

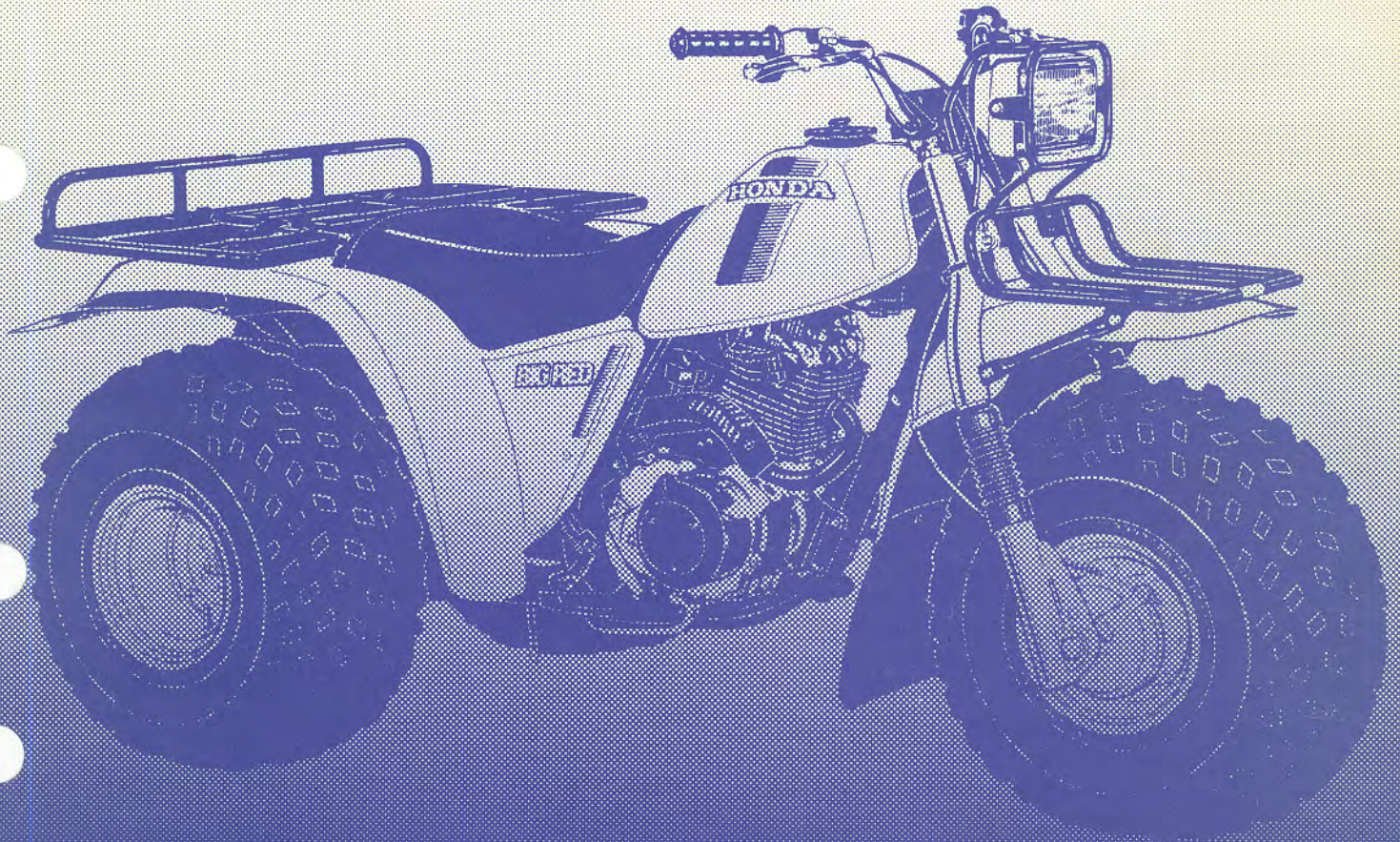
**Official**

# HONDA

## SHOP MANUAL

### ATC BIG RED

#### ATC 200ES



# '84

## 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 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 method or tools selected.



## HOW TO USE THIS MANUAL

Sections 1 through 3 apply to the whole motorcycle, while sections 4 through 18 describe parts of the motorcycle, grouped according to location.

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

Most sections start with an assembly or system illustration 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 19, 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.

HONDA MOTOR CO., LTD.  
Service Publications Office

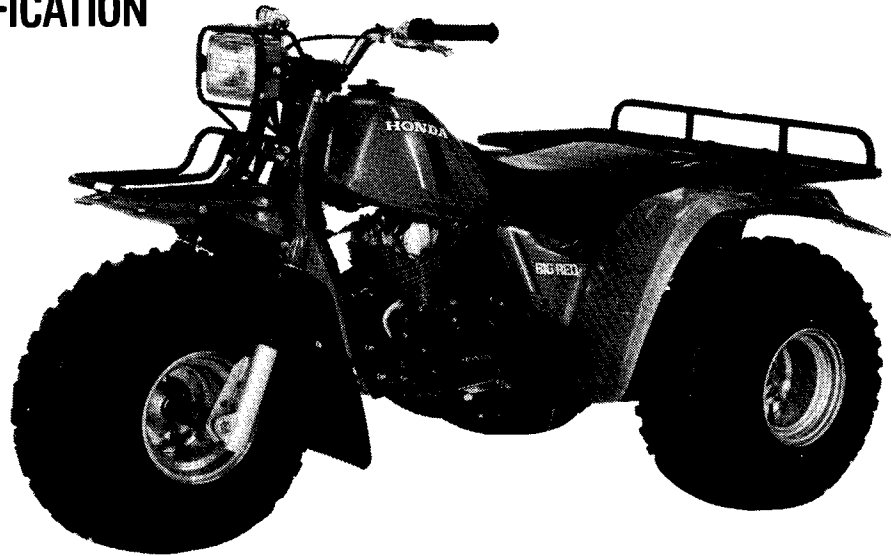
## CONTENTS

	<b>GENERAL INFORMATION</b>	<b>1</b>
	<b>LUBRICATION</b>	<b>2</b>
	<b>MAINTENANCE</b>	<b>3</b>
<b>ENGINE</b>	<b>FUEL SYSTEM</b>	<b>4</b>
	<b>ENGINE REMOVAL/INSTALLATION</b>	<b>5</b>
	<b>CYLINDER HEAD/VALVES</b>	<b>6</b>
	<b>CYLINDER/PISTON</b>	<b>7</b>
	<b>CLUTCH/OIL PUMP/GEARSHIFT LINKAGE</b>	<b>8</b>
	<b>RECOIL STARTER/ALTERNATOR/STARTER CLUTCH</b>	<b>9</b>
	<b>SUBTRANSMISSION/OUTPUT GEAR</b>	<b>10</b>
	<b>TRANSMISSION/CRANKSHAFT</b>	<b>11</b>
<b>CHASSIS</b>	<b>FRONT WHEEL/BRAKE/STEERING</b>	<b>12</b>
	<b>REAR WHEEL/BRAKE/FINAL DRIVE</b>	<b>13</b>
	<b>CARRIERS/REAR FENDER/HITCH/EXHAUST</b>	<b>14</b>
<b>ELECTRICAL</b>	<b>IGNITION SYSTEM</b>	<b>15</b>
	<b>BATTERY/CHARGING SYSTEM</b>	<b>16</b>
	<b>STARTER SYSTEM</b>	<b>17</b>
	<b>LIGHTS/SWITCHES</b>	<b>18</b>
	<b>TROUBLESHOOTING</b>	<b>19</b>

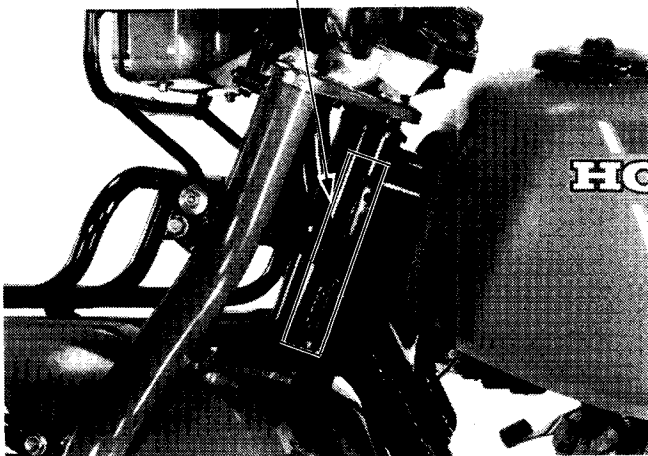


**HONDA**  
**ATC200ES**

## MODEL IDENTIFICATION

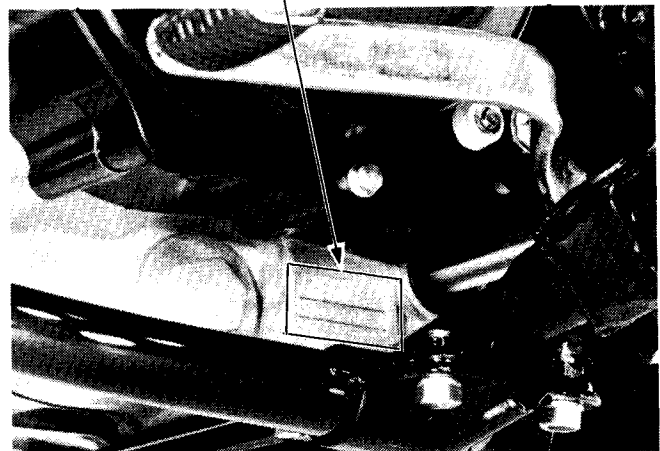


### FRAME SERIAL NUMBER



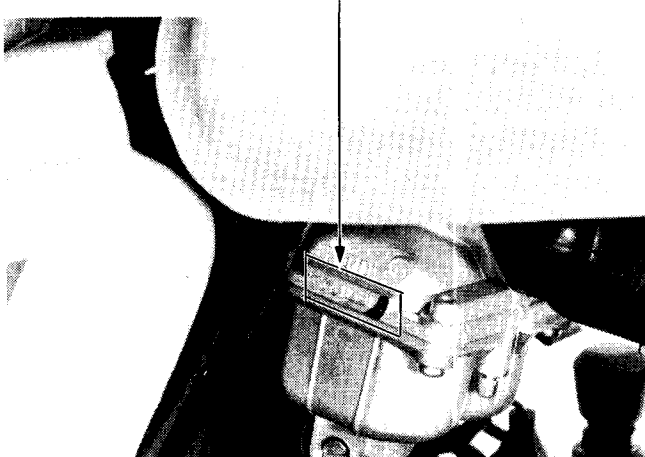
The frame serial number is stamped on the steering head left side.

### ENGINE SERIAL NUMBER



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

### CARBURETOR IDENTIFICATION NUMBER



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



GENERAL SAFETY	1-1
SERVICE RULES	1-1
SPECIFICATIONS	1-2
TORQUE VALUES	1-4
TOOLS	1-6
CABLE & HARNESS ROUTING	1-8
NOISE EMISSION CONTROL SYSTEM	1-11

## 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.*

**WARNING**

*The battery generates hydrogen gas which can be highly explosive. Do not smoke or allow flames or sparks near the battery, especially while charging it.*

**WARNING**

*The battery electrolyte contains sulfuric acid. Protect your eyes, skin and clothing. In case of contact, flush thoroughly with water and call a doctor if electrolyte gets in your eyes.*

## 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 this 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 1-4 steps, unless a particular sequence is specified.
6. Clean parts in non-flammable or high flash point solvent upon disassembly.
7. Lubricate any sliding surfaces before reassembly.
8. After reassembly, check all parts for proper installation and operation.



**GENERAL INFORMATION**

**SPECIFICATIONS**

<p><b>DIMENSIONS</b></p>	<p>Overall length Overall width Overall height Wheel base Rear tread Seat height Foot peg height Ground clearance Dry weight</p>	<p>1,850 mm (72.8 in) 1,070 mm (42.1 in) 1,005 mm (39.6 in) 1,230 mm (48.4 in) 800 mm (31.5 in) 685 mm (27.0 in) 260 mm (10.2 in) 150 mm (5.9 in) 170 kg (375 lb)</p>
<p><b>FRAME</b></p>	<p>Type Rim size Front Rear Front tire size, pressure Rear tire size, pressure Front brake Rear brake Fuel capacity Fuel reserve capacity Caster Trail</p>	<p>Semi-double cradle 9.2 x 9.0 9.2 x 9.0 25 x 12 - 9 0.15 kg/cm<sup>2</sup> (2.2 psi) 25 x 12 - 9 0.15 kg/cm<sup>2</sup> (2.2 psi) Cable operated leading shoe Cable operated leading shoe 11.5 liters (3.0 US gal, 2.5 Imp gal) 1.0 liter (0.26 US gal, 0.22 Imp gal) 69.5° 7 mm (0.28 in)</p>
<p><b>ENGINE</b></p>	<p>Type Cylinder arrangement Bore x stroke Displacement Compression ratio Valve train Maximum horsepower Maximum torque Oil capacity Lubrication system Cylinder compression Intake valve Exhaust valve Valve clearance (Cold)</p>	<p>Gasoline, air-cooled 4-stroke Single cylinder inclined 15° 65.0 x 57.8 mm (2.56 x 2.28 in) 192 cc (11.7 cu in) 7.8 : 1 Overhead camshaft chain driven 13.0 BHP/7,000 rpm 1.46 kg-m/5,500 rpm (0.6 ft-lb/5,500 rpm) 1.8 liters (1.9 US qt, 1.6 Imp qt) 1.0 liter (1.1 US qt, 0.9 Imp qt) after draining Forced pressure and wet sump 11.0 ± 1.0 kg/cm<sup>2</sup> (156 ± 14 psi) 5° BTDC 35° ABDC 35° BBDC 5° ATDC } at 1 mm lift 0.05 mm (0.002 in) 0.05 mm (0.002 in)</p>
<p><b>CARBURETOR</b></p>	<p>Type Venturi dia. Main jet Pilot screw opening Jet needle Float level Idle speed</p>	<p>Piston valve 22 mm (0.9 in) #95 1-7/8 turns out 3rd 14 mm (0.55 in) 1,400 ± 100 rpm</p>



# HONDA ATC200ES

## GENERAL INFORMATION

<p><b>DRIVE TRAIN</b></p>	<p>Clutch Transmission Primary reduction Gear ratio (Posi-torque gear ratio)</p> <p style="text-align: right;">I II III IV V Reverse</p> <p>Final reduction Gearshift pattern</p>	<p>Wet multi-plate, semi-automatic 5-speed constant mesh with reverse 3.333 2.841 (4.339) 1.767 (2.698) 1.306 (1.995) 1.026 (1.567) 0.836 (1.277) 4.616 4.255 Left foot operated return system, Forward: N-1-2-3-4-5 Reverse: N-1</p>
<p><b>ELECTRICAL</b></p>	<p>Ignition Ignition timing</p> <p style="text-align: right;">Initial Full advance Capacity</p> <p>Alternator Battery Spark plug</p> <p>Spark plug gap Headlight Taillight</p>	<p>CDI 10 ± 2° BTDC at idle 30 ± 2° BTDC at 3,350 rpm 70W/5,000 rpm 12V-14AH DR8ES-L (NGK) X24ESR-U (ND) 0.6 - 0.7 mm (0.024 - 0.028 in) 12V 45W/45W 12V 5W</p>

**GENERAL INFORMATION****TORQUE VALUES****ENGINE**

Item	Q'ty	Thread Size (mm)	Torque		
			N-m	kg-m	ft-lb
Cylinder head cap nut	4	8 x 1.25	28-30	2.8-3.0	20-22
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 adjusting screw lock nut	1	8 x 1.25	19-25	1.9-2.5	14-18
Alternator flywheel bolt	1	8 x 1.25	40-50	4.0-5.0	29-36
Valve adjuster cover	2	36 x 1.5	10-14	1.0-1.4	7-10
Oil filter screen cap	1	36 x 1.5	9-15	0.9-1.5	7-11
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	10-14	1.0-1.4	7-10
Clutch lifter stopper bolt	1	8 x 1.25	18-25	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 0.8	4-7	0.4-0.7	3-5
Pulse cover screw	2	5 x 0.8	4-7	0.4-0.7	3-5
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
Cam chain tensioner adjusting 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 pivot bolt	1	6 x 1.0	5-7	0.5-0.7	4-5
Right crankcase protector screw	3	Self tapping screw	3-7	0.3-0.7	2.2-5
Carburetor mounting nut	2	6 x 1.0	6-9	0.6-0.9	4-7
Cylinder head cover socket bolt	4	6 x 1.0	8-12	0.8-1.2	6-9
Change lever mount nut	1	8 x 1.25	18-25	1.8-2.5	13-18
Output driven gear bearing holder	3	8 x 1.25	26-30	2.6-3.0	19-22
Drive gear bearing outer race	1	70 x 1.5	90-100	9.0-10.0	65-72
Drive gear bearing inner race	1	28 x 1.0	70-80	7.0-8.0	51-58
Driven gear bearing outer race	1	56 x 1.5	90-100	9.0-10.0	65-72
Driven gear bearing inner race	1	24 x 1.0	70-80	7.0-8.0	51-58





### FRAME

Item	Q'ty	Tread Size mm	Torque		
			N·m	kg·m	ft·lb
Upper engine hanger nut	1	8 x 1.25	20-25	2.0-2.5	14-18
Front engine hanger nut	2	10 x 1.25	40-48	4.0-4.8	29-35
Front engine hanger nut	2	8 x 1.25	23-27	2.3-2.7	17-20
Rear engine hanger lower nut	1	10 x 1.25	45-53	4.5-5.3	32-38
Rear engine hanger upper nut	1	10 x 1.25	<del>40-80</del>	<del>6.0-8.0</del>	<del>29-35</del> 43-58
Handlebar upper holder bolt	4	6 x 1.0	8-12	0.8-1.2	6-9
Handlebar lower holder nut	2	10 x 1.25	40-48	4.0-4.8	29-35
Fork top bridge bolt	2	12 x 1.25	50-70	5.0-7.0	36-51
Steering stem nut	1	22 x 1.0	50-70	5.0-7.0	36-51
Front axle nut	1	14 x 1.5	60-80	6.0-8.0	43-58
Front wheel hub nut	4	8 x 1.25	20-25	2.0-2.5	14-18
Front brake drum bolt	3	8 x 1.25	20-25	2.0-2.5	14-18
Front fork cap nut	2	—	15-25	1.5-2.5	11-18
Front fork mounting bolt	2	10 x 1.25	30-40	3.0-4.0	22-29
Rear wheel hub nut	8	8 x 1.25	20-25	2.0-2.5	14-18
Rear brake drum cover	6	8 x 1.25	24-30	2.4-3.0	17-22
Brake drum inner nut	1	32 x 1.0	40-50	4.0-5.0	29-36
Brake drum outer nut	1	32 x 1.0	120-140	12.0-14.0	87-101
Rear axle nut	2	14 x 1.5	60-80	6.0-8.0	43-58
Pinion retainer	1	58 x 1.5	100-120	10.0-12.0	72-87
Gear case cover	8	8 x 1.25	24-30	2.4-3.0	17-22
Pinion nut	1	16 x 1.5	80-100	8.0-10.0	58-72
Final gear case mounting bolt	2	10 x 1.25	50-70	5.0-7.0	36-51

**NEW**

Torque specifications listed above are for the most important tightening points. If a torque specification is not listed, follow the standards given below.

### STANDARD TORQUE VALUES

Item	Torque N·m (kg·m, ft·lb)	Item	Torque N·m (kg·m, ft·lb)
5 mm bolt, nut	4.5-6 (0.45-0.6, 3.3-4.3)	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)

**GENERAL INFORMATION****TOOLS****SPECIAL**

DESCRIPTION	TOOL NUMBER	ALTERNATIVE TOOL	TOOL NUMBER	REF. PAGE
Lock nut wrench, 30/40 mm	07916-9690000			10-16, 10-23
Lock nut wrench attachment, 50 mm	07916-9690100			10-17, 10-22
Pinion holder attachment	07924-9690100			13-18, 15-19
Propeller shaft dis/assembly tool A	07967-9690100			13-14
Propeller shaft dis/assembly tool B	07967-9690200			13-14
Retainer wrench	07910-ME80000			13-19, 13-23
<b>NEW</b> <b>NEW</b> Lock nut spanner, 41 mm	07916-9580200	Nut holder wrench	07916-958020A (U.S.A. only)	13-4, 13-11
Wrench set, 41 mm	07916-9580300	Torque wrench adaptor, 41 mm Equivalent commercially available in U.S.A.	07916-958010A (U.S.A. only)	13-4
Wrench attachment, 41 mm	07916-9580400			13-4, 13-11
Socket wrench, 30 mm	07916-PD10000	Band strap wrench, commercially available in U.S.A.		8-6, 8-10
Clutch center holder	07923-9580000			8-12, 8-15
Lock nut wrench, 34/44 mm	07916-ME50000			10-17, 10-22
Shaft holder	07923-6890101			10-16, 10-17, 10-22, 10-23
Pinion holder	07924-ME40000			13-18, 13-19, 13-26
Shaft puller	07931-ME40000			13-19
Bearing remover, 17 mm	07936-3710300			8-5, 10-9
Remover handle	07936-3710100			8-5, 10-9
Remover weight	07741-0010201	Remover weight	07936-3710200	8-5, 10-9
Bearing remover, 15 mm	07936-KC10500			10-18, 11-9
<b>NEW</b> Ball race driver	07944-1150001	Bearing remover	M9360-277-9177A (U.S.A. only)	12-22
Driver	07945-3710101			13-16
Remover shaft	07965-ME30000			13-15
Valve guide reamer	07984-0980000			6-10
Attachment	07945-3330300	Attachment	07946-3710701	13-20
<b>NEW</b> Universal bead breaker	GN-AH-958-BB1	(U.S.A. only)		12-10

**COMMON**

DESCRIPTION	TOOL NUMBER	ALTERNATIVE TOOL	TOOL NUMBER	REF. PAGE
Float level gauge	07401-0010000			4-9
Pin spanner	07702-0020000	Pin spanner	M9361-412-099788 (U.S.A. only)	12-21, 12-23
Lock nut wrench, 20 x 24 mm	07716-0020100			8-12, 8-15
Extension bar	07716-0020500	Equivalent commercially available in U.S.A.		8-6, 8-12, 8-15, 12-21, 12-24



DESCRIPTION	TOOL NUMBER	ALTERNATIVE TOOL	TOOL NUMBER	REF. PAGE
Lock nut wrench, 30 x 32 mm	07716-0020400	Equivalent commercially available in U.S.A.		12-21, 12-24
Valve adjusting wrench	07708-0030200			3-6
Flywheel puller	07733-0010000	Flywheel puller	07933-0010000	9-8
Valve guide remover, 5.5 mm	07742-0010100	Valve guide remover	07942-3290100	6-10
Attachment, 32 x 35 mm	07746-0010100			10-9, 11-9, 13-21
Pilot, 15 mm	07746-0040300			10-9, 10-19, 11-9, 12-14, 13-21
Attachment, 42 x 47 mm	07746-0010300			10-19, 11-9, 12-14
Pilot, 20 mm	07746-0040500			11-9
Attachment, 37 x 40 mm	07746-0010200			8-5, 10-9, 12-22
Pilot, 17 mm	07746-0040400			8-5, 10-9, 12-22
Pilot, 25 mm	07746-0040600			10-20
Attachment, 52 x 55 mm	07746-0010400			10-19, 10-20, 11-9
Pilot, 30 mm	07746-0040700			11-9
Attachment, 62 x 68 mm	07746-0010500			13-8, 13-18
Attachment, 72 x 75 mm	07746-0010600			13-18, 13-21
Driver	07749-0010000			
Driver	07746-0020100			11-6
Attachment, 20 mm	07746-0020400			11-6
Attachment, 25 mm I.D.	07746-0030200			10-20, 11-6, 13-22
Driver	07746-0030100			10-20, 10-21, 11-5, 11-6, 13-22
Attachment, 30 mm I.D.	07746-0030300			10-21, 11-5
Valve spring compressor	07757-0010000	Valve spring compressor	07957-3290001	6-8, 6-14
Rear shock absorber compressor	07959-3290001			12-18, 12-19, 13-14

**VALVE SEAT CUTTER**

NOTE: The valve seat cutters are commercially available in U.S.A. Therefore these cutters are not required in U.S.A.

