SECTION DMS
DRIVE MODE SYSTEM

CONTENTS

PRECAUTION

PRECAUTIONS

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

INFOID:0000000010290950

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. Information necessary to service the system safely is included in the SR and SB section 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 SR section.**
- **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:

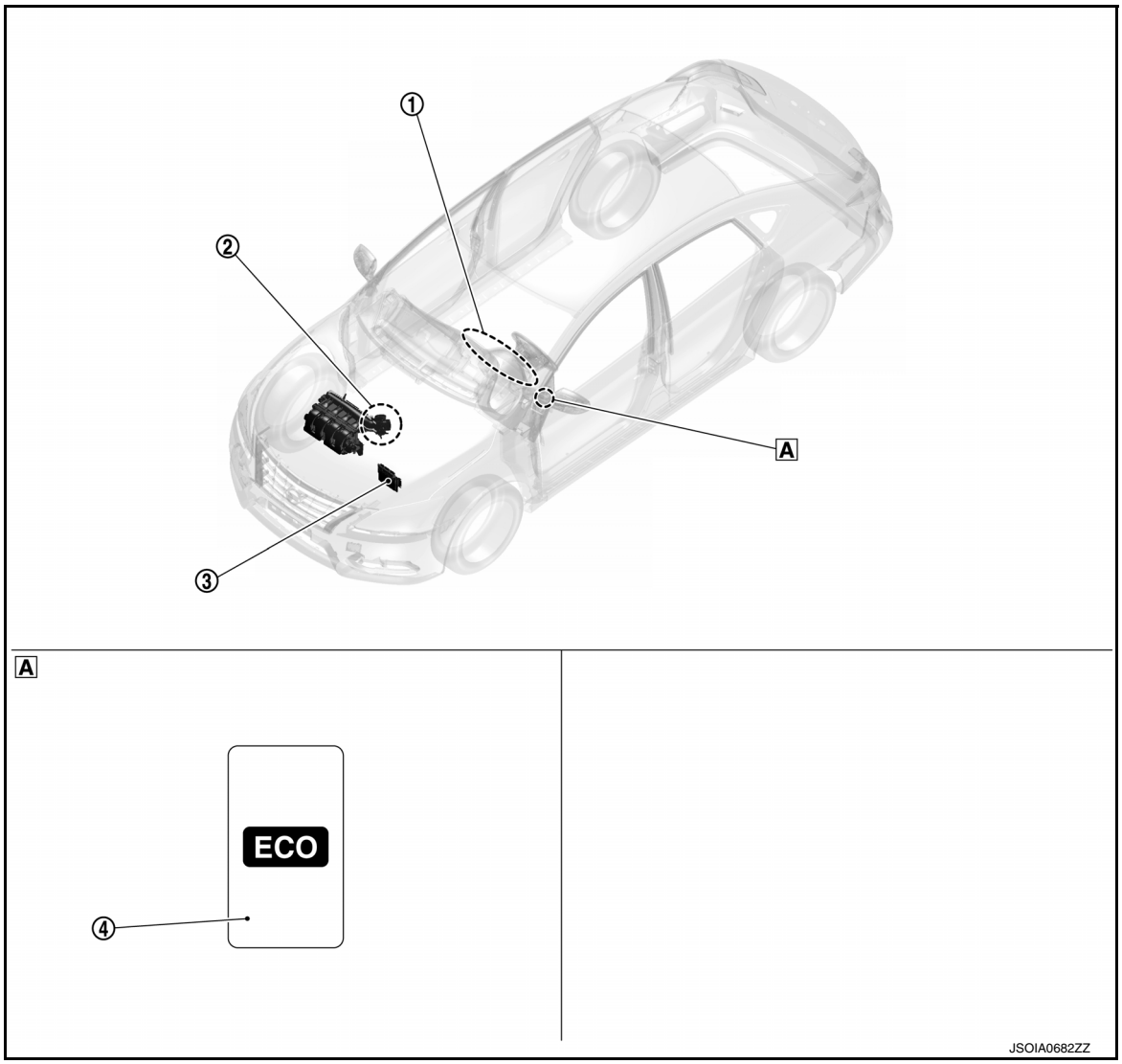
- **When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors with the Ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious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

SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

INFOID:0000000009755894



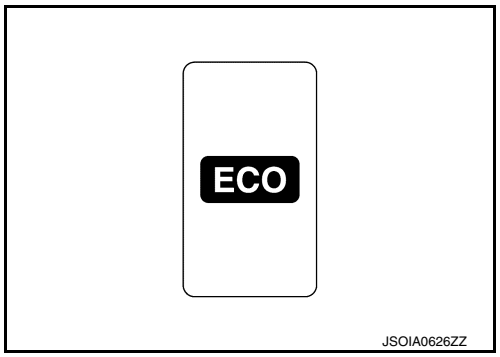
A Instrument lower finisher

No.	Component	Function
①	ECO mode indicator lamp	DMS-5, "ECO Mode Indicator Lamp"
②	Electric throttle control actuator	EC-22, "Electric Throttle Control Actuator"
③	ECM	EC-22, "ECM"
④	ECO mode switch	DMS-5, "ECO Mode Switch"

ECO Mode Switch

INFOID:0000000009755895

- The ECO mode switch is installed to the instrument lower finisher.
- When the ECO mode indicator lamp on the combination meter is OFF and the ECO mode switch is pressed, the ECO mode is active and the ECO mode indicator lamp is ON.
- When the ECO mode indicator lamp on the combination meter is ON and the ECO mode switch is pressed, the ECO mode is cancelled and the ECO mode indicator lamp is OFF.



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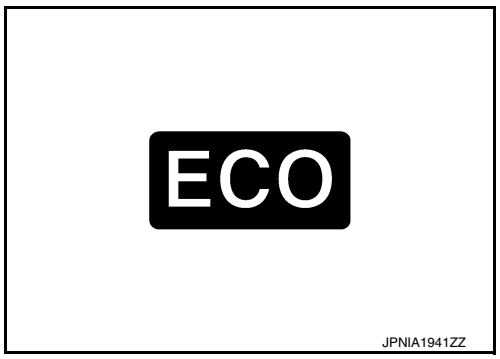
ECO Mode Indicator Lamp

INFOID:0000000009755896

DESIGN/PURPOSE

The ECO mode indicator lamp inform the driver that the vehicle is in ECO mode.



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SIGNAL PATH

- ECM receives ECO mode switch signal (ON/OFF) from combination meter via CAN communication.
- ECM transmits ECO mode indicator signal to combination meter via CAN communication. Based on the signal, combination meter illuminates ECO mode indicator lamp.

LIGHTING CONDITION

When all of the following conditions are satisfied.

- Ignition switch: ON
- The ECO mode switch is pressed when the ECO mode indicator lamp is OFF

SHUTOFF CONDITION

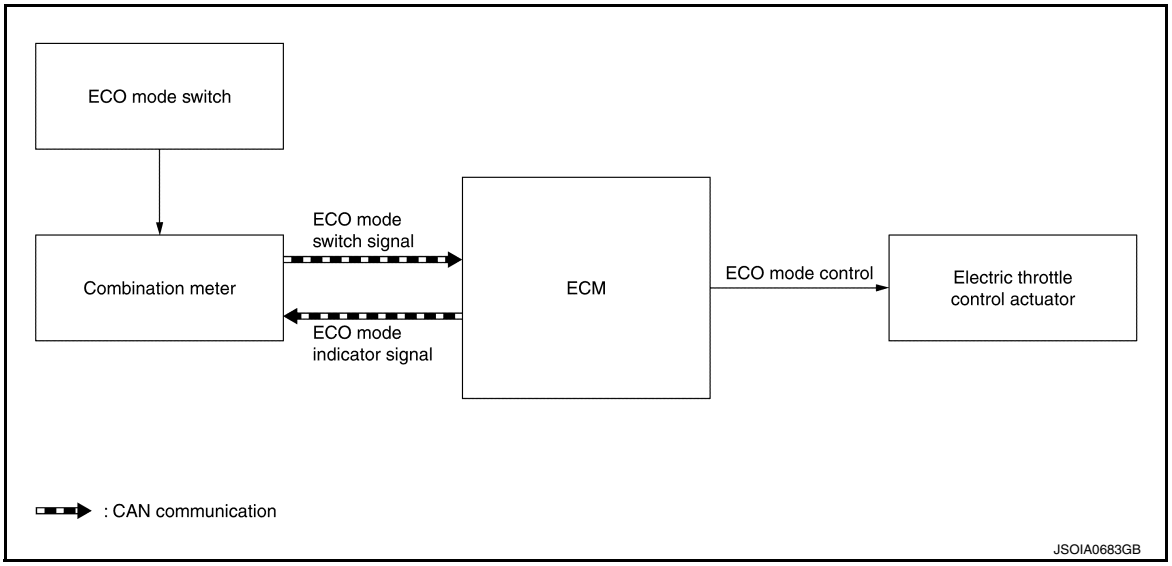
When any of the condition listed below is satisfied.

- Ignition switch: Other than ON
- The ECO mode switch is pressed when the ECO mode indicator lamp is ON.
- The SPORT mode switch is pressed when the ECO mode indicator lamp is ON.

SYSTEM
ECO MODE CONTROL
ECO MODE CONTROL : System Description

INFOID:0000000009755897

SYSTEM DIAGRAM



SYSTEM DESCRIPTION

- ECM transmits ECO mode indicator signal to combination meter via CAN communication. Combination meter illuminates ECO mode indicator lamp according to the signal.
- For ECM control details, refer to EC-52, "ECO MODE CONTROL : System Description".

FAIL-SAFE

If ECM detects a malfunction during ECO mode, the ECO mode indicator lamp turns OFF and the control switches to the normal mode control.

ECU DIAGNOSIS INFORMATION

ECM

List of ECU Reference

INFOID:0000000009755898

REFERENCE LIST

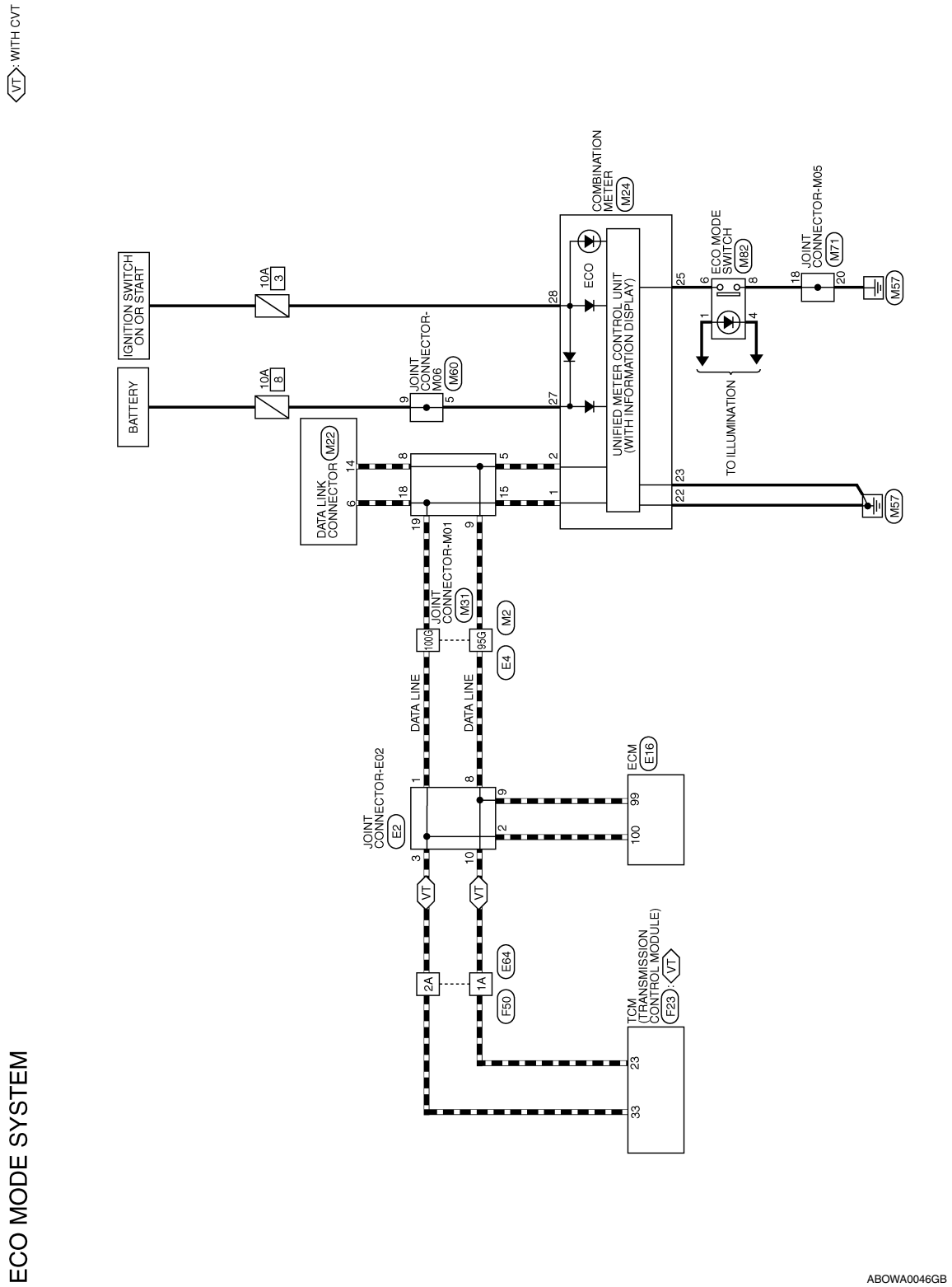
Engine	Reference
ECM	EC-77, "Reference Value"
	EC-90, "Fail Safe"
	EC-93, "DTC Inspection Priority Chart"
	EC-94, "DTC Index"
Combination meter	MWI-20, "Reference Value"
	MWI-25, "Fail-Safe"
	MWI-26, "DTC Index"

WIRING DIAGRAM

ECO MODE SYSTEM

Wiring Diagram

INFOID:0000000009755899



ECO MODE SYSTEM

ECO MODE SYSTEM CONNECTORS

Connector No.	M2
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
95G	P	–
100G	L	–

Connector No.	M22
Connector Name	DATA LINK CONNECTOR
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
6	L	–
14	P	–

Connector No.	M24
Connector Name	COMBINATION METER
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	L	CAN-H
2	P	CAN-L
22	B	GND2 (POWER)
23	B	GND3 (CIRCUIT)
25	GR	ECO MODE SW
27	LG	BAT
28	GR	IGN

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Connector No.	M31
Connector Name	JOINT CONNECTOR-M01
Connector Color	GRAY

H.S.

10	9	8	7	6	5	4	3	2	1
20	19	18	17	16	15	14	13	12	11

Terminal No.	Color of Wire	Signal Name
5	P	–
8	P	–
9	P	–
15	L	–
18	L	–
19	L	–

Connector No.	M60
Connector Name	JOINT CONNECTOR-M06
Connector Color	BLUE

H.S.

10	9	8	7	6	5	4	3	2	1
20	19	18	17	16	15	14	13	12	11

Terminal No.	Color of Wire	Signal Name
5	LG	–
9	W	–

Connector No.	M71
Connector Name	JOINT CONNECTOR-M05
Connector Color	PINK

H.S.

10	9	8	7	6	5	4	3	2	1
20	19	18	17	16	15	14	13	12	11

Terminal No.	Color of Wire	Signal Name
18	B	–
20	B	–

Connector No.	M82
Connector Name	ECO MODE SWITCH
Connector Color	GRAY

H.S.

4	3	2	1
8	7	6	5

Terminal No.	Color of Wire	Signal Name
1	L	–
4	B	–
6	GR	–
8	B	–

Connector No.	E2
Connector Name	JOINT CONNECTOR-E02
Connector Color	BLUE

H.S.

12	11	10	9	8	7	6	5	4	3	2	1

Terminal No.	Color of Wire	Signal Name
1	L	–
2	L	–
3	L	–
8	P	–
9	P	–
10	P	–

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Connector No.	E16
Connector Name	ECM
Connector Color	GRAY

Terminal No.	Color of Wire	Signal Name
99	P	CAN-L
100	L	CAN-H

Terminal No.	Color of Wire	Signal Name
95G	P	–
100G	L	–

Connector No.	E4
Connector Name	WIRE TO WIRE
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
1A	P	–
2A	L	–

Connector No.	E64
Connector Name	WIRE TO WIRE
Connector Color	BLACK

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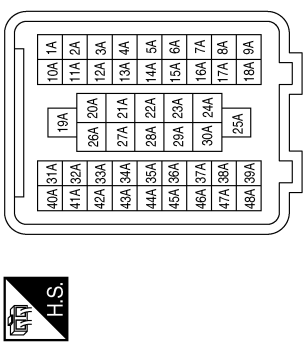
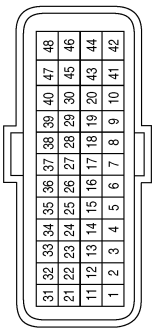
Connector No.	F50
Connector Name	WIRE TO WIRE
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
1A	P	–
2A	L	–

Connector No.	F23
Connector Name	TCM (TRANSMISSION CONTROL MODULE)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
23	P	CAN-L
33	L	CAN-H

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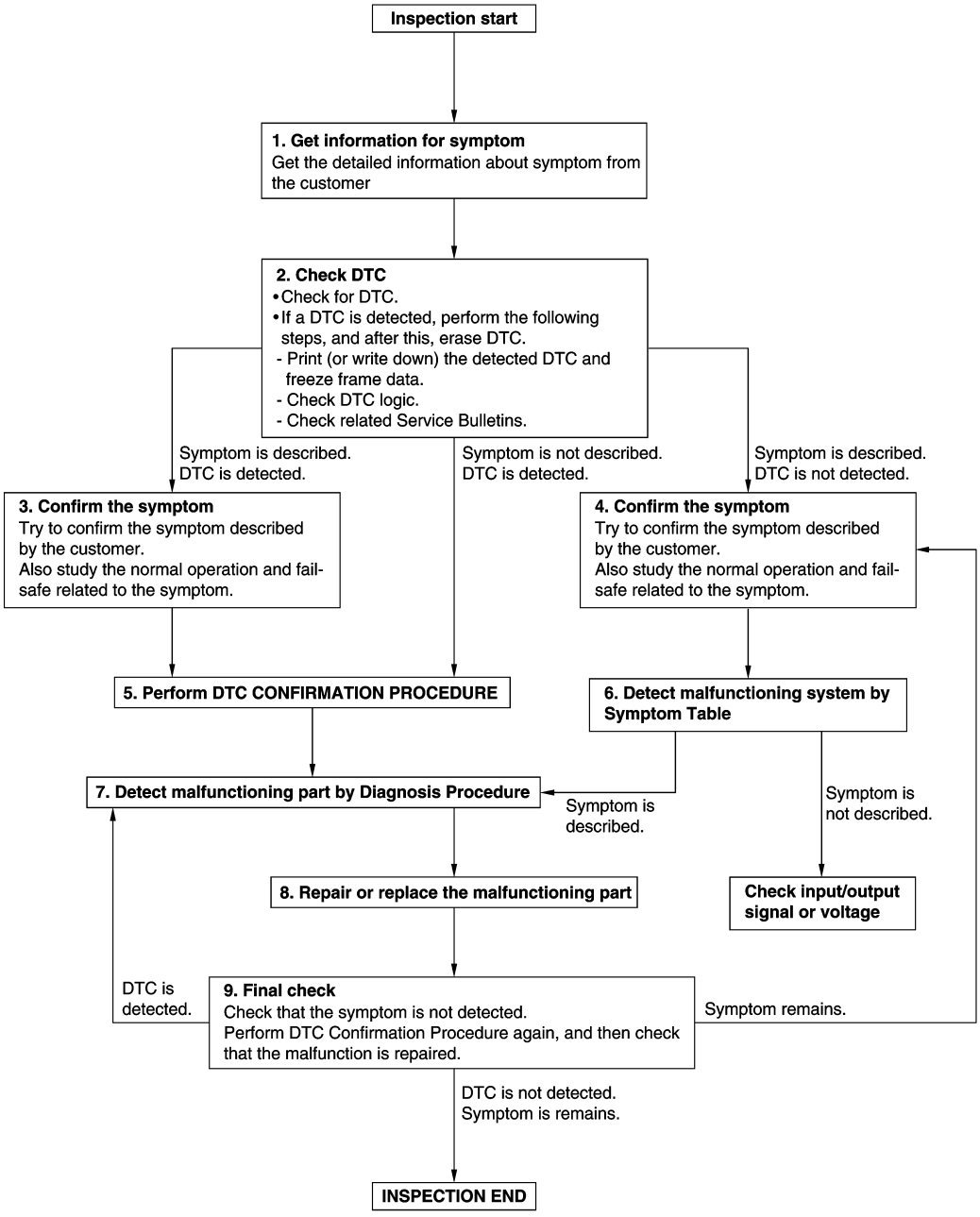
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000009755900

OVERALL SEQUENCE



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DETAILED FLOW

1.GET INFORMATION FOR SYMPTOM

Get the detailed information from the customer about the symptom (the condition and the environment when the incident/malfunction occurred) using the “Diagnostic Work Sheet”. (Refer to EC-129, "Diagnostic Work Sheet".)

>> GO TO 2.

2.CHECK DTC IN ECM

1. Check DTC in ECM.
2. If a DTC is detected, perform the following steps, and after this, erase DTC.
- Print (or write down) the detected DTC and freeze frame data.
- Check DTC logic.
- Study the relationship between the cause detected by DTC and the symptom described by the customer.
3. Check related Service Bulletins.

Are any symptoms described and any DTCs detected?

Symptom is described, DTC is detected>>GO TO 3.
Symptom is described, DTC is not detected>>GO TO 4.
Symptom is not described, DTC is detected>>GO TO 5.

3.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.
Also study the normal operation and fail-safe related to the symptom. Refer to EC-473, "Symptom Table" and EC-90, "Fail Safe".
Diagnosis Work Sheet is useful to verify the incident.
Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 5.

4.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.
Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 6.

5.PERFORM DTC CONFIRMATION PROCEDURE

Perform DTC CONFIRMATION PROCEDURE for the displayed DTC, and then check that DTC is detected again.
If two or more DTCs are detected, refer to EC-93, "DTC Inspection Priority Chart" and determine trouble diagnosis order.

NOTE:

- Freeze frame data is useful if the DTC is not detected.
- Perform Component Function Check if DTC CONFIRMATION PROCEDURE is not included on Service Manual. This simplified check procedure is an effective alternative though DTC cannot be detected during this check.
  If the result of Component Function Check is NG, it is the same as the detection of DTC by DTC CONFIRMATION PROCEDURE.

Is DTC detected?

YES >> GO TO 7.
NO >> Check ECO mode system. Refer to DMS-20, "Component Function Check".

6.DETECT MALFUNCTIONING PART BY SYMPTOM DIAGNOSIS

Detect malfunctioning system according to Symptom Diagnosis based on the confirmed symptom in step 4, and determine the trouble diagnosis order based on possible causes and symptoms.

Is the symptom described?

YES >> GO TO 7.
NO >> Monitor input data from related sensors or check voltage of related ECM terminals using CONSULT. Refer to EC-77, "Reference Value".

7. DETECT MALFUNCTIONING PART BY DIAGNOSIS PROCEDURE

Inspect according to Diagnosis Procedure of the system.

Is a malfunctioning part detected?

YES >> GO TO 8.
NO >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".

8. REPAIR OR REPLACE THE MALFUNCTIONING PART

1. Repair or replace the malfunctioning part.
2. Reconnect parts or connectors disconnected during Diagnosis Procedure again after repair and replacement.
3. Check DTC. If DTC is displayed, erase it.

>> GO TO 9.

9. FINAL CHECK

When DTC was detected in step 3, perform DTC CONFIRMATION PROCEDURE or Component Function Check again, and then check that the malfunction have been completely repaired.
When symptom was described from the customer, refer to confirmed symptom in step 4 or 5, and check that the symptom is not detected.

Is DTC detected and does symptom remain?

YES-1 >> DTC is detected: GO TO 7.
YES-2 >> Symptom remains: GO TO 4.
NO >> Before returning the vehicle to the customer, always erase DTC.

DTC/CIRCUIT DIAGNOSIS

ECO MODE SWITCH

Component Function Check

INFOID:0000000009755901

1. CHECK ECO MODE SWITCH OPERATION

1. Turn ignition switch ON.
2. Check ECO mode indicator lamp turns ON/OFF on combination meter when turn ECO mode switch ON/OFF.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Proceed to DMS-16, "Diagnosis Procedure".

2. CHECK ECO MODE SWITCH ILLUMINATION FUNCTION

1. Turn ON the headlamp.
2. Check ECO mode switch illumination lights up.

Is the inspection result normal?

YES >> INSPECTION END
NO >> Proceed to DMS-16, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009755902

Regarding Wiring Diagram information, refer to DMS-8, "Wiring Diagram".

1. CHECK ECO MODE SWITCH ILLUMINATION FUNCTION

1. Turn ignition switch ON.
2. Turn ON the headlamp.
3. Check that the ECO mode switch illumination lights up.

Is the inspection result normal?

YES >> GO TO 7.
NO >> GO TO 2.

2. CHECK ECO MODE SWITCH ILLUMINATION POWER SUPPLY-1

1. Turn OFF the headlamp.
2. Turn ignition switch OFF.
3. Disconnect ECO mode switch harness connector.
4. Turn ignition switch ON.
5. Turn ON the headlamp.
6. Check the voltage between ECO mode switch harness connector terminals.

ECO mode switch			Voltage
Connector	+	-	
	Terminal		
M82	1	4	Battery voltage

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident". If OK, replace ECO mode switch. Refer to DMS-21, "Removal and Installation".
NO >> GO TO 3.

3. CHECK ECO MODE SWITCH ILLUMINATION POWER SUPPLY-2

Check the voltage between ECO mode switch harness connector and ground.

+		—	Voltage
ECO mode switch			
Connector	Terminal		
M82	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 6.
NO >> GO TO 4.

4. CHECK FUSE

1. Turn OFF the headlamp.
2. Turn ignition switch OFF.
3. Pull out #37 fuse. Refer to PG-47, "Terminal Arrangement".
4. Check that the fuse is not fusing.

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace the fuse after repair the applicable circuit.

5. CHECK ECO MODE SWITCH ILLUMINATION POWER SUPPLY CIRCUIT

1. Disconnect IPDM E/R harness connector E45. Refer to INL-26, "Wiring Diagram".
2. Check the continuity between IPDM E/R harness connector and ECO mode switch harness connector.

+		–		Continuity
IPDM E/R		ECO mode switch		
Connector	Terminal	Connector	Terminal	
E45	33	M82	1	Existed

3. Also check harness for short to ground.

Is the inspection result normal?

YES >> Perform IPDM E/R auto active test and check tail lamp relay operation. Refer to PCS-9, "Diagnosis Description" (with intelligent key), PCS-37, "Diagnosis Description" (without intelligent key).
NO >> Repair or replace error-detected parts.

6. CHECK GROUND CIRCUIT

1. Turn OFF the headlamp.
2. Turn ignition switch OFF.
3. Check continuity between ECO mode switch harness connector terminal and ground.

+		–	Continuity
ECO mode switch			
Connector	Terminal		
M82	4	Ground	Existed

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Repair or replace error-detected parts.

7. CHECK ECO MODE SWITCH CIRCUIT

1. Turn OFF the headlamp.
2. Turn ignition switch OFF.
3. Disconnect ECO mode switch harness connector.
4. Turn ignition switch ON.
5. Check voltage between ECO mode switch harness connector terminals.

ECO mode switch			Voltage (Approx.)
Connector	+	-	
	Terminal		
M82	6	8	5 V

Is the inspection result normal?

YES >> GO TO 11.
NO >> GO TO 8.

8.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check the continuity between ECO mode switch harness connector and ground.

+		–	Continuity
ECO mode switch			
Connector	Terminal		
M82	8	Ground	Existed

Is the inspection result normal?

YES >> GO TO 9.
NO >> Repair or replace damaged parts.

9.CHECK CIRCUIT BETWEEN COMBINATION METER AND ECO MODE SWITCH-1

1. Disconnect combination meter harness connector M38.
2. Check continuity between combination meter harness connector terminal and ECO mode switch harness connector terminal.

+		–		Continuity
Combination meter		ECO mode switch		
Connector	Terminal	Connector	Terminal	
M24	25	M82	6	Existed

3. Also check harness for short to power and short to ground.

Is the inspection result normal?

YES >> GO TO 10.
NO >> Repair or replace damaged parts.

10.CHECK COMBINATION METER INPUT/OUTPUT SIGNAL

1. Connect all of disconnected connectors.
2. Check input/output signal of combination meter. Refer to MWI-20, "Reference Value".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Repair or replace error detected parts.

11.CHECK ECO MODE SWITCH

Check ECO mode switch. Refer to DMS-18, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace ECO mode switch. Refer to DMS-21, "Removal and Installation".

Component Inspection

INFOID:0000000009755903

1.CHECK ECO MODE SWITCH

Check continuity between ECO mode switch connector terminals.

ECO mode switch Terminal	Condition	Continuity
6 – 8	ECO mode switch is depressed.	Existed
	ECO mode switch is released.	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace ECO mode switch. Refer to DMS-21, "Removal and Installation".

ECO MODE

Component Function Check

INFOID:0000000009755904

1. CHECK ECO MODE OPERATION

1. Turn ignition switch ON.
2. Check ECO mode indicator lamp turns ON/OFF on combination meter when turn ECO mode switch ON/OFF.

Is the inspection result normal?

YES >> INSPECTION END.
NO >> Proceed to DMS-20, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009755905

1. CHECK DTC IN ECM

With CONSULT
Check “Self Diagnostic Results” in “ENGINE”.

Are any DTC detected?

YES >> Check DTC detected item. Refer to EC-94, "DTC Index".
NO >> GO TO 2.

2. CHECK DTC IN COMBINATION METER

With CONSULT
Check “Self Diagnostic Results” in “METER/M&A”.

Is any DTC detected?

YES >> Check DTC detected item. Refer to MWI-26, "DTC Index".
NO >> GO TO 3.

3. CHECK COMBINATION METER

With CONSULT
1. Select “Data Monitor” in “METER/M&A”.
2. Check that “ECO MODE IND” turns ON/OFF when ECO mode switch is operated. Refer to MWI-20, "Reference Value".

Is the inspection result normal?

YES >> Replace combination meter. Refer to MWI-77, "Removal and Installation".
NO >> GO TO 4.

4. CHECK ECO MODE SWITCH SYSTEM

Check ECO mode switch system. Refer to DMS-16, "Component Function Check".

Is the inspection result normal?

YES >> INSPECTION END
NO >> Repair or replace error-detected parts.

REMOVAL AND INSTALLATION

ECO MODE SWITCH

Removal and Installation

INFOID:0000000009755906

REMOVAL

1. Remove instrument lower panel LH. Refer to IP-21, "Removal and Installation".
2. Remove ECO mode switch.

INSTALLATION

Installation is in the reverse order of removal.

PRECAUTION

PRECAUTIONS

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

INFOID:0000000010291074

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. Information necessary to service the system safely is included in the SR and SB section 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 SR section.**
- **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:

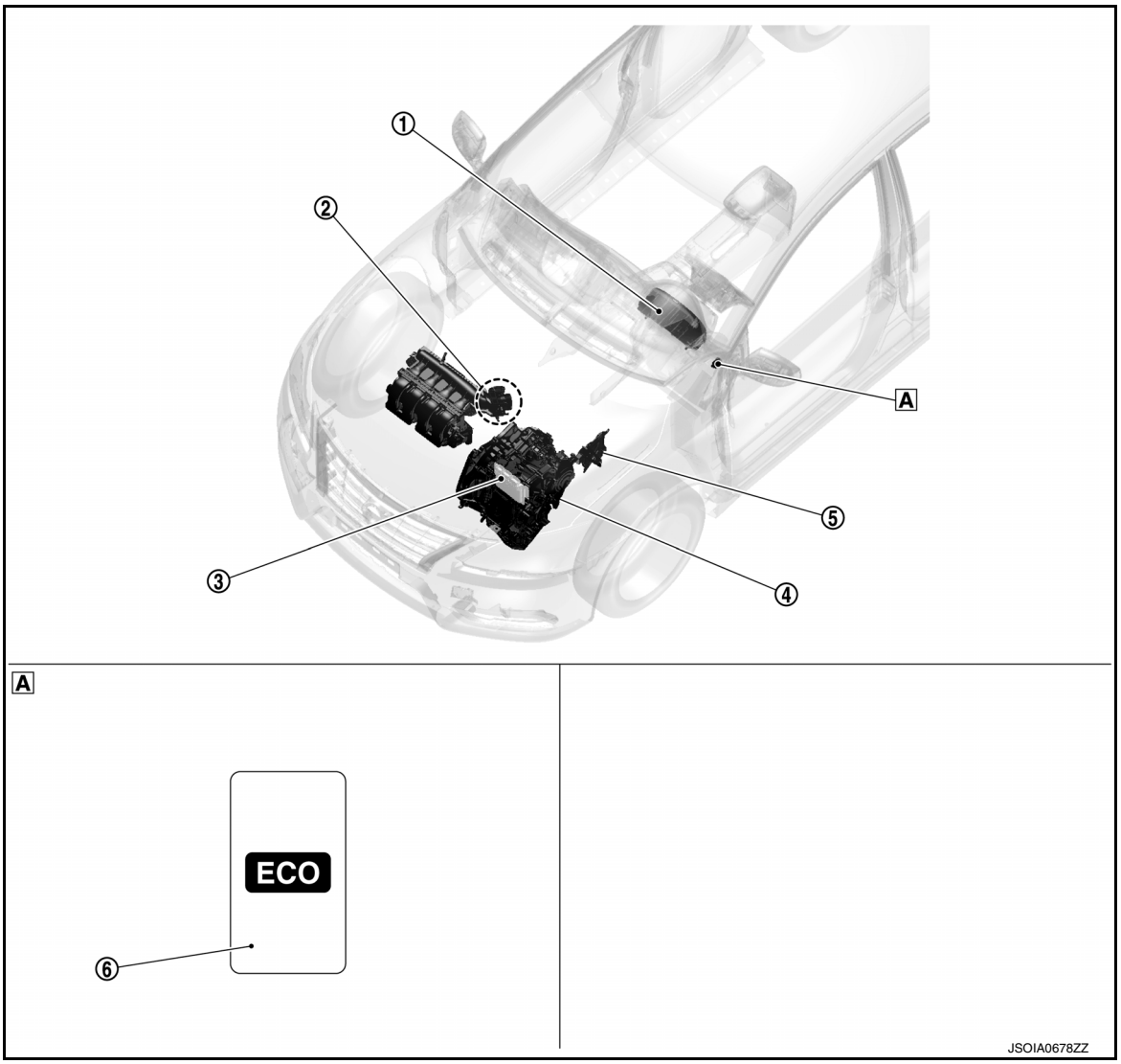
- **When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors with the Ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious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

SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

INFOID:0000000009755908



A Instrument lower finisher

COMPONENT DESCRIPTION

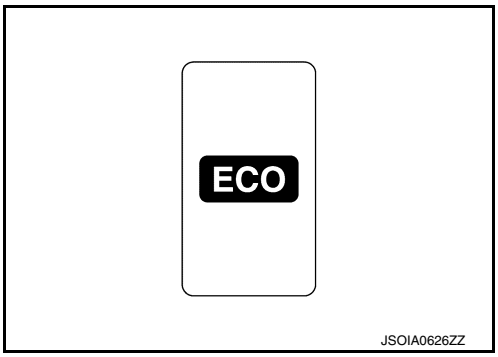
No.	Component	Function
①	Combination meter	• The combination meter transmittes the following signal via CAN communications to the TCM. - ECO mode switch signal • The combination meter receives the following signal via CAN communications from the ECM. - ECO mode indicator signal Refer to MWI-5, "METER SYSTEM : Component Parts Location" for detailed installation location.
②	Electric throttle control actuator	Refer to EC-22, "Electric Throttle Control Actuator".

No.	Component	Function
③	ECM	• The ECM receives the following signal via CAN communications from the TCM. - ECO mode signal • The ECM transmittes the following signal via CAN communications to the combination meter. - ECO mode indicator signal Refer to EC-15, "ENGINE CONTROL SYSTEM : Component Parts Location" for detailed installation location.
④	Transaxle assembly	Refer to TM-73, "CVT CONTROL SYSTEM : Component Parts Location".
⑤	TCM	• The TCM receives the following signal via CAN communications from the combination meter. - ECO mode switch signal • The TCM transmittes the following signal via CAN communications to the ECM. - ECO mode signal Refer to TM-73, "CVT CONTROL SYSTEM : Component Parts Location" for detailed installation location.
⑥	ECO mode switch	Refer to DMS-24, "ECO Mode Switch".

ECO Mode Switch

INFOID:0000000009755909

- The ECO mode switch is installed to the instrument lower finisher.
- When the ECO mode indicator lamp on the combination meter is OFF and the ECO mode switch is pressed, the ECO mode is active and the ECO mode indicator lamp is ON.
- When the ECO mode indicator lamp on the combination meter is ON and the ECO mode switch is pressed, the ECO mode is cancelled and the ECO mode indicator lamp is OFF.



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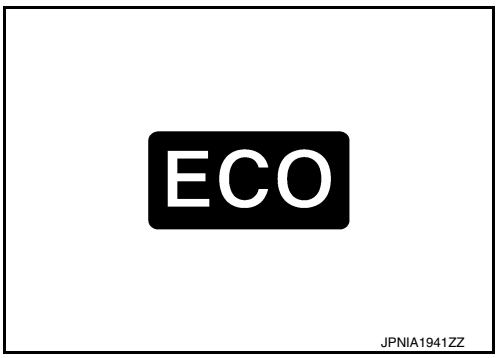
ECO Mode Indicator Lamp

INFOID:0000000009755910

DESIGN/PURPOSE

The ECO mode indicator lamp inform the driver that the vehicle is in ECO mode.



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BULB CHECK

Not applicable

SIGNAL PATH

- TCM receives ECO mode switch signal (ON/OFF) from combination meter via CAN communication. Based on the signal, TCM transmits ECO mode signal to ECM via CAN communication.
- ECM transmits ECO mode indicator signal to combination meter via CAN communication. Based on the signal, combination meter illuminates ECO mode indicator lamp.

LIGHTING CONDITION

When all of the following conditions are satisfied.

- Ignition switch: ON
- The ECO mode switch is pressed when the ECO mode indicator lamp is OFF

SHUTOFF CONDITION

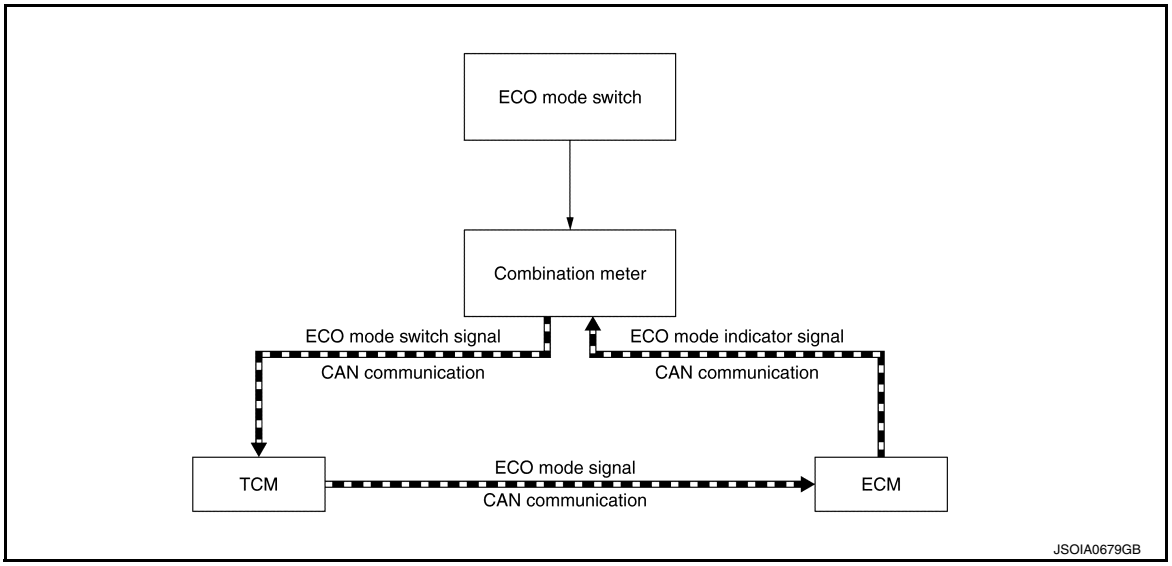
When any of the condition listed below is satisfied.

- Ignition switch: Other than ON
- The ECO mode switch is pressed when the ECO mode indicator lamp is ON.
- The SPORT mode switch is pressed when the ECO mode indicator lamp is ON.

SYSTEM
ECO MODE CONTROL
ECO MODE CONTROL : System Description

INFOID:0000000009755911

SYSTEM DIAGRAM



SYSTEM DISCRIPTION

- TCM receive ECO mode switch signal (ON/OFF) from combination meter via CAN communication. TCM transmit ECO mode signal to ECM via CAN communication according to the signal.
- ECM transmit ECO mode indicator signal to combination meter via CAN communication. Combination meter illuminates ECO mode indicator lamp according to the signal.

Each ECU Control

- For TCM control, refer to TM-104, "ECO MODE CONTROL : System Description".
- For ECM control, refer to EC-52, "ECO MODE CONTROL : System Description".

ECU DIAGNOSIS INFORMATION

ECO MODE

List of ECU Reference

INFOID:0000000009755912

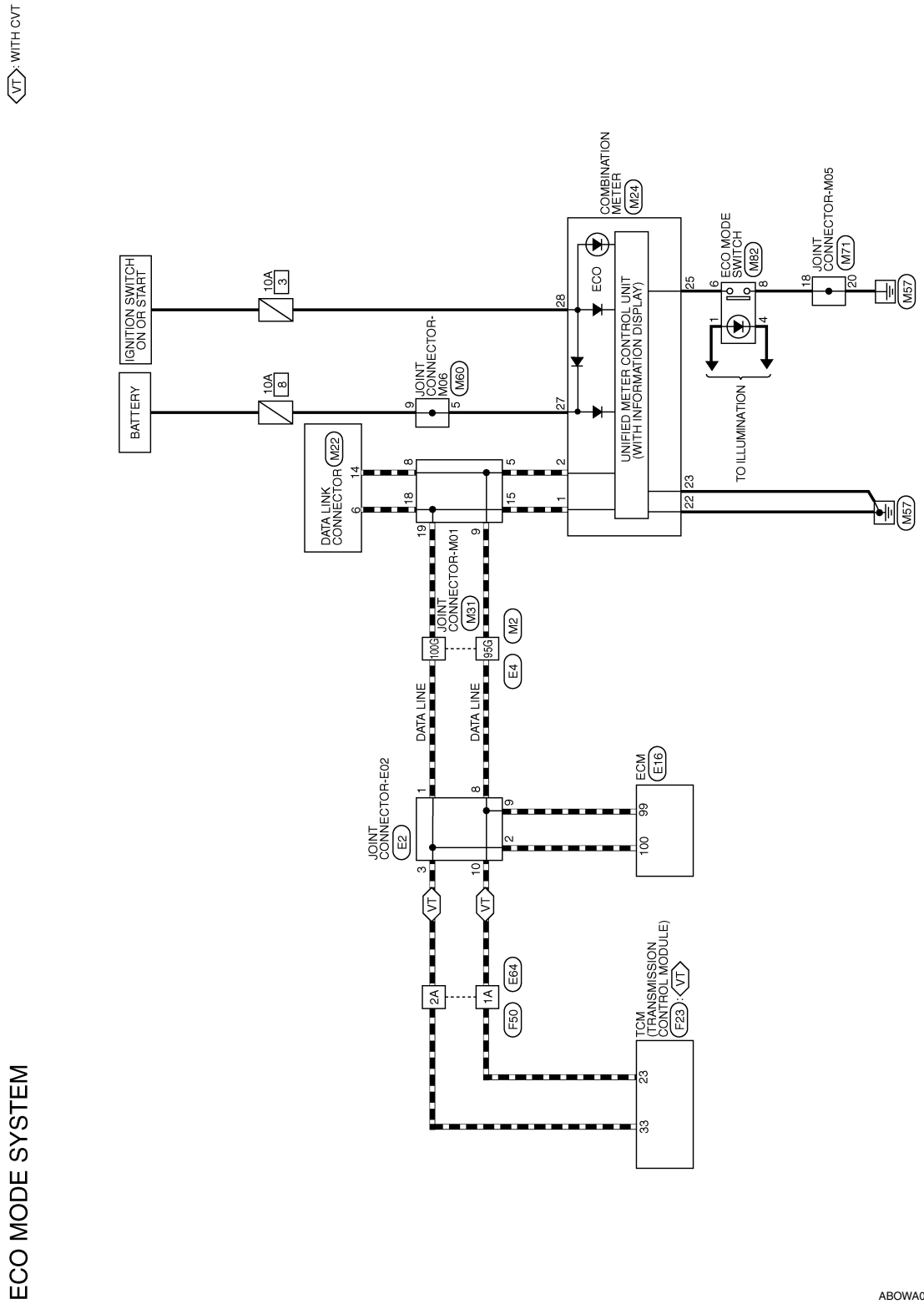
ECU	Reference
TCM	TM-114, "Reference Value"
	TM-122, "Fail-Safe"
	TM-125, "DTC Inspection Priority Chart"
	TM-126, "DTC Index"
ECM	EC-77, "Reference Value"
	EC-90, "Fail Safe"
	EC-93, "DTC Inspection Priority Chart"
	EC-94, "DTC Index"
Combination meter	MWI-20, "Reference Value"
	MWI-25, "Fail-Safe"
	MWI-26, "DTC Index"

WIRING DIAGRAM

ECO MODE SYSTEM

Wiring Diagram

INFOID:0000000010287562



ECO MODE SYSTEM

ECO MODE SYSTEM CONNECTORS

Connector No.	M2
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
95G	P	–
100G	L	–

Connector No.	M22
Connector Name	DATA LINK CONNECTOR
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
6	L	–
14	P	–

Connector No.	M24
Connector Name	COMBINATION METER
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	L	CAN-H
2	P	CAN-L
22	B	GND2 (POWER)
23	B	GND3 (CIRCUIT)
25	GR	ECO MODE SW
27	LG	BAT
28	GR	IGN

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Connector No.	M31
Connector Name	JOINT CONNECTOR-M01
Connector Color	GRAY

H.S.

