



HONDA

HONDA



IMPORTANT SAFETY NOTICE

▲WARNING

Indicates a strong possibility of severe personal injury or death if instructions are not followed.

CAUTION:

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

NOTE:

Gives helpful information.

Detailed descriptions of standard workshop procedures, safety principles and service operations are not included. It 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 possibly 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.

TYPE CODE

- Throughout this manual, the following abbreviations are used to identify individual model.

CODE	AREA TYPE	CODE	AREA TYPE
ED	EUROPEAN DIRECT SALES (Italy, Germany, Portugal, Norway, Finland, Denmark, Austria)	II H	NETHERLANDS TYPE II (Limited power/25 kw (34 PS); Spain)
II ED	EUROPEAN DIRECT SALES TYPE II (Limited power/37 kw (50 PS); Sweden, Germany)	E	U. K.
		F	FRANCE
III ED	EUROPEAN DIRECT SALES TYPE III (Limited power/25 kw (34 PS); Germany, Portugal)	G	GERMANY
		SW	SWITZERLAND
H	NETHERLANDS (Belgium, Spain)	U	AUSTRALIA

HOW TO USE THIS MANUAL

This service manual describes the service procedures for the CB600F.

Follow the Maintenance Schedule (Section 3) recommendations to ensure that the vehicle is in peak operating condition.

Performing the first scheduled maintenance is very important. It compensates for the initial wear that occurs during the break-in period.

Sections 1 and 3 apply to the whole motorcycle. Section 2 illustrates procedures for removal/installation of components that may be required to perform service described in the following sections. Sections 4 through 19 describe parts of the motorcycle, grouped according to location.

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

Most sections start with an assembly or system illustration, service information and troubleshooting for the section.

The subsequent pages give detailed procedure.

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

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. NO PART OF THIS PUBLICATION MAY BE REPRODUCED WITHOUT WRITTEN PERMISSION. THIS MANUAL IS WRITTEN FOR PERSONS WHO HAVE ACQUIRED BASIC KNOWLEDGE OF MAINTENANCE ON HONDA MOTORCYCLES, MOTOR SCOOTERS OR ATVS.












HONDA MOTOR CO., LTD.
SERVICE PUBLICATION OFFICE

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SYMBOLS

The symbols used throughout this manual show specific service procedures. If supplementary information is required pertaining to these symbols, it would be explained specifically in the text without the use of the symbols.

	Replace the part(s) with new one(s) before assembly.
	Use recommended engine oil, unless otherwise specified.
	Use molybdenum oil solution (mixture of the engine oil and molybdenum grease in a ratio of 1 : 1).
	Use multi-purpose grease (Lithium based multi-purpose grease NLGI # 2 or equivalent).
	Use molybdenum disulfide grease (containing more than 3 % molybdenum disulfide, NLGI # 2 or equivalent). Example: Molykote® BR-2 plus manufactured by Dow Corning, U. S. A. Multi-purpose M-2 manufactured by Mitsubishi Oil, Japan
	Use molybdenum disulfide paste (containing more than 40 % molybdenum disulfide, NLGI # 2 or equivalent). Example: Molykote® G-n paste, manufactured by Dow Corning, U. S. A. Honda Moly 60 (U. S. A. only) Rocol ASP manufactured by Rocol Limited, U. K. Rocol Paste manufactured by Sumico Lubricant, Japan
	Use silicone grease.
	Apply a locking agent. Use a middle strength locking agent unless otherwise specified.
	Apply sealant.
	Use DOT 4 brake fluid. Use the recommended brake fluid unless otherwise specified.
	Use Fork or Suspension Fluid.

1. GENERAL INFORMATION

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GENERAL SAFETY

CARBON MONOXIDE

If the engine must be running to do some work, make sure the area is well ventilated. Never run the engine in an enclosed area.

▲WARNING

The exhaust contains poisonous carbon monoxide gas that can cause loss of consciousness and may lead to death.

