



# 21. TROUBLESHOOTING

## ENGINE DOES NOT START OR IS HARD TO START

1. Check fuel flow to carburetor

REACHING CARBURETOR

2. Perform spark test

GOOD SPARK

3. TEST CYLINDER COMPRESSION

COMPRESSION NORMAL

4. Start by following normal procedure

ENGINE DOES NOT FIRE

5. Remove and inspect spark plug

NOT REACHING CARBURETOR

WEAK OR NO SPARK

LOW COMPRESSION

ENGINE FIRES BUT STOPS

WET PLUG

### POSSIBLE CAUSE

- (1) Fuel tank empty
- (2) Clogged fuel tube or fuel filter
- (3) Sticking float valve
- (4) Clogged fuel tank cap breather hole
- (1) Faulty spark plugs
- (2) Fouled spark plugs
- (3) Faulty spark unit
- (4) Broken or shorted high tension wires
- (5) Faulty A.C. generator
- (6) Broken or shorted ignition coil
- (7) Faulty ignition switch
- (8) Faulty pulser generator
- (1) Low battery charge
- (2) Improper valve clearance
- (3) Valve stuck open
- (4) Worn cylinder and piston rings
- (5) Damaged cylinder head gasket
- (6) Seized valve
- (7) Improper valve timing
- (1) Improper choke operation
- (2) Carburetor incorrectly adjusted
- (3) Manifold leaking
- (4) Improper ignition timing (Spark unit or pulser generator)
- (5) Incorrect fast idle
- (6) Fuel contaminated
- (1) Carburetor flooded
- (2) Choke closed
- (3) Throttle valve open
- (4) Air cleaner dirty



## ENGINE LACKS POWER

1. Raise wheels off ground and spin by hand

WHEEL SPINS FREELY



2. Check tire pressure

PRESSURE NORMAL



3. Accelerate rapid from low to second

ENGINE SPEED LOWERED WHEN CLUTCH IS RELEASED



4. Accelerate lightly

ENGINE SPEED INCREASES



5. Check ignition timing

CORRECT



6. Check valve clearance

CORRECT



7. Test cylinder compression

NORMAL



8. Check carburetor for clogging

NOT CLOGGED



9. Remove spark plug

NOT FOULED OR DISCOLORED



10. Check oil level and condition

CORRECT



11. Remove cylinder head cover and inspect lubrication

VALVE TRAIN LUBRICATED PROPERLY



12. Check for engine overheating

NOT OVERHEATING



13. Accelerate or run at high speed

ENGINE DOES NOT KNOCK

WHEELS DO NOT SPIN FREELY

## POSSIBLE CAUSE

- (1) Brake dragging
- (2) Worn or damaged wheel bearing
- (3) Wheel bearing needs lubrication
- (4) Drive chain too tight

PRESSURE LOW

- (1) Punctured tire
- (2) Faulty tire valve

ENGINE SPEED CHANGED WHEN CLUTCH IS RELEASED

- (1) Clutch slipping
- (2) Worn clutch disc/plate
- (3) Warped clutch disc/plate

ENGINE SPEED NOT INCREASED

- (1) Carburetor choke closed
- (2) Clogged air cleaner
- (3) Restricted fuel flow
- (4) Clogged fuel tank breather tube
- (5) Clogged muffler

INCORRECT

- (1) Faulty spark unit
- (2) Faulty pulser generator
- (3) Faulty ignition advancer

INCORRECT

- (1) Improper valve adjustment
- (2) Worn valve seat

TOO LOW

- (1) Valve stuck open
- (2) Worn cylinder and piston rings
- (3) Leaking head gasket
- (4) Improper valve timing

CLOGGED

- (1) Carburetor not serviced frequently enough

FOULED OR DISCOLORED

- (1) Plugs not serviced frequently enough
- (2) Spark plug with incorrect heat range

INCORRECT

- (1) Oil level too high
- (2) Oil level too low
- (3) Contaminated oil

VALVE TRAIN NOT LUBRICATED PROPERLY

- (1) Clogged oil passage
- (2) Clogged oil control orifice

OVERHEATING

- (1) Excessive carbon build-up in combustion chamber
- (2) Use of poor quality fuel
- (3) Clutch slipping
- (4) Fuel-air mixture too lean
- (5) Worn piston and cylinder

ENGINE KNOCKS

- (1) Fuel-air mixture too lean
- (2) Wrong type of fuel
- (3) Excessive carbon build-up in combustion chamber
- (4) Ignition timing too advanced (Faulty spark unit or advancer)



### POOR PERFORMANCE AT LOW AND IDLE SPEEDS

1. Check ignition timing and valve clearance

CORRECT

2. Check carburetor pilot screw adjustment

CORRECT

3. Check for leaking manifold

NO LEAK

4. Perform spark test

GOOD SPARK

INCORRECT

INCORRECT

See Fuel System Section

LEAKING

WEAK OR INTERMITTENT SPARK

### POSSIBLE CAUSE

- (1) Improper valve clearance  
(2) Improper ignition timing  
(Faulty spark unit or spark advancer)

- (1) Deteriorated insulator  
O-ring  
(2) Loose carburetor

- (1) Faulty, carbon or wet fouled spark plug  
(2) Faulty spark unit  
(3) A.C. generator faulty  
(4) Faulty ignition coil  
(5) Faulty spark advancer

### POOR PERFORMANCE AT HIGH SPEED

1. Check ignition timing and valve clearance

CORRECT

2. Disconnect fuel tube at carburetor

FUEL FLOWS FREELY

3. Remove carburetor and check for clogged jet

NO CLOG

4. Check valve timing

CORRECT

5. Check valve spring tension

NOT WEAKENED

INCORRECT

FUEL FLOW RESTRICTED

CLOGGED

INCORRECT

WEAK

- (1) Improper valve clearance  
(2) Faulty spark unit  
(3) Faulty pulser generator  
(4) Faulty spark advancer

- (1) Lack of fuel in tank  
(2) Clogged fuel line  
(3) Clogged fuel tank breather hole  
(4) Clogged fuel cock

- (1) Clean

- (1) Cam sprocket not installed properly

- (1) Faulty spring

### POOR HANDLING

Check tire pressure

1. If steering is heavy

2. If either wheel is wobbling

3. If the motorcycle pulls to one side

- (1) Steering top thread nut too tight  
(2) Damaged steering head bearings

- (2) Excessive wheel bearing play  
(2) Distorted rim  
(3) Improperly installed wheel hub  
(4) Swing arm pivot bushing excessively worn  
(5) Distorted frame  
(6) Improper drive chain tension or adjustment

- (1) Improperly adjusted shock absorber  
(2) Front and rear wheels not aligned  
(3) Bent front fork  
(4) Bent swing arm



## INTRODUCTION

This Addendum contains information for the 1980 CBX. Refer to the base shop manual for service information not included in this addendum.

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## I. SPECIFICATIONS

ITEM		
DIMENSIONS	Overall length	2,220 mm (87.4 in)
	Overall width	885 mm (34.8 in)
	Overall height	1,175 mm (46.3 in)
	Wheelbase	1,485 mm (58.5 in)
	Seat height	810 mm (31.9 in)
	Foot peg height	330 mm (13.0 in)
	Ground clearance	150 mm (5.9 in)
	Dry weight	252 kg (555.6 lb)
FRAME	Type	Diamond
	Front suspension, travel	Telescopic air forks 160 mm (6.3 in)
	Rear suspension, travel	Swing arm 100 mm (3.9 in)
	Front tire size	3.50V19 (4PR)
	Rear tire size	4.25V18 (4PR)
	Cold tire pressures	Up to 90 kg Front 2.25 kg/cm <sup>2</sup> (32 psi)
		(200 lbs) load Rear 2.25 kg/cm <sup>2</sup> (32 psi)
		Up to vehicle Front 2.25 kg/cm <sup>2</sup> (32 psi)
		capacity load Rear 2.8 kg/cm <sup>2</sup> (40 psi)
	F. brake, lining swept area	Double disc brake
	R. brake lining, swept area	Single disc brake
	Fuel capacity	20.0 liters (5.28 US gal)
	Fuel reserve capacity	5.0 liters (1.32 US gal)
	Caster angle	62°30'
	Trail	120 mm (4.7 in)
ENGINE	Front fork oil capacity	240 cc (8.2 ozs)
	Front fork air pressure	0.7 ± 0.2 kg/cm <sup>2</sup> (10 ± 3 psi)
	Type	Air cooled 4-stroke
	Cylinder arrangement	Vertical parallel six
	Bore and stroke	64.5 x 53.4 mm (2.54 x 2.10 in)
	Displacement	1047 cc (63.89 cu in)
	Compression ratio	9.3 : 1
	Valve train	Chain driven DOHC 4 valve/cylinder
	Maximum horsepower	98 BHP/9,000 rpm
	Maximum torque	8.5 kg-m (60.8 ft-lb)/8,000 rpm
	Oil capacity	5.5 liters (5.8 US qt) after disassembly
		4.0 liters (4.2 US qt) after draining
	Lubrication system	Wet sump dual pump with oil cooler
	Air filtration	Oiled polyurethane foam
	Cylinder compression	12.0 ± 1.0 kg/cm <sup>2</sup> (170 ± 14 psi)
	Intake valve	Opens 5° (BTDC) at 1 mm lift, 69° (BTDC) at 0 lift
		Closes 40° (ABDC) at 1 mm lift, 115° (ABDC) at 0 lift
	Exhaust valve	Opens 45° (BBDC) at 1 mm lift, 100° (BBDC) at 0 lift
		Closes 0° (ATDC) at 1 mm lift, 67° (ATDC) at 0 lift
CARBURETION	Valve clearance (Cold)	IN: } 0.06–0.13 mm (0.002–0.005 in) EX: }
	Engine weight	106 kg (233.7 lb)
	Idle speed	900 ± 100 rpm
	Carburetor type	VB 28 mm (1.1 in) venturi bore
	Identification number	VB62A
	Pilot screw	Refer to page 22–18
	Floot level	15.5 mm (0.61 in)



