



**PADDOCK WOOD CHIPPER
MULCHER**

P/N – SPWCHIP

User and Maintenance Manual



TABLE OF CONTENTS

INTRODUCTION	3
SPECIFICATIONS.....	4
WARNING.....	5
SAFETY MANAGEMENT PROCEDURES.....	5
SAFETY INSTRUCTIONS.....	6
GENERAL SAFETY	9
ASSEMBLY	9
OPERATION	11
MAINTENANCE	13
TROUBLESHOOTING.....	16
EXPLODED PARTS DIAGRAM	18
WARRANTY INFORMATION	20
SUPPORT INFORMATION	20



Congratulations and thank you for choosing the Paddock Petrol Engine Wood Chipper. This manual is an important part of your machine. It provides critical safety information and operating instructions to help you use and maintain your machine safely and correctly.

1. INTRODUCTION

The Paddock horizontal drum chipper design has been engineered with greater simplicity which aids in its performance. The heavy duty rotating drum design develops great inertia, allowing it to chip larger diameter branches in a range of materials including common Australian hardwoods. The unit utilises brute power rather than ultra sharp blades to mulch meaning it is less prone to ongoing servicing to achieve optimal performance.

- Quality sealed and greaseable bearings ensure reliable operation and minimise maintenance requirements
- Genuine Ducar 17HP 4 stroke commercial engine
- Suitable for hard and soft woods, capable of chipping branches up to 120mm diameter
- Heavy duty heat treated hammer blades
- Large wheels and tow hitch make transport around acreages simple
- Simple to service and maintain with spares available in Australia
- 12 Months Australian warranty

The Paddock chipper is simple to relocate around your property as it's supplied with a tow hitch, heavy duty chassis and large off-road wheels. The trailer is not road registerable but can be towed behind your quad bike, ATV or farm utility at slow speeds around your property. The chipper comes with an adjustable discharge chute allowing the chips to be directed and collected as desired.

With a large inlet hopper users can feed modestly sized branches with ease. The deep chute makes for a safe operating design which limits the users interaction with the heavy duty hammer blades.

The unit runs two rotating heat treated hammer blades along with a heavy duty fixed blade. The feed material is chipped with ease thanks to the high engine power and great spinning inertia. Having fixed and rotating blades means the wear and tear from daily use is localised to simple to replace consumable components. The chippers blades are straight forward to access and spares are available.

Quality Ducar Petrol Engines

Powered by a Ducar 17hp commercial petrol 4-stroke engine, the Paddock chipper is well powered to perform. Ducar is one of the worlds largest air cooled engine manufacturer with products in most established countries. Ducar engines meet strict emissions standards and are well proven across Australia. The engine comes fitted with dual starting options to allow manual recoil or electric start.

The unit is fitted with dual Kevlar drive belts that ensure the power from the powerful engine is effectively delivered to the rotating chipper drum.

Heavy Duty Construction

When it comes to chipper designs, stronger and heavier is better. The Paddock chipper uses a heavy weight, horizontal drum design with heat treated hammer blades to smash through timbers of all hardness. The units overall quality is evident

by the heavy steel construction. Oversized, easy to access and grease bearings support the rotating anvil/drum and ensure smooth performance. With a chipping capacity of 120mm diameter branches, this unit is extremely capable and will handle common acreage debris. Having a higher powered chipper makes yard work faster and less strenuous on the operator.

2. SPECIFICATIONS

	SPWCHIP
Engine	17HP 4 stroke Ducar DH457-X Commercial Petrol Engine
Fuel	Petrol
Starter	Dual Recoil / Electric
Battery	12V / Min 20 Ah
Blades	1 x fixed / 2 x rotating Heavy duty heat treated steel Reversible
Max. Capacity	120mm diameter
Motor oil	SF 15W40
Blade Speed	2,000 rpm
Drive	Dual Kevlar Belts
Discharge Chute	Adjustable
Wheels	16*8.0-7 ATV Pneumatic Wheel
Protection Mode	IP 20
Dimensions	1800mm (H) x 900mm (W) x 1150mm (L)
Weight	190 kg
Warranty	12 months

WARNING: PLEASE READ THIS!!!

THIS UNIT REQUIRES INITIAL SETUP, SERVICE & LUBRICATION. SEE THE MANUAL.

NOTE:

- Engines are supplied without Oil
- Grease nipples are supplied without grease
- Battery could be low on power, we recommend charging with a external charger before first use.
- Bolts could be loose – check everything



REPEAT LUBRICATION AND SETUP AFTER 30 MINUTES USE.

3. WARNING

Carefully read and understand all instructions and warnings in this manual before operating the vacuum. Failure to follow the safety precautions may result in serious injury or death.

This product is designed for certain applications only. The manufacturer cannot be responsible for issues arising from modification. It is strongly recommended this product not be modified and/or used for any application other than that for which it was designed. If you have any questions relating to a particular application, DO NOT use the product until you have contacted Paddock Machinery to determine if the machine is suitable for the application.

Do not lose this manual and be sure to store it with your machine for future reference.



4. SAFETY MANAGEMENT PROCEDURES

- The machine must only be used for its intended purpose! Any other use is deemed to be a case of misuse.
- To use the machine properly you must also observe and follow all safety regulations, the assembly instructions, operating and maintenance instructions as per this manual and the engine suppliers manual.
- All people who use and service the machine have to be acquainted with this manual and must be informed about the machine's potential hazards.
- It is also imperative to observe the accident prevention regulations in force in your area.
- The same applies for the general rules of occupational health and safety.
- The machine is used for:
 - Shredding of branches of all kinds (depending on the type of wood and freshness). Wilted, moist, garden waste already stored several days alternating with tree branches.



THIS MACHINE WHEN EQUIPPED WITH A DRAWBAR, IS NOT APPROVED FOR PUBLIC ROAD USE!



Any manipulation of the machine or its parts is a misuse, in this case the manufacturer and its sales partners cannot be made liable for ANY direct or indirect damage.

WARNING:

Ensure during the operation, that no foreign objects (such as stones, glass, metal, earth, plastic) are filled into the shredder. Such foreign bodies will blunt the chopping blades and severely damage the engine.

- Use your Mulcher solely for the purposes for which it was designed.
- The Mulcher should be carefully checked before use. Never use this unit if it's not in good condition. If you notice a defect on the machine, which could pose a danger to the user, do not use until the defects have been corrected.
- This machine contains rotating blades.
- These blades do not stop rotating immediately after stopping the engine.
- The in-feed must be completely assembled and fixed prior to use.

PROHIBITED USE:

- The operation of the machine outside the stated technical limits described in this manual is forbidden.
- Operation of the machine function without any protection devices is forbidden.
- The use of the machine for any purposes other than described in this user-manual is forbidden.
- Any manipulation of the machine and parts is forbidden.
- The use of the machine by untrained people is forbidden.
- Do not leave this machine operating unattended ever.

5. SECURITY INSTRUCTIONS

Missing or non-readable security stickers have to be replaced immediately!

To avoid malfunction, machine defects and injuries, read the following security instructions!

Local applicable laws and regulations may specify the minimum age of the operator for this machine!

- Use the machine only in good light so safe operation can be guaranteed.
- In tiredness, decreased concentration or under the influence of alcohol or drugs, the work on the machine is prohibited!
- Caution in slippery conditions - slip hazard - risk of injury. When working, robust and non-slip footwear. Slips / stumble / trips are a major cause of serious injury or death.
- Unauthorised persons, especially children and not trained personnel must be kept away from the running machine!
- The machine must be operated only by trained persons who have a knowledge and understanding of this manual.
- No other person or pets should be within 12m of this machine while in operation.
- The machine user manual should remain with the machine at all times.
- Before each use, the reliability of the machine is to be checked (tightness of the cutting tool, the proper function of the throttle lever, safety switch)
- Use personal safety equipment: ear protectors, safety gloves in EN 388, class 3111, safety shoes S1, safety goggles or face protection when working with the machine!
- Make sure that the device is completely and correctly assembled.

- Never leave the machine running unattended! Before leaving the working area switch the machine off and wait until the machine stops.
- Switch off the machine before maintenance or adjustment.
- The machine should only ever be operated on solid level ground.
- Never put your hands into the in-feed and discharge chute when the machine is running.
- Use your shredder only in places where it is protected from water and never use it during rain outdoors.
- Danger of burns! Exhaust gases and engine parts such as the muffler and engine become hot during operation.

WARNING: Petrol is highly flammable!

