



CHEETAH
PLUS



Owner's Manual

Version 2 September 2011



Owner's Information

Record the following information

Machine

Model No: _____

Serial No: _____

Date of Purchase: _____

Purchased From: _____

Engine

Model No: _____

ISSUED TO

Owners Name: _____

Address: _____

Town/City: _____

Phone No: _____

Mobile: _____

Fax No: _____

Email Address: _____

Contents List

	Page
Introduction	3
Assembly & Pre-Delivery Instructions	5
Introduction.....	5
Responsibility.....	5
Procedure.....	5
Service.....	6
Safety Instructions	7
Controls	12
Ignition Switch.....	12
Choke/Throttle Control.....	12
Cutter Engagement PTO Switch.....	12
Cutting Height Adjustment Lever.....	13
Brake Pedal.....	13
Park Brake Knob.....	13
Oil Lever Dipstick.....	14
Transmission Pump by-pass Lever.....	14
Hour Meter.....	14
Operation	15
Starting the Engine.....	15
Stopping the Engine.....	17
Driving—to travel machine forward or reverse.....	18
Pushing the Mower.....	19
Adjustments	20
Levelling the Cutting Deck.....	20
Seat Adjustment.....	20
Adjust Rack and Pinion.....	21
Adjust Handbrake.....	21
Adjust Electric Cutter Deck Clutch Air Gap.....	22
Maintenance Instructions	23
Check the Engine Oil Level.....	23
Engine Oil Change.....	24
Engine Oil Filter Change.....	24
Air Cleaner.....	26
Fuel Filter.....	28
Cooling System.....	28
Spark Plugs.....	28
Battery.....	29
Tyres.....	30
Lubrication.....	30

Contents List

Change the Hydrostatic Transmission Oil.....	31
Maintenance Schedule.....	32
After first 10 Hours of Service.....	32
Before each Use.....	32
After Every Use.....	32
12 Monthly or Every 50 Hours.....	33
Every 100 Hours.....	33
Troubleshooting.....	34
Warranty Policy.....	36
Service Record.....	39

Introduction

This manual covers the following products:

CHEETAH PLUS Side Discharge Ride-on Lawn Mower

- **Models:** CH161000P
CH161200P

Read this manual carefully to learn how to operate safely and maintain your Cheetah Plus Mower **effectively**. Failure to follow Safety, Operating or Maintenance instructions in this manual could result in Death, Personal Injury or Equipment Damage.

This manual is part of your Cheetah Plus mower and should be supplied with the mower when you take it to a Kingcat Dealer for service or if you lend or sell this mower. This should also apply to the Engine Owner's Manual.

Conventions:

Measurements in this manual are given in metric units unless otherwise stated. Right-hand and Left-hand are determined by facing the direction of forward travel. Direction of rotation is determined by looking into the components in motion parallel to the axis of rotation.

Write product identification numbers in the Owners Information section of this manual. A data plate with the relevant data is located on the inside of the steering column. Accurately recording these numbers will assist your Kingcat Dealer when ordering spare parts or help in tracing the Machine if it should be stolen. Store this manual in a secure place remote from the mower.



Ensure you understand the warranty policy with regard to the responsibilities of operation, maintenance and ownership of this mower.

The intended use of this machine is mowing of residential lawns, landscape parks, gardens, grounds, sporting fields. Strict adherence to the conditions of **Operation**, **Maintenance**, **Service** and **repair** as specified by the

Introduction

manufacturer constitute essential elements for the intended use.

Use in any other way not specifically approved directly by the manufacturer is considered as contrary to the intended use and will increase the risk of personal injury or property damage and is therefore considered as misuse for which the manufacturer accepts no responsibility as these increased risks must be accepted solely by the user.

Operation, Maintenance, Service and Repair of this machine should be performed only by persons familiar with its characteristics and acquainted with relevant Statutory Regulations in force at the place and time.

When your mower requires service or repair please remember your Kingcat Dealer is an industry trained professional who is supported by the personnel of the Sales and Marketing, Parts Distribution and Service Sections of the Manufacturer and is dedicated to your satisfaction.

The information included in this manual was considered correct at the time of approval for printing. HMF Mowers reserves the right to change specifications or designs without notice or obligation.

Assembly & Pre-Delivery Instructions

INTRODUCTION

The purpose of this section of the manual is to ensure the dealer makes the necessary installations, adjustments and checks required, before the machine is operational. This begins upon receiving the palletted mower and is finalised once the mower has been sold. This is the minimum amount of work required, however it should not be limited to the areas detailed in this procedure.

RESPONSIBILITY

It is the responsibility of the dealer to ensure that before a machine is delivered to a customer, it is in satisfactory operating condition.

PROCEDURE

UNPACK LAWN MOWER

- Check loose parts supplied against the following list:
- Owner/Operators Manual
- Engine Owners Manual
- Ignition key set

BATTERY

- Remove battery from mower.
- Using a 12V, 4 or 8 amp battery charger, charge the battery for a period of 30 minutes.

After charging proceed as follows:

- Allow battery to stand for 30 minutes.
- Check acid levels in all battery cells (top up if necessary).
- Replace battery, battery clamp and tighten bolt.
- Install the red battery lead onto the positive terminal first, and then the black battery lead onto the negative.

Assembly & Pre-Delivery Instructions

SERVICE

Tyres

Before operation ensure that tyre pressures are equal.

The recommended pressure is:

- Front 1.4 bar(20 P.S.I).
- Rear 1.0 bar (15 P.S.I).

Engine Oil

Before operation ensure that engine oil level is to the full mark on the dipstick, (Refer to Engine Owners Manual for correct oil classification to use).

CHECK OPERATION OF SAFETY SWITCHES

Cutter Engagement Switch

Sit on seat with cutter engaged and park brake on (locked), attempt to start engine using ignition switch.

The engine should not start.

Seat Switch

Sit on seat, with park brake on (locked) and start engine, engage cutter, and lift weight from seat.

The engine should stop.

Safety Instructions

Always adhere to the following safety precautions:

- Read, understand and follow all instructions in the Owner/Operators manual.
- Know the controls and how to stop the engine quickly in an emergency.
- Allow only responsible adults who are familiar with the instructions in this manual, to operate the machine.

- Clear the area to be mowed of loose objects such as sticks, stones, bones, wire, toys, debris etc., which could be picked up and thrown by the blades.
- DO NOT mow whilst people, especially children, or pets are in the mowing area.
- When mowing, never direct discharge of material toward bystanders or allow anyone near the machine while it is in operation.



- Exercise extreme caution on slopes.
- Reduce speed on slopes and in sharp turns to prevent overturning or loss of control.
- Start or stop slowly when on slopes.
- Mow up and down slopes, not across the slope.
- Stay alert for holes or bumps in the terrain and other hidden hazards.
- Use care when pulling loads – use only approved hitch point. Limit loads to those you can safely control, do not turn sharply and use care when backing up.
- Maximum weight on tow hitch (9kg).
- Maximum tow weight (trailer & load) 100kg.
- DO NOT use ground-engaging attachments. Dozer blade, plough etc.
- Watch out for traffic when crossing or operating the mower near roadways.
- Stop the blades rotating before crossing surfaces other than grass.
- Before leaving the operators position, disengage the mower blade, and apply the park brake. Stop the engine and remove the key.
- Disengage drive to attachments and stop engine before refuelling;

Safety Instructions

before clearing blockages from chute; before checking, cleaning or working on the mower.

- After striking a foreign object, check the mower for damage and make repairs before restarting and operating the equipment; if machine starts to vibrate abnormally check immediately.
- The mower operator should be in good physical and mental health and not under the influence of alcohol or any drug which might impair vision, co-ordination or judgement.

- Never mow while barefoot or wearing open sandals or thongs. Wear long trousers and heavy shoes.
- It is advisable to wear suitable protective safety gear when operating a mower.



