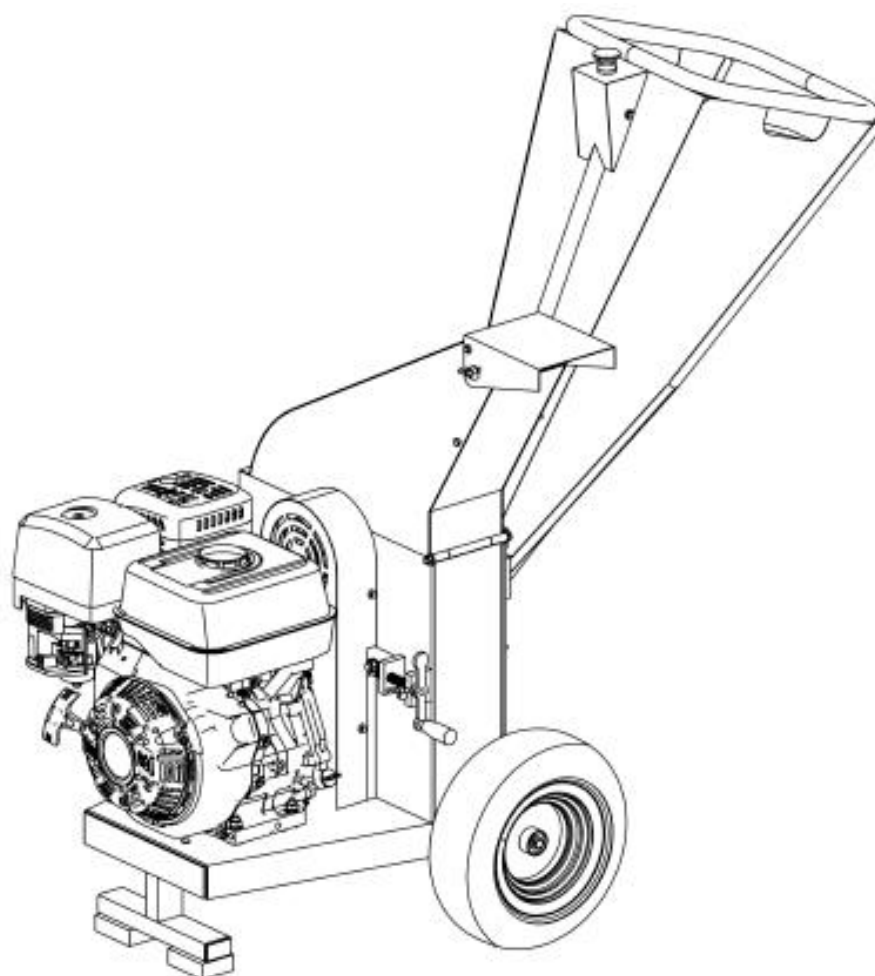


# INSTRUCTIONS AND USER MANUAL

# BIO150T



**ALNOVA<sup>®</sup>**

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ENG



**ANOVA** would like to congratulate you for having chosen one of our products and guarantees you the assistance and cooperation that has always distinguished our brand over time.

This machine is designed to last 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 questions you can contact us through our web supports such as [www.anova.es](http://www.anova.es)

## **INFORMATION ABOUT THIS MANUAL**

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

- This manual contains instructions for use and maintenance.
- Take this manual with you when you go to work on the machine.
- The contents are correct at the time of printing.
- They reserve the rights to make alterations at any time 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.

Adaptation of the machine to new technical requirements could cause differences between the content of this manual and the product purchased.

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

## **■ Content**

- 1. Safety instructions**
- 2. Technical data**
- 3. Assembly**
- 4. Troubleshooting**
- 5. Environment**
- 6. Exploding**
- 7. CE conformity declaration**

# 1. Safety instructions












## **Warning**

The machine operator is responsible and has the duty to ensure that the machine is used safely and in accordance with the instructions in this user manual. Keep the manual in a safe place and hand it over if the machine is loaned/sold to another user.

### **Please note the following safety points**

- The machine should never be left in a condition that would allow an untrained or unauthorized person to operate this machine.
- The operator must take all due care and diligence for the safety of and with respect to persons in the vicinity while operating the machine.
- Some or all of the following: PPE warning signs, symbols and/or pictograms may appear throughout this manual. You must comply with their warnings.

*Note: Failure to do so may result in personal injury to you or those around you.*

The following safety notes will help prevent or reduce the risk of injury or death.							
 <b>Danger</b> Indicates a hazard which, if not avoided, could result in serious injury or death.		 <b>Warning</b> Indicates a hazard which, if not avoided, could result in serious injury.		 <b>Caution</b> Indicates a hazard that, if not avoided, could result in minor injury or malfunction.			
<b>Note</b> Indicates a situation that could easily result in equipment damage.		Please read and keep the manual in a safe place and hand it over if the machine is loaned/sold to another user.		You must read the instructions completely to ensure you use and operate the machine safely.			
Appropriate personal protective equipment (PPE) Must be used at all times when the machine is in use or under repair							
							
ALWAYS keep the work area clear of non-essential people, including, but not limited to, children, the elderly, and vulnerable people. NEVER ALLOW an untrained person to use this machine.							

## **Carbon monoxide**

1. Carbon monoxide is a colorless, odorless gas. Inhaling this gas can cause death and serious long-term health problems, such as brain damage.

Symptoms of carbon monoxide poisoning may include, but are not limited to: Headaches, dizziness, nausea, difficulty breathing, collapse, or loss of consciousness.

2. The symptoms of carbon monoxide poisoning are similar to the flu, food poisoning, viral infections and simply tiredness. It is quite common for people to confuse this very dangerous poisoning with something else.
3. To avoid carbon monoxide poisoning, do not use gasoline or diesel equipment inside any of the following locations: home, garage, tent, RV, mobile home, caravan, or boat.

## **General security**

1. Fire Hazard: Keep fuel away from all ignition sources, e.g. heaters, lamps, grinding or welding sparks.
2. Do not carry out hot work on tanks that have contained fuel, it is extremely dangerous
3. Always keep the work area clean and tidy.
4. Always clean up all spills quickly using the correct methods, i.e. absorbent granules and a container with a lid.
5. Always dispose of waste fuels correctly.

## **Vibrations**

1. Prolonged use of manual (operated) machines will cause the user to feel the effects of vibrations.  
These vibrations can cause a white finger (Raynaud's phenomenon) or carpal tunnel syndrome.  
This condition reduces the hand's ability to sense and regulate temperature, causing numbness and sensations of heat and can cause nerve damage and death of circulatory tissue.
2. Not all factors that lead to white finger disease are known, but cold weather, smoking and other diseases that affect blood vessels and blood circulation, as well as the large and long-lasting impact of discharge, are considered factors. called in the formation of the white finger.  
Keep the following in mind to reduce the risk of white finger and carpal tunnel syndrome: Wear gloves and keep your hands warm, take regular breaks
3. All of the above precautions can help reduce the risk of white toe disease, but they do not rule out carpal tunnel syndrome. Therefore, regular and long-term users are recommended to observe the condition of their hands and fingers. Seek medical attention immediately if you experience any of the above symptoms.

## **Vibrations**

1. The operating noise of the machine may damage your hearing. Use hearing protection such as earplugs or ear protectors to protect your hearing. Regular and long-term users are advised to have their hearing checked regularly.  
Be especially alert and cautious when wearing hearing protection because your ability to hear alarm warnings will be reduced.
2. Noise emissions from this equipment are unavoidable. Perform noisy work at approved times and during certain periods.  
Limit work time to a minimum. For your personal protection and the protection of

people working nearby, it is also recommended that you wear hearing protection.

## **Machine Specific Safety**

### **Work area**

Never start or operate the machine inside an enclosed area. Exhaust gases are dangerous and contain carbon monoxide, an odorless and deadly gas. Use this unit only in a well-ventilated outdoor area.

### **Personal security**

1. Do not operate the machine under the influence of drugs, alcohol or any medication that may affect your ability to use it properly.
2. Dress appropriately. Wear long thick pants, boots, and gloves. Do not wear loose clothing, shorts, or jewelry of any kind. Secure long hair above shoulder level. Keep your hair, clothing and gloves away from moving parts. Loose clothing, jewelry, or long hair can get caught in moving parts.
3. Use safety equipment. Wear ear and eye protection while operating this machine or if you are within 22 meters of this machine. Rebounding thrown objects can cause serious eye injuries.
4. Check your machine before starting it. Keep guards in place and working. Make sure all nuts, bolts, etc. are secure. are tight.
5. Never remove or tamper with the safety device. Periodically check its correct operation.
6. Never operate the machine when it needs repair or is in poor mechanical condition. Replace damaged, missing or defective parts before use. Check for fuel leaks. Keep the machine in safe working condition.

### **Fuel safety**

1. Fuel is highly flammable and its vapors may explode if ignited. Take precautions when using it to reduce the possibility of serious personal injury.
2. When refilling or draining the fuel tank, use an approved fuel storage container. Always fill and drain fuel while outdoors in a clean, well-ventilated area.
3. Do not smoke, or allow sparks, open flames or other ignition sources near the area while adding fuel or operating the unit. Never fill the fuel tank indoors.
4. Always stop the engine and let it cool before filling the fuel tank.
5. Never remove the fuel tank cap or add fuel while the engine is running or when the engine is hot. Do not operate machine with known fuel system leaks.

### **Storage**

1. Do not force the machine. Use the correct machine for your application. The right machine will do the job better and safer at the speed for which it was designed.
2. DO NOT change the engine governor settings or over rev the engine. The governor controls the maximum safe operating speed of the engine.
3. DO NOT place hands or feet near rotating parts.

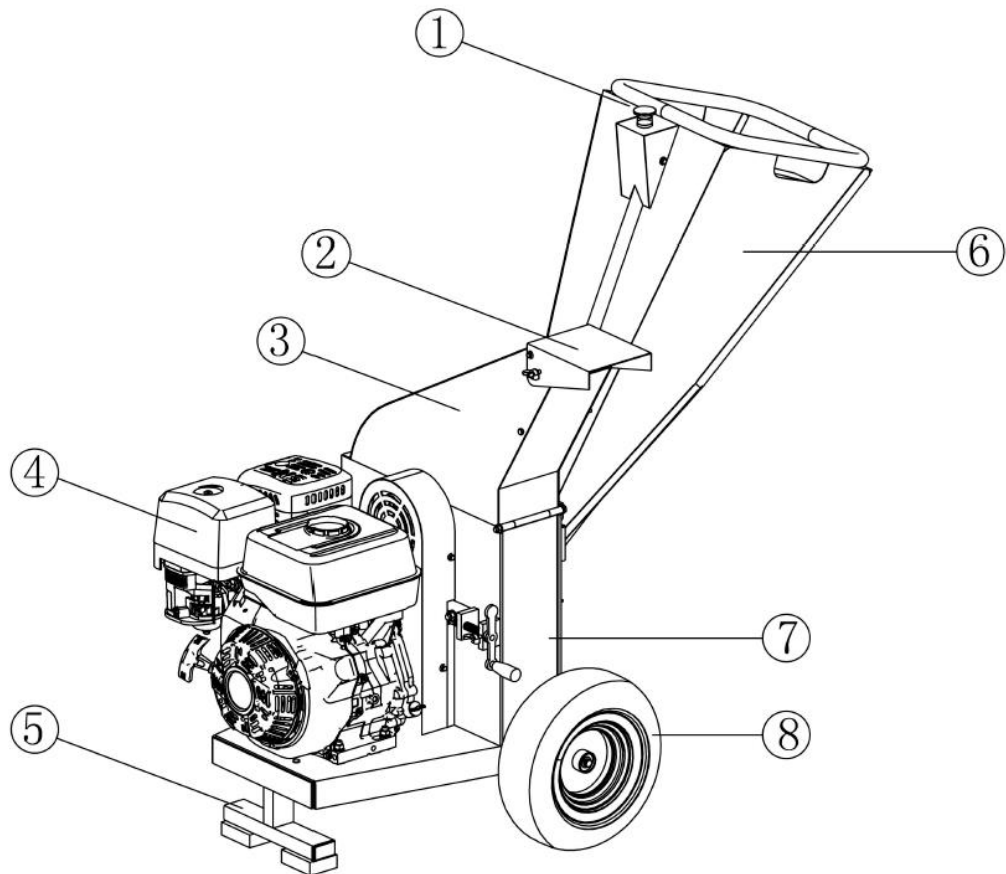
### **Services**

1. Before cleaning, repairing, inspecting or adjusting, stop the engine and make sure all moving parts have stopped. Disconnect the spark plug wire and keep it away from the spark plug to prevent accidental starting.
2. Have your machine serviced by qualified repair personnel using only identical replacement parts. This will ensure the safety of the machine is maintained.

