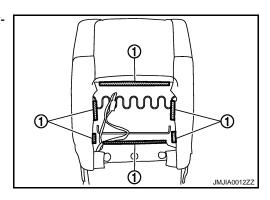
Remove the lumbar support lever knob. (Manual lumbar support model only.) 4.

< REMOVAL AND INSTALLATION >

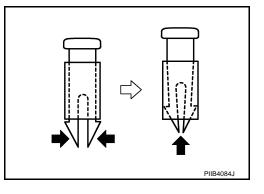
Pull snap ring (1) upward, and remove lumbar support lever knob (2) from seatback frame with hook and pick tool.



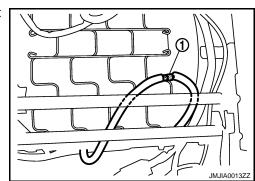
- 5. Remove the seatback pad and trim.
 - Remove the seatback retainer (1) on the back side of the seatback.



 Remove the headrest holder.
 CAUTION: Before installing headrest holder check its orientation. (front/rear and right/left)



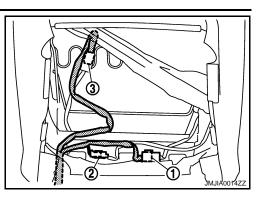
- Remove the side air bag module.
- Remove the side support hose joint (1) located under the seat cushion. (Side support model only.)



• Disconnect the seatback heater unit harness connector.

< REMOVAL AND INSTALLATION >

- Disconnect the reclining motor harness connector (1) and remove the harness clamp.
- Disconnect the lumbar support motor harness connector (2) and remove the harness clamp. (Power lumbar support model only.)
- Disconnect the side support unit harness connector (3) and remove the harness clamp. (Side support model only.)



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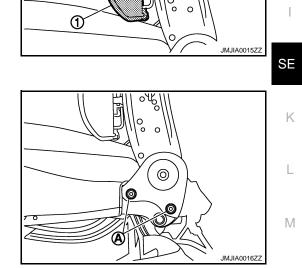
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- Remove the seatback pad and seatback trim from the seatback frame.
- Remove the hog rings, and separate the trim and pad.
- 6. Remove the seatback silencer.
- 7. Remove the lumbar support motor. (Power lumbar support model only.)
 - Remove the bolts, and then remove lumbar support unit.
 - Remove the screws, and then remove lumbar support motor.
- 8. Remove the side support bag and unit. (Side support model only.)
 - Remove the pawls, and then remove side support bag (1).
 - Remove the side support unit.

2 : Pawl

 Remove the seatback frame. Remove the seatback frame mounting bolts (A).



Assembly

Assemble in the reverse order of disassembly.

CAUTION:

Install the hog rings of seatback trim in position, and then securely connect the trim or trim cord with the pad side wire.

SEAT CUSHION

Disassembly

CAUTION:

- Never disassemble front passenger seat cushion assembly.
- Always replace as an assembly.
- For front passenger seat service parts, refer to the service part catalogue.
- 1. Remove the seat cushion outer finisher.

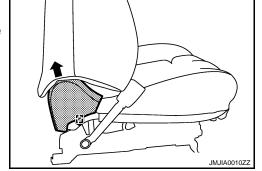
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< REMOVAL AND INSTALLATION >

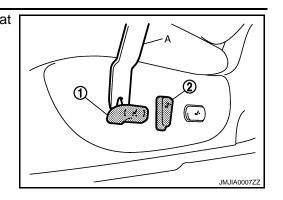
• Remove the seat slide and lifter switch knob (1) and seat reclining switch knob (2). Using a remover tool (A).

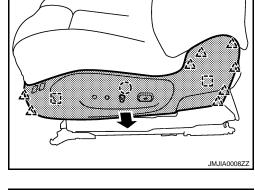
- Remove the metal clips, clips and pawls, and then pull out seat cushion outer finisher.
 - (`) : Clip
 [`] : Metal clip
 ∴ : Pawl
- Disconnect the seat control switch, lumbar support switch and side support switch harness connectors.

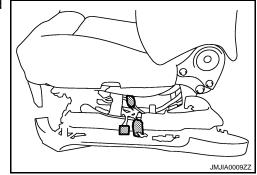
- Remove the reclining device outer cover (front, rear).
- 2. Remove the seat cushion inner finisher.
 - Remove the reclining device inner covers (front, rear) by releasing the metal clip and pull it up together with the cover.
 - Remove the relining device inner covers (front, rear) from the seat cushion inner finisher by releasing the pawls.
 - []] : Metal clip



3. Remove the seat cushion front finisher.



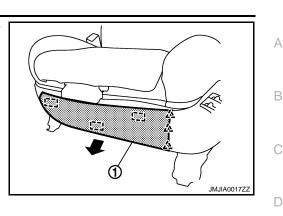




< REMOVAL AND INSTALLATION >

Remove the metal clips, and then pull out seat cushion front finisher (1).

- : Metal clip
- : Pawl



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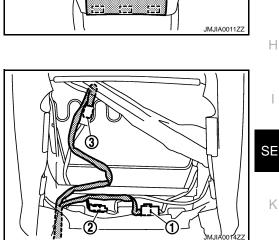
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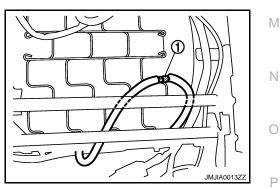
- 4. Remove the seatback board.
 - Remove the metal clips and clips, and then pull out seatback board (1).
 - Pull down the seatback board to release the upper pawls.



- Remove the seatback assembly.
 - Disconnect the reclining motor harness connector (1) and remove the harness clamp.
 - Disconnect the lumbar support motor harness connector (2) and remove the harness clamp. (Power lumbar support model only.)
 - Disconnect the side support unit harness connector (3) and remove the harness clamp. (Side support model only.)



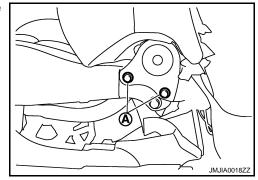
- Remove the seat cushion retainer, and then side air bag harness clamp and seatback heater unit harness connector.
- Remove the side support hose joint (1) located under the seat cushion. (Side support model only.)

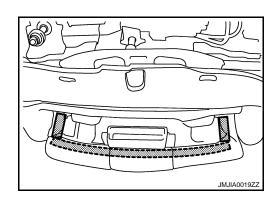


< REMOVAL AND INSTALLATION >

• Remove the seatback mounting bolts (A), and then remove the seatback assembly.

6. Remove the thigh extension. (Thigh extension model only.)• Remove the retainer.

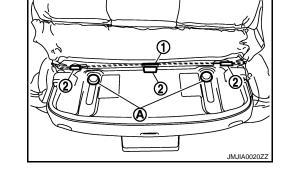


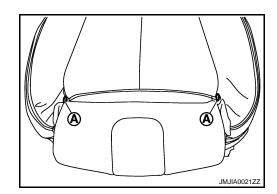


- Remove the thigh extension pad.
- Remove the mounting screws (A).

7. Remove the seat cushion pad and trim.

- Remove the seat cushion trim wire (1) from the hooks (2).
- Remove the thigh extension frame by sliding it.

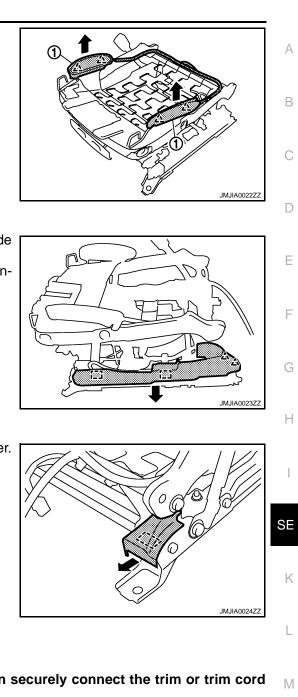




• Remove the clips (A). (Thigh extension model only.)

- Remove the retainer.
- Disconnect the seat cushion heater unit harness connector.
- Remove the hog rings, and separate the trim and pad.
- 8. Remove the side support bag. (Side support model only.)• Remove the hose clamp.

- Remove the pawls, and then remove side support bag (1).
 - ∠____: Pawl



- 9. Remove the seat slide outer finisher.
 - Remove the metal clips and pawls, and then pull out seat slide outer finisher (outside).
 - Remove the metal clip, and then pull out seat slide outer finisher (inside).
 - [] : Metal clip
- 10. Remove the seat slide inner finisher. Remove the metal clip, and then pull out seat slide inner finisher.
 - : Metal clip



Assemble in the reverse order of disassembly.

CAUTION:

Install the hog rings of seat cushion trim in position, and then securely connect the trim or trim cord with the pad side wire.

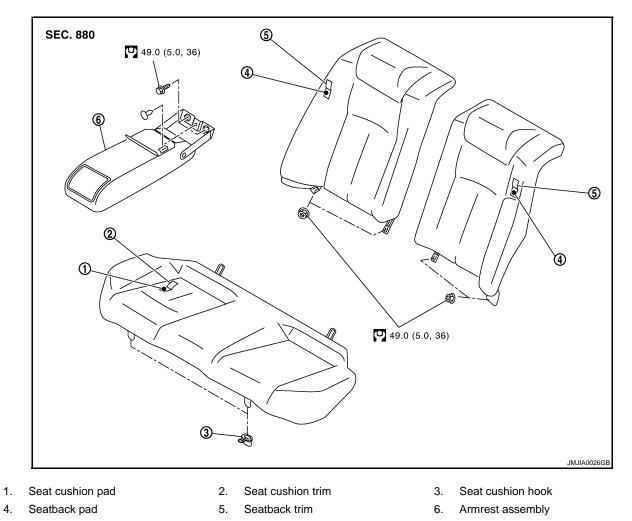
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REAR SEAT

Exploded View

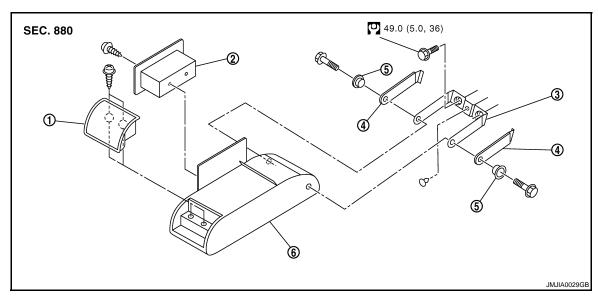
REAR SEAT

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Refer to $\underline{GI-4}$, "Components" for symbols in the figure.

ARMREST



REAR SEAT

< REMOVAL AND INSTALLATION >

1. Cup holder

2. Armrest side console

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- 3. Armrest bracket
- 6. Armrest trim and pad

Refer to <u>GI-4, "Components"</u> for symbols in the figure.

Removal and Installation

4. Armrest bracket outer cover

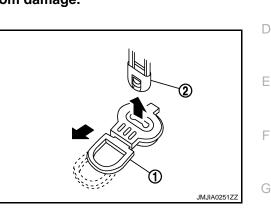
REMOVAL

CAUTION:

When removing and installing, use shop cloths to protect parts from damage.

5.

- 1. Remove the seat cushion.
 - Pull the lock lever (1) at the front bottom of the seat cushion forward (1 for each side), and pull the seat cushion upward to release the wire (2) from the seat cushion hook. Then pull the seat cushion forward to remove.
 - Remove the seat cushion from the vehicle.



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2.	 Remove the seatback. Remove the nuts under seatback. 	Н
	 Lift up seatback from underneath, and then remove seatback from seatback hook that is fixed to the vehicle. 	e
	Remove the seatback from the vehicle.	
3.	 Remove the armrest assembly. Remove the fastener. Remove the armrest mounting bolts. Remove the clip. Remove the armrest assembly from the vehicle. 	SE
Inst CA	TALLATION all in the reverse order of removal. UTION: en removing and installing, use shop cloths to protect parts from damage.	K
Dis	assembly and Assembly	L 17
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	assembly nove the hog rings, and separate the trim and pad.	N
	embly emble in the reverse order of disassembly.	IN
SE	AT CUSHION	0
	assembly nove the hog rings, and separate the trim and pad.	D
	embly emble in the reverse order of disassembly.	Ρ
ARI	MREST	
Disa	assembly	
1.	Remove the screws, and then remove the cup holder.	

2. Remove the screws, and then remove the armrest side console

- 3. Remove the bolts, and then remove the armrest bracket.
- 4. Remove the armrest bracket outer cover from armrest bracket.

Assembly

Assemble in the reverse order of disassembly.

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

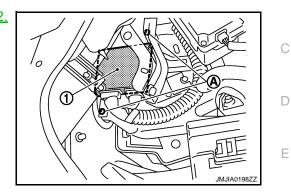
< REMOVAL AND INSTALLATION >

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

Removal and Installation

REMOVAL

- 1. Remove the instrument driver lower panel. Refer to <u>IP-12.</u> <u>"Removal and Installation"</u>.
- 2. Remove the screws (A).
- 3. Remove automatic drive positioner control unit (1).



INSTALLATION Install in the reverse order of removal. CAUTION:

• Be sure to clamp the harness to the right place.

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HEATED SEAT CONTROL UNIT

< REMOVAL AND INSTALLATION >

HEATED SEAT CONTROL UNIT

Exploded View

Refer to SE-112, "Exploded View".

Removal and Installation

REMOVAL

When removing and installing, use shop cloths to protect parts from damage.

- 1. Remove the front seat.
- 2. Disconnect heated seat control unit connector.
- 3. Remove the heated seat control unit from the heated seat control unit stay. Refer to <u>SE-112</u>, "Exploded <u>View"</u>.

INSTALLATION Install in the reverse order of removal. CAUTION: Always clamp the harness to the right place. INFOID:000000004535509

POWER SEAT SWITCH

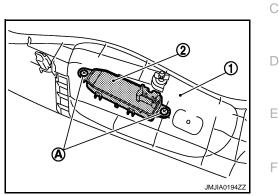
Removal and Installation

REMOVAL

CAUTION:

When removing and installing, use shop cloths to protect parts from damage.

- 1. Remove the seat cushion outer finisher (1). Refer to <u>SE-115.</u> <u>"Removal and Installation"</u>.
- 2. Remove the screws (A).
- 3. Remove the power seat switch (2) from the seat cushion outer finisher (1).



INSTALLATION Install in the reverse order of removal.

CAUTION:

• Be sure to clamp the harness to the right place.

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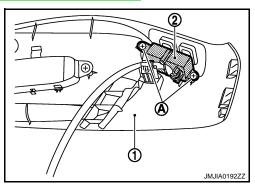
SIDE SUPPORT SWITCH

Removal and Installation

REMOVAL

CAUTION: When removing and installing, use shop cloths to protect parts from damage.

- 1. Remove the seat cushion outer finisher (1). Refer to <u>SE-115, "Removal and Installation"</u>.
- 2. Remove the screws (A).
- 3. Remove side support switch (2) from the seat cushion outer finisher.



INSTALLATION Install in the reverse order of removal. CAUTION:

• Be sure to clamp the harness to the right place.

LUMBAR SUPPORT SWITCH

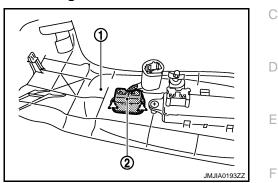
Removal and Installation

REMOVAL

CAUTION:

When removing and installing, use shop cloths to protect parts from damage.

- 1. Remove the seat cushion outer finisher (1). Refer to <u>SE-115.</u> <u>"Removal and Installation"</u>
- 2. Remove lumbar support switch (2).



INSTALLATION Install in the reverse order of removal. CAUTION: • Be sure to clamp the harness to the right place.

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TILT&TELESCOPIC SWITCH

Removal and Installation

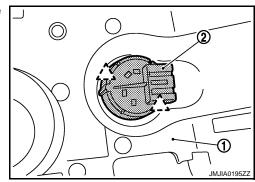
REMOVAL

CAUTION:

When removing and installing, use shop cloths to protect parts from damage.

- 1. Disconnect battery negative terminal.
- 2. Remove the steering column mask (1). Refer to IP-12, "Removal and Installation".
- 3. Press pawls and remove tilt & telescopic switch (2) from the steering column mask (1).





INSTALLATION Install in the reverse order of removal. CAUTION: • Be sure to clamp the harness to the right place.

HEATED SEAT SWITCH

< REMOVAL AND INSTALLATION >

HEATED SEAT SWITCH

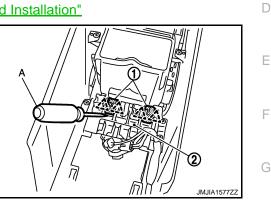
Exploded View INFOLD.00000004679111 Refer to IP-23, "Exploded View". INFOLD.00000004679112 Removal and Installation INFOLD.00000004679112 REMOVAL CAUTION: When removing and installing, use shop cloths to protect from damage. INFOLD.00000004679112

- 1. Remove the console body assembly. Refer to IP-24. "Removal and Installation"
- 2. Remove heated seat switch (1) from switch bracket (2) with flatbladed screwdriver (A).

: Pawl

NOTE:

The same procedure is performed for passenger side.



INSTALLATION

Install in the reverse order of removal.

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