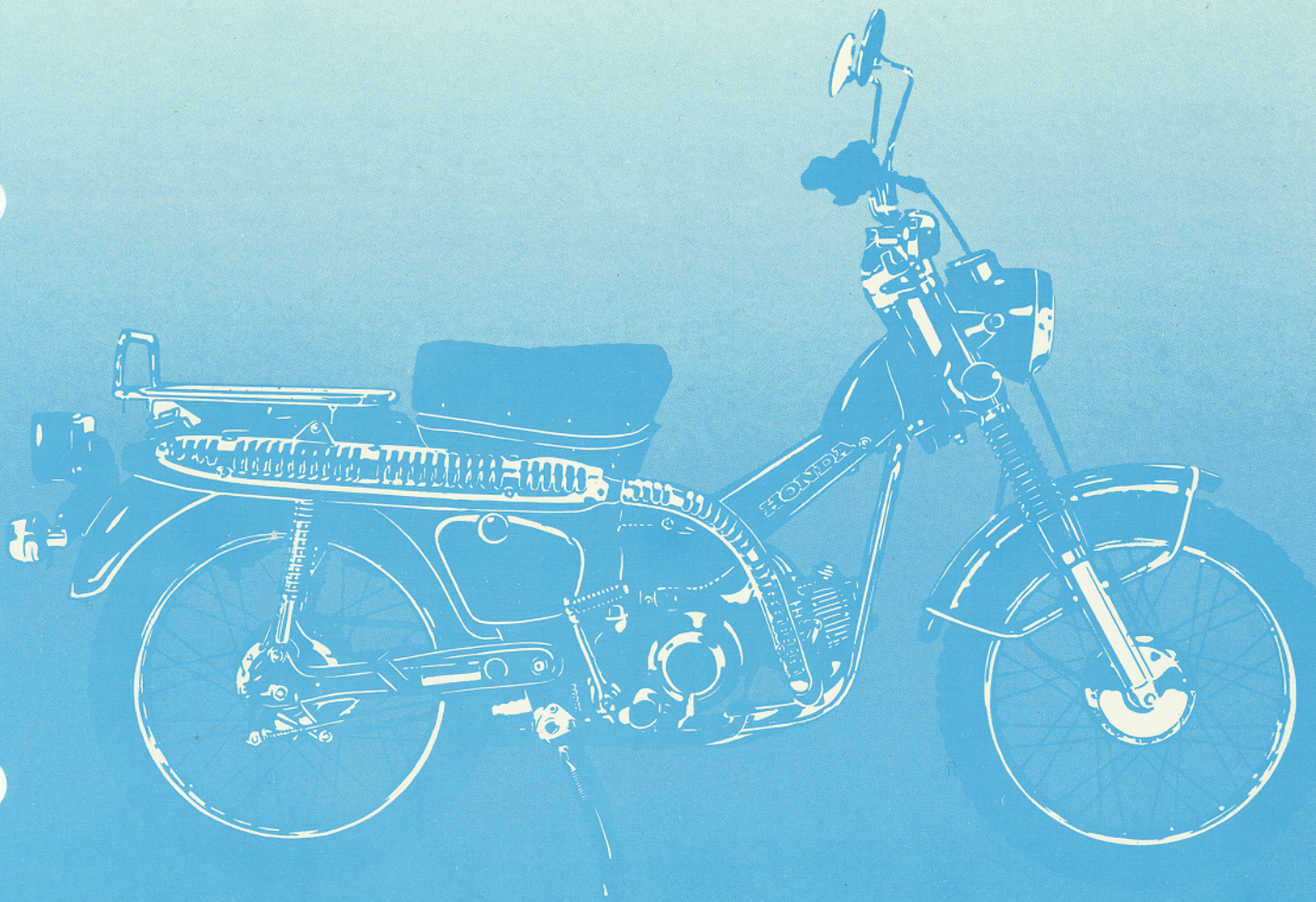


Official

HONDA

SHOP MANUAL

CT90·110



CT90 '77-'79

CT110 '80-'82



HONDA

CT90 • 110

INTRODUCTION

This shop manual contains service information and procedures for 1977 through 1979 CT90's and 1980 through 1982 Honda CT110's. Motorcycles manufactured after December 31, 1977 are equipped with emission controls. These are covered in this shop manual, in Section VII (78½ EMISSIONS ADDENDUM).

CT110 service information begins on page 141.

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Service Publications Office



CONTENTS

I	SPECIFICATIONS.	3
II	SERVICE INFORMATION	
	1. SERVICE DATA	5
	2. TORQUE SPECIFICATIONS	7
	3. SPECIAL TOOLS	8
	4. LUBRICATION POINTS	9
	5. WIRING DIAGRAM	10
	6. TROUBLE SHOOTING CHART	11
	7. MAINTENANCE SCHEDULE	20
III	INSPECTION/ADJUSTMENT	22
IV	ENGINE	
	1. ENGINE REMOVAL/INSTALLATION	36
	2. CYLINDER HEAD/VALVES	38
	3. CYLINDER/PISTON	50
	4. LUBRICATION SYSTEM	56
	5. CLUTCH/GEAR SHIFT/OIL PUMP	57
	6. AUXILIARY TRANSMISSION	65
	7. A.C. GENERATOR/CAM CHAIN TENSIONER	68
	8. TRANSMISSION/CRANKSHAFT/KICK STARTER	71
	9. CARBURETOR	78
V	FRAME	
	1. FRONT WHEEL/FRONT SUSPENSION/STEERING	83
	2. REAR WHEEL/REAR SUSPENSION	90
	3. TAIL LIGHT/FUEL TANK	96
	4. WIRING	97
VI	ELECTRICAL	
	1. BATTERY CHARGING SYSTEM	99
	2. IGNITION SYSTEM	103
	3. SWITCHES	106
VII	'78½ EMISSIONS ADDENDUM	109
VIII	'79 ADDENDUM	137
IX	'80 CT110 ADDENDUM	141
X	'81 CT110 ADDENDUM	171
XI	'82 CT110 ADDENDUM	185



Items	Specifications
<p>DIMENSION</p> <p>Overall Length</p> <p>Overall Width</p> <p>Overall Height</p> <p>Wheel Base</p> <p>Seat Height</p> <p>Ground Clearance</p> <p>Dry Weight</p>	<p>1,870 mm (73.6 in)</p> <p>740 mm (29.1 in)</p> <p>1,060 mm (41.7 in)</p> <p>1,220 mm (48.0 in)</p> <p>775 mm (30.5 in)</p> <p>165 mm (6.5 in)</p> <p>90 kg (198.5 lb.)</p>
<p>FRAME</p> <p>Type</p> <p>Front Suspension, Travel</p> <p>Rear Suspension, Travel</p> <p>Front Tire Size, Type</p> <p>Rear Tire Size, Type</p> <p>Front Brake</p> <p>Rear Brake</p> <p>Fuel Capacity</p> <p>Fuel Reserve Capacity</p> <p>Auxiliary Fuel Tank Capacity</p> <p>Caster Angle</p> <p>Trail Length</p> <p>Front Fork Oil Capacity</p>	<p>Back bone</p> <p>Telescopic fork, 102 mm (4.0 in)</p> <p>Swing arm, 77 mm (3.0 in)</p> <p>2. 75-17-4 PR Knobby, tire air pressure 1.75 kg/cm² (25 psi)</p> <p>2. 75-17-4 PR Knobby, tire air pressure 2.25 kg/cm² (32 psi)</p> <p>Internal expanding shoes</p> <p>Internal expanding shoes</p> <p>5.5 lit. (1.4 U.S. gal. 1.21 Imp. gal.)</p> <p>0.8 lit. (0.2 U.S. gal. 0.18 Imp. gal)</p> <p>2.3 lit. (0.6 U.S. gal. 0.54 Imp. gal)</p> <p>63°</p> <p>75 mm (3 in)</p> <p>125 - 135 cc (4.2 - 4.6 ozs.)</p> <p>To fill dry fork assembly</p> <p>130 - 140 cc (4.4 - 4.7 oz.)</p> <p>To refill after draining</p> <p>120 - 130 cc (4.1 - 4.4 oz.)</p>
<p>ENGINE</p> <p>Type</p> <p>Cylinder Arrangement</p> <p>Bore and Stroke</p> <p>Displacement</p> <p>Compression Ratio</p> <p>Carburetor, Venturi Dia.</p> <p>Valve train</p> <p>Oil Capacity</p> <p>Lubri cation System</p> <p>Fuel Required</p> <p>Air Filtration</p>	<p>Air cooled 4-stroke O.H.C. engine</p> <p>Single cylinder 75 inclined from vertical</p> <p>50 x 45.6 mm (1.970 x 1.797 in)</p> <p>89.5 cc (5.46 cu in)</p> <p>8.2 : 1</p> <p>Piston valve type, venturi dia. 16 mm (0.64 in)</p> <p>Chain driven over head camshaft</p> <p>0.9 lit. (0.95 U.S. qt. 0.80 Imp. qt.)</p> <p>Forced pressure and wet sump</p> <p>Low-lead or regular gasoline of 91 research octane (86 pump octane) or higher</p> <p>Oiled polyurethane foam filter</p>



SPECIFICATIONS

[] k9 (1978) model

Items	Specifications
Intake Valve : Opens Closes Exhaust Valve: Opens Closes Valve Clearance Engine Dry Weight Air Screw Opening Pilot Screw Opening Idle Speed	5° BTDC 20° ABDC 25° BBDC 5° ATDC IN/EX. 0.05 mm (0.002 in) 24 kg (52.9 lb.) 1 [1-1/4] 1,300 rpm
DRIVE TRAIN Clutch Transmission Primary Reduction Gear Ratio I II III IV Auxiliary Transmission High/Low Final Reduction Gear Shift Pattern	Wet multi plate automatic 4-speed constant mesh 3.722 2.538 1.611 1.190 0.958 1.000 / 1.867 3,000, drive sprocket 15 T, driven sprocket 45 T Left foot operated return system
ELECTRICAL Ignition Ignition Advance : " F " mark Max. advance Starting System Alternator Battery Capacity Fuse Capacity Spark Plug Condenser Capacity	Battery and ignition coil 1,300 rpm 10° TDC 26° - 32° Kick starter A.C. Generator 0.062 kw/6,000 rpm 6 V - 5.5 AH 15 amp. U.S.A. model D8HA (NGK), X24FS-U (ND) Canada model DR8HS (NGK), X24FSR-U (ND) 0.27 - 0.33 μ F



ENGINE

Unit: mm (in.)

Item		Standard		Service Limit		
Cylinder	I.D.	50.00–50.01	(1.9685 – 1.9689)	50.10	(1.9724)	
	Taper	0 – 0.01	(0 – 0.0004)	0.05	(0.002)	
	Out-of-round	0 – 0.01	(0 – 0.0004)	0.05	(0.002)	
Piston O. D.		49.97–49.99	(1.9673 – 1.9681)	49.80	(1.9606)	
Piston pin I. D.		14.002–14.008	(0.5513 – 0.5515)	14.04	(0.5528)	
Piston pin O. D.		13.994–14.000	(0.5509 – 0.5512)	13.960	(0.5496)	
Piston ring end gap	Top/second	0.15–0.35	(0.006 – 0.014)	0.50	(0.020)	
	Oil	0.15–0.40	(0.006 – 0.016)	0.50	(0.020)	
Piston-to-piston ring clearance	Top/second	0.010–0.045	(0.0004 – 0.0018)	0.12	(0.0047)	
	Oil	0.010–0.045	(0.0004 – 0.0018)	0.12	(0.0047)	
Piston ring thickness	Top/second	1.175–1.190	(0.0463 – 0.0469)	1.130	(0.0445)	
	Oil	2.475–2.490	(0.0974 – 0.0980)	2.43	(0.957)	
Valve stem O. D.	IN	5.455–5.465	(0.2148 – 0.2152)	5.435	(0.2139)	
	EX	5.435–5.445	(0.2140 – 0.2144)	5.415	(0.2132)	
Valve guide I. D.	IN/EX	5.475–5.485	(0.2157 – 0.2161)	5.525	(0.2175)	
Valve-to-valve guide clearance	IN	0.010–0.030	(0.0004 – 0.0012)	0.08	(0.0032)	
	EX	0.030–0.050	(0.0012 – 0.0020)	0.10	(0.0040)	
Valve spring	Free length	Outer	31.8	(1.252)	30.6	(1.205)
		Inner	26.5	(1.043)	25.5	(1.004)
	Preload/length	Outer kg/mm (lbs./in.)	19–21/22.3	(41.8–46.21/0.878)	————	————
		Inner kg/mm (lbs./in.)	9.5–10.5/18.4	(20.9–23.1/0.724)	————	————
Valve face width	IN/EX	1.2–1.5	(0.048 – 0.060)	1.8	(0.072)	
Valve seat width	IN/EX	1.0	(0.04)	1.6	(0.064)	
Cam height	IN/EX	24.90–24.98	(0.9803 – 0.9835)	24.6	(0.9685)	
Camshaft O. D.	R. End	17.927–17.938	(0.7058 – 0.7062)	17.90	(0.7047)	
	L. End	25.917 – 25.930	(1.0204 – 1.0209)	25.90	(1.0197)	
Camshaft end bearing I. D.	R. End	18.000–18.018	(0.7087 – 0.7094)	18.05	(0.7106)	
	L. End	26.000–26.020	(1.0236 – 1.0244)	26.05	(1.0256)	
Clutch disc thickness		2.8–2.9	(0.1102 – 0.1142)	2.4	(0.0945)	
Clutch plate thickness		1.93–2.07	(0.0760 – 0.0815)	1.85	(0.0729)	
Clutch plate warpage		0.2	(0.008)	0.5	(0.02)	
Clutch spring	Free length	27.0	(1.0630)	26.0	(1.0236)	
	Preload/length kg/mm (lbs/in)	10–10.4/15	(22–22.9/0.591)	————	————	
Crankshaft run out (at ends)		0 – 0.015	(0 – 0.0006)	0.10	(0.0040)	
Crankshaft bearing play	Axial	0.10–0.35	(0.004 – 0.019)	0.8	(0.032)	
	Radial	0. – 0.01	(0. – 0.0004)	0.05	(0.002)	
Connecting rod small end I. D.		14.012–14.028	(0.5517– 0.5523)	14.050	(0.5531)	
Connecting rod big end side clearance		0.10–0.35	(0.004 – 0.019)	0.8	(0.032)	
Connecting rod big end radial clearance		0 – 0.01	(0 – 0.0004)	0.05	(0.002)	
Clutch drive gear I.D.		24.00–24.02	(0.9449 – 0.9457)	24.15	(0.9508)	
Clutch center guide O.D		22.0–22.1	(0.8661 – 0.8701)	21.85	(0.8602)	
Clutch center guide-to-crankshaft clearance		0.005–0.047	(0.0002 – 0.0019)	0.15	(0.0060)	



Item		Standard		Service Limit	
Rocker arm shaft O. D.		9.972–9.987	(0.3926 – 0.3932)	9.92	(0.3906)
Rocker arm I. D.		10.000–10.015	(0.3937 – 0.3943)	10.10	(0.3976)
Primary drive gear I. D.		24.00–24.02	(0.945 – 0.946)	24.15	(0.951)
Crankshaft-to-clutch center guide clearance		0.005–0.047	(0.0002 – 0.0019)	0.15	(0.060)
Tensioner spring free length	Spring A	65	(2.6)	60	(2.4)
	Spring B	49.8	(19.92)	40	(1.6)
Oil pump	Inner-to-outer rotor clearance	0.15	(0.006)	0.2	(0.008)
	Outer rotor-to-body clearance	0.15–0.20	(0.0060 – 0.0080)	0.25	(0.010)
	Rotor-to-cover clearance	0.02–0.07	(0.0008 – 0.0028)	0.12	(1.0047)
Shift fork I. D.		42.00	(1.6535)	42.1	(1.6575)
Shift fork ends thickness		5.96–6.04	(0.2346 – 0.2378)	5.70	(0.2244)
Shift drum O. D.		41.950–41.975	(1.6516 – 1.6526)	41.80	(1.6457)
Shift drum groove width		6.1–6.2	(0.2402 – 0.2441)	6.4	(0.2520)
Shift fork-to-shift drum clearance		0.05	(0.0020)	0.2	(0.008)
Auxiliary transmission	Idler gear shaft O. D.	12.966–12.984	(0.5105 – 0.5112)	12.85	(0.5140)
	Idler gear I. D.	13.000–13.018	(0.5200 – 0.5207)	13.10	(0.5157)

FRAME

Item		Standard		Service Limit	
Front/rear axle shaft bend		0 – 0.05	(0 – 0.002)	0.2	(0.008)
Front/rear wheel bearing play	Axial	0 – 0.05	(0 – 0.002)	0.1	(0.004)
	Radial	0.003–0.008	(0.0001 – 0.0003)	0.04	(0.0016)
Front/rear brake drum I. D.		110.0	(4.3307)	111.0	(4.3701)
Wheel rim	Face runout	0 – 0.5	(0 – 0.02)	1.0	(0.04)
	Eccentricity	0 – 0.5	(0 – 0.02)	1.0	(0.04)
Front fork spring	Free length	203	(8.0)	185	(7.3)
Rear shock absorber spring	Free length	223	(8.78)	207	(8.16)
Front fork piston O. D.		30.950–30.975	(1.219 – 1.220)	30.85	(1.215)
Front fork bottom case I. D.		31.000–31.039	(1.221 – 1.223)	31.10	(1.225)
Brake lining thickness		4.0	(0.16)	2.0	(0.08)



ENGINE

Tightening point	Q'ty	Thread dia.	Torque kg-m (lbs ft)
Cylinder head nut	4	8	2.0 – 2.5 (14.5 – 18.1)
Camshaft sprocket bolt	2	6	0.9 – 1.2 (6.5 – 8.7)
Cam chain guide roller bolt	1	6	0.9 – 1.4 (6.5 – 10.1)
Spark advancer bolt	1	6	0.8 – 1.2 (5.8 – 8.7)
Clutch lock nut	1	16	3.8 – 4.5 (27.4 – 32.5)
A. C. generator rotor bolt	1	8	2.6 – 3.2 (18.8 – 23.2)
A. C. generator stator bolt	3	6	0.8 – 1.2 (5.8 – 8.7)
Shift drum bolt	1	6	0.8 – 1.2 (5.8 – 8.7)

FRAME

Tightening point	Q'ty	Thread dia.	Torque kg-m (lbs-ft)
Handlebars setting bolts	4	6	0.8 – 1.2 (5.8 – 8.7)
Steering stem nut	1	22	6.0 – 7.0 (43.4 – 50.7)
Front fork bolt	2	10	3.5 – 4.5 (25.3 – 32.6)
Steering bottom bridge bolt	2	8	1.8 – 2.5 (13.0 – 18.1)
Swingarm pivot bolt	1	10	4.0 – 6.0 (29.0 – 43.4)
Rear shock absorber upper nut	2	10	2.5 – 3.5 (18.1 – 25.3)
Rear shock absorber lower nut	2	8	2.5 – 3.5 (18.1 – 25.3)
Front axle nut	1	10	3.5 – 5.0 (25.3 – 36.2)
Rear axle nut	1	10	3.5 – 5.0 (25.3 – 36.2)
Rear axle sleeve nut	1	16	3.5 – 4.5 (25.3 – 32.6)
Driven sprocket bolt	4	8	1.8 – 2.5 (13.0 – 18.1)
Rear brake stop arm bolt	2	8	1.8 – 2.5 (13.0 – 18.1)
Engine hanger bolt	2	10	3.0 – 4.0 (21.7 – 29.0)
Step bar bolt	14	8	1.8 – 2.5 (13.0 – 18.1)

Torque specifications listed above are important tightening points. Others should be tightened to standard torque below.

Standard Torque Specifications

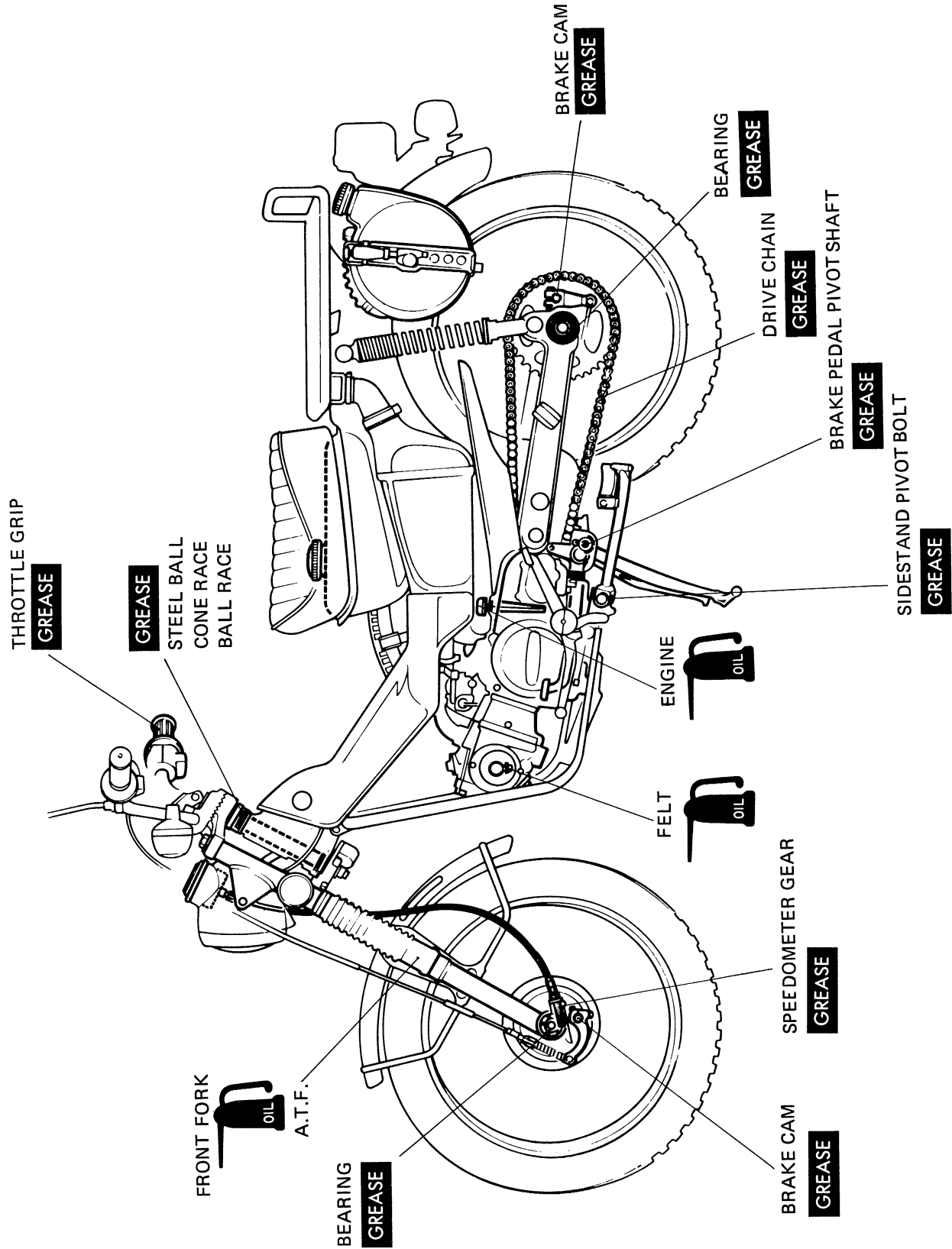
Type	Torque kg-m (lbs-ft)	Type	Torque kg-m (lbs-ft)
5 mm bolt and nut	0.45 – 0.60 (3.3 – 4.3)	5 mm screw	0.35 – 0.50 (2.5 – 3.6)
6 mm bolt and nut	0.8 – 1.2 (5.8 – 8.7)	6 mm screw	0.7 – 1.1 (5.1 – 8.0)
8 mm bolt and nut	1.8 – 2.5 (13.0 – 18.1)	6 mm flange bolt and nut	1.0 – 1.4 (7.2 – 10.1)
10 mm bolt and nut	3.0 – 4.0 (21.7 – 29.0)	8 mm flange bolt and nut	2.4 – 3.0 (17.4 – 21.7)
12 mm bolt and nut	5.0 – 6.0 (36.2 – 43.4)	10 mm flange bolt and nut	3.0 – 4.0 (21.7 – 29.0)

3. SPECIAL TOOLS



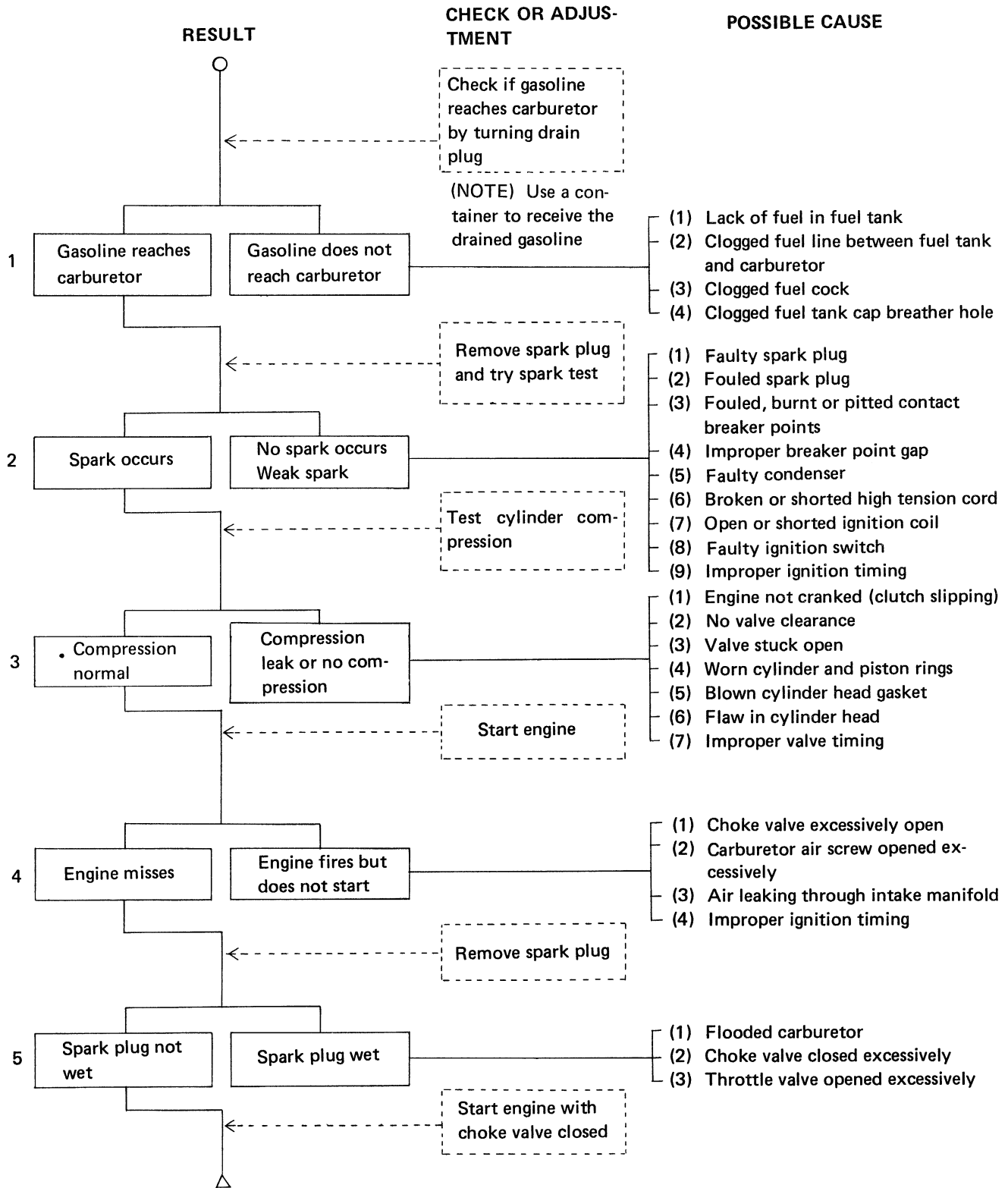
HONDA
CT90

TOOL NAME	PART NO.	REFERENCE PAGE
Float valve gauge	07401 – 0010000	81
36mm pin spanner	07902 – 0010000	86
Tappet adjusting wrench	07908 – 0010000	24
Steering stem nut wrench	07915 – 0300000	86
16mm lock nut wrench	07916 – 3710000	58
Clutch outer holder	07932 – 0340000	58
Rotor puller	07933 – 2160000	69
Valve guide driver	07942 – 3290100	42
Valve guide driver	07942 – 1180100	42
Valve spring compressor	07957 – 3290001	41
Valve guide reamer	07984 – 0980000	42
Bearing driver	07949 – 3000000	85, 91
Bearing driver attachment	07945 – 0980000	85, 91
Bearing driver	07949 – 6110000	92
Bearing driver attachment	07945 – 3330100	92
Ball race driver	07944 – 1150001	86
Fork seal driver	07974 – 1180001	87
Oil seal guide	07974 – 1280000	43
Rear shock absorber dis/assembling tool	07959 – 3290000	93
Spring holder	07967 – 1150100	93