DESCRIPTION	TOOL NUMBER	REF. PAGE
Valve seat cutter, 29 mm (EX 90°)	07780-0010300	6-11
Valve seat cutter, 35 mm (IN 90°)	07780-0010400	6-11
Valve seat cutter, 28 mm (EX 116°)	07780-0012100	6-11
Valve seat cutter, 33 mm (IN 116°)	07780-0012900	6-11
Valve seat cutter, 30 mm (IN, EX 60°)	07780-0014000	6-11
Valve seat cutter holder	07781-0010101	6-11

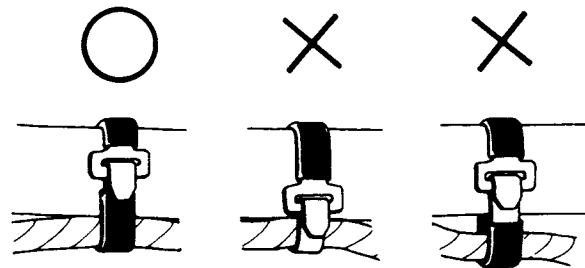
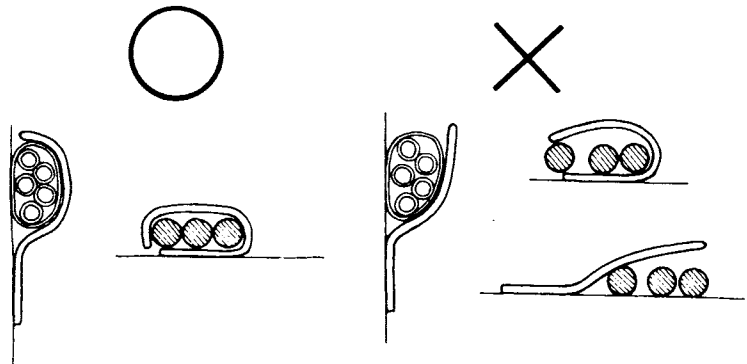


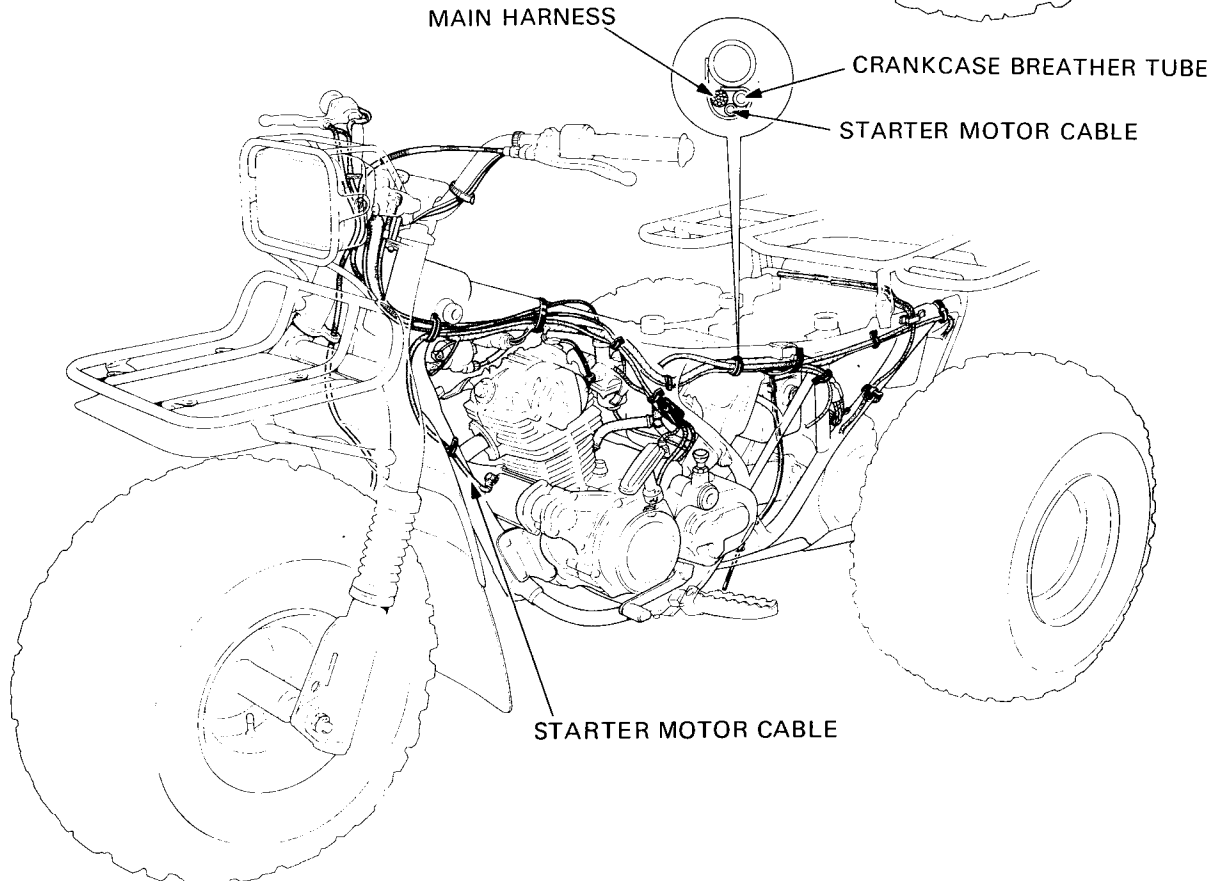
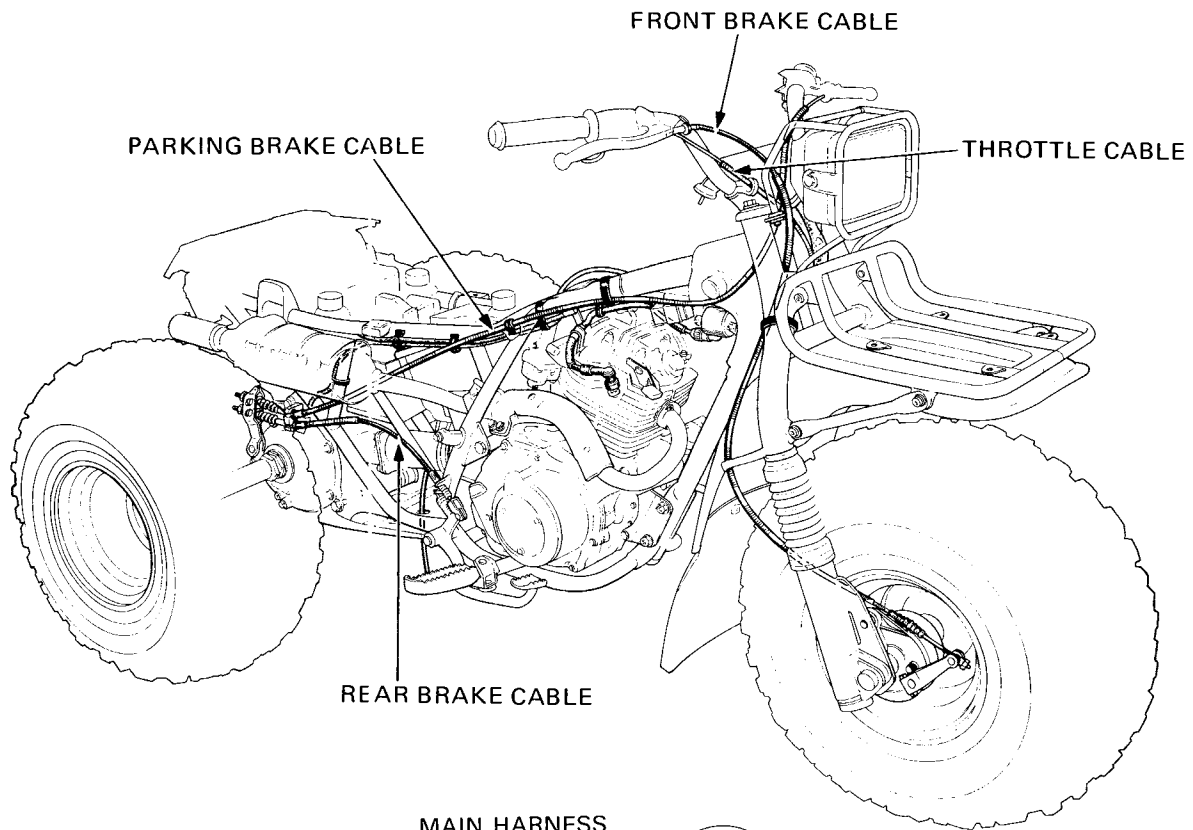
**GENERAL INFORMATION**

**CABLE & HARNESS ROUTING**

Note the following when routing cables and wire harnesses:

- A loose wire, harness or cable can be a safety hazard. After clamping, check each wire to be sure it is secure.
- Do not squeeze wires against the weld or end of its clamp when a weld-on clamp is used.
- Secure wires and wire harnesses to the frame with their respective wire bands at the designated locations. Tighten the bands so that only the insulated surfaces contact the wires or wire harnesses.
- Route harnesses so they are not pulled taut or have excessive slack.
- Protect wires and harnesses with electrical tape or tubes if they contact a sharp edge or corner. Clean the attaching surface thoroughly before applying tape.
- Do not use a wire or harness with a broken insulator. Repair by wrapping them with protective tape or replace them.
- Route wire harnesses to avoid sharp edges or corners.
- Also avoid the projected ends of bolts and screws.
- Keep wire harnesses away from the exhaust pipe and other parts that get hot.
- Be sure grommets are seated in their grooves properly.
- After clamping, check each harness to be certain that it is not interfering with any moving or sliding parts.
- Wire harnesses routed along the handlebars should not be pulled taut, have excessive slack, be pinched, or interfere with adjacent or surrounding parts in all steering positions.
- After routing, check that the wire harnesses are not twisted or kinked.

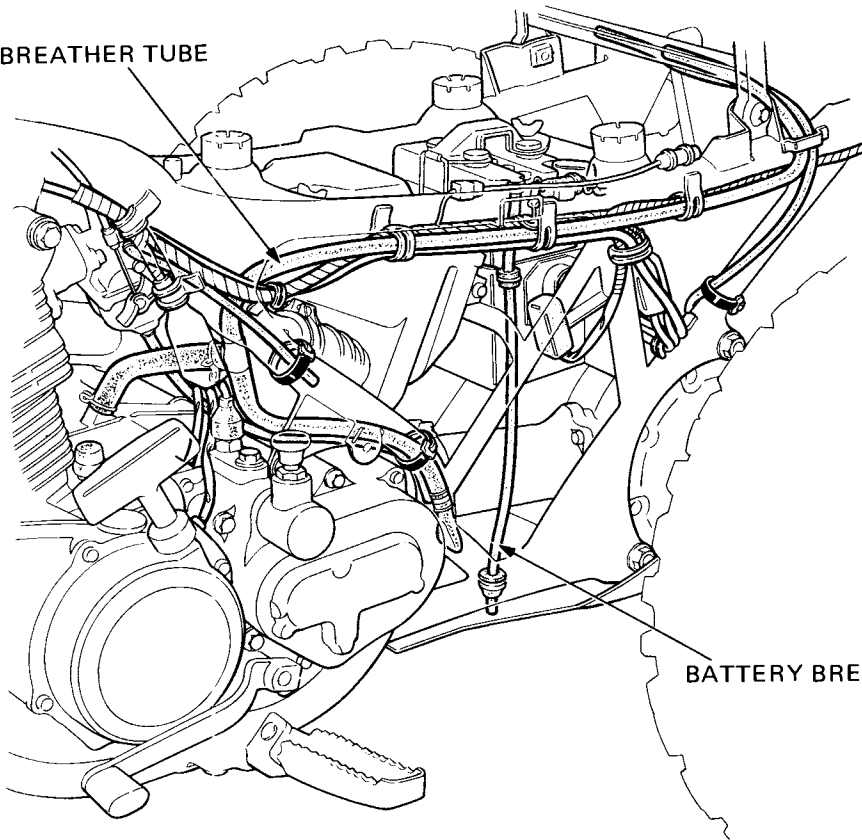






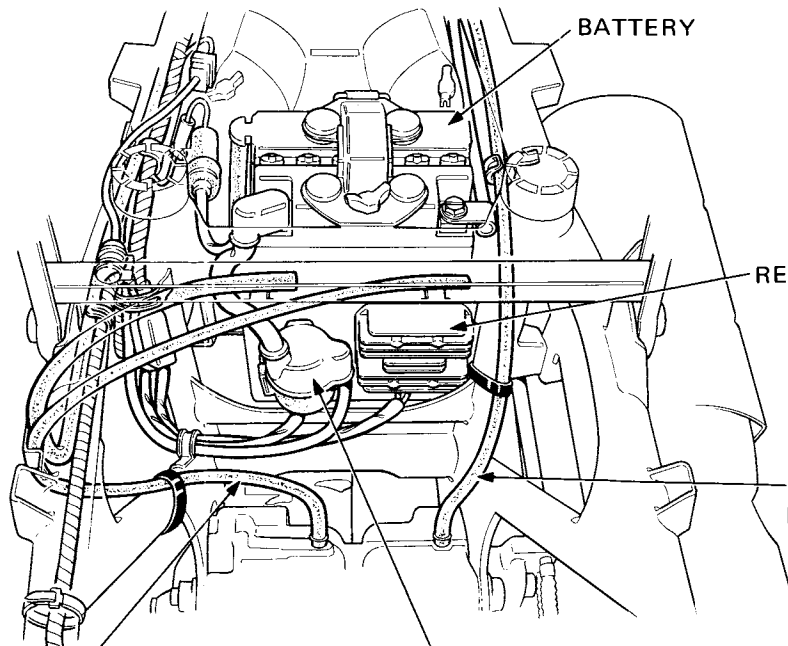
**GENERAL INFORMATION**

CRANKCASE BREATHER TUBE



BATTERY BREATHER TUBE

BATTERY



REGULATOR/RECTIFIER

REAR BRAKE  
BREATHER TUBE

FINAL DRIVE  
GEAR BREATHER TUBE

STARTER MOTOR RELAY



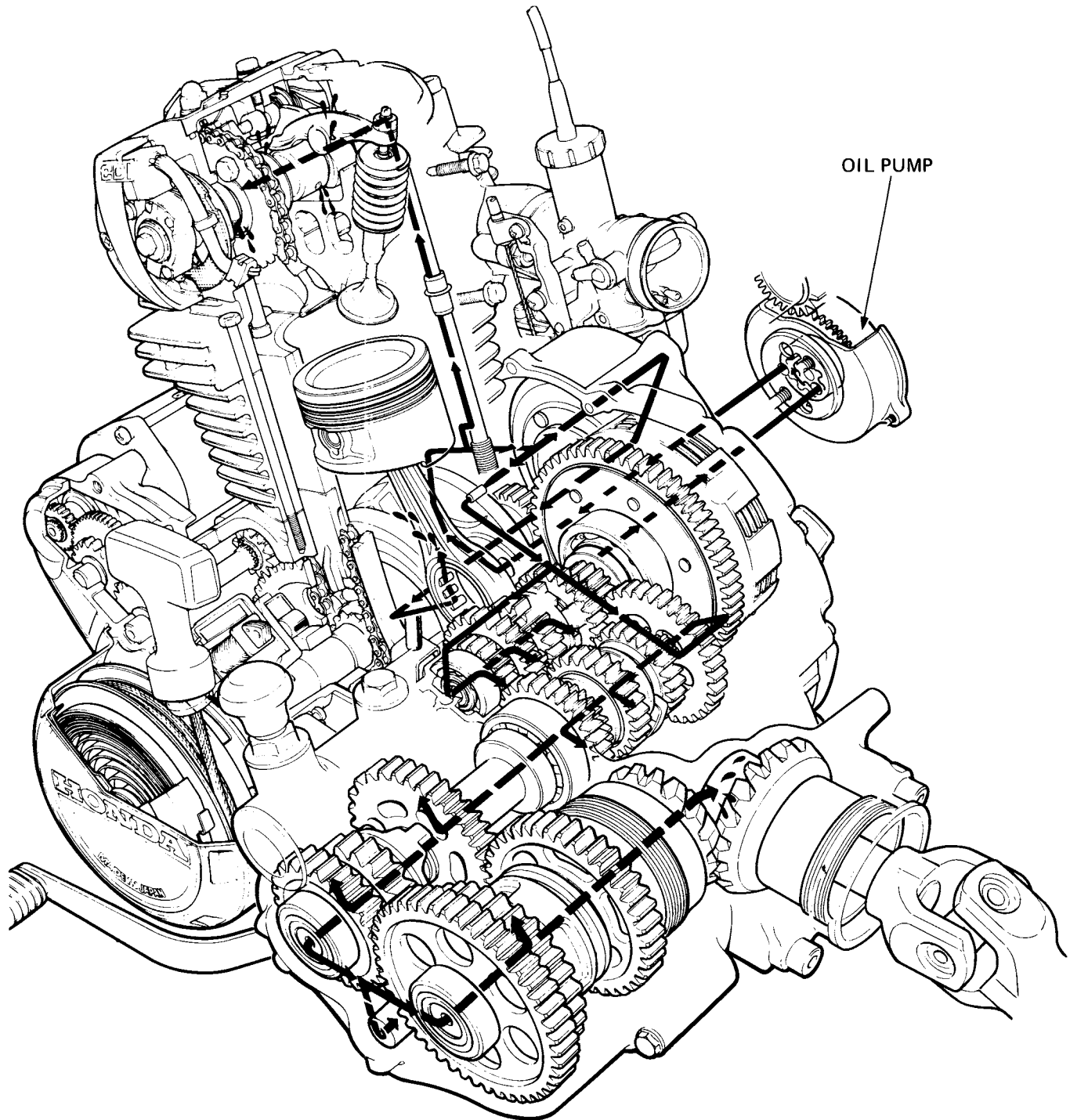
## **NOISE EMISSION CONTROL SYSTEM**

The U.S. Environmental Protection Agency requires manufacturers to certify that vehicles built after January 1, 1983 will comply with applicable noise emission standards for one year or 1,865 miles (3,000 km) after the time of sale to the ultimate purchaser, when operated and maintained according to the instructions provided. Compliance with the terms of the Distributor's Warranty for the Honda Vehicle Noise Emission Control System is necessary in order to keep the noise emission control system in effect.

**TAMPERING WITH THE NOISE CONTROL SYSTEM IS PROHIBITED:** Federal law prohibits the following acts or the causing thereof: (1) The removal or rendering inoperative by any person, other than for purposes of maintenance, repair, or replacement, of any device or element of design incorporated into any new vehicle for the purpose of noise control prior to its sale or delivery to the ultimate purchaser or while it is in use; or (2) the use of the vehicle after such device or element of design has been removed or rendered inoperative by any person.

**AMONG THOSE ACTS PRESUMED TO CONSTITUTE TAMPERING ARE THE ACTS LISTED BELOW:**

1. Removal of, or puncturing the muffler, bafflers, header pipes or any other component which conducts exhaust gases.
2. Removal of, or puncturing of any part of the intake system.
3. Lack of proper maintenance.
4. Replacing any moving parts of the vehicle, or parts of the exhaust or intake system, with parts other than those specified by the manufacturer.







SERVICE INFORMATION	2-1
TROUBLESHOOTING	2-1
ENGINE OIL LEVEL CHECK	2-2
ENGINE OIL CHANGE AND OIL FILTER SCREEN CLEANING	2-2
OIL FILTER ROTOR CLEANING	2-3
FINAL DRIVE OIL	2-3
LUBRICATION POINTS	2-4

## SERVICE INFORMATION

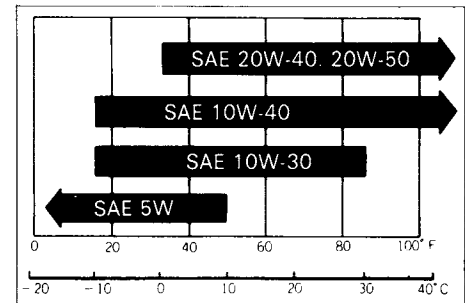
### GENERAL

- Section 8 shows how to service the oil pump.

### SPECIFICATIONS

Engine oil capacity	1.8 liters (1.9 US qt, 1.6 Imp qt) at disassembly 1.0 liter (1.1 US qt, 0.9 Imp qt) at draining
Engine oil recommendation	Use Honda 4-stroke oil or equivalent. API Service Classification: SE or SF Viscosity: SAE 10W-40
Final drive oil capacity	220 cc (7.4 oz)
Final drive oil recommendation	Hypoid gear oil SAE #80

### OIL VISCOSITY



### TORQUE VALUES

Oil filter screen cap	9-15 N·m (0.9-1.5 kg·m, 7-11 ft·lb)
Oil filter rotor cover bolt	10-14 N·m (1.0-1.4 kg·m, 7-10 ft·lb)

## TROUBLESHOOTING

### Oil level too low

1. Normal oil consumption
2. External oil leaks
3. Worn piston rings
4. Oil not changed often enough
5. Faulty head gasket

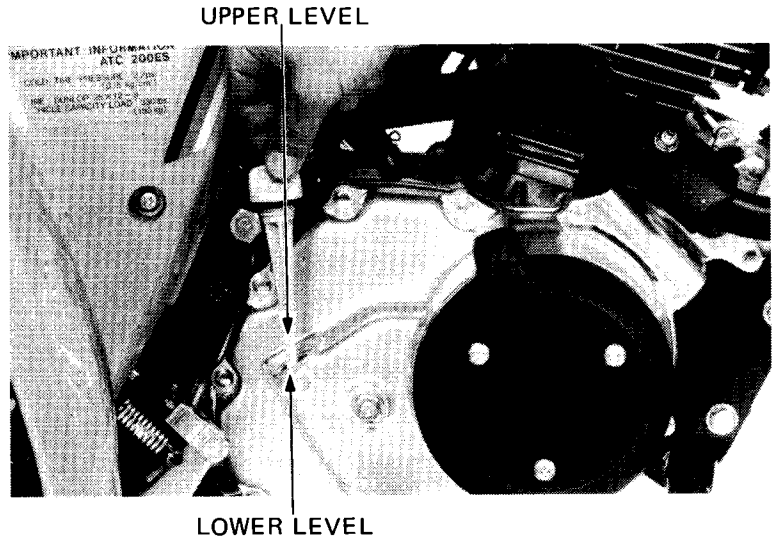


**LUBRICATION**

**ENGINE OIL LEVEL CHECK**

Place the ATC on level ground.  
Check the oil level with the oil cap/dipstick.  
Do not screw in the cap when making this check.

If the oil level is below the lower level mark on the dipstick, fill to the upper level mark with the recommended oil (Page 2-1).



**ENGINE OIL CHANGE AND OIL FILTER SCREEN CLEANING**

**NOTE:**

- Drain the oil with the engine warm.
- The oil filter screen and spring will come out when the oil filter screen cap is removed.

Remove the oil filler cap and oil filter screen cap. Operate the recoil starter several times to completely drain any residual oil. Clean the oil filter screen. Make sure that the oil filter screen, sealing rubber, screen cap and O-ring are in good condition. Install the oil filter screen, spring and screen cap.

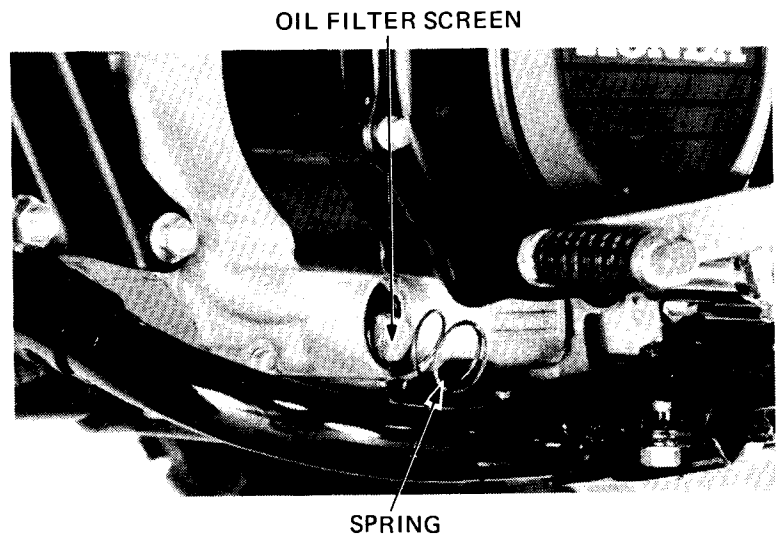
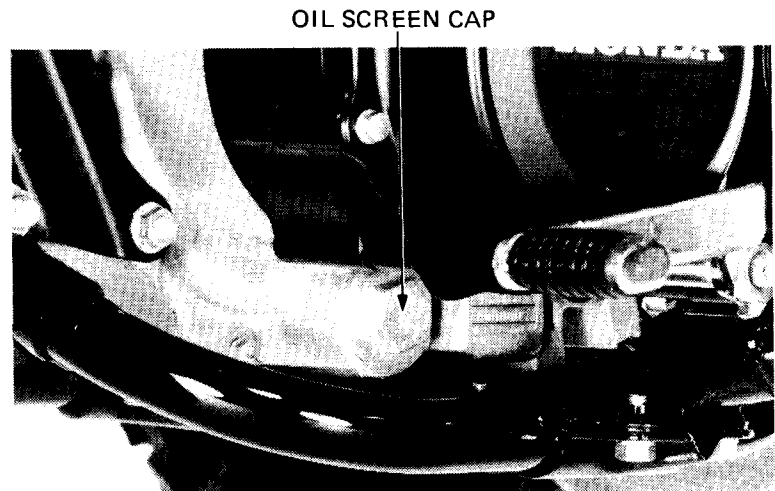
**TORQUE: 9–15 N·m (0.9–1.5 kg·m, 7–11 ft·lb)**

Fill the crankcase with the recommended grade oil (Page 2-1).

**ENGINE OIL CAPACITY:**

**1.0 liters (1.1 US qt, 0.9 Imp qt)  
after draining**

Install the oil filler cap.  
Start the engine and let it idle for 2–3 minutes. Stop the engine.  
With the ATC on level ground, make sure that the oil level is at the upper level mark.  
Be sure there are no oil leaks.





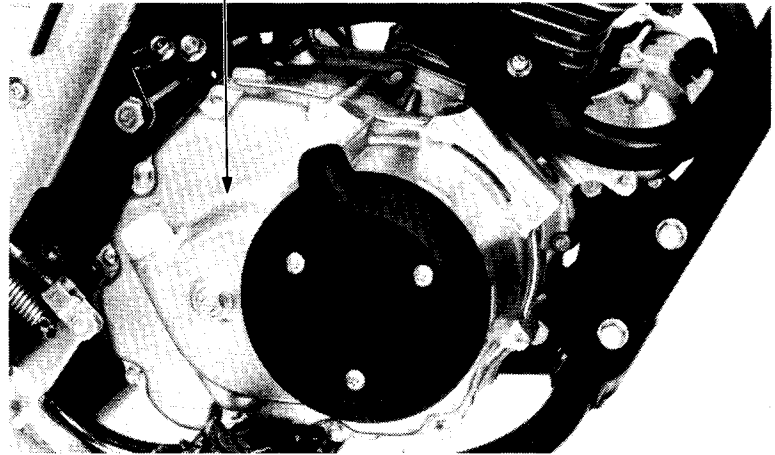
## OIL FILTER ROTOR CLEANING

**NOTE:**

Clean the oil filter rotor before adding oil.

