

## 190 MAINTENANCE

**Table 122 Indicator Switch Inspection**

Meter	Connections!	Brake	Standard
30V DC	Meter (+) <—> Yellow	Apply	Battery Voltage
		Release	0V
	Meter (+) <—> Green	Apply	0V
		Release	Battery Voltage

t1. Negative (-) meter lead connected to the ground.

2. Positive (+) meter lead at 3-pin plug with indicator switch connected.

If any one of the meter readings shows an improper value, the brake light failure indicator switch is defective.

### TURN SIGNALS

A wiring diagram of the turn signal circuit is shown in Fig. 606. When the ignition switch is on and the turn signal switch is turned to R or L, a ground is provided for the circuit so current can flow. Current to the right or left turn signals flows through the closed contacts and the resistance wire inside the turn signal relay, and the turn signals go on. The resistance wire quickly heats up, expands, and allows a spring to pull the contacts open. When the contacts have opened, the circuit is broken, the turn signals go off, and the resistance wire cools and contracts, closing the contacts so that the cycle can begin again. The indicator light in the turn signal circuit flashes on and off with the turn signals to indicate that they are working properly.

Since the turn signal relay is designed to operate correctly only when two turn signals (one front and one rear) and the turn signal indicator light are properly connected in the circuit, trouble may result from a burned out bulb, a bulb of incorrect wattage, loose wiring, as well as from a defect in the relay itself. In general, if the trouble with the circuit is common to both right and left turn signals, it is probably caused by a defective turn signal relay, although it may be due to a bad switch, wiring, or battery. If the trouble is with only one side - either right or left - then the relay is not at fault since the same relay is used for both sides.

### Turn Signal Circuit

Right Turn Turn

Signal Lights Switch

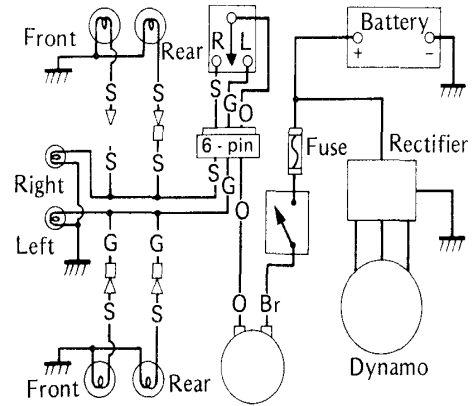
Turn Signal  
Indicator  
Lights

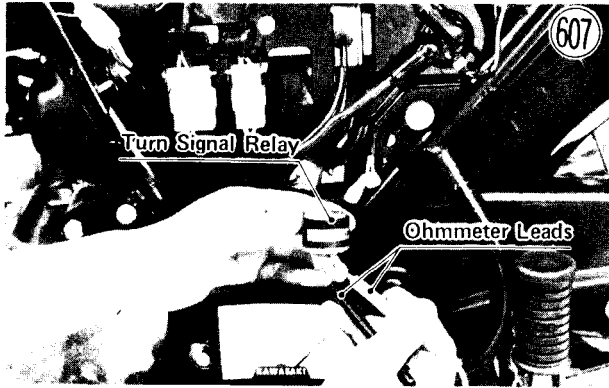
Left Turn  
Signal Lights

turn  
signal  
Relay

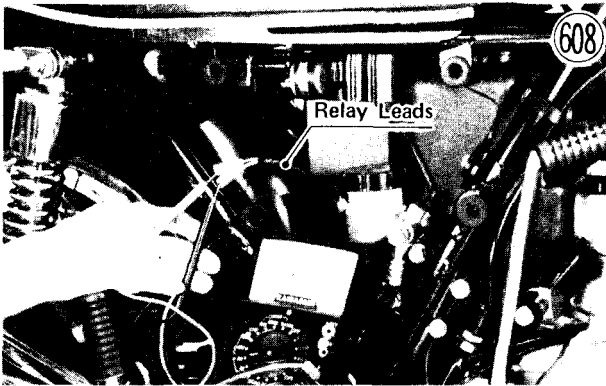
### Turn signal trouble

- (1) Neither right nor left turn signals come on at all:
- Check that battery voltage is normal.
  - Unplug the relay leads and use an ohmmeter to check that there is continuity (close to zero ohms) between the relay terminals. If there is no ohm-meter reading, or if there is several ohms resistance, replace the relay with a new one.





•If the relay checks good, turn the meter to the 30V DC range, connect the + meter lead to the brown lead that was disconnected from the relay, and connect the - meter lead to the orange lead. With the ignition switch on, first switch the turn signal switch to the R and then to the L position. The meter should register battery voltage at either position. If it does not, the fuse, ignition switch, or wiring is at fault. If battery voltage is read on the meter but the turn signals will still not work when the relay is reconnected, then recheck all wiring connections.



- (2) Both right or both left turn signals come on and stay on or flash too slowly:
- Check that battery voltage is not low.
  - Check that all wiring connections are good.
  - Check that the turn signal bulbs and indicator bulb are of the correct wattage.
  - If all of the above check good, replace the relay.
- (3) A single light on one side comes on and stays on:
- Either the light that does not come on is burned out or of the incorrect wattage, or the wiring is broken or improperly connected.
- (4) Neither light on one side comes on:
- Unless both lights for that side are burned out, the trouble is with the turn signal switch.