



HONDA
CB750K · CB750C
CB750F

INTRODUCTION

This shop manual is for these models:

'79: CB750K, CB750K LTD, CB750F
'80: CB750K, CB750C, CB750F
'81: CB750K, CB750C, CB750F
'82: CB750K, CB750C, CB750F, CB750SC

HOW TO USE THIS MANUAL

Follow the Maintenance Schedule recommendations to ensure that the vehicle is in peak operating condition and the emission levels are within the standards set by the U.S. Environmental Protection Agency. Performing the first scheduled maintenance is very important. It compensates for the initial wear that occurs during the break-in period.

Sections 1 through 3 apply to the whole motorcycle, while sections 4 through 19 describe parts of the motorcycle, grouped according to location.

Find the section you want on this page, then turn to the table of contents on page 1 of that section.

Most sections start with an assembly or system illustration, service information and troubleshooting for the section. The subsequent pages give detailed procedures for the section.

If you are not familiar with this motorcycle, read TECHNICAL FEATURES, section 20.

If you don't know the source of the trouble, go to section 21, TROUBLESHOOTING.

Beginning with section 22 are addendums. These contain information for 1979 and subsequent model years.

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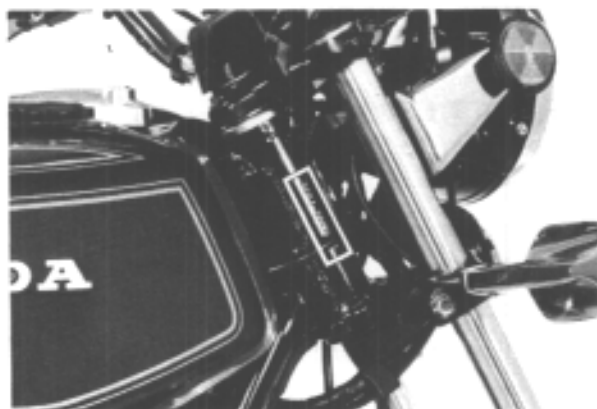
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SERVICE PUBLICATIONS OFFICE

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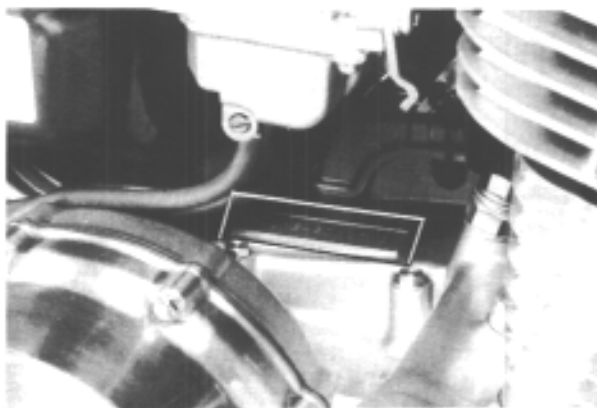
MODEL IDENTIFICATION



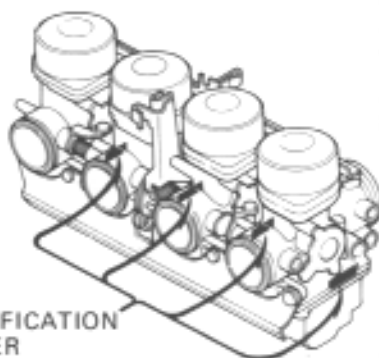
The frame serial number is stamped on the right side of the steering head.



The vehicle identification number (VIN) is on the left side of the steering head.



The engine serial number is stamped on top of the crankcase.



IDENTIFICATION
NUMBER

The carburetor identification number is on the left side of the carburetor body.



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GENERAL SAFETY

WARNING

If the engine must be running to do some work, make sure the area is well-ventilated. Never run the engine in a closed area. The exhaust contains poisonous carbon monoxide gas.

WARNING

Gasoline is extremely flammable and is explosive under certain conditions. Do not smoke or allow flames or sparks in your working area.

WARNING

- *The battery electrolyte contains sulfuric acid. Protect your eyes, skin and clothing. In case of contact, flush thoroughly with water and call a doctor if your eyes were exposed.*
- *The battery generates hydrogen gas which can be highly explosive. Do not smoke or allow flames or sparks near the battery, especially while charging it.*

SERVICE RULES

1. Use genuine HONDA or HONDA-recommended parts and lubricants or their equivalent. Parts that do not meet HONDA's design specifications may damage the motorcycle.
2. Use the special tools designed for this product.
3. Install new gaskets, O-rings, cotter pins, lock plates, etc. when reassembling.
4. When torquing bolts or nuts, begin with larger-diameter or inner bolt first, and tighten to the specified torque diagonally, unless a particular sequence is specified.
5. Clean parts in cleaning solvent upon disassembly. Lubricate any sliding surfaces before reassembly.
6. When installing a new oil seal, make sure that the sealing lip is lubricated with grease. If an oil seal and related parts have been washed, apply proper grease to the lip of the oil seal.
7. After reassembly, check all parts for proper installation and operation.
8. Use only metric tools when servicing this motorcycle. Metric bolts, nuts, and screws are not interchangeable with English fasteners. The use of incorrect tools and fasteners may damage the motorcycle.



SPECIFICATIONS

ITEM		
DIMENSIONS	Overall length	2,200 mm (87.4 in)
	Overall width	880 mm (34.6 in)
	Overall height	1,160 mm (45.7 in)
	Wheelbase	1,520 mm (59.8 in)
	Seat height	800 mm (31.5 in)
	Foot peg height	335 mm (13.2 in)
	Ground clearance	150 mm (5.9 in)
	Dry weight	233 kg (512 lb)
FRAME	Type	Double cradle
	Front suspension, travel	Telescopic fork 160 mm (6.3 in)
	Rear suspension, travel	Swing arm 112 mm (4.4 in)
	Front tire size	3.50H19 (4PR)
	Rear tire size	4.25H18 (4PR)
	Cold tire pressures	Up to 90 kg (200 lbs) load
		Front 2.0 kg/cm ² (28 psi) Rear 2.25 kg/cm ² (32 psi)
		Up to vehicle capacity load
		Front 2.0 kg/cm ² (28 psi) Rear 2.8 kg/cm ² (40 psi)
	Front brake, lining swept area	Disc brake, 306 cm ² (47.43 sq in)
	Rear brake, lining swept area	Internal expanding shoes, 218 cm ² (33.79 sq in)
ENGINE	Fuel capacity	20.0 liters (5.3 US gal)
	Fuel reserve capacity	5.0 liters (1.3 US gal)
	Caster angle	62°30'
	Trail	121 mm (4.8 in)
	Front fork oil capacity	172.5–177.5 cc (5.8–6.0 ozs) 155 cc (5.2 ozs) at draining
	Type	Air cooled 4-stroke
	Cylinder arrangement	Vertical parallel four
	Bore and stroke	62.0 x 62.0 mm (2.44 x 2.44 in)
	Displacement	749 cc (45.7 cu in)
	Compression ratio	9.0 : 1
	Valve train	Chain driven D.O.H.C. 4 valve
	Maximum horsepower	72 BHP/9,000 rpm
	Maximum torque	6.4 kg-m (45.6 ft-lb) /7,500 rpm
	Oil capacity	4.5 liters (4.7 US qt)
CARBURETION	Lubrication system	Wet sump
	Air filtration	Paper
	Cylinder compression	12.0 ± 1.0 kg/cm ² (170 ± 14 psi)
	Intake valve	Opens 5° (BTDC) at 1 mm lift, 58° (BTDC) at 0 lift Closes 35° (ABDC) at 1 mm lift, 101° (ABDC) at 0 lift
	Exhaust valve	Opens 35° (BBDC) at 1 mm lift, 87° (BBDC) at 0 lift Closes 5° (ATDC) at 1 mm lift, 72° (ATDC) at 0 lift
	Valve clearance	IN: } 0.08 mm (0.003 in) +0.05 mm (+0.002 in) EX: } -0.02 mm (-0.001 in)
	Engine weight	88.5 kg (195 lb)
	Idle speed	1,000 ± 100 rpm
	Carburetor type	VB type, 30 mm (1.18 in) venturi bore
	Identification number	VB42A, VB42C
	Pilot screw	Refer to 4-17.
	Float level	15.5 mm (0.61 in)



ITEM																				
DRIVE TRAIN	Clutch	Wet, multi-plate																		
	Transmission	5-speed constant-mesh																		
	Primary reduction	2.382																		
	Gear ratio I	2.533																		
	Gear ratio II	1.789																		
	Gear ratio III	1.391																		
	Gear ratio IV	1.160																		
	Gear ratio V	0.964																		
	Final reduction	2.533 (15/38)																		
	Gear shift pattern	Left foot operated return system																		
Drive chain	RK630SO or DID630V, 90 links																			
ELECTRICAL	Ignition	Transistorized																		
	Ignition timing "F-I" mark	10° BTDC at 1,000 rpm idle																		
	Full advance	40° BTDC/6,000 rpm—36° BTDC/7,400 rpm																		
	Starting system	Starting motor only																		
	Generator	Three phase A.C. generator 0.26 kw/5,000 rpm																		
	Battery capacity	12V—14AH																		
	Spark plug																			
	(): Canada model																			
		<table><tr><th colspan="2">For cold climate below 5°C (41°F)</th><th colspan="2">Standard</th><th colspan="2">For extended high speed driving</th></tr><tr><th>ND</th><th>NGK</th><th>ND</th><th>NGK</th><th>ND</th><th>NGK</th></tr><tr><td>X22ES-U</td><td>D7EA</td><td>X24ES-U (X24ESR -U)</td><td>D8EA (D8ES -L)</td><td>X27ES-U</td><td>D9EA</td></tr></table>	For cold climate below 5°C (41°F)		Standard		For extended high speed driving		ND	NGK	ND	NGK	ND	NGK	X22ES-U	D7EA	X24ES-U (X24ESR -U)	D8EA (D8ES -L)	X27ES-U	D9EA
	For cold climate below 5°C (41°F)		Standard		For extended high speed driving															
ND	NGK	ND	NGK	ND	NGK															
X22ES-U	D7EA	X24ES-U (X24ESR -U)	D8EA (D8ES -L)	X27ES-U	D9EA															
	Spark plug gap	0.6—0.7 mm (0.024—0.028 in)																		
	Firing order	1—2—4—3																		
	Fuse	10A, 30A																		
LIGHTS	Headlight (high/low beam)	65/50W sealed beam																		
	Tail/stoplight	3/32 cp SAE NO. 1157																		
	Turn signal light (front/rear)	32/32 cp SAE NO. F. 1034, R. 1073																		
	Speedometer light	2 cp SAE NO. 57																		
	Tachometer light	2 cp SAE NO. 57																		
	Neutral indicator light	2 cp SAE NO. 57																		
	Turn signal indicator light	2 cp SAE NO. 57																		
	High beam indicator light	2 cp SAE NO. 57																		



