



## **200 SERIES LUTV COMPONENT TROUBLESHOOTING**

**This guide will help in determining if a component is good or needs replaced.**

# 1. Testing the Brake Pressure Switch

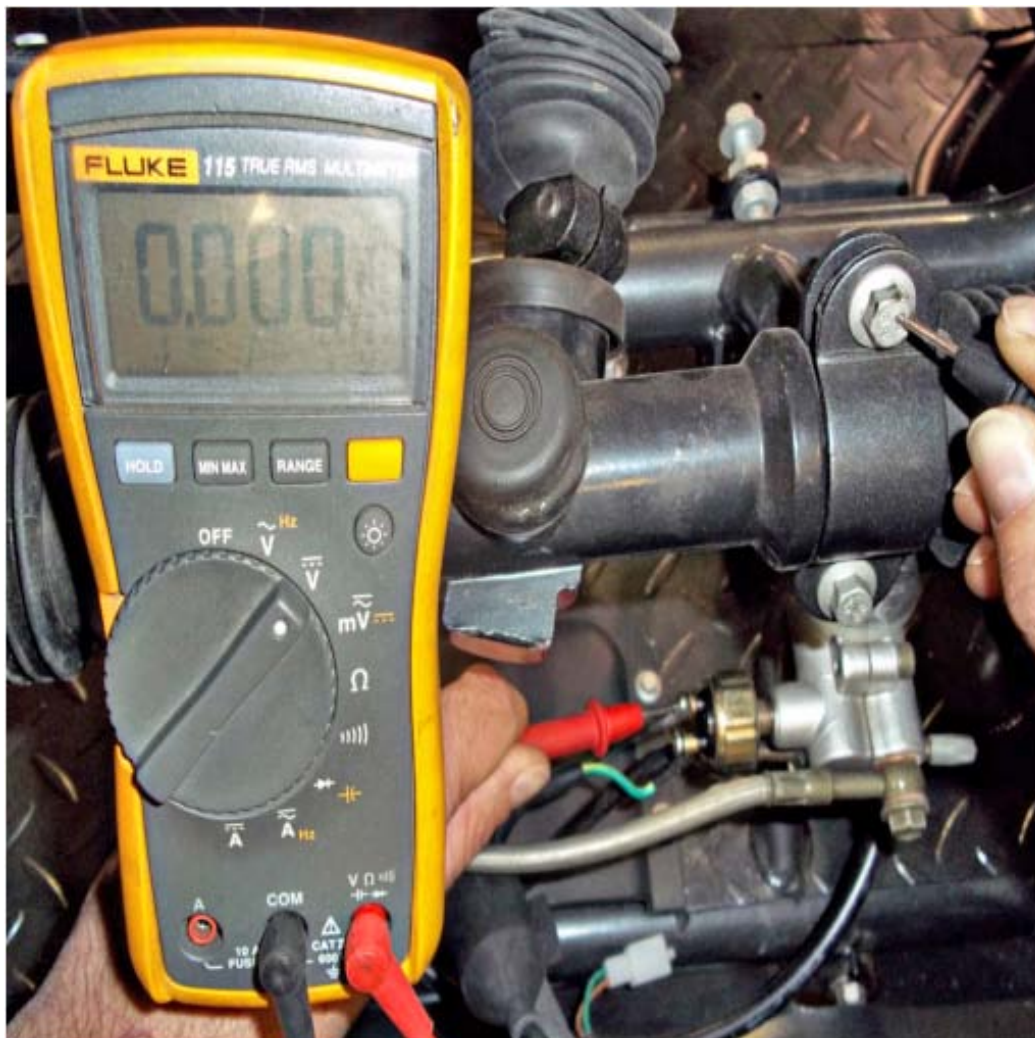
## Part number with description

14118 SWITCH, BRAKE LIGHT

## Location

Right side of master cylinder

- If the rear tail-light comes on when the brake pedal is depressed, the brake pressure switch is functioning and there is no need to perform this test.
- If each test described is followed and your test results are the same as the test description below then the part is good.
- If results do not match, then the part is bad and needs replaced.
- This test assumes that the battery is charged, connected, and all fuses are intact.



- Set the multi-meter to DC Volts.
- Without applying the brake, check voltage at the post with the black wire while the key is in the "off" position (+ multi-meter lead on the post, - on a good ground). There should be 0.0 V.
- Without applying the brake, check voltage at the post with the black wire while the key is in the "run/on" position (+ multi-meter lead on the post, - on a good ground). There should be 12V or more (fully charged battery voltage).
- Without applying the brake, check voltage at the post with the green wire with the yellow stripe with the key in the "run/on" position (+ multi-meter lead on the post, - on a good ground). There should be 0.0 V.
- Apply the brake and check voltage at the post with the green wire with the yellow stripe with the key in the "run/on" position (+ multi-meter lead on the post, - on a good ground). There should be approximately 12V.

## 2. Testing the Brake Interlock Relay

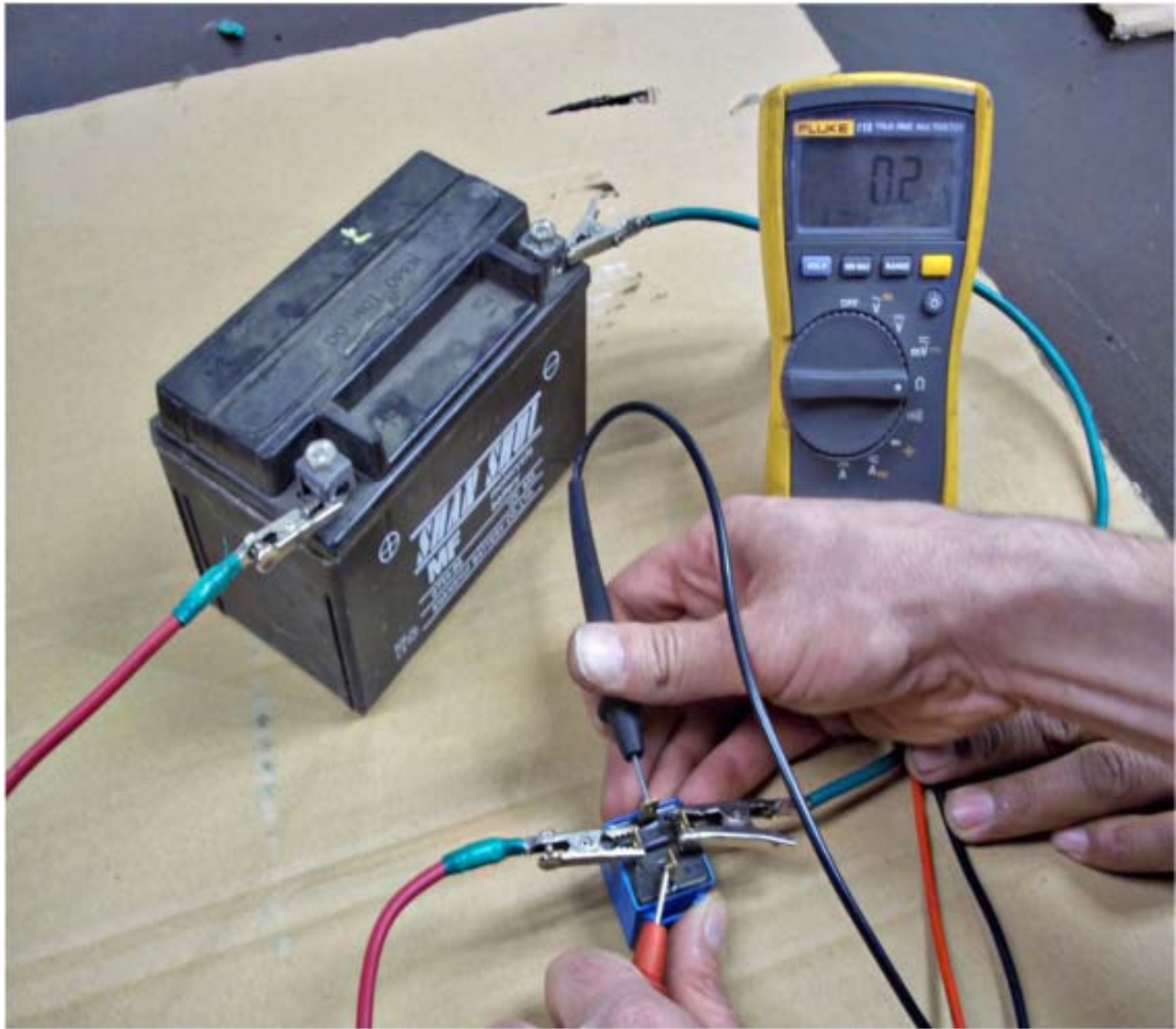
### Part number with description

15016 RELAY, BRAKE INTERLOCK

### Location

Front inside panel

- If each test described is followed and your test results are the same as the test description below then the part is good.
- If results do not match, then the part is bad and needs replaced.



- Using the resistance setting on the multi-meter, check across posts 30 and 87.

- The circuit should be "open" or incomplete. (An OL reading on the multi-meter)

- Using a 12V battery, apply 12V across posts 86 and 85 (+ battery lead to post 86, – lead to 85). An audible "click" should be heard.  
If click is not heard, repeat the steps.  
If no click is heard again the part is bad, needs replaced.

- Again, using the resistance setting on the multi-meter, check across posts 30 and 87.

