

SOIL FUMIGATION WITH THE YELLOW FELLOW MULCH LAYER USING NON-PRESSURIZED CYLINDERS OF METHYL BROMIDE, AND METERING DISCS

This system uses compressed **nitrogen** as a propellant. **Nitrogen** is used because it is dry, non-flammable, and inexpensive. Nitrogen comes in cylinders of 200-300 cubic feet, and can be acquired from a compressed-gas or welding-supply dealer. **Use only NITROGEN GAS.**

STEP 1: Place two fumigant cylinders and one nitrogen cylinder on the machine, and secure **FIRMLY** with the binders.

STEP 2: Determine ground speed accurately.

<u>TIME IT TAKES TO COVER 100 FEET</u>	<u>SPEED IN MPH</u>
34 seconds	2.0
27 seconds	2.5
22 seconds	3.0
19 seconds	3.5

STEP 3: Connect the nitrogen regulator to nitrogen tank. Connect nitrogen lines to small air valve on methyl bromide cylinders.

STEP 4: Connect swivel nuts to methyl bromide valves.

STEP 5: With the operator's cut-off valve on the machine closed:

- A – Open nitrogen cylinder.
- B – Set nitrogen regulator at approximately 40 PSI
- C – Open small nitrogen valve. Allow fumigant cylinder to pressurize fully.
- D – Open methyl bromide cylinder valve.

STEP 6: Adjusting methyl bromide pressure:

- A – Standing on the machine, open the operator's cut-off valve.
- B – Read the pressure on the manifold gauge.
- C – Close the cut-off valve.
- D – If more pressure is needed, increase the nitrogen pressure. If less pressure is needed, disconnect the nitrogen line from the methyl bromide cylinder and vent off some pressure on the fumigant cylinder. Reconnect the line, and lower the nitrogen pressure.

The nitrogen regulator is used to control a steady pressure on the fumigant.

NOTE: Because of pressure drops through the system, the nitrogen and the two methyl bromide gauges will read differently. **THIS IS NORMAL.** This difference should always remain the same.

STEP 7: Calibrate by fumigating a small area:

- A – Determine fraction of acre covered.
- B – Determine quantity of methyl bromide needed.
- C – After running, re-weigh the cylinder and determine amount of methyl bromide that was used.
- D – Adjust pressure accordingly.

STEP 8: Removing methyl bromide cylinders:

- A – Close all valves
- B – Slowly and carefully remove all lines.
- C – Replace cylinder safety caps.

STEP 9: Machine has two filter systems.

- A – Line strainer with a blow-out valve. This is cleaned periodically by partially opening the blow-out slowly, and blowing trash and fumigant to the ground. If the filter remains clogged, then remove the bottom strainer cap and the strainer for cleaning.
- B – Orifice disc strainers, located in front of each orifice disc.

NOTE: If the sight glass ball shows no flow, the above filters should be checked and cleaned.

STEP 10: Watch sight glass indicator. The sight glass will show material flowing, and when the cylinder is empty.

- A – If the ball is down, and liquid in the glass – this means no flow. Check cut-off valve, strainers and lines.
- B – If the ball is up, but no liquid is in the glass – this means the fumigant cylinder is empty.

GENERAL NOTES AND PRECAUTIONS:

All hoses should be checked daily for wear and leaks.

Fix all leaks on machine immediately.

Before removing any part from the fumigation system, be sure that all pressure has been relieved throughout the system. Remove parts slowly and carefully, to be safe. **DO NOT EXCEED 75 PSI ON THE SYSTEM.** Use only parts obtained directly from Reddick Fumigants.

METHYL BROMIDE IS A RESTRICTED-USE PESTICIDE DUE TO ACUTE TOXICITY. It may be used only by Certified Applicators or persons under their direct supervision, and only for those uses covered by the certified Applicator's certification. Follow label recommendations – it is violation of Federal law to use this product in a manner inconsistent with its labeling.

**REDDICK FUMIGANTS, INC.
HIGHWAY 64 -- PO BOX 391
WILLIAMSTON, NORTH CAROLINA 27892
(252) 792-1613**

METHYL BROMIDE SYSTEM FOR NON-PRESSURE CYLINDERS



