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2012 NISSAN Sentra SE-R OEM Service and Repair Workshop Manual

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DTC	Items	EV system warning lamp	Trip	Reference page
P1647-62	Charging system	—	Immediate detection	DTC Description
P164B-64	Electric shift system	×	1	DTC Description
P1666-72	Charging system	—	1	DTC Description
P166C-1D	Charging device	—	Immediate detection	DTC Description
P166E-63	Electric water pump	×	1	DTC Description
P1671-81	Communication error	—	1	DTC Description
P1672-81	Communication error	—	1	DTC Description
P1678-81	Communication error	—	1	DTC Description
P1679-81	Communication error	—	1	DTC Description
P168A-11	Precharge relay	×	1	DTC Description
P168A-12	Precharge relay	×	1	DTC Description
P168A-13	Precharge relay	×	1	DTC Description
P168B-73	System main relay	×	1	DTC Description
P168C-72	System main relay	×	1	DTC Description
P168D-11	System main relay	×	1	DTC Description
P168D-12	System main relay	×	1	DTC Description
P168D-13	System main relay	×	1	DTC Description
P168D-72	System main relay	×	1	DTC Description
P168E-11	System main relay	×	1	DTC Description
P168E-12	System main relay	×	1	DTC Description
P168E-13	System main relay	×	1	DTC Description
P168E-73	System main relay	×	1	DTC Description
P1692-19	Precharge relay	×	1	DTC Description
P1693-49	Communication error	×	1	DTC Description
P1693-87	Communication error	×	1	DTC Description
P1694-49	Communication error	×	1	DTC Description
P1694-87	Communication error	×	1	DTC Description
P1695-87	Traction motor system	—	1	DTC Description
P1695-96	Traction motor system	—	1	DTC Description
P16DC-61	Communication error	—	1	DTC Description
P1728-19	High voltage harness temperature	×	1	DTC Description
P1729-98	High voltage junction box temperature	×	1	DTC Description

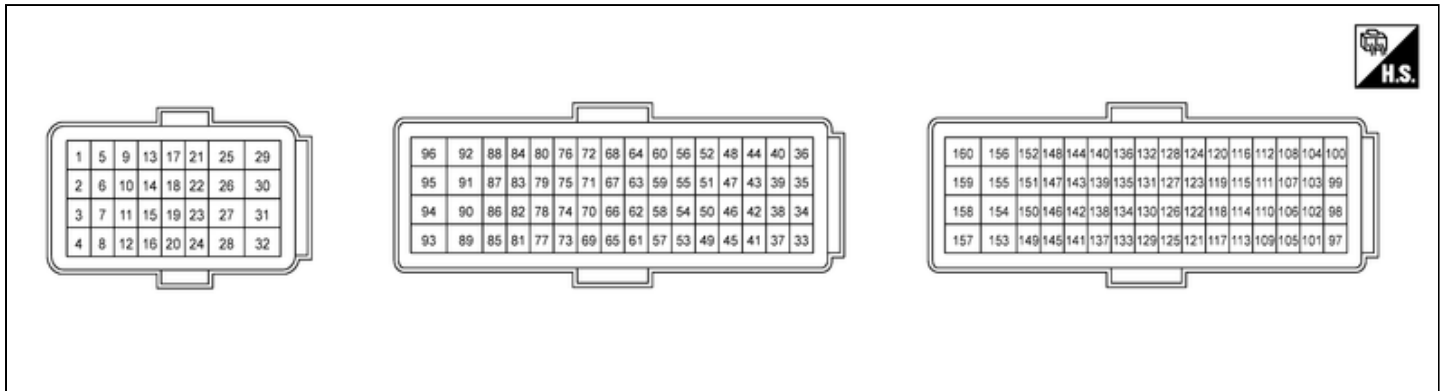
DTC	Items	EV system warning lamp	Trip	Reference page
P172A-11	High voltage junction box	×	1	DTC Description
P172A-15	High voltage junction box	×	1	DTC Description
P172B-64	Battery pack pressure sensor	×	1	DTC Description
P172C-00	Battery pack pressure sensor	×	Immediate detection	DTC Description
P172C-96	Battery pack pressure sensor	×	Immediate detection	DTC Description
P172D-00	Battery pack pressure sensor	×	Immediate detection	DTC Description
P172D-96	Battery pack pressure sensor	×	Immediate detection	DTC Description
P17C6-12	Power Supply	×	1	DTC Description
P17C6-14	Power Supply	×	1	DTC Description
P18A5-00	Auto park function cancel	—	1	DTC Description
P2121-00	Accelerator pedal position sensor D	—	1	Refer to DTC Description .
P2122-00	Accelerator pedal position sensor D	—	1	DTC Description
P2123-00	Accelerator pedal position sensor D	—	1	DTC Description
P2126-00	Accelerator pedal position sensor E	—	1	Refer to DTC Description .
P2127-00	Accelerator pedal position sensor E	—	1	DTC Description
P2128-00	Accelerator pedal position sensor E	—	1	DTC Description
P2138-00	Accelerator pedal position sensor	—	1	DTC Description
P2504-21	Charging system voltage	—	1	DTC Description
P2504-22	Charging system voltage	—	1	DTC Description
P2EBF-73	Immediate charging switch	—	1	DTC Description
P3101-61	VCM	×	1	DTC Description
P3101-62	VCM	× or —	1 or Immediate detection	DTC Description
P3194-00	Communication error	—	1	DTC Description
P3194-87	Communication error	—	1	DTC Description
U007A-00	Control module communication bus	—	1	DTC Description
U0273-87	Communication error	—	1	DTC Description
U1327-52	MAC key update	—	1	DTC Description
U1327-54	MAC key update	—	1	DTC Description
U2118-87	CAN communication error (Intelligent Key)	—	1	DTC Description

DTC	Items	EV system warning lamp	Trip	Reference page
U2148-82	CAN communication error (brake control unit)	—	2	DTC Description
U2148-86	CAN communication error (brake control unit)	—	2	DTC Description
U2148-87	CAN communication error (brake control unit)	—	2	DTC Description
U214E-87	CAN communication error (combination meter)	—	1	DTC Description
U214F-57	CAN communication error (BCM)	—	1	DTC Description
U214F-82	CAN communication error (BCM)	—	1	DTC Description
U214F-86	CAN communication error (BCM)	—	1	DTC Description
U214F-87	CAN communication error (BCM)	—	1	DTC Description
U2150-82	CAN communication error (AIRBAG)	—	1	DTC Description
U2150-87	CAN communication error (AIRBAG)	—	1	DTC Description
U2152-57	CAN communication error advanced driver assistant systems control unit	—	1	DTC Description
U2152-82	CAN communication error advanced driver assistant systems control unit	—	1	DTC Description
U2152-86	CAN communication error advanced driver assistant systems control unit	—	1	DTC Description
U2152-87	CAN communication error advanced driver assistant systems control unit	—	1	DTC Description
U2153-87	CAN communication error (Heating, Ventilating, Air Conditioning) ch1	—	1	DTC Description
U2154-87	CAN communication error (MIU)	—	1	DTC Description
U215B-82	CAN communication error (IPDM E/R)	—	2	DTC Description
U215B-86	CAN communication error (IPDM E/R)	—	2	DTC Description
U215B-87	CAN communication error (IPDM E/R)	—	2	DTC Description
U2165-57	CAN communication error sonar	—	1	DTC Description
U2165-82	CAN communication error sonar	—	2	DTC Description
U2165-86	CAN communication error sonar	—	2	DTC Description
U2165-87	CAN communication error sonar	—	2	DTC Description
U2176-57	CAN communication error (chassis control module/steering angle sensor)	—	1	DTC Description
U2176-82	CAN communication error (chassis control module/steering angle sensor)	×	1	DTC Description

