

## Instruction Sheet for the Candidate

<b>Qualification</b>	Agricultural Machinery Technician (Level-04)
<b>Competency Standard</b>	Maintain sprayer
<b>Purpose of Assessment</b>	Formative Assessment
<b>Candidate Details</b>	Name_____
	Registration/Roll Number_____
<b>Guidance for Candidate</b>	<p><b>To meet this standard, you are required to complete the following within 03 Hrs. time frame (for practical demonstration &amp; assessment):</b></p> <ul style="list-style-type: none"> <li>• Maintain Knapsack sprayer</li> <li>• Maintain tractor mounted boom sprayer</li> <li>• Clean Boom Assembly</li> </ul>
<b>Time: 03 Hrs.</b>	<b>During a practical assessment, under observation by an assessor, you are required to</b>
<b>Minimum Evidence Required</b>	<p><b>Maintain Knapsack sprayer</b></p> <ol style="list-style-type: none"> <li>1. Identify the main frame, water tank, hose pipe and nozzles</li> <li>2. Check the seals of pump</li> <li>3. Check working pressure of knapsack.</li> <li>4. Check the charging status of battery.</li> <li>5. Charge the battery.</li> </ol> <p><b>Maintain tractor mounted boom sprayer</b></p> <ol style="list-style-type: none"> <li>1. Check 3-point linkage system</li> <li>2. Check the drive shaft</li> <li>3. Check the main frame with water tank</li> <li>4. Remove the nuts and mounting bolts</li> <li>5. Assemble tank with suitable mounting</li> <li>6. Remove filter service with pressure water.</li> <li>7. Remove PTO shaft from pump</li> <li>8. Remove pump mounting bolts from frame.</li> <li>9. Remove pump.</li> <li>10. Open the regulating valve.</li> <li>11. Remove pumping piston and diaphragm.</li> <li>12. Remove drive shaft french and bearing</li> <li>13. Remove drive shaft and connecting rod</li> <li>14. Clean with kerosene oil</li> <li>15. Assemble pump with recommended torque.</li> <li>16. Top-up the pump with lubricant.</li> <li>17. Check and adjust pressure 2 to 3 bar.</li> </ol> <p><b>Clean Boom Assembly</b></p> <ol style="list-style-type: none"> <li>1. Remove high pressure pipe</li> </ol>

	<ol style="list-style-type: none"><li>2. Remove nozzles</li><li>3. Clean nozzle with clean water.</li><li>4. Assemble boom assembly with frame of sprayer</li></ol>
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## Self-Assessment Checklist

<b>Candidate Name</b>	
<b>Registration No.</b>	
<b>Qualification</b>	Agricultural Machinery Technician (Level-04)
<b>Competency Standard</b>	Maintain sprayer
<b>Purpose of Assessment</b>	Formative Assessment
<b>Assessment Task</b>	<ul style="list-style-type: none"> <li>• Maintain Knapsack sprayer</li> <li>• Maintain tractor mounted boom sprayer</li> <li>• Clean Boom Assembly</li> </ul>

I can.....

<b>Performance Criteria</b>	<b>Yes</b>	<b>No</b>
1. Identify the main frame, water tank, hose pipe and nozzles	<input type="checkbox"/>	<input type="checkbox"/>
2. Check the seals of pump	<input type="checkbox"/>	<input type="checkbox"/>
3. Check working pressure of knapsack.	<input type="checkbox"/>	<input type="checkbox"/>
4. Check the charging status of battery.	<input type="checkbox"/>	<input type="checkbox"/>
5. Charge the battery.	<input type="checkbox"/>	<input type="checkbox"/>
6. Check 3-point linkage system	<input type="checkbox"/>	<input type="checkbox"/>
7. Check the drive shaft	<input type="checkbox"/>	<input type="checkbox"/>
8. Check the main frame with water tank	<input type="checkbox"/>	<input type="checkbox"/>
9. Remove the nuts and mounting bolts	<input type="checkbox"/>	<input type="checkbox"/>
10. Assemble tank with suitable mounting	<input type="checkbox"/>	<input type="checkbox"/>
11. Remove filter service with pressure water.	<input type="checkbox"/>	<input type="checkbox"/>
12. Remove PTO shaft from pump	<input type="checkbox"/>	<input type="checkbox"/>
13. Remove pump mounting bolts from frame.	<input type="checkbox"/>	<input type="checkbox"/>
14. Remove pump.	<input type="checkbox"/>	<input type="checkbox"/>

15. Open the regulating valve.	<input type="checkbox"/>	<input type="checkbox"/>
16. Remove pumping piston and diaphragm.	<input type="checkbox"/>	<input type="checkbox"/>
17. Remove drive shaft french and bearing	<input type="checkbox"/>	<input type="checkbox"/>
18. Remove drive shaft and connecting rod	<input type="checkbox"/>	<input type="checkbox"/>
19. Clean with kerosene oil	<input type="checkbox"/>	<input type="checkbox"/>
20. Assemble pump with recommended torque.	<input type="checkbox"/>	<input type="checkbox"/>
21. Top-up the pump with lubricant.	<input type="checkbox"/>	<input type="checkbox"/>
22. Check and adjust pressure 2 to 3 bar.	<input type="checkbox"/>	<input type="checkbox"/>
23. Clean Boom Assembly	<input type="checkbox"/>	<input type="checkbox"/>
24. Remove high pressure pipe	<input type="checkbox"/>	<input type="checkbox"/>
25. Remove nozzles	<input type="checkbox"/>	<input type="checkbox"/>
26. Clean nozzle with clean water.	<input type="checkbox"/>	<input type="checkbox"/>
27. Assemble boom assembly with frame of sprayer	<input type="checkbox"/>	<input type="checkbox"/>

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

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

## Assessors Judgment Guide

<b>Qualification</b>	Agricultural Machinery Technician (Level-04)
<b>Competency Standard</b>	Maintain sprayer
<b>Purpose of Assessment</b>	Formative Assessment
<b>Candidate Details</b>	Name: _____ Registration/Roll Number: _____ Signature: _____
<b>Assessment Outcome</b>	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor _____ Assessor's code: _____ Signature: _____

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							

## Observation Checklist

Assessment Task		<ul style="list-style-type: none"> <li>• Maintain Knapsack sprayer</li> <li>• Maintain tractor mounted boom sprayer</li> <li>• Clean Boom Assembly</li> </ul>		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Identify the main frame, water tank, hose pipe and nozzles			
2.	Check the seals of pump			
3.	Check working pressure of knapsack.			
4.	Check the charging status of battery.			
5.	Charge the battery.			
6.	Check 3-point linkage system			
7.	Check the drive shaft			
8.	Check the main frame with water tank			
9.	Remove the nuts and mounting bolts			
10.	Assemble tank with suitable mounting			
11.	Remove filter service with pressure water.			
12.	Remove PTO shaft from pump			
13.	Remove pump mounting bolts from frame.			
14.	Remove pump.			
15.	Open the regulating valve.			
16.	Remove pumping piston and diaphragm.			
17.	Remove drive shaft frentch and bearing			
18.	Remove drive shaft and connecting rod			
19.	Clean with kerosene oil			
20.	Assemble pump with recommended torque.			

21.	Top-up the pump with lubricant.			
22.	Check and adjust pressure 2 to 3 bar.			
23.	Clean Boom Assembly			
24.	Remove high pressure pipe			
25.	Remove nozzles			
26.	Clean nozzle with clean water.			
27.	Assemble boom assembly with frame of sprayer			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

## Knowledge Assessment

<b>Qualification</b>	Agricultural Machinery Technician (Level-04)
<b>Competency Standard</b>	Maintain sprayer
<b>Purpose of Assessment</b>	Formative Assessment
<b>Candidate Details</b>	Name: _____ Registration/Roll Number: _____ Candidate Signature: _____
<b>Assessment Outcome</b>	<div style="display: flex; justify-content: space-around; align-items: center;"> <span><b>COMPETENT</b> <input type="checkbox"/></span> <span><b>NOT YET COMPETENT</b> <input type="checkbox"/></span> </div> Name of the Assessor: _____ Assessor's code: _____ Signature of the Assessor: _____

Candidate's response is not required to be identical, but similar concepts and/or keywords must be used. Oral questioning may be used to clarify candidate understanding of topic and its application.

Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)		Satisfactory	Not Satisfactory
1.	Name major assembly of boom sprayer.		
2.	Tell the recommended pressure of sprayer		
3.	How many types of nozzle		



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<b>Feedback to the Candidate</b>	
<b>Candidate's Signature</b> _____	<b>Assessor's Signature</b> _____