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HONDA

POWER EQUIPMENT

LAWN MOWER OWNER'S MANUAL

&

Service Record Booklet

Models:



HRU19RPU
HRU19DPU



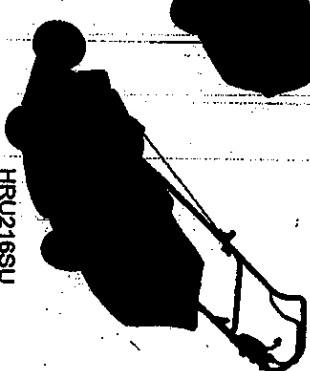
HRU198PU
HRU196DPU



HRU197PU
HRU197DPU



HRU217DPU



HRU216SU
HRU216DSU



HMA C90310 / Part No. C9031

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Honda Australia Motorcycle and Power Equipment Pty. Ltd.
ABN 96 006 662 862 (trading as Honda MPE).

Warranty

Honda Warranty

Honda* warrants each new Honda lawn mower to be free from defects in material and workmanship for the period detailed on your warranty registration form.

In order to qualify for this warranty, the Warranty Registration form (supplied) must be completed and returned to Honda Australia Motorcycle and Power Equipment Pty. Ltd., Private Bag No. 19, Somerton, Victoria, 3062 within ten (10) days of the date of purchase. The Honda warranty is limited. In order to qualify, the service schedule sheets located at the back of this manual must be completed (pages 27 to 28).

Any Authorised Honda Lawnmower Dealer will repair any part that proves defective within the limits of this warranty at no charge to the owner for parts and labour. All parts replaced under this warranty become the property of Honda. Transportation costs for the product either to or from the dealer are the responsibility of the owner.

This warranty will not apply to:

- Any part which has been subject to misuse, negligence, accidental damage, improper or inadequate maintenance, or improper storage.
- Repairs rendered necessary by or arising from, the use of other than genuine Honda parts.
- Normal maintenance items, including but not limited to adjustment and cleaning of carburettor, fuel strainer and air filter.
- Normal replacement of service items, including but not limited to spark plug, air filter and cutting blades.
- Deterioration of any item due to normal use, fair wear and exposure unless due to a defect in material or workmanship.
- Any work or adjustment performed by persons other than Authorised Honda Lawnmower Dealers, or damage resulting therefrom.

The benefits conferred by this warranty are in addition to all other rights and remedies in respect of the product which the purchaser has under the Trade Practices Act 1974 and/or any relevant State or Territory Acts. Where permitted, the liability of Honda shall be limited at its option to the repair or the replacement of the mower.

*Honda is: Honda Australia Motorcycle and Power Equipment Pty. Ltd.
ABN 96 006 662 862 Private Bag No. 19 Somerton Victoria 3062.

These warranty conditions apply to Australia only. Purchases in other countries should refer to their local distributor for warranty conditions.

Safety Instructions

Please read before using mower.

Lawnmower models HRU197DPU, HRU216SU, HRU19RPU, HRU196PU, HRU197PU, HRU19DPU, HRU196DDPU, HRU216DSU & HRU217DPU are designed for normal domestic use. Caution should be exercised when mowing through tall grass or other objects, such as piles of dry leaves, which may result in the build up of debris on the mower. This may present a fire hazard if the debris comes into contact with the hot engine or engine exhaust parts.

1. Never mow while barefoot or wearing open sandals or thongs. Wear long trousers and heavy shoes.
2. Know your controls. Read the Owner's Manual carefully. Learn how to stop the engine quickly in an emergency. In the event of an emergency, stop the engine immediately.
3. Make sure the lawn is clear of sticks, stones, bones, wire and any debris. They could be picked up and thrown by the blades, resulting in possible injury to the operator or others or damage to the machine.
4. Check your lawn for hidden obstructions such as drain covers and partially buried stones etc, taking care to avoid them while mowing.
5. Stop the engine and disconnect the spark plug cap before clearing blockages, checking or working on the mower.
6. Before using your mower, always visually inspect it to see that blades, blade bolts and cutter assembly are not worn or damaged. Replace worn or damaged blades and bolts in sets to preserve balance. **DAMAGED BLADES AND WORN BOLTS ARE MAJOR HAZARDS.**

7. Check all nuts, bolts, screws and blades often. Always be sure the mower is in safe operating condition. Use only replacement parts made and guaranteed by Honda.
8. Refuel outdoors only. Do not smoke while fuelling engine. Add fuel before starting engine. Never remove the cap off the fuel tank or add fuel while the engine is running or the engine is hot. If fuel is spilled, do not attempt to start the engine but move machine away from the area of the spill and avoid creating any source of ignition until fuel vapours have dissipated.
9. Do not mow whilst people, especially children, or pets are in the mowing area.
10. Replace worn or damaged mufflers prior to use.
11. Mow only in good daylight.
12. Start the engine carefully with feet well away from the blades.
13. Do not operate in a confined space where exhaust fumes (carbon monoxide) can collect. This may cause serious injury.
14. Stop the engine whenever you leave the mower, even for a moment.
15. Do not allow children or people unfamiliar with these instructions to use the mower.

Safety Instructions

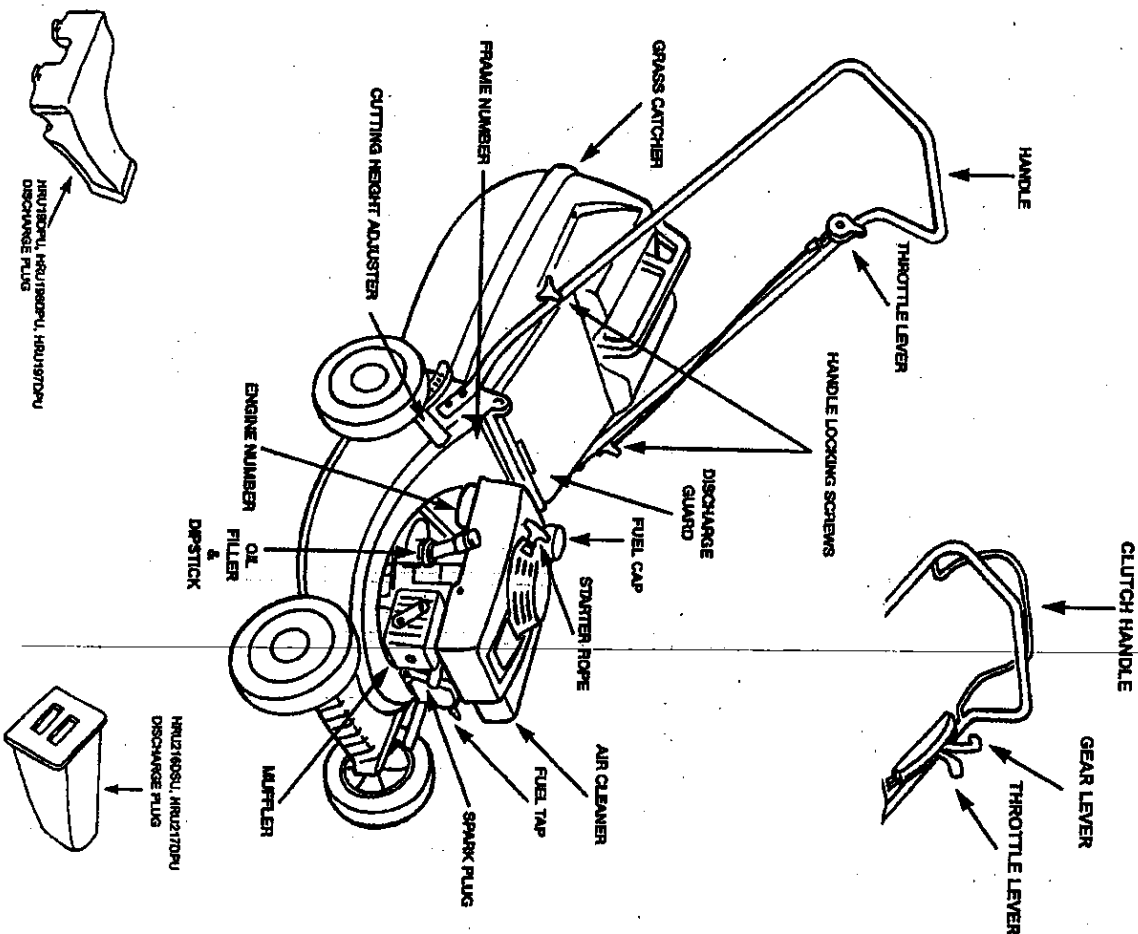
16. Store the mower in a well ventilated place away from naked flames, such as may be found in hot water heaters.
17. Exercise caution when handling the engine or exhaust system following use. These parts of the mower heat up during use and may cause injury.
18. Do not over speed the engine or alter governor settings. Excessive speed is dangerous and may cause injury and shorten mower life.
19. You should wear suitable eye protection when operating a mower.
20. Turn the fuel off at the conclusion of mowing and reduce the throttle setting during engine run-out.
21. Store fuel in a cool place in a container specifically designed for the purpose. In general, plastic containers are unsuitable.
22. Stop the engine, disconnect the spark plug cap and inspect the mower:
 - (a) If the mower begins to vibrate abnormally; or
 - (b) after striking a foreign object.
23. Never cut grass while walking backwards.
24. Stop the engine before pushing a mower across gravel drives, walks or roads.
25. Walk while mowing, never run.
26. Mow across the face of a slope, NEVER up and down the face of slopes. Exercise extreme caution when changing direction on slopes. Do not mow on steep slopes.
27. Exercise caution when lifting or carrying a mower. Never pick up or carry a mower when it is operating.
28. Never use the mower unless:
 - 1) On Models HRU19RPU, HRU196PU, HRU197PU, HRU216SU the grass catcher is fitted.
 - 2) On Models HRU19DPU, HRU196DPU, HRU197DPU, HRU216DSU, HRU217DPU the grass catcher or discharge plug is fitted.

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Component Identification

NOTE: Discharge plug optional extra for models HRU19RPU, HRU196PU, HRU197PU, HRU216SU.

HRU216SU & HRU216DSU HANDLE COMPONENT IDENTIFICATION



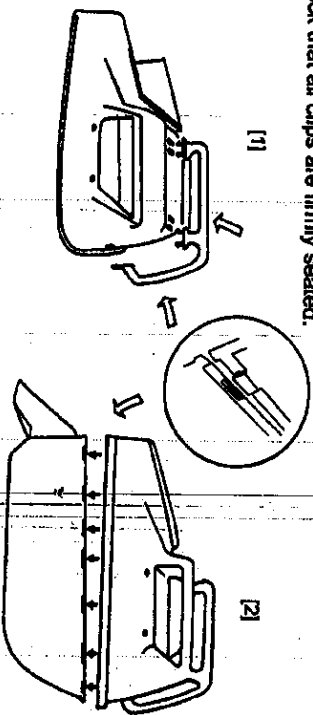
Setup Instructions

Grass catcher: HRU19RPU, HRU19DPU, HRU196PU, HRU196DPU, HRU197PU, HRU197DPU

Your grass catcher has been left dismantled for ease of packing and transportation. Catcher component check list: Handle x1, Top cover section x1 & Lower cover section x1.

To assemble, simply clip each item together. First take the handle and place the clips into the three locating holes on the top cover section. Be sure that the clips are firmly seated [1].

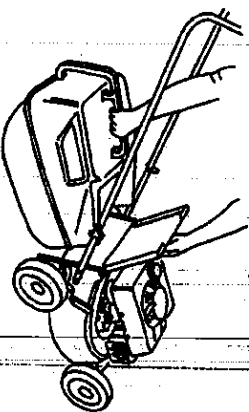
Next take the top cover section and position directly over the lower section [2]. Starting from the rear, place each clip through the locating holes and push firmly together. Be sure to check that all clips are firmly seated.



NOTE: The clips are not designed to come apart once they have been locked together. Do not attempt to unclip as this may damage the grass catcher.

Fitting of grass catcher

Raise the discharge guard and place the lower tongue of the catcher over the rear axle. Tilt catcher upward and lower the discharge guard over the top of catcher, making sure that the discharge guard seats firmly over raised lip section.



WARNING

Always ensure engine is stopped before fitting or removing grass catcher.

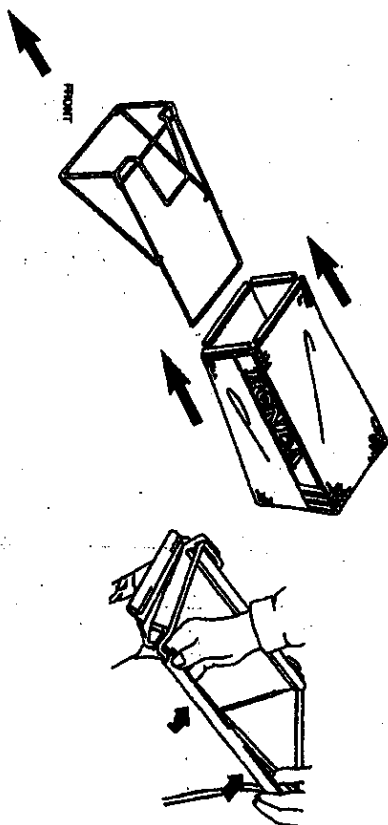
Setup Instructions

Grass catcher: HRU216SU, HRU216DSU, HRU217DPU

Your grass catcher has been left dismantled for ease of packing and transportation.

Catcher component check list: Metal frame work x 1 & Fabric grass bag x 1

To assemble the catcher simply slide the fabric over the metal framework and attach the four nylon clips to the metal frame as shown below.

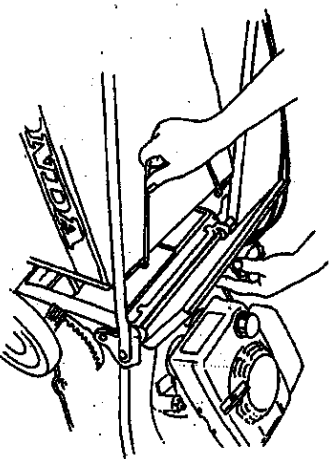


Fitting of grass catcher

Raise the discharge guard and hook the edges of the metal frame work to the ridge on top of the rear chute, then lower the discharge guard.

WARNING

Always ensure the engine is stopped before fitting or removing the catcher.

