

## CDX Tasksheet Number: MHT1E003

### 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 and reinstall/replace pulleys, tensioners, and drive belts; adjust drive belts and check alignment.

**MTST**  
I.E.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.

**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.

Time off \_\_\_\_\_

Time on \_\_\_\_\_

Total time \_\_\_\_\_

| Procedure:  | Step Completed           |
|---|--------------------------|
| 1. Reference the appropriate manufacturer's workshop materials.   |                          |
| a. Identify belt type(s).<br>i. Serpentine: <input type="checkbox"/><br>ii. V-belt: <input type="checkbox"/>          | <input type="checkbox"/> |
| b. Identify tensioner type(s).<br>i. Self-tensioner: <input type="checkbox"/><br>ii. Manual: <input type="checkbox"/> | <input type="checkbox"/> |
| c. Drive-belt tension: _____ ft-lb/N·m  | <input type="checkbox"/> |
| 2. Inspect all drive belts and pulleys for proper alignment as outlined in the manufacturer's workshop materials.     |                          |
| a. Within manufacturer's specifications:<br>Yes: <input type="checkbox"/> No: <input type="checkbox"/>                | <input type="checkbox"/> |
| b. If No, describe the recommended corrective action(s):  | <input type="checkbox"/> |
| 3. Remove all drive belts and inspect them for wear/damage as outlined in the manufacturer's workshop materials.      |                          |
| a. Within manufacturer's specifications:<br>Yes: <input type="checkbox"/> No: <input type="checkbox"/>                | <input type="checkbox"/> |
| b. If No, describe the recommended corrective action(s):  | <input type="checkbox"/> |
| 4. Inspect all drive pulleys for wear/damage as outlined in the manufacturer's workshop materials.                    |                          |
| a. Within manufacturer's specifications:<br>Yes: <input type="checkbox"/> No: <input type="checkbox"/>                | <input type="checkbox"/> |
| b. If No, describe the recommended corrective action(s):  | <input type="checkbox"/> |

|   |                          |
|---|--------------------------|
| 5. Inspect all tensioners for wear/damage as outlined in the manufacturer's workshop materials.                                   |                          |
| a. Within manufacturer's specifications:<br>Yes: <input type="checkbox"/> No: <input type="checkbox"/>                            | <input type="checkbox"/> |
| b. If No, describe the recommended corrective action(s):  | <input type="checkbox"/> |
| 6. If instructed by your supervisor/instructor, repair any pulley(s) that are out of alignment. List the steps of your procedure: | <input type="checkbox"/> |
| 7. Reinstall the drive belt(s) and adjust them to proper tension as outlined in the manufacturer's workshop materials.            |                          |
| a. Within manufacturer's specifications:<br>Yes: <input type="checkbox"/> No: <input type="checkbox"/>                            | <input type="checkbox"/> |
| b. If No, describe the recommended corrective action(s):  | <input type="checkbox"/> |
| 8. Discuss your findings with your supervisor/instructor.   | <input type="checkbox"/> |

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

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 removed and inspected the drive belts.                       |         |         |         |         |
| Student properly checked and corrected pulley alignment.                      |         |         |         |         |
| Student properly inspected pulleys and tensioners.                            |         |         |         |         |
| Student reinstalled all removed components undamaged and in working order.    |         |         |         |         |
| 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.       |         |         |         |         |
| <b>Total Score:</b><br><total # of points/4 = %>                              |         |         |         |         |

#### Supervisor/Instructor:

Supervisor/instructor signature \_\_\_\_\_ Date \_\_\_\_\_

#### Comments:

Retest supervisor/instructor signature \_\_\_\_\_ Date \_\_\_\_\_

#### Comments:

