Author & Automotive Expert James D. Halderman



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Halderman newsletter

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What's new with Jim?

One of the best kept secrets is that I have heard is that some college automotive instructors have not heard about one of my titles. Introduction to Automotive Service (ISBN 0-13-254008-8) is designed to be used as a text for a survey course that is offered by most colleges and many secondary and trade schools.

Automotive instructors have

asked for the following in a beginning-level textbook and this book delivers:

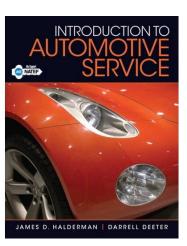
- 1. The content should be "an ankle deep and a mile wide."
- 2. Easy to read.
- 3. Many short chapters instead of a few longer chapters
- 4. Each new term defined at first use
- 5. Many full-color illustrations to help bring the topics to life

The content includes the basics needed by all service technicians and includes the following for most systems:

- 1. Purpose and function of the system
- 2. Parts involved and how it works (operation)
- 3. Basic visual diagnosis with the objective being: Is it working as designed or must further service or diagnosis be required? If your school teaches an entry-level automotive course, please consider using "Introduction to Automotive Service."

Please continue to follow me on <u>LinkedIn</u>, <u>Facebook</u> and <u>Twitter</u> for upto-the-minute updates and for the fantastic interaction I receive from many of you.

Sincerely, Jim



IN THIS ISSUE

Auto Trivia

Sample ASE question

Tech Tip

Straight Talk

Find Jim online

www.jameshalderman.com Email Jim Facebook The movie Bullitt had one of the most famous car chase scenes in movie history. What city did the chase of the Dodge Charger by the Ford Mustang take place?

- a. New York, NY
- b. Atlanta, GA
- c. San Francisco, CA
- d. Chicago, IL

Answer posted at the bottom of this newsletter, and I will post this question on my <u>Facebook page</u> on Friday. And then will post the answer in comments shortly thereafter.

Sample ASE question

QUESTION:

A clutch is chattering when it is engaged. What is the most likely cause?

- a. Oil or grease on the friction surface(s)
- b. A worn release (throw out) bearing
- c. A worn clutch fork
- d. A defective pilot bearing (bushing)

ANSWER:

The correct answer is a. Oil or grease on the friction surfaces of a clutch will cause it to chatter when it is engaged (clutch pedal up). Some slippage then grip can occur creating a rapid on and off action, which causes the chatter. Answer b is not correct because a worn release (throw out) bearing will cause a growling noise when the clutch is being disengaged (clutch pedal moving downward), but will not cause the clutch to chatter when it is engaged. Answer c is not correct because a worn clutch fork can cause the clutch pedal to grab at the wrong height but is unlikely to cause the clutch to chatter. Answer d is not correct because while a defective pilot bearing can make it difficult to shift, it will not cause the clutch to chatter.

Tech Tip

Bearing failure? Check the body grounds

Premature bearing failure that results in a pitted bearing can be caused by poor electrical grounds. The pits are often completely around the bearing races. Current flow for the electrical systems must return to battery ground. Poor engine ground straps will force this current to pass through the transmission and across the bearings, and this can cause an arc at the bearing races. If arcing of bearings is discovered, check and repair the factory ground wiring and connections at the body, engine block, and the transmission/transaxle itself.



Straight Talk

From the November 28, Wheels section of Dayton Daily News

Reader asks about torn CV Joint Boot

Wheels: Allyson writes by e-mail:

"My teenage daughter recently had the oil changed in the handed-down 2004 Toyota Camry she is currently driving. The technician told her the seals on the axle were broken and no grease was on

the axle. He advised her to get it repaired but said it wasn't urgent. What can you tell me about this? How soon do we have to have it repaired? Will it be expensive?"

Halderman: I think what the technician meant by the statement is that there was no grease on the axle was referring to the front-wheel-drive axle shaft boots that hold grease used to lubricate the constant velocity joints (CV joints). Either one of these should be corrected as soon as possible to avoid additional expense. Will it be expensive? If the CV joints are worn, the cost could be expensive, but if only the boots need to be replaced, the cost could be \$100 or less per boot. I suggest you get



another opinion from an experienced service technician and an estimate of the cost. Have an automotive question? Please write to Jim with your questions at jim@jameshalderman.com

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Trivia question answer: C

Please let me know what you think of the newsletter. I would love to include any of your automotive news, trivia questions or any tech tips you might have. Send me your suggestions! You can email me here or visit my website. You can connect with me on Facebook, Twitter and LinkedIn too (links above).

Regards,

Jim Halderman

James D. Halderman writes automotive technology textbooks for <u>Pearson Education</u>. He is an ASE-certified Master Technician with more than 20 years instructional experience.