**Automotive Technology 7th Edition**

**Chapter 96 – Brake Fluid, Lines, and Bleeding**

**Lesson Plan**

**CHAPTER SUMMARY:**

1. Brake Fluid, Brake Fluid Specifications, Brake Fluid Service Procedures, and Brake Lines

2. Brake Bleeding, Brake Bleeding Valve Loosening Methods, Bleeding Sequence, and Manual Bleeding

3. Vacuum Bleeding, Gravity Bleeding, Pressure Bleeding, and Hydraulic ABS Service

4. Brake Fluid Replacement/Flushing

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**OBJECTIVES:**

1. Discuss the purpose, function, and properties of brake fluids.

2. Discuss brake fluid specifications.

3. Describe brake service procedures and precautions.

4. Discuss the use of brake lines.

5. Discuss the need for brake bleeding.

6. Discuss the various methods of loosening the brake bleeder valve.

7. Describe the bleeding sequence for most vehicles.

8. Describe the manual bleeding procedure.

9. Discuss how to vacuum bleed the hydraulic brake system.

10. Discuss how to gravity bleed the hydraulic brake system.

11. Discuss how to pressure bleed the hydraulic brake system.

12. Describe how to bleed the ABS hydraulic unit.

13. Describe brake fluid replacement or flushing. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**RESOURCES:** (All resources may be found at jameshalderman.com)

1. Task Sheet: Brake Hoses and Lines

2. Task Sheet: Brake Fluid

3. Task Sheet: Brake Bleeding

4. Crossword Puzzle and Word Search

5. Chapter PowerPoint

6. Videos: [(A5) Brakes Videos](https://jameshalderman.com/a5_vid_lib_page/)

7. Animations: [(A5) Brakes Animations](https://jameshalderman.com/a5_anim_lib_page/)

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**ACTIVITIES:**

1. Task Sheet: Brake Hoses and Lines

2. Task Sheet: Brake Fluid

3. Task Sheet: Brake Bleeding

4. Crossword Puzzle and Word Search

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**ASSIGNMENTS:**

1. Chapter crossword and word search puzzles from the website.

2. Complete end of chapter quiz from the textbook.

3. Complete multiple choice and short answer quizzes downloaded from the website.

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**CLASS DISCUSSION:**

1. Review and group discussion chapter Frequently Asked Questions and Tech Tips sections.

2. Review and group discussion of the five (5) chapter Review Questions.

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**NOTES AND EVALUATION:**

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