



Author & Automotive Expert James D. Halderman



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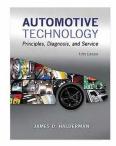
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February 2018

Halderman newsletter

What's new with Jim?

At a training event, I spoke to several trainers and many former students. Most said that they have seen and use my website and thanked me for making it available. One person, a trainer for Motor Craft at this event, said that I may be missing an opportunity for some income rather than giving the content away. He said that when free training was made available and shops in the area were notified, very few technicians attended. However, if they charged technicians for a training session, almost everyone attended because they had some "skin in the game" (money).



Automotive Technology: Principles, Diagnosis, and Service

5th Edition ©2016, Halderman

Automotive Technology covers all eight areas of automotive service, showing readers how automotive systems are connected, as well as the practical skills that students must master to be successful in the industry.

- Topics are presented in short, easy-to-read chapters. A topic or an entire short chapter can be assigned and taught instead of assigning individual page numbers or questions.
- To help readers see how automotive systems are connected, this book presents the theory, construction, dagnosis, and service of a particular component or system, together, in one location.
- Using bulleted and numbered lists, a streamlined interior design, helpful sidebars, tips, FAQs, and hundreds of full-cover photos, Halderman brings the subject to life.
- All content is correlated to the latest NATEF and ASE tasks, and information on hot topics like electric and hybrid vehicles is included.

The text is further enhanced with **MyAutomotiveLab**^{IM}, a dynamic online teaching and learning tool providing **practice** and **assessment** to help students succeed.

Prepare students for the ASE exam. Students can complete full-length, automatically-graded tests for each ASE area. A total of 300 ASE-style questions are available to help students get ready for the ASE exam.

Student Edition (Hardcover)		
Standalone	9780134133423	127.47
with MyAutomotiveLab with eText (1-year access)	9780134995021	148.85
NlyAutomotiveLab with eText (1 -year access)	9781323093092	99.97
NATEF Correlated Task Sheets	9780133995671	37.97

- The downloadable teacher resources listed below are available HERE
- Instructor Manual
 Image Bank
- Task Sheet Correlation Charts
 Task Sheets
- PowerPoints
- Test Bank

For more information or to place an order contact CTE@pearson.com

Prices are effective 10.01/17 and are subject to change without notice

All eight areas of automotive service are covered in the 5th edition of

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Where's Jim?

I will be attending the following events in January.

February 7-9- Chicago Auto Show February 14-16- Mobile Air Conditioning conference (MACS), Orlando, FL

Due to a family wedding I will NOT be attending Vision KC this year.

Keep up with me at: www.jameshalderman.com Email Jim Facebook

Puzzle of the month

Find this month's puzzle of the month at this <u>link</u> and test your students knowledge on transmissions.

I still feel that I want to keep my site open and free for all to use to help automotive Automotive Technology: Principles, Diagnosis, and Service. For more information email CTE@pearson.com.

service training as much as possible. However, I did ask my webmaster, Carl Borsani, to add to the home page that while it is and will remain free, and it does have a value. He added the following line to the top of the home page:

FREE Access to all resources - A \$50/month value! (No login or password needed)

	Power Flow Through Transmission Gear Sets Chapter 6
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5	The gets its name fromits position at the 3 in two-speed Reigneaux transmissions, the large owner of the gear set. 3 in two-speed Reigneaux transmissions, the large owner of the gear set.
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9	gers, and one ring gear. A transitission is a unit that uses a conowney dutor to allow an use hit that requires
	only the application of the next driving or reaction member.
	The outermost member of the geer set is the, an internal geer with teath on the inside.
	A Revignous goer set and a simple planetary goer set can be continued to get six, seven, and eight special and is known as the

Auto Trivia

Which was the last model built for the Oldsmobile division of General Motors?

- a. Aurora
- b. Bravada
- c. Alero
- d. Silhouette

Answer at the bottom of this page!

FAQ

Which companies build automatic transmissions?

Many larger automobile manufacturers make their own automatic transmissions, including General Motors, Ford, Chrysler, and Honda. However, several companies manufacture automatic transmissions and transaxles that are used in a variety of vehicles. These include:

- * ZF Friedrichshafen AG . This German company manufactures manual and automatic transmissions and transaxles for many vehicle manufacturers, including Mercedes, BMW, Volvo, VW, Audi, Jaguar, Chrysler, Bentley, and Maserati.
- * Aisin AW. This Japanese company makes automatic transmissions for many vehicle manufacturers, including Ford, Toyota, Nissan, Mazda, Mitsubishi, Subaru, Kia, and VW.
- * JA TCO (Japan Automatic Transmission Company). This is a Japanese manufacturer of automatic transmissions and transaxles for many vehicle manufacturers, including Nissan, Mazda, Infiniti, VW, Mitsubishi, and Suzuki.

Sample ASE certification-type question

Question:

An electronically controlled overdrive automatic transmission is equipped with a transmission fluid temperature sensor. Technician A says that the shift points may be changed if the fluid temperature is too low. Technician B says that overdrive may be disabled if the transmission fluid temperature is too high. Which technician is correct?

- a. A only
- b. B only
- c. Both A and B
- d. Neither A nor B

Answer/Explanation:

The correct answer is c. Both technicians are correct. Technician A is correct because when the transmission fluid temperature is low, the computer will usually command that the shifts be slightly delayed to help the engine achieve normal operating temperature as soon as possible for the lowest possible exhaust emissions. Technician B is correct because the computer will prevent the operation of overdrive and may apply the torque converter clutch in all gears except first in an attempt to reduce the temperature of the automatic transmission fluid. Answers a, b, and d are not correct because both technicians are correct.

Tech Tip

Use a binder clip



A binder clip (size 1 ½ inch wide) is used by wise technicians to help keep fender covers in place. These help keep the fender cover from falling off and can be easily stored with the cover by clipping them to the cover when not in use.

Straight Talk

From the January 27, Wheels section of Dayton Daily News

Variety of flex fuel vehicles abound

Wheels:

Ron K writes by email:

"I filled up my truck on Thursday and I saw a few cars filling up with E85 gas in cars that appeared to be in vehicles that are not made for E85. It was priced a lot less than regular gasoline. This made me wonder what does happen to these cars. Would the car fail to run, fail to start, ruin the engine?"

Halderman:

The vehicles may have been able to use E85 because not all vehicles that can use E85 are labeled "flex-fuel." Some flex fuel vehicles only have a small emblem on the side or rear of the vehicle while others only state that the vehicles can use E85 by looking at the under hood emission control sticker. I have had students do the same because E85 was cheaper and had a higher octane rating. However, it will make the engine almost impossible to start when cold. It will also run lean making the engine stumble and may stall. I told my students to just drive it and top off the tank with regular gas every 50 miles or more to try to get the tank back to gasoline. I doubt it would hurt the engine, but it will not run right and the fuel economy will be about 20 percent lower. For example, a Chevrolet pickup truck that is EPA rated at 15 MPG in the city and 20 MPG on the highway using gasoline is rated at 11 MPG in the city and 15 MPG on the highway using E85.

Have an automotive question? Please write to Jim with your questions at jim@jameshalderman.com



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.