#### Cap-Chur Model 1200C Projector Owner's Manual

BE SURE TO READ ALL INSTRUCTIONS AND WARNINGS IN THIS MANUAL, AS WELL AS ALL ACCOMPANYING SYRINGE/DART INSTRUCTIONS, BEFORE CHARGING AND USING YOUR CHEMICAL CAP-CHUR CO2 PROJECTOR



WARNING: THIS MANUAL CONTAINS IMPORTANT INFORMATION ABOUT YOUR PROJECTOR. IT SHOULD ALWAYS BE KEPT WITH YOUR PROJECTOR AND AVAILABLE FOR REVIEW BY ANYONE WHO MAY USE IT. THIS MANUAL SHOULD ACCOMPANY THE PROJECTOR UPON CHANGE OF OWNERSHIP.



WARNING: THIS PROJECTOR IS NOT A TOY AND IS INTENDED FOR ADULT USE ONLY. ALWAYS STORE YOUR PROJECTOR IN A SAFE PLACE AWAY FROM CHILDREN. MISUSE OR CARELESS USE MAY RESULT IN SERIOUS INJURY OR DEATH TO YOU AND/OR OTHERS AROUND YOU. ALWAYS WEAR PROPER EYE PROTECTION WHEN FIRING YOUR PROJECTOR. THE CAP-CHUR MODEL 1200C MAY BE DANGEROUS UP TO AND BEYOND 600 YARDS (549 meters).



WARNING: A PROJECTOR CAN BECOME A DANGEROUS WEAPON IF USED IMPROPERLY. SAFETY MUST THEREFORE BE YOUR PRIMARY CONCERN. FAILURE TO FOLLOW ANY OF THE WARNINGS OR INSTRUCTIONS IN THIS OWNER'S MANUAL COULD RESULT IN SERIOUS INJURY OR DEATH.

#### SAFETY FIRST AND FOREMOST

#### Be sure to read, understand and follow all of these warnings and instructions:

- **KNOW YOUR PROJECTOR**. Take sufficient time to familiarize yourself with the various components of your Projector and how they function. Know all safety features and how they operate.
- ALWAYS keep the muzzle of the Projector pointed in a SAFE DIRECTION.
- **NEVER** point the Projector at a person or at anything you do not intend to shoot.
- ALWAYS treat the Projector as though it is loaded and with the same respect you would a firearm.
- ALWAYS keep the Projector "On Safe" until you are ready to shoot.
- ALWAYS check to see if the Projector is "On Safe" and unloaded when receiving it from another person or from storage.
- ALWAYS keep your finger off the trigger and out of the trigger guard until you are ready to shoot.
- ALWAYS wear proper eye and ear protection.
- Use **ONLY** Palmer Cap-Chur Equipment Inc. Syringes /Darts and **ALWAYS** handle the syringe/darts with care, wearing gloves when loading and unloading to protect your hands from medications.
- **DO NOT** shoot at hard surfaces or at the surface of water. The Syringe / Dart may bounce off or ricochet and strike someone or something you do not intend to hit.
- **ALWAYS** be aware of what is beyond your intended target and **ALWAYS** be sure your backstop or shot-fall area is adequate.

- DO NOT attempt to disassemble, modify or tamper with your Projector. Contact Palmer Cap-Chur Equipment for all repairs and service. Using unauthorized repair centers or modifying the function of your Projector in any way may be unsafe and will void your warranty.
- Before storing your Projector, **ALWAYS** make sure it is unloaded, not charged, and that the projector is **"ON SAFE."**
- **NEVER** store your Projector with CO2 for more than one week.

If you have any questions regarding your new Projector, please contact Palmer Cap-Chur Equipment, Inc.at 770-942-4395 / 800-294-9482 or email: info@palmercap-chur.com or visit our website: www.cap-chur.com for online ordering and support videos.

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#### 1. Learning the Parts of Your New Projector

Learning the names of the component parts of your new Projector will help you better understand the warnings and instructions in this Owner's Manual. (See Fig.1)



#### 2. Operating the Manual Safety

#### 2.1 To Put the Projector "ON SAFE"

- Locate the safety button directly behind the trigger.
- From the left side, push the safety button all the way in. (**Fig. 2**) The safety is not "**ON SAFE**" unless it is pushed all the way in and the **RED** ring around the left side of the safety is **NOT** visible.

**WARNING:** Like any mechanical device, the manual safety on a Projector can fail. Therefore, even when the safety is "**ON SAFE**," you should **ALWAYS** handle the Projector in a safe and responsible manner. Maintain safe muzzle control at all times.

**NEVER** point the Projector at any person.

**NEVER** point the Projector at anything you do not intend to shoot.

# Push safe Push in from right for "OFF SAFE"

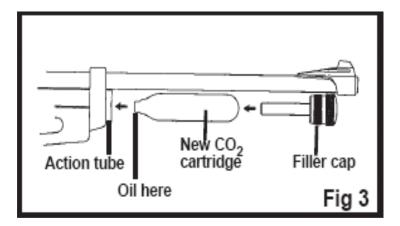
Push in from left for "ON\_SAFE"

Fig 2

#### 2.2 To Take the Projector "OFF SAFE"

- From the right side, push the safety button all the way in. (Fig. 2)
- When you can see the **RED** ring on the left side of the safety, the Projector is "OFF SAFE" and can be fired.

#### 3. Installing and Removing CO2 Cartridges



**IMPORTANT: ALWAYS** put 1 drop of Crosman Pellgunoil (Item #2405) on the tip of every CO2 cartridge to help maintain your Projector seals.



WARNING: CO2 CARTRIDGE MAY EXPLODE AT TEMPERATURES ABOVE 120°F (48.9°C). DO NOT EXPOSE THEM TO HEAT OR STORE AT TEMPERATURES ABOVE 120°F (48.9°C). NEVER LEAVE YOUR PROJECTOR INSIDE YOUR VEHICLE. ALWAYS STORE YOUR PROJECTOR IN A LOCATION WHERE CONSTANT TEMPERATURES ARE MAINTAINED. DO NOT MUTILATE OR INCINERATE CO2



WARNING: CO2 CAN CAUSE SEVERE FROSTBITE IF ALLOWED TO COME IN CONTACT WITH SKIN. ALWAYS KEEP HANDS AND FACE AWAY FROM ESCAPING CO2 GAS.

WARNING: ALWAYS MAKE SURE THE CO2 CARTRIDGE IS EMPTY BEFORE ATTEMPTING TO REMOVE IT FROM THE PROJECTOR. FOLLOW THE STEPS BELOW CAREFULLY.

#### 3.1 Installing a New CO2 Cartridge

- Put the Projector "ON SAFE." (Section 2.1)
- Make sure your Projector is **unloaded** and **free** of any obstructions or syringe/darts in the barrel by removing the breech bolt. Remove the breech bolt by pulling the bolt handle up and rearward, away from Projector barrel. (**Fig. 4**) **From the rear of your Projector** you should be able look through the barrel once the bolt is removed. After confirming there are no obstructions in the barrel, replace the breech bolt. Replace the breech bolt by gently pushing in and locking down into slot. **CAUTION:** The breech bolt **must** be in place and locked before installing a CO2 cartridge and pressurizing your Projector. (**Fig. 5**)
- ALWAYS make sure there is no CO2 Cartridge already inserted in your Projector and that the barrel is clear of any obstruction before attempting to load and pressurize it.

**IMPORTANT:** To check for the presence of a CO2 cartridge, slowly turn the filler cap counter-clockwise. **If you hear ANY CO2 gas escaping – STOP – and follow the steps in Section 3.2 for Removal of CO2 cartridge.** 

- Place one drop of Crosman 0241 Pellgunoil® (included with purchase of your Projector) on a new CO2 cartridge and insert into Action Tube with the small neck of the CO2 cartridge going in first. (Fig. 3)
- Replace the filler cap assembly on the action tube. Screw the filler cap completely into place **finger tight only, do not overtighten.**You will feel the cap touch the CO2 in 1 to 1-1/2 turns. (Some threads may still show.)

Turning the filler cap does not pierce the CO2; this is done by cocking and firing your Projector as directed in the following steps.

- Pull back on the Cocking Knob. There are (3) settings/clicks. (**Fig. 5**) The **First** click does nothing, the **Second** click is **Low** power setting, and the **Third** click is **High** power setting.
- Cock and fire your Projector on the Third/High setting THREE (3) times to fully charge your Projector.
- NOTE: The first cock/fire on a new CO2 cartridge pierces the CO2, the second cock/fire pressurizes the Projector and the third cock/fire gives full power.)
- If you do not hear the popping noise, tighten the filler cap slightly and repeat the cocking operation and fire the Projector until there is a popping noise, which will mean the Projector is releasing CO2 with each pull of the trigger.
- Return safety to the "ON SAFE" position. (Section 2.1)
- Your Projector is now fully charged and ready to use.

**CAUTION:** The Projector must be charged with CO2 to fire, but remember <u>not</u> to store your Projector with a CO2 cartridge in it. (Section 3.2)

#### 3.2 Removing the CO2 Cartridge

- Put the Projector "ON SAFE." (Section 2.1)
- Make sure your Projector is **unloaded** and **free** of any obstructions or syringe/darts in the barrel by removing the breech bolt. Remove the breech bolt by pulling the bolt handle up and rearward until you can lift the breech bolt from barrel. (**Fig. 4**) **From the rear of your projector**, look down the barrel to ensure there are no obstruction or object in the barrel. Replace the breech bolt. (**Fig. 5**)
- Point the Projector in a SAFE DIRECTION away from yourself and others.
- •To release CO2 pressure, **slowly** turn the filler cap counter-clockwise all the way until you do not hear the escape of CO2 gas. \*See CO2 Warnings Above. Do not place fingers or hand in front of the Projector barrel.
- Unscrew the filler cap. Pull the filler assembly from the action tube.
- Point the muzzle of the Projector down so the CO2 cartridge will fall out.

#### 4. Loading and Unloading Syringes / Darts in Projector

#### **4.1 Loading Syringes / Darts in Projector**



## WARNING: READ ALL LOADING AND ASSEMBLY INSTRUCTIONS FOR YOUR SPECIFIC SYRINGE/DART INCLUDED IN THE ACCOMPANYING MANUAL.

- **CAUTION**: When handling darts/syringes with medications and your Projector, **ALWAYS** wear gloves and safety glasses in addition to following any and all firearm safety procedures.
- Put the Projector "ON SAFE." (Section 2.1).
- Point the Projector in a SAFE DIRECTION.
- You should follow the steps under **Section 3.1** for installing a CO2 cartridge **prior** to loading syringe / dart into your Projector.
- Remove the breech bolt by pulling the breech bolt handle up and rearward until you can lift the breech bolt from barrel. (Fig. 4)
- With the breech bolt removed, place a loaded syringe / dart into the barrel needle first. (Fig. 4)

WARNING: This is a single shot syringe / dart Projector; load no more than one syringe / dart at a time.

- Lightly push the syringe / dart into the barrel. Close the breech bolt making sure the tailpiece is not caught and push the breech bolt handle down to lock. (**Fig. 5**) **DO NOT** jam or shove the breech bolt forward as this action can damage your Projector.
- Be sure the breech bolt is in a locked position before firing (fully forward and moved fully to the right). If it is not closed and fully locked, the syringe / dart may not be discharged.
- Move the safety button "OFF SAFE" only when you are ready to fire the Projector.
- Cock your projector <u>BY PULLING BACK ON THE COCKING KNOB. Remember, the FIRST click does nothing, the Second click is for LOW power, and the Third click is for HIGH power</u>. (Fig. 5)
- Aim at your target area. Remember to be aware of your surroundings in the event you miss your target.
- FIRE the Projector

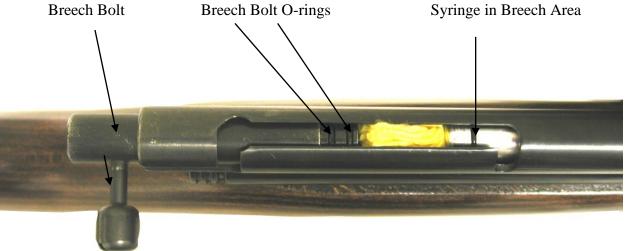


Fig. 4



Fig. 5

#### 4.2 Unloading Syringes / Darts From Projector

#### **Unloading by firing your Projector**

• The most common way to unload syringes / darts is to fire your Projector at your intended target following **Section 6** on aiming and firing safely.

#### **Unloading without firing your Projector**

- When handling darts/syringes with medications and your Projector, always wear gloves and safety glasses in addition to following any and all firearm safety procedures.
- Put the Projector "ON SAFE." (Section 2.1)
- Empty and remove the CO2 cartridge. (Section 3.1)
- Remove the breech bolt. (Section 4.1 Fig. 4)
- Insert a cleaning rod (ramrod) of the proper size into the barrel of your Projector (starting at the breech end).
- CAUTION: The barrel could be damaged if the incorrect sized cleaning rod (ramrod) is used.

- Push the unfired syringe / dart to the muzzle end of Projector just far enough to remove by hand or push the dart/syringe onto a flat surface. (Fig. 5) Do not strike the syringe /dart with the cleaning rod. Do not allow the syringe / dart to free fall from the barrel of your Projector.
- \*Upon removal of your unfired Syringe/Dart refer to your specific Syringe/Dart Instructions included with this Owner's Manual for steps regarding the proper process to disassemble a loaded/unfired syringe/dart.
- If you are not able to remove the syringe / dart from your projector by following this procedure, take **no further action** and contact Palmer Cap-Chur Equipment, Inc.

If you find you have left a syringe/dart in your Projector over time and it has seized up inside the barrel take **no action** and contact **Palmer Cap-Chur Equipment at 770-942-4395** / **800-294-9482** 

#### 5. Aiming and Firing The Projector Safely

#### **5.1 Sight Adjustment**

- The rear sight is designed so that it can be used as a notched sight.
- The rear sight may be adjusted to shoot higher (elevation). Loosen the windage adjustment screws by turning counterclockwise.
- Move the elevator down away from the muzzle (**Fig.1**) to make the syringe/dart hit higher on the target. Next, tighten the windage adjustment screws by turning clockwise.
- The rear sight may be adjusted to shoot right or left (windage). Loosen the windage adjustment screws by turning counterclockwise.
- Move the sight to the right to make the syringe / dart hit to the right on the target. Move the sight to the left to make the syringe / dart hit to the left on the target. Then tighten the windage adjustment screws by turning clockwise.

#### **5.2** Aiming and Firing the Projector

• ALWAYS wear shooting glasses to protect your eyes and follow all safety procedures in this Owner's Manual.

NOTE: Projector MUST BE COCKED BEFORE EACH SHOT by pulling back on the cocking knob. Remember, the FIRST click does nothing, the SECOND click is for LOW Power, and THIRD click is for HIGH Power. (See Fig. 5)

- ALWAYS point your Projector in a SAFE DIRECTION until ready to shoot.
- Follow the instructions for installing a CO2 cartridge (Step 3.1) and loading syringes / darts (Section 4.1 and Sections 8 9).
- ALWAYS be aware of what is beyond your intended target and ALWAYS be sure your backstop or shot-fall area is adequate.
- ALWAYS remember to aim at your target carefully THINK about what you will hit if you miss.
- When using the notched rear sight, the Projector is correctly aimed when the front sight blade is positioned exactly in the center of the notch of the rear sight. The top of the front sight blade should be even with the top of the notch in the rear sight. The target should appear to rest on the top of the front sight.



**WARNING: WEAR PROPER EYE AND EAR PROTECTION** 

• Once you have safely aimed the Projector at your target, move the manual safety to "OFF SAFE," and pull trigger.

#### 6. Maintaining Your Projector

- Before you attempt to oil your Projector, make sure the Projector is "ON SAFE," unloaded, and the CO2 cartridge has been removed (Section 2.1, 3.2 and 4.2).
- Put 1 drop of Crosman 0241 Pellgunoil® on the tip of every CO2 cartridge to help maintain your Projector. (**Fig. 3**) **DO NOT** use petroleum distillate based oil or solvents, such as Vaseline®, and **DO NOT** use excessive oil as this can cause damage to your Projector.
- Your Projector will maintain proper function longer if you place one drop of oil on the breech bolt o-ring every 250 shots. (Fig. 4)
- Rub a light coat of lubricating oil on all **exposed** metal parts of your Projector. Use a lightly coated cleaning patch on the inside of your Projector barrel. Do not spray/pour oil into the Projector barrel as this will cause internal seals and O-rings to wear faster.

- Leaving the CO2 cartridge in the Projector freezes the internal seal. In hot weather the cartridge sticks to the seal and removal of the cartridge can pull the seal out, damaging it. The oil will prevent damage during removal for a week or more after installation.
- **DO NOT MODIFY OR ALTER YOUR Projector.** Attempts to modify the Projector in any way inconsistent with this manual may make your Projector unsafe to use, cause serious injury or death, and will void the warranty.
- If you drop your Projector, carefully check for damage and ensure proper operation before use. If anything appears or feels abnormal, like a shorter or weaker trigger pull, there may be worn or broken parts.

Call Palmer Cap-Chur Equipment Inc. 770-942-4395 / 800-294-9482

#### 7. Cap-Chur Model 1200C Projector Specifications

Capacity Single Shot Weight 4.8 lbs. (2.2 kg)

Overall Length 39.75 inches (100.9 cm)

Sights Front: Fixed

Rear: Notch adjustable for windage and elevation

Crosman 12 gram CO2 cartridge

Safety Cross bolt

Velocity: Low Setting 100 FPS High Setting 165 FPS

Barrel: 29" Rifled Steel

#### **PERFORMANCE**

Many factors affect velocity, including brand of syringe/dart, type of syringe/dart, amount of CO2 in cartridge, lubrication, barrel condition, temperature and shooting conditions.

#### **REPAIR SERVICE**

If your Projector needs repair, contact Palmer Cap-Chur Equipment Inc. at 770-942-4395 / 800-294-9482 or by email to: **info@palmercap-chur.com DO NOT ATTEMPT TO DISASSEMBLE YOUR PROJECTOR** as most repairs require special tools and fixtures. Any disassembly or modification of Projector not performed by Palmer Cap-Chur Equipment will void the warranty.

#### 8. CAP-CHUR PROJECTOR LIMITED WARRANTY

#### LIMITED ONE YEAR WARRANTY

This product is warranted against defects in materials and workmanship for a period of one (1) year from the date of retail purchase. This warranty is transferable during that period.

#### 1. WHAT IS COVERED

Replacement parts, labor and return shipping charges for Projectors repaired under warranty.

#### 2. WHAT IS NOT COVERED

Shipping charges to Palmer Cap-Chur Equipment Inc., damages caused by normal wear, abuse, modification or failure to perform normal maintenance (see Section 6) or any other expense are not covered under this limited warranty.

CONSEQUENTIAL DAMAGES, INCIDENTAL DAMAGES, OR INCIDENTAL EXPENSES, INCLUDING BUT NOT LIMITED TO DAMAGE TO PROPERTY, ARE ALSO NOT COVERED AND ARE HEREBY EXPRESSLY DISCLAIMED. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE DISCLAIMER MAY NOT APPLY TO YOU.

#### **IMPLIED WARRANTIES**

ANY IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO ONE (1) YEAR FROM DATE OF RETAIL PURCHASE. SOME STATES DO NOT ALLOW LIMITATIONS ON THE DURATION OF IMPLIED WARRANTIES, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

#### HOW TO OBTAIN WARRANTY PERFORMANCE

Email Palmer Cap-Chur Equipment Inc. at info@palmercap-chur.com or phone Palmer Cap-Chur Equipment Inc. at 770-942-4395 / 800-294-9482. Palmer Cap-Chur Equipment Inc. will provide instructions on how to return the item for repair. You must contact Palmer Cap-Chur Equipment **prior to** shipping your product. You should record the serial number in the event the Projector is stolen or service is needed.

#### 9. 1200C Long Range Projector Distance Charts

For Cap-Chur Projectors and Cap-Chur syringes only.

#### 9.1 General

Achievable distances – those distances a certain size can reach with the Projector – are listed below. However, greater distances can be achieved with practice, depending on your target size and skill level.

**NOTE:** Syringes should have some drop in flight from point of aim to point of impact. Syringes are self-contained units, meaning there is something inside them which will empty the contents on impact **YOU DO NOT HAVE TO HIT HARD!!** 

**PERFORMANCE:** Many factors affect the accuracy of the syringe. Including but not limited to: size of syringe, condition and type of tailpiece, CO2, Power Loads, excessive oiling of projector, condition of projector, temperature and wind. Most importantly the person firing the projector, if you are unable to fire a firearm accurately then you most likely will not be accurate when shooting your projector.

NOTE: Projectors have a velocity closer to that of archery than firearms.

NOTE: Projectors have THREE clicks; the First click does NOTHING.

#### 9.1 CAP-CHUR REUSABLE and AIR INJECT SYRINGES

Low Power Setting (Second Click)	High Power Setting (Third Click)
<ul> <li>1cc Syringe 12 yards or 36 feet (11 meters)</li> <li>2cc Syringe 12 yards or 36 feet (11 meters)</li> <li>3cc Syringe 12 yards or 36 feet (11 meters)</li> <li>4cc Syringe 10 yards or 30 feet (9 meters)</li> <li>5cc Syringe 10 yards or 30 feet (9 meters)</li> <li>7cc Syringe 7 yards or 21 feet (6 meters)</li> <li>10cc Syringe 7 yards or 21 feet (6 meters)</li> </ul>	<ul> <li>1cc Syringe 25 yards or 75 feet (23 meters)</li> <li>2cc Syringe 20 yards or 60 feet (18 meters)</li> <li>3cc Syringe 20 yards or 60 feet (18 meters)</li> <li>4cc Syringe 20 yards or 60 feet (18 meters)</li> <li>5cc Syringe 20 yards or 60 feet (18 meters)</li> <li>7cc Syringe 18 yards or 54 feet (16 meters)</li> <li>10cc Syringe 15 yards or 45 feet (14 meters)</li> </ul>
<ul> <li>15cc Syringe 5 yards or 15 feet (5 meters)</li> <li>20cc Syringe 5 yards or 15 feet (5 meters)</li> </ul>	<ul> <li>15cc Syringe 12 yards or 36 feet (11 meters)</li> <li>20cc Syringe 12 yards or 36 feet (11 meters)</li> </ul>

#### 9.2 DISPOSABLE AERO<sup>TM</sup> SYRINGES US Patent No: 9,358,090

Low Power Setting (Second Click)	High Power Setting (Third Click)
• 1cc 17 YARDS (51 FT)	• 1cc 25 YARDS (75 FT)
• 2cc 15 YARDS (45 FT)	• 2cc 23 YARDS (69 FT)
• 3cc 15 YARDS (45 FT)	• 3cc 20 YARDS (60 FT)
• 4cc 15 YARDS (45 FT)	• 4cc 19 YARDS (57 FT)
• 5cc 15 YARDS (45 FT)	• 5cc 18 YARDS (54 FT)
• 6cc 13 YARDS (39 FT)	• 6cc 18 YARDS (54 FT)
• 7cc 12 YARDS (36 FT)	• 7cc 17 YARDS (51 FT)
• 10cc 10 YARDS (30 FT)	• 10cc 15 YARDS (45 FT)
• 12cc 9 YARDS (27 FT)	• 12cc 14 YARDS (42 FT)

### 9.3 DISPOSABLE DCF $^{\rm TM}$ Syringe Distance Chart

Low Power Setting (Second Click)	High Power Setting (Third Click)
<ul> <li>1cc 18 Yards / 54 Feet</li> </ul>	<ul> <li>1cc 25 Yards / 75 Feet</li> </ul>
<ul><li>2cc 17 Yards / 51 Feet</li></ul>	<ul> <li>2cc 23 Yards / 68 Feet</li> </ul>
<ul> <li>3cc 16 Yards / 48 Feet</li> </ul>	<ul> <li>3cc 19 Yards / 57 Feet</li> </ul>
<ul> <li>4cc 15 Yards / 45 Feet</li> </ul>	<ul> <li>4cc 18 Yards / 54 Feet</li> </ul>
<ul> <li>5cc 13 Yards / 39 Feet</li> </ul>	5cc 18 Yards / 54 Feet
6cc 12 Yards / 36 Feet	<ul> <li>6cc 16 Yards / 48 Feet</li> </ul>
<ul> <li>7cc 12 Yards / 36 Feet</li> </ul>	<ul> <li>7cc 16 Yards / 48 Feet</li> </ul>
<ul> <li>10cc 8 Yards / 24 Feet</li> </ul>	<ul> <li>10cc 15 Yards / 45 Feet</li> </ul>

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