10	9	8	7	6	5	4	3	2	1
20	19	18	17	16	15	14	13	12	11

Terminal No.	Color of Wire	Signal Name
5	P	–
8	P	–
9	P	–
15	L	–
18	L	–
19	L	–

Connector No.	M60
Connector Name	JOINT CONNECTOR-M06
Connector Color	BLUE

H.S.

10	9	8	7	6	5	4	3	2	1
20	19	18	17	16	15	14	13	12	11

Terminal No.	Color of Wire	Signal Name
5	LG	–
9	W	–

Connector No.	M71
Connector Name	JOINT CONNECTOR-M05
Connector Color	PINK

H.S.

10	9	8	7	6	5	4	3	2	1
20	19	18	17	16	15	14	13	12	11

Terminal No.	Color of Wire	Signal Name
18	B	–
20	B	–

Connector No.	M82
Connector Name	ECO MODE SWITCH
Connector Color	GRAY

H.S.

4	3	2	1
8	7	6	5

Terminal No.	Color of Wire	Signal Name
1	L	–
4	B	–
6	GR	–
8	B	–

Connector No.	E2
Connector Name	JOINT CONNECTOR-E02
Connector Color	BLUE

H.S.

12	11	10	9	8	7	6	5	4	3	2	1

Terminal No.	Color of Wire	Signal Name
1	L	–
2	L	–
3	L	–
8	P	–
9	P	–
10	P	–

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Connector No.	E16
Connector Name	ECM
Connector Color	GRAY

H.S.

128	124	120	116	112	108	104	100
127	123	119	115	111	107	103	99
126	122	118	114	110	106	102	98
125	121	117	113	109	105	101	97

Terminal No.	Color of Wire	Signal Name
99	P	CAN-L
100	L	CAN-H

Connector No.	E4
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

	5G	4G	3G	2G	1G																		
	10G	9G	8G	7G	6G																		
21G	20G	19G	18G	17G	16G	15G	14G	13G	12G	11G	41G	40G	39G	38G	37G	36G	35G	34G	33G	32G	31G		
30G	29G	28G	27G	26G	25G	24G	23G	22G			50G	49G	48G	47G	46G	45G	44G	43G	42G				
61G	60G	59G	58G	57G	56G	55G	54G	53G	52G	51G	81G	80G	79G	78G	77G	76G	75G	74G	73G	72G	71G		
70G	69G	68G	67G	66G	65G	64G	63G	62G			90G	89G	88G	87G	86G	85G	84G	83G	82G				
											95G	94G	93G	92G	91G								
											100G	99G	98G	97G	96G								

Terminal No.	Color of Wire	Signal Name
95G	P	–
100G	L	–

Connector No.	E64
Connector Name	WIRE TO WIRE
Connector Color	BLACK

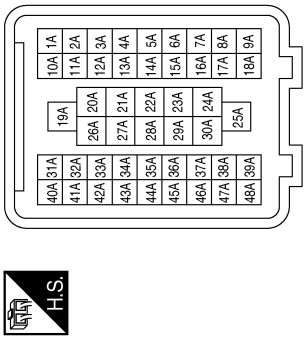
H.S.

1A	10A																						
2A	11A																						
3A	12A																						
4A	13A																						
5A	14A																						
6A	15A																						
7A	16A																						
8A	17A																						
9A	18A																						

Terminal No.	Color of Wire	Signal Name
1A	P	–
2A	L	–

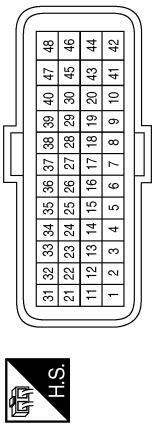
ABOIA0167GB

Connector No.	F50
Connector Name	WIRE TO WIRE
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
1A	P	–
2A	L	–

Connector No.	F23
Connector Name	TCM (TRANSMISSION CONTROL MODULE)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
23	P	CAN-L
33	L	CAN-H

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BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000009755914

DETAILED FLOW

1.OBTAIN INFORMATION ABOUT SYMPTOM

Interview the customer to obtain as much information as possible about the conditions and environment under which the malfunction occurs.

>> GO TO 2.

2.CHECK SYMPTOM

- Check the symptom based on the information obtained from the customer.
- Check if any other malfunctions are present.

>> GO TO 3.

3.DTC/SYSTEM DIGANOSIS

Perform a DTC/system diagnosis and repair or replace any malfunctioning part.

>> GO TO 4.

4.FINAL CHECK

Check that the ECO mode functions normally.

Does it operation normally?

YES >> End of trouble diagnosis
NO >> GO TO 2.

DTC/CIRCUIT DIAGNOSIS

ECO MODE SWITCH

Component Function Check

INFOID:0000000009755915

1. CHECK ECO MODE SWITCH OPERATION

1. Turn ignition switch ON.
2. Check ECO mode indicator lamp turns ON/OFF on combination meter when turn ECO mode switch ON/OFF.

Is the inspection result normal?

YES >> INSPECTION END
NO >> Go to DMS-38, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009755916

Regarding Wiring Diagram information, refer to DMS-28, "Wiring Diagram".

1. DETECT MALFUNCTIONING ITEMS

What is malfunction items?

ECO mode switch illumination does not turns ON>>GO TO 2.
ECO mode indicator lamp does not turns ON>>GO TO 8.

2. CHECK ECO MODE SWITCH ILLUMINATION POWER SUPPLY (1)

1. Turn OFF the headlamp.
2. Turn ignition switch OFF.
3. Disconnect ECO mode switch harness connector.
4. Turn ignition switch ON.
5. Turn ON the headlamp.
6. Check the voltage between ECO mode switch harness connector terminals.

ECO mode switch			Voltage
Connector	+	-	
	Terminal		
M82	1	4	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.
NO >> GO TO 4.

3. CHECK INTERMITTENT INCIDENTE

Refer to GI-39, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace ECO mode switch. Refer to DMS-39, "Removal and Installation".
NO >> Replace the fuse after repair the applicable circuit.

4. CHECK ECO MODE SWITCH ILLUMINATION POWER SUPPLY (2)

Check the voltage between ECO mode switch harness connector and ground.

+		-	Voltage
ECO mode switch			
Connector	Terminal		
M82	1	Ground	Battery voltage

Is the inspection result normal?

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

5.CHECK FUSE

1. Turn OFF the headlamp.
2. Turn ignition switch OFF.
3. Pull out #37 fuse. Refer to PG-47, "Terminal Arrangement".
4. Check that the fuse is not fusing.

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace the fuse after repair the applicable circuit.

6.CHECK ECO MODE SWITCH ILLUMINATION POWER SUPPLY CIRCUIT

1. Disconnect IPDM E/R harness connector E45. Refer to INL-26, "Wiring Diagram".
2. Check the continuity between IPDM E/R harness connector and ECO mode switch harness connector.

+		-		Continuity
IPDM E/R		ECO mode switch		
Connector	Terminal	Connector	Terminal	
E45	33	M82	1	Existed

3. Also check harness for short to ground.

Is the inspection result normal?

YES >> Perform IPDM E/R auto active test and check tail lamp relay operation. Refer to PCS-9, "Diagnosis Description" (with intelligent key), PCS-37, "Diagnosis Description" (without intelligent key).
NO >> Repair or replace error-detected parts.

7.CHECK GROUND CIRCUIT

1. Turn OFF the headlamp.
2. Turn ignition switch OFF.
3. Check continuity between ECO mode switch harness connector terminal and ground.

+		-	Continuity
ECO mode switch			
Connector	Terminal		
M82	4	Ground	Existed

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Repair or replace error-detected parts.

8.CHECK ECO MODE SWITCH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect ECO mode switch harness connector.
3. Turn ignition switch ON.
4. Check voltage between ECO mode switch harness connector terminals.

ECO mode switch			Voltage (Approx.)
Connector	+	-	
	Terminal		
M82	6	8	5 V

Is the inspection result normal?

YES >> GO TO 13.
NO >> GO TO 9.

9.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check the continuity between ECO mode switch harness connector and ground.

ECO mode switch		—	Continuity
Connector	Terminal		
M82	8	Ground	Existed

Is the inspection result normal?

YES >> GO TO 10.
NO >> Repair or replace damaged parts.

10.CHECK CIRCUIT BETWEEN COMBINATION METER AND ECO MODE SWITCH (1)

1. Disconnect combination meter harness connector M24.
2. Check continuity between combination meter harness connector terminal and ECO mode switch harness connector terminal.

Combination meter		ECO mode switch		Continuity
Connector	Terminal	Connector	Terminal	
M24	25	M82	6	Existed

Is the inspection result normal?

YES >> GO TO 11.
NO >> Repair or replace damaged parts.

11.CHECK CIRCUIT BETWEEN COMBINATION METER AND ECO MODE SWITCH (2)

Check continuity between combination meter harness connector terminal and ECO mode switch harness connector terminal.

Combination meter		—	Continuity
Connector	Terminal		
M24	25	Ground	Not existed

Is the inspection result normal?

YES >> GO TO 12.
NO >> Repair or replace damaged parts.

12.CHECK COMBINATION METER INPUT/OUTPUT SIGNAL

1. Connect all of disconnected connectors.
2. Check input/output signal of combination meter. Refer to MWI-20, "Reference Value".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace combination meter. Refer to MWI-77, "Removal and Installation".

13.CHECK ECO MODE SWITCH

Check ECO mode switch. Refer to DMS-37, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace ECO mode switch. Refer to DMS-39, "Removal and Installation".

Component Inspection

INFOID:0000000009755917

1.CHECK ECO MODE SWITCH

Check continuity between ECO mode switch connector terminals.

ECO mode switch	Condition	Continuity
Terminal		
6 – 8	ECO mode switch is depressed.	Existed
	ECO mode switch is released.	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace ECO mode switch. Refer to DMS-39, "Removal and Installation".

SYMPTOM DIAGNOSIS

THE ECO MODE INDICATOR LAMP DOES NOT TURN ON

Description

INFOID:0000000009755918

The ECO mode indicator lamp does not turn ON when the ECO mode switch is operated.

Diagnosis Procedure

INFOID:0000000009755919

1. PERFORM COMBINATION METER ON BOARD DIAGNOSIS

Perform combination meter on board diagnosis. Refer to MWI-16, "Description".

Is the check result normal?

YES >> GO TO 2.
NO >> Replace combination meter. Refer to MWI-77, "Removal and Installation".

2. CHECK DTC (TCM)

With CONSULT
1. Start the engine.
2. Check “Self Diagnostic Results” in “TRANSMISSION”.

Is any DTC detected?

YES >> Check DTC detected item. Refer to TM-126, "DTC Index".
NO >> GO TO 3.

3. CHECK DTC (ECM)

With CONSULT
Check “Self Diagnostic Results” in “ENGINE”.

Is any DTC detected?

YES >> Check DTC detected item. Refer to EC-94, "DTC Index".
NO >> GO TO 4.

4. CHECK DTC (COMBINATION METER)

With CONSULT
Check “Self Diagnostic Results” in “METER/M&A”.

Is any DTC detected?

YES >> Check DTC detected item. Refer to MWI-26, "DTC Index".
NO >> GO TO 5.

5. CHECK COMBINATION METER INPUT/OUTPUT SIGNAL

With CONSULT
1. Select “Data Monitor” in “METER/M&A”.
2. Select “ECO MODE IND”.
3. Check that “ECO MODE IND” turns ON/OFF when ECO mode switch is operated. Refer to MWI-20, "Reference Value".

Is any DTC detected?

YES >> Replace combination meter. Refer to MWI-77, "Removal and Installation".
NO >> GO TO 6.

6. CHECK ECO MODE SWITCH CIRCUIT

Check ECO mode switch circuit. Refer to DMS-34, "Diagnosis Procedure".

Is any DTC detected?

YES >> INSPECTION END
NO >> Repair or replace malfunctioning parts.

REMOVAL AND INSTALLATION

ECO MODE SWITCH

Removal and Installation

INFOID:0000000009755920

REMOVAL

1. Remove instrument lower panel LH. Refer to IP-21, "Removal and Installation".
2. Remove ECO mode switch.

INSTALLATION

Installation is in the reverse order of removal.

PRECAUTION

PRECAUTIONS

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

INFOID:0000000010291075

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. Information necessary to service the system safely is included in the SR and SB section 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 SR section.**
- **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:

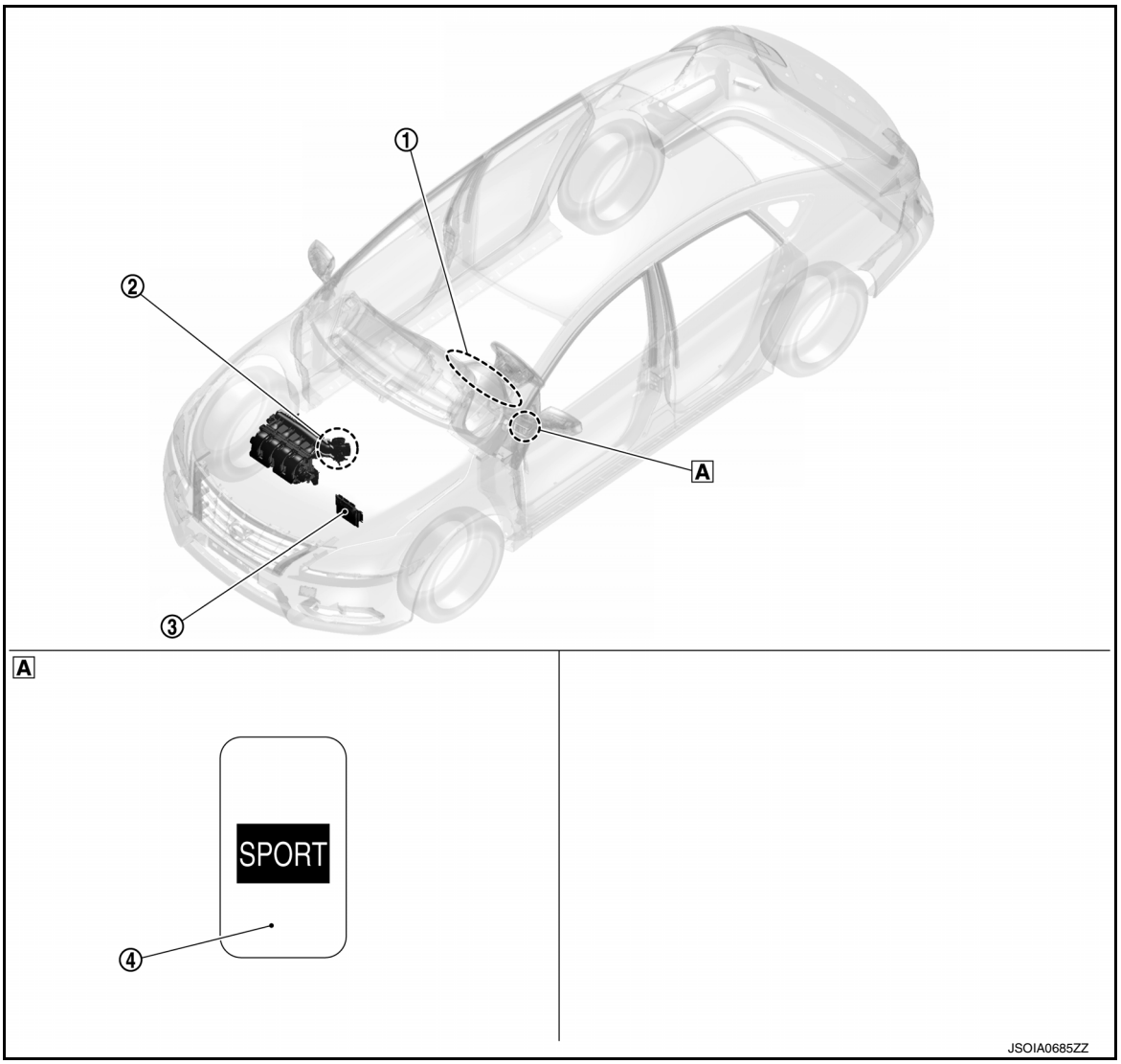
- **When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors with the Ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious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

SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

INFOID:0000000009755922



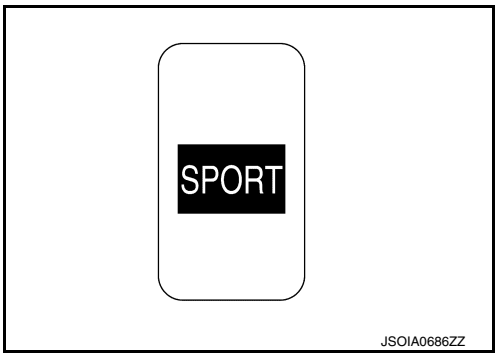
A Instrument lower finisher

No.	Component	Function
①	SPORT mode indicator lamp	DMS-42, "SPORT Mode Indicator Lamp"
②	Electric throttle control actuator	EC-22, "Electric Throttle Control Actuator"
③	ECM	EC-22, "ECM"
④	SPORT mode switch	DMS-42, "SPORT Mode Switch"

SPORT Mode Switch

INFOID:0000000009755923

- The SPORT mode switch is installed to the instrument lower finisher.
- When the SPORT mode indicator lamp on the combination meter is OFF and the SPORT mode switch is pressed, the SPORT mode is active and the SPORT mode indicator lamp is ON.
- When the SPORT mode indicator lamp on the combination meter is ON and the SPORT mode switch is pressed, the SPORT mode is cancelled and the SPORT mode indicator lamp is OFF.

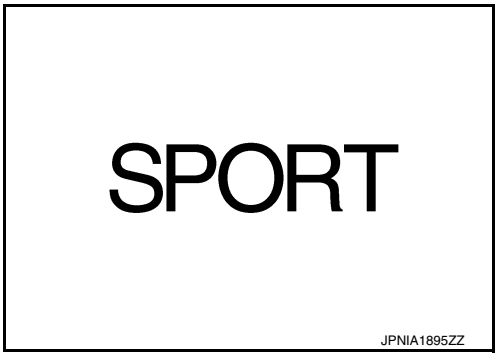


SPORT Mode Indicator Lamp

INFOID:0000000009755924

DESIGN/PURPOSE

The SPORT mode indicator lamp inform the driver that the vehicle is in SPORT mode.



BULB CHECK

Not applicable

SIGNAL PATH

- ECM receives SPORT mode switch signal (ON/OFF) from combination meter via CAN communication.
- ECM transmits SPORT mode indicator signal to combination meter via CAN communication. Based on the signal, combination meter illuminates SPORT mode indicator lamp.

LIGHTING CONDITION

When all of the following conditions are satisfied.

- Ignition switch: ON
- The SPORT mode switch is pressed when the SPORT mode indicator lamp is OFF

SHUTOFF CONDITION

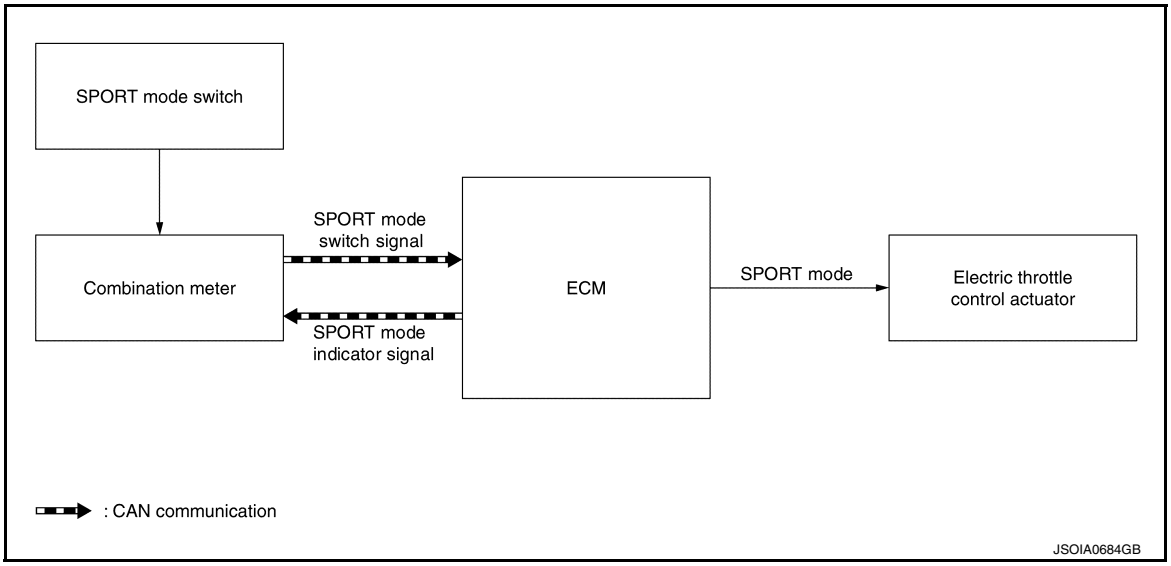
When any of the condition listed below is satisfied.

- Ignition switch: Other than ON
- The SPORT mode switch is pressed when the SPORT mode indicator lamp is ON.
- The ECO mode switch is pressded when the SPORT mode indicator lamp is ON.

SYSTEM
SPORT MODE CONTROL
SPORT MODE CONTROL : System Description

INFOID:0000000009755925

SYSTEM DIAGRAM



SYSTEM DESCRIPTION

- ECM transmits SPORT mode indicator signal to combination meter via CAN communication. Combination meter illuminates SPORT mode indicator lamp according to the signal.
- For ECM Control details, refer to EC-53, "SPORT MODE CONTROL : System Description".

FAIL-SAFE

If ECM detects a malfunction during SPORT mode, the SPORT mode indicator lamp turns OFF and the control switches to the normal mode control.

ECU DIAGNOSIS INFORMATION

ECM

List of ECU Reference

INFOID:0000000009755926

REFERENCE LIST

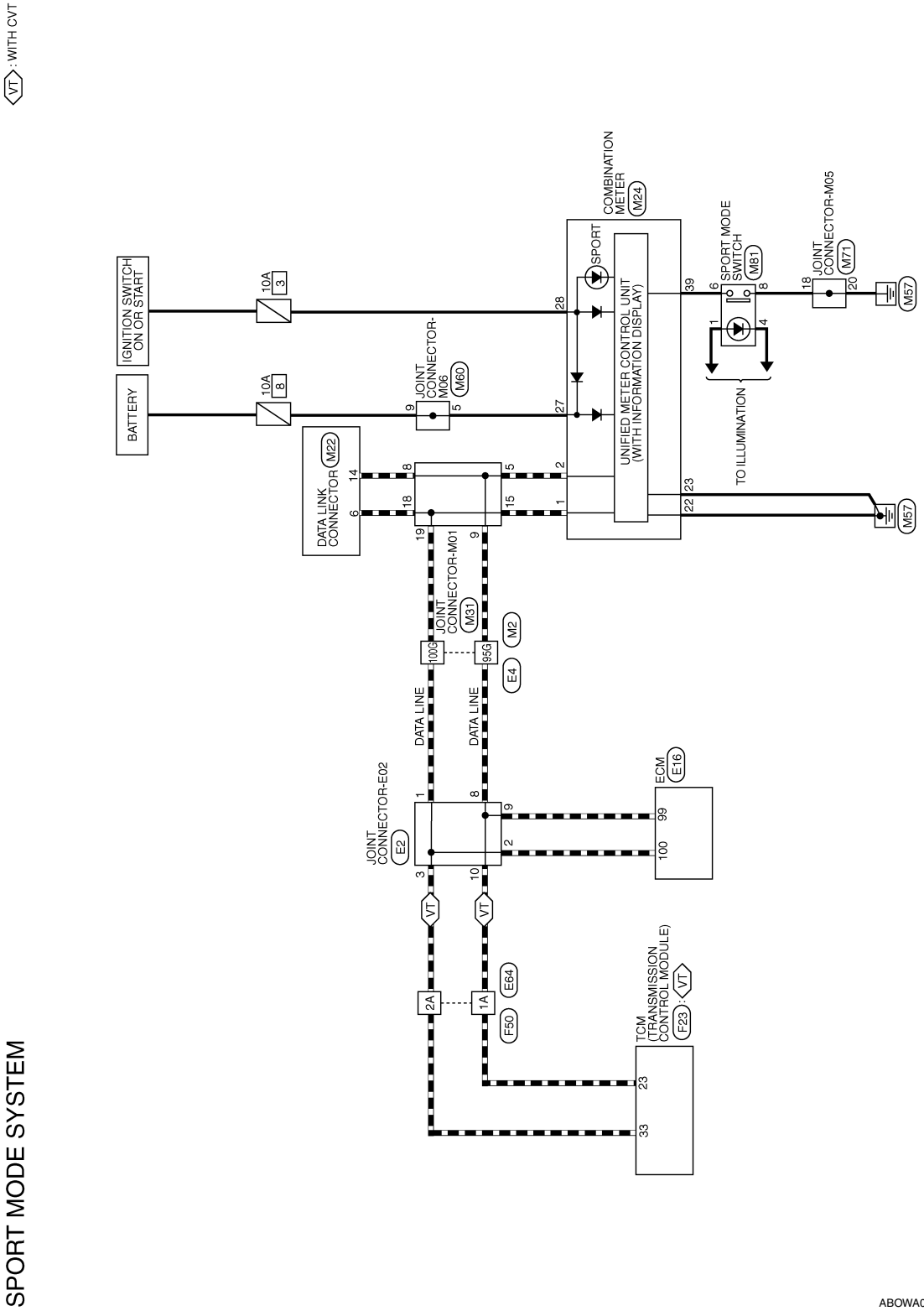
Engine	Reference
ECM	EC-77, "Reference Value"
	EC-90, "Fail Safe"
	EC-93, "DTC Inspection Priority Chart"
	EC-94, "DTC Index"
Combination meter	MWI-20, "Reference Value"
	MWI-25, "Fail-Safe"
	MWI-26, "DTC Index"

WIRING DIAGRAM

SPORT MODE SYSTEM

Wiring Diagram

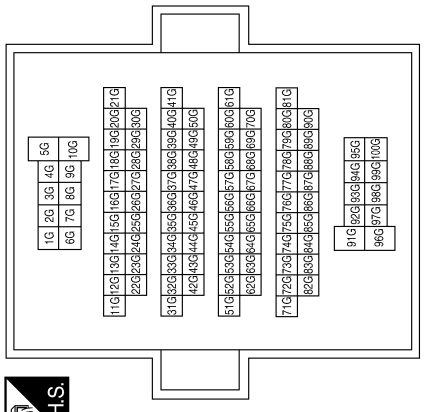
INFOID:0000000009755927



SPORT MODE SYSTEM CONNECTORS

Connector No.	M2
Connector Name	WIRE TO WIRE
Connector Color	WHITE

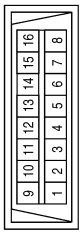
H.S.



Terminal No.	Color of Wire	Signal Name
95G	P	–
100G	L	–

Connector No.	M22
Connector Name	DATA LINK CONNECTOR
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
6	L	–
14	P	–

Connector No.	M24
Connector Name	COMBINATION METER
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	L	CAN-H
2	P	CAN-L
22	B	GND2 (POWER)
23	B	GND3 (CIRCUIT)
27	LG	BAT
28	GR	IGN
39	W	SPORT MODE SW

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Connector No.	M31
Connector Name	JOINT CONNECTOR-M01
Connector Color	GRAY

H.S.

10	9	8	7	6	5	4	3	2	1
20	19	18	17	16	15	14	13	12	11

Terminal No.	Color of Wire	Signal Name
5	P	–
8	P	–
9	P	–
15	L	–
18	L	–
19	L	–

Connector No.	M60
Connector Name	JOINT CONNECTOR-M06
Connector Color	BLUE

H.S.

10	9	8	7	6	5	4	3	2	1
20	19	18	17	16	15	14	13	12	11

Terminal No.	Color of Wire	Signal Name
5	LG	–
9	W	–

Connector No.	M71
Connector Name	JOINT CONNECTOR-M05
Connector Color	PINK

H.S.

10	9	8	7	6	5	4	3	2	1
20	19	18	17	16	15	14	13	12	11

Terminal No.	Color of Wire	Signal Name
18	B	–
20	B	–

Connector No.	M81
Connector Name	SPORT MODE SWITCH
Connector Color	BLUE

H.S.

4	3	2	1
8	7	6	5

Terminal No.	Color of Wire	Signal Name
1	L	–
4	B	–
6	W	–
8	B	–

Connector No.	E2
Connector Name	JOINT CONNECTOR-E02
Connector Color	BLUE

H.S.

12	11	10	9	8	7	6	5	4	3	2	1

Terminal No.	Color of Wire	Signal Name
1	L	–
2	L	–
3	L	–
8	P	–
9	P	–
10	P	–

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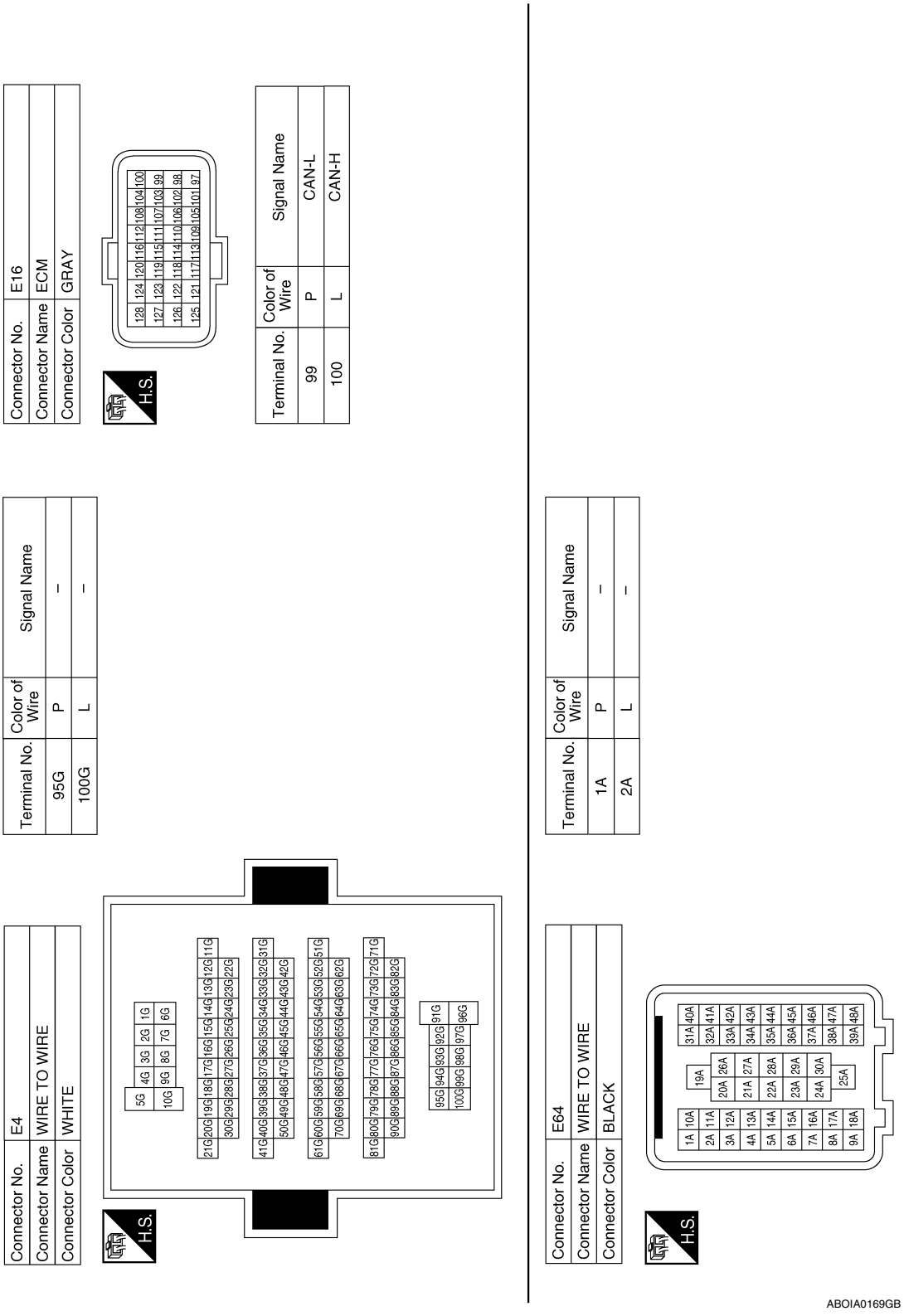

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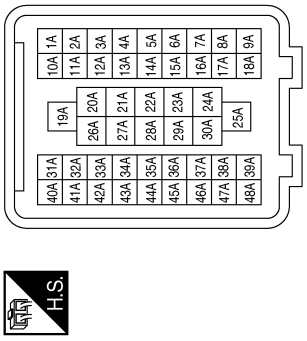
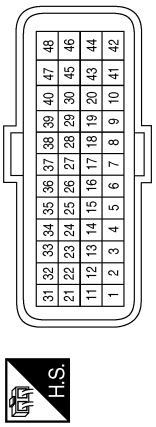
Connector No.	F50
Connector Name	WIRE TO WIRE
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
1A	P	–
2A	L	–

Connector No.	F23
Connector Name	TCM (TRANSMISSION CONTROL MODULE)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
23	P	CAN-L
33	L	CAN-H

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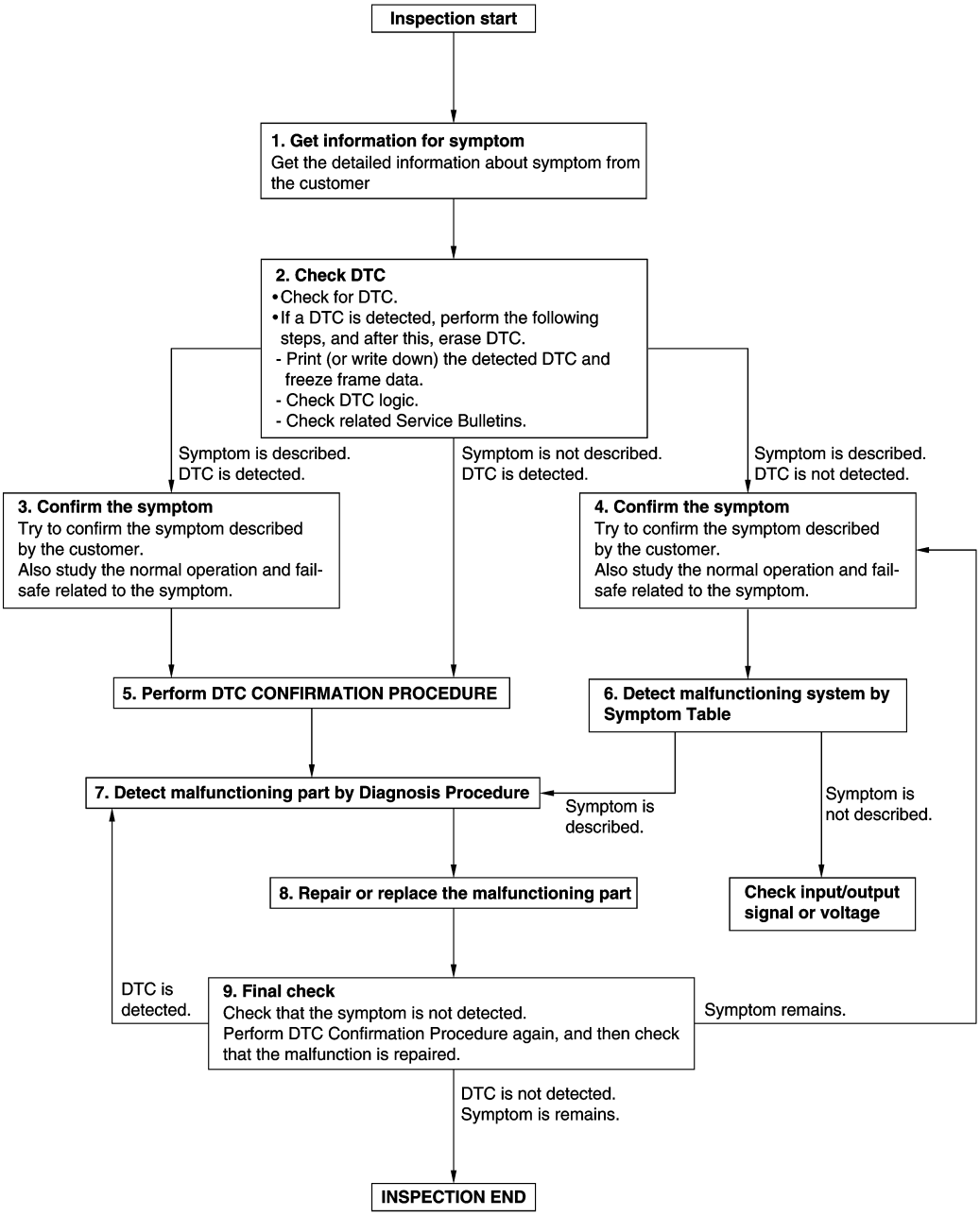
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000009755928

OVERALL SEQUENCE



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DETAILED FLOW

1.GET INFORMATION FOR SYMPTOM

Get the detailed information from the customer about the symptom (the condition and the environment when the incident/malfunction occurred) using the “Diagnostic Work Sheet”. (Refer to EC-129, "Diagnostic Work Sheet".)

>> GO TO 2.

2.CHECK DTC IN ECM

1. Check DTC in ECM.
2. If a DTC is detected, perform the following steps, and after this, erase DTC.
- Print (or write down) the detected DTC and freeze frame data.
- Check DTC logic.
- Study the relationship between the cause detected by DTC and the symptom described by the customer.
3. Check related Service Bulletins.

Are any symptoms described and any DTCs detected?

Symptom is described, DTC is detected>>GO TO 3.
Symptom is described, DTC is not detected>>GO TO 4.
Symptom is not described, DTC is detected>>GO TO 5.

3.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.
Also study the normal operation and fail-safe related to the symptom. Refer to EC-473, "Symptom Table" and EC-90, "Fail Safe".
Diagnosis Work Sheet is useful to verify the incident.
Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 5.

4.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.
Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 6.

5.PERFORM DTC CONFIRMATION PROCEDURE

Perform DTC CONFIRMATION PROCEDURE for the displayed DTC, and then check that DTC is detected again.
If two or more DTCs are detected, refer to EC-93, "DTC Inspection Priority Chart" and determine trouble diagnosis order.

NOTE:

- Freeze frame data is useful if the DTC is not detected.
- Perform Component Function Check if DTC CONFIRMATION PROCEDURE is not included on Service Manual. This simplified check procedure is an effective alternative though DTC cannot be detected during this check.
  If the result of Component Function Check is NG, it is the same as the detection of DTC by DTC CONFIRMATION PROCEDURE.

Is DTC detected?

YES >> GO TO 7.
NO >> Check SPORT mode system. Refer to DMS-57, "Component Function Check".

6.DETECT MALFUNCTIONING PART BY SYMPTOM DIAGNOSIS

Detect malfunctioning system according to Symptom Diagnosis based on the confirmed symptom in step 4, and determine the trouble diagnosis order based on possible causes and symptoms.

Is the symptom described?

YES >> GO TO 7.
NO >> Monitor input data from related sensors or check voltage of related ECM terminals using CONSULT. Refer to EC-77, "Reference Value".

7. DETECT MALFUNCTIONING PART BY DIAGNOSIS PROCEDURE

Inspect according to Diagnosis Procedure of the system.

Is a malfunctioning part detected?

YES >> GO TO 8.
NO >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".

8. REPAIR OR REPLACE THE MALFUNCTIONING PART

1. Repair or replace the malfunctioning part.
2. Reconnect parts or connectors disconnected during Diagnosis Procedure again after repair and replacement.
3. Check DTC. If DTC is displayed, erase it.

>> GO TO 9.

9. FINAL CHECK

When DTC was detected in step 3, perform DTC CONFIRMATION PROCEDURE or Component Function Check again, and then check that the malfunction have been completely repaired.
When symptom was described from the customer, refer to confirmed symptom in step 4 or 5, and check that the symptom is not detected.

Is DTC detected and does symptom remain?

YES-1 >> DTC is detected: GO TO 7.
YES-2 >> Symptom remains: GO TO 4.
NO >> Before returning the vehicle to the customer, always erase DTC.

DTC/CIRCUIT DIAGNOSIS

SPORT MODE SWITCH

Component Function Check

INFOID:0000000009755929

1. CHECK SPORT MODE SWITCH OPERATION

1. Turn ignition switch ON.
2. Check SPORT mode indicator lamp turns ON/OFF on combination meter when turn SPORT mode switch ON/OFF.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Proceed to DMS-53, "Diagnosis Procedure".

2. CHECK SPORT MODE SWITCH ILLUMINATION FUNCTION

1. Turn ON the headlamp.
2. Check SPORT mode switch illumination lights up.

Is the inspection result normal?

YES >> INSPECTION END
NO >> Proceed to DMS-53, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009755930

Regarding Wiring Diagram information, refer to DMS-45, "Wiring Diagram".

1. CHECK SPORT MODE SWITCH ILLUMINATION FUNCTION

1. Turn ignition switch ON.
2. Turn ON the headlamp.
3. Check that the SPORT mode switch illumination lights up.

Is the inspection result normal?

YES >> GO TO 7.
NO >> GO TO 2.

2. CHECK SPORT MODE SWITCH ILLUMINATION POWER SUPPLY-1

1. Turn OFF the headlamp.
2. Turn ignition switch OFF.
3. Disconnect SPORT mode switch harness connector.
4. Turn ignition switch ON.
5. Turn ON the headlamp.
6. Check the voltage between SPORT mode switch harness connector terminals.

SPORT mode switch			Voltage
Connector	+	-	
	Terminal		
M81	1	4	Battery voltage

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident". If OK, replace SPORT mode switch. Refer to DMS-58, "Removal and Installation".
NO >> GO TO 3.

3. CHECK SPORT MODE SWITCH ILLUMINATION POWER SUPPLY-2

Check the voltage between SPORT mode switch harness connector and ground.

+		—	Voltage
SPORT mode switch			
Connector	Terminal		
M81	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 6.
NO >> GO TO 4.

4. CHECK FUSE

1. Turn OFF the headlamp.
2. Turn ignition switch OFF.
3. Pull out #37 fuse. Refer to PG-47, "Terminal Arrangement".
4. Check that the fuse is not fusing.

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace the fuse after repair the applicable circuit.

5. CHECK SPORT MODE SWITCH ILLUMINATION POWER SUPPLY CIRCUIT

1. Disconnect IPDM E/R harness connector E45. Refer to INL-26, "Wiring Diagram".
2. Check the continuity between IPDM E/R harness connector and SPORT mode switch harness connector.

+		–		Continuity
IPDM E/R		SPORT mode switch		
Connector	Terminal	Connector	Terminal	
E45	33	M81	1	Existed

3. Also check harness for short to ground.

Is the inspection result normal?

YES >> Perform IPDM E/R auto active test and check tail lamp relay operation. Refer to PCS-9, "Diagnosis Description" (with intelligent key), PCS-37, "Diagnosis Description" (without intelligent key).
NO >> Repair or replace error-detected parts.

6. CHECK GROUND CIRCUIT

1. Turn OFF the headlamp.
2. Turn ignition switch OFF.
3. Check continuity between SPORT mode switch harness connector terminal and ground.

+		–	Continuity
SPORT mode switch			
Connector	Terminal		
M81	4	Ground	Existed

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Repair or replace error-detected parts.

7. CHECK SPORT MODE SWITCH CIRCUIT

1. Turn OFF the headlamp.
2. Turn ignition switch OFF.
3. Disconnect SPORT mode switch harness connector.
4. Turn ignition switch ON.
5. Check voltage between SPORT mode switch harness connector terminals.

SPORT mode switch			Voltage (Approx.)
Connector	+	-	
	Terminal		
M81	6	8	5 V

Is the inspection result normal?

YES >> GO TO 11.
NO >> GO TO 8.

8.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check the continuity between SPORT mode switch harness connector and ground.

+		–	Continuity
SPORT mode switch			
Connector	Terminal		
M81	8	Ground	Existed

Is the inspection result normal?

YES >> GO TO 9.
NO >> Repair or replace damaged parts.

9.CHECK CIRCUIT BETWEEN COMBINATION METER AND SPORT MODE SWITCH-1

1. Disconnect combination meter harness connector M38.
2. Check continuity between combination meter harness connector terminal and SPORT mode switch harness connector terminal.

+		–		Continuity
Combination meter		SPORT mode switch		
Connector	Terminal	Connector	Terminal	
M24	39	M81	6	Existed

3. Also check harness for short to power and short to ground.

Is the inspection result normal?

YES >> GO TO 10.
NO >> Repair or replace damaged parts.

10.CHECK COMBINATION METER INPUT/OUTPUT SIGNAL

1. Connect all of disconnected connectors.
2. Check input/output signal of combination meter. Refer to MWI-20, "Reference Value".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Repair or replace error detected parts.

11.CHECK SPORT MODE SWITCH

Check SPORT mode switch. Refer to DMS-55, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace SPORT mode switch. Refer to DMS-58, "Removal and Installation".

Component Inspection

INFOID:0000000009755931

1.CHECK SPORT MODE SWITCH

Check continuity between SPORT mode switch connector terminals.

SPORT mode switch Terminal	Condition	Continuity
6 – 8	SPORT mode switch is depressed.	Existed
	SPORT mode switch is released.	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace SPORT mode switch. Refer to DMS-58, "Removal and Installation".

SPORT MODE

Component Function Check

INFOID:0000000009755932

1. CHECK SPORT MODE OPERATION

1. Turn ignition switch ON.
2. Check SPORT mode indicator lamp turns ON/OFF on combination meter when turn SPORT mode switch ON/OFF.

Is the inspection result normal?

YES >> INSPECTION END.
NO >> Proceed to DMS-57, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009755933

1. CHECK DTC IN ECM

With CONSULT
Check “Self Diagnostic Results” in “ENGINE”.

Are any DTC detected?

YES >> Check DTC detected item. Refer to EC-94, "DTC Index".
NO >> GO TO 2.

2. CHECK DTC IN COMBINATION METER

With CONSULT
Check “Self Diagnostic Results” in “METER/M&A”.

Is any DTC detected?

YES >> Check DTC detected item. Refer to MWI-26, "DTC Index".
NO >> GO TO 3.

3. CHECK COMBINATION METER

With CONSULT
1. Select “Data Monitor” in “METER/M&A”.
2. Check that “SPORT MODE IND” turns ON/OFF when SPORT mode switch is operated. Refer to MWI-20, "Reference Value".

Is the inspection result normal?

YES >> Replace combination meter. Refer to MWI-77, "Removal and Installation".
NO >> GO TO 4.

4. CHECK SPORT MODE SWITCH SYSTEM

Check SPORT mode switch system. Refer to DMS-53, "Component Function Check".

