



**SUTTON AGRICULTURAL ENTERPRISES, INC.**  
 746 Vertin Avenue • Salinas, CA 93906 • Phone 831/422-9693 -or- 866/280-6229  
 Fax 831/422-4201 -or- 800/482-4240

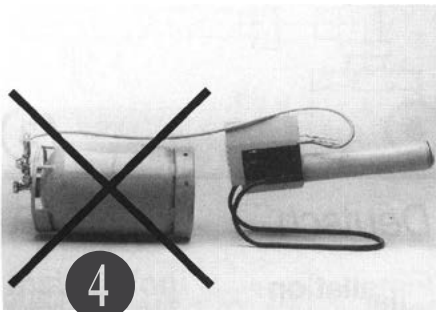


## Recommendations concerning the use

Read the following information carefully. In it you will find important instructions concerning the safety, use and maintenance of the device. Always keep these instructions with the device.

This device meets the prevailing EC-Directive 89/392/EEC (Machine Directive).

- Place the detonating device on a stable and horizontal surface.
- Observe the local requirements and rules that may apply to noise and the production of sound in the vicinity of a residential area or otherwise.
- Do not place any heavy objects on the detonating device and do not block the air circulation.
- It is important to move the device regularly in order to increase its effectiveness.
- If the device functions inadequately, consult the failure table on pages 17-22 or your local dealer.
- Consult your dealer for separate accessories.



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# Zon Mark 2 USER'S MANUAL

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## Warning

With a functioning device:

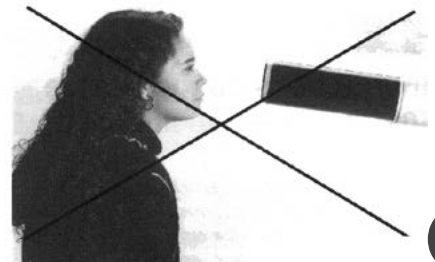
- Wear ear protection when putting the detonating device into operation (sound pressure level is approx. 120 dB(A) FAST) (fig. 1).
- Never place it in a closed area.
- Never look into its megaphone (fig. 2).
- Do not smoke (fig. 3).
- Never place subjects in the megaphone.
- Keep the gas cylinder away from sources of heat.
- The gas cylinder should be placed upright (fig. 4).
- Never place the gas cylinder in a pit.
- If there is a fire:
  - a. close the valve of the gas cylinder;
  - b. extinguish fire with dry-chemical extinguisher.
- The following types of gas are allowed: propane or butane! (fig. 5). Use no other types of gas!
- The device has certain components which can only be repaired or set by a recognised dealer.



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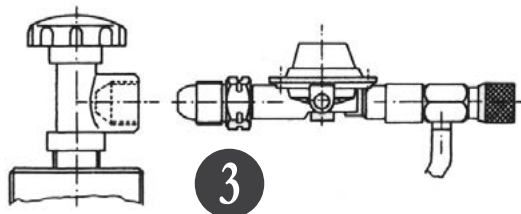
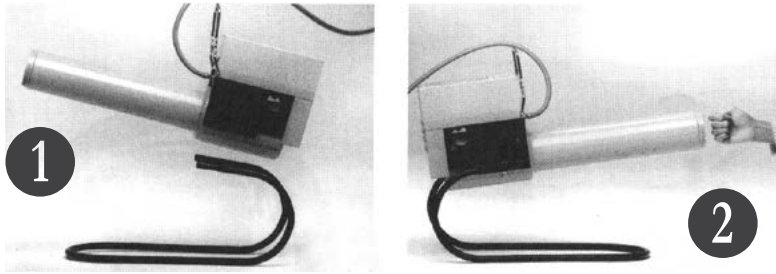


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# Zon Mark 2 USER'S MANUAL

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## Installation

- After the removal of the packing material, mount the device on the frame by means of the enclosed butterfly nuts and bolts (fig. 1).
- Put your hand in the megaphone and make a fist. Pull the inner megaphone outwards. The sound level can be adjusted somewhat with this telescopic part (fig. 2).
- The device operates on propane or butane gas. If propane gas is used it is also possible to operate the device at temperatures below 0 °C (32 °F).
- Connect the gas regulator to the gas cylinder. Take care that the connections of the gas regulator and gas cylinder are clean. Also check that the sealing ring is present with gas regulators, (fitted with a female thread), and that the ring is not dirty.
- Tighten the coupling nut on the gas cylinder (to the left) and use a suitable spanner for this purpose. Never use force when assembling the device (fig. 3, 4, or 5).
- Completely open the valve of the gas cylinder and the interval-regulator to the left. The first 2 bangs may have a lower sound level, but then the device will function well.
- If the interval-regulator has been opened (+) completely, the device will function with intervals of 1 to 2 minutes. If you wish to extend the intervals, close the interval-regulator in a continuously variable way (-) until the desired time has been found (fig. 6).
- The only way to stop the device is to close the valve of the gas cylinder.
- The only way to start the device is to open the valve of the gas cylinder. The intervals have already been adjusted.

## Failure table

FAILURE	CAUSE	REMEDY	
The ZON MARK 2, fully connected, fails to operate at all.	The valve of the gas tank is not open.	Open the valve.	
	The interval regulator is not opened.	Open it by turning into the + mark direction; if the detonations are too frequent, turn it a little to the - mark.	
	The gas tank is empty or has too little pressure.	Connect a new gas tank.	
	The gas valve, no. 7042, can't be opened. This is possible if the ZON MARK 2 has not been used for some time.	With two fingers, pull up the hinged clip, no. 7042M, two or three times.	
Leaks.	The coupling nut gas regulator is not tight enough.	Tighten coupling nut with suitable spanner.	
	The hose from the regulator-unit to the ZON MARK 2 has been damaged.	Renew the hose.  A fast method to trace a leak in the gas regulator is to check it with a leakage spray.	
	Diaphragm leaks along the plate rim.	Repair should be carried out by the dealer.	
The ZON MARK 2 operates, but there is no explosion or sound.	Ignition gives a weak spark or no spark at all.	Check the electrode, no. 7052F. It is possible that the porcelain or the mass point is broken; if so, renew.  <i>Distance mass point - electrode:</i> is not correct. This must be 2,5 - 3 mm. If not so, adjust with a small pair of pincers.  <i>Spark bolt, no. 7262:</i> is loose. Turn up or down until the tripper, no. 7226, is free from the main body, no. 7112. The distance is 1 - 1,5 mm, then tighten the nut firmly.  Note: The spark bolt, no. 7262, must be in horizontal contact with the piezo-element, no. 7052A.  <i>Piezo-element, no. 7052:</i> replace.  <i>Piezo-element, no. 7052A, and/or electrode, no. 7052F are wet.</i> Dry both well.	
		The wind is too strong; gas/air mixture is disturbed.	Place the ZON MARK 2 down the wind or, possible, place it out of the wind or behind a screen.
		Gas mixture is not good.	Gas mixture in the gas tank is not good, replace gas tank. Preferably use propane gas!
	The ZON MARK 2 works, but the diaphragm gland, no. 7142, remains in the top position.	The gasvalve-holder, no. 7042F, is blocked or partially blocked.	Clean opening with small piece of wire no more than 0,6 mm thick.
The gas valve, no. 7042, is not open.		With two fingers, pull up the hinged clip, no. 7042M, two or three times.	
Gas valve, no. 7042, stays open: diaphragm gland, no. 7142, remains above. The gas valve, no. 7042, can't be opened or sufficiently opened.		Torsion spring, no. 7152A and/or no. 7152B are broken. If so, replace. Lifting level must be 1 -2 mm. The measures which have to be taken for this, must be carried out by the dealer.	
The ZON MARK 2 works, but gives dull explosions.	Wind is too strong; gas/air mixture is disturbed.	Place the ZON MARK 2 down the wind or, possible, place it out of the wind or behind a screen.	
	Telescopic megaphone not or partially pulled out.	Pull out to full extension.	

<ul style="list-style-type: none"> <li>• Check that the device is out of action, and then store it at a dry place and maintain it at least once a year.</li> </ul>	<ul style="list-style-type: none"> <li>• When erecting the device, the following points should be lubricated (at least once a year) (see page 12). Grease = V Oil = O</li> </ul>	<ul style="list-style-type: none"> <li>• When erecting the device, the following points should be checked:                     <ul style="list-style-type: none"> <li>A. If the gas hose is defect (porous/cracks), replace it with a new one. When in doubt use a new hose.</li> <li>B. Check the springs on breaking. If there are any defects, fit new ones.</li> <li>C. Check the gas regulator on damage. If there are any defects, fit a new gas regulator.</li> <li>D. If other defects are detected, consult the dealer.</li> </ul> </li> </ul>
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## Routine maintenance



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Page 12 Lubrication Points

