OWNER'S MANUAL

76

IMPORTANT NOTICE

- FOR OFF THE ROAD USE ONLY.

  This vehicle is designed and manufactured for off-the-road use only. It does not comform to feddral motor vehicle safety standards and operation on public streets, roads, or highways is illegal.

- OPERATOR ONLY.

  This motorcycle is designed and constructed as an operator only model. The seating configuration does not safely permit the carrying of a passenger.

- READ OWNER'S MANUAL CAREFULLY.

PREFACE

It is with great pleasure that we welcome you as a new owner of the HONDA TL125. Thank you for selecting a HONDA product. The TL125 features a quiet engine and light weight construction, and has been designed for easy handling.

This Owner's Manual is a guide for the proper operation and servicing of your TL125. Read it thoroughly so that you will be able to maintain your TL125 in the best condition for the utmost in riding pleasure.

Your HONDA dealer will provide you with complete periodic inspection and is always happy to give you assistance in case you have any problem. We wish you many miles of safe and happy riding.

In this manual statements preceded by the following words are of special significance:

"**WARNING**" means that there is the possibility of personal injury to yourself and others.

"**CAUTION**" means that there is the possibility of damage to the vehicle.

"**NOTE**" indicates points of particular interest for more efficient and convenient operation.

We recommend that you take particular notice of these items when reading this manual.

OFF-ROAD SAFETY

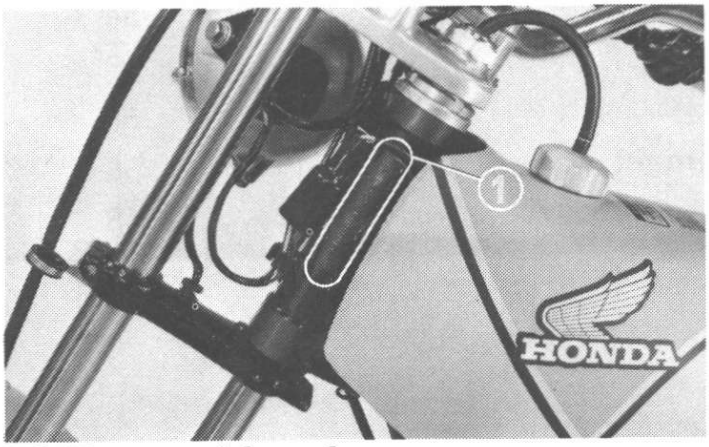
A motorcycle is only as safe as its operator. The safe rider will spend much time learning to ride and developing his riding skills in an uncongested off-road area free of obstacles before venturing into areas of varied terrain.

1. Always obey local off-road riding laws and regulations and show respect for private property by obeying posted signs.
2. Always preserve nature and watch for fire hazards such as dry grass conditions, etc.
3. Clean up trash and do not litter.
4. When off-road riding, ride in the company of a friend on another motorcycle so that you can be of mutual assistance to each other in the event of trouble.
5. Remember to always wear protective apparel including a safety helmet, eye protection, gloves, boots, and heavy clothing.
6. Familiarity with your motorcycle is critically important in off-road riding. NEVER ride beyond your ability and experience.
7. Know the terrain on which you are riding. Always ride so that your visibility is sufficient to give adequate warning of upcoming hazards.
8. NEVER ride faster than conditions warrant.
9. Don't modify your exhaust system. Remember that excessive noise antogonizes everyone and creates a bad image for motorcycles.
10. This motorcycle is not legally equipped to be ridden on the highway. Remember to walk an off-road motorcycle when crossing the public highways, roads or streets.

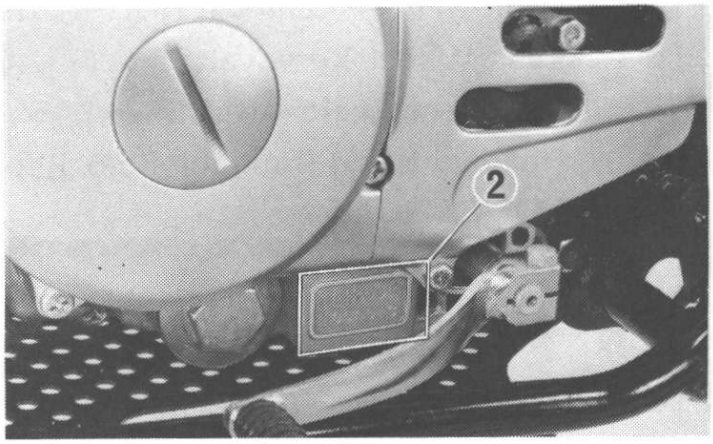
CONTENTS

SERIAL NUMBER LOCATION

The frame serial number ① is stamped on the left of the steering head. The engine serial number ② is located on the lower left side of the engine. These numbers are required when registering the motorcycle. Refer to the frame or engine serial number when ordering replacement parts to ensure that you will obtain the correct parts for your model series.

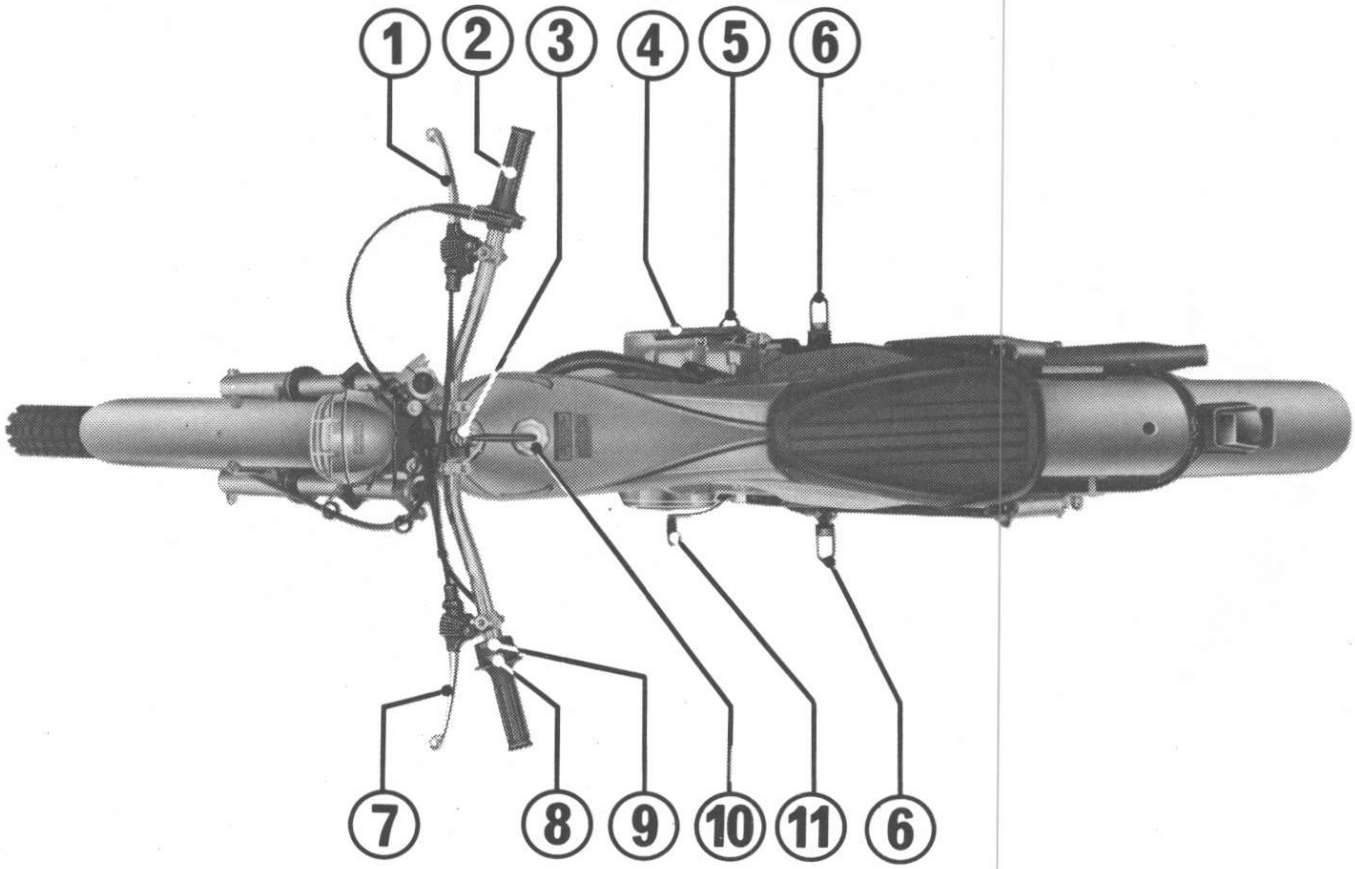


① **Frame serial number**

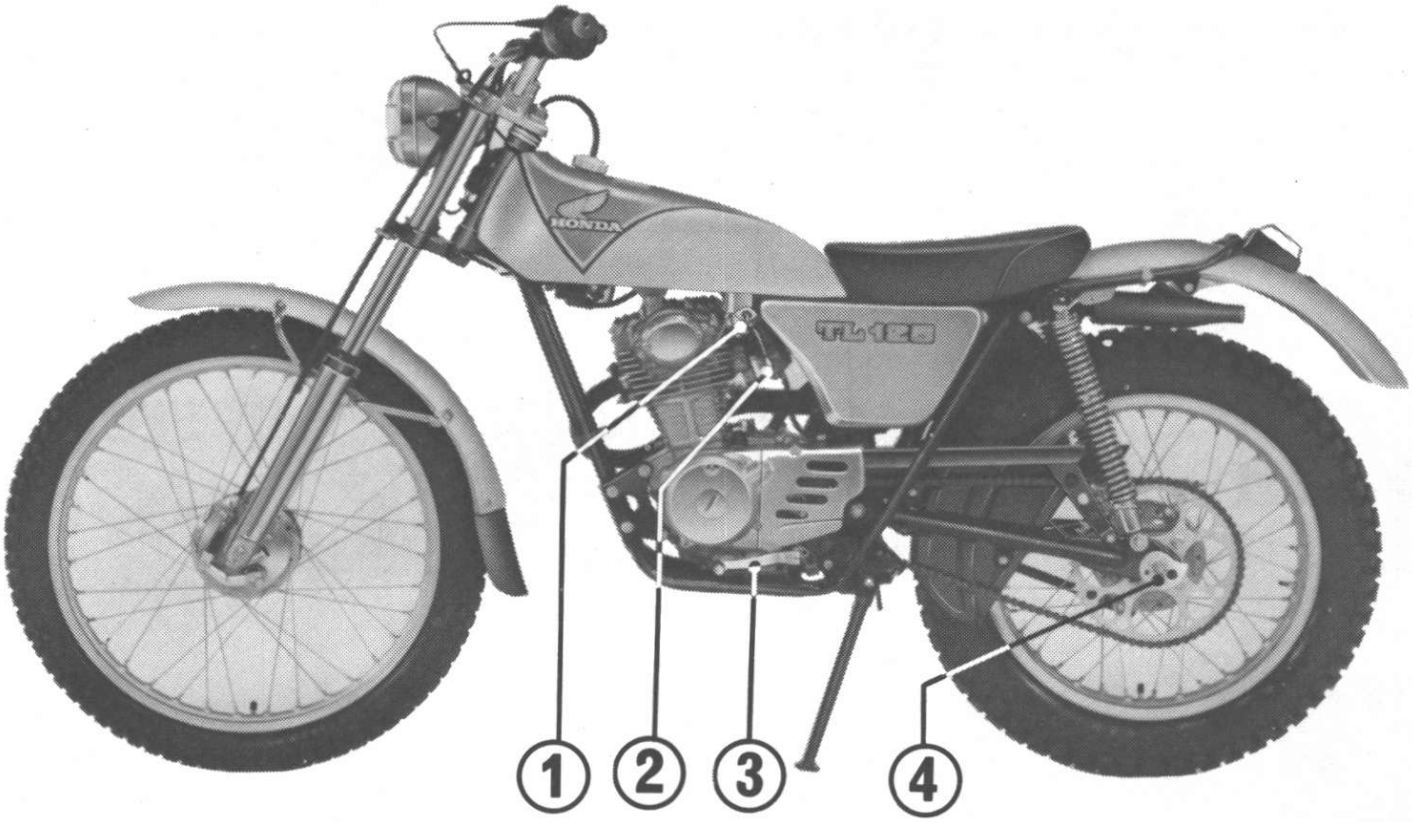


② **Engine serial number**

CONTROL LOCATIONS



① Front brake lever
② Throttle grip
③ Ignition switch
④ Kick starter pedal
⑤ Rear brake pedal
⑥ Foot peg
⑦ Clutch lever
⑧ Headlight dimmer switch
⑨ Headlight switch
⑩ Fuel tank cap
⑪ Gear change pedal

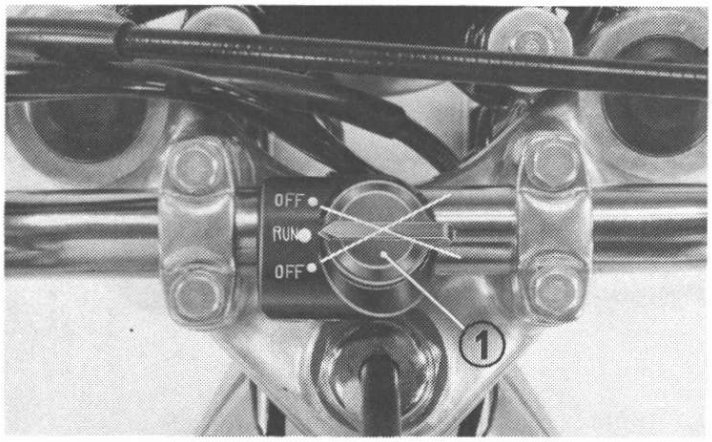


① **Fuel valve**
② **Choke lever**
③ **Gear change pedal**
④ **Drive chain adjuster**

① Drive chain adjuster ② Rear brake pedal ③ Kick starter pedal

Ignition Switch

The three position ignition switch ① is located on center of the handlebar. In the "RUN" position (center) the ignition circuit is complete and the engine operates. In the "OFF" position (either side of center) the ignition circuit is open and the engine will not operate.



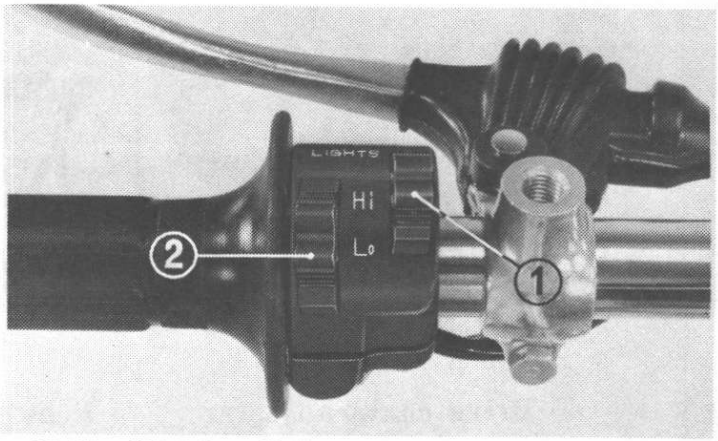
① **Ignition switch**

Headlight Switch

The headlight switch ① and the headlight dimmer switch ② are located at the left handlebar grip.

Move the headlight switch ① up to turn the headlight and taillight on, and down to turn off.

Move the headlight dimmer switch ② to the "Hi" position to select high beam and to the "Lo" position to select low beam. The lights will only operate when engine is running.



① **Headlight switch**
② **Headlight dimmer switch**

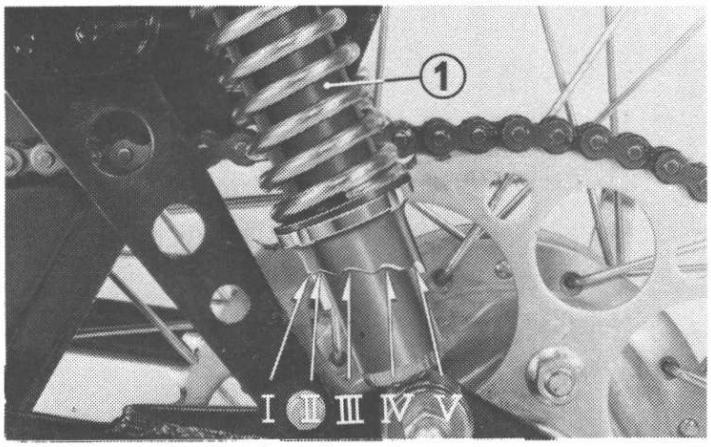
Rear Shock Absorbers

The rear shock absorbers ① are adjustable in five increments to meet different road or riding conditions.

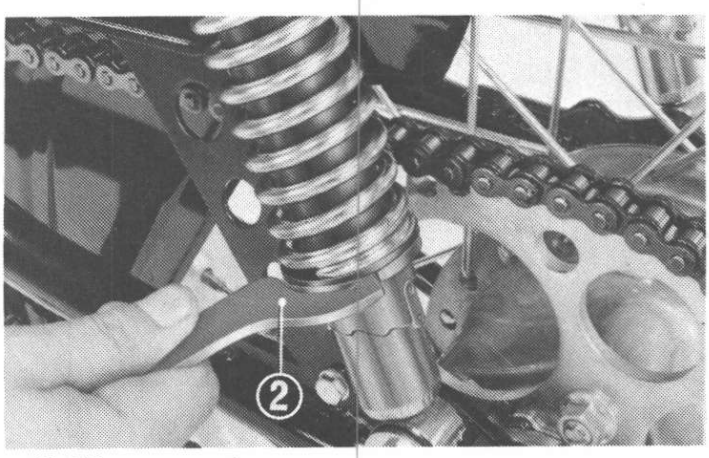
Position I is suitable for smooth roads and light rider weight. Shock absorber spring tension should be increased to prevent the rear suspension from bottoming when heavily laden or when traveling on rougher roads.

Shock absorber spring tension is progressively increased by turning the adjuster to position II, III, IV, or V.

Use a pin spanner ② to adjust the rear shock absorbers. Be certain to adjust both right and left shock absorbers to identical positions.



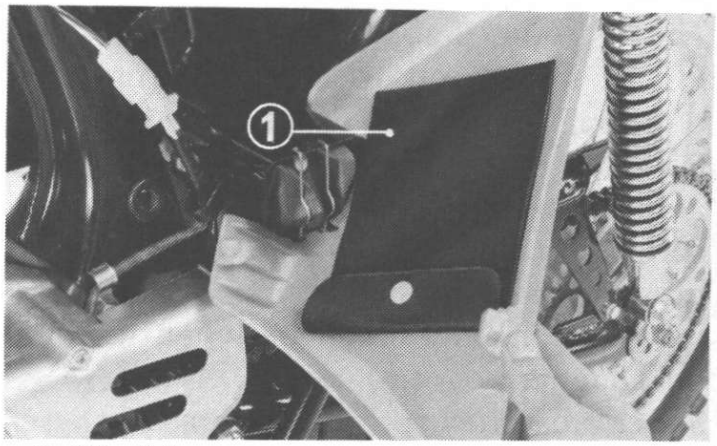
① **Rear shock absorber**



② **Pin spanner**

Document Compartment

A vinyl bag is attached to the inside of the left side cover for storing an owner's manual and/or other documents.
When washing the motorcycle, take care not to direct a blast of water over this area.



① **Vinyl bag**

Fuel Valve

The fuel valve is mounted under the left side of the fuel tank.

"OFF" position:

When the fuel valve lever ① is turned to the "OFF" position, fuel cannot flow from the fuel tank to the carburetor. Set the valve in this position whenever the motorcycle is not in use.

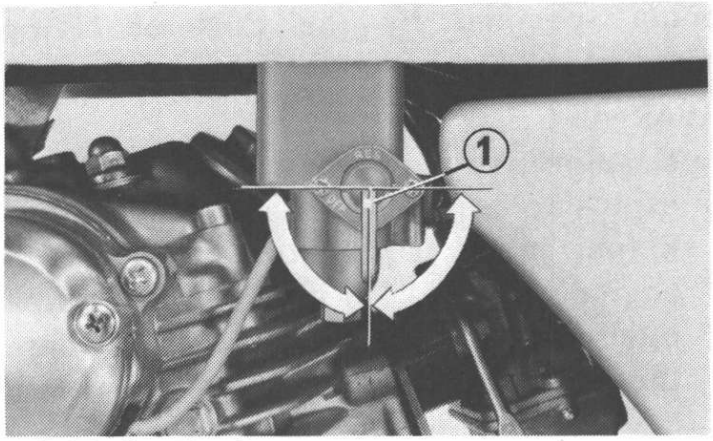
"ON" position:

When the fuel valve lever is turned to the "ON" position, fuel will flow from the main fuel supply to the carburetor. Set the valve in this position when the engine is to be operated from the main fuel supply.

"RES" position:

When the fuel valve lever is turned to the "RES" position fuel will flow from the reserve fuel supply to the carburetor. The fuel valve lever should be set in this position only after the main fuel supply has been consumed. The reserve fuel supply is 0.5 ℓ (0.13 U.S. gal:). Switching to the reserve fuel supply serves as a warning to the rider that it is time to refill the fuel tank.

NOTE: Do not operate the machine with the fuel valve in the reserve position after refuelling, or you will defeat the purpose of the reserve fuel supply.



① **Fuel valve lever**

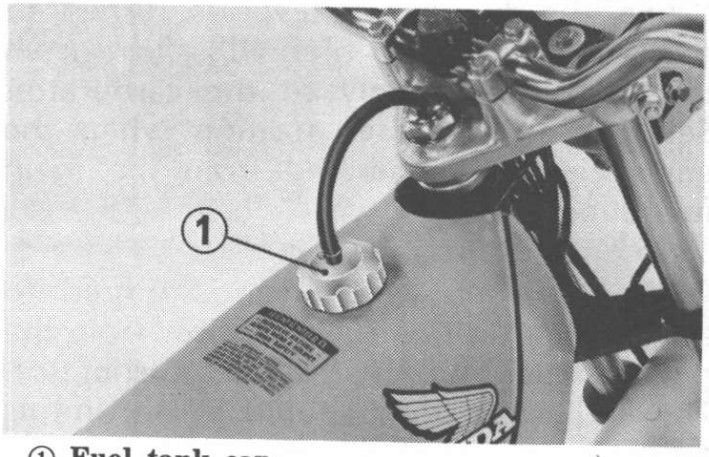
Fuel Tank

Fuel tank capacity is 4.5 ℓ (1.19 U.S. gal.) including 0.5 ℓ (0.13 U.S. gal.) in the reserve supply. The fuel tank cap ① is removed by twisting counterclockwise. Use low-lead or regular gasoline with a Research Octane number of 91 or higher, or a Pump Octane number of 86 or higher. When refueling, take care to exclude dirt, water or other contaminants from the fuel tank.

NOTE: Pump Octane is the octane formula specified by the Cost of Living Council.

WARNING:

- **Gasoline is extremely flammable and is explosive under certain conditions. Refuel in a well ventilated area with engine stopped. Do not smoke or allow open flames or sparks in the area where the motorcycle is refueled or where gasoline is stored.**
- **Do not overfill the tank (there should be no fuel in the filler neck). After refueling, make sure the filler cap is closed securely.**
- **Gasoline is harmful or fatal is swallowed. Avoid repeated or prolonged contact with skin or breathing of vapor. Keep out of reach of children. If gasoline is swallowed, do not induce vomiting. Call a physician immediately.**



① Fuel tank cap

Engine Oil Recommendation

Use only high detergent, premium quality motor oil certified to meet or exceed US automobile manufacturer's requirements for Service Classification SE. Motor oils intended for Service SE will show this designation on the container.

The regular use of special oil additives is unnecessary and will only increase operating expenses.

Engine oil should be changed at the intervals prescribed in the maintenance schedule on page 25.

CAUTION: Engine oil is a major factor affecting the performance and service life of the engine. Non-detergent and low quality oils are specifically not recommended.

Viscosity

Viscosity selection should be based on the average atmospheric temperature in your riding area. Change to the proper viscosity oil whenever the average atmospheric temperature changes substantially.

Recommended oil viscosity:

General, all temperatures

SAE 10W-30 or SAE 10W-40

Alternate:

Above 59°F	**SAE 30**
32° to 59°F	**SAE 20 or 20W**
Below 32°F	**SAE 10W**

PRE-RIDING INSPECTION

WARNING:

Take care not to let water enter the muffler or the brake system when washing the motorcycle. Water in the muffler may cause poor starting and wet brakes may reduce brake efficiency.

At the start of each riding day, perform a general inspection to be certain the motorcycle is in good, safe operating condition. This inspection will require only a few minutes and can save you much time and expense in the long run. Check the following items and adjust or service if necessary. Refer to the appropriate section of this manual for detailed maintenance instructions.

1. ENGINE OIL LEVEL—Measure oil level and add oil if necessary (page 28).
2. FUEL—Check fuel level and fill tank if low (page 13).
3. BRAKES—Check operation of front and rear brakes. Adjust free play if necessary (pages 48~50).
4. TIRE PRESSURE—Check with a tire pressure gauge (page 17).
5. DRIVE CHAIN—Check condition of chain and measure chain slack. Adjust if drive chain tension is incorrect. Lubricate if drive chain appears dry. Replace if drive chain is badly worn or damaged (pages 45~47).
6. THROTTLE—Check throttle operation in all steering positions. Adjust, if free play is incorrect. Replace or correct cable routing if throttle does not operate freely in all steering positions (page 40).

TIRE RECOMMENDATION

Check tire pressure frequently, and maintain pressure within a range of 0.5~1.5 kg/cm² (7~21 psi), which will provide the best handling characteristics and traction for your riding conditions.

WARNING:

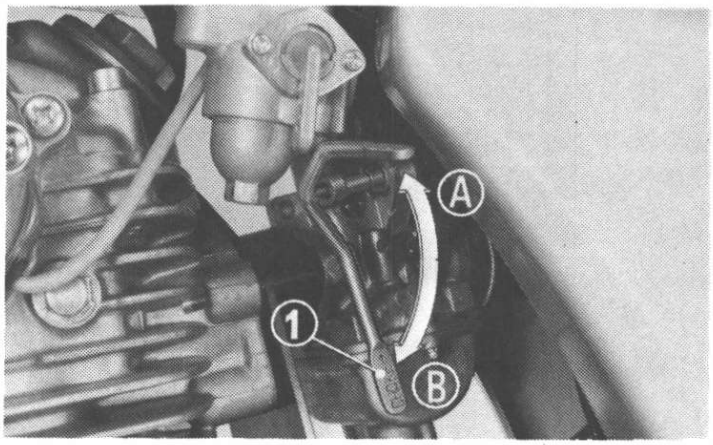
- **Improper tire inflation will cause abnormal tread wear or other damage and create a safety hazard.**
- **Check tire pressures frequently and adjust if necessary.**
- **It is recommended that the tires are replaced when the tread depth at the center of the tire is less than 3 mm (0.12 in.).**
- **Operation with excessively worn tires is very hazardous and will adversely affect traction, steering and handling.**

STARTING THE ENGINE

WARNING: Ensure that the transmission is in neutral before starting the motorcycle. Attempting to start the engine with the transmission in gear might result in injury to the rider or damage to the motorcycle.

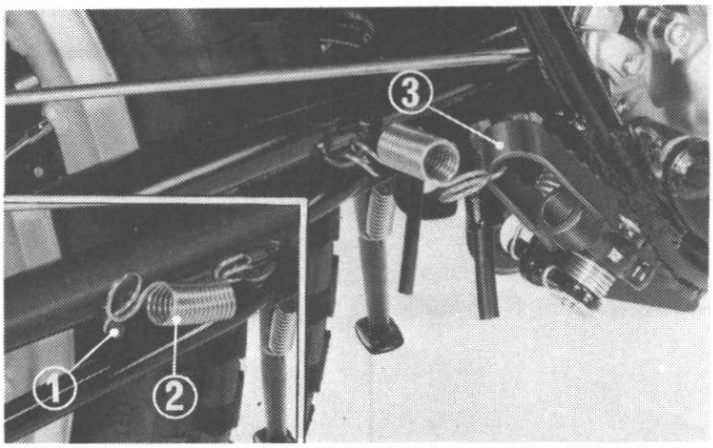
Starting a Cold Engine

1. Turn the fuel valve to the "ON" position (page 13)



① **Choke lever**

2. Turn the ignition switch to the "RUN" position (page 10).
3. Raise the choke lever to the fully closed position Ⓐ.
4. Shift the transmission into neutral (the engine can be started in gear with the clutch disengaged, but it is recommended that starting be performed in neutral.).
5. Unhook the foot peg holding spring ② from its anchor pin ① on the right rear fork, and hook the spring to the right foot peg ③. The right foot peg must be raised to allow full kick starter travel (limited kick starter travel, with foot peg down, is sufficient when restarting a warm engine).
6. Open the throttle about 1/8 turn, and operate the kick starter with the right foot, starting from the top of the stroke and following through to the bottom with a rapid and continuous kick. Operate several times until engine starts.



① **Anchor pin**
② **Foot peg holding spring** ③ **Right foot peg**

CAUTION: Do not allow the kick starter to snap back freely against the pedal stop as engine case damage could result.

If the engine fails to start after several repeated attempts, it may have become flooded with excess fuel. To clear the engine, turn off the ignition switch and lower the choke lever to the full open position Ⓑ, open the throttle fully and crank the engine several times using the kick starter pedal.

After the cylinder has been cleared of excess fuel turn the ignition switch to

the "RUN" position, and follow the starting procedure outlined in steps 1 through 4; however, at this time the use of the choke is not necessary.

7. After starting, warm up the engine until the engine properly responds to the throttle with the choke fully open (lever down).
8. Unhook the foot peg holding spring from the right foot peg, and hook it on the rear fork anchor pin.

Starting in Extremely Cold Weather

Prime the engine before starting by cranking several times with the kick starter pedal. The ignition switch should be "OFF", the choke fully closed (raised up) and the throttle opened slightly. Follow with the starting procedure for a cold engine.

Starting a Warm Engine

When the engine is to be re-started while still warm, proceed with cold engine starting procedure; however, do not use the choke. Limited kick starter travel, with foot peg down, is usually sufficient for starting a warm engine. If the engine fails to start, follow the same procedures as for the cold engine starting given above. **WARNING: Exhaust contains poisonous carbon monoxide gas. Avoid inhalation of exhaust gases. Never run the engine in a closed garage or confined area.**

BREAK-IN PROCEDURE

During the first week of operation, operate your new TL125 so the engine neither pulls laboriously nor exceeds 80% of the maximum rpm in any gear. Avoid full throttle operation, and select your gear changes to spare the engine undue stress. Careful break-in operation during the initial mileage will measurably extend the service life of the engine.

WARNING:

- **Exhaust pipe and muffler become very hot during operation and remain sufficiently hot to inflict burns if touched, even after shutting off the engine. Wear clothing which will completely cover the legs while riding and avoid any contact with unshielded portions of the exhaust system.**
- **Do not wear loose clothing which may catch on control levers, kick starter, foot pegs, drive chain, wheels, and tires.**

1. After the engine has been warmed up, the motorcycle is ready for riding.
2. While the engine is idling, pull in the clutch lever and depress the gear change pedal to shift into low (1st) gear.

WARNING: Ensure that the side stand is fully retracted before riding the motorcycle. Failure to retract the stand may interfere with an attempted left turn and cause serious control problems.

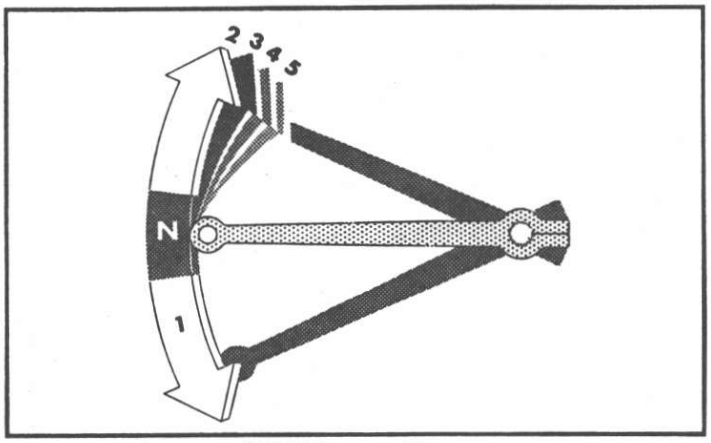
3. Slowly release the clutch lever and at the same time gradually increase engine speed by opening the throttle ; coordination of the throttle and clutch lever will assure a smooth start.
4. When the motorcycle attains a moderate speed, close the throttle, pull in the clutch lever and shift to 2nd gear by raising the gear change pedal.

CAUTION: When changing gears, the clutch must be disengaged and the throttle momentarily closed to avoid over-revving the engine and over-stressing the drive train components.

5. This sequence is repeated to progressively shift to 3rd, 4th and 5th gear.
6. When decelerating the motorcycle, coordination of the throttle and the front and rear brakes is important.

will, under most conditions, assure good control and stability during deceleration. As speed is reduced, it is common practice to downshift the transmission into the gear appropriate for the speed of the motorcycle. This assures maximum control through better braking effectiveness and better acceleration when necessary.

7. The smooth gradual application of both the front and rear brakes together with the required throttle coordination



Shifting pattern

8. For maximum deceleration and braking close the throttle, apply both the front and rear brakes simultaneously, and as the motorcycle comes to a stop, disengage the clutch. This maneuver requires smooth coordination of the controls.

   Both front and rear brakes should be applied equally. Independent use of only the front or rear brake reduces stopping performance. Excessive brake application may cause either wheel to lock, reducing control of the motorcycle. Avoid locking the wheels. If excessive brake application causes either wheel to lock, reduce applied pressure on the brake pedal or lever

WARNING:

- **When riding on wet terrain or when riding in rainy conditions, the frictional contact between the tires and the road is greatly reduced, therefore extreme caution should be exercised during**

operation including braking, acceleration and turning.

- When descending a steep grade, downshift and use engine compression together with intermittent applications of both brakes to slow the motorcycle down. Avoid continuous use of the brakes which may result in overheating and reduction of braking efficiency.

CAUTION: Donot coast for a long distance with the engine off, and do not tow the motorcycle a long distance. Even with gears in neutral, the transmission is only properly lubricated when the engine is running. Inadequate lubrication may damage the transmission.

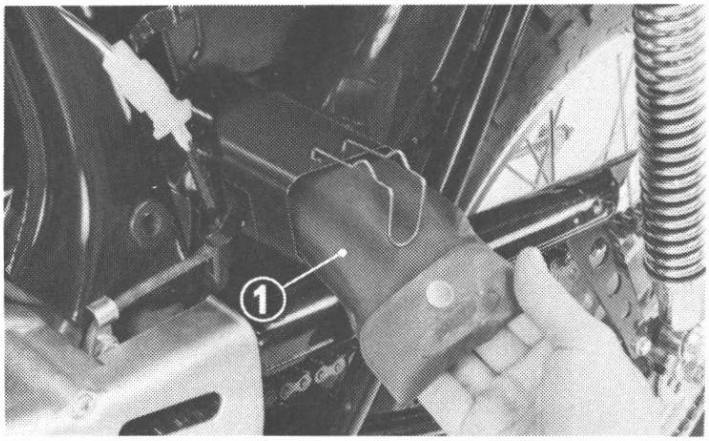
PARKING

WARNING: Park the motorcycle on firm, level ground. Failure to do so could result in injury or damage to the machine.

When parking the motorcycle, turn the ignition switch to the "OFF" position. Turn the fuel valve to the "OFF" position.

TOOL KIT

The tool kit ① is located in a compartment in the center of the motorcycle directly behind the left side cover. Minor adjustment and parts replacement can be performed with the tools contained in the kit. Adjustments or repairs which cannot be performed with the tools in the kit should be performed by your HONDA dealer.



① **Tool kit**

Listed below are the items included in the tool kit.

- Spark plug wrench
- Wrench handle
- 24 mm wrench: for oil filter cap removal
- 10mm box wrench: for air filter element removal
- No. 3 Phillips screwdriver
- Handle grip: for screwdriver
- Tool bag

MAINTENANCE SCHEDULE

The maintenance intervals shown in the following schedule are based upon average riding conditions. Machines subjected to severe use, or ridden in unusually dusty areas, require more frequent servicing.

Items marked* should be serviced by an authorized Honda dealer, unless the owner has proper tools and is mechanically proficient.

Other maintenance items are simple to perform and may be serviced by the owner.

CAUTION: To maintain the safety and reliability of your HONDA motorcycle, do not modify the motorcycle and use genuine HONDA parts when servicing or repairing. The use of other replacement parts which are not of equivalent quality may impair the operation of your motorcycle.

INITIAL SERVICE PERIOD		
FIRST WEEK OF OPERATION **NOTE** **Change front fork fluid initially after 30 operating days and once a year thereafter**	● ENGINE OIL—Change. ●*CONTACT POINTS AND IGNITION TIMING—Clean, check, and adjust or replace if necessary. ●*VALVE TAPPET CLEARANCE—Check and adjust if necessary. ●*CAM CHAIN TENSION—Adjust. ●*CARBURETOR—Check and adjust if necessary. ● THROTTLE OPERATION—Inspect cable. Check and adjust free play. ●*CLUTCH—Check operation and adjust if necessary. ● DRIVE CHAIN—Check, lubricate, and adjust if necessary.	● BRAKE CONTROL LINKAGE—Check linkage and adjust if necessary. ●*WHEELS, RIMS, AND SPOKES—Check. Tighten spokes and true wheels if necessary. ● TIRES—Inspect and check air pressure. ● FRONT FORK FLUID—Drain and refill. ● FRONT AND REAR SUSPENSION—Check operation. ● ALL NUTS, BOLTS, AND OTHER FASTENERS—Check security and tighten if necessary.

REGULAR SERVICE PERIOD

EVERY 30 OPERATING DAYS

NOTE

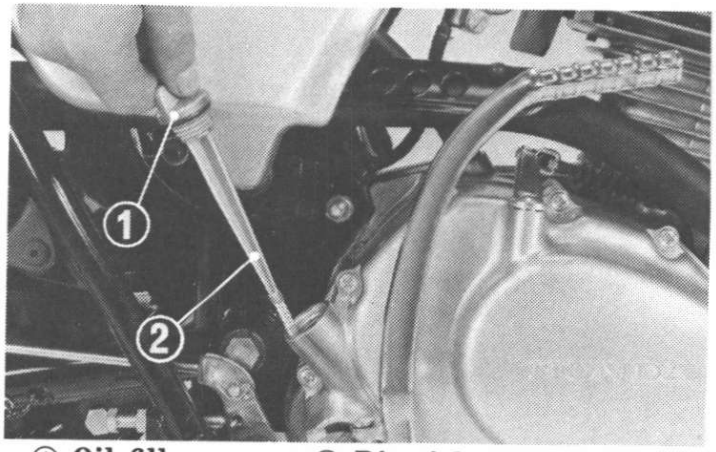
Change oil every 30 operating days or every 3 months, whichever occurs first.

- ENGINE OIL—Change.
- SPARK PLUG—Clean and adjust gap, or replace if necessary.
- *CONTACT POINTS AND IGNITION TIMING—Clean, check, and adjust or replace if necessary.
- *VALVE TAPPET CLEARANCE—Check and adjust if necessary.
- POLYURETHANE FOAM AIR FILTER ELEMENT—Clean and oil. Service more frequently if operated in dusty areas.
- SPARK ARRESTOR—Purge
- *CARBURETOR—Check and adjust if necessary.
- *CAM CHAIN TENSION—Adjust
- THROTTLE OPERATION—Inspect cable. Check and adjust free play.
- *CLUTCH—Check operation and adjust if necessary.
- DRIVE CHAIN—Check, lubricate, and adjust if necessary.
- BRAKE CONTROL LINKAGE—Check linkage and adjust if necessary.
- *WHEELS, RIMS, AND SPOKES—Check. Tighten spokes and tire wheels if necessary.
- TIRES—Inspect and check air pressure.
- FRONT AND REAR SUSPENSION—Check operation.
- REAR FORK BUSHING—Check for excessive looseness.
- SIDE STAND—Check installation, operation, deformation, damage and wear.
- ALL NUTS, BOLTS, AND OTHER FASTENERS—Check security and tighten if necessary.

EVERY YEAR	●*CENTRIFUGAL OIL FILTER—Clean. ● OIL FILTER SCREEN—Clean. ● FUEL FILTER SCREEN—Clean. ● FUEL LINE—Check. ●*BRAKE SHOES—Inspect and replace if worn. ● FRONT FORK FLUID—Drain and refill. ●*STEERING HEAD BEARINGS—Adjust.

Engine Oil Level

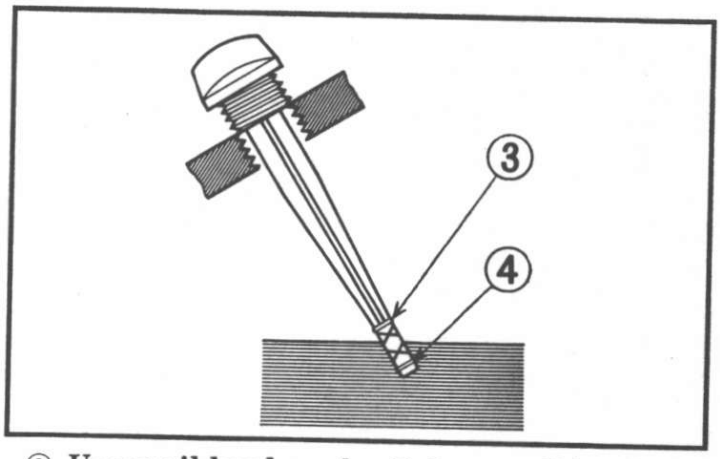
Check engine oil level at the start of each day the motorcycle is to be operated. The oil filler cap ① is located on the right crankcase cover and contains a dipstick ② for measuring oil level. Oil level must be maintained between the upper ③ and lower ④ oil level marks on the dipstick. Oil level must be checked with the motorcycle standing upright on level ground and the oil filler cap touching the surface of the filler opening but not screwed in.



① Oil filler cap ② Dipstick

Engine Oil Change

Engine oil should be changed in accordance with the maintenance schedule on page 25~27. Use only motor oil of the grade and viscosity recommended on page 14. When changing oil, drain the used oil



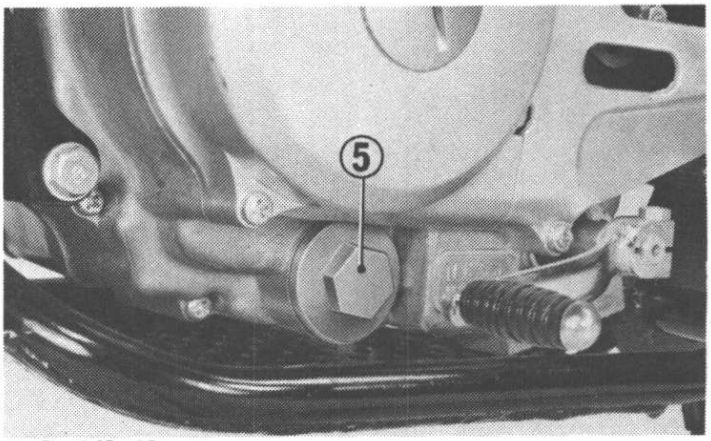
③ Upper oil level mark ④ Lower oil level mark

from the crankcase while the engine is warm. This will ensure complete and rapid draining.

1. Remove the oil filler cap ① (page 28) from the right crankcase cover.
2. Place an oil drain pan under the engine to catch the oil, and then remove the oil filter cap ⑤ with a 24 mm wrench provided in the tool kit.
3. After the oil stops draining from the crankcase, operate the kick starter several times to drain any oil which may be left in the engine.
4. When the oil has been completely drained, reinstall the oil filter cap making sure that the "O" ring seal used on the cap is in good condition. Thoroughly clean dirt and dust off the oil filter cap threads and tighten the filter cap properly.
5. Fill the crankcase through the oil filler orifice with approximately 1.0 ℓ (1.1 U.S. qt.) of recommended grade oil. Make sure that the oil level is between the upper ③ and lower ④ oil level marks (page 28).

CAUTION:

- **Check the oil level frequently.**
- **If the oil level is below the lower level mark on the dipstick, fill to the upper level mark before operating the engine.**
- **When operating the motorcycle in unusually dusty conditions, the oil changes must be performed at more frequent intervals than those specified in the maintenance schedule.**

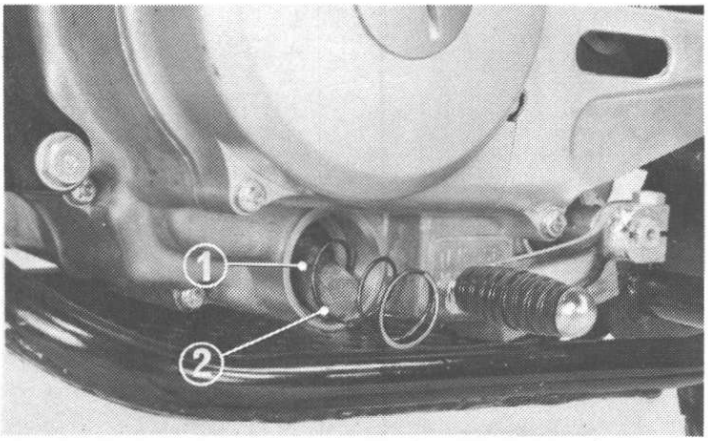


① Oil filter cap

Oil Filter Cleaning

Engine oil from the crankcase sump flows through a metal filter screen and is pumped through a centrifugal oil filter to engine components. The filtering process purifies the oil to minimize engine wear. Both filters should be cleaned yearly to ensure efficient operation.

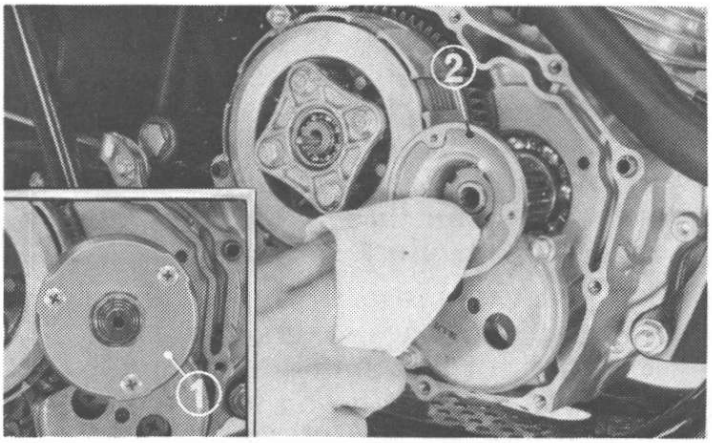
1. Drain the engine oil (page 29).
2. Remove the filter screen ① and spring ② and wash them in clean solvent, and then reinstall.



① Filter screen ② Spring

Oil Filter Rotor Cleaning

1. Drain the engine oil.
2. Remove the kick starter pedal.
3. Disconnect the clutch cable from the clutch lever.
4. Remove the right crankcase cover.
5. Remove the oil filter rotor cover.
6. Clean any sludge from the center of the oil filter rotor ②. Reassemble the filter.



① Oil filter rotor cover ② Oil filter rotor

Spark Plug Replacement and Adjustment

The standard spark plug for this model is the NGK D8ES-L or the ND X24ES.

Be sure to clean mud and sand from around the spark plug before removing it.

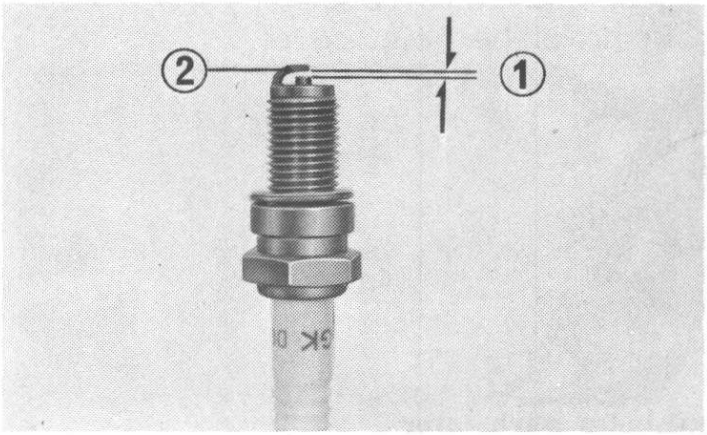
1. Detach the spark plug lead and remove the spark plug with the spark plug wrench provided in the tool kit.
2. Inspect the electrodes and center porcelain of the spark plug for deposits, eroded electrodes, or carbon fouling. If the spark plug deposits are heavy, or the electrodes appear to be eroded excessively, replace the spark plug with a new one. If the spark plug is carbon or wet fouled, the plug can sometimes be cleaned with a stiff wire brush.
3. Adjust the spark plug gap ① to 0.6–0.7 mm (0.024–0.028 in.). The gap can be measured with a wire gauge. The adjustment is made by bending the side (grounded) electrode ②.

Before installing the spark plug, clean any oil or dirt from the spark plug seat in the cylinder head.

Install the spark plug by hand until finger tight. Then use the spark plug wrench to tighten the plug an additional 1/2 to 3/4 turn or until the sealing gasket is compressed.

CAUTION:

· Spark plug must be securely tightened.



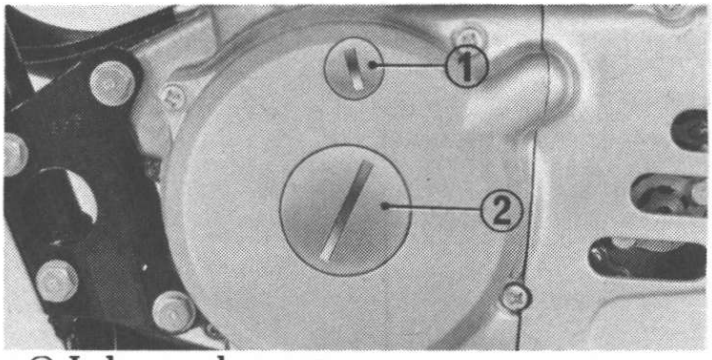
① Spark plug gap
② Side electrode

An improperly tightened plug can become very hot and possibly cause damage to the engine.

- **Never use a spark plug with a heat range that is not recommended for this motorcycle.**
- **Do not attempt to dry or remove soot from the spark plug by burning the tip.**

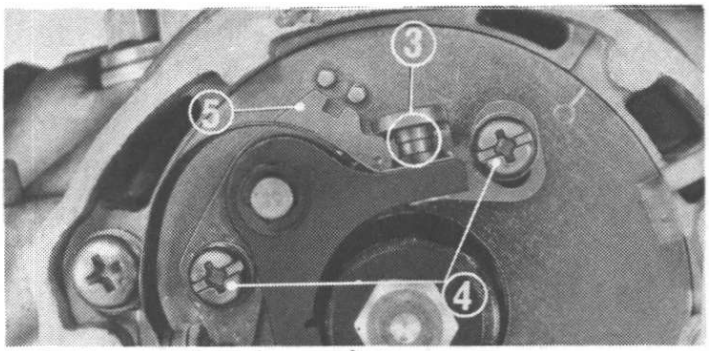
Contact Breaker Point Gap Adjustment

1. Remove the index mark cover ① and generator rotor cover ②.
2. Remove the point cover.



① **Index mark cover**
② **Generator rotor cover**

3. Open the contact breaker points ③ with your finger or small screw driver blade and check for pitting. If pitted or burned, the points should be replaced and the condenser checked. A gray discoloration is normal and can be removed with a point file. Filing should be done carefully and kept to a minimum. Clean the point contacts after filing with a clean piece of unwaxed paper such as a business card.
4. Rotate the generator rotor counterclockwise to find the point where the breaker point gap is at maximum and check



③ **Contact breaker points**
④ **Contact braker locking screws**
⑤ **Contact breaker plate**

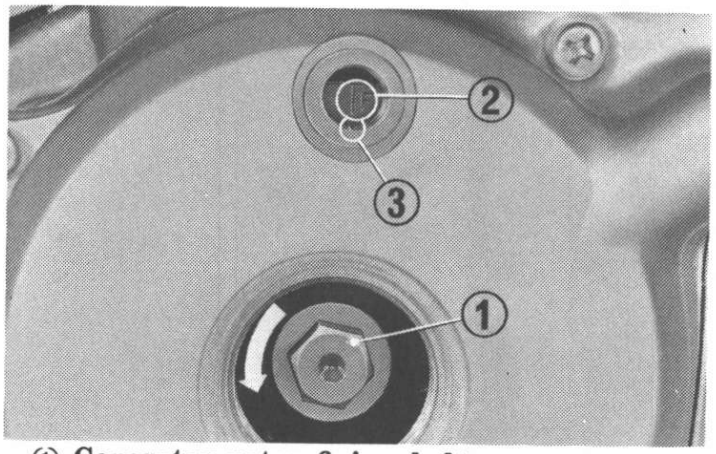
with a feeler gauge.
The standard gap is 0.3~0.4 mm (0.012 ~0.016 in.).

5. When adjustment is necessary, loosen the contact breaker plate locking screws ④ and move the contact breaker plate ⑤ to achieve correct gap. When properly gapped, retighten the locking screws.

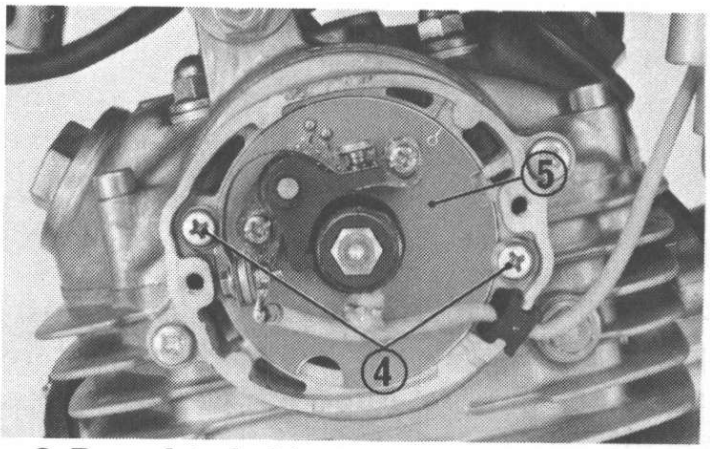
Ignition Timing Adjustment

Do not perform this operation until point gaps have been adjusted.

1. Rotate the generator rotor fixing bolt ① in the counterclockwise direction and align the "F" mark ② with the index mark ③. At this time, the contact breaker points should just start to open.
2. To adjust the timing loosen the two base plate locking screws ④ and move



① Generator rotor fixing bolt
② "F" mark ③ Index mark



④ Base plate locking screws
⑤ Breaker base plate

the contact breaker base plate ⑤. Moving the plate in the clockwise direction will advance the timing.

3. After performing the ignition timing adjustment, recheck the contact breaker point gap ③ (refer to page 32) to be sure that it has not changed.

   Static ignition timing is relatively accurate and will give satisfactory engine performance; however, the use of a stroboscopic timing light will provide more precise timing.

   When using the stroboscopic timing light to check the timing, idle the engine at 1,300 rpm.

   Perform the adjustment in the same manner as described above.

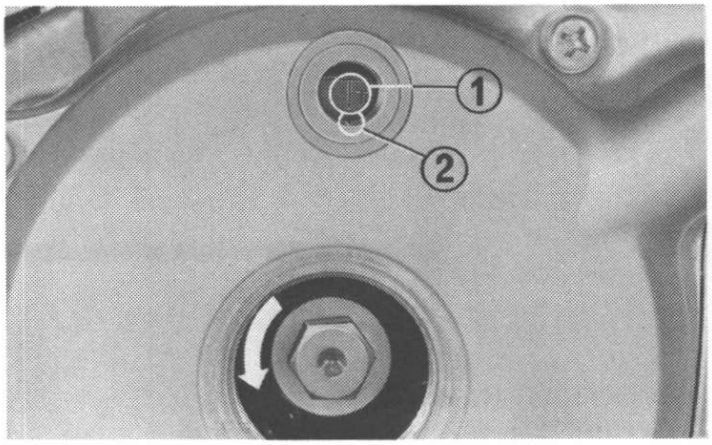
CAUTION: This ignition timing adjustment procedure must be made with care as advanced or retarded timing may cause engine damage. For best results, consult your Honda Dealer.

Valve Tappet Clearance Adjustment

Excessive valve tappet clearance will cause tappet noise, and little or no clearance will cause valve damage and loss of power. Therefore, valve tappet clearance should be properly maintained.

