## **SELF-DIAGNOSIS**



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The XVS1100 features self-diagnosis.

When the main switch is turned to "ON", the following items are monitored and the condition codes are displayed on the engine indicator light (irrespective of whether the engine is running or not).

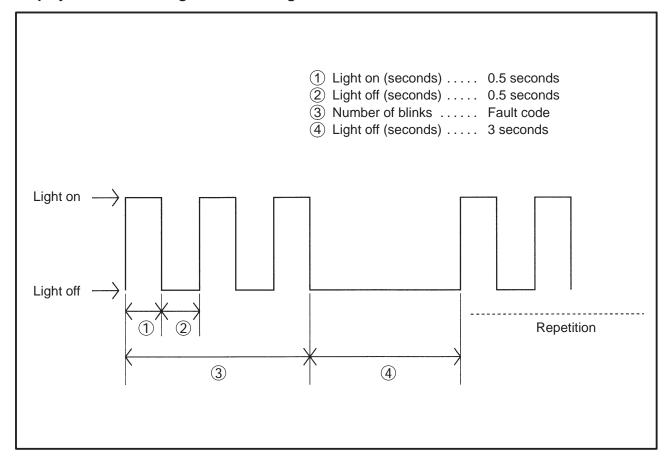
### NOTE: -

The XVS1100 features a self-diagnosing system.

In the XVS1100, when the main switch is turned on the "Engine indicator light" in the speedometer comes on for 1.4 seconds then goes off. However, if there is a malfunction, it comes on for 1.4 seconds, goes off and then begins flashing. (However, it is on while the engine is running.)

			Display condition code	
Item	Condition	Response	When engine is stationary	When engine is running
Throttle position sensor (TPS)	Disconnected Short-circuit Locked	<ul> <li>Enables the motorcycle to run so that the ignition timing is fixed when the throttle is fully opened.</li> <li>Displays the condition code on the engine indicator light.</li> </ul>	Blinks in Fault code: 3	Light on
Speed sensor	Disconnected short-circuit	• Displays the condition code on the enigne indicator light.	Blinks in Fault code: 4	Light on

## Display order on the engine indicator light



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EAS00835

### **TROUBLESHOOTING**

The engine warning light starts to display the self-diagnosis sequence.

#### Check:

- 1. throttle position sensor
- 2. speed sensor

#### NOTE: -

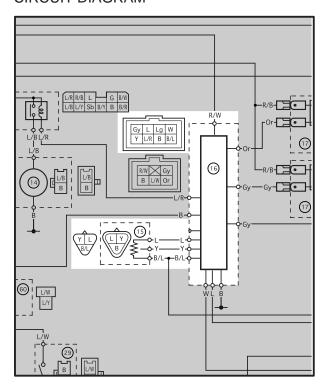
- Before troubleshooting, remove the following part(-s):
- 1) rider seat
- 2) fuel tank
- 3) air filter case
- 4) left side cover
- Troubleshoot with the following special tool(-s).



Pocket tester 90890-03112

EAS00836

## 1. Throttle position sensor CIRCUIT DIAGRAM



- 15 Throttle position sensor
- 16 Ignitor unit

## 1. Wire harness

- Check the wire harness for continuity. Refer to "CIRCUIT DIAGRAM".
- Is the wire harness OK?





Repair or replace the wire harness.

EB812401

### 2. Throttle position sensor

Check the throttle position sensor for continuity.

Refer to "CHECKING AND ADJUSTING THE THROTTLE POSITION SENSOR" in chapter 6.

Is the throttle position sensor OK?





NO

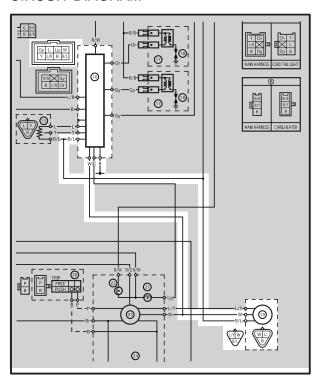
Replace the ignitor unit.

Replace the throttle position sensor.

## **SELF-DIAGNOSIS**



# **2. Speed sensor** CIRCUIT DIAGRAM



- 16 Ignitor unit
- 19 Speed sensor

### 1. Wire harness

- Check the wire harness for continuity. Refer to "CIRCUIT DIAGRAM".
- Is the wire harness OK?



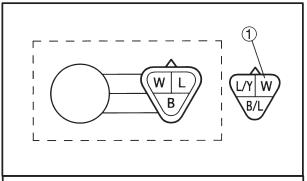


Repair or replace the wire harness.

### 2. Speed sensor

- Place the motorcycle on a suitable stand so that the rear wheel is elevated.
- Connect the pocket tester (DC 20V) to the speed sensor connector.

Tester (+) lead → White ① terminal Tester (-) lead → Body earth



- Set the main switch to "ON".
- Turn the rear wheel slowly.
- Check the tester voltage (0V 5V 0V).
- Is the speed sensor OK?



Replace the ignitor unit.

Replace the speed sensor.