Is the inspection result normal?

YES >> INSPECTION END
NO >> Repair or replace error-detected parts.

REMOVAL AND INSTALLATION

SPORT MODE SWITCH

Removal and Installation

INFOID:0000000009755934

REMOVAL

1. Remove instrument lower panel LH. Refer to IP-21, "Removal and Installation".
2. Remove SPORT mode switch.

INSTALLATION

Installation is in the reverse order of removal.

PRECAUTION

PRECAUTIONS

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

INFOID:0000000010291076

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. Information necessary to service the system safely is included in the SR and SB section 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 SR section.**
- **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:

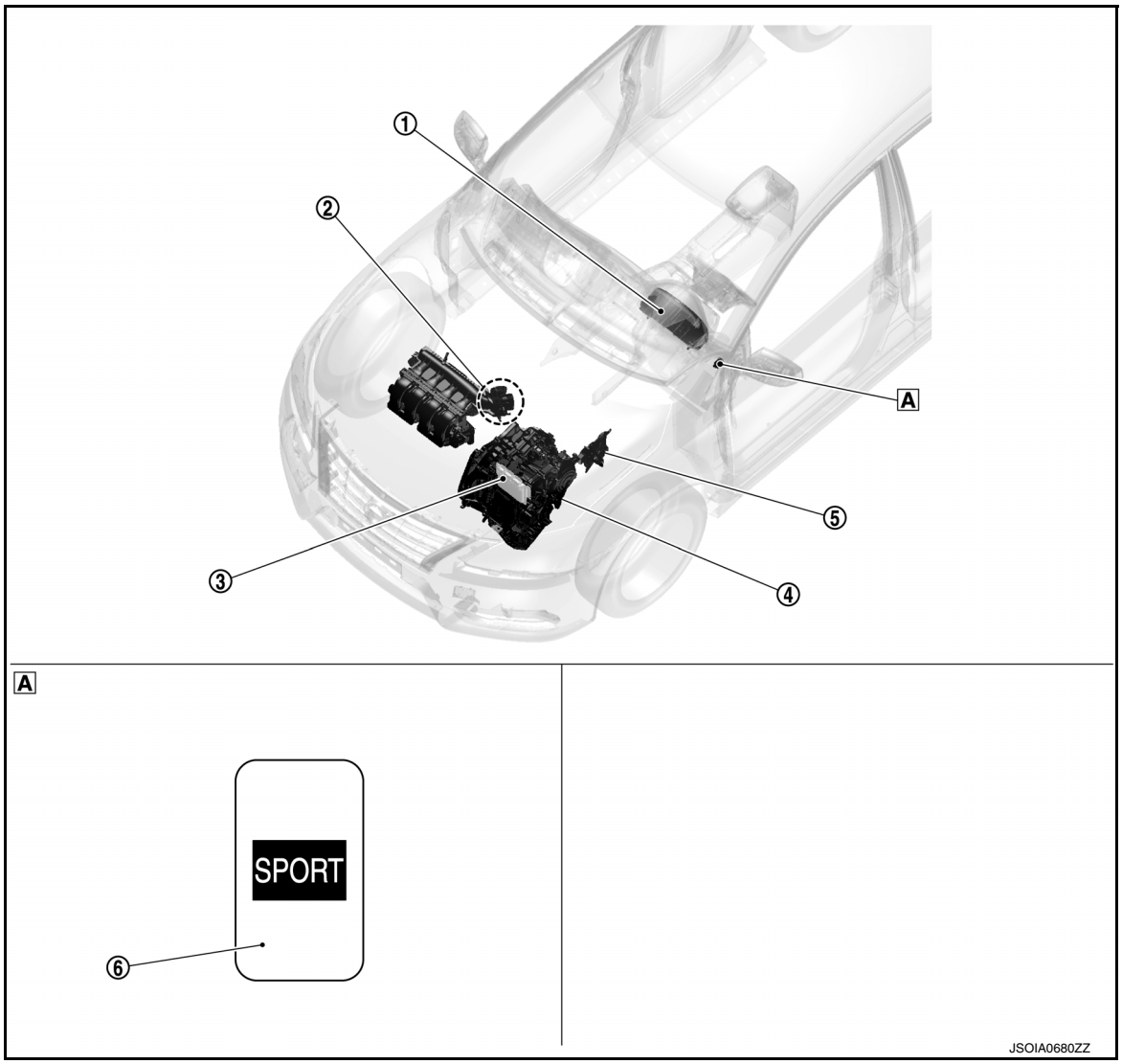
- **When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors with the Ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious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

SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

INFOID:0000000009755936



A Instrument lower finisher

COMPONENT DESCRIPTION

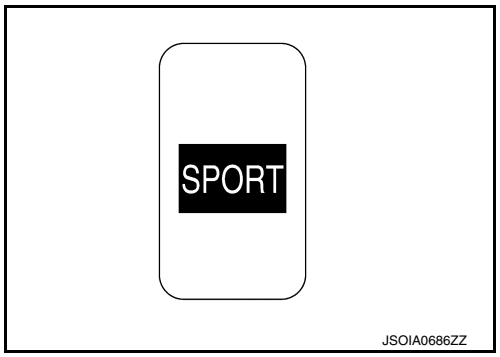
No.	Component	Function
①	Combination meter	• The combination meter transmittes the following signal via CAN communications to the TCM. - SPORT mode switch signal • The combination meter receives the following signal via CAN communications from the ECM. - SPORT mode indicator signal Refer to MWI-5, "METER SYSTEM : Component Parts Location" for detailed installation location.
②	Electric throttle control actuator	Refer to EC-22, "Electric Throttle Control Actuator".

No.	Component	Function
③	ECM	• The ECM receives the following signal via CAN communications from the TCM. - SPORT mode signal • The ECM transmittes the following signal via CAN communications to the combination meter. - SPORT mode indicator signal Refer to EC-15, "ENGINE CONTROL SYSTEM : Component Parts Location" for detailed installation location.
④	Transaxle assembly	Refer to TM-73, "CVT CONTROL SYSTEM : Component Parts Location".
⑤	TCM	• The TCM receives the following signal via CAN communications from the combination meter. - SPORT mode switch signal • The TCM transmittes the following signal via CAN communications to the ECM. - SPORT mode signal Refer to TM-73, "CVT CONTROL SYSTEM : Component Parts Location" for detailed installation location.
⑥	SPORT mode switch	Refer to DMS-61, "SPORT Mode Switch".

SPORT Mode Switch

INFOID:0000000009755937

- The SPORT mode switch is installed to the instrument lower finisher.
- When the SPORT mode indicator lamp on the combination meter is OFF and the SPORT mode switch is pressed, the SPORT mode is active and the SPORT mode indicator lamp is ON.
- When the SPORT mode indicator lamp on the combination meter is ON and the SPORT mode switch is pressed, the SPORT mode is cancelled and the SPORT mode indicator lamp is OFF.



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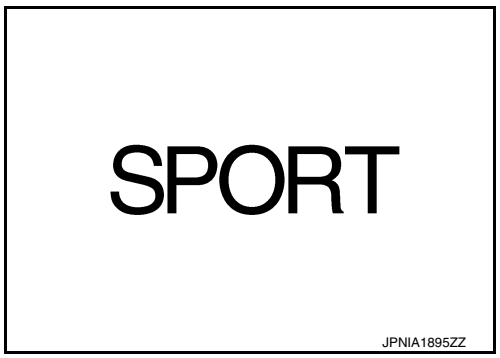
SPORT Mode Indicator Lamp

INFOID:0000000009755938

DESIGN/PURPOSE

The SPORT mode indicator lamp inform the driver that the vehicle is in SPORT mode.



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BULB CHECK

Not applicable

SIGNAL PATH

- TCM receives SPORT mode switch signal (ON/OFF) from combination meter via CAN communication. Based on the signal, TCM transmits SPORT mode signal to ECM via CAN communication.
- ECM transmits SPORT mode indicator signal to combination meter via CAN communication. Based on the signal, combination meter illuminates SPORT mode indicator lamp.

LIGHTING CONDITION

When all of the following conditions are satisfied.

- Ignition switch: ON
- The SPORT mode switch is pressed when the SPORT mode indicator lamp is OFF

SHUTOFF CONDITION

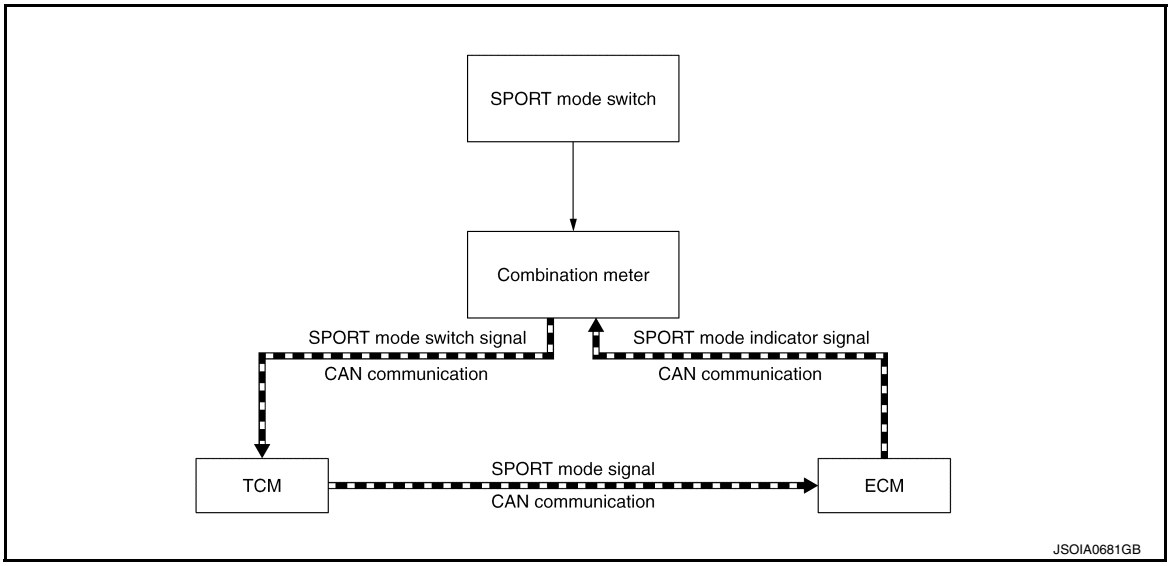
When any of the condition listed below is satisfied.

- Ignition switch: Other than ON
- The SPORT mode switch is pressed when the SPORT mode indicator lamp is ON.
- The ECO mode switch is pressded when the SPORT mode indicator lamp is ON.

SYSTEM
SPORT MODE CONTROL
SPORT MODE CONTROL : System Description

INFOID:0000000009755939

SYSTEM DIAGRAM



SYSTEM DISCRIPTION

- TCM receive SPORT mode switch signal (ON/OFF) from combination meter via CAN communication. TCM transmit SPORT mode signal to ECM via CAN communication according to the signal.
- ECM transmit SPORT mode indicator signal to combination meter via CAN communication. Combination meter illuminates SPORT mode indicator lamp according to the signal.

Each ECU Control

- For TCM control, refer to TM-104, "SPORT MODE CONTROL : System Description".
- For ECM control, refer to EC-53, "SPORT MODE CONTROL : System Description".

ECU DIAGNOSIS INFORMATION

SPORT MODE

List of ECU Reference

INFOID:0000000009755940

ECU	Reference
TCM	TM-114, "Reference Value"
	TM-122, "Fail-Safe"
	TM-125, "DTC Inspection Priority Chart"
	TM-126, "DTC Index"
ECM	EC-77, "Reference Value"
	EC-90, "Fail Safe"
	EC-93, "DTC Inspection Priority Chart"
	EC-94, "DTC Index"
Combination meter	MWI-20, "Reference Value"
	MWI-25, "Fail-Safe"
	MWI-26, "DTC Index"

WIRING DIAGRAM

SPORT MODE SYSTEM

Wiring Diagram

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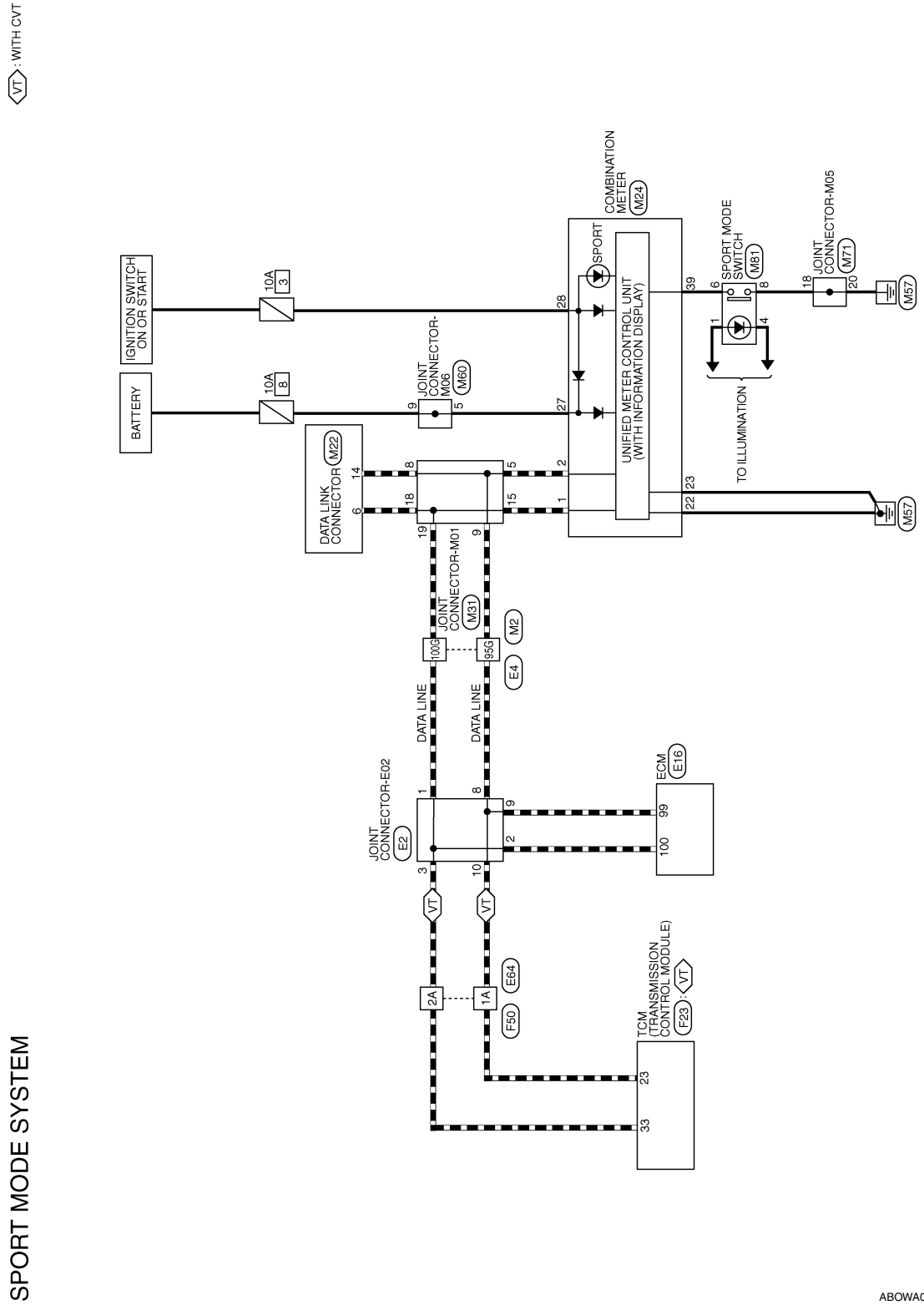
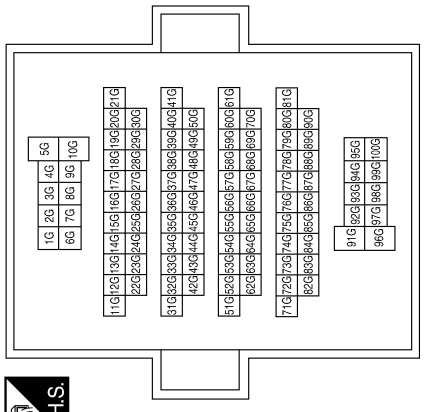


SPORT MODE SYSTEM CONNECTORS

Connector No.	M2
Connector Name	WIRE TO WIRE
Connector Color	WHITE

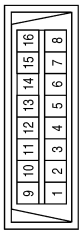
H.S.