- Stop the engine before refuelling
- Smoking and open flames are prohibited during refuelling.
- Do not refuel when the engine and carburettor are still hot.
- Refuel only outdoors or in a well ventilated area.
- Avoid contact with skin and clothes (fire hazard)
- Check after refuelling tank cap and check for leaks.
- Start the engine at least 3 meters from any stored fuel sites.
- Spilled fuel must be wiped away immediately.
- Keep the fuel in suitable containers only
- Make sure the fuel does not overflow. If the fuel overflows, the engine must not be started. Remove any dirt from the appliance and prevent any attempt at ignition until fuel fumes have evaporated
- Damaged fuel tank or other tank cap must be replaced immediately
- After operation, the fuel cock must be closed (if available)
- Danger of Intoxication! Only use outdoors and far from open windows and vents!
- Exhaust contains poisonous carbon monoxide. The exposure can cause unconsciousness and death.
- Change damaged parts immediately

TRANSPORT NOTES:

- Switch off the engine and let cool down
- Never lift or carry the machine while the engine is running
- Wait till the blades are completely stopped
- Secure the machine
- Empty tank completely, avoid fuel spillage
- To avoid damage to the device never drag but always lift correctly.

STORAGE NOTES:

- Clean and dry the machine
- Empty tank completely, avoid fuel spillage
- Let engine cool down before storing
- Store in a dry location, out of reach of children

- Do not store machines with fuels or fuels close to combustibles and highly flammable materials as well as sparks and open flames.
- Never remove the fuel tank cap when the engine is running or hot

Switch off the engine and remove the ignition key (if its available) in the following situations:

- Before checking, cleaning or working on the machine
- Before eliminating faults
- If the shredder starts to vibrate abnormally, stop the engine immediately and locate the cause. Vibrations generally mean a malfunction.
- Before refuelling
- If you leave the machine unattended

REMAINING RISK FACTORS

WARNING: It is important to recognise that each machine has remaining risks. In the execution of all work (even the simplest) greatest attention is required. Safe working depends on you!



Even if the machine is used as required it is still impossible to eliminate certain residual risk factors totally. The following hazards may arise in connection with the machines construction and design:

- Risk of injury to the hands / fingers by negligent guiding the feed material.
- Guide feed material slowly and carefully into the in-feed. Automatic feeding!
- Risk of injury: hair and loose clothing, etc. can be captured and wound up! Safety regulations must be observed with regard to clothing.
- Risk of injury by tilting the machine
- Risk of injury to the eye by flying debris, even with safety goggles.
- Risk of injury to the hearing by prolonged labor without hearing protection.
- Risk of burns: Touching the mufflers, exhaust and other machine components which can be hot after prolonged continuous operation can cause severe burns.

These risk factors can be minimized by obeying all security and operation instructions, proper machine maintenance, proficient and appropriate operation by persons with technical knowledge and experience.

Despite all safety advice, common sense is required for the use of this machine and is the most important safety factor!



6. GENERAL SAFETY

WARNING: Read and understand all instructions. Failure to follow all instructions listed as follows may result in serious injury or death.



CAUTION: Do not allow persons to operate or assemble this vacuum until they have read this manual and have developed a thorough understanding of how the vacuum works.

WARNING: The warnings, cautions, and instructions discussed in this manual cannot cover all possible conditions or situations that could occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product but must be supplied by the operator.

7. ASSEMBLY

Please check the product contents immediately after receipt for any transport damage or missing parts. Claims from transport damage or missing parts must be placed immediately after initial machine receipt and unpacking before putting the machine into operation.



