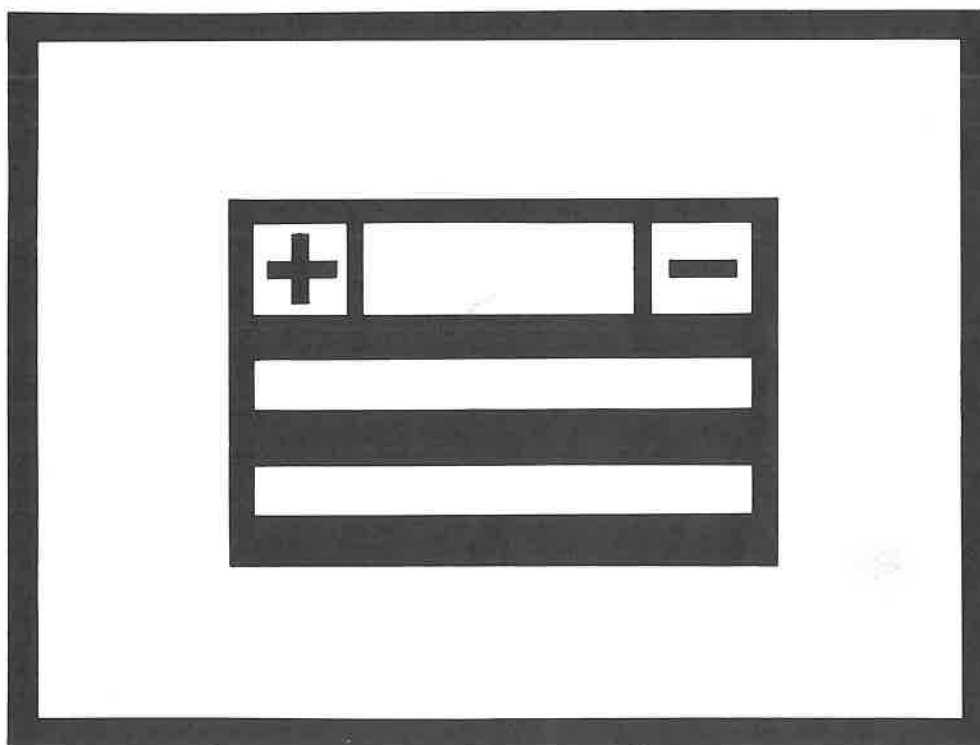




## CHAPTER 6 ELECTRICAL



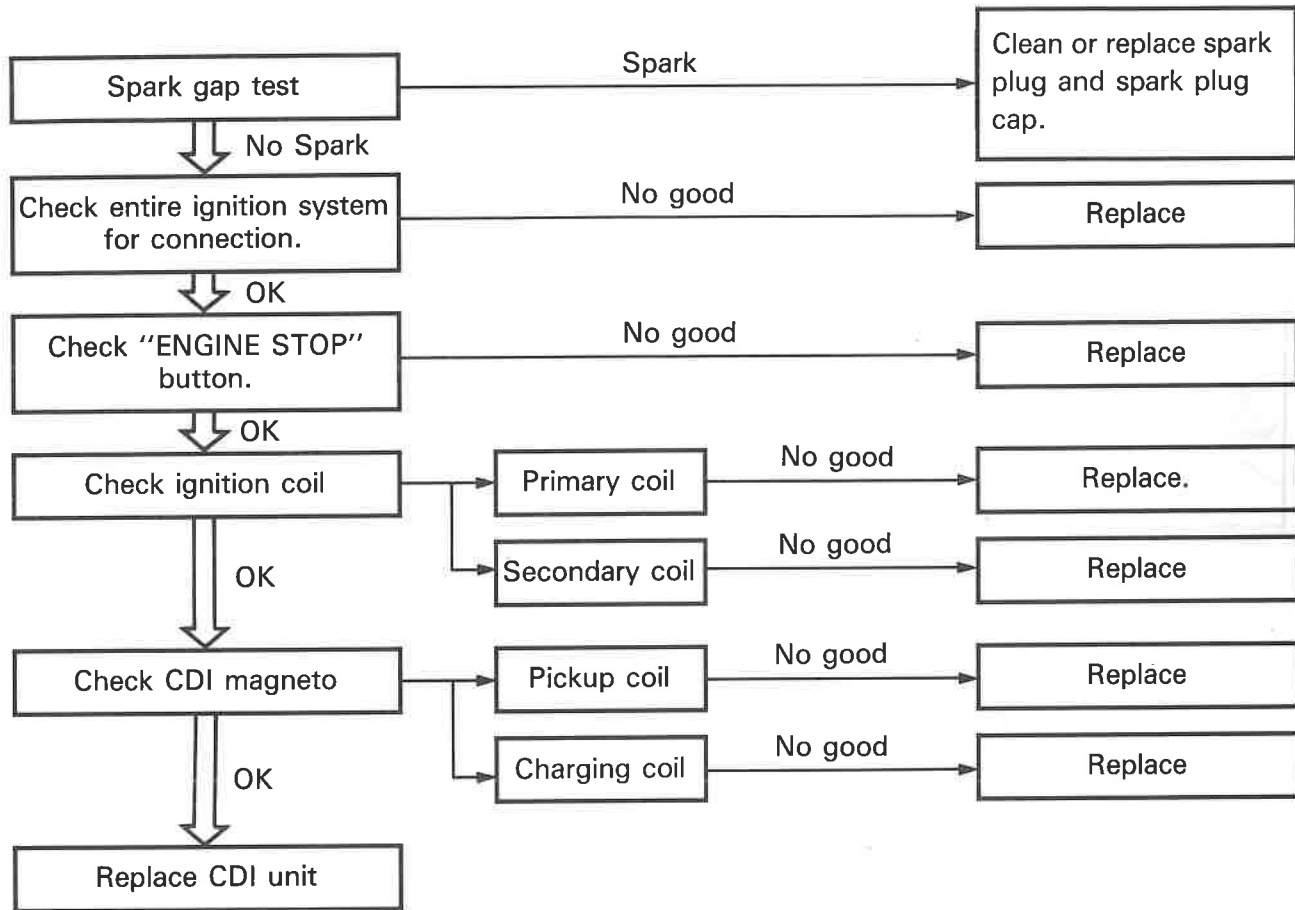
B/Br	.....	Black/Brown
B/R	.....	Black/Red
B/W	.....	Black/White
G/W	.....	Green/White
R/W	.....	Red/White
W/B	.....	White/Black
W/G	.....	White/Green
W/L	.....	White/Blue
W/R	.....	White/Red
Y/L	.....	Yellow/Blue



### IGNITION SYSTEM

#### INSPECTION STEPS

Use the following steps for checking the possibility of the malfunctioning engine being attributable to ignition system failure and for checking the spark plug which will not spark.



