



**HONDA**  
**FR500 / FR700**

**OWNER'S MANUAL**

## Thank you for purchasing a Honda tiller.

This manual covers the operation and maintenance of FR500 and FR700 tillers. All information in this publication is based on the latest product information at the time of printing. The illustrations in this manual are based on the FR700 tiller.

Honda Motor Co., Ltd. reserves the right to make changes at any time without notice and without incurring any obligation.

No part of this publication may be reproduced without written permission.

This manual should be considered a permanent part of the tiller and should remain with the tiller if it is resold.

Pay special attention to statements preceded by the following words:

### **DANGER**

**Indicates a possibility of severe personal injury or loss of life if instructions are not followed.**



*Indicates a strong possibility of severe personal injury or loss of life if instructions are not followed.*

### **CAUTION:**

*Indicates a possibility of personal injury or equipment damage if instructions are not followed.*

### **NOTE:**

Gives helpful information.

If a problem should arise, or if you have any question about your tiller, consult an authorized Honda tiller dealer.

## CONTENTS

TILLER SAFETY . . . . .	3
COMPONENT IDENTIFICATION . . . . .	7
OPERATION . . . . .	9
● High altitude operation. . . . .	23
MAINTENANCE. . . . .	29
TRANSPORTING/STORAGE . . . . .	39
SPECIFICATIONS . . . . .	41

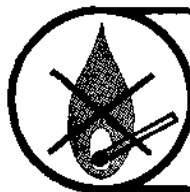
## TILLER SAFETY

### WARNING

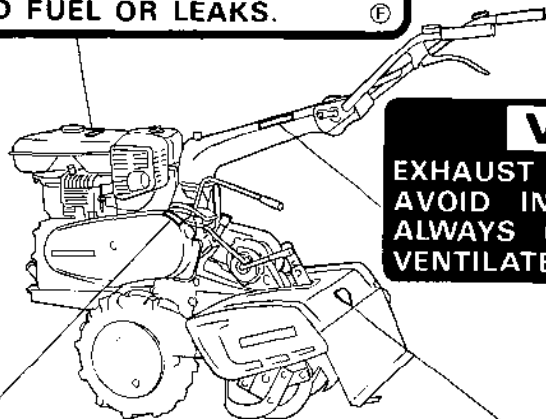
- *Honda tillers are designed to give safe and dependable service if operated according to instructions. Read and understand this Owner's Manual before operating the tiller. Failure to do so could result in personal injury or equipment damage.*
- *Before operation, inspect the area in which you will be operating the tiller. Remove debris and other obstacles the tiller might strike or throw, as that may cause injury or damage to the tiller.*
- *Inspect the tiller before operating it. Repair any damage and correct any malfunction before operation. Make sure all fasteners are properly secured. If you hit an obstacle while operating the tiller, stop the engine immediately, and check for damage. Damaged equipment may increase the possibility of injury during operation.*
- *Never operate the tiller without the V-belt cover and the recoil sarter cover. These covers protect you against possible injury from contact with rotating parts.*
- *Do not use the tiller when visibility is poor. Under conditions of poor visibility, there is a greater risk of striking an obstacle or causing injury.*
- *Children and pets must be kept away from the area of operation to avoid injury from flying debris and contact with the tiller or tiller attachments.*
- *Know how to stop the tiller quickly, and understand the operation of all controls. Never permit anyone to operate the tiller without proper instruction.*
- *If people or pets suddenly appear in front of the tiller, immediately release the clutch lever to stop the tiller to avoid possible injury from the rotating attachments.*
- *Always stop the engine before cleaning the tines or making adjustments. Never touch the attachments while the engine is running; serious personal injury could result.*
- *Gasoline is extremely flammable and is explosive under certain conditions.*
- *Refuel in a well-ventilated area with the engine stopped. Do not smoke or allow flames or sparks in the refueling area or where gasoline is stored.*
- *Do not overfill the fuel tank. After refueling, make sure the tank cap is closed properly and securely.*

- *When tilling on an incline, fuel spillage may occur. Keep the fuel tank less than half full to minimize spillage.*
- *Be careful not to spill fuel when refueling. Fuel vapor or spilled fuel may ignite. If any fuel is spilled, make sure the area is dry before starting the engine.*
- *Never run the engine in an enclosed or confined area. Exhaust contains poisonous carbon monoxide gas; exposure can cause loss of consciousness and may lead to death.*
- *The muffler becomes very hot during operation and remains hot for a while after stopping the engine. Be careful not to touch the muffler while it is hot. Let the engine cool before storing the tiller indoors.*
- *Wear protective clothing and shoes when operating the tiller.*
- *While operating the tiller, hold the handlebars firmly; they may tend to lift during clutch engagement.*
- *Be especially careful when operating the tiller in reverse gear. You can more easily lose your footing when walking backward.*

Read these labels before you operate the tiller.



**FUEL IS FLAMMABLE AND EXPLOSIVE. STOP ENGINE BEFORE FILLING FUEL TANK. DO NOT FILL OVER THE RED LEVEL LINE. WIPE OFF SPILLED FUEL OR LEAKS.** (F)



## **WARNING**

**EXHAUST GASES ARE POISONOUS. AVOID INHALATION. ALWAYS OPERATE IN A WELL VENTILATED AREA.** (F)

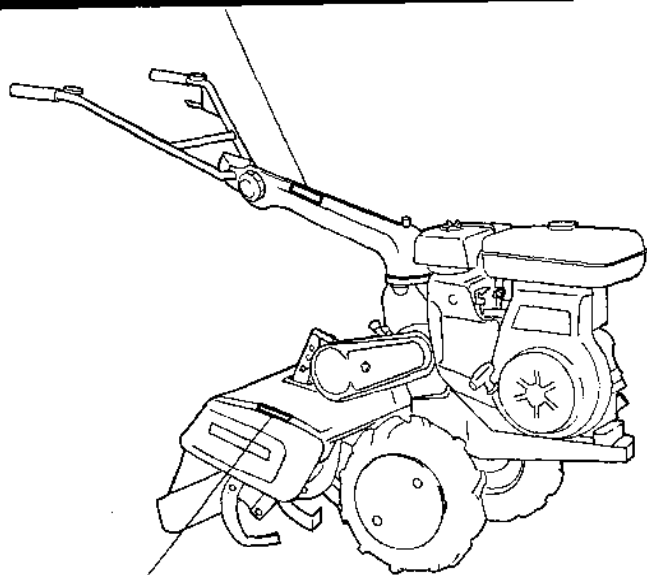
## **WARNING**

**DO NOT OPERATE WITH THIS COVER REMOVED. MOVING PARTS MAY CAUSE SERIOUS INJURY.** (A)



## WARNING

- GASOLINE IS EXTREMELY FLAMMABLE UNDER CERTAIN CONDITIONS.
- TILTING THE MACHINE EXCESSIVELY OR FAILING TO TURN THE FUEL VALVE OFF MAY CAUSE FUEL SPILLAGE. ⓐ

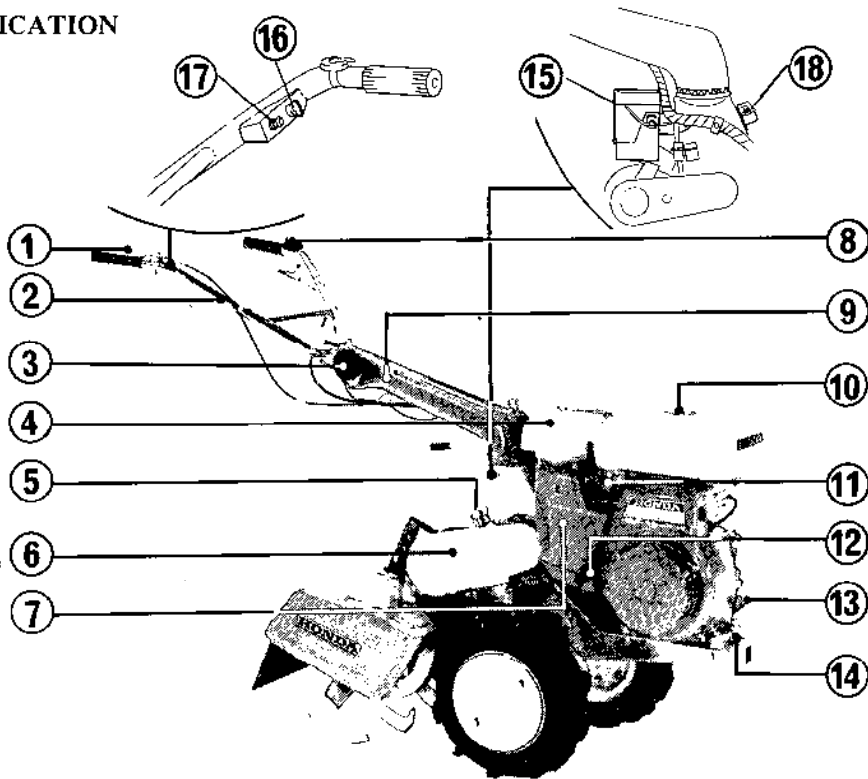


**DANGER: KEEP HANDS and FEET AWAY**

## COMPONENT IDENTIFICATION

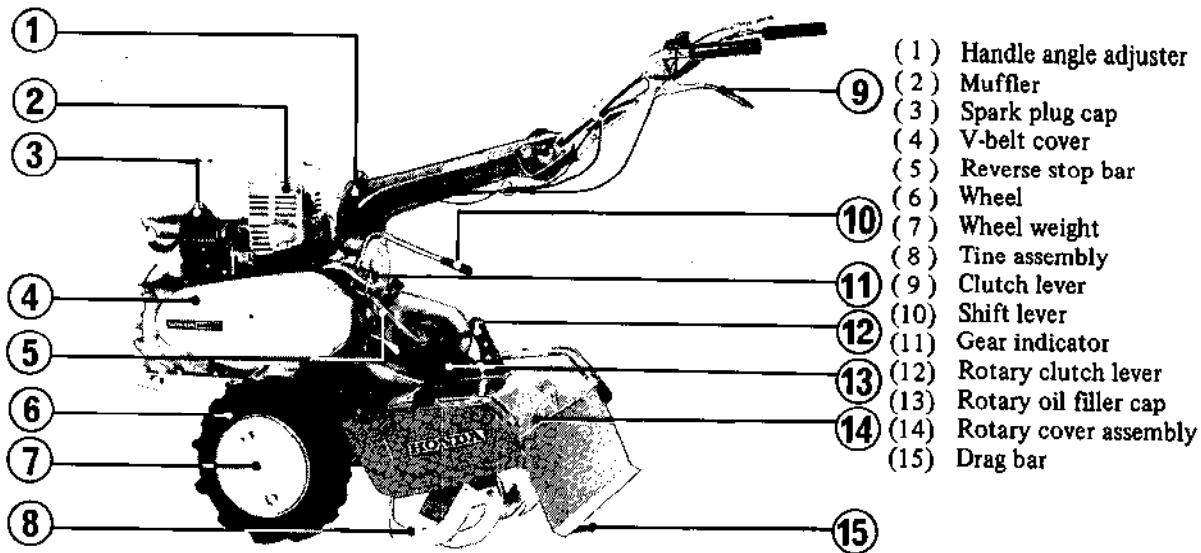
- (1) Throttle lever
- (2) Handlebars
- (3) Handle height adjuster
- (4) Air Cleaner
- (5) Transmission oil filler cap
- (6) Chain cover
- (7) Engine side cover
- (8) Ignition switch
- (9) Handle column
- (10) Fuel tank cap
- (11) Fuel valve
- (12) Recoil starter
- (13) Engine oil filler cap
- (14) Engine oil drain plug
- (15) Battery box (AS type)\*
- (16) Ignition switch (AS type)\*
- (17) Choke knob (AS type)\*
- (18) Fuse (AS type)\*

\* FR700 with electric starter



(Type: FR700)



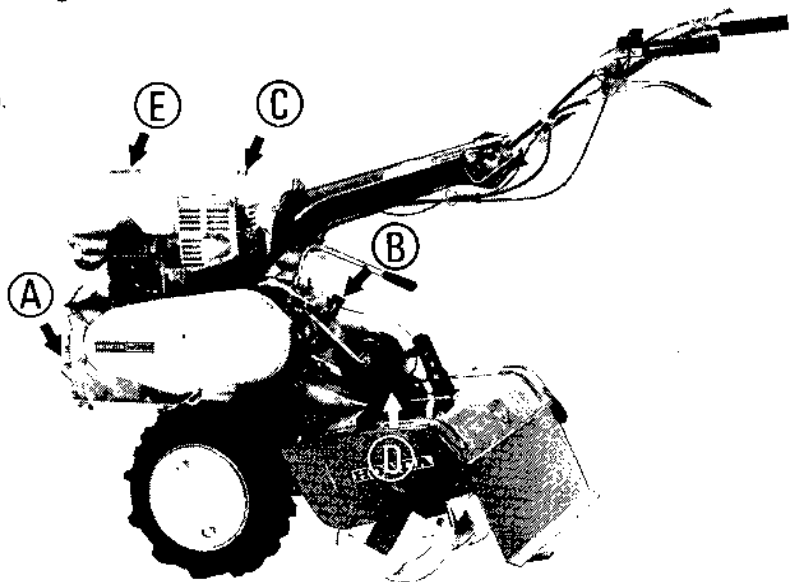


## OPERATION

### Pre-Operation Check

Always check the following before using the tiller:

- (A) Engine oil level.
- (B) Transmission oil level.
- (C) Air cleaner (condition and oil level).
- (D) Rotary oil level.
- (E) Fuel level.



## A. ENGINE OIL LEVEL

### Oil Recommendation

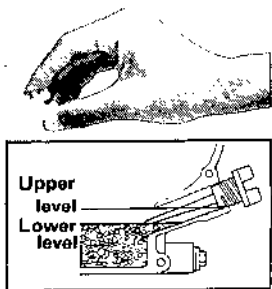
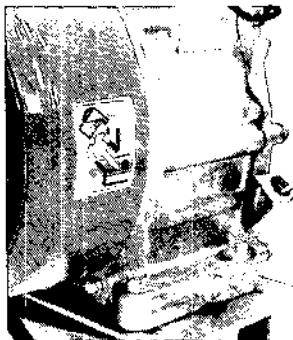
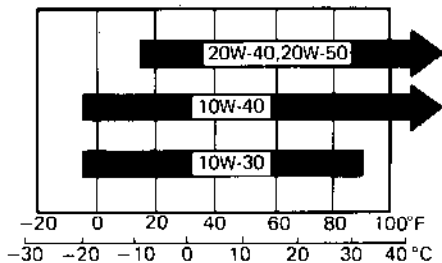
#### CAUTION:

- *Engine oil is a major factor affecting engine performance and service life. Non-detergent and 2-stroke engine oils are not recommended.*
- *Running the engine with insufficient oil can cause serious engine damage.*

Use Honda 4-stroke, or an equivalent high detergent, premium quality motor oil certified to meet or exceed U.S. automobile manufacturer's requirements for service classification SE or SF (Motor oils classified SE or SF will show this designation on the container).

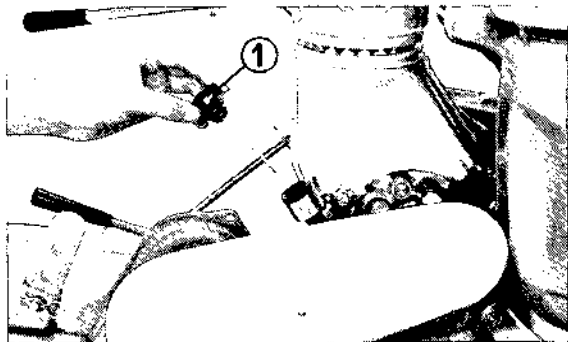
SAE 10W-40 is recommended for general, all temperature use. If single viscosity oil is used, select the appropriate viscosity for the average temperature in your area.

- Place the tiller on a level surface.
- Remove the oil filler cap and wipe the dipstick clean.
- Insert the dipstick into the oil filler neck, but do not screw it in.
- Check the oil level shown on the dipstick. If near the lower level, fill to the upper level with the recommended oil.



## B. TRANSMISSION OIL LEVEL

With the tiller on a level ground, remove the oil filler cap and check if oil is up to the tip of the dipstick. Add oil if necessary.



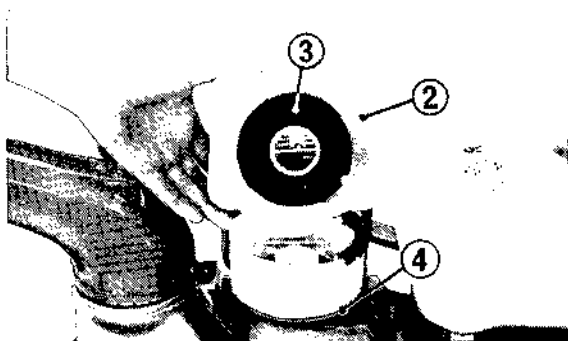
(1) Oil filler cap

## C. AIR CLEANER (CONDITION AND OIL LEVEL)

Remove the cover and inspect the elements, clean them if necessary (see p. 32).

With the tiller in a level position, check the case oil level. If necessary, add oil to the mark on the case.

**CAUTION:** *Never run the engine without the air cleaner. Rapid engine wear will result from contaminants, such as dust and dirt, being drawn through the carburetor, into the engine.*



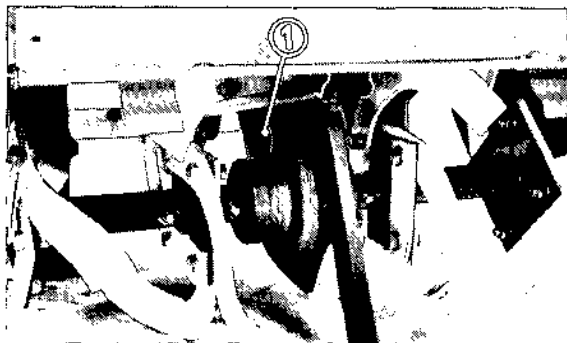
(2) Air cleaner cover

(3) Air cleaner elements

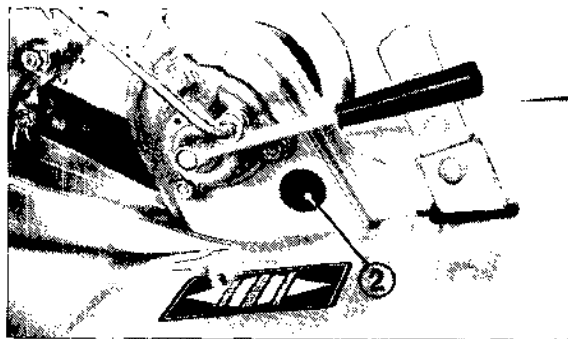
(4) Oil level

#### D. ROTARY OIL LEVEL

Place the tiller on level ground and remove the oil level check bolt. The oil level should be up to the lower edge of the check bolt hole. If the level is low, add oil until it begins to flow out of the hole.



(1) Oil check bolt



(2) Oil filler cap

## E. FUEL

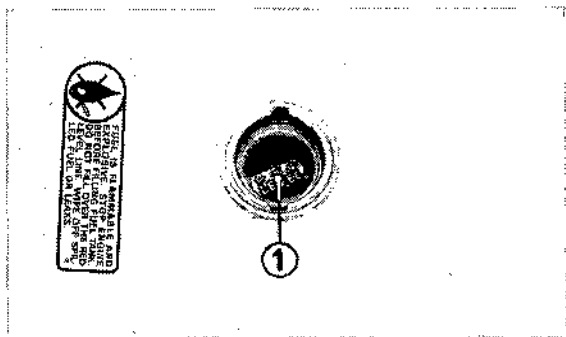
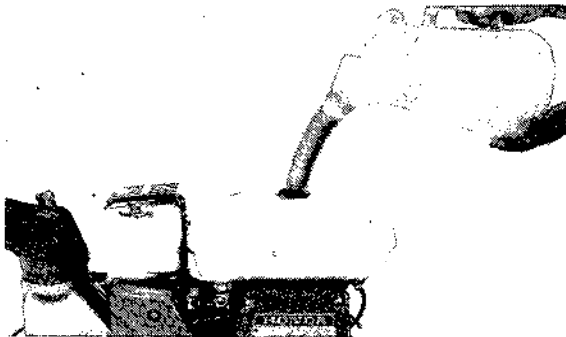
Use automotive gasoline with a pump octane number ( $R + \frac{M}{2}$ ) of 86 or higher, or a research octane number of 91 or higher (unleaded is preferred to minimize combustion chamber deposits).

Never use an oil/gasoline mixture or dirty gasoline. Avoid getting dirt, dust or water in the fuel tank.

After refueling, be sure to tighten the fuel tank cap firmly.

### WARNING

- *Gasoline is extremely flammable and is explosive under certain conditions. Refuel in a well ventilated area with the engine stopped.*
- *Do not smoke or allow flames or sparks in the area where the engine is refueled or where gasoline is stored.*
- *Do not overfill the tank and make sure the filler cap is securely closed after refueling.*
- *Be careful not to spill fuel when refueling. Fuel vapor or spilled fuel may ignite. If any fuel is spilled, make sure the area is dry before starting the engine.*



(1) Level mark

### **Gasolines Containing Alcohol**

If you decide to use a gasoline containing alcohol (“gasohol”), be sure its octane rating is at least as high as that recommended by Honda. There are two types of “gasohol”: that containing ethanol, and that containing methanol. Do not use gasohol that contains more than 10% ethanol. Do not use gasoline containing methanol (methyl or wood alcohol) that does not also contain cosolvents and corrosion inhibitors for methanol. Never use gasoline containing more than 5% methanol, even if it has cosolvents and corrosion inhibitors.

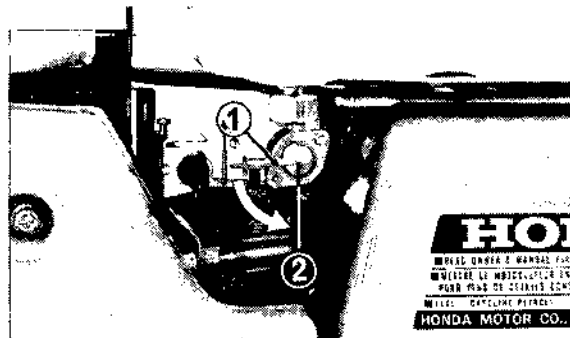
#### **NOTE:**

- Fuel system damage or engine performance problems resulting from the use of such fuels are not covered under Power Equipment Warranties. Honda cannot endorse the use of fuels containing methanol since evidence of their suitability is as yet incomplete.
- Before purchasing fuel from an unfamiliar station, try to confirm whether the fuel contains alcohol, and to what percentage. If you notice any undesirable operating symptoms after using a gasoline that contains alcohol; or one that you think contains alcohol, switch to a gasoline that you know does not contain alcohol.

## Starting the Engine with the Recoil Starter

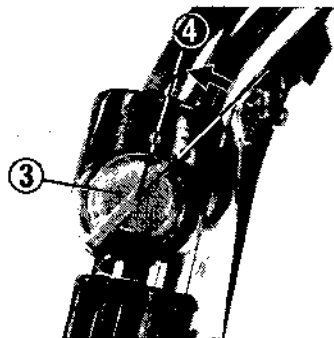
### WARNING

- *Never run the engine in an enclosed or confined area. Exhaust contains poisonous carbon monoxide gas; exposure can cause loss of consciousness and may lead to death.*
- *The muffler becomes very hot during operation and remains hot for a while after stopping the engine. Be careful not to touch the muffler while it is hot.*
- *Keep away from rotating parts while the engine is running.*



(1) Fuel valve      (2) ON

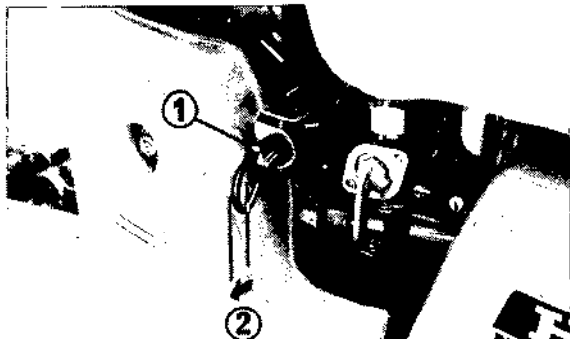
1. Turn the fuel valve ON.
2. Turn the ignition switch to RUN.



(3) Ignition switch      (4) RUN



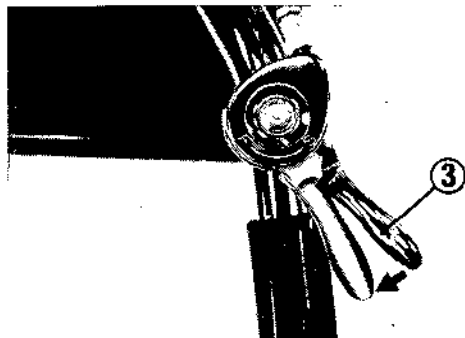
3. Pull out the choke rod to the closed position.



(1) Choke rod

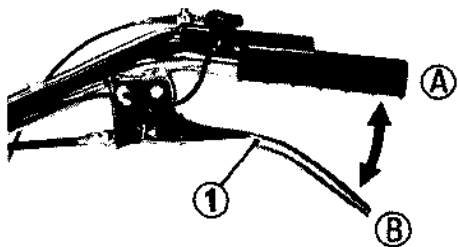
(2) "closed"

4. Move the throttle lever about 30 degrees from the extreme right (idle position).



(3) Throttle lever

**NOTE:** The clutch is engaged by pulling in the clutch lever and disengaged by releasing the lever.

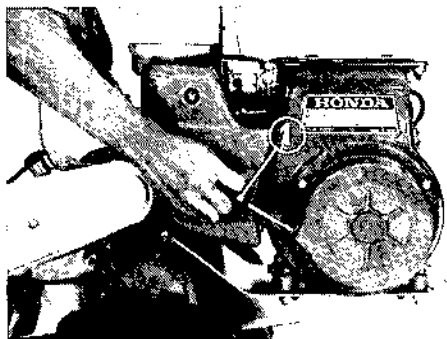


- (1) Clutch lever
- (A) Engaged
- (B) Disengaged

5. Make sure the clutch is disengaged and the transmission is in neutral, then pull the starter rope briskly to start the engine.

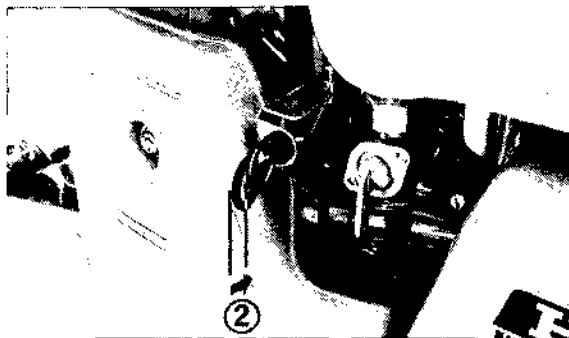
**CAUTION:**

- *Be sure the clutch is disengaged and the transmission is in neutral to prevent sudden uncontrolled movement when the engine starts.*
- *Do not allow the starter grip to snap back against the engine. Return it gently to prevent damage to the starter or housing.*



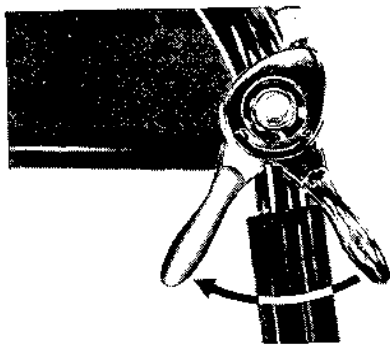
(1) Starter

6. Allow the engine to warm up, then push in the choke rod to the open position.



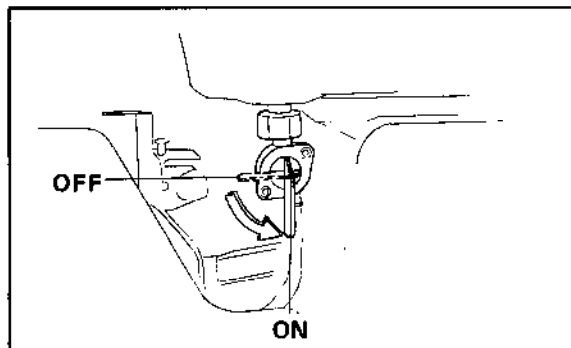
(2) "Open"

7. Move the throttle lever to the left as desired to increase engine speed.

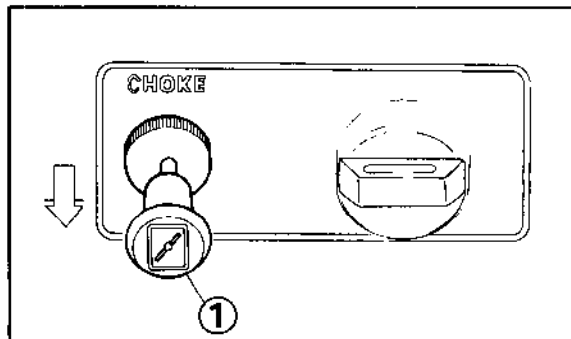


- FR700 models with electric starter

1. Turn the fuel valve to the ON position.

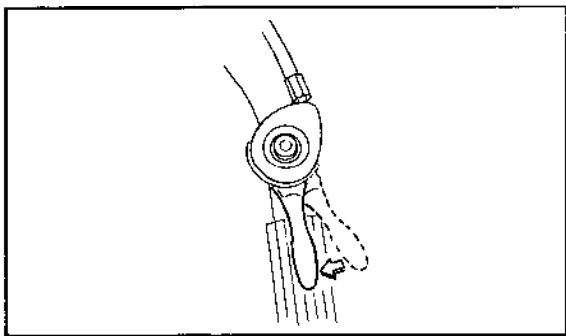


2. In cold weather and when the engine is cold, pull the choke knob to the CLOSE position.



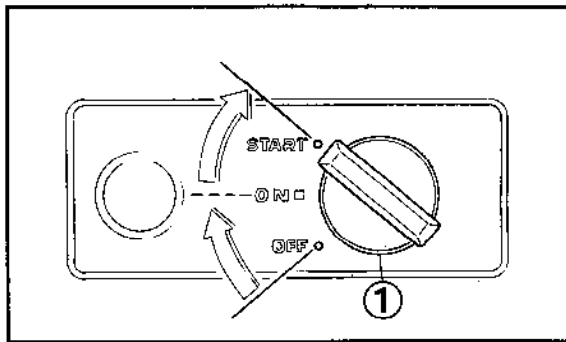
(1) Choke knob

3. Move the throttle lever about 30 degrees from the extreme right (idle position).



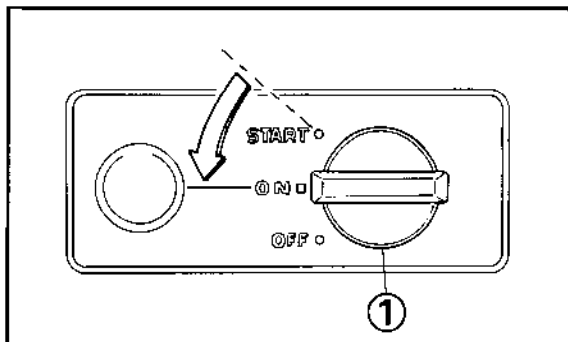
4. Turn the engine switch to START and hold it there until the engine starts.

NOTE: The battery will automatically recharge while the tiller is operated. If the tiller is not operated frequently enough to keep the battery charged, there will be a decrease in starter motor speed. If the battery is too discharged to run the starter motor, use the recoil starter.



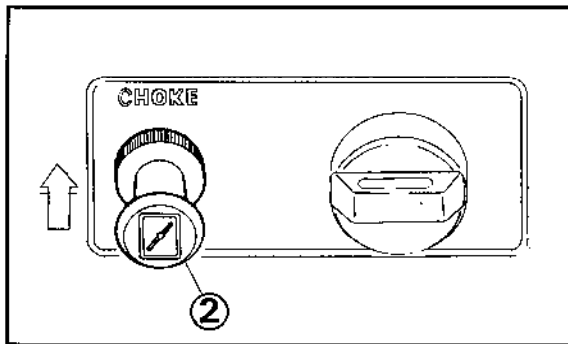
(1) Engine switch

5. After the engine starts, let the engine switch return to ON.



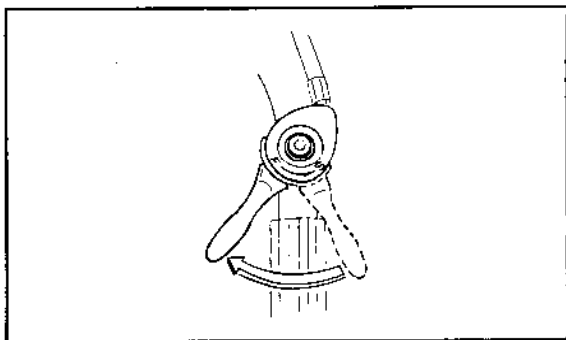
(1) Engine switch

6. Let the engine warm up for several minutes. If the choke has been pulled out to the CLOSE position, return it gradually to the OPEN position as the engine warms up.



(2) Choke knob

7. Move the throttle lever to the left as desired to increase engine speed.



● **High altitude operation**

At high altitude, the standard carburetor air-fuel mixture will be excessively rich. Performance will decrease, and fuel consumption will increase.

High altitude performance can be improved by installing a smaller diameter main fuel jet in the carburetor and readjusting the pilot screw. If you always operate the tiller at altitudes higher than 6,000 feet above sea level, have your authorized Honda Tiller dealer perform these carburetor modifications.

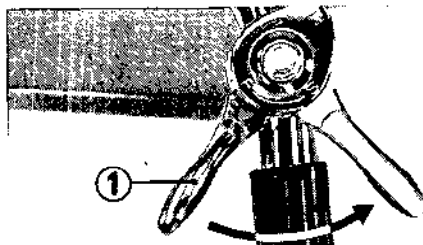
Even with suitable carburetor jetting, engine horsepower will decrease approximately 3.5% for each 1,000 foot increase in altitude. The affect of altitude on horsepower will be greater than this if no carburetor modification is made.

**CAUTION:** *Operation of the tiller at an altitude lower than the carburetor is jetted for may result in reduced performance, overheating, and serious engine damage caused by an excessively lean air/fuel mixture.*



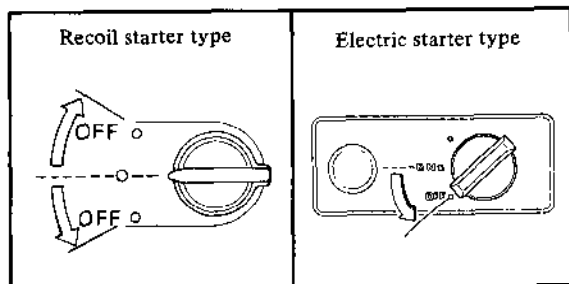
## Stopping the Engine

1. Disengage the clutch (release the lever) and shift to "N" (neutral).
2. Move the throttle lever to the extreme right.



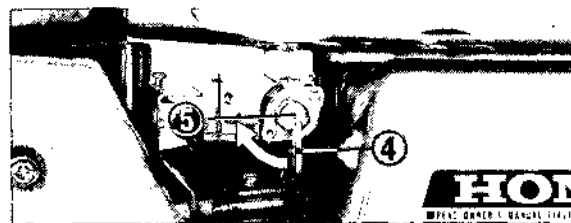
(1) Throttle lever

3. Turn the ignition switch OFF to stop the engine.



4. Turn the fuel valve OFF.

**NOTE:** To stop the engine in an emergency, disengage the clutch and turn the ignition switch OFF.



(4) Fuel valve (5) OFF

## Gear Selection

The transmission has two forward speeds and one reverse speed.

**CAUTION:** *Return the throttle lever to the idle position, and disengage the clutch, before moving the shift lever. Avoid using excessive force on the shift lever.*

1. Move the throttle lever to the idle position (extreme right).
2. Release the clutch lever and move the shift lever to the desired position.

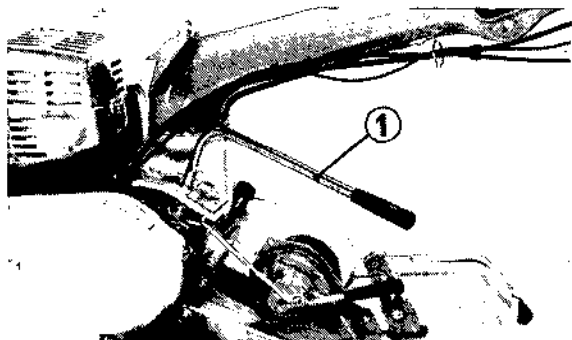
Neutral ——— bottom center

Forward 1st ——— right of neutral

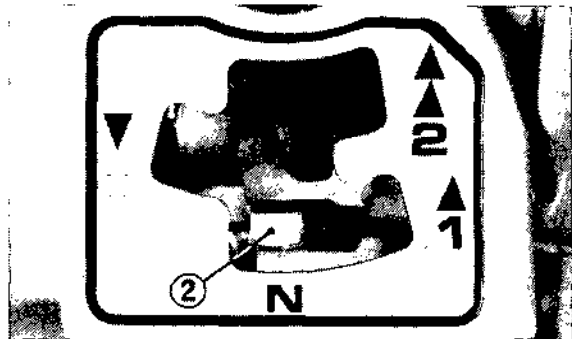
Forward 2nd ——— fully up from neutral and toward the right

Reverse ——— up to the center from neutral and to the left

**NOTE:** If the shift lever will not engage the desired gear, engage the clutch and move the tiller slightly to reposition the gears.



(1) Shift lever



(2) Gear indicator

## Rotary Clutch Operation/Tilling

To work the tiller

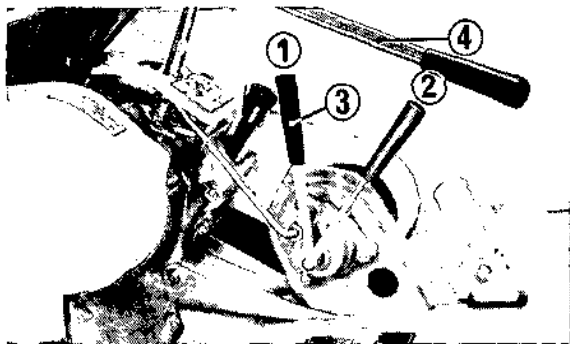
1. Start the engine.
2. With the throttle at idle and the clutch disengaged, select a forward gear.
3. Return the throttle to the engine start position (about 30° from idle), and engage the clutch.
4. Move the rotary clutch forward (position 1) and the tines will turn.
5. Increase engine speed as necessary.

To stop the tiller

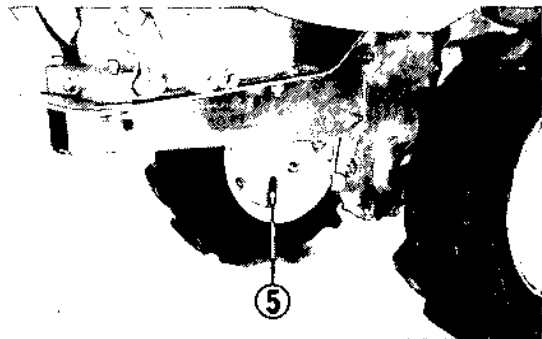
1. Move the rotary clutch to (position 2) and stop the engine.

## Tire Pressure

Excessive tire pressure will reduce traction, and underinflation may result in abnormal or accelerated tire wear. For best performance, keep the tires inflated to 1.2 kg/cm<sup>2</sup> (17.1 psi).



- |                    |                         |
|--------------------|-------------------------|
| (1) "ON" position  | (3) Rotary clutch lever |
| (2) "OFF" position | (4) Shift lever         |

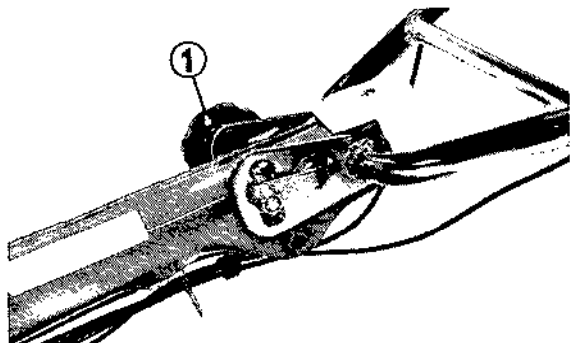


- (5) Tire valve

## Handlebar Height Adjustment

**CAUTION:** Before adjusting the handlebar, place the tiller on firm level ground to prevent the handle from falling accidentally.

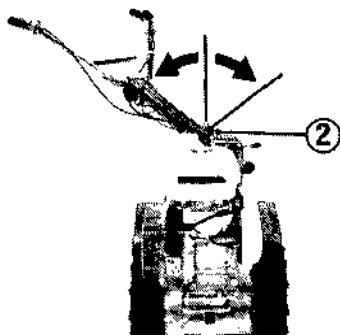
To adjust the handlebar height, loosen the adjuster knob, select the appropriate holes in the handle column and handlebar bracket, and tighten the knob.



(1) Height adjuster knob

## Handlebar Angle Adjustment

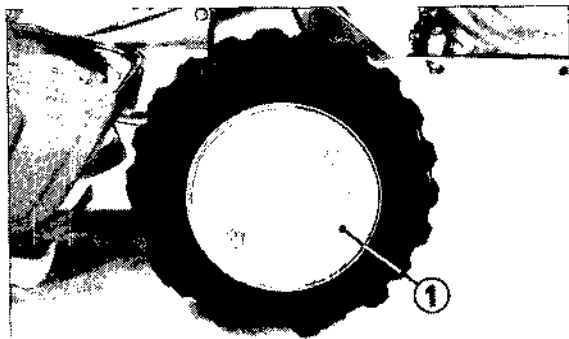
The handle can be adjusted at two different angles in either direction. To adjust, loosen the angle adjuster and move the column. After adjustment, be sure to tighten the adjuster securely.



(2) Angle adjuster

### Wheel Weight Installation

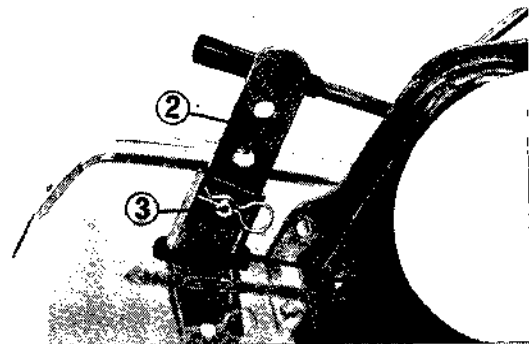
The wheel weights improve traction on soft or marshy ground. To install the weights, insert two bolts and secure them with the nuts supplied. Tighten the bolts and nuts securely to prevent them from being turned out during operation.



(1) Wheel weight

### Tilling depth adjustment

The tilling depth adjustment can be made by removing the retainer and sliding the drag bar up or down as necessary.



(2) Drag bar (3) Retainer

## MAINTENANCE

**WARNING** Shut off the engine before performing any maintenance. If the engine must be run, make sure the area is well ventilated. Exhaust contains poisonous carbon monoxide gas: exposure can cause loss of consciousness and may lead to death.

**CAUTION:** Use only genuine Honda parts or their equivalent for maintenance or repair. Replacement parts which are not of equivalent quality may damage the tiller.

Periodic inspection and adjustment of the Honda Tiller is essential if a high level of performance is to be maintained. Regular maintenance will also insure the longest possible life of your Honda tiller.

- Performed by owner.
  - Should be performed by an authorized Honda dealer unless the owner has the proper tools and is mechanically proficient. See the Honda Shop Manual.
- (1) Service the air cleaner more frequently as required.
  - (2) Tightening points are as follows:
    - Upper chain case to rotary case
    - Transmission to rotary frame
    - Rotary cover to rotary frame
    - Swing base to transmission
  - (3) For professional commercial use, log hours of operation to determine proper maintenance intervals.

ITEM	REGULAR SERVICE PERIOD		Daily	Initial 10 Hours operating	20 Hours operating or first month (3)	50 Hours operating or every month (3)	100 Hours operating or every 6 months (3)	300 Hours operating or every year (3)
	Perform at every indicated month or operating interval, whichever occurs first.							
Engine oil	check level	○						
Engine oil	change				○		○	
Transmission oil	check level	○						
Transmission oil	change				○			○
Rotary case oil	check	○						
Air cleaner	check level	○						
Air cleaner	clean/change oil					○ (1)		
Ignition timing	check/reajust							●
Spark plug	clean/adjust						○	
Carburetor	adjust					●		
Recoil starter	grease						●	
Valve clearance	adjust							●
Combustion chamber								●
Drive belt tension	adjust		○				○	
Upper chain tension	adjust			○				
Upper chain	grease							○
Clutch cable	adjust							○
Throttle cable	adjust							○
Fasteners	tighten			○ (2)			○	

## Engine Oil Change

**NOTE:** Change the oil when the engine is warm to assure rapid and complete draining.

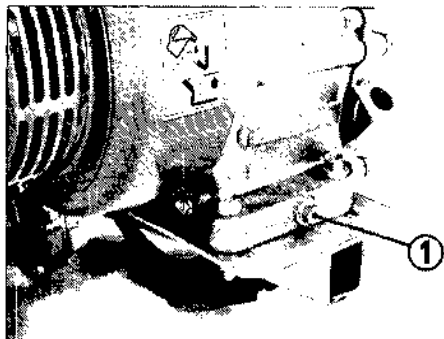
1. Remove the oil drain bolt and the filler cap.
2. Tilt the engine forward slightly and allow all of the oil to drain.
3. Reinstall the drain bolt and fill the crankcase to the maximum level with the recommended oil.
4. Reinstall and tighten the filler cap.

Oil capacity: FR500 – 0.7 ℓ (0.74 US qt)

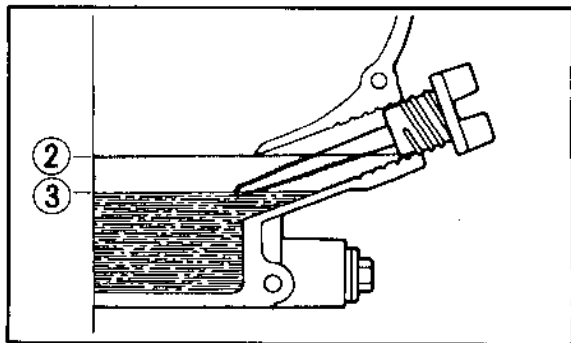
FR700 – 1.2 ℓ (1.3 US qt)

**CAUTION:** *Used motor oil may cause skin cancer if repeatedly left in contact with the skin for prolonged periods. Although this is unlikely unless you handle used oil on a daily basis, it is still advisable to thoroughly wash your hands with soap and water as soon as possible after handling used oil.*

**NOTE:** Please dispose of used motor oil in a manner that is compatible with the environment. We suggest you take it in a sealed container to your local service station for reclamation. Do not throw it in the trash or pour it on the ground.



(1) Oil drain bolt



(2) Maximum oil level

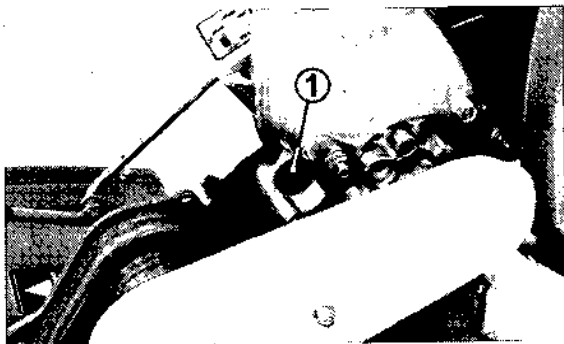
(3) Minimum oil level

## Transmission Oil Change

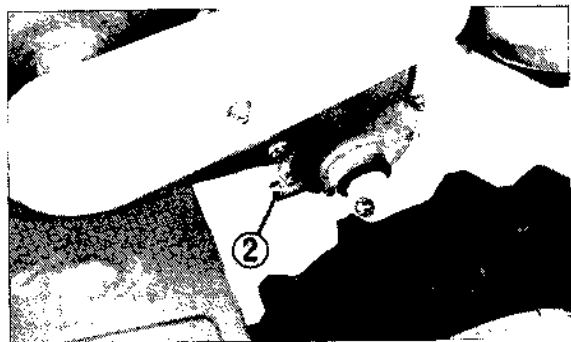
**NOTE:** Change the oil when the engine is warm to assure rapid and complete draining.

1. Remove the oil filler cap and drain bolt, and allow the oil to drain.
2. Reinstall the drain bolt and fill the transmission case up to the tip of the filler cap/dipstick with recommended oil.
3. Reinstall the filler cap.

Oil capacity: 1.1 ℓ (1.2 US qt)



(1) Oil filler hole



(2) Drain bolt



## Air Cleaner Service

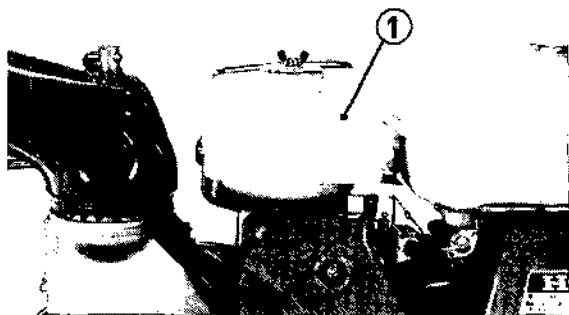
A dirty air cleaner will restrict air flow to the carburetor. To prevent carburetor malfunction, service the air cleaner regularly. Service more frequently when operating the engine in extremely dusty areas.

**CAUTION:** *Never run the tiller without the air cleaner. Rapid engine wear will result from contaminants, such as dust and dirt, being drawn through the carburetor, into the engine.*

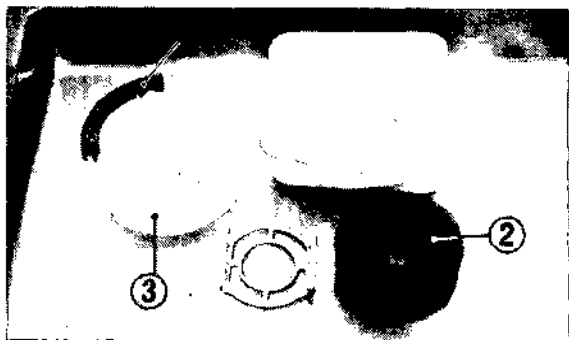
1. Remove the air cleaner cover. Remove and clean the elements in non-flammable or high flash point solvent. Allow the elements to dry.

**WARNING** *Never use gasoline or low flash point solvents for cleaning the elements. A fire or explosion could result.*

2. Saturate the elements with oil and squeeze out any excess.
3. Empty the oil from the air cleaner case and wash out any accumulated dirt with solvent. Dry the case.
4. Fill the case to the oil level shown on page 11.
5. Reassemble and reinstall the air cleaner.



(1) Air cleaner cover



(2) Air cleaner elements (3) Air cleaner case  
(4) Oil retainer

## Spark Plug Service

Recommended spark plug: BR-4HS (NGK),  
W14FR-U (ND)

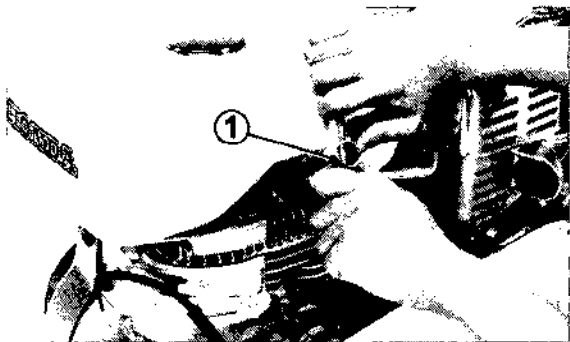
To ensure proper engine operation the spark plug must be properly gapped and free of deposits.

**WARNING** *The muffler becomes very hot during operation and remains hot for a while after stopping the engine. Be careful not to touch the muffler while it is hot.*

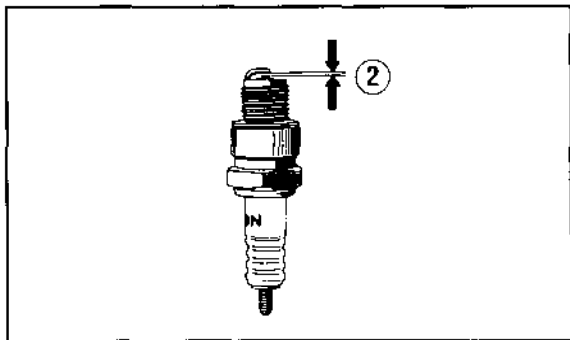
1. Clean any dirt from around the spark plug base.
2. Remove the plug cap and use the wrench to remove the spark plug.
3. Visually inspect the spark plug. Discard it if the insulator is cracked or chipped.
4. Measure the plug gap with a feeler gauge. The gap should be 0.6–0.7 mm (0.024–0.028 in). Correct as necessary by bending the side electrode.
5. Attach the plug washer. Thread the plug in by hand to prevent cross-threading.
6. Tighten a new spark plug 1/2 turn with the wrench to compress the washer. If you are reusing a plug it should only take 1/8–1/4 turn after the plug seats.

### CAUTION:

- *The spark plug must be securely tightened. An improperly tightened spark plug can become very hot and may cause engine damage.*
- *Use only the recommended spark plugs or equivalent. Spark plugs which have an improper heat range may cause engine damage.*



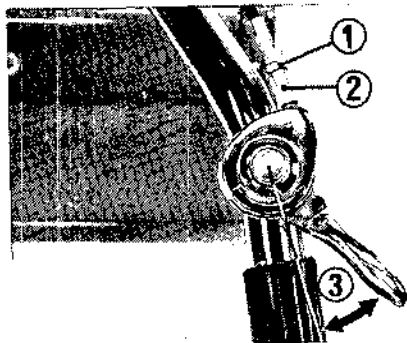
(1) Spark plug wrench



(2) 0.6–0.7 mm (0.024–0.028 in)

### Throttle Cable Adjustment

Loosen the lock nut and turn the throttle cable adjusting nut until free play at the throttle lever is between 5–10 mm (1/4–3/8 in) as shown. Tighten the lock nut securely.



- (1) Lock nut
- (2) Throttle cable adjusting nut
- (3) Free play

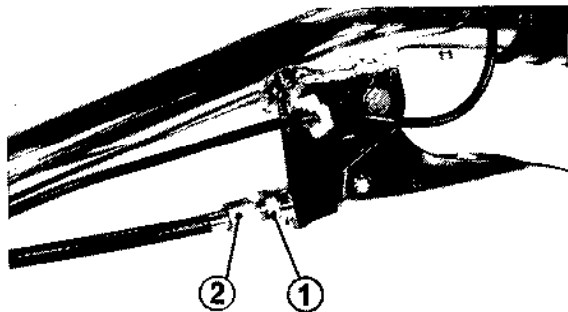
## Clutch Cable Adjustment

1. Remove the V-belt cover.
2. Loosen clutch cable the lock nut and turn the adjusting nut so that distance (A) is within the following limits, when the clutch is disengaged.

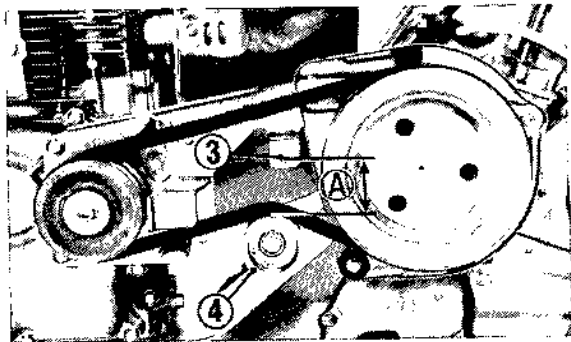
	FR500	FR700
(A)	50~52 mm (1.97~2.05 in)	58~60 mm (2.28~2.36 in)

3. After adjustment, tighten the lock nut securely, and replace the V-belt cover. Then start the engine and check for proper clutch lever operation.

**NOTE:** If the distance A measurement can't be set by the adjustment, the belts are probably worn beyond use and should be replaced. Always replace both belts as a set.



(1) Lock nut (2) Clutch cable adjusting bolt



(3) V-belt tightening bolt (4) Tension roller

## V-belt Adjustment

1. Remove the cover.
2. Engage the clutch and measure distance (A), it should be within the limits shown. To adjust, loosen five engine mounting bolts and shift the engine forward to tighten the belts.

	FR500	FR700
(A)	73 ~ 76 mm (2.87 ~ 2.99 in)	75 ~ 78 mm (2.95 ~ 3.07 in)

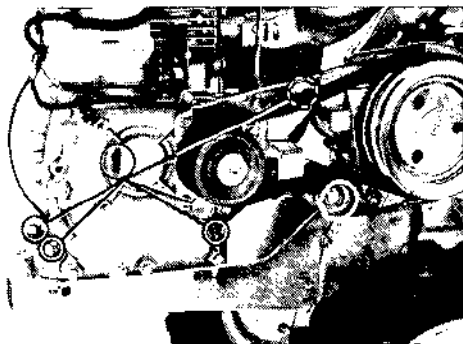
Tighten the bolts securely.

3. Measure clearances (B) and (C) to see if they fall within the following specifications:  
(B) 3–5 mm (0.12–0.20 in)  
(C) 6–8 mm (0.24–0.32 in)

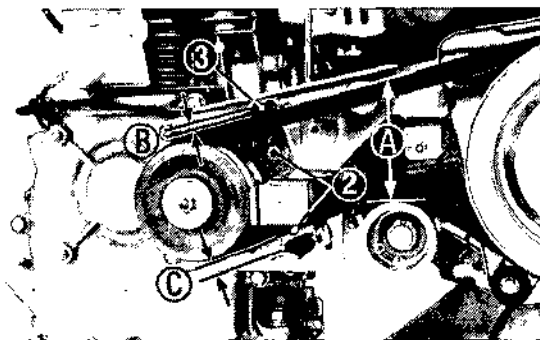
To adjust, loosen the belt stopper tightening bolts and slide the stoppers as required.

4. Tighten the bolts securely and reinstall the cover.

**NOTE:** If the clearances can't be obtained by adjustment, the belts are worn beyond use and should be replaced. Always replace both belts as a set.



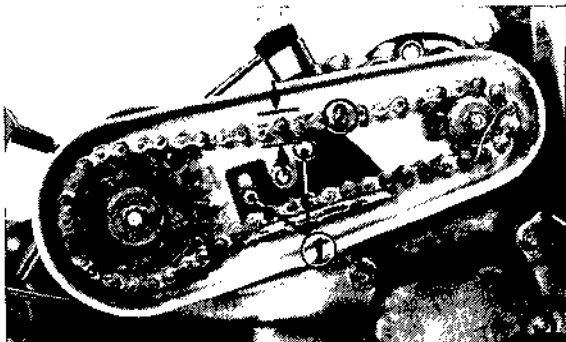
(1) Engine mounting bolts



(2) Stopper tightening bolts (3) Belt stoppers

## Upper Chain Adjustment

1. Remove the primary chain case cover.
2. Check chain slack midway between the sprockets; it should be 20–30 mm (0.79–1.18 in). To adjust tension, loosen the tensioner adjusting bolts and move the tensioner up or down as necessary.



(1) 8 mm adjust bolt    (2) Primary chain

## Fuse Replacement

(FR700 with electric starter)

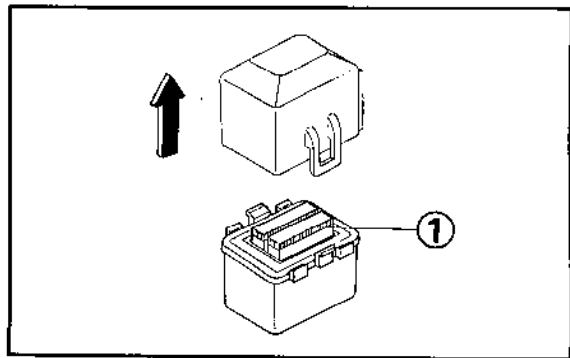
If the fuse has blown, replace it with a 5A fuse after checking the cause. If the fuse is changed without finding the cause, the new fuse may blow again.

**CAUTION:** *Do not substitute a higher capacity fuse, and do not use a wire or other material in place of the fuse; damage to the electrical system may result.*

### NOTE:

When the fuse case cover is removed, 2 fuses can be seen.

One of these is the spare fuse. Use it to replace the blown fuse.



(1) Spare fuse

## TRANSPORTING/STORAGE

### WARNING

- *To avoid severe burns or fire hazards, let the engine cool before transporting the tiller or storing it indoors.*
- *When transporting the tiller, turn the fuel valve to the OFF position, and keep the tiller level to prevent fuel spillage. Fuel vapor or spilled fuel may ignite.*

#### Preparation For Storage (Over 30 days):

- Close the IN. & EX. valves and the contact breaker points.  
Pull the starter handle until it becomes hard to pull (the piston is coming up on the compression stroke). Both valves and the contact breaker points will be closed. This will protect the valve seats and the points from corrosion.
- Drain the gasoline from the fuel tank and carburetor:  
Remove the fuel line from the fuel valve, turn the valve ON and drain all gasoline from the fuel tank into a metal container.  
Remove the carburetor drain bolt to drain gasoline from carburetor. Reinstall the fuel line and tighten the drain bolt securely. Turn the fuel valve OFF.

### WARNING

*Gasoline is flammable and is explosive under certain conditions. Do not smoke or allow flames or sparks near the equipment while draining fuel.*

- Drain the engine oil and refill the engine with fresh oil.
- Clean the tiller and coat areas of possible rust with a light film of oil.
- Coat the cylinder walls with oil. (If anticipated storage will exceed 1 year.)  
Remove the spark plug and pour two or three tablespoonsful of clean oil into the cylinder. Pull the starter handle slowly to distribute the oil over the cylinder walls. Leave the piston on compression to close the valves and points. Reinstall the spark plug.
- Cover the tiller and store on a level surface in a dry, dust-free area.
- Once a month, recharge the battery (FR700 models with electric starter).



## Removal From Storage

- Remove the spark plug and pull the starter handle several times.
- Check that the spark plug is clean and properly gapped, then reinstall and tighten the plug.
- Check engine, transmission, and air cleaner oil levels.

NOTE: Oil will deteriorate if left in an engine for a long period of time. Change the engine oil if the tiller has been stored for several months.

- Check that the battery is fully charged (FR700 models with electric starter).
- Fill the fuel tank.

### WARNING

- *Gasoline is extremely flammable and is explosive under certain conditions.*
- *Refuel in a well-ventilated area with the engine stopped. Do not smoke or allow flames or sparks in the refueling area or where gasoline is stored.*
- *Do not overfill the fuel tank. After refueling, make sure the tank cap is closed properly and securely.*
- *Be careful not to spill fuel when refueling. Fuel vapor or spilled fuel may ignite. If any fuel is spilled, make sure the area is dry before starting the engine.*
- Check operation and condition of all controls. (If any parts are required, use only genuine Honda parts or their equivalent).
- Turn the fuel valve ON, start the engine and check operation. (Note: If the cylinder was oiled for storage, the engine will smoke for a while after it starts. This will clear up.)

## SPECIFICATIONS

Model . . . . .	FR500
Dimensions (L x W x H) . . . . .	1,340 x 620 x 960 mm (52.8 x 24.4 x 37.8 in)
Dry weight . . . . .	100 kg (220.5 lb)
Tire size . . . . .	350-7
Maximum handle height . . . . .	1,230 mm (48.4 in)
Engine	
Model . . . . .	G200
Type . . . . .	Single cylinder, 4-stroke forced air cooled, side valve, gasoline
Displacement/Bore and stroke . . . . .	197 cm <sup>3</sup> (12.0 cu in)/67 x 56 mm (2.6 x 2.2 in)
Ignition timing . . . . .	20° BTDC, fixed
Ignition system . . . . .	Flywheel magneto
Engine oil capacity . . . . .	0.7 ℓ (0.74 US qt)
Fuel tank capacity . . . . .	2.7 ℓ (0.7 US gal.)
Spark plug . . . . .	BR-4HS (NGK), W14FR-U (ND)
Clutch . . . . .	Belt tension
Transmission . . . . .	Two speeds forward and one reverse speed
Oil capacity . . . . .	1.1 ℓ (1.2 US qt)
Rotary	
Dry weight . . . . .	30 kg (66.2 lb)
Tilling depth control . . . . .	Adjustable dragbar
Tine shaft speed . . . . .	243 rpm
Tilling pitch . . . . .	22 ~ 43 mm (0.9 ~ 1.7 in)
Tilling width . . . . .	500 mm (20 in) [Standard] 627 mm (25 in) [Optional]
Tine turning diameter . . . . .	100 mm (40 in) [Standard]
No. of tines . . . . .	6 on each side (Standard) 8 on each side (Optional)
Oil capacity . . . . .	0.35 ℓ (0.37 US qt)

## SPECIFICATIONS

Model	FR700
Dimensions (L x W x H)	A, AR: 1,510 x 620 x 980 mm (59.4 x 24.4 x 38.4 in), AS: 1,595 x 620 x 980 mm (62.7 x 24.4 x 38.4 in)
Dry weight	A, AR: 115 kg (253.6 lb), AS: 121 kg (266.8 lb)
Tire size	350-7
Maximum handle height	1,290 mm (50.8 in)
Engine	
Model	G300
Type	Single cylinder, 4-stroke forced air cooled, side valve, gasoline
Displacement/Bore and stroke	272 cm <sup>3</sup> (16.6 cu in)/76 x 60 mm (3.0 x 2.4 in)
Ignition timing	20° BTDC, fixed
Ignition system	Flywheel magneto
Engine oil capacity	1.2 ℓ (1.3 US qt)
Fuel tank capacity	3.7 ℓ (1.0 US gal)
Spark plug	BR-4HS (NGK), W14FR-U (ND)
Clutch	Belt tension
Transmission	Two speeds forward and one reverse speed
Oil capacity	1.1 ℓ (1.2 US qt)
Rotary	
Dry weight	30 kg (66.2 lb)
Tilling depth control	Adjustable dragbar
Tine shaft speed	243 rpm
Tilling pitch	22 ~ 43 mm (0.9 ~ 1.7 in)
Tilling width	500 mm (20 in) [Standard] 627 mm (25 in) [Optional]
Tine turning diameter	100 mm (4 in) [Standard]
No. of tines	6 on each side (Standard) 8 on each side (Optional)
Oil capacity	0.35 ℓ (0.37 US qt)

## WARRANTY SERVICE

### Owner Satisfaction

Your satisfaction and goodwill are important to your dealer and to us. All Honda warranty details are explained in the Distributor's Limited Warranty. Normally, any problems concerning the product will be handled by your dealer's service department. If you have a warranty problem that has not been handled to your satisfaction, we suggest you take the following action:

- Discuss your problem with a member of dealership management. Often complaints can be quickly resolved at that level. If the problem has already been reviewed with the Service Manager, contact the owner of the dealership or the General Manager.
- If your problem still has not been resolved to your satisfaction, contact the Power Equipment Customer Relations Department of American Honda Motor Co., Inc.

American Honda Motor Co., Inc.  
Power Equipment Customer Relations Department  
P. O. Box 50  
Gardena, California 90247-0805  
Telephone: (213) 604-2400

We will need the following information in order to assist you:

- Your name, address, and telephone number
- Product model and serial number
- Date of purchase
- Dealer name and address
- Nature of the problem

After reviewing all the facts involved, you will be advised of what action can be taken. Please bear in mind that your problem will likely be resolved at the dealership, using the dealer's facilities, equipment, and personnel, so it is very important that your initial contact be with the dealer.

Your purchase of a Honda product is greatly appreciated by both your dealer and American Honda Motor Co., Inc. We want to assist you in every way possible to assure your complete satisfaction with your purchase.

## **Current customer service contact information:**

### **United States, Puerto Rico, and U.S. Virgin Islands:**

Honda Power Equipment dealership personnel are trained professionals. They should be able to answer any question you may have. If you encounter a problem that your dealer does not solve to your satisfaction, please discuss it with the dealership's management. The Service Manager or General Manager can help. Almost all problems are solved in this way.

If you are dissatisfied with the decision made by the dealership's management, contact the Honda Power Equipment Customer Relations Office. You can write:

American Honda Motor Co., Inc.  
Power Equipment Division  
Customer Relations Office  
4900 Marconi Drive  
Alpharetta, GA 30005-8847

Or telephone: (770) 497-6400 M-F, 8:30 am - 7:00 pm EST

When you write or call, please provide the following information:

- Model and serial numbers
- Name of the dealer who sold the Honda power equipment to you
- Name and address of the dealer who services your equipment
- Date of purchase
- Your name, address, and telephone number
- A detailed description of the problem



**HONDA**

HONDA MOTOR CO., LTD. TOKYO, JAPAN

31723601  
00X31-723-6010

(AH) (SM) 10009011  
PRINTED IN JAPAN