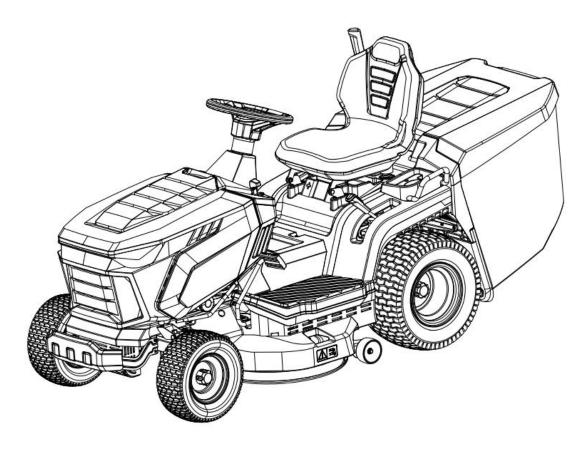


# COBRA GARDEN TRACTOR OWNER'S MANUAL

MODEL: LTX92HR2L (T92H)

LTX102HR2L (T102H)







When using the machine the safety rules must be followed. For your own safety and bystanders please read these instructions before operating the machine. Please keep the instructions safe for later use.

#### **Cobra Garden Machinery**

Henton and Chattell Ltd., London Road, Nottingham NG2 3HW UK www.cobragarden.co.uk

**Revised November 2024** 

#### **IMPORTANT**

The lawnmower must always be used with utmost caution. So that safety precautions and operating instructions are always readily on hand, labels have been affixed to the machine showing pictographs illustrating the main operating precautions. The labels, according to applicable safety standards, are considered an integral part of the machine, the user is therefore responsible for replacing them in the event they become detached or illegible.

#### **LABELS**

the



Warning:

Read the instructions before operating this machine.



Danger!

Ejected objects:



Warning:

Disconnect the ignition key and read the instructions before carrying out any repair or maintenance work.



Risk of injury.

Blades in movement, the blade will continue turning for some time after switching off the engine or disabling the blade control.



Danger!

Risk of overturning on steep gradients.



Danger!

Risk of burns

Wait for the engine to completely cool down before making any adjustments or servicing the engine itself.



Warning!

Never use pressure lances to wash the transmission system.







Do not use the machine on slopes on slopes with longitudinal gradients great than 15°.

Do not use the machine on slopes on slopes with lateral gradients great than 10°.

#### 1. SAFETY

#### 1.1 HOW TO READ THE MANUAL

Some paragraphs in the manual containing important information regarding safety and operation are emphasised in the following ways.

NOTE

or

IMPORTANT

These give details or further information on what has already been said, in the aim to prevent damage to the machine.

**▲** WARNING!

Non-observance will result in the risk of injury to oneself or others

A DANGER!

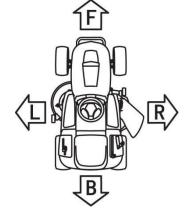
Non-observance will result in the risk of serious injury or death to oneself or others

NOTE

Positions refer such as "front", "back", "left" or "right" hand side, refer to forward travel direction.

**IMPORTANT** 

For all operations regarding the use and maintenance of the engine not described in this manual, refer to the relevant manuals which form an integral part of all the documentation supplied with the machine.



#### 1.2 GENERAL SAFETY REGULATIONS

**▲** WARNING!

Read carefully before using the machine.

#### A) TRAINING - Read the instructions carefully.

#### Be familiar with the controls and how to use the equipment properly.

- Never let children or people unfamiliar with these instructions use the machine. Local regulations can restrict
  the age of the user.
- Never mow while people, especially children, or pets are nearby; Never mow while dark.
  - Keep in mind that the operator or user is responsible for accidents or hazards occurring to other people or their property.
  - Do not carry passengers.
  - All drivers should seek and obtain professional and practical instruction. Such instruction should emphasise:
  - the need for care and concentration when working with ride-on machines;
  - you cannot use the brake to regain control of a ride-on machine sliding down a slope.

#### The main reasons for loss of control are:

- insufficient wheel grip;
- over-speeding;
- inadequate braking;
- the type of machine is unsuitable for its task;
- unawareness of the effect of ground conditions, especially slopes;
- incorrect hitching and load distribution



#### **B) PREPARATION**





While mowing, always wear sturdy footwear and long trousers. Do not operate the equipment barefoot or wearing open sandals. Thoroughly inspect the area where the equipment is to be used and remove all objects which can be ejected from the machine, such as twigs, branches, stones, and other debris.

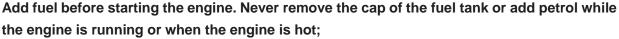


#### **DANGER!** Petrol is highly flammable:

store fuel in containers specifically designed for this purpose;



refuel outdoors only and do not smoke while refueling;
 Add fuel before starting the engine. Never remove the cap of the fuel tall





- if you spill petrol, do not start the engine and move the machine away from the area of spillage. Do not create any source of ignition until the petrol vapors have evaporated;
- put back and tighten all fuel tank and container caps securely.
  - -Replace faulty silencers.
  - Before use, always inspect the machine to check that the blades, blade bolts and cutter assembly are not worn or damaged. Replace worn or damaged blades and bolts in sets to preserve balance.
  - On multi-bladed machines, remember that the rotation of one blade can cause other blades to rotate.

### NOTICE! – Always check the engine oil is the correct level before starting. Check the engine manual for further details.

#### C)OPERATION

Do not start the engine in a confined space where dangerous carbon monoxide fumes can collect.



- 2) Mow only in daylight or good artificial light.
- 3) Before starting the engine, disengage the blades and shift into neutral.
- 4) Do not use the machine on slopes with longitudinal gradients of more than 15°(27%). Do not use the machine on slopes with lateral gradients above 10°(18%).
- 5) Remember there is no such thing as a "safe" slope. Travelling on grass slopes requires particular care.

#### To guard against overturning:

- do not stop or start suddenly when going up or downhill;
- engage the drive slowly and always keep the machine in gear, especially when travelling downhill;
- machine speeds should be kept low on slopes and during tight turns;
- stay alert for humps and hollows and other hidden hazards;
- never mow across the face of the slope.
- use care when pulling loads or using heavy equipment:
- use only approved drawbar hitch points;
- limit loads to those you can safely control;
- do not turn sharply. Use care when reversing;
- use counterweight(s) or wheel weights whenever advised in the instructions manual.
- 6) Stop the blades before crossing surfaces other than grass.
- 7) Never use the machine with damaged guards, or without the safety protective devices in place.
- 8) Do not change the engine governor settings or overspeed the engine. Operating the engine at excessive speed can increase the risk of personal injury.

- 9) Before leaving the driving seat:
- disengage the blades and lower the attachments;
- go into neutral and apply the parking brake;
- stop the engine and remove the ignition key.
- 10) Disengage the blades, stop the engine and remove the ignition key:
- before clearing blockages or unclogging the collector channel;
- before cleaning, checking or servicing the machine;
- after striking a foreign object. Inspect the machine for damage and make repairs before restarting and operating the machine;
- If the machine starts to vibrate abnormally (check for the causes immediately).
- 11) Disengage the blades for transport or whenever they are not in use.
- 12) Stop the engine and disengage the blades:
- before refueling;
  - before making height adjustments unless adjustment can be made from the operator's position.
- 13) Reduce the throttle during engine run-out. If the engine is provided with a shut-off
- 14) Cut off the fuel with the fuel valve when you have finished mowing.
- 15) Watch out for traffic when crossing or near roadways.
- 16) Never direct discharge of material towards bystanders nor allow anyone near the machine while in operation.

