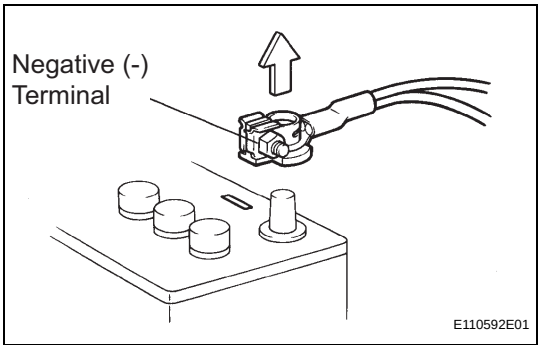




METER / GAUGE SYSTEM

PRECAUTION

1. REMOVAL AND INSTALLATION OF THE BATTERY TERMINAL

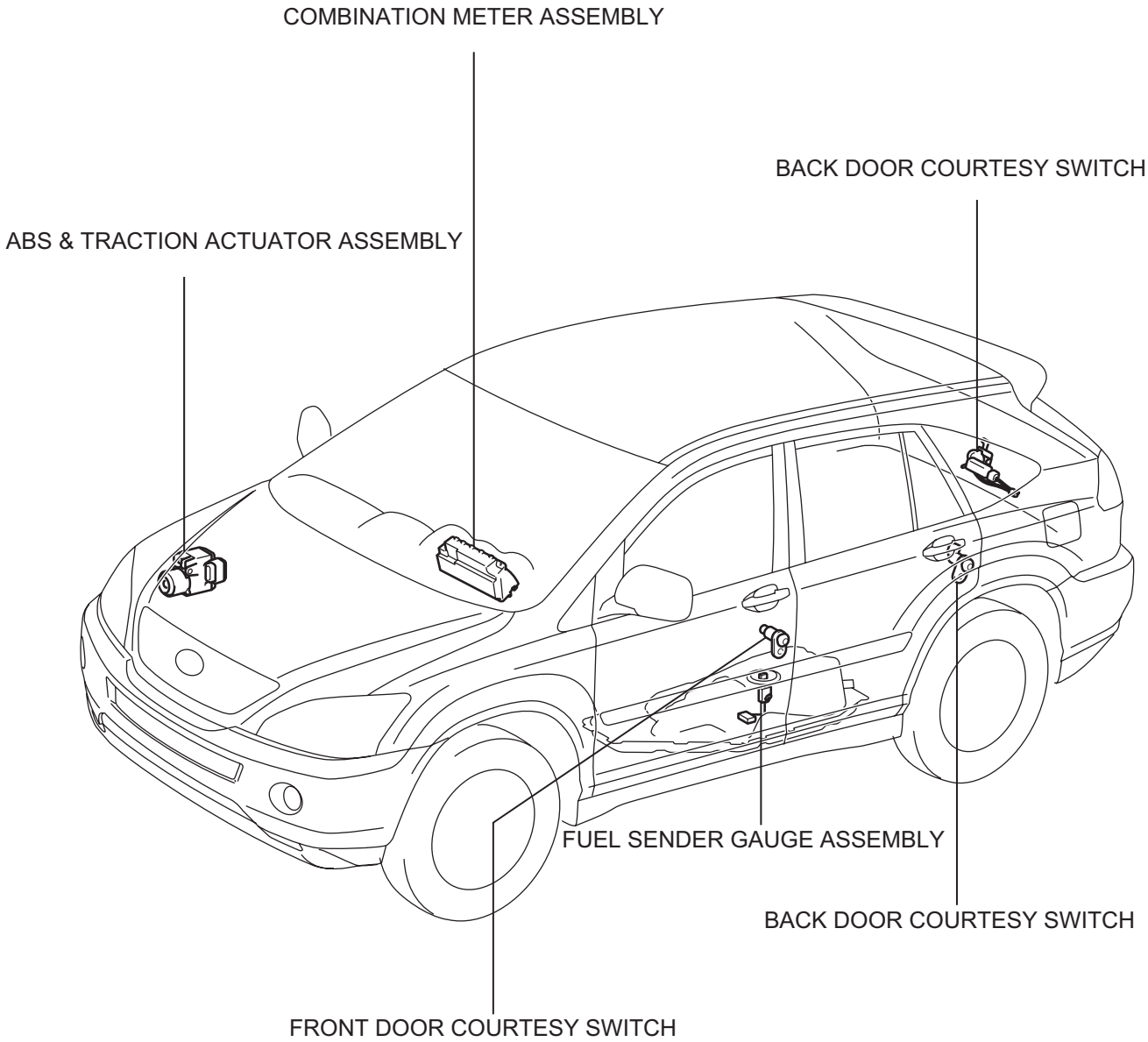
- (a) Before performing electrical work, disconnect the battery negative (-) terminal in order to prevent a short in the system.
- (b) When disconnecting and reconnecting the battery cable, turn the ignition switch and lighting switches off and loosen the terminal nut completely. Perform these operations without prying on the terminal.
- (c) When the battery terminal is removed, the memories of the clock, radio, DTCs, etc. are erased. So before removing the terminal, check and make a note of them.

NOTICE:

When disconnecting the battery negative (-) terminal, initialize the following system after the terminal is reconnected.

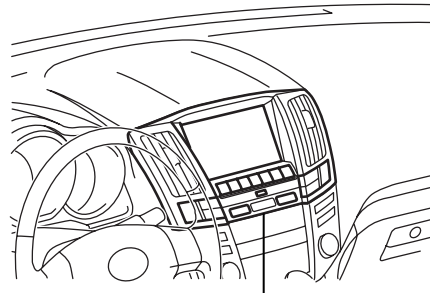
System Name	See Procedure
Lighting System	LI-17
Sliding Roof Control System	RF-4 and RF-22
Power Window Control System	WS-12
Power Back Door System	ED-33

PARTS LOCATION

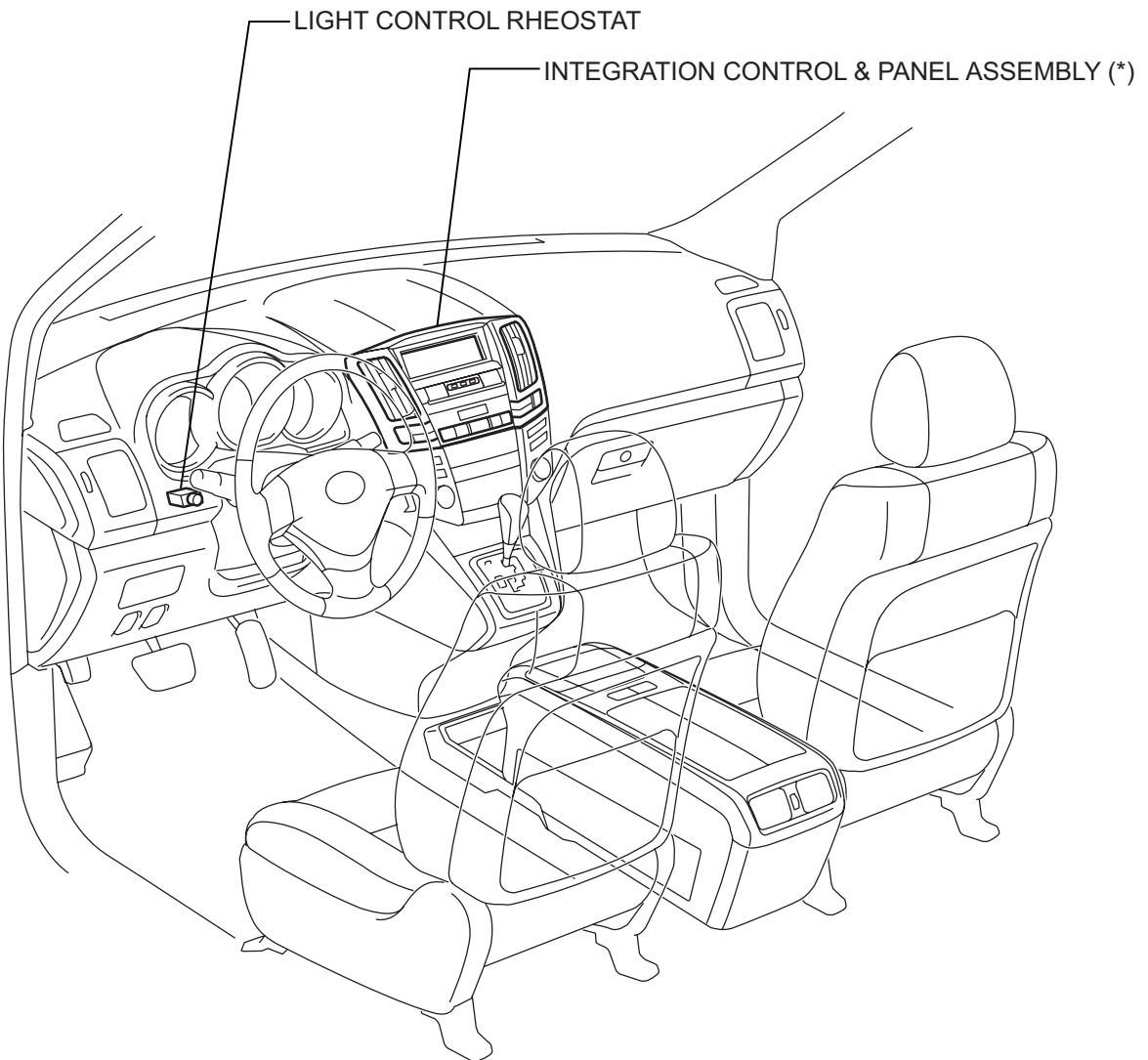


ME

W/ NAVIGATION SYSTEM:



MULTI-DISPLAY ASSEMBLY



*: W/O NAVIGATION SYSTEM

H

ME

HOW TO PROCEED WITH TROUBLESHOOTING

1

VEHICLE BROUGHT TO WORKSHOP

NEXT

2

CUSTOMER PROBLEM ANALYSIS

NEXT

3

CHECK BODY MULTIPLEX COMMUNICATION SYSTEM

- (a) Check for DTC output.
HINT:
(See page [MP-20](#)).

MULTIPLEX DTC OUTPUTS (PROCEED TO "BODY MULTIPLEX COMMUNICATION SYSTEM")

NO MULTIPLEX DTC (GO TO STEP 4)

4

CHECK CAN COMMUNICATION SYSTEM

- (a) Check for DTC output.
HINT:
(See page [CA-5](#)).

CAN DTC OUTPUTS (PROCEED TO "CAN COMMUNICATION SYSTEM")

NO CAN DTC (GO TO STEP 5)

5

PROBLEM SYMPTOM CONFIRMATION

NEXT

6

PROBLEM SYMPTOMS TABLE

- HINT:
(See page [ME-5](#)).

NEXT

ME

7**CIRCUIT INSPECTION****NEXT****8****REPAIR OR REPLACE****NEXT****9****CONFIRMATION TEST****NEXT****END**

PROBLEM SYMPTOMS TABLE

MALFUNCTION SYSTEM:

Symptom	Suspected area	See page
Entire combination meter does not operate.	Combination Meter Circuit	ME-21
Operating light control rheostat does not change light brightness.	Light Control Rheostat Circuit	ME-37
Malfunction in ODO/TRIP switch	ODO/TRIP Switch Circuit	ME-35

METER GAUGES:

Symptom	Suspected area	See page
Speedometer malfunction	Speedometer	ME-23
Tachometer malfunction	Tachometer	ME-27
Fuel receiver gauge malfunction	Fuel Receiver Gauge	ME-30
Engine coolant temperature malfunction	Engine Coolant Temperature Receiver Gauge	ME-33

WARNING LIGHTS:

Symptom	Suspected area	See page
Check Engine warning light does not come on.	1. MIL Circuit	ES-361
	2. Wire Harness or Connector	-
	3. Combination Meter Assembly	ME-40
Discharge warning light does not come on.	1. LED	ME-15
	2. Wire Harness or Connector	-
	3. ECM	ES-37
	4. Combination Meter Assembly	ME-40
Brake warning light does not come on.	1. Wire Harness or Connector	-
	2. Skid Control ECU	BC-13
	3. Combination Meter Assembly	ME-40
ABS warning light does not come on.	1. Skid Control ECU	BC-13
	2. Wire Harness or Connector	-
	3. Combination Meter Assembly	ME-40
SRS warning light does not come on.	1. LED	ME-15
	2. Airbag Sensor Assembly Center	RS-23
	3. Wire Harness or Connector	-
	4. Combination Meter Assembly	ME-40
Open Door warning light does not come on.	1. LED	ME-15
	2. Wire Harness or Connector	-
	3. Front Door Courtesy Switch	DL-27
	4. Body ECU	-
	5. Combination Meter Assembly	ME-40
Fuel Level warning light does not come on.	1. LED	ME-15
	2. Wire Harness or Connector	-
	3. Fuel Sender Gauge Assembly	ME-43
	4. Combination Meter Assembly	ME-40
Low Oil Pressure warning light does not come on.	1. LED	ME-15
	2. Wire Harness or Connector	-
	3. Low Oil Pressure Warning Switch	ME-44
	4. Combination Meter Assembly	ME-40

Symptom	Suspected area	See page
Driver's seat belt warning light does not come on.	1. LED	ME-15
	2. Wire Harness or Connector	-
	3. Body ECU	-
	4. Front Inner Belt Assembly	SB-7
	5. Combination Meter Assembly	ME-40
Passenger's seat belt warning light does not come on.	1. LED	ME-15
	2. Wire Harness or Connector	-
	3. Body ECU	-
	4. Front Inner Belt Assembly	SB-9
	5. Combination Meter Assembly	ME-40
A/T oil temperature warning light does not come on.	1. LED	ME-15
	2. Automatic Transaxle (for 2WD)	AX-38
	3. Automatic Transaxle (for 4WD)	AX-38
	4. Wire Harness or Connector	-
	5. ECM	-
	6. Combination Meter Assembly	ME-40
VSC warning light does not come on.	1. Skid Control ECU	BC-13
	2. Wire Harness or Connector	-
	3. Combination Meter Assembly	ME-40

INDICATOR LIGHTS:

Symptom	Suspected area	See page
Shift indicator light does not come on.	1. LED	ME-15
	2. Wire Harness or Connector	-
	3. Natural Start Switch Circuit (for 2WD)	AX-21
	4. Neutral Start Switch Circuit (for 4WD)	AX-21
	5. Combination Meter Assembly	ME-40
Turn indicator light does not come on.	1. Wire Harness or Connector	-
	2. Turn Signal and Hazard Warning System	LI-19
	3. Combination Meter Assembly	ME-40
TRC off indicator light does not come on.	1. LED	ME-15
	2. Skid Control ECU	BC-13
	3. Wire Harness or Connector	-
	4. Combination Meter Assembly	ME-40
SLIP indicator light does not come on.	1. LED	ME-15
	2. Wire Harness or Connector	-
	3. Skid Control ECU	BC-13
	4. Combination Meter Assembly	ME-40
ETC SNOW indicator light does not come on.	1. LED	ME-15
	2. Wire Harness or Connector	-
	3. ECM	-
	4. Combination Meter Assembly	ME-40
AFS OFF indicator light does not come on.	1. Wire Harness or Connector	-
	2. Combination Meter Assembly	ME-40
HEAD LEVELING indicator light does not come on.	1. Wire Harness or Connector	-
	2. Combination Meter Assembly	ME-40
CRUISE indicator light does not come on.	1. LED	ME-15
	2. Wire Harness or Connector	-
	3. ECM	-
	4. Combination Meter Assembly	ME-40

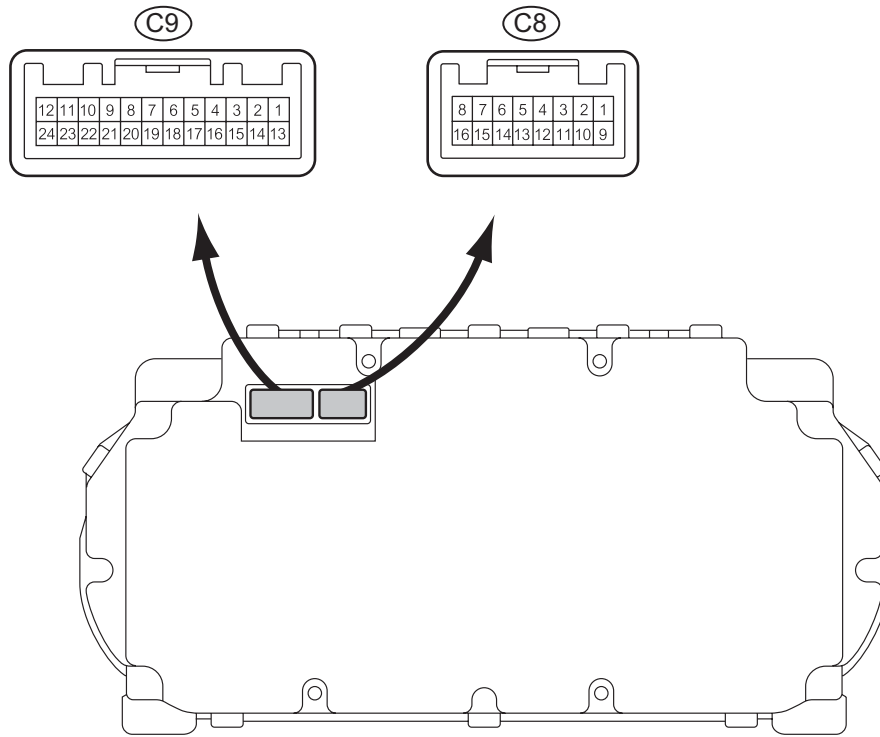
Symptom	Suspected area	See page
"NORM" "READY" indicator light does not come on.	1. LED	ME-15
	2. Cruise Control System	CC-10
	3. Wire Harness or Connector	-
	4. ECM	-
	5. Combination Meter Assembly	ME-40
High Beam indicator light does not come on.	1. Wire Harness or Connector	-
	2. Headlight Dimmer Switch	LI-19
	3. Combination Meter Assembly	ME-40
Tire pressure indicator light does not come on	1. Tire And Wheel System	-
	2. Wire Harness or Connector	-
	3. ECM	-
	4. Combination Meter Assembly	ME-40
Washer level indicator light does not come on.	1. Wire Harness or Connector	-
	2. ECM	-
	3. Combination Meter Assembly	ME-40
	4. Washer Level Sensor	-
AIR SUS (LO, N, OFF) indicator light does not come on.	1. Suspension System	SP-1
	2. Wire Harness or Connector	-
	3. AIR SUS ECU	-
	4. Combination Meter Assembly	ME-40
AIR SUS LODING DOME indicator light does not come on.	1. Suspension System	SP-1
	2. Wire Harness or Connector	-
	3. AIR SUS ECU	-
	4. Combination Meter Assembly	ME-40

ACCESSORY METER:

Symptom	Suspected area	See page
Indicated "Distance to empty" is in excessive error (Other meters operate normally).	Combination Meter Assembly	-
Indicated average fuel consumption and instantaneous fuel consumption are in excessive error (Other meters operate normally).	Combination Meter Assembly	-
Incomplete display (Does not indicate numbers, some digital segments are missing).	Center integration Switch (w/o Navigation)	-
Indicated direction is in excessive error.	Accessory Meter (w/ Navigation)	-

TERMINALS OF ECU

1. Combination Meter Assembly



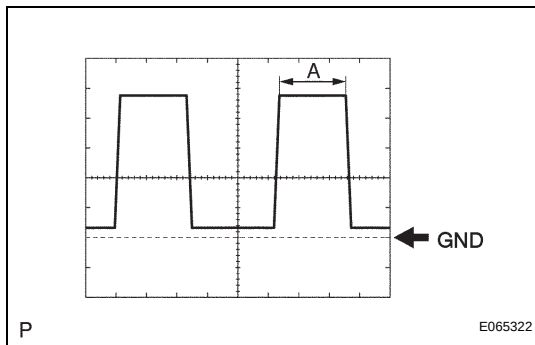
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E110168E01

ME

Symbols (Terminal No.)	Wiring Color	Terminal Description	Condition	Specified Condition
POWER GND (C8-1) - Body ground	W-B - Body ground	Ground	Always	Below 1 V
ILL- (C8-2) - Body ground	L - Body ground	Illumination signal	Headlight switch ON, Light control rheostat position MIN → MAX	Pulse generation (See Waveform 1)
AIR SUS LOADING MODE (C8-3) - Body ground	G - Body ground	AIR SUS signal	Ignition switch ON, AIR SUS LOADING MODE indicator ON → OFF	Below 1 V → 10 to 14 V
CHECK ENGINE (C8-4) - Body ground	BR - Body ground	CHECK ENGINE signal	Ignition switch ON, CHECK ENGINE warning light ON → OFF	Below 1 V → 10 to 14 V
MPX + (C8-5)	Y	Communication signal	Communication circuit	-
4P (C8-6) - Body ground	LG - Body ground	Speed signal (Output)	Ignition switch ON and turn the wheel slowly	Pulse generation (See waveform 2)
TACH (C8-7) - Body ground	W - Body ground	Tachometer signal	Engine running	Pulse generation (See waveform 3)
IG2 (C8-8) - Body ground	GR - Body ground	Ignition switch signal	Ignition switch OFF → ON	Below 1 V → 10 to 14 V
AIR SUS OFF (C8-9) - Body ground	W - Body ground	AIR SUS signal	Ignition switch ON, AIR SUS OFF indicator ON → OFF	Below 1 V → 10 to 14 V
AIR SUS LO (C8-10) - Body ground	GR - Body ground	AIR SUS signal	Ignition switch ON, AIR SUS LO indicator ON → OFF	Below 1 V → 10 to 14 V
AIR SUS N (C8-11) - Body ground	R - Body ground	AIR SUS signal	Ignition switch ON, AIR SUS N indicator ON → OFF	Below 1 V → 10 to 14 V

Symbols (Terminal No.)	Wiring Color	Terminal Description	Condition	Specified Condition
AIR SUS HI (C8-12) - Body ground	V - Body ground	AIR SUS signal	Ignition switch ON, AIR SUS HI indicator ON → OFF	Below 1 V → 10 to 14 V
TURN R (C8-13) - Body ground	P - Body ground	Turn signal right	Turn signal RH indicator light OFF → ON	Below 1 V → 10 to 14 V
TURN L (C8-14) - Body ground	B - Body ground	Turn signal left	Turn signal LH indicator light OFF → ON	Below 1 V → 10 to 14 V
ECU+B (C8-15) - Body ground	SB - Body ground	Battery	Always	10 to 14 V
DOME+B (C8-16) - Body ground	O - Body ground	Battery	Always	10 to 14 V
SIGNAL GND (C9-1) - Body ground	W-B - Body ground	Ground	Always	Below 1 V
FE (C9-2) - Body ground	SB - Body ground	Fuel ground	Always	Below 1 V
MPX - (C9-4)	V	Communication signal	Communication circuit	-
ABS (C9-6) - Body ground	R - Body ground	ABS signal	Ignition switch ON, ABS warning light ON → OFF	6.7 to 12 V → Below 1 V
BRAKE (C9-7) - Body ground	P - Body ground	Brake signal	Ignition switch ON, BRAKE warning light ON → OFF	6.7 to 12 V → Below 1 V
BRAKE LEVEL (C9-8) - Body ground	W - Body ground	Brake fluid level signal	Ignition switch ON, brake fluid level (LO) → NORMAL	Below 1 V → 10 to 14 V
VSC (C9-9) - Body ground	O - Body ground	VSC signal	Ignition switch ON, VSC warning light ON → OFF	Below 1 V → 10 to 14 V
H-LP LEVEL (C9-10) - Body ground	B - Body ground	Headlight level signal	Ignition switch ON, H-LP LEVEL indicator ON → OFF	Below 1 V → 10 to 14 V
AFS OFF (C9-12) - Body ground	L - Body ground	AFS OFF signal	Ignition switch ON, AFS OFF indicator light ON → OFF	Below 1 V → 10 to 14 V
RE (C9-13) -Body ground	W - Body ground	Rheostat trip switch signal (RE)	Always	Below 1 V
VR (C9-14) - Body ground	O - Body ground	Rheostat trip switch signal (VR)	Ignition switch OFF → ON	Below 1 V → 4 to 6 V
RL (C9-15) - Body ground	B - Body ground	Rheostat trip switch signal (RL)	Ignition switch OFF → ON	Below 1 V → 4 to 6 V
TCAN SW (C9-16) - Body ground	Y - Body ground	Rheostat trip switch signal (Tail cancel switch)	Ignition switch ON, rheostat trip switch (TCAN SW) OFF → ON	Below 1 V → 4 to 6 V
ODO/TRIP SW (C9-17) - Body ground	L - Body ground	Rheostat trip switch signal (ODO/TRIP switch)	Ignition switch ON, rheostat trip switch (ODO/TRIP SW) OFF → ON	Below 1 V → 4 to 6 V
SPEED SIGNAL (C9-18) - Body ground	BR - Body ground	Speed signal (Input)	Ignition switch ON and turn the wheel slowly	Pulse generation (See waveform 2)
FUEL SENDER (C9-19) - Body ground	V - Body ground	Fuel signal	Fuel sender gauge is F position → E position	Below 1 V → 4.5 to 6.7 V
P-SEAT BELT (C9-22) - Body ground	R - Body ground	Passenger seat belt signal	Ignition switch ON, sit on the passenger seat, belt unfastened → fastened	Below 1 V → 10 to 14 V
RR LIGHT (C9-23) - Body ground	G - Body ground	Rear light failure signal	Ignition switch ON, RR light failure indicator light ON → OFF	Below 1 V → 10 to 14 V
WASHER LEVEL (C9-24) - Body ground	LG - Body ground	Washer level signal	Ignition switch ON, washer level warning light ON → OFF	Below 1 V → 10 to 14 V

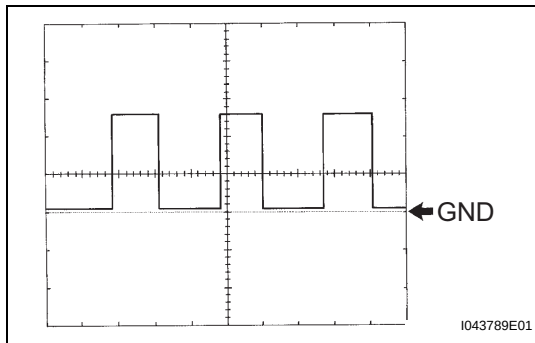


(a) Waveform 1 (Reference): Using oscilloscope:

Item	Condition
Tool setting	2 V/DIV., 1ms/DIV.
Vehicle condition	Ignition switch ON

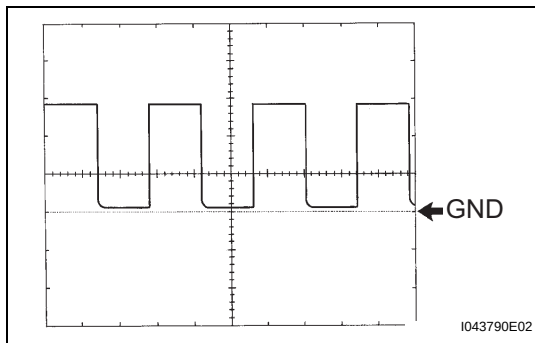
HINT:

Duty ratio changes as illumination becomes darker ("A" becomes longer).



(b) Waveform 1 (Reference): Using oscilloscope:

Item	Condition
Tool setting	5 V/DIV., 20 ms/DIV.
Vehicle condition	Driving at approx. 20 km/h

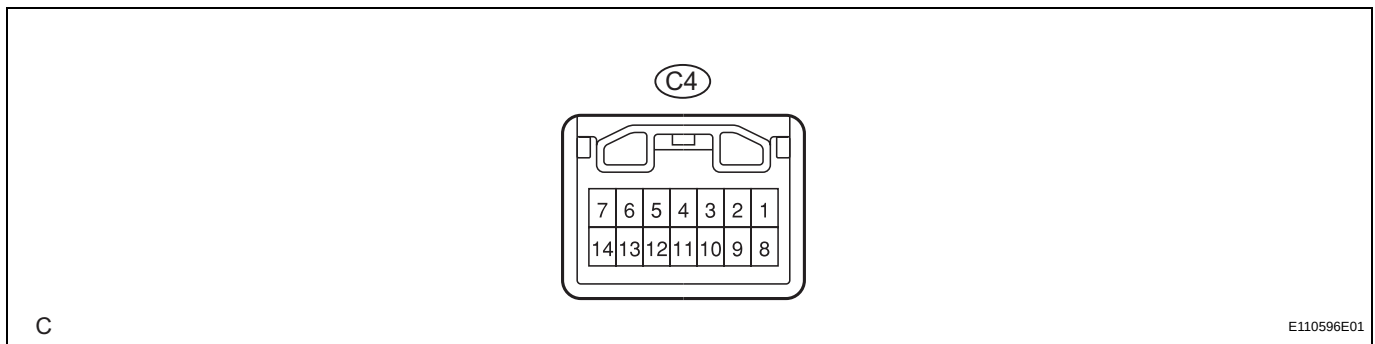


(c) Waveform 1 (Reference): Using oscilloscope:

Item	Condition
Tool setting	5 V/DIV., 10 ms/DIV.
Vehicle condition	Engine idle speed

2. Multi-Display Assembly (w/o Navigation System)

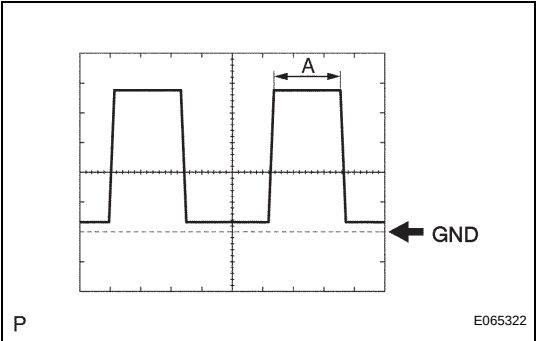
ME



Symbols (Terminal No.)	Wiring Color	Terminal Description	Condition	Specified Condition
+B (C4-1) - GND (C4-7)	O - W-B	Battery	Always	10 to 14 V
ACC (C4-2) - GND (C4-7)	GR - W-B	Ignition switch signal	Ignition switch OFF → ACC	Below 1 V → 10 to 14 V
LP (C4-4) - GND (C4-7)	P - W-B	Theft deterrent indicator signal	Put ignition key IN → OUT from ignition key cylinder	Below 1 V → Pulse generation (Below 1 V → 10 to 14 V)
MPX+ (C4-5)	L	Communication signal	Communication circuit	-
P-AB (C4-6) - GND (C4-7)	BR - W-B	Airbag signal	Ignition switch ON, Airbag indicator ON → OFF	Below 1 V → 10 to 14 V

Symbols (Terminal No.)	Wiring Color	Terminal Description	Condition	Specified Condition
GND (C4-7) - Body ground	W-B - Body ground	Ground	Always	Below 1 V
ILL+ (C4-8) - GND (C4-7)	G - W-B	Illumination signal	Headlight switch OFF → ON	Below 1 V → 10 to 14 V
IG+ (C4-9) - GND (C4-7)	LG - W-B	Ignition switch signal	Ignition switch OFF → ON	Below 1 V → 10 to 14 V
F (C4-11) - GND (C4-7)	V - W-B	Turn signal	Turn signal indicator light OFF → ON	Below 1 V → 10 to 14 V
MPX- (C4-12)	GR	Communication signal	Communication circuit	-
ILL (C4-14) - GND (C4-7)	W - W-B	Illumination signal	Headlight switch ON, Light control rheostat position MIN → MAX	Pulse generation (See Waveform)

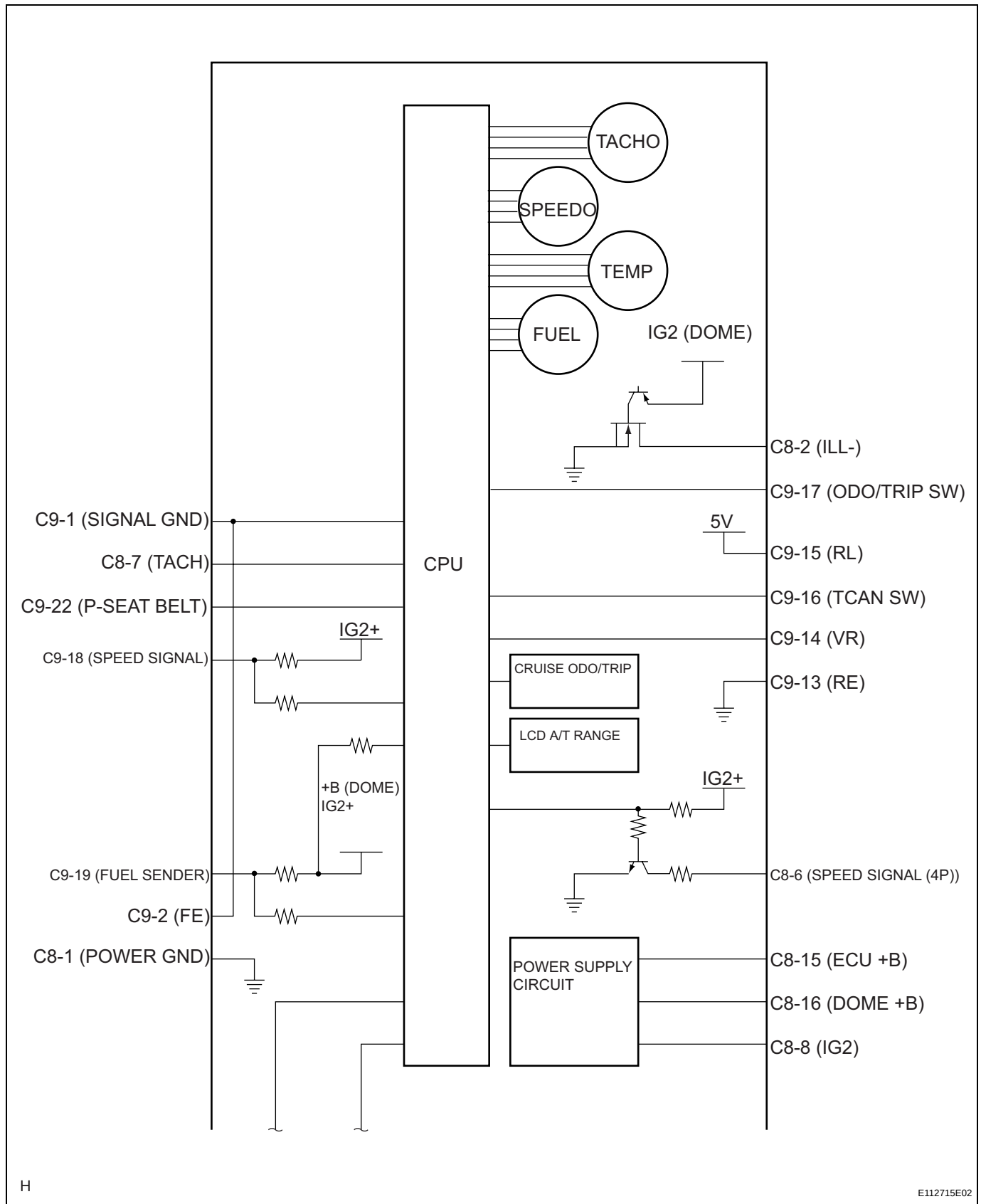
(a) Waveform 1 (Reference): Using oscilloscope:

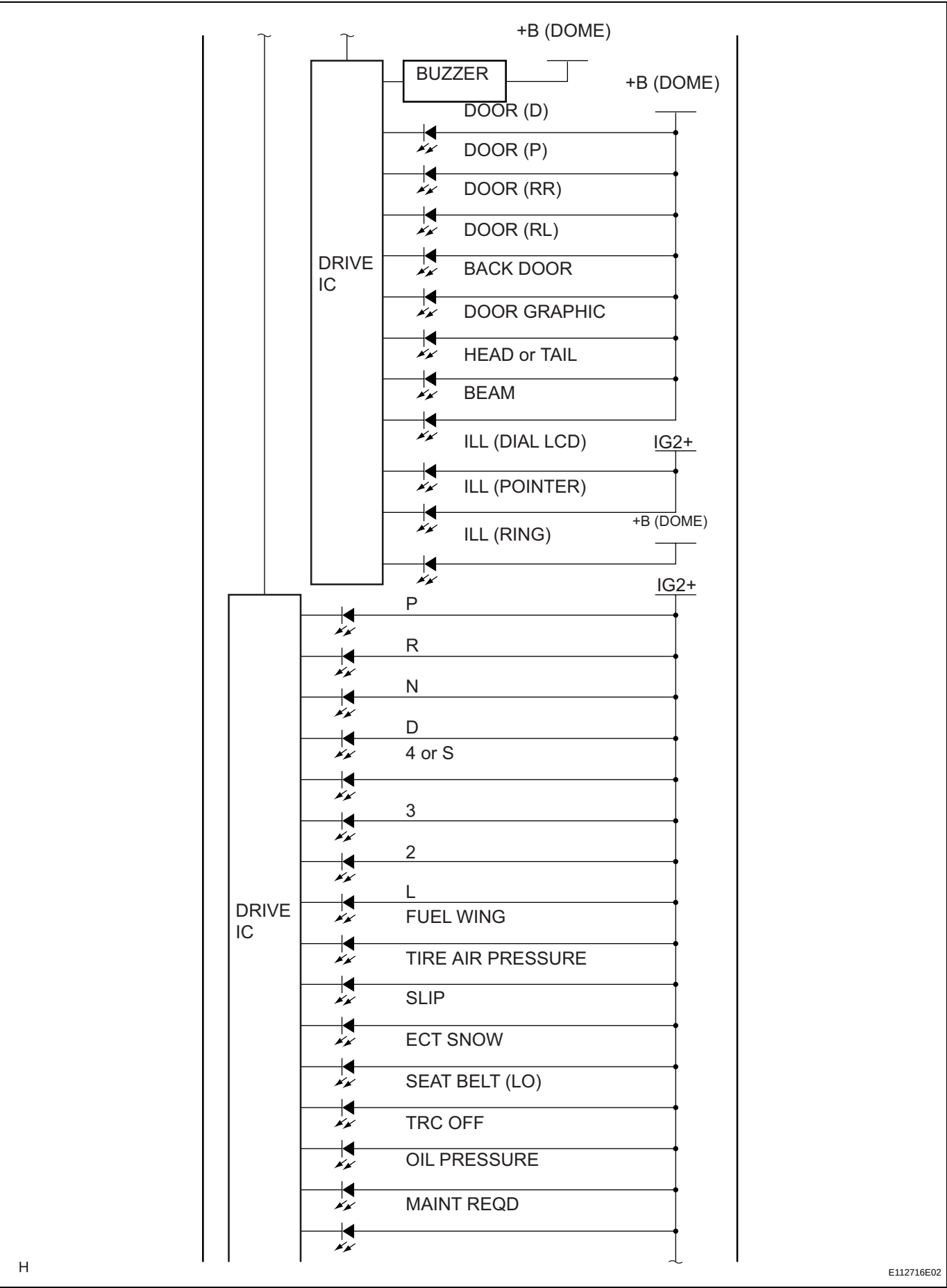


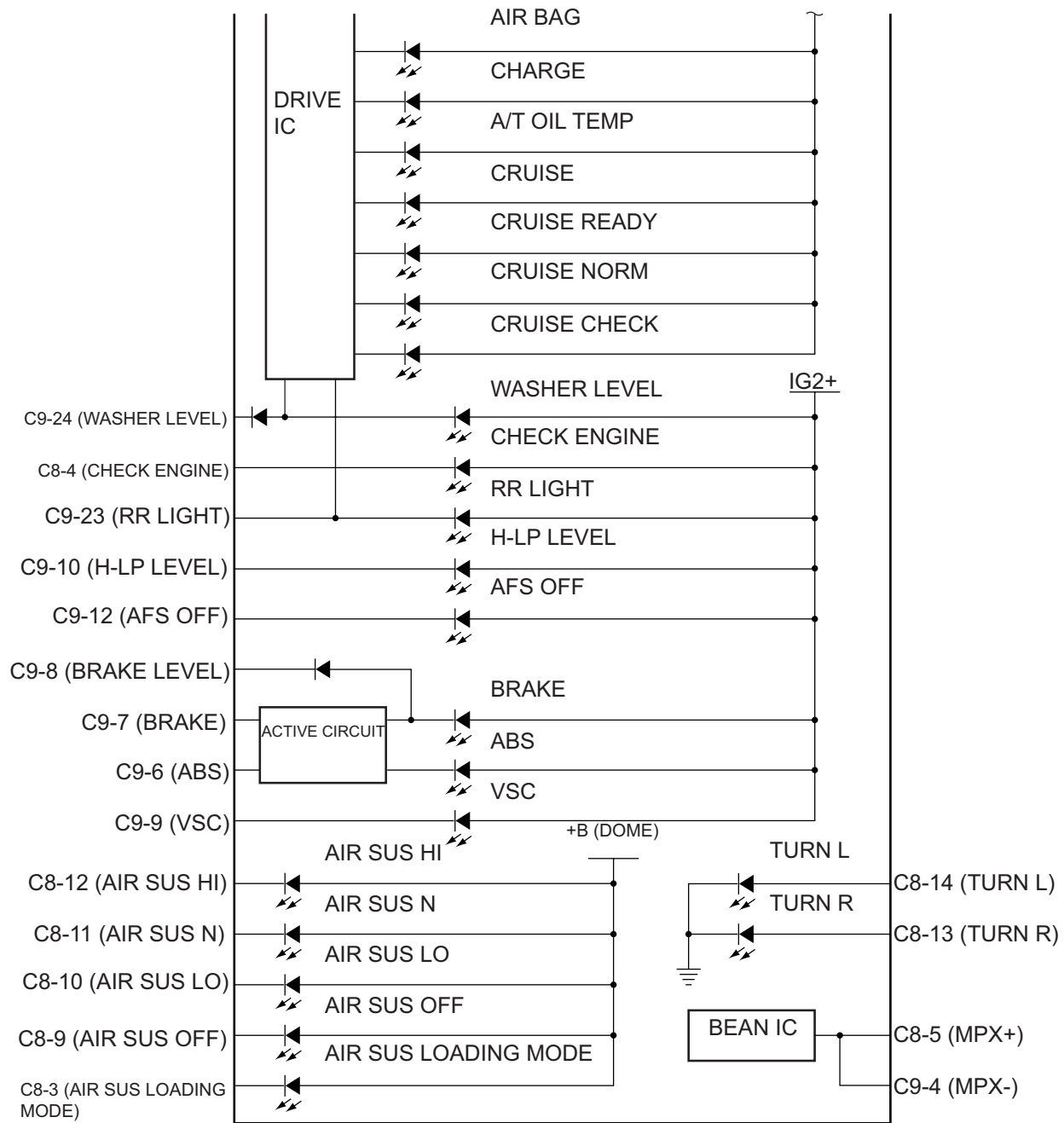
Item	Condition
Tool setting	2 V/DIV., 1 ms/DIV.
Vehicle condition	Ignition switch ON

HINT:
Duty ratio changes as illumination becomes darker ("A" becomes longer).

3. COMBINATION METER INNER CIRCUIT







ME

Terminal No.		Wire harness side
C8	1	Ground (Signal Ground)
	2	PANEL Fuse
	3	Suspension Control ECU
	4	ECM
	5	Airbag Sensor Assembly Center
	6	4P OUT (Other Parts)
	7	ECM
	8	GAUGE2 Fuse
	9	Suspension Control ECU
	10	Suspension Control ECU
	11	Suspension Control ECU
	12	Suspension Control ECU
	13	Turn Signal Flasher Relay
	14	Turn Signal Flasher Relay
	15	ECU-B Fuse
	16	DOME Fuse
C9	1	Ground (Signal Ground)
	2	Fuel Ground
	3	-
	4	Power Window Master Switch
	5	-
	6	Skid Control ECU with Actuator
	7	Skid Control ECU with Actuator
	8	Brake Fluid Level Warning Switch
	9	Skid Control ECU with Actuator
	10	Headlight Beam Level Control ECU
	11	-
	12	AFS ECU
	13	Rheostat Trip Switch
	14	Rheostat Trip Switch
	15	Rheostat Trip Switch
	16	Rheostat Trip Switch
	17	Rheostat Trip Switch
	18	Skid Control ECU with Actuator
	19	Fuel Sender Gauge Assembly
	20	-
	21	-
	22	Multi-Display
	23	Luggage Room J/B ECU
	24	Washer Level Warning Switch

DATA LIST / ACTIVE TEST

1. DATA LIST

According to the DATA LIST displayed by the intelligent tester, you can read the values of the switches, sensors, actuators and so on without parts removal. Reading the DATA LIST as the first step of troubleshooting is one method to shorten work time.

- (a) Warm up the engine.
- (b) Turn the ignition switch off.
- (c) Connect the intelligent tester to the DLC3.
- (d) Turn the ignition switch to the ON position.
- (e) Operate the intelligent tester according to the steps on the display and select the "DATA LIST".

METER:

ITEM	Measurement Item/ Range (Display)	Normal Condition	Diagnostic Note
SPEED METER	Vehicle speed / Min.: 0 km/h (0 mph), Max.: 255 km/h (158 mph)	Almost same as actual vehicle speed (When driving)	-
TACHO METER	Engine speed / Min.: 0 rpm, Max.: 12,750 rpm	Almost same as the meter rpm (When engine is running)	-
FUEL GAUGE	Fuel input signal Min.: 0, Max. 255	Fuel gauge indicates (F): 35	-
		Fuel gauge indicates (3/4): 85	-
		Fuel gauge indicates (1/2): 145	-
		Fuel gauge indicates (1/4): 186	-
		Fuel gauge indicates (E): 205	-
LIGHT RHEOSTAT	Light Control Rheostat / Min.: 0, Max.: 255	Light control rheostat switch is Dark (0) → Bright (255)	-
ODO/TRIP SW	ODO/TRIP switch is ON/OFF	ON: Switch is pushed OFF: Switch is released	-
TRIP/RESET SW	TRIP/RESET switch is ON/OFF	ON: Switch is pushed OFF: Switch is released	-
TAIL CANCEL SW	TAIL CANCEL switch is ON/OFF	ON: Switch is pushed OFF: Switch is released	-

ABS / VSC / TRAC:

ITEM	Measurement Item/ Range (Display)	Normal Condition	Diagnostic Note
FR/FL/RR/RL WHEEL SPD	Vehicle speed / Min.: 0 km/h (0 mph), Max.: 326 km/h (202 mph)	Almost same as actual vehicle speed (When driving)	-
VEHICLE SPD	Vehicle speed / Min.: 0 km/h (0 mph), Max.: 326 km/h (202 mph)	Almost same as actual vehicle speed (When driving)	-
LEVER POSITION	A/T shift position P/R/N/D/B	Same as actual shift position	-
PARKING BRAKE SW	Parking brake switch is ON/OFF	ON: Parking brake is on OFF: Parking brake is released	-

ECM

ITEM	Measurement Item/ Range (Display)	Normal Condition	Diagnostic Note
VEHICLE SPD	Vehicle speed / Min.: -256 km/h (-159 mph), Max.: 254 km/h (158 mph)	Almost same as actual vehicle speed (When driving)	-
COOLANT TEMP	Coolant temperature / Min.: -40°C (-40°F), Max.: 140°C (284°F)	After warming up: 80 to 95°C (176 to 203°F)	If the value is "-40°C (-40°F)" or "140°C (284°F)", sensor circuit is open or shorted.

BODY (Multiplex Network Body ECU):

ITEM	Measurement Item/ Range (Display)	Normal Condition	Diagnostic Note
OPEN DOOR WARN	Any door is OPEN/CLOSE	ON: Any door is opened OFF: All doors are closed	-
KEY UNLK WRN SW	Key unlock warning switch is ON/ OFF	ON: Ignition key is inserted OFF: Ignition key is not inserted	-
PARKING BRAKE SW	Parking brake switch is ON/ OFF	ON: Parking brake is on OFF: Parking brake is released	-
D SEAT BUCKLE SW	Driver seat buckle switch is ON/ OFF	ON: Seat belt is fastened OFF: Seat belt is unfastened	-
HEAD LIGHT SW (*1)	Headlight is ON/OFF	ON: Headlight is on OFF: Headlight is off	-
TIL LIGHT SW (*2)	Taillight is ON/OFF	ON: Taillight is on OFF: Taillight is off	-
D DOR CTY SW	Driver door is OPEN/CLOSE	ON: Driver door is closed OFF: Driver door is opened	-
P DOR CTY SW	Passenger door is OPEN/CLOSE	ON: Passenger door is closed OFF: Passenger door is opened	-
Rr DOR CTY SW	Rear door is OPEN/CLOSE	ON: Rear door is closed OFF: Rear door is opened	-

*1: U.S.A.

*2: Except U.S.A.

2. ACTIVE TEST

Performing the ACTIVE TEST using the intelligent tester allows the meters, indicators and so on to operate without parts removal. Performing the ACTIVE TEST as the first step of troubleshooting is one way to shorten labor time.

It is possible to display the DATA LIST on the intelligent tester during the ACTIVE TEST.

- Connect the intelligent tester to the DLC3.
- Turn the ignition switch switch to the ON position.
- From the display on the tester, performing the "ACTIVE TEST".

METER:

Item	Test Details	Diagnostic Note
SPEED METER	0 / 40 (24) / 80 (48) / 120 (72) / 160 (96) / 200 (120) km/h (mph)	-
TACHOMETER	0 (rpm) / 1,000 (rpm) / 2,000 (rpm) / 3,000 (rpm) / 4,000 (rpm) / 5,000 (rpm) / 6,000 (rpm) / 7,000 (rpm)	-
FUEL GAUGE	EMPTY, 1/2, FULL	-
COOLANT TEMP	LOW / NORM / HIGH	-
SHIFT INDIC	L / 2 / 3 / 4 / D / N / R / P	-
LOW FUEL WARN	Fuel warning light is OFF / ON	-
OPEN DOOR WARN	Open door indicator is OFF / ON	-
P-BELT REMIND	P-belt indicator is OFF / ON	-
D-BELT REMIND	D-belt indicator is OFF / ON	-
OIL PRESS WARN	Oil pressure warning is OFF / ON	-
DISCHARGE WARN	Discharge warning is OFF / ON	-
HEADLIGHT INDIC	"HEAD" indicator is OFF / ON	-
TAILLIGHT INDIC	"TAIL" indicator is OFF / ON	-
CRUISE INDIC	"CRUISE" indicator is OFF / ON	-
ECT SNOW INDIC	"ECT SNOW" indicator is OFF/ON	-

Item	Test Details	Diagnostic Note
Rr FOG INDIC	"Rr FOG" indicator is OFF / ON	-
OIL LEVEL WARN	"OIL LEVEL" warning is OFF / ON	-
SRS WARN	SRS is OFF / ON	-
HIGH BEAM INDIC	Hi-beam indicator is OFF / ON	-
TRC OFF INDIC	"TRC-OFF" indicator is OFF / ON	-
SLIP INDIC	"SLIP" indicator is OFF / ON	-
ODO/TRIP DISP	ODO/TRIP display is OFF / ON	-
A/T OIL TEMP	A/T oil temp operation is OFF / ON	-
L-CRUISE DISP	L-Cruise display is OFF / ON	-
L-CRS CHECK IND	L-Cruise indicator is OFF / ON	-
L-CRS READY IND	"READY" indicator is OFF / ON	-
Fr FOG INDIC	"Fr FOG" indicator is OFF / ON	-
TIRE PRESS WARN	"TIRE PRESS" warning is OFF / ON	-
L-CRS NORMAL	Laser radar cruise normal OFF / ON	-
KEY REMIND BUZZER	Key reminder Buzzer is OFF / ON	-
LGT REMIND BUZZER	Light remained buzzer is OFF / ON	-
SEAT BELT BUZZER	Seat belt buzzer is OFF / ON	-
REVERSE BUZZER	Reverse buzzer is OFF / ON	-
S SHIFT RJCT BUZ	Sports shift buzzer is OFF / ON	-
SPEED BUZZER	Speed buzzer is OFF / ON	-
WARNING BUZZER	Warning buzzer is OFF / ON	-
A/T SHIFT LCD	A/T shift LCD is OFF / ON	-

ON-VEHICLE INSPECTION

1. INSPECT SPEEDOMETER

- (a) Check the operation.
 - (1) Using a speedometer tester, check the speedometer indication according to the table below.

Reference: mph (U.S.A.)

Standard indication	Acceptable range
20 mph	20.0 to 23.0 mph
40 mph	40.0 to 43.5 mph
60 mph	60.0 to 64.0 mph
80 mph	80.0 to 84.5 mph
100 mph	100.0 to 105.0 mph
120 mph	120.0 to 125.5 mph
140 mph	140.0 to 146.0 mph
160 mph	160.0 to 166.5 mph

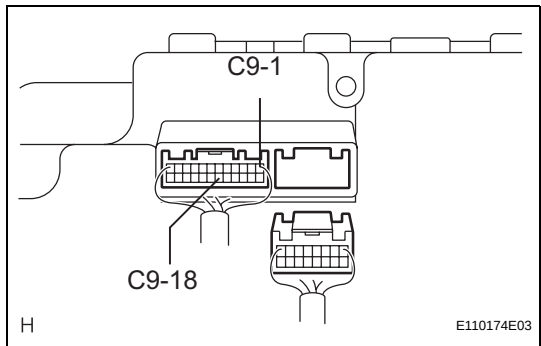
Reference: km/h (Canada)

Standard indication	Acceptable range Data in () is for reference
20 km/h	(17.5 to 21.5 km/h)
40 km/h	38.0 to 42.0 km/h
60 km/h	58.0 to 63.0 km/h
80 km/h	78.0 to 84.0 km/h
100 km/h	98.5 to 104.5 km/h
120 km/h	119.0 to 125.0 km/h
140 km/h	139.0 to 146.0 km/h
160 km/h	159.0 to 167.0 km/h
180 km/h	179.0 to 188.0 km/h
200 km/h	199.0 to 209.0 km/h
220 km/h	219.0 to 230.0 km/h
240 km/h	239.0 to 251.0 km/h

NOTICE:
Tire wear, as well as over or under inflation will cause errors.

- (2) Check the deviation from the acceptable value of the speedometer indication.

Reference:
Below 0.5 km/h (0.3mph)



2. INSPECT OUTPUT SIGNAL OF VEHICLE SPEED

- (a) Check for the signal.
 - (1) While driving the vehicle at 10 km/h, check the voltage between the terminal C9-1 and C9-18 of the combination meter assembly.

Standard:
Fluctuation between 7.7 to 14 V or less is repeated 7 times within 1 sec.

NOTICE:
Check it with the ignition switch turned to the ON position and the connector connected.

3. INSPECT TACHOMETER

(a) Check operation.

- (1) Connect the tune-up test tachometer, and start the engine.

NOTICE:

- Reversing the connection of the tachometer will damage the transistors and the insides of the diodes.
- When removing or installing the tachometer, be careful not to drop or subject it to heavy shocks.

- (2) Compare the result of the test with the standard indication.

DC 13.5 V, 25 °C (77 °F)

Standard indication (r/min)	Acceptable range (r/min) Data in () are for reference
700	580 - 720
1,000	(900 - 1100)
2,000	(1850 - 2150)
3,000	2800 - 3200
4,000	(3800 - 4200)
5,000	4800 - 5200
6,000	(5750 - 6250)
7,000	6700 - 7300
8,000	(7700 - 8300)

4. MAINTENANCE LIQUID RESETTING PROCEDURE**Indicator Condition:**

State	Condition	Specified State
Blinking	The vehicle runs 4,500 miles after the previous setting	The indicator blinks for 15 seconds after the ignition switch is on (including 3 seconds for a bulb check).
Continuously Illuminated	The vehicle runs 5,000 miles after the previous setting	The indicator is continuously illuminated after the ignition switch is on.

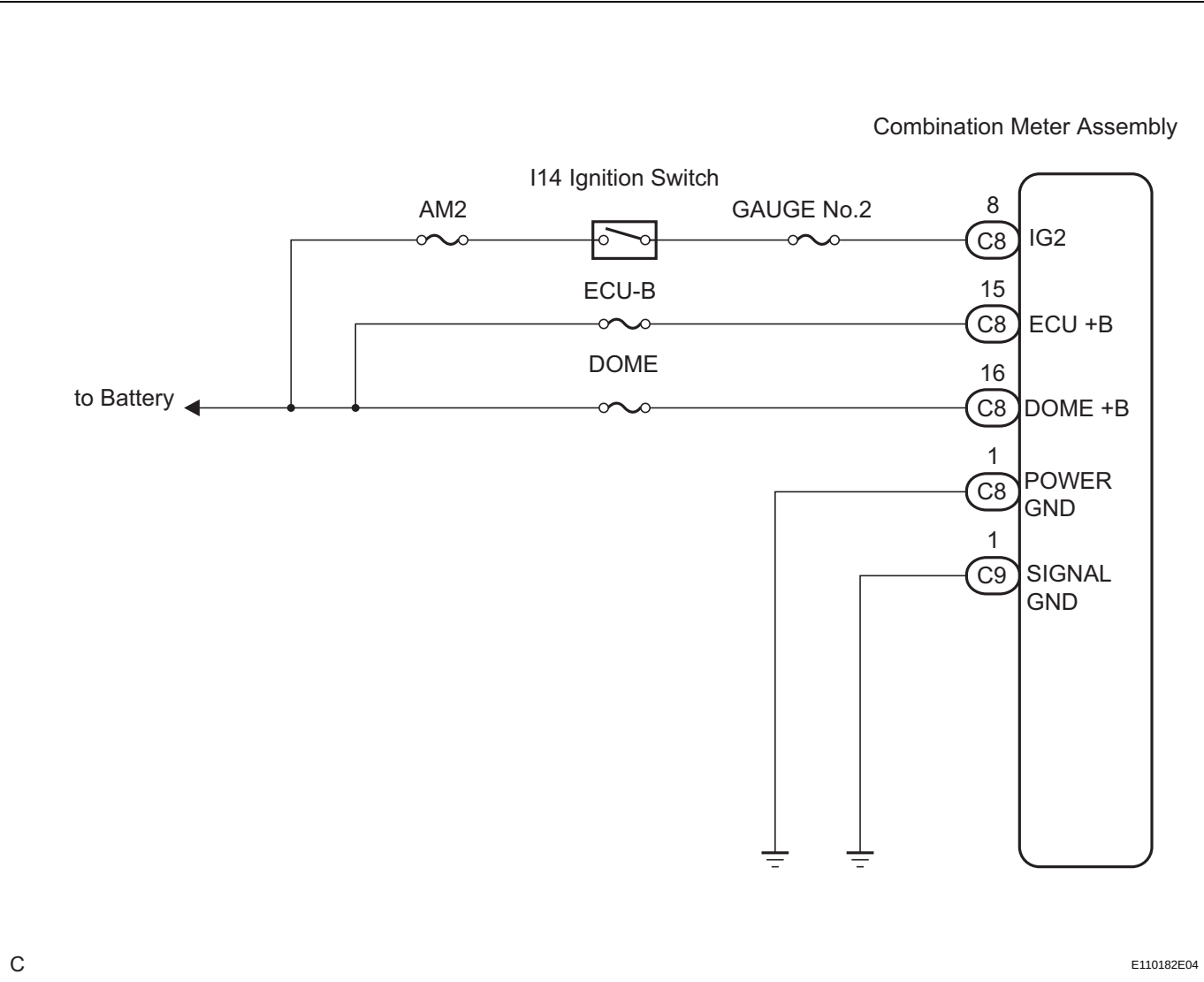
- (a) Set the display window to ODO.
- (b) Turn the ignition switch off.
- (c) Pressing the reset switch, turn the ignition switch to the ON position (keep pressing for at least 5 seconds.)
- (d) Reset procedure is completed.

HINT:

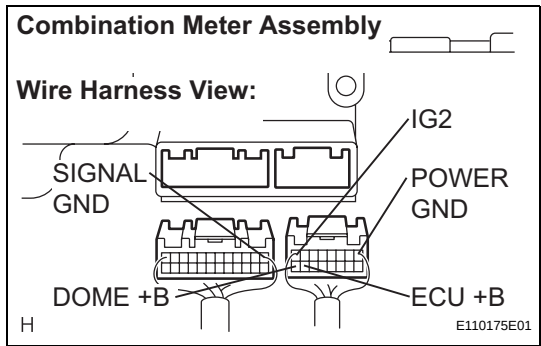
- If the ignition switch is off during reset procedure, reset mode is canceled.
- If the reset switch is pushed off during the reset procedure, reset mode is canceled and the display shows the condition prior to the reset procedure.

Entire Combination Meter does not Operate

WIRING DIAGRAM



1 INSPECT COMBINATION METER ASSEMBLY



- (a) Disconnect the C8 and C9 connectors.
- (b) Measure the resistance according to the value(s) in the table below.

Standard Resistance

Tester Connection	Condition	Specified Condition
C8-1 (POWER GND) - Body ground	Always	Below 1 Ω
C9-1 (SIGNAL GND) - Body ground	Always	Below 1 Ω

- (c) Measure the voltage according to the value(s) in the table below.

Standard Voltage

Tester Connection	Condition	Specified Condition
C8-8 (IG2) - Body ground	Ignition switch ON	10 to 16 V
C8-15 (ECU +B) - Body ground	Always	10 to 16 V
C8-16 (DOME +B) - Body ground	Always	10 to 16 V

NG

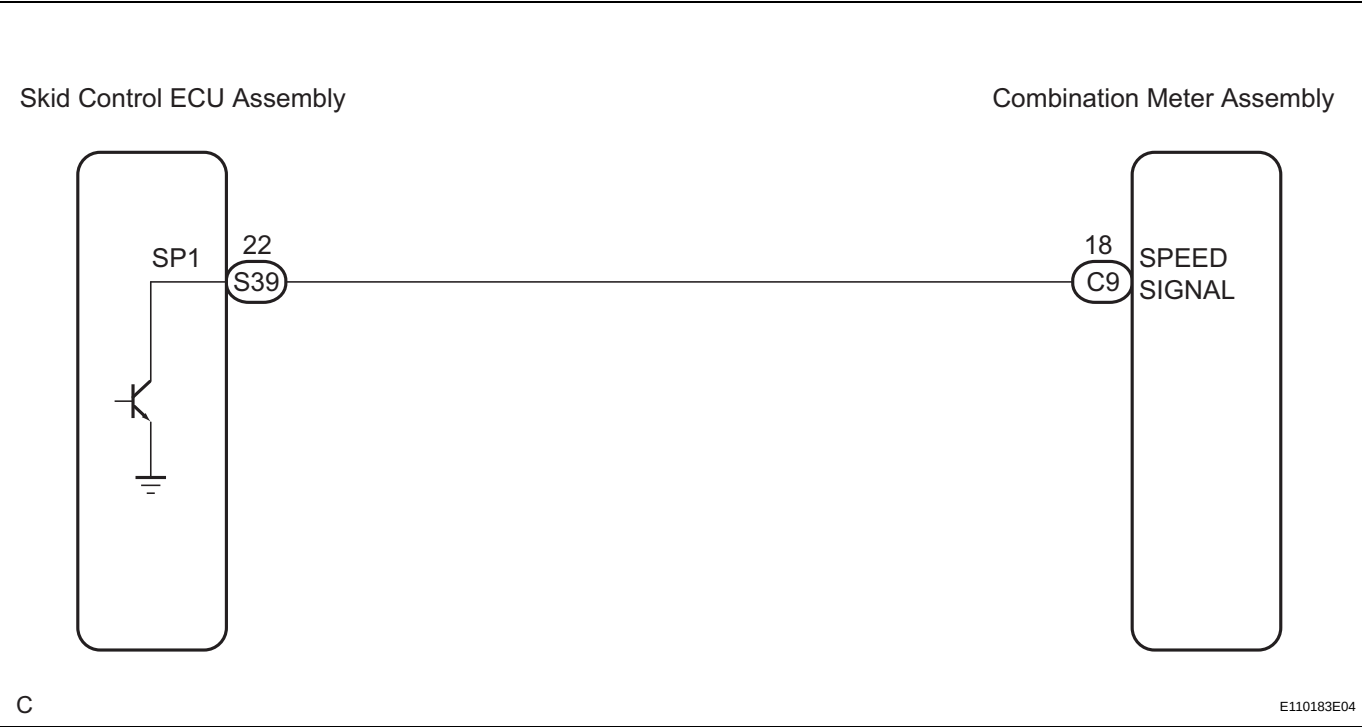
REPAIR OR REPLACE HARNESS OR
CONNECTOR

OK

REPLACE COMBINATION METER ASSEMBLY

Speedometer Malfunction

WIRING DIAGRAM



ME

HINT:
Start the inspection from step 1 when using the intelligent tester and start from the step 4 when not using intelligent tester.

1 PERFORM ACTIVE TEST BY INTELLIGENT TESTER

- (a) Operate the intelligent tester according to the steps on the display and select "ACTIVE TEST".

METER:

Item	Test Details	Diagnostic Note
SPEED METER	0 / 40 (24) / 80 (48) / 120 (72) / 160 (96) / 200 (120) km/h (mph)	-

OK:
Needle indication is within the allowable range.

NG

REPLACE COMBINATION METER ASSEMBLY

OK

2 READ VALUE OF INTELLIGENT TESTER

- (a) Operate the intelligent tester according to the steps on the display and select "DATA LIST".

METER:

Item	Measurement Item/Range (Display)	Normal Condition	Diagnostic Note
SPEED METER	Vehicle speed / Min.: 0 km/h (0 mph), Max.: 255 km/h (158 mph)	Almost same as actual speed (When driving)	-

OK:

Vehicle speed displayed on the tester is almost the same as the actual vehicle speed.

NG

Go to step 3

OK

REPLACE COMBINATION METER ASSEMBLY**3 READ VALUE OF INTELLIGENT TESTER**

- (a) Operate the intelligent tester according to the steps on the display and select "DATA LIST".

ABS (Skid control ECU):

Item	Measurement Item/Range (Display)	Normal Condition	Diagnostic Note
SPD1	Vehicle speed / Min.: 0 km/h (0 mph), Max.: 255 km/h (158 mph)	Almost same as actual speed (When driving)	-

OK:

Vehicle speed displayed on the tester is almost the same as the actual vehicle speed.

NG

GO TO BRAKE CONTROL SYSTEM

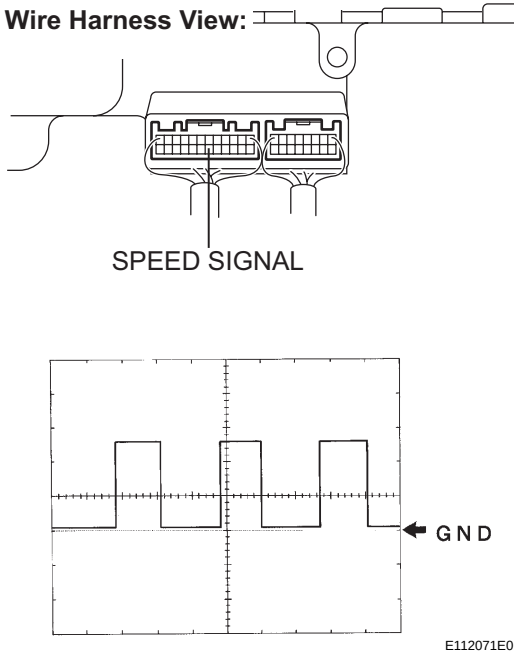
OK

ME

4 INSPECT COMBINATION METER ASSEMBLY

Combination Meter Assembly

Wire Harness View:



- (a) Check the input signal waveform.
- (1) Remove the combination meter assembly with connector(s) still connected.
 - (2) Connect the oscilloscope to the terminals C9-18 (SPEED SIGNAL) and body ground.
 - (3) Start the engine.
 - (4) Check the signal waveform according to the condition(s) in the table below.

Item	Condition
Tool setting	5 V/DIV., 20 ms/DIV.
Vehicle condition	Driving at approx. 20 km/h (12 mph)

OK:

The waveform is displayed as shown in the illustration.

HINT:

As the vehicle speed increases, the cycle of the signal waveform narrows.

NG

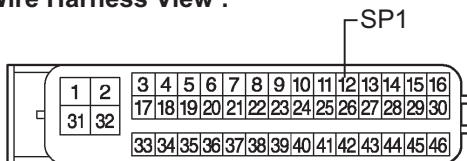
Go to step 6

OK

5 INSPECT COMBINATION METER ASSEMBLY

Skid Control ECU Assembly

Wire Harness View :



- (a) Disconnect the S39 connector.
- (b) Measure the voltage according to the value(s) in the table below.

Standard Voltage

Tester Connection	Condition	Specified Condition
S39-22 (SPEED SIGNAL) - Body ground	Ignition switch ON	10 to 14 V

NG

REPLACE ABS & TRACTION ACTUATOR ASSEMBLY

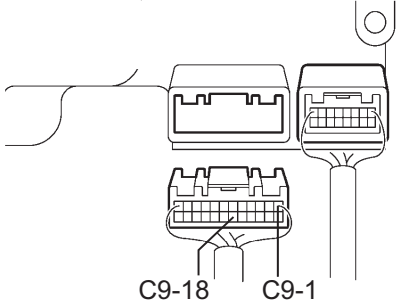
OK

REPLACE COMBINATION METER ASSEMBLY

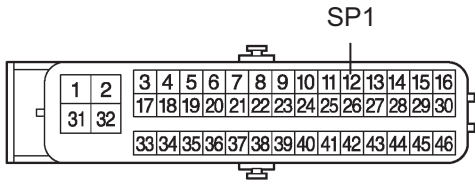
6

CHECK HARNESS AND CONNECTOR (COMBINATION METER AND SKID CONTROL ECU)

Combination Meter Assembly
Wire Harness View:



Skid Control ECU Assembly
Wire Harness View:



I036643E02

- (a) Disconnect the C9 and S39 connectors.
- (b) Measure the resistance according to the value(s) in the table below.

Standard Resistance

Tester Connection	Condition	Specified Condition
C9-18 (SPEED SIGNAL) S39-22 (SP1)	Always	Below 1 Ω
C9-18 (SPEED SIGNAL) - Body ground	Always	10 kΩ or higher

NG

REPAIR OR REPLACE HARNESS OR
CONNECTOR

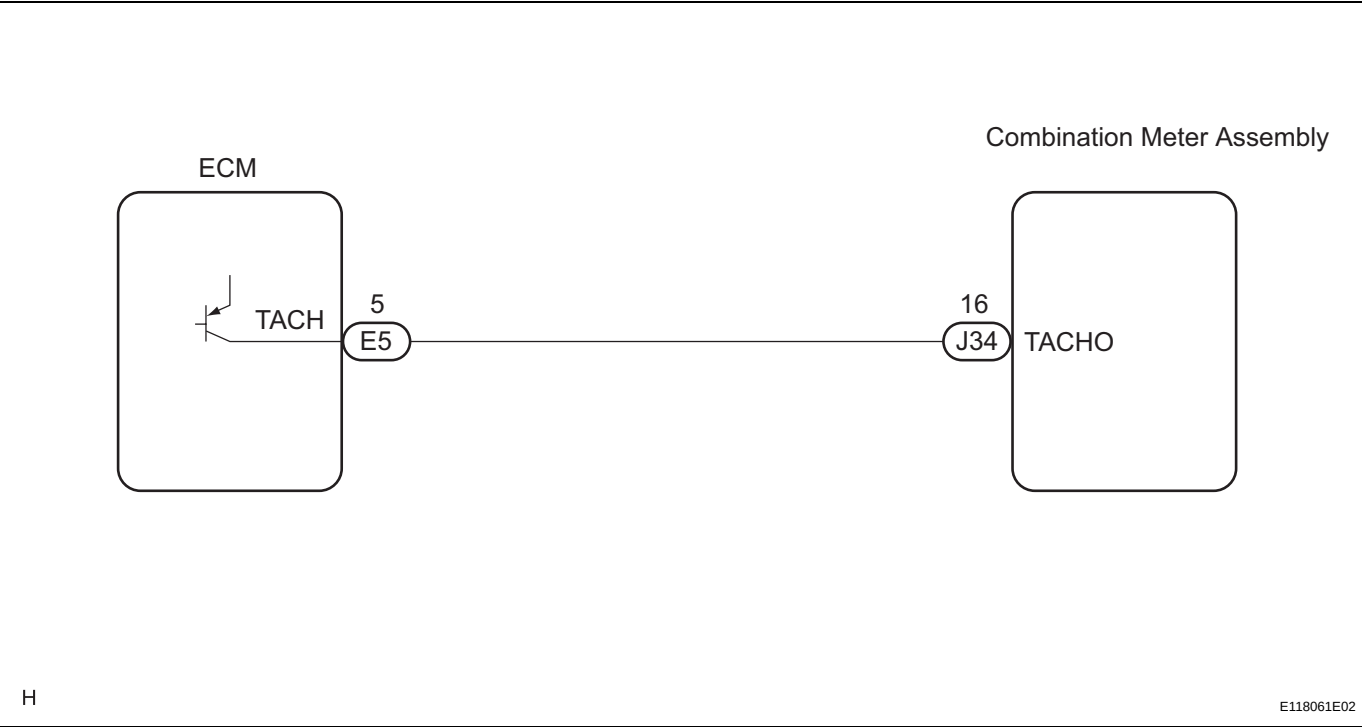
OK

ME

REPLACE COMBINATION METER ASSEMBLY

Tachometer Malfunction

WIRING DIAGRAM



ME

1 PERFORM ACTIVE TEST BY INTELLIGENT TESTER

- (a) Operate the intelligent tester according to the display and select the "ACTIVE TEST".

METER:

Item	Test Details	Diagnostic Note
TACHO METER	0 / 1,000 / 2,000 / 3,000 / 4,000 / 5,000 / 6,000 / 7,000 / 8,000 (rpm)	-

OK:
Needle indication is normal.

NG

REPLACE COMBINATION METER ASSEMBLY

OK

2 READ VALUE OF INTELLIGENT TESTER (ENGINE SPEED SIGNAL)

- (a) Operate the intelligent tester according to the display and select the "DATA LIST".

METER:

Item	Measurement Item / Range (Display)	Normal Condition	Diagnostic Note
TACHO METER	Engine speed/Min.: 0 rpm, Max.: 12,750 rpm	Almost same as actual engine speed (When engine is running)	-

OK:

Engine speed displayed on the tester is almost the same as the actual engine speed.

NG

Go to step 3

OK

REPLACE COMBINATION METER ASSEMBLY

3

READ VALUE OF INTELLIGENT TESTER (ENGINE SPEED SIGNAL)

- (a) Operate the intelligent tester according to the steps on the display and select the "DATA LIST".

ECM:

Item	Measurement Item / Range (Display)	Normal Condition	Diagnostic Note
ENGINE SPD	Engine speed/Min.: 0 rpm, Max.: 12,750 rpm	Almost same as actual engine speed (When engine is running)	-

NG

GO TO ENGINE CONTROL SYSTEM

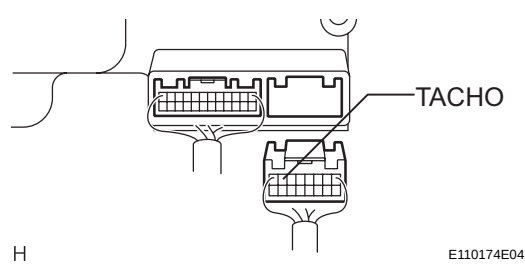
OK

4

CHECK COMBINATION METER

ME

Combination Meter Assembly
Wire Harness View:



- (a) Check the input signal waveform.
- (1) Remove the combination meter with the connector still connected.
 - (2) Connect the oscilloscope to the terminal C8-7 (TACHO) and body ground.
 - (3) Start the engine.

- (4) Check the signal waveform according to the condition(s) in the table below.

Item	Condition
Tool setting	5 V/DIV., 10 ms./DIV.
Vehicle condition	Engine idle speed

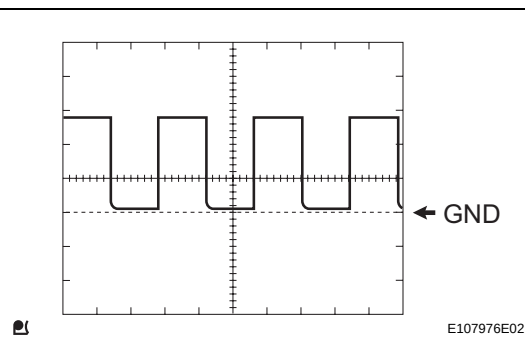
OK:

The waveform is displayed as shown in the illustration.

OK

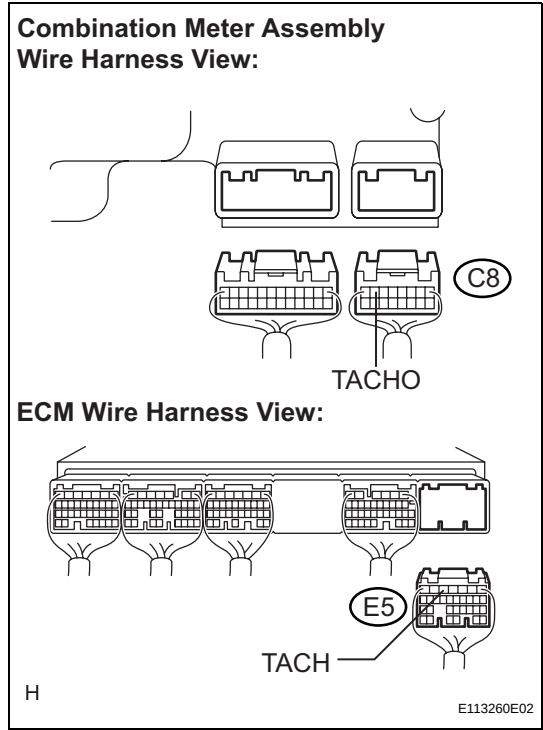
REPLACE COMBINATION METER ASSEMBLY

NG



5

CHECK HARNESS AND CONNECTOR (BETWEEN COMBINATION METER AND ECM)



- (a) Disconnect the C8 and E5 connectors.
(b) Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester Connection	Condition	Specified Condition
C8-7 (TACHO) -E5-5 (TACH)	Always	Below 1 Ω
C8-7 (TACHO) - Body ground	Always	10 kΩ or higher

NG

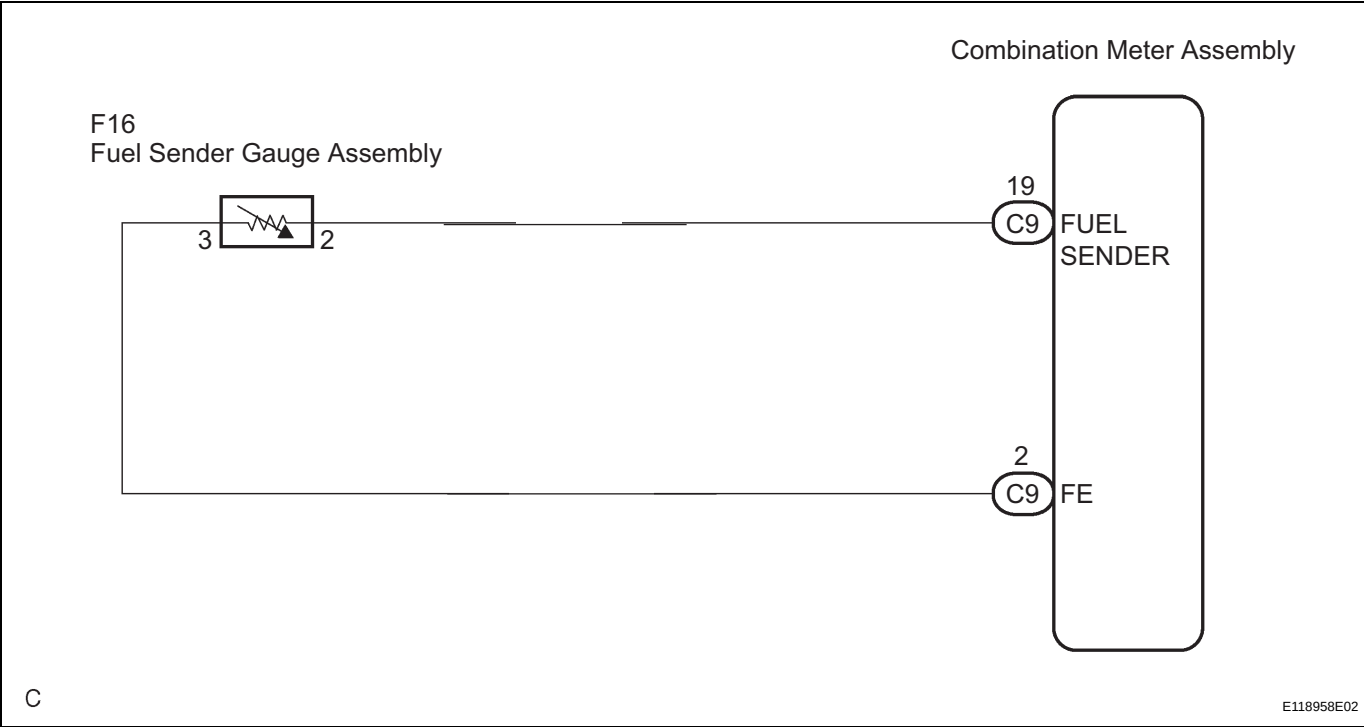
REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

REPLACE ECM

Fuel Receiver Gauge Malfunction

WIRING DIAGRAM



ME

1 PERFORM ACTIVE TEST BY INTELLIGENT TESTER

- (a) Operate the intelligent tester according to the steps on the display and select "ACTIVE TEST".

METER:

Item	Test Details	Diagnostic Note
FUEL GAUGE	EMPTY, 1/2, FULL	-

OK:
Needle indication is normal.

NG → REPLACE COMBINATION METER ASSEMBLY

OK

2

READ VALUE OF INTELLIGENT TESTER

- (a) Operate the intelligent tester according to the steps on the display and select "DATA LIST".

METER:

Item	Measurement Item/Range (Display)	Normal Condition	Diagnostic Note
FUEL GAUGE	Fuel gauge indicates "F" Fuel gauge indicates "3/4" Fuel gauge indicates "1/2" Fuel gauge indicates "1/4" Fuel gauge indicates "E" (Fuel input / Min.: 0, Max.: 255)	Fuel gauge indicates "F" 48 (Ω) Fuel gauge indicates "3/4" 93 (Ω) Fuel gauge indicates "1/2" 148 (Ω) Fuel gauge indicates "1/4" 188 (Ω) Fuel gauge indicates "E" 206 (Ω)	-

OK:
Fuel value signal displayed on the tester is almost the same as needle indication.

OK

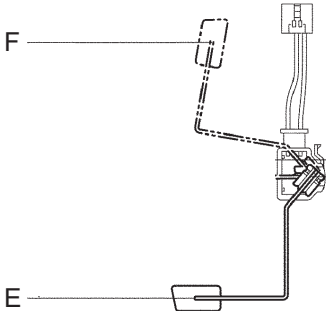
REPLACE COMBINATION METER ASSEMBLY

NG

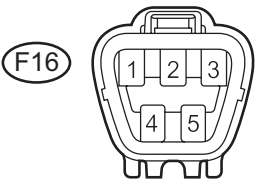
3

INSPECT FUEL SENDER GAUGE ASSEMBLY

ME



Fuel Sender Gauge Wire Harness View:



E1118927E02

- (a) Remove the fuel sender gauge assembly.
(b) Check that the float position is between E and F and measure resistance between the terminals 2 and 3 of connector.
(c) Measure the resistance according to the value(s) in the table below.

Tester level	Resistance (Ω)
F	3.0 to 5.0
E	109.0 to 111.0

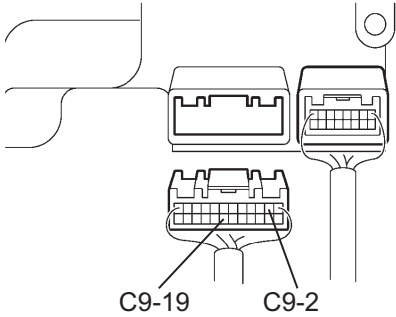
NG

REPLACE FUEL SENDER GAUGE ASSEMBLY

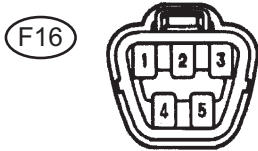
OK

4 CHECK HARNESS AND CONNECTOR (BETWEEN COMBINATION METER AND FUEL SENDER GAUGE)

Combination Meter Assembly:



Fuel Sender Gauge:



E118959E01

- (a) Disconnect the C9 connector and fuel tank wire.
(b) Measure the resistance according to the value(s) in the table below.

Standard Resistance

Tester Connection	Condition	Specified Condition
C9-19 (FUEL SENDER) - F16-2	Always	Below 1 Ω
C9-2 (FE) - F16-3	Always	Below 1 Ω
C9-19 (FUEL SENDER) - Body ground	Always	10 k Ω or higher
C9-19 (FE) - Body ground	Always	10 k Ω or higher

NG

REPAIR OR REPLACE HARNESS OR CONNECTOR

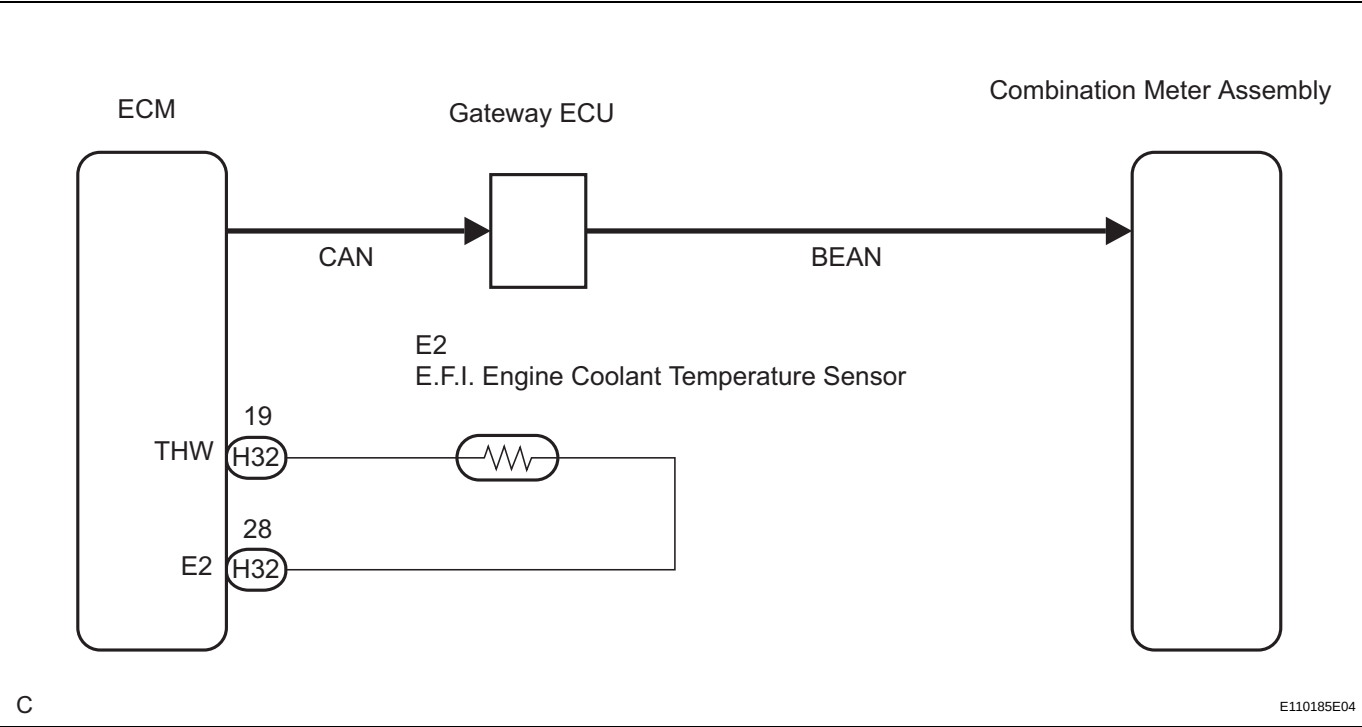
OK

ME

REPLACE COMBINATION METER

Engine Coolant Temperature Receiver Gauge Malfunction

WIRING DIAGRAM



ME

HINT:
If there is an open or short in the engine coolant temperature sensor circuit, the hybrid vehicle control ECU outputs the DTCs. Perform troubleshooting with the "SFI System" (See page [ES-37](#)).

1 PERFORM ACTIVE TEST BY INTELLIGENT TESTER

- (a) Operate the intelligent tester according to the steps on the display and select "ACTIVE TEST".

METER:

Item	Test Details	Diagnostic Note
COOLANT TEMP	LOW/NORMAL/HI	-

OK:
Needle indication is normal.

NG → REPLACE COMBINATION METER ASSEMBLY

OK

2 READ VALUE OF INTELLIGENT TESTER

- (a) Operate the intelligent tester according to the steps on the display and select "DATA LIST".

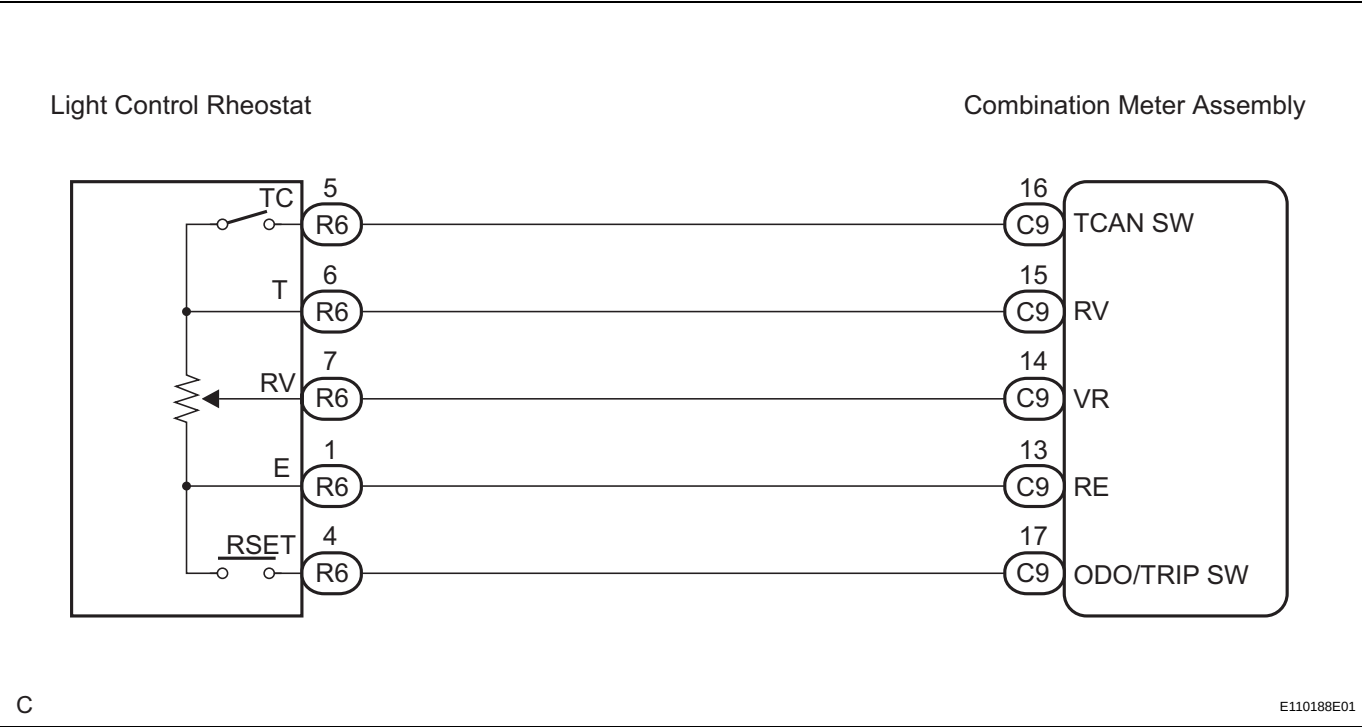
ECM:

Item	Measurement Item/Range (Display)	Normal Condition	Diagnostic Note
WATER TEMP	Engine coolant temp: -40°C (-40°F) to 140°C (284°F)	After warming up: 80 to 95°C (176 to 203°F)	-

NG**GO TO SFI SYSTEM****OK****3 REPLACE COMBINATION METER ASSEMBLY****NG****GO TO SFI SYSTEM****OK****END****ME**

Odo / Trip Switch Malfunction

WIRING DIAGRAM



- ME** HINT:
- The whole light control rheostat should be replaced if the ODO/TRIP switch has a malfunction because this part is not identically supplied.
 - Start the inspection from step1 when using the intelligent tester and start from the step 4 when not using intelligent tester.

1 READ VALUE OF INTELLIGENT TESTER

(a) Operate the intelligent tester according to the steps on the display and select "DATA LIST".

METER:

Item	Measurement Item/Range (Display)	Normal Condition	Diagnostic Note
ODO/TRIP SW	ODO/TRIP switch is ON/OFF	ON: Switch is pushed OFF: Switch is not pushed	-

OK:
Switch condition (ON/OFF) can be switched by actual operation.

OK

NG

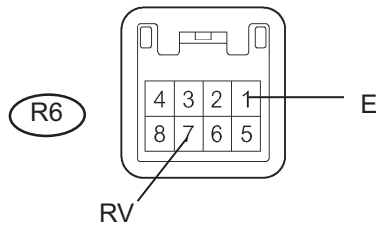
Go to step 2

REPLACE COMBINATION METER ASSEMBLY

2 INSPECT ODO/TRIP SWITCH

ODO/TRIP SWITCH

Connector Front View:



E111191E01

- Remove the light ODO/TRIP switch with connector still connected.
- Measure the resistance according to the value(s) in the table below.

Standard Resistance

Tester Connection	Condition	Specified Condition
R6-1 (E) - R6-7 (RV)	ODO/TRIP switch OFF → ON	10 k Ω or higher → Below 1 Ω

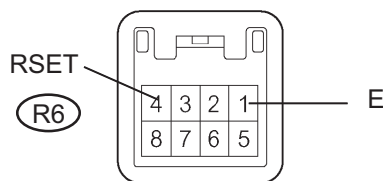
NG

REPLACE LIGHT CONTROL RHEOSTAT

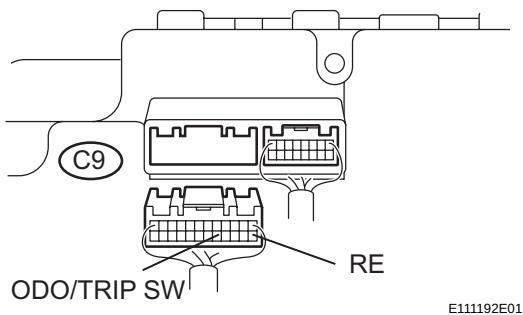
OK

3 CHECK HARNESS AND CONNECTOR (BETWEEN COMBINATION METER AND ODO/TRIP SWITCH)

ODO/TRIP Switch Wire Harness View:



Combination Meter Assembly Wire Harness View:



E111192E01

- Disconnect the C9 and R6 connectors.
- Measure the resistance according to the value(s) in the table below.

Standard Resistance

Tester connection	Condition	Specified condition
C9-13 (RE) - R6-1 (E)	Always	Below 1 Ω
C9-17 (ODO/TRIP SW) - R6-4 (RSET)	Always	Below 1 Ω

NG

REPAIR OR REPLACE HARNESS OR
CONNECTOR

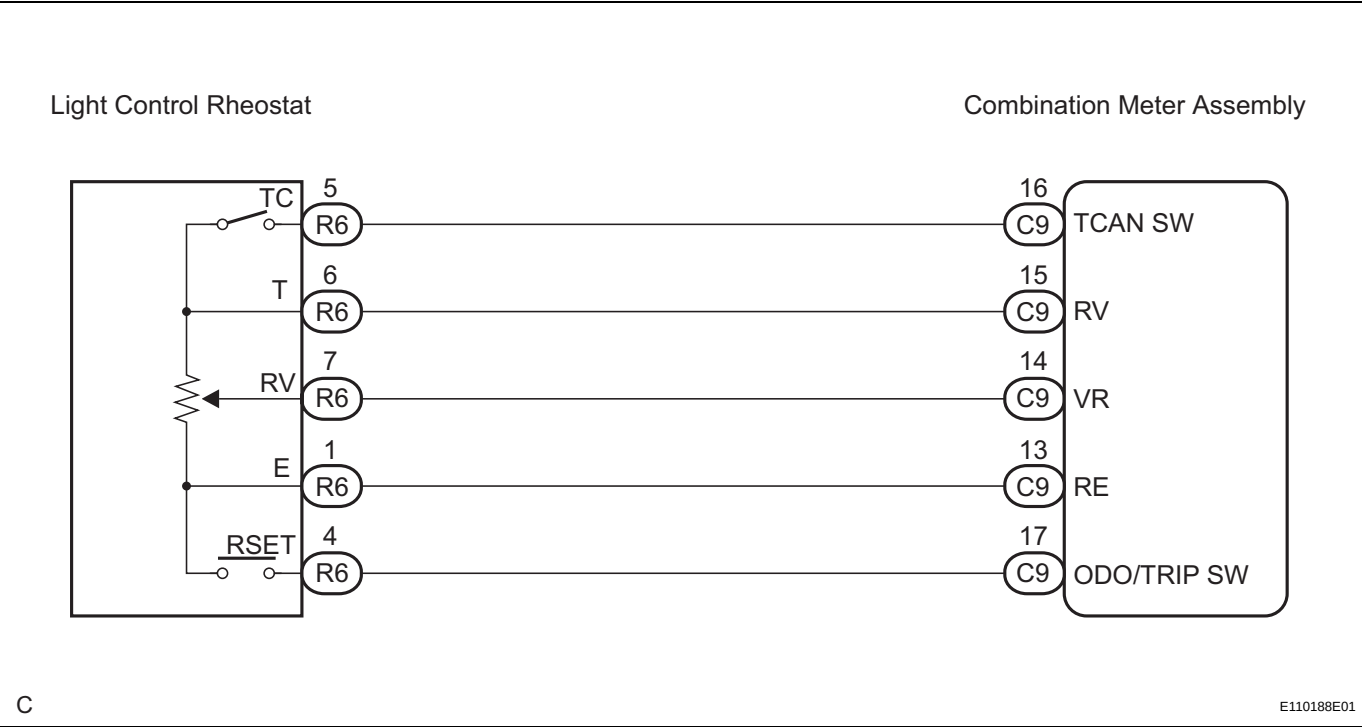
OK

REPLACE COMBINATION METER ASSEMBLY

ME

Operating Light Control Rheostat does not Change Light Brightness

WIRING DIAGRAM



HINT:
Start the inspection from step1 when using the intelligent tester and start from the step4 when not using intelligent tester.

1 READ VALUE OF INTELLIGENT TESTER

- (a) Operate the intelligent tester according to the steps on the display and select "DATA LIST".

METER:

Item	Measurement Item/Range (Display)	Normal Condition	Diagnostic Note
RHEOSTAT VOL	Light control rheostat/Min.: 0, Max.: 255	Light control rheostat switch is Dark (0) → Bright (255)	-

OK:
Light brightness can be changed within the specified range by actual operation.

NG Go to step 2

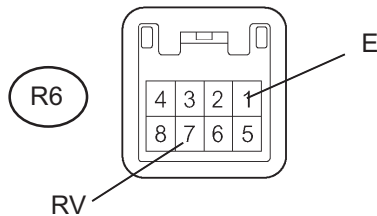
OK

REPLACE COMBINATION METER ASSEMBLY

2 INSPECT LIGHT CONTROL RHEOSTAT

Light Control Rheostat

Wire Harness View:



- Remove the light control rheostat with connector still connected.
- Measure the resistance according to the value(s) in the table below.

Standard Resistance

Tester Connection	Condition	Specified Condition
R6-1 (E) - R6-7 (RV)	Rheostat knob is in the MAX. position	8 to 12 k Ω
R6-1 (E) - R6-7 (RV)	Rheostat knob is in the MIN. position.	Approx. 0 Ω

NG

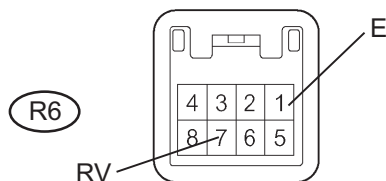
REPLACE LIGHT CONTROL RHEOSTAT

OK

3 CHECK HARNESS AND CONNECTOR (BETWEEN COMBINATION METER AND LIGHT CONTROL RHEOSTAT)

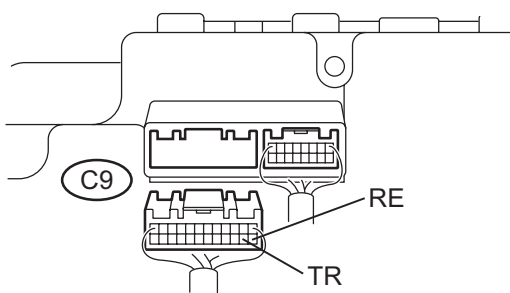
Light Control Rheostat

Wire Harness View:



Combination Meter Assembly

Wire Harness View:



- Disconnect the C9 and R6 connectors.
- Measure the resistance according to the value(s) in the table below.

Standard Resistance

Tester Connection	Condition	Specified Condition
C9-13 (RE) - R6-1 (E)	Always	Below 1 Ω
C9-14 (TR) - R6-7 (RV)	Always	Below 1 Ω
R6-7 (RV) - Body ground	Always	10 k Ω or higher
R6-1 (E) - Body ground	Always	Below 1 Ω

NG

REPAIR OR REPLACE HARNESS OR CONNECTOR

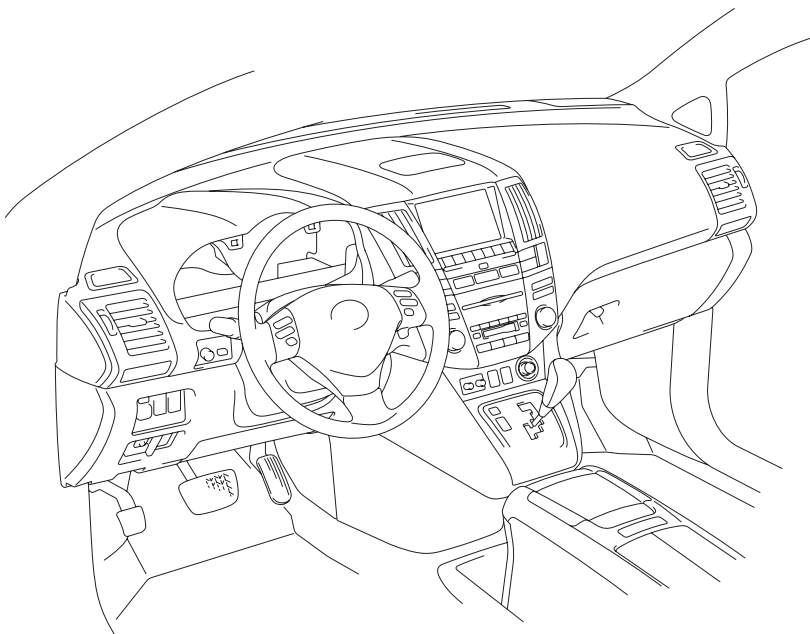
OK

REPLACE COMBINATION METER ASSEMBLY

ME

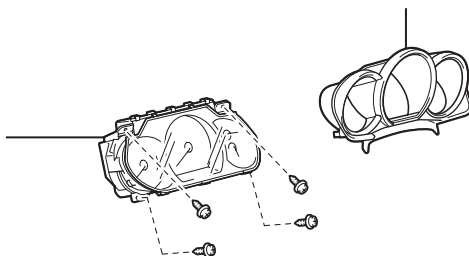
COMBINATION METER

COMPONENTS

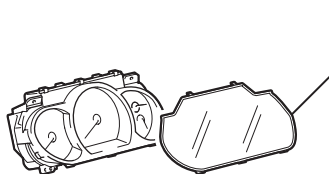


INSTRUMENT CLUSTER FINISH PANEL SUB-ASSEMBLY

COMBINATION METER ASSEMBLY



COMBINATION METER GLASS



ME

REMOVAL

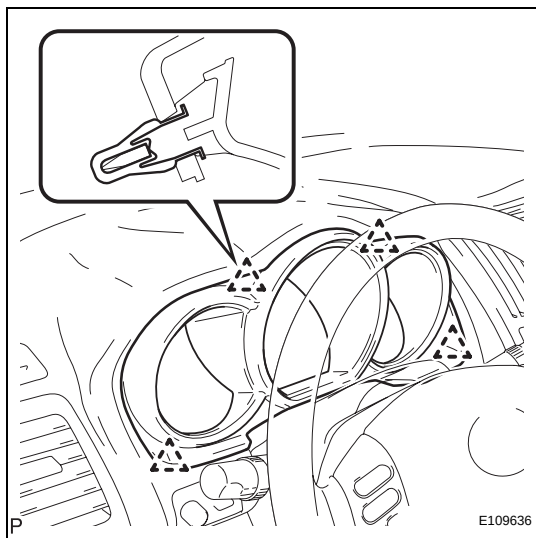
1. **DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL**

CAUTION:

Wait for 90 seconds after disconnecting the cable to prevent the airbag working (See page [RS-1](#)).

