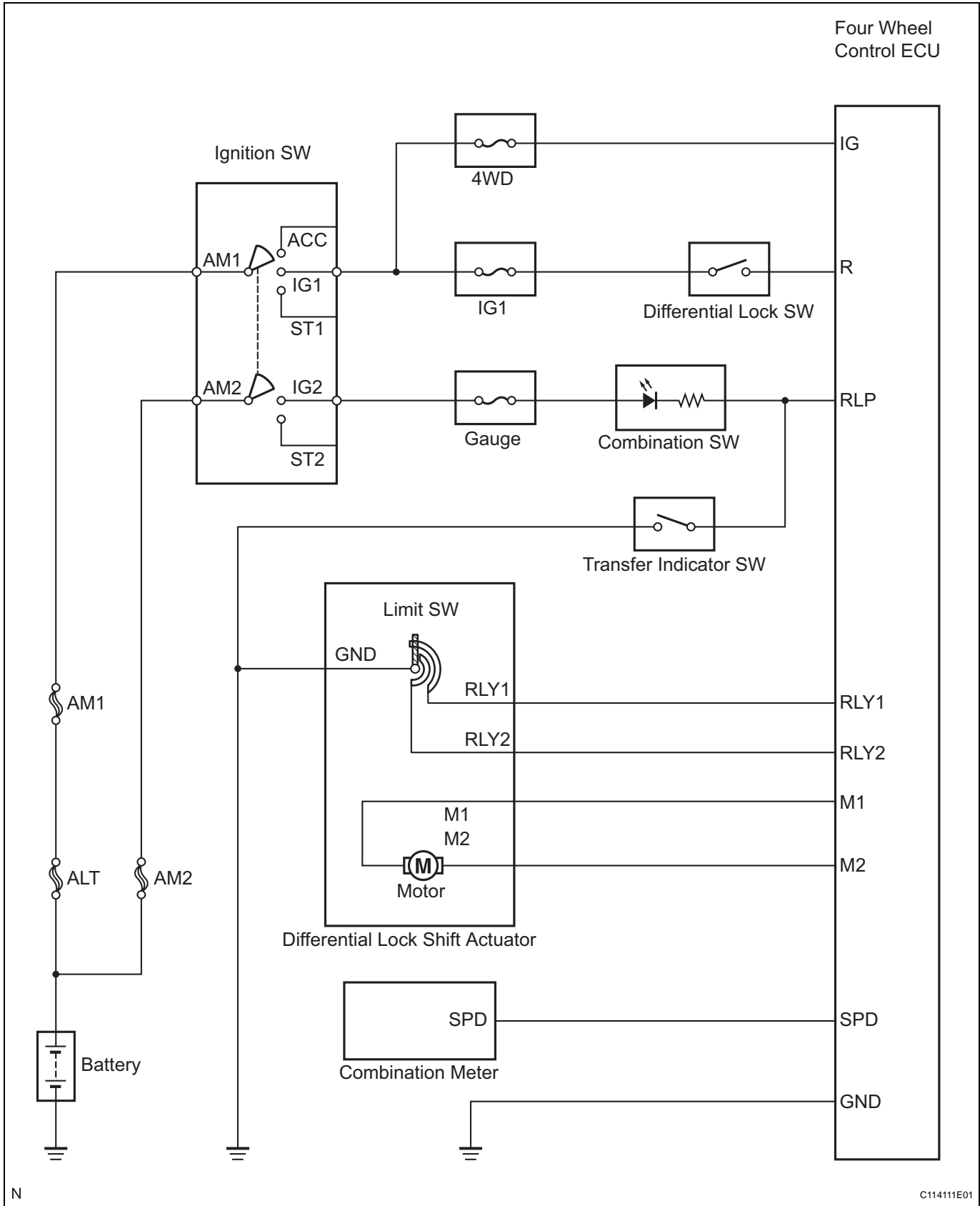
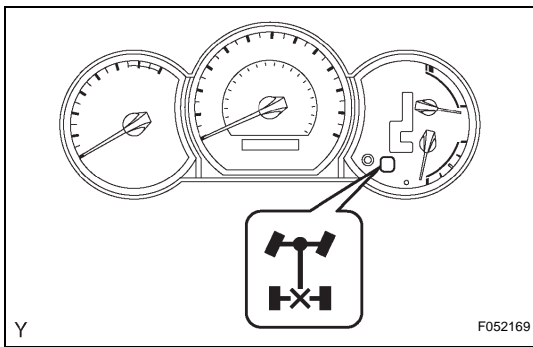


SYSTEM DIAGRAM



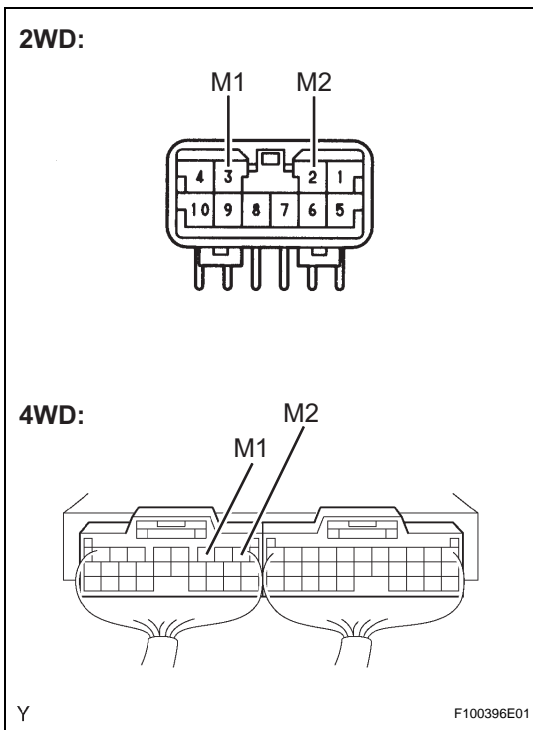


ON-VEHICLE INSPECTION

1. INSPECT REAR DIFFERENTIAL LOCK SYSTEM

- (a) Inspect the indicator light.
 - (1) Check that the indicator light illuminates for approx. 1 second when the ignition switch is turned ON.
- (b) Inspect the differential lock operation.
 - (1) Jack up the vehicle and start the engine.
 - (2) When the differential lock control switch is ON the indicator light blinks.

HINT:
If the gears of the differential lock system are not engaged, the indicator light continues blinking, so rotate the tires to engage the gear.
 - (3) When the differential lock control switch is in the OFF position, the indicator light goes off. The differential lock is released for the rear wheel at this time.
 - (4) Check the voltage between the terminals of the rear differential lock control ECU when switching the rear differential lock control ON, with the speedometer registering at approximately 7 mph (11 km/h) or more.

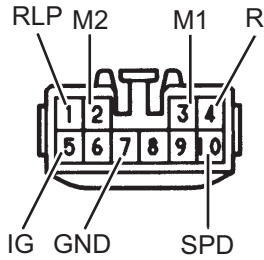


Switch position	Terminal	Specified condition
ON	M1 - M2	0.5 V or less (No change)

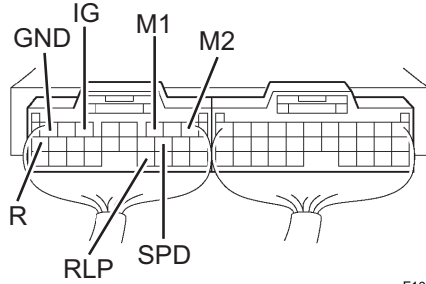
- (5) Return the differential lock control switch to OFF.
 - (6) Stop the engine and lower the vehicle.
- ### 2. INSPECT DIFFERENTIAL LOCK SYSTEM CIRCUIT
- (a) Inspect the battery positive voltage.

Battery positive voltage:
10 to 14 V

2WD:



4WD:



Y

F100397E01

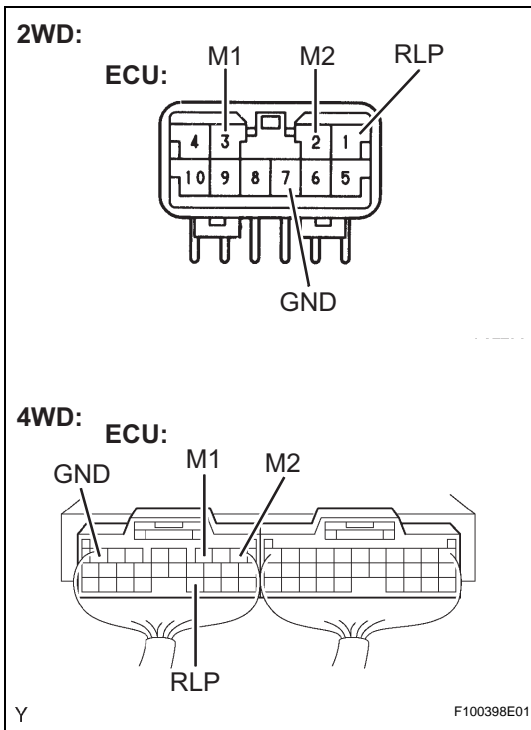
- (b) Inspect the system circuit with the connector disconnected.
Disconnect the connector from the rear differential lock control ECU and inspect the connector on the wire harness side, as shown in the table.

DF

Standard

Symbols (Terminals No.)	Trouble part	Condition	Specified value
M1 - M2	RR Differential Lock Actuator	-	Less than 100 Ω
GND - Body ground	Body Ground	-	Below 1 Ω
SPD - Body ground	Speed Sensor	Vehicle moves slowly	1 pulse each 40 cm (15.75 in.)
IG - Body ground	DIFF Fuse	Ignition switch ON	10 to 14 V
RLP - Body ground	Rear Differential Lock Indicator Switch	Ignition switch ON with indicator light ON	About 0 V
		Ignition switch ON with indicator light OFF	10 to 14 V
R - Body ground	Differential Lock Control Switch	Ignition switch ON with differential lock control switch RR	10 to 14 V
		Ignition switch ON with differential lock control switch OFF	About 0 V

If the result is not as specified value, check and repair or replace the malfunctioning part shown in the table above.



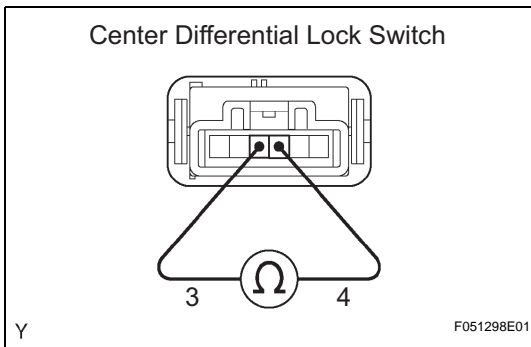
- (c) Inspect the system circuit with the connector connected.
- (1) Turn the ignition switch to the ON position.
 - (2) Using a voltmeter, measure the voltage when the differential lock control switch is in the positions shown in the table.

Tester Connection + - -	Switch position	Specified condition
RLP - GND	RR*	0.5 V or less
M1 - M2	OFF → RR	0.5 V or less → 10 - 14 V (Approx. 1 sec.) → 0.5 V or less
M2 - M1	RR → OFF	

HINT:

*: The rear differential should be locked mechanically. If the result is not as specified, replace the ECU.

- (3) Install the ECU



INSPECTION

1. INSPECT CENTER DIFFERENTIAL LOCK SWITCH

- (a) Check the resistance.
- (1) Measure the resistance using an ohmmeter.
- Standard**

Tester Connection	Switch Condition	Specified Condition
3 - 4	Released	10 kΩ or higher
3 - 4	Pushed in	Below 1 Ω

If the result is not as specified, replace the center differential lock switch.

2. INSPECT NO. 1 TRANSFER INDICATOR SWITCH

- (a) Check the resistance.
- (1) Measure the resistance using an ohmmeter.
- Standard**

Tester Connection	Switch Condition	Specified Condition
1 - 2	Released	10 kΩ or higher
1 - 2	Pushed in	Below 1 Ω

If the result is not as specified, replace the No. 1 transfer indicator switch.