## 2. Technical data

<b>Model</b>	BIO150T
<b>Engine</b>	4T – 15HP
<b>Displacement</b>	420cc _
<b>Waste type</b>	granulated shavings
<b>Function</b>	Shredding of leaves, branches, forage, agricultural feed
<b>Fuel type</b>	Unleaded petrol
<b>Fuel volume</b>	6.5L
<b>Oil volume</b>	1.1L
<b>Number of blades</b>	3
<b>Max. chipped size</b>	100mm

### machine parts



1. Emergency switch
2. Download port
3. Main body cover
4. Engine
5. Support leg
6. Feed hopper
7. Main body
8. Wheels

### Fuel valve control

The fuel valve opens and closes the passage between the fuel tank and the carburetor. The fuel valve lever must be in the ON position for the engine to run. When the engine is not in use, leave the fuel valve lever in the OFF position to prevent carburetor flooding and reduce the possibility of fuel leaks.

### throttle control

The throttle lever controls the speed of the engine. Moving the throttle lever makes the engine run faster or slower.

### engine switch

The engine switch enables and disables the ignition system. The engine switch must be in the ON position for the engine to run. Turning the engine switch to the OFF position stops the engine.

### choke lever

- The choke lever opens and closes the choke valve on the carburetor. The closed position enriches the fuel mixture to start a cold engine.
- The open position provides the correct fuel mixture for post-start operation and for restarting a warm engine.

### recoil starter grip

By pulling the starter handle, the recoil starter works to turn the engine.

### Feed hopper

It is the opening through which all the materials to be chopped must be introduced.

### discharge port

Chipped materials are discharged through this opening. The deflector can be placed on the ramp.

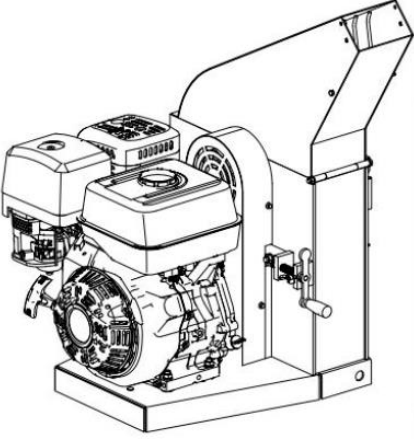















### Deflector lever

Loosen it counterclockwise to adjust the discharge angle. Tighten it clockwise.



### 3. Assembly

Open the carton and check all the accessories as follows to assemble the machine.

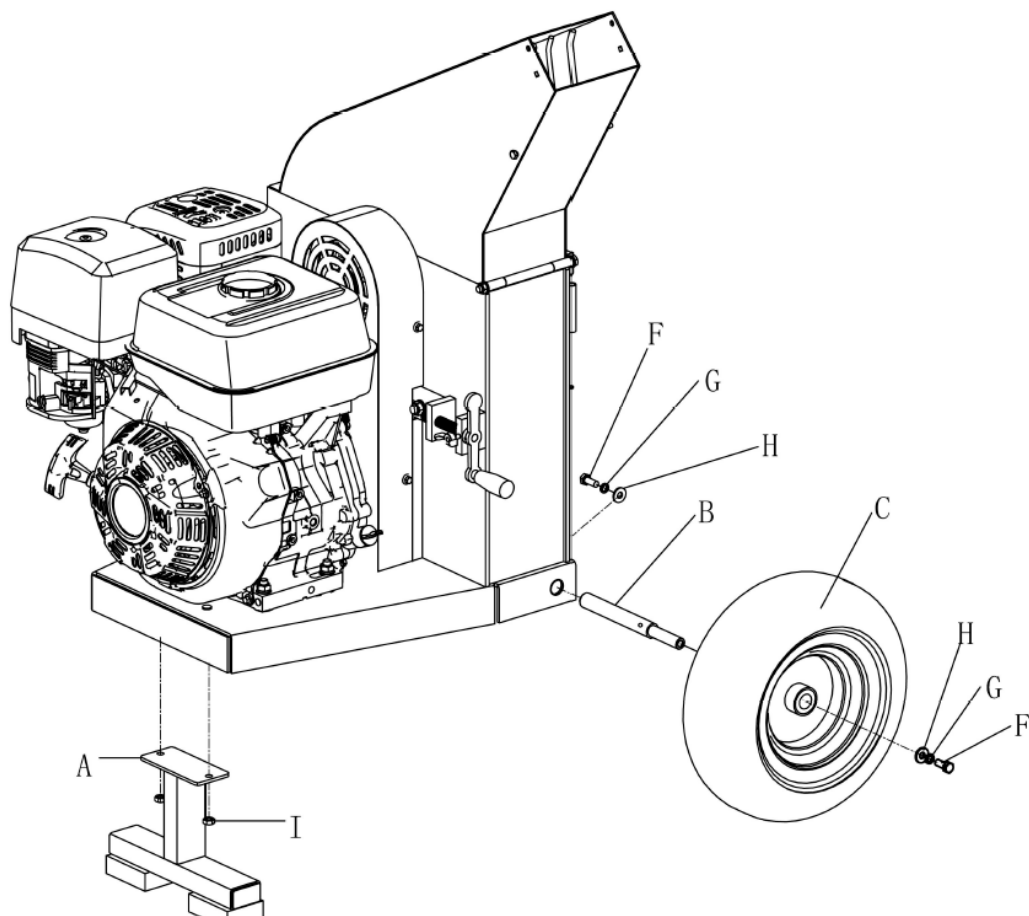
	A 1PC 	B 2PCS 	C 2PCS 
	D 1PC 	E 1PC 	F 4PCS  M8x20
	G 6PCS  Ø8	H 4PCS  Ø8xØ20x2	I 2PCS  M8
	J 2PCS  Ø8	K 2PCS  M6x12	L 2PCS  M6
	M 2PCS  Ø6xØ18x1.6	N 2PCS  M6X20	O 2PCS  M6

