Rurally Speaking: How Are Hydraulic Rescue Tools Faring on Today's Toughest New Vehicles?

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Author: Carl J. Haddon

We all know of the budgetary challenges faced by a majority of rural fire departments today. As such, when it comes time to consider buying or replacing vehicle extrication rescue tools, there is a lot to consider. One of the most important considerations is, will these things handle today's toughest new vehicles?"

Litigation

Not only is it important to have tools that will do the job, but lately we've been seeing more and more litigation against fire departments as a result of extrications "taking too long." The public, our customers, has an expectation that the fire department will have the right tools and the properly trained personnel to do the job in an acceptable amount of time. The saddest part of this situation is that we are seeing fire departments either lose these court battles or settle out of court to avoid such losses. For the sake of professionalism, I won't site actual case history, but rest assured it exists, and at least one such major case of late involves a rural combination department in the eastern United States. My goal is not to scare anybody but to make you aware that this litigation is in no way confined to big city departments. Forewarned is forearmed.

NVT Training

Over the past five or six years Five Star Fire Training, LLC, has produced new vehicle extrication training programs that are sponsored by Volvo Cars of North America. Volvo provides us with new and crash-tested new vehicles for these programs. The last three of these programs were held in rural locations in the Pennsylvania, New Jersey, and Kansas. I bring this up not to promote a particular training program but moreover to share with you what we found out about how today's rescue tools performed on some of the toughest cars in the world. Additionally, I thought it a good idea to share some of the misnomers about new vehicle technology (NVT) cars that abound today.

First and foremost, you can't know how any manufacturer's rescue tools will perform on new vehicles unless you personally find the opportunity to use them on new vehicles with new metals. No matter what you read in columns like this, or any other publication, you can't learn NVT or how your rescue equipment will work on it by training on old cars or by simply listening to what a tool rep tells you—period. Second, don't ever let anyone tell you to "just do this or that" on an NVT vehicle. Every wreck is different, and every vehicle is different—especially when you compare a 2014 model year car with even that of a 2000 model year car. Things like "simple" door pops and dash rolls are

not simple on these cars. When things go wrong, they go wrong a lot faster and a lot more violently on NVT cars.

The Spoiler

During our aforementioned training programs during the second half of 2013, we had the opportunity to use the best of the best hydraulic rescue tools from all the major tool manufacturers offered in the United States. Firefighters, not instructors, used the tools on 2013 and 2014 Volvo vehicles of all models, shapes, sizes, and varying conditions—from showroom-floor new to crashed cars originally used to obtain Volvo's latest crash test ratings. Students used these tools at the operations, technician, and specialist levels, trying everything from simple door pops to the infamous "crack the egg" maneuver. In a nutshell, I can tell you that some tools were more successful than others, but interestingly enough, only in certain circumstances. In other words, every tool could do something well, some could do most things well, however no tool could do it all. Some had the necessary power and speed but lacked blade design. Some had blade design, but were too heavy and slow. Some had good mechanics, but the battery took a dump in the middle of a maneuver.

With this said, we also left a wake of disabled rescue tools and unusable or broken rescue tool blades in our path. Make no mistake about it—real NVT cars (not softballs designed to make rescue tools look good) are tough, very tough. While working on these cars, we (students and tool reps alike) broke red ones, blue ones, gold ones, orange ones, green ones, black ones, new ones and old ones. Sounds kind of like a Dr. Seuss kids book, no? We did find that the level-headed, well-trained firefighters in the groupings had fewer tools fail or break. They seemed to have a better feel for the warning signs of imminent tool failures and had a better understanding of how particular tools worked. Also successful were those firefighters who paid attention to the importance of understanding how the new metals are used in new vehicle construction processes, thereby changing their entire school of thought concerning today's vehicle rescues. Rescue tools in the hands of these firefighters worked much better, and were able to accomplish much more.

In the final analysis, rescue tools don't operate themselves and don't overcome the challenges of today's cars and today's vehicle accidents without well trained, level headed operators at the controls. The rescue tool is only as good and the rescuer operating it.

CARL J. HADDON is a member of the Fire Apparatus & Emergency Equipment editorial advisory board and the director of Five Star Fire Training LLC, which is sponsored, in part, by Volvo North America. He serves as assistant chief and fire commissioner for the North Fork (ID) Fire Department and is a career veteran of more than 25 years in the fire and EMS services in southern California. He is a certified Level 2 fire instructor and an ISFSI member and teaches Five Star Auto Extrication and NFPA 610 classes across the country.

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