# HONDA 50 MODEL QA50

OWNER'S MANUAL

### READ OWNER'S MANUAL CAREFULLY:

THIS VEHICLE WAS MANUFACTURED FOR OFF-THE-ROAD USE ONLY. DO NOT OPERATE ON PUBLIC STREETS, ROADS, OR HIGHWAYS.

# Message to Mom & Dad:



Most Honda Mini-Trails 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 QA-50 is designed and equipped for off-the-road use only and should not be operated on public streets. A minibike 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 mini-bike 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.



#### ·mmmmmmmmmrfOREWORD

It is with great pleasure that we welcome you as a new owner of the HONDA Mini-Bike. Further, we wish to thank you for selecting a HONDA product.

This mini-bike features a quiet engine and a light weight construction, and has been designed for easy handling. It is not designed, equipped, or approved for operation on public highways or roads.

This Owner's Manual is a guide for the proper operation and servicing of your

Mini-Bike Read it thoroughly so that you will be able to maintain your Mini-Bike in the best of condition for the utmost in riding pleasure.

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

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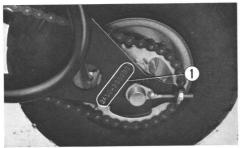
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WIRING DIAGRAM

## 

The frame No. ① is stamped on the left side of the rear wheel axle bracket.

The engine No. ② is located on the left side of the engine at the bottom

These serial numbers are required for applying for warranty claims or ordering parts, the frame No. should be stated to assure receiving the proper parts.

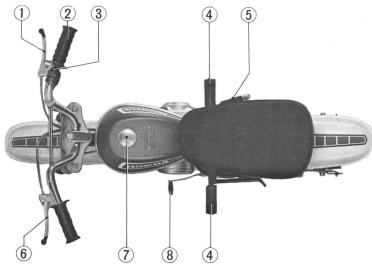


1 Frame serial number



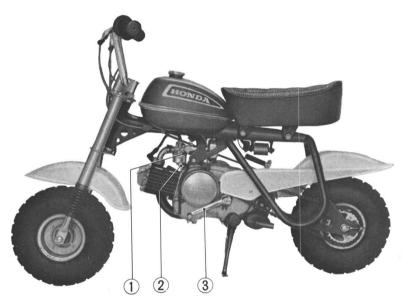
2 Engine serial number

## vanaaaaaaaaaaaacCONTROL LOCATIONS



- ① Front brake lever
- 2 Throttle grip3 Ignition switch
- **4** Foot rests
- ⑤ Kick starter pedal⑥ Rear brake lever

- 7 Fuel tank cap8 Gear change pedal



① Choke lever ② Fuel drain valve ③ Gear change pedal

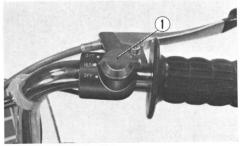


① Kick starter pedal ② Fuel valve

### OPERATING INSTRUCTIONS

## **Ignition Switch**

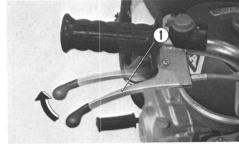
The ignition switch ① is located on the right side of the handlebar. Turn the switch to "RUN" when starting the engine and to "OFF" when stopping.



1 Engine stop switch

#### Front Brake Lever

The front brake lever ① is located on the right handlebar. Application of the front brake is effected by squeezing the front brake lever with a force proportional to the braking effort required.



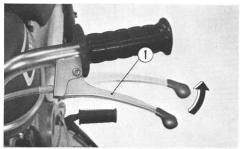
1 Front brake lever

#### Rear Brake Lever

The rear brake lever ① is located on the left handlebar. Application of the rear brake is effected by squeezing the rear brake lever with a force proportional to the braking effort required.

## 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 Rear brake lever



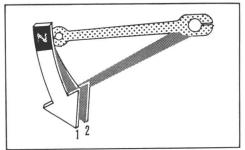
1) Gear change pedal

Shifting to low from neutral is performed by depressing the gear change pedal; successive shifting into second (top) is made by depressing the pedal in sequence. Shifting down in gear is accomplished by lifting up the gear change pedal in successive sequence. The shifting sequence pattern is shown below.

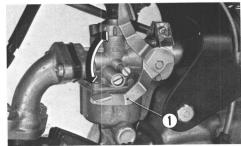
#### Choke Lever

The choke lever ① is located on the left side of the carburetor.

Raising the lever will close the carburetor choke. Placing the lever in the lowered position will open the choke valve fully. Refer to page 13 for operating instruction of the choke valve.



Gear shifting sequence



1 Choke lever

### """ FUEL AND OIL """" """"

#### Fuel Tank

The fuel tank capacity is 1.2 gal.

Use of low-lead gasoline with a 91 octane rating or higher is recommended. Do not mix fuel with the oil.

If such gasoline is not available, you may use a leaded regular grade gasoline.

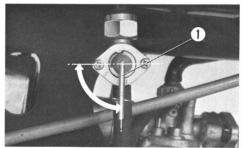
#### WARNING:

Gasoline is flammable and explosive under certain conditions. Always stop the engine and allow open flames or sparks near the motorcycle when refueling.

#### Fuel Valve

The fuel valve ① is located on the right side under the fuel tank.

Turning the lever to the vertical position will allow fuel to flow from the fuel tank. This lever should be turned to the horizontal position to shut off the fuel from the tank whenever the engine is stopped.



1) Fuel valve

## **Engine Oil Recommendation**

Use only high detergent, premium quality motor oil certified to meet or exceed US automobile manufacturer's requirements for Service Classification SE.

Motor oils intended for Service SE will show this designation on the container. The regular use of special oil additives is unnecessary and will only increase operating expenses.

Engine oil should be changed at the intervals prescribed in the Maintenance Schedule on pages 16 and 17.

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

#### Viscosity

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

Recommended oil viscosity:

General, all temperatures SAE 10 W-40 Temperatures above 59°F SAE 20 W-50 Alternate:

Above 59°F SAE 30

32° to 59°F **SAE 20** or **20** W

Below 32°F SAE 10 W

## PRE-RIDING INSPECTION .......

Prior to staring you mini-bike, it is advised that you perform a general inspection as a matter of habit to make sure that the motorcycle is in good, safe riding condition. This inspection will only require a few minutes and can save you much time and expense in the long run. Check the following items and if adjustment or servicing is necessary, refer to the appropriate section in the manual.

 Engine oil level—add engine oil if it is below the lower level mark on the dipstick (page 18)

- Fuel level—fill gasoline when it is not enough for travel (page 11)
- 3. Front and rear brakes—adjust free play in the front brake and brake levers if it is incorrect. (page 30~31)
- Tire air pressure—low tire pressure will result in poor riding and poor stability characteristics. Standard tire air pressure is 14 psi.
- 5. Drive chain—adjust chain tension when it is too loose (page 28~29)
- 6. Throttle operation—repair if it is not smooth (page 25)

### STARTING ENGINE

## Starting a Cold Engine

It is recommended that the following procedures be followed when starting the engine.

- 1. Turn the fuel valve to the "ON" position and position the ignition switch to "RUN" position.
- 2. Raise the choke lever to choke the carburetor.
- 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.
- After the engine starts, operate for 2~
   3 minutes at medium speed to warm

up the engine.

5. When the engine is warm, place the choke lever in the open position (lever down)

## 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.

## 

1. After the engine has been warmed up. it is now ready for riding. First, return the throttle to the idling

position, depress the gear change pedal to shift into low gear. 2. Increase the engine speed by twisting

the throttle grip inward.

When the mini-bike attains at speed of approximately 10 mph close the throttle and shift to 2nd gear by depressing the gear change pedal. (refer to page 9~10 for operation of gear change pedal).

NOTE: When shifting gears either up or down, the throttle must be closed. This is to prevent damage to the gears. Due to the engine torque of this small vehicle shifting gears while the throttle is open may cause the rider to lose control.

- 3. The most important point to keep in mind when applying brakes is to apply both the front and rear brakes together. The front brake is operated by the front brake lever located on the right side of handlebar, the rear brake is operated by the rear brake lever located on the
- 4. When the ignition switch (refer to page 8) is turned to "OFF" position, the engine will be stopped.

left side of the handlehar.

5. Whenever parking the mini-bike for a long period, position the fuel valve lever to the "S" position to shut off the flow of fuel.

#### www.carrying tips///www.

Do not transport the motorcycle on its side or in a tilted position. However, with use of the special fuel tank cap available as an option, the motorcycle can be transported on its side without fuel spilling; in this case, follow the procedure below.

- 1. Shut the fuel tank cap valve to the "OFF" position.
- 2. Shut the fuel valve to the "S" position.
- Screw out the fuel drain valve ① located on the left side of the carburetor to empty the fuel contained in the carburetor and then close the valve.



① Fuel drain valve

#### MAINTENANCE MAINTENANCE

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

Items marked \* should be serviced by an authorized Honda dealer, unless the owner has proper tools and is mechanically proficient. Other maintenance items are simple to perform and may be serviced by the owner.

#### MAINTENANCE SCHEDULE

MAINTENANC	E SCHEDULE	
INITIAL SERVICE PERIOD	<ul> <li>ENGINE OIL—Change.</li> <li>*CONTACT POINTS AND IGNITION TIMING—Clean, check, and adjust or replace if necessary.</li> </ul>	<ul> <li>DRIVE CHAIN—Check, lubricate, and adjust if necessary.</li> <li>BRAKE CONTROL LINKAGE—Check linkage and adjust if necessary.</li> </ul>
	<ul> <li>*VALVE TAPPET CLEARANCE         —Check and adjust if necessary.     </li> </ul>	<ul> <li>TIRES—Inspect and check air pressure.</li> <li>ALL NUTS, BOLTS, AND</li> </ul>
	<ul><li>*CARBURETOR—Check and adjust if necessary.</li></ul>	OTHER FASTENERS—Check security and tighten if necessary.
FIRST WEEK OF OPERA- TION	<ul> <li>THROTTLE OPERATION— Inspect cable. Check and adjust free play.</li> </ul>	
	<ul><li>*CLUTCH—Check operation and adjust if necessary.</li></ul>	

REGULAR
<b>SERVICE</b>
PERIOD

## EVERY 30 OPERATING DAYS

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

- ENGINE OIL—Change.
- SPARK PLUG—Clean and adjust gap, or replace if necessay.
- \*CONTACT POINTS AND IGNITION TIMING—Clean, check, and adjust or replace if necessary.
- \*VALVE TAPPET CLEARANCE
   —Check and adjust if necessary.
- POLYURETHANE FOAM AIR FILTER ELEMENT—Clean and oil. Service more frequently if operated in dusty areas.
- \*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.

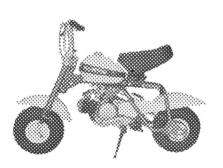
## **EVERY YEAR**

- FUEL LINE-Check.
- \*STEERING HEAD BEARINGS—Adjust.
- \*BRAKE SHOES—Inspect and replace if worn.

## """ MAINTENANCE OPERATIONS

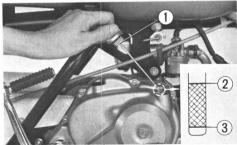
## **Engine Oil Replenishment**

Check engine oil level at pre-riding inspection (refer to page 13) and replenish engine oil when the level is limit mark. Check the level with the oil filler cap dipstick without screwing it in.



## **Engine Oil Change**

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



Oil filler cap dipstick
 Upper level mark

3 Lower level mark

- 1. Remove the oil filler cap ① from the right crankcase cover.
- 2. Place a drip pan under the crankcase to catch the oil and then remove the drain plug 4.
- 3. After the oil stops draining from the crankcase, operate the kick starter several times to drain any oil which may be left in the engine.
- 4. When the oil has been completely drained, reinstall the drain plug, mak-



4 Drain plug

- ing sure that the packing used on the plug is in good condition.
- 5. Fill the crankcase through the oil filler opening with approximately 1.0 US qt. (1 liter) of recommended grade oil. Check the oil level with filler cap dipstick. Oil level should be between the upper ② and lower ③ oil level marks on the dipstick.

(refer to page 18)

#### NOTE:

- Do not operate the engine if the oil level is below the lower 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.

## Spark Plug

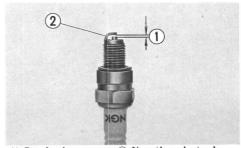
NGK C-7 HS or ND U 22 FS spark plug is used on this model. Servicing of the spark plug is as follows.

- Remove the spark plug with the spark plug wrench which is attached under the seat after removing the high tension cord terminal cap.
- Check tip of the spark plug for fouling or deposit.
  - Clean the spark plug with a spark plug cleaner, however, if it is not available, use a stiff pin or brush to remove the deposited substance, and wash in solvent followed by drying with a rag.
- 3. Adjust the spark plug gap ① to 0.024~ 0.028 in. (0.6~0.7 mm) with a clearance gauge.
  - The adjustment is made by bending the negative electrode ②.
- 4. When installing the spark plug, it should be first screwed in finger tight and then

torqued with the spark plug wrench for further 1/2 to 3/4 turn.

#### NOTE:

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



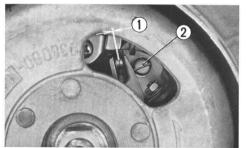
(1) Spark plug gap

② Negative electrode

## **Ignition Timing**

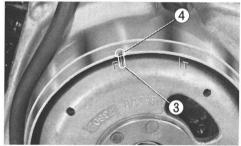
Adjustment of contact breaker point gap and ignition timing are required to maintain satisfactory engine performance.

- 1. Remove the left crankcase cover.
- 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 feeler gauge.
- 3. The standard gap ① is 0.012-0.016 in. (0.3-0.4 mm).
- 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.



Breaker point gap
 Breaker locking screw

3 "F" mark
4 Timing index

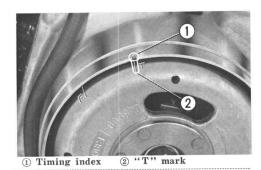


5. After completing the breaker point gap adjustment, recheck the ignition timing. To perform the check, rotate the flywheel so that when "F" mark ③ on the flywheel is aligned to the timing index ④ on the left crankcase flange, the breaker points just begin to open.

## 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 cylinder head cover by loosening a fixing bolt.
- 2. Remove the left crankcase cover.
- 3. Rotate the flywheel counterclockwise until the "T" mark ② on the flywheel lines up with the timing index ① on the crankcase flange.



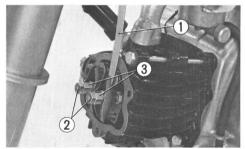
In this position, the piston may either be on the compression or the exhaust stroke. The adjustment must be made when the piston is on the top dead center of the compression stroke, that is when both valves are closed. This condition can be determined by shifting the tappets with fingers and if the tappets 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.

4. The valve tappet clearance is measured between the valve stem and tappet. Both the inlet and the exhaust valves should be adjusted to 0.002 in. (0.05 mm). To perform the adjustment, loosen the adjuster lock nut ② and turn the adjuster③. Turning the adjuster in the clockwise direction will reduce the clearance.

OTE: Make sure that the adjustment

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.

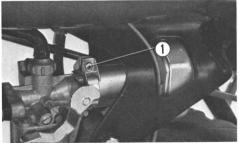


- 1) Feeler gauge
- 2 Adjuster lock nut
- 3 Adjuster

#### Air Filter

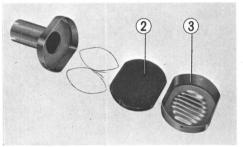
Air filter element cleaning and or replacement depends on the motorcycle operating conditions. Your HONDA dealer can help you to determine the frequency of cleaning or replacing the element.

- Unscrew the air filter tube fixing screw ① and remove the air filter from the carburetor.
- 2. Unscrew the two air filter cover



1 Air filter tube fixing screw

- screws and separate the air filter cover 3.
- 3. Remove the air filter element 2.
- Wash the air filter element in clean stoddard solvent and allow to dry thoroughly.
- 5. Soak the air filter element in clean gear oil (No. 80-No. 90) until saturated, then squeeze out excess oil.
- 6. Reinstall the air filter into the air filter



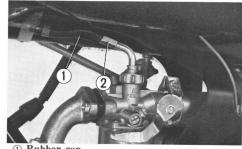
- 2 Air filter element
- 3 Air filter cover

## Throttle Grip Play

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

- 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.
- Standard throttle grip free play is approximately 10~15° of the grip rotation. 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 becomes  $10\sim15^{\circ}$ .



- 1 Rubber cap
- 2 Throttle cable adjuster

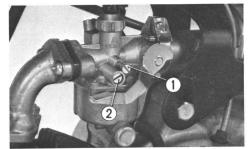
#### Carburetor

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

- 1. Adjust the engine idle speed to approximately 1, 400 rpm with the throttle stop screw ①
- Turn the air screw ② slowly back and forth to obtain the point of the highest engine rpm.
   Standard air screw setting is 11/8 to 13/8

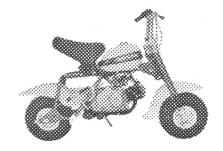
- from full close position.
- 3. If the idle speed increases excessively, reduce the speed with the throttle stop screw, then recheck the air screw.

  Repeat the above procedure again if necessary to obtain a stable adjustment.



1 Throttle stop\_screw



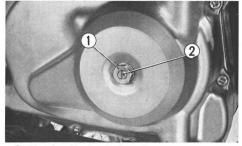


#### Clutch

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

- Clutch must be adjusted with the engine shut off. Loosen the clutch adjuster lock nut ①.
- Turn the clutch adjuster ② clockwise about one turn; do not turn excessively.
- Next, slowly turn the clutch adjuster counterclockwise and stop when the screw starts to turn heavy.
- From this point, back off the adjuster in the clockwise direction 1/4 to 1/3 turn, and then tighten the lock nut.
- 5. Check to make sure that the clutch operates properly after adjustment.
  - 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.



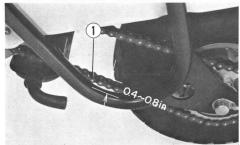
1 Clutch adjuster lock nut

2 Clutch adjuster

#### Drive Chain

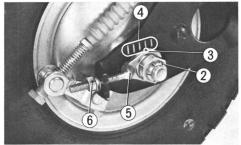
The tension of the drive chain will have considerable effect on the transmission of power from the engine to the rear wheel and on the life of the chain itself. Therefore, the chain should always be maintained at the proper slack, in other words, not too tight and not too loose. Whenever adjustment is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

1. The maximum amount of the drive



1) Drive chain

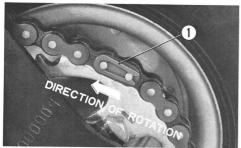
- chain slack is measured by pressing the chain up and down at the midpoint between the sprockets. The maximum slack of the chain should be 0.4~0.8 in. (10~20mm)
- 2. If adjustment is necessary, loosen the rear axle nut ②.
- Adjust the chain slack with the lock nut ® by turning it in the clockwise, this will decrease the chain slack;



- 2 Rear axle nut
  - Index markReference mark
- (5) Chain adjuster(6) Chain adjuster lock nut

turning the counterclockwise will loosen the chain. Upon completion of adjustment, the index mark ③ on the both the right and left chain adjusters ⑤ should be at the same reference marks ④ on the rear forks. (page 28)

- 4. Finally, tighten the axle nut securely to prevent the nut from loosening.
- 5. When the drive chain is dirty excessively, it is recommended that the drive



1 Master link retaining clip

chain be cleaned as following steps.

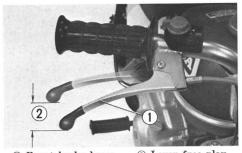
- Carefully remove the master link retaining clip with pliers. Do not bend or twist the clip. Remove the master link. Remove the drive chain from the bike.
- 2) Clean the drive chain in solvent and allow to dry. Inspect the drive chain for possible wear or damage. Replace any chain that has damaged rollers, loose fitting links, or otherwise appears unserviceable.
- 3) Lubricate the drive chain.
- 4) Install the master link retaining clip ① so that the closed end of the clip will face the direction of forward wheel rotation.
- 5) Adjust the drive chain to the proper tension, following the instructions on page 28~29.

#### Front Brake

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

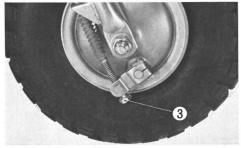
- 1. Raise the front wheel off the ground by placing a support block under the engine, spin the front wheel by hand and measure the amount the front brake lever ① must be moved before the brake starts to take hold. The lever
- free play ② should be  $0.8\sim1.2$  in. (20 $\sim$  30mm) at the end of the 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 Lever free play



3 Front brake adjusting nut

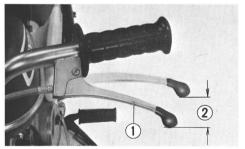
#### Rear Brake

should always be maintained in proper adjustment.

- 1. Raise the rear wheel off the ground by placing the support block under the motorcycle.
- 2. Rotate the rear wheel by hand and note distance the rear brake lever free play (2) before the brake takes hold

Brakes are items of personal safety and 3. Nominal free play is 0.8~1.2 in. (20~ 30 mm).

> If the adjustment is necessary, make the adjustment by turning the rear brake adjusting nut 3. Turn clockwise for less free play, counterclockwise for greater free play.



1) Rear brake lever

2 Lever free play

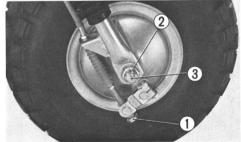


(3) Rear brake adjusting nut

#### Front Wheel Removal

Removal of the front wheel is performed in the following manner.

- Place a suitable block under the engine to raise the front wheel off the ground.
- Remove the front brake adjusting nutand remove the front brake cable from the brake arm.
- 3. Remove the front wheel axle nut ② and pull out the front wheel axle ③.
- 4. The front wheel can be removed from the frame.
- Installation of front wheel is performed in the reverse order of described above.

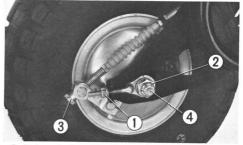


- 1) Front brake adjusting nut
- 2 Front wheel axle nut
- 3 Front wheel axle

#### Rear Wheel Removal

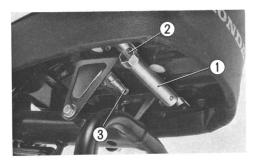
Removal of the rear wheel is performed in the following manner.

- 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 ① and rear wheel axle nut ②.
- Remove the chain joint clip and drive chain.
- Unscrew the rear brake adjusting nut
   and separate the rear brake cable from the rear brake arm.
- 5. Pull out the rear wheel axle (4) and then the rear wheel can be disassembled from the fame.
- Installation of rear wheel is performed in the reverse order of described above.



- 1) Drive chain adjusting nut
- 2 Rear wheel axle nut
- 3 Rear brake adjusting nut
- 4 Rear wheel axle

## 



The spark plug wrench and valve joint are attached under the seat.

① Spark plug wrench: For spark plug and axle nut

② Handle bar:

For spark plug wrench

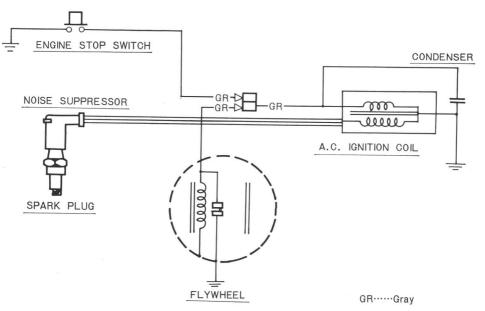
3 Valve joint: For inflating tire

### ......SPECIFICATIONS

Overall length Overall width Overall height Wheel base	47.2 in. (1,200 mm) 24.0 in. (610 mm) 32.9 in. (835 mm) 34.4 in. (875 mm)
WEIGHT Dry weight	84 lbs (38 kg)
CAPACITIES  Engine oil Fuel tank	1.0 US qt. (1.0 liter) 1.2 US gal. (4.5 liter)
ENGINE  Bore and stroke  Compression ratio	1.654×1.405 in. (42.0×35.6 mm) 8.5:1

Displacement	3.0 cu. in. (49 cc)	
Contact breaker point gap	0.012~0.016 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	66°	
Trail	1.7 in. (43 mm)	
Tire size, front	4.00-5 (2 PR)	
Tire size, rear	4.00-5 (2 PR)	
POWER TRANSMISSION		
Primary reduction	3.000	
Final reduction	1.800	
Gear ratio, 1st.	4.272	
2nd	2.625	

# """ WIRING DIAGRAM



# MEMO