

Springdale Fire Department

Policy & Procedures Manual

Volume 2 – Operations

Section 203 – Fire Operations

203.6 – Cold Weather Considerations

All personnel should familiarize themselves and take appropriate precautionary actions concerning operations during cold weather.

Apparatus Pump Draining

Whenever the outdoor temperature is (or is expected to be) 10° F or lower, fire pumps and piping (including booster lines) should be drained.

- Tank to pump valve should be closed, all intake and discharge lines uncapped and valves opened to facilitate draining in addition to the individual intake and discharge drain valves being opened.
- Master pump drain valve should also be opened and drained.
- On apparatus equipped with bumper lines, the automatic drain mechanism should be checked to ensure the line has completely drained.
- After completely draining all intake and discharge lines, all open valves and drains should be closed. If the tank to pump line valve allows water to flow into the pump, the pump master drain should be left open until such time as the pump is put into operation. **BE ESPECIALLY MINDFUL OF ANY DRAINS LEFT OPEN** and remember to close these before opening the tank to pump line and engaging the pump primer to prime the pump.

Possible Pump Shift Freeze Up

Truck 1, Engine 1, Engine 2, and Truck 6 have air actuated pump shift mechanisms. The air system routinely has a certain amount of moisture within the system. As a result, there is a possibility that the pump shift mechanism may freeze when exposed to significant cold temperatures for an extended period of time. In the event a pump shift mechanism freezes, the only repair is to bring the apparatus back into a warm environment to thaw out. If the apparatus is in the pump mode and the shift mechanism freezes, the apparatus will require being towed to the maintenance bay.

When these units must be exposed to cold temperatures for an extended period of time, consider the following.

- On EMS related calls where there is no likelihood of the pump being needed, leave the apparatus pump shift in the road position.
- On FIRE related calls where there is ANY chance of the pump being needed, place the apparatus pump shift into the pump position immediately. Obviously, whenever the pump is engaged it must be primed with water to prevent damage to the pump from being operated dry.

Taking Apparatus and Squads Outdoors

Whenever the outdoor temperature is (or is expected to be) 25° F or lower it is very important to limit the outdoor exposure time of apparatus. When these weather conditions are present, non-emergent trips (such as grocery shopping) should be limited and the length of time the units are

outdoors should be kept as brief as possible. Try to schedule needed trips during the warmest period of the day. Normal non-emergent outdoor activities such as pre-planning, street familiarization, etc. should be curtailed whenever temperatures are below freezing.

All units parked outdoors when temperatures are below 25° F should be left with the engines running. Squad patient compartment heaters should be operating at all times when the unit is out of the station. Efforts should be made to keep the patient compartment as warm as possible; do not leave patient compartment doors open. Ensure an adequate supply of blankets is in each squad with one additional blanket kept on the cot.

When temperatures are above 25° F but below 40° F special attention should still be given to the amount of time squads are outside without the engine running and patient compartment heater operating. Remember to activate the high idle whenever the squad is parked.

Under these weather conditions, whenever outlying units must report to a station other than their own, personnel should make every effort to park apparatus inside the station; or when at Station 1 in the wash bay.

Remember, when temperatures fall below 10 degrees it only takes a short period of time for small amounts of water to freeze. The smallest lines on fire apparatus (such as gauge lines and drain lines) freeze quickest. Be especially mindful of the additional factor of wind chill. Apparatus traveling just a few miles at 30 mph encounter a significant wind chill factor to all water lines and other components.