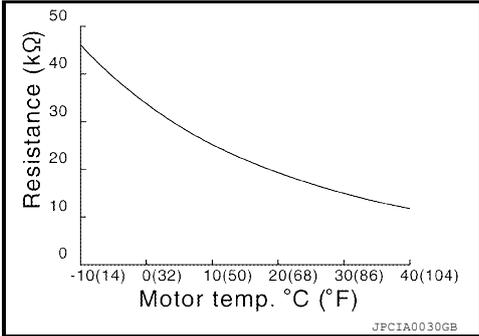


## TRACTION MOTOR INVERTER

### < ECU DIAGNOSIS INFORMATION >

- Check them with vehicle side harness connector, removing traction motor inverter connector. Never touch terminals of traction motor inverter side connector at this operation.
- If power switch is pushed ON with traction motor inverter connector removed, other control modules might detect malfunction of traction motor inverter.

Terminal No. (Color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
14 (L)	—	EV system CAN-H	Input/ Output	—	—
15 (G)	—	EV system CAN-L	Input/ Output	—	—
18 (L)	17 (P)	Traction motor resolver signal (S2 – S4)	Input	Power switch OFF	20 – 35 Ω
19 (R)	27 (G)	Traction motor resolver signal (R1 – R2)	Output	Power switch OFF	8 – 15 Ω
20 (B)	21 (W)	Traction motor resolver signal (S1 – S3)	Input	Power switch OFF	20 – 35 Ω
42 (LG)	Ground	Power ON power sup- ply	—	Power switch ON	9 – 16 V
				Power switch OFF	0 V
45 (Y)	44 (O)	Traction motor tempera- ture sensor	Input	Power switch OFF	Within ± 50% of temperature characteristics diagram 
46 (G)	Ground	12V battery power sup- ply	—	Power switch ON	9 – 16 V
47 (B)	Ground	GND	—	Always	0 V
48 (G)	Ground	12V battery power sup- ply	—	Power switch ON	9 – 16 V
49 (B)	Ground	GND	—	Always	0 V

### Fail-safe

INFOID:000000010120913

DTC	Vehicle behavior
P0A1B	Any of the following statuses is observed. <ul style="list-style-type: none"> <li>• No impact to vehicle behavior</li> <li>• Stops drive control of traction motor</li> <li>• Stops drive control of traction motor, and requires system main relay OFF to VCM</li> <li>• Limits the maximum torque of traction motor to 40% or less</li> </ul>
P0A2C	Limits the maximum torque of traction motor to 40% or less
P0A2D	Limits the maximum torque of traction motor to 40% or less
P0A2F	Stops drive control of traction motor
P0A3F	Stops drive control of traction motor

# TRACTION MOTOR INVERTER

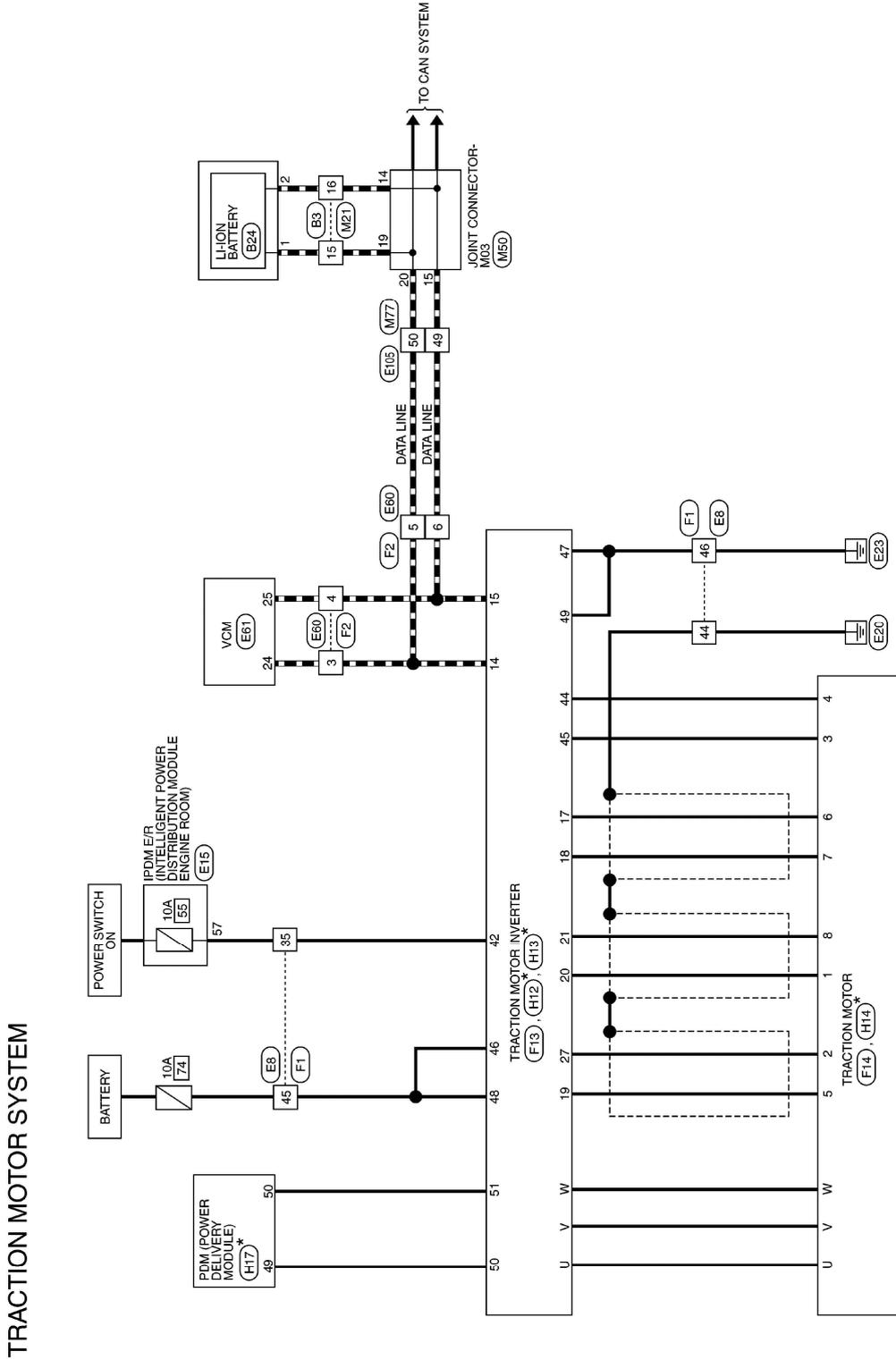
< WIRING DIAGRAM >

## WIRING DIAGRAM

### TRACTION MOTOR INVERTER

Wiring Diagram

INFOID:000000010120917

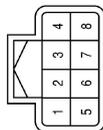


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# TRACTION MOTOR INVERTER

< WIRING DIAGRAM >

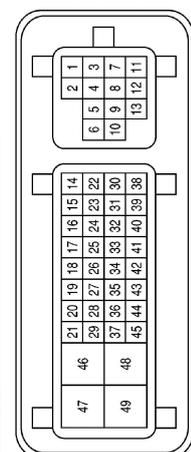
Connector No.	F14
Connector Name	TRACTION MOTOR
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
1	B	-
2	G	-
3	Y	-
4	O	-
5	R	-
6	P	-
7	L	-
8	W	-

Terminal No.	Color of Wire	Signal Name
21	W	TRACTION MOTOR RESOLVER SIGNAL (S1-S3)
22	-	-
23	-	-
24	-	-
25	-	-
26	-	-
27	G	TRACTION MOTOR RESOLVER SIGNAL (R1-R2)
28	-	-
29	-	-
30	-	-
31	-	-
32	-	-
33	-	-
34	-	-
35	-	-
36	-	-
37	-	-
38	-	-
39	-	-
40	-	-
41	-	-
42	LG	POWER ON POWER SUPPLY
43	-	-
44	O	TRACTION MOTOR TEMPERATURE SENSOR
45	Y	TRACTION MOTOR TEMPERATURE SENSOR
46	G	12V BATTERY POWER SUPPLY
47	B	GND
48	G	12V BATTERY POWER SUPPLY
49	B	GND

Connector No.	F13
Connector Name	TRACTION MOTOR INVERTER
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
1	-	-
2	-	-
3	-	-
4	-	-
5	-	-
6	-	-
7	-	-
8	-	-
9	-	-
10	-	-
11	-	-
12	-	-
13	-	-
14	L	EV SYSTEM CAN-H
15	G	EV SYSTEM CAN-L
16	-	-
17	P	TRACTION MOTOR RESOLVER SIGNAL (S2-S4)
18	L	TRACTION MOTOR RESOLVER SIGNAL (S2-S4)
19	R	TRACTION MOTOR RESOLVER SIGNAL (R1-R2)
20	B	TRACTION MOTOR RESOLVER SIGNAL (S1-S3)

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