



Author & Automotive Expert James D. Halderman



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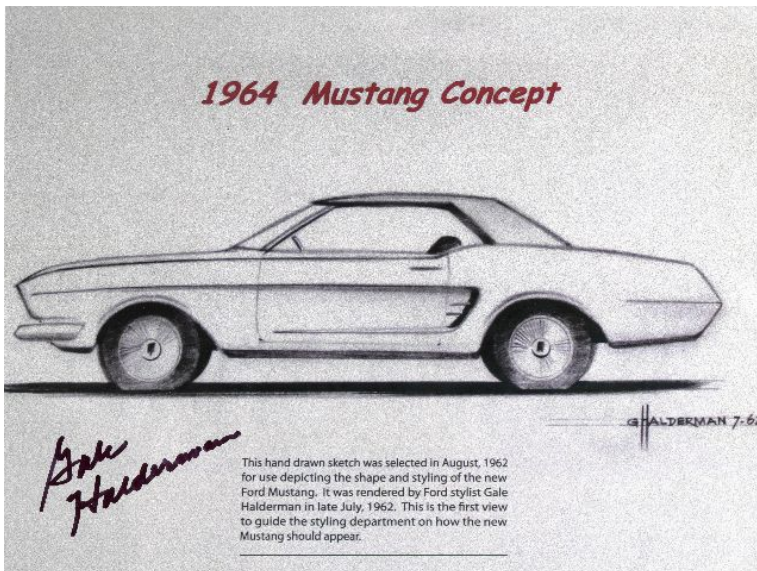
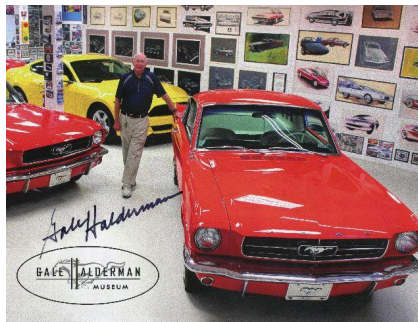
March 2017

What's new with Jim?

I am pleased to announce that Jimmy Dinsmore and I signed a contract to write a new book together. The title is *BIRTH OF THE MUSTANG: GALE HALDERMAN'S QUEST TO DESIGN FORD'S NEW PONY CAR*.

Gale is my first cousin (our fathers were brothers) and we are excited to be able to tell his story and the story of how the original Mustang was designed.

It is being published by CAR TECH and the manuscript is due at the end of the year and will be out in the summer of 2018.



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WHERE'S JIM?

March 1-5 - Attending the VISION Expo in Overland Park, Kansas

March 16-17 - Presenting at ICAIA being held at Joliet Junior College

March 20 - Visiting the Henry Ford Museum, (Research for a future project)

March 24 - Attending the Advisory Committee meeting for the Technological Studies Department at Ohio Northern University

March 30 - Presenting at the South Eastern Michigan Automotive Teachers Association (SEMATA) conference at Macomb Community College

Auto Trivia

Through the years, different manufactures produce vehicles known as "halo cars." Chevrolet has the Corvette, Dodge has the Viper. What was Ford's "halo car" between the years 2005-06?

- Cobra
- Lightning
- Thunderbird
- GT

Answer at the bottom of this page!

FAQ

How does electronic traction control work?

Many recent vehicles use electronic traction control (ETC) to prevent single-wheel spin. ETC uses the wheel speed sensors, control module, and hydraulic modulator of the antilock brake system (ABS) to sense wheel spin and, if spin occurs, to apply the brake on that wheel. This will transfer torque to the other drive wheel.

Sample ASE certification-type question

Question:

Various lubricants are used in a manual transmission except _____.

- Automatic transmission fluid (ATF)
- High temperature chassis grease
- SAE 80W-90 gear lube
- Engine oil

Answer/Explanation

The correct answer is b. High-temperature grease is the only lubricant listed that is not used in a manual transmission/transaxle. Answers a, c, and d are not correct because depending on the vehicle manufacturer and year, manual transmissions and transaxles may use ATF, SAE 80W-90 gear lube, or engine oil (usually SAE 5W-30).



Tech Tip

Test drive tip for noise diagnosis

When test driving a vehicle trying to pinpoint the location of a noise, perform the following:

1. Drive next to park cars- This causes any noise to be reflected off the other vehicle and is more likely to be heard.
2. Drive over bumps in the road- This will cause the suspension to move up and down and also places stresses on the body and frame that might create a noise not heard in normal driving on smooth roads.
3. Drive into and out of driveways- This causes the suspension and steering to be stressed as well as weight transfer that could create noises that are not normally heard.
4. Drive in reverse- This action causes the forces to be reversed from normal driving and may cause noise that may not be heard during a normal test drive.

Straight Talk

From the February 25, Wheels section of Dayton Daily News

Reader asks about jump starting another vehicle

Wheels: RJ writes by email:

"On my way out of the mall, a young man asked if I would help him start his truck. So I hooked the cables up and within 5 minutes he said I needed to rev the engine as the car would start faster if I did that. Still, I thought I would ask you if that made a difference".

Halderman: He is right. A typical alternator only charges about 20 amperes at idle but can charge over 100 amperes when the engine is at 2,500 RPM. Many vehicles can't start when the temperatures are low due to several causes including:

1. The engine oil is thicker when cold making the starter require more electrical current (amperes) for the battery to crank the engine
2. The low temperatures also slow the chemical reaction inside the battery so it unable to produce the amount of current it could at warmer temperatures.
3. The capacity of a battery is affected by age so an older battery will not be able to supply what it once was able to when it was new.

To help prevent the need for jump starting, it is wise to have the battery tested every year or replaced about every 3-5 years. There are also small batteries that can be used to jump start another vehicle that are light weight and can be kept in the trunk if needed.

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

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.