ASSEMBLY

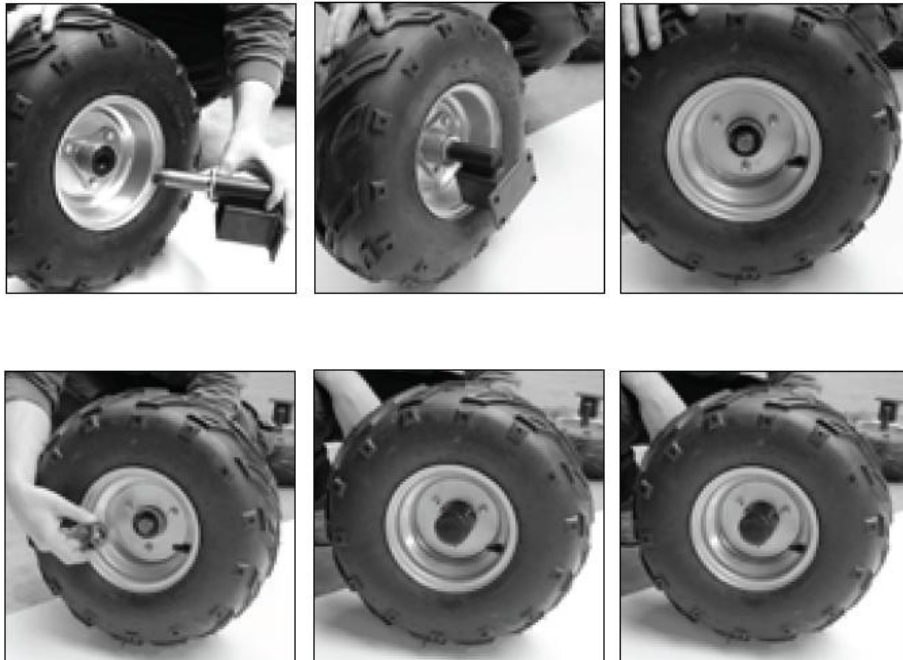
NOTICE: Some machine components are heavier than 20kg. Assembly only from min. 2 persons! Assembly only with engine switched off!

DRAWBAR: Place the drawbar on the Jockey wheel and fix with bolts M12x100, washers and nuts M12.

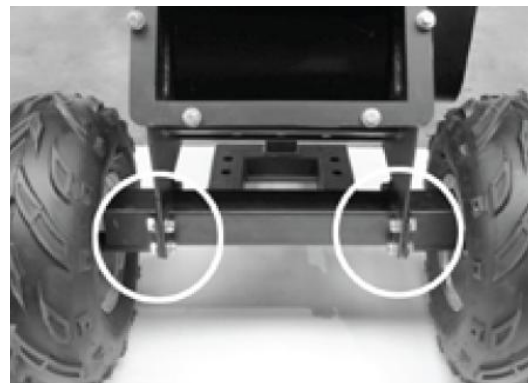


WHEELS: Push the axis through the rim, tighten the nut and secure with a splint.

Then fit the hubcap.



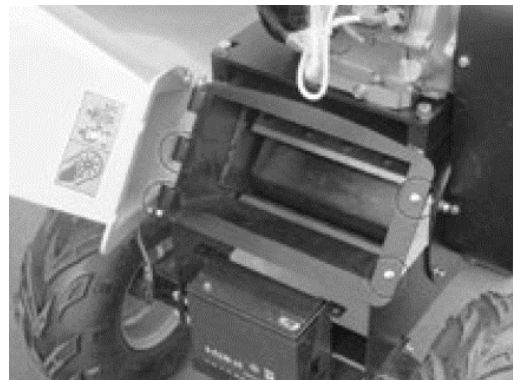
AXIS: Tilt the blades chassis slightly backwards and fix the axis with screws, washers and nuts.



IN-FEED: Place the in-feed on the blades chassis so that the mounting holes coincide with the holes on the in-feed.

Fix with washers and nuts.

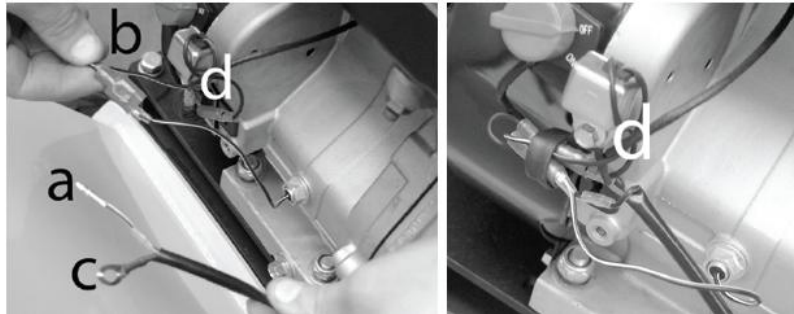
Attention: Risk of cutting!



SAFETY SWITCH:

Insert the cable (a) into the plug of the cable (b).

Then connect the cable (c) to the motor using screw (d).



DISCHARGE CHUTE:

Place the discharge chute on the blades chassis so that the mounting holes coincide with the holes on the discharge chute.

Fix with screws, washers and nuts.



