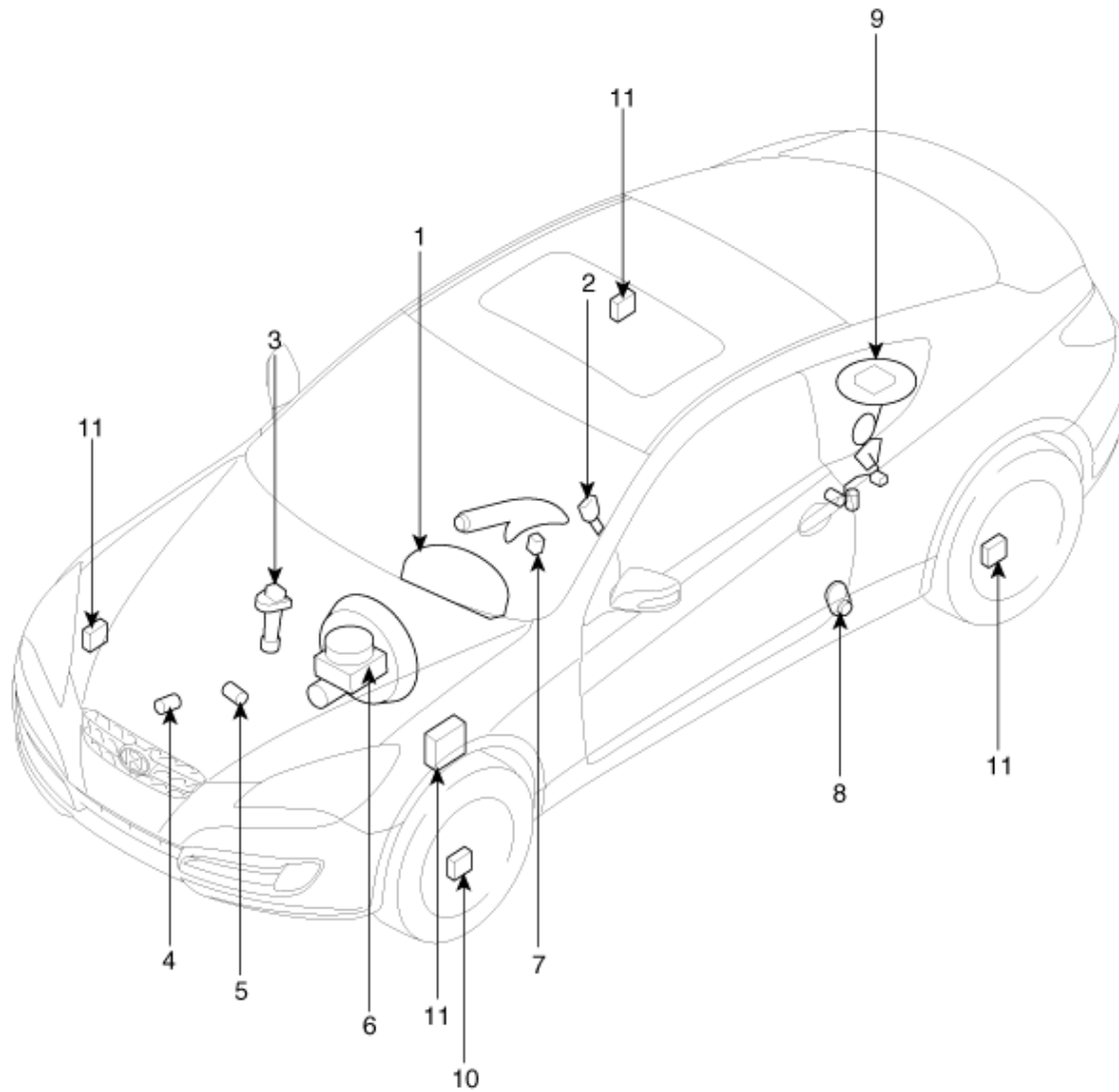


Component Location



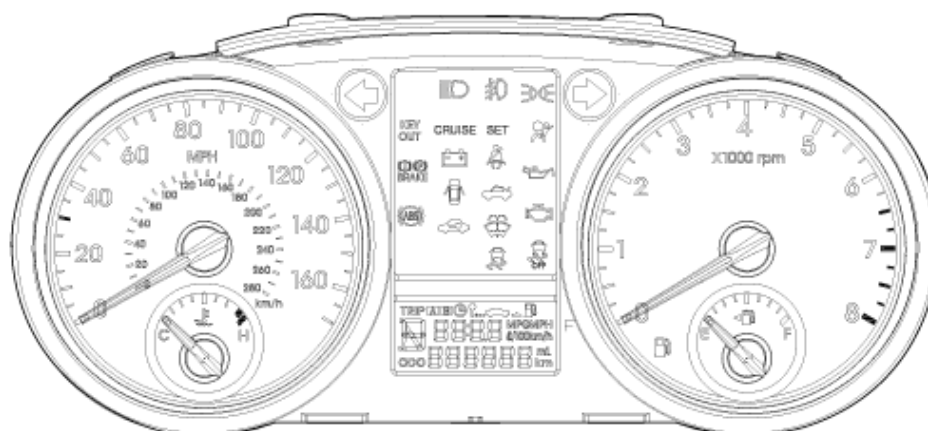
1. Cluster assembly
2. Seat belt switch
3. Vehicle speed sensor
4. Engine coolant temperature sender
5. Oil pressure switch
6. Brake fluid level warning switch

7. Parking brake switch
8. Door switch
9. Fuel gauge sender
10. Wheel speed sensor
11. ABS ECU

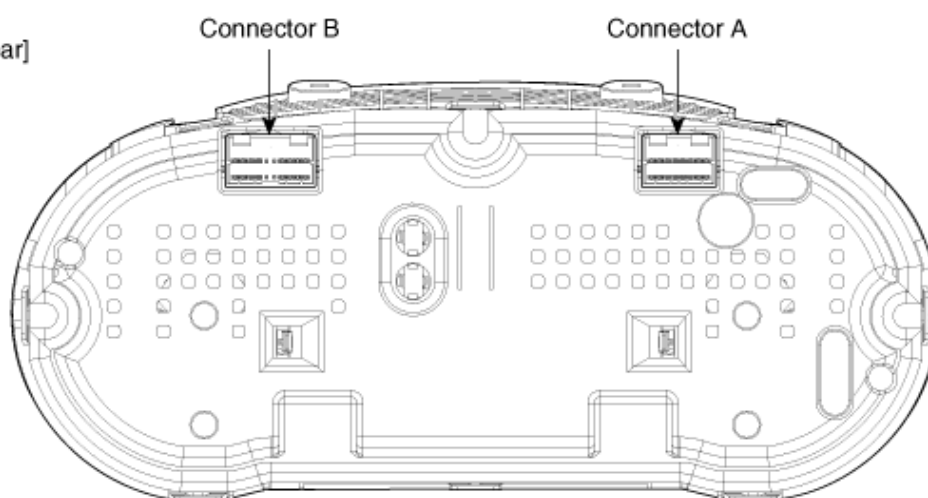
Components

[USA]

[Front]

