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Official

# HONDA

## SHOP MANUAL

### NH125 aero125



'84

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PRINTED IN JAPAN

61KG800  
Ⓢ Ⓜ A21508310E

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## 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.



# HONDA NH125

## HOW TO USE THIS MANUAL

Follow the Maintenance Schedule (Section 3) recommendations to ensure that the vehicle is in peak operating condition and the emission levels are within the standards set by the U.S. Environmental Protection Agency. 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 16 describe parts of the 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 are familiar with this scooter read the Technical Features in section 17.

If you don't know what the source of the trouble is, refer to section 18, 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 WHATSOEVER.**

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HONDA MOTOR CO., LTD.  
Service Publications Office

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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 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

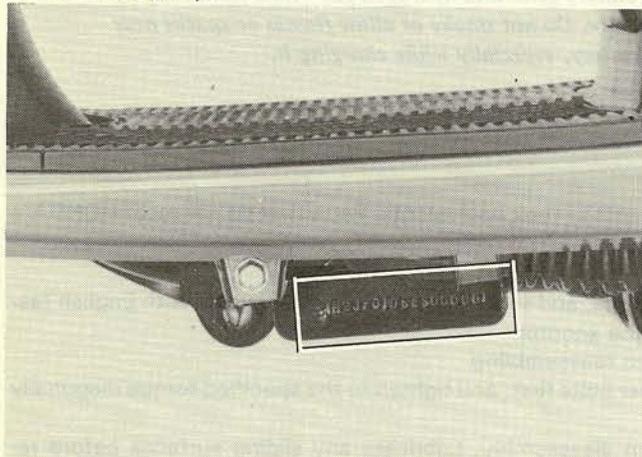
1. Use genuine HONDA or HONDA-recommended parts and lubricants or their equivalents. Parts that do not meet HONDA's design specifications may damage the scooter.
2. Use the special tools designed for this product.
3. Use only metric tools when servicing this scooter. Metric bolts, nuts, and screws are 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 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 re-assembly.
7. After reassembly, check all parts for proper installation and operation.
8. Route all electrical wires as shown on page 1-7, Cable and Harness Routing.



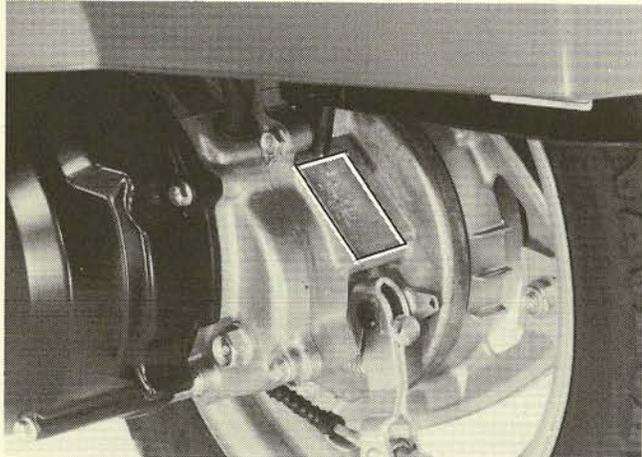
## MODEL IDENTIFICATION



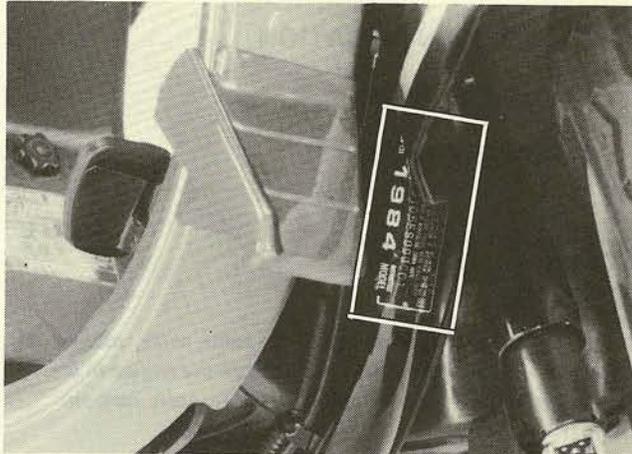
The frame serial number is stamped on the left side of the frame body.



The engine serial number is stamped on the back of the crankcase near the rear wheel.



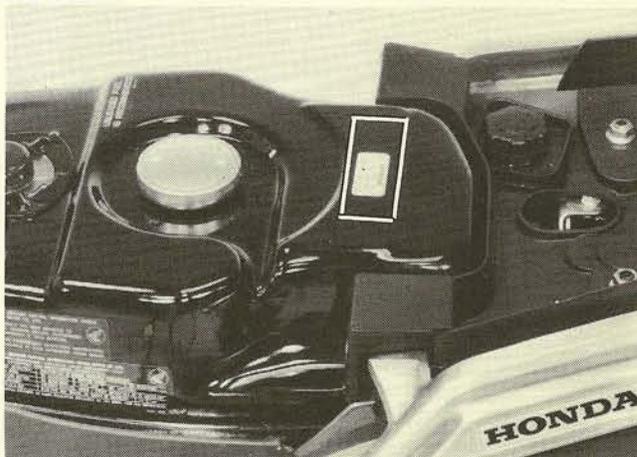
The vehicle identification number is on the frame pipe in the center of the front cover.



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



The color label is attached to the fuel tank below the seat.





**SPECIFICATIONS**

ITEM		SPECIFICATION		
DIMENSIONS	Overall length	1750 mm (68.9 in)		
	Overall width	645 mm (25.4 in)		
	Overall height	1090 mm (42.9 in)		
	Wheelbase	1205 mm (47.5 in)		
	Seat height	755 mm (29.7 in)		
	Ground clearance	110 mm ( 4.3 in)		
	Dry weight	89 kg (196 lb)		
	Curb weight	96.4 kg (24.2 lb)		
FRAME	Type	Back bone		
	Front suspension, travel	Bottom link, 86.4 mm (3.4 in)		
	Rear suspension, travel	Engine/Final drive unit swing arm, 75.5 mm (3.0 in)		
	Gross vehicle weight rating	240 kg (530 lb)		
	Vehicle capacity load	145 kg (320 lb)		
	Front tire size	3.50-10-4PR		
	Rear tire size	3.50-10-4PR		
	Cold tire pressure	Up to 90 kg (200 lbs) load	Front	21 psi (150 kPa, 1.5 kg/cm <sup>2</sup> )
			Rear	28 psi (200 kPa, 2.0 kg/cm <sup>2</sup> )
		Up to vehicle capacity load	Front	21 psi (150 kPa, 1.5 kg/cm <sup>2</sup> )
Rear			36 psi (250 kPa, 2.5 kg/cm <sup>2</sup> )	
Front brake, lining swept area		Internal expanding shoe, 86.4 cm <sup>2</sup> (13.4 sq in)		
Rear brake, lining swept area		Internal expanding shoe, 86.4 cm <sup>2</sup> (13.4 sq in)		
Fuel capacity		7.0 liters (1.8 US gal)		
Caster		27°		
Trail		73 mm (2.9 in)		
ENGINE	Type	Air cooled 2-stroke		
	Cylinder arrangement	Single cylinder 20° inclined from vertical		
	Bore and stroke	55 x 52.4 mm (2.17 x 2.06 in)		
	Displacement	124 cm <sup>3</sup> (7.6 cu in)		
	Compression ratio	6.7 : 1		
	Maximum horsepower	9.5 BHP/7000 rpm		
	Maximum torque	1.3 kg-m (8.7 ft-lb)/5.000 rpm		
	Transmission oil capacity	90 cc (0.09 US qt)		
	Oil tank capacity	1.3 liters (1.4 US qt)		
	Lubrication system	Lubricated by mixing oil with fuel		
	Air filtration	Oiled urethane foam		
	Cylinder compression	12.0 kg/cm <sup>2</sup> (171 psi)		
	Port timing	Intake	Open	Reed valve controlled
			Close	Reed valve controlled
		Exhaust	Open	84° BBDC
Close			84° ABDC	
	Scavenge	Open	57° BBDC	
		Close	57° ABDC	
Engine dry weight		21.3 kg (46.9 lb)		
Idle speed		1,800 ± 100 rpm		

**GENERAL INFORMATION**

ITEM		SPECIFICATION	
CARBURETION	Carburetor type, size	Piston valve, 18 mm (0.71 in) venturi dia.	
	Identification number	PB02B	
DRIVE TRAIN	Air screw	Refer to page 4-11	
	Float level	8.5 mm (0.33 in)	
DRIVE TRAIN	Clutch type	Automatic dry centrifugal clutch	
	Primary reduction	V-belt	
ELECTRICAL	Gear ratio	2.23~1.22	
	Final reduction	6.061 : 1	
ELECTRICAL	Ignition type	C.D.I.	
	Ignition timing "F" mark	18° BTDC at idle	
ELECTRICAL	Starting system	Starting motor	
	Alternator	12V—131W/5,000 rpm	
ELECTRICAL	Battery capacity	12V—5AH	
	Spark plug	NGK	ND
ELECTRICAL	Standard	BPR6HS	W20FPR
	For cold climate (Below 5°C, 41°F)	BPR4HS	W14FPR-L
ELECTRICAL	For extended high speed riding	BPR7HS	W22FPR
	Spark plug gap	0.6—0.7 mm (0.024—0.028 in)	
ELECTRICAL	Fuse capacity	7A	
	LIGHTS		
LIGHTS	Headlight (High/Low)	12V—35/35 W	
	Tail/brake light	12V—3/32 cp	
LIGHTS	Turn signals (Front)	12V—32 cp	SAE No. 1156
	(Rear)	12V—32 cp	SAE No. 1156
LIGHTS	Speedometer light	12V—2 cp	SAE No. 57
	Oil indicator light	12V—2 cp	SAE No. 57
LIGHTS	Turn signal indicator	12V—2 cp	SAE No. 57
	High beam indicator	12V—2 cp	SAE No. 57



**TORQUE VALUES**

**ENGINE**

ITEM	THREAD DIA. mm	TORQUE N·m (kg·m, ft·lb)	REMARKS
Cylinder head	8	18-12 (1.8-2.2, 13-16)	While the engine is cold (below 35°C, 95°F).
Flywheel	10	35-40 (3.5-4.0, 25-29)	
Drive pulley	12	50-60 (5.0-6.0, 36-43)	
Clutch outer	10	35-40 (3.5-4.0, 25-29)	
Driven face and clutch	—	35-40 (3.5-4.0, 25-29)	
Intake pipe	6	8-12 (0.8-1.2, 6-9)	
Carburetor	6	9-12 (0.9-1.2, 7-9)	
Crankcase	6	8-12 (0.8-1.2, 6-9)	

**FRAME**

ITEM	THREAD DIA. mm	TORQUE N·m (kg·m, ft·lb)	REMARKS
Steering stem nut	—	80-120 (8.0-12.0, 58-87)	Self-locking nut
Front axle nut	12	50-70 (5.0-7.0, 36-51)	
Engine hanger bolt	10	27-33 (2.7-3.3, 20-24)	
Rear axle nut	14	80-100 (8.0-10.0, 58-72)	Self-locking nut
Rear shock absorber (Upper)	10	30-45 (3.0-4.5, 22-33)	Apply a locking agent.
Rear shock absorber (Lower)	8	20-30 (2.0-3.0, 14-22)	
Rear shock absorber damper lock nut	8	15-25 (1.5-2.5, 11-18)	
Rear brake arm	6	8-12 (0.8-1.2, 6-9)	
Front brake arm	6	8-12 (0.8-1.2, 6-9)	
Front fork pivot arm	8	20-24 (2.0-2.4, 14-17)	
Front fork (Upper)	8	30-36 (3.0-3.6, 22-26)	
Front fork (Lower)	8	15-20 (1.5-2.0, 11-17)	
Front fork damper lock nut	8	15-25 (1.5-2.5, 11-18)	
Muffler	8	40-50 (4.0-5.0, 29-36)	

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	4-6 (0.4-0.6, 3-4)	5 mm screw	3-5 (0.3-0.5, 3-4)
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	20-30 (2.0-3.0, 14-22)
12 mm bolt and nut	50-60 (5.0-6.0, 36-43)	10 mm flange bolt and nut	30-40 (3.0-4.0, 22-29)

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

\*: These tools are designed and have not been used before.

DESCRIPTION	NUMBER	ALTERNATIVE	NUMBER	REF. PAGE		
Hand vacuum pump with gauge	A937X-041-XXXXX	Hand vacuum pump (USA only: Included in turbo kit)	ST-AH-260-MC7	4-14		
Bearing puller	07931-4630000	Puller attachment Puller shaft	07967-KG80100 07967-KG80200	12-19, 12-20		
*Front shock absorber attachment set	07967-KG80000			12-19, 12-20		
Universal bearing puller	07631-0010000			10-3		
Lock nut wrench, 39 mm	07916-1870002	Bearing remover 12 mm Remover weight	07936-1660100 07741-0010201	8-10, 8-17		
Lock nut wrench	07916-1870100			12-22, 12-26		
Crankcase puller	07935-KG80000			8-8, 10-2		
Bearing remover set, 12 mm	07936-1660001			9-4		
Bearing remover, 17 mm	07936-3710300			9-4		
Bearing remover handle	07936-3710100			9-4		
Remover weight	07741-0010201	9-4				
Bearing driver	07945-GC80000	Right crankshaft Left crankshaft		8-15		
Bearing driver attachment 28 x 30 mm	07946-1870100			8-16		
Seal and Case assembling tool						
~1. Assembly tool	07965-1480200			10-6		
~2. Assembly collar	07965-GC70100			10-5		
~3. Assembly tool	07965-1660200					
Clutch spring compressor	07960-KJ90000			8-10, 8-17		
Rear shock absorber attachment A	07967-GA70101			13-7, 13-8		
Spring attachment holder	07967-GC80000			Spring attachment holder	07967-1180100	13-7, 13-8

**COMMON**

DESCRIPTION	NUMBER	ALTERNATIVE	NUMBER	REF. PAGE		
Float level gauge	07401-0010000			4-7		
Lock nut wrench 30 x 32 mm	07716-0020400			12-8, 12-9		
Extension bar	07716-0020500			12-8, 12-9		
Universal holder	07725-0030000			7-2, 7-5, 8-2, 8-10, 8-17		
Rotor puller	07733-0010000	Flywheel puller	07933-0010000	7-3,		
Pilot 12 mm	07746-0040200			12-12		
Driver outer 32 x 35 mm	07746-0010100			12-12, 13-1		
Pilot 15 mm	07746-0040300			13-1		
Driver outer 37 x 40 mm	07746-0010200			9-4, 9-5		
Pilot 17 mm	07746-0040400			9-4, 9-5, 8-16		
Driver outer 42 x 47 mm	07746-0010300			9-4, 12-24		
Pilot 20 mm	07746-0040500			9-4		
Driver outer 52 x 55 mm	07746-0010400			10-5		
Pilot 25 mm	07746-0040600			10-5		
Driver	07749-0010000			9-4, 9-5, 9-6, 10-5, 12-12, 12-24		
Pin spanner	07702-0020000			Adjustable pin spanner (USA only)	M9361-412-099788	12-26
Bearing remover shaft	07746-0050100					8-13, 12-12
Bearing remover head 12 mm	07746-0050300			8-13, 12-12		
Bearing remover head 17 mm	07746-0050500			8-13		
Rear shock absorber compressor	07959-3290001			13-7, 13-8		

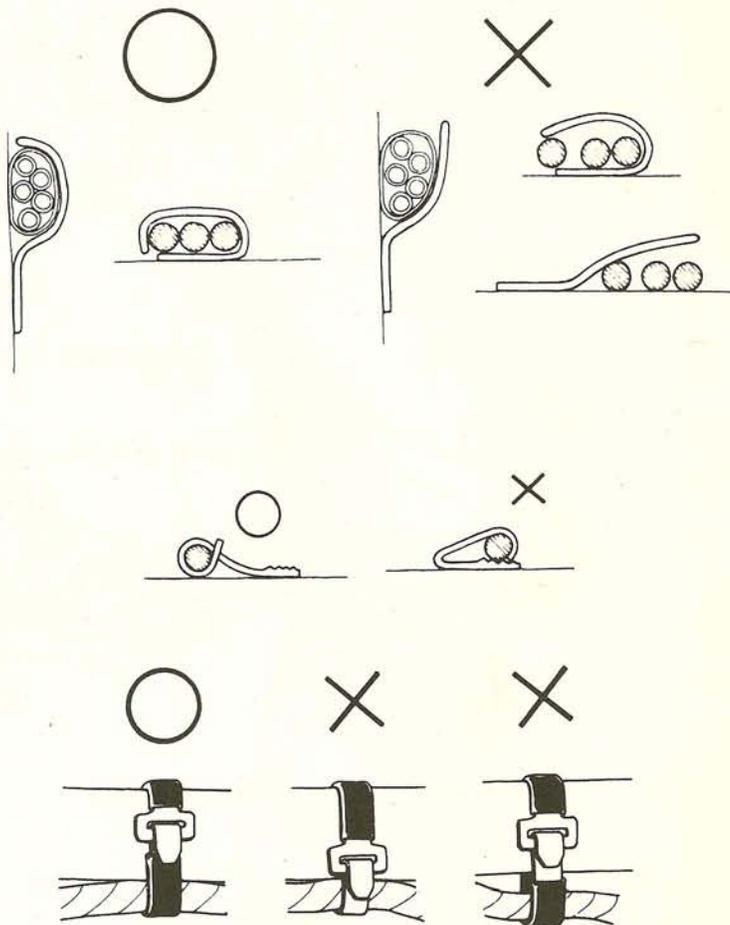


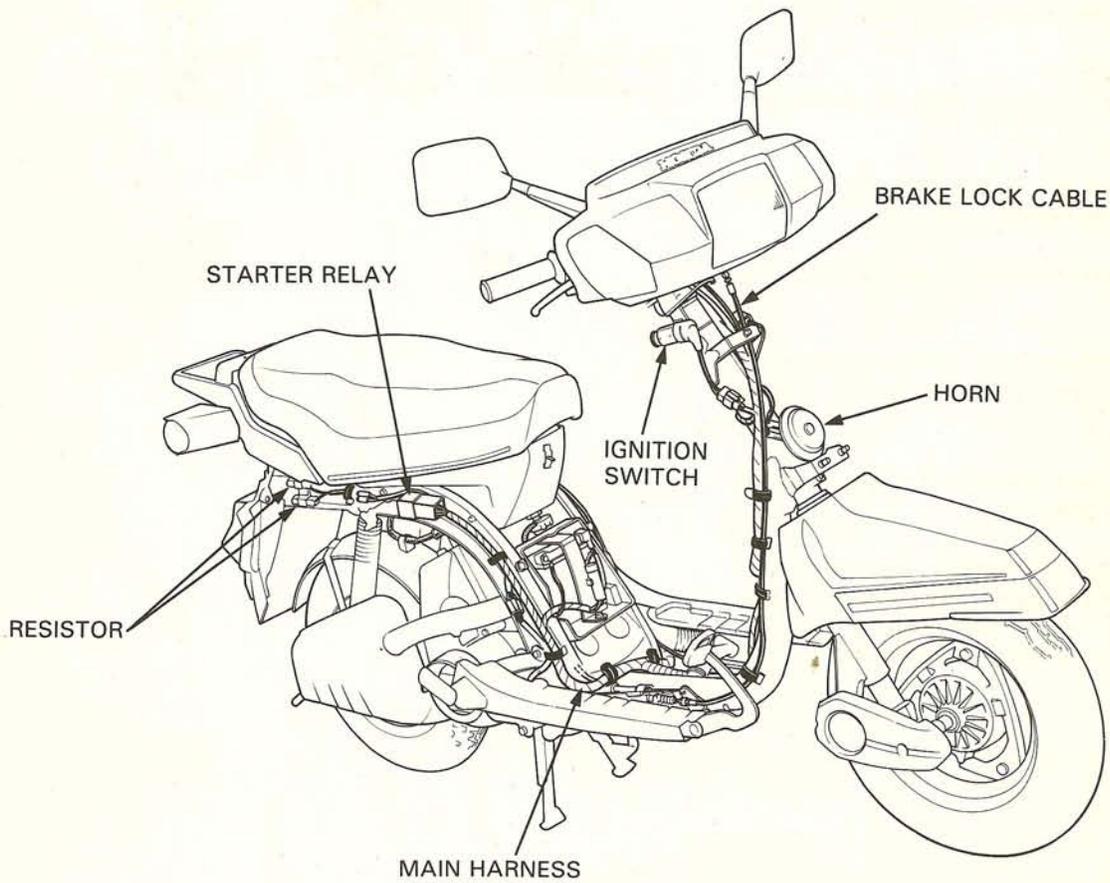
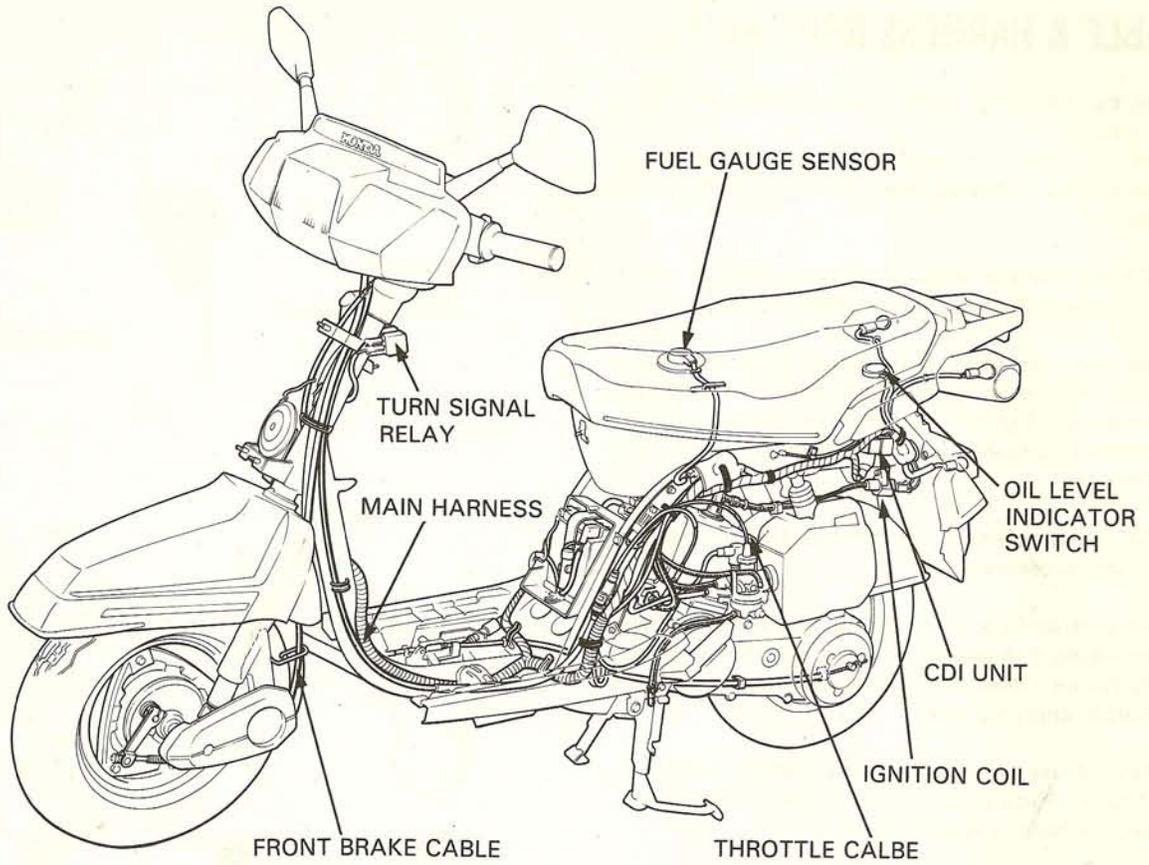
### CABLE & HARNESS ROUTING

