Davide e Luigi Volpi S.p.A. Via San Rocco, 10 46040 CASALROMANO MN ITALIA



COMPANY WITH QUALITY SYSTEM MANAGEMENT CERTIFIED BY ICIM = ISO 9001 =

IRRORATRICE A SPALLA ELETTRICA	ITALIANO
V-BLACK VITA	
MANUALE D'USO	pag. 4
SHOULDER ELECTRIC SPRAYER	ENGLISH
V-BLACK VITA	
USER MANUAL	page 15
PULVERIZADOR A MOCHILA ELÉCTRICO	ESPAÑOL
V-BLACK VITA	4 7 Y /
MANUAL DE USO	pag. 25
PULVÉRISATEUR ELECTRIC	FRANÇAIS
V-BLACK VITA	
MODE D'EMPLOI	pag. 36
PULVERIZADOR DORSAL ELÉTRICO	PORTUGUÊS
V-BLACK VITA	* \ / . C '
MANUAL DE USO	pág. 47
ELEKTRISCHE RÜCKENSPRITZE	DEUTSCH
V-BLACK VITA	
BENUTZERHANDBUCH euch	Seite 58
ЭЛЕКТРИЧЕСКИЙ РАНЦЕВЫЙ ОПРЫСКИВАТЕЛЬ	РУССКИЙ
V-BLACK VITA	
РУКОВОДСТВО ПО ЭКСПЛУАТАЦИИ	стр. 69



ATTENZIONE: LEGGERE ATTENTAMENTE IL MANUALE D'USO PRIMA DI UTILIZZARE L'UTENSILE PER LA PRIMA VOLTA

CAUTION: READ THE USER MANUAL CAREFULLY FIRST BEFORE USE

PRECAUCIÓN: LEA EL MANUAL DEL USUARIO CUIDADOSAMENTE ANTES DE USAR

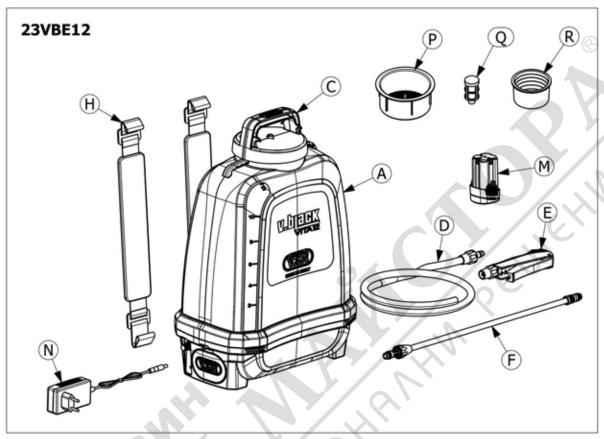
ATTENTION: LISEZ ATTENTIVEMENT LE MANUEL DE L'UTILISATEUR AVANT UTILISATION

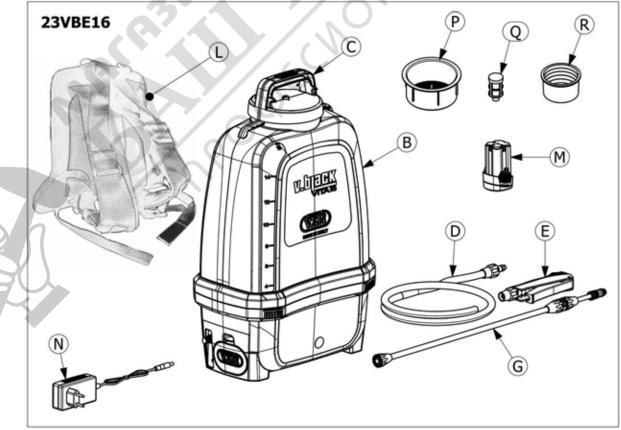
<u>ATENÇÃO</u>: LER ATENTAMENTE O MANUAL DE USO ANTES DE UTILIZAR A FERRAMENTA PELA PRIMEIRA VEZ <u>ACHTUNG</u>: LESEN SIE DIE BEDIENUNGSANLEITUNG SORGFÄLTIG DURCH, BEVOR SIE DAS WERKZEUG ZUM