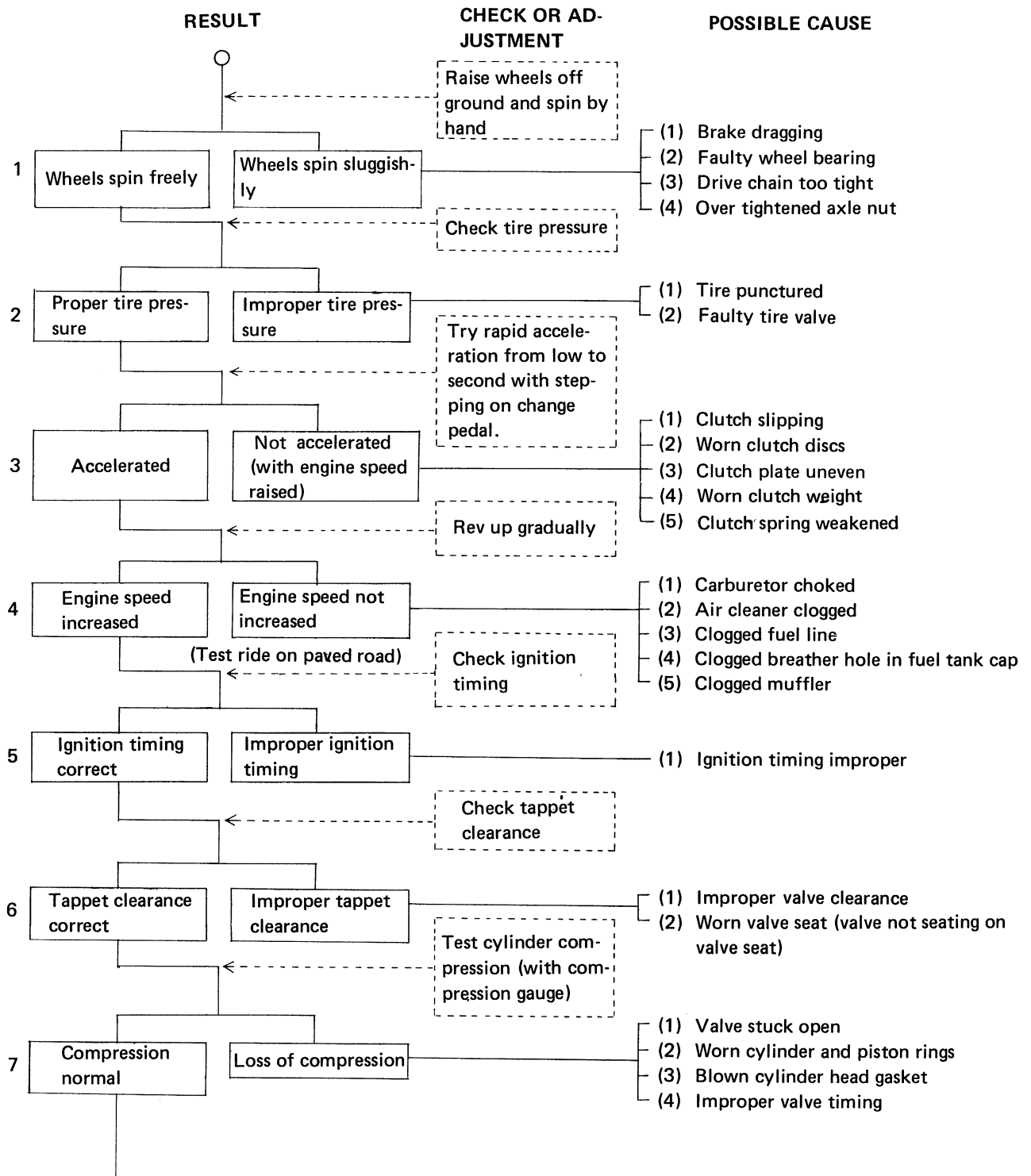


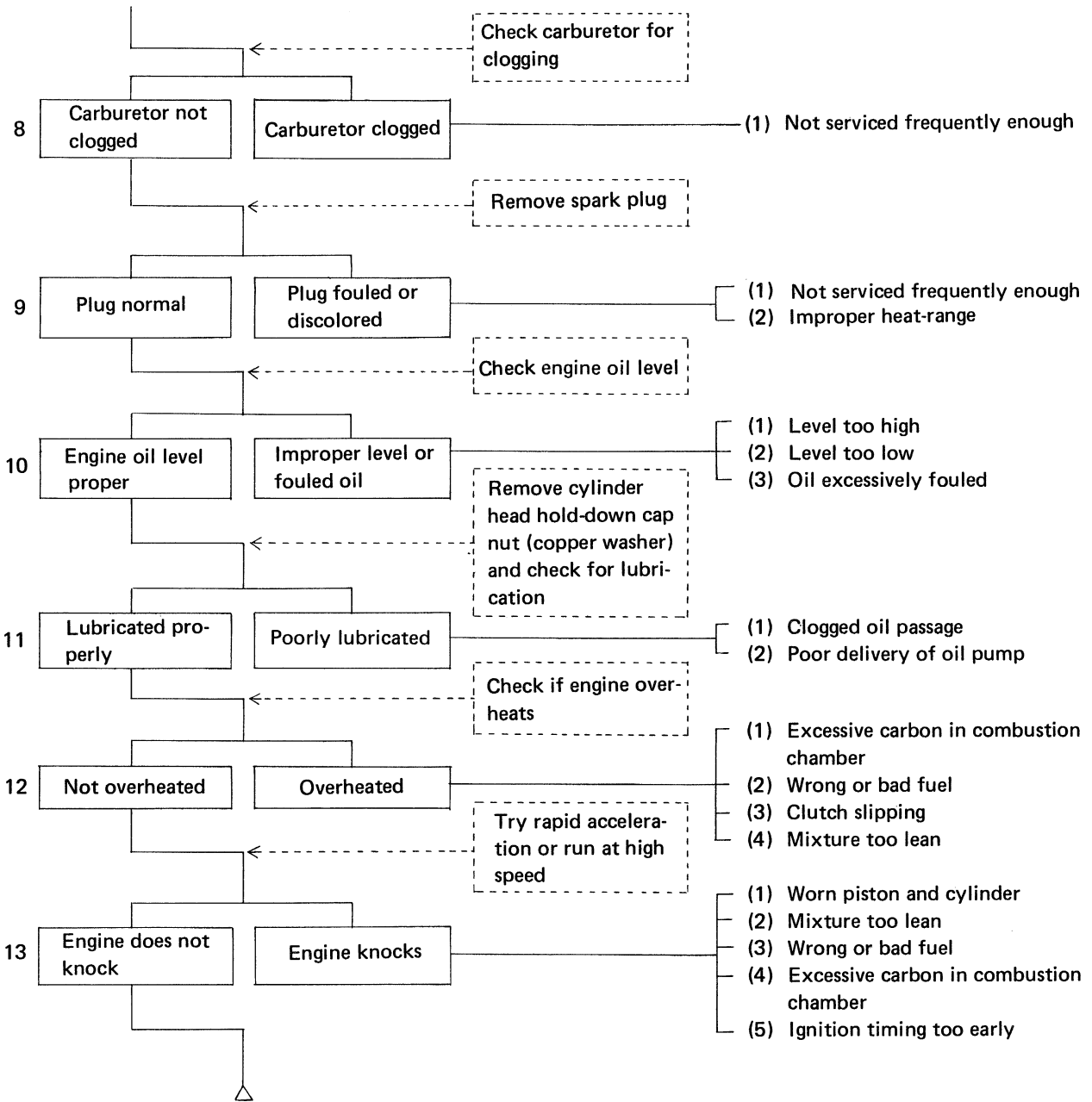
**A. ENGINE WILL NOT START
(OR HARD STARTING)**





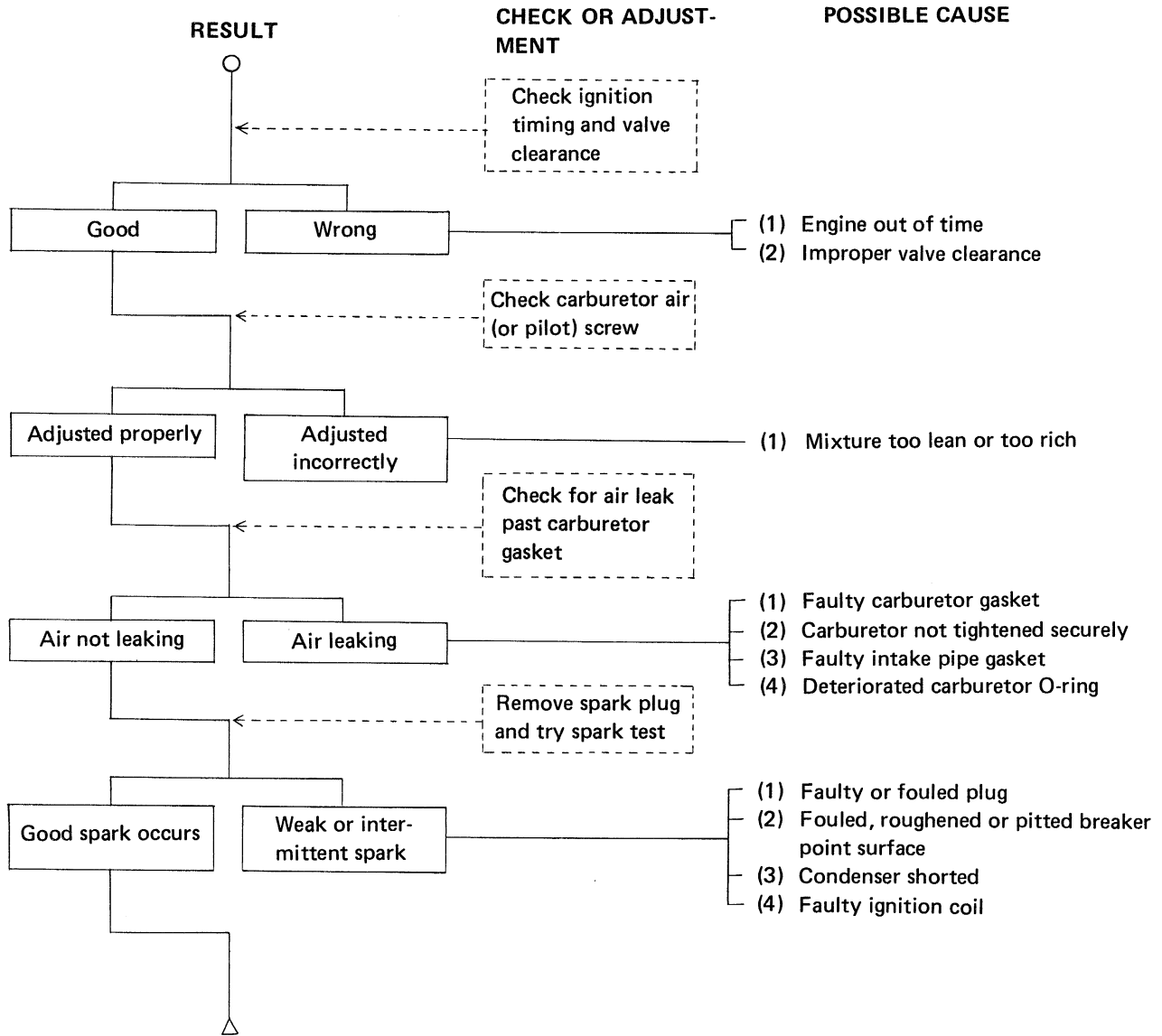
B. ENGINE LACKS POWER (AUX. TRANSMISSION OPERATES PROPERLY)





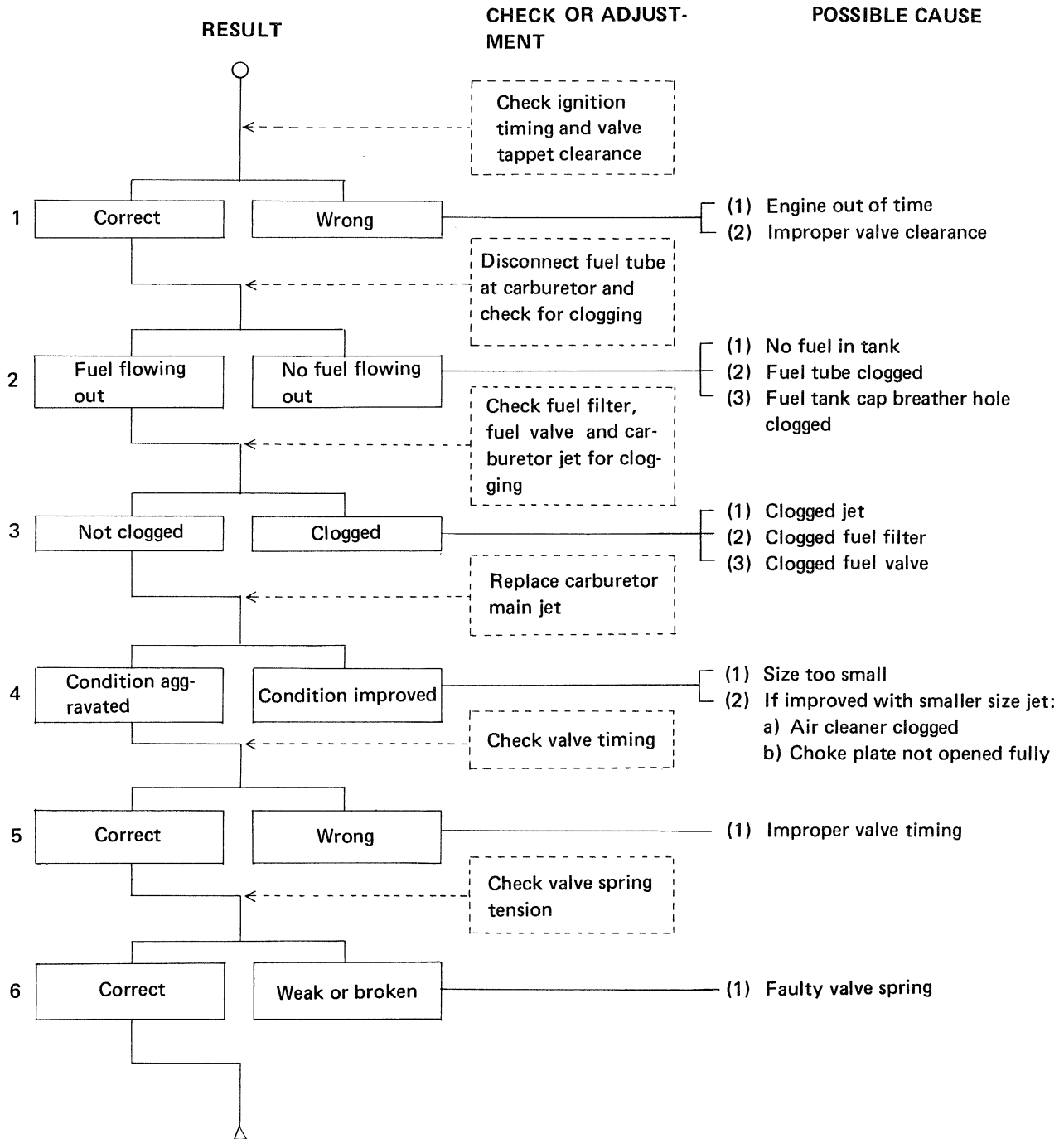


C. ROUGH IDLE OR POOR LOW SPEED PERFORMANCE (CARBURETOR IS CORRECTLY JETTED FOR LOCAL ALTITUDE.)





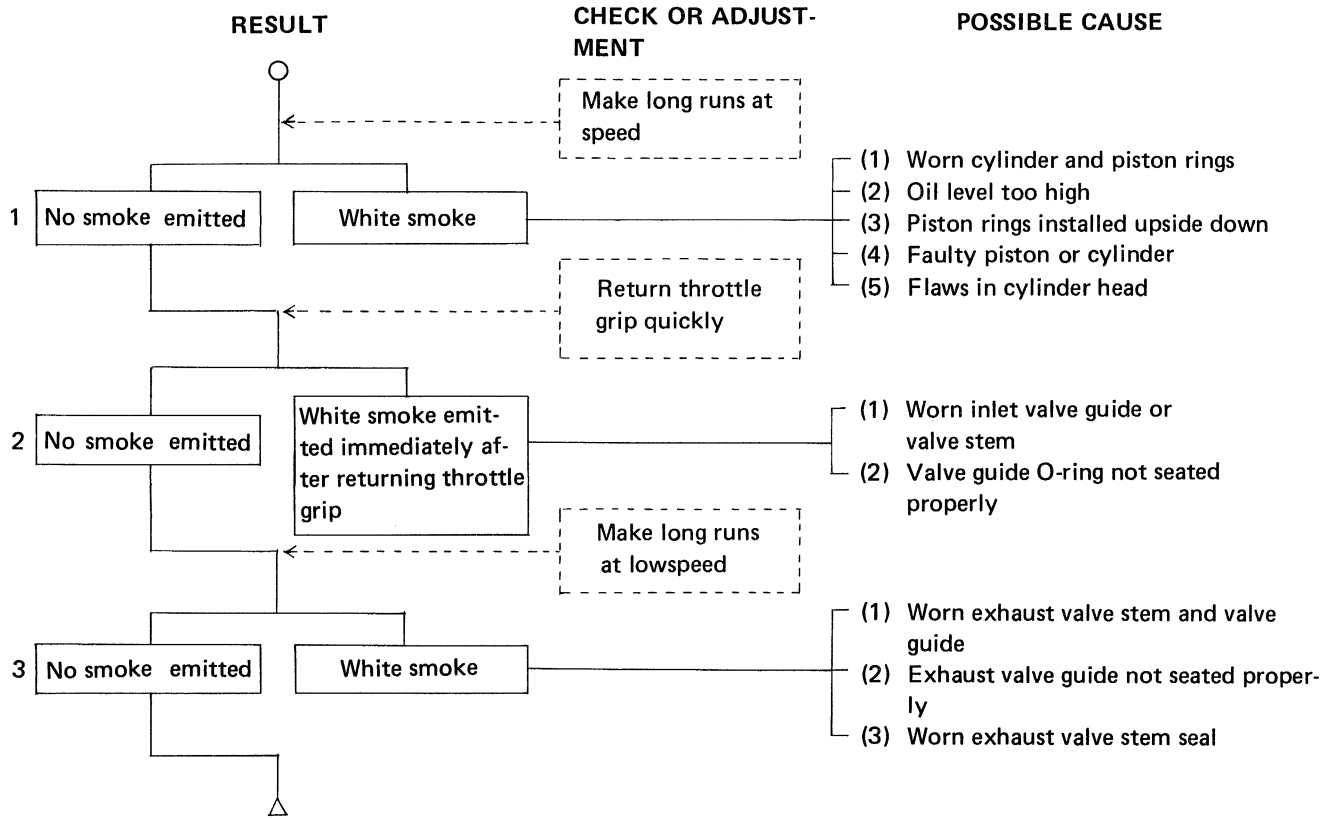
D. ENGINE LACKS HIGH SPEED PERFORMANCE



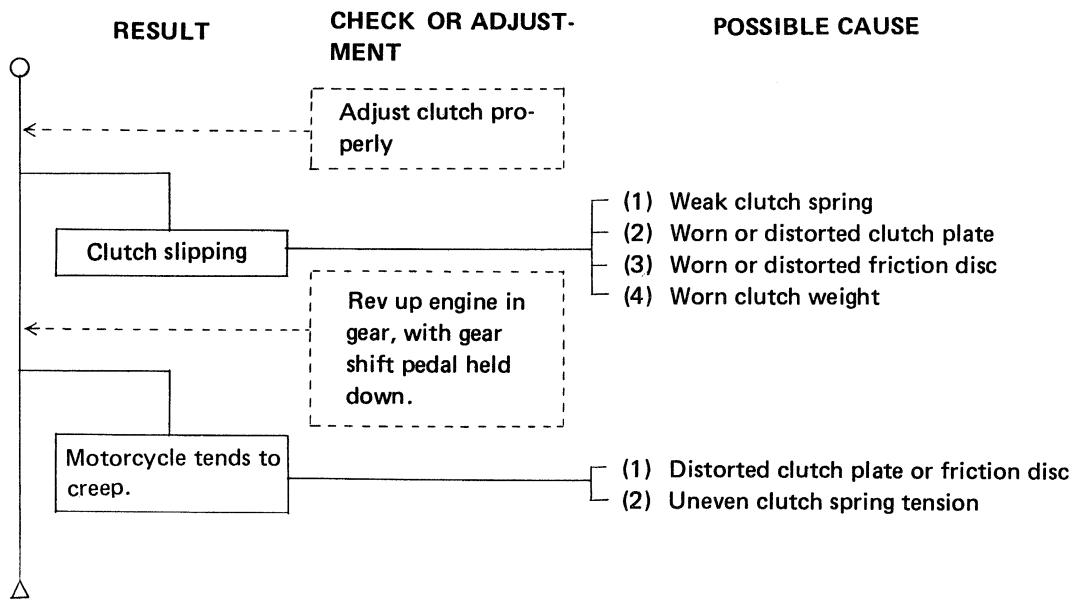


TROUBLESHOOTING CHART

E. SMOKY EXHAUST

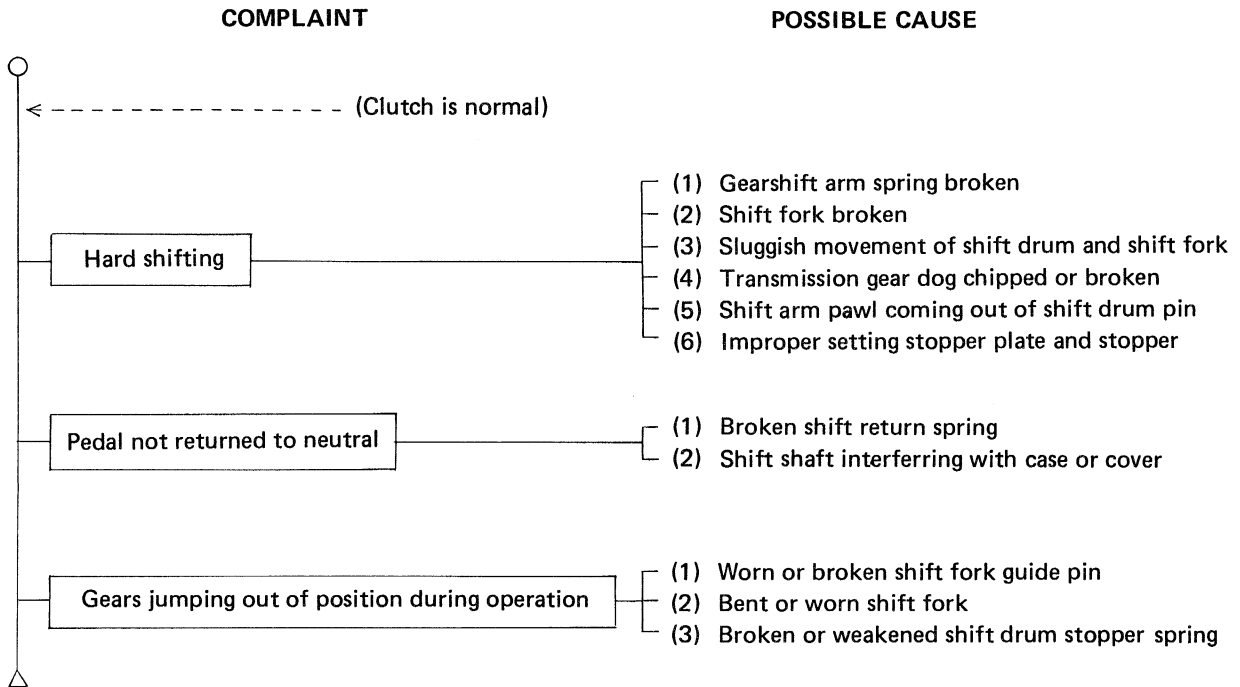


F. DEFECTIVE CLUTCH

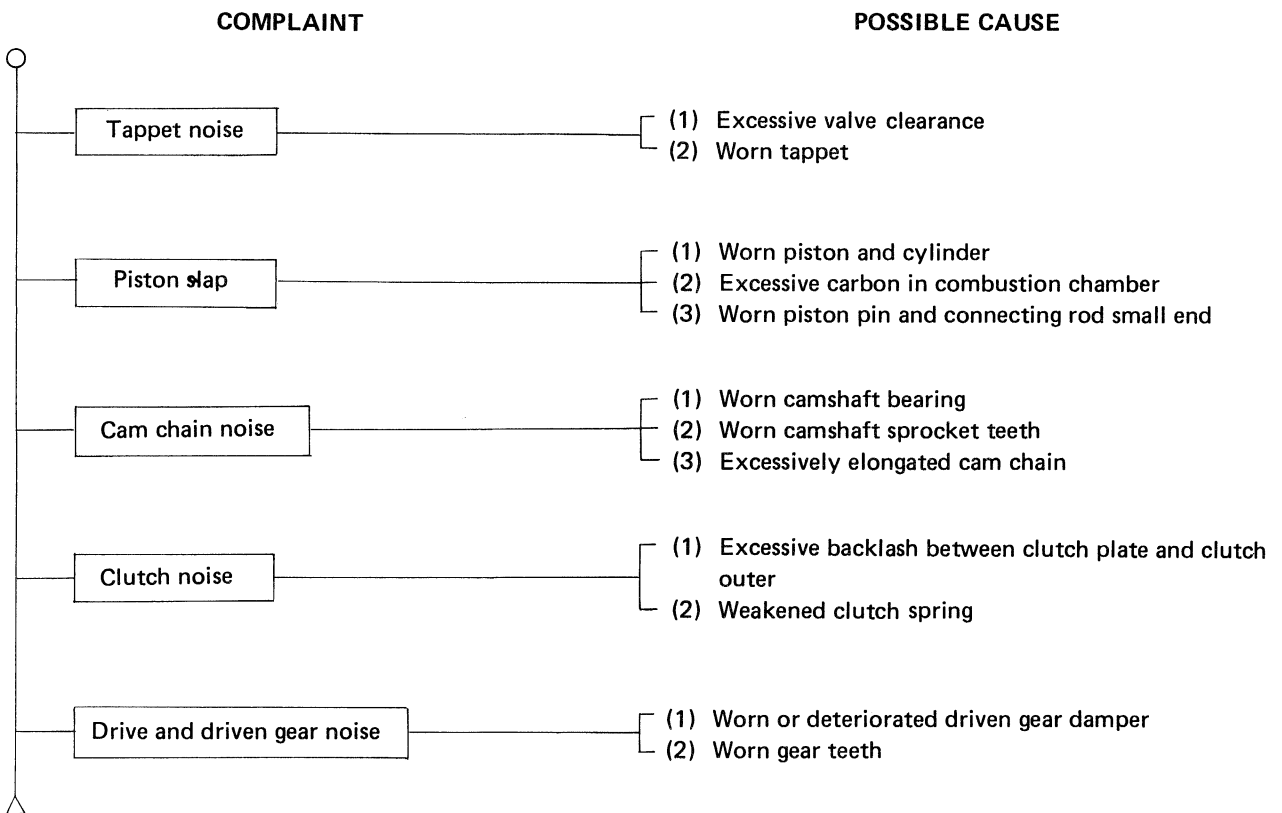




G. HARD SHIFTING

