CBXA ADDENDUM

Engine No. SC03E–2000163 and subsequent
Frame No. SC03 –2000163 and subsequent

SUPPLEMENT CBXA

Moteur nº SC03E–2000163 et suivants
Châssis nº SC03 –2000163 et suivants

NACHTRAG FÜR CBXA

Ab Motornummer SC03E–2000163
Ab Rahmennummer SC03 –2000163

APENDICE PARA EL CBXA

Motor No–SC03E–2000163 y siguientes
Bastidor No–SC03 –2000163 y siguientes

IMPORTANT SAFETY NOTICE

WARNING *Indicates a possibility of personal injury or loss of life if instructions are not followed.*

CAUTION *Indicates a possibility of equipment damage if instructions are not followed.*

Detailed descriptions of standard workshop procedures, safety principles and service operations are not included. 't is important to note that this manual contains some warnings and cautions against some specific service methods which could cause **PERSONAL INJURY** to service personnel or could damage a vehicle or render it unsafe. Please understand that those warnings could not cover all conceivable ways in which service, whether or not recommended by Honda might be done or of the possible hazardous consequences of each conceivable way, nor could Honda investigate all such ways. Anyone using service procedures or tools, whether or not recommended by Honda *must satisfy himself thoroughly* that neither personal safety nor vehicle safety will be jeopardized by the service methods or tools selected.

IMPORTANT POUR LA SECURITE

ATTENTION *Signale un risque de blessures corporelles ou d'accident mortel si les instructions ne sont pas suivies.*

PRECAUTION *Signale un risque de détérioration du véhicule si les instructions ne sont pas suivies.*

'e manuel ne donne pas le détail des procédures standard d'atelier, principes de sécurité et opérations d'entretien. ıl est important de noter qu'il contient certaines mises en garde (attention et précaution) contre des méthodes d'entretien spécifiques qui pourraient entraîner des DOMMAGES CORPORELS pour le personnel d'entretien et porter atteinte au véhicule ou à sa sécurité. Ces mises en garde ne peuvent, naturellement, couvrir toutes les méthodes, recommandées ou non par Honda, concevables pour l'exécution de l'entretien, ni tous les risques entraînés par ces méthodes, Honda n'ayant pu les explorer toutes. Toute personne ayant recours aux procédures ou outils d'entretien, recommandés ou non par Honda, doit s'assurer que ni la sécurité personnelle ni celle du véhicule n'est menacée par eux.

INTRODUCTION

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

ALL INFORMATION, ILLUSTRATIONS, DIRECTIONS AND SPECIFICATIONS INCLUDED IN THIS PUBLICATION ARE BASED ON THE LATEST PRODUCT INFORMATION AVAILABLE AT THE TIME OF APPROVAL FOR PRINTING. HONDA MOTOR CO., LTD. RESERVES THE RIGHT TO MAKE CHANGES AT ANY TIME WITHOUT NOTICE AND WITHOUT INCURRING ANY OBLIGATION WHATEVER.

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INTRODUCTION

Ce supplément renferme des informations pour la CBXA. Se reporter au manuel d'atelier principal pour les informations d'entretien qui n'y sont pas données.

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SPECIFICATIONS

ITEM			AREA (Type)
DIMENSIONS	Overall length	2,220 mm (87.4 in)	CM, SA, DK, DM, U
		2,240 mm (88.2 in)	E, G, F
		2,260 mm (89.0 in)	ED
	Overall width	885 mm (34.8 in)	CM only
		780 mm (30.7 in)	
	Overall height	1,175 mm (46.3 in)	CM only
		1,145 mm (45.1 in)	
	Wheelbase	1,490 mm (58.9 in)	ED only
		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 (556 lb)	CM, SA, DK, DM, U
		250 kg (551 lb)	ED, E, G, F
FRAME	Type	Back-bone Style Diamond-configuration Structure	
	F. suspension, travel	Telescopic fork 160 mm (6.3 in)	
	R. suspension, travel	Swing arm 100 mm (3.9 in)	
	F. tire size, cold tire pressure	3.50V19 (4PR) 225 kPa (2,25 kg/cm^2, 32 psi)	
	R. tire size, cold tire pressure	4.25V19 (4PR) 280 kPa (2.8 kg/cm^2, 40 psi)	
	F. brake	Double disk brake	
	R. brake	Single disk brake	
	Fuel capacity	20.0 liters (5.28 U.S. gal., 4.4 Imp. gal.)	
	Fuel reserve capacity	5.0 liters (1.32 U.S. gal., 1.1 Imp. gal.)	
	Caster angle	62°30′	
	Trail	120 mm (4.7 in)	
	Front fork oil capacity	237.5–242.5 cm^3 (8–8.2 oz)	
	Front fork air pressure	70± 20 kPa (0.7± 0.2 kg/cm^2 10± 3 psi)	
ENGINE	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 cm^3 (63.89 cu in)	
	Compression ratio	9.3 : 1	
	Valve train	Chain driven D.O.H.C. 4 valve/cylinder	
	Maximum horsepower	<SAE> 73.1 kW/9,000 min^{-1} (98 BHP/9,000 rpm)	CM only
		<DIN> 73.6 kW/9,000 min^{-1} (100 PS/9,000 rpm)	
	Maximum torque	82.4 N·m/8,000 min^{-1} (8.4 kg-m, 60.8 ft-lb/8,000 rpm)	CM only
		84.3 N·m/8,000 min^{-1} (8.6 kg-m, 62.9 ft-lb/8,000 rpm)	
	Oil capacity	5.5 liters (5.8 U.S.qt., 4.8 Imp. qt)	
	Lubrication system	Wet sump dual pump system with oil cooler	
	Air filtration	Oiled polyurethane form	
	Cylinder compression	1176.8±98.1 kPa (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	40° (ABDC) at 1 mm lift, 115° (ABDC) at 0 lift	
	Exhaust valve Opens	40° (BBDC) at 1 mm lift, 94° (BBDC) at 0 lift	
	Closes	5° (ATDC) at 1 mm lift, 71° (ATDC) at 0 lift	
	Valve clearance	IN: / EX: 0.08 mm (0.003 in) +0.05 mm (+0.002 in) −0.02 mm (−0.001 in)	
	Engine weight	106 kg (234 lb)	CM, SA, DK, DM, U
		105 kg (231 lb)	ED, E, G, F
	Idle speed	900±100 min^{-1} (900±100 rpm)	

ITEM			AREA (Type)
CARBURETION	Carburetor type	VB type, 28 mm (1.1 in) venturi bore	
	Identification number	VB60A	CM, SA, DK, DM, U
		VB61A	ED, E, F, G
	Pilot screw	Refer to 4–26.	
	Float level	15.5 mm (0.61 in)	
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)	
		2.278 (18/41)	ED only
	Gear shift pattern	Left foot operated return system	
ELECTRICAL	Ignition	Transistorized	
	Ignition timing "F" mark	10° BTDC static	
	Full advance	41° BTDC at 8.000 min^{-1} (rpm)	
	Starting system	Starting motor only	
	Generator	Three phase A.C. generator 0.35 kW/ 5.000 min^{-1} (rpm)	CM, SA, DK, DM, U
		Three phase A.C. generator 0.24 kW/ 5.000 min^{-1} (rpm)	ED, E, G, F
	Battery capacity	12 V – 18 AH	CM, SA, DK, DM, U
		12 V – 14 AH	ED, E, G, F
	Spark plug	Standard:	
		ND X24ESR-U, NGK DR8ES-L	E, F, G, ED, CM
		ND X24ES-U, NGK D8EA	SA, U, DK, DM
		For cold climate:	
		ND X22ESR-U, NGK DR7ES	E, F, G, ED, CM
		ND X22ES-U, NGK D7EA	SA, U, DK, DM
		For extended high speed driving:	
		ND X27ESR-U, NGK DR8ES	E, F, G, ED, CM
		ND X27ES-U, NGK D9EA	SA, U, DK, DM
	Spark plug gap	0.6 – 0.7 mm (0.024 – 0.028 in)	
LIGHTS	Headlight (low/high beam)	55/60 W H4 BULB (Philips 12342/99, or equivalent)	CM, ED, E, G, F
		40/50 W	SA, DK, DM, U
	Tail/stoplight	3/32 cp	CM
		5/21 W	ED, E, G, F
		8/27 W	SA, DK, DM, U
	Turn signal light (front/rear)	32/32 cp	CM
		21/21 W	ED, E, G, F
		23/23 W	SA, DK, DM, U
	Speedometer light	3.4 W (2 cp)	( ) CM only
	Tachometer light	3.4 W (2 cp)	
	Neutral indicator light	3.4 W (2 cp)	
	Turn signal indicator light	3.4 W (2 cp)	
	High beam indicator light	3.4 W (2 cp)	
	Running light	3 cp	CM
	Position light	4 W	ED, E, G, F
		3 W	SA, DK, DM, U

TORQUE VALUES

- ENGINE

Item	Q'ty	Thread Dia (mm)	Torque N·m (kg-m, ft-lb)	Remarks
Cylinder head cover	8	6	8–12 (0.8–1.2, 6– 9)	
Cam holder	32	6	12–16 (1.2–1.6, 9–12)	
Cylinder head	8	10	33–35 (3.3–3.5, 24–25)	
Cylinder head	10	8	19–21 (1.9–2.1, 14–15)	
Cam sprocket	4	7	14–18 (1.4–1.8, 10–13)	
Spark plug	6		12–16 (1.2–1.6, 9–12)	Apply molybdenum disulfide base grease to threads and underside of bolts
Crankcase		8	23–27 (2.3–2.7, 17–20)	
A.C. generator	1	14	36–44 (3.6–4.4, 26–32)	
Primary shaft	1	22	40–50 (4.0–5.0, 29–36)	
Mainshaft	1	25	45–55 (4.5–5.5, 33–40)	
Drive sprocket	1	10	50–54 (5.0–5.4, 36–39)	
Connecting rod nut	12	8	30–34 (3.0–3.4, 22–25)	
Oil filter center bolt	1	20	27–33 (2.7–3.3, 20–24)	
Oil pressure switch	1		15–20 (1.5–2.0, 11–15)	Apply THREE-BOND
Neutral switch	1	10	11–15 (1.1–1.5, 8–11)	
Oil drain bolt	1	12	28–32 (2.8–3.2, 20–23)	
Oil pipe	1	8	18–22 (1.8–2.2, 13–16)	
Oil pipe	1	10	20–24 (2.0–2.4, 14–17)	

- CHASSIS

ITEM	Q'ty	Thread Dia (mm)	Torque N·m (kg-m, ft-lb)	Remarks
Steering stem nut	1	24	80–120 (8.0–12.0, 59–87)	
Steering handlebar	2	8	28–32 (2.8–3.2, 20–23)	
Front fork top bridge	2	7	9–13 (0.9–1.3, 7– 9)	
Front fork bolt	2	31	15–30 (1.5–3.0, 11–22)	
Front axle nut	1	12	55–65 (5.5–6.5, 40–47)	
Front/rear brake disc	10	8	27–33 (2.7–3.3, 20–24)	UBS
Brake hose bolt	5	10	25–35 (2.5–3.5, 18–25)	
Rear axle	1	18	80–100 (8.0–10.0, 59–72)	
Final driven sprocket	5	12	80–100 (8.0–10.0, 59–72)	UBS
Swing arm pivot nut	1	14	60–70 (6.0–7.0, 43–51)	
Seat strap	2	6	8–9.5 (0.8–0.95, 6– 7)	
Engine hanger nut	3	14	90–100 (9.0–10.0, 65–72)	
Air cleaner inlet duct	2	5	3– 6 (0.3–0.6, 2– 4)	
Head top thread	1	26	11–13 (1.1–1.3, 8– 9)	

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

STANDARD TORQUE VALUES

Type	Torque N·m (kg-m, ft-lb)	Type	Torque N·m (kg-m, ft-lb)
5 mm bolt, nut	4.5–6 (0.45–0.6, 3.5–4.5)	5 mm screw	3.5–5 (0.35–0.5, 2.5–3.6)
6 mm bolt, nut	8–12 (0.8–1.2, 6–9)	6 mm screw	7–11 (0.7–1.1, 5–8)
8 mm bolt, nut	18–25 (1.8–2.5, 13–18)	6 mm flange bolt, nut	10–14 (1.0–1.4, 7–10)
10 mm bolt, nut	30–40 (3.0–4.0, 22–29)	8 mm flange bolt, nut	24–30 (2.4, 3.0, 17–22)
12 mm bolt, nut	50–60 (5.0–6.0, 36–43)	10 mm flange bolt, nut	30–40 (3.0–4.0, 22–29)

III. SPECIAL TOOLS/COMMOM TOOLS

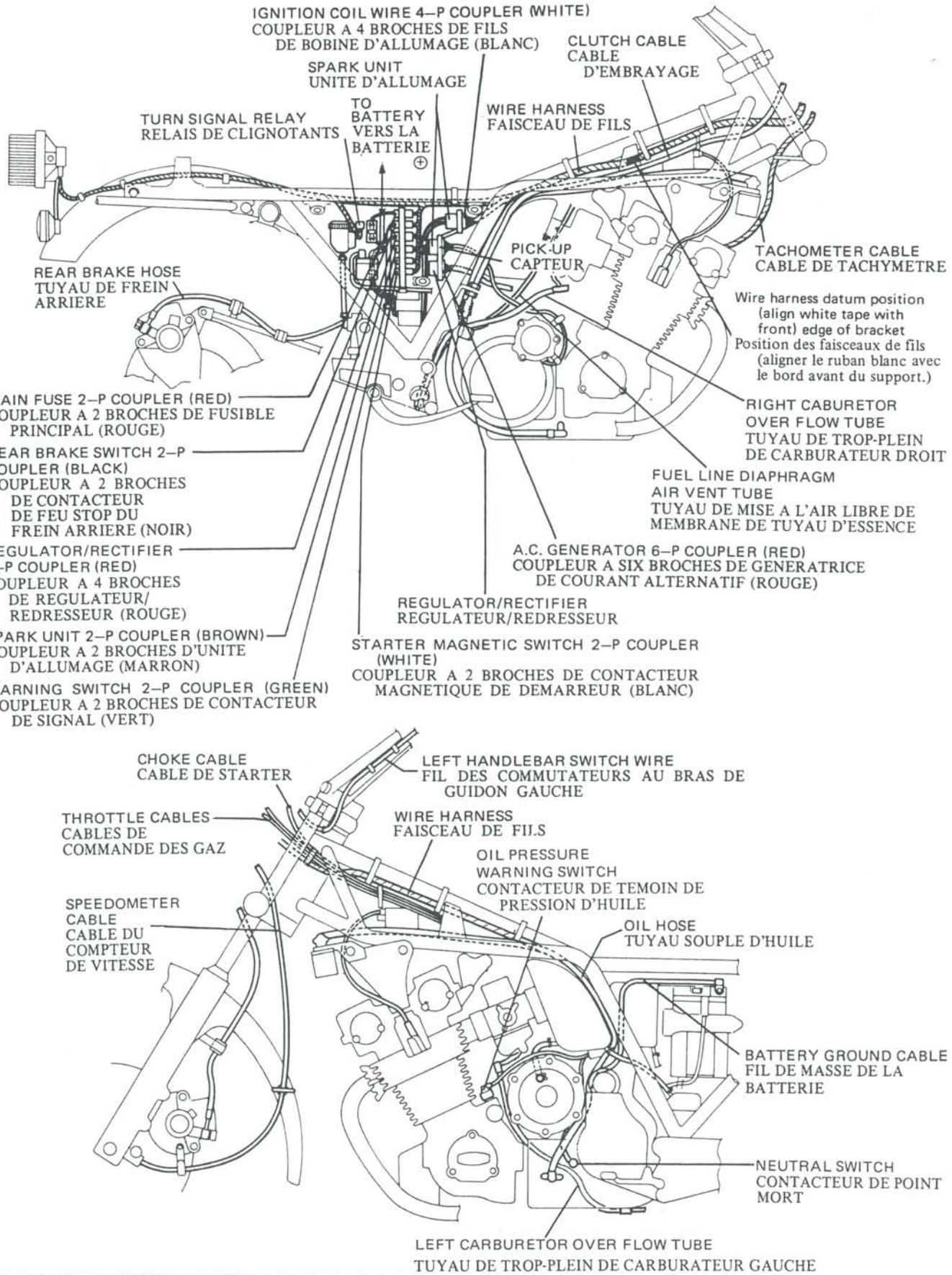
- SPECIAL TOOLS (Newly provided for CBXA)

Tool Name	Part No.	Q'ty	Ref. page
Lock nut wrench	07908–4690001	1	23–29
Retainer wrench	07910–4690100	1	23–24
Bearing driver (Needle bearing)	07946–4690100	1	23–25, 23–26
Bearing driver (Angular bearing)	07946–4690200	1	23–26
Dust seal driver	07948–4690100	1	23–26

III. OUTILS SPECIAUX/OUTILS ORDINAIRES

- OUTILS SPECIAUX (nouvellement fournis pour la CBXA)

Désignation d'outil	Pièce n°	Qté	Page de référence
Clé pour contre-écrou	07908–4690001	1	23–29
Clé pour anneau de maintien	07910–4690100	1	23–24
Chassoir de roulement (roulement à aiguilles)	07946–4690100	1	23–25, 23–26
Chassoir de roulement (roulement angulaire)	07946–4690200	1	23–26
Chassoir de cache-poussière	07948–4690100	1	23–26


IGNITION COIL WIRE 4–P COUPLER (WHITE)
COUPLEUR A 4 BROCHES DE FILS DE BOBINE D'ALLUMAGE (BLANC)
SPARK UNIT
UNITE D'ALLUMAGE
CLUTCH CABLE
CABLE D'EMBRAYAGE
TURN SIGNAL RELAY
RELAIS DE CLIGNOTANTS
TO BATTERY
VERS LA BATTERIE
⊕
WIRE HARNESS
FAISCEAU DE FILS
PICK-UP
CAPTEUR
TACHOMETER CABLE
CABLE DE TACHYMETRE
REAR BRAKE HOSE
TUYAU DE FREIN ARRIERE
Wire harness datum position (align white tape with front) edge of bracket
Position des faisceaux de fils (aligner le ruban blanc avec le bord avant du support.)
MAIN FUSE 2–P COUPLER (RED)
COUPLEUR A 2 BROCHES DE FUSIBLE PRINCIPAL (ROUGE)
RIGHT CABURETOR OVER FLOW TUBE
TUYAU DE TROP-PLEIN DE CARBURATEUR DROIT
REAR BRAKE SWITCH 2–P COUPLER (BLACK)
COUPLEUR A 2 BROCHES DE CONTACTEUR DE FEU STOP DU FREIN ARRIERE (NOIR)
FUEL LINE DIAPHRAGM AIR VENT TUBE
TUYAU DE MISE A L'AIR LIBRE DE MEMBRANE DE TUYAU D'ESSENCE
REGULATOR/RECTIFIER 4–P COUPLER (RED)
COUPLEUR A 4 BROCHES DE REGULATEUR/ REDRESSEUR (ROUGE)
A.C. GENERATOR 6–P COUPLER (RED)
COUPLEUR A SIX BROCHES DE GENERATRICE DE COURANT ALTERNATIF (ROUGE)
REGULATOR/RECTIFIER
REGULATEUR/REDRESSEUR
SPARK UNIT 2–P COUPLER (BROWN)
COUPLEUR A 2 BROCHES D'UNITE D'ALLUMAGE (MARRON)
STARTER MAGNETIC SWITCH 2–P COUPLER (WHITE)
COUPLEUR A 2 BROCHES DE CONTACTEUR MAGNETIQUE DE DEMARREUR (BLANC)
WARNING SWITCH 2–P COUPLER (GREEN)
COUPLEUR A 2 BROCHES DE CONTACTEUR DE SIGNAL (VERT)
CHOKE CABLE
CABLE DE STARTER
LEFT HANDLEBAR SWITCH WIRE
FIL DES COMMUTATEURS AU BRAS DE GUIDON GAUCHE
THROTTLE CABLES
CABLES DE COMMANDE DES GAZ
WIRE HARNESS
FAISCEAU DE FILS
OIL PRESSURE WARNING SWITCH
CONTACTEUR DE TEMOIN DE PRESSION D'HUILE
SPEEDOMETER CABLE
CABLE DU COMPTEUR DE VITESSE
OIL HOSE
TUYAU SOUPLE D'HUILE
BATTERY GROUND CABLE
FIL DE MASSE DE LA BATTERIE
NEUTRAL SWITCH
CONTACTEUR DE POINT MORT
LEFT CARBURETOR OVER FLOW TUBE
TUYAU DE TROP-PLEIN DE CARBURATEUR GAUCHE

VI. INSPECTION AND ADJUSTMENT

AIR CLEANER

Remove the seat (page 5-2).

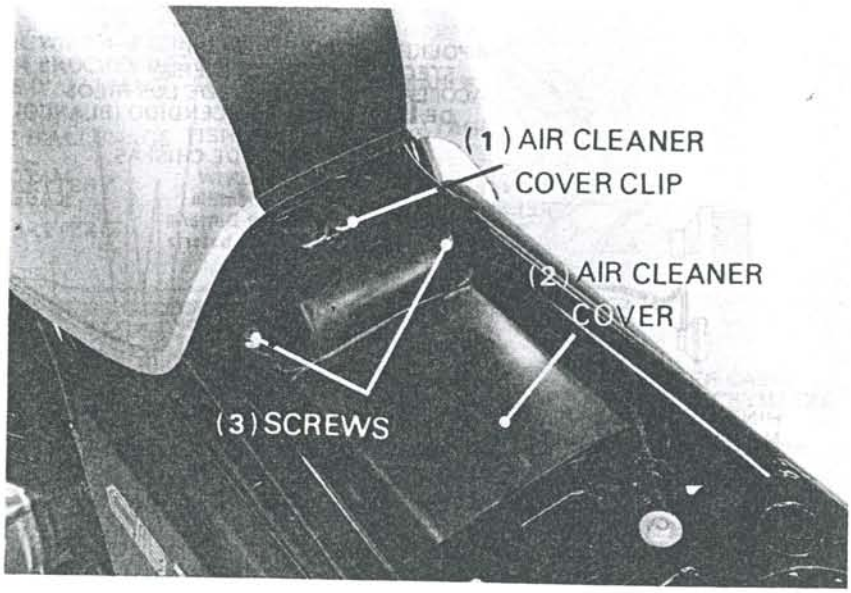
Lift the air cleaner cover clip up.

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 (CM. model only)

RECOMMENDED SPARK PLUG

For cold climate below 5°C (41°F)		Standard		For extending high speed riding	
ND	NGK	ND	NGK	ND	NGK
X22ESR-U	DR7ES	X24ESR-U	DR8ES-L	X27ESR-U	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.

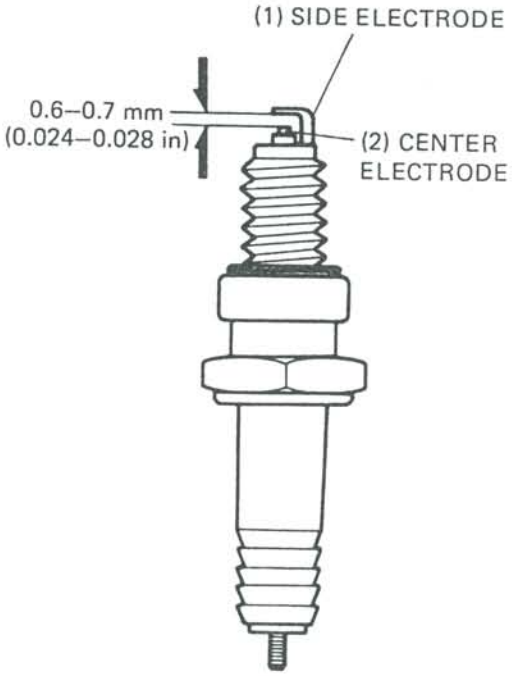
SPARK PLUG GAP: 0.6–0.7 mm (0.024–0.028 in)

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 mating surface of upper and lower.

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

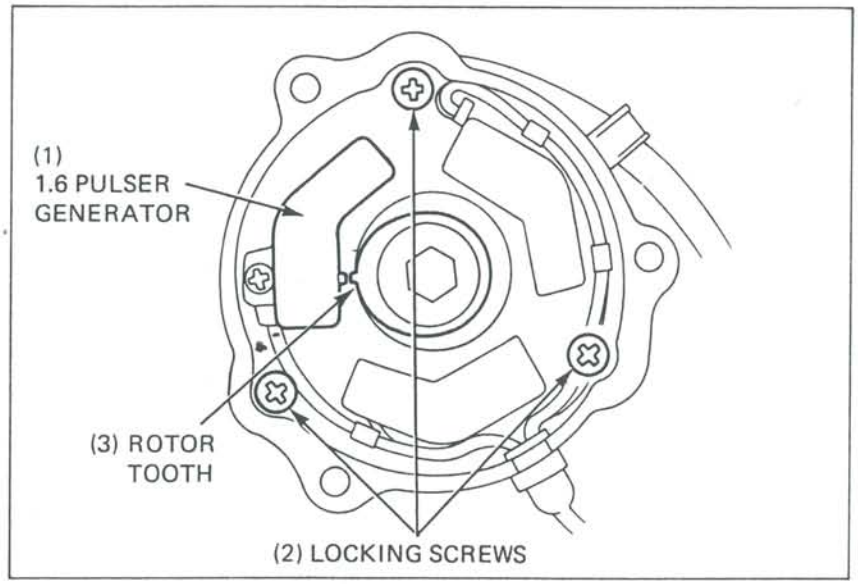
The timing is correct if the narrow projection of 1, 6 pulser generator is aligned with the rotor tooth.

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.

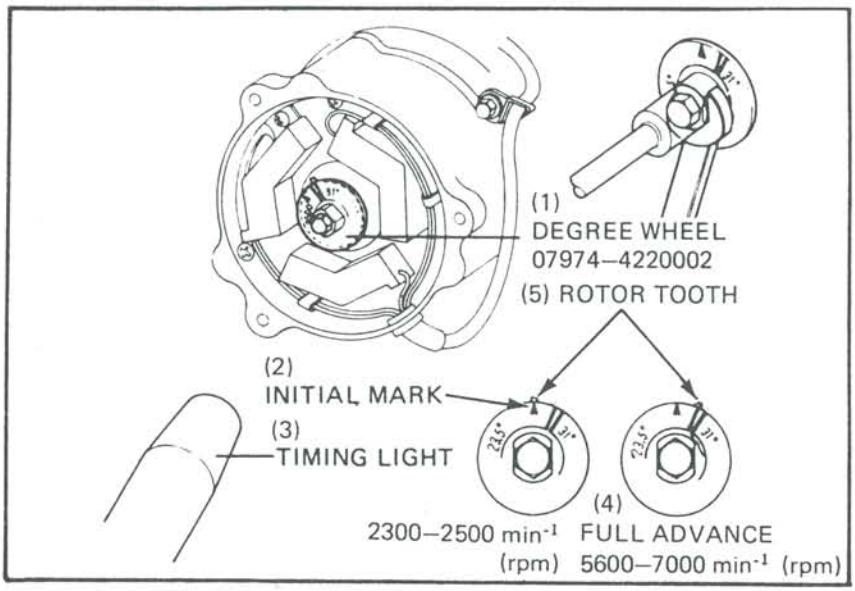


SPARK ADVANCER

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°30' degree mark aligns with the rotor tooth at 2,300–2,500 rpm.

Then bring engine speed to 7,000 min^{-1} (7,000 rpm) and check that the rotor tooth aligns with the 31 degree mark.

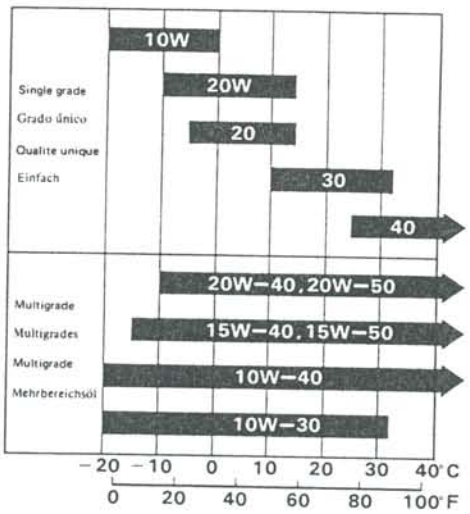
CAUTION

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: API service classification-SE General, all temperature 10W-40 Alternate



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 (#1, 2, 4, 5 and 6) from the carburetors and 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. Disconnect the vacuum tube from the #3 carburetor. Stop the engine.

Connect the vacuum gauge to the #3 carburetor.
If the vacuum gauge tube I.D. is over 6 mm (0.24 in), Connect a tube (No. 95005–35085–20) and joint (No. 36025–657–671) to the #3 carburetor.

NOTE

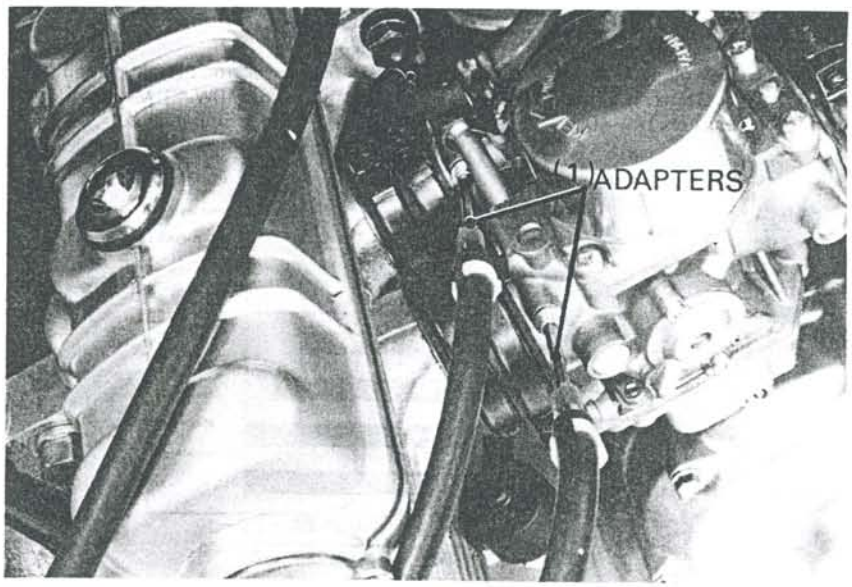
Do not remove the vacuum tube connector from the 3 carburetor when connecting the vacuum tube of the gauge.

Restart the engine and adjust the idle speed to 900 ± 100 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 adjustment.
- The pilot screw is factory pre-set and should not be removed unless the carburetor is overhauled.

CARBURETOR SPECIFICATIONS

Identification mark	VB60A (CM, SA, DK, DM, U) VB61A (ED, E, F, G)
Idle speed	900 ± 100 rpm
Fast idle	2000 ± 500 rpm
Float level	15.5 ± 1 mm (0.61 ± 0.04 in)
Venturi dia.	28 mm (1.1 in)
Main jet	#110

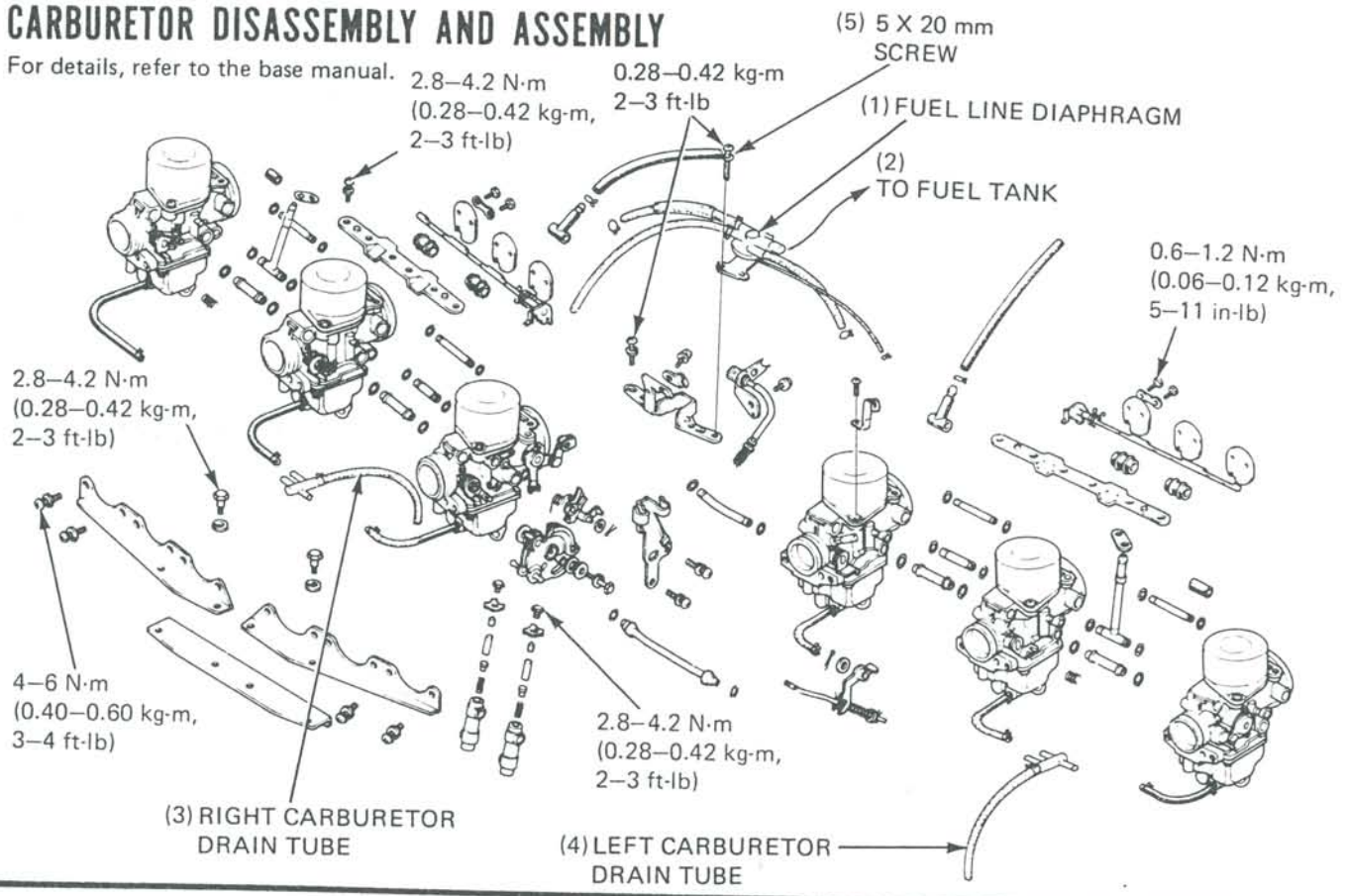
TROUBLESHOOTING

Fuel line diaphragm

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

CARBURETOR DISASSEMBLY AND ASSEMBLY

For details, refer to the base manual.



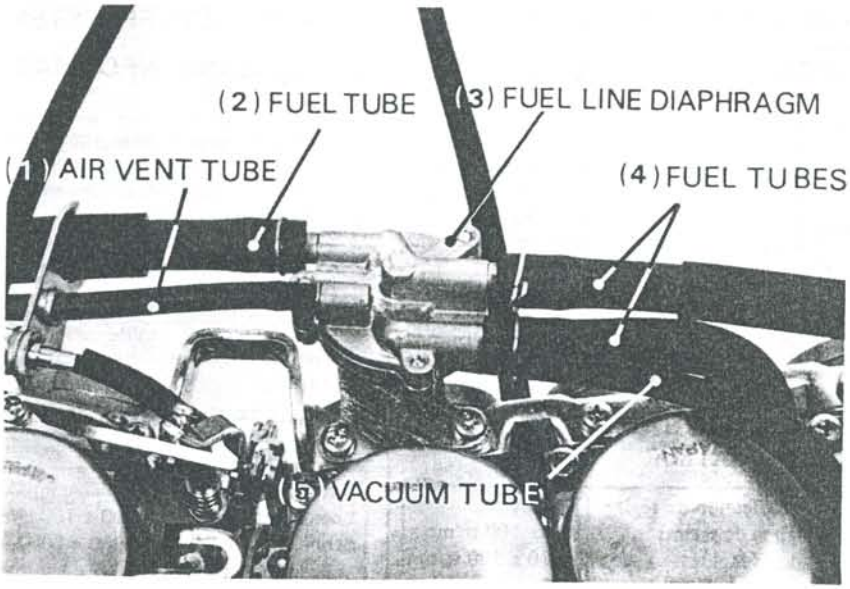
FUEL LINE DIAPHRAGM

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).

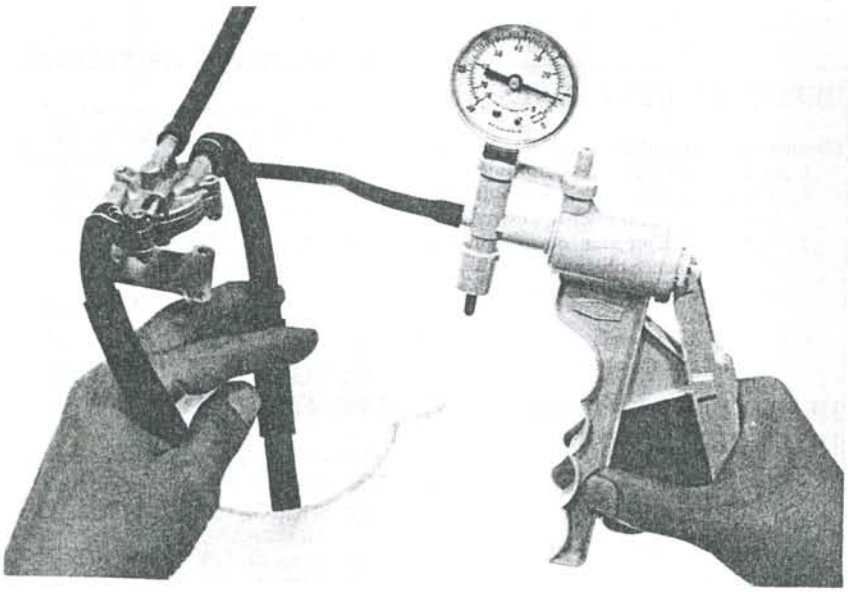
Disconnect the inlet fuel tube from the diaphragm, and connect a longer tube to the fuel tank.

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.

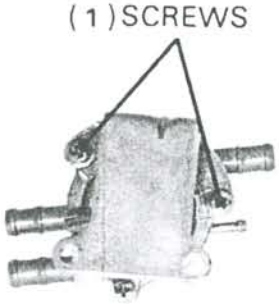
If the flow is restricted, check the diaphragm for clogged fuel or air passages and the diaphragm itself for tears.



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.



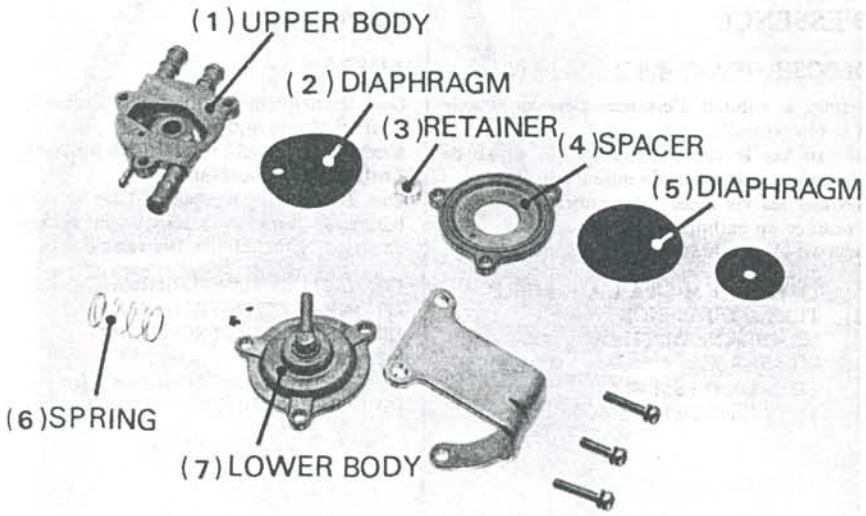
Check the upper and lower bodies for signs of damage to the diaphragm contacting faces.

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 passage.



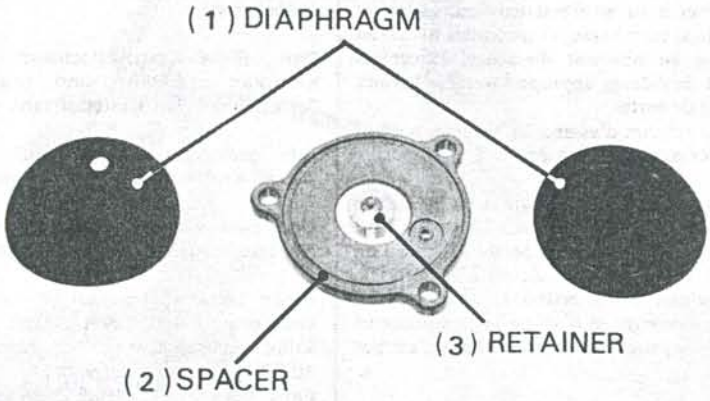
ASSEMBLY

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.

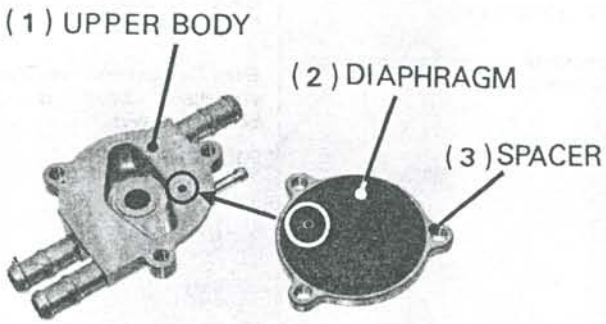


Install the spacer on the upper body.

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

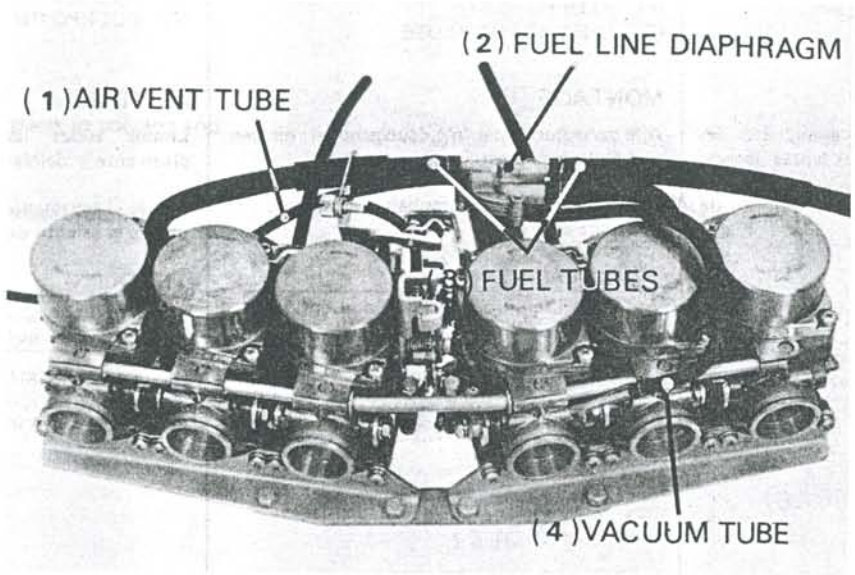
Installation of the fuel line diaphragm is the reverse of removal.

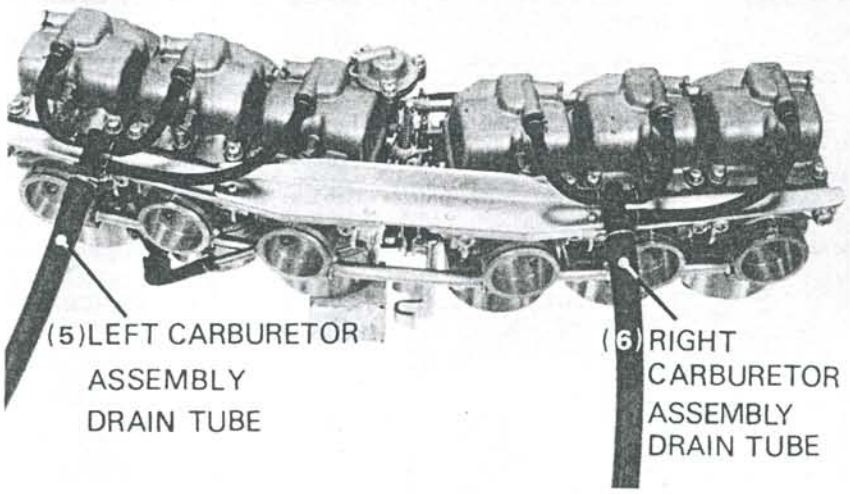
NOTE

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

CARBURETOR TUBE ROUTING

Route the carburetor tubes as shown.





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 CBXA 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

Head top thread	11–13 N·m	(1.1–1.3 kg-m, 8–9 ft-lb)
Front fork air valve	4– 7 N·m	(0.4–0.7 kg-m, 3–5 in-lb)
Front fork cap bolt	15–30 N·m	(1.5–3.0 kg-m, 11–22 ft-lb)
Front fork socket bolt	15–25 N·m	(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^2 (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)

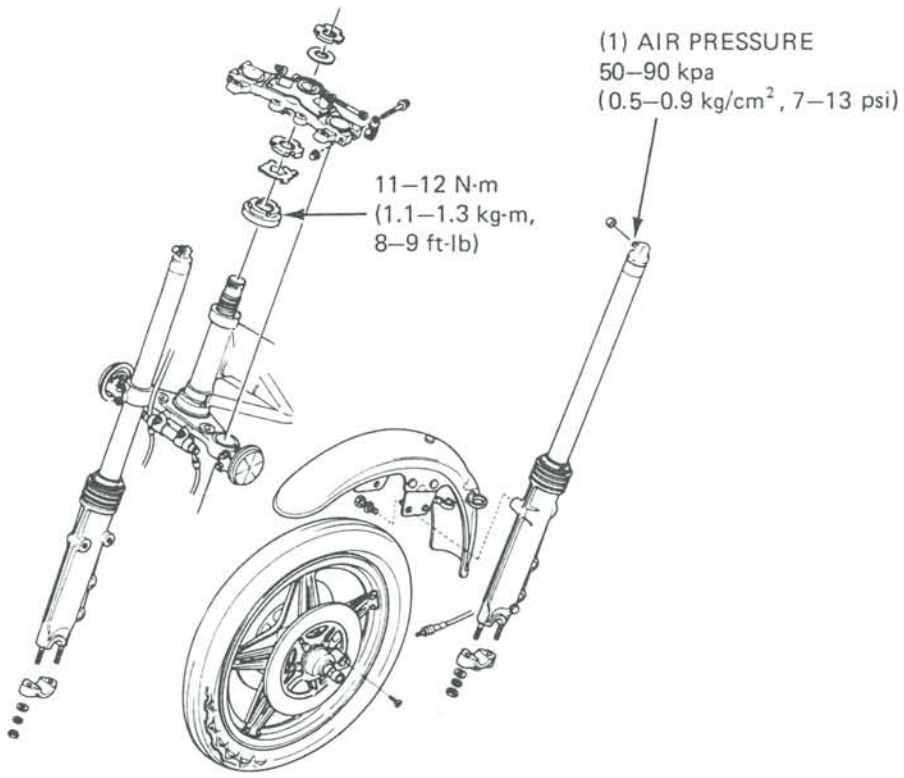
TROUBLESHOOTING

Soft Suspension

1. Weak fork springs.
2. Insufficient fluid in forks.
3. Low air pressure.

Hard Suspension

1. Incorrect fluid weight in forks.
2. Excessive air pressure in fork tube.
3. Excessive oil amount in forks.



FRONT FORK DISASSEMBLY

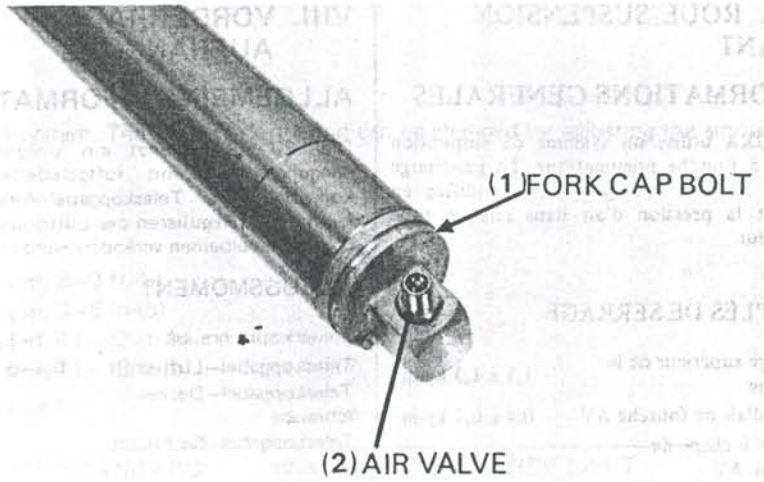
Remove the front fork (Pages 13-19 and 20).

Depress the valve stem to relieve air pressure.

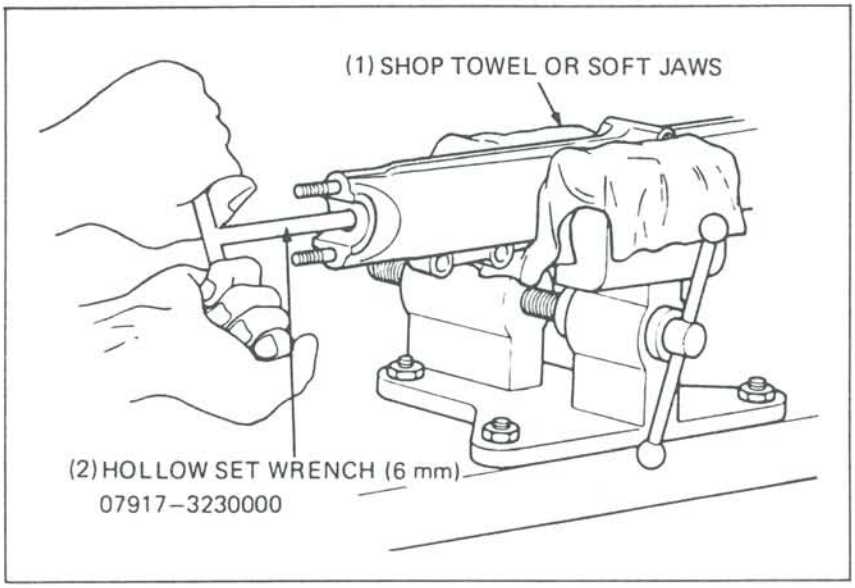
CAUTION

DO NOT disassemble the forks until air pressure is relieved.

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

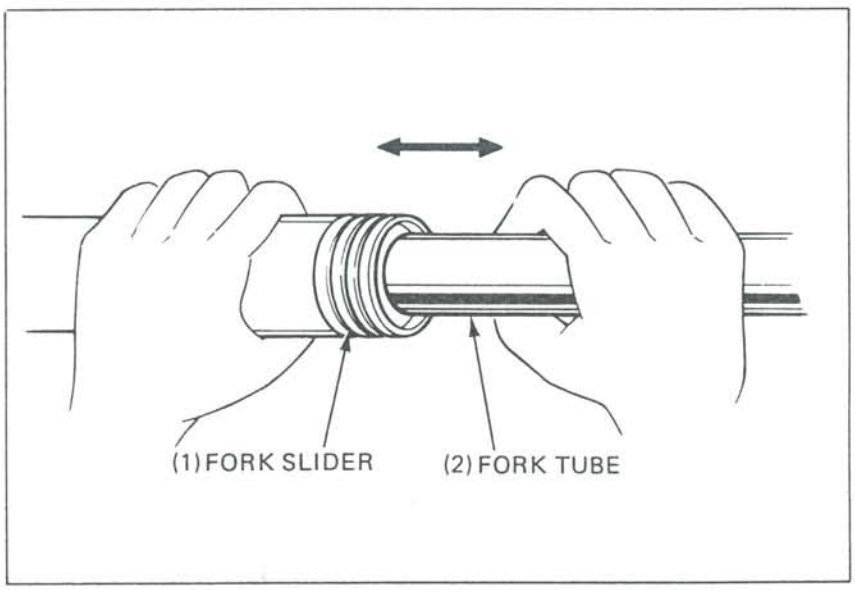


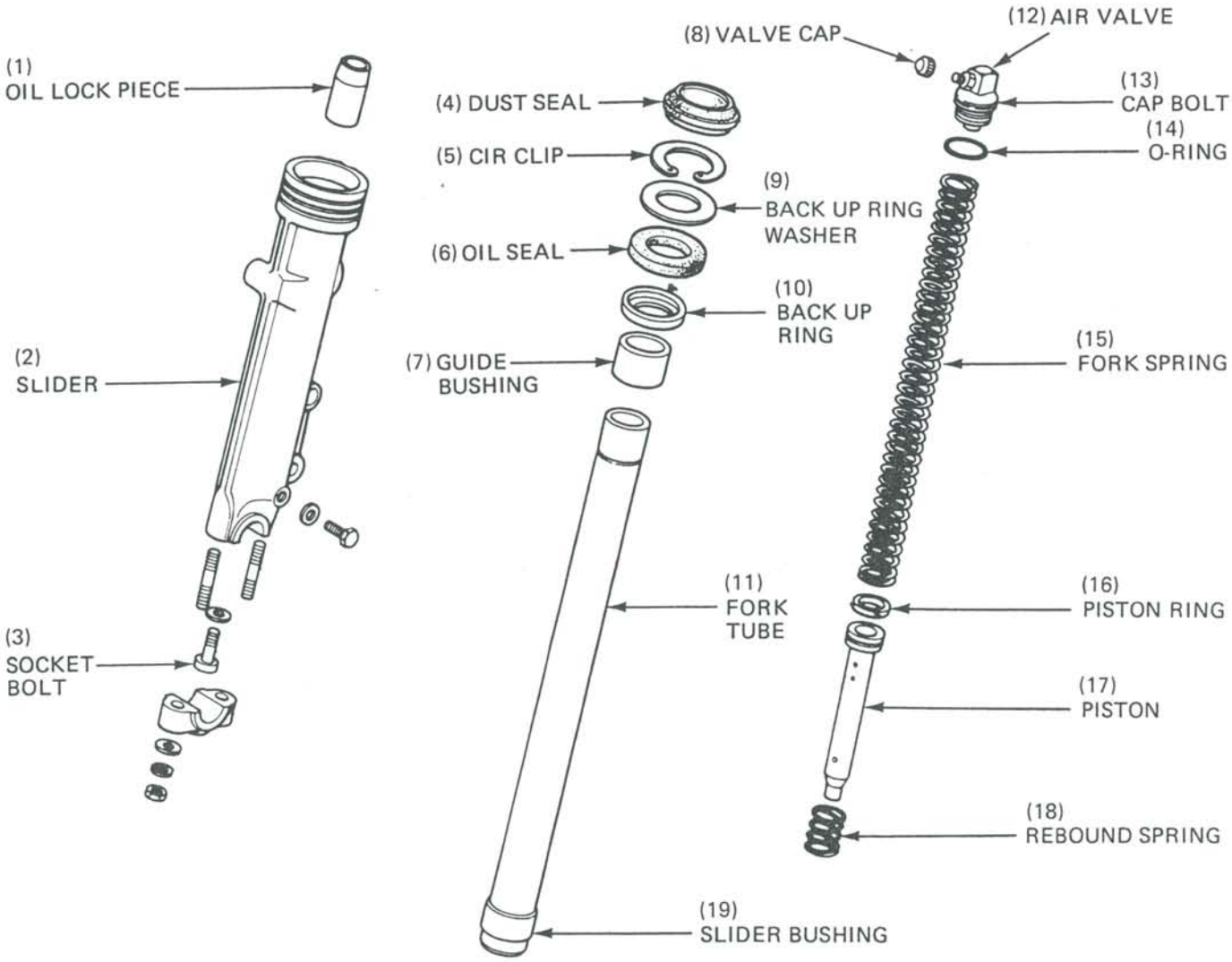
Remove the socket bolt. Remove the fork piston and rebound spring.



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 tube.





FRONT FORK ASSEMBLY

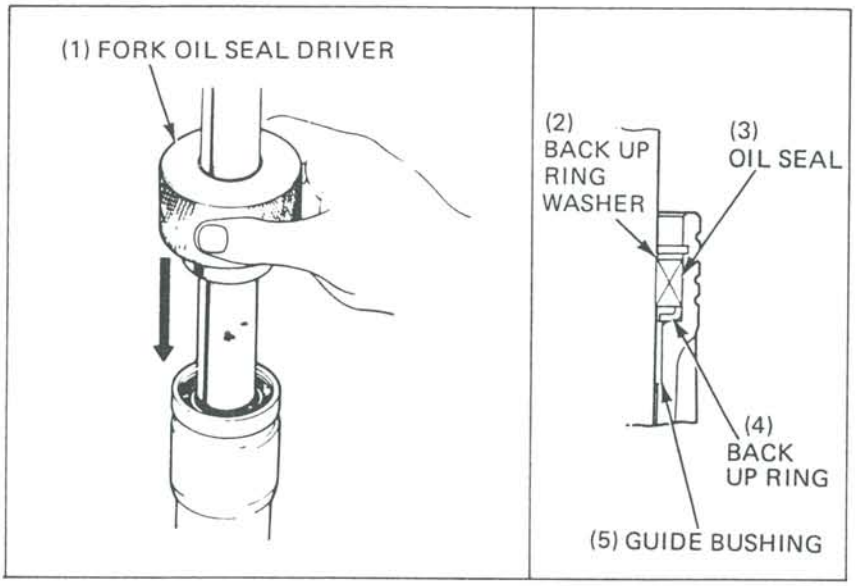
Install the rebound spring and piston into the fork tube.
Install the fork spring and tighten the cap bolt loosely.
Install the oil lock piece and forktube into the slider by aligning the oil lock piece with the fork tube.
Apply a locking agent to the socket bolt and tighten.

TORQUE: 15–25 N·m
(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 back up 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 cm³ (8.2 ozs)

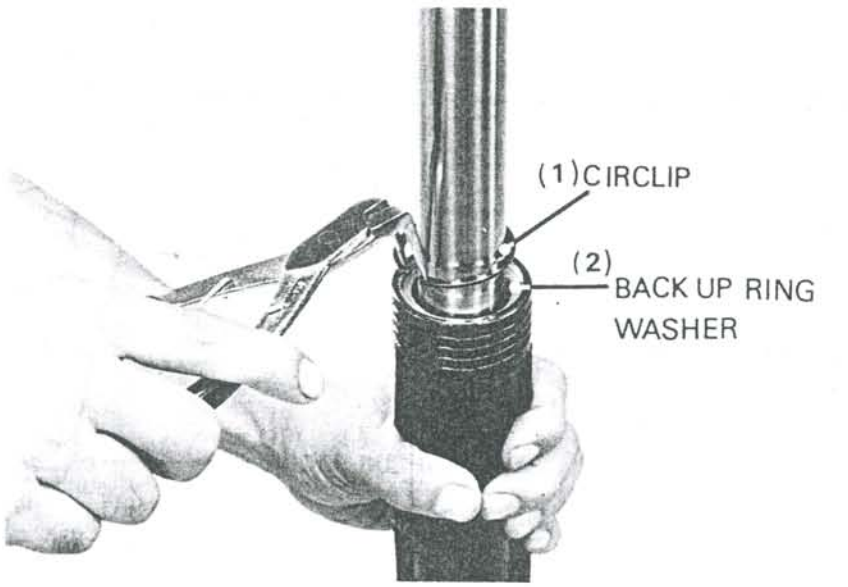
Install and tighten the cap bolt.

TORQUE: 15–25 N·m
(1.5–3.0 kg-m, 11–22 ft-lb).

Fill the fork tube with 0.7 ± 0.2 kg/cm² pressure of air.

CAUTION

- *Use only a hand operated air pump to fill the fork tubes. Do not use compressed air.*
- *Maximum pressure is 30KPa (3 kg/cm², 43 psi). Do not exceed this or fork tube component damage may occur.*



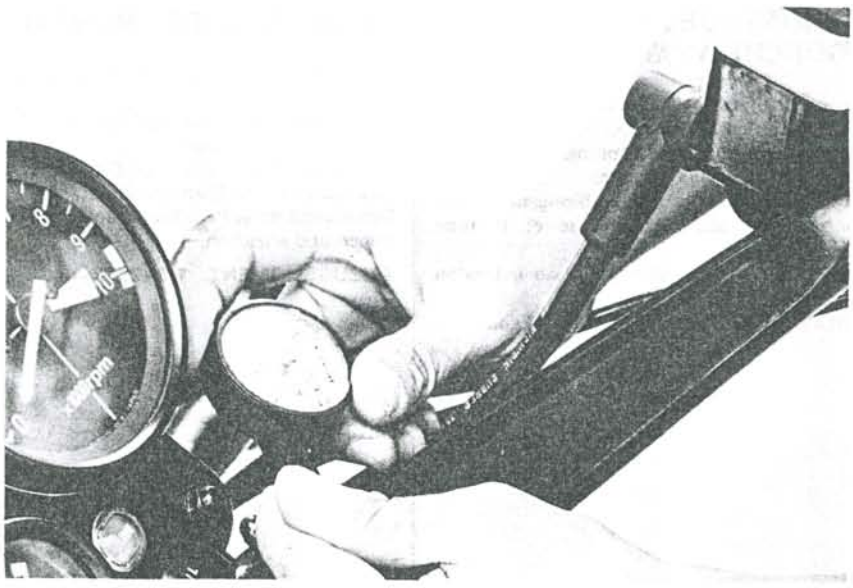
FRONT FORK INSTALLATION

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: 70 ± 20 kpa
(0.7 ± 0.2 kg/m², 10 ± 3 psi)



STEERING STEM

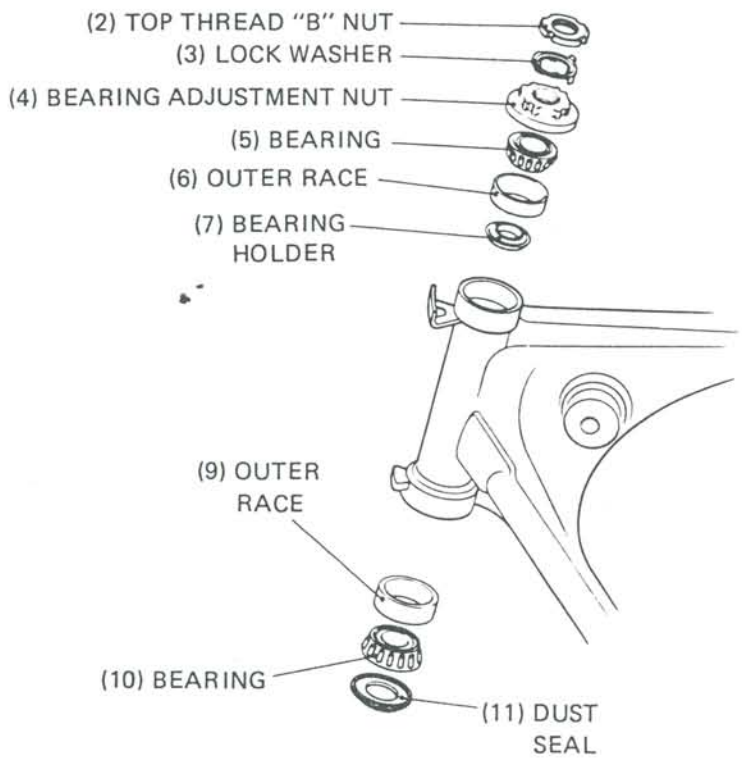
STEM REMOVAL

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 race (Page 13–26).
Install the upper and lower bearing outer race (Page 13–27).



(1) STEERING STEM SOCKET
07916–3710100

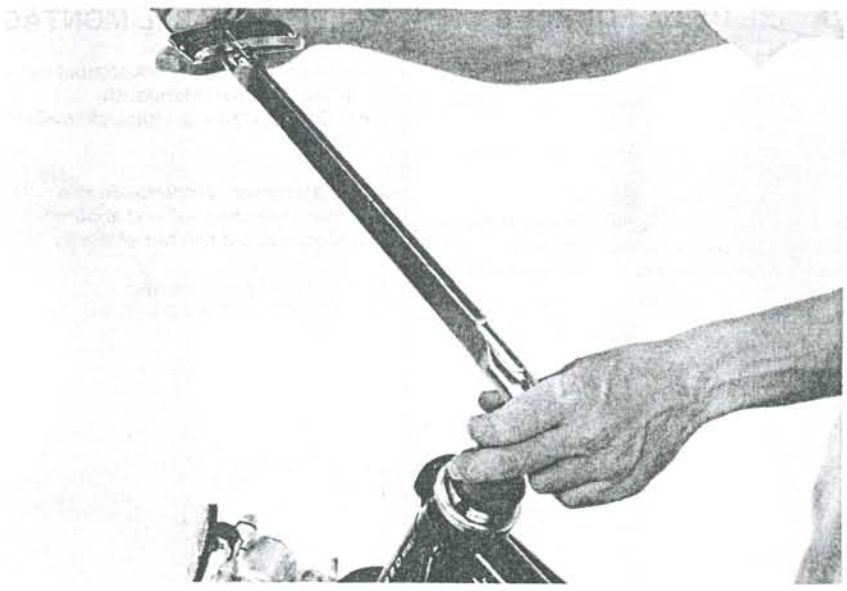
(8) STEERING STEM

STEERING STEM INSTALLATION

Clean the upper and lower bearings throughly.
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: 11–13 N·m
(1.1–1.3 kg-m, 8–9 ft-lb)



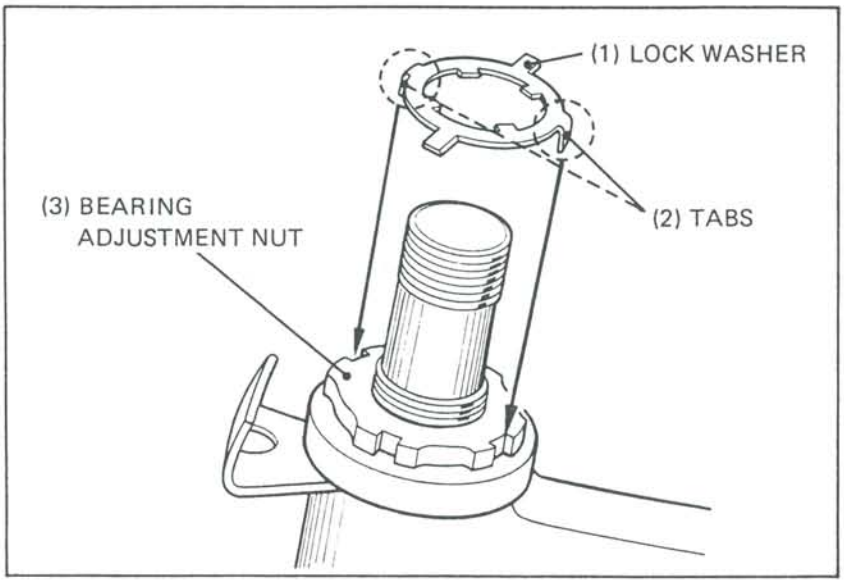
Turn the steering stem lock-to-lock 5 times to seat the bearings.
Repeat the bearing tightening and steering stem turning sequence twice.
If the nut does not tighten after turning the steering stem the first or second time, remove the nut and inspect it and the steering stem threads for dirt or burrs.



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.

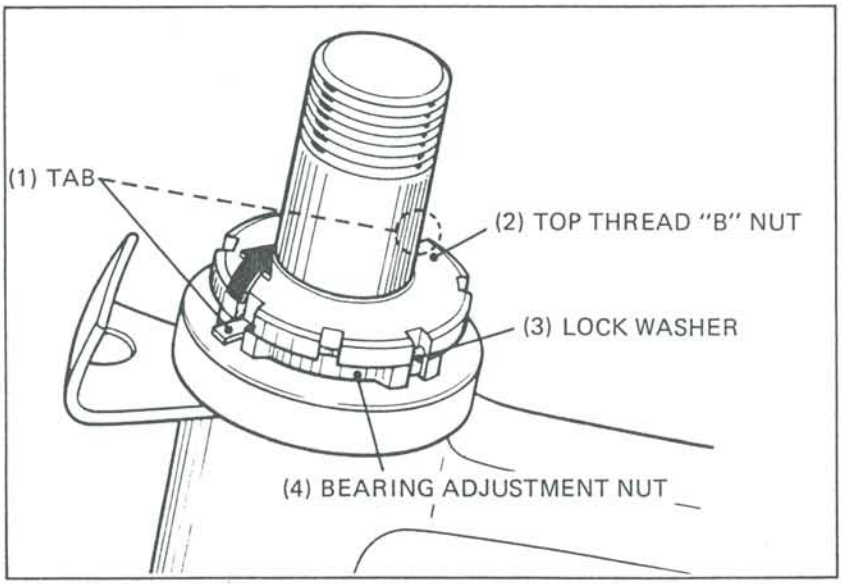
NOTE

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)

TORQUE VALVES

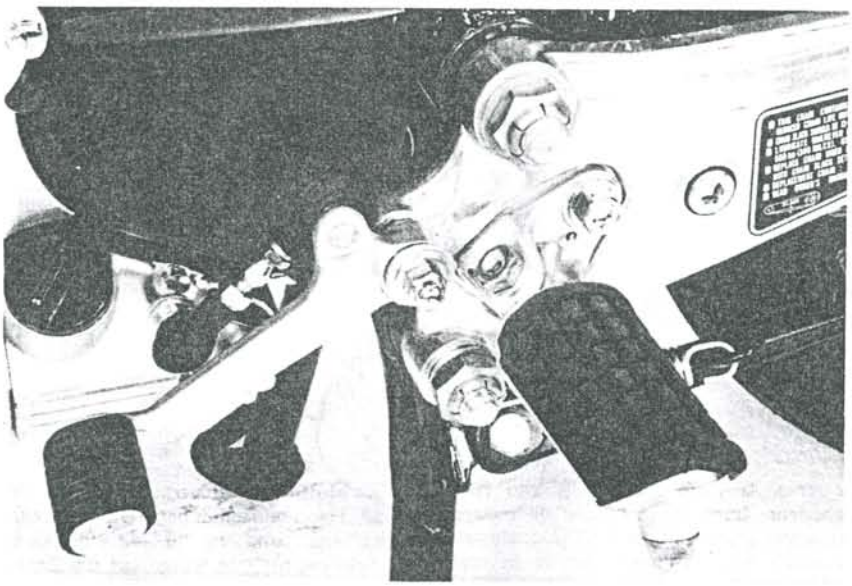
Swing arm right pivot collar	30–40 N·m (3.0–4.0 kg-m, 22–29 ft-lb)
Swing arm left pivot collar	25–30 N·m (2.5–3.0 kg-m, 18–22 ft-lb)
Left pivot piece lock nut	45–55 N·m (4.5–5.5 kg-m, 33–40 ft-lb)
Swing arm pivot bolt	70–80 N·m (7.0–8.0 kg-m, 51–58 ft-lb)

TROUBLESHOOTING

Wobble or Vibration in Motorcycle
1. Distorted 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

SWING ARM REMOVAL

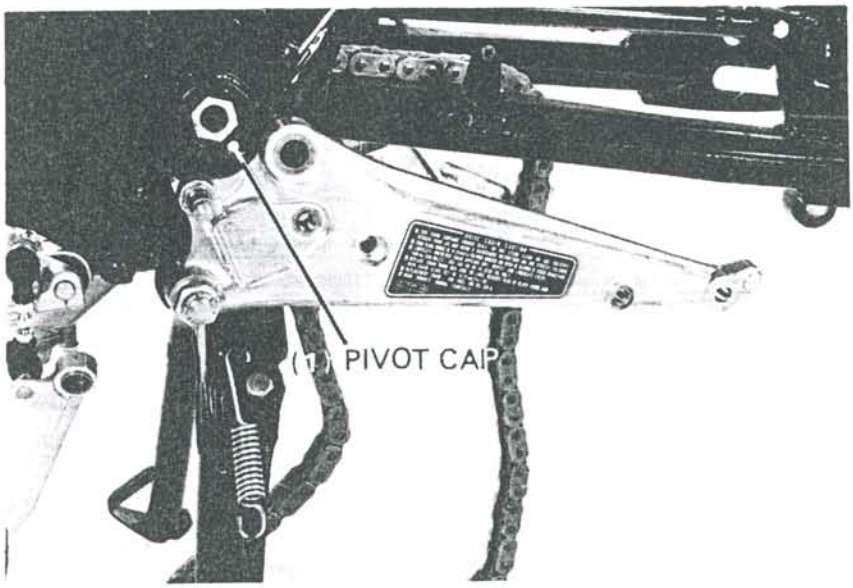
Remove the left muffler (Page 14-3).
Remove the rear wheel (Page 14-3).
Remove the gearshift pedal and left foot peg.
Remove the drive chain cover.
Remove the right and left shock absorbers lower mounting bolts.



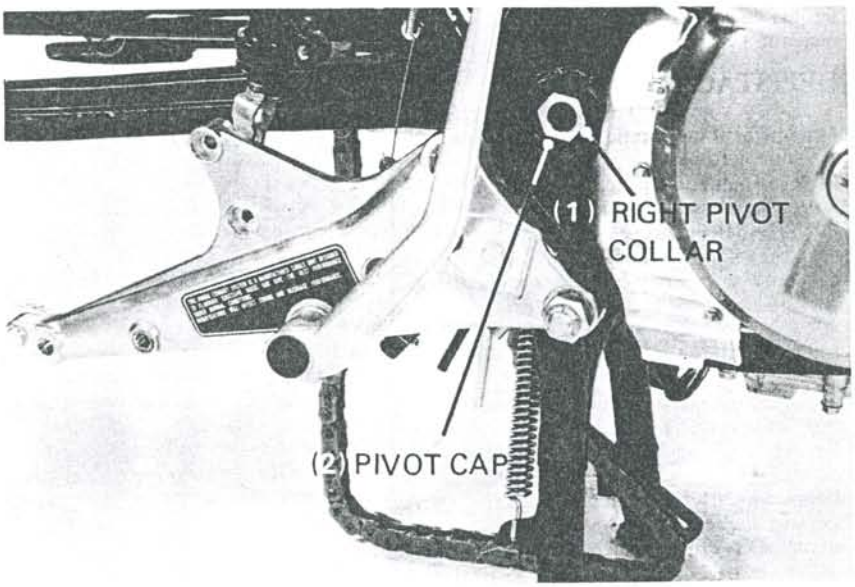
Remove the right muffler.
Remove the right foot peg.
Disconnect the rear brake master cylinder from the rear brake pedal at the joint.
Remove the rear brake master cylinder (Page 15-14).



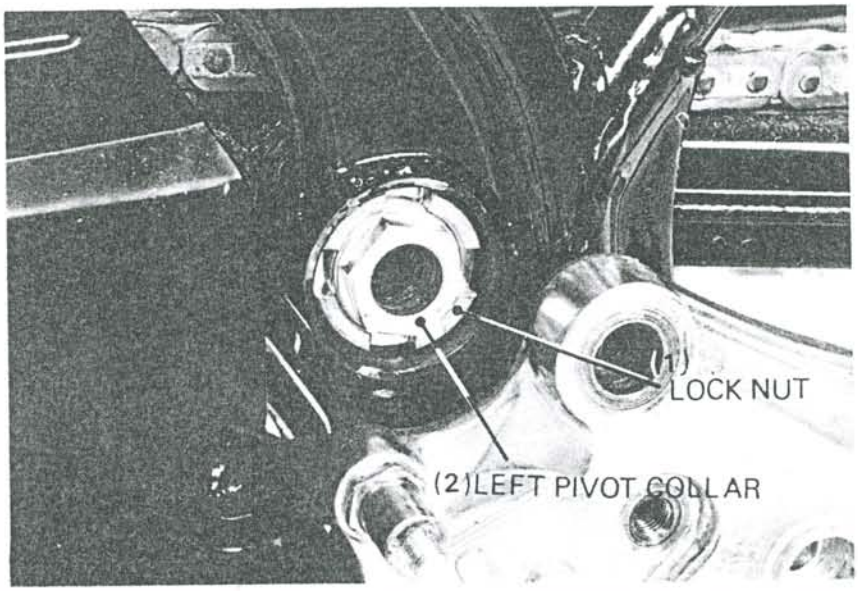
Loosen the rear engine hanger bolt.
Remove the swing arm pivot bolt and move the left foot peg bracket out of the way.
Remove the pivot cap.



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.

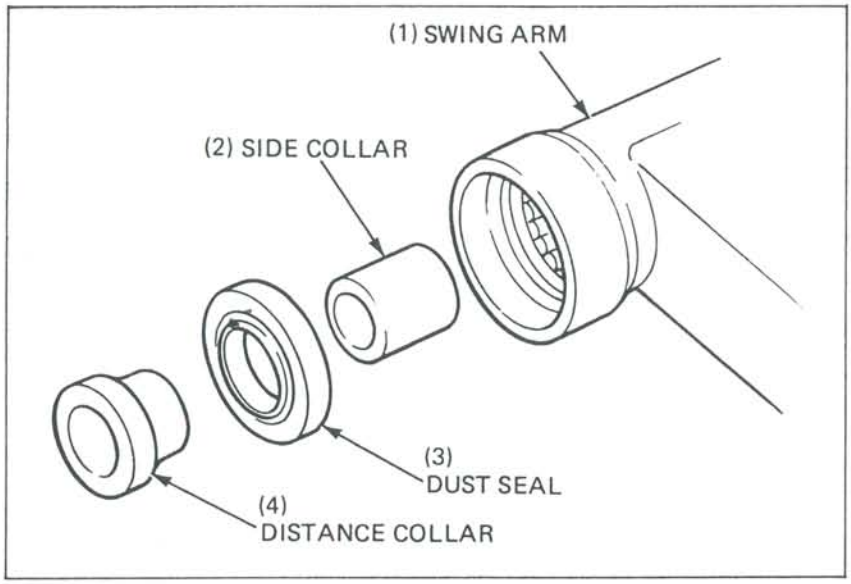


Remove the left pivot collar lock nut and remove the left pivot collar.
Remove the swing arm.



SWING ARM DISASSEMBLY

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

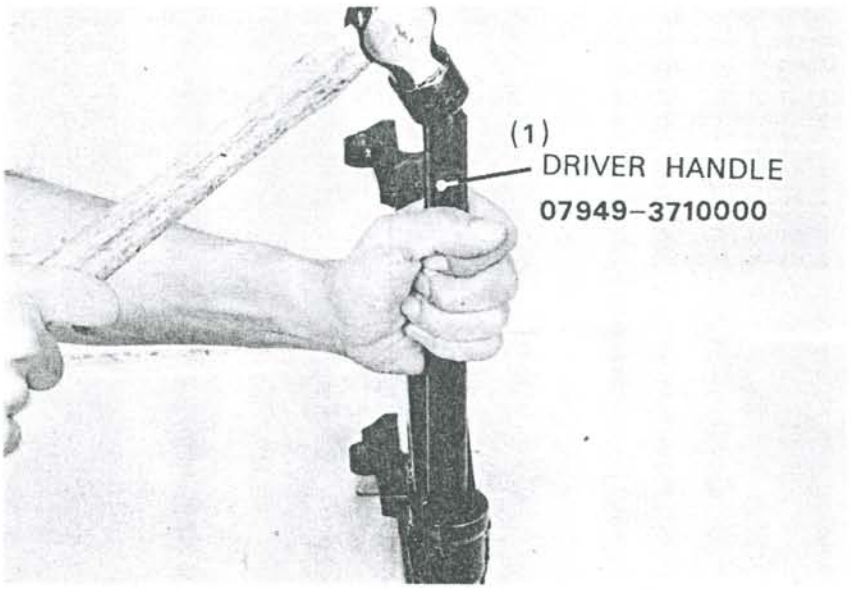


Remove the bearing retainer with the dust seal.

Remove the dust seal from the bearing retainer if necessary.



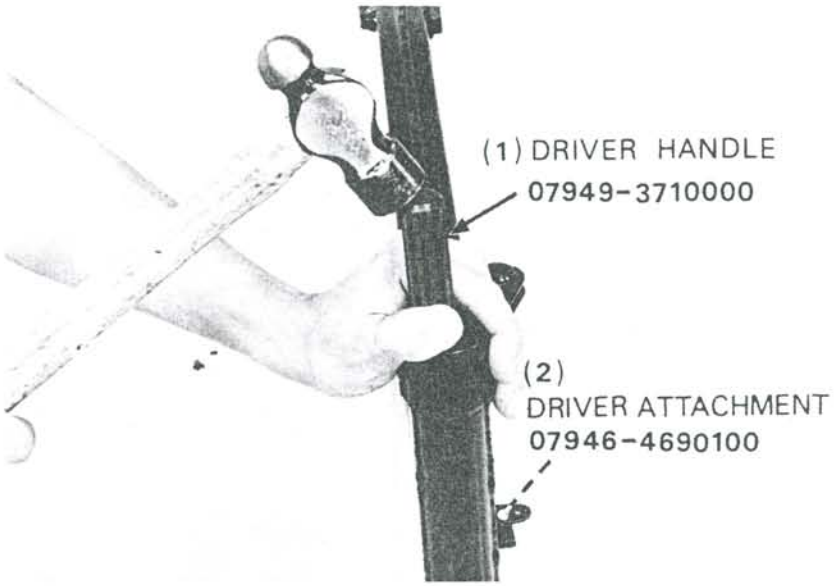
Drive out the center collar and right ball bearing as a set.



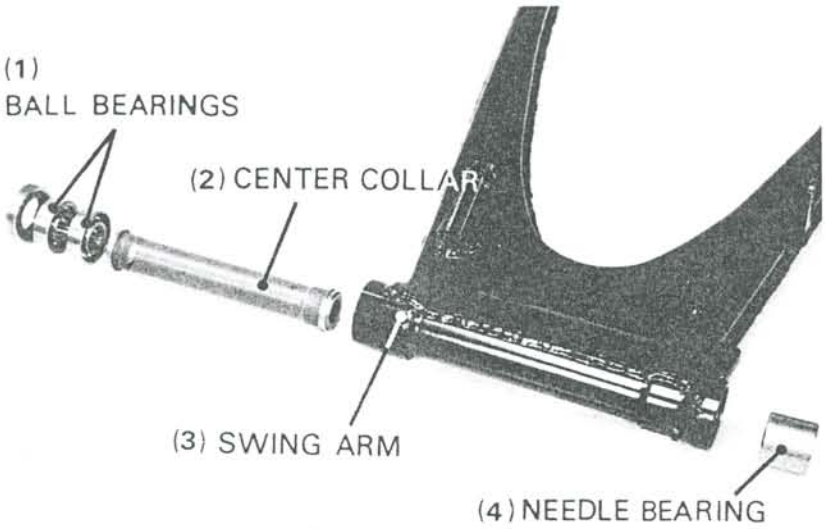
Drive out the needle bearing.

NOTE

Replace the needle bearing with a new one whenever disassembled.

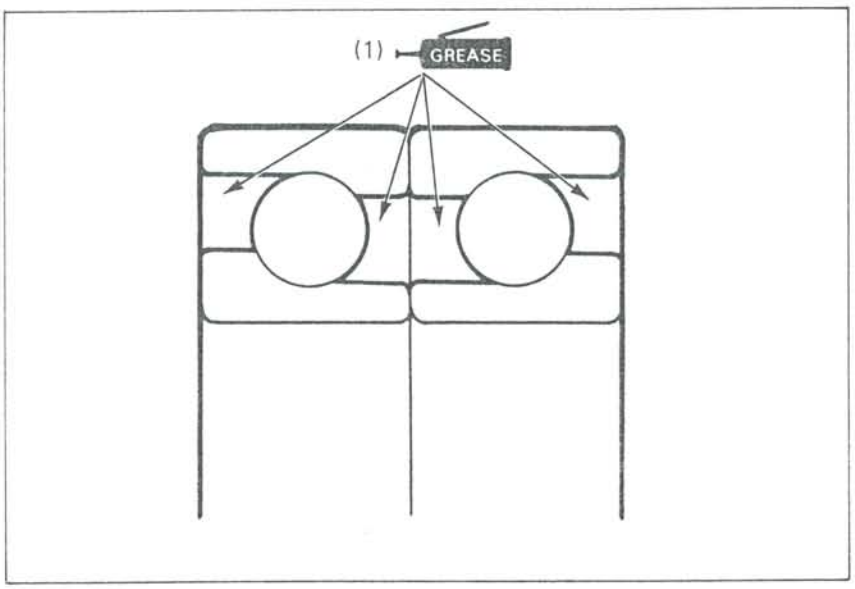


Clean all the disassembled parts and check for wear or damage. Parts which show excessive wear or damage must be replaced.

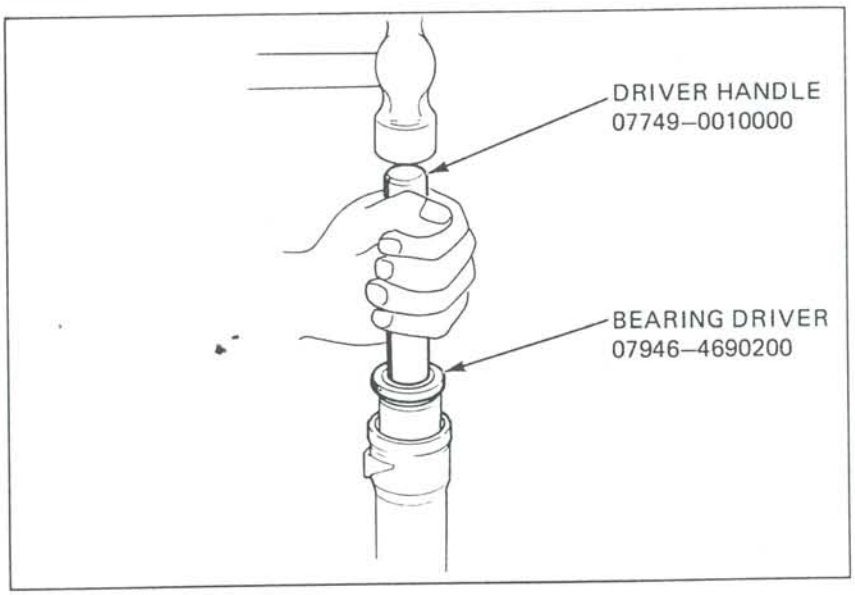


SWING ARM ASSEMBLY

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

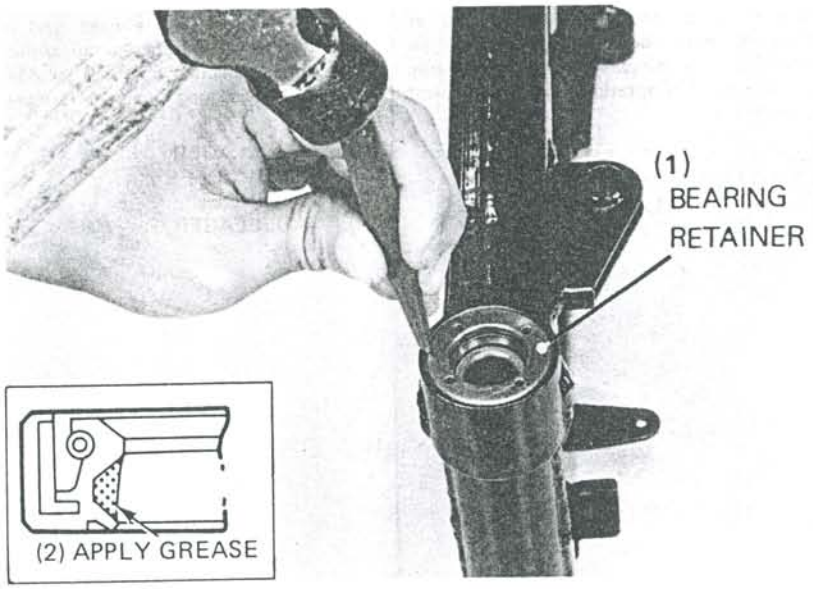


Drive one ball bearing into place with the numbers facing toward the swing arm center. Install the second ball bearing with its numbers facing out.

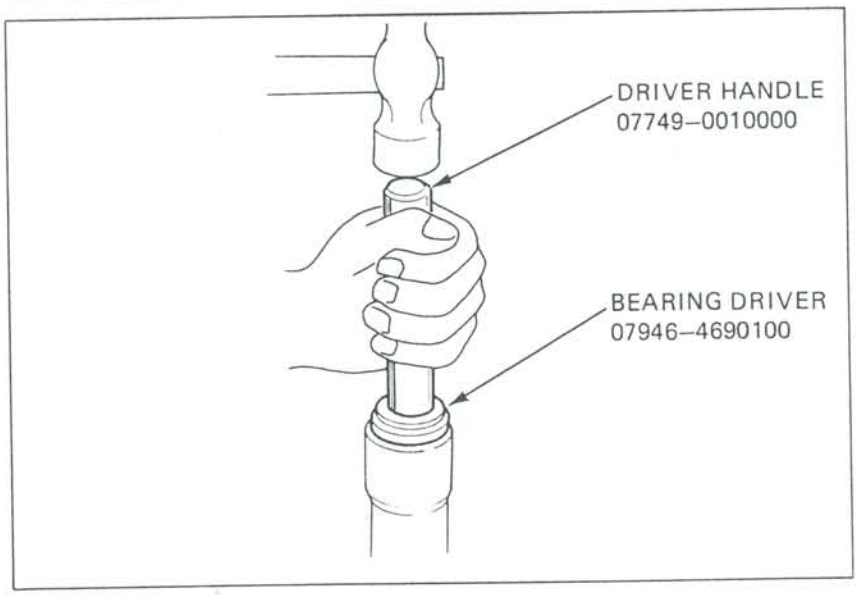


Install the dust seal onto the retainer and apply grease to the insidelip.
Tighten the retainer.
Peen the retainer over the swing arm using a hammer and drift.

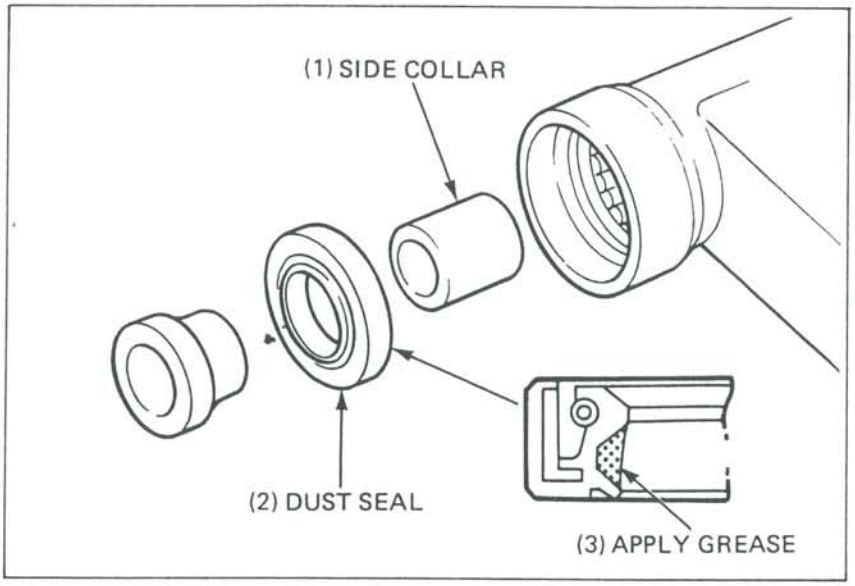
TORQUE: 30–40 N·m
(3.0–4.0 kg-m, 22–29 ft-lb)



Apply grease to the center collar and slide it into place.
Pack the needle bearing with grease.
Drive the needle roller 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.

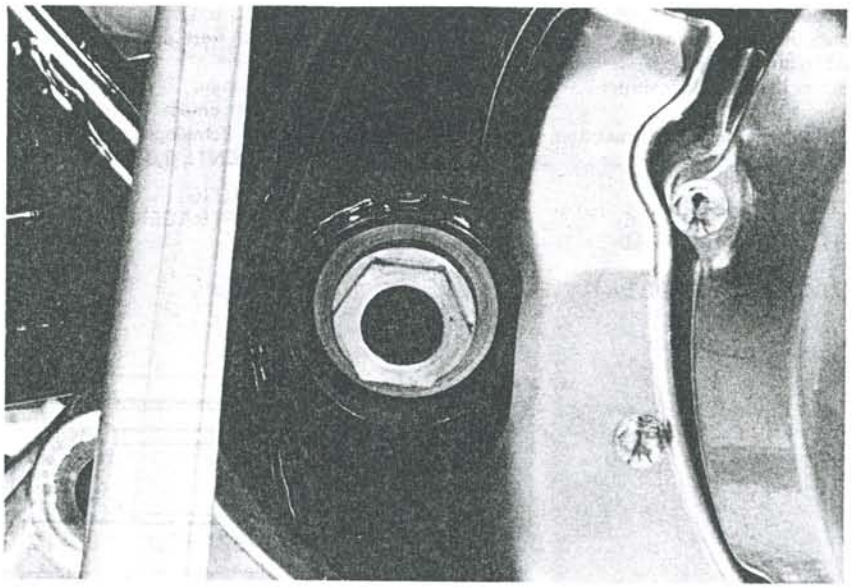


SWING ARM INSTALLATION

Tighten the right pivot collar.

TORQUE: 30–40 N·m
(3.0–4.0 kg-m, 22–29 ft-lb)

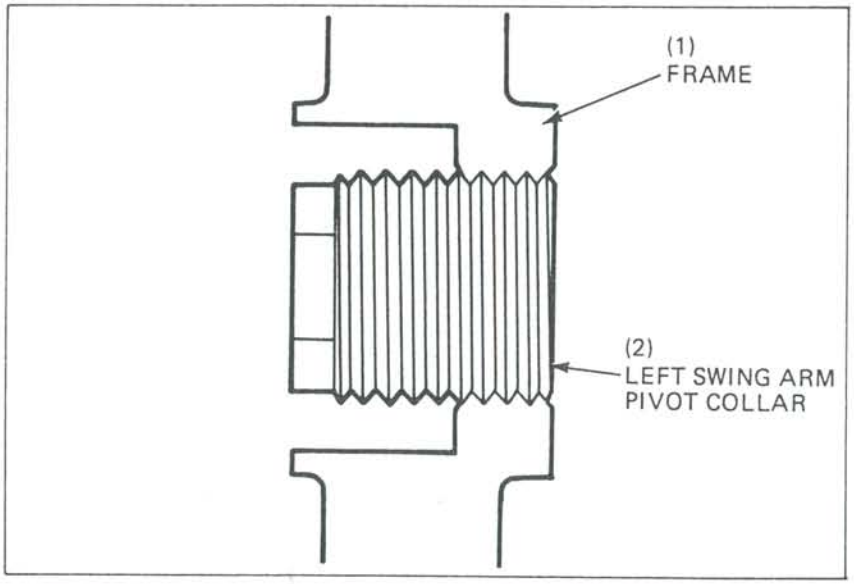
Install the pivot cap and right foot peg bracket.



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.



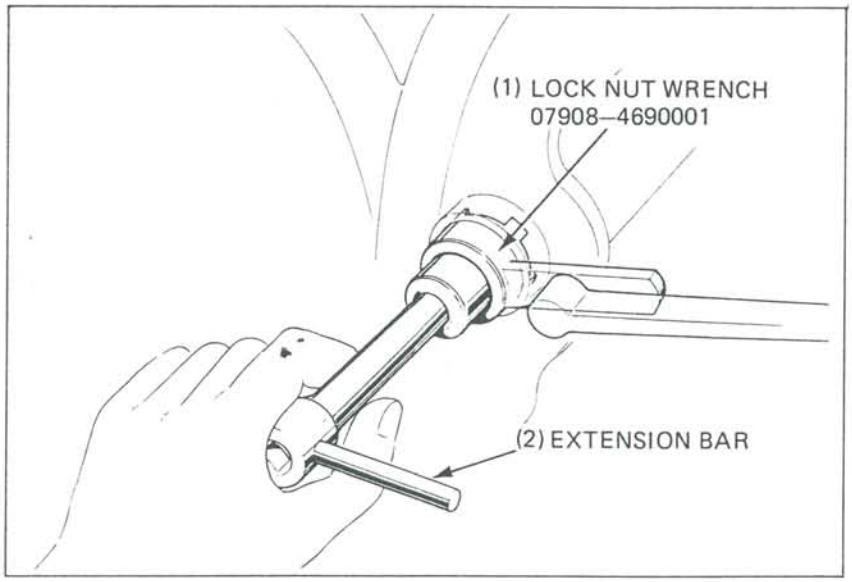
Install the swing arm and insert the pivot bolt.

Tighten the left pivot collar.
TORQUE: 25–30 N·m
(2.5–3.0 kg-m, 18–22 ft-lb)

Hold the pivot collar and tighten the lock nut.
TORQUE: 45–55 N·m
(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: 70–80 N·m
(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 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
(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

X. DEPISTAGE DES PANNES

LE MOTEUR NE PART PAS OU SON DEMARRAGE EST DIFFICILE

1. Vérifier le passage d'essence
   ↓
   ATTEINT LE CARBURATEUR

N'ATTEINT PAS LE CARBURATEUR →
(1) Réservoir d'essence vide
(2) Tuyau d'essence ou filtre à essence bouchés
(3) Vide n'atteignant pas la membrane du tuyau d'essence
(4) Membrane de tuyau d'essence défectueuse
(5) Adhérence du pointeau
(6) Orifice de mise à l'air libre sur le bouchon du réservoir d'essence obstrué

LE MOTEUR MANQUE DE PUISSANCE

4. Accélérer légèrement
   ↓
   AUGMENTATION DE REGIME

PAS D'AUGMENTATION DE REGIME →
(1) Starter fermé
(2) Filte à air colmaté
(3) Ecoulement d'essence restreint
(4) Orifice de mise à l'air libre sur le bouchon du réservoir d'essence obstrué
(5) Vide n'atteignant pas la membrane du tuyau d'essence
(6) Membrane du tuyau d'essence défectueuse
(7) Silencieux obstrué

MAUVAISE PERFORMANCE A REGIME ELEVE

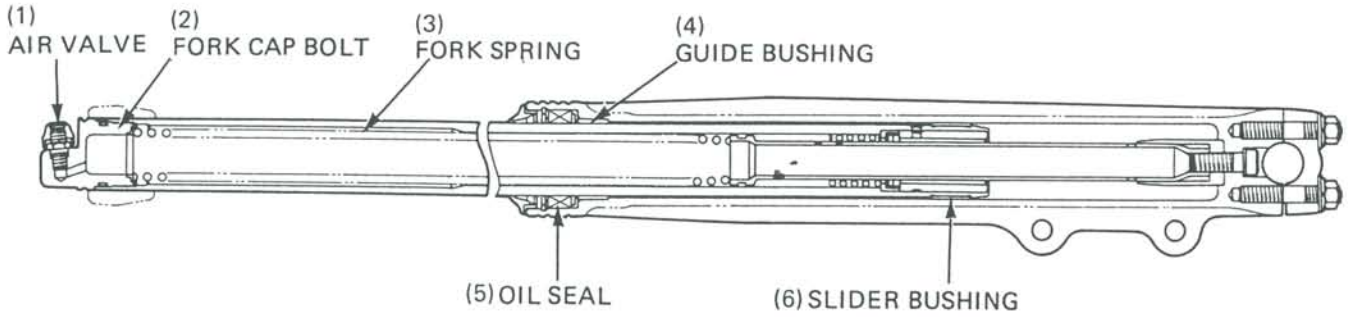
2. Débrancher le tuyau d'essence
   ↓
   L'ESSENCE COULE LIBREMENT

ECOULEMENT D'ESSENCE RESTREINT →
(1) Manque d'essence dans le réservoir
(2) Conduit d'essence obstrué
(3) Orifice de mise à l'air libre du réservoir d'essence obstrué
(4) Robinet d'essence obstrué
(5) Vide n'atteignant pas la membrane du tuyau d'essence
(6) Membrane du tuyau d'essence défectueuse

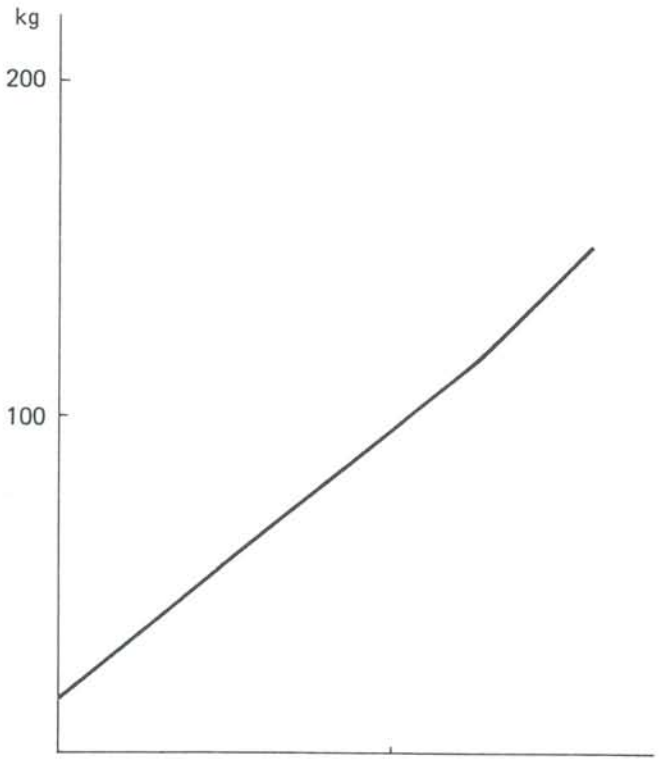
XII. TECHNICAL FEATURES

FRONT AIR FORKS

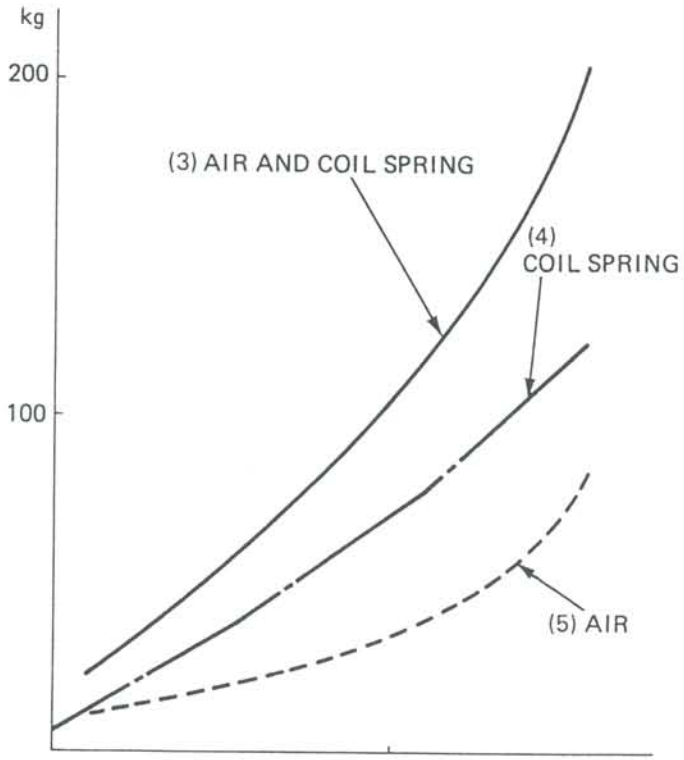
The front forks uses air and a coil spring. The air chamber is inside each fork tube with an air valve at the fork cap bolt.



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.



(1) CONVENTIONAL SUSPENSION



(2) AIR SUSPENSION

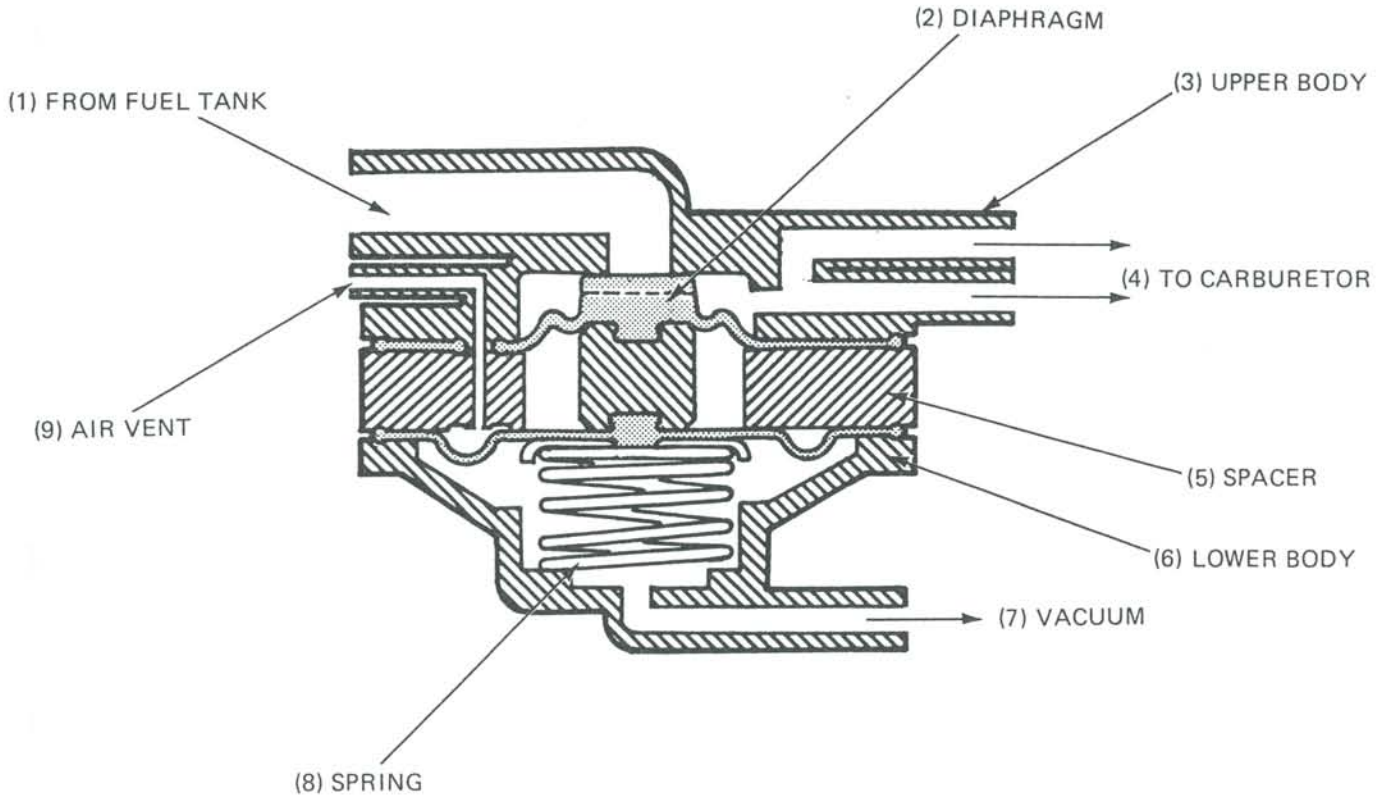
FUEL LINE DIAPHRAGM

The auto fuel cock 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 operating.

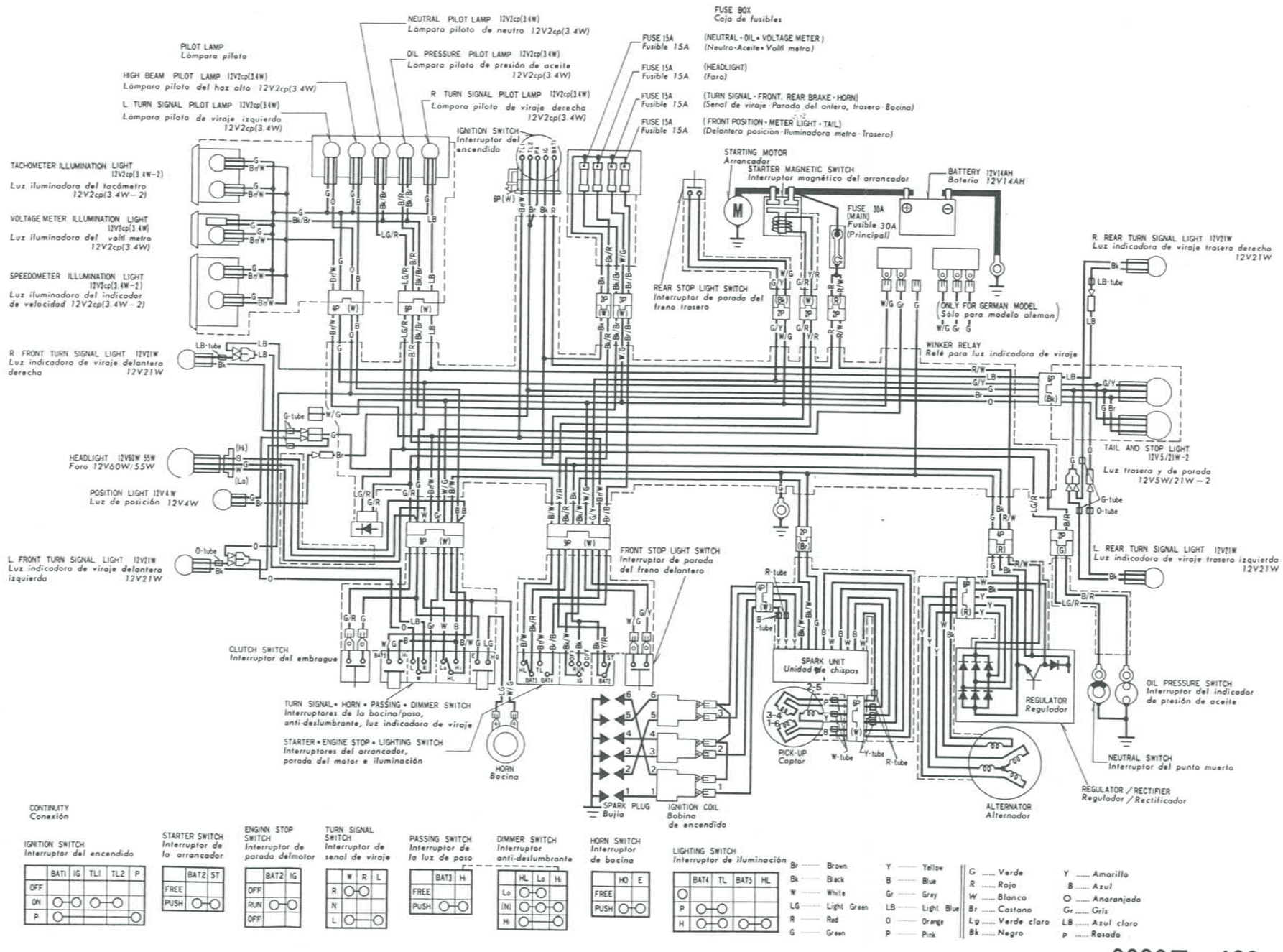
With the engine off, the diaphragm is held against the fuel outlet within the diaphragm body; no fuel can flow through the fuel tank to the carburetor.

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

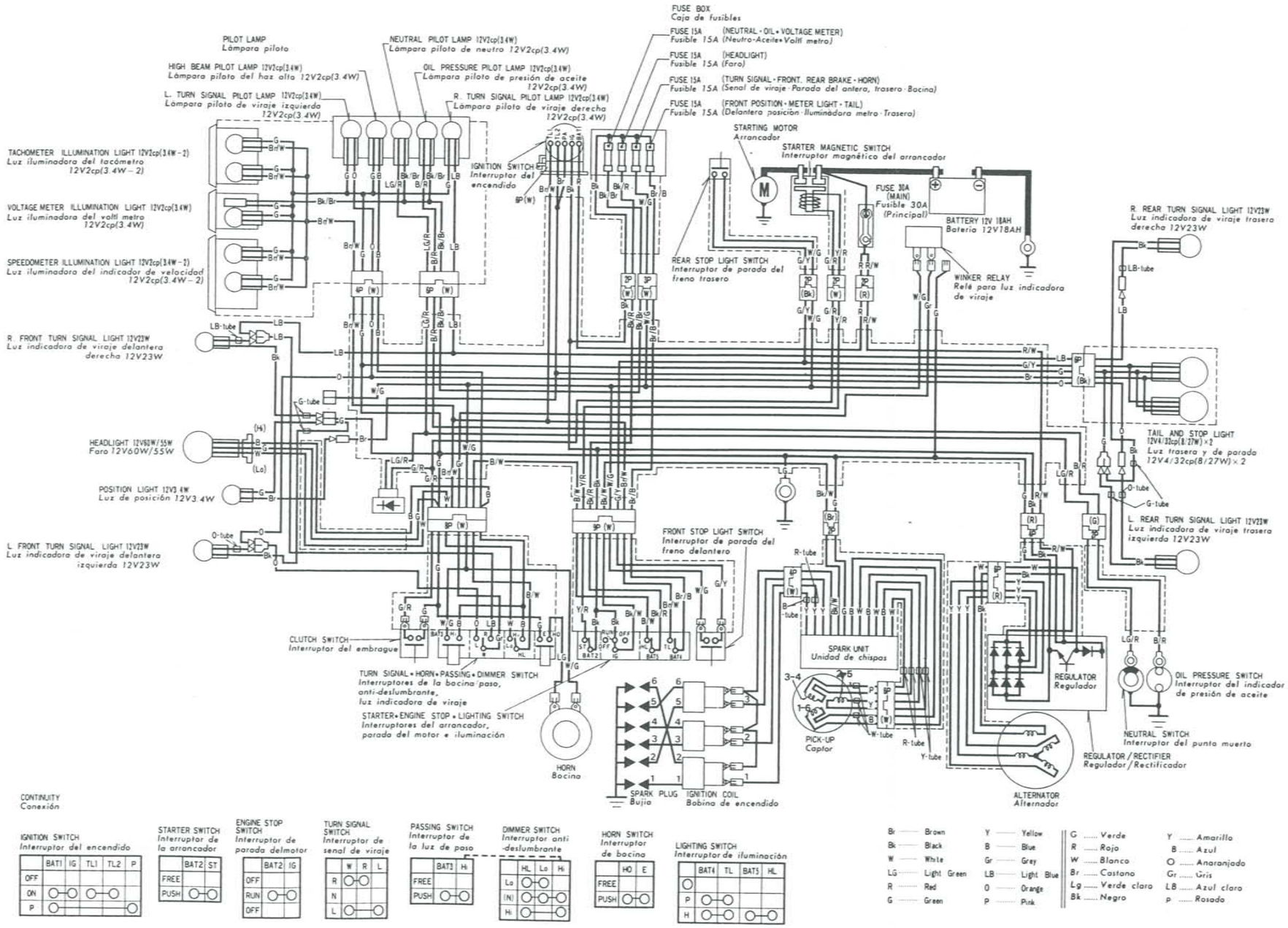
When the engine is stopped, the diaphragm is pushed back against the fuel outlet to block the fuel flow.



CBXA (E,ED,F,G) ①



0030Z-422-6001


PILOT LAMP
Lámpara piloto
NEUTRAL PILOT LAMP 12V2cp(3.4W)
Lámpara piloto de neutro 12V2cp(3.4W)
HIGH BEAM PILOT LAMP 12V2cp(3.4W)
Lámpara piloto del haz alto 12V2cp(3.4W)
OIL PRESSURE PILOT LAMP 12V2cp(3.4W)
Lámpara piloto de presión de aceite 12V2cp(3.4W)
L. TURN SIGNAL PILOT LAMP 12V2cp(3.4W)
Lámpara piloto de viraje izquierda 12V2cp(3.4W)
R. TURN SIGNAL PILOT LAMP 12V2cp(3.4W)
Lámpara piloto de viraje derecha 12V2cp(3.4W)
FUSE BOX
Caja de fusibles
FUSE 15A (NEUTRAL · OIL · VOLTAGE METER)
Fusible 15A (Neutro-Aceite-Volti metro)
FUSE 15A (HEADLIGHT)
Fusible 15A (Faro)
FUSE 15A (TURN SIGNAL · FRONT. REAR BRAKE · HORN)
Fusible 15A (Senal de viraje · Parada del antera, trasero · Bocina)
FUSE 15A (FRONT POSITION · METER LIGHT · TAIL)
Fusible 15A (Delantera posición · Iluminadora metro · Trasera)
TACHOMETER ILLUMINATION LIGHT 12V2cp(3.4W-2)
Luz iluminadora del tacómetro 12V2cp(3.4W-2)
VOLTAGE METER ILLUMINATION LIGHT 12V2cp(3.4W)
Luz iluminadora del volti metro 12V2cp(3.4W)
SPEEDOMETER ILLUMINATION LIGHT 12V2cp(3.4W-2)
Luz iluminadora del indicador de velocidad 12V2cp(3.4W-2)
IGNITION SWITCH
Interruptor del encendido
STARTING MOTOR
Arrancador
STARTER MAGNETIC SWITCH
Interruptor magnético del arrancador
FUSE 30A (MAIN)
Fusible 30A (Principal)
BATTERY 12V 18AH
Bateria 12V18AH
REAR STOP LIGHT SWITCH
Interruptor de parada del freno trasero
WINKER RELAY
Relé para luz indicadora de viraje
R. REAR TURN SIGNAL LIGHT 12V23W
Luz indicadora de viraje trasera derecha 12V23W
LB-tube
R. FRONT TURN SIGNAL LIGHT 12V23W
Luz indicadora de viraje delantera derecha 12V23W
G-tube
HEADLIGHT 12V60W/55W
Faro 12V60W/55W
POSITION LIGHT 12V3.4W
Luz de posición 12V3.4W
O-tube
L. FRONT TURN SIGNAL LIGHT 12V23W
Luz indicadora de viraje delantera izquierda 12V23W
TAIL AND STOP LIGHT
12V4/32cp(8/27W)×2
Luz trasera y de parada 12V4/32cp(8/27W)×2
L. REAR TURN SIGNAL LIGHT 12V23W
Luz indicadora de viraje trasera izquierda 12V23W
R-tube
FRONT STOP LIGHT SWITCH
Interruptor de parada del freno delantero
CLUTCH SWITCH
Interruptor del embrague
SPARK UNIT
Unidad de chispas
PICK-UP
Captor
Y-tube
REGULATOR
Regulador
OIL PRESSURE SWITCH
Interruptor del indicador de presión de aceite
NEUTRAL SWITCH
Interruptor del punto muerto
REGULATOR / RECTIFIER
Regulador / Rectificador
TURN SIGNAL · HORN · PASSING · DIMMER SWITCH
Interruptores de la bocina paso, anti-deslumbrante, luz indicadora de viraje
STARTER · ENGINE STOP · LIGHTING SWITCH
Interruptores del arrancador, parada del motor e iluminación
HORN
Bocina
SPARK PLUG
Bujia
IGNITION COIL
Bobina de encendido
ALTERNATOR
Alternador
CONTINUITY
Conexión
IGNITION SWITCH
Interruptor del encendido
STARTER SWITCH
Interruptor de la arrancador
ENGINE STOP SWITCH
Interruptor de parada delmotor
TURN SIGNAL SWITCH
Interruptor de senal de viraje
PASSING SWITCH
Interruptor de la luz de paso
DIMMER SWITCH
Interruptor anti-deslumbrante
HORN SWITCH
Interruptor de bocina
LIGHTING SWITCH
Interruptor de iluminación
Br Brown
Bk Black
W White
LG Light Green
R Red
G Green
Y Yellow
B Blue
Gr Grey
LB Light Blue
O Orange
P Pink
G ..... Verde
R ..... Rojo
W ..... Blanco
Br ..... Castano
Lg ..... Verde claro
Bk ..... Negro
Y ..... Amarillo
B ..... Azul
O ..... Anaranjado
Gr ..... Gris
LB ..... Azul claro
P ..... Rosado