



8. Gear motor

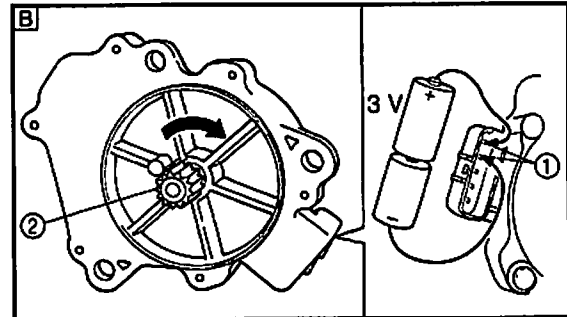
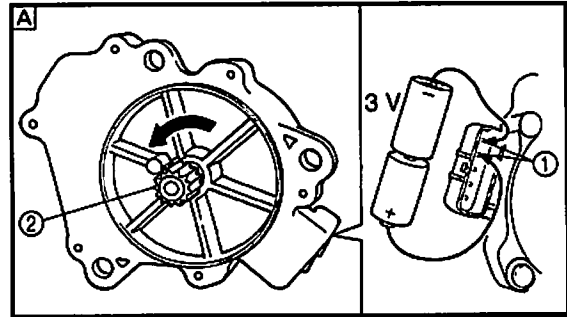
- Disconnect the gear motor coupler.
- Remove the gear motor from the differential gear case.
Refer to "FRONT CONSTANT VELOCITY JOINTS, DIFFERENTIAL GEAR AND FRONT DRIVE SHAFT" in chapter 7.
- Connect two C size batteries to the gear motor terminals ① (as shown illustrations).

A Check that the pinion gear ② turns counter-clockwise.

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, DIFFERENTIAL GEAR AND FRONT DRIVE SHAFT" in chapter 7.



INCORRECT



Replace the gear motor.

CORRECT

EB803028

9. Wiring connection

- Check the connections of the entire 2WD/4WD selecting system.
Refer to "CIRCUIT DIAGRAM".

CORRECT

Replace the C.D.I. unit.

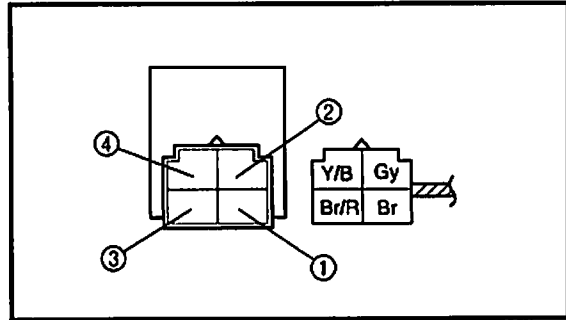
POOR CONNECTION



Properly connect the 2WD/4WD selecting system.



6. Four-wheel drive relay 3
<ul style="list-style-type: none"> • Remove the four-wheel drive relay 3 from the wire harness. • Connect the pocket tester ($\Omega \times 1$) and the battery (12 V) to the four-wheel drive relay 3 terminals.
Battery (+) terminal → Brown/Red terminal ①
Battery (-) terminal → Yellow/Black terminal ②
Tester (+) lead → Brown terminal ③ Tester (-) lead → Gray terminal ④
<ul style="list-style-type: none"> • Check the four-wheel drive relay 3 for continuity.



NO CONTINUITY

Replace the four-wheel drive relay 3.

CONTINUITY



7. On-Command four-wheel drive switch and differential gear lock switch
Refer to "CHECKING THE SWITCHES".

INCORRECT

Replace the On-Command four-wheel drive switch and differential gear lock switch.

CORRECT



*



4. Four-wheel drive relay 2

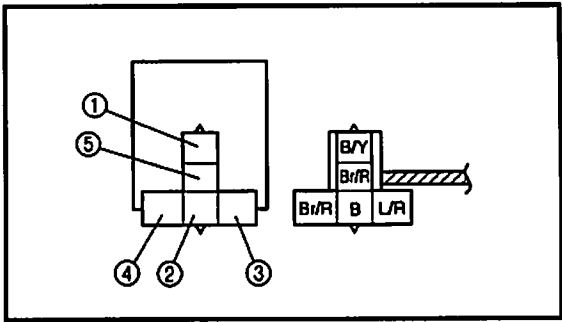
- Remove the four-wheel drive relay 2 from the wire harness.
- Connect the pocket tester ($\Omega \times 1$) and the battery (12 V) to the four-wheel drive relay 2 terminals.

Tester (+) lead → **Black/Yellow terminal ①**
Tester (-) lead → **Black terminal ②**

Battery (+) terminal → **Brown/Red terminal ③**
Battery (-) terminal → **Blue/Red terminal ④**

Tester (+) lead → **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 2.



5. Four-wheel drive relay 1

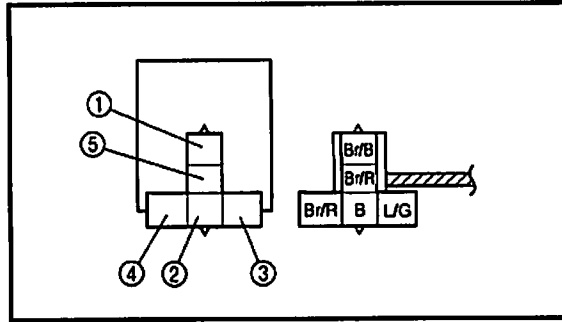
- Remove the four-wheel drive relay 1 from the wire harness.
- Connect the pocket tester ($\Omega \times 1$) and the battery (12 V) to the four-wheel drive relay 1 terminals.

Tester (+) lead → **Brown/Black terminal ①**
Tester (-) lead → **Black terminal ②**

Battery (+) terminal → **Brown/Red terminal ③**
Battery (-) terminal → **Blue/Green terminal ④**

Tester (+) lead → **Brown/Black terminal ①**
Tester (-) lead → **Brown/Red terminal ⑤**

- Check the four-wheel drive relay 1 for continuity.



NO CONTINUITY

Replace the four-wheel drive relay 1.



EB803020
TROUBLESHOOTING

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

Procedure

Check:

- 1. Fuses (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) Console
- Use the following special tool(s) for troubleshooting.

	Pocket tester P/N. YU-03112-C, 90890-03112
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EB802011

1. Fuses (main, four-wheel drive)
Refer to "CHECKING THE SWITCHES".

CONTINUITY
↓

NO CONTINUITY

Replace the fuse.

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2. Battery

- Check the battery condition. Refer to "CHECKING AND CHARGING THE BATTERY" in chapter 3.

Open-circuit voltage
12.8 V or more at 20 °C (68 °F)

CORRECT
↓

INCORRECT

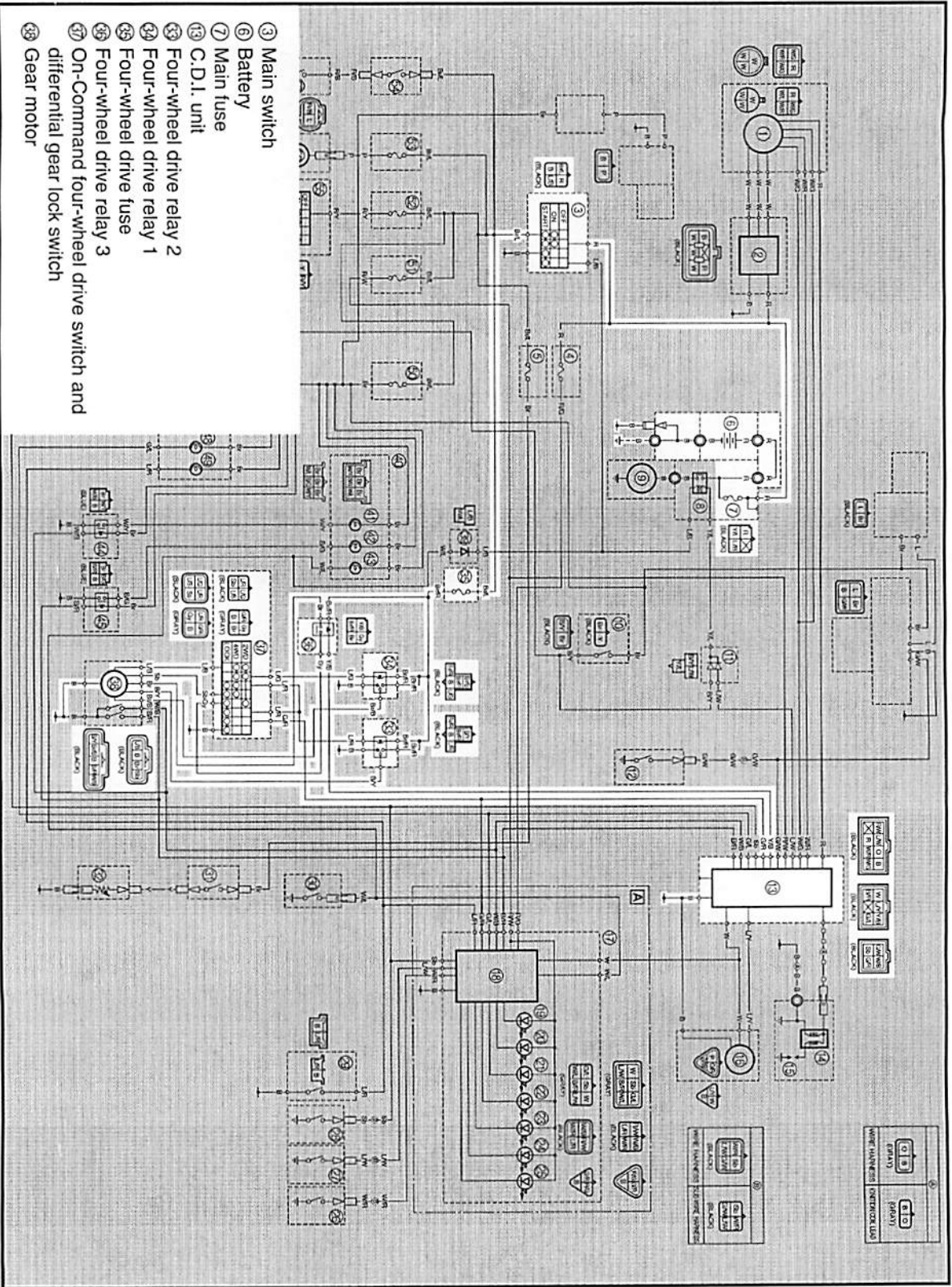
- Clean the battery terminals.
- Recharge or replace the battery.

3. Main switch
Refer to "CHECKING THE SWITCHES".

CORRECT
↓
*

INCORRECT

Replace the main switch.



- 1 Main switch
- 2 Battery
- 3 Main fuse
- 4 C.D.I. unit
- 5 Four-wheel drive relay 2
- 6 Four-wheel drive relay 1
- 7 Four-wheel drive fuse
- 8 Four-wheel drive relay 3
- 9 On-Command four-wheel drive switch and differential gear lock switch
- 10 Gear motor

2WD/4WD SELECTING SYSTEM
CIRCUIT DIAGRAM

CHECKING THE SWITCHES

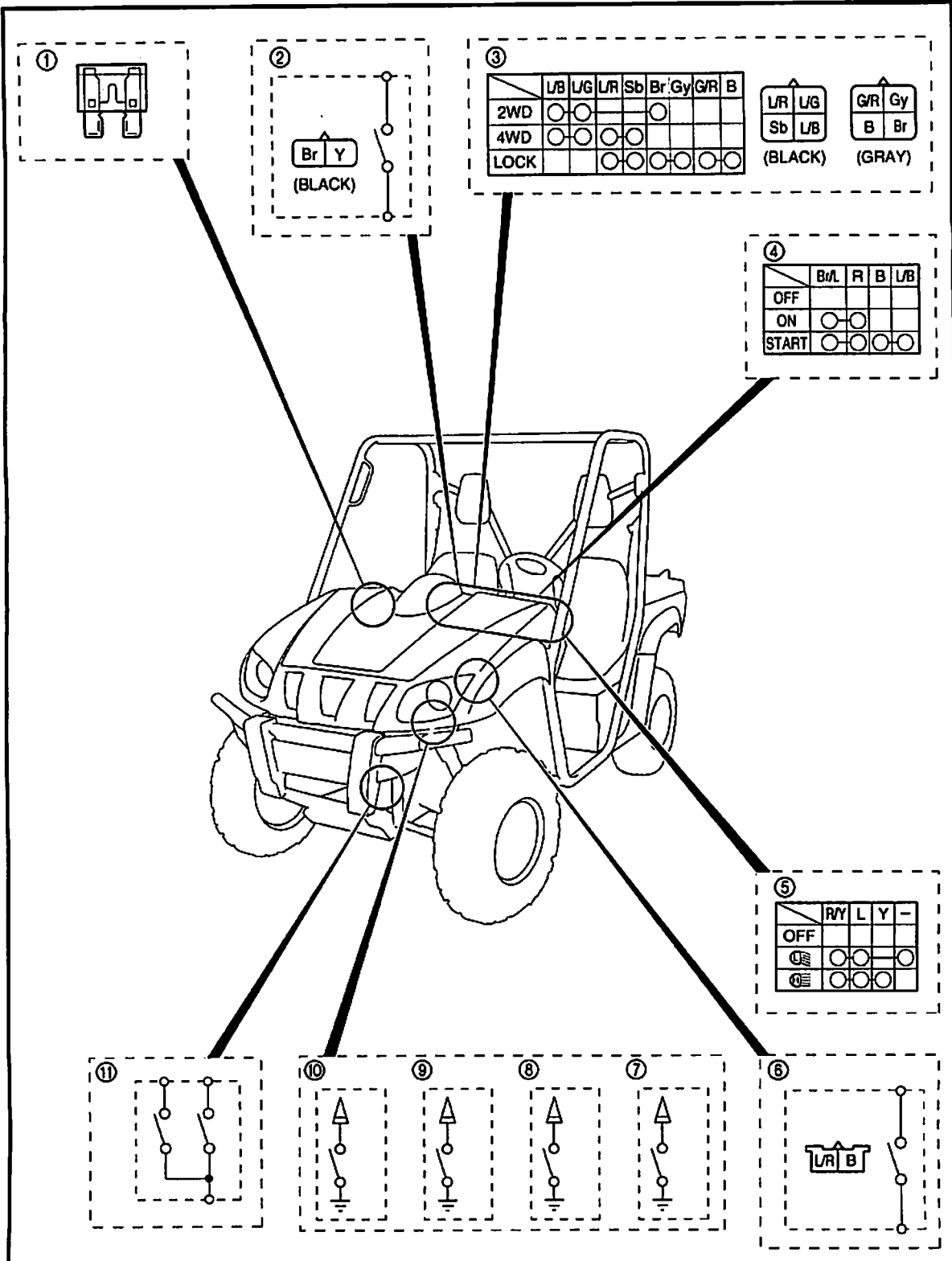


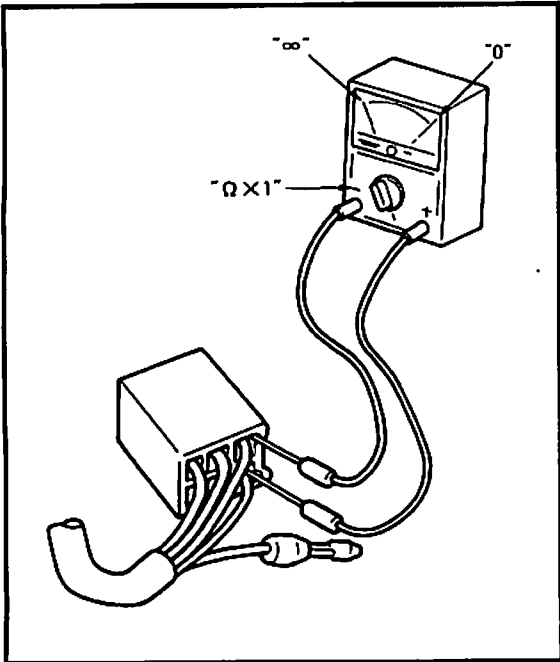
CHECKING THE SWITCH CONTINUITY

Refer to "CHECKING THE SWITCHES" and check for continuity between lead terminals.

Poor connection, no continuity → Correct or replace.

* The coupler locations are circled.





CHECKING THE SWITCHES

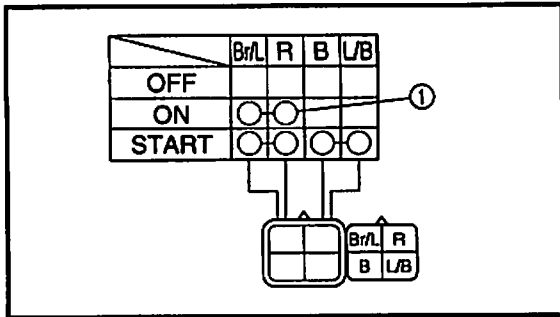
CHECKING THE SWITCHES

Use a pocket tester to check the terminals for continuity. If the continuity is faulty at any point, replace the switch.

	<p>Pocket tester P/N. YU-03112-C, 90890-03112</p>
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NOTE:

- Set the pocket tester to "0" before starting the test.
- The pocket tester should be set to the "Ω x 1" range when testing the switch for continuity.
- Turn the switch on and off a few times when checking it.



CHECKING A SWITCH SHOWN IN THE MANUAL

The terminal connections for switches (main switch, light switch, etc.) are shown in a chart similar to the one on the left.

This chart shows the switch positions in the column and the switch lead colors in the top row.

For each switch position, "○—○" indicates the terminals with continuity.

The example chart shows that:

- ① There is continuity between the "Brown/Blue and Red" leads when the switch is set to "ON".