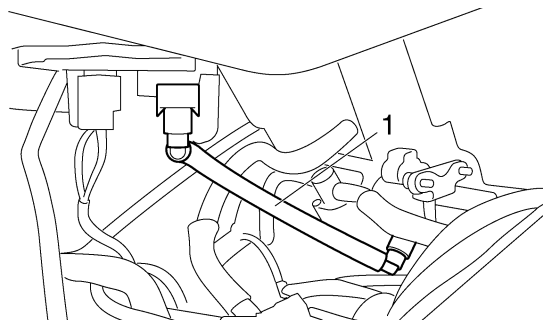
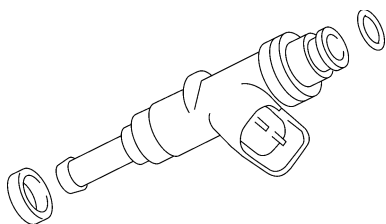


EAS26980

CHECKING THE INJECTORS

1. Check:
 - Injectors
 - Damage → Replace.



- c. Connect the pressure gauge "2" and adapter "3" to the fuel hose (fuel tank to primary injector fuel rail).

Pressure gauge
90890-03153
YU-03153
Fuel pressure adapter
90890-03176
YM-03176

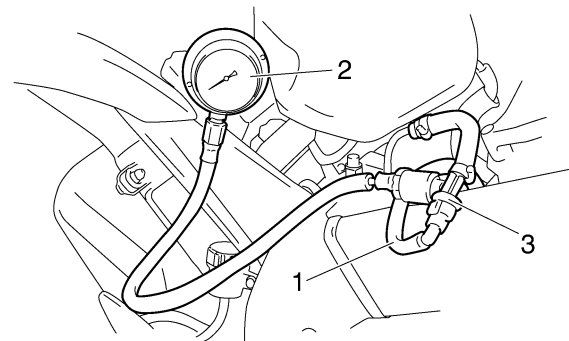
EAS26990

CHECKING THE THROTTLE BODIES

1. Check:
 - Throttle bodies
 - Cracks/damage → Replace the throttle bodies as a set.
2. Check:
 - Fuel passages
 - Obstructions → Clean.



- a. Wash the throttle bodies in a petroleum-based solvent.
Do not use any caustic carburetor cleaning solution.
- b. Blow out all of the passages with compressed air.



- d. Start the engine.
- e. Measure the fuel pressure.

EAS4S81001

CHECKING THE FUEL PRESSURE

1. Check:
 - Fuel pressure



- a. Remove the rider and passenger seat.
Refer to "GENERAL CHASSIS" on page 4-1.
- b. Disconnect the fuel hose (fuel tank to primary injector fuel rail) "1" from the primary injector fuel rail.

Fuel pressure
324 kPa (46.1 psi) (3.24 kg/cm²)

Faulty → Replace fuel pump.

EWA4C81001

⚠ WARNING

Cover fuel hose connections with a cloth when disconnecting them. Residual pressure in the fuel lines could cause fuel to spurt out when removing the hoses.

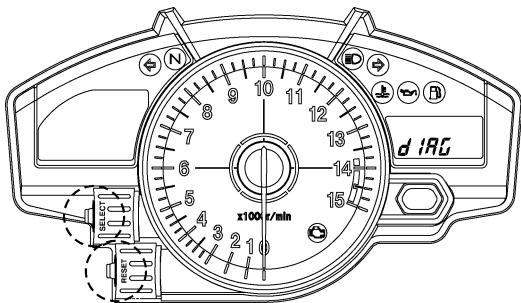
EAS27030

ADJUSTING THE THROTTLE POSITION SENSOR (FOR THROTTLE VALVES)

1. Check:
 - Throttle position sensor (for throttle valves)
Refer to "CHECKING THE THROTTLE POSITION SENSOR (FOR THROTTLE VALVES)" on page 8-89.
2. Adjust:
 - Throttle position sensor angle

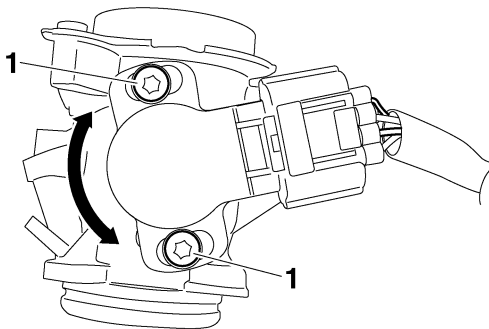


- Temporary tighten the throttle position sensor (for throttle valves).
- Check that the throttle valves are fully closed.
- Connect the throttle position sensor (for throttle valves), throttle position sensor (for throttle cable pulley) and throttle servo motor to the wire harness.
- Turn the main switch to "OFF" and set the engine stop switch to "ON".
- Simultaneously press and hold the "SELECT" and "RESET" buttons, turn the main switch to "ON", and continue to press the buttons for 8 seconds more.



NOTE:
"diag" appears on the odometer, tripmeter and fuel reserve trip LCD.

- Diagnostic code 01 is selected.
- Adjust the position of the throttle position sensor angle so that 16 can appear in the meter.
- After adjusting the throttle position sensor angle, tighten the throttle position sensor screws "1".



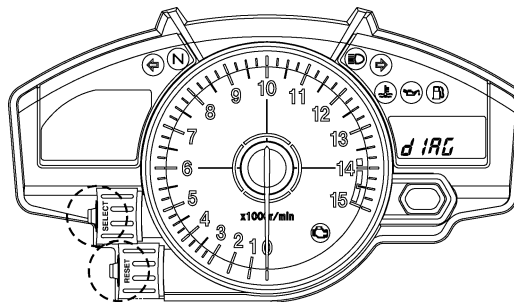
EAS4C81023

ADJUSTING THE THROTTLE POSITION SENSOR (FOR THROTTLE CABLE PULLEY)

- Check:
 - Throttle position sensor (for throttle cable pulley)
 Refer to "ADJUSTING THE THROTTLE POSITION SENSOR (FOR THROTTLE CABLE PULLEY)" on page 7-7.
- Adjust:
 - Throttle position sensor (for throttle cable pulley) angle



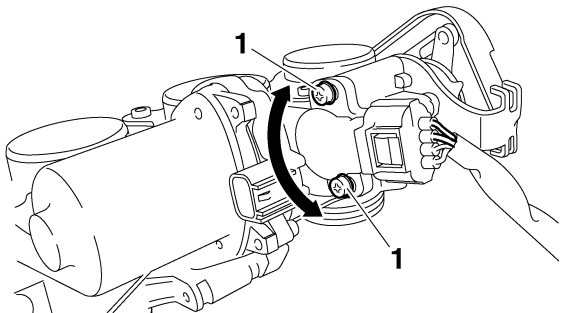
- Temporary tighten the throttle position sensor (for throttle cable pulley).
- Check that the throttle valves are fully closed.
- Connect the throttle position sensor (for throttle valves), throttle position sensor (for throttle cable pulley) and throttle servo motor to the wire harness.
- Turn the main switch to "OFF" and set the engine stop switch to "ON".
- Simultaneously press and hold the "SELECT" and "RESET" buttons, turn the main switch to "ON", and continue to press the buttons for 8 seconds more. Simultaneously press and hold the "SELECT" and "RESET" buttons, turn the main switch to "ON", and continue to press the buttons for 8 seconds more.



NOTE:
"diag" appears on the odometer, tripmeter and fuel reserve trip LCD.

- Diagnostic code 14 is selected.
- Adjust the position of the throttle position sensor angle so that 17 can appear in the meter.
- After adjusting the throttle position sensor angle, tighten the throttle position sensor screws "1".

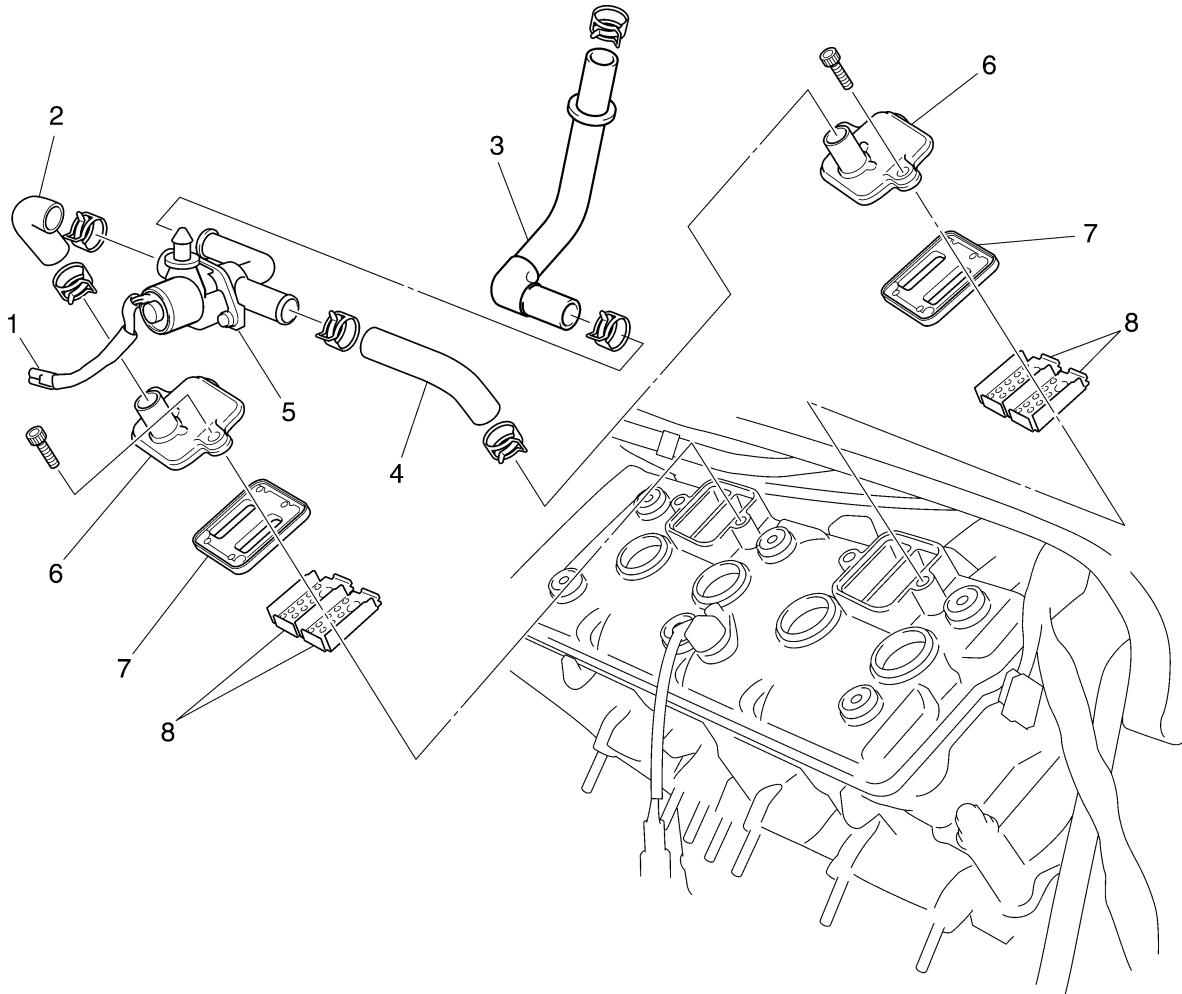
THROTTLE BODIES



EAS27040

AIR INDUCTION SYSTEM

Removing the air cut-off valve assembly and hoses



Order	Job/Parts to remove	Q'ty	Remarks
1	Air cut-off valve coupler	1	Disconnect.
2	Air cut-off valve hose 1	1	Disconnect.
3	Air cut-off valve hose 2	1	Disconnect.
4	Air cut-off valve hose 3	1	Disconnect.
5	Air cut-off valve	1	
6	Reed valve cap	2	
7	Reed valve assembly	2	
8	Plate	4	
			For installation, reverse the removal procedure.

EAS27060

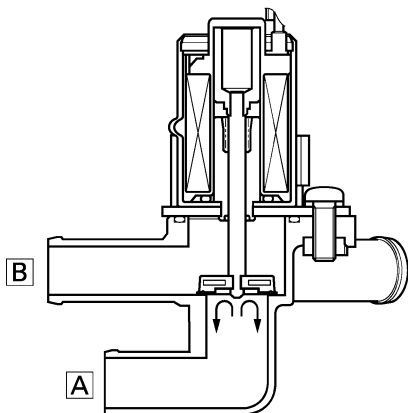
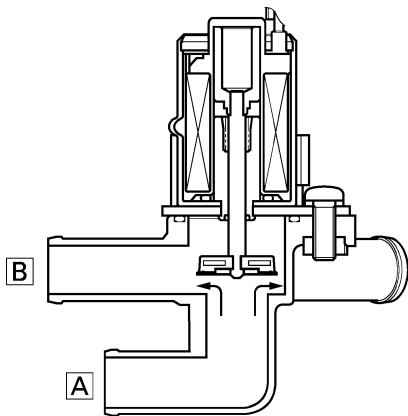
CHECKING THE AIR INDUCTION SYSTEM

Air injection

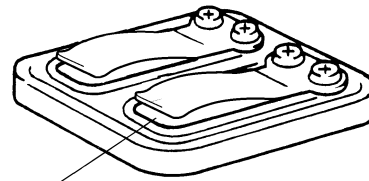
The air induction system burns unburned exhaust gases by injecting fresh air (secondary air) into the exhaust port, reducing the emission of hydrocarbons. When there is negative pressure at the exhaust port, the reed valve opens, allowing secondary air to flow into the exhaust port. The required temperature for burning the unburned exhaust gases is approximately 600 to 700°C.

Air cut-off valve

The air cut-off valve is controlled by the signals from the ECU in accordance with the combustion conditions. Ordinarily, the air cut-off valve opens to allow the air to flow during idle and closes to cut-off the flow when the vehicle is being driven. However, if the coolant temperature is below the specified value, the air cut-off valve remains open and allows the air to flow into the exhaust pipe until the temperature becomes higher than the specified value.

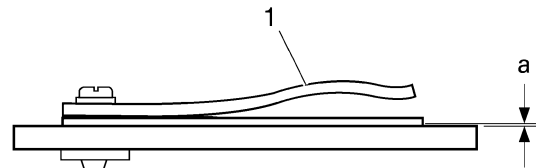
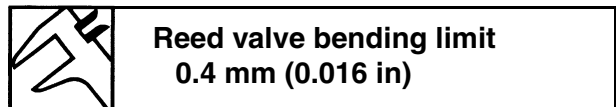


- A. From the air cleaner
 - B. To the cylinder head
1. Check:
 - Hoses
Loose connections → Connect properly.
Cracks/damage → Replace.
 - Pipes
Cracks/damage → Replace.
 2. Check:
 - Reed valve "1"
 - Reed valve stopper
 - Reed valve seat
Cracks/damage → Replace the reed valve.



1

3. Measure:
 - Reed valve bending limit "a"
Out of specification → Replace the reed valve.



14710301

4. Check:
 - Air cut-off valve
Cracks/damage → Replace.
5. Check
 - Air induction system solenoid
Refer to "CHECKING THE AIR INDUCTION SYSTEM SOLENOID" on page 8-90.

ELECTRICAL SYSTEM

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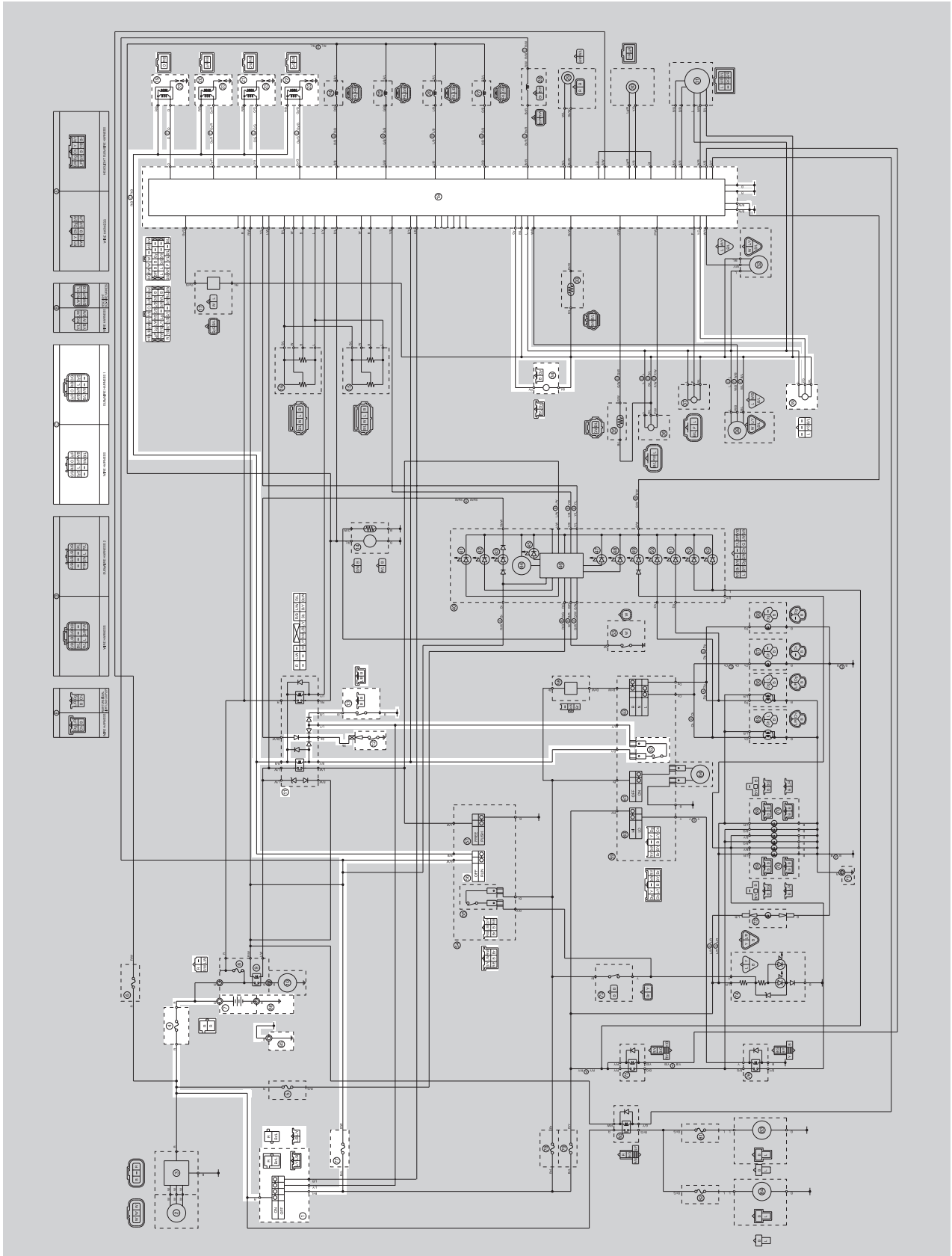


EAS27090

IGNITION SYSTEM

EAS27110

CIRCUIT DIAGRAM



- 1. Main switch
- 4. Main fuse
- 7. Battery
- 11. Starting circuit cut-off relay
- 12. Neutral switch
- 13. Sidestand switch
- 18. ECU (engine control unit)
- 19. Ignition coil #1
- 20. Ignition coil #2
- 21. Ignition coil #3
- 22. Ignition coil #4
- 23. Spark plug
- 34. Crankshaft position sensor
- 39. Lean angle sensor
- 56. Engine stop switch
- 62. Clutch switch
- 77. Ignition fuse
- 85. Ground
- 86. Battery negative lead

EAS27150

TROUBLESHOOTING

The ignition system fails to operate (no spark or intermittent spark).

NOTE:

- Before troubleshooting, remove the following part(s):

- 1 Rider seat
- 2 Passenger seat
- 3 Fuel tank
- 4 Side cowlings

<p>1 Check the fuses. (Main and ignition) Refer to "CHECKING THE FUSES" on page 8-77.</p>	NG→	<p>Replace the fuse(s).</p>
OK↓		
<p>2 Check the battery. Refer to "CHECKING AND CHARGING THE BATTERY" on page 8-77.</p>	NG→	<ul style="list-style-type: none"> • Clean the battery terminals. • Recharge or replace the battery.
OK↓		
<p>3 Check the spark plugs. Refer to "CHECKING THE SPARK PLUGS" on page 3-9.</p>	NG→	<p>Re-gap or replace the spark plugs.</p>
OK↓		
<p>4 Check the ignition spark gap. Refer to "CHECKING THE IGNI- TION COILS" on page 8-83.</p>	NG→	<p>Ignition system is OK.</p>
OK↓		
<p>5 Check the ignition coils. Refer to "CHECKING THE IGNI- TION COILS" on page 8-83.</p>	NG→	<p>Replace the ignition coils.</p>
OK↓		
<p>6 Check the crankshaft position sen- sor. Refer to "CHECKING THE CRANKSHAFT POSITION SEN- SOR" on page 8-84.</p>	NG→	<p>Replace the crankshaft position sen- sor.</p>
OK↓		
<p>7 Check the main switch. Refer to "CHECKING THE SWITCHES" on page 8-73.</p>	NG→	<p>Replace the main switch.</p>
OK↓		

IGNITION SYSTEM

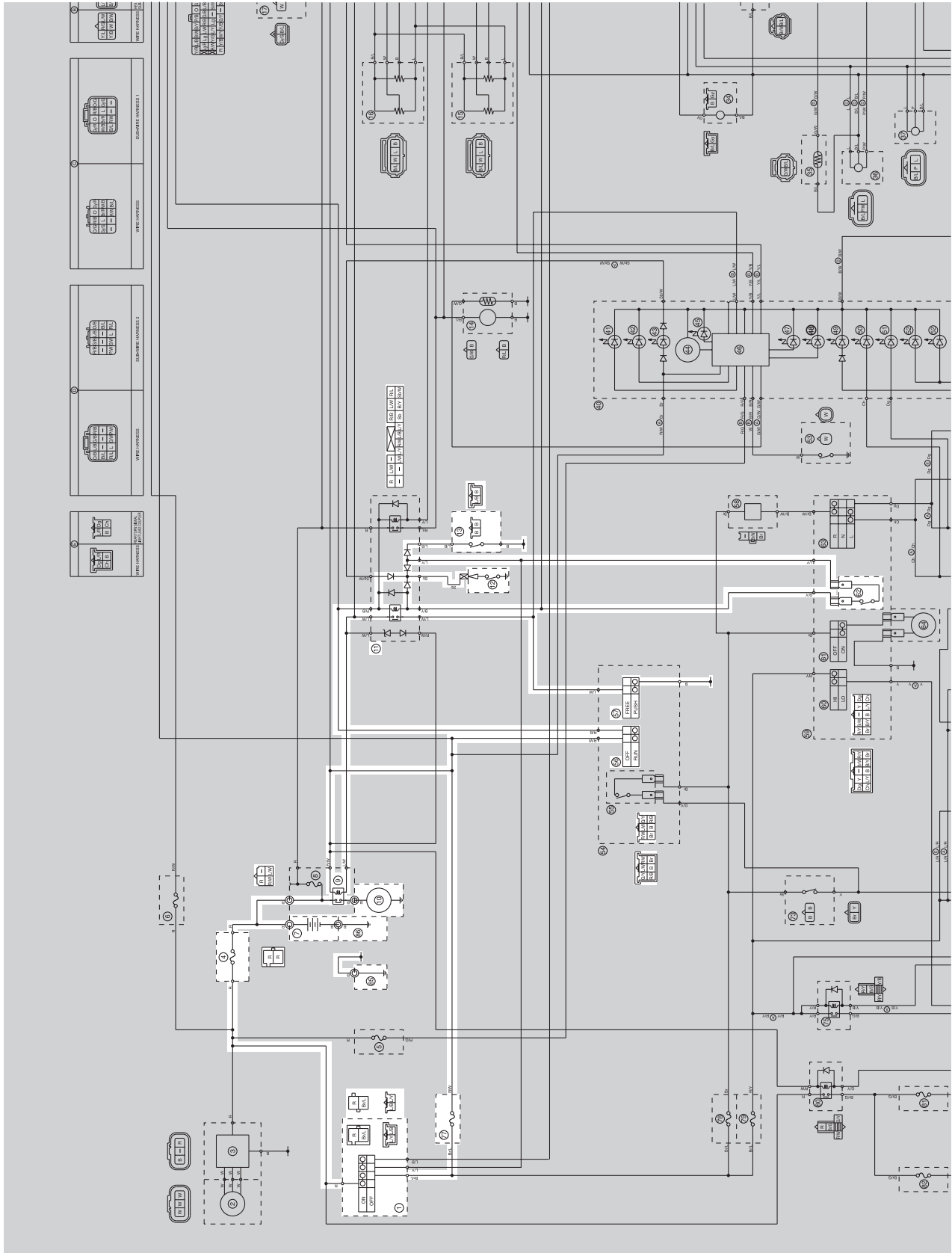
8 Check the engine stop switch. Refer to "CHECKING THE SWITCHES" on page 8-73.	NG→	Replace the right handlebar switch.
OK↓		
9 Check the neutral switch. Refer to "CHECKING THE SWITCHES" on page 8-73.	NG→	Replace the neutral switch.
OK↓		
10 Check the sidestand switch. Refer to "CHECKING THE SWITCHES" on page 8-73.	NG→	Replace the sidestand switch.
OK↓		
11 Check the clutch switch. Refer to "CHECKING THE SWITCHES" on page 8-73.	NG→	Replace the clutch switch.
OK↓		
12 Check the starting circuit cut-off relay. Refer to "CHECKING THE RELAYS" on page 8-80.	NG→	Replace the starting circuit cut-off relay.
OK↓		
13 Check the lean angle sensor. Refer to "CHECKING THE LEAN ANGLE SENSOR" on page 8-84.	NG→	Replace the lean angle sensor.
OK↓		
14 Check the entire ignition system's wiring. Refer to "CIRCUIT DIAGRAM" on page 8-1.	NG→	Properly connect or repair the ignition system's wiring
OK↓		
Replace the ECU.		

EAS27160

ELECTRIC STARTING SYSTEM

EAS27170

CIRCUIT DIAGRAM



ELECTRIC STARTING SYSTEM

1. Main switch
4. Main fuse
7. Battery
9. Starter relay
10. Starter motor
11. Starting circuit cut-off relay
12. Neutral switch
13. Sidestand switch
56. Engine stop switch
57. Start switch
62. Clutch switch
77. Ignition fuse
85. Ground
86. Battery negative lead

ELECTRIC STARTING SYSTEM

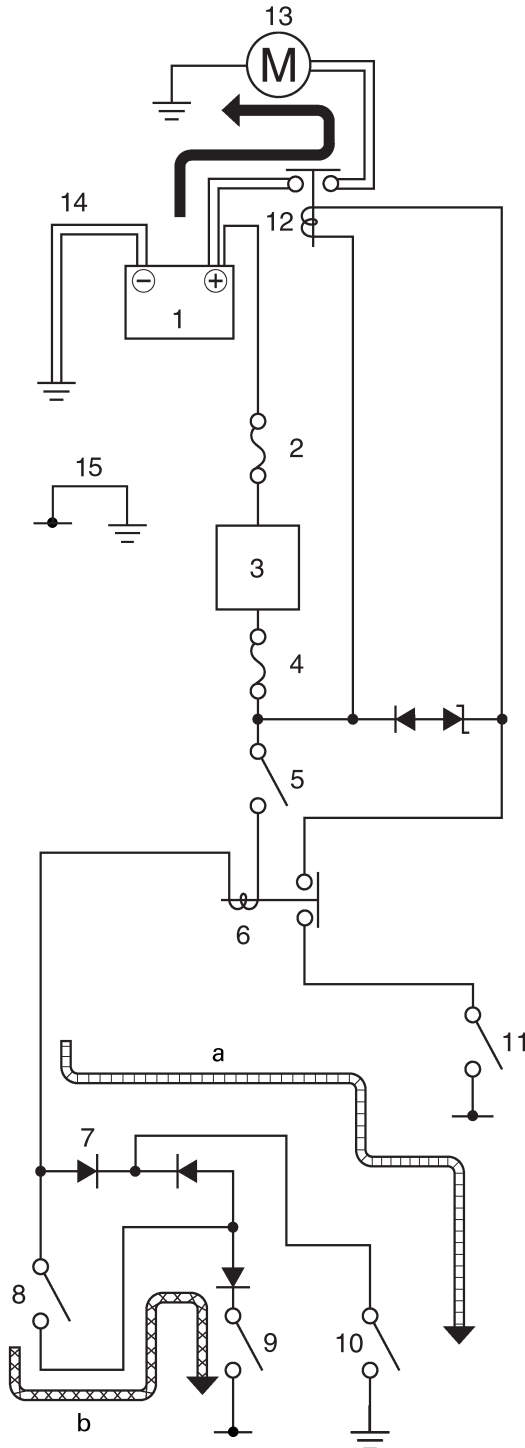
EAS27180

STARTING CIRCUIT CUT-OFF SYSTEM OPERATION

If the engine stop switch is set to “○” and the main switch is set to “ON” (both switches are closed), the starter motor can only operate if at least one of the following conditions is met:

- The transmission is in neutral (the neutral switch is closed).
- The clutch lever is pulled to the handlebar (the clutch switch is closed) and the sidestand is up (the sidestand switch is closed).

The starting circuit cut-off relay prevents the starter motor from operating when neither of these conditions has been met. In this instance, the starting circuit cut-off relay is open so current cannot reach the starter motor. When at least one of the above conditions has been met the starting circuit cut-off relay is closed and the engine can be started by pressing the starter switch.



ELECTRIC STARTING SYSTEM

- a. WHEN THE TRANSMISSION IS IN NEUTRAL
- b. WHEN THE SIDESTAND IS UP AND THE CLUTCH LEVER IS PULLED TO THE HANDLEBAR
 - 1. Battery
 - 2. Main fuse
 - 3. Main switch
 - 4. Ignition fuse
 - 5. Engine stop switch
 - 6. Starting circuit cut-off relay
 - 7. Diode
 - 8. Clutch switch
 - 9. Sidestand switch
 - 10. Neutral switch
 - 11. Start switch
 - 12. Starter relay
 - 13. Starter motor
 - 14. Battery negative lead
 - 15. Ground

ELECTRIC STARTING SYSTEM

EAS27190

TROUBLESHOOTING

The starter motor fails to turn.

NOTE:

- Before troubleshooting, remove the following part(s):

- 1 Rider seat
- 2 Passenger seat
- 3 Fuel tank
- 4 Air filter case

1 Check the fuses. (Main and ignition) Refer to "CHECKING THE FUSES" on page 8-77.	NG→	Replace the fuse(s).
OK↓		
2 Check the battery. Refer to "CHECKING AND CHARGING THE BATTERY" on page 8-77.	NG→	<ul style="list-style-type: none">• Clean the battery terminals.• Recharge or replace the battery.
OK↓		
3 Check the starter motor operation. Refer to "CHECKING THE STARTER MOTOR OPERATION" on page 8-85.	NG→	Repair or replace the starter motor.
OK↓		
4 Check the starter motor. Refer to "CHECKING THE STARTER MOTOR" on page 5-41.	NG→	Repair or replace the starter motor.
OK↓		
5 Check the starting circuit cut-off relay. Refer to "CHECKING THE RELAYS" on page 8-80.	NG→	Replace the starting circuit cut-off relay.
OK↓		
6 Check the starter relay. Refer to "CHECKING THE RELAYS" on page 8-80.	NG→	Replace the starter relay.
OK↓		
7 Check the main switch. Refer to "CHECKING THE SWITCHES" on page 8-73.	NG→	Replace the main switch.
OK↓		

ELECTRIC STARTING SYSTEM

8 Check the engine stop switch.
Refer to "CHECKING THE SWITCHES" on page 8-73.

NG→

Replace the right handlebar switch.

OK↓

9 Check the neutral switch.
Refer to "CHECKING THE SWITCHES" on page 8-73.

NG→

Replace the neutral switch.

OK↓

10 Check the sidestand switch.
Refer to "CHECKING THE SWITCHES" on page 8-73.

NG→

Replace the sidestand switch.

OK↓

11 Check the clutch switch.
Refer to "CHECKING THE SWITCHES" on page 8-73.

NG→

Replace the clutch switch.

OK↓

12 Check the start switch.
Refer to "CHECKING THE SWITCHES" on page 8-73.

NG→

Replace the right handlebar switch.

