# OPERATOR'S

## MANUAL

### WALK BEHIND LAWN MOWER

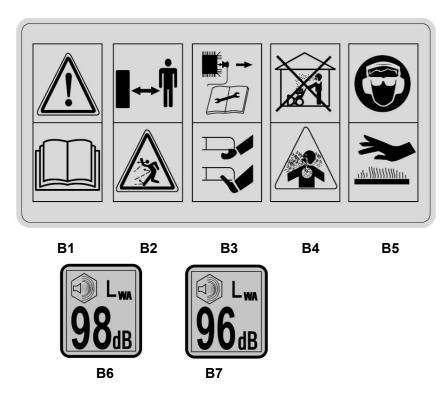


MODEL	KCL21SDP
	KCL21SP
	KCL21P
	KCL21SD
	KCL21S
	KCL21

CAUTION: Before any use, read carefully the user manual which has been purposely drawn up to provide you with all the necessary information for proper use, in compliance with basic safety requirements.

Symbols Explanation:

KCL19SDP KCL19SP KCL19P KCL19SD KCL19S KCL19



- B1: Read the manual carefully before use.
- **B2:** Keep other people well away from the working area.
- **B3:** Risk of hand and feet injuries. When repairing, please take out the spark plug wire, then repair it according to the operational manual.
- **B4:** Emission of toxic gas, do not use the mower in a closed area or not well ventilated.
- **B5:** When mowing, please wear the glasses and ear plugs. Hot surfaces.
- **B6:** Noise label according to directive 2000/14/EC, amended by 2005/88/EC (For models with 21inch cutting blade.)
- **B7:** Noise label according to directive 2000/14/EC, amended by 2005/88/EC (For models with 19inch & 17inch cutting blade.)

#### 9- WARRANTY

#### WARRANTY CONDITIONS:

The manufacturer warrants the product 12months from the date of purchasing, from all fabrication faults. The lawnmowers that are used in a professional or locative way are warranted 3months. The warranty cannot be claimed in case of normal wear.

The manufacturer will replace at his expense the spare parts, which would be classified as defective by him or an agreed station service. In any case the manufacturer will not accept the reimbursement of the machine (partially or totally) and/or damages and interest direct or indirect.

The warranty does no cover:

- An insufficient maintenance.
- An abnormal use or damage due to shocks.
- The mounting, adjustment and preparation of the machine. -
- The spare parts with normal wear, security spare parts (belt, blade, blade support, bearings, cables, deflectors, spark plug, air filter etc...)
- Freight and packing cost. -
- Only use spare parts coming for the manufacturer

The manufacturer will refuse any responsibility if the machine was not used for the purpose it was made or if the operator did not use the machine as describe in the operations and maintenance rules in the owner manual.

Read carefully the instruction manual before any use of the lawnmower.

#### Technical data:

	KCL21SDP		KCL19SDP
	KCL21SP		KCL19SP
Drive type	Self-propelled	Drive type	Self-propelled
Height adjustment	Central adjustment	Height adjustment	Central adjustment
Cutting heights	30-80mm/7grades	Cutting heights	30-80mm/7grades
Catcher TYPE	Rear Bag Collection	Catcher TYPE	Rear Bag Collection
Catcher volume	60L	Catcher volume	60L
Cutting width	530mm	Cutting width	480mm
Deck material	Steel	Deck material	Steel
Blade type	KCL21-6	Blade type	KCL19-6

	KCL21P		KCL19P
Drive type	Hand Push	Drive type	Hand Push
Height adjustment	Central adjustment	Height adjustment	Central adjustment
Cutting heights	30-80mm/7grades	Cutting heights	30-80mm/7grades
Catcher TYPE	Rear Bag Collection	Catcher TYPE	Rear Bag Collection
Catcher volume	60L	Catcher volume	60L
Cutting width	530mm	Cutting width	480mm
Deck material	Steel	Deck material	Steel
Blade type	KCL21-6	Blade type	KCL19-6

	KCL21SD		KCL19SD
	KCL21S		KCL19S
Drive type	Self-propelled	Drive type	Self-propelled
Height adjustment	Central adjustment	Height adjustment	Central adjustment
Cutting heights	30-80mm/7grades	Cutting heights	30-80mm/7grades
Catcher TYPE	Rear Bag Collection	Catcher TYPE	Rear Bag Collection
Catcher volume	55L	Catcher volume	55L
Cutting width	530mm	Cutting width	480mm
Deck material	Steel	Deck material	Steel
Blade type	KCL21-6	Blade type	KCL19-6

	KCL21		KCL19
Drive type	Self-propelled	Drive type	Self-propelled
Height adjustment	Central adjustment	Height adjustment	Central adjustment
Cutting heights	30-80mm/7grades	Cutting heights	30-80mm/7grades
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IMPORTANT: Read with care the security requirements included in the engine manual before the first use of the engine.



- Blade engagement lever 1.
- Self-propelled lever 2.
- Control handle 3.
- 4. Gasoline engine
- Side discharge cover 5.
- 6. Height adjustment assembly
- 7. Grass bag

Including A: Spark plug wrench

#### 8 - TROUBLE SHOOTING

PROBLEM	PROBABLE CAUSE	CORRECTIVE ACTION
Engine does not	Throttle chock not in the correct	Move throttle chock to correct position.
start.	position for the prevailing conditions.	
	Fuel tank is empty.	Fill tank with fuel: refer to ENGINE OWNERS MANUAL.
	Air cleaner element is dirty.	Clean air cleaner element: refer to ENGINE OWNERS MANUAL.
	Spark plug loose.	Tighten spark plug to 25-30 Nm.
	Spark plug wire loose or	Install spark plug wire on spark plug.
	disconnected from plug.	
	Spark plug gap is incorrect.	Set gap between electrodes at 0.7 to 0.8mm.
	Spark plug is defective.	Install new, correctly gapped plug: refer to ENGINE OWNERS MANUAL.
	Carburetor is flooded with fuel	Remove air cleaner element and pull starter rope continuously until carburetor clears itsel and install air cleaner element.
	Faulty ignition module.	Contact the service agent.
Engine difficult to start or loses power.	Dirt, water, or stale fuel tank.	Drain fuel and clean tank. Fill tank with clean fresh fuel.
	Vent hole in fuel tank cap is plugged.	Clean or replace fuel tank cap.
	Air cleaner element is dirty.	Clean air cleaner element.
Engine operates erratically.	Spark plug is defective.	Install new, correctly gapped plug: refer to ENGINE OWNERS MANUAL.
	Spark plug gap is incorrect.	Set gap between electrodes at 0.7 to8mm.
	Air cleaner element is dirty.	Clean air cleaner element: refer to ENGINE OWNERS MANUAL.
Engine idles poorly.	Air cleaner element is dirty.	Clean air cleaner element: refer to ENGINE OWNERS MANUAL.
	Air slots in engine shroud are blocked.	Remove debris from shots.
	Colling fins and air passages under engine blower hosing are blocked.	Remove debris from cooling fins and air passages.
Engine skips at high speed.	Gap between electrodes of spark plug is too close.	Set gap between electrodes at 0.7 to 0.8mm
Engine overheats.	Cooling air flow is restricted.	Remove any debris from slots in shroud, blower housing, air passages.
	Incorrect spark plug.	Install spark plug and cooling fins on engine.
Mower vibrates	Cutting assembly is loose.	Tighten blade.
abnormally.	Cutting assembly is unbalance.	Balance blade.

#### 7.2 CLEANING

CAUTION: Do not hose engine. Water can damage engine or contaminate the fuel system.

- 1. Wipe deck with dry cloth.
- 2. Hose under deck by tilting the mower so that the spark plug is up.
- 3. Refer to separate engine manual for engine cleaning instructions.

#### 7.3 STROAGE INSTRUCTIONS

The following steps should be taken to prepare lawn mower for storage.

- 1. Following the final cut of the season allow the fuel tank to run dry.
- 2. Clean and lubricate mower thoroughly as described in the lubrication instructions.
- 3. Refer to engine manual for correct engine storage instructions.
- 4. Lightly coat mower's cutting blade with chassis grease to prevent rusting.
- 5. Store mower in a dry, clean area.

NOTE:

- When storing any type of power equipment in an unventilated or material storage shed, care should be taken to rust-proof the equipment. Using a light oil or silicone, coat the equipment, especially cables and all moving parts.

- Be careful not to bend or kink cables.

- If the starter rope becomes disconnected from rope guide on handle, disconnect and ground the spark plug wire, depress the blade control handle and pull the starter rope out from engine slowly. Slip the starter rope into the rope guide bolt on handle.

#### **IMPORTANT:** Read with care the security requirements included in the engine manual

before the first use of the engine.



- Control handle 1.
- 2. Blade engagement lever
- 3. Self-propelled lever
- Gasoline engine 4.
- 5. Height adjustment assembly
- 6. Grass bag



Including A: Spark plug wrench

#### 1 - SET UP OF THE MOWER

(1) Pull the handle in position and tighten plastic nuts. The mower installation is completed comfortably and easy to handle.











(2) Adjust the handle to the height you want.



(3) Fix the cables with the plastic collars.



(4) Introduce the rope of the recoil starter handle on its support rope guide.



#### 7 - MAINTENANCE, CLEANING AND STORAGE

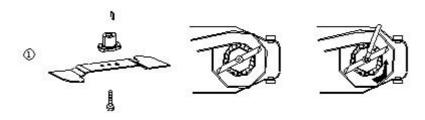
#### 7.1 Maintenance

- **WARNING:** stop the engine and unplug the spark plug before any repairing or maintenance operations. - Refer to separate engine manual for engine maintenance instructions.
  - Stop the engine and unplug the spark plug before any repairing or maintenance operations. -
  - For four strokes engine read carefully the maintenance engine manual. Check regularly the oil level and add some oil or replace it if necessary.
  - Frequently check the lawnmower and ensure that all grass deposits are removed from beneath the deck.
  - Lubricate regularly the wheel axle and the bearings with grease.
  - -Check often the blade, in order to obtain a clean work the blade should always be sharp and well balance.
  - At regularly intervals check the tightening of all bolts and screws. Wear off or badly tightening nuts and bolts can involve some important damages to the engine or the frame.
  - If the blade hits violently an obstacle, stop the lawnmower and bring it to agreed service station.

THE BLADE: the blade is made of pressed steel, in order to obtain a clean work sharpen the blade frequently, around every 25hours of work. Be sure that the blade is always well balance, YOU MUST ONLY USE THE MANUFACTURER BALDE IT SHOULD BE REFERENCED AND WEAR THE MANUFACTURER BRAND "JE0101"

are worn out or damaged.

When reassembling the blade, make sure that the cutting edges face in the direction of the engine rotation. The blade screw must be torque to 3.7 K gm(37Nm) with a dynamometric tool.



ONLY USE ORIGINAL SPARE PARTS. SPARE PART OF BAD QUALITY CAN INVOLVE IMPORTANT DAMAGES TO YOUR LAWNMOWER AND BEPREJUDICIAL FOR YOUR SECURITY.

- To remove the blade, unscrew the screw, ocheck the blade support and change all spare parts if they

1.3.14 Start the engine carefully according to instructions and with feet well away from the blade(s);

1.3.15 Do not tilt the lawn mower when starting the engine;

1.3.16 Do not start the engine when standing in front of the discharge chute;

1.3.17 Do not put hands or feet near or under rotating parts. keep clear of the discharge opening at all times:

1.3.18 Never pick up or carry a lawn mower while the engine is running;

1.3.19 Stop the engine and disconnect the spark plug wire, make sure that all moving parts have come

to a complete stop and, where a key is fitted remove the key:

- Before clearing blockages or unclogging chute;
- Before checking, cleaning or working on the lawn mower;

After striking a foreign object. Inspect the lawnmower for damage and make repairs before restarting and operating the lawn mower;

- If lawn mower starts to vibrate abnormally (check immediately);

1.3.20 Stop the engine and disconnect the spark plug wire, make sure that all moving parts have come to a complete stop and, where a key is fitted remove the key:

- Whenever you leave the lawn mower;

- Before refueling;

1.3.21 Reduce the throttle setting during engine shut down and, if the engine is provided with a shut-off valve, turn the fuel off at the conclusion of mowing;

1.3.22 Go slow when using a trailing seat.

1.4 Maintenance and storage

1.4.1 Keep all nuts, bolts and screws tight to be sure the equipment is in safe working condition;

1.4.2 never store the equipment with petrol in the tank inside a building where fumes can reach an open flame or spark;

1.4.3 Allow the engine to cool before storing in any enclosure;

1.4.4 To reduce the fire hazard, keep the engine, silencer, battery compartment and petrol storage area free of grass, leaves, or excessive grease;

1.4.5 Check the grass catcher frequently for wear or deterioration;

1.4.6 Replace worn or damaged parts for safety;

1.4.7 If the fuel tank has to be drained, this should be done outdoors.

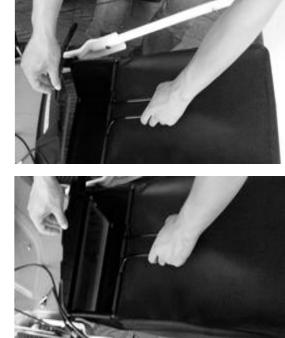
Caution: Do not touch rotating blade.

Warning: Refuel in a well ventilated area with the engine stopped.

