

# HOW TO USE THIS MANUAL

< HOW TO USE THIS MANUAL >

**Drive Shaft Installation Bolt : 44.3 N-m (4.5 kg-m, 33 ft-lb)**

## Contents

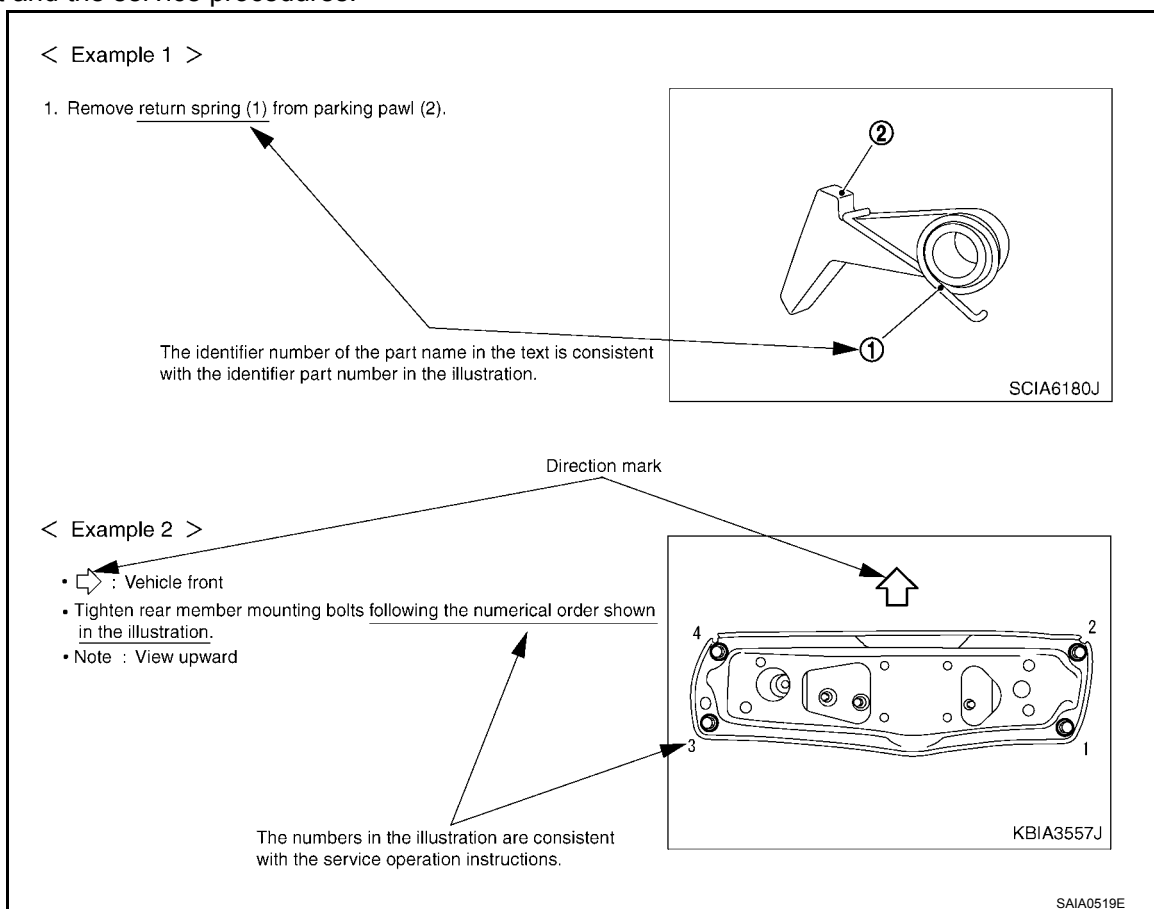
INFOID:0000000014628252

- **A QUICK REFERENCE INDEX**, a black tab (e.g. **BR**) is provided on the first page. You can quickly find the first page of each section by matching it to the section's black tab.
- **THE CONTENTS** are listed on the first page of each section.
- **THE TITLE** is indicated on the upper portion of each page and shows the part or system.
- **THE PAGE NUMBER** of each section consists of two or three letters which designate the particular section and a number (e.g. "BR-5").
- **THE SMALL ILLUSTRATIONS** show the important steps such as inspection, use of special tools, knacks of work and hidden or tricky steps which are not shown in the previous large illustrations. Assembly, inspection and adjustment procedures for the complicated units such as the automatic transaxle or transmission, etc. are presented in a step-by-step format where necessary.

## Relation between Illustrations and Descriptions

INFOID:0000000014628253

The following sample explains the relationship between the part description in an illustration, the part name in the text and the service procedures.



## Components

INFOID:0000000014628254

- **THE LARGE ILLUSTRATIONS** are exploded views (see the following) and contain tightening torques, lubrication points, section number of the **PARTS CATALOG** (e.g. SEC. 440) and other information necessary to perform repairs. The illustrations should be used in reference to service matters only. When ordering parts, refer to the appropriate **PARTS CATALOG**. Components shown in an illustration may be identified by a circled number. When this style of illustration is used, the text description of the components will follow the illustration.

# LIFTING POINT

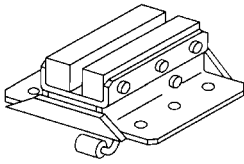
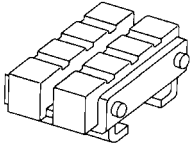
< PRECAUTION >

## LIFTING POINT

### Special Service Tool

INFOID:0000000014628276

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
LM4086-0200 ( - ) Board on attachment	 <p>S-NT001</p>
LM4519-0000 ( - ) Safety stand attachment	 <p>S-NT002</p>

### CAUTION:

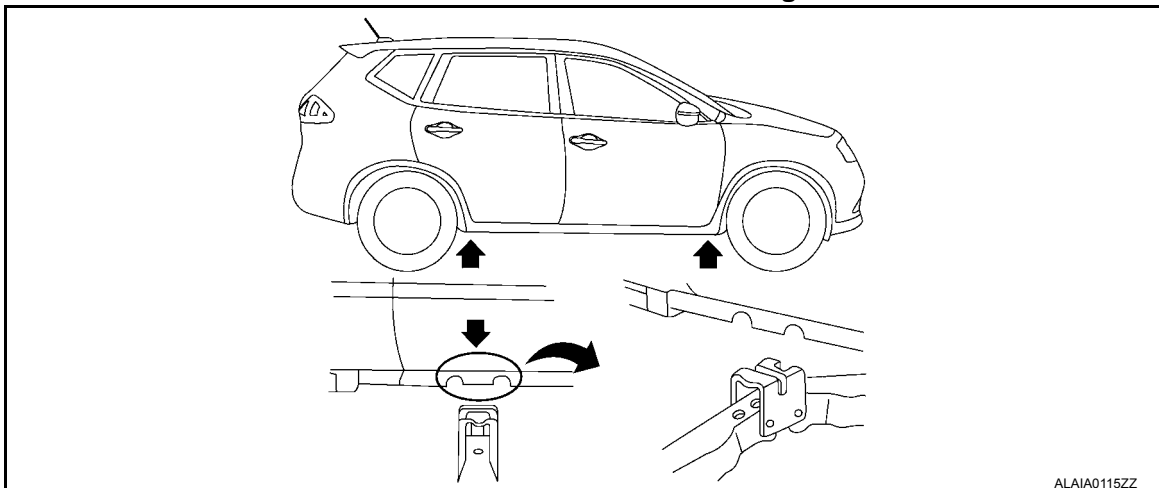
- Every time the vehicle is lifted up, maintain the complete vehicle curb condition.
- Since the vehicle's center of gravity changes when removing main parts on the front side (engine, transmission, suspension etc.), support a jack up point on the rear side garage jack with a transmission jack or equivalent.
- Since the vehicle's center of gravity changes when removing main parts on the rear side (rear axle, suspension, etc.), support a jack up point on the front side garage jack with a transmission jack or equivalent.
- Be careful not to smash or do anything that would affect piping parts.

### Pantograph Jack

INFOID:0000000014628277

### WARNING:

- Never get under the vehicle while it is supported only by the jack. Always use safety stands to support the frame when you have to get under the vehicle.
- Place wheel chocks at both front and back of the wheels on the ground.



# P3112 STOP LAMP SWITCH

< DTC/CIRCUIT DIAGNOSIS >

## P3112 STOP LAMP SWITCH

### DTC Description

INFOID:0000000014736230

### DTC DETECTION LOGIC

DTC	CONSULT screen terms (Trouble diagnosis content)	DTC detection condition	
		Diagnosis condition	—
P3112	STOP LAMP SWITCH (Stop lamp switch)	Signal (terminal)	Stop lamp switch signal
		Threshold	Stop lamp switch is ON state for extremely long time.
		Diagnosis delay time	—

### POSSIBLE CAUSE

- Harness or connectors (Stop lamp switch circuit is shorted.)
- Stop lamp switch

### FAIL-SAFE

Not applicable

### DTC CONFIRMATION PROCEDURE

#### 1.PERFORM COMPONENT FUNCTION CHECK

##### NOTE:

Use component function check to check the overall function of the stop lamp switch circuit. During this check, a DTC might not be confirmed.

##### Ⓔ With CONSULT

1. Select "STOP LAMP SW" in "DATA MONITOR" mode of "EV/HEV" using CONSULT.
2. Check that monitor indication as per the following condition.

Monitor item	Condition		Indication
STOP LAMP SW	Brake pedal	Slightly depressed	On
		Fully released	Off

##### ⓧ Without CONSULT

1. Turn ignition switch OFF.
2. Check for stop lamp illumination as per the following condition.

Brake pedal	Stop lamp
Fully released	Not illuminated
Slightly depressed	Illuminated

##### Is the inspection result normal?

YES >> Proceed to [HBC-253. "Diagnosis Procedure"](#).

NO-1 >> To check malfunction symptom before repair: Refer to [GI-54. "Intermittent Incident"](#).

NO-2 >> Confirmation after repair: INSPECTION END

### Diagnosis Procedure

INFOID:0000000014736231

#### 1.CHECK STOP LAMP SWITCH OPERATION

1. Turn ignition switch OFF.
2. Check the stop lamp when depressing and releasing the brake pedal.

# U0101 LOST COMMUNICATION TCM

< DTC/CIRCUIT DIAGNOSIS >

## U0101 LOST COMMUNICATION TCM

### DTC Description

INFOID:0000000014844898

### DTC DETECTION LOGIC

DTC	Trouble diagnosis (Trouble diagnosis contents)	Detecting condition	
		Diagnosis condition	When ignition switch is ON
U0101	LOST COMMUNICATION TCM (Lost communication transmission control module)	Signal (terminal)	CAN communication signal
		Threshold	LBC cannot receive a CAN communication signal from TCM
		Diagnosis delay time	2 seconds or more

### POSSIBLE CAUSES

Harness or connector  
(CAN communication line open or short)

### FAIL-SAFE

WARNING LAMP ON (P3180 is detected in HPCM)  
• Illuminate hybrid system warning lamp

### DTC CONFIRMATION PROCEDURE

#### 1. PREPARATION BEFORE STARTING OPERATIONS

If other DTC confirmation procedure is performed immediately before this procedure, turn the ignition switch OFF and wait at least 10 seconds to start the next test.

>> GO TO 2.

#### 2. PERFORM DTC CONFIRMATION PROCEDURE

##### Ⓔ WITH CONSULT

1. Perform work procedure (inspection mode 5). Refer to [HBC-115, "Work Procedure \(Inspection Mode 5\)"](#).
2. Start the engine and wait for 5 seconds or more.
3. Perform "All DTC Reading" with CONSULT.
4. Check if the DTC is detected in "Self Diagnostic Result" of "MOTOR CONTROL".

Is U0100, U0101, U0111 or U0293 detected?

YES >> GO TO 3.

NO-1 >> DTC U0100, U0101, U0111 or U0293 is stored in "Motor Control" at the time of receiving: GO TO 3.

NO-2 >> Confirmation after repair: INSPECTION END

#### 3. PERFORM CAN DIAGNOSIS

##### Ⓔ WITH CONSULT

1. Perform "CAN DIAGNOSIS"
2. Check diagnosis result.

>> Refer to [HBB-137, "Diagnosis Procedure"](#).

### Diagnosis Procedure

INFOID:0000000014844899

#### CAUTION:

- To perform diagnosis, observe the cautions in performing diagnoses. Refer to [LAN-32, "Precautions for Trouble Diagnosis"](#).
- To repair harnesses, observe the cautions in repairing harnesses. Refer to [LAN-32, "Precautions for Harness Repair"](#).

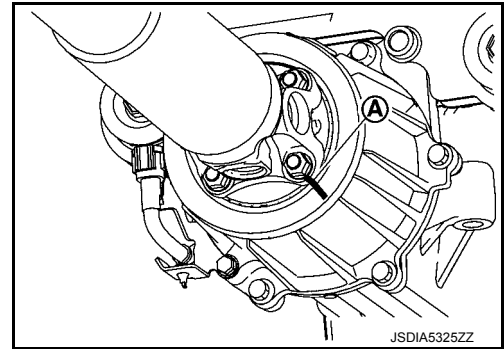
#### 1. START INSPECTION

# REAR PROPELLER SHAFT

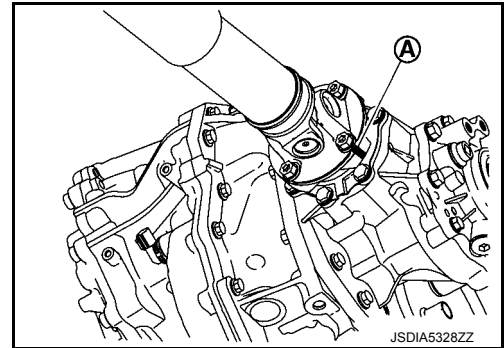
## < REMOVAL AND INSTALLATION >

### [REAR PROPELLER SHAFT: C-CVJ-C]

- Align matching marks (A) made during removal, install propeller shaft flange yoke and electric controlled coupling of final drive.



- Align matching marks (A) made during removal, to install propeller shaft flange yoke and transfer companion flange.

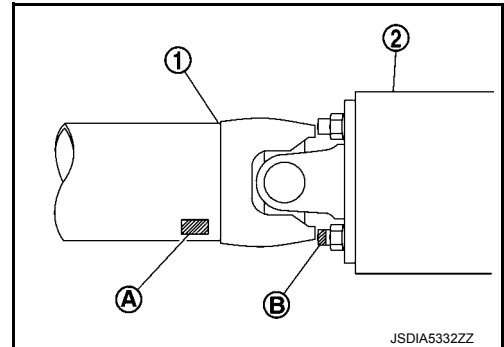


- If a new propeller shaft assembly, final drive assembly or electric controlled coupling has been installed, connect propeller shaft assembly and electric controlled coupling of final drive as follows:
- Install propeller shaft (1) while aligning its matching mark (A) of propeller shaft with matching mark (B) on stud bolt of electric controlled coupling (2) as close as possible.

#### CAUTION:

If a new stud bolt is installed, use the painted matching mark in removal as a guide.

- Perform inspection after installation. Refer to [DLN-109, "Inspection"](#).



INFOID:0000000014914646

## Inspection

### INSPECTION AFTER REMOVAL

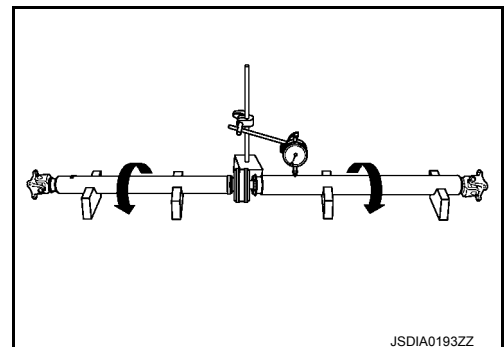
#### Appearance

Check propeller shaft tube surface for dents or cracks. If malfunction is detected, replace propeller shaft assembly.

#### Propeller Shaft Runout

Check propeller shaft runout at measuring points with a dial indicator. If runout exceeds specifications, install a new propeller shaft assembly.

**Propeller shaft runout** : Refer to [DLN-105, "Inspection"](#).

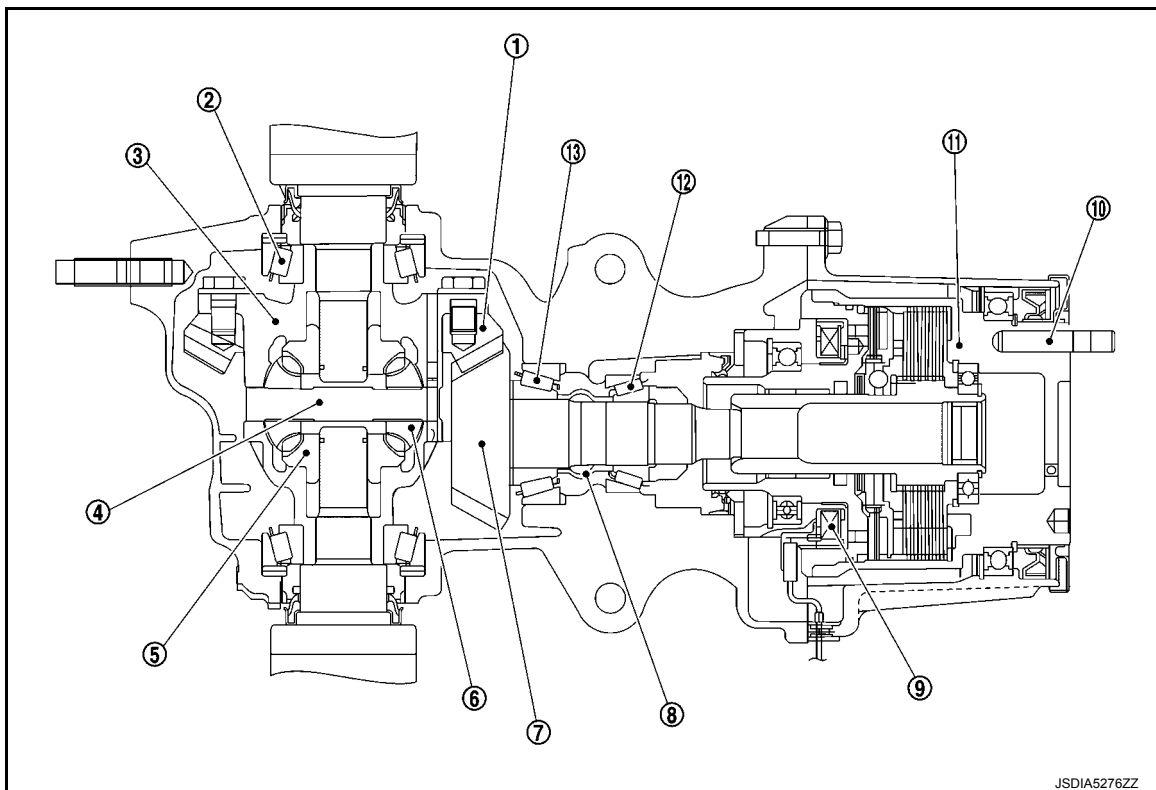


## SYSTEM DESCRIPTION

## STRUCTURE AND OPERATION

## Sectional View

INFOID:0000000014630266



- |                       |                                |                        |
|-----------------------|--------------------------------|------------------------|
| ① Drive gear          | ② Side bearing                 | ③ Differential case    |
| ④ Pinion mate shaft   | ⑤ Side gear                    | ⑥ Pinion mate gear     |
| ⑦ Drive pinion        | ⑧ Collapsible spacer           | ⑨ AWD solenoid         |
| ⑩ Stud bolt           | ⑪ Electric controlled coupling | ⑫ Pinion front bearing |
| ⑬ Pinion rear bearing |                                |                        |

## Electric Controlled Coupling

INFOID:0000000014630267

The electric controlled coupling operates as the AWD system. For the operation, refer to [DLN-15, "Operation Description"](#).

# BRAKE PEDAL

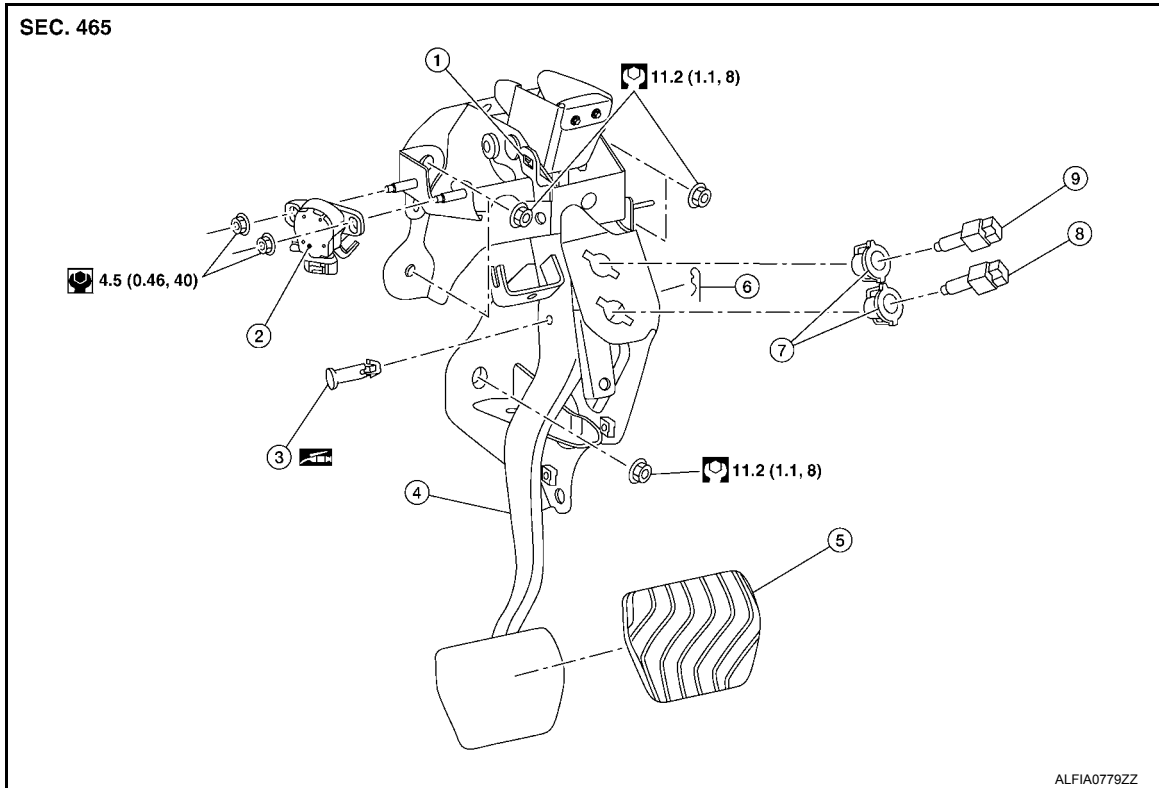
< REMOVAL AND INSTALLATION >

## REMOVAL AND INSTALLATION

### BRAKE PEDAL

#### Exploded View

INFOID:0000000014900143



- |                |                        |                                |
|----------------|------------------------|--------------------------------|
| 1. Rivet       | 2. Brake stroke sensor | 3. Clevis pin                  |
| 4. Brake pedal | 5. Brake pedal pad     | 6. Snap pin                    |
| 7. Clip        | 8. Stop lamp switch    | 9. Brake pedal position switch |

### Removal and Installation

INFOID:0000000014900144

#### REMOVAL

1. Remove instrument lower panel LH. Refer to [IP-22, "Removal and Installation"](#).
2. Remove the knee protector. Refer to [IP-14, "Exploded View"](#).
3. Remove snap pin and clevis pin from clevis of brake booster.
4. Disconnect the harness connectors from the stop lamp switch, brake pedal position switch and brake stroke sensor.
5. Remove the accelerator pedal. Refer to [ACC-3, "Removal and Installation"](#).
6. Remove the brake pedal.

#### CAUTION:

**Support the brake booster and master cylinder to prevent contact with other components.**

#### INSPECTION AFTER REMOVAL

- Check the following items and replace the brake pedal assembly if necessary.
  - Check the brake pedal rivet for deformation or damage.
  - Check the brake pedal for bend, damage, and cracks on the welded parts.



# COMPONENT PARTS

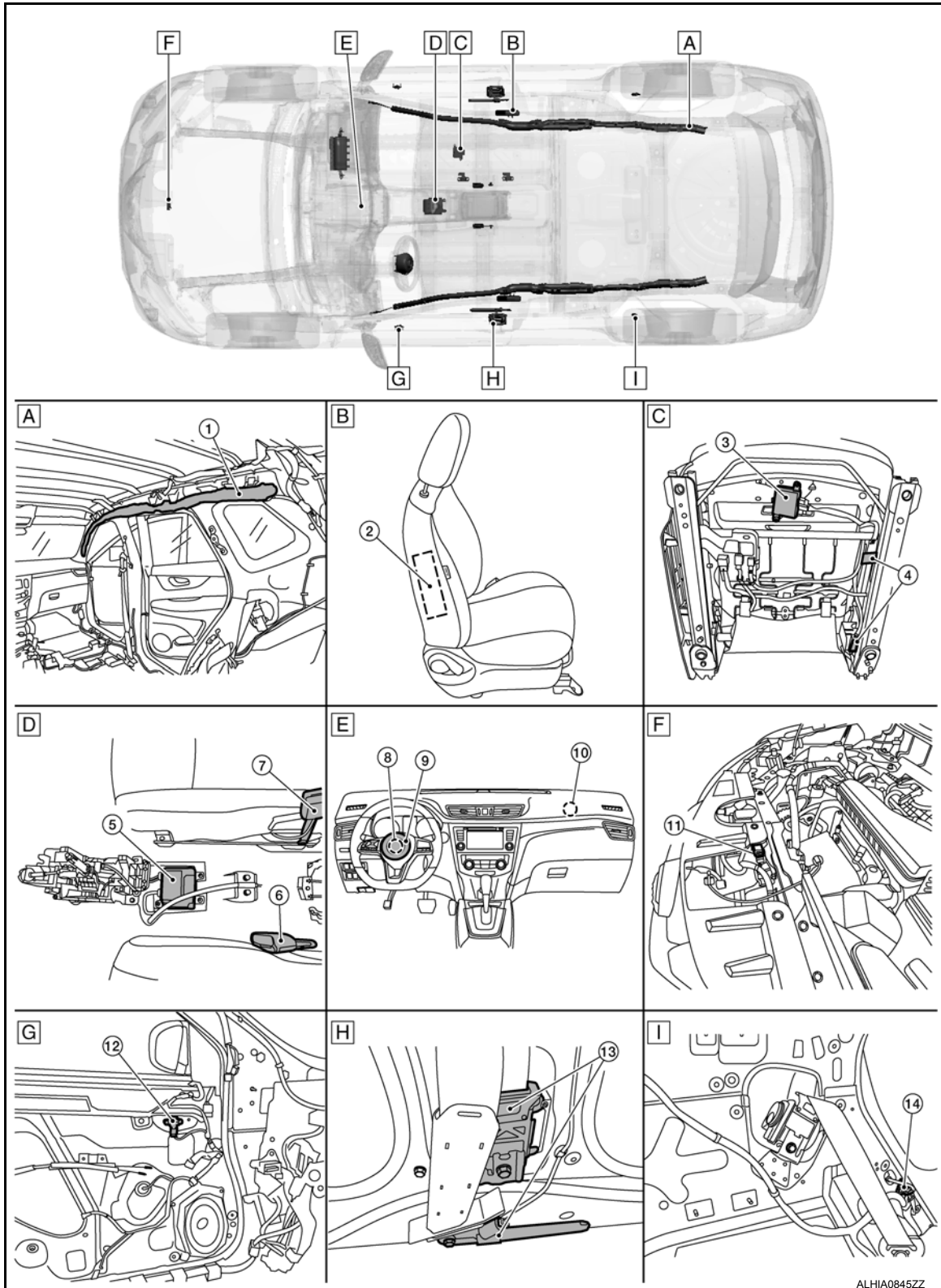
< SYSTEM DESCRIPTION >

## SYSTEM DESCRIPTION

### COMPONENT PARTS

#### Component Parts Location

INFOID:0000000014626060



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P

SRC



# POWER SEAT FOR DRIVER SIDE

< WIRING DIAGRAM >

## POWER SEAT FOR DRIVER SIDE CONNECTORS - WITHOUT AUTOMATIC DRIVE POSITIONER

Connector No.	B42
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS
Connector Color	WHITE




1	2	3	4		5	6	7	
8	9	10	11	12	13	14	15	16

5	-	TO FRONT SEAT LH HARNESS
6	LA/BG	TO FRONT SEAT LH HARNESS

Connector No.	B202
Connector Name	WIRE TO WIRE
Connector Type	NS06MW-CS
Connector Color	WHITE



1		2
3	4	5
		6

Terminal No.	Color of Wire	Signal Name
1	LG	TO MAIN HARNESS
2	LG	TO MAIN HARNESS
3	V	TO MAIN HARNESS
4	LA/G	TO MAIN HARNESS
5	W	TO MAIN HARNESS
6	BG	TO MAIN HARNESS
7	LA/R	TO MAIN HARNESS
8	LA/R	TO MAIN HARNESS (WITH AUTOMATIC DRIVE POSITIONER)
8	LA/G	TO MAIN HARNESS (WITHOUT AUTOMATIC DRIVE POSITIONER)
9	LA/P	TO MAIN HARNESS
10	LA/R	TO MAIN HARNESS
11	LA/Y	TO MAIN HARNESS
12	LA/Y	TO MAIN HARNESS
13	LA/GR	TO MAIN HARNESS
14	LA/BG	TO MAIN HARNESS
15	LA/R	TO MAIN HARNESS
16	R	TO MAIN HARNESS

Connector No.	B92
Connector Name	WIRE TO WIRE
Connector Type	NS06FW-CS
Connector Color	WHITE



2	<div></div>	1
6	5	4
		3

Terminal No.	Color of Wire	Signal Name
1	LA/G	TO FRONT SEAT LH HARNESS
2	LA/B	TO FRONT SEAT LH HARNESS
3	-	TO FRONT SEAT LH HARNESS
4	LA/BR	TO FRONT SEAT LH HARNESS

AAJIA1491GB

Connector No.	B206
Connector Name	SLIDING MOTOR LH (WITHOUT AUTOMATIC DRIVE POSITIONER)
Connector Type	0 - 1379217-1
Connector Color	BLACK



1	2	3	4	5
---	---	---	---	---

Terminal No.	Color of Wire	Signal Name
1	SB	SLIDING MOTOR (BACKWARD)
2	-	-
3	-	-
4	-	-
5	L	SLIDING MOTOR (FORWARD)

Connector No.	B207
Connector Name	RECLINING MOTOR LH (WITHOUT AUTOMATIC DRIVE POSITIONER)
Connector Type	0 - 1379218-1
Connector Color	WHITE



1	2	3	4	5
---	---	---	---	---

Terminal No.	Color of Wire	Signal Name
1	BR	RECLINING MOTOR (BACKWARD)
2	-	-
3	-	-
4	-	-
5	P	RECLINING MOTOR (FORWARD)

Connector No.	B208
Connector Name	LIFTING MOTOR LH (WITHOUT AUTOMATIC DRIVE POSITIONER)
Connector Type	6098-2830
Connector Color	WHITE



4	5	
1	2	3

Terminal No.	Color of Wire	Signal Name
1	-	-
2	-	-
3	-	-
4	R	LIFTING MOTOR (DOWNWARD)
5	V	LIFTING MOTOR (UPWARD)

Connector No.	E36
Connector Name	WIRE TO WIRE
Connector Type	L02FB-MC
Connector Color	BLACK



1	2
---	---

Terminal No.	Color of Wire	Signal Name
1	-	TO MAIN HARNESS
2	W	TO MAIN HARNESS

## DOOR KEY CYLINDER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

BCM		Ground	Continuity
Connector	Terminal		
M19	92		No
	93		

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-73, "Removal and Installation"](#).

NO >> Repair or replace harness.

### 3.CHECK DOOR KEY CYLINDER SWITCH GROUND CIRCUIT

Check continuity between front door lock assembly LH harness connector and ground.

Front door lock assembly LH		Ground	Continuity
Connector	Terminal		
D23	4		Yes

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

### 4.CHECK DOOR KEY CYLINDER SWITCH

Refer to [DLK-224, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace front door lock assembly LH. Refer to [DLK-319, "DOOR LOCK : Removal and Installation"](#).

### 5.CHECK INTERMITTENT INCIDENT

Refer to [GI-54, "Intermittent Incident"](#).

>> Inspection End.

## Component Inspection

INFOID:0000000014910990

### 1.CHECK DOOR KEY CYLINDER SWITCH

1. Turn ignition switch OFF.
2. Disconnect front door lock assembly LH connector.
3. Check continuity between front door lock assembly LH terminals.

Front door lock assembly LH		Condition		Continuity
Terminal				
5	4	Driver side door key cylinder	Unlock	Yes
			Neutral / Lock	No
6			Lock	Yes
			Neutral / Unlock	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace front door lock assembly LH. Refer to [DLK-319, "DOOR LOCK : Removal and Installation"](#).

