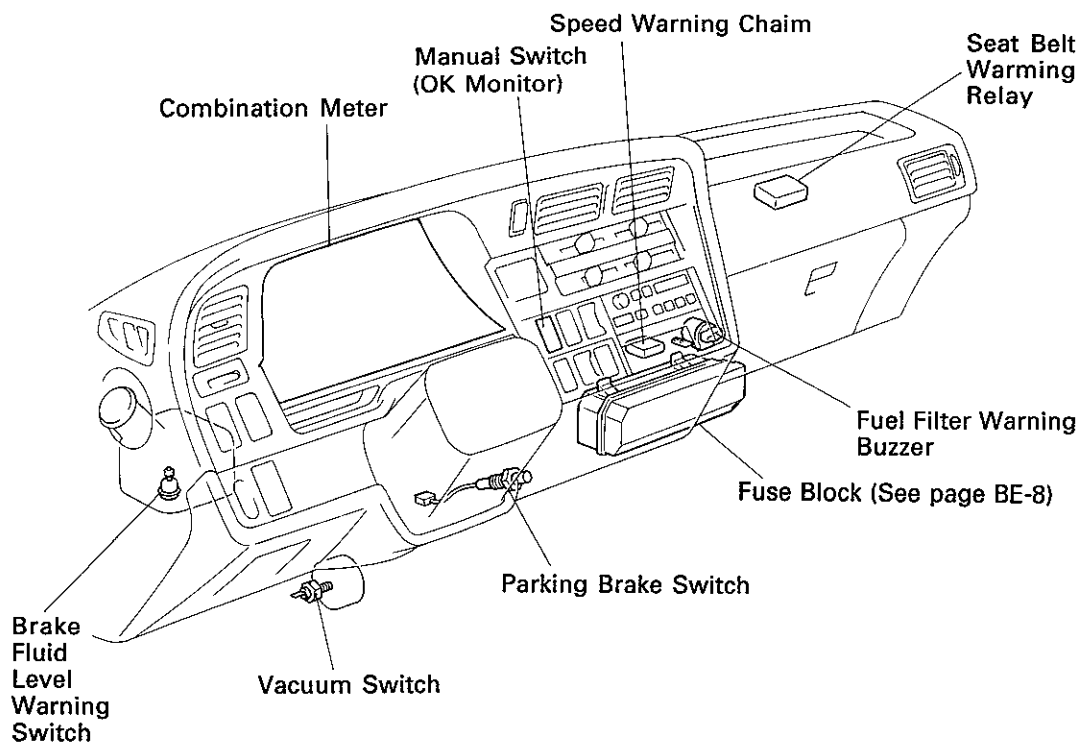


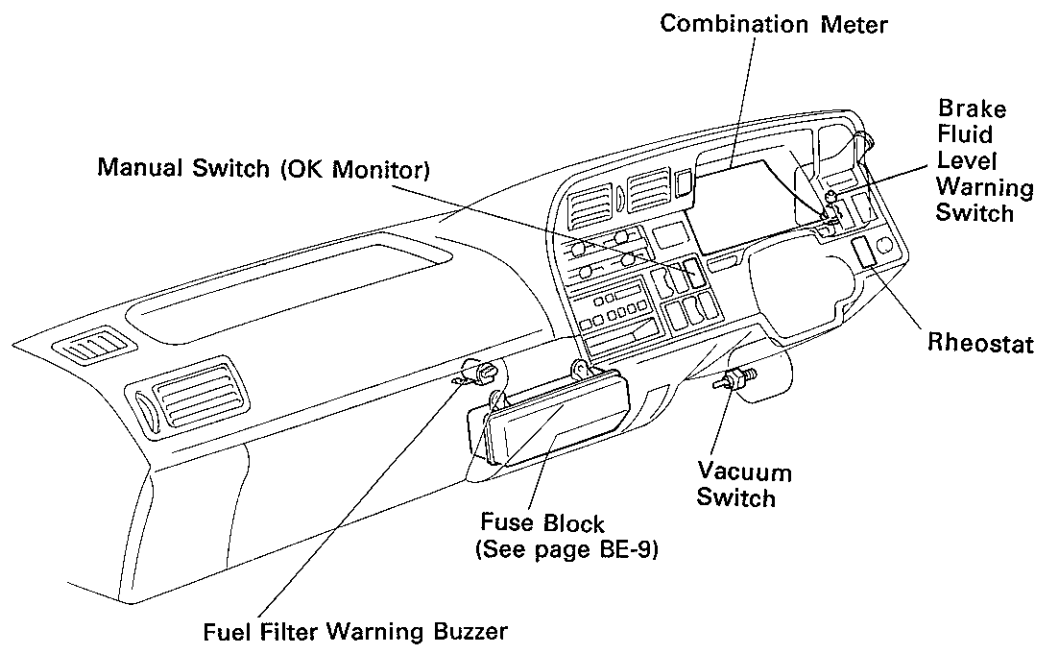
COMBINATION METER

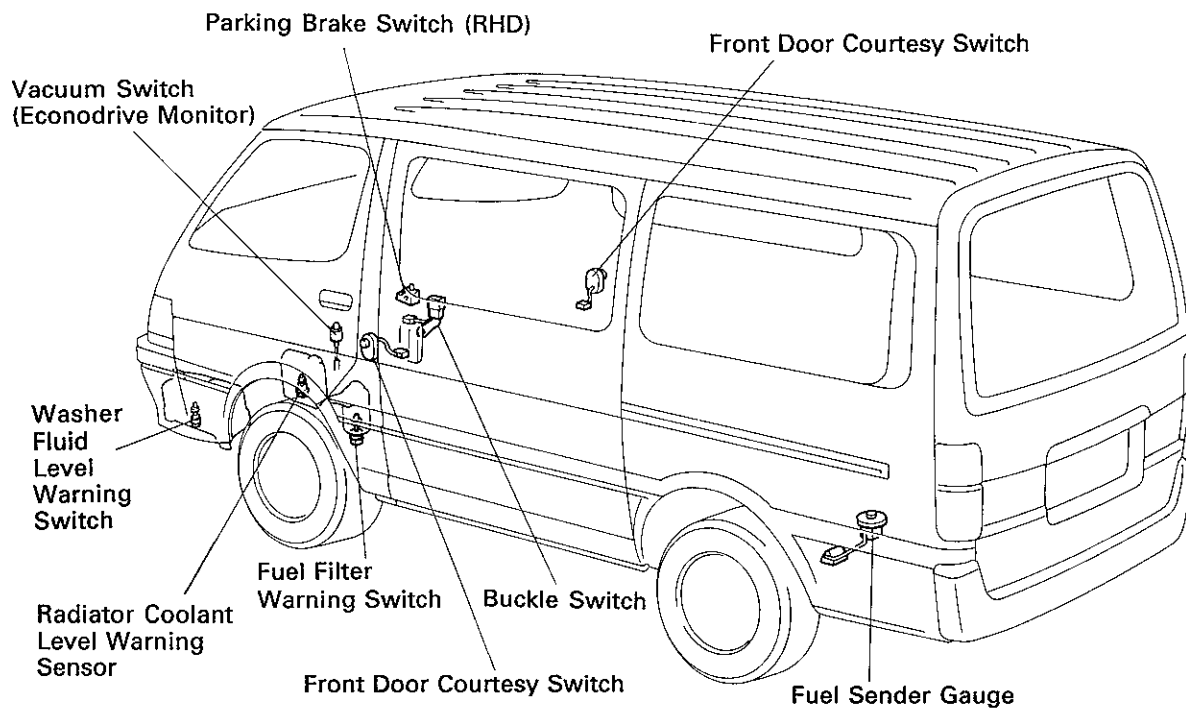
Parts Location

LHD Vehicles



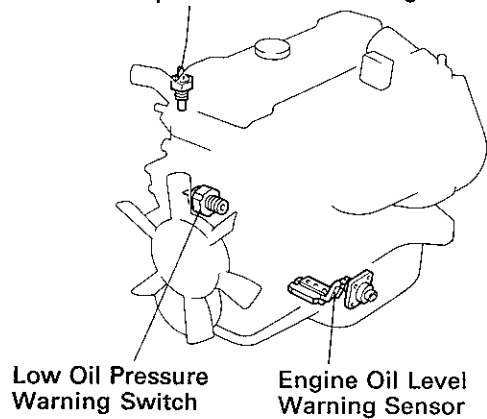
RHD Vehicles





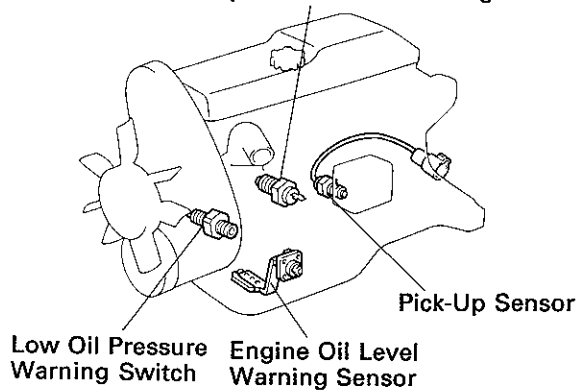
• RZ Series Engine

Water Temperature Sender Gauge



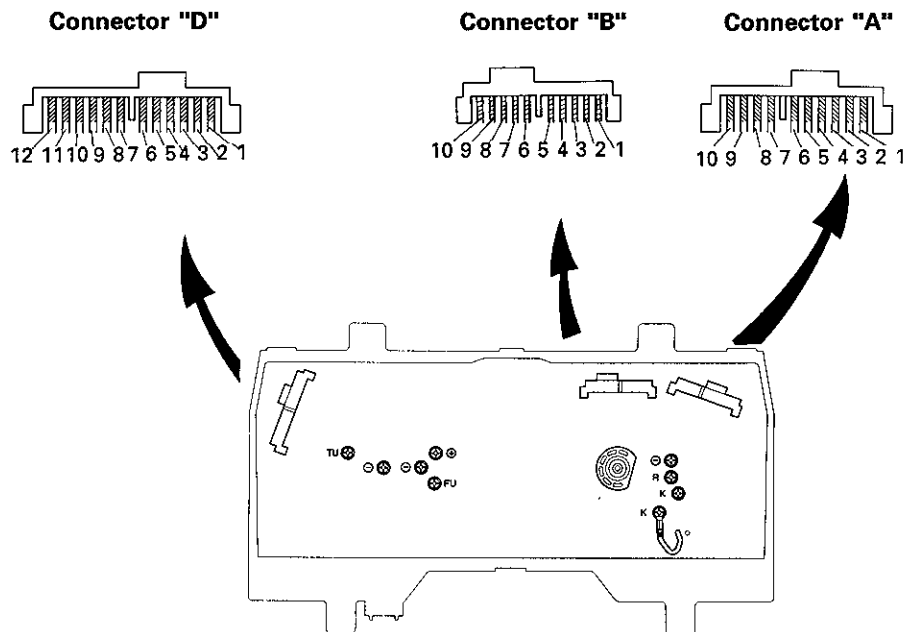
• L Series Engine

Water Temperature Sender Gauge

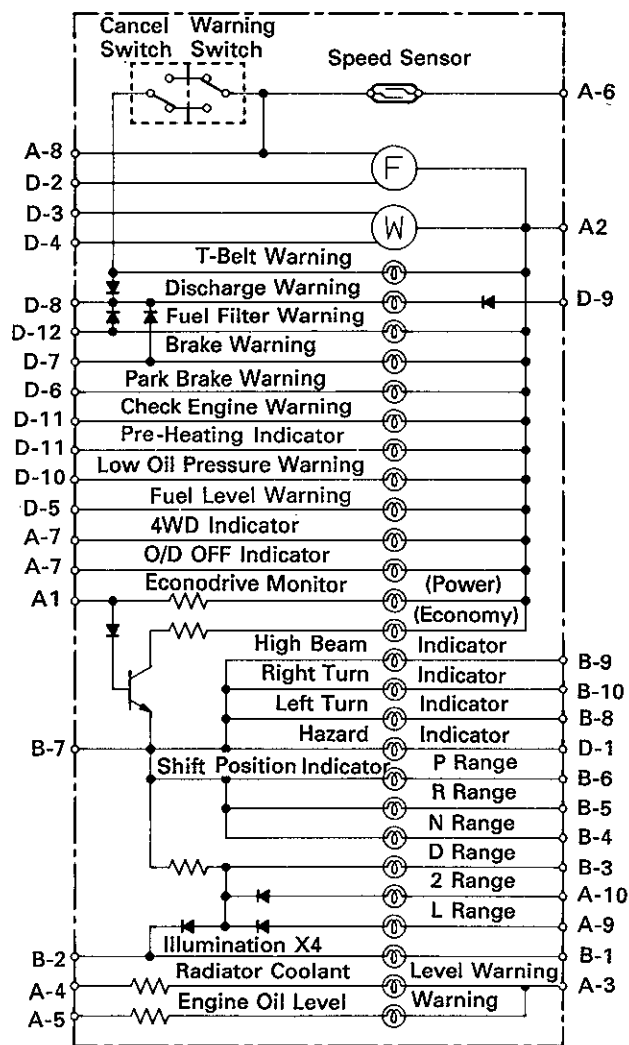


Meter Circuit

(w/o Tachometer: Middle East and G.C.C)



BE1267 BE2576 BE1270
BE4196



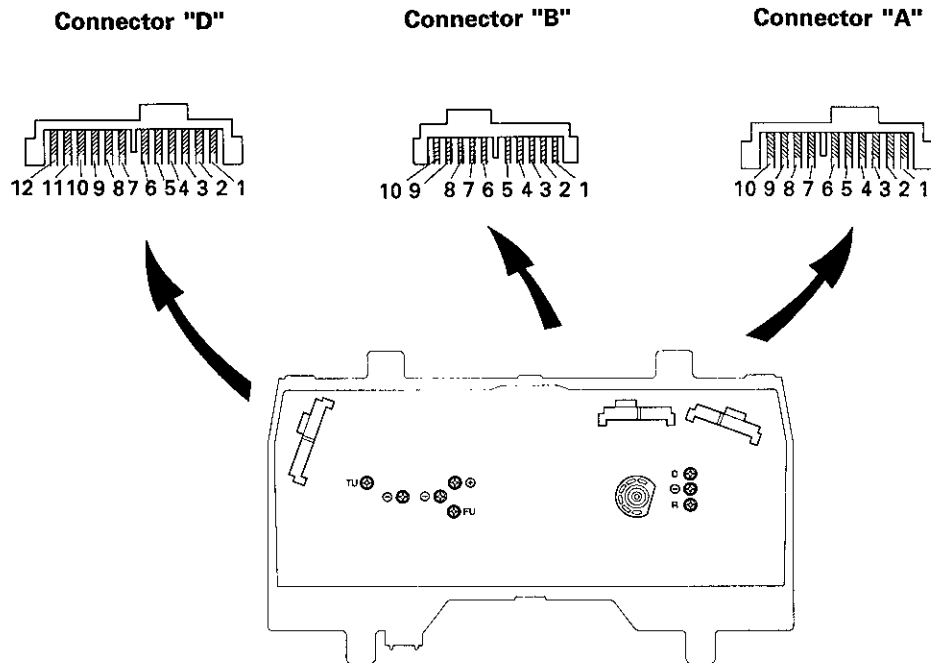
(F): Fuel Gauge (W): Water Temperature Gauge

BE4197

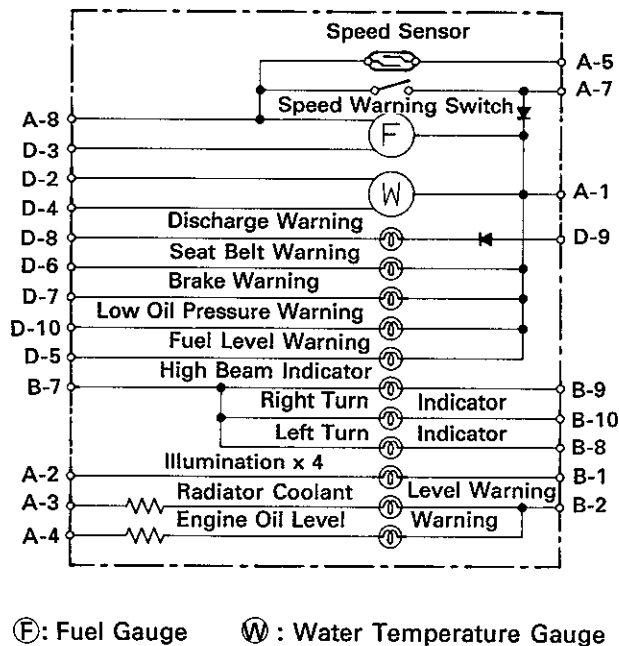
No.	Wiring connector side
A	1 Vacuum Switch (ED Monitor) 2 IGN fuse 3 Engine Oil Level & Radiator Coolant Level Relay 4 Manual Switch (OK Monitor/Radiator Coolant) 5 Manual Switch (OK Monitor/Engine Oil) 6 Speed Control Unit 7 (4WD) Transfer Indication Switch (A/T) O/D Main Switch 8 Ground 9 (A/T) Neutral Start Switch "L" 10 (A/T) Neutral Start Switch "2"
B	1 TAIL or TAIL (RH) fuse 2 (Australia) Rheostat or (Other) Ground 3 (A/T) Neutral Start Switch "D" 4 (A/T) Neutral Start Switch "N" 5 (A/T) Neutral Start Switch "R" 6 (A/T) Neutral Start Switch "P" 7 Ground 8 Turn Signal Switch (Left) 9 See pages BE-13 to BE-14. 10 Turn Signal Switch (Right)
D	1 Hazard Warning Switch 2 Fuel Sender Gauge 3 Ground 4 Water Temperature Sender Gauge 5 Fuel Sender Gauge 6 Parking Brake Switch 7 Brake Fluid Level Warning Switch (Diesel) Vacuum Warning Switch and (w/o Park Brake Warning) Parking Brake Switch 8 CHARGE fuse 9 IGN fuse 10 Low Oil Pressure Warning Switch 11 (Diesel) Pre-Heating Timmer (EFI) TCCS ECU 12 (Diesel) Fuel Filer Warning Switch

Meter Circuit

(w/o Tachometer: Middle East and G.C.C Destination)



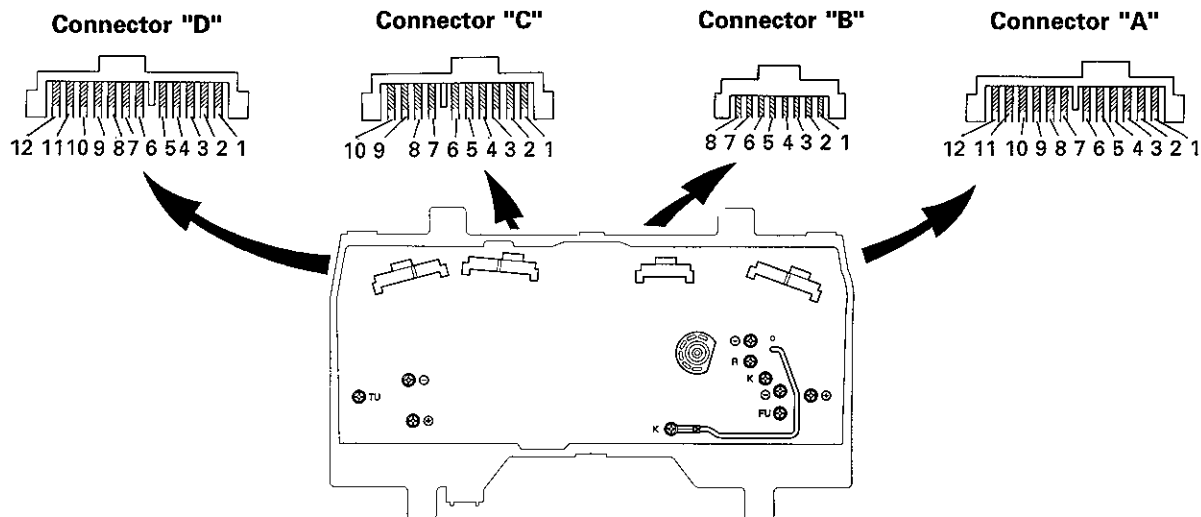
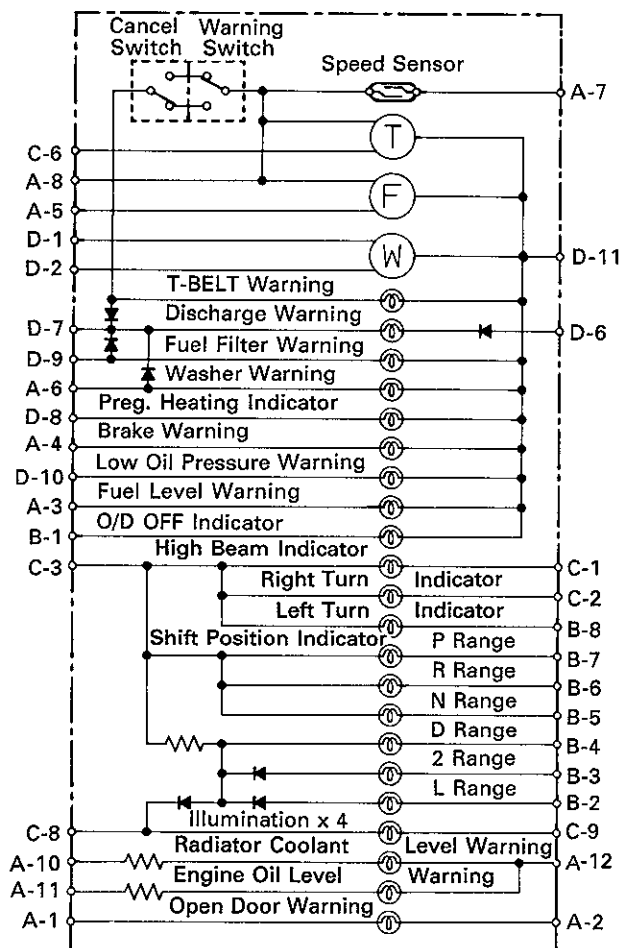
BE1267 BE2576 BE1270
BE4198



BE4199

No.	Wiring connector side
A	1 IGN fuse
	2 Engine Oil Level & Radiator Coolant Level Relay
	3 Manual Switch (OK Monitor/Radiator Coolant)
	4 Manual Switch (OK Monitor/Engine Oil)
	5 Speed Control Unit
	7 Speed Warning Chaim
	8 Ground
B	1 TAIL fuse
	2 Ground
	7 Ground
	8 Turn Signal Switch (Left)
	9 Headlight Dimmer Switch
	10 Turn Signal Switch (Right)
D	2 Ground
	3 Fuel Sender Gauge
	4 Water Temperature Sender Gauge
	5 Fuel Sender Gauge
	6 Seat Belt Warning Relay
	7 Brake Fluid Level Warning Switch and Parking Brake Switch
	8 CHARGE fuse
	9 IGN fuse
	10 Low Oil Pressure Warning Switch

(w/ Tachometer: Australia)

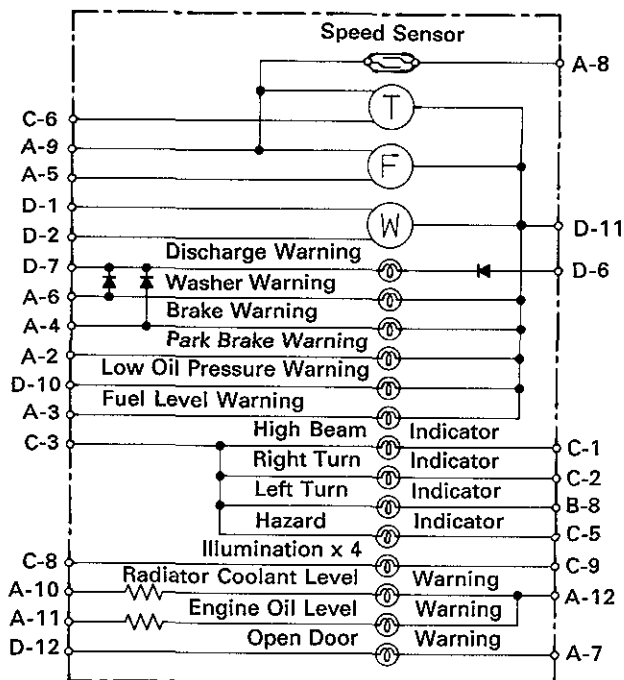
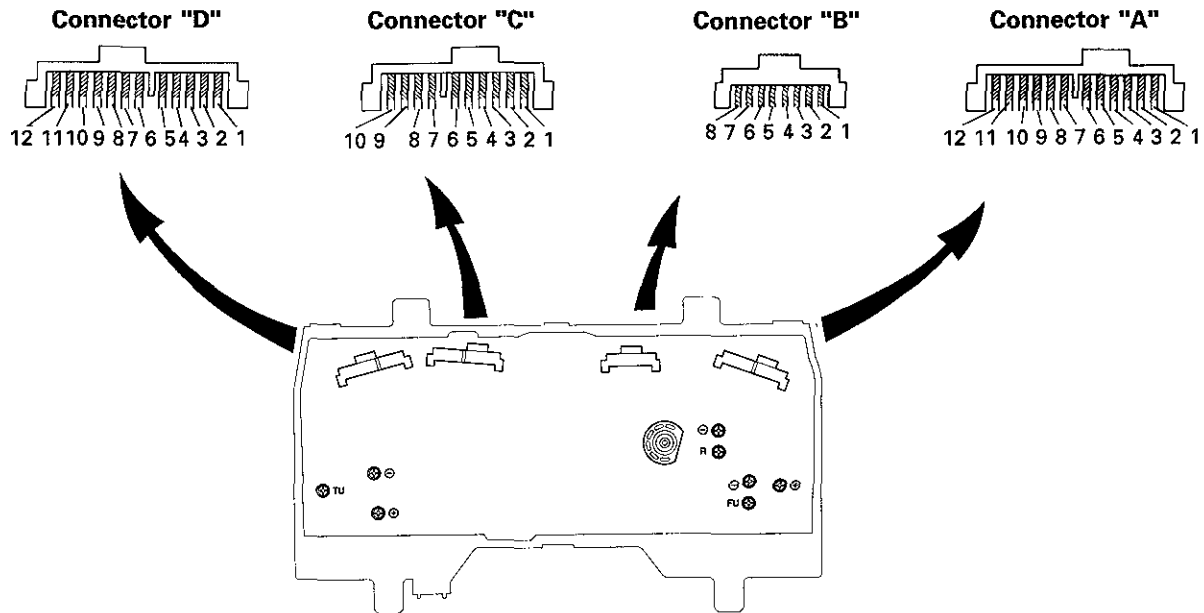
BE1266 BE1270 BE2639 BE1267
BE4200

Ⓣ : Tachometer
 ⓕ : Fuel Gauge Ⓜ : Water temperature Gauge

No.	Wiring connector side
A	1 Door Courtesy Switch
	2 DOME fuse
	3 Fuel Sender Gauge
	4 Brake Fluid Level Warning Switch, Parking Brake Switch and (Diesel) Vacuum Warning Switch
	5 Fuel Sender Gauge
	6 Washer Fluid Level Warning Switch
	7 Speed Control Unit
	8 Ground
	10 Manual Switch (OK Monitor/Radiator Coolant)
	11 Manual Switch (OK Monitor/Engine Oil)
	12 Engine Oil Level & Radiator Coolant Level Relay
B	1 (A/T) O/D Main Switch
	2 (A/T) Neutral Start Switch "L"
	3 (A/T) Neutral Start Switch "2"
	4 (A/T) Neutral Start Switch "D"
	5 (A/T) Neutral Start Switch "N"
	6 (A/T) Neutral Start Switch "R"
	7 (A/T) Neutral Start Switch "P"
	8 Turn Signal Switch (Left)
C	1 Headlight Dimmer Switch
	2 Turn Signal Switch (Right)
	3 Ground
	6 (Gasoline) Ignition Coil
	(Diesel) Pick-Up Sensor
	8 Rheostat
D	9 TAIL fuse
	1 Ground
	2 Water Temperature Sender Gauge
	6 IGN fuse
	7 CHARGE fuse
	8 (Diesel) Pre-Heating Timmer
	9 (Diesel) Fuel Filter Warning Switch
	10 Low Oil Pressure Warning Switch
	11 IGN fuse

BE4201

(w/ Tachometer: Norway)



T: Tachometer F: Fuel Gauge
W: Water Temperature Gauge

BE1266 BE1270 BE2639 BE1267
BE4202

No.	Wiring connector side
A	2 Parking Brake Switch 3 Fuel Sender Gauge 4 Brake Fluid Level Warning Switch 5 Fuel Sender Gauge 6 Washer Fluid Level Warning Switch 7 DOME fuse 8 Speed Control Unit 9 Ground 10 Manual Switch (OK Monitor/Radiator Coolant) 11 Manual Switch (OK Monitor/Engine Oil) 12 Engine Oil Level & Radiator Coolant Level Relay
B	8 Turn Signal Switch (Left)
C	1 Headlight Dimmer Switch 2 Turn Signal Switch (Right) 3 Ground 5 Hazard Warning Switch 6 Ignition Coil 8 Rheostat 9 TAIL fuse
D	1 Ground 2 Water Temperature Sender Gauge 6 IGN fuse 7 CHARGE fuse 10 Low Oil Pressure Warning Switch 11 IGN fuse 12 Door Courtesy Switch

BE4203

Troubleshooting

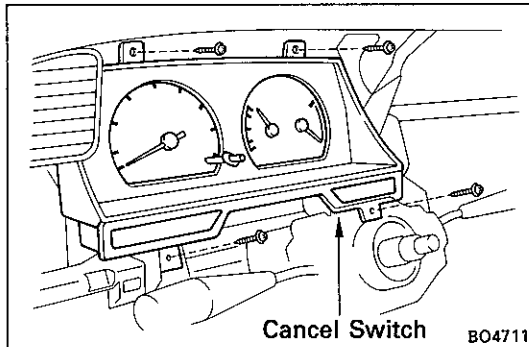
Problem	Possible cause	Remedy	Page
Combination meter do not operate	TURN-GAUGE fuse blown Wiring or ground faulty	Replace fuse and check for short Repair as necessary	BE-7
Speedometer does not operate	Speedometer cable faulty Speedometer faulty	Check cable Check speedometer	BE-51
Speed warning chaim does not sound	Speed warning chaim faulty Speed warning switch faulty Wiring or ground faulty	Check speed warning chaim Check speed warning switch Repair as necessary	BE-52 BE-51
Tachometer does not operate	Tachometer faulty Pick-up sensor faulty Wiring or ground faulty	Check tachometer Check pick-up sensor Repair as necessary	BE-52 BE-52
Fuel gauge does not operate	Receiver gauge faulty Sender gauge faulty Wiring or ground faulty	Check gauge Check gauge Repair as necessary	BE-52 BE-53
Fuel level warning light does not light up	Bulb burned out Warning switch faulty Wiring or ground faulty	Replace bulb Check switch Repair as necessary	BE-54
Fuel filter warning light does not light, warning buzzer does not sound (w/ buzzer)	Bulb burned out Warning switch faulty Warning buzzer faulty Wiring or ground faulty	Replace bulb Check switch Check buzzer Repair as necessary	BE-54 BE-54
Water temperature gauge does not operate	Receiver gauge faulty Sender gauge faulty Wiring or ground faulty	Check gauge Check gauge Repair as necessary	BE-55 BE-55
Low oil pressure warning light does not light up	Bulb burned out Warning switch faulty Wiring or ground faulty	Replace bulb Check switch Repair as necessary	BE-56
Park warning lighth does not light up	Bulb burned out Parking brake switch faulty Wiring or ground faulty	Replace bulb Check switch Repair as necessary	BE-56
Brake warning light does not light up	Bulb burned out Level Warning switch faulty Vacuum switch faulty Parking brake switch faulty Wiring or ground faulty	Replace bulb Check switch Check switch Check switch Repair as necessary	BE-57 BE-57 BE-56
Seat belt warning light does not light up	Bulb burned out Warning switch faulty Warning relay faulty Wiring or ground faulty	Replace bulb Check switch Check relay Repair as necessary	BE-58 BE-59
Open door warning light does not light up	Bulb burned out Courtesy switch faulty Wiring or ground faulty	Replace bulb Check switch Repair as necessary	BE-59
Timing belt warning light does not light up	Bulb burned out Warning switch faulty Wiring or ground faulty	Replace bulb Check switch Repair as necessary	BE-59
Headlight cleaner fluid level warning light does not light up	Bulb burned out Warning switch faulty Wiring or ground faulty	Replace bulb Check switch Repair as necessary	BE-60
OK monitor does not operate	Bulb burned out Level sensor faulty Manual switch faulty Wiring or ground faulty	Replace bulb Check sensor Check switch Repair as necessary	BE-61 BE-61
Econodrive monitor does not operate	Bulb burned out Vacuum switch faulty Monitor faulty Wiring or ground faulty	Replace bulb Check switch Check monitor Repair as necessary	BE-62 BE-62
Meter illumination control system does not operate	Bulb burned out Rheostat faulty Wiring or ground faulty	Replace bulb Check Rheostat Repair as necessary	BE-62
Shift position indicator light does not light up	Bulb burned out Switch faulty Wiring or ground faulty	Replace bulb Check switch Repair as necessary	AT-16

Parts Adjustment

(Diesel Engine)

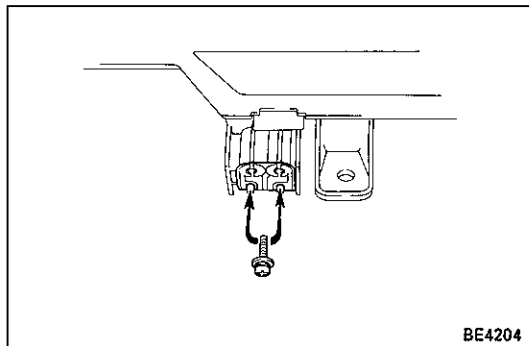
Adjustment of Interval Switch for Timing Belt Warning System

NOTICE: Work carefully so that components are not damaged in any way.

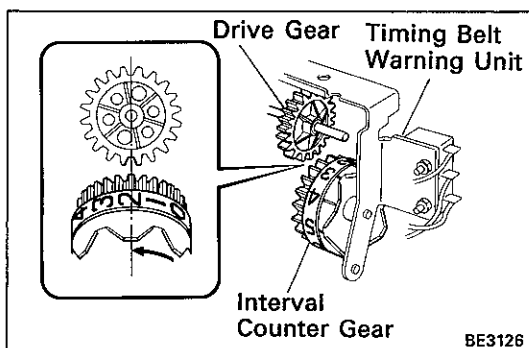


RESET CANCEL SWITCH

- (a) Remove the combination meter.
(See steps 1 to 8 and 13 on pages BO-48 to 50)

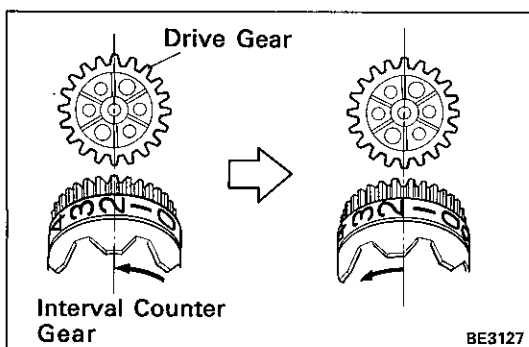


- (b) Remove the cancel switch screw and install the another screw installation hole.
Check that the timing belt warning light goes off.
- (c) Install combination meter by following removal sequence in reverse.



IF REPLACING TIMING BELT BEFORE WARNING LIGHT LIGHT UP

- (a) Remove the timing belt warning unit from the speedometer.
- (b) When installing the timing belt warning unit to the speedometer, rotate the interval counter gear in the direction of the arrow so that the tooth at number "2" on the interval counter gear engages with the drive gear on the speedometer side.



HINT: If the tooth at number "2" on the interval counter gear does not engage with the drive gear, move the tooth at number "2" slightly in the direction of the arrow until the tooth engage.

- (c) Install the timing belt warning unit to the speedometer.

HINT: If turn on the timing belt warning light, reset the cancel switch.

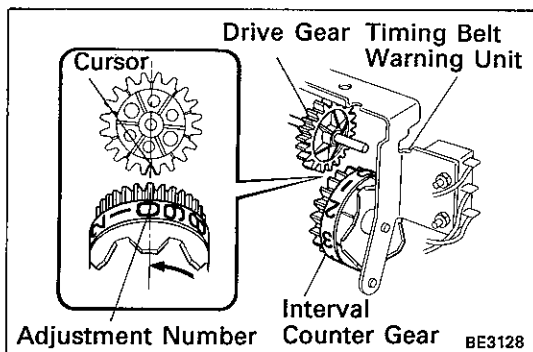
Old odometer reading value (b)	(c) Adjustment number for interval counter gear	
	km/h display	MPH display
10000	1	7
20000	0	6
30000	9	5
40000	8	4
50000	7	3
60000	6	2
70000	5	1
80000	4	0
90000	3	A
100000	2	B
110000	1	9
120000	0	8
130000	9	7
140000	8	6
150000	7	5
.	.	.
.	.	.
.	.	.

IF REPLACING SPEEDOMETER

- Remove the timing belt warning unit from the speedometer.
- Read the value in tens of thousands from the old odometer (taken to the next highest figure when the thousands column shows on thousand or more)
- Find the value from (b) in the table on the left, then find the corresponding number from adjustment of the interval counter gear.

Example: When the old odometer shows.

013251 km/h
↓
(b) = 020000
↓
(c) = "0" for the interval counter gear number.



- When installing the timing belt warning unit to the speedometer, rotate the interval counter gear in the direction of the arrow so that the number (c) on the interval counter gear aligns with the cursor on the drive gear on the speedometer side.

HINT: Check that the tooth beside to number on the counter gear engages the gap on the cursor port on the drive gear.

- Install the timing belt warning unit to the speedometer.

Parts Inspection

Speedometer System

(mph)

Standard indication	Allowable range
20	21 – 23.5
40	41.5 – 44
60	62.5 – 66
80	83 – 87
100	104 – 108.5

(km/h)

Standard indication	Allowable range	
	Australia	Ex. Australia
20		21 – 25
40	38 – 42	41.5 – 46
60	58 – 63	62.5 – 67
80	78 – 84	83 – 88
100	99 – 104.5	104 – 109
120	119.5 – 125.5	125 – 130.5
140	139.5 – 146.5	145.5 – 151.5
160	159.5 – 167.5	166 – 173

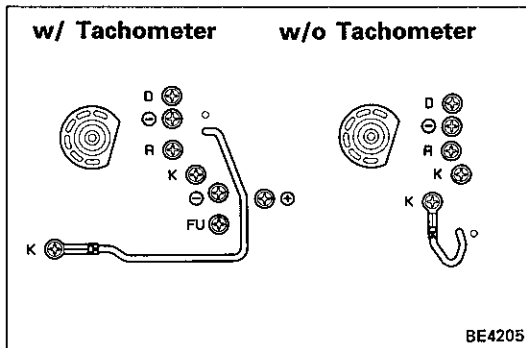
1. INSPECT SPEEDOMETER (ON-VEHICLE)

- (a) Using a speedometer tester, inspect the speedometer for allowable indication error and check the operation of the odometer.

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

- (b) Check the speedometer for pointer vibration and abnormal noise.

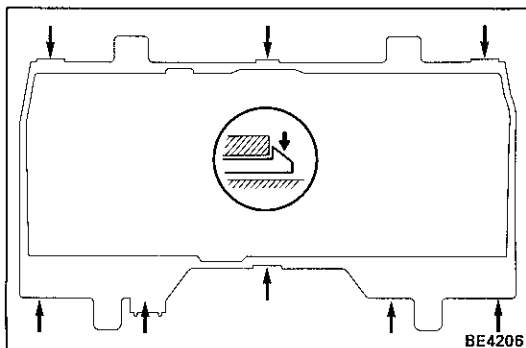
HINT: Pointer vibration can be caused by a loose speedometer cable.



2. INSPECT SPEED SENSOR

Check that there is continuity between terminals R and ⊖ four times per each revolution of the speedometer shaft.

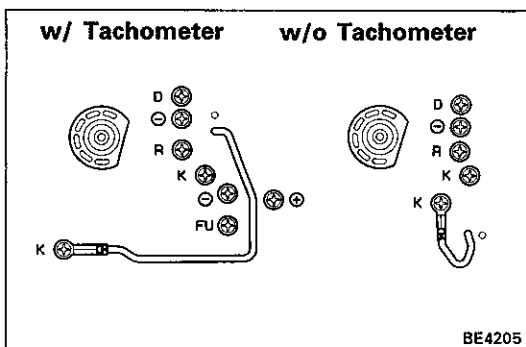
If operation is not as specified, replace the speedometer.



3. INSPECT SPEED WARNING CHIME SWITCH

- (a) Press down on the tabs and remove the combination meter glass from the combination meter case.

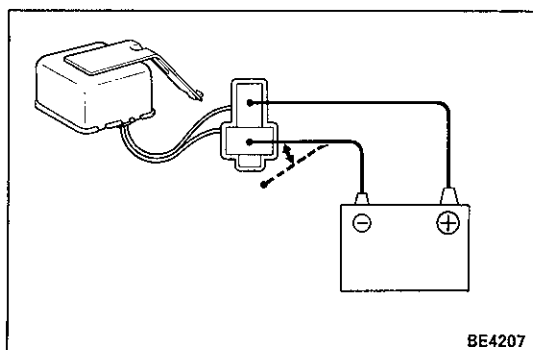
NOTICE: Be careful not to dirty or damage the speedometer panel.



- (b) Move the speedometer needle to the 124 km/h or 77 mph mark and fix it there.

- (c) Keep on turning the speedometer shaft, check that the continuity between terminals D and ⊖ repeatedly fluctuates.

If operation is not as specified, replace the speedometer.



4. INSPECT SPEED WARNING CHIME

Apply battery voltage intermittently between terminals of the chime, check that the chime sounds.

HINT: The sound will be distorted if the chime is tilted.

If operation is not as specified, replace the chime.

DC 13.5V 20°C (68°F) rpm	
Standard indication	Allowable range
700	610 – 750
3,000	2,850 – 3,150
5,000	4,850 – 5,150
7,000	6,790 – 7,210

Tachometer System

1. INSPECT TACHOMETER (ON-VEHICLE)

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

NOTICE:

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

- (b) Compare the tester and tachometer indications.

If error is excessive, replace the tachometer.

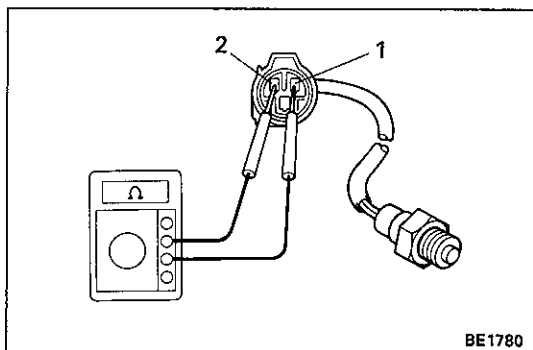
2. (Diesel Engine)

INSPECT PICK-UP SENSOR

Measure the resistance between terminals 1 and 2.

Resistance: approx. 730 Ω

If resistance value is not as specified, replace the sensor.



Fuel Gauge System

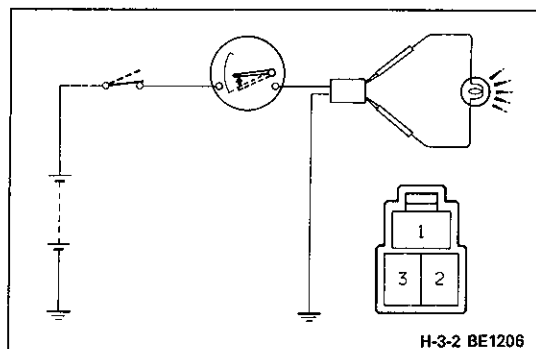
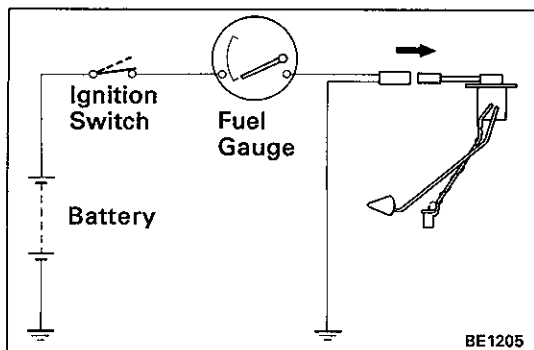
1. INSPECT RECEIVER GAUGE (Operation)

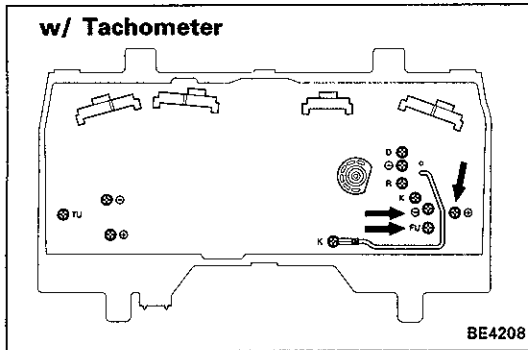
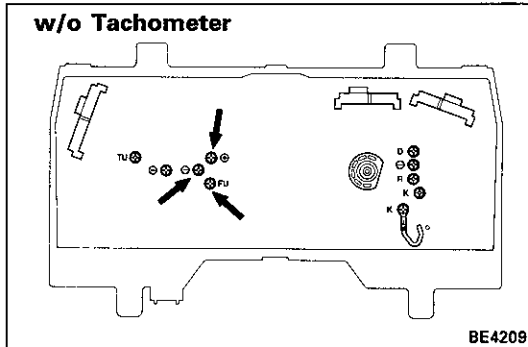
- (a) Disconnect the connector from the sender gauge.
- (b) Turn the ignition switch ON, check that the receiver gauge needle indicates EMPTY.

- (c) Connect terminals 2 and 3 on the wire harness side connector through a 3.4 watts test bulb.
- (d) Turn the ignition switch ON, check that the bulb lights up and the receiver gauge needle moves towards the full side.

HINT: Because of the silicon oil in the gauge, it will take a short time for needle to stabilize.

If operation is not as specified, inspect the receiver gauge resistance.



w/ Tachometer**w/o Tachometer****(Resistance)**

Measure the resistance between terminals.

Between terminals	Resistance (Ω)
FU - \oplus	approx. 116
FU - \ominus	approx. 156
\oplus - \ominus	approx. 272

If resistance value is not as specified, replace the receiver gauge.

2. INSPECT SENDER GAUGE**(Operation)**

- Connect a series of three 1.5 volts dry cell batteries.
- Connect the positive (+) lead from the dry cell batteries to terminal 2 through a 3.4 watts test bulb and the negative (-) lead to terminal 1.
- Connect the positive (+) lead from the voltmeter to terminal 2 and the negative (-) lead to terminal 1.
- Check that the voltage rises as the float is moved from the full to empty position.

(Resistance)

Measure the resistance between terminals 2 and 3.

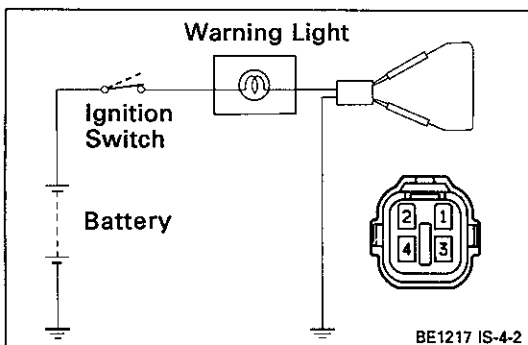
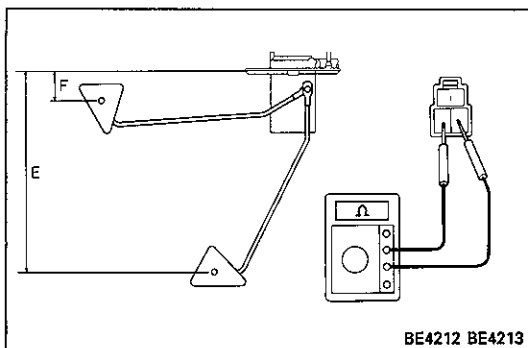
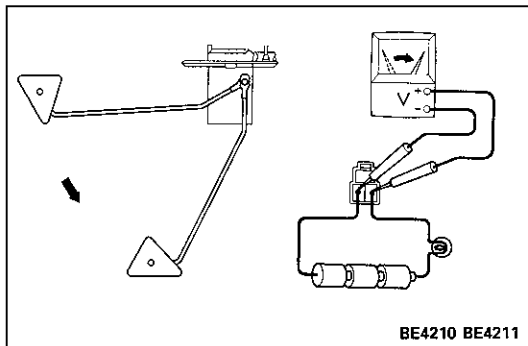
Float position mm (in.)	Resistance (Ω)
F approx. 23 (0.91)	approx. 3
E approx. 157 (6.18)	approx. 110

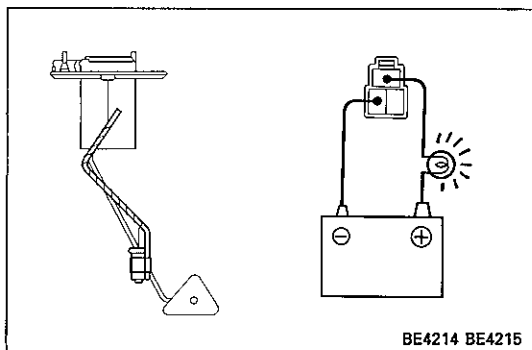
If resistance value is not as specified, replace the sender gauge.

Fuel Level Warning System**1. INSPECT WARNING LIGHT**

- Disconnect the connector from the sender gauge.
- Connect terminals 1 and 3 on the wire harness side connector.
- Turn the ignition switch ON, check that the warning light lights up.

If the warning light does not light up, test the bulb.

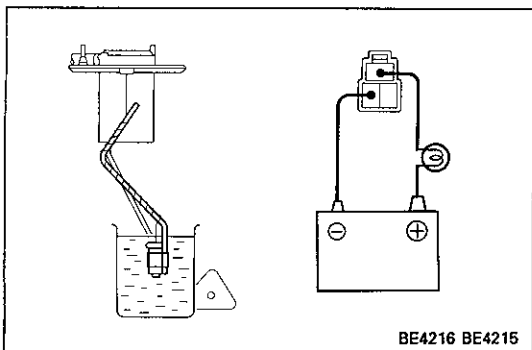




2. INSPECT WARNING SWITCH

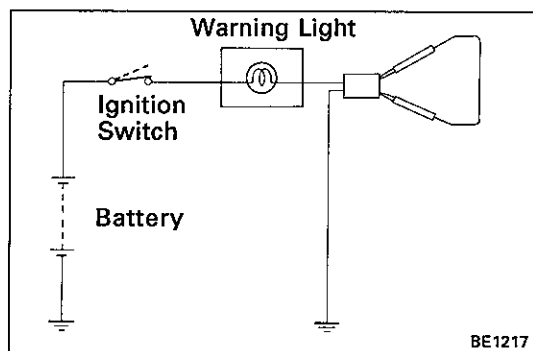
- (a) Apply battery voltage between terminals 1 and 3 through a 3.4 watts test bulb, check that the bulb lights up.

HINT: It will take a short time for the bulb to light up.



- (b) Submerge the switch in fuel, check that the bulb goes out.

If operation is not as specified, replace the sender gauge.



Fuel Filter Warning System

1. INSPECT WARNING LIGHT

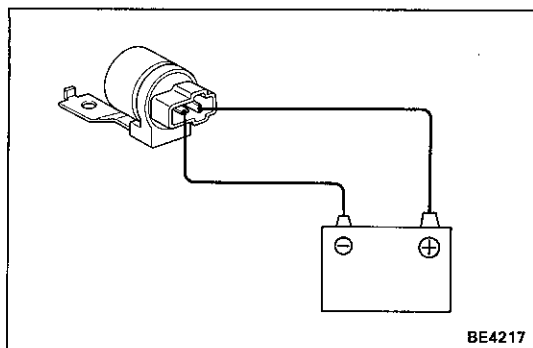
- (a) Disconnect the connector from the warning switch and connect terminals on the wire harness side connector.
- (b) Remove the CHARGE fuse and turn the ignition switch ON.
- (c)-1 (w/ Buzzer)

Check that the warning light lights up and the warning buzzer sounds.

- (c)-2 (w/o Buzzer)

Check that the warning light lights up.

If operation is not as specified, test the bulb and/or warning buzzer.



2. INSPECT WARNING BUZZER

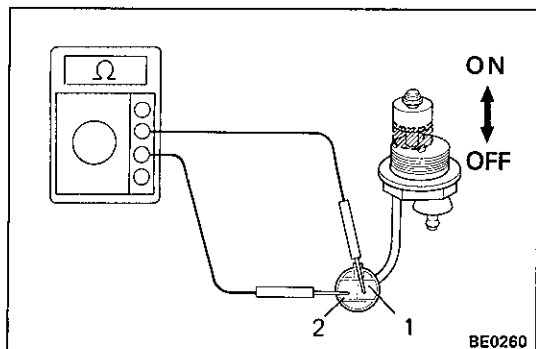
Apply battery voltage between terminals, check that the buzzer sounds.

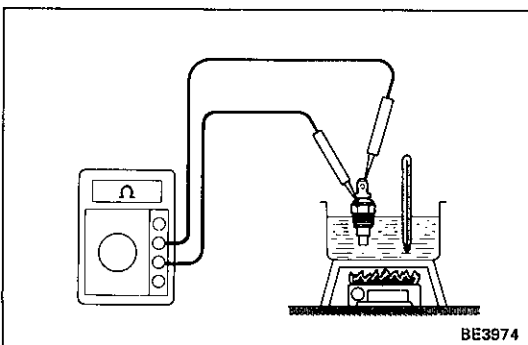
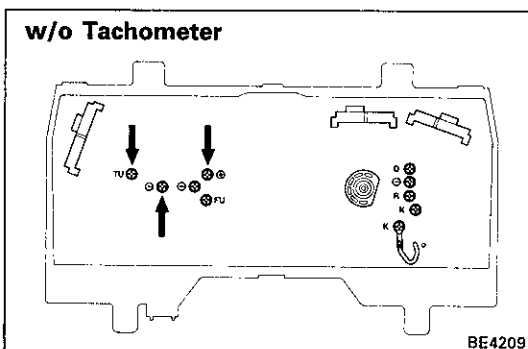
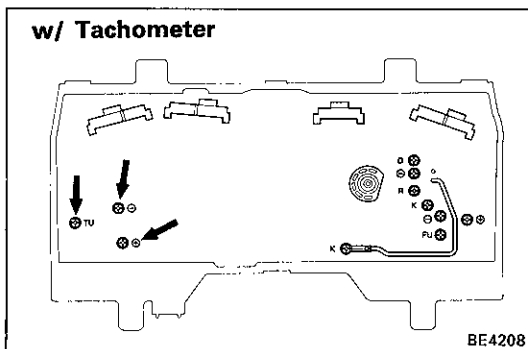
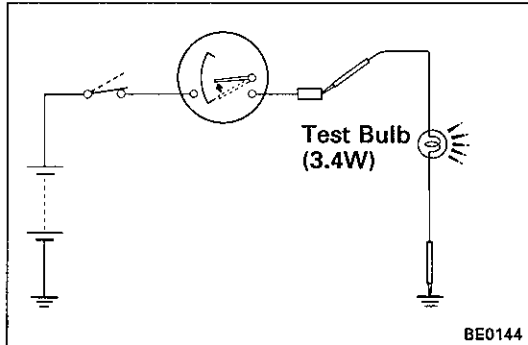
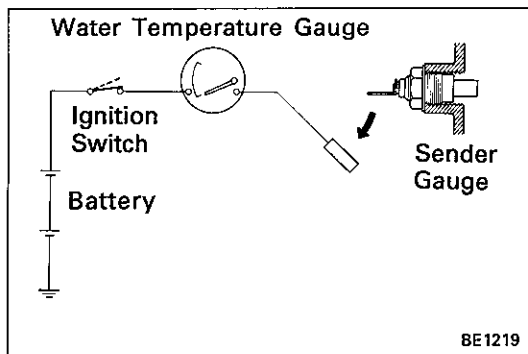
If buzzer does not sound, replace the buzzer.

3. INSPECT WARNING SWITCH

- (a) Check that there is no continuity between terminals with the warning switch OFF (float down).
- (b) Check that there is continuity between terminals with the warning switch ON (float up).

If operation is not as specified, replace the switch.





Water Temperature Gauge System

1. INSPECT RECEIVER GAUGE (Operation)

- Disconnect the connector from the sender gauge.
- Turn the ignition switch ON, check that the receiver gauge needle indicates COOL.
- Ground terminal on the wire harness side connector through a 3.4 watts test bulb.
- Turn the ignition switch ON, check that the bulb lights up and the receiver gauge needle moves to the hot side.

If operation is not as specified, measure the receiver gauge resistance.

(Resistance)

Measure the resistance between terminals.

Between terminals	Resistance (Ω)
TU - \oplus	approx. 55
TU - \ominus	approx. 117
\oplus - \ominus	approx. 113

HINT: Connect the test leads so that the current from the ohmmeter can flow according to the above order. This circuit include the diode.

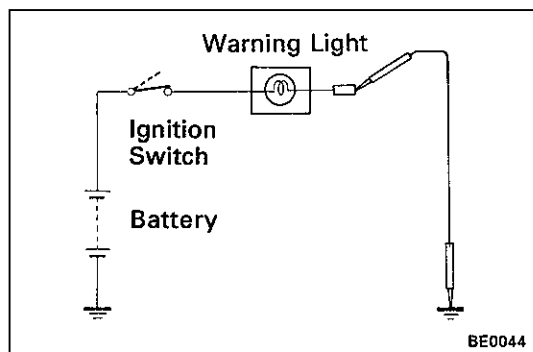
If resistance value is not as specified, replace the receiver gauge.

2. INSPECT SENDER GAUGE

Measure the resistance between terminal and the gauge body.

Water Temp. $^{\circ}\text{C}$ ($^{\circ}\text{F}$)	Resistance (Ω)	
	YAZAKI	DENSO
60 (140)	approx. 147	—
115 (239)	approx. 24	approx. 24

If resistance value is not as specified, replace the receiver gauge.

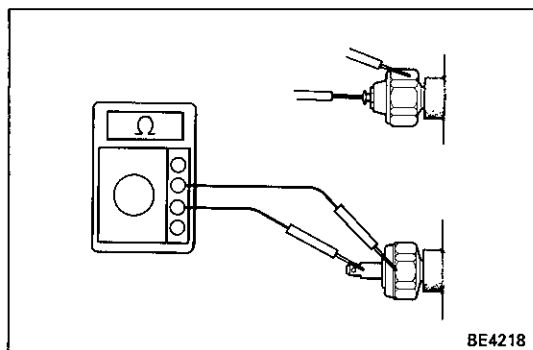


Low Oil Pressure Warning System

1. INSPECT WARNING LIGHT

- Disconnect the connector from the warning switch and ground terminal on the wire harness side connector.
- Turn the ignition switch ON, check that the warning light lights up.

If the warning light does not light up, test the bulb.

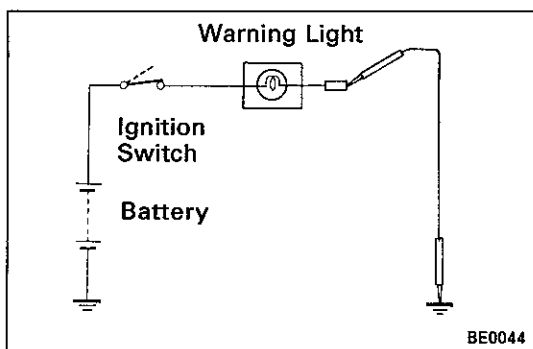


2. INSPECT WARNING SWITCH

- Disconnect the connector from the switch.
- Check that there is continuity between terminal and ground with the engine stopped.
- Check that there is no continuity between terminal and ground with the engine running.

HINT: Oil pressure should be over 0.3 kg/cm² (4.3 psi, 29 kPa)

If operation is not as specified, replace the switch.

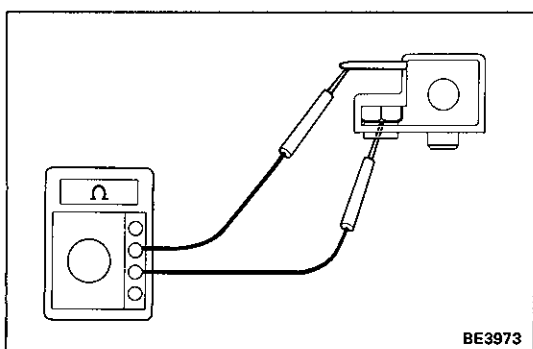


Park Brake Warning System

1. INSPECT WARNING LIGHT

- Disconnect the connector from the parking brake switch and ground terminal on the wire harness side connector.
- Turn the ignition switch ON, check that the warning light lights up.

If the warning light does not light up, test the bulb.

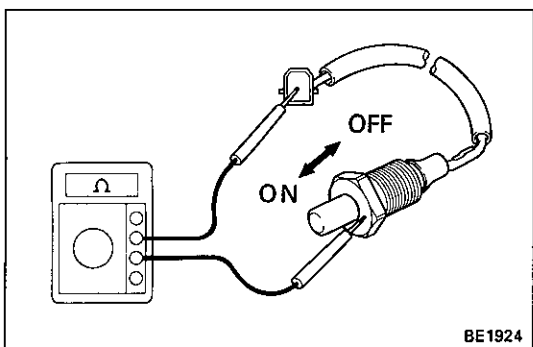


2. INSPECT SWITCHES

(Pull Handle Type Parking Brake Switch)

- Check that there is continuity between terminal and the switch set nut with switch pin released. (parking brake lever pulled up)
- Check that there is no continuity between terminal and the switch set nut with switch pin pushed in. (parking brake lever released)

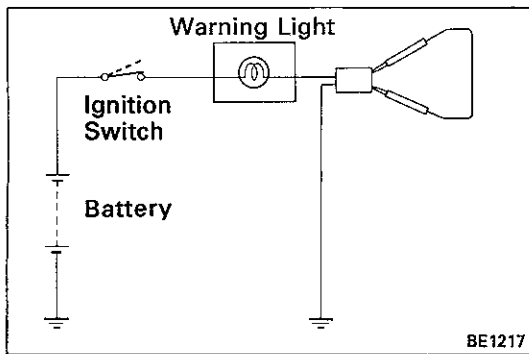
If operation is not as specified, replace the switch.



(Stick Type Parking Brake Switch)

- Check that there is continuity between terminal and the switch body with switch pin released. (parking brake lever pulled up)
- Check that there is no continuity between terminal and the switch body with switch pin pushed in. (parking brake lever released)

If operation is not as specified, replace the switch.



Brake Warning System

1. INSPECT WARNING LIGHT

(a) (w/o Park Brake Warning System)

Disconnect the connectors from the level warning switch, parking brake switch and (Diesel Engine) vacuum warning switch.

(w/ Park Brake Warning System)

Disconnect the connectors from the level warning switch and (Diesel Engine) vacuum warning switch.

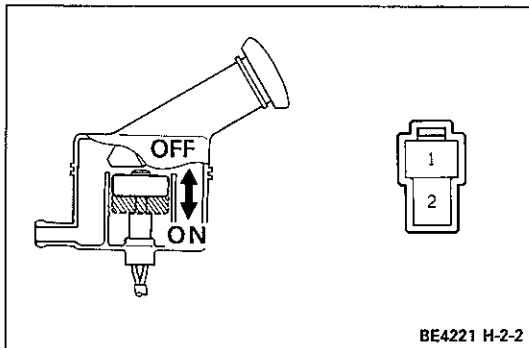
(b) Connect terminals on the wire harness side connector of the level warning switch connector.

(c) Turn the ignition switch ON, check that the warning light lights up.

If the warning light does not light up, test the bulb.

2. INSPECT SWITCHES

(Parking Brake Switch: w/o Park Brake Warning System) See step 2 on page BE-56.

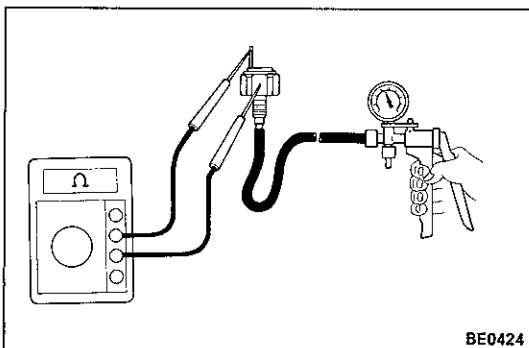


(Brake Fluid Level Warning Switch)

(a) Check that there is no continuity between terminals with the switch OFF (float up).

(b) Check that there is continuity between terminals with the switch ON (float down).

If operation is not as specified, replace the switch.



(Vacuum Warning switch: Diesel Engine)

(a) Check that there is continuity between terminal and the switch body with a no vacuum.

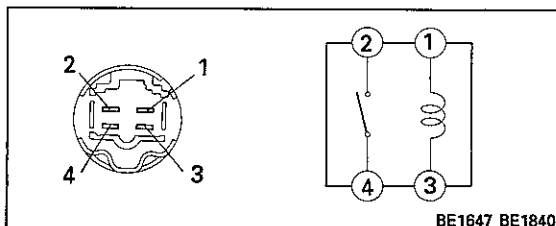
(b) Apply 200 ± 40 mmHg (7.87 ± 1.57 in.Hg, 26.7 ± 5.3 kPa) of pressure.

(c) Check that there is no continuity between terminal and the switch body.

If operation is not as specified, replace the switch.

3. INSPECT RELAY

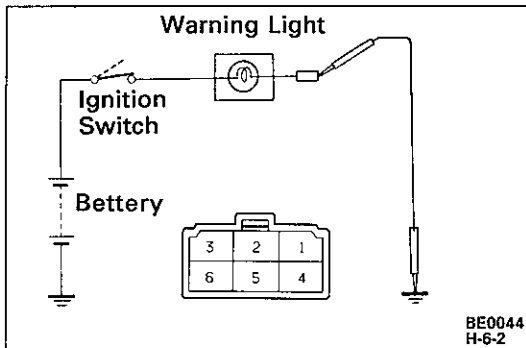
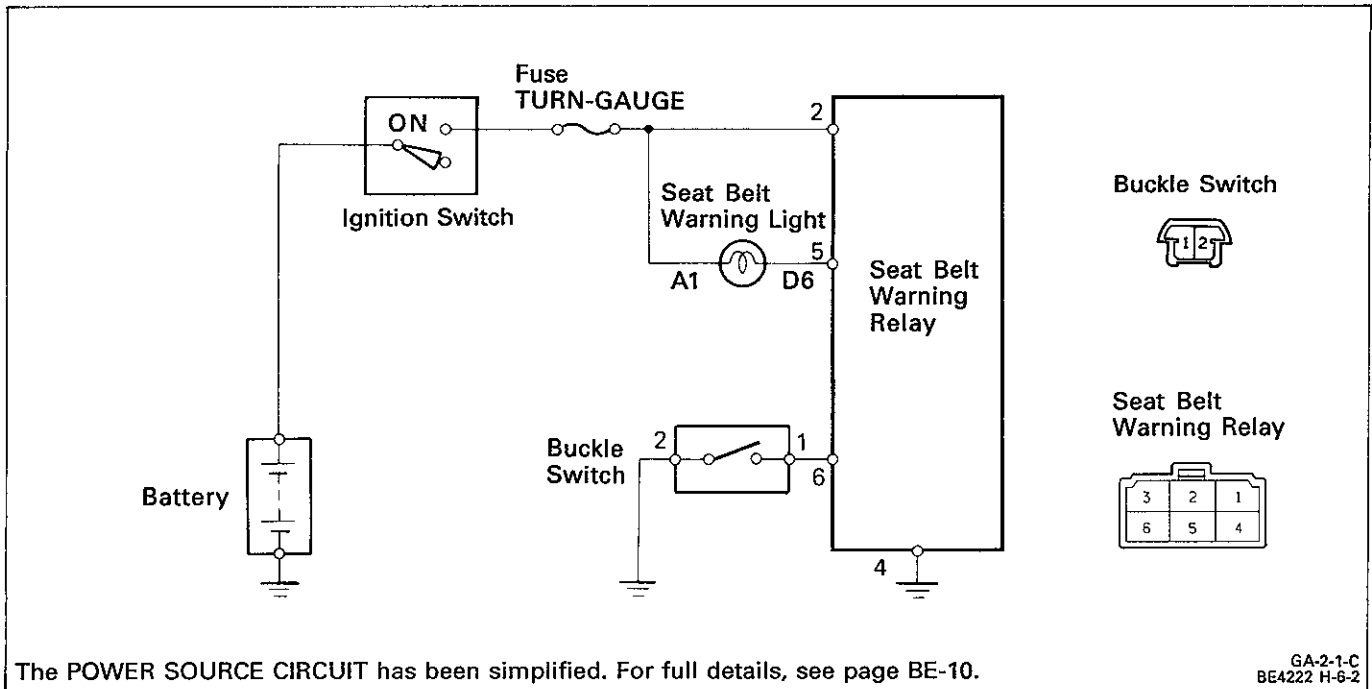
(Bulb Check Relay: Australia/Continuity)



Terminal	1	2	3	4
Condition				
Constant	○	○	○	
Apply battery voltage to terminals 1 and 3.		○	○	○

If continuity is not as specified, replace the relay.

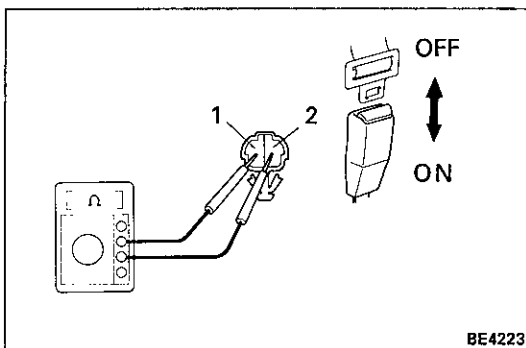
Seat Belt Warning System



1. INSPECT WARNING LIGHT

- (a) Disconnect the connector from the seat belt warning relay.
- (b) Ground terminal 5 on the wire harness side connector.
- (c) Turn the ignition switch ON, check that the warning light lights up.

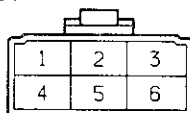
If the warning light does not light, test the bulb.



2. INSPECT BUCKLE SWITCH

- (a) Check that there is no continuity between terminals with the switch OFF (belt unfastened).
- (b) Check that there is continuity between terminals with the switch ON (belt fastened).

If operation is not as specified, replace the seat belt inner.

Wire Harness Side

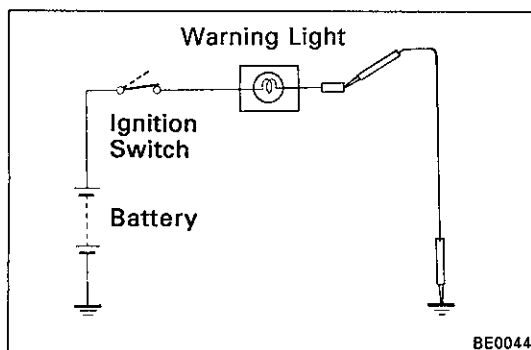
H-6-1

3. INSPECT SEAT BELT RELAY (Relay Circuit)

Disconnect the connector from the relay and inspect the connector on the wire harness side as shown in the chart.

Check for	Tester Connection	Condition		Specified Value
Continuity	4 – Ground	Constant		Continuity
	6 – Ground	Buckle switch position	OFF (Belt fastened) ON (Belt unfastened)	No continuity Continuity
Voltage	2 – Ground	Ignition switch position	LOCK or ACC	No voltage
			ON	Battery voltage
	5 – Ground	Ignition switch position	LOCK or ACC	No voltage
			ON	Battery voltage

If circuit is as specified, replace the relay.



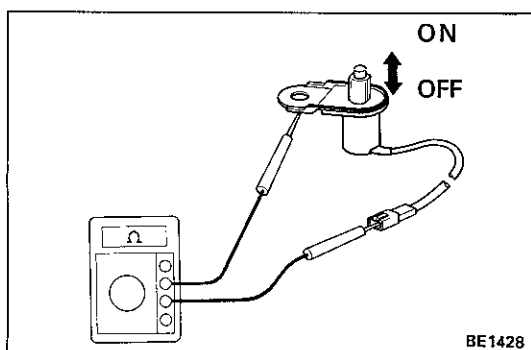
BE0044

Open Door Warning System

1. INSPECT WARNING LIGHT

- Disconnect the connector from the door courtesy switch and ground terminal on the wire harness side connector.
- Turn the ignition switch ON, check that the warning light lights up.

If the warning light does not light up, test the bulb.

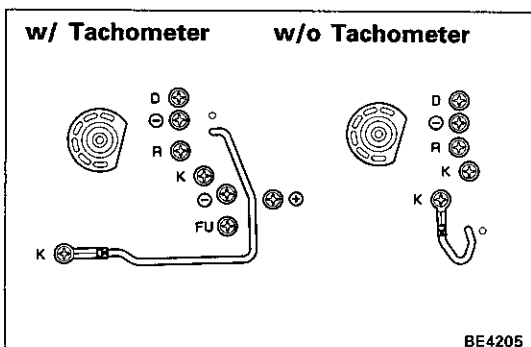


BE1428

2. INSPECT COURTESY SWITCH

- Check that there is continuity between terminal and the switch body with the ON (switch pin released:opened door).
- Check that there is no continuity between terminal and the switch body with the OFF (switch pin pushed in:closed door).

If operation is not as specified, replace the switch.



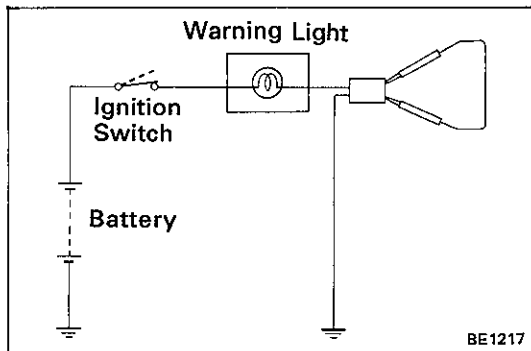
BE4205

Timing Belt Warning System

1. INSPECT WARNING LIGHT

- Remove the combination meter with connectors connected.
- Connect terminals K.
- Remove CHARGE fuse and turn the ignition switch ON, check that the warning light lights up.

If the warning light does not light up, test the bulb.

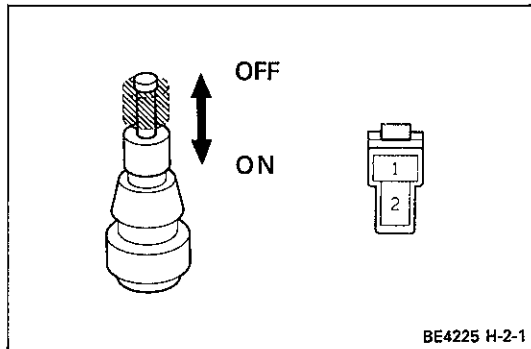


Headlight Cleaner fluid Level Warning System

1. INSPECT WARNING LIGHT

- Disconnect the connector from the warning switch and ground terminal on the wire harness side connector.
- Turn the ignition switch ON, check that the warning light lights up.

If the warning light does not light up, test the bulb.



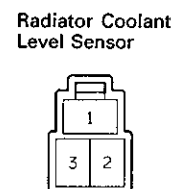
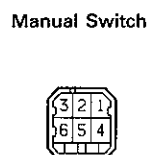
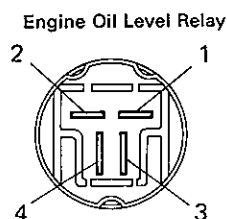
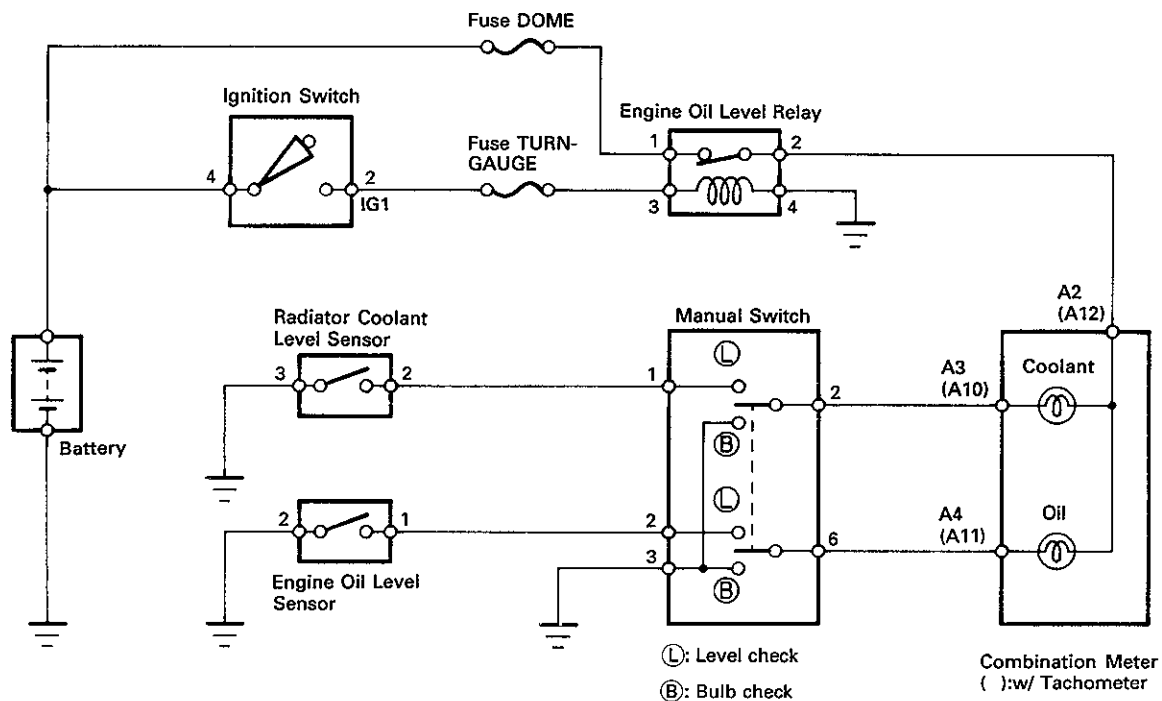
2. INSPECT FLUID LEVEL WARNING SWITCH

- Check that there is no continuity between terminals with the switch OFF (Float up).
- Check that there is continuity between terminals with the switch ON (Float down).

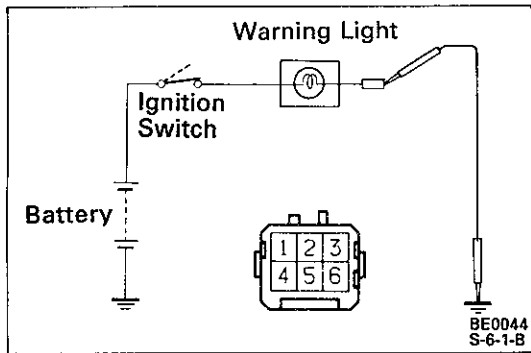
If operation is not as specified, replace the switch.

OK Monitor System

(Radiator Coolant Level Warning System and Engine Oil Level Warning System)



The POWER SOURCE CIRCUIT has been simplified. For full details, see page BE-10.



1. INSPECT WARNING LIGHTS

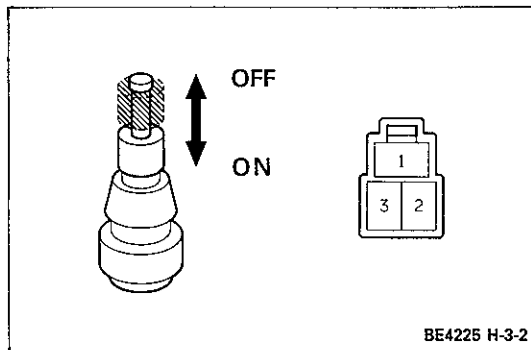
- Disconnect the connector from the manual switch.
- Ground terminal 2 on the wire harness side connector, check that the radiator coolant level warning light lights up.
- Ground terminal 6 on the wire harness side connector, check that the engine oil level warning light lights up.

If the warning light does not light up, test the bulb.

2. INSPECT MANUAL SWITCH (Continuity)

Terminal	1	2	3	4	6
Switch position					
LEVEL	○	○		○	○
OFF					
BULB		○	○	○	○

If continuity is not as specified, check the bulb or replace the switch.

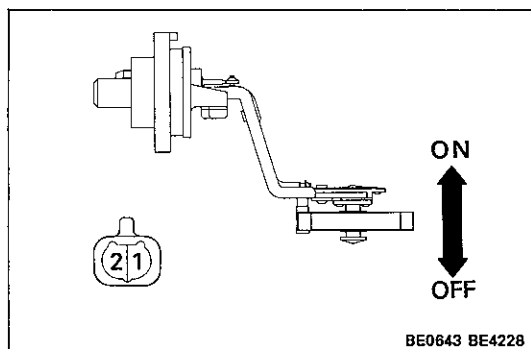


3. INSPECT SENSOR

(Radiator Coolant Level Sensor/Continuity)

- Check that there is no continuity between terminals 2 and 3 with switch OFF (float up).
- Check that there is continuity between terminals 2 and 3 with switch ON (float down).

If operation is not as specified, replace the switch.



(Engine Oil Level Sensor/Continuity)

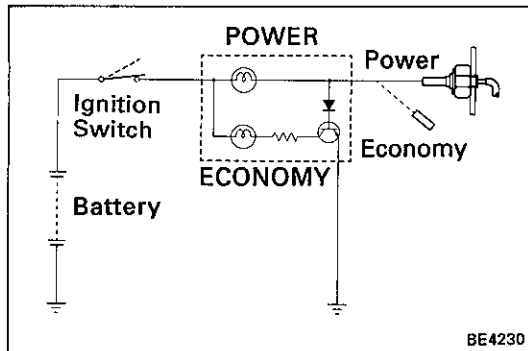
- Check that there is no continuity between terminals with switch OFF (float down).
- Check that there is continuity between terminals with switch ON (float up).

If operation is not as specified, replace the switch.

4. INSPECT RELAY (Continuity)

Terminal	1	2	3	4
Condition				
Constant	○	○	○	○
Apply battery voltage to terminal 3 and 4.	No Continuity			

If continuity is not as specified, replace the relay.



Econodrive Monitor System

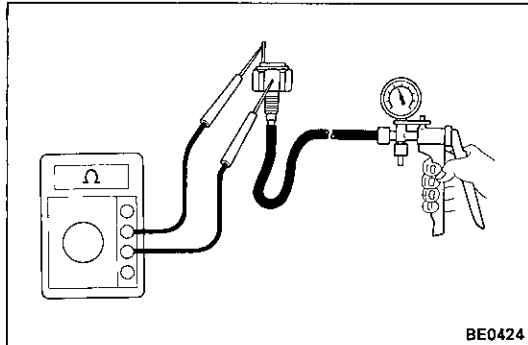
1. INSPECT INDICATOR LIGHTS

- (a) Turn the ignition switch ON, check that the power (umber) light lights up.

If the light does not light, check the bulb and vacuum switch.

- (b) Disconnect the connector from the vacuum switch, check that the economy (green) light lights up.

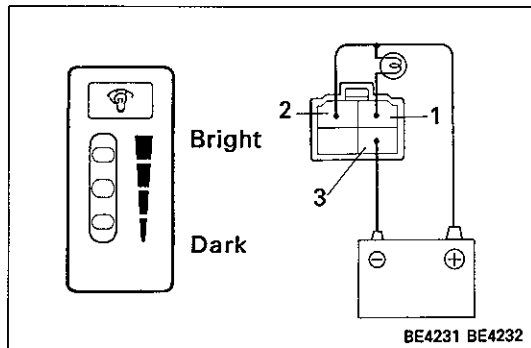
If the light does not light, check the bulb and meter circuit.



2. INSPECT VACUUM SWITCH

- (a) Check that there is continuity between the terminal and the switch body with a no vacuum.
- (b) Apply 100 ± 25 mmHg ($3.94 < 0.98$ in.Hg, 13.3 ± 3.3 kPa) of vacuum, check that there is no continuity between the terminal and the switch body.

If operation is not as specified, replace the switch.



Meter Illumination Control System

INSPECT LIGHT CONTROL RHEOSTAT

(Dim Out Operation)

- (a) Connect the positive (+) lead from the battery to terminal 2 and the negative (-) lead to terminal 3.
- (b) Connect the positive (+) lead from the battery to terminal 1 through a 2.0 watts test bulb.
- (c) Gradually turn the rheostat knob from the bright side to dark side, check that the test bulb brightness changes from bright to dark.

If operation is not as specified, replace the light control rheostat.