WARNINGS: After final assembly, check all screw connections and retighten if necessary!

8. OPERATION

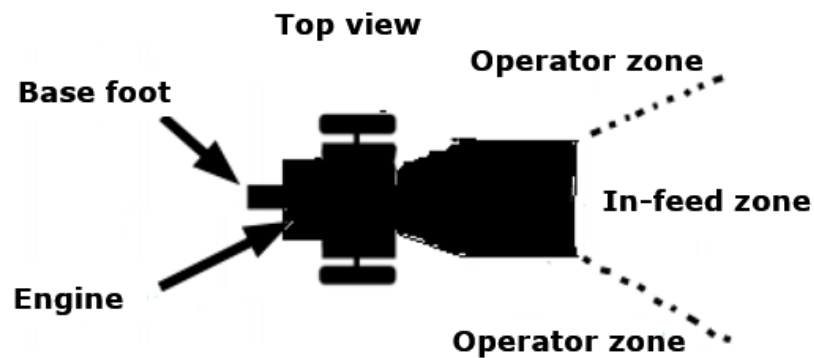
Machine to be operated in perfect condition only. Inspect the device visually every time it is to be used. Check in particular the safety equipment, electrical controls, electric cables and screwed connection for damage and if tightened correctly. Replace any damaged parts before operating the device.



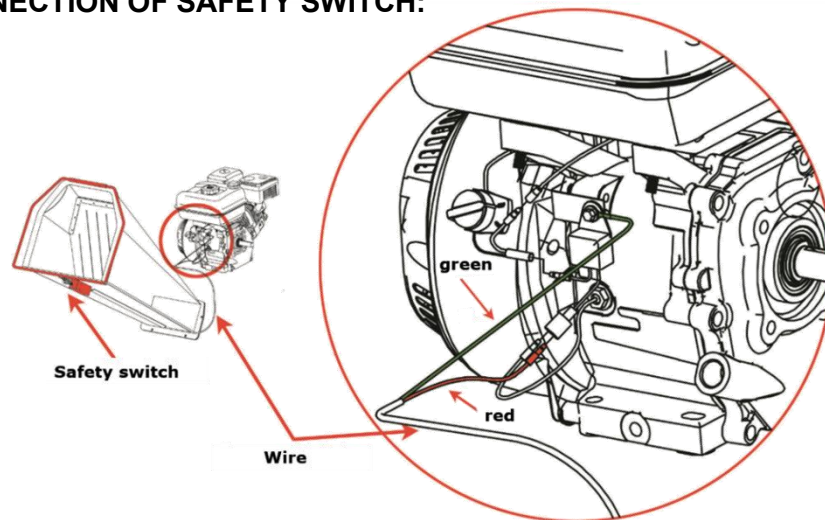
OPERATION INSTRUCTIONS

WARNINGS: Stop the machine before any break, maintenance and cleaning!
The safety switch must be connected! RISK OF INJURY!

- Do not stand in the discharge chute area during starting the machine
- Before starting check that the in-feed is free of any material
- Start shredding after the engine has reached full speed
- Operate only with sharp blades
- Use only blades designed for this machine!
- Never use damaged blades!
- Always operate in the operator zone
- Never stay in the in-feed zone



CONNECTION OF SAFETY SWITCH:



WARNING: The machine will be delivered without any fuel or oil.

Read also the separately packed operation manual from the engine manufacturer

REFUEL, START, STOP: Refer to the engine manufactures operation manual.

WARNING: To stop the engine quickly in an EMERGENCY, press the Emergency handle on the in-feed. Never hesitate in such cases!

NOTICE:

- The feed material should be as dry as possible!
- Wet material can cause clogging and damage the machine
- Insert the feed material into the chute and when the material is gripped by the machine and automatically fed, release the material immediately
- Always feed in material with the thick end first
- Saw off long side branches and insert them separately
- Never work with too much pressure
- Do not overload the machine
- In the event of blockages, switch off the engine immediately and eliminate any malfunctions.
- Remove crosswise lying material only when the engine is switched off and the blades are stopped!
- Use a suitable piece of wood (branch) for removal.
- Switch off the engine immediately if there are any unusual noise and vibrations. Repair any faults immediately.

After finishing operation, allow the machine sufficient time to process all material and clear itself. This avoids start-up difficulties when working next time!

