An Upper Rail Dash Roll

The advanced dash roll technique is a technique that can be used in situations such as an under-ride involving a HGV or structure such as a brick wall, this is just two examples, and it can also be used in situations where a Rapid Extrication is called for.

This technique can save a lot of time where there is not the time to remove the roof due to the deterioration of the casualty but where they have lower limb or waist entrapment from impact damage to the dash area.

This technique can also be used in conjunction with full roof and door removal, it works just as well.

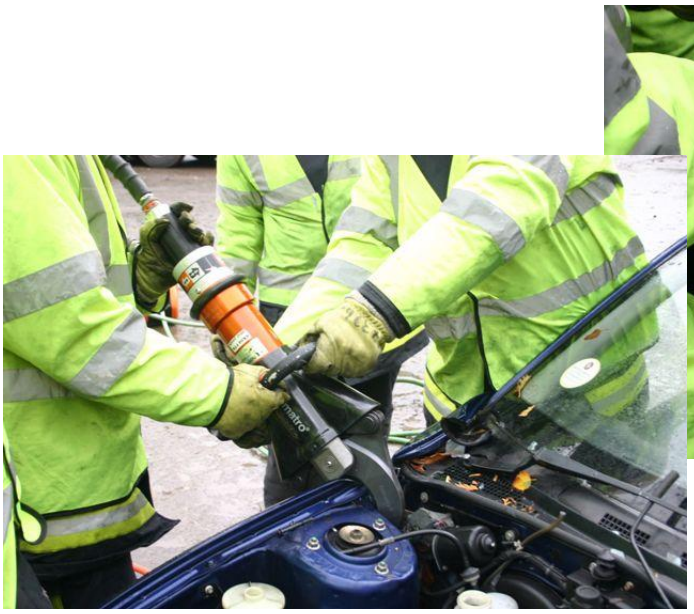
It's a technique that enables you to relocate the dash, without causing the main bulk of the engine compartment to roll down into the ground, which can then have a negative result by causing the vehicle to buckle at the front driver's floor plan area. Carrying out the advanced dash roll will in most cases just enable a small section of the dash in font of the firewall / bulkhead to roll forward and down.

This is a basic run down of how do carry out the procedure:

1. Stabilise the vehicle as per normal procedures, with additional stabilisation under the B-post where the Ram purchase point will be.

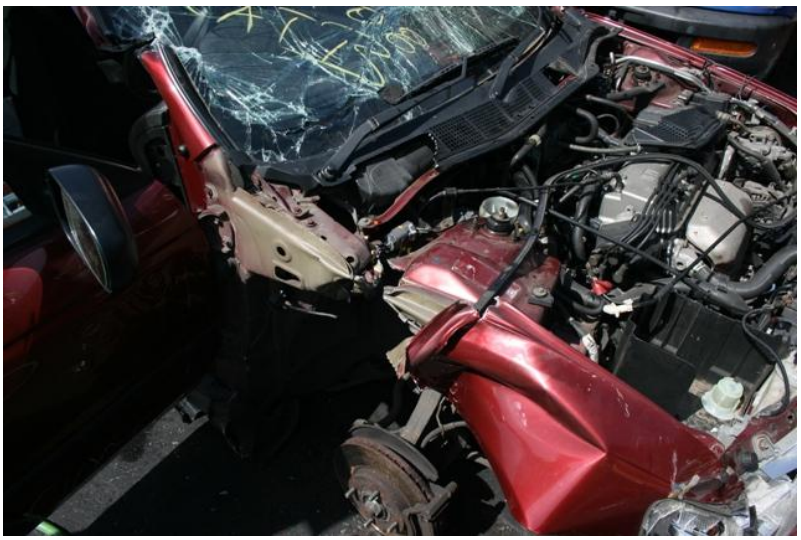
2. Once we have stabilised the vehicle we used a ram and tensioned it to the A-post, to prevent the A-post and dash from moving downwards when we make the cuts in the A-post. Also cutting the door check strap will enable to move the door back out of the way, or if time permits remove the door completely.

3. Once the A-post has the load taken up on the ram we will now cut a 1 -2 inch piece out of the A-post so that when we roll the dash the A-post will not catch against itself.



4. With simultaneous activity a second crew, if man power permits can also be removing the wing, this is optional, but will give you a clearer view of the upper rail. Once done they can continue to put the relief cut into the upper rail behind (bulkhead side) of the suspension transom.

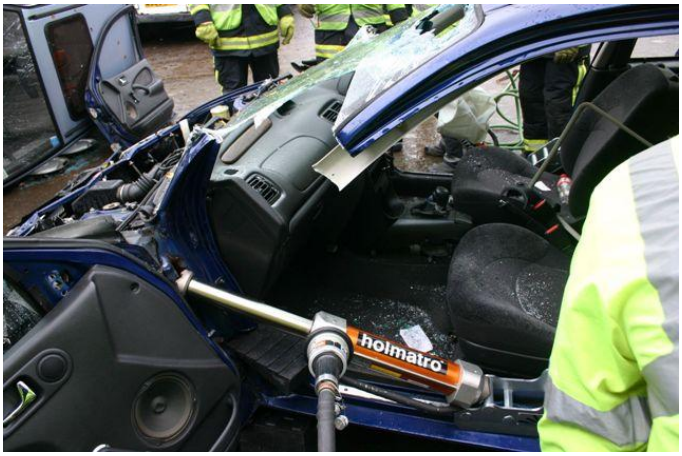
For a better outcome it would be beneficial to cut a section approx 1” width out of the upper rail, to help reduce the issue of the metals moving against each other.



5. Also at the same time Horizontal relief cuts need to be made in the base of the A-post. The cuts ideally should be horizontal but only the situation will dictate where the relief cuts are made. This cut can be made earlier on before we tension a ram against the A-post.

6. Once all the cuts are made and the stabilisation has been checked, we can now think about starting to ram either against the A-post or a Door hinge, we did both on each side of the car, the side where we rammed of the door hinge, didn't effect the door glass and this stayed intact through out.

Notice how the door Glass is still intact, again saving time not having to manage it, however sheeting it over would be standard procedures in case of accidental breakage.



Ramming is just beginning here. Steady progress with space creation can be observed

The Glazing has broken off here; it was partially damaged before we started, but as we maxed out the rams to see what we could do it just ripped of completely, so there is still a need for correct PPE for rescuer and casualty from glass dust etc.

This was again just to see what we could do; perhaps removing all the A-post would have given us even more space to work with without that hazard of hitting your head.

Eventually the whole engine compartment started to roll down.

You can start to see the displacement of the centre console and floor plan.

As you can see in the above pictures quite a significant amount of space can be created.

Refresh

1. Stabilise as necessary including an extra point under the Ram purchase point, usually under the B-post
2. Make a relief cut preferably horizontally in the base of the A-post
3. Tension a ram against the A-post prior to making the upper cuts in the A-post to prevent any collapse.
4. Remove a piece of the A-post about a 3rd of the way up the A-post from dash level approximately 1-2 inches wide. Or as the situation dictates.
5. Whilst areas 2-4 are being done you can start to remove the wing to expose the upper rail.
6. Preferably make a complete cut through the upper rail, bulkhead side of the suspension transom, and if time permits cut a section of the upper rail out.
7. Notify personnel that ramming is going to take place, put in all safety precautions with regard to un-deployed SRS systems, casualty and rescue teams.
8. Commence ramming until enough space is made to extricate the casualty.

A point to bear in mind is to always try to tension a ram against the dash prior to making your relief cuts to prevent any unwanted downward movement of the dash when the relief cuts are being made. This will reduce and unwanted discomfort or further injury to the casualty.

I hope you have found this article of some use. Please forward any ideas to progress it, or any points you see that may need changing.

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