

INTRODUCTION

Thank you for purchasing a Honda lawn mower.

This manual covers the operation and maintenance of the Honda HRX537HYEA and HRX537HZEА lawn mowers.

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 lawn mower 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 your rights and responsibilities. The warranty policy is a separate document provided by your dealer.

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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 lawn mower or other property can be damaged if you don't follow instructions.

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

HONDA

OWNER'S MANUAL (Original instructions) HRX537HYEA • HRX537HZEА LAWN MOWER



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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.
- Never allow children or people unfamiliar with these instructions to use the lawn mower. Local regulations may restrict the age of the operator.
- Never mow while people, especially children, or pets are nearby.
- 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 open sandals.
- Thoroughly inspect the area where the equipment is to be used, and remove all objects which may be thrown by the machine.
- Petrol is highly flammable:
 - Store fuel in containers specifically designed for this purpose.
 - Refuel outdoors only and do not smoke while refuelling.
 - Add fuel before starting the engine. Never remove the cap of the fuel tank or add petrol while the engine is running or when the engine is hot.
 - If petrol is spilled, do not attempt to start the engine, 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.
- Replace faulty mufflers.
- Before using, always visually inspect to see that the blades, blade bolts, and mower housing are not worn or damaged. Replace worn or damaged blades and 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.
- Avoid operating the equipment in wet grass, where feasible.
- Mowing on slopes:
 - Always be sure of your footing on slopes.
 - Mow across slopes, never up and down.
 - Walk, never run.
 - Exercise extreme caution when changing direction on slopes.
 - Do not mow excessively steep slopes.

- Use extreme caution when pulling the lawn mower toward you.
- Stop the blades if the lawn mower has to be tilted for transporting, when crossing surfaces other than grass, and when transporting the lawn mower to and from the area to be mowed.
- Never operate the lawn mower with defective guards or shields, or without safety devices (for example, deflectors and/or grass catchers in place).
- Do not attempt to make wheel height adjustments while the machine is running.
- Do not change the engine governor setting or over-speed the engine.
- Disengage all blade and drive clutches before starting the machine.
- Start the engine carefully according to the instructions and with feet well away from the blades.
- Do not tilt the lawn mower when starting the engine.
- Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times.
- Never pick up or carry a lawn mower while the engine is running.
- Stop the engine and disconnect the spark plug wire:
 - Before clearing a blockage or unclogging the lawn mower.
 - 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.
 - If lawn mower starts to vibrate abnormally, check immediately.
- Stop the engine:
 - Whenever you leave the lawn mower.
 - Before refuelling the lawn mower.
 - Before removing the grass catcher or side discharge adapter.
- Reduce the throttle setting during engine shut down, and turn the fuel valve off at the conclusion of mowing.
- Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
- Never store the equipment with petrol in the tank inside a building where fumes may reach an open flame or spark.
- Allow the engine to cool before storing in any enclosure.
- To reduce the fire hazard, keep the petrol storage area, engine, muffler, and battery compartment (if applicable) free of grass, leaves, or excessive grease.
- Check the grass catcher frequently for wear or deterioration.
- Replace worn or damaged parts for safety.
- If the fuel tank has to be drained, this should be done outdoors.
- 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 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. |

| | |
|---|--|
| 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 EC-Directive and GOST-R conformity mark 3. Nominal power in kilowatts 4. Maximum engine speed 5. Weight in kilograms 6. Year of manufacture 7. Serial number 8. Model 9. Manufacturer's name and address and authorized representative |

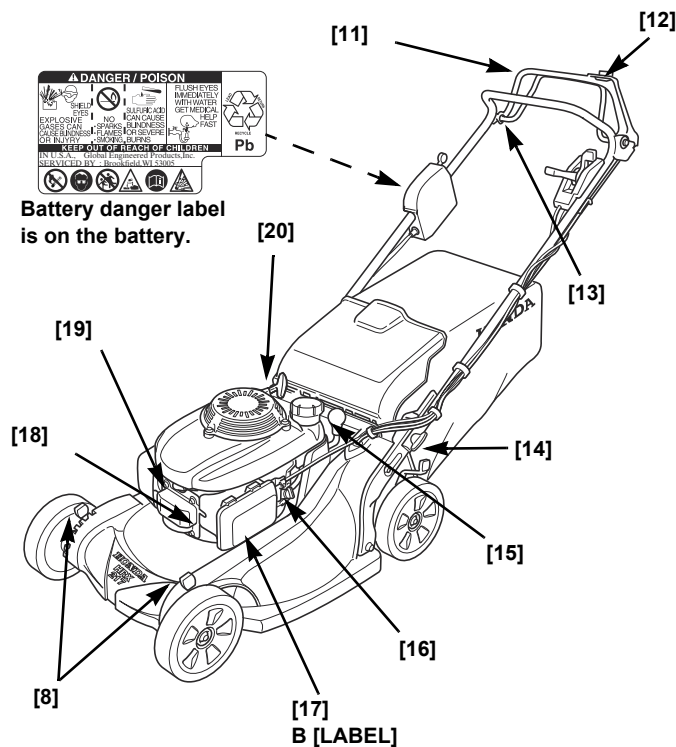
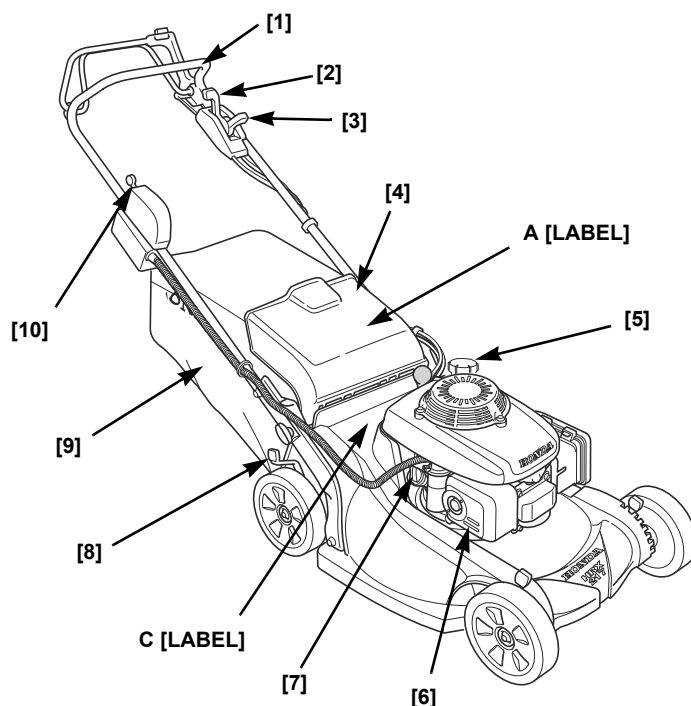
Record the frame and engine serial numbers in the space below. you will need these numbers when ordering parts and when making technical or warranty inquiries.

Frame serial number: _____

Engine serial number: _____

Date of purchase: ____ / ____ / ____

COMPONENT IDENTIFICATION



| | |
|----|-------------------------------------|
| 1 | Handlebar |
| 2 | Shift lever |
| 3 | Throttle lever |
| 4 | Discharge guard |
| 5 | Fuel tank cap |
| 6 | Muffler |
| 7 | Oil filler cap |
| 8 | Cutting height adjustment lever (4) |
| 9 | Grass bag |
| 10 | Key switch (HZEА only) |

| | |
|----|---------------------------|
| 11 | Blade control lever |
| 12 | Button |
| 13 | Drive clutch lever |
| 14 | Handlebar adjust knob (2) |
| 15 | Clip Director knob |
| 16 | Fuel valve |
| 17 | Air cleaner |
| 18 | Carburetor |
| 19 | Spark plug cap |
| 20 | Recoil starter |

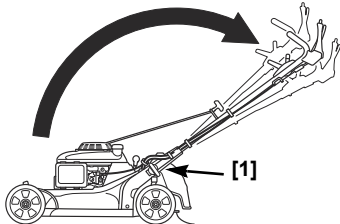
SET-UP

UNPACKING

Remove all the cardboard from around the handlebar.

HANDLEBAR SETUP

1. Turn the handlebar adjust knobs [1] 90 degrees into the unlock position (page 7).
2. Move the handlebar into the mowing position so that the locating pins align with either the upper, middle, or lower holes on the handlebar mounting brackets.
3. Turn the adjust knobs 90 degrees into the lock position and the pins will snap into the holes and lock into position.



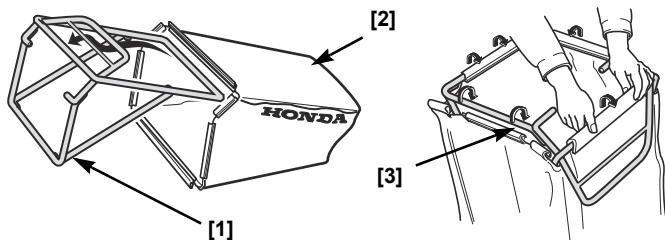
BATTERY (HZEА TYPE)

The lawn mower has an internal charging system. Under normal mowing usage it is not necessary to charge or maintain the battery.

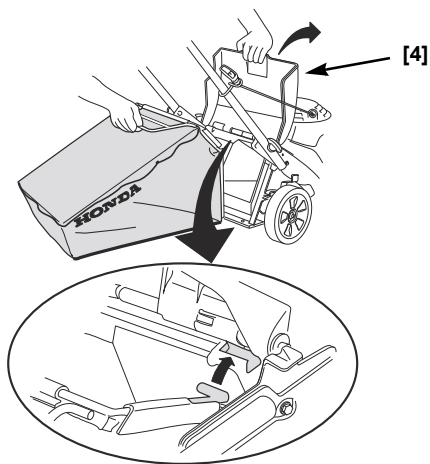
The mower is shipped with the ignition key in the parts bag. Install the key in the key switch.

GRASS BAG ASSEMBLY

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



2. Lift the discharge guard [4] and install the grass bag.



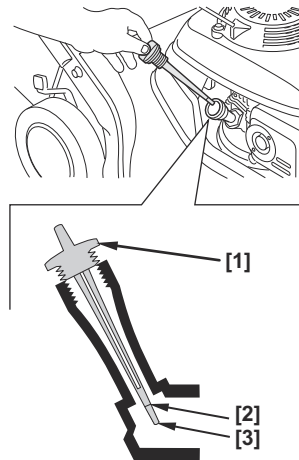
ENGINE OIL

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.

Refill amount: 0,35 ~ 0,40 ℓ

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 6.

BEFORE USING YOUR LAWN MOWER

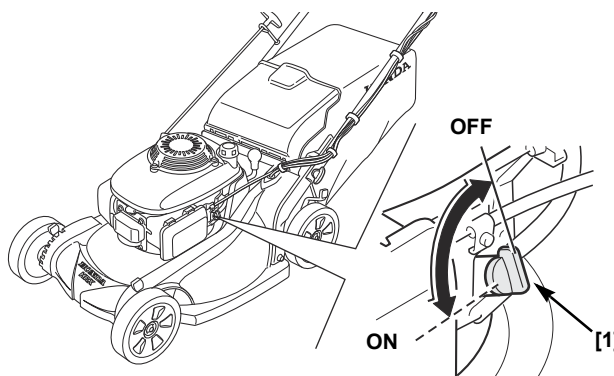
Before using the lawn mower, all mower operators must read the following chapters:

- **SAFETY INSTRUCTIONS** (page 2)
- **CONTROLS** (page 4)
- **PRE-OPERATION CHECKS** (page 5)
- **OPERATION** (page 9)
- **MAINTENANCE SCHEDULE** (page 13)

CONTROLS

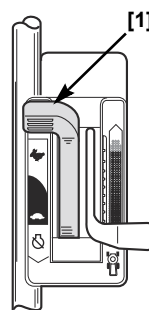
FUEL VALVE

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



THROTTLE LEVER

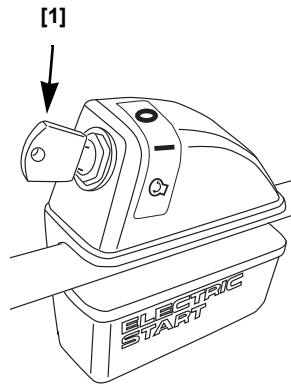
The throttle lever [1] controls the following functions:



| | | |
|--|-------------|---|
| | FAST | For starting the engine and for mowing. |
| | SLOW | For idling the engine. |
| | STOP | For stopping the engine. (HZEА type; Turn the key switch OFF to stop the engine.) |

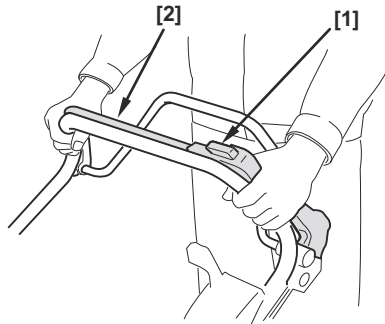
ENGINE SWITCH [1] (HZEА TYPE)

| | | |
|---|-------|---|
| ○ | OFF | Stops the engine. |
| I | ON | Running position (the key switch must be in the ON position to use the recoil starter). |
| ⊞ | START | Operates the electric starter. |



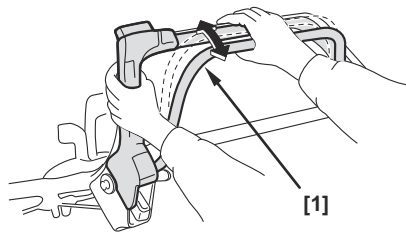
BLADE CONTROL LEVER

The button [1] and blade control lever [2] start and stop blade rotation.



DRIVE CLUTCH LEVER

The drive clutch lever [1] engages and disengages the transmission.

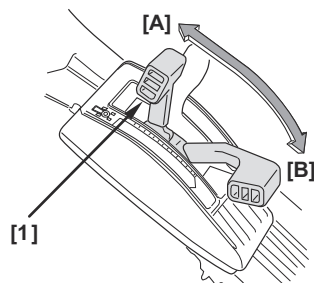


SHIFT LEVER

The shift lever [1] selects and controls the mower's drive speed.

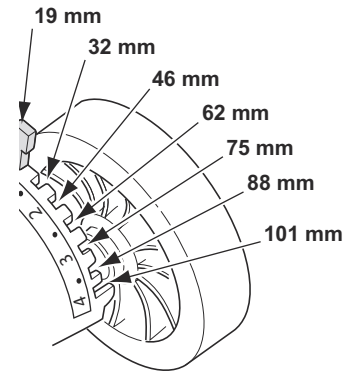
With the shift lever [1] all the way back [A] and the drive clutch lever engaged, the mower will move slowly or not at all. Use a slow speed for mowing thick grass or maneuvering in small areas.

Use position [B] for maximum self-propelled speed in large, open areas, and for transport.

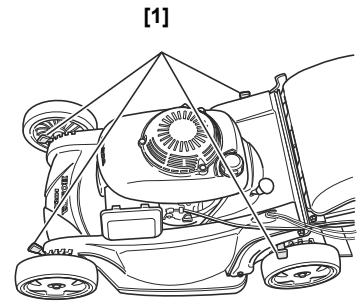


CUTTING HEIGHT ADJUSTMENT LEVERS

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

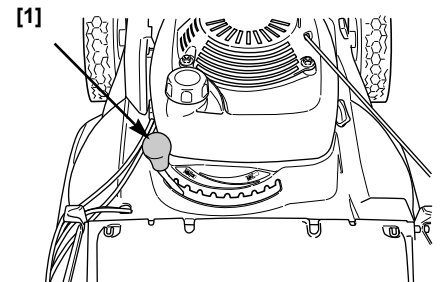


There is one adjustment lever [1] for each wheel.



CLIP DIRECTOR KNOB

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



PRE-OPERATION CHECKS

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.

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 blades 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

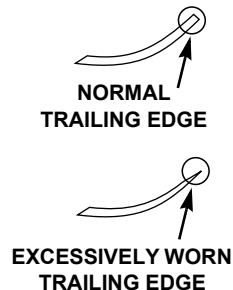
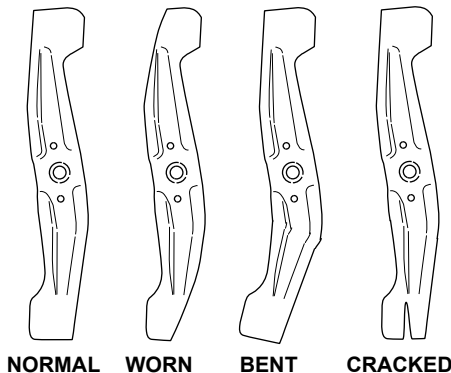
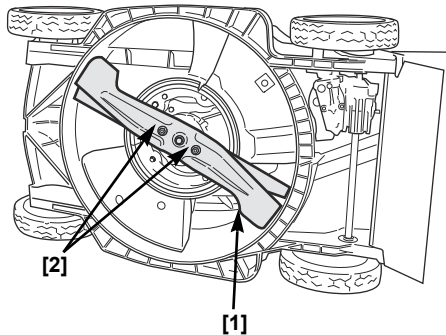
Check the length and condition of the grass, so that you will know what cutting height and mowing speed to use.

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

Blades

1. Move the throttle lever to the STOP position (page 4).
2. Move the fuel valve to the OFF position (page 4).
3. Disconnect the spark plug cap from the spark plug (page 14).
4. Tilt the mower to the right so the fuel cap is up. This will help prevent fuel leakage, motor oil seeping into the air filter, and hard starting.
5. Inspect the blades [1] for damage, cracks, and excessive wear, rust, or corrosion.



⚠ WARNING

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

Thrown objects can cause serious injury.

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

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

When a blade needs sharpening or replacement, take the lawn mower to an authorized Honda dealer. Or, if you have a torque wrench, you can remove and install the blades yourself.

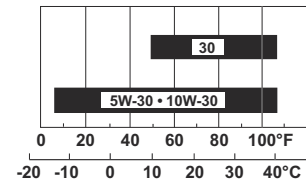
Check that the blade bolts [2] are tight (page 17).

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 classification SJ or later. Always check the API service label on the oil container to be sure it includes the letters SJ or later.

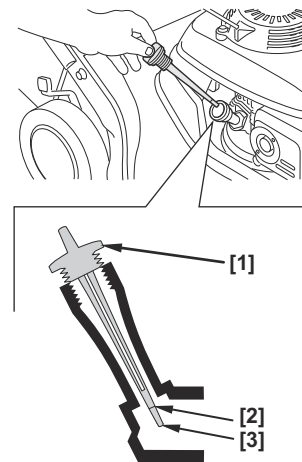
SAE 10W-30 is recommended for general use. Other viscosities shown in the chart may be used when the average temperature in your area is within the indicated range.



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.



Petrol

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 18) for additional information regarding fuel deterioration.

⚠ WARNING

Petrol is highly flammable and explosive.

You can be burned or seriously injured when handling fuel.

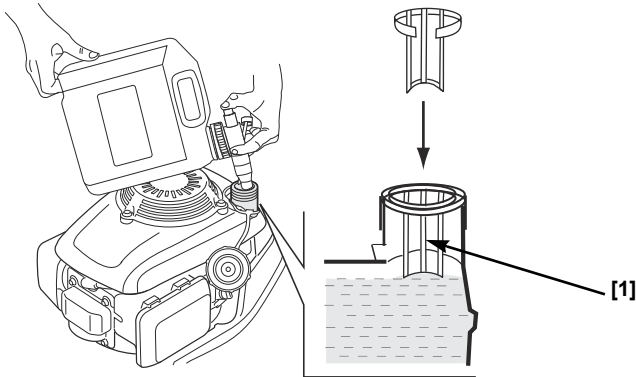
- Stop the engine and keep heat, sparks, and flame away.
- Handle fuel only outdoors.
- Wipe up spills immediately.

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 fuel 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.

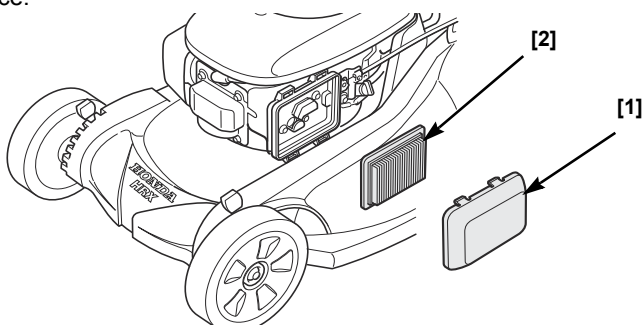
Fuel Storage Container

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/reg5oair/mobile/winter.html>).

Air Cleaner Inspection

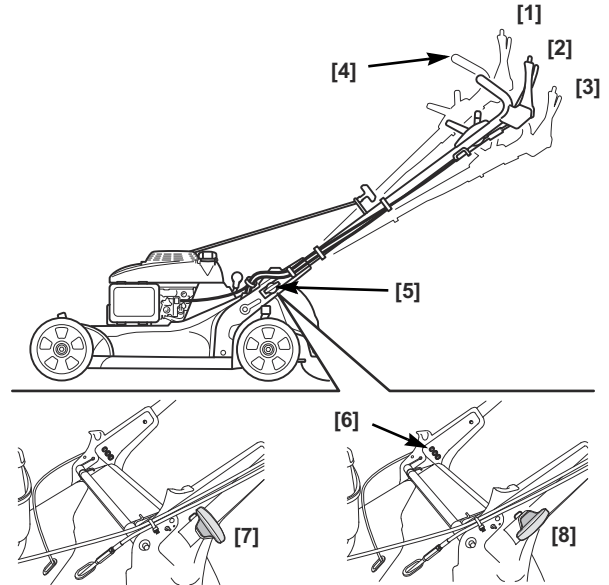
Remove cover [1]. Make sure the filter [2] is clean and in good condition. A dirty air filter will restrict air flow to the carburetor, reducing engine performance. Refer to page 14 for air cleaner service.



Handlebar Height Adjustment

Handlebar height can be adjusted to three positions: high [1], middle [2], and low [3].

1. Turn the handlebar adjust knobs [5] 90 degrees into the unlock [7] position.
2. Move the handlebar [4] up or down, so the locating pins align with either the higher, middle, or lower holes on the handlebar mounting brackets [6].
3. Turn the adjust knobs 90 degrees into the lock position [8] and the pins will snap into the holes and lock into position.



Grass Bag

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

Inspection

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

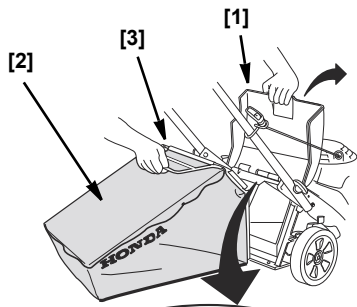
NOTICE

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

If the grass bag needs replacement, you can remove and install a bag yourself (page 17).

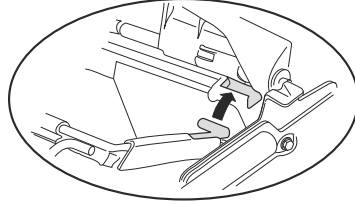
Installation

1. Raise the discharge guard [1], and use the grass bag handle [3] to hook the grass bag [2] onto the mower deck as shown.
2. Release the discharge guard to secure the grass bag.



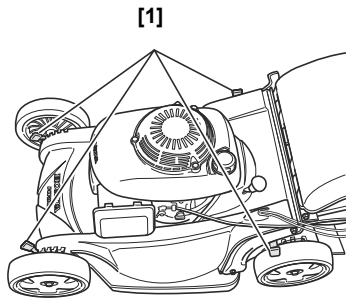
Removal

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



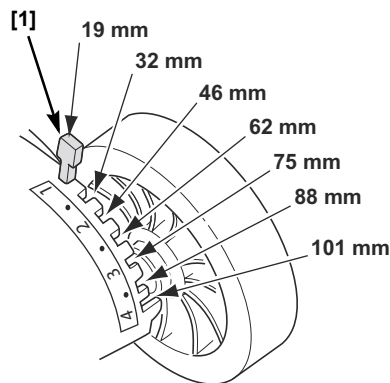
Cutting Height

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



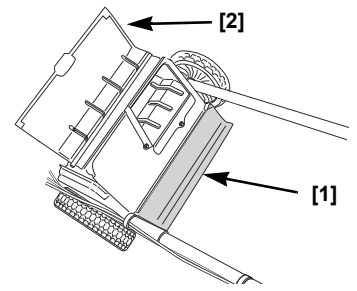
To adjust cutting height, pull each adjustment lever [1] toward the wheel, and move it into another notch.

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.



Rear Shield

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

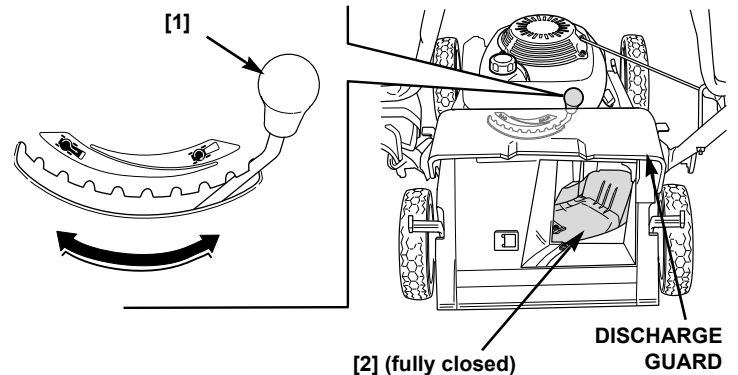


Clip Director

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 [2] from the fully open BAG position to the fully closed MULCH position (see the following page).



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.

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, start the engine, and engage the blade control lever several times.

Important Safety Precaution

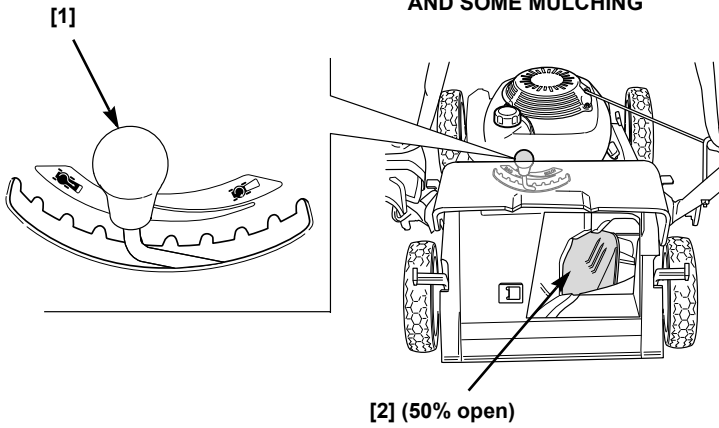
Always turn the engine off and disconnect the spark plug cap before lifting the discharge guard to view or clean around the sliding door. This will prevent contact with the rotating blades and prevent objects from being thrown into the discharge area.

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 bag and begin mowing with the Clip Director knob [1] all the way to the BAG position. Check the appearance of the lawn. As the knob is moved towards the MULCH position, more grass will be

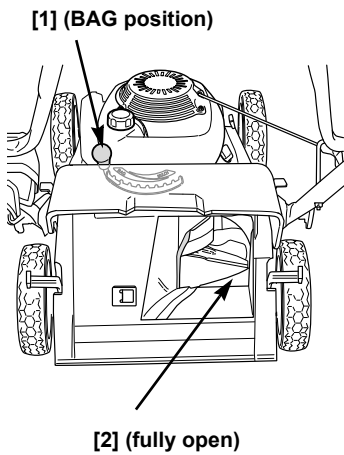
recycled back into the lawn. Adjust the Clip Director knob until the desired result is achieved.

BAGGING OR REAR DISCHARGE AND SOME MULCHING



[2] (50% open)

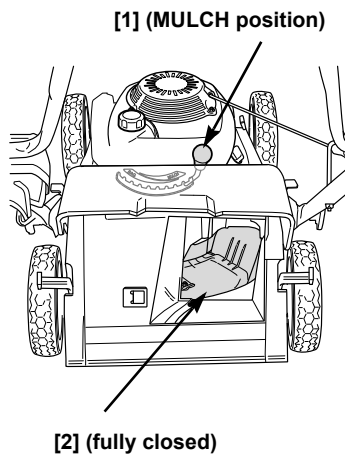
FULL BAGGING OR REAR DISCHARGE



[1] (BAG position)

[2] (fully open)

FULL MULCHING

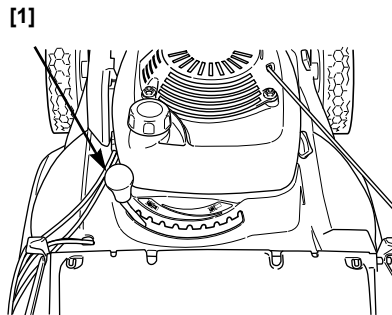


[1] (MULCH position)

[2] (fully closed)

Rear Discharge

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



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



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.

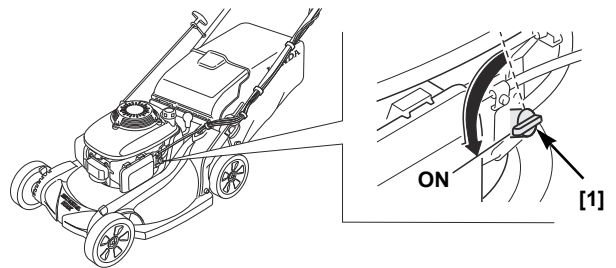
For your safety, do not start or operate the engine in an enclosed area such as a garage. Your mower's exhaust contains poisonous carbon monoxide gas that can collect rapidly in an enclosed area and cause illness or death.

FREQUENCY OF USE

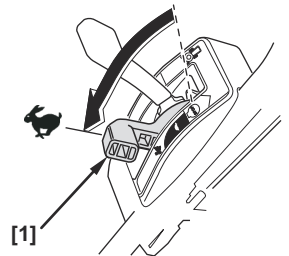
If your equipment will be used on an infrequent or intermittent basis, (more than 4 weeks before next use) please refer to the *Fuel* section of the *STORAGE* chapter (page 18) for additional information regarding fuel deterioration.

STARTING THE ENGINE

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



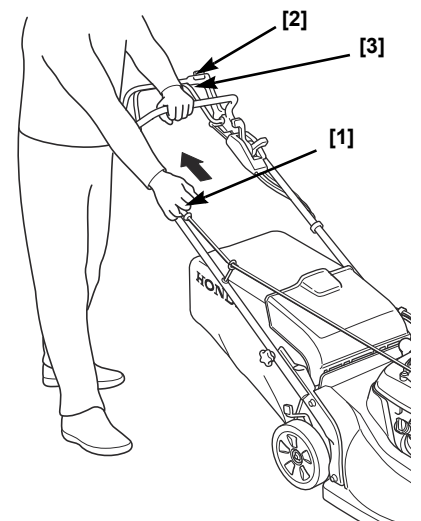
2. Move the throttle lever [1] to the fast (F) position.



3. HYEA type:

Pull the starter grip [1] lightly until you feel resistance, then pull briskly. Return the starter grip gently.

To keep the blades from turning and to prevent the mower from moving forward, always release the blade control lever [2] and drive clutch lever [3] when you pull the starter.



HZEA electric start type:

Turn the starter key switch to the START (⊖) position. Let the key return to the ON (⏻) position when the engine starts.

The starter should not be cranked for more than 5 seconds at a time. If the engine fails to start, release the switch and wait 10 seconds before operating the starter again.

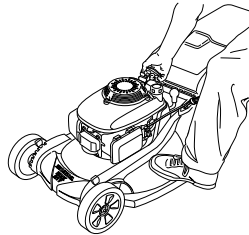
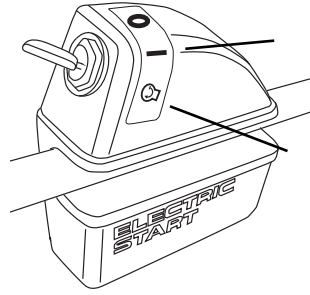
If the battery does not have sufficient charge to start the engine, possibly due to a long storage period, use the recoil starter to start the engine for at least one mowing session. The battery should have sufficient charge after one mowing session (approximately 1 hr).

HZEA manual start:

Turn the starter key switch ON. The engine switch must be in the ON (⏻) position to start the engine with the recoil starter.

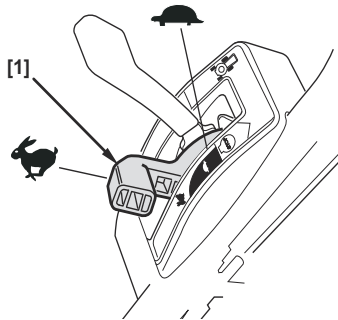
Move the throttle lever to the FAST (👉) position.

Place your foot on the mower deck step. Pull the starter grip lightly until you feel resistance, then pull briskly. Return the starter grip gently.



- Put the throttle lever [1] in the FAST (👉) position to mow or to the SLOW (👈) position to idle.

To ensure easy restarting and maximum performance from the Auto Choke System™, allow the engine to run for at least three minutes after starting a cold engine before shutting down. The minimum run time will need to be longer if the temperature is below 21°C.



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

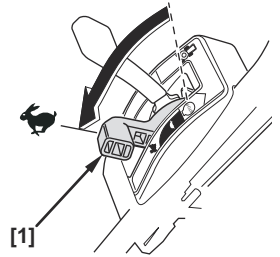
When the carburetor has been modified for high altitude operation, the air-fuel mixture will be too lean for low altitude use. Operation at altitudes below 1,500 meters with a modified carburetor may cause the engine to overheat and result in serious engine damage. For use at low altitudes, have your authorized Honda dealer return the carburetor to original factory specifications.

OPERATING THE CONTROLS FOR MOWING

Throttle Lever

For best cut quality, always mow with the throttle lever [1] in the FAST (👉) position. When the blades rotate at the preset fast speed, it creates a strong fan action that lifts and cuts grass more efficiently.

Do not try to increase the preset engine speed; the blade could fracture and come apart.

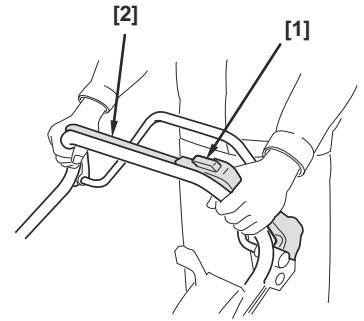


Blade Control Lever

To start blade rotation, press the yellow button [1] on top of the blade control lever [2], then push the lever forward and hold it against the handlebar.

Release the blade control lever [2] to stop the blade.

Operate the blade control lever with a quick and complete motion, so the blade control is always either fully engaged or disengaged. This will help to prevent stalling the engine, and it will help prevent damage to the blade control mechanism.

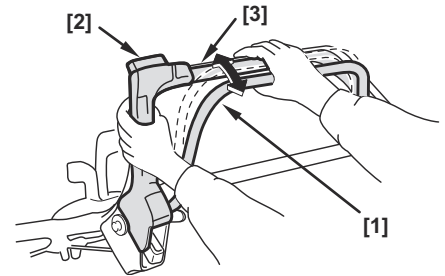


Drive Clutch Lever

Push the drive clutch lever [1] forward to propel the mower forward.

For self-propelled mowing, press the yellow button [2] on top of the blade control lever [3], push the blade control lever forward to the handlebar, and then push the drive clutch lever [1] forward.

Release the drive clutch lever [1] to stop the mower's forward movement.



You can control mower speed with the drive clutch lever [1]. The mower will move gradually faster as you push the lever forward. If you push the lever all the way up to the handlebar, the mower will move at the speed determined by the shift lever setting.

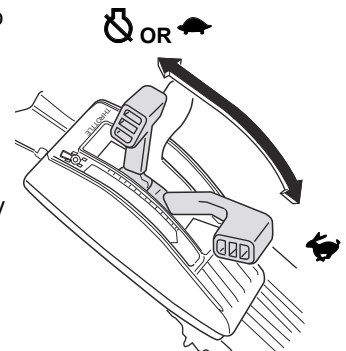
Shift Lever

Use the shift lever to select the forward speed at which you wish to mow.

Do not use the throttle lever to adjust your forward speed. The throttle lever must remain in the fast position for good mowing performance. Otherwise, cut quality suffers.

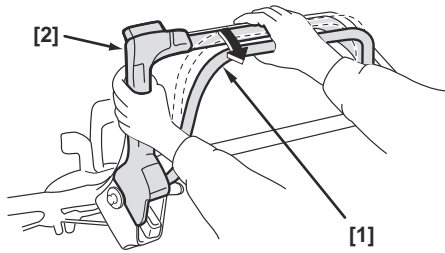
Use the lower speed range for mulching and bagging, the higher speed range for transporting.

With the shift lever all the way back and the drive clutch lever engaged, the mower will move slowly or not at all.

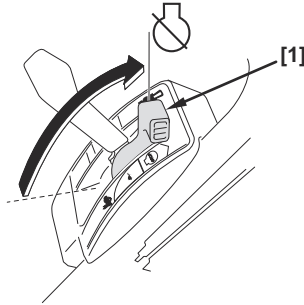


STOPPING THE ENGINE

1. Release the drive clutch lever [1] and blade control lever [2].

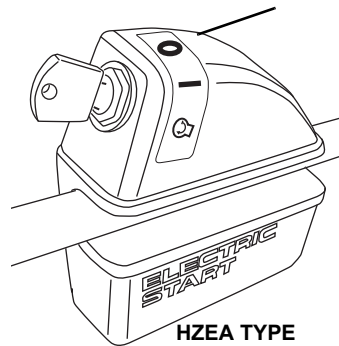


2. HYE type: Move the throttle lever [1] to the STOP (⊗) position to stop the engine.



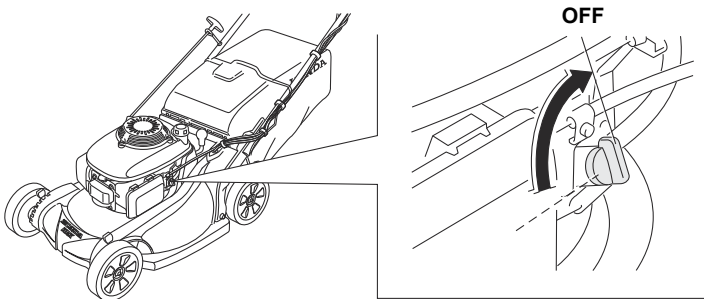
HYEA TYPE

HZEA type: Move the throttle lever to the STOP position and then turn the key switch to the OFF (○) position.



HZEA TYPE

3. When the mower is not in use, turn the fuel valve to the OFF position.



4. 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 18 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

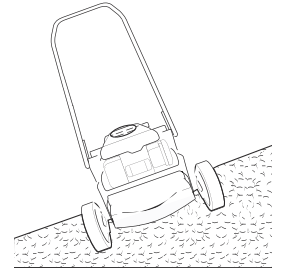
The blades are sharp and spin at high speed.

A spinning blade 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 drive clutch lever 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 blade hits something, or if the mower starts to vibrate, stop the engine immediately and check for damage. Striking objects may damage the blade, bend the crankshaft, and/or break the mower deck or other components. Vibration usually indicates serious trouble.

⚠ WARNING

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

Thrown objects can cause serious injury.

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

The warranty does not cover parts damaged by accident or 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 blade control lever to stop the blade 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 bagging. 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 4).

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.

Blade Speed

The blades must spin very fast to cut properly. Always use the fast throttle setting, and keep the engine running at maximum rpm.

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

Blade Sharpness

A sharp blade cuts cleanly. A dull blade tears the grass, leaving shredded ends that turn brown. When your blade 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.

Fallen Leaves

Your mower can be used to pick up fallen leaves for disposal. If using the mower to bag 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 bag.



LONG ENOUGH



TOO SHORT

Depending on the size, type, and water content of the leaves, it may be necessary to open the sliding door to allow for best bagging results. Using the sliding door correctly will allow better grass bag filling, resulting in less grass bag 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 bag so your mower can pick them up for disposal.

Clogged Mower Deck

Before clearing a clogged mower deck, 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.

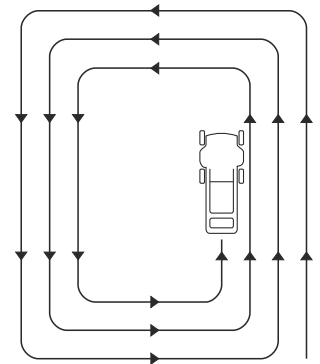
Clear a clogged deck with a stick, not your hands.

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 blades rotate, cause these mowing patterns to give the best results.

Mulching

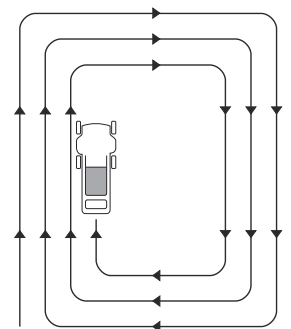
Use a counterclockwise mowing pattern when the Clip Director knob is in the full MULCH position. If the lawn has an irregular shape, or many obstacles, divide it into sections where you can use counterclockwise mowing patterns.



MULCHING PATTERN

Bagging

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



BAGGING & REAR-DISCHARGE PATTERN

Rear Discharge Mowing

Remove the grass bag 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

THE IMPORTANCE OF 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: Rear shield Check: Blades Check: Blade torque Check: Grass bag Check: Engine oil level Check: Air filter Check: Operation blade control | page 8 page 6 page 16 page 4 page 6 page 7 page 15 |
| First month or 5 hours | Change: Engine oil | page 14 |
| First 25 hours | Clean: Air filter ¹ Adjust: Blade control cable ² Adjust: Drive clutch cable ² | page 14 |
| Every 6 months or 50 hours | Change: Engine oil ¹ Clean: Air filter ¹ | page 14 page 14 |
| Every year or 100 hours | 6 month items above plus: Check-adjust: Spark plug Clean: Spark arrester ³ (if equipped) Check operation of the blade control Adjust the throttle cable ² Grease the pinion gears ² Adjust the blade control cable ² Adjust the drive clutch cable ² Adjust the valve clearance ² Adjust the idle speed ² Clean the fuel tank ² | page 14 page 15 page 15 |
| Every 2 years or 200 hours | Yearly items above plus: Replace: Air filter Replace: Spark plug Inspect-grease rear wheel adjuster bushing ² | page 14 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.

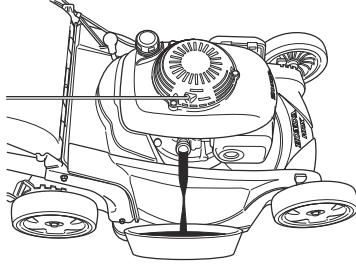
Failure to follow this maintenance schedule could result in non-warrantable failures.

ENGINE MAINTENANCE

Engine Oil Change

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

1. Put the throttle lever in the STOP position and turn the fuel valve OFF. This will reduce the possibility of fuel leakage (page 4).
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.



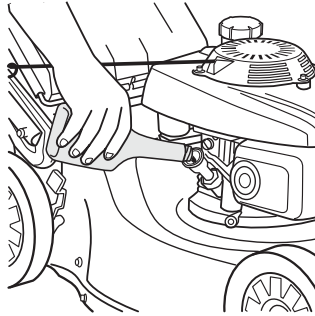
Please dispose of used motor oil and the containers in a manner that is compatible with the environment. We suggest you take it in a sealed container to your local recycling center or service station for reclamation. Do not throw it in the trash, pour it on the ground or pour it down a drain.

4. Fill with the recommended oil (page 6).

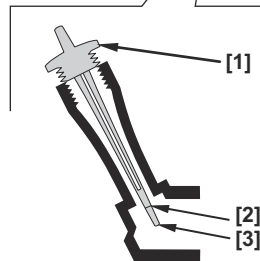
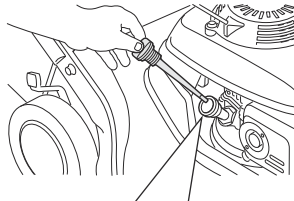
Refill amount: 0.35 ~ 0.40 ℓ

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.

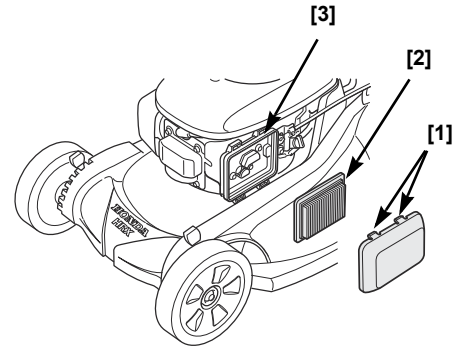
Air Cleaner Service

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, and replace it if it is 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

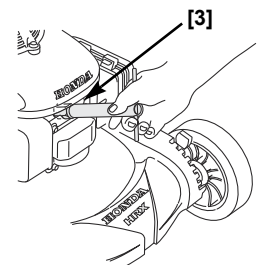
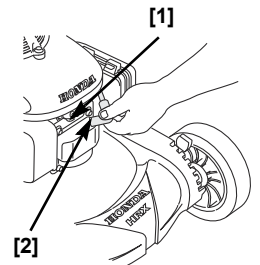
Recommended spark plugs: NGK - BPR5ES

NOTICE

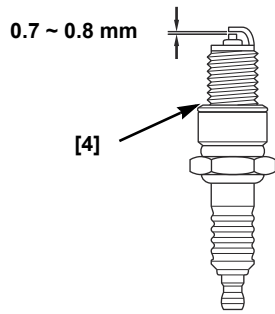
Incorrect spark plugs can cause engine damage.

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].



- Inspect the spark plug. Replace it if the electrodes are worn or if the insulator is cracked or chipped. Clean the spark plug with a wire brush if you are going to reuse it.



- 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.

- Install the spark plug carefully, by hand, to avoid cross-threading.

- 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.

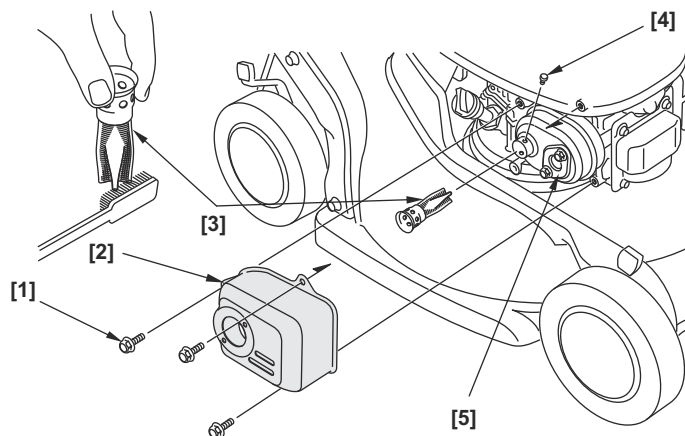
- Install the spark plug cap on the spark plug.

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.

- Allow the engine to cool, and then remove the three bolts [1] from the muffler shield [2] using a 10 mm socket wrench.
- Remove the muffler shield [2].
- Remove the screw [4].
- Remove the spark arrester [3] from the muffler [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.
- Install the spark arrester in the muffler.
- Install the muffler components on the engine, and tighten the three bolts securely.

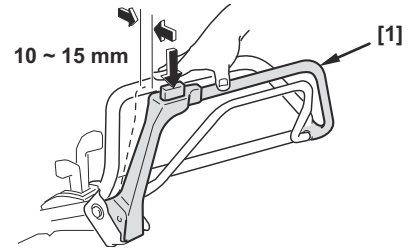


CONTROL CABLE ADJUSTMENTS

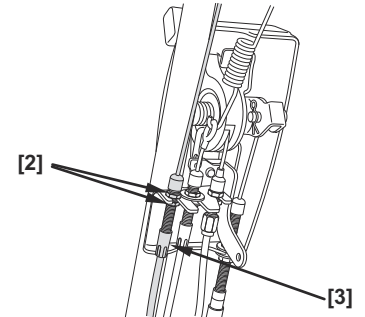
Blade Control Cable

Measure free play at the top of the blade control lever [1], while holding the button down. Free play should be 10 ~ 15 mm. If adjustment is necessary:

- Loosen the locknuts [2] with a 10 mm wrench, and move the adjuster [3] up or down as required.
- Tighten the locknuts and recheck free play.
- Start the engine outdoors, and operate the blade control lever.

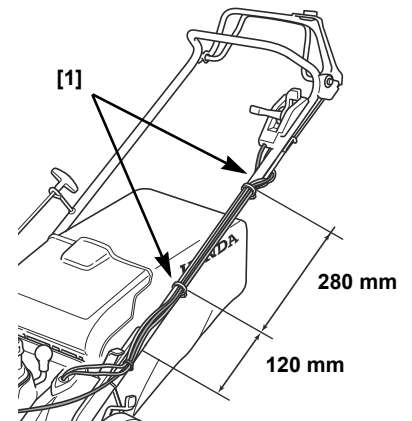


If the blade does not start or stop as it should, with correct cable adjustment, take the mower to an authorized Honda dealer for repair.

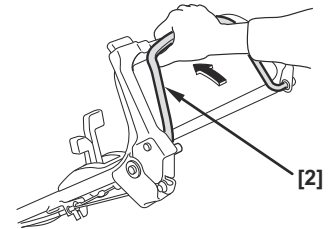


Drive Clutch Cable Adjustment

- With the engine stopped, position the control cable bands [1] as shown.
- Pull the shift lever all the way back to the stop position.
- Start the engine and move the throttle lever to the FAST position.

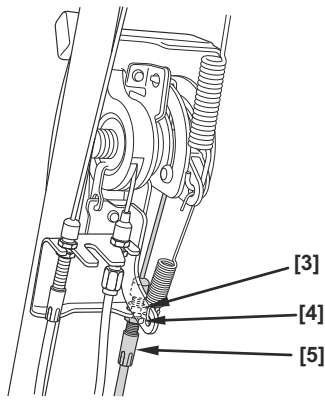


- Engage the drive clutch lever [2] and confirm the following:
 - Mower does not self-propel.
 - Mower begins to self-propel or creeps very slowly forward when the shift lever is moved one notch forward.



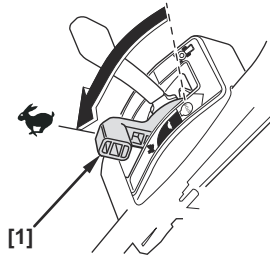
If the mower does not operate as outlined above, go to step 5. If the mower does operate as outlined above, adjustment is not required.

- Loosen the top [3] and bottom [4] drive clutch cable locknuts with a 10 mm wrench. Move the adjuster [5] up or down, as required, until the mower operates as outlined in step 4. Tighten the locknuts.

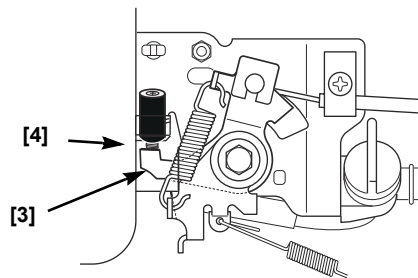


Throttle Cable Adjustment

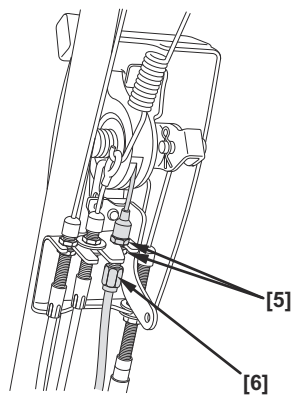
- Move the throttle lever [1] to the fast position [2].
- Remove air cleaner cover.



- Check that the control lever [3] just touches the stopper screw [4]. If adjustment is required, proceed to step 5.



- Loosen lock nuts [5] with a 10 mm wrench. Move adjuster [6] up or down as required to achieve clearance in step 3. Retighten locknuts [5].



BLADE REMOVAL AND INSTALLATION

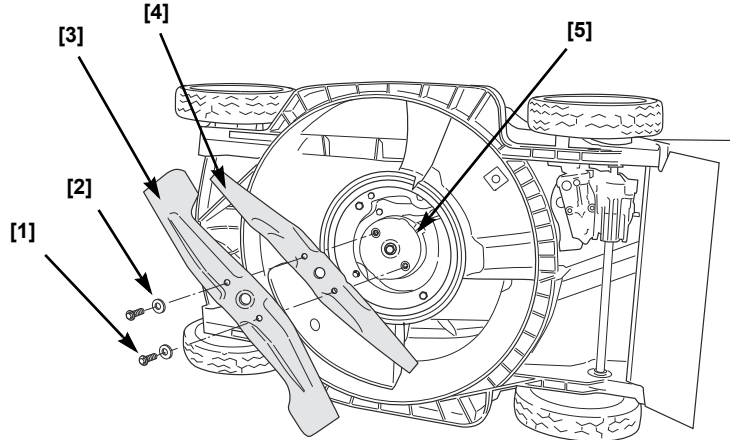
If you remove the blades for sharpening or replacement, you will need a torque wrench for installation. Wear heavy gloves to protect your hands.

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

BLADE REPLACEMENT: Use Honda Genuine replacement blades or their equivalent.

Blade Removal

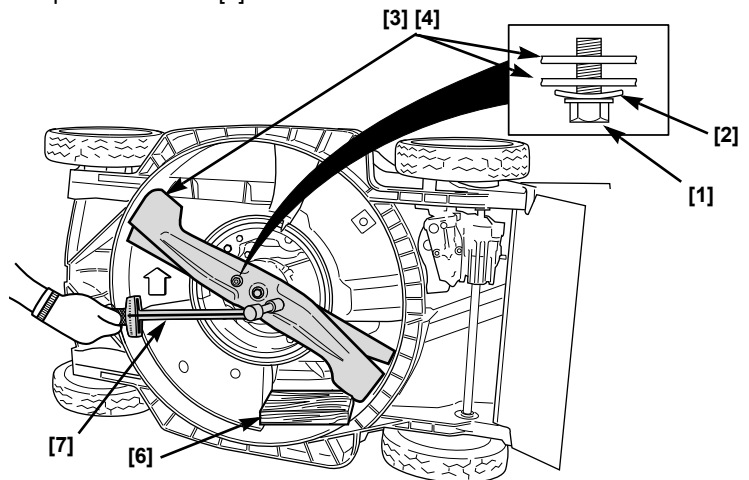
- H1EA:** Put the throttle lever in the STOP position.
H2EA: Turn the key to the OFF position.
- Disconnect the spark plug cap. Tilt the mower to the right so the fuel cap is up. This will help prevent fuel leakage, motor oil seeping into the air filter, and hard starting.



- Use a 14 mm (6 point) socket wrench and remove the two blade bolts [1] and special washers [2] from the blade control assembly [5]. Use a wooden block to prevent the blades from turning when removing the bolts.
- Remove the upper [4] and lower blades [3].

Blade Installation

- Clean dirt and grass from around the blade mounting area.
- Install the blades [3] and [4] using the two blade bolts [1] and special washers [2] as shown.



⚠ WARNING

Operating this mower with only one blade will result in an improperly seated blade that can be thrown from the mower and seriously hurt or kill someone. Always use both blades as a set.

Be sure to install the special washers with the concave side toward the blades and the convex side toward the head of the bolt.

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

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

Blade bolt torque: 49 ~ 59 N·m

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

GRASS BAG CLEANING AND REPLACEMENT

Cleaning

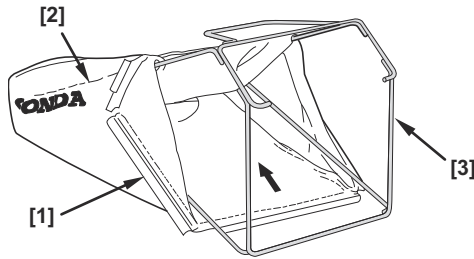
Wash the bag with a garden hose, and allow it to dry completely before use; a wet bag will clog quickly.

Replacement

Replace a worn or damaged bag with a Honda replacement bag or its equivalent.

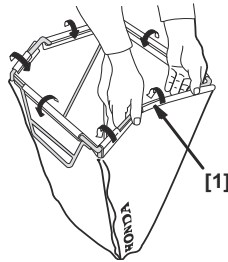
Removal

- Unclip the plastic edges [1] of the bag [2] from the frame [3].
- Remove the bag from the frame.



Installation

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



CHARGING THE BATTERY (HZEА TYPE)

The lawn mower engine has an internal charging system. Under normal mowing usage it is not necessary to charge or maintain the battery.

If the mower fails to start or has been stored for an extended period:

- Start the lawn mower using the recoil starter manually for one mowing session. This should charge the battery sufficiently to use the electric starter.
- If you prefer, there is an optional AC powered battery charger available from your Honda dealer.
- If the lawn mower fails to start (after manually starting for one mowing session) check for a blown fuse.
- If it still fails to start, take the lawn mower to an authorized Honda servicing dealer.

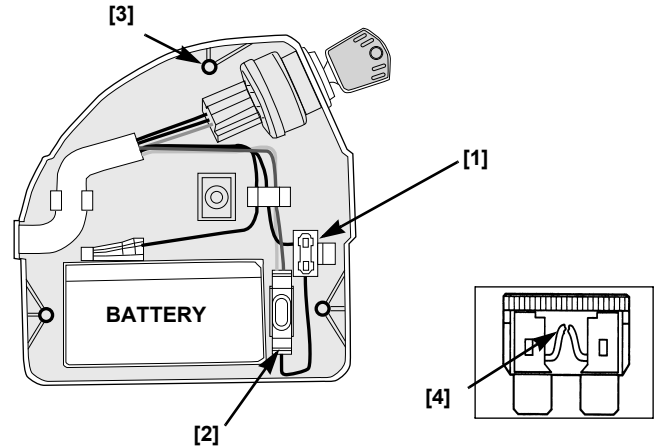
REPLACING A FUSE

The electric starter circuit and battery are protected by a 40 ampere fuse [1] and 3 ampere fuse [2]. If the 40 amp fuse burns out, the electric starter will not operate and if the 3 amp fuse burns out, the battery will not charge. The engine can be started manually if either fuse burns out.

- Remove the battery cover by removing the three cover mounting screws [3].

- Remove and inspect the fuses. If they are burned out [4], replace with the correct fuse as shown.

Never use a fuse with a rating other than shown. Serious damage to the electrical system or a fire can result.



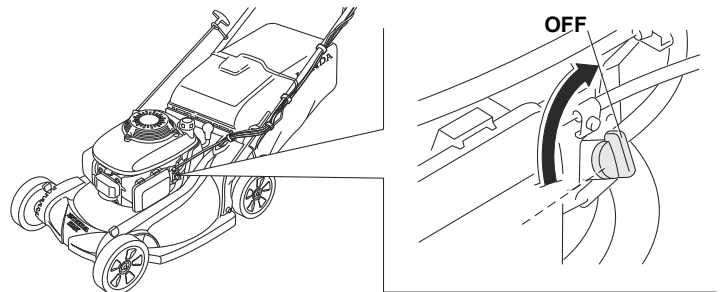
If a frequent fuse failure occurs, it usually indicates a short circuit or an overload in the electrical system. Take the mower to an authorized Honda servicing dealer for repair.

TRANSPORTING

Before Loading

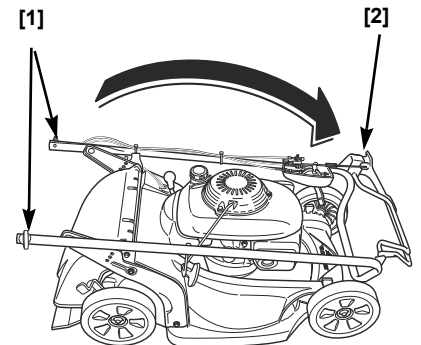
If the engine has been running, allow it to cool for at least 15 minutes before loading the mower on the transport vehicle. A hot engine and exhaust system can burn you and can ignite some materials.

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



Handlebar Folding

- Remove the grass bag. You can place it on top of the engine, with the bag opening to the front.
- Turn the handlebar adjust knobs [1] 90° into the unlock position.
- Fold handlebar [2] over mower.



When folding the handlebar, be careful to avoid kinking or pinching the control cables.

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.

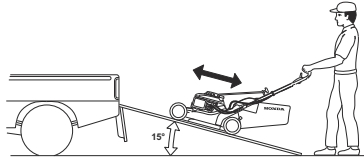
NOTICE

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 lawn mower 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 lawn mower again.

Cleaning

1. Wash the lawn mower, including the underside of the mower deck.

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 filters 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 a half hour before washing.

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.

Before washing the underside of the mower deck, be sure the throttle lever is in the STOP position and the fuel valve is in the OFF position. Tilt the mower to the right so the fuel cap is up. This will help to prevent fuel leakage and hard starting due to carburetor flooding. Wear heavy gloves to protect your hands from the blade(s).

Grass Bag

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

2. After washing the lawn mower, wipe dry all accessible surfaces.
3. With the mower in an upright position, start the engine outdoors, and let it run until it reaches normal operating temperature to evaporate any water remaining on the engine.
4. Stop the engine and allow it to cool.
5. After the lawn mower 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.

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 mower deteriorates during storage, you may need to have the carburetor and other fuel system components serviced or replaced.

The length of time that petrol can be left in your fuel tank and carburetor without causing functional problems will vary with such factors as 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 petrol was not fresh when you filled the fuel tank.

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. 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.
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. Turn the fuel valve to the OFF position.
4. 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.

Note:

- All stabilizers have a shelf life and their performance will deteriorate over time.
- Fuel stabilizers will not reconstitute stale fuel.

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.

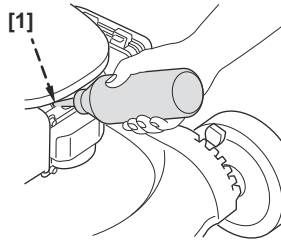
Fuel system damage or engine performance problems resulting from neglected storage preparation are not covered under the *Distributor's Warranty*.

Engine Oil

Change the engine oil (page 14).

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 17).

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*.

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

TROUBLESHOOTING

ENGINE WILL NOT START

| Possible Cause | Correction |
|---|--|
| Fuel valve OFF | Turn the fuel valve ON (page 4). |
| Throttle lever in the wrong position | Move the throttle lever to the FAST position. (page 10). |
| Starter turns slow or not at all (HZEA type) | <ul style="list-style-type: none"> • Use the recoil starter for at least one mowing session to allow the battery to charge (page 9) • Check for blown fuse (page 17) |
| Out of fuel | Refuel (page 6). |
| Bad fuel; mower stored without treating the petrol, or refueled with bad petrol | Refuel with fresh petrol (page 6). |
| 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 |
|---|---|
| Throttle not set to FAST | Move the throttle to FAST (page 10). |
| Grass is too tall to cut | Raise the cutting height (page 8), cut a narrower swath, use a slower ground speed (page 10), or cut more frequently. |
| Mower deck is clogged | Clean out the mower deck (page 12). |
| Air cleaner is clogged | Clean or replace the air cleaner (page 14). |
| Bad fuel; mower stored without treating petrol, or refueled with bad petrol | Refuel with fresh petrol (page 6). |
| 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 mower deck | Clean out the mower deck (page 12). |
| Blades loose, bent, damaged, or unbalanced by improper sharpening | Tighten loose blade bolts (page 16). If blades are found to be bent or damaged, take the lawn mower 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 BAGGING PROBLEMS

| Possible Cause | Correction |
|---|---|
| Engine speed is too slow to cut well | Move the throttle lever to the FAST position (page 4). |
| Mower is moving too fast for lawn conditions | Shift to a slow speed (page 10). |
| Cutting height adjustment levers set at different positions | Set all levers at the same cutting height position (page 5). |
| Grass bag overfilled or clogged | Empty the grass bag. Wash the grass bag if it is clogged with dirt (page 17). |
| Mower deck is clogged | Clean out the mower deck (page 12). |
| Blades dull, worn, or damaged | Sharpen or replace the blades if necessary (page 16). |
| Wrong blades installed | Install correct blades (page 16). |

SPECIFICATIONS

| | | |
|-------------------------|---------|---------|
| MODEL | HRX537 | |
| TYPE | HYEA C2 | HZEA C3 |
| DESCRIPTION CODE | MAGA | |

GENERAL

| | | |
|---|---|---------|
| Length | 1,825 mm | |
| Handlebar height (Middle position) | 1,115 mm | |
| Dry weight | 44.8 kg | 46.4 kg |
| Width | 585 mm | |
| Cut width | 530 mm | |
| Cut height adjustments | 19 mm, 32 mm, 46 mm, 62 mm, 75 mm, 88 mm, 101 mm | |
| Grass bag capacity | 88 ℓ | |
| Sound pressure level at operator's ears (According to 2006/42/EC directive) | 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 2006/42/EC directive) | 20.8 m/s ² | |
| Uncertainty | 3.8 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 ₋₁₅₀ rpm |
| Idle speed | 1,700 ± 150 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 octane rating of 91 or higher |
| Fuel tank capacity | 0.91 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 4).

DRIVE

| | |
|-------------------------------------|-------------------|
| Type | Hydrostatic |
| Engine to transmission | V-belt |
| Main clutch | Fluid type |
| Mower speed (engine @ 2,850 rpm) | 0 ~ 1.61 m/s |
| Recommended fluid | Honda hydrostatic |