Remove the right crankcase cover (Page 8-3).

RIGHT CRANKCASE COVER



Remove the oil filter rotor cover and clean the inside of the rotor cover and rotor.

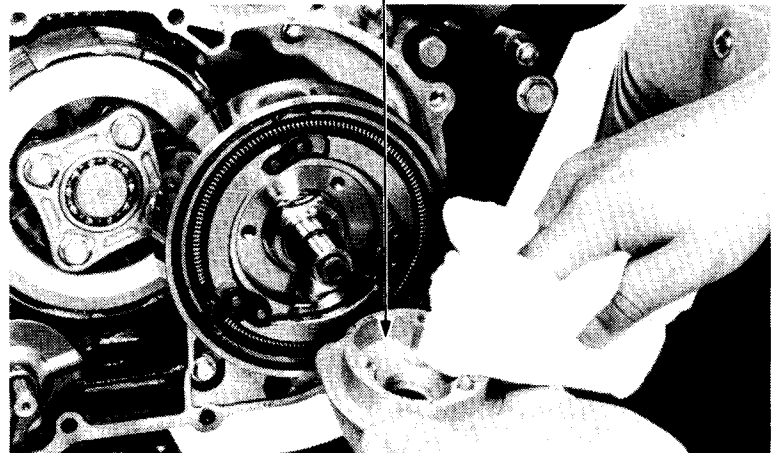
Install the oil filter rotor cover (Page 8-6).

**TORQUE: 10–14 N·m (1.0–1.4 kg·m, 7–10 ft·lb)**

Install the right crankcase cover (Page 8-21).

Fill the engine with the recommended grade of oil (Page 2-1).

OIL FILTER ROTOR COVER



## FINAL DAIVE OIL

### CHECK

Remove the oil filler cap.

Level the rear wheel on the ground by placing a support block under the engine.

Check that the oil level reaches the lower edge of the oil filler cap hole.

Check for leaks, if the level is low. Pour fresh oil through the oil filler hole until it reaches the lower edge.

### CHANGE

Remove the oil filler cap.

Remove the drain bolt to drain all oil from the final gear case.

Install the drain bolt securely.

Fill the gear case with the recommended oil up to the correct level.

**OIL CAPACITY: 350 cc (11.8 US oz)**

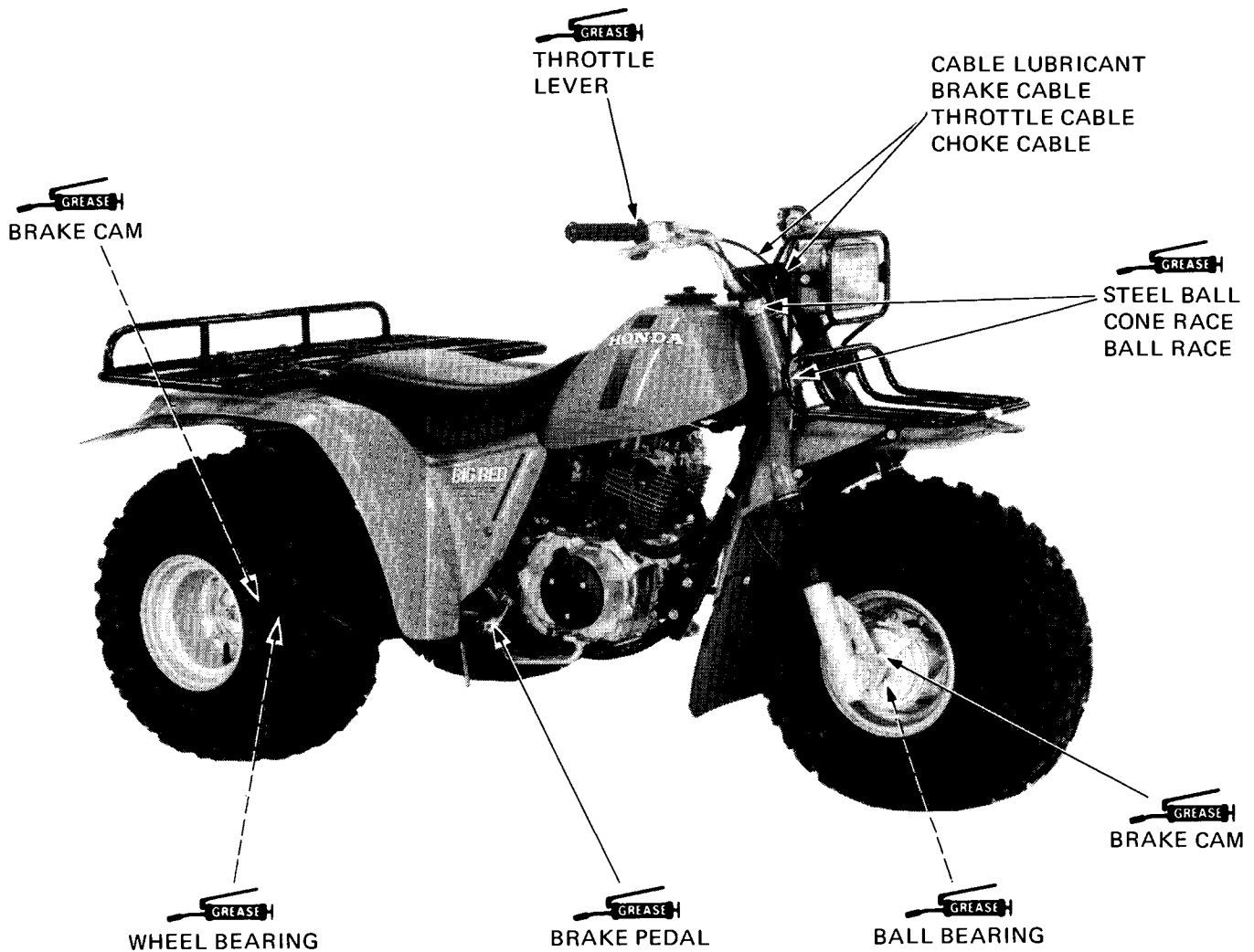
**RECOMMENDED OIL: Hypoid gear oil SAE #80**



**LUBRICATION**

**LUBRICATION POINTS**

Use general purpose grease when no other specification is given. Apply oil or grease to any 2 sliding surfaces and cables not shown here.





SERVICE INFORMATION	3-1	CYLINDER COMPRESSION	3-9
MAINTENANCE SCHEDULE	3-3	BATTERY	3-9
AIR CLEANER	3-4	BRAKE SHOES	3-10
SPARK PLUG	3-5	FRONT BRAKE	3-11
VALVE CLEARANCE	3-5	REAR BRAKE	3-11
FUEL STRAINER	3-6	CLUTCH	3-13
THROTTLE OPERATION	3-7	SPARK ARRESTER CLEANING	3-13
CAM CHAIN TENSION	3-7	NUTS, BOLTS, FASTENERS	3-13
CARBURETOR IDLE SPEED	3-8	LIGHTING EQUIPMENT	3-14
FUEL LINE	3-8	TIRES	3-14
IGNITION TIMING	3-8	STEERING HEAD BEARINGS	3-14

## SERVICE INFORMATION

### SPECIFICATIONS

Ignition timing:

Initial 10° ± 2° BTDC at idle  
Full advance 30° ± 2° BTDC at 3,350 rpm

Spark plug:

Spark plug gap 0.6–0.7 mm (0.024–0.028 in)

Recommended spark plugs:

DR8ES-L (NGK)  
X24ESR-U (ND)

Valve clearance (cold)

Intake 0.05 mm (0.002 in)  
Exhaust 0.05 mm (0.002 in)

Throttle lever free play

5–10 mm (3/16–3/8 in)

Idle speed

1,400 ± 100 rpm

Cylinder compression

11.0 ± 1.0 kg/cm<sup>2</sup> (156 ± 14 psi)

Front brake lever free play

15–20 mm (5/8–3/4 in)

Rear brake pedal free play

15–20 mm (5/8–3/4 in)

Rear brake lever (parking brake lever)  
free play

15–20 mm (5/8–3/4 in)

Front/rear rim size

9.2 x 9.0

Front/rear tire size

25 x 12–9

Front/rear tire pressure

Recommended pressure 2.2 psi (15 kPa, 0.15 kg/cm<sup>2</sup>)  
Minimum pressure 1.7 psi (12 kPa, 0.12 kg/cm<sup>2</sup>)  
Maximum pressure 2.6 psi (18 kPa, 0.18 kg/cm<sup>2</sup>)

Front/rear tire circumference

Standard 1,920 mm (75.6 in)



**MAINTENANCE**

---

**TORQUE VALUES**

Spark plug	12–19 N·m (1.2–1.9 kg·m, 9–14 ft·lb)
Valve adjuster cover	10–14 N·m (1.0–1.4 kg·m, 7–10 ft·lb)
Cam chain tensioner adjusting bolt	15–22 N·m (1.5–2.2 kg·m, 11–16 ft·lb)
Clutch adjusting screw lock nut	19–25 N·m (1.9–2.5 kg·m, 14–18 ft·lb)
Valve adjuster lock nut	15–18 N·m (1.5–1.8 kg·m, 11–13 ft·lb)

**TOOL**

**Common**

Valve adjusting wrench, 10 x 12 mm	07708–0030200
------------------------------------	---------------



# MAINTENANCE

The maintenance intervals shown in the following schedule are based upon average riding conditions. ATC's subjected to severe use, or ridden in wet or unusually dusty areas, require more frequent servicing. Items marked \* should be serviced by an authorized Honda dealer, unless the owner has the proper tools and is mechanically proficient. Other maintenance items are simple to perform and may be serviced by the owner.

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

- I: Inspect and Clean, Adjust, Lubricate or Replace, if necessary.
- C: Clean
- A: Adjust
- R: Replace

ITEM	INITIAL SERVICE PERIOD (First week of operation)	REGULAR SERVICE PERIOD (Every 30 operating days)	Refer to page
ENGINE OIL (NOTE 1, 2)	R	R	2-2
* ENGINE OIL FILTER SCREEN	C	C	2-2
* ENGINE OIL FILTER ROTOR		C	2-3
AIR CLEANER ELEMENT (NOTE 2)		I	3-4
SPARK PLUG		I	3-5
BATTERY	I	I	3-9
* VALVE CLEARANCE	I	I	3-5
* CAM CHAIN TENSIONER	A	A	3-7
* CARBURETOR	I	I	3-8
FUEL LINE	I: (EVERY YEAR)		3-8
* FUEL FILTER	C: (EVERY YEAR)		3-6
THROTTLE OPERATION	I	I	3-7
FINAL DRIVE OIL	I: (EVERY YEAR), R: (EVERY 2 YEARS)		2-3
* BRAKE SHOES	I: (EVERY YEAR)		3-10
BRAKE CONTROL LINKAGE	I	I	3-11
* CLUTCH	A	A	3-13
* SPARK ARRESTER		C	3-13
ALL NUTS, BOLTS, FASTENERS	I	I	3-13
LIGHTING EQUIPMENT	I	I	3-14
TIRES	I	I	3-14
* STEERING HEAD BEARING	A: (EVERY YEAR)		12-22

- NOTES: 1. Replace every 30 operating days or every 3 months, whichever comes first.  
 2. Service more frequently when riding in dusty areas.

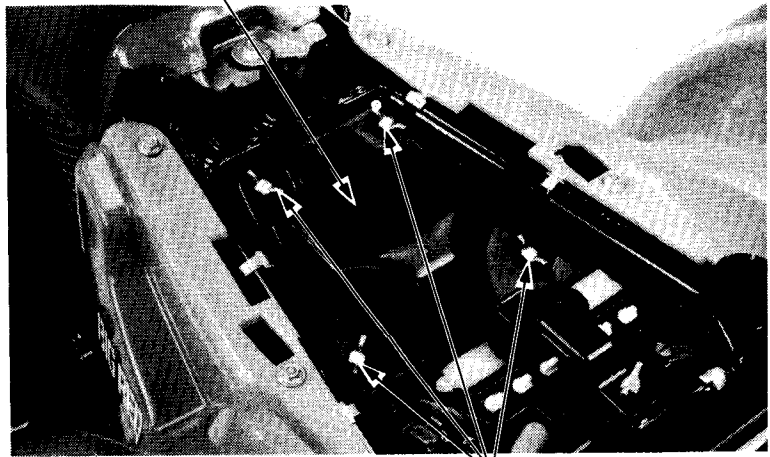


**MAINTENANCE**

**AIR CLEANER**

Remove the seat by pulling the seat lever.  
Remove the four wing bolts attaching the air cleaner case cover.  
Remove the air cleaner case cover.  
Remove the air cleaner element assembly from the air cleaner case.

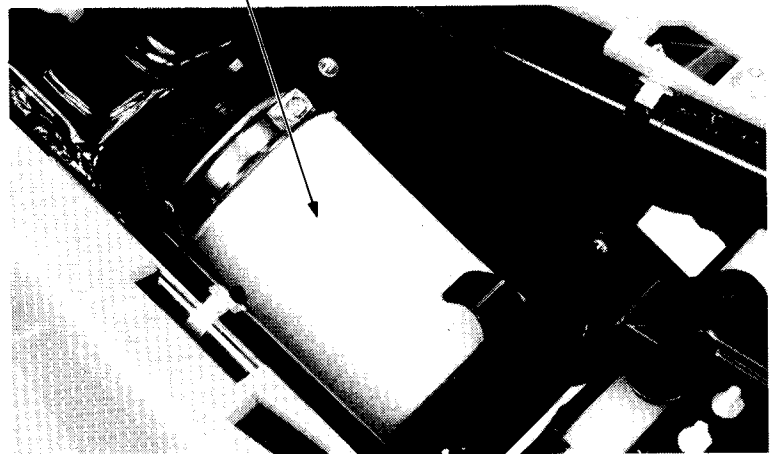
AIR CLEANER CASE COVER



WING BOLTS

Remove the bracket from the element holder.  
Remove the air cleaner element from the element holder.

AIR CLEANER ELEMENT

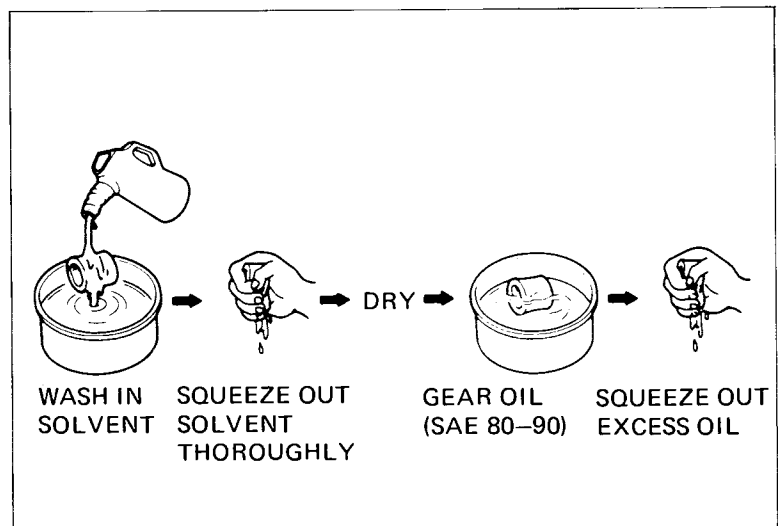


Wash the element in non-flammable or high flash point solvent, squeeze out the solvent thoroughly, and allow to dry.

Soak the element in gear oil (SAE 80-90) and squeeze out excess.  
Place the element onto the element holder.

Install the bracket onto the element holder.  
Install the air cleaner case cover with the four wing bolts.  
Install the seat.

Install the element assembly into the air cleaner case.







### SPARK PLUG

Disconnect the spark plug cap and remove the spark plug.

Visually inspect the spark plug electrodes for wear. The center electrode should have square edges and the side electrode should have a constant thickness. Discard the spark plug if there is apparent wear or if the insulator is cracked or chipped. Measure the gap with a wire-type feeler gauge and adjust by carefully bending the side electrode.

#### SPARK PLUG GAP:

0.6–0.7 mm (0.024–0.028 in)

#### RECOMMENDED REPLACEMENT PLUG:

DR8ES-L (NGK)

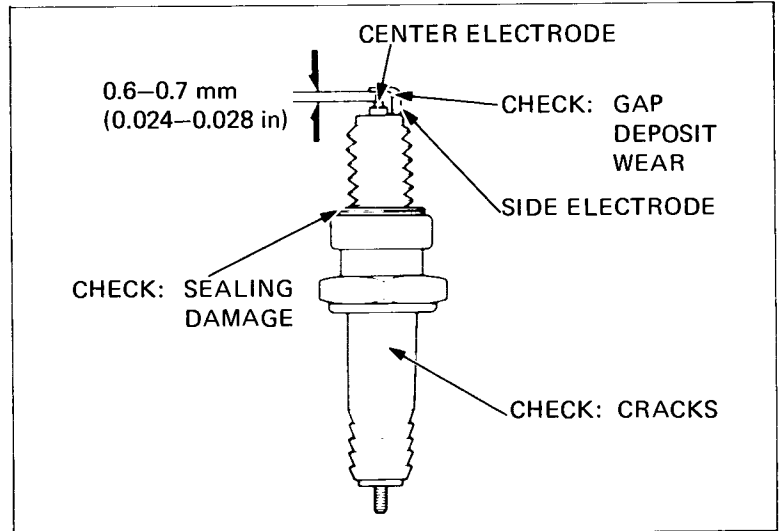
X24ESR-U (ND)

Check the sealing washer and replace with a new one if damaged.

With the sealing washer attached, thread the spark plug in by hand to prevent cross-threading. Tighten the spark plug to the specified torque.

**TORQUE: 12–19 N·m (1.2–1.9 kg·m, 9–14 ft·lb)**

Connect the spark plug cap.



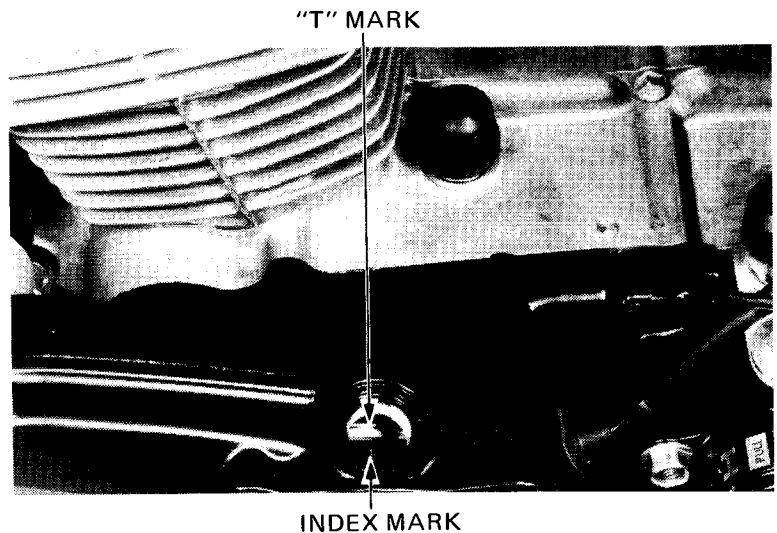
### VALVE CLEARANCE

#### NOTE:

- Inspect and adjust valve clearance while the engine is cold (below 35°C/95°F).
- Make sure the decompressor valve lifter has free play.

Remove the timing mark hole cap.  
Remove the valve adjuster covers.

Rotate the crankshaft by using the recoil starter and align the "T" mark on the rotor with the index mark. The piston must be at TDC of the compression stroke.





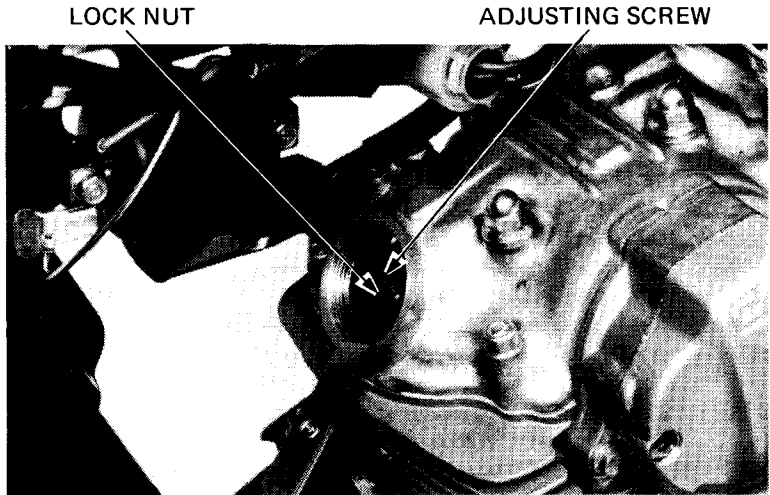
## MAINTENANCE

Inspect the intake and exhaust valve clearances by inserting the feeler gauge between the adjusting screw and valve stem.

### VALVE CLEARANCES:

Intake: 0.05 mm (0.002 in)

Exhaust: 0.05 mm (0.002 in)



Adjust by loosening the lock nut and turning the adjusting screw until there is a slight drag on the feeler gauge.

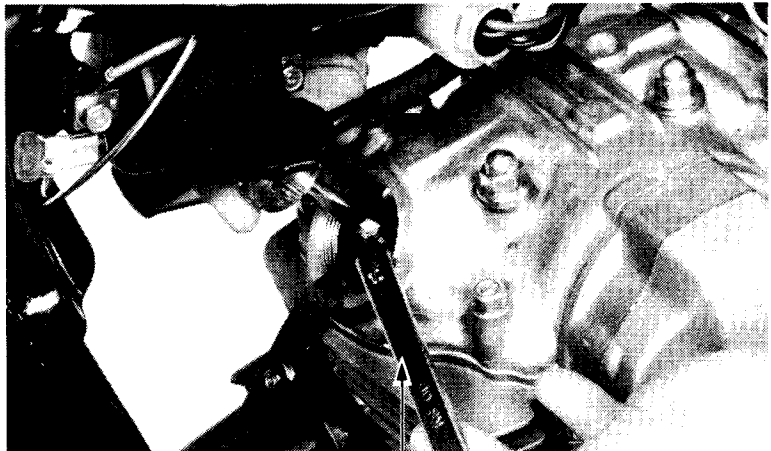
Hold the adjusting screw and tighten the lock nut.

**TORQUE: 15–18 N·m (1.5–1.8 kg·m,  
11–13 ft·lb)**

Recheck the valve clearance and install the valve adjuster covers.

**TORQUE: 10–14 N·m (1.0–1.4 kg·m, 7–10 ft·lb)**

Install the timing hole cap.



VALVE ADJUSTING WRENCH, 10 x 12 mm  
07708-0030200

## FUEL STRAINER

Disconnect the fuel tube and drain fuel from the tank.

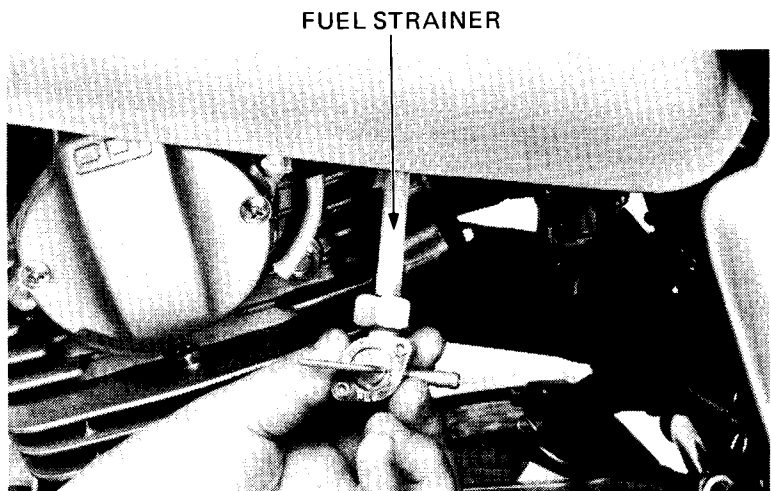
### WARNING

*Keep gasoline away from flames or sparks.  
Wipe up spilled gasoline at once.*

Remove the fuel valve by loosening the valve nut. Remove the fuel strainer and wash it in clean non-flammable or high flash point solvent.

Install the strainer and valve and attach the fuel line.

Fill the fuel tank and turn the fuel valve "ON" and check for leaks.





## THROTTLE OPERATION

Check for smooth throttle lever full opening and automatic full closing in all steering positions. Make sure there is no deterioration, damage or kinking in the throttle cable. Replace any damaged parts.

Disconnect the throttle cable at the upper end. Thoroughly lubricate the cable and pivot point with a commercially available cable lubricant to prevent premature wear.

Install the throttle cable in the reverse order of removal.

Make sure the throttle lever free play is 5–10 mm (3/16–3/8 in) at the tip of the throttle lever.

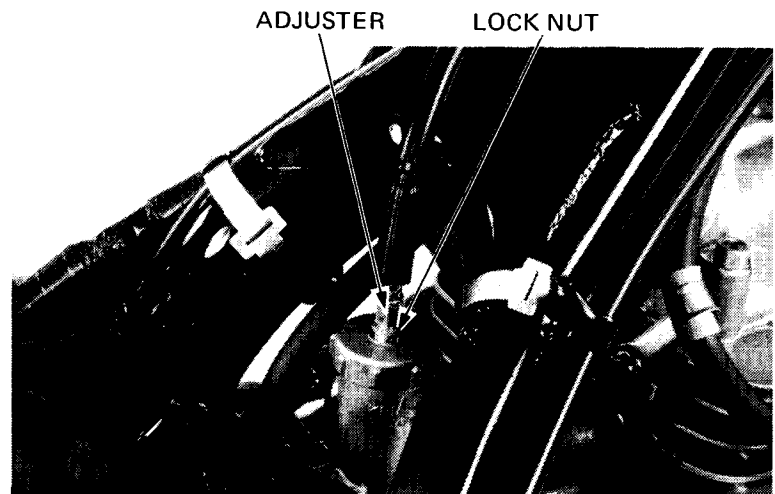
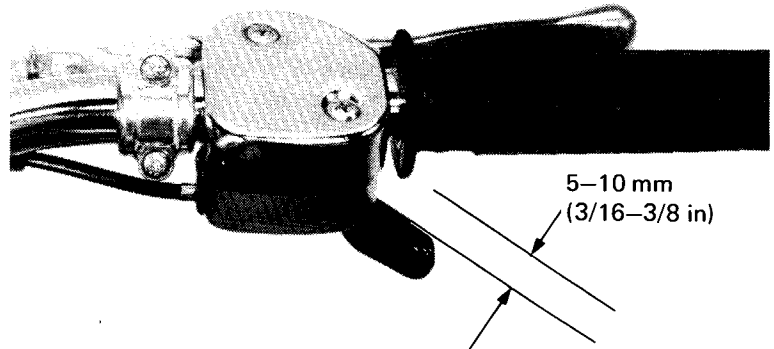
Adjust as follows:

Remove the fuel tank.

Slide the rubber cap off the adjuster on the carburetor cap.

Adjust the throttle lever free play by loosening the lock nut and turning the adjuster on the carburetor. Tighten the lock nut and install the adjuster rubber cap.

Install the fuel tank.



## CAM CHAIN TENSION

Start the engine and allow it to idle.

Remove the rubber cap and loosen the cam chain tensioner adjusting bolt.

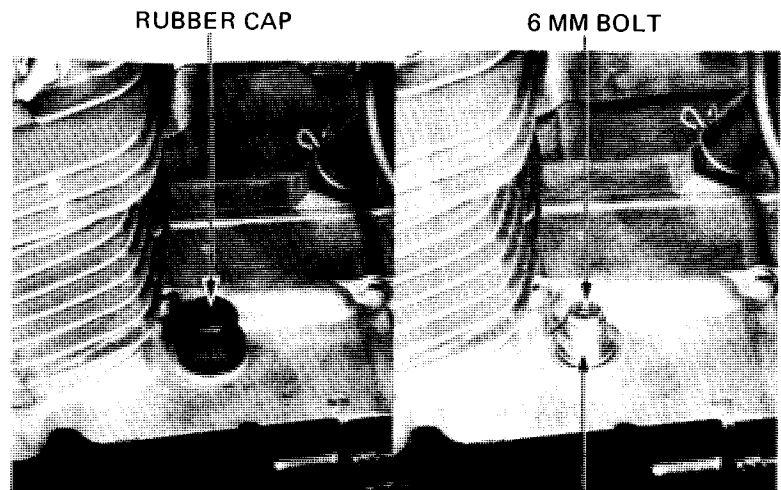
When the cam chain tensioner adjusting bolt is loosened, the tensioner will automatically position itself to provide the correct tension.

Retighten the adjusting bolt and install the rubber cap.

**TORQUE: 15–22 N·m (1.5–2.2 kg·m,  
11–16 ft·lb)**

**NOTE:**

Do not attempt to loosen the 6 mm bolt while adjusting.



ADJUSTING BOLT



**MAINTENANCE**

**CARBURETOR IDLE SPEED**

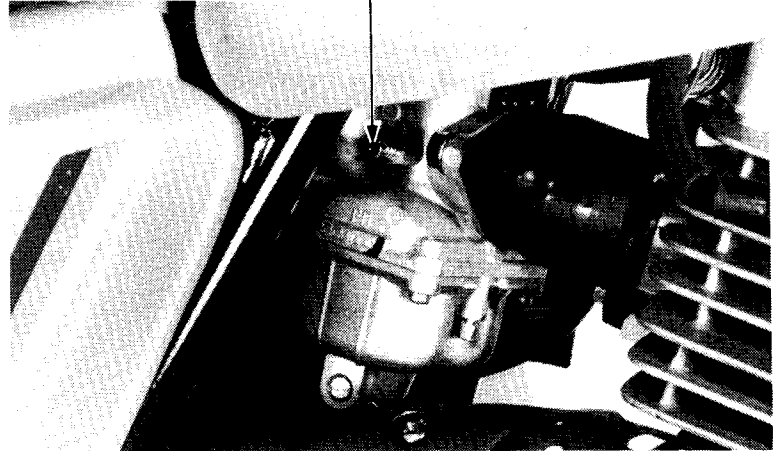
**NOTE:**

- Inspect and adjust the idle speed after all other maintenance items have been performed and are within specifications.
- The engine must be warm for accurate idle speed inspection and adjustment.

Warm up the engine for about ten minutes. Turn the throttle stop screw as required to obtain the specified idle speed.

**IDLE SPEED: 1,400 ± 100 rpm**

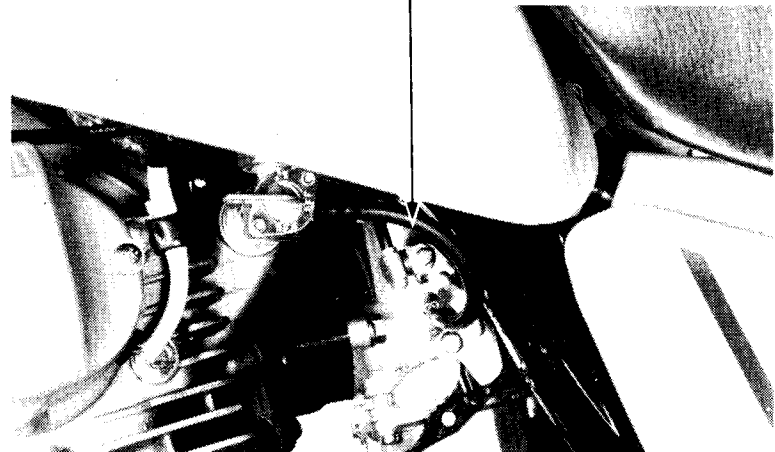
THROTTLE STOP SCREW



**FUEL LINE**

Replace any parts which show signs of deterioration, damage or leaks.

FUEL LINE



**IGNITION TIMING**

**NOTE:**

The Capacitive Discharge Ignition (CDI) system is factory pre-set and does not require adjustment. To inspect the function of the CDI components, ignition timing inspection procedures are given here.

Remove the timing hole cap. Connect a tachometer and timing light. Start the engine and allow it to idle.

**IDLE SPEED: 1,400 ± 100 rpm**

Inspect the ignition timing. Timing is correct, if the "F" mark on the flywheel is aligned with the index mark on the left crankcase cover at idle.





## CYLINDER COMPRESSION

Warm up the engine. After the engine is warm, stop the engine and remove the spark plug.

Insert a compression gauge.

Pull out the choke knob all the way and fully open the throttle.

Push the starter button until the compression gauge reading stops rising.

**NOTE:**

Watch for compression leaking at the gauge connection.

**COMPRESSION:**

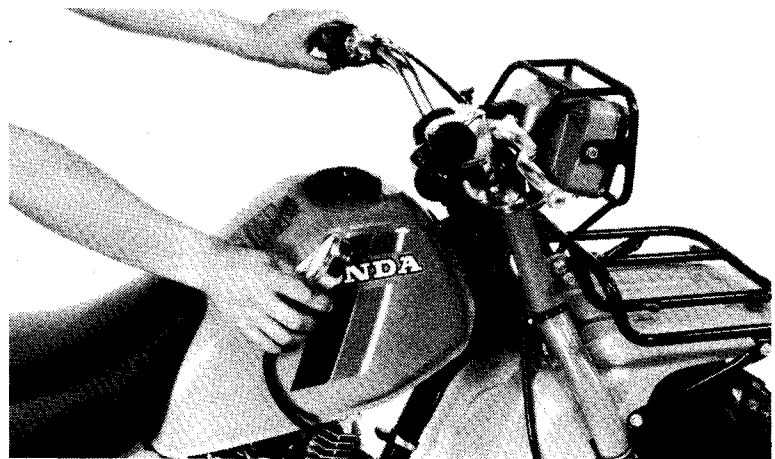
$11.0 \pm 1.0 \text{ kg/cm}^2$  ( $156 \pm 14 \text{ psi}$ )

**Low compression can be caused by:**

- Improper valve adjustment
- Valve leakage
- Cylinder head gasket leaking
- Worn piston ring or cylinder

**High compression can be caused by:**

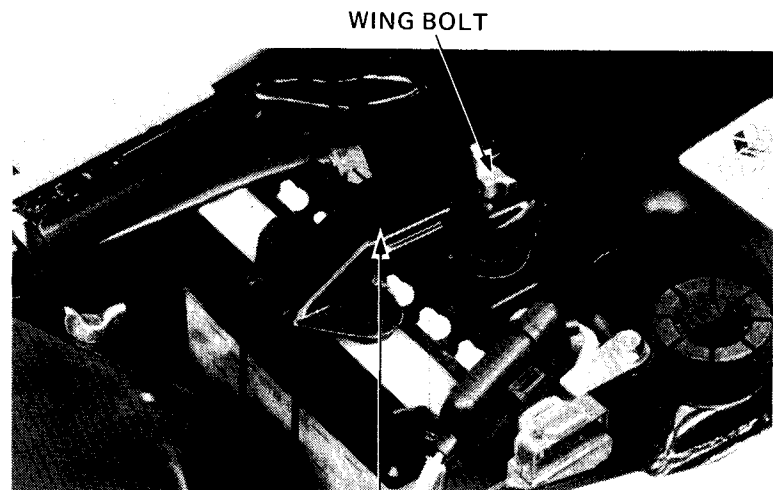
Carbon deposits in combustion chamber or on piston crown. The maximum reading is usually reached within 4–7 seconds.



## BATTERY

Remove the seat by pulling the seat lever.

Remove the battery holder by loosening the wing bolt.



WING BOLT

BATTERY HOLDER



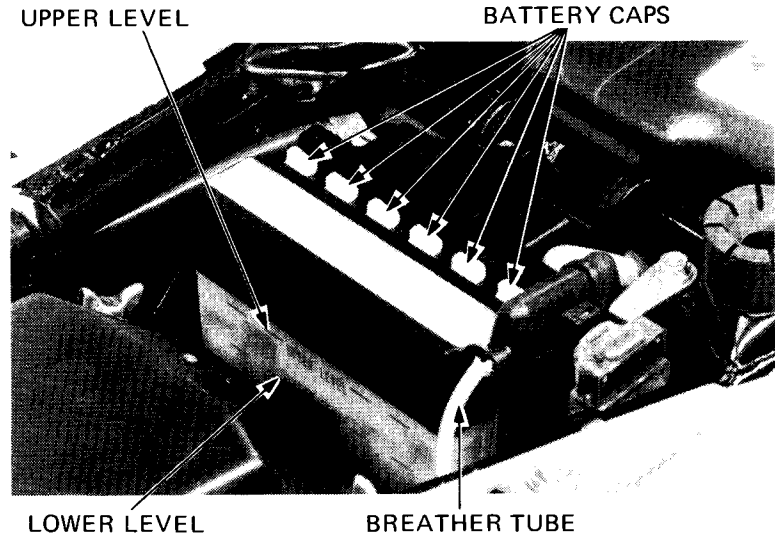
## MAINTENANCE

Inspect the battery fluid level.

When the fluid level nears the lower level, refill with distilled water to the upper level. Add only distilled water. Tap water will shorten the service life of the battery.

### WARNING

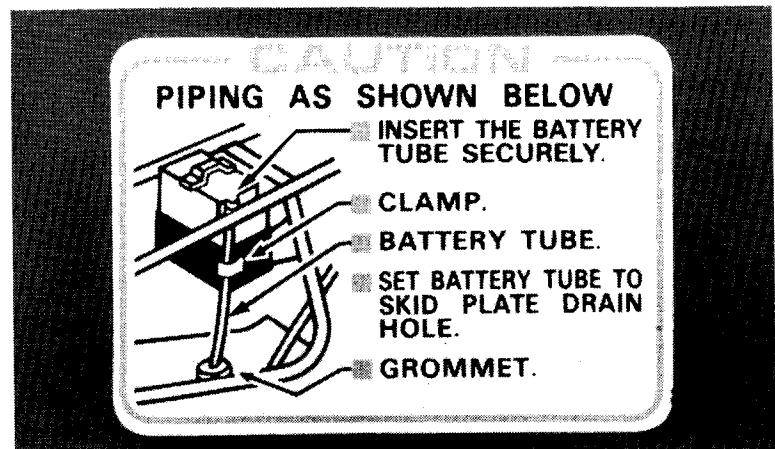
- *The battery electrolyte contains sulfuric acid. Protect your eyes skin and clothing. In case of contact flush thoroughly with water and contact a doctor if electrolyte gets in your eyes.*
- *Batteries produce explosive gases. Keep sparks, flames and cigarettes away.*



### CAUTION

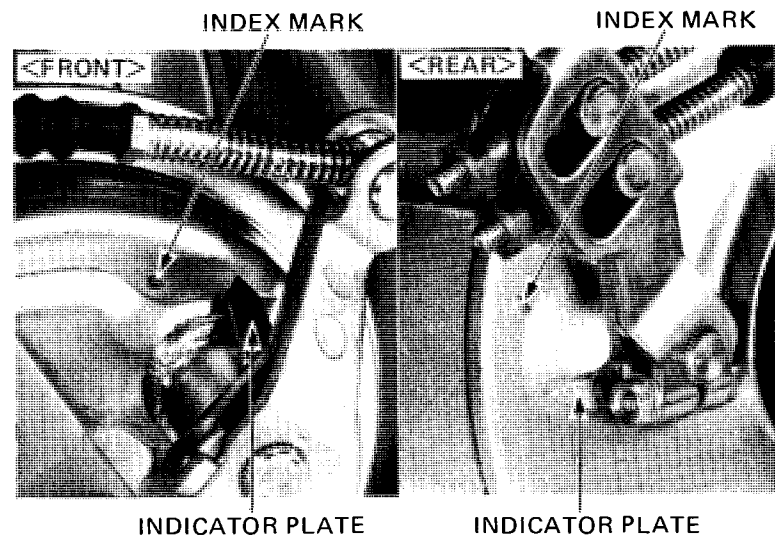
*The battery breather tube must be routed as shown on the label. Do not bend or twist the breather tube. A bent or kinked breather tube may pressurize the battery and damage its case causing electrolyte leakage.*

Replace the battery if sulphation forms or sediments (paste) accumulate on the bottom.



