



# **ST104**

## **300L/400L-GEO**



**OPERATION AND  
MAINTENANCE INSTRUCTIONS**



ATV SPRAYER

ST104-300L/400L-GEO

MODEL : .....

SERIAL NO : .....

OPERATION AND  
MAINTENANCE INSTRUCTIONS

## INTRODUCTION



### Introduction

RB SPRAY TECH SDN BHD is a Malaysian owned company specializing in the supply of crop protection equipments to primary producers. A leader in the design of agricultural sprayers, the company was established in 1996 and has grown to become the largest manufacturer and supplier of crop protection equipments in Malaysia.

RB SPRAY TECH tractor mounted sprayers and associated equipments are designed and manufactured with high standard of performance and safety, incorporated with innovative features. To ensure continued efficient performance and safe operation, you need to read this manual thoroughly and fully familiarize yourself with all aspects of your sprayer's operation, maintenance and safety procedures.

Now that you're a proud owner of RB SPRAY TECH product, all our services and dealer support are available to you should you need them. We assure you of our best attention at all the times.

No liability can be accepted for any inaccuracies or omissions in this publication, although due care has been taken to make it as complete and accurate as possible.  
The information, illustrations and technical data were considered to be correct at the time of preparation.  
In accordance with our policy of continuous development RB SPRAY TECH reserves the right to make changes at any time without notice.



## **UPON GOOD RECEPTION**

On the reception of the machine, make sure that this product is in complete and good condition at every part. If there are any damaged parts found, kindly inform about the issue to the machine distributor with timely manner, or directly contact RB Spray Tech Sdn. Bhd. Upon reception of the machine, expressly verify the following conditions:

- The machine delivered is fully assembled, and that the equipments are fully comply with the requested configuration (this procedure is necessary, because for overall dimensions' requirements the machine is often partially disassembled during the transportation);
- The connections are correctly mounted;
- The cable clamps are correctly tightened, as well as all the fittings and connections;
- All the protections are both present and firmly fastened;

## **PUBLICATION IDENTIFICATION**

The "OPERATION AND MAINTENANCE INSTRUCTIONS" manual is an integrative part of the sprayers. It is identified by a Publication No. located on the frontispiece, and through which the document can be identified, traced and/or subsequently referred to. The information elements contained herein are updated as at the date of publication. RB Spray Tech Sdn. Bhd. reserves the right to modify its machines without notice, with the purpose of applying technical enhancements, and it declines all responsibility for possible omissions from the publication. All right reserved. No parts of this book may be reproduced or utilized in any form or by any means, electronic or mechanical, including photo copying, recording, or by any information storage and retrieval system, without premission in writing by RB Spray Tech Sdn. Bhd.

## **PURPOSE OF PUBLICATION**

All indications contained in this manual are aimed at the user of the sprayer. The duration of the machine and its operation, the operator's safety and the respect for the environment are dependent upon scrupulous observance of the stated norms. Before making use of the sprayer, the user must read, understand and abide by all regulations listed in this manual.

## **UPDATES**

Possible updates that RB Spray Tech Sdn. Bhd. will provide the owner of the sprayer will be accompanied by instructions to insert in this publication. Should the machine be sold, the owner must inform the new purchaser that he should notify RB Spray Tech Sdn. Bhd. of his address in order to receive possible future integrating issues and/or updates.



## ST104-300/400LITER-GEO

### USING THE MANUAL

Read every part of this manual, paying attention to the WARNING and DANGER indications both on the text and on the machine or on components. All operations suggested by the manual will have to be followed with the utmost care and only after having understood the negative consequences of improper usage. The following “symbols” are used within the text in order to highlight and visually identify the importance of the various types of information:



Indicates important additional information



Non observance can result in permanent damage to the sprayer.



Highlights possibly dangerous situations to people.

The manual, with relevant attachments and possible integrating issues, must be kept with the utmost care and must always be complete, integer and legible in every part. Should it be mislaid it is imperative to immediately request a duplicate from RB Spray Tech Sdn. Bhd. Should the decals originally applied on the machine be mislaid, damaged or become incomprehensible, they should be promptly replaced. For every type of distribution device (Head) delivered with the sprayer, a specific user and maintenance manual is attached. All the head manuals must always accompany the one of the machine.



- The manual must always be kept for the sprayer's whole operational life.
- Any modification received must be permanently inserted in this publication.
- The manual must be ceded with the sprayer should this be sold.

### GLOSSARY

#### TERMINOLOGY

The terms FRONT, REAR, RIGHT and LEFT utilised in this publication refer to the sprayer as seen by an operator from behind the operative unit along the drive line and facing it: the rear part of the machine is that closest to the operator, and is where the distribution device (Head) is mounted - and the front part is the one that gets attached to the tractor.



## ST104-300/400LITER-GEO

### ABBREVIATION

cm .....	centimetres
g .....	grams
h .....	hour
ha.....	hectare
ha/h .....	hectare per hour
l .....	litres
l/h .....	litres per hour
l/min .....	litres per minute
kg .....	kilogram
kg/cm2 .....	kilograms per square centimeter (atmosphere)
k m.....	kilometre
km/h .....	kilometres per hour
Lm.....	width in metres
m .....	metre
Mesh .....	N° of meshes per linear inch
Micron .....	1/1000 of millimetre
mm.....	millimetres
PPE.....	Personal Protective Equipment
PTO.....	power take-off
RPM .....	revs per minute
s .....	seconds

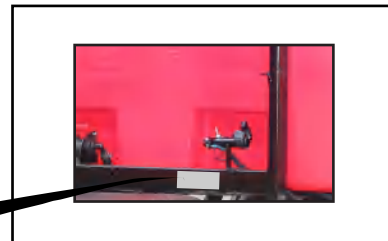


## ST104-300/400LITER-GEO

### MACHINE IDENTIFICATION



SERIAL NO :  
MODEL :  
DATE :



### TECHNICAL ASSISTANCE

RB Spraytech is at complete disposal of customers for any type of intervention. The names and addresses of its service network, both in Malaysia and foreign countries, can be requested from:

Head Office  
RB Spray Tech Sdn. Bhd. (627487-P)  
No.1, Jalan Ikan Mata Duyung, KS10,  
Kampung Nelayan, Telok Gong, 42000 Pelabuhan Klang,  
Selangor Darul Ehsan,  
Malaysia.

Tel : 603 3134 1402, 3134 1159

Fax : 603 3134 1195

E-mail : sales@rbspraytech.com

info@rbspraytech.com

### SAFETY NOTICES

#### GENERAL



The personnel appointed to the use of the machine must have acquired an exhaustive knowledge of the same one and of the dispositions contained inside this publication, be able to properly interpret the symbols of the adhesives applied on the machine, and, in addition, perfectly know the safety and the work hygienic rules in force in the country where the machine itself is to be used.

All the preparation, use, maintenance, moving and transporting operations must be carried out of the regulations contained in this publication.



IT IS FORBIDDEN TO UTILISE THE SPRAYER FOR PURPOSES OTHER THAN FOR ITS INTENDED USE, SINCE IT WAS MANUFACTURED ONLY FOR SPRAYING AGRICULTURAL CROPS WITH ANTI-PARASITIC PRODUCTS. Use the sprayer is allowed only during daylight: YOU MAY NOT USE IN NIGHTWORK. ANY USE OTHER THAN THOSE DESCRIBED IN THE USE PERMITTED IS CONSIDERED AS NOT CONFORMING AND THEREFORE IS NOT PERMITTED.



## ST104-300/400LITER-GEO

It is necessary to scrupulously abide by the following general norms:

- Check that the power of the tractor is compatible with the sprayer to be used;
- Verify that the maximum weight admitted on the three-point hoister of the tractor is compatible with the weights of the sprayer to be used;



**On the identification plate, the full-load weight (PESO T.) of the machine is indicated, measured WITHOUT the distribution device, and WITHOUT the accessories possibly installed.**

**In order to calculate the weight on the hoister in operative conditions (at full load), add to the weight indicated on the identification plate (PESO T.), the weight of the distribution device which is used (see “Distribution devices – Use instructions” manual), the weight of the installed accessories (Par. 4.4) and the 50% of the weight of the used cardan shaft (see the relevant specific manual).**

- Before utilisation, check the correct tightening and securing of the machine's various components, paying particular attention to the safety protections and to the moving parts;
- Only utilise protected cardan shafts provided with CE conformity certification.  
Carry out the assembly only if the drive outlets of both tractor and sprayer are equipped with the protection counter-guard;
- Check that the cardan shaft is blocked by the appropriate anti-rotation chains;
- Keep people and animals away from the machine before starting it up;
- Don't wear articles of clothing that might get caught in moving parts;
- Keep to a low speed while negotiating bumps or crossing ditches;
- During the use of the machine, the operator must have a sufficiently good visibility on the working areas, consequently it is recommended to keep both clean and efficient the cab windows and the rear-view mirrors;
- Always stop the tractor's engine and actuate the parking brake before carrying out any operation on the sprayer;
- Never leave the machine unguarded, when the key is inserted inside the tractor control panel;



- **All maintenance and repair operations must be carried out only after having rinsed the tank and flushed the system.**
- **Before operating within the tank it is necessary to wash it thoroughly with clean water.**
- **The application of paints and/or solvents, the washing of closed environments and machinery as well as the utilisation of the air flow for purposes other than those expressly concerning the spraying of agro-chemicals is not permitted.**
- **It is forbidden to enter the tank.**

## PRECAUTIONS AGAINST FIRE

Don't approach either flames or heat sources to the machine. The materials used for manufacturing the machine itself are widely made by oil derivatives: tanks, pipes, tyres, plastic components; besides, the presence of lubricants and of chemical product residuals make them potentially flammable.



- **It is forbidden to carry out welding works, if ammonium salts have been used.**
- **It is forbidden to use the machine within a potentially explosive environment.**



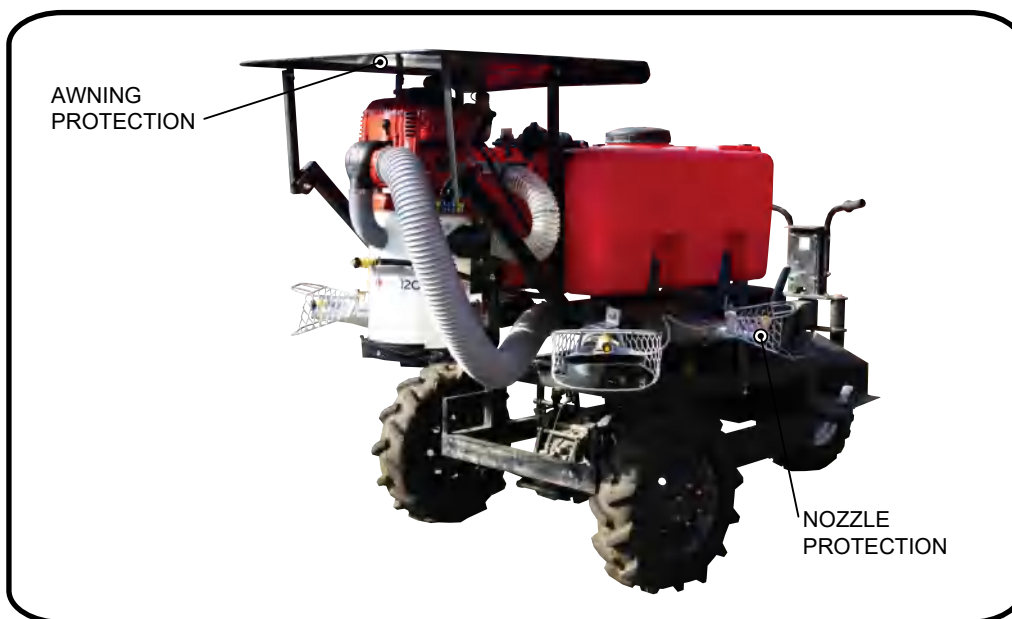
## SAFETY SYSTEMS

All machine moving parts are suitably protected by guards and highlighted through the use of warning decals.



- It is forbidden to use the machine with these guards removed.
- Before removing the protection, stop the tractor's engine and remove the key from the control panel.

The pictures illustrate the machine's guarded parts:



**THE OWNER AND/OR THE OPERATOR OF THE SPRAYER ARE NOT PERMITTED TO MODIFY THE STRUCTURE OR THE SPECIFIC OPERATION OF THE SPRAYER ITSELF. ANY REPAIRING INTERVENTION HAS TO BE CARRIED OUT EITHER AT THE DEALERS' OR AT THE RB SPRAYTECH WORKSHOPS, OTHERWISE ANY KIND OF WARRANTY IMMEDIATELY CEASES AND RB SPRAYTECH IS CLEARED OF ANY CONSEQUENT AND/OR IMPLIED RESPONSIBILITY.**

## HANDLING OF AGRO-CHEMICALS

The operator could become contaminated due to accidental spray, contact or inhalation of products or crop-spraying mixtures.

The environment could become polluted by mixture over-spills, puncturing of containers, uncontrolled storage of used and unwashed containers or spillage into waterworks.

In order to avoid these risks the preparation and filling operations must be carried out in suitably appointed and adequately equipped sites.



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To use pesticides (purchase, transport, loading, treatment planning, mixture preparation, field transfer, treatment performance, ending treatment liquid waste management, equipment rinsing and waste disposal) you must follow the country rules.



Absolutely adhere the rules on the label of the product used referring to the dose per hectare and to the compatibility of other products.

### STORAGE

Fixed / stationary: the site used must be well ventilated and secured by lockable doors in order to prevent even accidental access by children or any unauthorised person.

Mobile: the carrier equipment must be properly locked and kept under conditions whereby access by children or any unauthorised person can be prevented during the absence of the operator. All full or partially utilised containers must be secured against tipping, falling or breakage during transportation.

Both types of storage must:

- Have a suitable container for the storing of empty packaging materials should a specific storage area not be available;
- Have a clean water supply readily available for washing, by means of a specific container or through connection to the waterworks system;
- Have the use of fire extinguishers, should flammable products and substances be stored.

### SPECIFIC EQUIPMENT

The site at which the preparation and filling out will take place must provide for:

- All the equipment necessary to the precise measuring of both the water quantity and the dose of product to be mixed in the tank at every filling;
- All the equipment and means useful to the preparation of the mixture and for the cleaning of the operator in case of contamination;
- All tools necessary to facilitate the direct introduction of the agro-chemicals in the tank;
- The allocation of clothing and specific equipment in order to avoid contamination by contact or inhalation during the whole operative phase of the intervention;
- The availability of proper equipment able to stop the uncontrolled spilling and flowing of the mixture;
- A retaining valve on the feed pipe when the filling of the tank takes place directly from the waterworks system.

### DISPOSAL OF EMPTY CONTAINERS AND AGRO-CHEMICAL RESIDUES

Agro-chemicals are classified as 'special' waste and their disposal must take place separately from "urban" wastes.



Empty packaging and contaminated containers to be done away with cannot be dispersed, burned or buried.

The washing water for the cisterns and the tools utilised for the preparation of mixtures cannot be emptied on the ground, spilled into the sewage system or in waterways and rivers.

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The disposal of special wastes is regulated by specific norms. In order to perform this operation it is necessary to obtain the relevant information from the Local Offices specifically appointed to rule on this subject. The non compliance with these regulations can cause considerable damage to persons and animals as well as polluting the environment.

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

The use of phytosanitary products might imply a more or less high chemical risk for the workers on the basis of the toxicity and the dangerous properties of the phytosanitary product, of the level and duration of the exposure, of the absorption level through the respiratory tract, the skin, the mucosa and the ingestive tract, as well as the way and frequency of the use. The “personal protective equipment” (PPE) are equipment that all the users of the machine need to wear and hold in order to be protected by one or more risks that are capable to treat the security or healthy during the job.

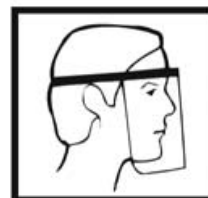
Regarding the basic requirements, PPE have to:

- be suitable to the risks that have to be prevented, without causing major risks themselves;
- be suitable to the existing conditions on the workplace;
- consider the ergonomic (easily adaptable, easy to wear and safe) or health needs for any users;
- be adaptable to the user according to his/her needs.

The PPE for the protection against dangerous chemical agents used for the operations that concern the exposition to phytosanitary products , pertains to the third class (3rd class – 0000).



Use solely PPE equipped with the needed CE mark, in the scrupulous respect of the regulations in force in the country where the machine is in use and adequate to the phytosanitary product used.



It's needed to use the PPE in each of the following working stage:

- tank filling and addition of the phytosanitary product;
- spraying,
- calibration of the sprayer,
- draining and cleaning of the tank,
- phytosanitary product replacement,
- servicing.

The following must be worn:

- for the protection of the body (gloves, suits, boots),
- for the protection of the respiratory tract, of the head and of the eyes (helmet, masks, filters, glasses, hoods and headdresses).



Filters must be replaced following the producers' instructions, and in any case:

- in case a bad smell is noticed;
- in case a resistance to the respiratory function is noticed;
- at least once a year in case of occasional use.

For ALL PPE in use, follow the use instruction declared by the PPE producers.



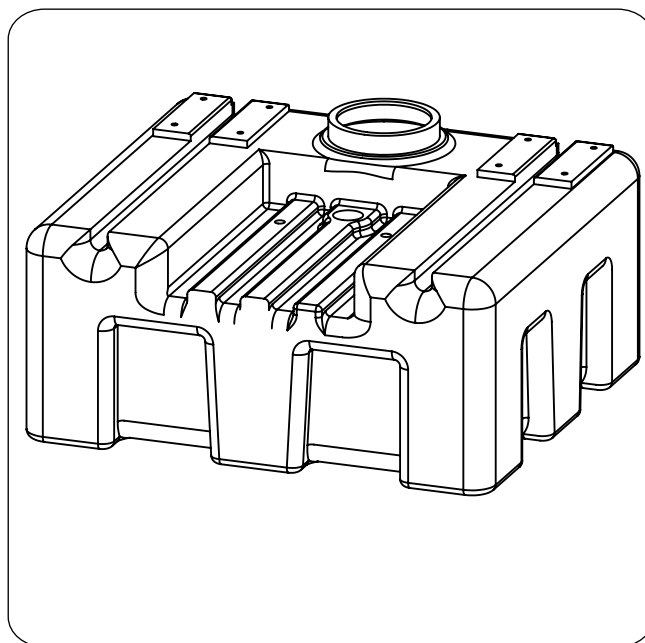
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## ST104-300/400LITER-GEO

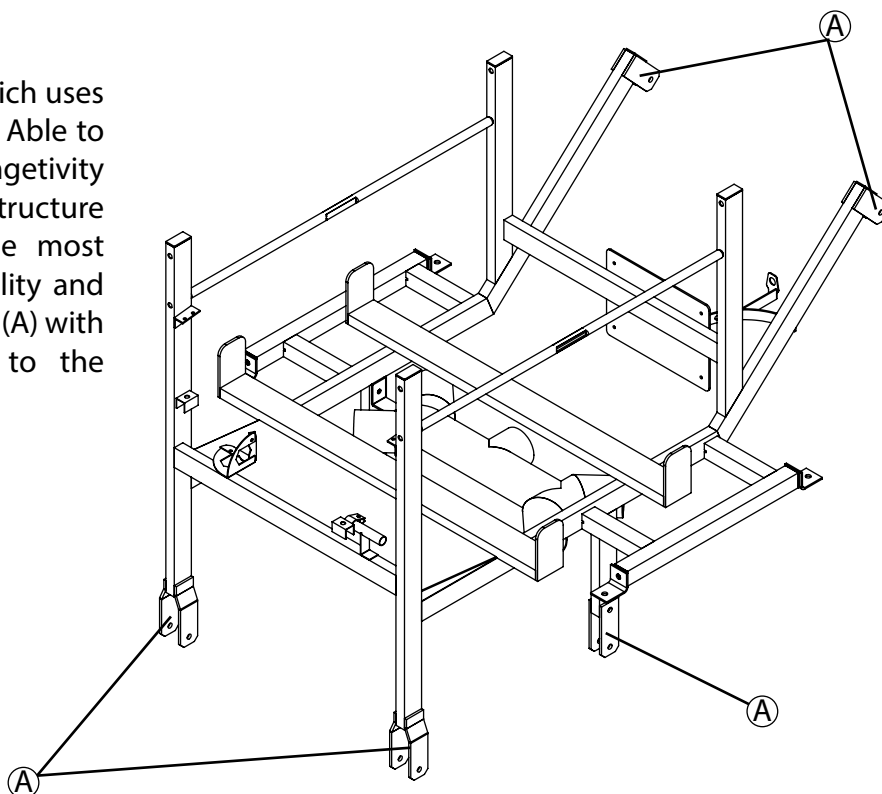
### TANK

Tank main filler with collapsible lid, for the filling with spraying products. Transparent level indicator external pipe with graduated scale.



### FRAME

This frame is custom made, which uses mild steel as the core material. Able to withstand high pressure for longevity in usage. The durable frame structure supports are mounted in the most effective position for the stability and strength. When this frame joint (A) with the machine it is coupled to the moving transport steadily.



## ST104-300/400LITER-GEO

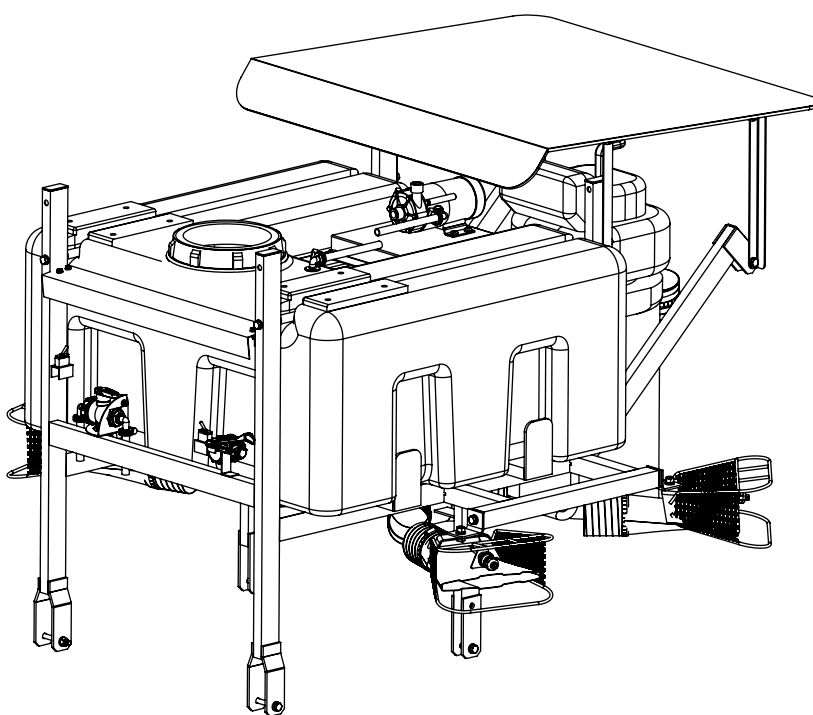
### TECHNICAL DATA

#### Sprayers dimensions and weight



On the identification plate, the full-load weight of the machine is indicated, measured WITHOUT the distribution device, and WITHOUT the accessories possibly installed.

