



Connect with me:



**What's new with Jim?**

During these trying times, my team has reached out to help automotive instructors to offer to their student's online assignments and technical information. I am offering the following resources:

- FREE access to my website ([www.jameshalderman.com](http://www.jameshalderman.com)) for 60 days to automotive instructors. Glen Plants, a member of my team, can setup the free site. Please email him at [glen@jameshalderman.com](mailto:glen@jameshalderman.com) with your name and school information to receive the free access information.
- A full year for just \$79 (\$119 value). Follow the link on site if paying with a credit card. If you want to use a purchase order and need a quote or a W9 form, please email Glen Plants at [glen@jameshalderman.com](mailto:glen@jameshalderman.com) and ask him to send you what you need
- For three (3) or more instructors from the same school, we offer a 20% discount.

The resources on the website include all sorted by content area such as disc brakes, making it easy to use and download to the learning Management System (LMS):

- Power Points
- Task sheets
- Puzzles (using the key terms)
- Animations (Over 700 in movie mode making it easy to download and view
- Videos-over 2.200 all sorted by content area (chapter)

Coming soon:

- Online assignments, five per chapter (680 total) for the big book's 136 chapters. In PDF format so they can be filled out electronically and emails back to the instructor.
- Super Power Points- Starting with the big book (Automotive Technology-6th), the Power Points will include the animations (over 700) and videos (over

**IN THIS ISSUE**

- [Auto Trivia](#)
- [FAQ](#)
- [Sample ASE](#)
- [Tech Tip](#)
- [Straight Talk](#)

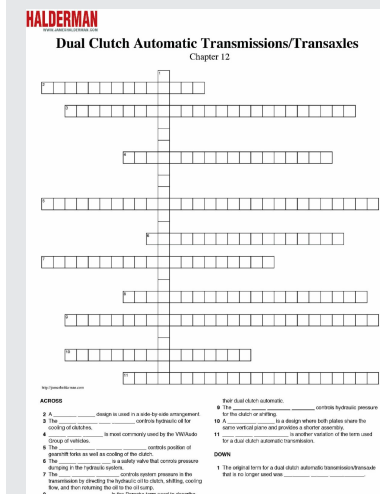
**Where's Jim?**

Due to the Coronavirus, all events have been canceled and I have no travel plans in May.

Keep up with me at:  
[www.jameshalderman.com](http://www.jameshalderman.com)  
 Email Jim  
 Facebook

**Puzzle of the month**

Find this month's puzzle of the month at this [link](#) and test your students knowledge on dual clutch transmissions.



2,200) making these presentations a total learning experience for the students.

## Auto Trivia



Which BMW model is shown?

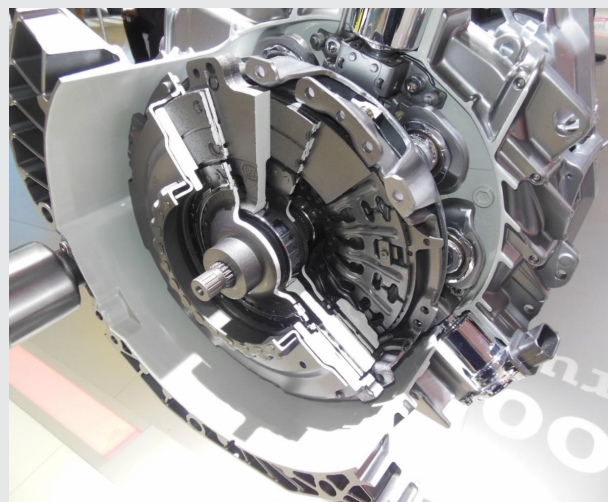
- a. Z1
- b. Z3
- c. Z4
- d. Z8

**Answer at the bottom of this page!**

## FAQ

### How Does a Dual Clutch Type Transmission Achieve Better Fuel Economy?

One of the advantages of a dual clutch automatic is that it is able to provide improved fuel economy over a conventional torque converter-type automatic. One strategy is to have the unit go into neutral when the vehicle is stopped by disengaging the clutches. This allows the engine to remain running but reduces the load on the engine, which improves fuel economy and reduces vibrations. The clutch is engaged when the driver releases the brake.



## Sample ASE certification-type question

### Question:

All of the following service operations should be performed during a routine troubleshooting procedure of an automatic transmission/transaxle fault except:

- a. Checking the fluid level
- b. Adjusting the TP sensor
- c. Checking the line pressure

d. A thorough test drive

### Answer/Explanation

The correct answer is b. The adjustment of the throttle position (TP) sensor is not included in the procedure that should be followed during a routine analysis of a transmission/transaxle fault because even though it could cause shifting problems, an adjustment is unlikely to be necessary or possible on most vehicles. Answers a (fluid level check), c (line pressure check), and d (test drive) are not correct because all three should be done as part of a thorough automatic transmission/transaxle diagnosis.

## Tech Tip

### Look for PUN or TUN

In GM automatic transmission/transaxles, the part numbers identify the solenoid performance characteristic data which is stored in the Transmission Control Module (TCM). If a solenoid is replaced, not only should the correct solenoid be used, but its unique performance characteristic must be programmed into the TCM. These unique part numbers are called:

\* PUN-Part unique number

\* TUN-Transmission unique number

The PUN or TUN is printed on the solenoid. The vehicle needs to be connected to a scan tool, which is connected to the Internet so that the TCM can be updated with the new PUN/TUN.

Check service information for the exact procedures to follow for the unit being serviced.

## Straight Talk

From the April 25 Wheels section of Dayton Daily News

### Reader Questions What Ohio Thinks A Hybrid Means

#### Wheels:

Stephen S. writes by email:

"I just got my registration today for my Lexus RX450h vehicle. I had to pay an additional \$100 plus the \$71.00 for tags. I do not know if you would be interested in writing an article about how unfair this new tax is, but I am not very happy about it. I drove my Lexus, 9900 miles last year getting 25 miles per gallon according to the cars digital read out. \$100 is totally unfair. What do you think"?



#### Halderman:

I think the people in charge of the license bureau in Ohio think like about half of the people in the country, that a "hybrid" needs to be plugged in to charge the high-voltage batteries. The gasoline engine is used to charge the batteries in a hybrid electric vehicle. The word "hybrid" means that it has two sources of propulsion. It can be powered by the gasoline engine or by an electric motor or a combination of the two. There is no need to plug the vehicle into an electrical outlet. While most hybrids do achieve better fuel economy than the same non-hybrid version of the same vehicle, taxing the higher fuel economy version is like taxing all four-cylinder cars and not taxing six-cylinder cars.

What to do? I suggest that you write to the Governor of the State of Ohio and complain.

*Have an automotive question? Please write to Jim with your questions at [jim@jameshalderman.co](mailto:jim@jameshalderman.co)*

Trivia question answer: d.

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 [Pearson Education](#). He is an ASE-certified Master Technician with more than 20 years instructional experience.*