- Mow only in daylight or good artificial light.
- Before using, always visually inspect to see that blades, bolts and cutter assembly are not worn or damaged. Replace worn or damaged blades and bolts in sets to preserve balance.
- Check all nuts, bolts and screws often, always be sure the mower is in safe operating condition.
- Keep safety devices (guards and switches) in place and in working order.
- Never use the mower unless guards provided by the manufacturer are in position.
- Ensure any replacement parts used comply with the original manufacturer's recommendations and specifications.
- Replace worn or faulty mufflers.
- Keep machine free of grass, leaves, or other debris, excessive oil, grease, or spilt fuel. These can be a fire hazard.

Refuel outdoors only. Do not smoke while fuelling engine. Never remove the cap of the fuel tank or add petrol while the machine is running or the engine is hot. Use an approved fuel container, funnel or siphon hose (static/spark resistant).



- Remove fuel cap slowly to relieve the tank pressure.
- 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.
- Check for fuel leaks while refuelling, before and while using the mower. If a fuel leak is found, do not start or run the engine until the leak is fixed and spilt fuel is wiped away.



- Do not operate engine in a **confined** space where exhaust fumes (carbon monoxide) can collect and be inhaled.



- Use hearing protection while operating the machine.



- Do not over speed the engine or alter **governor settings**. Excessive speed is dangerous and shortens mower life.
- Stop the engine whenever you leave the mower, even for a moment.
- Store the mower in a well **ventilated** room away from naked flames such as may be found in hot water heaters.
- Do not lend or sell the mower, without the owner/operators manual.

Safety Instructions

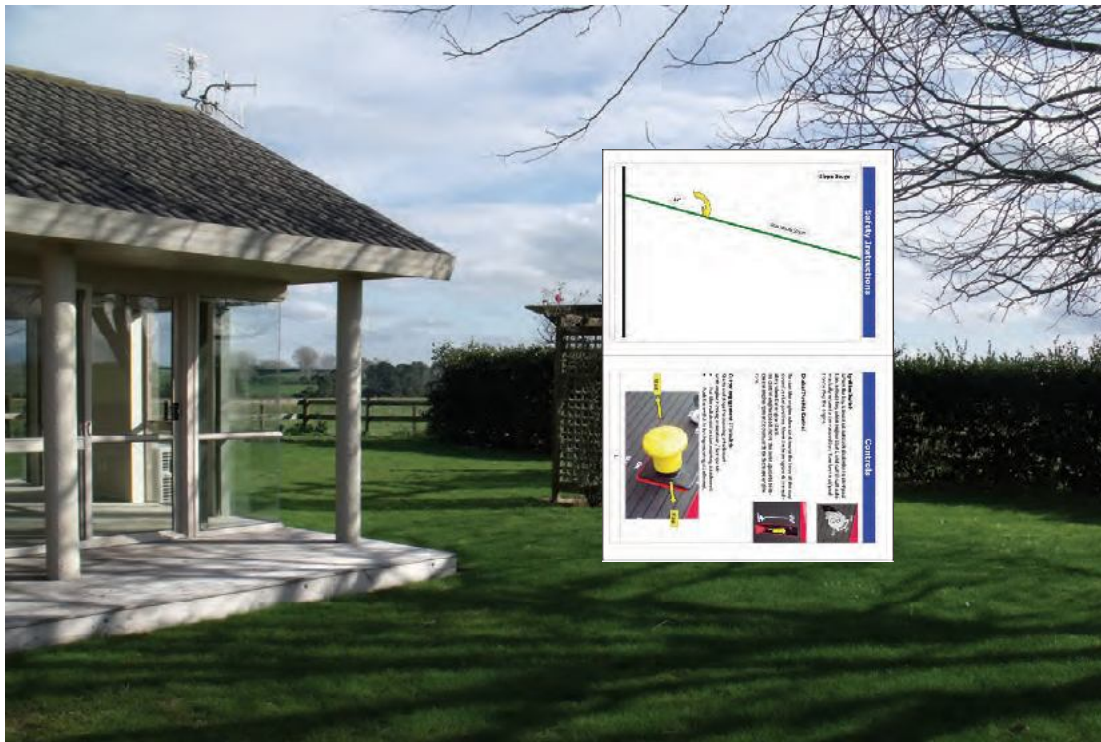
Mowing Slopes

Take great care when mowing slopes. It is recommended that operators should not **attempt** to mow a slope until sufficient experience and confidence has been gained on flat ground.

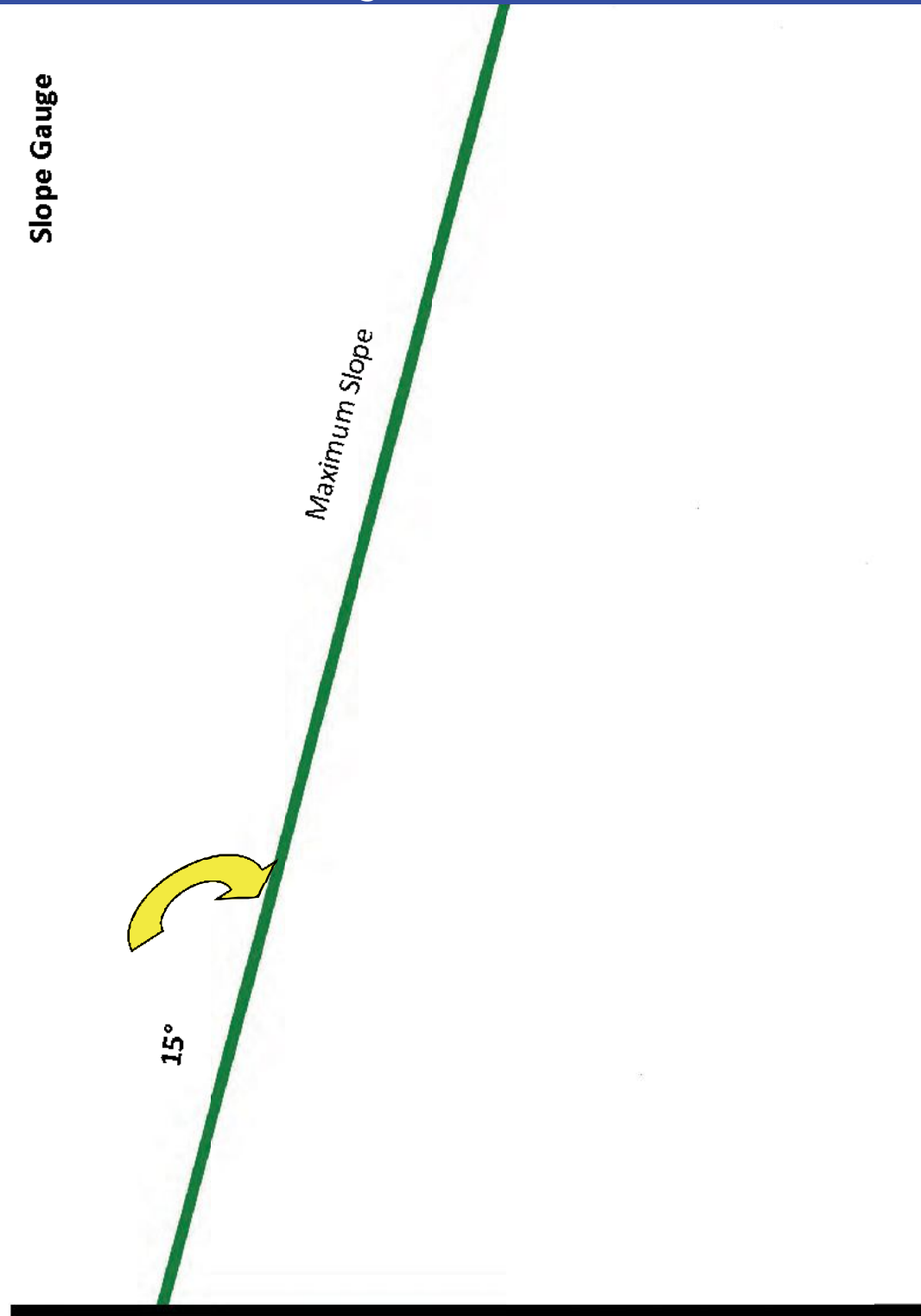
When mowing slopes, always check that there are no hazards at the bottom of the slope such as rivers, banks, fences etc. **Do not attempt to mow a slope exceeding 15°**. Mowing on an excessive slope could cause the operator to lose control of the mower.