#### D) MAINTENANCE AND STORAGE

- 1) Keep all nuts, bolts and screws tight to be sure the equipment is in safe working condition.
- 2) Never store the equipment with petrol in the tank inside a building where fumes may reach an open flame or spark.
- 3) Allow the engine to cool before storing in any enclosure.
- 4) To reduce fire hazards, keep the engine, silencer, battery compartment and petrol storage area free of grass, leaves, or excessive grease.
- 5) Check the grass-catcher frequently for wear or deterioration.
- 6) Replace worn or damaged parts for safety purposes.
- 7) If the fuel tank has to be drained, this should be done outdoors.
- 8) On multi-bladed machines, remember that the rotation of one blade can cause other blades to rotate.
- 9) When the machine is to be parked, stored or left unattended, lower the cutting means unless a positive mechanical lock is used.

#### **E) CAUTION WHEN TOWING**

A kit for towing a small trailer is available on request, This accessory is to be fitted following the instructions provided, When using the towing kit. Do not exceed the recommended loads stated on the label and follow the safety instruction.

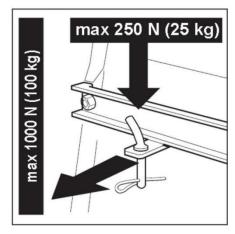


Fig1

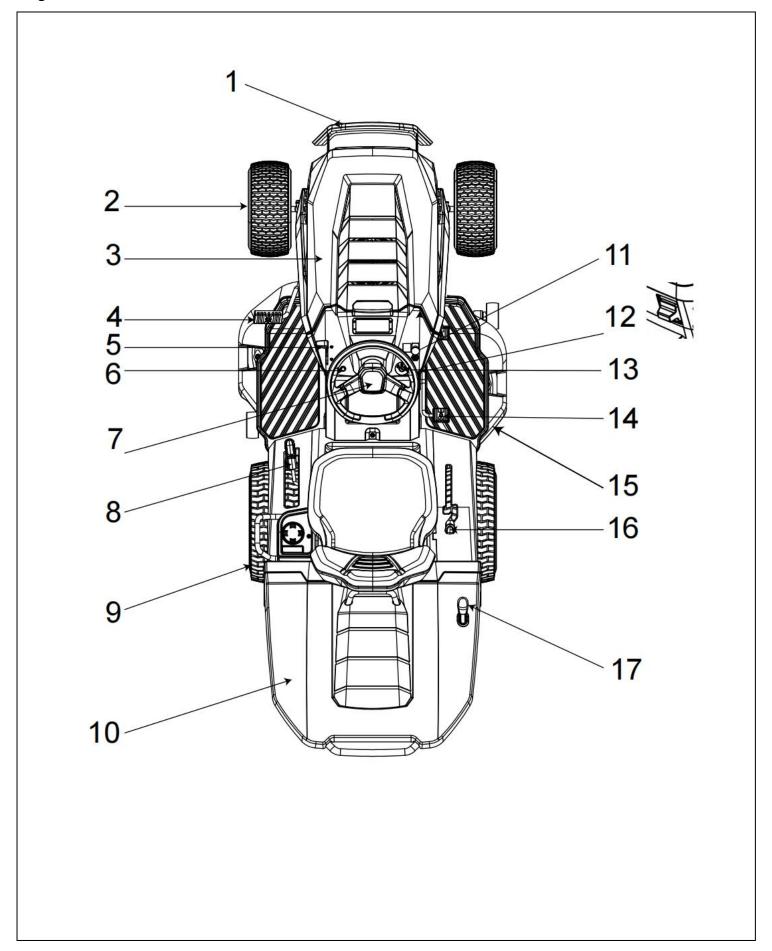
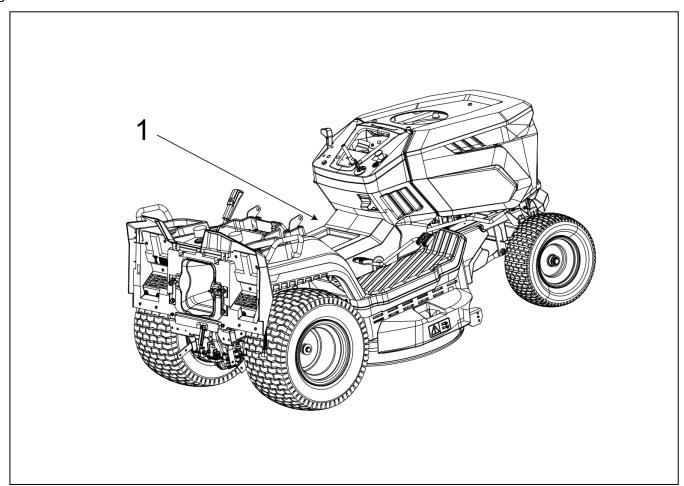


Fig 2



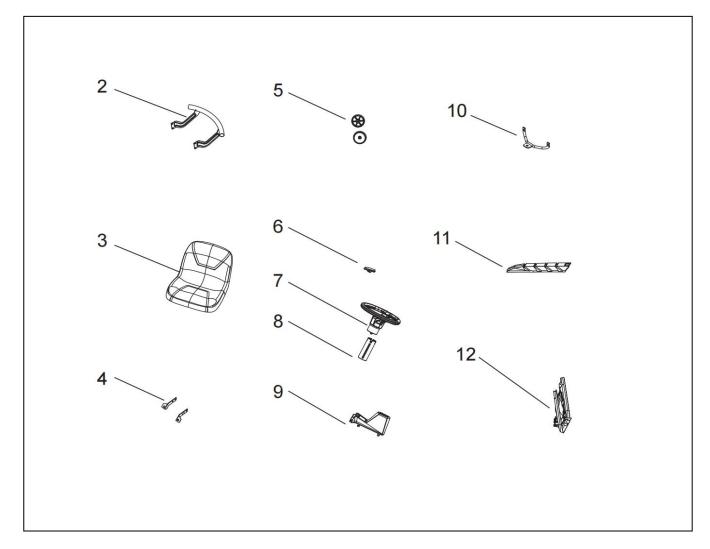
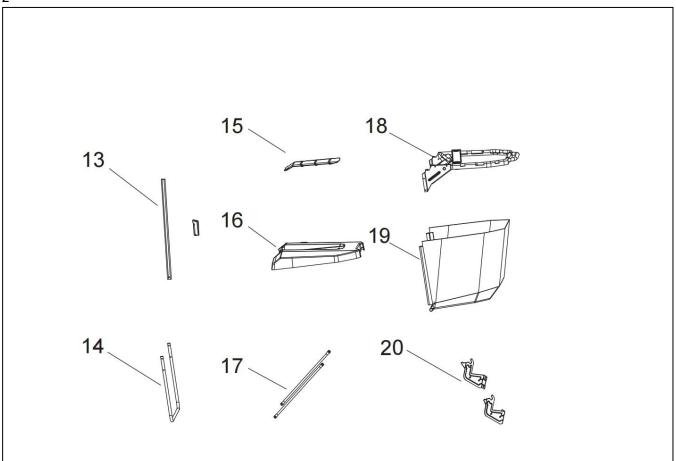


Fig 2



Item 21 Fixing Kit

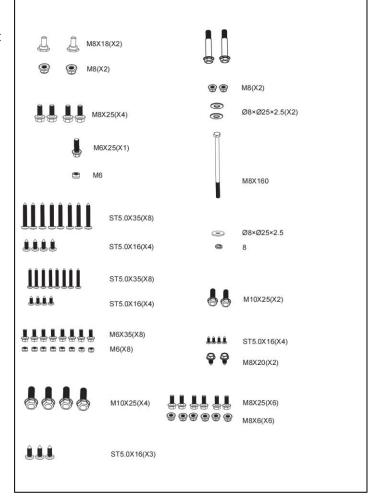


Fig 3

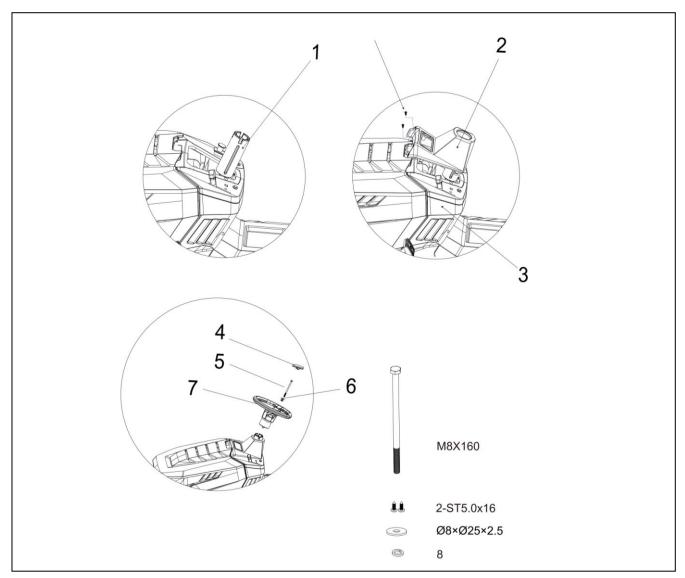


Fig 4

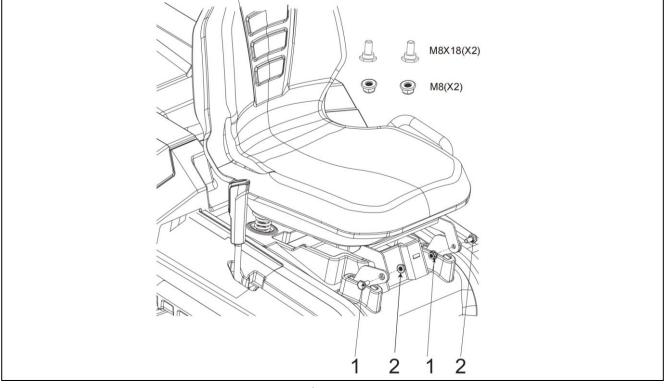


Fig 5

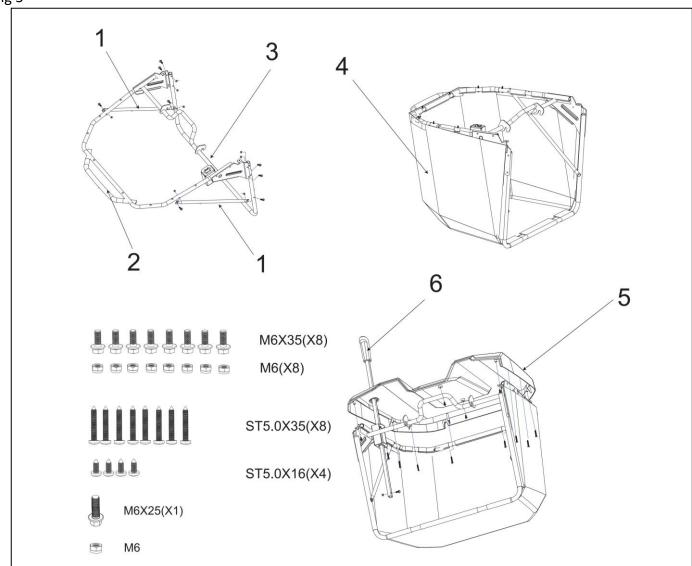


Fig 6

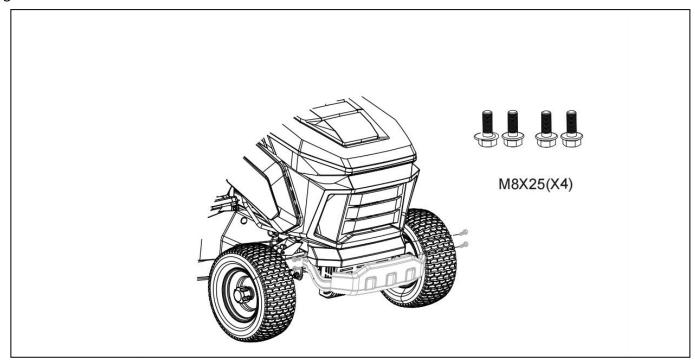


Fig 7

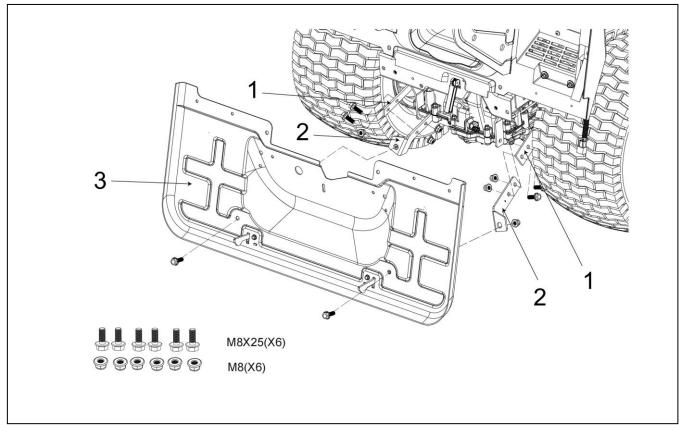


Fig 8

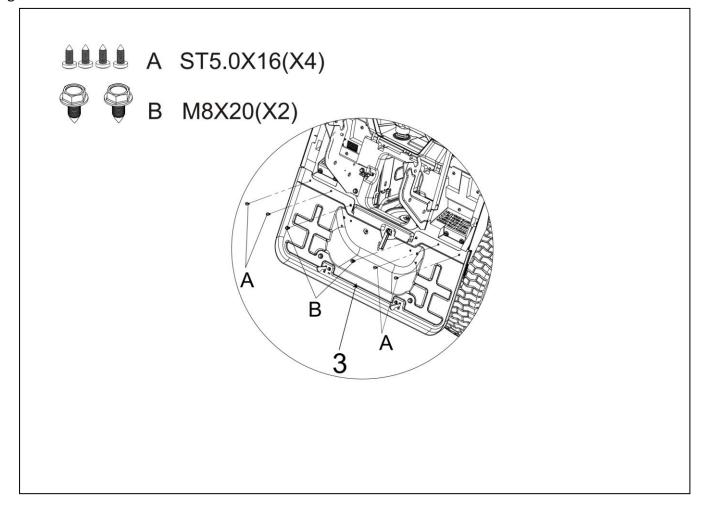


Fig 9

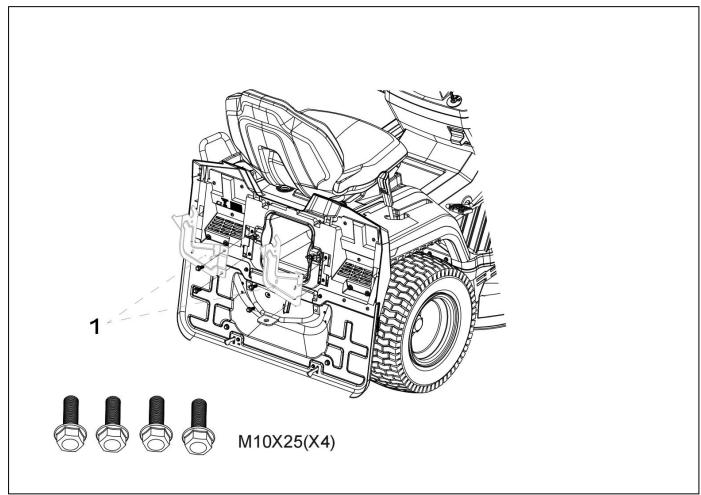


Fig 10

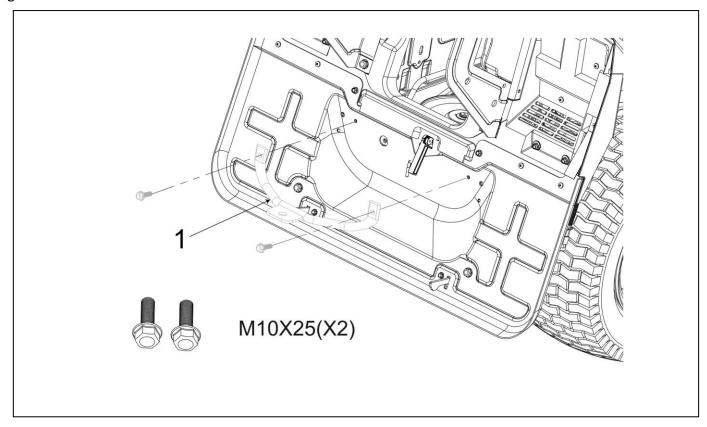


Fig 11

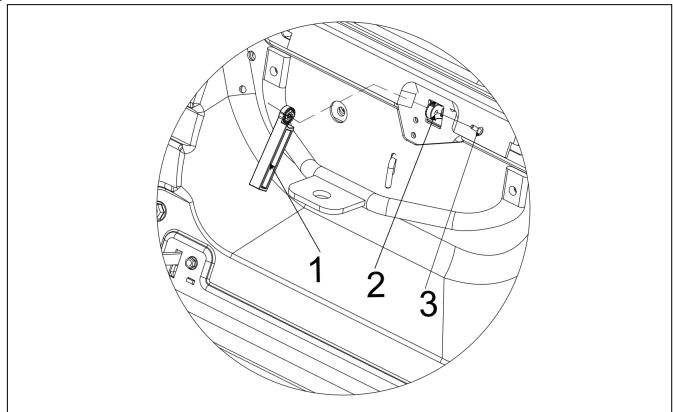


Fig 12

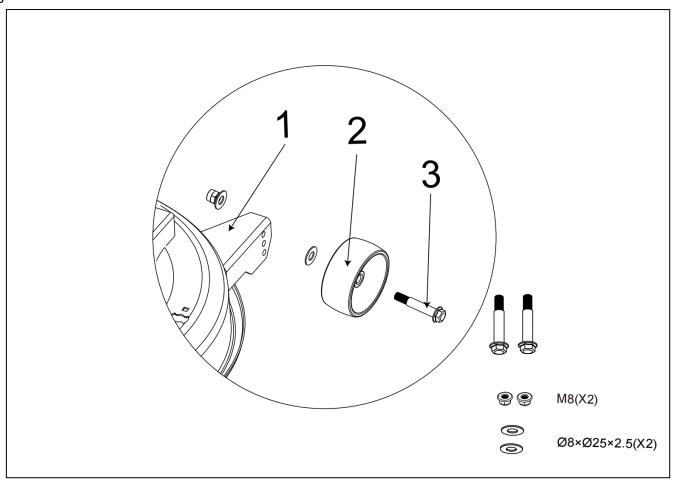


Fig 13

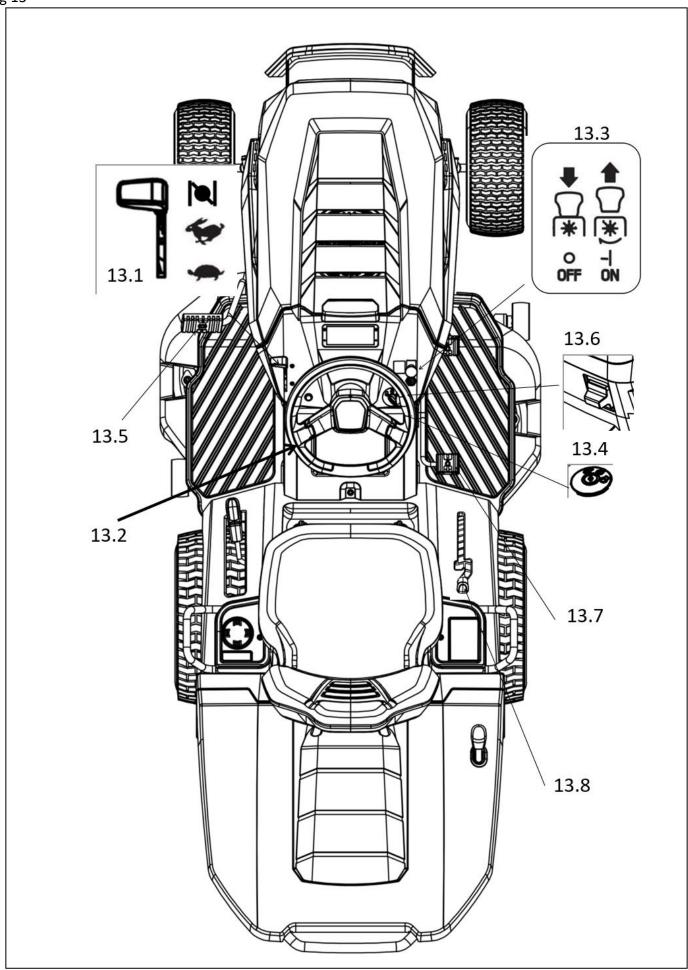


Fig 14

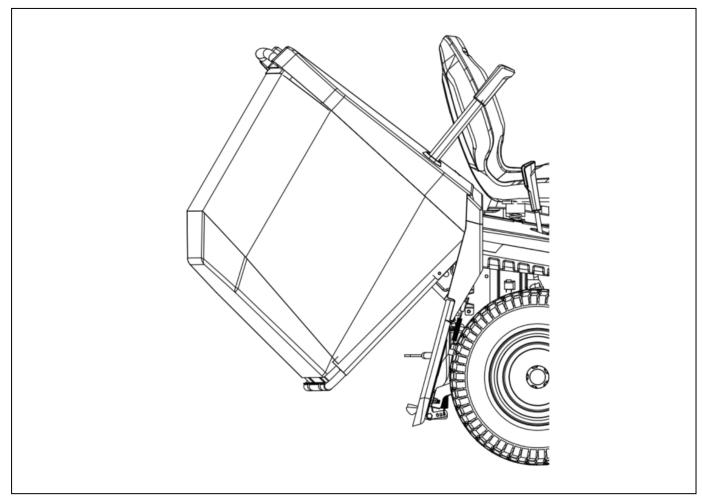


Fig 15

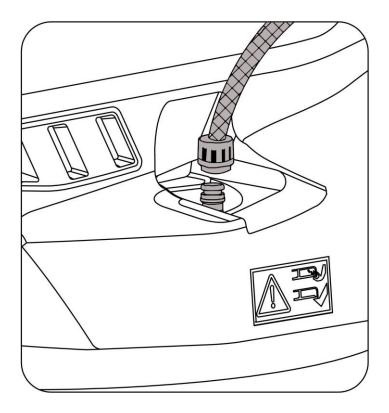


Fig 16

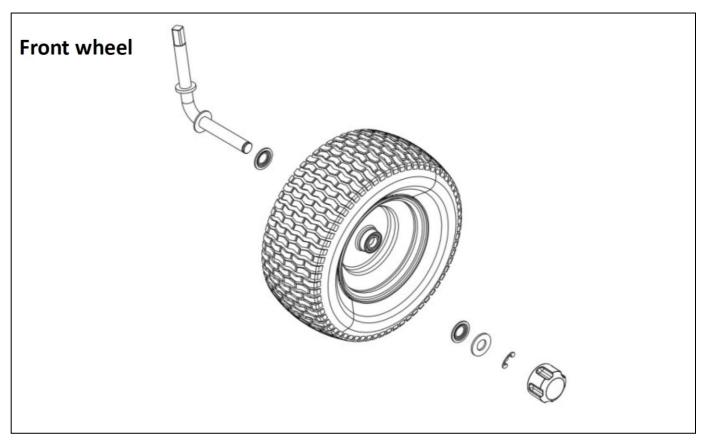


Fig 17

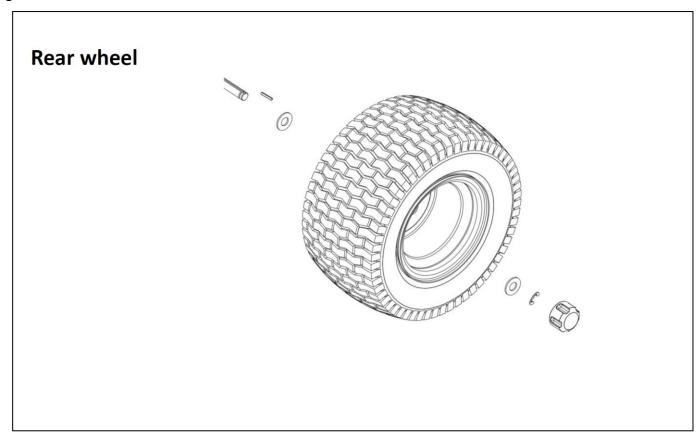


Fig 18

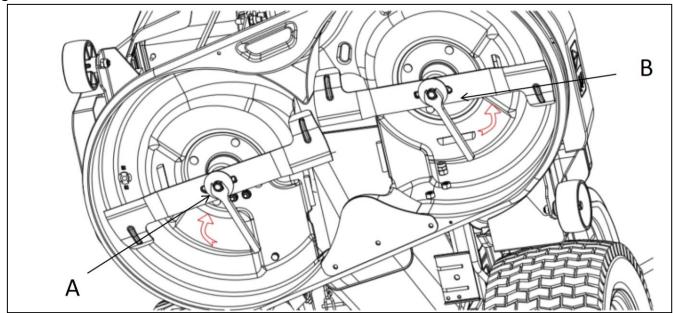


Fig <u>19</u>

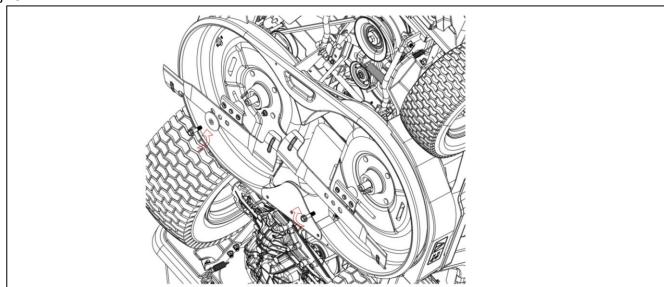


Fig 20

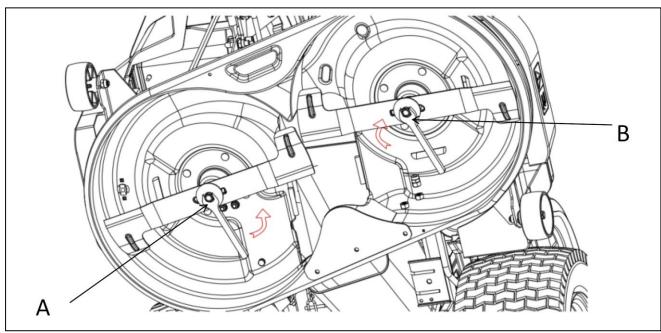


Fig 21



#### Specifications

		LTX92HR2L	LTX102HR2L
MODEL		T92H-L5	T102H-L5
	Engine	LC2P73F	LC2P73F
	Power	12.5kW	12.5kW
	Displacement	586cc	586cc
Power	Engine speed	2800rpm	2800rpm
	Fuel tank capacity	8.5L	8.5L
	Battery capacity	DC12V/18Ah	DC12V/18Ah
