CDX Tasksheet Number: MHT4F006

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 wheel alignment 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.
- 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 Check rear axle(s) alignment (thrust line/centerline) and tracking. ***MTST IV.F.6; P2***

Time off _____

Time on _____

Total time _____

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.

Procedure:	Step Completed
1. Reference the appropriate manufacturer's repair information.	☐
2. Attach the wheel sensors on the vehicle to the locations specified by the alignment equipment manufacturer and compensate for tire and wheel rim runout.	☐
3. Follow the alignment machine instructions for taking the rear axle alignment measurements and compare them with the vehicle manufacturer's specifications.	☐
a. Manufacturer's specification for thrust angle tolerance: _____ in/mm	☐
b. Record the thrust angle reading for both rear axles: Front: _____ Rear: _____	☐
4. Perform rear axle alignment using the field method.	☐
a. Park the vehicle on a flat surface. Clamp a long straight edge across the frame in front of the front axle of the tandem at exactly 90 degrees to the vehicle center line.	☐
b. Drop a plumb bob line from the straight edge in line with the front axle hub. Using a trammel bar, measure the distance from the line to the hub, and tighten the trammel.	☐
c. Repeat the procedure on the other side of the vehicle. Compare the measurements; they should be within the manufacturer's specifications. Adjust as necessary.	☐

d. Using the trammel, check the distance between the two hubs of the tandem on the left side. Compare with the right side. Adjust as necessary. 	☐
e. Record the thrust angle reading for both rear axles: Front: _____ Rear: _____	☐
5. Return the vehicle to its beginning condition, and return any tools you used to their proper locations.	☐
6. 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 used manufacturer's repair information.				
Student performed diagnostic measurements properly and made appropriate conclusions.				
Student completed repairs as directed by the supervisor/instructor.				
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: