

2009 Maxima

[Report a problem with this article](#)

SHIFT LOCK SYSTEM

Description

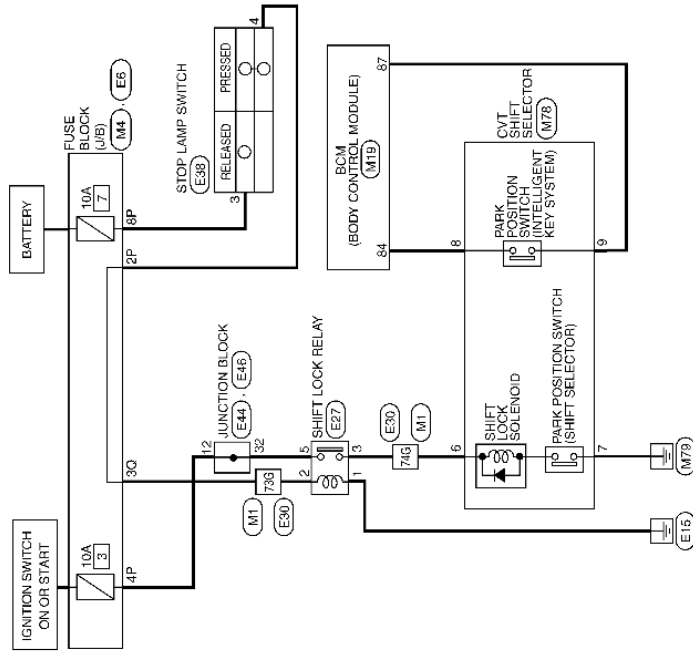
INFOID:000000003900161

The selector lever cannot be shifted from "P" position to any other position unless the ignition switch is in the ON position and the brake pedal is depressed.

Wiring Diagram - CVT SHIFT LOCK SYSTEM -

INFOID:000000003900162

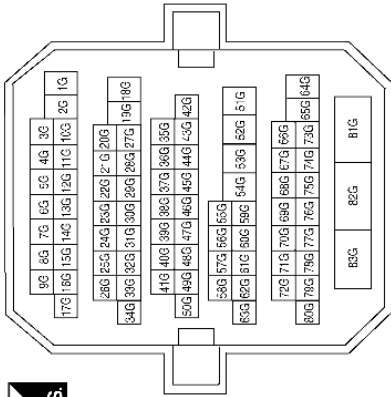
CVT SHIFT LOCK SYSTEM



ABDWA0321GB

CVT SHIFT LOCK SYSTEM CONNECTORS

Connector No.	M1
Connector Name	WIRE TO WIRE
Connector Color	WHITE



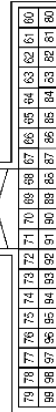
Terminal No.	Color of Wire	Signal Name
73G	O/L	-
74G	R/W	-

Connector No.	M4
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
3Q	O/L	-

Connector No.	M19
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
84	Y/R	AT DEVICE OUT
87	G/B	SHIFT P/ASCD CANCEL SW

Connector No.	M78
Connector Name	CVT SHIFT SELECTOR
Connector Color	WHITE



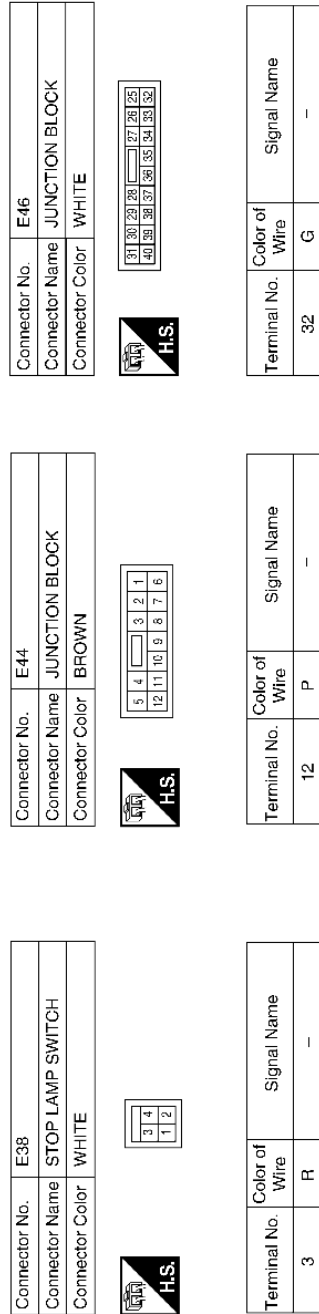
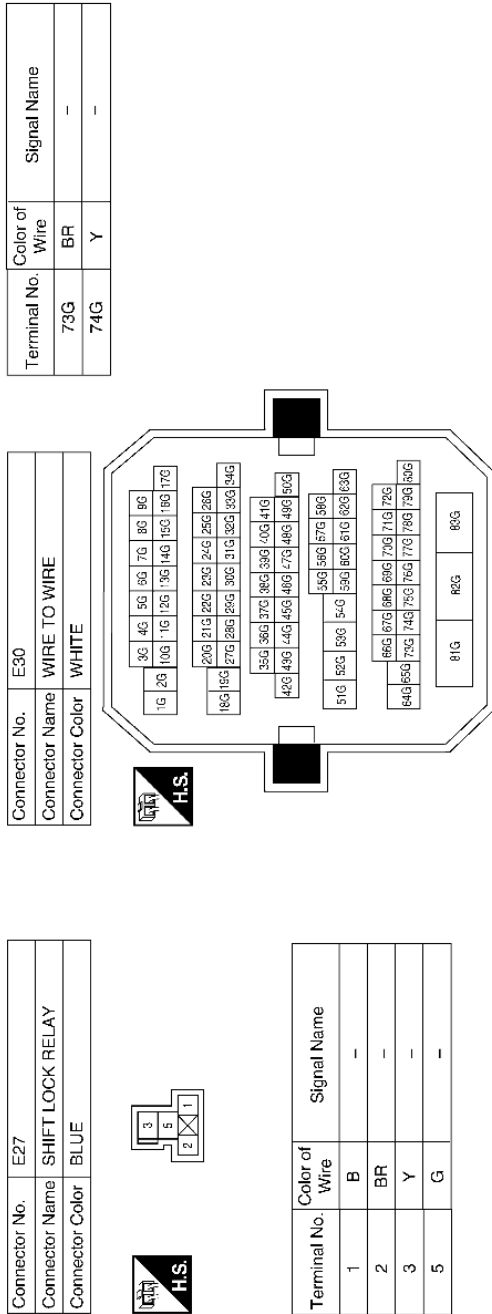
Terminal No.	Color of Wire	Signal Name
6	R/W	S/LOCK SOL GND
7	B	S/LOCK SOL INPUT
8	Y/R	DETENT KEY SW
9	G/B	DETENT KEY SW

Connector No.	E6
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
2P	LG	-
4P	P	-
8P	R	-

ABDIA0621GB



ABDIA0011GB

INFOID:000000003900163

Component Function Check

1. CHECK CVT SHIFT LOCK OPERATION

1. Turn ignition switch ON.
2. Move selector lever to "P" position.
3. Attempt to shift selector lever to any other position with brake pedal released.

Can selector lever be shifted to any other position?

- YES >> Go to [TM-112. "Diagnosis Procedure"](#).
- NO >> GO TO 2.

2. CHECK CVT SHIFT LOCK OPERATION

Attempt to shift selector lever to any other position with brake pedal depressed.

Can the selector lever be shifted to any other position?

- YES >> Inspection End
- NO >> Go to [TM-112. "Diagnosis Procedure"](#).

Diagnosis Procedure

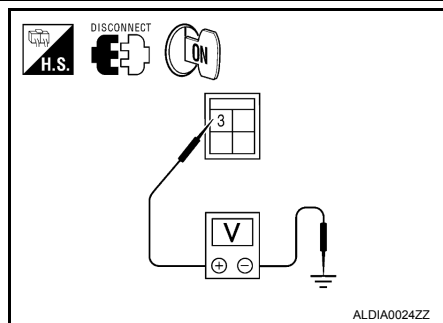
INFOID:000000003900164

Regarding Wiring Diagram information, refer to [TM-108. "Wiring Diagram - CVT SHIFT LOCK SYSTEM -"](#).

