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Training, Equipment & Consulting for the Fire Service

Effective Practices And Information For Draining And Loading Hose **Applicable To All Hose, Including LDH**

-All hose sections are drained individually with a hose roller, do not keep sections connected while draining and/or loading.

-If the hose is a hand line, nozzle must be removed from the end of the hose prior to draining it, (some guys try to take short cuts and leave the nozzle on and think that by leaving the bail in the open position you can effectively drain the hose). Leaving the nozzle in place (even if it's open) creates back pressure in the line and air will get passed the hose roller (especially if you are not using the recommended technique below) leaving air in the line, leaving you with a puffy hose load.

-(Technique)when hose roller is being rolled down the hose line, the top side of the hose roller is tilted forward creating a bend in the hose, versus just allowing the hose to pass through the roller flat. By using this technique you are creating a tighter squeeze on the hose increasing the friction applied to the hose as you move the roller down the hose line. Traditionally, firefighters just allow the hose to move through the roller flat and in doing so, it allows water and air to stay behind in the hose.

-The hose is rolled using the same technique a second time. The first time you drain the hose is mostly to drain the bulk of the water, the second time is to eliminate any residual water, but mostly to eliminate the air in the hose.

-Once the hose is drained for a second time, the ends of the hose are folded over and the couplings are placed on top of the hose, the hose is kept this way as the hose is being loaded until the coupling reaches approx. 10' from the apparatus. At this point, unfold the hose and allow gravity to help in eliminating any residual water or air that may still be in the line and as the coupling reaches the actual hose bed go ahead and attach the nozzle or the next section and continue to repeat this process until all hose is loaded. This way loading the hose itself, serves as another form of draining the hose. The end of the hose section is folded over initially to accomplish two things, 1- it does not allow air back in the line while the hose is being dragged and loaded. 2- it keeps the couplings off the ground as the hose is being dragged, therefore protecting the threads/coupling. If this technique is not done after the hose has been drained, air tends to enter the hose while the hose is being loaded, leaving you with a puffy load.

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-We commonly see several firefighters standing next to each other behind the apparatus holding LDH off the ground as the hose is being loaded, sometimes extending out several feet behind the truck. This is not a good practice! The next section should not be attached until the coupling of the hose being loaded has reached the hose bed, as mentioned earlier.

-Another draining technique that can be used that works well with LDH to prevent the hose load from ending up puffy from residual water or air is to simply just roll the hose on itself like a doughnut roll. As the hose is rolled the roll gets bigger and heavier assuring that all water and air has been eliminated. The hose is then loaded from the doughnut roll and because the hose is in this configuration as it is being loaded, you make sure that no air has entered the hose. Just make sure that when you roll the LDH, you roll the hose toward the apparatus, not away from the apparatus (you don't want to have to carry a 100' section of LDH 100' to the truck to load it, it's heavy!). The problem with this technique is that it takes longer to load the hose because you have to unroll it as you are loading it. If you unroll the whole section then you must resort back to the other technique because now you have introduced air into the line.

-All new hose that comes in needs to be laid out and the first technique need to be applied before loading it. This is done for several reason, 1- it allows you to do an effective visual inspection of the hose. 2- it starts the breaking in process of the hose. 3- it allows you to drain whatever air is in the hose prior to loading it. All new hose usually has air in it that is introduced in the packaging and shipping process, so always suspect new hose to have air in it. If you load it straight out of the box you are pretty much guaranteed to end up with a puffy hose.

-If you are putting new hose on an apparatus, never expect to be able to fit as much hose as you had previously. You are guaranteed to not fit the same amount of hose! There are several reasons for this, 1- It is new hose! It has not been broken in, all hoses have to go through a breaking in process for them to eventually lay nice and flat as the other hose. 2- Hose loads have to be given time to settle in, you may only be able to load 600' or 700' of new hose initially but once the load sits in the hose bed and the apparatus drives around, with the movement, vibration of the apparatus and weight of the hose load itself, it will start to settle in better creating more space to fit more hose. It is recommended to stagger the loading of new hose over a few days to eventually load the total amount of hose desired.

-Loading techniques vary based on the hose bed and the hose load being used, but the draining techniques should always be the same. We just have to make sure we stay discipline in the way we do it and not take any short cuts. It's the little things that make a difference. Stay discipline and consistent.