



17" Ducar Powered Petrol Lawn Mower V450



User Manual

[Revision 7.0 February 2020]



READ THIS MANUAL CAREFULLY BEFORE USE – FAILURE TO DO SO MAY RESULT IN INJURY, PROPERTY DAMAGE AND MAY VOID WARRANTY. • KEEP THIS MANUAL FOR FUTURE REFERENCE. • Products covered by this manual may vary in appearance, assembly, inclusions, specifications, description and packaging.

The product is NOT supplied with engine oil, although traces of oil from the manufacturing process may be present. It is essential to add adequate engine oil of the correct type to the engine before use. **Failure to add engine oil will void the product warranty.**

Safety

Safety messages are designed to alert you to possible dangers or hazards that could cause death, injury or equipment or property damage if not understood or followed. Safety messages have the following symbols:



You **WILL** be KILLED or SERIOUSLY INJURED if you do not follow instructions.



You **CAN** be KILLED or SERIOUSLY INJURED if you do not follow instructions.



You **CAN** be INJURED if you do not follow instructions or equipment damage may occur.

It is vital that you read and understand this user manual before using the product, including safety warnings, and any assembly and operating instructions. Keep the manual for future reference.

Safety precautions and recommendations detailed here must be fully understood and followed to reduce the risk of injury, fire, explosion, electrical hazard, and/or property damage.

Safety information presented here is generic in nature – some advice may not be applicable to every product. The term "equipment" refers to the product, be it electrical mains powered, battery powered or combustion engine powered.

- **Before Use** - If you are not familiar with the safe operation/handling of the equipment, or are in any way unsure of any aspect of suitability or correct use for your application, you should complete training conducted by a person or organization qualified in safe use and operation of this equipment, including fuel/electrical handling and safety.
- Do NOT operate the equipment in flammable or explosive environments, such as in the presence of flammable liquids, gases or dust. The equipment may create sparks or heat that may ignite flammable substances.
- Keep clear of moving parts.
- Equipment may be a potential source of electric shock or injury if misused.
- Do NOT operate the equipment if it is damaged, malfunctioning or is in an excessively worn state.
- Do NOT allow others to use the equipment unless they have read this manual and are adequately trained.
- Keep packaging away from children - risk of suffocation! Operators must use the equipment correctly. When using the equipment, consider conditions and pay due care to persons and property.

General Work Area Safety

- Work areas should be clean and well lit.
- Do not operate the equipment if bystanders, animals etc are within operating range of the equipment or the general work area.
- If devices are provided for connecting dust extraction / collection facilities, ensure these are connected and used properly. Dust collection can reduce dust-related hazards.

General Personal Safety

- Wear appropriate protective equipment when operating, servicing, or when in the operating area of the equipment to help protect from eye and ear injury, poisoning, burns, cutting and crush injuries. Protective equipment such as safety goggles, respirators, non-slip safety footwear, hard hat, hearing protection etc should be used for appropriate equipment / conditions. Other people nearby should also wear appropriate personal protective equipment. Do not wear loose clothing or jewellery, which can be caught in moving parts. Keep hair and clothing away from the equipment.
- Stay alert and use common sense when operating the equipment. Do not over-reach. Always maintain secure footing and balance.
- Do not use the equipment if tired or under the influence of drugs, alcohol or medication.
- This equipment is not intended for use by persons with reduced physical, sensory or mental capabilities.

General Fuel Safety

- Petrol/fuel/gasoline is extremely flammable – keep clear of naked flames or other ignition sources.
- Do not spill fuel. If you spill fuel, wipe it off the equipment immediately – if fuel gets on your clothing, change clothing.
- Do NOT smoke near fuel or when refuelling.
- Always shut off the engine before refuelling.
- Do NOT refuel a hot engine.
- Open the fuel cap carefully to allow any pressure build-up in the tank to release slowly.
- Always refuel in well ventilated areas.
- Always check for fuel leakage. If fuel leakage is found, do not start or run the engine until all leaks are fixed.

General Carbon-Monoxide Safety

- Using a combustion engine indoors **CAN KILL IN MINUTES**. Engine exhaust contains carbon-monoxide – a poison you cannot smell or see.
- Use combustion engines OUTSIDE only, and far away from windows, doors and vents.

General Equipment Use and Care

- The equipment is designed for domestic use only.
- Handle the equipment safely and carefully.
- Before use, inspect the equipment for misalignment or binding of moving parts, loose components, damage or any other condition that may affect its operation. If damaged, have the equipment repaired by an authorised service centre or technician before use.
- Prevent unintentional starting of the equipment - ensure equipment and power switches are in the OFF position before connecting or moving equipment. Do not carry equipment with hands or fingers touching any controls. Remove any tools or other items that are not a part of the equipment from it before starting or switching on.
- Do not force the equipment. Use the correct equipment for your application. Equipment will perform better and be safer when used within its design and usage parameters.
- Use the equipment and accessories etc. in accordance with these instructions, considering working conditions and the work to be performed. Using the equipment for operations different from those intended could result in hazardous situations.
- Always keep equipment components (engines, hoses, handles, controls, frames, housings, guards etc) and accessories (cutting tools, nozzles, bits etc) properly maintained. Keep the equipment clean and, where applicable, properly lubricated.
- Store the equipment out of reach of children or untrained persons. To avoid burns or fire hazards, let the equipment cool completely before transporting or storing. Never place or store the equipment near flammable materials, combustible gases or liquids etc.
- The equipment is not weather-proof, and should not be stored in direct sunlight, at high ambient temperatures or locations that are damp or humid.
- Do not clean equipment with solvents, flammable liquids or harsh abrasives.
- For specific equipment safety use and care, see Equipment Safety.

General Electrical Safety	General Electrical Safety	General Service Information
- Inspect electrical equipment, extension cords, power bars, and electrical fittings for damage or wear before each use. Repair or replace damaged equipment immediately. - Ensure all power sources conform to equipment voltage requirements and are disconnected before connecting or disconnecting equipment. - When wiring electrically powered equipment, follow all electrical and safety codes. - Wherever possible, use a residual current device (RCD). - High voltage / high current power lines may be present. Use extreme caution to avoid contact or interference with power lines. Electrical shock can be fatal.	- Electrically grounded equipment must have an approved cord and plug and be connected to a grounded electrical outlet. - Do NOT bypass the ON/OFF switch and operate equipment by connecting and disconnecting the electrical cord. - Do NOT use equipment that has exposed wiring, damaged switches, covers or guards. - Do NOT use electrical equipment in wet conditions or in damp locations. - Do NOT use electrical cords to lift, move or carry equipment. - Do NOT coil or knot electrical cords, and ensure electrical cords are not trip hazards.	- The equipment must be serviced or repaired at authorised service centres by qualified personnel only. - Replacement parts must be original equipment manufacturer (OEM) to ensure equipment safety is maintained. - Do NOT attempt any maintenance or repair work not described in this manual. - After use, the equipment and components may still be hot – allow the equipment to cool and disconnect spark plugs and/or electrical power sources and/or batteries from it before making adjustments, changing accessories or performing repair or maintenance. - Do NOT make adjustments while the equipment is running. - Perform service related activities in suitable conditions, such as a workshop. - Replace worn, damaged or missing warning/safety labels immediately.

Lawn Mower Safety

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

General Conditions of Use

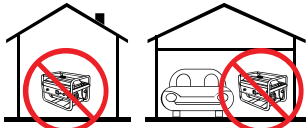
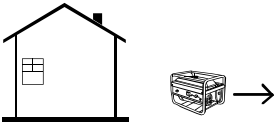
- This machine is to be used exclusively for cutting natural grass. Never use the mower for other purposes. Any other utilization can involve danger for your safety and can involve damage to the mower.
- Persons under 16 years of age and persons who are not familiar with the user instructions must not use the mower.
- The user is responsible of the safety of other people in the working area. Keep children and domestic animals at a safe distance while the mower is in use.
- Before mowing, remove all foreign object from the lawn which may be thrown by the machine, stay alert for any foreign objects which may have been missed.

Usage Instructions

- Check that all nuts, bolts and screws are well tightened.
- Before mowing, place the grass catcher in its position.
- Before mowing make sure that the blade and the blade fixing screw are securely fastened. When cutting edges require resharpener, this must be done evenly on both sides so as to prevent any imbalance. If the blade is damaged, it must be replaced.
- When mowing always wear a long trousers and strong footwear.
- Do not run the engine in an enclosed and/or poorly ventilated area, where gas of the engine contains carbon monoxide, which are dangerous for your health.
- Work only when there is sufficient light.
- Do not use the lawnmower when it is raining or when the grass is wet.
- Particular precautions must be taken while mowing on slopes or downing stretches. Mow across the face of slopes, never down or up.
- Turn off the engine if you must leave the lawnmower unattended, displace the lawnmower or incline it.
- Never lift the rear of the mower while starting the engine and never place your hands and feet underneath the deck or into the rear discharge chute while the engine is running.
- Never change in any way the rated speed of the engine.
- On the self-propelled mowers, disconnect the self-propelled system before starting the engine.
- Never lift or carry the mower while the engine is running.
- Stop the engine and remove the spark plug cover in these cases:
 - Before any operation under the deck or the grass rear discharge chute.
 - Before any maintenance, repairing or checking operations.
 - Before carrying, lifting or removing the mower.

17" Ducar Powered Petrol Lawn Mower - V450

- If you leave the mower unattended or changing the cutting height.
- To remove and emptying the grass catcher.
- After hitting a foreign object, stop the engine and check thoroughly the mower in order to see if it is damaged. Bring the mower in a agreed service station to do the repairing if necessary. **WARNING: After you stopped the engine the blade is still in motion during a few seconds.**
- If the mower vibrates in an abnormal way, find the reasons why, and take your mower to an agreed service station.
- Check regularly that bolts, nuts and screws are regularly tightening for a safe use of the mower.
- **WARNING! GASOLINE IS HIGHLY INFLAMMABLE.**
 - Keep gasoline in a jerry can specially made for this purpose.
 - Fill up the tank with a funnel, do the operation outside. Do not smoke. Do not use mobile phone.
 - Fill up with gasoline and oil before starting the engine. Never open the cap of the fuel tank to add gasoline while the engine is running or still hot.
 - Do not start the engine if there is some gasoline spread around, take the mower away from the one where gasoline has been spilled and avoid any contact from a hot source as long as the spilled gasoline is completely evaporated.
 - Tighten the fuel tank cap and close tightly the jerry can cap.

 DANGER 	
Using an engine or wood/charcoal/gas fuelled appliance indoors CAN KILL YOU IN MINUTES. Engine exhaust and wood/charcoal/gas fumes contain carbon monoxide. This is a poison you cannot see or smell.	
 NEVER use inside a building, home, garage, boat, caravan or tent EVEN IF doors and windows are open.	 Only use OUTSIDE and far away from windows, doors, and vents.
Avoid other hazards - READ MANUAL BEFORE USE.	

GENERAL:

- Do not operate in a hazardous location. Such areas include where there is a risk of explosion of petrol fumes, leaking gas or explosive dusts.
- Do not operate in a confined area where exhaust gases or wood/charcoal/gas fumes could reach dangerous concentrations.

PRODUCTS FEATURING AN ENGINE

- Follow all warnings in the section titled "GENERAL".
- Explosion hazard - never smoke while refuelling.
- Take care not to spill fuel. When refuelling the engine, ensure that the engine has been allowed to cool. Prevent spilling of fuel as this may also ignite with a hot engine.
- Never refuel while engine is running.

GENERATORS

- Follow all warnings in the sections titled "GENERAL" and "PRODUCTS FEATURING AN ENGINE".
- The output of this generator is potentially lethal. The generator should not be connected to a fixed electrical installation except by an appropriately licensed person.
- Not weatherproof – protect your machine. This machine is not weatherproof and should not be exposed to direct sunlight, high ambient temperature, damp conditions, wet conditions or high humidity conditions.

Safety Symbols

The product may have safety warning labels attached to it, explained below. Understand the symbols on your product and their meanings. If any stickers become unreadable, unattached etc, replace them.

 Flammable Material Hazard Flammable liquids, gases or substances etc may present. Avoid ignition sources and open flames. Danger of fire.	 Read User Manual Read and fully understand product safety warnings, operation, procedures etc before using the product.	 Use Hand Protection Wear appropriate hand protection and take due care as the product or use of the product may present hand hazards.	 Carbon-Monoxide Hazard Do not use the product in confined areas or without adequate ventilation. Carbon-monoxide poisoning can be fatal.
 Electrocution / Electrical Shock Hazard High voltage or high current electricity may be present or required by the product. Take due care when handling electrical products, cables, plugs and leads. Electrical shock can be fatal.	 Toxic Fumes / Dust Hazard Using the product or by-products from use may produce fumes, smoke or particles that could be harmful if inhaled. Wear appropriate breathing protection and have adequate ventilation.	 Explosive Material Hazard Combustible liquids, gases or substances etc may be present. Avoid ignition sources and open flames. Danger of explosion.	 Cutting / Amputation Hazard The product may have blades, edges or mechanical devices that can cause severe cut injury to fingers, limbs etc. Take due care when handling and using the product.
 Crush Hazard The product may have blades, edges or mechanical devices that can cause severe crush injury to fingers, limbs etc. Take due care when handling and using the product.	 Single Operator Only The product must be operated by a single person only. More than one person operating the product may introduce additional hazards.	 Use Face Protection Wear appropriate full-face protection and take due care as the product or use of the product may present face and eye hazards.	 Use Foot Protection Wear appropriate foot protection and take due care as the product or use of the product may present foot hazards.
 Use Eye / Ear / Head Protection Wear appropriate eye and / or ear and / or head protection and take due care as the product or use of the product may present eye, hearing and head hazards.	 Running Hazard Do not run on or near the product as doing so may present a fall hazard.	 Diving Hazard Do not dive into the product as doing so may present a neck / head injury hazard.	 Adult Supervision Required Always supervise children and other users of a product to prevent drowning or injury.
 Skin Penetration / Puncture Hazard The product may produce pressure, emit liquids or objects that can cause severe injury to fingers, limbs, blood etc. Take due care when handling and using the product.	 Hot Surface Hazard Be aware that the product may produce high temperatures and hot surfaces that can cause burn injuries.	 Flying Debris Hazard Be aware that the product or use of the product may present hazards produced by flying debris. Wear appropriate clothing and protective devices.	 Moving Parts Hazard Be aware that the product contains or uses mechanical devices that move or rotate. Always wait for moving parts to stop fully before handling the product, adjusting, maintenance etc.

 Carbon-Monoxide Hazard Do not use the product in confined areas or without adequate ventilation. Carbon-monoxide poisoning can be fatal.	 Pull Hazard Be aware that the product contains or uses mechanical devices that can pull in objects and can cause severe injury to fingers, limbs etc. Take due care when handling and using the product.	 Slope / Fall Injury Hazard Be aware that using the product on sloping surfaces or in slippery conditions may present additional dangers from falls and contact with blades, moving parts, hot surfaces etc.	 "Slam Dunk" Warning Do NOT attempt "slam dunk" manoeuvres as this may result in severe injury due to falling, product breakage or collapse etc.
 Electrocution / Electrical Shock Hazard - Outdoor High voltage or high current electricity may be present or required by the product. Do NOT use in rain, damp or wet conditions. Electrical shock can be fatal.	 Electrocution / Electrical Shock Hazard - Disconnect High voltage or high current electricity may be present or required by the product. Always disconnect the product from the electrical supply before handling the product, adjusting, maintenance etc.	 Power Line Electrocution Hazard High voltage / high current power lines may be present. Use extreme caution to avoid contact or interference with power lines. Electrical shock can be fatal.	 "Kick-Back" Hazard High level of "kick-back" hazard that can cause the machine to suddenly rotate towards operator. Kick-back injury can be fatal.
 Winch Operator Position Hazard Do NOT stand between winch and load. Do NOT use winch to move people.	 Winch Lift Hazard Do NOT LIFT load vertically. Use machine to PULL only.	 Cable Hazard Ensure that load bearing cable is not kinked or knotted.	 Winch Cable Hazard Ensure that there is a minimum number of cable coils on winching mechanism.
 Winch Hook Hazard Carry hook to load – do NOT throw or run.	 Flash / Blinding Hazard Wear appropriate eye protection for welding. Direct exposure to weld arcs may cause permanent eye injury.	 Laser Hazard Laser may be in use – do NOT look directly at laser, or allow others to.	

Equipment Safety



Lawn mowers are high-speed, fast-cutting equipment with exposed blades that can cause serious or fatal injury if not used correctly or without taking proper safety precautions. It is extremely important that you read and fully understand the information in this section and all other safety warnings / recommendations and usage instructions before using the equipment.

Operator

- The equipment is designed for domestic use only.
- If you are untrained in the use of a petrol-powered lawn mower, it is highly recommended that you be trained/instructed by a suitably qualified or experienced user before using the machine.
- Fully understand how to safely operate the machine and the various attachments. See Operation.
- You must be in good physical condition to use a lawn mower. NEVER operate the machine when tired, or under the influence of any substance (medication, alcohol, drugs etc) that may impair your judgement, alertness, physical strength, vision or dexterity.
- Maintain sure-footing and balance always when using or handling the machine and have full awareness of your surroundings and any possible hazards.
- Do not start self-propelled models (where applicable) with the drive mechanism engaged.
- Use caution when reversing or pulling the equipment towards you, and changing direction.
- After stopping the engine, always allow all moving components (blades etc) to stop moving before moving, lifting etc.
- Stop the engine if the equipment requires tilting or moving over non-grass surfaces.
- Prolonged use may lead to health complications, such as carpal tunnel syndrome, due to vibration. To help reduce the possibility of such conditions, wear gloves, take breaks frequently, keep fingers and hands warm, and maintain the equipment for optimal operation and minimal vibration. It is recommended to seek medical advice if you feel numbness or burning sensations in fingers/hands.

Clothing and Protective Equipment – All Operators and Assistants

- Wear approved safety goggles, or safety glasses with adequate top and side protection. In addition to eye protection, wearing a full-face shield is highly recommended.
- Wear suitable hearing protection.
- Wear approved heavy-duty safety boots, with steel toe-caps and non-slip soles.

Work Area Safety

- Check the work area before mowing and remove any objects (stones etc) that may be thrown by the mower or may otherwise damage it.
- Ensure that any person other than the operator and any assistants is kept a minimum 10m (30') away from where the equipment is being used or where there is any possibility of ejected debris etc. Be aware of any property that may be affected by ejected debris etc.
- Be aware of fire risks resulting from machine use. Ensure that the machine exhaust and spark arrestor (if equipped) is well maintained and that engine is tuned correctly.
- Refuel outdoors only. Avoid fuel spillage. Start the machine at least 3m (10') away from the fuelling location.

Operational Safety

- Do NOT use the machine if the throttle or any safety guard or mechanism is not installed or is not operating correctly – have the machine inspected and repaired at an authorised service centre before using it again.
- Fully understand how to safely operate the machine and the various attachments. See Operation.
- Always hold the machine firmly with both hands during operation. Always use the machine handles.
- Avoid cutting wet or very tall grass. If grass is tall, mow in several passes, each time reducing the cut height.
- Do not use the equipment for purposes it is not designed for, such as shredding leaves or wood chipping.
- Avoid overly steep slopes when mowing and, when mowing on an incline, mow across the face of the incline, not up and down it.

Transportation Safety

- Always STOP the engine and ensure all cutting devices have fully stopped before moving the machine, transporting or working on it (refuelling, adjusting etc).
- When transporting the machine in a vehicle, ensure the engine is OFF. Secure the machine in an upright position to prevent tip-over, machine damage or fuel spills.

Table of Contents

Safety	2
Safety Symbols	5
Equipment Safety.....	7
Parts Identification.....	10
Before Use Checklist	11
Engine Oil.....	11
Air Filter	11
Fuel	12
Spark Plug.....	12
Assembly and Set-Up	13
Handle Assembly	13
Cutting Height Adjustments.....	13
Operation	14
Engine Starting.....	15
Speed Control	15
Stopping the Engine.....	15
Environmental Considerations	16
Important Primer Bulb Information	16
Mowing Guidelines.....	16
Maintenance	18
Maintenance Schedule – Petrol Engine / Machine	19
Engine Oil.....	20
Air Filter	21
Inspection and Cleaning	21
Removal/Installation	21
Spark Plug.....	22
Cutting Blades.....	23
Sharpening	23
Removal/Installation	23
Cleaning Guidelines	24
Cleaning the Drive Belt	24
Transportation and Storage.....	25
Troubleshooting.....	26
Specifications.....	29
Engine Service and Maintenance Record.....	30

Parts Identification



No.	Name
1	Throttle control
2	Upper handle
3	Grass catcher
4	Height adjusting lever
5	Deck
6	Lower handle
7	Engine
8	Priming bulb

Before Use Checklist

Engine Oil



The product is NOT supplied with engine oil, although traces of oil from the manufacturing process may be present. It is essential to add adequate engine oil of the correct type to the engine before use – see [Engine Oil](#). **Failure to add engine oil will void the product warranty.**

Please note: Before using the mower, you must apply air filter oil to the foam air filter element. This prevents dust ingress into the motor, thus preventing potential engine damage or failure. This should also be done after cleaning the air filter.

Four-stroke engines require engine oil in the crankcase for lubrication of internal components. Severe or irreparable damage may occur if the engine is allowed to run without engine oil. The engine oil level requires regular maintenance. Check the engine oil level and ensure that the oil level is at or just under the maximum level indicator.

Always check the engine oil level before starting the engine. See [Engine Oil](#).

To Add Engine Oil



Step 1: Locate the oil fill cap on the crankcase to start. Fill cap locations vary, depending on the make and model of your engine.



