

# HEAVY MACHINE OPERATOR



ASSESSMENT PACKAGE  
National Vocational Certificate Level 2

Version 1 - November, 2019

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**Document Version**

November, 2019  
**Islamabad, Pakistan**

# HEAVY MACHINE OPERATOR



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**ASSESSMENT PACKAGE**  
National Vocational Certificate Level 2

Version 1 - November, 2019

<b>Title of Qualification:</b> National Vocational Certificate level 2, in <b>Heavy Machine Operator</b>	<b>CS Code:</b>	<b>Level:</b> 2	<b>Version:</b> 1 (2019)
<b>Competency Standard Title:</b> <b>073200589 Maintain Machines (with Engine Off)</b>	<b>Assessment Date (DD/MM/YY):</b>		

Candidate Details	Name: .....  Registration/Roll Number: .....
Guidance for Candidate	<p><b>To meet this standard, you are required to complete the following within 5 hours (for practical demonstration &amp; assessment):</b></p> <ol style="list-style-type: none"> <li><b>Assessment Task 1:</b> Inspect and service lubrication system.</li> <li><b>Assessment Task 2:</b> Inspect and service electrical system.</li> <li><b>Assessment Task 3:</b> Inspect and service hydraulic system.</li> <li><b>Assessment Task 4:</b> Inspect and service cooling system.</li> <li><b>Assessment Task 5:</b> Inspect and service air intake system.</li> <li><b>Assessment Task 6:</b> Inspect and service fuel system.</li> <li><b>Assessment Task 7:</b> Inspect and service suspension system.</li> <li><b>Assessment Task 8:</b> Inspect and service Drive train.</li> <li><b>Assessment Task 9:</b> Inspect and service braking system.</li> <li><b>Assessment Task 10:</b> Inspect and service load bearing structure.</li> <li><b>Assessment Task 11:</b> Inspect and service operator station/cab.</li> <li><b>Assessment Task 12:</b> Inspect safety equipment.</li> <li><b>Assessment Task 13:</b> Inspect and service attachments.</li> <li><b>Assessment Task 14:</b> Inspect and service supporting pneumatic (air-filled) system.</li> </ol> <p><b>And complete:</b></p> <ol style="list-style-type: none"> <li><b>Knowledge assessment test (Written or Oral).</b></li> <li><b>Portfolios at the time of assessment (if any).</b></li> </ol>

Minimum Evidence Required	<p><b>During a practical assessment, under observation by an assessor, you will complete:</b></p> <p><b>Assessment Task 1: Inspect and service lubrication system.</b></p> <p>Performance Criteria 1: Locate components to be inspected for lubrication.</p> <p>Performance Criteria 2: Identify low oil levels and dirty filler caps.</p> <p>Performance Criteria 3: Select appropriate tools for lubrication system.</p> <p>Performance Criteria 4: Adjust oil levels as per required standards.</p> <p>Performance Criteria 5: Identify and report leakages if any.</p>
	<p><b>Assessment Task 2: Inspect and service electrical system.</b></p> <p>Performance Criteria 1: Locate electrical components to be inspected.</p> <p>Performance Criteria 2: Identify defects and hazardous conditions through visual/physical inspection.</p> <p>Performance Criteria 3: Select appropriate tools for rectification of minor defects in electrical components.</p> <p>Performance Criteria 4: Check Electrolyte level of batteries.</p> <p>Performance Criteria 5: Replace batteries.</p>
	<p><b>Assessment Task 3: Inspect and service hydraulic system.</b></p> <p>Performance Criteria 1: Locate hydraulic components to be inspected.</p> <p>Performance Criteria 2: Identify defects and leakages hazardous conditions through visual/physical inspection.</p> <p>Performance Criteria 3: Report leakages and noise of the hydraulic system.</p> <p>Performance Criteria 4: Check hydraulic oil levels as per standard gauge.</p> <p>Performance Criteria 5: Replace hoses/pipes.</p>