- The circuit should now be "closed" or complete. (A reading of 0.0 or greater on the multi-meter)

## 3. Testing Keyed Ignition Switch

### Part number with description

14222 SWITCH, KEYED IGNITION

### Location

Dash area

- If each test described is followed and your test results are the same as the test description below then the part is good.
- If results do not match, then the part is bad and needs replaced.



### Using the resistance setting on the multi-meter,

- (+ lead to red wire, - to white wire ).  
Key on: closed circuit / 0.0 or greater  
Key off: open circuit / OL

- (+ lead to red wire, - to green wire ).  
Key on or off: open circuit / OL  
Key to start position: closed circuit / 0.0 or greater

## 4. Testing Starter Relay

### Part number with description

14225 RELAY, STARTER

### Location

Electric box on swing arm

- If each test described is followed and your test results are the same as the test description below then the part is good.
- If results do not match, then the part is bad and needs replaced.



### Set the multi-meter to DC Volts.

- (+ lead to yellow/red wire, - to green wire).  
With Key positioned "off" or "run", there should be no voltage.  
With the key turned to start, there should be battery voltage (~12V)

### Set the multi-meter to resistance.

- Disconnect the wire going out to the starter from its post.
- (+ lead to one post of the relay and the - to the other).  
With Key positioned "off" or "run", there should be an open circuit.  
With the key turned to start, the circuit should close.

## 5. Testing ignition Coil

### Part number with description

14227 COIL, IGNITION

### Location

Swing arm right side

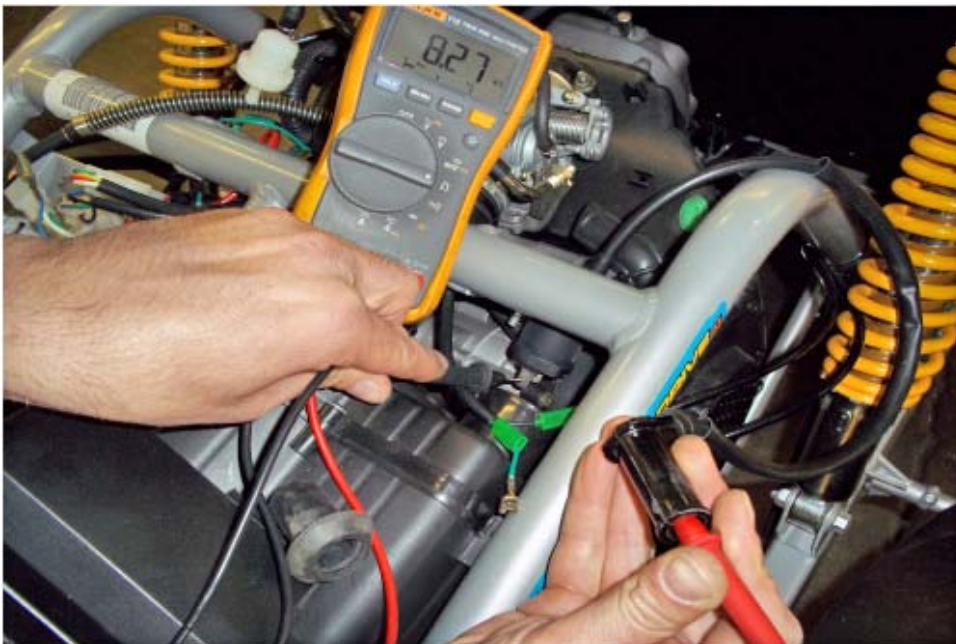
- If each test described is followed and your test results are the same as the test description below then the part is good.
- If results do not match, then the part is bad and needs replaced.



Remove the black/yellow and green wires from these tabs and check resistance across them for the primary coil.

#### Test the primary coil by:

- Set the meter to resistance
- Place one probe of the meter on each tab of the coil
- The value should be .1 to 1.0  $\Omega$



#### Test the secondary coil by:

- Set the meter to resistance
- Place one probe of the meter on either tab of the coil and one at the contact point of the spark plug boot.
- The value should be 7 to 9 k $\Omega$ .

# 6. Battery Inspection

**Part number with description**

14189 BATTERY - GTX9-BS

**Location**

Rear Swing arm

- If each test described is followed and your test results are the same as the test description below then the part is good.
- If results do not match, then the part is bad and needs replaced.



**Disconnect the battery cables from the battery.**

- Negative first
- Positive second
- Measure the voltage between the poles of the battery  
(+ lead to + post, - lead to - post )

<b>Full Charge</b>		13.1V
<b>Under Charged</b>		12.3V
<b>Charger settings</b>		
<b>Charging Current</b>	Normal	0.7 A
	Fast	3.0 A
<b>Charging Time</b>	Normal	5 to 10 Hours
	Fast	30 Minutes
<b>Charging Result</b>		≥ 12.8 V



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