Step 2: Start by adding approximately 400ml of engine oil

- Replace the dipstick, to ensure an accurate reading, reinsert the dipstick completely. If the dipstick cap is a screw-in type, ensure an accurate reading by screwing in all the way before removing it to check the level.
- Then, remove it again and **check the oil level**.

The oil mark on the dipstick should be between the lines shown on the dipstick. It should never be above the FULL line or below the ADD line. Add additional as required.

Air Filter

The air filter is used to prevent dirt and other particles from possibly entering the engine and causing internal damage to it. The air filter requires regular maintenance.

Always check the air filter before starting the engine. See [Air Filter](#).

Fuel



Petrol/fuel/gasoline is extremely flammable – keep clear of naked flames or other ignition sources. • The engine must be OFF and cool before refueling.

Adequately fill the fuel tank with the correct fuel type.

- Use non-ethanol unleaded petrol (higher RON values will provide best engine performance). Do not use old or contaminated fuel.

To fill or top up fuel:

1. Place the machine in an upright position on a flat and level surface.
2. Clean the machine around the fuel filler so that no dirt or other material enters the engine when the cap is removed.
3. Remove (rotate left) the fuel filler cap.
4. Using a funnel, carefully fill the tank with fuel. Do not fill above the top of the strainer (if equipped) or otherwise overfill the tank.
5. When finished, re-install (rotate right) the fuel filler cap until firm. Wipe away any residual fuel from the machine. If fuel has been spilt, move the machine away from the spillage before starting the engine.

Spark Plug

The spark plug may come disconnected from the spark plug lead. If this is the case, place the electrical lead over the spark plug terminal and push it down so that it connects firmly with the terminal. See [Spark Plug](#).

Assembly and Set-Up

Handle Assembly

1. To attach the lower handles, place the lower handle in position by aligning the 2 lower handle ends on the outer side of the metal mounting plates located at the back of the mower deck.
2. Once in position, insert the bolt on each side through the mounting plate and then through the lower handle.

NOTE: There is a notch on the metal bar where the bolt head will sit securely once fastened.

3. Once the bolts are loosely in position, place a washer over the bolt and then attach the handle bar locking knobs on the outer side of the lower handles and secure until tight.

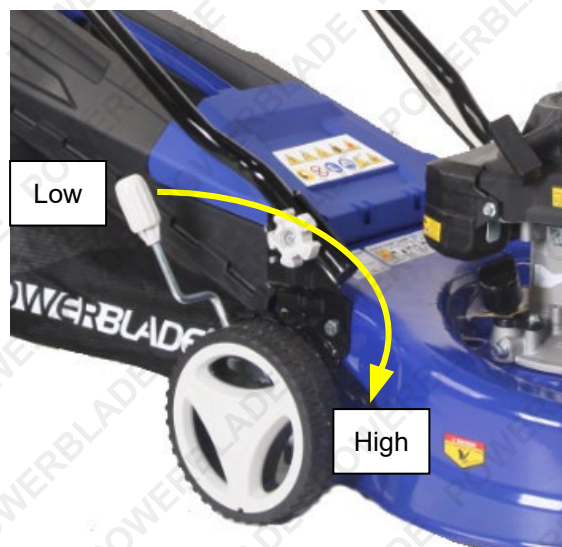


4. Repeat steps 1-3 for the upper handle assembly.
5. Pull the start cord up and wind through the metal loop on the upper handle.

Cutting Height Adjustments



WARNING: Stop the engine and unplug the spark plug before any repairs or maintenance operations. The mower has one lever to easily adjust the cutting height.



Operation



Lawn mowers are high-speed, fast-cutting equipment with exposed blades that can cause serious or fatal injury if not used correctly or without taking proper safety precautions. **It is extremely important that you read and fully understand the information in this section and all other safety warnings / recommendations and usage instructions before using the equipment.**

- Always wear suitable protective clothing and equipment when using the machine.
- Inspect the machine before each use and check for wear or damage. If the machine is damaged, have it inspected and repaired at an authorized service centre before using it again.
- If you experience excessive vibration from the mower during operation, this is an indication of wear or damage. It is recommended to have it inspected and repaired at an authorized service centre before using it again.
- Be aware that once the engine is running, the cutting blades will be rotating and parts of the machine may be extremely hot.
- Ensure that the area to be mowed is free of objects that may get caught in the mower or be thrown by it (stones, branches etc).

When the engine is idling (slowest continuous running speed), the cutting action is minimal. As engine speed increases, the cutting action becomes more efficient. Note the following recommendations:

- Operate the engine at a sufficient speed to provide the desired cutting action. This may vary on the type of grass, grass height and density etc.
- After use, it is recommended to clean the mower of excessive grass cuttings, dirt etc. Some models feature a "deck wash", which can be used to simplify cleaning the underside of the mower deck.

The lawn mower may have additional features to "just" cutting grass. For example, mulching, side discharge chute etc.



Engine delivered without oil: add 0.4liter of oil before starting the engine.

Engine Starting



NOTE. • Before starting the mower check the oil and fuel levels. • **Warranty will be void if the engine becomes faulty due to insufficient oil and fuel levels.** • Ensure the mower is set to the highest height setting so the blades are not resting deep into the grass.

Video Tutorial:

[Starting 4-Stroke Engines](#)



1. Move the throttle lever to the START/RUN position.



2. Depress the priming bulb fully 3-4 times.



3. Pull the recoil starter lightly until you feel resistance then pull quickly until the engine starts. Do not pull the cord with a jerk or release it until fully rewound.



Speed Control

- The speed of this motor is pre-set at the factory and will automatically maintain the motor speed during operation.
- There is NO speed adjustment on the Start and stop lever.
- The lever is just to run or stop the motor.

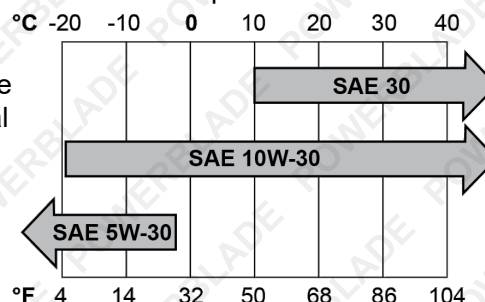
Stopping the Engine

To stop the engine, push the throttle lever right back to the OFF position.

Environmental Considerations

Altitude – If the engine is being used in altitudes at or above 1500m (approximately 5000'), adjustments to the carburettor may be required. This is because there is less oxygen in the air as altitude increases, which effectively "enriches" the ratio of fuel to air going into the engine and the higher the altitude, the richer the fuel mixture becomes. If the engine is being permanently operated at high altitude, it is recommended to have an authorized service centre make the necessary carburettor adjustments. If the engine is used occasionally at altitude (not extreme altitudes), no adjustments should be required, however, a slight decrease in engine performance can be expected.

Temperature – If the engine is being used in extremely cold or hot environments; for example, desert or snow conditions, the type of engine oil may need to be changed to suit environmental temperatures. Oil thickens as the temperature decreases and thins as temperature increases, which means that if the engine oil is not suited to the temperature its ability to properly lubricate the engine may be affected. Use the following chart to determine the correct engine oil:



Important Primer Bulb Information

The Primer bulb pump is designed to deliver fuel directly into the engine for easy start. Follow these guidelines and you should have a trouble-free starting.

1. For first starting at the beginning of the mower session, Pump the primer 3- 4 times. **DO NOT EXCEED 4 pumps.**
2. To restart a cold engine i.e. after the engine has started and run for just a short time, you will only need to pump the bulb once. **DO NOT EXCEED 2 pumps.**
3. To restart a hot engine, you will not need to pump the primer at all.