## BRAKE SHOES

Replace the brake shoes if the indicator plate aligns with the brake panel index mark when the front brake lever, rear brake lever or pedal is applied.





**HONDA**

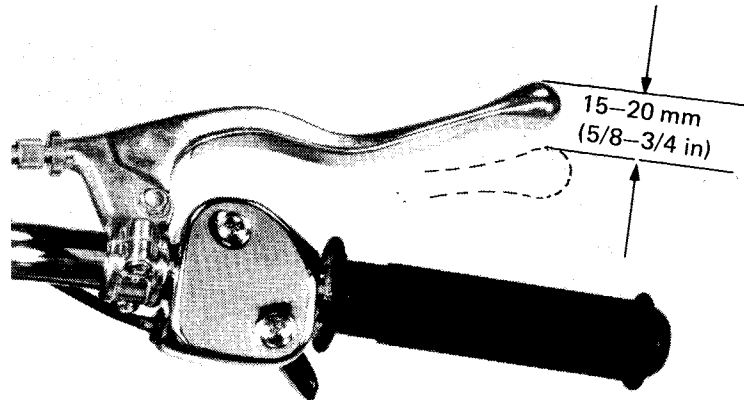
**ATC200ES**

## FRONT BRAKE

Check the cable and brake lever for loose connections, excessive play, or other damage. Replace or repair if necessary.

Disconnect the brake cable at the upper end. Thoroughly lubricate the cable and pivot point with a commercially available cable lubricant to prevent premature wear.

Install the brake cable.  
Make sure brake lever free play is 15–20 mm (5/8–3/4 in) at the brake lever tip.

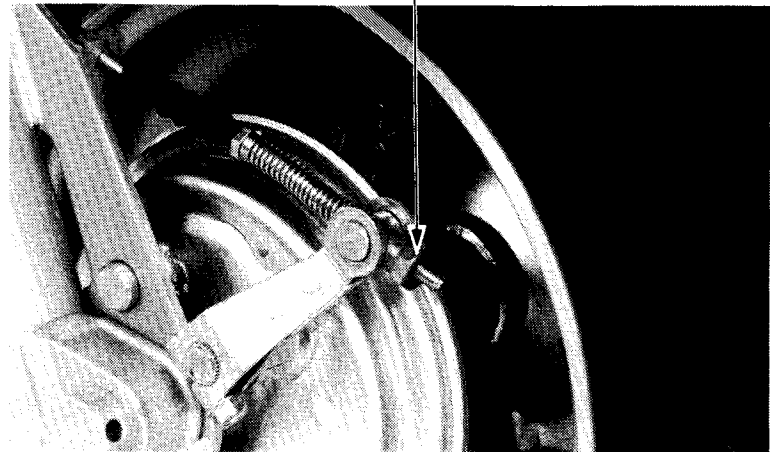


Adjust free play by turning the adjusting nut.

**NOTE:**

Make sure the cut-out of the adjusting nut is seated on the brake arm pin.

ADJUSTING NUT



## REAR BRAKE

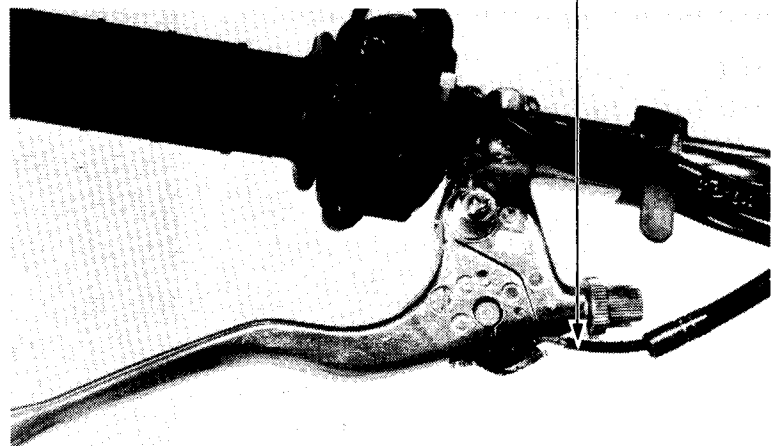
Check the cable, brake lever and brake pedal for loose connections, excessive play, or other damage.

Replace or repair if necessary.  
Disconnect the brake cables at the brake lever or pedal ends.

Thoroughly lubricate the cables and their pivot point with a commercially available cable lubricant to prevent premature wear.

Install the cables.

BRAKE CABLE

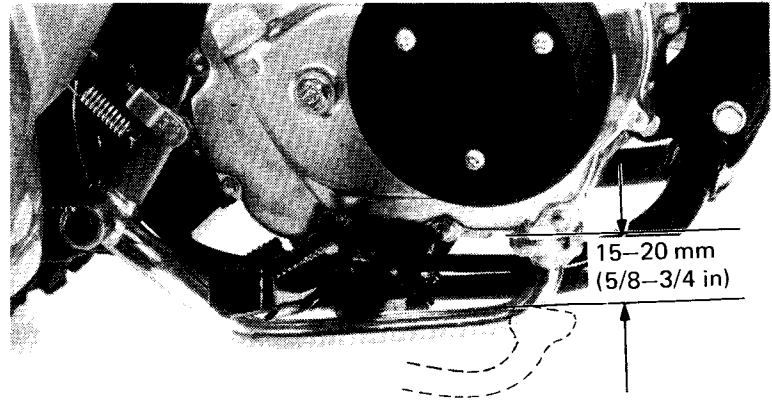




**MAINTENANCE**

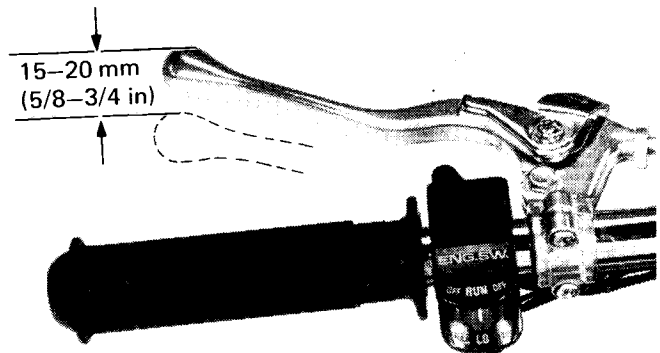
Measure the brake pedal free play at the end of the brake pedal.

**BRAKE PEDAL FREE PLAY:**  
15–20 mm (5/8–3/4 in)



Measure the rear brake lever (parking brake) free play at the end of the brake lever.

**REAR BRAKE LEVER FREE PLAY:**  
15–20 mm (5/8–3/4 in)



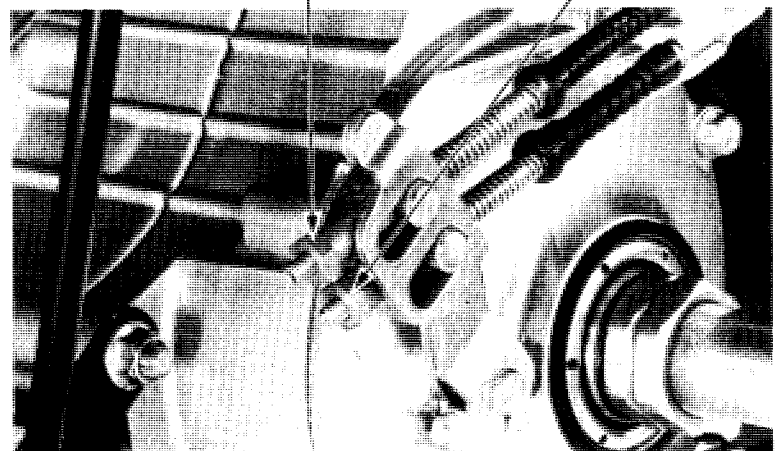
Adjust the lever and pedal free play by turning the adjusting nuts at the lower end of the cables.

**NOTE:**

Make sure the cut-out of each adjusting nut is seated on the brake arm pin.

PEDAL ADJUSTING NUT

LEVER ADJUSTING NUT







### CLUTCH

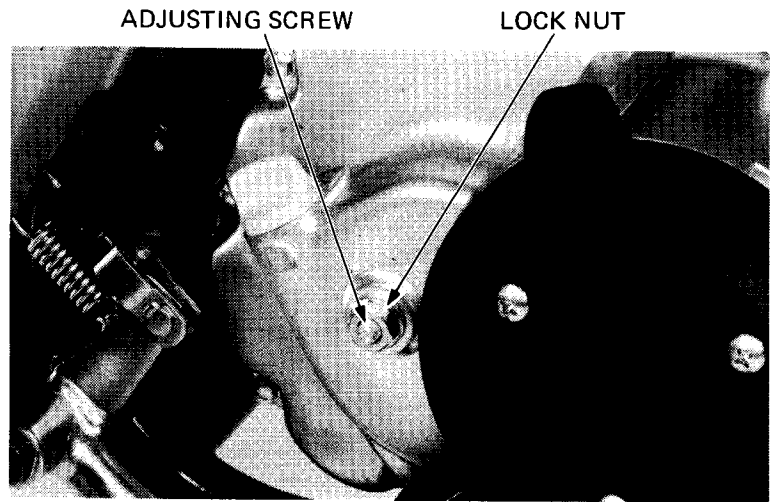
Stop the engine.  
Loosen the clutch adjusting screw lock nut.

Slowly turn the adjusting screw counterclockwise until resistance is felt.

Then turn the adjusting screw clockwise 1/4 turn, and tighten the lock nut.

**TORQUE:** 19–25 N·m (1.9–2.5 kg-m,  
14–18 ft-lb)

After adjustment, start the engine and check for proper clutch operation.



### SPARK ARRESTER CLEANING

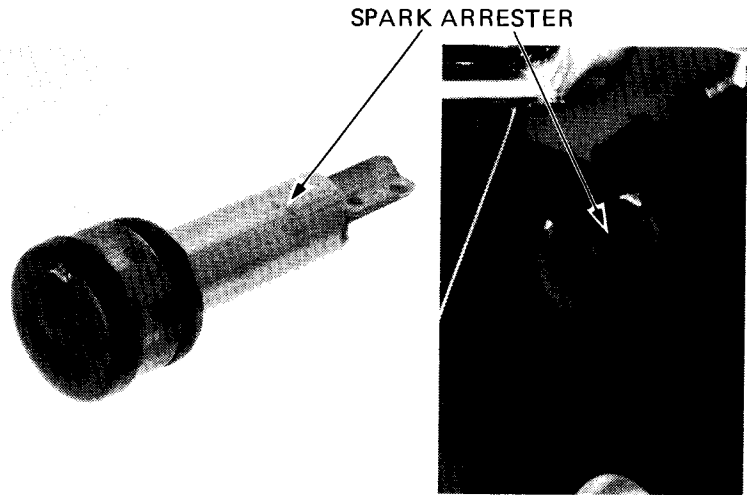
#### WARNING

- *Do not remove and install the spark arrester while the exhaust pipe is hot.*
- *Perform this operation in a well-ventilated area, free from fire hazard.*
- *Use adequate eye protection.*

Remove the spark arrester bolts and the spark arrester.  
Remove any accumulated carbon from the arrester.

Start the engine and remove accumulated carbon from the exhaust system by momentarily revving up the engine several times.

Stop the engine and reinstall the spark arrester.



### NUTS, BOLTS, FASTENERS

Tighten bolts, nuts and fasteners at regular intervals shown in the Maintenance Schedule (Page 3-3).

Check that all chassis nuts and bolts are tightened to their correct torque values (Page 1-4). Check that all cotter pins and safety clips are in place.



**Download the full PDF manual instantly.**

**Our customer service e-mail:**

**[aservicemanualpdf@yahoo.com](mailto:aservicemanualpdf@yahoo.com)**