

SWISSMEX®

OPERATOR'S MANUAL MANUAL DE OPERADOR

**2 YEAR
WARRANTY**

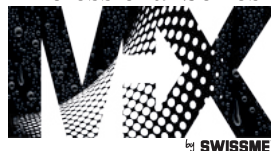
SEE INSIDE FOR DETAILS

**2 AÑOS
GARANTÍA**

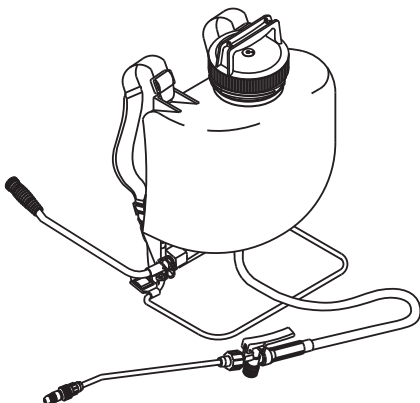
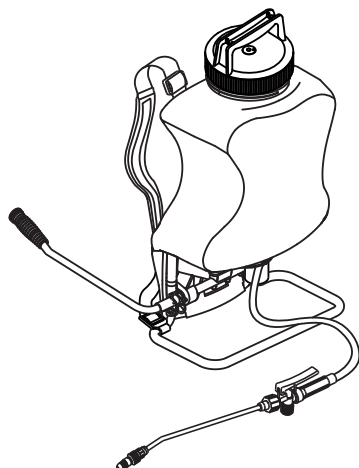
CONSULTE EL
MANUAL EN EL INTERIOR

BACK PACK SPRAYER PULVERIZADOR DE MOCHILA

Professional Series



01 02 03 09



4, 3 US GAL SPRAYER PULVERIZADOR 11 Y 15 LITROS

- Models MX01- MX02 - MX03 - MX09 are very innovative model with a piston, diaphragm or pisto-diaphragm system. With this sprayer you may apply liquid products as: insecticides, herbicides, fertilizers, etc. in an easy, practical and safe way.
- Son un modelo de sistema de pistón-diafragma, diafragma o pistón . Con estos equipos usted puede aplicar productos líquidos como: insecticidas, herbicidas, fertilizantes, etc. de forma práctica y segura.

MODELS / MODELOS

503125 (MX01), 502185 (MX02)

501185 (MX09), 530185 (MX03)

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1. INTRODUCTION

Thank you for buying a Swissmex equipment, we guarantee that the product you have acquired was made with an unbeatable quality, because it was developed with state of the art technology following all quality standards required. This equipment was carefully designed and built with the purpose of providing the maximum performance, economy and ease of operation. It is very important that the operator knows all the information contained in this manual, read it before operate it, follow the recommendations step by step and keep it at hand to consult it when necessary.



This manual contains important safety warnings: read it carefully, and watch for any possible accident. Preserve all the equipment stickers and if necessary replace them.

Backpack sprayers have been designed to apply different liquid products like herbicides, fungicides, insecticides, etc. Swissmex backpack sprayers are practical and light. Models MX01-MX02-MX03-MX09 have a pumping system (piston, piston-diaphragm or diaphragm) that produces good pressure. It has a back support and padded straps, spray gun with filter, a big tank opening with strainer and handle to transport and facilitate emptying it.



NOTE: Remember that inadequate application of agrichemicals may be harmful to man, environment and crops.

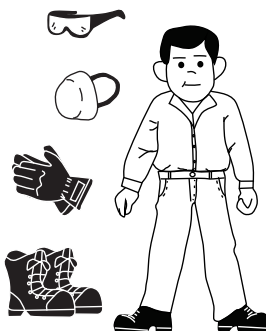
2. SAFETY INFORMATION

For your own safety and the safety of those around you please use the protective equipment suggested below when operating your sprayer:

2.1 PROTECTION EQUIPMENT

Personal protection equipment needed:

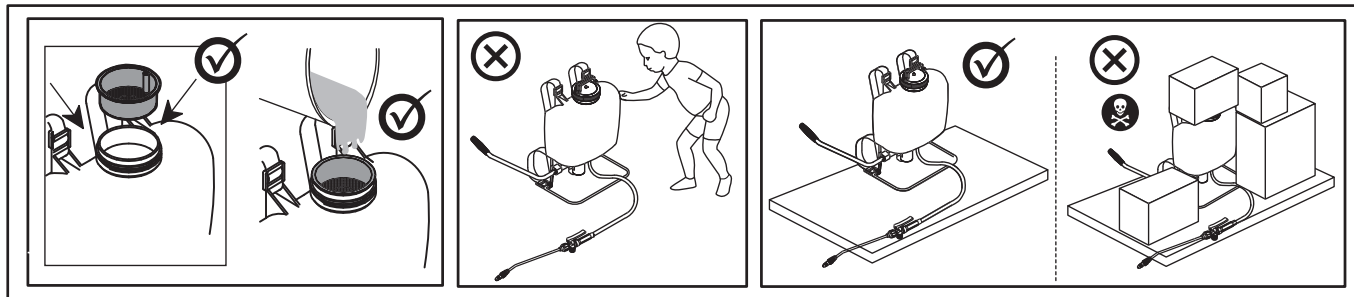
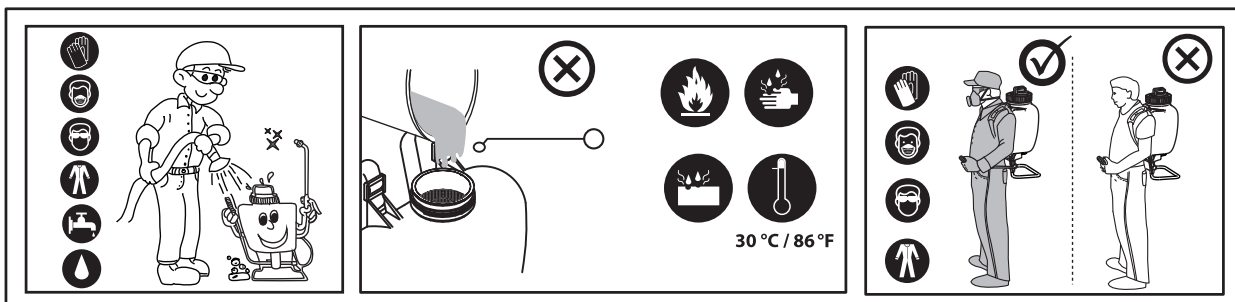
- Protective gloves
- Eye protection
- Enclosed shoes
- Overall / Safety Clothes
- Mask



Important: this sprayer is designed to be used with chemicals and products in concentrations not higher than a 5% than marked, that are compatible with the materials of this unit, using products that are not compatible with this materials can cause damage in the user and the unit. Warranty will apply only when the chemicals and products used with this unit are compatible with it.

2.2 SAFETY MEASURES

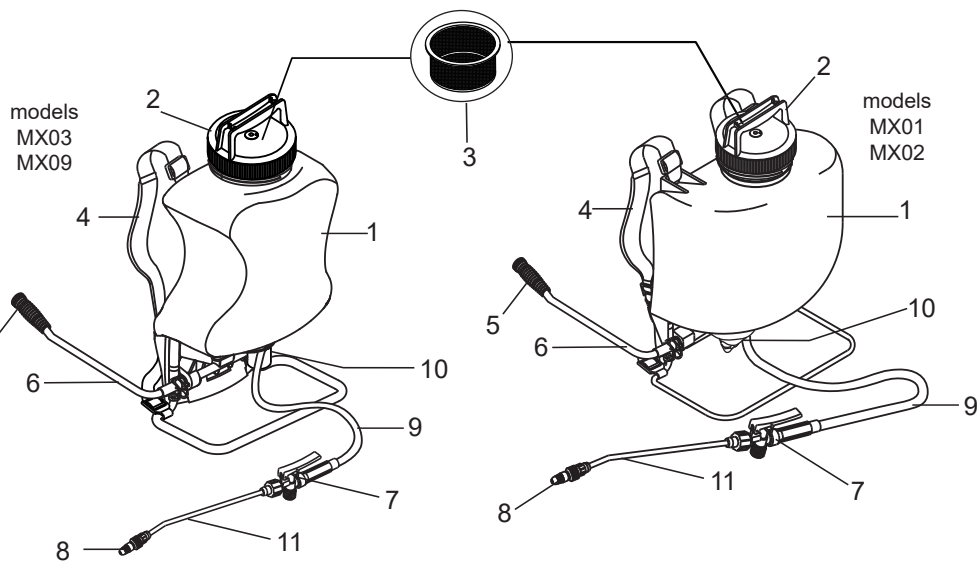
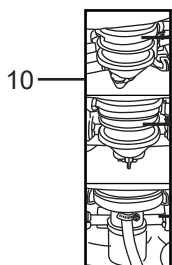
- Read carefully the entire owner's manual before filling, using or cleaning the sprayer.
- Do not leave the sprayer in reach of children or persons not qualified to handle it properly.
- Do not modify your equipment; it may compromise your equipment and put into risk third party safety. Any modifications or adaptation is under your own risk and it voids the warranty.
- Keep your equipment in good condition and in a safe place. Always wash and store the sprayer without pressure
- Read and follow instructions of chemical supplier.
- Wear always the personal protective equipment advised above, whenever using, filling or cleaning the sprayer.
- Keep connections well tightened to prevent leaks.
- Never fill the sprayer with hot liquids. Max. 30°C = 85°F.
- Do not use your sprayer to apply caustic, corrosive or flammable solutions.



3. GENERAL INFORMATION

3.1 MAIN COMPONENTS

1. Tank
2. Tank lid
3. Strainer
4. Adjustable carrying straps
5. Ergonomic grip
6. Pump handle
7. Shut-off valve with filter
8. Adjustable plastic nozzle
9. Hose
10. Pump system
11. Spray wand



3.2 TECHNICAL DATA

ESPECIFICACIONES				
Model	503125 -MX 01	502185 - MX 02	501185 - MX09	530185 - MX 03
Tank capacity	15.0 L / 4.0 US gal			11.0 L / 3 US gal
Filling port	14.2cm / 5.6"			14.2cm / 5.6"
Carrying Straps	Cushioned with belt			Cushioned with belt
Pumping system	Piston-Diaphragm	Diaphragm	Piston	Piston
Piston Sleeve	1.8" / 45 mm	N/A	1.8" / 45 mm	
Hose	fiber vinil reinforced 3/8" ID			
Shut-Off valve	Professional with filter			
Spray wand	20.5"/52 cm fibber glass			
Nozzle	Plastic adjustable			
Discharge at 3 bar/min	21 US gal / 800 ml			
Work pressure	4 - 6 bar / 58 – 87 psi			
Net Weight	4.7 kg / 10.3 Lbs		4.3 kg / 9.4 Lbs	4.2 kg / 9.2 Lbs
Weight with box	5.4 kg / 12 Lbs		5 kg / 11 Lbs	4.2 kg / 9.3 lbs
Dimentions	53 x 36 x 21 cm - 20 x 14 x 8"			15.7 x 9 x 20.6" / 40 x 23 x 52.5 cm

3.3 ASSEMBLY

3.3.1 Parts you will receive:

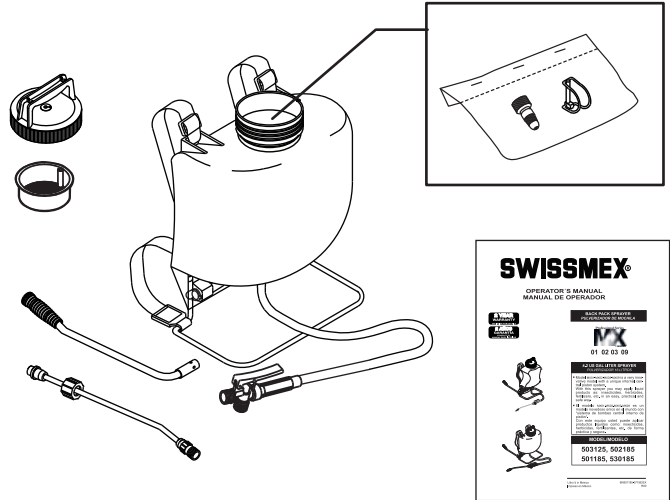
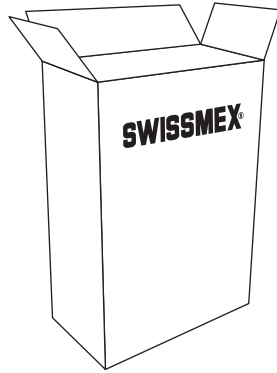
- 1 Pump handle
- 1 Spray wand
- 1 Tank lid
- 1 Owner's manual

Inside the tank you will find:

- 1 Strainer

And a plastic bag with:

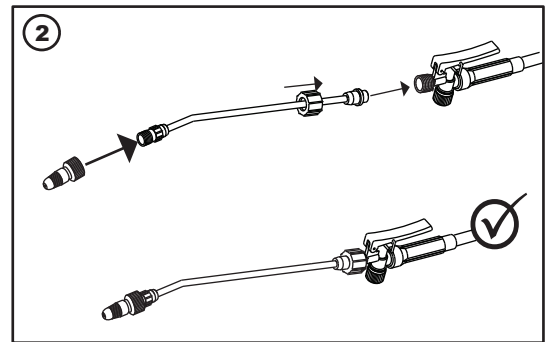
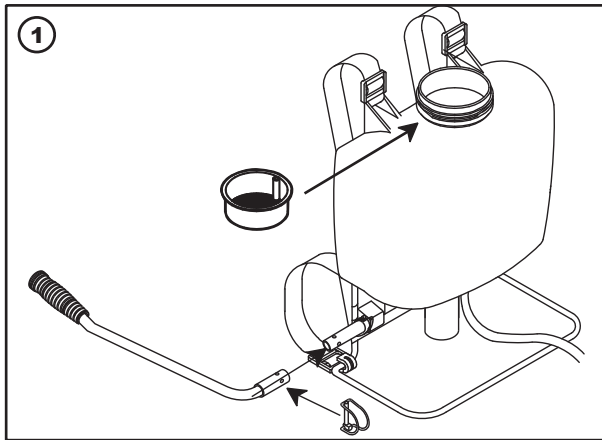
- 1 Adjustable nozzle
- 1 Lock pin



3.3.2 How to assemble your sprayer:

Following is explained how to assemble your sprayer, read carefully the text. The number at the beginning of the line corresponds to the graphic.

1. Take out all the parts from the box and from the tank, your sprayer is almost assembled, take the pump handle and install it on the axis in the bottom, fix it with the locking pin; take the strainer and put it on the mouth of the tank, then put on the cap.
2. Put the adjustable nozzle on the spray wand and then put the spray wand on the shut-off valve (screw in). Your sprayer is ready for use.



4. OPERATION

- Always use the strainer when filling the tank up with liquid.
- Mix the solution in a separate container, following the supplier directions on the box.
- Pour pre-mixed solution into sprayer and cap.
- Place the sprayer on your back and pressurize tank by pumping 25 times approx.
- You will need to pump once each 3 or 4 seconds to maintain the desired spraying pressure.
- For a continuous spraying, fix the shut-off valve lever with the lever lock.
- Move the nozzle cap to change the spraying pattern.

NOTE:

To ensure good performance use original "SWISSMEX-RAPID" spare parts

5. MAINTENANCE

Since the sprayer needs little maintenance, if you follow the steps mentioned in this manual its lifespan will be very long. Do not keep the sprayer with pressure after finishing your spraying job, release the pressure through the nozzle depressing the trigger, then take the cap and strainer out and pour the remaining solution. Now rinse system with fresh water as follows:

- Pour approximately 1/2 gallon of fresh water in the tank, pressurize and flush, the pumping system by pressing trigger at least 2 minutes, then drain all remaining water.
- Carrying straps are made of non-absorbent materials, nevertheless in case of solution spillage, wash them with fresh water to eliminate all risk of skin irritation.

- A unit that has been used with herbicides should never be used to spray insecticides, unless the sprayer has been properly cleaned and all other chemicals neutralized. Failure to do this could cause you to kill plants that have been sprayed.
- Always follow manufacturer's instructions of the chemicals in use to avoid accidents and take maximum advantage of the product. Store your sprayer clean, empty and dry in a place protected from sunlight.

NOTE: To keep your sprayer in good conditions of use is necessary to maintain oiled the following parts: Nozzle O-rings ,gun o-rings , piston ring , gasket, breather valve and cap gasket.

5.1 MAINTENANCE GUIDE

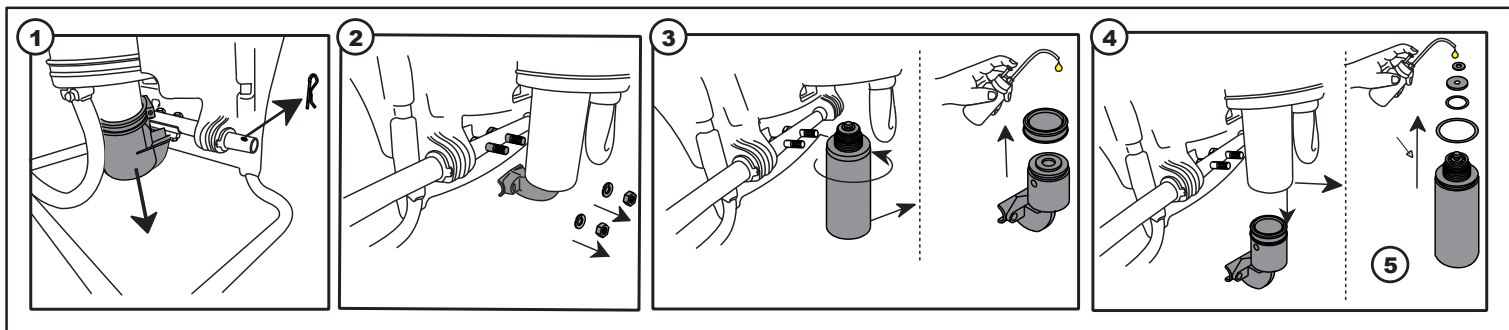
Below are instructions for maintaining your spray:

Rinse with clean water externally and internally, to avoid risk of contamination. When doing maintenance we recommend to replace all orings and gaskets that is composed by:

- Piston ring (model 501185 and 530185)
- Shut-off valve gaskets
- Nozzle gaskets
- Breather check
- Cap gasket.

Instructions for disassembling piston system models:

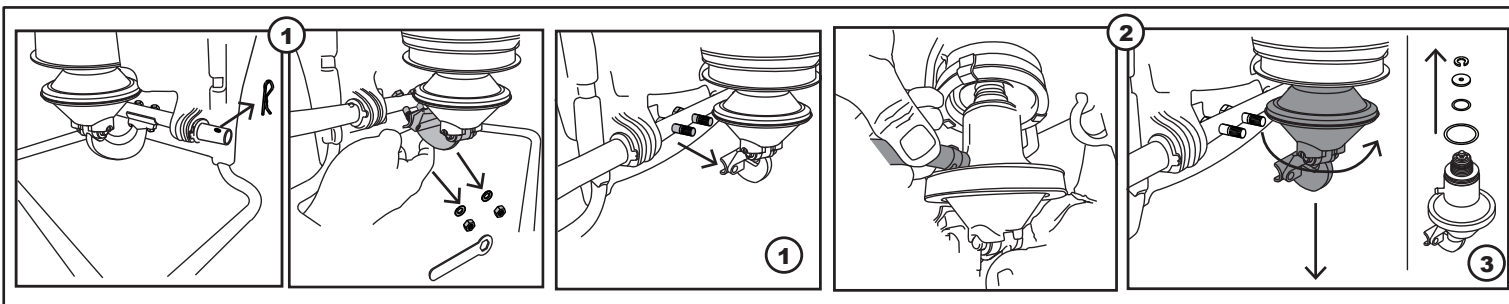
1. Take the pin out from the lower axis of the pump handle and take out the plastic protection of the pumping system.
2. Take out the bolts of the rocker arm assy.
3. Pull the rocker arm assy. down to take the piston out.
4. Unscrew the cylinder.
5. Replace the seals and gaskets and the ring and assembly back doing this steps backwards again.



Instructions for disassembling diaphragm module system models:

1. Take the pin out from the lower axis of the pump handle and take out the nuts and bolts that hold the rocker arm assy.
2. If you want to check or change the checks, disconnect the hose and unbolt the module, change the checks making sure that the outside clamp is aligned with the chamber piece. This is the right position for the module windows to match the exit of the chamber.
3. Put the rocker arm assy. back on the module and the plastic protection.

NOTE: We recommend to change the module when you have a problem.



6. TROUBLE SHOOTING GUIDE

PROBLEM	CAUSE	SOLUTION
The shut-off valve does not close after releasing the trigger.	The plunger O-rings are worn out or swollen.	Replace them and lubricate the plunger with the new O-rings.
The shut-off valve does not function when depressing the trigger.	The filter or nozzle are blocked.	Take the filter out of the shut-off valve, clean or replace it and clean the nozzle.
Moving the pump handle becomes very difficult.	The internal part of the cylinder are dirty, so the piston ring can not run smoothly, or the piston ring grew because the material used to apply is very aggressive.	Open the cylinder according to the method mentioned in point 5.1 to check if its dirty and clean, compare the piston ring to a new one to see if it grew, if it did change immediately.
The tank collapses "it shrinks".	The cap gasket is not letting air through.	Clean the gasket and lubricate, also clean the cap and assembly again.
While working there is leakage between the cap and the tank .	The cap gasket is not lubricated.	Lubricate or replace according to the diagnosis.
While working there is some leakage from the cylinder.	The cylinder can be worn out from the inside or the piston rings damaged	Replace.
While working, the sprayer does not generate pressure.	The gaskets are dirty, dry or blocked.	Replace.
While pressuring the tank with the lever, when you stop it goes up and stays there.	The gasket that is inside the cylinder is blocked or stayed open.	Inspect the cylinder, clean, adjust and put back in place.
While working, the pressure lasts very little time.	The pressure chamber is filled with water because the gaskets are not working.	Take the water out of the sprayer and replace the gaskets.
The sprayer builds low or no pressure.	Check valve in the pump have become stuck and/or there is an air lock in the unit.	Release pressure by keeping flow control open and pumping several times. Disassemble and force seals open by hand if step one does not work.
The sprayer does not hold pressure or tank leaks at pump connection.	The O-rings and check valve need replacing, the pressure chamber has expanded or the check valves are clogged with debris.	Replace O-rings and seals, replace pressure chamber if there is no improvement, lubricate and reassemble.
Tank leaks at pump and pressure chamber connection.	The hose clamp is loose or the O-ring is damaged.	Tighten the hose clamp, use part No. E501-021 to replace the O-ring.
Module is leaking.	The Sealed module piston-diaphragm pump is damaged.	Replace module with part No. E505-155-C.
Tank leaks at hose connection.	Clamp is loose or damaged.	Replace clamp.

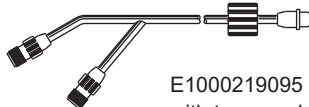
7. ACCESSORIES

SPRAY LANCES:

Brass spray lances (without spray tip, nut and gasket)

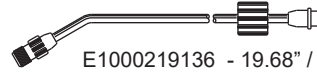


E1000803085 - 19.68" / 50 cm
E1000803400 - 15.74" / 40 cm



E1000219095
with two nozzles,
length 19.368" / 50 cm

FVR spray lances (without spray tip, nut and gasket)



E1000219136 - 19.68" / 50 cm
E1000219142 - 39.37" / 1.0 m
E1000219143 - 59.0" / 1.50 m
E1000219146 - 78.7" / 2.0 m

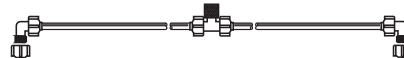
EXTENSION LANCE:

Brass extensions (with connector)



E1000219500 - 26.3" / 67 cm
E1000219510 - 39.37" / 1.0 m
E1000219520 - 47.24" / 1.20 m

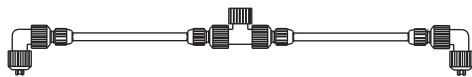
2-nozzle brass extensions



E1999219098 - 15.74" / 40 cm

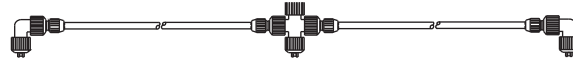
EXTENSION LANCE:

2-nozzle FVR extensions



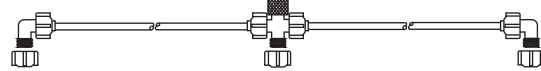
E1000219140 - 19.6" / 50 cm
E1000219147 - 39.37" / 20 cm
E1000219148 - 28.7" / 73 cm

3-nozzle FVR extensions



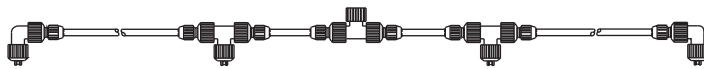
E1000219138 - 39.37" - de 1 m
E1000219151 - 59.0 de 1.5 m

3-nozzle brass extensions



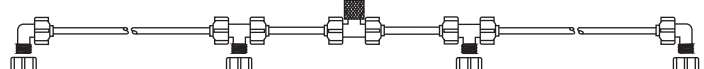
E1000219420- 39.37 - 1.0 m

4-nozzle FVR extension



E1000219213 - 39.0" / 1.5 m

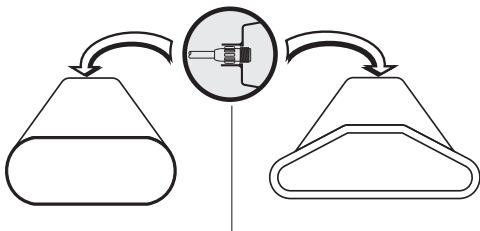
4-nozzle brass extension



E1000219097 - 59.0" / 1.5 m

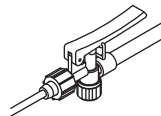
SCREEN SHIELDS

E1000219099 - 15.74" / 40 cm
E1000219117 - 8.6" / 22 cm



SHUT-OFFS

Shut-offs without grip



E1000803073

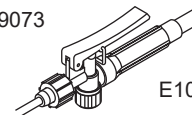
Shut-offs complete with filter and filter housing



E1000809073

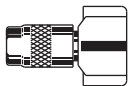


E1000808073



E1000807073

COMPLETE NOZZLES



E1000803092



E1000219610



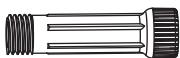
E1000219710



For more technical information please look into our Nozzle Chart at www.swissmex.com

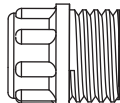
MORE ACCESSORIES

Filter housing



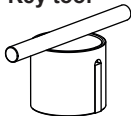
E1000803602

Extension adapter



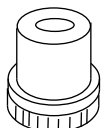
E1000219555

Key tool

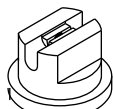


E1000219003

SPRAY TIPS



E2002219013



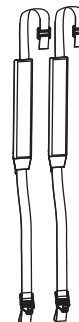
E2888219006

CARRYING STRAPS

E1000080034
E1000501034
E1000501134



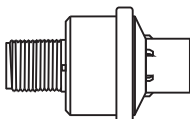
E1000501230



E1000501336

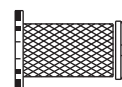


PRESSURE REGULATORS



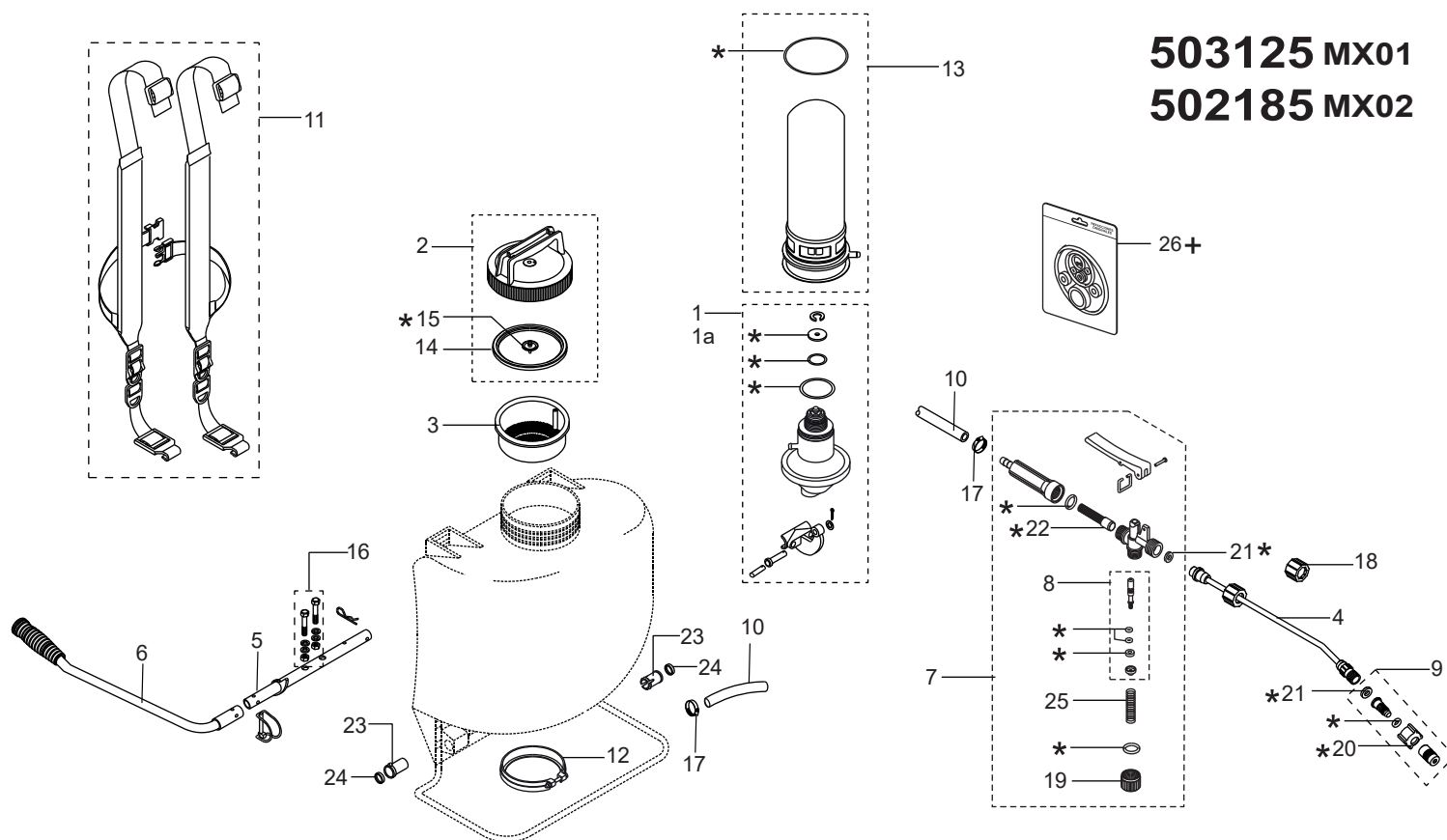
E1016219002
E1888219001
E1016219001
E1016219003

FILTERS



E2888219011
E2002219026
E2002219027
E2888219012
E2998219028

8. SPARE PARTS LIST



A Spare parts and consumables always available.

Part No.	Code	Description	Qty.
2	E1000501101	TANK LID	1
14	E1000501002	TANK LID GASKET	10
15	E1000501020	BREATHER CHECK	20
18	E1000803059	NUT	10
19	E1000803064	CAP	1
20	E1000803090	NUT	50

MODELS 503125, 502185

+26 E1000502200 SEAL KIT

FILTER	1	GASKET (PLUNGER)	1
ORING (PUMP MODULE)	1	GASKET (NOZZLE)	
ORING (CILINDER)	1	GASKET (BREATHER CHECK)	1
ORING (PLUNGER)	2	WASHER	1
ORING (NUT)	2	NUT	1
ORING (CILINDER)	1		
ORING (NOZZLE)	1		

NOTE: + It is not included in the equipment

B Medium-use parts, available at discretion

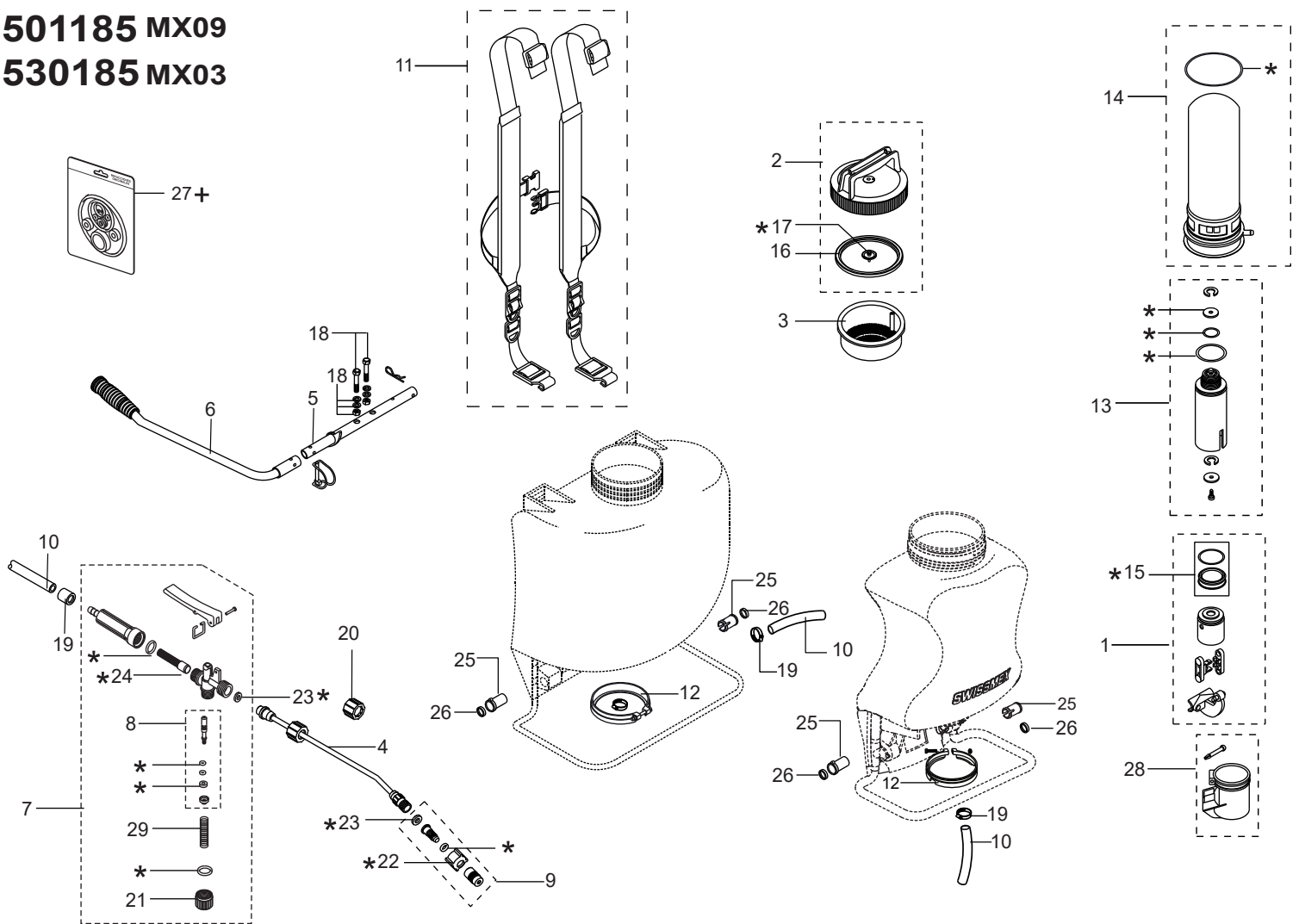
Part No.	Code	Description	Qty.
1	E1000505155	PUMP MODULE (model 503125)	1
1a	E1000502024	PUMP MODULE (model 502185)	1
3	E1000501004	STRAINER	1
4	E1000803219	SPRAY LANCE	1
5	E1000501392	PUMP SHAFT	1
6	E1000501394	PUMP HANDLE	1
7	E1000807075	SHUT OFF	1
8	E1000803167	PLUNGER	1
9	E1000803262	ADJUSTABLE PLASTIC NOZZLE	5
10	E1000803177	HOSE	1
11	E1000428034	CARRYING STRAPS	1
12	E1000476010	CLAMP	5
13	E1000425100	PRESSURE CHAMBER	1
16	E1000501045	BOLT AND NUT	10
17	E1000501082	CLAMP	50
21	E1000803215	NOZZLE GASKET	10
22	E1000807074	FILTER	10
23	E1000501206	PUMP SHAFT BUSHING	10
24	E1000501010	WASHER	10
25	E1000803067	PLUNGER SPRING	10
26	E1000502200	SEAL KIT (not included)	1

