#### INTRODUCTION

Thank you for purchasing a Honda brushcutter.

This manual covers the operation and maintenance of the Honda brushcutter UMK450E.

Honda France manufacturing S. A. S. reserves the right to make changes at any time without notice and without incurring any obligation.

The illustrations in this manual show the most suitable model to represent the topic dealt with.

The other illustrations common to all types are based on the UMK450E XEET type.

The illustrations of the cutting attachment in this manual show the most suitable type to represent dealt with.

The other illustrations common to all types are based on the flexible cutting means or steel cutting means (3-teeth).

The illustrations in this manual may differ from those of your model.

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

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

#### **SAFETY MESSAGES**

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.

#### **READ OWNER'S MANUAL**

Carefully read the instructions in this manual before using your brushcutter. Familiarize yourself with how to use it correctly, and with its controls. Know how to stop the engine rapidly (see page 26).

Read and understand the safety instructions on pages 2 to 4 before operating the brushcutter.

Honda brushcutters are designed to give safe and dependable service if operated according to instructions.

#### **▲WARNING**

Operating a brushcutter requires special effort to ensure the safety of the operator and the safety of others. Read and understand this Owner's Manual before operating the brushcutter; failure to do so could result in personal injury or equipment damage.

If a problem should arise, or if you have any questions about the brushcutter, consult your servicing dealer.

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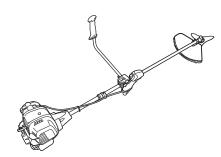
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#### **OWNER'S MANUAL**

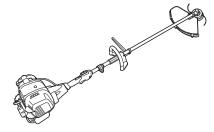
(Original Instructions)

## UMK450E Brushcutters

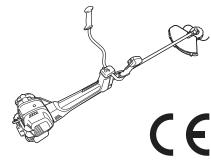
**UEET TYPE** 



**LEET TYPE** 



XEET TYPE



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#### **HOW TO IDENTIFY YOUR MACHINE**

The model of your brushcutter is indicated on its "Identification label" by a series of letters.

	UEET	LEET	XEET
Bike handle	•*		•*
Loop handle		•	
Flexible cutting means	•*	•*	•*
Steel cutting means (3-teeth)	•*	•*	•*
Anti-vibration system			•

- \* The specifications may vary with each types.
- \* For optional cutting attachment application, please refer to page 35.

#### **SAFETY INSTRUCTIONS**

#### **OPERATOR RESPONSIBILITIES**

#### **AWARNING**

- Never operate the brushcutter when tired, ill or under influence of alcohol or other drugs.
- Any part of the machine is a potential source of danger if the machine is used in abnormal conditions or if the maintenance is not done correctly.
- Never attempt to modify the brushcutter. It can cause an accident as well as damage to the brushcutter and appliances. Tampering with the engine voids the EU type-approval of this engine.
  - Do not connect an extension to the muffler.
  - Do not modify the intake system.
- Read the owner's manual carefully. Be familiar with the controls and the proper usage of the brushcutter. Know how to stop the engine rapidly.
- Use the brushcutter for the purpose it is intended for, which is trimming and brush cutting.
  - Any other use could be dangerous or damage the brushcutter. Do not use the brushcutter as a pruning hook.
- Never allow children or people unfamiliar with this Owner's Manual to use the brushcutter. Local regulations may restrict the age of the operator.

- If you lend or resell your brushcutter to a third person, instruct him or her with how to handle the product and alert him or her to read the Owner's Manual carefully before operation.
- Never operate the brushcutter while:
  - people, especially children or pets are nearby.
- Never use the machine in cases of fatigue or illness of the user, or after consumption of medications, drugs, alcohol or dangerous substances which might interfere with his ability regarding reflexes and concentration.
- Keep people and pets at least 15 m (49 ft) away from the operator during operation. Note that an assistant to the operator should work at least 15 m (49 ft) away from the operator, too. We recommend deciding the engine stop signal and other signals between the operator and assistant in advance, and using them for safety during operation.
- Keep in mind that the operator or user is responsible for accidents or hazards that occur to other people or their property.
- While operating the brushcutter, always wear the following protective clothing and protective devices.
  - Protective clothing

Wear adequate clothes with long sleeves and long pants. The clothes must fit your body and button up or zip up securely. Do not leave the sleeves and bottom of the shirt/jacket loose. Wear the arm covers, too.

Do not wear clothes with tapes, laces and/or ribbons, loose clothes, neckties, necklaces, etc. during operation. They can be caught in the brushcutter in weed causing injury. Tie your hair if it is long, and do not let your hair below your

- Protective devices

#### \* Goggles

shoulder.

Wear goggles or other eye protection to protect your eyes from the debris that is thrown by the rotating cutting attachment.

#### \* Helmet

Wear a helmet to protect your head from the overhead branches and falling material.

### \* Face shield

Wear a face shield to protect your face from debris thrown by the rotating cutting attachment.

#### \* Ear muffs/ear plugs

Wear ear muffs, ear plugs or other hearing protection to protect your ears from the noise.

#### \* Gloves

Wear gloves to protect your hands.

#### Safety boots

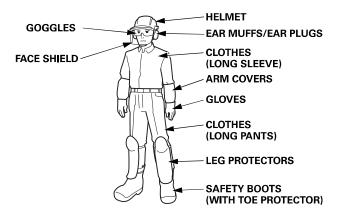
Wear safety boots with non-slip sole and toe protector to protect your feet from flying debris.

Do not operate the brushcutter when barefoot or wearing open sandals.

Wear leg protectors as well.

#### \* Dust mask

We recommend that you wear a dust mask if you suffer from the allergic rhinitis, e.g. pollinosis, etc. Dust masks are available at pharmacies and are helpful for reducing the amount of pollens you breathe.



- Before each use, visually inspect the brushcutter including a cutting attachment for any damage and looseness of fastening parts.
- Never operate the machine if there is a risk of adverse weather such as lightning or a storm, stop operation.
- Walk, never run during operation.
- Avoid operating the brushcutter on a steep slope.
   Steep slopes are very slippery, so you might slip down.
- Do not operate the brushcutter with the cutting attachment guard, labels, and other parts removed.
   Note that the cutting attachment guard is provided for protection of the operator from the debris that are thrown from the rotating cutting attachment.
   Never operate the brushcutter with the cutting attachment guard

removed or before installing the cutting attachment guard in the proper position securely.

- Do not mount an incorrect part and do not tamper with the brushcutter as it can result in personal injury and/or equipment damage. Use the cutting attachment that is designated for your model and application.
- Before cranking the engine, be sure to check that the cutting attachment does not come into contact with the ground or any obstruction. Failure to do so may result in losing control of the brushcutter.
- Start the engine carefully according to instructions and with hands and feet well away from the cutting attachment.
- Start the brushcutter on a level surface, free of high grass or obstacles.
- Do not raise the cutting attachment above your knee height during operation. You can be hit by the debris thrown by the wheeling cutting attachment in your eyes and face, causing injury.
- Never carry the brushcutter while the cutting attachment is turning. Before you carry the brushcutter be sure to stop the engine and confirm the cutting attachment stops turning.
- Stop the engine with the engine switch in the OFF position in the following cases:
  - Before any operation around the cutting attachment.
  - Before checking, cleaning or working on the brushcutter.
- After striking a foreign object. Inspect the brushcutter for damage and make repairs before restarting and operating the brushcutter again.
- If the brushcutter starts to vibrate abnormally. Inspect immediately the cause of the vibration and perform the necessary repair.
- Whenever you leave the brushcutter unattended.
- Before refueling.
- When person or pet is approaching.
- Shut off the engine immediately when the brushcutter shows abnormal vibration suddenly. Sudden vibration suggests damaged rotating parts or loose fasteners. Examine the cause of the problem, and do not start the engine before repair is made.
- When wires catch on the rotating cutting attachment and flap around. Remove the wires after the cutting attachment has stopped turning.
- Before placing the brushcutter on the ground, make sure the cutting attachment stops turning as well.
   Note that the cutting attachment turns by inertia right after returning the throttle control trigger and while the engine is idling.
- Regularly remove the tangled grass and brush from the cutting attachment (if there is a blockage, clean the area of the cutting attachment or cutting attachment guard, taking care to stop the engine).
- For machine with a clutch, routines for checking that the cutting attachment stops turning when the engine idles.
- Make sure the handles are clean and dry, free of oil and other soiling.
- The brushcutter is faulty when the engine is idling by returning the throttle but the cutting attachment keeps turning, and idle speed adjustment must be made. Consult your servicing dealer.
- Keep all nuts, bolts and screws tight to be sure the brushcutter is in safe working condition. Regular maintenance is an essential aid to user's safety and retaining a high level of performance.

- Do not use the brushcutter with worn or damaged parts. Parts must be replaced, or repaired. Replace worn or damaged parts with Honda genuine parts or its equivalent. Non equivalent quality parts may damage the machine and be prejudicial to your safety.
- Adjust the holding position of your brushcutter.
  Be sure to adjust the holding position with the engine stopped.
  Adjust the double harness so that the quick-release mechanism is positioned at your hip. Hook the brushcutter to the double harness. Adjust the double harness length so that the cutting attachment is parallel to the ground and stays above the ground keeping the clearance. Note that it might be hard to hold the brushcutter in the correct position if you are very tall. Do not operate the brushcutter if the cutting attachment is close to your feet when you hold the brushcutter at the correct position.
- Check the balance of the brushcutter between its front and rear sides for proper control and less fatigue. Hold the brushcutter in the correct position as described in this manual. Slacken your grip on the handle gradually. Do not release but put your hands lightly on the handle and check that the cutting attachment-to-ground clearance does not change significantly. Balancing adjustment is necessary if the cutting attachment rises above your knees. Do not operate the brushcutter without the balancing adjustment.
- Hold the brushcutter firmly with both of your hands during operation to keep the brushcutter under control at all times.
- Injury caused by vibration and cold: You may feel prickling or burning pain in your fingers, and the fingers may lose colour and feeling depending on your constitution. It is believed that these symptoms are brought by vibration and/or exposure to cold. The specific trigger point of these symptoms are not identified yet, but observe the following instructions.
- Limit the amount of time you spend operating the brushcutter in a day.
   A day's work should consist of the work with the brushcutter and other work without the hand-held equipment so you
  - and other work without the hand-held equipment so you can limit the amount of time when your hands are exposed to the machine vibration.
- Keep your body warm, especially your hands, wrists and arms.
- Take your breaks at shorter intervals and arm exercises well to maintain good blood circulation. Do not smoke while working.
- When you feel discomfort, redness and swelling of the fingers followed by whitening and loss of feeling, consult your doctor promptly.

If you feel that the brushcutter vibrates excessively, have your brushcutter inspected at your servicing dealer.

- Injury caused by repeated operation:
  - Performing the repeated operation for a prolonged time may cause injury. Observe the following instructions to reduce the causes of the injury.
    - \* Avoid repeated operation of using your wrist(s) in a bent, stretched or twisted position.
    - \* Take breaks regularly to minimize the effect of repeated operation. Take your time when performing repeated operation. Do not rush to operate the brushcutter.
    - \* When your fingers, hands, wrists and/or arms are throbbing or numb, consult your doctor.

#### **CHILD SAFETY**

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

#### **THROWN OBJECT HAZARD**

Objects hit by the rotating cutting attachment can be thrown from the brushcutter with great force, and may cause serious injury.

 Thoroughly inspect the area where the brushcutter is to be used and remove all objects (stones, branches, wires, bones, etc.) which may be thrown by the rotating cutting attachment.

#### **FIRE AND BURN HAZARD**

Petrol is extremely flammable, and petrol vapour can explode. Use extreme care when handling petrol. Keep petrol out of reach of children.

- Store fuel in containers specifically designed for this purpose.
- Refuel outdoors only, and do not smoke while refueling or handling fuel.
- Add fuel before starting the engine. Never remove the cap of the fuel tank or add petrol while the engine is running or when the engine is hot.
- If petrol is spilled, do not attempt to start the engine. Move the brushcutter away from the area of spillage and avoid creating any source of ignition until petrol vapours have dissipated.
- Tighten all fuel tanks and container caps securely.
   When you start the engine after refueling, be sure to start the engine at least 3 m (10 ft) away from the refueling spot.
- Never store the brushcutter with petrol 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 fire hazard, keep the brushcutter, especially the engine, muffler, as well as the petrol storage area, free of grass, leaves, or excessive grease.
  - Do not leave containers of vegetable matter in or near a building.
- If the fuel tank has to be drained, this should be done outdoors, with a cold engine.

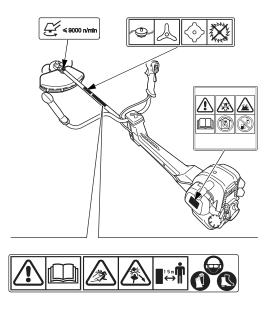
#### **CARBON MONOXIDE POISONING HAZARD**

Exhaust contains poisonous carbon monoxide, a colourless 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.

#### SAFETY LABEL LOCATIONS

Your brushcutter must be used with care. Therefore, decals have been placed on the machine, to remind you pictorially of main precautions to take during use. Their meanings are explained in this chapter. These decals are considered a part of the brushcutter. Should one become detached or unreadable, contact your servicing dealer for its replacement.





- Honda brushcutter is designed to give safe and dependable service if operated according to instructions.
  - Read the Owner's manual carefully, and follow all warnings and safety instructions.

Failure to do so could result in personal injury or brushcutter damage.







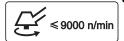
- Keep all persons and pets away from the brushcutter operating area.
- Machine fitted with a steel cutting means can be thrown violently to the side when the steel cutting means comes into contact with solid objects. To prevent accidental contacts with the rotating steel cutting means or thrown objects from the rotating cutting attachment, keep people and pets at least 15 m (49 ft ) away from the brushcutter when it is in use.



- Wear eye and hearing protection.
- Wear head protection, where there is a risk of falling objects.
- Wear slip-resistant footwear and gloves.



 The brushcutter is to be used with a nylon line, metal disc cutting attachment or circular saw blade. When you use the brushcutter with a circular saw blade, change the standard cutting attachment guard to the optional cutting attachment guard for circular saw blade. Do not use a circular saw blade with the standard cutting attachment guard.



When replacing the steel cutting means, please use a blade which is designed for a maximum rotational speed of

9,000 n/min or above.

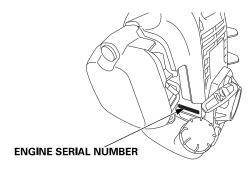


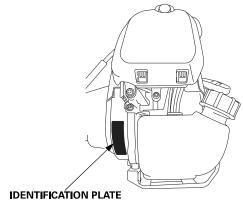




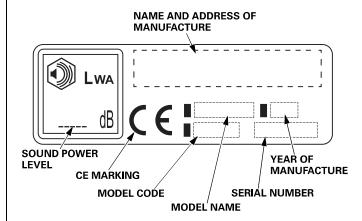
- Petrol is highly flammable and explosive. Stop the engine and let cool before refueling.
- The engine emits toxic poisonous carbon monoxide gas. Do not run in an enclosed area.
- Read Owner's Manual before operation.

#### IDENTIFICATION OF MACHINE





#### **IDENTIFICATION PLATE**

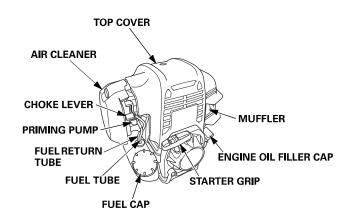


Record the frame serial number, engine serial number, and date purchased in the spaces below. You will need this information when ordering parts, and when making technical or warranty inquiries.

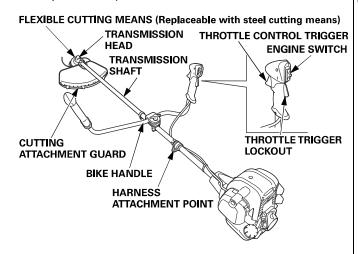
Frame serial number	
Engine serial number	
Date purchased	

#### **COMPONENT IDENTIFICATION**

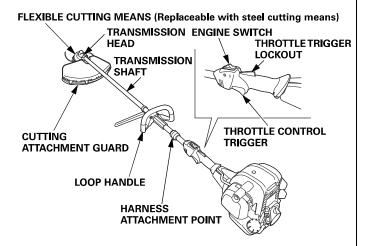
**ENGINE (ALL TYPES):** 



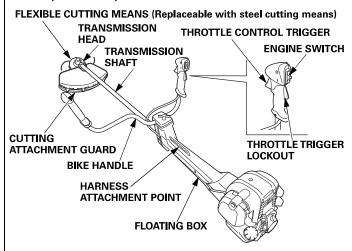
#### FRAME (UEET TYPE):



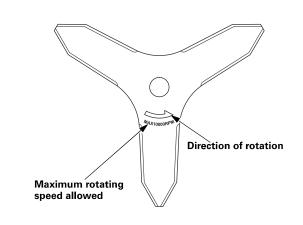
#### FRAME (LEET TYPE):



#### FRAME (XEET TYPE):

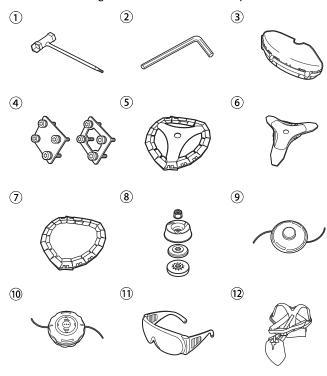


# DENOTATION OF THE STAMP ON THE STEEL CUTTING MEANS (3-TEETH):



#### **LOOSE PARTS**

Refer to the followings and check the enclosed parts.



- 1) 16 x 19 mm wrench
- 2 4 mm hexagon wrench 3 Cutting attachment guard
- 4 Spacer and four bolts (left: UEET and LEET types, right: XEET type)
- (5) Steel cutting means (3-teeth) and cover (UEET and LEET types)
- 6 Steel cutting means (3-teeth) and cover (XEET type)
- (7) Cutting means cover for optional steel cutting means (XEET type)
- (8) Spacer A, spacer B, stabilizer and cutting means nut (From the bottom)
- 9 Flexible cutting means (UEET and LEET types)
- (10) Flexible cutting means (XEET type)
- (1) Goggles
- 12 Double harness

#### **ASSEMBLY INSTRUCTIONS**

Proper assembly is essential to operator safety and the reliability of the brushcutter. Any error or oversight made by the person assembling and servicing a brushcutter can result in faulty operation, damage to the machine, or injury to the operator.

#### **AWARNING**

Improper assembly can cause an unsafe condition that can lead to serious injury or death.

Follow the procedures and precautions in the assembly instructions carefully.

#### ADDING ENGINE OIL

The brushcutter is shipped WITHOUT OIL in the engine. Add recommended oil (page 31) to bring to the upper limit. To add the engine oil, please refer to page 31.

#### NOTE:

The engine may be seriously damaged if the engine runs with insufficient engine oil. Add engine oil to the upper limit before using the brushcutter.

Do not use nondetergent oil or 2-stroke engine oil. These oils could shorten the engine service life.

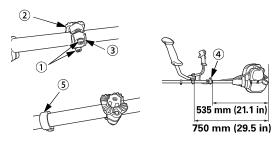
#### **INSTALLATION OF THE HANDLE**

#### **UEET type**

1. Loosen two bolts ①. Slide the handle holder B ② and the handle holder C ③ to the standard position (shown in the figure below) and tighten the two bolts ①. Tightening torque: 9.8 N·m (1.0 kgf·m).

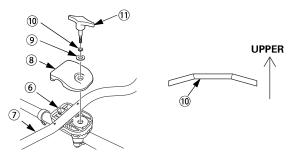
Check that the position of the harness attachment point 4. The standard positions are shown in the figure below. The position of the handle holder can be adjusted afterwards if required.

For safety, the handle bar and handle holder must not be installed beyond the safety collar (5).



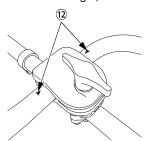
Place the handle holder D 6 on the handle holder B 2. Then place the handle bar 7 on the handle holder D 5. Install the handle holder A 8, plane washer 9 and conical washer 10. Tighten the handle adjuster bolt 11 lightly.

Be careful of the conical washer direction. The convex side faces the upper side.



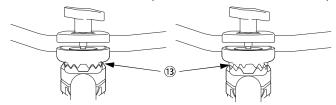
Adjust the handle bar lateral position and angle. Two arrows
 on the handle bar must be visible.

To adjust the handle bar angle, refer to page 19.



4. Fit the serration faces (3) correctly and tighten the adjuster bolt (10) securely.

OK (Serration faces fit correctly) NG (Serration faces fit incorrectly)



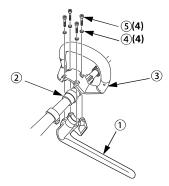
#### NOTE:

When tightening the adjuster bolt, make sure that the serration faces fit correctly. If the adjuster bolt is tightened with incorrectly fitted serration faces, the adjuster bolt may be broken.

#### **LEET type**

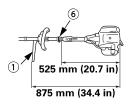
 Place the protector 1 on the underside of the rubber 2 on the transmission shaft. Place the loop handle 3 on the upper side of the rubber 2. Install four washers 4 and four bolts 5. Tighten the four bolts 5 lightly.

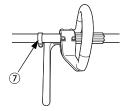
Tightening torque: 1.8 N·m (0.2 kgf·m)



Check that the position of the loop handle ① and harness attachment point ⑥. The standard positions are shown in the figure below. Adjust their positions if necessary.
 The position of the loop handle can be adjusted afterwards if required.

For safety, the loop handle must not be installed beyond safety collar  $\widehat{7}$ .

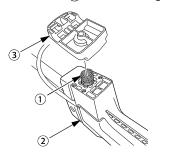




3. Tighten the four bolts (5) securely.

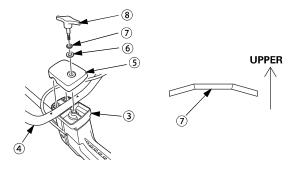
#### **XEET type**

1. Place the spring ① on the hole of the floating box ②. Then place the handle holder B ③ on the floating box ②.



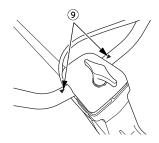
2. Place the handle bar ④ on the handle holder B ③. Install the handle holder A ⑤, plane washer ⑥ and conical washer ⑦. Tighten the handle adjuster bolt ⑧ lightly.

Be careful of the conical washer direction. The convex side faces the upper side.

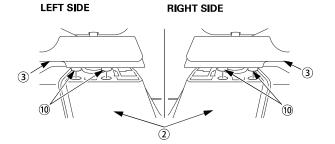


3. Adjust the handle bar lateral position and angle. Two arrows(9) on the handle bar must be visible.

To adjust the handle bar angle, refer to page 19.



4. Lightly press the handle holder A (5) and tighten the handle adjuster bolt (8) securely. Make sure the four tabs (10) on the handle holder B (3) are engaging with the holes of the floating box (2).



#### INSTALLATION OF THE CUTTING ATTACHMENT

#### **▲WARNING**

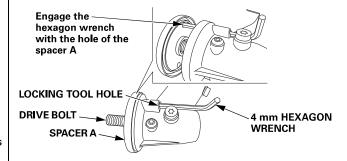
- To avoid severe personal injury, make sure that the engine switch is in the OFF position to prevent accidental starting.
- For safety, inspect the cutting attachment for wear and damage and check the tightness of the cutting attachment before starting the engine. Operating the brushcutter with a worn, cracked, or damaged cutting attachment can cause a personal injury or brushcutter damage. A worn, cracked or damaged attachment can break and pieces of the damaged attachment can hit the operator or bystanders, causing death or serious injury.

#### **CAUTION:**

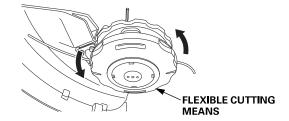
 Wear heavy gloves to protect your hands when servicing around the cutting attachment.

#### Flexible cutting means

- 1. Make sure the spacer A is installed in the transmission head.
- 2. Insert the 4 mm hexagon wrench into the locking tool hole to keep the drive bolt from turning.



3. Turn the flexible cutting means counter-clockwise to install it to the transmission head.



#### Steel cutting means

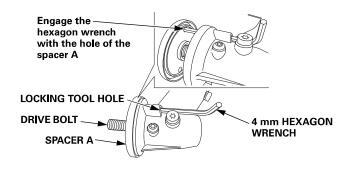
#### **CAUTION:**

 To avoid personal injury, install the cutting means cover to the steel cutting means before servicing around the steel cutting means.

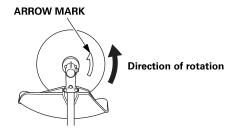
To install the cutting means cover, please refer to page 14.

Steel cutting means (3-teeth) specifications:
UEET, LEET types: Diameter with 255 mm (10.0 in), 3-teeth blade,
maximum rotating speed allowed is less than 10,000 min<sup>-1</sup>(rpm)
XEET type: Diameter with 303 mm (11.9 in), 3-teeth blade,
maximum rotating speed allowed is less than 10,000 min<sup>-1</sup>(rpm)
For optional steel cutting means, please consult your servicing dealer.

 Insert the 4 mm hexagon wrench into the locking tool hole to keep the drive bolt from turning.



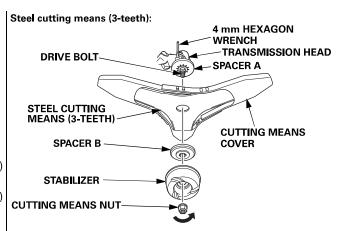
Install the steel cutting means. Make sure that the projection of the spacer A aligns with the cutting means hole. Confirm the arrow mark on the steel cutting means and install it in the correct direction.



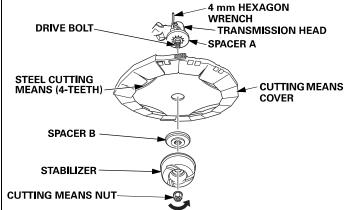
3. Install the spacer B, the stabilizer and the cutting means nut. Tighten the cutting means nut to the specified torque. The drive bolt and cutting means nut use left-hand threads. Turn counter-clockwise to install.

Tightening torque of the cutting means nut:

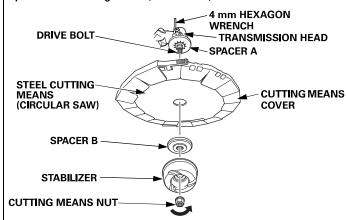
UEET, LEET: 19.2 N·m (1.9 kgf·m) XEET: 29.0 N·m (3.0 kgf·m)



Optional steel cutting means (4-teeth):



Optional steel cutting means (circular saw):



#### **AWARNING**

- Use the steel cutting means (circular saw) only with UEET and XEET types. Never use it with LEET type. LEET type is not designed to be used with the steel cutting means (circular saw) and operating LEET type with the steel cutting means (circular saw) may cause an unexpected accident.
- Never install the steel cutting means (circular saw) in the opposite direction. When install, confirm the arrow mark on the steel cutting means (circular saw) and install it in the correct direction.
- The steel cutting means (circular saw) must be fitted together with the optional cutting attachment guard (see page 11).
- 4. After tightening the cutting means nut, turn the steel cutting means with your hand and check that it is installed in the centre properly. Check that the steel cutting means is neither eccentric nor interfering with any neighboring part.

#### INSTALLATION OF THE CUTTING ATTACHMENT GUARD

#### **AWARNING**

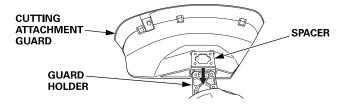
- Install the cutting attachment guard in the proper position securely to protect you from the debris that are thrown from a rotating cutting attachment.
- Never use the brushcutter without the cutting attachment guard. Stones or other foreign objects thrown outward by the rotating cutting attachment or contact with the rotating cutting attachment could cause personal injury or property damage.

#### CAUTION:

 Wear heavy gloves to protect your hands when servicing around the cutting attachment.

# Standard cutting attachment guard for steel cutting means (3-teeth and 4-teeth) and flexible cutting means:

1. Place the spacer on the cutting attachment guard. Then attach them to the guard holder on the transmission head.



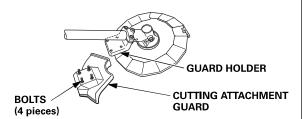
 Install four bolts. Tighten them securely using the Torx wrench side of the 16 x 19 mm wrench.
 Tightening torque of the bolt: 5.5 N·m (0.6 kgf·m)



The lower piece of cutting attachment guard must be detached when operating with the steel cutting means (3-teeth and 4-teeth). To detach, see the page 16.

# Optional cutting attachment guard for steel cutting means (circular saw):

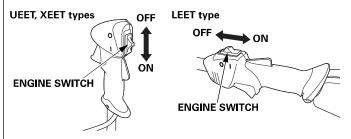
Fit the cutting attachment guard to the guard holder on the transmission head. Install the spacer and four bolts. Tighten them Torx wrench side of the 16 x 19 mm wrench. Tightening torque of the bolt: 5.5 N·m (0.6 kgf·m) Standard spacer and bolts can be used.



#### **CONTROLS AND COMPONENTS**

#### **ENGINE SWITCH**

The engine switch enables and disables the ignition system. The engine switch must be in the ON position to run the engine. Turning the engine switch to the OFF position stops the engine.

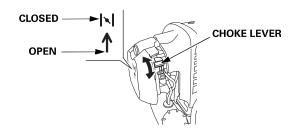


#### **CHOKE LEVER**

The choke lever opens and closes the choke valve in the carburetor.

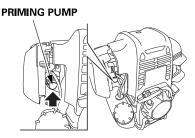
CLOSED position enriches the fuel mixture for starting a cold engine.

OPEN position provides the correct fuel mixture for operation after starting, and for restarting a warm engine.



#### **PRIMING PUMP**

Pressing the priming pump feeds the petrol from the fuel tank to the carburetor. This procedure is necessary for starting the engine.



#### **STARTER GRIP**

Pulling the starter grip operates the recoil starter to crank the engine for starting.



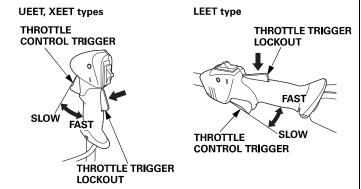
#### THROTTLE CONTROL TRIGGER

The throttle control trigger controls engine speed. Pulling and releasing the throttle control trigger shown below makes the engine run faster or slower.

The throttle trigger lockout makes the throttle control trigger operable. The throttle control trigger cannot be pulled unless the throttle trigger lockout has been pushed beforehand.

By pulling the throttle control trigger gradually, the engine speed increases and the cutting attachment starts to run. Pull the throttle control trigger more to accelerate the engine speed and the cutting rotating speed.

By releasing the throttle control trigger, the engine speed decreases and the cutting attachment keeps turning for a while by inertia, then it stops.



#### HARNESS ATTACHMENT POINT AND HOOK

When operating the brushcutter, wear the double harness (see page 20) and set the hook on the harness attachment point.

#### **▲WARNING**

- Be sure to wear the double harness before using the brushcutter.
  - Otherwise, injuries might occur due to its instability.
- For operator safety and comfort, it is important to adjust the harness straps so they can be worn comfortably and so that the machine is properly balanced in the working position.

#### **UEET, LEET types:**

The harness attachment point has one hole for hooking. To detach the brushcutter from the hook, press the lever on the hook and release the harness attachment point from the hook.

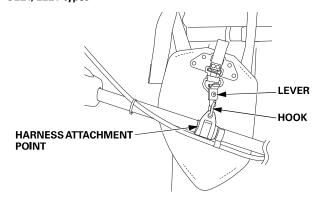
#### XEET type:

The harness attachment point has nine holes for hooking. You can choose the harness attachment point hole to set the hook as you can gain appropriate balance.

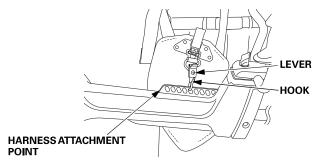
To detach the brushcutter from the hook, press the lever on the hook and release the harness attachment point from the hook.

|To balance the brushcutter when it is on the hook, see page 19.

#### **UEET, LEET types**



#### XEET type



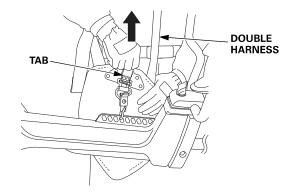
#### **QUICK-RELEASE MECHANISM**

#### NOTE:

 When the quick-release mechanism is used to detach the brushcutter, the brushcutter may fall down. When you check function of the quick-release mechanism, do not attach the brushcutter to the hook on the waist pad to prevent the brushcutter from falling down and being damaged.

The tab of the quick-release mechanism is provided to detach the brushcutter from your body in an emergency. Pull up the tab of the quick-release mechanism and push the brushcutter away to detach the brushcutter from the double harness.

After releasing the brushcutter by quick-release mechanism, the hook remains on the harness attachment point. Attach the hook to the waist pad after using the quick release latch.

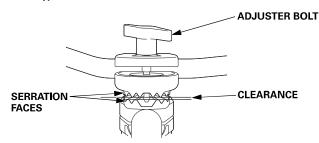


#### FOLDING THE HANDLE BAR (UEET, XEET TYPES ONLY)

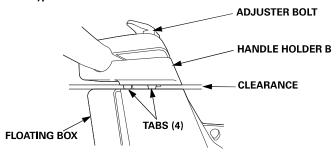
The handle bar can be folded for storage and transportation.

- 1. Loosen the adjuster bolt 6 7 turns.
- 2. (UEET type) Make sure there is enough clearance between the serration faces.
  - (XEET type) Make sure the tabs on the handle holder B are not engaged with the holes of the floating box.

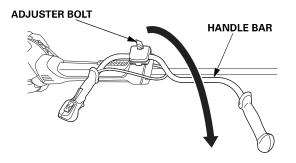
#### **UEET type**



#### XEET type



Rotate the handle holder 90 degrees and fold the handle bar left or right. Be careful not to fold the handle bar over 90 degrees.

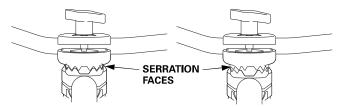


[4. (UEET type) Fit the serration faces correctly and tighten the adjuster bolt.

(XEET type) Tighten the adjuster bolt. Note that the clearance between handle holder B and the floating box will remain even after tightening the adjuster bolt.

#### UEET type only:

#### OK (Serration faces fit correctly) NG (Serration faces fit incorrectly)

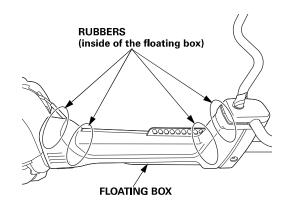


#### NOTE:

When tightening the adjuster bolt, make sure that the serration faces fit correctly. If the adjuster bolt is tightened with incorrectly fitted serration faces, the adjuster bolt may be broken.

#### **ANTI-VIBRATION SYSTEM (XEET TYPE ONLY)**

Anti-vibration system reduces handle vibration with floating box structure. The floating box is supported by rubbers which are mounted at the handle holder section and clutch housing. If you feel that the control grip vibration is excessive, contact your servicing dealer.



#### PRE-OPERATION CHECKS

For safe and efficient trimming, always conduct pre-operation checks.

#### **AWARNING**

- Any part from the machine is a potential source of danger if the machine is used in abnormal conditions or if maintenance is not done correctly.
- Perform the pre-operation checks on a firm, level surface with the cutting attachment stopped and make sure that the engine switch is in the OFF position.

Before each use, look around and underneath the engine for signs of oil or petrol leaks.

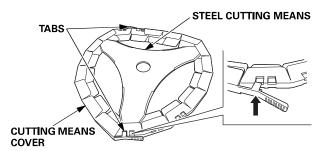
#### **CLEAN THE CUTTING ATTACHMENT GUARD**

Before each use, clean the debris, grass or any other foreign object on the cutting attachment guard.

#### INSTALLATION OF THE CUTTING MEANS COVER

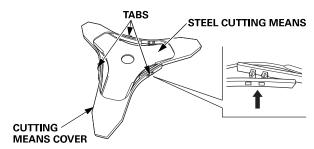
#### Steel cutting means (3-teeth) for UEET and LEET types Steel cutting means (4-teeth and circular saw) for UEET, LEET and XEET types

Detach the tab, roll up the cutting means cover on the tips of the steel cutting means so that the tips of the steel cutting means are fully covered with the cutting means cover. Fasten the tabs securely.



#### Steel cutting means (3-teeth) for XEET types

Install the cutting means covers on the tips of the steel cutting means (3-teeth). Make sure the tips of the steel cutting means (3-teeth) are fully covered with the cutting means covers. Fasten the tabs securely.



#### **CHECK THE ENGINE OIL**

#### NOTE:

- Running the engine with low oil level will cause serious engine damage.
- Using nondetergent oil or 2-stroke engine oil could shorten the engine's service life.
- Place the brushcutter on a level surface and remove the oil filler cap.
- 2. Check the oil level: it should reach the edge of the oil filler neck, and check the engine oil for contamination and deterioration.
- 3. If the oil level is low, fill with the recommended oil (see page 31) to the upper limit (edge of the oil filler neck).

  If the oil is contaminated or deteriorated, replace it (see page 31).
- 4. Install the oil filler cap.

Every 10 hours, check the engine oil level and replenish oil up to the top of the oil filler neck if the engine is operated for more than 10 hours continuously.

# OIL FILLER NECK UPPER LIMIT (edge of the oil filler neck) UPPER LIMIT

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

#### **CHECK THE FUEL LEVEL**

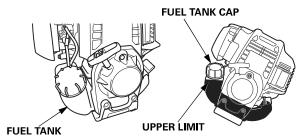
Use unleaded petrol E10, with a Research Octane Number of 91 or higher (a Pump Octane Number of 86 or higher).

Fuel specification(s) necessary to maintain the performance of the emissions control system: E10 fuel referenced in EU regulation.

Never use petrol that is stale, contaminated, or mixed with oil. Avoid getting dirt or water in the fuel tank.

#### **▲WARNING**

- Petrol 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 petrol is stored.
- Do not overfill the fuel tank (there should be no fuel in the filler neck).
  - After refueling, make sure the tank cap is closed properly and securely.
- Be careful not to spill fuel when refueling. Spilled fuel or fuel vapour 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 vapour.
- KEEP OUT OF REACH OF CHILDREN.
- Check the fuel level visually from the outside of the fuel tank while keeping the fuel filler neck upright.



2. If the fuel level is low, refuel the fuel tank until the level as specified. Remove the fuel tank cap gradually to release pressurized air in the fuel tank. Fuel in the fuel tank may spout out, if the fuel tank cap is removed quickly. When refueling, place the engine on a level surface. Use a funnel and hose to refuel. Wipe any dirt on the fuel tank cap to avoid getting dirt in the fuel tank.

Fuel tank capacity: 630 cm<sup>3</sup> (0.63 L, 0.55 lmp qt)

3. After refueling, tighten the fuel tank cap securely.

#### NOTE:

Petrol spoils very quickly depending on factors such as light exposure, temperature and time.

In worst cases, petrol can be contaminated within 30 days. Using contaminated petrol can seriously damage the engine (carburetor clogged, valve stuck).

Such damage due to spoiled fuel is not covered by the warranty. To avoid this please strictly follow these recommendations:

- · Only use specified petrol.
- Use fresh and clean petrol.
- To slow deterioration, keep petrol in a certified fuel container.
- If long storage (more than 30 days) is foreseen, drain the fuel tank and carburetor (see page 33).

Petrol substitutes are not recommended; they may be harmful to fuel system components.

#### Petrol containing alcohol

If you decide to use a petrol containing alcohol (gasohol), be sure its 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 petrol containing more than 10% ethanol (E10).

Do not use petrol containing methanol (methyl or wood alcohol) that does not also contain cosolvents and corrosion inhibitors for methanol.

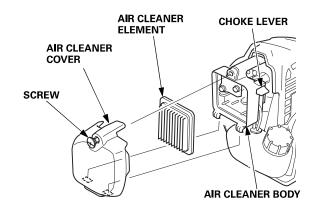
#### NOTE:

- Fuel system damage or engine performance problems resulting from the use of petrol that contains more alcohol than recommended is not covered under the warranty.
- Before buying petrol from an unfamiliar station, first determine if the petrol contains alcohol. If it does, find out the type and percentage of alcohol used.

If you notice any undesirable operating symptoms while using a particular petrol, switch to a petrol that you know contains less than the recommended amount of alcohol.

#### **CHECK THE AIR CLEANER**

- 1. Move the choke lever to the CLOSED (upwards) position.
- 2. Loosen the screw and remove the air cleaner cover from the air cleaner body.
- Check the air cleaner element for dirt or obstruction. Clean the air cleaner element, if it is dirty (see page 31). Replace the air cleaner element if it is excessively dirty.
- 4. Reinstall the air cleaner element.
- 5. Reinstall the air cleaner cover and tighten the screw securely.



#### NOTE:

Never run the engine without the air cleaner; rapid engine wear will result.

#### CHECK THE THROTTLE CONTROL TRIGGER OPERATION

Check that the throttle control trigger operates smoothly and always springs back to the idle position.

If it does not operate smoothly, check and adjust the throttle cable free play. Consult your servicing dealer for the service. If it does not spring back to the idle position, do not operate the brushcutter. Contact your servicing dealer.

UEET, XEET types

THROTTLE CONTROL
TRIGGER

# CHECK THE CUTTING ATTACHMENT GUARD / DETACHING AND ATTACHING THE LOWER PIECE OF THE CUTTING ATTACHMENT GUARD

THROTTLE CONTROL TRIGGER

#### **AWARNING**

 Never use the brushcutter without the cutting attachment guard. Stones or other foreign objects thrown outward by the rotating cutting attachment or contact with the rotating cutting attachment could cause personal injury or property damage.

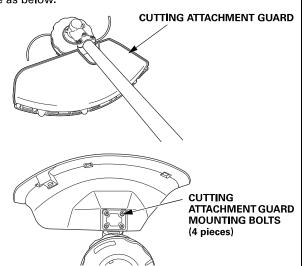
#### **CAUTION:**

- Wear heavy gloves to protect your hands when servicing around the cutting attachment.
- To avoid personal injury, install the cutting means cover to the steel cutting means before servicing around the steel cutting means.

To install the cutting means cover, please refer to page 14.

#### Check the cutting attachment guard

- 1. Stop the engine with the engine switch in the OFF position.
- Inspect the cutting attachment guard to be sure that they are correctly installed and are not damaged. If the cutting attachment guard is damaged, replace it before using the brushcutter.
- 3. Check the cutting attachment guard mounting bolts for looseness. Tighten the bolts securely, if necessary.
- Keep the cutting attachment guard position and direction the same as below.



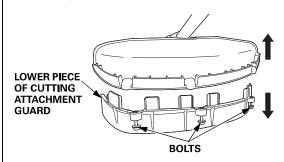
# Detaching and attaching the lower piece of the cutting attachment guard

When operating the brushcutter with the steel cutting means (3-teeth or 4-teeth), detach the lower piece of the cutting attachment guard.

For flexible cutting means usage, attach the lower piece of the cutting attachment guard.

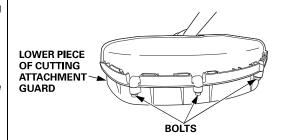
Detaching (For steel cutting means (3-teeth or 4-teeth) operation):

Remove three bolts, then detach the lower piece of the cutting attachment quard.



Attaching (For flexible cutting means operation): Fit the two pieces of the cutting attachment guard and clamp them.

Install three bolts and tighten them securely.



#### **CHECK THE TRANSMISSION HEAD**

#### **AWARNING**

- To avoid severe personal injury, make sure that the engine switch is in the OFF position to prevent accidental starting.
- For safety, check the transmission head for wear and damage before starting the engine.

#### CAUTION:

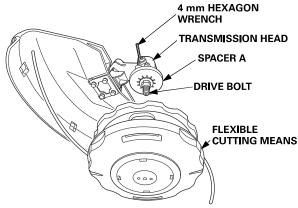
- Wear heavy gloves to protect your hands when servicing around the cutting attachment.
- To avoid personal injury, install the cutting means cover to the steel cutting means before servicing around the steel cutting means.

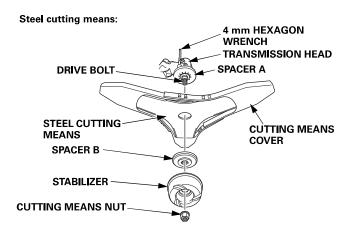
To install the cutting means cover, please refer to page 14.

#### Inspect the transmission head

- 1. Stop the engine with the engine switch in the OFF position.
- 2. Check if there is grass or thread tangled between the spacer A and cutting attachment. If there is, remove it.
- 3. After removing grass or thread, check if there is contaminated material such as mud or dirt in between the transmission head and spacer A. If there is, remove the cutting attachment (see page 28) and clean the transmission head. When cleaning, perform "Inspect the drive bolt" at the same time.

#### Flexible cutting means:

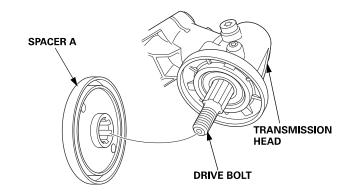




#### Cleaning the transmission head

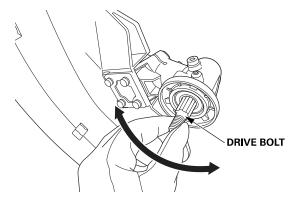
If there is contaminated material such as grass, thread, mud, or dirt in between the transmission head and spacer A, clean them using the following procedure.

- 1. Stop the engine with the engine switch in the OFF position.
- 2. Remove the cutting attachment. (see page 28)
- 3. Remove the spacer A.
- Remove grass, thread, mud, or dirt around spacer A and the drive bolt.



#### Inspect the drive bolt

Hold the drive bolt, move it left and right, and check if it is loose. If it is loose, the transmission head must be replaced. Contact your servicing dealer for replacement.



After "Cleaning the transmission head", and "Inspect the drive bolt", make sure to assemble spacer A to the transmission head before attaching the cutting attachment. To attach the cutting attachment, refer to page 28.

#### **CHECK THE CUTTING ATTACHMENT**

#### **AWARNING**

- To avoid severe personal injury, make sure that the engine switch is in the OFF position to prevent accidental starting.
- For safety, inspect the cutting attachment for wear and damage and check the tightness of the cutting attachment before starting the engine. Operating the brushcutter with a worn, cracked, or damaged cutting attachment can cause personal injury or brushcutter damage. A worn, cracked or damaged attachment can break and pieces of the damaged attachment can hit the operator or bystanders causing death or serious injury.

#### **CAUTION:**

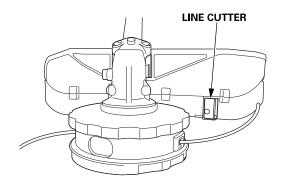
- Wear heavy gloves to protect your hands when servicing around the cutting attachment.
- To avoid personal injury, install the cutting means cover to the steel cutting means before servicing around the steel cutting means.

To install the cutting means cover, please refer to page 14.

To select the cutting attachment, refer to "Cutting attachment applications" on page 24.

#### Flexible cutting means

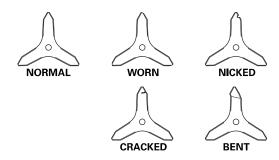
- 1. Stop the engine with the engine switch in the OFF position.
- Check the flexible cutting means for looseness.
   Tighten the flexible cutting means securely if it is loose (see page 28).
- 3. Check the nylon line for fluffing.
  - If the nylon line is damaged, have the nylon line advance according to the following procedures. To advance the nylon line, see page 25.
  - Before feeding the nylon line, check that the line cutter is free from dust, dirt or other foreign material. Clean the line cutter if necessary.



#### Steel cutting means

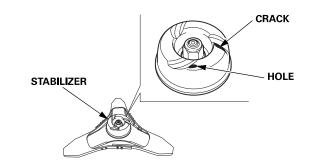
- 1. Stop the engine with the engine switch in the OFF position.
- Check the tightness of the cutting means nut. Tighten the nut if it is loose (see page 10).
- 3. Check the steel cutting means for wear, bends, cracks and other damage. If the steel cutting means is worn out, cracked, chipped, or otherwise damaged, replace the damaged steel cutting means with a new genuine Honda replacement steel cutting means or its equivalent.

A dull steel cutting means can be sharpened. If it is hard to do it yourself, consult your servicing dealer.



#### STABILIZER INSPECTION (FOR STEEL CUTTING MEANS)

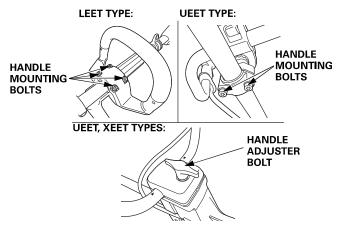
Check the wear of the stabilizer. If there are cracks or holes in the stabilizer, replace it. Contact your servicing dealer for replacement.



#### **CHECK ALL BOLTS AND NUTS**

Check the bolt and nut whether it is loose before every work. If the bolts or nuts come loose, tighten them.

- 1. Check each bolt and nut on the engine and frame for looseness. Tighten them securely if necessary.
- 2. Check the handle for loose mounting bolts or screws, and tighten them securely if necessary.



#### **BALANCING THE BRUSHCUTTER**

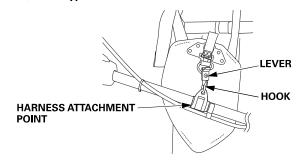
#### **▲WARNING**

- Be sure to wear the double harness before using the brushcutter.
  - Otherwise, injuries might occur due to its instability.
- For operator safety and comfort, it is important to adjust the harness straps so they can be worn comfortably and so that the machine is properly balanced in the working position.

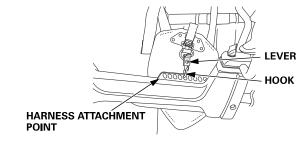
#### Check the double harness

- 1. Wear the double harness. (see page 20)
- 2. Set the hook to the harness attachment point. (see page 12)
- 3. Check that the hook is fastened to the harness attachment point securely.
- Check that the balance and position of the brushcutter are as follows.

#### **UEET, LEET types**



#### **XEET type**



#### Appropriate balance

- 1. Adjust the double harness so that the harness attachment point is positioned at your right hip (see page 20).
- Keep the brushcutter so that the cutting attachment is parallel to the ground by holding the handle with both of your hands.
- Adjust the double harness length (page 20), handle position or handle bar angle (page 19) so that the cutting attachment is parallel to the ground and stays above the ground keeping the clearance.



# Parallel to the ground and keeps the clearance

#### **▲WARNING**

Do not operate the brushcutter if the turning cutting attachment could reach your feet. Your feet can get injured if the turning cutting attachment touches your feet.

#### **ADJUSTING THE HANDLE**

#### Adjusting the handle holder position (UEET, LEET types only)

#### UEET type

You can move the handle holder forward or backward. To adjust the handle holder position, see page 8.

For safety, the handle bar and handle holder must not be installed beyond the safety collar.

#### **LEET type**

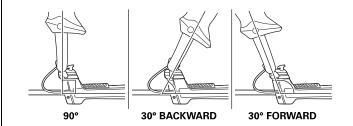
The position of the loop handle can be moved forward or backward. Refer to page 8.

For safety, the loop handle must not be installed beyond the safety collar.

#### Adjusting the handle bar angle (UEET, XEET types only)

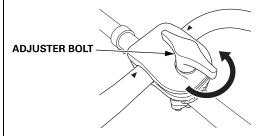
The standard angle is 90 degrees.

You can tilt the handle bar forward or backward within 30 degrees from its standard angle.



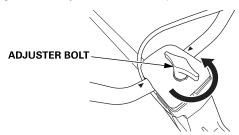
#### **UEET type**

To adjust the handle bar angle, loosen the adjuster bolt slightly and tilt the handle bar. Tighten the adjuster bolt securely.



#### **XEET type**

To adjust the handle bar angle, loosen the adjuster bolt slightly and tilt the handle bar. Lightly press the handle holder A and tighten the adjuster bolt securely.



After adjusting the handle position or handle bar angle, make sure the throttle cable is not pulled tightly.

Also check that the throttle control trigger operates smoothly.

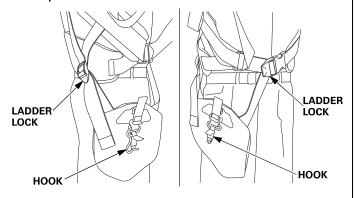
#### **ADJUSTING THE DOUBLE HARNESS**

All of the adjustments can be done by lengthening or shortening the adjustment strap with the ladder lock.

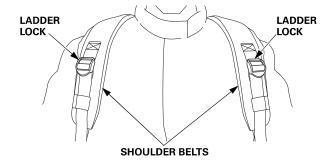
#### **Adjusting points**

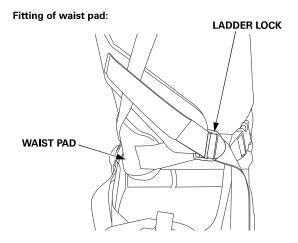
- The position of the hook can be adjusted with the ladder locks on the straps suspend the waist pad.
- The length of the shoulder belt and the waist pad position can be adjusted with the ladder locks on the shoulder belts.
- The fitting of the waist pad can be adjusted with the ladder lock on the right side.

#### Hook position:

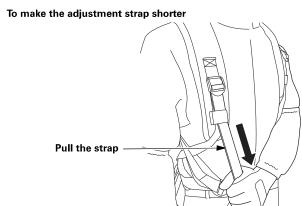


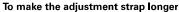
#### Length of shoulder belts:

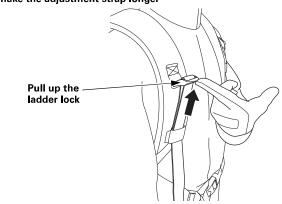




#### Ladder lock







All the ladder locks can be operated in the same way.

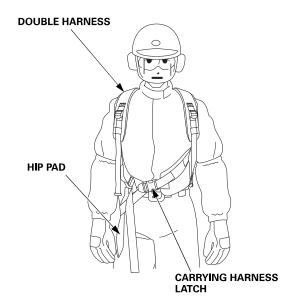
#### Wearing the double harness

Wear the double harness so that the hip pad is on the right side of your body.

Make sure the harness does not twist.

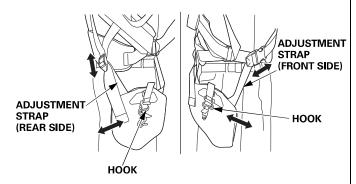
Firmly secure the double harness latch on the front of your body until it clicks.

To unlock the double harness latch, pull the harness to the right and to the left while pressing the latch.



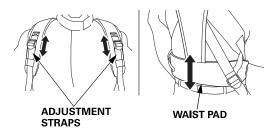
#### Adjusting the hook position

- Shortening both the front and rear adjustment straps raises the hook position.
- Lengthening both the front and rear adjustment straps lower the hook position.
- Adjusting either side of the adjustment strap or both sides in opposite ways move the hook position to the direction that you pulled. (e.g. If the adjustment strap on the front side is shortened and rear side lengthened, the hook will move forward)



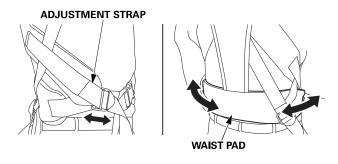
#### Adjusting the shoulder belt and waist pad positions

- Shorten or lengthen the adjustment straps so that the waist pad fits around the waist.
- Shortening the adjustment straps raises the waist pad.
- · Lengthening the adjustment straps lower the waist pad.
- To adjust the weight proportion receive on the shoulder and back, adjust the adjustment straps left or right.
- Shortening both adjustment straps puts more weight on the shoulder and back.
- · Lengthening them puts more weight on the waist.



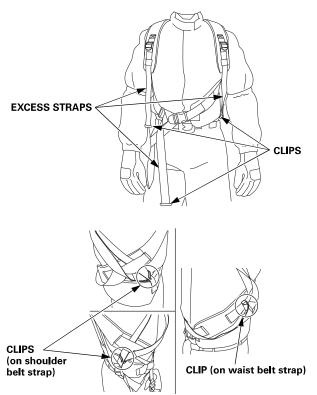
#### Adjusting the fitting of waist pad

- Shortening the adjustment strap makes the waist pad fits more tightly.
  - This adjustment is suitable for heavy load working as the suspending weight of the brushcutter and reactive force will be dispersed.
- Lengthening the adjustment strap increases the swinging motion range of the brushcutter.
  - This adjustment is suitable for light reactive force working and light load working, such as on a flat terrain, for work requiring more flexible movement.



#### Fixing the excess straps

After adjusting the harness, fix the excess straps on the belt using the fixing clips.



Do not fix the clips in the following way.

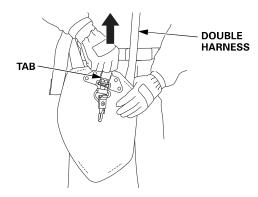
- Fixing the left side clip to the right side belt and vice-versa.
- Fixing on a place not on the double harness.

Fixing the clips in the above way might prevent you from taking off the double harness even if the double harness latch is released.

#### **CHECK THE QUICK-RELEASE MECHANISM**

#### NOTE:

- When the quick-release mechanism is used to detach the brushcutter, the brushcutter may fall down. When you check function of the quick-release mechanism, do not attach the brushcutter to the hook on the waist pad to prevent the brushcutter from falling down and being damaged.
- 1. Wear the double harness.
- Check that the latch is released as soon as the tab of the quick-release mechanism is pulled upwards while holding the hip pad with your left hand.
- Insert the latch tongue in the slot of the quick-release mechanism.



If the latch is not released, have your device inspected and repaired by your servicing dealer.

#### CHECK THE ENGINE IDLING AND CLUTCH OPERATION

This inspection is needed to start the engine. To start the engine, please refer to page 23.

#### **▲W**ARNING

- Exhaust gas contains poisonous carbon monoxide. Never run the engine in an enclosed area. Be sure to provide adequate ventilation.
- Start the engine in a place at least 15 m (49 ft) away from people, pets, and surrounding buildings. Be sure there are no obstacles in the working area.

#### **CAUTION:**

Do not start the engine with the cutting attachment touching the ground or any obstruction. The brushcutter can make unexpected movement causing injury to your legs, etc.

#### Check the engine idling

Start the engine (see page 23), and check that the idling speed is normal.

If the idling speed is abnormally high or low, do not operate the brushcutter and have your brushcutter inspected by your servicing dealer.

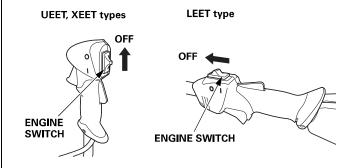
#### Check the clutch operation

Check that the cutting attachment stops turning with the throttle control trigger released.

The cutting attachment should not rotate with the engine idling. If there is rotation at idle, adjust the idle speed correctly before using the brushcutter. Have your brushcutter inspected by your servicing dealer.

#### **CHECK THE ENGINE SWITCH OPERATION**

Check that the engine is stopped by moving the engine switch to the OFF position.



#### **CAUTION:**

- Note that the cutting attachment keeps turning for a while by inertia after the engine is stopped.
- Be sure that the engine is stopped and the cutting attachment stops turning before placing the brushcutter on the ground.

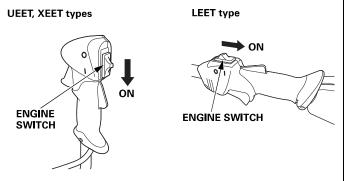
#### STARTING THE ENGINE

#### **▲WARNING**

- Exhaust gas contains poisonous carbon monoxide. Never run the engine in an enclosed area. Be sure to provide adequate ventilation.
- Start the engine in a place at least 15 m (49 ft) away from people, pets, and surrounding buildings. Be sure there are no obstacles in the working area.

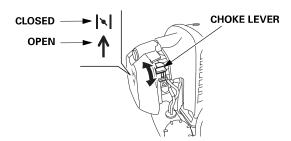
#### **CAUTION:**

- Do not start the engine with the cutting attachment touching the ground or any obstruction. The brushcutter can make unexpected movement causing injury to your legs, etc.
- Wear protective clothing and protective devices (see page 2).
- 1. Turn the engine switch to the ON position.



To start a cold engine, move the choke lever to the CLOSED position.

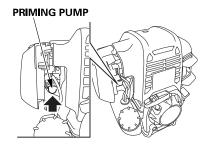
To restart a warm engine, leave the choke lever in the OPEN position.



3. Press the priming pump several times until the priming pump is filled with fuel.

Even if the priming pump is pressed too many times, the extra fuel will return to the fuel tank.

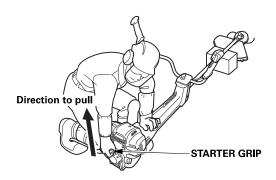
If the priming pump is not pressed enough, the engine may not start.



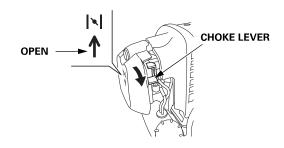
4. Pull the starter grip lightly until you feel resistance while supporting the transmission shaft with your foot and holding the transmission shaft with your hand, then pull briskly in the direction of the arrow as shown below. Return the starter grip gently.

#### NOTE:

- Do not allow the starter grip to snap back against the engine.
   Return it gently to prevent damage to the starter.
- Damage may result if the starter grip is pulled while the engine is running.



5. If the choke lever has been moved to the CLOSED position to start the engine, gradually move it to the OPEN position as the engine warms up.



#### TRIMMING OPERATION

Read and understand the safety instructions on pages 2 to 4 before operating the brushcutter.

If you notice any abnormal sound, smell, vibration, or other unusual signs, stop the engine immediately and consult your servicing dealer.

Stop the engine when adjusting the length of the double harness.

#### **AWARNING**

- Do not operate the brushcutter if the turning cutting attachment can reach your feet. Your feet can get injured if the turning cutting attachment touches your feet.
- Be sure to wear the double harness before using the brushcutter.
   Otherwise, injuries might occur due to its instability.
- For safety, inspect the cutting attachment for wear and damage and check the tightness of the cutting attachment before starting the engine. Operating the brushcutter with a worn, cracked, or damaged cutting attachment can cause a personal injury or equipment damage. A worn, cracked or damaged attachment can break and pieces of the damaged attachment can hit the operator or bystanders, causing death or serious injury.
- Be sure to wear the double harness before using the brushcutter.
  - Otherwise, injuries might occur due to its instability.
- For operator safety and comfort, it is important to adjust the harness straps so they can be worn comfortably and so that the machine is properly balanced in the working position.

#### **CUTTING ATTACHMENT APPLICATIONS**

For more efficient use, select an appropriate cutting attachment in accordance with the length of grass and other ground conditions.

Cutting	attachment type	Suitable conditions
	Flexible cutting means	Mowing low grass and cleaning
	Steel cutting means (3-teeth)	Cleaning dense and tangled weeds, bushes such as brambles or wild
	Steel cutting means (4-teeth) (Optional part)	shrubs whose stem is less than 20 mm (0.79 in) in diameter
And the second s	Steel cutting means (circular saw) (Optional part)	Cutting shrubs, bushes and small trees whose trunk is less than 60 mm (2.36 in) in diameter

# WEARING THE DOUBLE HARNESS AND SETTING THE BRUSHCUTTER ON THE HOOK

#### NOTE:

When using the brushcutter, always return to the idling between operations. If the engine runs at maximum speed with no load (no resistance on the cutting attachment) for a long time, the engine may be seriously damaged.

- 1. Wear the double harness and adjust its fitting (see page 20).
- 2. Start the engine (see page 23) and hang the brushcutter on the double harness hook (see page 12).
- Make sure the brushcutter stays at the appropriate balance (see page 19).

#### **BASIC OPERATION**

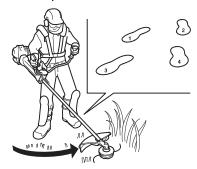
#### Correct attitude for trimming operation

- Hold the brushcutter at the correct position (see page 19).
- Slacken your grip on the handle gradually. Do not release but put both of your hands lightly on the handle, and be sure that the height of the cutting attachment from the ground does not change significantly.
- Hold the brushcutter firmly with both of your hands, with your fingers and thumbs encircling the handles. This will help you to keep the brushcutter under control at all times.
- · Keep firm footing and balance.
- Do not overreach.
- Keep the cutting attachment below your knee height.
- Keep all parts of your body away from the rotating cutting attachment and hot surface.

Adjustment is necessary if the cutting attachment rises high above your knees. Do not operate the brushcutter before adjustment. If you cannot balance the brushcutter with the correct adjustment, consult your servicing dealer.

#### Basic action of trimming operation

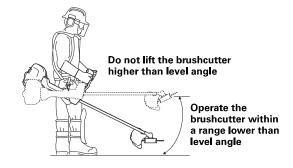
- Operate the brushcutter not by using your arm force but by using your waist so that the cutting attachment swings in a level arc from right to left.
  - Hold the brushcutter so that you can shift your weight to the right leg then to the left leg safely and easily, and walk slowly with narrow strides.
- When operating the brushcutter on a moderate slope, stand at the down side of the slope. Steep slopes are slippery and you can lose your balance. Do not operate the brushcutter on a steep slope.



#### **CAUTION:**

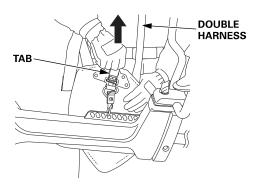
Take good care of your step. Do not operate the brushcutter in a place that is slippery, or you can lose your balance.

 When operating the brushcutter, do not lift it higher than level angle. Always keep the brushcutter within a range lower than level angle.



#### In an emergency

In an emergency, pull up the tab of quick-release mechanism and push the brushcutter away to detach the brushcutter from the double harness.



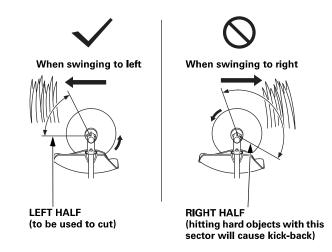
#### To avoid a kick-back

Steel cutting means sectors of the "right half" must not be used to cut. Contact between the steel cutting means and hard objects while the steel cutting means is rotating will cause the tool to rebound owing to the direction of rotation (this phenomenon is called "kick-back").

#### **▲WARNING**

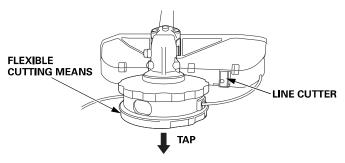
- Never contact hard objects such as stones, trees, stakes, or concrete with the rotating steel cutting means. If the steel cutting means hits to such objects, it will cause a kick-back. Never cut very hard wood and/or plants with a large stem diameter with the steel cutting means, it will cause a kick-back. A kick-back causes loss of control of the brushcutter and contact of the steel cutting means with the operator or bystanders, causing death or serious injury. It also causes a worn, cracked or damaged steel cutting means that can break, and thrown pieces of the steel cutting means can hit the operator or bystanders, causing death or serious injury.
- Cutting action must be done only when you swing the trimmer to left. Steel cutting means sectors of the "right half" must not be used to cut. When swinging it to right, do not cut grass. Hitting a hard object in this direction will cause a kickback, causing death or serious injury.
- If the steel cutting means contacts an obstacle, stop the engine immediately. Check the steel cutting means after stopping the steel cutting means rotation. Never restart operation with a broken or damaged steel cutting means.





#### Line feeding of the flexible cutting means

For this type of cutting attachment, the nylon line advances when the flexible cutting means is tapped against the ground while the engine is running. A cutting attachment guard with line cutter must be used with it.

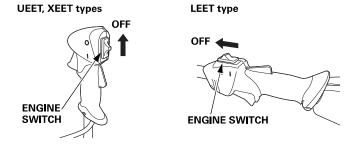


#### STOPPING THE ENGINE

- 1. Release the throttle control trigger.
- 2. Turn the engine switch to the OFF position.

#### **CAUTION:**

- Note that the cutting attachment keeps turning for a while by inertia after the engine is stopped.
- Be sure that the engine is stopped and the cutting attachment stops turning before placing the brushcutter on the ground.



#### **MAINTENANCE**

Periodic checks and adjustment of the brushcutter is essential if high level performance is to be maintained. Regular maintenance will also help to extend service life. The required service intervals and the kind of maintenance to be performed are described in the maintenance schedule.

For longer service and efficiency, keep the underside of the cutting attachment guard clean and free of accumulated grass clippings by washing it down with a hose after each use and/or cleaning it with a wire brush and scraper.

#### **AWARNING**

- Before performing any maintenance, place the brushcutter on a level surface, make sure the cutting attachment is stopped, and turn the engine switch to the OFF position to be certain the engine will not start accidentally.
- The brushcutter should be serviced by your servicing dealer unless the owner has proper tools and service data and feels he/she is mechanically qualified.

#### **CAUTION:**

- Use genuine Honda parts or their equivalent for maintenance or repair. Replacement parts which are not of equivalent quality may damage the brushcutter.
- To avoid personal injury, install the cutting means cover to the steel cutting means before servicing around the steel cutting means.

To install the cutting means cover, please refer to page 14.

#### **MAINTENANCE SCHEDULE**

			Frequency						
Item	Perform at every month or operat interval, whichev	ing hour \	Each use	First month or 10 hrs.	Every 3 months or 25 hrs.	Every 6 months or 50 hrs.	Every year or 100 hrs.	Every 2 years or 300 hrs.	Page
	Funina all	Check level	0						14
	Engine oil	Change		0		0			31
		Check	0						15
	Air cleaner	Clean			o (1)				31
		Replace					0		31
	Spark plug	Check-adjust					o (2)		-
	Spark plug	Replace						o (2)	-
	Throttle cable / throttle control trigger	Check	0						16
	Operation of engine switch	Check	0						22
	Double harness	Check	0						19
	Cutting attachment	Check (Replace if necessary)	0						18
	Cutting attachment guard	Check	0						16
	Idle / Clutch	Check	0						22
	Engine cooling fins	Check-clean				o (1)(2)			-
	Nuts, bolts, fasteners	Check (Retighten if necessary)	0						18
	Fuel tank	Clean					0		32
	Fuel filter	Check					0		32
	Clutch shoe and drum	Check				o (2)(4)			-
	Wear out of transmission head	Check				o (2)			-
	Transmission	Check-clean	0						17
	head	Grease			0				32
	Idle speed	Check-adjust					o (2)		-
	Valve Clearance	Check-adjust					o (2)		-
	Combustion chamber	Clean		Every 2 y	ears or e	very 300	hours (2	)	-
	Fuel tubes	Check	Every year or every 100 hours (Replace if necessary) (2)			ssary) (2)	-		
Oil tubes Check		E	very 2 ye	ars (Repl	ace if ne	cessary)	(2)	-	
	Anti Vibration Rubber (5)	Check-adjust				o (2)			-

- (1) Service more frequently when used in dusty areas.
- (2) 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.
- (3) Log hours of operation to determine proper maintenance intervals.
- (4) These consumption parts should be replaced even a short period if it is necessary.
- (5) XEET type (applicable type)

#### **CUTTING ATTACHMENT REPLACEMENT**

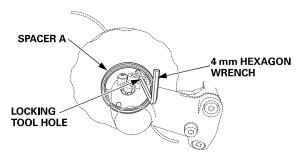
#### **AWARNING**

- To avoid severe personal injury, make sure that the engine switch is in the OFF position to prevent accidental starting.
- For safety, inspect the cutting attachment for wear and damage and check the tightness of the cutting attachment before starting the engine. Operating the brushcutter with a worn, cracked, or damaged cutting attachment can cause a personal injury or equipment damage. A worn, cracked or damaged attachment can break and pieces of the damaged attachment can hit the operator or bystanders, causing death or serious injury.

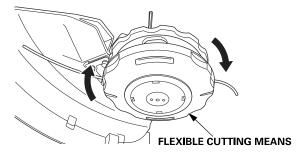
#### Flexible cutting means replacement

#### Removal:

- 1. Stop the engine with the engine switch in the OFF position.
- 2. Insert the 4 mm hexagon wrench into the locking tool hole. Turn the flexible cutting means until you feel the hexagon wrench drop into the hole of the spacer A. Make sure the flexible cutting means does not turn.

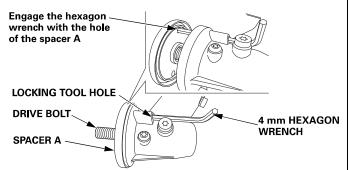


3. Turn the flexible cutting means clockwise to remove it from the transmission head.

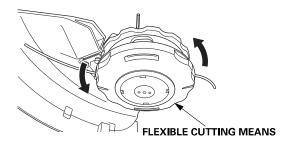


#### Installation:

- 1. Make sure the spacer A is installed in the transmission head.
- Insert the 4 mm hexagon wrench into the locking tool hole to keep the drive bolt from turning.



Turn the flexible cutting means counterclockwise to install it to the transmission head.



#### Nylon line replacement

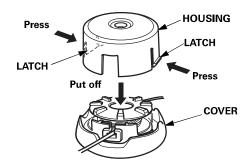
#### **AWARNING**

 Never replace the nylon line with a line of a different material, such as steel wire,

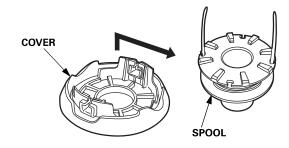
#### UEET, LEET types:

Recommended nylon line specifications: Standard nylon line diameter: 2.7 mm (0.11 in), Maximum length: 6.0 m (19.7 ft)

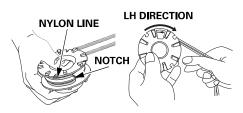
1. Pull off the cover from housing. Press two latches of the housing, and pull down the cover.



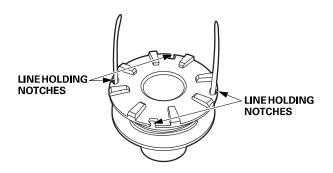
Pull off spool from the cover and remove the rest of the nylon line.



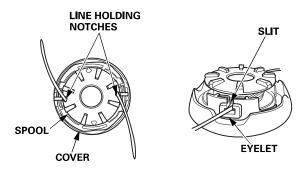
- Prepare an appropriate length of nylon line and fold it in half, lengthwise.
- Place the middle of the nylon line in the notch in the reel and coil the nylon line by turning in the specified direction.



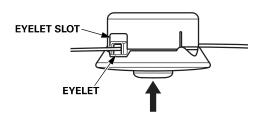
5. Hold the nylon lines to the line holding notches on one of the | XEET type: spool outer flanges. Leave 10 cm of the lines from the notches. Do not let the lines loosen.



6. Put the spool onto the cover at the position that aligns the line holding notches with the eyelets on the cover. Set the nylon lines into the eyelets through the slits on upper side of the eyelets.

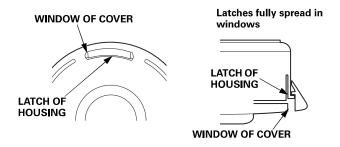


Align the eyelet with the eyelet slot of the housing, and install the cover into the housing.



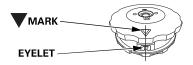
#### NOTE:

Make sure that the latches of the housing fully spread in each windows of the cover.

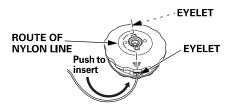


Recommended nylon line specifications: Standard nylon line diameter: 3.0 mm (0.12 in), Maximum length: 5.0 m (16.4 ft)

1. Align the mark with the eyelet.

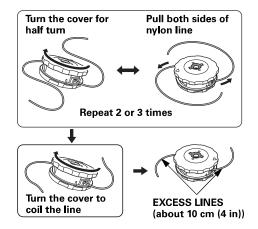


- 2. Prepare an appropriate length of nylon line. Insert the nylon line to the eyelet from the left side as shown in the picture. Inserting from this direction makes pushing the line to the other side of the hole smooth.
- 3. Push the nylon line so that the tip of the line comes out the other side of the eyelet.



- 4. Pull the nylon line out and adjust the line length so that the length on both sides are the same.
- While holding the spool, turn the cover in the specified direction for half turn to coil the nylon line.

Pull both sides of nylon line to make the coiled line in the spool tight, then turn the cover for half turn and pull the nylon line again. Repeat this procedure 2 or 3 times. Then turn the cover until each excess line is about 10 cm (4 in).



#### Steel cutting means replacement

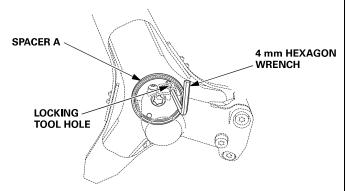
#### **CAUTION:**

- Wear heavy gloves to protect your hands when servicing around the cutting attachment.
- To avoid personal injury, install the cutting means cover to the steel cutting means before servicing around the steel cutting means.

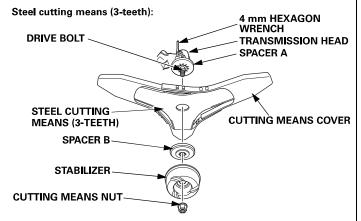
To install the cutting means cover, please refer to page 14.

#### Removal:

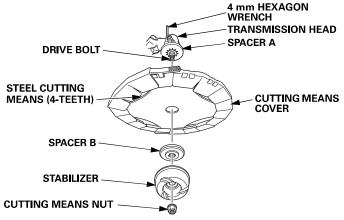
- 1. Stop the engine with the engine switch in the OFF position.
- 2. Insert the 4 mm hexagon wrench into the locking tool hole. Turn the steel cutting means until you feel the hexagon wrench drops into the hole of the spacer A. Make sure the steel cutting means does not turn.



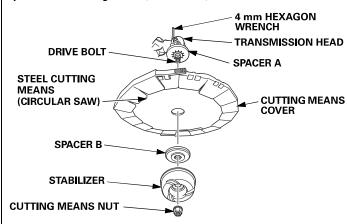
 Loosen the cutting means nut. The drive bolt and cutting means nut use left-hand threads. Turn clockwise to loosen. Pay attention to the order and orientation of the parts as they are removed.



Optional steel cutting means (4-teeth):



Optional steel cutting means (circular saw):



Installation:

To install the steel cutting means, please see page 10.

#### **ENGINE OIL CHANGE**

#### NOTE:

- Running the engine with low oil level will cause serious engine damage.
- Using nondetergent oil or 2-stroke engine oil could shorten the engine's service life.

#### NOTE:

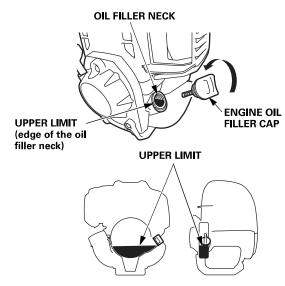
Drain the oil while the engine is still warm to assure rapid and complete draining.

- 1. Check that the fuel tank cap is tightened.
- Remove the oil filler cap and drain the oil into the oil container by tipping the engine toward the oil filler neck.



- 3. Refill with the recommended oil to the upper limit (edge of the oil filler neck).
- 4. Install the oil filler cap.

ENGINE OIL CAPACITY: 130 cm3 (0.13 L, 0.11 Imp qt)



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

#### NOTE:

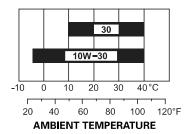
Please dispose of used motor oil in a manner that is compatible with the environment. We suggest you take it in a sealed container to your local service station for reclamation. Do not throw it in the trash or pour it on the ground.

#### Recommended engine oil

Use 4-stroke motor oil that meets or exceeds the requirements for API service classification SE or later (or equivalent). Always check the API service label on the oil container to be sure it includes the letters SE or later (or equivalent). SAE 10W-30 is recommended for general use. Other viscosities

SAE 10W-30 is recommended for general use. Other viscosities shown in the chart may be used when the average temperature in your area is within the indicated range.

Lubrication oil specifications necessary to maintain the performance of the emissions control system: Honda genuine oil.



#### **CLEANING AIR CLEANER FILTER**

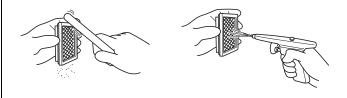
A dirty air cleaner will restrict air flow to the carburetor. To prevent carburetor malfunction, service the air cleaner regularly. Service more frequently when operating the brushcutter in extremely dusty places.

#### **AWARNING**

Never use petrol or low flash point solvents to clean the air cleaner element. A fire or explosion could result.

Remove the air cleaner element to clean it. To remove the air cleaner element, see page 15.

Tap the paper air cleaner element several times on a hard surface to remove dirt, or blow compressed air [not exceeding 200 kPa (2.0 kgf/cm<sup>2</sup>, 29 psi)] through the cleaner element from the air cleaner body side. Never try to brush off dirt; brushing will force dirt into the fibers. Replace the air cleaner element if it is excessively dirty.



After cleaning the air cleaner filter, install it to the air cleaner body securely.

To install the air cleaner element, see page 15.

#### NOTE

Never run the engine without the air cleaner; rapid engine wear will result.

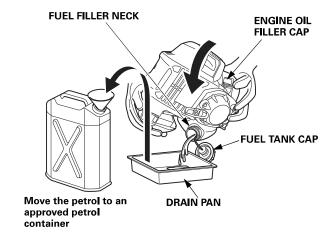
#### **FUEL FILTER AND FUEL TANK CLEANING**

#### **AWARNING**

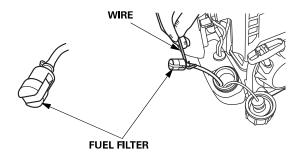
- Petrol is extremely flammable and explosive under certain conditions.
- Service in a well-ventilated area with the engine stopped. Do not smoke or allow flames or sparks in the area where the engine is refueled or where petrol is stored.
- Be careful not to spill fuel when refueling. Spilled fuel or fuel vapour 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 vapour.
- KEEP OUT OF REACH OF CHILDREN,

Note that the clogged fuel filter can cause poor engine performance. Water and dust, dirt or contaminated material in the fuel tank cause poor engine performance.

- 1. Be sure that the engine oil filler cap is tightened securely.
- 2. Remove the fuel tank cap and drain the petrol into the container by tipping the engine toward the fuel filler neck.



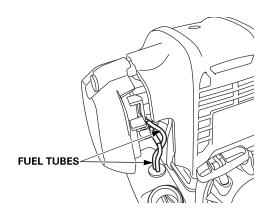
Pull out the fuel filter with a wire (such as a straightened paper clip) from the fuel filler neck gently.



- 4. Inspect the fuel filter of its dirt. If the fuel filter is dirty, wash it gently with nonflammable or high flash point solvent. If the fuel filter is excessively dirty, replace it.
- Remove water and dirt in the fuel tank by rinsing the inside of the fuel tank with nonflammable or high flash point solvent.
- Return the fuel filter into the fuel tank and tighten the fuel tank cap securely.

#### **CHECKING THE FUEL TUBES**

Check that fuel tubes for cracks and any other deterioration and confirm that there is no leakage of fuel on the fuel tubes. If you notice any abnormal symptoms on the fuel tubes, contact your servicing dealer.



#### **GREASING THE TRANSMISSION HEAD**

#### **AWARNING**

 To avoid severe personal injury, make sure that the engine switch is in the OFF position to prevent accidental starting.

#### CAUTION:

- Wear heavy gloves to protect your hands when servicing around the cutting attachment.
- 1. Remove the bolt of the transmission head.
- Apply the grease until the grease overflows the transmission head while turning the cutting attachment slowly. Maximum amount of grease:

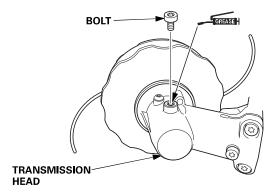
UEET, LEET types: 14.5 g (0.51 oz) XEET type: 19.0 g (0.67 oz)

3. Install the bolt securely.

Tighten the bolt securely. Tightening torque of the bolt:

6.9 N·m (0.7 kgf·m)

Recommended grease: Lithium Complex Moly, NLGI grade 2= penetration is approximately 290 (Equivalent of Molynoc No.2 JXTG Nippon Oil & Energy Corporation)



#### **TRANSPORTING**

#### **CAUTION:**

 To avoid personal injury, install the cutting means cover to the steel cutting means before transporting the brushcutter.

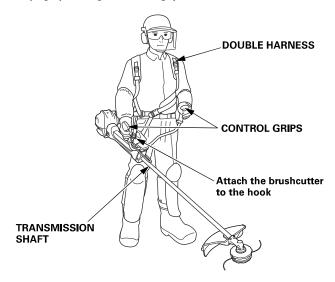
To install the cutting means cover, please refer to page 14.

Always turn the engine switch to the OFF position. Make sure the fuel cap is securely tightened and the engine is cool.

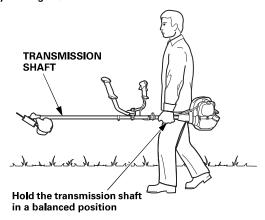
#### **CARRYING THE BRUSHCUTTER BY HAND**

Attach the brushcutter to the hook of double harness and hold the control grips, or hold the transmission shaft to carry it with good balance.

Carrying by holding the control grips:



Carrying by holding the transmission shaft:



#### TRANSPORTING THE BRUSHCUTTER BY VEHICLE

Secure the brushcutter in level and make sure that it will not move or fall down.

For UEET and XEET types, fold the handle bar as necessary (see page 13).

#### **STORAGE**

Proper storage preparation is essential for keeping your brushcutter trouble free and looking good. The following steps will help to keep rust and corrosion from impairing your brushcutter.

#### **CAUTION:**

- If the brushcutter has been running, the engine will be very hot; allow it to cool before proceeding.
- Place the brushcutter on a level surface and make sure that the engine switch is in the OFF position to be certain the engine will not start accidentally.

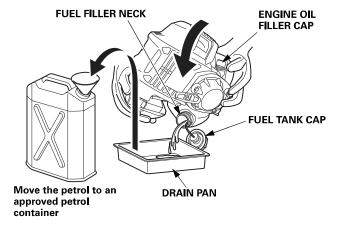
#### **CLEAN THE BRUSHCUTTER**

Clean all exterior surfaces, touch up any damaged paint, and coat other areas that may rust with a light film of oil.

#### **DRAIN THE FUEL**

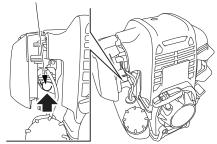
#### **▲WARNING**

- Petrol is extremely flammable and is explosive under certain conditions.
- Service 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 petrol is stored.
- Be careful not to spill fuel when refueling. Spilled fuel or fuel vapour 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 vapour,
- KEEP OUT OF REACH OF CHILDREN.
- 1. Be sure that the engine oil filler cap is tightened securely.
- Remove the fuel tank cap and drain the fuel into the container by tipping the engine toward the fuel filler neck.



3. Press the priming pump several times until all fuel has returned to the fuel tank.

#### PRIMING PUMP



- 4. Tip the engine toward the fuel filler neck again to drain the fuel left in the fuel tank into the container.
- Tighten the fuel tank cap securely after draining the fuel completely.
- Start the engine and let it work until it stops because lack of fuel.

#### NOTE:

- Deteriorated petrol may cause unexpected damage to your engine.
- Petrol should be stored in a clean container used exclusively for petrol.
- Petrol should be stored in a cool and well ventilated place.
- Do not store or transport petrol in PET [poly (ethylene terephthalate)] bottles.

#### **CHANGE THE ENGINE OIL**

To change the engine oil, refer to page 31.

#### **CAUTION:**

The engine will be very hot if it has been running. Allow it to cool before proceeding.

#### **CLEAN THE AIR CLEANER**

To clean the air cleaner, refer to the page 31.

#### **PULLING THE STARTER GRIP SLOWLY**

Pull the starter grip slowly until resistance is felt. Storing with this position prevents internal corrosion.

#### PUTTING THE OIL TO THE STEEL CUTTING MEANS

Put a light film of oil to the steel cutting means to prevent rust.

#### **STORING**

Close the choke (move the choke lever upwards) and install the cutting means cover.

For UEET and XEET types, fold the handle bar as necessary (see page 13).

Cover the brushcutter to keep out dust.

If storing at vertical position, the engine side should be lower to prevent falling down during storage.

Before using the brushcutter, conduct the pre-operation checks properly.

#### **TROUBLESHOOTING**

#### **ENGINE DOES NOT START**

1.	No fuel.	Page 15
2.	The engine switch is OFF.	Page 23
3.	Spark plug cap incorrectly attached or	-
	disconnected.	
4.	Faulty spark plug or incorrect gap.	-
5.	Engine flooded. Remove spark plug,	-
	dry it with a cloth and reinstall it.	
6.	Fuel filter is dirty. Clean it.	Page 32

#### STARTING DIFFICULT OR LOSS OF POWER

1.	Dirty air cleaner.	Page 31
2.	Impurities in the fuel tank.	Page 32
3.	Water in the fuel tank and fuel.	Page 32
4.	Fuel tank cap vent and / or carburetor	-
	clogged.	
5.	Engine is hot; choke is closed. Open	Page 23
	choke.	

#### **UNEVEN RUNNING**

1.	Faulty spark plug or incorrect gap.	-
2.	Dirty air cleaner.	Page 31

#### **ENGINE OVER HEAT**

ı			
I	1.	Spark plug gap is incorrect.	-
I	2.	Dirty air cleaner.	Page 31
I	3.	Engine cooling fins clogged.	-
I	4.	Oil level too low.	Page 14
I	5.	Starter pulley fouled by grass cuttings,	-
I		etc.	

#### **BRUSHCUTTER VIBRATES EXCESSIVELY**

1.	Steel cutting means incorrectly	-
	balanced or cutting attachment	
	incorrectly fitted.	
2.	Engine bolts loose.	-

#### **CONTROL GRIP VIBRATES EXCESSIVELY (XEET TYPE)**

1.	Floating box becomes insufficient by	-
	rubber holder sliding.	
2.	Floating box becomes insufficient by	-
	damage of rubber holder.	

For the possible causes that are not referred in this manual, consult your servicing dealer.

#### **ACCESSORIES**

#### **CURRENT PARTS, CONSUMABLES**

Various accessories are supplied with the machine or are available as options, depending on the model. When you need those accessories or parts, contact your servicing dealer for purchase.

		UEET	LEET	XEET	
Mowing and clearing					
Item Flexible cutting means				means	
	Part No.	72560-\	/L6-P31	72560- VR4-E21	
Thorny hedges and	brush				
Item Standard steel cuttin (3-teeth)				ng means	
	Part No.	72511-\	/L6-P31	72511- VR4-E21	
Large areas of gras	S			•	
Item Optional steel cutting means (4-teeth)					
<b>Part No.</b> 72511-VF9-E32 (Φ230 mi 72512-VL6-P31 (Φ255 mi		•			
Knotty brush and bushes					
(antional for model LIEET and VEET types)					

(optional for model UEET and XEET types)

on the second se	Item	Optional steel cutting means (circular saw)			
	Part No.	72511- VL6-H31	-	72511- VL6-H31	

Standard cutting attachment guard for flexible cutting means and steel cutting means (3-teeth, 4-teeth)

	ltem	Standard cutting attachment guard
	Part No.	76240-VR4-E01

Optional cutting attachment guard for steel cutting means (circular saw)

	Item	Optional cutting attachment guard		
	Part No.	76247- VL6-J31	-	76247- VL6-J31

Cutting means cover for steel cutting means (3-teeth) of UEET and LEET types and all optional steel cutting means

	Item	Cutting means cover		
	Part No.	72534-VJ3-681		
Cutting means cover for steel cutting means (3-teeth) of XEET type				
9	Item	Cutting means cover		
	Part No.	72534-VR4-E21		

Current parts						
	Item	Air filter				
	Part No.	17211-Z3F-000				
	Item	Spark plug				
	Part No.	31915-Z0H-003				
	Item	Recoil starter rope				
	Part No.	28462-ZM3-003				
Consumables						
	Item	Engine oil				
	Part No.	08221-888-010MP				

Illustrations in this table are visual references. Appearance may be different from the actual product.

#### **▲WARNI**NG

For your safety, it is strictly prohibited to install any other attachment than the ones listed above and especially designed for your brushcutter's model and type.

#### **DISPOSAL**

To protect the environment, do not dispose of this product, battery, engine oil, etc. carelessly by leaving them in the waste. Observe the local laws and regulations or consult authorized Honda dealer for disposal.

#### TECHNICAL INFORMATION

#### **CARBURETOR MODIFICATION FOR HIGH ALTITUDE OPERATION**

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

Operation at an altitude that differs from that at which this engine was certified, for extended periods of time, may increase emissions.

High altitude performance can be improved by specific modifications to the carburetor. If you always operate your brushcutter at altitudes above 1,500 m (5,000 ft), have your servicing dealer perform this carburetor modification. This engine, when operated at high altitude with the carburetor modifications for high altitude use, will meet each emission standard throughout its useful life.

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

#### CAUTION:

When the carburetor has been modified for high altitude operation, the air-fuel mixture will be too lean for low altitude use. Operation at altitudes below 1,500 m (5,000 ft) with a modified carburetor may cause the engine to overheat and result is serious engine damage. For use at low altitudes, have your servicing dealer return the carburetor to original factory specifications.

#### **SPECIFICATIONS**

MC	MODEL UMK450E				
TYPE		UEET	LEET	XEET	
Description code		HAMF HANF HAMF			
Function			Cutting of brush		
FRAME		1			
Handle type		Bike handle	Loop handle	Bike handle	
Clutch type			Centrifugal clutch		
Cutting attachment	Type	Nylo	on line cutting head, Tap &	k Go	
(Flexible cutting means)	Body diameter		444 mm (17.5 in)		
Cutting attachment	Туре		3-teeth blade		
(Steel cutting means)	Overall diameter		(10.0 in)	303 mm (11.9 in)	
Dimensions	Flexible cutting means	1870 x 670 x 520 mm (73.6 x 26.4 x 20.5 in)	1870 x 385 x 280 mm (73.6 x 15.2 x 11.0 in)	1880 x 670 x 585 mm (74.0 x 26.4 x 23.0 in)	
Length x Width x Height	Steel cutting means (3-teeth)	1905 x 670 x 510 mm (75.0 x 26.4 x 20.1 in)	1905 x 385 x 280 mm (75.0 x 15.2 x 11.0 in)	1925 x 670 x 570 mm (75.8 x 26.4 x 22.4 in)	
Dry mass (without cutting	g attachment, oil and fuel)	8.1 kg (17.9 lbs)	7.7 kg (17.0 lbs)	9.4 kg (20.7 lbs)	
Number of cutting attachment rotation (Maximum rotation	Flexible cutting means	7,100 min <sup>-1</sup> (rpm)	7,100 min <sup>-1</sup> (rpm)	7,400 min <sup>-1</sup> (rpm)	
when completed machine under no load)	Steel cutting means (3-teeth)	8,150 min <sup>-1</sup> (rpm)	8,150 min <sup>-1</sup> (rpm)	7,900 min <sup>-1</sup> (rpm)	
ENGINE					
Model		GX50T			
Description code		GCCFT			
Туре		4 stroke, overhead	l-camshaft, single cylinde	r, forced air cooled	
Displacement			47.9 cm <sup>3</sup> (2.9 cu-in)		
Bore / Stroke		43	3.0 x 33.0 mm (1.69 x 1.30 i	in)	
Net power* (SAE J1349)		1.4	kW (2.0 PS)/7,000 min <sup>-1</sup> (r <sub>l</sub>	om)	
Net Torque max.of engine	e* (SAE J1349)	2.2 N·m (0.	22 kgf·m, 1.6 lbf·ft)/5,000 ı	min <sup>-1</sup> (rpm)	
Maximum speed when no	oload	MIN. 10,000 min <sup>-1</sup> (rpm)			
Idle speed		3,100±200 min <sup>-1</sup> (rpm)			
Engine oil		4-stroke motor oil, API service classification SE or later (or equivalent), SAE 10W-30			
Oil capacity		130 cm <sup>3</sup> (0.13 L, 0.11 Imp qt)			
Fuel		Unleaded petrol E10			
Fuel tank capacity 630 cr			30 cm <sup>3</sup> (0.63 L, 0.55 lmp q	30 cm <sup>3</sup> (0.63 L, 0.55 Imp gt)	
Ignition		Transistor magneto			
Spark plug brand and type		NGK CMR5H			
Carburetor		Diaphragm			
Carbon dioxide (CO2) em	issions**	Please refer to "CO2 Information List" on www.honda-engines-eu.com/co2			

<sup>\*</sup> The power rating of the engine indicated in this document is the net power output tested on a production engine for the engine model GX50T and measured in accordance with SAE J1349 at 7,000 min<sup>-1</sup> (rpm) (Net Power) SAE J1349 and 5,000 min<sup>-1</sup> (rpm) (Net Torque max.).

Mass production engines may vary from this value. Actual power output for the engine installed in the final machine will vary depending on numerous factors, including the operating speed of the engine in application, environmental conditions, maintenance, and other variables.

<sup>\*\*</sup> The CO2 measurement results from testing over a fixed test cycle under laboratory conditions a(n) (parent) engine representative of the engine type (engine family) and shall not imply or express any guarantee of the performance of a particular engine.

NOISE						
<b>I</b> tems		Equivalent sound pressure level at operator station (2006/42/EC, ISO 22868: 2011) (dB(A))		Measured sound power level (2000/14/EC) (dB(A))		Guaranteed sound power level (2000/14/EC) (dB(A))
	Types		Measuring uncertainty (dB(A))		Measuring uncertainty (dB(A))	
	Flexible cutting means	96.0	2.3	108.4	2.3	112
	Steel cutting means (3-teeth)	94.1	1.6	103.0	1.6	112
UEET	Steel cutting means (4-teeth, Φ255 mm) (Option)	94.2	2.3	103.1	2.3	112
	Steel cutting means (4-teeth, Φ230 mm) (Option)	94.3	1.9	103.1	1.9	112
	Steel cutting means (circular saw) (Option)	94.7	6.4	106.1	6.4	112
	Flexible cutting means	94.9	1.3	108.8	1.3	112
LEET	Steel cutting means (3-teeth)	92.7	1.4	103.1	1.4	112
LEET	Steel cutting means (4-teeth, Φ255 mm) (Option)	93.2	1.3	103.1	1.3	112
	Steel cutting means (4-teeth, Φ230 mm) (Option)	93.1	1.5	103.0	1.5	112
XEET	Flexible cutting means	97.0	1.8	109.2	1.8	112
	Steel cutting means (3-teeth)	95.4	1.4	103.4	1.4	112
	Steel cutting means (4-teeth, Φ255 mm) (Option)	94.5	1.2	102.8	1.2	112
	Steel cutting means (4-teeth, Φ230 mm) (Option)	95.1	1.6	102.6	1.6	112
	Steel cutting means (circular saw) (Option)	94.7	4.1	105.7	4.1	112

Vibratio	1			
	Items		(2006/42/EC, IS	ibration level 60 22867: 2011) /s <sup>2</sup> )
Т	ypes and measuring positions			Measuring uncertainty (m/s <sup>2</sup> )
	Flexible cutting means	Left side	3.58	0.50
	Tiexible duting means	Right side	3.80	0.50
	Steel cutting means (3-teeth)	Left side	4.06	1.00
	Steel cutting means (5-teeth)	Right side	3.39	0.90
UEET	Steel cutting means (4-teeth, Ф255 mm) (Option)	Left side	5.49	1.40
OLLI	Steel cutting means (4-teeth, \$\pi_255 \text{min} (\text{Option})	Right side	3.96	1.00
	Steel cutting means (4-teeth, Φ230 mm) (Option)	Left side	3.65	1.20
	Steel cutting means (4-teeth, \$\psi_230 \text{min}) (Option)	Right side	2.54	0.60
	Steel cutting means (circular saw) (Option)	Left side	6.80	1.60
		Right side	4.52	1.00
	EL TIL W	Rear side	5.90	0.90
	Flexible cutting means	Front side	4.77	1.40
	Steel cutting means (3-teeth)	Rear side	5.58	0.50
LEET		Front side	4.89	2.10
LEET	Charles #1'	Front side	5.66	0.80
	Steel cutting means (4-teeth, Φ255 mm) (Option)	Rear side	5.91	0.40
		Front side	4.18	1.30
	Steel cutting means (4-teeth, Φ230 mm) (Option)	Rear side	5.81	0.80
	EL MIL WILL	Left side	2.30	0.60
	Flexible cutting means	Right side	1.80	0.20
	(0, 1, 1)	Left side	2.45	0.48
XEET	Steel cutting means (3-teeth)	Right side	1.85	0.27
	0. 1 /4 4055 \( \)	Left side	2.25	0.41
	Steel cutting means (4-teeth, Φ255 mm) (Option)	Right side	1.87	0.35
		Left side	2.30	0.64
	Steel cutting means (4-teeth, Φ230 mm) (Option)	Right side	1.93	0.44
	0. 1 1. 1. 1.2.	Left side	2.36	0.50
Steel cutting means (circular saw) (Option)		Right side	2.15	0.20