Use the slope gauge on the following page to estimate the angle of the slope by turning the manual through 90° and aligning the **vertical** black line with a **vertical** object such as a wall, fence post or telegraph pole. The slope should not exceed the angle of the green line on the gauge.



Safety Instructions



Controls

Ignition Switch

When the key is inserted, rotate it clockwise to *start* position, release key when engine starts, and switch will automatically return to the run position. Turn key to *off* position to stop the engine.

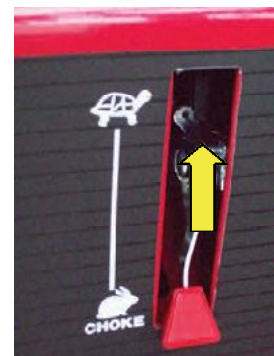


Choke/Throttle Control

To start the engine when cold, move the lever all the way down for start position. Move the lever upwards immediately when the engine starts.

To control engine speed, move the lever downwards to increase engine rpm and upwards to decrease engine rpm.

Full throttle is approximately 3/4 of the way down.

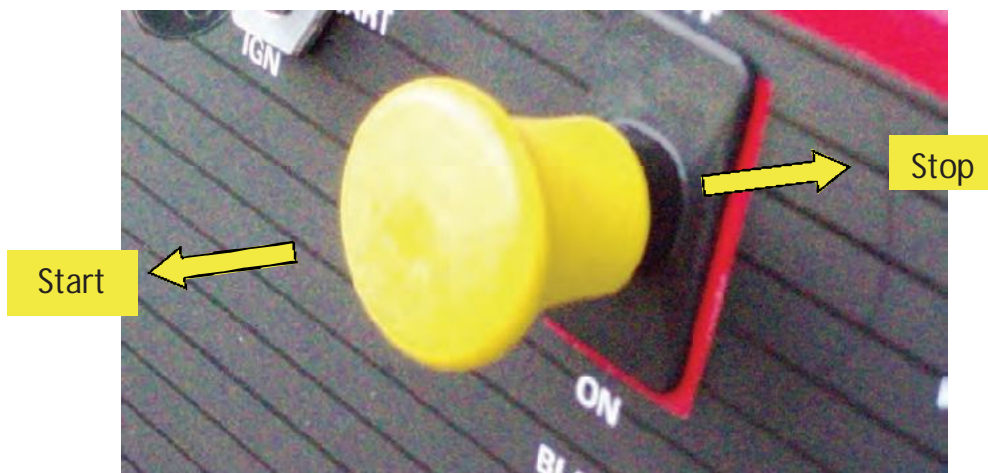


Cutter engagement PTO Switch

Starts and stops the mowing attachment.

With engine running at medium / fast speed:

- Pull the switch out to start mowing attachment.
- Push the switch in to stop mowing attachment.



Controls

Cutting Height Adjustment Lever

Adjusts the mowing attachment cutting height.

- To raise cutting height, pull up on lever, stop at desired cutting height.
- To lower cutting height, lower the lever, stop at desired cutting height.
-

Note

For best short mowing performance, lower the deck until skids or rollers just touch the ground.



Brake Pedal

Stops machine travel before setting park brake. Remove foot from pedal to release brake.

Caution

Do not operate the mower with the handbrake engaged as doing so will cause excessive brake wear.



Park Brake Knob

Applies the park brake to keep the machine stationary. Fully depress the brake pedal and push brake knob down while releasing brake pedal to "on" (lock). To return park brake knob to "off" (unlock) position, depress brake pedal on park brake fully and knob will return to "off" (unlock) position.



Controls

Oil Level Dipstick

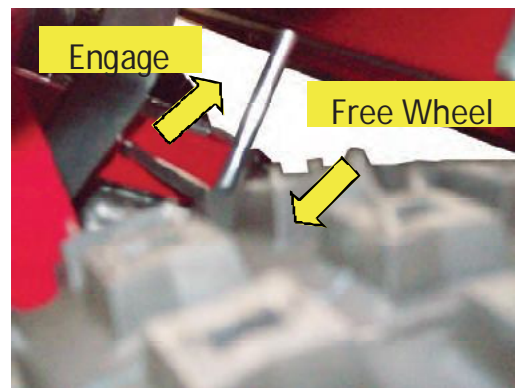
Used to indicate oil level in engine when engine is not running. (Refer to page 23 of the owner's manual for instructions on checking engine oil level).



Transmission Pump by-pass Lever

Disengages the transmission allowing the mower to be pushed easily. The lever is positioned in front of right rear wheel.

- Push the lever in for normal operation or lift up, pull out and lock in position to engage free wheel.



Note:

When the by-pass lever is engaged, the drive pedal will not function.

Hour Meter

Records the machine running hours. Monitor this meter to ensure regular service intervals.



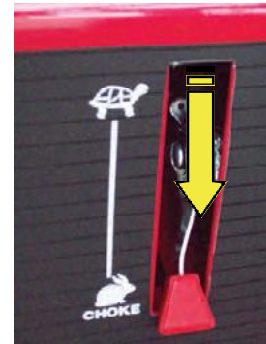
Operation

Starting the Engine

To start cold engine:

Check engine oil level, check fuel level. To start engine:

- Place throttle control lever into choke position .



- Ensure the mowing attachment control is in the "off" position. The switch must be pushed in.



- Ensure the park brake is locked.

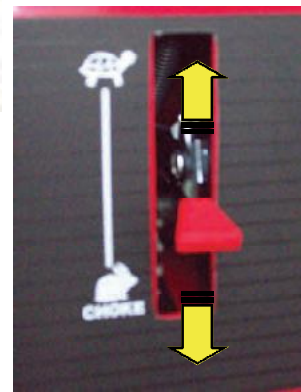


Operation

- Insert the key in the ignition switch.
- Turn the key all the way right to start (3rd) position, release key when engine has started.

Caution:

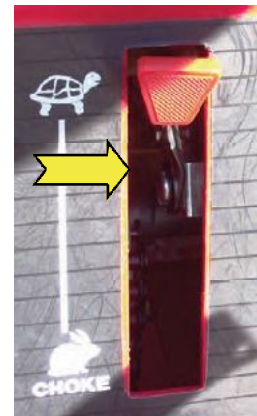
More than 15 seconds of continuous cranking can damage the starter motor. Short starting cycles give best starter motor life. Allow starter motor to cool for 2 minutes before attempting to restart engine.



- After engine starts gradually move throttle control lever up to obtain desired engine speed.

To start warm/hot engine:

- Place throttle control slightly past slow position



- Ensure the mowing attachment control is in the "off" position. Push the switch in.



Operation

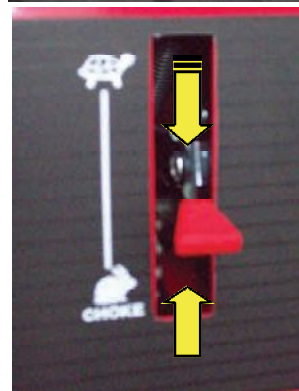
To start warm/hot engine (continued):

Ensure the park brake is locked.

- Insert the key in the ignition switch.
- Turn the key all the way right to start (3rd) position, release key when engine has started.



- Move throttle control lever to obtain desired engine speed.

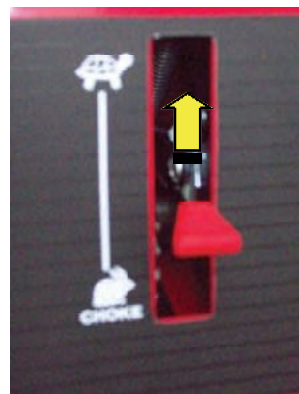


Stopping the Engine

- Ensure the mowing attachment control is in the off position. Push the switch in.



- Return throttle to slow position



Operation

- Lock the park brake. The brake pedal must be depressed to lock the brake.
- Allow the engine to idle for 30 seconds



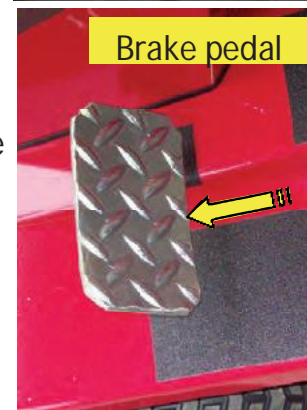
- Turn the ignition switch to the “off” (1st) position.



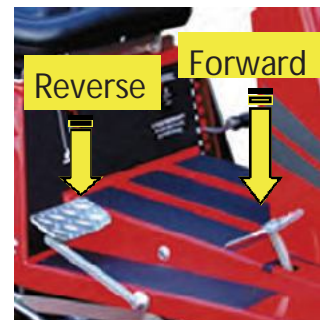
Driving – to travel machine forward or reverse :

With engine running:

- Set **throttle** control lever to obtain desired engine speed, $\frac{3}{4}$ to full **throttle** for the best mowing finish and for engine and transmission cooling.
- Apply pressure to the brake pedal. This will release the spring loaded park brake.
- Release the brake pedal.
- Apply downward pressure on front of drive pedal with foot to travel forward,
- Apply downward pressure on back of drive pedal with heel to travel in reverse.



It is not necessary to apply foot brake before changing from forward to reverse or reverse to forward. The amount of pedal travel is used to control the ground



Operation

speed, small downward travel will give a slow ground speed, full downward travel will give a fast ground speed.

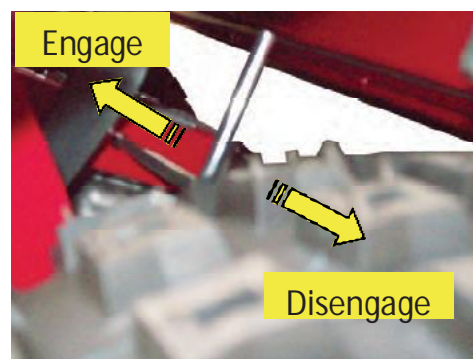
Note:

Use slower ground speed for travelling up and down slopes or mowing heavy grass.

Pushing the mower

To push the mower easily, disengage the transmission.

- Pull the by-pass lever out to disengage.
- Push lever in for normal operation .



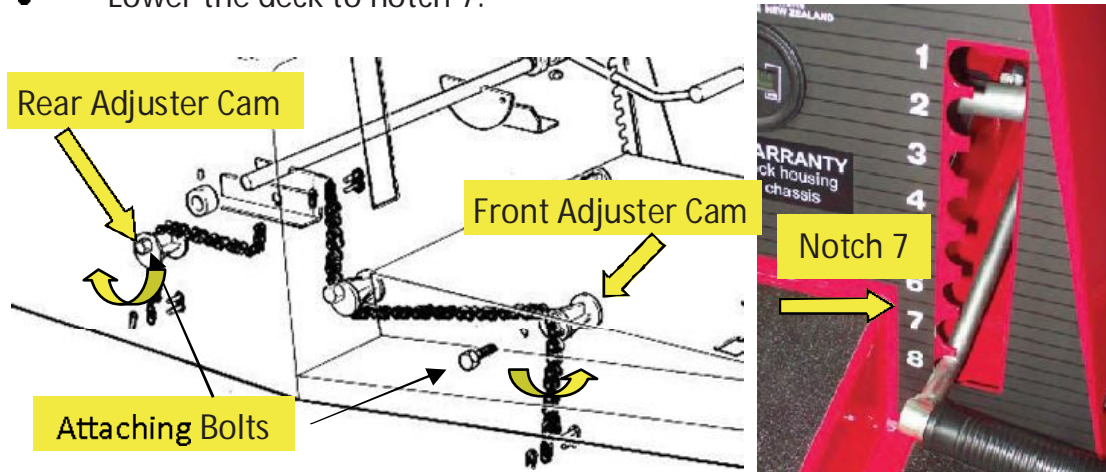
Note:

The by-pass lever is located in front of the left rear wheel. When the by-pass lever is engaged, the drive pedal will not function.

Adjustments

Levelling the cutting deck

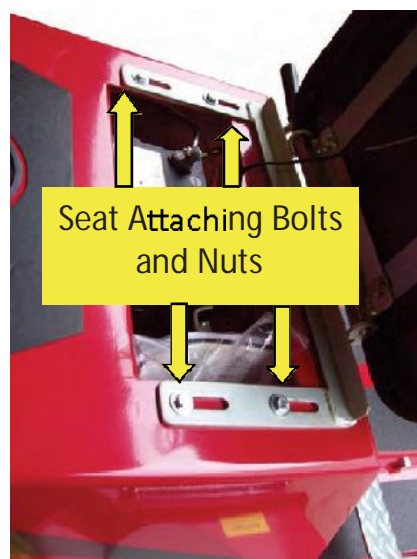
- Position the mower on a hard flat level surface such as a garage floor.
- Lower the deck to notch 7.



- Slacken off the attaching bolts for the two rear chain adjuster cams.
- Slacken off the attaching bolts for the two front chain adjuster cams.
- Twist the right rear adjuster cam backwards until the chain is tight and tighten the attaching bolt securely.
- Twist the left rear adjuster cam backwards until the chain is tight and tighten the attaching bolt securely.
- Twist the left front adjuster cam forwards until the chain is tight and tighten the attaching bolt securely.
- Twist the right front adjuster cam forwards until the chain is tight and tighten the attaching bolt securely.

Seat Adjustment

- Tilt the seat forward.
- Slacken off the four mounting bolts and nuts.
- Move the seat to the desired position.
- Tighten the mounting bolts and nuts.

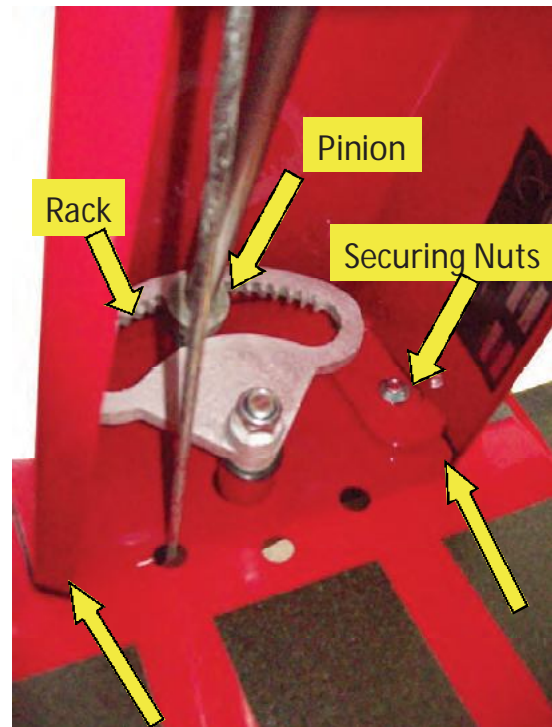


Adjustments

Adjust Rack and Pinion

Excessive play in the rack and pinion can be adjusted as follows:

- Slacken off the four Hex nuts that secure the steering cowl.
- Use a rubber mallet to gently tap the cowl forward until the clearance between the rack and the pinion is suitably reduced.
- Tighten the four cowl securing nuts.

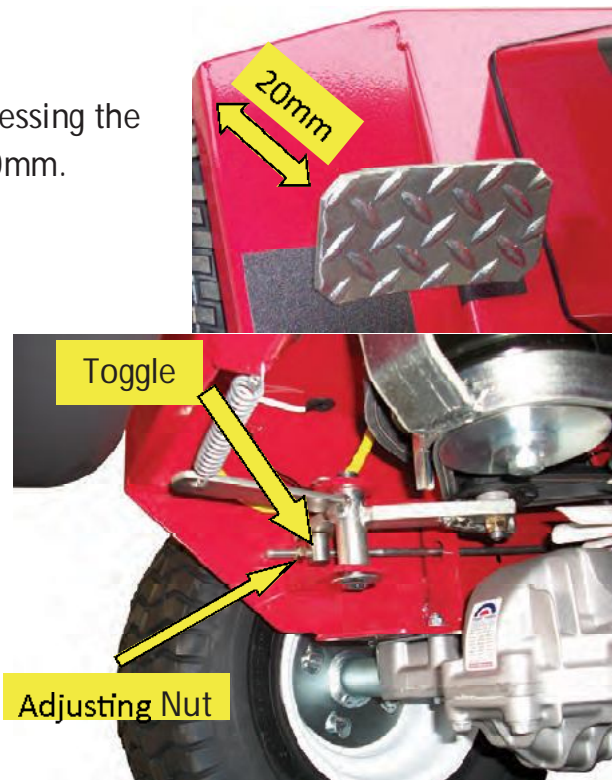


Adjust Handbrake

Brake pedal free travel when depressing the pedal should be approximately 20mm.

To adjust:

- Turn the Nyloc adjusting nut on the brake link to achieve a free play of approximately 3mm between the adjusting nut and the toggle.

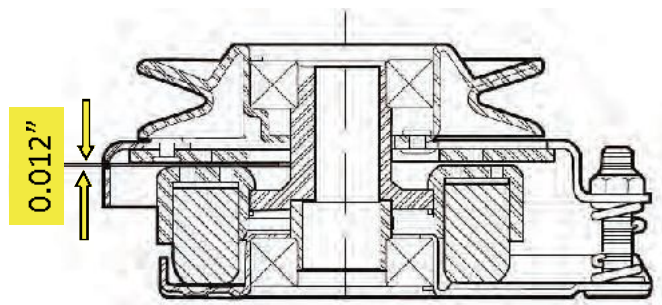
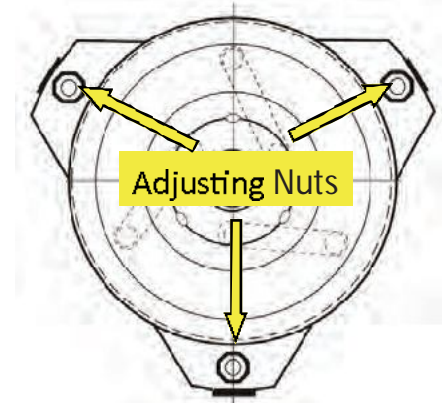
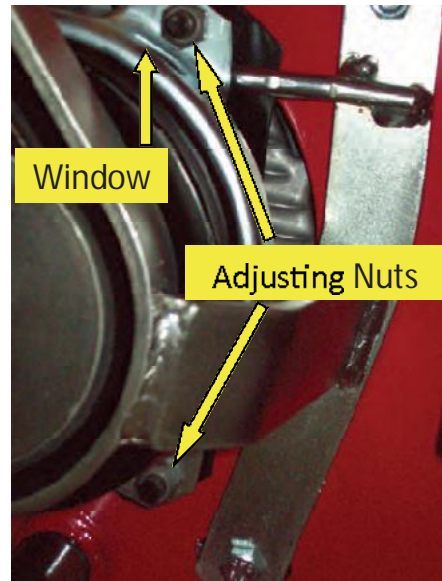


Adjustments

Adjust Electric Cutter Deck Clutch Air Gap

In hot conditions it can occur that the clutch refuses to engage, but engages after cooling down. This can be due to incorrect clutch airgap setting. Airgap adjustment is achieved by tightening or loosening three nuts:

- Turn the engine and Blade Engage switch off.
- Locate the three windows where the air gap is checked.
- Use a feeler gauge to check the gap in all three locations.
- The factory air gap setting is 0.005" to 0.023".
- If the gap doesn't fall between those limits, reset the gap using an 0.012" feeler gauge.
- Adjustment is achieved by tightening or loosening the nut at each window .



Maintenance Instructions

Regular maintenance of your mower will ensure reliability and prolong the life of the machine. This section details maintenance tasks to be carried out in accordance with the maintenance schedule in this manual.

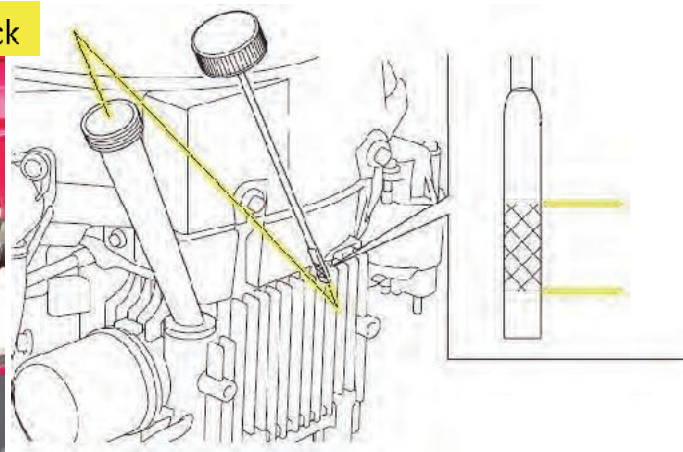
Note:

It is a condition of the warranty on your machine that regular servicing be carried out and recorded at the specified intervals by an authorised Kingcat dealer for the duration of the warranty. PLEASE READ THE WARRANTY CONDITIONS CAREFULLY. We recommend that you continue to have the machine maintained and serviced by an authorised dealer after the warranty period.

Check the Engine Oil Level

- Check the engine oil level with the engine stopped and in a level position.
- Check engine oil level and top up if required.
- Unscrew the engine oil cap.
- Pull the dip stick out and wipe with a clean lint-free cloth.

Oil filler cap and dipstick



- Place the dip stick back in position without screwing the cap back.
- Remove the dip stick again and read the oil level.
- Top up the oil if required.

Caution

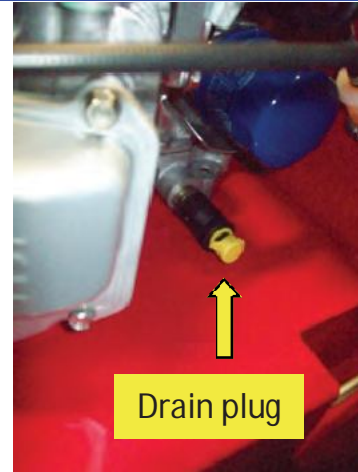
Do not read the oil level if the filler cap has been screwed fully on as this will give an inaccurate reading and over-filling which could damage the engine.



Maintenance Instructions

Engine Oil Change

- Drain the used oil when the engine is warm. Warm oil drains quickly and completely.
- Place a suitable container below the engine to catch the used oil.
- Fit a suitable length of hose over the drain valve.
- Remove the oil filler cap/dipstick, and operate the drain valve by pushing in, turn counter-clockwise and pull out.
- Allow the used oil to drain completely, then close the drain valve..



Note

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

Caution

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



- With the engine in a level position, fill to the upper limit mark on the dipstick with the recommended oil .
- Install the oil filler cap/dipstick and tighten securely.

Engine Oil Filter Change

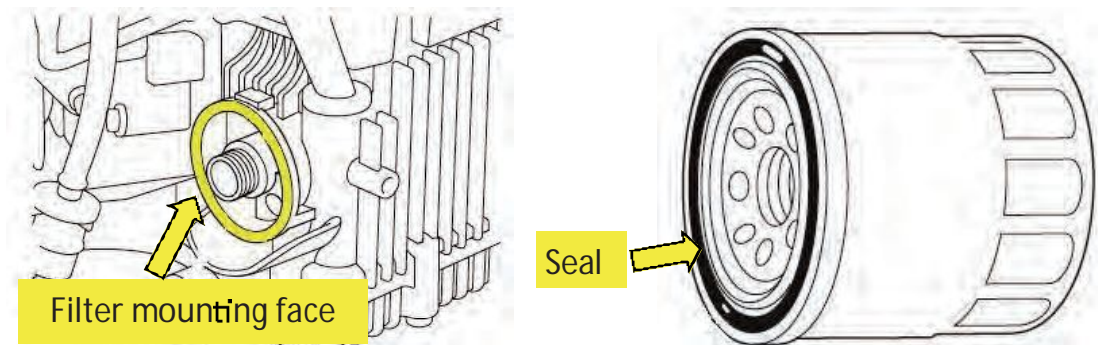
- Drain the engine oil, as described above.
- Remove the oil filter with an oil filter wrench, and drain the remaining oil into a suitable container.
- Dispose of the used oil and filter in a manner compatible with the environment.



Maintenance Instructions

Note

Use an oil filter wrench, rather than a strap wrench, to avoid striking and damaging the oil filter.



- Clean the filter mounting base, and coat the seal of the new oil filter with clean engine oil.
- Screw on the new oil filter by hand until the seal contacts the filter mounting base, then use an oil filter wrench to tighten the filter an additional 7/8 turn.
- Oil filter tightening torque: 12 N·m (1.2 kgf·m , 9 lbf·ft)

Caution

Use only a genuine Honda oil filter or a filter of equivalent quality specified for your model. Using the wrong filter, or a non-Honda filter which is not of equivalent quality, may cause engine damage.



Maintenance

- Refill the crankcase with the specified amount of recommended oil . Reinstall the oil filler cap/dipstick.
- Start the engine, and check for leaks.
- Stop the engine, and check the oil level as described on page .
- If necessary, add oil to bring the oil level to the upper limit mark on the dipstick.

Air Cleaner

Inspection

- Remove the air cleaner cover and inspect the filter elements.
- Clean or replace dirty filter elements.
- Always replace damaged filter elements.

A dirty air cleaner will restrict air flow to the carburettor, reducing engine performance. If you operate the engine in a dusty environment, clean the air filter more often than specified in the MAINTENANCE SCHEDULE.

Caution

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



Cleaning

- Remove the two air cleaner cover bolts from the air cleaner cover, and remove the cover.
- Remove the foam filter element.

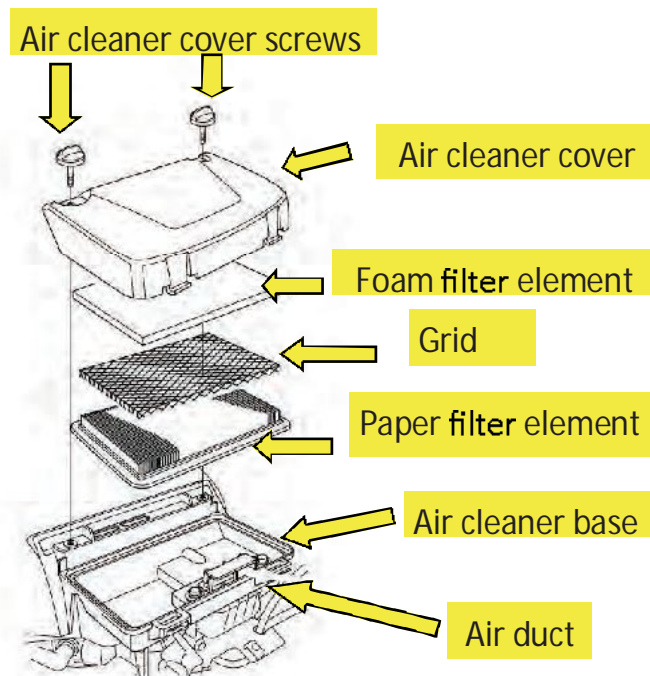


Maintenance

- Remove the paper filter element from the grid.
- Inspect both air filter elements, and replace them if they are damaged. Always replace the paper filter element at the scheduled interval.
- Clean the air filter elements if they are to be reused.

Paper air filter element:

- Tap the filter element several times on a hard surface to remove dirt, or blow compressed air [not exceeding 207 kPa (2.1 bar , 30 psi)] through the filter element from the inside.
- Never try to brush off dirt -brushing will force dirt into the fibres.
- Foam air filter element:
- Clean in warm soapy water, rinse, and allow to dry thoroughly or clean in non flammable solvent and allow to dry.
- Dip the filter element in clean engine oil, then squeeze out all excess oil.



Note

Excess oil will restrict air flow through the foam filter element and may transfer to the paper filter element, soaking and clogging it.

- The engine will smoke when started if too much oil is left in the foam.
- Wipe dirt from the inside of the air cleaner case and cover, using a moist rag.
- Be careful to prevent dirt from entering the air duct that leads to the carburettor.

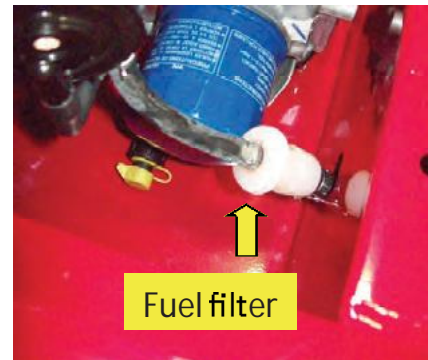
Maintenance

- Place the foam filter element into the air cleaner cover.
- Install the grid over the paper filter element then install the assembly into the air cleaner base.
- The grid must be placed between the foam element and the paper element to prevent oil from transferring to the paper element.
- Install the cover and tighten the two air cleaner cover bolts securely.

Fuel filter

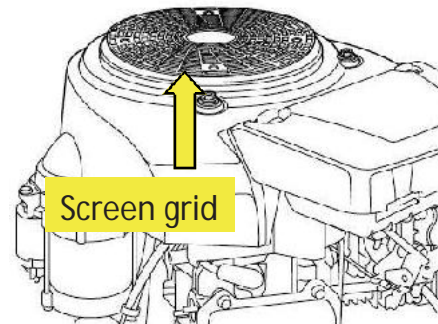
Inspection

- Check the fuel filter for water accumulation or sediment.
- If the fuel filter is found with excessive water accumulation or sediment, take the engine to your authorized Honda servicing dealer.



Cooling system

Check the screen grid for blockage and clean if necessary.



Spark Plugs

Recommended Spark Plugs:

BPR5ES (NGK)

W16EPR-U (DENSO)

The recommended spark plugs are the correct heat range for normal engine operating temperatures.

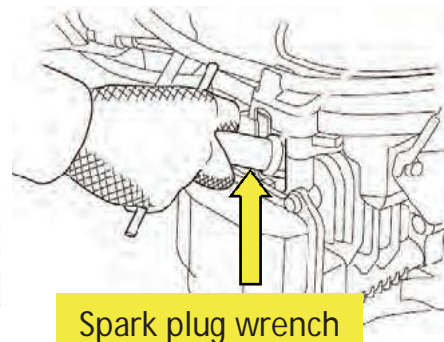
Caution

Incorrect spark plugs can cause engine damage.



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

- Disconnect the spark plug caps, and remove any dirt from around the spark plug area.



Maintenance

- Remove the spark plugs with a 13/16-inch spark plug wrench.

Inspect the Spark Plugs

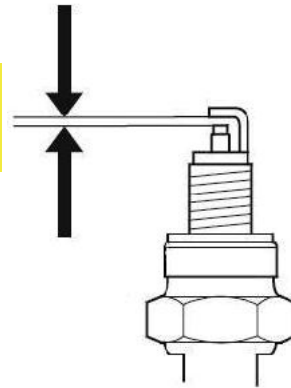
- Replace them if damaged, badly fouled, if the sealing washer is in poor condition, or if the electrode is worn.
- Measure the spark plug electrode gaps with a wire-type feeler gauge. Correct the gap, if necessary, by carefully bending the side electrode.

The gap should be:

0.70–0.80 mm (0.028–0.031 in)

0.70—0.80 mm

0.028—0.031 in



- Install the spark plug carefully, by hand, to avoid cross threading.
- After the spark plug is seated, tighten with a 13/16-inch spark plug wrench to compress the sealing washer.
- When installing a new spark plug, tighten 1/2 turn after the spark plug seats to compress the washer.
- When reinstalling the original spark plug, tighten 1/8–1/4 turn after the spark plug seats to compress the washer.
- Attach the spark plug caps to the spark plugs.

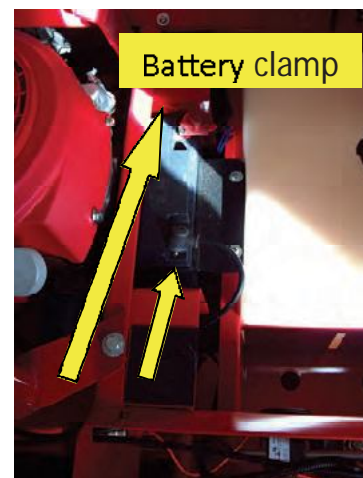
Battery

Caution

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



- Check the battery fluid level and top up with distilled water if required.
- Check that the battery terminals are secure and uncorroded.
- If necessary clean the terminals and cover with a light coat of grease or petroleum jelly.
- Check that the battery clamp is secure and uncorroded.
- If necessary clean the clamp and cover with a light coat of grease or petroleum jelly.



Maintenance

Tyres

- Check tyres for correct inflation.
Correct tyre pressure are front: 138 kpa (20 psi) and rear tyres is 105 kpa (15 psi).

Lubrication

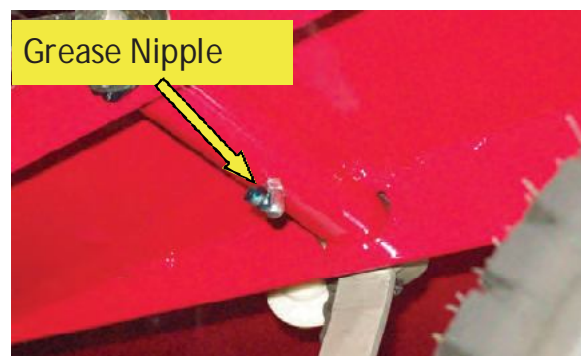
- Check the hydrostatic transmission oil level.
- About 50mm of oil should be visible in the sight tube.
- Use 10W30 oil.



- Grease the left hand and right hand side stub axles.

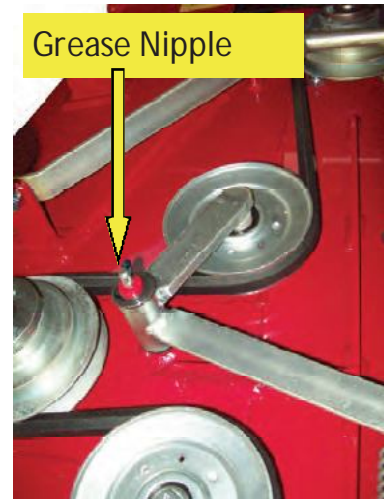


- Grease the reverse drive pedal shaft located on the underside of the chassis.

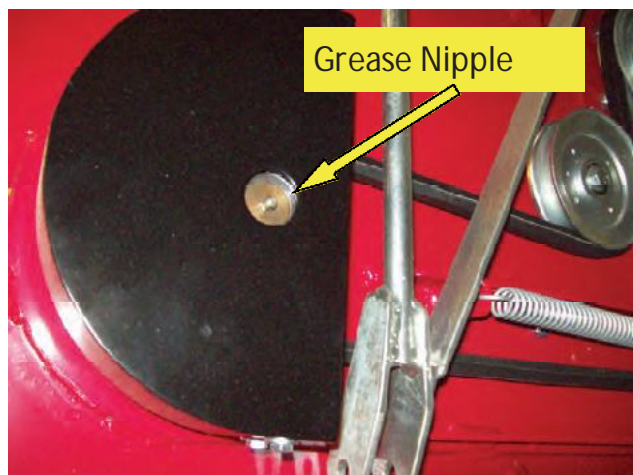


Maintenance

- Grease the cutting deck belt tension arm spindle.

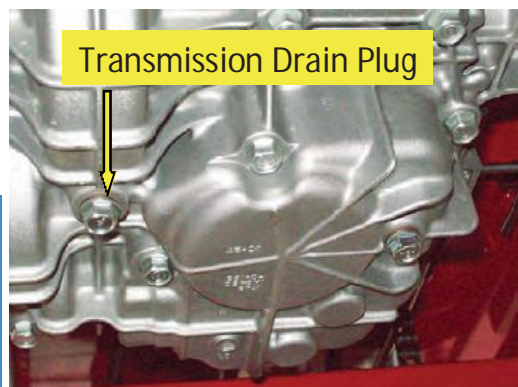


- Grease the two or three cutting deck spindle housings.
- Continue pumping grease into the spindle housings until grease starts to seep past the seals under the belt pulley.



Change the Hydrostatic Transmission Oil

- Change the transmission oil every 100 hours.
- Remove the drain plug.
- Drain the oil into a suitable container.
- Replace the drain plug.



Note:

If the mower is used on hilly terrain or used to tow loads, the transmission oil should be changed every 50 hours.

Maintenance Schedule

The Cheetah Plus has been designed and manufactured to very high specifications to provide a grass cutting machine that will give long trouble free service.

It is important however, that general maintenance is carried out on a regular basis to ensure that Performance, Reliability and Safety are maximised.

As the engine manufacturer may update servicing requirements independently of HMF Mowers, and servicing instructions in the engine manufacturer's manual will take precedence over any instructions contained in this manual.

Note

It is a part of the warranty conditions that this service be carried out and recorded in this manual by an authorised Kingcat dealer.

After first 10 Hours of Service

- Change the engine oil.
- Check the condition of the air filter and clean if required.
- Check the engine screen grid for blockage and clean if necessary.
- Check for loose fasteners and tighten if required.
- Check park brake operation and adjust if required.
- Check the operation of the safety switches.
- Check the tyre pressures and correct if required.
- Check the cutter blades, bolts, nuts, housing and guards for damage. Replace if required.
- Check and adjust belt tensions and/or free play.

Before each Use

- Check the engine oil level and top up if required.
- Check the condition of the air filter and clean if required.
- Check the engine screen grid for blockage and clean if necessary.
- Check the operation of the safety switches.
- Check the tyre pressures and correct if required.
- Check for loose fasteners and tighten if required.

After every Use

- Rinse and clean the cutting deck thoroughly.

Maintenance Schedule

12 Monthly or Every 50 Hours whichever comes first

- Change the engine oil.
- Check the condition of the air filter and clean if required.
- Check the engine screen grid for blockage and clean if necessary.
- Check for loose fasteners and tighten if required.
- Check park brake operation and adjust if required.
- Check the operation of the safety switches.
- Check the tyre pressures and correct if required.
- Check the cutter blades, bolts, nuts, housing and guards for damage. Replace if required.
- Check and adjust belt tensions and/or free play.
- Lubricate all linkages and pivot points associated with the deck lifting mechanism.
- Grease the tension arm and spindle housings on the cutter deck.

Every 100 Hours

- Change the engine oil & filter.
- Change the hydrostatic transmission oil.
- Clean the air filter foam element, grid, base and air duct and replace the paper filter element.
- Check the engine screen grid for blockage and clean if necessary.
- Check and adjust or replace spark plugs as required.
- Check for loose fasteners and tighten if required.
- Check park brake operation and adjust if required.
- Check the operation of the safety switches.
- Check the tyre pressures and correct if required.
- Check the cutter blades, bolts, nuts, housing and guards for damage. Replace if required.
- Check and adjust belt tensions and/or free play.
- Lubricate all linkages and pivot points associated with the deck lifting mechanism.
- Grease the tension arm and spindle housings on the cutter deck.
- Check the condition of the drive belts and replace if required. Use only the belts specified by HMF Mowers.

Troubleshooting

Symptom	Possible Cause	Remedy
Engine will not start	Battery flat	Charge battery or replace
	Choke open	Move lever to "choke" position unless engine is hot
	Engine out of fuel	Check and fill fuel tank
	Fuel contaminated	Drain fuel tank and carburettor and replace fuel
	Spark plugs faulty, fouled or electrode gap incorrect	Clean spark plugs, reset gap or replace
	Spark plug wet with fuel (engine flooded)	Dry and reinstall the spark plugs. Start the engine with the throttle lever in the MAX. position.
	Fuel filter restricted, carburettor malfunction, ignition malfunction, valves stuck, etc.	Replace or repair faulty components as necessary.
	Cutter lever is in the "engage" position	Put the lever in the "disengage" position
Engine lacks power	Air filter element(s) restricted.	Clean or replace filter element(s)
	Fuel contaminated	Drain fuel tank and carburettor and replace fuel

Troubleshooting

Symptom	Possible Cause	Remedy
	Fuel filter restricted, carburettor malfunction, ignition malfunction, valves stuck, etc.	Replace or repair faulty components as necessary
Mower will not move in either direction	The transmission engage lever is in the "disengage" position	Move the lever to the "engage" position
	The park brake is on	Depress the brake pedal to release the park brake.
Cutter does not engage	Drive belt tension incorrect or belt broken	Adjust or replace drive belt
	Incorrect adjustment of electric clutch airgap	Adjust airgap
	Defective battery	Replace defective battery
	Faulty charging system, wiring or connectors	Check electrical system and repair as required
Engine lacks power and exhaust blowing black smoke	Throttle is down into the choke position	Move throttle back to fast, approx $\frac{3}{4}$ of the way towards "rabbit"
Engine "hunts " at idle or low revs	Blocked carburettor jets	Strip and clean carburettor and all jets, replace fuel with fresh clean fuel, replace fuel filter.

Warranty Policy

New Mower

HMF Mowers warrants in respect of each new ride-on sold, that for a period of one (1) year (Domestic use**) or six (6) months (Commercial/Contractor/Hire use***) to the original purchaser from the date of purchase, HMF Mowers or an authorized dealer will repair or replace free of charge any ride-on mower parts found to be defective in materials or workmanship under normal use and operating conditions provided that:

- The mower has been properly and reasonably used, operated, maintained and regularly serviced as per the safety and operating instructions and maintenance schedule during warranty period.
- The replacement or repair is performed by an authorized HMF Mower Dealer.

** "Domestic/Consumer use" means the personal residential household property use by the original retail purchaser.

*** "Commercial use" means all other uses, including income producing, rental, schools, government departments and charity operators.

New Mower Warranty Extension

To triple the warranty period (Domestic use only) from the existing twelve (12) months to thirty six (36) or 300 hours whichever comes first, all we require is that:

- The warranty registration form be completed and returned to HMF Mowers, Private Bag 20503, Te Rapa, Hamilton 3241
- The mower receives an initial service at five (5) to ten (10) hours or one (1) month, then a service as per the maintenance schedule at every fifty (50) hours or twelve (12) months whichever is the sooner, and those service times and dates are recorded in the owner's manual by the Kingcat Mowers servicing dealer.
- The structural integrity of all Cheetah Plus cutter deck chassis produced from 2007 are warranted to give a minimum of FIVE years safe operation. (excludes paint repairs).

Parts Installed During New Mower Warranty Period

Warranty coverage for parts installed during the life of the new mower warranty period shall consist of the remainder of the new mower period or ninety (90) days, whichever is the greater, provided the installation is performed by an authorized HMF Mowers Service Dealer.

Warranty Policy

Engine

The engine in a new mower is covered by the manufacturer of that specific engine, not by HMF Mowers. Please refer to the engine manual supplied with the mower.

Battery and Electric Clutch

The battery or electric clutch in a new mower is covered for a period of twelve (12) months by the battery/electric clutch supplier and/or HMF Mowers to the original purchaser from the date of purchase. (Excluded in extended Warranty)

Warranty Service

In the event of the need for warranty service, please contact your local authorized HMF Mowers dealer. The date of purchase and Model and Serial number of the machine must be supplied before any warranty claim will be accepted for the processing.

Warranty registration

The warranty registration card must be completed by the dealer with the customer at the time of the purchase and returned to HMF mowers, Private bag 20503, Te Rapa, Hamilton 3241

Warranty Exclusions

- The rental of another machine or related equipment while unit repairs are in progress
- Telephone, facsimile expenses or other related communication expenses.
- Transportation and Insurance charges during transportation of failed unit or any part thereof.
- The labour, parts, mechanical adjustments or lubricant costs which, in the judgment of HMF Mowers are made or should be made as standard maintenance according to the maintenance schedule.
- The replacement of normal maintenance parts such as mower discs, blades, cutter bars, bolts and nuts, vee belts, bearings, and chains

Warranty Policy

made in connection with normal maintenance services as opposed to manufacturing defects.

- Any defect caused by alteration, modification, fitment of non genuine part or attachment not approved by HMF Mowers.
- Any defect caused by misuse, negligence, accidents or failure to carry out proper maintenance procedures.
- Any defect caused by work carried out by anyone other than an Authorized Dealer.
- Damage caused by the continued operation of the machine after it is known to be defective.
- Damage caused by racing and similar activities or by overloading.

All implied warranties (save those preserved by statute) are excluded. Liability for consequential damages under any and all warranties are excluded to the extent exclusion is permitted by law. To the extent that it is not prevented from doing so from statute, the manufacturer will not accept liability for costs of labour, postage, cartage or delivery to replace faulty materials or parts; or for any loss, damage or accident directly, indirectly, or consequently suffered by the purchaser, operator or any person or property as a result of such faults whether due to defective materials or workmanship or otherwise.

The careless or improper use of a machine of this type can be dangerous. The manufacturer or selling agent does not accept responsibility for accident either to the operator, to the owner or to any person directly or indirectly or to property as a result of such accident is caused by circumstances other than by negligence or default of HMF Mowers.

Due to HMF Mowers on-going commitment to product improvement, we reserve the right to change at any time, product specifications, configurations and company policies.

Service Record			
INTERVAL	HOUR METER READING	SERVICE DATE	DEALER STAMP
10 Hours			
50 Hours			

Service Record			
INTERVAL	HOUR METER READING	SERVICE DATE	DEALER STAMP

Service Record			
INTERVAL	HOUR METER READING	SERVICE DATE	DEALER STAMP

Service Record			
INTERVAL	HOUR METER READING	SERVICE DATE	DEALER STAMP

Service Record			
INTERVAL	HOUR METER READING	SERVICE DATE	DEALER STAMP



www.kingcat.co.nz

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