

Product: 1986-1986 Honda TG50M Gyro S Motorcycle Service Repair Workshop Manual

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Official

HONDA

SHOP MANUAL

TG50M Gyro S



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'85 '86

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 possible 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

Follow the Maintenance Schedule 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 15 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 section 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.

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.

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1. GENERAL INFORMATION

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GENERAL SAFETY

WARNING

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

WARNING

Gasoline is extremely flammable and is explosive under certain conditions. Do not smoke or allow flames or sparks in your 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 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 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 and always keep them away from sharp edges and areas where they might be pinched between moving parts.



COLOR CODE LABEL

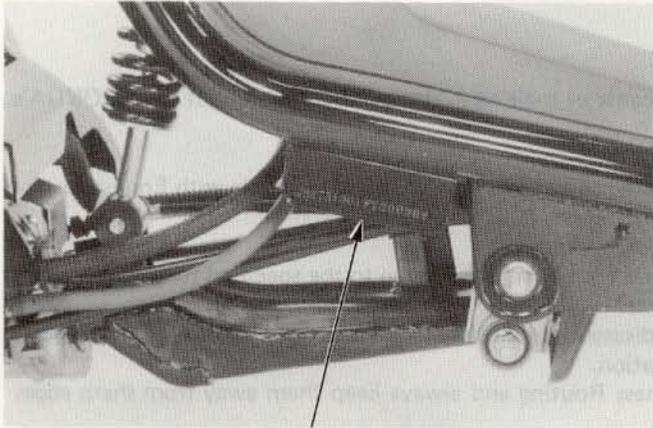


ENGINE SERIAL NUMBER

MODEL IDENTIFICATION

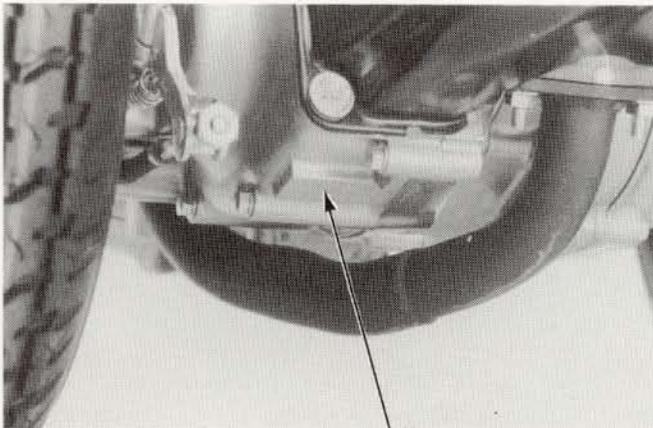


The frame serial number is stamped on the right side of the frame.



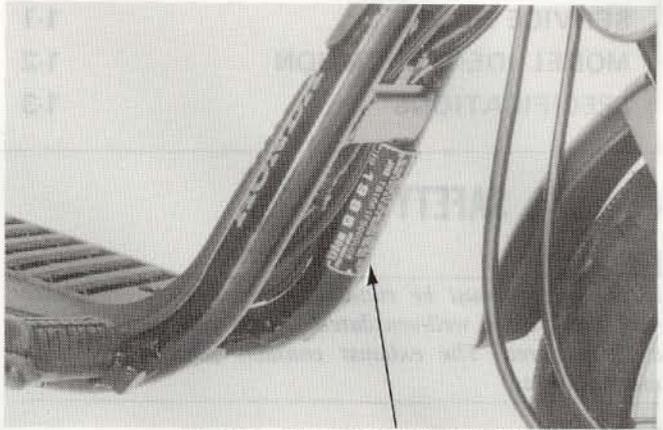
FRAME SERIAL NUMBER

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



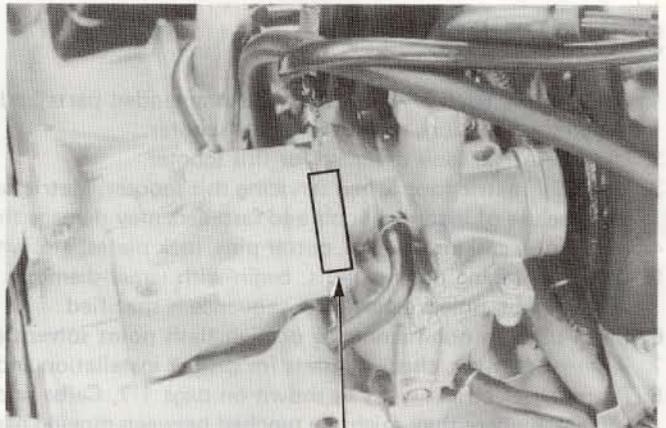
ENGINE SERIAL NUMBER

The vehicle identification number is on the frame tube in front of the floor board.



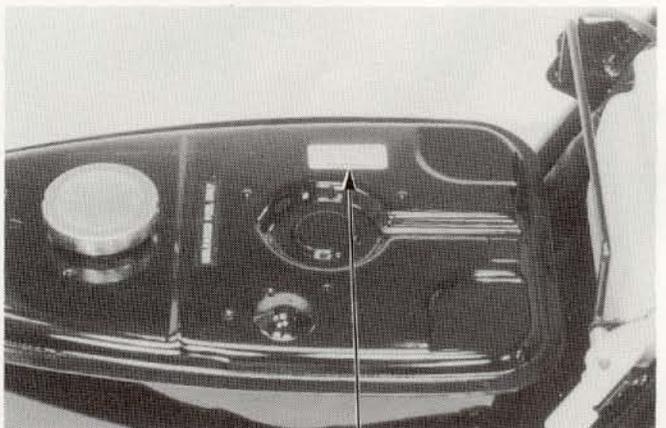
VEHICLE IDENTIFICATION NUMBER

The carburetor identification number is on the carburetor body.



CARBURETOR IDENTIFICATION NUMBER

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



COLOR CODE LABEL

SPECIFICATIONS

ITEM		SPECIFICATION	
DIMENSIONS	Overall length	1,710 mm (67.3 in)	
	Overall width	605 mm (23.8 in)	
	Overall height	1,010 mm (39.8 in)	
	Wheel base	1,285 mm (50.6 in)	
	Ground clearance	70 mm (2.8 in)	
	Dry weight	64 kg (141.1 lb)	
FRAME	Type	Back bone	
	Front suspension, travel	Telescopic fork, 65 mm (2.6 in)	
	Rear suspension, travel	Unit swing, 60 mm (2.4 in)	
	Vehicle capacity load	82 kg (180 lb)	
	Front tire size, pressure	3.00-10-2PR, 150 kPa (1.50 kg/cm ² , 21 psi)	
	Rear tire size, pressure	4.50-6-2PR, 75 kPa (0.75 kg/cm ² , 11 psi)	
	Front brake	Internal expanding shoe	
	Rear brake	Internal expanding shoe	
	Fuel capacity	3.7ℓ (1.0 US gal, 0.81 Imp gal)	
	Caster angle	27°	
	Trail	62 mm (2.4 in)	
	Front fork grease	5 cc (0.17 US oz, 0.18 Imp oz)	
ENGINE	Type	Air cooled 2-stroke	
	Cylinder arrangement	Single cylinder	
	Bore and stroke	41.0 x 37.4 mm (1.61 x 1.47 in)	
	Displacement	49.3 cm ³ (3.0 cu in)	
	Compression ratio	6.9 : 1	
	Transmission oil capacity	210 cc (7.1 US oz, 7.4 Imp oz)	
	Oil tank capacity	1.2 lit. (1.3 US qt, 1.06 Imp qt)	
	Lubrication system	Lubricated by the fuel and oil mixture	
	Port timing		
	Intake	Open Close	Reed valve controlled Reed valve controlled
	Exhaust	Open Close	73.5° BBDC 73.5° ABDC
	Scavenge	Open Close	53° BBDC 53° ABDC
	Engine dry weight		12.0 kg (26.5 lb)
	Idle speed		1,800 ± 100 rpm
	CARBURETOR	Carburetor type	Piston valve
Identification number		'85: PA27E After '85: PA27F	
Air screw initial setting		2-1/4 turns out	
Float level		12.2 mm (0.48 in)	

GENERAL INFORMATION

ITEM		SPECIFICATION	
DRIVE TRAIN	Clutch type	Automatic centrifugal, wet clutch	
	Transmission	2-speed automatic	
	Primary reduction	2.636	
	Gear ratio	1st: 1.623, 2nd: 1.000	
	Final reduction	3.928	
ELECTRICAL	Ignition	Condenser capacitive discharge ignition (CDI)	
	Starting system	Starting motor	
	Alternator	91W/5,000 rpm	
	Spark plug	NGK	ND
	Standard	BPR6HSA	W20FPR-L
	For cold climate	BPR4HSA	W14FPR-L
	For extended high speed riding	BPR8HSA	W24FPR-L
	Spark plug gap	0.6–0.7 mm (0.024–0.028 in)	
	Ignition timing "F" mark	14.5° BTDC	
	Battery capacity	12V 3AH	
	Fuse capacity	10A	
LIGHTS	Headlight Low/High	12V–25/25W	
	Tail/stoplight	12V–8/23W	3/32 cp
	Turn signal	12V–23W	32 cp
	Speedometer light	12V–3.4W	2 cp
	High beam indicator	12V–3.4W	2 cp
	Turn signal indicator	12V–3.4W	2 cp
		Compression ratio	
		Transmission oil capacity	
		Oil tank capacity	
		Lubrication system	
		Port timing	
		Intake	Open
		Close	Close
		Exhaust	Open
		Close	Close
		Scavenging	Open
		Close	Close
		Engine dry weight	
		Idle speed	
		12.0 kg (26.5 lb)	
		1,800 ± 100 rpm	
		Piston valves	
		Before '88: PA27E	
		After '88: PA27F	
		2.74 turns out	
		12.2 mm (0.48 in)	
		Carburetor type	
		Identification number	
		Air screw initial setting	
		Float level	

TORQUE VALUES

ENGINE

Item	Q'ty	Thread Dia. (mm)	Torque N·m (kg·m, ft·lb)	Remarks
Cylinder head bolt	4	6	8-12 (0.8-1.2, 6-9)	While the engine is cold. (Below 35°C, 95°F)
Flywheel nut	1	10	35-40 (3.5-4.0, 25-29)	
Crankcase bolt	5	6	8-12 (0.8-1.2, 6-9)	While the engine is cold. (Below 35°C, 95°F)
Intake pipe bolt	3	6	8-12 (0.8-1.2, 6-9)	
Low drive plate nut	1	17	38-42 (3.8-4.2, 27-31)	Left hand threads
Carburetor bolt	2	6	9-12 (0.9-1.2, 6-9)	While the engine is cold. (Below 35°C, 95°F)
Ratchet plate bolt	3	6	10-12 (1.0-1.2, 7-9)	
Transmission oil level check bolt	1	12	50-60 (5.0-6.0, 36-43)	

CHASSIS

Item	Q'ty	Thread Dia. (mm)	Torque N·m (kg·m, ft·lb)	Remarks
Rear axle nut	2	12	65-80 (6.5-8.0, 48-58)	Apply oil
Front axle nut	1	10	40-50 (4.0-5.0, 29-36)	
Joint shaft pivot bolt	2	10	40-55 (4.0-5.5, 29-40)	
Steering stem lock nut	1	25.4	5-13 (0.5-1.3, 3.6-9)	
Steering stem nut	1	25.4	60-80 (6.0-8.0, 43-58)	
Speedometer cable set screw	1	4	1.5-2 (0.15-0.2, 1.1-1.5)	
Brake arm bolt	2	5	4-7 (0.4-0.7, 3-5)	
Rear brake cable primary adjuster lock nut	1	7	3.5-5 (0.35-0.5, 2.5-3.6)	
Joint case bolt	2	8	24-30 (2.4-3.0, 17-22)	
	4	6	10-14 (1.0-1.4, 7-10)	
Joint shaft nut	1	12	55-65 (5.5-6.5, 40-48)	
Swing lock arm A	1	5	4-7 (0.4-0.7, 3-5)	
Rear shock absorber damper rod lock nut	1	10	30-45 (3.0-4.5, 22-32)	Apply locking agent
Rear shock absorber mounting bolt	2	10	30-45 (3.0-4.5, 22-32)	
Rear brake equalizer cover screw	3	5	2.5-4 (0.25-0.4, 1.8-3)	
Front fork bridge bolt	2	10	40-50 (4.0-5.0, 29-36)	
Rear wheel disc bolt	3	8	24-30 (2.4-3.0, 17-22)	Apply oil
Rear wheel hub bolt	3	10	45-50 (4.5-5.0, 32-36)	
Fuel strainer cup	1	-	3-5 (0.3-0.5, 2.2-3.6)	
Engine mounting bolt	3	8	24-30 (2.4-3.0, 17-22)	
Exhaust pipe, muffler joint nut	4	6	10-14 (1.0-1.4, 7-10)	

Torque specifications listed above are for important fasteners. Others should be tightened to the standard torque values listed 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 (0.35-0.5, 2.5-3.6)
6 mm bolt and nut	8-12 (0.8-1.2, 6-9)	6 mm screw, SH bolt	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, 25-32)

GENERAL INFORMATION

TORQUE VALUES
ENGINE

TOOLS

SPECIAL

Description	Tool Number	Alternate Tool	Tool Number	Ref. Page
Universal bearing puller	07631-0010000	Commercially available in U.S.A.		9-2
Snap ring pliers	07914-3230001	Commercially available in U.S.A.		11-15, 11-16
Lock nut wrench	07916-1870101			11-17, 11-18
Lock nut wrench	07916-KM10000			11-18
Shaft protector	07931-1870000			9-2
Crankcase puller	07935-GJ50000	Crankcase puller	07937-4300000	9-2
Bearing remover set, 12 mm	07936-1660001			8-7
– Bearing remover shaft, 12 mm	(07936-1660100)			8-7
– Remover weight	(07741-0010201)	Remover weight	07936-3710200	8-7
Crankcase assembly tool	07965-1480010			9-4, 9-5
– Collar	(07965-1480100)			9-4, 9-5
– Shaft	(07965-GM00300)			9-4, 9-5
Attachment, 28 x 30 mm	07946-1870100			11-10
Rear shock absorber attachment A	07967-GA70101			13-2, 13-3
Rear shock absorber attachment B	07967-GA70200			13-2, 13-3
Steering stem driver	07946-4300101			11-17
Ball race remover	07946-GA70000	Not available in U.S.A.		11-17
Hand vacuum pump	A937X-041-XXXXX	U.S.A. only	ST-AH-260-MC7 (U.S.A. only)	4-5
Digital multimeter	07411-0020000		KS-AHM-32-003 (U.S.A. only)	14-4

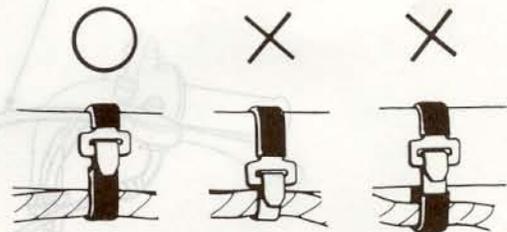
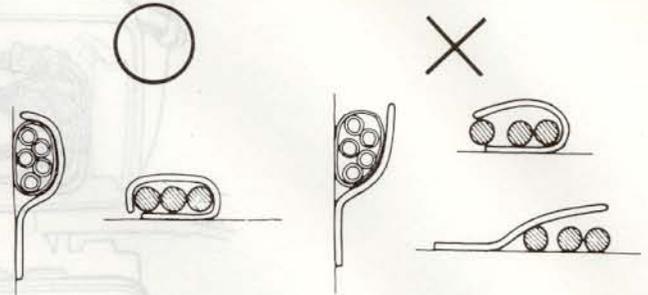
COMMON

Description	Tool Number	Alternate Tool	Tool Number	Ref. Page
Float level gauge	07401-0010000			4-8
Lock nut wrench, 30 x 32 mm	07716-0020400	Commercially available in U.S.A.		11-16, 11-18
Extension	07716-0020500	Commercially available in U.S.A.		11-16, 11-18
Universal holder	07725-0030000			7-3, 7-5
Clutch center holder	07724-0050000	Commercially available in U.S.A.		8-8, 9-5
Flywheel puller	07733-0010000	Flywheel puller	07933-0010000	7-4
Attachment, 24 x 26 mm	07746-0010700			7-6
Pilot, 10 mm	07746-0040100			7-6, 11-10
Attachment, 32 x 35 mm	07746-0010100			8-13
Pilot, 15 mm	07746-0040300			8-13
Attachment, 37 x 40 mm	07746-0010200			9-4
Pilot, 17 mm	07746-0040400			9-4
Attachment, 42 x 47 mm	07746-0010300			9-4, 11-17
Pilot, 20 mm	07746-0040500			9-4
Driver	07749-0010000			7-6, 8-13
Driver	07746-0020100			7-6
Bearing remover expander	07746-0050100			11-10
Bearing remover collet, 10 mm	07746-0050200			11-10
Shock absorber compressor	07959-3290001			13-2, 13-3

CABLE & HARNESS ROUTING

Note the following when routing cables and wire harnesses:

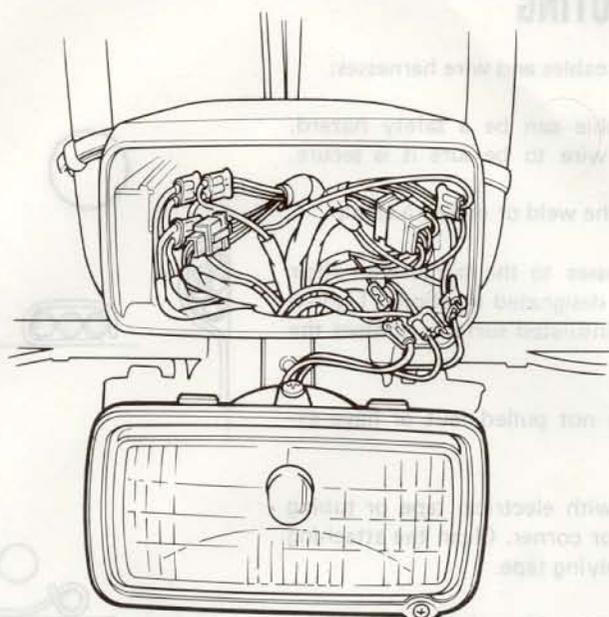
- A loose wire, harness or cable can be a safety hazard. After clamping, check each wire to be sure it is secure.
- Do not squeeze wires against the weld or end of a clamp.
- Secure wires and wire harnesses to the frame with their respective wire bands at the designated locations. Tighten the bands so 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 contact 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 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.



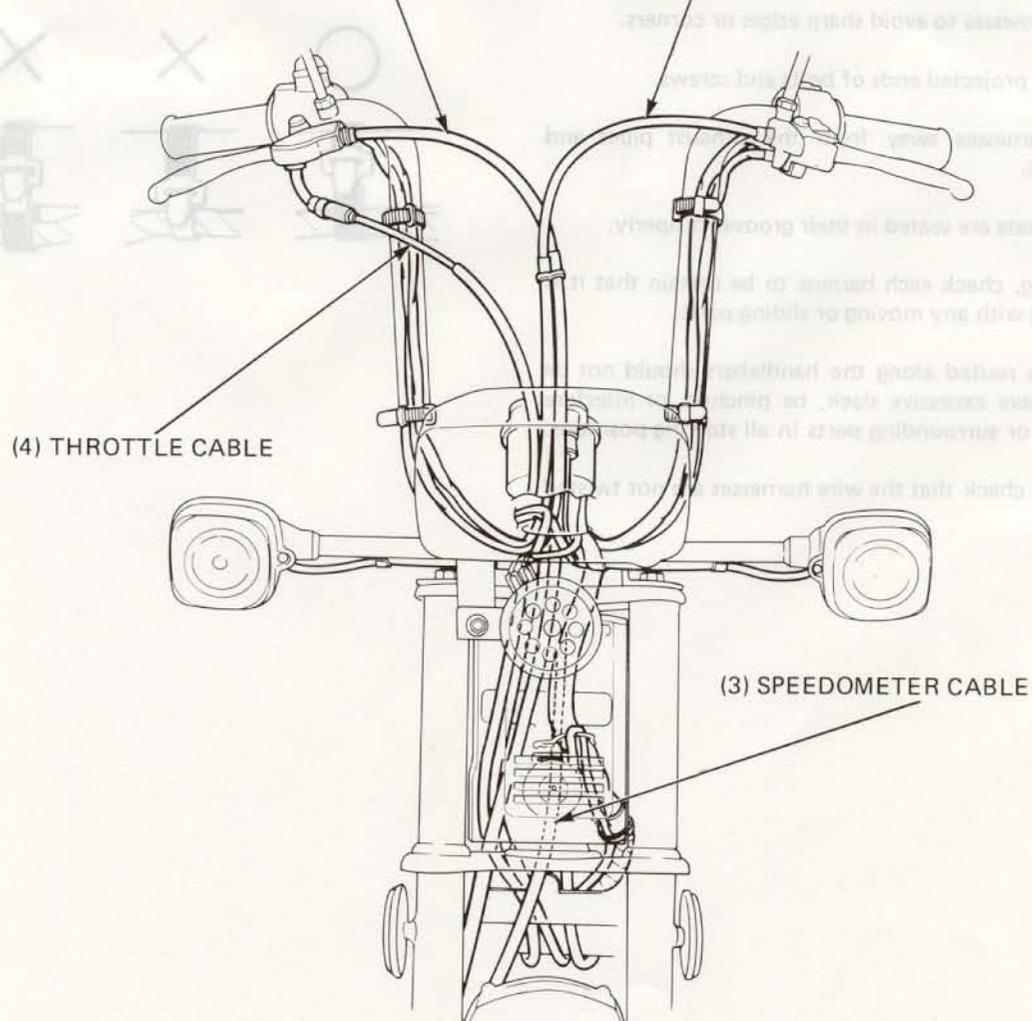
(3) SPEEDOMETER CABLE

(M) THROTTLE CABLE

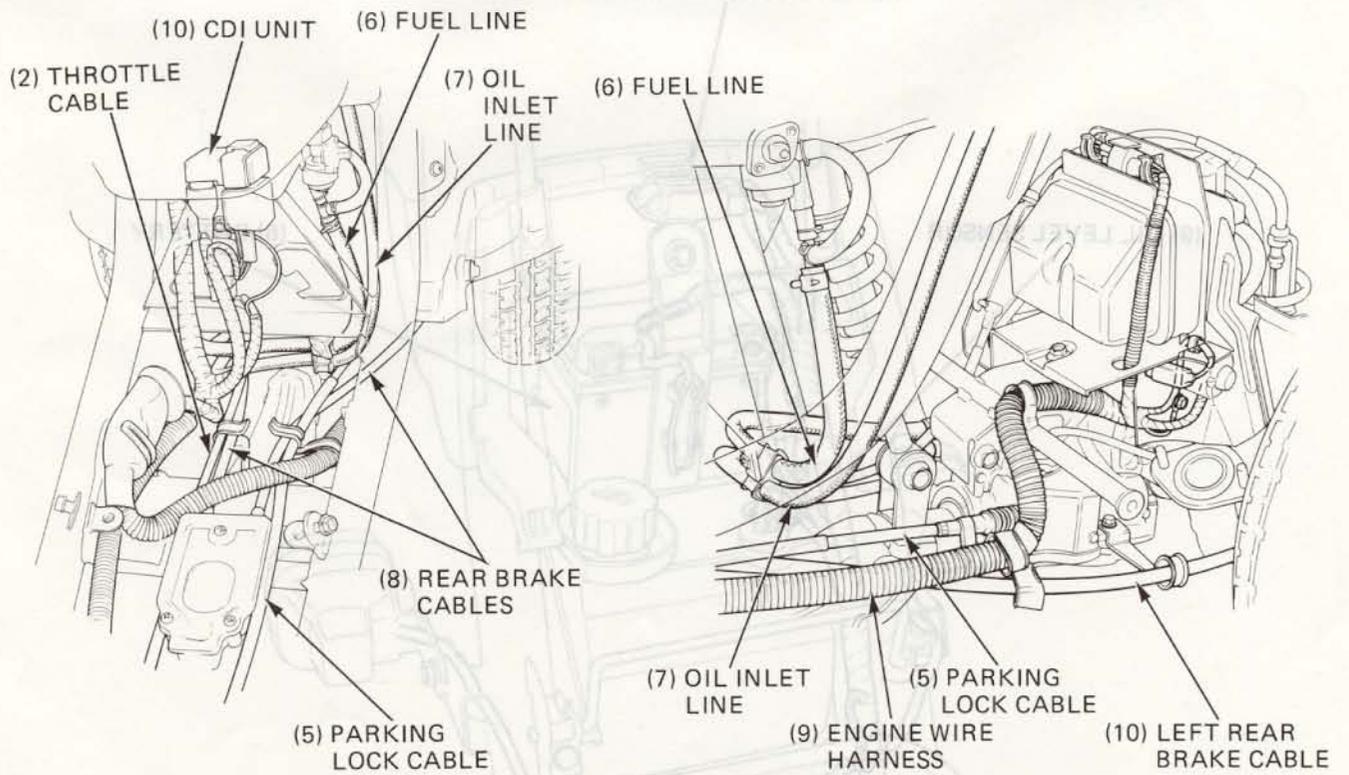
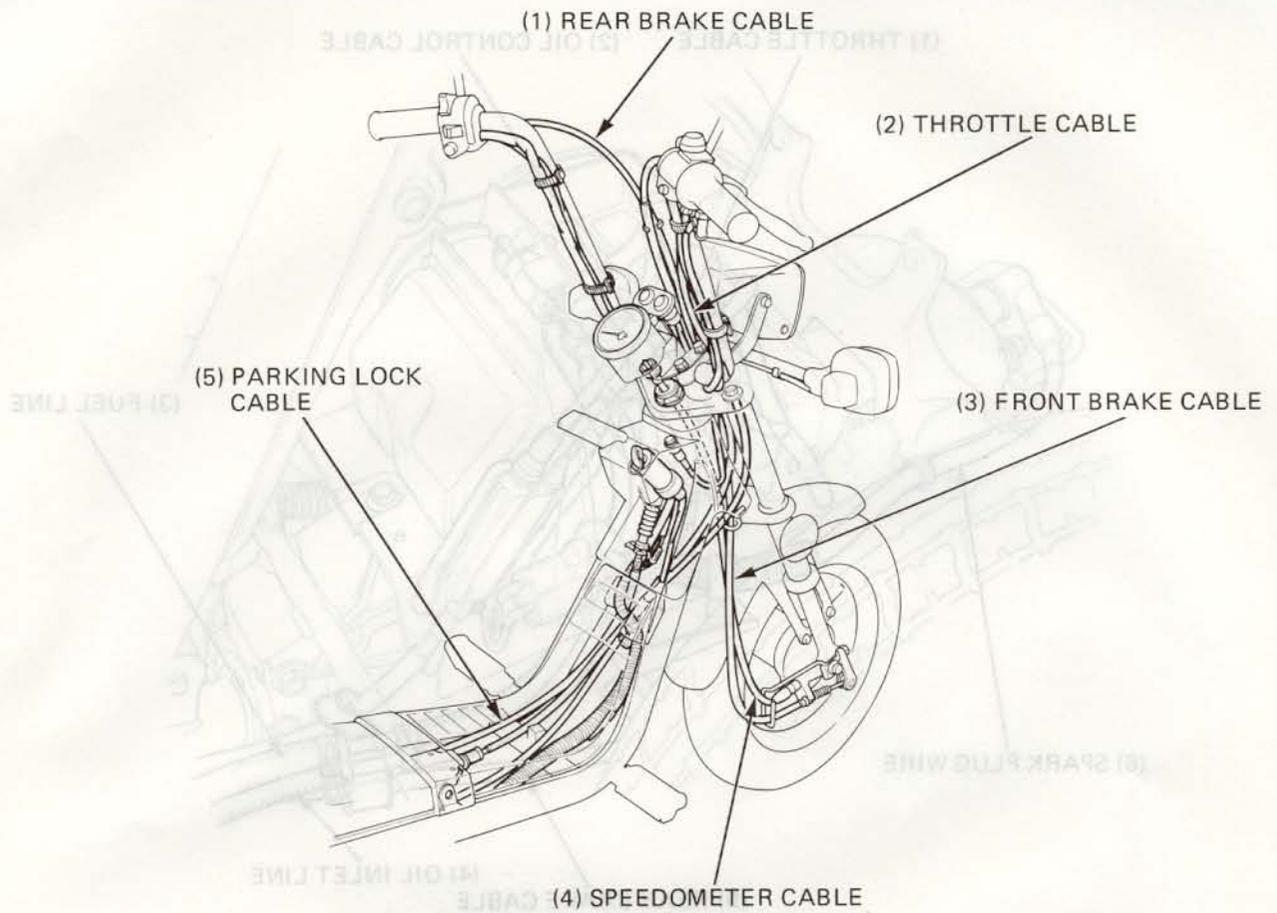
CABLE & HARNESS ROUTING



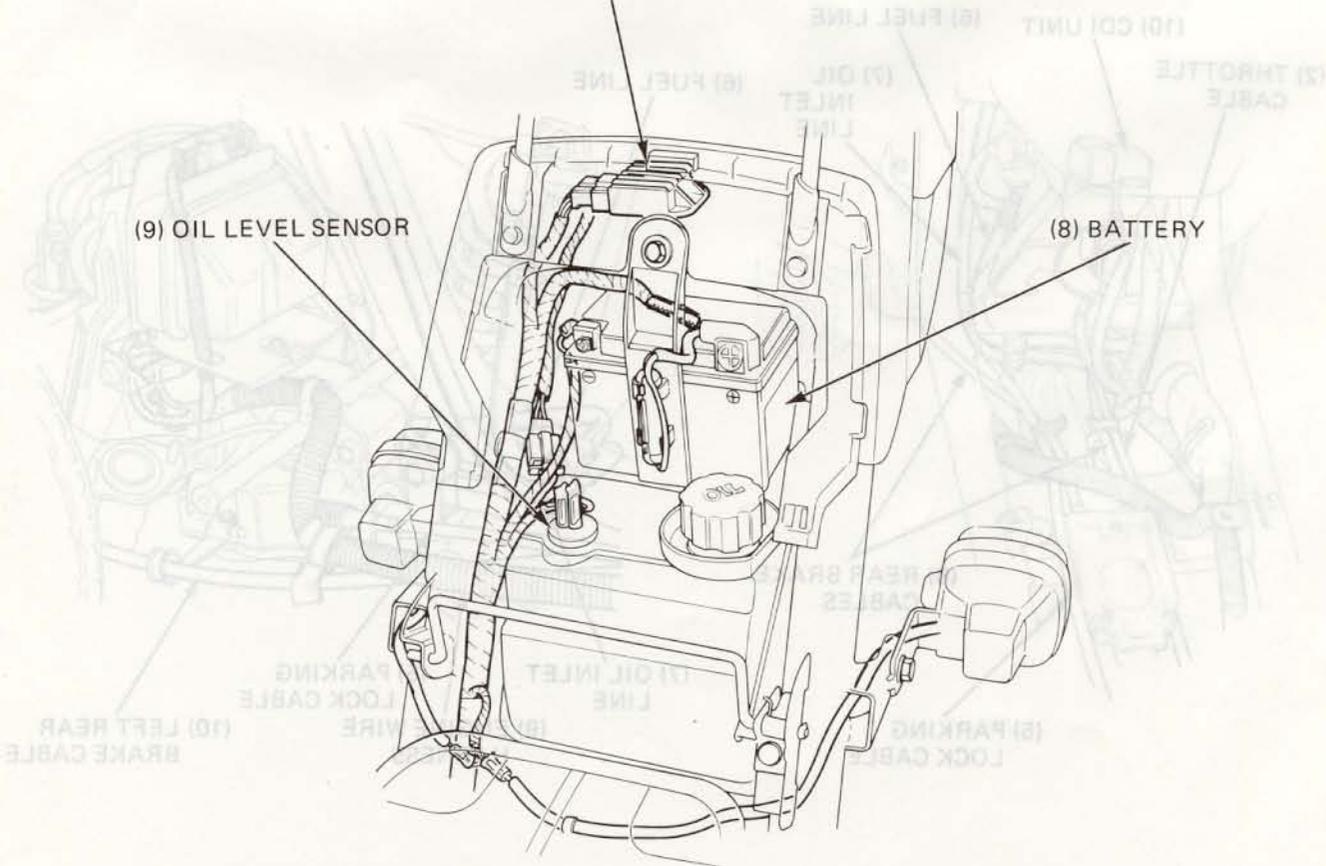
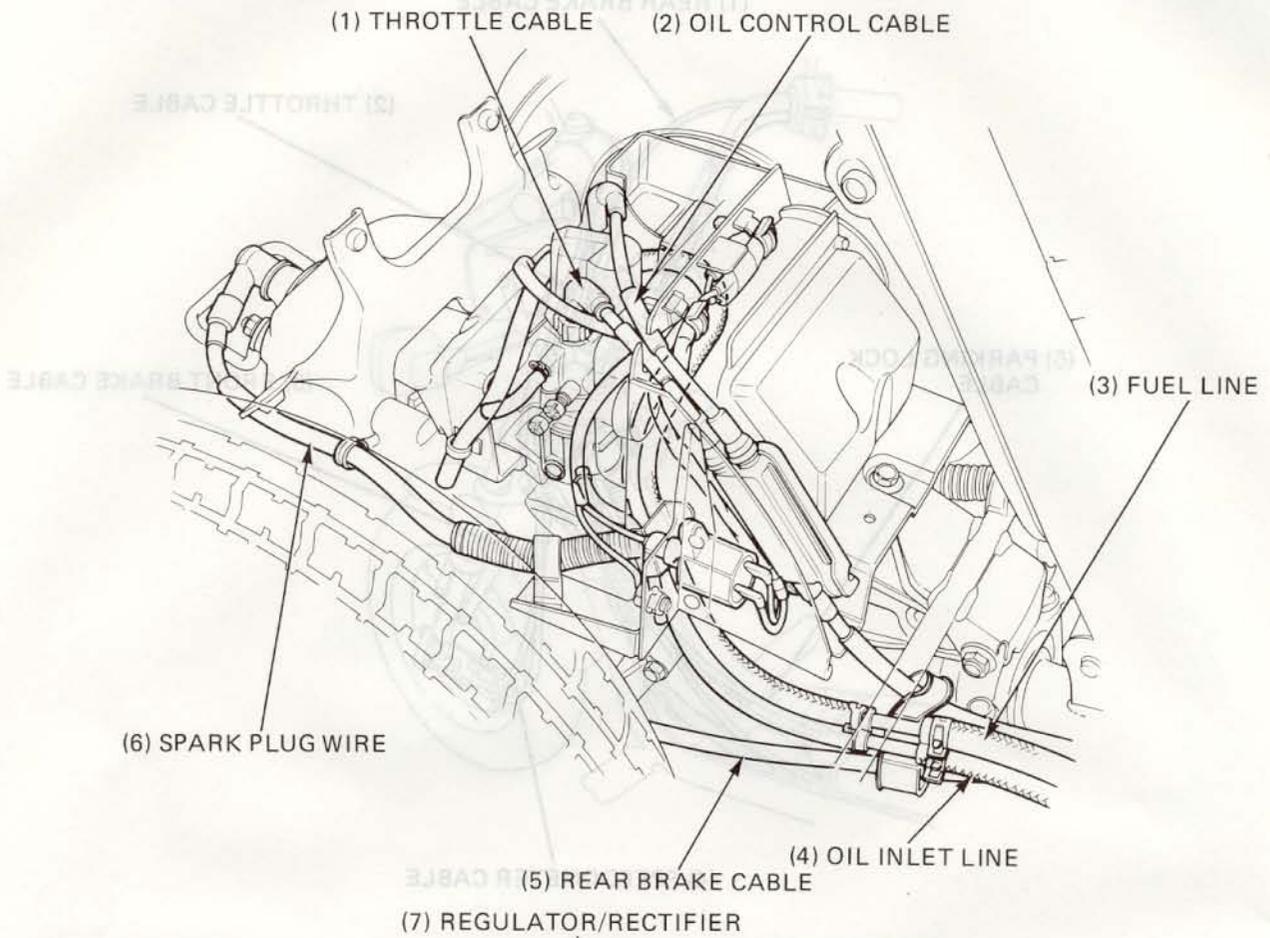
(1) FRONT BRAKE CABLE (2) REAR BRAKE CABLE



(3) SPEEDOMETER CABLE



GENERAL INFORMATION



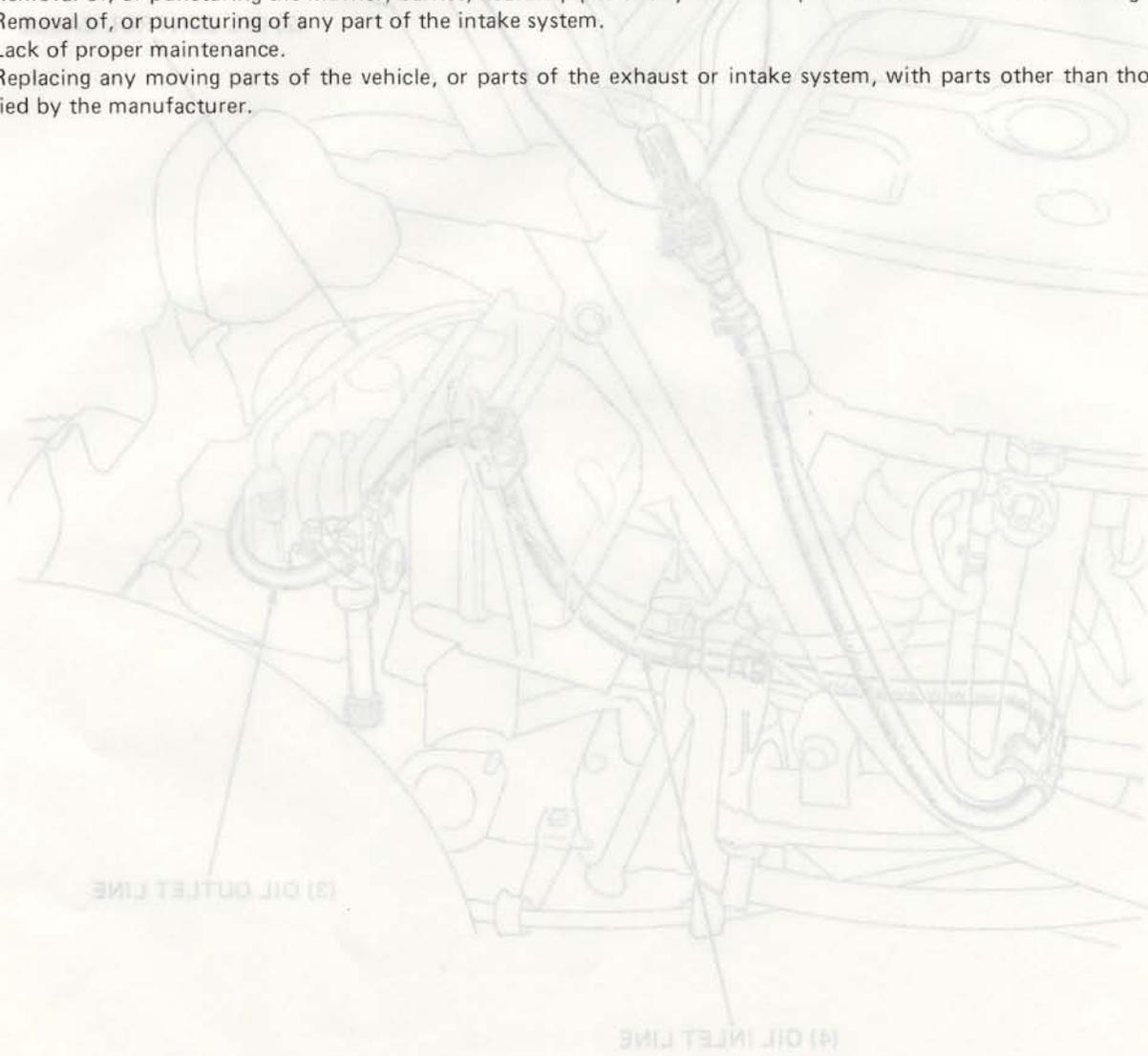
NOISE EMISSION CONTROL SYSTEM (USA ONLY)

- The U.S. Environmental Protection Agency requires manufacturers to certify that Scooter 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 Scooter Noise Emission Control System is necessary in order to keep the noise emission control system in effect. (USA only)

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:

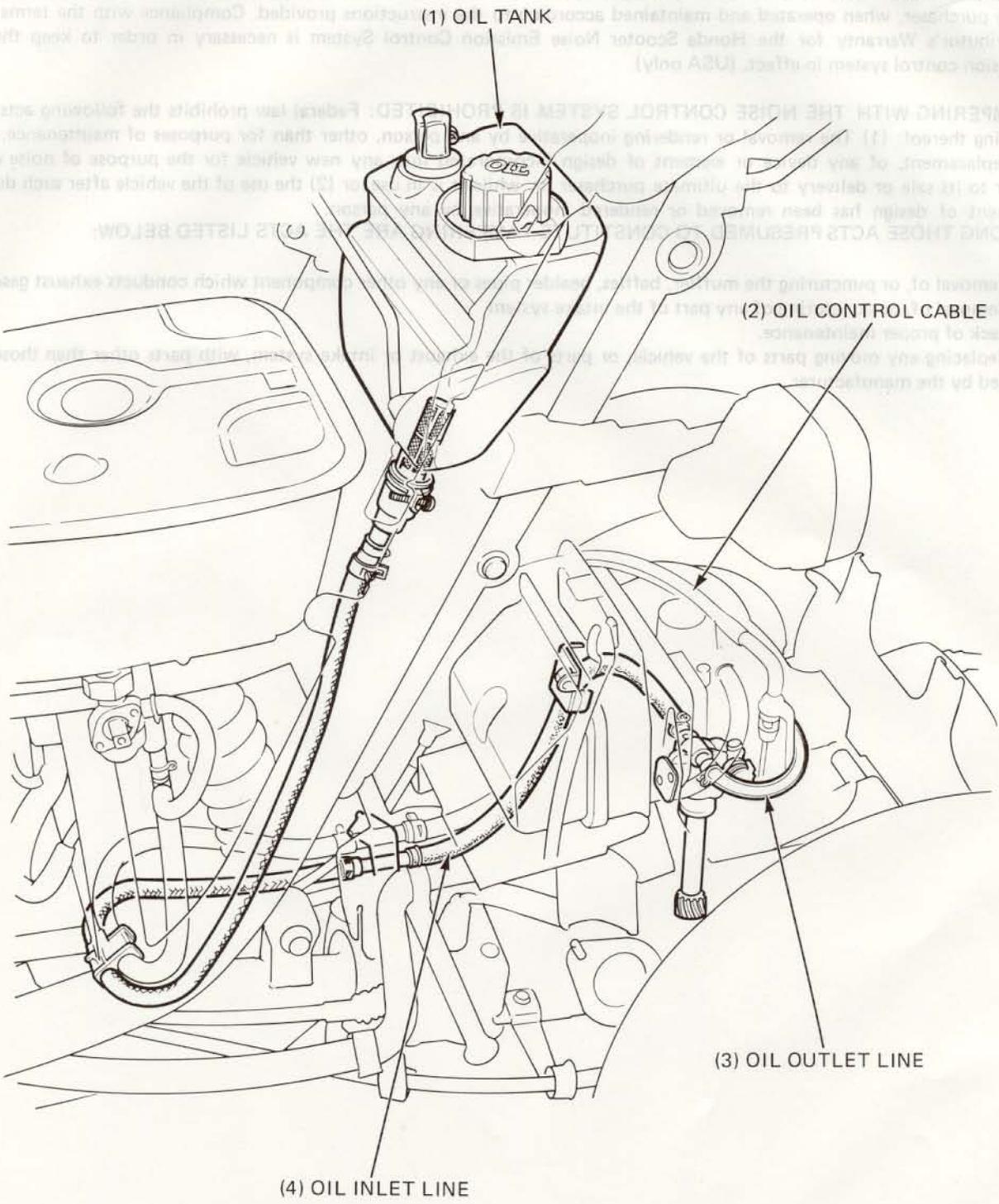
1. Removal of, or puncturing the muffler, baffles, header pipes or any other component which conducts exhaust gases.
2. Removal of, or puncturing of any part of the intake system.
3. Lack of proper maintenance.
4. Replacing any moving parts of the vehicle, or parts of the exhaust or intake system, with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



NOISE EMISSION CONTROL SYSTEM (USA ONLY)

The U.S. Environmental Protection Agency requires manufacturers to certify that Scooter built after January 1, 1983 will comply with applicable noise emission standards for one year or 1,000 miles (1,600 km) after the date 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 Scooter Noise Emission Control System is necessary in order to keep the noise emission control system in effect. (USA only)

TAMPERING WITH THE NOISE CONTROL SYSTEM IS PROHIBITED. Federal law prohibits the following acts which cause or result in the removal or tampering with any part of the noise control system, other than for purposes of maintenance, repair, or replacement, of any part of the noise control system, or the use of the vehicle for the purpose of noise control, prior to its sale or delivery to the ultimate purchaser: (1) the use of the vehicle after such device or element of design has been removed or tampered with; (2) the use of the vehicle after such device or element of design has been removed or tampered with; (3) the use of the vehicle after such device or element of design has been removed or tampered with; (4) the use of the vehicle after such device or element of design has been removed or tampered with.



SERVICE INFORMATION	2-1	OIL STRAINER	2-4
TROUBLESHOOTING	2-1	OIL TANK	2-4
OIL PUMP	2-2	TRANSMISSION OIL	2-5
OIL LINES/PUMP BLEEDING	2-3	LUBRICATION POINTS	2-6

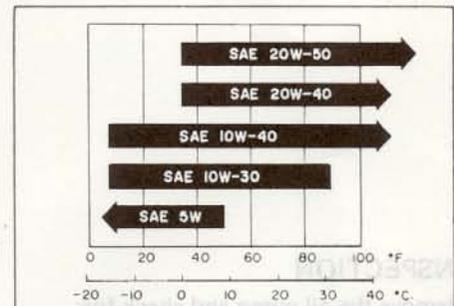
SERVICE INFORMATION

GENERAL

- The oil pump can be serviced without removing the engine from the frame.
- When removing and installing the oil pump do not allow dust or dirt to enter the engine and all oil line.
- Do not attempt to disassemble the oil pump.
- Bleed 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 has been disconnected.

SPECIFICATIONS

Engine oil recommendation	Honda 2-stroke injector oil or equivalent
Engine oil tank capacity	1.2 liters (1.27 US qt, 1.06 Imp qt)
Transmission oil recommendation	Use Honda 4-stroke oil or equivalent. API Service Classification: SE or SF Viscosity: SAE 10W-40 Other viscosities shown in the chart may be used when the average temperature in your riding area is within the indicated range.
Transmission oil capacity	190 cc (6.4 US oz, 6.7 Imp oz) after draining 210 cc (7.1 US oz, 7.4 Imp oz) after disassembly



TORQUE VALUE

Transmission oil level check bolt	50-60 N·m (5.0-6.0 kg-m, 36-43 ft-lb)
-----------------------------------	---------------------------------------

TROUBLESHOOTING

Excessive engine smoke and/or carbon on spark plug

- Pump not properly synchronized (excessive oil).
- Low quality engine oil.

Overheating

- Oil pump not adjusted properly (insufficient oiling).
- Low quality oil.

Seized piston

- No oil in tank or clogged oil line.
- Pump not properly adjusted (insufficient oiling).
- Air in oil lines.
- Faulty oil pump.
- Clogged oil strainer.

Oil not flowing out of tank

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

OIL PUMP

REMOVAL

NOTE

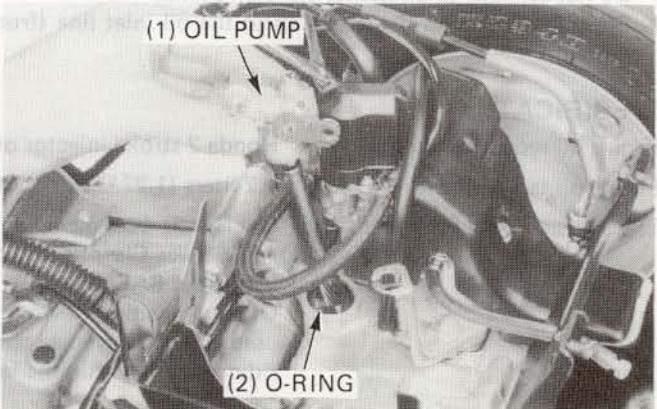
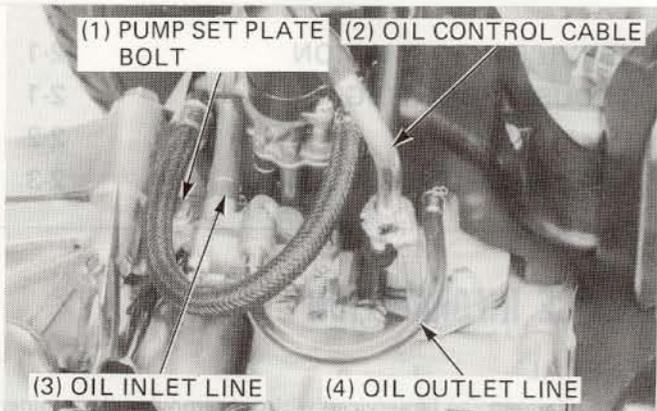
- Clean the oil pump and its surrounding area thoroughly before removing the pump.

Remove the following parts:

- engine cover (page 10-5).
- air cleaner case (page 4-3).

Disconnect the oil inlet line at the oil pump and clamp the end. Disconnect the oil outlet line and the oil pump control cable. Remove the bolts attaching the oil pump set plate.

Remove the oil pump by pulling it straight up. Remove the O-ring.



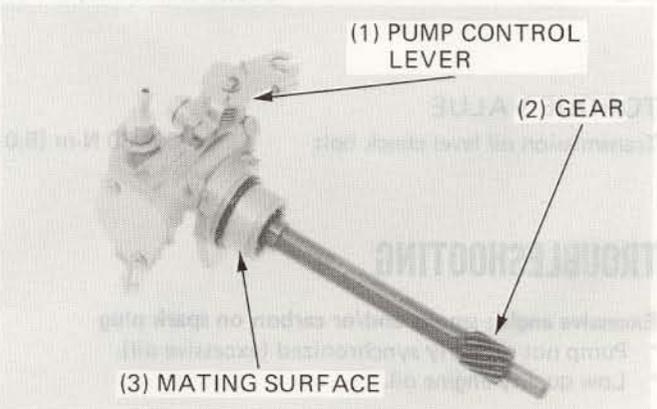
INSPECTION

Remove the oil pump and check for:

- deteriorated O-ring.
- damage to the crankcase mating surface.
- damage to the pump body.
- pump control lever operation.
- worn or damaged pump gear.
- oil leaks.

CAUTION

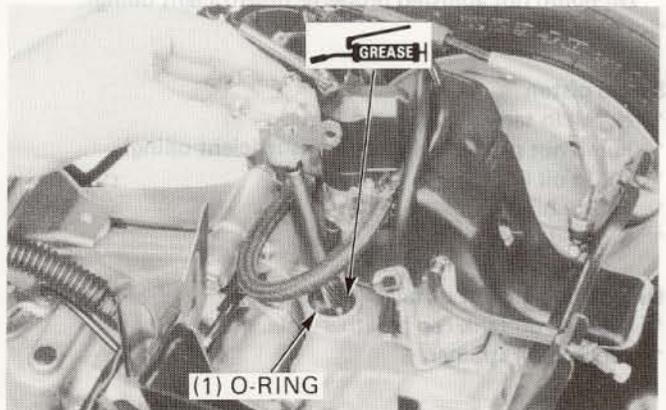
- *Do not disassemble the oil pump.*



INSTALLATION

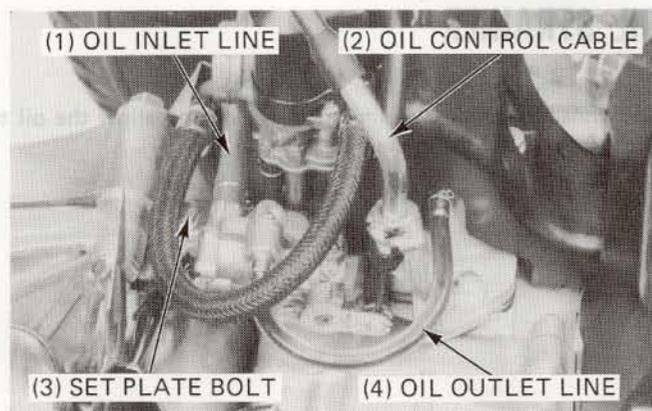
Coat a new O-ring with grease and install it into the oil pump mounting hole.

Apply molybdenum disulfide grease to the oil pump driven gear and install the oil pump onto the crankcase.



Install the pump set plate and tighten the bolt.

Connect the inlet and outlet lines to the oil pump.
Connect and adjust the oil control cable (page 3-5).
Bleed air from the oil pump and oil outlet line.



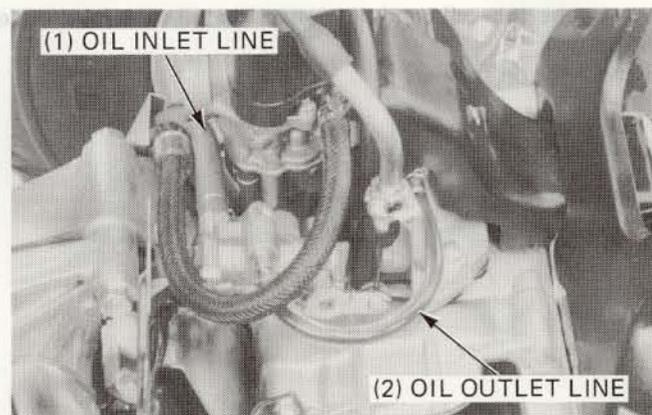
OIL LINES/PUMP BLEEDING

Remove the air cleaner case (page 4-3).

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 about 4cc (0.14 US oz) of clean engine oil through the oil pump inlet opening.

Fill the oil inlet line with oil and connect it to the oil pump.

Disconnect the oil outlet line from the intake pipe, fill it with oil and reconnect to the intake pipe.



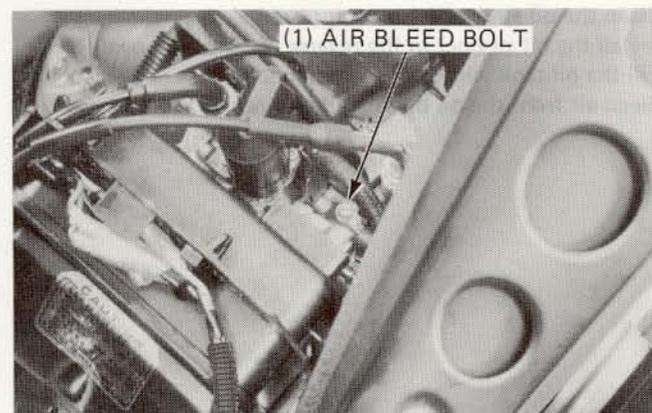
Install the air cleaner case (page 4-3).
Temporarily install the exhaust muffler.

Start the engine and allow it idle.
Bleed air from the oil pump by loosening the bleed bolt on the oil pump.

WARNING

- Perform this operation in a well ventilated area.
- Do not race the engine while bleeding air from the oil pump.

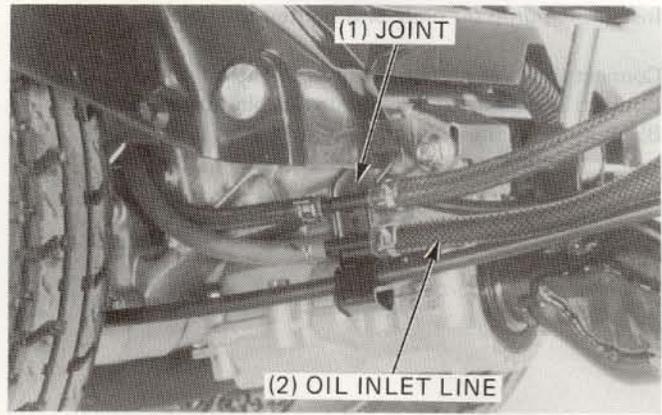
Remove the exhaust muffler.
Install the engine cover (page 10-5).



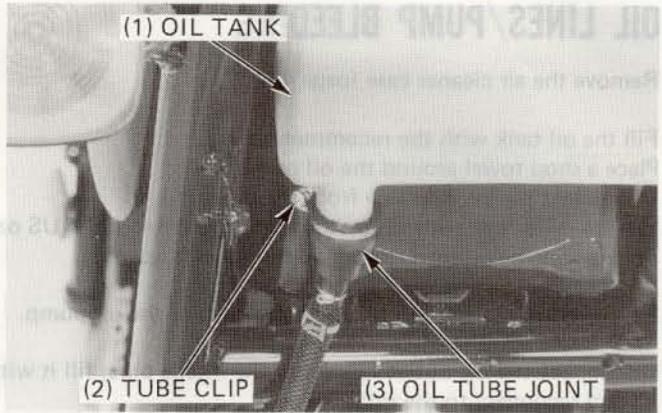
OIL TANK
 REMOVAL/INSTALLATION
 Remove the body rear cover (page 10-4).
 Disconnect the oil inlet line at the joint and drain and oil into a clean container.

OIL STRAINER

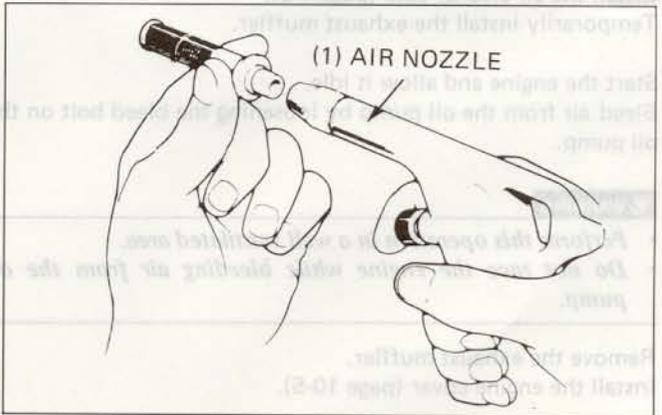
Remove the frame rear cover (page 10-4).
Disconnect the oil inlet line at the joint and allow the oil to drain into a clean container.



Loosen the tube clip and disconnect the oil tube joint under the oil tank.
Remove the oil strainer.



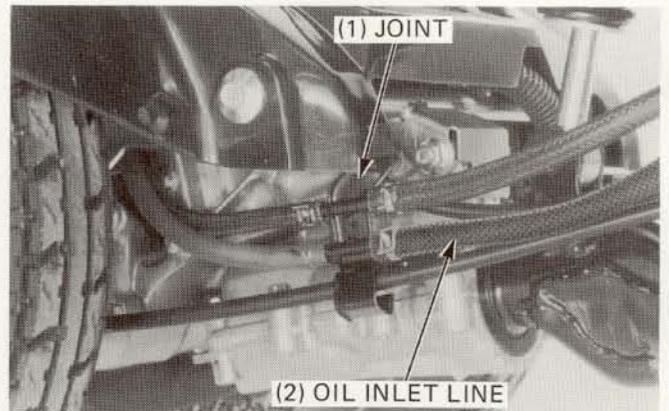
Clean the oil strainer with compressed air.
Install the oil strainer in the reverse order of removal.
Fill the oil tank with the recommended oil.
Bleed air from the oil pump and oil lines.



OIL TANK

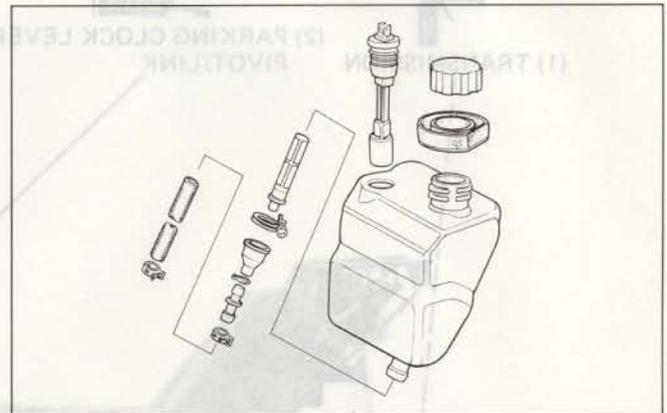
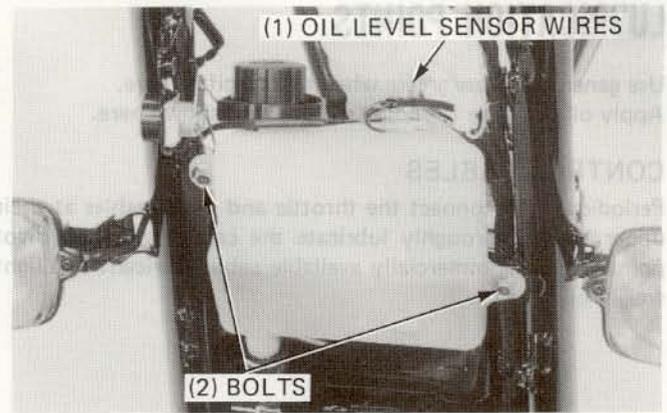
REMOVAL/INSTALLATION

Remove the body rear cover (page 10-4).
Disconnect the oil inlet line at the joint and drain the oil into a clean container.



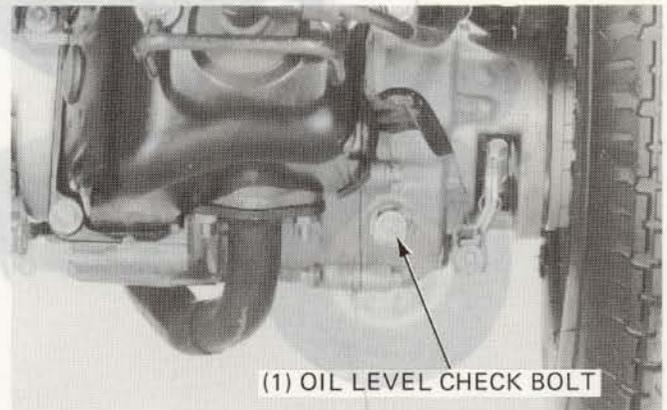
Disconnect the wires from the oil level sensor.
Remove the two oil tank mounting bolts and the oil tank from the frame.

Install the oil tank in the reverse order of removal.
Bleed air from oil pump and oil lines (page 2-3).



TRANSMISSION OIL

Place the scooter on the level ground.
Remove the oil level check bolt.
Remove the drain bolt and drain oil thoroughly.
Make sure that the sealing washer on the drain bolt is in good condition and install the drain bolt.



Fill the transmission with the recommended oil (page 2-1) up to the bottom edge of the oil level check bolt hole.

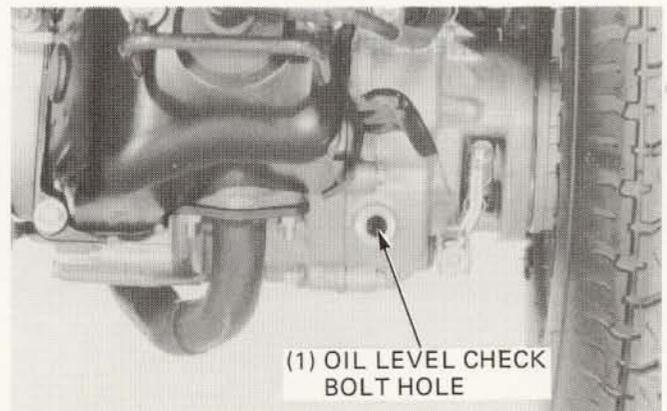
OIL CAPACITY:

190 cc (6.4 US oz, 6.7 Imp oz) after draining
210 cc (7.1 US oz, 7.4 Imp oz) after disassembly

Install and tighten the oil level check bolt.

