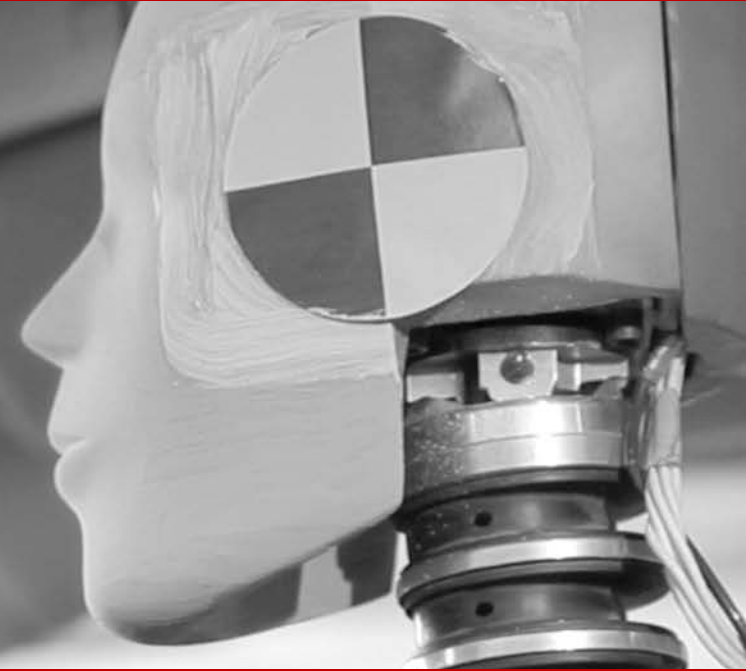


Vehicle Identification
Number (VIN),
Using Manufacturer
VIN Specifications as a
Standard



Michael D Frenchik

Safety Systems Management Division
(SSMD), Chief

Vehicle Identification Number (VIN)

What is it? How is it used?

- VINs are used to identify vehicles that are intended to be operated on roads throughout the world
- A VIN is broken up into six main parts
 - World Manufacturer Index (WMI)
 - Manufacturer Specification Data
 - Check Digit
 - Model Year
 - Plant Location
 - Vehicle Unique Number

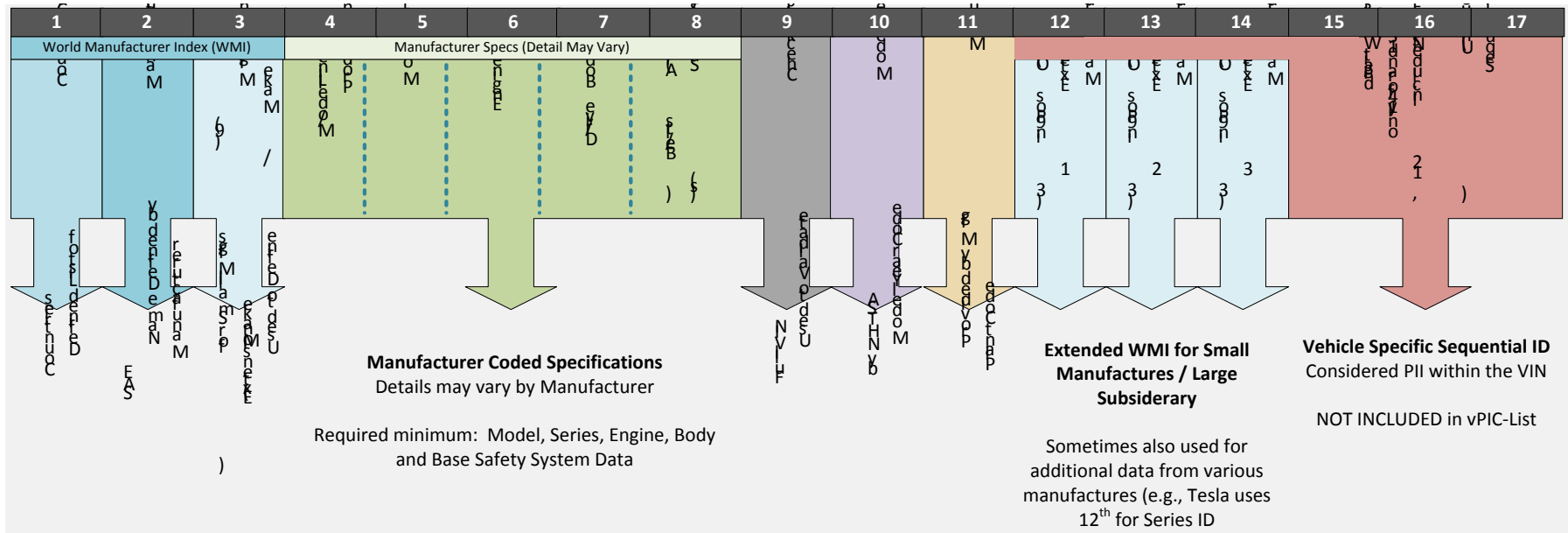
NHTSA manages the standard of how VINs are applied within the United States through CFR 49 Part 565.

Vehicle Identification Number (VIN)

How is it generated?

VIN Specification

- Unique to the vehicle
- Follows guidance based on NHTSA's standard (CFR 49 Part 565)
- Specifications reported minimum 60 days prior to production
- Manufacturers are required to maintain a standard for creation



Vehicle Identification Number (VIN) NHTSA Regulation / SAE Collaboration

Partnership with SAE

- NHTSA maintains the reporting requirements from the manufacturers and VIN standards / regulations
 - [CFR 49 Part 565](#) (Vehicle Identification Number Guidance)
 - Manufacturers are required to submit to NHTSA
- SAE maintains the process for World Manufacturer Indexes (WMIs)
 - Includes trying to maintain WMI records for foreign companies
 - Issuance of WMI Certificate Letters

For More Information Search for CFR on eCFR at:

<http://www.ecfr.gov/>

NHTSA Product Information Catalog and Vehicle Listing (vPIC)

- To Serve as a centralized authoritative data source for VIN associated, and VIN specific data:
 - Manufacturer 565 Submittals – Primary Source
 - > 10,000 submitted documents used;
 - New vPIC Data Standard Used for Core (565-based)
- Includes data intended to represent all regulated vehicles by NHTSA
 - Model Year 1995 Forward
 - Older model years lower confidence / completeness

vPIC: Vehicle Types Included

Passenger Vehicles	Multi Purpose Vehicles (MPVs)	Motorcycles / Scooters
Trucks	Buses	Low Speed Vehicles (LSVs)
	Trailers	

* Some manufacturers have included off-road / track-only vehicles for purposes of transparency / crash decoding (Not regulated by NHTSA)

vPIC Overview

What is in a vPIC “Vehicle Configuration”?

vPIC “Vehicle Configuration” - **Not a Complete VIN**

- A Vehicle Identification Number (VIN) is specific to a vehicle and is considered PII.
- **NO** sequential IDs in vPIC
- Only decoding information

“Vehicle Configuration”

- Refers to a group of vehicles with a similar configuration
- Comprises of the first 11-14th digits of the VIN
 - 11 digits for Large Volume Manufacturers
 - 14 digits for Low Volume Manufacturers (< 999 vehicles / year)
 - Requires a “9” in 3rd Digit of the Coding

vPIC Demonstration

Please show me what you are talking about

vPIC Public Interface:

- Link: <http://vpic.nhtsa.dot.gov/>
- Includes three Public application areas:
 - **vPIC Decoder**
 - Full decoding capability
 - **Manufacturer Information Database (MID)**
 - General manufacturer information
 - WMI entries
 - View submittals
 - **Application Programming Interfaces (APIs)**
 - Single and Batch Decoding
 - Attributes and values
 - Manufacturer information (Name, Make, Models, etc.)

