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3.	CHECK CAN COMMUNICATION LINE
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(a) Select "Bus Check" from the System Selection Menu screen, and follow the prompts on the screen to inspect the CAN bus (See page [INFO](#) [INFO](#)).

OK:

"Bus Check" indicates no malfunctions in CAN communication.

Result

RESULT	PROCEED TO
DTC is not output	A
DTC is output	B

B CHECK CAN COMMUNICATION SYSTEM

A

4.	READ VALUE USING TECHSTREAM (TRANSFER POSITION SWITCH)
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- (a) Turn the engine switch off.
- (b) Connect the Techstream to the DLC3.
- (c) Turn the Techstream on.
- (d) Turn the engine switch on (IG).
- (e) Enter the following menus: Powertrain / Four Wheel Drive / Data List.
- (f) According to the display on the Techstream, read the Data List.

Four Wheel Drive

TESTER DISPLAY	MEASUREMENT ITEM/RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Transfer Position Control SW	Transfer position switch (integration control and panel assembly) status/ ON or OFF	ON: L4 OFF: H4	-

OK:

Display changes according to transfer position switch (integration control and panel assembly) operation.

NG GO TO STEP 6

OK

5.	CHECK COMBINATION METER ASSEMBLY (4LO INDICATOR LIGHT)
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- (a) Turn the engine switch off.
- (b) Perform an Active Test of the combination meter assembly using the Techstream (See page [INFO](#) [INFO](#)).
- (c) Check the combination meter assembly.

OK:

The 4LO indicator light turns on or off in accordance with the Techstream.

OK ▶ **REPLACE 4 WHEEL DRIVE CONTROL ECU**

NG ▶ **CHECK METER / GAUGE SYSTEM**

6. INSPECT INTEGRATION CONTROL AND PANEL ASSEMBLY

(a) Remove the transfer position switch (integration control and panel assembly) (See page [INFO](#)).

(b) Inspect the transfer position switch (integration control and panel assembly) (See page [INFO](#)).

OK:

The transfer position switch (integration control and panel assembly) operates normally.

NG ▶ **REPLACE INTEGRATION CONTROL AND PANEL ASSEMBLY**

OK

7. CHECK HARNESS AND CONNECTOR (4 WHEEL DRIVE CONTROL ECU - INTEGRATION CONTROL AND PANEL ASSEMBLY)

(a) Disconnect the A27 4 wheel drive control ECU connector.

(b) Disconnect the V9 transfer position switch (integration control and panel assembly) connector.

(c) Measure the resistance according to the value(s) in the table below.

Standard Resistance:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
A27-13 (LO) - V12-21 (2WD)	Always	Below 1 Ω
A27-13 (LO) or V12-21 (2WD)- Body ground	Always	10 k Ω or higher
V12-1 (E) - Body ground	Always	Below 1 Ω

OK ▶ **REPLACE 4 WHEEL DRIVE CONTROL ECU**

NG ▶ **REPAIR OR REPLACE HARNESS OR CONNECTOR**

8. CHECK 4LO INDICATOR LIGHT

HINT:

Perform the following procedure with the vehicle stopped.

(a) Turn the engine switch on (IG).

(b) Move the shift lever to N.

(c) Turn the transfer position switch (integration control and panel assembly) to H4.

(d) Check the 4LO indicator light.

Result

RESULT	PROCEED TO
The 4LO indicator light remains illuminated	A
The 4LO indicator light is blinking or illuminated	B

Blinking: Blinks at 0.5 second intervals (0.5 seconds on and 0.5 seconds off)

B  **END**

A


9. CHECK CAN COMMUNICATION LINE

(a) Select "Bus Check" from the System Selection Menu screen, and follow the prompts on the screen to inspect the CAN bus (See page  ).

OK:

"Bus Check" indicates no malfunctions in CAN communication.

Result

RESULT	PROCEED TO
DTC is not output	A
DTC is output	B

B  **CHECK CAN COMMUNICATION SYSTEM**

A


10. READ VALUE USING TECHSTREAM (4LO INDICATOR LIGHT)

- (a) Turn the engine switch off.
- (b) Connect the Techstream to the DLC3.
- (c) Turn the Techstream on.
- (d) Turn the engine switch on (IG).
- (e) Enter the following menus: Powertrain / Four Wheel Drive / Data List.
- (f) According to the display on the Techstream, read the Data List.

Four Wheel Drive

TESTER DISPLAY	MEASUREMENT ITEM/RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
L4 Indicator Request	4LO indicator light request/ Blink3, Blink1, ON, OFF	• Blink3: Indicator light rapidly blinks • Blink1: Indicator light blinks • ON: Indicator light illuminates • OFF: Indicator light turns off	• Blinking: 0.5 second intervals (0.5 seconds on and 0.5 seconds off) • Rapidly blinking: 0.25 second intervals (0.25 seconds on and 0.25 seconds off)

- (1) Operate the transfer position switch (integration control and panel assembly) several times between H4 and L4, and then check the Techstream display condition of the 4LO indicator light.

RESULT	PROCEED TO
Data List continues to display ON even when transfer position switch (integration control and panel assembly) is operated	A
Data List display changes according to transfer position switch (integration control and panel assembly) operation	B

A ▶ REPLACE 4 WHEEL DRIVE CONTROL
ECU

B ▶ CHECK METER / GAUGE
SYSTEM

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