

INSTRUCTIONS AND USER MANUAL

BIO150S



ALNOVA®

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ANOVA wishes to congratulate you for choosing one of our products and guarantees the assistance and cooperation that has always distinguished our brand over time.

This machine is designed to last for many years and to be of great use if used in accordance with the instructions contained in the user manual. We therefore recommend that you read this instruction manual carefully and follow all our recommendations.

For more information or doubts, you can contact us through our web supports such as www.anova.es.

INFORMATION ABOUT THIS MANUAL

Pay attention to the information provided in this manual and on the machine for your safety and that of others.

- This manual contains instructions for use and maintenance.
- Take this manual with you when you go to work with the machine.
- The contents are correct at the time of printing.
- The rights to make changes at any time are reserved without affecting our legal responsibilities.
- This manual is considered an integral part of the product and must remain with it in case of loan or resale.
- Ask your dealer for a new manual in case of loss or damage.

READ THIS MANUAL CAREFULLY BEFORE USING THE MACHINE

To ensure that your machine provides the best results, please read the usage and safety regulations carefully before using it.

OTHER WARNINGS:

Incorrect use could cause damage to the machine or other objects. The adaptation of the machine to new technical requirements could cause differences between the content of this manual and the purchased product.

Read and follow all instructions in this manual. Failure to follow these instructions could result in serious personal injury.

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1. Safety instructions

Caveat

The machine must not be used in any other way than described in the manual.

Only use original spare parts. If you use unapproved replacement parts, there is an increased risk and therefore it is not allowed.

All liability is disclaimed in the event of an accident or other damage caused by the use of unapproved parts.

Before using the machine for the first time, please read this manual.

Check the emergency stop switch before each operation.

Make sure all bolts and nuts are tight before start-up.

Choose a flat workplace. The machine can only be used outdoors, away from flammable materials.

The user must wear close-fitting work clothes, work gloves, eye protection, ear plugs, a dust-proof mask and work boots.

Before and after using the machine, proper maintenance is necessary.

Failure to follow these safety instructions could result in personal injury and/or product damage.

Protection

Caveat

This is a high powered machine, with moving parts that operate with a large amount of energy. You must use the machine safely. Unsafe operation can create a number of hazards for you and anyone else in the vicinity.

Always take the following precautions when using this machine:

- Please note that the operator is responsible for accidents or hazards to other people, their property and themselves.
- Always wear safety glasses with side shields while using the mower to protect your eyes from debris.
- Avoid wearing loose clothing or jewelry, which can be caught in moving parts.
- We recommend wearing gloves. Make sure your gloves fit well and do not have loose cuffs or drawstrings
- Wear steel-toed boots with slip-resistant treads. Do not use the machine without proper footwear.
- Wear long pants.
- Keep other people at least 15 meters away from your work area at all times. Stop the engine when another person or pet approaches.

Safety for children and pets

Caveat

Tragic accidents can occur if the operator is not alert to the presence of children and pets. Children are often attracted to the machine and how it works. Never assume that children will remain where you last saw them. Always follow these precautions:

- Keep children and pets at least 15 meters away from the work area and make sure they are under the care of a responsible adult.
- Be alert and turn off the machine if children or pets come near the work area.
- Never let children use the machine.

Safety with gasoline engines

Caveat

Gasoline is a highly flammable liquid. It also gives off flammable vapors that can easily ignite and cause a fire or explosion. Never ignore the dangers of gasoline. Always follow these precautions:

- Never run the engine in an enclosed area or without adequate ventilation, as engine exhaust contains carbon monoxide, which is an odorless, tasteless, and deadly poisonous gas.
- Store all fuel and oil in containers specifically designed and approved for this purpose and keep them away from heat and open flame, and out of the reach of children.
- Fill the gas tank outdoors with the engine off and allow the engine to cool completely. Do not handle gasoline if you or someone nearby is smoking, or if you start something that could cause it to ignite or explode. Reinstall the fuel tank cap and fuel container cap securely.
- If you spill gasoline, do not try to start the engine. Move machine away from spill area and avoid creating any sources of ignition until gas vapors have dissipated. Clean up spilled fuel to avoid a fire hazard and dispose of waste properly.
- Let the motor cool down completely before storing it in any enclosure. Never store a machine that has gasoline in the tank or fuel container near an open flame or spark, such as a water heater, space heater, clothes dryer, or oven.
- Never make adjustments or repairs with the engine running. Stop engine, disconnect spark plug wire, keeping it away from spark plug to prevent accidental starting, wait 5 minutes before making adjustments or repairs.
- Never alter the engine governor setting. Over-revving the engine is dangerous and will damage the engine and other moving parts of the machine. The engine governor setting has been preset at the factory.
- Keep combustible substances away from the engine when it is hot.
- Never cover the machine while the muffler is still hot.
- Do not run the engine with the air filter or carburetor air inlet cover removed. Removal of such parts could create a fire hazard. Do not use flammable solutions to clean the air filter.
- The muffler and engine become very hot and can cause severe burns. Do not touch.

Note

No list of warnings and precautions can be exhaustive. If situations occur that are not covered by this manual, the operator must apply common sense and operate the shredder safely. The product does NOT come with oil. There may be residue from the factory tests, but it is not enough to run the engine.

We recommend 10W-30 motor oil and the motor holds 1.2 quarts.

Both yellow oil fill holes go to the same reservoir. Use the one that is easiest to reach.

Make sure all bolts are tight before running.

2. Technical data

Model	BIO150S
Motor	DUCAR
Displacement	420cc
Type of waste	granulated minced
Function	Shredded leaves, branches, fodder, agricultural feed
Cutting speed	2530rpm
Fuel type	Unleaded petrol
Weight	175kg

3. Commissioning

All branches must not exceed 4 inches in diameter. Freshly cut branches and straw are recommended for best performance. Due to the different hardness and moisture content, the motor may have problems, but it will continue to chip. Proper branch insertion is from large diameter to smaller diameter. It is best to put branches with leaves all together. It is recommended to place small logs with branches together for safety reasons.

Procedure

1. Make sure the machine is on a flat, dry surface.
2. Adjust the outlet chute to the location for the processed material.
3. See the engine manual for how to start the engine.
4. Set throttle to full RPM.
5. Do not stand directly behind the intake chute. Stand to the side of the entrance ramp as material can back up.
6. Load material from the large diameter side.
7. When the machine starts to feed automatically, release the branch.
8. Let the material fully process before adding more.
9. If the machine does not feed automatically, you may need to load the branches slowly or use other branches to guide it in.



4. Maintenance

Regular maintenance is the way to ensure the best performance and long life of your machine. Consult this manual for proper maintenance procedures.

Caveat

Before performing any maintenance or inspection procedures, stop the engine, unplug the power cord and wait 5 minutes to allow all parts to cool. Disconnect the spark plug wire to prevent accidental starting.

Maintenance procedure

Procedure	Before each use	every 5 hours	every 25 hours	every 100 hours
Check engine oil level	Δ			
Check the general equipment	Δ			
grease bearings	Δ			
check belts	Δ			
engine cleaning		Δ		
Change engine oil	After first use/ Every 5 hours of use		Δ	
Replace air filter			Δ	
replace spark plug				Δ

engine service

Refer to the engine manufacturer's user manual for information on engine maintenance.

Lubrication

We recommend 1 pump of lithium grease in each bearing before each use.

blades

Check blades for cracks, dents, or chips. If there are cracks, do not use it until it has been replaced. If the blade shows wear or is chipped, these blades can be reversed and used on the other side.

The blades can be removed using the included T-bar wrench or a 17mm socket with extension and ratcheting screwdriver. Be sure to use soft material on the drum to prevent it from moving. If the drum moves, you can remove the screws. Also, use rags or paper towels at the entrance to prevent bolts or blades from falling into the drum.

entrance knife

The blade is located at the bottom of the drum housing towards the inlet chute. Create a gap for the shredding blades and create a scissor action.

If you have poor shredding performance, we recommend adjusting by loosening the bolts below, adjusting the inlet blade approx 2-5mm to the shredding blades, make sure it is parallel to the shredding blades, and retighten.

media jam

Stop the machine, remove both the inlet duct and the outlet duct. Remove the bearing cap and turn the shaft with the included wrench.

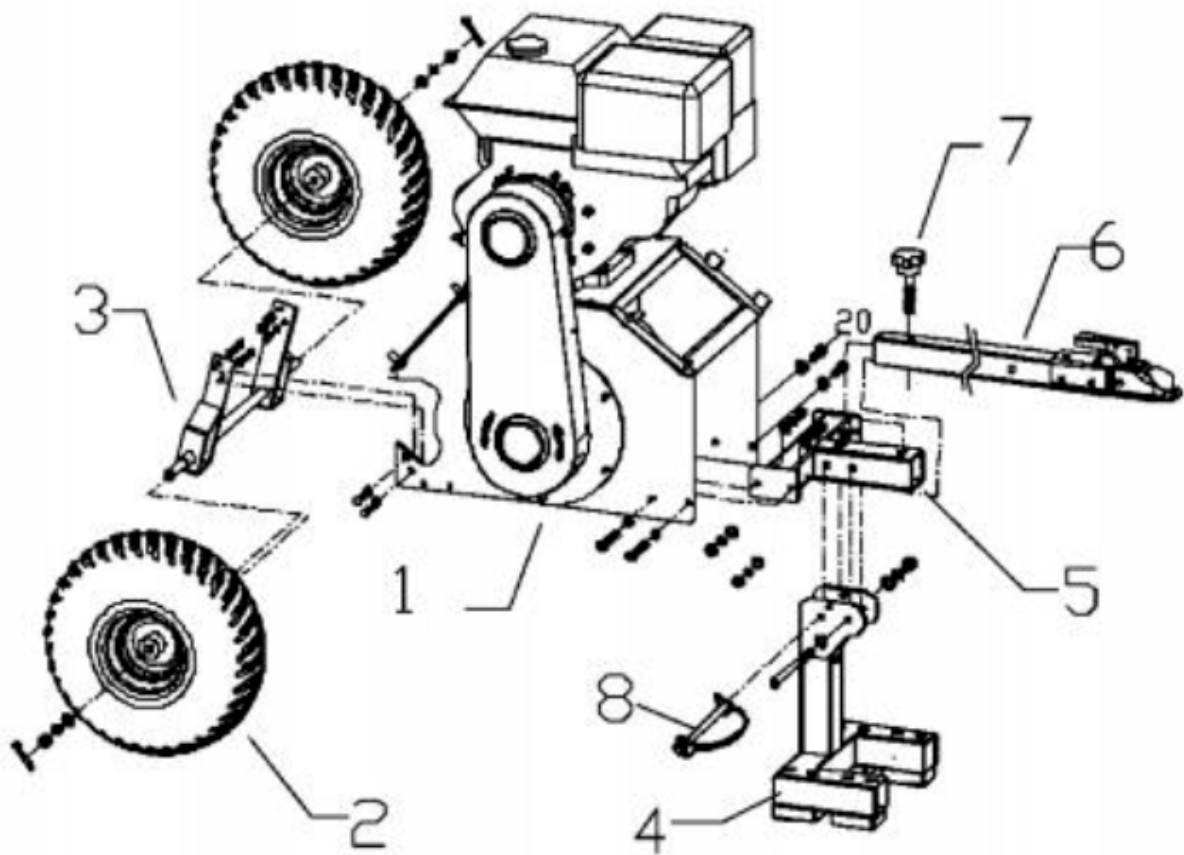
You can also use a larger adjustable wrench if you need more force. Try twisting in both directions to loosen jammed material.

5. Troubleshooting

SYMPTOM	POSSIBLE CAUSE
The motor does not start.	<ul style="list-style-type: none">• Is the ignition switch in the "ON" position?• Is the fuel shutoff valve open?• Are you using clean, fresh gas? If the gas is old, change it.• Use a fuel stabilizer if holding fuel for more than 30 days.• Is the spark plug clean? If the spark plug is dirty or cracked, replace it. If it's oily, leave it out, put a rag over the plug hole and pull the recoil cable a few times to blow the oil into the cylinder, then wipe the plug clean and reinsert it.
Engine lacks power or is not running gently.	<ul style="list-style-type: none">• Check that the throttle lever is in the "Run" position.• Is the air filter clean? If it is dirty, replace it following the procedure in the engine manufacturer's owner's manual.• Is the spark plug clean? If it is dirty or cracked, replace it. If it's oily, leave it out, put a rag over the plug hole and pull the recoil cable several times to blow the oil out of the cylinder, then wipe the plug clean and reinsert it.• Are you using clean, fresh, unleaded gas? If it's old, replace it. Use a fuel stabilizer if you keep the fuel for more than 30 days.• Does your engine have the proper amount of clean oil? If it is dirty, replace it following the procedure in the engine manufacturer's owner's manual.• Check the oil level and adjust it as necessary.
The engine smokes	<ul style="list-style-type: none">• Check the oil level and adjust it as necessary.• Check the air filter and clean or replace it if necessary.• You may be using the wrong oil, too light for the temperature. See the Engine Owner's Manual for detailed information.• Clean the cooling fins if they are dirty.
Motor stalls while chipping	<ul style="list-style-type: none">• Check if the motor is stopped due to overload.• Check if there is something blocked in the ducts.

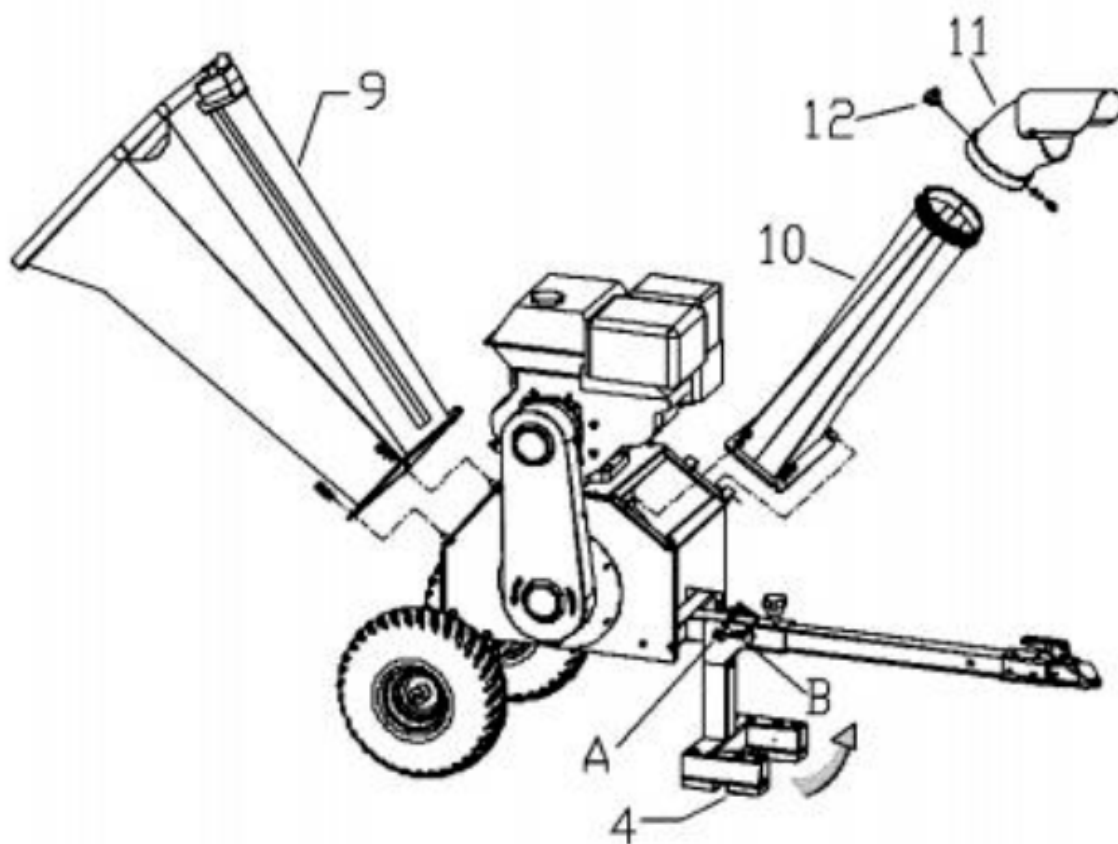
	<ul style="list-style-type: none"> • Check the emergency stop button and protection switch.
The drum is stuck	<ul style="list-style-type: none"> • Stop the machine, remove the inlet chute, the outlet chute, the cap over the bearing, and rotate the shaft to expel the material. You can use the included wrench or use a larger adjustable wrench for more strength.
poor shredding performance	<ul style="list-style-type: none"> • Check the gap between the entry blade and the shredding blades. We recommend 1-5mm clearance for best performance

