

09-22 INSTRUMENTATION/DRIVER INFO.

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INSTRUMENT CLUSTER

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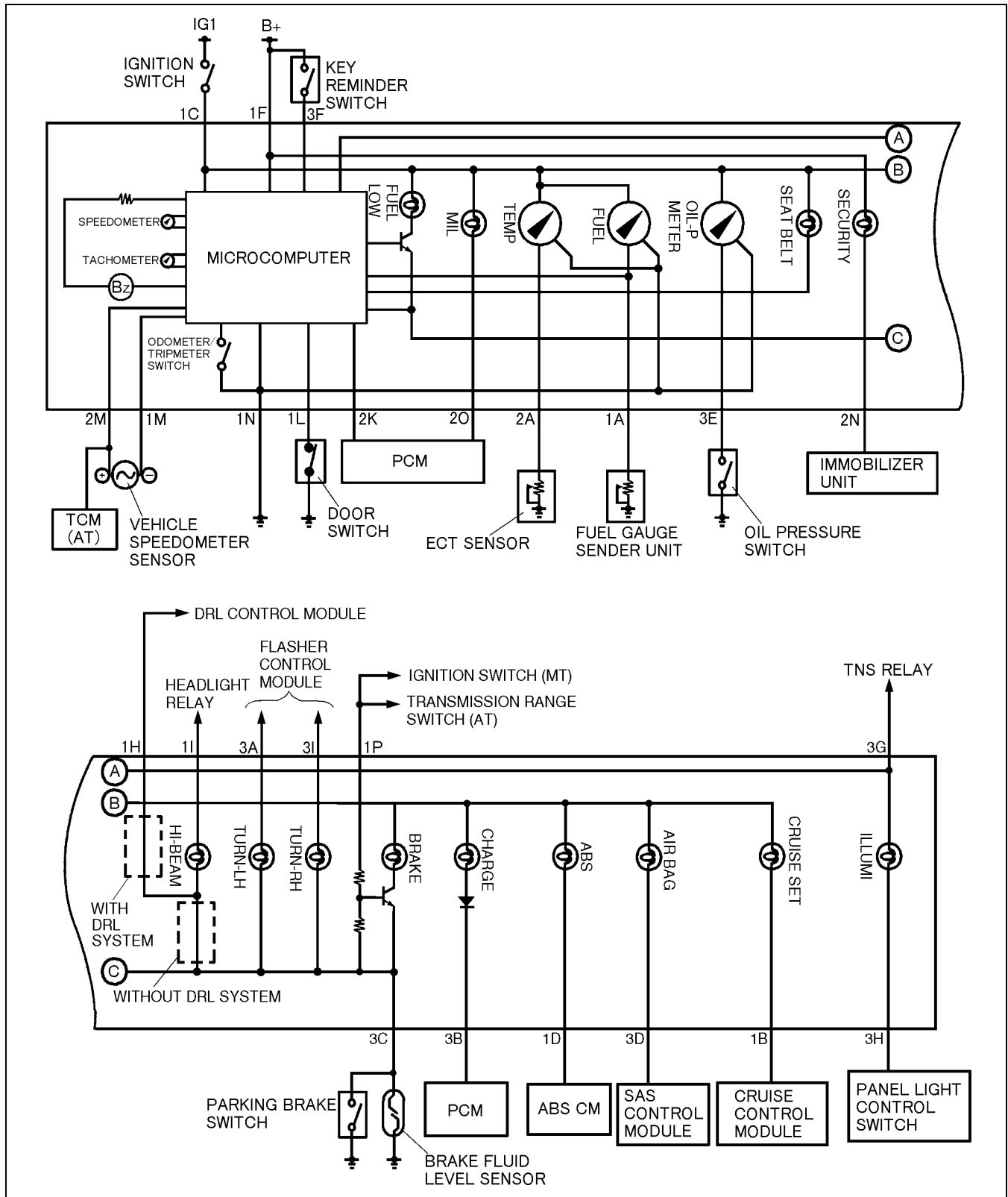
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INSTRUMENTATION/DRIVER INFO.

INSTRUMENT CLUSTER SYSTEM WIRING DIAGRAM

A5U092255430W01



A5U0920W103

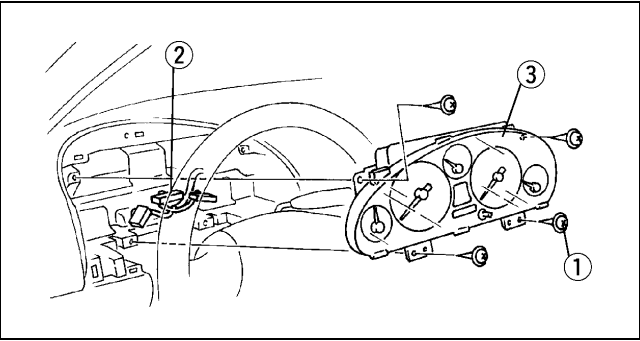
INSTRUMENT CLUSTER REMOVAL/INSTALLATION

A5U092255430W02

1. Disconnect the negative battery cable.
2. Remove the meter hood. (See 09-17-6 METER HOOD REMOVAL/INSTALLATION.)
3. Remove in the order indicated in the table.

1	Screw
2	Connector
3	Instrument cluster

4. Install in the reverse order of removal.



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INSTRUMENT CLUSTER DISASSEMBLY/ASSEMBLY

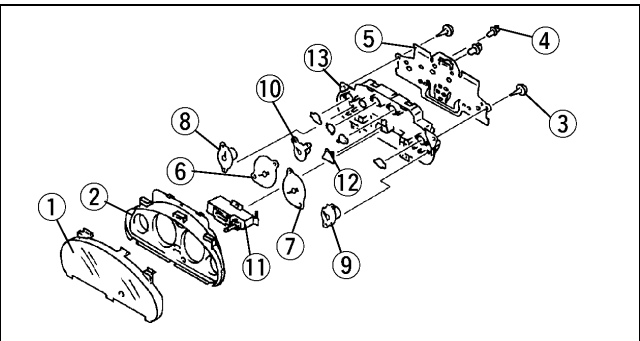
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Caution

- If the instrument cluster is dropped or damaged, the system will not work properly and it may be the cause of trouble or malfunction.

1. Disassemble in the order indicated in the table.

1	Front glass
2	Window plate
3	Screw
4	Bulb
5	Print plate
6	Tachometer
7	Speedometer
8	Fuel gauge
9	Water temperature gauge
10	Oil pressure gauge
11	Odometer/tripmeter
12	Warning plate
13	Case



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2. Assemble in the reverse order of disassembly.

INSTRUMENT CLUSTER INSPECTION

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Speedometer

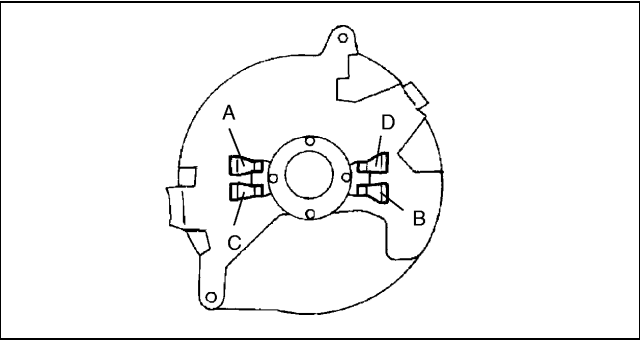
1. Remove the speedometer. (See 09-22-3 INSTRUMENT CLUSTER DISASSEMBLY/ASSEMBLY.)
2. Measure the resistance between the speedometer terminals using an ohmmeter.
 - If not as specified, replace the speedometer. (See 09-22-3 INSTRUMENT CLUSTER DISASSEMBLY/ASSEMBLY.)

○—W—○ : Resistance

Step	Terminal			
	A	B	C	D
1	○—W—○			: R
2			○—W—○ : R	

R: 136—184 Ω

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Tachometer

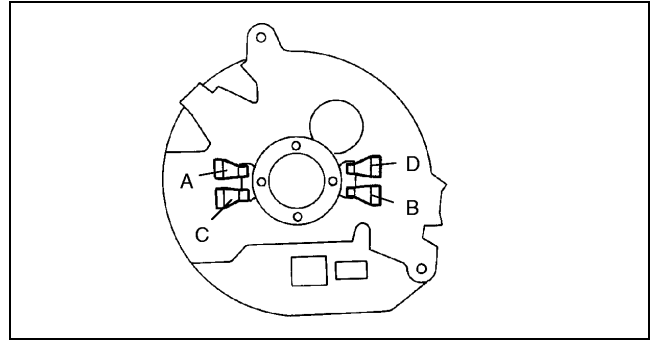
1. Remove the tachometer. (See 09-22-3 INSTRUMENT CLUSTER DISASSEMBLY/ASSEMBLY.)
2. Measure the resistance between the tachometer terminals using an ohmmeter.
 - If not as specified, replace the tachometer. (See 09-22-3 INSTRUMENT CLUSTER DISASSEMBLY/ASSEMBLY.)

○—W—○ : Resistance

Step	Terminal			
	A	B	C	D
1	○—W—○			: R
2			○—W—○	: R

R: 136—184 Ω

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Fuel Gauge

1. Remove the fuel gauge. (See 09-22-3 INSTRUMENT CLUSTER DISASSEMBLY/ASSEMBLY.)
2. Measure the resistance between the fuel gauge terminals using an ohmmeter.
 - If not as specified, replace the fuel gauge. (See 09-22-3 INSTRUMENT CLUSTER DISASSEMBLY/ASSEMBLY.)

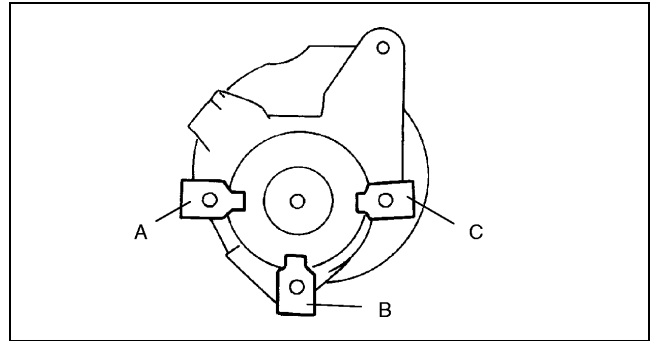
○—W—○ : Resistance

Step	Terminal		
	A	B	C
1	○—W—○		: R ₁
2		○—W—○	: R ₂
3	○—W—○		: R ₃

R₁: 110.7—135.3 Ω R₂: 89.1—108.9 Ω

R₃: 199.8—244.2 Ω

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X5U922WA7

Water Temperature Gauge

1. Remove the water temperature gauge. (See 09-22-3 INSTRUMENT CLUSTER DISASSEMBLY/ASSEMBLY.)
2. Measure the resistance between the water temperature gauge terminals using an ohmmeter.
 - If not as specified, replace the water temperature gauge. (See 09-22-3 INSTRUMENT CLUSTER DISASSEMBLY/ASSEMBLY.)

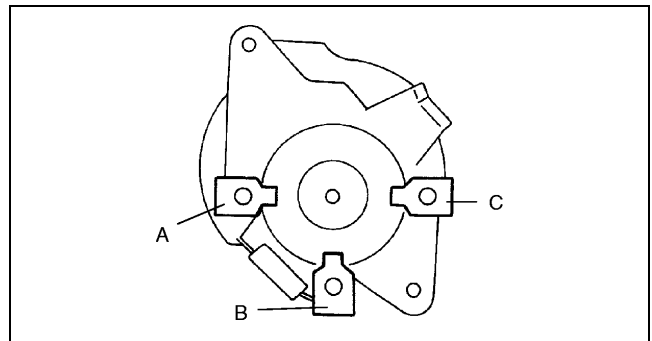
○—W—○ : Resistance

Step	Terminal		
	A	B	C
1	○—W—○		: R ₁
2		○—W—○	: R ₂
3	○—W—○		: R ₃

R₁: 85.5—94.5 Ω R₂: 247.5—302.5 Ω

R₃: 193.5—236.5 Ω

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Oil Pressure Gauge

1. Remove the oil pressure gauge. (See 09-22-3 INSTRUMENT CLUSTER DISASSEMBLY/ASSEMBLY.)
2. Measure the resistance between the oil pressure gauge terminals using an ohmmeter.
 - If not as specified, replace the oil pressure gauge. (See 09-22-3 INSTRUMENT CLUSTER DISASSEMBLY/ASSEMBLY.)

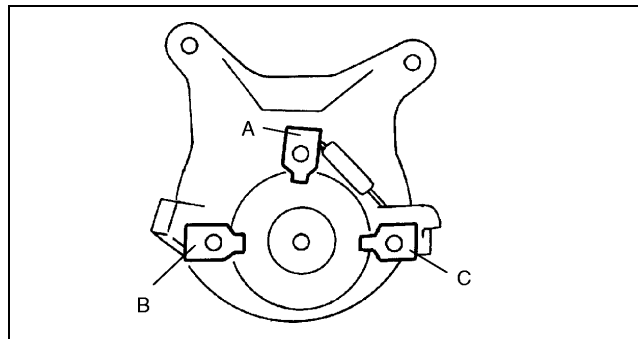
○—W—○ : Resistance

Step	Terminal		
	A	B	C
1	○—W—○		:R ₁
2		○—W—○	:R ₂
3	○—W—○		:R ₃

R₁: 89.1—108.9 Ω R₂: 228.6—279.4 Ω

R₃: 139.5—170.5 Ω

X5U922WAA



X5U922WAB

INSTRUMENT CLUSTER INPUT/OUTPUT CHECK MODE

A5U092255430W05

Note

- In this mode, it is possible to check the item in the following chart.

Diagnostic Trouble Code Chart

DTC	Checking item
01	Seat belt switch
04	Door switch
08	TNS relay
14	Buzzer
31	Key reminder switch

Note

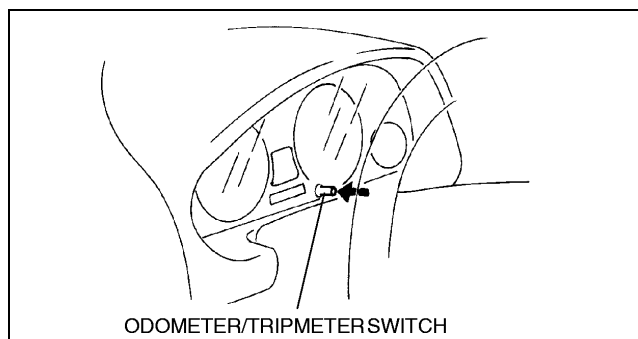
- The DTC switch are not listed may be indicated, but they cannot be inspected.

Operating Order

Note

- Wait **30 seconds or more** have passed after disconnecting the negative battery cable and connect the cable then operate the input/output check mode again after terminating the input/output check mode.

1. Close the all doors.
2. Disconnect the negative battery cable.
3. Open the driver's side door.
4. Connect the negative battery cable.
5. Perform the following procedures within **30 seconds**, after connecting the negative battery cable.
 - a. Turn the ignition switch to the ON position.
 - b. Push the door switch 3 times.
 - c. Push the odometer/tripmeter switch 3 times.



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Checking Order

Note

- The DTC are displayed in numerical order. (While performing the inspection, if you want to inspect a DTC whose number is smaller than the code number you are currently inspecting, terminate the check mode then repeat the inspection from the beginning.)
- If rotating the wheels, cancel the input/output check mode.

Check Code 01—14

Note

- The DTC can be fast-forwarded by pushing and holding the odometer/tripmeter switch for **1 second or more**.

1. Push the odometer/tripmeter switch and select the DTC.
2. Inspect each DTC by following the related inspection procedures. (See 09–22–6 Inspection of Diagnostic Trouble Codes (DTC).)

Check Code 31

1. Turn the ignition switch to the ACC position.
2. Push the odometer/tripmeter switch and select the DTC.
3. Inspect each DTC by following the related inspection procedures. (See 09–22–6 Inspection of Diagnostic Trouble Codes (DTC).)

Cancel Order

1. Cancel the input/output check mode by turning the ignition switch to the LOCK position then back to the ON position.

Note

- Cancel the input/output check mode by leaving the instrument cluster in check mode for **approximately 45 minutes**.

Inspection of Diagnostic Trouble Codes (DTC)

DTC 01 Seat belt switch on/off signal			
STEP	INSPECTION	INDICATION	ACTION
1	Pull the driver's side seat belt.	on	Check the seat belt switch. Check the wiring harness. (Instrument cluster — seat belt switch)
		off	Go to next step.
2	Release the driver's side seat belt.	on	Input signal to instrument cluster is okay.
		off	Check the seat belt switch. Check the wiring harness. (Instrument cluster — seat belt switch)

DTC 04 Door switch on/off signal			
STEP	INSPECTION	INDICATION	ACTION
1	Open the driver's side door.	on	Close the driver's side door, then go to next step.
		off	Check the door switch. Check the wiring harness. (Instrument cluster — door switch)

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DTC 04 Door switch on/off signal			
STEP	INSPECTION	INDICATION	ACTION
2	Open the passenger's side door.	ON	Close the passenger's side door, then go to next step.
		OFF	Check the door switch. Check the wiring harness. (Instrument cluster — door switch)
3	Close all doors.	ON	Check the door switch. Check the wiring harness. (Instrument cluster — door switch)
		OFF	Input signal to instrument cluster is okay.

DTC 08 TNS relay on/off signal			
STEP	INSPECTION	INDICATION	ACTION
1	Turn the headlight switch to TNS position.	ON	Go to next step.
		OFF	Check the TNS relay. Check the wiring harness. (Battery — TNS relay — instrument cluster)
2	Turn the headlight switch to OFF.	ON	Check the TNS relay. Check the wiring harness. (Battery — TNS relay — instrument cluster)
		OFF	Input signal to instrument cluster is okay.

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DTC 14 Operation signal to buzzer			
INSPECTION		INDICATION	ACTION
Wait for 2 seconds after selecting DTC 14.		(No indication)	Buzzer continuously sounds.
			Buzzer does not continuously sound.
			Buzzer is okay.
			Replace the odometer/tripmeter.

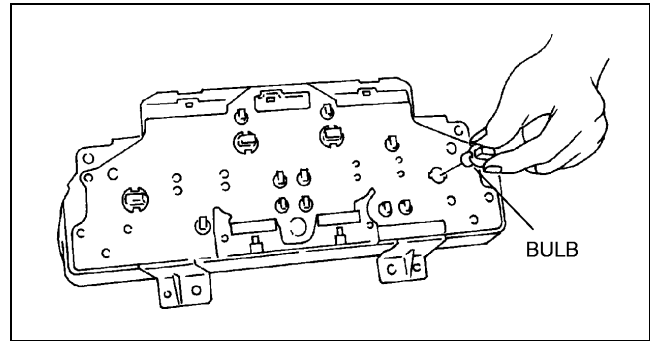
DTC 31 Key reminder switch on/off signal			
STEP	INSPECTION	INDICATION	ACTION
1	Insert the key into steering lock.	ON	Go to next step.
		OFF	Check the key reminder switch. Check the wiring harness. (Battery — key reminder switch — instrument cluster)
2	Remove the key from steering lock.	ON	Check the key reminder switch. Check the wiring harness. (Battery — key reminder switch — instrument cluster)
		OFF	Input signal to instrument cluster is okay.

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WARNING AND INDICATOR LIGHT BULB REMOVAL/INSTALLATION

A5U092255431W01

1. Disconnect the negative battery cable.
2. Remove the instrument cluster. (See 09-22-3 INSTRUMENT CLUSTER REMOVAL/INSTALLATION.)
3. Turn the socket counterclockwise to remove the bulb as shown in the figure.
4. Install in the reverse order of removal.

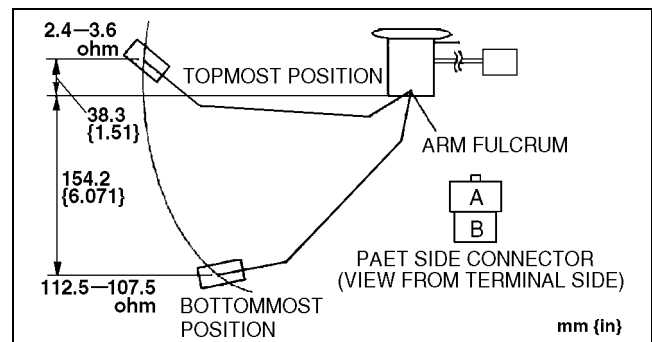


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FUEL GAUGE SENDER UNIT INSPECTION

A5U092260960W01

1. Remove the fuel pump. (See 01-14-10 FUEL PUMP (FP) REMOVAL/INSTALLATION.)
2. Move the float to the topmost and bottommost positions, and verify that the resistance between terminals A and B of the unit and the position of the float are as indicated in the figure.
 - If they are not as indicated, replace the fuel gauge sender unit. (See 01-14-10 FUEL PUMP (FP) REMOVAL/INSTALLATION.)



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OIL PRESSURE SWITCH INSPECTION

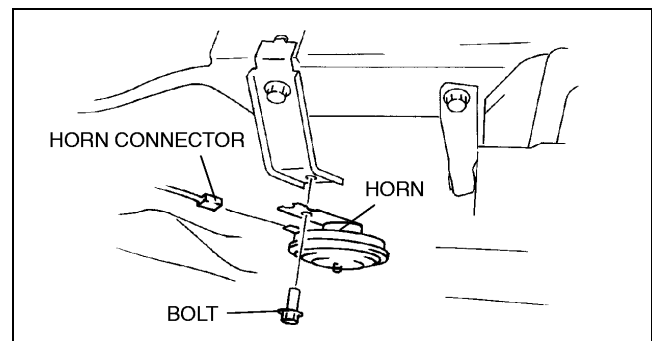
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1. Verify that the oil pressure gauge needle moves to H when the engine is started.
2. Verify that the oil pressure gauge needle moves to L when the engine is stopped.
 - If the oil pressure gauge needle does not move, inspect the oil pressure gauge and related wiring harness.
 - If the oil pressure gauge and related wiring harness are normal, inspect the oil pressure. (See 01-11-3 OIL PRESSURE INSPECTION.)
 - If the oil pressure is normal, replace the oil pressure switch. (See 01-11-3 OIL PRESSURE INSPECTION.)

HORN REMOVAL/INSTALLATION

A5U092266790W01

1. Disconnect the negative battery cable.
2. Remove the upper seal board.
3. Disconnect the horn connector.
4. Remove the bolt.
5. Remove the horn.
6. Install in the reverse order of removal.



X5U922WAE