## Automotive Technology 7<sup>th</sup> Edition Chapter 103 – Machining Brake Drums and Rotors Lesson Plan

#### **CHAPTER SUMMARY:**



- 1. Brake Drums, Brake Drum and Rotor Damage, Brake Drum Distortion, and Removing Drums
- 2. "Machine To" Versus "Discard", Machining Brake Drums, and Disc Brake Rotors
- 3. Disc Brake Rotor Distortion, Carbon-Ceramic Rotors, and Disc Brake Rotor Thickness
- 4. When the Rotors Should be Machined, Rotor Finish, and Qualifying a Brake Lathe
- 5. Machining a Disc Brake Rotor, and On-The-Vehicle Rotor Machining

### **OBJECTIVES**:



- 1. Describe the types of brake drums.
- 2. Explain the factors that cause drum and rotor damage.
- 3. Discuss brake drum distortion.
- 4. Discuss brake drum removal.
- 5. Discuss "machine to" versus "discard."
- 6. Explain how to machine a brake drum.
- 7. Discuss disc brake rotors.
- 8. Discuss disc brake rotor distortion.
- 9. Discuss carbon-ceramic rotors.
- 10. Discuss disc brake rotor thickness.
- 11. Discuss when the rotors should be machined.
- 12. Describe rotor surface finish.
- 13. Explain the procedure for qualifying a brake lathe.
- 14. Discuss machining a disc brake rotor.
- 15. Discuss on-the-vehicle rotor machining.

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

- 1. Task Sheet: Brake Drum Service
- 2. Task Sheet: Brake Rotor Service
- 3. Crossword Puzzle and Word Search
- 4. Chapter PowerPoint
- 5. Videos: (A5) Brakes Videos
- 6. Animations: (A5) Brakes Animations

### DEMO

### **ACTIVITIES**:

- Task Sheet: Brake Drum Service
   Task Sheet: Brake Rotor Service
- 3. Crossword Puzzle and Word Search

### 1111

### **ASSIGNMENTS:**

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



# Automotive Technology 7<sup>th</sup> Edition Chapter 103 – Machining Brake Drums and Rotors Lesson Plan

## 4

### **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:**