TO BE MULCHED: Hedge and tree cuttings, bush and brush, branches.

TO BE NOT MULCHED: Glass, metal, plastic, plastic bags, stones, cloth, roots with soil, food left-overs, fish or meat.

9. MAINTENANCE



ATTENTION: No cleaning, upkeep, checks or maintenance when machine is running

Shut off the machine, let it cool down, disconnect spark plug cap from spark plug!

The machine does not require intense maintenance. However, to ensure a long lifespan, we strongly recommend following the upkeep and maintenance plan.

Repairs must be carried out by specialists! Use original parts only!

NOTICE: Only properly maintained equipment will last and operate reliably. Care and maintenance deficiencies can cause unpredictable accidents and injuries.

Repairs should be performed only by authorized service centers.

Improper operation may damage the equipment or endanger your safety.

MAINTENANCE PLAN

CONTROLS FOR THE MAINTENANCE OF THE MACHINE	
Loose or lost screws, nuts, bolts	Regularly prior to each operation
Damage of any part of the machine	Regularly prior to each operation
Fuel level	Regularly prior to each operation
Fuel tank of tightness	Regularly prior to each operation
Machine cleaning	Regularly prior to each operation
Oil level	Regularly prior to each operation
Function of safety switch	Regularly prior to each operation
Tension of the V-belt	Regularly prior to each operation
Greasing of the blade drum	Every 25 working hours
Cleaning spark plug	Every 25 working hours
Cleaning air filter	Every 20-30 working hours
Engine maintenance	Refer to engine manual

CLEANING THE AIR FILTER

A clogged air filter reduces the engines power output drastically and causes engine disfunction. Furthermore, it reduces the engines lifespan!

Disassemble the air filter cap. Remove the air filter from the machine. Clean the air filter and drip some drops of oil onto the filter. Refit the filter.

CLEANING THE SPARK PLUG

Take off the spark plug cap. Loosen and remove the spark plug. Clean it with a small brush to remove soot debris. The contact distance shall measure approx. 0, 5mm – 0,7mm.

GREASING OF THE BLADE DRUM

Grease the bearings of the blade drum on both sides to the grease nipple. Repeat after cleaning machine!

- Remove V-belt cover.
- Clean grease nipple with cloth
- Apply the grease gun and pump the grease
- Reassemble the V-belt cover



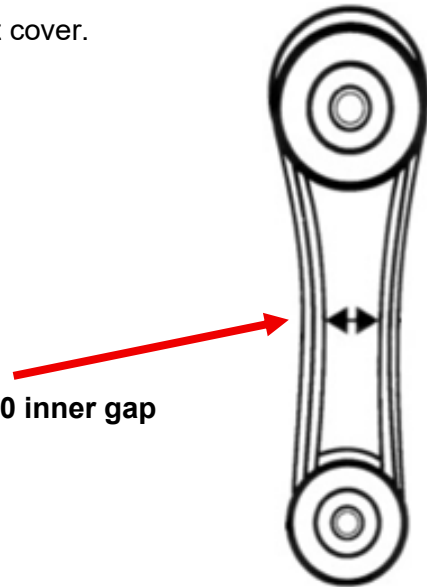
ADJUSTING THE V-BELT

The V-belt connects the engine and blade drum. Ensure belt has approx 80mm gap on thumb pressure, adjust the V-belt when necessary.

1. Switch off the machine and take off the belt cover.
2. Loose the four nuts at the engine.
3. Move back the engine for tightening and forward to loosen the V-belt.
4. Ensure the engine and drive pulley are parallel (a ruler can be helpful). Tighten the four nuts at the engine again.
5. Fix the cover of the V-belt again.

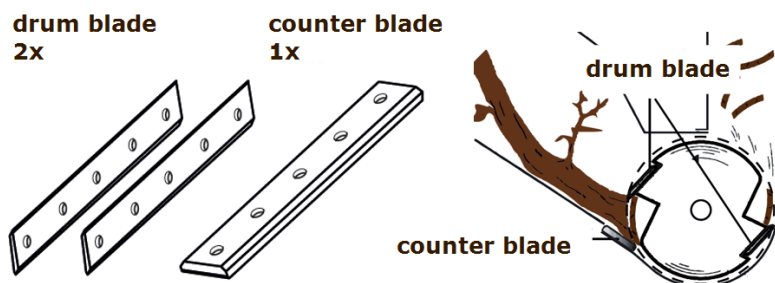


Approx 80 inner gap



BLADES

- Wear safety gloves. Ensure Spark Plug is disconnected.
- After approx. 30-50 working hours, the blades may be blunt and require sharpening or replacement.
- Blades are blunt if:
 - abnormal noise
 - decreased speed
 - V-belt (despite correct tension) slips
- Drum blades and counter blade can be turned 1 time
- Replace damaged blades immediately!



