

OPERATOR'S MANUAL MS-4 BACKPACK SPRAYER

Thank you for choosing the ECHO Backpack Sprayer. This sprayer is powered by retained air pressure and is made of materials highly resistant to corrosion and commonly used chemicals. The ECHO Backpack Sprayer is easy to maintain, easy to repair. No special tools are required. These and other features make this sprayer very functional, lightweight and economical.

RULES FOR SAFE OPERATION

Read and understand this entire manual before using the sprayer to avoid potentially serious situation.

- Always inspect your sprayer thoroughly before and after each use. Check to be sure hose is securely attached and in good condition before pressurizing tank.
- Use special care when spraying near electrical installations.
- Keep the work area clear of people and animals.
- Never use the sprayer during windy conditions.
- Always wear goggles when filling, using or cleaning the sprayer.
- Always wear a mask or respirator when filling, using and cleaning sprayer if recommended by the spray material manufacturer.
- Wear protective gear and clothing when filling, using and cleaning the sprayer.
- Always release pressure in the pump prior to filling, cleaning or servicing the sprayer.
- Before opening a container of pesticide or other spray material carefully read, understand and follow all instructions on the label.
- Do not use flamables in the sprayer. They can ignite or explode, causing serious injury.
- Never use caustic or corrosive materials in sprayer, which could result in damage to unit.
- In case of personal contamination, remove contaminated clothing, remain upright, do not consume liquids or cause vomiting, get professional help immediately.
- Never attempt to pressurize unit by any other method than with the pump module provided. Never over pressurize unit.
- Do not eat, drink or smoke while spraying.
- Wash face and hands with soap and water after spraying.
- Clean and rinse tank and spraying assembly after each use to prevent crystallization, which would later cause clogging and chemical damage to the unit.
- Do not store sprayer under pressure or with spray solution in tank.
- Do not transfer spray materials to other containers, especially food and/or drink containers.
- Keep spray materials locked up and out of reach of children and animals.
- Use only original manufacture's replacement parts.



CONTENTS:

1 Backpack sprayer	2 lockwashers
1 Handle	1 adjustable brass nozzle
1 Sprayer wand	1 #110 blue plastic nozzle
1 flat washer	1 brown plastic wide-fan nozzle
2 bolts	1 wrench
2 nuts	

ASSEMBLY

1. Lay sprayer on it's side, backrest toward you, metal stand to the right.

2. Set flat washer (A) on handle shaft sleeve, and insert handle shaft (B).

3. Pull pump actuator lever (C) away from pump backrest.

4. Turn sprayer so metal stand is up.









5. Slide handle shaft into handle sleeve. Insert bolts (D) in handle shaft, as bolt holes become visible through rectangular cutout in backrest.

- 6. Move pump actuator lever (C) so bolt holes in lever align with bolt holes in handle shaft.
- 7. Secure handle to pump actuator lever with lock washers and nuts.
- 8. Tighten hose clamps.





HOW TO PREPARE YOUR UNIT FOR USE

Choosing the correct nozzle:

All nozzles are calibrated at 40 psi.

The #110 blue nozzle supplied is a 110-degree fan pattern spray nozzle normally used for herbicide spraying and is rated at 3/10 GPM at 40 psi.

The brown nozzle is a fan-pattern flood nozzle, normally used for insecticide spraying. The nozzle opening can face up or down, depending on whether you need to spray the tops or bottoms of leaves. The purpose is to saturate the area.

The brass nozzle is adjustable, and will spray a straight steam or a cone shaped pattern and, if fully tightened, a fine mist.

IMPORTANT

Before using: oil cap gasket, oil check valve and maintain breather hole clear of debris. Your failure to oil and to clean check valve, and to maintain breather hold open to allow air into tank, can cause tank to collapse and crack due to vacuum created by the pump.

- 1. Remove cap and pour out remaining solution, then rinse all parts thoroughly with clean water.
- 2. Leaving approximately 1/2 gallon of fresh water in tank, pressurize and flush pumping system by depressing trigger at least 2 minutes, then drain all remaining water.
- 3. Always store tank clean and empty in a dry I shaded location.
- 4. Place sprayer on back and pressurize tank by pumping approximately 5 to 11 times.
- 5. You will need to pump occasionally to maintain the desired spraying pressure.
- 6. Always oil the seal on cap of unit as well as the check valve, this will extend life of seal and is important for obtaining proper seal for no leaks.
- 7. 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. Consult with the manufacturer of the chemicals in sue to obtain proper instructions.

ECHO CONSUMER PRODUCT SUPPORT

If you require assistance or have questions concerning the application, operation or maintenance of this product you may call the ECHO Consumer Product Support Department at 1-800-673-1558 from 8:30 am to 4:30 pm (Central Standard Time) Monday through Friday. Before calling, please know the model and serial number of your unit to help your Consumer Product Support Representative

