

071606T4AMT

AUTOMOTIVE MECHATRONICS TECHNOLOGY LEVEL 6

ENG/OS/AMT/CR/09/6/A

MAINTAIN VEHICLE ELECTRONICS AND TRANSDUCERS

July/Aug 2023



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

PRACTICE

INSTRUCTIONS TO THE ASSESSOR

1. The candidate is allocated **three hours** to perform the tasks
2. You are required to mark the practical as the candidate performs the tasks.
3. You are required to take video clips at critical points.
4. Ensure the candidate has an identification tag pinned at the back and front near the shoulders showing candidate's name and registration code.

This guide consists of FIVE (5) printed pages.

Turn Over

OBSERVATION CHECKLIST

Candidate's Name & Registration No.			
Assessor's Name & Reg. code			
Unit(s) of Competency	Maintain Vehicle Electronics and Transducers		
Venue of Assessment			
Date of assessment			
Items to be evaluated: <i>Please award marks as appropriate. Give a brief comment on your observation.</i>	Marks obtained	Marks allocated	Comments
REPAIR OF THE FAULTY DIESEL INJECTOR			
1. Assembled tools, equipment and materials appropriate for the job as per workplace procedures. i. Injector tester ii. Assorted tools iii. Diesel iv. Fuel can v. Injector Service manual vi. Cleaning materials (Award ½ mark or zero)	2		
2. Wore Personal Protective Equipment as per workplace procedures. i. Overall/overcoat, ii. Safety boots iii. Surgical masks, iv. Gloves (Award ½ mark or zero)	2		
3. Secured the vehicle accordingly. (Award 2 marks or zero)	2		
4. Started the engine accordingly. (Award 1 mark or zero)	1		
5. Allowed the engine to idle for a few minutes. (Award 1 mark or zero)	1		
6. Identified the faulty injector using the stethoscope (Award 1 mark or zero for listening to each of the four injectors)	4		

7. Reported the faulty injector to the examiner. <i>(Award 1 mark or zero)</i>	1		
8. Switched off the engine accordingly. <i>(Award 1 mark or zero)</i>	1		
9. Released residual pressure as per the service manual. <i>(Award 2 marks or zero)</i>	2		
10. Removed the injector pipe as per the service manual. <i>(Award 1 mark or zero)</i>	1		
11. Took note of the connection code and removed electrical connection as per the service manual as per the service manual. <i>(Award 1 mark for code taking and 1 mark or zero for connection removal)</i>	2		
12. Loosened the holding clamp as per the s manual. <i>(Award 1 mark or zero)</i>	1		
13. Pulled the injector and placed on the wo bench. <i>(Award 1 mark or zero)</i>	1		
14. Cleaned the injector externally as per the service manual. <i>(Award 1 mark or zero)</i>	1		
15. Inspected of the injector visual as per the service manual. <i>(Award 1 mark or zero)</i>	1		
16. Checked diesel level on the testing machine as per the service manual. <i>(Award 2 marks or zero)</i>	2		
17. Mounted the injector correctly as per the service manual. <i>(Award 2 marks or zero)</i>	2		
18. Connected the machine to power supply as per the service manual. <i>(Award 3 marks or zero)</i>	3		
19. Conducted the test as per the service manual. <i>(Award 3 marks or zero)</i>	3		
20. Confirmed the injector nozzle was clean.	2		

<i>(Award 2 marks or zero)</i>			
21. Compared the readings to the manufacturers' service manual. <i>(Award 2 marks or zero)</i>	2		
22. Refitted and tightened the holding clamp to manufacturers specifications <i>(Award 2 marks or zero)</i>	2		
23. Fitted the electrical connector as per the service manual. <i>(Award 2 marks or zero)</i>	2		
24. Started the engine accordingly <i>(Award 1 mark or zero)</i>	1		
25. Retested the injector using the stethoscope as per the service manual. <i>(Award 1 mark or zero for listening to each of the four injectors)</i>	4		
26. Switched off the engine accordingly <i>(Award 1 mark or zero)</i>	1		
27. Returned the tools, equipment and mater accordingly <i>(Award 1 mark or zero)</i>	1		
28. Observed neatness <i>(Award 1 mark or zero)</i>	1		
29. Completed the task within the stipulated time. <i>(Award 1 mark or zero)</i>	1		
TOTAL	50		
ASSESSMENT OUTCOME			
The candidate was found to be: Competent ☐ Not yet competent ☐ <i>(Please tick as appropriate)</i> <i>(The candidate is competent if s/he gets at least 50%)</i>			
Feedback from candidate:			

Feedback to candidate:	
Candidate's Signature	Date
_____	_____
Assessor's/ verifier's signature	