# CDX Tasksheet Number: MHT6C003

#### 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 air conditioning concerns
- 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.
- 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** Identify the source of A/C system odors; determine needed action.

**MTST** VI.C.3; P1

Time off.

Time on

Total time.

<b>Student Instructions:</b> 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.

Procedure:		
1. Reference the appropriate manufacturer's repair information.		
2. Check for odors as you try each of the following: selecting "fresh" air and turning the fan on high, selecting the dash vent, selecting each vent set- ting, turning the heater on high, and turning the air conditioner on.		
3. If the odor is in all positions, the problem is likely in the heater/evaporator housing. Keep testing until you can pinpoint the source of the odor.		
4. If the drain tube becomes clogged with leaves or debris over time, the water will not be able to drain; it will stagnate and begin growing bacteria, creating an unpleasant odor.		
a. A drain hose is connected to the evaporator housing and exits through the vehicle's firewall. Checking that the drain is not plugged is a common diagnostic procedure.		
b. Determine if the drain tube is clogged by allowing the air-conditioning system to run while observing the drain tube for water drops. In the case of a plugged drain, no water or very few drops are found.		
<ul> <li>c. Carefully use low-pressure shop air and an air nozzle to blow air into the drain tube.</li> <li>(Note: The water will come out of the drain tube when the clog is removed and will result in a large discharge of malodorous water; stand back.)</li> </ul>		

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d. When the water has completely drained, the task has been performed. Advise the customer to periodically check for a water puddle under the vehicle; if one is not present, the clog may have reoccurred and removal of the air box may be necessary to open the air box and clean out any remaining debris.	
5. Open all the doors on the vehicle to allow it to air out a bit.	
6. Turn the blower fan on medium speed.	
7. Operate the system in all zones and see if the smell is stronger in one position than in the others. If so, inspect that portion of the system. If the smell is equally strong in all positions, inspect the heater/evaporator housing.	
a. If the odor is caused by mold or bacteria buildup, use an anti-odor kit to clean and kill any buildup.	
8. Return the vehicle to its beginning condition, and return any tools you used to their proper locations.	
9. Discuss your findings with your supervisor/instructor.	

Non-Task-Specific Evaluations:	
<ol> <li>Tools and equipment were used as directed and returned in good working order.</li> </ol>	
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) recommend	

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**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)	(O pts)	(1 pt)	(O pts)
Student detailed the 3 Cs on the submitted repair order.				
Student used manufacturer's repair information.				
Student performed diagnostic procedures properly and made appropriate conclusions.				
Student completed repairs as directed by the supervisor/instructor.				
Non-Task-Specific Evaluation	(O pts)	(-1 pt)	(O 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 #="" 4="%" of="" points=""></total>				

Date		
Date		

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