



**1973**

# Owner's Manual



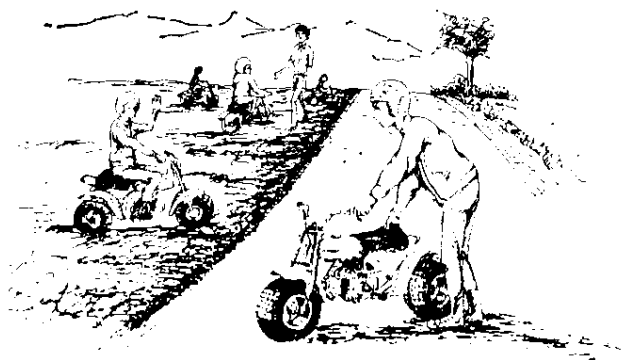
**ATC70**

## **WARNING**

This vehicle was manufactured for off-the-road use only. Do not operate on public streets, roads, or highways.

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## *Message to Mom & Dad:*



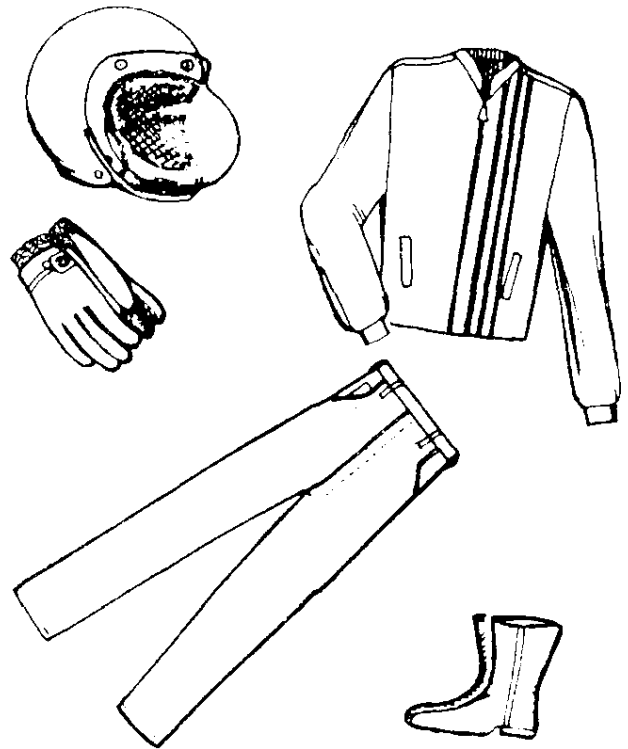
Most Honda ATC-70 will be operated by junior riders. In many instances, this is their initial introduction to the sport of motorcycling. Before your sons or daughters start to ride, it is important that you review the contents of this manual with them. A preliminary understanding of proper operation and maintenance will facilitate training and will contribute to their safety and the service life of the machine.

The Honda ATC-70 is designed and equipped for off-the-road use only and should not be operated on public streets. A ATC-70 is less visible to traffic than larger machines. If the rider must cross a street to reach his riding area, then for safety and to comply with laws in many states, he should shut off the engine and walk the ATC-70 across. When training your son or daughter, select a safe practice area with an even surface, free of obstacles.

The rider should wear protective clothing. The most important item is a good safety helmet. Eye protection is also necessary-safety glasses, goggles, or a plastic face shield attached to the helmet. Clothing should protect the body as much as possible, and the rider should wear gloves and boots or sturdy shoes.

RESPECT PRIVATE PROPERTY. THE RIDER SHOULD NEVER CUT ACROSS RESIDENTIAL YARDS OR USE PRIVATE PROPERTY WITHOUT PERMISSION.

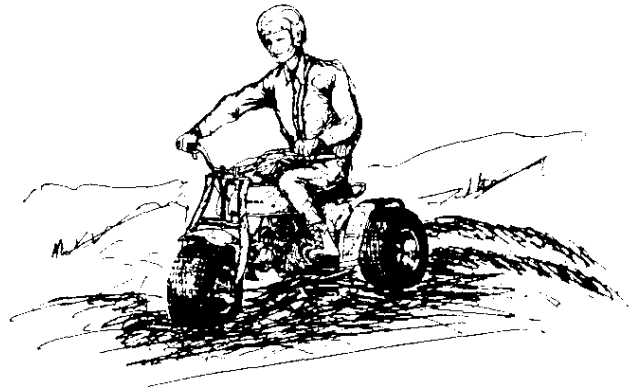
NOISE IS A NUISANCE TO YOUR NEIGHBORS. DO NOT ALTER OR REMOVE THE MUFFLER.



## PREFACE

This booklet is your guide to the basic operation and proper maintenance of your new Honda ATC-70. Please take the time to read it carefully. Details necessary for riding the Honda ATC are given on later pages to acquaint the new owner with special riding techniques to be learned. Your authorized Honda dealer will be glad to provide assistance or further information and is fully equipped to handle your future service needs.

Thank you for selecting a Honda. We wish you continued riding pleasure in the miles ahead.



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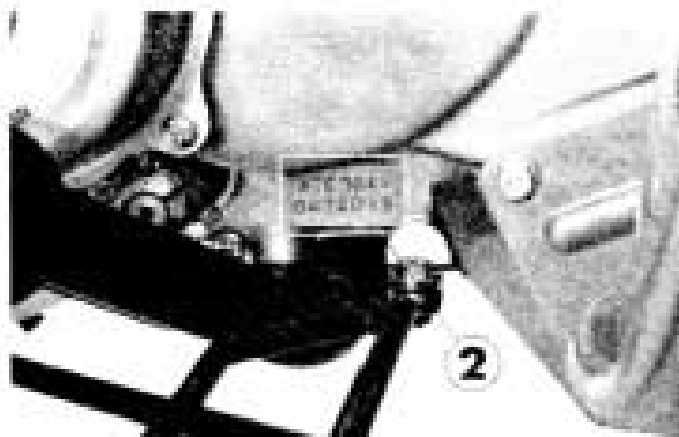
## **SERIAL NUMBER LOCATIONS**

The frame serial number ① is stamped on the left of the steering head pipe.

The engine serial number ② is stamped on the crankcase just above the step bar attaching point.

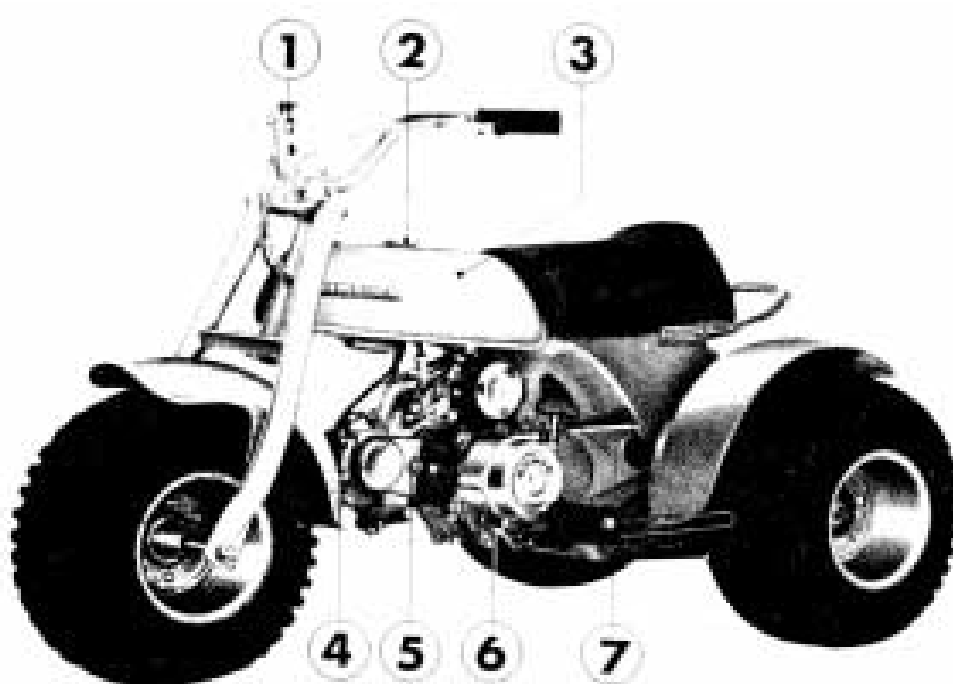


① Frame serial number

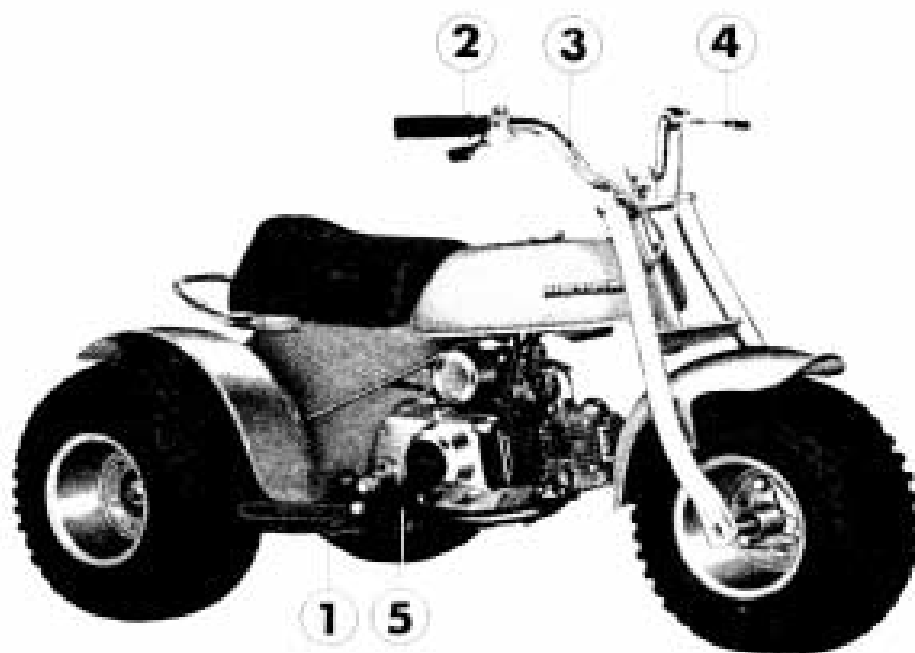


② Engine serial number

## NOMENCLATURE



- ① Ignition switch    ② Fuel tank cap    ③ Fuel tank    ④ Fuel valve  
⑤ Choke handle    ⑥ Gear change pedal    ⑦ Recoil starter



- ① Oil filler cap    ② Throttle lever    ③ Handlebar  
④ Rear brake lever    ⑤ Foot rest

## OPERATING INSTRUCTIONS

### IGNITION SWITCH

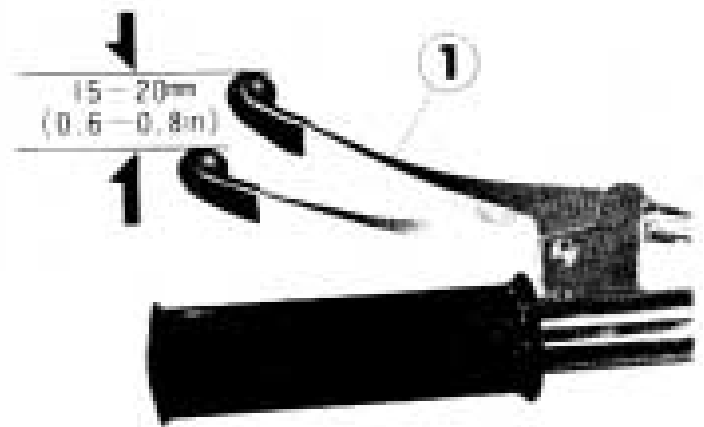
The ignition switch ① is located on the right handlebar. Turn the switch to the "ON" position when starting the engine and to the "OFF" position to stop the engine.



① Ignition switch

### REAR BRAKE LEVER

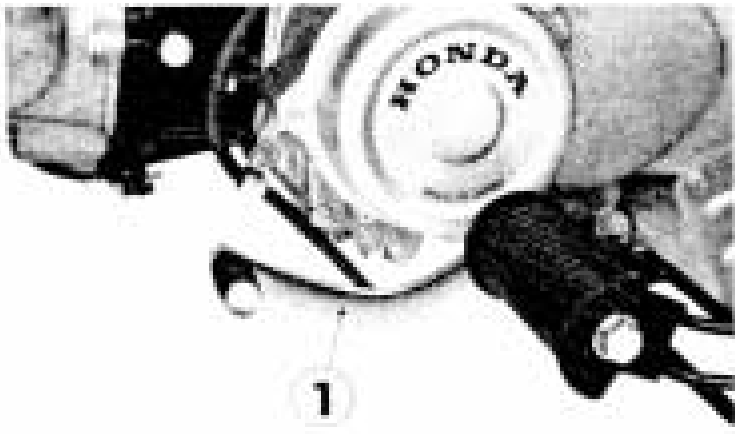
The rear brake lever ① is located on the left handlebar and applies the brake to the rear wheels only. The brake lever free play should be 15~20 mm (0.6~0.8 in.) at the tip of the lever.



① Rear brake lever

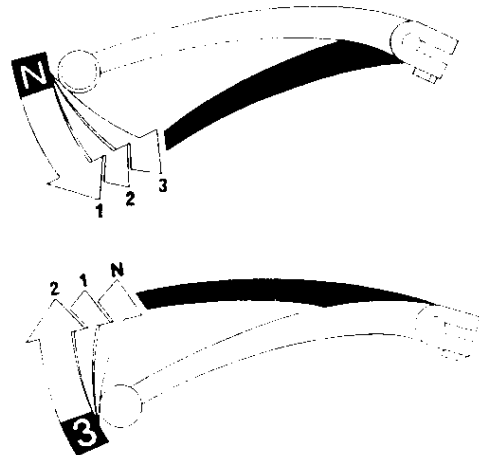
## GEAR CHANGE PEDAL

The gear change pedal ① is located near the left foot rest. One full stroke of the gear change pedal will shift the transmission into gear. The pedal automatically returns to the horizontal position when released. The next stroke of the pedal engages the next gear in sequence. The shifting sequence is illustrated in the diagram below.



① Gear change pedal

The pedal is depressed with the toe to upshift and is raised to downshift. Starting with the transmission in neutral, the pedal is depressed to shift into low gear, 2nd and 3rd gear are selected in sequence each time the pedal is again depressed.



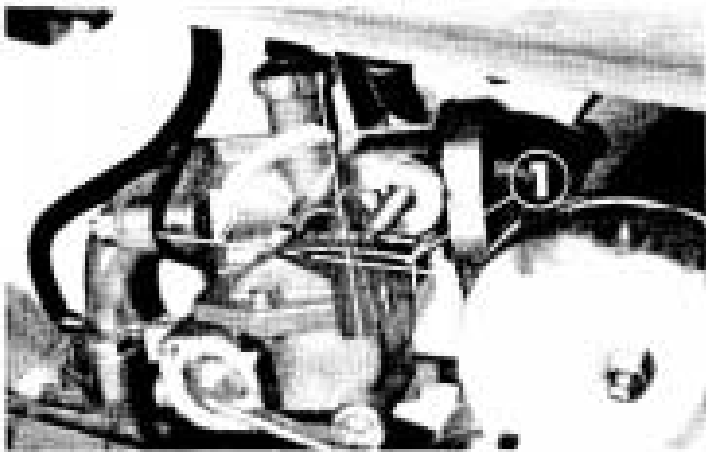
Shifting pattern

Each time the pedal is raised, the next lower gear in sequence is engaged until the neutral position is reached.

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### **CHOKE HANDLE**

Turning the choke handle ① counter-clockwise will close the choke to produce a rich fuel mixture for starting the engine when cold. As the engine attains normal



① Choke handle

operating temperature, the choke must be opened by turning the choke handle clockwise.

---

### **FUEL VALVE**

The fuel valve ① (page 10) is mounted on the left side of the carburetor.

#### **“S” position**

In this position, the fuel flow will be cut off.

When parking the vehicle, place the fuel valve in the “S” position.

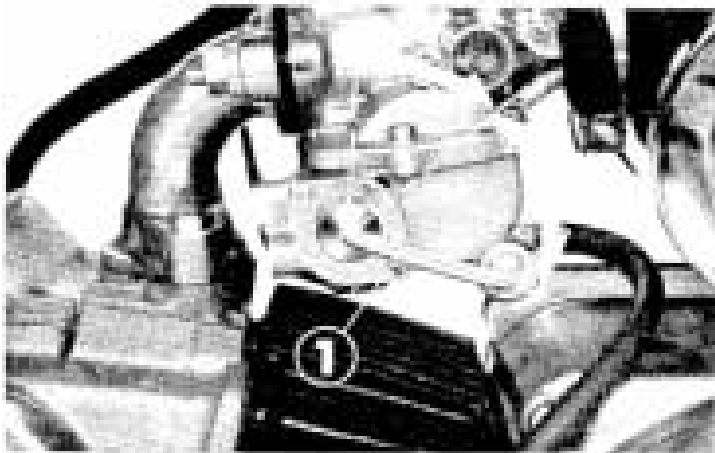
#### **“ON” position**

In this position, fuel will flow to the carburetor.

When starting the engine, place the valve in the “ON” position.

### **“RES” position**

This is the reserve fuel position. The reserve fuel capacity is 0.5 l (0.13 U.S. gal.). The fuel valve should be turned to this position only after the regular fuel supply is consumed. This serves as a warning to the rider that it is time to refill the fuel tank.



① Fuel valve lever

### **FUEL TANK AND FUEL TANK CAP**

The fuel tank cap ② is removed by turning it counterclockwise. The fuel tank capacity including reserve fuel is 2.5 l (0.6 U.S. gal.). Use of low lead gasoline having a 91 octane rating or higher is recommended. If such gasoline is not available, use a leaded regular grade gasoline. Do not use a gasoline-oil mixture.



② Fuel tank cap

When refueling, take care to exclude dirt, water or other foreign materials from the fuel tank.

**WARNING:**

**Gasoline is flammable, and explosive under certain conditions. Always stop the engine and do not smoke or allow open flames or sparks near the ATC-70 when draining or refueling.**

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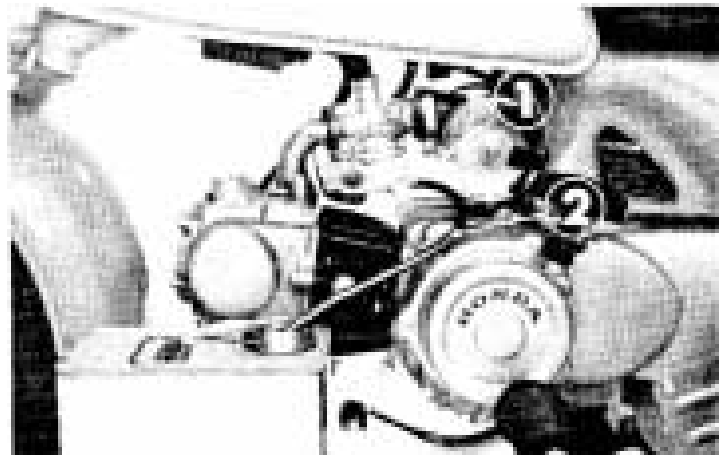
## FUEL DRAIN

A fuel drain is provided to drain the carburetor and fuel tank for storage or transport. The fuel drain is opened by turning the carburetor drain screw knob ① counterclockwise. If the fuel valve is set at the "S" position, only the carburetor will drain.

With the fuel valve set at the "RES" position, the fuel tank and carburetor will drain.

When draining, put the lower end of the carburetor drain tube ② into a suitable gasoline container.

Before refilling the fuel tank, close the fuel drain by turning the carburetor drain screw knob clockwise until tight.



① Drain screw knob    ② Drain tube

## OIL RECOMMENDATION

Use only high detergent, premium quality motor oil certified to meet or exceed U.S. car manufacturer's requirements for Service SE. Motor oils intended for Service SE will show this designation on the container. Oil should be changed at intervals prescribed in the Maintenance Schedule on pages 21 and 22.

### NOTES:

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

## VISCOSITY

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

Recommended viscosity:

In all seasons                      SAE 10W-40

Alternate:

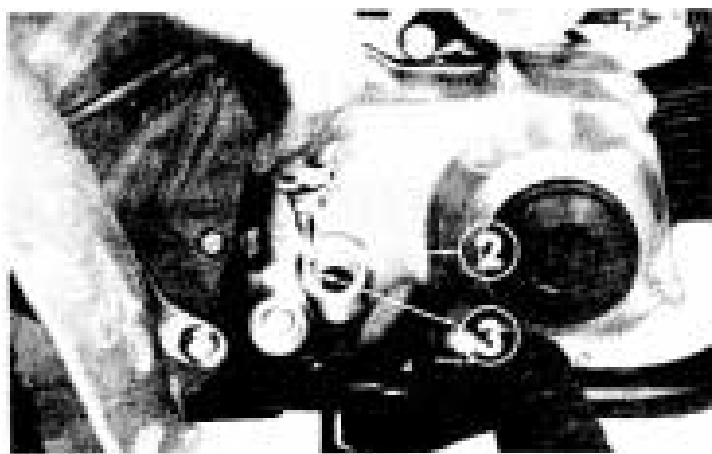
Above 15°C (59°F)              SAE 30

0°~15°C (32~59°F)          SAE 20 or 20W

Below 0°C (32°F)              SAE 10W

## ENGINE OIL LEVEL

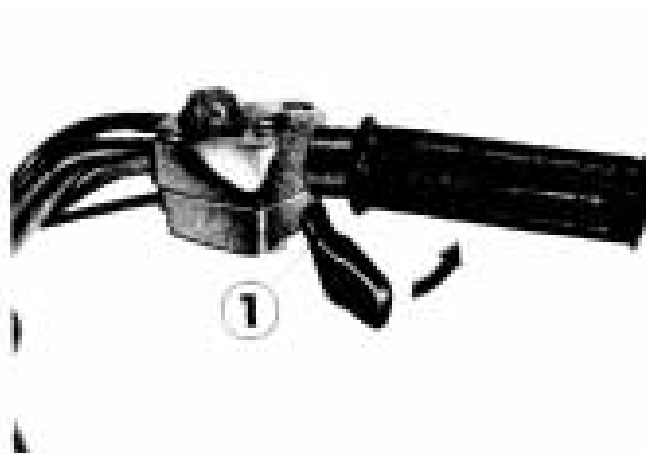
To check the oil level, place the vehicle on level ground and insert the dipstick ① by putting the oil filler cap in position. Do not screw it in. The oil level should be between the upper ② and lower ③ marks on the dipstick.



- ① Dipstick    ② Upper oil level mark  
③ Lower oil level mark

## THROTTLE LEVER

The throttle lever ① is located at the right handlebar grip and is operated by the rider's thumb. Pressing the lever forward opens the throttle. When the lever is released, spring tension closes the throttle automatically.



- ① Throttle lever

## TIRES

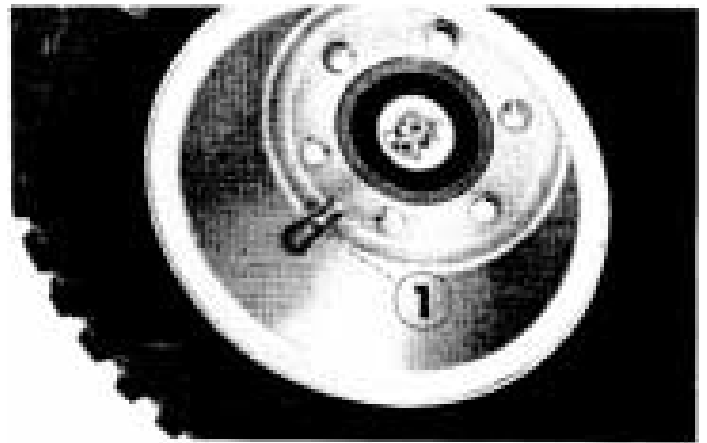
The ATC-70 is equipped with 16 × 8—7, low pressure, tubeless tires. These tires are designed specifically for off-the-road use. Paved surfaces should be avoided since they will cause excessive tire wear.

For normal use, the tires should be inflated to a maximum pressure of 3.0 psi. A manually operated tire pump should be used rather than the high pressure systems found in service stations. This will lessen the chance of inadvertently damaging the tires through over-inflation.

Be especially careful to inflate both rear tires equally. If the ATC-70 is operated with unequal tire pressures, the resultant difference in tire circumference will cause the ATC-70 to tend to run toward one side and will affect handling

adversely.

Recommended pressure:  
0.2 kg/cm<sup>2</sup> (3.0 psi)



① Tire valve

## PRE-RIDING INSPECTION

Before riding your ATC-70, inspect the following items for safe riding. This inspection will take only a few minutes and can save you much time and expense in the long run.

### 1. Engine Oil Level

Check engine oil level and add if necessary.

### 2. Fuel

Check the amount of fuel in the tank and refill if necessary.

### 3. Brake

Check operation and brake lever free play. Adjust if necessary.

### 4. Tire Pressure

Check the tire pressure.

Recommended Pressure:

0.2 kg/cm<sup>2</sup> (3.0 psi)

### 5. Bolts, Nuts and Fittings

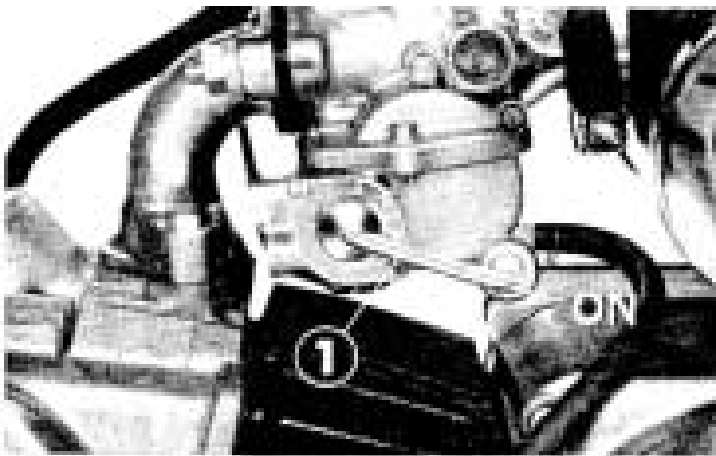
Check wheels to see that axle nuts

are tightened and secured by cotter pins. Check all bolts, nuts and fittings for looseness and retighten if necessary.



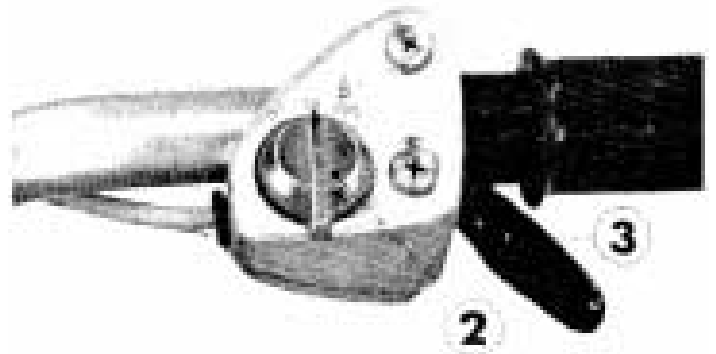
## STARTING THE ENGINE

1. Turn the fuel valve lever ① to the "ON" position.
2. Turn the ignition switch ② to the "ON" position.
3. Shift the transmission into neutral.
4. Close the choke valve and open the throttle lever ③ approximately 1/4 to 1/3.



① Fuel valve lever

5. Pull the recoil starter rope ④ (page 17) lightly until compression is felt, then pull the rope quickly with a full arm stroke.

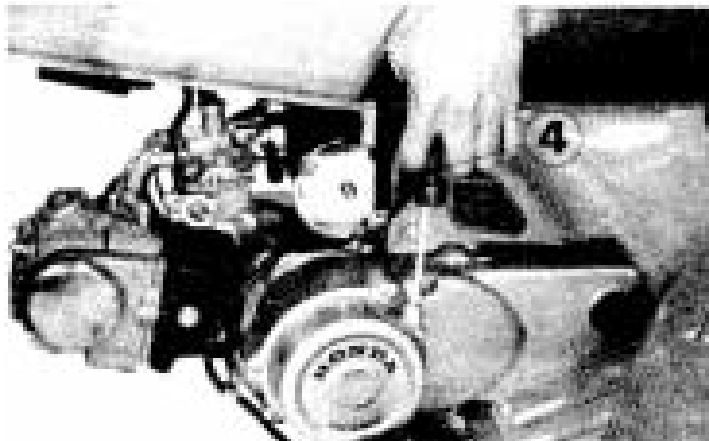


② Ignition switch    ③ Throttle lever

If the engine fails to start after several attempts, it is possible that the engine may have become flooded with excess fuel. To unflood the engine, turn the ignition switch off, open the choke, hold the throttle fully open, and pull the

recoil starter rope several times. When the engine is unflooded, turn the ignition switch on and repeat the normal starting procedure, but do not close the choke.

- In cold weather, leave the choke closed during the first several minutes after the engine starts and then gradually open the choke as the engine warms up.



④ Recoil starter

**NOTE :**

**Do not race the engine during the warm-up period. Revving a cold engine wastes fuel and causes rapid engine wear.**

**WARNING :**

**Exhaust gases contain poisonous carbon monoxide. Never run the engine in a closed garage or confined area.**

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**BREAK-IN PROCEDURE**

During the first few days of riding, operate your new ATC-70 so the engine neither pulls laboriously nor approaches maximum R.P.M. Avoid full throttle operation, and select your gear changes to spare the engine undue stress. Careful break-in procedure during initial operation will measurably extend the service life of the engine.

## **RIDING**

1. After the engine has been warmed up, the machine is ready for riding.
  2. While the engine is idling, depress the gear change pedal to shift into low (1st) gear.
  3. Increase engine speed by opening the throttle.
  4. When speed increases close the throttle and shift to 2nd gear by depressing the gear change pedal.
  5. This sequence is repeated to shift to 3rd (top) gear. The shifting pattern is illustrated on page 8.
- 

## **PARKING THE VEHICLE**

When parking the vehicle, turn the ignition switch to "OFF" position and the fuel valve to "S" position.

## **STORAGE**

Preparing the machine for storage.

1. Completely clean all parts of the machine. When exposed to sea breeze or salt water, wash the machine down with fresh water and wipe dry.
2. Drain gasoline from the fuel tank and carburetor.
3. Change the engine oil.
4. Position the piston to the top of the compression stroke. This can be determined by pulling the starter rope until compression is felt.
5. Enclose the machine with a dust cover.
6. Store in a place which is free of humidity and dust.

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## MAINTENANCE

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### MAINTENANCE SCHEDULE

The maintenance intervals shown in the following schedule are based upon average riding conditions. Vehicles 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.

**INITIAL  
SERVICE  
PERIOD**

**FIRST WEEK  
OF  
OPERATION**

- 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.
- TIRES - Inspect and check air pressure.
- 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, which-  
ever 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.
- **CAM CHAIN TENSION** - Adjust.
- **POLYURETHANE FOAM AIR FILTER ELEMENT** - Clean and oil. Service more frequently if operated in dusty areas.
- **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.
- **TIRES** - Inspect and check air pressure.
- **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 LINES -Check.
- \*STEERING HEAD BEARINGS - Adjust.
- \*BRAKE SHOES - Inspect and replace if worn.

## TOOL KIT

A spark plug wrench and handle are attached under the rear of the seat. Any extensive work requiring additional tools should be performed by an authorized Honda dealer.



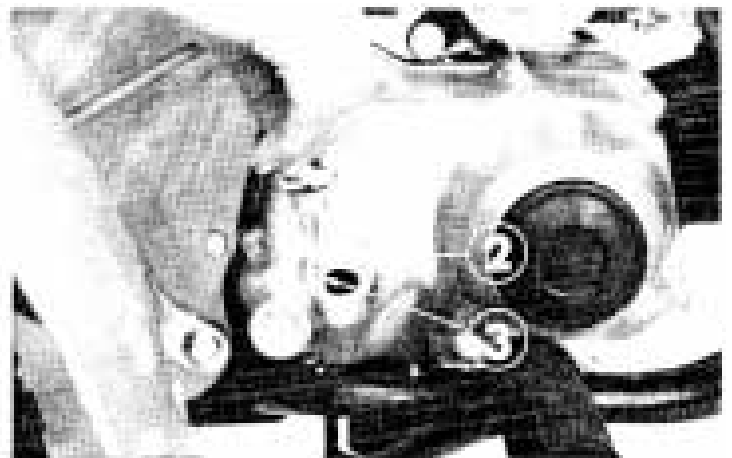
- ① Spark plug wrench
- ② Wrench handle

## MAINTENANCE OPERATIONS

### ENGINE OIL LEVEL

Check engine oil level at the start of each day the ATC-70 is to be ridden. The oil filler cap contains a dipstick for measuring oil level.

Oil level should be checked with the



- ① Dipstick
- ② Upper level mark
- ③ Lower level mark

ATC-70 resting on level ground and with the oil filler cap touching the filler hole but not screwed in.

Oil level should be maintained between the upper and lower oil level marks on the dipstick.

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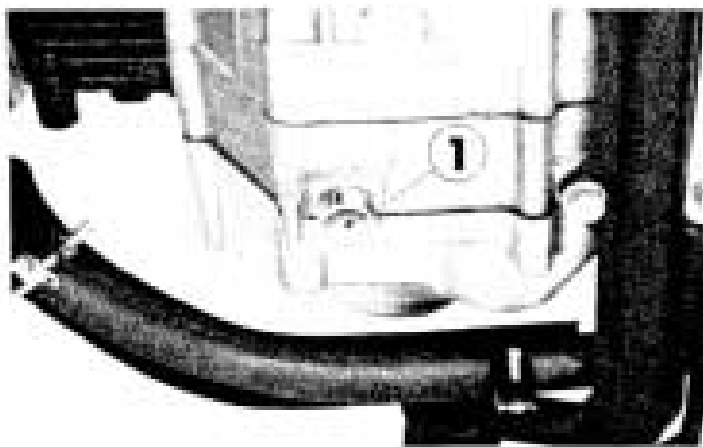
## ENGINE OIL CHANGE

Engine oil should be changed in accordance with the maintenance schedule on pages 21 and 22. Use motor oils of the grade and viscosity recommended on page 12.

When changing oil, drain the used oil from the crankcase while the engine is still warm. This will ensure complete and rapid draining.

1. Remove the oil filler cap from the right crankcase cover.

2. Place a drip pan under the engine to catch the oil, and then remove the drain plug ① with a 17mm box wrench.



① Drain plug

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3. After the oil stops draining from the crankcase, operate the recoil starter rope several times to drain any oil which may be left in the engine.

4. When the oil has been completely drained, reinstall the drain plug. Be sure the washer which seals the drain plug is in good condition.
5. Fill the crankcase through the oil filler opening with approximately 0.8 liter (0.8 U.S. qt.) of recommended grade of motor oil.

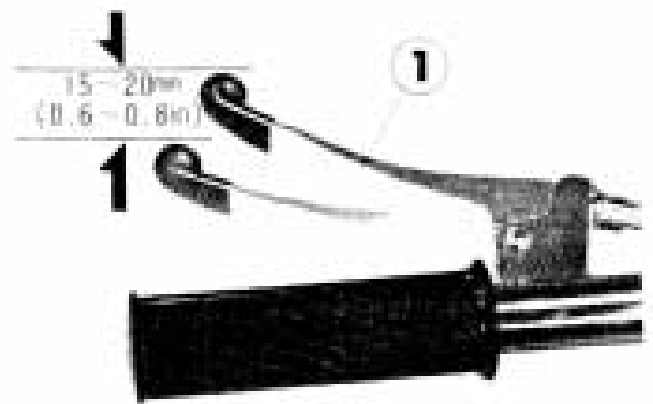
Make sure that the oil level is between the upper and lower level marks. If the level is low, add oil.

**NOTE :**

**Vehicles ridden in unusually dusty areas require oil changes at more frequent intervals than specified in the MAINTENANCE SCHEDULE.**

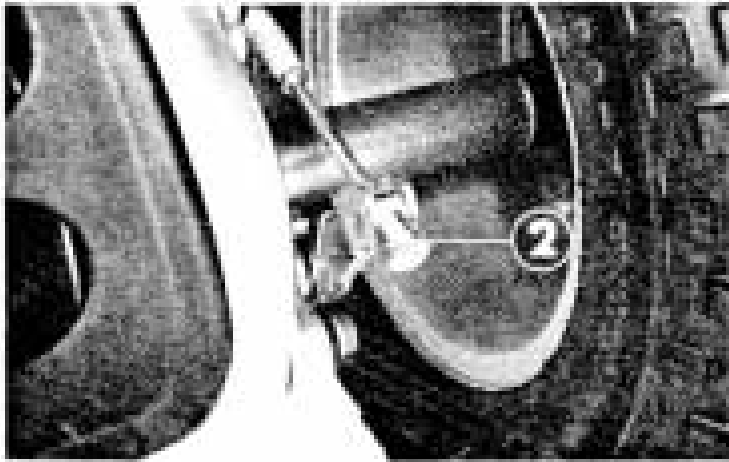
## **BRAKE ADJUSTMENT**

Free play, measured at the tip of the brake lever ①, should be maintained at 15~20 mm (0.6~0.8 in.).



① Brake lever

The adjusting nut ② is located on the brake operating rod at the rear of the frame on the right side.

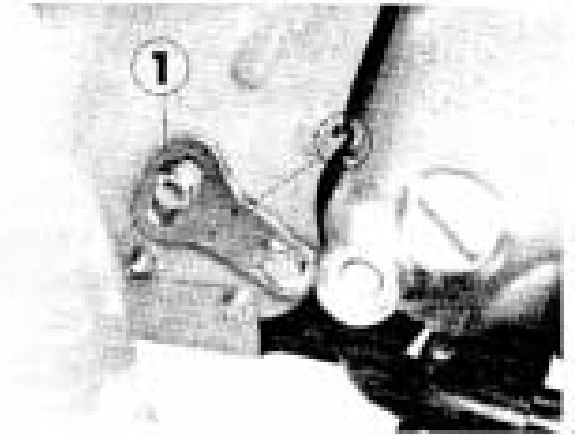


② Adjusting nut

## DRIVE CHAIN ADJUSTMENT

The drive chain will wear through use and requires periodic adjustment. Adjustment is normally performed every 30 operating days, in accordance with the MAINTENANCE SCHEDULE.

Loosen the chain tensioner locking bolt ① and push the chain tensioner plate ② upward until resistance is felt. Retighten the locking bolt.



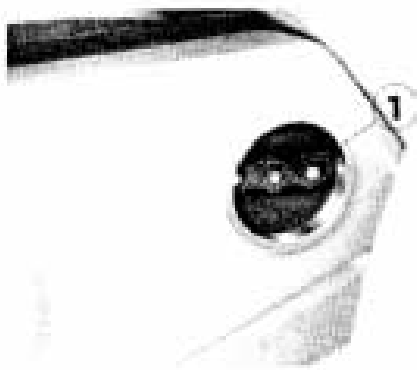
- ① Locking bolt
- ② Chain tensioner plate

## DRIVE CHAIN LUBRICATION

The drive chain can be lubricated through the hole in the side of the drive chain case. This hole is covered with a rubber plug which excludes dirt from the chain case. Be sure to reinstall the plug after lubrication.

Commercially prepared drive chain lubricants may be purchased at most motor-

cycle dealerships and should be used in preference to motor oil for lubricating the drive chain.



① Drive chain

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## VALVE TAPPET ADJUSTMENT

Valve tappet clearance should be maintained at 0.05mm (0.002 in.). Excessive clearance will cause tappet noise. Insufficient clearance will cause loss of power and valve damage.

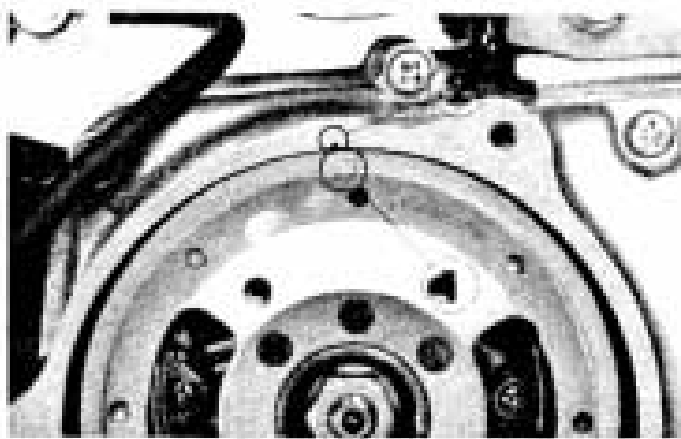
Valve tappet clearance must be checked when the engine is cold.

1. Remove the recoil starter and tappet adjusting hole caps.

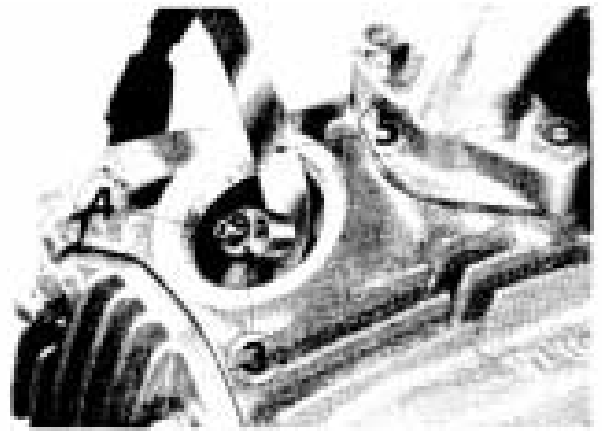
2. Rotate the generator rotor counter-clockwise until the "T" mark ① on the rotor lines up with the timing index mark ② on the stator.

In this position, the piston may either be on the compression or the exhaust stroke. The adjustment must be made when the piston is at top dead center on the compression stroke when both

the intake and exhaust valves are closed. This can be determined by moving the tappets with the fingers. 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



① "T" mark    ② Index mark



③ Adjusting screw lock nut  
④ Adjusting screw    ⑤ Feeler gauge

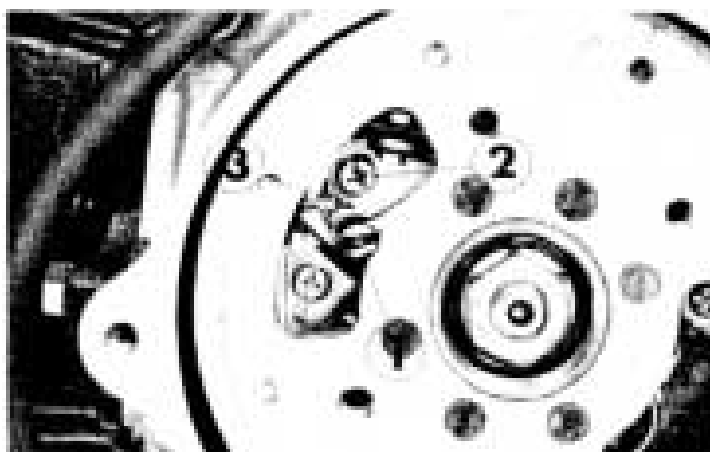
index mark. Check the clearance of both valves by inserting the 0.05mm (0.002 in.) gauge into between the adjusting screw and valve stem.

To adjust, loosen the adjusting screw lock nut ③ (page 28) and turn the adjusting screw ④ so that a slight resistance is felt when the gauge is inserted. After completing the adjustment, tighten the adjusting screw lock nut while holding the adjusting screw to prevent it from turning. Recheck the clearance to make sure that the adjustment has not been disturbed.

## CONTACT BREAKER POINT GAP AND IGNITION TIMING ADJUSTMENT

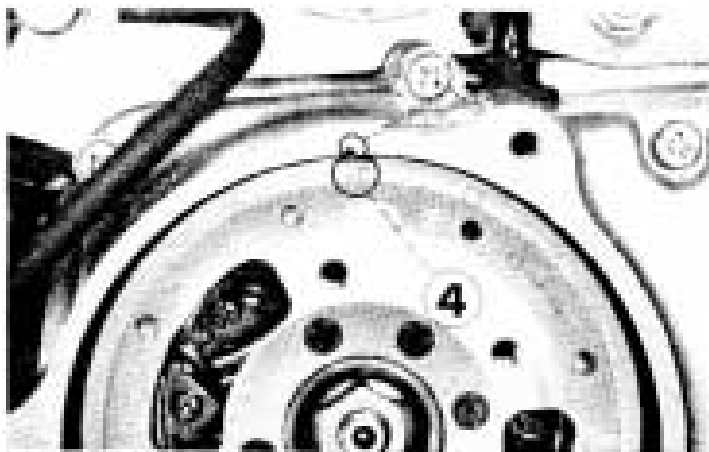
Ignition timing is adjusted by altering the contact breaker point gap ①.

1. Remove the recoil starter located on the left side of the engine.
2. Rotate the flywheel counterclockwise



- ① Contact breaker point
- ② Contact breaker point locking screw
- ③ Contact breaker point base

until the "F" mark ④ aligns with the index mark ⑤. Ignition timing is correct if the contact breaker points just begin to open at this moment.



④ "F" mark ⑤ Index mark

- advance ignition timing. Decreasing the gap will retard ignition timing.
4. Retighten the contact breaker locking screw and recheck ignition timing.

**NOTE :**

Point gap must remain within limits of 0.3–0.4 mm (0.012–0.016 in.) after ignition timing has been set. If correct timing results in a point gap which is outside these limits, replace the contact breaker points.

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3. If ignition timing is incorrect, loosen the contact breaker locking screw ② (page 29) and adjust the breaker point gap. Increasing the gap will

## SPARK PLUG REPLACEMENT AND ADJUSTMENT

For normal riding conditions, we recommend using an NGK C-7HS or ND U-22FS spark plug.

The spark plug may be removed for cleaning or replacement, using the socket wrench and handle provided in the tool kit.

When the used spark plug is removed, inspect the firing tip. If the electrodes and insulator nose appear unusually fouled or burned, we suggest that you contact your Honda dealer for his analysis of the problem.

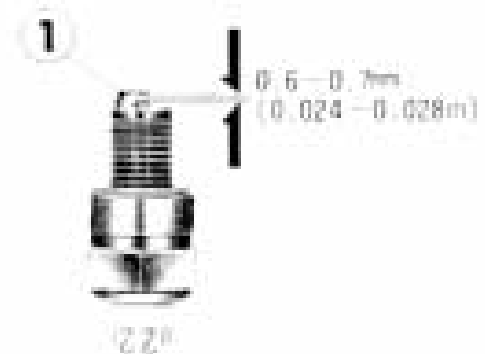
A fouled spark plug indicates an excessively cold spark plug heat range selection, rich fuel mixture or excessive oil consumption.

A spark plug with burned electrodes and

a glazed or blistered insulator nose indicates an excessively hot spark plug heat range selection, lean fuel mixture or excessively advanced ignition timing.

### CAUTION:

**The use of spark plugs of incorrect size or heat range can cause serious engine damage.**



- ① Bend side electrode to adjust plug gap

The spark plug gap should be adjusted to 0.6~0.7mm (0.024~0.028 in.), by inserting a clearance gauge between the electrodes. To adjust the plug gap, carefully bend the side electrode.

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 using the spark plug wrench, tighten the spark plug an additional 1/2 to 3/4 turn or until the sealing gasket is compressed.

## AIR FILTER MAINTENANCE

The air filter element accumulates dust and must be cleaned periodically. If the ATC-70 is ridden in unusually dusty areas, the filter element must be cleaned at more frequent intervals than specified in the MAINTENANCE SCHEDULE.

1. Remove the nut ① and air cleaner cover ②.
2. Remove the filter element from the air cleaner case.

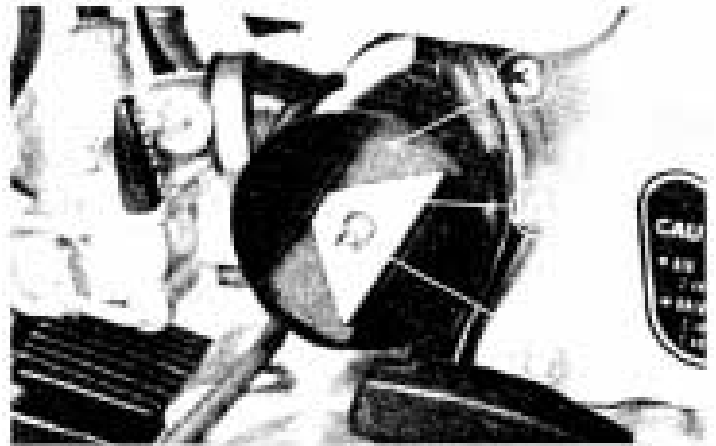


① Nut ② Air cleaner cover

3. Remove air filter element tube ⑤ and support ④ from filter element ③.
4. Wash the filter element in clean stoddard solvent and allow to dry thoroughly.
5. Soak the filter element in clean gear oil (No. 80~No. 90) until saturated, then squeeze out excess oil.
6. Reassemble filter by reversing the disassembly sequence procedures.

**WARNING :**

**Gasoline or low flash point solvents are highly flammable and must not be used to clean air filter elements.**



③ Filter element    ④ Filter element support    ⑤ Filter element tube

## THROTTLE CABLE INSPECTION AND ADJUSTMENT

Inspect the condition and operation of the throttle cable. The throttle cable must not bind or impair smooth operation of the throttle lever in any steering position. Reroute the cable if it is improperly installed. Replace the cable

if it has become worn or kinked.

Free play, measured at the tip of the throttle lever, should be maintained at 5mm (0.2 in.).

The adjusting nut is located the top of the carburetor, against the end of the throttle cable sheath. Slide back the rubber sleeve ① to expose the throttle cable adjuster ②. Replace the sleeve after adjustment.



- ① Rubber sleeve
- ② Throttle cable adjuster

## CARBURETOR ADJUSTMENT

The carburetor should be adjusted with the engine at operating temperature and the choke fully open.

1. Turn the idle speed screw ① until the engine idles at approximately 1,500 R.P.M. The idle speed screw is turned clockwise to increase engine speed and counterclockwise to decrease engine 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 will be found to

be  $\frac{7}{8}$  to  $1\frac{1}{2}$  turns open from a fully closed position.

3. If idle speed changes after adjusting fuel mixture, readjust the idle speed screw ①.

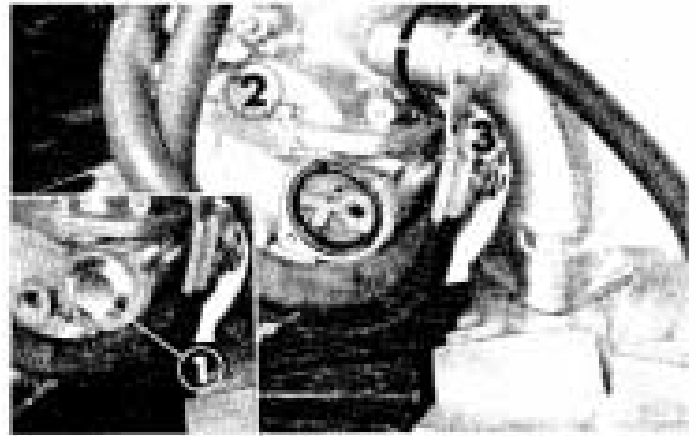


① Idle speed screw    ② Air screw

## FUEL FILTER MAINTENANCE

The fuel filter is located on the right side of the carburetor body. The fine mesh screen of the filter prevents dirt from entering the carburetor passages. Dirt which accumulates at the filter must be removed periodically, or the flow of fuel will eventually be restricted.

1. Turn the fuel valve to the "S" position.
2. Remove the two screws attaching the fuel filter cover, ① and remove the cover.
3. Remove the neoprene "O" ring ② and the filter screen ③.
4. Wash the filter screen in solvent.
5. Reassemble by reversing the disassembly procedures.
6. Turn the fuel valve to the "ON" position, and check for leaks at the fuel filter cover.



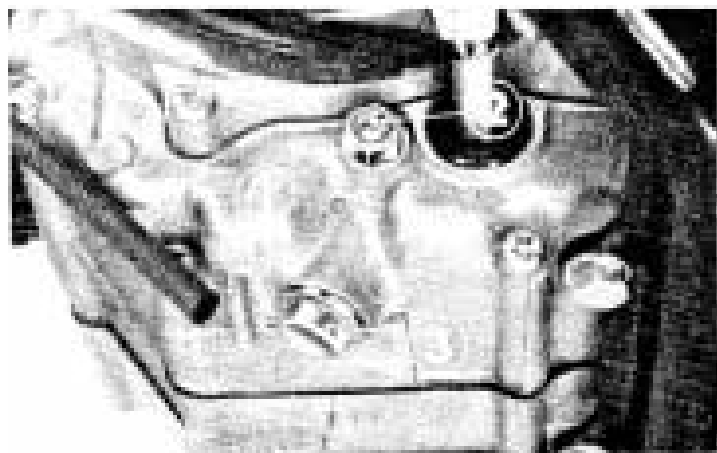
- ① Filter cover    ② "O" ring  
③ Filter screen

## CAM CHAIN ADJUSTMENT

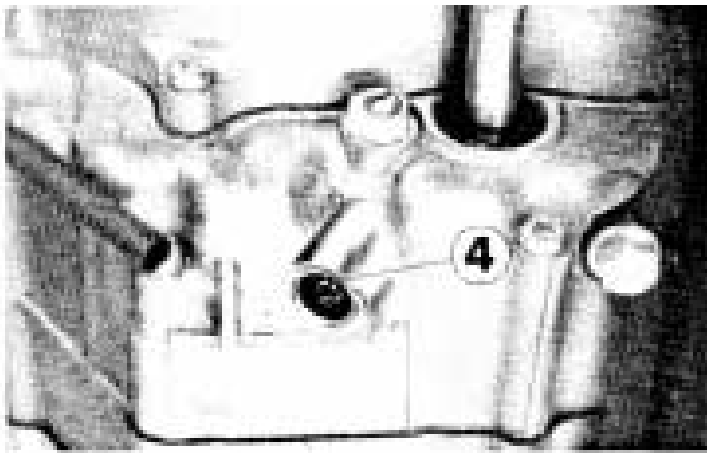
Too tight or too loose a cam chain will adversely affect the engine. Make tension adjustment while the engine is idling.

1. To adjust, loosen the lock nut ①, and loosen tensioner adjust bolt ② approximately one half turn.
2. If the chain is still noisy even after

the above adjustment, loosen the 14 mm sealing bolt ③ located on the left bottom side of the crankcase, and screw in the tensioner bolt ④ gradually until the cam chain becomes quiet. After completing the adjustment, tighten the tensioner adjust bolt, lock nut, and 14mm sealing bolt securely.



① Lock nut    ② Tensioner adjust bolt  
③ Sealing bolt



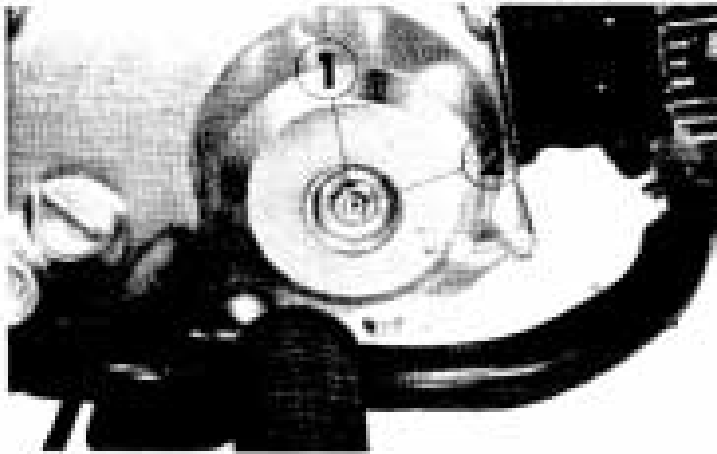
④ Tensioner bolt

## CLUTCH ADJUSTMENT

The automatic clutch must be adjusted with the engine stopped.

Remove the clutch adjuster rubber cap. Loosen the lock nut ①, and turn the clutch adjuster ② counterclockwise until resistance is felt. Then turn the clutch adjuster 1/8 to 1/4 turn clockwise, and tighten the lock nut to hold the adjuster

in this position. After adjusting, start the engine and test ride the ATC-70 to be sure that the clutch is operating properly.



① Lock nut    ② Clutch adjuster

# **RIDING THE HONDA ATC**

## SAFETY PRECAUTIONS

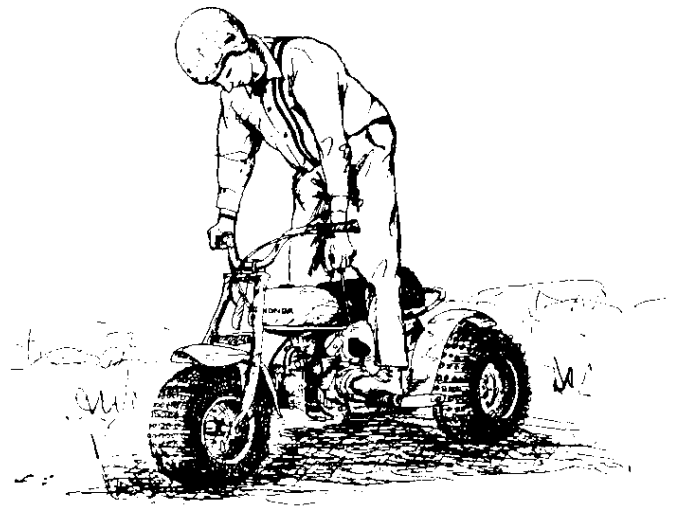
For your initial riding practice, select a safe area, free of obstacles, with an even surface of dirt, sand, snow, etc. Avoid paved surfaces, as they are more difficult on which to learn to maneuver and will also significantly shorten the life of the tires.

The clothing most suitable for comfort and protection varies with factors of climate and hazards of the terrain to be traveled. This matter is therefore best left to the discretion of the individual rider. In all circumstances, however, we recommend wearing a safety helmet, and boots which rise at least above the ankles. Shift the transmission into neutral before starting the engine. Allow sufficient warm-up time before proceeding. Ride with your feet upon the foot pegs

at all times. Under normal riding conditions, it is not necessary nor desirable to touch the ground for balance.

### **WARNING :**

**If your feet are removed from the foot pegs to touch the ground while the ATC is in motion, they come in contact with the rear wheels.**

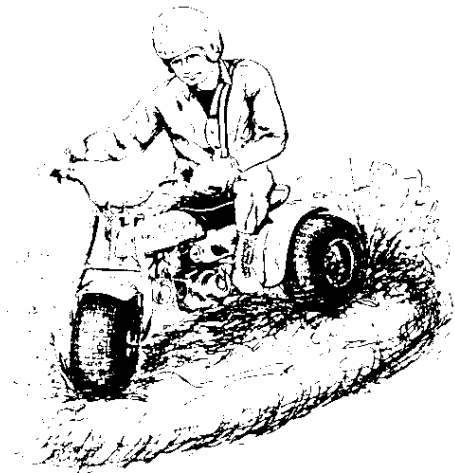


## TURNING MANEUVERS

For better traction in off-the-road use, the ATC has been fitted with a rear axle which drives both rear wheels equally at all times.

When negotiating a turn, however, the wheel on the outside of the turn must travel a wider radius, and thus a greater distance, than the inside wheel. As the

rear axle does not permit differing rate of wheel rotation, it is not enough to merely steer the ATC into a turn. The new rider must learn to shift his weight and control the throttle to allow the rear tires to negotiate the turn. This is the primary technique to be mastered in riding the Honda ATC.



For your initial riding practice, operate the ATC in low gear. Defer higher speeds until you are confident of your proficiency. Practice turning the ATC at slow, constant speeds.

**Steer in the direction of the turn, and lean your body to the inside of the turn, while supporting your weight on the outer foot peg. Use the throttle to maintain power throughout the turn.**

This technique allows the ATC to lean slightly toward the outside, altering the balance of traction between the rear wheels sufficiently to let them negotiate the turn.

Once this technique is learned, turning maneuvers can be performed within a relatively small area.



## SKIDDING

If the front wheel tends to skid in mud or snow, you may be able to improve control under these conditions by leaning forward, transferring additional weight to the front wheel.

If the rear wheels inadvertently skid sideways, correct your slide by steering in the direction of the skid if you have room to perform this maneuver safely. Avoid braking or accelerating until you have directional control of the ATC. To avoid skids while traveling any slippery terrain, the rider must exercise a high degree of caution.

After you become experienced at handling the ATC, you may wish to try some intentional skidding maneuvers. Controlled skids and spins, when performed safely, add to the sport the rider can enjoy. However, as skidding maneuvers

are inherently more hazardous than those performed under full traction, we must caution the rider to first master the basic techniques of handling the ATC before practicing any skidding maneuver.

Incorrect turning technique may cause the front wheel to slide straight ahead when steered, without affecting the ATC's direction of travel. If this should



occur, close the throttle, come to a stop, then continue practice, adhering to the technique out-lined on the preceding page.

The technique in executing a skidding turn differs from the basic turning technique previously outlined, in that the rider must steer more sharply to the side and must open the throttle wider in order to break traction. As greater power is needed to break traction, it is easier to initiate a rear wheel skid with the transmission in low gear.

Once the skid is begun, steering opposite to the direction of the skid will tend to cause the ATC to spin in a circle, while steering in the direction of the skid will tend to cause the ATC to resume a straight course. Lean your body to counter centrifugal force and reduce the

hazard of overturning.

Surface composition is, of course, a major factor affecting skidding capability. It is obviously easier to slide on packed snow than in deep sand. Surfaces with extremely low or extremely high coefficients of friction must not be used for skidding maneuvers, however, it is dangerous to skid on ice, because you may lose all directional control, and it is dangerous to skid on pavement, because you may regain traction suddenly and unexpectedly, which can cause you to lose your balance and overturn.

## CLIMBING HILLS

Practice climbing on even slopes of less than 25°. The ATC's capability in climbing hills or traveling any specific terrain is dependent upon the skill of the rider. As you gain experience in handling the ATC, and learn the hazards to be encountered and your own limitations, you may then proceed to ride more challenging terrain. However, you must first be able to discern and avoid any hill or hazard that would cause the ATC to overturn.

**WARNING:** IF THE FRONT WHEEL IS ALLOWED TO RISE FROM THE GROUND, THIS WILL LESSEN YOUR CONTROL OVER THE ATC, AND FURTHER, MAY CAUSE THE ATC TO OVERTURN BACKWARD. THE SUDDEN APPLICATION OF POWER BY

*OPENING THE THROTTLE OR GEAR CHANGING WILL TEND TO RAISE THE FRONT WHEEL, ESPECIALLY WHILE ASCENDING A HILL.*



The riding technique for hill climbing involves transferring your weight toward the front wheel to keep it in contact with the ground. This may be done by leaning forward from the normal riding position, or for greater weight transference, by standing on the foot pegs and leaning forward.

Take a running start, approaching the base of the hill in the appropriate gear and speed for the ascent, and climb at a steady rate of speed.

If you should find that you have incorrectly estimated climbing capability and lack the power or traction to continue the ascent, then if space permits, turn the ATC while you still have the forward speed to do so and descend. Avoid stalling part way up a hill, as maneuvering will then become more

difficult.

**WARNING:** *BEFORE ATTEMPTING ANY TURNING MANEUVER ON A HILLSIDE, THE RIDER SHOULD FIRST LEARN TURNING TECHNIQUE BY PRACTICING ON LEVEL GROUND.*

If you do lose all forward speed, and can neither continue uphill nor maneuver the ATC under its own power, it will be necessary to dismount and physically turn the ATC about in order to descend.

**WARNING:** *TO AVOID OVERTURNING, THE RIDER MUST EXERCISE A HIGH DEGREE OF CAUTION WHEN DISMOUNTING OR LUGGING THE ATC ABOUT ON A HILLSIDE.*

If it becomes necessary to roll the ATC

backward, first shift the transmission into neutral. Wherever circumstances permit, however, we strongly recommend that the rider turn the ATC rather than backing downhill.

**WARNING:** *APPLYING THE BRAKES OR ENGAGING THE TRANSMISSION, WHILE ROLLING BACKWARD DOWNHILL, CAN EASILY CAUSE THE ATC TO OVERTURN BACKWARD AND TUMBLE UPON THE RIDER.*



## DESCENDING HILLS

It is usually advisable to descend hills with the ATC pointed directly downhill, avoiding angles that would cause the ATC to lean sharply to one side. As you approach the point of descent, stop and survey the terrain below. Never ride headlong past your limit of visibility. When you have picked a safe path of descent, shift the transmission into low gear and descend slowly with the throttle closed. Sit well back in the seat, with arms extended and braced upon the handlebars.

When descending sand dunes, we recommend that the rider also apply the brakes, locking the rear wheels to further retard forward speed.

Braking effectiveness is, of course, reduced while descending any incline

with loose surface composition.



## TRAVERSING SLOPES

When riding across a slope, at right angles to the incline of the hill, lean your body in the uphill direction to maintain balance and stability. In addition, especially on loose surface such as sand, it may become necessary to steer slightly uphill in order to maintain your course of travel.

**WARNING:** *BALANCE IS MORE PRECARIOUS WHILE THE ATC IS TILTED TO ONE SIDE. AVOID TRAVERSING SLOPES WHERE THERE IS SLIPPERY OR DIFFICULT TERRAIN.*



## **TIRE CARE**

The Honda ATC is equipped with 16 × 8—7, low pressure, tubeless tires. For normal use, they should be inflated to a maximum pressure of 3 p.s.i. A manually operated tire pump should be used rather than the high pressure systems found in service stations. This will lessen the chance of accidentally damaging the tires through overinflation.

If no air pressure gauge is available to accurately measure 3 p.s.i., this value can be obtained by measuring the circumference of the tires with a measuring tape. The tires will increase in circumference as air pressure is added. When inflated to 3 p.s.i., the maximum tire circumference, measured over the tread ribs, will be approximately 50 to 52 inches. The relationship between tire

pressure and actual circumference varies slightly with factors of wear and stretching that occur through use.

To increase traction for use in deep snow, the tires may be deflated and run with neutral pressure (0 p.s.i.). The tires can be quickly depressurized by removing the valve cores from the tire valve stems. As soon as all air under pressure has escaped, replace the valve cores. The air remaining in the tires at atmospheric pressure will be sufficient to support the weight of the ATC while ridden in deep snow. Be sure to reinflate the tires to 3 p. s. i. before riding the ATC on firmer terrain.

Be especially careful to inflate both rear tires, equally. If the ATC is operated with unequal tire pressures,

the resultant difference in tire circumference will cause the ATC to tend to run toward one side and will affect handling adversely.

If these tires sustain a puncture, they may be repaired by applying an automotive inner tube patch to the outside surface of the tire. The procedure for applying a patch is the same as that used in patching automobile inner tubes. Any tire that is severely damaged or damaged in a position that will not hold a patch must be replaced.

Whenever the ATC is to be operated far from service facilities or available transport, we recommend that the rider carry with him a tire pump and a suitable tire patch kit.

## TRANSPORTING THE ATC

### Fuel

If the ATC is to be carried on its side, drain the fuel tank and carburetor to prevent leakage during transit.

It is not necessary to drain the crankcase, as no appreciable oil leakage will occur when the ATC is carried on its side.

### WARNING :

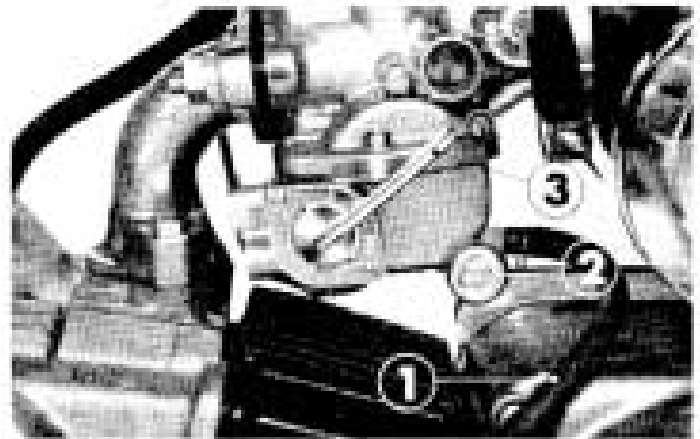
**Gasoline is flammable, and explosive under certain conditions. Always stop the engine and do not smoke or allow open flames or sparks near the ATC-70 when draining fuel or refueling.**

## Draining the Fuel Tank and Carburetor

You may drain all fuel through the carburetor drain tube. This tube is connected to the carburetor float bowl at the left side of the engine and extends downward by the left foot peg.

1. Turn the carburetor fuel valve to the "RES" position. This will allow all gasoline in the fuel tank to drain through the carburetor.
2. Place the free end of the carburetor drain tube into a suitable gasoline container.
3. Open the carburetor drain by turning the drain screw knob counterclockwise.

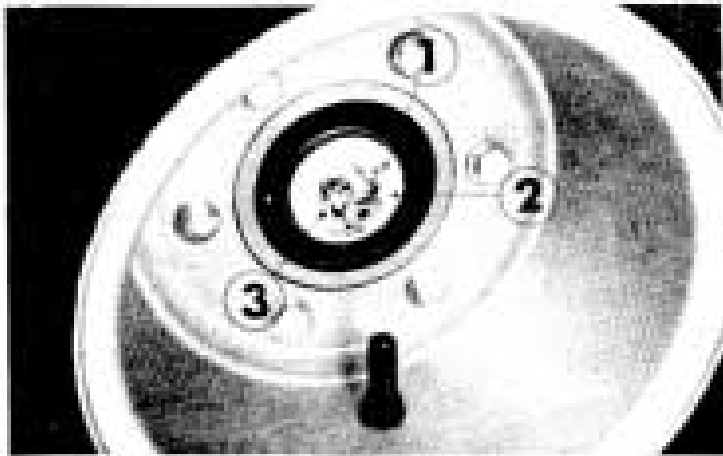
4. When all fuel has been drained from the ATC, close the carburetor drain screw.
5. Turn the carburetor fuel valve to the "S" position.



- ① Drain tube    ② Drain screw  
③ Fuel valve

## REMOVING THE REAR WHEELS

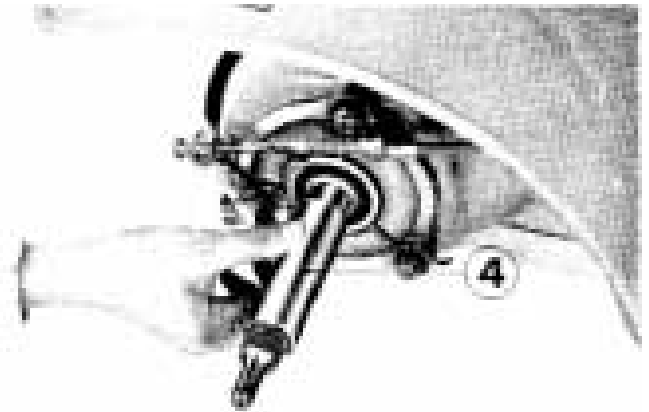
1. Remove the cotter pin ① securing the left rear wheel axle nut ③.
2. Remove the axle nut and washer ②.
3. Remove the left rear wheel and wheel spacer ④ from the axle.
4. The right rear wheel is removed from the axle in the same way as the left rear wheel.



① Cotter pin    ② Washer    ③ Axle nut

## INSTALLING THE REAR WHEELS

Reinstall the rear wheels by reversing the removal procedures. Be sure the raised side of the washer is installed towards the wheel. Replace cotter pins, if damaged.

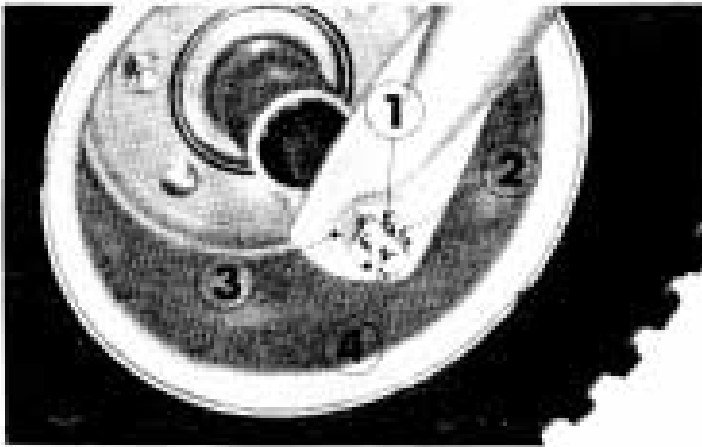


④ Wheel spacer

## REMOVING THE FRONT WHEEL

If limited carrying space requires removal of the front wheel, use the following procedure:

1. Remove the cotter pin ① securing the front axle nut.



- ① Cotter pin    ② Axle nut  
③ Washer      ④ Front axle

2. Remove the axle nut ② and washer ③.
3. Pull out the axle ④ and then remove the front wheel.

---

## INSTALLING THE FRONT WHEEL

Reinstall the front wheel by reversing the removal procedures.

### NOTE :

Install the wheel so the tire valve is on the left side. (As viewed by the rider.) Replace the cotter pin, if damaged. To reduce the hazard of snagging the ends of the cotter pins, while the ATC is operated, we recommend that the projecting ends of the front axle cotter pins be cut close to the axle nuts.

**WARNING :** Be sure that the axle nuts are properly secured by cotter pins; otherwise, the wheels may loosen while the ATC is being operated.

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## SPECIFICATIONS

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### DIMENSIONS

|                |                     |
|----------------|---------------------|
| Overall length | 1,300 mm (51.2 in.) |
| Overall width  | 800 mm (31.5 in.)   |
| Overall height | 785 mm (30.9 in.)   |
| Wheel base     | 895 mm (35.2 in.)   |

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### WEIGHT

|            |              |
|------------|--------------|
| Dry weight | 74 (163 lbs) |
|------------|--------------|

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### CAPACITIES

|              |                       |
|--------------|-----------------------|
| Engine oil   | 0.8ℓ (0.8 U.S. qt)    |
| Fuel tank    | 2.5ℓ (0.6 U.S. gal.)  |
| Reserve fuel | 0.5ℓ (0.13 U.S. gal.) |

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### ENGINE

|                 |                                |
|-----------------|--------------------------------|
| Bore and stroke | 47.0×41.4 mm (1.850×1.630 in.) |
|-----------------|--------------------------------|

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|                           |                              |
|---------------------------|------------------------------|
| Compression ratio         | 7.5 : 1                      |
| Displacement              | 72 cc (4.4 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.)          |

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## CHASSIS AND SUSPENSION

|                           |                  |
|---------------------------|------------------|
| Caster angle              | 67°              |
| Trail length              | 32 mm (1.26 in.) |
| Tire size, front and rear | 16×8-7           |

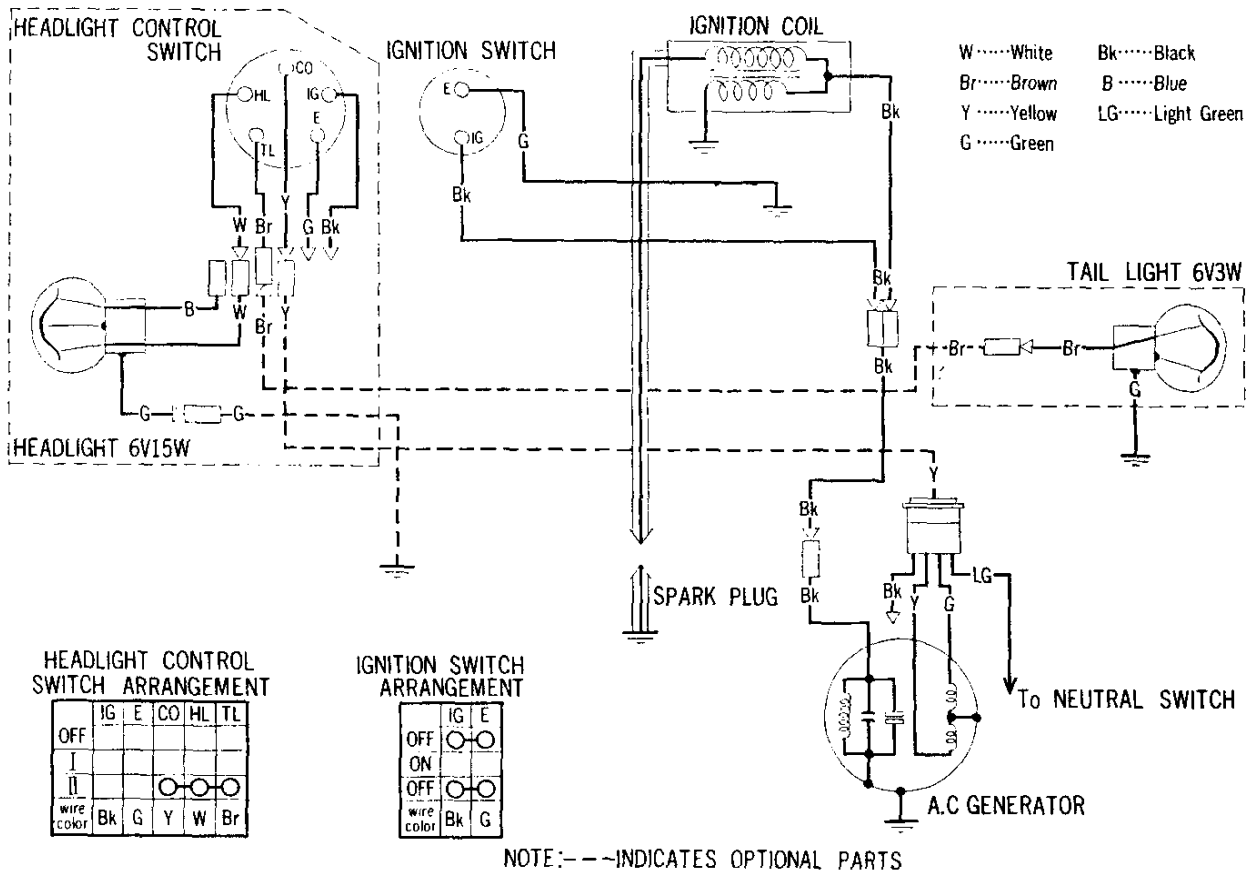
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## POWER TRANSMISSION

|                   |       |
|-------------------|-------|
| Primary reduction | 4.058 |
| Final reduction   | 2.500 |
| Gear ratio, 1st   | 3.272 |
| 2nd               | 1.722 |
| 3rd               | 1.190 |

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## WIRING DIAGRAM



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