

CDX Tasksheet Number: MHT1G003

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 engine concern
- Engine manufacturer's workshop materials
- Manufacturer-specific tools depending on the concern/procedure(s)
- Vehicle/component lifting equipment, if applicable

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.
- Lifting equipment and machines such as vehicle jacks and stands, vehicle hoists, and engine hoists are important tools that increase productivity and make the job easier. However, they can also cause severe injury or death if used improperly. Make sure you follow the manufacturer's operation procedures. Also make sure you have your supervisor's/instructor's permission to use any particular type of lifting 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 wheel chocks, 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.

► TASK Inspect low-pressure fuel system components, including fuel pump, pump drives, screens, fuel water separators/indicators, hoses, lines, filters, heaters, coolers, engine control module (ECM) cooling plates, check valves, pressure regulator valves, restrictive fittings, and mounting hardware; determine needed action.

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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 _____

Note: This tasksheet may require the student to check the condition of miscellaneous vehicle fluids, some of which may be flammable and could damage the environment or cause health problems if not handled properly. Observe all safety precautions and follow local regulations for the proper disposal of fluids.

Procedure:	Step Completed
1. Inspect the fuel supply and return lines for damage, leaks, and proper securement as outlined in the manufacturer's workshop materials.	
a. Within manufacturer's specifications: Yes: ☐ No: ☐	☐
b. If No, describe the recommended corrective action(s):	☐
2. Inspect the ECM cooling plate for proper mounting, damage, or signs of leakage as outlined in the manufacturer's workshop materials.	
a. Within manufacturer's specifications: Yes: ☐ No: ☐	☐
b. If No, describe the recommended corrective action(s):	☐
3. Inspect the water fuel separator/primary fuel filter for proper mounting, damage, or signs of leakage as outlined in the manufacturer's workshop materials.	
a. Within manufacturer's specifications: Yes: ☐ No: ☐	☐
b. If No, describe the recommended corrective action(s):	☐
4. Drain any water from the water fuel separator and properly dispose of it.	☐
5. Disconnect the wiring harness from the water fuel separator and observe the operation of the water in the fuel light. If the light does not come on with the harness disconnected, place a jumper wire across the harness connections and observe the operation of the water in the fuel light. (Note: For wiring harnesses other than a 2-wire harness/connector, refer to the manufacturer's workshop materials/wiring diagrams[s] for proper testing.)	
a. Within manufacturer's specifications: Yes: ☐ No: ☐	☐

b. If No, describe the recommended collective action(s):	☐
6. Inspect the fuel cooler for proper mounting, damage, or signs of leakage as outlined in the manufacturer's workshop materials.	
a. Within manufacturer's specifications: Yes: ☐ No: ☐	☐
b. If No, describe the recommended collective action(s):	☐
7. Record the procedure for performing a fuel heater test as outlined in the manufacturer's workshop materials, and then perform the test:	
a. Within manufacturer's specifications: Yes: ☐ No: ☐	☐
b. If No, describe the recommended collective action(s):	☐
8. Inspect the electric/mechanical fuel transfer/lift pump for proper mounting, damage, or signs of leakage as outlined in the manufacturer's workshop materials.	
a. Within manufacturer's specifications: Yes: ☐ No: ☐	☐
b. If No, describe the recommended collective action(s):	☐
9. Remove the manual transfer/lift pump and inspect the pump drive for damage as outlined in the manufacturer's workshop materials. (Note: This procedure is only for engines with mechanical lift pumps.)	
a. Within manufacturer's specifications: Yes: ☐ No: ☐	☐
b. If No, describe the recommended collective action(s):	☐

10. Record the procedure for performing a transfer/lift pump flow-rate test as outlined in the manufacturer's workshop materials, and then perform the test:	
a. Within manufacturer's specifications: Yes: ☐ No: ☐	☐
b. If No, describe the recommended collective action(s):	☐
11. Record the procedure for performing a transfer/lift pump pressure test as outlined in the manufacturer's workshop materials, and then perform the test:	
a. Within the manufacturer's specifications: Yes: ☐ No: ☐	☐
b. If No, describe the recommended collective action(s):	☐
12. 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.	☐
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 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 to award students points only 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 properly inspected the fuel tank supply, return lines, ECM cooling plate, water fuel separator, and water in the fuel light's operation.				
Student properly inspected the fuel cooler and fuel heater.				
Student properly removed and inspected the fuel transfer/lift pump.				
Student properly performed the fuel transfer/lift pump flow-rate test and pressure test.				
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: