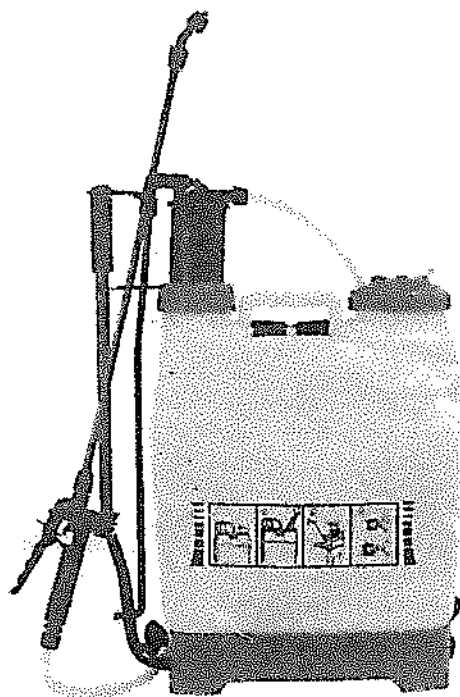


# KS-16

## KNAPSACK SPRAYER

### INSTRUCTION MANUAL



#### FEATURES

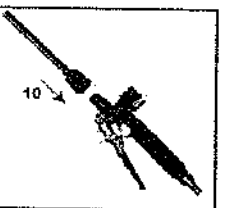
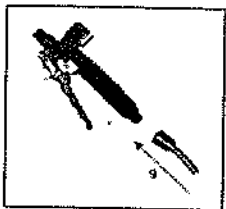
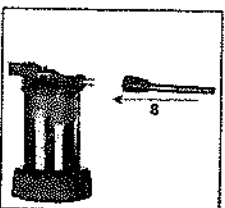
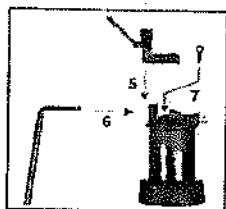
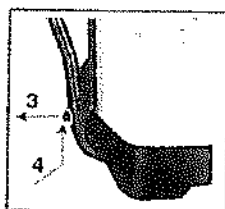
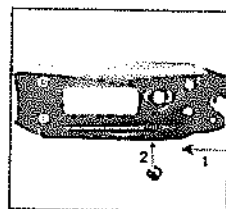
The KS-16 lever operated knapsack sprayer is a high quality robust and durable general-purpose sprayer.

- 16 litre ergonomically designed HDPE tank.
  - Large filling aperture with filter.
  - Leak-proof valve on tank lid.
  - Lightweight and profiled for maximum operator comfort.
  - Internal piston pump.
  - Internal agitation of liquid.
  - Operating pressure range 1 – 4 bar (15 – 60 PSI).
  - Adjustable straps with low absorbency of liquid.
  - Metal lance and trigger valve handle for maximum durability.
  - Hytrel™ pump seal and Viton™ valve and hose seals for maximum resistance to aggressive spray liquids.
  - Retaining clip for handle & lance.
  - Supplied with interchangeable nozzle tips for herbicide and insecticide/fungicide application.
  - Optional constant flow valve.
- Proven reliability – tested to over 40,000 operations without failure.

## SPECIFICATION

Empty weight	3.4 kg
Gross weight (packed)	3.8 kg
Weight full	19.4 kg
Dimensions (packed)	36 x 20 x 54cm
Liquid capacity	16 l
Air chamber capacity	0.9 l
Max pressure	10 bar
Working pressure	1 – 4 bar
Hose length	120 cm
Lance length	60 cm
Carrying strap	100 x 3.5 x 2cm

## ASSEMBLY



1. Fit the handle and lance retaining clip to the top of the air chamber.
2. Insert the long end of the connecting rod through the hole in the top of the air chamber and retaining clip.
3. Secure the connecting rod to the handle with the split pin and washer.
4. Insert the handle into the hole in the tank base.
5. Fit the short end of the connecting rod through the hole in the handle.
6. Secure the connecting rod in position with the split pin.
7. Fit the attachment clip over the end of the handle and between the flanges of the green tank base.
8. Attach one end of the spray hose to the fitting on the air chamber.
9. Attach the other end of the spray hose to the inlet fitting of the trigger valve (see illustration for correct orientation).
10. Attach the spray lance to the outlet of the trigger valve.

## OPERATION

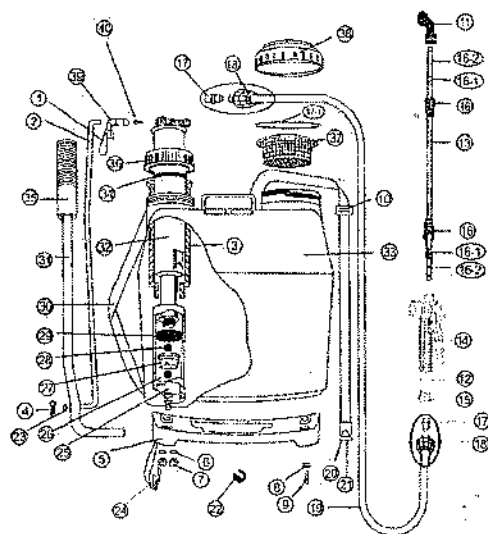
1. Fit the appropriate nozzle for the spray pattern required.
2. Open the tank lid but do not remove the filling filter from the tank opening.
3. Pour the required volume of spray liquid into the tank (maximum 16 l).
4. Replace the tank lid and tighten.
5. Place the sprayer on the operator's back and adjust the lengths of the straps as necessary, using the buckles.
6. Operate the pump handle 6 – 8 times to draw liquid into the pressure chamber and to provide the required working pressure.
7. Press on the handle of the trigger valve to spray.
8. Continue operating the pump handle to maintain pressure in the sprayer whilst spraying.

## MAINTENANCE AND SAFETY

1. Wash the inside of the spray tank with clean water after each use.
2. Lubricate the felt sealing washer at the top of the air chamber with light oil at regular intervals. This ensures smooth operation of the air pump and prevents leakage of spray liquid.

3. To replace the cup washer on the piston of the air pump:
  - Remove the lid of the air chamber (36).
  - Withdraw the air chamber (32), and remove the valve seal (27).
  - Replace the cup washer (29).
  - Re-assemble all components, ensuring that all threaded fittings are securely tightened.
4. Always wear appropriate personal protective equipment whilst using, cleaning and servicing the sprayer.
5. Do not smoke whilst using the sprayer.
6. Always direct the spray downwind of the operator. Spraying into the wind will result in operator contamination.
7. Store the sprayer in a well ventilated area out of reach of children and away from livestock.
8. Do not expose the sprayer to strong sunlight during storage to prevent deterioration of the tank.
9. The sprayer is designed for the application of agricultural chemicals, disinfectants, cleaning agents etc. Do not use to spray caustic or corrosive solutions.

## PARTS DIAGRAM



- 13 Lance
- 14 Trigger valve
- 15 Adaptor
- 16-1 Locking sleeve
- 16-2 O-ring
- 17 Hose barb
- 18 Hose nut
- 19 Hose
- 20 Carrying strap end fitting
- 21 Carrying strap hook
- 22 Pump handle attachment clip
- 23 Washer
- 24 Carrying strap attachment
- 25 Pump
- 26 Valve ball
- 27 Valve seal
- 28 Valve ball
- 29 Cup washer
- 30 Carrying strap
- 31 Pump handle
- 32 Air chamber
- 33 Pesticide tank
- 34 Felt sealing washer
- 35 Pump handle grip
- 36 Air chamber lid
- 37 Pesticide tank filling filter
- 37-1 Sealing washer
- 38 Pesticide tank lid
- 39 Handle & lance retaining clip
- 40 Split pin

## PARTS LIST

- 1 Handle securing ring
- 2 Connecting rod
- 3 Guide bushing
- 4 Split pin
- 5 Tank base
- 6 Washer
- 7 Nut
- 8 Washer
- 9 Screw
- 10 Strap buckle
- 11 Nozzle assembly
- 12 Washer