



PURPOSE

To define proper setup, safety, and application of the aerial heavy duty ladders. All personnel shall be familiar with this procedure.

POLICY

General Information

This apparatus is NFPA compliant and meets all standards relating to a heavy duty aerial ladder.

A heavy duty ladder is defined as an aerial ladder that will support 500 lbs at the tip from -5 to 75 degrees elevation, at any length of extension, full 360 degrees rotation, flowing 1000gpm in a 50 mph wind.

Pre-driving checks

1. Ladder properly stowed in the boom support
2. Stabilizers properly stowed for travel
3. Aerial master switch, located in the cab in the off position

Operational Considerations

1. Rescue vs. water tower operations or vertical ventilation
2. Overhead obstruction
3. Positioning the apparatus for best attack

Apparatus Positioning

1. Offensive operations: Position on side "A" in front or as directed by Incident Commander.
2. Defensive operations: Position on the corner which gives access to two sides and is potentially out of the collapse zone.
3. Rescue operations: From a window, if possible approach from above and lower until first rung is even with the window sill. From a roof, extend tip at least 6 feet above the edge of the roof. Rescue operations should be performed upwind when possible.

Note: Life safety is priority; the waterway should be kept pinned in the rescue mode so that it will not interfere with reaching victims.

4. Area around the apparatus must be clear for full stabilizer extension. Full extension is required for 360 degree rotation or 180 degree over the rear of the apparatus with the ladder fully loaded.

Approved

Fire Chief

1 of 3



RUSSELLVILLE FIRE DEPARTMENT
POLICY MANUAL

Policy Number:
Section:
Original Date:
Revised Date:

5. When placing the ladder to a building or object the beams should be kept 6 to 12 inches distance above the point of contact. It is acceptable to have the ladder settle to the building when loaded, but the evolution should never start rested on the object before loading the ladder.
6. When using the ladder pipe to fight a fire from above, never work over the roof. The danger of the roof ventilating could be a serious hazard to those on the aerial.

Stabilizer Setup

1. Shift transmission to neutral
2. Ensure front parking brake is set
3. Turn on Aerial Master (Aerial PTO also if applicable)
4. Set wheel chocks in place under front tires
5. Switch to outriggers/stabilizers
6. Deploy stabilizers and jack pads
7. Turn handles on pads up, positioned toward the inside
8. Level the apparatus using bubble level indicators affixed to the rear of the apparatus. To avoid re-leveling, level low side first and then high side if on uneven surface. Tires should be off the ground 1 to 2 inches
9. Insert safety pins as close to collar as possible

Short Jacking

1. The aerial ladder can be operated with one side of the stabilizers not fully extended. It will however limit the use of the aerial ladder to 180 degrees on the side in which the stabilizers are fully deployed.

Aerial Setup

1. Switch from outrigger/stabilizer to aerial mode
2. Test alarms
3. Perform aerial maneuvers as required by operating the desired lever

Aerial and Water Pump Operations

1. Engine must be at idle to engage pump
2. Transmission in NEUTRAL
3. Push PUMP SHIFT lever down SLOWLY to engage pump
4. Place transmission in DRIVE
5. Open desired valves for water flow at pump panel
6. Turn on nozzle master switch at pedestal console and operate directional controls as needed
Note: The high idle will be deactivated and the water pump will control the engine throttle. During pump operations the engine RPM is sufficient to operate all aerial functions.

Operating with Personnel on the Ladder

1. Aerial ladder shall not be extended or retracted with personnel on the ladder
2. Personnel on the ladder shall be locked in with a ladder belt when stationary

Approved

Fire Chief

2 of 3



RUSSELLVILLE FIRE DEPARTMENT
POLICY MANUAL

Policy Number:
Section:
Original Date:
Revised Date:

3. Personnel operating tip control must be in communication with operator at pedestal console via intercom
4. Tip controls operate the same as pedestal controls, but at 1/3 the speed
5. A manual switch at the console controls the selection of the tip or console aerial controls

Safety Warnings

1. The ladder has two safety devices to assist the operator in knowing when the aerial is overloaded:
 - a. The stability indicator on the pedestal console
 - b. Flashing amber lights located on either side of the of the aerial tip section, and a horn at the pedestal console
2. A dangerous operating condition is indicated by the amber lights flashing and the horn sounding. When this happens, operator shall immediately reduce the load on the ladder. The quickest and easiest way to take the aerial out of an overload situation is to raise the ladder.
3. Various warning labels are exhibited on the apparatus, but nothing takes the place of proper training and familiarization with both the apparatus and operations manuals

Manual Overrides

1. Aerial ladder and stabilizers can be activated by pulling the respective override knob located on the lower right rear of the apparatus or at the ladder pedestal for aerial ladder rotational overrides. These job specific knobs must be pulled outward for each specific task and used in conjunction with the emergency hydraulic power toggle switch. These overrides are in the event of loss of main system hydraulic power and can be used to store the aerial and stabilizers in the event of such a power loss.
2. The EPU (Emergency Pump Unit) should only be used when the main hydraulic pump is not operating.
3. Do not run the EPU for more than 30 minutes without allowing 30 minutes for cooling down.
4. Always activate the desired function, and then hold the emergency hydraulic power toggle switch to the on position.

Approved

Fire Chief

3 of 3