

<b>Health and Safety Executive</b>		<b>Sector Information Minute</b>	
Commercial and Consumer Services, Transportation and Utilities Sector (CACTUS)		<b>SIM 05/2002/13</b> (formerly SIM 03/2002/20)	
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Target Audience:

AFQ Inspectors

Specialist Group Inspectors (Mech, Med, Occ Hyg and Occ Health)

### **RISKS ASSOCIATED WITH THE MANUAL OPERATION OF TRAILER LEGS ON HEAVY GOODS VEHICLES**

This SIM, issued jointly by the Engineering & Utilities and Food & Entertainment (F&E) Sectors, alerts inspectors about possible musculoskeletal risks to road haulage workers involved in the raising/lowering of manually-operated trailer landing leg mechanisms on heavy goods vehicles. It forms part of the F&E Sector's contribution to the RHS Inspection Pack on musculoskeletal disorders.

#### **BACKGROUND**

- 1 Concern has been expressed that persons operating traditional hand-cranked trailer landing legs on heavy goods vehicles (HGVs) **with the feet on the ground** might be exposed to a risk of upper limb disorders. This was based on a claim that the forces required to operate the winding mechanism to adjust the front-end trailer height, for example when uncoupling or connecting a fully loaded trailer to a tractor unit, were excessive.
- 2 Although large numbers of heavy commercial trailers fitted with manually- operated trailer leg mechanisms have been in daily use across the UK for many years, it has not been possible to assess the actual risk to road haulage workers. Available accident/ill health statistics have not produced any meaningful data specific to this problem, though back injuries and other musculoskeletal disorders (MSD) are, in general, one of the most common kinds of injury in the road haulage industry.
- 3 The activity involved is NOT pushing or pulling as envisaged in the Manual Handling Operations Regulations 1992 (MHOR) reg.2(1) and consequently is not within the scope of these Regulations.
- 4 HSE leaflet INDG312 *Parking of large goods vehicles safely* does not cover the risks referred to in this SIM. The advice in that leaflet deals only with the unsafe practice of drivers leaving the tractor unit with its engine running and parking brake not applied when coupling or uncoupling the air lines to the semi-trailer.

#### **RISK**

5 The forces which must be exerted to turn the crank handle of a typical geared landing leg mechanism to raise the front-end of a fully loaded trailer, ie **with the feet on the ground**, have been calculated. For a new manually-operated system, the forces will be significant but below permissible two-hand, push-pull force limits. However, for older or poorly maintained systems, it is considered that greater effort will be required.

6 With today's modern vehicles, it should not be necessary to use the crank handle to carry out such front-end adjustments. Its purpose should be only to lower the landing legs to the ground before uncoupling the trailer from the tractor, or to raise them again after a tractor has been coupled to the trailer before the vehicle moves off. Uncoupling/coupling should be effected by using the tractor's air-suspension to lower/raise its king-pin height.

7 Where an operator can envisage situations which would require manual adjustments of a laden trailer, they should be fully considered when carrying out their risk assessments. Operators should also be aware that any possible MSD risk could be reduced by ensuring that the equipment was properly maintained. The use of a powered system would eliminate the risk completely.

8 The Commercial Trailers Association (CTA) represents most UK manufacturers of heavy commercial trailers. According to the CTA, its members currently produce about half of the heavy goods trailers placed on the UK market, and almost all are fitted with landing legs obtained from overseas manufacturers. Following discussions with the CTA, its members agreed to raise the issue with their suppliers. As a result, at least one major manufacturer has revised its *Mounting and Operating Instructions* for users of its non-powered systems to include the warning 'Do not use landing gear to compensate for height differences'.

9 HSE is continuing to assess the risk to transport workers. Discussions will be held with representatives of the manufacturers, suppliers and users with a view to publicising the possible risks and safe operating practices where manually- operated landing leg systems are fitted.

#### ACTION BY INSPECTORS

10 The RHS MSD Inspection Pack Appendix 2 includes advice on the possible control measures (page 20 'enforcement liaison/handtools etc').

11 During visits to trailer manufacturers, particularly non-CTA members, inspectors should advise that sales literature and operating instructions for manually-operated systems include a warning about the risks from using the landing gear for front-end height adjustment, ie **with the feet on the ground**, on laden trailers. Also, that potential customers should be made aware of the availability of powered systems.

12 Road haulage companies operating trailers fitted with non-powered mechanisms should also be alerted to the possible risks during visits. Where appropriate, their risk assessments should consider alternative ways of carrying out front-end height adjustments and include maintenance arrangements. Drivers should be informed of the actions which must be taken and adequately trained.

13 The Food and Entertainment Sector in Glasgow would welcome any feedback from such visits, including actual evidence of ill health and details of effective interventions (MSD Inspection Pack - Appendix 3).

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