

INTRODUCTION

Thank you for purchasing a Honda lawnmower!

This manual covers the operation and maintenance of the Honda HRX537VKEA lawnmower.

We want to help you get the best results from your new mower and to operate it safely. This manual contains the information on how to do that; please read it carefully.

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

If you have a problem or questions concerning the mower, contact your supplying dealer.

We recommend that you read the warranty policy to fully understand its coverage and your responsibilities of ownership.

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SAFETY MESSAGES

Pay special attention to statements preceded by the following words:

⚠ DANGER

You WILL be KILLED or SERIOUSLY HURT if you don't follow instructions.

⚠ WARNING

You CAN be KILLED or SERIOUSLY HURT if you don't follow instructions.

⚠ CAUTION

You CAN be HURT if you don't follow instructions.

Each message tells you what the hazard is, what can happen, and what you can do to avoid or reduce injury.

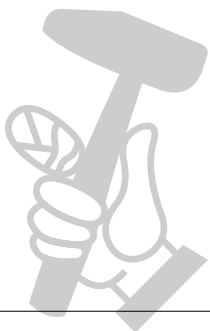
DAMAGE PREVENTION MESSAGES

You will also see other important messages that are preceded by the following word:

NOTICE

Your lawnmower or other property can be damaged if you don't follow instructions.

The purpose of these messages is to help prevent damage to your lawnmower, other property, or the environment.



00X39VH7 V310

HONDA

OWNER'S MANUAL

(Original instructions)
HRX537VKEA

PEDESTRIAN CONTROLLED LAWNMOWER



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SAFETY INSTRUCTIONS

⚠ WARNING

To ensure safe operation –



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

- Read instructions carefully, become familiar with controls and proper use of equipment.
- Use the lawnmower for the purpose it is intended for, that is mowing and collecting grass. Any other use could be dangerous or damage the equipment.
- Never allow children or people unfamiliar with these instructions to use the lawnmower. Local regulations may restrict the age of the operator.
- Never mow when:
 - People, especially children, or pets are nearby.
 - User is under medication or has swallowed substance known to affect judgment or reactions.
 - There is a risk of adverse weather such as lightning or a storm.
- Keep in mind that the operator or user is responsible for injuries or hazards occurring to other people or their property.
- While mowing, always wear substantial footwear and long trousers. Do not operate the equipment when barefoot or wearing sandals.
- 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...).
- **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 refueling 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 the petrol vapors have dissipated.
 - Install fuel caps securely.
 - Before tipping the lawnmower to maintain the cutting means or drain oil, remove fuel from the tank.
- Replace faulty mufflers.
- Before using, always visually inspect to see that the cutting means, cutting-means bolts, and cutting-means enclosure are not worn or damaged. Replace worn or damaged cutting means and cutting-means bolts in sets to preserve balance.
- Do not operate the engine in a confined space where dangerous carbon monoxide fumes can collect.
- Mow only in daylight or good artificial light.
- If there is a risk of adverse weather such as lightning or a storm, stop operation.
- Avoid operating the equipment in wet grass, where possible.
- While mowing, always keep the safety distance to the cutting means, which is provided by the handle length.
- Walk, never run. Do not let yourself be pulled by the lawnmower.
- Always be sure of your footing on slopes. Mow across the face of slopes, never up and down.
- Exercise extreme caution when changing direction on slopes.
- Do not mow slopes of more than 20°.
- Use extreme caution when pulling the lawnmower toward you.
- Stop the cutting means if the lawnmower has to be tilted for transporting, when crossing surfaces other than grass, and when transporting the lawnmower to and from the area to be mowed.

- Never operate the lawnmower with defective guards or shields, or without safety devices such as discharge guard and/or grass catcher.
- Do not change the engine governor setting or over-speed the engine.
- Disengage the cutting-means control and drive clutch control before starting the machine.
- Start the engine carefully according to the instructions and with feet well away from the cutting means.
- Do not tilt the lawnmower when starting the engine. Start the lawnmower on a level surface, free of high grass or obstacles.
- Keep hands and feet away from rotating parts. Do not start the engine when standing in front of the discharge opening.
- Never pick up or carry a lawnmower while the engine is running.
- Stop the engine and disconnect the spark plug cap:
 - Before any operation under the cutting-means enclosure or the discharge chute.
 - Before checking, cleaning, or working on the lawnmower.
 - After striking a foreign object. Inspect the lawnmower for damage and make repairs before restarting and operating the lawnmower.
 - If lawnmower starts to vibrate abnormally, Check immediately the cause of the vibration and perform the necessary repair.
- Stop the engine in the following cases:
 - Whenever you leave the lawnmower.
 - Before refueling the lawnmower.
- Stop the cutting means in the following cases:
 - When installing or removing the grass catcher.
 - Before adjusting the cutting height.
- Turn the fuel valve off at the conclusion of mowing.
- Using any attachments other than those recommended in this manual may cause damage to your lawnmower and such damage will not be covered by your guarantee.
- 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.
- Never store the equipment 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 the fire hazard, keep the lawnmower, especially the engine and silencer, the petrol storage area, and battery compartment (if applicable) free of grass, leaves, or excessive grease. Do not leave container of grass cuttings in or near a building.
- If the fuel tank has to be drained, this should be done outdoors with a cold engine.
- Check the grass catcher frequently for wear or deterioration.
- Do not use the machine with worn or damaged parts. Part must be replaced, not repaired. Replace worn or damaged parts with Honda genuine parts. Cutting means must always bear the mark Honda and the reference number. Non equivalent quality parts may damage the machine and be prejudicial to your safety.
- Wear thick gloves when removing or installing the cutting means or when cleaning the cutting-means enclosure. When tightening or loosening the cutting-means bolts, use a wooden block to prevent the cutting means from rotating.
- Always make sure the correct balance of the cutting means when sharpening.
- Wear eye protection.

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 your authorized Honda dealer for disposal.

SAFETY LABEL LOCATION

This label warns you of potential hazards that can cause serious injury. Carefully read meaning. If label comes off or becomes hard to read, contact your dealer for a replacement.

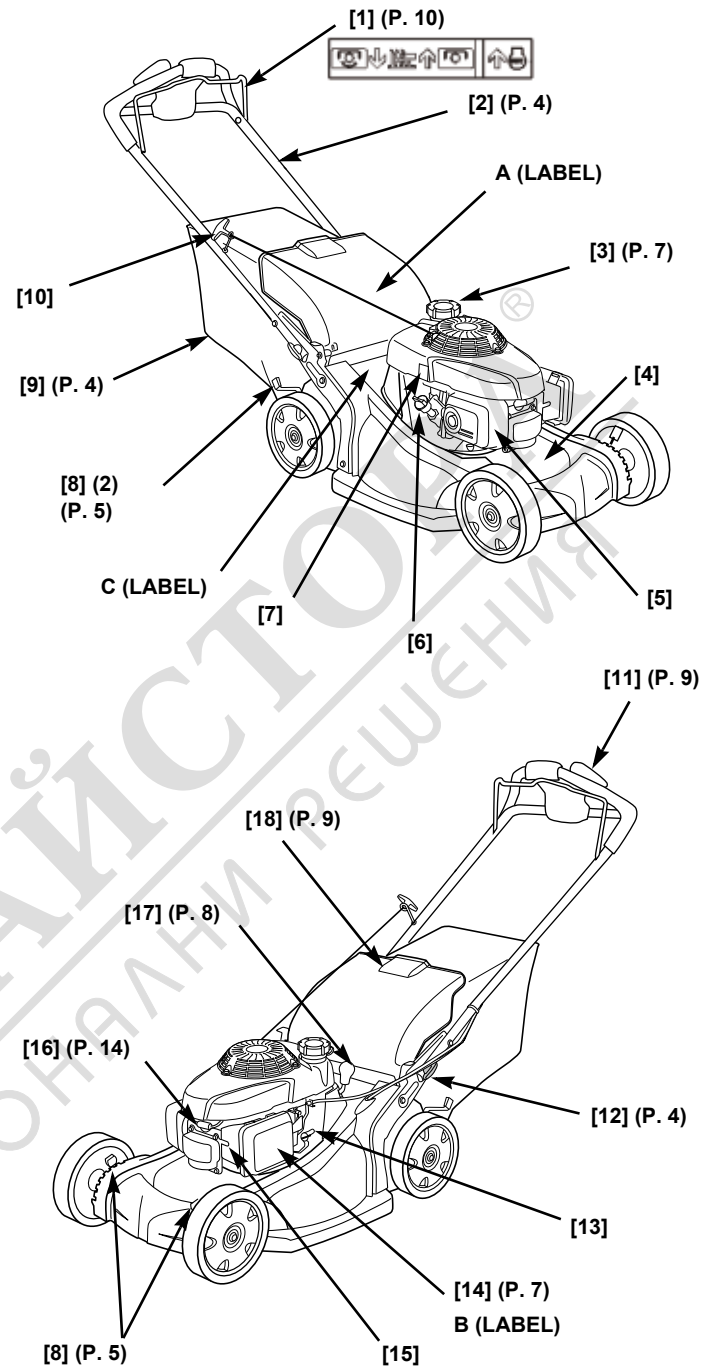
Letter	Meaning
A	
	<ol style="list-style-type: none"> 1. Read the owner's manual before using the mower. 2. Risk of projections: Keep third persons away from the area during use. 3. Risk of cuts. Rotating cutting means: Do not put hands or feet inside the cutting-means enclosure. Disconnect the spark plug cap before performing any operation of maintenance or repairs. 4. Do not operate without either cutting-means enclosure or grass catcher in place.

B	
	<ol style="list-style-type: none"> 5. Read the owner's manual before using the mower. 6. The engine emits toxic carbon monoxide. Do not run in an enclosed area. 7. Petrol is highly flammable. Stop the engine before refueling.

PRODUCT IDENTIFICATION PLATE

Letter	Meaning
C	
	<ol style="list-style-type: none"> 1. Guaranteed sound power level according to Directive 2000/14/EC 2. Conformity mark, according to the EC-Directive 3. Optional conformity mark 4. Nominal power in kilowatts 5. Maximum engine speed 6. Weight in kilograms 7. Year of manufacture 8. Serial number 9. Model 10. Manufacturer's name and address 11. Authorized representative name and address <p>Name and address of manufacturer and authorized representative are written in the "EC Declaration of Conformity" CONTENT OUTLINE in this Owner's Manual.</p>

COMPONENT IDENTIFICATION



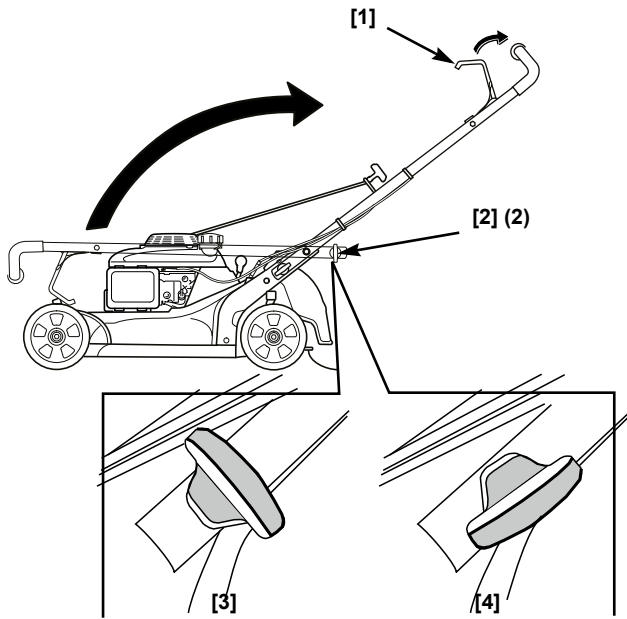
1	Cutting-means control lever (Starts and stops the cutting means)	10	Recoil starter
2	Handlebar	11	Select Drive control
3	Fuel tank cap	12	Handlebar adjust knob (2)
4	Cutting-means enclosure	13	Fuel valve
5	Muffler	14	Air cleaner
6	Oil filler cap	15	Carburetor
7	Engine serial number	16	Spark plug cap
8	Cutting height adjustment lever (4)	17	Clip Director knob
9	Grass catcher	18	Discharge guard

SET-UP

UNPACKING

Remove all the cardboard from around the handlebar.

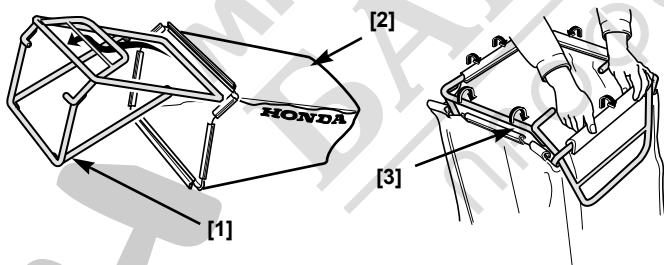
HANDLEBAR SETUP



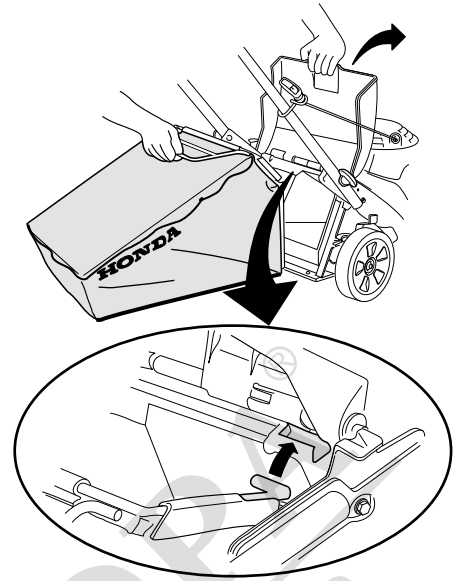
1. Turn the handlebar adjust knobs [2] 90 degrees into the unlock position [3].
2. Hold the cutting-means control lever [1] against the handlebar, and unfold the handlebar into the mowing position.
3. Move the handlebar up or down, so the locating pins align with either the higher, middle, or lower holes on the handlebar mounting brackets.
4. Turn the adjusting knobs 90 degrees into the lock position [4], and the pins will spring into the holes and lock into position.

GRASS CATCHER ASSEMBLY

Slide the grass catcher frame [1] into the grass catcher [2] and install the plastic clips [3] as shown.



Lift the discharge guard and install the grass catcher.

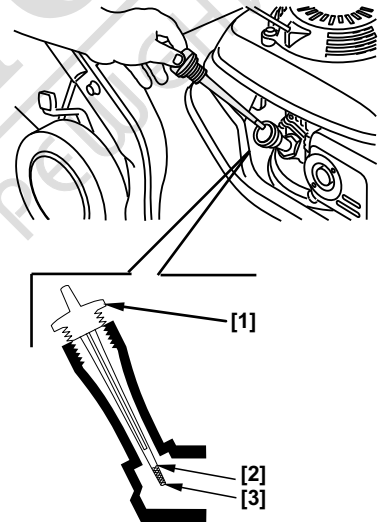


ENGINE OIL

The mower is shipped **WITHOUT OIL** in the engine.

Add enough SAE 10W-30 API service category SJ or later oil to bring the oil level between the upper limit [2] and lower limit [3] marks on the dipstick [1] as shown.

Do not overfill the engine with oil. If the engine is overfilled, the excess oil may get transferred to the air cleaner housing and air filter.



FUEL

Refer to page 7.

BEFORE USING YOUR LAWNMOWER

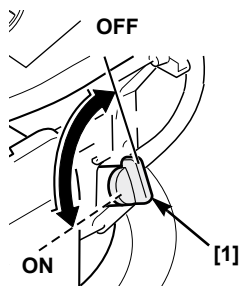
Before using the lawnmower, all mower operators must read the following chapters:

- **SAFETY INSTRUCTIONS** (page 2)
- **CONTROLS** (page 5)
- **PRE-OPERATION CHECKS** (page 5)
- **OPERATION** (page 9)
- **MAINTENANCE SCHEDULE** (page 12)

CONTROLS

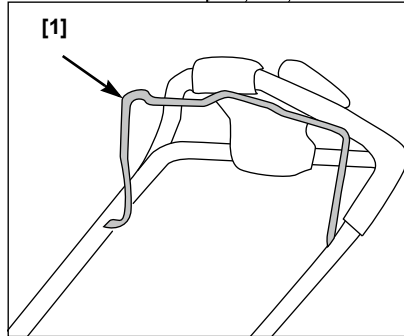
FUEL VALVE

The fuel valve [1] opens and closes the connection between the fuel tank and the carburetor.



CUTTING-MEANS CONTROL SYSTEM

The cutting-means control lever [1] must be pulled back against the handlebar to start and run the engine. The cutting means start to rotate when the lever is pulled back against the handlebar and the recoil starter grip is pulled.

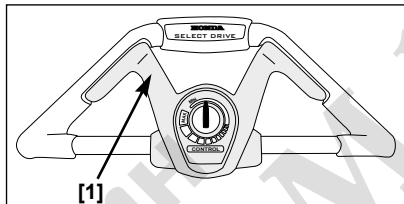


Continue to hold the cutting-means lever fully against the handlebar. This will keep the engine and cutting means rotating smoothly and prevent premature wear to the cutting-means control system.

Release the cutting-means control lever to stop the engine and stop cutting means rotation whenever you need to leave the mower.

SELECT-DRIVE CONTROL

With the engine running and the cutting means rotating, slowly push the Select Drive control [1] to propel the mower forward.



Normal operation is with your hand comfortably around the handle bar and Select Drive control. Push the Select Drive control with your thumb into the indentation for boost operation (up a hill, or through thick grass).

You can reduce the ground speed by partially releasing the Select Drive control.

Ground speed varies with terrain, grass height, slope, and grass catcher weight. Moving the Select Drive knob (page 9) or varying how far you push the Select Drive control forward allows you to maintain the desired ground speed under constantly changing mowing conditions.

Release the Select Drive control to disengage (stop) the rear wheels.

Disengage the drive when mowing around trees and other obstacles. Push the mower around obstacles for better directional control.

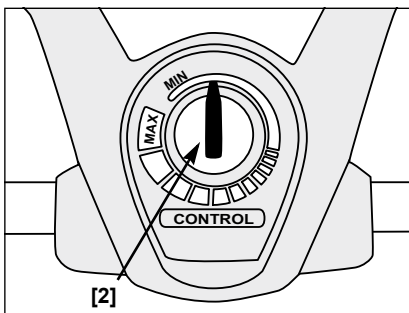
Adjusting The Select Drive Control Knob

The Select Drive control knob allows you to adjust the maximum ground speed when the Select Drive lever is fully engaged.

Adjustment is from MIN to MAX. With the Select Drive lever fully engaged:

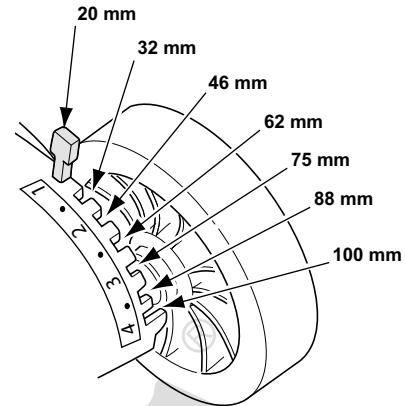
MIN will propel the lawnmower at its slowest speed.

MAX will propel the lawnmower at its fastest speed.

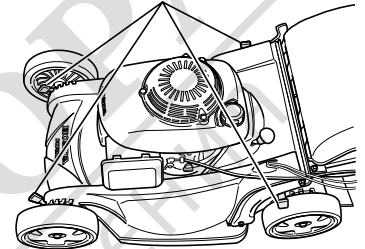


CUTTING HEIGHT ADJUSTMENT LEVERS

There are seven adjustment settings. The cutting height figures are approximate. The actual height of cut grass will vary with lawn and soil conditions.

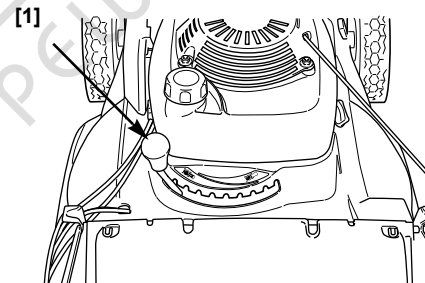


There is one adjustment lever [1] for each wheel.



CLIP DIRECTOR KNOB

The Clip Director knob [1] controls catching, mulching, and rear discharge. The knob has ten adjustment positions.



PRE-OPERATION CHECKS

CHECK YOUR LAWN

For your safety and for the safety of others, always inspect the area before mowing.

Objects

Anything that can be picked up by the cutting means and thrown is a potential hazard to you and others. Look for things like stones, sticks, bones, and wire. Remove them from the mowing area.

People and Pets

People and animals near the mowing area can move into your path or into a position where they could be struck by thrown objects. Clear the area of people, especially children, and pets. Their safety is your responsibility.

Lawn

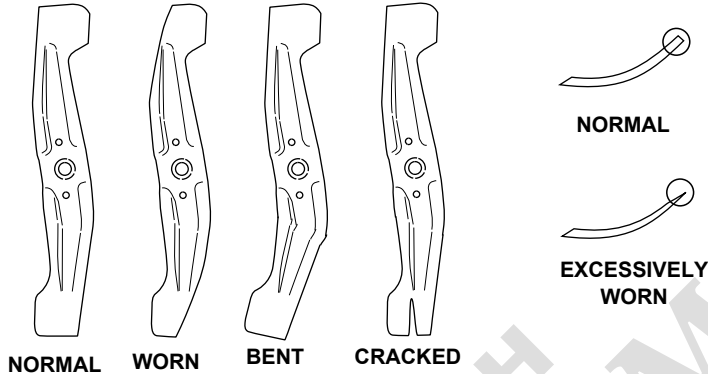
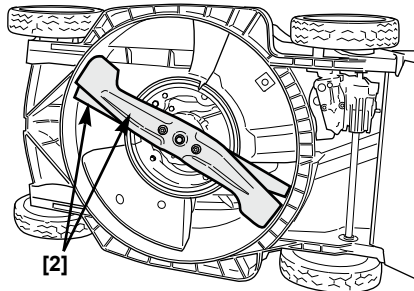
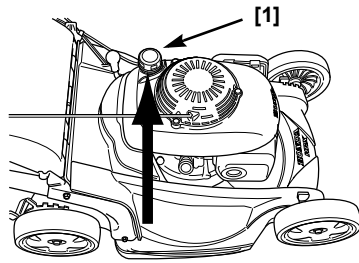
Check the length and condition of the grass, so that you will know what cutting height and mowing speed to use.

Avoid mowing wet grass. Not only will wet grass clog your mower deck and collect in clumps on the lawn, it also gives poor traction, increasing your risk of losing your footing.

CHECK YOUR MOWER

Cutting Means

1. Move the fuel valve to the OFF position (page 5) and disconnect the spark plug cap from the spark plug (page 14).
2. Tilt the mower to the right so the fuel cap is up [1]. This will help prevent fuel leakage, motor oil seeping into the air filter, and hard starting.
3. Inspect the cutting means [2] for damage, cracks, and excessive wear, rust, or corrosion.



⚠ WARNING

A worn, cracked, or damaged cutting means can break, and pieces of the damaged cutting means can become dangerous projectiles.

Thrown objects can cause serious injury.

Inspect the cutting means regularly, and do not operate the mower with a worn or damaged cutting means.

A dull cutting means can be sharpened, but a cutting means that is worn out, bent, cracked, or otherwise damaged must be replaced. A worn or damaged cutting means can break, causing cutting means pieces to be thrown from the mower.

When a cutting means needs sharpening or replacement, take the lawnmower to an authorized Honda dealer. Or, if you have a torque wrench, you can remove and install the cutting means yourself.

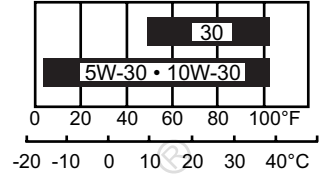
Check that the cutting means bolts are tight (page 15).

Engine Oil Level

Check the engine oil level with the engine stopped and the mower on a level surface.

Use 4-stroke motor oil that meets or exceeds the requirements for API service category SJ or later. Always check the API SERVICE label on the oil container to be sure it includes the letters SJ or later.

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.

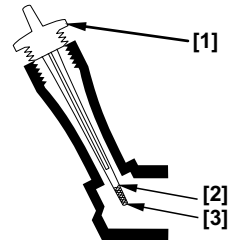
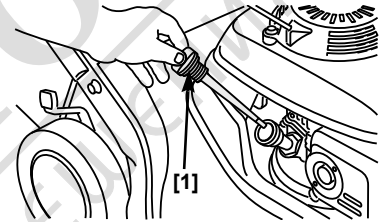


AMBIENT TEMPERATURE

NOTICE

- Running the engine with a low oil level can cause engine damage.
- Using nondetergent oil can shorten the engine's service life, and using 2-stroke oil can damage the engine.

1. Remove the oil filler cap/dipstick [1], and wipe the dipstick clean.
2. Insert the dipstick into the filler neck. Do not screw it down. Remove the dipstick and check the oil level.
3. If the oil level is near the low level mark [3], add the recommended oil to bring the level up to the high limit mark [2]. Do not overfill.
4. Install and tighten the filler cap/dipstick [1] securely.



Fuel

This engine is certified to operate on unleaded petrol with a research octane rating of 91 or higher.

We recommend refueling after each use to minimize the air present in the fuel tank.

Refuel in a well-ventilated area before starting the engine. If the engine has been running, allow it to cool. Never refuel the mower inside a building where petrol fumes may reach flames or sparks.

You may use regular unleaded petrol containing no more than 10% ethanol (E10) or 5% methanol by volume. In addition, methanol must contain cosolvents and corrosion inhibitors. Use of fuels with content of ethanol or methanol greater than shown above may cause starting and/or performance problems. It may also damage metal, rubber, and plastic parts of the fuel system. In addition, ethanol is hygroscopic, which means it attracts and retains water in the fuel system. Engine damage or performance problems that result from using a fuel with percentages of ethanol or methanol greater than shown above are not covered by warranty.

If your equipment will be used on an infrequent or intermittent basis, (more than 4 weeks before next use) please refer to the *Fuel* section of the STORAGE chapter (page 17) for additional information regarding fuel deterioration.

⚠ WARNING

Petrol is highly flammable and explosive.

You can be burned or seriously injured when handling fuel.

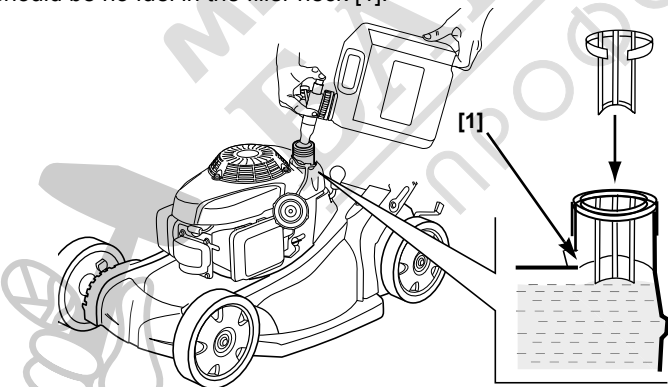
- Stop the engine and allow to cool.
- Keep heat, sparks, and flame away.
- Handle fuel only outdoors.
- Wipe up spills immediately.

Never use stale or contaminated petrol or an oil/petrol mixture. Avoid getting dirt or water in the fuel tank.

NOTICE

Fuel can damage paint and plastic. Be careful not to spill fuel when filling your fuel tank. Damage caused by spilled fuel is not covered under warranty.

Remove the tank cap and check the fuel level. Refill the tank if the fuel level is low. Refuel carefully to avoid spilling fuel. Do not overfill; there should be no fuel in the filler neck [1].



After refueling, tighten the fuel tank cap securely.

Move the mower at least 3 meters away from the fueling source and site before starting the engine.

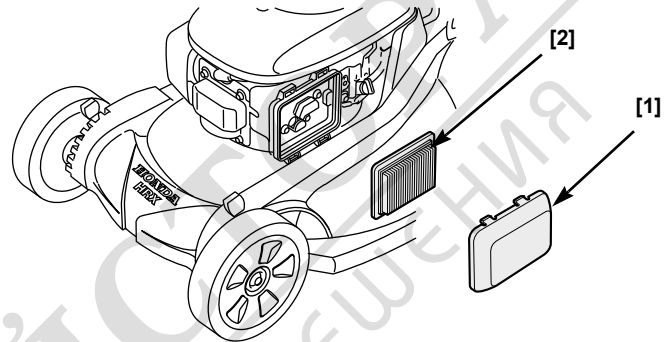
Fuel Storage Container

Store your gasoline in a clean, plastic, sealed container approved for fuel storage. Close the vent (if equipped) when not in use, and store the container away from direct sunlight. If it will take more than 3 months to use the fuel in the container, we suggest adding a fuel stabilizer to the fuel when you fill the container.

If you have some fuel left in your storage container at the end of the season, the Environmental Protection Agency (EPA) recommends adding the gasoline to your vehicle's gas tank (<http://epa.gov/reg50air/mobile/winter.html>).

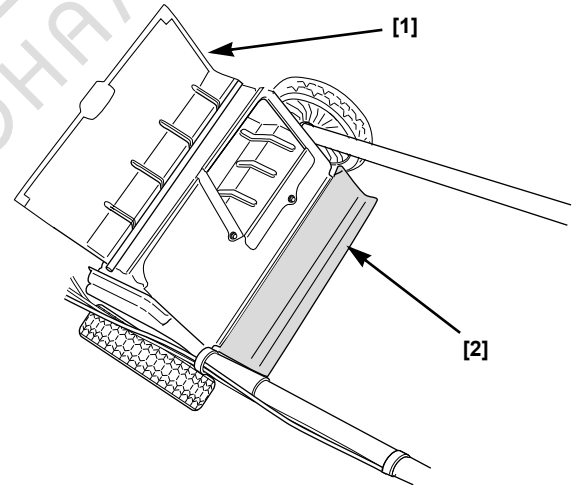
Air Cleaner Inspection

Remove cover [1]. Make sure the filter [2] is clean and in good condition. A dirty air filter will restrict air flow to the carburetor, reducing engine performance. Refer to page 13 for air cleaner service.



REAR SHIELD

During normal use the rear shield is subject to deterioration and wear. Remove the grass catcher and raise the discharge guard [1] to check the rear shield [2] for cracks or tears. If the rear shield is excessively worn, have it replaced by your authorized Honda servicing dealer.



Handlebar Height Adjustment

Adjust handlebar height to a comfortable operating position (page 4)

Grass catcher

A lawnmower works like a vacuum cleaner; it blows air through the catcher, which traps the grass clippings. Always empty the grass catcher before it becomes filled to the limit of its capacity. Grass catcher performance will diminish after the catcher becomes about 90% filled. Also, the catcher is easier to empty when it is not packed full.

Inspection

During normal use, the grass catcher material is subject to deterioration and wear.

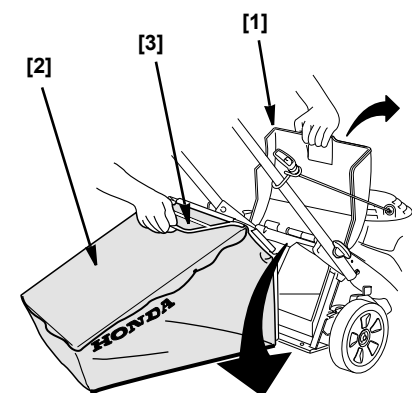
NOTICE

Frequently inspect the grass catcher for tears, holes, and excessive wear. Check for necessary replacement. Make sure the new catcher meets the original specifications.

If the grass catcher needs replacement, you can remove and install a catcher yourself (page 15).

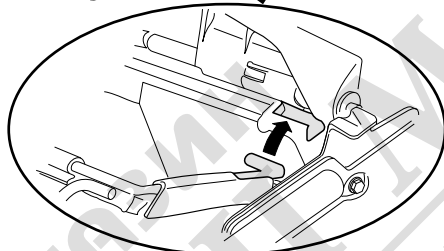
Installation

1. Raise the discharge guard [1], and use the grass catcher handle [3] to hook the grass catcher [2] onto the cutting-means enclosure as shown.
2. Release the discharge guard to secure the grass catcher.



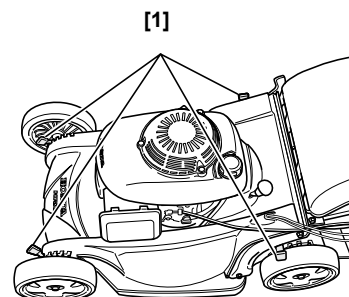
Removal

1. Raise the discharge guard, grasp the grass catcher handle, and remove the grass catcher.
2. Release the discharge guard.
3. When the grass catcher is clear of the discharge guard, you can lift it through the handlebar opening, or you can remove it to the rear of the lawnmower below the handlebar.



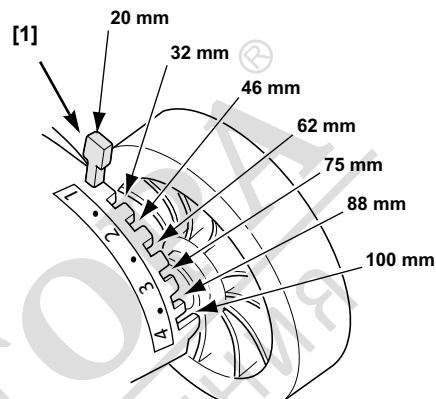
Cutting Height

Check the mower deck cutting height settings, and be sure that all four adjustment levers [1] are set to the same cutting height position.



To adjust cutting height, pull each adjustment lever [1] toward the wheel, and move it into another notch.

If you are not sure what cutting height to select, start with a high setting and check the appearance of the lawn after mowing a small area. Then readjust cutting height if necessary.

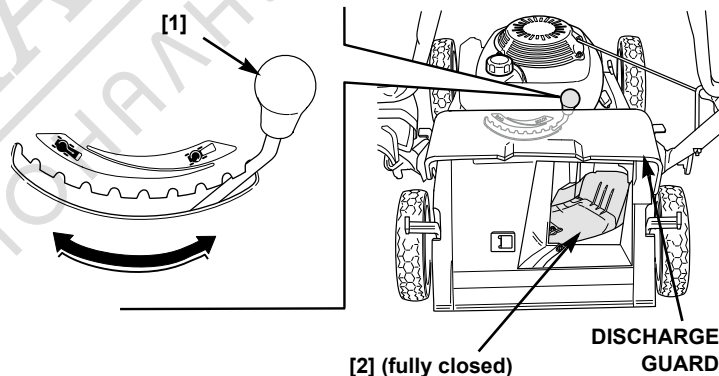


Clip Direction

Clip Director Knob Adjustment

Adjust the Clip Director knob [1] in any one of the ten positions to achieve the desired mowing results.

To adjust the Clip Director knob, pull the knob downward and towards the rear of the mower. The knob adjusts a sliding door from the fully open catcher position to the fully closed MULCH position (see the following page).



IMPORTANT SAFETY PRECAUTION

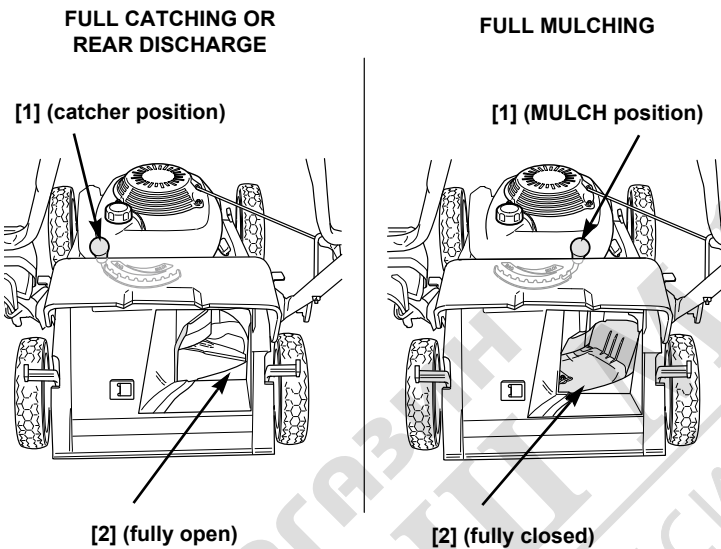
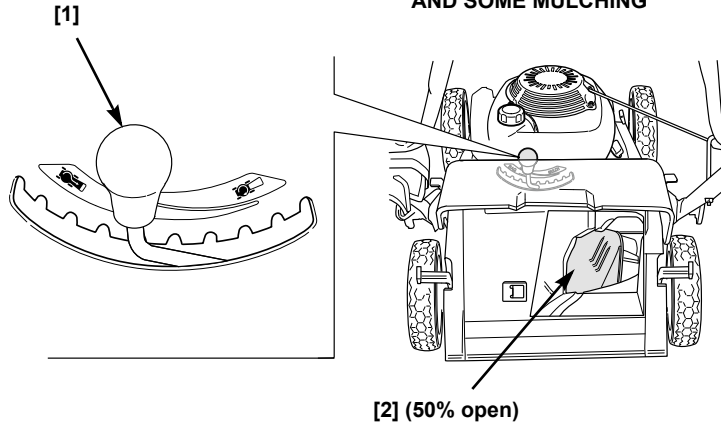
Always turn the engine off and disconnect the spark plug cap before lifting the discharge guard to view or clean around the sliding door. This will prevent contact with the rotating cutting means and prevent objects from being thrown into the discharge chute.

Some grass accumulation in the discharge opening is normal when the Clip Director is fully closed. To remove this grass, close the discharge guard, fully open the Clip Director, and start the engine.

If a high resistance is noticed when moving the Clip Director knob from side-to-side, excessive grass may have built up on top of the sliding door.

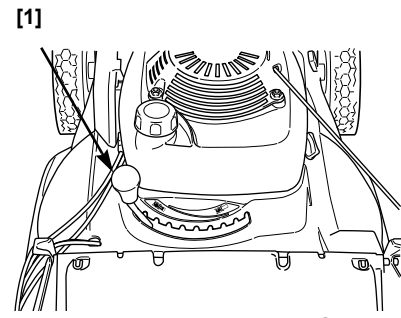
Sliding Door Position

The sliding door [2] can be positioned to produce different mowing results. If the preferred sliding door position is unknown, install a grass catcher and begin mowing with the Clip Director knob [1] all the way to the catcher position. Check the appearance of the lawn. As the knob is moved towards the MULCH position, more grass will be recycled back into the lawn. Adjust the Clip Director knob until the desired result is achieved.



Rear Discharge

To discharge clippings to the rear, remove the grass catcher and position the Clip Director knob [1] in the catcher range.



Maximum rear discharge will occur when the Clip Director knob is all the way to the left (catcher) position. As the Clip Director knob is moved toward the right (MULCH) position, less grass will be discharged through the rear cutting-means enclosure.

Are You Ready to Mow?

Be sure to wear protective clothing. Long pants and eye protection can lower your risk of injury from thrown objects. Wear footwear that protects your feet and won't let you slip if you mow on slopes or uneven ground.



OPERATION

MOWING PRECAUTIONS

Before operating the mower for the first time, please review *SAFETY INSTRUCTIONS* (page 2) and *PRE-OPERATION CHECKS* (page 5).

Even if you have operated other mowers, take the time to become familiar with how this mower works, and practice in a safe area until you build up your skills.

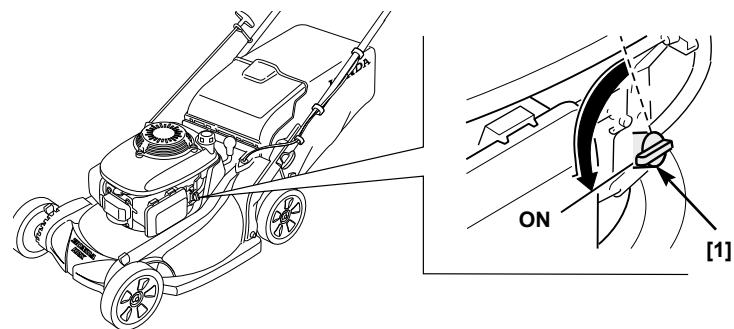
For your safety, avoid starting or operating the engine in an enclosed area such as a garage. Your mower's exhaust contains poisonous carbon monoxide gas that can collect rapidly in an enclosed area and cause illness or death.

FREQUENCY OF USE

If your equipment will be used on an infrequent or intermittent basis, (more than 4 weeks before next use) please refer to the *Fuel* section of the *STORAGE* chapter (page 17) for additional information regarding fuel deterioration.

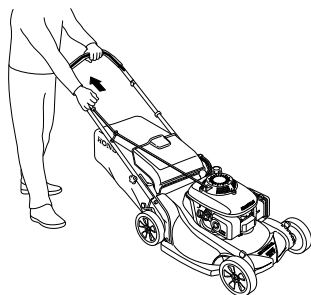
STARTING THE ENGINE

1. Turn the fuel valve [1] to the ON position.



2. Pull back on the cutting-means control lever and hold it against the handlebar.

The lever must be against the handlebar to start the engine. The cutting means start to rotate when the lever is against the handlebar and the recoil starter grip is pulled.



3. Pull the starter grip lightly until you feel resistance, then pull briskly. Return the starter grip gently.

Continue to hold the cutting-means control lever against the handlebar; the engine stops when the cutting-means control lever is released.

To ensure easy restarting and maximum performance from the Auto Choke System, start mowing as soon as the engine starts and allow the engine to run for at least three minutes before stopping the engine.

High Altitude Operation

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

High altitude performance can be improved by specific modifications to the carburetor. If you always operate your mower at altitudes above 1,500 meters, have a Honda dealer perform this carburetor modification.

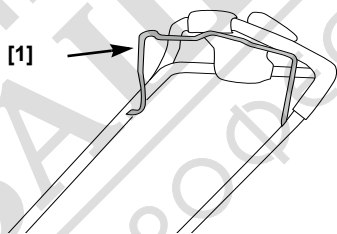
Even with carburetor modification, engine power will decrease about 3.5% for each 300 meter increase in altitude. The effect of altitude on power will be greater than this if no carburetor modification is made.

NOTICE

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 meters with a modified carburetor may cause the engine to overheat and result in serious engine damage. For use at low altitudes, have your authorized Honda dealer return the carburetor to original factory specifications.

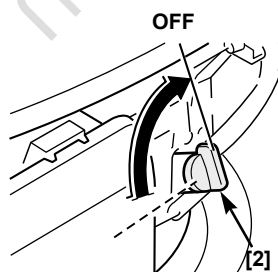
STOPPING THE ENGINE

1. Release the cutting-means control lever [1] to stop the engine and cutting means rotation.



2. When the mower is not in use, turn the fuel valve [2] to the OFF position.

3. If your equipment will not be used for 3 to 4 weeks, we recommend running the engine's carburetor out of fuel. You can do this by leaving the fuel valve OFF, restarting the engine and running it out of fuel. See "STORAGE" on page 16 for periods of inactivity that exceed 4 weeks.



SAFE MOWING PRACTICES

For your safety, keep all four wheels on the ground, and be careful to avoid losing your footing and your control of the mower. Keep a firm grip on the handlebar, and walk, never run, with the mower. Be very careful when mowing uneven or rough ground.

If stuck, do not kick or shove the mower with your foot. Use the handlebar to control the mower.

WARNING

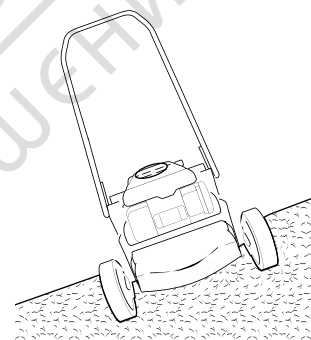
The cutting means are sharp and spin at high speed.

A spinning cutting means can cut you severely and can amputate fingers and toes.

- Wear protective footwear.
- Keep your hands and feet away from the mower deck while the engine is running.
- Stop the engine before performing any adjustment, inspection, or maintenance.

Slopes

Mow across slopes, not up and down. Avoid steep slopes (more than 20°), and be careful when changing direction. Mowing on a slope when the grass is damp or wet could cause you to slip, fall, and lose control of the mower.



Obstacles

Use the side of the mower to cut close to large obstacles, such as fences or walls.

Release the Select Drive control to disengage the drive when mowing around trees and other obstacles. Push the mower around obstacles for better directional control. Be careful when mowing over obstacles embedded in the lawn, such as sprinkler heads, paving, edging, etc. Avoid anything that sticks up above the surface of the lawn.

If the cutting means hits something, or if the mower starts to vibrate, stop the engine immediately and check for damage. Striking objects may damage the cutting means, bend the crankshaft, and/or break the mower deck or other components. Vibration usually indicates serious trouble.

WARNING

A worn, cracked, or damaged cutting means can break, and pieces of the damaged cutting means can become dangerous projectiles.

Thrown objects can cause serious injury.

Inspect the cutting means regularly, and do not operate the mower with a worn or damaged cutting means.

The warranty does not cover parts damaged by collision.

Gravel and Loose Objects

Gravel, loose stones, and landscaping material can be picked up by the mower and thrown many feet with enough force to cause serious personal injury and/or property damage. The best way to prevent potential injury from thrown objects is to release the flywheel brake lever to stop the cutting means before reaching areas with gravel, loose stones, or landscaping material.

MOWING TIPS

When to Mow

Most grasses should be mowed when they have grown 12 ~ 25 mm above their recommended height.

More frequent mowing is required for mulching than for catching. For best results, you may need to mow the lawn twice a week during the growing season.

Cutting Height

Consult a local nursery or lawn and garden center for cutting height recommendations and advice about specific types of grasses and growing conditions in your area.

If you look closely, you'll see that most grass has stems and leaves. If you cut off the leaves, you'll scalp the lawn. Let the grass recover between mowings. Your mower will work better, and your lawn will look better.

If your grass gets too tall, cut it once at the highest cutting height setting, and then mow again in 2 or 3 days. Don't take off more than one third of total grass height in any one mowing, or brown patches may develop.

Cutting height adjustment levers are explained in the *CONTROLS* chapter (page 5).

Cutting Width

For an even lawn finish, overlap each mowing swath by a few centimeters. If the grass is very tall or thick, use more overlap and a narrower mowing swath.

Cutting Means Speed

The cutting means must spin very fast to cut properly.

If engine speed drops, it could mean the engine is being overloaded by the cutting means trying to cut too much grass. Mow a narrower swath, move the mower slower, or raise the cutting height.

Cutting Means Sharpness

A sharp cutting means cuts cleanly. A dull cutting means tears the grass, leaving shredded ends that turn brown. When your cutting means doesn't cut cleanly anymore, have it sharpened or replaced.

Dry Grass

If the ground is too dry, mowing will stir up a lot of dust. Besides being unpleasant to work in, too much dust will clog the carburetor air filter.

If dust is a problem, water your lawn the day before mowing. Mow when the grass is dry to your touch, but the soil is still moist.

Wet Grass

Wet grass is slippery and can make you lose your footing. Also, wet grass clippings will clog the mower deck and collect in clumps on the lawn. Always wait for wet grass to dry before mowing.



LONG ENOUGH



TOO SHORT

Fallen Leaves

Your mower can be used to pick up fallen leaves for disposal. If using the mower to catch large amounts of fallen leaves and not for mowing, set the cutting height adjustment levers so the front of the mower deck is one or two settings higher than the rear.

To start, position the Clip Director knob in the #9 position (not quite full mulching). This setting will allow the leaves to be recirculated and recut until the particles are small enough to pass through the sliding door opening and into the grass catcher. Depending on the size, type, and water content of the leaves, it may be necessary to open the sliding door to allow for best catching results. Using the sliding door correctly will allow better grass catcher filling, resulting in less grass catcher emptying. Be sure there are no obstacles, including rocks, hidden under the leaves.

If you want to mulch fallen leaves into your lawn, don't let the leaf cover get too deep before you begin. For best results, start mulching while grass still shows through the leaf cover. Position the Clip Director knob in the MULCH position. In places where fallen leaves completely cover the grass, remove the leaves by raking, or use the grass catcher so your mower can pick them up for disposal.

Clogged Cutting-means Enclosure

Before clearing a clogged cutting-means enclosure, stop the engine and turn the fuel valve to the OFF position. With the spark plug cap disconnected, tilt the mower so the air cleaner side is up.

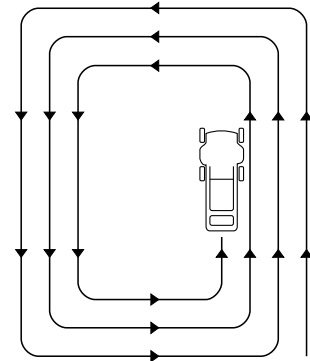
Clear a clogged enclosure with a stick, not your hands.

Mowing Patterns

Your Honda mower will work most efficiently if you use the following mowing patterns as much as possible. Mower deck and equipment design, and the direction in which the cutting means rotate, cause these mowing patterns to give the best results.

Mulching

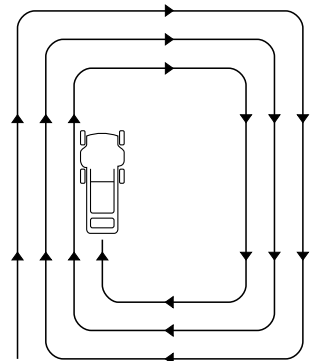
Use a counterclockwise mowing pattern when the Clip Director knob is in the full MULCH position. If the lawn has an irregular shape, or many obstacles, divide it into sections where you can use counterclockwise mowing patterns.



MULCHING PATTERN

Catching

Use a clockwise mowing pattern. This will give the best Clip Director and catching performance, leaving the least amount of clippings on the lawn.



CATCHING & REAR-DISCHARGE PATTERN

Rear Discharge Mowing

Remove the grass catcher and close the discharge guard. Adjust the Clip Director knob to the desired setting and begin mowing in a clockwise mowing pattern. If the lawn has an irregular shape, or many obstacles, divide it into sections.

MAINTENANCE

Good maintenance is essential for safe, economical, and trouble-free operation. It will also help reduce air pollution.

To help you properly care for your mower, the following pages include a maintenance schedule, routine inspection procedures, and simple maintenance procedures using basic hand tools. Other service tasks that are more difficult, or require special tools, are best handled by professionals and are normally performed by a Honda technician or other qualified mechanic.

The maintenance schedule applies to normal operating conditions. If you operate your mower under unusual conditions, consult an authorized Honda dealer for recommendations applicable to your individual needs and use.

Remember that your Honda dealer knows your mower best and is fully equipped to maintain and repair it.

To ensure the best quality and reliability, use only new, Honda Genuine parts or their equivalents for repair and replacement.

WARNING

Improper maintenance, or failure to correct a problem before operation, can cause a malfunction in which you can be seriously hurt or killed.

Always follow the inspection and maintenance recommendations and schedules in this owner's manual.

MAINTENANCE SAFETY

Some of the most important safety precautions follow. However, we cannot warn you of every conceivable hazard that can arise in performing maintenance. Only you can decide whether or not you should perform a given task.

WARNING

Failure to properly follow maintenance instructions and precautions can cause you to be seriously hurt or killed.

Always follow the procedures and precautions in this owner's manual.

Safety Precautions

- Make sure the engine is off before you begin any maintenance or repairs. This will eliminate several potential hazards:
 - **Carbon monoxide poisoning from engine exhaust.**
Be sure there is adequate ventilation whenever you operate the engine.
 - **Burns from hot parts.**
Let the engine and exhaust system cool before touching.
 - **Injury from moving parts.**
Do not run the engine unless instructed to do so.
- Read the instructions before you begin, and make sure you have the tools and skills required.
- To reduce the possibility of fire or explosion, be careful when working around petrol. Use only a nonflammable solvent, not petrol, to clean parts. Keep cigarettes, sparks, and flames away from all fuel-related parts.

MAINTENANCE SCHEDULE

Perform at every indicated month/year or operating hour interval, whichever comes first.

Regular Service Period	Item	Page
Before each use	Check: Grass catcher Check: Cutting means Check: Operation of the cutting means-control Check: Engine oil level Check: Air filter Check: Rear shield Check: Cutting-means bolt torque	page 15 page 6 page 5 page 6 page 7 page 7 page 15
First month or 5 hours	Change: Engine oil	page 13
First 25 hours	Clean: Air filter ¹ Adjust: Cutting-means control cable ² Adjust: Select Drive cable ²	page 13
Every 6 months or 50 hours	Change: Engine oil ¹ Clean: Air filter ¹	page 13 page 13
Every year or 100 hours	<i>6 month items above plus:</i> Check-adjust: Spark plug Clean: Spark arrester ³ (if equipped) Check: Operation of the cutting-means control Grease: Pinion gears ² Adjust: Select Drive cable ² Adjust: Valve clearance ² Adjust: Idle speed ² Clean: Fuel tank ²	page 14 page 14 page 5
Every 2 years or 150 hours	<i>Yearly items above plus:</i> Replace: Air filter Replace: Spark plug Inspect-grease: Rear wheel adjuster bushing ²	page 13 page 14
Every 2 years	Check: Fuel lines replace if necessary ²	

1. Service more frequently when used in dusty areas.
2. These items should be serviced by an authorized Honda servicing dealer, unless you have the proper tools and are mechanically proficient. Refer to the Honda shop manual for service procedures.
3. In Europe and other countries where machinery directive 2006/42/EC is enforced, this cleaning should be done by your servicing dealer.

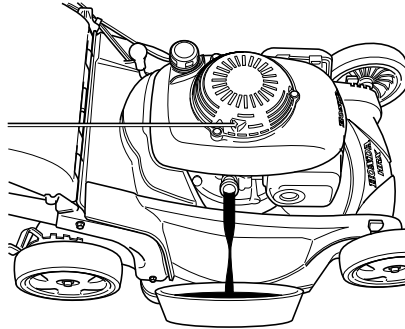
Failure to follow this maintenance schedule could result in non-warrantable failures.

ENGINE MAINTENANCE

Engine Oil Change

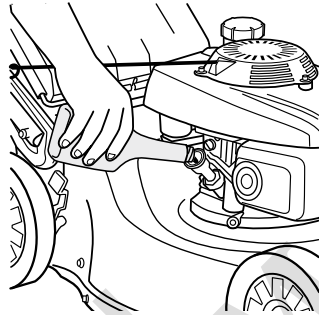
Drain the oil while the engine is warm. Warm oil drains quickly and completely.

1. Turn the fuel valve OFF. This will reduce the possibility of fuel leakage (page 5).
2. Wipe the oil filler area clean, and then remove the oil filler cap/dipstick.
3. Place a suitable container next to the mower to catch the used oil, and then tilt the mower on its right side. The used oil will drain through the filler neck. Allow the oil to drain completely.

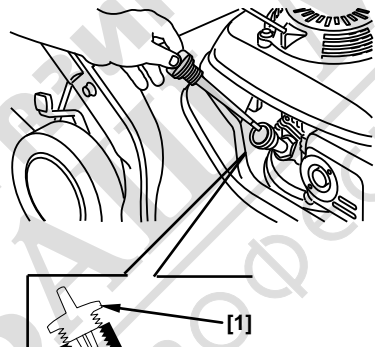


Please dispose of used motor oil and the containers in a manner that is compatible with the environment. We suggest you take it in a sealed container to your local recycling center or service station for reclamation. Do not throw it in the trash, pour it on the ground or pour it down a drain.

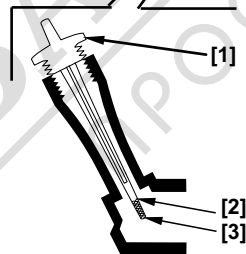
4. Fill with the recommended oil (page 6). Do not overfill. Measure the oil level as shown.
5. After changing the engine oil and before starting the engine, check the oil level with the mower on a level surface:



- a. Remove the filler cap/dipstick [1].
- b. Wipe the dipstick clean.
- c. Insert and remove the dipstick without screwing it into the filler neck. Check the oil level shown on the dipstick.



- d. If the oil level is below the low level mark [3], add oil to reach the high limit mark [2] on the dipstick. Do not overfill. If the engine is overfilled, the excess oil may get transferred to the air cleaner housing and air cleaner filter.



NOTICE

Running the engine with a low oil level can cause engine damage.

- e. Screw in the filler cap/dipstick securely.

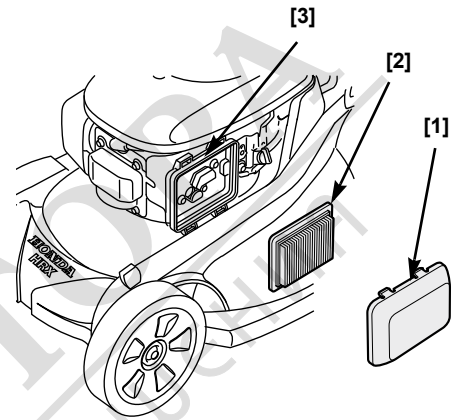
Air Cleaner Service

A properly maintained air filter will help prevent dirt from entering your engine. Dirt entering the carburetor can be drawn into small passages in the carburetor and cause premature engine wear. These small passages can become blocked, causing starting or running problems. Always use an air filter specified for your engine to ensure it seals and performs as designed. You will need to clean the filter more frequently if you operate the engine in very dusty conditions.

NOTICE

Operating the engine without an air filter, or with a damaged filter, will allow dirt to enter the engine, causing rapid engine wear. This type of damage is not covered by the warranty.

1. Press down on the air cleaner cover [1] tabs, and then remove the cover.
2. Remove the filter [2] from the air cleaner housing [3].
3. Inspect the filter; replace if damaged.
4. Clean the filter by tapping the filter several times on a hard surface to remove dirt, or blow compressed air (not exceeding 207 kPa) through the filter from the inside. Never try to brush off dirt; brushing will force dirt into the fibers.
5. Wipe dirt from the inside of the air cleaner housing and cover, using a moist rag. Be careful to prevent dirt from entering the air duct that leads to the carburetor.
6. Reinstall the filter and cover.



Spark Plug Service

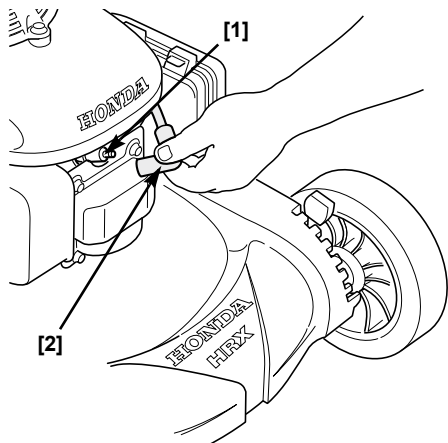
Recommended spark plugs: NGK - BPR5ES

NOTICE

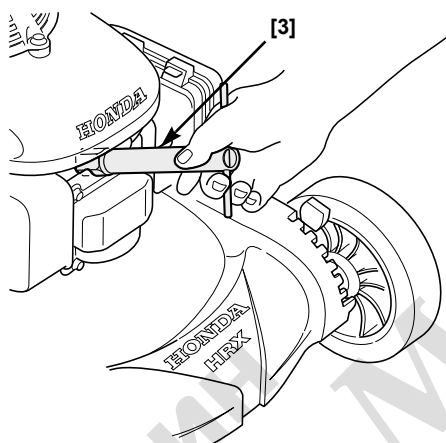
Incorrect spark plugs can cause engine damage.

For good performance, the spark plug [1] must be properly gapped and free of deposits.

1. Disconnect the spark plug cap [2], and remove any dirt from around the spark plug area.

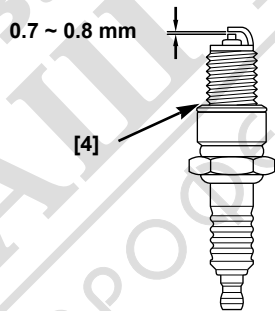


2. Remove the spark plug with a spark plug wrench [3].



3. Inspect the spark plug. Replace if the electrodes are worn or if the insulator is cracked or chipped.

4. Measure the spark plug electrode gap with a suitable gauge. The gap should be 0.7 ~ 0.8 mm. Correct the gap, if necessary, by carefully bending the side electrode.



5. Install the spark plug carefully, by hand, to avoid cross-threading.
6. After the spark plug seats, tighten with a spark plug wrench to compress the washer.

If reinstalling the old spark plug, tighten 1/8 to 1/4 turn after the spark plug seats.

If installing a new spark plug, tighten 1/2 turn after the spark plug seats to compress the washer [4].

NOTICE

A loose spark plug can overheat and damage the engine. Overtightening the spark plug can damage the threads in the cylinder head.

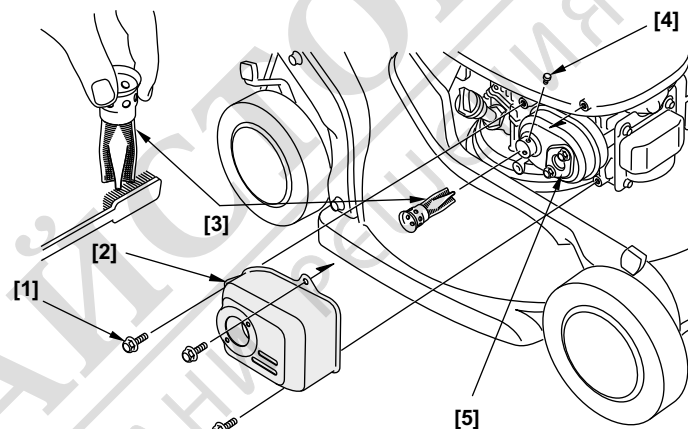
7. Install the spark plug cap on the spark plug.

Spark Arrester Service

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

The spark arrester must be serviced every 100 hours to keep it functioning as designed.

1. Allow the engine to cool, and then remove the three bolts [1] from the muffler shield [2] using a 10 mm socket wrench.
2. Remove the muffler shield [2].
3. Remove the screw [4].
4. Remove the spark arrester [3] from the muffler [5].
5. Check for carbon deposits on the spark arrester and the exhaust port. Brush carbon deposits away. Be careful to avoid damaging the spark arrester screen.
6. Install the spark arrester in the muffler.
7. Install the muffler components on the engine, and tighten the three bolts securely.



CUTTING MEANS REMOVAL AND INSTALLATION

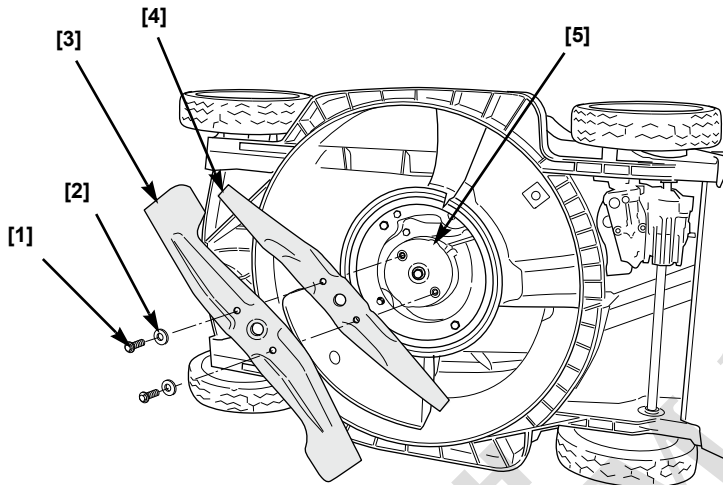
If you remove the cutting means for sharpening or replacement, you will need a torque wrench for installation. Wear heavy gloves to protect your hands.

Cutting means SHARPENING: To avoid weakening the cutting means, or causing imbalance or poor cutting, the cutting means should be sharpened by trained staff at an authorized Honda dealer.

Cutting means REPLACEMENT: Use Honda Genuine replacement cutting means or their equivalent.

Removal

1. Turn the fuel valve OFF and disconnect the spark plug cap.
2. Tilt the mower to the right so the fuel cap is up. This will help to prevent fuel leakage, motor oil seeping into the air filter, and hard starting.
3. Use a 14 mm (6 point) socket wrench and remove the two cutting-means bolts [1] and special washers [2] from the flywheel brake assembly [5]. Use a wooden block to prevent the cutting means from turning when removing the bolts.



4. Remove the upper [4] and lower cutting means [3].

Installation

1. Clean dirt and grass from around the cutting means mounting area.
2. Install both cutting means [3] and [4] using the two cutting means bolts [1] and special washers [2] as shown. Be sure to install the special washers with the concave side toward the cutting means and the convex side toward the head of the bolt.

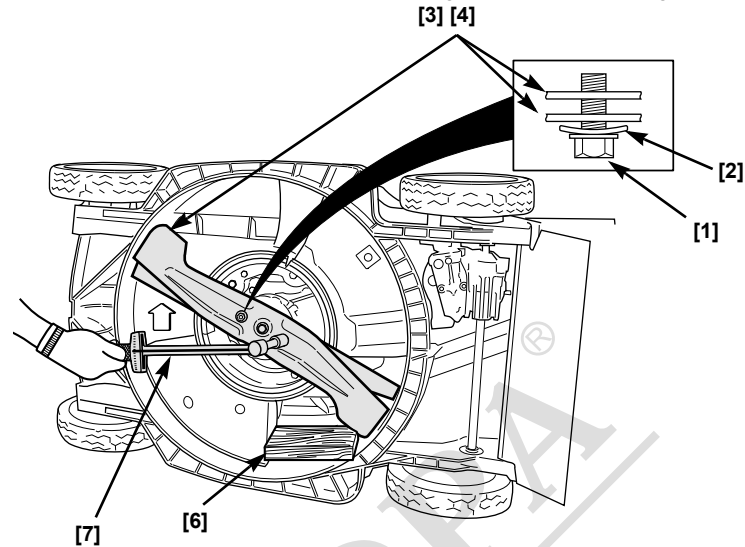
⚠ WARNING

Operating this mower with only one cutting means will result in an improperly seated cutting means that can be thrown from the mower and seriously hurt or kill someone.

Always install both cutting means as a set.

The cutting-means bolts are specially designed for this application and must not be replaced with other bolts.

3. Tighten the cutting-means bolts with a torque wrench [7]. Use a wooden block [6] to prevent the cutting means from turning.



Cutting-means bolt torque: 49 ~ 59 N·m

If you do not have a torque wrench, have an authorized Honda dealer tighten the cutting-means bolts before you use the mower. If the cutting-means bolts are overtightened, they could break. If the cutting-means bolts are not tightened enough, they could loosen or come out. In either case, it would be possible for the cutting means to fly off while you are operating the mower.

GRASS CATCHER CLEANING AND REPLACEMENT

Cleaning

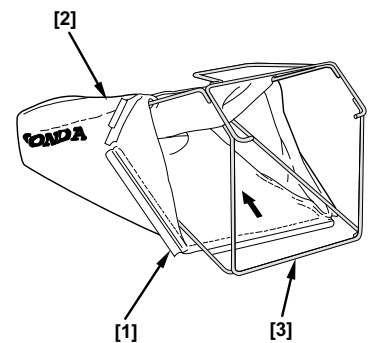
Wash the grass catcher with a garden hose, and allow it to dry completely before use; a wet grass catcher will clog quickly.

Replacement

Replace a worn or damaged grass catcher with a Honda replacement part or its equivalent.

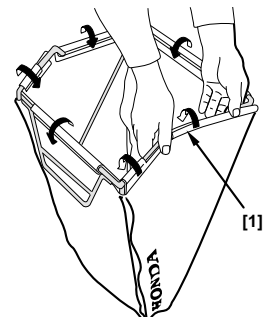
Removal

1. Unclip the plastic edges [1] of the grass catcher [2] from the frame [3].
2. Remove the grass catcher from the frame.



Installation

1. Insert the grass catcher frame [3] into the grass catcher [2], as shown above.
2. Clip the plastic edges [1] of the grass catcher onto the frame.



OPERATION CHECK OF THE CUTTING-MEANS CONTROL

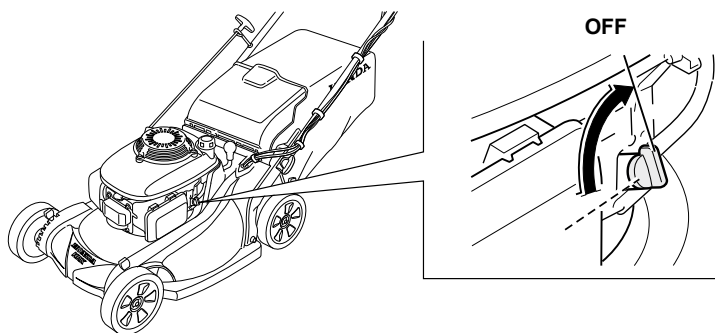
Start the engine outdoors. Release the cutting-means control lever; the engine should stop quickly. If the engine does not stop quickly, take the mower to an authorized Honda servicing dealer for repair.

TRANSPORTING

Before Loading

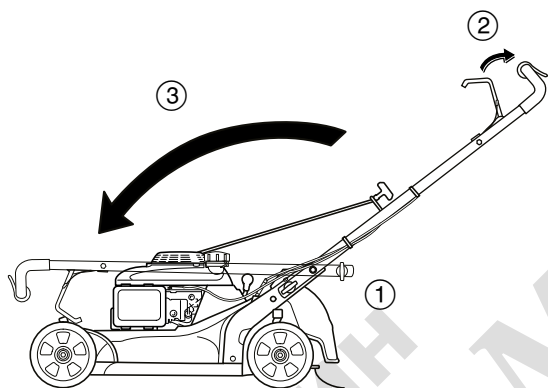
If the engine has been running, allow it to cool for at least 15 minutes before loading the mower on the transport vehicle. A hot engine and exhaust system can burn you and can ignite some materials.

Turn the fuel valve to the OFF position. This will prevent carburetor flooding and reduce the possibility of fuel leakage.



Handlebar Folding

1. Remove the grass catcher. You can place it on top of the engine, with the catcher opening to the front.



2. Unlock the handlebar adjust knobs ①.
3. Pull and hold the flywheel brake lever ②.
4. Swing the handlebar forward ③. Prevent the cables from getting pinched or kinked.

When unfolding the handlebar, be sure to lock the adjust knobs to secure the handlebar in the mowing position.

Loading and Unloading

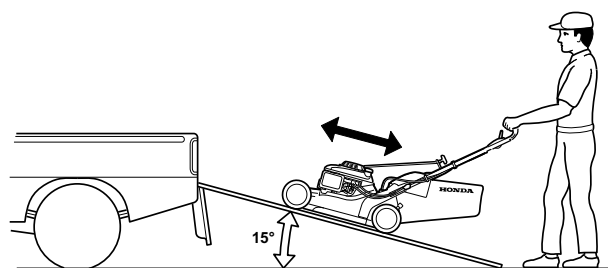
Position the mower so all four wheels are on the bed of the transport vehicle. Tie the mower down with rope or straps, and block the wheels. Keep the tie-down rope or straps away from the controls, adjustment levers, cables, and the carburetor.

NOTICE

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.

1. Turn the fuel valve to the OFF position.
2. Use a suitable loading ramp. Adjust the loading ramp so that it is inclined at an angle of less than 15°. If a loading ramp is not available, two people should lift the mower on and off the transport vehicle while keeping the mower level.



STORAGE

Proper storage is essential for keeping your lawnmower troublefree and looking good. The following steps will help protect the mower from rust and corrosion, and make the engine easier to start when you use the lawnmower again.

Cleaning

Engine

Wash the engine by hand, and be careful to prevent water from entering the air cleaner.

NOTICE

Using a garden hose or pressure washing equipment can force water into the air cleaner. Water in the air cleaner will soak the paper filter and can enter the carburetor or engine cylinder, causing damage. Water contacting a hot engine can cause damage. If the engine has been running, allow it to cool for at least half an hour before washing.

Mower Deck

Before washing the underside of the mower deck, be sure the fuel valve is in the OFF position. Disconnect the spark plug cap. Rest the mower on its right side so the fuel filler cap is up. This will help prevent fuel leakage and hard starting due to carburetor flooding. Wear heavy gloves to protect your hands from the cutting means.

Wash the lawnmower, including the underside of the mower deck.

If using a garden hose or pressure washing equipment to clean the mower deck, be careful to avoid getting water into controls and cables, or anywhere near the engine air cleaner or muffler opening.

Grass catcher

Remove the catcher from the mower, and wash it with a garden hose or pressure washing equipment. Allow the catcher to dry completely before storage.

Drying

1. After washing the lawnmower, wipe dry all accessible surfaces.
2. With the mower in an upright position, move the Clip Director knob to the catcher position, start the engine outdoors, and let it run until it reaches normal operating temperature to evaporate any water remaining on the engine.
3. Stop the engine and allow it to cool.
4. After the lawnmower is clean and dry, touch up any damaged paint and coat other areas that may rust with a light film of oil.

Fuel

NOTICE

Depending on the region where you operate your equipment, fuel formulations may deteriorate and oxidize rapidly. Fuel deterioration and oxidation can occur in as little as 30 days and may cause damage to the carburetor and/or fuel system. Please check with your servicing dealer for local storage recommendations.

Gasoline will oxidize and deteriorate in storage. Old gasoline will cause hard starting, and it leaves gum deposits that can clog the small passages in the fuel system. If the gasoline in your mower deteriorates during storage, you may need to have the carburetor and other fuel system components, serviced or replaced.

The length of time that gasoline can be left in your fuel tank and carburetor without causing functional problems will vary with such factors as gasoline blend, your storage temperatures, and whether the fuel tank is partially or completely filled. The air in a partially filled fuel tank promotes fuel deterioration. Very warm storage temperatures accelerate fuel deterioration. Fuel deterioration problems may occur within a few months, or even less if the gasoline was not fresh when you filled the fuel tank.

If you keep a container of gasoline for refueling, be sure that it contains only fresh gasoline.

If it will take more than 3 months to use the fuel in your storage container, we suggest adding a fuel stabilizer to the fuel when you fill the container.

Short Term Storage (30-90 days)

If your equipment will not be used for 30 to 90 days, we recommend the following to prevent fuel-related problems:

1. Add fuel stabilizer following the manufacturer's instructions.
When adding a fuel stabilizer, fill the fuel tank with fresh gasoline. If only partially filled, air in the tank will promote fuel deterioration during storage.
Note:
 - All stabilizers have a shelf life and their performance will deteriorate over time.
 - Fuel stabilizers will not reconstitute stale fuel.
2. After adding a fuel stabilizer, run the engine outdoors for 10 minutes to be sure that treated gasoline has replaced the untreated gasoline in the carburetor.
3. Stop the engine and turn the fuel valve to the OFF position.
4. Start the engine and continue to run the engine until it stops from the lack of fuel in the carburetor fuel bowl. Running time should be less than 3 minutes.

Long Term or Seasonal Storage (greater than 90 days)

Start the engine and allow it to run long enough to empty all the gasoline from the entire fuel system (including the fuel tank). Do not allow gasoline to remain in your engine for more than 90 days of inactivity.

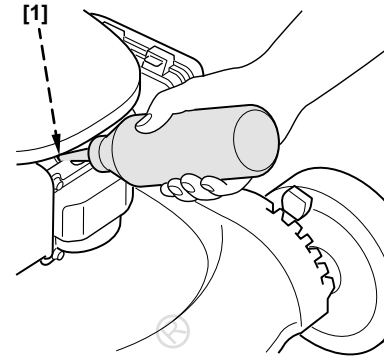
The *DISTRIBUTOR'S LIMITED WARRANTY* does not cover fuel system damage or engine performance problems resulting from neglected storage preparation.

Engine Oil

Change the engine oil (page 13).

Engine Cylinder

If the mower is to be stored for more than 3 months, remove the spark plug (page 14). Pour 5 ~ 10 cm³ of clean engine oil into the cylinder [1]. Pull the starter rope several times to distribute the oil in the cylinder. Reinstall the spark plug.



Pull the starter rope slowly until resistance is felt, then return the starter grip gently. This will close the valves so moisture cannot enter the engine cylinder.

PLACING IN STORAGE

Since your mower will be stored with petrol in the fuel tank and carburetor, it is important to reduce the hazard of petrol vapor ignition. Select a well-ventilated storage area away from any appliance that operates with a flame, such as a furnace, water heater, or clothes dryer. Also avoid any area with a spark-producing electric motor, or where power tools are operated.

If possible, avoid storage areas with high humidity, because that promotes rust and corrosion.

Place the mower with its wheels on a level surface. Tilting can cause fuel or oil leakage.

The handlebar can be folded for compact storage (page 16).

With the engine and exhaust system cool, cover the mower to keep out dust. A hot engine and exhaust system can ignite or melt some materials. Do not use sheet plastic as a dust cover. A nonporous cover will trap moisture around the mower, promoting rust and corrosion.

REMOVING FROM STORAGE

Check your mower as described in *PRE-OPERATION CHECKS* (page 5).

If the cylinder was coated with oil during storage preparation, the engine will smoke briefly at startup. This is normal.

FRAME AND ENGINE SERIAL NUMBER

Record the frame and engine serial numbers in the space below. You will need these numbers when ordering parts and when making technical or warranty inquiries.

Frame serial number: _____

Engine serial number: _____

Date of purchase: ____/____/____

PARTS

Item	Part Number
Air Cleaner	17211-ZL8-023
Spark Plug	98079-55846
Cutting Means	72531-VH7-000 (upper) 72511-VH7-000 (lower)
Cutting-means Bolt	90105-VA3-J01
Bolt Washer	90502-VG3-000

TROUBLESHOOTING

ENGINE WILL NOT START

Possible Cause	Correction
Fuel valve OFF	Turn the fuel valve ON (page 5).
Out of fuel	Refuel (page 7).
Bad fuel; mower stored without treating the petrol, or refueled with bad petrol	Refuel with fresh petrol (page 7).
Spark plug faulty, fouled, or improperly gapped	Gap or replace the spark plug (page 14).
Spark plug wet with fuel (flooded engine)	Dry and reinstall the spark plug.
Fuel filter clogged, carburetor malfunction, ignition malfunction, valves stuck, etc.	Take the mower to an authorized Honda servicing dealer or refer to the shop manual for repair.

LOSS OF POWER

Possible Cause	Correction
Grass is too tall to cut	Raise the cutting height (page 8), cut a narrower swath, use a slower ground speed, or cut more frequently.
Cutting-means enclosure is clogged	Clean out the cutting-means enclosure (page 11).
Air cleaner is clogged	Clean or replace the air cleaner
Bad fuel; mower stored without treating the petrol, or refueled with bad petrol	Refuel with fresh petrol (page 7).
Fuel filter clogged, carburetor malfunction, ignition malfunction, valves stuck, etc.	Take the mower to an authorized Honda servicing dealer or refer to the shop manual for repair.

VIBRATION

Possible Cause	Correction
Grass and debris lodged under the cutting-means enclosure	Clean out the cutting-means enclosure (page 11).
Cutting means loose, bent, damaged, or unbalanced by improper sharpening	Tighten loose cutting-means bolts (page 15). If cutting means are found to be bent or damaged, take the lawnmower to an authorized Honda servicing dealer for inspection.
Mechanical damage, such as a bent crankshaft	Take the mower to an authorized Honda servicing dealer or refer to the shop manual for repair.

MOWING AND CATCHING PROBLEMS

Possible Cause	Correction
Mower is moving too fast for lawn conditions	Move the Select Drive to a slower speed (page 9) or push slower.
Cutting height adjustment levers set at different positions	Set all levers at the same cutting height position (page 8).
Grass catcher overfilled or clogged	Empty the grass catcher. Wash the grass catcher if it is clogged with dirt (page 15).
Cutting-means enclosure is clogged	Clean out the cutting-means enclosure (page 11).
Cutting means dull, worn, or damaged	Sharpen or replace the cutting means if necessary (page 15).

SPECIFICATIONS

MODEL	HRX537C4
TYPE	VKEA
DESCRIPTION CODE	MAGA

GENERAL

Length	1,638 mm
Handlebar height (Middle position)	1,016 mm
Dry weight	40.1 kg
Width	585 mm
Cutting width	530 mm
Cutting height adjustments	19 mm, 32 mm, 46 mm, 62 mm, 75 mm, 88 mm, 101 mm
Grass catcher capacity	85 L
Sound pressure level at operator's ears (According to EN ISO 5395-1:2013)	85 dB(A)
Uncertainty	1 dB(A)
Sound power level measured (According to 2000/14/EC directive)	97 dB(A)
Uncertainty	0.8 dB(A)
Sound power level guaranteed (According to 2000/14/EC directive)	98 dB(A)
Vibration transmitted (According to EN ISO 5395-1:2013)	4.7 m/s ²
Uncertainty	2.3 m/s ²

ENGINE

Model	GCV190
Type	4-stroke, single cylinder, vertical shaft, OHC
Displacement	187 cc
Bore and stroke	69 x 50 mm
Cooling	Forced air
Lubrication	Splash and spray
Compression ratio	8.5:1
Maximum speed	2,850 ⁺⁰ ₋₁₀₀ rpm
Ignition system	Transistorized magneto
Spark plug	NGK: BPR5ES
Spark plug gap	0.7 ~ 0.8 mm
Air cleaner	Dry element type
Recommended fuel	Unleaded petrol with a research octane rating of 91 or higher
Fuel tank capacity	0.93 L
Recommended oil	SAE 10W-30, API SJ or later
Engine oil capacity	0.55 L * Refill amount: 0.35 ~ 0.40 L

* Actual amount will vary due to residual oil in the engine. Always use the dipstick to confirm the actual level (see page 6).

DRIVE

Type	Variable speed Select Drive
Engine to transmission	V-belt
Main clutch	Slipping friction cone type
Mower speed (engine @ 2,850 rpm)	0 ~ 1.64 m/s