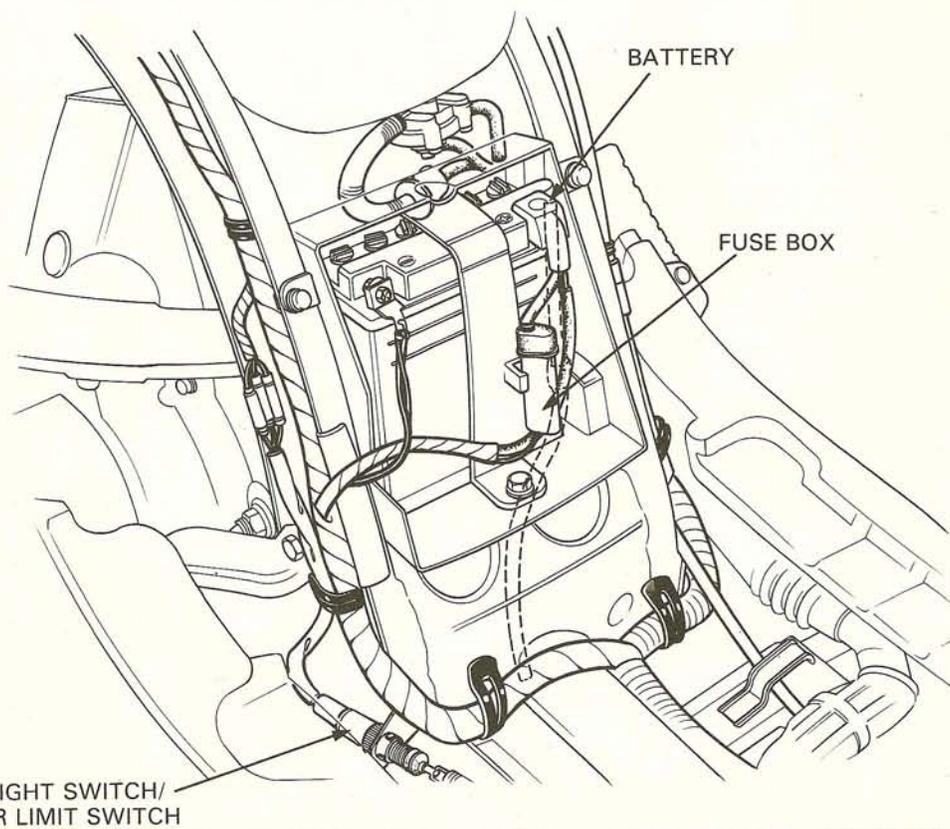
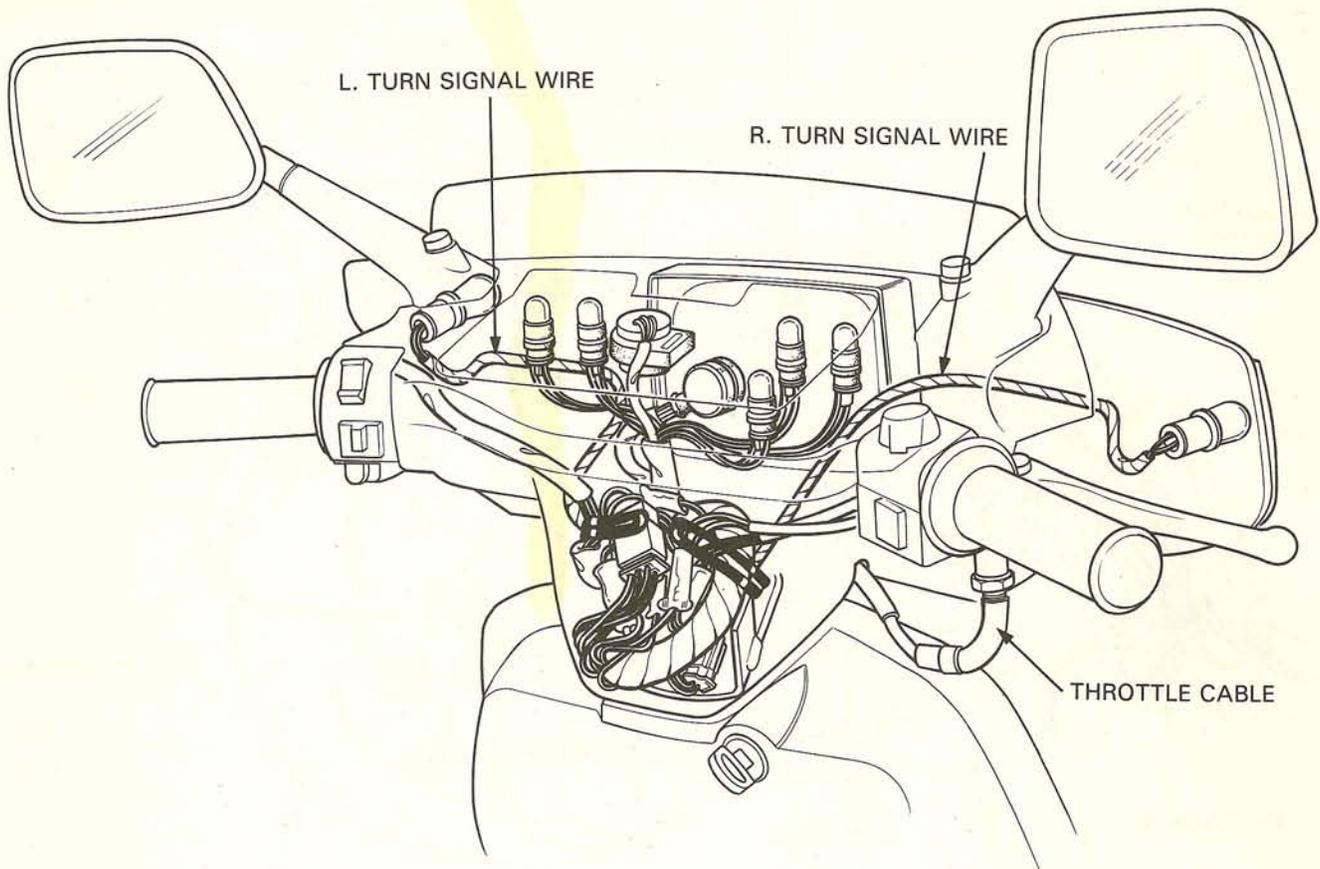
Note the following when routing cables and wire harnesses.

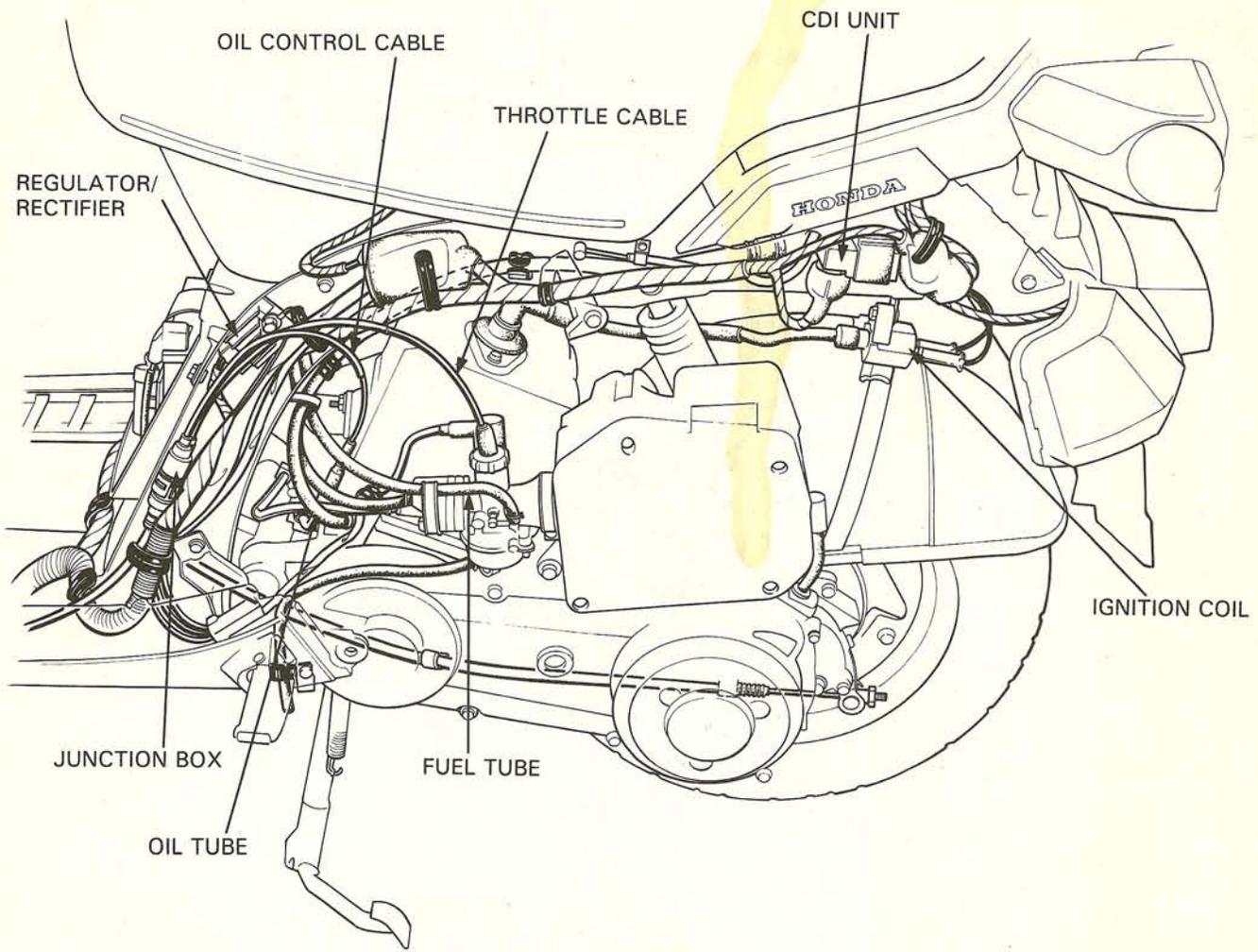
A loose wire, harness or cable can be a safety hazard. After clamping, check each wire to be sure it is secure.

- 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 tight 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 a 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.
- After routing, check that the wire harnesses are not twisted or kinked.
- Wire harnesses routed along the handlebars should not be pulled tight, have excessive slack, be pinched, or interfere with adjacent or surrounding parts in all steering positions.











## **EXHAUST AND NOISE EMISSION CONTROL SYSTEMS (U.S.A. ONLY)**

The U.S. Environmental Protection Agency requires manufacturers to certify that scooters built after December 31, 1977 will comply with applicable emission standards during their useful life when operated and maintained according to the instructions provided, and that scooters built after January 1, 1983 will comply with applicable noise emission standards when operated and maintained according to the instructions provided for one year or 6,000 km (3,730 miles) after the time of sale to the ultimate purchaser. Compliance with the terms of the Distributor's warranty for Honda Motorcycle Emission Control System is necessary in order to keep the emission control system warranty in effect (U.S.A. only).

### **Noise Emission Control System**

**TAMPERING WITH THE NOISE CONTROL SYSTEM IS PROHIBITED:**

Federal law prohibits the following acts or 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.

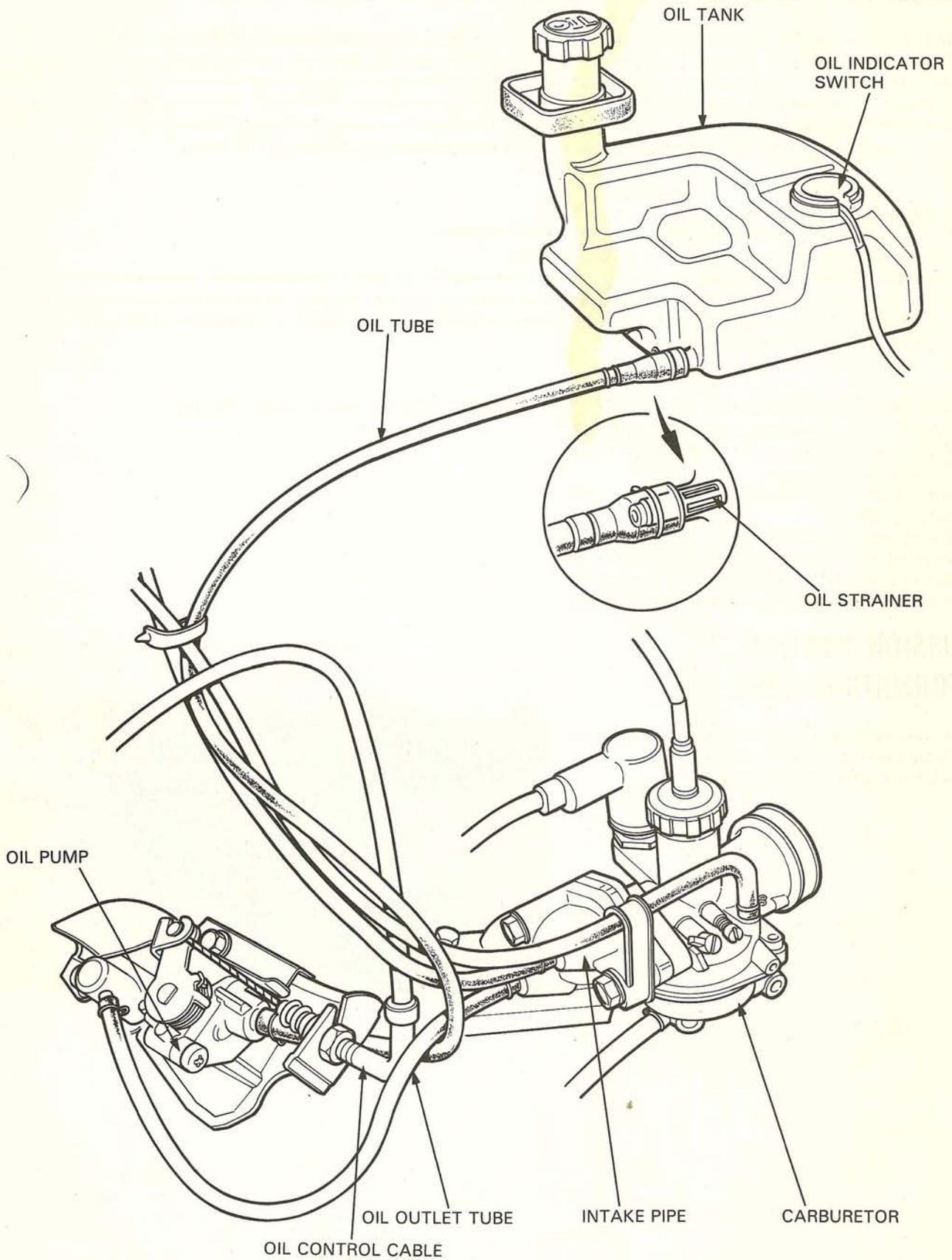
AMONG THOSE ACTS PRESUMED TO CONSTITUTE TAMPERING ARE THE ACTS LISTED BELOW:

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.

## **EMISSION CONTROL INFORMATION LABEL**

An emission control information label is attached to the frame below the seat, as shown. It gives basic tune-up specification.







SERVICE INFORMATION	2-1	OIL PUMP BLEEDING	2-3
TROUBLESHOOTING	2-1	OIL PUMP CONTROL CABEL ADJUSTMENT	2-4
OIL PUMP REMOVAL	2-2	FINAL REDUCTION OIL	2-5
OIL PUMP INSPECTION	2-2	CONTROL CABLE LUBRICATION	2-5
OIL PUMP INSTALLATION	2-2	LUBRICATION POINTS	2-6

**SERVICE INFORMATION**

**GENERAL**

- The engine must be removed from the frame when removing and installing the oil pump.
- When removing and installing the oil pump, use care not to allow dust and dirt to enter the engine and oil line.
- Bleed air from the oil pump if there is air in the oil inlet line (from the oil tank to the oil pump) or if the oil line is disconnected.
- Bleed air from the oil outlet line (from the oil pump to the carburetor) if the line is disconnected.

**SPECIFICATIONS**

Engine oil recommendation:	Honda 2-stroke oil or equivalent
Final reduction oil capacity:	90 cc (3.0 oz)
Final reduction oil recommendation:	Honda 4-stroke oil or equivalent
	Viscosity: SAE 10W-40
	API Service classification: SE or SF

**TORQUE VALUE**

Final reduction oil drain bolt	10-14 N·m (1.0-1.4 kg-m, 7-10 ft-lb)
--------------------------------	--------------------------------------

**TROUBLESHOOTING**

**Excessive smoke and/or carbon on spark plug**

1. Pump not properly adjusted (excessive oil)
2. Low quality engine oil
3. Incorrect engine oil

**Overheating**

1. Oil pump not adjusted properly (insufficient oiling)
2. Low quality oil
3. Incorrect engine oil

**Seized piston**

1. No oil in tank or clogged oil line
2. Pump not properly adjusted (insufficient oiling)
3. Air in oil lines
4. Faulty oil pump

**Oil not flowing out of tank**

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

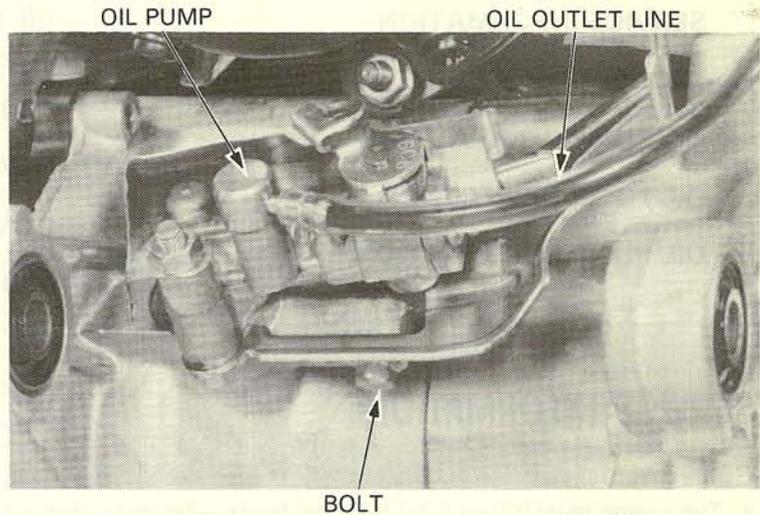


## OIL PUMP REMOVAL

**NOTE:**

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

Remove the engine (Section 5).  
 Remove the starter motor (Page 15-12).  
 Disconnect the oil outlet line from the intake pipe.  
 Remove the oil pump attaching bolt and remove the oil pump.



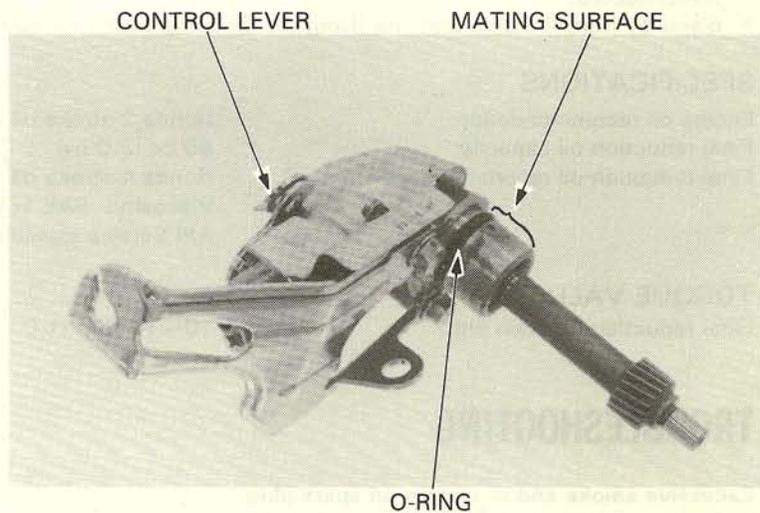
## OIL PUMP INSPECTION

Remove the oil pump and check for the following items:

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

**CAUTION:**

*Do not disassemble the oil pump.*



## 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.*



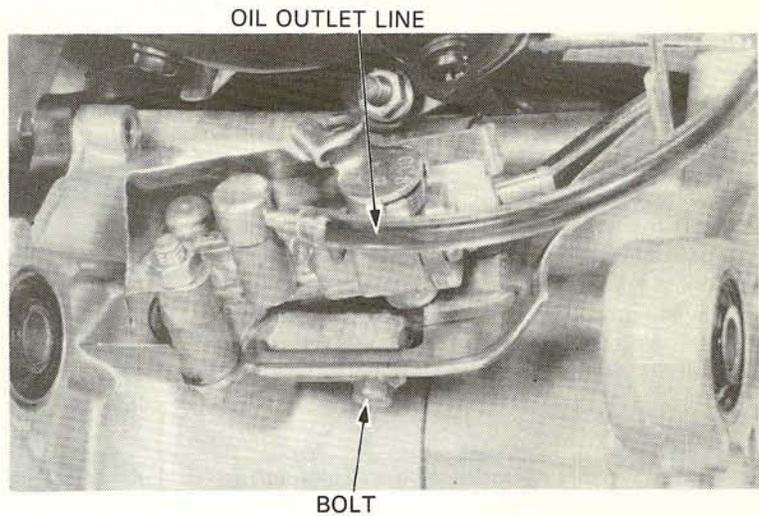


Tighten the oil pump attaching bolt securely.  
Connect the oil outlet line.  
Install the starter motor (Page 15-14).  
Install the engine (Page 5-4).