TORQUE VALUES

• ENGINE

Item	Qty	Thread Dia mm	Torque kg-m (ft-lb)	Remarks
Cylinder head cover	8	6	0.8-1.2 (6-9)	Apply molybdenum disulfide grease to threads and under-side of nuts
Cam holder	24	6	1.2-1.6 (9-12)	
Cylinder head	12	10	3.6-4.0 (26-29)	
Cam sprocket	4	7	2.2-2.6 (16-19)	
Spark plug	4		1.2-1.6 (9-12)	Apply molybdenum disulfide grease to threads and under-side of nuts
Crankcase		8	2.1-2.5 (15-18)	
A.C. generator	1	12	8.0-10.0 (58-72)	
Primary shaft	1	12	8.0-10.0 (58-72)	
Mainshaft	1	16	3.8-4.2 (28-30)	Apply liquid sealant
Drive sprocket	1	10	5.0-5.4 (36-39)	
Connecting rod nut	12		3.0-3.4 (22-25)	
Oil filter center bolt	1		2.8-3.2 (20-23)	
Oil pressure switch	1		1.5-2.0 (11-14)	
Neutral switch	1		1.6-2.0 (11-14)	
Oil drain plug	1	14	3.5-4.0 (25-29)	
Oil pipe	2	10	3.1-3.5 (22-25)	
Spark advancer	1	8	3.3-3.7 (24-27)	
Starting clutch	3	8	2.6-3.0 (19-22)	
Oil filter bolt boss	1		3.5-4.5 (25-33)	

• CHASSIS

Item	Qty	Thread Dia mm	Torque kg-m (ft-lb)	Remarks
Steering stem nut	1	24	8.0-12.0 (58-87)	UBS
Steering handlebar	4	8	1.8-2.5 (13-18)	
Front fork top bridge	2	7	0.9-1.3 (7-9)	
Front fork cap bolt	2		2.0-3.0 (15-22)	
Front fork bottom bridge	2	10	3.0-4.0 (22-29)	
Front axle holder	4	8	1.8-2.5 (13-18)	
Front axle nut	1	12	5.5-6.5 (40-47)	
Front brake disc	5	8	2.7-3.3 (20-24)	
Brake hose bolt	5	10	2.5-3.5 (18-25)	
Front brake caliper carrier	2	10	3.0-4.0 (22-29)	
Front brake caliper A	2	10	3.0-4.0 (22-29)	UBS
Rear axle	1	18	8.0-10.0 (58-72)	
Final driven sprocket	4	12	8.0-10.0 (58-72)	
Swing arm pivot bolt	1	14	5.5-7.0 (40-51)	
Rear brake torque link	1	8	1.8-2.5 (13-18)	
Rear shock absorber				
Upper	1	10	2.0-3.0 (14-22)	
Lower	1	10	3.0-4.0 (22-29)	
Engine hanger bolt	4	10	3.0-4.0 (22-29)	
	1	12	5.5-6.5 (40-48)	
Steering adjustment nut	1	26	→	See page 13-27
Foot peg	1	12	5.5-6.5 (40-47)	
Gearshift pedal	1	6	0.8-1.2 (6-9)	

Fasteners not listed should be tightened to standard torques listed below.

STANDARD TORQUE VALUES

Type	Torque kg-m (ft-lb)	Type	Torque kg-m (ft-lb)
5 mm bolt, nut	0.45-0.6 (3.5-4.5)	5 mm screw	0.35-0.5 (2.5-3.6)
6 mm bolt, nut	0.8-1.2 (6-9)	6 mm screw	0.7-1.1 (5-8)
8 mm bolt, nut	1.8-2.5 (13-18)	6 mm flange bolt, nut	1.0-1.4 (7-10)
10 mm bolt, nut	3.0-4.0 (22-29)	8 mm flange bolt, nut	2.4-3.0 (17-22)
12 mm bolt, nut	5.0-6.0 (36-43)	10 mm flange bolt, nut	3.0-4.0 (22-29)



SPECIAL TOOLS/COMMON TOOLS

- SPECIAL TOOLS (New)
CB750K SPECIAL TOOLS SET (Includes special tool case)

Tool Name	Part No.	Q'ty	Ref. page
Primary gear holder	07924-4220000	1	8-6
Rotor puller	07933-4250000	1	16-6
Steering stem driver	07953-4250000	1	13-26

- SPECIAL TOOLS (Other models)

