An Upper Rail Dash Roll

The upper rail 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 etc; it can also be used in situations where a Rapid Extrication is called for.

This technique can save a lot of time and create much needed space when a rapid casualty removal is needed when face with situations mentioned above.

It can also be used in conjunction with full roof and door removal.

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 floor pan to buckle and deform in the foot area. Carrying out the upper rail 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 guide 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.



Cutting the door check/retaining strap will allow the door to be opended a lot more giving better access.



2. Once you have stabilised the vehicle use a ram and tension it against the A-post, to prevent the A-post and dash from dropping downwards when we make the cuts in the A-post. "Remember the A-post's hold a lot of the integral strength" Also cutting the door check strap will enable you to move the door back out of the way, or if time permits remove the door completely.



3. Once you have tension on the ram against the A-post, 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, (with skill you can angle the tool blade so that the lower post ends up on the outside of the vehicle after the cut). Or if time permits and no complications occur cut out the whole upper section of A-post completely



4. With simultaneous activity a second crew, if personnel 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) 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. At the same time Horizontal relief cuts need to be made in the base of the Apost. The cuts ideally should be horizontal but only the situation will dictate where the relief cuts are made. This can be carried out earlier on before we tension a ram against the A-post



6. Once all the cuts are complete 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. "Uvgcf { "r tqi tguu"y kj "ur ceg"etgcvkqp"ecp"dg"qdugtxgf



Always use full casualty protection and apply windshield covers as sharps protection prior to ramming.

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.



Removing all of the A-post here would have given greater casualty access and created a safer work area.



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 or all 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, see video.
- 5. Whilst areas 2-4 are being done you can start to remove the wing to expose the upper rail. You can just cut through the wing and upper rail in one or two cuts.
- 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 any 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.

rtc.rescue@gmail.com