

# SCARE-AWAY M-4 SINGLE SHOT CANNON ASSEMBLY, OPERATING & SAFETY INSTRUCTIONS



### 1. Attach the Barrel Extension:

After removing the Scare-Away from the shipping box, attach the barrel extension (#54) to the barrel of the combustion chamber (#83).

# Ensure that the weep hole faces the ground:

Ensure that the welded section on the seam of the barrel extension is **facing down**, so that any water will drain from the weep hole just above it.

Tighten the three bolts (#56) with a 13 mm wrench.

# Important:

These three bolts (#56) must be tight, or explosion pressure will damage the bolt connections on the combustion chamber (#83).

# 2. Connect Scare-Away to LP Gas:

Ensure the valve to the LP gas tank is closed.

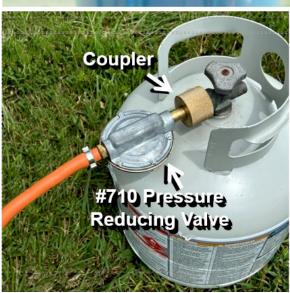
Connect the pressure reducing valve (#710) to the external ACME threads of the LP gas tank.

Ensure that **the side with the label faces down**, so that any water will drain from the weep hole.

Turn coupler to the right until fit is snug.







■ PLEASE READ THE SAFETY PRECAUTIONS ON THE NEXT PAGE ■

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# 3. Adjust Firing Frequency

The time between shots can be adjusted from approximately 45 seconds to approximately 15 minutes.

The frequency of firing can be adjusted with the needle valve on the left side of the Scare-Away frame.

Adjust the frequency to your requirements.



**To increase firing frequency**, turn handle (#129) **counter-clockwise**, in the direction of the arrow on the dial (#139).





To decrease firing frequency, turn the handle clockwise.

The Scare-Away M-4 is equipped with a piezo ignition system (#922 in Schematic on page 4) that will produce at least 100,000 ignitions.

**To start the Scare-Away**, slowly open the valve of the LP gas tank. The Scare-Away will fire at the same frequency as previously set, without further adjustment.

To stop the Scare-Away, close the valve on the LP gas tank.

# SAFETY PRECAUTIONS







To prevent accidental detonations, bleed remaining fuel by disconnecting rubber tubing from needle valve.

- Always use ear protection.
   Never operate in or on a structure.
- Always place Scare-Away cannon on flat ground.
  Use only original pressure reducing valve.
- Use only liquid propane (LP) gas. No smoking or open flame near the Scare-Away Cannon.
  - Change locations often.Change rate of fire often.
  - Cold temperatures and wind can adversely affect the Scare-Away cannon's performance.

**WHEN NOT IN USE**: Store Scare-Away cannon in a dry, protected area. Protect the cannon muzzle with a suitable covering, to prevent debris or rodents from entering the barrel chamber, and **remove the covering before firing**.

## SCARE-AWAY M-4 SINGLE SHOT CANNON - TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	REMEDY
FAILS TO OPERATE:	The LP gas cylinder valve is not open.	Open the valve.
Scare-Away M-4,	The LP gas cylinder is empty.	Replace fuel.
fully connected, fails to operate at all.	The needle valve (#123-140) is not open.	By turning needle valve lever in direction of arrow, frequency of detonations will increase.
	The needle valve (#123-140) cannot be opened.	Replace needle (#137), or replace complete needle valve.
LEAKS:	The pressure reducing valve (#710) is not attached to the LP gas cylinder tightly enough.	Hand-tighten the coupler until snug.
	Check the following hoses for possible damage:	Replace the appropriate hose.
	- hose (#148) from pressure reducing valve to the needle valve.	
	- hose (#12) from the needle valve to the base of the mechanical assembly.	
	Diaphragm (#121) in pressure reducing valve leaks.	Replace diaphragm, or replace complete pressure reducing valve.
	Diaphragm (#64) in mechanical assembly leaks.	Replace diaphragm.
	Diaphragm (#11) in gas release valve leaks.	Replace diaphragm, or replace, complete gas release valve.
	Interior hose (#49, 12) in gas release valve leaks.	Replace interior hose, or replace complete gas release valve.
NO EXPLOSION:  Scare-Away M-4 operates, but there is no explosion.	Ignition gives a weak spark, or no spark at all.	Check impact capsule (#922) for wear. Check electrode tip (#930) for wear. Make sure shaft (#48) knob rests on left side of mallet flange (#909) - distance between shaft knob and mallet flange should be 1/8".
		Check entire sparking assembly (#903-929) for damage.
		Replace where necessary.
DULL EXPLOSION:	Wind is too strong and gas/air mixture is disturbed.	Place the Scare-Away M-4 out of the wind, or place the muzzle down-wind.
Scare-Away M-4 works, but gives a dull explosion.	Barrel extension (#54), or firing chamber (#83), contain debris.	Remove barrel extension. If there is debris in the barrel extension or firing chamber, remove debris.