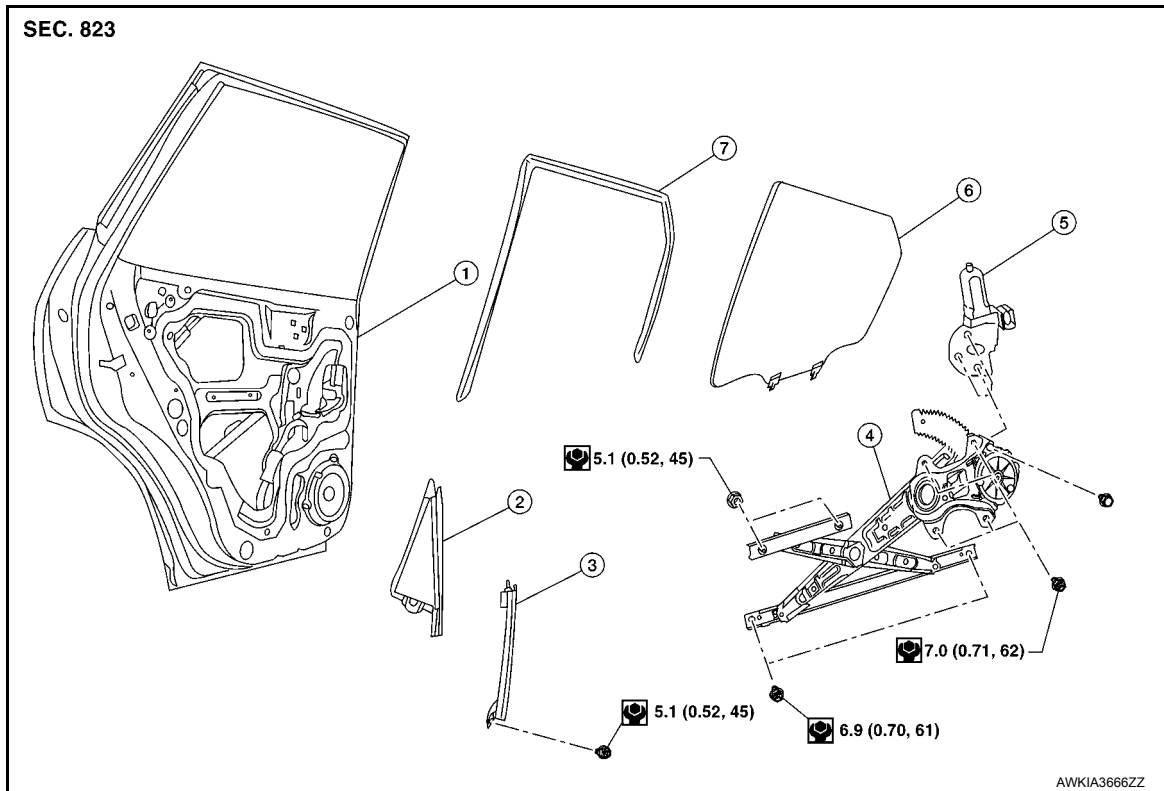
# REAR REGULATOR

< REMOVAL AND INSTALLATION >

## REAR REGULATOR

Exploded View

INFOID:0000000014625483



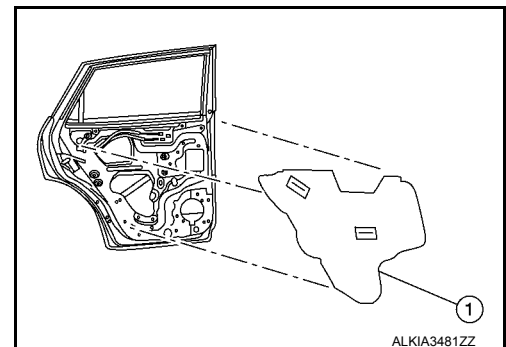
- |                                       |                                       |                                     |
|---------------------------------------|---------------------------------------|-------------------------------------|
| 1. Rear door panel                    | 2. Rear door glass corner finisher    | 3. Rear door glass rear run channel |
| 4. Rear door regulator assembly       | 5. Rear door glass power window motor | 6. Rear door glass                  |
| 7. Rear door glass rubber run channel |                                       |                                     |

## Removal and Installation

INFOID:0000000014625484

### REMOVAL

1. Remove the rear door finisher. Refer to [INT-18. "Removal and Installation"](#).
2. Remove rear door vapor barrier (1).