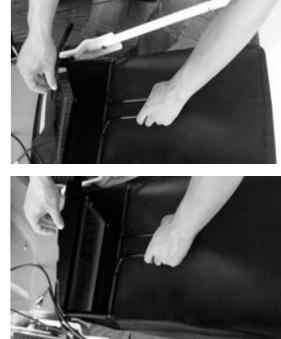
#### 2 - ASSEMBLY OF THE GRASS CATCHER

- 1. To fit: Raise the rear cover and hitch the grass bag on rear of mower.
- 2. To remove: grasp and lift the rear cover, remove grass bag.









#### **3 - CUTTING HEIGHT AJUSTMENTS**

#### Apply outward pressure to disengage lever from rack, move lever forward or backward to adjust height.





#### **4 - SAFETY PRECAUTIONS**

- a) Always use the lawnmower with the grass catcher or the deflector in position.
- b) Stop the engine before emptying the grass catcher or before you change the cutting height.
- c) While the engine is running, never introduce your hands or feet under the lawnmower or under the grass ejection area.
- d) Before mowing, remove all foreign objects from the lawn, which maybe thrown by the machine.
- Keep children and other people and domestic animals at a safe distance when the lawnmower is in e) use.
- f) Never lift the mower while starting the engine.

#### **5 - OPERATION**

#### 5.1 Before using the machine you must read the separate Engine instruction book carefully and fill the engine with petrol and oil.

#### ENGINE STARTING:

Once the machine has been serviced properly, start the engine as follow:

- 1. Standing behind the unit, grasp the brake lever and hold it against the handle bar as shown in Figure 8.
- 2. Grasp the brake lever and pull up the recoil starter rapidly. Return it slowly to the rope guide after engine starts. Releasing the brake lever will stop the engine and blade.



Figure 8

Figure 9

The blade is in action as soon as engine started. Maintain the brake lever in working position while the machine is working. The engine will stop as soon as you release the brake lever.

#### 5.2 THE SELF PROPELLED FUNCTION

Grasp the Self-propelled lever, then the machine will move forward automatically. (See Figure 9) During operation, tightly hold the handles with both hands.

#### **5.3 STOP THE ENGINE AND MACHINE**

Release the brake lever to stop the engine and blade, thus stopping the lawnmower from operating.

#### **5.4 GRASS CATCHER**

Empty and clean the bag, make sure it is clean and ensure its meshwork is ventilated.

#### **6 - SECURITY MEASURESURES**

#### Safety instructions

#### 1.1 Training

1.1.1 Read the instructions carefully. Be familiar with the controls and the proper use of the equipment; 1.1.2 Never allow children or people unfamiliar with these instructions to use the lawn mower. Local regulations can restrict the age of the operator;

1.1.3 Never mow while people, especially children, or pets are nearby; 1.1.4 Keep in mind that the operator or user is responsible for accidents or hazards occurring to other

people or their property.

#### 1.2 Preparation

1.2.1 While mowing, always wear substantial footwear and long trousers. Do not operate the equipment when barefoot or wearing open sandals;

1.2.2 Thoroughly inspect the area where the equipment is to be used and remove all objects which can be thrown by the machine;

- 1.2.3 WARNING- Petrol is highly flammable.
- store fuel in containers specifically designed for this purpose;
- refuel outdoors only and do not smoke while refueling;

engine is running or when the engine is hot;

- if petrol is spilled, do not attempt to start the engine but move the machine away from the area of spillage and avoid creating any source of ignition until petrol vapour have dissipated; - replace all fuel tank and container caps securely;

1.2.4 Replace faulty silencers;

1.2.5 Before using, always visually inspect to see 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; 1.3 Operation

1.3.1 Do not operate the engine in a confined space where dangerous carbon monoxide fumes can collect:

1.3.2 Mow only in daylight or in good artificial light;

1.3.3 Avoid operating the equipment in wet grass, where feasible;

1.3.4 Always be sure of your footing on slopes;

1.3.5 Walk, never run;

1.3.6 For wheeled rotary machines, mow across the face of slopes, never up and down; 1.3.7 Exercise extreme caution when changing direction on slopes;

1.3.8 Do not mow excessively steep slopes;

1.3.9 Use extreme caution when reversing or pulling the lawn mower towards you; 1.3.10 Stop the blade(s) if the lawn mower has to be tilted for transportation when crossing surfaces other than grass, and when transporting the lawn mower to and from the area to be mowed; 1.3.11 Never operate the lawn mower with defective guards, or without safety devices, for example deflectors and/or grass catchers, in place;

1.3.12 Do not change the engine governor settings or over-speed the engine; 1.3.13 Disengage all blade and drive clutches before starting the engine;

- add fuel before starting the engine. Never remove the cap of the fuel tank or add petrol while the