Tool Name	Part No.	Q'ty	Ref. page
Vacuum gauge set	07404-0020000 (H/C No. 20176)	1	3-13
Oil pressure gauge	07506-3000000	1	2-3
Oil pressure gauge attachment	07510-4220100	1	2-3
Carburetor throttle wrench	07908-4220100	1	3-14, 4-8
Carburetor pilot screw wrench	07908-4220200	1	4-7
Snap ring pliers	07914-3230001	1	15-6
Steering stem socket	07916-3710100	1	13-27
6 mm hollow set wrench	07917-3230000	1	13-20, 13-23
Bearing race remover	07946-3710500	1	13-26
Steering stem driver	07946-3710600	1	13-26
Bearing driver attachment	07946-3710700	1	13-27
Bearing driver	07947-6340000	1	13-27
Piston base	07958-2500001	2	7-8
Valve lifter holder	07964-4220001	1	3-8
Valve guide reamer (5.5 mm)	07984-2000000	1	6-15
Piston ring compressor	07954-3000000	2	7-8
Valve lifter bore	07999-4220000	1	6-11, 6-17
Bearing driver	07947-6340000	1	13-27


• COMMON TOOL

Tool	Part No.	Q'ty	Alternate Tool Part No.	Ref. Page
Float level gauge	07401-0010000	1		4-8
Retainer wrench (A)	07710-0010100	1	Bearing retainer wrench 07910-2830000	14-4, 14-8
Retainer wrench (B)	07710-0010200	1	Bearing retainer wrench 07920-3230101	13-15, 13-17
Retainer wrench (C)	07710-0010300	1	Bearing retainer wrench 07910-3230201	14-4, 14-8
Retainer wrench body	07710-0010400			13-15, 13-17
				14-4, 14-8
Lock nut wrench socket (20 x 24 mm)	07716-0020100	1	Lock nut wrench 07916-6390001	8-4, 8-9
Lock nut wrench socket (30 x 32 mm)	07716-0020400	1		13-25, 13-28
Extension bar	07716-0020500	1		8-4, 8-9
				13-25, 13-28
Universal holder	07725-0010101	1		8-3
Valve guide remover (5.5 mm)	07742-0010100	1	Valve guide driver 07942-3290100	6-15
Valve guide driver (B)	07742-0020200	1	Valve guide driver 07942-3290200	6-15
Bearing driver outer (42 x 47)	07746-0010300	1	Bearing driver 07945-3330100	13-17
Bearing driver outer (52 x 55)	07746-0010400	1	Bearing driver 07946-3290000	14-8
Bearing driver outer (62 x 68)	07746-0010500	1	Bearing driver 07946-3600000	14-8
Bearing driver handle (C)	07746-0030100	1		11-8, 12-12
Bearing driver inner (25 mm)	07746-0030200	1		11-8
Bearing driver pilot (15 mm)	07746-0040300	1		13-17
Bearing driver pilot (20 mm)	07746-0040500	1		14-8
Bearing driver pilot (25 mm)	07746-0040600	1		14-8
Bearing driver handle (B)	07746-0020100	1		11-8, 12-12
Bearing driver handle (20 mm)	07746-0020400	1		12-12
Front fork oil seal driver body	07747-0010100	1		13-22
Front fork oil seal attachment (E)	07747-0010600	1	Fork seal driver 07947-3290000	13-22
Bearing driver handle (A)	07749-0010000	1	Driver handle attachment 07949-6110000	13-17, 14-8
Valve spring compressor	07757-0010000	1	Valve spring compressor 07957-3290001	6-11, 6-17
Shock absorber compressor	07959-3290001	1		14-10, 14-11

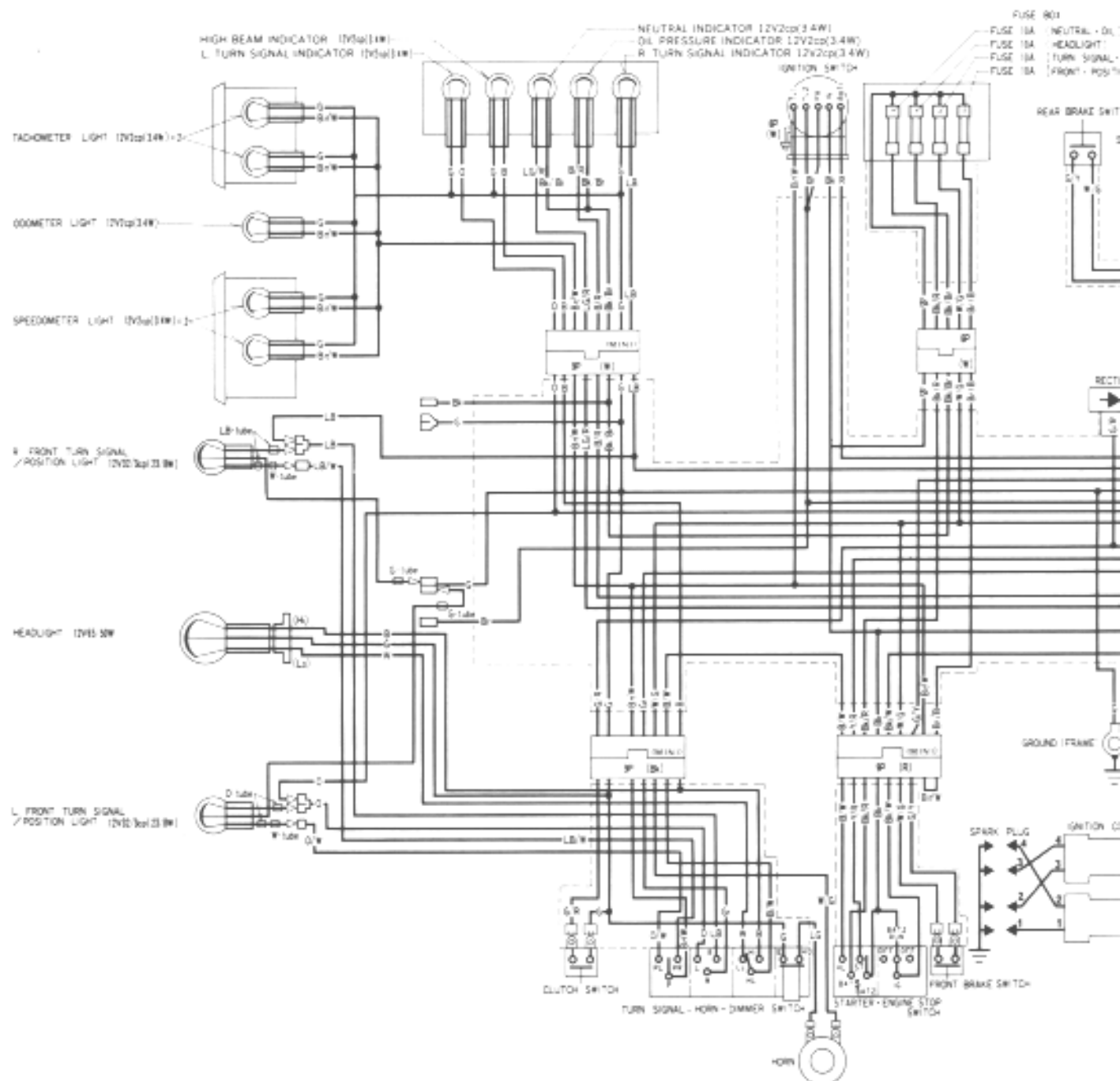


HONDA
CB750K

GENERAL INFORMATION

WIRING DIAGRAMS

CB750K



SWITCH CONTINUITY

IGNITION SWITCH

	BAT	IG	TL	TL2	P
OFF					
ON					
P					

STARTER SWITCH

	BAT1	HL	BAT1	ST
FREE				
PUSH				

ENGINE STOP SWITCH

	BAT2	IG
OFF		
RUN		
OFF		

TURN SIGNAL SWITCH

	N	R	L	P	RR	RL
R						
N						
L						

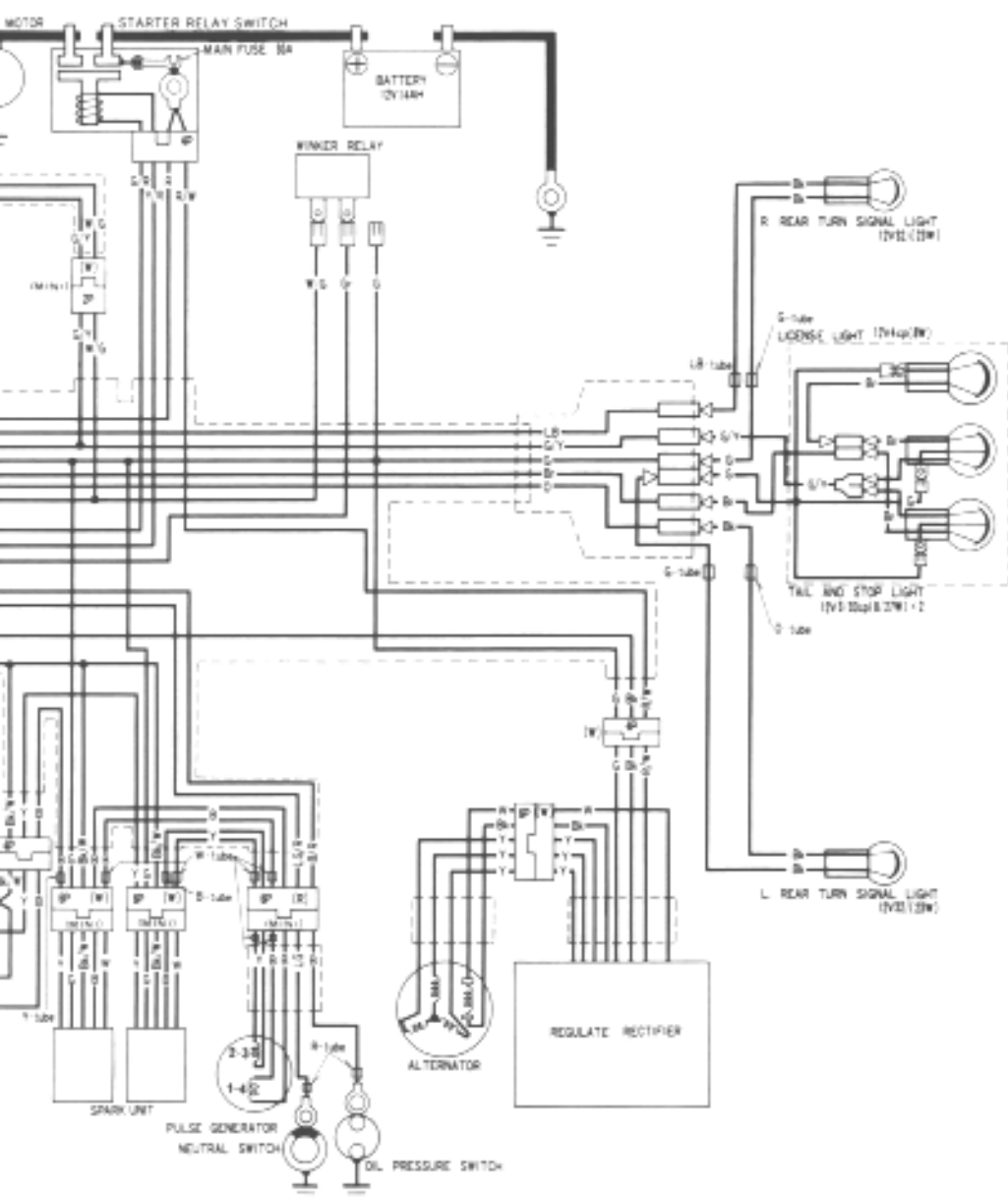
DIMMER SWITCH

	HL	LL	H
L			
N			
H			

HORN SWITCH

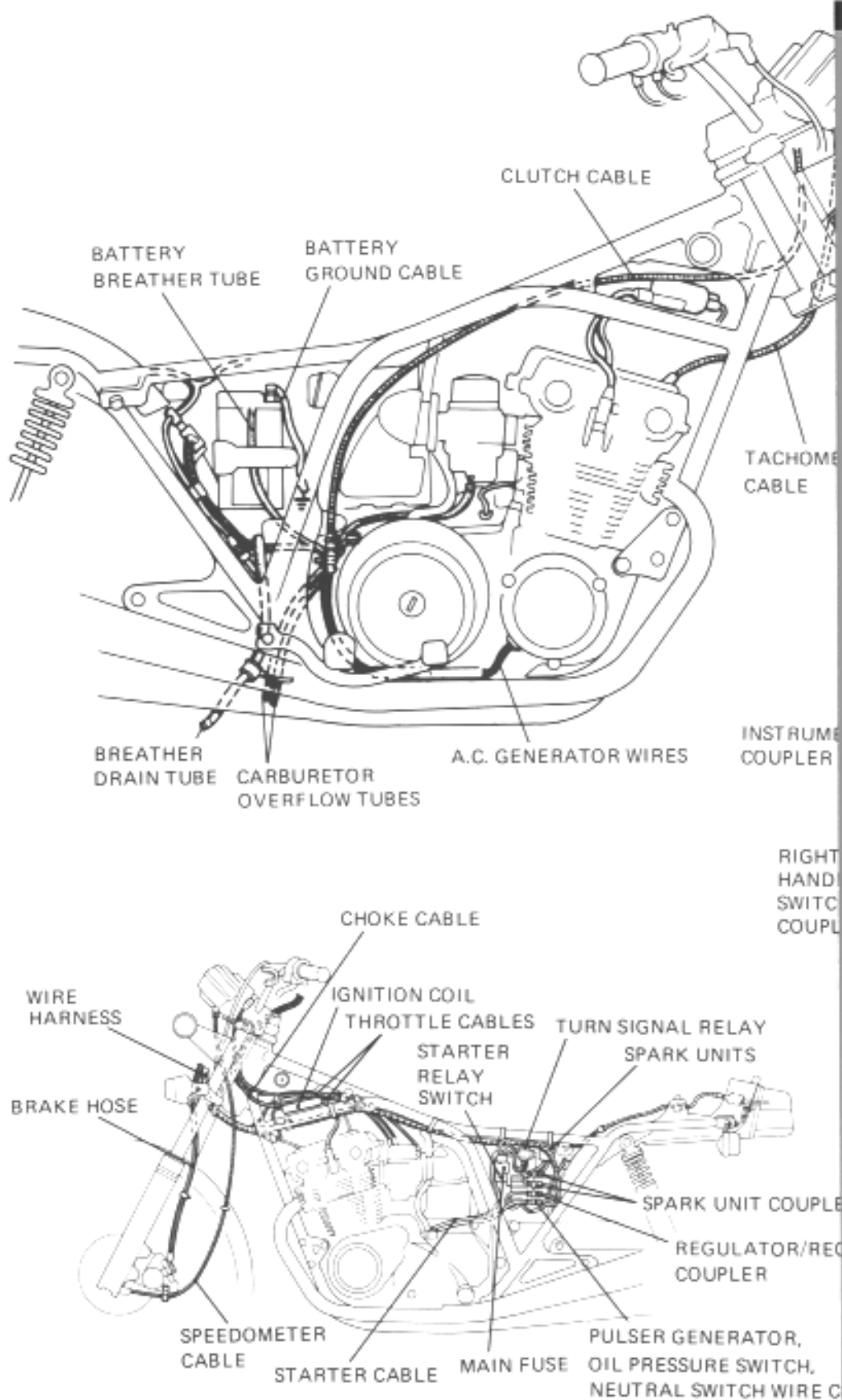
	HO	E
FREE		
PUSH		

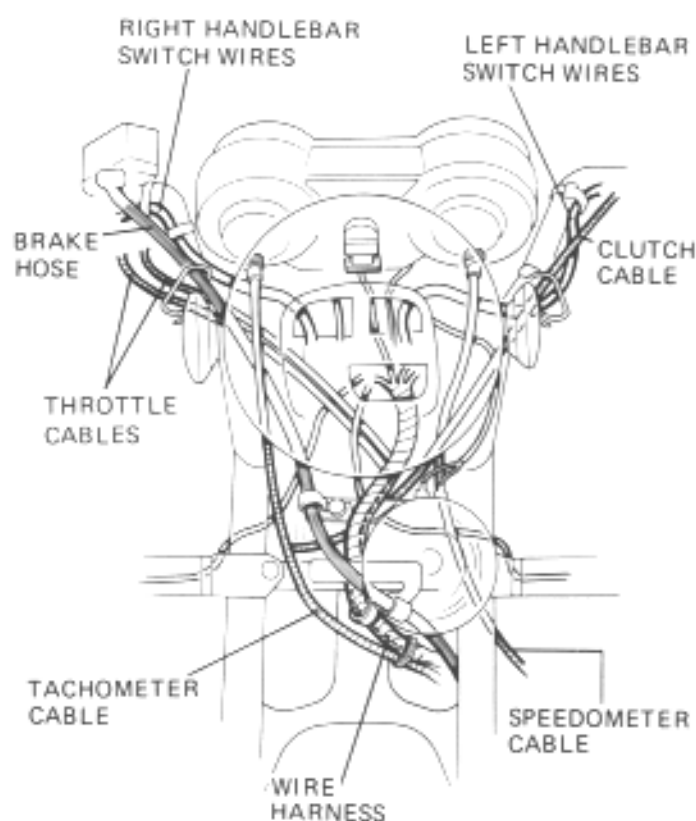
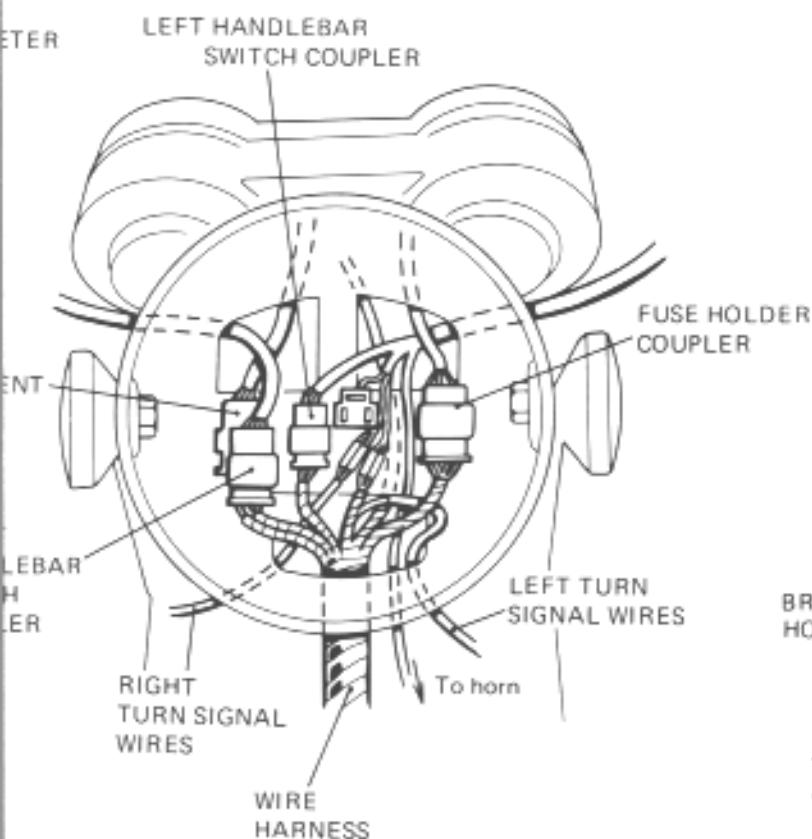
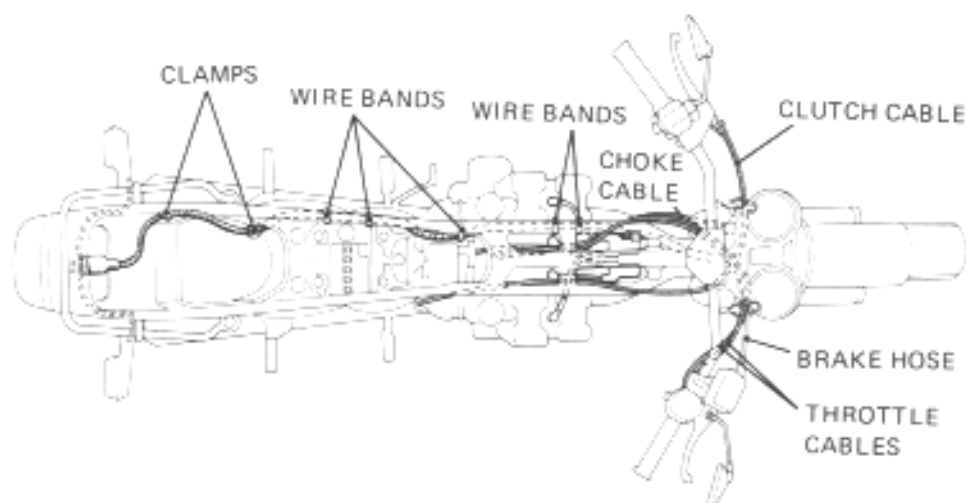
REAR STOP-HORN
(R - TAIL)



B	Brown	Y	Yellow
Bl	Black	B	Blue
W	White	Gr	Grey
LG	Light Green	LB	Light Blue
R	Red	O	Orange
G	Green	P	Pink

0030Z-425-6700







MAINTENANCE SCHEDULE

Perform the PRE-RIDE INSPECTION in the Owner's Manual at every maintenance period.