Run the engine in an open area or with an exhaust evacuation system in an enclosed area.

GASOLINE

Work in a well ventilated area. Keep cigarettes, flames or sparks away from the work area or where gasoline is stored.

▲WARNING

Gasoline is extremely flammable and is explosive under certain conditions. KEEP OUT OF REACH OF CHILDREN.

HOT COMPONENTS

▲WARNING

Engine and exhaust system parts become very hot and remain hot for some time after the engine is run. Wear insulated gloves or wait until the engine and exhaust system have cooled before handling these parts.

USED ENGINE OIL

▲WARNING

Used engine oil may cause skin cancer if repeatedly left in contact with the skin for prolonged periods. Although this is unlikely unless you handle used oil on a daily basis, it is still advisable to thoroughly wash your hands with soap and water as soon as possible after handling used oil. KEEP OUT OF REACH OF CHILDREN.

BRAKE DUST

Never use an air hose or dry brush to clean the brake assemblies.

▲WARNING

Inhaled asbestos fibers have been found to cause respiratory disease and cancer.

BRAKE FLUID

CAUTION:

Spilling fluid on painted, plastic or rubber parts will damage them. Place a clean shop towel over these parts whenever the system is serviced. KEEP OUT OF REACH OF CHILDREN.

GENERAL INFORMATION

COOLANT

Under some condition, the ethylene glycol in engine coolant is combustible and its flame is not visible. If the ethylene glycol does ignite, you will not see any flame, but you can be burned.

▲WARNING

- *Avoid spilling engine coolant on the exhaust system or engine parts. They may be hot enough to cause the coolant to ignite and burn without a visible flame.*
- *Coolant (ethylene glycol) can cause some skin irritation and is poisonous if swallowed. KEEP OUT OF REACH OF CHILDREN.*
- *Do not remove the radiator cap when the engine is hot. The coolant is under pressure and could scald you.*
- *Keep hands and clothing away from the cooling fan, as it starts automatically.*

BATTERY HYDROGEN GAS & ELECTROLYTE

▲WARNING

- *The battery gives off explosive gases; keep sparks, flames and cigarettes away. Provide adequate ventilation when charging.*
- *The battery contains sulfuric acid (electrolyte). Contact with skin or eyes may cause severe burns. Wear protective clothing and a face shield.*
 - *If electrolyte gets on your skin, flush with water.*
 - *If electrolyte gets in your eyes, flush with water for at least 15 minutes and call a physician immediately.*
- *Electrolyte is poisonous.*
 - *If swallowed, drink large quantities of water or milk and follow with milk of magnesia or vegetable oil and call a physician. KEEP OUT OF REACH OF CHILDREN.*

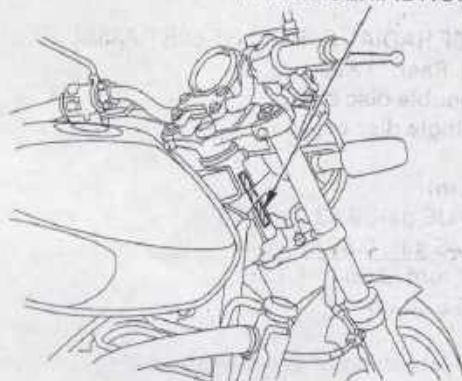
SERVICE RULES

1. Use genuine HONDA or HONDA-recommended parts and lubricants or their equivalents. Parts that don't meet HONDA's design specifications may cause damage to the motorcycle.
2. Use the special tools designed for this product to avoid damage and incorrect assembly.
3. Use only metric tools when servicing the motorcycle. Metric bolts, nuts and screws are not interchangeable with English fasteners.
4. Install new gaskets, O-rings, cotter pins, and lock plates when reassembling.
5. When tightening bolts or nuts, begin with the larger diameter or inner bolt first. Then tighten to the specified torque diagonally in incremental steps unless a particular sequence is specified.
6. Clean parts in cleaning solvent upon disassembly. Lubricate any sliding surfaces before reassembly.
7. After reassembly, check all parts for proper installation and operation.
8. Route all electrical wires as show on pages 1-22 through 1-31, Cable and Harness Routing.

MODEL IDENTIFICATION



FRAME SERIAL NUMBER



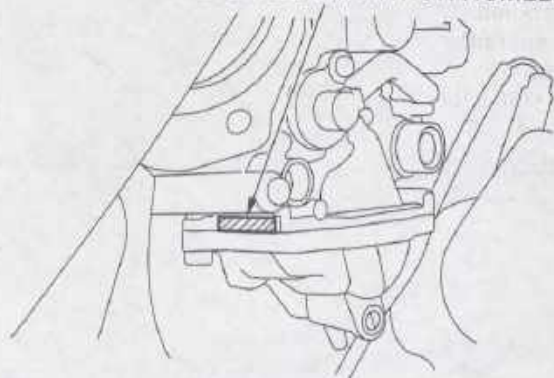
- (1) The frame serial number is stamped on the right side of the steering head.

ENGINE SERIAL NUMBER



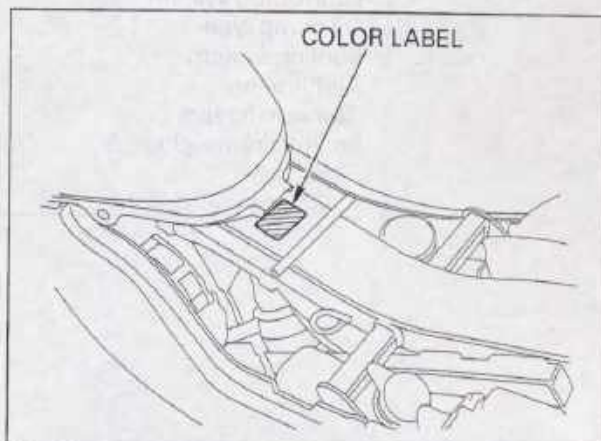
- (2) The engine serial number is stamped on the lower right side of the crankcase.

CARBURETOR IDENTIFICATION NUMBER



- (3) The carburetor identification number is stamped on the intake side of the carburetor body as shown.

COLOR LABEL



- (4) The color label is attached as shown. When ordering color-coded parts, always specify the designated color code.

SPECIFICATIONS

GENERAL		
	ITEM	SPECIFICATIONS
DIMENSIONS	Overall length	2,080 mm (81.9 in)
	Overall width	740 mm (29.1 in)
	Overall height	1,055 mm (41.5 in)
	Wheelbase	1,420 mm (55.9 in)
	Seat height	795 mm (31.3 in)
	Footpeg height	344 mm (13.5 in)
	Ground clearance	135 mm (5.3 in)
	Dry weight	176 kg (388 lbs)
	Curb weight	196 kg (432 lbs)
	Maximum weight capacity	188 kg (414 lbs)
FRAME	Frame type	Diamond
	Front suspension	Telescopic fork
	Front wheel travel	112 mm (4.4 in)
	Front axle travel	112 mm (4.4 in)
	Rear suspension	Swingarm
	Rear wheel travel	127 mm (5.0 in)
	Rear axle travel	127 mm (5.0 in)
	Rear damper	Nitrogen gas filled damper
	Front tire size	130/70ZR16 (61W) Radial
	Rear tire size	180/55ZR17 (73W) Radial
	Tire brand	
	Bridgestone	Front: BT-50F RADIAL G /Rear: BT-50R RADIAL G
	Michelin	Front: TX11/Rear: TX23
	Front brake	Hydraulic double disc brake
	Rear brake	Hydraulic single disc brake
	Caster angle	25°40'
ENGINE	Trail length	98 mm (3.9 in)
	Fuel tank capacity	16.0 ℓ (4.23 US gal , 3.52 Imp gal)
	Fuel reserve capacity	3.0 ℓ (0.79 US gal , 0.66 Imp gal)
	Bore and stroke	65.0 × 45.2 mm (2.56 × 1.78 in)
	Displacement	599 cm ³ (36.5 cu-in)
	Compression ratio	12.0 : 1
	Valve train	Silent multi-link chain driven DOHC, 4 valves per cylinder
	Intake valve	opens — at 1 mm.
		closes — (0.04 in) lift
	Exhaust valve	opens —
		closes —
	Lubrication system	Forced pressure and wet sump
	Oil pump type	Trochoid
	Cooling system	Liquid cooled
	Air filtration	Oiled paper filter
	Crankshaft type	Unit type
	Engine dry weight	61.9 kg (136.5 lbs)
	Firing order	1 — 2 — 4 — 3
	Cylinder arrangement	Vertical 30° inline four

