

CASOTTI[®]

What was still missing.

Use and maintenance manual

Version n. 3/2015



DUPIGET GREENHOUSE

Code **SUPER-B/W**

(Cleaning and disinfection)

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Safety Instructions

General information

This use and maintenance manual has been written in accordance with the most recent laws regarding safety.

It is the responsibility of the owner or of the operator of the machine to read this manual before putting the equipment described into operation.

It is the responsibility of the person using the machine to work in conditions of safety.

Failure to follow the use and safety laws make the operator responsible for damage caused both to the equipment or to people animals or things.

Should doubts arise when reading this manual, contact the nearest reseller, or Casotti directly. When making any type of request, the data on the plate positioned on the machine cover must be cited.

Safety laws

The user must read the technical-operative indications relating to correct machine use carefully.

The manual must be read before using the machine, and then must always be kept within reach for consultation.

Information regarding safety is to be integrated with the specific information for use and maintenance of each single machine.






For the reseller:

The person in charge of delivery and application of the machine, must read this manual, and understand its contents, and is responsible for the delivery of this manual to the final client.





Signs used in the manual

When you see these warnings, you must follow scrupulously and in the sequence indicated, all the operations regarding set up, regulation and maintenance of the machine. Failure to observe these indications meticulously could lead to serious damage to you person, to the equipment and to other people or animals.







Danger signs

-  Indicates the measures to be adopted to avoid personal harm, and points out that some of the usual manual procedures if not carried out with caution can result to be dangerous.
-  Indicates danger given by the presence of electric current
-  Indicates the nature and danger of the content of containers with harmful substances.
-  Indicates the nature and danger of the content of containers with toxic substances.
-  Indicates the danger of biological risk

Prohibition signs

-  No entry to non authorized personnel.
-  Prohibition to remove protections and safety devices when parts are in movement.
-  Prohibition to clean, lubricate, repair, register moving parts.
-  Prohibition to run polluting substances into the drains and into the sewers.

Important warnings

-  Do not use the machine without knowing its characteristics. Do not use the sprayer for uses other than those it has been designed for, if necessary contact Casotti for explanations regarding its use. Make sure that the personnel using the machinery is suitably trained to do so.
-  The Casotti sprayer is a diffuser of substances harmful to man. Therefore, the operator must position himself on the vehicle in movement, on the part opposite the distribution of the antiparasitic and must make sure other people are not near the sprayer. The safety distance varies according to the work pressure: as a reference the average distance is about 15 metres.
-  Do not lubricate, clean, repair the machine without first having disconnected the electric and hydraulic connections.
-  One operator at a time must use the machine.
-  Handle the product to be distributed with maximum care, adopting all the necessary precautions during use, not only during the distribution phase, but also in the previous phases of preparation and mixing of the product.
-  It is recommended that the instructions of the product to be distributed are read carefully since there are different rules according to the degree of toxicity.

Trasport, handling and storage

At the moment of delivery check that:

- the delivery note and the contents of the packing correspond.
- the packing is integral in order to individuate possibile damage that can

be attributed to the transporter.

In case of damage inform Casotti immediately.

Particular precautions for transport are not needed since size is minimum and the weight of each prayer is limited.

Casotti sprayers are usually delivered in a carton of size cm 40 x 25 x 30, with some disassembled parts.

If not installed immediately, the packing must be kept in a closed and dry place to avoid deterioration of the carton and of the sprayer itself.

Should the packing be kept outside, cover with a rainproof cover, so that dust, rain and humidity can not damage it.

If goods are delivered on a pallet, it is recommended to employ specially trained personnel and authorized for the use of forklifts.



Warranty

The terms and conditions of the warranty are determined in accordance to the following modalities, with the exception of different specifications in the Order of Confirmation.

Casotti, as well as guaranteeing good quality and good manufacture of the machine, commits oneself, during the period of warranty, to substitute or repair free of charge those components that are recognized as faulty from manufacture.

The period of warranty starts from the moment of delivery of the machine to the final client.

Should the product result to be faulty during the period of warranty the buyer must inform the reseller and manufacturer of the fault immediately; the manufacturer will decide at his discretion how to intervene.

The guarantee is not valid for those parts which are broken or worn due to:

- Failure to follow the instructions of this use and maintenance manual.
- Lack of or incorrect maintenance.
- Negligence of the user regarding the operation of the sprayer.
- Use of non suitable tools for maintenance
- Modifications and tampering carried out or had carried out without specific approval from Casotti.
- Use of non original spare parts.

The material and parts that are subject to normal wear and the parts whose duration can not be estimated beforehand are excluded from the warranty.

The buyer accepts that he is not entitled to any rights or any other compensation for possible damages such as loss of profit or sales, of production or harvest, for machine breakage or of any other indirect damage. Return of the product is not allowed without the written confirmation of the producer.

All the expenses regarding transport and delivery are usually at the expense of the buyer.

According to the current laws the warranty has a duration of 24 MONTHS starting from the date of delivery.

Aware of the excellent quality and duration of our products, Casotti grants an extension of a total of up to 36 months on the period of warranty for the sprayers.



Technical information

Sprayer description



The Casotti sprayer is a practical and modern means for rapid distribution of plant protection products, and cleaning and disinfection products.

The Casotti sprayer has been designed and manufactured in conformity with directive 2006/42/CE.

It consists of a central body made of steel and aluminium in which the pipelines that input the product to be distributed are installed.

The sprayer can be applied to a tank for liquid and a pump is required.



The liquid is put into pressure by the pump and opportunely filtered passes from the tank to the elbows, supplied with nozzles, positioned lower down from the central body.

An electric 12V or 24V motor generates the oscillating movement of the nozzles.

Machine use



The machine, which in this manual is defined Casotti sprayer, is to be used for the distribution of phytosanitary products on grass crops and other plants in general and for cleaning and disinfection.



The use of phytosanitary products shall respect the amounts and methods defined by the rules in force in your Country. In case of doubt about the use, please contact Casotti in order to verify the use method and the suitability of the used product.



Technical characteristics

All the components are of excellent quality, the screws and nuts and bolts are made of stainless steel.

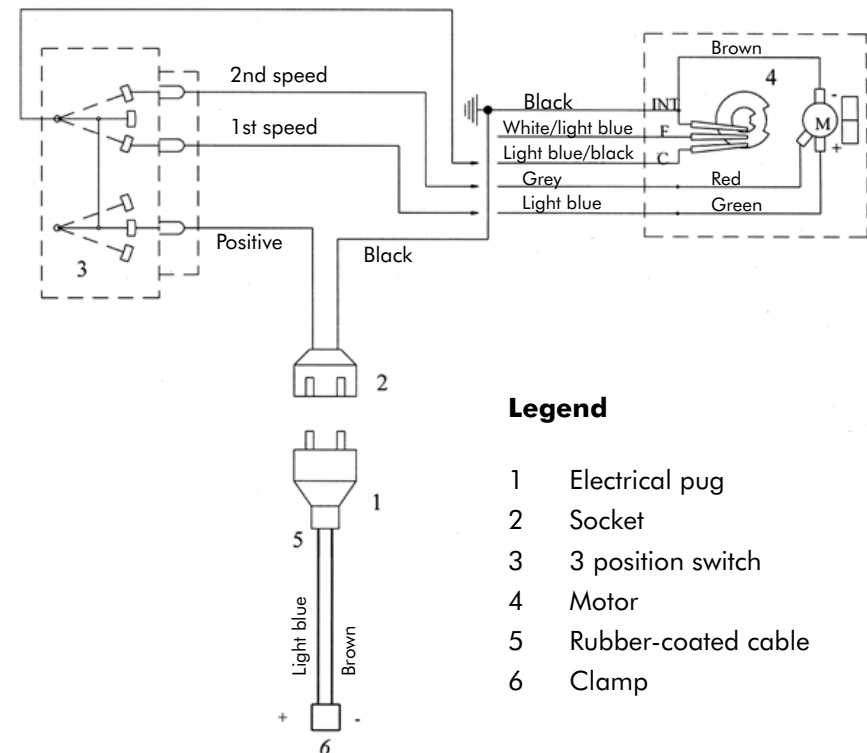
Nozzles are made of steel or brass, with inserts made of widia or allumina (ceramic).

Nozzles of different sizes are available, see table pag.

Technical data

Pressure	Min. 15 - Max. 100 bar
Capacity per minute	Min. 20
Voltage	12V or 24V
Electric absorption	2.5 / 6 A
Noise	Less than 65 dB

Electrical diagram



Installation and connections



The Casotti sprayer can be applied to a carried or pulled equipment, supplied with tank and pump.

We recommend high pressure pump, working pressure minimum 10, maximum 100 bar.

The sprayer does not work at low pressure.

Required capacity: minimum 35 litres per minute.

Insert the support (cod. 29) into the joint (code 30), position the sprayer.

Tighten the bolts to avoid the accidental fall of the machine.

Activate the electric and hydraulic connections.



Electric connection:

Add cable to the current plug supplied (cod. 31) in order to reach the position with a voltage of 12V.

(For 24V connection, contact Casotti for specific instructions).

A double pole cable 2 x 1 in conformity with the current safety laws must be used.

Warning:

The plug coming with the machine has 2 codes next to the two poles, visible on the front side.

When the cable is connected to the plug the positive pole has to be fitted into n° 58.

If the wires are reversed this can cause irreparable damage to the electric components of the sprayer.

Insert the electrical plug (cod. 31) to the socket (cod. 27) positioned on the side of the central body. Activate the switch (cod. 28) positioned on the body of the sprayer, and make sure power arrives.

Always keep at a safe distance from the moving parts.



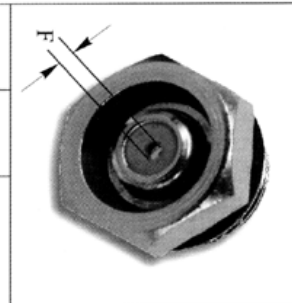
Hydraulic connection:

The pipelines coming from the pump must be inserted directly on the machine body, using the revolving unions (cod. M300) supplied.

Nozzle capacity table round hole nozzles

Capacity l/min

F (mm)	Codice Code Kode	15 bar		25 bar		35 bar		40 bar		45 bar		50 bar	
		Round	Fan	Round	Fan	Round	Fan	Round	Fan	Round	Fan	Round	Fan
1	1009.010	2.50	2.45	3.10	3.00	3.50	3.35	3.65	3.55	3.85	3.70	4.15	4.05
1.2	1009.012	3.80	3.60	4.55	4.20	5.30	4.60	5.90	5.15	6.00	5.30	6.40	5.65
1.5	1009.015	5.00	4.80	6.60	5.70	7.00	6.50	7.80	7.00	8.40	7.30	8.60	7.80
1.8	1009.018	7.30	5.80	9.20	7.80	10.60	8.50	11.60	9.30	12.00	10.80	12.80	10.70
2.0	1009.020	8.80	7.00	11.60	8.60	13.40	10.20	14.10	11.00	15.20	11.70	15.60	12.40
2.2	1009.022	10.50	7.90	13.80	10.00	16.40	12.50	17.50	13.40	18.40	14.00	19.30	14.40
2.5	1009.025	13.00	8.20	16.40	11.40	19.00	14.10	21.10	14.50	22.00	15.50	23.00	16.50
2.75	1009.275	15.80	10.20	21.10	13.30	24.00	16.40	25.80	16.90	26.80	18.00	28.30	18.90
3.0	1009.030	18.40	11.50	24.00	14.50	28.20	18.10	30.10	18.60	31.50	19.60	33.10	21.00
3.5	1009.035	24.20	13.20	30.50	16.80	36.20	20.20	38.80	21.60	41.60	23.20	44.20	24.50
3.8	1009.038	29.00	14.10	33.80	18.90	41.00	21.50	42.40	23.30	47.10	25.80	49.80	26.60



Modification of the angle of oscillation

The Casotti sprayer usually comes appropriately adjusted in accordance to the work to be carried out, the angle of oscillation is adjustable from 45° to 185°. Usually Dupiget Greenhouse is supplied with a pre-adjusted angle of about 120°. To modify the angle of oscillation, use the regulator under the rubber plug (cod. 4) in the lower cover.

Remove the plug and turn the switch to the lowest speed. Stop movement using the switch, when "0" is shown at the centre of the hole: reference "0" indicates regulation at 180°.

To modify the angle of oscillation, loosen the screw and with a screwdriver push the regulation lever for about 2 cm., then check that the angle is the desired one. If this is not so regulate the lever again.

Possible breakages

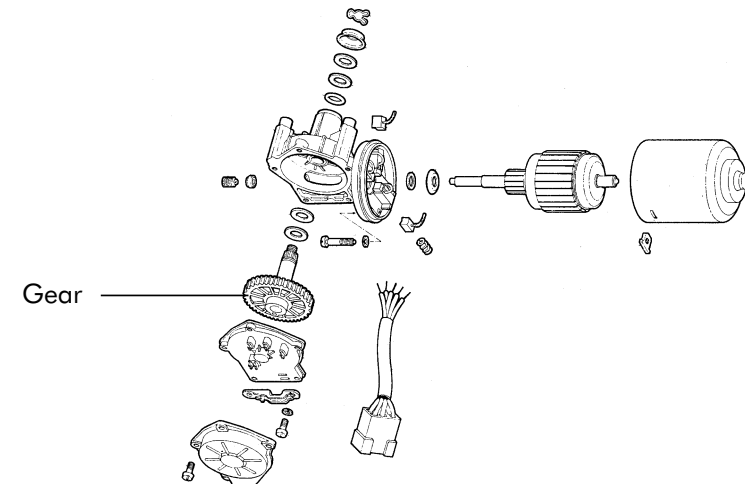
This chapter lists the most frequent anomalies, the possible causes and solutions to restore normal conditions of operation. If the breakage is not included in the case study shown here, Casotti can be contacted for necessary indications.

The liquid does not arrive:

- Make sure the tank is not empty.
- Check operation of the pump.

The nozzle holder elbows do not oscillate:

- Check there is electric supply to the motor
- Disassemble the cover and check for motor breakdown.
- Check if the white plastic gear inside the motor is worn. (see diagram)



Maintenance and dismantling



Do not allow non qualified personnel to carry out maintenance operations and make sure the personnel in charge of the machine has read this manual.

Do not carry out maintenance operations while the system is in operation



All operations of maintenance and repair must be carried out with the electric supply cut off , maintenance in the electric part must be carried out by specialized personnel.

Always use Casotti original spare parts, use of non original spare parts can cause irreparable damage to the system and to personnel.

Normal maintenance of the sprayer is solved by lubricating the internal pivots of the cogged wheels, which give movement to the elbow nozzle support, by pumping lubricant into the grease box.

It is not possible to see when lubrication is necessary therefore use 1 pump up a year as a reference.

The Casotti sprayer as designed does not require specific cleaning, having said this we recommend that the pipelines are cleaned with water at the end of the work cycle.



The machine is made up of different types of material: these must be disposed of in accordance to the current laws in the country of use.

Contact the appropriate authorities for locations and procedures.

The first operation to be carried out is elimination of the electric connection between sprayer and the tractor.

Unscrew the rubber tube which connects the pump to the sprayer, unscrew the orthogonal joint (fig. 30 spare parts) and remove the sprayer from the support tube.

Disassemble the various parts of the sprayer and carry out disposal of the various parts, such as:

- Stainless steel
- Iron
- Aluminium
- Bronze
- Rubber



Instructions for use

Dupiget Greenhouse is used for cleaning and disinfection of greenhouses, farm sheds and poultry farms. The machine can operate at high pressure, it is necessary to provide it with pipes suitable.

Dupiget Greenhouse is equipped with watertight cap to protect the switch.

However, if the liquid gets inside it doesn't damage the mechanism.

For the purpose the fusion presents a small hole to facilitate the discharge of the liquid.

The sprayer is made up of a machine body and some parts to be assembled:

- 1 orthogonal joint code 30
- 1 support code 29
- 2 revolving unions code M300
- 2 elbows with single nozzle with round hole nozzle diam. 2,5 mm
- 1 Double-pole current plug cod. 31

The machine body is type SUPER, that is there are three bolts: two central ones and a lateral one.

What is the use of the closed side pivot?

The side pivot oscillates at about 90°, normally not used in Dupiget Greenhouse.

How to carry out assembly?

The tubes and the elbows must be installed in the two central pivots, leave the side pivot closed. The pipelines coming from the pump must be inserted directly onto the sprayer body, by means of the revolving unions (code M300) supplied. Position the longer elbow on the central pivot.

Can the angle of oscillation be varied?

The machine is supplied with a swivel angle of 120°.

To change the angle see pag. 16

Maintenance:

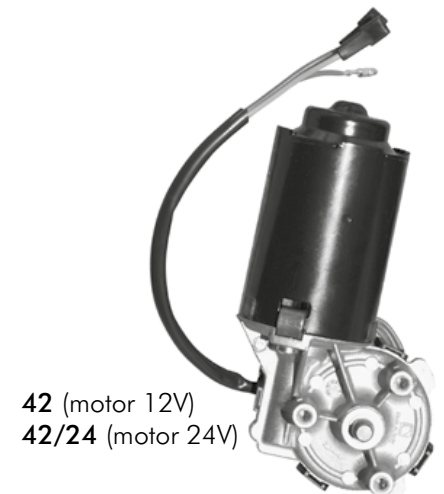
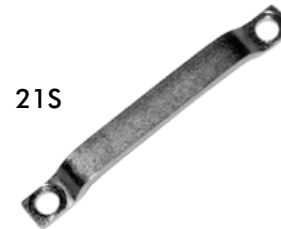
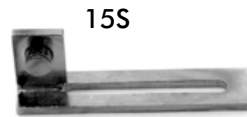
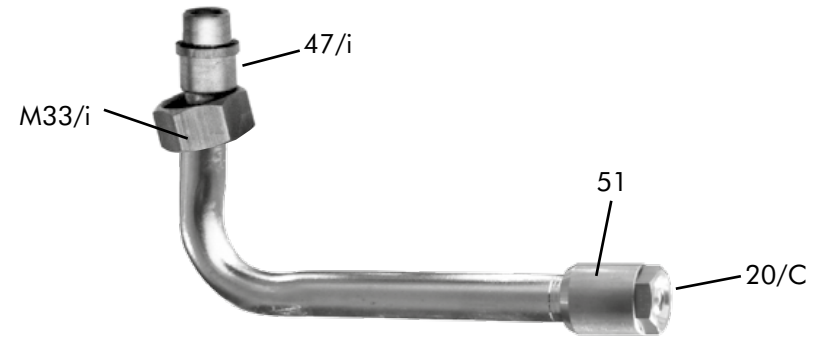
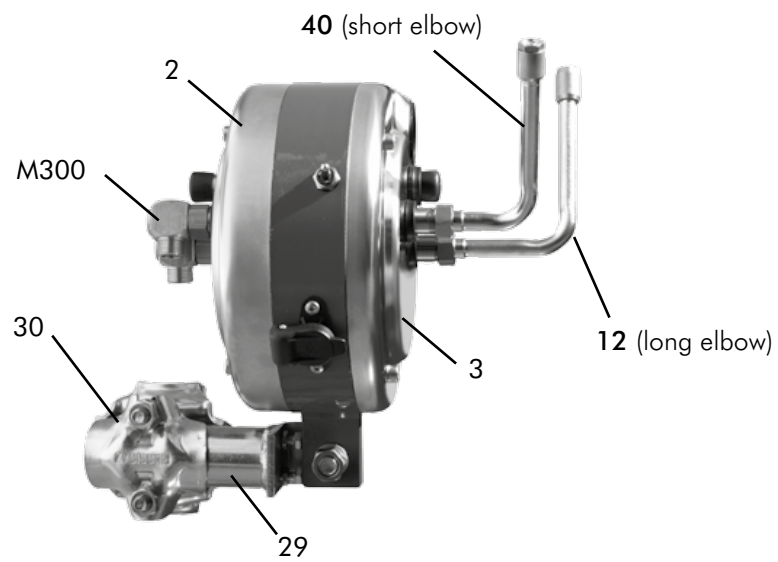
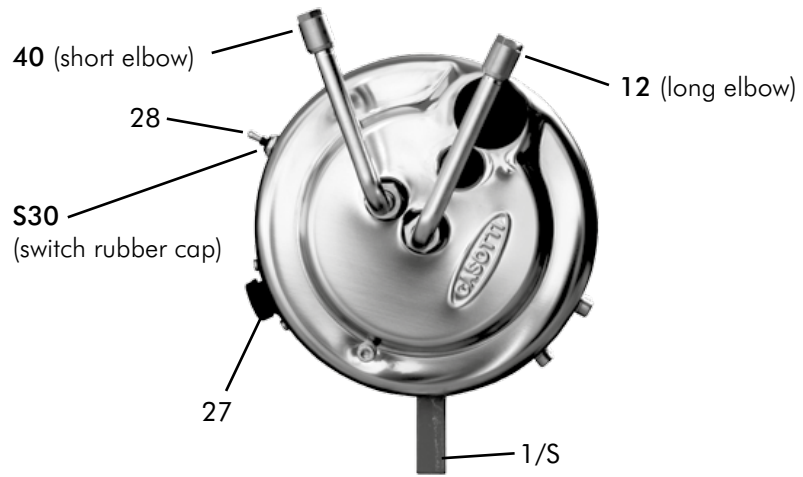
Periodically grease the internal part of the revolving union (it is better to use Teflon grease); to disassemble it, remove the snap ring placed on its top.



Catalogue

DUPIGET GREENHOUSE: components

CODE	DESCRIPTION
1/S	Machined casting SUPER
2	Upper cover
3	Lower cover
4	Regulation plug
12	1 nozzle elbow fitted with nozzle code 20/C
14+Z20	Central tube fitted with Z20 gear
14+Z40	Central tube fitted with Z40 gear
15S	Stainless steel adjustable lever
16	Starting motor crank
17	Lip seal
20/C	Round hole nozzle ceramic
21S	Stainless steel connecting rod
27	Double-pole current socket
28	2 speed switch
S30	Switch rubber cap
29	Support
30	Orthogonal joint
31	Double-pole current plug
40	Elbow fitted with nozzle cod. 20/C
42	Motor TGE-428 12V
42/24	Motor TGE-428 24V
47/i	Steel collet
51	Support for nozzle
58	Gear 55 cogs for motor TGE-428
M33/i	Steel nut
M300	Revolving union
91	Circlip





Conformity

It is hereby declared that the machine comes with the following documents:

- CE marking plate
- Integral version of the original use and maintenance manual
- Original of the declaration of conformity to the provisions of Machinery Directive 2006/42/CE.

The machine is constructed to be built in a plant or to be assembled with other machines to form a complex assembly featuring integral functioning. The machine cannot be commissioned until the plant it is built in and of which it will become a component is identified and conformity is declared in compliance with provisions of directive 2006/42/CE.

For the Reseller:

It is compulsory to deliver to the final user the "Use and Maintenance Manual" in its integral version and the original of the "Declaration of conformity".

EC Declaration of Conformity

We, the undersigned CASOTTI IRRORATORI di Casotti Elisa, one-man business
With registered office in Via Cerreto 10, 43035 Felino (Parma) Italy
hereby declare that the following machinery:

Equipment: Casotti Sprayer
Function: Distribution of phytosanitary products
Model:
Code:
Serial Number:
Year of construction:

Is in conformity with the applicable requirements of the Machinery Directive 2006/42/EC

Name and address of the person authorized to compile the Technical File:
Casotti Elisa, Via Cerreto 8/1, 43035 Felino (Parma) Italy

The signatory of this document is Mrs. Elisa Casotti, who is legally authorized to
represent Casotti Irroratori within the European Community.

Felino

Casotti Elisa

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What was still missing.

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