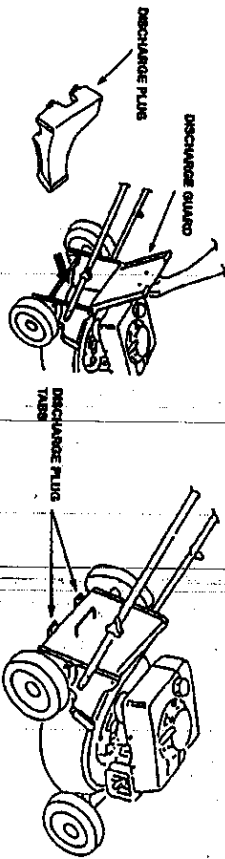


Setup Instructions

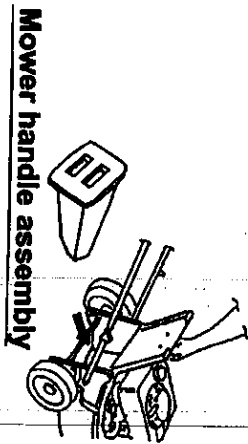
Setup instructions

Discharge plug installation: HRU190DPU, HRU196DPU & HRU197DPU

1. Ensure engine is stopped.
2. Raise discharge guard and insert discharge plug at the base of the rear chute.
3. Close discharge guard and ensure tabs protrude from discharge guard on 19" models.



Discharge plug installation: HRU216DSU, HRU217DSU



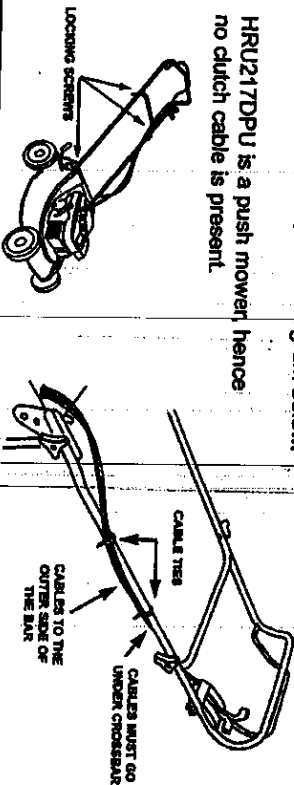
Mower handle assembly

HRU216SU, HRU216DSU, HRU217DPU

The handle assembly comes in 2 sections (upper and lower). The upper section has the controls and cables already fixed to it. The lower section is fitted to the mower first with the long bolt and locking screws. The upper section is then fitted to the lower using the shorter bolts and locking screws.

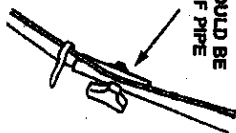
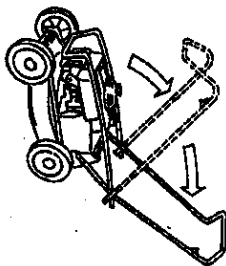
Take care to route the cables as per the diagram below.

NOTE: HRU217DPU is a push mower hence no clutch cable is present.



Setup Instructions

HRU191RP, HRU190DP, HRU196PU, HRU196DP, HRU197PU, HRU197DP



Fold back the handle to the upright position and tighten the locking screws on each side. To fold handle down, loosen the locking screws and fold handle forward over the mower.

NOTE: Make sure the throttle control cable is lying on top of handle pipe to prevent fouling when handle is folded forward.

Engine preparation

Place the mower on level ground. Remove the oil filler cap and fill the engine with the recommended oil to the UPPER mark on the dip stick.

Recommended oil is Honda Premium Engine Oil 10W 30 (API classification SG up to SJ)

Engine oil capacity is: 0.65 litres (HRU196PU, HRU196DP, HRU216SU, HRU216DSU)

See Diagram 1

0.55 litres (HRU191RP, HRU190DP, HRU197PU, HRU197DP, HRU217DP) See Diagram 2

NOTE: Do not screw dipstick in when checking oil level.

DIAGRAM 1

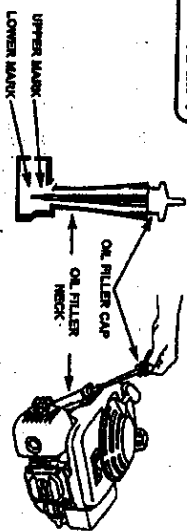
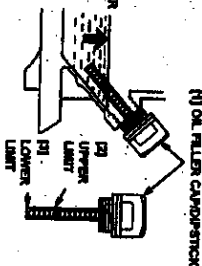


DIAGRAM 2



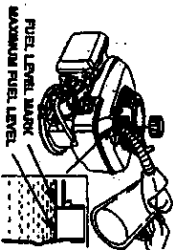
Fuel tank

Fill the fuel tank with fuel. Unleaded fuel only should be used. For safety warnings and refuelling procedures refer to Safety Instructions, page 3.

NOTE: Fuel Tank capacity is 1.1 litres (HRU191RP, HRU190DP, HRU197PU, HRU197DP, HRU217DP)

Fuel Tank capacity is 1.5 litres (HRU196PU & HRU196DP)

Fuel Tank capacity is 2.0 litres (HRU216SU & HRU216DSU)



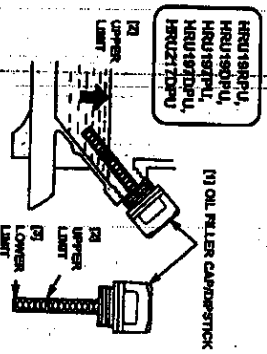
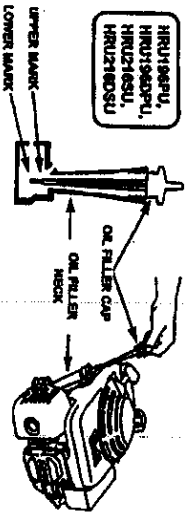
Important: Before you start the mower

Before you start the mower

1. Check the engine oil

NOTE: Do not screw dipstick in when checking oil level.

Ensure the engine is stopped and place the mower on level ground. Remove the oil filler cap and check the oil level using the dip stick. If the level is low add the recommended oil to the UPPER mark on the dip stick. Do not over-fill. Excess oil will result in power loss and smoking. Never use the mower if the oil level is low. This will result in serious engine damage.

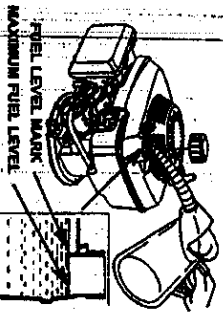


2. Check the fuel level

Use unleaded fuel only. Never use an oil/fuel mixture or dirty fuel. Avoid getting dirt, dust and water in the fuel tank.

WARNING

- Fuel is extremely flammable and explosive under certain conditions. Refuel in a well ventilated area with the engine stopped.
- Do not smoke or allow flames or sparks in the area where the mower is refuelled or where fuel is stored.
- Be careful not to spill fuel when refuelling. Fuel vapour or spilled fuel may ignite. Make sure that any spilled fuel is dry before starting the engine. Do not overfill fuel tank and make sure the filler cap is securely closed after refuelling.
- Refuel only when engine is cold.
- Add fuel only up to the fuel level mark in the neck of the fuel tank.



3. Check the air cleaner

Remove the air cleaner cover and remove the air cleaner element. Inspect both the outer foam element and the inner paper element, if fitted, for dirt. Clean or replace if necessary. Refer to the Maintenance Section (page 22) for correct cleaning procedures.

Important: Before you start the mower

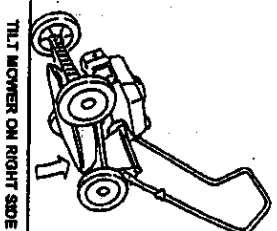
4. Check the cutting blades

WARNING

Exercise caution when inspecting and checking the blades. Stop engine before tipping the lawn mower to inspect the blades, and remove fuel from fuel tank. Disconnect spark plug cap.

Tilt the mower over to the right side and inspect the cutting blades for damage.

Check the cutting blade bolts for tightness.



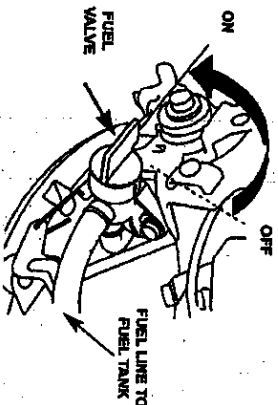
For blade replacement warnings and procedures refer to Maintenance Section (page 22).

Operational Procedures

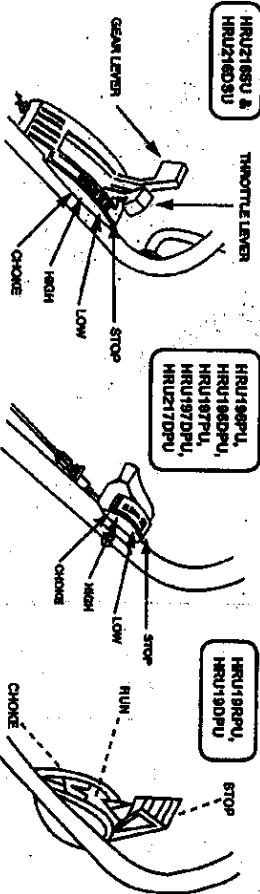
Starting and stopping the engine

Starting the engine

1. Turn the fuel tap to the ON position.
2. Place the mower on firm level ground. Move the throttle lever to the CHOKE position.



NOTE: Use of the CHOKE may not be necessary when the engine is warm or the air temperature is high. Move the throttle lever to LOW position instead.



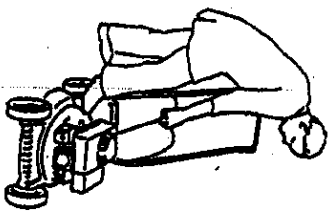
Operational Procedures

3. Hold handle bar firmly. Pull the starter rope lightly until you feel resistance, then pull briskly.

NOTE: Do not allow the rope to snap back. Return it by hand to prevent damage to the starter.

4. If the choke was used to start the engine, move the throttle lever to the FAST position as soon as the engine warms up enough to run smoothly without use of the choke.

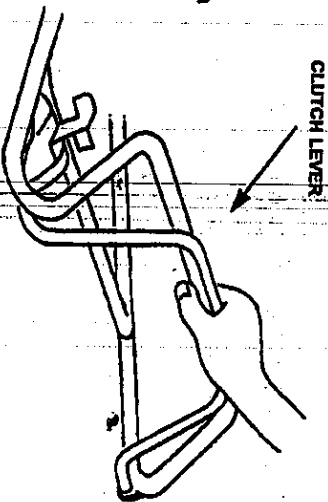
5. For best engine performance, it is recommended that the engine be operated with the throttle in the FAST position.



Clutch lever operation: HRU216SU & HRU216DSU

The mower will only move forward when the clutch lever is squeezed against the handle bar.

The drive stops when the lever is released.



Gear lever operation: HRU216SU & HRU216DSU

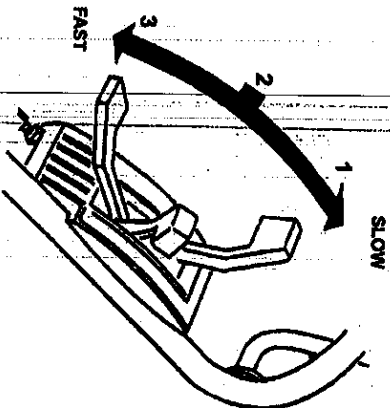
The gear lever has three positions enabling the speed of the mower to be varied according to the requirements of the operator and the conditions.

Ensure you are familiar with the mower speeds in each gear prior to the commencement of mowing.

NOTE: The speed must only be changed

when the mower is stationary.

Release clutch lever before changing gears.



Flooded engine

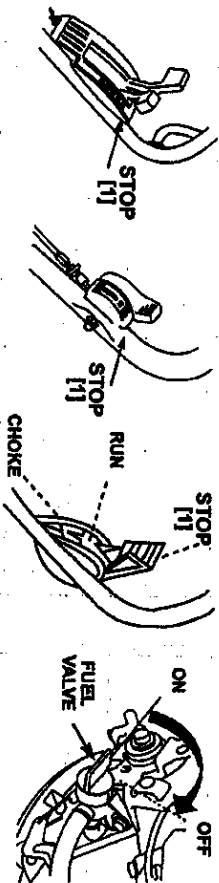
If the engine will not start after several pulls on the starter rope, the engine may be flooded.

To clear a flooded engine:

1. Move the throttle lever to the STOP position and turn off the fuel tap.
2. Remove and dry the spark plug. When reinstalling the spark plug, screw it in by hand until seated, then tighten a further quarter turn with the spark plug spanner (refer page 21).
3. Move the throttle lever to the FAST position. Turn on the fuel tap and repeat step (3) for starting the engine (page 12).

Stopping the engine

1. Slowly move the throttle lever to the STOP position [1].
2. Turn the fuel tap to the OFF position (lever vertical). (HRU196 and 216 - push fuel tap towards the front of the mower).

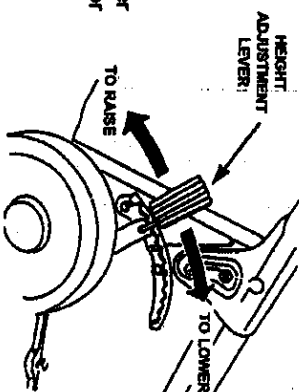


Cutting height adjustment

Eleven height settings are available to suit your requirements.

To adjust the height:

- Stop the engine.
- Pull the adjuster lever away from the adjuster panel and move towards the rear (to raise) or towards the front of the mower (to lower).



Operational Procedures

Operational Procedures

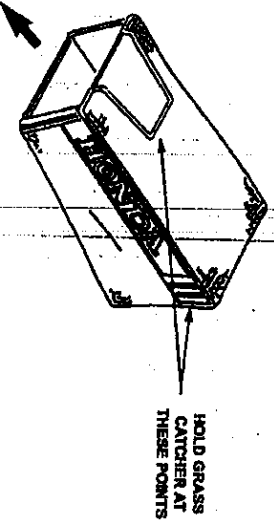
Using your mower

- Read and observe the Safety instructions on page 3 of this manual. Be alert.
- Always use the mower with the grass catcher (HRU19RPU, HRU196PU, HRU197PU & HRU216SU).
- Note HRU19DPU, HRU196DPU, HRU197DPU, HRU216DSU & HRU217DPU should be used with either grass catcher or discharge plug fitted.
- Adjust the throttle lever to the desired engine speed.
- Stand directly behind the mower and firmly hold the handle with both hands.
- Walk, never run with a mower. Control the direction by using the handle, not by foot pressure on the mower base.
- Always push, never pull the mower while the engine is running.
- Mow across slopes, NEVER up and down the face of slopes. Exercise extreme caution when changing direction on slopes. Do not mow on excessively steep slopes.
- It is advisable to start mowing at the high cutter height setting then lower to the desired cut.
- Empty the grass catcher regularly, particularly if the grass is long, as the catcher will fill more quickly.
- Never bind or strap the clutch lever to the handle (HRU216SU & HRU216DSU).

To empty the grass catcher: 21" MODELS - HRU216SU, HRU216DSU, HRU217DPU

Stop the engine.

- Lift the discharge guard and grasp the top handle of the catcher. Lift and pull back to remove the catcher. Empty contents.
- Check and clear the catcher. Also check the rear housing chute for blockages, particularly if grass is damp. Disconnect the spark plug cap and clear if necessary.



Operational Procedures

To empty the grass catcher: 19" MODELS - HRU19RPU, HRU19DPU, HRU196PU, HRU196DPU, HRU197PU, HRU197DPU

Stop the engine.

- Lift the discharge guard and grasp the top handle of the catcher. Lift and pull back to remove the catcher. Empty contents.
- Check and clear the catcher. Also check the rear housing chute for blockages, particularly if grass is damp. Disconnect the spark plug cap and clean if necessary.

Cleaning

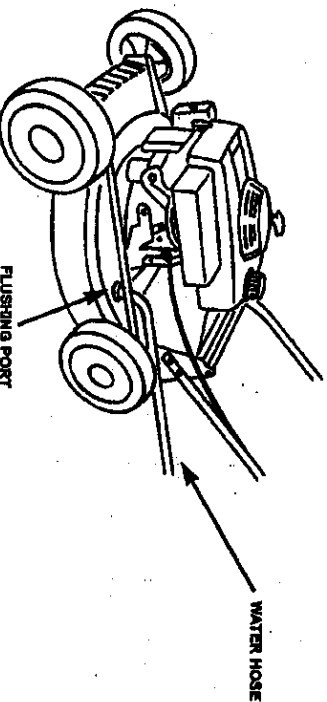
To maintain cutting performance and reduce fire hazard, the mower should be cleaned on completion of each mowing operation.

CAUTION: Do not hose the engine and its components.

To clear the underside of the mower base (all models), direct water through the flushing port with a garden hose while the engine is running at idle (see below). Be sure to clean out the catcher, particularly the vents on top of the catcher.

WARNING

Do not place hands or feet under cutter deck at any time while engine is running. Do not tilt the mower while the engine is running.



Transportation and storage

Transportation

Turn the fuel tap OFF when transporting the mower.

WARNING

To avoid spillage of fuel and oil do not tilt the unit, as spilled fuel may ignite.

The handle may be folded for convenience. Remove the grass catcher (if fitted), loosen the handle locking screws and fold the handle forward, as shown below.

Take care not to damage the cables when folding the handle bar.

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 fuel system can burn you and can ignite some materials.

Turn the fuel valve OFF. This will prevent carburetor flooding and reduce the possibility of fuel leakage. If equipped, remove the grass bag.

Loading and unloading

A suitable loading ramp is not available, two people should load the mower on and off the transport vehicle while holding the mower level.

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 controls, adjustment levers, cables and the carburetor.

Storage

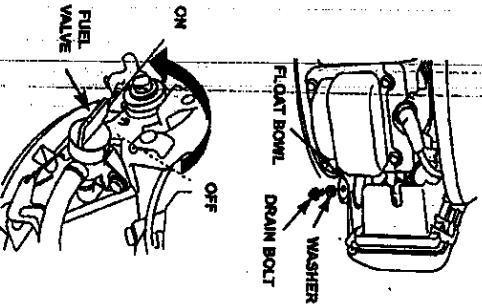
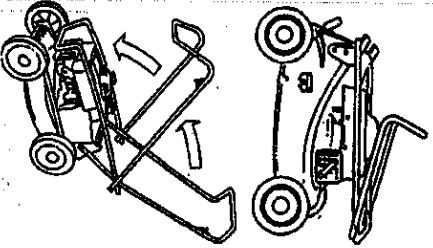
Follow the following procedures if mower is to be stored for an extended period (3 months or more).

Preparing the fuel tank and carburetor

Remove the carburetor bowl drain bolt and washer with a 9mm wrench, and drain the carburetor bowl fuel into an approved fuel container.

Do not force the carburetor bowl off the carburetor body.

Turn the fuel tap to the ON position. This will allow the fuel tank to drain through the carburetor bowl. After draining carburetor and fuel tank, install the drain bolt and washer and tighten securely. Be sure the carburetor bowl is firmly sealed against the carburetor body before tightening the drain bolt.



Transportation and storage

WARNING

Gasoline is highly flammable and explosive and you can be burned or seriously injured when handling fuel.

TO AVOID INJURY:

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

Engine oil

1. Change engine oil (refer Maintenance Section, page 19).

2. Remove the spark plug and pour 5-10cc of clean engine oil into the cylinder. Using the starter rope, crank the engine a few revolutions slowly to distribute the oil in the cylinder, then reinstall the spark plug.

If your mower will be stored with fuel in the fuel tank and carburetor, it is important to reduce the hazard of fuel vapour ignition. Select a well ventilated storage area away from any appliance that operates with a flame, such as a furnace or water heater. 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 they may promote rust and corrosion.

If there is fuel in the fuel tank, leave the fuel valve in the OFF position.

Keep the mower level during storage. Tilting can cause fuel or oil leakage.

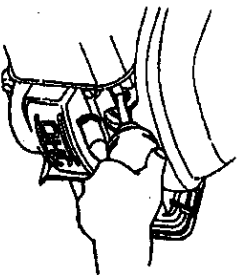
With the engine and exhaust system cool, cover the engine to keep out dust.

NOTE:

A hot engine and exhaust system can ignite or melt some materials. Do not use sheet plastic as a dust cover. A non-porous cover will trap moisture around the engine, promoting rust and corrosion.

Removal from storage

1. Check your mower as described in the "Before You Start The Mower" section of this manual (refer page 10).
2. If the fuel was drained during storage preparation, fill the tank with fresh fuel. If you keep a container of fuel for refuelling, be sure it contains only fresh fuel. Fuel oxidises and deteriorates over time, causing hard starting.
3. If the cylinder was coated with oil during storage preparation, the engine will smoke briefly at start-up. This is normal.



Maintenance

Maintenance

Disconnect the spark plug cap before performing any maintenance work.

Periodic inspection and adjustment of your Honda lawnmower is essential if a high level of performance is to be maintained. Regular maintenance will also ensure long service life. The required service intervals and the kind of maintenance to be performed is described hereunder.

- GCV160 engine only, (HRU198PU, HRU19DPU),
- GXV160 engine only, (HRU196PU, HRU196DPU, HRU216SU, HRU216DSU),
- GSV190 engine only, (HRU197PU, HRU197DPU, HRU217DPU).

Maintenance schedule

Regular service period ¹ Performed at every indicated month or operating hours interval, which ever occurs first	Each use	First month or 5 hrs	First month or 20 hrs	Every 3 months or 25 hrs	Every 3 months or 50 hrs	Every 6 months or 100 hrs	Every 6 months or 150 hrs	Every year or 200 hrs	Every year or 300 hrs
Engine oil	Change	◆	○	◆	◆	○			
if Cleaner	Check	◆	○	◆	○	◆			
Idle Bolt, Blades	Clean or replace			◆	○	◆		■	■
Washers	Check & replace if necessary							◆	◆
Spark Plug	Check, Clean & Adjust					◆		◆	◆
Honda Cables	Check & Adjust					◆		◆	◆
Blade Clearance	Check & Adjust					◆		◆	◆
Gas Speed	Check & Adjust							◆	◆
Fuel tank and filter	Clean							◆	◆
Fuel hoses	Check & replace if necessary							◆	◆

◆ ○ every 2 years*

NOTE: Combustion chamber cleaning is necessary for GCV160 (◆) and GSV190 (■) at 250 hours, and GXV160 (○) at 300 hours.

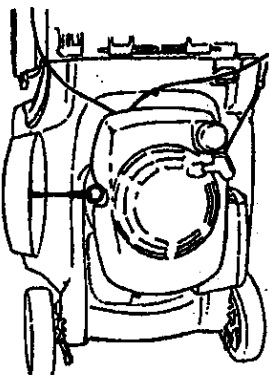
- For commercial use, log hours of operation to determine proper maintenance intervals.
- Replace the paper element only.
- Service more frequently when used in dusty conditions.
- These items should be serviced by an Authorised Honda Dealer.
- Replace spark plug.
- Change engine oil every 25 hours when used under heavy load or in high ambient temperature.

Maintenance

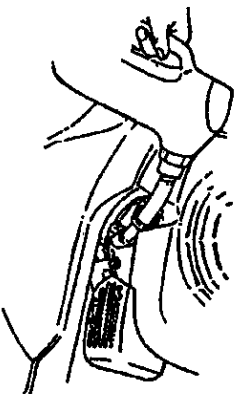
Engine Oil change

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

1. Stop the engine and remove spark plug cap.
 2. Place a suitable container next to the mower to catch the used oil.
 3. Wipe the oil filler area clean, then remove the oil filler cap/dipstick.
 4. With the throttle lever in the STOP position and the fuel tap in the off position to reduce the possibility of fuel leakage, 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 engine oil in a manner that does not harm the environment. Do not throw it in the trash or pour it on the ground or down the drain.



4. Fill with the recommended Honda Premium Engine Oil 10W 30 (API classification SG up to SJ). Do not overfill, measure the oil level as shown on page 9.



NOTE: Do not screw dipstick in when checking oil level.

Engine oil capacity is:

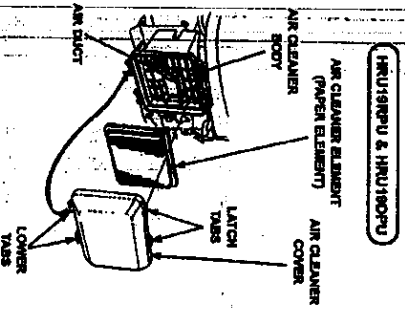
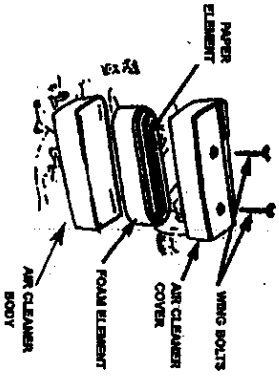
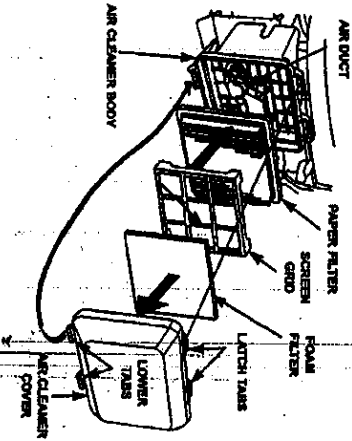
- 0.55 litres (HRU198PU, HRU19DPU, HRU197PU, HRU197DPU & HRU217DPU),
- 0.65 litres (HRU196PU, HRU196DPU, HRU216SU & HRU216DSU).

Air cleaner

Dirty air filter(s) will restrict airflow to the carburetor, reducing engine performance. If you operate the mower in very dusty conditions, clean the air filter(s) more often than specified in the Maintenance schedule.

NOTE: Operating the engine without air filter(s), or with a damaged filter(s) will allow dirt to enter the engine, causing rapid engine wear. This type of damage is not covered by Honda's Warranty.

1. Unclip latch tabs or unscrew wing bolts, then remove the air cleaner cover.
2. Remove the paper filter from the air cleaner body. Remove the foam filter from the housing (HRU197PU, HRU197DPU & HRU217DPU) or remove from around the paper element (HRU196PU, HRU196DPU, HRU216SU & HRU216DSU).
3. Inspect the filter(s), and replace them if they are damaged.
4. Clean the filter(s).



Cleaning the air cleaner

1. Paper element

Tap the element several times on a hard surface to remove excess dirt, or blow compressed air (not exceeding 207kPa or 30psi) through the filter from the inside. Never try to brush off dirt; brushing will force dirt into the fibres. Replace the paper element if it is excessively dirty.

2. Foam element (All models except HRU199PU & HRU190PU).

Wash the element in a solution of household detergent and warm water, then rinse thoroughly, or wash in nonflammable or high flash point solvent. Do not use fuel as a cleaning solvent because this will create a risk of fire or explosion. Allow the element to dry thoroughly. Soak the element in clean engine oil and squeeze out the excess oil. The engine will smoke during initial start-up if too much oil is left in the foam, or the oil could saturate the paper element making the engine inoperable.

3. Wipe dirt from the air cleaner body and cover using a moist rag. Be careful to prevent dirt from entering the air duct that leads to the carburetor.
4. Reinstall the air cleaner element(s), and make sure the element(s) are properly positioned. Install the air cleaner cover and clip in or tighten the screws securely.

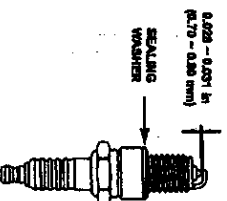
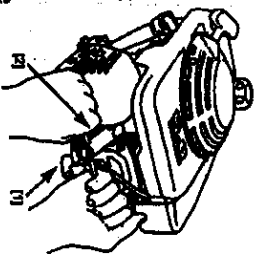
Spark plug

Recommended spark plug:

NGK BPR6ES for the following models: HRU196PU, HRU196DPU, HRU216SU & HRU216DSU, **NGK BPR6ES** for the following models: HRU199PU, HRU190PU, HRU197PU, HRU197DPU & HRU217DPU.

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

1. Disconnect the cap [1] from the spark plug, and remove any dirt from the spark plug area.
2. Use the proper size plug wrench [2] to remove the spark plug.
3. Inspect the spark plug. Replace it if damaged, badly fouled, if the sealing washer is in poor condition, or if the electrode is worn. If the spark plug is to be reused, clean it with a wire brush.
4. Measure the electrode gap with a suitable gauge. The correct gap is 0.70-0.80mm. If adjustment is needed, correct the gap by carefully bending the side electrode.
5. Install the spark plug by screwing it in by hand until seated, then tighten a further quarter turn with a spark plug spanner.



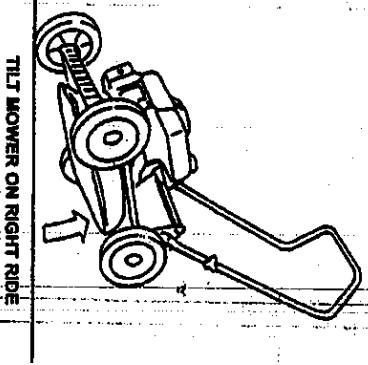
Maintenance

Blade removal (All models)

WARNING

To avoid severe personal injury, disconnect the spark plug cap to prevent accidental starting, and wear heavy gloves to protect your hands from the cutter blade.

- Stop engine.
- Disconnect spark plug lead.
- Leave cutter disc on.
- Turn fuel tap to OFF position.
- Drain carburettor (see Carburettor drainage, page 16).



WARNING Before flipping the lawn mower to maintain the blades or drain oil, remove fuel from tank. Use only genuine Honda replacement blades. Always ensure that blades are fitted as opposing pairs, and always replace blades in sets using new bolts each time blades are replaced.

- Tilt mower onto the right hand side with carburettor facing up.
- Holding the cutter disc securely, loosen the cutter blade nuts and remove blade bolts and blades.
- If, for any reason, you are unable to undo cutter blade nuts take your mower to your Authorised Honda Dealer for blade replacement.

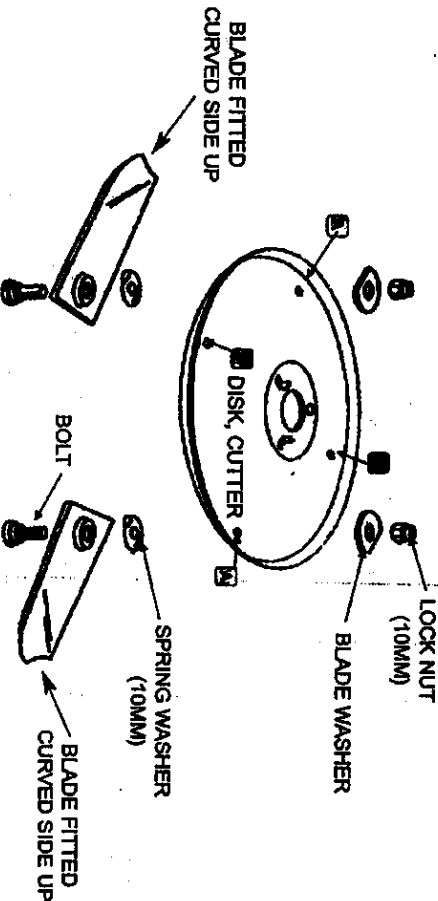
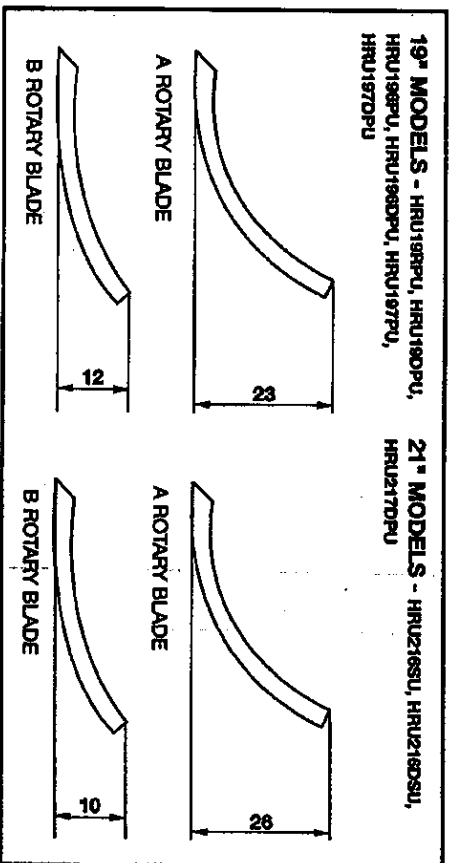
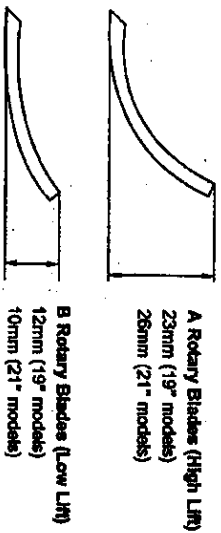
NOTE: Never tilt the mower so the carburettor side is down, or hard starting will result.

Maintenance

Blade replacement (All models)

For complete blade replacement you should have:

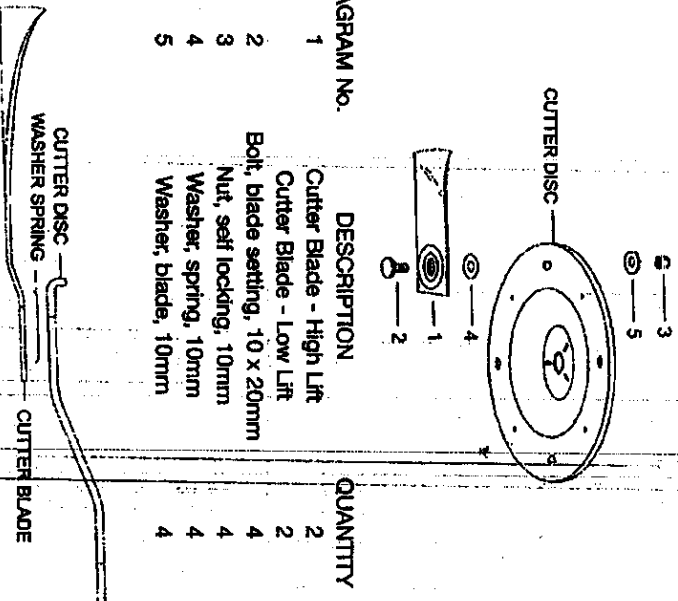
- 4 x Bolts
- 4 x Lock nuts
- 4 x Blade Washer
- 4 x Spring Washer
- 2 x A Rotary Blades (High Lift)
- 2 x B Rotary Blades (Low Lift)



Maintenance

Blade Installation:

1. Refit the new bolts, washers, nuts & blades to the disc with the curved side of the blade facing upwards.
Tighten nuts to 300-400kg/cm (30-40Nm).
2. On completion, place the mower on a flat surface and pull the recoil starter slowly several times to ensure that the cylinder is free of oil prior to starting.
3. Replace spark plug lead, turn fuel tap to the ON position.
4. Start mower with caution.



WARNING

To avoid severe personal injury, disconnect the spark plug cap to prevent accidental starting, and wear heavy gloves to protect your hands from the cutter blade.

Troubleshooting

Engine will not start	Possible Cause	Correction
1. Check throttle lever position.	Throttle lever in wrong position (unless engine is warm).	Move throttle lever to the choke position.
2. Check fuel.	Out of fuel. Fuel valve off. Bad fuel; engine stored without draining, or refuelled with bad petrol.	Refuel. Turn fuel valve on. Drain fuel tank and carburettor. Refuel with fresh petrol.
3. Remove and inspect spark plug.	Spark plug fouled or improperly gapped. Spark plug wet (flooded engine).	Clean, gap or replace spark plug. Dry and reinstall spark plug. Start engine with throttle lever in fast position.
4. Take the lawnmower to a Honda Lawnmower Dealer.	Fuel filter clogged, carburettor malfunction, ignition malfunction, compression problem.	Replace or repair faulty components as necessary.
Loss of power	Possible cause	Correction
1. Check air filters.	Air filter(s) clogged.	Clean or replace air filter(s).
2. Check fuel.	Bad fuel; engine stored without draining, or refuelled with bad petrol.	Drain fuel tank and carburettor. Refuel with fresh petrol.
3. Check throttle lever position.	Throttle lever in wrong position (low position).	Position the throttle lever in fast.
4. Take the lawnmower to a Honda Lawnmower Dealer.	Fuel filter clogged, carburettor malfunction, ignition malfunction, compression problem.	Replace or repair faulty components as necessary.

To locate your nearest Honda Lawnmower Dealer just Call: **1800 241 173**
or get on our **WEBSITE: www.hondapowerequipment.com.au**

Specifications

Chassis Specifications

	HRU196PU & HRU19DPU	HRU197PU	HRU198PU	HRU197PU & HRU19DPU	HRU197PU	HRU198PU	HRU197PU & HRU19DPU	HRU216DSU	HRU217DPU
Overall length	1410mm	1410mm	1410mm	1410mm	1630mm	1630mm	1630mm	1570mm	1570mm
Overall width	510mm	510mm	510mm	510mm	570mm	570mm	570mm	570mm	570mm
Overall height	1065mm	1065mm	1065mm	1065mm	1065mm	1065mm	1065mm	1065mm	1065mm
Track: Front	440mm	440mm	440mm	440mm	470mm	470mm	470mm	470mm	470mm
Track: Rear	465mm	465mm	465mm	465mm	500mm	500mm	500mm	500mm	500mm
Wheel base	520mm	520mm	520mm	520mm	625mm	625mm	625mm	625mm	625mm
Grass catcher	54 litres	54 litres	54 litres	54 litres	73 litres	73 litres	73 litres	73 litres	73 litres
Dry weight	30.6kg (HRU196PU) 30.9kg (HRU19DPU)	34.5kg (HRU196PU) 35.2kg (HRU19DPU)	31.8kg (HRU197PU) 32.1kg (HRU19DPU)	31.8kg (HRU197PU) 32.1kg (HRU19DPU)	43.3kg (HRU216DSU) 43.6kg (HRU216DSU)	43.3kg (HRU216DSU) 43.6kg (HRU216DSU)	43.3kg (HRU216DSU) 43.6kg (HRU216DSU)	35.0kg	35.0kg
Cutting width	480mm	480mm	480mm	480mm	530mm	530mm	530mm	530mm	530mm
Cutting height	16-78mm	16-78mm	16-78mm	16-78mm	16-78mm	16-78mm	16-78mm	16-78mm	16-78mm
adjustable range									
Tyre size: Front	200mm	200mm	200mm	200mm	200mm	200mm	200mm	200mm	200mm
Tyre size: Rear	200mm	200mm	200mm	200mm	200mm	200mm	200mm	200mm	200mm
Land Speed					1st 0 km/h 2nd 1.1 km/h 3rd 1.4 km/h				
Noise Level (dB(A) (at 7.5m)	72.4	72.4	72.4	72.4	74.0	74.0	74.0	74.0	74.0

Engine Specifications

	HRU196PU & HRU19DPU	HRU196PU, HRU196DPU, HRU197PU, HRU197DPU & HRU216DSU	HRU197PU, HRU197DPU & HRU216DSU	HRU197PU, HRU197DPU & HRU216DSU	HRU197PU, HRU197DPU & HRU216DSU	HRU197PU, HRU197DPU & HRU216DSU	HRU197PU, HRU197DPU & HRU216DSU	HRU197PU, HRU197DPU & HRU216DSU	HRU197PU, HRU197DPU & HRU216DSU
Model	GCV160	GCV160	GCV160	GCV160	GCV160	GCV160	GCV160	GCV160	GCV160
Engine type	4 stroke OHC	4 stroke OHC	4 stroke OHC	4 stroke OHC	4 stroke OHC	4 stroke OHC	4 stroke OHC	4 stroke OHC	4 stroke OHC
Displacement	160cc	160cc	160cc	160cc	167cc	167cc	167cc	167cc	167cc
Bore & Stroke	64 x 50mm	68 x 45mm	68 x 45mm	68 x 45mm	69 x 50mm	69 x 50mm	69 x 50mm	69 x 50mm	69 x 50mm
Maximum HP	5.5hp	5.5hp	5.5hp	5.5hp	6.5hp	6.5hp	6.5hp	6.5hp	6.5hp
Maximum torque	(4.1kw)@3,600rpm 11.4Nm@2,500rpm	(4.0kw)@3,600rpm 10.8Nm@2,500rpm	(4.0kw)@3,600rpm 10.8Nm@2,500rpm	(4.0kw)@3,600rpm 10.8Nm@2,500rpm	(4.8kw)@3,600rpm 13.2Nm@2,500rpm	(4.8kw)@3,600rpm 13.2Nm@2,500rpm	(4.8kw)@3,600rpm 13.2Nm@2,500rpm	(4.8kw)@3,600rpm 13.2Nm@2,500rpm	(4.8kw)@3,600rpm 13.2Nm@2,500rpm
Cooling system	Forced air	Forced air	Forced air	Forced air	Forced air	Forced air	Forced air	Forced air	Forced air
Ignition system	Transistorized magneto ignition	Transistorized magneto ignition	Transistorized magneto ignition	Transistorized magneto ignition	Transistorized magneto ignition	Transistorized magneto ignition	Transistorized magneto ignition	Transistorized magneto ignition	Transistorized magneto ignition
Lubrication system	Forced Splash	Forced Splash	Forced Splash	Forced Splash	Forced splash	Forced splash	Forced splash	Forced splash	Forced splash
P.T.O. shaft direction	Counter clockwise	Counter clockwise	Counter clockwise	Counter clockwise	Counter clockwise	Counter clockwise	Counter clockwise	Counter clockwise	Counter clockwise
Carburettor	Horizontal butterfly	Horizontal butterfly	Horizontal butterfly	Horizontal butterfly	Horizontal butterfly	Horizontal butterfly	Horizontal butterfly	Horizontal butterfly	Horizontal butterfly

Service schedule sheet

Service Record First Year

1ST MONTH OR 5 HOUR SERVICE (HRU196PU & HRU19DPU)

Hours Use (Tanks x Hrs/Tank)	Date	Notes

Servicing Dealer Stamp

Date: _____

1ST MONTH OR 20 HOUR SERVICE (ALL MODELS EXCEPT HRU196PU & HRU19DPU)

Hours Use (Tanks x Hrs/Tank)	Date	Notes

Servicing Dealer Stamp

Date: _____

EVERY 3 MONTHS OR 50 HOUR SERVICE (HRU196PU)

Hours Use (Tanks x Hrs/Tank)	Date	Notes

Servicing Dealer Stamp

Date: _____

EVERY 6 MONTHS OR 100 HOUR SERVICE (ALL MODELS EXCEPT HRU196PU & HRU19DPU)

Hours Use (Tanks x Hrs/Tank)	Date	Notes

Servicing Dealer Stamp

Date: _____

Here is an easy way to keep track of the hours your Honda lawnmower has done. Record how many hours you get from a tank of fuel, then simply record the number of tanks used. TANKS X HOURS per TANK = TOTAL HOURS USE.

Service schedule sheet

RECORD FURTHER SERVICES HERE:

Service Record

NEXT SERVICE

Hours Use (Tanks x Hrs/Tank)	Date	Notes

Service Dealer Stamp

Date:

NEXT SERVICE

Hours Use (Tanks x Hrs/Tank)	Date	Notes

Service Dealer Stamp

Date:

NEXT SERVICE

Hours Use (Tanks x Hrs/Tank)	Date	Notes

Service Dealer Stamp

Date:

NEXT SERVICE

Hours Use (Tanks x Hrs/Tank)	Date	Notes

Service Dealer Stamp

Date:

Here is an easy way to keep track of the hours your Honda lawnmower has done. Record how many hours you get from a tank of fuel, then simply record the number of tanks used. TANKS X HOURS per TANK = TOTAL HOURS USE.
(Refer to maintenance schedule on page 18.)

** THIS PAGE CAN BE PHOTOCOPIED **