vPIC: Online Submissions- Manufacturers

New Request

Here you can submit new form for VIN Requirements (49 CFR Part 565), Manufacturer Identification (49 CFR Part 566), Designation of U.S. Agent (49 CFR Part 551, Subpart D) or new Equipment Plant Code Request (for Brake Hose, Glazing, New Tires, or Tire Retread)

Fields marked with * are required

Document Type *

Manufacturer Name *

Manufacturer Country *

Manufacturer State/Province *

Manufacturer City *

Business Email *

Business Phone *

Cover Letter / Submission Description *

Please include information on whether this is a new request or an update to existing request

Rich text editor toolbar: Bold (B), Italic (I), Underline (U), Strikethrough (ABC), Bulleted List (List), Numbered List (List), Text Color (A), Background Color (A), and Full Screen (Full Screen).

Check Status

If you already submitted a request and you want to check its status you can follow the link received in confirmation email.

The same email contains a **Submission ID** and you can type (or copy/paste) it here:

[Check Status of Submitted Request](#)

vPIC: MID Search

Search Criteria

Hint: Multiple search criteria is treated as an "AND". To increase search results, enter fewer search criteria. Likewise, to reduce search results enter more search criteria.

Manufacturer ⓘ

Name

Doing Business As (DBA)

City

State

Country

WMI (SAE) only uses **Name** and **Country**

Doing Business As (DBA) applies to 565, 566 and Make Model searches only

World Manufacturer Identifier (WMI) ⓘ

WMI

Product Type

Make Name

Model Name

Part 565 Part 566 ⓘ

File Name

Minimum Letter Date

Maximum Letter Date

Search Results

[Return to Search](#)

[Go to 565 Results](#) | [Go to 566 Results](#) | [Go to WMI Results](#) | [Go to Equipment Plant Results](#) | [Go to Make/Model Results](#)

565 Results

Search Criteria for: Part 565, AND Manufacturer Name contains 'Toyota'

[Export to Excel](#)

Letter Date	Manufacturer Name	Doing Business As (DBA)	Address	City	State/Province	Country
6/18/2015	TOYOTA MOTOR NORTH AMERICA, INC		601 Thirteenth Street, NW	Washington	DC	United States (USA)
6/18/2015	TOYOTA MOTOR NORTH AMERICA, INC		601 Thirteenth Street, NW	Washington	DC	United States (USA)
6/18/2015	TOYOTA MOTOR NORTH AMERICA, INC		601 Thirteenth Street, NW	Washington	DC	United States (USA)
6/18/2015	TOYOTA MOTOR NORTH AMERICA, INC		601 Thirteenth Street, NW	Washington	DC	United States (USA)
6/18/2015	TOYOTA MOTOR NORTH AMERICA, INC		601 Thirteenth Street, NW	Washington	DC	United States (USA)
6/18/2015	TOYOTA MOTOR NORTH AMERICA, INC		601 Thirteenth Street, NW	Washington	DC	United States (USA)
6/18/2015	TOYOTA MOTOR NORTH AMERICA, INC		601 Thirteenth Street, NW	Washington	DC	United States (USA)
6/18/2015	TOYOTA MOTOR NORTH AMERICA, INC		601 Thirteenth Street, NW	Washington	DC	United States (USA)
6/18/2015	TOYOTA MOTOR NORTH AMERICA, INC		601 Thirteenth Street, NW	Washington	DC	United States (USA)


vPIC: Decoding Screenshot

NHTSA VIN Decoder Powered by **vPIC**
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

VIN:

Model Year:

When entered, the year from VIN is ignored.

