

# 2-stroke motor pump

# BA2C10

*ANOVA*

*Instructions and user manual*



EN

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CE



**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](http://www.anova.es)

### **INFORMATION ABOUT THIS MANUAL**

Please pay attention to the information provided in this manual and on the appliance 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. USER WARNINGS

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### **Warning**

Read carefully the recommendations included in this instruction manual that comes with your equipment and familiarize yourself with its content.

This machine must not be used for purposes other than those for which it is designed.

Keep this manual in a specific place where you can read it again if you have any questions.

Remember that warning signs, danger, notice or important notes will appear throughout the manual. These clarifications contain information that must be taken into account in order to prevent and/or avoid serious injury to the unit and the user.

*Note: Due to technical product updates, this document is subject to change without notice.*

### 1.1. Safety procedures

Do not use this pump to suck flammable or corrosive liquids such as gasoline, acids, salt water, motor oil, alcohol, milk, etc.

Make sure you know how to stop the engine and how to use all the controls. Do not use the pump in a risky way against the instructions.

Put the pump on a firm and level place to avoid tilting or the machine toppling over.

Keep the pump at least 1 meter away from buildings or walls, and do not leave flammable liquids near the pump.

Always refuel in a well-ventilated place. Never smoke while refueling. Do not fill the fuel tank above the top.

Do not use or service this machine if you do not clearly have this manual, minimize the risk of injury.

To reduce the risk of injury, you must maintain control at all times and observe all safety procedures while in use. Never allow an untrained person to use this machine.



Read and follow this manual, make sure anyone who uses the machine does the same. Failure to do so could cause injury or mechanical failure. Keep this manual for future reference.



Always wear a helmet to avoid head injuries while using the machine. Also always wear eye and ear protection. The use of protective screens in addition to glasses is recommended.

Wear non-slip work gloves to improve your grip on the machine. Wear non-slip boots for added safety. Wear tight clothing.

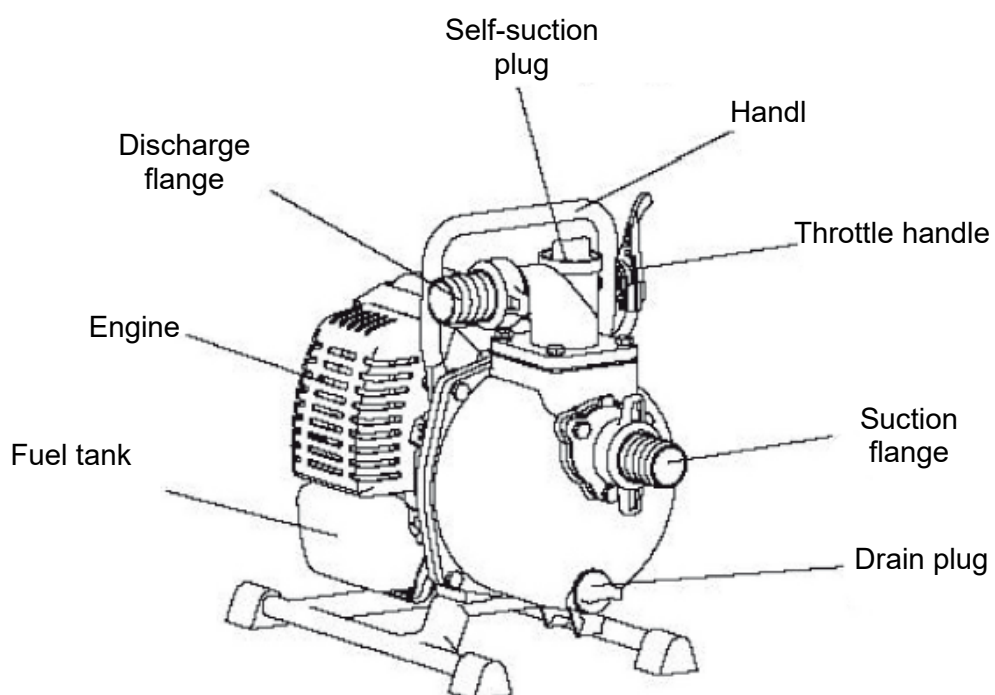


Never use this machine if you are tired, ill, or under the influence of medication or other substances that may impair your abilities.

## 2. TECHNICAL SPECIFICATIONS

<b>BA2C10</b>	
<b>Dimensions</b>	355×285×395mm
<b>Weight</b>	6kg
<b>Engine</b>	
<b>Guy</b>	Air-ventilated two-stroke engine
<b>Model</b>	D43B-ENGINE
<b>Power (max)</b>	0.9Kw/8000rpm
<b>Total displacement</b>	32.6cc
<b>Start</b>	Electronic (CID)
<b>Gas</b>	Gasoline/oil mixture (50:1)
<b>Tank capacity</b>	1L
<b>Bomb</b>	
<b>Suction flange diameter</b>	25mm
<b>Evacuation (max.)</b>	6m <sup>3</sup> /h
<b>Overall height (max.)</b>	30m
<b>Suction height (max.)</b>	8m
<b>Suction time (3m.)</b>	≤ 80s
<b>Sealer shaft</b>	Mechanical seal (carbon ceramic)

## 3. PRODUCT DESCRIPTION

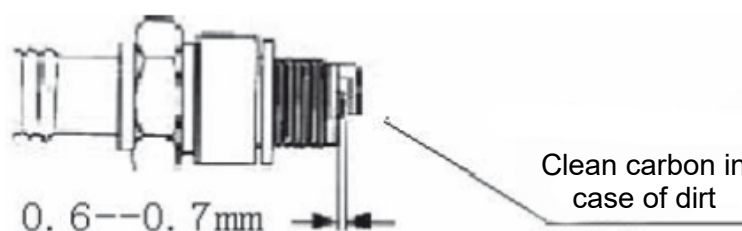


## 4. OPERATING AND ASSEMBLY INSTRUCTIONS

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### 4.1. Preparation before use

- Check that all items such as fuel tank cap, spark plug, etc. are in place and properly tightened.
- Make sure that the ventilation inlets and outlets are not obstructed by dust or dirt. A clogged passage would cause the engine ventilation air to overheat during operation.
- Look at the air filter. If it is dirty, this would cause irregular operation and additional consumption.
- Check the spark plug. If it is dirty, clean it and adjust the electrodes (its ideal separation is between 0.6 and 0.7mm).



### 4.2. Pump Installation

- Install the pump on a flat place, as close as possible to the water source.
- Remove the self-suction plug and fill the pump with water until it overflows. Then tighten the cap tightly.

#### **▲ Warning**

Make sure the auto suction cap, suction hose and other connections are tight. Otherwise, air would enter the pump and break the suction.

### 4.3. Refueling

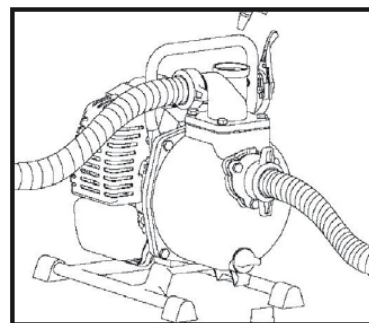
- Pour the mixture into the fuel tank. The fuel is a mixture of gasoline with at least 70 octane and two-stroke engine oil. The mix is 50:1. Make sure you use good quality gasoline and oil.
- Do not refuel the pump without completely stopping the engine. Refueling with the engine running poses a risk of fire.

## 4.4. Start

### ⚠ Warning

Never start the pump without having filled it with water.

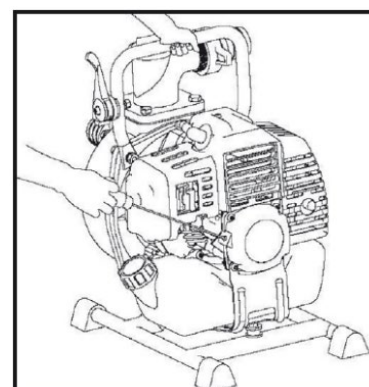
1. Put the fuel handle in the open position. Move the choke handle to the closed position.
2. Move the throttle grip to the start position.
3. Pull the starter handle in a jerky motion.



### ⚠ Warning

Never pull the starter handle all the way out. Do not let the pull cord retract on its own.

- Once the engine has started, slowly open the choke.
- Once the engine has started, confirm that the water in the suction hose goes up to the pump and adjust the amount of water by opening the throttle.



### ⚠ Warning

If too much fuel has entered, close the fuel inlet, apply full throttle and open the choke fully. Then pull the starter handle.

The pump may not suck water at first, if the discharge valve is closed or the hose is kinked.

## 4.5. Precautions during use

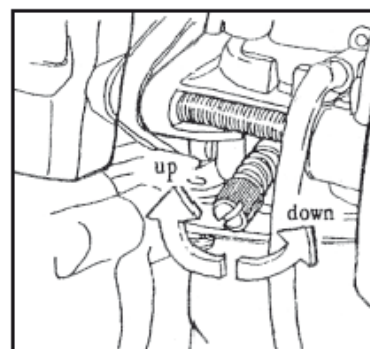
- In case of running out of water during operation, stop the engine immediately.
- Using the pump dry would considerably shorten the life of the motor and the pump. Never start the pump without water.
- Do not refuel the pump without stopping the engine completely.
- Refueling with the engine running carries a risk of fire. Never smoke or open fire near the pump motor.

## 4.6. Idle adjustment

- The idle speed is set at the factory, but can be readjusted if required.
- Turn the idle speed adjusting screw clockwise to increase speed and counterclockwise to decrease speed.

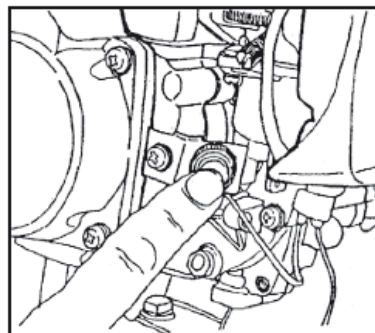
### ⚠ Warning

The idle must be adjusted five minutes after the engine starts.



## 4.7. Engine stop

1. Move the throttle handle to the lowest speed position and let the engine continue to run and cool for 2 - 3 minutes.
2. Close the fuel tap.
3. Keep the stop button pressed until the motor stops completely.



### **▲ Warning**

Sudden stopping of the engine during high-speed operation may cause engine damage, so avoid it except in an emergency.

## 5. MAINTENANCE AND STORAGE

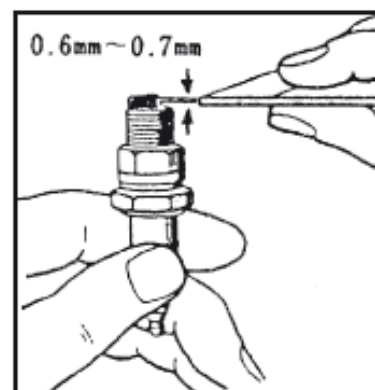
Before carrying out any maintenance or cleaning of the machine, make sure that the engine is completely stopped.

Non-original spare parts may cause the machine to malfunction and may even cause injury to the user.

The reliability of this pump will depend on the quality of maintenance. It is recommended that you inspect the unit before and after each use.

### 5.1. Maintenance after use

1. After each use, thoroughly clean the motor of dust and dirt.
2. Check engine for fuel leaks.
3. Check all those parts that may have become loose.
4. When water containing dirt or sand has been drained away, run clean water through the appliance's circuit to clean the internal parts (suction and discharge ducts, etc.).



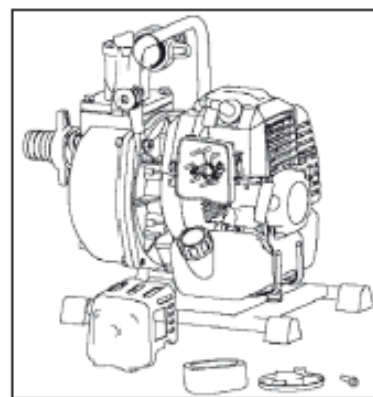
### **▲ Warning**

In cold winter conditions, the pump may be damaged due to water freezing inside. After a day's work, be sure to drain all the water from inside the machine and the hose.



## 5.2. Maintenance every 30 hours

Remove and clean the spark plug and adjust the gap between electrodes. The recommended distance is between 0.6 and 0.7mm.). The spark plug type is NGK BPM6A.



## 5.3. Maintenance every 50 hours

1. Remove the air filter and rinse it well with gasoline.
2. After rinsing the filter, drain it well and install it again.

## 5.4. Storage

When the machine is not going to be used for a long period of time, follow the instructions below to ensure proper storage of the machine:

- Drain the water from the pump and from the suction and drainage lines.
- Before storing the machine, fix or replace any worn or damaged parts.
- Drain the fuel tank and carburetor chambers.
- Store the device in a dry and dust-free place.

## 6. ASSEMBLY - DISASSEMBLY - REPAIR

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### 6.1. Disassembly

1. Take out the screws and remove the handle and then the casing.
2. The impeller screw goes clockwise. If you turn it in the opposite direction, it would disassemble the impeller.

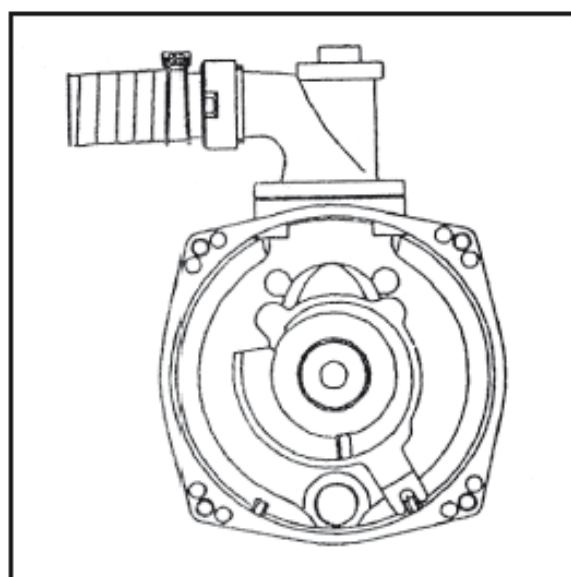
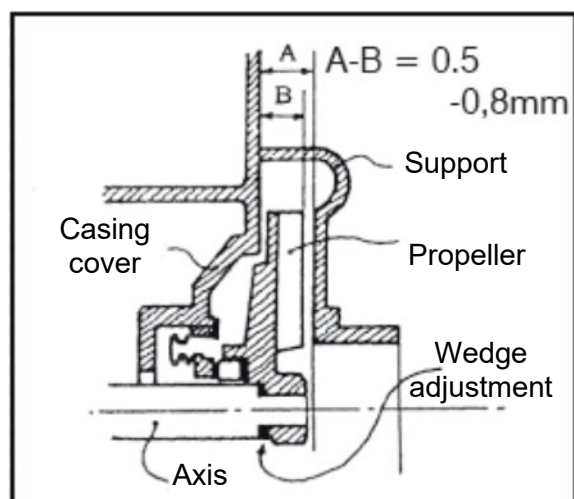
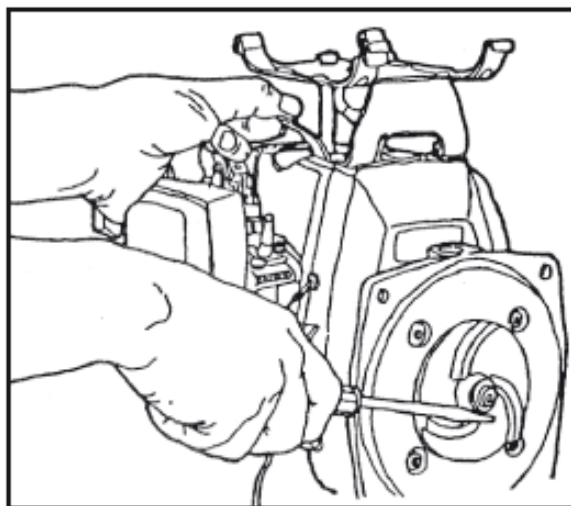
### 6.2. Mounting

1. If you change the impeller and casing, please adjust the distance to 0.7mm. loosening or tightening the adjusting piece.
2. The adjustment of the screws in the pump will be done according to the following torque table:

Screws	Torque (Nm)
M5 (screw)	2.5 – 3.5
M6 (screw)	4 – 6
M8 (bolt)	9 – 11
M6 (bolt)	9 - 11

**⚠ Attention**

Do not disassemble the engine under any circumstances. If necessary, contact your official Anova distributor or point of sale.



## 7. PROBLEM SOLVING

### 7.1. If you can't start the engine

Problem	probable cause	Required action
<b>Spark plug</b>	1. The head is wet.	dry it
	2. There is residual carbon.	clean it
	3. The distance between electrodes is not correct.	Adjust it between 0.6-0.7mm.
	4. The electrodes are burned.	Change the spark plug
	5. The insulation is damaged.	Change the spark plug
<b>Ignition coil</b>	1. The cable connection has come loose or is broken.	tighten or change
	2. Poor coil insulation.	Change
	3. There is too much distance between the stator and the rotor.	Set the distance to 0.4mm.
<b>The compression ratio is good and there is combustion</b>	1. Too much fuel has entered	reduce fuel
	2. Fuel quality is poor or has been mixed with water or dirt.	change fuel
<b>There is combustion, but the compression ratio is bad</b>	The cylinder and piston ring are worn or broken.	change them
<b>Carburetor not working</b>	1. There is no fuel in the tank.	add fuel
	2. Fuel cock is closed.	Open
	3. The reservoir hole is clogged.	Clean up

### 7.2. Engine stalls while running

Problem	probable cause	Required action
<b>The engine stops suddenly</b>	1. The piston is bitten.	Change or fix the piston
	2. Carbon has fallen from the spark plug and has caused a short circuit.	Clean the charcoal
	3. The coil is defective	check and fix
<b>The engine turns off little by little</b>	1. Fuel runs out	Refuel
	2. Carburetor stuck	Clean up
	3. Water in fuel	Refuel with clean fuel

### 7.3. Engine power is insufficient

Problem	probable cause	Required action
<b>Compression ratio is good and engine doesn't stall</b>	1. Fuel line connection lets in air.	Squeeze
	2. Carburetor connection lets in air	Change the frieze and tighten
	3. Water has been mixed with the fuel	change fuel
	4. Filter is clogged	Clean up
	5. The muffler is clogged	Clean up
<b>Engine overheats</b>	1. The mixture is very poor	Adjust the carburetor
	2. The cylinder is full of carbon	Clean up
<b>The engine makes a lot of noise</b>	1. Low quality fuel	Change
	2. Combustion chamber filled with carbon	Clean up
	3. Worn Items	review and change

### 7.4. Pump problems

Problem	probable cause	Required action
<b>No suction</b>	1. Not enough water in the pump	add water
	2. The gasket is damaged or loose causing the hose to suck in air	change or tighten
	3. The suction hose is broken and air enters	Change the hose
	4. Discharge valve closed or hose kinked	check and adjust
	5. The distance between the impeller and the casing is not correct	Adjust
	6. The pump is stuck by something	Clean up
<b>The water outlet and insufficient and the pressure too low</b>	1. The suction hose filter is clogged	Clean up
	2. Suction hose is kinked or clogged.	Clean up
	3. The pump is clogged by a foreign object	unclog
	4. Impeller and casing are worn	Change
	5. Discharge flange position is too high	Change the position of the pump
<b>Can't pull starter rope</b>	1. Impeller and casing are rusty	Clean up
	2. The pump is clogged	unclog
<b>Water leak</b>	1. Worn mechanical frieze	Change
	2. Shaft washer damaged	Change

## 7.1. Engine does not turn off easily

Problem	probable cause	Required action
Engine	Overheating of the cylinder and piston causes a start	Clean the charcoal
Correlative circuit	1. Spark plug electrodes overheat	Clean the spark plug and check the gap between electrodes
	2. The stop button is damaged	check and fix

## 8. WARRANTY

Millasur guarantees that if your product suffers from a manufacturing defect during the established guarantee period, contact or go to your point of sale.

Your purchase invoice should be kept as proof of the purchase date. Your tool must be returned to your dealer in an acceptable clean condition, in its original molded case, if applicable to the unit, accompanied by your appropriate proof of purchase.

### 8.1. Warranty period

The legal guarantee period of the product begins on the original date of purchase by the first initial buyer and its duration will be that established by the Royal Decree-law of protection of consumers and users against situations of social and economic vulnerability of the year corresponding to the moment of purchase of the product.

Some countries do not allow limitations on how long an implied warranty lasts or do not allow the exclusion or limitation of consequential or incidental damages, in which case the above limitation and exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state or country to country.

### 8.2. Exclusions

This warranty does not cover product damage or performance problems caused by:

- Natural wear and tear.
- Misuse, negligence, careless operation or lack of maintenance.
- Defects caused by incorrect use, damage caused due to manipulations carried out by personnel not authorized by Anova or use of non-original spare parts.
- Defects of normal wear parts, such as bearings, brushes, cables, plugs or accessories such as drills, bits, saw blades, etc.
- Damage or defects resulting from abuse, accidents or alterations.
- Improper use and storage (explicit reference that the rules described in the operating instructions have not been followed).
- Customer caused wear (for example, broken saw blades, worn carbon brushes, etc.).
- Wear and secondary damage due to lack of maintenance, repair, lubricants (e.g. overheating damage due to blocked cooling slots, bearing damage as a result of dirt, frost damage, etc.)

- Damage as an obvious result of excessive use / overload.
- Damage caused by improper supplies (eg incorrect fuel)
- Load-induced failure of housing components or accessories due to abnormal stress
- Load-induced deformation of housing components or accessories due to abnormal stress.
- Damage resulting from the operation of supplies that are overfilled or leak due to improper storage, inappropriate cleaning agents, or other damaging chemical components.
- Damage due to improper exposure to extreme temperatures (for example, freeze fractures, thermal deformation of components, etc.)
- Damage from permanent exposure to ultraviolet radiation.
- Damage caused by improper maintenance.
- Any damage caused by non-compliance with the instruction manual
- Any product that has attempted to be repaired by an unqualified professional.
- Any product connected to an improper power source (amps, voltage, frequency).
- Any damage caused by external influences (water, chemical, physical, shock) or foreign substances.
- Use of inappropriate accessories or parts.
- It does not include defects in normal wear parts, nor does it cover damages or defects resulting from abuse, accidents or alterations, nor does it cover transportation costs.

Also, the warranty is void if the product has been altered or modified, or if the trademark/serial number on the machine has been defaced or removed.

Routine maintenance, tune-ups, adjustments or normal wear and tear are not covered under this warranty.

This manual does not cover all possible situations regarding warranty exclusions, for more information contact your nearest Anova dealer.

### **8.3. In case of incident**

The guarantee must be correctly completed with all the information requested, and accompanied by the purchase invoice.

Anova reserves the right to reject any claim where the purchase cannot be verified or where it is clear that the product was not properly maintained (maintenance, clean ventilation slots, lubrication, regularly maintained carbon brushes, cleaning, storage, etc.) .

Private use means personal domestic use by an end consumer. Instead, commercial use means all other uses, including uses for commercial, income-generating, or rental purposes. Once the product has been used for commercial use, it will be considered a commercial use product for the purposes of this guarantee.

These are our standard warranty terms, but occasionally there may be additional warranty coverage not determined at the time of publication. For more information, contact your nearest Anova official distributor or by going to [www.millasur.com](http://www.millasur.com).

Warranty service is only available through official Anova dealers. You can locate your nearest distributor on our distributor map at [www.anova.es](http://www.anova.es).

## 9. ENVIRONMENT

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If your machine needs to be replaced after prolonged use, do not put it in the household waste, but dispose of it in an environmentally safe manner and in accordance with the legal provisions in this regard in your locality.

Protect the environment. Recycle used oil 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. Its plastic or metal components can be classified according to their nature and recycled.

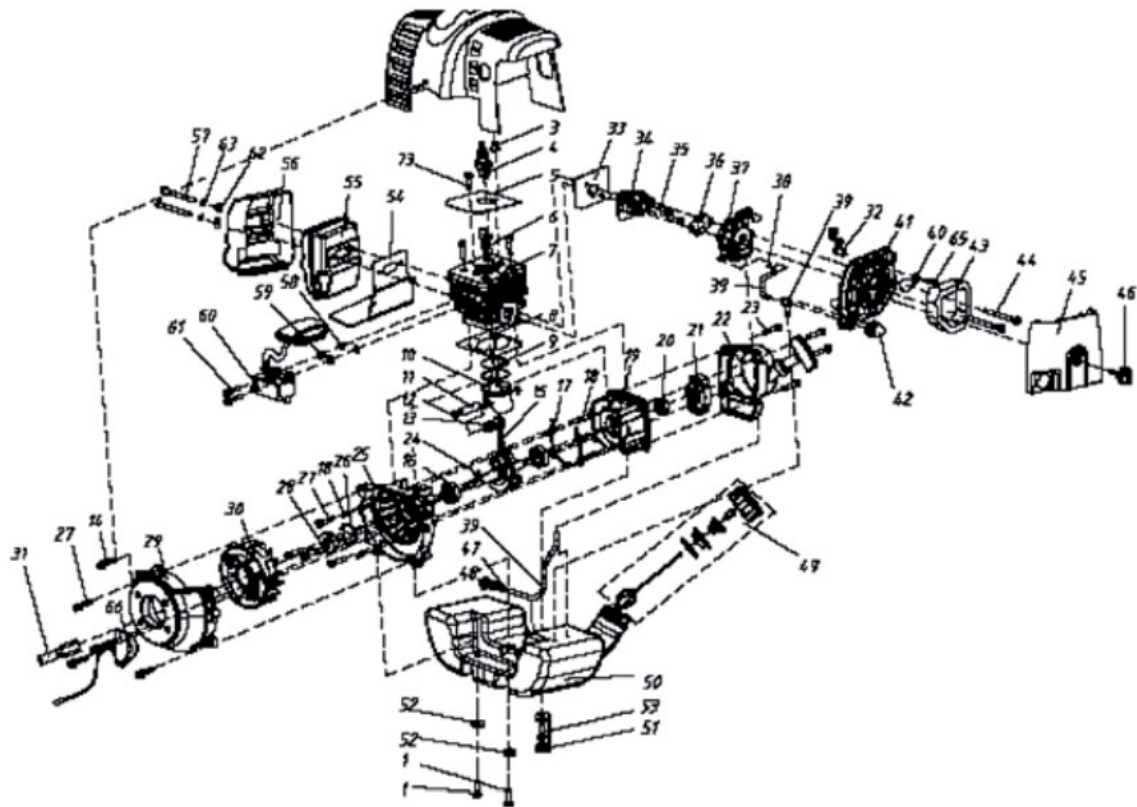
The materials used to pack this machine are recyclable. Please do not dispose of the packaging in household waste. Please dispose of these packages at an official waste collection point.

## 10. EXPLODED

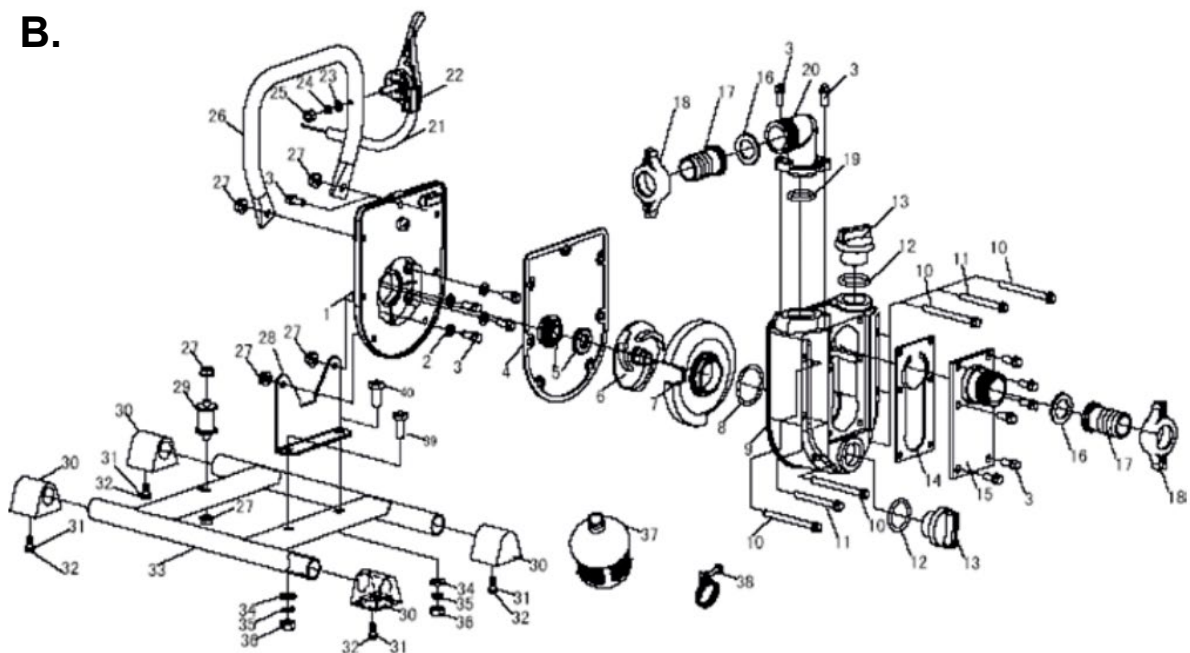
**ANOVA**

BA2C10

**A**



**B.**





## 11. CE CERTIFICATE

### DISTRIBUTION COMPANY

MILLASUR, SL

RUA EDUARDO PONDAL, Nº 23 PISIGÜEIRO

15688 OROSO - A CORUÑA

SPAIN



## 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: **MOTOR PUMP**

Model: **BA2C10**

Recognized and approved standard to which it conforms:

**EC Directive: Directive 2006/42/EC**

Tested according to regulations:

**EN809/A1:2009, EN1679-1:1996**

Company seal

**MILLASUR, S.L.U.**  
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