Loosen the screws, turn the blades (grind if necessary) and retighten the blades. Adjust counter blade cutting gap to 0,5 mm.

CARBURETTOR

Carburetor settings must be performed only by trained personnel!

REFUEL

Use normal petrol (unleaded petrol) or premium petrol with octane index (ROZ) of 95. Never use a mix of oil and petrol or dirty petrol. Avoid infiltration of the gasoline tank by water, dust or dirt.

CLEANING

Clean the machine and the working attachment from dirt.

Clean the machine housing with a wet cloth and a mild cleaning solution.

NOTICE: The usage of solvents, aggressive chemicals or scouring agents damages the machine housing.

STORAGE

If the machine is stored for longer than 30 days:

- Let the machine cool down
- Clean the machine and dry
- Empty Tank and carburetor completely, avoid fuel spillage
- Store in a dry location, out of reach of children.

10. TROUBLESHOOTING

ATTENTION: Shut off the machine, let it cool down, disconnect spark plug cap from spark plug

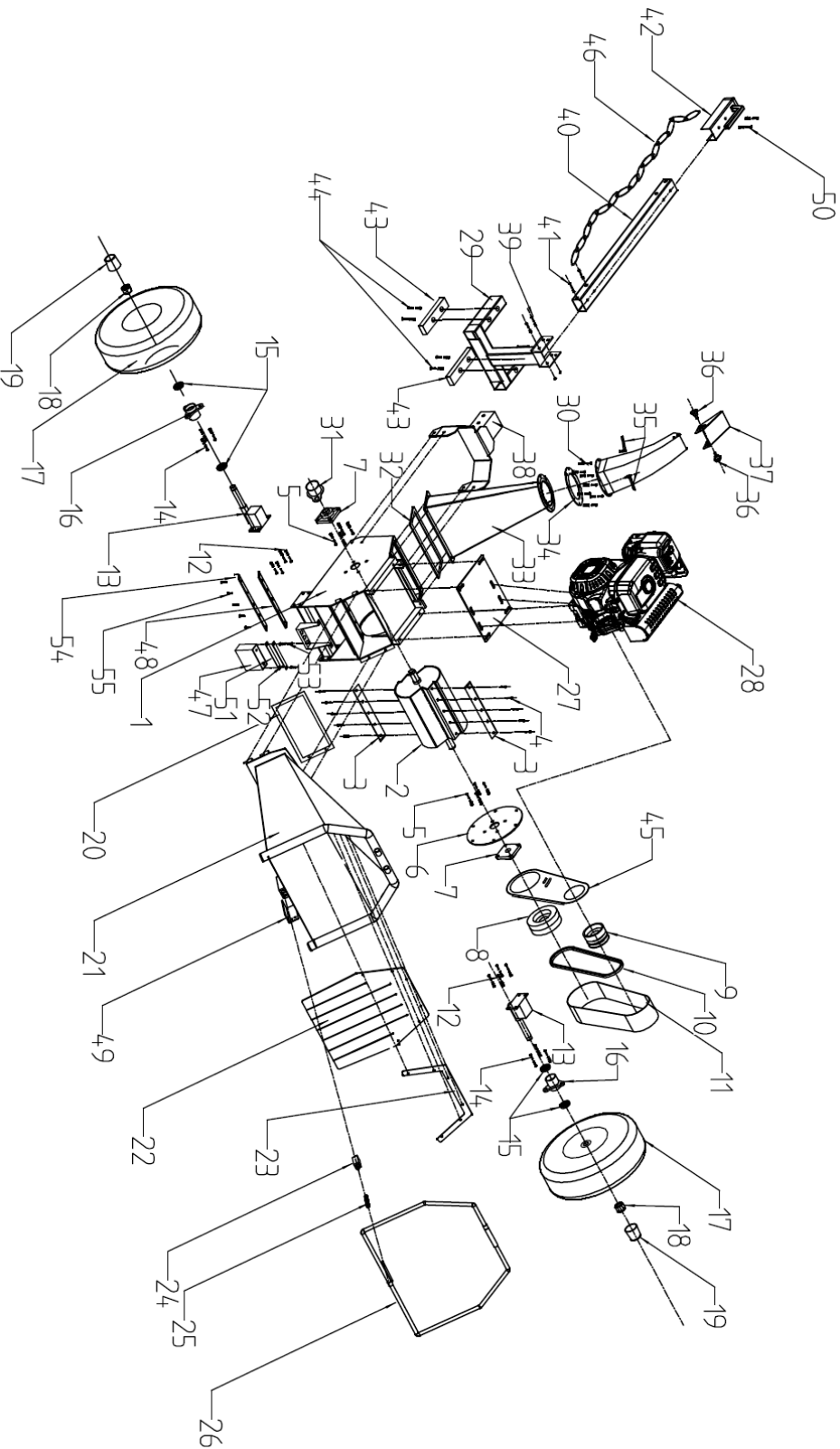
Engine does not start	• Ignition switch defect	• Repair or change
	• No fuel	• Refuel
	• Spark plug dirty or damaged	• Clean or change
	• Fuel line faulty	• Check fuel line for damage and kinks
To low power	• Air filter dirty	• Clean or change
	• V-belt	• Tighten or change
	• Overload	• Reduce material feeding
	• Blockage	• Remove shredded material
	• Blades blunt	• Turn/grind blades
No automatically feeding of the shredded material	• Blades blunt	• Turn/grind blades
Extra-ordinary sounds	• Screws, nuts or other parts are loose	• Tighten parts