 2003 SUBARU - PASSENGER CAR

✓ Error Code: 0 - VIN decoded clean. Check Digit (9th position) is correct

Manufacturer: FUJI HEAVY INDUSTRIES U.S.A., INC. (C/O SUBARU OF AMERICA)

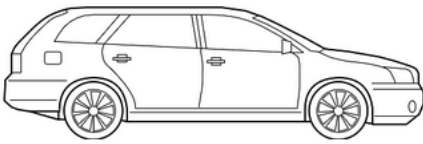
Vehicle Type: PASSENGER CAR

Model Year: 2003

Make: SUBARU

Model: Legacy

Body Class: Wagon



Other Information


Information provided below is based on the details provided by the manufacturer of this vehicle to NHTSA in the part 565 submittal

Series:	Trim: Outback-Ltd.
Gross Vehicle Weight Rating:	Drive Type: AWD/All Wheel Drive
Cylinders:	Primary Fuel Type:
Engine Model:	Engine Brake (HP):
Engine Manufacturer:	Transmission Speed: 5
Transmission Style: Manual/Standard	Engine Displacement (L): 2.500000

Mobile Ready

NHTSA VIN Decoder
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

Powered by **vPIC**

 2011 AUDI - PASSENGER CAR

✓ Error Code: 0 - VIN decoded clean. Check Digit (9th position) is correct

Manufacturer: QUATTRO GMBH

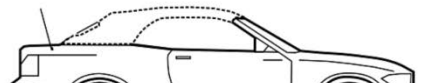
Vehicle Type: PASSENGER CAR

Model Year: 2011

Make: AUDI

Model: R8

Body Class: Cabriolet/Convertible



vPIC: APIs – Data Feeds

The NHTSA Product Information Catalog Vehicle Listing (vPIC) Application Programming Interface (API) specifications. The vPIC Dataset is populated using the information submitted by the Motor Vehicle manufacturer assigned by the manufacturer is captured in this catalog and used to decode a VIN and extract vehicle

API Action

Decode VIN

/vehicles/DecodeVin/5UXWX7C5*BA?format=xml&modelyear=2011

[More Information](#)

Decode VIN (flat format)

/vehicles/DecodeVinValues/5UXWX7C5*BA?format=xml&modelyear=2011

[More Information](#)

Decode VIN Extended

/vehicles/DecodeVinExtended/5UXWX7C5*BA?format=jsv&modelyear=2011

[More Information](#)

Decode VIN Extended (flat format)

/vehicles/DecodeVinValuesExtended/5UXWX7C5*BA?format=jsv&modelyear=2011

[More Information](#)

Decode WMI

/vehicles/DecodeWMI/1FD?format=xml

[More Information](#)

Get All Makes

/vehicles/getallmakes?format=csv

[More Information](#)

Get Parts

/vehicles/GetParts?type=565&fromDate=1/1/2015&toDate=5/5/2015&format=xml&page=1

[More Information](#)

```
-<Response>
  <Count>114</Count>
  <Message>Results returned successfully</Message>
  <SearchCriteria>VIN(s): 5UXWX7C5*BA</SearchCriteria>
  -<Results>
    -<DecodedVINValues>
      <VIN>5UXWX7C5*BA</VIN>
      <BatteryInfo/>
      <BatteryType/>
      <BedType/>
      <BodyCabType/>
    -<BodyClass>
      Sport Utility Vehicle (SUV)/Multi Purpose Vehicle (MPV)
    </BodyClass>
    <Country/>
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    <DisplacementL>3.0</DisplacementL>
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    <DriveType/>
    <FuelTypePrimary/>
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    <Make>BMW</Make>
    <Manufacturer>BMW MANUFACTURER CORPORATION / BMW NORTH AMERICA</Manufacturer>
    <Model>X3</Model>
    <ModelYear>2011</ModelYear>
    <PlantCity>Munich</PlantCity>
    <Seats/>
    <Series>X3</Series>
    <SteeringLocation/>
    <TransmissionStyle/>
    <Trim>xDrive35i</Trim>
    <VehicleType>MULTIPURPOSE PASSENGER VEHICLE (MPV)</VehicleType>
    <Windows/>
```

vPIC: Online Public Platform

<http://vpic.nhtsa.dot.gov/>

FREE FOR PUBLIC USE

Manufacturers Can Update

View Submittals and Company Info

Research Vehicle Data

vPIC Discussion

Conclusion / Questions

NHTSA Contact Information:

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