

071605T4AMEM

AGRICULTURAL MACHINERY AND EQUIPMENT MECHATRONICS LEVEL 5

ENG/OS/AME/CR/5/5/A

Maintain Hydraulic and Pneumatic Systems

Nov/Dec 2024



**TVET CURRICULUM DEVELOPMENT, ASSESSMENT AND CERTIFICATION  
COUNCIL (TVET CDACC)**

**PRACTICAL ASSESSMENT**

**Time: 3 HOURS**

**OBSERVATION CHECKLIST**

<b>Candidate's name &amp; Registration Code</b>			
<b>Assessor's name &amp; Registration Code</b>			
<b>Venue of Assessment</b>			
<b>Date of assessment</b>			
<b>Items to be evaluated:</b> <i>Please award marks as appropriate. Give a brief comment on your observation.</i>	<b>Marks available</b>	<b>Marks obtained</b>	<b>Comments</b>
<b>TASK 1: CARRY OUT PRE-START CHECKS ON HYDRAULIC SYSTEMS OF A TRACTOR</b>			
1. Wore PPEs <ul style="list-style-type: none"> <li>• Overall</li> <li>• Boots</li> <li>• Gloves</li> <li>• Helmet</li> </ul> <i>(Award 1 mark for each PPE worn or zero mark)</i>	4		

2. Checked loose hoses (Award 2 marks or zero mark)	2		
3. Checked leakages (Award 2 marks or zero mark)	2		
4. Checked hydraulic oil level (Award 2 marks or zero mark)	2		
5. Checked oil condition (Award 2 marks or zero mark)	2		
<b>Sub-Total 1</b>	<b>12</b>		
<b>TASK 2: SERVICE HYDRAULIC SYSTEM OF A TRACTORS</b>			
6. Removed hydraulic oil filter <ul style="list-style-type: none"> <li>Identified the hydraulic oil filter</li> <li>Positioned the oil drain pan under the filter</li> </ul> (Award 2 marks for each or zero mark)	4		
7. Cleaned filter elements <ul style="list-style-type: none"> <li>Drained old hydraulic oil</li> <li>Place the drain pan under the drain plug</li> </ul> (Award 1 mark for each or zero mark)	2		
8. Drain the hydraulic oil <ul style="list-style-type: none"> <li>Removed the oil drain plug and allow the hydraulic oil to drain completely</li> <li>Reinstalled and tighten drain plug</li> </ul> (Award 1 mark for each or zero mark)	2		
9. Installed new hydraulic oil filter <ul style="list-style-type: none"> <li>Removed and clean hydraulic oil filter</li> <li>Placed the oil pan under the filter</li> <li>Used oil filter wrench to remove old hydraulic oil filter</li> <li>Installed the new filter with hands</li> </ul> (Award 2 marks for each x 4)	8		
10. Refilled new hydraulic oil	3		

<ul style="list-style-type: none"> <li>• Located the hydraulic oil filter cap</li> <li>• Placed the funnel on the hydraulic oil tank opening</li> <li>• Added new hydraulic oil</li> </ul> <p><i>(Award 1 mark for each or zero mark)</i></p>			
<p>11. Performed post operation activities</p> <ul style="list-style-type: none"> <li>• Checked hydraulic oil level</li> <li>• Cranked the engine and let it run for 10 minute</li> <li>• Re-checked the hydraulic oil level using dip stick</li> <li>• Added or drained more if necessary</li> </ul> <p><i>(Award 1 mark for each or zero mark)</i></p>	4		
<b>Sub-Total 2</b>	<b>23</b>		
<b>GRAND TOTAL</b>	<b>35</b>		
<b>ASSESSMENT OUTCOME</b>			
<p><b>The candidate was found to be:</b></p> <p style="text-align: center;">Competent <input type="checkbox"/>      Not yet competent <input type="checkbox"/></p> <p><i>(Please tick as appropriate)</i></p> <p><i>(The candidate is competent if the candidate obtains at least 50%)</i></p>			
<b>Feedback from candidate:</b>			
<b>Feedback to candidate:</b>			
<b>Candidate's Signature</b>		<b>Date</b>	
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<b>Assessor's Signature</b>		<b>Date</b>	
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