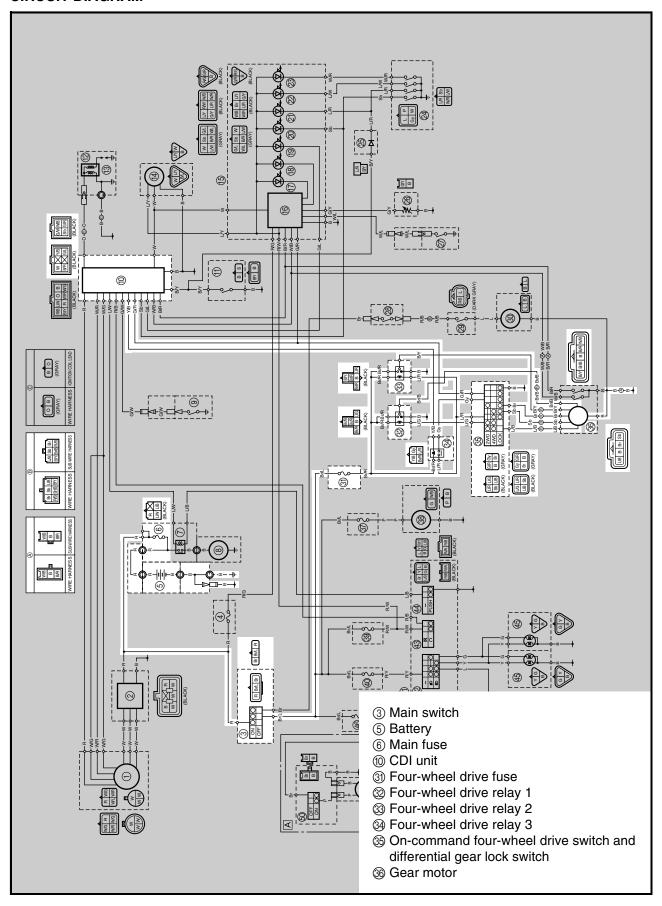


# **2WD/4WD SELECTING SYSTEM**

## **CIRCUIT DIAGRAM**





EB803020

### **TROUBLESHOOTING**

### IF THE FOUR-WHEEL DRIVE INDICATOR FAILS TO COME ON:

#### **Procedure**

Check:

- 1.Fuse (main, four-wheel drive)
- 2.Battery
- 3.Main switch
- 4. Four-wheel drive relay 1
- 5. Four-wheel drive relay 2
- 6. Four-wheel drive relay 3

- 7.On-command four-wheel drive switch and differential gear lock switch
- 8.Gear motor
- 9. Wiring connections (the entire 2WD/4WD selecting system)

#### NOTE

- Remove the following part(s) before troubleshooting:
- 1)Seat
- 2)Front carrier
- 3)Front fender
- Use the following special tool(s) for troubleshooting.



**Pocket tester:** 

P/N. YU-03112, 90890-03112



1.Fuse (main, four-wheel drive)

Refer to "CHECKING THE SWITCH".



CONTINUITY

NO CONTINUITY

Replace the fuse.

#### EB802012

### 2.Battery

 Check the battery condition.
Refer to "CHECKING THE BATTERY" in CHAPTER 3.

Open-circuit voltage:

12.8 V or more at 20 °C (68 °F)

INCORRECT

- Clean the battery terminals.
- Recharge or replace the battery.



CORRECT

3.Main switch

Refer to "CHECKING THE SWITCH".

CORRECT

**INCORRECT** 

Replace the main switch.





### 4. Four-wheel drive relay 1

- Remove the four-wheel drive relay 1 from the wire harness.
- Connect the pocket tester ( $\Omega \times 1$ ) and the battery (12 V) to the four-wheel drive relay 1 terminals.

Tester (+) lead  $\rightarrow$ 

Brown/Black terminal (1)

**Tester (–) lead** → **Black terminal** ②

Battery (+) terminal  $\rightarrow$ 

**Brown/Red terminal** ③

Battery (–) terminal  $\rightarrow$ 

Blue/Green terminal (4)

Tester (+) lead  $\rightarrow$ 

Brown/Black terminal ①

Tester (-) lead → Brown/Red terminal ⑤

Check the four-wheel drive relay 1 for continuity.



## 5. Four-wheel drive relay 2

- Remove the four-wheel drive relay 2 from the wire harness.
- Connect the pocket tester (Ω × 1) and the battery (12 V) to the four-wheel drive relay 2 terminals.

Tester (+) lead  $\rightarrow$ 

Black/Yellow terminal (1)

**Tester (–) lead** → **Black terminal** ②

Battery (+) terminal  $\rightarrow$ 

**Brown/Red terminal** ③

Battery (–) terminal  $\rightarrow$ 

Blue/Red terminal (4)

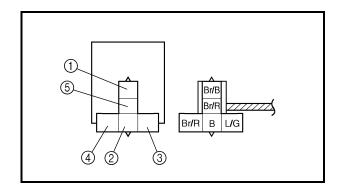
Tester (+) lead  $\rightarrow$ 

Black/Yellow terminal (1)

Tester (-) lead → Brown/Red terminal ⑤

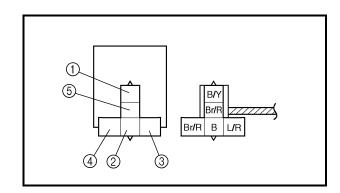
Check the four-wheel drive relay 2 for continuity.





#### NO CONTINUITY

Replace the four-wheel drive relay 1.



#### NO CONTINUITY

Replace the four-wheel drive relay 2.





## 6. Four-wheel drive relay 3

- Remove the four-wheel drive relay 3 from the wire harness.
- Connect the pocket tester (Ω × 1) and the battery (12 V) to the four-wheel drive relay 3 terminals.

Tester (+) lead  $\rightarrow$ 

**Brown/Red terminal** (1)

Tester (–) lead  $\rightarrow$ 

Yellow/Black terminal ②

Battery (+) terminal  $\rightarrow$ 

Brown/Red terminal ①

Battery (–) terminal  $\rightarrow$ 

Yellow/Black terminal ②

Tester (+) lead → Blue/Red terminal ③

**Tester (–) lead** → **Gray terminal** ④

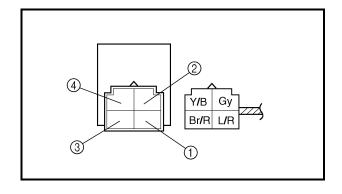
Check the four-wheel drive relay 3 for continuity.



7.On-command four-wheel drive switch and differential gear lock switch

Refer to "CHECKING THE SWITCH".





**NO CONTINUITY** 

Replace the four-wheel drive relay 3.

**INCORRECT** 

Replace the on-command four-wheel drive switch and differential gear lock switch.





### 8.Gear motor

- Disconnect the gear motor coupler.
- Remove the gear motor from the differential gear case.

Refer to "FRONT CONSTANT VELOCITY JOINTS AND DIFFERENTIAL GEAR" in CHAPTER 7.

- Connect two C size batteries to the gear motor terminals ① (as shown illustrations).
- A Check that the pinion gear ② turns counterclockwise.
- B Check that the pinion gear 2 turns clockwise.
- Make sure that the drive gear (shift fork sliding gear) operates correctly.

#### NOTE:

When installing the differential gear case in the gear motor, refer to "FRONT CONSTANT VELOCITY JOINTS AND DIFFERENTIAL GEAR" in CHAPTER 7.



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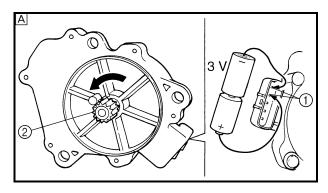
#### 9. Wiring connection

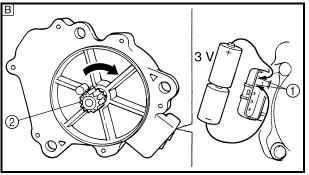
 Check the connections of the entire 2WD/ 4WD selecting system.

Refer to "CIRCUIT DIAGRAM".

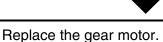


Replace the meter assembly.





## **INCORRECT**



## POOR CONNECTION



Properly connect the 2WD/4WD selecting system.