## Manual Drivetrains and Axles 9<sup>th</sup> 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

#### **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.



**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
- 11. Animations: (A3) Manual Drive Train Axles Animations



#### **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



#### **ASSIGNMENTS:**

- 1. Chapter crossword and word search puzzles.
- 2. Complete end of chapter 10 question guiz.
- 3. Complete multiple choice and short answer quizzes downloaded from the website.



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### **CLASS DISCUSSION:**

- 1. Review and group discussion chapter <u>Frequently Asked Questions</u> and <u>Tech Tips</u> sections.
- 2. Review and group discussion of the five (5) chapter Review Questions.

### **NOTES AND EVALUATION:**