Use a repair shop if you are not confident in checking and performing service and maintenance yourself.



11.EXPLODED PARTS DIAGRAM



No.	Description	No.	Description
1	Base Frame	29	Jockey Wheel
2	Roller	30	M6x25 Hex Bolt
3	Drum Blade	31	Bearing Cover
4	M10x25 Hex Bolt	32	Discharge to Frame Rubber
5	M12x40 Hex Bolt	33	Discharge Chute
6	Bearing Mount Plate	34	Flange to Discharge Chute
7	Bearing	35	M8x15 Handle Bolt
8	Pulley	36	M8x15 Rubber
9	Clutch	37	Chute Deflector
10	17x1041Li Belt	38	Tongue Base
11	Belt Cover	39	N/A
12	M10x25 Hex Bolt	40	Tow Bar
13	Wheel Axis	41	M10x60 Hex Bolt
14	M8x25 Hex Bolt	42	Tow Hitch for 2" Ball
15	Wheel Bearing	43	N/A
16	Wheel Flange	44	N/A
17	16x8.00-7 Tire	45	Belt Inner Cover
18	M24x1.5 Castle Nut	46	Safety Chains
19	Wheel Rubber Cap	47	Battery
20	In-Feed to Frame Rubber	48	Bed Knife
21	In-Feed Chute	49	Switch cover
22	Rubber Chip Baffle	50	M12x80 Hex Bolt
23	Rubber Baffle Mount	51	Rubber Pad
24	Limit Switch	52	Battery cover
25	Spring	53	M8x20 Hex Bolt
26	Switch Frame	54	Lower Blade Fixed Angel Steel
27	Engine Base Plate	55	M10x25 Hex Bolt
28	Petrol Engine		

NOTICE: 2024 onwards models have updated chute outlet (see below)



12. WARRANTY INFORMATION

The below information is an addition to information covered under the standard Terms and Conditions of sale at your place of purchase.

WOOD CHIPPER – Is warranted for manufacturing faults and defects for a period of 12 months from date of purchase.

ACCESSORIES / ATTACHMENTS – 12 months

EXCLUSIONS - Normal wearing parts and consumables are not covered by warranty. Examples include: filters, hoses, tires. Equipment damaged, misused, not maintained, adjusted incorrectly, effected by fire, rain, accident or flood will not be covered by warranty.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

13. SUPPORT INFORMATION

SALES ENQUIRIES:

P: 1300 246 406

E: info@paddockmachinery.com

SUPPORT REQUESTS

Via the website support request - www.paddockmachinery.com

ADDRESS:

47 Eagleview Place

Eagle Farm QLD 4009

Australia