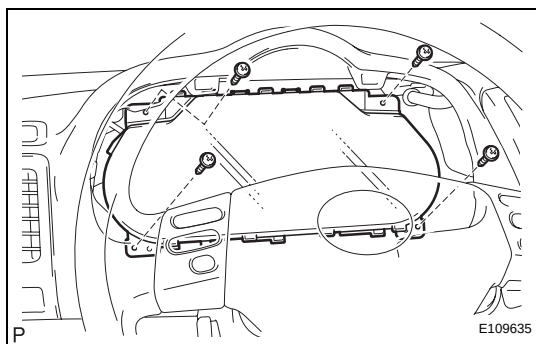
2. **REMOVE INSTRUMENT CLUSTER FINISH PANEL SUB-ASSEMBLY**

- (a) Disengage the 4 clips and remove the instrument cluster finish panel sub-assembly.



3. **REMOVE COMBINATION METER ASSEMBLY**

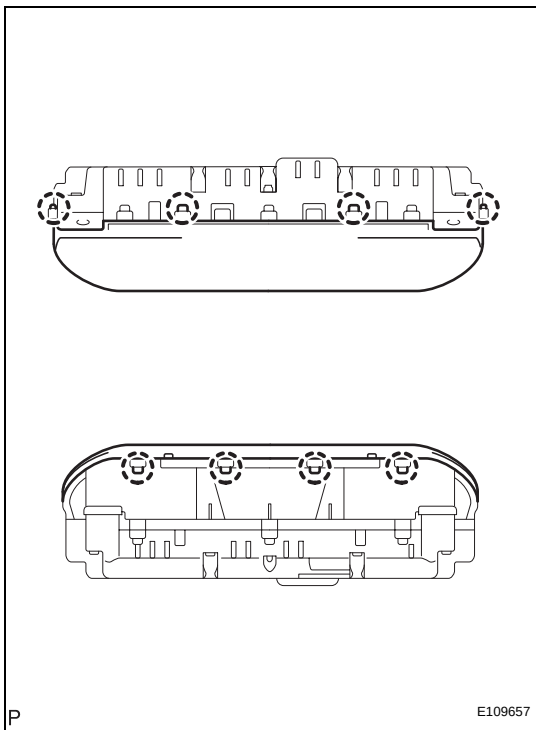
- (a) Remove the 4 screws.
- (b) Pull out the combination meter assembly, and disconnect the connectors.



DISASSEMBLY

1. REMOVE COMBINATION METER GLASS

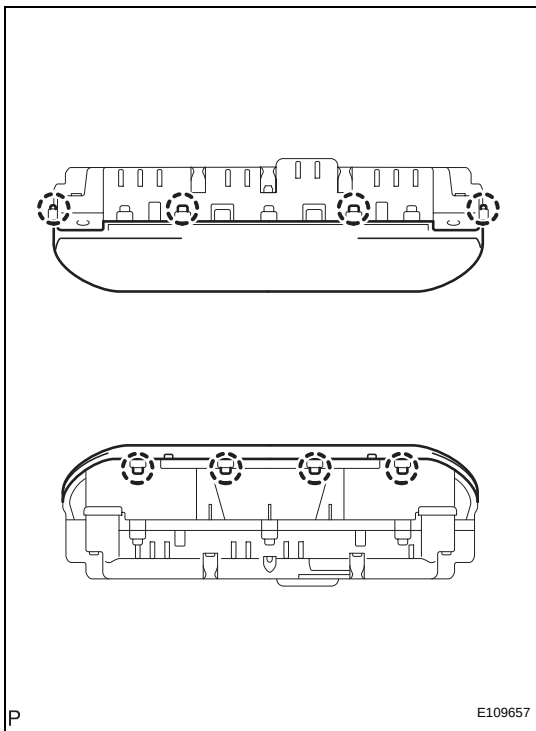
- (a) Disengage the 8 claws and remove the combination meter glass.



REASSEMBLY

1. INSTALL COMBINATION METER GLASS

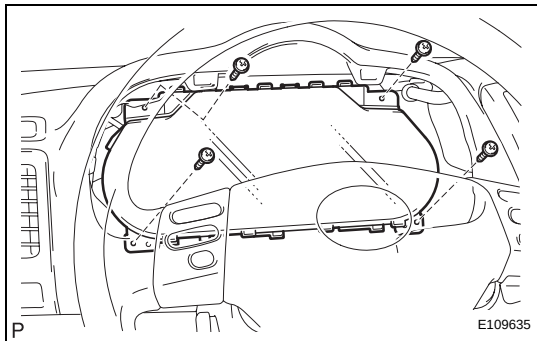
- (a) Engage the 8 claws and install the combination meter glass.



INSTALLATION

1. INSTALL COMBINATION METER ASSEMBLY

- (a) Connect the connectors.
- (b) Install the combination meter assembly with the 4 screws.



2. INSTALL INSTRUMENT CLUSTER FINISH PANEL SUB-ASSEMBLY

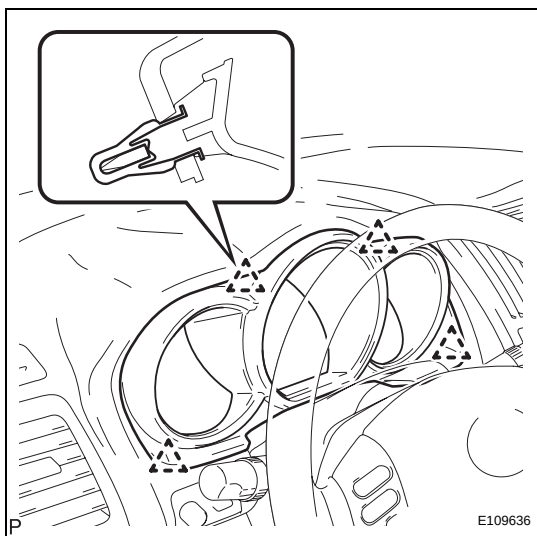
- (a) Engage the 4 clips and install the instrument cluster finish panel sub-assembly.

3. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

4. PERFORM INITIALIZATION

NOTICE:

Some systems need initialization when disconnecting the cable from the negative battery terminal.



FUEL SENDER GAUGE ASSEMBLY

INSPECTION

1. INSPECT FUEL SENDER GAUGE ASSEMBLY
- (a)

Check the operation of the float moving smoothly between F and E.
- (b)

Disconnect the fuel sender gauge connector.
- (c)

Remove the fuel sender gauge assembly.
- (d)

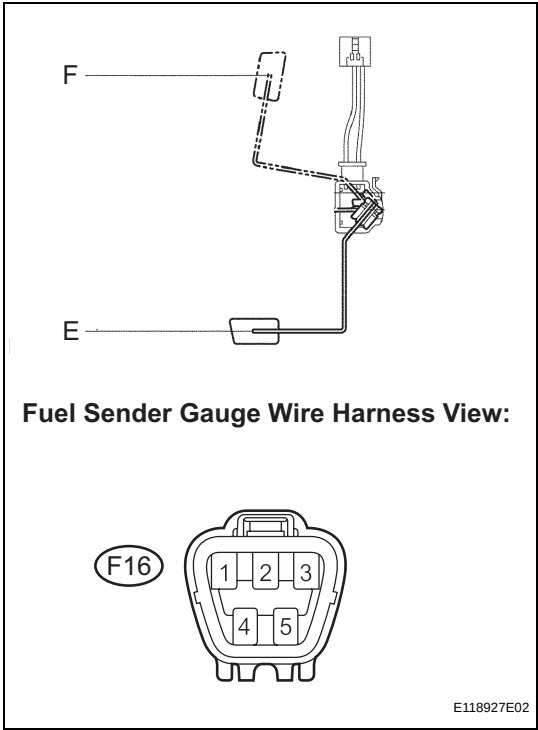
Measure the resistance between the terminals 2 (FE) and 3 (FS) of connector according to the value(s) in the table below.

OK

Float Level	Resistance (Ω)
F	3.0 to 5.0
E	109.0 to 111.0

HINT:

If the value is not as specified, replace the fuel sender gauge assembly.



ENGINE OIL PRESSURE SWITCH

ON-VEHICLE INSPECTION

1. INSPECT ENGINE OIL PRESSURE SWITCH

- (a) Disconnect the connector from the engine oil pressure switch.
- (b) Ground the terminal of wire harness side, then measure the resistance.

Standard Resistance:

Engine idling:

Below 1 Ω

Engine stopped:

10 k Ω or higher

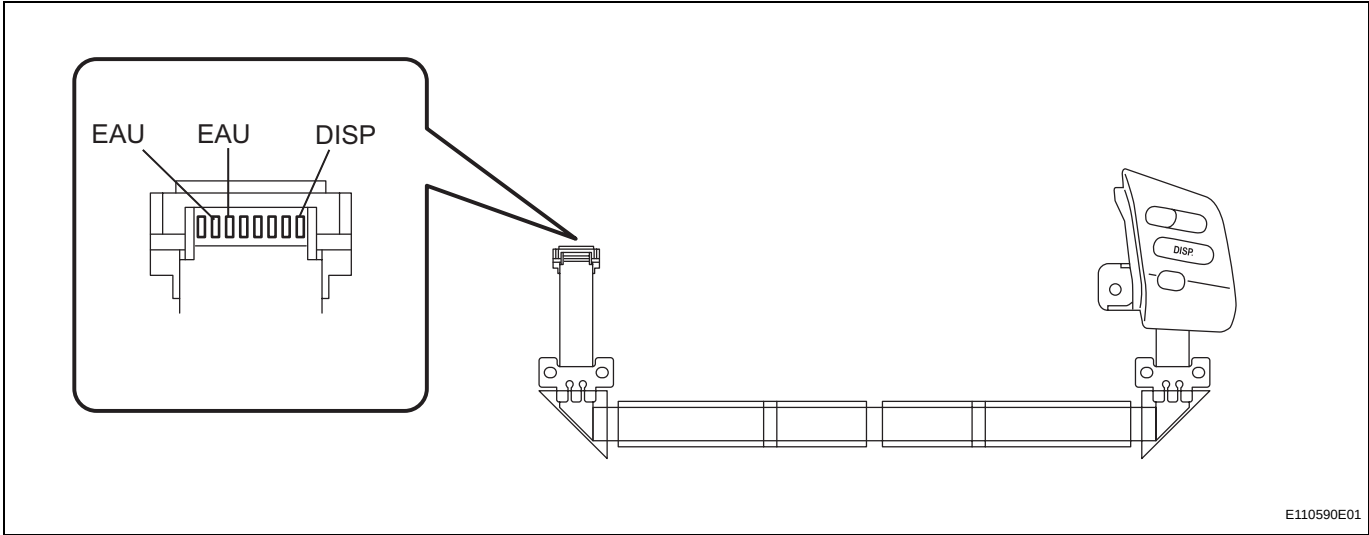
HINT:

If the value is not as specified, replace the engine oil pressure switch.

STEERING PAD SWITCH

INSPECTION

1. INSPECT STEERING PAD SWITCH
- (a) Remove the steering pad switch LH connector with the steering pad switch RH and spiral cable still connected.

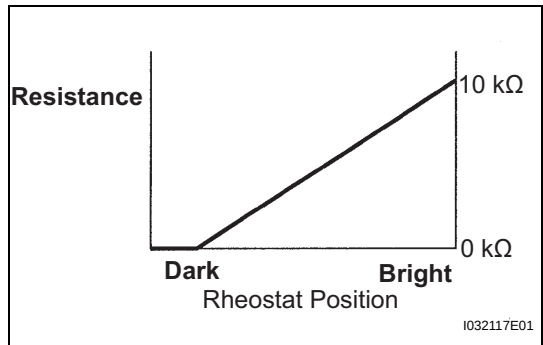
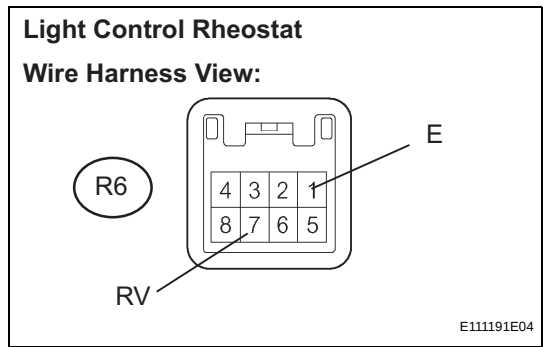


- (b) Measure the resistance according to the value(s) in the table below.

Standard Resistance

Tester Connection	Condition	Specified Condition
DISP - EAU	DISP switch is not pushed in.	10 kΩ or higher
DISP - EAU	DISP switch is pushed in.	Below 1Ω

HINT:
If the value is not as specified, replace the steering pad switch RH.



LIGHT CONTROL RHEOSTAT

INSPECTION

1. **INSPECT LIGHT CONTROL RHEOSTAT**
 - (a) Remove the light control rheostat with connector still connected.
 - (b) Measure the resistance according to the value(s) in the table below.

Standard Resistance

Tester Connection	Condition	Specified Condition
R6-1 (E) - R6-7 (RV)	Light control rheostat position is MIN.	Below 1 Ω
R6-1 (E) - R6-7 (RV)	Light control rheostat position is between MIN. and MAX.	8 to 12 kΩ
R6-1 (E) - R6-7 (RV)	ODO/TRIP switch is OFF → ON	10 kΩ or higher → Below 1 Ω

HINT:
If the value is not as specified, replace the light control rheostat.