#### NOTE:

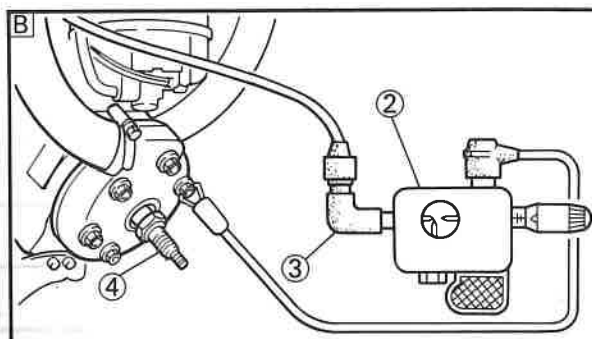
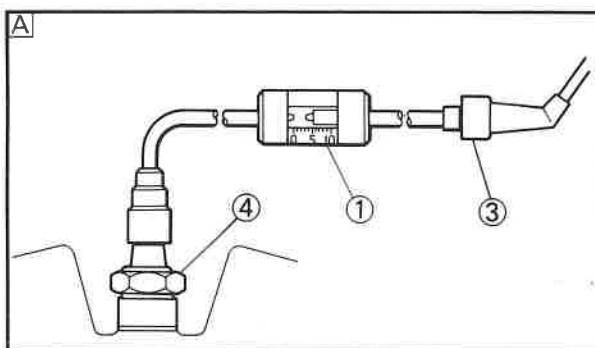
- Remove the following parts before inspection.
  - 1) Cowling
  - 2) Fuel tank
- Use the following special tools in this inspection.



**Dynamic spark tester:**  
YM-34487  
**Ignition Checker:**  
90890-06754



**Pocket Tester:**  
YU-03112/90890-03112



### SPARK GAP TEST

1. Disconnect the spark plug cap from spark plug.
2. Connect the Dynamic Spark Tester (1) (Ignition Checker (2)) as shown.

- Spark plug cap (3)
- Spark plug (4)

- A For USA and CDN  
B Except for USA and CDN

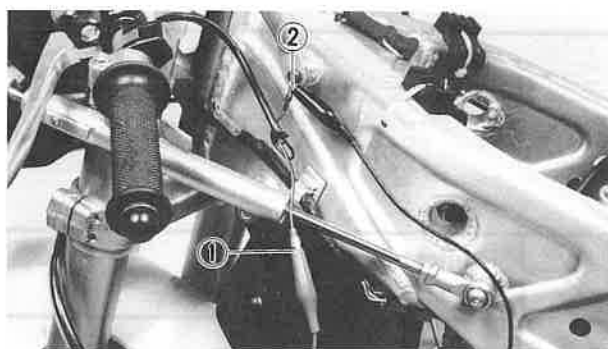
3. Start the engine.
4. Check the ignition spark gap.
5. Start engine, and increase spark gap until mis-fire occurs.



**Minimum Spark Gap:**  
5.0 mm (0.20 in)

### COUPLERS AND LEADS CONNECTION INSPECTION

1. Check:
  - Couplers and leads connection
  - Rust/Dust/Looseness/Short-circuit → Repair or replace.



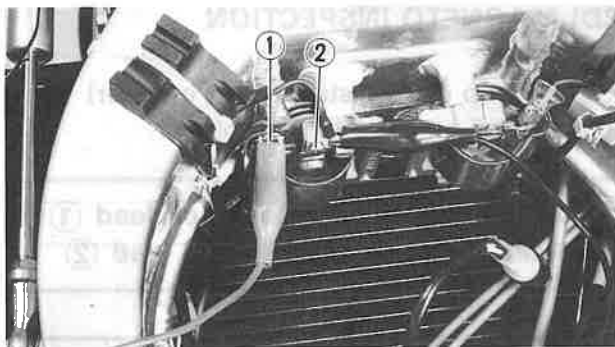
### "ENGINE STOP" BUTTON INSPECTION

1. Inspect:
  - "ENGINE STOP" button conduct

Tester (+) lead → Black/White lead (1)  
Tester (-) lead → Black lead (2)

		B/W ①	B ②	Tester selector position
	PUSH IN	○	○	Ω × 1
	FREE			

No continuity while being pushed → Replace.  
Continuity while being freed → Replace.




### IGNITION COIL INSPECTION

#### 1. Inspect:

- Primary coil resistance  
Out of Specification → Replace.

Tester (+) lead → Orange lead ①  
Tester (–) lead → Black lead ②

	Primary Coil Resistance	Tester Selector Position
	0.14 ~ 0.18Ω at 20°C (68°F)	Ω × 1


≈ 0



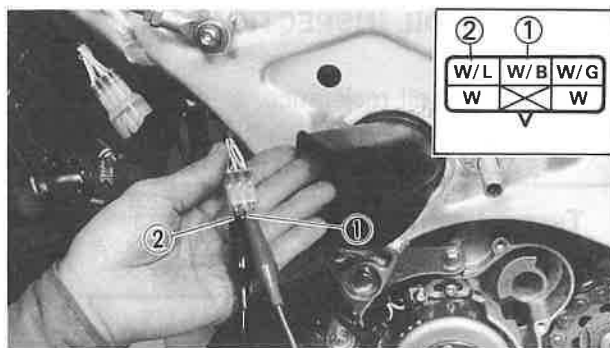
#### 2. Inspect:

- Secondary coil resistance  
Out of specification → Replace.

Tester (+) lead → Spark plug lead ①  
Tester (–) lead → Black lead ②

	Secondary Coil Resistance	Tester Selector Position
	5.0 ~ 7.4kΩ at 20°C (68°F)	kΩ × 1

≈ 14




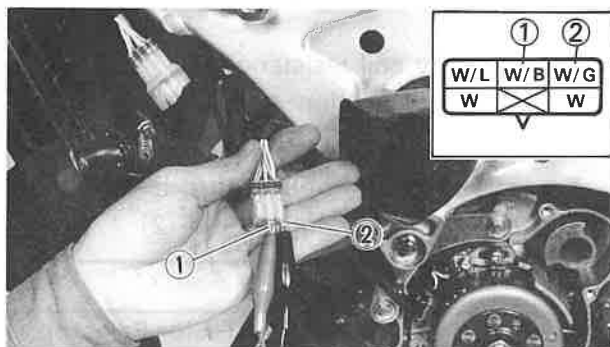
### CDI MAGNETO INSPECTION

#### 1. Inspect:

- Pick-up coil resistance (left cylinder)  
Out of specification → Replace.

Tester (+) lead → White/Black lead ①  
Tester (-) lead → White/Blue lead ②


	Pick-up Coil Resistance	Tester Selector Position
	94 ~ 140Ω at 20°C (68°F)	Ω × 100



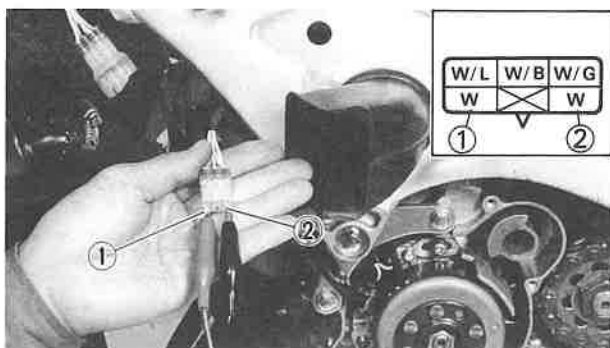
#### 2. Inspect:

- Pick-up coil resistance (right cylinder)  
Out of specification → Replace.

Tester (+) lead → White/Black lead ③  
Tester (-) lead → White/Green lead ④

	Pick-up Coil Resistance	Tester Selector Position
	94 ~ 140Ω at 20°C (68°F)	Ω × 100


6



#### 3. Inspect:

- Source coil resistance  
Out of specification → Replace.

Tester (+) lead → White lead ①  
Tester (-) lead → White lead ②

	Source Coil Resistance	Tester Selector Position
	1.3 ~ 1.9Ω at 20°C (68°F)	Ω × 1

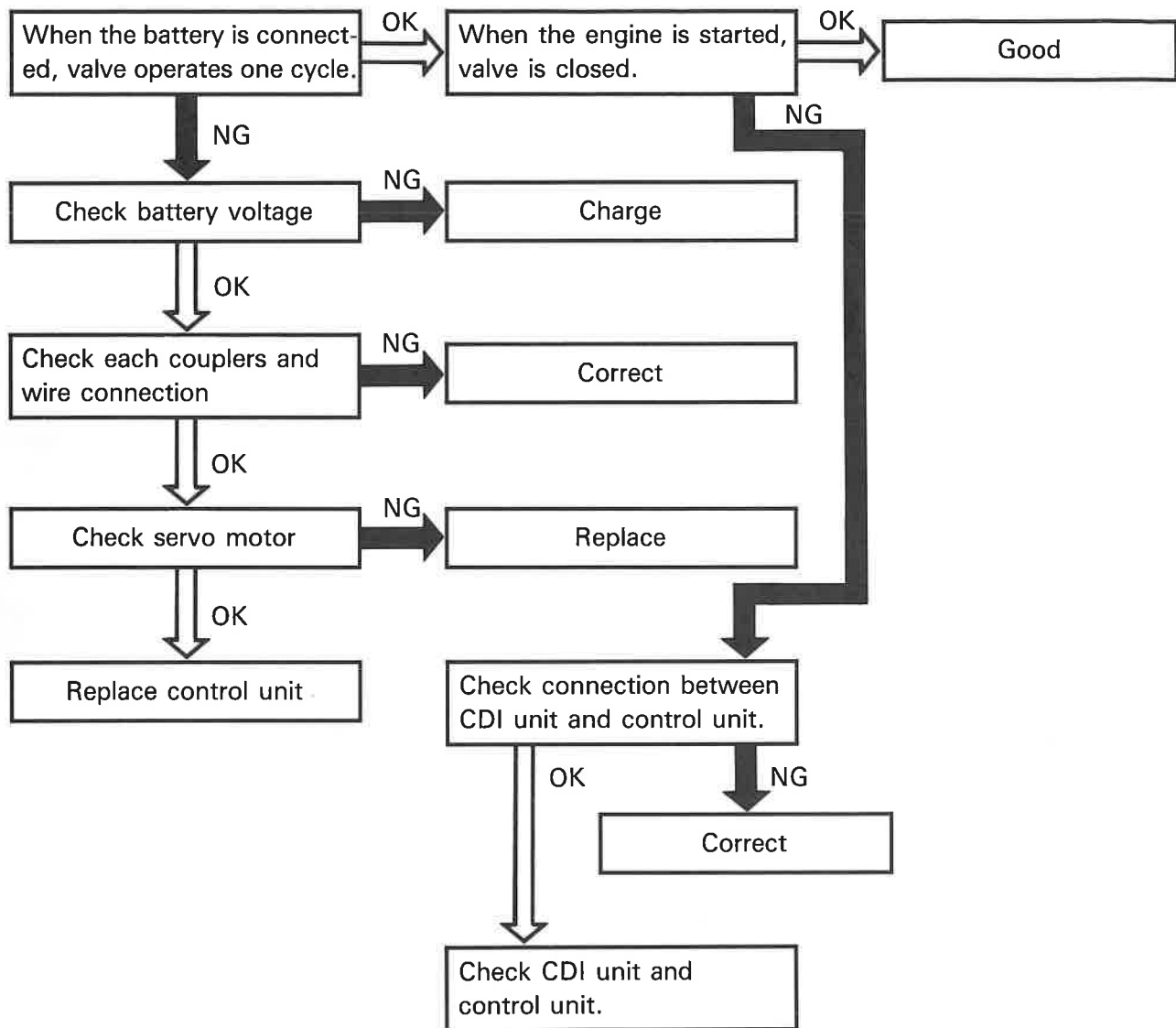


### CDI UNIT INSPECTION

Check all electrical components. If no fault is found, replace the CDI unit. Then check the electrical components again.



## YPVS SYSTEM INSPECTION STEPS



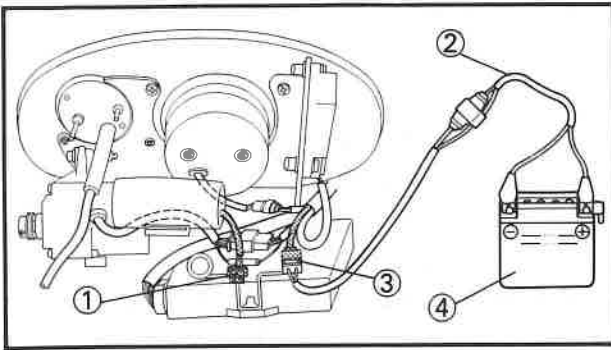
### NOTE:

- Remove the following parts before inspection.

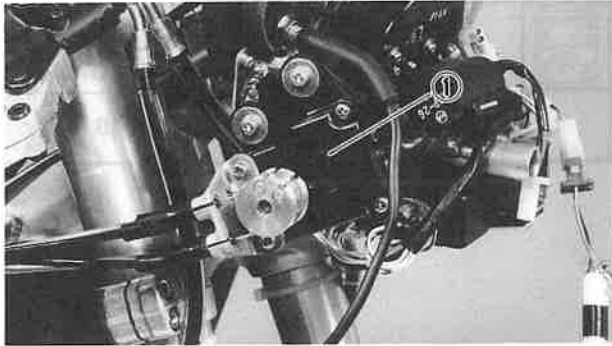
- 1) Cowling
- 2) Fuel tank

- Use 12V battery in this inspection.

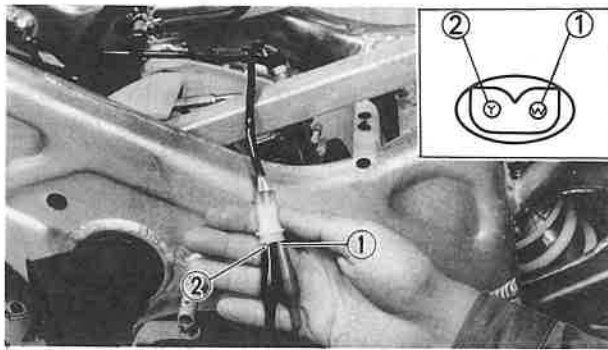


**SERVOMOTOR INSPECTION**

1. Disconnect the condenser lead ①
2. Connect the checking lead (with packing parts) ② between the wire harness ③ and battery (12V) ④.

**3. Inspect:**

- Servomotor ①  
Not operate → Replace.

**SOLENOID VALVE****SOLENOID VALVE INSPECTION**

## 1. Inspect:

- Solenoid resistance  
Out of specification → Replace.

**Tester (+) lead → White lead ①****Tester (−) lead → Yellow lead ②****Solenoid  
Resistance****52.0 ~ 63.6Ω at  
20°C (68°F)****Tester Selector  
Position****Ω × 10**