	<p><b>Assessment Task 4: Inspect and service cooling system.</b></p> <p>Performance Criteria 1: Identify unobstructed air/Coolant flow of radiator</p> <p>Performance Criteria 2: Locate cooling system components to be inspected.</p> <p>Performance Criteria 3: Adjust coolant level.</p> <p>Performance Criteria 4: Replace defective belts and hoses.</p>
	<p><b>Assessment Task 5: Inspect and service air intake system.</b></p> <p>Performance Criteria 1: Locate air intake components to be inspected.</p> <p>Performance Criteria 2: Clean air filters with compressed air.</p> <p>Performance Criteria 3: Replace intake hoses and clamps.</p>
	<p><b>Assessment Task 6: Inspect and service fuel system.</b></p> <p>Performance Criteria 1: Locate fuel system components to be inspected.</p> <p>Performance Criteria 2: Select tools for service of fuel system.</p> <p>Performance Criteria 3: Identify defects and hazardous conditions through visual inspection.</p> <p>Performance Criteria 4: Clean fuel strainer and water separator.</p> <p>Performance Criteria 5: Identify and report fuel leakage.</p>
	<p><b>Assessment Task 7: Inspect and service suspension system.</b></p> <p>Performance Criteria 1: Locate suspension system components.</p> <p>Performance Criteria 2: Select suspension system tools for service.</p> <p>Performance Criteria 3: Identify greasing points.</p> <p>Performance Criteria 4: Identify damaged bearings and pins.</p>

	<p><b>Assessment Task 8: Inspect and service Drive train.</b></p> <p>Performance Criteria 1: Locate Drive train components.</p> <p>Performance Criteria 2: Select tools for drive train service.</p> <p>Performance Criteria 3: Identify defects through visual inspection.</p> <p>Performance Criteria 4: Check leaks and damage of drive train components.</p> <p>Performance Criteria 5: Identify defective undercarriage components.</p>
	<p><b>Assessment Task 9: Inspect and service braking system.</b></p> <p>Performance Criteria 1: Locate braking system components.</p> <p>Performance Criteria 2: Identify defects through visual/physical inspection.</p> <p>Performance Criteria 3: Top-up fluid reservoir.</p> <p>Performance Criteria 4: Identify defective components of braking system.</p>
	<p><b>Assessment Task 10: Inspect and service load bearing structure.</b></p> <p>Performance Criteria 1: Locate load bearing components.</p> <p>Performance Criteria 2: Select tools for load bearing structures</p> <p>Performance Criteria 3: Identify defects through visual inspection</p> <p>Performance Criteria 4: Identify greasing points and pins for load bearing components.</p>
	<p><b>Assessment Task 11: Inspect and service operator station/cab.</b></p> <p>Performance Criteria 1: Locate controls inside operator station/ cab</p> <p>Performance Criteria 2: Identify defective components inside operator station.</p> <p>Performance Criteria 3: Check knobs of all lights and indicators.</p>

	<p><b>Assessment Task 12: Inspect safety equipment.</b></p> <p>Performance Criteria 1: Identify safety equipment.</p> <p>Performance Criteria 2: Identify expired fire extinguisher.</p>
	<p><b>Assessment Task 13: Inspect and service attachments.</b></p> <p>Performance Criteria 1: Identify defects through visual inspection.</p> <p>Performance Criteria 2: Identify tools for fixing of attachments.</p> <p>Performance Criteria 3: Identify greasing points of attachments.</p> <p>Performance Criteria 4: Locate worn out teeth.</p>
	<p><b>Assessment Task 14: Inspect and service supporting pneumatic (air-filled)</b></p> <p>Performance Criteria 1: Locate pneumatic components.</p> <p>Performance Criteria 2: Select tools for pneumatic system.</p> <p>Performance Criteria 3: Identify defects through visual inspection.</p> <p>Performance Criteria 4: Identify choked pneumatic components.</p>

	<p><b>Portfolios required at the time of assessment (if any) for</b></p> <p>Performance criteria for the evaluation of portfolio:  Submit log book or activity record (practical journal, project, pictures etc.)  completed during the training.</p>
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**Assessors Judgment Guide** (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

**073200589 Maintain Machines (with Engine Off)**

Candidate Details	Name: ..... Registration/Roll Number: ..... Candidate's Signature: .....
Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: ..... Assessor's code: ..... Signature of the Assessor: .....

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration							
Knowledge Assessment							
Other Requirement							

Each Assessment Task (with performance criteria)				
Assessment Task 1		Description of assessment task 1 <b>Inspect and service lubrication system</b>		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance Criteria 1: Located components to be inspected for lubrication.			
2	Performance Criteria 2: Identified low oil levels and dirty filler caps.			
3	Performance Criteria 3: Selected appropriate tools for lubrication system.			
4	Performance Criteria 4: Adjusted oil levels as per required standards.			
5	Performance Criteria 5: Identified and reported leakages if any.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Assessment Task 2		Description of assessment task 2 <b>Inspect and service electrical system</b>		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance Criteria 1: Located electrical components to be inspected.			
2	Performance Criteria 2: Identified defects and hazardous conditions through visual/physical inspection.			
3	Performance Criteria 3: Selected appropriate tools for rectification of minor defects in electrical components.			
4	Performance Criteria 4: Checked electrolyte level of batteries.			
5	Performance Criteria 5: Replaced batteries.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Assessment Task 3		Description of assessment task 3 <b>Inspect and service hydraulic system</b>		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance Criteria 1: Located Hydraulic components to be inspected.			
2	Performance Criteria 2: Identified defects and hazardous conditions through visual/physical inspection.			
3	Performance Criteria 3: Reported leakages and noise of the hydraulic system.			
4	Performance Criteria 4: Checked hydraulic oil levels as per standard gauge.			
5	Performance Criteria 5: Replaced hoses/pipes.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Assessment Task 4		Description of assessment task 4 <b>Inspect and service cooling system</b>		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance Criteria 1: Identified unobstructed air/Coolant flow of radiator.			
2	Performance Criteria 2: Located cooling system components to be inspected.			
3	Performance Criteria 3: Adjusted coolant level.			
4	Performance Criteria 4: Replaced defective belts and hoses.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Assessment Task 5		Description of assessment task 5 <b>Inspect and service air intake system</b>		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance Criteria 1: Located air intake components to be inspected.			
2	Performance Criteria 2: Cleaned air filters with compressed air.			
3	Performance Criteria 3: Replaced intake hoses and clamps.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Assessment Task6		Description of assessment task6 <b>Inspect and service fuel system</b>		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance Criteria 1: Located fuel system components to be inspected.			
2	Performance Criteria 2: Selected tools for service of fuel system.			
3	Performance Criteria 3: Identified defects and hazardous conditions through visual inspection.			
4	Performance Criteria 4: Cleaned fuel strainer and water separator.			
5	Performance Criteria 5: Identified and report fuel leakage.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Assessment Task. 7		Description of assessment task7 <b>Inspect and service suspension system</b>		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance criteria 1: Located suspension system components.			
2	Performance criteria 2: Selected suspension system tools for service.			
3	Performance criteria 3: Identified greasing points.			
4	Performance criteria 4: Identified damaged bearings and pins.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Assessment Task8		Description of assessment task8 <b>Inspect and service Drive Train</b>		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance criteria 1: Located Drive train components.			
2	Performance criteria 2: Selected tools for drive train service.			
3	Performance criteria 3: Identified defects through visual inspection.			
4	Performance criteria 4: Checked leaks and damage of Drive train components.			
5	Performance criteria 5: Identified defective undercarriage components.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Assessment Task 9		Description of assessment task 9 <b>Inspect and service braking system</b>		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance criteria 1: Located braking system components.			
2	Performance criteria 2: Identified defects through visual/physical inspection.			
3	Performance criteria 3: Top-up fluid reservoir.			
4	Performance criteria 4: Identified defective components of braking system.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Assessment Task 10		Description of assessment task 10 <b>Inspect and service load bearing structure</b>		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance criteria 1: Located load bearing components.			
2	Performance criteria 2: Selected tools for load bearing structures.			
3	Performance criteria 3: Identified defects through visual inspection.			
4	Performance criteria 4: Identified greasing points and pins for load bearing components.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Assessment Task 11		Description of assessment task 11 <b>Inspect and service operator station/Cab</b>		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance criteria 1: Located controls inside operator station/ cab.			
2	Performance criteria 2: Identified defective components inside operator station.			
3	Performance criteria 3: Checked knobs of all lights and indicators.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Assessment Task 12		Description of assessment task 12 <b>Inspect safety equipment</b>		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance criteria 1: Identified safety equipment.			
2	Performance criteria 2: Identified expired fire extinguisher.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Assessment Task 13		Description of assessment task 13 <b>Inspect and service attachments</b>		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance criteria 1: Identified defects through visual inspection.			
2	Performance criteria 2: Identified tools for fixing of attachments.			
3	Performance criteria 3: Identified greasing points of attachments.			
4	Performance criteria 4: Located worn out teeth.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Assessment Task 14		Description of assessment task 14 <b>Inspect and service supporting pneumatic (Air-filled) system</b>		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance criteria 1: Located pneumatic components.			
2	Performance criteria 2: Selected tools for pneumatic system.			
3	Performance criteria 3: Identified defects through visual inspection.			
4	Performance criteria 4: Identified choked pneumatic components.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Portfolio(if any)		Description of portfolio		
Current <input type="checkbox"/> Sufficient <input type="checkbox"/> Authentic <input type="checkbox"/> Valid <input type="checkbox"/> Reliable <input type="checkbox"/>				
Portfolio meet the following performance standards:		Yes	No	Remarks
1	Performance criteria for the evaluation of portfolio: Submitted log book or activity record (practical journal, project, pictures etc.) completed during the training.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

<b>Title of Qualification:</b> National Vocational Certificate level 2 in Heavy Machine Operator	CS Code:	Level: 2	Version: 1 (2019)
<b>Competency Standard Title:</b> <b>073200589 Maintain Machines (with Engine Off)</b>	<b>Assessment Date (DD/MM/YY):</b> --/--/--		

Guidance for Candidate	<b>To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.</b>
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**Assessors Guide** (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

Candidate Details	Name:.....Registration/Roll Number:  Candidate's Signature:.....
Written Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/>  Name of the Assessor:.....Assessor's code:  Signature of the Assessor: .....

**Feedback to the candidate on assessment.**

       Candidate Signature..... Assessor Signature .....
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<b>Title of Qualification:</b> National Vocational Certificate level 2 in <b>Heavy Machine Operator</b>	CS Code:	Level: 2	Version: 1 (2019)
<b>Competency Standard Title:</b>  <b>073200589 Maintain Machines (with Engine Off)</b>	<b>Assessment Date (DD/MM/YY):</b> --/--/--		

#### WRITTEN ASSESSMENT

Question	Candidate's answer
1. Describe Functions of Mechanical Systems in Heavy Machines?	
2. Describe Inspection & Maintenance of Heavy Machines, and their Associated Attachments?	
3. Describe Inspection & Maintenance Procedure of Mechanical Systems in Heavy Machines?	

<b>Title of Qualification:</b> National Vocational Certificate level 2, In <b>Heavy Machine Operator</b>	CS Code:	Level: 2	Version: 1 (2019)
<b>Competency Standard Title:</b> <b>073200590 Maintain Machines (with Engine Running)</b>	<b>Assessment Date (DD/MM/YY):</b>		

Candidate Details	Name: .....  Registration/Roll Number: .....
Guidance for Candidate	<p><b>To meet this standard, you are required to complete the following within 5 hours (for practical demonstration &amp; assessment):</b></p> <p><b>15. Assessment Task 1:</b> Start engine monitor warning systems.</p> <p><b>16. Assessment Task 2:</b> Warm up engine.</p> <p><b>17. Assessment Task 3:</b> Cycle equipment functions.</p> <p><b>18. Assessment Task 4:</b> Comply with scheduled maintenance requirements.</p> <p><b>19. Assessment Task 5:</b> Maintain logbook.</p> <p><b>And complete:</b></p> <p><b>3. Knowledge assessment test (Written or Oral).</b></p> <p><b>4. Portfolios at the time of assessment (if any).</b></p>

Minimum Evidence Required	<p><b>During a practical assessment, under observation by an assessor, you will complete:</b></p> <p><b>Assessment Task 1: Start engine monitor warning systems.</b></p> <p>Performance Criteria 1: Identify leaks and engine warning lights on the panel.</p> <p>Performance Criteria 2: Replace fuses and tighten loose fittings.</p>
	<p><b>Assessment Task 2: Warm up engine.</b></p> <p>Performance Criteria 1: Monitor warning lights on panel.</p> <p>Performance Criteria 2: Warm up engine according to manufacturer's instructions.</p>
	<p><b>Assessment Task 3: Cycle equipment functions.</b></p> <p>Performance Criteria 1: Activate brakes, steering, lights, wipers and hydraulic functions.</p> <p>Performance Criteria 2: Identify problems, if any.</p>
	<p><b>Assessment Task 4: Comply with scheduled maintenance requirements.</b></p> <p>Performance Criteria 1: Identify safety requirements.</p> <p>Performance Criteria 2: Identify indicators/warning signals.</p> <p>Performance Criteria 3: Maintain record on log book.</p> <p>Performance Criteria 4: Identify daily maintenance requirements.</p>
	<p><b>Assessment Task 5: Maintain logbook.</b></p> <p>Performance Criteria 1: Record fuel consumption.</p> <p>Performance Criteria 2: Record oil change.</p> <p>Performance Criteria 3: Record time period/mileage of vehicle for schedule maintenance.</p>
	<p><b>Portfolios required at the time of assessment (if any) for</b></p> <p>Performance criteria for the evaluation of portfolio:</p> <p>Submit log book or activity record (practical journal, project, pictures etc.) completed during the training.</p>

**Assessors Judgment Guide** (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

**073200590 Maintain Machines (with Engine Running)**

Candidate Details	Name: ..... Registration/Roll Number: ..... Candidate's Signature: .....
Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: ..... Assessor's code: ..... Signature of the Assessor: .....

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration							
Knowledge Assessment							
Other Requirement							

Each Assessment Task (with performance criteria)				
Assessment Task 1		Description of assessment task 1 <b>Start engine monitor warning systems</b>		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance Criteria 1: Identified leaks and engine warning lights on the panel			
2	Performance Criteria 2: Replaced fuses and tighten loose fittings			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Assessment Task 2		Description of assessment task 2 <b>Warm up engine</b>		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance Criteria 1: Monitored warning lights on the panel.			
2	Performance Criteria 2: Warmed up engine according to manufacturer's instructions.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Assessment Task 3		Description of assessment task 3 <b>Cycle Equipment Functions</b>		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance Criteria 1: Activated brakes, steering, lights, wipers and hydraulic functions.			
2	Performance Criteria 2: Identified problems, if any.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Assessment Task 4		Description of assessment task 4 <b>Comply with Scheduled Maintenance Requirements</b>		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance Criteria 1: Identified safety requirements.			
2	Performance Criteria 2: Identified indicators/warning signals.			
3	Performance Criteria 3: Maintained record on log book.			
4	Performance Criteria 4: Identified daily maintenance requirements.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Assessment Task 5		Description of assessment task 5 <b>Maintain Logbook</b>		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance Criteria 1: Recorded fuel consumption.			
2	Performance Criteria 2: Recorded oil change.			
3	Performance Criteria 3: Recorded time period/mileage of vehicle for schedule maintenance.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Portfolio(if any)		Description of portfolio		
Current <input type="checkbox"/> Sufficient <input type="checkbox"/> Authentic <input type="checkbox"/> Valid <input type="checkbox"/> Reliable <input type="checkbox"/>				
Portfolio meet the following performance standards:		Yes	No	Remarks
1	Performance criteria for the evaluation of portfolio: Submitted log book or activity record (practical journal, project, pictures etc.) completed during the training.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

<b>Title of Qualification:</b> National Vocational Certificate level 2 in Heavy Machine Operator	CS Code:	Level: 2	Version: 1 (2019)
<b>Competency Standard Title:</b> <b>073200590 Maintain Machines (with Engine Running)</b>	<b>Assessment Date (DD/MM/YY):</b> --/--/--		

Guidance for Candidate	<b>To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.</b>
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**Assessors Guide** (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

Candidate Details	Name: ..... Registration/Roll Number: .....  Candidate's Signature: .....
Written Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/>  Name of the Assessor: ..... Assessor's code:.....  Signature of the Assessor:.....

Feedback to the candidate on assessment.

Candidate Signature.....	Assessor Signature .....

<b>Title of Qualification:</b> National Vocational Certificate level 2 in <b>Heavy Machine Operator</b>	CS Code:	Level: 2	Version: 1 (2019)
<b>Competency Standard Title:</b> <b>073200590 Maintain Machines (with Engine Running)</b>	<b>Assessment Date (DD/MM/YY):</b> --/--/--		

#### WRITTEN ASSESSMENT

Question	Candidate's answer
4. Describe warning systems of machines?	
5. Describe types of machine warning?	
6. Describe procedure of engine warming up?	
7. Describe functions of cycle equipments?	



Question	Candidate's answer
<p>8. Describe techniques of scheduled maintenance?</p>	
<p>9. Describe procedure to maintain logbook?</p>	

<b>Title of Qualification:</b> National Vocational Certificate level 2, In <b>Heavy Machine Operator</b>	CS Code:	Level:2	Version: 1 (2019)
<b>Competency Standard Title:</b> <b>073200591 Park Machines</b>	<b>Assessment Date (DD/MM/YY):</b>		

Candidate Details	Name: .....  Registration/Roll Number: .....
Guidance for Candidate	<p><b>To meet this standard, you are required to complete the following within 5 hours (for practical demonstration &amp; assessment):</b></p> <p>20.   <b>Assessment Task 1:</b> Park equipment in appropriate location.</p> <p>21.   <b>Assessment Task 2:</b> Shut down and secure equipment.</p> <p>22.   <b>Assessment Task 3:</b> Perform housekeeping tasks.</p> <p><b>And complete:</b></p> <p>5.   <b>Knowledge assessment test (Written or Oral).</b></p> <p>6.   <b>Portfolios at the time of assessment (if any).</b></p>

Minimum Evidence Required	<p><b>During a practical assessment, under observation by an assessor, you will complete:</b></p> <p><b>Assessment Task 1: Park equipment in appropriate location.</b></p> <p>Performance Criteria 1: Identify suitable parking location.</p> <p>Performance Criteria 2: Park equipment according to company policy and procedure.</p> <p>Performance Criteria 3: Place the attachments to the ground level after parking.</p>
	<p><b>Assessment Task 2: Shut down and secure equipment.</b></p> <p>Performance Criteria 1: Switch off machine according to the manufacturer's specifications.</p> <p>Performance Criteria 2: Secure equipment against movement and damage.</p>
	<p><b>Assessment Task 3: Perform housekeeping tasks.</b></p> <p>Performance Criteria 1: Identify important housekeeping parts (blades, buckets wind shields, side rails, steps and instrument panel etc.).</p> <p>Performance Criteria 2: Identify the covering components such as glass/mirror.</p>
	<p><b>Portfolios required at the time of assessment (if any) for</b></p> <p>Performance criteria for the evaluation of portfolio:</p> <p>Submit log book or activity record (practical journal, project, pictures etc.) completed during the training.</p>

Candidate Details	Name: ..... Registration/Roll Number: ..... Candidate's Signature: .....
Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: ..... Assessor's code: ..... Signature of the Assessor: .....

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration							
Knowledge Assessment							
Other Requirement							

Each Assessment Task (with performance criteria)				
Assessment Task 1		Description of assessment task 1 <b>Park equipment in appropriate location</b>		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance Criteria 1: Identified suitable parking location.			
2	Performance Criteria 2: Parked equipment according to company policy and procedure.			
3	Performance Criteria 3: Placed the attachments to the ground level after parking.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Assessment Task 2		Description of assessment task 2 <b>Shut down and secure equipment</b>		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance Criteria 1: Switched off machine according to the manufacturer's specifications.			
2	Performance Criteria 2: Secured equipment against movement and damage.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Assessment Task 3		Description of assessment task 3 <b>Perform housekeeping tasks</b>		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance Criteria 1: Identified important housekeeping parts (blades, buckets wind shields, side rails, steps and instrument panel etc.).			
2	Performance Criteria 2: Identified the covering components such as glass/mirror.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Portfolio (if any)		Description of portfolio		
Current <input type="checkbox"/> Sufficient <input type="checkbox"/> Authentic <input type="checkbox"/> Valid <input type="checkbox"/> Reliable <input type="checkbox"/>				
Portfolio meet the following performance standards:		Yes	No	Remarks
1	Performance criteria for the evaluation of portfolio: Submitted log book or activity record (practical journal, project, pictures etc.) completed during the training.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

<b>Title of Qualification:</b> National Vocational Certificate level 2 in Heavy Machine Operator	CS Code:	Level: 2	Version: 1 (2019)
<b>Competency Standard Title:</b> <b>073200591 Park Machines</b>	<b>Assessment Date (DD/MM/YY):</b> --/--/--		

Guidance for Candidate	<b>To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.</b>
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**Assessors Guide** (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment).

Candidate Details	Name: ..... Registration/Roll Number: .....  Candidate's Signature: .....
Written Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/>  Name of Assessor: ..... Assessor's code.....  Signature of the Assessor:.....

**Feedback to the candidate on assessment.**

<hr/> <hr/> <hr/> <hr/>	
Candidate Signature.....	Assessor Signature .....

<b>Title of Qualification:</b> National Vocational Certificate level 2 in <b>Heavy Machine Operator</b>	CS Code:	Level: 2	Version: 1 (2019)
<b>Competency Standard Title:</b>  <b>073200591 Park Machines</b>	<b>Assessment Date (DD/MM/YY):</b> --/--/--		

#### WRITTEN ASSESSMENT

Question	Candidate's answer
10. Describe manufacturers' specifications?	
11. Describe company policies and procedures?	
12. Describe importance of cleaning tracks, wheels, rollers, and attachments?	

Question	Candidate's answer
<p>13. Describe knowledge of suitable and safe parking locations, such as dry and clean surface, level, away from fuel storage or water courses, secure area?</p>	



<b>Title of Qualification:</b> National Vocational Certificate level 2, In Heavy Machine Operator	CS Code: 0732CON04	Level: 2	Version: 1 (2019)
<b>Competency Standard Title:</b> <b>Summative Assessment HMO NVQF Level-2</b>	<b>Assessment Date (DD/MM/YY):</b>		

Candidate Details	Name: .....  Registration/Roll Number: .....
Guidance for Candidate	<p><b>To meet this standard, you are required to complete the following within 5 hours (for practical demonstration &amp; assessment):</b></p> <p><b>1. Assessment Task 1:</b> In a given situation to maintain and park machines.</p> <p><b>And complete:</b></p> <p><b>7. Knowledge assessment test (Written or Oral).</b></p> <p><b>8. Portfolios at the time of assessment (if any).</b></p>

/Minimum Evidence Required	<p><b>During a practical assessment, under observation by an assessor, you are required to Maintain and Park Machines demonstrating the following criteria:</b></p> <p><b>Identify Machines and their sizes.</b></p> <p><b>Inspect and service lubrication system</b>  Performance Criteria 1: Locate lubrication components to be inspected.  Performance Criteria 2: Identify low oil levels.</p> <p><b>Inspect and service hydraulic system</b>  Performance Criteria 3: Locate hydraulic components to be inspected.  Performance Criteria 4: Check hydraulic oil levels.</p> <p><b>Inspect and service cooling system</b>  Performance Criteria 5: Follow safety measures.  Performance Criteria 6: Check airflow through radiator.  Performance Criteria 7: Adjust coolant level.</p> <p><b>Inspect and service braking system</b>  Performance Criteria 8: Locate components to be inspected.  Performance Criteria 9: Top-up fluid reservoir.</p> <p><b>Warm up engine</b>  Performance Criteria 10: Monitor instrument panel.  Performance Criteria 11: Warm up engine according to manufacturer's instructions.  Performance Criteria 12: Activate all functions, such as brakes, steering, lights, wipers and hydraulic functions.</p> <p><b>Park equipment in appropriate location</b>  Performance Criteria 13: Identify appropriate parking location.  Performance Criteria 14: Park machine according to company policy and procedure.  Performance Criteria 15: Lower the attachments to the ground level.  Performance Criteria 16: Switch off machine according to the manufacturer's specifications.</p>
	<p><b>Portfolios required at the time of assessment (if any) for</b></p> <p>Performance criteria 1 for the evaluation of portfolio: Submit log book or activity record (practical journal, project, pictures etc.) completed during the training.</p>

*Continued on following page*

# Self-Assessment Checklist

I can.....

<b>Candidate Name</b>		
<b>Registration No.</b>		
<b>Qualification</b>	National Vocational Certificate Level-2 in <b>Heavy Machine Operator</b>	
<b>Purpose of Assessment</b>	<b>Summative Assessment HMO NVQF Level 2</b>	
<b>Assessment Task</b>	<ul style="list-style-type: none"> <li>• Maintain and Park Machines.</li> <li>• Knowledge Assessment.</li> </ul>	

  

<b>Performance Criteria</b>	<b>Yes</b>	<b>No</b>
1. Locate lubrication components to be inspected.	<input type="checkbox"/>	<input type="checkbox"/>
2. Identify low oil levels.	<input type="checkbox"/>	<input type="checkbox"/>
3. Locate hydraulic components to be inspected.	<input type="checkbox"/>	<input type="checkbox"/>
4. Check hydraulic oil levels.	<input type="checkbox"/>	<input type="checkbox"/>
5. Follow safety measures.	<input type="checkbox"/>	<input type="checkbox"/>
6. Check airflow through radiator.	<input type="checkbox"/>	<input type="checkbox"/>
7. Adjust coolant level.	<input type="checkbox"/>	<input type="checkbox"/>
8. Locate braking components to be inspected.	<input type="checkbox"/>	<input type="checkbox"/>
9. Top-up fluid reservoir.	<input type="checkbox"/>	<input type="checkbox"/>
10. Monitor instrument panel.	<input type="checkbox"/>	<input type="checkbox"/>
11. Warm up engine according to manufacturer's instructions.	<input type="checkbox"/>	<input type="checkbox"/>
12. Activate all functions, such as brakes, steering, lights, wipers and hydraulic functions.	<input type="checkbox"/>	<input type="checkbox"/>
13. Identify appropriate parking location.	<input type="checkbox"/>	<input type="checkbox"/>
14. Park machine according to company policy and procedure.	<input type="checkbox"/>	<input type="checkbox"/>
15. Lower the attachments to the ground level.	<input type="checkbox"/>	<input type="checkbox"/>
16. Switch off machine according to the manufacturer's specifications.	<input type="checkbox"/>	<input type="checkbox"/>

Candidate's Signature \_\_\_\_\_ Assessor's Signature \_\_\_\_\_

Date: \_\_\_\_\_

**Assessors Judgment Guide** (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

Candidate Details	Name: ..... Registration/Roll Number: ..... Candidate's Signature: .....
Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: ..... Assessor's code: ..... Signature of the Assessor:.....

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration							
Knowledge Assessment							
Other Requirement							

Each Assessment Task (with performance criteria)				
Assessment Task 1		Description of assessment task 1 Maintain and Park Machines		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance Criteria 1: Located lubrication components to be inspected.			
2	Performance Criteria 2: Identified low oil levels.			
3	Performance Criteria 3: Located hydraulic components to be inspected.			
4	Performance Criteria 4: Checked hydraulic oil levels.			
5	Performance Criteria 5: Followed safety measures.			
6	Performance Criteria 6: Checked airflow through radiator.			
7	Performance Criteria 7: Adjusted coolant level.			
8	Performance Criteria 8: Located braking components to be inspected.			
9	Performance Criteria 9: Top-up fluid reservoir.			
10	Performance Criteria 10: Monitored instrument panel.			
11	Performance Criteria 11: Warmed up engine according to manufacturer's instructions.			
12	Performance Criteria 12: Activated all functions, such as brakes, steering, lights, wipers and hydraulic functions.			
13	Performance Criteria 13: Identified appropriate parking location.			
14	Performance Criteria 14: Parked machine according to company policy and procedure.			
15	Performance Criteria 15: Lowered the attachments to the ground level.			
16	Performance Criteria 16: Switched off machine according to the manufacturer's specifications.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

# Knowledge Assessment

<b>Qualification</b>	National Vocational Certificate Level-2 in <b>Heavy Machine Operator</b>
<b>Purpose of Assessment</b>	<b>Summative Assessment</b>
<b>Candidate Details</b>	Name: _____ Registration Number: _____ Signature: _____
<b>Assessment Outcome</b>	<div> <b>COMPETENT</b> <input type="checkbox"/> <b>NOT YET COMPETENT</b> <input type="checkbox"/> </div> Name of the Assessor _____ Assessor's code: _____ Signature: _____

Portfolio (if any)		Description of portfolio		
Current <input type="checkbox"/>	Sufficient <input type="checkbox"/>	Authentic <input type="checkbox"/>	Valid <input type="checkbox"/>	Reliable <input type="checkbox"/>
Portfolio meet the following performance standards:		Yes	No	Remarks
1	Performance criteria 1 for the evaluation of portfolio: Submitted log book or activity record (practical journal, project, pictures etc.) completed during the training.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

<b>Questions</b> (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)		<b>Satisfactory</b>	<b>Not Satisfactory</b>
1.	What is Lubricant?		
2.	What is Coolant?		

3.	Differentiate between Brake oil and Hydraulic oil?		
4.	Why warm up engine is necessary?		
5.	What is radiator?		
6.	Define fuel pump?		
7.	Define air intake system?		