**NOTE:**

After installation, perform the following inspections and adjustment:

- Control cable adjustment (Page 2-4).
- Oil pump bleeding.
- Check for oil leaks.



**OIL PUMP BLEEDING**

**CAUTION:**

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



**OIL INLET LINE/OIL PUMP**

Fill the oil tank with the recommended oil.  
Place a shop towel around the oil pump.  
Disconnect the oil inlet line from the oil pump.  
Fill the oil pump with oil by squirting clean oil through the joint (about 3 cc).  
Fill the oil line with oil and connect it to the joint of the oil pump.  
After installation, make sure there is no air in the oil inlet line.

**CAUTION:**

*Bleed air from the oil outlet line after bleeding the oil inlet line and oil pump.*



**LUBRICATION**

**OIL OUTLET LINE**

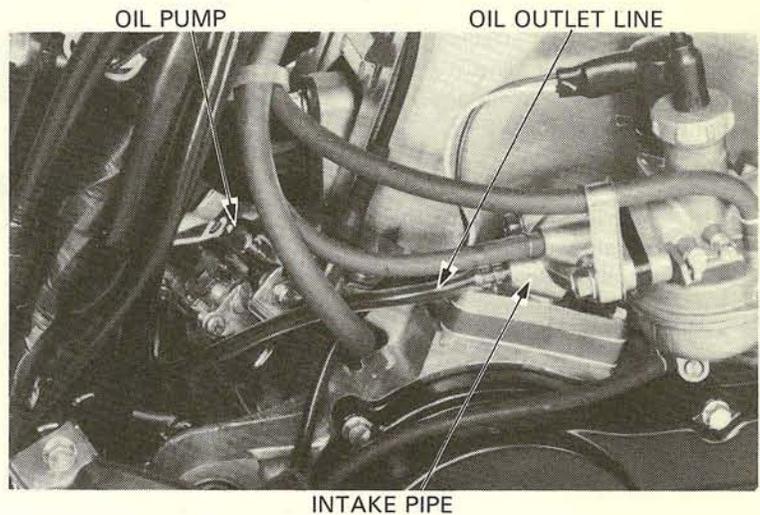
1. Disconnect the oil outlet line at the carburetor and force air out of the tube by filling it with oil using an oil squirt can.
2. Connect the oil outlet line to the carburetor.
3. Start the engine and allow it to idle with the oil control lever in the fully open position, making sure that there are no air bubbles in the oil from the oil pump.
4. If there are air bubbles, repeat steps 1 through 3 until the oil line is free of air bubbles.

**WARNING**

- *Perform this operation in a well ventilated area.*

**CAUTION:**

- *Do not race the engine unnecessarily.*



**OIL PUMP CONTROL CABLE ADJUSTMENT**

**NOTE:**

The oil pump control cable should be adjusted after the throttle grip free play adjustment.

Remove the frame center cover (Page 11-3). Loosen the oil pump control cable lock nut and open the throttle fully. Check that the aligning mark on the oil pump control lever is aligned with the index mark projection on the pump body. Adjust if necessary by turning the adjusting nut.

**CAUTION:**

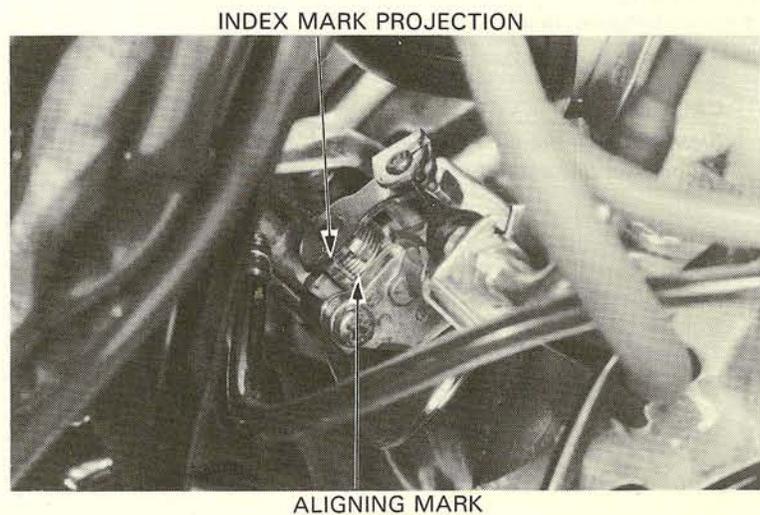
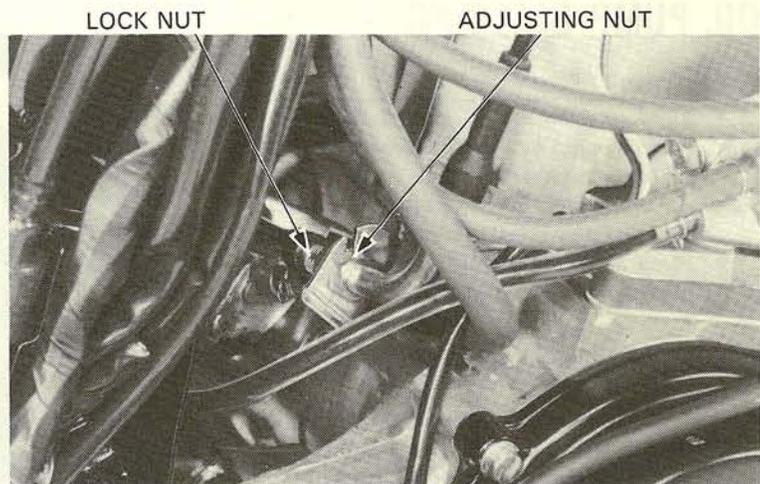
*Reference tip adjustment within 1 mm (0.04 in) of index mark on the open side is acceptable. However, the aligning mark must never be on the closed side of the index mark, otherwise engine damage will occur because of insufficient lubrication.*

Excessive white smoke or hard starting:

- Pump control lever excessively open

Seized piston:

- Pump control lever not properly adjusted





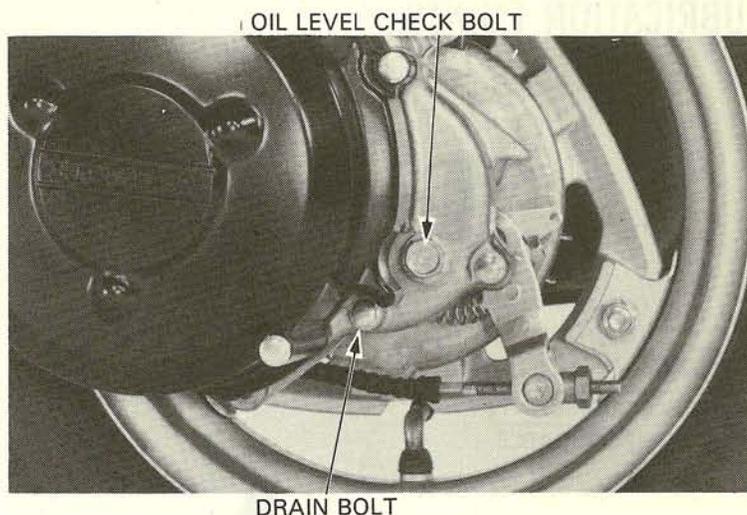
## FINAL REDUCTION OIL

### CHECK

#### 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 oil level check bolt hole.



### CHANGE

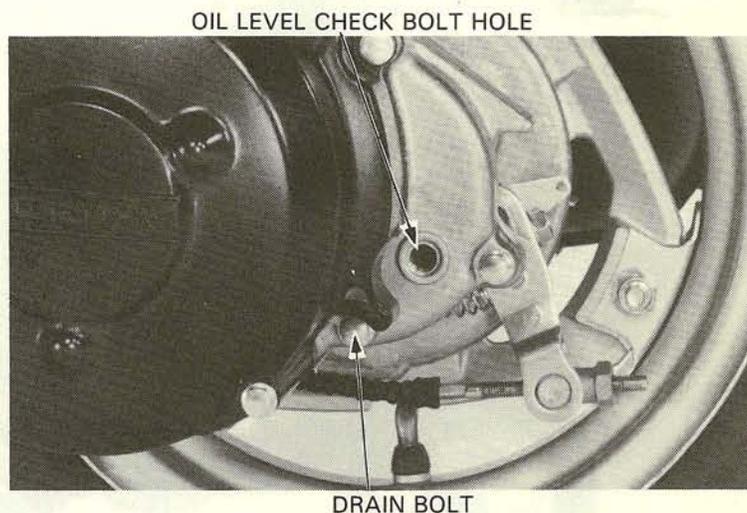
Remove the oil level check bolt.  
Remove the drain bolt to allow the oil to drain thoroughly.  
Reinstall the drain bolt

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

#### NOTE:

Check that the sealing washer is in good condition.

Fill the final reduction case up to the proper level with the recommended oil.



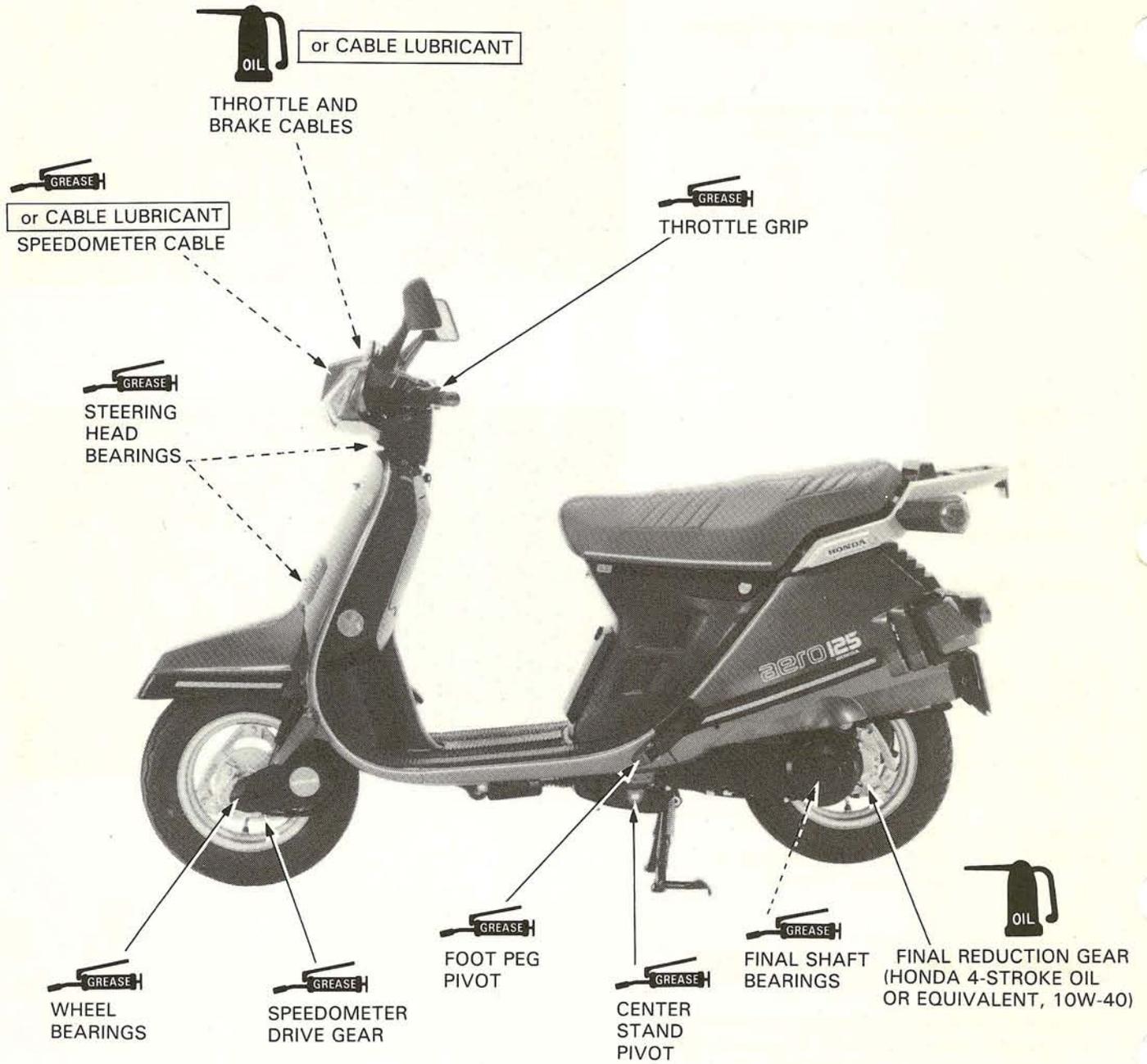
**OIL CAPACITY:** 90 cc (3.0 oz)  
**SPECIFIED OIL:** HONDA 4-STROKE OIL or  
equivalent, 10W-40

## CONTROL CABLE LUBRICATION

Periodically disconnect the throttle, oil control and brake cables at their upper ends. Thoroughly lubricate the cables and their pivot points with a commercially available cable lubricant.



**LUBRICATION POINTS**





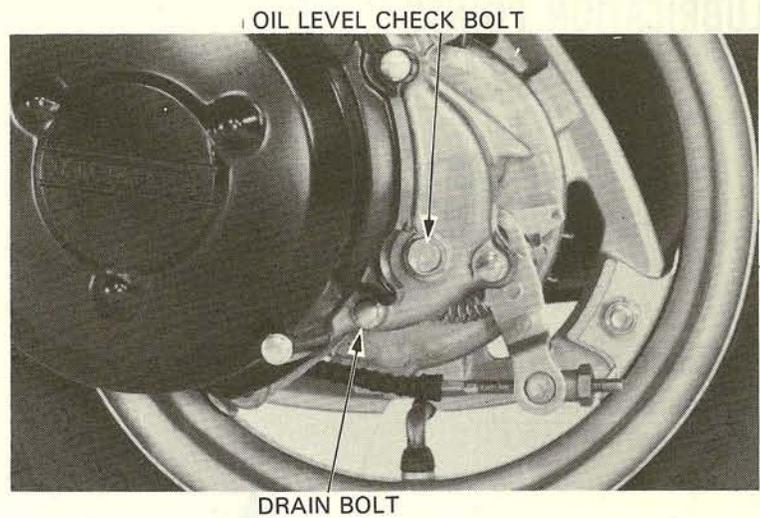
## FINAL REDUCTION OIL

### CHECK

#### 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 oil level check bolt hole.



### CHANGE

Remove the oil level check bolt.  
Remove the drain bolt to allow the oil to drain thoroughly.  
Reinstall the drain bolt

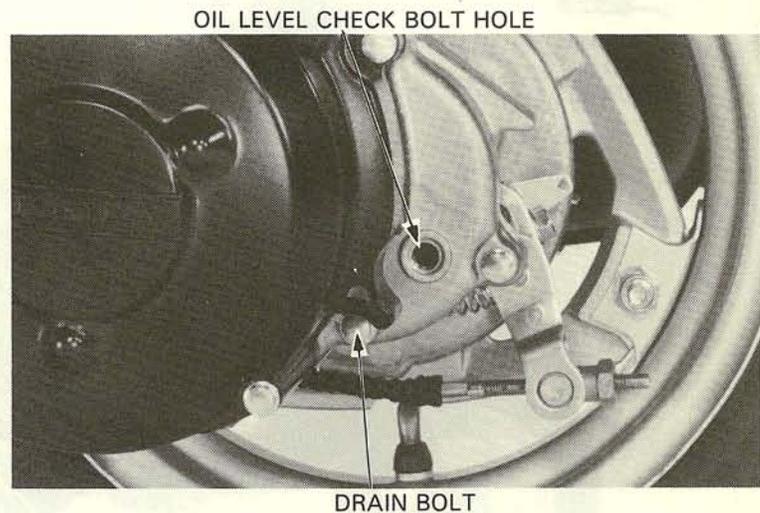
**TORQUE:** 10–14 N·m (1.0–1.4 kg-m,  
7–10 ft-lb)

#### NOTE:

Check that the sealing washer is in good condition.

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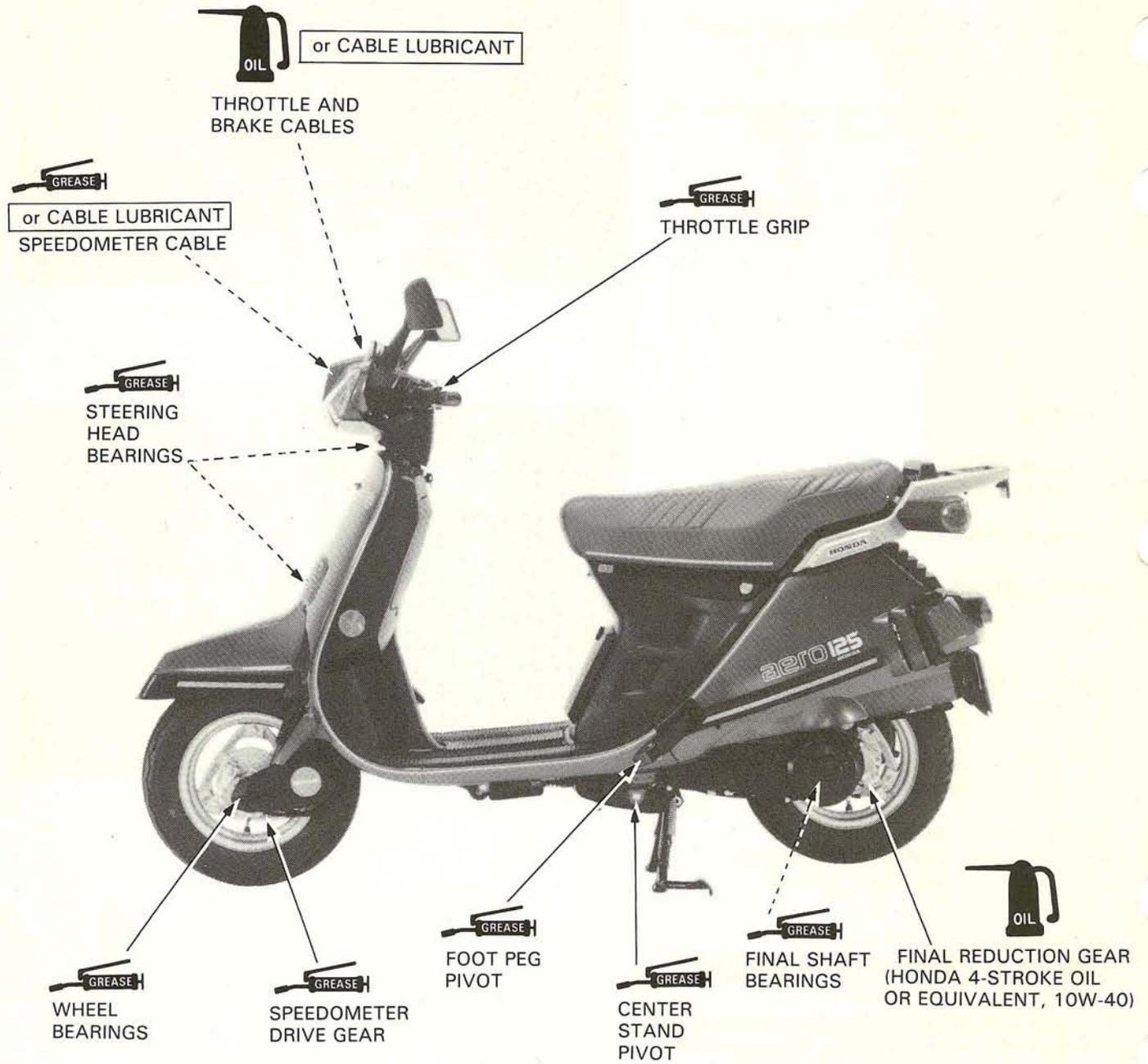


## CONTROL CABLE LUBRICATION

Periodically disconnect the throttle, oil control and brake cables at their upper ends. Thoroughly lubricate the cables and their pivot points with a commercially available cable lubricant.



**LUBRICATION POINTS**





SERVICE INFORMATION	3-1	BATTERY	3-8
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**SERVICE INFORMATION**

**GENERAL**

Oil pump See page 2-2.  
 Transmission oil See page 2-5.  
 Clutch shoe wear See page 8-14.

**SPECIFICATIONS**

<Engine>  
 Spark plug:

Standard		For cold climate (below 5°C, 41°F)		For extended high speed riding	
NGK	ND	NGK	ND	NGK	ND
BPR6HS	W20FPR	BPR4HS	W14FPR-L	BPR7HS	W22FPR

Spark plug gap: 0.6-0.7 mm (0.024-0.028 in)  
 Throttle grip free play: 2-6 mm (1/8-1/4 in)  
 Idle speed: 1,800 ± 100 rpm  
 Cylinder compression: 12.0 kg/cm<sup>2</sup> (171 psi)

<Chassis>

Front brake free play: 10-20 mm (3/8-3/4 in)  
 Rear brake free play: 20-30 mm (3/4-1 1/8 in)

Tire:

Tire size		Front	Rear
		3.50-10-4PR	3.50-10-4PR
Cold tire pressure psi (kPa, kg/cm <sup>2</sup> )	Up to 90 kg (200 lbs) load	21 (150, 1.5)	28 (200, 2.0)
	90 kg (200 lbs) load and up to vehicle capacity load	21 (150, 1.5)	36 (250, 2.5)



## MAINTENANCE SCHEDULE

Perform the Pre-ride Inspection in the Owner's Manual at each scheduled maintenance period.

I : INSPECT AND CLEAN, ADJUST, LUBRICATE, OR REPLACE IF NECESSARY.

C : CLEAN

R : REPLACE

A : ADJUST

L : LUBRICATE

ITEM	FREQUENCY	WHICHEVER COMES FIRST ↓ EVERY	ODOMETER READING (NOTE 2)				Refer to page
			600 mi (1,000 km)	2,500 mi (4,000 km)	5,000 mi (8,000 km)	7,500 mi (12,000 km)	
EMISSION RELATED ITEMS	* FUEL LINES			I	I	I	3-3
	* FUEL FILTER					R	3-3
	* THROTTLE OPERATION		I	I	I	I	3-4
	AIR CLEANER	NOTE 1		C	C	C	3-4
	SPARK PLUG			R	R	R	3-6
	** OIL PUMP		I	I	I	I	2-2
	ENGINE OIL LINES			I	I	I	3-6
	* ENGINE OIL STRAINER SCREEN				C		3-6
	** MUFFLER DECARBONIZATION					C	3-7
	* CARBURETOR-IDLE SPEED		I	I	I	I	3-7
NON-EMISSION RELATED ITEMS	* DRIVE BELT				I		3-13
	* TRANSMISSION OIL	2 YEARS R*					2-5
	BATTERY	MONTH	I	I	I	I	3-8
	BRAKE SHOE WEAR			I	I	I	3-8
	BRAKE SYSTEM		I	I	I	I	3-9
	* BRAKE LOCK LEVER		I	I	I	I	3-10
	* STARTER LIMIT SWITCH		I	I	I	I	3-11
	* BRAKE LIGHT SWITCH		I	I	I	I	3-11
	* HEADLIGHT AIM		I	I	I	I	3-11
	* SUSPENSION		I	I	I	I	3-11
	* NUTS, BOLTS, FASTENERS		I	I	I	I	3-12
	** CLUTCH SHOE WEAR			I	I	I	8-14
	** WHEELS		I	I	I	I	3-12
** STEERING HEAD BEARINGS		I			I	3-13	

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

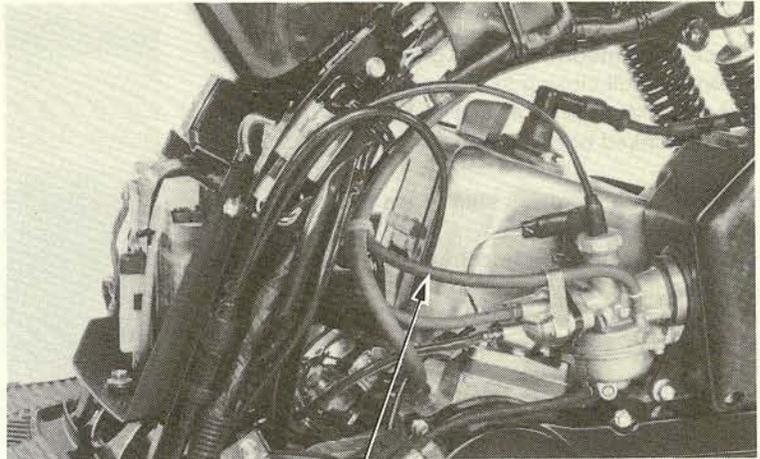
\*\* IN THE INTEREST OF SAFETY, WE RECOMMEND THESE ITEMS BE SERVICED ONLY BY AN AUTHORIZED HONDA SCOOTER DEALER.

NOTES: 1. Service more frequently when riding in dusty areas.  
2. For higher odometer readings, repeat at the frequency interval established here.



## FUEL LINES

Remove the frame center cover (Section 11.)  
Check the fuel lines and replace any parts which show deterioration, damage or leakage.  
Install the frame center cover.



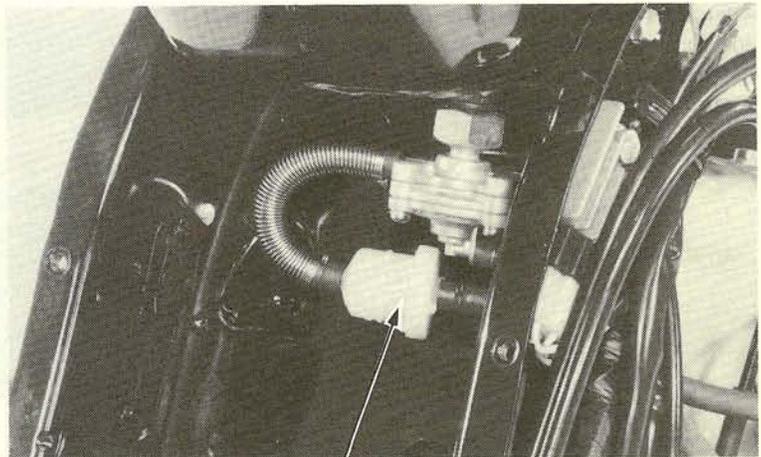
FUEL LINE

## FUEL FILTER

Replace the fuel filter with a new one when indicated by the maintenance schedule (page 3-2).  
Remove the frame center cover and battery box (Section 11).  
Disconnect the fuel lines from the fuel filter.  
Replace the fuel filter with a new one.

**WARNING**

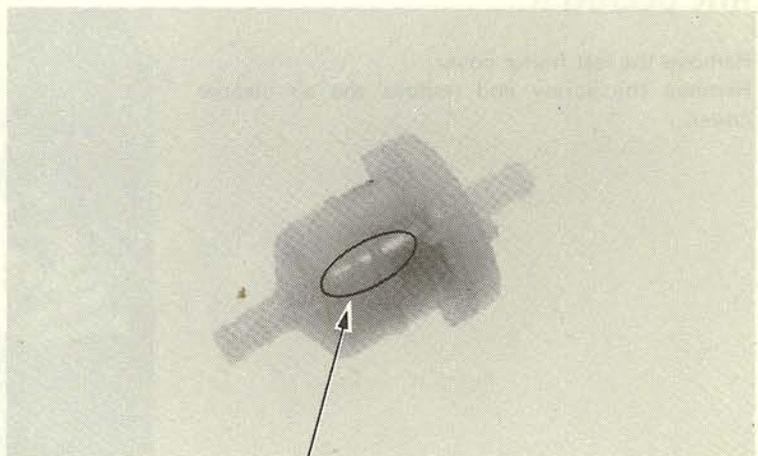
*Gasoline is flammable and is explosive under certain conditions. Do not smoke or allow flames or sparks in your working area.*



FUEL FILTER

Install the fuel filter with the arrow in the normal direction of fuel flow.

After installing, check that there are no fuel leaks.



ARROW



## THROTTLE OPERATION

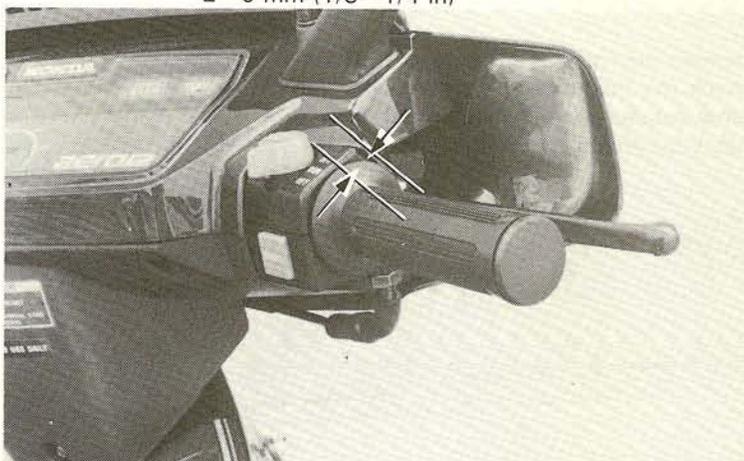
Check for smooth throttle grip full opening and automatic full closing in all steering positions. Check the throttle cable and replace it, if it is deteriorated, kinked or damaged.

Lubricate the throttle cable (page 2-5), if throttle operation is not smooth.

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

**FREE PLAY: 2–6 mm (1/8–1/4 in)**

2–6 mm (1/8–1/4 in)



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.



ADJUSTER

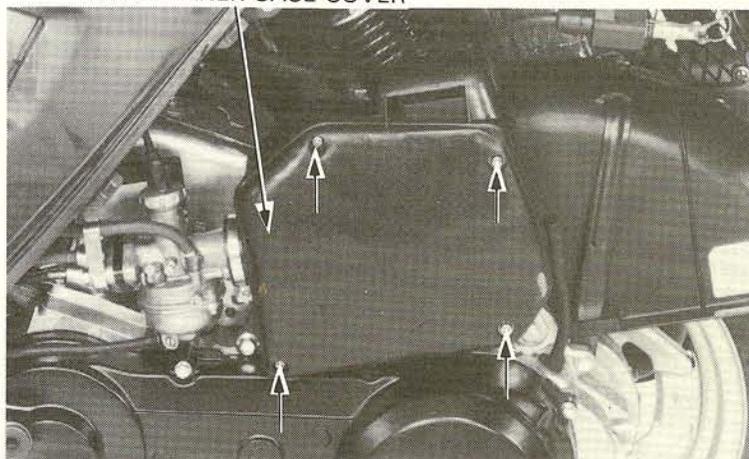
LOCK NUT

## AIR CLEANER

Remove the left frame cover.

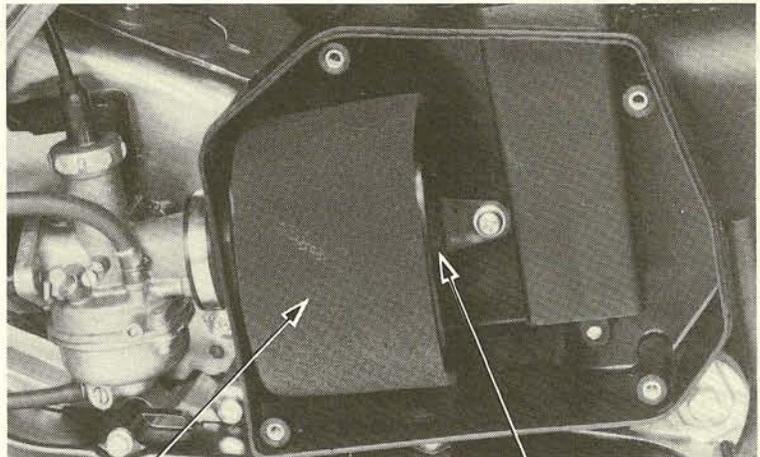
Remove the screw and remove the air cleaner cover.

AIR CLEANER CASE COVER





Remove the element holder.  
Remove the element from the element holder.



