



Connect with me:

View my profile on  
[Linked in](#)



Follow me on  
[twitter](#)

Halderman newsletter

April 2015

## What's new with Jim?

I hope everyone gets some time off and can enjoy the summer. I am enjoying driving around in my convertible with the top down listening to the new louder exhaust pipes singing a deep tone as I shift through the gears. Now, I can look back at some of my hard work in the spring as several new book editions are in the production phase and due to be released at the end of the year. For those not familiar with the publishing process, here is what happens after I send in the manuscript and the art to Pearson Education.

1. The chapters are submitted electronically after being written in MS Word and reviewed by other automotive instructors and industry experts to help insure technical accuracy while maintaining an easy-to-read style that students can understand.
2. The art to be drafted and the new Halderman photos are included and sent electronically.
3. An art log is submitted showing what each figure and if it is to be picked up from a previous edition or if it is a new line drawing or Halderman photo.
4. The chapters are then sent by Pearson to a copy editor who checks the manuscript for proper grammar, spelling, and punctuation using the Chicago Style format. (Newspapers use the AP style but most textbooks adhere to the Chicago style format).
5. While these are being done by Pearson, I am busy creating the appendixes and adding words to the glossary in addition to creating the instructor's manual.
6. After several weeks, I am sent the copied-edited chapters to make sure that any changes did not affect the meaning of the original text.
7. The line art drawings are rendered by a Pearson Education artist and they are sent to me to review for technical accuracy.
8. The photos are sized and the labels added, and again, I review these to make sure that the labels are correct.
9. After all of the elements are created and checked, they are sent to a compositor who creates the page layout, called page proofs.
10. I receive the page proofs for each chapter and I mark any issues found using sticky notes on the PDFs. These page proofs include the front matter (FM) and back matter (appendixes, glossary, and index).

## IN THIS ISSUE

[Auto Trivia](#)

[FAQs](#)

[Tech Tip](#)

[Where's Jim?](#)

[Straight Talk](#)

## QUICK LINKS

[www.jameshalderman.com](http://www.jameshalderman.com)

[Email Jim](#)

[Facebook](#)

11. When I review the page proofs, I locate the page number where each answer for the end-of-chapter questions are found and add this information to the instructor's manual.
12. In the final step, I receive and review second pass pages which are the same page proofs with all of the changes and corrections made. This is the last of the quality control steps for the project.
13. The finished textbook is sent to the printer. It takes about six weeks for the text to be printed, bound, and shipped to the warehouse and ready to be shipped to schools and colleges throughout North America.
14. I am often asked how long it takes to write a book. It varies of course, but as an example: If it is a new title, it takes me about 2,000 to 3,000 hours including the time needed to review the page proofs, etc. My first textbook took over three years to complete just the manuscript. For a revision, the time is reduced, of course, but it still requires 400 to 500 hours. Each title is updated about every three years to keep the content up-to-date.

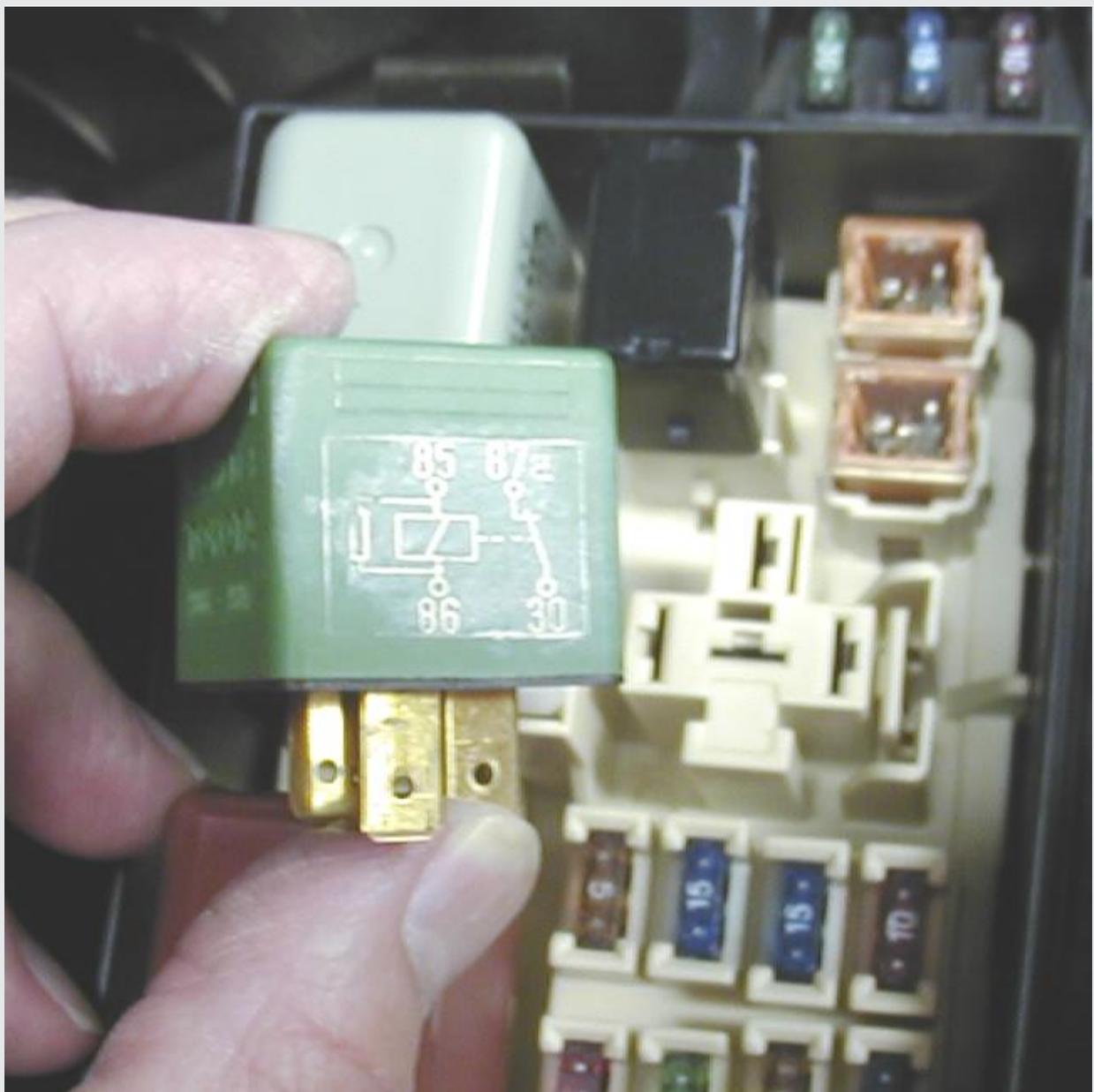
I receive a few copies for my records and family members. I have to admit, I really enjoy looking through them when I get my copies. It really makes all of my hard work and the long hours it required worth it when I see the finished product.

*Please continue to follow me on [LinkedIn](#), [Facebook](#) and [Twitter](#) for up-to-the-minute updates and for the fantastic interaction I receive from many of you.*

Sincerely,  
Jim

## *Auto Trivia*

On the side of the relay is the schematic of the inner workings. For what are the terminals 86 and 85 used?



- a. The power and ground for the circuit being controlled.
- b. The terminals for the relay coil
- c. Terminals used for the power input and output from the relay
- d. The internal set of contacts

*Answer posted at the bottom of this newsletter, and I will post this question on my [Facebook page](#) on Friday. And then will post the answer in comments shortly thereafter.*

## *Frequently Asked Questions*

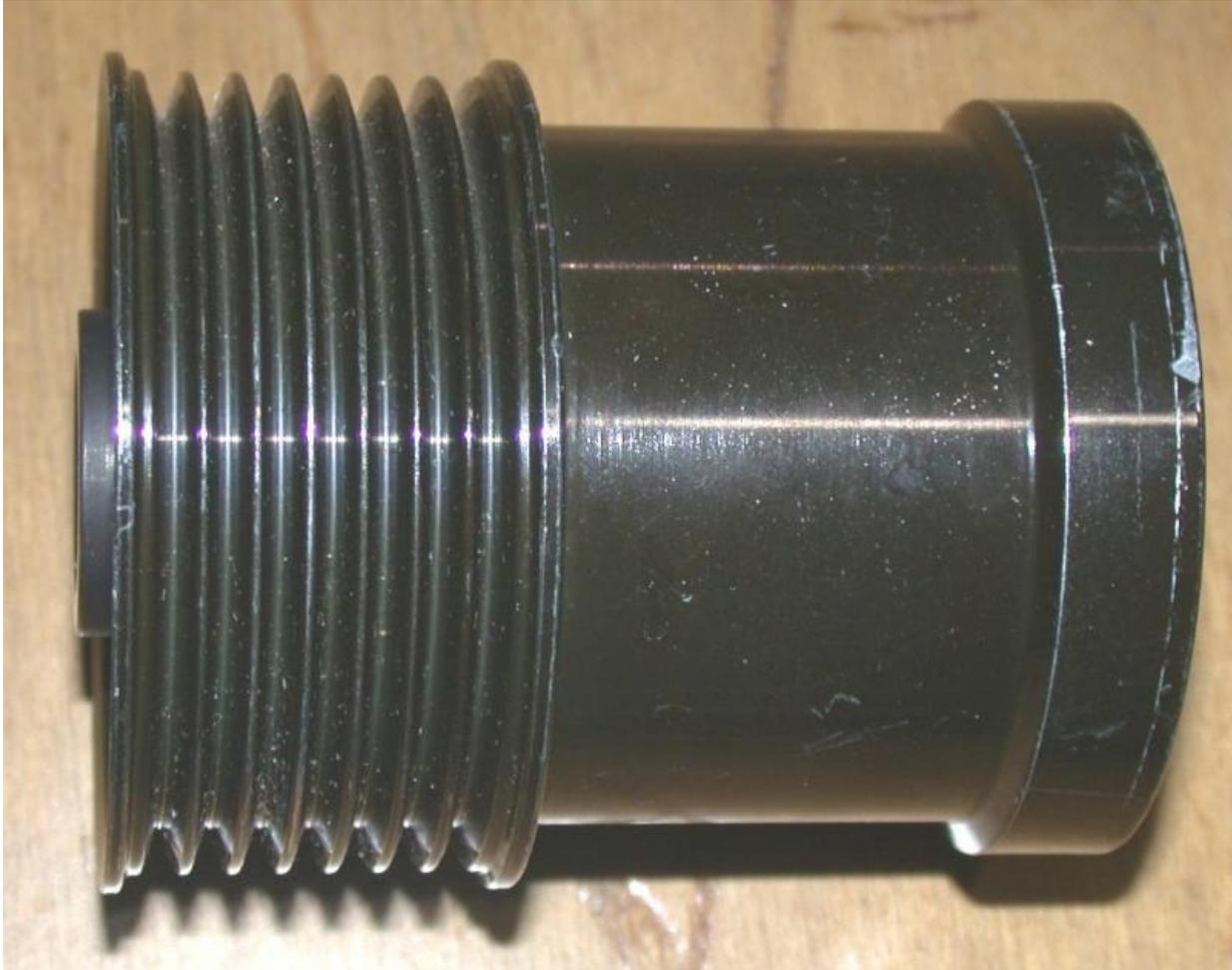
### **What is "ghost voltage?"**

When using a digital multimeter (DMM), especially when AC voltage is selected, sometimes a seemingly random and constantly changing voltage is seen on the display. This is often caused by electromagnetic induction from a moving magnetic field or often from a fluorescent trouble light. This ghost voltage most often appears on the meter display when the test leads are connected to the meter, but the tips of the test leads are not attached to a circuit. If measuring a circuit for AC voltage, try to keep the meter leads away from fluorescent lights or sources of magnetic fields to help prevent this induced voltage from interfering with the test result. In most cases the induced

voltage is weak and only appears when the meter is not attached to another circuit, but this ghost voltage has caused some technicians to wonder what was going on in their shop. Don't worry as most of the time the meter leads were simply close to a trouble light and the shop is not haunted.

## *Tech Tip*

### **Check the overrunning clutch**



If low or no alternator output is found, remove the alternator drive belt and check the overrunning alternator pulley (OAP) or overrunning alternator dampener (OAD) for proper operation. Both types of overrunning clutches use a one-way clutch. Therefore, the pulley should freewheel in one direction and rotate the alternator rotor when rotated in the opposite direction.

## *Conferences/Training*

This month is a busy one for me. I will be attending and presenting at two of the industry's biggest events this month. I hope to see you there and consider attending my presentations. I promise I'll keep you entertained. If you see me, at least stop and say hi!

**NACAT- July 20-24, Joliet, Illinois** -I am scheduled to give two presentations. One by myself titled "Engine Oil Update" and one showing instructor resources with Curt Ward. For more about NACAT, click [here](#). If you've never been to NACAT you simply must attend this great event.

**ASE/AYES/NATEF- July 27-30, Kansas City, Missouri**- I am scheduled to give a presentation

with Curt Ward on Diesel Diagnosis for the Gas Instructor. Please plan to join Curt and I for this informative and entertaining presentation. For more about this year's ASE/AYES event, click [here](#).

## Straight Talk

From the June 27 Wheels section of Dayton Daily News

### Reader has questions about using manual shift mode

**Wheels:** Steve C. of West Carrollton asks:

"I took a friend's car to Gatlinburg, TN, and it was equipped with an automatic transmission but it had a "manual" position labeled "M" on the gear selector instead of what I am used to with DRIVE and a 1 and 2 on the shifter display. I was descending a long grade coming down from New Found Gap and I was trying to slow the car using the gear selector so I did not overheat the brakes. Nothing seemed to happen when I selected the manual setting and I also noticed that there were levers or paddles on the steering column. What are these for and how do I use the manual setting?"



**Halderman:** You are wise to try to use the gear selector when descending long grades to help avoid damage to your brakes, which can become overheated if kept applied on a long downhill road. For many vehicles equipped with an automatic transmission, the following gear selections and their meanings include:

- Drive (D). The D position includes the overdrive ratios in most vehicles. If there is an overdrive shift mode, however, then D is used to provide all forward gears except overdrive. Use this position when driving on the highway.
- Third (3). In third position the transmission/transaxle will upshift normally to third gear but will not upshift to a higher gear. When the third position is selected while driving in a higher gear, the transmission will downshift into third if the vehicle speed is low enough to prevent the engine from being over-revved. This gear selection is used for the gentle grades at a moderate vehicle speed when engine compression braking is needed.
- Second (2). The second position is used for slowing the vehicle while descending long grades. In this gear selection, the vehicle speed is controlled and the engine speed is increased to provide engine compression braking. This gear selection is used for the gentle grades at a moderate vehicle speed.
- First (1 or Low). The first (or low) position is used for slowing the vehicle while descending steep grades. In this gear selection, the vehicle speed is controlled and engine compression braking is used to slow the vehicle. This gear selection is used for the steepest grades at the lowest possible speed.

With a newer vehicle with the manual setting, the gears can be selected using the shift paddles on the steering wheel. It usually defaults to the gear that it is currently in when the manual setting is selected. Then to change from say 5th to 4th gear, depress the shift paddle once usually on the left side labeled with a larger minus (-) symbol.

The gear selected is usually displayed on the speedometer face so you can see what gear is currently being used. To select a lower gear, to help maintain a lower speed while descending a long grade, depress the shift paddle again. To select a higher gear so the engine does less compression braking, depress the right side (+) shift paddle. Usually, I have found that using second (2) or third (3) gear works the best and allows the vehicle to descend long grades without

having to use the brakes. When the road levels out, move the gear selector back to "Drive" to allow fully automatic shifting.

**NOTE:** Some vehicles have shift paddles on both sides of the steering column and they are both labeled "+". In this case, the gears are selected by depressing the paddle to increase the gear and paddle (either side) and then it is pulled toward you to downshift to a lower gear. Always check the owner's manual for the exact procedure to follow when using manual mode.

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

**Trivia question answer: B.**

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.*