	Minimum turning radius	45cm	45cm
	Cutting width	927mm	1024mm
	Reverse mowing	Yes	Yes
Cutting	Cutting height range	25-80mm with 6 positions	25-80mm with 6 positions
system	number of blades	2	2
	blade engagement type	Electric	Electric
	Traction	Rear-wheel drive	Rear-wheel drive
	Transmission type	Hydraulic	Hydraulic
Drive		Tufftorq	Tufftorq
system	Collector capacity	280L	280L
	front wheels size	15inch	15inch
	rear wheels size	18inch	18inch
	headlights	LED-Advanced	LED-Advanced
	Bumper	Yes	Yes
	Deck wash	Yes	Yes
Equipment	connector		
	Antiscalp wheels	2pcs	2pcs
	Mulching kit	Yes	Yes
	Battery charger	Yes	Yes
	Trailer hitch kit	Yes	Yes

#### 2. IDENTIFICATION OF COMPONENTS

The main components of the machine as following: (see Fig 1)

- 1. Bumper
- 2. Front Wheel
- 3. Engine Cover
- 4. Brake Pedal
- 5. Throttle Lever
- 6. Reverse Cutting Button
- 7. Steering Wheel
- 8. Height Adjust Handle
- 9. Rear Wheel
- 10. Grass-catcher
- 11. Blade engagement Switch
- 12. Park Handle
- 13. Ignition Switch
- 14. Drive Pedal
- 15. Deck Component
- 16. Speed lever (Manual)
- 17. Grass Catcher Lever

#### 3. UNPACKING AND ASSEMBLY

For storage and transport purposes, some components of the machine are not installed in the factory and have to be assembled after unpacking. Follow the instructions below

