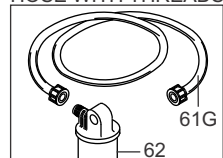
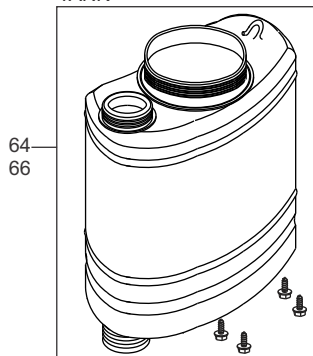
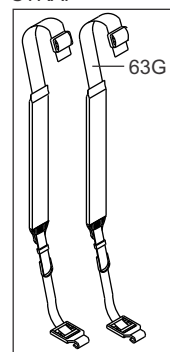


**FACTORY-INSTALLED UPGRADE OPTIONS**

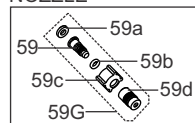
Part	Code	Description	Part	Code	Description
58G	E219-236-C	Telescopic spray lance ass'y	62	E081-125	Pressure chamber
59	E803-092	Nozzle body	65	E807-073	Valve body
59a	E803-114	Gasket - N	65a	E807-175	Filter housing
59b	E803-083	O'ring	65b	E803-060	O'ring
59c	E803-090	Nozzle nut (2pcs)	65c	E807-074	Filter insert
59d	E803-087	Nozzle cap	65d	E803-114	Gasket - N
59G	E803-092-C	Nozzle body ass'y	65e	E803-068	Oring - V (2pcs)
60a	E219-134	Hi-volume nozzle gasket	65f	E803-061	Pin gasket - V
60b	E219-133	Hi-volume nozzle cap	65g	E803-065	Metal suport
60G	E219-610-C	Hi-volume nozzle 11/16" thread aluminum	65h	E803-067	Plunger spring
61G	E807-181-C	Hose with thread ass'y	65i	E803-064	Cap
63G	E501-230-C	Padded carrying strap ass'y	65G	E807-175-C	Heavy duty shut-off valve ass'y
64	E189-505	Yellow tank	65G1	E803-072-C	Valve lever ass'y
66	E189-105	Blue tank	65G2	E803-061-C	Plunger ass'y

**HOSE WITH THREADS**


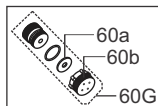
"C" &amp; "P" GRUP

**TANK**

**PADDLED CARRYING STRAP**


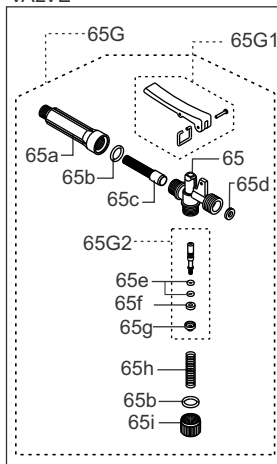
"C" &amp; "P" GRUP

**ADJUSTABLE BRASS NOZZLE**


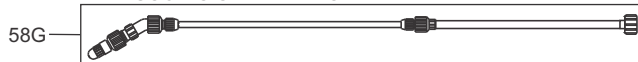
"E" &amp; "P" GRUP

**HI-VOLUME NOZZLE**


"E" &amp; "P" GRUP

**HEAVY DUTY SHUT-OFF VALVE**


"E" &amp; "P" GRUP

**TELESCOPIC SPRAY LANCE**

**NOTE:**

Please note that marked "=" have standard ORANGE color. Unless a parts order states otherwise they will be supplied in this standard color.

For practical time-saving accessories, special nozzle tips etc. please refer to spec sheet "OPTIONAL SWISSMEX-RAPID ACCESSORIES".

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

**SWISSMEX-RAPID S.A. DE C.V.**

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# Operating hints Agricultural Knapsack Sprayer Model 189

**Dear Customer:**

You have purchased one of the best knapsack sprayers on the market today. The Safety Hints from the label on your sprayer are repeated here for your protection. We urge you to read and observe them.

**FOR YOUR SAFETY AND COMFORT:**

- Before using, filling or cleaning any sprayer, read all parts of the operating hints.
- Make sure to set up the sprayer exactly as described in printed operating hints, on reminder tags and/or stickers.
- Wear protective clothing, respirator, gloves, eye protection, etc., whenever using, filling or cleaning the sprayer.
- Periodically re-grease the lid gasket, lid vent and piston sleeve where applicable.
- To ensure good performance keep lid vent free of obstruction. Keep connections well tightened.
- Service and replace worn parts as required. Make sure the hose loops freely without kinking.
- Read and follow all instructions of chemical suppliers.
- Do not mix chemical formula inside the sprayer. Use separate container and fill the sprayer from there. Else -as when applying liquid fertilizers- add these after the water.
- Always sift formula through a strainer. If there is none under the lid, use a screened funnel.
- Never fill the sprayer with hot liquids. Max. 30°C = 85°F.
- This sprayer is made for agrichemicals in their recommended water or oil solutions. Do not use caustic, corrosive or flammable solutions.
- Before cleaning or servicing the sprayer allow all pressure to scape. Do not store or transport the sprayer under pressure.
- Unless spraying is to be resumed within hours, drain chemical formula (dispose of it in proper fashion) after use and wash the sprayer -including hose, lance and shut-off valve- with plenty of fresh water.
- Never store formula in a sprayer for more than a few hours.
- Use the sprayer only for jobs for which it was designed. If in doubt, ask your dealer.
- Do not leave any sprayer in reach of children or persons not qualified to use it in correct fashion.
- When not in use -and especially for prolonged storage- keep your sprayer in a protected place away from direct solar heat.

**ASSEMBLY**

- On opening the shipping box locate the following parts:
  - 1 Plastic bag containing 3 "C"-shaped locking pins, 1 "R" locking pin and 4 metal washers
  - 1 Nozzle assembly
  - 1 Pump handle
  - 1 Spray lance
  - 1 Agitator
  - 1 Pump connecting rod
  - 1 Spray hose and shut-off valve
- Place the sprayer upright on a table or other raised surface.
- Insert the top end of the pump con rod (larger side) into the eye on the pump while placing one washer on each side of the eye. Then secure the C-shaped locking pin making sure it fits on the space exactly (the groove).
- Tilt the tank back, logo facing up.
- With the handle pointing downward, insert the pump shaft into the opening in the tank base. As the shaft is pushed forward insert the free end of the con rod through the hole of the handle. When the shaft has gone as far as it can go through the second opening add the larger washer and secure with locking pin. Do the same on the con rod end secure with a washer and locking pin "C".
- Attach nozzle assembly. Tighten securely by hand.
- Attach spray lance to the shut-off valve. Tighten securely by hand, making sure all seals and gaskets are snugly in place.
- Attach spray hose. Tighten securely by hand.
- Attach agitator as required.

**OPERATION**

(see section For Your Comfort and Safety)

Bear in mind that rubber parts on modern sprayer-e.g. piston sleeves, O rings -resist virtually any agrichemical. Yet improper use (formulas in greater-than-normal concentration, strong industrial solvents not commonly known and/or used at the time of manufacture) may cause even the best materials to deform or wear out prematurely. If this ever happens, call your supplier for support.

## MAINTENANCE

(see section For Your Comfort and Safety)

When rinsing out sprayer, lance, hose, etc., be extra thorough when changing over from herbicides to other types of formulas. -On hot days a dry gasket may "freeze" the lid. Keep it greased.-

## PUMP DISASSEMBLY

1. Position sprayer upright on a flat surface. Pull the "C" pin from the upper end of the pump con rod. Watch those washers and locking pins.
2. Remove the agitator through the filler port.
3. Loosen the big pump nut atop the tank. Pull out pump.
4. Loosen plastic piston bolt. (Screw counter-clockwise by pressing its slot against the top edge of the pump handle connector.)
5. To check the ball valve, remove piston bolt and make sure the seal is clean and in good shape.
6. Be careful to re-assemble the piston holder disk with its groove facing the piston.

## Knapsack Sprayer 189

## BASIC CONFIGURATION

Part	Code	Description	Part	Code	Description
1	E300-019	Pressure chamber	31	E803-262	Nozzle body
1G	E189-020-C	Pressure chamber ass'y	31G	E803-262-C	Nozzle body ass'y
2	E189-021	Piston disk	32	E803-083	O'ring
3	E189-054	Piston - G8	33	E219-211	Nut
4	E080-022	Plastic check ball	34	E803-263	Nozzle cap
5	E189-033	Piston fitting	35	E189-005	Tank (it includes integrated washer screws)
6	E080-003	Pump holder nut	36	E501-004	Filler screen
7	E080-008	Felt ring	37G	E501-001-C	Tank lid ass'y
8	E080-201	Bushing guide	38	E501-051	"R" lock pin
9	E080-023	O'ring	39	E501-144	Lid screw
10	E189-027	O'ring	40	E501-020	Breather check
11	E189-024	Cylinder	41	E501-002	Lid gasket
12	E189-025	Cylinder holder nut	42	E189-007	Tank base
13	E803-081	Hose 3/8"	45G	E189-115-C	Pump lever
13G	E803-081-C	Hose with clamp	46	E326-037	Washer
14	E501-082	SX 9-18 clamp	47	E289-014	"C" lock pin
15	E807-075	Filter housing	48	E189-116	Pump handle
16	E803-060	O'ring	49	E501-015	Handle grip
17	E807-074	Filter insert	50	E200-050	Agitator
18	E807-173	Valve body 807	51	E501-034	Carrying strap
18G	E807-075-C	Valve body 807 ass'y	51G	E501-034-C	Carrying strap ass'y (2 pcs)
18G1	E807-065-C1	Valve body and hose ass'y 807	52	E189-036	Strap hook
19	E803-166	Plunger	53	E501-025	Shoulder pad
19G	E803-067-C	Plunger ass'y	54	E501-035	Strap buckle
20	E803-068	O'ring - V (2pcs)	55	E501-010	Washer
21	E803-063	Pin gasket - N	<b>former version</b>		
22	E803-065	Metal support			
23	E803-067	Plunger spring	43	E189-149	Plastic nut
24	E803-164	Cap	44G	E080-047-C	Screw with washer ass'y
25G	E803-072-C	Valve lever ass'y	44	E080-048	Washer
28	E803-114	Gasket - N	56	E289-500	Integrated washer screw
29	E803-059	Nu	57	E081-019	Pressure chamber
30	E803-085	Spray lance	57G	E189-120-C	Pressure chamber ass'y
30G	E803-285-C	Spray lance ass'y	58G	E189-012-C	Pump lever ass'y
			59	E501-037	Washer 1/2"

## BASIC CONFIGURATION