ERSTEN MAL BENUTZEN

ВНИМАНИЕ: ВНИМАТЕЛЬНО ПРОЧИТАЙТЕ РУКОВОДСТВО ПО ЭКСПЛУАТАЦИИ ПЕРЕД ПЕРВЫМ

ИСПОЛЬЗОВАНИЕМ АППАРАТА





SUMMARY

1.	HANDBOOK DESCRIPTION		15
2.	SPRAYER DESCRIPTION		15
3.	GENERAL INSTRUCTIONS		16
4.	TRANSPORT AND HANDLING INSTRUCTIONS		17
5.	INSTRUCTIONS FOR USE		17
6.	MAINTENANCE		22
7.	PROBLEMS - CAUSES - SOLUTIONS		23
8.	instructions for dismantlement and disposal	(6)	23
	WARRANTY		
10.	CE DECLARATION OF CONFORMITY		24

INTRODUCTION

Our congratulation for the choice made. The main features of our electric sprayers are the high quality of their parts and their long-lasting lifetime. They have been studied to resist any weather condition and they guarantee a maximum efficacy with the lowest power waste. As all our other products this sprayer went through accurate and precise tests; if it is used according to the instructions below, it will meet your needs for many years and a very reliable spare-parts service will give you the possibility to make repairs with original parts for a long time.

1. HANDBOOK DESCRIPTION

1.1. INTRODUCTION

Please kindly study very carefully this instruction handbook before any setting, use, maintenance or any other imaginable operation of/on the sprayer.

A correct use of the sprayer and an effective and rational maintenance allows you to keep the sprayer in the best working conditions without reducing its efficacy and safety.

The present instruction handbook was drawn up in conformity with the indications included in ENCLOSURE I of the MACHINERY DIRECTIVE 2006/42/CE" and is considered an integral and essential part of the sprayer.

This handbook must be kept close to the sprayer and ready for consultation; it must be kept together with the sprayer during its whole lifetime, from the starting test until the final dismantling.

1.2. PURPOSES AND LIMITS OF THE HANDBOOK

This manual is intended for the use of:

- Describe the operation and conditions for use of the sprayer.
- Show the main technical features of the sprayer.
- Provide the correct instructions for use.
- Underline the potential risks and/or possible dangerous situations.
- Provide instructions for maintenance and repair.
- Enable understanding of possible operational problems and how to solve them.

In addition to the observance of the instructions contained in this handbook, the use of the sprayer depends on the respect of all the safety rules in force.

2. SPRAYER DESCRIPTION

2.1. TECHNICAL FEATURES

The Sprayer "V-BLACK VITA" was produced for dispensing liquid solutions avoiding temperatures that exceeds 40°C.

	23VBE12	23VBE16
Tank capacity	12 Lt	16 Lt
Tank material	Polypropylene	Polypropylene
Sprayable liters for each battery	With 2.0 bar pressure, up to 95 liters	With 2.0 bar pressure, up to 95 liters
charge	With 5.0 bar pressure, up to 75 liters	With 5.0 bar pressure, up to 75 liters
Sprayable liters for each battery charge	Up to 255 liters	Up to 255 liters
Rechargeable lithium battery	14,4 Vdc 2,0 Ah 28,8 Wh	14,4 Vdc 2,0 Ah 28,8 Wh
Nozzle supplied	Adjustable brass nozzle for spraying	Adjustable brass nozzle for spraying
Electronic pressure regulator	Adjustable working pressure 0.5 to 5 bar - 7.25 to 72.5 psi	Adjustable working pressure 0.5 to 5 bar - 7.25 to 72.5 psi
Pressure control	Electronic board with voltage control that keeps constant pressure throughout battery life	Electronic board with voltage control that keeps constant pressure throughout battery life
Battery charge control	Led	Led
Extra outlet	For 4-nozzle bar connection on trolley (optional)	For 4-nozzle bar connection on trolley (optional)
Aluminum lance	Standard	Standard
Screw cap with lance holder	Standard	Standard
Padded shoulder straps	Standard	Standard
Battery charger	1,0 A – 18W	1,0 A – 18W
Gaskets	NBR (high tensile strength - resistance to mineral oils and greases)	NBR (high tensile strength - resistance to mineral oils and greases)
Pump	High performance diaphragm with pressure switch	High performance diaphragm with pressure switch
Delivery hose length	1,2 mt	1,2 mt
Filling diameter	105 mm	105 mm
Min./max. temperature	5° C / 40° C	5° C / 40° C
Dimensions	220 x 360 x 510	220 x 360 x 570
Sprayer weight (empty) with battery	3,1 Kg	3,2 Kg

