HWF MOWERS

Kingcat

CUB 610/660

Owner/Operator Manual

PRE-DELIVERY CHECK

Model:_____ Engine Type:_____

Engine No:_____ Serial No:_____

Purchasers Name:_____

Dealer's Name:_____

Pre-Delivery Date: / /

Dealer's signature:_____

1.LUBRICATION
Grease all grease points
Check engine oil level
Check fuel level

2. GENERAL CHECKS
Hand control levers
Blade engagement lever
Cutting deck is level
Idle speed
Top speed
Belt tensions
Tyre pressure
Check all bolts, etc for tightness
Cutter belt tension
Operation of Choke, throttle and stop control

3. FINAL INSPECTION
Paint work
Engine handbook
Operators Manual

4. RECORD OF ANY ACCESSORIES FITTED

_____

_____

Servicing
Mechanic:_____

Delivery and Demonstration Guide

When you receive your new *Kingcat Cub*, ensure your dealer has carefully explained the following points:

1. Starting Procedure
2. Hand-control driving levers
3. Operation of all controls
   - recoil start
   - throttle
   - hand control driving lever
   - mower engagement.
4. Use of the discharge flap
5. Mowing speeds and mower heights.
6. Belt tensioning
7. Location of engine and serial numbers
8. Regular maintenance procedures
   - air filter
   - oil drain and level points
   - greasing points.

Operating Instructions

Engine Starting

Refer to engine handbook

- 1. Ensure the mower blade is disengaged and the drive engage levers are in the neutral position.
- 2. Keep all bystanders well clear.
- 3. Shift the throttle lever to choke and pull the recoil. When the engine fires, shift throttle lever immediately to run position.

Moving Off

- 1. Shift throttle lever to required position for correct engine speed (for mowing, full engine revs)
- 2. Select required gear ratio.
- 3. Ease drive levers forward to engage drive.

Stopping

- 1. Ease drive levers back to neutral drive.
- 2. Reduce engine speed.
- 3. To stop engine, shift throttle lever to stop and engine will cut out.

Engaging mower

- 1. Ensure that the mower pan is set at it's maximum height.
- 2. Start the engine.
- 3. Set the throttle to full speed.
- 4.Ease the mower engagement lever forward to the on position.
- 5. Allow blade to reach operating speed.
- 6. Adjust the mower blade to the desired cutting height before proceeding.
- 7. To disengage mower blade, reverse the above procedure.

Mowing

- ***Take special note of this section as mowing conditions can vary greatly.***

- The ***KingCat Cub*** has been designed to cope with a large range of grass types, conditions, lengths and mowing speeds. Always use high revs when mowing and regulate mower speed using the hand control drive levers. As a general rule, travel slowly when mowing over rough ground, long grass, touch grass eg. Rye grass, Kikuyu, etc) or if the grass is wet.
- Select a suitable height for the conditions. The ***KingCat Cub*** is fitted with a single lever height control with five settings, ranging from 10mm to 60mm. The upturned bar blades creates sufficient wind velocity to clear the blade housing of cut grass and to spread it evenly on the right hand side of the mower. For safety, the discharge is fitted with a deflector flap.

Speed Selection

- The KingCat is fitted with a three-speed gearbox to provide the right speed for all mowing conditions.

Operator Maintenance

Check the following daily or every 8 hours of mowing.

1. Engine oil level – Remove dipstick and ensure level is correct. Ensure that the mower is on level ground when checking the oil level. If necessary, top ip with the grade oil specified in the engine handbook.
2. Engine air filter – Refer the engine handbook.
3. Belt Tensions – See "Adjustments"
4. Tyre pressures – 150 kPa (20psi)
5. Make sure the underside of the mower deck is cleaned out after use.
6. Oil wheel drive pivots every 50 hours.

Important Safety Instructions

Training

- 1. Read the operating and maintenance manuals carefully. Be thoroughly familiar with the controls and proper use of the equipment. Know how to stop the mowers and disengage the controls quickly in an emergency.
- 2. Never allow children or people unfamiliar with these instructions to operate the mower.
- 3. Keep the area of operation clear of all person, particularly small children and pets.