TORQUE: 50–60 N·m (5.0–6.0 kg·m, 36–43 ft·lb)

Check the transmission case for oil leaks.



MAINTENANCE SCHEDULES

'85 :

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

	PRE-RIDE INSPECTION	INITIAL SAFETY INSPECTION	REGULAR SERVICE PERIOD		Refer to page
			Perform at indicated mileage interval		
		600 miles (1,000 km)	1,000 miles (1,500 km)	2,000 miles (3,000 km)	
This maintenance schedule is based upon average riding condition. Scooters subjected to severe use, or ridden in unusually dusty areas, require more frequent servicing.					
AIR CLEANER ELEMENT			(EVERY 6 MONTHS) C		3-4
CARBURETOR		I	I	I	3-5
* THROTTLE OPERATION	I		I	I	3-5
OIL PUMP			I	I	3-5
FUEL FILTER SCREEN			C	C	3-6
OIL LINE			I	I	3-6
FUEL LINE			I	I	3-6
			(EVERY 2 YEARS) R		
* OIL AND FUEL LEVEL	I				
DECARBONIZE CYLINDER HEAD, CYLINDER, PISTON AND MUFFLER				C	3-7,6-3,6-4
TRANSMISSION OIL				R	2-5
* TRANSMISSION CASE FOR LEAKS	I				2-5
CLUTCH SHOE WEAR				I	8-6,8-9
TIRE: PRESSURES AND CONDITION	I				3-7
WHEEL TRUENESS			I	I	3-7
* BRAKE OPERATION AND FREE PLAY	I	I	I	I	3-7
BRAKE LININGS			I	I	3-7
PARKING LOCK LEVER OPERATION AND FREE PLAY		I			3-8
STEERING HEAD BEARINGS		I		I	3-9
SUSPENSION OPERATION			I	I	3-9
NUTS, BOLTS (TIGHTEN)		I		I	3-10
* SPARK PLUG			R	R	3-10
ALL LIGHTS AND HORN	I				3-10

Items marked* are simple to perform and may be serviced by the owner.
 Other maintenance items should be serviced by an authorized Honda motor scooter dealer.

After '85 :

Perform the pre-ride inspection a 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 → ↓	ODOMETER READING [NOTE 3]				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)	
* FUEL LINE		2 YEARS *R	—	I	I	I	3-6
* FUEL STRAINER SCREEN			—	C	C	C	3-6
* THROTTLE OPERATION			—	I	I	I	3-5, 3-7
** OIL PUMP AND OIL LINE			—	I	I	I	3-5
AIR CLEANER		NOTE 1	—	C	C	C	3-4
SPARK PLUG		NOTE 2	EVERY 1,000 mi (1,600 km) R				3-10
** DECARBONIZING		NOTE 2	EVERY 2,000 mi (3,200 km) C				6-2
* CARBURETOR IDLE SPEED			I	I	I	I	3-5
TRANSMISSION OIL			—	—	—	R	2-5
BRAKE SHOE WEAR			—	I	I	I	3-7
BRAKE SYSTEM			I	I	I	I	3-7
* BRAKE LIGHT SWITCH			—	I	I	I	3-9
* PARKING BRAKE OPERATION AND FREE PLAY			I	—	—	—	3-8
* HEADLIGHT AIM			—	I	I	I	3-10
** CLUTCH SHOE WEAR			—	—	I	—	8-6, 8-9
* SUSPENSION			—	I	I	I	3-9
* NUT, BOLT, FASTNER			I	—	I	—	3-10
** WHEEL			—	I	I	I	3-7
** STEERING HEAD BEARING			I	—	—	I	3-9

* Should be serviced by an authorized HONDA 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 Dealer.

- NOTES: 1. Service more frequently when riding in dusty areas.
 2. HONDA 2 STROKE MOTORCYCLE OIL has been specifically tested in and is recommended for his 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.
 3. For higher odometer reading, repeat at the frequency interval established here.



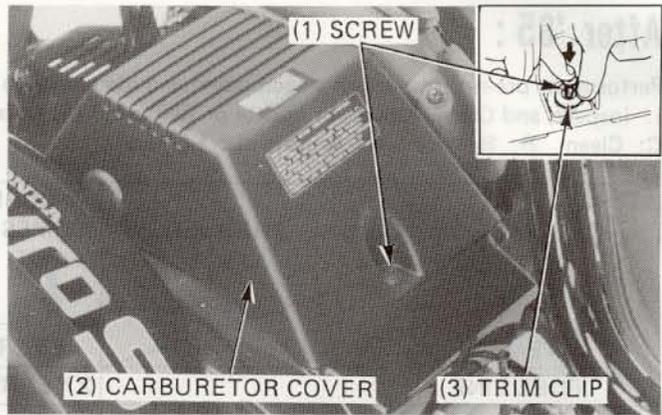
Wash the element in non-flammable or high flash point solvent and allow to dry.
 Never use gasoline or low flash point solvents for cleaning the air cleaner element. A fire or explosion could result.
 Soak the element in clean motor oil (SAE 10W-30) and squeeze out the excess.
 Reinstall the element, air cleaner case, and carburetor cover.

AIR CLEANER

Remove the carburetor cover by removing the attaching screw.

NOTE

- To install the carburetor cover, press in the trim clip screw while holding the trim clip down on the cover.



Remove the air cleaner case cover screw and the cover.



Remove the air cleaner element.



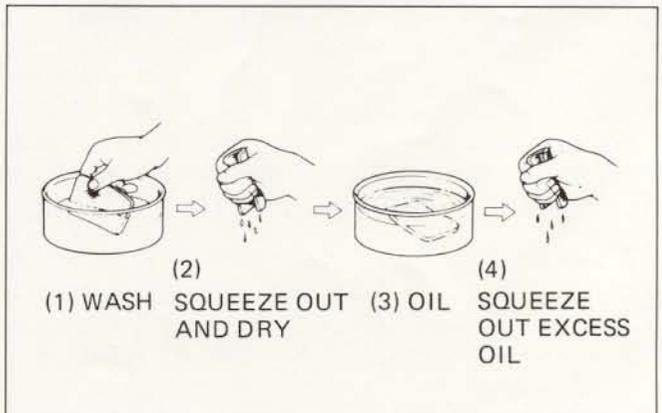
Wash the element in non-flammable or high flash point solvent, squeeze out and the element and allow to dry.

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-30) and squeeze out the excess.

Reinstall the element, air cleaner case, and carburetor cover.



CARBURETOR IDLE SPEED

Remove the carburetor cover (page 3-4).
Place the scooter on level ground.
Warm up the engine and attach a tachometer.
Turn the throttle stop screw as required to obtain the specified idle speed.

IDLE SPEED: 1,800 ± 100 rpm

Install the carburetor cover.

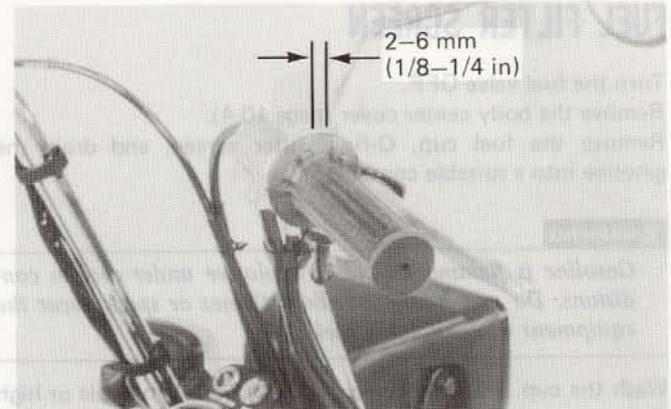


THROTTLE OPERATION

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

Remove the right handlebar switch housing and disconnect the throttle cable upper end. Thoroughly lubricate the cable with a commercially available cable lubricant or grease. Install the throttle cable in the reverse order of removal. Measure the throttle grip free play at the throttle grip flange.

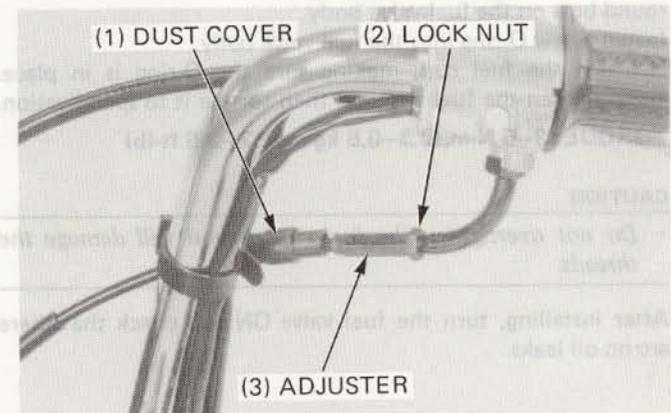
FREE PLAY: 2–6 mm (1/8–1/4 in)



Adjustment can be made by loosening the lock nut and turning the adjuster.

Replace the throttle cable if it can not be adjusted using the above procedure (page 11-6).

Check the oil control cable adjustment.



OIL PUMP

OIL CONTROL CABLE ADJUSTMENT

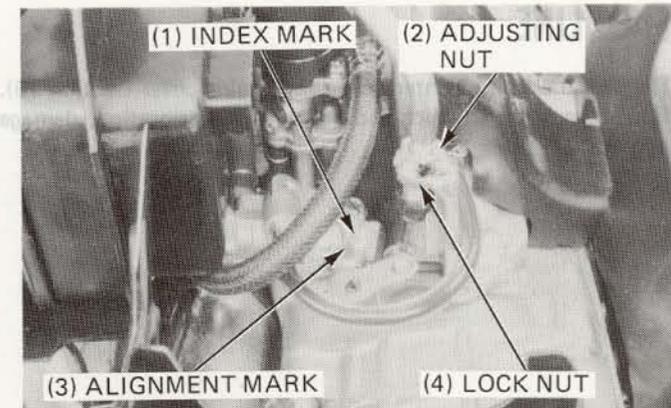
NOTE

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

Remove the engine cover (page 10-5).
Open the throttle grip completely and make sure that the alignment mark on the oil pump control lever aligns with the index mark on the pump body.

CAUTION

- Over stroke up to 1 mm (0.04 in) is acceptable. However, the alignment mark should never be short of the index mark, otherwise engine damage will occur because of insufficient lubrication.



MAINTENANCE

Start the engine and open the throttle slightly above idle speed and make sure that the oil pump control lever starts to move simultaneously as the engine speed increases.