3. Temporarily reconnect the rear power window switch.

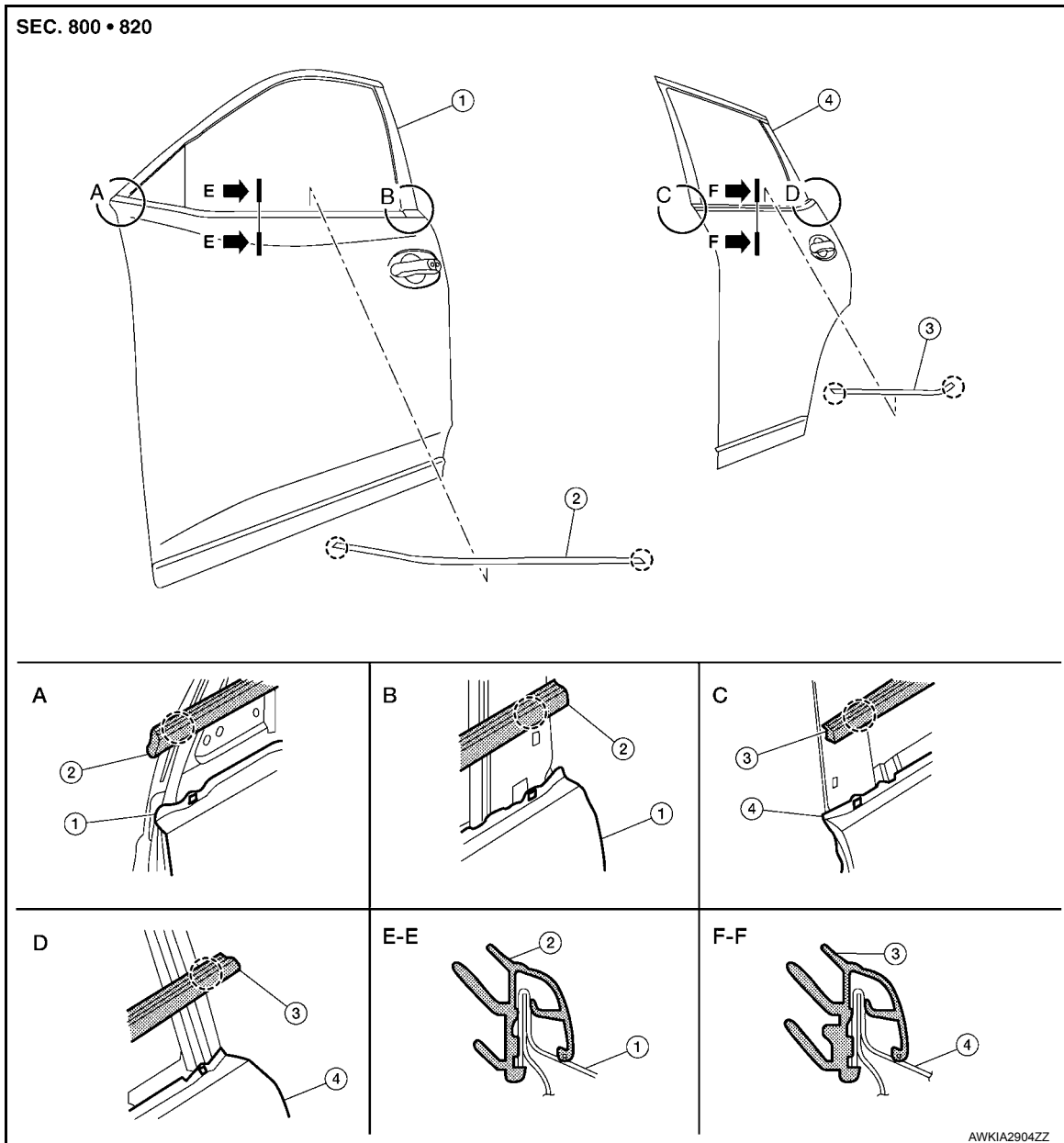
# DOOR OUTSIDE MOLDING

< REMOVAL AND INSTALLATION >

## DOOR OUTSIDE MOLDING

Exploded View

INFOID:0000000014625670



## Removal and Installation

INFOID:0000000014625671

### FRONT DOOR OUTSIDE MOLDING

#### Removal

1. Lower front door glass.
2. Remove door mirror. Refer to [MIR-23, "Removal and Installation"](#).

# TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

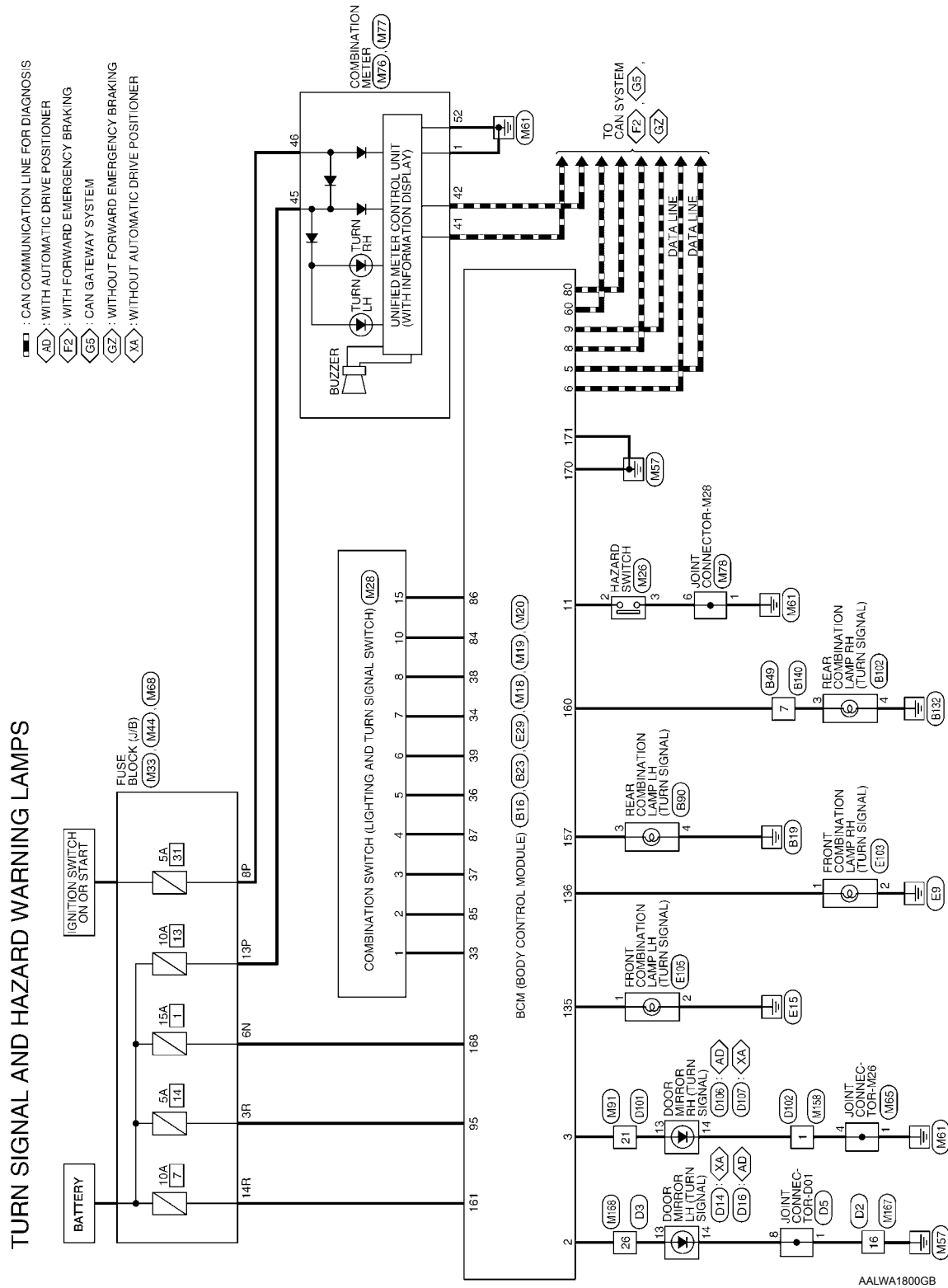
< WIRING DIAGRAM >

[HALOGEN HEADLAMP]

## TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

### Wiring Diagram

INFOID:0000000014623090

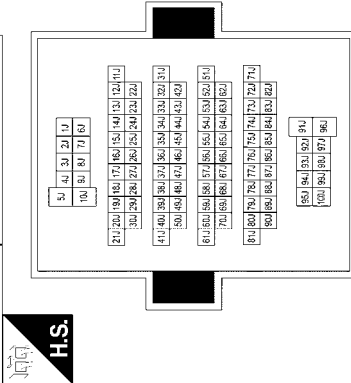


# REAR WIPER AND WASHER SYSTEM

< WIRING DIAGRAM >

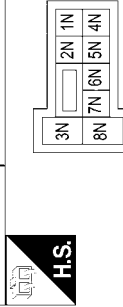
## REAR WIPER AND WASHER SYSTEM CONNECTORS

Connector No.	M31
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4
Connector Color	WHITE



