# MODEL Z50A

OWNER'S MANUAL



HONDA MOTOR CO., LTD. 1976

#### - IMPORTANT NOTICE

- ADULT SUPERVISION REQUIRED.
- READ OWNER'S MANUAL CAREFULLY.
- NOT RECOMMENDED FOR CHILDREN UNDER 7 YEARS OLD.
- OPERATOR ONLY, NO PASSENGERS.

This motorcycle is designed and constructed as an operator only model. The seating configuration does not safely permit the carrying of a passenger. Do not exceed the vehicle capacity load limit shown on the tire information label.

• FOR OFF THE ROAD USE ONLY.

This vehicle is designed and manufactured for off-the-road use only. It does not conform to Federal Motor Vehicle Safety Standards and operation on public streets, roads, or highways is illegal.

All information, illustrations, directions and specifications included in this publication are based on the latest product information available at the time of approval for printing. HONDA MOTOR CO., LTD. reserves the right to make changes at any time without notice and without incurring any obligation whatever.

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## IMESSAGE TO THE PARENTSI

This motorcycle is a fine learning motorcycle as long as the following precautions are observed:

- The parent or instructor must be fully familiar with the motorcycle, the motorcycle controls and the control functions before starting to teach a junior rider. Both instructor and student must fully understand everything in this manual before riding instruction begins.
- The Z50A is an OPERATOR ONLY model. The rider weight limit of 68 kg (150 lbs) must be observed.
- A potential student rider must be of sufficient size to hold the motorcycle up while he is straddling it with both feet on the ground. He must also have

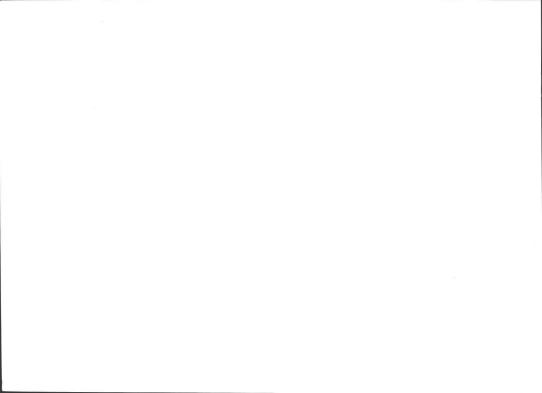
- sufficient strength to right the motorcycle if it is laid on its side.
- The student rider must be dressed in protective apparel including a helmet, eye protection, gloves, boots and heavy clothing.
- The practice location must be a level uncongested area.
- It is illegal to ride the Z50A on public streets, roads or highways. It must be ridden only in off-the-road areas where such activities are permitted.

- Empty the fuel tank before transporting the motorcycle.
- For safety, the Z50A must be properly adjusted and maintained. Be sure to make a "Pre-Riding Inspection" and be sure to impress upon the student rider the importance of checking all the items thoroughly before riding the motorcycle.
- A prime objective in the instruction process is developing the student's self-confidence. This self-confidence comes with a total familiarization with the motorcycle controls and their functions.

WARNING: Flared pants or pants with large cuffs can catch on control levers, kick starter, foot pegs and drive chain and, consequently, are specifically NOT RECOMMENDED as rider apparel.

- Always obey local off-road riding laws and regulations and show respect for private property by obeying posted signs.
- Always preserve nature. Be especially careful where there are fire hazards such as dry grass conditions where you are riding.
  - Clean up trash and do not litter.
- When off-road riding, ride in the company of a friend on another motorcycle so that you can be of mutual assistance to each other in the event of trouble.
  - Familiarity with your motorcycle is critically important in off-road riding. NEVER ride beyond your ability and experience.

- Know the terrain on which you are riding. Always ride so that your visibility is sufficient to give adequate warning of upcoming hazards.
- NEVER ride faster than conditions warrant.
- Don't modify your exhaust system.
   Remember that excessive noise antagonizes everyone and creates a bad image for motorcycles.
- Remember that spark arrestors are required in many areas.



## PREFACE

THANK YOU for selecting a HONDA Mini-Trail.

This mini-bike is specially designed to be conveniently carried in automobiles, light airplanes, boats, etc. It is not designed, equipped or approved for riding on public highways or roads.

This OWNER'S MANUAL gives information on safe riding and proper servicing of your Mini-Trail. Read it carefully to maintain your Mini-Trail in top performance for many pleasant riding miles.

Your HONDA Dealer is happy to give you assistance whenever you have any problem.

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

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

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

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

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

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## **SPECIFICATIONS**

#### **DIMENSIONS**

Overall length

Overall height

Wheel base

Dry weight

#### CAPACITIES

Engine oil Fuel tank

Passenger capacity

#### **ENGINE**

Bore and stroke

Compression ratio

Displacement

Contact breaker point gap

Spark plug gap

Valve tappet clearance

1,300 mm (51.2 in.)

615 mm (24.2 in.)

850 mm (33.5 in.)

895 mm (35.2 in.)

53 kg (117 lbs)

0.8 & (0.8 U.S. qt, 0.7 Imp. qt)

4.0  $\ell$  (1.1 U.S. gal. 0.9 lmp. gal)

Operator only

39.0×41.4 mm (1.535×1.630 in.)

8.8:1

49 cc (3.0 cu in.)

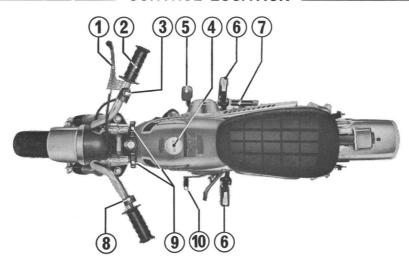
0.3~0.4 mm (0.012~0.016 in.)

0.6~0.7 mm (0.024~0.028 in.)

0.05 mm (0.002 in.)

CHASSIS AND SUSPENSION	
Caster	65°
Trail	42 mm (1.7 in.)
Tire size, front	3.50—8 (2 P.R. or 4 P.R.)
Tìre size, rear	3.50—8 (2 P.R. or 4 P.R.)
TRANSMISSION	
Primary reduction	3.722
Final reduction	3.083
Gear ratio, 1 st.	3.181
2 nd.	1.823
3 rd.	1.190
LIGHTS	
Headlight	6 V-15 W
Taillight	6 V-5.3 W (3 CP)

## CONTROL LOCATION



- 1) Front brake lever
- (5) Rear brake pedal
- Handlebar knobs
- ② Throttle grip

- 6 Foot pegs 7 Kick starter pedal

3 Ignition switch

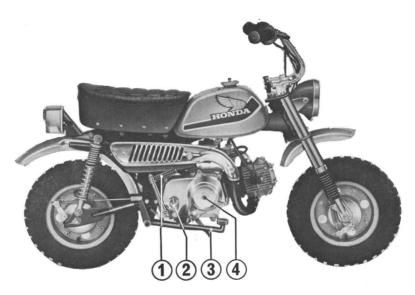
10 Gear change pedal

- 4 Fuel tank cap
- (8) Headlight switch



① Choke lever

② Gear change pedal
③ Fuel valve



① Kick starter pedal

2 Oil filler cap

<sup>3</sup> Rear brake pedal
4 Clutch adjuster

## Frame and Engine Serial Numbers

lower left side of the engine. Refer to for your model series.

The frame serial No. ① is stamped on the frame or engine serial number when the left side of the steering head. The ordering replacement parts to ensure engine serial No. 2 is stamped on the that you will obtain the correct parts



Frame serial number



2 Engine serial number

## **Ignition Switch**

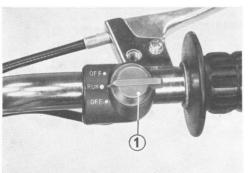
The ignition switch ① is located at the right handlebar grip.

Move the switch to the "RUN" (red dot) position to switch on ignition and to the "OFF" (black dot) position to stop the engine.

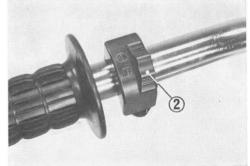
## **Headlight Switch**

The headlight switch ② is located at the left handlebar grip.

Start the engine, then move the switch to the "ON" position to light headlight and taillight and to the "OFF" position to shut off the lights. The headlight operates only when the engine is running.



1 Ignition switch



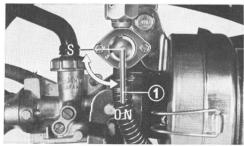
(2) Headlight switch

#### Fuel Valve

The fuel valve is located on the left Fuel tank capacity is 4.0 ℓ (1.1 U.S. gal.) side under the fuel tank

Turning the lever ① to the vertical lever ③ with "ON" and "OFF" posiposition "ON" will allow fuel to flow tions to open or close the tank vent. from the fuel tank

fuel from the tank whenever the engine is stopped.



Fuel valve lever

#### Fuel Tank

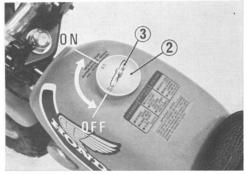
The fuel tank cap (2) (page 12) has a The fuel tank cap lever 3 should be This lever should be turned to the turned to "ON" to allow fuel to flow horizontal position "S" to shut off the when running the engine. Turning the lever to "OFF" will prevent fuel from flowing out of the vent hole when transporting the Mini-Trail. Always tighten fuel tank cap firmly.

> Use low-lead or regular gasoline with a Research Octane number of 91 or higher or a Pump Octane number of 86 or higher.

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

#### **WARNING:**

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



② Fuel tank cap

(3) Fuel tank cap lever

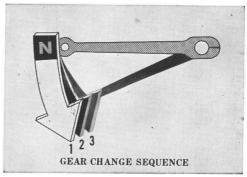
## Gear Change Pedal

The gear change pedal ① is located on the left side of the engine.

Shifting to first from neutral is performed by depressing the gear change pedal. is shown below. Successive shifts into second and third Close the throttle when shifting gears. gear are made by depressing the pedal in sequence.

FICTRIDA

Shifting down is accomplished by lifting up the gear change pedal in successive sequence. The shifting sequence pattern



(1)Gear change pedal

## STARTING ENGINE

#### **WARNING:**

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

## Starting a Cold Engine

Observe the following procedure when starting the engine.

- Turn the fuel valve lever to the "ON" position.
- 2. Turn the fuel tank cap lever to the "ON" position.
- 3. Turn the ignition switch to "RUN".
- Raise the choke lever ① to close the choke valve.
- 5. Open the throttle slightly, and operate the kick starter with a rapid stroke.



① Choke lever

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

If the engine does not start with the above procedure, turn the ignition switch to the "OFF" position, set the choke lever to the fully open position (choke lever in the down position) and crank the engine several times with the throttle fully open.

Next, turn the ignition switch to "RUN" and follow the normal starting procedure.

- 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 (lever down).

## Starting in Extremely Cold Weather

Prime the engine before starting by cranking the engine several times with the ignition 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.

#### **WARNING:**

Exhaust contains poisonous carbon monoxide gas. Avoid inhalation of exhaust gases. Never run the engine in a closed garage or confined area.

## RIDING TIPS I

#### **WARNING:**

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

### Seat Height Adjustment

Seat height can be adjusted by using the alternate mounting bracket holes. When the seat is bolted using the lower holes ② in the bracket, its height will be increased approx. 25mm (1 in.).



(1) Seat attaching bolts

② Lower holes

## **Shifting Gears**

After the engine has been warmed up, the Mini-Trail is ready for riding.

Close the throttle to the idle position and depress the gear change pedal to shift into low (1 st.) gear. Increase the engine speed by opening the throttle. When the Mini-Trail attains moderate speed close the throttle and shift to 2nd gear by depressing the gear change pedal. This sequence is repeated to shift into 3rd gear. (refer to page 13).

#### **WARNING:**

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

CAUTION: Do not coast with the engine off, and do not tow the motorcycle unless the drive chain has first been removed. Even with the gears in neutral, the transmission is only properly lubricated when the engine is running. Inadequate lubrication may damage the transmission.

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

#### **WARNING:**

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

#### **Brakes**

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 pedal.

Both front and rear brakes should be applied. Independent use of only the front or rear brake reduces stopping performance. Excessive brake application may cause either wheel to lock, reducing control of the motorcycle.

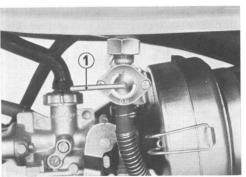
WARNING: When riding on a wet surface or when riding under rainy conditions, braking efficiency is greatly reduced and extra care should be taken when applying the brakes.

## **Parking**

#### **WARNING:**

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

When parking the Mini-Trail, turn the ignition switch to the "OFF" position, and turn the fuel valve lever ① to the "S" position.



1) Fuel valve lever

## TRANSPORTING TIPS

This trail bike can be folded into a compact unit for transporting by automobile, airplane, boat, etc. Follow the items listed below to prepare the bike for transporting.

- Turn the fuel tank cap lever to "OFF" and the fuel valve lever to "S" position.
- Turn 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.



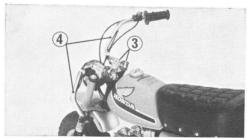
1 Fuel drain valve

② Carburetor

WARNING: Do not smoke or allow open flames or sparks near when fuel vapors are present. Perform this operation only in a well ventilated area.

- Unscrew both handlebar knobs ③.
   Fold the handlebars ④ down and retighten both handlebar knobs.
- 4. Fold foot pegs and secure them with rope.

NOTE: If the Mini-Trail is to be carried on its side, keep the left side down.



3 Handlebar knobs

4 Handlebars

## ENGINE OIL RECOMMENDATION

## USE **EOUIVALENT.**

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

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

Engine oil should be changed at the intervals prescribed in the Maintenance Schedule on page 23~25.

#### CAUTION:

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

HONDA 4-STROKE OIL OR Viscosity selection should be based on the average atmospheric temperature in your riding area. Change to the proper viscosity oil whenever the average atmospheric temperature changes substantially.

## Recommended oil viscosity:

General, all temperatures **SAE 10W-40** 

Alternate:

C **SAF 30** -15 → **SAF 20** SAF 20W 10W-40 0= SAE 10W

## PRE-RIDING INSPECTION

#### WARNING

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

Prior to starting your Mini-Trail, perform a general inspection as a matter of habit to make sure that the bike is in good, safe riding condition.

This inspection will require only a few minutes and can save you much time and expense in the long run.

Check the following items and if adjustment or servicing is necessary, refer to the appropriate section in this manual.

- ENGINE OIL LEVEL—Measure oil level and add oil if necessary (page 27).
- FUEL—Check fuel level and fill tank if low (page 11).
- 3. BRAKES—Check operation of front

- and rear brakes. Adjust free play if necessary (page 43~45).
- 4. TIRES—Adjust to correct pressure and check tire damage (page 22).
- 5. DRIVE CHAIN—Check condition of chain and measure chain slack. Adjust if drive chain slack is incorrect. Lubricate if drive chain appears dry. Replace if drive chain is badly worn or damaged (page 40~42).
- THROTTLE—Check throttle operation in all steering positions. Adjust if free play is incorrect. Replace cable or correct cable routing if throttle does not operate freely in all steering positions (page 37).
- LIGHTING EQUIPMENT—Check headlight and taillight. Replace any bulb which fails to light (page 49– 51).

#### TIRE INFORMATION

#### TIRE INFORMATION

Correct air pressure will provide maximum safety, stability, riding comfort and tire life.

Be sure to follow the tire specification.

Cold tire pressures	Front 1.0kg/cm <sup>2</sup> (14psi), Rear 1.0kg/cm <sup>2</sup> (14psi)
Vehicle capacity load	68kg (150 lbs), operator only
Tire size	Front 3.50-8 (2 P.R.···Tire brand: Bridgestone, Nitto) (4 P.R.···Tire brand: Inoue)  Rear 3.50-8 (2 P.R.···Tire brand: Bridgestone, Nitto) (4 P.R.···Tire brand: Inoue)

#### **WARNING:**

- Improper tire inflation will cause abnormal tread wear or other damage and create a safety hazard. Riding with underinflated tires will cause the tires to slip on the rims damaging the innertube valve. Severe underinflation may result in loss of the tire from the rim.
- Check tire pressures frequently and adjust if necessary.
- Operation with excessively worn tires is very hazardous and will adversely affect traction, steering and handling.

## MAINTENANCE SCHEDULE

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

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

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

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

#### **WARNING:**

To prevent personal injury, always make certain the engine is stopped and the motorcycle is supported securely on a level surface prior to performing any maintenance.

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.
- \*CARBURETOR—Check and adjust if necessary.
- THROTTLE OPERATION—Inspect cable. Check and adjust free play.
- \*CLUTCH—Check operation and adjust if necessary.

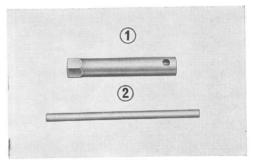
- DRIVE CHAIN—Check, lubricate, and adjust if necessary.
- BRAKE CONTROL LINKAGE— Check linkage and adjust if necessary.
- TIRES—Inspect and check air pressure.
- LIGHTING EQUIPMENT—Check.
- ALL NUTS, BOLTS, AND OTHER FASTENERS—Check security and tighten if necessary.

REGULAR SERVICE PERIOD  EVERY 30 OPERATING DAYS  NOTE Change oil every 30 operating days or every 3 months, whichever occurs first.	<ul> <li>ENGINE OIL—Change.</li> <li>SPARK PLUG—Clean and adjust gap, or replace if necessary.</li> <li>*CONTACT POINTS AND IGNITION TIMING—Clean, check, and adjust or replace if necessary.</li> <li>*VALVE TAPPET CLEARANCE—Check and adjust if necessary.</li> <li>POLYURETHANE FOAM AIR FILTER ELEMENT—Clean and oil. Service more frequently if operated in dusty areas.</li> <li>*CARBURETOR—Check and adjust if necessary.</li> <li>SPARK ARRESTOR-Purge.</li> </ul>	<ul> <li>THROTTLE OPERATION—Inspect cable. Check and adjust free play.</li> <li>*CLUTCH—Check operation and adjust if necessary.</li> <li>DRIVE CHAIN—Check, lubricate, and adjust if necessary.</li> <li>BRAKE CONTROL LINKAGE—Check linkage and adjust if necessary.</li> <li>TIRES—Inspect and check air pressure.</li> <li>LIGHTING EQUIPMENT—Check.</li> <li>ALL NUTS, BOLTS, AND OTHER FASTENERS—Check security and tighten if necessary.</li> </ul>
*FUEL FILTER SCREEN—Clean.     *FUEL LINE—Check.     *STEERING HEAD BEARINGS—Adjust.     *BRAKE SHOES—Inspect and replace if worn.		

## TOOL KIT

The spark plug wrench ① and the handle bar ② are attached to the center of the frame. Remove the left side cover and remove them.





- ① Spark plug wrench
- ② Handle bar

## MAINTENANCE OPERATIONS

## **Engine Oil Level**

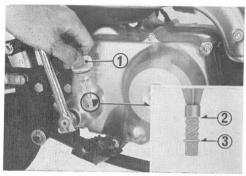
Check engine oil level at the start of each day the motorcycle is to be operated.

The oil filler cap (1) is located on the right crankcase cover and contains a dipstick for measuring oil level. Oil level must be maintained between the upper (2) and lower (3) oil level marks on the dipstick. Oil level must be checked with the Mini-Trail standing upright on level ground and the oil filler cap touching the surface of the filler opening but not screwed in.

## **Engine Oil Change**

Engine oil should be changed in accordance with the maintenance schedule on page 24~25. Use only motor oil of the grade and viscosity recommended on page 20.

When changing oil, drain the used oil

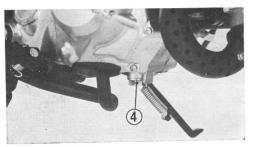


1) Oil filler cap 2 Upper level mark

(3) Lower level mark

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

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



- (4) Drain plug
- Place a drip pan under the crankcase to catch the oil and then remove the drain plug 4.
- 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, making

- sure that the sealing washer used on the plug is in good condition.
- 5. Fill the crankcase with approximately 0.8 ℓ (0.8 U.S. qt.) of recommended grade oil. Check the oil level with the filler cap dipstick. Oil level should be between the upper ② and lower ③ oil level marks on the dipstick (refer to page 27).

#### **CAUTION:**

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

## Spark Plug Replacement and Adjustment

Standard spark plug:

American model:

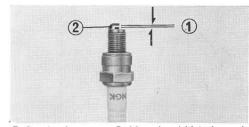
C6H (NGK) or U20FS (ND)

Canadian model:

CR6HS (NGK) or U20 FSR-L( ND)

Service the spark plug as follows:

- Detach the spark plug lead and remove the spark plug with the spark plug wrench.
- Check tip of the spark plug for fouling or deposit.
  - Clean the spark plug with a spark plug cleaner, or a stiff wire brush.
- 3. Adjust the spark plug gap 1 to 0.6  $\sim$ 0.7 mm (0.024 $\sim$ 0.028 in.) with a feeler gauge.
  - The adjustment is made by bending the negative (side) electrode 2.
- 4. The spark plug should be screwed in finger tight. Tighten with the spark



① Spark plug gap ② Negative (side) electrode

plug wrench an additional 1/2 to 3/4 turns.

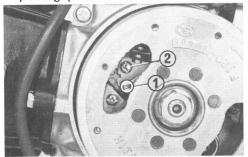
#### **CAUTION:**

- Spark plugs must be securely tightened.
   An improperly tightened plug can become very hot and possibly cause damage to the engine.
- Never use a spark plug with a heat range that is not recommended for this motorcycle.
- Do not attempt to dry or remove soot from the spark plug by burning the tip.

# Contact Breaker Point Gap and Ignition Timing Adjustment

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

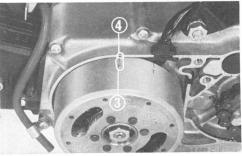
- 1. Remove the left crankcase cover.
- Rotate the flywheel counterclockwise to find the point where the breaker point gap is at maximum and check



1) Breaker point 2 Breaker locking screw

- the gap by using a feeler gauge.
- 3. The standard gap is  $0.3\sim0.4 \text{ mm}$   $(0.012\sim0.016 \text{ in.})$ .
- 4. When adjustment is necessary, loosen the breaker locking screw ② and move the breaker base either clockwise or counterclockwise to obtain the correct point gap setting.

NOTE: Wipe the contact breaker point surfaces with a clean rag if dirty.



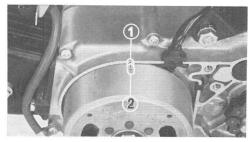
(3) "F" mark (4) Index mark

5. After completing the breaker point gap adjustment, check the ignition timing. To perform the check, rotate the flywheel so that when the "F" mark ③ on the flywheel is aligned with the index mark ④ (page 30) on the left crankcase, the breaker points just begin to open.

# Valve Tappet Adjustment

Excessive valve tappet clearance will cause tappet noise, and little or no clearance will cause valve damage and loss of power; therefore, the valve tappet clearance should be maintained properly. NOTE: The checking or adjusting of the tappet clearance should be performed while the engine is cold. The clearance may tend to increase as the temperature rises.

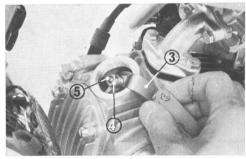
Remove the tappet adjusting hole caps.



1 Index mark 2 "T" mark

- 2. Remove the left crankcase cover.
- 3. Rotate the flywheel counterclockwise until the "T" mark ② on the flywheel lines up with the index mark 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 at top dead center of the compression stroke and the intake and exhaust valves are closed. This condition can be determined by moving the rocker arm with the fingers through the tappet adjusting holes. 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 open, so rotate the fly-



- (3) Feeler gauge (4) Adjusting screw lock nut
- (5) Adjusting screw

- wheel 360° counterclockwise and realign the "T" mark with the index mark.
- 4. The valve tappet clearance is measured between the valve stem and tappet adjusting screw. Both the intake and the exhaust valves should be adjusted to 0.05 mm (0.002 in.). To perform the adjustment, loosen the adjusting screw lock nut 4 and turn the adjusting screw clockwise will reduce the clearance and turning it counterclockwise will increase the clearance.

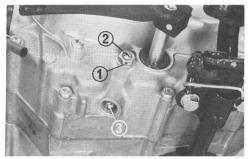
#### NOTE:

Ensure that the adjustment has not been disturbed while tightening the lock nut by rechecking the clearance after the lock nut has been tightened.

# Cam Chain Adjustment

Improper cam chain tension will adversely affect the engine. Make the tension adjustment while the engine is idling.

- To adjust, loosen the lock nut ①, and loosen the tensioner adjust bolt ② approximately one half turn.
- 2. If the chain is still noisy even after the above adjustment, loosen 14 mm sealing bolt located at the bottom of the crankcase, and screw in the tensioner bolt ③ gradually until the cam chain becomes quiet. After completing the adjustment, tighten the tensioner adjust bolt, lock nut, and 14 mm sealing bolt securely.



- 1 Tensioner adjust bolt lock nut
- 2 Tensioner adjust bolt
- 3 Tensioner bolt

### Air Filter Maintenance

Air filter element cleaning and/or replacement depends on the conditions under which your Mini-Trail is operated. Your Honda dealer can help you to determine the frequency for cleaning or replacing the element.

- 1. Remove the air filter cover ①.
- 2. Remove the air filter element 2.
- 3. Wash the filter element in clean stoddard solvent and allow to dry

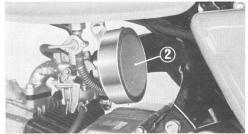


1) Air filter cover

thoroughly.

- Soak the filter element in clean gear oil (SAE 80~SAE90) until saturated, then squeeze out excess oil.
- 5. Reinstall the filter element.
- 6. Reinstall the filter cover.

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



2 Air filter element

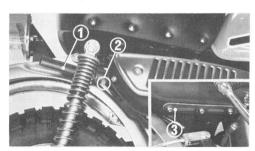
# **Spark Arrestor Maintenance**

Carbon deposits must be periodically removed from the spark arrestor.

- Remove the spark arrestor ① by removing the securing bolt ②.
- 2. Remove the clean-out port lid 3 by removing the three securing screws.
- Start the engine and rev several times while momentarily creating exhaust system back pressure by blocking the end of the exhaust pipe with a rag.
- After clearing the carbon from the exhaust pipe, reinstall the clean-out port lid.
- Remove carbon from spark arrestor and reinstall,

#### **WARNING:**

- Exercise caution when performing this operation because the exhaust system becomes very hot after the engine has been running.
- Because of the increased fire hazard when purging the spark arrestor be sure that there are no combustible materials in the area.
- Exhaust gases contain poisonous carbon monoxide. Perform this operation only in a well ventilated area.
- Wear eye protection.



- ① Spark arrestor
- 3 Clean-out port lid

2 Securing bolt

### **Fuel Strainer Maintenance**

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

## Throttle Grip Play Adjustment

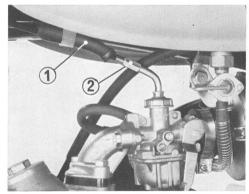
- Check for smooth rotation of the throttle grip from the fully open to the fully closed positions. Check throttle operation when at full left and full right steering positions. Inspect the condition of the throttle cable from the throttle grip down to the carburetor. If the cable is kinked, chafed or improperly routed, it should be replaced and/or rerouted.
   Standard throttle grip free play is
  - rotation. Adjust free play with the throttle cable adjuster ②.

    Turn the adjuster to obtain 10~15° of throttle grip free play.

approximately 10~15° of the grip

#### WARNING .

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



1 Rubber cap 2 Throttle cable adjuster

### Carburetor Adjustment

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 1,500 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.
- 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.

#### NOTE:

- Before making adjustments to the carburetor, be sure the ignition system is functioning properly and the engine has good compression. Do not attempt to compensate for other faults by carburetor adjustment.
- We recommend that carburetor adjustment be performed by an authorized Honda dealer.



(1) Throttle stop screw (2) Air screw

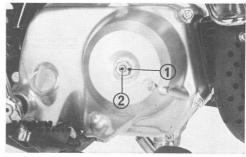
## Clutch Adjustment

The Mini-Trail incorporates an automatic centrifugal clutch. Perform the clutch adjustment by the following procedure.

NOTE: The clutch must be adjusted with the engine shut off.

- 1. Loosen the adjuster lock nut ①.
- Turn the clutch adjuster screw @ clockwise about one turn. Do not turn excessively.
- 3. Next, slowly turn the adjuster screw counterclockwise and stop when resistance is felt.
- 4. From this point, back off the adjuster screw clockwise 1/8 to 1/4 turn, and then tighten the lock nut.
- 5. Check clutch operation after adjust-

- ment.
- The engine should start easily with the kick starter without the clutch slipping.
- When shifting gears, the clutch operation should be smooth and light, especially when shifting into the neutral position.

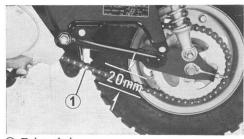


1 Adjuster lock nut 2 Clutch adjuster screw

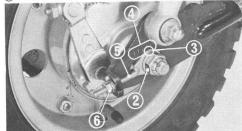
### **Drive Chain Maintenance**

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 properly adjusted. Lubricate the chain whenever adjustment is made.

- 1. Place the motorcycle on the support block. Engine should be stopped.
- 2. The maximum amount of drive chain slack is measured by pressing the chain up and down at the midpoint between the sprockets. The maximum chain slack should be 20 mm (3/4 in.).
- 3. If adjustment is necessary, loosen the rear axle nut ②.
- 4. Adjust chain tension by turning the adjuster lock nut ® clockwise to



1) Drive chain



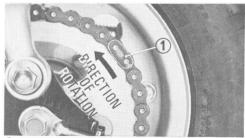
- 2 Rear axle nut 3 Index mark
- 4 Corresponding scale graduation5 Chain adjuster
- 6 Chain adjuster lock nut

tighten chain or counterclockwise to loosen the chain. After adjustment, the index marks ③ on both the right and left chain adjusters ⑤ should correspond with the same scale graduations ④ on both sides of the rear fork.

- Finally, tighten the axle nut securely to prevent the nut from loosening and then tighten the chain adjuster nut securely.
- 6. When the drive chain is excessively dirty, it is recommended that the drive chain be cleaned as follows:
  - Carefully remove the master link retaining clip ① with pliers. Do not bend or twist the clip. Remove the master link. Remove the drive chain from the Mini-Trail.
  - 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.
- Inspect the sprocket teeth for possible wear or damage. Replace if necessary.

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



1 Retaining clip

4) Lubricate the drive chain. Commercially prepared drive chain lubricants may be purchased at most motorcycle shops and should be used in preference to motor oil or other lubricants.

Saturate each chain link joint so that the lubricant will penetrate the space between adjacent surfaces of link plates and rollers.

5) Pass the chain over the sprockets and join the ends of the chain with the master link. For ease of assembly, hold the chain ends against adjacent rear sprocket teeth while inserting the master link. Install the master link retaining clip ① (refer to page 41) so that the closed end of the clip will face the direction of forward wheel rotation.

The master link is the most critical part affecting the security of the drive chain. It is recommended that a new master link be installed whenever the drive chain is reassembled.

- Adjust the drive chain to the proper tension, following the instructions on page 40~41.
- Check rear brake adjustment after adjusting chain.

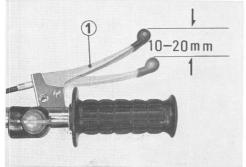
#### NOTE:

If drive chain slack is excessive when the rear axle is moved to the rearward limit of adjustment, the drive chain is worn out and must be replaced.

## Front Brake Adjustment

Brakes are items of personal safety and play is the distance the brake lever should always be maintained in proper adjustment.

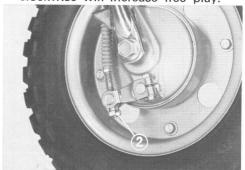
Free play, measured at the tip of the front brake lever ①, should be maintained at  $10\sim20 \text{ mm} (0.4\sim0.8 \text{ in.})$ . Free



Front brake lever

moves before the brake starts to engage.

1. Adjust brake lever free play with the front brake adjusting nut 2. Turning the nut clockwise will decrease free play and turning the nut counterclockwise will increase free play.



Front brake adjusting nut

## Rear Brake Adjustment

Rear brake pedal free play, measured at the tip of the rear brake pedal 1, should be maintained at  $10\sim20 \text{ mm}$  (0.4 $\sim$  0.8 in.). Free play is the distance the brake pedal moves before the brake starts to engage.

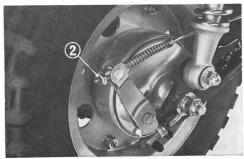
1. Adjust brake pedal free play by turning the rear brake adjusting nut 2.

10-20mm

1) Rear brake pedal

Turning the adjusting nut clockwise will decrease brake pedal free play and turning the nut counterclockwise will increase free play.

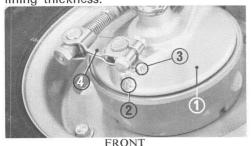
NOTE: When brake service is necessary, see your authorized Honda dealer, who has been properly trained to perform such service. Use only genuine Honda parts or their equivalent.



2) Rear brake adjusting nut

### **Brake Wear Indicator**

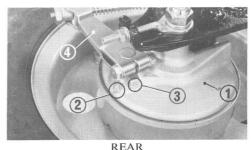
On the Z 50, wear indicators are provided for the front and rear brakes. When the brake is applied, an arrow ③, adjacent to the brake arm ④, moves toward a reference mark ② on the brake backing plate ①. The distance between the arrow and the reference mark, on full application of the brake, indicates brake lining thickness.



① Backing plate ② Reference mark

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

NOTE: When brake service is necessary, see your authorized Honda dealer, who has been properly trained to perform such service. Use only genuine Honda parts or their equivalent.



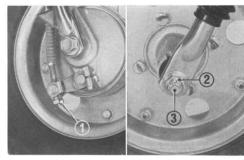
3 Arrow 4 Brake arm

### 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.
- 2. Remove the front brake adjusting nut

  ① and remove the front brake cable
  from the brake arm.
- 3. Remove the front axle nut 2 and pull out the front axle 3.
- 4. Remove the front wheel.
- Installation of the front wheel is performed in the reverse order of that removal procedure.
- 6. Ensure that the front axle nut is securely tightened to 250-300 kg-cm (19-22 lbs. ft).
- 7. Check front brake adjustment.



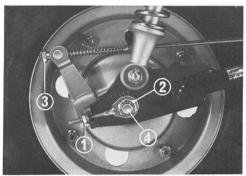
- 1 Front brake adjusting nut
- 2 Front axle nut 3 Front axle

### Rear Wheel Removal

Removal of the rear wheel is performed 7. Ensure that the rear axle nut is sein the following manner:

- 1. Place a support block under the engine to raise the rear wheel off the around.
- 2. Loosen the drive chain adjuster lock nut 1) and remove the rear axle nut 2).
- 3. Remove the chain joint clip and drive chain
- 4. Remove the rear brake adjusting nut 3 and separate the rear brake rod from the rear brake arm.
- 5. Pull out the rear axle 4 and then the rear wheel can be removed from the frame.
- 6. Installation of the rear wheel is performed in the reverse order of the removal procedure.

- curely tightened to 250-350 kg-cm (19-25 lbs. ft).
- 8. Check rear brake adjustment.



- Drive chain adjuster lock nut
- (2) Rear axle nut
- (3) Rear brake adjusting nut
- (4) Rear axle

## Front Suspension Inspection

Check front fork action by locking the front brake and pumping the forks up and down several times. The suspension should function smoothly. If it is damaged or binding, the suspension should be repaired before the motorcycle is operated. Check security of all front forks and handlebar mounting bolts.

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

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

# Rear Suspension Inspection

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

- Rear fork bushing—this can be checked by pushing hard against the side of the rear wheel while the motorcycle is on a support block and feeling for looseness in the fork bushings.
- 2. Check side stand spring for damage.
- Check all suspension component attachment points for security of their respective fasteners.
- Check for grease leaks in rear damper units.
- Check the rear fork pivot nut and the rear frame tightening bolts for looseness.

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

## Headlight Beam Adjustment

Headlight beam can be adjusted verti- 2. Tighten the bolts ① after adjustment. cally.

 The adjustment is made by loosening the bolts 10 which mount the headlight and tilting the headlight case.



Headlight mounting bolts

#### **CAUTION:**

Do not operate Mini-Trail with either bulb (headlight or taillight) burned out or removed.

It may cause the other one to burn out.

# Headlight Bulb Replacement

- proceed as follows:
- 1. Loosen the mounting screw at the from the reflector 2. bottom of the headlight and remove 3. Pull the bulb 3 out and replace. the headlight rim.
- When changing the headlight bulb, 2. Remove the headlight socket 1 by pushing down on the socket and twisting counterclockwise to unhook



1 Headlight socket 2 Reflector

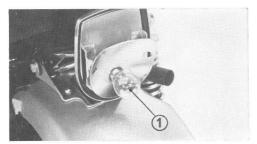


(3) Headlight bulb

# Taillight Bulb Replacement

When changing the taillight bulb, proceed as follows:

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



1 Taillight bulb

# Fastener Security

Be sure to check all bolts and nuts for looseness, retightening them if necessary. Bolts and nuts used on axles, suspension system, steering system and cylinder head cover should be checked with special care.

# **WIRING DIAGRAM**