ITEM																									
DRIVE TRAIN	Clutch	Wet, multi-plate																							
	Transmission	5-speed constant-mesh																							
	Primary reduction	2.269																							
	Gear ratio I	2.438																							
	Gear ratio II	1.750																							
	Gear ratio III	1.391																							
	Gear ratio IV	1.200																							
	Gear ratio V	1.037																							
	Final reduction	2.333 (18/42)																							
Gear shift pattern	Left foot operated return system 1-N-2-3-4-5																								
ELECTRICAL	Ignition	Transistorized																							
	Ignition timing "F" mark	10° BTDC static																							
	Full advance	41° BTDC at 8,000 rpm																							
	Starting system	Starting motor only																							
	Generator	Three phase A.C. generator 350 W/5,000 rpm																							
	Battery capacity	12V — 18AH																							
	Spark plug	<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 riding</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 (X22ER-U)</td><td>D7EA (DR7ES)</td><td>X24ES-U (X24ESR-U)</td><td>D8EA (DR8ES-L)</td><td>X27ES-U (X272SR-U)</td><td>D9EA (DR8ES)</td></tr></table>						For cold climate below 5°C, 41°F		Standard		For extended high speed riding		ND	NGK	ND	NGK	ND	NGK	X22ES-U (X22ER-U)	D7EA (DR7ES)	X24ES-U (X24ESR-U)	D8EA (DR8ES-L)	X27ES-U (X272SR-U)	D9EA (DR8ES)
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( ): Canada Model																									
Spark plug gap	0.6—0.7 mm (0.024—0.028 in)																								
LIGHTS	Headlight (low/high beam)	60/55W H4 BULB (Philips 12342/99, or equivalent)																							
	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	2 cp SAE NO. 57																							
	Turn signal indicator	2 cp SAE NO. 57																							
	High beam indicator	2 cp SAE NO. 57																							
	Running light	3 cp SAE NO. 1034																							



## II. TORQUE VALUES

### • ENGINE

Item	Q'ty	Thread Dia (mm)	Torque kg-m (ft-lb)	Remarks
Cylinder head cover	8	6	0.8-1.2 ( 6- 9)	Apply molybdenum disulfide base grease to threads and underside of bolts
Cam holder	32	6	1.2-1.6 ( 9-12)	
Cylinder head	8	10	3.3-3.5 (24-25)	
Cylinder head	10	8	1.9-2.1 (14-15)	
Cam sprocket	4	7	1.4-1.8 (10-13)	
Spark plug	6		1.2-1.6 ( 9-12)	
Crankcase		8	2.3-2.7 (17-20)	
A.C. generator	1	14	3.6-4.4 (26-32)	
Primary shaft	1	22	4.0-5.0 (29-36)	
Mainshaft	1	25	4.5-5.5 (33-40)	
Drive sprocket	1	10	5.0-5.4 (36-39)	Apply THREE-BOND
Connecting rod nut	12	8	3.0-3.4 (22-25)	
Oil filter center bolt	1	20	2.7-3.3 (20-24)	
Oil pressure switch	1		1.5-2.0 (11-14)	
Neutral switch	1	10	1.1-1.5 ( 8-11)	
Oil drain bolt	1	12	2.8-3.2 (20-23)	
Oil pipe	1	8	1.8-2.2 (13-16)	
Oil pipe	1	10	2.0-2.4 (14-17)	

### • CHASSIS

Item	Q'ty	Thread Dia (mm)	Torque kg-m (ft-lb)	Remarks
Steering stem nut	1	24	8.0-12.0 (58-87)	UBS
Steering handlebar	2	8	2.8-3.2 (20-23)	
Front fork top bridge	2	7	0.9-1.3 ( 7- 9)	
Front fork bolt	2	31	1.5-3.0 (11-22)	
Front axle nut	1	12	5.5-6.5 (40-47)	
Front/rear brake disc	10	8	2.7-3.3 (20-24)	
Brake hose bolt	5	10	2.5-3.5 (18-25)	
Rear axle	1	18	8.0-10.0 (58-72)	
Final driven sprocket	5	12	8.0-10.0 (58-72)	
Swing arm pivot nut	1	14	6.0-7.0 (43-51)	
Seat strap	2	6	0.8-0.95 ( 6- 7)	UBS
Engine hanger nut	3	14	9.0-10.0 (65-72)	
Air cleaner inlet duct	2	5	0.3-0.6 ( 2- 4)	
Steering Stem adjusting nut	1	26	1.1-1.3 ( 8- 9)	

Fasteners not listed should be tightened to the standard torque values 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)



### III. SPECIAL TOOLS/COMMON TOOLS

• SPECIAL TOOLS (Newly provided for '80 CBX)

Tool Name	Part No.	Q'ty	Ref. page
Lock nut wrench	07908-4690001	1	22-34
Retainer wrench	07910-4690100	1	22-30
Bearing driver (needle bearing)	07946-4690100	1	22-32
Bearing driver (angular bearing)	07946-4690200	1	22-32
Dust seal driver	07948-4690100	1	22-32

• SPECIAL TOOLS (Other models)

Tool Name	Part No.	Q'ty	Ref. page
Vacuum gauge set	07504-0020000	1	3-7
	(H/C No. 47978)	1	
Oil pressure gauge	07506-3000000	1	2-3
Snap ring pliers	07914-3230001	1	15-8, 15-15
Steering stem socket	07916-3710100	1	13-27
6 mm hollow set wrench	07917-3230000	1	13-20, 13-23
Race bearing remover	07946-3710500	1	13-26
Steering stem driver	07946-3710600	1	13-26
Bearing driver attachment	07946-3710700	1	13-27, 22-30
Piston base	07958-2500000	1	7-8
Valve guide reamer (5.5 mm)	07984-2000000	1	6-14, 6-16
Oil pressure gauge attachment	07510-4220100	1	2-3
Carburetor throttle wrench	07908-4220100	1	3-8, 4-12
Carburetor pilot screw wrench	07908-4220200 or 07908-4220201	1	4-26
Lock nut wrench	07916-4220000	1	8-4, 8-11
Primary gear holder	07924-4220000	1	8-7, 8-8
Piston ring compressor	07954-4220000	1	7-8
Valve lifter holder	07964-4220001	1	3-6
Degree wheel	07974-4220000 or 07974-4220002	1	3-11
Valve hole protector	07999-4220000	1	6-12, 6-18



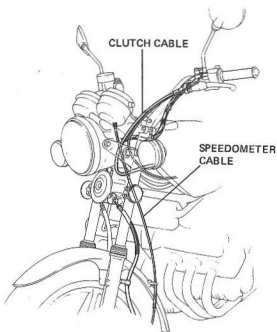
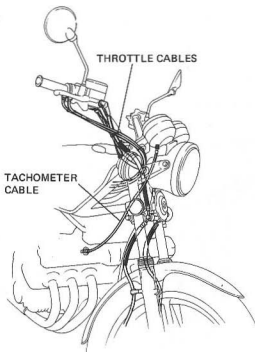
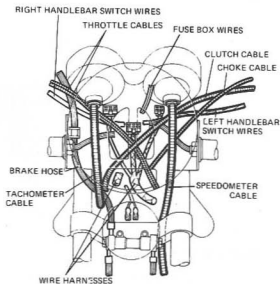
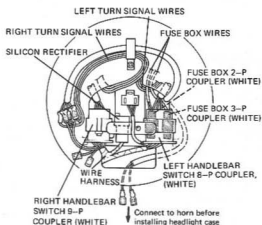


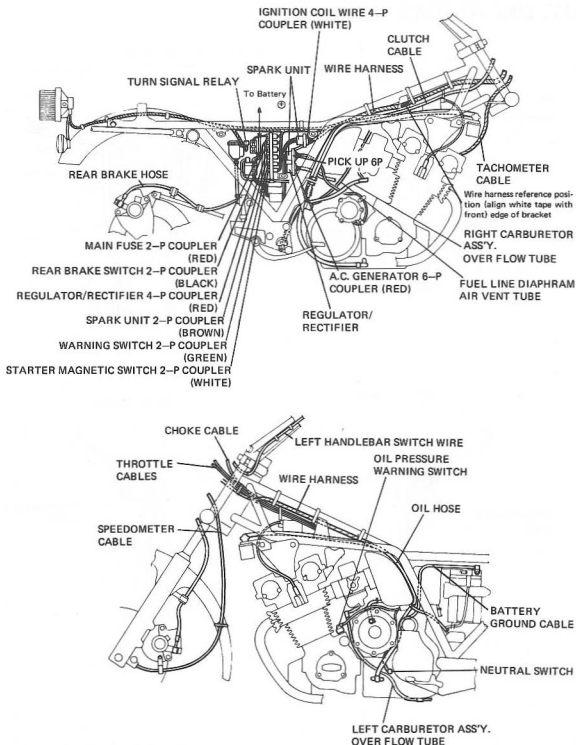
## • COMMON TOOL

Tool Name	Part No.	Q'ty	Alternate Tools (Common tool → Special tool)	Ref. Page
Float level gauge	07401-0010000	1		4-9
Pin spanner	07702-0010000	1		14-4, 14-7
Retainer wrench (A)	07710-0010100	1	07910-2830000&07910-3600000	14-4, 14-7
Retainer wrench (B)	07710-0010300	1	Bearing retainer wrench 07910-3230101	13-15, 13-17
Retainer wrench body	07710-0010400			13-15, 13-17, 14-4, 14-7
Lock nut wrench socket (26 x 30 mm)	07716-0020202	1		13-25, 13-28
Extension bar	07716-0020500	1	Commercially available	13-25, 13-28
Universal holder	07725-0010101	1	Flywheel holder 07923-0400000	8-3
Valve guide remover (5.5 mm)	07742-0010100	1	Valve guide driver 07942-3290100	6-15, 6-16
Bearing driver outer (32 x 35)	07746-0010100	1	Bearing driver 07945-4150200	16-7
Bearing driver outer (37 x 40)	07746-0010200	1	Bearing driver 07946-2860200	12-15, 16-7
Bearing driver outer (42 x 47)	07746-0010300	1	Bearing driver 07946-9350200	13-17
Bearing driver outer (52 x 55)	07746-0010400	1	Bearing driver 07946-9370100	12-16, 14-6
			Bearing driver 07946-3710200	
Bearing driver outer (62 x 68)	07746-0010500	1	Bearing driver 07946-3600000	14-6
Bearing driver handle (C)	07746-0030100	1		11-13, 12-16
Bearing driver inner (25 mm)	07746-0030200	1		12-16
Bearing driver inner (30 mm)	07746-0030300	1		11-13
Bearing driver pilot (15 mm)	07746-0040300	1		13-17
Bearing driver pilot (20 mm)	07746-0040500	1		14-6
Bearing driver pilot (25 mm)	07746-0040600	1		12-15, 12-16, 14-6
Front fork oil seal driver body	07747-0010100	1		13-22
Front fork oil seal attachment (E)	07747-0010600	1	Fork seal driver 07947-3710100	13-22
Bearing driver handle (A)	07749-0010000	1	Driver handle attachment 07949-6110000	12-15, 12-16, 13-17, 13-29, 14-6, 16-7
Valve spring compressor	07757-0010000	1	Valve spring compressor 07957-3290001	6-12, 6-18
Shock absorber compressor	07959-3290001	1		14-9, 14-10



## IV. CABLE AND HARNESS ROUTING







# V. MAINTENANCE SCHEDULE

Perform the PRE-RIDE INSPECTION in the Owner's Manual at each scheduled maintenance.

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

C: CLEAN A: ADJUST

R: REPLACE L: LUBRICATE

ITEM		FREQUENCY	WHICHEVER COMES FIRST ↓ EVERY	ODOMETER READING (NOTE 3)							Refer to
				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)		
EMISSION RELATED ITEMS	* FUEL LINES			I	I	I	I	I	I	Page 3- 3	
	* THROTTLE OPERATION			I	I	I	I	I	I	Page 3- 6	
	* CARBURETOR CHOKE				I	I	I	I	I	Page 3- 9	
	AIR CLEANER	NOTE 1			C	C	C	C	C	Page 22-10	
	CRANKCASE BREATHER	NOTE 2			C	C	C	C	C	Page 3- 3	
	SPARK PLUGS				R	R	R	R	R	Page 22-10	
	* VALVE CLEARANCE			I	I	I	I	I	I	Page 3-10	
	* IGNITION TIMING			I	I	I	I	I	I	Page 22-11	
	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	
	* ENGINE OIL SCREEN						C			Page 2- 3	
	* CAM CHAIN TENSION			A	A	A	A	A	A	Page 3-14	
	* CARBURETOR-SYNCHRONIZE			I	I	I	I	I	I	Page 22-13	
NON-EMISSION RELATED ITEMS	* CARBURETOR-IDLE SPEED			I	I	I	I	I	I	Page 3- 9	
	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	MONTH I 2 YEARS *R		I	I	I	*R	I	I	Page 3-17	
	BRAKE PAD 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			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			I	I	I	I	I	I	Page 3-22	
	** STEERING HEAD BEARING			I	I	I	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 DUSTY AREAS.

2. SERVICE MORE FREQUENTLY WHEN RIDING IN RAIN OR AT FULL THROTTLE (USA ONLY).

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



## VI. INSPECTION AND ADJUSTMENT

### AIR CLEANER

Remove the seat (page 5-2).

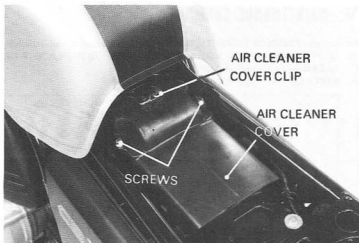
Lift the air cleaner cover clip up.

Remove the two air cleaner cover screws and the air cleaner cover.

Remove the air cleaner element set spring.  
Remove the air cleaner element.

Clean the element (Page 3-3).  
Install the removed parts (Page 3-3).

Snap the air cleaner cover clip into place.



### SPARK PLUGS

#### RECOMMENDED SPARK PLUG

( ) Canada model

For cold climate below 5°C (41°F)		Standard		For extending high speed riding	
ND	NGK	ND	NGK	ND	NGK
X22ES-U (X22ESR-U)	D7EA (DR7ES)	X24ES-U (X24ESR-U)	D8EA (DR8ES-L)	X27ES-U (X27ESR-U)	D9EA (DR8ES)

Clean any dirt from around the spark plug base.

Disconnect the spark plug caps.

Remove and discard the spark plugs.

Measure the new spark plug gaps using a wire-type feeler gauge.

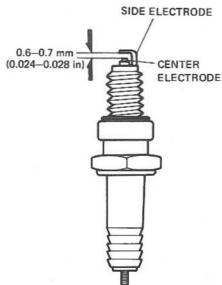
**SPARK PLUG GAP: 0.6–0.7 mm**  
(0.024–0.028 in)

Adjust by bending the side electrode carefully.

With the plug washer attached, thread the new spark plugs in by hand to prevent cross-threading.

Tighten the spark plugs another 1/2 turn with a spark plug wrench to compress the plug washer.

Connect the spark plug caps.



### CONTROL CABLE LUBRICATION

Periodically, disconnect the throttle and clutch cables at their upper ends.  
Thoroughly lubricate the cables and their pivot points with a commercially available cable lubricant.



### IGNITION TIMING

#### NOTE

Can be done with oil in the engine.

Remove the right crankcase cap and pulser generator cover.

Rotate the crankshaft clockwise and align the "F" mark with the crankcase front upper and lower mating surface.

Either No. 6 or No. 1 piston must be near TDC of the compression stroke.

The timing is correct if the narrow projection of 1,6 pulser generator is aligned with the rotor tooth.

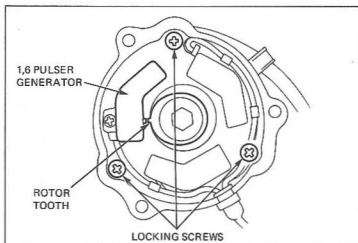
If the ignition timing is incorrect, loosen the three pulser generator base plate locking screws.

Rotating the base plate counterclockwise will advance the ignition timing.

Rotating the base plate clockwise will retard the ignition timing.

Tighten the base plate locking screws and recheck the ignition timing.

Install the removed parts.



### SPARK ADVANCER

#### NOTE

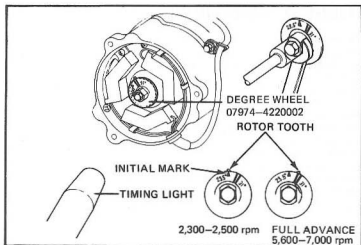
- Check the spark advancer only if engine performance difficulties occur.
- A high quality stroboscopic timing light designed for transistorized ignition systems must be used. It should also be capable of accurate operation at 9,000 rpm.

Remove the pulser cover.

Remove the rotor bolt and install the special degree wheel. (07974-4220002).

Align initial mark on the degree wheel with the rotor tooth and tighten the rotor bolt.

Connect a timing light to the No. 6 high tension wire.





Start the engine.

Check that the initial mark remains aligned with the rotor tooth at idle.

Increase engine speed and check that the 23.5° mark aligns with the rotor tooth at 2,300–2,500 rpm.

And then check that the 31° mark aligns with the rotor tooth at 5,600–7,000 rpm.

**NOTE:**

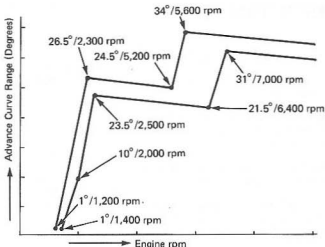
The degree wheels for the '79 model CBX (H/C 71955 T/N 07974-4220000 or H/C 84396 T/N 07974-4220002) can be used on the '80 model CBX. Just be sure to check 31° advance at 5,600–7,000 rpm instead of 8,000 rpm as shown on these degree wheels.

**CAUTION**

*Do not allow engine speed to exceed 8,000 rpm or engine damage may result.*

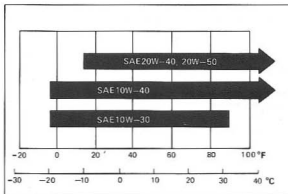
Replace the advancer assembly if it is not functioning properly.

Install the pulser cover.

**ENGINE OIL**

Recommended oil:

- Use **HONDA 4-STROKE OIL** or equivalent.
- API service classification – SE
- Viscosity – SAE 10W-40
- Other oil viscosities may be used when the average temperature in your riding area is within the indicated range.

**CARBURETOR SYNCHRONIZATION****NOTE**

Perform the carburetor synchronization with engine at normal operating temperature, transmission in neutral and motorcycle on the center stand.

Remove the seat and air cleaner inlet duct.

Turn the fuel valve OFF and remove the fuel tube and fuel tank.

Prepare a longer fuel tube and reconnect it to the fuel tank and carburetor.

Position the fuel tank higher than its normal position.



Remove the vacuum plugs from the carburetors (except the No. 3). Install long adapters to the inner carburetors and short adapters to the outer carburetors.  
Connect the vacuum gauges.

Start the engine.  
Clamp the No. 3 carburetor vacuum tube shut to hold the fuel diaphragm open.  
Stop the engine.  
Remove the vacuum tube from the No. 3 carburetor.  
Connect the vacuum gauge to the No. 3 carburetor.

### NOTE

If the vacuum gauge tube I.D. is over 6 mm (1/4 in), connect an adapter tube (No. 95005-35085-20) and joint (No. 36025-657-671) to the No. 3 carburetor.

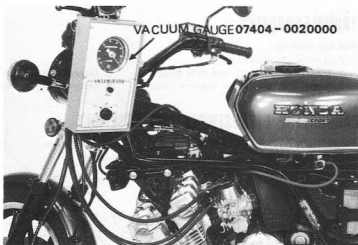
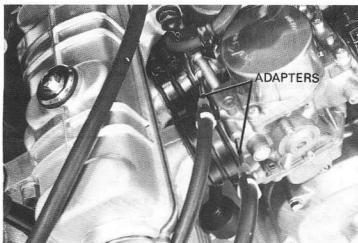
### CAUTION

*Do not attempt to remove the No. 3 carburetor vacuum tube connector. Carburetor damage may result.*

Restart the engine and adjust the idle speed to 900 rpm.

Make sure that the maximum difference in vacuum reading is not more than 40 mm Hg (1.6 in Hg).

For adjustment, refer to the base manual (Page 3-8).







## VII. FUEL SYSTEM

### GENERAL INFORMATION

- The carburetors are equipped with a fuel line diaphragm. After carburetor overhaul, it is necessary to crank the engine for 2-3 seconds, three times with the throttle fully closed to fill the float chambers.
- Refer to section 4 for carburetor adjustments.
- The pilot screw is factory pre-set and should not be removed unless the carburetor is overhauled.

### CARBURETOR SPECIFICATIONS

Identification mark	VB62A
Idle speed	900 $\pm$ 100 rpm
Fast idle	2000 $\pm$ 500 rpm
Float level	15.5 $\pm$ 1 mm (0.61 $\pm$ 0.04 in)
Venturi dia.	28 mm (1.1 in)
Main jet	# 110

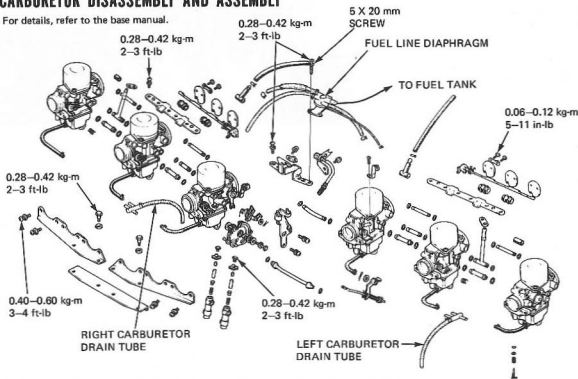
### TROUBLESHOOTING

#### Fuel line diaphragm

- Fuel not reaching carburetors
  1. Fuel line diaphragm vent tube clogged
  2. Fuel line diaphragm vacuum tube clogged
  3. Clogged fuel line diaphragm.
  4. Clogged fuel line diaphragm check valve

### CARBURETOR DISASSEMBLY AND ASSEMBLY

For details, refer to the base manual.





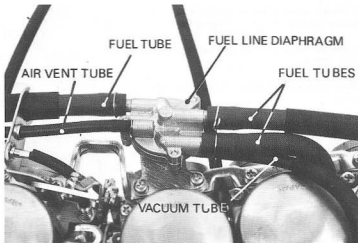
## FUEL LINE DIAPHRAGM

### REMOVAL

Turn the fuel valve off. Remove the seat and fuel tank.

Disconnect the fuel tube, vacuum tube and air vent tube.

Unscrew the screws attaching the fuel line diaphragm to the carburetors. Remove the fuel line diaphragm.



### INSPECTION

Remove the fuel line diaphragm (see above).

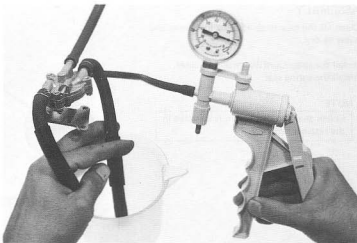
Disconnect the inlet fuel tube from the diaphragm, and connect a longer tube to the fuel tank.

Place a suitable drainage container under the outlet fuel tubes.

Turn the fuel valve on. Fuel should not flow from the outlet tubes.

Connect a vacuum gauge to the diaphragm vacuum outlet. Fuel should flow out from the outlet tubes when 10–20 mm Hg (0.4–0.8 in Hg) of vacuum is applied.

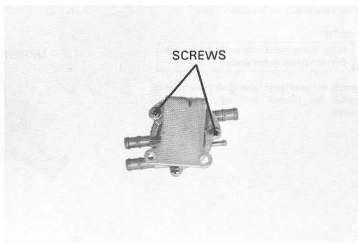
If the flow is restricted, check the diaphragm for clogged fuel or air passages and the diaphragm itself for tears.



### DISASSEMBLY

Disassemble the upper body, spacer, spring and lower body by removing the screws shown.

Disassemble the spacer, being careful not to damage the diaphragm.





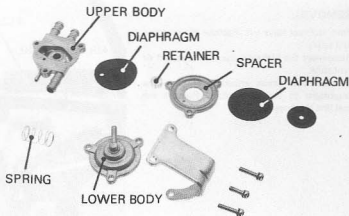
Check the upper and lower bodies for signs of damage to the diaphragm contacting faces.

Check the diaphragm for damage, cracks or other defects.

Check the bodies and spacer for clogged vent holes.

Check the diaphragm seal for damage.

Check for clogged fuel or air passages.



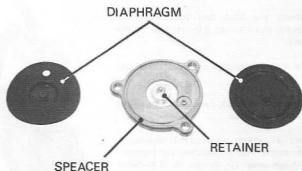
## ASSEMBLY

Clean all the disassembled parts in solvent and allow to dry.

Install the spacer and diaphragm retainer.  
Install the spring seat.

### NOTE

Check that the diaphragm is installed in the retainer properly.

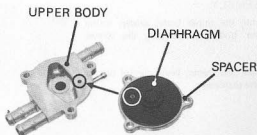


Install the spacer on the upper body.

### NOTE

Align the air vent hole in the body with the air passage in the spacer.

Install the diaphragm spring and lower body.  
Install the bracket and tighten with the screws.





## INSTALLATION

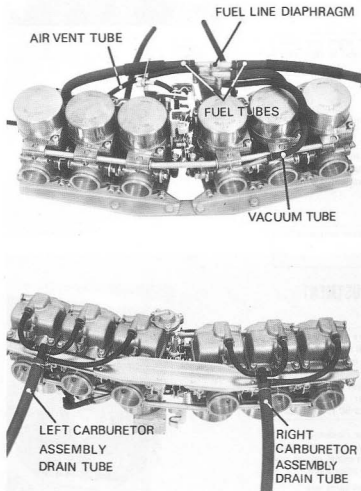
Installation of the fuel line diaphragm is the reverse of removal.

### NOTE

Check that air or gasoline is not leaking past the fuel tube joints or connections.

## CARBURETOR TUBE ROUTING

Route the carburetor tubes as shown.





## PILOT SCREW REMOVAL/ INSTALLATION

### NOTE

The pilot screws are factory pre-set and should not be removed unless the carburetor is overhauled.

Remove the carburetors. (Page 4-3).

Remove the float chambers (Page 4-6).

Turn the pilot screw in and carefully count the number of turns before it seats lightly. Make a note of this to use as a reference when reinstalling the pilot screw.

### CAUTION

*Damage to the pilot screw seat will occur if the pilot screw is tightened against the seat.*

Remove the pilot screw.

Inspect the pilot screw and replace if worn or damaged.

Install the pilot screw and return it to its original position as noted during removal. Perform pilot screw adjustment if a new pilot screw is installed (below).

### NOTE

Do not install limiter caps on new pilot screws until after adjustment has been made (below).

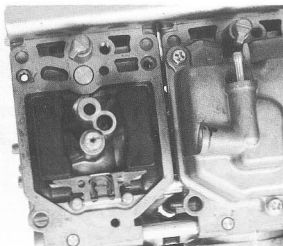
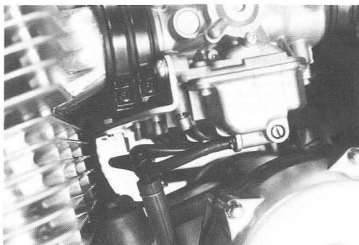
## PILOT SCREW ADJUSTMENT

### NOTE

- The pilot screws are factory pre-set and no adjustment is necessary unless the pilot screw is replaced (See removal above).
- Use a tachometer with graduations of 50 rpm or smaller and that will accurately indicate a 50 rpm change.

1. Turn each pilot screw clockwise until it seats lightly and back it out to the specification given. This is an initial setting prior to the final pilot screw adjustment

**INITIAL OPENING:** 1-1/4 turns out





### CAUTION

*Damage to the pilot screw seat will occur if the pilot screw is tightened against the seat.*

2. Warm up the engine to operating temperature. Stop and go driving for 10 minutes is sufficient.
3. Attach a tachometer.
4. Adjust the idle speed with the throttle stop screw.

### IDLE SPEED: 900 rpm

5. Turn each pilot screw in or out to obtain the highest engine speed.
6. Adjust the idle speed with the throttle stop screw.
7. Turn the No. 1 carburetor pilot screw in until it seats lightly, recording the number of turns.
8. Turn the No. 2 carburetor pilot screw in until the engine speed drops 50 rpm.
9. Turn the No. 2 carburetor pilot screw 1/2 turn out from the position obtained in Step 7.
10. Perform Steps 8 and 9 for the No. 3, 4, 5 and 6 carburetor pilot screws.
11. Turn the No. 1 pilot screw the number of turns recorded in step 7.
12. Turn the No. 6 pilot screw in until it seats lightly, recording the number of turns.
13. Perform Steps 8 and 9 for the No. 1 carburetor pilot screw.
14. Turn the No. 6 pilot screw out the number of turns recorded in Step 12.
15. Adjust the idle speed with the throttle stop screw.

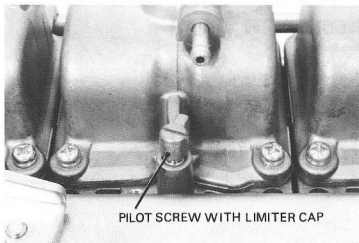
### LIMITER CAP INSTALLATION

If the pilot screw is replaced, a new limiter cap must be installed after pilot screw adjustment is completed.

After adjustment, cement the limiter cap over the pilot screw, using LOCTTE® 601 or equivalent. The limiter cap should be placed against its stop, preventing further adjustment that would enrich the fuel mixture (limiter cap position permits clockwise rotation and prevents counterclockwise rotation).

### NOTE

A pilot screw limiter cap must be installed. It prevents misadjustment that could cause poor performance and increase exhaust emissions.



PILOT SCREW WITH LIMITER CAP

## VIII. CYLINDER HEAD/VALVES

### CAM HEIGHT INSPECTION

Using a micrometer, check each cam lobe height for wear or damage.

		STANDARD	SERVICE LIMIT
CAM LOBE HEIGHT	IN	37.800–37.060 mm (1.4882–1.4945 in)	37.7 mm (1.48 in)
	EX	37.800–37.160 mm (1.4567–1.4630 in)	36.9 mm (1.45 in)



## IX. FRONT WHEEL/SUSPENSION

### GENERAL INFORMATION

- The '80 CBX uses an air assist fork front suspension system. The front fork preload can be changed by adjusting the amount of air pressure in each front fork tube.

### TORQUE

Steering stem adjusting nut	1.1–1.3 kg-m (8–9 ft-lb)
Front fork air valve	0.4–0.7 kg-cm (3–5 in-lb)
Front fork cap bolt	1.5–3.0 kg-m (11–22 ft-lb)
Front fork socket bolt	1.5–2.5 kg-m (11–18 ft-lb)

### SPECIFICATIONS

	STANDARD	SERVICE LIMIT
Fork spring free length	551.0 mm (26.69 in)	541 mm (21.3 in)
Front fork slider I.D.	36.042–36.084 mm (1.4190–1.4192 in)	36.20 mm (1.425 in)
Front fork tube O.D.	34.925–34.950 mm (1.3750–1.3760 in)	34.85 mm (1.372 in)
Front fork oil capacity	240 cc (8.2 ozs)	_____
Front fork air pressure	0.5–0.9 kg/cm <sup>2</sup> (7–13 psi)	_____
Front fork slider bushing O.D.	36.00–35.94 mm (1.417–1.413 in)	35.85 mm (1.411 in)
Front fork guide bushing I.D.	35.07–35.13 mm (1.381–1.383 in)	35.25 mm (1.388 in)

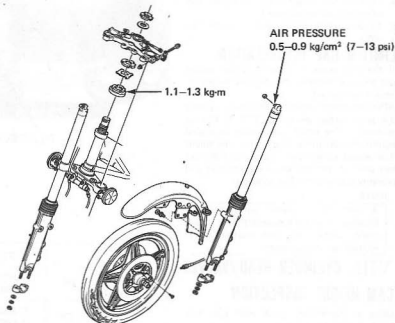
### TROUBLESHOOTING

#### Soft Suspension

- Weak fork springs.
- Insufficient fluid in forks.
- Low air pressure.

#### Hard Suspension

- Incorrect fluid weight in forks.
- Excessive air pressure in fork tube.
- Excessive oil amount in forks.





## FRONT FORK DISASSEMBLY

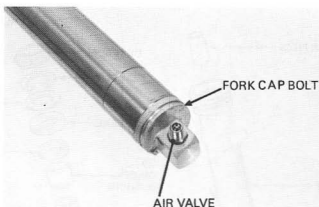
Remove the front fork (Pages 13-19 and 20).

Depress the valve stem to relieve air pressure.

**CAUTION**

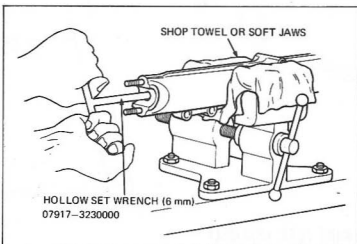
*DO NOT* disassemble the forks until air pressure is relieved.

Unscrew the fork cap bolts and drain the fork leg. Remove the fork spring.



Remove the socket bolt.

Remove the fork piston and rebound spring.

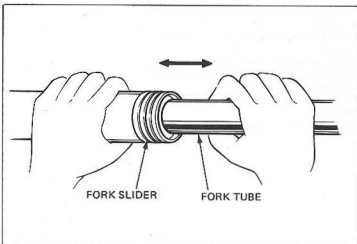


Remove the dust seal.

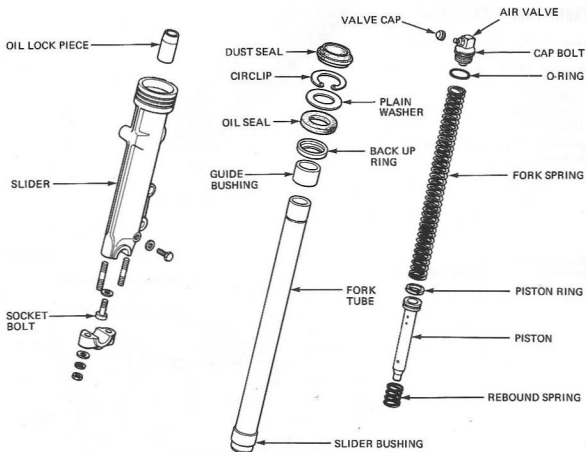
Remove the circlip and plain washer.

Pull the fork tube out of the slider.

Remove the oil seal, back up ring and guide bushing from the fork slider.







## FRONT FORK ASSEMBLY

Install the rebound spring and piston into the fork slider.

Install the fork spring and tighten the cap bolt loosely.

Install the oil lock piece and fork tube into the slider by aligning the oil lock piece with the fork tube.

Apply a locking agent to the socket bolt and tighten.

**TORQUE: 1.5–2.5 kg-m (11–18 ft-lb)**



Install the guide bushing into the slider.

Install the backup ring.

Dip the new fork seal in ATF and install it into the slider.

Drive the oil seal into position until the circlip groove appears.

Install the backup ring washer.

Install the circlip and dust cover.

### NOTE

Install the circlip with the round edge down.

Remove the cap bolt.

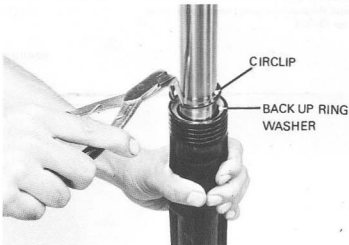
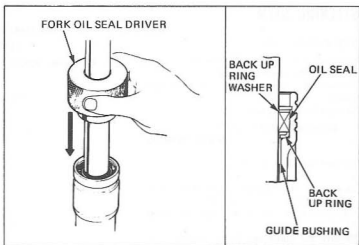
Fill the fork tube with ATF.

**OIL CAPACITY:** 240 cc (8.2 ozs)

Install and tighten the cap bolt.

**TORQUE:** 1.5–3.0 kg-m (11–22 ft-lb).

Fill the fork tube with  $0.7 \pm 0.2$  kg/cm<sup>2</sup> pressure of air.



## FRONT FORK INSTALLATION

For front fork installation, refer to page 13-24.  
Adjust the front fork air pressure as follows.

With the front brake applied, pump the front forks up and down several times.  
Place the motorcycle on the center stand.

Measure the air pressure.

**STANDARD:**  $0.7 \pm 0.2$  kg/m<sup>2</sup> ( $10 \pm 3$  psi)

### CAUTION

- Use only a hand operated air pump to fill the fork tubes. Do not use compressed air.
- Maximum pressure is 3 kg/cm<sup>2</sup> (43 psi). Do not exceed this or fork tube component damage may occur.





## STEERING STEM

### STEM REMOVAL

Remove the fork top bridge (Page 13-25).

Straighten the lock washer tabs.

Remove the top-thread "B" nut and lock washer.

Remove the bearing adjustment nut.

#### STEERING STEM SOCKET

07916-3710100

Remove the steering stem.

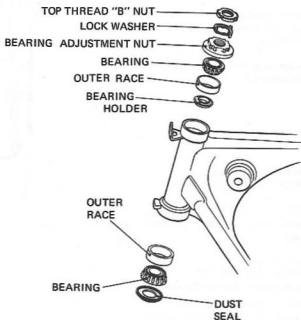
Remove the upper bearing and bearing holder.

Remove the lower bearing and dust seal.

Install the lower bearing and dust seal (Page 13-26).

Remove the upper and lower bearing outer races (Page 13-26).

Install the upper and lower bearing outer races (Page 13-27).



### STEERING STEM INSTALLATION

Clean the upper and lower bearings thoroughly. Thread the bearing adjustment nut and top thread "B" nut onto the steering stem to make sure that they turn smoothly and will not bind.

Remove the top thread "B" nut and adjustment nut.

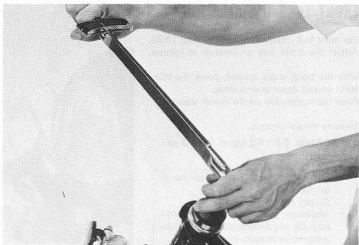
Clean the steering stem and adjustment nut threads. Remove all dirt and burrs.

Pack all bearing cavities with bearing grease. Insert the steering stem into the steering head pipe.

Install the upper bearing holder and bearing.

Install and tighten the adjustment nut.

**TORQUE: 1.1-1.3 kg-m (8-9 ft-lb)**

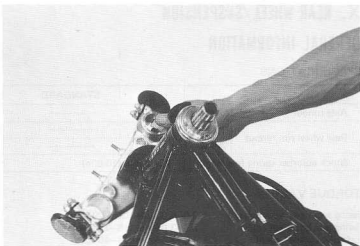




Turn the steering stem lock-to-lock 5 times to seat the bearings.

Repeat the bearing tightening and steering stem turning sequence twice.

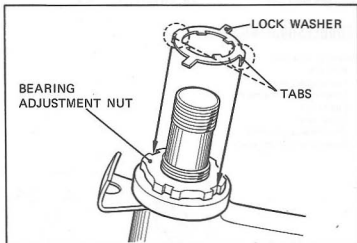
If the nut does not tighten after turning the steering stem the first or second time, remove the nut and inspect it and the steering stem threads for dirt or burrs.



Install a new bearing adjustment nut lock washer aligning the tabs with the nuts grooves.

### NOTE

DO NOT install a used bearing adjustment nut lock washer.



Hand tighten the top thread "B" nut. Hold the adjustment nut and further tighten the "B" nut only to align its grooves with the lock washer tabs.

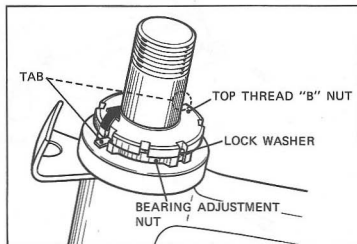
### NOTE

If the top thread "B" nut grooves cannot be easily aligned with the lock washer tabs, remove the nut, turn it over and reinstall.

Bend the other two lock washer tabs up into the top thread "B" nut grooves.

Install the top bridge (Pages 13-27 and 28).

Check that the steering stem rotates freely and that there is no vertical movement.





## X. REAR WHEEL/SUSPENSION

### GENERAL INFORMATION

#### SPECIFICATIONS

		STANDARD	SERVICE LIMIT	
Axle runout		—	0.2 mm	(0.008 in)
Rear wheel rim runout	Radial	—	2.0 mm	(0.08 in)
	Axial	—	2.0 mm	(0.08 in)
Shock absorber spring free length		254.2 mm (10.0 in)	249.5 mm	(9.82 in)

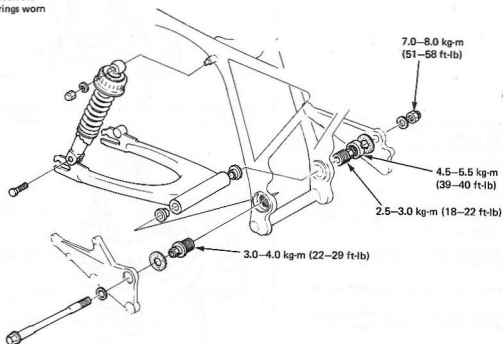
#### TORQUE VALUES

Swing arm right pivot collar	3.0–4.0 kg-m (22–29 ft-lb)
Swing arm left pivot collar	2.5–3.0 kg-m (18–22 ft-lb)
Left pivot piece lock nut	4.5–5.5 kg-m (33–40 ft-lb)
Swing arm pivot bolt	7.0–8.0 kg-m (51–58 ft-lb)

### TROUBLESHOOTING

Wobble or Vibration in Motorcycle

1. Bent rim
2. Loose wheel bearing
3. Loose or distorted spokes
4. Faulty tire
5. Loose axle
6. Tire pressure incorrect
7. Swing arm bearings worn





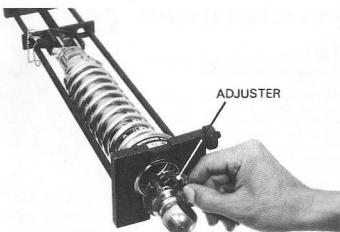
## REAR SHOCK ABSORBER DISASSEMBLY

Remove the rear shock absorber (Page 14-8).

### NOTE

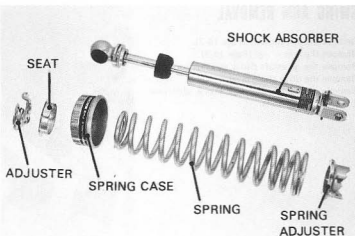
Wrap the spring case with tape to prevent damage.

Compress the spring just enough to remove the adjuster and remove the parts.



### NOTE

Do not try to disassemble the absorber any further.

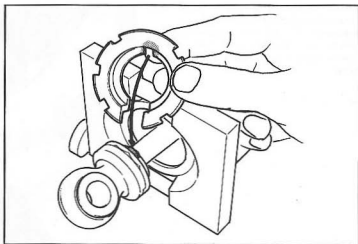


## SHOCK ABSORBER ASSEMBLY

Assembly of the shock absorber is essentially the reverse order of disassembly.

### NOTE

- Install the spring with the small coils at the bottom.
- To install the spring adjuster, use the tool "REAR SPRING COMPRESSOR" as in removal. Align the lug on the upper eye with the cutout in the adjuster.





## SHOCK ABSORBER ADJUSTMENT

### NOTE

Be certain to adjust both shock absorbers to the same position.

The FVQ shock absorber has three adjustable positions; spring adjuster, damper tension adjuster and damper compression adjuster. The tension adjuster has three adjusting positions and the compression adjuster has two positions. Position "1" is for light or standard load. Position 2 kg and 3 are for heavier loads or rough roads.



## SWING ARM REMOVAL

Remove the left muffler (Page 14-3).  
Remove the rear wheel (Page 14-3).  
Remove the gearshift pedal and left foot peg.  
Remove the drive chain cover.  
Remove the right and left shock absorbers lower mounting bolts.



Remove the right muffler.  
Remove the right foot peg.  
Disconnect the rear brake master cylinder from the rear brake pedal at the joint.  
Remove the rear brake master cylinder (Page 15-14).

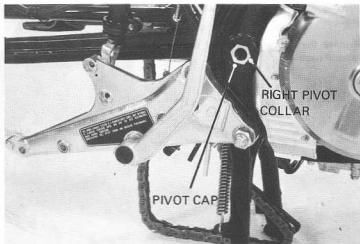




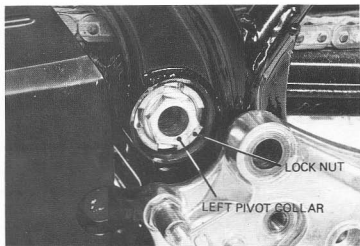
Loosen the rear engine hanger bolt.  
Remove the swing arm pivot bolt and move  
the left foot peg bracket out of way.  
Remove the pivot cap.



Move the right foot peg bracket out of the  
way and remove the pivot cap.  
Inspect the right pivot collar for damage.  
Replace if necessary.



Remove the left pivot collar lock nut and  
remove the left pivot collar.  
Remove the swing arm.

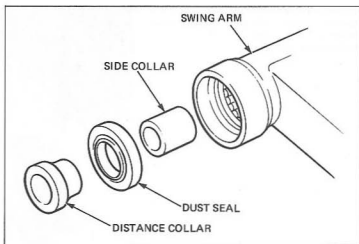






## SWING ARM DISASSEMBLY

Remove the distance collar.  
Remove the left dust seal and side collar.



Remove the bearing retainer with the dust seal.

Remove the dust seal from the bearing retainer if necessary.



Drive out the center collar and right ball bearing as a set.



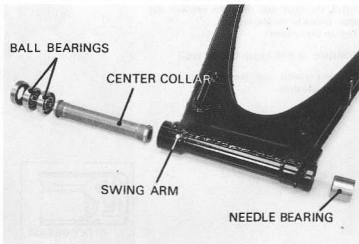
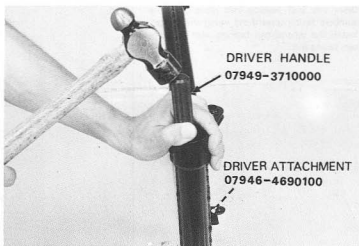


Drive out the needle bearing.

**NOTE**

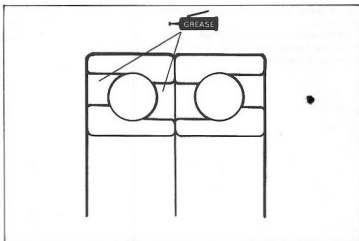
Replace the needle bearing with a new one whenever disassembled.

Clean all the disassembled parts and check for wear or damage. Parts which show excessive wear or damage must be replaced.



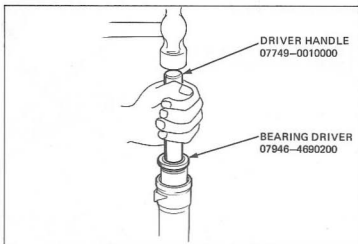
**SWING ARM ASSEMBLY**

Clean all the disassembled parts.  
Pack the right bearing cavities with grease.





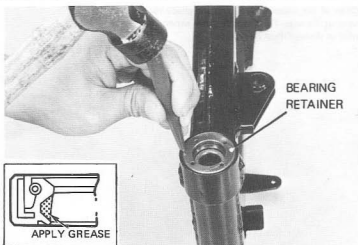
Drive one ball bearing into place with the numbers facing toward the swing arm center. Install the second ball bearing with its numbers facing out.



Install the dust seal onto the retainer and apply grease to the inside lip. Tighten the retainer.

**TORQUE: 3.0–4.0 kg-m (22–29 ft-lb)**

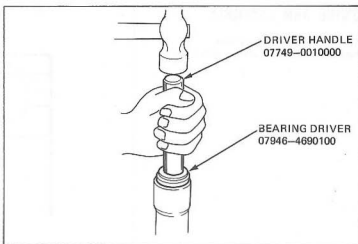
Peen the retainer over the swing arm using a hammer and drift.



Apply grease to the center collar and slide it into place.

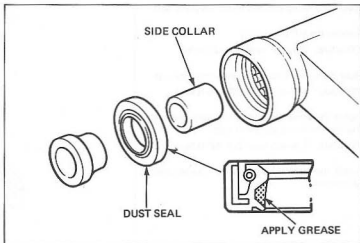
Pack the needle bearing with grease.

Drive the needle bearing into place with its numbers facing out.





Apply grease to the dust seal; install the distance collar and dust seal on the left side.

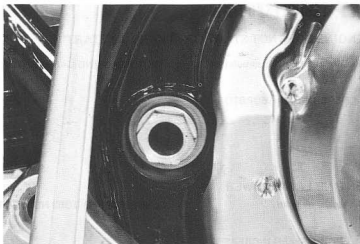


## SWING ARM INSTALLATION

Tighten the right pivot collar.

**TORQUE: 3.0–4.0 kg-m (22–29 ft-lb)**

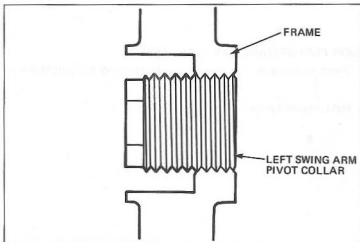
Install the pivot cap and right foot peg bracket.



Install the distance collar onto the swing arm.  
Install the left pivot collar loosely.

### NOTE

Make sure that the end of the pivot collar does not extend past the frame.





Install the swing arm and insert the pivot bolt.

Tighten the left pivot collar.

**TORQUE: 2.5–3.0 kg-m (18–22 ft-lb)**

Hold the pivot collar and tighten the lock nut.

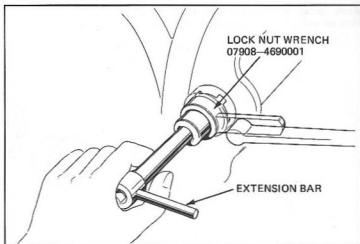
**TORQUE: 4.5–5.5 kg-m (33–40 ft-lb)**

Install the pivot cap and left footpeg bracket.

Tighten the swing arm pivot bolt.

**TORQUE: 7.0–8.0 kg-m (51–58 ft-lb)**

Install the removed parts in the reverse order of removal.



## XI. TROUBLESHOOTING

### ENGINE DOES NOT START OR IS HARD TO START

1. Check fuel flow to carburetor

↓  
REACHING CARBURETOR

NOT REACHING CARBURETOR →

- (1) Fuel tank empty
- (2) Clogged fuel tube or fuel filter
- (3) Vacuum not reaching fuel line diaphragm
- (4) Faulty fuel line diaphragm
- (5) Sticking float valve
- (6) Clogged fuel tank cap breather hole

### ENGINE LACKS POWER

4. Accelerate lightly

↓  
ENGINE SPEED INCREASE

ENGINE SPEED DOES NOT INCREASE →

- (1) Carburetor choke closed
- (2) Clogged air cleaner
- (3) Restricted fuel flow vent
- (4) Clogged fuel tank cap breather hole
- (5) Vacuum not reaching fuel line diaphragm
- (6) Fuel line diaphragm faulty
- (7) Clogged muffler

### POOR PERFORMANCE AT HIGH SPEED

2. Disconnect fuel tube

↓  
FUEL FLOWS FREELY

FUEL FLOW RESTRICTED →

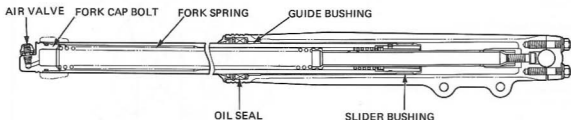
- (1) Lack of fuel in tank
- (2) Clogged fuel line
- (3) Clogged fuel tank breather hole
- (4) Clogged fuel valve
- (5) Vacuum not reaching fuel line diaphragm
- (6) Fuel line diaphragm faulty



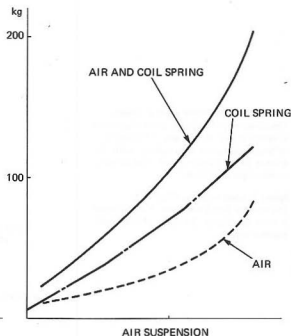
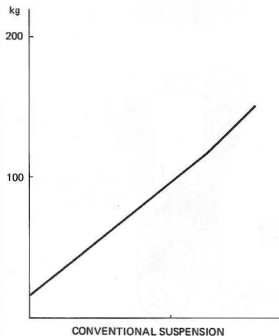
## XII. TECHNICAL FEATURES

### FRONT AIR FORKS

The front forks uses air and a coil spring. The air chamber is inside each fork tube with an air valve at the fork cap bolt.



When adjusted correctly, the air fork system provides a more progressive compression than a conventional fork. The air fork system can be adjusted to each individual's preference to compensate for load and riding conditions.





## ADJUSTABLE F.V.Q. SHOCK ABSORBER

The CBX shock absorbers have three adjustments; spring preload, compression damping and rebound damping, for each individuals preferences

### 1. Rebound Adjuster (3 stages)

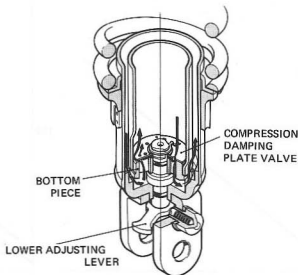
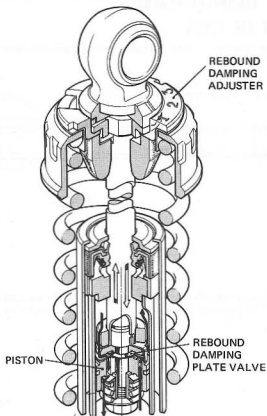
The rebound adjuster consists of a plate valve with a series of orifices having different diameters. As the adjuster is moved, the valve is rotated. This changes the relationship between the orifices and piston oil passage.

### 2. Compression Adjusting Lever (2 stages)

The compression adjuster uses a plate valve in which either of two sets of orifices with different diameters are indexed with the grooves in the bottom piece. This controls compression dampings.

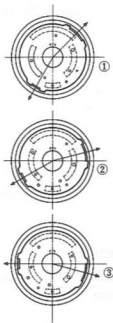
### 3. Spring Preload Adjuster (5 stages)

The adjuster had 5 positions. A pin spanner is used to change the load of the shock absorber spring.

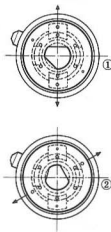




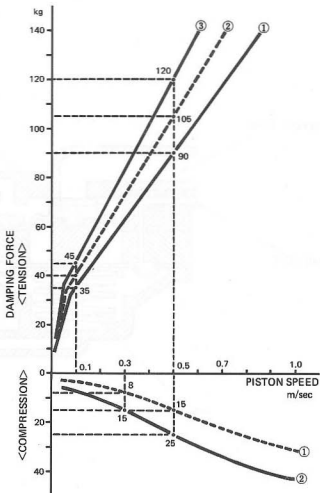
The upper adjuster controls rebound damping.



The lower adjusting mechanism controls compression.



## DAMPING FORCE CHARACTERISTICS







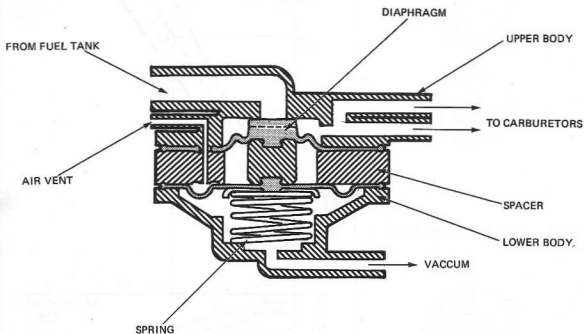
## FUEL LINE DIAPHRAGM

The fuel line diaphragm depends upon a negative crankcase pressure and a spring loaded diaphragm, allowing fuel to flow from fuel tank to the carburetor to the engine only when the engine is operating.

With the engine off the diaphragm is held against the fuel outlet within the diaphragm body; no fuel can flow through the fuel tank to the carburetor.

As the engine is cranked, negative vacuum pressure pulls the diaphragm down against diaphragm spring tension. This opens the fuel outlet allowing fuel to flow to the carburetor.

When the engine is stopped, the diaphragm is pushed back against the fuel outlet to block the fuel flow.



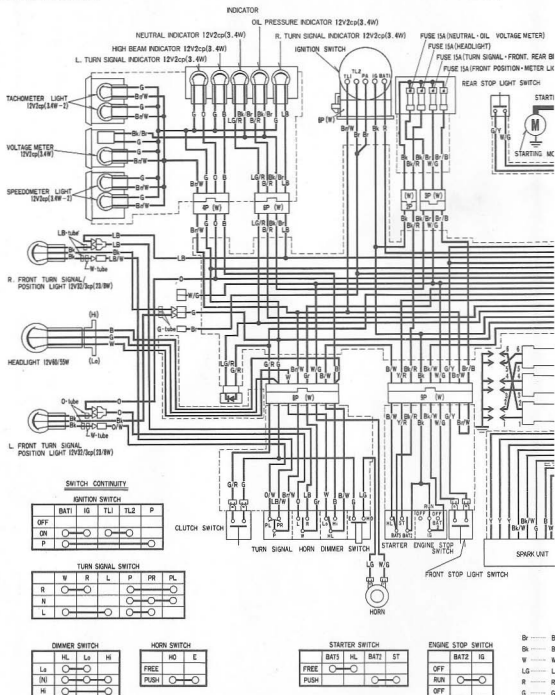


**HONDA**  
**CB X**

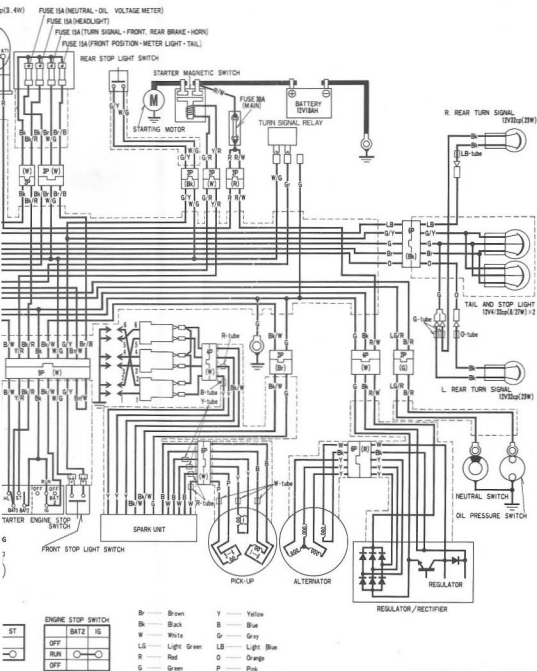
'80 ADDENDUM

# XIII. WIRING DIAGRAM

**CBX**



## CBX



0030Z-422-6701

## **1979-80 Honda CBX Service Manual Errata**

### **Page Changes:**

**1-3** Under "Lights," last item is "Running light". Bulb should be SAE NO 1034.

**3-1** Under "Special Tools," Degree wheel is P/N 07974-4220001.

Delete reference to Mag. Mopus-S7301 and Mag. Mopus-G504 tires in Tire table.

**3-6** Second line down, correct spelling: "inatall" should be "install."

**3-11** Delete lower arrow under 17 mm wrench drawing. Delete reference to valve lifter holder P/N 07964-4220000. Add note: Refer to "Service Tool News" T/N: 07964-422000A H/C: 4563102 July, 1994

**3-13** In valve shim selection chart, change "EX" to "EXAMPLE" (TWO LOCATIONS).

Add sequence chart:

\* Open #2 INTAKES > measure #1 INTAKES, #3 INTAKES, #5 INTAKES

\* Open #2 EXHAUSTS > measure #2 INTAKES, #1 EXHAUSTS, #3 EXHAUSTS

\* Open #4 EXHAUSTS > measure #4 INTAKES, #5 EXHAUSTS, #6 EXHAUSTS

\* Open #5 EXHAUSTS > measure #6 INTAKES, #2 EXHAUSTS, #4 EXHAUSTS

**3-19** Top picture, correct spelling: "spaneer" should be "spanner."

**3-21** Top line, change to read: "Remove the clutch adjustment bolt cap (use wrench P/N 07709-0010001 to avoid damage to cap). Loosen..."

**3-22** Delete reference to Mag. Mopus-S7301 and Mag. Mopus-G504 tires in tire size table.

**5-4** Middle pictures, add text: "Loosen lower hanger bolt."

Lower picture, delete the lower arrow and darken over the rear hanger bolt (removed).

**6-22** Paragraph six, correct spelling: "inatall" should be "install"

Paragraph seven, correct spelling: "inatall" should be "install"

Paragraph eight, correct spelling: "blots" should be "bolts"

Paragraph nine, delete "Adjust cam chain tensioner (page 3-14)." It appears on pg. 6-24.

**8-10** First NOTE, change to read: "The lifter plate bolts are two lengths."

**9-3** Under Neutral Switch Inspection, last line, change to read: "...if there is continuity between the top terminal and the body."

**11-15** First NOTE, last line, change to read: "...fork groove of C-3, C-4, and M-3 gears."

**12-1** Under Torque Values, change "crankpin" to "connecting rods"  
Under TROUBLESHOOTING, change "crank pin" to "connecting rods"

**12-11** Last NOTE, third line, correct spelling: "mian" should be "main"

**12-13** Middle picture, add: "NOTE Always use new connecting rod bolts and nuts."

**12-14** After second NOTE, add: "CAUTION Verify torque values on rod bearings after one hour 'set'  
After CAUTION, add: "Install main bearings and use torques on page 12-10"

**13-3** Under NOTE, change to read: "Do not touch the bulb with your fingers"

**13-6** Under WARNING, Can any one explain this???

**15-17** Change the NOTE to a CAUTION

**18-1** Under TROUBLESHOOTING, insert: "- 30 A fuse blown"

**19-3** Did you know you have a "Both" (N) position for two headlight beams at once? (115W)  
Also, what is the "H" "P" and "." on the housing right above the turn signal switch???

**20-2** Under A.C. GENERATOR COUPLING, correct spelling: "other" should be "other"

**22-3** Under ELECTRICAL table, change to read: "...BTDC at 7000 rpm"

**22-5** Under SPECIAL TOOLS, delete Degree Wheel P/N "07974-4220000 or"