Preparation

- 1. Thoroughly inspect the area where the equipment is to be used and remove all stones, sticks, wires, bones and other foreign objects before mowing.
- 2. Do not operate the equipment when barefoot or wearing open sandals. Always wear substantial footwear. It is advisable to wear suitable eye and hearing protection.
- 3. Check the fuel before starting the engine. Do not smoke while fuelling the engine. Do not fill the fuel tank indoors, when the engine is running or until it has been allowed to cool for several minutes after running. Clean off any spilled fuel before starting the engine.
- 4. Mow only in daylight or good artificial light and always keep children away from mowing area.

Operation

1. Disengage all blade and drive controls before starting the engine.

2. Do not tilt the mower when starting the engine.

3. Start the engine carefully with feet well away from the blades.

4. Do not put hands or feet near or under rotating parts. Always keep clear of the blade and discharge opening.

5. Do not change the engine governor setting of over-speed the engine.

6. Disengage mower blade when crossing gravel drives, walks or roads.

7. In the event of striking a foreign object, stop the engine, remove the high tension cable from the spark plug, thoroughly inspect the mower for any damage and repair the damage before restarting the mower.

8. If the mower should start to vibrate abnormally, stop the engine, disconnect the spark plug high tension cable and check immediately for the cause. Vibration is generally a warning of trouble.

9. Stop the engine whenever you leave the mower, before cleaning the mower housing and when making any repairs of inspections.

10. when cleaning, repairing or inspecting, make certain the blade and all moving parts have stopped and that the engine has had time to cool. Disconnect the spark plug high tension cable and keep the cable away from then lug to prevent accidental starting.

11. Do not the run the engine indoors. Lethal exhaust gasses can be produced.

12. Shut the engine off and wait until the blade comes to a complete stop before unclogging the chute.

13. It is always preferable to mow across the face of slopes. If the terrain is such that it is possible to mow across a slope, only mow up the direction on slopes, **but never down.** Exercise extreme caution when changing direction on slopes.
Do not mow excessively steep slopes.

14. Never operate the mower without proper guards, deflectors or other safety devices in place.

15. never pick up or carry the mower when it is operating.

Maintenance and Storage

1. before using, check the blades (s) and the blade bolts (s) for wear and damage. Replace worn or damaged blades or bolts insets to preserve the balance. Damaged blades and worn bolts are major hazards.

2. Keep all nuts, bolts and screws tight to ensure the mower is in a safe working condition.

3. Never store the mower with fuel in the tank inside a building where fumes may reach an open flame or spark. Allow the engine to cool before storing in any enclosure.

4. Store fuel in an approved container safely out of reach of children in a cool, well ventilated space.

5. Reduce fire hazard by keeping the engine free of grass, leaves or excessive grease.

6. If the mower is to be stored for a period of more than 3 months, drain the fuel tank as stale fuel will make the mower difficult to start.

Adjustments

Gearbox Drive Belt

- Slacken the four engine mounting bolts. Move the engine forward to tension the belt and tighten the bolts.

Blade Belt

- Lever and belt idler arm. Loosen locknuts both sides of engagement arm and tension the belt until a firm engagement is achieved. Re-tighten Adjust link between blade between locknuts and arm.

Drive Belt

- Belt tension is adjusted using turnbuckles located just below the drive engagement levers. Adjust the turnbuckles until firm engagement is achieved.

Mower Deck

- Position mower on a firm lever area.
- RAKE: The mower deck should be adjusted so that the blade is 5mm higher at the rear than the front. Loosen the front locknuts on the height control connecting rod. Adjust until the correct rake is achieved. Tighten the locknuts.
- HEIGHT: With the blade height set on position 1, the blade should be adjusted to be 10mm off the ground. Loosen the rear locknut on the height control connecting rod. Adjust to the correct height. Tighten the locknut.
- engagement locknuts. Leave approx 3mm freeplay

Specifications

• **Engine:**	**Te Cumseh Formula**	**Honda**
• **Horsepower**	10hp	12hp
• **Cylinders**	1	1
• **Cycle**	4	4 stroke
• **Cooling**	Aircooled	Aircooled
• **Engine Oil**	Sae30	Sae30
• **Transmission**	Independent tensioned 'V' belt to both back (driving) wheels	
• **Gear box**	Peerless 3 speed	
• **Tyres**	Rear: Pneumatic 400-480 x 8 Front: duel swivel castors zero Pressure 200x75mm	

• **Capacities**	
• Fuel Tank	1.43 litres of 91 or 96 octane
• Gearbox Oil	Lubricated for Life
• Mower:	
• Width of cut	610mm (24 Inch)
• Cutting Heights	10-60mm in 5 settings

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