# THE ASSOCIATION

**Indiana Association of Certified Accident Investigators**
**Www.iacai.com**

**Issue #2 / 2008**

**May 2008**

## Feds Move To Make Changes To The Current VIN Format

**From the Federal Register, Vol 73, No. 84**

Effective October 27, 2008, the way we interpret the automobile Vehicle Identification numbers will change. Under 49 CFR Part 565, Vehicle Identification Number Requirements, The National Highway Traffic Safety Administration has moved to amend the current rules governing VIN requirements to allow the current system to remain viable for another 30 years.

The change in the VIN requirement was initiated after the Society of Automotive Engineers (SAE) International filed a petition based on concerns that the available supply of VINs may run out.

To address this concern, NHTSA revised the requirements for where certain information must be communicated in a vehicle identification number (VIN) as well as the characters that may be used in some of the 17 positions of the VIN for passenger cars and multipurpose vehicles and trucks with a gross passenger weight rating of 10,000 lbs or less. The changes will have two primary effects: First, the need to issue new manufacturer identifiers, particularly for large manufacturers, should be dramatically reduced, which should allow for a longer period of time the remaining combinations of characters that are available to be issued. Secondly, the changes will substantially increase the number of combinations of characters available in positions 4 through 8 of the VIN, as well as combinations of those characters with characters in the other VIN positions, so that the number of available VINs will significantly increase , enabling the current 17-character system to continue for another 30 years and possibly longer.

The new VIN requirements apply to vehicles that are manufactured on or after October 27, 2008, whose VINs have the letter 'A' or 'B' in the 10th position of the VIN, and to all vehicles manufactured on or after April 30, 2009. The principle changes that impact the options vehicle manufacturers have in complying with Part 565 are as follows:

- Vehicle 'make' will no longer be required to be identified in the manufacturer identifier of the VIN.
- Vehicle 'make' will now need to be identified, along with other information items included in the previous version of Part 565, in the second section of the VIN, which consists of VIN positions 4-8.
- In generating VINs for vehicles that comply with Part 565, manufacturers of passenger cars and multipurpose passenger vehicles and trucks with a gross vehicle weight rating of 10,000 lbs or less, will have an expanded number of characters available in positions 4, 5, and 6 of the VIN. All three of these positions may now be either numeric or alphabetic. These manufacturers will also be required to use an alphabetic character in position 7 of the VIN.

Since 1954, American Automobile manufacturers have used a VIN to describe and identify each of the motor vehicles they manufacture. In January 1, 1969, the first systematic VIN standard was implemented, requiring a passenger car to have a VIN that is permanently "sunk or embossed" on a part of the vehicle visible through the glazing by a person standing at the left windshield pillar. Manufacturers were required to avoid having a VIN repeated within a 10 year period.

**Inside this issue:**

## New Year Codes For VINs

As part of the new revisions to 49 CFR Part 565, Vehicle Identification Number Requirements, a new table of year codes for VIN numbers have been established. The new year codes will be found in the 10th position of the 17 digit VIN code. The codes will be as follows:

| Vehicle Year | Code |
|---|---|
| 2005 | 5 |
| 2006 | 6 |
| 2007 | 7 |
| 2008 | 8 |
| 2009 | 9 |
| 2010 | A |
| 2011 | B |
| 2012 | C |
| 2013 | D |
| 2014 | E |
| 2015 | F |
| 2016 | G |
| 2017 | H |
| 2018 | J |
| 2019 | K |
| 2020 | L |
| 2021 | M |
| 2022 | N |
| 2023 | P |
| 2024 | R |
| 2025 | S |
| 2026 | T |
| 2027 | V |
| 2028 | W |
| 2029 | X |
| 2030 | Y |
| 2031 | 1 |
| 2032 | 2 |
| 2033 | 3 |
| 2034 | 4 |
| 2035 | 5 |

## IACAI's Website Changed

If you haven't visited the IACAI website recently, you really need to log on and take a peek. The website recently went through a major overhaul thanks to North Director Phil Nott. The new website provides viewers with new and improved graphics, updated home page and links. The home page offers visitors the opportunity to look over past issues of the Association, answers to previous Skill Review questions, and access to IACAI Board Member's via email. While the new website looks fantastic, its still a work in progress, with more additions and changes to come.

## Heavy Vehicle Terminology:

Cubing Out: Utilizing full cargo space provided by truck or trailer body or container.

Deadhead: Traveling without a load.

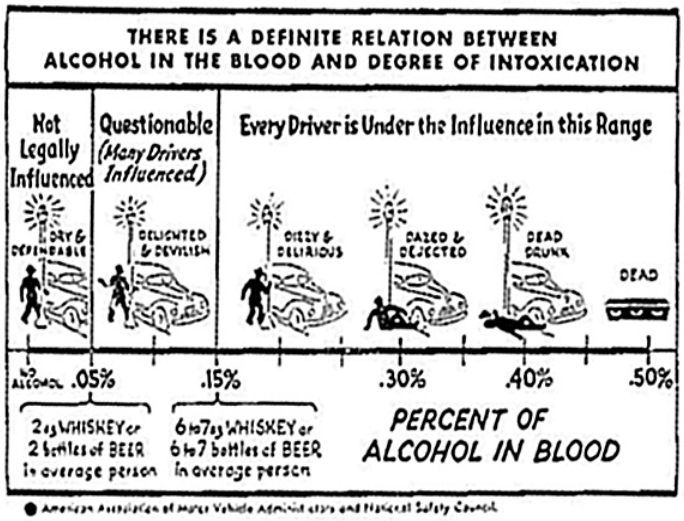
Durameter: An instrument which measures the hardness of rubber.

Rolling Resistance: The sum of the forces at the area of contact between the vehicle's tires and the road surface against the direction of movement. This term is usually used to describe only engine and/or other mechanical retarding forces.

Unsprung Weight: Vehicle weight not supported by springs such as tires, wheel and axle assembly.

**Please visit www.iacai.com to see all the new changes and updates!**

I recently came across this illustration from the 1966 edition of the Northwestern University's "Traffic Accident Investigation Manual For Police," by J. Stannard Baker. The illustration, originally published by the American Association of Motor Vehicle Administrators and the National Safety Council, attempts to point out the hazards of consuming too much alcohol. Check out the various levels of reported intoxication. Do you think this chart would work in today's courts?



# Evenflo Recalls One Million Discovery Infant Car Seats

**NHTSA Press Release 2/08**

The National Highway Traffic Safety Administration is urging parents with Evenflo Discovery child safety seat Models 390, 391, 534, and 552 manufactured between April 2005 and January 29, 2008, to immediately check their seats. Evenflo is recalling approximately one million Discovery child safety seats that could fail to adequately protect children in a high impact side collision. The model numbers and date of manufacture are located on a white label at the bottom of the car seat.

The Discovery car seat is designed with a convenience base that attaches to the vehicle's seat and allows the seat to be attached or removed from the vehicle without removing the base. Tests conducted by NHTSA and the Evenflo company have found that this car seat has the potential to separate from its base. Parents are urged to immediately contact Evenflo for a free supplemental dual-hook fastener to ensure the seat doesn't separate from the base. However, parents should continue to use the child safety seat while waiting for the fastener to arrive.

Owners of the affected seats can contact Evenflo toll-free at 1-800-356-2229 between 8am and 5pm ET or visit their website at:

http://safety.evenflo.com/cs/sc/cssc_RD.phtml

**"...Company has found that this car seat has the potential to separate from its base"**

## Crash Investigation Training Info:

***IPTM*** (http://www.iptm.org)

| | | | |
|---|---|---|---|
| 6/2-8 | Energy Methods & Damage Analysis | $695 | Jacksonville, FL |
| 6/9-13 | Traffic Accident Reconstruction Update | $695 | Tampa, FL |
| 6/16-27 | Traffic Accident Reconstruction | $825 | St. Petersburg, FL |
| 7/14-18 | Ped/Bicycle Crash Reconstruction | $625 | Orlando, FL |

***Northwestern Un. CPS*** (http://www.nucps.northwestern.edu)

| | | | |
|---|---|---|---|
| 6/10-12 | Traffic Accident Reconstruction Refresher | $500 | Evanston, IL |
| 9/8-19 | Accident Investigation I | $1200 | Evanston, IL |
| 9/22-10/3 | Accident Investigation II | $1200 | Evanston, IL |
| 10/6-10 | Basic Physics | $900 | Evanston, IL |

***Accident Reconstruction Network/Collision Safety Institute***
(http://www.accidentreconstruction.com)

| | | | |
|---|---|---|---|
| 6/2-5 | ARC/CSI Crash Conference | $799 | Las Vegas, NV |

## Welcome New IACAI Members!

The Association would like to take this space to welcome the newest members in the IACAI!

- Sgt. Brian Stevenson, Reconstructionist, Boone County Sheriff's Dept.
- Deputy David Goodrich, Reconstructionist, Monroe County Sheriff's Dept.
- Officer Troy Hintz, Technical Crash Inv., Kokomo Police Dept.
- Officer Orville Harness, At-Scene Crash Inv., Kokomo Police Dept.
- Spc. Donald Hartman, Reconstructionist, W. LaFayette Police Dept.

# AI Resources

Every once in awhile its nice to have some sort reference list for getting information needed in this kind of work. So, while not complete by far, here's a list of companies and agencies catering to the accident investigation/reconstruction field. Feel free to copy, laminate, reproduce, add to, etc.

**Accident Investigation Equipment**

| | |
|---|---|
| Laser Technology Inc | http://www.lasertech.com/ |
| Sokkia Inc. | http://www.sokkia.com/ |
| Trimble, Inc. | http://www.trimble.com/ |
| Vetronix / Bosch (CDR) | http://www.igothit.com/ |
| Leica Inc. | http://www.leica-geosystems.com/ |
| Vericom Inc | http://www.vericomcomputers.com/ |

**AI Training Classes/Seminars**

| | |
|---|---|
| Institute For Police Technology & Mgt. | http://www.iptm.org/ |
| Northwestern Unv. CPS | http://nucps.northwestern.edu/home/catalogs.asp |
| Steve Neese & Assoc. | http://neese-assoc.com/crash.php |

**Books / Publications:**

| | |
|---|---|
| Accident Reconstruction Network | http://accidentreconstruction.com |
| CriterionPress | http://criterionpress.com |
| Institute For Police Technology & Mgt. | http://iptm.org/webstore/ |
| Lawyers And Judges Publishers | http://lawyersandjudges.com |
| Northwestern Unv. Center for Public Safety | http://nucps.northwestern.edu/cart/cart.items.asp |

**Computer Programs:**

| | |
|---|---|
| Calculation programs | http://www.dirigosoftware.com/<br>http://mchenrysoftware.com/<br>http://www.rec-tec.com/<br>http://www.sunposition.com/ |
| Diagramming Programs | http://arsoftware.com/<br>http://cadzone.com/<br>http://www.mapscenes.com/ |
| Photography | http://www.adobe.com<br>http://www.mapscenes.com/<br>http://www.photomodeler.com/<br>http://www.visualstatement.com/ |

**Crash Investigation Data Sources**

| | |
|---|---|
| 4N6XPRT (Vehicle data) | http://www.4n6xprt.com |
| Heavy Vehicle EDR Information | http://www.heavytruckedr.org/ |
| Insurance Institute for Highway Safety | http://www.iihs.org |
| Neptune Engineering (Vehicle data) | http://www.neptuneeng.com/ |
| NHTSA (Vehicle crash test data) | http://www.nhtsa.gov |

# IACAI Skill Review

This edition of the IACAI Skill Review has to do with formulas & their usage!! The answers will be in the next issue of the Association. Enjoy!!

1. The formula $f = D/16.1 \cdot t^2$ is generally used when?

   a. This equation is used to calculate a deceleration factor or an acceleration factor for a vehicle that slows or accelerates from one velocity to another.
   b. This equation is used to calculate a deceleration or acceleration factor by know ing the distance (ft) and the test time (sec).
   c. This equation is used to calculate a deceleration/acceleration factor if the deceleration/acceleration rate is known.
   d. This equation is used to calculate superelevations when the distance is known.

2. The formula $\frac{S = 2.73 \cdot D}{\sqrt{H}}$ is used when calculating:

   a. The speed in miles per hour of an object that goes airborne.
   b. The speed in miles per hour of a object that flips from a 45° take-off angle.
   c. The speed in miles per hour of an object that goes airborne from a level surface.
   d. The speed in feet per second of an object that goes airborne from a 30° take-off angle.

3. The formula $f = \mu \cdot n \pm m$ is generally used:

   a. To adjust the level coefficient of friction value by the percentage of braking and the percentage of grade.
   b. To adjust the level coefficient of friction value by the percentage of super-elevation.
   c. To define the true value of the coefficient of friction when dealing with a level surface.
   d. To calculate the acceleration/deceleration rate if the coefficient of friction is known.

4. The equation $A = wb_0b_1/gW$ is used to determine:

   a. The maximum expected crush depth of a motor vehicle.
   b. The "A" stiffness coefficient value when considering crush in determining a vehicle speed.
   c. The "B" stiffness coefficient value when considering crush in determining a vehicle speed.
   d. The "G" stiffness coefficient value when considering crush in determining a vehicle speed.

Equations are from the "Traffic Accident Reconstruction Manual", published by Northwestern University, Center for Public Safety & IPTM's "Equations for the Traffic Crash Reconstructionist."

**Answers to last issues' Skill Review:**

1. **c**
2. **c**
3. **b**
4. **b**
5. **c**

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Contact us at:

P.O. Box 346
Greenwood, IN 46142
317-882-2901 (FAX)

# *Seminar Announcement*

*The Indiana Association of Certified Accident Investigators will be sponsoring a seminar on*

## "Vehicle Forensics"

## "Collision Damage Analysis"

June 18, 2008 0900-1500 hrs

West LaFayette Police Department

711 Navajo Dr.

West LaFayette, IN 47906

Instructors: Dr. Patrick Jones, Sgt. Phil Nott

Cost: $50 for IACAI members; $75 for non-members

No advanced registration is required.

Registration begins at 08:30am

Please plan to attend!!

Questions regarding this seminar may be directed to IACAI President Don Harris

email: donhar232@comcast.net

The Association is published quarterly as a service to members of the Indiana Association of Certified Accident Investigators.