In order to calculate the weight on the hoister in operative conditions (at full load), add to the weight indicated on the identification plate, the weight of the installed accessories, the weight of the distribution device which is used.



WIDTH : 1552.86 MM

HEIGHT : 1112.55 MM

LENGTH : 1780.12 MM

WEIGHT : 134kg

## ST104-300/400LITER-GEO

### FILLING AND MIXING



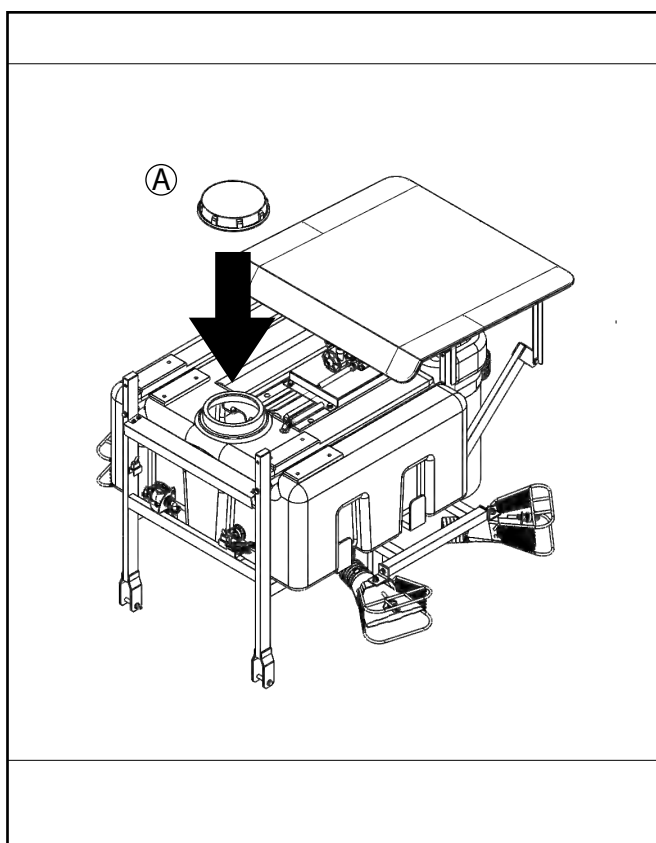
THE INLET OF THE FILLER PIPING MUST NEVER COME INTO CONTACT WITH THE ANTIPARASITIC MIXTURE: IT MUST ALWAYS BE KEPT AT A SAFE HEIGHT ABOVE THE TANK FILLER AND MUST BE EQUIPPED WITH A NON-RETURN VALVE.



MAKE SURE TO WEAR THE MOST SUITABLE PERSONAL PROTECTIVE EQUIPMENT (PPE) FOR SAFETY PURPOSES.



THE PUMP MUST NEVER RUN DRY.



### FILLING

the tank by collecting the water needed for the dilution of the phytosanitary products mixture from an external tank.

#### EXECUTION:

1. Prepare the water source to use either external tank, from a well or from a canal / channel.
2. Reach out the water source into the top opening as in (A) and fill the water.
3. Close the tank opening with the tanklid as the process no. 3 successfully takes place.



## **PRELIMINARY OPERATION TO TREATMENT**

- The operator must:
  - a. Be aware of the meteorological conditions forecast for all the time necessary for carrying out the treatment.
  - b. Check that the product is available in a quantity sufficient to complete the intervention.
  - c. Read the product's utilisation instructions carefully, in order to ascertain the usage conditions, the correct dosage and the expiration dates.
  - d. Make sure of the parameters necessary to the adjustments of the machine and determine the exact dose of product to be applied to every loading.



## ST104-300/400LITER-GEO

### PREPARATORY OPERATION TO TREATMENT



**THE FILLING MUST BE CARRIED OUT WITH THE MACHINE ON A FLAT SURFACE. BEFORE THE OPERATION, IN THE ALLOCATED AREA, THE DOSES OR MIXTURES TO BE POURED IN THE TANK MUST BE MADE READY.**

**Before starting the filling cycle, check:**

- THAT THE DELIVERY FILTER ARE CLEAN;**
- THE EFFICIENCY OF THE DISTRIBUTION DEVICE (HEAD);**
- THE CONDITIONS OF THE TANK LEVEL INDICATOR.**

• The operator must:

- a. Wear adequate protective clothing and accessories such as overalls, waterproof suits, gloves, glasses and masks to shield the operator from contamination by inhalation or contact with the products



- Anti-dust masks don't offer any protection against toxic vapours.**
- Avoid wearing loose clothes that might entangle with moving parts.**

- b. With the parameters defined during the preliminary operations, carry out the adjustments of the sprayer.
- c. Prepare the mixtures in a well ventilated area. When in the open, the presence of wind increases the danger of contamination.
- d. Precisely weigh the previously calculated doses of products to be mixed at every filling operation.
- e. Avoid handling products close to open flames, embers, incandescent bodies or in the presence of flammable substances.
- f. In order to obtain the correct volume dosage of agro-chemicals and fertiliser mixtures, the fertiliser must be first diluted.
- g. Wash and rinse the just emptied product containers with clean water – collect the washing water and pour it in the tank before carrying out the filling – place the empty packaging in the specific container
- h. Wash the equipment and tools utilised in the preparation and place them in the chemical products storage area.
- i. Always leave the area assigned to the loading and preparation of the mixtures in such condition as to avoid any possibility of contamination to persons or animals or of pollution to the environment.





## THE TREATMENT



**IT IS ADVISABLE TO BEGIN TREATMENT AT THE HEADLANDS.**



**WHEN THE TREATMENT IS OVER, OR IF THE SAME HAS TO BE TEMPORARILY INTERRUPTED, ALWAYS LET THE FAN STILL OPERATE FOR APPROXIMATELY 30 SECONDS AFTER CUTTING-OUT THE POWER SUPPLY (EITHER MANUAL DISTRIBUTOR P10 OR ELECTRICAL DISTRIBUTOR E11), IN ORDER TO FULLY ELIMINATE THE PRODUCT MIXTURE FROM THE DISTRIBUTING DEVICES, SO PREVENTING ANY POSSIBLE ANOMALOUS DRIPPING FROM TAKING PLACE.**

- The operator must:
  - a. Shake the mixture in the tank before starting the treatment, re-circulating it completely for as long as it takes to make it homogeneous.
  - b. Check the orientation of the distributors (hands, guns and/or fishtails) of the distribution device (sprayhead) in relation to the dimensions, the shape and the thickness of the vegetation to be treated.
  - c. Continue to shake the mixture until the treatment is resumed should the intervention momentarily be interrupted. If the utilisation is to be deferred, check that the filter cartridge is clean before resuming and agitate the mixture that has remained in the tank.
  - d. Ensure that the hand wash supplementary tank is filled with clean water after each filling operation.
  - e. Make use of individual protections identical to those envisaged for the preparation of mixtures if the tractor is not equipped with a pressurised cabin with aeration filters.
  - f. Wash immediately all the elements that might have become contaminated during the treatment, promptly remove the polluted garments and interrupt the work if these cannot be immediately replaced.
  - g. Keep to the preliminary operations already indicated (10.1.c), in case of wind conditions prevailing.
  - h. Stop the engine, remove the key from the tractor's control panel and lower the hoist during stoppages.
  - i. Pay particular attention to the treatment when close to boundaries and in proximity of dwellings, waterways, roads or public-usage paths.



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### END OF SEASONAL CYCLE

• The operator must:

- Take the utmost care in carrying out the operations envisaged at the end of the daily treatments: the cleaning of the main tank must be done at least twice. Check that no product residues are left in any part the tank.
- Execute the necessary maintenance and lubrication operations , then let the atomizer operate for some minutes.



The pump must never run dry



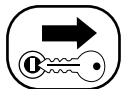
Avoid using anti-freeze solutions.

- Check the proper operation of all parts and of the machine structure. In case of faults being detected, request the intervention of one of our service points.
- Keep the machine on a plane surface with a suitable consistency, in a well ventilated place, sheltered from rain, icing and direct sun rays.



The machine must be stored in a secure or closed place, so as to prevent access to unauthorized personnel.

### TANK DRAINING



- Stop the tractor and remove the key from the control panel.
- Wear suitable protective clothing and accessories in order to avoid contamination by contact or inhalation of the mixture.
- Carry out the discharging in a suitable and properly geared area for the collection of the washing liquid.

#### EXECUTION:

- Turn the tractor engine off.
- Unscrew and remove the water drain plug (A).
- Let the water from the inside of the tank flow out until totally drained.
- Screw back the water drain plug (A).



(A)



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ST104-300/400LITER-GEO

## FAULT FINDINGS

**E. FAULT** Anomalous and continuous noisiness together with vibrations of the fan group.

1. CAUSE : Breaking of the fan shaft bearings.  
REMEDY : **Address to RB Spraytech Sdn. Bhd. point of 'Sale and Service'.**
2. CAUSE : Interference fan - case.  
REMEDY : **Address to RB Spraytech Sdn. Bhd. point of 'Sale and Service'.**

**F. FAULT** No spraying action delivered: totally.

1. CAUSE : Clogging up of the grill/filter on the pump, of the pump suction inside the tank or suction pipes of pump clogged up with deposits of hardened plant protection product.  
REMEDY : **Clean.**

**G. FAULT** No spraying action delivered: totally.

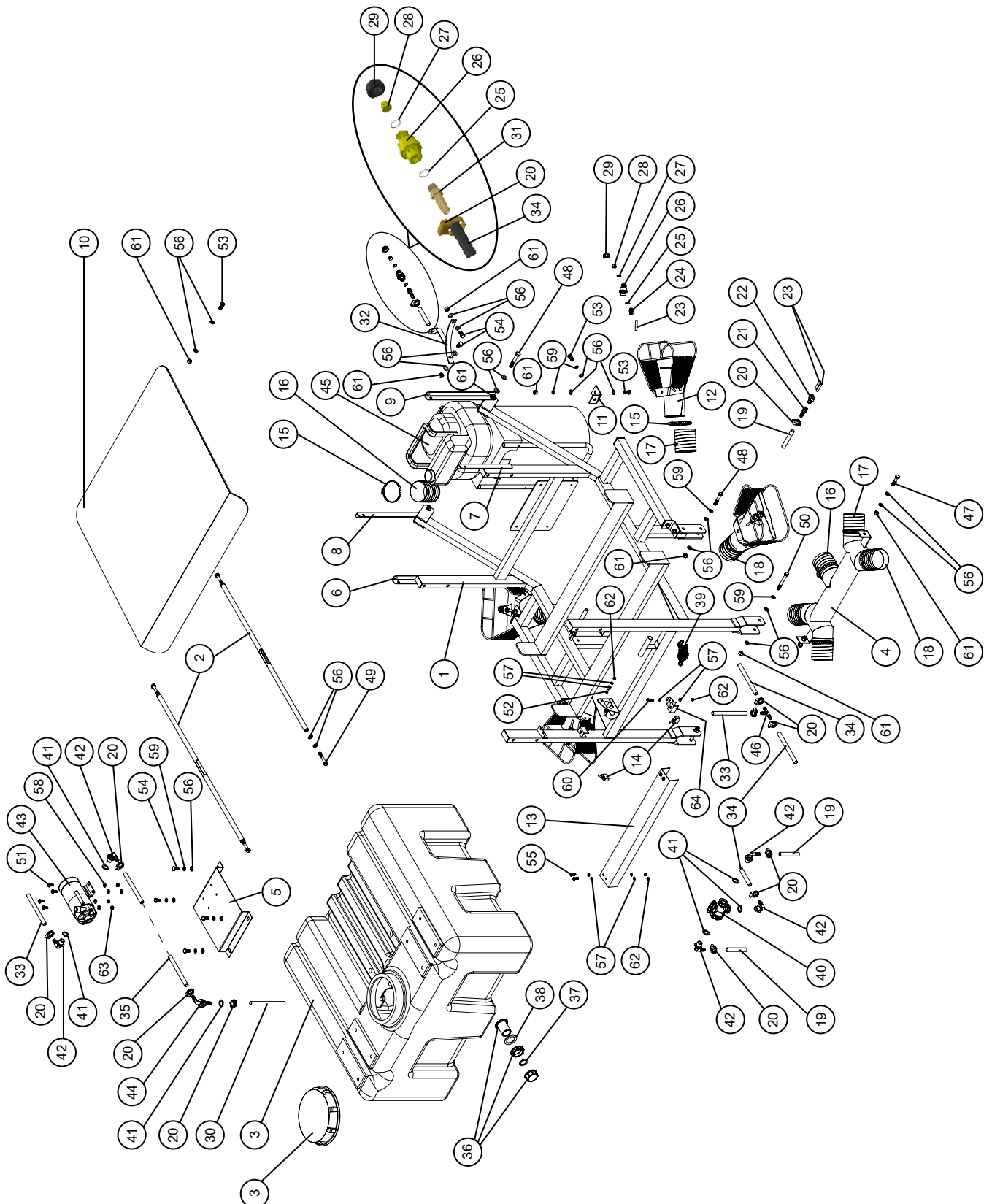
1. CAUSE : Pump defective (only in case total delivery missing).  
REMEDY : **Address to RB Spraytech Sdn. Bhd. point of 'Sale and Service'.**



THE CAUSES AND REMEDIES FOR THE FAULTS CONCERNING THE DELIVERY OF THE SPRAYING BY ONE OR MORE DIFFUSERS ARE INDICATED IN THE USE AND MAINTENANCE MANUAL OF EACH SPRAYHEAD.



ST104-300L/400L-GEO-V1200E SPRAYERS ASSEMBLY



- Mounted Sprayers

## SPARE PARTS LIST



ST104-300L/400L-GEO-V1200E

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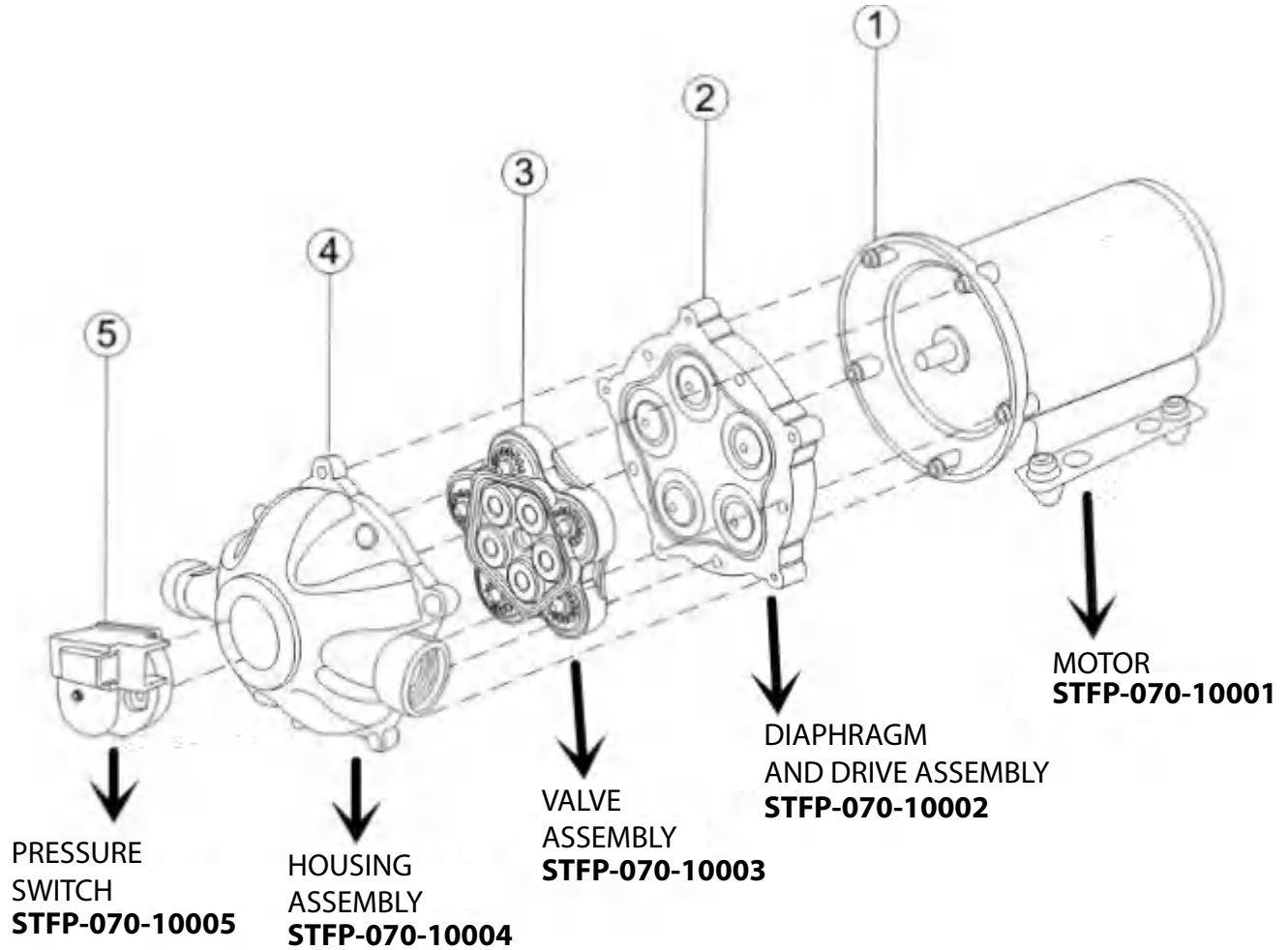
### ST104-300L/400L-GEO-V1200E SPRAYERS SPARE PART LIST

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	STST-398-10000	COMPLETE W.A ST104_300L/400L_UNIVERSAL_V1200	1
2	STST-398-10010	W.A AA PIPE 0.5inch STOPPER TANK	2
3	STSV-430-10300 STSV-430-10400	TANK 300L - SQUATPACK TANK 400L - SQUATPACK	1
4	STST-398-10041	W.A EXTENSION PIPE TO HAND AIR	1
5	STST-398-10058	PLATE BASE PUMP	1
6	STST-398-10063	ANGLE STAND BACK AWNING_SHORT 1	1
7	STST-398-10064	ANGLE STAND BACK AWNING_SHORT 2	1
8	STST-398-10065	ANGLE STAND BACK AWNING_LONG 1	1
9	STST-398-10066	ANGLE STAND BACK AWNING_LONG 2	1
10	STST-398-10073	W.A AWNING BACK	1
11	STST-326-10034	L HAND BLOWER SUPPORT	4
12	STST-398-10088	W.A HAND AIR_ST104	4
13	STJT-104-10023	COVER PVC FEEMA 75MM X 50MM	1
14	STQE-104-10022	TOGGLE SWITCH	2
15	301.078.101	HOSE CLIPS	10
16	204.100.1000	AIR HOSE CENTER TO V1200	1
17	204.88.9.0360	AIR HOSE CENTER TO HAND AIR	2
18	204.88.9.0190	AIR HOSE CENTER TO FRONT HAND AIR	2
19	202.013.2500	RUBBER HOSE	2
20	103.018.020	HOSE CLIPS	13
21	AAB88	BRASS HOSETAIL 1/2" F X 12MM	2
22	PWT8-04	PNEUMATIC FITTING 1/2" X 8MM X 8MM	2
23	208.008.0500	NYLON WATER HOSE	4
24	GPC-803	PNEUMATIC FITTING 3/8" X 8MM	4
25	STTK-011-10043	WASHER	5
26	STGV-221-10004	CF VALVE NOZZLE 3/8 21PSI	5
27	STTK-012-10010	WASHER	5
28	FRD110/0.80/3	LOW DRIFT YELLOW 110 NOZZLE	5
29	STTK-020-10003	SMV NOZZLE CAP 3/8	5
30	202.013.0400	RUBBER HOSE	1
31	AAA86	BRASS HOSETAIL 3/8" M X 12MM	1
32	STST-398-10085	W.A BACK NOZZLE BRACKET	1
33	202.013.2000	RUBBER HOSE	1
34	202.013.1000	RUBBER HOSE	2
35	202.013.0850	RUBBER HOSE	1
36	STAF-220-10059	COMPLETE TANK OUTLET	1
37	STAF-999-40015	GASKET	1
38	STAF-999-40005	WASHER	1
39	STSL-104-10003	SHIMATSU HAND THROTTLE	1
40	STAF-455-21112	BALL VALVE	1
41	STAF-999-40002	FLAT GASKET	6
42	STAF-113-12213	90 HOSETAIL 1/2" M D.13	5
43	STFP-070-10000	HIGH VOLUME DC SHURFLO PUMP	1
44	STAF-118-10213	SINGLE PIECE ELBOW	1
45	STCF-120-10120	CIFARELLI V1200 (VACUUM)	1
46	AA-E8	3WAY BARD 1/2"	1
47	109.10.050	HALF THREAD SCREW M10 X 50	2
48	109.10.060	HALF THREAD SCREW M10 X 60	4
49	109.10.065	HALF THREAD SCREW M10 X 65	4
50	109.10.090	HALF THREAD SCREW M10 X 90	2

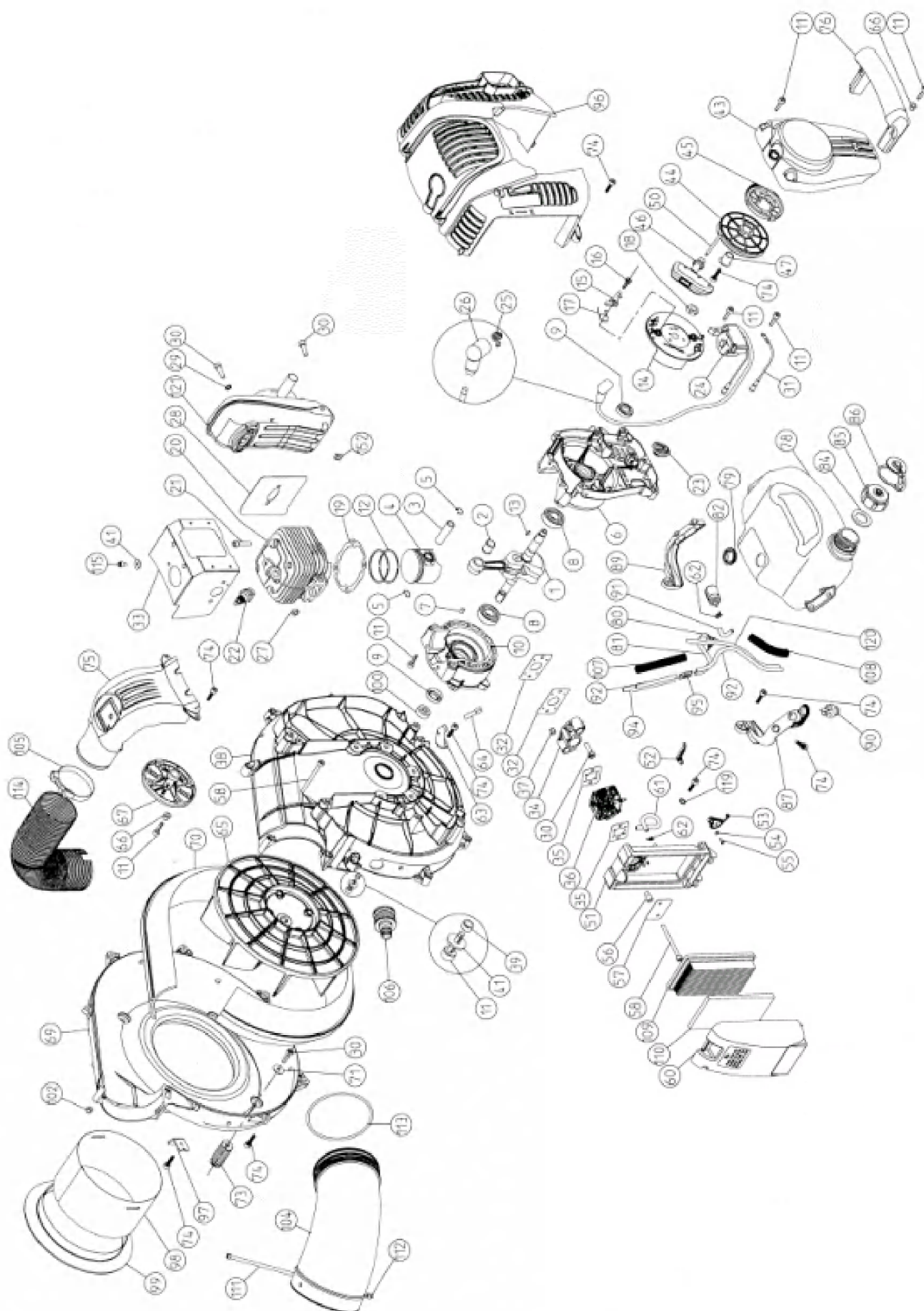
ITEM NO.	PART NUMBER	DESCRIPTION	QTY
51	102.08.020	ALLEN CAP SCREW M8 X 20	4
52	101.06.016	SCREW M6 X 16	2
53	101.10.025	SCREW M10 X 25	12
54	101.10.020	SCREW M10 X 20	6
55	101.06.020	SCREW M6 X 20	4
56	103.10.000	FLAT WASHER M10	52
57	103.06.000	FLAT WASHER M6	12
58	103.08.000	FLAT WASHER M8	4
59	105.10.000	SPRING WASHER M10	16
60	101.06.025	SCREW M6 X 25	1
61	106.10.000	NYLOC NUT M10	18
62	106.06.000	NYLOC NUT M6	7
63	106.08.000	NYLOC NUT M8	4
64	STST-398-10061	W.A BRACKET SWITCH HANDLE	1

## ST104-300/400LITER-GEO

### HIGH VOLUME DC SHURFLO PUMP ASSEMBLY



CIFARELLI V1200E SPARE PART







### CIFARELLI V1200E SPARE PART LIST

ITEM NO	PART NUMBER	DESCRIPTION	QTY	ITEM NO	PART NUMBER	DESCRIPTION	QTY
1	STCF-002-10013	CRANKSHAFT C7 METRIC THREAD	1	65	STCF-00G-10359	FAN V1200 WITH SPACERS	1
2	STCF-041-10001	GABBIA AD AGHI PER SPINOTTO C7	1	66	STCF-021-10106	DISTANZIALE NELLA VENTOLA PER MOZZO	6
3	STCF-003-10002	SPINOTTO C7	1	67	STCF-00G-10428	VENTILATOR'S HUB METRIC THREAD CPL	1
4	STCF-00G-10019	PISTONE + SEGMENTI E SPINOTTO C7	1	69	STCF-00G-10361	FAN COVER COUPLE V1200 CPL	1
5	STCF-003-10014	RING SEALING PLUG C7	2	70	STCF-011-10152	FAN COVER INSIDE PROFILE V1200	1
6	STCF-00G-10300	SEMICARTER COUPLE SERIE 1200 CPL	1	71	STCF-062-10015	FLAT WASHER D.6.4 x 18 x 2 ZINCATE	4
7	STCF-065-10007	PARALLEL PIN 5 X 10	2	73	STCF-012-10047	SPRING SILENT BLOCK	4
8	STCF-040-10001	CUSCINETTO 6202 C3	2	74	STCF-053-10070	SCREW TCEI 5X20 F. PLASTIC SPEC	25
9	STCF-070-10001	PARALIO SEMICARTER	2	75	STCF-011-10145	AIR MANIFOLD V1200	1
10	STCF-00G-10300	SEMICARTER COUPLE SERIE 1200 CPL	1	76	STCF-00G-10360	LEFT HAND HANDLE STARTER V1200+SPACERS	1
11	STCF-053-10071	SCREW TCEI 5X20	22	78	STCF-011-10150	FUEL TANK V1200 VACUUM	1
12	STCF-003-10003	SEGMENTO C7	2	79	STCF-083-10078	GROMMET FOR WELDED MIXTURE TANK	1
13	STCF-075-10001	LINGUETTA AMERICANA 10 x 3,7 x 3	1	80	STCF-083-10079	SUPPORT HOSE FOR MIXTURE 1200	1
14	STCF-00G-10075	ROTOR DE VOLANTA C7 COMPLETO	1	81	STCF-083-10084	SUCTION MIXTURE PIPE SUPPORT/CONNECTOR	1
15	STCF-008-10055	LEVER OF THE CATCH FOR ENGINE C7	2	82	STCF-006-10119	FILTRO ASPIR.MISC.A DOPPIA RETINA	1
16	STCF-053-10008	SELF-DRILL SCREW W/TRILOB SECTION F/CATCH	2	84	STCF-083-10057	GASKET FOR VALVE BODY UNDERCAP	1
17	STCF-008-10056	CATCH SPRING	2	85	STCF-00G-10355	FUEL CAP WITH VALVE CPL	1
18	STCF-047-10002	DADO BASSO 10 x 1,25 ZINCATO	1	86	STCF-021-10177	HOOK FUEL CAP	1
19	STCF-004-10002	CYLINDER GASKET	1	87	STCF-011-10148	RIGHT SUPPORT FUEL TANK V1200	1
20	STCF-00G-10310	C7 KIT INT. PULSE CYLINDER+CPL PISTON	1	89	STCF-011-10149	LEFT SUPPORT FUEL TANK V1200	1
21	STCF-050-10060	SCREW TCEI M6x25 BOTTOM NOTC.10.9 + GLUE	4	90	STCF-083-10045	WALBRO CARBURETTOR AIR PURGE	1
22	STCF-030-10063	CANDELA C3/C7 (RCJ6Y)	1	91	STCF-083-10083	PIPE FOR FUEL SUCTION FILTER/SUPPORT	1
23	STCF-012-10049	CABLE GUIDE RUBBER M1200	1	92	STCF-083-10064	PIPE	2
24	STCF-030-10101	ELECTRONIC COIL C7 SELET + WIRE FOR STOP	1	94	STCF-083-10068	SUCTION MIXTURE PIPE	1
25	STCF-099-10249	SPRING+PIPET KIT	1	95	STCF-083-10059	MULTI-CONNECTOR FOR FUEL TUBES	1
26	STCF-099-10249	SPRING+PIPET KIT	1	96	STCF-012-10050	ENGINE COVER M1200	1
27	STCF-046-10007	NUT MEDIUM M6 GALVANIZED	2	97	STCF-011-10137	BRACKET FOR SUCTION PIPE V1200	2
28	STCF-005-10034	GUARNIZ SCAR.C7C/SCHERMO[0504800 no ASP]	1	98	STCF-011-10136	SUCTION TUBE CONVEYOR V1200	1
29	STCF-063-10004	CASING GROUND CABLE>SHORT HANDLE	2	99	STCF-011-10128	WASHER	1
30	STCF-050-10005	GASKET CYLINDER/CARBURETOR M1200	9	100	STCF-021-10182	SPACER BETWEEN THE HUB AND FAN 1200	1
31	STCF-030-10053	COOLING CARTER CYLINDER V1200+GASKETS	1	102	STCF-048-10005	LOW SELF-LOCKING NUT M5	2
32	STCF-004-10051	WASHER LOCK-RITE M6	2	104	STCF-011-10264	AIR OUTLET ELBOW D.100 CPL V1200	1
33	STCF-00G-10386	SCREW TCEI M6 X 20 INOX	1	105	STCF-069-10024	CLAMP D. 66	1
34	STCF-00G-10292	HDA CARBURETOR FLANGE WITH NUTS	1	106	STCF-011-10185	THREADED TAP CONNECTOR V1200	1
35	STCF-004-10050	SUCTION GASKET F. HDA CARBURETTOR	2	107	STCF-083-10069	MIXTURE PIPES PROT. SHEATH L85	1
36	STCF-006-10134	WALBRO HDA M1200 CARBURETTOR	1	108	STCF-083-10070	MIXTURE PIPES PROT. SHEATH L70	1
37	STCF-048-10002	STOP NUT M5	2	109	STCF-006-10097	FILTRO ARIA IN CARTA	1
38	STCF-00G-10361	FAN COVER COUPLE V1200 cpl	1	110	STCF-006-10100	PRE FILTRO ARIA IN CARTA	1
39	STCF-021-10107	DISTANZIALE PER COPRIVENTOLA IN PLASTICA	5	111	STCF-050-10066	SCREW TCEI M5 x 110	2
41	STCF-062-10004	WASHER D.5 X 15 X 1,5 ZINCATE	6	112	STCF-048-10018	NUT M5 BLIND WITH SPHERICAL SHELL	2
43	STCF-00G-10301	RECOIL STARTER BOX C7 1200	1	113	STCF-073-10024	RING OR 4387	1
44	STCF-008-10049	RECOIL STARTER PULLEY M1200	1	114	STCF-011-10222	SMOOTH COOLING PIPE V1200	1
45	STCF-008-10051	SPRING F.RECOIL STARTER CONTAINER M1200	1	115	STCF-050-10054	SCREW TCEI M5 x 8	1
46	STCF-008-10054	CUSHIONED STARTER HANDLE CPL ANM	1	119	STCF-063-10001	RONDELLA DENTELLATA D.6	1
47	STCF-021-10187	AUTOENVELOPING WRENCH 1200	1	120	STCF-083-10085	RETURN FUEL TUBE PURGE/TANK	1
50	STCF-008-10045	STARTING ROPE	1	121	STCF-00G-10445	V1200 C7Eur1 ENGIN SILENCER WITH GASKET	1
51	STCF-00G-10318	SILENCED BODY WITH AIR LEVER	1	152	STCF-048-10017	SQUARE NUT M6	1
52	STCF-00G-10348	KIT LEVER AND THROTTLE OPEN./CLOSING AIR	1	999	STCF-00G-10303	C7 RECOIL STARTER BOX 1200 CPL	1
53	STCF-00G-10348	KIT LEVER AND THROTTLE OPEN./CLOSING AIR	1	999	STCF-00G-10363	FUEL TANK COMPLETE V1200 CIFARELLI CPL	1
54	STCF-060-10015	FLAT WASHER D.3	1	999	STCF-00G-10358	GASKETS C7 ENGINE SERIES V1200	1
55	STCF-053-10024	SCREW ATF TIC 2,9 X 9,5	1	999	STCF-00G-10449	FAN V1200 WITH METRIC THREAD HUB CPL	1
56	STCF-006-10106	SPACER SILENCER 97 X PLATE	2				
57	STCF-006-10107	PIASTRINA FILTRO 97 CARAB. MEMBRANA	1				
58	STCF-053-10074	METRICAL SCREW TCEI M5X65	4				
60	STCF-006-10135	FILTER CAP FOR MIST-SPRAYER M1200	1				
61	STCF-083-10050	CONNECTOR/CARB. ASPIRATION FUEL TUBE	1				
62	STCF-069-10034	BAND D.7	2				
63	STCF-00G-10349	SUPP. THREAD GAS SERIE1200 WITH REGIST.	1				
64	STCF-00G-10349	SUPP. THREAD GAS SERIE1200 WITH REGIST.	1				





## ST104-300/400LITER-GEO

### WARRANTY

RB SPRAY TECH welcomes any warranty repair and apologises for any inconvenience caused. See the next page for the statement of the warranty coverage offered by RB SPRAY TECH. The following information will assist your understanding of warranty procedures.

Any authorised RB SPRAY TECH dealer service outlet can perform warranty repairs, however, we recommend that such repairs be carried out by the Dealer from whom you bought the machine.

Most warranty repairs are handled routinely, but sometimes requests for repairs cannot be accepted under warranty. Normal wear and tear is not covered by warranty nor does warranty apply if a machine fails prematurely and that failure can be attributed to abuse or neglect.

Whilst RB SPRAY TECH will abide by its warranty policy under all genuine circumstances, we must emphasise that such can only apply when our equipment has been used in applications for which it was designed and manufactured and that a reasonable degree of care and common sense has been exercised by the operator.

#### Warranty Repair Site

The warranty provides for repairs to be carried out at the servicing dealer's normal place of business. An owner may elect to have repairs carried out at his own residence but, whilst RB SPRAY TECH will accept the actual repair cost of the failed component(s), the travelling costs will not be covered under warranty.

#### Items Not Covered By Warranty

The warranty does not allow for the cost of the following items. These are the responsibility of the owner.

- 1) Labour to travel to and from a broken-down machine or for any distance charges.
- 2) Labour premiums that might apply for any repairs that are made outside the dealer's normal business hours.
- 3) Transportation costs of the machine to and from the service outlet.
- 4) Freight costs to get parts to and from the service outlet.
- 5) Telephone and fax calls made by the owner in connection with the warranty repair.

### TO PASS SAFETY INFORMATION

The buyer is responsible towards the final user for the safety information shown on the sale documentation, concerning use limit, performances and product features.

### VALIDITY AND ACCEPTANCE

The guarantee is valid if the CERTIFICATE OF GUARANTEE is sent, to RB Spraytech Sdn. Bhd., with every part of it filled in,



- Mounted Sprayers



www.rbspraytech.com

ST104-300/400LITER-GEO

## CERTIFICATE OF WARRANTY

The warranty will not be considered valid if this coupon, with every part of it filled in, is not mailed to the following address: Head Office RB Spray Tech Sdn. Bhd. (627487-P), No.1, Jalan Ikan Mata Duyung, KS10, Kampung Nelayan, Telok Gong, 42000 Pelabuhan Klang, Selangor Darul Ehsan, Malaysia., or sent by fax to the following number: +603 3134 1194.

Last name, Name or

NAME OF THE FIRM .....

ADDRESS .....

Place ..... PROVINCE ..... ZIP .....

e.mail (\*) ..... telephone (\*) .....

Date of purchase ..... INVOICE N. ....

MACHINE MOD. .... MATRICULATION N. ....

SPRAYHEAD MOD. ....

Dealer's stamp (compulsory)

(\*) NOT COMPULSORY DATA

## PRIVACY

Consent for the personal data processing— **PROTECTION OF THE PRIVACY .**

I authorize you to do the processing of my personal data in observance of the law above mentioned, for the indicated purposes, and so that they can be communication to the subjects for the declared purposes.

Date ..... Signature .....