



ENGINEER CANDIDATE CERTIFICATION

TRUCK COMPANY – SERVICE AERIAL RESCUE OPERATIONS

MAXIMUM TIME: 6:00

TASK #	TASK
1	Wear Proper PPE <ul style="list-style-type: none"> • Wear appropriate clothing and footwear for incident • Do not wear helmet in the cab
2	Check for crew and apparatus security – seat belts <ul style="list-style-type: none"> • All compartment and crew doors must be closed • Check for crew being seated and wearing seat belts • Must be done before apparatus moves
3	Turn on emergency lights, including headlights (Opticom ON while driving Code 3) <ul style="list-style-type: none"> • Must turn on headlights and all warning lights • Once Spring Brake is released, check for door and seatbelt warning lights
4	Spot apparatus (turn table) in correct location for aerial operation
5	Set both parking brake and front parking brake CRITICAL ERROR <ul style="list-style-type: none"> • TIME STARTS
6	Place road transmission into neutral CRITICAL ERROR
7	Engage Ladder Master device
8	Engage Ladder PTO device
9	Exit Cab <ul style="list-style-type: none"> • Take helmet, portable radio and other PPE
10	Place wheel blocks on left and right front tires. CRITICAL ERROR <ul style="list-style-type: none"> • Collapsible wheel blocks locked • Forward and aft of wheel; must be done before outriggers CRITICAL ERROR • Wheel blocks in complete alignment with tire • Square to tread
11	Verbalize operating grade level indicators for Slope/Grade identification prior to leveling
12	Switch hydraulic power to Stabilizer position (if equipped)
13	Turn on High Idle Switch
14	Extend outriggers <ul style="list-style-type: none"> • Low side first • High side second • Do Not Short Jack CRITICAL ERROR
15	Place outrigger plates down CRITICAL ERROR <ul style="list-style-type: none"> • Place plates with handles facing the truck side – trip hazard • Lower jacks to ground, low side first, stair step lifting if needed. Jacks should be placed in center of pad.

TASK	TASK
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16	Raise rear wheels off ground or take the bulge out of the rear for correct stabilization <ul style="list-style-type: none"> • Per Task Book and Operators Manual, the operator can either take the bulge out of the rear tires or raise the tires off the ground on level ground • Front tires must maintain contact at all times CRITICAL ERROR
17	Verbalize and Ensure apparatus level indicators are green for slope and grade. CRITICAL ERROR
18	Verbalize and Ensure all on ground indicator lights are illuminated to activate ladder power
19	Place safety pins CRITICAL ERROR <ul style="list-style-type: none"> • Chains must be unrolled (if equipped) • Ensure that handled end does not come in contact with outrigger box • T-Handle to outside
20	Switch hydraulic power to Aerial (if equipped)
21	Close outrigger control doors (if equipped)
22	Replace pedestal safety chain after mounting turn table (if equipped)
23	Open cover of pedestal controls
24	Verbalize proper placement of Control Lever for RESCUE OPERATIONS CRITICAL ERROR
25	Monitor portable radio at all times
26	Turn volume on aerial ladder intercom up to an audible level
27	Ensure high idle is on
28	Turn on aerial ladder tracking lights
29	Issue CLEAR and AUDIBLE verbal statements prior to aerial ladder movement
30	To operate aerial controls <ul style="list-style-type: none"> • Activate dead-man pedal or pull up on locking collars (if equipped) • Two hands are recommended • DO NOT override safety interlocks (if equipped) CRITICAL ERROR • *IF UTILIZING A FIREFIGHTER ON THE AERIAL LADDER FOR RESCUE, FOLLOW FIREFIGHTER RESCUE PROCEDURES *
31	Ensure proper placement for Rescue Operation <ul style="list-style-type: none"> • One movement (Elevate, Rotate, Extend) at a time is preferred but multiple movements can be done simultaneously
32	Lower to objective or designated area for rescue (window) <ul style="list-style-type: none"> • Minor adjustments to aerial ladder are acceptable • Tip of ladder must be within 24" of objective (measured from the last rung at the tip of the ladder) CRITICAL ERROR • No part of the ladder can touch the objective/structure during any ladder movement (Elevate, Rotate and Extend) CRITICAL ERROR
33	All movement with aerial ladder must be smooth and safe CRITICAL ERROR
34	State Aerial is ready for climbing
35	Notify Rater that the evolution is completed by CLEARLY CALLING "TIME" CRITICAL ERROR

FIREFIGHTER RESCUE PROCEDURES

- **Elevate the ladder MINIMUM 10 degrees and extend MINIMUM 10 feet prior to the firefighter accessing the aerial ladder.**

Rescue Firefighter responsibilities:

- Dons full PPE for incident.
- Asks permission from engineer to mount turntable and climb aerial ladder
- Kneels on ladder and places boots on foot plates confirming proper placement
- Places hands on beam of ladder and checks for any hazards and confirming equipment is clear of ladder
- Utilizes department approved retention device (Ladder Belt) and clips into diagonal truss brace
- Verbally and visually confirms with Engineer they are safely positioned and ready for ladder movement
- Ladder evolution is complete by confirming correct ladder placement and addressing any safety concerns during the operation with the Engineer.

If any ladder adjustments are needed during the evolution or rescue, the firefighter needs to return to the foot plates and repeat the safety checks, communicating visually and verbally with the Engineer before any movement of the ladder.

Engineer responsibilities, must confirm the following with Rescue Firefighter before continuing with Aerial Rescue Operation:

- Ladder is Elevated to a Minimum of 10 degrees and extended minimum 10 feet prior to firefighter climbing aerial ladder.
- Confirm verbally and visually with the Rescue Firefighter he/she is kneeling has placed boots on foot plates and has proper hand placement on beam of ladder.
- Confirm verbally and visually with the Rescue Firefighter he/she is utilizing department approved retention device (Ladder Belt) and has clipped into diagonal truss brace
- Confirm verbally and visually with rescue firefighter they are ready for Aerial ladder movement
- Must have and maintain communication with Rescue Firefighter throughout the evolution

If at any point any of the steps above is not confirmed and communicated, the evolution will STOP and crews will re-evaluate



RESCUE OPERATION INSTRUCTIONS:

CRITICAL ERRORS – ANY CRITICAL ERROR CONSTITUTES A FAILURE

SAFETY VIOLATION – ERRORS THAT COULD CAUSE INJURY, BE LIFE THREATENING OR CAUSE PROPERTY DAMAGE

EXAMPLES:

- Fails to set Parking Brakes and vehicle rolls after seat belt is removed from driver
- Fails to place Transmission in Neutral
- Fails to place Wheel Blocks
- Fails to place Outriggers, Outrigger Safety Pins and/or Outrigger Plates
- Fails to keep Front Tires in contact with the ground
- Short Jacking Outriggers
- Fails to ensure all Operating Level Indicators are in the green
- Tip of ladder is greater than 24" from objective
- Any part of the ladder strikes building, object, or rests ladder on building
- All ladder movements are to be smooth and safe
- Fails to place Control Lever for RESCUE OPERATIONS
- Exceeds Maximum time
- Overrides Safety interlocks (if equipped)
- Remove and properly stow Outrigger Safety Pins before moving
- Backing apparatus without assistance

****Fails to complete Truck evolution as outlined****

*****If at any time, which could include prior to or after any portion of this evolution, the Rater determines that your actions create a hazard which may result in injury to any person, damage to property, other vehicles, or the apparatus you will be IMMEDIATELY disqualified from any certification process and asked to turn the apparatus over to the Rater*****



RESCUE SHUTDOWN PROCEDURE

1	Properly signal for Shut Down/Pick Up <ul style="list-style-type: none"> Utilize radio, voice, or hand signals to verify shut down with personnel
2	Ensure Ladder is between 70-75 degrees before retracting ladder
3	Retract Ladder
4	Rotate Ladder to bed position
5	Lower Ladder
6	Stop Ladder prior to bedding to visualize both sides for obstructions: <ul style="list-style-type: none"> Recheck Nozzle position If Left/Right movements must be made at or below 20 degrees, utilize 0-20 degrees override switch on pedestal (if equipped) Be aware of truck body when making left/right movements below 20 degrees
7	All movement with Aerial Ladder must be smooth and safe CRITICAL ERROR
8	Lower ladder to cradle <ul style="list-style-type: none"> Load hydraulic system until audibly bypassing to verify ladder is properly bedded (1000psi on pedestal gauge)
9	Turn off Aerial lighting
10	Turn off Intercom
11	Close Pedestal cover
12	Exit Turntable, Ensure safety chain is clipped in place (if utilized)
13	Remove and properly stow outrigger safety pins <ul style="list-style-type: none"> Must be done before moving outriggers CRITICAL ERROR
14	Stow Outriggers <ul style="list-style-type: none"> Switch hydraulic power to Stabilizer position (if equipped) Raise and stow outriggers – High side first Retract outriggers until seated Close outrigger control doors (if equipped) Replace outrigger jack plates
15	In cab <ul style="list-style-type: none"> Ensure “Jacks not Nested” light is off or check Command Zone (if equipped) Disengage Ladder PTO device Disengage Ladder Master device
16	Turn off all Emergency Lights <ul style="list-style-type: none"> Turn on four-way flashers Shut down engine
17	Secure all Equipment and Apparatus (nozzles, hose, compartment doors, etc.) <ul style="list-style-type: none"> All equipment should be returned to same compartment where it was found
18	Perform safety walk around <ul style="list-style-type: none"> Verify all previous steps are completed and perform any that were missed
19	Notify Rater that the apparatus is “Road Ready”

