

# **L2 Construction Plant and Machinery Maintenance**

## SUGGESTED EVIDENCE

The NVQ Level 2 Diploma in Construction Plant and Machinery Maintenance is made up of 9 Mandatory units plus 2 Optional units (11 Units Total). You must provide details to your assessor of which optional units are relevant to your work that will be achievable for you; these are detailed within this document.

The Suggested Evidence List will hopefully assist you in providing the correct information towards your NVQ, when you collect your evidence. This MUST be sent to either of the following:

### assessor@workforceskillssupport.co.uk

WhatsApp – 07496423820 (Please ensure you state your full name and Company when sending evidence via WhatsApp).

You will be required to provide evidence towards your NVQ to show competence against the NVQ Units - some units will have endorsements you must cover to achieve the full unit through working on different systems. Evidence may vary depending on what you use within your organisation and the 2 optional units you decide to complete. The main types of evidence used for this type of NVQ that you can start to gather are:

- 1. **Job Sheets** Briefly detailing work you have completed.
- 2. Service/Inspection Sheets For relevant work you have completed, including repairs.
- 3. **Worksop manuals used** Photos of the pages used to gather information, send these with associated job sheets.
- 4. **Risk Assessments for Work Activities** Provide copies of risk assessments you work to or dynamic risk assessments that you carry out yourself.

## **NVQ Mandatory Units – You must complete all Mandatory Units**

Unit Title:	Conforming to general health, safety and welfare in the workplace
Evidence:	Risk Assessments for work Activities.
	2. This will also be covered with your assessor through professional discussion and
	Questioning about your job sheets
<b>Unit Title:</b>	Conforming to productive working practices in the workplace
Evidence:	This will also be covered with your assessor through professional discussion and
	Questioning about your job sheets
Unit Title:	Moving, handling and storing resources in the workplace
Evidence:	This will also be covered with your assessor through professional discussion and
	Questioning about your job sheets
Unit Title:	Operating plant or machinery for non-operational activities in the workplace
Evidence:	<ul> <li>This will also be covered with your assessor through professional discussion and Questioning about your job sheets, you must provide evidence to cover 2 of the following endorsements: <ul> <li>Hand-operated power tools</li> <li>Static machinery</li> <li>Pedestrian controlled power equipment</li> <li>Tracked plant</li> <li>Wheeled plant</li> <li>Rollers</li> </ul> </li> <li>Job Sheets – following repairs or when manoeuvring plant into the work area if you have operated the plant during these repairs, it can be covered through discussions with your assessor.</li> </ul>
Unit Title:	Servicing plant or machinery in the workplace
Evidence:	This will also be covered with your assessor through professional discussion and Questioning about your job sheets, you must provide evidence to cover 5 of the following endorsements:  • Fluids, fuels, lubricants, coolants  • Service items  • Lubrication

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	Flushing through
	Cleaning parts and components
	Fastenings secured
	1. Job Sheets – Detailing Type of service completed (250, 500, 1000 Hour or 6 monthly),
	if you have also completed repairs as well as a service it will cover more units.
	2. Service Sheets – If you complete specific service documentation such as tick lists.
11	3. Photos – of servicing procedures, removed and replace filters, spillage controls.
Unit Title:	Removing and replacing plant or machinery components to restore operational use in
Evidence:	the workplace
Evidence.	This will also be covered with your assessor through professional discussion and Questioning about your job sheets, you must provide evidence to cover <b>7</b> of the following endorsements:
	Housing
	Transmission
	Steering
	Track or running gear
	Hydraulic
	Pump
	Brakes
	Electrical
	Electronic
	Ancillaries
	Job Sheets – you must provide evidence where you have had to remove and replace
	any types of components from 7 of the systems detailed above, a single job sheet may
	cover more than one endorsement if you have worked on several systems during
	repairs to plant or machinery.
	2. Photos – Provide photo evidence of parts removed including any damage identified.
Unit Title:	Dismantling and assembling plant or machinery components to replace worn, damaged
	or faulty parts in the workplace
Evidence:	This will also be covered with your assessor through professional discussion and Questioning
	about your job sheets, you must provide evidence to cover <b>4</b> of the following endorsements:
	Power unit     To a contract the second
	Transmission
	Steering     Hydraulia
	Hydraulic     Dump
	Pump     Brake
	Electronic
	Ancillaries (blade, boom, cab, drives)
	Job Sheets – you must provide evidence where you have had to Dismantle and
	Assemble any types of components from 4 of the systems detailed above, a single job
	sheet may cover more than one endorsement if you have worked on several systems
	during repairs to plant or machinery.
	2. Photos – Provide photo evidence of parts dismantled components and reassembled
	them including any damage identified.
Unit Title:	Inspecting plant or machinery for operational serviceability in the workplace
Evidence:	This will also be covered with your assessor through professional discussion and Questioning
	about your job sheets, you can provide the following Evidence:
	1. <b>Job Sheets</b> – You can provide job sheets detailing the type of inspection you have
	completed, such as:
	a. Pre-delivery
	b. Post Hire c. Post Repair
	d. Periodic inspection (3 or 6 Monthly etc.)
	2. Inspection Sheets – If you use specific inspection documentation such as tick list
	type, you can provide these as evidence.
Unit Title:	Diagnosing faults in plant or machinery systems or components in the workplace
Evidence:	This will also be covered with your assessor through professional discussion and Questioning
	about your job sheets, you must provide evidence to cover <b>4</b> of the following endorsements:
	• Transmission
	a Steering

Steering



- Hydraulic
- Pump
- Brake
- Electronic
- Operating ancillaries and attachments
- 1. **Job Sheets** you must provide evidence where you have had to complete fault diagnostics from 4 of the systems detailed above, a single job sheet may cover more than one endorsement if you have worked on several systems during repairs to plant or machinery.
  - a. You should provide evidence where you have had to use diagnostic aids to diagnose faults, you don't have to cover all the below, but this provides suggestions of equipment's:
    - i. Multi-meter
    - ii. Power Probes
    - iii. Pressure Gauges
    - iv. Flow Meters
    - v. Compression Testers
    - vi. Computer diagnostics
- **2. Photos** Provide photo's of diagnostic aids being used, and configured on the plant or machinery.

# Optional Units – You MUST choose 2 additional unit Only from the selection Below:

Unit Title:	Installing, repairing or modifying construction resources by heating, welding, brazing,
	soldering and thermal cutting in the workplace
Evidence:	This will also be covered with your assessor through professional discussion and Questioning
	about your job sheets, you must provide evidence to cover full range of endorsements as
	specified below:
	Heating: Two of the following endorsements required:
	Components freed
	Heat transmission
	Corrosion reduction/removal
	Adjustment
	Expansion and contraction fit
	Welding: Two of the following endorsements required:
	Oxygen and fuel gas
	Manual metal arc
	MIG or MAG
	Tungsten inert gas
	Soldering: one of the following endorsements required:
	Oxygen and fuel gas
	Iron and flux
	Electric soldering iron
	Joints: Two of the following endorsements required:
	Butt
	• Lap
	• Fillet
	• Corner
	Positions: two of the following endorsements required:
	• Flat
	Vertical/horizontal
	Vertical
	Overhead
	Thermal cutting: one of the following endorsements
	required:
	Oxy fuel gas
	Plasma



	Job Sheets – you must provide evidence where you have had to complete Welding
	and Soldering repairs, a single job sheet may cover more than one endorsement
	during repairs to plant or machinery.
	2. Photos – Provide photos of any welding or soldered repairs, including any templates
Hait Title	made to fabricate new components.
Unit Title:	Producing one-off components to restore or maintain the operational functions or plant or machinery in the workplace
Evidence:	This will also be covered with your assessor through professional discussion and Questioning
Evidence.	about your job sheets.
	This unit covers fabrication of components to carry out repairs on Plant and Machinery, you
	Must provide evidence of 2 pieces you have fabricated including photos.
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	1. Job Sheets – you must provide evidence where you have had fabricate 2 components
	using a selection of different processes, for example:
	a. – measuring, marking out, disassembling, cutting, drilling, filing, shaping,
	joining, assembling, fitting, fixing and securing.
11	2. Photos – Provide photo evidence of the fabricated pieces you have made.
Unit Title:	Installing plant or machinery for operational activities in the workplace
Evidence:	This will also be covered with your assessor through professional discussion and Questioning
	about your job sheets.  This unit covers installing Plant and Machinery on site such as Cranes, mobile crushers and
	screeners, hoists etc ready for operations., you Must provide evidence of 2 installations on 2
	different sites which cover the minimum endorsements below:
	Unit Endorsements:
	One of the following endorsements required:
	Mobile or ringer crane
	Tower crane
	Hoist
	Rig (piling/drilling/demolition)
	Excavation/vacuum plant machinery
	Batching/mixing/blending plant
	Crushing/screening plant
	Power generation equipment
	Pump
	Climate management machines
	<u>.</u>
	Concrete placing boom
	1. Job Sheets – you must provide evidence where you have had to install at least one of
	the equipment's detailed in the endorsement list, this could include any handover or
	commissioning documentation.
	2. Photos – Provide photo evidence of the plant installed on site.
Unit Title:	Carrying out specific tests on plant or machinery to determine operational serviceability
	in the workplace
Evidence:	This will also be covered with your assessor through professional discussion and Questioning
	about your job sheets.
	This unit covers Testing of components and systems prior to, during and post repairs on Plant
	and Machinery, you Must provide evidence to meet the endorsements detailed below:
	Unit Endorsements:
	At least four of the following endorsements required:  • Electric systems
	Cooling systems
	Lubrication systems
	Emission control
	Hydraulic systems
	Hydraulic systems     Hydrostatic drive
	I
	Transmission systems     Programatic systems
	Pneumatic systems

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- Braking systems
- Vibration management
- Steering/suspension systems
- Generator output control
- Electronic management
- Powered access equipment
- Material handling equipment
- Water pumps
- Craneage
- Lifting equipment
- Load testing (cranes, hoists, MEWPs, MHE)
- 1. Job Sheets you must provide evidence detailing the specific testing you have completed as part of the pre-start/functional checks, testing during repairs or post repair to ensure the machinery is serviceable.
- Photos Provide photo evidence of any test equipment used.

### **Unit Title:**

## Configuring plant or machinery for specific operational activities in the workplace

Evidence:

This will also be covered with your assessor through professional discussion and Questioning about your job sheets.

This unit covers setting up Plant and Machinery ready for operations with the correct systems or ancillaries, you Must provide evidence to cover the endorsements as specified:

### **Unit Endorsements:**

## Two of the following endorsements required:

- Attachments
- **Ancillaries**
- Fire prevention
- Structural support
- Safety measures
- Contaminant reduction
- Carriage of ancillaries/additional equipment
- Rail and trackside
- Cutting equipment
- Additions (e.g. publicity boards, notices, lights)
- Machine control
- Productivity measurement
- 1. Job Sheets you must provide evidence where you have set up equipment ready for site operations, this could include for example placing a breaker on a excavator, load testing a MEWP, setting operating parameters.
- 2. Photos Provide photo evidence of any configuration completed

### **Unit Title:**

## Handing over plant or machinery to the control of others in the workplace

## Evidence:

This unit covers familiarisation and handover of equipment's to users of the plant or someone else within your organisation, it ensures that the equipment has the relevant operations manuals in place, and it is safe for operational conditions, 2 pieces of evidence required and this can be covered through:

- 1. Job Sheets This can be a signature on your job sheet where your work has been signed off by a supervisor or manager.
- 2. Delivery Notes This could be a delivery note where the plant has been delivered to site and signed for by the customer.
- 3. Formal Handover Documentation A organisational documents you use to record handing over of plant and equipment.
- 4. Photos This could be a photo of your computer screen showing the company system used to handover the plant.