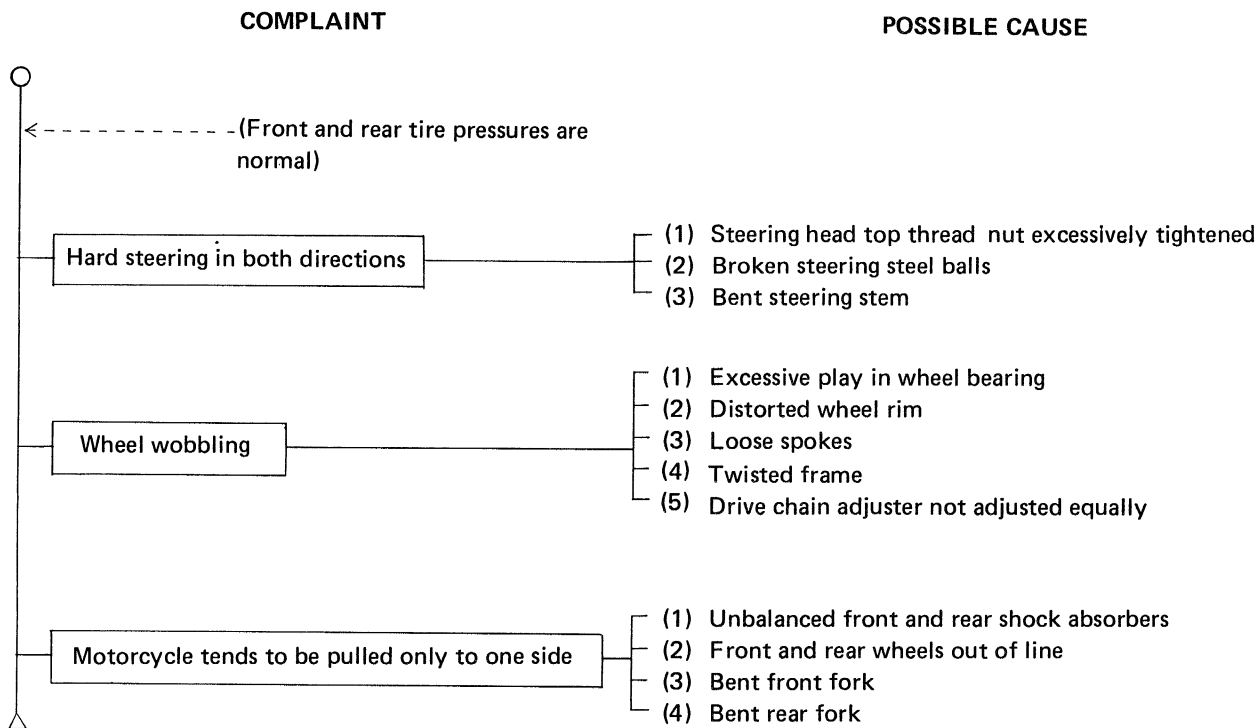


H. ENGINE NOISE

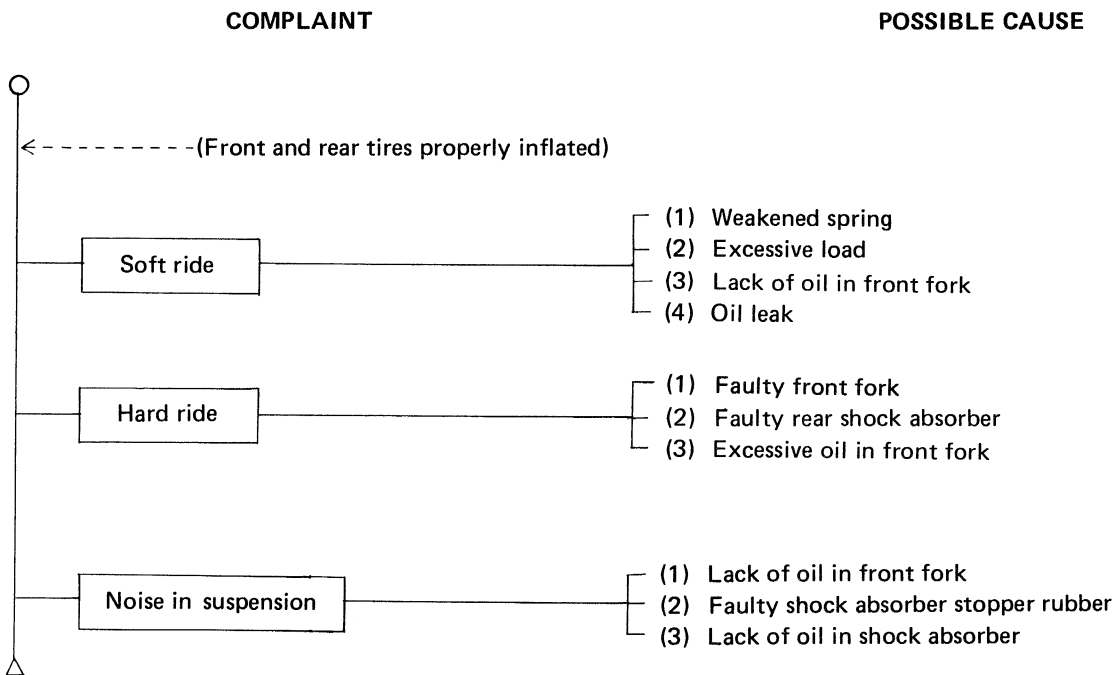




I. MOTORCYCLE PULLED TO ONE SIDE

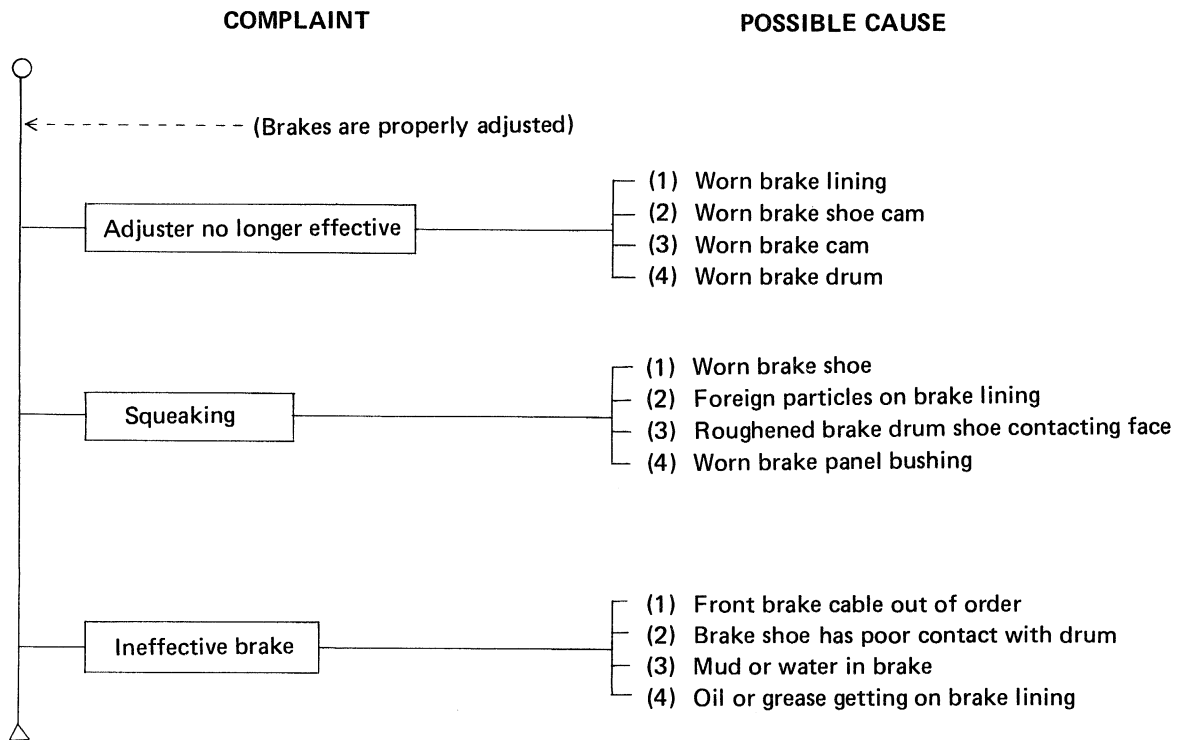


J. FAULTY FRONT AND REAR SHOCK ABSORBERS

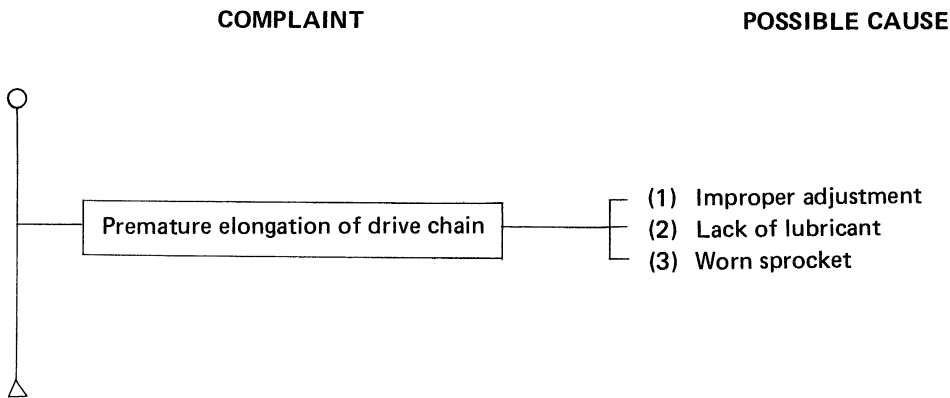




K. FAULTY BRAKE



L. PREMATURE ELONGATION OF DRIVE CHAIN



7. MAINTENANCE SCHEDULE



HONDA
CT90

1977 (K8) model

This maintenance schedule is based upon average riding conditions.

Machines subjected to severe use, or ridden in unusually dusty areas, require more frequent servicing.

	INITIAL SERVICE PERIOD		REGULAR SERVICE PERIOD Perform at every indicated month or mileage interval, whichever occurs first.			
	Month	—	1	3	6	12
	Mile	500	500	1,500	3,000	6,000
	Km	1,000	1,000	2,500	5,000	10,000
ENGINE OIL		R		R		
CENTRIFUGAL OIL FILTER						C
OIL FILTER SCREEN						C
SPARK PLUG					I	
CONTACT BREAKER POINT		I			I	
IGNITION TIMING		I			I	
VALVE CLEARANCE		I			I	
CAM CHAIN TENSION		I			I	
POLYURETHANE FOAM AIR FILTER ELEMENT		(service more frequently if operated in dusty areas.)		C		
CARBURETOR		I			I	
THROTTLE OPERATION		I			I	
FUEL FILTER SCREEN		I			I	
FUEL LINES					C	
CLUTCH		I			I	
DRIVE CHAIN		** I & L	I & L			
BRAKE SHOES					I	
BRAKE CONTROL LINKAGE		I			I	
WHEEL RIMS		I			I	
TIRES		I	I			
FRONT FORK OIL		*** R				
FRONT AND REAR SUSPENSION		I			I	
REAR FORK BUSHING					I	
STEERING HEAD BEARINGS						I
SIDE STAND					I	
BATTERY		I		I		
LIGHTING EQUIPMENT		I	I			
NUTS, BOLTS (TIGHTEN)		I	I			

I— Inspection, clean, adjust or replace if necessary. R—Replace C—Clean L—Lubricate

** Initial service period 200 miles. *** Initial service period 1,500 miles.



HONDA CT90

MAINTENANCE SCHEDULE

1978 (K9) model

FREQUENCY ITEM	WHICHEVER → COMES FIRST ↓	ODOMETER READING [NOTE (2)]			
	EVERY	600 mi. (1000km)	2400 mi. (4000km)	4800 mi. (8000km)	7200 mi. (12000km)
ENGINE OIL	YEAR	R	REPLACE EVERY 1200mi. (2000km)		
* ENGINE OIL FILTER ROTOR				C	
* ENGINE OIL FILTER SCREEN				C	
AIR CLEANER	NOTE (1)		C	C	C
* FUEL LINES			I	I	I
SPARK PLUG			I	I	R
* VALVE CLEARANCE		I	I	I	I
* CONTACT BREAKER POINTS		I	I	I	I
* IGNITION TIMING		I	I	I	I
* CAM CHAIN TENSION		A	A	A	A
* THROTTLE OPERATION		I	I	I	I
* CARBURETOR IDLE SPEED		I	I	I	I
* CARBURETOR CHOKE			I	I	I
DRIVE CHAIN	NOTE (3)		INSPECT EVERY 600mi. (1000 km)		
BATTERY ELECTROLYTE	MONTH	I	I	I	I
BRAKE SHOE WEAR			I	I	I
BRAKE FREE PLAY		I	I	I	I
* BRAKE LIGHT SWITCH		I	I	I	I
* HEADLIGHT AIM		I	I	I	I
SIDE STAND			I	I	I
CLUTCH		I	I	I	I
* SUSPENSION		I	I	I	I
* SPARK ARRESTOR			C	C	C
* NUTS, BOLTS, FASTENERS		I	I	I	I
** WHEELS/SPOKES		I	I	I	I
** STEERING HEAD BEARING		I			I

I: INSPECTION, CLEAN, ADJUST, OR REPLACE IF NECESSARY.

C: CLEAN

R: REPLACE

A: ADJUST

** IN THE INTEREST OF SAFETY, WE RECOMMEND THESE ITEMS BE SERVICED ONLY BY AN AUTHORIZED HONDA DEALER.

* SHOULD BE SERVICE BY AN AUTHORIZED HONDA DEALER, UNLESS THE OWNER HAS PROPER TOOLS AND SERVICE DATA AND IS MECHANICALLY QUALIFIED.

NOTES (1) More frequent service may be required when riding in dusty areas.

(2) For higher odometer readings, repeat at the frequency interval established here.

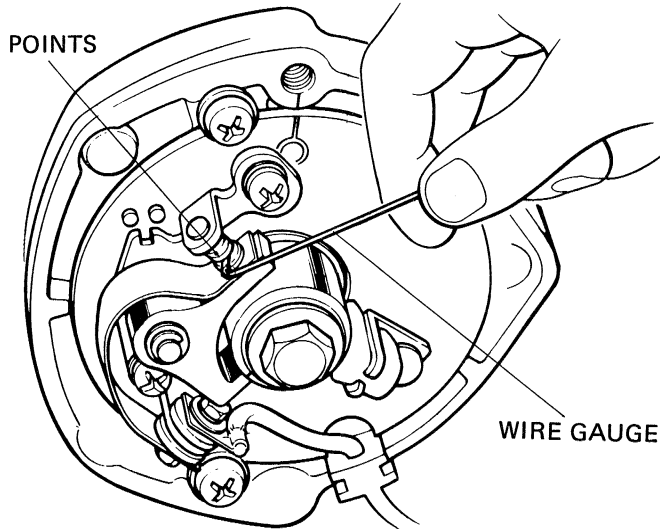
(3) Initial service period 200 miles.



• CONTACT BREAKER POINT GAP

INSPECTION

- Remove the point and generator covers.



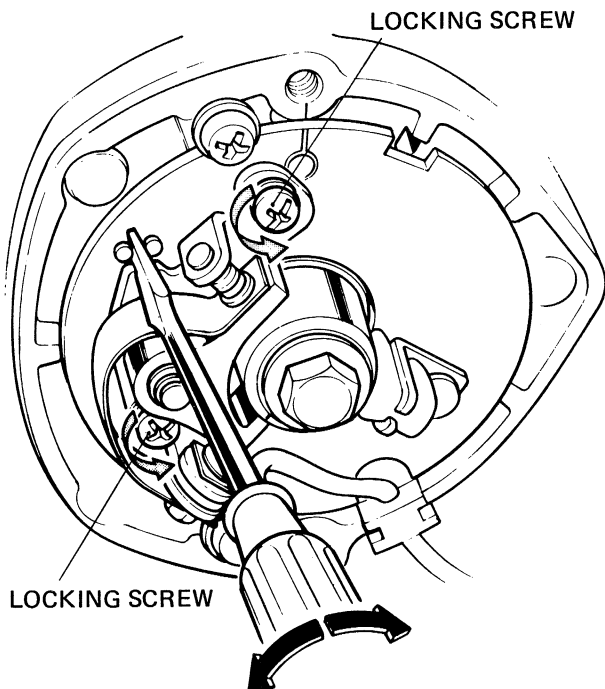
ADJUSTMENT

NOTE

Contact breaker point gap must be adjusted before the ignition timing adjustment is performed.

POINT GAP

0.3-0.4 mm (0.012-0.16 in.)

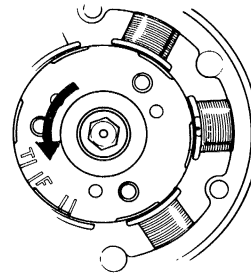


- (1) Rotate the A.C. generator counterclockwise to find the position where the point gap is at maximum.
- (2) Check the point gap with wire gauge.

POINT GAP

0.3-0.4 mm (0.012-0.016 in.)

- When adjustment is necessary, observe the following:



- (1) Rotate the A. C. generator rotor counterclockwise to find the position where the point gap is at maximum.
- (2) Loosen the contact breaker plate locking screws and move the contact breaker plate to achieve correct gap.
- (3) When properly adjusted, retighten the locking screws.

NOTE

Do not allow the plate to move when tightening the locking screws.

- (4) Rotate the A.C. generator rotor several times and recheck the breaker point gap. If the gap is incorrect, repeat the steps (1) thru (4) above.



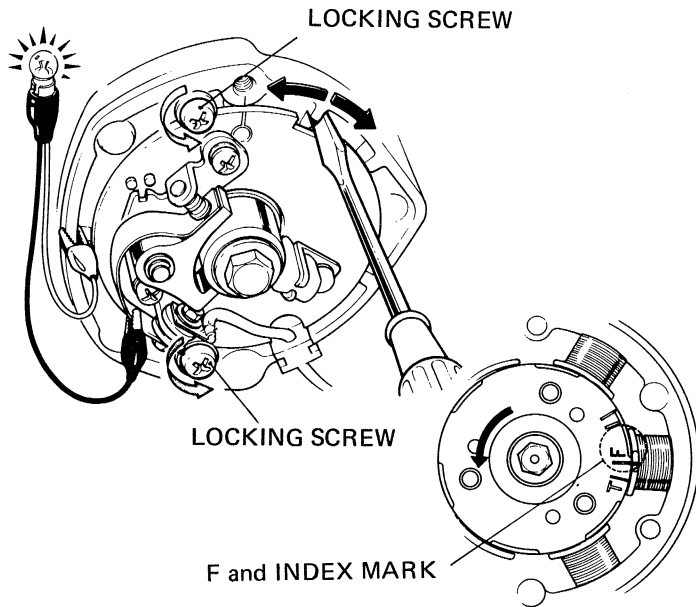
• IGNITION TIMING

Do not perform this operation until point gap has been adjusted.