2.2. ALLOWED ENVIRONMENTAL CONDITIONS

The environmental conditions where the sprayer can work are: Temperature: $5 \div 40^{\circ}$ C; Humidity: $0 \div 70\%$ (not condensed). It is also necessary to put the sprayer protected from bad weather, sunrays and cold weather, in a clean and dry place.

WARNING: THE SPRAYER IS NOT SUITABLE TO BE USED IN ENVIRONMENT UNDER EXPLOSION RISK CONDITIONS.

2.3. NOISE AND VIBRATIONS

The vibrations and noise produce while using the sprayer is largely below the disturbance threshold by law and cannot cause harm to the operator.

3. GENERAL INSTRUCTIONS

3.1. SAFETY WARNINGS AND CAUTIONS TO BE OBSERVED

In spite of the adopted cautions, the sprayer may involve dangerous situations and potential risks in the working area. It is necessary to analyze carefully the potential presence of these dangerous situations and risks in order to assure safe working procedures, appropriate behaviour rules and to plan individual protective devices.

- DURING USE OF THE SPRAYER, THE OPERATOR MUST FOLLOW SAFE WORKING PROCEDURES AND FOLLOW THE SICURITY RULES AND REGULATIONS.
- Do not use products whose toxicological features are unknown. Use exclusively products authorized by the Public Health Ministry, carefully respecting all the instructions listed on the packaging.
- For children, teen-agers and pregnant women it is strictly forbidden to use the sprayer.
- Do not use in case of tiredness, illness or under the effect of alcohol, drugs or medicines that can affect the physical and mental state.
- Do not spray solvents, acids and inflammable liquids.
- Always wear protective clothes and devices, in order to avoid any contact with harmful and toxic products:
 - Hand protection
 - Body protection
 - Respiratory protection
 - Eye protection
- Carefully avoid breathing fumes or drops of the chemical solution: in case of accidental contact or inhalation call the
 doctor
- Do not eat or smoke while using the sprayer.

- Use the sprayer in well airy and illuminated areas, not windy or shady.
- Do not use the sprayer upwind.
- Use the sprayer at least 6mt away from people or animals.
- Keep the sprayer far from children and domestic pets; do not spray close to fish aquariums.
- Do not eat treated fruits or vegetables before the date foreseen by the chemical product manufacturer and, in any case, wash them very carefully.
- Do not pressurize by means of under pressure devices.
- Do not disperse the remaining chemical solutions in the environment.
- After using the sprayer, carefully wash hands, face and clothes.
- Do not leave the sprayer out in bad weather conditions.
- The user is responsible for the fact that the sprayer is maintained at optimal operating conditions so the sprayer can function in a proper and safe way. Parts and accessories of the equipment must be replaced when they no longer assure a correct function of the sprayer.

3.2. PROHIBITIONS

- It is forbidden to modify the sprayer's parts.
- It is forbidden to apply devices or accessories to the sprayer without the authorization of DAVIDE E LUIGI VOLPI S.P.A
- It is forbidden to use solvents, such as alcohol, gasoline solvents or thinner, for the cleaning of the sprayer.

4. TRANSPORT AND HANDLING INSTRUCTIONS

The transport of the sprayer must be realized using all the necessary cautions in order to avoid damages.

When transporting the sprayer please make sure the switch on/off is always off.