DTC	Items	EV system warning lamp	Trip	Reference page
U2176-86	CAN communication error (chassis control module/steering angle sensor)	×	1	DTC Description
U2176-87	CAN communication error (chassis control module/steering angle sensor)	—	1	DTC Description
U2181-82	CAN communication error (CPLC)	—	1	DTC Description
U2181-86	CAN communication error (CPLC)	—	1	DTC Description
U2181-87	CAN communication error (CPLC)	—	1	DTC Description
U218C-87	CAN communication error gateway	—	1	DTC Description
U2212-87	CAN communication error brake unit	—	2	DTC Description
U2247-82	Controller area network communication error (electric shift)	—	1	DTC Description
U2247-86	Controller area network communication error (electric shift)	—	1	DTC Description
U2247-87	Controller area network communication error (electric shift)	—	1	DTC Description
U2248-82	CAN communication error brake control unit	—	2	DTC Description
U2248-86	CAN communication error brake control unit	—	2	DTC Description
U2248-87	CAN communication error brake control unit	—	2	DTC Description
U2252-82	CAN communication error advanced driver assistant systems control unit	—	1	DTC Description
U2252-87	CAN communication error advanced driver assistant systems control unit	—	1	DTC Description
U226B-87	Controller area network communication error front camera	—	1	DTC Description
U2252-86	CAN communication error advanced driver assistant systems control unit	—	1	DTC Description
U2276-82	CAN communication error (chassis control module/steering angle sensor)	—	1	DTC Description
U2276-86	CAN communication error (chassis control module/steering angle sensor)	—	1	DTC Description
U2276-87	CAN communication error (chassis control module/steering angle sensor)	—	1	DTC Description
U2342-82	Controller area network communication error (Inverter motor generator/motor generator)	—	1	DTC Description
U2342-86	Controller area network communication error (Inverter motor generator/motor generator)	—	1	DTC Description
U2342-87	Controller area network communication error (Inverter motor generator/motor generator)	—	1	DTC Description
U2344-82	CAN communication error (LBC/BMS)	—	1	DTC Description
U2344-86	CAN communication error (LBC/BMS)	—	1	DTC Description

DTC	Items	EV system warning lamp	Trip	Reference page
U2344-87	CAN communication error (LBC/BMS)	—	1	DTC Description
U2357-04	Controller area network communication error (Direct current direct current)	—	1	DTC Description
U2357-62	Controller area network communication error (Direct current direct current)	—	1	DTC Description
U2357-81	Controller area network communication error (Direct current direct current)	—	1	DTC Description
U2357-86	Controller area network communication error (Direct current direct current)	—	1	DTC Description
U2370-94	CAN communication error (OBC)	—	1	DTC Description
U2370-96	CAN communication error (OBC)	—	1	DTC Description
U2379-82	CAN comm error (LBC2/VMR)	—	2	DTC Description
U2379-86	CAN comm error (LBC2/VMR)	—	2	DTC Description
U2379-87	CAN comm error (LBC2/VMR)	—	2	DTC Description
U23A1-82	CAN comm error (INV RE)	—	2	DTC Description
U23A1-86	CAN comm error (INV RE)	—	2	DTC Description
U23A1-87	CAN comm error (INV RE)	—	2	DTC Description
U2457-82	CAN communication error (DCDC)	—	1	DTC Description
U2457-86	CAN communication error (DCDC)	—	1	DTC Description
U2457-87	CAN communication error (DCDC)	—	1	DTC Description
U2470-82	CAN comm error (OBC)	—	2	DTC Description
U2470-86	CAN comm error (OBC)	—	2	DTC Description
U2470-87	CAN comm error (OBC)	—	2	DTC Description
U2A02-88	Comm Bus Off PT-FD	—	2	DTC Description
U2A0D-88	Communication error	—	2	DTC Description
U2A0F-88	Communication error	—	1	DTC Description

TERMINAL LAYOUT



SIEMD-7196755-09-000277984

PHYSICAL VALUES



NOTE:

Specification data are reference values.

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	—	Signal name	Input/Output		
3 (R)	—	CAN-L (Drivetrain CAN communication 2 circuit)	Input/Output	—	—
4 (GR)	—	CAN-H (Drivetrain CAN communication 2 circuit)	Input/Output	—	—
10 (Y)	Ground	Immediate charging switch	Input	Immediate charging switch switch: Pressed	12V battery power supply voltage (12 - 15 V)
				Immediate charging switch switch: Released	0 V
13 (R)	Ground	Power ON power supply	Input	Power switch ON	12V battery power supply voltage (12 - 15 V)
14 (Y)	15 (B)	ProPILOT Assist 2.0 steering switch	Input	<ul style="list-style-type: none"> Power switch ON ProPILOT Assist 2.0 switch: Pressed 	0 V approx.
				<ul style="list-style-type: none"> Power switch ON LANE CHANGE switch: Pressed 	0.5 V approx.
				<ul style="list-style-type: none"> Power switch ON 	1 V approx.

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	—	Signal name	Input/Output		
				<ul style="list-style-type: none"> CANCEL switch: Pressed 	
				<ul style="list-style-type: none"> Power switch ON DISTANCE switch: Pressed 	1.5 V approx.
				<ul style="list-style-type: none"> Power switch ON SET – switch: Pressed 	2.1 V approx.
				<ul style="list-style-type: none"> Power switch ON RES+ switch: Pressed 	2.9 V approx.
				<ul style="list-style-type: none"> Power switch ON ProPILOT Assist 2.0 steering switch: No operation 	3.9 V approx.
		ProPILOT Assist steering switch	Input	<ul style="list-style-type: none"> Power switch ON ProPILOT Assist switch: Pressed 	0 V approx.
				<ul style="list-style-type: none"> Power switch ON CANCEL switch: Pressed 	1.3 V approx.
				<ul style="list-style-type: none"> Power switch ON DISTANCE switch: Pressed 	2.2 V approx.
				<ul style="list-style-type: none"> Power switch ON SET – switch: Pressed 	3 V approx.
				<ul style="list-style-type: none"> Power switch ON RES+ switch: Pressed 	3.7 V approx.
				<ul style="list-style-type: none"> Power switch ON 	4.3 V approx.

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	—	Signal name	Input/Output		
				<ul style="list-style-type: none"> ProPILOT Assist steering switch: No operation 	
15 (B)	—	ProPILOT Assist/ProPILOT Assist 2.0 steering switch ground	—	—	—
17 (G)	—	CAN-L (EV system CAN 2 circuit)	Input/Output	—	—
18 (L)	—	CAN-H (EV system CAN 2 circuit)	Input/Output	—	—
20 (W)	Ground	Stop lamp switch	Input	<ul style="list-style-type: none"> Power switch ON Accelerator pedal: Fully depressed 	0 V
				<ul style="list-style-type: none"> Power switch ON Accelerator pedal: Fully released 	12V battery power supply voltage (12 - 15 V)
22 (W)	24 (B)	Sensor power supply (Accelerator pedal position sensor 2)	Output	Power switch ON	5 V approx.
23 (R)	24 (B)	Accelerator pedal position sensor 2	Input	<ul style="list-style-type: none"> Power switch ON Accelerator pedal: Fully released 	0.3 – 0.45 V
				<ul style="list-style-type: none"> Power switch ON Accelerator pedal: Fully depressed 	1.95 – 2.4 V
24 (B)	—	Sensor ground (Accelerator pedal position sensor 2)	—	—	—
26 (W)	31 (B)	Sensor power supply (Accelerator pedal position sensor 1)	Output	Power switch ON	5 V approx.
28 (B)	—	VCM ground	—	—	—
29 (B)	—	VCM ground	—	—	—

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	—	Signal name	Input/Output		
30 (R)	31 (B)	Accelerator pedal position sensor 1	Input	<ul style="list-style-type: none"> Power switch ON Accelerator pedal: Fully released 	0.6 - 0.9V
				<ul style="list-style-type: none"> Power switch ON Accelerator pedal: Fully depressed 	3.9 - 4.8V
31 (B)	—	Sensor ground (Accelerator pedal position sensor 1)	—	—	—
32 (B)	—	VCM ground	—	—	—
38 (L)	Ground	Charge port light	Output	Port indicator lamp: ON	0 V approx.
				Port indicator lamp: OFF	12V battery power supply voltage (12 - 15 V)
41 (L)	Ground	Charging status indicator	Output	Charge ongoing	5 V approx.
44 (P)	Ground	Battery pack pressure sensor power supply	Output	Power switch ON	5 V approx.
46 (SB)	Ground	EV power relay	Output	Power switch ON or READY	0 V approx.
52 (BR)	68 (GR)	High voltage junction box temperature sensor	Input	Quick charge ongoing	1.4 – 4.8 approx.
54 (W)	Ground	e-Pedal switch	Input	e-Pedal switch: Depressed	12V battery power supply voltage (12 - 15 V)
				e-Pedal switch: Released	0 V
62 (R)	Ground	Charge connector lock status detection switch	Input	Charge connector: Fitting	9.0 - 11.0 V
				Charge connector: Non-fitting	Open
64 (LG)	Ground	Battery pack pressure sensor 2 signal	Input	READY status	1.0 – 4.0 V
65 (R)	Ground	EVSE communication	Input/Output	Normal charge ongoing	(-12.6) – (+12.6) V
				Except the above	0 V
67 (B)	—	Battery pack pressure sensor ground	—	—	—
68 (GR)	—	Sensor ground (High voltage junction box temperature sensor)	—	—	—