

### Safe Working Practices:

#### SWP- 31 Engineering General

Before doing any type of work you must carry out an assessment of the task to be undertaken. This will include the equipment to be worked on, the task itself, Personal Protective Equipment requirements, the work area and environment, plus the tools and equipment required to carry out the job safely. Consult your team leader if you are not satisfied the job can be carried out in a safe manner.

### INTRODUCTION

- 1.0 This Safe Working Practice addresses general engineering safety issues/requirements and is designed to compliment other more “specific” SWP’s where they exist. The overriding principle will always be one that safety must never be compromised.

### GENERAL SAFETY GUIDANCE

- 2.0 Employers and Team Members both have legal obligations placed upon them to provide a safe working environment for all. Observance of this and all other Safe Working Practices will enable both parties to discharge their obligation to the law and to each other.
- 2.1 Whenever work is undertaken at any location, technicians must recognise and remember that ultimately his safety and that of others around him is his responsibility. A service technician will normally work alone and unsupervised, he will have had the training, been given or have access to the right tools and equipment. He will have received all the technical information and backup necessary to do the job safely and efficiently the rest is up to him, he is his own Safety Officer. SWP-01 Work Area outlines the requirements for a safe working area and must be adhered to when undertaking engineering tasks.
- 2.2 Because of the physical nature of the job, technicians should be particularly aware of the necessity for correct manual handling techniques and the maintenance of correct working posture. The work involves regular stooping and kneeling, sitting on such things as the tool box will avoid pressure on the knees and back. Wherever possible this practice should be adopted. More information and guidance is available in SWP-13 and SM-30
- 2.3 The work requires regular use of a hammer and drift for the removal of wheels and axles etc. Technicians should make sure that the tools he uses are appropriate and well maintained e.g. drifts are not excessively peened and hammer heads are securely fitted to the shaft and undamaged. He/she should be aware of the moment, when tackling stubborn axles, fatigue sets in and his grip/co-ordination begins to suffer; this is the moment to take a short break rather than miss hitting the object and breaking something else such as a finger or worse, punch/drift holders are available from the parts department (Service message 185) Appropriate PPE should be worn at all times ref SWP-32.
- 2.4 Remember that unless jacked and blocked correctly elevated loads are likely to collapse with disastrous results. Jacking must be done safely, in accordance with training delivered and the Safe Working Practice “Jacking & Blocking” SWP-02.
- 2.5 As with most pieces of machinery there are areas where careless service technicians can trap fingers such as between the hydraulic unit and the fork frame or in swinging bogies, in fact anything that moves (motors, revolving parts etc.). Training and experience will have made the technician aware of these areas, he should treat them with caution and remain diligent.
- 2.6 Technicians should also be wary of the unexpected, for example, opening a heavy access panel/door, the hinges may fail allowing the door to fall suddenly.

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- 2.7 Technicians must never place themselves in a dangerous position, for example, between the retracting reach carriage and battery/truck chassis without it being blocked. The golden rule with all battery operated machines is NEVER WORK WITH, ON, OR IN A MACHINE WHILST THE BATTERY IS CONNECTED. Unless it is absolutely necessary always switch off and disconnect the battery when working with such equipment.
- 2.8 Communication between technicians working together is important; any misunderstanding of each others intention to complete the task can lead to accidents. When working together engineers should elect a leader and discuss a plan of action to be taken, it will only take a matter of minutes to discuss.
- 2.9 See in particular SWP's Battery Handling/Maintenance and Working with Electricity. Further advice and general engineering safety information can also be found in the manufacturers' service manuals.
- 2.10 It will be necessary for the technician to carry out work on equipment with masts raised. It isn't possible to cover every scenario and the technician should refer to their technical training to effectively manage all risks. Tasks that require forks and attachments to be raised to a height in which contact can be made with the head should be given extra consideration to the required controls. PPE should form part of the controls considered including the use of hard hats and bump caps where appropriate.

### **CHILDREN AND YOUNG PERSONS**

- 3.0 See Safety & Environmental Manual procedure "Employment of Young Persons" for precise definitions on children and young persons.
- 3.1 "Children" will not be involved with engineering tasks directly. They may be allowed to observe such operations and work practices, but must take no active part, be kept at a safe distance and under the constant supervision of a competent person.
- 3.2 "Young Persons" may be allowed to carry out some engineering work subject to the conditions imposed above and only when under the constant supervision of a competent person.