

ELECTRIC AIR CANNON

EFFECT

When loaded properly, this 2" cannon will safely propel streamers and/or confetti to a distance of approximately 15 metres. The end result resembles a cascading display of falling spinning confetti and comet tails! It uses no explosives, but a much safer propellant, a disposable 8 or 16 gram CO₂ cylinder.

ASSEMBLY AND OBSERVATION

The electric unit is supplied already mounted onto a wooden base by a mounting bolt. Note how the unit can be angled with adjustment knobs and the cover is removable.

Important: The internal return spring comes factory set with a tension that is suitable for both stage and upside down truss mounting, so no adjustment should be required.

FIRING PIN

The piercing pin depth is factory set and machine tapered to a sharp point! This should not need any readjusting.

CO₂ CHARGE

The CO₂ cylinder screws into the centre of the female section of the bayonet fitting. When the barrel is installed it conceals the CO₂ inside. When you remove the barrel for refilling, screw in a new CO₂ cylinder then replace loaded barrel.

Important: The firing pin must have movement after the CO₂ has been installed, if not you should screw out the CO₂ cylinder by one or two turns. This problem occurs because some brands of CO₂ may have longer necks. Another way to rectify this problem is to put a thin washer over its neck so it does not go into the chamber too far.

LOADING

First insert the double-sided lifting cap by pushing it down the barrel to the bottom using the ramrod provided. You may need to squeeze in the bottom side of the cap to make the lower end fit. This cap acts as an expanding propellant sealer and helps eject your streamers further. Be sure the cap is inserted fully down the barrel onto the stop. Now you are ready to load in any amount of streamer/confetti effects on top of the cap. Hard press packing is not necessary but you may compress a little so a good amount can be loaded in. Next, follow the instructions included with

the streamers and load in as much as you need. We recommend at least 36 x 25ft streamers or 18 x 50' streamers. More or less can be used, but the more you use the more spectacular the effect! If your budget permits, a full barrel looks unbelievable but you do not need to fill the barrel to get a great effect.

LOADING TIP

If you are mixing big streamers with small streamers, load in the smaller streamers first then up to the largest. For the best visual effect shoot in an 6 metre or higher area with the mortar set at a 45 degree angle. Results are not as effective in a low ceiling environment.

INSTALLING BACK PRESSURE CAP

When the barrel is loaded, fit the cap over the top of the barrel. With PVC tape, neatly tape 2 or 3 turns around the side of the barrel and cap. After taping, roll your hand around the tape pressing to form a tight air seal. When the cannon is fired, the pressure will blow the lid off and expelling the contents.

Note: The lifting caps are reusable (if you can find them!), however the back pressure caps may need replacing if they tear when blown off.

MOUNTING

If the cannon is floor mounted you may want to tape the base plate and power cord down so it is not tripped over.

Important: Always lock the barrel into position ensuring the bayonet retaining clip has locked over bayonet pin and the safety chain and clasp has been attached to the aluminium angle brackets.

FIRING

On cue, send full current into device for one second then cut power. The cannon needs a quick on/off to work. You must cut power for the gas to release. Do not leave power on as this will burn out the coil. **DO NOT** operate from a dimmer board. The unit needs instant direct power, otherwise the ram will move too slowly and not have the thrust to piece the CO₂.

UK power rating: 230v AC, 50/60HZ. Effective power operation + or – 5%.

FIRING RESULTS

The result you can expect will depend factors such as the type of streamers or confetti used, the method of packing and the size of the cylinder! The barrel need not be full to produce a good effect. The best

way to accomplish a desired effect is by trial and error. You will soon assemble your own standard guidelines. However, should you need any technical assistance, feel free to call us.

Note: Any soft, safe objects of your choice can be shot out of the barrel!

SAFETY

Never use aerotechnic products if there are any open flames present.

Never point the cannon directly at anyone or look over the barrel when loaded. When using, keep away from spectators and always aim way up over the crowd. Be sure the barrel is locked into position and the safety chain and clasp are attached.

Use caution when removing the CO₂ cartridge, it gets very cold after firing.

TROUBLESHOOTING

If your system ever develops a leak it will be behind the 'O' ring located just behind the firing pin or the large 'O' ring on the male part of the bayonet fitting. Usually the system fires so fast that a minor leak never really affects the operation, however spare 'O' rings are available. Keep the threads clean and the barrel will screw in easier. Lubricate the firing pin and large 'O' ring with silicone grease every few weeks.

CO₂ CYLINDERS

The Carbon Dioxide (CO₂) cylinder has a pressure rating ranging from 700-900 psi. At room temperature the pressure is about 845 psi. Certain precautions are therefore advised when handling. To avoid bursting, do not expose to heat beyond 140 degrees F or store in direct sunlight. To avoid possible freezer burn after activating, do not remove the cylinder for several seconds. For best performance results, keep cylinders at room temperature prior to use. Cold weather exposure greatly reduces internal pressure, so if used out of doors on a cold day, keep them at body temperature in your chest pocket until ready for use.

Electric Air Cannon and consumables available direct from

Pea Soup Ltd.

Tel. 01642 808288

www.smokemachines.NET