Official

# IFICINIDA SHOP MANUAL ATC2005



'84~'86

C HONDA MOTOR CO., LTD. 1985

### **IMPORTANT SAFETY NOTICE**

WARNING

Indicates a strong possibility of severe personal injury or loss of life if

instructions are not followed.

**CAUTION:** 

Indicates a possibility of personal injury or equipment damage if instruc-

tions 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.

#### HOW TO USE THIS MANUAL

Sections 1 through 3 apply to the whole ATC, while sections 4 through 16 describe parts of the ATC, grouped according to location.

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

Most sections start with an assembly or system illustration and all the required specifications, torque values, general instructions, tools and troubleshooting for the section. The subsequent pages give detailed procedures.

If you don't know the source of the trouble, see section 17, TROUBLESHO-OTING.

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## 1. GENERAL INFORMATION

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#### **GENERAL SAFETY**

#### **WARNING**

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

#### **WARNING**

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

#### **SERVICE RULES**

- 1. Use genuine Honda or Honda-recommended parts and lubricants or their equivalents. Parts that do not meet Honda's design specifications may damage the ATC.
- 2. Use the special tools designed for this product.
- 3. This ATC uses only metric fasteners; use only metric tools when servicing.
- 4. Install new gaskets, O-rings, cotter pins, lock plates, etc. when reassembling.
- 5. When tightening bolts or nuts, begin with larger-diameter or inner bolts first, and tighten to the specified torque diagonally, 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.





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



The engine serial number is tamped on the lower left side of crankcase.



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

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## **SPECIFICATIONS**

	ITEM	
DIMENSIONS	Overall length Overall width Overall height Wheel base Rear tread Seat height Foot peg height Ground clearance Dry weight	1,735 mm (68.3 in) 1,015 mm (40.0 in) 980 mm (38.6 in) 1,130 mm (44.5 in) 760 mm (29.9 in) 665 mm (26.2 in) 267 mm (10.5 in) 115 mm (4.9 in) 125 kg (276 lb)
FRAME	Type Rim size Rear Tires Front: size-pressure Rear: size-pressure Standard tire circumference '84~'85 After '85  Front brake Rear brake Rear brake Fuel capacity After '84: Fuel reserve capacity Caster Trail Front oil capacity	Semi-double cradle $8.25 \times 8.0$ $8.25 \times 8.0$ $8.25 \times 8.0$ $22 \times 11-8 - 2.2$ psi (15 kPa, 0.15 kg/cm²) $22 \times 11-8 - 2.2$ psi (15 kPa, 0.15 kg/cm²) $1,759$ mm (69.3 in) $1,750$ mm (68.9 in) Cable operated leading shoe Cable operated leading shoe 8.2 liters (2.17 US gal, 1.80 lmp gal) $7.8$ liters (2.06 US gal, 1.72 lmp gal) $1.6$ liters (0.42 US gal, 0.35 lmp gal) $69^\circ$ $34.5$ mm (1.35 in) $90 \pm 2.5$ cc ( $3.0 \pm 0.08$ OZ)
ENGINE	Type Cylinder arrangement Bore x stroke Compression ratio Displacement Valve train Maximum horsepower Maximum torque  Oil capacity After disassembly After draining  Lubrication system Cylinder compression Intake valve Opens Closes Exhaust valve Opens Closes Valve clearance Intake (Cold) Exhaust	Gasoline, air-cooled 4-stroke, OHC Single cylinder inclined 15° 65×57.8 mm (2.56×2.28 in) 7.8:1 192 cc (11.7 cu in) Chain driven overhead camshaft 13.5 BHP/7,000rpm 1.5 kg-m/6,000rpm ( 11 ft-lb/6,000rpm) 1.35 liters (1.4 US qt, 1.1 lmp qt) 0.95 liters (1.0 US qt, 0.8 lmp qt)  Forced pressure and wet sump 11.0±1.0 kg/cm² (156±14 psi) 5° BTDC 35° ABDC 35° ABDC 5° ATDC 0.05 mm (0.002 in) 0.05 mm (0.002 in)
CARBURETOR	Type Main jet Pilot screw opening Float level Idle speed Venturi diameter	Piston valve #100 2-½ turns out 14.0 mm (0.55 in) 1,400 ± 100 rpm 22 mm (0.9 in)

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	ITEM		
DRIVE TRAIN	Clutch Transmission Primary reduction Gear ratio  Final reduction	             V  V	Wet multi-plate, semi-automatic 5-speed constant mesh 3.333 2.769 1.722 1.273 1.000 0.815 3.909
ELECTRICAL	Gearshift pattern Drive chain Ignition		Left foot operated return system, N-1-2-3-4-5 520, 84 L
	Ignition timing Alternator Spark plug Spark plug gap Headlight Tailight	Initial Full advance Capacity	10°±2° BTDC at idle 30°±2° BTDC at 3,350rpm A.C. generator, 12V 50W/5,000rpm X24ESR-U (ND) DR8ES-L (NGK) 0.6 - 0.7 mm (0.024 - 0.028 in) 12V 45W/45W 12V 5W

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## TORQUE VALUES

#### **ENGINE**

_	Q'ty	Thread Size (mm)	Torque			
Item			N·m	kg-m	ft-lb	
Cylinder head cover cap nut	4	8	28-30	2.8-3.0	20—22	
socket bolt	4	6	8-12	0.8—1.2	6—9	
Clutch lock nut	1	16 x 1.0	50-60	5.0-6.0	36-43	
Centrifugal clutch lock nut	1	22 x 1.25	105-115	10.5-11.5	76–83	
Clutch adjuster lock nut	1	8 x 1.25	19–25	1.9-2.5	14–18	
A.C. generator rotor nut	1	12 x 1.25	65–75	6.5-7.5	47-54	
Valve adjuster cover	2	36 x 1.5	10-14	1.0-1.4	7-10	
Oil filter cap	1	36 x 1.5	9—15	0.9—1.5	6.5—11	
Spark plug	1	12 x 1.25	12-19	1.2-1.9	9-14	
Cam sprocket bolt	2	6 x 1.0	8-12	0.8-1.2	6–9	
Oil filter rotor cover bolt	3	6 x 1.0	1014	1.0-1.4	7–10	
Clutch lifter stopper bolt	1	8 x 1.25	1825	1.8-2.5	13-18	
Gearshift drum stopper arm bolt	1	6 x 1.0	10-14	1.0-1.4	7-10	
Pulse generator screw	2	5 x 0.5	4-7	0.4-0.7	2.9-5.0	
Pulse cover screw	2	5 x 0.8	4_7	0.4-0.7	2.9-5.0	
Valve adjuster lock nut	2	6 x 0.75	15–18	1.5–1.8	11-13	
Gearshift stopper plate bolt	1	6 x 1.0	8–12	0.8-1.2	6–9	
Clutch bolt	4	6 x 1.0	10–14	1.0-1.4	7–10	
Recoil starter driven pulley	4	6 x 1.0	10–14	1.0-1.4	7–10	
Cam chain tensioner adjust bolt	1	16 x 1.0	15–22	1.5-2.2	11–16	
Cam chain tensioner check bolt	1	6 x 1.0	8–10	0.8-1.0	6–7	
Decompressor lever pivot bolt	1	6 x 1.0	5–7	0.5-0.7	3.6-5.1	
Drive sprocket bolt	3	6 x 1.0	8-12	0.8-1.2	6–9	
Right crankcase protector screw	3	Self tapping screw	3–17	0.3-0.7	2.2-5.1	

#### **FRAME**

•	044	Thread Size (mm)	Torque			
Item	Q'ty		N∙m	kg-m	ft-lb	
Handlebar upper holder bolt	4	8×1.25	18-30	1.8-3.0	13-22	
Handlebar lower holder nut	2	10×1.25	40-48	4.0-4.8	29-35	
Fork top bridge bolt	2	12×1.25	50-70	5.0-7.0	36-51	
Steering stem nut	1	22×1.0	50—70	5.0—7.0	36-51	
Front axle	1	14×1.5	70—110	7.0—11.0	51-80	
Front hub nut	4	8×1.25	20—25	2.0-2.5	14-18	
Front brake drum bolt	4	8×1.25	20—25	2.0-2.5	14-18	
Front axle holder nuts	4	6×1.0	10-14	1.0-1.4	7—10	
Front/rear rim nut	12	8×1.25	20-25	2.0-2.5	14-18	
Damper holder nut	5	8×1.25	25-30	2.5-3.0	18-22	
Rear brake drum nut (Inner)	1	32×1.0	35-45	3.5—4.5	25-33	
(Outer)	1	32×1.0	120—140	12.0—14.0	87—10	
Rear hub nut (Rear wheel nut)	8	8×1.25	20-25	2.0-2.5	14-18	
Rear axle nut	2	14×1.5	60-80	6.0-8.0	44-58	
Bearing holder bolt	4	12×1.25	50-70	5.0-7.0	36-51	
Front fork mounting bolt	4	1×1.25	40-50	4.0-5.0	29-36	

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