

## HGV Extrication Tips

Extrication training and operations can be very draining on resources and the skills of the rescuers present.

Training on HGV/LGV's is something that we do not get to do very often due to the difficulty in getting hold of these vehicles because of scrap values and cost.

Here we are going to look at some very basic procedures and snippets of information you may find helpful in the future.

One of the main problems we will face is gaining access, here we can see the height of the cab will work against us, we will need to use equipment such as work platforms / sections of ladders / other improvised equipment and possibly the use of an ariel platform in extreme cases.



We will also face the problem of using heavy hydraulic tools above shoulder height, which they are not designed for.

Here we can see the fuel tank and next to it on the right the AdBlue tank which has the blue top, this is no risk to the rescue at all, it is a mix of water and Pig urine which is used to reduce emissions, it will pose a Bio hazard should you get in on bare skin or digest it.



Stability is always a problem, especially if you do not carry the equipment designed for heavy vehicle stabilisation, such as Air-shore or Paratech etc. Here we can see the vehicle is fitted with a tail lift, lowering this can actually create a stable base for rear vehicle stability, however the main risk with this is should the hydraulics fail or it has been damaged the support may fail.





The control box for the tail lift. These are not the same and can be in different locations.



The use of blocks and wedges can be used on many areas of the vehicle, again this will depend of the amount carried on the fire appliance / truck.



The initial task will be to chock either side of a wheel with suitable wedges big enough to prevent motion.

The next step will be to check the handbrake and turn off the ignition (If we need to enter the cab, we will need to secure an upright support to prevent movement while we do this) we will then need to look at dumping the air to secure the brakes in the on position, either by pumping the break pedal or by removing the air from the air-tanks, with a trailer unit we can pull the red suzi cable or pull the break lever on the trailer (usually on the nearside) and then lower the landing gear.

Wedges and blocks can also be used to secure an Air-sprung cab, be aware the air cushions will try to counter act the stability.





Here you can see the blocks have been placed between the wheel and the top of the wheel arch to provide additional stability for the cab.



Here you can see a slightly different method, this again will depend on what you have available.

The use of a step block to aid stability, this is for demonstration purposes, this part of the vehicle will not support the load should something fail.





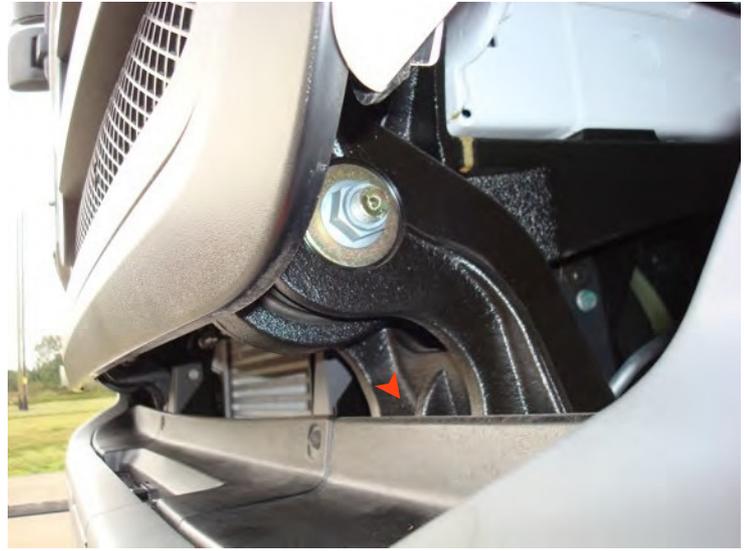
This would be a more suited method covering a greater surface area, and placed onto a load bearing part of the chassis.

If there is a risk that the cab tilt mechanism has been damaged we will need to secure the cab to the chassis, using a ratchet strap or similar. This is achieved by securing the cab to the chassis. The old pictured of securing the cab to the wheels by going over the roof is not an effective method as the cab can still roll side to side within the ratchet strap arc. Best practise is to secure the cab directly to the chassis from the mid/bottom cab area.

Rear



Front





Here we can see the ratchet strap attached to the wheel, either way is ok but you can see that the left hand picture it is attached to the bottom of the wheel, this poses the problem of the wheel turning when tensioned, by law only the rear wheels have to lock when the handbrake is applied, so it would be better to attach the ratchet to the top of the wheel as seen in the right hand picture. Or similarly use a chain set.



The ratchet could also be attached to the chassis instead. From the bottom of the cab to the chassis and not over the entire cab roof.



The battery will normally be 24v and can be isolated by disconnecting the negative terminal or by removing the short piece of cable that joins the two battery blocks together to create the circuit.