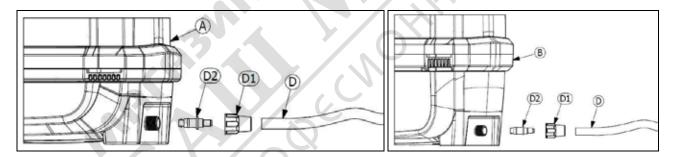
During transport, the tank must always be empty or, if not possible, safely fixed in order to avoid accidental outpours of liquid. During transport and storing, do not put the sprayer on or under other material.

When moving the sprayer, it is recommended to avoid bumps, which could damage the product.

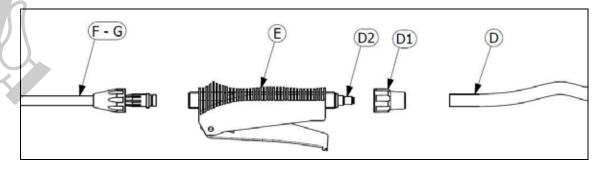
5. INSTRUCTIONS FOR USE

5.1. SETTING OF THE SPRAYER

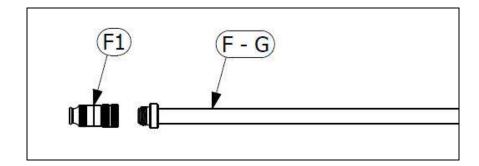
- Insert the locking nut D1 onto delivery hose D.
- Insert delivery hose D onto hose holder D2
- Insert the hose holder D2 into the housing of the base A 23VBE12) B (23VBE16).
- Screw the locking nut D1 onto the base all the way down and tighten firmly.



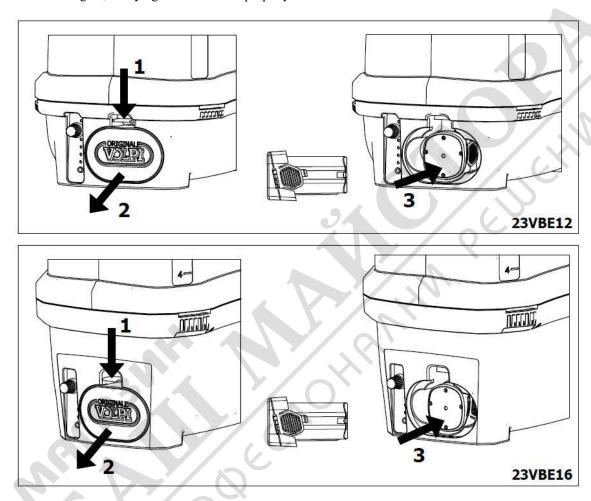
- Unscrew the locking nut D1 from the handle E.
- Insert the locking nut D1 onto the delivery hose D.
- Insert the delivery hose D onto the hose holder D2.
- Screw the locking nut D1 onto the handle E.
- Screw the lance F (23VBE12) G (23VBE16) onto the handle E



• Screw the brass sprayer F1 onto the lance F (23VBE12) G (23VBE16).

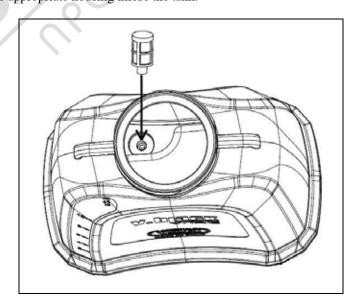


- Open the side door and insert the battery all the way in. Insert the battery oriented as showed in the picture.
- Close the door again, verifying that the door is properly locked.



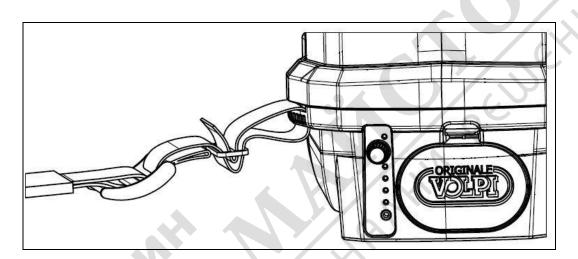
• Insert filter Q into the appropriate housing inside the tank.



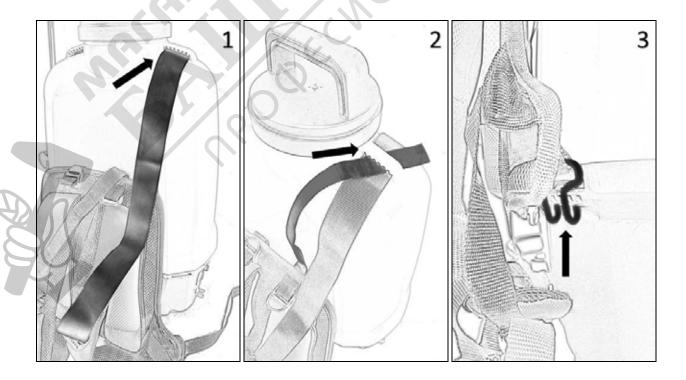


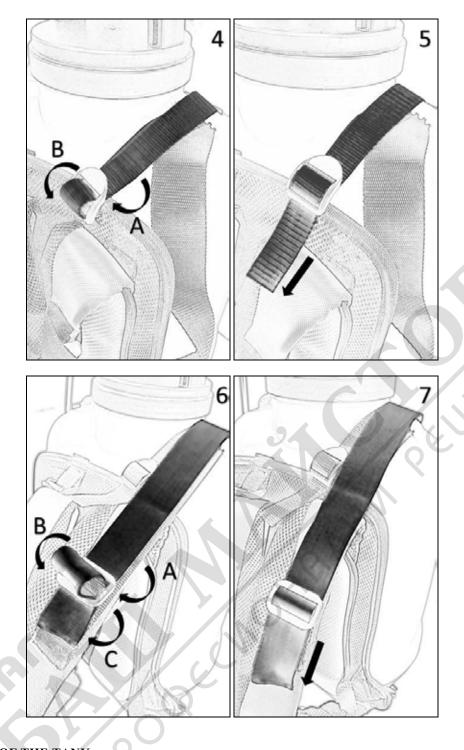
• Hook the shoulder straps H to the sprayer body as showed in the picture (23VBE12).





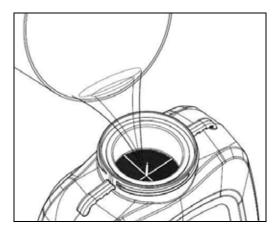
• Hook the padded backrest H to the sprayer body as showed in the picture (23VBE16)...





5.2. FILLING OF THE TANK

Prepare the solution in a specific container.
Unscrew the cap of the tank and pour the prepared solution through the filter.
Carefully screw the cap.



WARNING:

Do not prepare the solution in the sprayer tank but always in a separate container.

Do not ever pour the solution into the tank without the use of the filter.

5.3. POSITIONING OF THE SPRAYER

Put the sprayer on a flat surface at a useful height, in order to put the sprayer on your shoulders easily, with the belts previously adjusted.

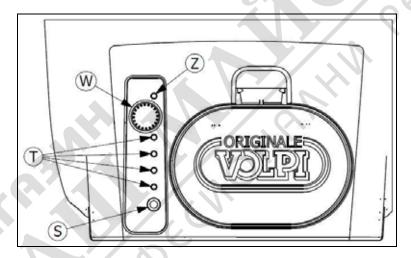
If you need to adjust the belts, put the sprayer on a flat and raised surface, remove your arms from the shoulder belts and adjust the length through the buckles.

5.4. SPRAYER START-UP

- Turn on the pump by turning the knob W clockwise.
- The red-colored led Z indicates that the machine is on.
- The four green-colored leds T indicate the battery charging status.
 - \circ 4 leds = 100% battery
 - \circ 3 leds = 75% battery
 - \circ 2 leds = 50 % battery
 - \circ 1 led = 25 % battery
- If the battery is low, recharge it following the instructions in section 6.2.
- Move the lever on the handle to start spraying
- Use the electronic pressure regulator W to manage the desired working pressure.
- When releasing the handle lever, the pump stops automatically interrupting the spraying of the liquid

WARNING: The sprayer is equipped with electronic board with voltage control that keeps the set pressure constant throughout the life of the battery.

Auxiliary socket S is the configuration for using the pump on trolley with the 4-nozzle spray boom (optional).



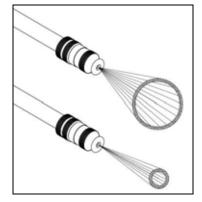
WARNING: Never let the sprayer work when the tank is empty.

WARNING: Avoid discharging the battery completely; when the battery is getting low, you need a full recharge. Completely recharge the battery before storing the sprayer for a long time.

5.5. NOZZLE REGULATION

This sprayer is supplied with adjustable con nozzle F1.

Screwing or unscrewing the final part of the nozzle F1, it is possible to adjust the diameter of the "rose" spray until you get the "jet".



Adjustable brass nozzle for spraying (Cod. 928)			
PRESSURE	FLOW RATE	Sprayable liters for each	
bar	Lt / min	battery charge	
5,0	0,60	75	
4,0	0,54	85	
3,0	0,49	90	
2,0	0,44	95	

5.6. OPERATIONS TO BE CARRIED OUT AT TERMINATION OF WORK

When finishing work, pour the remaining liquid in a specific container and carefully rinse the internal of the tank and the hose letting it flow through the lance with clean cold water.

Check that the water used for rinsing has completely come out.

Turn off the pump by turning knob W counterclockwise and check that led Z is off.

After having cleaned the tank, remove, clean and reassemble the filters (O and P).

Unscrew the nozzle F1 from the lance F-G; disassemble the nozzle and clean the two parts with clean water, paying attention not to damage or loose the OR.

Clean the handle using a damp cloth without soaking it in water. Unscrew the nut D1; remove the hose from its holder; remove the hose holder with filter and wash it with clean water; then, reassemble all the parts.

Remove from the tank eventual materials or objects that could damage the sprayer.

Wear clothes and protective devices during these activities.

WARNING: Do not disperse the rinsing water neither the remaining solution in the environment; it is recommended to pour all these liquids in specific drains, suitable for water purification and drainage.

Turn off the pump by turning knob W counterclockwise and check that led Z is off after every use.

Keep the sprayer out of reach from children, protected from sunrays and cold temperatures and with completely charged battery.

5.7. CHANGE OF LIQUID IN THE TANK

In case a change of the liquid inside the tank is necessary, follow the instructions given in point 5.6 and after that, the instructions in point 5.2.

6. MAINTENANCE

6.1. INTRODUCTION

A correct use of the sprayer and a regular maintenance are necessary to keep the sprayer in the best working, efficacy and safety conditions.

Use exclusively original spare-parts.

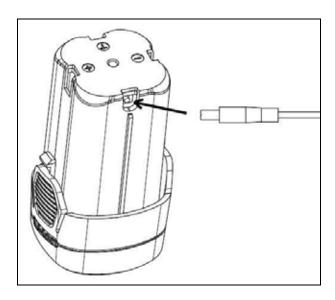
6.2. BATTERY RECHARGE

The sprayer powered by a sealed storage battery, rechargeable with the supplied battery charger N. In order to handle the battery in a safe way it is necessary to follow the below listed instructions:

- Keep the battery away from high temperatures (ex. flames).
- Do not open the battery.

WARNING: During the recharge operations, follow safe working procedures and carefully observe the general safety rules. In order to recharge the battery, follow these instructions:

- Turn off the pump by turning knob W counterclockwise and check that led Z is off
- Check that the network voltage corresponds to the indication printed on the battery charger plate N.
- Open the side door and pull out the battery.
- Connect the battery charger N to a suitable and electrically protected current-socket.
- Insert the battery charger plug into the battery slot.
- To recharge the battery completely, you need 2 hours.
- At the end of the re-charge it is recommended to disconnect the battery charger from the power network first and then from the battery;
- During long periods of inactivity, check that the led Z is off.



The battery life mostly depends on the observance of some important rules:

- Do not create a short-circuit.
- Do not discharge it excessively: when the battery is almost discharged, charge it immediately.
- Promptly recharge it with the general on/off switch turned off and respecting the necessary time of charging.
- For the recharge exclusively use the battery charger supplied with the sprayer.
- Do not turn the sprayer on when the battery charger is connected.
- After the complete recharge keep the battery between 5 and 40° C.
- In case of long stocking or non-use, recharge the battery every four months.

When the battery is no longer rechargeable it is necessary to replace it with another one with the same sizes and features, respecting the connection polarities; the old battery shall be taken to an authorized collecting point.

7. PROBLEMS - CAUSES - SOLUTIONS

PROBI	FMS	POSSIBLE CAUSES	SOLUTIONS
_			
When activating the handle	Motor does not work	General switch off	Turn on general switch
lever, no water is coming out		Exhausted battery	Replace or recharge
		Blocked pump	Contact the service centre
		Broken cable	Contact the service centre
		Engine failure	Contact the service centre
	Motor works	Clogged nozzle	Clean
		Clogged tank filter	Clean
		Clogged handle filter	Clean
		Defective pump	Contact the service centre
Little water comes out when	7/10	Pressure regulator at minimum	Raise the regulator
pressing the handle lever		Dirty nozzle filter	Clean
		Dirty handle filter	Clean
		Defective pump	Contact the service centre
		Dirty nozzle	Clean
Battery working time is not as	Lower working time	Battery not fully charged	Recharge the battery
expected		Defective battery charger	Replace
		Exhausted battery	Replace
	No endurance	Broken cable	Contact the service centre
		Defective battery charger	Repair or replace
***) \		Exhausted battery	Replace

8. INSTRUCTIONS FOR DISMANTLEMENT AND DISPOSAL

To dismantle the sprayer, it is necessary to operate according to laws in force, contacting, if necessary, specialized companies in materials disposal.

The sprayer is made of non-dangerous materials:

- Plastic and synthetic materials;
- Iron metals (steel) and non-iron metals (aluminium-brass-copper);
- Electric battery

9. WARRANTY

24 months warranty for private users and 12 months warranty for professional users. It covers core parts, including Li-battery, charger, motor and transmission mechanism.

Following conditions invalidate the warranty:

- Any abnormal operation
- Product not maintained as per the Maintenance Instruction
- Product modifications
- Any damages even if made by mistake
- Damaged after amateurish repairing.
- Nature caused damages
- Battery not recharged with the requested frequency
- Components subjected to wear during normal operation are not covered by warranty.



The warranty is valid only for products that have been registered through the website within 30 days from the purchase date.

Activate the warranty for your new product Originale Volpi through our website:

https://www.volpioriginale.it/registra-il-tuo-prodotto/



The buyer must also keep a copy of the sales document (receipt, invoice) and of the warranty registration: a copy of these documents must be given to the Dealer or Authorized Customer Service together with the machine to be repaired. In the absence of these documents, the machine will in any case be considered out of warranty.

10. CE DECLARATION OF CONFORMITY Translation of the original text

The Company Davide e Luigi Volpi S.p.A.	

Via San Rocco, 10 – 46040 Casalromano (MN) ITALIA

DECLARES THAT THE MACHINE

Type:	ELECTRIC SPRAYER
Code:	23VBE12 - 23VBE16 - 23VBC12 - 23VBC16 -
	23VBB12 – 23VBB16

IS IN CONFORMITY WITH THE RELEVANT COMMUNITY HARMONISATION LEGISLATION:

DIRECTIVE 2006/42/CE Machinery Directive

DIRECTIVE 2014/30/UE Electromagnetic Compatibility

DIRETTIVA 2009/127/CE Machines for the application of pesticides

Reference to the relevant harmonized standards used or references to other technical specifications for which conformity is declared:

UNI EN ISO 12100:2010 - UNI EN ISO 19932-1:2013 - UNI EN ISO 19932-2:2013 - EN 61000-6-1:2007 EN 61000-6-3:2007 - EN 61000-3-2:2014 - EN 61000-3-3:2013

Authorized person to set up the technical documentation:

	Name:	Davide e Luigi Volpi S.p.A.
</th <th>Residence:</th> <th>Via San Rocco 10 – 46040 Casalromano (MN) Italia</th>	Residence:	Via San Rocco 10 – 46040 Casalromano (MN) Italia

This Declaration of Conformity is issued under the sole responsibility of the manufacturer.

Casalromano, february 1st 2023 The legal representative Eligio Volpi