merse lower unit in water, connect a suitable power timing light, start engine and warm-up to normal operating temperature. Refer to Fig. SZ7-9 for view of timing marks and pointer. Ignition timing at 600 rpm should be 9-13 degrees ATDC on Model DT8C and 10-14 degrees ATDC on Model DT9.9C. Total timing advance at 2000 rpm or over should be 16-20 degrees BTDC on Model DT8C and 26-30 degrees BTDC on Model DT9.9C.

TROUBLE-SHOOTING. If ignition malfunction occurs, use only approved procedures to prevent damage to ignition components. Check spark plugs, wiring and wiring connections. Use Stevens Model CD-77 peak voltage tester or Suzuki Pocket Tester 09900-25002 to test ignition components and circuits. A suitable ohmmeter may be substituted for Suzuki Pocket Tester 09900-25002.

To test ignition system using Stevens Model CD-77 tester, remove spark plugs and crank engine using manual starter. Refer to chart in Fig. SZ7-10 for tester lead connections, test values and related remarks.

Test ignition system components using Suzuki Pocket Tester 09900-25002 or suitable equivalent ohmmeter. Refer to Figs. SZ7-8 and SZ7-11.

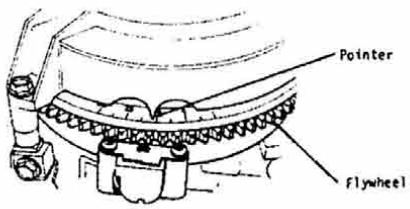


Fig. SZ7-9—View of timing pointer and flywheel timing marks.

NOTE: The following ignition system resistance specifications are based on an ambient temperature of 20° C (68° F).

CONDENSER CHARGING COIL. Disconnect condenser charging coil and connect tester between condenser charging coil leads. Resistance should be 230-240 ohms. Renew coil if resistance is not to specification.

BATTERY CHARGING COIL. Disconnect battery charging coil. On manual start models, connect tester between red and yellow wires. Resistance should 0.1-0.4 ohms. On electric start models, connect tester between yellow with red tracer wire and yellow wire, then between red and yellow wires. Resistance should be 0.1-0.4 ohms on each test. Renew coil if resistance is not to specification.

PULSER COILS. Disconnect pulser coils and connect tester between white wire with green tracer and black wire on number 1 pulser coil and between red wire with black tracer and black wire on number 2 pulser coil. Resistance should be 170-250 ohms on each coil. Renew pulser coil(s) if resistance is not to specification: Note that number 1 and number 2 pulser coils have different color wires and must not be interchanged. Refer to Fig. SZ7-11. The firing order will be altered and engine will not start if pulser coils are interchanged. Air gap between pulser coils and flywheel magnets should be 0.75 mm (0.030 in.). Refer to Fig. SZ7-12.

IGNITION COILS. Disconnect ignition coils. Check primary windings by connecting tester between orange and black wires on number 1 coil and be-

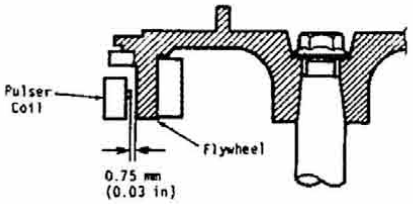
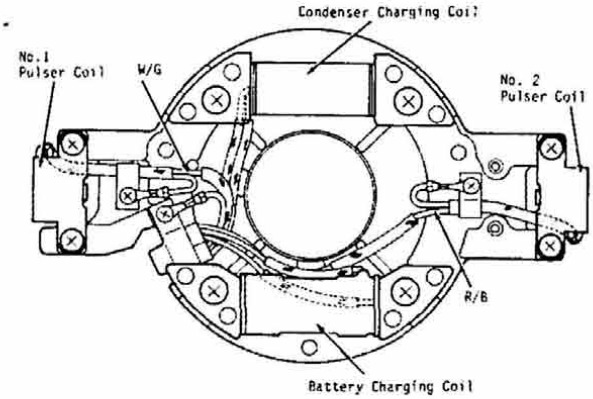


Fig. SZ7-12—Air gap between pulser coils and flywheel magnets should be 0.75 mm (0.030 in.) as shown.

Fig. SZ7-11—Pulser coils must be installed on stator in location shown for proper ignition system operation. Pulser coils are identified by wire color code.
R/B. Red with black trace
W/G. White with green tracer



ITEM		DATA	METER LEAD CONNECTION	REMARKS
Condenser charging coil		80V or over (Meter setting: POS500)	Red: Green Black: Black/Red	Connect CDI unit
Pulser coil		3.0V or over (Meter setting:SEN50)	Red: White/Green (No. 1), Red/Black (No. 2) Black: Black	Connect CDI unit
Battery charging coil	Manual Start Models	1.3V or over (Meter setting:POS50)	Red: Red Black: Yellow	Disconnect rectifier
		1.6V or over (Meter setting: POS50)	Red: Red/Yellow Black: Yellow	
	Electric Start Models	1.6V or over (Meter setting:POS50)	Red: Red Black: Yellow	
CDI to coil		85V or over (Meter setting: POS500)	Red: Orange (No. 1), Gray (No. 2) Black: Black	Connect ignition coil

Fig. SZ7-10—Use chart shown when trouble-shooting ignition system using Stevens Model CD-77 peak voltage tester. Remove spark plugs and crank engine with manual rewind starter when performing tests.