Terminal No.	Color of Wire	Signal Name
95G	P	–
100G	L	–

Connector No.	M22
Connector Name	DATA LINK CONNECTOR
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
6	L	–
14	P	–

Connector No.	M24
Connector Name	COMBINATION METER
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	L	CAN-H
2	P	CAN-L
22	B	GND2 (POWER)
23	B	GND3 (CIRCUIT)
27	LG	BAT
28	GR	IGN
39	W	SPORT MODE SW

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Connector No.	M31
Connector Name	JOINT CONNECTOR-M01
Connector Color	GRAY

H.S.

10	9	8	7	6	5	4	3	2	1
20	19	18	17	16	15	14	13	12	11

Terminal No.	Color of Wire	Signal Name
5	P	–
8	P	–
9	P	–
15	L	–
18	L	–
19	L	–

Connector No.	M60
Connector Name	JOINT CONNECTOR-M06
Connector Color	BLUE

H.S.

10	9	8	7	6	5	4	3	2	1
20	19	18	17	16	15	14	13	12	11

Terminal No.	Color of Wire	Signal Name
5	LG	–
9	W	–

Connector No.	M71
Connector Name	JOINT CONNECTOR-M05
Connector Color	PINK

H.S.

10	9	8	7	6	5	4	3	2	1
20	19	18	17	16	15	14	13	12	11

Terminal No.	Color of Wire	Signal Name
18	B	–
20	B	–

Connector No.	M81
Connector Name	SPORT MODE SWITCH
Connector Color	BLUE

H.S.

4	3	2	1
8	7	6	5

Terminal No.	Color of Wire	Signal Name
1	L	–
4	B	–
6	W	–
8	B	–

Connector No.	E2
Connector Name	JOINT CONNECTOR-E02
Connector Color	BLUE

H.S.

12	11	10	9	8	7	6	5	4	3	2	1

Terminal No.	Color of Wire	Signal Name
1	L	–
2	L	–
3	L	–
8	P	–
9	P	–
10	P	–

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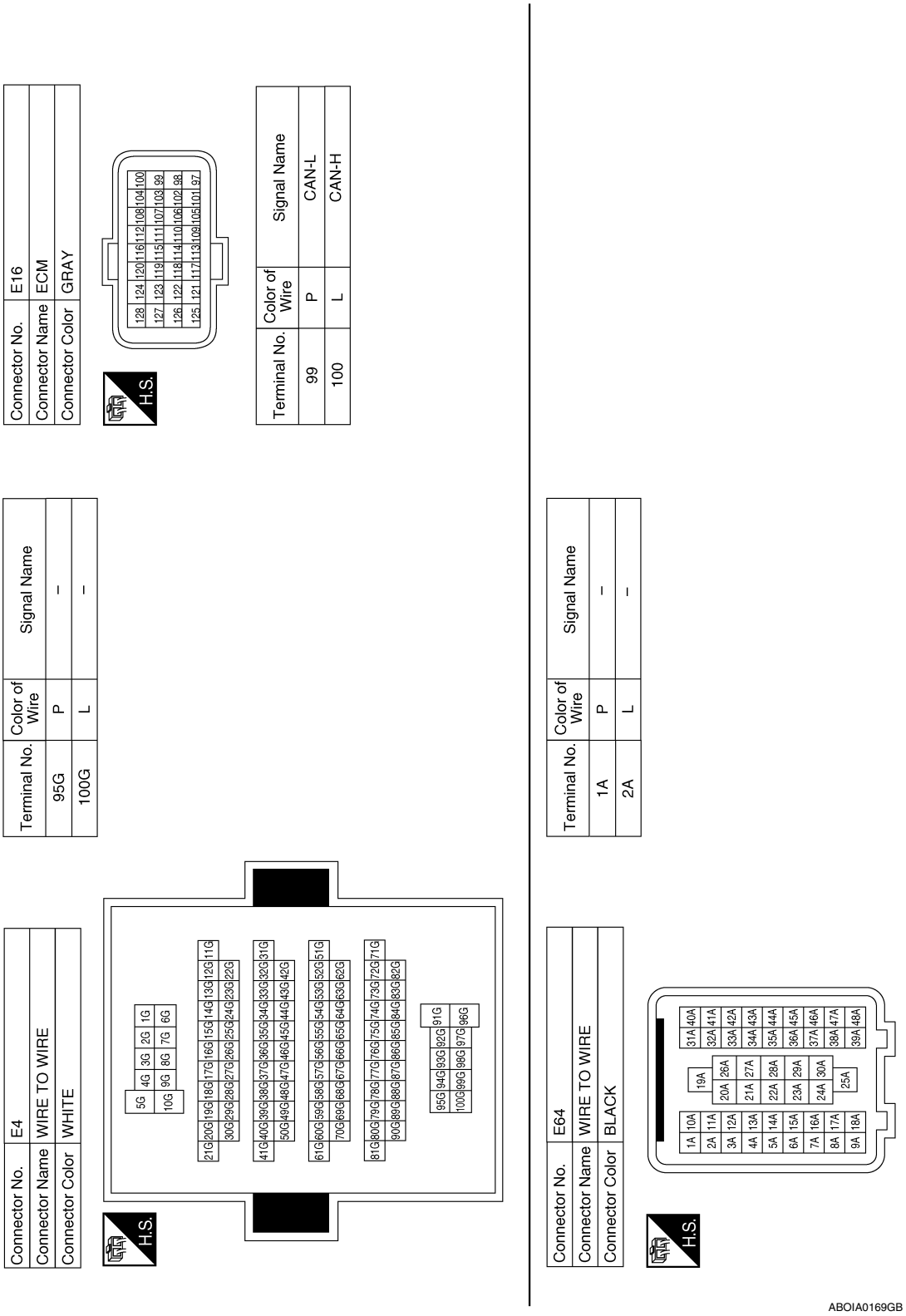

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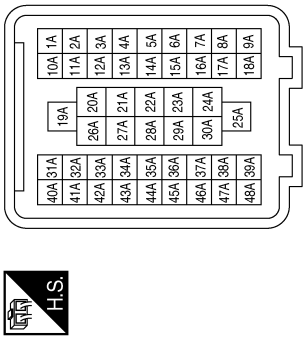
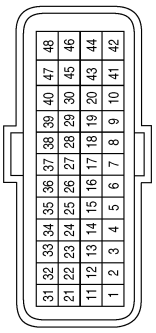
Connector No.	F50
Connector Name	WIRE TO WIRE
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
1A	P	–
2A	L	–

Connector No.	F23
Connector Name	TCM (TRANSMISSION CONTROL MODULE)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
23	P	CAN-L
33	L	CAN-H

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BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000009755942

DETAILED FLOW

1.OBTAIN INFORMATION ABOUT SYMPTOM

Interview the customer to obtain as much information as possible about the conditions and environment under which the malfunction occurs.

>> GO TO 2.

2.CHECK SYMPTOM

- Check the symptom based on the information obtained from the customer.
- Check if any other malfunctions are present.

>> GO TO 3.

3.DTC/SYSTEM DIGANOSIS

Perform a DTC/system diagnosis and repair or replace any malfunctioning part.

>> GO TO 4.

4.FINAL CHECK

Check that the SPORT mode functions normally.

Does it operation normally?

YES >> End of trouble diagnosis
NO >> GO TO 2.

DTC/CIRCUIT DIAGNOSIS

SPORT MODE SWITCH

Component Function Check

INFOID:0000000009755943

1. CHECK SPORT MODE SWITCH OPERATION

1. Turn ignition switch ON.
2. Check SPORT mode indicator lamp turns ON/OFF on combination meter when turn SPORT mode switch ON/OFF.

Is the inspection result normal?

YES >> INSPECTION END.
NO >> Proceed to DMS-71, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009755944

Regarding Wiring Diagram information, refer to DMS-65, "Wiring Diagram".

1. DETECT MALFUNCTIONING ITEMS

What is malfunction items?

SPORT mode switch illumination does not turns ON>>GO TO 2.
SPORT mode indicator lamp does not turns ON>>GO TO 8.

2. CHECK SPORT MODE SWITCH ILLUMINATION POWER SUPPLY (1)

1. Turn OFF the headlamp.
2. Turn ignition switch OFF.
3. Disconnect SPORT mode switch harness connector.
4. Turn ignition switch ON.
5. Turn ON the headlamp.
6. Check the voltage between SPORT mode switch harness connector terminals.

SPORT mode switch			Voltage
Connector	+	-	
	Terminal		
M81	1	4	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.
NO >> GO TO 4.

3. CHECK INTERMITTENT INCIDENTE

Refer to GI-39, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace SPORT mode switch. Refer to DMS-76, "Removal and Installation".
NO >> Replace the fuse after repair the applicable circuit.

4. CHECK SPORT MODE SWITCH ILLUMINATION POWER SUPPLY (2)

Check the voltage between SPORT mode switch harness connector and ground.

+		—	Voltage
SPORT mode switch			
Connector	Terminal		
M81	1	Ground	Battery voltage

Is the inspection result normal?

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

5. CHECK FUSE

1. Turn OFF the headlamp.
2. Turn ignition switch OFF.
3. Pull out #37 fuse. Refer to PG-47, "Terminal Arrangement".
4. Check that the fuse is not fusing.

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace the fuse after repair the applicable circuit.

6. CHECK SPORT MODE SWITCH ILLUMINATION POWER SUPPLY CIRCUIT

1. Disconnect IPDM E/R harness connector E45. Refer to INL-26, "Wiring Diagram".
2. Check the continuity between IPDM E/R harness connector and SPORT mode switch harness connector.

+		–		Continuity
IPDM E/R		SPORT mode switch		
Connector	Terminal	Connector	Terminal	
E45	33	M81	1	Existed

3. Also check harness for short to ground.

Is the inspection result normal?

YES >> Perform IPDM E/R auto active test and check tail lamp relay operation. Refer to PCS-9, "Diagnosis Description" (with intelligent key), PCS-37, "Diagnosis Description" (without intelligent key).
NO >> Repair or replace error-detected parts.

7. CHECK GROUND CIRCUIT

1. Turn OFF the headlamp.
2. Turn ignition switch OFF.
3. Check continuity between SPORT mode switch harness connector terminal and ground.

+		–	Continuity
SPORT mode switch			
Connector	Terminal		
M81	4	Ground	Existed

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Repair or replace error-detected parts.

8. CHECK SPORT MODE SWITCH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect SPORT mode switch harness connector.
3. Turn ignition switch ON.
4. Check voltage between SPORT mode switch harness connector terminals.

SPORT mode switch			Voltage (Approx.)
Connector	+	-	
	Terminal		
M81	6	8	5 V

Is the inspection result normal?

YES >> GO TO 13.
NO >> GO TO 9.

9.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check the continuity between SPORT mode switch harness connector and ground.

SPORT mode switch		—	Continuity
Connector	Terminal		
M81	8	Ground	Existed

Is the inspection result normal?

YES >> GO TO 10.
NO >> Repair or replace damaged parts.

10.CHECK CIRCUIT BETWEEN COMBINATION METER AND SPORT MODE SWITCH (1)

1. Disconnect combination meter harness connector M24.
2. Check continuity between combination meter harness connector terminal and SPORT mode switch harness connector terminal.

Combination meter		SPORT mode switch		Continuity
Connector	Terminal	Connector	Terminal	
M24	39	M81	6	Existed

Is the inspection result normal?

YES >> GO TO 11.
NO >> Repair or replace damaged parts.

11.CHECK CIRCUIT BETWEEN COMBINATION METER AND SPORT MODE SWITCH (2)

Check continuity between combination meter harness connector terminal and SPORT mode switch harness connector terminal.

Combination meter		—	Continuity
Connector	Terminal		
M24	39	Ground	Not existed

Is the inspection result normal?

YES >> GO TO 12.
NO >> Repair or replace damaged parts.

12.CHECK COMBINATION METER INPUT/OUTPUT SIGNAL

1. Connect all of disconnected connectors.
2. Check input/output signal of combination meter. Refer to MWI-20, "Reference Value".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace combination meter. Refer to MWI-77, "Removal and Installation".

13.CHECK SPORT MODE SWITCH

Check SPORT mode switch. Refer to DMS-37, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Replace SPORT mode switch. Refer to DMS-39, "Removal and Installation".

Component Inspection

INFOID:0000000009755945

1.CHECK SPORT MODE SWITCH

Check continuity between SPORT mode switch connector terminals.

SPORT mode switch	Condition	Continuity
Terminal		
6 – 8	SPORT mode switch is depressed.	Existed
	SPORT mode switch is released.	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace SPORT mode switch. Refer to DMS-76, "Removal and Installation".

SYMPTOM DIAGNOSIS

THE SPORT MODE INDICATOR LAMP DOES NOT TURN ON

Description

INFOID:0000000009755946

The SPORT mode indicator lamp does not turn ON when the SPORT mode switch is operated.

Diagnosis Procedure

INFOID:0000000009755947

1. PERFORM COMBINATION METER ON BOARD DIAGNOSIS

Perform combination meter on board diagnosis. Refer to MWI-16, "Description".

Is the check result normal?

YES >> GO TO 2.
NO >> Replace combination meter. Refer to MWI-77, "Removal and Installation".

2. CHECK DTC (TCM)

With CONSULT
1. Start the engine.
2. Check “Self Diagnostic Results” in “TRANSMISSION”.

Is any DTC detected?

YES >> Check DTC detected item. Refer to TM-126, "DTC Index".
NO >> GO TO 3.

3. CHECK DTC (ECM)

With CONSULT
Check “Self Diagnostic Results” in “ENGINE”.

Is any DTC detected?

YES >> Check DTC detected item. Refer to EC-94, "DTC Index".
NO >> GO TO 4.

4. CHECK DTC (COMBINATION METER)

With CONSULT
Check “Self Diagnostic Results” in “METER/M&A”.

Is any DTC detected?

YES >> Check DTC detected item. Refer to MWI-26, "DTC Index".
NO >> GO TO 5.

5. CHECK COMBINATION METER INPUT/OUTPUT SIGNAL

With CONSULT
1. Select “Data Monitor” in “METER/M&A”.
2. Select “SPORT MODE IND”.
3. Check that “SPORT MODE IND” turns ON/OFF when SPORT mode switch is operated. Refer to MWI-20, "Reference Value".

Is any DTC detected?

YES >> Replace combination meter. Refer to MWI-77, "Removal and Installation".
NO >> GO TO 6.

6. CHECK SPORT MODE SWITCH CIRCUIT

Check SPORT mode switch circuit. Refer to DMS-34, "Diagnosis Procedure".

Is any DTC detected?

YES >> INSPECTION END
NO >> Repair or replace malfunctioning parts.

REMOVAL AND INSTALLATION

SPORT MODE SWITCH

Removal and Installation

INFOID:0000000009755948

REMOVAL

1. Remove instrument lower panel LH. Refer to IP-14, "Exploded View".
2. Remove SPORT mode switch.

INSTALLATION

Installation is in the reverse order of removal.