ELEMENT

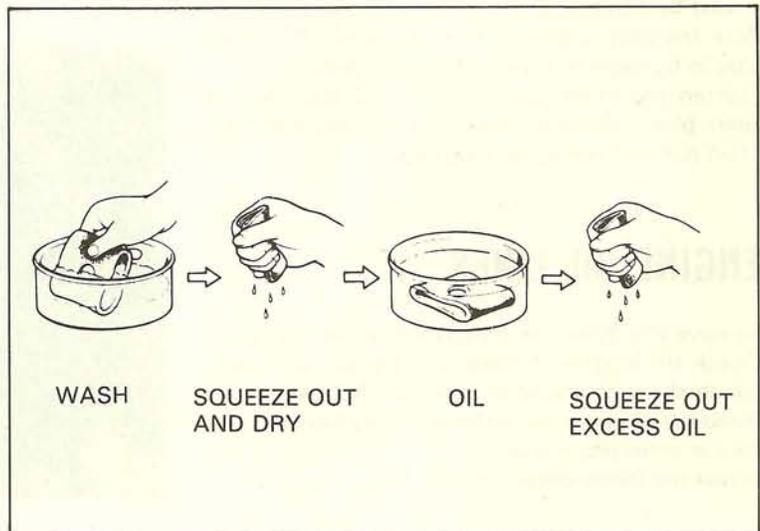
ELEMENT HOLDER

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

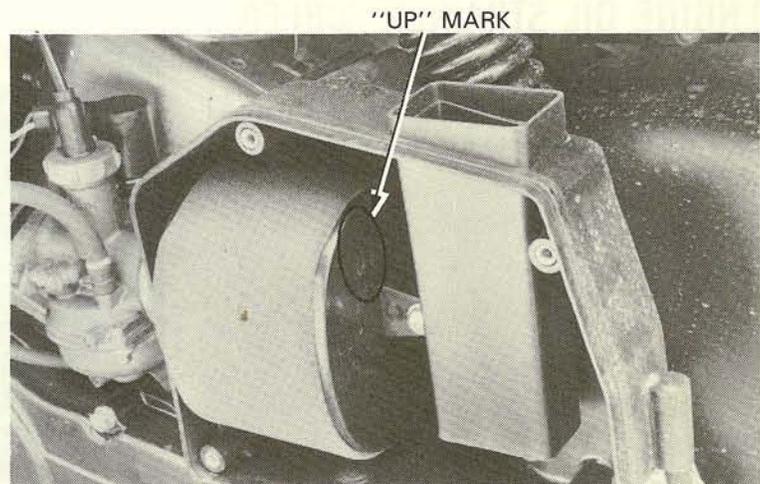
**WARNING**

*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 the excess. Reinstall the element, element holder, air cleaner case cover and carburetor cover.



Install the element according the up mark.



"UP" MARK



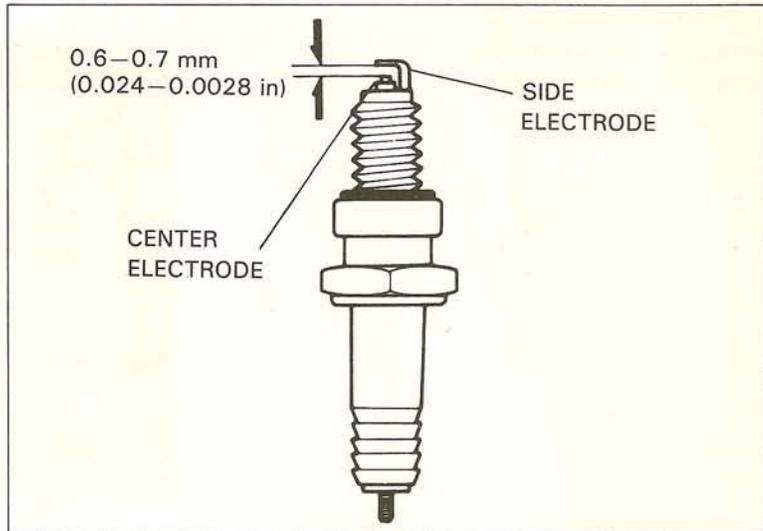
**MAINTENANCE**

**SPARK PLUG**

**RECOMMENDED SPARK PLUG**

	NGK	ND
Standard	BPR6HS	W20FPR
For cold climate (Below 5°C, 41°F)	BPR4HS	W14FPR-L
For extended high speed riding	BPR7HS	W22FPR

Disconnect the spark plug cap.  
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.

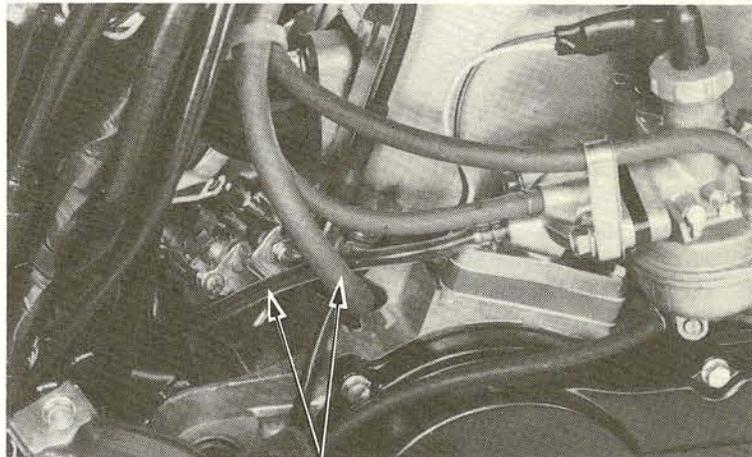


**SPARK PLUG GAP: 0.6—0.7 mm (0.024—0.028 in)**

Adjust 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.

**ENGINE OIL LINES**

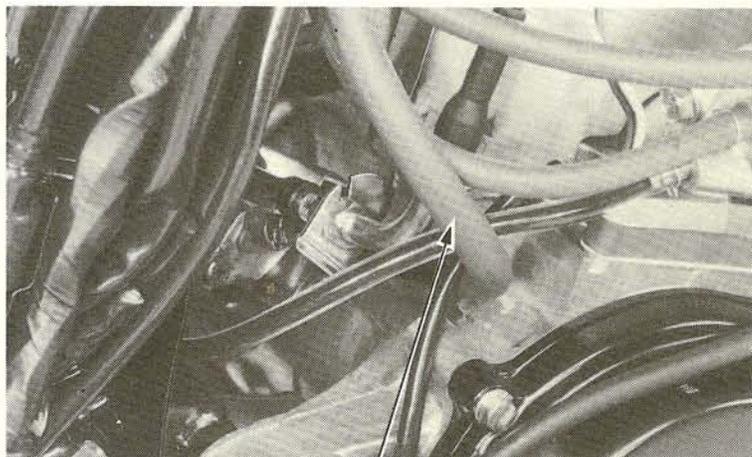
Remove the frame center cover (Section 11.).  
Check the engine oil lines and replace any parts which show deterioration, damage or leakage.  
Bleed the oil pump and oil lines, if they have air bubbles in them (Page 2-3).  
Install the frame center cover.



**ENGINE OIL LINES**

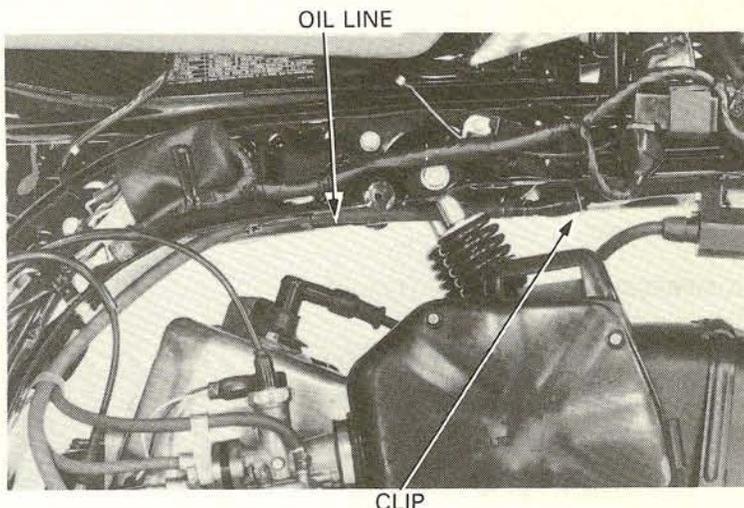
**ENGINE OIL STRAINER SCREEN**

Remove the frame center cover (Section 11).  
Disconnect the oil inlet line at the oil pump and allow the oil to drain into a clean container.



**OIL INLET LINE**

Disconnect the oil line at the bottom of the oil tank by loosening the clip.  
Remove the oil strainer.



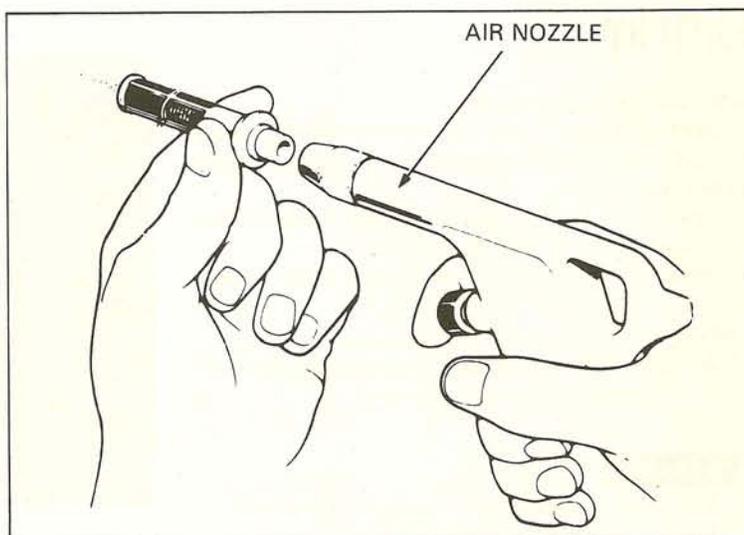
Clean the oil strainer with compressed air. Replace the oil strainer if necessary. The installation sequence is essentially the reverse order of removal. Fill the tank with the recommended oil up to the proper level and bleed air from the oil pump and oil line (Page 2-3).

**NOTE:**

- Connect the oil line securely.
- Check for leaks.

## MUFFLER DECARBONIZATION

Remove the muffler (Page 13-2).  
Remove the carbon from the muffler.  
Reinstall the muffler (Page 13-3).



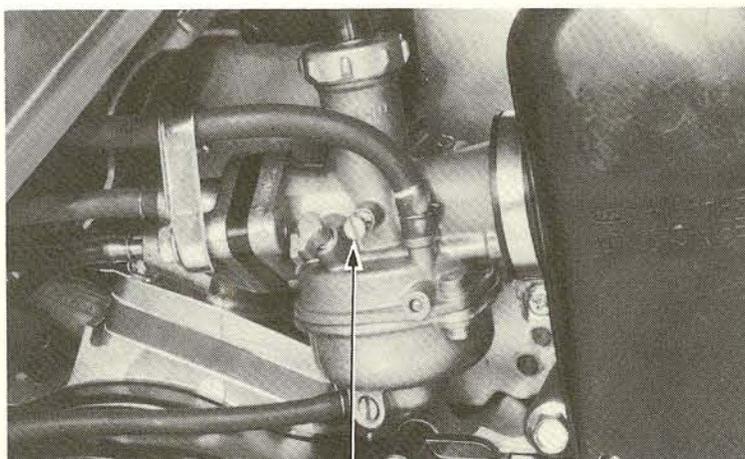
## CARBURETOR IDLE SPEED

**NOTE:**

- Inspect and adjust idle speed after all other engine adjustments are within specifications.
- The engine must be warm for accurate adjustment. Ten minutes of stop-and-go riding is sufficient.

Remove the left side cover.  
Warm up the engine and place the scooter on its center stand.  
Turn the throttle stop screw as required to obtain the specified idle speed.

**IDLE SPEED: 1,800 ± 100 rpm**



THROTTLE STOP SCREW