Adjust if necessary by loosening the lock nut and turning the adjusting nut.

Tighten the lock nut securely after adjustment.

NOTE

- If the pump control level is opened excessively, white smoke or hard starting will occur.
- If the pump control lever movement is insufficient, piston seizure may result.

FUEL FILTER SCREEN

Turn the fuel valve OFF.

Remove the body center cover (page 10-4).

Remove the fuel cup, O-ring, filter screen, and drain the gasoline into a suitable container.

WARNING

- *Gasoline is flammable and is explosive under certain conditions. Do not smoke or allow flames or sparks near the equipment while draining fuel.*

Wash the cup and filter screen in clean non-flammable or high flash point solvent.

Reinstall the screen, aligning the hole in the screen with the round boss on the fuel valve body.

Install a new O-ring into the fuel valve body.

Reinstall the fuel cup, making sure the O-ring is in place. Hand tighten the fuel cup and then torque it to specification.

TORQUE: 3–5 N·m (0.3–0.5 kg·m, 2.2–3.6 ft·lb)

CAUTION

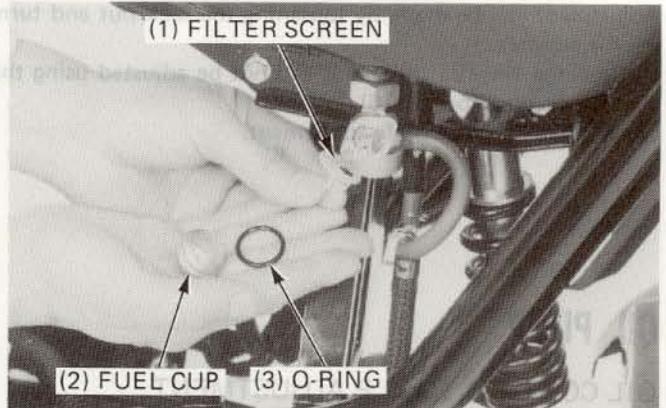
- *Do not overtighten the fuel cup or you will damage the threads.*

After installing, turn the fuel valve ON and check that there are no oil leaks.

FUEL LINE

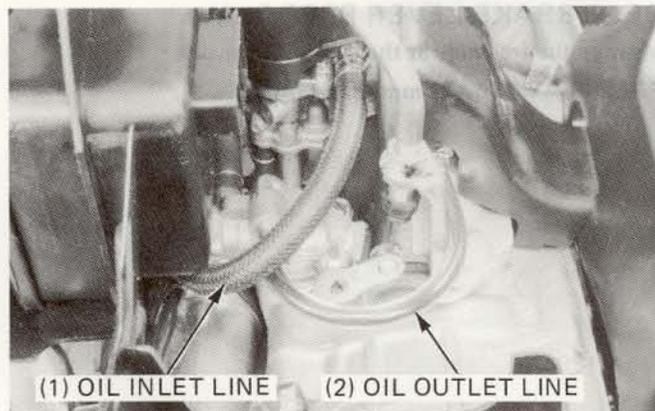
Remove the frame center cover and engine cover (section 10). Replace any parts which show signs of deterioration, damage or leaks.

Remove the carburetor cover (page 3-4).
Place the scooter on level ground.
Warm up the engine and attach a tachometer.
Turn the throttle stop screw as required to obtain the specified idle speed.
IDLE SPEED: 1,800 ± 100 rpm
Install the carburetor cover.



OIL LINE

Remove the engine cover and frame rear cover (section 10).
 Replace any oil line parts which shows signs of deterioration, damage or leaking.



MUFFLER DECARBONIZATION

Remove the muffler (page 10-5).
 Remove carbon deposits from the inside of the muffler.
 Install the muffler (page 10-5).

WHEELS

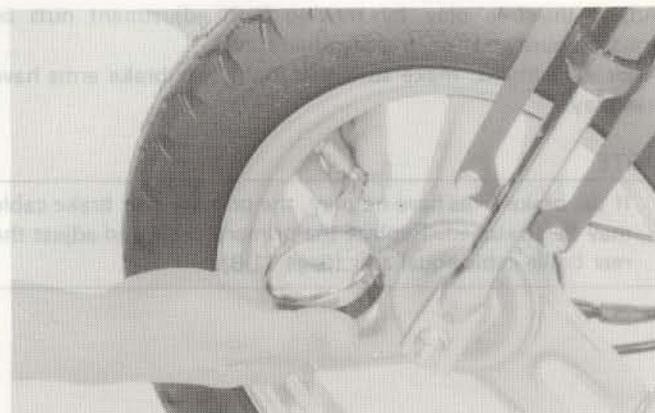
Check the tires for cuts, imbedded nails, or other damage.
 Check the tire pressures.

NOTE

- Tire pressure should be checked when the tires are cold.

TIRE PRESSURE: FRONT 150 kPa (1.5 kg/cm², 21 psi)
 REAR 75 kPa (0.75 kg/cm², 11 psi)

TIRE SIZE: FRONT 3.00-10-2PR
 REAR 4.50-6-2PR

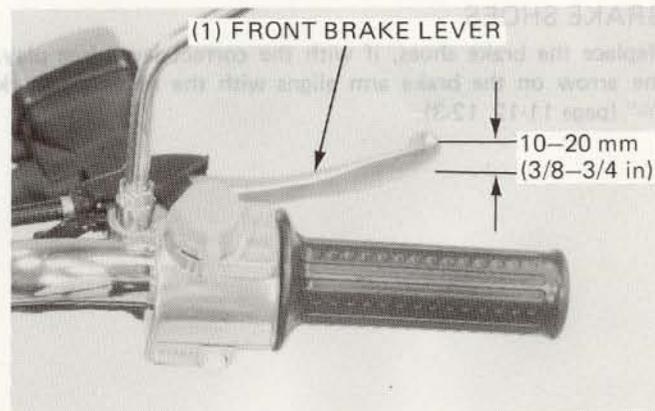


BRAKES

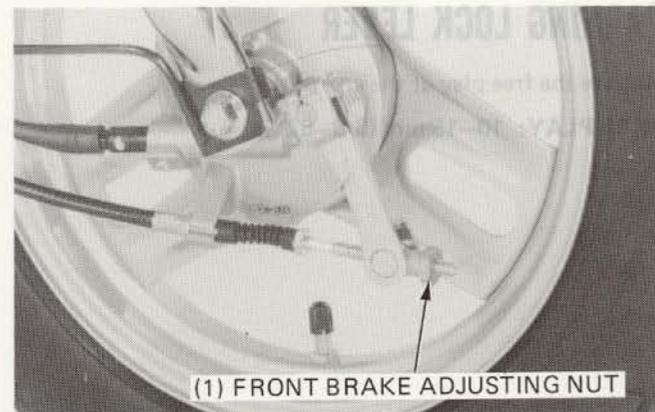
FRONT BRAKE LEVER FREE PLAY

Measure the free play at the end of the lever.

FREE PLAY: 10-20 mm (3/8-3/4 in)



Turn the brake adjusting nut to obtain specified free play.



MAINTENANCE

Product: 1986-1986 Honda TG50M Gyro S Motorcycle Service Repair Workshop Manual

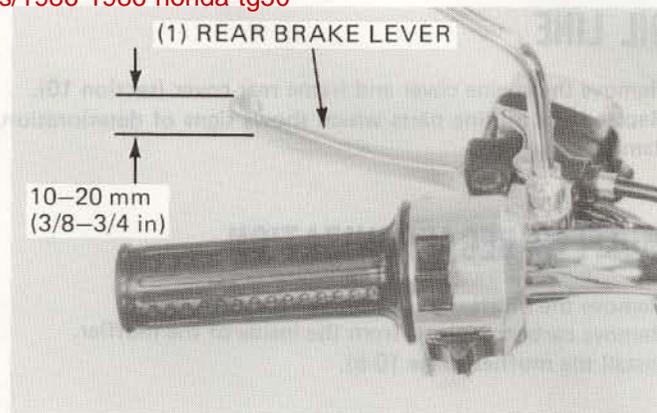
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[m-gyro-s-motorcycle-service-repair-workshop-manual/](https://www.aresairmanual.com/downloads/1986-1986-honda-tg50)

REAR BRAKE LEVER FREE PLAY

Measure the free play at the end of the lever.

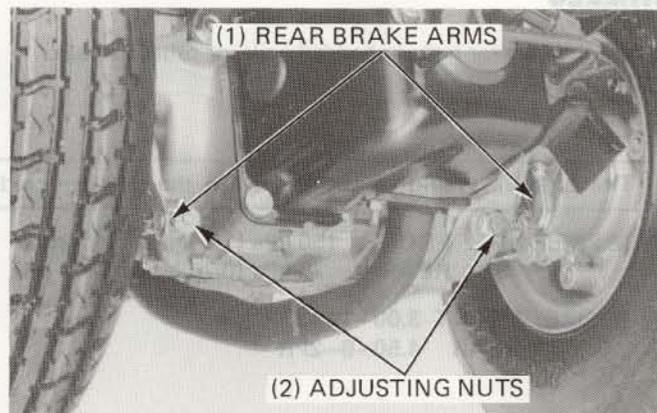
FREE PLAY: 10–20 mm (3/8–3/4 in)



Adjust the free play by moving both adjustment nuts an equal amount to allow the specified travel. After adjustment, make sure that both rear brake arms have free play.

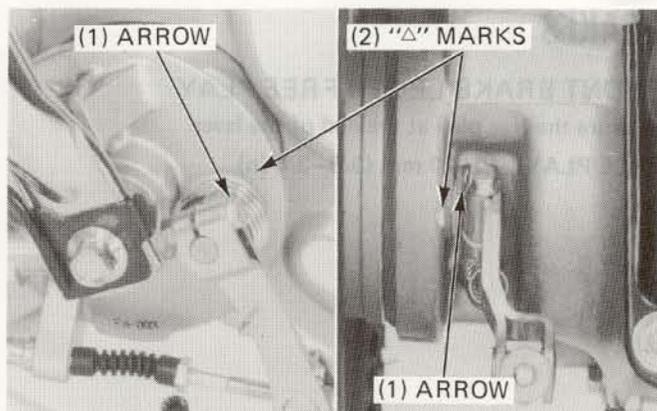
NOTE

- If the brake arms have no play, the primary rear brake cable may be stretched. Replace the primary cable and adjust the rear brake cable equalizer (page 11-8).



BRAKE SHOES

Replace the brake shoes, if with the correct lever free play, the arrow on the brake arm aligns with the reference mark "Δ" (page 11-12, 12-3).



PARKING LOCK LEVER

Measure the free play at the end of the lever.

FREE PLAY: 10–15 mm (3/8–5/8 in)



Sample of manual. Download All 164 pages at:

<https://www.aresairmanual.com/downloads/1986-1986-honda-tg50m-gyro-s-motorcycle-service-repair-workshop-manual/>