

CDX Tasksheet Number: MHT2B003

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 clutch 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** Inspect, adjust, repair, and/or replace hydraulic clutch slave and master cylinders, lines, and hoses; bleed system.

MTST
II.B.2; 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.

Time off _____

Time on _____

Total time _____

| Procedure: | Step Completed |
|--|--------------------------|
| 1. Research the procedure and specifications for inspecting and adjusting the hydraulic clutch components in the appropriate service information. | <input type="checkbox"/> |
| 2. Inspect the clutch slave and master cylinder for the correct fluid level and test the quality of the fluid. | <input type="checkbox"/> |
| a. Check the boot on the slave cylinder for seepage, which may indicate a leaking slave cylinder piston seal. | <input type="checkbox"/> |
| b. Inspect hydraulic, the clutch operational lines, and hoses. | <input type="checkbox"/> |
| i. Meets the manufacturer's specifications: Yes: <input type="checkbox"/> No: <input type="checkbox"/> | <input type="checkbox"/> |
| ii. If no, list your recommendations for any rectifications: | <input type="checkbox"/> |
| 3. If directed by your supervisor/instructor, bleed the hydraulic clutch system in accordance with the specifications listed in the workshop manual. | <input type="checkbox"/> |
| a. Use a suction gun or old antifreeze tester to suck the fluid out of the clutch master cylinder reservoir. Fill it with the specified fluid. | <input type="checkbox"/> |
| b. Have an assistant depress the clutch pedal slowly. Open the bleeder valve on the slave cylinder and let the fluid run out into a container. | <input type="checkbox"/> |
| c. When all the fluid stops flowing, close the bleeder valve and slowly release the pedal. | <input type="checkbox"/> |
| d. Repeat this process until all the air and old fluid are removed from the system. | <input type="checkbox"/> |
| 4. After bleeding the clutch hydraulic system, check for correct pedal feel, and fill the master cylinder to the correct level with the specified type of brake fluid. | <input type="checkbox"/> |
| 5. Return the vehicle to its beginning condition, and return any tools you used to their proper locations. | <input type="checkbox"/> |
| 6. Discuss your findings with your supervisor/instructor. | <input type="checkbox"/> |

| Non-Task-Specific Evaluations | Step Completed |
|---|--------------------------|
| 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 (PPE). | <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 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 the manufacturer's repair information. | | | | |
| Student performed the diagnostic observations 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: