

FOREWORD

Dear Honda User,
You have just purchased a Honda lawn mower and we thank you for your confidence in us.

This manual has been written to familiarise you with your mower, to enable you to use it in the best possible conditions and to carry out its maintenance.

Our aim is to make you benefit to the full from technological advances, from new equipment and materials and from our experience. This is why we regularly make improvements to our models. Thus, the specifications and information contained in this manual may be modified without prior notice and without obligation to update it.

If you have a problem, or if you have any questions concerning the mower, contact your supplying dealer or approved Honda dealer. Keep this manual handy so you can consult it at any time. If you sell the mower be sure that the manual accompanies it.

We recommend that you read the guarantee policy to fully understand your rights and responsibilities. The guarantee policy is a separate document provided by your dealer.

No reproduction, even partial, may be made of this publication without prior written authorisation.

SAFETY INSTRUCTIONS

For your own safety and operating comfort, it is highly recommended that you read this manual in full.

Pay attention to these symbols and their meaning:

WARNING:

Indicates a high risk of severe personal injury or death if instructions are not followed.

CAUTION:

• Indicates a possibility of personnel injury or equipment damage if instructions are not followed.

NOTE : Source of usefull information.

DESCRIPTION OF THE CODES USED IN THIS MANUAL

HRX426C - HRX476C	P D E A	P X E A	Q X E A	R X E A	S D E A	S X E A
Pushed.	●	●				
Self-propelled with gearbox and rear roller. . .			●			
Pushed and rear roller.				●		
Self-propelled with gearbox.					●	●
Blade brake.	●				●	
Rotostop.		●	●	●		●

The model of your machine is indicated on its "identification label", by a series of letters and figures (see page 3).

 _____
Write down your machine's serial number here

Write down your machine's model here

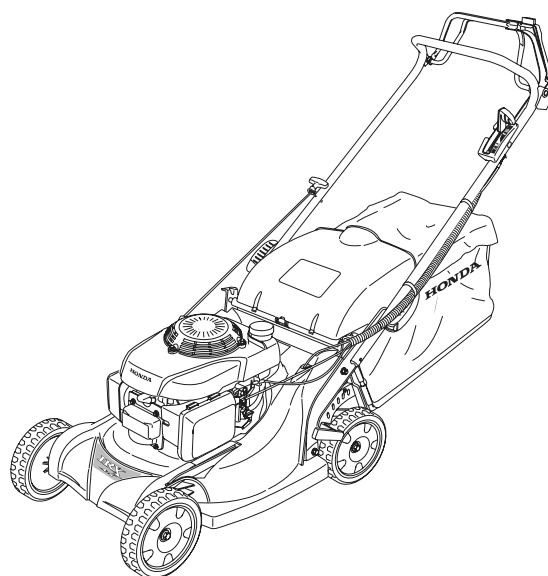
HONDA
POWER EQUIPMENT

OWNER'S MANUAL

Original instructions

HRX426C - HRX476C

Lawn mowers



CONTENTS

Foreword	1
Safety instructions	2
Safety stickers	3
Identification of machine	3
General description	3
Preparation and checks before use	4
Starting and stopping the engine	6
Operating hints and tips	6
Maintenance.	8
Troubleshooting	12
Storage.	13
Transport	14
Useful information.	14
Technical specifications	15
Major Honda distributor addresses.	17
"EC Declaration of Conformity" CONTENT OUTLINE	18

ENGLISH

FRANCAIS

DEUTSCH

ITALIANO

NEDERLANDS

ESPAÑOL

SAFETY INSTRUCTIONS

For your own safety and operating comfort, it is highly recommended that you read this manual in full.

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This sign means that you must take care during certain operations. Refer to the safety instructions on the following pages, to the point(s) indicated in the box.

TRAINING

- A1.** Read the instructions carefully. Be familiar with the controls and the proper use before using the equipment. Know how to stop the engine rapidly.
- A2.** Use the mower for the purpose it is intended for, that is mowing and collecting grass.
Any other use could be dangerous or damage the equipment.
- A3.** Never allow children or people unfamiliar with these instructions to use the lawn mower.
Local regulations may restrict the age of the operator.
- A4.** Never mow when:
 - People, especially children or pets are nearby.
 - User is under medication or has swallowed substances known to affect judgement or reactions.
- A5.** Keep in mind that the owner or user is responsible for accidents or hazards occurring to other people or their property.

PREPARATION

- B1.** While mowing, always wear substantial footwear and long trousers.
Do not operate the equipment when barefoot or wearing sandals.
- B2.** Thoroughly inspect the area where the equipment is to be used and remove all objects which may be thrown by the machine (stones, branches, wires, bones, etc...).
- B3. WARNING** - Petrol is highly flammable.
 - Store fuel in containers specifically designed for this purpose.
 - Refuel outdoors only, before starting the engine and do not smoke while refuelling or handling fuel.
 - 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 but move the machine away from the area of spillage and avoid creating any source of ignition until petrol vapours are dissipated.
 - Replace all fuel tanks and container caps securely.
 - Before tipping the lawn mower to maintain the blade or drain oil, remove fuel from tank.
- B4.** Replace faulty silencers.
- B5.** Before use, always visually inspect the machine, especially to see that the blades, blade bolts and cutter assembly are not worn or damaged.
Replace worn or damaged blades and bolts in sets to preserve balance.

OPERATION

- C1.** Do not operate the engine in a confined space where dangerous carbon monoxide fumes can collect.
- C2.** Mow only in daylight or in good artificial light. Make sure to comply with legal regulations which may vary from one region to another
- C3.** Avoid operating the equipment in wet grass, where feasible.
- C4.** While mowing, always keep the safety distance to the blade, which is provided by the handle length.
- C5.** Walk, never run. Do not let yourself be pulled by the mower.
- C6.** Always be sure of your footing on slopes. Mow across the face of slopes, never up and down.

C7. Exercise extreme caution when changing direction on slopes.

C8. Do not mow slopes of more than 20°.

C9. Use extreme caution when pulling the lawn mower towards you.

C10. Stop the blade if the lawn mower has to be tilted for transportation when crossing surfaces other than grass, and when transporting the lawn mower to and from the area to be mowed.

C11. Never operate the lawn mower with defective guards or housings, or without safety devices such as deflectors and/ or grass catchers.

C12. Do not change the engine governor settings or overspeed the engine.

C13. Disengage all blade (models equipped with Rotostop) and drive clutches (self-propelled models) before starting the engine.

C14. Start the engine carefully according to instructions and with feet well away from the blade.

C15. Do not tilt the lawn mower when starting the engine.
Start the mower on a level surface, free of high grass or obstacle.

C16. Keep hands and feet away from the rotating parts.
Do not start the engine when standing in front of the discharge opening.

C17. Never pick up or carry a lawn mower while the engine is running.

C18. Stop the engine and disconnect the spark plug cap in the following cases:

- Before any operation under the cutter housing or the discharge tunnel.
- Before checking, cleaning or working on the lawn mower.
- After striking a foreign object. Inspect the lawn mower for damage and make repairs before restarting and operating the lawn mower again.
- If lawn mower starts to vibrate abnormally. Check immediately the cause of the vibration and perform the necessary repair.

C19. Stop the engine in the following cases:

- Whenever you leave the lawn mower unattended.
- Before refuelling.

C20. Stop the blade (models equipped with Rotostop) or the engine in the following cases:

- When installing or removing the grass bag.
- Before adjusting the cutting height.

C21. Reduce the throttle setting during engine shut-down. Close the fuel shut-off valve by turning the fuel shut-off valve.

C22. Using any attachments other than those recommended in this manual may cause damage to your lawn mower, and such damage will not be covered by your guarantee.

MAINTENANCE AND STORAGE

D1. Keep all nuts, bolts and screws tight to be sure the equipment is in safe working condition. Regular maintenance is an essential aid to user's safety and retaining a high level of performance.

D2. Never store the equipment with petrol in the tank inside a building when vapours may reach an open flame, spark or high temperature source.

D3. Allow the engine to cool before storing in any enclosure.

D4. To reduce the fire hazard, keep the mower, especially the engine and silencer, the petrol storage area as well, free of grass, leaves, or excessive grease.
Do not leave containers of vegetable matters in or near a building.

D5. If the fuel tank has to be drained, this should be done outdoors, with a cold engine.

D6. Check the grass collecting system frequently for wear or deterioration.

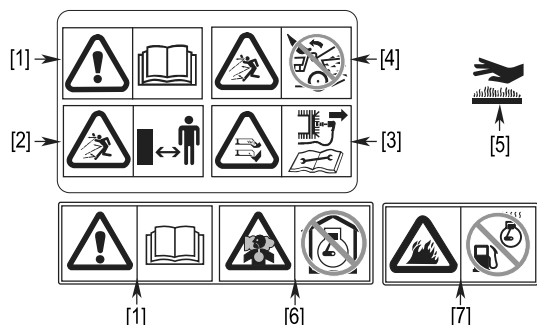
D7. Do not use the machine with worn or damaged parts.
Parts must be replaced, not repaired. Replace worn or damaged parts with Honda genuine parts.
Blades must always bear the mark Honda and the reference number.
Non equivalent quality parts may damage the machine and be prejudicial to your safety.

D8. Wear thick gloves when removing or installing the blade or when cleaning the cutter housing.
When tightening or loosening the blade screws, use a wooden block to prevent the blade from rotating.

D9. Always make sure the correct balance of the blade when sharpening.

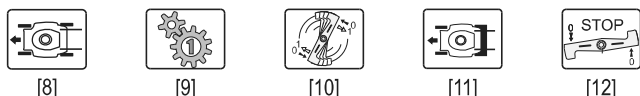
SAFETY STICKERS

Your lawn mower 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 meaning is explained below. These decals are considered as a part of the mower. Should one become detached or unreadable, contact your Honda dealer for its replacement. We also recommend that you read the safety advice on carefully (see page 2).



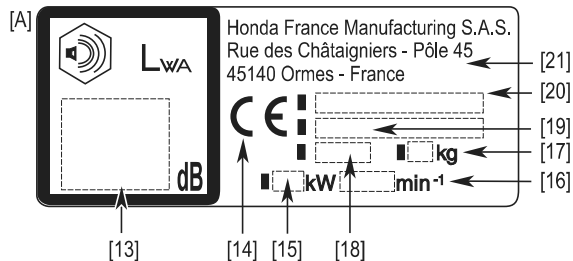
- [1] **WARNING:** Read the owner's manual before using the mower.
- [2] Risk of projections: Keep third persons away from the area during use.
- [3] Risk of cuts. Rotating blade: Do not put hands or feet inside the blade enclosure. Disconnect the spark plug cap before performing any operation of maintenance or repairs.
- [4] Do not operate without either discharge guard or grass catcher in place.
- [5] The muffler becomes very hot during operation and remains hot for a while after stopping the engine.
- [6] The engine emits toxic carbon monoxide. Do not run in an enclosed area.
- [7] Petrol is highly flammable. Stop the engine before refueling.

DESCRIPTION OF THE SYMBOLS USED IN THIS MANUAL



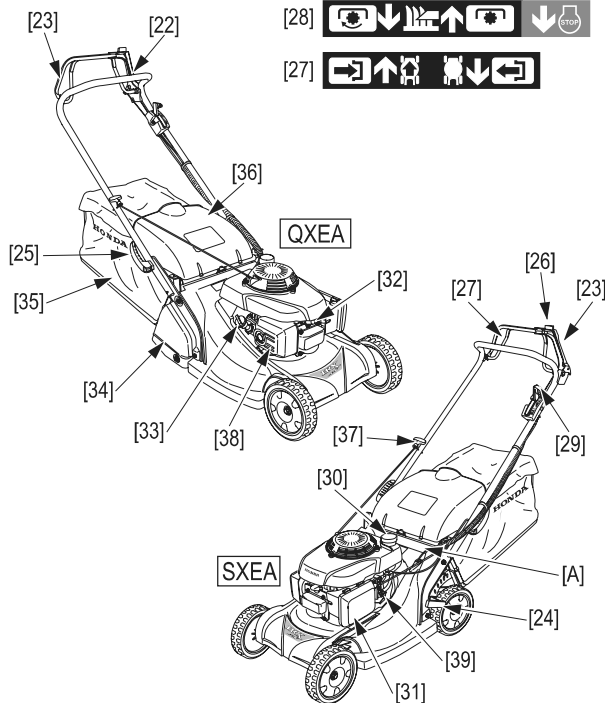
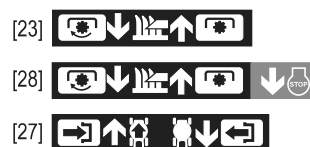
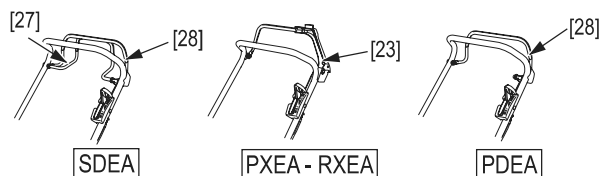
- [8] Four wheels models
- [9] 1-Speed gear box models
- [10] Models equipped with blade clutch (Rotostop)
- [11] Rear roller models
- [12] Models equipped with blade brake

IDENTIFICATION OF MACHINE



- [13] Sound power level
- [14] CE marking
- [15] Nominal power in kilowatt
- [16] Recommended engine speed in rpm
- [17] Mass in kilograms
- [18] Year of manufacture
- [19] Serial number
- [20] Model - Type
- [21] Name and adress of the manufacturer

GENERAL DESCRIPTION



EQUIPMENT IDENTIFICATION

CONTROLS

FUNCTIONS

- [22] Handle
- [23] Blade clutch lever (*). Couple and stops the blade
- [24] Lever for adjusting the cutting height. Selects the desired cutting height
- [25] Lever for folding / adjusting the handle. Allows you to adjust the height of the handle or to fold the handle
- [26] Blade clutch lever control button (*) Activates blade clutch lever
- [27] Drive clutch lever (*). Controls the transmission which drives the rear wheels or the rear roller
- [28] Blade brake lever (*). Stops the blade rotation and the engine / Authorises start-up
- [29] Throttle lever. Controls the engine speed
- [30] Fuel tank
- [31] Air filter
- [32] Spark plug
- [33] Engine oil reservoir
- [34] Rear roller (*)
- [35] Grass bag Collects the cut grass
- [36] Discharge guard. Protects the projections
- [37] Recoil Allows you to start the engine
- [38] Muffler
- [39] Fuel valve. Closes / opens the fuel circuit

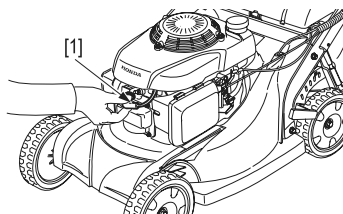
(*) For the models equipped

PREPARATION AND CHECKS BEFORE USE



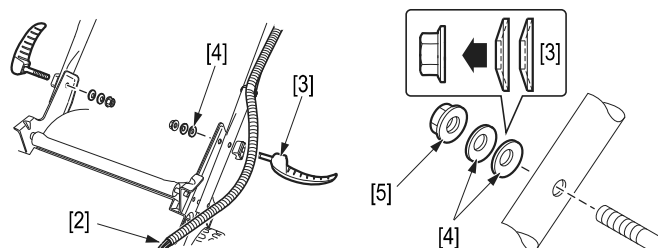
⚠ WARNING:

To carry out this series of checks, place the mower on stable and level ground with engine stopped and spark plug [1] cap removed.

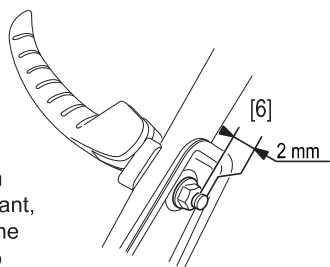


ASSEMBLY OF THE HANDLE

Before mounting the handle, ensure that the cables [2] are positioned outside the handle. Fit the components in the order indicated. Take care to position the cables above the handle [3]. Note the direction of assembly of the spring washers [4], with the convex side turned towards the nut [5].

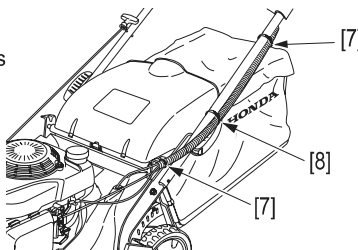


While holding the handle [3] in an open position, tighten the nut [5] until the thread is 2 mm [6] longer than the nut [5]. Choose the desired height and tighten the handles to lock the handle. If the effort to close down the handles [3] seems too important, untighten slightly the nuts [5]. If the clamping of the handle seems too weak, tighten the nut [5].



Ensure that the clamping rings for the cables on the handle are positioned correctly:

- [7] at each end of the fluted tube
- [8] aligned with the center of the clamping handle



To assemble the grass bag, please refer to see page 11.

CHECKING THE GRASS BAG

⚠ WARNING:

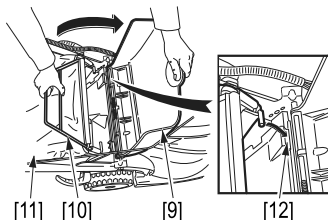
Before use, ensure that the bag closing device is correctly locked (discharge guard). Even in normal use, the grass bag tends to wear. Regularly check that it is not frayed or torn. A worn out bag must be replaced. Replace a damaged bag by a Honda bag only.

Bag removal:

1. Stop the engine.
2. Raise discharge guard [9], grasp handle [10] and remove bag [11] while keeping it in an upright position.

Bag fitting:

1. Raise the discharge guard and hook the front of the bag on the mower's attachment lugs [12].



NOTE :

- The HRX mower can be fitted with an optional mulching kit, available from your approved Honda reseller, comprising an additional special blade and a housing cap (see page 14).
- Mulching is a natural fertilisation technique. The grass is no longer collected in the grass bag, but is finely ground and deposited on the lawn. The grass cuttings chopped up in this way decompose in the sun and form a natural humus which can produce a quarter of the annual fertilisation requirement of your lawn.
- In addition to its fertilising role, mulching protects the ground, limits evaporation of water during hot periods and relieves you of the task of collecting the grass.

CHECKING FUEL LEVEL

⚠ WARNING:

Do not fill the fuel tank up to the brim (There must be no fuel in the filler neck). When filling is completed, ensure that the tank filler cap is screwed fully on.

Avoid getting fuel on the skin repeatedly or for long periods and avoid breathing fuel vapours. Keep fuel away from children.

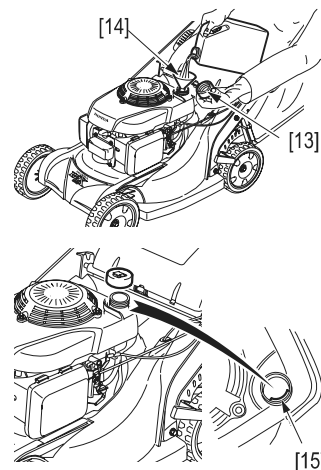
CAUTION:

- Never use a gas-oil mixture.
- Only use unleaded petrol 95 or 98.
- Do not let dirt, clippings, etc. get into the tank.
- Do not use dirty or contaminated fuel (water, dust, ...), or fuel which is too old. The quality of unleaded petrol deteriorates with time. Do not keep fuel for more than one month (see page 13).

To check the fuel level:

1. Remove filler cap [13] and check fuel level.
2. Fill [14] tank if level is low. The maximum level is reached when the fuel is opposite mark [15].
3. Screw filler cap [13] fully on after filling.

NOTE : Fuel substitute products are not recommended. These may damage fuel system components.



FUEL CONTAINING ALCOHOL

If you intend to use fuel with alcohol, ensure that its octane number is at least as high as that recommended by Honda (86). There are two types of fuel/alcohol mixtures: one contains ethanol and the other methanol.

Do not use mixtures containing more than 10% ethanol, or fuel containing methanol (methyl or wood alcohol), which do not contain cosolvents, or corrosion inhibitors for methanol. In the case of a mixture containing methanol with addition of cosolvents and corrosion inhibitors, limit the proportion to 5% of methanol.

NOTE : The guarantee does not cover damage caused to the fuel system or engine performance problems resulting from the use of fuel containing alcohol. Honda does not give its approval to the use of fuels containing methyl alcohol since their suitability is not yet proven.

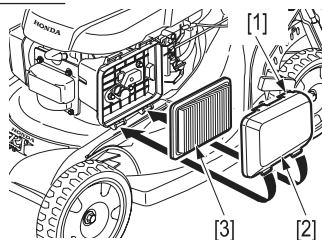
CHECKING THE AIR CLEANER

CAUTION:

- Never run the engine without the air cleaner fitted since this could cause premature engine wear.

To check the condition of the air cleaner:

1. Press the latch tabs [1] on the top of the air cleaner cover and remove the cover [2].
2. Check the cleanliness of filter element [3].
If the element is dirty, follow the cleaning procedure (see "Maintenance" chapter page 8).
3. Reinstall the filter [3] and air cleaner cover [2].



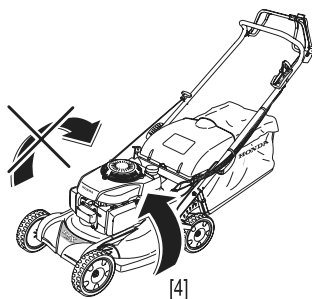
CHECKING BLADE CONDITION

CAUTION:

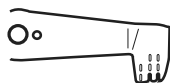
- Do not tilt the mower with the carburetor facing down; this will make the mower difficult to start later, due to engine oil contaminating the air cleaner.

To check blade condition:

1. Stop the engine.
2. Pull off the spark plug cap.
3. Place the mower on its side so that the carburetor is facing upwards (left side [4]).
 - Check if the blade is showing signs of wear. For your information, it is necessary to replace the blade when the recesses join together, or when a crack appears.
 - Check that blade bolts are tight (see «Maintenance» chapter page 8).
 - To replace or remove the blade, refer to the procedure described in the «Maintenance» chapter page 8.



NEW BLADE



WORN BLADE

WARNING:

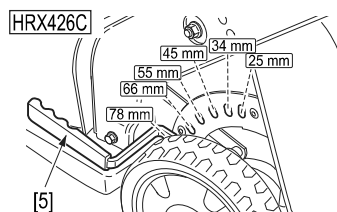
Never operate the mower with a worn, damaged, split or dented blade. A piece of blade which breaks off and is thrown outwards can cause serious bodily injuries.

NOTE: Blade wear is increased when the mower is used on sandy soils. Inspect the blade more often when the mower is used in these conditions.

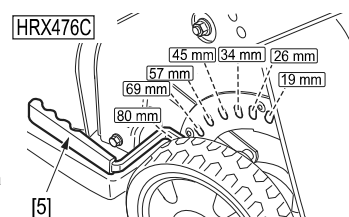
ADJUSTING CUTTING HEIGHT

To change the cutting height:

1. Stop the engine.
2. Pull the adjusting lever [5] towards the outside of the machine.
3. Turn the adjusting lever [5] left or right to move the wheels up or down to raise or lower the cutting height.

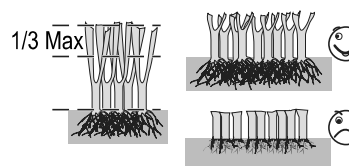
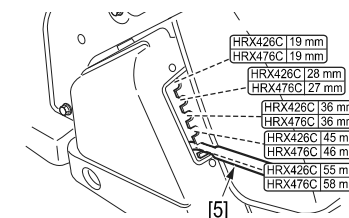


The cutting height settings are approximate values, the actual height of the cut grass varies with the lawn and ground condition. To choose the cutting height, check how the lawn looks after mowing a small area and adjust the cutting height where necessary.



NOTE:

- Do not cut more than 1/3 of the initial height of the grass in one passage as brown spots will appear. The cut will be cleaner and this will limit the amount of jamming.
- If the lawn is too high, mow at the maximum permissible height of the mower. Mow the lawn again 2 or 3 days later.
- The depth of the roots is proportional to the height of the grass cuttings: the shorter the cut, the shallower the roots.
- Choose a cutting height suited to the use of the lawn: leisure, sport: 5 cm or more, ornamental: 1 to 3 cm.
- Only some species of lawn can endure short cuts. If a lawn is cut too short, it is fragile and susceptible to dryness. Please ask the advice of a specialist.



CHECKING ENGINE OIL LEVEL

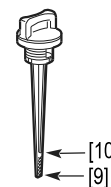
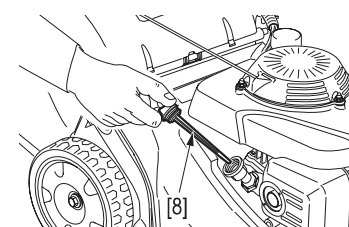
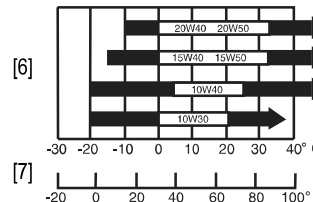
CAUTION:

- The engine oil is an essential element which affects the performance and lifetime of the engine.
- The engine may be seriously damaged if run with insufficient oil. We recommend the use of Honda 4-stroke oil or an equivalent quality engine oil which is highly detergent. Oil viscosity must be appropriate for the average temperature in the zone where the mower is to be used.

Types of oil [6] adapted to the ambient temperature [7].

To check engine oil level:

1. Put the lawn mower on flat, even ground.
2. Remove the oil filler cap and wipe the dipstick [8].
3. Replace the dipstick in the filler neck but do not screw it down.
4. Check the level of the oil left on the dipstick. If the level is near the low level mark [9], add the recommended oil up to the high level mark [10].
5. Screw filler cap.



STARTING AND STOPPING THE ENGINE



STARTING THE ENGINE

CAUTION:

- Do not start the engine with the blade clutch lever or the drive clutch lever engaged.



[A]
CHOKE

For starting a cold engine.



[B]
FAST

For restarting a hot engine and for mowing.



[C]
SLOW

Selects engine idling speed.

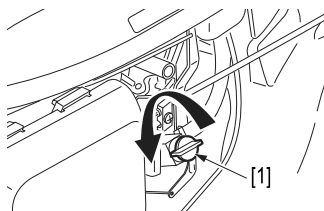


[D]
STOP

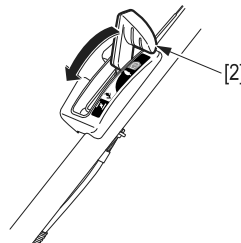
Stops engine. (Rotostop models)

All models:

1. Open the fuel cock [1].



2. Place the throttle lever [2] in "CHOKE" position [A].



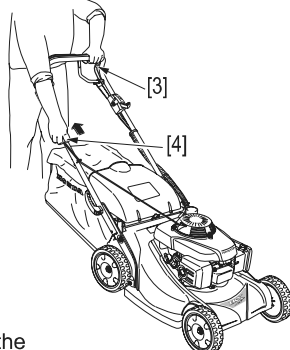
NOTE: Place the throttle lever in "FAST" position [B] when the engine is hot or the ambient temperature is high.



3. Keep the blade brake lever held [3] firmly against the handle when starting the engine.

All models:

4. Pull the starter [4] slowly until a resistance is felt; then pull sharply.



NOTE: Do not let the starter spring back suddenly on its own; guide it back slowly.

5. Once the engine has warmed up (The engine runs evenly when the accelerator lever is moved away from the "CHOKE" position [A]), set the throttle lever to "FAST" position [B].

NOTE: To adjust the engine speed when the mower is running, the throttle lever can be set anywhere between the "FAST" [B] and "SLOW" [C] positions. However, the best results are obtained in the "FAST" position [B].



The engine may stall if the lever is in the "SLOW" position [C] when the blade clutch is engaged. To facilitate starting, place the mower on a flat surface where the grass is not long.

STOPPING THE ENGINE



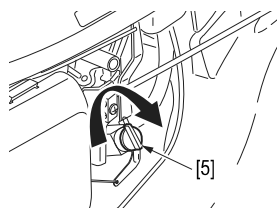
1. Move the throttle control to the "STOP" position [D].



2. Move the throttle control to the "SLOW" position [C].
2. Release the flywheel brake lever.

All models:

3. Turn the fuel cock "OFF" [5].



FLOODED ENGINE

If the engine still refuses to start after several pulls on the starter, the engine may be flooded.

To clear a flooded engine:

1. Place the throttle lever in "STOP" position [D] (Rotostop model).
2. Remove and dry the spark plug. When refitting the spark plug, screw it up until it is finger tight and correctly seated. Then using the plug spanner, tighten it an additional 1/8 to 1/4 turn so that the washer is correctly compressed.
3. Next, place the throttle lever in "FAST" position [B] and repeat the operations previously mentioned under the heading "Starting the engine".

OPERATING HINTS AND TIPS

USING THE MOWER AT HIGH ALTITUDES

At high altitudes, the standard fuel/air mixture in the carburetor is much too rich: this will reduce performance and increase fuel consumption.

It is possible to improve the high altitude performance by fitting the carburetor with a smaller diameter jet and by adjusting the pilot screw. If you use your mower at an altitude of more than 1500 meters above sea level, we recommend that you have these modifications made by your approved Honda dealer.

Even with the appropriate modifications made to the carburetor, engine power will be reduced by about 3.5% for every 300 meters of altitude. However, the altitude will have a much greater effect on power if these modifications are not carried out.

CAUTION:

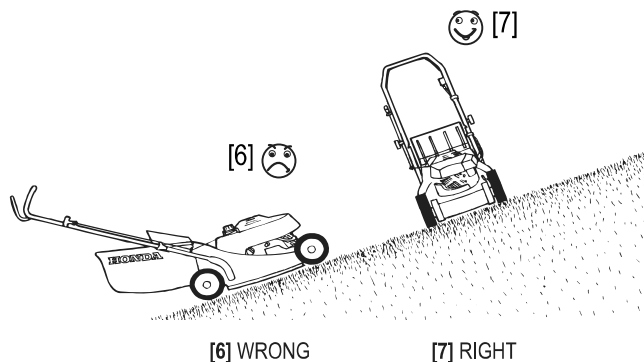
- Running the mower at an altitude less than that for which the carburetor is adjusted may cause overheating and seriously damage the engine, due to the gas/air mixture being far too weak.

WARNING:

Take special care when mowing on uneven or irregular ground. The mower may tip over, thus uncovering the blade; also, the blade may throw out objects which were previously hidden. Keep the four wheels firmly on the ground. Control the direction of the mower using the handle and not by exerting pressure on the blade casing with your foot.

CAUTION:

- When mowing around an obstacle, be careful that the blade does not hit it. Never push the mower directly over an object.
- When mowing an uneven area, do not let yourself be pulled along by the mower. Hold the handle firmly and control its advance.



[6] WRONG

[7] RIGHT



MOWING PROCEDURE



Read the safety instructions before starting to mow.

1. Place the mower in an obstacle-free area.



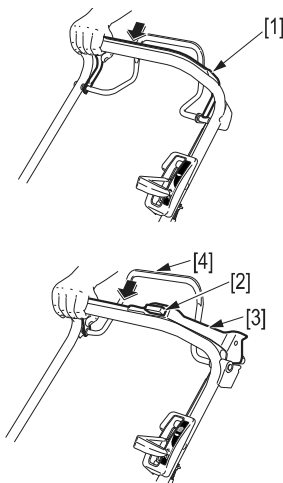
2. The blade brake lever [1] must be held firmly against the handle for starting the engine.

All models:

3. Start the engine, allow it to reach its maximum temperature and rotation speed.



4. Engage the blade: press the yellow button [2] located on the top of the blade control lever [3], and at the same time push it quickly and hold it against the handle.



NOTE: For self-propelled models and Rotostop models, it is possible to refrain from using the forward drive while mowing in areas with a narrow surface. Likewise, the drive clutch can be used to move the mower without engaging the blade clutch (lanes, borders, etc.).

CAUTION:

• Move the blade control lever quickly from one end of its travel to the other, so that the blade is always either fully engaged or fully disengaged. This is to avoid stalling the engine and increases the service life of the blade control mechanism.

WARNING:

Always release the blade clutch lever [3] and the drive clutch lever [4] before starting the engine. Starting is more difficult when the blade is engaged. If the clutch is engaged, the mower will move when the engine is started.

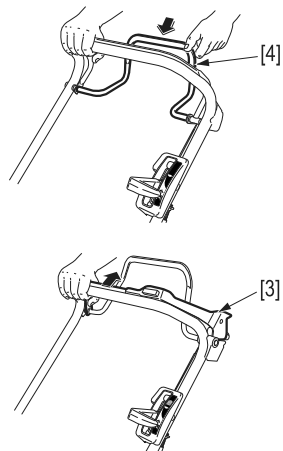
Except PDEA, PXEA, RXEA:

5. Engage mower forward drive when the engine has built up speed: to start the mower moving, push the drive clutch lever [3] forward and hold it against handle.



NOTE:

• Move the drive clutch lever [4] quickly and completely so that the drive clutch is always fully engaged or fully disengaged. This avoids stalling the engine and increases the service life of the clutch mechanism.



6. To stop the mower moving release the clutch lever [4].

7. To stop the blade rotating:

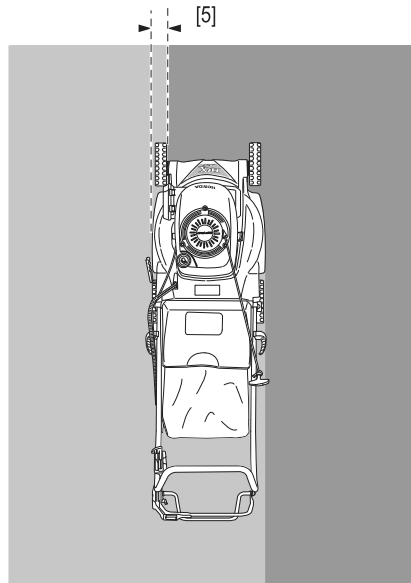
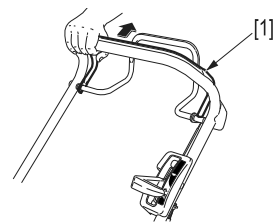


• release the blade clutch lever [3].



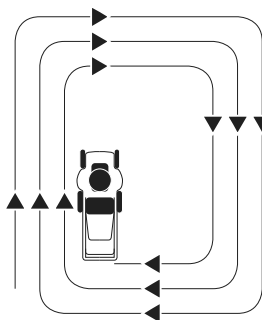
• release the blade clutch lever [1].

NOTE: Releasing the blade brake lever [1] stops the blade rotating and stops the engine.

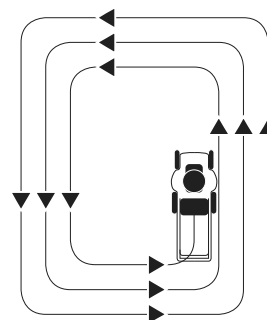


NOTE:

- Mowing frequency: once a week for a lawn intended for leisure purposes, twice a week for an ornamental lawn.
- If possible, mow the lawn in the afternoon or evening before sprinkling, as the grass must be dry. If dust levels are too high, mow the lawn when the grass is dry, but the ground is still damp.
- Choose a cutting height adapted to the terrain (see page 5).
- For a regular cut, you should overlap the part that has already been cut by a few centimetres [5], and increase this overlap zone if the cutting height is high.
- To achieve maximum efficiency, follow the suggested path.
- If your terrain does not have a regular shape or involves several obstacles, divide it into internal parcels which you can mow in the recommended direction.



[6] With collection: turn in a clockwise direction to achieve the maximum efficiency.

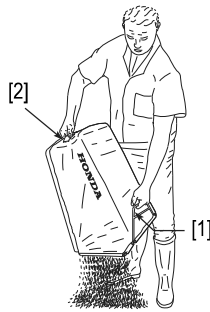


[7] With the mulching kit (optional, see page 14): turn in an anti-clockwise direction.

EMPTYING THE GRASS BAG

When the grass bag becomes too full, grass collection is no longer efficient (the sound of the mower changes and the bag is no longer puffed up by the air from the blade).

1. Stop the engine.
2. Remove the grass bag (see page 4).
3. Empty the bag:
 - Hold the bag by the metal handle [1].
 - Grasp handle [2] and shake the bag to remove the grass.



CAUTION:

- To reduce the fire risk, never leave grass cuttings or leaves in the grass bag, or in or near buildings. Decomposing vegetable matter causes a high temperature rise.

WARNING:

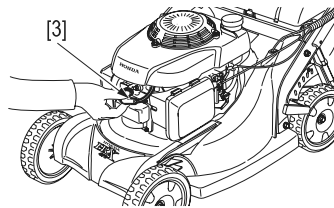
Before use, check that the bag closing device is correctly positioned (discharge guard).

MAINTENANCE

Regular maintenance is the guarantee of a long lifetime for your mower.

WARNING:

To avoid the mower starting accidentally, pull off the spark plug cap [3] before carrying out maintenance work.



CAUTION:

- The engine and the muffler reach temperatures high enough to cause burns and start fires if flammable materials are to be found nearby.
- Allow the engine to cool down for 15 minutes before carrying out maintenance operations.

NOTE: To assure a longer lifetime and more efficient operation, the underside of the mower must be kept clean and free of grass debris by cleaning with a brush and scraper. After use the mower must be cleaned thoroughly before being stored.

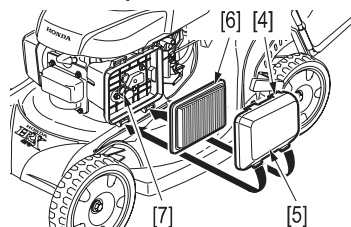
AIR CLEANER MAINTENANCE

A dirty air cleaner will reduce the flow of air to the carburetor. To prevent the carburetor operating inefficiently, the air cleaner must be regularly maintained.

WARNING:

Never clean the air cleaner element using gas or flammable solvents; this could cause a fire or an explosion.

1. Press the latch tabs [4] on the top of the air cleaner cover, and remove the cover [5].
2. Inspect air filter [6] and replace it if it is damaged.



3. Tap the filter several times on a hard surface to remove dirt or blow compressed air (not exceeding 2.1 kgf/cm², 30 psi) through the filter from the clean side that faces the engine.

NOTE: The filtering element [6] must be dry in order to work correctly. Do not soak with oil.

4. Wipe dirt from the inside of the air cleaner cover [5] and clean case, using a moist rag.

NOTE: Be careful to prevent dirt from entering the air duct [7] that leads to the carburetor.

5. Reinstall the filter [6] and air cleaner cover [5].

ENGINE OIL CHANGE

Drain the oil while the engine is still hot, so that the oil drains quickly and completely.

CAUTION:

- Used engine oil can cause skin cancer if it remains in contact with the skin for long periods. Although this is highly unlikely unless you handle used oil every day, we recommend that you wash your hands thoroughly with soap and water each time you handle used engine oil.

1. Tip the mower on its side.

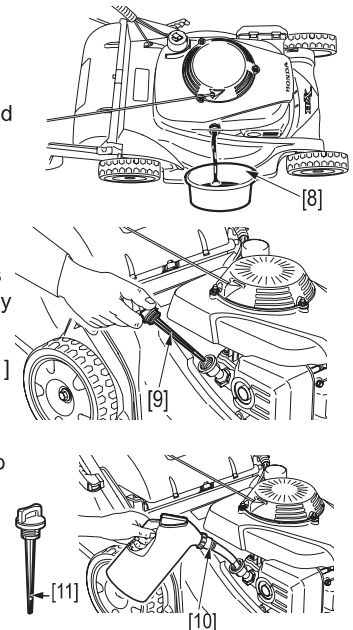
2. Place a receptacle [8] under the casing filler tube hole. And rock the mower on the right side.

3. Remove the oil filler cap [9].

4. Return the mower to the upright position on its wheels when the casing is completely empty.

5. Fill up [10] to «high level» [11] using the recommended oil (see page 5).

6. Screw the filler cap fully on to avoid the risk of leaks.



NOTE: The used engine oil must be disposed of in a manner which respects the environment.

We recommend that you take it to a service station which will ensure that it is recycled. Never dispose of used engine oil in dustbins or pour it away on the ground, in the gutter or down the drains.

CHECKING THE SPARK PLUG

Recommended plugs: NGK - BPR5ES

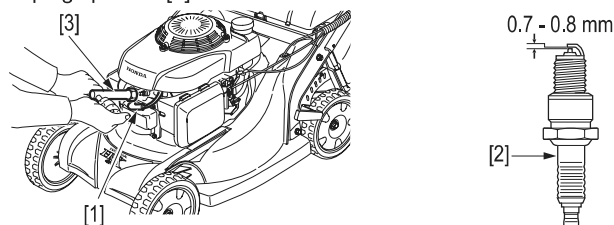
CAUTION:

- Use only recommended spark plugs. Using spark plugs with inappropriate temperature ranges may damage the engine.

WARNING:

If the engine has just been run, do not touch the muffler and the spark plug which will still be very hot.

1. Pull off spark plug cap [1] and remove spark plug [2] using a plug spanner [3].



2. Carefully inspect the spark plug. Replace the plug if there are a lot of deposits or if the insulator is cracked or broken.
3. Measure the plug gap using a set of feeler gauges ; the gap must be between 0.7 and 0.8 mm. If adjustment is necessary, carefully bend the side electrode.
4. Check that the sealing washer is in good condition ; then screw the plug down by hand until finger tight and correctly seated.
5. Using a plug spanner, give an additional 1/2 turn for a new spark plug, to compress the washer. If you refit the same plug, just 1/8 to 1/4 turn will do from the finger tight position.
6. Refit the spark plug cap.

CAUTION:

- The spark plug must be correctly tightened. A plug incorrectly screwed down can become very hot and damage the engine.



MAINTENANCE OF SPARK ARRESTER (Optional part)

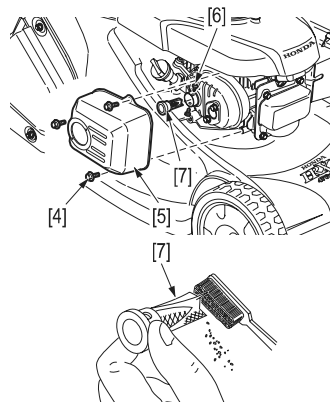
(In Europe and other countries where the machinery directive 2006/42/EC is enforced, this cleaning should be done by your servicing dealer).

WARNING:

If the mower has just been run, the silencer will still be very hot. Allow it to cool down before carrying out this operation.

In some regions, it is prohibited to operate an engine without a spark arrester.

1. Remove the three flange bolts [4] from the muffler protector [5] and remove the muffler protector.



2. Remove the two tapping screws [6] from the spark arrester [7] and remove the spark arrester from the muffler.

3. Check the carbon deposits around the exhaust port and spark arrester. Clean if necessary.
4. Replace the spark arrester if there are any breaks or tears.
5. Install the spark arrester [7] and muffler protector [5] in the reverse order of removal.



CARBURETOR ADJUSTMENT

CAUTION:

- It is recommended to ask your Honda dealer for adjustment.

Specified idle speed: 1 700 ± 150 rpm

Operating speed: HRX426C : 2 900 $\pm_{100}^0$ rpm

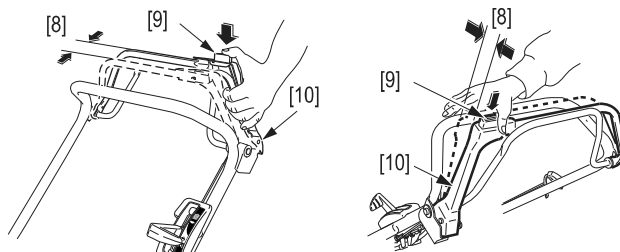
HRX476C : 2 750 $\pm_{100}^0$ rpm



BLADE CLUTCH LEVER FREE PLAY

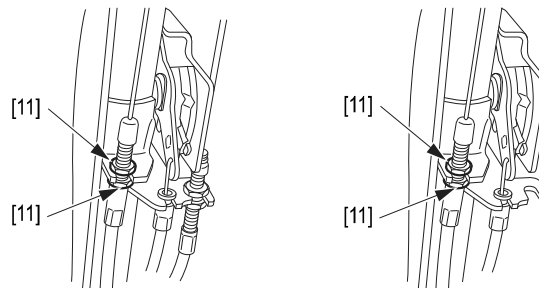
Measure the clearance [8] at the top of the lever [10] by holding the yellow button [9] pressed in.

It must be between 5 and 10 mm.



If necessary:

1. Undo the lock nuts [11] with a 10 mm spanner.
2. Move the nuts [11] up or down as necessary.
3. Retighten the lock nuts [11] and recheck the clearance.



4. Start the engine outdoors and engage the blade clutch lever. Check that the blade starts to rotate when you pull the lever to the rear, and that it stops rapidly when the lever is released. If the blade does not start to rotate or stop as it should, even when the cable is correctly adjusted, the system may need to be repaired. Take the mower to an approved Honda dealer.

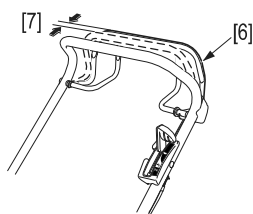


BLADE BRAKE CABLE ADJUSTMENT

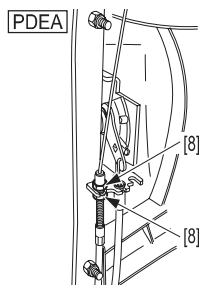
1. Stop the engine and disconnect the spark plug cap.
2. Release the flywheel brake lever [6] and verify that there is a strong resistance when pulling on the recoil starter.

If not:

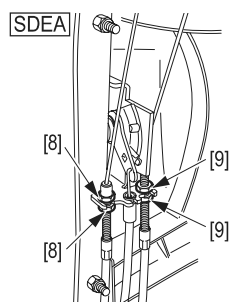
3. Measure clearance [7] at the tip of the lever [6] = 30-35 mm.



4. If adjustment is necessary, loosen the lock nuts [8] and adjust as required. Tighten the lock nuts and check the clearance again.



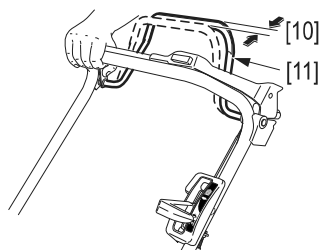
5. Start the engine and release the blade brake lever. Check that the blade and the engine stop when the lever is released. If not, take the mower to an approved Honda dealer.



CLUTCH CABLE ADJUSTMENT

Measure the free play [10] on the side of lever [11] as shown.

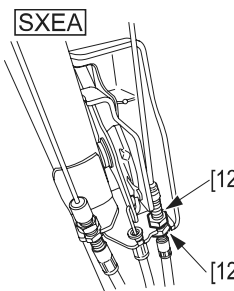
1. Loosen the locknuts [12] using a 10 mm spanner.



2. Relax or tighten the cable as necessary so that a free play of 1 to 5 mm is achieved.

3. Retighten the locknuts [12] and recheck the free play [10].

4. Start the engine in the open air and operate the clutch lever. Check that the clutch engages and disengages correctly.



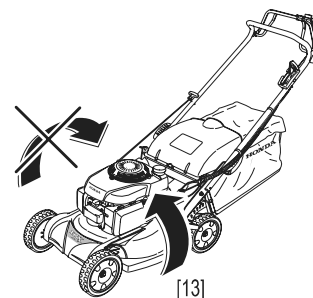
NOTE : If the clutch does not engage correctly even when the cable is correctly adjusted, the system may need to be repaired. Take the mower to an approved Honda dealer.



BLADE FITTING ANDREMOVAL

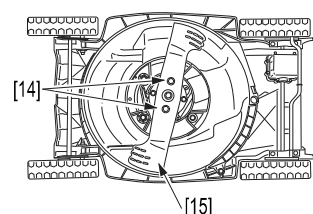
BLADE REMOVAL

1. Place the throttle lever in "STOP" position.



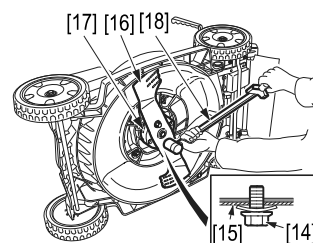
2. Tip the mower so that the carburetor faces upwards [13].

3. Remove the bolts [14] from the blade [15] using a 14 mm socket wrench [18]. Use a wood block to stop the blade rotating when slackening the bolts.



4. Remove the blade [15] from the blade holder [17].

NOTE: Never tip the mower so that the carburetor faces down; this will make starting difficult.



BLADE SHARPENING

1. Sharpen the blade cutting edges with a file. File the top side only. Maintain the original bevel for a fine cutting edge. File both ends evenly to maintain blade balance.
2. After sharpening, test the blade's balance using a screwdriver as shown. If either side dips slightly below the horizontal, file that side. Replace the blade if it dips excessively.

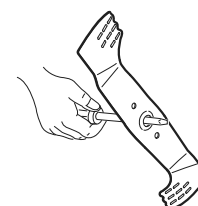
CAUTION:

• To avoid weakening the blade, causing it to become unbalanced or getting a bad quality of cut, the blade should be sharpened by competent personnel at your Honda dealer's.

BLADE REPLACEMENT

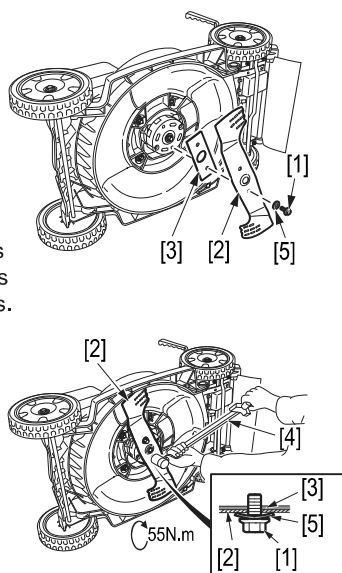
CAUTION:

- Blade balance is critical to proper mower performance. Replace any blade that is damaged or out of balance.
- Use only genuine Honda replacement blades.



BLADE FITTING

1. Clean the dirt and grass from around the blade assembly area.
2. Fit the spacer [3] then the blade [2] using the 2 bolts [1] and the special washers [5] as illustrated. The blade bolts are specially designed for this usage. Do not use other bolts.
3. Retighten the blade bolts [1] using a torque wrench [4]. Use a wood block to stop the blade rotating when tightening the bolts.



Blade bolt tightening torque: 55 Nm

CAUTION:

- If you do not have a torque wrench, ask your approved Honda mower dealer to tighten the blade bolts for you before you use the mower.
- If the blade bolts are too tight or too slack, they may break or unscrew.

GRASS BAG CLEANING AND REPLACEMENT

BAG CLEANING

CAUTION:

- Washing with a high pressure water or steam jet will damage the bag.
- Blocked mesh will prevent the grass from entering the bag.
- To clean the bag, we recommend washing it using a water jet directed from the outside to the inside of the bag. The bag must be completely dry before being used again. If the bag is damp, it will become clogged very quickly.



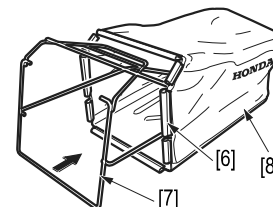
⚠ WARNING:

Objects struck by the blade may be thrown through a torn or damaged grass bag.
Objects thrown out by the blade can cause serious injuries.
Always replace a torn or damaged grass bag.

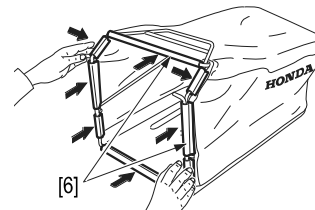
BAG REPLACEMENT

The grass bag tends to wear even in normal conditions of use. Regularly check that it is not frayed or torn. Replace a damaged bag only by a genuine Honda replacement bag.

1. Detach the plastic edges [6] of the worn bag [8] and remove the bag's frame [7].



2. Insert the frame into the new bag and fit the plastic edges [6] to the frame.



FORWARD DRIVE BELT CHECK (EXCEPT QXEA)

⚠ WARNING:

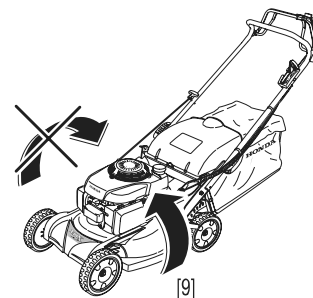
To avoid all risks of serious injury, pull off the spark plug cap to prevent the engine starting accidentally, and wear thick gloves to protect your hands from the blade.



1. Move the throttle control to the "STOP" position.

All models:

2. Pull off the spark plug cap.

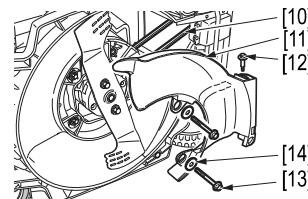


3. Tilt the mower so that the carburetor [9] (left side of mower) is facing upwards.

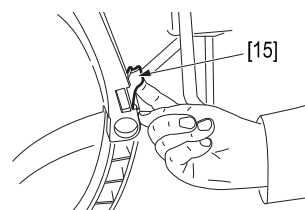
CAUTION:

- Never tilt the mower so that the carburetor side is facing downwards. Fuel will spill out and the mower will be difficult to start.

4. Unscrew the bolt [12] and the two bolts [13] as well as their washer [14]. Pull on the hook [15] and remove the scroll guide [11].



5. Check that the belt [10] is not torn, cracked or showing early signs of breaking. If a replacement is necessary, take the mower to an approved Honda dealer.



MAINTENANCE SCHEDULE

Maintenance to be carried out at the intervals indicated in months or in operating hours which ever occurs first.		Frequency				
		Each use	First month or 5 hours	Every 3 months or 25 hours	Every 6 months or 50 hours	Every year or 100 hours
Item	Intervention					
Engine oil	Check level					
	Change				(1)	
Air cleaner element	Check					
	Clean			(1)		
	Change					(1)
Grass bag	Clean					
Blade screw tightness and blade condition	Check					
Spark plug	Check					
	Clean					
Spark arrester (Optional part)	Clean				(7)	
ROSTOP cable (3)	Check		(2)		(2)	
	Adjust		(2)		(2)	
Blade brake cable (4)	Check					
	Adjust		(2)		(2)	
ROSTOP (3)	Check		(2)		(2)	
Shift cable (5)	Adjust					
Throttle cable	Check		(2)		(2)	
	Adjust		(2)		(2)	
Valve clearance	Check					(2)
	Adjust					(2)
Fuel tank and filter	Clean				(2)	
Fuel lines	Check (replace if necessary)	Every 2 years (2)				
Flywheel brake shoe (4)	Check				(2)	
Drive belt (5)	Check				(2)	
	Change					(2)
Roller driving chain	Check				(2)	
Rear roller bearing (6)	Check (replace if necessary)					(2)
	Grease					(2)

- (1) Increase cleaning frequency when mower is used in dusty areas.
 (2) Maintenance of these points must be carried out by a Honda dealer.
 (3) Types : QXEA, SXEA, RXEA, PXEA
 (4) Types : PDEA, SDEA
 (5) Types : SDEA, SXEA, QXEA
 (6) Types : RXEA, QXEA
 (7) In Europe and other countries where the machinery directive 2006/42/EC is enforced, this cleaning should be done by your servicing dealer.

TROUBLESHOOTING

Problem	Probable cause	Page
Engine does not start:	1. No gas.	4
	2. Throttle lever is in "STOP" position (models equipped rotostop).	6
	3. Spark plug cord incorrectly attached or disconnected.	9
	4. Spark plug defective or incorrect gap.	9
	5. Engine flooded.	6
	6. The blade brake lever is not firmly held against the handle (models fitted).	6
The engine smokes continuously:	1. Check the condition of the air filter (clogged).	5
Starting difficult or loss of power:	1. Impurities in fuel tank and/or fuel filter. Drain the reservoir. Refill with fresh fuel.	13
	2. Air cleaner dirty.	5
	3. Water in gas tank and in carburetor. Drain the reservoir. Refill with fresh fuel.	13
	4. Fuel tank filler cap vent and/or carburetor obstructed (*).	-
Uneven running:	1. Spark plug defective or incorrect gap.	9
	2. Air cleaner dirty.	5
Engine overheats:	1. Spark plug gap incorrect.	9
	2. Air cleaner dirty.	5
	3. Engine cooling fins clogged (*).	-
	4. Oil level too low.	5
	5. Starter pulley clogged by grass cuttings, etc (*).	-
Mower vibrates excessively:	1. Blade or engine bolts slack.	10
	2. Blade unbalanced.	10

(*) Maintenance of these points must be entrusted to an approved Honda dealer unless the user has the necessary tools and is mechanically competent.

STORAGE

PREPARATION FOR STORING THE MOWER

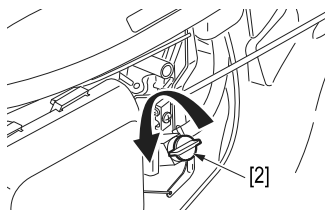
Carry out the following operations to protect the mower each time it is to be stored for a period of more than 30 days.

WARNING:

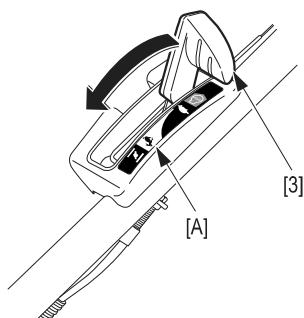
Do not drain the fuel tank while the muffler is hot.

1. Drain the fuel tank and the carburetor into a suitable receptacle [1].

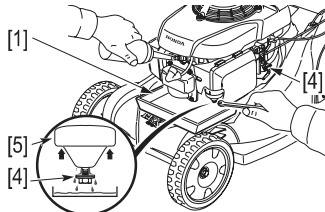
- a. Open the fuel cock [2].



- b. Place the throttle control lever [3] in "FAST" position [A].

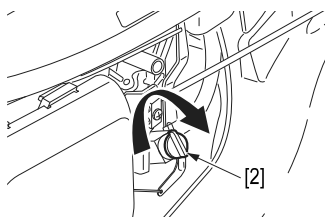


- c. Unscrew the carburetor float bowl retaining bolt [4] (1/4 to 1/2 turn maximum).



- d. Lift up the carburetor float bowl against the body of the carburetor [5] allowing the fuel to drain.

- e. Refit the drain plug and close the fuel shut-off valve [2].



2. Change the engine oil (see page 8).

3. Pull the starter slowly until a resistance is felt. This closes the valves and protects them from dust and corrosion.

4. Coat all surfaces liable to rust with a thin film of oil. Cover the mower and store it on a flat surface in a dry, dust free place. Do not use a plastic cover since this retains dampness.

NOTE: If the mower is to be stored for a period of more than 3 months, remove the spark plug and pour 5 to 10 cc of clean engine oil into the cylinder ; then pull the starter slowly two or three times to spread the oil. Do not leave the mower lying on its side over long periods. This may cause difficult starting and gear oil leaks.

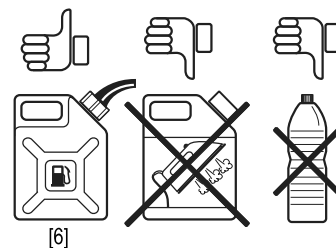


FUEL STORAGE

NOTE:

- Petrol will oxidize and deteriorate in storage. Old petrol will cause hard starting, and it leaves gum deposits that clog the fuel system. If the petrol in your engine deteriorates during storage, you may need to have the carburetor and other fuel system components serviced or replaced.

- Ensure that you use containers or drums specifically designed for hydrocarbons [6]. This will prevent polluting the fuel through the dissolution of the container walls, which will lead to poor functioning of the engine.



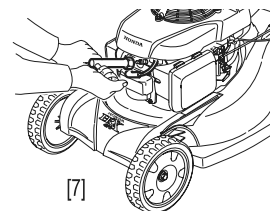
- Store the fuel in a dark place, in a room at constant temperature (avoid garden sheds).

- The warranty does not cover a blocked carburetor or valves jammed by old or polluted fuel.

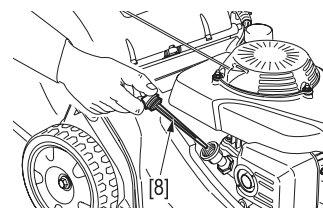
- The quality of unleaded petrol alters very quickly (2 to 3 weeks in some cases). Do not use fuel more than 1 month old. Store the absolute minimum required for your monthly consumption.

USING THE MOWER AFTER A STORAGE PERIOD

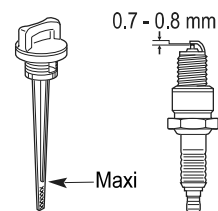
1. Remove the spark plug [7], check that it is clean and that the electrode gap is correct. Pull the starter several times.



2. We recommend that the spark plug be screwed down as far as possible by hand until finger tight ; then use a plug spanner to tighten it by an extra 1/8 or 1/4 turn.



3. Check the level and condition of the engine oil [8].



4. Fill the fuel tank and start the engine.

NOTE: If the cylinder has been coated with oil, the engine will smoke on start-up. This is normal.

TRANSPORT

TRANSPORTING THE MOWER



⚠ WARNING:

Do not tilt the mower since this may cause fuel or oil spillage; spilt fuel or even fuelvapours are a fire hazard.

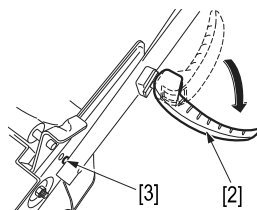
To transport the mower:

1. Place the throttle lever in "STOP" position (except PDEA, SDEA types).
2. Pull off the spark plug cap.
3. Close the fuel shut-off valve [1].

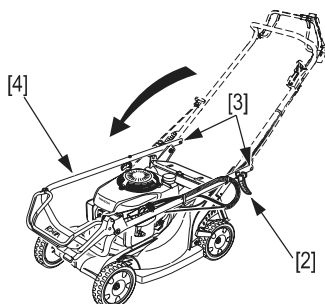


To facilitate the operation:

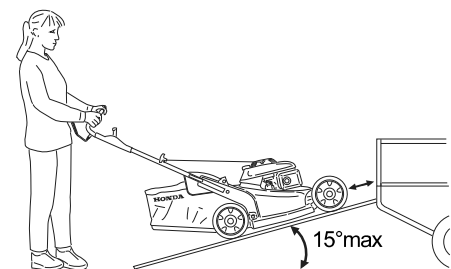
1. Remove the grass bag (see page 4).
2. Loosen the handle attachment knobs [2], pull out the adjustment stops [3] and fold the handle [4].



NOTE: After folding the handle, check that the cables are not kinked, twisted or stretched.



LOADING THE MOWER



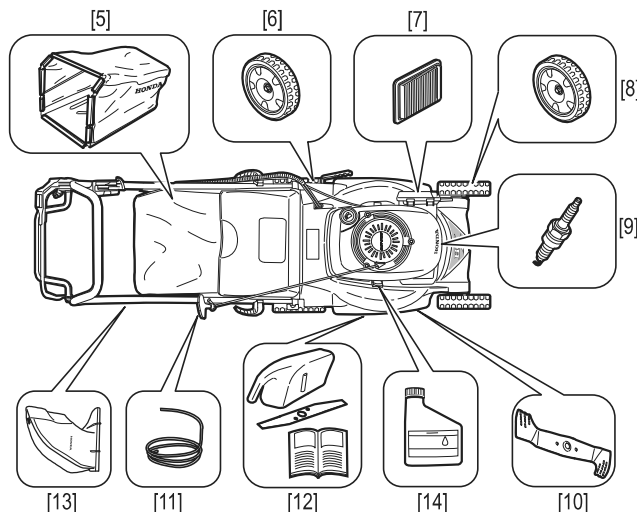
CAUTION:

- To prevent losing control of or damaging the mower, do not use the drive system when going up or down a loading ramp.
- To prevent damaging the drive system, do not engage the clutch when the mower is rolling backwards.
- Transport the mower in normal horizontal position with its four wheels flat on the vehicle platform.
- We recommend that you use a loading ramp or that you get someone to help you load and unload the mower.
- Adjust the loading ramp so that it is inclined at an angle of less than 15°.
- When transporting the mower, immobilise it using straps and place chocks under the wheels.
- The straps must not touch the following parts of the mower: throttle lever, blade clutch lever, gas tank and all the control cables.

USEFUL INFORMATION

FIND AN APPROVED DEALER

Please refer to the European Internet site:
<http://www.honda-eu.com>



CURRENT PARTS, OPTIONAL ACCESSORIES AND CONSUMABLES

To buy one of the original parts listed below, or any other part, please contact an approved Honda reseller.

	HRX426C		HRX476C	
Current parts				
[5]	Grass bag	81320-VG8-A51	81320-VK8-003	Bag only (without frame)
[6]	Rear wheel	42700-VK8-753		
[7]	Air filter	17211-Z8B-9010-M1		Filter paper
[8]	Front wheel	44700-VK8-000		
[9]	Spark plug	98079-55846		NGK (brand) : BPR5ES (model)
[10]	Standard blade	72511-VK7-000	72511-VK8-000	Requires use of a dynamometric key
[11]	Recoil starter	28462-ZL8-631		Ask your Honda dealer to replace these
Optional part				
[12]	Mulching kit	06762-VK7-000	06762-VK8-000	1 upper blade, 1 plug, 1 Owner's Manual
Consumables				
[13]	Engine oil	08221-888-061HE SAE 10W30, 0,6 ℓ		Oil for 4-stroke engines

⚠ WARNING:

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



TECHNICAL SPECIFICATIONS

MODELS		HRX426C					
		SDEA	SXEA	QXEA	RXEA	PDEA	PXEA
GENERAL CHARACTERISTICS							
Description code		MATF					
Function		Cutting of grass					
Dimensions L x W x h	mm	1 475 x 480 x 995	1 440 x 480 x 1 030	1 440 x 480 x 1 045		1 475 x 480 x 995	1 440 x 480 x 1 030
Dry weight	kg	33	36	38	34	31	34
Track FR/RR	mm	380/415		380/345	380/360	380/415	
Cutting width	mm	420					
Cutting heights settings	mm	6 positions (25 to 78 mm)		5 positions (19 to 55 mm)		6 positions (25 to 78 mm)	
Rear/Front wheel diameter	mm	200/200		90/200		200/200	
Grass bag capacity	ℓ	60					
Sound pressure level at operator's ears (in accordance with directive EN 836: 1997 + A4: 2011)	dB(A)	83.7					
Measuring uncertainty	dB(A)	1					
Measured sound power level (in accordance with directives 2000/14/EC, 2005/88/EC)	dB(A)	93					
Measuring uncertainty	dB(A)	1					
Sound power level guaranteed (in accordance with directives 2000/14/EC, 2005/88/EC)	dB(A)	94					
Vibration test (in accordance with directives EN 836: 1997 + A4: 2011, EN12096-D: 1997)	m/s ²	3.5					
Measuring uncertainty	m/s ²	1.4					
ENGINE							
Model		GCV160A					
Type		Air-cooled overhead valve four-stroke engine					
Displacement	cc	160					
Bore x Stroke		64 x 50					
Cooling		Forced air					
Lubrication		Spray lubrication					
Compression ratio		8.5 : 1					
Net power (*)	kW/rpm	3.3 / 3 600					
Rated power	kW/rpm	2.8 / 2 900					
Operating speed	rpm	2 900 ⁺⁰ ₋₁₀₀					
Idle speed	rpm	1 700 ± 150					
Ignition		Transistorised magneto ignition					
Spark plug		NGK : BPR5ES					
Electrode gap	mm	0.7 to 0.8					
Air cleaner		Dry (paper) type					
Recommended fuel		Unleaded 95 or 98					
Fuel tank capacity	ℓ	0.91					
Fuel consumption	ℓ/h	1.1					
Running time on tank of fuel (*)	h	0.8					
Recommended oil		SAE 10W30					
Engine oil capacity	ℓ	0.5					
TRANSMISSION							
Type		Endless screw			-		
Engine to drive		V-belt			-		
Final transmission		Gear		Chain	-		
Main clutch		Dual cone clutch			-		
Number of speeds		Single speed			-		
Forward speed	m/s	1.04		0.9	-		
Lubrication		Oil bath and projection			-		
Recommended oil		10W40		15W40	-		
Oil capacity	cc	65		100	-		

* The power rating of the engine indicated in this document is the net power output tested on a production engine for the engine model GCV160A and measured in accordance with SAE J1349 at 3 600 rpm (Net Power). 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.

MODELS		HRX476C
		QXEA
GENERAL CHARACTERISTICS		
Description code		MASF
Function		Cutting of grass
Dimensions L x W x h	mm	1 520 x 530 x 1 055
Dry weight	kg	42
Track FR/RR	mm	420/393
Cutting width	mm	470
Cutting heights settings	mm	5 positions (19 to 58 mm)
Rear/Front wheel diameter	mm	100/200
Grass bag capacity	ℓ	73
Sound pressure level at operator's ears (in accordance with directive EN 836: 1997 + A4: 2011)	dB(A)	83,5
Measuring uncertainty	dB(A)	1
Measured sound power level (in accordance with directives 2000/14/EC, 2005/88/EC)	dB(A)	93
Measuring uncertainty	dB(A)	1
Sound power level guaranteed (in accordance with directives 2000/14/EC, 2005/88/EC)	dB(A)	94
Vibration test (in accordance with directives EN 836: 1997 + A4: 2011, EN12096-D: 1997)	m/s ²	3.8
Measuring uncertainty	m/s ²	1.1
ENGINE		
Model		GCV160A
Type		Air-cooled overhead valve four-stroke engine
Displacement	cc	160
Bore x Stroke		64 x 50
Cooling		Forced air
Lubrication		Spray lubrication
Compression ratio		8.5 : 1
Net power (*)	kW/rpm	3.3 / 3 600
Rated power	kW/rpm	2.7 / 2 750
Operating speed	rpm	2 750 ⁺⁰ ₋₁₀₀
Idle speed	rpm	1 700 ± 150
Ignition		Transistorised magneto ignition
Spark plug		NGK : BPR5ES
Electrode gap	mm	0.7 to 0.8
Air cleaner		Dry (paper) type
Recommended fuel		Unleaded 95 or 98
Fuel tank capacity	ℓ	0.91
Fuel consumption	ℓ/h	1.1
Running time on tank of fuel (*)	h	0.8
Recommended oil		SAE 10W30
Engine oil capacity	ℓ	0.5
TRANSMISSION		
Type		Endless screw
Engine to drive		V-belt
Final transmission		Chain
Main clutch		Dual cone clutch
Number of speeds		Single speed
Forward speed	m/s	1.0
Lubrication		Oil bath and projection
Recommended oil		15W40
Oil capacity	cc	100

(*) The power rating of the engine indicated in this document is the net power output tested on a production engine for the engine model GCV160A and measured in accordance with SAE J1349 at 3 600 rpm (Net Power). 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.