- A. Support leg
- B. Wheel axle
- C. Tires
- D. Feeding hopper
- E. Discharge port
- F. M8x20 bolt
- G. Spring washer Ø8

- H. Flat Washer Ø8x20x2
- I. M8 nut
- J. Flat washer Ø8
- K. Bolt M6x12
- L. M6 wing nut
- M. Ø6xØ18x1.6 Flat Washer
- N. Bolt M6x20
- O. M6 Nut

## Wheel and support leg assembly

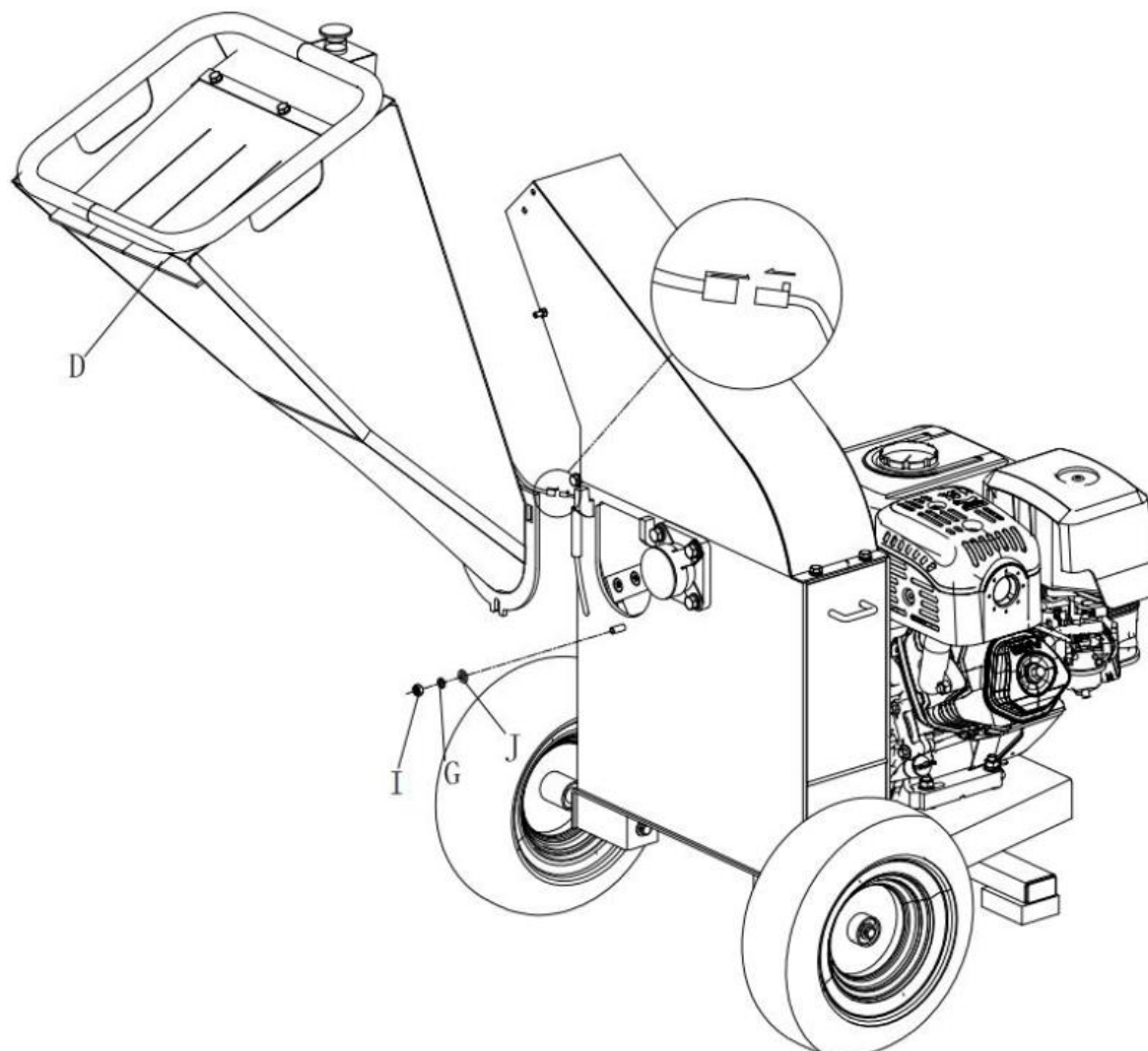
- Attach the Support Leg (A) to the main body using the M8 Nut (I).
- Install the wheels on both sides of the main body using Tires (C), Wheel Axle (B), M8x20 Bolt (F), Ø8 Spring Washer (G) and Ø8x20x2 Flat Washer (H).



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## Feed Hopper Assembly

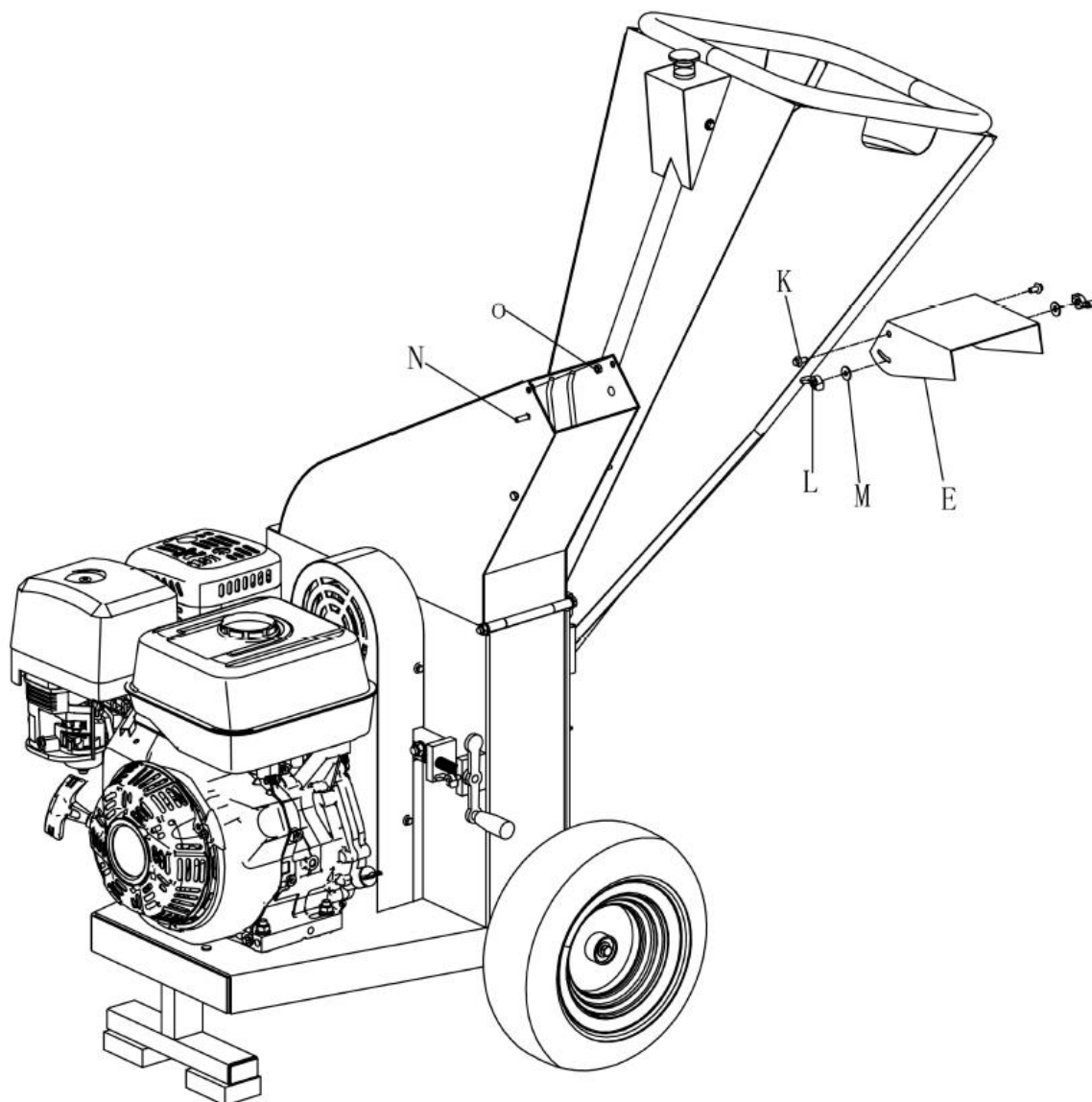
- Open the main body cover by loosening the screw.
- Install the feed hopper (D) to the main body using a Ø8 flat washer (J), a Ø8 spring washer (G) and an M8 nut (I)
- Close the main body cover by tightening the screw
- Connect the cable connector



