



What's new with Jim?

I am pleased to announce that the new second edition of the ASE Test Preparation and Study Guide (ISBN 0-13-416972-7) is now available. This new updated edition now includes all eight ASE content areas (A1-A8), plus in this new edition, A9, G1 and L1. The L1 test requires the use of the Composite Vehicle Type 4 reference booklet that needs to be downloaded from ASE (www.ase.com).

Question:

Do you want your business or organization to have your own ASE Study guide to sell to your customers?

A custom version with a cover showcasing your company with a unique ISBN is available from Pearson. For more information and a quote, visit

http://jameshalderman.com/books_ase_study_guide.html

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

ASE Test Preparation and Study Guide

Covers ASE Areas A1-A8 plus A9, G1 and L1

James D. Halderman Second Edition



IN THIS ISSUE

[Auto Trivia](#)

[Sample ASE question](#)

[Tech Tip](#)

[FAQ](#)

[Straight Talk](#)

Find Jim online

www.jameshalderman.com
Email Jim
Facebook

WHERE'S JIM?

Shows Jim will be attending this month.

March 4-6- Vision Expo in Kansas City (attending)

March 10-11- Illinois automotive teacher's conference (ICAIA)- St. Louis, MO (Presenting "Teaching Tires and Wheels")

March 18-20- Automotive Training Expo (ATE)- SeaTac, WA (attending)

Auto Trivia

What is lead free solder made from?

- Antimony and copper
- Tin and nickel
- Tin and antimony
- Silver and copper

Answer at the bottom of this page!

Sample ASE question

Question:

Technician A says a short to voltage may or may not blow a fuse and may or may not affect more than one circuit. Technician B says that a short to ground will usually cause a decrease in circuit resistance and an increase in current flow causing the fuse to blow. Which technician is correct?

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

Answer:

The correct answer is c. Both technicians are correct. Technician A is correct because a short to voltage will usually affect more than one circuit and depending on the resistance involved may or may not cause a fuse to blow. Technician B is correct because a short to ground involves a power side wire contacting ground, which reduces or eliminates the resistance in the circuit and will cause a fuse to blow. Answers a, b, d are not correct because both technicians are correct.

Tech Tip

Always check the OAP or OAD first

Overrunning alternator pulleys (OAP) and overrunning alternator dampeners (OAD) can fail. An OAP or OAD is attached to the shaft of the alternator and driven by the accessory drive belt. They are used to reduce front accessory drive belt noise and speed variations due to the engine firing pulses being transmitted through the drive belt to the alternator. The OAP uses a one-way clutch only whereas the OAD also has a one-way clutch plus includes a dampener spring. The most common fault is the failure of the one-way clutch which both units use. If the one-way clutch fails, the unit will freewheel and not power the alternator or it can lock up and not provide the dampening as designed. If the charging system is not working, the OAP or OAD could be the cause, rather than a fault in the alternator itself. In most cases, the OAP or OAD can be replaced but both require special tools to remove and replace.



FAQ

What does that ISBN number I see on books mean?

The number used to identify books is the "International Standard Book Number" (ISBN). The unique number used on each book identifies the following about the book:

1. The publisher
2. The title
3. The edition

For example, paper and hardcover editions of the same book have their own unique ISBN.

Until about 2007, most ISBNs used 10 digits and are often shown as ISBN-10. Because of the great number of titles including electronic versions and type of cover, the ISBN numbers were expanded to 13 digits and labeled as ISBN-13.

Many textbooks print both ISBN-10 and ISBN-13 numbers until eventually, only ISBN-13 numbers will be used. For example, the ISBNs listed for the ASE Test Preparation and Study Guide are:

ISBN-13: 978-0-13-416972-9

ISBN-10: 0-13-416972-7

Reader asks about the life of a battery

Wheels: An e-mail from Annie asks by e-mail:

"The 60-month battery in my 2000 Olds is 4 years and 7 months old. I had it and the vehicle's charging system checked. The system is fine but the battery tested at 458 cold cranking amps instead of the 550 CCA it is supposed to have. The technician advised me to remove the battery and put a charger on it overnight. Since the battery is not holding a full charge from the vehicle's charging system, why would charging it out of the car help? Can I leave the battery in the car to do the charging?"



Halderman: The fact that your battery has lost some of its capacity is perfectly normal. In fact, I am surprised that the battery had as high a percentage of capacity as it did after four years. I would recommend not doing anything but keep checking the battery regularly for signs of weakness.

These signs include:

- * Slower than normal cranking speed
- * Dimmer than normal headlights at idle
- * Using battery water in one or more cells
- * Corrosion on battery cables or terminals

The service technician is correct by saying it is safer to charge the battery out of the vehicle because the higher voltage from the charger could affect some computer circuits. You can charge a battery with it still in the vehicle. Again, your battery is normal and should provide you with a year or more of service. The normal life of a battery is generally considered to be 4 to 7 years. Just remember that batteries do wear out and your battery is old in battery years, so replacing it soon I think, would be wise.

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