

HOW TO USE THIS MANUAL

Follow the Maintenance Schedule 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 through 3 apply to the whole motor scooter, while sections 4 through 14 describe parts of the motor scooter, 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, service information and troubleshooting for the section. The subsequent pages give detailed procedures.

If you don't know what the source of the trouble is, refer to section 16, Troubleshooting.

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HONDA MOTOR CO., LTD.
 Service Publications Office

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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 which may cause loss of consciousness and lead to death.

WARNING

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

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.

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.

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 scooter.
2. Use the special tools designed for this scooter.
3. Use only metric tools when servicing this scooter. Metric bolts, nuts, and screws are not interchangeable with English fasteners. The use of incorrect tools and fasteners may damage the scooter.
4. Install new gaskets, O-rings, cotter pins, lock plates, etc. when reassembling.
5. When tightening a series of bolts or nuts, begin with larger-diameter or inner bolts first, and tighten to the specified torque diagonally in 2-3 steps, unless a particular sequence is specified.
6. Clean parts in non-flammable or high flash point 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 shown on pages 1-7 through 1-12, Cable and Harness Routing, and always away from sharp edges and areas where they might be pinched between moving parts.

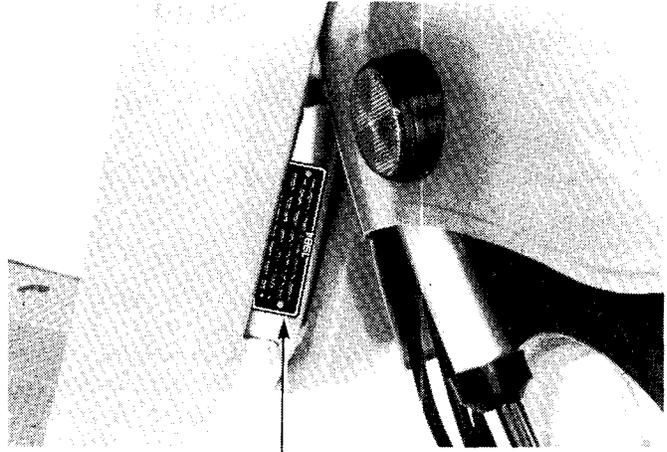
GENERAL INFORMATION

MODEL IDENTIFICATION '84-'86 Shown;
After '86: Similar



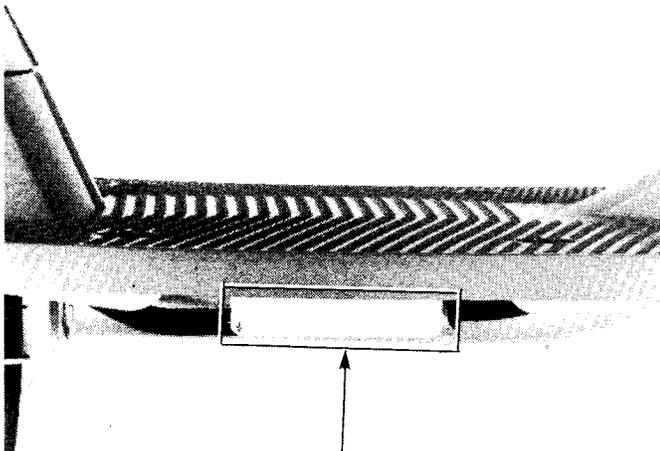
The frame serial number is stamped on the right side of the frame.

The vehicle identification number is on the frame tube in front of the right front cover.



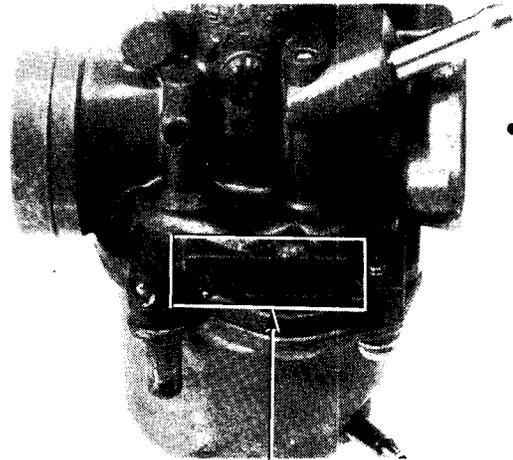
VEHICLE IDENTIFICATION NUMBER

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



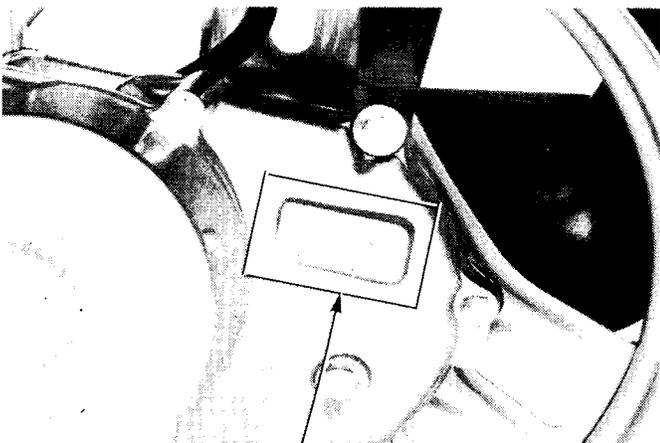
FRAME SERIAL NUMBER

The engine serial number is stamped on the left side of the engine case.



CARBURETOR IDENTIFICATION NUMBER

The color code label is attached to the fuel tank below the seat. When ordering a color coded part, always specify its designated color.



ENGINE SERIAL NUMBER



COLOR CODE LABEL

SPECIFICATIONS

	ITEM	SPECIFICATIONS
DIMENSIONS	Overall length	1,530 mm (60.2 in) After '86: 1,505 mm (59.3 in)
	Overall width	590 mm (23.2 in)
	Overall height	925 mm (36.4 in) After '86: 950 mm (37.4 in)
	Wheel base	1,065 mm (41.9 in)
	Ground clearance	105 mm (4.1 in)
	Dry weight	39 kg (86 lb) '86: 41.8 kg (92 lb) After '86: 42.5 kg (94 lb)
FRAME	Type	Back bone
	Front suspension, travel	Telescopic fork, 56 mm (2.2 in)
	Rear suspension, travel	Final drive unit/swing arm, 58 mm (2.3 in) After '86: Unit swing, 45.5 mm (1.79 in)
	Maximum weight capacity	82 kg (180 lb)
	Front tire size, pressure	2-50-10-2PR (1.25 kg/cm ² , 18 psi)
	Rear tire size, pressure	2-50-10-2PR (1.75 kg/cm ² , 24 psi)
	Front brake	Internal expanding shoe
	Rear brake	Internal expanding shoe
	Fuel capacity	2.5 ℓ (0.66 U.S. gal., 0.55 imp. gal.)
	Caster angle	27°
	Trail	76 mm (3.0 in)
	Front fork grease (L,R)	10g (36oz)
ENGINE	Type	Air cooled 2-stroke
	Cylinder arrangement	Single cylinder inclined 15° from vertical
	Bore and stroke	41.0 × 37.4 mm (1.61 × 1.47 in)
	Displacement	49 cm ³ (3.0 cu in)
	Compression ratio	7.2 : 1 '86: 6.8 : 1 After '86: 6.8 : 1 <7.0 : 1>
	Transmission oil capacity	90 cc (3.0 U.S. oz, 2.5 imp. oz)
	Oil tank capacity	0.6 ℓ (0.63 U.S. qt, 0.53 imp. qt)
	Lubrication system	Oil automatically mixed with gasoline
	Port timing	
	Intake	Open Reed valve controlled Close Reed valve controlled
	Exhaust	Open 71° (BBDC) <70°> After '85: 73 (BBDC) <71°> Close 71° (ABDC) <70°> After '85: 73 (ABDC) <71°>
	Scavenge	Open 52° (BBDC) <50°> After '85: 54° (BBDC) <52°> Close 52° (ABDC) <50°> After '85: 54° (ABDC) <52°>
	Engine dry weight	10 kg (22.1 lb) After '85: 11 kg (24.3 lb)
	Idle speed	1,800 ± 100 rpm
	CARBURETION	Carburetor type
Identification number		PA29C '86: PA29H <PA29L> After '86: PA29P <PA29Q>
Air screw initial setting		1-7/8 turns out '86: 1-1/2 turns out After '86: 1-3/8 turns out
Float level		12.2 mm (0.48 in)

< > : IOWA MODEL

GENERAL INFORMATION

	ITEM	SPECIFICATIONS
DRIVE TRAIN	Clutch type Primary reduction Gear ratio Final reduction	Automatic dry centrifugal clutch V-Belt 1.8 : 1 6.917: 1 '86: 6.345: 1 <6.917: 1> After '86: 6.385: 1 <6.917: 1>
ELECTRICAL	Ignition Starting system Generator Spark plug	Condenser capacitive discharge ignition (CDI) Starter motor (After '86: & Kick starter) Alternator 12V 87 W/5,000 rpm 12V 96W/5,000 rpm(After '85:)
		NGK
	Standard	BPR6HS After '85: BPR6HSA
	For cold climate (Below 5°C, 41°F)	BPR4HS After '85: BPR4HSA
	For extended high speed riding	BPR8HS After '85: BPR8HSA
		ND
		W20FPR After '85: W20FPR-L
		W14FPR-L
		W24FPR After '85: W24FPR-L
	Spark plug gap Ignition timing "F" mark Battery capacity Fuse capacity	0.6–0.7 mm (0.02–0.03 in) 15° BTDC at 1,800 ± 100 rpm 12V 4AH After '85: 12V 3AH 7A (10A, After '86:)
LIGHTS	Headlight Low/High Tail/stoplight Turn signal Front/Rear Speedometer light High beam indicator Turn signal indicator	12V-25/25W 12V-3/32 cp 12V-32 cp 12V-3.4W 12V-1.7W 12V-3.4W

< >: IOWA MODEL

TORQUE VALUES

ENGINE

Item	Q'ty	Thread Dia (mm)	Torque N·m (kg-m, ft-lb)	Remarks
Cylinder head	4	6	8-12 (0.8-1.2, 6-9)	While the engine is cold. (Below 35°C, 95°F)
Flywheel	1	10	35-40 (3.5-4.0, 25-29)	
Drive pulley	1	10	35-40 (3.5-4.0, 25-29)	
Intake pipe	4	6	8-12 (0.8-1.2, 6-9)	While the engine is cold. (Below 35°C, 95°F)
Clutch outer	1	10	35-40 (3.5-4.0, 25-29)	
Carburetor	2	6	9-12 (0.9-1.2, 7-9)	While the engine is cold. (Below 35°C, 95°F)

CHASSIS

Item	Q'ty	Thread Dia (mm)	Torque N·m (kg-m, ft-lb)	Remarks
Handlebar pinch bolt	1	10	40-50 (4.0-5.0, 29-36)	Self-locking nut
Steering stem nut	1	-	80-120 (8.0-12.0, 58-87)	
(After '86:)	1	-	60-80 (6.0-8.0, 43-58)	Self-locking nut
Front axle nut	1	10	40-50 (4.0-5.0, 29-36)	
Steering top thread	1	-	5-13 (0.5-1.3, 4-10)	Self-locking nut
Engine hanger bolts	2	8	35-45 (3.5-4.5, 25-33)	
Rear axle nut	1	12	65-80 (6.5-8.0, 47-58)	Self-locking nut
Rear shock absorber (Upper)	1	10	30-45 (3.0-4.5, 22-33)	Self-locking nut
(After '86:)	1	10	24-30 (2.4-3.0, 17-22)	
Rear shock absorber (Lower)	1	8	20-30 (2.0-3.0, 14-22)	Self-locking nut
Rear shock damper lock nut	1	8	15-20 (1.5-2.5, 11-18)	
Front brake panel (After '86:)	1	4	1-3 (0.1-0.3, 1-2)	Self-locking nut
Exhaust muffler mounting bolt	1	8	24-30 (2.4-3.0, 17-22)	
Front/Rear brake arm	2	5	4-7 (0.4-0.7, 3-5)	Self-locking nut
Frame body center cover	1	6	8-12 (0.8-1.2, 6-9)	

Torque specifications listed above are for important fasteners. Others should be tightened to the standard torque values below.

STANDARD TORQUE VALUES

Item	Torque N·m (kg-m, ft-lb)	Item	Torque N·m (kg-m, ft-lb)
5 mm bolt and nut	4.5-6 (0.45-0.6, 3-4)	5 mm screw	3.5-5 (0.35-0.5, 2-4)
6 mm bolt and nut	8-12 (0.8-1.2, 6-9)	6 mm screw	7-11 (0.7-1.1, 5-8)
8 mm bolt and nut	18-25 (1.8-2.5, 13-18)	6 mm flange bolt and nut	10-14 (1.0-1.4, 7-10)
10 mm bolt and nut	30-40 (3.0-4.0, 22-29)	8 mm flange bolt and nut	24-30 (2.4-3.0, 17-22)
12 mm bolt and nut	50-60 (5.0-6.0, 36-43)	10 mm flange bolt and nut	35-45 (3.5-4.5, 25-33)

GENERAL INFORMATION

TOOLS

SPECIAL

Description	Tool Number	ALTERNATIVE TOOL	Ref. Sec
Hand vacuum pump with gauge	A937-041-xxxx	Hand vacuum pump (U.S.A. only: Included in turbo kit) ST-AH-260-MC7	4
*Lock nut wrench, 39 mm	07GMA-KS40100	07916-1870002 or commercially available 39 mm socket.	8
*Universal bearing puller	07631-0010000	Equivalent commercially available in U.S.A.	10
Crankcase puller	07935-GK80000	Shaft protector 07931-1870000 (Section 9, 10) Clutch/flywheel puller 07935-8050002	10 10
Lock nut wrench	07916-1870100	Equivalent commercially available in U.S.A.	11
Lock nut wrench	07916-GK00000		11
Shaft protector	07931-1870000		9, 10
*Attachment, 28x30 mm	07946-1870100		11
Clutch spring compressor	07960-KM10000	or 07960-KM1000A (U.S.A. only)	8
Bearing driver	07945-GC80000		8
(Seal and case assembly tool set)	(07965-1480010)		
Assembly collar	07965-1480100		9, 10
Assembly bolt	07965-1480200	or 07960-GM00300	9, 10
Rear shock absorber compressor attachment set	07967-GA70001		12
Rear shock absorber compressor	07959-3290001		12
Spring attachments	07967-1180100		12
Snap ring pliers	07914-3230001		11
Bearing remover, 15 mm	07936-KC10500 (U.S.A. only)		9
Remover weight	07936-3710200		9
Fork seal driver	07947-1180001		11
Digital multimeter	KS-AH-32-003 (U.S.A. only)	or 07308-0020000	14

*These tools are not available in the U.S.A. Equivalent tools or items commercially available in the U.S.A. or other methods are recommended. Refer to the Alternate Tool column.

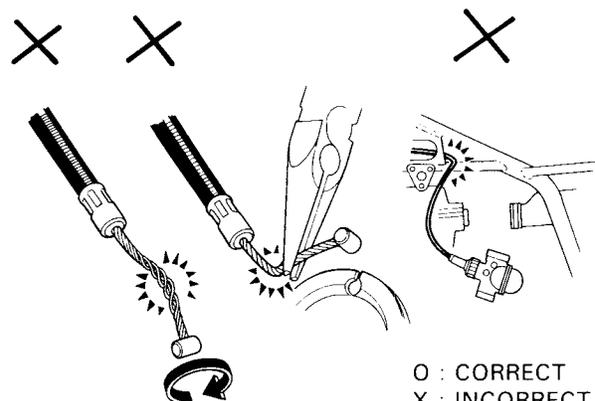
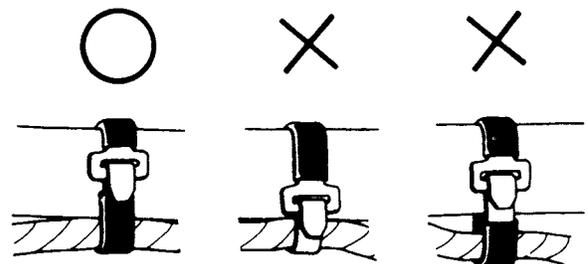
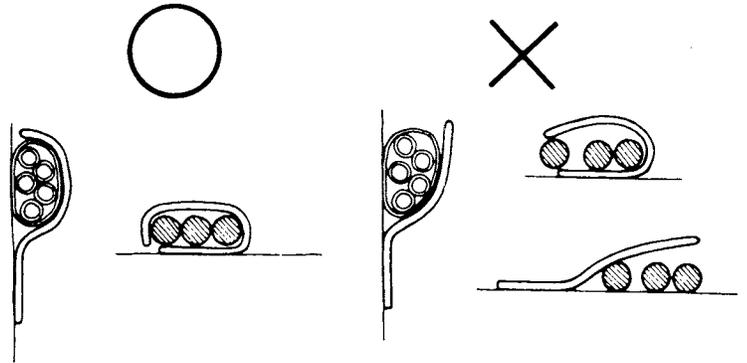
COMMON

Description	Tool Number	ALTERNATIVE TOOL	Ref. Sec
Float level gauge	07401-0010000		4
Universal holder	07725-0030000		7, 8
Flywheel puller	07733-0010000		7
Attachment, 24x26mm	07746-0010700		8
Attachment, 32x35 mm	07746-0010100		9
Attachment, 37x40 mm	07746-0010200		10
Attachment, 42x47 mm	07746-0010300		10, 11
Pilot, 10 mm	07746-0040100		11
Pilot, 15 mm	07746-0040300		9
Pilot, 17 mm	07746-0040400		10
Pilot, 20 mm	07746-0040500		10
Pilot, 25 mm	07746-0040600		11
Pilot, 30 mm	07746-0040700		11
Driver	07749-0010000		9, 10, 11
Bearing remover expander	07746-0050100	Commercially available	11
Bearing remover collet, 10 mm	07746-0050200	in U.S.A.	11
Bearing inner handle	07746-0020100		10
Bearing inner driver, 17mm	07746-0020300		10

CABLE & HARNESS ROUTING

Note the following when routing cables and wire harnesses:

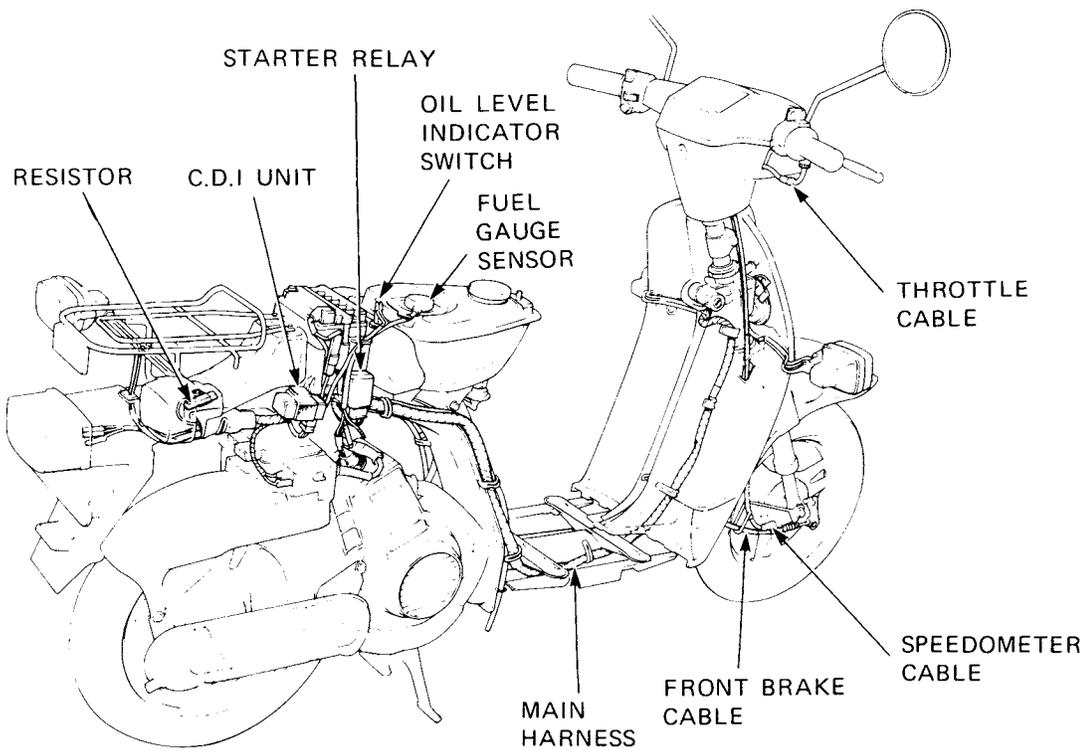
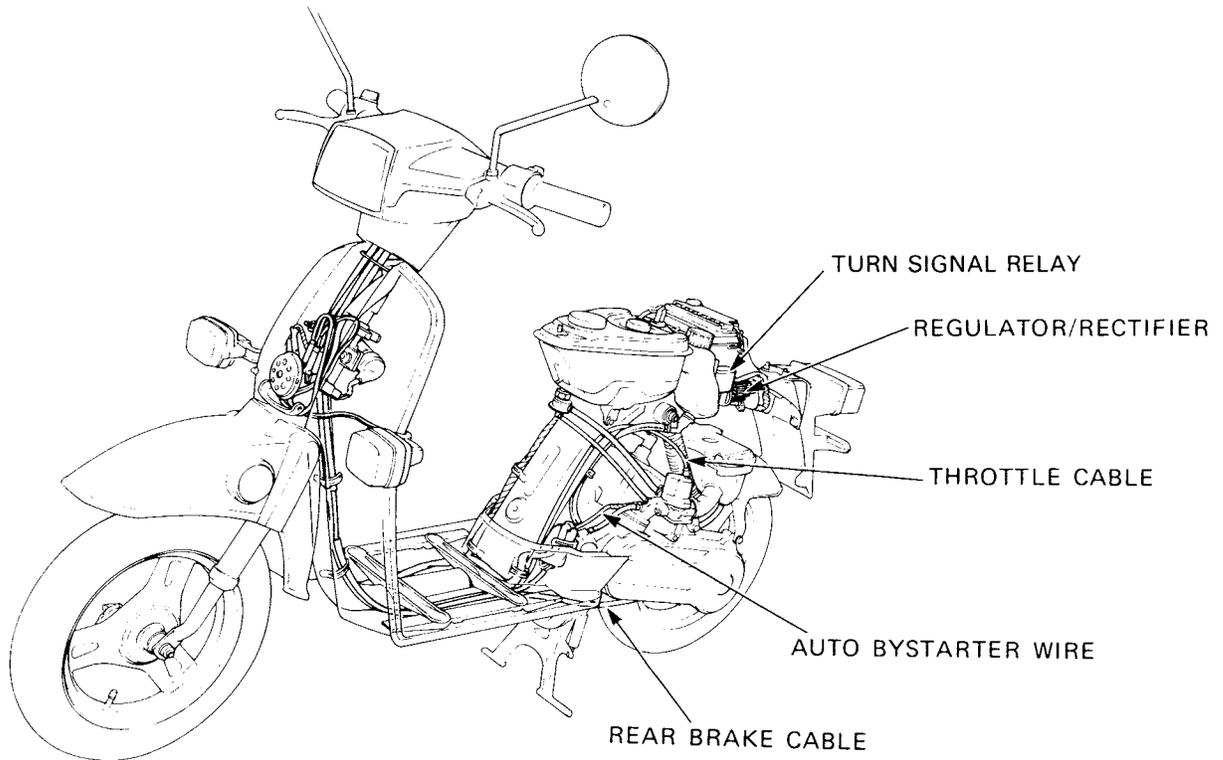
- A loose wire, harness or cable can be a safety hazard. After clamping, check each wire to be sure it is secure.
- Do not squeeze wires against the weld or end of its clamp when a weld-on clamp is used.
- Secure wires and wire harnesses to the frame with their respective wire bands at the designated 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 tubing if they are in contact with a sharp edge or corner. Clean the attaching surface thoroughly before applying tape.
- Do not use wires or harnesses 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 pipes and other hot parts.
- 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 handlebar should not be pulled tight, 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.
- Do not bend or twist control cables. Damaged control cables will not operate smoothly and may stick or bind.

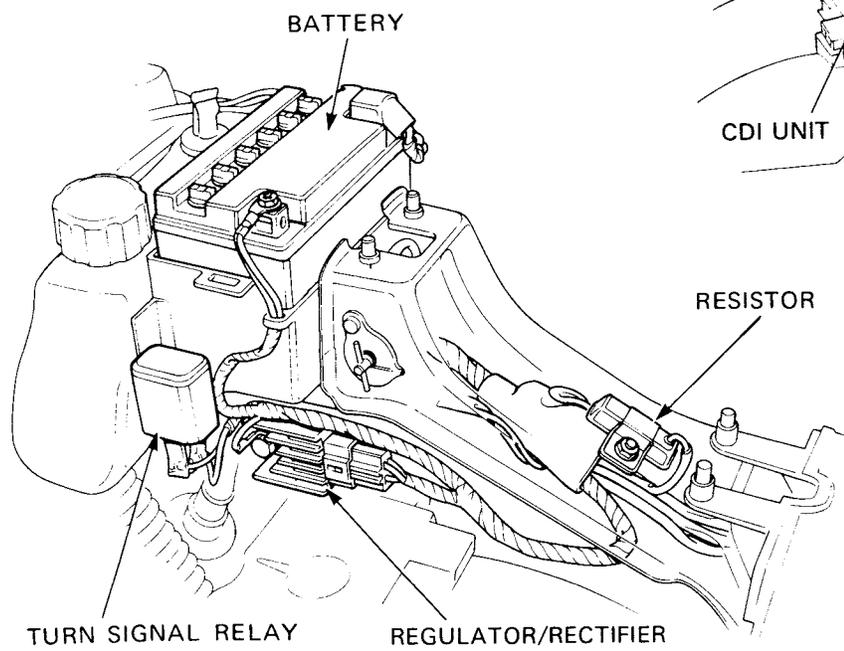
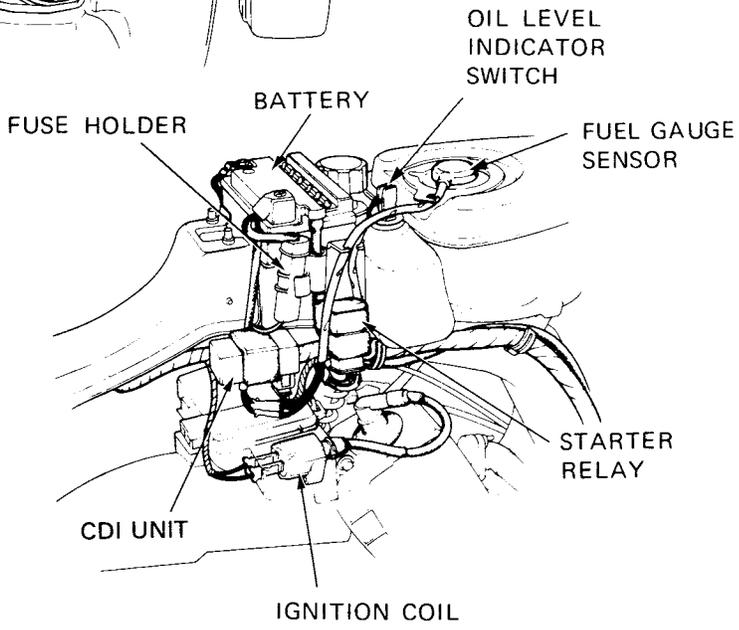
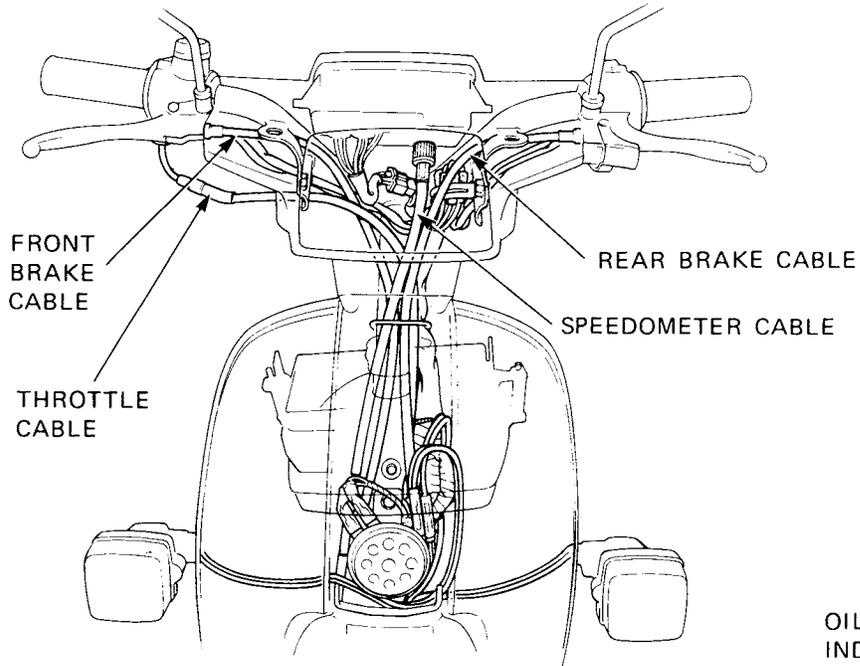


O : CORRECT
X : INCORRECT

GENERAL INFORMATION

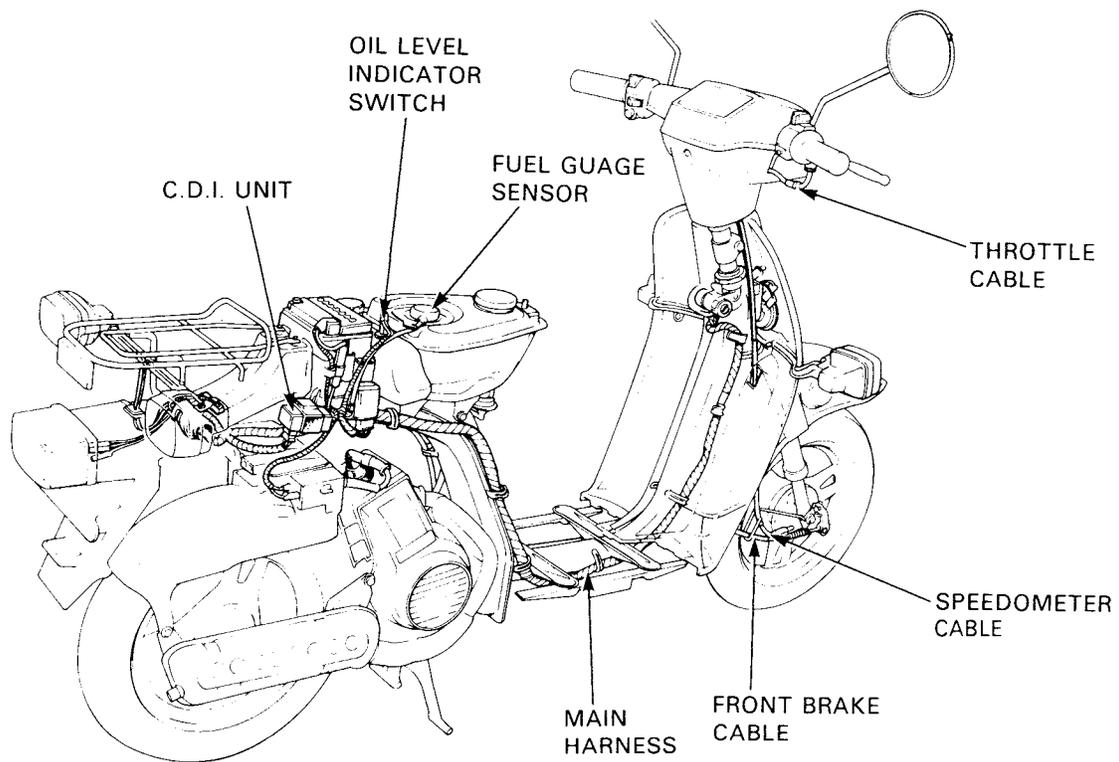
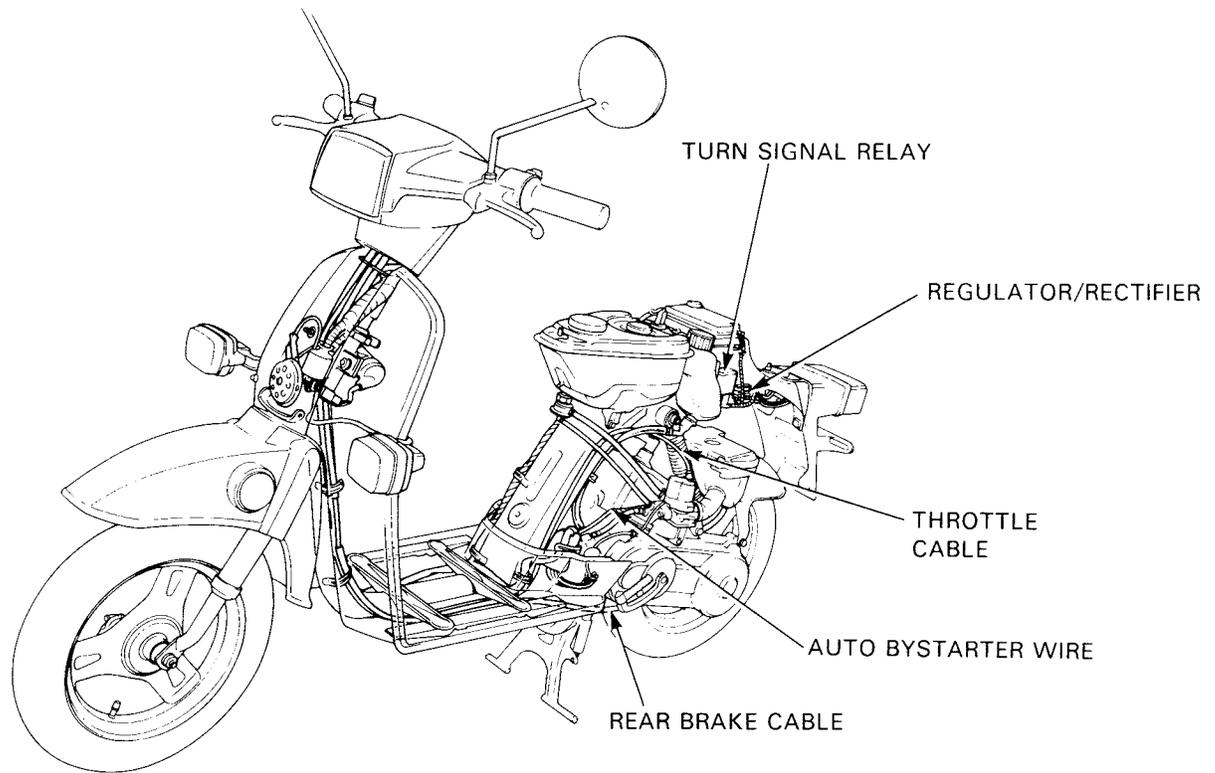
'84, '85:



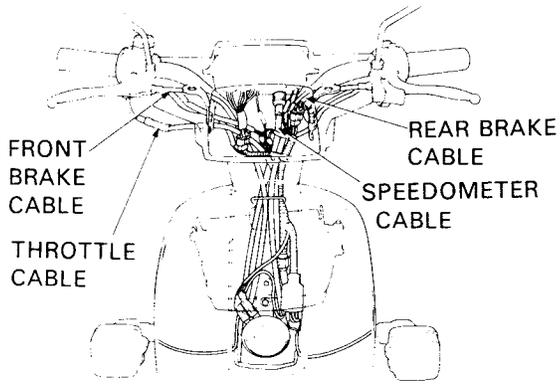


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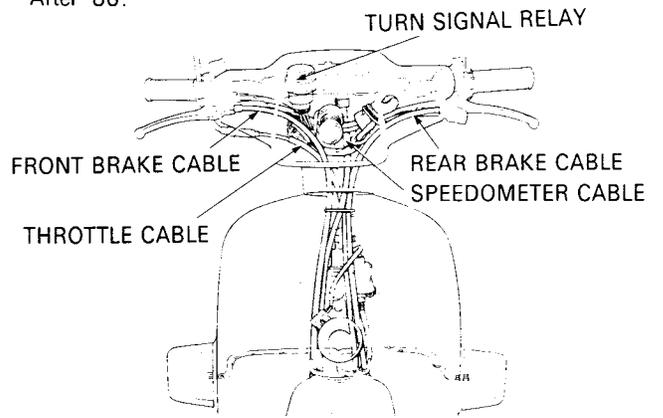
'86;