#### **IMPORTANT**

The machine is supplied without engine oil or fuel. Before starting the engine, fill with oil and fuel following the instructions given in the engine manual.

Before starting the engine always check the engine oil level and add the correct oil as required.

#### 3.1 UNPACKING

When unpacking the machine, take care to gather all individual parts and fittings, and do not damage the cutting deck when taking the machine off the pallet.

The standard packaging contains: (see fig 2)

- 1. Machine body;
- 2. Bumper;
- 3. Seat:
- Rear Plate Fix Plate(X2);
- 5. Anti scalp Wheels(X2);
- 6. Steering Wheel Cover;
- 7. Steering Wheel;
- 8. Steering Wheel Sleeve;
- 9. Steering Wheel Base;
- 10. Trailer Hitch;
- 11. Engine Cover;
- 12. Rear Plate:
- 13. Grass Catcher Lever;
- 14. Grass Catcher frame;
- 15. Grass Catcher upper cover I;
- 16. Grass Catcher upper cover II;
- 17. Grass Catcher frame I:
- 18. Grass Catcher frame II:
- 19. Grass catcher;
- 20. Grass catcher bracket;
- 21. Fixings and Tools.

**NOTE** To prevent damage to the cutting deck, raise it to its maximum height and take utmost care when taking the machine off the pallet.

#### 3.2 FITTING THE STEERING WHEEL(see fig 3)

Put the machine on a flat surface and straighten up the front wheels.

- Fit the sleeve (1) onto the shaft.
- Mounting the steering wheel lower cover (2) to base (3), and use 2 screws(ST5.0\*16) to fix. Fix the steering wheel with the bolt(5) and washers(6), (Use the hex wrench in accessories tools)
- Mount the steering wheel cover(4).

**NOTE** Pay attention to the direction when mounting the steering wheel.

#### 3.3 FITTING THE SEAT (see fig 4)

- Use the Bolt(1) and Nut(2) to fix the seat on the machine.(Use the hex wrench in accessories tools)

## **3.4 ASSEMBLING THE GRASS CATCHER** (see Fig 5)

- Mounting the front bracket (3) on the Top frame (2) using 4 bolts (M6x35) and 4 nuts(M6).
- Mounting the 2pcs side stay pipes(1) on the Top frame (2) and front bracket (3) using 4 bolts (M6x35) and nut (M6).
- Fit the grass bag(4) on the frame component;
- Attach the Grass Catcher Cover(5) on the frame component using 8 screws(ST5.0X35) and 4 screws(ST5.0X16).
- Put the tipping lever (6) into the grass-catcher cover board and insert the nut (M6) and the bolt (M6x25).

#### 3.5 FITTING THE FRONT BUMPER

(see Fig 6)

- Fit the front bumper on the bottom of the frame using the 4 bolts(M8x25).

## 3.6 MOUNTING REAR BAFFLE PLATE COMPONENT I (see Fig 7)

- Fit the 2 brackets(2) to the frame(1) with 4 bolts(M8x25) and 4 nuts(M8).
- Fit the rear plate(3) on the Bracket with 2 bolts (M8x25) and 2 nuts(M8).

# 3.7 MOUNTING REAR BAFFLE PLATE COMPONENT II (see Fig 8)

- Fix the rear plate with 4 Screw A (ST5.0X16) and 2 hexagon Screw B (M8X20)

#### 3.8 FITTING THE COLLECTOR BRACKETS

(see Fig 9)

- Fit the collector brackets(1) with 4 bolts (M10x25).

#### 3.9 MOUNTING TRAILER HITCH

(see Fig 10)

- Mount the Trailer Hitch(1) with 2 bolts(M10x25).

## 3.10 FITTING ALARM SWITCH PRESSURE PLATE (see Fig 11)

- Fit the Plate(1) on the Rear plate by 1 bolt(3).

### 3.11 FITTING ANTISCALP WHEELS (see Fig 12)

Fit the anti-scalp wheels (2) on the deck with bolts(3) and washer (8 x 25 x 2.5). Repeat on the other side of the deck.

#### 4.CONTROLS AND INSTRUMENTS

#### 4.1 THROTTLE LEVER (Fig. 13.1)

This regulates the engine revs, The positions are indicated on a label showing the following symbols:



«SLOW» for minimum engine speed

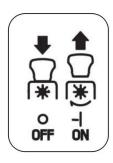
«FAST» for maximum engine speed

- The «CHOKE» position enriches the mixture when starting from cold.
- When moving from one area to another, put the lever in a position between «SLOW» and «FAST».
- When the mowing, shift into «FAST»
- When moving from one area to another, put the lever in a position between «SLOW» and «FAST».
- Return to «FAST» when cutting again.

#### 4.2 STEERING WHEEL(Fig. 13.2)

Turns the front wheels.

#### 4.3 BLADE START/STOP KNOB (Fig.13.3)



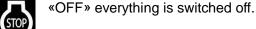
The blade start/stop knob is located on the RH console in front of the key switch.

The blade start/stop knob operates the electric clutch. Pull the knob upward to engage the blades, or push the knob downward to disengage

the blades.

#### 4.4 KEY IGNITION SWITCH (Fig. 13.4)

This key operated control has four positions





«ON» activates all parts;



«START» engages the starter motor.

#### 4.5 Brake Pedal (Fig. 13.5)

The brake pedal is located on the left front side of the board. The brake pedal can be used for sudden stops or setting the parking brake.

**NOTE**: When the machine is moving, keep your foot off the pedal.

#### 4.6 PARKING BRAKE LEVER (Fig. 13.6)

With machine stopped:

- 1) Keep the brake pedal pressed;
- 2) Press down the parking brake lever and keep pressing.
- 3) Release the brake pedal.

Fully press the brake pedal (the parking brake lever is automatically released and returns to the up position).

#### 4.7 DRIVE ENGAGEMENT PADAL (Fig. 13.7)

This pedal engages drive to the wheels, either forward or reverse. Depressing the pedal further increases the speed.

- -To engage forward drive, press it towards «F» with your toe cap. As you increase the pressure on the pedal, the speed of the machine increases.
- Reverse is engaged by pressing the pedal with the heel towards «R».
- The pedal automatically goes into neutral «N» when released.

**WARNING!** Reverse must only be engaged when the machine is stopped.

**NOTE**: Release the parking brake before engaging the drive.

#### **4.9 GRASS CUTTING**

To start cutting:

- Move the throttle to «FAST»;
- Raise the cutting deck to the highest position;
- Let the engine warm up a few minutes before engaging the cutting means;
- Engage the cutting blade only on short grass lawns; avoid engaging them on stony ground or when the grass is very high;

**IMPORTANT** If the cutting deck is engaged when the grass is too high, the engine could suffer a sudden drop of rpm and stop in some cases, or the clutch may wear prematurely.

- start moving forwards on the grass very slowly and with utmost caution, as already described;

- Adjust the cutting height and speed considering the conditions of the lawn (the height, density and dampness of the grass). To maintain collection in thicker or longer grass moderate speed and only cut a third of the grass length.

#### **4.10 CUTTING HEIGHT ADJUSTMENT LEVER**

Lifts or lowers the blade deck to adjusts the grass cutting height. There are seven positions for this lever (shown as «1» to «6» on the label), which correspond to various heights between 25 and 80mm.

#### 4.11 GRASS-CATCHER (Fig.14)

This grass catcher lever helps tip the grass clippings. The operator can empty the collector from the seat.

**NOTE** The emptying of the grass catcher can only be done with the cutting blade disengaged, otherwise the engine stops.

# 4.12 REVERSE MODE OPERATION BUTTON (RMO)

The reverse mode operation knob is located on left of the throttle lever. The blades will stop when travelling in reverse. The RMO button keeps the blades rotating when reversing

**NOTE**: Caution is required when mowing in reverse.

#### 4.13 WHEN FINISHING MOWING

When you have finished mowing, disengage the cutting blade, reduce the engine speed and set the mower deck to the highest cutting height position.

#### 4.14 END OF WORK

Stop the machine, put the accelerator lever in the «SLOW» position and turn off the engine by moving the ignition key into the «OFF» position.

**WARNING!** To avoid backfiring, put the accelerator in the «SLOW» position for 20 seconds before stopping the engine.

**IMPORTANT** To keep the battery charged, do not leave the ignition key in the «ON» position when the engine is not running. Do not operate the machine when the battery charging.

#### **4.15 CLEANING THE TRACTOR**

After each mowing session, clean the outside of the machine, empty the grass catcher and shake it to remove residual grass and earth. Clean the plastic parts of the body with a damp sponge using water and detergent, taking care not to wet the engine, the electrical parts or the electronic circuit board located under the seat.

**IMPORTANT** Never use a water hose-nozzles or harsh detergents for cleaning the body and engine.

**WARNING!** Do not let debris and dried grass accumulate in the upper part of the cutting deck assembly. Keep clear to maintain maximum machine efficiency and safety levels.

After each use, clean the cutting-deck assembly thoroughly to remove any grass remains or debris.

**WARNING!** Wear eye protection and keep people or animals away from the surrounding area when cleaning the cutting deck assembly.

- a. When washing the inside of the cutting deck assembly and the collector channel, the machine must be on firm ground:
- Prepare the machine according to the operating mode that was used the last time.
- Connect a water hose to its pipe fitting, and run water through it.
- Sit in the operator's position;
- Lower the cutting-means assembly completely;
- Start the engine and stay in neutral;
- Connect a water hose to each of the pipe fittings one at a time and run water through each one for a few minutes, with the blades operating. When washing, the cutting deck should be lowered right down. Take off the grass-catcher, empty and rinse it, and then put it in a position where it can dry quickly.
- b. To clean the upper part of the cutting means assembly:
- lower the cutting-means assembly completely;
- blow a jet of compressed air through the right and left guard openings.

## 4.16 STORAGE AND INACTIVITY FOR LONG PERIODS

If you intend not to use the machine for a long period (more than 1 month), disconnect the battery cables and follow the instructions in the engine instruction manual.

- Close the fuel stopcock.
- Remove the clamp using pliers, reconnect the tube, and empty the tank collecting all the fuel in a suitable container.

**WARNING**: Ensure there are no ignition sources before proceeding.

- Open the tap and start the engine, leaving it running till it stops because all fuel left in the tubes and carburettor has been used up. Reconnect the tube making sure you position the clamp properly.
- Put the machine away in a dry, sheltered place and preferably covered with a cloth.

**IMPORTANT** The battery must be kept in a cool and dry place. Before a long storage period (more than 1 month), always charge the battery, and then recharge before using again.

The next time the machine is used, check that there are no fuel leaks from the tubes, fuel stopcock or carburettor.

#### **4.17 USING ON SLOPES**

Observe the indicated limits (longitudinal gradients less than 15°, lateral gradients less than 10°).

**WARNING!** Take care when beginning forward movement on sloping ground to prevent the risk of tipping up. Reduce the forward speed before going on a slope, particularly downhill.

**DANAGER!** Never switch to reverse gear to decrease speed when going downhill: this could cause loss of control of the machine, especially on slippery ground.

**DANAGER!** Never ride the machine on slopes in neutral or with the clutch out! Always shift into a low gear before leaving the machine at a standstill and unattended.

**IMPORTANT** Drive down slopes with your foot off the drive pedal to use the braking effect of the hydraulic transmission when the transmission is not engaged.

#### **4.18 TRANSPORTING**

WARNING! If the machine is transported by truck or trailer, please use suitable equipment for lifting. Never use ropes and pulleys to lift the machine. During transportation, close the fuel cock, lower the cutting table, apply the parking brake, and securely secure the machine to the towing device with ropes, braces or chains.

#### 5. MAINTENANCE

#### **5.1 SAFETY RECOMMENDATIONS**

- Before cleaning or doing maintenance work, take out the ignition key and read the relevant instructions. Wear suitable clothing and work gloves whenever your hands are at risk.
- Never use the machine with worn or damaged parts. Faulty or worn-out parts must always be replaced and not repaired. Only use original spare parts! Parts that are not of the same quality can damage the equipment and affect your safety and that of others.
- Never dispose of used oil, fuel, batteries or other pollutants in unauthorized places!

#### 5.2 Scheduled maintenance

Operation	Every
	hours
MACHINE	
Check of fastening and sharpness of blades	25
Blade replacement	100
Transmission belt check	25
Transmission belt replacement	-
Blade belt check	25
Blade belt replacement	-
Drive adjustment and check	10
Blade brake and engagement check	10
Bolt and screw check	25
General lubrication	25
ENGINE	
Check engine oil level	5
Engine oil change	50
Air filter cleaning and check	5
Air filter replacement	50
Fuel filter check	50
Fuel filter replacement	100
Spark plug contacts check and cleaning	50
	100

- 1) See the engine manual for the full list and frequency.
- 2) At the first signs of any malfunction, contact your Dealer immediately.
- 3) The operation must be carried out by your Dealer or a specialised Service Centre.
- 4) General lubrication of all joints should also be carried out whenever the machine is to be left unused for a long period.

#### **5.2.1 ENGINE**

Follow all the instructions in the engine manual. To empty the engine oil, unscrew the oil plug when refitting the plug, make sure the seal is positioned correctly.

#### **5.2.2 BATTERY**

To ensure good performance of the battery it is essential to keep it carefully maintained.

The battery must be periodically recharged using the battery-charger provided (if included).

The machine battery must always be fully charged:

- before using the machine for the first time after purchase;
- every 20 starts of the engine;
- before leaving the machine unused for a long period:
- before starting up the machine after a prolonged period of inactivity.

Carefully read and observe the battery recharging instructions in the booklet provided with the battery. Failure in following the procedure or in charging the battery could permanently damage the battery elements. A flat battery must be recharged as soon as possible.

**IMPORTANT** Recharging must be done using the correct battery charger at a constant voltage. Other recharging systems can irreversibly damage the battery.

#### **5.3 MAINTENANCE- REPLACEMENTS**

#### 5.2.3 REPLACING THE WHEELS (FIG16 17)

Stop the machine on flat ground and put a block under a load-bearing part of the frame on the side that the wheel is to be changed.

The wheels are held by a snap ring which can be eased off with a screwdriver.

**NOTE** If you have to replace one or both rear wheels, they have the same diameter, and check that cutting deck is horizontal to prevent an uneven cut. You must make sure the key and washer are securely lodged in place.

**IMPORTANT** Before remounting the wheel, apply grease to the axle. Put the snap ring and supporting washer back in place.

### 5.2.4 Dismantling, replacing and remounting the blades

**WARNING!** Always wear work gloves when handling the blades. Before you inspect or remove the blade, stop the engine and disconnect the wire to the spark plug.

#### - Removing the Blade (Fig18)

A screw with right thread (loosen anti-clockwise)
B screw with left thread (tighten clockwise)

#### - Fitting the Blade (Fig19)

Check that the concave part of the cushion disc presses against the blade. Remount the shaft hubs, making sure that the keys are securely lodged In place.

#### - Tightening the Bolts (Fig20)

A screw with right thread (tighten clockwise)

B screw with left thread (tighten anti-clockwise)

Tighten with a torque wrench calibrated to 40-45 Nm.

#### 6. TROUBLESHOOTING AND FAULT CODE

Problem	Possible cause(s)	Remedy
With the key on «START» the starter motor does not run.	Electronic circuit board blocked due to:  - flat battery  - fuse blown  - bad earthing to the engine or the frame  - earth connections of the microswitches disconnected  - badly earthed starter motor  - starting conditions have not been met	Turn the ignition key to «STOP» position and look for the cause of the problem:  - recharge the battery  - replace the fuse (10 A)  - check connections of black earth leads  - check connections  - check earth connections  - check that the conditions allowing the start are met
With the key on  «START» the  starter motor  runs but the  engine does not  start	- faulty fuel supply - faulty ignition	-check the level in the tank -check the fuel filter -check that spark plug cap is securely fitted -check that the electrodes are clean and have the correct gap
The engine stops	Electronic circuit board blocked due to:  - earth connections of the micro switches disconnected  -flat battery  -badly connected battery (poor contact)  -engine badly earthed	Turn the ignition key to «STOP» position and look for the cause of the problem: - check connections - recharge the battery - check connections - check engine earth connection
Starting is difficult or the engine runs erratically	– fault in carburation	<ul> <li>clean or replace the air filter</li> <li>flush out the float chamber</li> <li>empty the fuel tank and refill with fresh fuel</li> <li>check and replace the fuel filter if necessary</li> </ul>
Weak engine performance during cutting	- forward speed too high in relation to cutting height	- reduce the forward speed and/or raise the cutting height

Problem	Possible cause(s)	Remedy
The engine switches off	<ul> <li>the height of cut lever is lowered too quickly.</li> </ul>	<ul><li>lower the deck slowly</li><li>in long lush grass set the cutting height</li></ul>
when the cutting	- you are not ready to engage the cutting	higher
blade is engaged	deck	- check that the safety requirements are met
Uneven mowing and poor grass collection	<ul> <li>cutting-deck assembly is not parallel to the ground</li> <li>inefficient cutting means;</li> <li>forward speed too high compared to height of grass</li> <li>collector channel is blocked</li> <li>cutting-deck assembly is full of grass</li> </ul>	<ul> <li>check the tyre pressure</li> <li>reinstate the alignment of the cutting-deck assembly in relation to the ground</li> <li>contact your dealer</li> <li>reduce the forward speed and/ or raise the cutting-deck assembly</li> <li>wait for the grass to dry</li> <li>remove the grass catcher and empty the collector channel and clean the cutting assembly</li> </ul>

### 7. DISPLAY CONTENT AND FAULT CODE (Where fitted)

#### 7.1 DISPLAY

ITEM	IMAGE	CONTENT
1	COBRA	Cobra logo
2	D	DRIVE selected
3		Parking brake engaged
4	R	REVERSE selected.
5		Running time and fault code.(see the fault code content sheet)
6	+	Charging or low power indicator
7		Battery capacity indicator

8		Fault detected
9		Tractors lights are on
10		Operator present on the seat
11		Grass bag collector is lifted up
12		Cutting blades are engaged
13		Indicates reverse mowing is operating
14	526	Grass bag full indicator

#### 7.2 SWITCH LOGIC AND POSITIONS

ITEM	Switch position NO	Switch Name	Switch attribute
1	K1	Gear switch	Neutral: Disconnect
			Forward/backward: Close
2	K2	Reverse	Backward: disconnect
		switch	Neutral/Forward: Closed
3	K9 / K11	Seat switch	Person on seat: disconnect
			Vacancy: closed
4	K6	Grass bag	Grass bag fitted: disconnect
		switch	No grass bag: closed
5	K4	Parking switch	Parking: Disconnect
6	K5	Blade clutch	Blade rotation: closed
		switch	Blade stop: disconnect
7	K3	Reverse	Stop: disconnect
		mowing switch	Start: Close
			The startup must take effect when reversing
			up
8	SW2	Start Key	

#### 7.3 FAULT CODES

ITEM	Fault phenomenon	Reason for fault	Troubleshooting
P1		When starting, the gear is not in	Check K1 switch and circuit
		neutral	
P2		When starting, no one is present	Check K9/K11 switch and
	Unable to start	on the seat	circuit
P3		When igniting, the blade clutch is	Check K5 switch and circuit
		not released	
P4		When not parked, leave the seat,	Check K9/K11 switch and
		the engine will turn off!	circuit
P5		When the grass bag is not	
		hanging or falling off, the blade is	Check K5/K6 switch and
		in rotation, the engine will turn	circuit
		off!	
P6		Under the rotation of the blade,	
	Abnormal turn off	move backwards, but do not	Check K2/K3/K5 switch and
		press the reverse grass cutting	circuit
		switch, the engine will turn off!	
P7		When parking, if the person	Check K4/K5/K9/K11 switch
		leaves the seat but the blade	and circuit
		clutch is not released, the engine	
		will turn off!	
P8	Controller high	Controller high temperature	Cooling controller
	temperature		
E0	Communication Failure	Communication Failure	Check JP5 and the circuit

#### 8. WARRANTY

This product is warranted in accordance with legal regulations for a 24 month period effective from the date of purchase by the first user. A further 36 months limited warranty is available subject registration, reasonable homeowner use and annual servicing by an approved Cobra dealer and the conditions outlined below. The Cobra dealer will require evidence that the annual services were completed through-out the period of ownership for the warranty to be extended.

This product will not be covered if used in a commercial application.

This warranty covers all material or production failures, it does not include: defects from normal wear and tear, parts such as, bearings, brushes, cables, air cleaning elements, brake pad, clutch disc, tyre, wheel, recoil starter rope, belts, cutter blades, blade bosses, plugs, lubricant oils and grease or accessories. Damage or defects resulting from abuse, accidents or alterations, natural fading of painted or plated surfaces, sheet peeling and other natural deterioration.

Any damage that occurs from the use of non-genuine Cobra parts will not be covered.

We reserve the right to reject any claim where the purchase cannot be verified or when it is clear that the product was not maintained properly. (Clean ventilation slots, carbon brushes and serviced regularly)

Expenses incidental to the warranty claim that are not covered;

- -Compensation for loss of time, commercial loss or rental costs of substitute product.
- -Costs incurred for transportation to and from the dealership.

Any damage that occurs from the following will not be covered; exposure of the product to smoke and soot, chemical agents, bird droppings or other animal waste, seawater, sea breeze, salt or other environmental phenomena.

Any damage resulting from operating methods other than those indicated in the owner's manual will not be covered.

Your purchase receipt must be kept as proof for date of purchase. Your un-dismantled tractor must be returned to your dealer in an acceptably clean state, accompanied by your proof of purchase.

#### **Please Register Your Tractor**

If your dealer did not collect registration information from you, please take a few minutes and register your purchase with Cobra. You can register by completing and mailing the registration card that should be in the box or by going online to:

www.cobragarden.co.uk and clicking on Product Registration.

#### 9. EC-DECLARATION OF CONFORMITY

EC Declaration of Conformity		
We herewith declare,	Cobra Garden Machinery	
	Henton & Chattell Ltd, London Road, Nottingham NG2 3HW UK	
That the following machine complies	with the appropriate basic safety and health requirements of the EC	
Directive based on its design and type, a	as brought into circulation by us.	
In case of alteration of the machine, not	t agreed upon by us, this declaration will lose its validity	
Product	Ride-on lawnmower for mowing garden lawns	
Machine Type:	LTX92HR2L (T92H) LTX102HR2L (T102H)	
Rated power	12.5kW at 2,600 min <sup>-1</sup>	
Measured sound power level:	98.9 dB(A) K <sub>WA</sub> : 3.0 dB(A)	
Guaranted sound power level:	100 dB(A) Notified Body for EC Directive 2000/14/EC:0359 TÜV Rheinland LGA Products GmbH Tillystraße 2 DE-90431 Nürnberg Germany	
Applicable EC Directives:	2014/30/EU 2006/42/EC 2000/14/EC 2011/65/EU 2016/1628/EU	
Commission Delegated Regulation	2017/654 amended by (EU) 2018/989 2017/655 amended by (EU) 2018/987 2017/656 amended by (EU) 2018/988	
Applicable Harmonized Standards:	EN ISO 5395-1:2013+A1, EN ISO 5395-3:2013+A1+A2	
Technical standards/ specifications :	EN ISO 12100:2010, EN ISO 14982:2009	
Authorized Signature/Date:	Whalone 4/12/2024	
Title of Signatory:	Managing Director	
Name and address of the person	Cobra Garden Machinery	
authorised to compile the technical file	Henton & Chattell Ltd, London Road, Nottingham NG2 3HW UK	