Safe and effective control of invasive weed species





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Section 1: Introduction

The Stem Master is a highly accurate herbicide applicator. Based on medical apparatus, it delivers a calibrated dose of herbicide directly into the stem of the weed.

We have designed the Stem Master to be robust and easy to use. It is supplied in a hard case for easy and safe storage when not in use.

The Stem Master should only be used with label approved herbicide products.



Section 2: Component List



1 Two needles (with guard)



2 Trigger



3 Handle grip



4 Piston assembly







6 Air Intake Valve



7 Allen Key



8 Grease

Section 3: Preparing for Use

ALWAYS READ BEFORE USING THE STEM MASTER

Personal Protective Equipment (PPE)

The minimum PPE recommended for use is:

- Coveralls
- Face shield
- Suitable protective gloves
- Wellington boots.

Always refer to the herbicide product label for the recommended PPE.

Connecting the needle

- Select the appropriate needle
- Fit the needle guard to the needle and secure it by tightening the grub screw on the guard
- Smear a light coating of silicone grease on the end of the needle (where the o ring is located)
- Loosen the three grub screws on the needle adaptor
- Insert the needle into the adaptor, so that the hole in the needle is facing downwards when the Stem Master is held upright
- Secure the needle by equally tightening the three grub screws on the needle adaptor.

Filling the bottle with herbicide

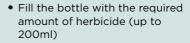
 Hold the Stem Master upside down and unscrew the bottle in a clockwise direction. Place the Stem Master in a safe location











- Take care to avoid spillages during filling. Follow local emergency procedures should a spillage occur
- With the bottle on a suitable surface, hold the Stem Master upside down and insert the air breather tube into the bottle
- Firmly hold the Stem Master and the bottle. Turn the bottle in an anti-clockwise direction to tighten.

Checking for leaks

Hold the Stem Master in an upright position and check carefully for any leaks around the bottle, trigger and air intake hole.

If a leak is found:



Air intake hole – remove the bottle, decant the herbicide and contact Nomix Enviro

Trigger - contact Nomix Enviro



Priming

It is important to prime the Stem Master before use.

Point the needle into a container and squeeze the trigger between two and four times, until fluid emerges from the needle and all air is expelled from the unit.

Please Note: When the Stem Master is held in the correct position, the herbicide delivery aperture is located on the underside of the needle.

Section 3: Preparing for Use (cont.)





Calibrating

The Stem Master is an accurate herbicide delivery system, calibrated by a simple twist adjustment dial on the end of the handle grip.

- The calibration dial is graduated in 0.5 ml increments and locks into place in 1 ml increments
- To increase the amount of herbicide applied, turn the calibration adjustment dial in a clockwise direction
- To reduce the amount of herbicide applied, turn the calibration adjustment dial in an anti-clockwise direction
- When the trigger is squeezed, the calibrated amount of herbicide will be dispensed through the needle
- Always calibrate to the product label instructions.

The Stem Master is now ready to use.

Section 4: Operating



Please Note: The size of the plant stem should be approximately 30mm in diameter. Plants will normally 'take up' the herbicide within 20 minutes of the injection.

- Holding the Stem Master upright, insert the needle into the stem, midway between the lower nodes
- Ensure the needle has pierced the stem on both sides. This allows any pressurised water in the stem to escape
- Squeeze the trigger and the calibrated amount of herbicide will be delivered into the stem cavity
- Releasing the trigger automatically reloads the Stem Master with the calibrated herbicide dose, ready for the next application.

SAFETY PRECAUTION: Use the allen key supplied to tighten the grub screw on the needle guard, if it requires tightening. The Stem Master should not be used without the needle guard attached.

Always be careful when handling the Stem Master, as the needles are extremely sharp.

Section 5: Cleaning



The Stem Master should be cleaned at the end of each day's use.

- Prepare a bowl of soapy water and have absorbent material available
- Turn the Stem Master upside down and unscrew the bottle by turning it in a clockwise direction. Place the Stem Master safely to one side
- Decant any unused herbicide back into the original container and place the Stem Master bottle safely to one side
- Remove the handle grip by twisting it in a clockwise direction and pulling it down to release
- Immerse the Stem Master in soapy water, without the bottle and the handle grip attached
- Whilst the Stem Master is in the water, squeeze the trigger several times
- Triple rinse the bottle and clean the handle grip
- Allow the bottle, handle grip and Stem Master to dry
- Once the Stem Master, handle grip and bottle are dry, reattach the handle grip by pushing it onto the piston assembly and secure in an anti-clockwise direction
- Reattach the bottle by firmly holding the Stem Master and turning the bottle in an anticlockwise direction.

Section 6: Storing







When you are not using the Stem Master, it should be stored in the original case supplied. This helps to avoid damage to the Stem Master whilst it is not in use.

- Clean the Stem Master (following instructions in section 5).
- Remove the handle grip by twisting it in a clockwise direction and pulling it down to release.
- 3) Remove the piston, by applying a small amount of downward pressure on the calibration dial. Detach the piston from the keyhole slots in the side arms and pull the piston from the main body of the Stem Master. Then remove the spring from the piston.
- 4) Wash and rinse the piston and spring, then allow to dry.
- 5) Once dry, smear a very small amount of liquid paraffin or castor oil onto the piston and spring, in order to keep the parts lubricated.
- 6) Replace the spring onto the piston and, with the trigger in the open position, reattach the piston to the main body. Secure it by fastening the keyhole slots in the side arms.
- 7) Reattach the handle grip by pushing it onto the piston assembly unit and secure in an anti-clockwise direction.
- 8) Ensure the calibration dial is set to the 1mm position.
- 9) Store in the case supplied.

Section 6: Storing (cont.)

WARNING: Do not dismantle the Stem Master any further than the instructions above. The Stem Master contains intricate components which if lost, broken or incorrectly replaced, will render the unit inoperable and invalidate the warranty.

If the Stem Master is not functioning correctly, contact Nomix Enviro to arrange repair on 01264 388050.

Section 7: Servicing

We recommend the Stem Master is serviced by Nomix Enviro on an annual basis.







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USE HERBICIDES SAFELY.
ALWAYS READ THE LABEL AND
PRODUCT INFORMATION BEFORE USE.