Static test (with a use of test lamp)

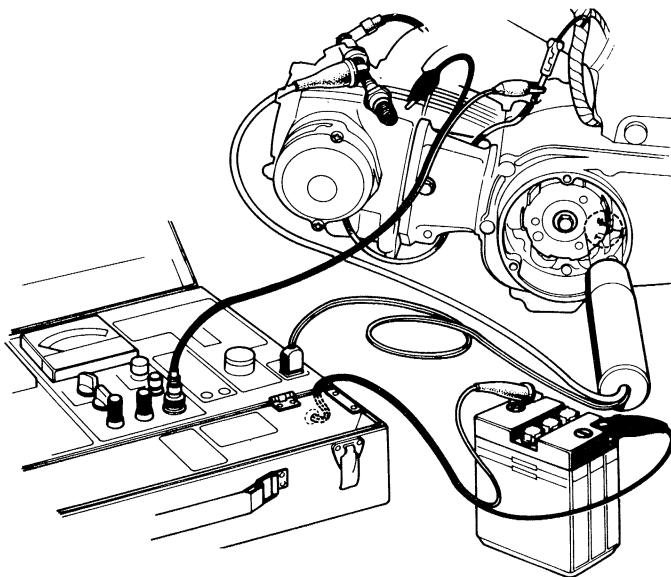
CAUTION

Use caution when adjusting the timing not to touch the points with a screwdriver.



Dynamic test (with a use of stroboscopic light)

Make the connections as described in the booklet furnished with the service tester.



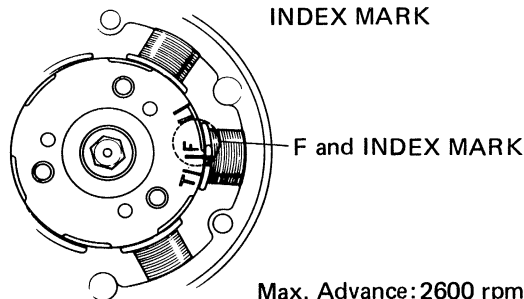
- (1) Remove the point and generator covers.
- (2) Turn on the ignition switch.
- (3) Rotate the A.C. generator rotor slowly in the counterclockwise direction.
- (4) Align the "F" mark on the rotor with the index mark on the stator on compression stroke.
- (5) The contact breaker points should just start to open when both marks align (the timing light should come on). If the timing of the breaker point opening is incorrect, adjustment is made by loosening the base plate locking screws and carefully rotating the base plate until the light comes on.

TO ADVANCE TIMING . . . Rotate the base plate clockwise.

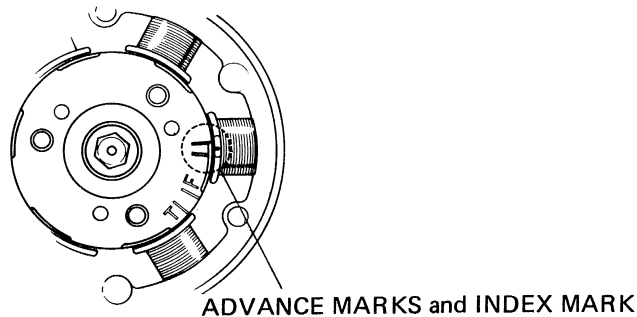
TO RETARD TIMING . . . Rotate the base plate counterclockwise.

- (6) Retighten the base plate locking screws securely, exercising care not to allow the base plate to move.
- (7) Rotate the A.C. generator rotor several times and recheck the timing. If the moment of point opening is incorrect, repeat the steps (3) thru (7) above.

Idling: 1300 rpm
"F" MARK ALIGNED WITH
INDEX MARK

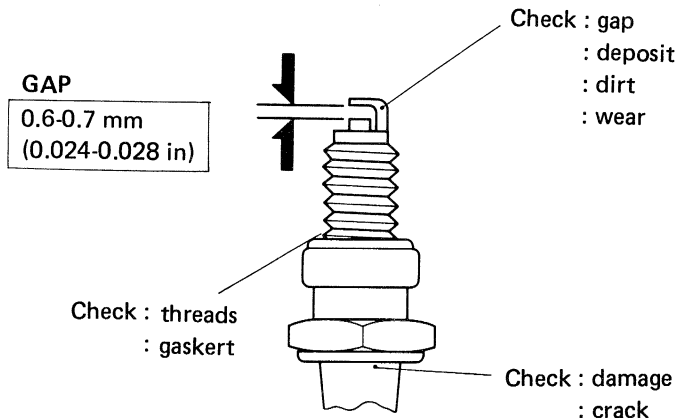


Max. Advance: 2600 rpm
"ADVANCE" MARKS ALIGNED
WITH INDEX MARK





• **SPARK PLUG**



To clean use a plug cleaner or steel wire.



To install, first thighten finger tight, then tighten with a spark plug wrench to compress the washer.

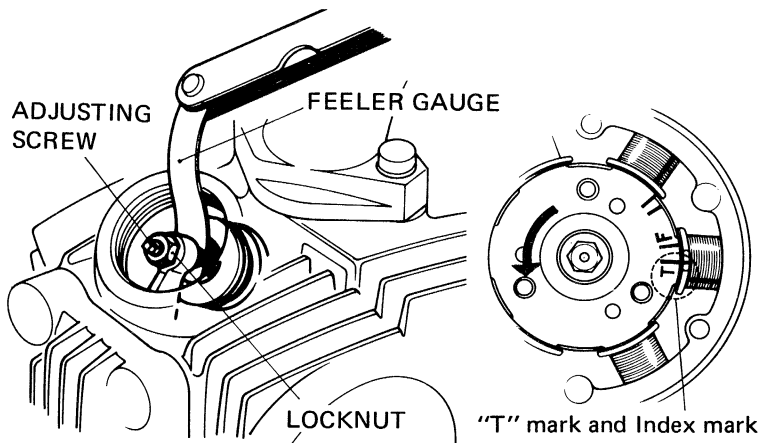
• **VALVE CLEARANCE**

Valve tappet clearance inspection and adjustment should be performed while the engine is cold.

- (1) Remove the tappet hole caps and generator cover.

VALVE CLEARANCE (IN, EX)

0.05 ±0.02 mm (0.002 ±0.0008 in.)

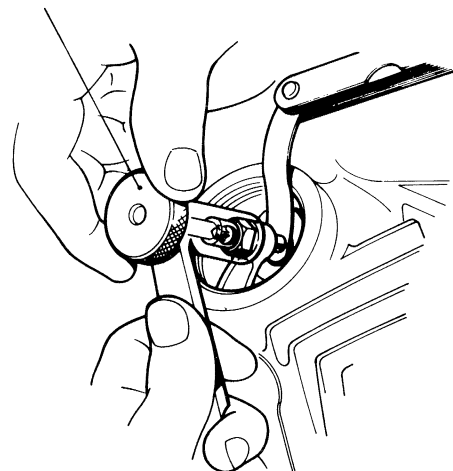


- (2) Rotate the A.C. generator rotor in the counterclockwise direction and align the "T" mark on the rotor with the index mark on the stator.

Perform this operation with the cylinder at T.D.C. (top-dead-center) of the compression stroke. In this position, the intake and exhaust valves should be fully closed.

- (3) Check the clearance of both valves by inserting a feeler gauge between the tappet adjusting screw and the valve stem.
- (4) Adjustment is made by loosening the tappet screw lock nut and turning the adjusting screw until there is a slight drag on the feeler gauge.

TAPPET ADJUSTING WRENCH
NO. 07908-0010000



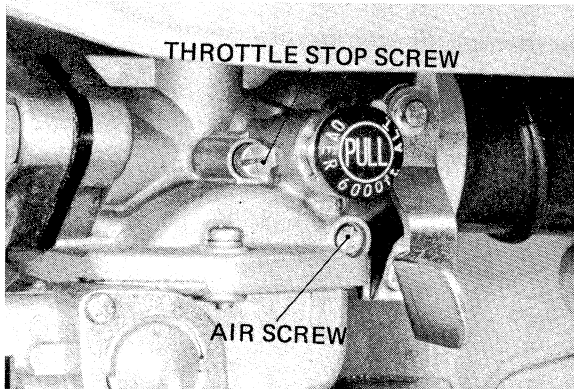
Hold the adjusting screw while the lock nut is being tightened.

- (5) Rotate the A.C. generator rotor several times and re-check the clearance with the feeler gauge.



• IDLE SPEED AND MIXTURE

Perform this operation while the engine is hot.



- (1) With engine running at operating temperature, turn the throttle stop screw counterclockwise to obtain the lowest stable idle speed possible.
- (2) Turn the air screw (pilot screw on 1978 (K9 model) in either direction to find the setting that produces the highest idle speed obtainable without readjusting the throttle stop screw.

NOTE: If air/pilot screw adjustment causes idle speed to increase beyond 1300 rpm, turn the throttle stop screw farther counterclockwise to lower the idle speed and repeat step 2.

- (3) After air/pilot screw adjustment has been completed, adjust the throttle stop screw to achieve the specified idle speed of 1300 rpm. Open and close the throttle a few times to verify proper throttle response, prompt return to idle, and stable idle speed.

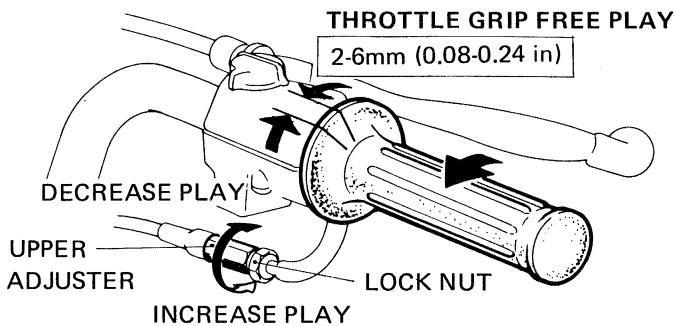
IDLE SPEED	1300 rpm
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STANDARD	AIR SCREW OPENING	1 turn 1977(k8) model
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STANDARD	PILOT SCREW OPENING	1¼ turn 1978(k9) model
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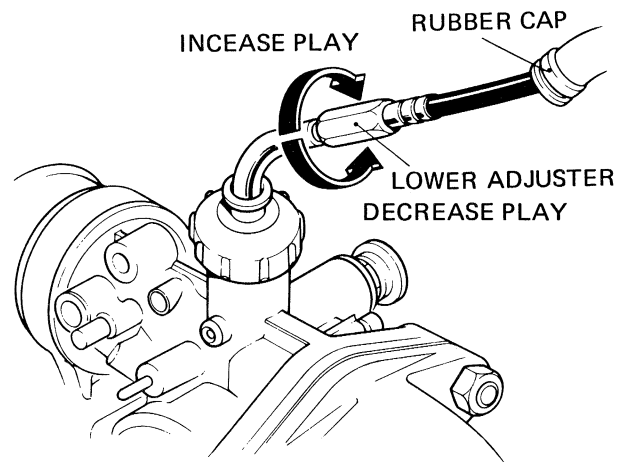
• THROTTLE CABLE

- (1) Minor adjustment is made with the upper adjuster.



- (2) Major adjustment is made with the lower adjuster.

- If adjustment is to be made with the lower adjuster, loosen the upper adjuster.
- Make sure the rubber cap is tightened securely.



Replace the throttle cable if both adjustments are no longer effective.



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