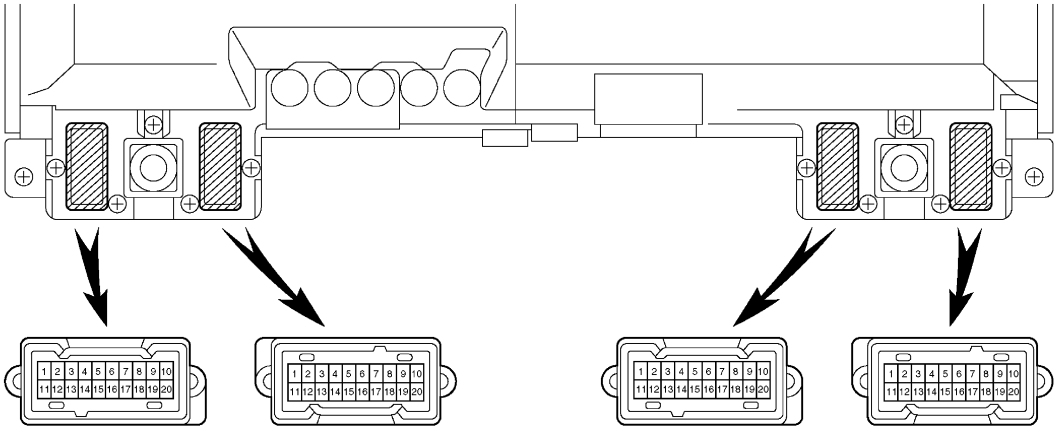
BE1FK–01

INSPECTION

Connector disconnected:

INSPECT COMBINATION METER CIRCUIT

Connect the connector ”A” , ”B”, ”C” and ”D” to the combination meter and inspect the wire harness side connectors from the back side as shown in the table.



I06263

Tester connection	Condition	Specified condition
A1 – Ground	Key unlock warning switch ON (Key is inserted)	No voltage
A1 – Ground	Key unlock warning switch OFF (Key is removed)	Battery voltage
A2 – Ground	Ignition switch ON	4.5 – 5.5 V
A3 – Ground	Ignition switch ON and fuel sender gauge float UP	Approx. 4.5 V
A3 – Ground	Ignition switch ON and fuel sender gauge float DOWN	Approx. 0.5 V
A4 – Ground	Constant	0 V
A5 – Ground	Ignition switch ON	4.5 – 5.5 V
A6 – Ground	Ignition switch ON and fuel sub sender gauge float UP	Approx. 5.5 V
A6 – Ground	Ignition switch ON and fuel sub sender gauge float DOWN	Approx. 0.5 V
A7 – Ground	Constant	0 V
A8 – Ground	Ignition switch ON and sub fuel switch ON	Battery voltage
A8 – Ground	Ignition switch OFF and sub fuel switch OFF	No voltage
A9 – Ground	Ignition switch ON and ABS warning light light up	No voltage
A9 – Ground	Ignition switch ON and ABS warning light does not light up	Battery voltage
A10 – Ground	Ignition switch ON and light control rheostat volume minimum	Analog → Battery voltage Opti → Approx. 8 V (Approx. 8 V at rheostat off)

A10 – Ground	Ignition switch ON and light control rheostat volume maximum	No voltage
A11 – Ground	Light control switch OFF	No voltage
A11 – Ground	Light control switch TAIL or HEAD	Battery voltage
A12 – Ground	Ignition switch ON and driver door is opened	No voltage
A12 – Ground	Ignition switch ON and driver door is closed	Battery voltage
A13 – Ground	Ignition switch ON and sub fuel switch ON	No voltage
A13 – Ground	Ignition switch OFF and sub fuel switch OFF	Battery voltage
A14 – Ground	Ignition switch ON and engine is stopped	No voltage
A14 – Ground	Ignition switch ON and engine is running	Battery voltage
A15 – Ground	Ignition switch ON and seat belt is unfastened	No voltage
A15 – Ground	Ignition switch ON and seat belt is fasted	Battery voltage
A16 – Ground	Ignition switch OFF	No voltage
A16 – Ground	Ignition switch ON	Battery voltage
A17 – Ground	Constant	Battery voltage
A18 – Ground	Ignition switch ON and ABS is error	No voltage
A18 – Ground	Ignition switch ON and ABS is normal	Battery voltage
A19 – Ground	Ignition switch ON and fog light switch OFF	Battery voltage
A19 – Ground	Ignition switch ON and fog light switch ON	No voltage
B1 – Ground	Ignition switch ON and tire carrier is opened	No voltage
B1 – Ground	Ignition switch ON and tire carrier is closed	Battery voltage
B2 – Ground	Ignition switch ON and engine is stopped	No voltage
B2 – Ground	Ignition switch ON and engine is running	Battery voltage
B4 – Ground	Ignition switch OFF	No voltage
B4 – Ground	Ignition switch ACC or ON	Battery voltage
B5 – Ground	Ignition switch ON and A/T shift P indicator light up	No voltage
B5 – Ground	Ignition switch ON and A/T shift P indicator does not light up	Battery voltage
B6 – Ground	Ignition switch ON and except A/T shift P position	No voltage
B6 – Ground	Ignition switch ON and A/T shift P position	Battery voltage
B7 – Ground	Ignition switch ON and except A/T shift R position	No voltage
B7 – Ground	Ignition switch ON and A/T shift R position	Battery voltage
B8 – Ground	Ignition switch ON and A/T oil temperature indicator light up	No voltage
B8 – Ground	Ignition switch ON and A/T oil temperature indicator does not light up	Battery voltage
B9 – Ground	Ignition switch ON and slowly move the wheel	Pulse signal is output below 1.5 V ↔ approx. 5 V or below 1.5 V ↔ Battery voltage
B10 – Ground	Ignition switch ON and slowly move the wheel	Pulse signal is output below 1.5 V ↔ Battery voltage
B11 – Ground	Constant	0 V
B13 – Ground	Ignition switch ON and engine is stopping	No voltage
B13 – Ground	Ignition switch ON and engine is running	Battery voltage

B14 – Ground	Ignition switch OFF	No voltage
B14 – Ground	Ignition switch ON	Battery voltage
B15 – Ground	Ignition switch ON and Water temperature 90 °C	Analog: Approx. 5V Opti: Approx. 2V
B16 – Ground	Constant	0 V
B17 – Ground	Engine is running	Pulse generation
B18 – Ground	Ignition switch ON and engine is running	No voltage
B18 – Ground	Ignition switch ON and engine is stopping	Battery voltage
C1 – Ground	Ignition switch ON and rear diff. lock switch OFF	Battery voltage
C1 – Ground	Ignition switch ON and rear diff. lock switch ON	No voltage
C2 – Ground	Ignition switch ON and rear diff. lock switch OFF	Battery voltage
C2 – Ground	Ignition switch ON and rear diff. lock switch ON	No voltage
C3 – Ground	Constant	Battery voltage
C4 – Ground	Ignition switch ON and airbag indicator light light up	No voltage
C4 – Ground	Ignition switch ON and airbag indicator does not light up	Battery voltage
C5 – Ground	Ignition switch ON and except A/T shift N position	No voltage
C5 – Ground	Ignition switch ON and A/T shift N position	Battery voltage
C6 – Ground	Ignition switch ON and except A/T shift D position	No voltage
C6 – Ground	Ignition switch ON and A/T shift D position	Battery voltage
C7 – Ground	Ignition switch ON and except A/T shift 2nd position	No voltage
C7 – Ground	Ignition switch ON and A/T shift 2nd position	Battery voltage
C8 – Ground	Ignition switch ON and except A/T shift L position	No voltage
C8 – Ground	Ignition switch ON and A/T shift L position	Battery voltage
C10 – Ground	Ignition switch ON and O/D off switch ON	No voltage
C10 – Ground	Ignition switch ON and O/D off switch OFF	Battery voltage
C11 – Ground (M/T vehicle)	Ignition switch ON and ETCS indicator light light up	No voltage
C11 – Ground (M/T vehicle)	Ignition switch ON and ETCS indicator light does not light up	Battery voltage
C12 – Ground	Ignition switch ON and engine is running	Analog: Approx. 6 – 14 V Opti: Approx. 5 – 8 V
C12 – Ground	Ignition switch ON and engine is stopping	Analog: Battery voltage Opti: Approx. 8 V
C13 – Ground	Ignition switch ST position	Battery voltage
C13 – Ground	Ignition switch ON	No voltage
C14 – Ground	Ignition switch ON and cruise control switch OFF	Battery voltage
C14 – Ground	Ignition switch ON and cruise control switch ON	No voltage
C15 – Ground	Ignition switch ON and center diff. lock switch OFF	Battery voltage
C15 – Ground	Ignition switch ON and center diff. lock switch ON	No voltage
C16 – Ground	Rear fog light switch ON	Battery voltage

C16 – Ground	Rear fog light switch OFF	No voltage
C17 – Ground	IG switch ON, off road TRC indicator light ON	Below 1.5 V
	IG switch ON, off road TRC indicator light OFF	10 – 14 V
C18 – Ground	IG switch ON, VSC warning light ON	Below 2.0 V
	IG switch ON, VSC warning light OFF	10 – 14 V
C19 – Ground	IG switch ON, VSC warning light ON	Below 2.0 V
	IG switch ON, VSC warning light OFF	10 – 14 V
C20 – Ground	IG switch ON, VSC OFF indicator light ON	Below 2.0 V
	IG switch ON, VSC OFF indicator light OFF	10 – 14 V
D2 – Ground (Diesel vehicle)	Ignition switch ON and glow indicator light up	No voltage
D2 – Ground (Diesel vehicle)	Ignition switch ON and glow indicator does not light up	Battery voltage
D3 – Ground	Ignition switch ON and HPS indicator light up	Approx. 5 V
D3 – Ground	Ignition switch ON and HPS indicator light does not light up	No voltage
D4 – Ground	Ignition switch ON and HPS switch N	Approx. 5 V
D4 – Ground	Ignition switch ON and HPS switch HI or LO	No voltage
D5 – Ground	Ignition switch ON and HPS switch LO	Approx. 5 V
D5 – Ground	Ignition switch ON and HPS switch N	No voltage
D6 – Ground	Ignition switch ON and HPS system is operating	Approx. 5 V
D6 – Ground	Ignition switch ON and HPS system is OFF	No voltage
D7 – Ground	Ignition switch ON and brake fluid level warning switch float DOWN	No voltage
D7 – Ground	Ignition switch ON and brake fluid level warning switch float UP	Battery voltage
D8 – Ground	Ignition switch ON and parking brake lever is pulled	No voltage
D8 – Ground	Ignition switch ON and parking brake lever is released	Battery voltage
D9 – Ground	Ignition switch ON, parking brake lever is released and brake fluid level warning switch float DOWN	No voltage
D9 – Ground	Ignition switch ON, parking brake lever is released and brake fluid level warning switch float UP	Battery voltage
D10 – Ground	Ignition switch ON and pattern select switch NORM	No voltage
D10 – Ground	Ignition switch ON and pattern select switch PWR	Battery voltage
D11 – Ground	All door is opened	No voltage
D11 – Ground	Either door is closed	Battery voltage
D12 – Ground	Constant	0 V
D13 – Ground	Ignition switch ON and turn signal switch OFF or RIGHT	No voltage
D13 – Ground	Ignition switch ON and turn signal switch LEFT	Battery voltage
D14 – Ground	Light control switch OFF	No voltage
D14 – Ground	Light control switch HI	Battery voltage

D15 − Ground	Ignition switch ON and turn signal switch OFF or LEFT	No voltage
D15 − Ground	Ignition switch ON and turn signal switch RIGHT	Battery voltage
D16 − Ground	Head Light control switch ON	Battery voltage
D16 − Ground	Head Light control switch OFF	No voltage
D18 − Ground	IG switch ON, BRAKE warning light ON	Below 2.0 V
D17 − Ground	Ignition switch ON and washer indicator light ON	No voltage
D17 − Ground	Ignition switch OFF and washer indicator light OFF	Battery voltage
D18 − Ground	IG switch ON, BRAKE warning light OFF	10 − 14 V

If circuit is not as specified, wiring diagram and inspect the circuits connected to other parts.