I : INSPECT AND CLEAN, ADJUST, LUBRICATE, OR REPLACE IF NECESSARY.

C: CLEAN

R: REPLACE

A: ADJUST

L: LUBRICATE

FREQUENCY		WHICHEVER COMES FIRST ↓	ODOMETER READING (NOTE 3)						
			600 mi (1,000 km)	4,000 mi (6,400 km)	8,000 mi (12,800 km)	12,000 mi (19,200 km)	16,000 mi (25,600 km)	20,000 mi (32,000 km)	Refer to
EMISSION RELATED ITEMS	ENGINE OIL	YEAR	R	R	R	R	R	R	Page 2- 2
	ENGINE OIL FILTER	YEAR	R	R	R	R	R	R	Page 2- 2
	CRANKCASE BREATHER	NOTE 1		C	C	C	C	C	Page 3- 2
	AIR CLEANER	NOTE 2		C	R	C	R	C	Page 3- 2
	* FUEL LINES			I	I	I	I	I	Page 3- 3
	SPARK PLUGS			I	R	I	R	I	Page 3- 4
	* VALVE CLEARANCE		I	I	I	I	I	I	Page 3- 7
	* CAM CHAIN TENSION		A	A	A	A	A	A	Page 3-11
	* THROTTLE OPERATION		I	I	I	I	I	I	Page 3-12
	* CARBURETOR CHOKE			I	I	I	I	I	Page 3-12
	* CARBURETOR SYNCHRONIZE		I	I	I	I	I	I	Page 3-13
	* CARBURETOR IDLE SPEED		I	I	I	I	I	I	Page 3-15
NON-EMISSION RELATED ITEMS	DRIVE CHAIN		I, L EVERY 300 mi (500 km)						Page 3-16
	BATTERY	MONTH	I	I	I	I	I	I	Page 3-17
	BRAKE FLUID (FRONT)	MONTH I 2 YEARS R	I	I	I	*R	I	I	Page 3-17
	BRAKE PAD/SHOE WEAR			I	I	I	I	I	Page 3-18
	BRAKE SYSTEM		I	I	I	I	I	I	Page 3-18
	* BRAKE LIGHT SWITCH		I	I	I	I	I	I	Page 3-19
	* HEADLIGHT AIM		I	I	I	I	I	I	Page 3-19
	CLUTCH FREE PLAY		I	I	I	I	I	I	Page 3-20
	SIDE STAND			I	I	I	I	I	Page 3-21
	* SUSPENSION		I	I	I	I	I	I	Page 3-22
	* NUTS, BOLTS, FASTENERS		I	I	I	I	I	I	Page 3-23
	** WHEELS/SPOKES		I	I	I	I	I	I	Page 3-22
	** STEERING HEAD BEARING		I		I		I		Page 3-23

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

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

NOTES: (1) SERVICE MORE FREQUENTLY WHEN RIDING IN RAIN OR AT FULL THROTTLE. (U.S.A. ONLY)

(2) SERVICE MORE FREQUENTLY WHEN RIDING IN DUSTY AREAS.

(3) FOR HIGHER ODOMETER READINGS, REPEAT AT THE FREQUENCY INTERVAL ESTABLISHED HERE.



EMISSION CONTROL SYSTEM

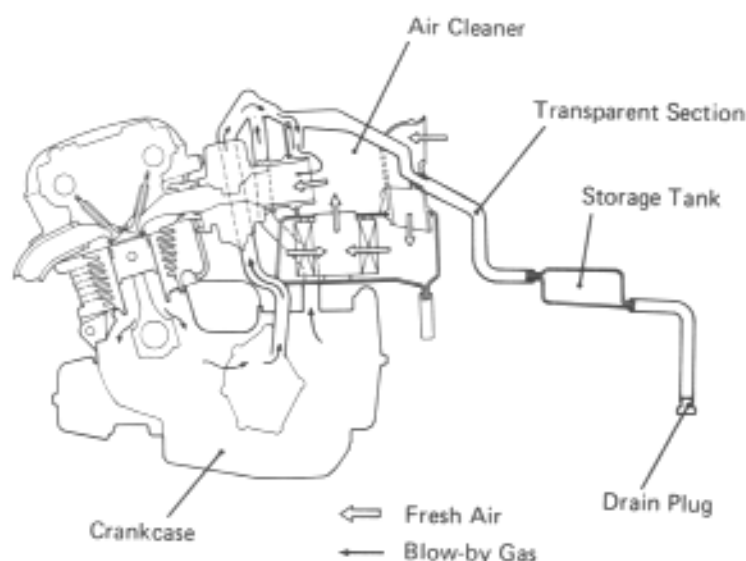
The CB750K is equipped with two Emission Control Systems.

EXHAUST EMISSION CONTROL SYSTEM

The exhaust emission control system is composed of a factory pre-set carburetor. No adjustment should be made except to the idle speed with the throttle stop screw.

CRANKCASE EMISSION CONTROL SYSTEM

The engine is equipped with a "Closed System" to prevent crankcase emissions entering the atmosphere. Blow-by gas is returned to the combustion chamber through air cleaner and carburetor. Liquids are collected in the strage tank.



EMISSION CONTROL INFORMATION LABEL

An Emission Control Information Label is located on the frame as shown. It contains basic tune-up specifications.





MEMO