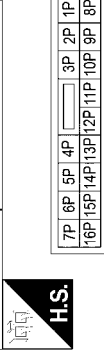
76J	-	TO ENGINE ROOM HARNESS
79J	SHIELD	TO ENGINE ROOM HARNESS
80J	B	TO ENGINE ROOM HARNESS
81J	W	TO ENGINE ROOM HARNESS
82J	-	TO ENGINE ROOM HARNESS
83J	-	TO ENGINE ROOM HARNESS
84J	-	TO ENGINE ROOM HARNESS
85J	-	TO ENGINE ROOM HARNESS
86J	-	TO ENGINE ROOM HARNESS
87J	-	TO ENGINE ROOM HARNESS
88J	-	TO ENGINE ROOM HARNESS
89J	-	TO ENGINE ROOM HARNESS
90J	-	TO ENGINE ROOM HARNESS
91J	-	TO ENGINE ROOM HARNESS
92J	Y	TO ENGINE ROOM HARNESS
93J	G	TO ENGINE ROOM HARNESS
94J	L	TO ENGINE ROOM HARNESS
95J	P	TO ENGINE ROOM HARNESS
96J	-	TO ENGINE ROOM HARNESS
97J	SB	TO ENGINE ROOM HARNESS
98J	P	TO ENGINE ROOM HARNESS
99J	LA/R	TO ENGINE ROOM HARNESS
100J	R	TO ENGINE ROOM HARNESS

Connector No.	M33
Connector Name	FUSE BLOCK (J/B)
Connector Type	CS06FW-M2
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1N	L	ACCESSORY RELAY 1 OUTPUT
2N	LG	BATTERY
3N	Y	FRONT BLOWER MOTOR RELAY OUTPUT
4N	LG	BATTERY
5N	R	BATTERY
6N	BG	BATTERY
7N	BR	ACCESSORY RELAY 1 CONTROL
8N	SB	FRONT BLOWER MOTOR RELAY OUTPUT

Connector No.	M44
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS16FW-CS
Connector Color	WHITE

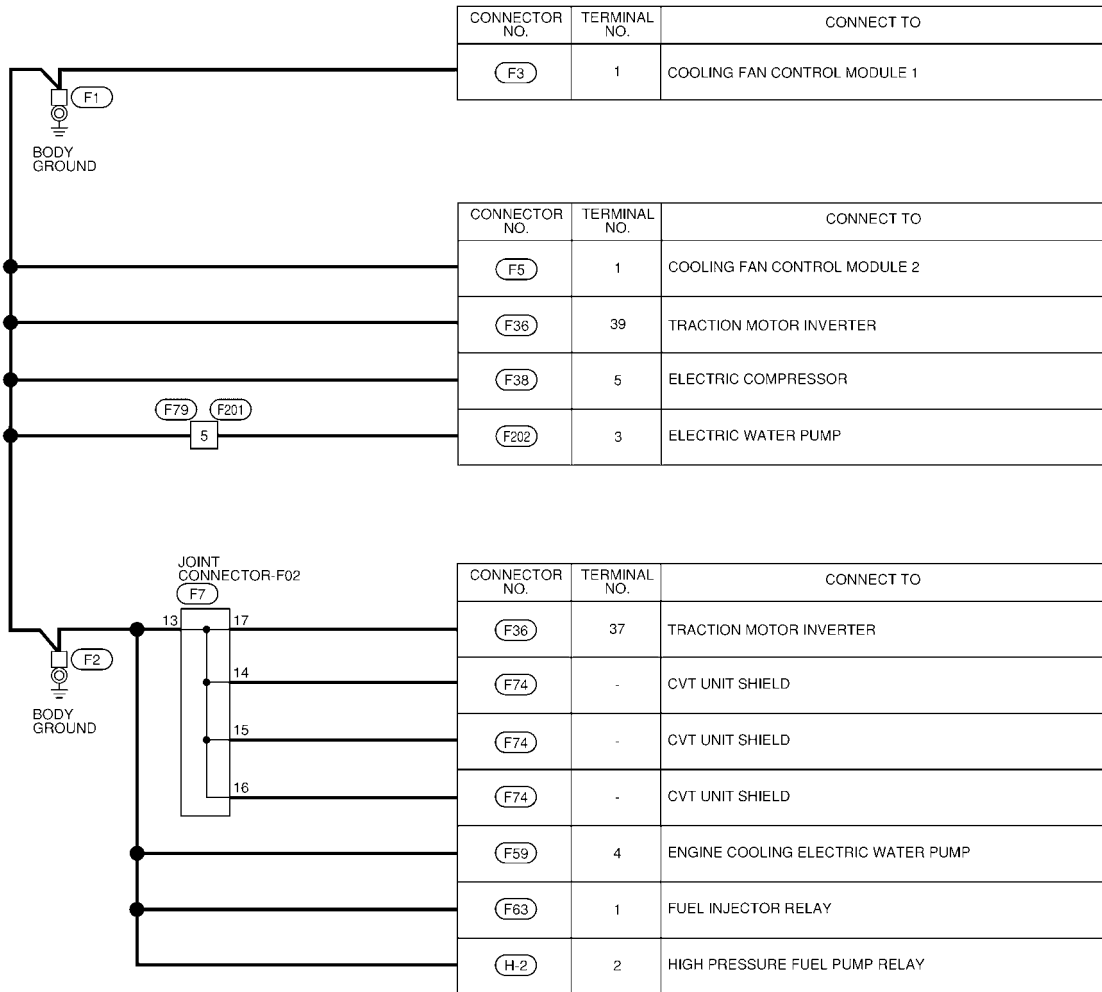
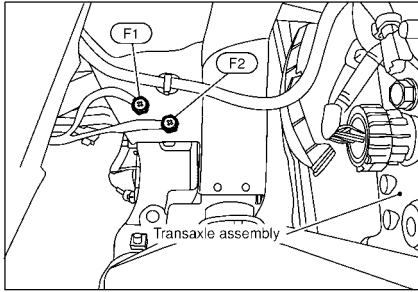


Terminal No.	Color of Wire	Signal Name
1P	R	IGNITION
2P	G	IGNITION
3P	Y	IGNITION RELAY-2 CONTROL
4P	LG	REAR WINDOW DEFOGGER RELAY OUTPUT
5P	GR	REAR WINDOW DEFOGGER RELAY OUTPUT
6P	LA/R	REAR WINDOW DEFOGGER RELAY CONTROL
7P	Y	IGNITION
8P	V	IGNITION
9P	L	BATTERY
10P	LG	IGNITION
11P	-	-
12P	-	-
13P	G	BATTERY
14P	-	-
15P	L	BATTERY
16P	LA/W	FRONT BLOWER MOTOR RELAY CONTROL

# GROUND

< WIRING DIAGRAM >

## ENGINE CONTROL HARNESS



AAMIA5468GB