

# Automotive Technology 7<sup>th</sup> Edition

## Chapter 130 – Hydraulic Components and Control Systems

### Lesson Plan



#### **CHAPTER SUMMARY:**

1. Automatic Transmission Fluid, Automatic Transmission Fluid Cooler, and Transmission Oil Pump
  2. Apply or Holding Devices, Bands, Multiple-Plate Clutches, and Accumulators
  3. One-Way Clutches, Valve Body, Electronically Controlled Transmissions, and Typical Torque Flow
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#### **OBJECTIVES:**

1. Discuss the different types of automatic transmission fluid.
  2. Explain the function of automatic transmission fluid coolers.
  3. Explain the function of transmission oil pumps.
  4. Explain the function of apply/holding devices.
  5. Discuss bands.
  6. Discuss multi-plate clutches.
  7. Discuss accumulators.
  8. Discuss one-way clutches.
  9. Explain the construction of a valve body.
  10. Explain electronically controlled transmissions.
  11. Discuss the typical torque flow in these transmissions.
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#### **RESOURCES:** (All resources may be found at jameshalderman.com)

1. Task Sheet: Diagnose Hydraulic Pressure Concerns
  2. Task Sheet: Transmission/Transaxle Power Flow Principles
  3. Crossword Puzzle and Word Search
  4. Chapter PowerPoint
  5. Videos: [\(A2\) Automatic Transmissions and Transaxles Videos](#)
  6. Animations: [\(A2\) Automatic Transmissions and Transaxles Animations](#)
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#### **ACTIVITIES:**

1. Task Sheet: Diagnose Hydraulic Pressure Concerns
  2. Task Sheet: Transmission/Transaxle Power Flow Principles
  3. 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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