NOTE: If you over pump the engine, it will not start. DO NOT re-pump the engine primer.

4. Continue to pull the recoil starter and after a number of pulls, the engine will start mowing uneven or rough ground. Keep a firm grip on the handle bar at all times, always walk, never run with the mower.

Mowing Guidelines



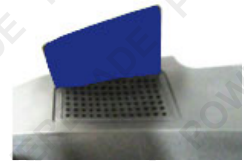
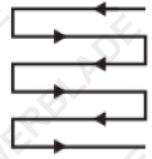
If the machine strikes against an object during mowing or an object gets caught in the mower, stop the machine immediately. Allow the machine to stop running completely and to cool down before inspecting the machine and/or removing any objects that may be caught in it. If the machine is damaged, have it inspected and repaired at an authorized service centre before using it again. • If you experience excessive vibration from the mower during operation, this is an indication of wear or damage. It is recommended to have it inspected and repaired at an authorized service centre before using it again.

The following information are general guidelines to mowing:

- Avoid cutting wet grass. Wet grass clippings do not collect well and have a tendency to stick to the underside of the mower deck.
- Avoid cutting very tall grass. If the grass is tall, mow in several passes, each time reducing the cut height.
- Avoid overly steep slopes when mowing and, when mowing on an incline, mow across the face of the incline, not up and down it.

17" Ducar Powered Petrol Lawn Mower - V450

- Be aware that cutting more than one third of the total height of the grass may affect the health of the grass, and that weeds are able to spread more easily in extremely short grass. A healthier lawn is achieved by regular mowing and not cutting the grass back excessively.
- When mowing, move the mower through the grass at a sensible rate so as to not strain the machine or otherwise reduce its effectiveness, and to achieve the best cutting results.
- Mow in slightly overlapping rows. An effective pattern is to mow in straight lines, starting along the longest edge of the work area, then turning at the end and mowing the next row and so on. Using a regular pattern helps keep the end result neat and reduces the chance of uncut areas.
- For lawns with trees or flowerbeds, for best results it is recommended to cut 1 or 2 rows around the circumference of trees/flowerbeds.
- Regularly empty the grass catcher. Some models may feature an indicator to show when the grass catcher requires emptying. This is usually a small flap on the top of the catcher that lifts when the catcher becomes full.



Maintenance



Running combustion engines in confined areas CAN KILL IN MINUTES. Engine exhaust fumes contain carbon-monoxide – a deadly gas that you cannot smell or see. NEVER run a combustion engine in confined areas EVEN IF windows and doors are open. ONLY run combustion engines OUTDOORS and away from doors, windows and vents. • Petrol / fuel / gasoline is extremely flammable – keep clear of naked flames or other ignition sources. • Do not have the engine running during inspection and maintenance unless specifically required. • The engine should be cool enough to touch before performing maintenance activities. • Some maintenance activities may be beyond the scope of some users. Do NOT attempt procedures that you are not comfortable with, or do not have the necessary tools, experience or knowledge for – take the unit to an authorised service centre or qualified technician for servicing. • Harsh operating environments such as extreme temperatures, dust etc. may necessitate more frequent maintenance. • **Failure to follow the maintenance schedule, using incorrect or non-compatible accessories or replacements parts, or general negligence may result in making the product warranty void.**

To keep the machine performing at optimal efficiency, regular checks and maintenance is required. The maintenance schedule below specifies preventative maintenance checks and necessary maintenance tasks and how often they should be performed. The schedule applies to multiple engines; some engines may not include some components, so maintenance on those components is not applicable.

Maintenance Schedule

Use the following maintenance schedule for a list of regular maintenance tasks and how often they need to be performed. Maintenance frequency is based on average usage. Be aware of how much the machine is used and be sure to follow the schedule according to time or usage, whichever comes first.

Towards the end of this document is a form you can use for maintenance record keeping. It is recommended that you keep a reference of all maintenance.



Major Servicing and "Heavy-Duty" Usage - For engines that are subject to "heavy-duty" use, which can be defined as being used under loads of 85% or more and / or in use more than approximately 300 hours per year (for example, generators and water pumps), more frequent "Major Service" maintenance is required. In addition to normal service requirements, and as with many smaller machine and off-road bike engines, the following parts (as applicable for petrol, diesel or 2-stroke engines) may require replacement during a major service:

- Piston rings.
- Big-end bearings.
- Small-end bearings.
- Gudgeon pin.
- Oil rings.
- Gaskets and seals.
- Valve seats.

Inspection of the following items is required:

- Piston for cracks and stress fractures.
- Bore for wear requiring reconditioning.
- Full machine for broken, worn or loose parts.

Failure to follow the maintenance schedule, using incorrect or non-compatible accessories or replacements parts, or general negligence may result in making the product warranty void.

Maintenance Schedule – Petrol Engine / Machine

Component / Task	Every Use	After First 5 Hours Use	3 Months / 25 Hours Use	6 Months / 50 Hours Use	12 Months / 100 Hours Use	Major Service – Normal Use 24 Months / 200 Hours Use	Major Service – Heavy-Duty Use Every 200 Hours Use
Engine Oil ***	Check level. Adjust as necessary				Replace		
Engine Oil Filter *						Replace	
Loose Engine / Machine Fasteners					Check. Tighten as necessary		
Air Filter	Check		Clean. Replace as necessary			Replace	Replace
Spark Plug			Check			Replace	
Spark Arrestor *							
Fuel Filter *			Clean. Replace as necessary			Replace	
Fuel Strainer *	Check						
Float Bowl *						Clean	
Fuel Lines / Hoses	Check				Replace as necessary		
Fuel Injector *						Check. Clean	
Fuel Pump *							
Fuel Tank						Flush and clean	
Idle Speed						Check. Adjust as necessary	
Valve Clearance						Check. Adjust as necessary	
Cylinder Head Fasteners						Check. Tighten as necessary	
Combustion Chamber						Check. Clean / de-coke as necessary	
Battery Electrolyte *					Check level. Adjust as necessary		
Major Service						Perform	
Cutting Blade / Chain *	Check				Sharpen. Replace as necessary		
Water Pump Oil **	Check level. Adjust as necessary					Replace	
Hydraulic Fluid ***	Check level. Adjust as necessary					Replace	
Drive Belt Maintenance *	Check tension. Clean & adjust as necessary. How to remove the cover.					Check. Replace as necessary	

* Where applicable. ** Pressure washers with non-sealed water pumps. *** Log splitters only.

**** Briggs & Stratton "EXi" engines do NOT require engine oil changes; just ensure that oil level is correct.

Engine Oil



Engines are NOT supplied with engine oil, although traces of oil from the manufacturing process may be present. It is essential to add adequate engine oil of the correct type to the engine before use. **Failure to add engine oil will void the product warranty.** • Always check engine oil level when the machine is in an upright position on a flat and level surface. • Do not use used or contaminated engine oils. • Use only engine oils of the correct type (see [Specifications](#)). • Perform the first oil change within the first 20 hours of use. Subsequently, change the oil every 20 hours of use. • It is recommended that the engine be warm, but not hot, when performing oil changes. When the oil is warm it drains faster. • Using dirty or incorrect engine oil may cause engine damage and void any warranty • Always use suitable tools. • Always dispose of used oil in an environmentally responsible manner and according to regulations. • Some engines feature oil level detection, which will prevent the engine being started or automatically stop a running engine if there is insufficient oil. • **Always check the oil level and ensure it is at or near the "MAX" indicator before using the machine.** • Some models may have 2 oil drain plugs and fillers on either side of the engine – it does not matter which one is used.

4-stroke engines require engine oil in the crankcase for lubrication of internal components. Severe or irreparable damage may occur if the engine is allowed to run without engine oil. The engine oil level requires regular maintenance as per the maintenance schedule.

To Check Engine Oil Level



Step 1: Locate the oil fill cap on the crankcase to start. Fill cap locations vary, depending on the make and model of your engine.



Step 2: Clean the Crankcase: To prevent dirt and debris from falling into the crankcase, use a clean cloth to wipe the area clean before removing the cap.



Step 3: Inspect the Oil Dipstick and wipe it with a clean cloth.

- To ensure an accurate reading, reinsert the dipstick completely. If the dipstick cap is a screw-in type, ensure an accurate reading by screwing in all the way before removing it to check the level.
- Then, remove it again and **check the oil level.**

The oil mark on the dipstick should be between the lines shown on the dipstick. It should never be above the FULL line or below the ADD line.

Air Filter



Operating the machine without a functional air filter may cause severe engine damage and will void any warranty. • A dirty or oil saturated air filter will restrict air flow, which can be mistaken as fuel system problems. Check the condition of the air filter before adjusting engine idle speed, where applicable. • If the air filter is damaged (torn, broken, disintegrating), replace it.

The air filter is used to prevent dirt and other particles from possibly entering the engine and causing internal damage to it. The air filter requires regular maintenance as per the maintenance schedule.

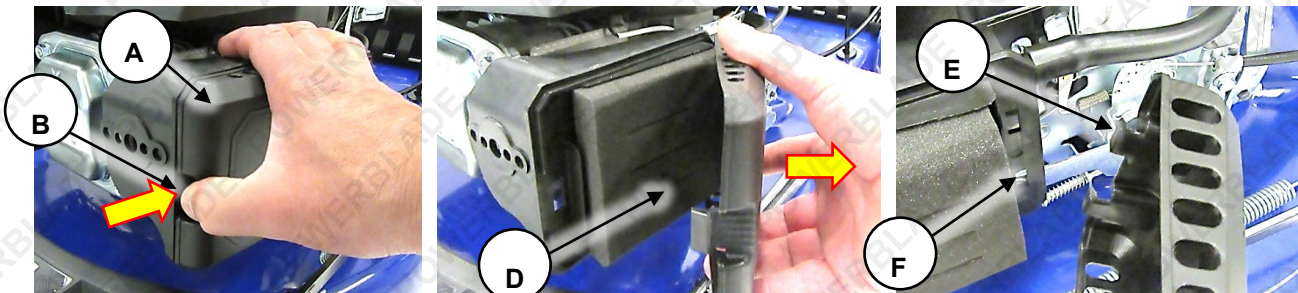
Inspection and Cleaning

Inspect the air filter for dirtiness and debris, damage etc. Clean or replace the filter element as necessary. To clean air filters:

- For foam filters, wash the filter in warm water and mild detergent, then rinse and allow to dry.
- For paper filters, use compressed air to blow particles from it. The air should be blown from the engine side of the filter. Tapping the filter element against a hard surface and brushing the pleats using a soft brush may also help remove debris from the filter.
- Clean all other air filter assembly components using water and mild detergent, then dry them.
- For foam filters, place a few drops of clean engine oil on the filter then squeeze it a few times to spread the oil through the filter material and remove any excess oil.

Removal/Installation

1. Firmly press on the tab (A) at the front of the air filter cover (B) until it "unclips" from the air filter housing (C).
2. Swing the air filter cover open, then remove the filter element (D).



To install the air filter:

1. Insert the air filter element, and ensure it is correctly positioned in relation to the air intake assembly as it will seat and seal properly in one position only.
2. Re-install the filter cover, ensuring to hook the air filter cover tabs (E) into the slots (F) in the air filter housing, then close the cover tightly so it is firmly "clipped" into position at tab A.

Spark Plug



If the spark plug is damaged (cracked insulator, broken or eroded electrodes etc), replace it. • Always use spark plugs of the correct "heat range".

The spark plug is used to ignite the air/fuel mixture inside the engine. The spark plug has electrodes on one end and an electrical terminal on the other. The spark plug requires regular maintenance.

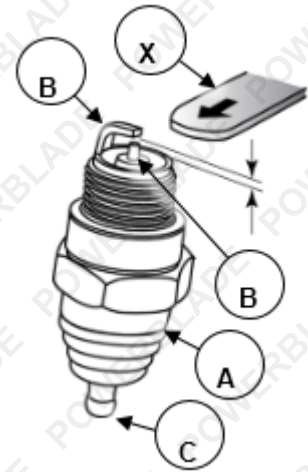
Cleaning and Gap Checking

The spark plug should be checked and cleaned as per the maintenance schedule.

1. Remove any carbon deposits on the spark plug (A) electrodes (B) with a wire brush.
2. Clean the spark plug threads and the electrical terminal (C) on the top.

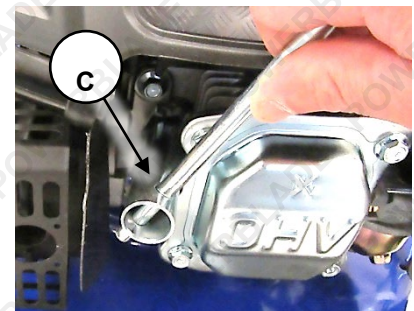
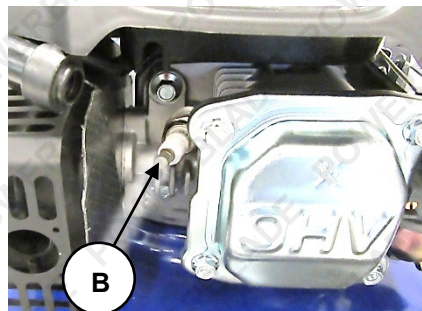
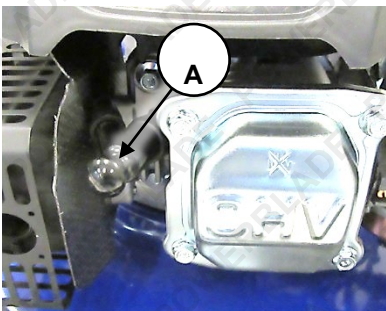
To check and adjust the spark plug "gap":

1. Use "feeler" or "thickness" gauges (X) to measure the existing gap. The gauge must drag a little when being slid between the electrodes (2) – this means the measurement is fairly accurate.
2. Adjust the gap to within specification. If the gap needs to be reduced, gently tap the electrode as required. If the gap needs to be increased, use pliers to gently pull the electrode as required.
3. Measure the gap again and ensure it is within the specified range before re-installing the spark plug.



Removal/Installation

1. Pull the electrical lead (A) from the terminal on top of the spark plug (B).
2. If accessible, clean the area around the spark plug so that no dirt or other material can enter the engine when the spark plug is removed.
3. Use the spark plug tool (C) to remove the spark plug (rotate left).



To re-install the spark plug:

1. Place the spark plug in its hole and screw it in (rotate right) until "finger tight".
2. Use the spark plug tool to tighten the spark plug approximately one quarter turn (do not over-tighten).
3. Place the electrical lead over the spark plug terminal and push it down so that it connects firmly with the terminal.

Cutting Blades

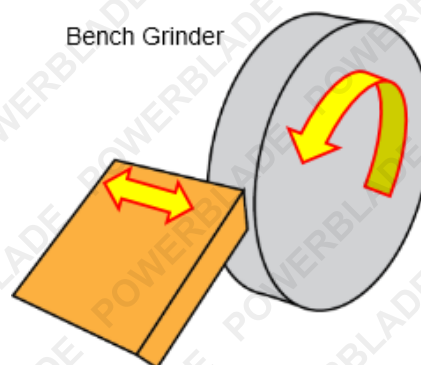
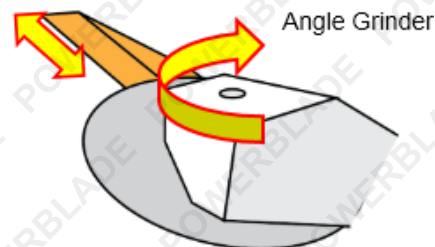
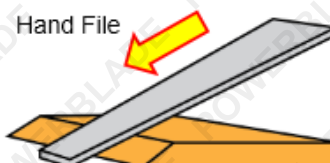


If any cutting blade is structurally damaged (cracked or broken etc), replace it. • Always use manufacturer supplied replacement blades. • Before removing the blades, disconnect the spark plug lead and ensure the fuel cap is secure. • Always wear suitable protective gloves when handling cutting blades.

The cutting blade(s) are spun at very high speed for efficient grass cutting. Sharp blades provide the most efficiency, and neatest finish. Depending on frequency of use and contact with stones, roots etc, the blades will require regular maintenance:

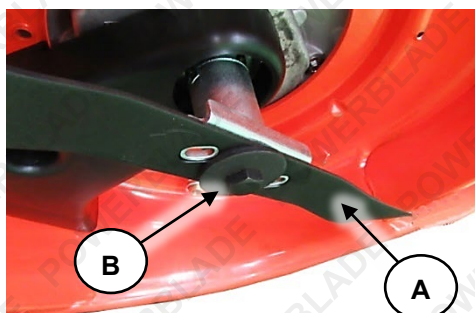
Sharpening

1. Remove the blade(s) from the machine.
2. Remove any loose material from the blades with a wire brush. Inspect the blades for damage or wear that cannot be sharpened out – replace the blade if damaged or overly worn.
3. When sharpening, carefully follow the existing cutting edge angle (generally 40 to 45°). Remove enough material so the blade face is bright and that the cutting edge is complete over its length (no nicks or gouges). The blades do not need to be razor sharp – butter knife sharpness is fine. Sharpen using a:
 - Hand file. Mount the blade in a vice, or clamp it securely to a suitable surface. Move the cutting edges of the file from the blunt side of the blade toward the cutting edge.
 - Angle grinder. Mount the blade in a vice, or clamp it securely to a suitable surface. Move the disc along the cutting edge, with it rotating toward the cutting edge.
 - Bench grinder – Hold the blade securely, then bring the cutting edge up to the grinding wheel so the wheel is rotating toward the cutting edge, then run the blade back and forward across the grinding wheel.



Removal/Installation

1. Rotate the lawn mower so it is on its side. Rotate it so the carburetor is facing up.
2. Clearly mark the bottom and cutting side of the blade(s), so you know which way to re-install it, or which way to install the replacement blade. If the blades are installed incorrectly, they will not cut.
3. For one-piece blades, hold the blade (A) (or wedge it with a wood etc) to prevent it rotating, then remove the central bolt (B) or nut using a suitable spanner. Keep note of any washers, spacers etc and their positions, then remove the blade.
4. Using a wire brush, clean all blade mounting pieces, and the areas where the blades mount to the machine.



To re-install the blade(s):

1. Place the blade in position – ensure that any washers, spacers etc are positioned correctly, and the blade is oriented correctly, with the cutting edge in the direction of rotation and the raised edge of the blade (if applicable) facing up toward the deck.
2. Using a suitable spanner, secure the blade firmly by hand. Firmly hold the blade or wedge it to prevent it rotating.
3. Rotate the machine so it is resting on its wheels, then re-attach the spark plug lead etc.

Cleaning Guidelines



Do not use solvents, chemicals or abrasives when cleaning the machine, as some surfaces may be damaged. • Wear gloves or use suitable tools to assist in cleaning – do not use bare hands. • Clean the machine after every use to ensure best performance and longest service life. • It is recommended to jack the machine up when inspecting or working on the underside of the deck. Avoid tilting the machine to avoid potential fuel or oil spills or leaks.

- Use a slightly damp cloth, water and mild detergent for cleaning.
- Use a brush for parts that are difficult to reach.
- Ensure air vents and surfaces designed for heat dissipation are clean and free of obstructions or debris.
- Remove clippings, dirt etc from the underside of the deck and cutting blades.
- It is recommended to lightly oil the cutting blades after each use to help prevent corrosion.
- Ensure all chutes and flaps are clean and not obstructed.
- Ensure that spring-loaded parts, such as the rear guard, return to the normal position when released.
- Clean and check the grass catcher for any damage – replace damaged parts. Allow the grass catcher to dry thoroughly before storing to prevent mildew or deterioration of the catcher netting (where applicable).
- Ensure that all control cables, levers, switches etc are clean and operate normally and smoothly.

Cleaning the Drive Belt

From time-to-time, the drive belt needs to be accessed and cleaned to remove any accumulated debris that can cause the self-propelling function to stop working.

Video Tutorial:

[Drive Belt Diagnosis](#)



Please see video link to the right for a general overview on how to access and diagnose the drive belt.

Transportation and Storage



Always ensure that the machine is cool enough to touch before transporting or storing. • Petrol/fuel/gasoline is extremely flammable – keep clear of naked flames or other ignition sources. • Always transport the machine with the fuel tap and engine ON / OFF switch (where applicable) in the "OFF" position. • Drain the fuel tank before transportation or storage.

Preparing for Transport and Storage

- Drain the fuel system by allowing the engine to run until it stops. It is advised to have the fuel tank as empty as possible before draining.
- Ensure that the fuel tap (if applicable), engine ON/OFF or key switch (where applicable) is in the "OFF" position.
- Disconnect the spark plug lead.
- Avoid exposing the equipment to direct sunlight, particularly during transportation.
- Ensure the equipment is secure and upright during transport.
- Store the unit in a dry, well-ventilated area and out of the reach of children.

Long Term Storage

Follow the normal procedures for storage, then:

- Unscrew (rotate left) the carburettor drain plug. Use a suitable container to catch the draining fuel, and allow the fuel to drain. Store the drained fuel in a properly sealed container.
- Re-install (rotate right) the carburettor drain plug and tighten.
- Remove the spark plug and put 10ml of clean engine oil into the cylinder. Pull the starter cord slowly to distribute the oil. Re-install the spark plug.
- Cover the equipment to protect it.

Troubleshooting

Running combustion engines in confined areas **CAN KILL IN MINUTES**. Engine exhaust fumes contain carbon-monoxide – a deadly gas that you cannot smell or see. NEVER run a combustion engine in confined areas EVEN IF windows and doors are open. ONLY run combustion engines OUTDOORS and away from doors, windows and vents. • Petrol/fuel/gasoline is extremely flammable – keep clear of naked flames or other ignition sources. • The product is NOT supplied with engine oil, although traces of oil from the manufacturing process may be present. It is essential to add adequate engine oil of the correct type to the engine before use – see [Engine Oil](#). **Failure to add engine oil will void the product warranty**. • Do not have the engine running during inspection and maintenance unless specifically required. • The engine should be cool enough to touch before performing maintenance activities. • Some maintenance activities may be beyond the scope of some users. Do NOT attempt procedures that you are not comfortable with, or do not have the necessary tools, experience or knowledge for – take the unit to an authorised service centre or qualified technician for servicing.

The following information may assist in identifying a problem and rectifying it.

Cannot attach grass catcher.

Possible Fault	Action
<i>Handle installed incorrectly</i>	For models that do not have spigots on the handle mounting brackets, ensure the handle is installed against the outer face of the mounting brackets.

Difficulty starting the engine.

Possible Fault	Action
<i>Lack of fuel</i>	Check that there sufficient fuel in the tank and the fuel tap (if equipped) is in the "ON" position. • To further check if fuel is reaching the carburettor, remove the carburettor drain plug and check if fuel drains.



<i>Carbon build-up on spark plug</i>	Perform a spark plug service.
--------------------------------------	-------------------------------



<i>Spark plug faulty</i>	Remove the spark plug, then reconnect the plug lead to it. Touch the spark plug electrode to a part of the engine crankcase, away from the spark plug hole, and attempt to start the engine – a spark should be visible across the electrodes as the engine is rotated. If no spark is visible, replace the spark plug.
--------------------------	---



<i>Engine "flooded" with fuel</i>	Place the choke in the "HOT START" position. Pull the starter cord several times to assist clearing excess fuel from engine before attempting to start engine.
-----------------------------------	--



<i>Not enough or too much engine oil</i>	Check oil level and ensure that the level is at or just below the recommended maximum level. For some engines, an engine oil sensor will automatically switch off the engine or prevent starting if a low engine oil level is detected.
--	---

Engine starts but does not idle.

Possible Fault	Action
<i>Blocked air filter</i>	Perform an air filter service.



<i>Idle speed requires adjustment</i>	Adjust idle speed until engine runs smoothly and at a reasonable speed when idling.
---------------------------------------	---

Engine starts but runs erratically.

Possible Fault	Action
<i>Spark plug lead loose</i>	Ensure the spark plug lead is undamaged and is securely connected to the spark plug terminal.
<i>Choke ON</i>	Set the choke to the "HOT START" position.
<i>Blocked fuel line or stale fuel.</i>	Clean the fuel line. Fill the tank with clean, fresh fuel.
<i>Water or dirt in fuel system</i>	Drain fuel tank and carburettor. Refill with fresh fuel.
<i>Dirty air filter</i>	Perform an air filter service.

Difficulty restarting the engine after use or engine stops suddenly during use.

Possible Fault	Action
<i>No fuel or engine oil</i>	Check that there sufficient fuel in the tank and the fuel tap (if equipped) is in the "ON" position. For some engines, an engine oil sensor will automatically switch off the engine or prevent starting if a low engine oil level is detected.
<i>Cutting blades jammed</i>	Remove jammed material from the machine. In the case of obstacles in the work area (rocks, roots etc), avoid them or raise cutting height.
<i>Overheating</i>	Allow engine to cool before restarting. Ensure all air vents and heat dissipation surface are clean and free of debris. If possible, improve engine cooling, such as operating in lower temperatures.
<i>Carbon build-up on spark plug</i>	Perform a spark plug service.
<i>Carburettor blocked</i>	Clean the carburettor.

Reduced engine speed/power during use.

Possible Fault	Action
<i>Blocked air filter</i>	Perform an air filter service.
<i>Carbon build-up in engine and/or entry to exhaust silencer</i>	Remove the engine cylinder head and clean any carbon from the combustion chamber. For the exhaust silencer, remove it and clean any carbon deposits from the exhaust entry port.
<i>Carbon build-up on spark plug</i>	Perform a spark plug service.
<i>Fuel system blockage</i>	Clean fuel lines / fuel filter / carburettor / fuel injector.

Grass cutting is poor.

Possible Fault	Action
Blades dull or damaged	Sharpen or replace cutting blades.
↓	
Cutting too much in one pass	Adjust the cutting height and rate of mowing to reduce load on the engine. For tall or very thick grass, cut in several passes. Do not attempt to cut beyond the capacity of the machine.
↓	
Cutting height not suitable	Adjust cutting height as required.

Engine overheats.

Possible Fault	Action
Engine oil level low	Fill the crankcase with the correct engine oil type to the "MAX" indicator or just under.
↓	
Dirty air cleaner	Perform an air filter service.

Excessive vibration.

Possible Fault	Action
Blades dull or damaged	Sharpen or replace cutting blades.
↓	
Fasteners loose	Check all accessible fasteners for tightness.
↓	
Engine output shaft worn or bent	Replace worn or damaged parts as required.

Specifications

Engine	OHV, air-cooled, 4 stroke
Torque/Speed	3000rpm
Displacement	139cc
Steel Deck	17"
Starting System	Recoil/Pull Start
Fuel Tank Capacity	1L
Fuel type	Unleaded 95+ RON
Height Adjustment	7 stage
Cutting Height	25-75mm
Oil Tank Capacity	0.4L
Cutting Width	41cm
Wheels	7" front, 7" rear
Grass Catcher Capacity	45L
Engine Oil Type	10W-30 / 10W-40 / 15W-30 / 15W-40 non-synthetic engine oil (not included with purchase)

Use the following tables as a record of machine servicing and maintenance. Keeping accurate records will help ensure longest machine service life and may simplify fault diagnosis and any possible warranty claims. Fill out date, number of hours of use and the activity performed, as required (see [Maintenance Schedule](#)).

[illegible]



Some experts believe that the incorrect or prolonged use of almost any product may cause serious injury or death. To help reduce your risk of serious injury or death, refer to the information below. For more information, see www.datastreamserver.com/safety

- Consult all documentation, packaging and product labelling before use. Note that some products feature documentation available online. It is recommended to print and retain the documentation.
- Before each use, check the product for loose/broken/damaged/missing parts, wear or leaks (if applicable). Never use a product with loose/broken/damaged/missing parts, wear or leaks.
- Products must be inspected and serviced (if applicable) by a qualified technician every 6 months. This is based on average residential use by persons of average size and strength, and on a property of average metropolitan size. Use beyond these recommendations may require more frequent inspections/servicing.
- Ensure that all users of the product have completed a suitable industry recognised training course before being allowed access to the product.
- The product has been supplied by a general merchandise retailer that may not be familiar with your specific application or description of application. Be sure to attain third-party approval from a qualified specialist for your application before use, regardless of any assurances from the retailer or its representatives.
- This product is not intended for use where fail-safe operation is required. As with any product (for example, automobile, computer, toaster), there is the possibility of technical issues that may require the repair or replacement of parts, or the product itself. If the possibility of such failure and the associated time it may take to rectify could in any way inconvenience the user, business or employee, or financially affect the user, business or employee, then the product is not suitable for your requirements. This product is not intended for use where incorrect operation or a failure of any kind, including but not limited to, a condition requiring product return, replacement, parts replacement or service by a technician may cause financial loss, loss of employee time or an inconvenience requiring compensation.
- If this product has been purchased in error when considering the information presented here, contact the retailer directly for details of their returns policy, if required.

