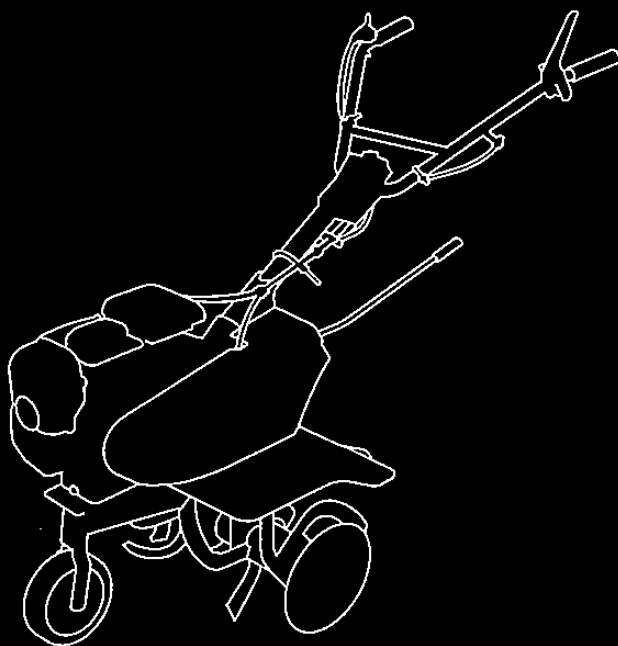


HONDA
POWER PRODUCTS

TILLER
FG400/FG500



OWNER'S MANUAL
MANUEL DE L'UTILISATEUR
BEDIENUNGSANLEITUNG
MANUAL DE EXPLICACIONES
MANUALE DELL'UTENTE

Thank you for purchasing a Honda tiller.

This manual covers operation and maintenance of the FG400 and FG500 tillers.

All information in this publication is based on the latest product information available at the time of printing.

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 is considered a permanent part of the tiller and it must stay with the tiller if resold.

Pay special attention to statements preceded by the following words:

▲WARNING Indicates a strong possibility of severe personal injury or death 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 questions about your tiller, consult an authorized Honda tiller dealer.

▲WARNING

The Honda tiller is designed to give safe and dependable service if operated according to instructions. Read and understand the Owner's Manual before operating the tiller. Failure to do so could result in personal injury or equipment damage.

- The illustration may vary according to the type.

CONTENTS

1. SAFETY INSTRUCTIONS	3
2. SAFETY LABEL LOCATIONS	8
CE mark and noise label locations	9
3. COMPONENT IDENTIFICATION	10
4. PRE-OPERATION CHECK	12
5. STARTING THE ENGINE	16
• High altitude operation	
6. TILLER OPERATION	19
7. STOPPING THE ENGINE	24
8. MAINTENANCE	26
9. TRANSPORTING/STORAGE	36
10. TROUBLESHOOTING	37
11. SPECIFICATIONS	38
12. MAJOR Honda DISTRIBUTOR ADDRESSES IN EUROPE	40

1. SAFETY INSTRUCTIONS

⚠ WARNING

To ensure safe operation –

For your safety and the safety of others, pay special attention to these precautions:



- Honda tiller is designed to give safe and dependable service if operated according to instructions. Read and understand the Owner's Manual before operating the tiller. Failure to do so could result in personal injury or equipment damage.



- Exhaust gas contains poisonous carbon monoxide. Never run the tiller in an enclosed area. Be sure to provide adequate ventilation. When installed in ventilated protection are to be observed.



- The rotating tines are sharp and they turn at high speed. Accidental contact can cause serious injury.
 - Keep your hands and feet away from the tines while engine is running.
 - Stop the engine and disengage the tines clutch before inspection or maintenance of tines.
 - Disconnect the spark plug cap to prevent any possibility of accidental starting. Wear heavy gloves to protect your hands from the tines when cleaning the tines or when inspecting or replacing the tines.

Operator responsibility

- Keep the tiller in good operating condition. Operating a tiller in poor or questionable condition could result in serious injury.
- Be sure all safety devices are in working order and warning labels are in place. These items are installed for your safety.
- Be sure the safety covers (tine covers, fan cover and recoil starter cover) are in places.
- Know how to stop the engine and tines quickly in case of emergency. Understand the use of all controls.
- Keep a firm hold on the handlebars. They may tend to lift during clutch engagement.

▲ WARNING

To ensure safe operation —

Operator responsibility

- Read the owner's manual carefully. Be familiar with the controls and their proper use of the tiller.
- Use the tiller for the purpose it is intended that is, cultivating the soil. Any other use could be dangerous or damage the equipment, especially never use it to cultivate soil containing rocks, stones, wires and any other hard materials.
- Never allow children or people unfamiliar with this owner's manual to use the tiller. Local regulations may restrict the age of the operator.
- Before each use, visually inspect the tiller including parts for any wear, damage and looseness. If necessary, replace the damaged parts as an assembly.
- Keep in mind that the owner or user is responsible for accidents or damage, occurring to other people or their property. In the event of hire use, be sure that operational explanations are given in the presence of the user.
- Keep your hands and feet away from the tines while the engine is running.
- Allowing anyone to operate this tiller without proper instruction may result in injury.
- Wear sturdy, full-coverage footwear. Operating this tiller barefoot or with open toe shoes or sandals increases your risk of injury.
- Dress sensibly. Loose clothing may get caught in moving parts, increasing your risk of injury.
- Be alert. Operating this tiller when you are tired, ill or under the influence of alcohol or drugs may result in serious injury.
- Keep all persons and pets away from the tilling area.
- Be sure drag bar is in place and properly adjusted.
- Do not change the engine governor settings or overspeed the engine.
- Start the engine carefully according to the instructions in this manual, keeping your feet away from the tines.
- When starting the engine, keep your feet away from the tines.
- Avoid operating the tiller at night or in a bad weather of poor visibility, because there is much possibility of accident.
- Walk, never run during operation.
- When taking backward steps during operation, pay special attention to people and obstacles behind the operator.
- Before transporting or hoisting the tiller, make sure that the engine is stopped.

▲WARNING

To ensure safe operation –

Operator responsibility

- Stop the engine in the following cases:
 - Whenever you leave the tiller unattended.
 - Before refueling
- When stopping the engine, move the throttle lever to the LOW position, then turn the engine switch OFF. If the fuel valve is equipped on the tiller, be sure to turn the fuel valve OFF.
- Keep all nuts, bolts and screws tight to be sure the tiller is in safe working condition. Regular maintenance is an essential aid to user's safety and retaining a high level of performance.
- Never store the tiller with gasoline in the tank inside a building where fumes may reach an open flame, spark or high temperature source.
- Allow the engine to cool before storing in any enclosure.
- To reduce the fire hazard, keep the tiller especially the engine, muffler, the gasoline storage area as well, free of grass, leaves, or excessive grease.
Do not leave containers of vegetable matters in or near a building.
- If the fuel tank has to be drained, this should be done outdoors, with a cold engine.
- Replace the worn or damaged parts for safety.

Child safety

- Keep children indoors and supervised at all times when any outdoor power equipment is being used nearby. Young children move quickly and are attracted especially to the tiller and the tilling activity.
- Never assume children will remain where you last saw them. Be alert and turn the tiller off if children enter the area.
- Children should never be allowed to operate the tiller, even under adult supervision.

Thrown object hazard

Objects hit by the rotating tines can be thrown from the tiller with great force, and may cause serious injury.

- Before tilling, clear the tilling area of sticks, large stones, wire, glass, etc. Till only in daylight.
- Always inspect the tiller for damage after striking a foreign object. Repair or replace any damaged parts before continuous use.
- Pieces thrown from worn or damaged tines can cause serious injury. Always inspect the tines before using the tiller.

▲ WARNING

To ensure safe operation —

Fire and burn hazard

Gasoline is extremely flammable, and gasoline vapor can explode. Use extreme care when handling gasoline. Keep gasoline out of reach of children.

- Add fuel before starting the engine. Never remove the cap of the fuel tank or add gasoline while the engine is running or when the engine is hot.
- Refuel in a well-ventilated area with the engine stopped.
- Refuel outdoors only and do not smoke while refueling or handling fuel.
- Allow the engine to cool before refueling. Fuel vapor or spilled fuel may ignite.
- The engine and exhaust system become very hot during operation and remain hot for a while after stopping. Contact with hot engine components can cause burn injuries and can ignite some materials.
- Avoid touching a hot engine or exhaust system.
- Allow the engine to cool before performing maintenance or storing the tiller indoors.
- Tighten all fuel tanks and container caps securely.
- Store fuel in containers specifically designed for this purpose.
- If gasoline is spilled, do not attempt to start the engine but move the tiller away from the area of spillage and avoid creating any source of ignition until gasoline vapors have dissipated.

▲WARNING

To ensure safe operation —

Carbon monoxide poisoning hazard

Exhaust contains poisonous carbon monoxide, a colorless and odorless gas. Breathing exhaust can cause loss of consciousness and may lead to death.

- If you run the engine in an area that is confined or even partially enclosed, the air you breathe could contain a dangerous amount of exhaust gas. To keep exhaust gas from building up, provide adequate ventilation.
- Replace faulty muffler.
- Do not operate the engine in a confined space where dangerous carbon monoxide fumes can collect.

Operation on slope

- When tilling on slopes, keep the fuel tank less than half full to minimize fuel spillage.
- Till across the slope (at equally spaced intervals) rather than up and down it.
- Be very careful when changing the direction of the tiller on a slope.
- Do not use the tiller on a slope of more than 10°.

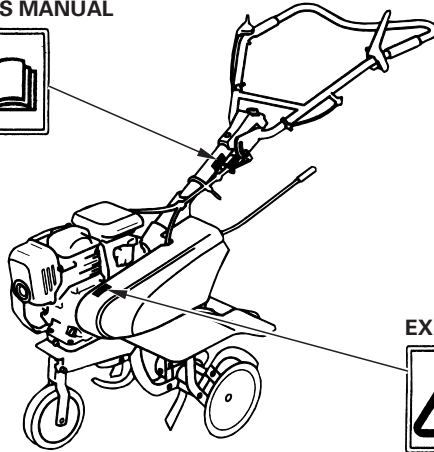
The maximum safe grade angle shown is for reference purpose only and should be determined according to the type of the tool. Before starting the engine, check that the tiller is not damaged and in good condition. For your safety and safety of others, exercise extreme care when using the tiller on up or down hill.

2. SAFETY LABEL LOCATIONS

These labels warn you of potential hazards that can cause serious injury. Read the labels and safety notes and precautions described in this manual carefully.

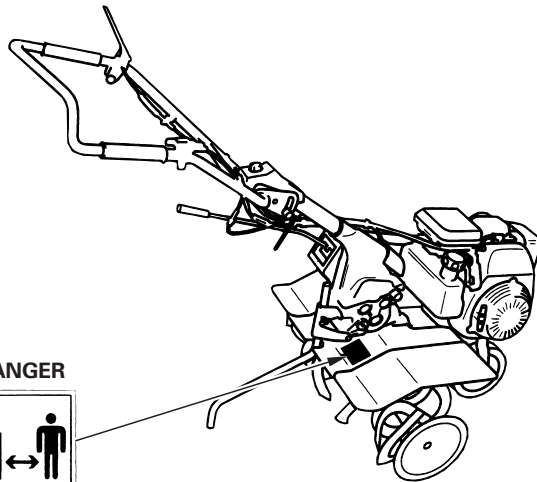
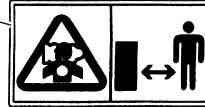
If a label comes off or becomes hard to read, contact your Honda dealer for a replacement.

READ OWNER'S MANUAL



(E2 type)

EXHAUST CAUTION



CUTTING DANGER

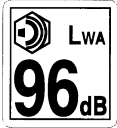


(E2 type)

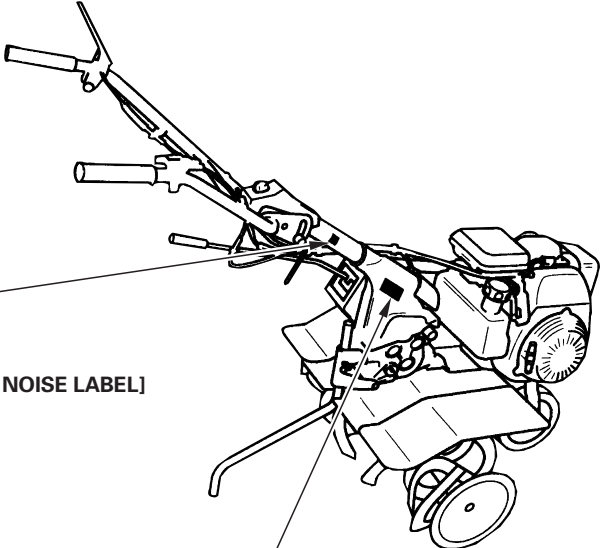
CE mark and noise label locations

(FG400-E1, E1S, E1T, Types)

NOISE LABEL



[Example: FG400 NOISE LABEL]



CE MARK

Manufacturer and address

HONDA MOTOR CO., LTD.
2-1-1 MINAMI AOYAMA, MINATO-KU,
TOKYO, JAPAN

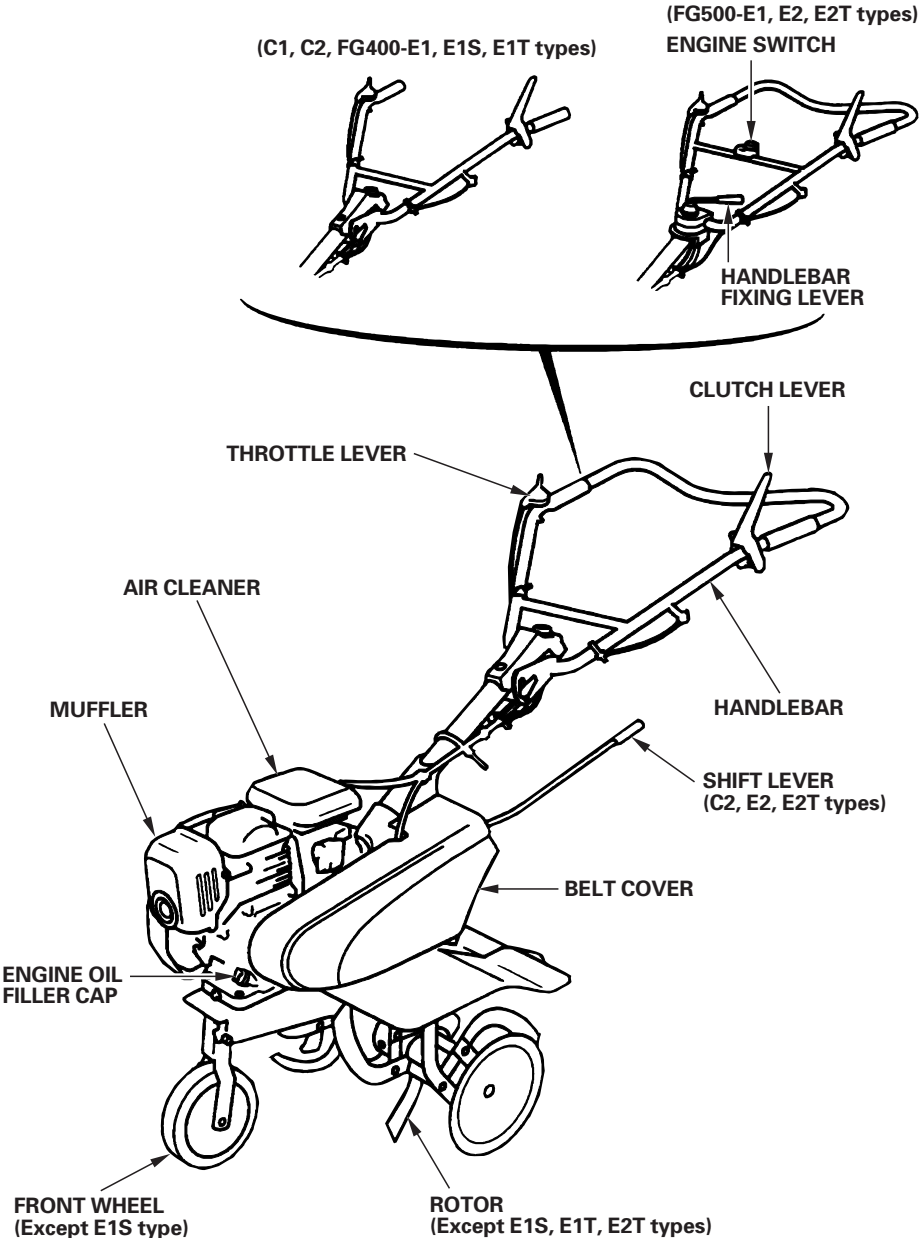
CE ■ FZCW ■ 200
■ FZCW- []
■ 2.9 kW ■ 50 kg

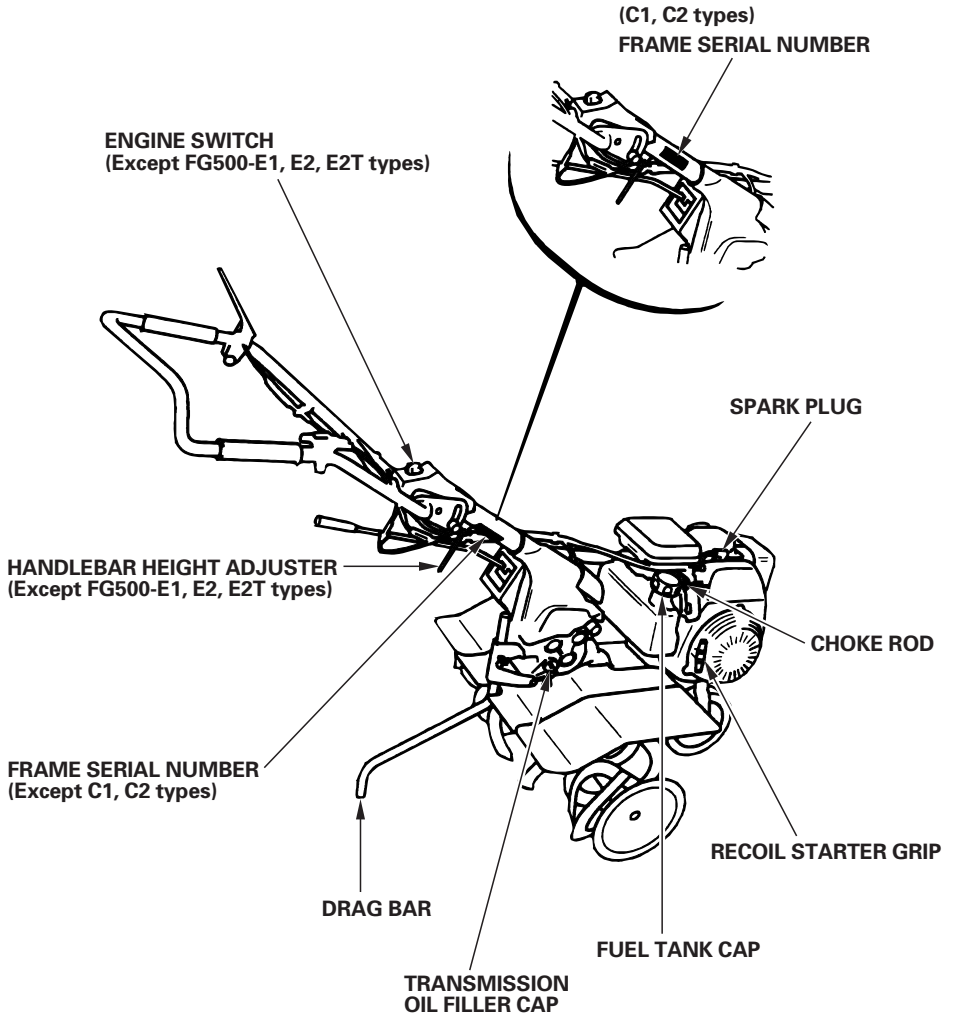
Rated output

Machine weight (standard specification)

[Example: FG400 CE MARK]

3. COMPONENT IDENTIFICATION





4. PRE-OPERATION CHECK

1. Engine oil

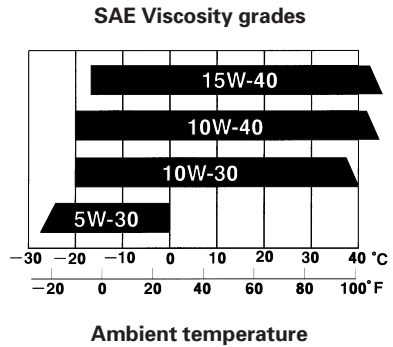
CAUTION:

- Running the engine with insufficient oil can cause serious engine damage.
- Be sure to check the engine on a level surface with the engine stopped.

1. Remove the oil filler cap/dipstick and check the oil level.
2. If the level is low, add the recommended oil to the edge of the oil filler hole.

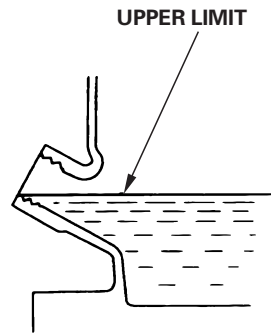
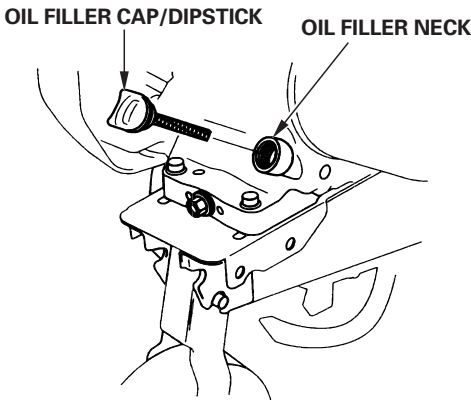
Use Honda 4-stroke oil, or an equivalent high detergent premium quality motor oil certified to meet or exceed U.S. automobile manufacturer's requirements for service classification SF, SH. (Motor oils classified SF, SH will show this designation on the container.)

Select the appropriate viscosity for the average temperature in your area.



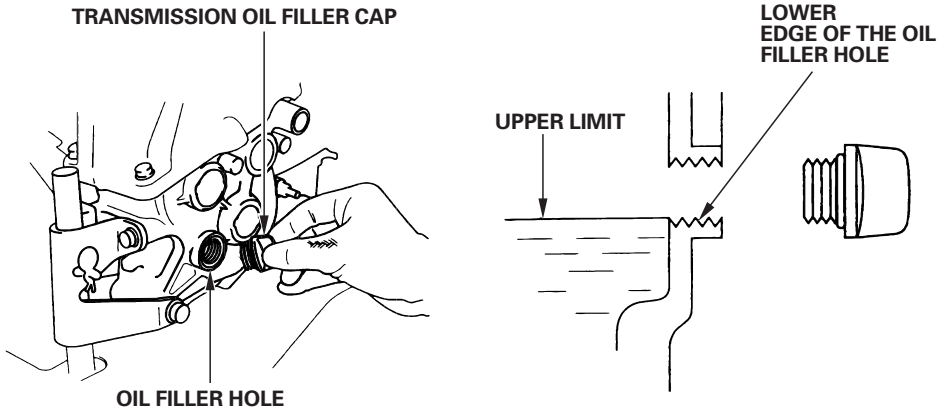
CAUTION:

Using non-detergent oil or 2-stroke engine oil will shorten the engine's service life.



2. Transmission gear oil

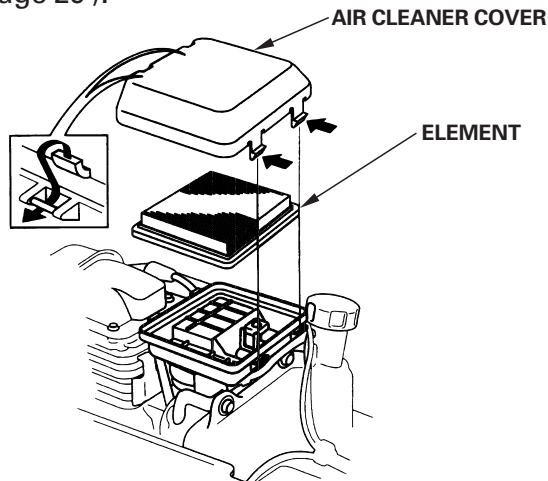
Place the tiller on a level surface and remove the oil filler cap. The oil should be level with the lower edge of the oil filler hole. Add high quality engine oil if the level is low.



3. Air cleaner

CAUTION:
Never run the engine without the air cleaner. Rapid engine wear will result.

Remove the air cleaner cover and check cleaner for dirt or obstruction of the element (see page 29).



4. Fuel

Check the fuel level, and refill the tank if the fuel level is low. Use automotive gasoline (Unleaded or lowleaded is preferred to minimize combustion chamber deposits).

FOR NEW SOUTH WALES ONLY:

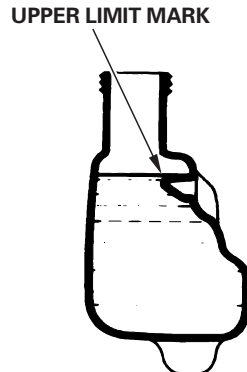
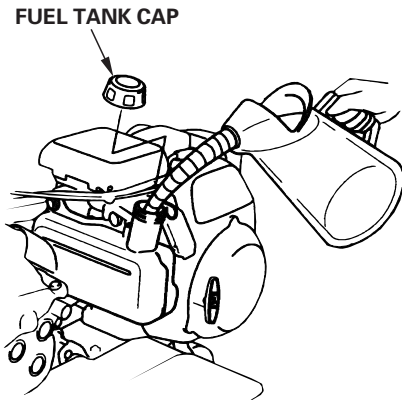
Use unleaded fuel only.

Never use stale or contaminated gasoline or an oil/gasoline mixture. Avoid getting dirt or water in 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 area where the engine is refueled or where gasoline is stored.**
- **Do not overfill the fuel tank (there should be no fuel above the upper limit mark). After refueling, make sure the tank cap is closed properly and securely.**
- **Be careful not to spill fuel when refueling. Spilled fuel or fuel vapor may ignite. If any fuel is spilled, make sure the area is dry before starting the engine.**
- **Avoid repeated or prolonged contact with skin or breathing of vapor. KEEP OUT OF REACH OF CHILDREN.**

Fuel tank capacity: FG400..... 1.7 ℓ (0.45 US gal , 0.37 Imp gal)
FG500..... 2.0 ℓ (0.53 US gal , 0.44 Imp gal)



Gasolines containing alcohol

If you decide to use a gasoline containing alcohol (gasohol), be sure it's octane rating is at least as high as that recommended by Honda. There are two types of "gasohol": one containing ethanol, and the other 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 gasoline that contains alcohol is not covered under the warranty.

Honda cannot endorse the use of gasoline containing methanol since evidence of its suitability is as yet incomplete.

- Before buying gasoline from an unfamiliar station, first determine if the gasoline contains alcohol; if it does, find out the type and percentage of alcohol used.

If you notice any undesirable operating symptoms while using a gasoline that contains alcohol, or one that you think contains alcohol, switch to a gasoline that you know does not contain alcohol.

5. Tools and Attachments

To install a tool or attachment on the tiller, follow the instructions furnished with the tool or attachment. Ask your Honda dealer for advice if you encounter any problem or difficulty in installing a tool or attachment.

5. STARTING THE ENGINE

CAUTION:

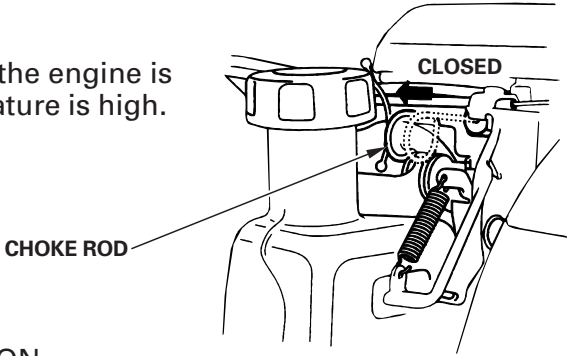
Be sure the clutch is disengaged and the shift lever (C2 and E2 types) is in the neutral position to prevent sudden uncontrolled movement when the engine starts.

The clutch is engaged by squeezing the clutch lever and disengaged by releasing the lever.

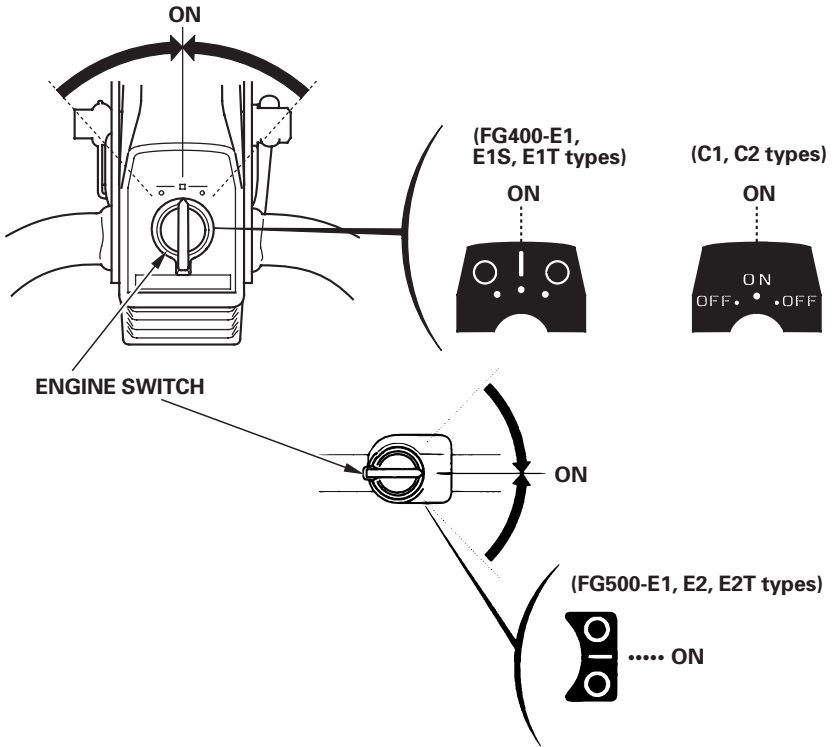
1. Pull the choke rod to the CLOSED position.

NOTE:

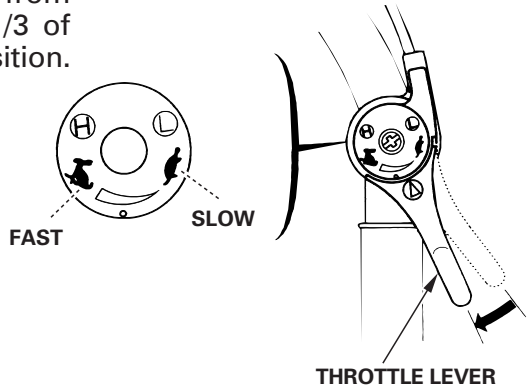
Do not use the choke if the engine is warm or the air temperature is high.



2. Turn the engine switch ON.



3. Move the throttle lever away from the SLOW position, about 1/3 of the way toward the FAST position.

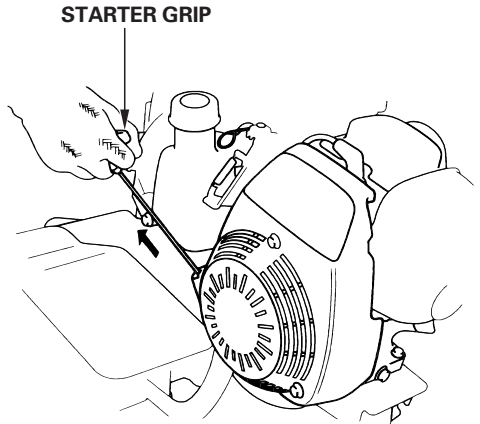


4. Pull the starter grip lightly until resistance is felt, then pull briskly.

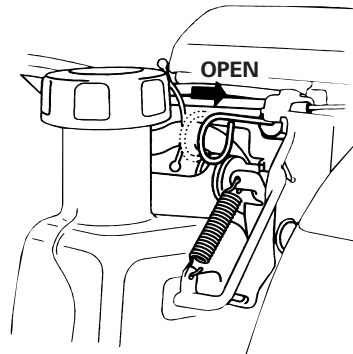
Hold the handle with your left hand and start the engine by pulling out the starter grip.

CAUTION:

Do not allow the starter grip to snap back against the engine. Return it gently to prevent damage to the starter.



5. If the choke rod has been pulled to the CLOSED position to start the engine, push in to the OPEN position as soon as the engine warms up enough to run smoothly.



- **High altitude operation**

At high altitude, the standard carburetor air-fuel mixture will be too rich. Performance will decrease, and fuel consumption will increase. A very rich fuel mixture will also foul the spark plugs and cause hard starting.

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 1,500 meters (5,000 feet) above sea level, have an authorized Honda tiller dealer perform this carburetor modification.

Even with carburetor modification, engine horsepower will decrease about 3.5% for each 300 meters (1,000 feet) increase in altitude. The effect of altitude on horsepower will be greater than this if no carburetor modification is made.

CAUTION:

Once a carburetor is jetted for high altitude use, operation at lower altitudes without rejetting may result in reduced performance, overheating, and serious engine damage.

6. TILLER OPERATION

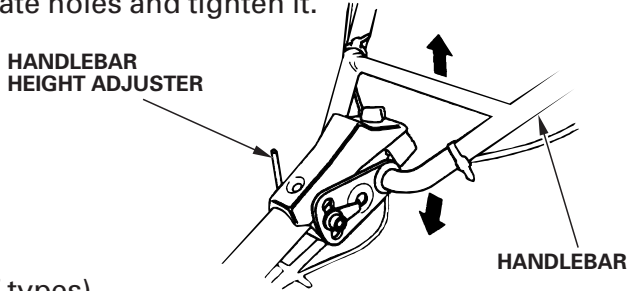
1. Handlebar position adjustment

CAUTION:

Before adjusting the handlebar, place the tiller on the firm level ground to prevent the handle from collapsing accidentally.

(FG400-E1, E1S, E1T, FG400-C1 types/FG500-C1, C2 types)

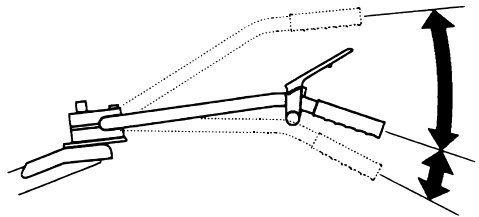
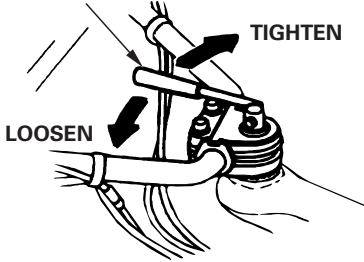
To adjust the handlebar height, loosen the handlebar height adjuster, select the appropriate holes and tighten it.



(FG500-E1, E2, E2T types)

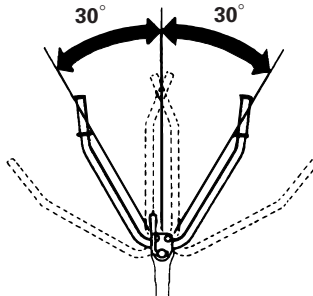
To adjust the handlebar height, loosen the handlebar fixing lever, move the handlebar to a desired position and tighten the lever.

HANDLEBAR FIXING LEVER



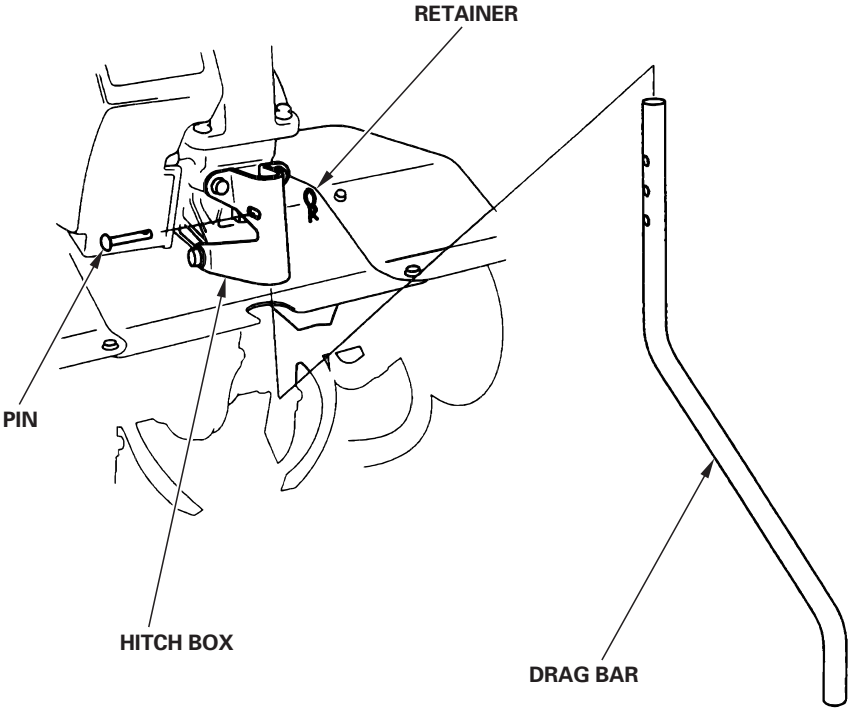
If the handlebar angle adjustment is needed, loosen the handlebar fixing lever, move the handlebar to a required position and tighten the lever.

The handlebar can swing within the sweep of 30° from the center to the right and left each.



2. Tilling depth adjustment

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



3. Clutch operation

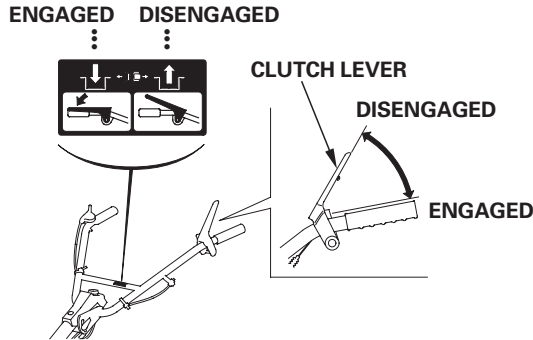
The clutch engages and disengages the power from the engine to the transmission.

When the clutch lever is squeezed, the clutch is engaged and power is transmitted. Squeeze the lever. The tool will be rotated.

When the lever is released, the clutch is disengaged and power is not transmitted. Release the clutch lever. The tool will be stopped.

CAUTION:

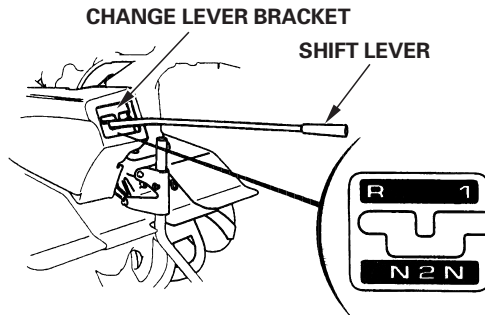
Reduce engine rpm before operating the clutch lever.



4. Gear selection (C2, E2, E2T types)

The transmission can be shifted into two forward and one reverse (Except C1, E1, E1S, E1T types).

The shift lever should be operated in accordance with the change lever bracket.



Gear shifting

1. Return the throttle lever to the slowest position.
2. Release the clutch lever to disengage the clutch.
3. Move the shift lever to the desired gear position.

NOTE:

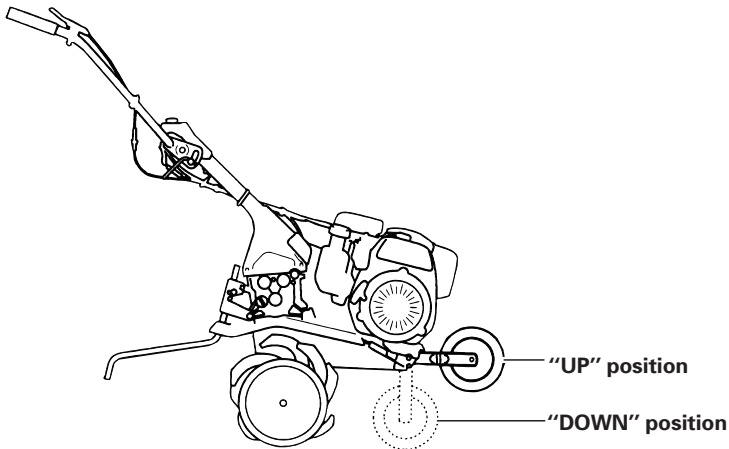
If the shift lever will not engage the desired gear, squeeze the clutch lever and move the tiller slightly to reposition the gears. Release the clutch lever again.

4. Squeeze the clutch lever to engage the clutch.

5. Front wheel

Use a front wheel to move the tiller on the road ("DOWN" position). Lift the handlebars up and ground the front wheel.

When the tiller is used in the field, move the wheel up ("UP" position) by shifting the pivot at the front wheel fork into the upper notch.



6. Handling tips

Adjust the handlebar height to a comfortable position (waist height for normal tilling).

Should the machine jerk forward while tilling, press down on the handlebars.

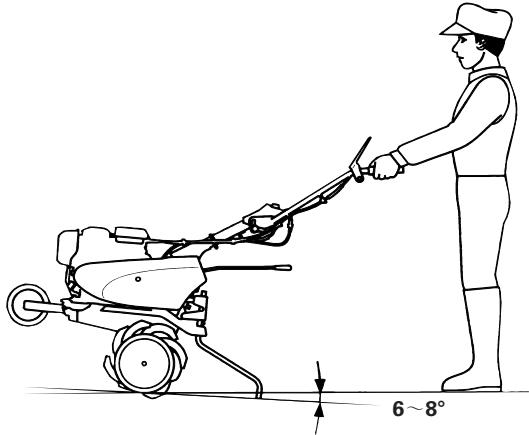
If the machine will not move forward, move the handlebars from side to side.

Turn: The proper method of negotiating a turn during a tilling operation is to lower the handlebars to bring the weight toward the rear and then make the turn.

This will permit a turn to be made with relative ease.

7. Normal operating angle

Lower the handle slightly so the front of the machine is raised about $6 \sim 8^\circ$.



To get the maximum advantage from the tiller, try to hold the machine at the angle shown while you are tilling the ground:

CAUTION:

- Do not use the tiller with a rotor whose diameter is outside the specifications below.

Model	FG400	FG500	
Type	C1, E1	C1, C2	E1, E2
Rotor	300 mm (11.8 in)	350 mm (13.8 in)	300 mm (11.8 in)

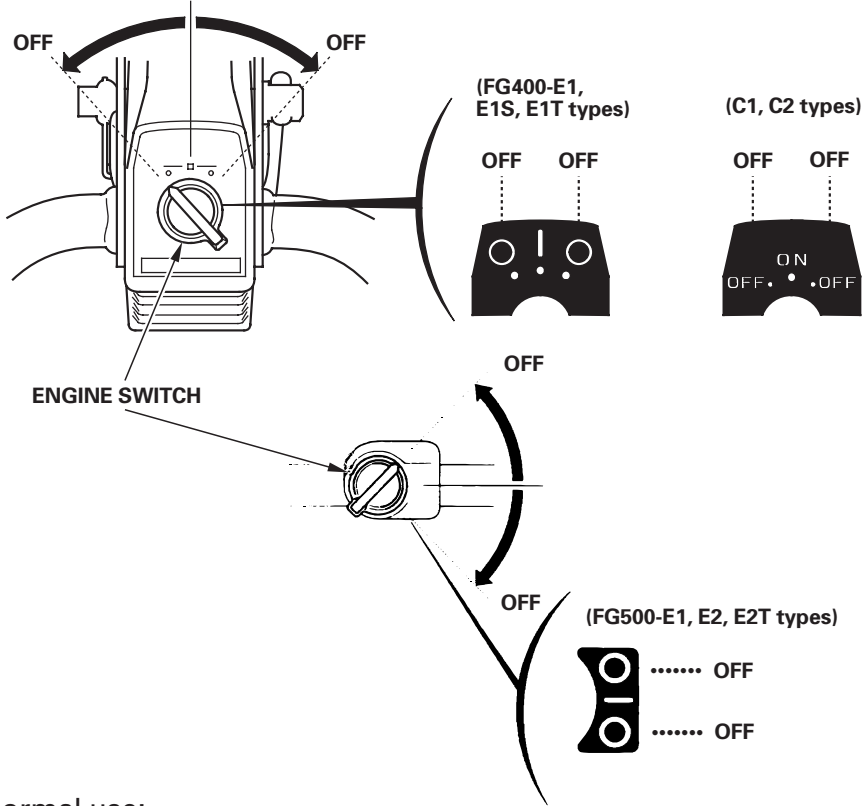
- Operating the tiller on grades could cause the tiller to tip over.
- Allowing any one to operate this tiller without proper instruction may result in injury.
- Wear sturdy, full coverage footgear. Operating this tiller with bare feet, or with open toe shoes or sandals increases your risk of injury.
- Do not use the tiller in the night.
- When the rotor is clogged with mud, pebbles etc., immediately stop the engine and clean the rotor in a safe place. Be sure to wear heavy gloves when cleaning the rotor.

To prevent damage, check the tiller for any signs of damage or other faults each time the tiller is used after it has been operated last.

7. STOPPING THE ENGINE

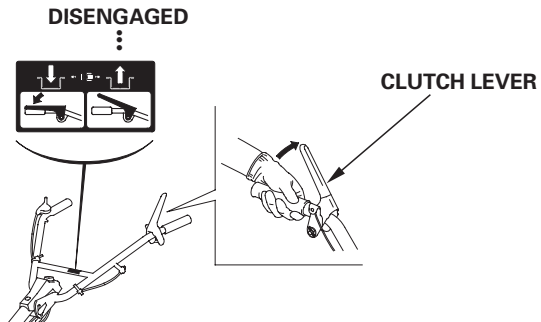
In an emergency:

- Turn the engine switch OFF.

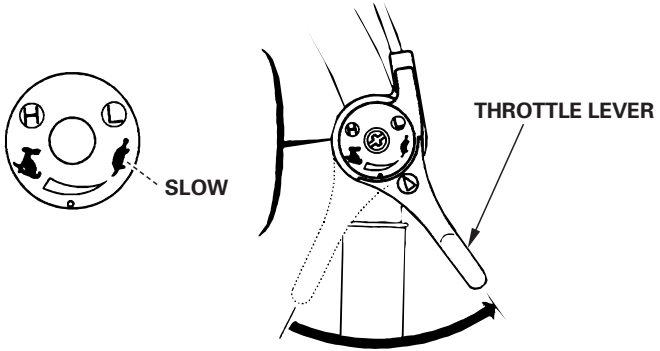


In normal use:

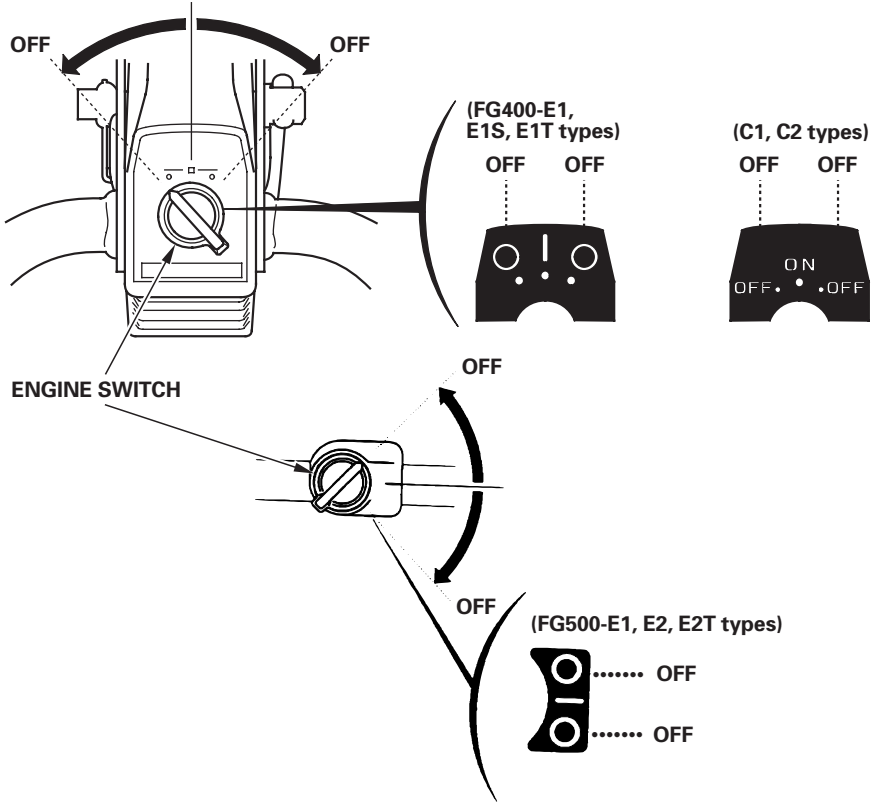
1. Release the clutch lever to **DISENGAGED** position and shift lever is in neutral position (C2, E2, E2T types: see page 21).



2. Move the throttle lever to the slowest position.



3. Turn the engine switch OFF.



8. MAINTENANCE

The purpose of the maintenance schedule is to keep the tiller in the best operating condition. Inspect or service as scheduled in the table below.

▲WARNING

- **Shut off the engine before performing any maintenance. Exhaust contains poisonous carbon monoxide gas; Exposures cause loss of consciousness and may lead to death. If the engine must be run, make sure the area is well ventilated.**
- **To prevent an accidental start-up, disconnect the spark plug cap.**

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.

Maintenance schedule

REGULAR SERVICE PERIOD (4) Perform at every indicated month or operating hour interval, whichever comes first.		Each use	First month or 5 hrs.	Every 3 months or 25 hrs.	Every 6 months or 50 hrs.	Every year or 100 hrs.	Every 2 years or 250 hrs.
Item							
Engine oil	Check level	○					
	Change		○		○ (2)		
Air cleaner	Check	○					
	Clean			○ (1)			
	Replace						○
Spark plug	Check-adjust					○	
	Replace						○
Spark arrester (Optional parts)	Clean					○	
Tiller outside	Check	○					
Each lever function	Check	○					
Bolts and Nuts tightens	Check	○					
Wirings and cables	Check	○					
Engine operation	Check	○					
Transmission oil	Check	○					
Drive belt	Adjust			First time 25 Hrs.		○	
Throttle cable	Adjust						○
Clutch cable	Adjust			First time 25 Hrs.		○	
Idle speed	Check-adjust					○ (3)	
Valve clearance	Check-adjust					○ (3)	
Combustion chamber	Clean	After every 250 hrs. (3)					
Fuel tank and filter	Clean					○ (3)	
Fuel tube	Check	Every 2 years (Replace if necessary) (3)					

NOTE: (1)Service more frequently when used in dusty areas.

(2)Change engine oil every 25 hours when used heavy load or in high ambient temperature.

(3)These items should be serviced by your servicing dealer, unless you have the proper tools and are mechanically proficient. Refer to Honda shop manual for service procedures.

(4)For commercial use, log hours of operation to determine proper maintenance intervals.

1. Changing oil

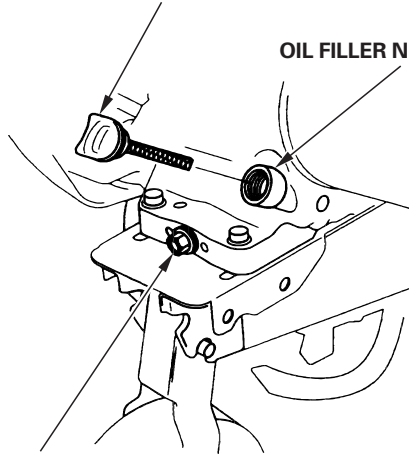
Change the oil when the engine is warm to assure rapid and complete draining.

1. Remove the oil filler cap/dipstick and drain plug to drain the oil.
2. Reinstall the drain plug and tighten it securely.
3. Refill with the recommended oil (see page 12) and check the oil level.
4. Reinstall the oil filler cap/dipstick.

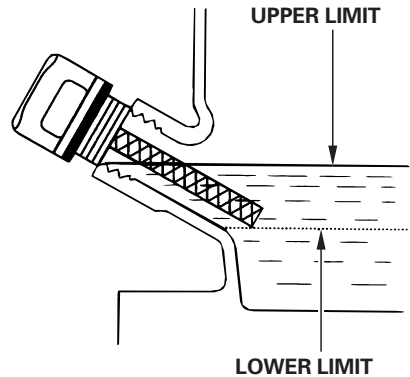
Oil capacity: 0.58 ℓ (0.61 US qt , 0.51 Imp qt)

OIL FILLER CAP/DIPSTICK

OIL FILLER NECK



DRAIN PLUG



Wash your hands with soap and water after handling used oil.

NOTE:

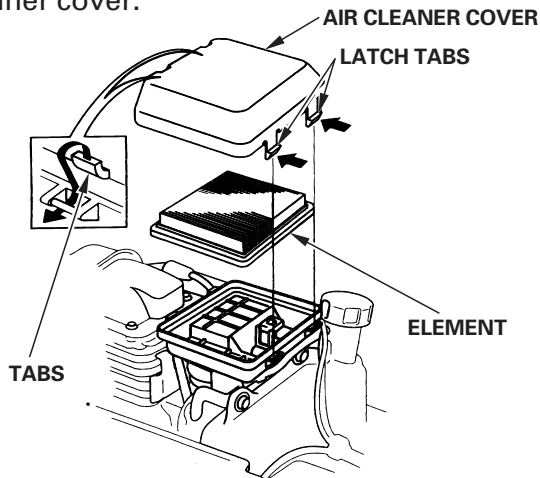
Please dispose of used motor oil in a manner that is compatible with the environment. We suggest you take it in a sealed container to your local service station for reclamation. Do not throw it in the trash or pour it on the ground.

2. Air cleaner service

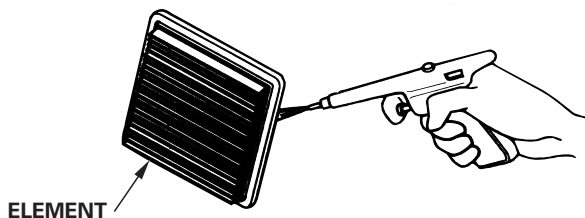
A dirty air cleaner will restrict air flow to the carburetor. To prevent carburetor malfunction, service the air cleaner regularly. Service more frequently when operating the engine in extremely dusty areas.

CAUTION:
Never run the engine without the air cleaner. Rapid engine wear will result.

1. Press the latch tabs on the fuel tank side of the air cleaner cover and remove the air cleaner cover.



2. Remove the element. Carefully check the element for holes or tears and replace it if damaged.
3. Tab the element lightly several times on a hard surface to remove excess dirt, or blow compressed air through the filter from the inside out. Never try to brush the dirt off; brushing will force dirt into the fibers. Replace the element if it is excessively dirt.



4. Install the element and the air cleaner cover.

3. Spark plug service

Recommended spark plug: BPR6ES (NGK)

CAUTION:

Never use a spark plug with an improper heat range.

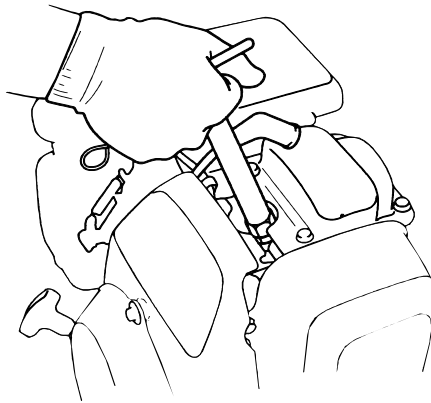
To ensure proper engine operation, the spark plug must be properly gapped and free of deposits.

1. Remove the spark plug cap.

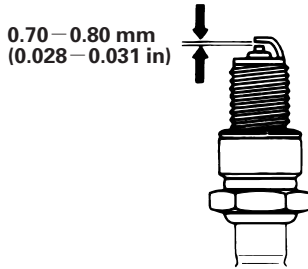
Use the spark plug wrench to remove the spark plug.

▲WARNING

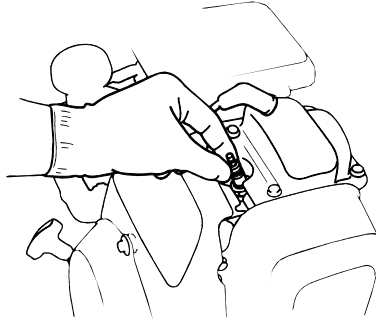
If the engine has been running, the muffler will be very hot. Be careful not to touch the muffler.



-
2. Visually inspect the spark plug. Discard it if the insulator is cracked or chipped. Clean the spark plug with a wire brush if it is to be reused.
 3. Measure the plug gap with a feeler gauge.
Correct as necessary by bending the side electrode.
The gap should be: 0.70–0.80 mm (0.028–0.031 in)



4. Check that the spark plug washer is in good condition and thread the spark plug in by hand to prevent cross-threading.



5. After the spark plug is seated, tighten with a spark plug wrench to compress the washer.

NOTE:

After seating it by hand, 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.

CAUTION:

The spark plug must be securely tightened. An improperly tightened plug can become very hot and possibly damage the engine.

4. Spark arrester maintenance (optional part)

▲WARNING

If the engine has been running, the muffler will be very hot. Allow it to cool before proceeding.

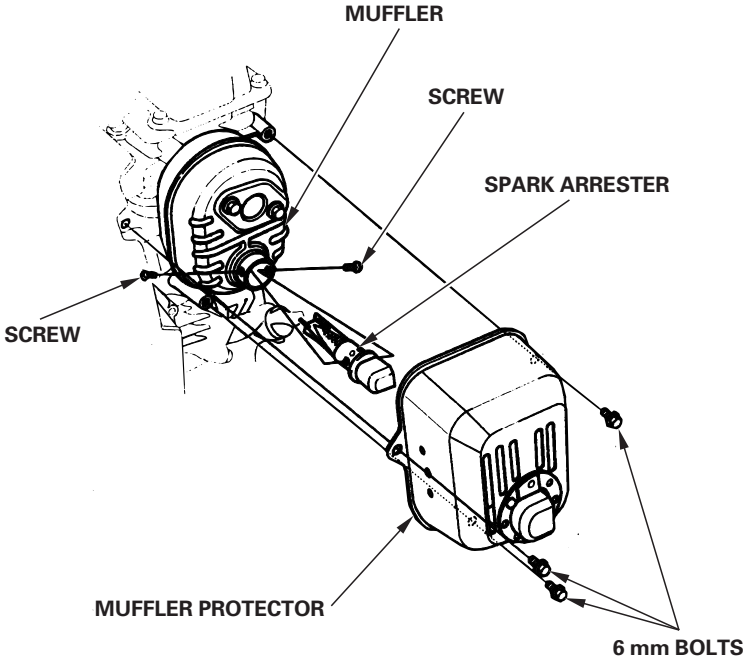
CAUTION:

The spark arrester must be serviced every 100 hours to maintain its efficiency.

1. Remove the muffler protector by removing the three 6 mm bolts.
2. Remove the spark arrester from the muffler by removing the two screws.
(Taking care not to damage the wire mesh.)

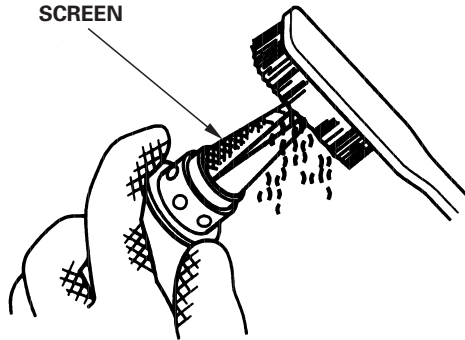
NOTE:

Check for carbon deposits around the exhaust port and the spark arrester, and clean if necessary.



3. Use a brush to remove carbon deposits from the spark arrester screen.

CAUTION:
Be careful not to damage the spark arrester screen.



NOTE:
The spark arrester must be free of breaks and holes. Replace the spark arrester if it is damaged.

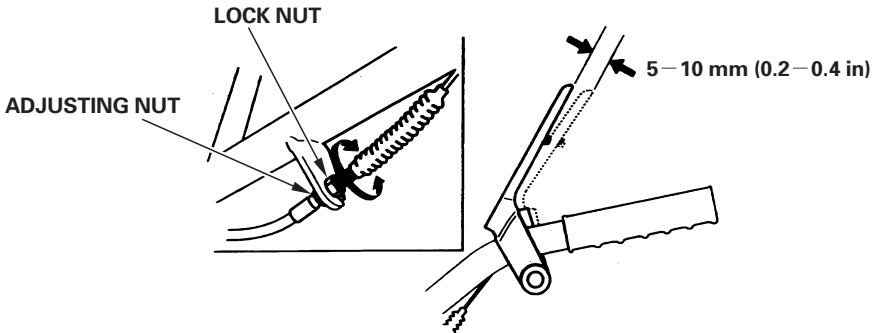
4. Install the spark arrester and the muffler in the reverse order of disassembly.

5. Clutch cable adjustment

Measure the free play at the lever tip.

Free play: 5–10 mm (0.2–0.4 in)

If the free play is incorrect, loosen the lock nut and turn the adjusting nut in or out as required.



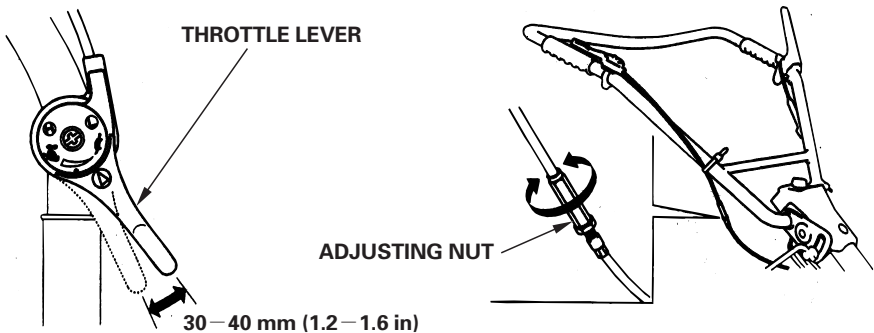
After adjusting the cable free play, tighten the lock nut securely. Then start the engine and check for proper clutch operation.

6. Throttle cable adjustment

Measure the free play at the lever tip.

Free play: 30–40 mm (1.2–1.6 in)

If the free play is incorrect, loosen the lock nut and turn the adjusting nut in or out as required.

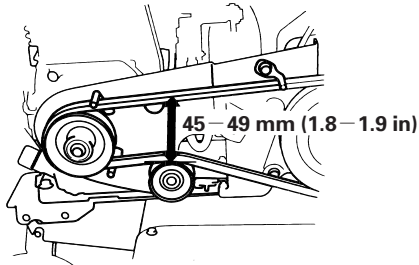


7. Belt tension adjustment

Adjust the clutch lever free play (Page 34).

The standard belt tension at the tension roller with the clutch engaged (clutch lever is squeezed) is:

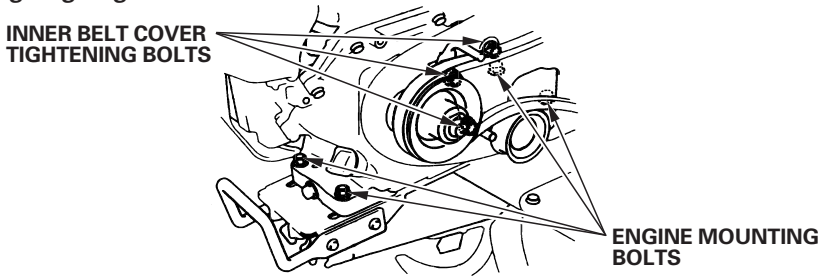
45–49 mm (1.8–1.9 in)



To adjust, loosen the four engine mounting bolts and the three inner belt cover tightening bolts and move the engine forward or reverse to get proper tension of the belt.

NOTE:

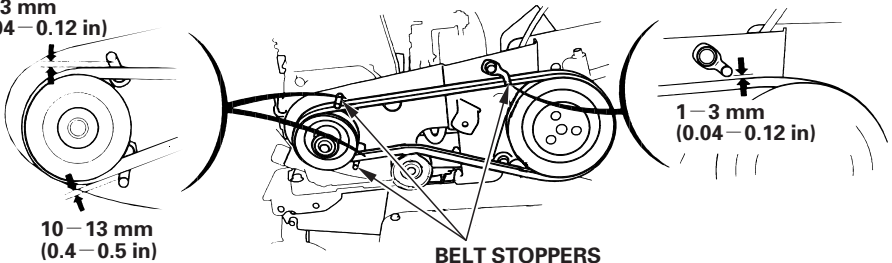
After adjusting the tension, make sure that the outside face of the drive pulley is flush with the outside face of the driven pulley by using a straight gauge.



Loosen the belt stopper attaching bolts.

Adjust the clearance between the belt stopper and the belt as illustrated with the clutch lever squeezed.

1–3 mm
(0.04–0.12 in)



9. TRANSPORTING/STORAGE

⚠ WARNING

When transporting the tiller, keep the tiller level to prevent fuel spillage. Fuel vapor or spilled fuel may ignite.

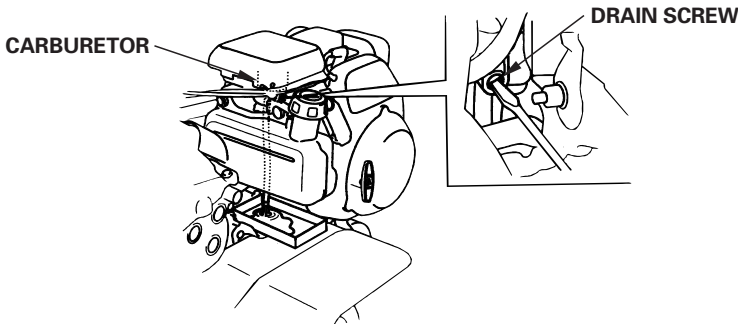
Before storing the unit for an extended period:

1. Be sure the storage area is free of excessive humidity and dust.
2. Drain the fuel tank and carburetor into a suitable gasoline container

⚠ WARNING

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

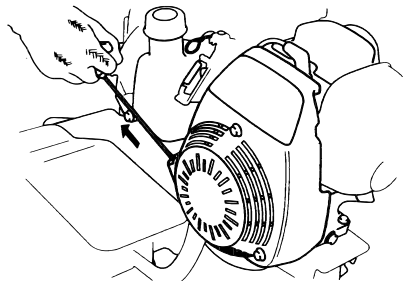
- A. Empty the fuel tank into an approved gasoline container using a commercially available hand siphon.
- B. Loosen the carburetor drain screw to drain the carburetor.
- C. Retighten the drain screw.



3. Change the engine oil (see page 28).
4. Pull the starter grip slowly until resistance is felt.

At this point, the intake and exhaust valves are closed, and this will help to protect the engine from internal corrosion.

5. Coat areas that may rust with a light film of oil. Cover the tiller and store it on a level surface in a dry, dust free area.



Do not place the tiller with the handlebars on the ground. It will cause the oil entering the cylinder or fuel will spill over.

10. TROUBLESHOOTING

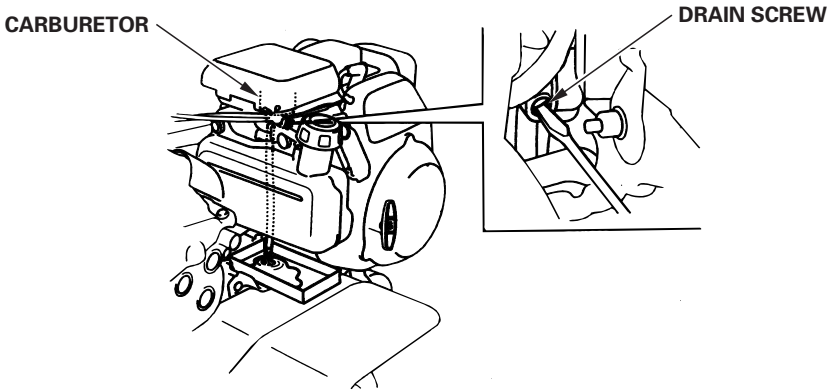
When the engine will not start:

1. Is there enough fuel?
2. Is the engine switch on?
3. Is gasoline reaching the carburetor?

To check, loosen the fuel drain screw. Fuel should flow out freely. Re-tighten the drain screw.

▲WARNING

If any fuel is spilled, make sure the area is dry before testing the spark plug or starting the engine. Spilled fuel or fuel vapor may ignite.



4. Is the throttle lever positioned properly (see page 17)?
5. Is the spark plug in good condition?

Remove and inspect the spark plug. Clean, readjust gap and dry the spark plug. Replace it if necessary.

6. If the engine still does not start, take the tiller to an authorized Honda dealer.

11. SPECIFICATIONS

Model	FG400-C1	FG400-E1	FG400-E1S	FG400-E1T
Power equipment description code	FZCW			

Dimensions and weight

Model	FG400-C1	FG400-E1	FG400-E1S	FG400-E1T
Length	1,350 mm (53.1 in)	1,440 mm (56.7 in)	1,445 mm (56.9 in)	1,440 mm (56.7 in)
Width	655 mm (25.8 in)	925 mm (36.4 in)	600 mm (23.6 in)	
Height	1,090 mm (42.9 in)			
Dry weight	44 kg (97 lbs)	48 kg (106 lbs)	36 kg (79 lbs)	
Clutch	Belt tension type			
Transmission oil capacity	0.95 ℓ (1.00 US qt , 0.84 Imp qt)			

Engine

Model	FG400-C1	FG400-E1	FG400-E1S	FG400-E1T
Engine model	GC135			
Type	4-stroke, 1-cylinder, OHC, forced air cooled			
Displacement	135 cm ³ (8.2 cu-in)			
Bore × stroke	64 × 42 mm (2.5 × 1.7 in)			
Rated output [Max.output]	2.1 kW (2.8 PS)/3,600 rpm [2.9 kW (4.0 PS)/3,600 rpm]			
Ignition system	Transistor magneto			
Oil capacity	0.58 ℓ (0.61 US qt , 0.51 Imp qt)			
Fuel tank capacity	1.7 ℓ (0.45 US gal , 0.37 Imp gal)			
Spark plug	BPR6ES (NGK)			

Noise and Vibration

Model	FG400-C1	FG400-E1	FG400-E1S	FG400-E1T
Sound pressure level (LpA) Tested by EN709	—	75 dB		
Guaranteed sound power level (LWA) Tested by 2000/14/EC	—	96 dB		
Vibration Tested by EN709	—	14 m/s ²		

NOTE:

Specifications are subject to change without notice due to improvements.

Model	FG500-C1	FG500-C2	FG500-E1	FG500-E2	FG500-E2T
Power equipment description code	FZCY				

Dimensions and weight

Model	FG500-C1	FG500-C2	FG500-E1	FG500-E2	FG500-E2T
Length	1,350 mm (53.1 in)		1,455 mm (57.3 in)		
Width	655 mm (25.8 in)		925 mm (36.4 in)		600 mm (23.6 in)
Height	1,090 mm (42.9 in)		980 mm (38.6 in)		
Dry weight	47 kg (104 lbs)	50 kg (110 lbs)	49 kg (108 lbs)	52 kg (115 lbs)	40 kg (88 lbs)
Clutch	Belt tension type				
Transmission oil capacity	0.95 ℓ (1.00 US qt , 0.84 Imp qt)				

Engine

Model	FG500-C1	FG500-C2	FG500-E1	FG500-E2	FG500-E2T
Engine model	GC160				
Type	4-stroke, 1-cylinder, OHC, forced air cooled				
Displacement	160 cm ³ (9.8 cu-in)				
Bore × stroke	64 × 42 mm (2.5 × 1.7 in)				
Rated output [Max.output]	2.8 kW (3.8 PS)/3,600 rpm [3.7 kW (5.0 PS)/3,600 rpm]				
Ignition system	Transistor magneto				
Oil capacity	0.58 ℓ (0.61 US qt , 0.51 Imp qt)				
Fuel tank capacity	2.0 ℓ (0.53 US gal , 0.44 Imp gal)				
Spark plug	BPR6ES (NGK)				

Noise and Vibration

Model	FG500-C1	FG500-C2	FG500-E1	FG500-E2	FG500-E2T
Sound pressure level (LpA) Tested by EN709	_____		81 dB		
Guaranteed sound power level (LWA) Tested by 2000/14/EC	_____		N.A.		
Vibration Tested by EN709	_____		14 m/s ²		

NOTE:

Specifications are subject to change without notice due to improvements.

12. MAJOR Honda DISTRIBUTOR ADDRESSES IN EUROPE

For European

NAME OF FIRM (COMPANY)	ADDRESS	TEL: FAX:
Honda (U.K.) Limited	470 London Road, Slough, Berkshire, SL38QY, United Kingdom	Tel: 01753-590-590 Fax: 01753-590-000
Honda Europe Power Equipment S.A.	Pole 45 Rue des Chataigniers 45140 Ormes France	Tel: 1-38-65-06-00 Fax: 1-38-65-06-05
Honda Deutschland GmbH.	Sprendlinger, Landstraße 166 D-63069 Offenbach/MaIn Germany	Tel: 069-83-09-0 Fax: 069-83-09-519
Honda Belgium H.V.	Wijngaardveld 1, 9300 Aalst Belgium	Tel: 053-725-111 Fax: 053-725-100
Honda Italia Industriale S.P.A.	Via della Cecchignola, 5/7 00143 ROMA	Tel: 06-54928-1 Fax: 06-54928-400
Honda (Suisse) S.A.	Route des Moulières 10 Case Postale Ch 1214 Vernier-Geneve, Switzerland	Tel: 022-341-22-00 Fax: 022-341-09-72
Honda Nederland B.V.	Nikkelstraat 17 2984 Ridderkerk Netherlands	Tel: 018-04-57-333 Fax: 018-04-91-888
Honda Austria G.M.B.H.	Honda Strasse 1 A-2351 Wiener Neudorf Austria	Tel: 223-66-900 Fax: 223-66-4130
Honda Power Equipment Sweden A.B.	Ostmästargränd 8 Stockholm-Årsta Sweden	Tel: 08-602-24-60 Fax: 08-722-36-27
Honda Produtos De Força, Portugal, S.A.	Lugar da Abrunheira S. Pedro de Penaferrim 2710 Sintra, Portugal	Tel:351-9150374 Fax:351-9111021
Berema A/S	Berghagan 5, Langhus Box 454, 1401 Ski Norway	Tel: 64-86-05-00 Fax: 64-86-05-49

For European (continued)

NAME OF FIRM (COMPANY)	ADDRESS	TEL: FAX:
OY Brandt AB	Tuupakantie 4 SF-01740, Vantaa Finland	Tel: 90-895-501 Fax: 90-878-5276
TIMA PRODUCTS A/S	Tårnfalkevej 16, Postboks 511 DK 2650 Hvidovre Denmark	Tel: 31-49-17-00 Fax: 36-77-16-30
Greens	Polig. Industrial Congost 08530, La Garriga (Barcelona), Spain	Tel: 93-871-84-50 Fax: 93-871-81-80
Automocion Canarias S.A. (AUCASA)	Apartado de Correos, num 206 Santa Cruz de Tenerife Canary Island	Tel: 922-61-13-50 Fax: 922-61-13-44
The Associated Motors Company Ltd.	148, Rue D'Argens, Msida Malta	Tel: 356-333001 Fax: 356-340473
Two Wheels Ltd.	Crosslands Business Park, Ballymount Road, Dublin 12, Ireland	Tel: 4602111 Fax: 4566539
General Automotive Co., S.A.	P.O. Box 1200, 101 73 Athens Greece	Tel: 346-5321 Fax: 346-7329
BG technik s.r.o	Radlická 117/520 158 01 Praha 5 Czech Republic	Tel: 2-5694 573 Fax: 2-5694 571
Aries Power Equipment Ltd.	01-493 Warszawa, ul Wroclawska 25a Poland	Tel: 22-685 17 06 Fax: 22-685 16 03
MO.TOR.PEDO Ltd.	1134 Budapest, Dózsa Gy.út 61-63 Hungary	Tel: 1-4652080 Fax: 1-4652081

For Canadian

NAME OF FIRM (COMPANY)	ADDRESS	TEL: FAX:
Honda Canada Inc.	715 Milner Avenue Toronto ON M1B 2K8	Tel: 1-888-946-6329 Fax: 1-887-939-0909

HONDA

The Power of Dreams



36V08603
00X36-V08-6030

EU1

K1:FG400
© Honda Motor Co., Ltd. 2001
④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮ ⑯ ⑰ ⑱ ⑲ ⑳ ㉑ ㉒ ㉓ ㉔ ㉕ ㉖ ㉗ ㉘ ㉙ ㉚ ㉛ ㉜ ㉝ ㉞ ㉟ ㊱ ㊲ ㊳ ㊴ ㊵ ㊶ ㊷ ㊸ ㊹ ㊺ ㊻ ㊼ ㊽ ㊾ ㊿

1000.2002.10
Printed in Japan