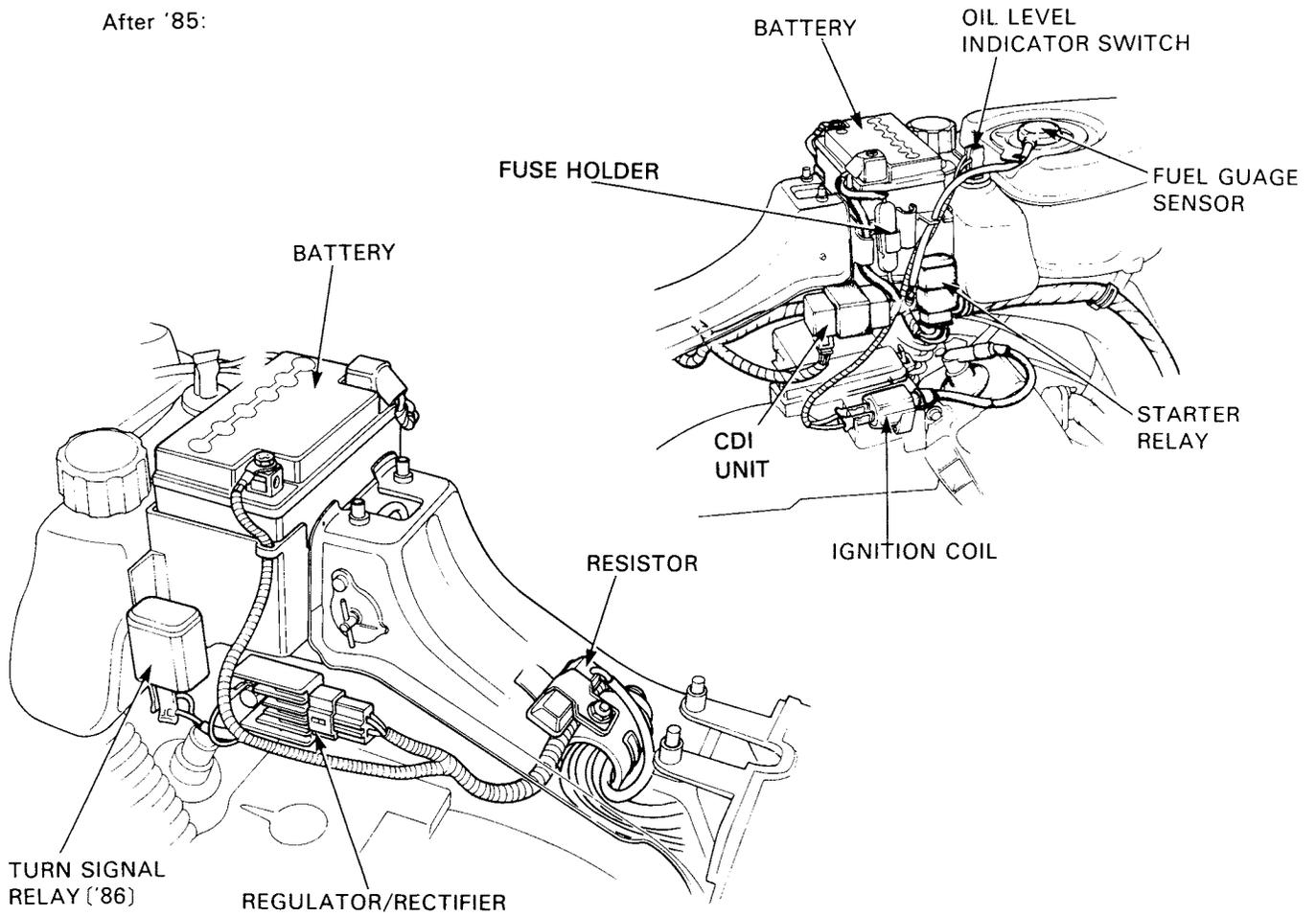
'86:



After '86:

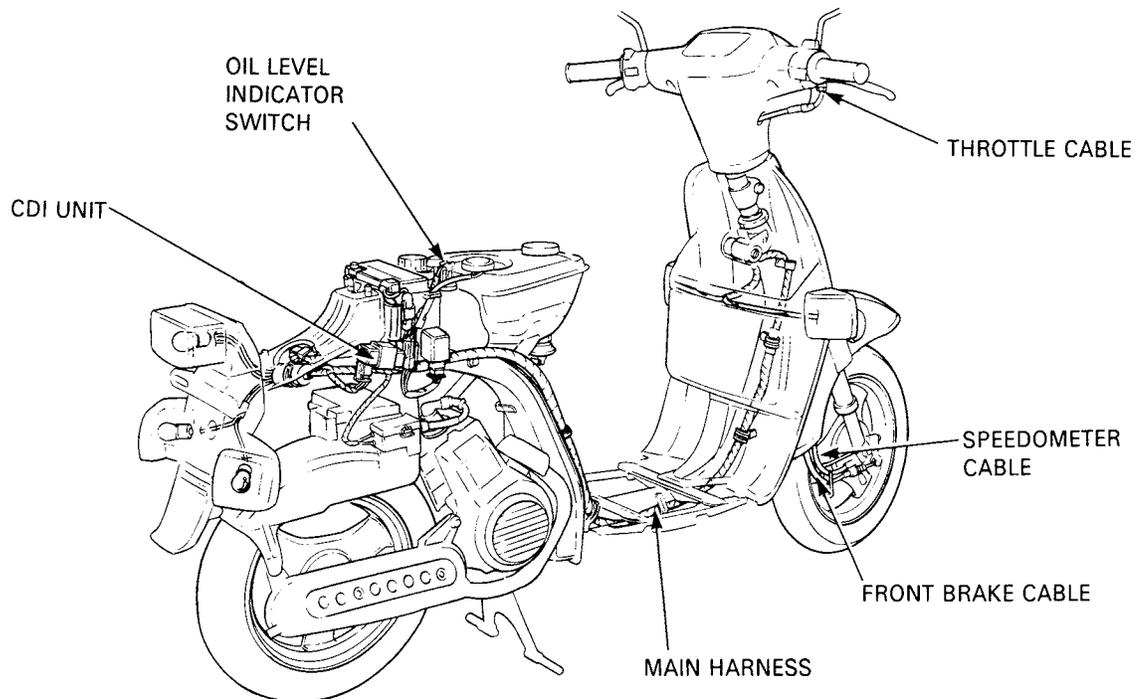
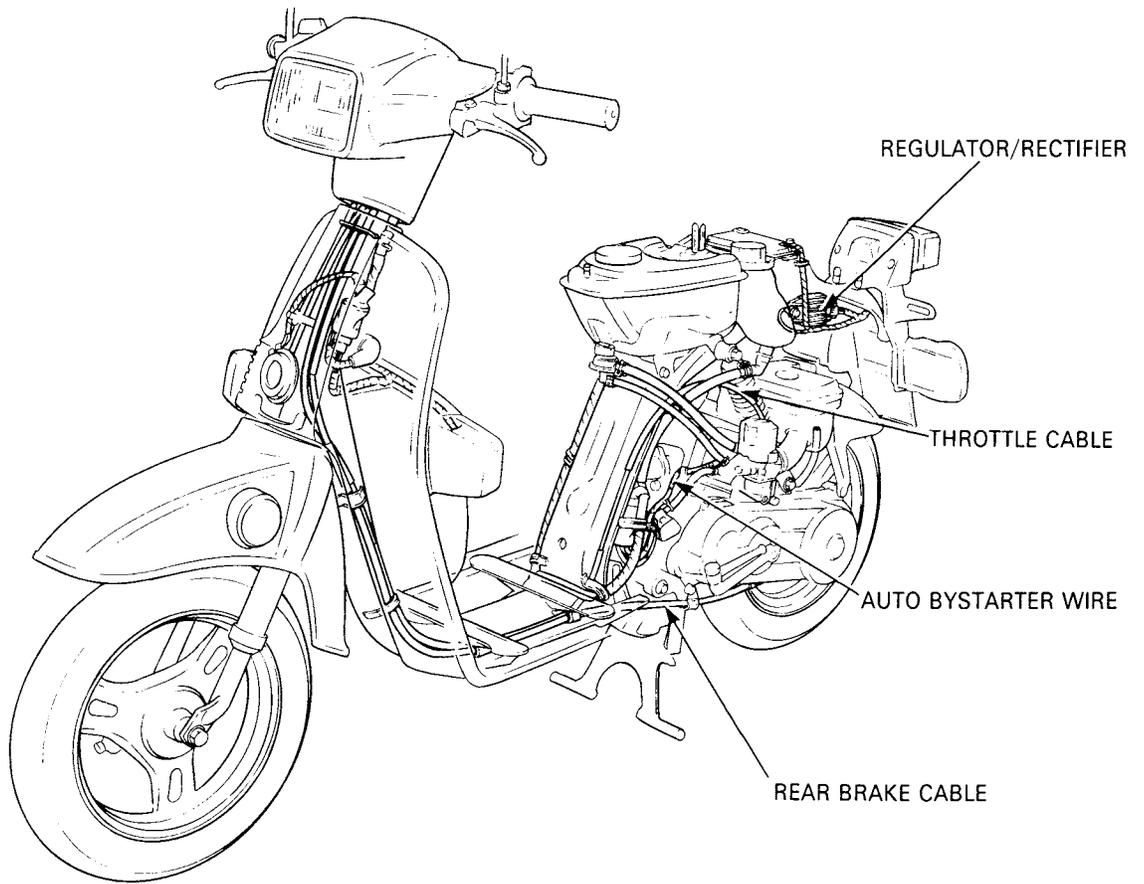


After '85:



GENERAL INFORMATION

After '86:



2. LUBRICATION

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SERVICE INFORMATION

GENERAL

- When removing and installing the oil pump use care not to allow dust or dirt to enter the engine and oil line.
- Do not attempt to disassemble the oil pump.
- Bleed air from the oil pump if there is air in the oil inlet line (from the oil tank to the oil pump) or whenever the oil line has been disconnected.
- Bleed air from the oil outlet line (from the oil pump to the carburetor) whenever the line has been disconnected (page 2-3).
- Use HONDA 2-stroke injector oil or equivalent.

TROUBLESHOOTING

Excessive smoke and/or carbon on spark plug

1. Faulty oil pump
2. Low quality engine oil

Overheating

1. Faulty oil pump
2. Low quality oil

Seized piston

1. No oil in tank or clogged oil line
2. Air in oil lines
3. Faulty oil pump
4. Clogged oil strainer

Oil not flowing out of tank

1. Clogged oil tank cap breather hole
2. Clogged oil strainer

LUBRICATION

OIL PUMP REMOVAL

Remove the rear frame covers (page 5-2).

NOTE:

Before removing the oil pump, clean the oil pump and crankcase.

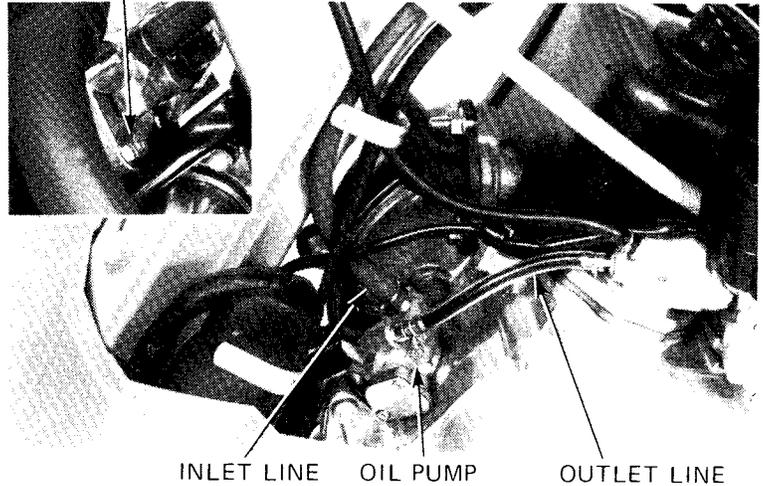
Disconnect the oil lines from the oil pump.

NOTE:

Plug the oil line so oil does not flow out of it.

Remove the oil pump attaching bolt and remove the oil pump.

OIL PUMP
ATTACHING BOLT



OIL PUMP INSPECTION

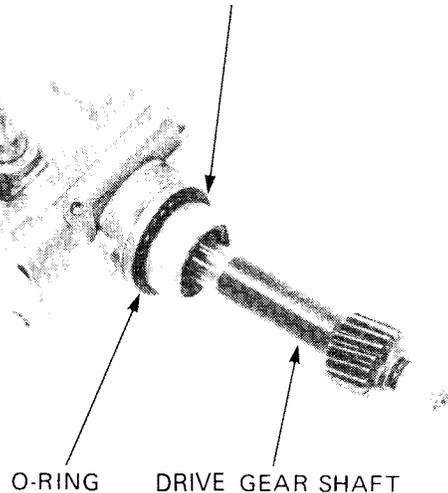
Inspect for the following items :

- Damaged or weak O-rings
- Damage to crankcase mating surface
- Damage to pump body
- Worn or damaged pump gears
- Oil leaks

CAUTION:

Do not disassemble the oil pump.

MATING SURFACE



OIL PUMP INSTALLATION

Install the oil pump onto the crankcase.

CAUTION:

- *Lubricate the pump gear and O-ring with clean grease before installation.*
- *Make sure that the oil pump is inserted into the crankcase properly.*

Tighten the oil pump attaching bolts securely.
Reconnect the oil inlet and outlet lines.

NOTE:

After installation, perform the following inspections and adjustments:

- Oil pump bleeding (page 2-3)
- Oil outlet line bleeding (page 2-3)
- Check for oil leaks.

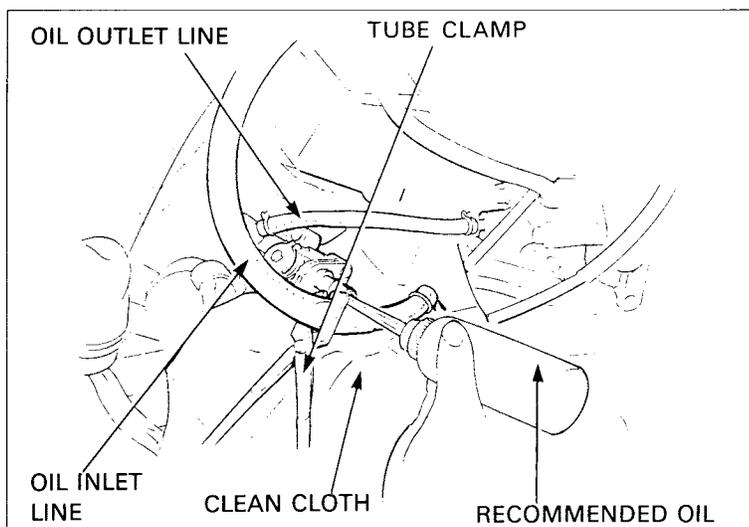
O-RING



OIL LINES/PUMP BLEEDING

CAUTION

- Air in oil system will block or restrict oil flow and may result in severe engine damage.
- Bleed air from the oil lines whenever the oil lines or pump have been removed or there is air in the oil lines.
- Bleed air from the oil inlet first, then bleed air from the oil outlet line.



OIL INLET LINE/OIL PUMP

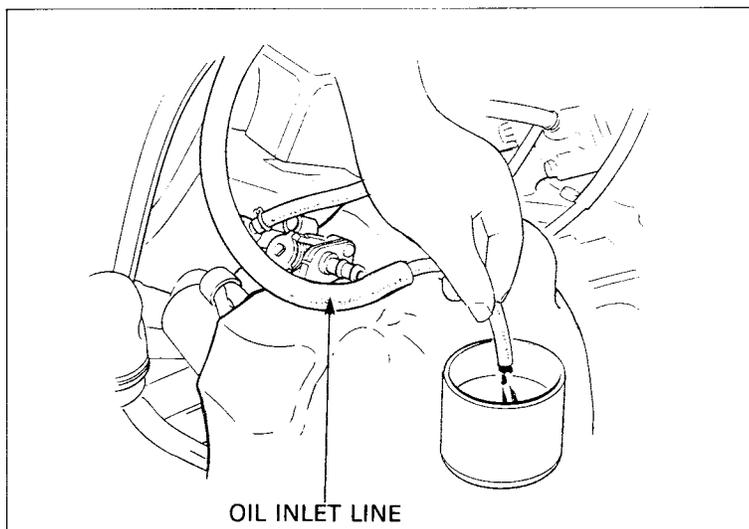
Remove the left rear frame cover (page5-2).
Fill the oil tank with recommended oil.

Place a piece of clean cloth around the oil pump and disconnect the oil inlet line from the pump. Fill the oil pump by pumping clean oil through the joint (about 3 cc) using an oil can.

Drain the oil in a clean container until there is no air bubble in the oil flow from the oil inlet line.

Hold the tube end and quickly connect it to the oil pump joint.

Then bleed the outlet line.



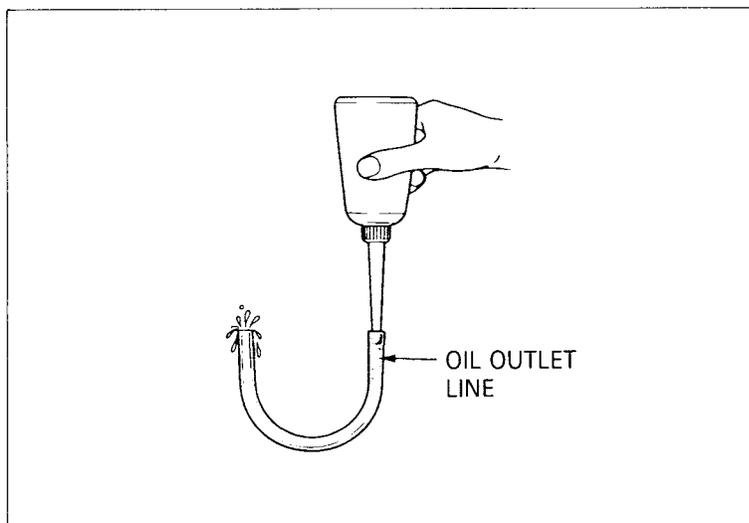
OIL OUTLET LINE

WARNING

Perform this operation in a well ventilated area.

Remove the oil outlet line and close the joint of the intake pipe.

Bend the oil outlet line in "U" form with both the ends parallel, and fill the oil outlet line with clean oil can or squeeze bottle as shown.



LUBRICATION

Connect the oil outlet to the joint of the oil pump.

Start the engine and allow it to idle with the oil control lever in the fully open position, making sure that oil is flowing out from the oil outlet line.

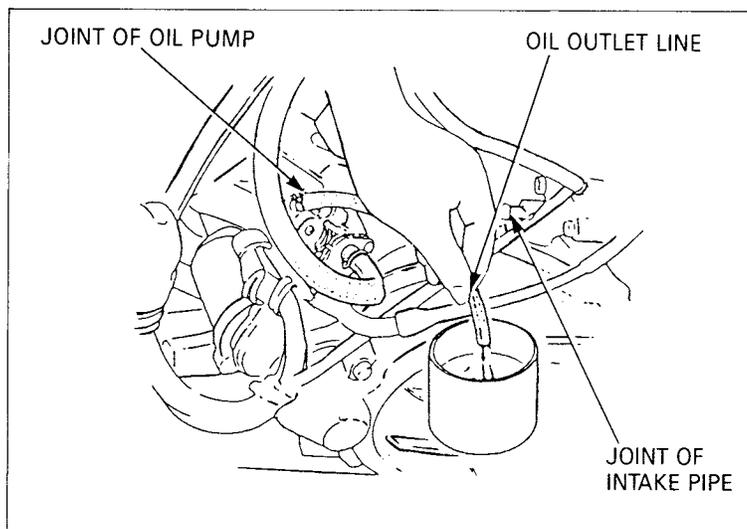
IDLE SPEED: $1,800 \pm 100$ rpm

CAUTION:

- *Do not rise the engine unnecessarily.*
- *If oil does not flow out within 1 minute, stop the engine and bleed air from the oil inlet line and oil pump again and then recheck.*

Connect the oil outlet line to the joint of the intake pipe.

Install the left rear frame cover.



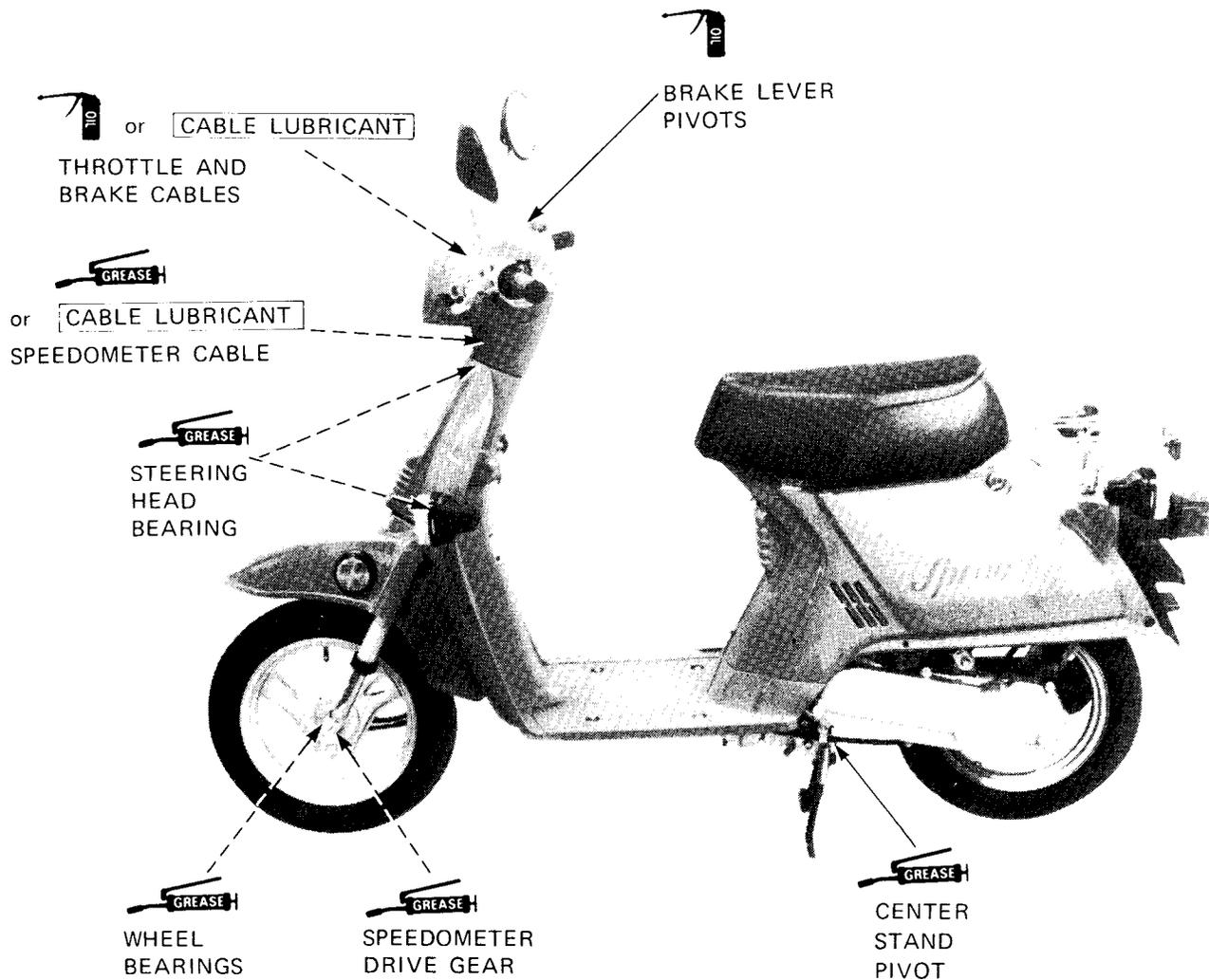
LUBRICATION POINTS

ENGINE

LUBRICATION POINTS	LUBRICANT	
Piston/crankshaft	Honda 2-stroke injector oil or equivalent	
Final reduction	SAE 10W-40	90 cc (3.0 U.S. oz)
Driven face	Lithium-based grease Mitsubishi HD-3 Nippon Sekiyu Lipanox Delux 3 Idemitsu Coronex 3 or equivalent	3 g (0.11 oz.)
Starter gears	General purpose grease	

FRAME

Apply clean engine oil or grease to cables and parts not called out.



3. MAINTENANCE

3

SERVICE INFORMATION	3-1	COMPRESSION TEST	3-9
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SERVICE INFORMATION

SPARK PLUG

	NGK	ND
Standard	BPR6HS After '85: BPR6HSA	W20FPR After '85: W20FPR-L
For cold climate (Below 5°C, 41°F)	BPR4HS After '85: BPR4HSA	W14FPR-L
For extended high speed riding	BPR8HS After '85: BPR8HSA	W24FPR After '85: W24FPR-L

SPARK PLUG GAP

0.6-0.7 mm (0.02-0.03 in)

COMPRESSION

8.0 kg/cm². (113 psi) Minimum

IGNITION TIMING

15° BTDC/1,800 ± 100 rpm

THROTTLE FREE PLAY

2-6 mm (1/8-1/4 in)

IDLE SPEED

1,800 ± 100 rpm

AIR SCREW OPENING

1-7/8 turns out '86: 1-1/2 turns out After '86 : 1-3/8 turn out

BRAKE LEVER FREE PLAY

FRONT

10-20 mm (3/8-3/4 in)

REAR

10-20 mm (3/8-3/4 in)

TIRE SIZE

FRONT

2.50-10-2PR

REAR

2.50-10-2PR

TIRE PRESSURE

FRONT

125 kPa (1.25 kg/cm², 18 psi)

REAR

175 kPa (1.75 kg/cm², 24 psi)

MAINTENANCE

MAINTENANCE SCHEDULES

The following items require some mechanical knowledge. Certain items (particularly those marked *and**) may require more technical information and tools. Consult your authorized Honda Scooter Dealer.

'84 and '85

I – Inspect and clean, adjust, lubricate or replace if necessary R – Replace C – Clean

This maintenance schedule is based upon average riding conditions. Scooters subject to severe use, or ridden in unusually dusty areas, require more frequent servicing.	PRE-RIDE INSPECTION	INITIAL SAFETY INSPECTION	REGULAR SERVICE PERIOD Perform at every indicated month or mileage interval whichever occurs first		Refer to page
		**1 month 600 miles (1,000 km)	12 months 1,000 miles (1,500 km)	24 months 2,000 miles (3,000 km)	
AIR CLEANER ELEMENT			(EVERY 6 MONTHS) C		3-5
CARBURETOR		I	I	I	3-9
* THROTTLE OPERATION	I		I	I	3-9
OIL PUMP AND LINES			I	I	2-2
FUEL FILTER SCREEN			C	C	3-6
FUEL LINES			I	I	3-6
* FUEL LEVELS	I				3-6
DECARBONIZE CYLINDER HEAD, CYLINDER, PISTON AND MUFFLER				C	6-4, 6-5
* FINAL REDUCTION CASE FOR LEAKS	I				3-8
CLUTCH SHOE WEAR				I	8-6
TIRES: PRESSURES AND CONDITION	I				3-12
WHEELS/TIRES			I	I	3-12
* BRAKE OPERATION AND FREE PLAY	I	I	I	I	3-10
BRAKE LININGS			I	I	3-10
STEERING HEAD BEARINGS		I		I	3-12
SUSPENSION OPERATION			I	I	3-11
NUTS, BOLTS (TIGHTEN), FASTENERS		I		I	3-12
* SPARK PLUG			R	R	3-8
* BATTERY FLUID LEVEL	I				3-5
BATTERY FLUID SPECIFIC GRAVITY			I	I	14-3
ALL LIGHTS AND HORN	I				11-4 14-13

** : 1984 model initial inspection is 200 miles (300 km).

Items marked * may be serviced by the owner. Other maintenance items should be serviced by an authorized Honda dealer.

'86:

I: Inspect and Clean, Adjust, Lubricate or Replace, if necessary.

C: Clean R: Replace A: Adjust L: Lubricate

ITEM	FREQUENCY	WHICHEVER COMES FIRST ↓	ODOMETER READING (NOTE 2)				Refer to
			800 mi (1,000 km)	2,500 mi (4,000 km)	5,000 mi (8,000 km)	7,500 mi (12,000 km)	
* FUEL LINE			—	I	I	I	3-6
* FUEL STRAINER SCREEN			—	C	C	C	3-6
* THROTTLE OPERATION			—	I	I	I	3-9
** OIL PUMP AND OIL LINE			—	I	I	I	2-2
* CARBURETOR CHOKE			—	I	I	I	3-9
AIR CLEANER		NOTE 1	—	C	C	C	3-5
SPARK PLUG		NOTE 3	EVERY 1,000 mi (1,600 km) R				3-8
** DECARBONIZING		NOTE 3	EVERY 2,000 mi (3,200 km) C				6-4, 6-5
* CARBURETOR-IDLE SPEED			I	I	I	I	3-9
FINAL REDUCTION OIL			—	—	—	R	3-8
* FINAL DRIVE OIL		2 YEARS *R	—	—	—	—	3-10
BRAKE SHOE WEAR			—	I	I	I	3-10
BRAKE SYSTEM			I	I	I	I	3-10
* BRAKE LIGHT SWITCH			—	I	I	I	14-14
* SUSPENSION			—	I	I	I	3-11
* NUTS, BOLT, FASTENERS			I	—	I	—	3-12
* HEADLIGHT AIM			—	I	I	I	11-4
** CLUTCH SHOE WEAR			—	—	I	—	8-6
** WHEELS/TIRES			—	I	I	I	3-12
** STEERING HEAD BEARING			I	—	—	I	3-12

* SHOULD BE SERVICED BY AN AUTHORIZED HONDA SCOOTER DEALER UNLESS THE OWNER HAS PROPER TOOLS AND SERVICE DATA, AND IS MECHANICALLY QUALIFIED.

** IN THE INTEREST OF SAFETY, WE RECOMMEND THESE ITEMS BE SERVICED ONLY BY AN AUTHORIZED HONDA SCOOTER DEALER.

NOTES: (1) Service more frequently when riding in dusty areas.

(2) For higher odometer readings, repeat at the frequency intervals established here.

(3) HONDA 2-STROKE MOTORCYCLE OIL has been specifically tested in and is recommended for this engine. The use of other oils may cause excessive carbon build-up in the engine and exhaust system, resulting in loss of power and possible engine damage.

MAINTENANCE

After '86:

I: Inspect and Clean, Adjust, Lubricate or Replace, if necessary.

C: Clean R: Replace A: Adjust L: Lubricate

ITEM	FREQUENCY	WHICHEVER COMES FIRST	ODOMETER READING (NOTE 2)				Refer to
			600 mi (1,000 km)	2,500 mi (4,000 km)	5,000 mi (8,000 km)	7,500 mi (12,000 km)	
* FUEL LINE	EVERY		I	I	I	3-6	
* THROTTLE OPERATION			I	I	I	3-9	
** OIL PUMP AND OIL LINE			I	I	I	2-2	
AIR CLEANER	NOTE 1		C	C	C	3-5	
SPARK PLUG	NOTE 3		EVERY 1,000 mi (1,600 km) R			3-8	
** DECARBONIZING	NOTE 3		EVERY 2,000 mi (3,200 km) C			6-4, 6-5	
* CARBURETOR-IDLE SPEED		I	I	I	I	3-9	
BATTERY			I	I	I	3-5	
BRAKE SHOE WEAR			I	I	I	3-10	
BRAKE SYSTEM		I	I	I	I	3-10	
* BRAKE LIGHT SWITCH			I	I	I	14-14	
* SUSPENSION			I	I	I	3-11	
* NUTS, BOLTS, FASTENERS		I		I		3-12	
* HEADLIGHT AIM			I	I	I	11-4	
** CLUTCH SHOE WEAR				I		8-6	
** WHEELS/TIRES			I	I	I	3-12	
** STEERING HEAD BEARING		I			I	3-12	

* SHOULD BE SERVICED BY AN AUTHORIZED HONDA SCOOTER DEALER UNLESS THE OWNER HAS PROPER TOOLS AND SERVICE DATA, AND IS MECHANICALLY QUALIFIED.

** IN THE INTEREST OF SAFETY, WE RECOMMEND THESE ITEMS BE SERVICED ONLY BY AN AUTHORIZED HONDA SCOOTER DEALER.

NOTES: (1) Service more frequently when riding in dusty areas.

(2) For higher odometer readings, repeat at the frequency intervals established here.

(3) HONDA 2-STROKE MOTORCYCLE OIL has been specifically tested in and is recommended for this engine. The use of other oils may cause excessive carbon build-up in the engine and exhaust system, resulting in loss of power and possible engine damage.

BATTERY

Inspect the battery fluid level.

When the fluid level nears the lower level mark, refill with distilled water to the upper level line.

- Check the specific gravity of the battery electrolyte in each cell (page 14-3).
- Recharge the battery if necessary (page 14-4).

NOTE:

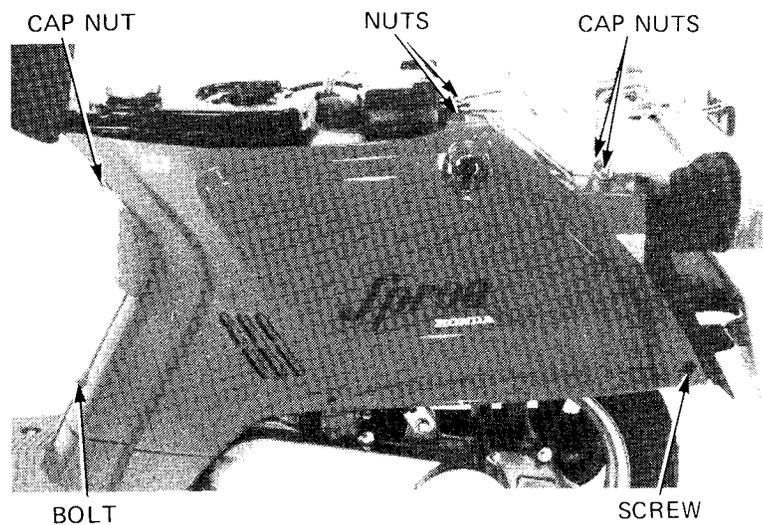
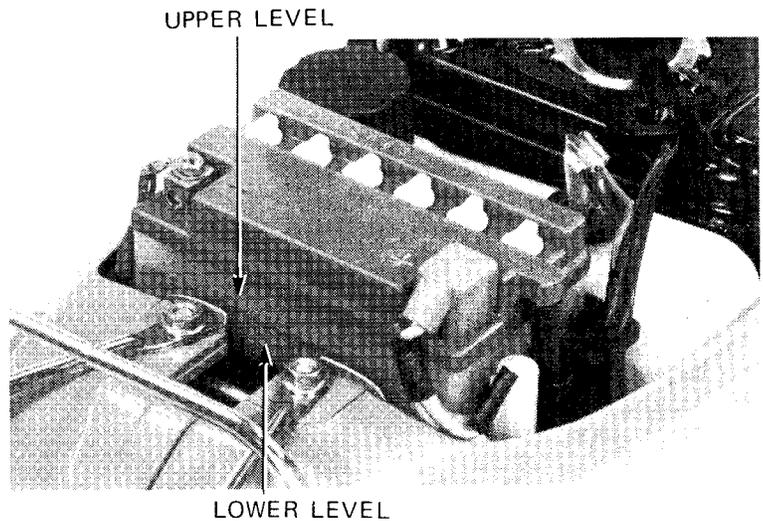
Add only distilled water. Tap water will shorten the service life of the battery.

WARNING

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

After '85:

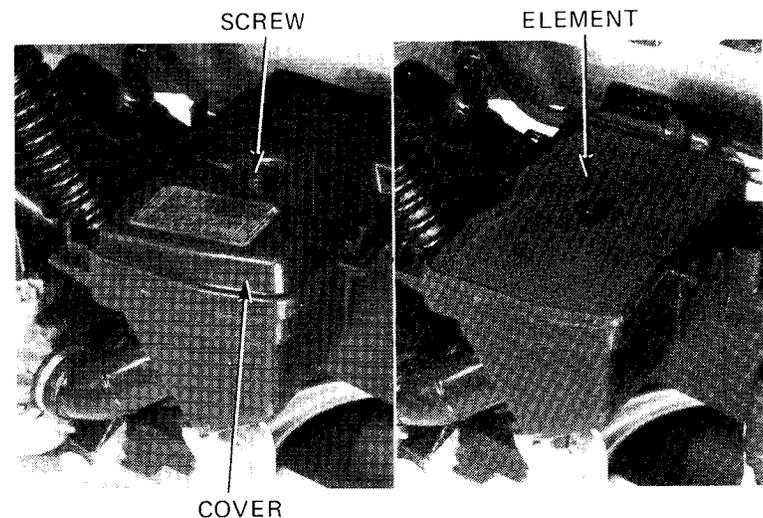
The battery After '85, is a maintenance free type and requires no service other than the initial electrolyte installation.



AIR CLEANER

Remove the rear carrier.

Remove the bolt, nut and screw attaching both rear frame covers and remove the rear frame covers.



Remove the screw attaching the air cleaner case cover and remove the air cleaner case cover.

Remove the air cleaner element.

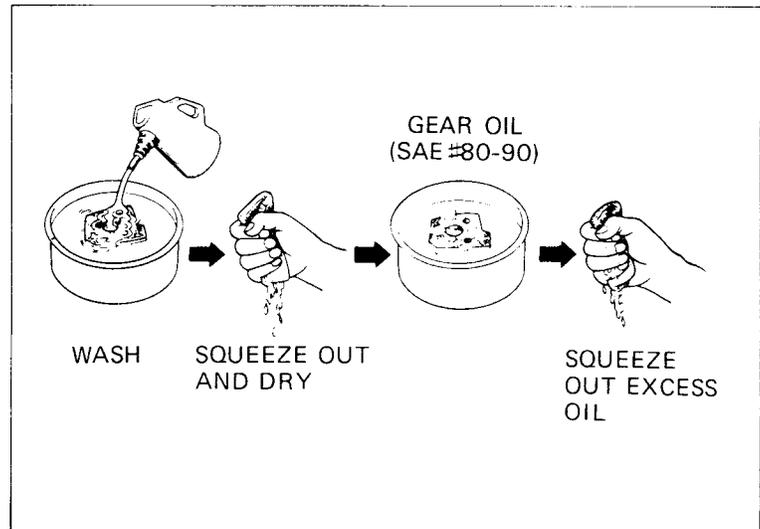
MAINTENANCE

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

WARNING

Never use gasoline or low flash point solvents for cleaning the air cleaner element. A fire or explosion could result.

Soak the element in clean motor oil (SAE 10W-40) or gear oil (#80-90) and squeeze out excess. Reinstall the element, element holder and air cleaner case cover.



FUEL LINE/FUEL STRAINER

WARNING

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

Remove the fuel valve cover.

After '86:

Remove the rear frame covers (page 5-2).

Check the fuel lines for deterioration, damage, or leakage.

Replace if necessary.

Disconnect the fuel line and vacuum tube at the fuel valve. Drain the gasoline into a safe container.

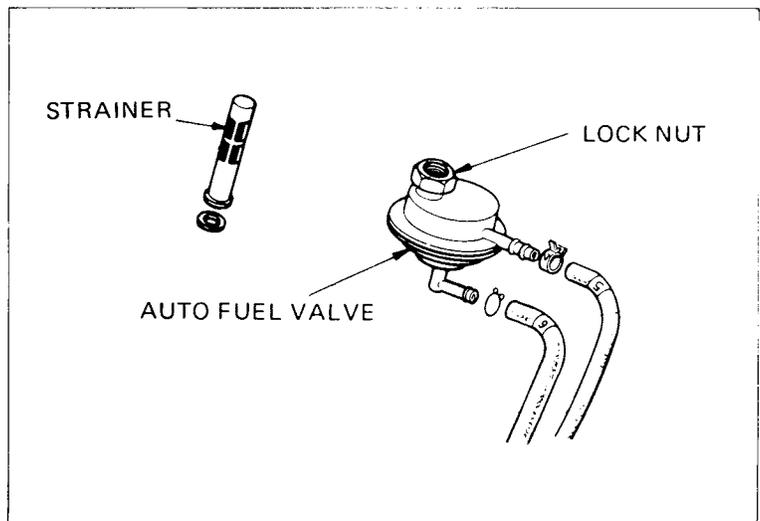
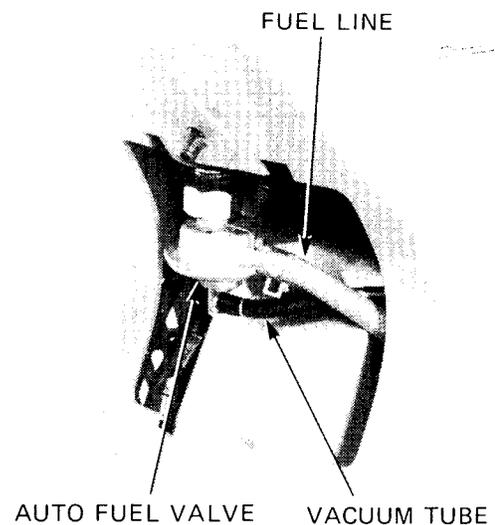
WARNING

Drain the gasoline into a safe container labeled for gasoline.

Remove the lock nut and remove the fuel valve.

Remove the fuel strainer.

Clean the strainer with compressed air.



Install the fuel valve.

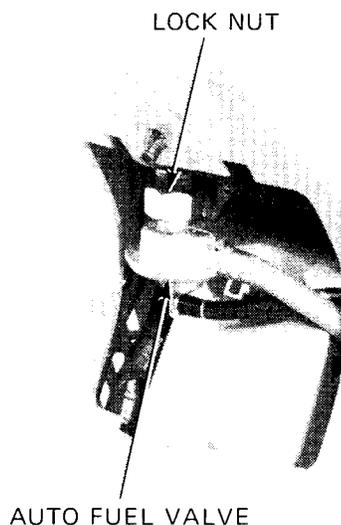
NOTE:

- After assembling, check for leaks.
- Do not overtighten the lock nut.

Install the fuel valve cover.

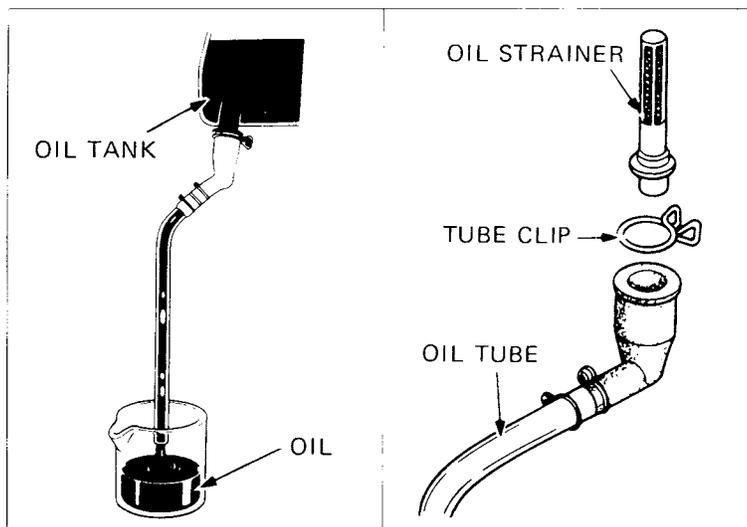
After '86:

Install the rear frame covers.



OIL STRAINER

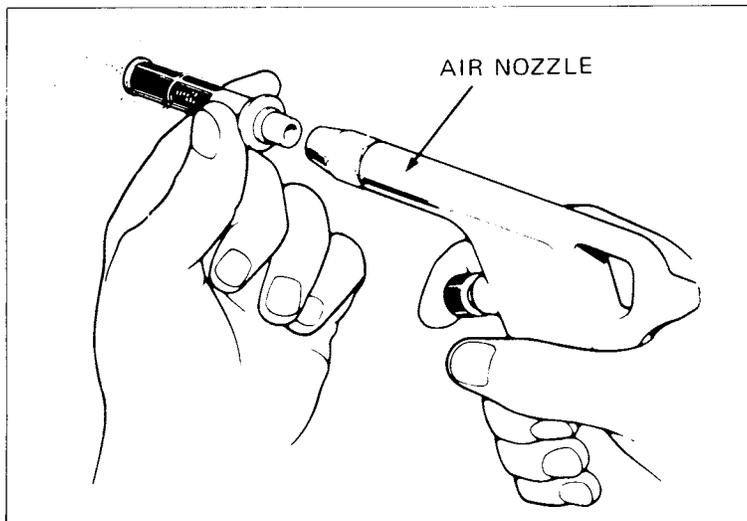
Remove both rear frame covers (page 5-2)
 Disconnect the oil inlet line at the oil pump and allow the oil to drain into a clean container.
 Loosen the tube clip and disconnect the oil tube joint under the oil tank.
 Remove the oil strainer.



Clean the oil strainer with compressed air.
 Installation of the oil strainer is the reverse of removal.
 Fill the oil tank with the recommended oil up to the proper level.
 Bleed air from the oil pump and oil line (page 2-3).

NOTE:

- Connect the oil line securely and check for leaks.



FINAL REDUCTION OIL

OIL LEVEL INSPECTION

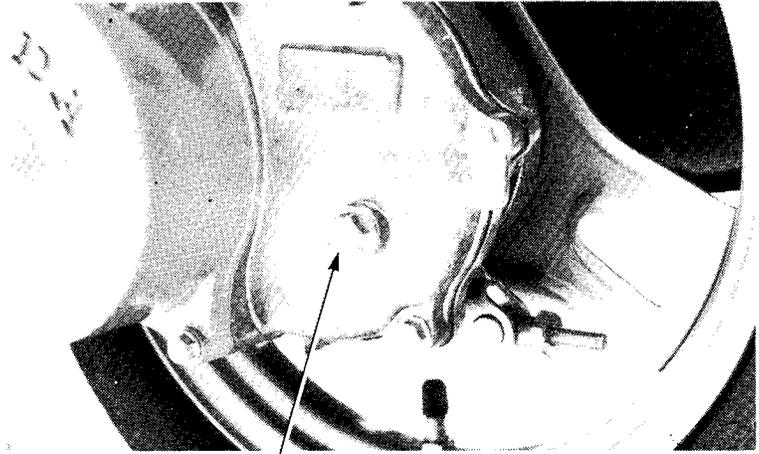
NOTE:

Place the scooter on level ground and support it with the center stand.

Remove the oil level check bolt and check that the oil level is at the bottom edge of the oil level check bolt hole.

If its not, fill the reduction case with the recommended oil to the bottom edge of the hole.

RECOMMENDED OIL: SAE 10W-40



OIL LEVEL CHECK BOLT

SPARK PLUG

RECOMMENDED SPARK PLUGS:

	NGK	ND
Standard	BPR6HS After '85: BPR6HSA	W20FPR After '85: W20FPR-L
Fod cold climate (Below 5°C, 41 F)	BPR4HS After '85: BPR4HSA	W14FPR-L
For extended high speed riding	BPR8HS After '85: BPR8HSA	W24FPR After '85: W24FPR-L

Disconnect the spark plug cap and clean any dirt from around the spark plug base.

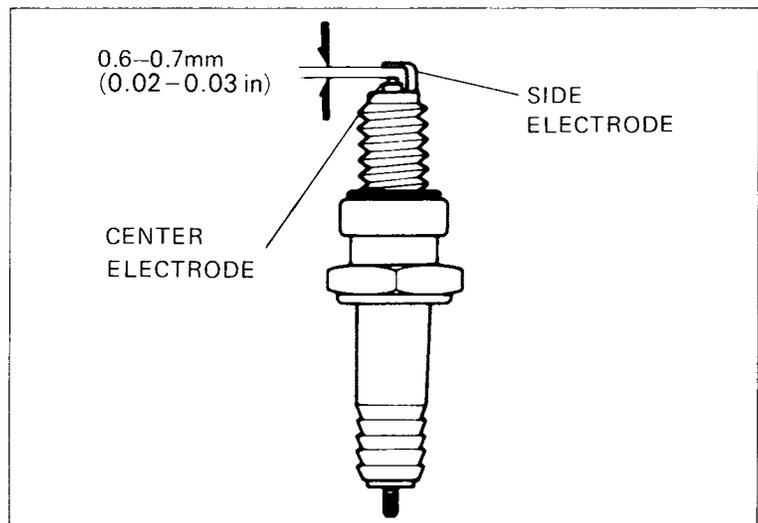
Remove and discard the spark plug.

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

**SPARK PLUG GAP: 0.6–0.7 mm
(0.02–0.03 in)**

Adjust the gap by bending the side electrode carefully.

With the plug washer attached, thread the spark plug in by hand to prevent cross-threading. Tighten the spark plug another 1/2 turn with a spark plug wrench to compress the plug washer. Then connect the spark plug cap.



COMPRESSION TEST

Remove the rear frame covers (page 5-2)
 Warm up the engine.
 Stop the engine and remove the spark plug.
 Insert a compression gauge.
 Open the throttle grip fully and operate the starter motor several times.

COMPRESSION: 8.0 kg/cm² (114 psi)
Minimum

Low compression can be caused by:

- Leaking cylinder head gasket
- Worn piston rings
- Worn cylinder

High compression can be caused by:

- Carbon deposits in combustion chamber or on top of the piston.



COMPRESSION GAUGE (COMMERCIALY AVAILABLE in U.S.A.)

IGNITION TIMING

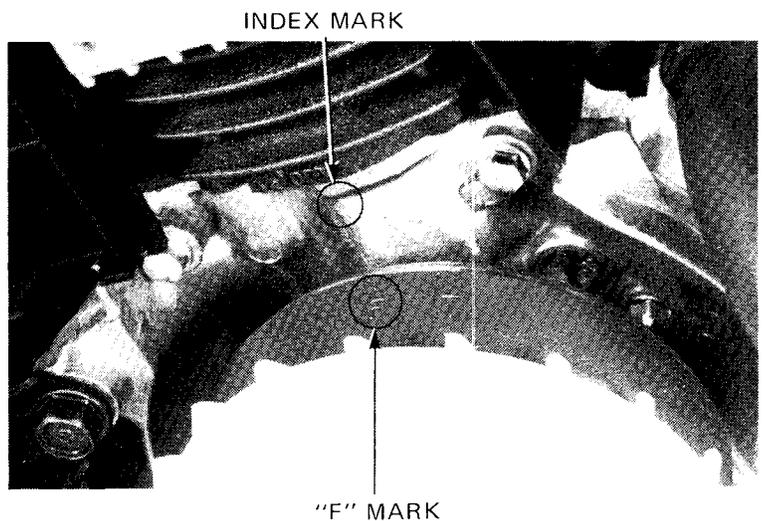
NOTES:

- The CDI ignition timing is not adjustable. If the ignition timing is not correct, check the CDI unit and alternator and replace any faulty parts.

IGNITION TIMING INSPECTION

Remove both rear frame covers (page 5-2)
 Remove the fan cover (page 6-2).
 Check the ignition timing with a timing light.
 Timing is correct if the index mark aligns with the "F" mark at 1,800 rpm.

IGNITION TIMING: 15° at 1,800 ± 100 rpm

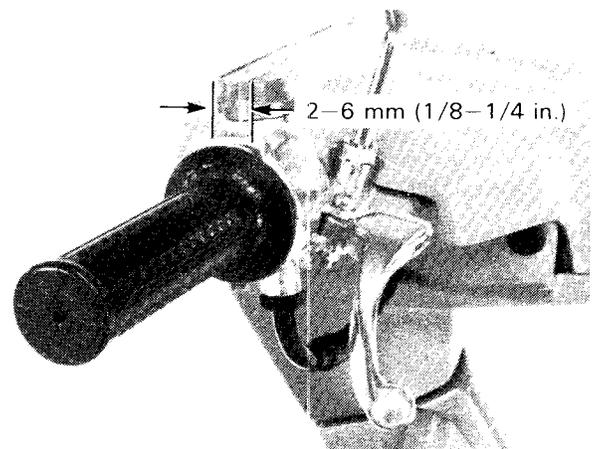


CARBURETOR ADJUSTMENT

THROTTLE CABLE

Measure the throttle grip free play at the throttle grip flange.

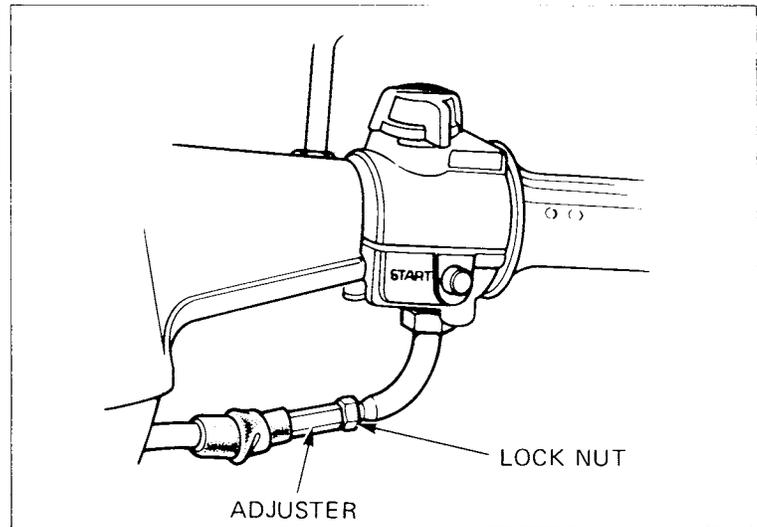
FREE PLAY: 2-6mm (1/8-1/4 in)



MAINTENANCE

Adjustments can be made by loosening the lock nut and turning the throttle grip free play adjuster.

Replace the throttle cable when the above procedure is no longer effective.

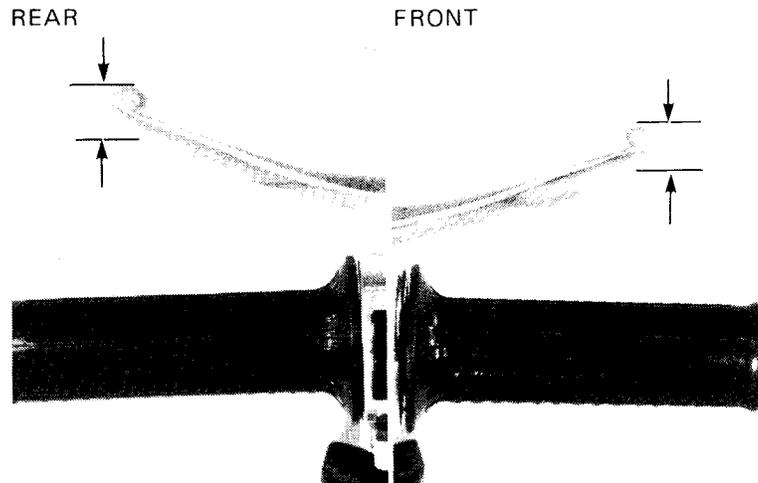
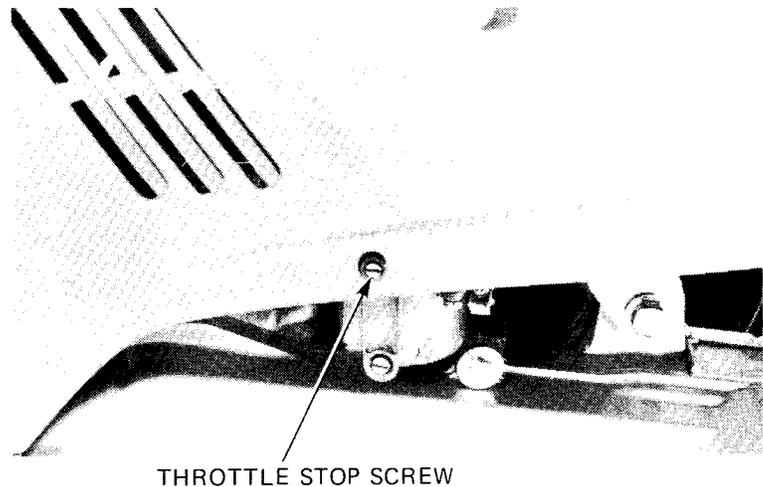


IDLE SPEED ADJUSTMENT

NOTE:

The engine must be warm for accurate adjustment.

1. Remove both rear frame covers (page 5-2).
2. Attach an engine tachometer.
3. Turn the throttle stop screw to obtain the specified idle speed of $1,800 \pm 100$ rpm. When the engine misses or runs erratically, proceed as follows:
 - (1) Screw in the air screw until it lightly seats, then turn it below.
1-7 '8 turns out.
'86: 1-1/2 turns out
After '86: 1-3/8 turns out
 - (2) Reset the idle speed with the throttle stop screw.
 - (3) Turn the air screw in or out to find the highest idle speed.
 - (4) Reset the idle speed with the throttle stop screw.
 - (5) Make sure that the engine does not miss or run erratically. necessary, repeat steps (2) through (4).



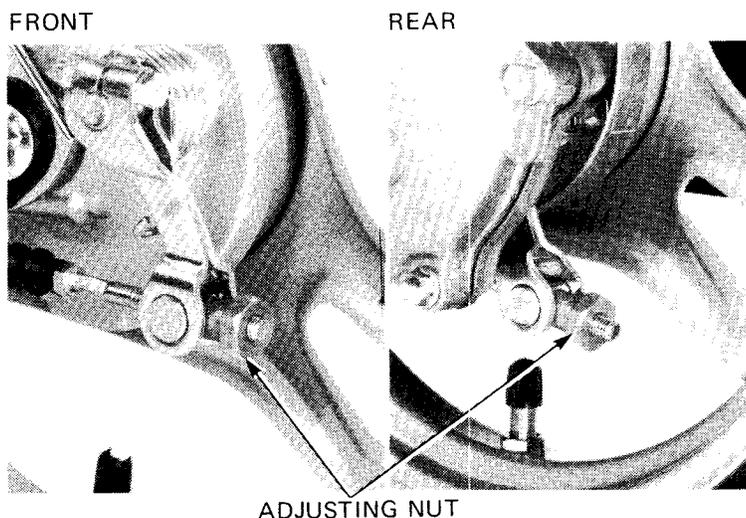
BRAKES

Measure the front and rear brake lever free play at the end of the levers.

FREE PLAY:

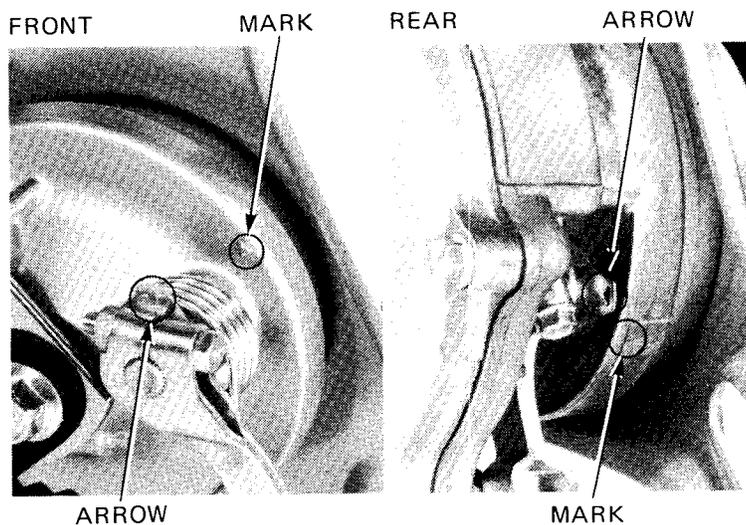
- FRONT: 10-20 mm (3/8-3/4 in)
REAR: 10-20 mm (3/8-3/4 in)

If adjustment is necessary, turn the brake adjusting nut.



BRAKE SHOE INSPECTION

Replace the brake shoes if the arrow on the brake arm aligns with the reference mark "▲" on full application of the front or rear brake.



SUSPENSION

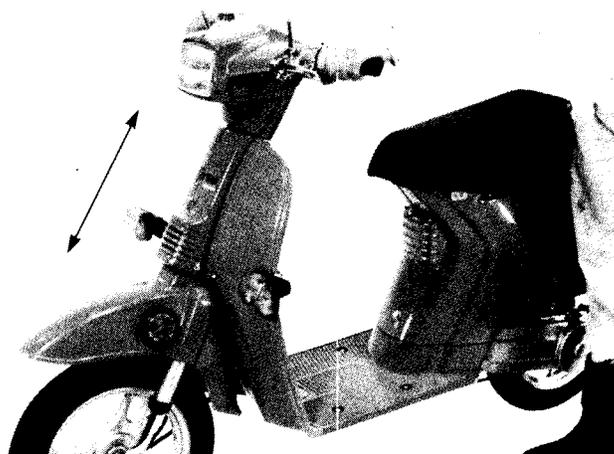
FRONT

Check the action of the front forks by compressing them several times.

Check the entire fork assembly for signs of damage.

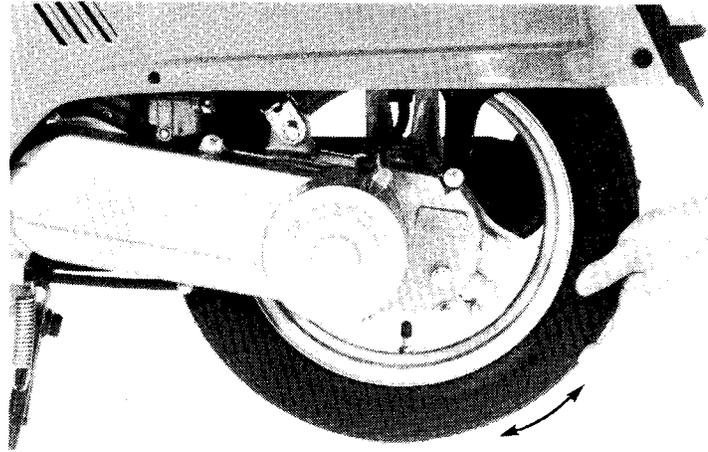
Replace any components which cannot be repaired.

Tighten all nuts and bolts to the specified torque values (page 1-5).



REAR

Place the scooter on the center stand.
Hold the rear carrier with one hand and move the rear wheel sideways with force to see if the swing arm bushings are worn; replace the bushings if excessively worn (page 5-4).
Check the entire suspension assembly.
Be sure it is securely mounted and not damaged.
Tighten all nuts and bolts to the specified torque values (page 1-5).

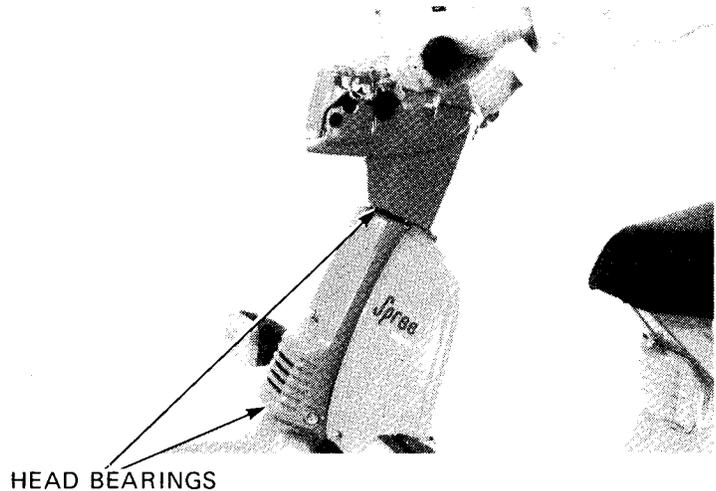


STEERING HEAD BEARINGS

NOTE:

Check that the control cables do not interfere with the handlebar rotation.

Place the scooter on the center stand.
Raise the front wheel off the ground by placing a support under the frame.
Check that the handlebar rotates freely.
If the handlebar moves unevenly, binds, or has vertical movement, adjust the steering head bearing by turning the steering head adjusting nut (page 11-23).



WHEELS/TIRES

Check the tire pressures when the tires are COLD.

TIRE PRESSURES:

FRONT: 125 kPa (1.25 kg/cm², 18 psi)

REAR: 175 kPa (1.75 kg/cm², 24 psi)

TIRE SIZES:

FRONT: 2.50-10-2PR

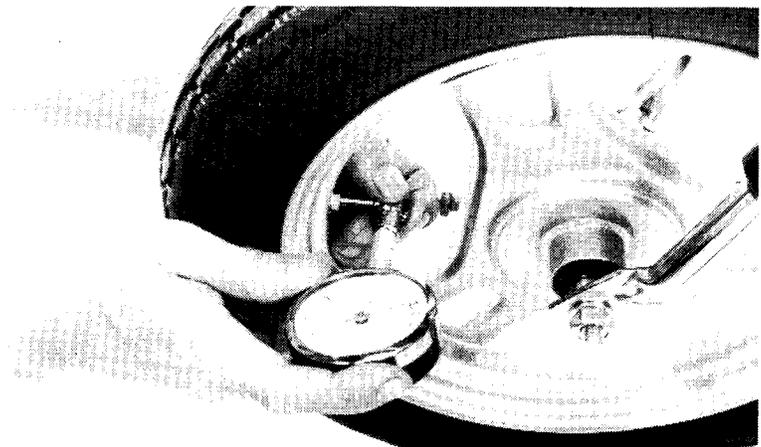
REAR: 2.50-10-2PR

Check the tires for wear, damage or embedded objects.

Check the runout of the wheels (page 11-13, 12-2).

NUTS, BOLTS, FASTENERS

Check that all chassis nuts and bolts are tightened to the correct torque values (page 1-5).



Check all cotter pins and safety clips; condition and placement

Sample of manual. Download All 161 pages at:

<https://www.arepairmanual.com/downloads/1986-honda-nq50-motorcycle-service-repair-workshop-manual/>