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## **Topic #16                      Master Stream Devices – Fixed and Portable**

The Cincinnati Fire Department utilizes (2) devices for apparatus mounted and portable mounted master streams. They are:

1.        The Stinger
2.        The Apollo

### **STINGER NOZZLE**



**TARGET G.P.M:**                      1250 GPM in the deck gun mode,  
1000 GPM in the portable mode.

**DEVICE PRESSURE:**                200psi. max.


**TIP SIZES:**                            1-3/8", 1-1/2", 1-3/4" AND 2" (same as referred to in  
Master Stream Nozzle Topic)

(a “stream straightening” adapter is used in front of the tips to enhance the capabilities of the solid stream).

The TFT Master Stream Nozzle can also be used

***ALWAYS CARRY 2 INCH TIP READY TO FLOW.  
SMALLER TIPS CAN BE PLACED ON THE DEVICE  
IF NEEDED.***

**LOCATION:**                              Carried by some engine companies

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### **MAINTENANCE:**

Grease the enclosed worm gear, annually. Do not grease or lubricate the leg locking pins. For other problems, consult the owners manual or report the defect to central stores.

The Stinger Nozzle may be used as a deck mounted gun or as a portable master stream device. The monitor handwheel drives a fully enclosed worm gear, which controls the stream elevation. Clockwise rotation will lower the stream and counterclockwise will raise the stream. The monitor is equipped with a safety stop that will limit the lowest elevation of the stream to 25° above horizontal. This safety stop can be overridden during deck mounted operations by the release of the elevation safety stop pin. **This safety stop may not be overridden while the monitor is being used in the portable mode.**

### **DECK MOUNT:**

When placing the appliance onto the deck mounted adapter, press down on the carrying handle until the unit snaps into place. You should hear two very distinct clicks as the unit seats itself. Make sure that the latch pins are fully engaged by pulling up firmly on the carrying handle. There will be a 3/16" movement when the unit is tested in this manner and also when water is flowed to the device. This movement is necessary for the quick release joint design.




#### **Deck Mount Release**

1. Pull Pin
2. Twist Handle & Lift From Base

#### **Vertical Elevation Lock**

Limits the height of the monitor to 25° above horizontal. Pull pin to lower in deck mode only.

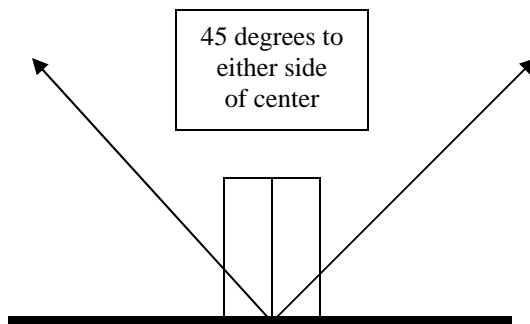
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### **PORTABLE MODE:**

The portable base is prepared for use by simply rotating each of the four folding legs into the locked position, starting with the rear legs first. The legs must be in the locked position prior to flowing water through the device. The inlet for the Stinger is a 5" Stortz connection.

The hose must be kept straight for a distance of at least 10' from the point of contact with the base. The front leg of the monitor should be aimed at the center of the target when possible.

Horizontal rotation in the portable mode must be limited to 45° either side of straight ahead. Whenever the monitor is operated in the portable mode, it must be secured with the safety chain that is provided.



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## **SETUP**

There are three recommended methods of setting up the Stinger Nozzle. Each situation may require a different method, however, one of the following methods should provide the proper set-up for any situation.

1. Connect the Stinger nozzle to the 5" hose and allow the hose to lay out in a straight line behind the nozzle. Connect the safety chain to a stationary object, to prevent the nozzle from moving. Apollo & Stinger the same set up in this mode.



**10 feet straight in**  
**AFFIX CHAIN TO**  
**STATIONARY OBJECT**

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2. Form a loop with the 5" hose so that the hose passes in front of the nozzle. Make sure that the hose extends in a straight line for a distance of 10' from the point where it connects to the nozzle. Secure the safety chain around the 5" hoses directly in front of the nozzle.



**Form big loop and affix the chain to the hose in front of the device.**


**Don't over tighten chain to avoid water flow interruption  
Adjust once charged**

3. Form a loop with the 5" hose so that the hose passes over itself behind the nozzle coupling. Make sure that the hose extends in a straight line for a distance of 10' from the point where it connects to the nozzle. Secure the safety chain to a stationary object to prevent the nozzle from moving. **PROBABLY THE SAFEST MODE**



**Form big loop and pass the hose over the 10 foot straight run near the coupling**

**AFFIX THE CHAIN TO A STATIONARY DEVICE**

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### **SWITCHING MODES:**


To release the unit:

1. Fully release the horizontal lock.
2. Pull out the twist handle lock pin.
3. While pulling out on the lock pin, rotate the handle to the release position.
4. While holding the handle in the release position, use the other hand to support the nozzle and lift the unit from the base. The unit will slide and lock into place without activating any handles or pins.

### **NOTES:**

1. Items that the chain can be affixed to:
  - a. Pole (utility or fence)
  - b. Straight Bar Driven into the ground
  - c. Parking Meter
  - d. Straight Bar against a doorway



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## APOLLO NOZZLE



**TARGET G.P.M.:** 1250 GPM in the deck gun mode,  
1000 GPM in the portable mode.

**DEVICE PRESSURE:** 200psi. max.


**TIP SIZES:** 1-3/8", 1-1/2", 1-3/4" AND 2"  
(same as referred to in Master Stream Nozzle Topic)

(a “stream straightening” adapter is used in front of the tips to enhance the capabilities of the solid stream).

The TFT Master Stream Nozzle can also be used

***ALWAYS CARRY 2 INCH TIP READY TO FLOW.  
SMALLER TIPS CAN BE PLACED ON THE DEVICE  
IF NEEDED.***

**LOCATION:** Carried by some engine companies

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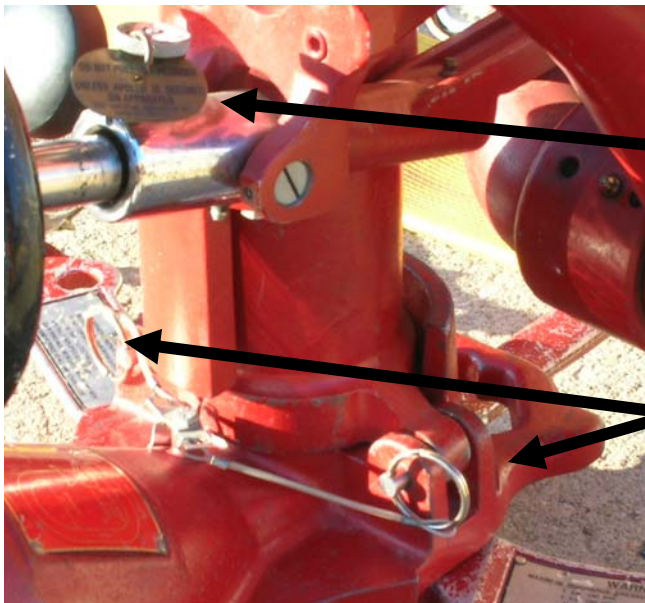
### **MAINTENANCE:**

Grease all fittings annually or as needed. Do not grease or lubricate the leg locking pins. For other problems, consult the owners manual or report the defect to central stores.

The Apollo Nozzle may be used as a deck mounted gun or as a portable master stream device. The monitor hand wheel controls the stream elevation. Clockwise rotation will lower the stream and counterclockwise will raise the stream. The monitor is equipped with a safety stop that will limit the lowest elevation of the stream to 35° above horizontal. This safety stop can be overridden during deck mounted operations by the release of the elevation safety stop pin. **This safety stop may not be overridden while the monitor is being used in the portable mode.**

### **DECK MOUNT:**

When placing the appliance onto the deck mounted adapter, position the nozzle on the mount and insert the two locking pins. Make sure that the locking pins are fully engaged by pulling up firmly on the carrying handle.




#### **Vertical Elevation Lock**

Limits the height of the monitor to 35° above horizontal.  
Pull pin to lower in deck mode only.

#### **Deck Mount Release**

Pull Pins & Lift Device off of base



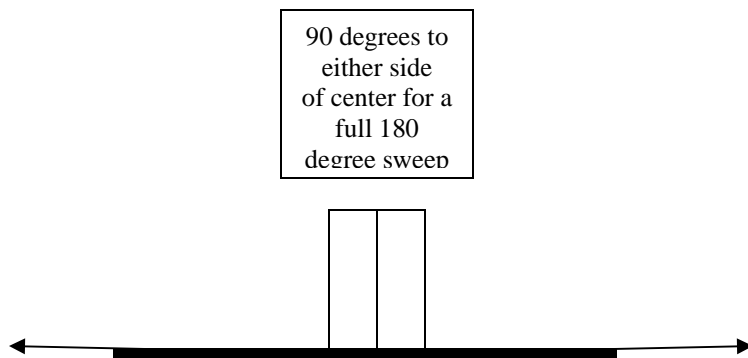
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### **PORTABLE MODE:**

The portable base is prepared for use by simply unfolding the three retracted legs. The front leg of the monitor should be aimed at the center of the target whenever possible. The inlet for the Apollo is a 5" Stortz connection.

The hose must be kept straight for a distance of at least 10' from the point of contact with the base.

Horizontal rotation in the portable mode will be limited to 90° either side of straight ahead, for a full 180° horizontal sweep. Whenever the monitor is operated in the portable mode, it must be secured with the self adjusting spikes along with the safety chain, or the tie down straps or both.



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## **SET UP**


There are three recommended methods of setting up the Apollo Nozzle. Each situation may require a different method; however, one of the following methods should provide the safe operation for any situation.

2. Connect the Apollo nozzle to the 5" hose and allow the hose to lay out in a straight line behind the nozzle. Set the self adjusting spikes and connect the safety chain to a stationary object, to prevent the nozzle from moving. Apollo & Stinger the same set up in this mode.




**10 feet straight in**

**AFFIX CHAIN TO  
STATIONARY OBJECT**

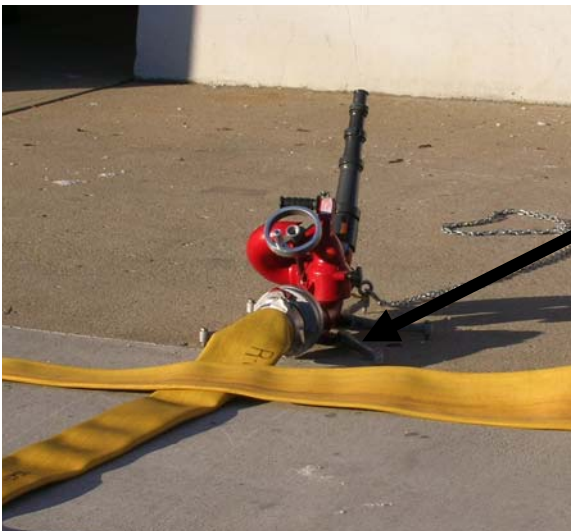
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3. Form a loop with the 5” hose so that the hose passes in front of the nozzle. Make sure that the hose extends in a straight line for a distance of 10’ from the point where it connects to the nozzle. Secure the tie down straps around the 5” hose, directly in front of the nozzle. Make sure the hooks on the Straps are turned out (points away from the hose). Set the self adjusting spikes. You may want to pass the safety chain under the 5” hose and secure it , as an extra safety measure. **SAFER MODE**




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4. Form a loop with the 5" hose so that the hose passes over itself behind the nozzle coupling. Make sure that the hose extends in a straight line for a distance of 10' from the point where it connects to the nozzle. Secure the safety chain to a stationary object to prevent the nozzle from moving. Set the self adjusting spikes.  
**PROBABLY THE SAFEST MODE.** Apollo & Stinger the same set up in this mode.



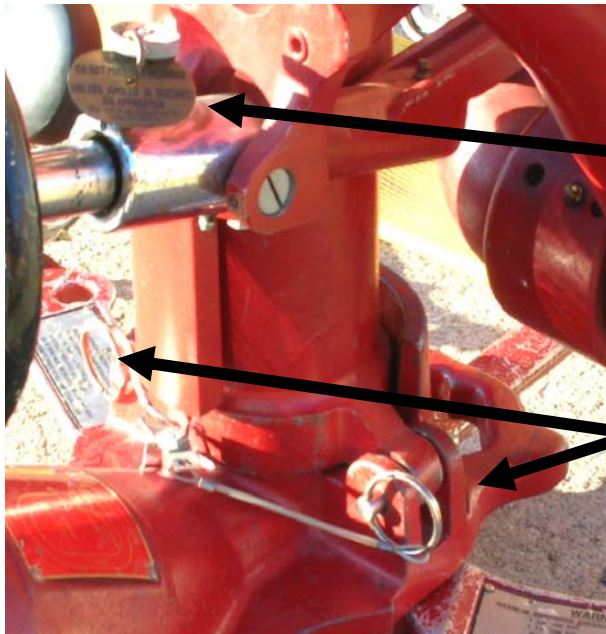
**Form big loop and pass the hose over the 10 foot straight run near the coupling**

**AFFIX THE CHAIN TO A STATIONARY DEVICE**

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### **SWITCHING MODES:**

To release the unit, remove the two locking pins at the base of the nozzle and lift the nozzle up by the handle.



#### **Vertical Elevation Lock**

Limits the height of the monitor to 35° above horizontal.  
Pull pin to lower in deck mode only.

#### **Deck Mount Release**

Pull Pins & Lift Device off of base