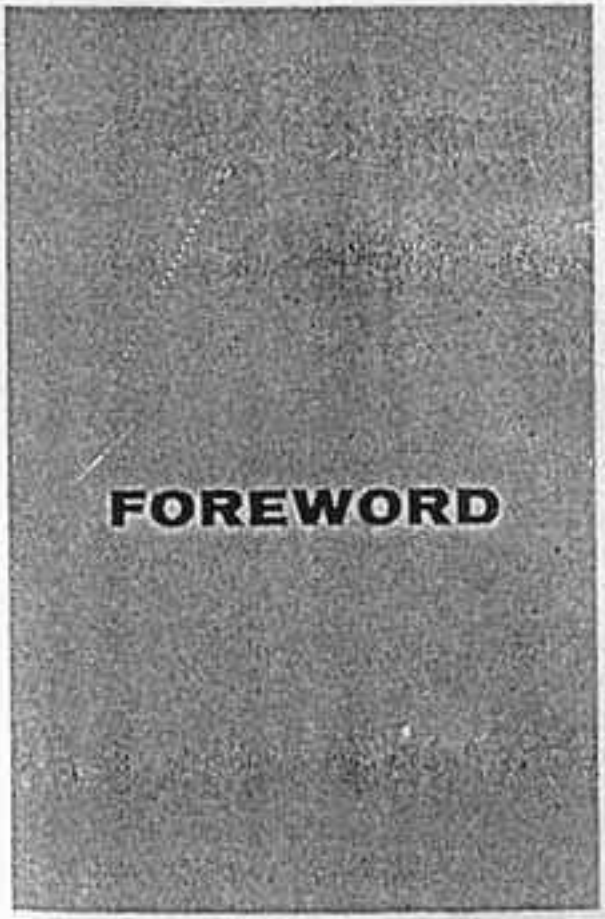
HONDA 50

MODEL ST50

OWNER'S MANUAL



FOREWORD

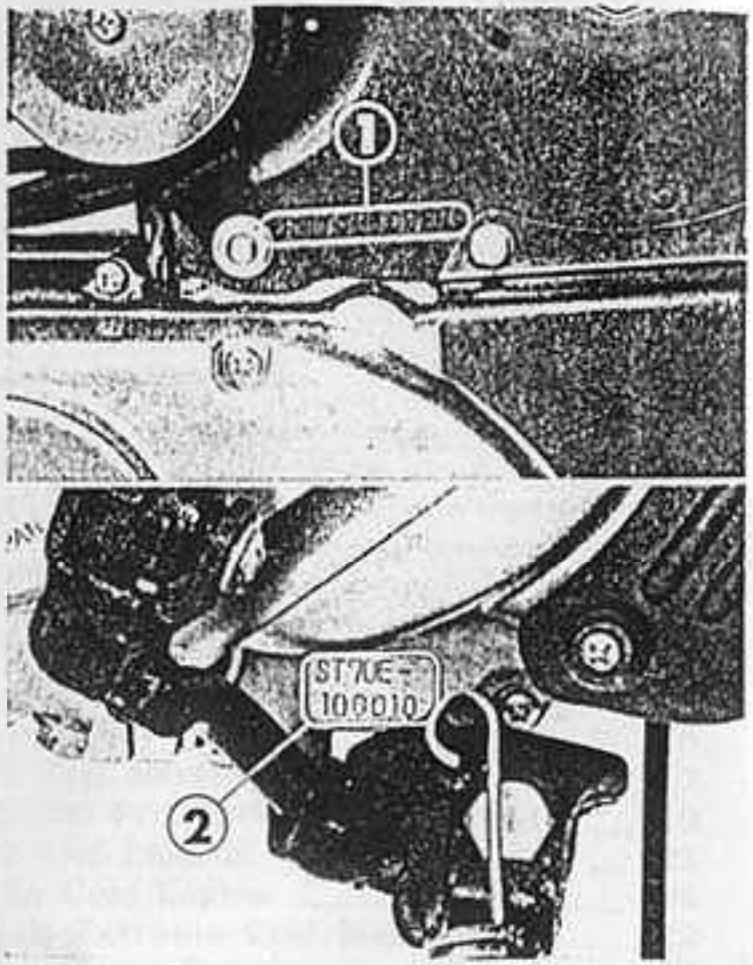
Thank you for purchasing HONDA product.

This HONDA motorcycle is designed to carry easily by automobile, boat, lightweight aircraft, etc., so that you can readily enjoy motorcycling with this model at anywhere.

This owner's manual is a guide for the proper operation and servicing of your motorcycle. Read it thoroughly so that you will be able to maintain your motorcycle in the best of condition for the utmost in riding pleasure.
Your HONDA dealer is fully equipped to handle your service needs and, furthermore, he is always happy to provide assistance if needed.
We wish you many miles of safe and pleasant trail riding.

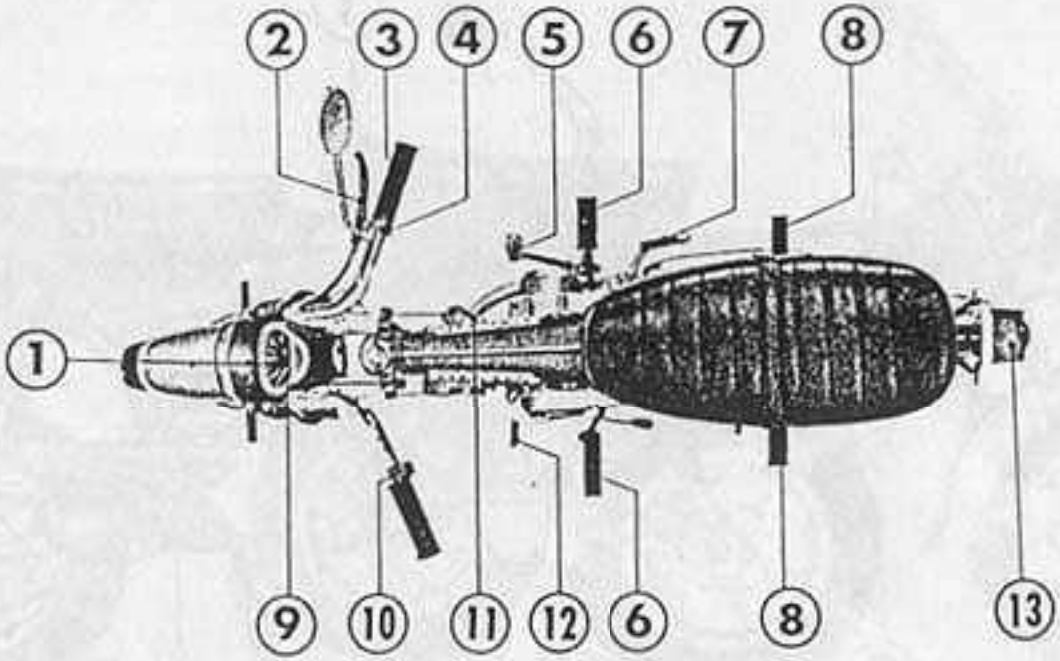
SERIAL NUMBER LOCATION

The frame serial number ① is stamped on the left side at the frame center and the engine serial number ② is located on the crankcase directly above the step bar attaching point.
Further, the frame serial number must be indicated when processing the warranty claim and for ordering spare parts.

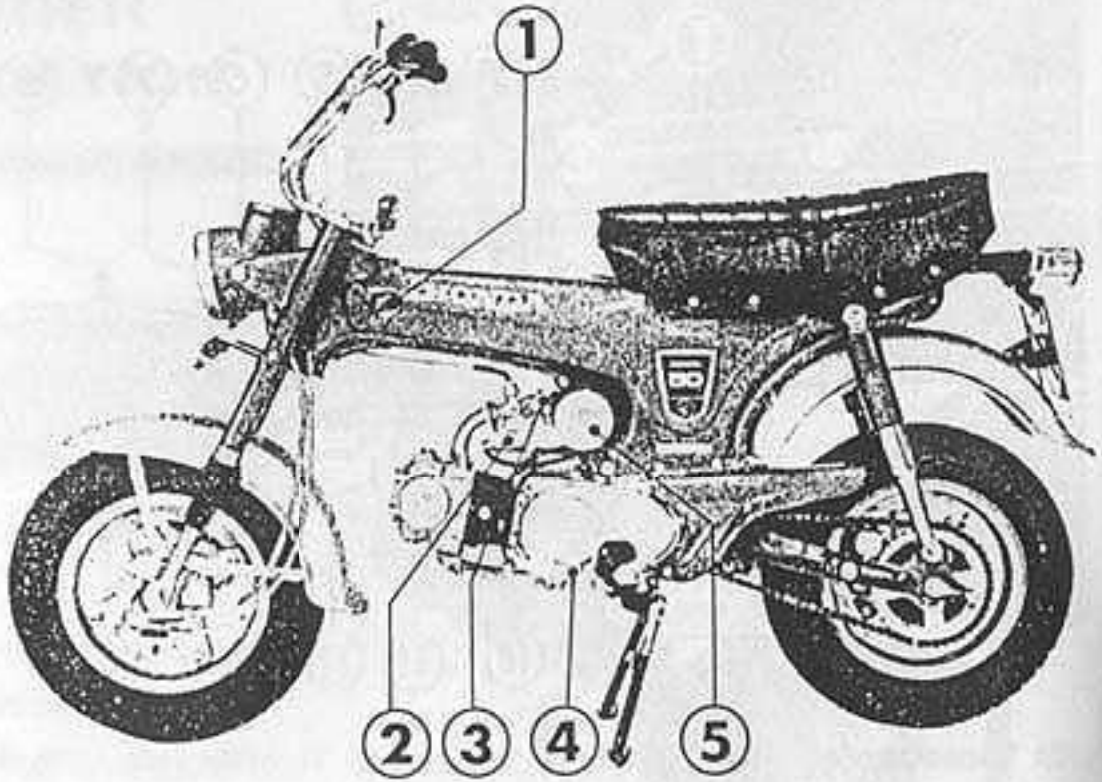


① Frame serial number
② Engine serial number

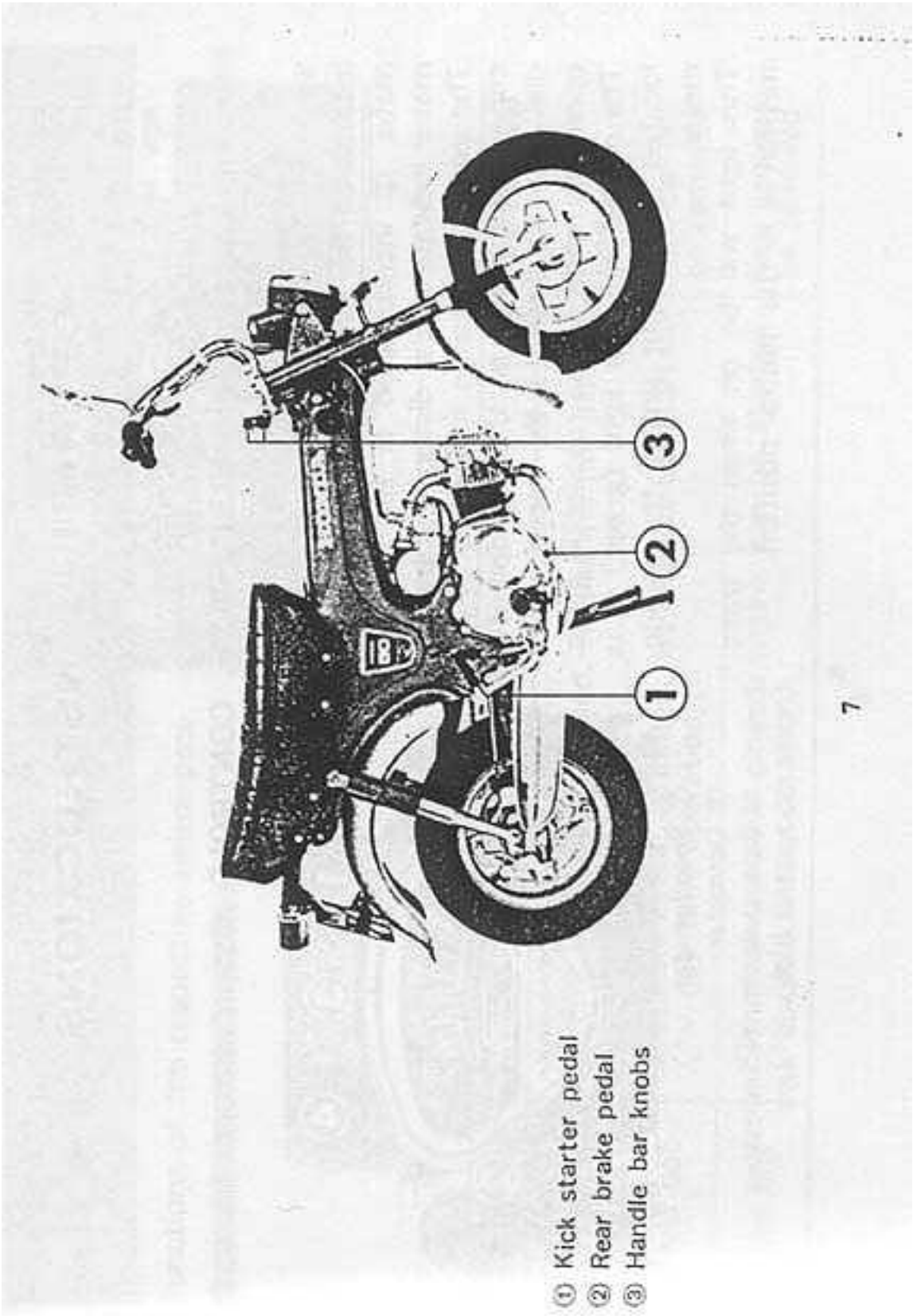
NOMENCLATURE



① Speedometer ② Front brake lever ③ Throttle grip ④ Horn button ⑤ Rear brake pedal ⑥ Foot rests ⑦ Kick starter pedal ⑧ Pillion step ⑨ Main switch ⑩ Headlight beam control switch ⑪ Handle bar knobs ⑫ Gear change pedal ⑬ Tail/stoplight



① Main switch
② Fuel valve
③ Choke lever
④ Gear change pedal
⑤ Air cleaner case

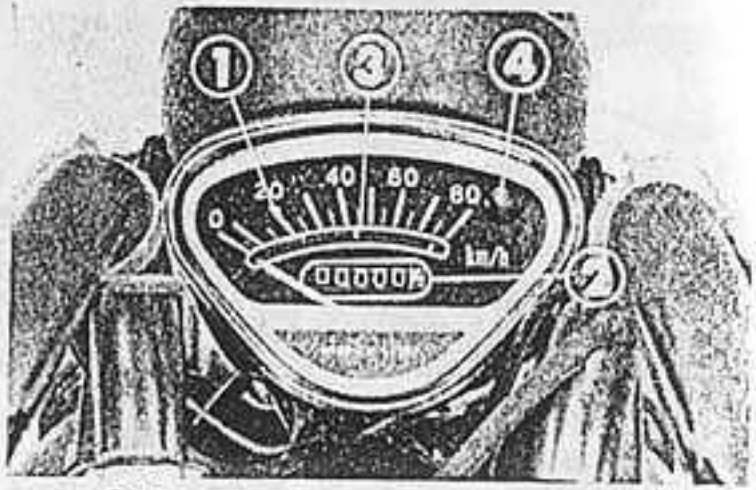


① Kick starter pedal
② Rear brake pedal
③ Handle bar knobs

ELECTRICAL CONTROLS

Speedometer : The speedometer ① is located on the headlight case and odometer ② incorporated in the speedometer indicates total distance travelled. The gear speed range indicators ③ are curved bars shown on the speedometer dial plate to indicate the recommened operating range of the respective gears. The neutral indicator light (green) ④ is located at the right side of the speedometer.

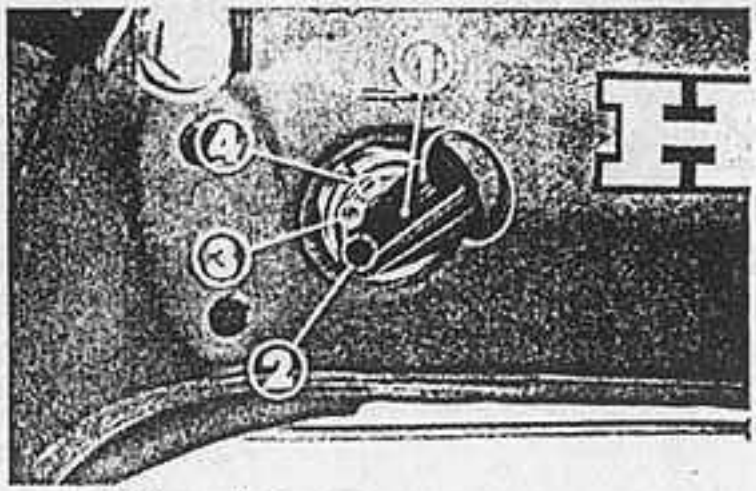
This light will be on when the transmission is in the neutral position.



① Speedometer
② Odometer
③ Gear speed range indicators
④ Neutral indicator light

Main Switch: The main switch ① is located on the left side of the main pipe.

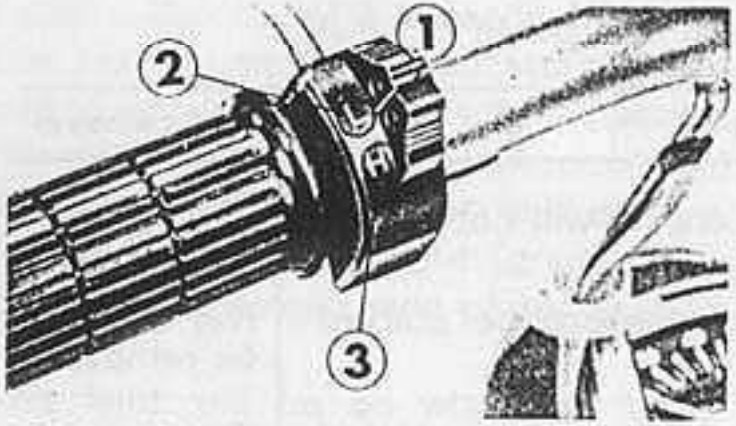
Functions of the respective switch positions are shown in the chart below.



① Main switch

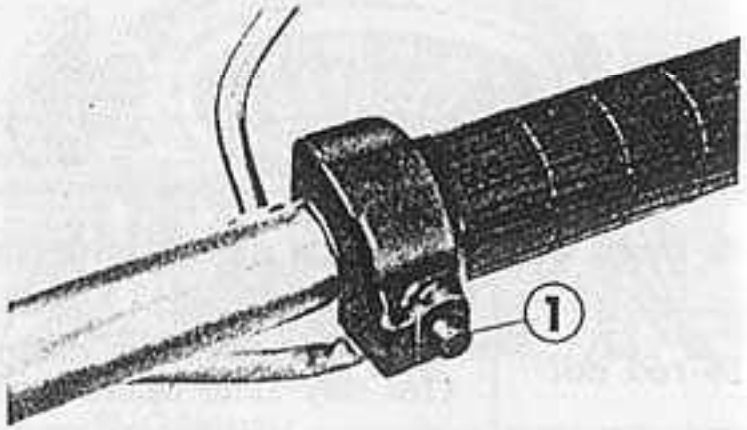
Key position	Function	Key removal
② black dot	Electrical circuit is opened. engine will not start.	Key can be removed
③ red dot	Electrical circuit is closed, engine can be started (for day time operation).	Key can not be removed
④ red dot	Electrical circuit is closed, engine can be started (for night time operation).	Key can not be removed

Headlight Beam Control Switch: The headlight beam control switch ① is located on the left handle grip switch housing.
"L" is Low beam position (low beam light and tail light on). "H" is high beam light and tail light on.
The headlight will only operate when the main switch is in the on position (refer to page 9).



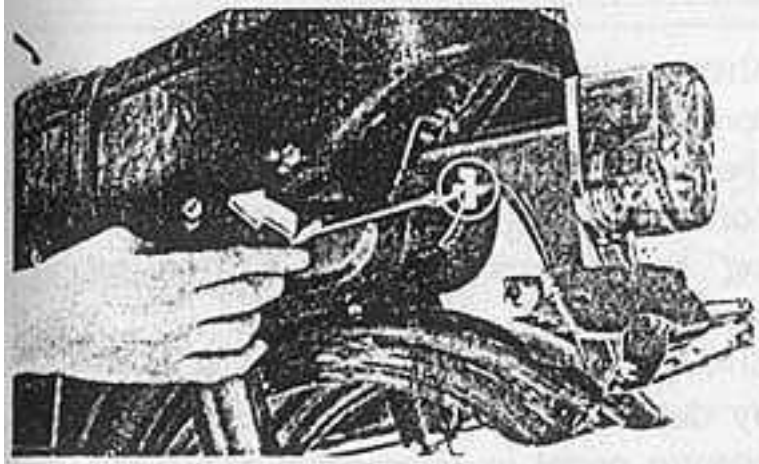
① Headlight beam control switch
② "L" position ③ "H" position

Horn Button: The horn button ① is located on the right handle grip.



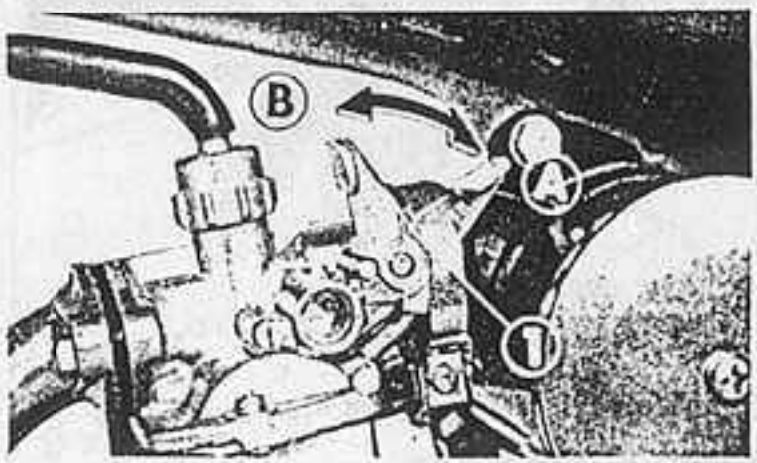
① Horn button

Seat Latch: The seat latch ① is located on the left rear end of the seat.
The seat can be raised by releasing the seat latch.



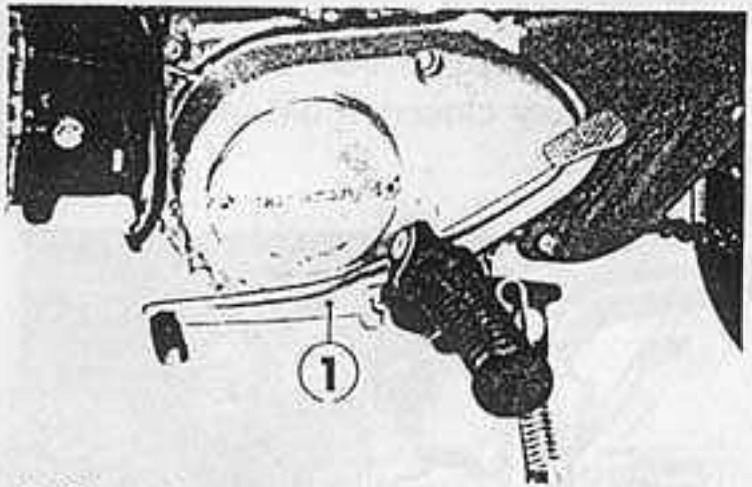
① Seat latch

Choke Lever: The choke lever ① is located at the left side of the carburetor.
When the choke lever is down Ⓐ the choke is fully open (normal driving position).
When the choke lever is up Ⓑ the choke is fully closed (cold engine starting position).



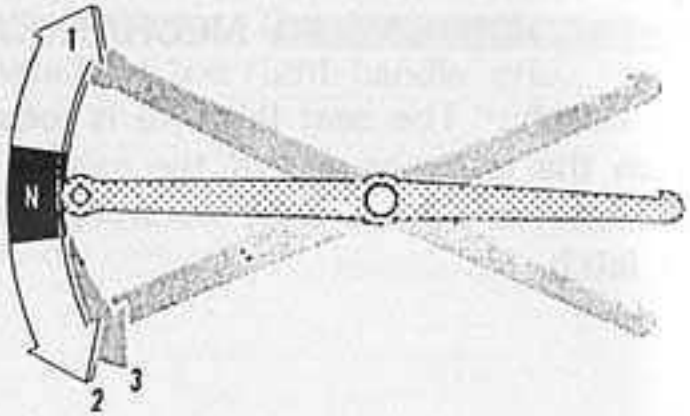
① Choke lever

Gear Change Pedal : The gear change pedal ① located near the left foot rest is of the progressive shift, positive stop type, which means one full stroke of the gear change pedal will shift only one gear position.



① Gear change pedal

The shifting sequence is arranged as shown in the figure.



Gear change sequence

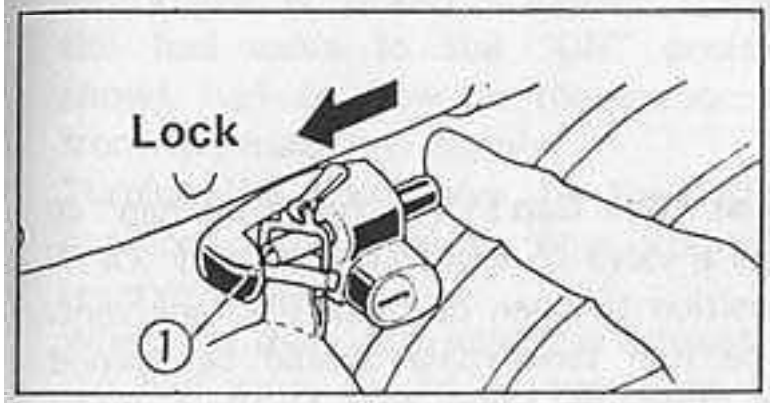
Shifting to low gear from neutral is performed by depressing the rear end of the gear change pedal; shifting into second and top gears are made by depressing the forward end of the pedal in sequence.

Shifting down in gear is accomplished by depressing the rear end of the gear change pedal in successive sequence.

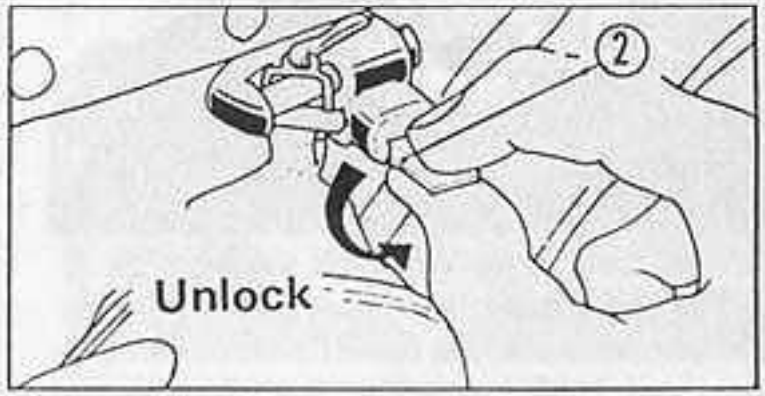
Helmet Holder :

The helmet holder eliminates carrying your helmet when parking. The holder can be locked to prevent theft.

1. Hang your helmet on the holder pin and push the pin to lock. This action automatically locks the holder.
2. Unlock the holder with the main switch key.

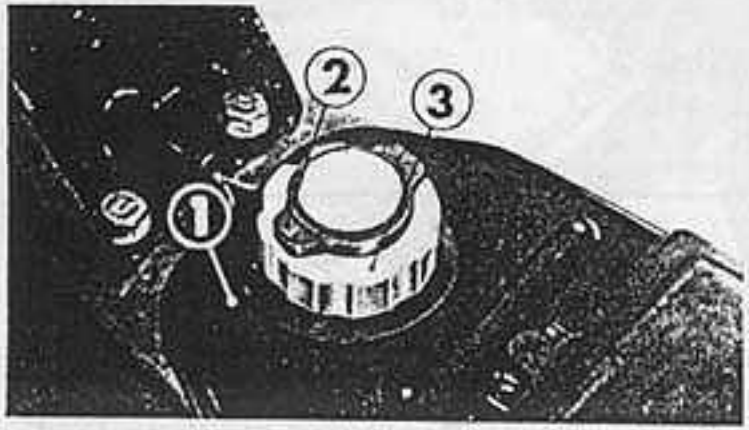


① Holder pin



② Key

Fuel Tank : The fuel tank ① is located under the seat.



① Fuel tank ② Fuel tank valve
③ Fuel tank cap

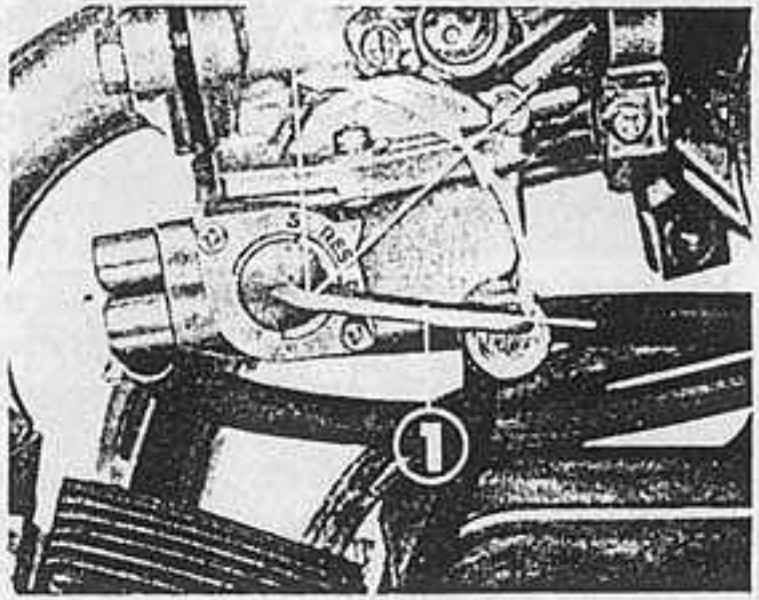
The fuel tank capacity is 0.6 Imp. gal. (0.7 US gal., 2.5 liter) including 0.9 Imp. pt (1.0 US pt, 0.5 liter) in the reserve supply.

NOTE: Premium grade fuel with an octane rating of 85 or above must be used. Do not mix oil with the fuel.

Fuel Tank Cap : The fuel tank cap ③ has a valve ② with on "ON" and "OFF" position to open or close the tank vent. The fuel tank valve should be turned to "ON" to allow fuel to flow when running the engine.

Turning the lever to "OFF" will prevent fuel from flowing out the vent hole when transporting the motorcycle.

Fuel Valve: The fuel valve ① is located at the left side of the carburetor. When the fuel valve is in the "S" position, fuel can not flow from the fuel tank to the carburetor. The fuel valve should be set in this position when the motorcycle is parked or carried. Turning the fuel valve to the "ON" position allows fuel to flow to the carburetor from the main fuel supply.
Turning the fuel valve to the "RES" position allows fuel to flow from the reserve supply.
When the main fuel supply is exhausted, the fuel valve should be turned to the "RES" position.

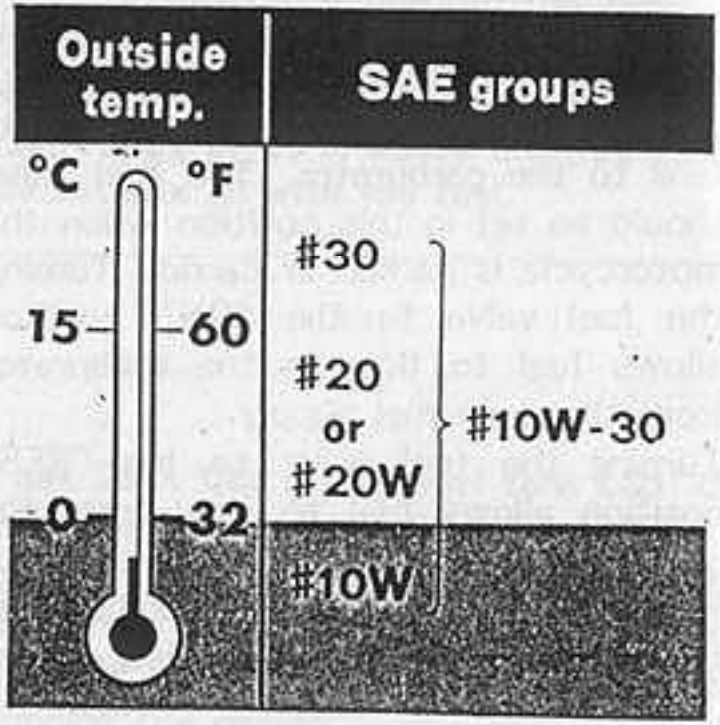


① Fuel valve

Oil Recommendation: Use only reliable quality oil of the **MS, DG** or **DM grade** (**API service classification**) or its equivalent. Select proper oil viscosity according to the outside temperature by referring to the chart.

However, **SAE** group **10 W-30** is an all temperature oil and may be used over the normal range of outside temperature.

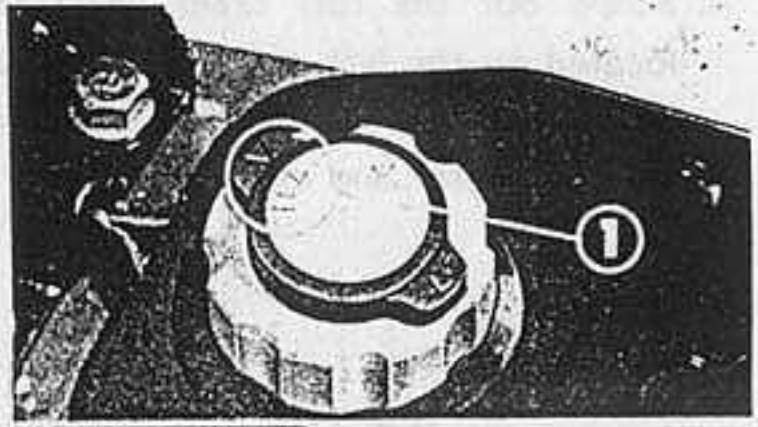
Oil should be changed at the prescribed intervals according to MAINTENANCE SCHEDULE (page 25) and change procedure in the MAINTENANCE OPERATIONS (page 29-30).



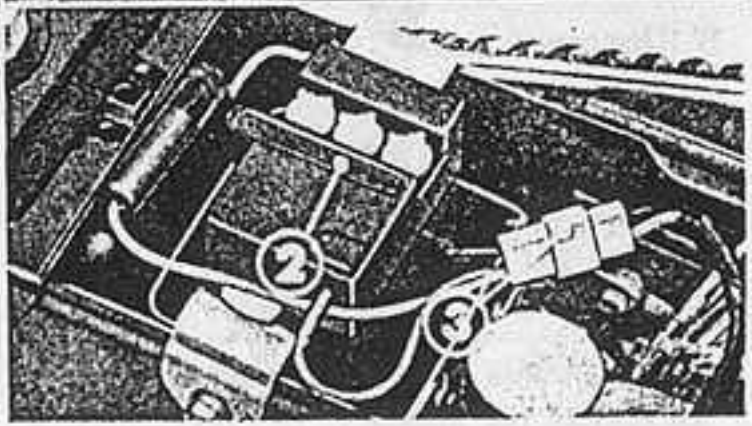
CARRYING THE MOTORCYCLE

Follow the items listed below to prepare for carrying.

1. Turn the fuel tank valve ① to "OFF" position.



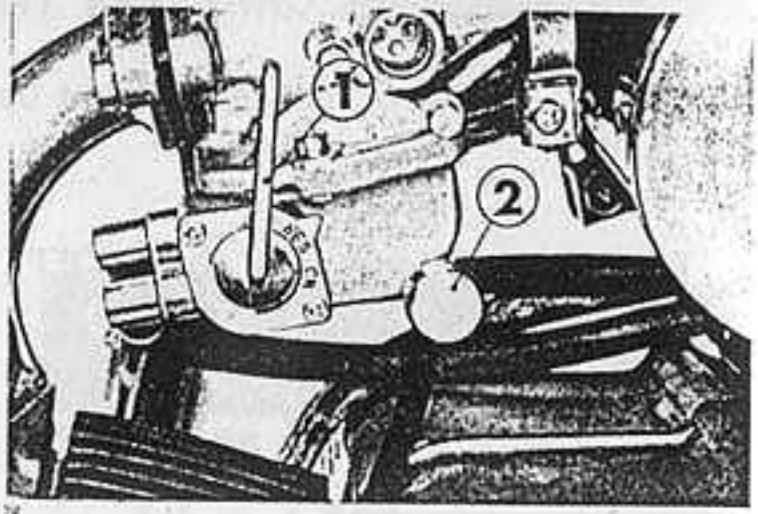
2. Remove the battery by removing the battery setting band and the leads connector ③, and keep in upright position.



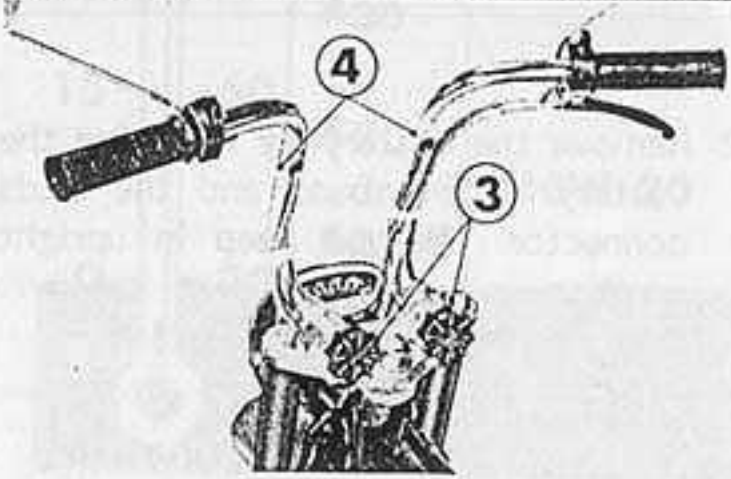
① Fuel tank valve ② Battery
③ Leads connector

3. Turn the fuel valve ① to "S" position.

4. Screw out the fuel drain valve ② located on the left side of the carburetor to empty the fuel contained in the carburetor and close the valve.



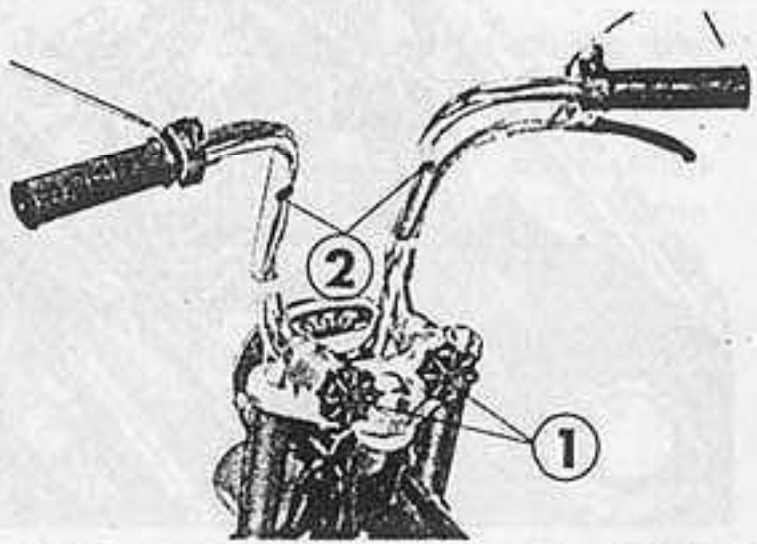
5. Unscrew both handle bar knobs ③, fold the handle bars ④ down and retighten the handle bar knobs.



① Fuel valve ② Fuel drain valve
③ Handle bar knobs ④ Handle bars

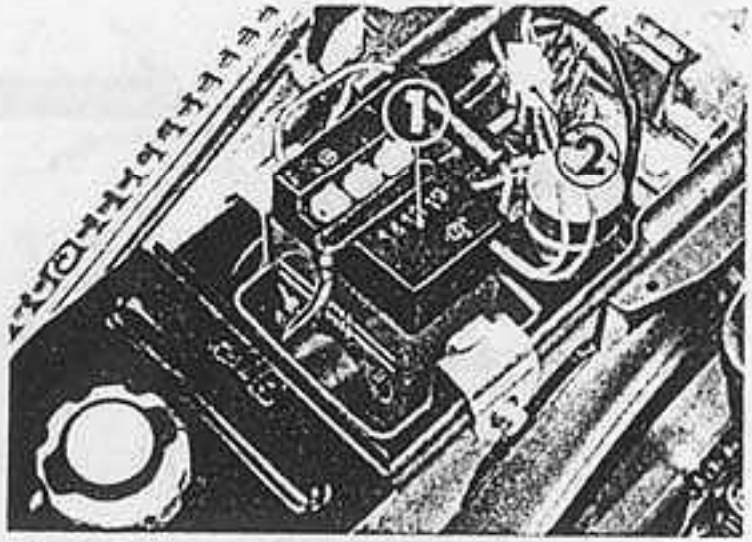
Perform the following task before riding

1. Loosen the handle bar knob, unfold the handle bar to the normal riding position, insert the stopper located at the base of the handle bar into the handle bar holder groove, and then securely tighten the knobs.



① Handle bar knobs
② Handle bars

NOTE: Turn the handle fully in both directions to assure that the brake and throttle cables are not being pulled.



① Bettery
② Leads connector

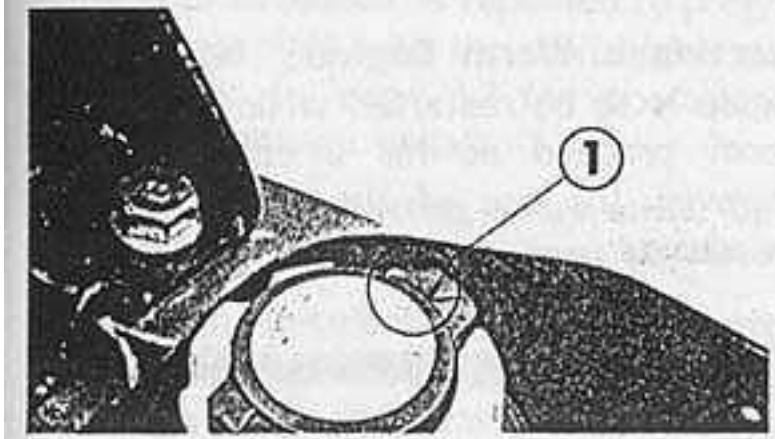
2. Raise the seat, install the battery ① and connect the leads connector ③.

NOTE: When installing the battery, make sure that the battery vent tube is not pinched.

STARTING THE ENGINE

Starting a Cold Engine : It is recommended that the following procedures be followed when starting the engine.

1. Turn the fuel tank valve ① to "ON" position.



① Fuel tank valve

2. Turn the fuel valve to "ON" position.
3. Turn the main switch to "ON" position (refer to page 9).
4. Raise the choke lever to choke the carburetor (refer to page 11).
5. Step on the kick starter pedal with a rapid kick stroke and at the same time, open the throttle valve slightly by twisting the throttle grip inward approximately 15°~20°.
   Perform the kick starting until the engine starts.
   If the engine does not start by the above procedure, turn the main switch to the off position, set the

choke valve to the full open position and then crank the engine several times with the kick starter, holding the throttle grip turned fully inward. Next, position the main switch to on and then follow the normal starting procedure.

6. After the engine starts, operate for 2~3 minutes at medium speed to warm up the engine.
7. When the engine is warm, place the choke lever in the open position.

Starting in Extreme Cold Weather: Prime the engine before starting by cranking the engine several times with the main switch off. The choke should be fully closed and the throttle opened. Follow with the procedure for starting a cold engine.

Starting a Warm Engine: When the engine is to be restarted while it is still warm proceed as for a cold engine, however, the use of the choke is not necessary.

RIDING THE MOTORCYCLE

1. After the engine has been warmed up, the motorcycle is ready for riding
2. Return the throttle grip to the idling position and depress the rear end of the gear change pedal to shift into low (1st) gear.

3. Increase the engine speed by twisting the throttle grip inward. When the motorcycle attains a speed of approximately 10mph (16kph), close the throttle and shift to 2 nd gear by depressing the forward end of the gear change pedal.

4. This sequence is repeated to progressively shift into the next higher gear. (refer to page 12 for operation of gear change pedal).

NOTE: When shifting gears either up or down, the throttle grip must be closed.

5. When decelerating the motorcycle, close the throttle grip and apply both the front and rear brakes simultaneously.
   Indepedent application of either the front or rear brake gently is possible, but if only one brake is applied strongly enough to lock the respective wheel, it can cause loss of control of the motorcycle.

   Both the front and rear brakes should be applied together uniformly and gradually.

Further, when braking on a steep down grade, the engine compression may also be used for braking without danger or causing damage to the engine.

MAINTENANCE SCHEDULE

The mileage intervals shown in the MAINTENANCE SCHEDULE are intended as a guide for establishing regular maintenance and lubrication periods for your HONDA. Sustained severe operation under adverse conditions may necessitate more frequent servicing. To determine specific recommendations for conditions under which you use your motorcycle, consult your authorized HONDA dealer.

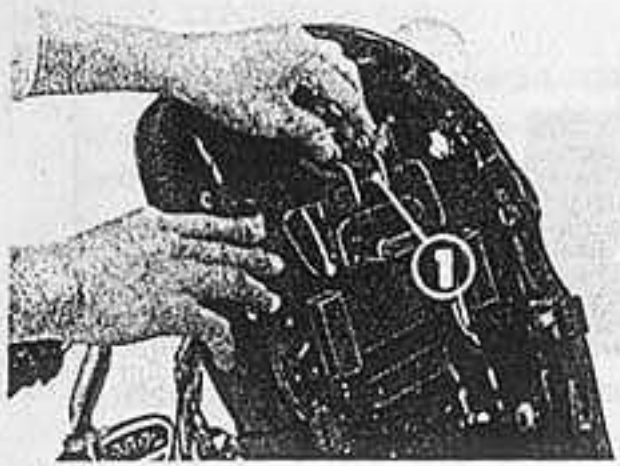
Especially when your HONDA ST 50 has been turned over or involved in a collision, have your HONDA dealer carefully inspect the major components, e. g. frame, suspension and steering parts, for misalignment or damage to insure further safe operation.

Service Required		Months or Miles, whichever occurs first					Page Reference
		First	Second	Third	Thereafter Repeat Every		
	Month	—	6	12	6	12	
	Mile	200	3,000	6,000	3,000	6,000	
	km	300	5,000	10,000	5,000	10,000	
Engine Oil-change		○	Every 1,000 Miles (1,600 km)				29
Spark Plug-clean and adjust or replace			○	○	○		43
Contact Breaker Points-check or service			○	○	○		32
Ignition Timing-check or adjust		○	○	○	○		31
Valve Tappet Clearance-check or adjust		○	○	○	○		33
Air Cleaner-clean and			○			○	40
replace				○		○	40
Throttle Operation-check			○	○	○		47
Carburetor-check or adjust			○	○	○		47
Fuel Valve Strainer-clean			○	○	○		48
Fuel Tank and Fuel Lines-check			○	○	○		14
Clutch-check or adjust		○	○	○	○		31

Service Required		Months or Miles, whichever occurs first					Page Reference
		First	Second	Third	Thereafter Repeat Every		
	Month	—	6	12	6	12	
	Mile	200	3,000	6,000	3,000	6,000	
	km	300	5,000	10,000	5,000	10,000	
Drive Chain and Sprockets-adjust and lubricate or replace		○	○	○	○		37
Front and Rear Brake-adjust		○	○	○	○		35
Front and Rear Brake Shoes-check or replace				○		○	—
Front and Rear Brake Links-check			○	○	○		—
Wheel Rims-check		○	○	○	○		—
Tires-check or replace			○	○	○		41
Steering Head Bearings-check or adjust				○		○	—
Battery Electrolyte Level-check and replenish if necessary		○	○	○	○		39
Lights, Horn, Speedometer-check for operation or adjust			○	○	○		44, 8, 9, 10

TOOL

The tool kit ① is contained in the compartment located under the seat.
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 referred to your HONDA dealer.



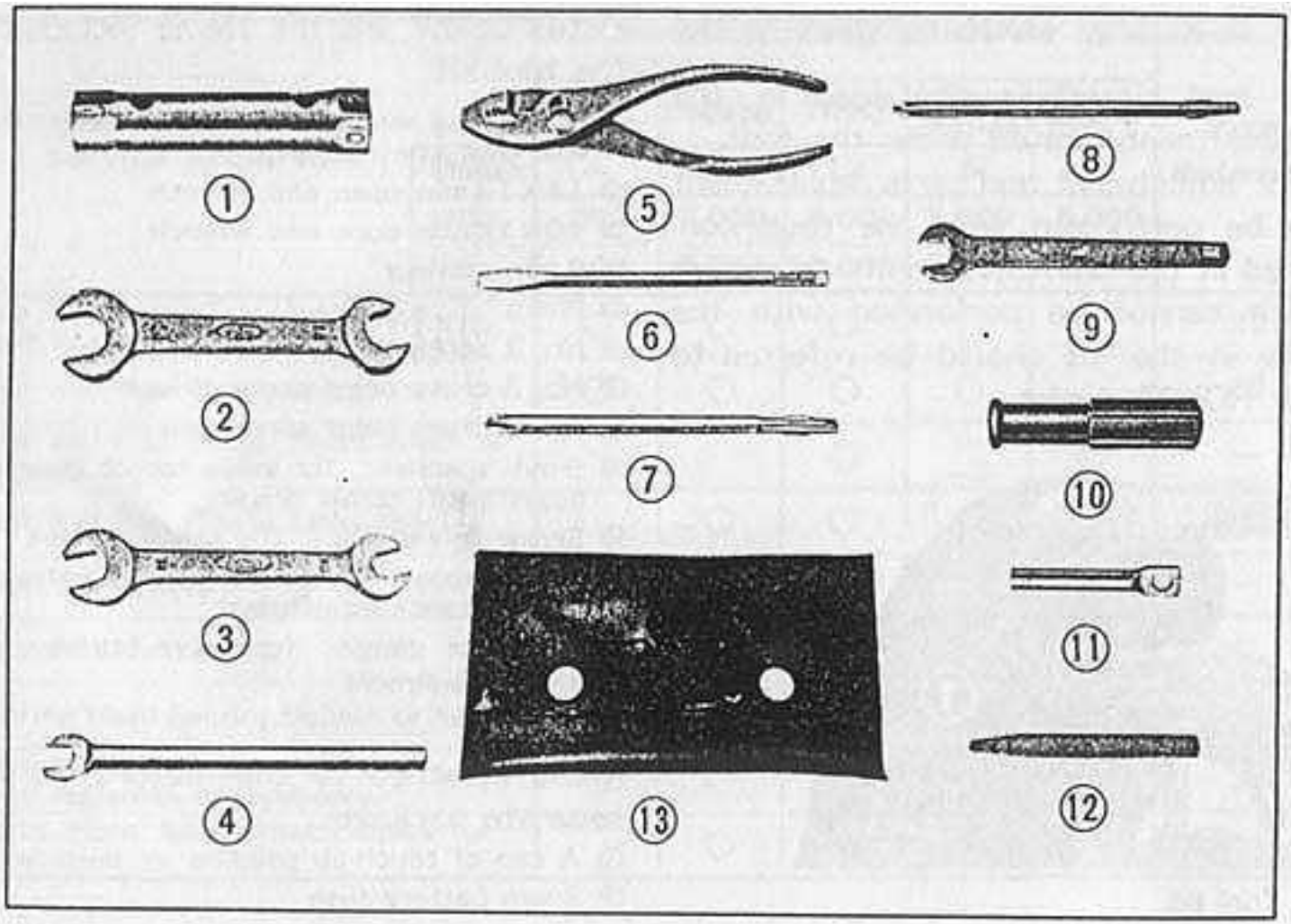
① Tool kit

Listed below are the items included in the tool kit

① Spark plug wrench: for spark plug, front and rear axle nut
② 14×17 mm open end wrench
③ 10×12 mm open end wrench
④ 8 mm spanner
⑤ Pliers
⑥ No. 2 screw driver
⑦ No. 3 cross point screw driver
⑧ No. 2 cross point screw driver
⑨ 9 mm spanner: for valve tappet clearance adjustment, screw driver
⑩ Screw driver grip: for screw drivers
⑪ Valve tappet adjust wrench: for valve tappet clearance adjustment
⑫ Clearance gauge: for valve tappet clearance adjustment
⑬ Tool bag

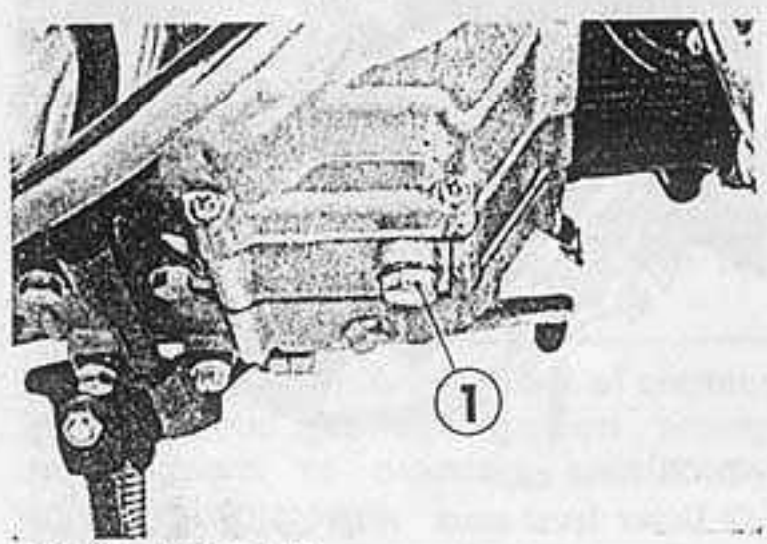
Items attached to the motorcycle in a separate package

① A cap of touch-up paint
② Spare battery fuse



Engine Oil : As the effectiveness of engine oil is limited to a certain period, it is necessary to perform oil changes at suggested intervals shown in the MAINTENANCE SCHEDULE. When draining the oil, it should be performed while the engine is still warm as this will assure complete and rapid draining, saving much time

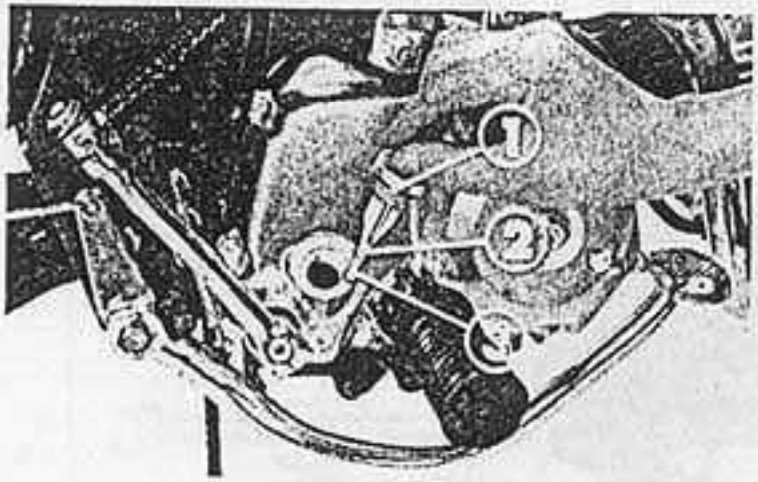
1. Remove the oil filler cap from the right crankcase cover.
2. Place an empty vessel under the crankcase to catch the oil and then remove the drain plug ① with 17 mm wrench.
3. After the oil stops draining from the crankcase, operate the kick starter pedal several times to drain any oil which may be left in the engine.
4. When the oil has been completely



① Oil drain plug

drained, reinstall the drain plug making sure that the drain plug packing used on the plug is in good condition.

5. Fill the crankcase through the oil filler opening with approximately 1.4 Imp. pt (1.7 US pt, 0.8 liter) of recommended grade oil. Check the oil level with filler cap dipstick, however, when making this check, do not screw in the cap. Oil level should be between the upper ② and lower ③ oil level marks on the dipstick.



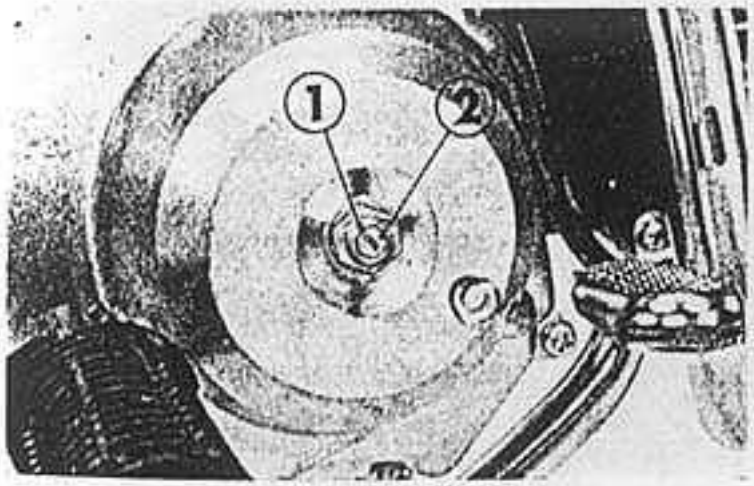
① Oil filler cap
② Upper level mark ③ Lower level mark

NOTE:

- **Do not operate the engine if the oil level is below the lower oil level mark on the dipstick.**
- **When operating the motorcycle under unusually dusty condition, it is recommended that the oil change be performed at more frequent intervals than that which is specified in the maintenance schedule; this will have a very beneficial effect on the engine.**

Clutch : This motorcycle incorporates an automatic centrifugal clutch. Perform the clutch adjustment by the following procedure.

1. Clutch must be adjusted with the engine shut off. Loosen the adjuster lock nut ①.
2. Turn the adjuster screw ② clockwise about one turn; do not turn excessively.



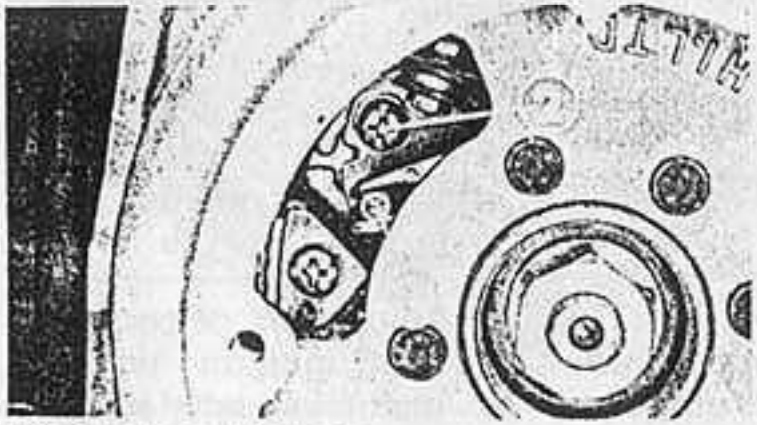
① Lock nut ② Clutch adjuster screw

3. Next, slowly turn the adjuster screw counterclockwise and stop when the screw starts to turn heavy.
4. From this point, back off the adjuster in the clockwise direction 1/8 to 1/4 turn, and then tighten the lock nut.
5. Check to make sure that the clutch operates properly after adjustment.
   1) The engine should start easily with the kick starter without the clutch slipping.
   2) When changing gear, the clutch operation should be smooth and light, especially when shifting down in gear to the neutral position.

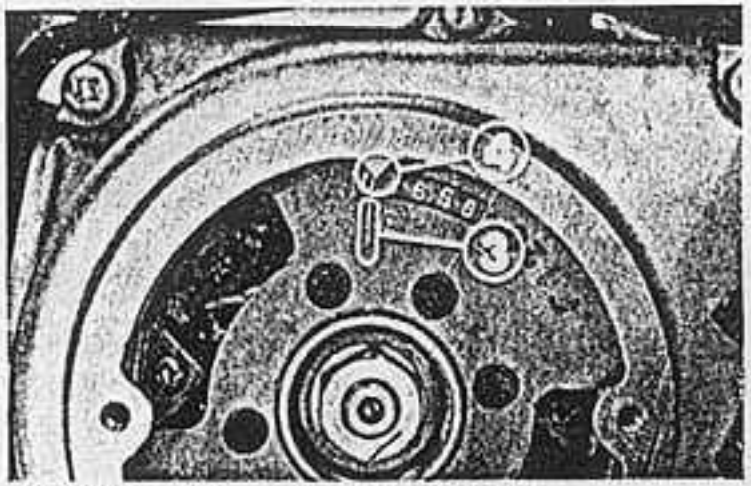
Ignition Timing : Adjustment of contact breaker point gap and ignition timing are required to maintain satisfactory engine performance.

1. Remove the left crankcase cover.

2. Rotate the flywheel counterclockwise to find the point where the breaker point gap is at maximum and check if the gap is correct using a clearance gauge.
3. The standard gap ① is **0.012-0.016 in. (0.3-0.4 mm.)**.
4. When adjustment is necessary, loosen the breaker locking screw ② and move the breaker base in either clockwise or counterclockwise direction to obtain the standard point gap setting.
5. After completing the breaker point gap adjustment, recheck the ignition timing. To perform the check, rotate the flywheel so that when "F" timing mark ③ on the flywheel is aligned to the timing index ④ on the left crankcase, the breaker points just begin to open.



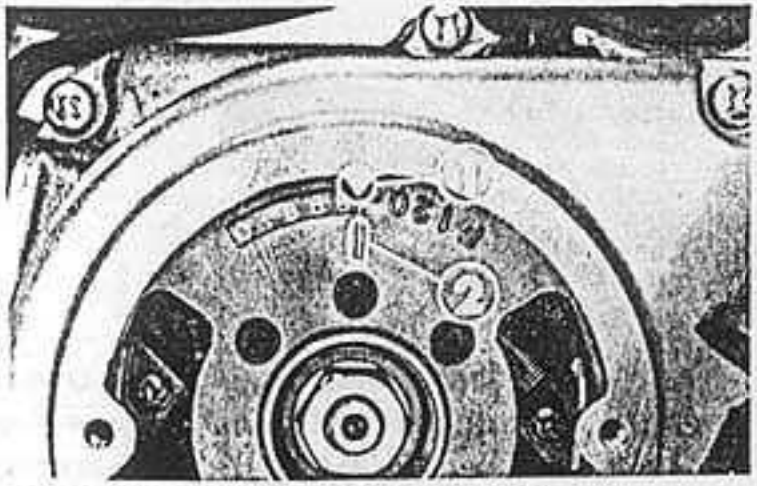
① Breaker point gap
② Breaker locking screw



③ "F" mark ④ Timing index

Valve Tappet Clearance : Excessive valve tappet clearance will cause tappet noise, and negative clearance will cause valve damage and low power. Therefore, the valve tappet clearance should be maintained properly. Adjustment should be made with the engine cold.

1. Remove the tappet adjusting hole caps.
2. Remove the left crankcase cover.

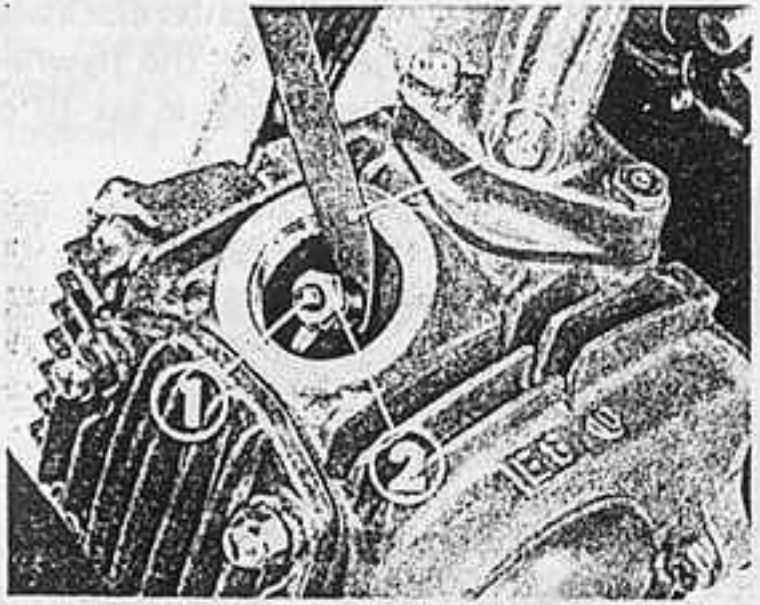


① Timing index ② "T" mark

3. Rotate the flywheel counterclockwise until the "T" mark ② on the flywheel lines up with the timing index ① on the crankcase flange.
   In this position, the piston may either be on the compression or the exhaust stroke. The adjustment must be made when the piston is on the top dead center of the compression stroke, that is when both valves are closed. This condition can be determined by shifting the tappets with fingers through the tappet adjusting holes and if the tappets are free, it is an indication that the valves are

closed and the piston is on the compression stroke.

If the tappets are tight, the valves are opened, so rotate the flywheel 360° and realign the "T" mark to the timing index.



① Adjusting screw ② Adjusting screw lock nut ③ Clearance gauge

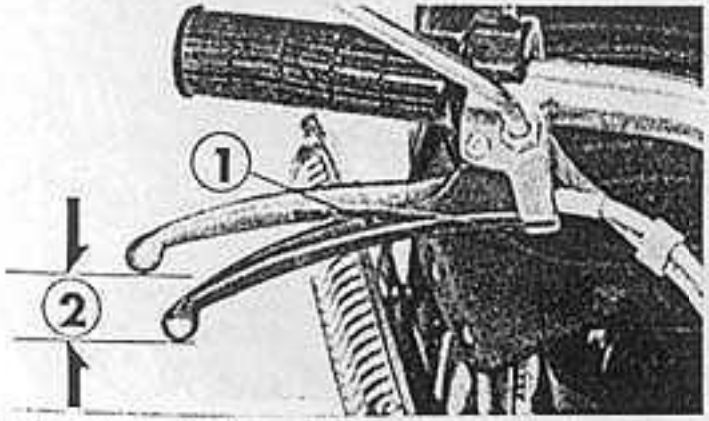
4. The valve tappet clearance is measured between the valve stem and tappet adjusting screw. Both the inlet and the exhaust valves should be adjusted to **0.002 in. (0.05 mm)**. To perform the adjustment, loosen the lock nut ② and turn the adjusting screw ①. Turning the adjusting screw in the clockwise direction will reduce the clearance.

NOTE: Make sure that the adjustment has not been disturbed while tightening the lock nut, by rechecking the clearance after the lock nut has been tightened.

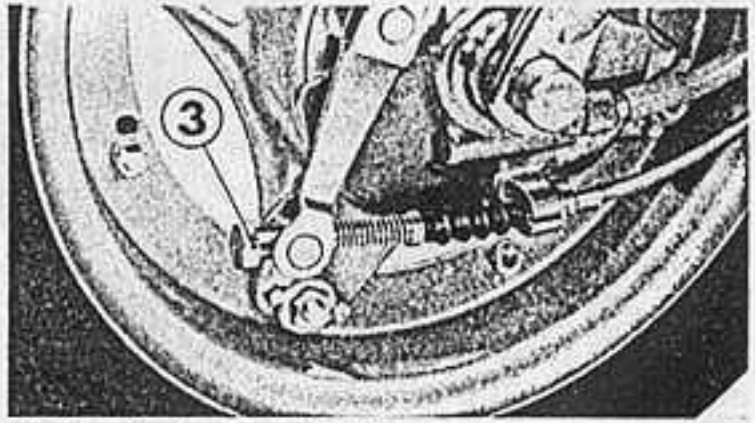
Front Brake : Brakes are items of personal safety and should always be maintained in proper adjustment.

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 amount. The front brake lever ① must be moved before the brake starts to take hold. The lever free play ② should be **0.8~1.2 in. (20~30 mm)** at the end of the brake lever

2. When brake adjustment becomes necessary, perform the task with the front brake adjusting nut ③.
Turning the nut in the clockwise direction will decrease the play of the lever and turning the nut counterclockwise will increase the play.



① Front brake lever ② Free play

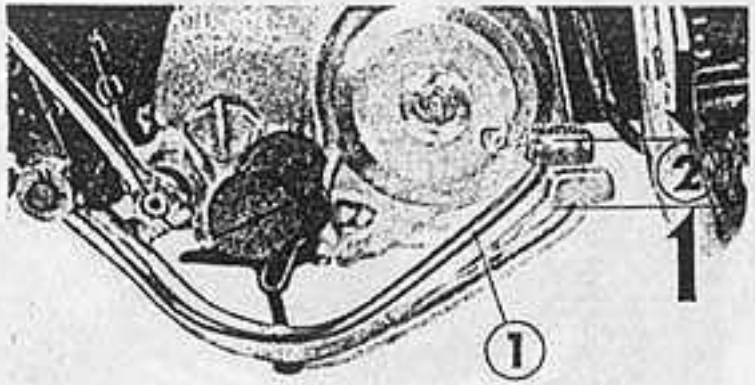


③ Front brake adjusting nut

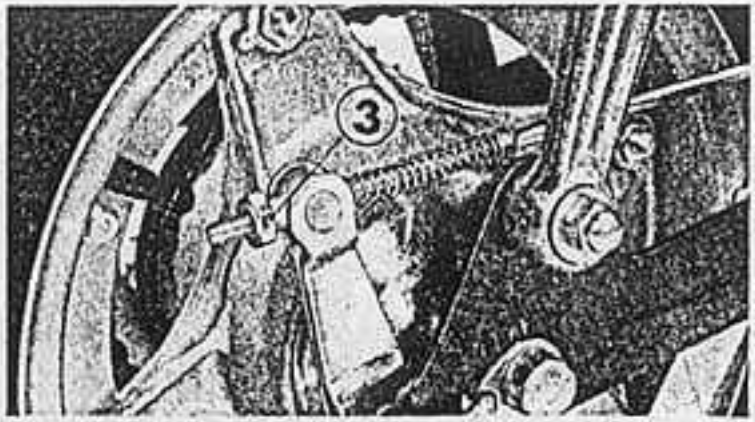
Rear Brake :

1. Place the a support block under the motorcycle, raise the rear wheel, and then, tread on the rear brake pedal while lightly rotating the rear wheel. Check the pedal free play ② until the rear brake starts to take hold.
   The standard pedal free play is **0.8-1.2 in. (20-30 mm).**

2. The adjustment is made with the rear brake adjusting nut ③. The pedal free play decrease by turning the adjusting nut clockwise, while it increases by turning the adjusting nut counterclockwise.



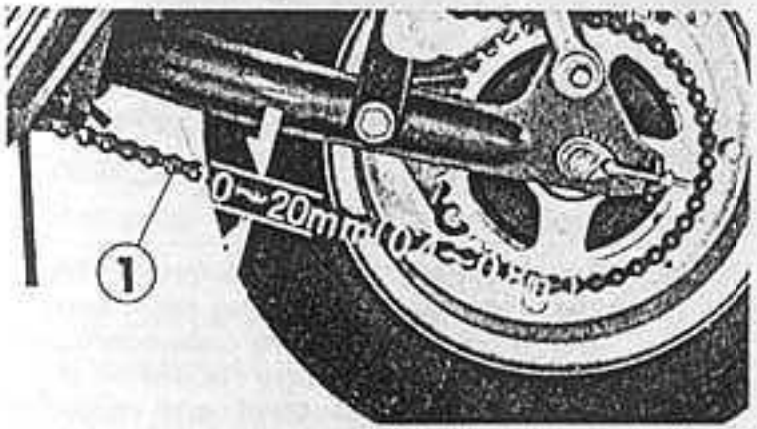
① Rear brake pedal ② Free play



③ Rear brake adjusting nut

Drive Chain: The tension of the drive chain will have considerable effect on the transmission of power from the engine to the rear wheel and on the life of the chain itself. Therefore, the chain should always be maintained at the proper slack, in other words, not too tight and not too loose.
Whenever adjustment is made, make it habit to lubricate the chain with engine oil.

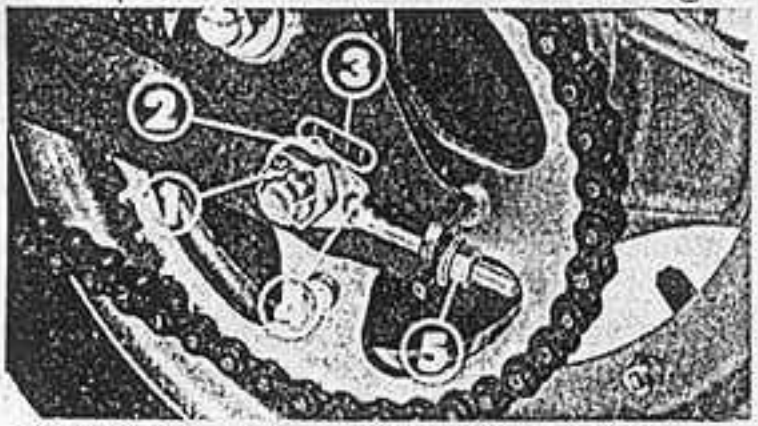
1. The maximum amount of the drive chain slack is measured by pressing the chain up and down at the mid-point between the sprockets. The maximum slack of the chain should be **0.4~0.8 in. (10~20 mm)**.



①Drive chain

2. If adjustment is necessary, loosen the rear axle nut ①. (page 38)
3. Adjust the chain slack with the lock nut ⑤ by turning it in the clockwise, this will decrease the chain slack; turning the counterclockwise will loosen the chain. Upon completion of adjustment, the index mark ② on the both the right and left chain adjusters ④ should be at the same reference marks ③ on the rear forks. (page 38)

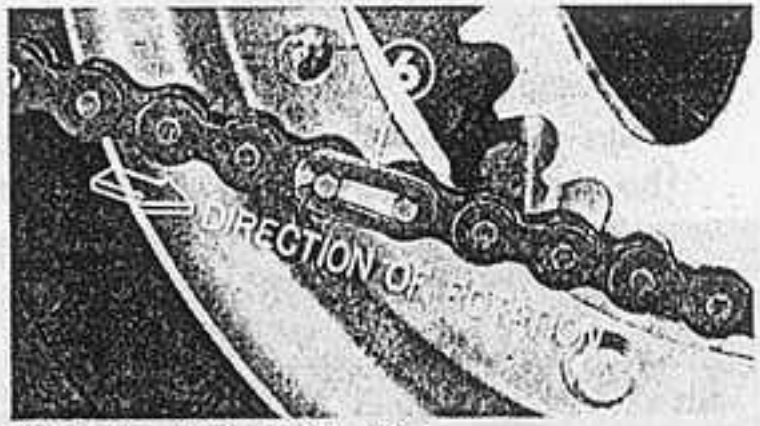
4. Finally, tighten the axle nut securely to prevent the nut from loosening.



① Rear axle nut ③ Reference mark
② Index mark ④ Chain adjuster
⑤ Chain adjuster lock nut

5. When the drive chain is dirty excessively, it is recommended that the drive chain be cleaned as following steps.

1). Remove the chain by taking off the joint clip ⑥ and wash in solvent with a stiff brush to take dirt and old grease off.
After drying it thoroughly, place the chain in a vessel containing a mixture of good grade engine oil and petroleum jelly (1/2 qt. oil to 5 oz. petroleum jelly), and heat for 10 minutes at a temperature of 50° to 120°C (120° to 250°F) while agitating.
Remove the chain and hang. After the grease hardens, wipe off the excess with a clean rag and assemble on the machine.

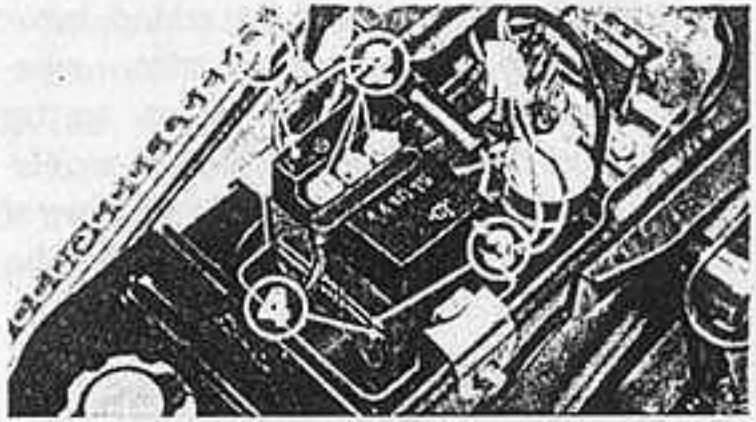


⑥ Drive chain joint clip

2). To assemble the drive chain, loosen the rear axle, allowing the ends of the drive chain to be connected with a joint. The joint clip should be installed so that the open end will face opposite to the direction of rotation.

Battery : If the motorcycle is operated with an insufficient (low) battery electrolyte level, sulfation and battery plate damage may occur. Inspecting and maintaining the electrolyte level is a simple, quick operation, therefore, it should be performed frequently as indicated in the MAINTENANCE SCHEDULE on page25.

1. The **6V-2AH** battery ① is mounted under the seat.
   Access to the battery is obtained by releasing the seat latch on the rear end under the seat and raising the rear of it.
2. Remove the battery setting rubber and raise the battery slightly to check the battery electrolyte.
   The correct electrolyte level is between the lower and upper level marks on the battery case.



① Battery ③ Upper level mark
② Cell Caps ④ Lower level mark

3. To correct the electrolyte, remove the battery cell caps ② from the cells needing level correction. For case of cell level correction a small syringe or plastic funnel should be used. Using a small syringe, carefully add distilled water to bring the electrolyte to a level between the upper and lower marks. For maximum

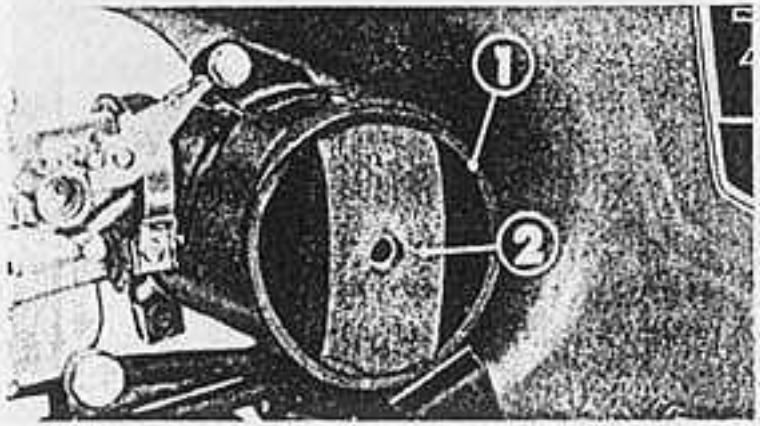
battery performance and life, only distilled water should be added, however, in an emergency situation where electrolyte level is found to be low and distilled water is not available, drinking water or a low mineral content can be used. Reinstall the cell caps.

4. When replacing the battery into the compartment, make sure that the vent tube of the battery is not pinched or blocked.

NOTE: If unusual high rate of battery electrolyte loss is experienced, consult your HONDA dealer for check of the trouble.

Air Cleaner: A clogged air cleaner will adversely affect engine performance, therefore it should be cleaned periodically as follows.

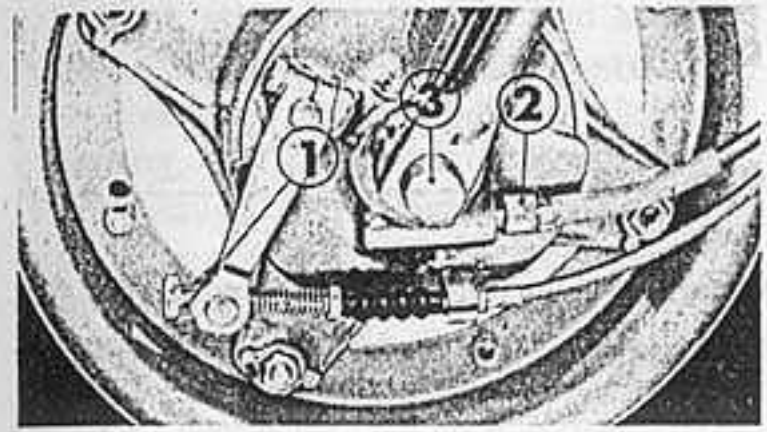
1. Unscrew the air cleaner cover setting nut and remove the air cleaner cover.
2. Remove the air cleaner element ②.
3. Wash the air cleaner element with gasoline and dry it thoroughly.
4. Soak the air cleaner element in engine oil, curing out by hand and then reinstall into the air cleaner case.



①Air cleaner case ② Air cleaner element

Front Wheel: Removal of front wheel is performed in the following manner.

1. Place a suitable block under the engine to raise the front wheel off the ground.
2. Remove the front brake adjusting nut ① and remove the front brake cable from the brake arm.



① Front brake adjusting nut
② Speedometer cable
③ Front wheel axle

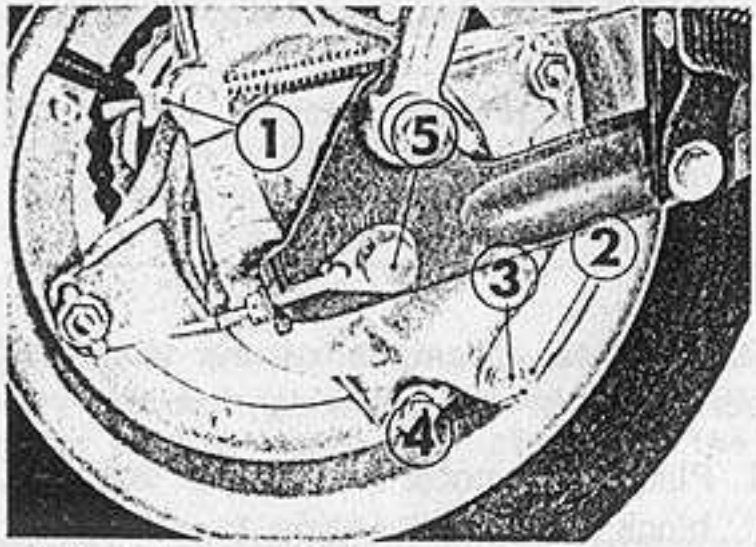
3. Remove the speedmeter cable ②.
4. Remove the front wheel axle nut and pull out the front wheel axle ③.
5. The front wheel can be removed from the frame.
6. Installation of front wheel is performed in the reverse order of described above.
   Standard tire air pressure is 1.0 kg/cm² (14.2 lbs/in²).

Rear Wheel: Removal of rear wheel is performed in the following manner.

1. Place the motorcycle on a support block under the engine to raise the rear wheel off the ground.
2. Unscrew the drive chain adjusting nut and rear wheel axle nut.

3. Remove the chain joint clip and drive chain.

4. Unscrew the rear brake adjusting nut ① and separate the rear brake rod from the rear brake arm.



① Rear brake adjusting nut
② Cotter pin ③ Lock nut
④ Torque arm setting bolt
⑤ Rear wheel axle

5. Pull out the cotter pin ②, loosen the lock nut ③ and remove the torque arm setting bolt ④.

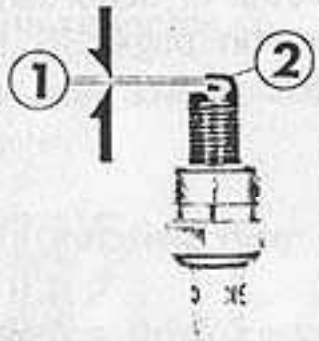
6. Pull out the rear wheel axle ⑤ and then the rear wheel can be disassembled from the frame.

7. Installation of rear wheel is performed in the reverse order of described above.
Standard tire air pressure is 1.2 kg/cm² (17 lbs/in².).

Fuse : The fuse is installed on near by the battery. When the fuse is blown, the cause should be checked and corrected prior to replace it with a spare fuse. The specified fuse is 7 amp. Any fuse of other rating should not be used.

Spark Plug : The **NGK C-6H** or **ND U-20 FS** plug is used as standard equipment on this model. Servicing of the spark plug is as follows.

1. Detach the high tension cord from the spark plug 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, erroded electrodes, or carbon fouling. If the spark plug deposits are heavy, or the electrodes appear to be erroded 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 such as a pin.
3. Adjust the spark plug gap ① to **0.024-0.028 in. (0.6-0.7 mm.)**. The gap can be measured with a clearance gauge. The adjustment is made by bending the negative (grounded) electrode ②.
4. When installing the spark plug, do not over tighten.



① Spark plug gap ② Negative electrode

NOTE :

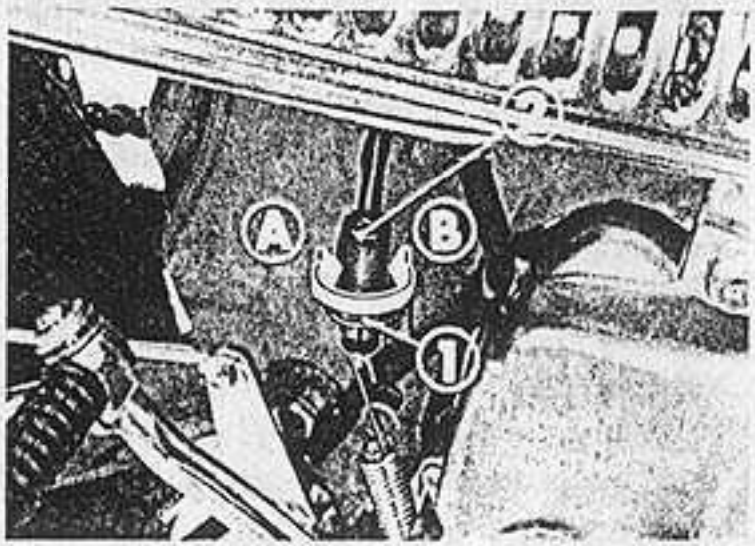
- **Never use an improper heat range spark plug.**
- **Do not attempt to dry or remove soot from the spark plug by burning.**

Stoplight Switch: The stop light switch adjustment is made at the stoplight switch ② located on the right side toward the rear of the engine.

1. First check the adjustment of the rear brake pedal in accordance with the procedure on page 36 to make sure that the brakes are properly adjusted.

2. Turn on the main switch.

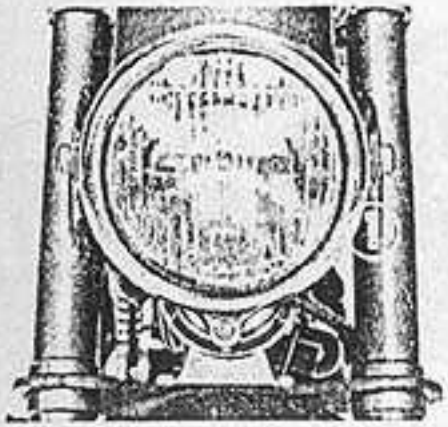
3. Adjust the stop light switch ② so that the stop light will come on when the brake pedal is depressed to the point where the brake just starts to take hold. If the stop light switch is late in switching on the stop light, screw in Ⓐ the switch adjusting nut ① and if the stop light comes on too early screw out Ⓑ the switch adjusting nut.



① Adjusting nut
② Stoplight switch

Headlight Bulb: When exchanging the headlight bulb, perform the following manner.

1. Loosen the mounting screw ① at the bottom of the headlight and remove the headlight rim.
2. Remove the socket assembly ② by pushing down on the socket and twisting counterclockwise to unhook from the reflector ③.
3. Pull the bulb out and replace.

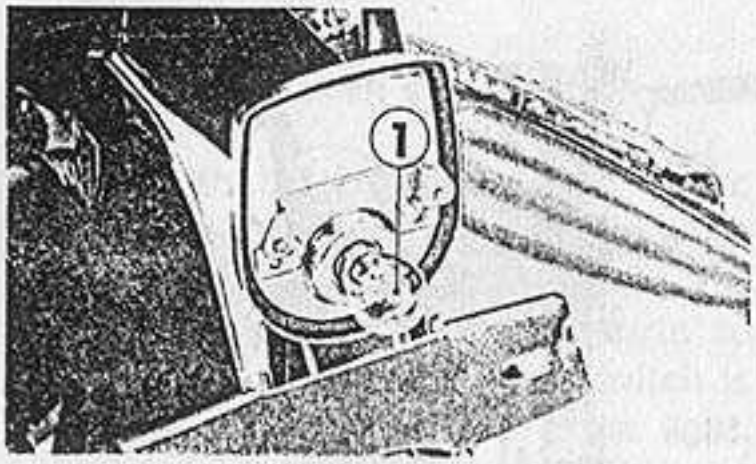


① Headlight rim mounting screw

② Headlight socket ③ Reflector

Tail/stoplight Bulb : When exchanging the tail/stoplight bulb, perform the following manner.

1. Remove the two screws retaining the tail/stoplight lens.
2. Press the bulb ① inward and twist to the left, and the bulb can be removed.

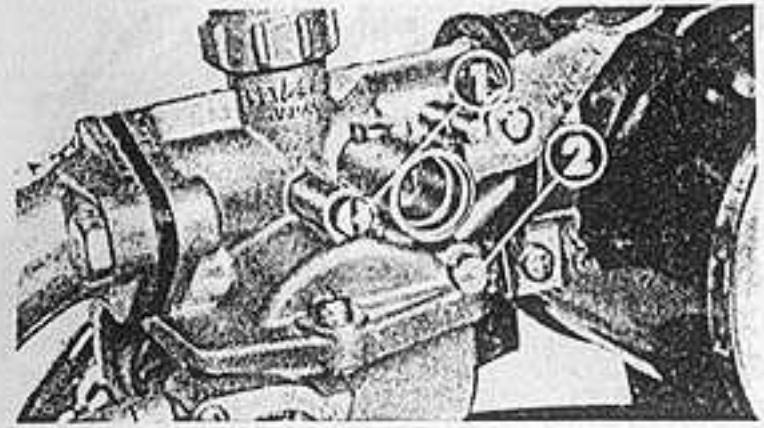


① Tail/stoplight bulb

3. When installing the taillight lens, do not over tighten the screws, as this may damage the lens.

Carburetor: Perform the carburetor adjustment periodically as necessary. Make the carburetor adjustment after the engine attains operating temperature.

1 Adjust the engine idle speed to approximately **1,300 rpm** with the throttle stop screw ①.
2. Turn the air screw ② slowly back and forth to obtain the point of the highest engine rpm.

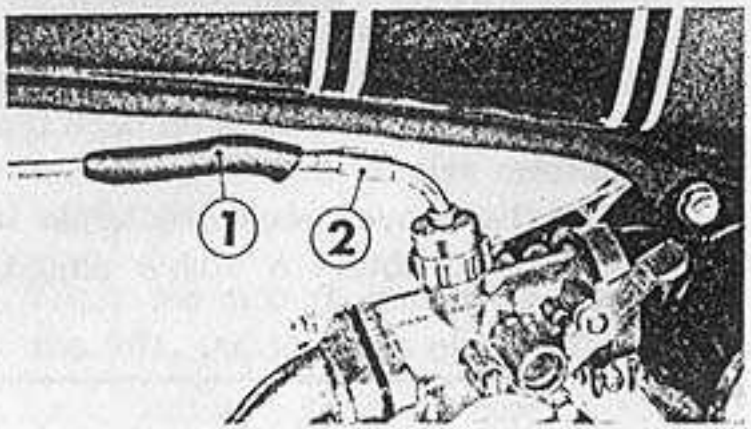


① Throttle stop screw ② Air screw

3. If the idling speed increases excessively, reduce the speed with the throttle stop screw, then recheck the air screw.
   Repeat the above procedure again if necessary to obtain a stable adjustment.

Throttle Cable: For safe, positive and consistent engine response the good condition and operation of the throttle grip and throttle cable is a must.

1. Check for the smooth rotation of the throttle control grip from the full open to the full close positions. Check when at full left and full right steering positions.
2. Standard throttle grip free play is approximately 10~15° of the grip rotation.



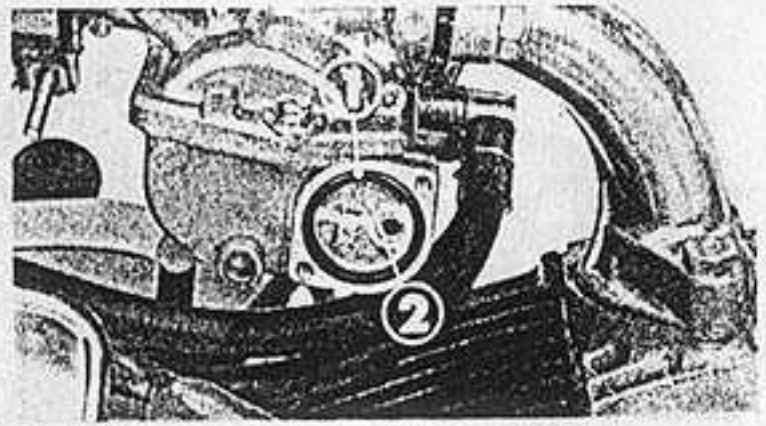
① Rubber cap ② Throttle cable adjuster

If grip free play rotation exceeds, this adjustment of the throttle cable adjuster ② is necessary.
Turn the cable adjuster until grip free play rotation is reduced to 10~15°.

Fuel Strainer : The fuel strainer is incorporated in the right side of the carburetor. Accumulation of dirt in the strainer will restrict the flow of the fuel and cause the carburetor to malfunction, therefore, the fuel strainer should be serviced periodically.

1. Turn the fuel valve to "S" position.
2. Remove the fuel strainer cover and O ring seal ①.
3. The screen fuel strainer ② can be removed from the carburetor.

Wash in solvent or gasoline and reassemble.

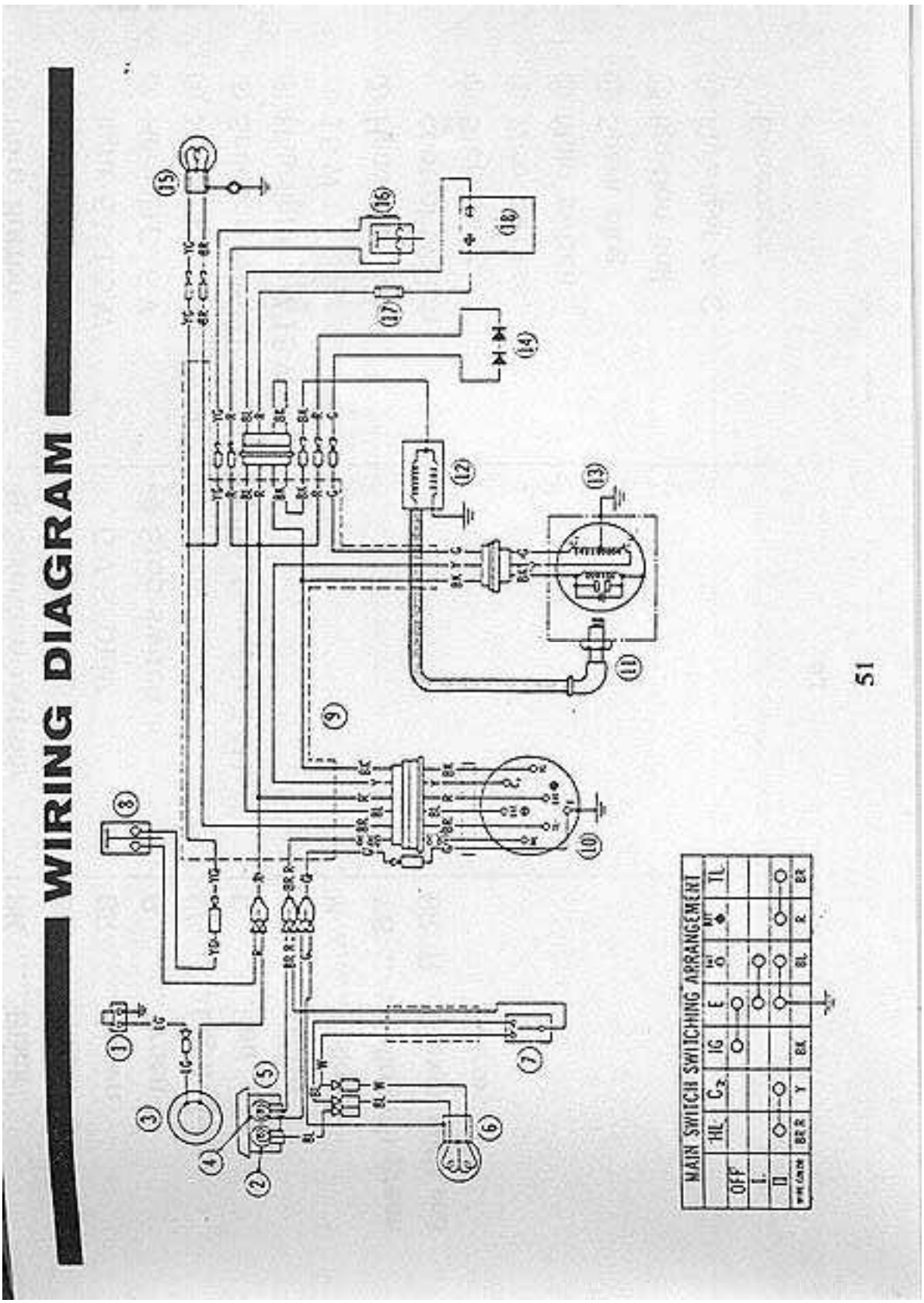


① "O" ring seal ② Fuel strainer

SPECIFICATIONS

DIMENSIONS	
Overall length	59.4 in. (1,510 mm)
Overall width	22.8 in. (580 mm)
Overall height	37.8 in. (960 mm)
WEIGHT	
Curb weight	141.1 lbs (64 kg)
CAPACITIES	
Engine oil	1.4 Imp. pt (1.7 US pt, 0.8 liter)
Fuel tank	0.6 Imp. gal. (1.7 US gal., 2.5 liter)
Fuel reserve tank	0.9 Imp. pt (1.0 US pt, 0.5 liter)
ENGINE	
Bore and stroke	1.535×1.63 in. (39×41.4 mm)
Compression ratio	8.8 : 1
Displacement	3.0 cu in. (49 cc)
Horse power	4.5 ps/9,000 rpm
Contact breaker point gap	0.012~0.014 in. (0.3~0.4 mm)
Spark plug gap	0.024~0.028 in. (0.6~0.7 mm)
Valve tappet clearance	0.002 in. (0.05 mm)

CHASSIS AND SUSPENSION	
Caster	65°
Trail	2.3 in. (58 mm)
Tire size, front	3.50~10 (2 PR)
Tire size, rear	3.50~10 (2 PR)
POWER TRANSMISSION	
Primary reduction	3.722
Final reduction	2.733
Gear ratio, 1 st.	3.364
2 nd.	1.824
3 rd.	1.190
ELECTRICAL	
Battery	6 V-2 AH
Generator	Flywheel
LIGHTS	
Headlight	6 V-15/15 W
Tail/stoplight	6 V-3/10 W
Meter light	6 V-1.5 W
Neutral indicator light	6 V-1.5 W
Fuse	7 amp



① Horn Button
② High beam indicator light 6 V-1.5 W
③ Horn D.C. 6 V
④ Meter light 6 V-1.5 W
⑤ Speedometer
⑥ Headlight 6 V-15 W/15 W
⑦ Headlight beam control switch
⑧ Stop switch
⑨ Wire harness
⑩ Main switch
⑪ Spark plug
⑫ Ignition coil
⑬ Flywheel A. C. Generator
⑭ Selenium rectifier
⑮ Tail/stoplight 6 V-5/18 W
⑯ Stop switch
⑰ Fuse 7 A
⑱ Battery 6 V-2 AH

BK .....Black
BL .....Blue
BR .....Brown
G .....Green
LG .....Light green
R .....Red
W.....White
Y .....Yellow
YG .....Yellowish green
BR. R ...Brown with red Spiral