

Problems we now face:

With the increase in newer and safer vehicles on the road today, our job is going to get harder and more challenging. Something needs to be done.

I have witnessed over the years a greater understanding from emergency services with regard to a casualty centered approach, this in itself is a fantastic move forward, which has of course increased the realism that we will be required to carry out more roof removals and other space creation techniques that in the past would have been substituted with a swift removal on a Spine board out through the tailgate.

With the increase of medical entrapments becoming a day to day practice, we find ourselves having to carry out space creation evolutions on very new and modern vehicles, this is where our problems start .

What used to be a fairly simple procedure for removing the Roof or B-post can now become a problem for us with regard to new exotic metals found on vehicles today, HSLA (high strength low alloy steel) Boron, UHST (ultra high strength steel) are just some of the metals starting to appear more and more on new vehicles on the roads today.

There have been a few occasions now where I have witnessed hydraulic tools struggling, and at times unable to cut these metals, a very unexpected problem to have to encounter, our thoughts where, we have never had this problem before, what are we going to do now?

This unfortunately is the start of things to come, what can we do?

Training needs to be improved so that we can become familiar with new vehicle technology and what materials we can now expect to find, do you think that training on old rusty cars is enough to prepare us for such an event?

Do your tools have enough power to be able to overcome these metals and complete the cut without bottoming out on power, possibly making a simple extrication become a more time consuming event because we now have to look at un-rehearsed alternatives.

I know that Volvo states you need at least 40 ton's of cutting force to cut through Boron, is this enough ? what cutting forces should we be looking at ?

I will hopefully be able to get some up to date information on what cutting forces are needed, and I will post them as soon as I get them.

Cutting force has improved hugely, we are now looking at minimum cutting forces of 90 ton plus to take us into the near future, I say near future because cars are only going to get stronger.

If you have encountered these problems please tell us about it and what you had to do to overcome them.

Check out the gallery for some additional pictures showing what we can be facing and trying to cut on the roads today.



Tool Use When Cutting these metals:

- Inspect what you are going to cut before you cut it, looking for type of construction and the best place to cut and also SRS systems.
- Will the tool cut it or not (a bit of experience will enable you to make the call as to cut or spread or go to plan B)
- Keep the tool at a 90 degree angle to what you are cutting, this will also help prevent the tool from twisting and side loading the blades.
- Do not point load the blades as this may cause a failure. (loading the tips only)
- Try to completely surround the part you are cutting
- Observe blades throughout for any abnormal movement.
- If in doubt stop re-position and carry on.
- If you get too much movement in the tool try rotating it 180 degrees and try again, that change in blade orientation may stop unwanted movement.
- B-post cuts, if you attack the b-post at 90 degrees facing the post direction, you may find it better to approach the cut in line with the vehicle (basically rotate the tool 90 degrees to the left or right) this has been found to assist with cutting the stronger metals, without compacting the metal as much.
- Don't get stuck on one cut , avoid tunnel vision, plan ahead
- If it isn't working go to **PLAN B - C - D**