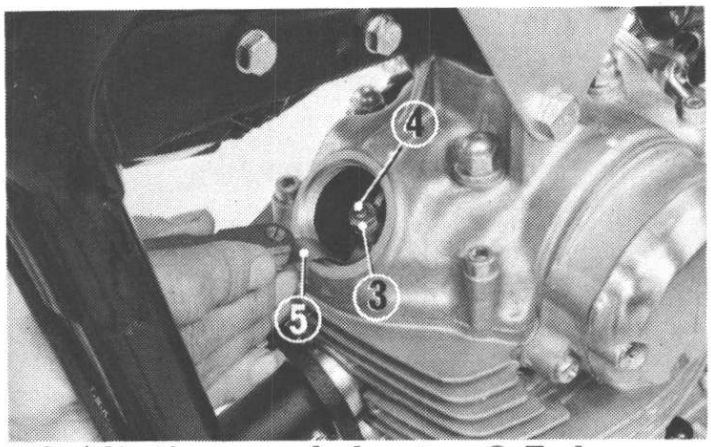
NOTE: The checking or adjusting of the tappet clearance should be performed while the engine is cold. The clearance may tend to increase as the temperature rises.

1. Turn the fuel valve lever to "OFF" position and remove the fuel tank.



① "T" mark ② Index mark

2. Remove the index and generator rotor covers as shown on page 32.
3. Remove the tappet adjusting hole caps.
4. Rotate the generator rotor counterclockwise until the "T" mark ① on the generator rotor lines up with the index mark ② on the left crankcase cover. In this position, the piston may be either on the compression or the exhaust stroke.
   The adjustment is made with the piston at the top of the compression stroke when both the intake and exhaust valves are closed. This condition can be determined by moving the tappets with the fingers through the tappet adjusting holes. If the tappets are free, it is an indication that the valves are closed and that the piston is on the compression stroke. If the tappets are tight and the valves are open, rotate the generator rotor 360° and realign the "T" mark to the timing index mark. Check the clearance of both valves by inserting a 0.05 mm (0.002 in.) feeler gauge between the adjusting screw and the valve stem.
   If it is necessary to make an adjustment, loosen the adjusting screw lock nut ③ and turn the adjusting screw ④ so that the valve clearance offers slight resistance when the feeler gauge ⑤ is inserted. After completing the adjustment, tighten the adjusting screw lock nut while holding the adjusting screw to prevent it from turning. Finally, recheck the clearance to make sure that the adjustment has not been disturbed.

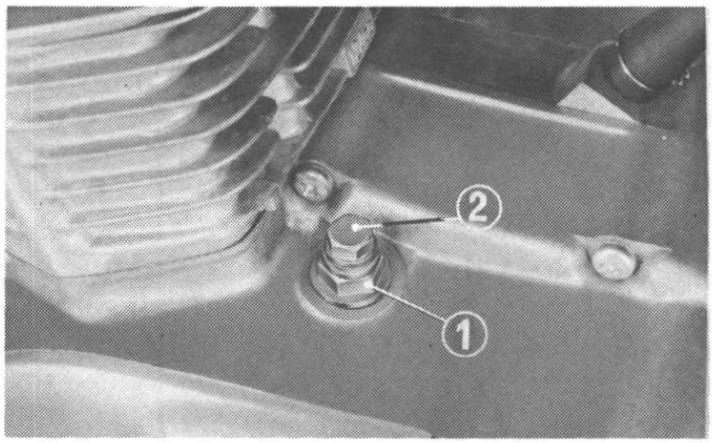


③ **Adjusting screw lock nut** ⑤ **Feeler gauge**
④ **Adjusting screw**

Cam Chain Adjustment

If the cam chain is excessively noisy during engine operation, the tension of the cam chain is improper and requires adjustment.

1. Start the engine and set the idling speed to 1,300 rpm.
2. Remove the rubber cap and loosen the cam chain adjuster ① (not the 6 mm sealing bolt ②). This will automatically apply the proper tension to the cam chain.
3. After completing the adjustment, tighten the adjuster securely.



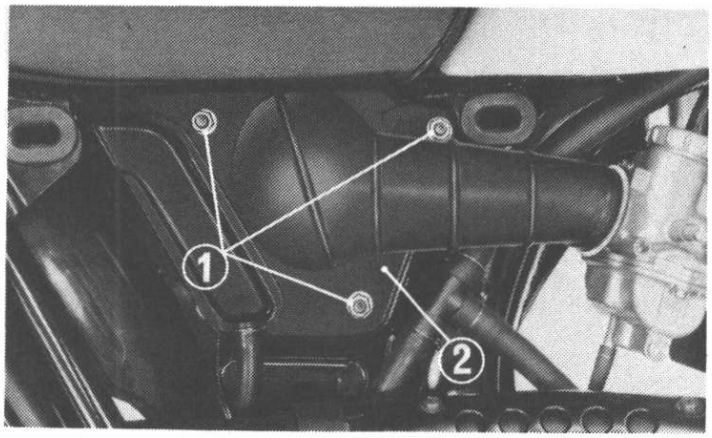
① Cam chain adjuster
② 6 mm sealing bolt

Air Cleaner Maintenance

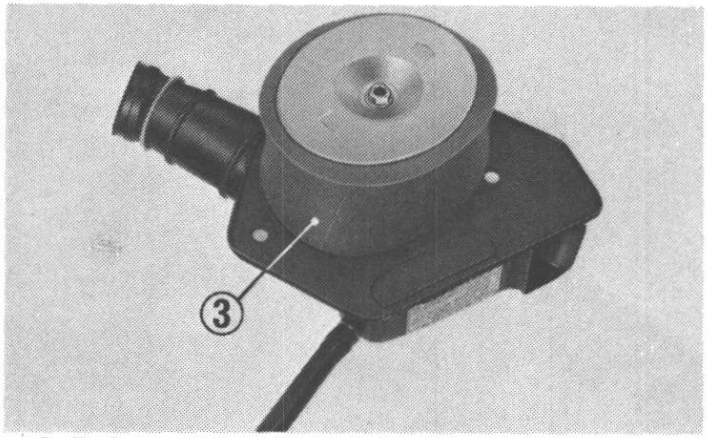
If the air cleaner is clogged, it affects engine performance and, therefore, should be cleaned periodically.

1. Remove the right side cover.
2. Unscrew the three air cleaner mounting nuts ① with the 10 mm box wrench contained in the tool kit and remove the air cleaner case ②.
3. Remove the air cleaner element ③ from the case.
4. Wash the air cleaner element in clean stoddard solvent and allow to dry thoroughly.
5. Soak the air cleaner element in clean gear oil (SAE 80–SAE 90) until saturated then squeeze out excess oil.
6. Reinstall the air cleaner element.
7. Reinstall the right side cover

WARNING: Gasoline or low flash point solvents are explosive and highly flammable and must not be used to clean the air cleaner element. Fire or explosion could result.



① Air filter mounting nuts ② Air filter case

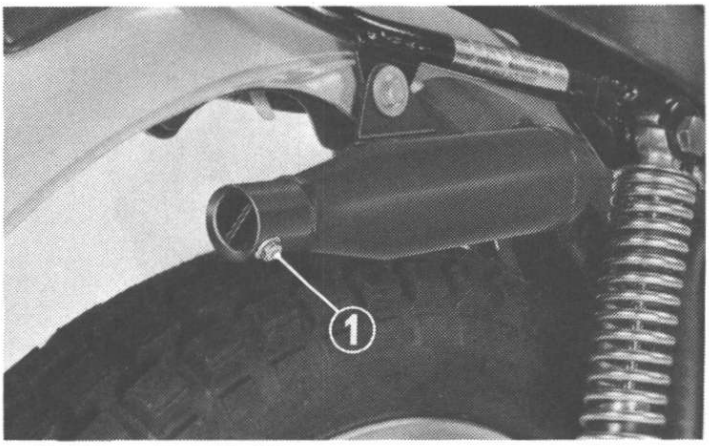


③ Polyurethane foam air filter element

Spark Arrestor Maintenance

The exhaust system spark arrestor must be purged of accumlated carbon periodically.

1. Remove the spark arrestor mounting bolt ①.
2. Remove the spark arrestor from the muffler outlet.
3. Start the engine and purge accumulated carbon from the muffler by momentarily revving up the engine.
4. Clean the spark arrestor of carbon.
5. Stop the engine and reinstall the spark arrestor and mounting bolt.



① **Mounting bolt**

WARNING:

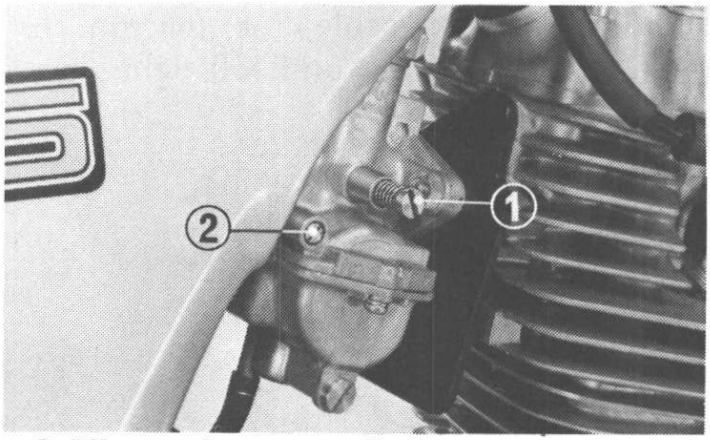
- **Do not perform this operation immediately after the engine has been run because the exhaust system becomes very hot.**
- **Because of the increased fire hazard ensure that there are no combustible materials in the area when purging the spark arrestor.**
- **Exhaust gases contain poisonous carbon monoxide. Perform this operation only in a well ventilated area.**
- **Wear eye protection.**

Carburetor Adjustment

NOTE: Before making adjustments to the carburetor, be sure the ignition system is functioning properly and the engine has good compression. Do not attempt to compensate for other faults by carburetor adjustment.

The carburetor should be adjusted only after the engine has attained operating temperature.

1. Adjust the idle speed screw ① until the engine idles at approximately 1,300 R.P.M. Turn the idle speed screw clockwise to increase idle speed or counterclockwise to decrease idle speed.
2. Turn the air screw ② clockwise until you hear the engine miss or decrease in speed, then counterclockwise until the engine again misses or decreases in speed. Set the air screw exactly between these two extreme positions. Turning the air screw clockwise creates a richer fuel mixture, while turning the air screw counterclockwise creates a leaner fuel mixture. Usually the correct setting (between extremes of richness and leanness) will be found to be $1^{1}/_{4}$ turns open from a fully closed position.
3. If idle speed changes after adjusting fuel mixture, readjust the idle speed screw.

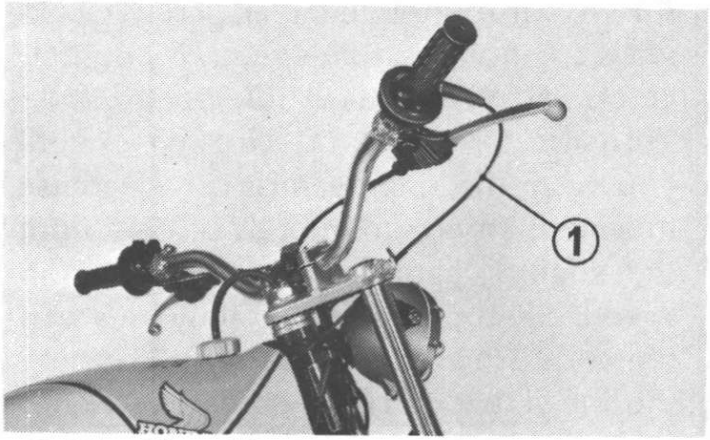


① Idle speed screw ② Air screw

Throttle Cable Inspection

WARNING: For safe operation and positive engine response, the throttle cable must be properly adjusted.

Check for smooth rotation of the throttle grip from the fully open to the fully closed position. Check both when at full left and full right steering positions. Inspect the condition of throttle cable ① from the throttle grip down to the carburetor. If the cable is kinked, chafed or improperly routed, it shoud be replaced and/or re-routed. Recheck cable for tension or stress at both full left and full right steering positions.

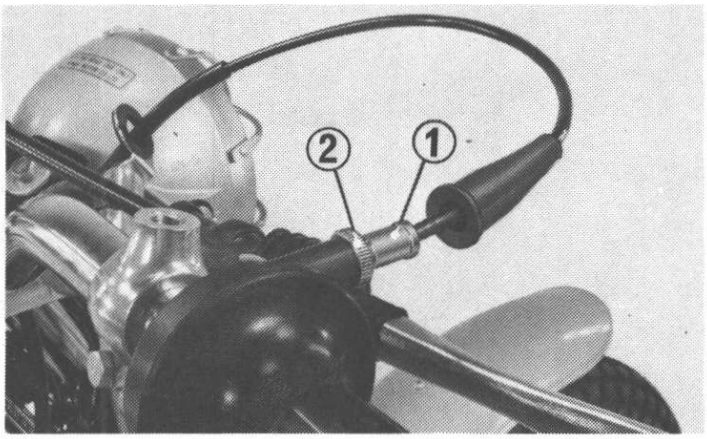


① **Throttle cable**

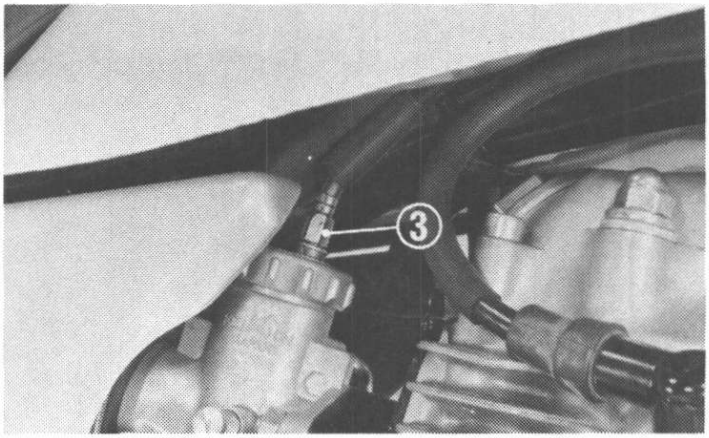
Throttle Cable Adjustment

Standard throttle grip free play is approximately 10–15° of grip rotation. This free play can be adjusted at the grip free play upper adjuster ① and also with the grip free play lower adjuster ③. Major free play adjustments are made with the lower adjuster ③ (after replacing a throttle cable or removing the carburetor). Minor free play adjustments are made with the upper adjuster ①. To adjust free play, loosen the lock nut and turn the adjuster. Tighten the lock nut after adjustment. Check for smooth rotation and closing tension of the throttle grip in all steering positions.

Inspect the throttle cable for kinks, chafing or improper routing.



① **Grip free play upper adjuster** ② **Lock nut**

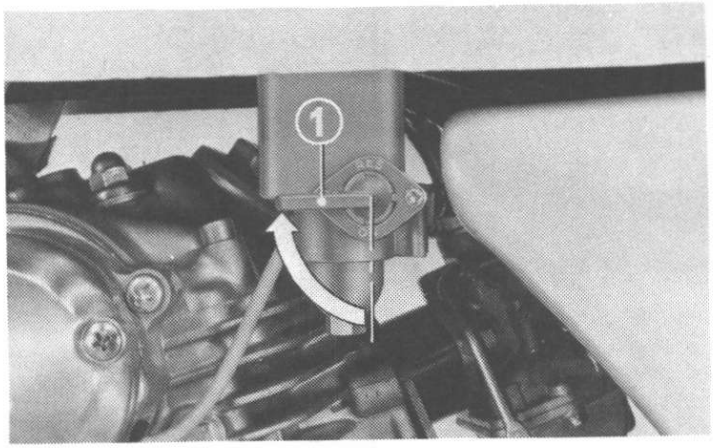


③ **Grip free play lower adjuster**

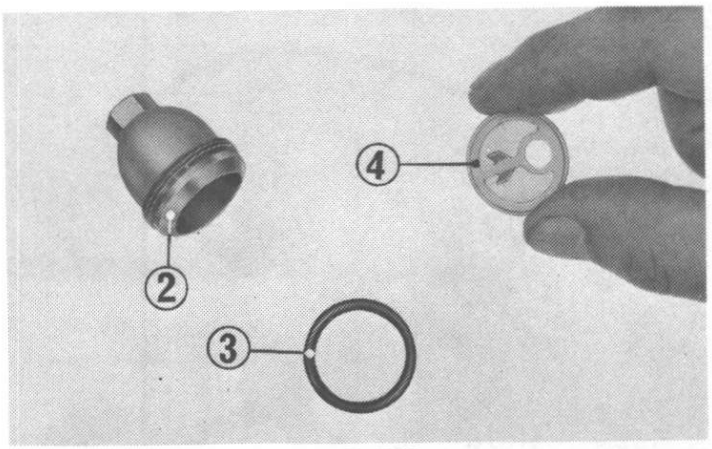
Fuel Filter Maintenance

The fuel filter is incorporated in the fuel valve which is mounted on the bottom of the fuel tank at the left side. Accumulation of dirt in the filter will restrict the flow of the fuel and cause the carburetor to malfunction, therefore, the fuel filter should be serviced periodically.

1. Turn the fuel valve lever ① to the "OFF" position.
2. Unscrew the fuel filter cap ②. Wipe all sediment from the inside of the cap.
3. Remove the "O" ring seal ③ and the filter screen ④. Clean the filter screen.
4. Reinstall the filter screen, "O" ring, and cap.
5. Turn the fuel valve lever to the "ON" position and check for leakage at the filter cap.



① **Fuel valve lever**



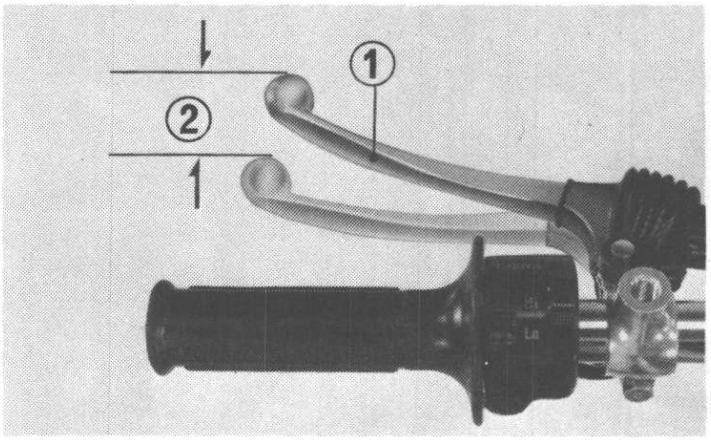
② **Fuel filter cap** ④ **Filter screen**
③ **"O" ring seal**

Clutch Adjustment

The clutch should be adjusted so that operating the clutch lever completely disengages the transmission from the engine. If the clutch does not completely disengage, the engine will stall when shifting, or the motorcycle will have the tendency to creep even with the clutch disengaged. On the other hand, if the clutch does not fully engage, the clutch will slip, and the motorcycle will not accelerate in response to the acceleration of the engine. In order for full engine output to be delivered to the rear wheel, it is necessary to have the clutch properly adjusted.

1. The normal clutch lever ① free play is 10~20 mm (0.4~0.8 in.) at the lever end before the clutch starts to disengage.
2. Clutch lever free play can be adjusted at either end of the clutch cable. Major adjustments (after replacing the clutch cable) should be made at the lower adjuster ③ (page 44).

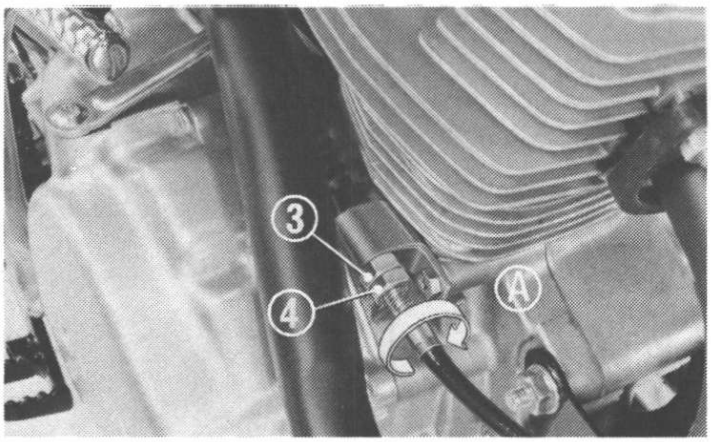
Minor adjustment should be made at the upper adjuster ⑥ (page 44).
The adjustment procedure is similar for using either the upper or lower adjuster



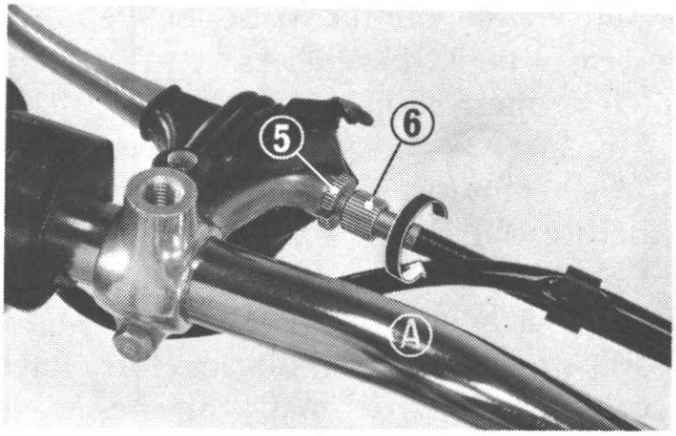
① **Clutch lever** ② **Clutch lever free play**

Loosen the lock nut (④ lower or ⑤ upper), turn the adjuster (③ lower or ⑥ upper) to provide the correct clutch lever free play, then retighten the adjuster. Turning the adjuster in direction Ⓐ will decrease free play and turning the adjuster in the opposite direction will increase free play.

3. After the adjustment has been made, check to see that the clutch is not slipping or that the clutch is properly disengaging according to the following procedure. After the engine starts, pull in the clutch lever and shift into gear, and make sure that the engine does not stall, nor the motorcycle start to creep. Gradually release the clutch lever and open the throttle, the motorcycle should start smoothly and accelerate gradually.



③ Clutch cable lower adjuster ④ Lock nut



⑤ Lock nut ⑥ Clutch cable upper adjuster

Drive Chain Maintenance

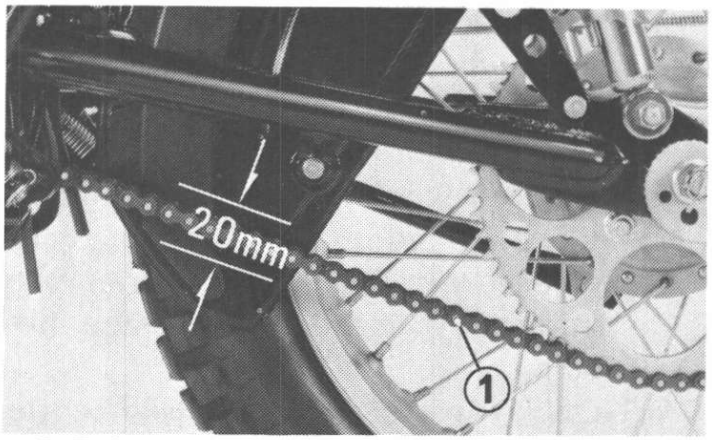
Proper tensioning and lubrication will help to extend the service life of the drive chain and ensure smooth power transmission to the rear wheel. Under severe usage, or when the motorcycle is ridden in unusually dusty areas, more frequent maintenance is necessary.

Tension Adjustment:

1. Place the motorcycle on a support block to raise the rear wheel off the ground. Shift the transmission into neutral.
2. Check vertical movement of the lower length of the drive chain at a point midway between the sprockets. Move the chain up and down with your fingers and observe the amount of slack. Drive chain tension should be adjusted to allow approximately 20 mm vertical movement at this point.
   Rotate the rear wheel and check drive chain tension throughout its length.

Drive chain tesion should remain constant as the wheel is rotated.

If the chain is found to be slack in one segment of its length and taut in another, this indicates that some of the links are either worn or kinked and binding. Kinking and binding can frequently be eliminated by lubrication.



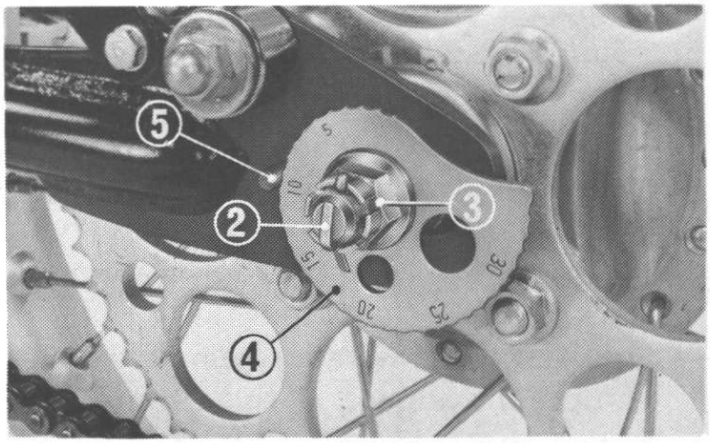
① **Drive chain**

3. If the drive chain is found to require adjustment, proceed as follows:
   a. Remove the cotter pin ②.
   b. Loosen the rear axle nut ③.
   c. Pull back on the rear wheel, and turn the left drive chain adjuster ④ to a setting which will produce 20 mm of drive chain slack. Turn the right drive chain adjuster to the same setting.
   d. With both adjusters seated firmly against their stopper pins ⑤, tighten the rear axle nut, and secure the nut with a new cotter pin.
   e. Recheck drive chain slack.
   f. Rear brake pedal free play is affected when repositioning the rear wheel to adjust drive chain slack. Check rear brake pedal free play and adjust as necessary (page 49~50).

CAuTION: Always replace used cotter pins with new ones.

Lubrication:
Commercially prepared drive chain lubricants may be purchased at most motorcycle shops and should be used in preference to motor oil or other lubricants. Saturate each chain link joint so that the lubricant will penetrate the space between adjacent surfaces of link plates and rollers.

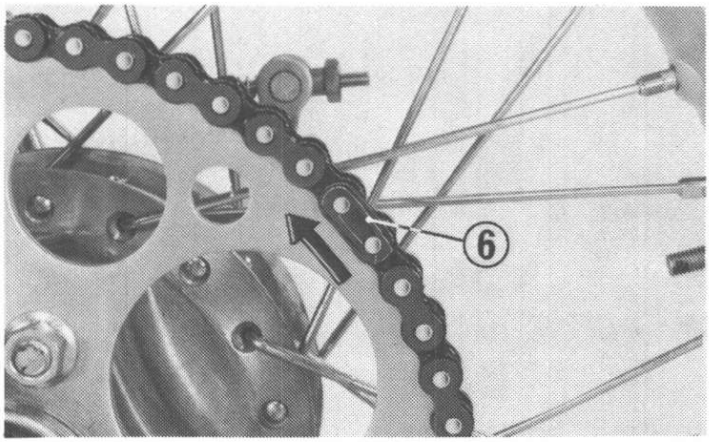
Removal and Cleaning:
When the drive chain becomes extremely dirty, it should be removed and cleaned prior to lubrication.



② **Cotter pin**
③ **Rear axle nut**
④ **Drive chain adjuster**
⑤ **Adjuster stopper pin**

1. Carefully remove the master link retaining clip with pliers. Do not bend or twist the clip. Remove the master link. Remove the drive chain from the motorcycle.
2. Clean the drive chain in solvent and allow to dry. Inspect the drive chain for possible wear or damage. Replace any chain that has damaged rollers, loose fitting links, or otherwise appears unserviceable.
3. Inspect the sprocket teeth for possible wear or damage. Replace if necessary. Never use a new drive chain on badly worn sprockets. Both chain and sprockets must be in good condition, or the new replacement chain or sprocket will wear rapidly.
4. Lubricate the drive chain.
5. Install the master link retaining clip ⑥ so that the closed end of the clip will face the direction of forward wheel rotation.
   The master link is the most critical part affecting the security of the drive chain. It is recommended that a new master link be installed whenever the drive chain is reassembled.
6. Adjust the drive chain to the proper tension, following the instructions on page 46.

CAUTION: Never install a new drive chain on badly worn sprockets, or use new sprockets with a badly worn drive chain. Both chain and sprockets must be in good condition, or the new replacement chain or sprocket will wear rapidly.

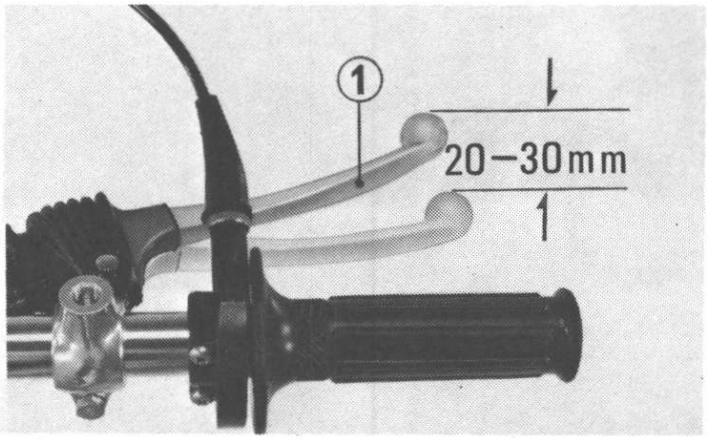


⑥ **Retaining clip**

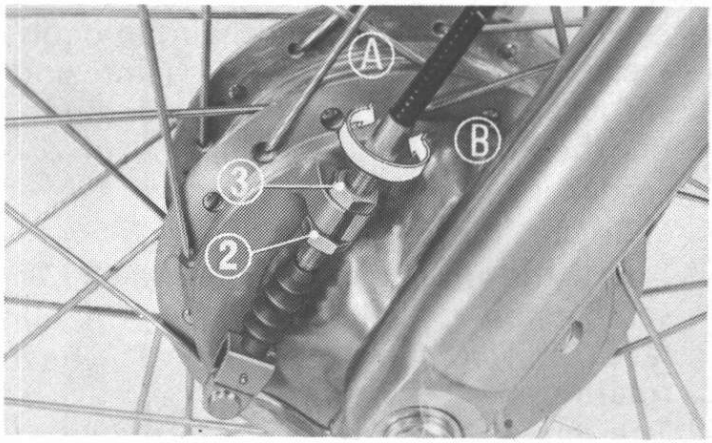
Front Brake Adjustment

1. Raise the front wheel off the ground by placing a support block under the engine, spin the front wheel by hand and measure the distance the front brake lever ① must be moved before the brake starts to engage.
   Free play at the end of the brake lever should be 20~30 mm (0.8~1.2 in).

2. Major adjustments should be made using the adjuster located at the front wheel.
   Loosen the lock nut ② and then turn the front brake adjusting nut ③.
   Turning the nut in direction Ⓐ will decrease the brake lever free play, and turning the nut in direction Ⓑ will increase the free play.

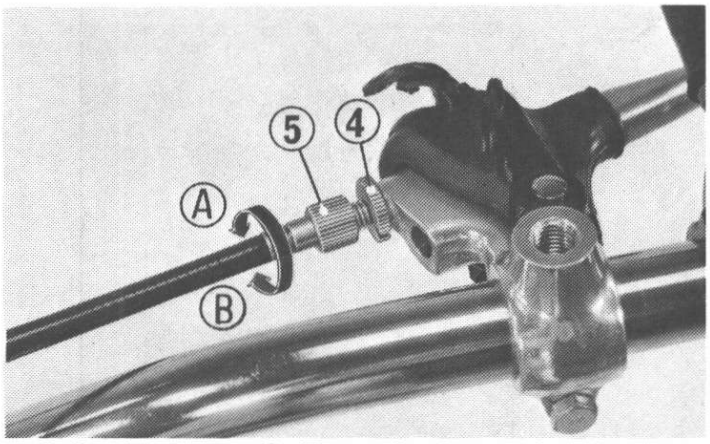


① **Front brake lever**



② **Lock nut**
③ **Front brake adjusting nut**

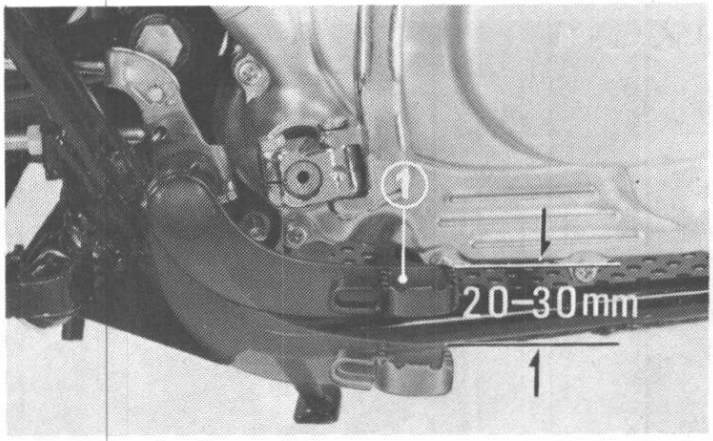
3. Minor adjustments can be made with the front brake cable adjuster on the front brake lever.
   Loosen the lock nut ④ and turn the front brake cable adjuster ⑤. Turning the adjuster in direction Ⓐ will decrease the brake lever free play, and turning the adjuster in direction Ⓑ will increase the free play.



④ Lock nut ⑤ Front brake cable adjuster

Rear Brake Adjustment

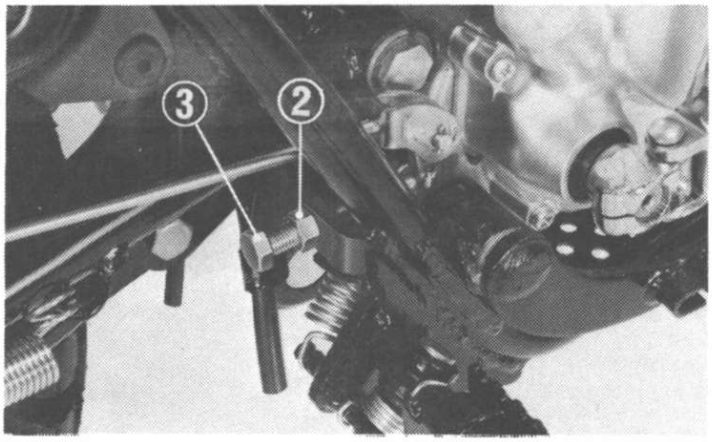
Rear brake pedal free play, measured at the tip of the rear brake pedal ①, should be maintained at 20–30 mm (0.8~1.2 in). Free play is the distance the brake pedal moves before the brake starts to engage.



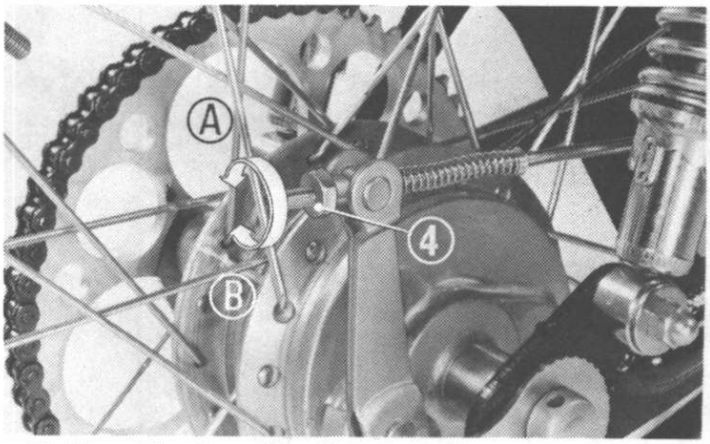
① Rear brake pedal

1. Brake pedal height can be adjusted to suit the rider.
   To adjust, loosen the lock nut ②, and turn the stopper blot ③. Retighten the lock nut after the pedal is adjusted to the desired height.

2. Adjust the pedal free play by turning the rear brake adjusting nut ④. Turning the adjusting nut in direction Ⓑ will decrease the brake pedal free play and turning the nut in direction Ⓐ will increase the free play.



② **Lock nut** ③ **Stopper bolt**



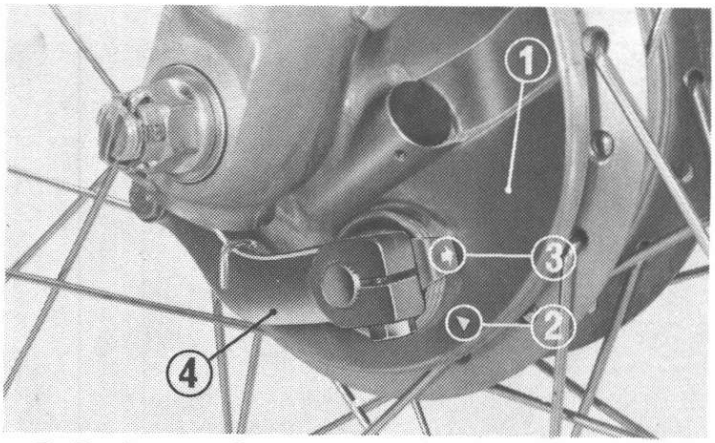
④ **Rear brake adjusting nut**

Brake Wear Indicator

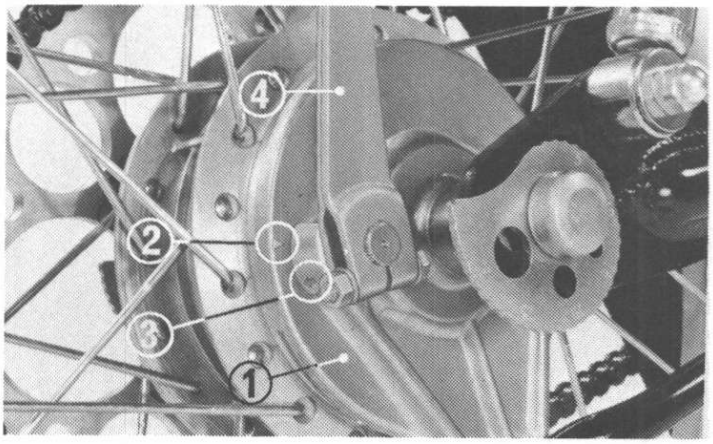
On the TL125, the wear indicator is provided in the front and rear brakes. When the brake is applied, a arrow ③, adjacent to the brake arm ④, moves toward a reference mark ② on the brake panel ①. The distance between the arrow and the reference mark, on full application of the brake, indicates brake lining thickness.

If the arrow aligns with the reference make on full application of the brake, replace the brake shoes.

NOTE: When brake service is necessary, or when brake adjustment is impossible (refer to pages 48~50), see your authorized Honda motorcycle dealer. When replacing brake shoes, install only genuine Honda parts.



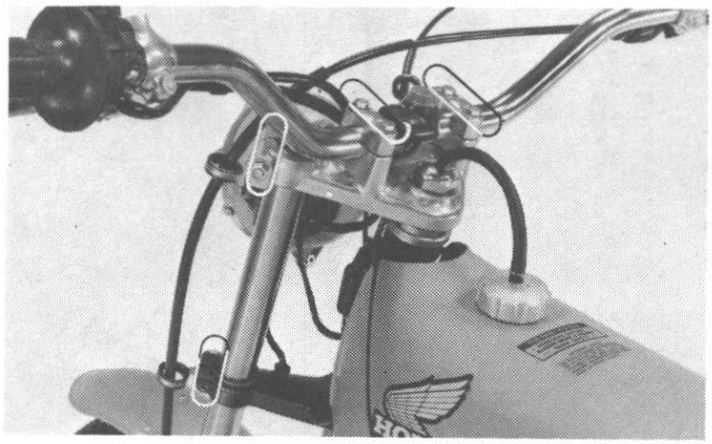
① **Brake panel**
② **Reference mark**
③ **Arrow**
④ **Brake arm**



Front Suspension Inspection

Check front fork action by locking the front brake and pumping the forks up and down several times. The suspension should function smoothly, with no oil leakage from the fork legs. Damaged, binding, or leaking front forks should be repaired before the motorcycle is operated. Check security of all front fork and handlebar mounting bolts illustrated below.

WARNING: Contact your Honda dealer for repair of any steering or front suspension wear or damage.

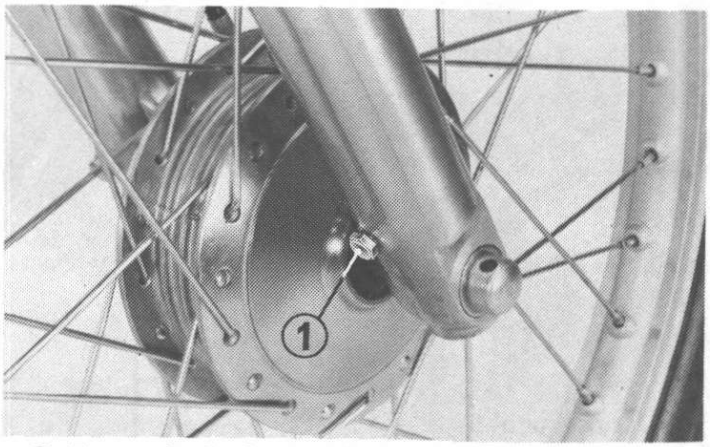


Do not operate the motorcycle with loose, worn, or damaged steering or front suspension, as handling will be adversely affected.

Front Fork Oil Change

To maintain good riding characteristics and increase fork service life, the oil in the front fork should be changed periodically.

1. Remove drain plugs ① from each fork leg and pump the forks several times to ensure complete draining.
2. Reinstall drain plugs and block up the front of the motorcycle.

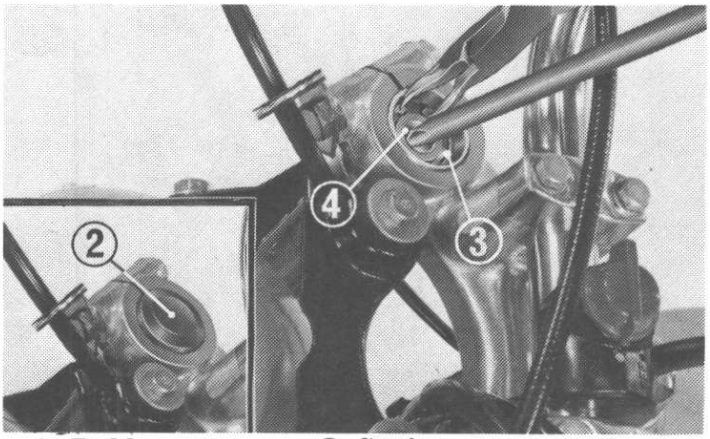


① **Front fork drain plug**

3. Remove the rubber cap ②.
4. While pushing down the spring upper seat ④ with the tip of a screwdriver, remove the snap ring ③ using snap ring pliers. Then remove the spring upper seat.

CAUTION: When removing the snap ring, the spring upper seat may accidentally jump out by means of the force of shock absorber spring.

5. Fill each fork leg with 130~140 cc (4.4~4.7 ozs) of premium quality Automatic Transmission Fluid (ATF).
6. Installation is the reverse order of removal.



② **Rubber cap** ④ **Spring upper seat**
③ **Snap ring**

NOTE: Securely set the snap ring in the ring groove in the front fork.

Rear Suspension Inspection

Check the rear suspension periodically by careful visual examination. Note the following items.

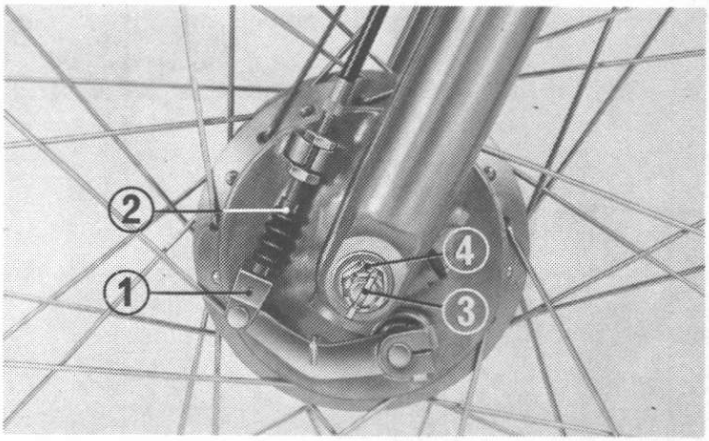
1. Rear fork bushing—this can be checked by pushing hard against the side of the rear wheel while the motorcycle is on a support block and feeling for looseness of the fork bushings.
2. Check the side stand spring for damage.
3. Check all suspension components attachment points for security of their respective fasteners.

WARNING: If any suspension components appear worn or damaged, consult your HONDA dealer for further inspection.

Front Wheel Removal

1. Place a wood block under the engine and raise the front wheel off the ground.
2. Remove the cotter pin ① and disconnect the front brake cable ② from the brake arm.
   Unscrew the brake cable lock nut and disconnect the front brake cable from the brake panel.
3. Remove the cotter pin ③, the front axle nut ④ and remove the front axle. The front wheel can then be removed.
4. To install the front wheel, follow the reverse of removal procedure outlined in steps 1 through 3.
   Be sure to tighten the axle nut to 350–500 kg·cm (26–31 lbs·ft).

CAUTION: Always replace used cotter pins with new ones.

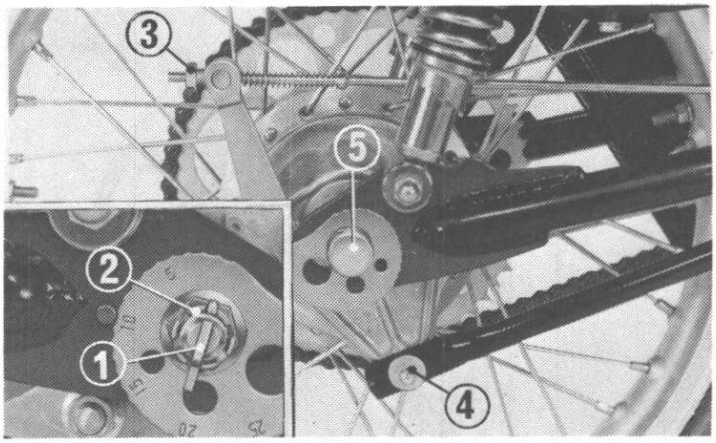


① Cotter pin **③ Cotter pin**
② Front brake cable **④ Front axle nut**

Rear Wheel Removal

1. Place a wood block under the engine to raise the rear wheel off the ground.
2. Remove the cotter pin ①, loosen the rear axle nut ②, and disconnect the drive chain.
3. Remove the rear brake adjusting nut ③ and rear brake rod from the brake arm.
4. Remove the rear torque arm bolt ④ at the rear brake backing plate.
5. Pull out the rear axle ⑤, and the rear wheel can be removed from the frame.
6. To install the rear wheel, follow the reverse of removal procedure outlined in steps 1 through 5.
   Be sure to tighten the axle nut to 400–550 kg·cm (29–39 lbs·ft)

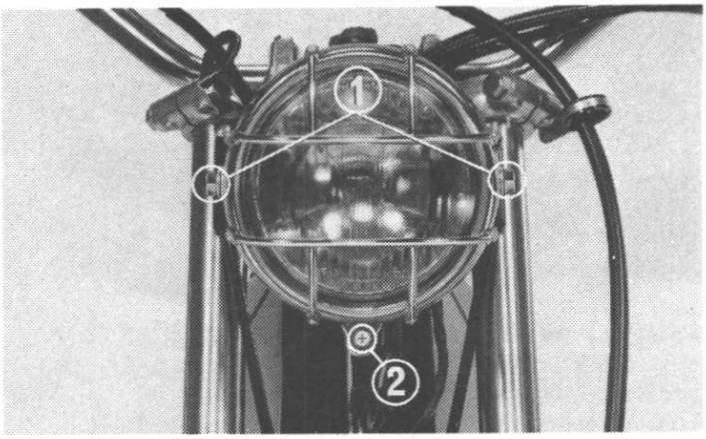
CAUTION: Always replace used cotter pins with new ones.



① Cotter pin **④ Torque arm bolt**
② Rear axle nut **⑤ Rear axle**
③ Rear brake adjusting nut

Headlight Beam Adjustment

Vertical adjustment is made by pivoting the headlight case on its mounting bolts ①.

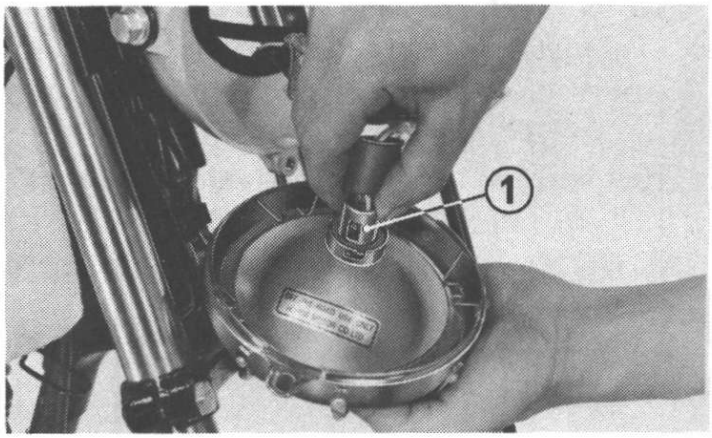


① **Headlight mounting bolts**
② **Headlight attaching screw**

Headlight and Taillight Bulb Replacement

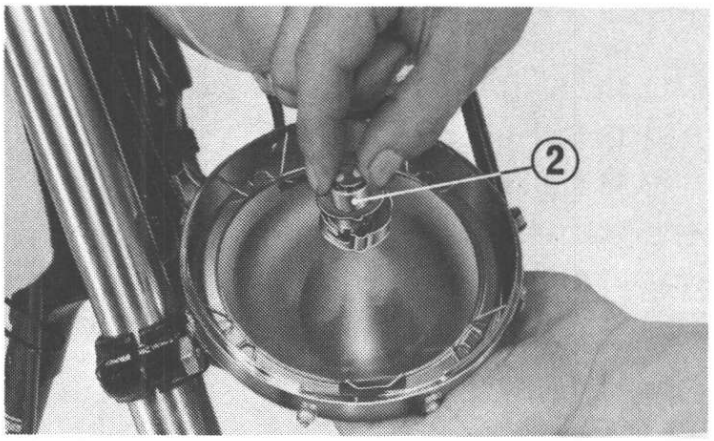
Headlight Bulb Replacement

1. Remove the headlight attaching screw and remove the headlight from the headlight case.
2. Remove the headlight socket ① by pushing down the socket and twisting counterclockwise to unhook from the reflector.



① **Headlight socket**

3. Pull the bulb ② out and replace.



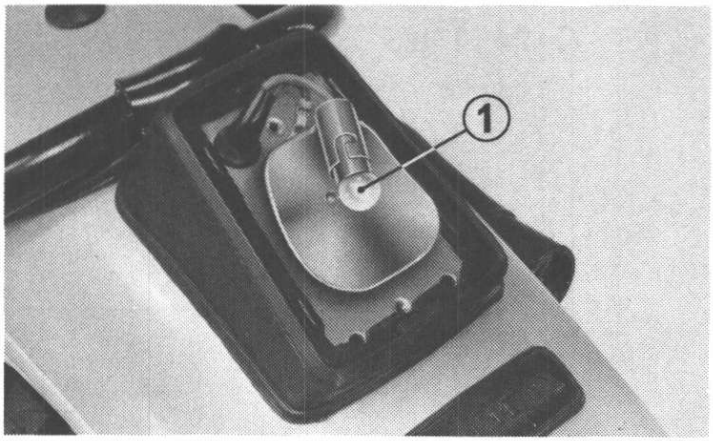
② **Headlight bulb**

Taillight Bulb Replacement

1. Remove the two screws retaining the taillight lens.
2. Press the bulb ① inward and twist to the left, and the bulb can be removed.
3. When installing the taillight lens, do not overtighten the screws.

CAUTION: If either light burns out, turn the headlight switch off immediately and replace the bulb, or the other bulb will burn out.

WARNING: The lighting equipment is not legal for highway use. Do not operate on public streets, roads or highways.



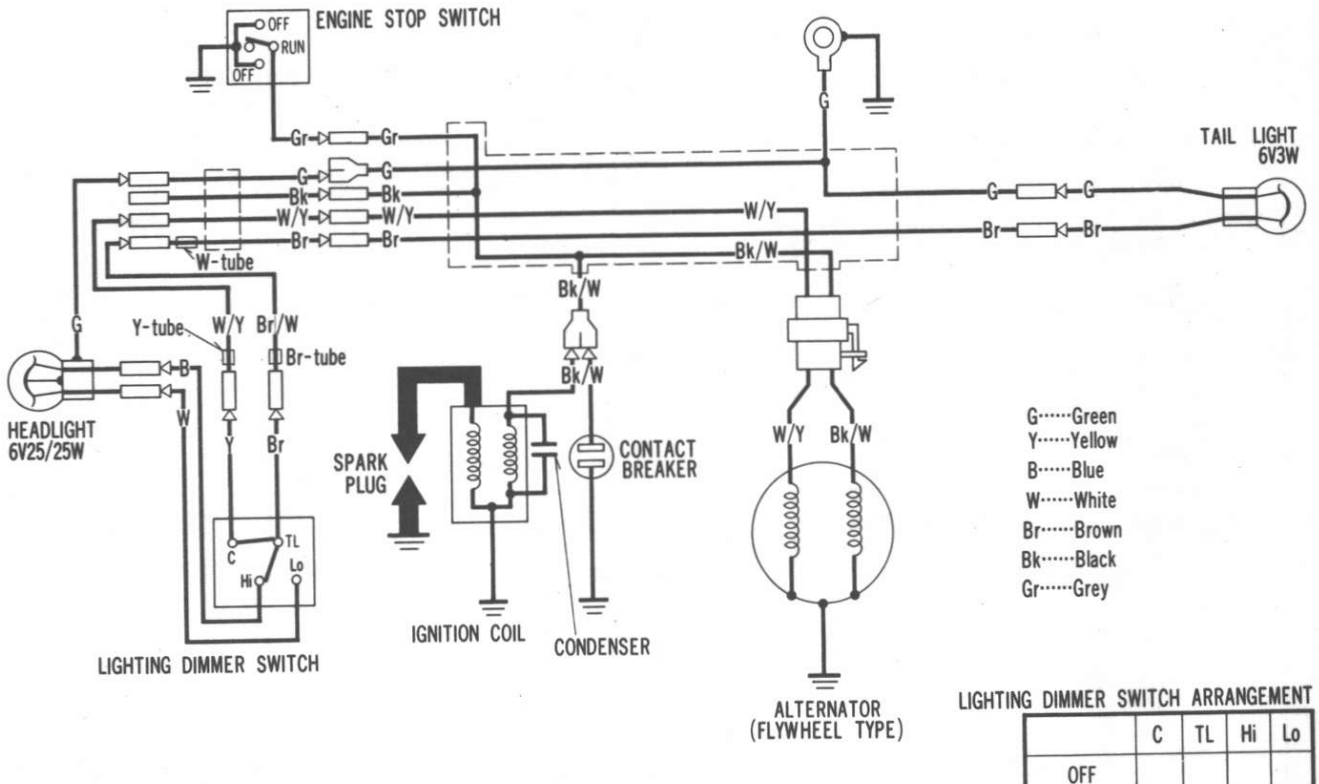
① **Taillight bulb**

SPECIFICATIONS

Item	
DIMENSIONS	
Overall length	1,995 mm (78.7 in.)
Overall width	840 mm (33.1 in.)
Overall height	1,095 mm (43.1 in.)
Wheel base	1,280 mm (50.4 in.)
WEIGHT	
Dry weight	88 kg (194 lbs.)
CAPACITIES	
Engine oil	1.0 ℓ (1.1 U.S. qt.)
Fuel tank	4.5 ℓ (1.19 U.S. gal.)
Fuel reserve tank	0.5 ℓ (0.13 U.S. gal.)
Front forkoil	145~155 cc (4.9~5.3 ozs)
Passenger capacity	Operator only
ENGINE	
Bore and stroke	56.5 × 49.5 mm (2.224 × 1.949 in.)
Compression ratio	8.0 : 1

Item	
Displacement	124 cc (7.57 cu-in.)
Contact breaker point gap	0.3~0.4 mm (0.012~0.016 in.)
Spark plug gap	0.6~0.7 mm (0.024~0.028 in.)
Valve tappet clearance	0.05 mm (0.002 in.)
CHASSIS AND SUSPENSION	
Caster	61°30′
Trail	105 mm (4.13 in.)
Tire size	2.75–21 (4 PR)
Tire size	4.00–18 (4 PR)
POWER TRANSMISSION	
Primary reduction	4.055
Final reduction	4.000
Gear ratio, 1st	2.769
2nd	2.125
3rd	1.450
4th	1.000
5th	0.724

TL 125 WIRING DIAGRAM



LIGHTING DIMMER SWITCH ARRANGEMENT

		C	TL	Hi	Lo
OFF					
ON	Hi	●	●	●	
	Lo	●	●		●

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