6. Assembly guide



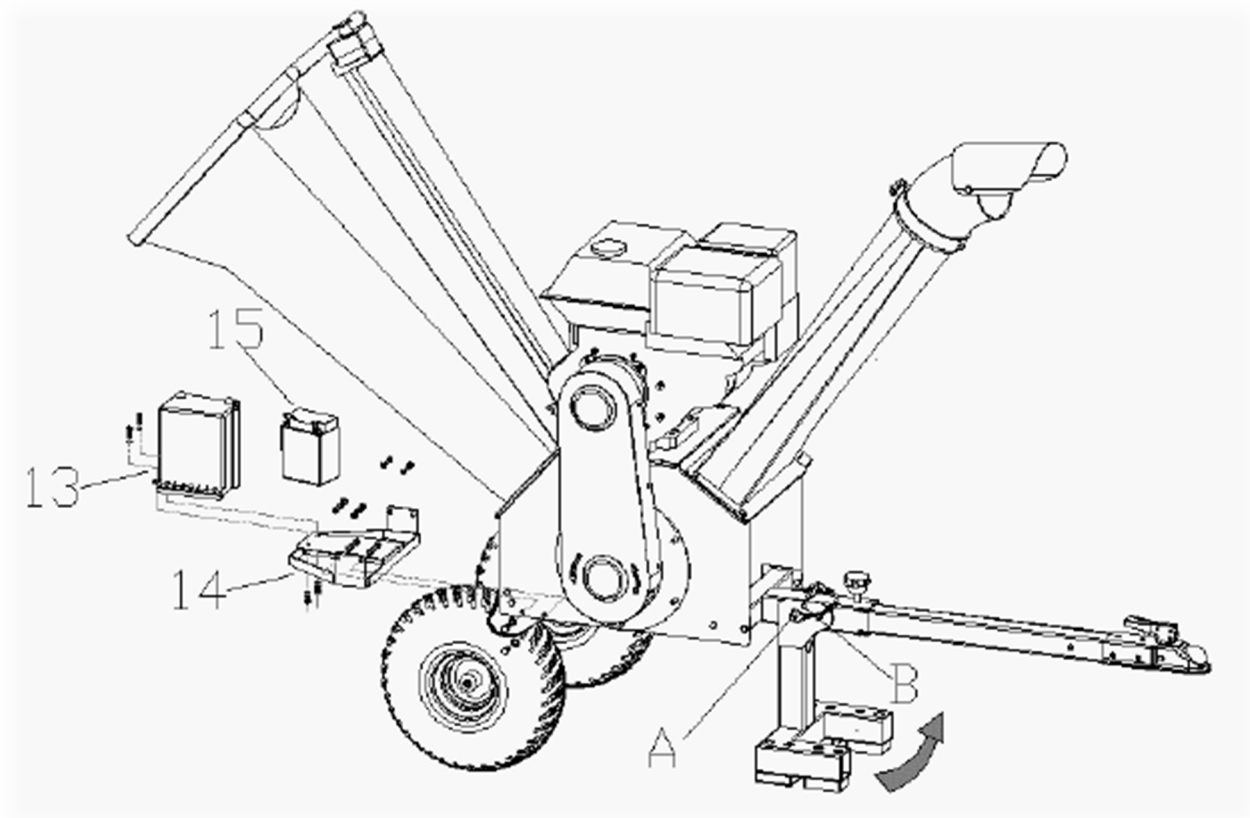
Installation procedure:

1. Place the drum shell (1) on a small platform. Make sure there is space on the sides for the installation of the wheels (2) and the support leg (4).
2. Attach the wheels (2) to the axle bracket (3) and use the appropriate nuts to secure.
3. Attach the wheels (2) with the axle bracket (3) to the drum housing (1) using the appropriate bolts and nuts.
4. Install the drawbar joint (5) to the drum housing (1) using the appropriate bolts and nuts.
5. Attach the support leg (4) to the tow bar joint (5) using a bolt, nut and shear pin (8).
6. The tow bar (6) connects to the tow bar joint (5) and use the locking knob (7) to secure it.
7. Remove from platform.



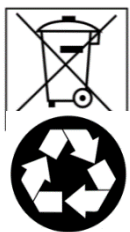
10. Attach the input ramp hinge (9) to the drum housing hinge (1). Use swivel nuts or hex nuts to secure.
11. Attach the outlet chute hinge (10) to the drum housing hinge (1). Use swivel nuts or hex nuts to secure.
12. Attach the adjustable diverter (11) to the top of the outlet chute (10) and use the adjustment knob (12) to secure.

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13. Put the battery into the battery cover first, and then slide it onto the battery pedestal under the power chute.

7. Environment



Protect the environment. Recycle the oil used by this machine by taking it to a recycling center. Do not pour used oil into drains, land, rivers, lakes or seas.

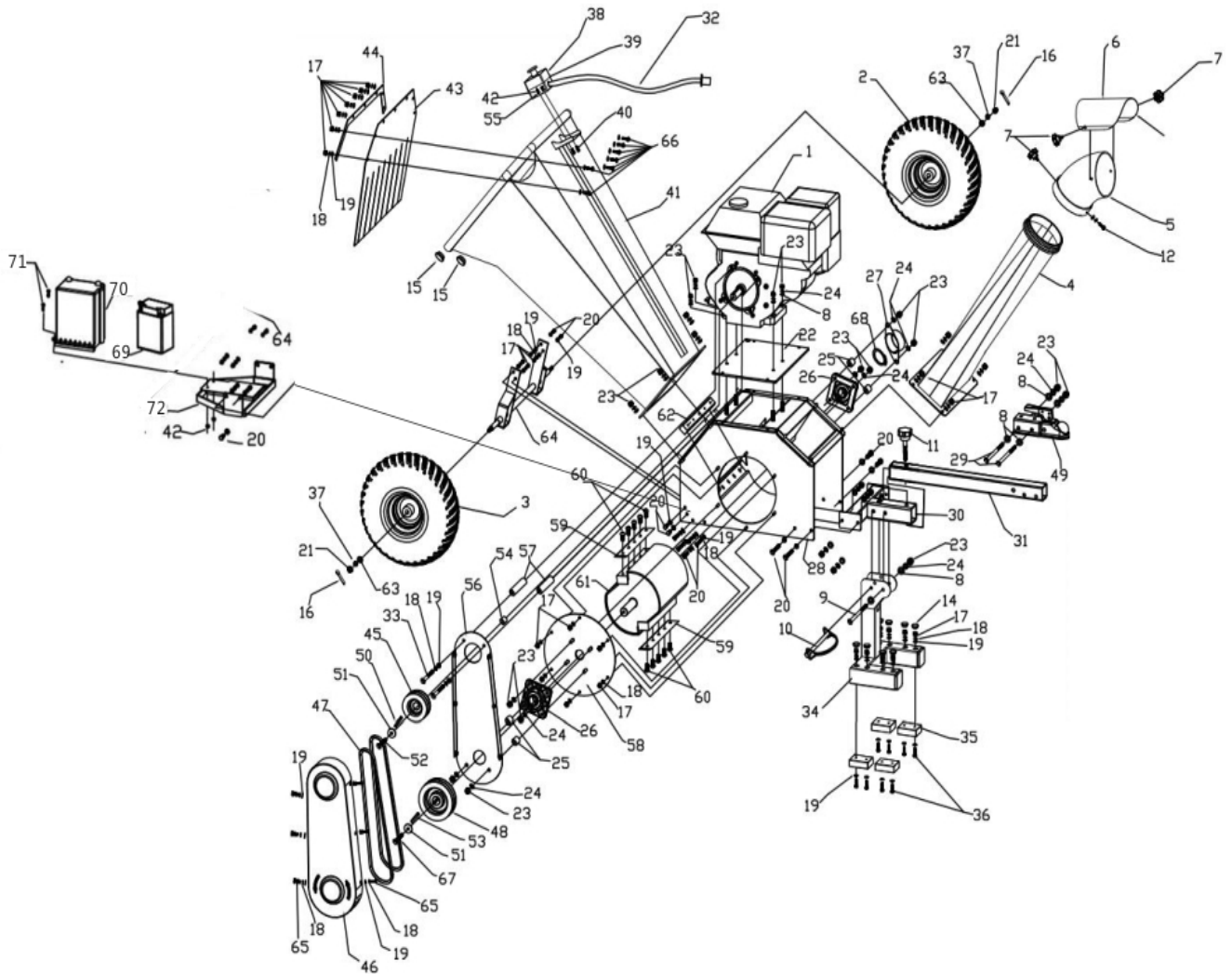
Please dispose of your machine in an ecological way. We must not dispose of machines together with household waste. Its plastic and metal components can be sorted according to their nature and recycled.

The materials used to pack this machine are recyclable. Please do not dispose of the packaging in household waste. Please dispose of these packages at an official waste collection point.

8. Exploded view

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9. CE declaration of conformity

DISTRIBUTION COMPANY

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EC DECLARATION OF CONFORMITY

In compliance with the different CE directives, it is hereby confirmed that, due to its design and construction, and according to the CE mark printed by the manufacturer on it, the machine identified in this document complies with the relevant and fundamental health and safety requirements. of the aforementioned EC directives. This declaration validates the product to display the CE symbol.

In the event that the machine is modified and this modification is not approved by the manufacturer and communicated to the distributor, this declaration will lose its value and validity.

Name of the machine: BIO-SHREDDER

Model: BIO150S

Recognized and approved standard to which it conforms:

directive2006/42/EC
2014/30/EU

Tested according to standards:

**EN ISO 12100-2010, BS EN ISO 14120:2015,
EN 13683:2003+A2:2011+AC:2015,
ENISO13854:2019, ENISO13857:2019,
EN13525:2020, ENISO14982:2009**

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