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## Discharge port assembly

- Install the discharge port (E) to the main body cover using the M6x12 bolt (K), M6 nut (O), M6x20 bolt (N), Ø6xØ18x1.6 flat washer (M) and wing nuts (L).



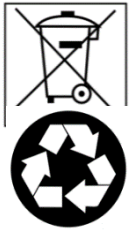
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## 4 . Troubleshooting

Problem	Cause	Solution
<b>The motor does not start</b>	Spark plug wire disconnected	Connect the spark plug wire securely to the spark plug
	No fuel or stale fuel	Fill with clean, fresh gasoline
	Fuel valve is not in the ON position	The fuel valve must be in the ON position
	Choke lever is not in the CLOSE position	Choke level must be in the CLOSE position for a cold start
	Blocked fuel line	Clean the fuel line
	Dirty spark plug	Clean, adjust space or replace
	Engine flooding	Wait a few minutes to restart, but it doesn't start
<b>The engine is not running properly</b>	Loose spark plug wire	Connect and tighten the spark plug wire
	Unit operating with choke lever in CLOSED position	Move the choke lever to the OPEN position
	Blocked fuel line or stale fuel	Clean the fuel line. Fill the tank with fresh, clean gasoline.
	Clogged ventilation	Transparent ventilation
	Water or dirt in the fuel system	Drain the fuel tank. Fill with new fuel
	Dirty air filter	Clean or replace the air filter
	Incorrect carburetor adjustment	Consult the engine manual
<b>The engine overheats</b>	Low engine oil level	Fill the crankcase with the correct oil
	Dirty air filter	Clean air filter
	Restricted air flow	Remove the casing and clean
	poorly adjusted carburetor	Consult the engine manual
<b>Chipping action is too slow, cutting disc jams or material is</b>	Engine speed is too slow causing belt to slip	Run the engine at full speed
	Loose or damaged drive belt	Tighten or replace drive belt
	Dull or damaged knives	Sharpen or replace knives

<b>not discharged</b>	Cutting disc clogged by debris from feed hopper and discharge chute	Remove any accumulated debris and rotate the cutting disc with a wooden stick to ensure it rotates freely
	Clogged discharge chute	Clear debris
<b>The belt frays or rolls on the pulley.</b>	Rotor drive pulley groove may be nicked	Check the drive belts for wear and hard spots. File any dents in the pulley
	Drive belts can be stretched	Replace drive belts
	Pulleys may be misaligned	Adjust the pulleys
<b>Vibrate and move excessively with an unusual noise when working.</b>	Dull or damaged knives	Sharpen or replace knives
	The blades are not seated correctly on the cutting disc	Loosen the blade mounting screws, readjust the blades and tighten the screws
	The gap between the blades and the wear plate is too large	Adjust the gap
	Rotor overloaded with material	Allow unit to clear itself before adding more material to hopper
<b>Chipper blades are hitting wear plate</b>	The gap between the blades and the wear plate is not set correctly	Adjust the gap

## 5 . 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.

Dispose of your machine in an environmentally friendly way. We should not dispose of machines with household waste. Its plastic and metal components can be classified according to their nature and recycled.

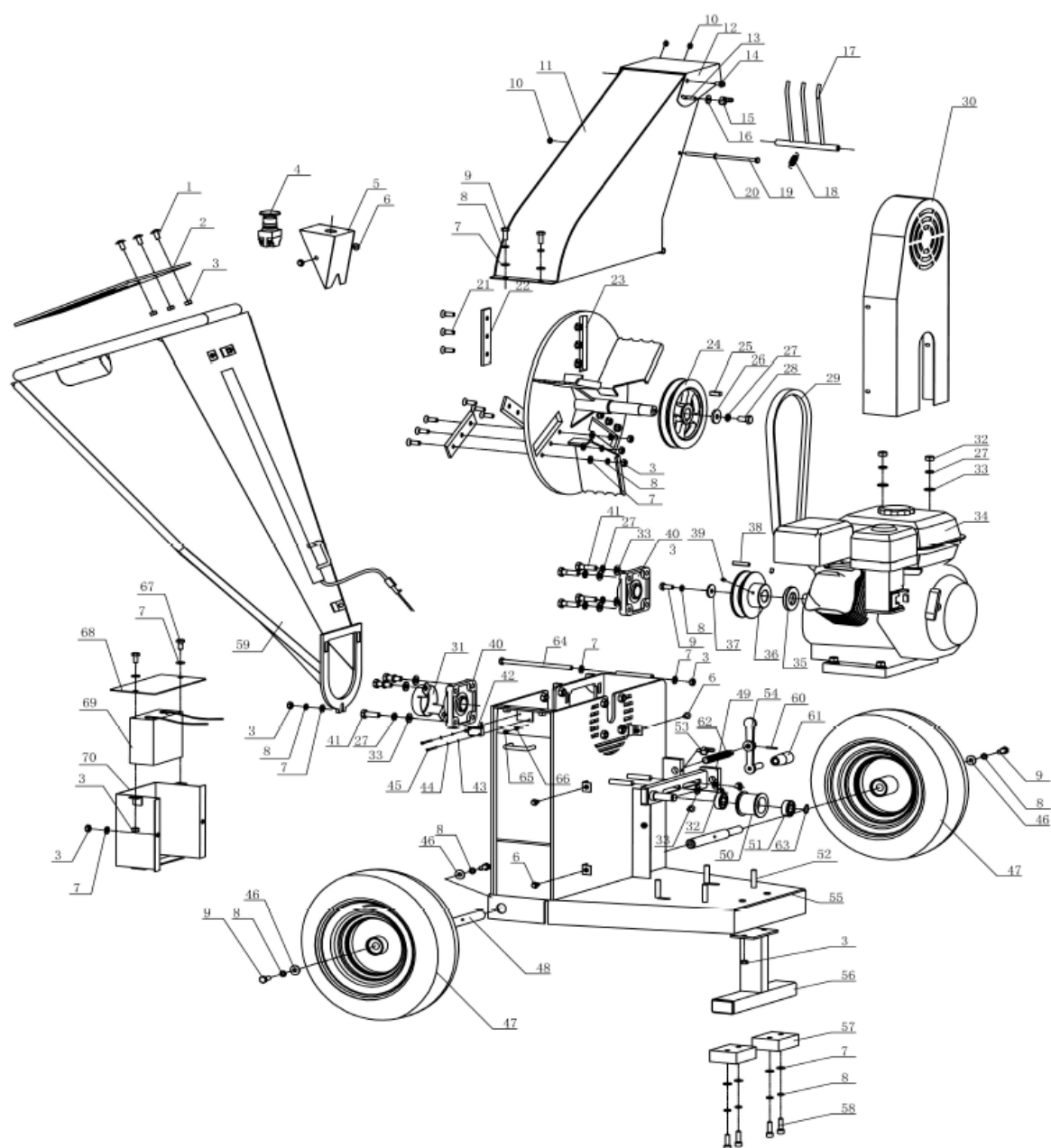
The materials used to package this machine are recyclable. Please do not throw the packaging into household waste. Dispose of these packaging at an official waste collection point.

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## 6 . Exploded view

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**BIO150T**





## 7 . CE conformity declaration

### DISTRIBUTION COMPANY

MILLASUR, SL  
RUA EDUARDO PONDAL, Nº 23 PISIGÜEIRO  
15688 OROSO - A CORUÑA  
SPAIN

CE

**ANOVA**

### 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.

Machine name: **WOOD CRUSHER**

Model: **BIO150T**

Recognized and approved standard to which it complies:

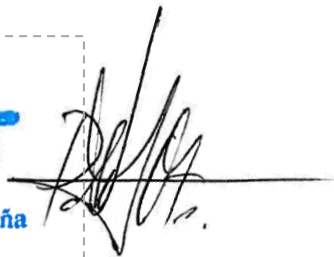
**Directive 2006/42/EC**  
**2014/30/EU**

Tested according to standards:

**EN 13683:2003/A2:2011**  
**EN ISO 14982:2009**

Sello de empresa

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