**Manual Drivetrains and Axles 9th Edition**

**Chapter 8 –** **Manual Transmission/Transaxle Diagnosis and Service**

**CHAPTER SUMMARY:**

1. Preventive Maintenance and Manual Transmission/Transaxle Diagnosis

2. Transaxle/Transmission Removal and Transaxle/Transmission Overhaul

3. Transmission Disassembly, Shift Mechanism, and Case and Covers

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**OBJECTIVES:**

1. Explain how to perform transaxle/transmission maintenance operations.

2. Explain manual transaxle/transmission diagnosis.

3. Discuss the procedure for transaxle/ transmission removal and replacement.

4. Discuss the procedure for transaxle/ transmission overhaul.

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

1. Task Sheet: Diagnose Drive Train Concerns

2. Task Sheet: Diagnose Fluid Condition & Loss

3. Task Sheet: Drain and Fill Manual Transmission/Transaxle

4. Task Sheet: Remove and Replace Transmission/Transaxle

5. Task Sheet: Disassemble/Reassemble Transmission/Transaxle

6. Task Sheet: Manual Transmission Noise/Shifting Diagnosis

7. Task Sheet: Manual Transmission/Transaxle Linkage

8. Task Sheet: Transaxle Final Drive Noise Diagnosis

8. Chapter PowerPoint

9. Crossword Puzzle and Word Search

10. Videos: [(A3) Manual Drive Train Axles Videos](https://jameshalderman.com/a3_vid_lib_page/)

11. Animations: [(A3) Manual Drive Train Axles Animations](https://jameshalderman.com/a3_anim_lib_page/)

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**ACTIVITIES:**

1. Task Sheet: Diagnose Drive Train Concerns

2. Task Sheet: Diagnose Fluid Condition & Loss

3. Task Sheet: Drain and Fill Manual Transmission/Transaxle

4. Task Sheet: Remove and Replace Transmission/Transaxle

5. Task Sheet: Disassemble/Reassemble Transmission/Transaxle

6. Task Sheet: Manual Transmission Noise/Shifting Diagnosis

7. Task Sheet: Manual Transmission/Transaxle Linkage

8. Task Sheet: Transaxle Final Drive Noise Diagnosis

9. Crossword Puzzle and Word Search

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**ASSIGNMENTS:**

1. Chapter crossword and word search puzzles.

2. Complete end of chapter 10 question quiz.

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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