

CDX Tasksheet Number: MHT2A003

Student/Intern Information

Name _____ Date _____ Class _____

Vehicle, Customer, and Service Information

Vehicle used for this activity:

Year _____ Make _____ Model _____

Odometer _____ VIN _____

Materials Required

- Vehicle with possible drivetrain concern
- Vehicle manufacturer's repair information
- Manufacturer-specific tools depending on the concern/procedure(s)

Task-Specific Safety Considerations

- Activities may require test-driving the vehicle on the school grounds or on a hoist, both of which carry severe risks. Attempt this task only with full permission from your supervisor/instructor, and follow all the guidelines exactly.
- Caution: If you are working in an area where there could be clutch dust present (it may contain asbestos, which has been determined to cause cancer when inhaled or ingested), ensure you wear and use all OSHA-approved asbestos protective/removal equipment.
- Comply with personal and environmental safety practices associated with clothing; eye protection; hand tools; power equipment; proper ventilation; and the handling, storage, and disposal of chemicals/materials in accordance with federal, state, and local regulations.
- Always wear the correct protective eyewear and clothing and use the appropriate safety equipment, as well as fender covers, seat protectors, and floor mat protectors.
- Make sure you understand and observe all legislative and personal safety procedures when carrying out practical assignments. If you are unsure of what these are, ask your supervisor/instructor.
- While working on the vehicle, wheel chocks must be placed on both sides of one set of tires or as directed by your supervisor/instructor.
- Exhaust evacuation hoses must be placed over exhaust outlets while the engine is used in the confined shop space.

► TASK Use the appropriate electronic service tool(s) and procedures to diagnose problems; check, record, and clear diagnostic codes; interpret digital multimeter (DMM) readings.

MTST
II.A.3; P1

Student Instructions: Read through the entire procedure prior to starting. Prepare your workspace and any tools or parts that may be needed to complete the task. When directed by your supervisor/instructor, begin the procedure to complete the task and check the box as each step is finished.

Time off _____

Time on _____

Total time _____

Procedure:	Step Completed
1. Reference the appropriate manufacturer's repair information.	☐
a. Research how to retrieve diagnostic codes. List the procedure and type of software and/or data scan tools that you will use for the vehicle:	☐
2. Connect the software and/or data scan tool to the vehicle's data link connector (DLC), and retrieve any diagnostic trouble codes (DTCs). Using the process described in the flow chart as a guide, undertake the test and list any DTCs here:	☐
3. Research the DTCs for this vehicle in the appropriate service manual.	☐
a. List the DTC descriptions for each code stored:	☐
4. Follow the vehicle service manual procedure to diagnose the specific cause of the DTC, and use the PC-based software and/or data scan tool to assist in your diagnosis of the problem. List the data related to this DTC here:	☐
5. Compare this data to the service manual specifications and list your interpretations:	☐
6. Determine any necessary action(s):	☐
7. Advise your supervisor/instructor of needed repairs and carry them out if authorized.	☐

8. After successfully completing the repairs and testing for proper function, clear the DTCs.	☐
9. Was a digital multimeter (DMM) used in the diagnostic testing: Yes: ☐ No: ☐	☐
a. If Yes, verify with your supervisor/instructor the ohms or volts reading you measured and what conclusions those readings led you to.	☐
10. Return the vehicle to its beginning condition, and return any tools you used to their proper locations.	☐
11. Discuss your findings with your supervisor/instructor.	☐

Non-Task-Specific Evaluations:	Step Completed
1. Tools and equipment were used as directed and returned in good working order.	☐
2. Complied with all general and task-specific safety standards, including proper use of any personal protection equipment (PPE).	☐
3. Completed the task in an appropriate time frame. (Recommendation: 1.5 or 2 times the flat rate)	☐
4. Left the workspace clean and orderly.	☐
5. Cared for customer property and returned it undamaged.	☐

Student signature _____ Date _____

Comments:

Have your supervisor/instructor verify satisfactory completion of this procedure, any observations made, and any necessary action(s) recommended.

Evaluation Instructions: The scoring box below is intended to act as a guide for both student and supervisor/instructor. Each criterion listed will help students to understand what is expected of them and help supervisors/instructors to articulate the level of success at a particular task. The scoring is set up to allow a second attempt at each task (see the Test and Retest columns). Scoring is also designed only to award students points for task criteria that were completed correctly. Points are lost for failure to complete the employability requirements (see Non-Task-Specific Evaluation criteria). When all criteria are evaluated, tally the points for a total at the bottom of each column.

Tasksheet Scoring

	Test		Retest	
Evaluation Items	Pass	Fail	Pass	Fail
Task-Specific Evaluation	(1 pt)	(0 pts)	(1 pt)	(0 pts)
Student detailed the 3 Cs on the submitted repair order.				
Student correctly retrieved DTCs from the vehicle's DLC.				
Student made appropriate conclusions based on diagnostics.				
Student completed repairs as directed by the supervisor/instructor, then cleared the DTCs.				
Non-Task-Specific Evaluation	(0 pts)	(-1 pt)	(0 pts)	(-1 pt)
Student successfully completed at least three of the non-task-specific steps.				
Student successfully completed all five of the non-task-specific steps.				
Total Score: <total # of points /4 = %>				

Supervisor/Instructor:

Supervisor/instructor signature _____ Date _____

Comments:

Retest supervisor/instructor signature _____ Date _____

Comments: