

071604T4AUT

AUTOMOTIVE TECHNOLOGY LEVEL 4

ENG/OS/AUT/CR/2/4/A

SERVICE AND REPAIR VEHICLE ENGINE

July/August 2024



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

OBSERVATION CHECKLIST

INSTRUCTIONS TO ASSESSOR

1. Assess the candidate as the practical progresses observing the critical areas
2. You are required to mark the practical as the candidate perform the tasks
3. You are required to take video clips at critical points
4. Ensure the candidate has a name tag and registration code at the back and front

This guide consists of FOUR (4) printed pages.

**Assessor should check the guide to ascertain that all the pages are printed as indicated and
that no questions or answers are missing**

OBSERVATION CHECKLIST			
Candidate's Name & Registration No.			
Assessor's Name & Reg. Code			
Venue of Assessment			
Date of assessment			
(Indicate the marks available and marks obtained respectively. Award marks appropriately as guided for in the items for evaluation indicated. Give a brief comment where necessary)			
Items to be evaluated:	Marks Allocated	Marks Obtained	Comments
Cylinder head service			
1. Wore personal protective gears - Safety boot - Overall/dustcoat (Award 1 mark for each safety gear worn correctly)	1 1		
2. Disconnected the battery (Award 1 mark or zero)	1		
3. Drained coolant from the radiator according to manufacturer's specification (Award 2 marks or zero)	2		
4. Removed inlet and exhaust manifolds (Award 2 marks or zero)	2		
5. Removed the top cover and overhead engine (Award 2 marks or zero)	2		
6. Removed the cylinder head bolts in the correct sequence (Award 4 marks or zero)	3		
7. Removed the cylinder head from the engine according to manufacturer's specification (Award 4 marks or zero)	3		

8. Disassembled the valves and cleaned the components <i>(Award 2 marks or zero for each)</i>	4		
9. Cleaned the cylinder head <i>(Award 2 marks or zero)</i>	2		
10. Inspecting • Cylinder head for crack • Camshaft for wear/cracks • Valve seat wear • Valves for wear <i>(Award 1 mark for each inspection)</i>	1 1 1 1		
11. Placed cylinder on flat bench and checked for warpage <i>(Award 2 marks or for each)</i>	4		
12. Ground the valve seats and tested for leakage <i>(Award 2 marks or 0 for each)</i>	4		
13. Fitted valves back after cleaning according to manufacturer's specification <i>(Award 2 marks or 0)</i>	2		
14. Assembled cylinder head, fitted back to the engine and step torquing the bolts • Assembled cylinder head • Fitted back cylinder head and new gasket • Tightened cylinder head bolts <i>(Award 4 marks as guided)</i>	1 2 1		
15. Fitted back the coolant pipes <i>(Award 2 marks or 0)</i>	2		
16. Fitted back top cover <i>(Award 2 marks or 0)</i>	2		

17. Filled the engine with coolant and oil to the required level according to manufacturer's specification <i>(Award 3 marks or 0)</i>	3		
18. Connected the battery <i>(Award 1 mark or 0)</i>	1		
19. Finished within specified time frame <i>(Award 2 marks or 0)</i>	2		
20. Cleaned the working area and properly disposed the waste materials <i>(Award 1 mark or 0)</i>	1		
TOTAL	50		

ASSESMENT OUTCOME**The candidate was found to be:**Competent ☐ Not yet competent ☐*(Please tick as appropriate)**(The candidate is competent if s/he gets 50% or higher)***Feedback from candidate:****Feedback to candidate:****Candidate's signature:****Date:****Assessor's signature:****Date:**