OK↓

13 Check the entire starting system's wiring.
Refer to "ELECTRIC STARTING SYSTEM" on page 8-5.

NG→

Properly connect or repair the starting system's wiring

OK↓

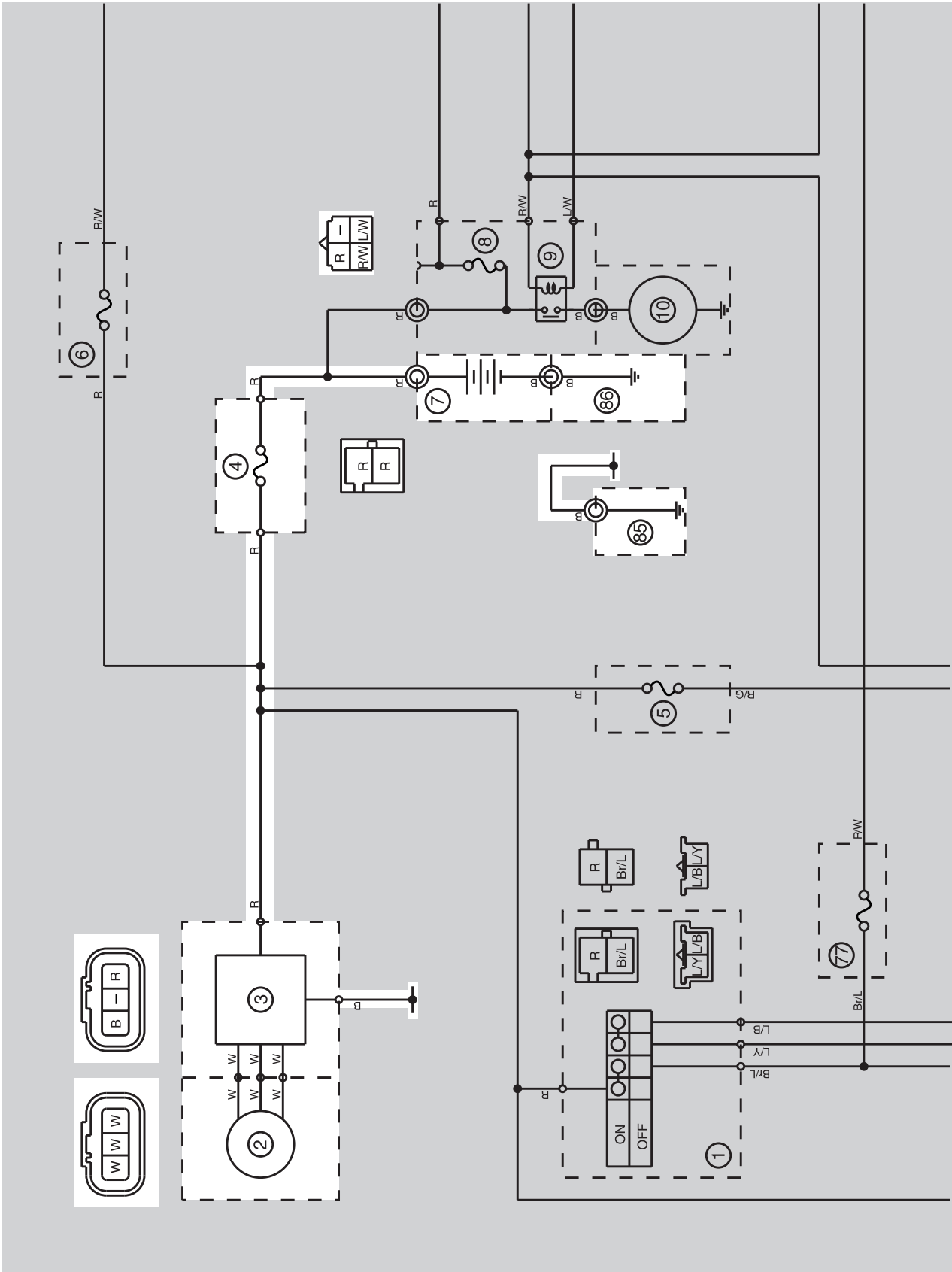
The starting system circuit is OK.

EAS27200

CHARGING SYSTEM

EAS27210

CIRCUIT DIAGRAM



- 2. AC magneto
- 3. Rectifier/regulator
- 4. Main fuse
- 7. Battery
- 85. Ground
- 92. Battery negative lead

EAS27230

TROUBLESHOOTING

The battery is not being charged.

NOTE:

- Before troubleshooting, remove the following part(s):

1 Rider seat

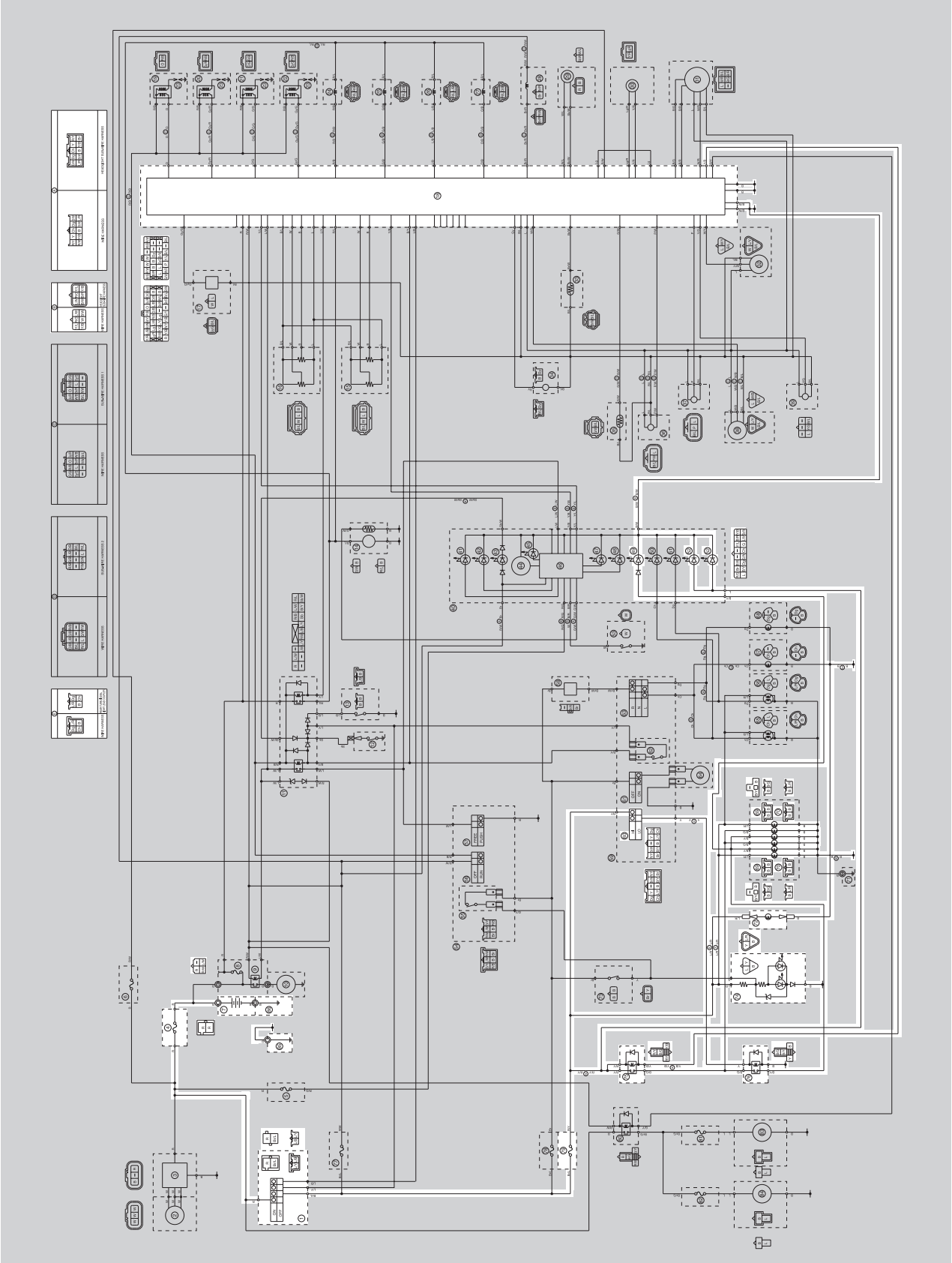
2 Fuel tank

3 Air filter case

<p>1 Check the fuse. (Main) Refer to "CHECKING THE FUSES" on page 8-77.</p>	<p>NG→</p>	<p>Replace the fuse.</p>
<p>OK↓</p>		
<p>2 Check the battery. Refer to "CHECKING AND CHARGING THE BATTERY" on page 8-77.</p>	<p>NG→</p>	<ul style="list-style-type: none"> • Clean the battery terminals. • Recharge or replace the battery.
<p>OK↓</p>		
<p>3 Check the stator coil Refer to "CHECKING THE STATOR COIL" on page 8-85.</p>	<p>NG→</p>	<ul style="list-style-type: none"> • Replace the stator coil assembly.
<p>OK↓</p>		
<p>4 Check the rectifier/regulator. Refer to "CHECKING THE RECTIFIER/REGULATOR" on page 8-85.</p>	<p>NG→</p>	<p>Replace the rectifier/regulator.</p>
<p>OK↓</p>		
<p>5 Check the entire charging system's wiring. Refer to "CHARGING SYSTEM" on page 8-11.</p>	<p>NG→</p>	<p>Properly connect or repair the charging system's wiring.</p>
<p>OK↓</p>		
<p>This circuit is OK.</p>		

EAS27240
LIGHTING SYSTEM

EAS27250
CIRCUIT DIAGRAM



- 1. Main switch
- 4. Main fuse
- 7. Battery
- 18. ECU (engine control unit)
- 49. High beam indicator light
- 52. Meter light
- 60. Dimmer switch
- 69. Headlight
- 70. Auxiliary light
- 72. License plate light
- 74. Tail/brake light
- 75. Headlight relay (on/off)
- 76. Headlight relay (dimmer)
- 79. Headlight fuse
- 85. Ground
- 86. Battery negative lead

EAS27260

TROUBLESHOOTING

Any of the following fail to light: headlight, high beam indicator light, taillight, license light or meter light.

NOTE:

- Before troubleshooting, remove the following part(s):

1 Rider seat

2 Fuel tank

3 Side cowlings

<p>1 Check the each bulbs and bulb sockets condition. Refer to "CHECKING THE BULBS AND BULB SOCKETS" on page 8-76.</p>	<p>NG→</p>	<p>Replace the bulb(s) and bulb socket(s).</p>
<p>OK↓</p>		
<p>2 Check the fuses. (Main, headlight and park) Refer to "CHECKING THE FUSES" on page 8-77.</p>	<p>NG→</p>	<p>Replace the fuse(s).</p>
<p>OK↓</p>		
<p>3 Check the battery. Refer to "CHECKING AND CHARGING THE BATTERY" on page 8-77.</p>	<p>NG→</p>	<ul style="list-style-type: none"> • Clean the battery terminals. • Recharge or replace the battery.
<p>OK↓</p>		
<p>4 Check the main switch. Refer to "CHECKING THE SWITCHES" on page 8-73.</p>	<p>NG→</p>	<p>Replace the main switch.</p>
<p>OK↓</p>		
<p>5 Check the dimmer switch. Refer to "CHECKING THE SWITCHES" on page 8-73.</p>	<p>NG→</p>	<p>The dimmer switch is faulty. Replace the left handlebar switch.</p>
<p>OK↓</p>		
<p>6 Check the rear brake light switch. Refer to "CHECKING THE SWITCHES" on page 8-73.</p>	<p>NG→</p>	<p>Replace the rear brake light switch.</p>
<p>OK↓</p>		
<p>7 Check the headlight relay (on/off). Refer to "CHECKING THE RELAYS" on page 8-80.</p>	<p>NG→</p>	<p>Replace the headlight relay.</p>
<p>OK↓</p>		