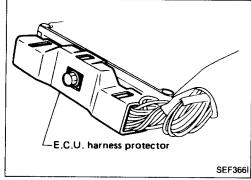


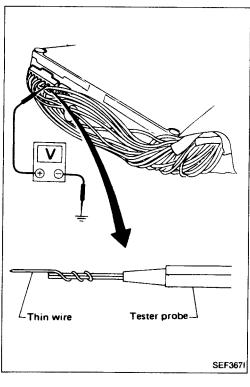
## **Electrical Components Inspection**

## E.C.U. INPUT/OUTPUT SIGNAL INSPECTION

1. E.C.U. is located behind the center console panel. For this inspection, remove the center console under cover.



2. Remove E.C.U. harness protector.



 Perform all voltage measurements with the connectors connected. Extend tester probe as shown to perform tests easily.

## **TROUBLE DIAGNOSES**

## **Electrical Components Inspection (Cont'd)**

## E.C.U. inspection table

\*Date are reference values.

			Date are reference values.
TER- MINAL NO.	ITEM	CONDITION	*DATA
1	Ignition signal	Engine is running.	0.3 - 0.5V
		Engine is running.  Engine speed is 2,000 rpm	0.7 - 0.8V
3	Ignition check	Engine is running.	Approximately 12V
4	E.C.C.S. relay (Self-shut off)	Engine is running.  Ignition switch "OFF"  For approximately 2 seconds after turning ignition switch "OFF"	0 - 1V
		Approximately 2 seconds after turning ignition switch "OFF"	BATTERY VOLTAGE (11 - 14V)
9	Radiator fan relay	Engine is running.  Radiator fan is not operating.	BATTERY VOLTAGE (11 - 14V)
		Engine is running.  Radiator fan is operating.	0.6 - 0.8V
11	Air conditioner relay	Engine is running.  Both A/C switch and blower switch are "ON".	0.5 - 1V
		Engine is running.  A/C switch is "OFF".	BATTERY VOLTAGE (11 - 14V)
16	Air flow meter	Engine is running. (Warm-up condition)	1.0 - 1.5V
		Engine is running. (Warm-up condition)  Engine speed is 2,000 rpm.	1.3 - 1.8V
18	Engine temperature sensor	Engine is running.	0 - 5.0V Output voltage varies with engine water temperature.
19	Exhaust gas sensor	Engine is running.  After warming up sufficiently.	0 - Approximately 1.5V

## **TROUBLE DIAGNOSES**

## **Electrical Components Inspection (Cont'd)**

\*Date are reference values.

			*Date are reference values.
TER- MINAL NO.	ITEM	CONDITION	*DATA
20	Throttle sensor	Ignition switch "on"  Accelerator pedal released	0.45 - 0.55V
		Ignition switch "on"  Accelerator pedal fully depressed	Approximately 4V
22 30	Crank angle sensor (Reference signal)	Engine is running.  Do not run engine at high speed under no-load.	0.2 - 0.5V
27	Detonation sensor	Engine is running.	2.0 - 3.0V
31 40	Crank angle sensor (Position signal)	Do not run engine at high speed under no-load.	2.0 - 3.0V
34	Start signal	Ignition switch "ON"	Approximately 0V
		[gnition switch "START"]	BATTERY VOLTAGE (11 - 14V)
35	Neutral switch	Ignition switch "ON"  -Neutral	ov
		Ignition switch "ON"  Except the above gear position	Approximately 6V
00	Ignition switch	Ignition switch "OFF"	ov
36		Ignition switch "ON"	BATTERY VOLTAGE (11 - 14V)
37	Throttle sensor power supply	Ignition switch "ON"	Approximately 5V
38 47	Power supply for E.C.U.	[gnition switch "ON"]	BATTERY VOLTAGE (11 - 14V)
41	Air conditioner switch	Engine is running.  Both air conditioner switch and blower switch are "ON".	Approximately 0V
		Engine is running.  Air conditioner switch is "OFF".	Approximately 8V

# **Electrical Components Inspection (Cont'd)**

TER- MINAL NO.	ITEM	CONDITION	*Date are reference valu
43	Power steering oil pressure switch	Engine is running.  Steering wheel is being turned.	ov
		Engine is running.  Steering wheel is not being turned.	8 - 10V
46	Power supply (Back-up)	Ignition switch "OFF"	BATTERY VOLTAGE (11 - 14V)
101	Injector No. 1		BATTERY VOLTAGE (11 - 14V)
103	Injector No. 3	Francisco	
110	Injector No. 2	Engine is running	
112	Injector No. 4	1	
104	Fuel pump relay	For 1 second after turning ignition switch "ON"  Engine is running.  Ignition switch "ON"  1 second after turning ignition	0.7 - 0.9V BATTERY VOLTAGE (11 - 14V)
111	Wastegate valve control solenoid valve	switch "ON"  Engine is running.  Idle speed  Engine is running.  Accelerator pedal is quickly depressed and released.	BATTERY VOLTAGE (11 - 14V) 0 - 1.0V
113	A.A.C. valve	Engine is running.  Idle speed  Engine is running.	9 - 14V
		-Steering wheel is being turnedAir conditioner is operatingRear defogger is "ON"Headlamp are in high position.	5 - 9V

SR20DET

#### **TROUBLE DIAGNOSES**

## **Electrical Components Inspection (Cont'd)**

#### E.C.U. HARNESS CONNECTOR TERMINAL LAYOUT



SEF877K