CDX Tasksheet Number: MHT3D001

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 brake 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 brake 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.
- Air lines may contain pressurized air so be aware of the potential energy release while working with air brake components. Release the air pressure in the system before attempting any repairs.

▶ TASK Inspect, test, and/or replace the parking (spring) brake chamber. **MTST** *III.D.1; 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. Inspect and test the parking brake chamber(s), diaphragm, and seals.	☐
a. Reference the manufacturer's repair information for the correct procedure for checking the parking brake chamber(s), diaphragm, and seals. Inspect and test parking brake operation.	☐
b. Ensure the air pressure has been completely built up; apply and release the parking brake.	☐
i. Operational: ☐ Requires servicing: ☐	☐
ii. If servicing is required, list the problem(s) and your recommendation(s):	☐
c. Check to ensure all parking brake chambers have applied. Yes: ☐ No: ☐	☐
i. If no, list the problem components and your recommendation(s):	☐
3. Replace the parking (spring) brake chamber.	☐
a. Reference the manufacturer's repair information for the correct procedure for replacing the parking brake chamber(s), including all safety precautions.	☐
i. List the procedure and all safety requirements when replacing a parking (spring) brake chamber assembly:	☐

ii. Discuss the procedure with your supervisor/instructor.	☐
iii. If directed by your supervisor/instructor, replace the parking (spring) brake chamber in accordance with the manufacturer's procedure and safety requirements.	☐
b. Replace the parking (spring) brake chamber in accordance with the manufacturer's repair information.	☐
c. Removal:	☐
i. As outlined in the repair information, fit the manual cage retaining bolt and disarm the parking brake spring.	☐
ii. Disconnect the air line hoses and seal/cap hoses from the parking (spring) brake chamber.	☐
iii. Remove the cotter pin and clevis pin.	☐
iv. Remove the mounting bolts and parking (spring) brake chamber.	☐
v. Check the mounting bracket for any damage. Condition: Good: ☐ Needs replacing: ☐	☐
vi. Check the bracket mounting holes for elongation. Condition: Good: ☐ Needs replacing: ☐	☐

d. Replacement:	☐
i. Install the new parking (spring) brake chamber; fit and torque the mounting bolts.	☐
ii. Adjust the push rod to align with the clevis pin and refit the clevis pin and cotter pin.	☐
iii. Remove the protective covers/caps from brake hoses and reconnect in the correct manner as outlined in the repair information.	☐
4. Referencing local and, where necessary, state/federal legislation/regulations, follow the correct procedure for disposing of a used parking (spring) brake chamber(s).	☐
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 assessments 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: