

Proposed amendment to rule B. 19.1. RECOVERY POINTS

Having witnessed the incident a couple of years ago which sparked the original rule change to include the requirement for a 3mm spreader to be fitted I fully support the decision and I personally have always promoted that recovery points should be even more substantial than this where possible.

However, the new regulation is slightly confusing and misleading, resulting in some issues at scrutineering.

The requirement for a 3mm spreader to be fitted "**regardless of type or location**" implies that no matter what the design or method of fitment then a 3mm spreader plate should be fitted. However the requirement really comes where a recovery point is bolted through the chassis or "standard" bumper, relying solely on the < 3mm plate of the chassis / bumper for its security.

If the recovery point is bolted to a 6mm thick winch bumper or an 8mm thick drop plate does it really need a 3mm spreader behind it?

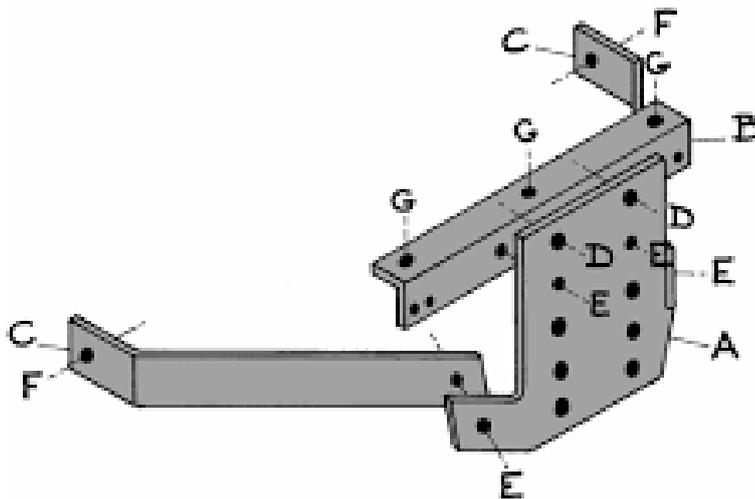
Also, and probably more importantly, I come to late Defender cross members. The wording of the regulation doesn't allow for the fitting of aftermarket recovery points in the manner intended by Land Rover. It states "**Factory specification (or better) trailer hitches are acceptable**". But it isn't clear how this relates to aftermarket or home made recovery systems (not trailer hitches) and also how the 3mm plate rule applies in this scenario.

It is "almost" impossible to fit a 3mm spreader in this situation but where brackets are fitted in line with Land Rovers methods, there is no need for a 3mm spreader.

Can the wording of the rule please be amended to make it clear and to allow many of the commonly fitted aftermarket solutions to be used without any doubt or confusion?

Currently there is no exemption from the 3mm spreader plate rule for any Defender however it is almost impossible to achieve this on the td5 / tdc1 chassis and goes against the design of the standard fitment.

The manufacturers design is for the tow bracket to be secured to multiple fixing points (points G, D and F in the diagram below), 7 bolts in total screwed into existing captive threads. This offers far greater strength than a standard series cross member with 2 x m16 bolts, bolted directly through the cross member even with a 3mm spreader plate on the reverse as that is still dependant on the structural integrity of the cross member and is reliant on the < 3mm steel that the cross member is made from. As opposed to the late Defender design which has the additional support from the stays attached to the fuel tank frame and the vertical bolts attached to the bottom face of the cross member.



This is a genuine Land Rover trailer hitch.



Finally, there is no mention of recovery points "built in" to winch / heavy duty bumpers, such as welded brackets or swivel eyes both designed to attach shackles to. Are these acceptable at the scrutineers discretion? Eg a swivel eye attached through a 6mm thick bumper is very substantial, however the same swivel eye passed through a standard bumper will pull through with ease. It states "***if a tow ball is fitted, welding alone is insufficient***", but what about a welded attachment on a HD bumper?

Therefore the new wording of regulation B. 19 on page 79 should state:-

B. 19.1. Adequate front and rear recovery attachments must be provided for recovery purposes in all events. Bumpers, tie-down rings, lifting rings or Range Rover/Discovery “tow fittings” are not adequate. Factory specification (or better) trailer hitches are acceptable.

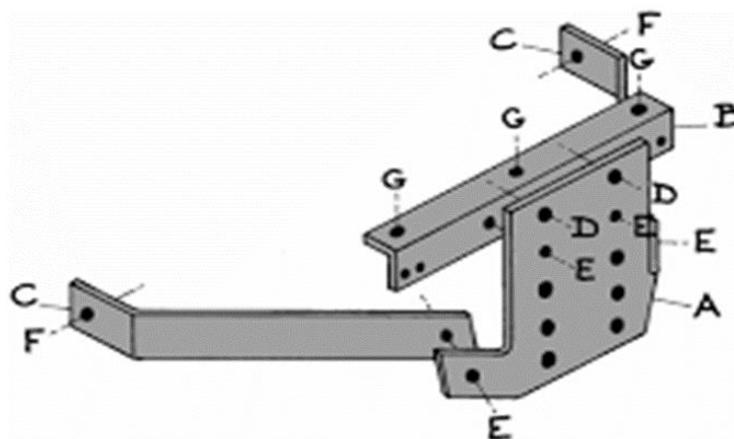
If a tow-ball is fitted, welding alone is insufficient – high tensile nuts and bolts must be used for attachment. If the recovery point is attached to a bumper, the bumper must be attached to the chassis with high tensile nuts and bolts.

Where recovery points attach through the chassis or bumper there must be a minimum of a 3mm thick, mild steel spreader plate behind its mounting point,

“Where it is not possible to fit a spreader plate (such as late Defenders cross members) then any recovery point must attach using a minimum of the 7 designated fixing points (D,G,F. Diagram A) using high tensile bolts. Point F should attach to the designated points on the fuel tank frame or if not present can bolt through the longitudinal chassis rails

*Points “E” must be bolted together with high tensile nuts and bolts as per the manufacturers design. The towing attachment must **Not** be attached at point D. Tow attachments must be fitted using high tensile M16 bolts and nuts or equivalent. Drop plates / recovery systems can be shortened or purpose built provided they attach to the vehicle by the same 7 bolt method and are of equal or greater strength and design”.*

Diagram A



Factory specification recovery points, when installed and used as vehicle handbook, to the following generations of vehicle are deemed suitable for recovery up to and including RTV Trials:

- *Range Rover P38A and subsequent generations*
- *Discovery 3 and Subsequent generations*
- *Freelander, all generations*

Where winch bumpers, HD bumpers or underbody protection are fitted incorporating the recovery point, these must be attached to the vehicle chassis with High tensile nuts and bolts to designated bumper attachment points or alternative equally reinforced holes. "built in" or Welded attachment points must be of suitable design to withstand the forces of a recovery and will be subject to the discretion of the scrutineer. Bolt in or swivel attachments must attach through a minimum of 6mm mild steel plate or incorporate a 3mm mild steel spreader plate and attach via high tensile nuts and bolts where applicable.

Towing balls, jaws and pintles used for recovery must be rated as a minimum to the capacity of the vehicle being recovered. E.g. a 3.5Te towing ball fitted to a Freelander is compliant: a 2.25Te combined ball and jaw hitch fitted to a Defender is not compliant.

*B19.2 A pair of Land Rover chassis-Shackles (forged JATE rings) are suitable **when used together**.*

Proposed by A Reaney P&D membership secretary



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Additional information;

Suitable examples of recovery points attached to Defender cross member: -

Below are examples of suitable recovery points. Others may be acceptable where they are attached by the same methods and constructed to equal or greater strength and design.



The item below (including other brands of similar design) are very popular due to their ease of fitting, Strength, Ground clearance and versatility due to the availability of different attachments. However there is nowhere and no way to incorporate a 3mm plate and without the tow ball attachment it doesn't strictly fit with the current wording.

("Factory specification (or better) trailer hitches are acceptable").

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The item shown below would need to come with the tie bars to attach it to the fuel tank support / chassis legs. As allowing it without would discredit the ruling above?

I would argue that due to the extra leverage applied to the cross member when using this attachment there is an increased need for the tie bars.



Unsuitable examples bolted directly to the cross member without spreader plates or incorporating the other fixing points, relying solely on the captive threaded holes in the cross member.



Suitable examples of HD bumper attachments when bolted through 6mm steel or used with 3mm spreader:-



“Built in” / Welded eyes would need to be deemed suitable by the scrutineer but the expectation is that where they are built in as part of the manufactures design they should be suitable but may need to be used as a pair, via a bridle.

