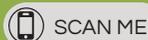


# ZON MARK IV SCARE CANNON

# 1000 - INSTRUCTION MANUAL



FOR PRODUCT  
MANUALS AND VIDEOS,  
SCAN THE QR CODE



DISCLAIMER: THIS PRODUCT WAS DESIGNED AND INTENDED FOR THE SOLE PURPOSE OF WILDLIFE CONTROL AND MANAGEMENT. THE PROPER AND SAFE USE OF THIS PRODUCT IS THE SOLE RESPONSIBILITY OF THE OWNER AND/OR OPERATOR. THE SELLER ASSUMES NO RESPONSIBILITY OR LIABILITY FOR THE IMPROPER AND/OR ILLEGAL USE, RESALE, ANY PHYSICAL INJURY AND/OR PROPERTY DAMAGE RESULTING FROM DELIBERATE OR ACCIDENTAL DISCHARGE OF THE PRODUCT, OR MODIFICATIONS MADE TO THE PRODUCT, SELF-SUPPLIED MATERIALS USED ALONG WITH THE PRODUCT, CARELESS OPERATION OR MAINTENANCE NEGLECT OF THIS PRODUCT.



## CANNON FEATURES

- ▶ 120dB blasts scare birds and keep them away.
- ▶ One 20lb propane tank will provide approximately 17,000 detonations.
- ▶ Stable frame design prevents movement when detonating.
- ▶ Operates in strong winds.
- ▶ 40 second to 30 minute intervals.
- ▶ Weight: 8.4kg (18.5lbs)



## UPGRADES



- ▶ The Zon Mark IV Rotating Tripod (#1002) provides 360° coverage and elevates the cannon's blast. Using the tripod will increase the cannon's coverage to 30 acres.



- ▶ The Zon Quartz Clock Timer (#1001) activates and deactivates the Zon Mark IV Cannon automatically at set interval times.

## TIPS AND TRICKS



- ▶ Birds find it difficult to adapt to the confusion presented when using several deterrents together. Combine scare cannons with other audio and visual deterrents for the best effect.
- ▶ Deploy your cannons before your crops are damaged, not after. It's easier to keep birds out of the control areas than to chase them out once they've been rewarded.
- ▶ Birds are most active at dawn and dusk.
- ▶ In order to reduce your overall sound output and prevent habituation, restrict cannon use when birds are not active.
- ▶ A single cannon will protect up to 6 acres of high lure value crop from persistent birds.
- ▶ Relocate the cannon frequently to prevent habituation. Depending on the bird, cannon should be moved every 1-2 days. More frequent moving delivers the best result.

# SAFETY INFORMATION



## WARNING! ALWAYS WEAR EAR AND EYE PROTECTION WHEN OPERATING CANNON!

- ▶ Clear an area of 5m (15ft) surrounding the propane tank and cannon. This means removing any debris and flammable / combustible materials such as dried weeds and grass.
- ▶ The area directly in front of the megaphone must be clear of all obstructions.
- ▶ Never place objects or look directly into the megaphone.
- ▶ Never walk in front of or look into the barrel.

# INSTALLATION

1. Attach Yellow Plastic Lid (#Z4-91606) to cannon body with the Handle (#Z4-91616).
2. Insert the Plastic End Caps (#Z4-91656) onto the end of the Metal Legs (#Z4-91636) and (#Z4-91646) using 4 butterfly nuts.
3. Make sure the Gas Regulator(#Z4-91926) and the Propane Tank both have connections.
4. Connect the Gas Regulator (#Z4-91926) to your Propane Tank (not included) snug with a 24mm (15/16") wrench. Do not open propane valve.
5. Open the valve on the Gas Regulator and on the Propane Tank by turning them both counterclockwise.
6. The cannon will begin to fire.

- ▶ Do not place objects on top of the cannon.
- ▶ Do not operate cannon in an enclosed space.
- ▶ Keep fire and other sources of heat/ ignition away from the cannon.
- ▶ Cannon should be on a stable, horizontal ground when in use.
- ▶ Only use LP Gas (propane) or butane gas. Keep canister upright. DO NOT place in a pit.
- ▶ Call the proper authorities/emergency services in case of a fire.
- ▶ Service cannon after 150kg (330lbs) of use.
- ▶ Replace the gas hose every 2 years. Contact Margo Supplies to order replacement.

## NOTE:

The first few cycles may have low/no volume due to air being in the system. Once the air is cleared, the volume will adjust.

7. When the Precise Valve (#Z4-91806) is entirely open, the cannon will fire in 40-60 second intervals. For longer time intervals, close the Precise Valve until you reach your desired timing.
8. Close the Propane Tank Valve to turn off the cannon.

## CAUTION:

After the cannon is turned off, propane will remain inside the hose and diaphragm. Lift the hammer to release any gas once disconnected from the propane tank.

# MAINTENANCE

**IMPORTANT! CANNON SHOULD BE DISCONNECTED FROM GAS WHEN STORED.**

A full maintenance check should be performed at least once a year. When the cannon is not in use, it should be stored in a dry location - ideally free from rodents.

## NOTES:

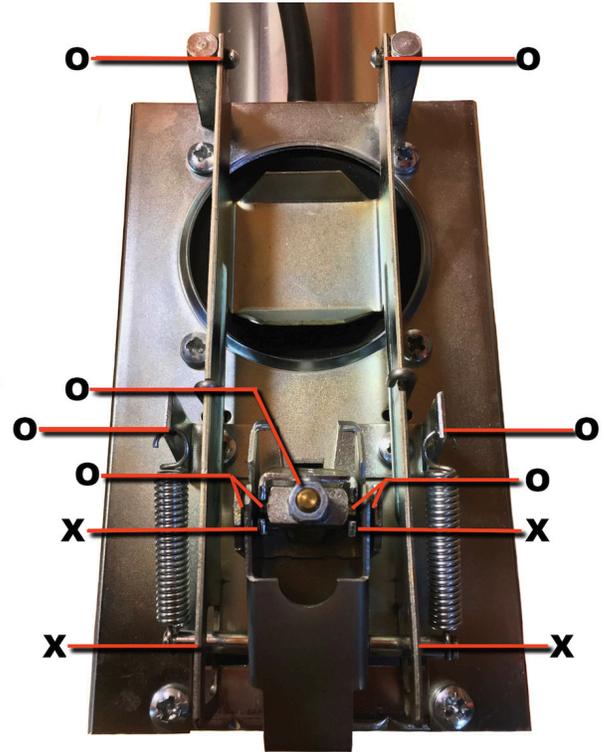
- Never use flammable cleaning agents on this device.
- Do not use a stream jet sprayer to clean.

## MAINTENANCE CHECKLIST:

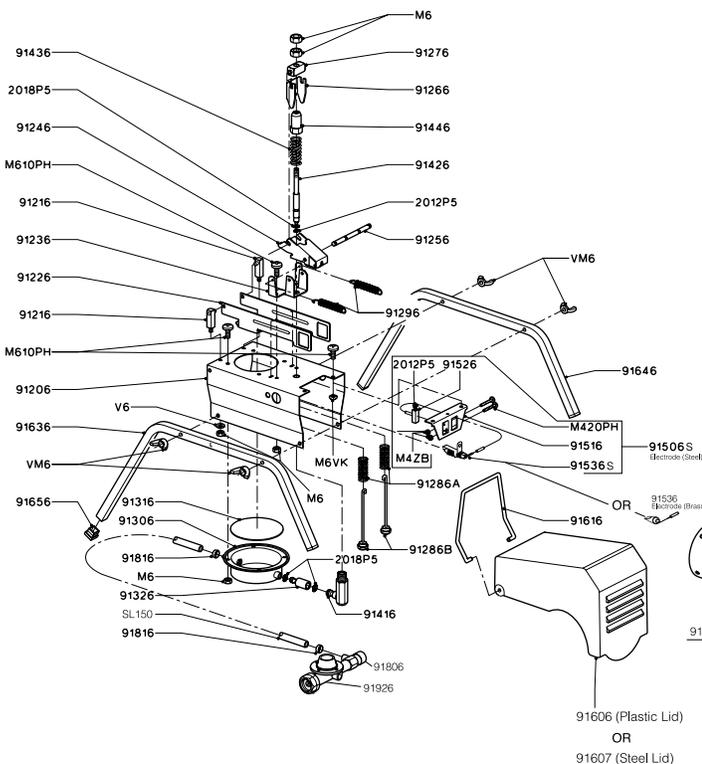
1. Gas hose has no cracks or defects.
2. Test springs and replace if necessary.
3. Inspect gas regulator for dirt and damage.
4. Lubricate the following parts:

X = GREASE (lightly apply)

O = OIL

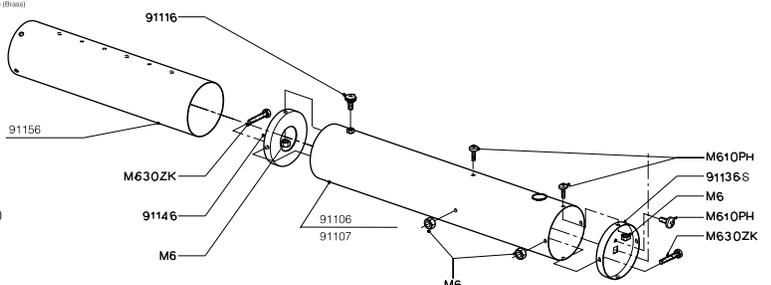


# PARTS DIAGRAM



## IGNITER

- Z4-91506 Igniter Complete
- Z4-91516 Frame Igniter Complete
- Z4-91526 Piezo Element
- Z4-91536 Electrode - Brass
- Z4-91536S Electrode - Steel
- Z4-2012PS O-Ring
- Z4-M6VK Square Nut (M6)
- Z4-M610PH Bolt (M6 x 10)
- Z4-M4ZB Hexagonal Lock Nut
- Z4-M420PH Bolt (M4 x 2w0)



# PARTS LIST

## MECHANISM

|           |                   |
|-----------|-------------------|
| Z4-91206  | Main Body         |
| Z4-91216  | Joint Pin         |
| Z4-91226  | Diaphragm Gland   |
| Z4-91236  | Spring Holder     |
| Z4-91246  | Tripper           |
| Z4-91256  | Pull Spring Pin   |
| Z4-91266  | Hinged Clip       |
| Z4-91276  | Hinged Block      |
| Z4-91286A | Pull Rod Spring   |
| Z4-91286B | Pull Rod          |
| Z4-91296  | Pull Spring       |
| Z4-91306  | Diaphragm Holder  |
| Z4-91316  | Diaphragm         |
| Z4-91326  | Connecting Nipple |
| Z4-M610PH | Bolt (M6 x 10)    |
| Z4-M6     | Hexagonal Nut     |
| Z4-V6     | Washer            |

## GAS VALVE

|           |                      |
|-----------|----------------------|
| Z4-91406  | Gas Valve (Complete) |
| Z4-91406  | Holder               |
| Z4-91216  | Shaft                |
| Z4-2012P5 | O-Ring               |
| Z4-2018P5 | O-Ring               |
| Z4-91436  | Spring               |
| Z4-91446  | Housing              |
| Z4-M6     | Hexagonal Nut        |

## FRAME

|           |                               |
|-----------|-------------------------------|
| Z4-91106  | Outer Megaphone               |
| Z4-91107  | Single Megaphone              |
| Z4-91116  | Clamping Bolt                 |
| Z4-91136  | Rear Cover (Brass Electrodes) |
| Z4-91136S | Rear Cover (Steel Electrodes) |
| Z4-91146  | Iris Cover                    |
| Z4-91156  | Inner Megaphone               |
| Z4-91606  | Plastic Lid                   |
| Z4-91607  | Steel Lid                     |
| Z4-91616  | Handle                        |
| Z4-91636  | Base Frame (left)             |
| Z4-91646  | Base Frame (right)            |
| Z4-91656  | Cap                           |
| Z4-VM6    | Butterfly Nut M6              |
| Z4-M630ZK | Bolt (M6 x 30)                |
| Z4-M610ZK | Bolt (M6 x 10)                |
| Z4-M6     | Hexagonal Nut                 |

## REGULATOR COMPONENTS

|            |                      |
|------------|----------------------|
| Z4-91926   | Regulator (Complete) |
| Z4-91806   | Precise Valve        |
| Z4-0115533 | Regulator Shell      |
| Z4-ALRING  | Aluminum Ring        |
| Z4-SL150   | Hose                 |
| Z4-91816   | Hose Clamp           |



# TROUBLESHOOTING

## PROBLEM

## CAUSE

## SOLUTION

The cannon is connected yet fails to operate

The Propane Valve is not open.

Open the Propane Tank Valve.

The Propane Tank is empty or does not have enough pressure.

Fill or replace the Propane Tank.

The Gas Valve (#Z4-91406) does not open, this may happen if the device has not been operated for some time.

Pull the Hinged Clip (#Z4-91266) vertically a few times. Keep the hinged clip from slipping over the stop line of the Spring Holder (#Z4-91236) as this will prevent the Gas Valve from opening.

The cannon is leaking

The Coupling Nut (#Z4-91926) on the Gas Regulator is not tight enough.

Tighten Coupling Nut (#Z4-91926) with appropriate wrench 24mm (15/16").

The hose is damaged.

Contact Margo Supplies for replacement hose.

The diaphragm leaks along the plate rim.

Contact dealer for repairs.

The cannon operates but there is no sound/a very dull explosion

Ignition gives weak spark or no spark at all.

Check Electrode. The porcelain or mass point may be broken.

Pull Rod Springs (#Z4-91286A) are worn or broken, causing the Tripper to come down slowly.

Replace the Pull Rod Springs (#Z4-91286A). Has to be separated from the barrel to do so.

Wind is too strong (>16km/hr or 26mph) - gas to air ratio mixture is disturbed.

Place the cannon in a protected area, out of direct wind.

Mechanism is dirty, causing the Tripper to come down slowly.

Clean the mechanism of dirt/sand. Lubricate all of the moving parts as indicated under "Maintenance".

# TROUBLESHOOTING

## PROBLEM

## CAUSE

## SOLUTION

The cannon operates but the diaphragm (#Z4-91316) stays in the same position

Gas Valve Holder (#Z4-91416) is partially or completely blocked.

Clean the Gas Valve opening with a small piece of wire/pipe/drill bit no more than 0.8mm.

Gas Valve (#Z4-91406) won't open. This may happen if the device has not been used for some time.

Pull the Hinged Clip (#Z4-91266) vertically a few times. Keep the Hinged Clip from slipping over the stop line of the Spring Holder (#Z4-91286A) as this will prevent the Gas Valve (#Z4-91406) from opening.

Gas Valve (#Z4-91406) remains open. The Diaphragm Gland (#Z4-91226) remains in the top position.

Check and replace broken Pull Rod Spring (#Z4-91286A). Check for leaks at Diaphragm (#Z4-91316).

Gas Valve (#Z4-91406) won't open.

Check for leaks throughout the system.

