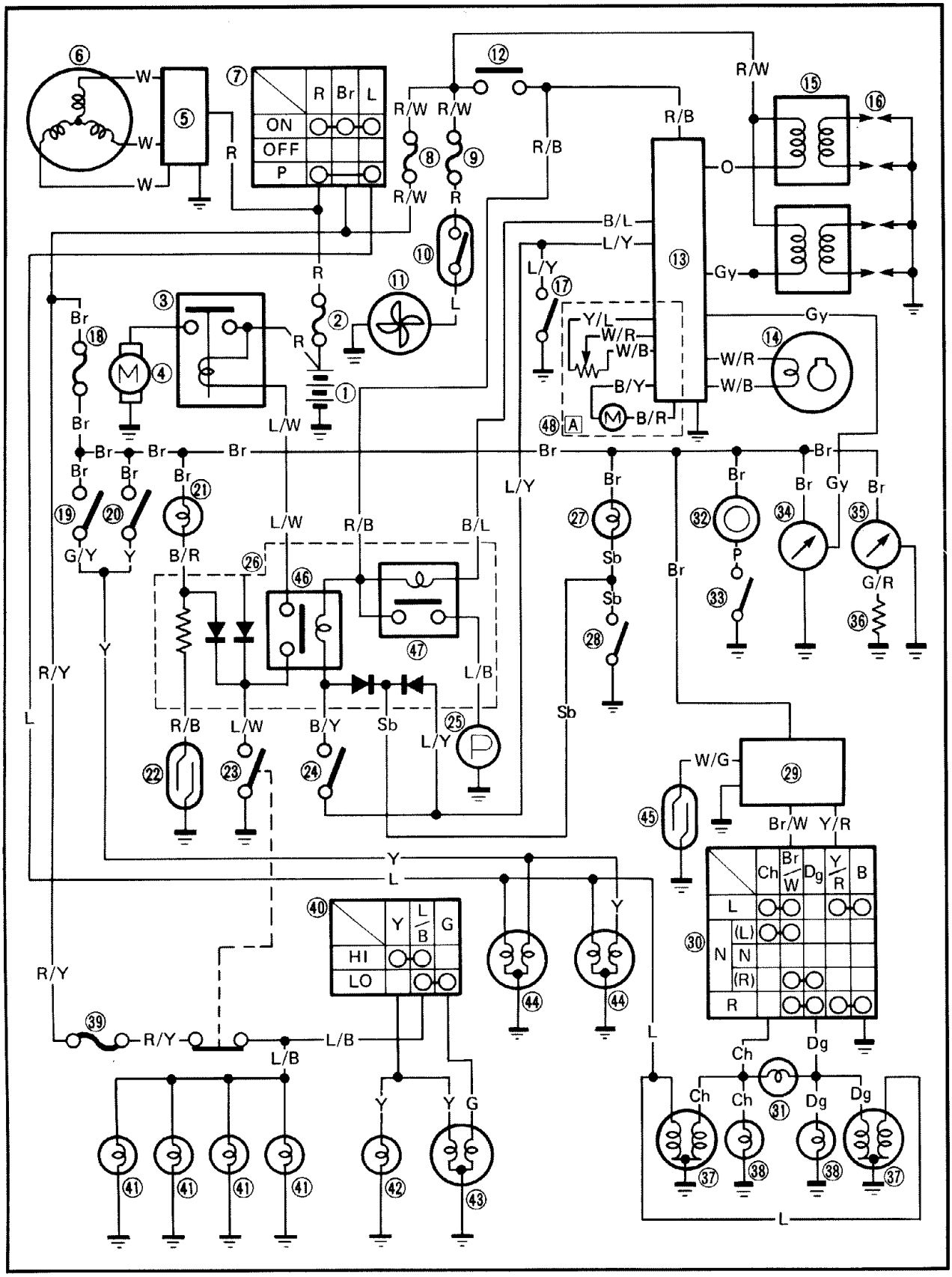
FUEL PUMP SYSTEM

CIRCUIT DIAGRAM

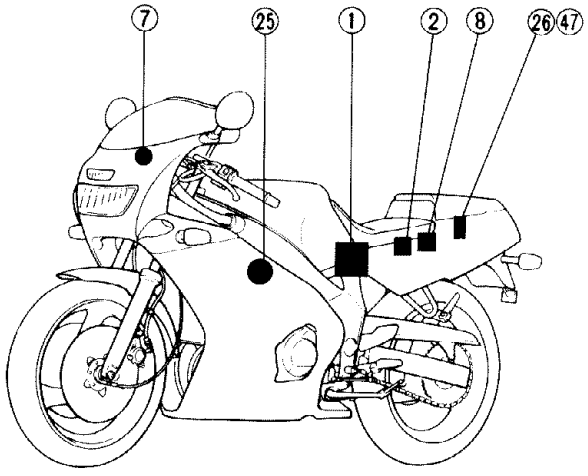


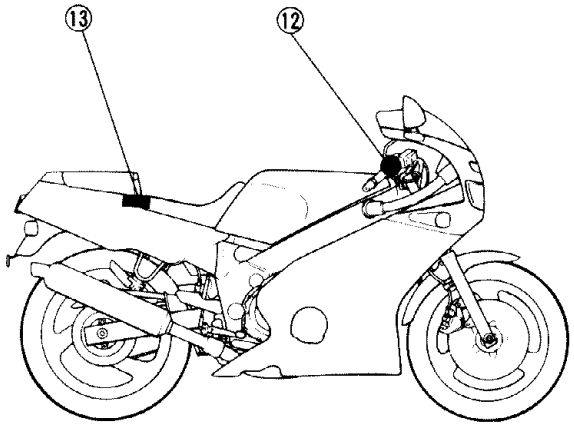
Aforementioned circuit shows fuel pump system circuit in circuit diagram.

NOTE:

For the color codes, see page 41.

① Battery
② Fuse (main)
⑦ Main switch
⑧ Fuse (ignition)
⑫ "ENGINE STOP" switch
⑬ Ignitor unit
㉕ Fuel pump
㉖ Relay assembly
㊼ Fuel pump relay

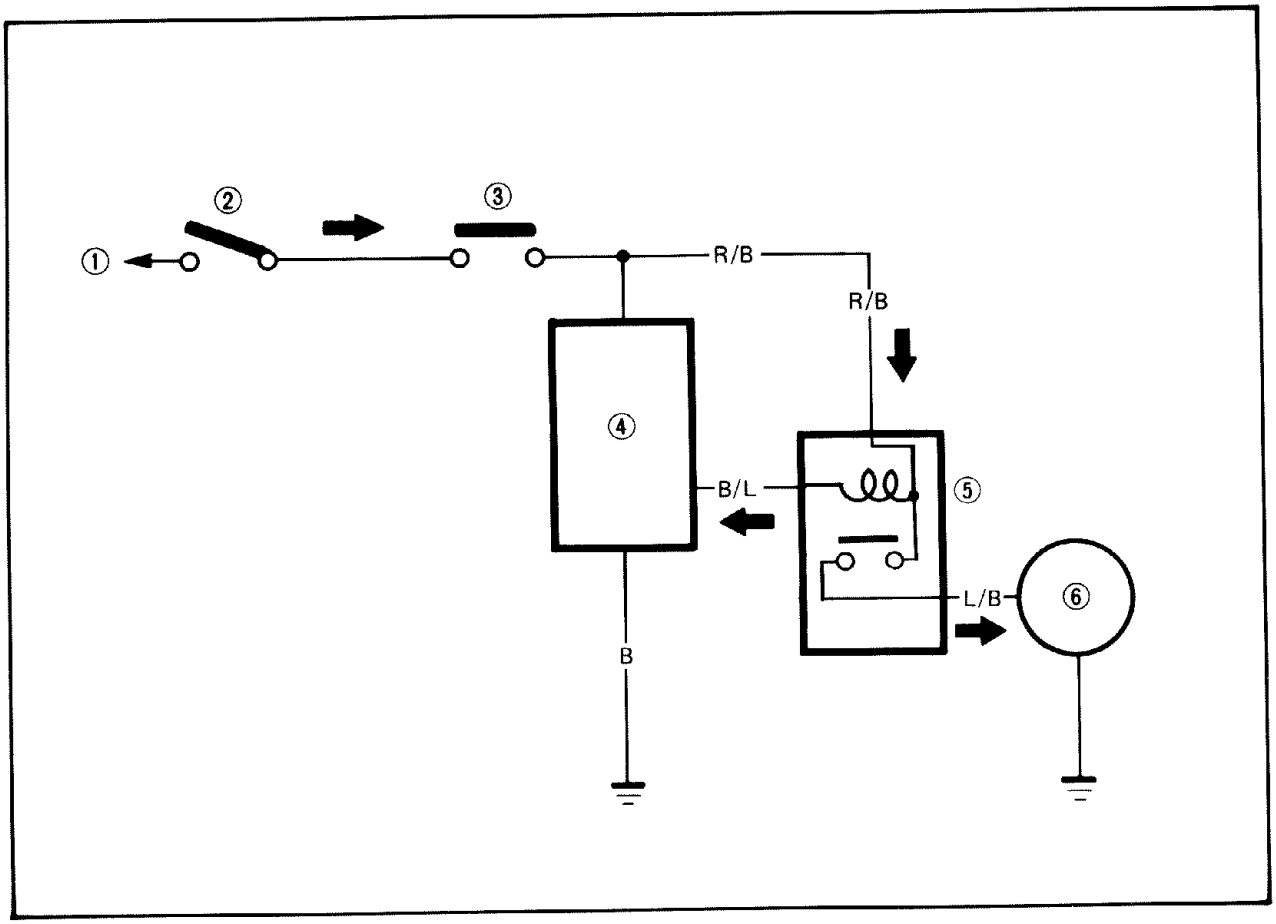




FUEL PUMP CIRCUIT OPERATION

The fuel pump circuit consists of the fuel pump relay, fuel pump, "ENGINE STOP" switch and digital ignition unit.
The digital ignition unit includes the control unit for the fuel pump.
The fuel pump starts and stops as indicated in the chart below.

① To main fuse and battery
② Main switch
③ "ENGINE STOP" switch
④ Digital ignitor unit
⑤ Fuel pump relay
⑥ Fuel pump



FUEL PUMP		
START		STOP
• Main/Engine stop switch turned to "ON"	• Engine turned on	• Engine turned off
For about 5 seconds when carburetor fuel level is low	After about 0.1 second	After about 5 seconds

TROUBLESHOOTING

FUEL PUMP FAILS TO OPERATE.

Procedure

1. Fuse (main)
2. Battery
3. Main switch
4. "ENGINE STOP" switch
5. Fuel pump relay (relay assembly)
6. Fuel pump
7. Wiring connection (Entire fuel system)

NOTE:

- Remove the following before troubleshooting.
  1) Seat (front and rear)
  2) Top cover
  3) Fuel tank
- Use the following special tool in this troubleshooting.

Pocket tester:
YU-03112
90890-03112

1. Fuse (main)

- Remove the fuse (main) and (ignition).
- Connect the pocket tester (Ω x 1) to the fuse (main).
- Check the fuse for continuity.

NO CONTINUITY → Fuse is faulty, replace it.

CONTINUITY ↓

2. Battery

- Check the battery condition. Refer to the "BATTERY INSPECTION" section in the CHAPTER 3.

Specific gravity:
1.280 at 20°C (68°F)

INCORRECT →
- Refill battery fluid.
- Clean battery terminals.
- Recharge or replace battery.

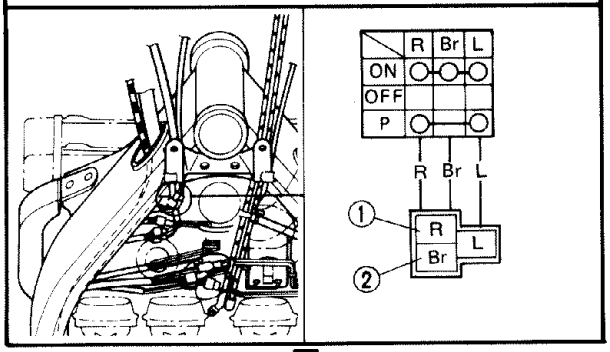
CORRECT ↓

*

*

3. Main switch

- Disconnect the main switch coupler and lead from the wire harness.
- Check the switch component for the continuity between "Red ① and Brown ② " Refer to the "CHECKING OF SWITCHES" section.



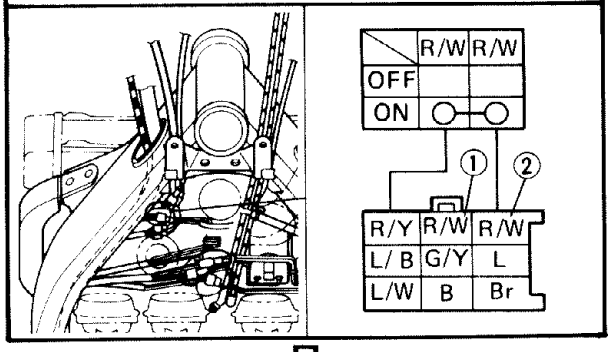
INCORRECT

Replace main switch.

CORRECT

4. "ENGINE STOP" switch

- Disconnect the "ENGINE STOP" switch coupler from the wire harness.
- Check the switch component for the continuity between "Red/White ① and Red/White ② ". Refer to the "CHECKING OF SWITCHES" section.



INCORRECT

Replace handlebar switch (right).

CORRECT

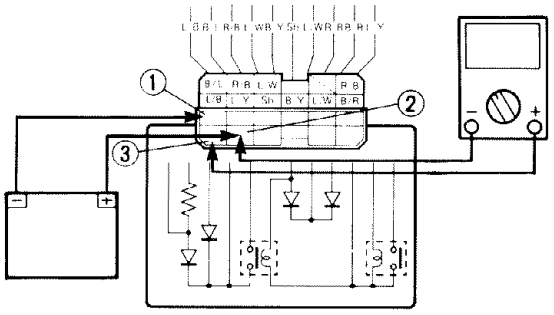
*

*

5. Fuel pump relay (relay assembly)

- Disconnect the fuel pump relay coupler from the wire harness.
- Connect the pocket tester (Ω x 1) and battery (12V) voltage to the fuel pump relay coupler terminals.

Tester (+) lead → Blue/Black ① terminal
Tester (–) lead → Red/Black ② terminal
Battery (+) lead → Red/Black ② terminal
Battery (–) lead → Black/Blue ③ terminal



- Check the relay for continuity.

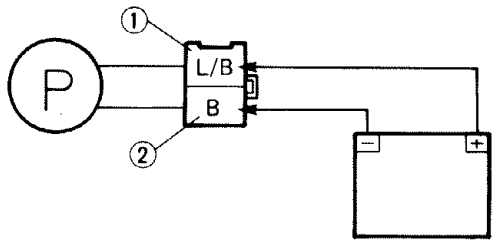
NO CONTINUITY → Replace relay assembly.

CONTINUITY ↓

6. Fuel pump

- Disconnect the fuel pump coupler from the wire harness.
- Connect the battery voltage as shown.

Battery (+) lead → Blue/Black ① terminal
Battery (-) lead → Black ② terminal

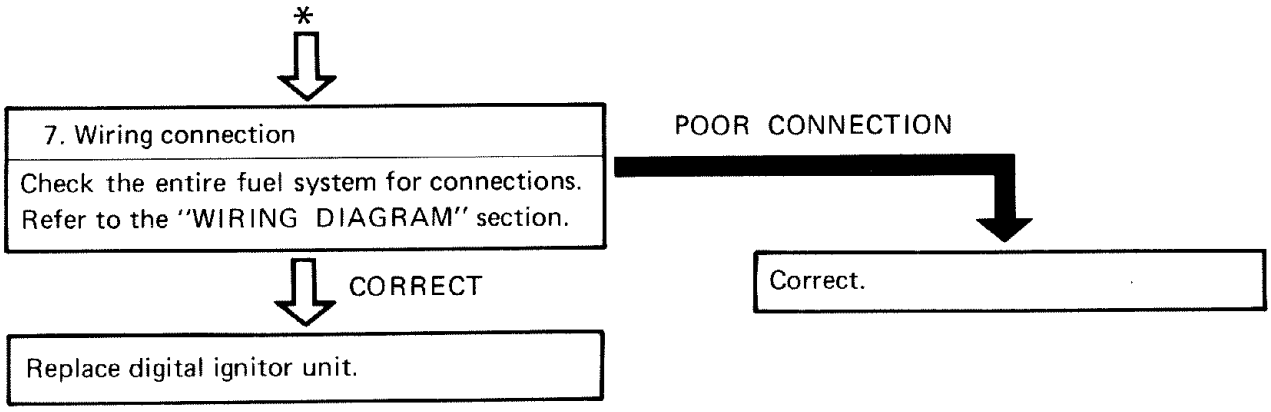


- Check the fuel pump operation.

NO OPERATIVE → Replace fuel pump.

OPERATIVE ↓

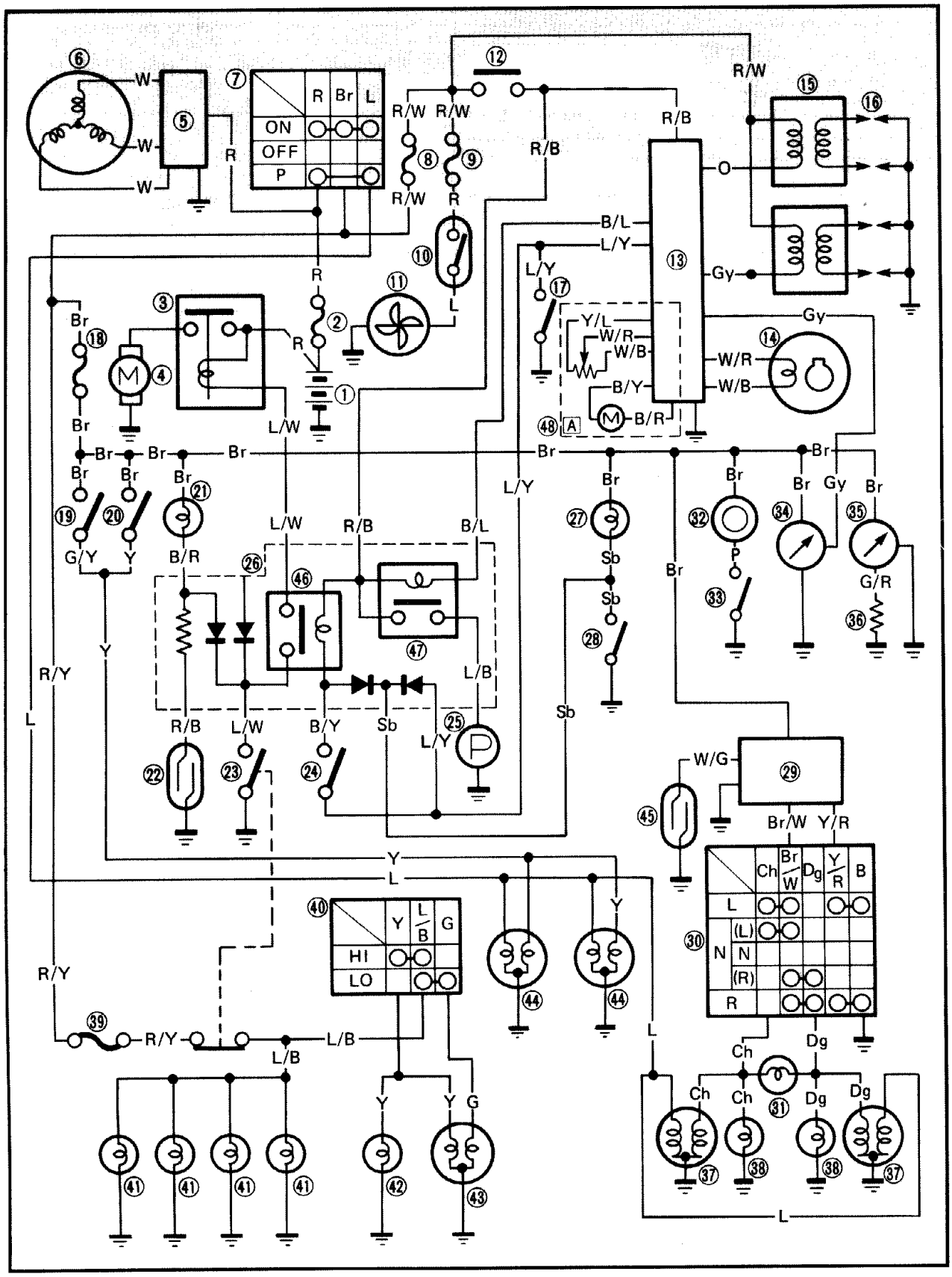
*


*
7. Wiring connection
Check the entire fuel system for connections.
Refer to the "WIRING DIAGRAM" section.
POOR CONNECTION
Correct.
CORRECT
Replace digital ignitor unit.

— MEMO —

EXUP SYSTEM (FOR CALIFORNIA ONLY)

CIRCUIT DIAGRAM

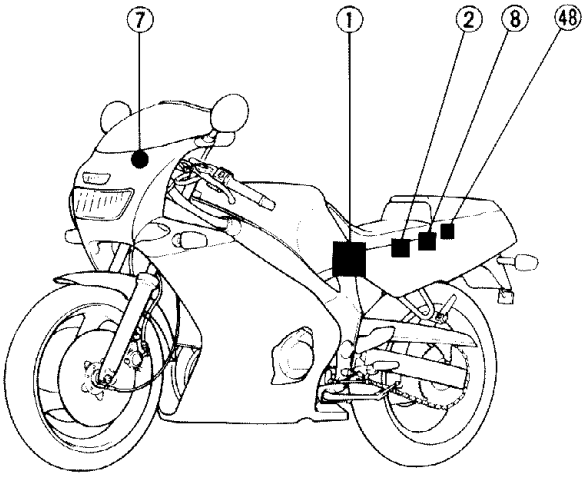


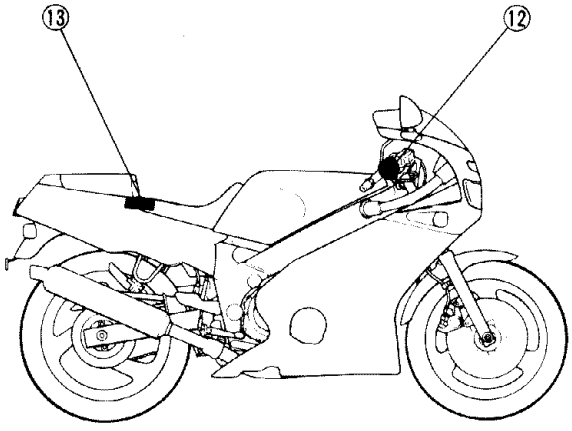
Aformentioned circuit diagram shows EXUP circuit in circuit diagram.

NOTE:

For the color codes, see page 41.

① Battery
② Fuse (main)
⑦ Main switch
⑧ Fuse (ignition)
⑫ "ENGINE STOP" switch
⑬ Ignitor unit
㊽ "EXUP" servo motor
[A] For California only





TROUBLESHOOTING

EXUP SERVOMOTOR DOES NOT OPERATE.

Procedure (1)
Check;
1. EXUP servo motor operation (with EXUP servo motor coupler connected)
2. Voltage
3. EXUP servo motor operation (with EXUP servo motor coupler disconnected)
4. EXUP servo motor resistance (potentiometent resistance)
5. Wiring connection (entire EXUP system)

Procedure (2)
Check;
1. Fuse "MAIN/IGNITION"
2. Battery
3. Main switch
4. "ENGINE STOP" switch
5. Wiring connection (entire EXUP system)

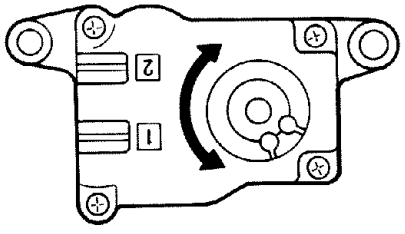
NOTE:
- Remove the following parts before troubleshooting.
  1) Seat (front and rear)
  2) Side cover (left)
  3) Side cowling (left)
- Use the following special tool in this troubleshooting.

Pocket tester:
YU-03112
90890-03112

Procedure (1)

1. EXUP servo motor operation (with EXUP servo motor coupler connected)

- Disconnect the EXUP cables at EXUP servo motor pully side.
- Start the engine and rev it up to 2,000 r/min.



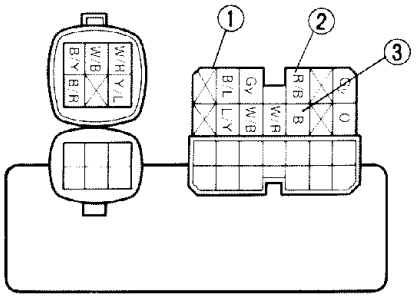
PULLY TURNS → Check the EXUP cables connection. If connection is correct. Inspect the EXUP valve and cables. Refer to "ENGINE OVERHAUL" section in the CHAPTER 4.

PULLY DOES NOT TURN ↓

2. Voltage

- Connect the pocket tester (DC20V) to the ignitor unit ① connector.

Tester (+) lead → Red/Black ② terminal
Tester (–) lead → Black ③ terminal



- Turn the main switch to "ON" and check for the voltage between "Red/Black and Black".

Voltage (Red/Black – Black):
10 ~ 14V

OUT OF SPECIFICATION

Go to the "Procedure (2)".

MEETS SPECIFICATION

3. EXUP servo motor operation (with EXUP servo motor coupler disconnected)

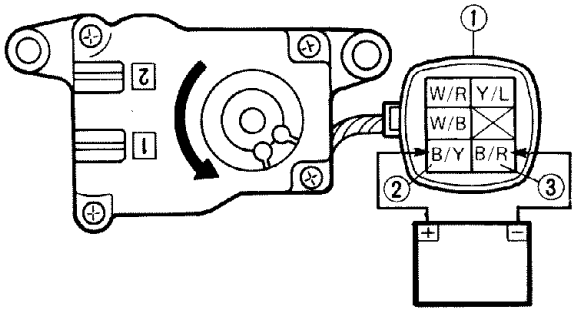
- Disconnect the EXUP cables at EXUP servo motor pulley side.
- Disconnect the EXUP servo motor coupler ① from the wireharness.
- Connect the battery leads to the EXUP servo motor coupler.

Battery positive lead → Black/Yellow ② lead
Battery negative lead → Black/Red ③ lead

- Check for pully operation by allowing it to rotate serveral times.

CAUTION:

This test should be performed within a few seconds to prevent further damage.



PULLY DOES NOT TURN

Replace EXUP servo motor.

PULLY TURNS

*

*

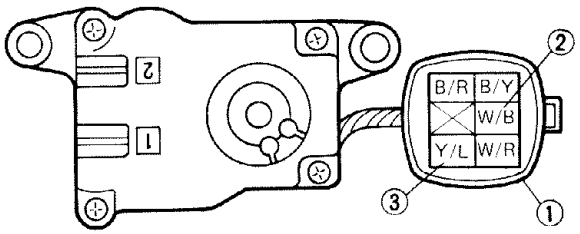
4. EXUP servo motor resistance (potentiometer resistance)

- Disconnect the EXUP servo motor coupler ① from the wireharness.

Steps 1:

- Connect the pocket tester (Ω x 1K) to the EXUP servo motor couplers.

Tester (+) lead → White/Black ② lead
Tester (–) lead → Yellow/Blue ③ lead



- Measure the EXUP servo motor resistance.

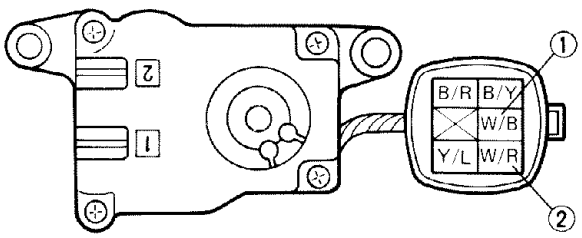
EXUP servo motor resistance:
6.7 ~ 10 kΩ
(White/Black – Yellow/Blue)

OUT OF SPECIFICATION

Steps 2:

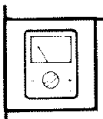
- Connect the pocket tester (Ω x 1K) to the EXUP servo motor coupler.

Tester (+) lead → White/Black ① lead
Tester (–) lead → White/Red ② lead



- Measure the EXUP servo motor resistance while turning the pully slowly.

EXUP servo motor is faulty, replace it.



EXUP servo motor resistance:
0 ~ about 10 kΩ
(White/Black – White/Red)
When pully is turned one turn.

BOTH MEET SPECIFICATIONS

5. Wiring connection

Check the entire EXUP system for connections. Refer to the "WIRING DIAGRAM" section.

POOR CONNECTION

Correct.

CORRECT

Ignitor unit is faulty, replace it.

Procedure (2)

1. Fuse "MAIN/IGNITION"
- Remove the fuse "MAIN" and "IGNITION".
- Connect the pocket tester (Ω x 1) to the fuse "MAIN" and "IGNITION".
- Check the fuse for continuity.

NO CONTINUITY → Replace fuse "MAIN" and/or "IGNITION".

CONTINUITY ↓

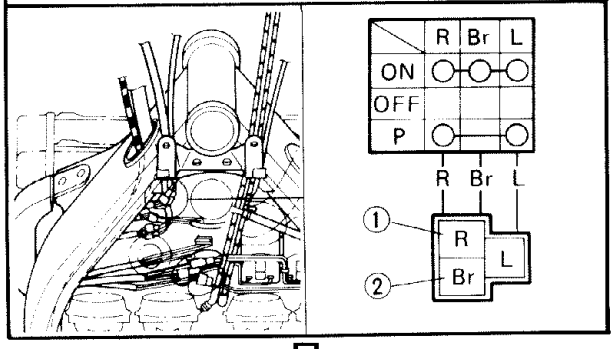
2. Battery
- Check the battery condition.
- Refer to the "BATTERY INSPECTION" section in the CHAPTER 3.

Specific gravity:
1.280 at 20° C (68° F)

INCORRECT →
- Refill battery fluid.
- Clean battery terminals.
- Recharge or replace battery.

CORRECT ↓

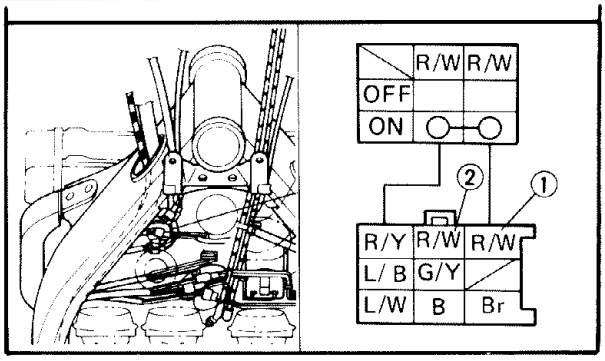
3. Main switch
- Disconnect the main switch coupler from the wireharness.
- Check the switch component for the continuity between "Red ① and Brown ②". Refer to the "CHECKING OF SWITCHES" section.



INCORRECT → Replace main switch.

CORRECT ↓

4. "ENGINE STOP" switch
- Disconnect the "ENGINE STOP" switch coupler from the wireharness.
- Check the switch component for the continuity between "Red/White ① and Red/White ②". Refer to the "CHECKING OF SWITCHES" section.



INCORRECT

Replace handlebar switch (right).

CORRECT

5. Wiring connection

Check the entire EXUP system for connections. Refer to the "WIRING DIAGRAM" section.

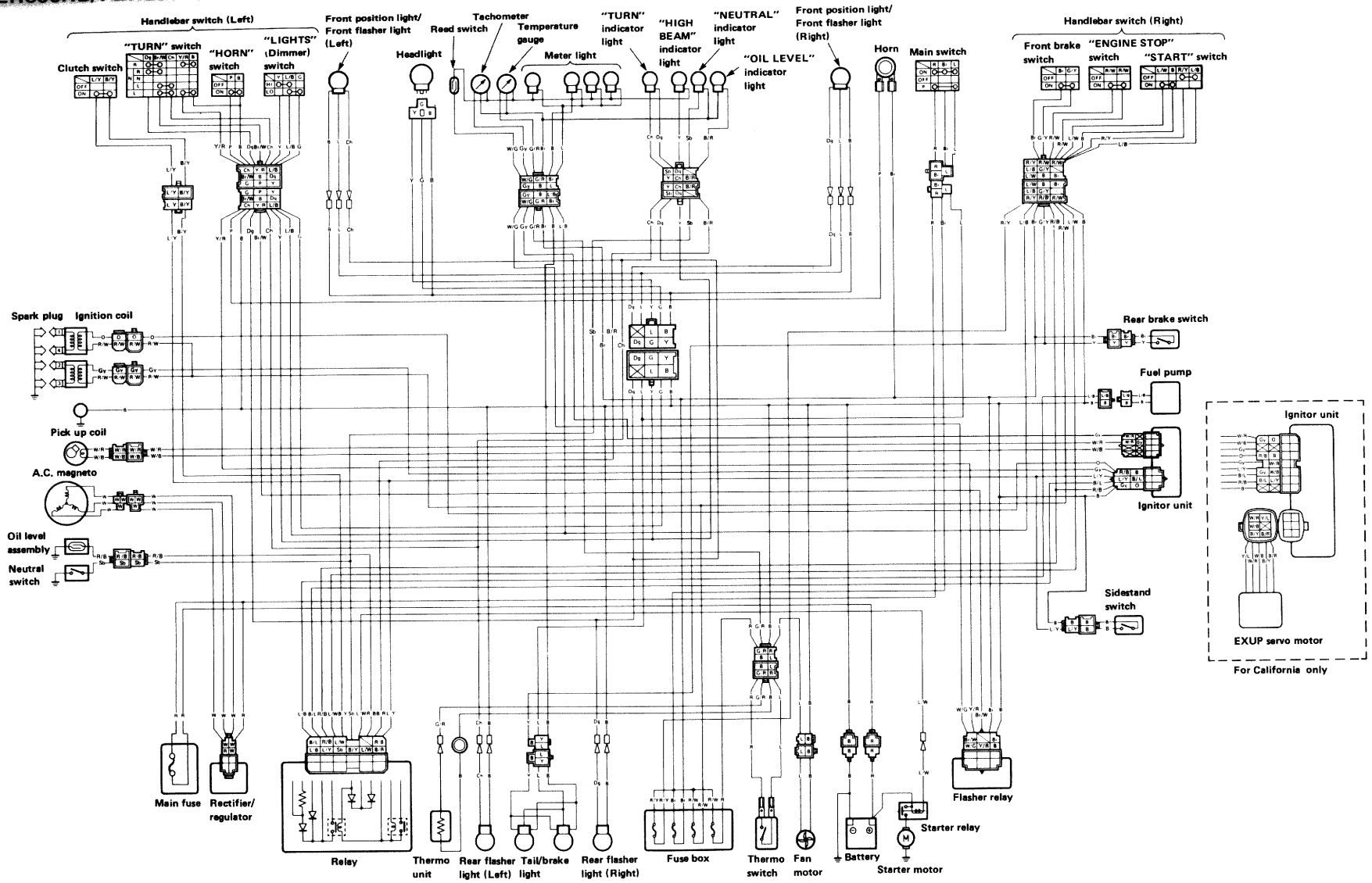
POOR CONNECTION

Correct.

CORRECT

Go to "Procedure (1)".

FZR600RB/FZR600RBC WIRING DIAGRAM



COLOR CODE

B . . . . . .Black	P . . . . . .Pink	Sb . . . . . .Sky blue	B/R . . . . .Black/Red	G/R . . . . .Green/Red	Br/W. . . . .Brown/White
L . . . . . .Blue	O . . . . . .Orange	Dg . . . . . .Dark green	L/B. . . . . .Blue/Black	Y/R . . . . .Yellow/Red	W/B . . . . .White/Black
G . . . . . .Green	Br. . . . . .Brown	W. . . . . .White	L/Y . . . . .Blue/Yellow	R/B . . . . .Red/Black	W/G . . . . .White/Green
Y . . . . . .Yellow	Ch . . . . . .Chocolate	B/L. . . . . .Black/Blue	L/W . . . . .Blue/White	R/Y . . . . .Red/Yellow	W/R . . . . .White/Red
R . . . . . .Red	Gy . . . . . .Gray	B/Y . . . . .Black/Yellow	G/Y . . . . .Green/Yellow	R/W . . . . .Red/White	