

# LANLEO21 - SQA Unit Code F9GX 04

## Service and repair suspension systems on land-based equipment



---

### Overview

This standard covers the suspension systems found on land-based equipment, (e.g. cab, axle or seat suspension) and the maintenance and repair of these systems.

It includes the skill, knowledge and understanding required to ascertain and maintain the integrity of chassis, cabs and suspension systems, the materials and components used for sealing, sound proofing, insulation and vibration damping, and the evaluation of noise, and viability of safety structure repair with due regard for regulations governing ROPS and FOPS structures.

It covers installation of optimal equipment relating to the operators cab, e.g. seats, windscreen wipers, glazing, heating and ventilation systems (excluding air-conditioning systems which are contained within **LEO28** Service and repair land-based air-conditioning/refrigeration equipment).

# LANLEO21 - SQA Unit Code F9GX 04

## Service and repair suspension systems on land-based equipment

---

### Performance criteria

*You must be able to:*

- P1 remove and replace suspension assemblies and their components
- P2 dismantle repair and reinstate suspension systems and components to manufacturers' specifications, e.g.
  - P2.1 cab suspension
  - P2.2 seat suspension
  - P2.3 axle suspension
- P3 identify and correct faults in suspension assemblies and their components

# LANLEO21 - SQA Unit Code F9GX 04

## Service and repair suspension systems on land-based equipment

---

### Knowledge and understanding

*You need to know and understand:*

- K1 how to remove and replace suspension assemblies and components
- K2 how to dismantle, repair and reinstate suspension assemblies and components to operator's/manufacture's specifications
- K3 the types, construction and operating principles of suspension assemblies and their components, e.g. cab mounts, dampers, springs, accumulators, levelling devices, cab and seat
- K4 how to identify faults in suspension assemblies and components

# LANLEO21 - SQA Unit Code F9GX 04

## Service and repair suspension systems on land-based equipment

---

### Glossary

#### **ROPS**

Roll Over Protection System

#### **FOPS**

Falling Object Protection System

# LANLEO21 - SQA Unit Code F9GX 04

## Service and repair suspension systems on land-based equipment

---

**Developed by** LANTRA

---

**Version number** 1

---

**Date approved** October 2009

---

**Indicative review date** October 2011

---

**Validity** Current

---

**Status** Original

---

**Originating organisation** LANTRA

---

**Original URN** LEO21Oct09

---

**Relevant occupations** Agriculture, Horticulture and Animal Care; Science and Engineering Technicians

---

**Suite** Land-based Engineering Operations

---

**Key words** cab; axle; maintenance; damping; structure