

<p align="center"><b>Crown Point Fire Rescue Department</b> <b>Standard Operating Guidelines</b></p>	<p>DATE OF ISSUE 5-15-00</p>	<p>AMENDED</p>	<p>No. 108</p>
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**PURPOSE**

To guide the crew members of the apparatus safely through all operating procedures associated with the KME Tower.

**GOALS**

To familiarize all Crown Point Fire Rescue members with all aspects of safe operation of the apparatus and equipment.

**Driver:** The person who drives the apparatus from station to scene and is in charge of all setup, ladder and pumping operations.

**Officer Seat:** The person in charge of all personnel on the apparatus. Officer shall be Incident Commander or liaison to the Incident Commander. Officer shall determine placement and priorities of the apparatus if not already indicated by Incident Command.

**Position #1 (driver side front):** With airpack donned, this position is the lead fire suppression crew member or the lead rescue member operating the ladder depending on direction of Officer.

**Position #2 (driver side rear):** Firefighter will work in conjunction with and under the direction of the driver. Truck setup, pad placement and pinning of outriggers and water supply at the apparatus location (i.e., breaking of attack and supply lines).

**Position #3 (passenger side front):** Works hand in hand with Position #1 firefighter unless otherwise directed by the Officer.

**Position #4 (passenger side rear):** Responsible for hydrant hookup and will stand by on platform during ladder operations.

**PTO Switch (for ladder operations):** To apply hydraulic power to ladder. Position truck and apply parking brake. Located to the left of the steering wheel, two switches labeled **LADDER POWER** and **PTO SWITCH**. Depress ladder power first and PTO switch second. (Reverse order when turning off)

**High Idle Switch:** Located on the rear of the truck, on the platform and in the bucket. This switch should be turned on anytime a hydraulic component is operated.

**Outriggers (leveling):** Using the level indicator located on the rear of the truck, determine the lowest side of the truck. Outriggers on the lowest side are extended fully first and retracted last. After both outriggers are fully extended, the level should be checked between front and rear outriggers on each side.

**Outriggers (positioning):** When positioning apparatus, approximately 5 ft. should be allowed on both

sides of truck when possible. (If unable to obtain 5 ft. of clearance see short jacking)

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**Outriggers (short jacking):** Sometimes it may be necessary to under-extend outriggers on one side of the truck due to limited work area. Under no circumstances should the ladder be moved to the under-extended side of the truck.

**Ladder Power Switch:** There are two ladder power switches. One in the cab, one on the platform. Both switches must be on to operate the ladder.

**Dead Man Switch:** Yellow foot switches located on the platform and in the bucket. These switches must be depressed in order to operate the controls in either location.

**Platform Controls:** Located under the hood on the platform to the left of the ladder, contains the power switch and control levers for movement of the ladder. Platform controls will override the bucket controls with dead man foot switch depressed.

**Bucket Controls:** Located in the bucket under the hood on the right side as you enter the bucket area. Ladder power switch must be on and dead man foot switch depressed to operate. (High idle should be used when operating the controls.....slow ladder speed is recommended for close quarter work)

**Safety Override Switch:** Located in the rear of the truck under the level indicator behind the fold down panel. This function should only be used in an emergency situation and by authorized personnel. This switch overrides all safety features on the tower.

**Pump Switch (for pumping operations):** To put truck in pump gear. Put truck in neutral, apply parking brake, pull collar on the pump switch (located directly below parking brake) forward and move switch to the lowest position. Place truck in drive, observe green lights near pump switch indicating if pump is in gear. \*\*\*Helpful hint: Always remember NPD (neutral, pump, drive)

**Five Inch Supply Line:** Located on the right rear of the truck inside the upper panel door. The bulk of the hose is stored underneath the ladder platform.

**Hand Lines:** Two crosslays are located immediately behind the crew cab.

**Bucket Nozzle (manual):** Located in the bucket, this nozzle can be operated manually using the hand cranks located on the nozzle itself.

**Bucket Nozzle (electric):** Located in the bucket, this nozzle can be operated either from the electric control switches in the bucket or from the electrical control switches on the platform.

**Bucket Attack Line:** Located in the bucket, this hose and nozzle can be operated by opening the valve on the supply stem of the hose.

**Bucket Shower Nozzle:** Located in the front of the bucket on the floor. This nozzle is used to help cool

the underside of the bucket.

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**Bucket Air Mask:** Two air masks, belt mounted regulators and 25 ft. of air supply line are located in the boxes on either side as you enter the bucket.

**Bucket Safety Harness:** Located in the boxes on either side as you enter the bucket. These harnesses should be worn at all times while the bucket is in operation.

**Tower Drain:** Located on the center rear of truck beneath the bumper. **ALWAYS PULL TOWER DRAIN BEFORE RETRACTING LADDER.**

**Low Air Alarm:** Typically this alarm will sound immediately when the Ladder Power Switch and PTO Switch are turned on. This is your reminder to open the two 4500 PSI bottles on the platform. Keep in mind, this is the breathing air for your bucket crew.

### **Truck Set-Up**

The set-up of the truck should be performed in a specific order so that it becomes a routine operation. The steps are as follows:

1. Position truck appropriately
2. Set parking brake
3. Depress ladder power switch in cab
4. Depress PTO switch in cab
5. Open 4500 PSI air bottle to silence alarm
6. Perform a walk-around (potential overhead or collapse hazards)
7. Check for 5 foot side clearance for outriggers
8. Turn on high idle switch at back of truck panel
9. Determine lowest side of truck using level indicator
10. Open outrigger control box door on lowest side of truck
11. Depress both toggles to out position
12. Depress front toggle down until it is about 1 foot off the ground
13. Depress rear toggle down until it is about 1 foot off the ground
14. Place pads under outriggers with handles facing the rear of the truck
15. Depress front toggle down until it touches the pad
16. Depress rear toggle down until it touches the pad
17. Depress both toggles equally until the rear tires are barely off the ground
18. Try to level this set of outriggers with each other
19. Close outrigger control box door on this side
20. Open outrigger control box on opposite side
21. Repeat steps 11 through 16
22. Depress both toggles equally until the bubble on the level indicator is as close to zero as possible (it must be in the green)
23. Try to level this set of outriggers with each other

24. Make sure all green lights are lit on each side
25. Close outrigger control box on this side
26. Turn off high idle
27. Truck set-up is complete.

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## **Driver Operations**

### **Roles & Responsibilities**

The driver is responsible for safe operation of set up and pumping operations. Unless directed by a senior officer, override procedures should only be done by the driver in charge.

### **Truck Positioning**

The truck should be positioned in such a manner to allow for:

- A. Collapse zone.
- B. Avoidance of overhead hazards
- C. Maximum tactical positioning for rescue, and/or fire suppression.

### **Water Supply**

Determine the largest hydrant available within a reasonable distance to the fireground. (Example: You may lay a longer line from a larger hydrant, even though a small main is nearer the fire) In the event there is no large hydrant near the fire you have two choices:

- A. Place pumper near largest hydrant available and operate as a relay pumper.
- B. Lay two separate supply lines from two separate hydrants.

### **Pump Operations**

The driver is responsible for all safe operations of pumping. Some key things to remember while pumping are as follows:

- A. Flowing water to both the tower and hand lines is an extremely delicate procedure as you will typically want to flow high pressures at the tower while maintaining controllable pressure for the hand lines.

## **Ladder Operations**

### **Roles & Responsibilities**

Crew member from position #1 is responsible for safe operation of all ladder operations. The operator must constantly be aware of:

- A. Changing structural condition
- B. Overhead hazards
- C. Wind direction
- D. Water supply
- E. Emergency override procedures

### **Seating the Ladder**

The ladder must be seated any time the tower is cradled. The person in charge of the platform seats the

ladder. To seat the ladder, after the ladder has been placed in the cradle, make sure high idle is on and push lower lever until the pressure gauge reads 1500 PSI.....hold in place for 2 seconds.

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## **Emergency & Manual Override Procedures**

### **Emergency Override**

In the event of a primary valve failure or a safety feature that you need to override, you have the ability to totally override all systems from the back of the truck. This procedure should only be performed in the event of an emergency and under the direction of a qualified individual. At least two people should be involved in this operation. The purpose for at least two people to be involved in this operation is so that one person can operate override controls, and the other can physically watch the condition of the vehicle and/or ladder.

Located in the glove compartment box on the passenger side of the cab is a tool and two keys. One of the keys is used to turn on the override switch. Turning this key allows you to override the safety features of the truck. For instance, if the truck was set up properly and the boom is extended out with weight on it and for some reason the truck would become un-level, the safety feature would prevent you from operating the ladder any further. However, by turning the safety override switch in the on position, you would be able to bypass the safety and move the ladder.

### **Manual Override**

Located in the glove compartment box on the passenger side of the cab is a tool with two keys attached to it. This tool will be needed in the event you want to manually operate the outriggers.

### **Manual Outrigger Operations**

Behind the panel on the rear of the truck is the manual override for the hydraulic outriggers. The following steps are needed to perform this function:

1. Open rear panel
2. Use outrigger valve on left and/or right side

The tool is to be used to manually operate the outriggers by putting the tool into the small hole on the valve itself and pushing. The front side of the valve system is for the down and out functions. The rear of the valve system is for the up and in functions.

### **Back-Up Hydraulic Pump**

On the face of the rear panel are two switches for the back-up hydraulic pump. The following steps are needed to perform this function:

1. Open rear panel
2. Flip switch to back-up
3. Move selector to Ladder or Outriggers
4. Close rear panel
5. Have one person push “emergency pump button”

6. Have second person operate controls