1. CHECK POWER SOURCE (STOP LAMP SWITCH)

1. Turn ignition switch OFF.
2. Disconnect stop lamp switch connector.
3. Check voltage between stop lamp switch connector E38 terminal 3 and ground.

Stop lamp switch		Ground	Voltage (Approx.)
Connector	Terminal		Battery voltage
E38	3		



Is the inspection result normal?

- YES >> GO TO 2.
- NO >> Check the following:
 - Harness for short or open between fuse block (J/B) and stop lamp switch
 - 10A fuse (No. 7, located in fuse block [J/B])

2. CHECK STOP LAMP SWITCH

Check stop lamp switch. Refer to [TM-115. "Component Inspection \(Stop Lamp Switch\)"](#).

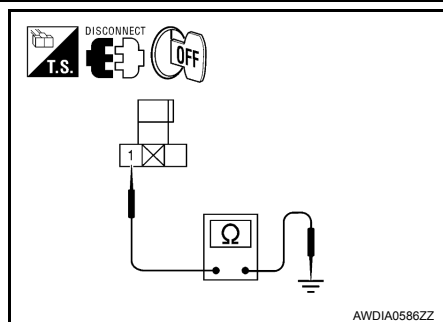
Is the inspection result normal?

- YES >> GO TO 3.
- NO >> Replace stop lamp switch. Refer to [BR-18. "Exploded View"](#).

3. CHECK GROUND CIRCUIT (SHIFT LOCK RELAY)

1. Remove shift lock relay.
2. Check continuity between shift lock relay connector E27 terminal 1 and ground.

Shift lock relay		Ground	Continuity
Connector	Terminal (+)		Yes
E27	1		



Is the inspection result normal?

- YES >> GO TO 4.
- NO >> Repair or replace damaged parts.

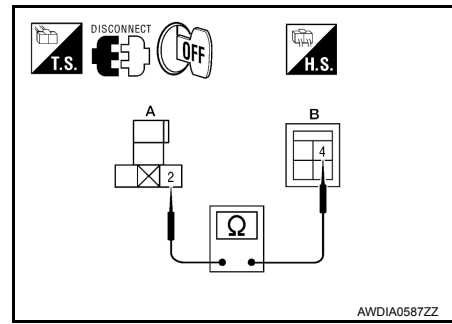
4. CHECK HARNESS BETWEEN SHIFT LOCK RELAY AND STOP LAMP SWITCH FOR OPEN

Check continuity between **shift** lock relay connector E27 (A) terminal 2 and stop lamp switch connector E38 (B) terminal 4.

Shift lock relay		stop lamp switch		Continuity
Connector	Terminal	Connector	Terminal	
E27 (A)	2	E38 (B)	4	Yes

Is the inspection result normal?

- YES >> GO TO 5.
NO >> Repair or replace damaged parts.



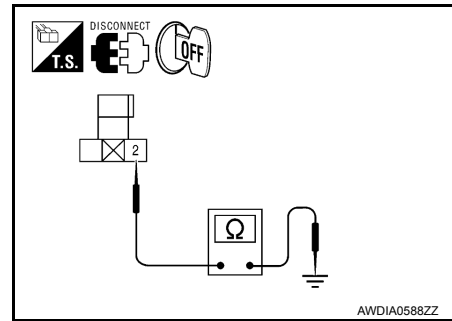
5. CHECK HARNESS BETWEEN **SHIFT** LOCK RELAY AND STOP LAMP SWITCH FOR SHORT CIRCUIT

Check continuity between **shift** lock relay connector E27 terminal 2 and ground.

Shift lock relay		Ground	Continuity
Connector	Terminal		
E27	2		No

Is the inspection result normal?

- YES >> GO TO 6.
NO >> Repair or replace damaged parts.



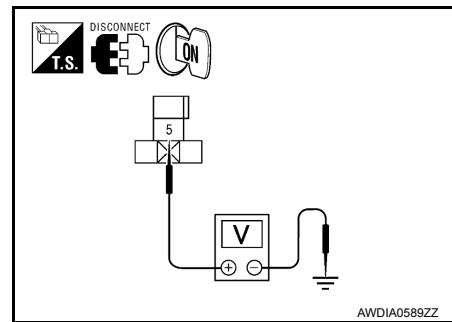
6. CHECK POWER SOURCE (**SHIFT** LOCK RELAY)

- Turn ignition switch ON.
- Check voltage between **shift** lock relay connector E27 terminal 5 and ground.

Shift lock relay		Ground	Voltage (Approx.)
Connector	Terminal		
E27	5		Battery voltage

Is the inspection result normal?

- YES >> GO TO 9.
NO >> GO TO 7.



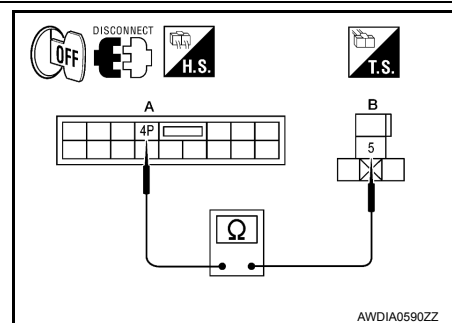
7. CHECK HARNESS BETWEEN FUSE BLOCK (J/B) AND **SHIFT** LOCK RELAY FOR OPEN

- Disconnect fuse block (J/B).
- Check continuity between fuse block (J/B) connector E6 (A) terminal 4P and **shift** lock relay connector E27 (B) terminal 5.

Fuse block (J/B)		Shift lock relay		Continuity
Connector	Terminal	Connector	Terminal	
E6 (A)	4P	E27 (B)	5	Yes

Is the inspection result normal?

- YES >> GO TO 8.
NO >> Repair or replace damaged parts.



8. CHECK HARNESS BETWEEN FUSE BLOCK (J/B) AND **SHIFT** LOCK RELAY FOR SHORT CIRCUIT

Check continuity between **shift** lock relay connector E27 terminal 5 and ground.

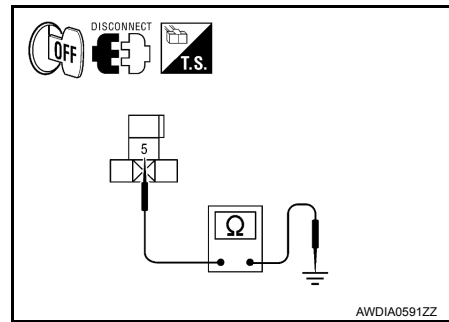
Shift lock relay		Ground	Continuity
Connector	Terminal		
E27	5		No

Is the inspection result normal?

YES >> GO TO 9.

NO >> Check the following. If NG, repair or replace damaged parts.

- 10A (No. 3, located in fuse block [J/B])
- Ignition switch



9. CHECK HARNESS BETWEEN **SHIFT** LOCK RELAY AND CVT **SHIFT** SELECTOR FOR OPEN

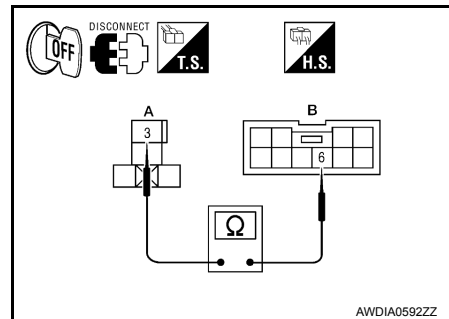
1. Disconnect CVT **shift** selector connector.
2. Check continuity between **shift** lock relay connector E27 (A) terminal 3 and CVT **shift** selector connector M78 (B) terminal 6.

Shift lock relay		CVT shift selector		Continuity
Connector	Terminal	Connector	Terminal	
E27 (A)	3	M78 (B)	6	Yes

Is the inspection result normal?

YES >> GO TO 10.

NO >> Repair or replace damaged parts.



10. CHECK HARNESS BETWEEN **SHIFT** LOCK RELAY AND CVT **SHIFT** SELECTOR FOR SHORT CIRCUIT

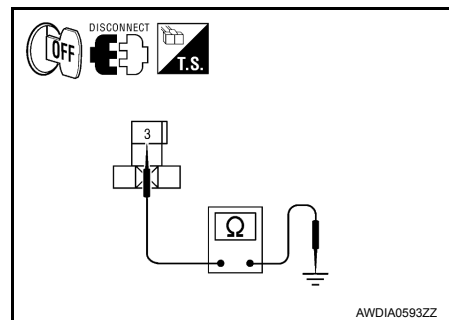
Check continuity between **shift** lock relay connector E27 terminal 3 and ground.

Shift lock relay		Ground	Continuity
Connector	Terminal		
E27	3		No

Is the inspection result normal?

YES >> GO TO 11.

NO >> Repair or replace damaged parts.



11. CHECK **SHIFT** LOCK RELAY

Check **shift** lock relay. Refer to [TM-115, "Component Inspection \(Shift Lock Relay\)"](#).

Is the inspection result normal?

YES >> GO TO 12.

NO >> Replace **shift** lock relay.

12. CHECK GROUND CIRCUIT (CVT **SHIFT** SELECTOR)

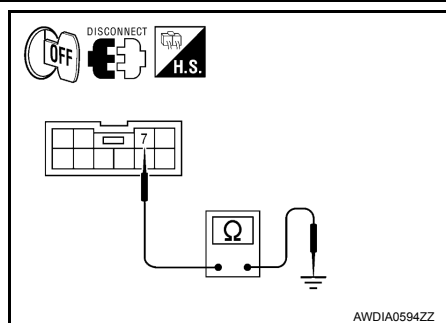
Check continuity between CVT **shift** selector connector M78 terminal 7 and ground.

CVT shift selector		Ground	Continuity
Connector	Terminal		
M78	7		Yes

Is the inspection result normal?

YES >> Replace **shift** lock solenoid. Refer to [TM-167](#). "[Exploded View](#)".

NO >> Repair or replace damaged parts.



AWDIA0594ZZ

INFOID:000000003900165

Component Inspection (Stop Lamp Switch)

1. CHECK STOP LAMP SWITCH

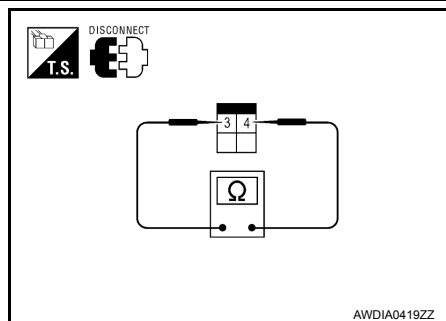
Check continuity between stop lamp switch terminals.

Stop lamp switch terminals		Condition	Continuity
3	4	Brake pedal depressed	Yes
		Brake pedal released	No

Is the inspection result normal?

YES >> Inspection End

NO >> Replace stop lamp switch. Refer to [BR-18](#). "[Exploded View](#)".



AWDIA0419ZZ

INFOID:000000003900166

Component Inspection (Shift Lock Relay)

1. CHECK SHIFT LOCK RELAY

1. Apply battery voltage between terminals 2 and 1 of the shift lock relay.

CAUTION:

Connect a fuse between the terminals when applying battery voltage.

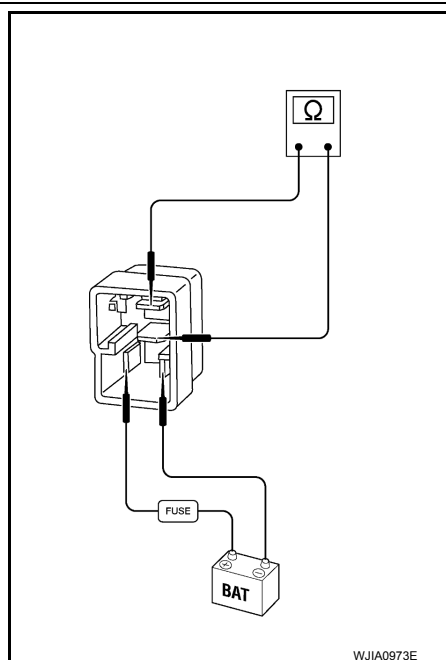
2. Check continuity between **shift** lock relay terminals 5 and 3.

Shift lock relay terminals	Condition	Continuity
5 and 3	Battery voltage applied between terminals 2 and 1.	Yes

Is the inspection result normal?

YES >> Inspection End

NO >> Replace **shift** lock relay.



WJIA0973E