10 SURPRISING FACTS ABOUT VINS, VIN DECODING & VEHICLE DATA

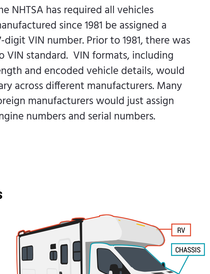
1. Most VIN decoders do not decode all 17 digits of a VIN

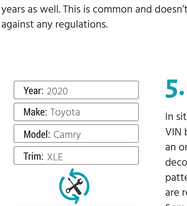
The majority of VIN decoders on the market do not actually decode all 17 digits of the VIN, but rather the VIN pattern made up of positions 1-8, 10, and 11. The check digit (position 9) is used for VIN validation and the serial number (positions 12-17) is what makes each VIN unique, but can't be decoded without OEM build data.

World Manufacturer Identifier (WMI)			Vehicle Descriptor Section (VDS)					Check Digit	Model Year	Plant	Serial Number					
S	B	M	1	3	G	A	A	1	H	W	0	0	2	1	2	5

2. Trim & transmission aren't always encoded in the VIN pattern

There are some significant details, such as trim and/or transmission, that may be left out of the VIN pattern since the NHTSA has allowed leeway within the vehicle descriptor section (positions 4-8) of the VIN to accomodate for a diverse passenger/light-duty vehicle market.





1956 Chevrolet 3100 Pickup Truck VIN

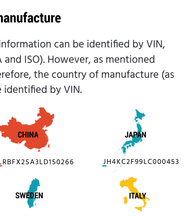
Engine Type	Series Code	Model Year	Assembly Plant	Serial Number				
V	3	A	56	S	1	0	0	1

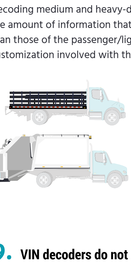
3. Not all VIN numbers are 17 digits

The NHTSA has required all vehicles manufactured since 1981 be assigned a 17-digit VIN number. Prior to 1981, there was no VIN standard. VIN formats, including length and encoded vehicle details, would vary across different manufacturers. Many foreign manufacturers would just assign engine numbers and serial numbers.

4. Some RVs have two VIN numbers

Some RVs, more specifically motorhomes, are built in two stages (aka. multi-stage RVs) by both the chassis/cab manufacturer and the RV manufacturer. As a result, these motorhomes will often have two VINs. In some cases, the chassis/cab is manufactured the previous model year, in which case the motorhome would have two different model years as well. This is common and doesn't go against any regulations.





5. VIN patterns can be reverse engineered

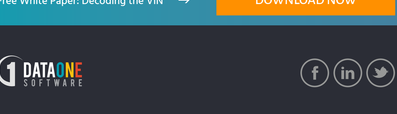
In situations where a user is required to submit a VIN but doesn't have it handy, such as submitting an online insurance quote request, some VIN decoding solutions can reverse engineer a VIN pattern. In order to do so, certain vehicle details are required, including year, make, model, and trim. Some additional fields are often needed to identify light-duty vehicles.

6. VIN standards are not the same world-wide

While vehicles destined for sale in the U.S. and Canada adhere to the NHTSA VIN standard, the rest of the world follows the ISO standard. The two standards are very similar, and both use the same World Manufacturer Identifier (WMI) format for positions 1-3. However, there are some differences.

7. Every VIN encodes the country of manufacture

There's quite a bit of variability in what vehicle information can be identified by VIN, especially across the two VIN standards (NHTSA and ISO). However, as mentioned previously, the WMI is the same worldwide. Therefore, the country of manufacture (as well as the vehicle manufacturer) can always be identified by VIN.



8. Medium and heavy-duty truck VINs offer less detail than passenger and light-duty vehicles

Decoding medium and heavy-duty truck VINs is valuable for many businesses. However, the amount of information that can be obtained from these VINs is much more limited than those of the passenger/light-duty market. This is largely due to the level of customization involved with these vehicles after manufacturing.

9. VIN decoders do not tell vehicle history

The information encoded in a VIN is what is installed at the time of manufacture. A VIN decoder tool simply decodes this information. Vehicle history data, such as accident damage reports, registration records, ownership transfers, etc., is tied to (but not encoded in) the VIN throughout the life of the vehicle, since the VIN is a unique identifier, like a human's DNA.

10. Accessories, and some optional equip/packages, are not encoded in a VIN unless installed at time of manufacture

Vehicle accessories are typically installed at either the port or the dealership, after the vehicle has been badged with a VIN (which occurs at the time of manufacture). This is also true for a good amount of optional equipment. As such, this information will not be encoded in the VIN.