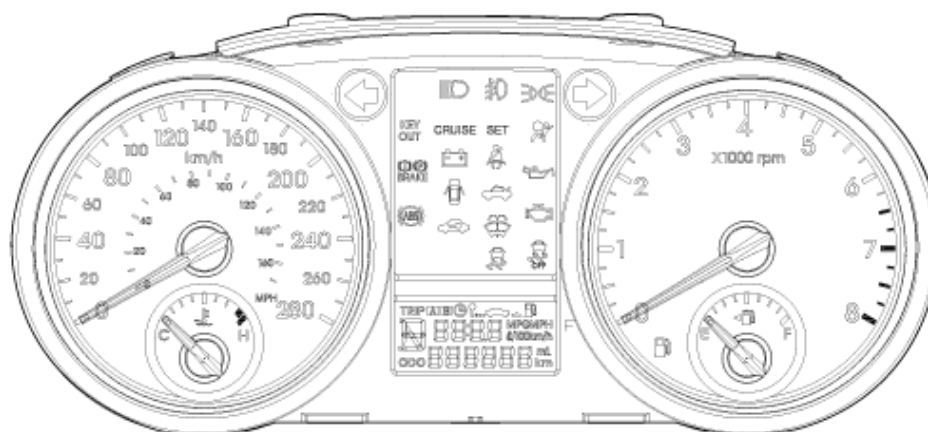


[Rear]

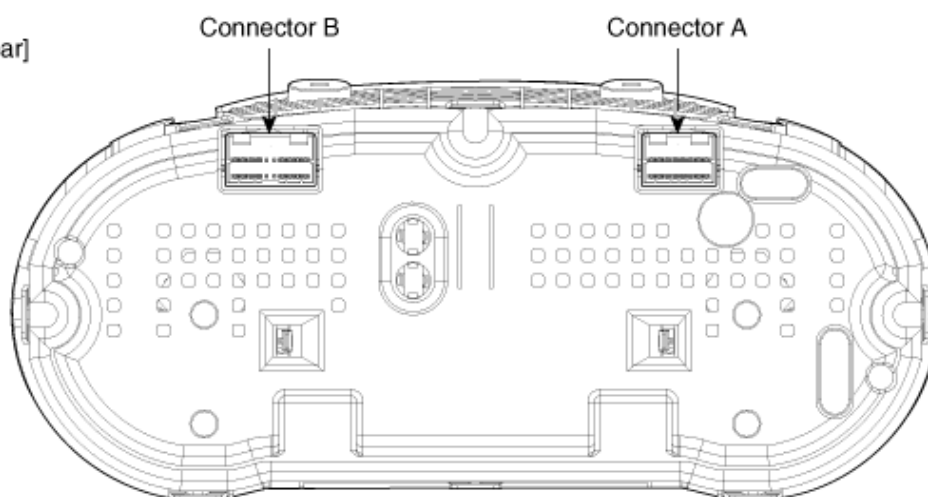


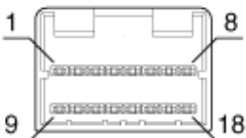

[CANADA]

[Front]



[Rear]



Connector	No.	Name	No.	Name
 <p>Connector A (18pin)</p>	1	key Out	9	CAN H
	2	Turn Signal Lamp (L)	10	CAN L
	3	P	11	Washer Low
	4	R	12	-
	5	N	13	Trip Switch
	6	D	14	IG (+)
	7	4P OUT	15	B+
	8	Trip Reset	16	GND (S)
 <p>Connector B (20pin)</p>	1	Trunk Lid	11	Immobilizer
	2	ILL (-)	12	-
	3	ILL (+)	13	Door Open
	4	Fuel GND	14	Oil
	5	Fuel Power	15	Engine Warning
	6	Turn Signal Lamp (R)	16	Charge
	7	Front Fog Lamp	17	Brake
	8	GND (P)	18	Seat Belt
	9	Airbag (+)	19	-
	10	Airbag (-)	20	Head Lamp Hi-beam (+)

Inspection

Speedometer

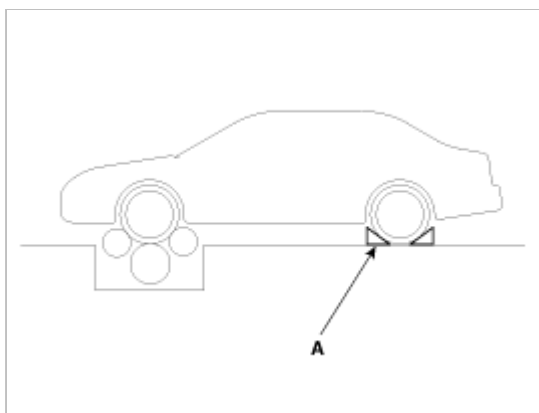
1. Adjust the pressure of the tires to the specified level.
2. Drive the vehicle onto a speedometer tester. Use wheel chocks(A) as appropriate.
3. Check if the speedometer indicator range is within the standard values.

CAUTION

Do not operate the clutch suddenly or increase/ decrease speed rapidly while testing.

NOTE

Tire wear and tire over or under inflation will increase the indication error.



[km/h - Canada]

Velocity (km/h)	20	40	60	80	100	120	140
Tolerance (km/h)	+3.0 0	+3.3 0	+3.4 0	+3.8 0	+4.1 0	+4.9 0	+5.2 0
Velocity (km/h)	160	180	200	220	240	260	280
Tolerance (km/h)	+5.7 0	+6.2 0	+6.5 0	+6.7 0	+6.9 0	+7.1 0	+7.3 0

[MPH- USA]

Velocity (MPH)	10	20	40	60	80
Tolerance (MPH)	+2.3 0	+2.4 0	+2.5 0	+2.6 0	+2.7 0
Velocity (MPH)	100	120	140	160	
Tolerance (MPH)	+2.8 0	+2.9 0	+3.0 0	+3.3 0	

Tachometer

1. Connect the scan tool to the diagnostic link connector or install a tachometer.
2. With the engine started, compare the readings of the tester with that of the tachometer. Replace the tachometer if the tolerance is exceeded.

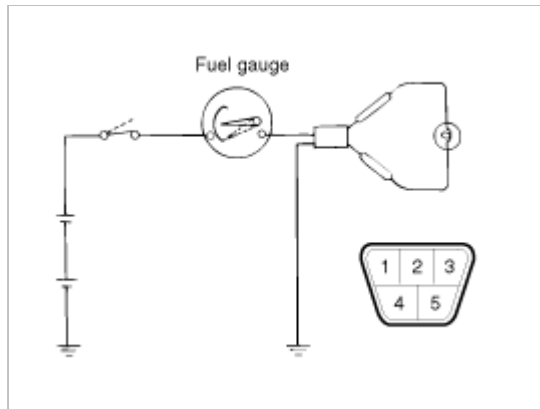
CAUTION

1. Reversing the connections of the tachometer will damage the transistor and diodes inside.
2. When removing or installing the tachometer, be careful not to drop it or subject it to severe shock.

Revolution(rpm)	1,000	2,000	3,000	4,000
Tolerance(rpm)	±100	±125	±150	±150
Revolution(rpm)	5,000	6,000	7,000	8,000
Tolerance(rpm)	±150	±180	±210	±240

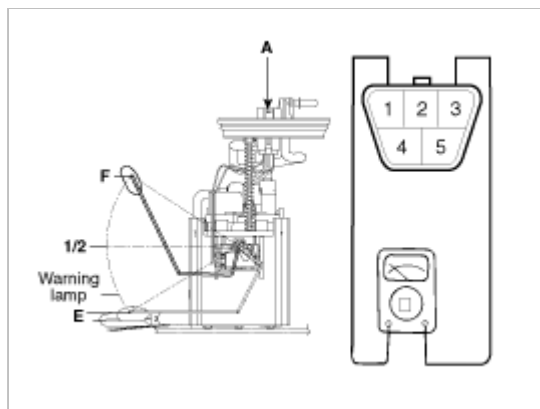
Fuel Gauge

1. Disconnect the fuel sender connector from the fuel sender.
2. Connect a 3.4 watt, 12V test bulb to terminals 1 and 3 on the wire harness side connector.
3. Turn the ignition switch to the ON, and then check that the bulb lights up and the fuel gauge needle moves to full.



Main Fuel Gauge Sender

1. Using an ohmmeter, measure the resistance between terminals 1 and 3 of sender connector (A) at each float level.



2. Also check that the resistance changes smoothly when the float is moved from "E" to "F"

Position	Resistance(Ω)
Sender (E)	193.4 ± 2
Warning lamp	186.8 ± 2

1/2	104.3 ± 2
Sender (F)	13.5 ± 2

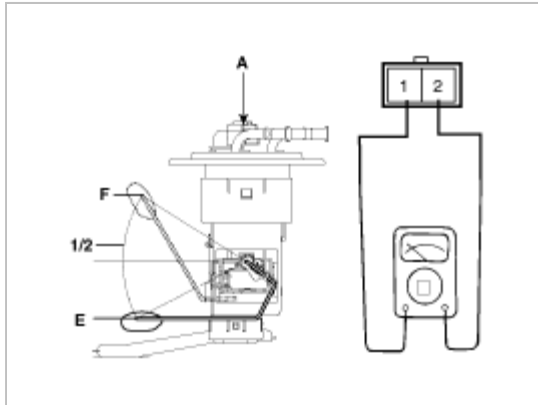
- If the height resistance is unsatisfied, replace the fuel sender as an assembly.

CAUTION

After completing this test, wipe the sender dry and reinstall it in the fuel tank.

Fuel Gauge Servo Sender

- Using an ohmmeter measure the resistance between terminals 1 and 2 of servo sender connector (A) at each float level.

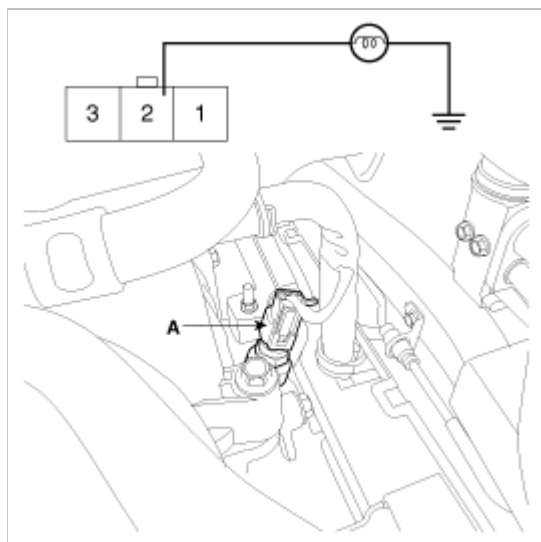


- Also check that the resistance changes smoothly when the float is moved from "E" to "F".

Position	Resistance (Ω)
E	193.4 ± 2 Ω
1/2	104.3 ± 2 Ω
F	13.5 ± 2 Ω

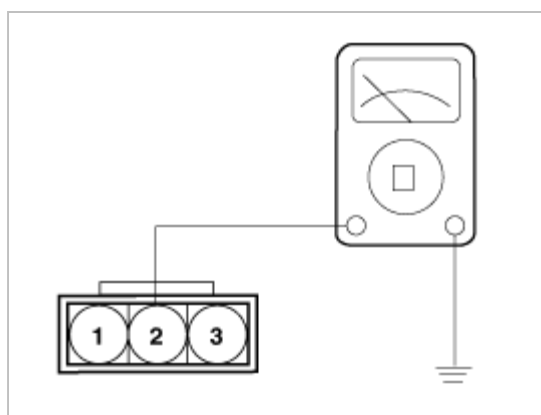
Engine Coolant Temperature Gauge

- Disconnect the wiring connector (A) from the engine coolant temperature sender in the engine compartment.
- Turn the ignition switch ON. Check that the gauge needle indicates cool. Turn the ignition switch OFF.
- Connect a 12V, 3.4 watt test bulb between the harness side connector and ground.
- Turn the ignition switch ON.
- Verify that the test bulb flashes and that the indicator moves to HOT.
If operation is not as specified, replace the engine coolant temperature gauge. Then recheck the system.



Engine Coolant Temperature Sender

1. Using an ohmmeter, measure the resistance between the terminal 2 and ground.

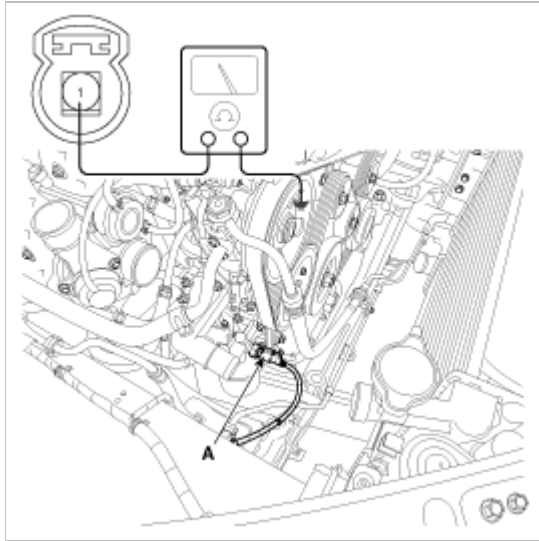


2. If the resistance value is not as shown in the table, replace the temperature sender.

Temperature [°F(°C)]	131(55)	160(71) ~ 230(110)	257(125)
Gauge angle (°)	-45	-70 ± 25	+35

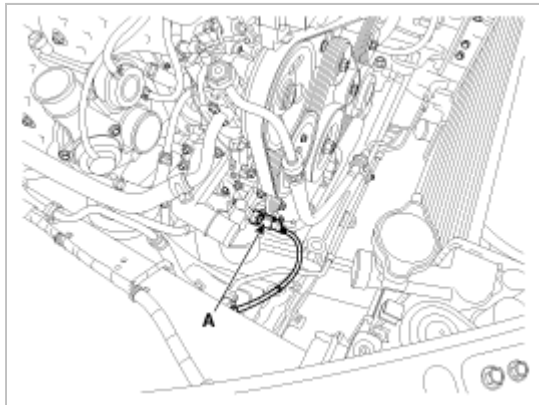
Oil Pressure Switch

1. Check that there is continuity between the oil press switch terminal (A) and ground with the engine off.
2. Check that there is no continuity between the terminal and ground with the engine running.
3. If operation is not as specified, replace the switch.



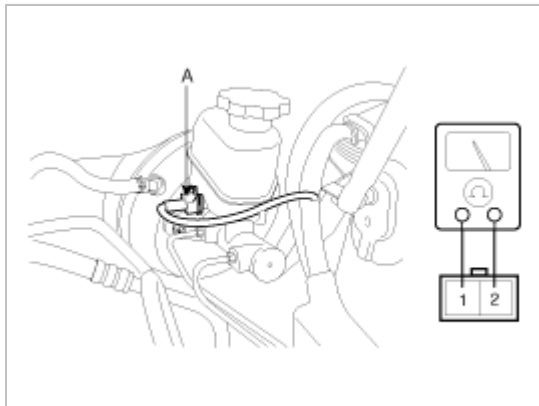
Oil Pressure Warning Lamp

1. Disconnect the connector (A) from the warning switch and ground the terminal on the wire harness side connector.
2. Turn the ignition switch ON. Check that the warning lamp lights up. If the warning lamp doesn't light, test the bulb or inspect the wire harness.



Brake Fluid Level Warning Switch

1. Remove the connector(A) from the switch located at the brake fluid reservoir.
2. Verify that continuity exists between switch terminals 1 and 2 while pressing the switch (float) down with a rod.



Brake Fluid Level Warning Lamp

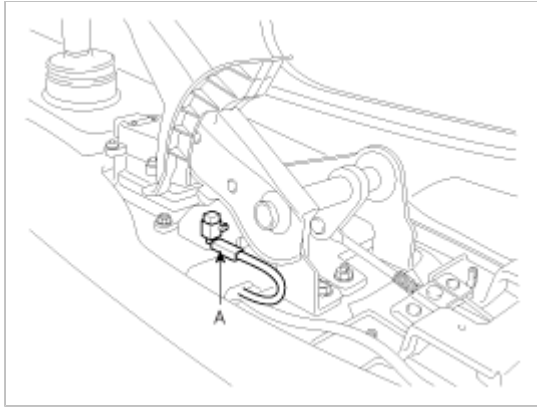
1. Ignition "ON"
2. Release the parking brake.

3. Remove the connector from the brake fluid level warning switch.
4. Ground the connector at the harness side.
5. Verify that the warning lamp lights.

Parking Brake Switch

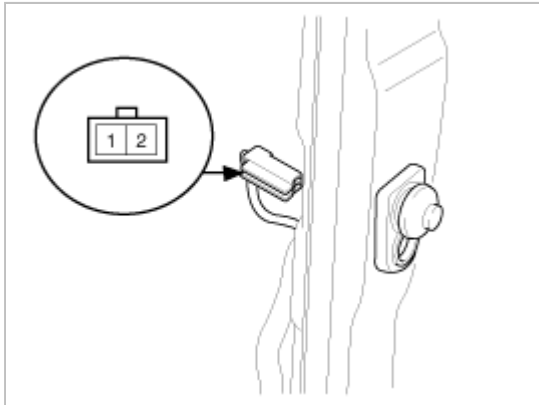
The parking brake switch (A) is a pulling type. It is located under the parking brake lever. To adjust, move the switch mount up and down with the parking brake lever released all the way.

1. Check that there is continuity between the terminal and switch body with the switch ON (Lever is pulled).
2. Check that there is no continuity between the terminal and switch body with the switch OFF (Lever is released).
If continuity is not as specified, replace the switch or inspect its ground connection.



Door Switch

Remove the door switch and check for continuity between the terminals.



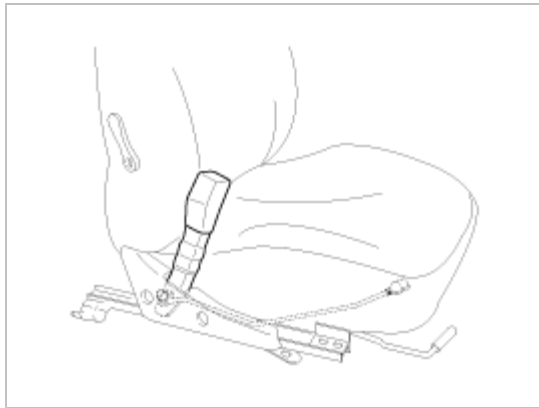
[Front Door Switch]

Terminal Position	1	2	Body (Ground)
Free(Door open)	○	○	○
Push(Door close)			

Seat Belt Switch

1. Remove the connector from the switch.
2. Check for continuity between terminals.

Seat belt condition	Continuity
Fastened	Non-conductive ($\infty\Omega$)
Not fastened	Conductive (Ω)



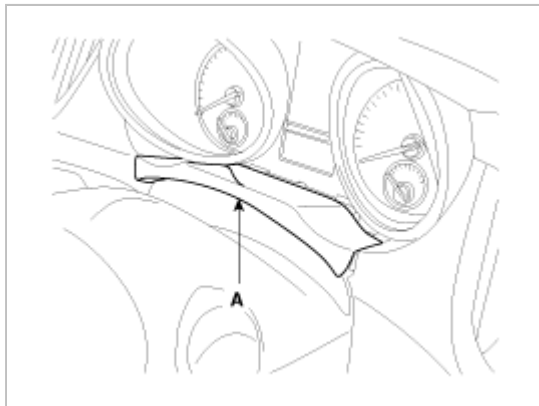
Seat Belt Warning Lamp

With the ignition switch turned ON, verify that the lamp glows.

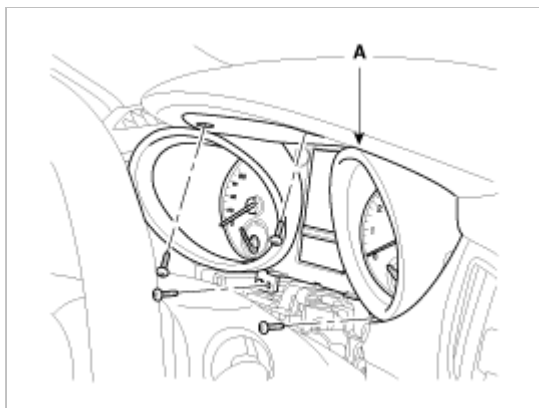
Seat belt condition	Warning lamp
Fastened	OFF
Not fastened	ON

Removal

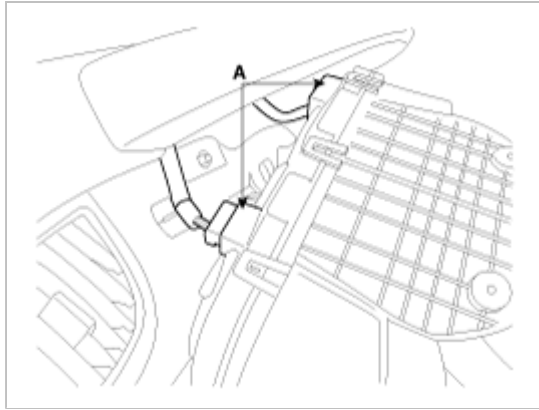
1. Disconnect the negative (-) battery terminal.
2. Tilt the steering column down.
3. Remove the cluster fascia lower panel(A).



4. Remove the cluster(A) after loosening the screws.



5. Disconnect the cluster connector (A), then remove the cluster.



Installation

1. Install the cluster to the cluster housing.
2. Install the cluster fascia lower panel.

GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Body Electrical System > Indicators And Gauges > Troubleshooting

Troubleshooting

Symptom	Possible cause	Remedy
Speedometer does not operate	Cluster fuse (10A) blown	Check for short and replace fuse
	Speedometer faulty	Check speedometer
	Vehicle speed sensor faulty	Check vehicle speed sensor
	Wiring or ground faulty	Repair if necessary
Tachometer does not operate	Cluster fuse (10A) blown	Check for short and replace fuse
	Tachometer faulty	Check tachometer
	Wiring or ground faulty	Repair if necessary
Fuel gauge does not operate	Cluster fuse (10A) blown	Check for short and replace fuse
	Fuel gauge faulty	Check gauge
	Fuel sender faulty	Check fuel sender
	Wiring or ground faulty	Repair if necessary
Low fuel warning lamp does not light up	Cluster fuse (10A) blown	Check for short and replace fuse
	Bulb burned out	Replace bulb
	Fuel sender faulty	Check fuel sender
	Wiring or ground faulty	Repair if necessary
Water temperature gauge does not operate	Cluster fuse (10A) blown	Check for short and replace fuse
	Water temperature gauge faulty	Check gauge
	Water temperature sender faulty	Check sender
	Wiring or ground faulty	Repair if necessary
Oil pressure warning lamp does not light up	Cluster fuse (10A) blown	Check for short and replace fuse
	Bulb burned out	Replace bulb
	Oil pressure switch faulty	Check switch
	Wiring or ground faulty	Repair if necessary
Parking brake warning lamp does not light up	Cluster fuse (10A) blown	Check for short and replace fuse
	Bulb burned out	Replace bulb
	Brake fluid level warning switch faulty	Check switch
	Parking brake switch faulty	Check switch
	Wiring or ground faulty	Repair if necessary
Open door warning lamp and trunk lid warning lamp do not light up	Memory fuse (15A) blown	Check for short and replace fuse
	Bulb burned out	Replace bulb
	Door switch faulty	Check switch
	Wiring or ground faulty	Repair if necessary
Seat belt warning lamp does not light up	Cluster fuse (10A) blown	Check for short and replace fuse
	Bulb burned out	Replace bulb
	Seat belt switch faulty	Check switch
	Wiring or ground faulty	Repair if necessary