GENERAL (Cont'd)

ITEM		SPECIFICATIONS
CARBURETOR	Type Throttle bore	Constant velocity 34 mm (1.3 in)
DRIVE TRAIN	Clutch system Clutch operation system Transmission Primary reduction Final reduction Gear ratio 1st 2nd 3rd 4th 5th 6th Gearshift pattern	Multi-plate, wet Cable operated type Constant mesh, 6-speed 1.863 (82/44) 2.800 (42/15) 2.928 (41/14) 2.062 (33/16) 1.647 (28/17) 1.368 (26/19) 1.200 (24/20) 1.086 (25/23) Left foot operated return system, 1 - N - 2 - 3 - 4 - 5 - 6
ELECTRICAL	Ignition system Starting system Charging system Regulator/rectifier Lighting system	Full transistorized ignition Electric starter motor Triple phase output alternator SCR shorted/triple phase, full wave rectification Battery

GENERAL INFORMATION

Unit: mm (in)

LUBRICATION SYSTEM		STANDARD	SERVICE LIMIT
ITEM			
Engine oil capacity	At draining	3.5 ℓ (3.7 US qt, 3.1 Imp qt)	_____
	At disassembly	4.2 ℓ (4.4 US qt, 3.7 Imp qt)	_____
	At oil filter change	3.8 ℓ (4.0 US qt, 3.3 Imp qt)	_____
Recommended engine oil		HONDA 4-stroke oil or equivalent motor oil API service classification SE, SF or SG Viscosity: SAE 10 W-40	_____
Oil pressure at oil pressure switch		490 kPa (5.0 kgf/cm ² , 71 psi) at 6,000 min ⁻¹ (rpm)/(80 °C/176 °F)	_____
Oil pump rotor	Tip clearance	0.15 (0.006) max.	0.20 (0.008)
	Body clearance	0.15 - 0.22 (0.006 - 0.009)	0.35 (0.014)
	Side clearance	0.02 - 0.07 (0.001 - 0.003)	0.10 (0.004)
Oil pump drive sprocket collar O. D.		34.050 - 34.075 (1.3405 - 1.3415)	34.03 (1.340)
Oil pump drive sprocket I. D.		35.025 - 35.075 (1.3789 - 1.3809)	35.10 (1.382)

FUEL SYSTEM		SPECIFICATIONS
ITEM		
Carburetor identification number	Except SW type	VP49A
	SW type	VP49B
Main jet		No.1/4; #100, No.2/3; #102
Slow jet		#40
Jet needle		J7SL
Pilot screw initial opening	Except SW type	1 3/4 turns out
	SW type	2 1/8 turns out
Float level		13.7 mm (0.54 in)
Idle speed		1,300 ± 100 min ⁻¹ (rpm)
Carburetor vacuum difference		Within 30 mm Hg (1.2 in Hg)
Base carburetor for synchronization		No.3 carburetor