NOTE: + Not supplied with unit, see sheet of accessories.

NOTE: In the interest of continued technologic progress specifications are subject to change without notice.

501185 MX09

530185 MX03



A Spare parts and consumables always available.

Part No.	Code	Description	Qty.
2	E1000501101	TANK LID	1
14	E1000501019	PRESSURE TANK	1
15	E1000501054	PISTON	20
16	E1000501002	GASKET FOR TANK LID	10
17	E1000501020	BREATHER CHECK	20
20	E1000803059	NUT	10
21	E1000803064	CAP	1
22	E1000803090	NUT	50

MODELS 501185, 530185

+27 E1000501204 SEAL KIT

PISTON WITH SPRING	1	JN70 345 GASKET	1
2-153 ORING	1	N - ORING	1
2-224 ORING	1	N - GASKET	2
3-911 ORING	1	BREATHER CHECK	1
2-115 N - ORING	2	NUT	1
MV 2 X 5 .V - ORING	2	VALVE PLATE	2
		FILTER	1

NOTE: + it is not included in the equipment.

B Spare parts and consumables always available.

Part No.	Code	Description	Qty.
1	E1000501031	PISTON WITH PUMP LEVER ASSY	1
3	E1000501004	STRAINER	1
4	E1000803219	SPRAY LANCE	1
5	E1000501392	PUMP SHAFT	1
6	E1000501394	PUMP HANDLE	1
7	E1000807075	VALVE BODY	1
8	E1000803167	PLUNGER ASSY	1
9	E1000803262	ADJUSTABLE PLASTIC NOZZLE	5
10	E1000803177	HOSE	1
11	E1000428034	CARRYING STRAP	1
12	E1000476008	CLAMP	5
13	E1000501401	CILINDER	1
18	E1000501045	BOLT AND NUT	10
19	E1000501082	CLAMP	50
23	E1000803215	GASKET	10
24	E1000807074	FILTER	10
25	E1000501206	PUMP SHAFT BUSHING	10
26	E1000501010	WASHER	10
27	E1000501204	SEAL KIT (not included)	1
28	E1000501041	DUST CAP ASSY	5
29	E1000803067	PLUNGER SPRING	10

NOTE: + Not supplied with unit, see sheet of accessories.

NOTE: In the interest of continued technologic progress specifications are subject to change without notice.

9. STORAGE

Always store the sprayer clean and empty in a dry place protected from the sun.

10. WARRANTY

SWISSMEX®

Any claim made under this warranty must adhere to the Warranty Policy described below:

The warranty will be granted by SWISSMEX RAPID SA DE CV when the product presents manufacturing, assembly or material defects and this has been established after conclusive analysis at Swissmex plant (Lagos de Moreno, Jalisco, Mexico). The warranty consists of replacement of damaged parts or replacement of damaged equipment depending on conclusions of the analysis of the claim. This warranty does not include labor installation costs or shipping costs.

The warranty of your product can be PREMIUM, MEDIUM or BASIC, depending on which category your equipment belongs to. You can check this on the Operator's Manual and our website at www.swissmex.com.

The applicable warranty period can be:

Advanced Line = 3 years
Professional Line = 2 years
Heavy duty = 1 year

THIS WARRANTY WILL BE INVALID UNDER THE FOLLOWING CIRCUMSTANCES:

1. When the product presents faults due to abuse, misuse or inadequate maintenance, lack of proper cleaning and rinsing according to the instructions contained in the Owner's manual.
2. For the purpose of this warranty the use of any chemical solution listed as dangerous or different from those recommended in the Operator's Manual will be considered as misuse.
3. When the product has undergone modifications or adaptations by unauthorized persons or by the use of spare parts that have not been provided by SWISSMEX-RAPID.
4. When the product has been damaged as a result of natural disasters.
5. When the fault is caused by normal wear of the parts due to use.

SWISSMEX-RAPID is not responsible for indirect or consequential damages arising from the use or operation of the product, damages resulting in personal injury, economic loss, loss of property, loss of income or profits or costs of removal, installation or reinstallation.

SWISSMEX-RAPID, makes no other express warranty with the exception of the one quoted here. This warranty gives you specific legal rights and you may have other rights that vary from country to country.

To make this warranty valid, contact your dealer and present proof of purchase.

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