





Best Practices for Title and Registration of Reconstructed and Replica Vehicles





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VEHICLE STANDING COMMITTEE UNCONVENTIONAL VEHICLES WORKING GROUP

# Contents

Executive Sumi	mary	2		
Section One	Definitions and Acronyms	3		
Section Two	Reconstructed Vehicles	5		
	Definition	5		
	Engineer's Certification	5		
	Best Practices for Reconstructed Vehicles	6		
	Prior to Titling and Registration	6		
	Titling	6		
Section Three	Replica Vehicles	7		
	Definition	7		
	Consumer and Protection Challenges			
	Best Practices for Replica Vehicles	7		
	Prior to Titling and Registration			
	Titling			
Section Four	Conclusion	9		
Appendix A	Unconventional Vehicles Working Group Charter	10		
Appendix B	Unconventional Vehicles Working Group Members			
Appendix C	Survey Results from 30 Jurisdictions	14		
Appendix D	Sample Engineer's Report	16		

# **Executive Summary**

This document establishes best practices for the title and registration of **reconstructed** vehicles (permanently altered from original equipment manufacturer (OEM) construction by removing, adding, or substituting major components) and **replica** vehicles (newly built vehicles, usually for hobbyists, designed to resemble a previously built manufacturer's make and model).

In November 2012, AAMVA's Unconventional Vehicles Working Group developed a companion document that establishes *Best Practices for Title and Registration of Rebuilt and Specially Constructed Vehicles*. The principles that guided the development of both best practice documents are: ensuring the safety of vehicle occupants, pedestrians, and other road users; promoting consumer protection; and facilitating consistent registration and titling practices. These best practices seek to ensure that reconstructed vehicles are as safe as when the vehicle was originally manufactured and, recognizing that replica vehicles are intended for limited use on public roads, to ensure that replicas meet basic safety requirements. In addition, these best practices facilitate uniform vehicle registry records and other consumer protection processes.

These best practices provide guidance in the following areas:

- i. Inspection requirements
- ii. Vehicle identification number (VIN) requirements
- iii. Vehicle modification reporting requirements
- iv. Titling and registration conventions, including; brand, year, make, and model
- v. Proof of ownership requirements and document retention practices

In the development of the best practices, the Working Group consulted with industry and acknowledged the uniqueness of street rods and custom vehicles when the vehicles are used on a limited basis.

It is recommended that jurisdictions adopt the recommended best practices in this document for reconstructed and replica vehicles to ensure their safe use on public roads and consistent titling and registration.

# **Section One** Definitions and Acronyms

For purposes of these best practices, the following definitions and acronyms shall be used:

**AAMVA** American Association of Motor Vehicle Administrators

**CMVSS** Canadian Motor Vehicle Safety Standards

**Custom vehicle** A vehicle that is at least 25 years old and of a model year after 1948; or was

manufactured to resemble a vehicle 25 or more years old and of a model year after 1948; and has been altered from the manufacturers original design; or has a body

constructed from non-original materials.

**FMVSS** Federal Motor Vehicle Safety Standards adopted by the United States Department of

Transportation 49 CFR 571.

Major Component Parts means all integral and body parts, whether new or used, the removal, addition, alteration, or substitution of which would conceal the identity of the vehicle or **substantially** alter its appearance, model, type, or mode of operation.

**GAWR** Gross axle weight rating

**GVWR** Gross vehicle weight rating

**Motor vehicle** A vehicle driven or drawn by mechanical power and manufactured primarily for use

on public streets, roads, and highways, but does not include a vehicle operated only

on a rail line. (49 USC 30102)

Non-repairable vehicle A motor vehicle that is damaged, destroyed, wrecked, burned, or submerged in water

to the extent that the only residual value of the vehicle is as a source of parts or scrap metal or identified by a jurisdiction or insurer, and that cannot be rebuilt. Vehicles designated as non-repairable cannot be rebuilt for operation on public roads.

**OEM** Original equipment manufacturer

**Rebuilt vehicle** A motor vehicle that has been previously titled or registered, or both, that was

incapable of operation for use on public roads due to damage and that has been rebuilt to the original design of the vehicle by replacing major component parts with like make and model parts. Prior to rebuilding, the vehicle may have been declared a

total loss by an insurance company and branded salvage.

**Reconstructed vehicle** A vehicle that has been permanently altered from its original construction by

removing, adding, or substituting major component parts. It does not include vehicles that have been rebuilt to the original manufacturer's design specification nor does it

include a specialty constructed vehicle.

**Registration** Documentary proof of authority to operate a motor vehicle on a public road, or the

process of issuing such proof.

**Replica vehicle** A new vehicle assembled with major component parts built to resemble a specific

manufacturer's make and model that is at least 25 years old. Replica vehicles are constructed with major component parts licensed by the original manufacturer or other original, new, or reconditioned parts. Replica vehicles may also be known as

"rebodied vehicles" in some jurisdictions.

Salvage vehicle A motor vehicle that has been damaged by collision, fire, accident, or other

occurrence to the extent its salvage value plus the cost of repairing the vehicle for legal operation on a public road exceeds its fair market value immediately prior to damage, but does not include a flood damaged vehicle. A salvage vehicle also includes a vehicle that is determined to be a total loss by an insurance company following an insurance

claim.

Specially constructed vehicle

A newly built motor vehicle that does not resemble a specific manufacturer make or model, past or present and is made from any combination of new, used, or homemade parts from other vehicles and may include a manufacturer's kit. This category may include kitcar, ubilt, or assembled type vehicles. A specially constructed vehicle does not include a replica vehicle that is built to resemble a specific manufacturer's make or model, past or present.

**Street rod** A vehicle that is a 1948 or older vehicle, or the vehicle was manufactured after 1948

to resemble a vehicle manufactured before 1949 and has been altered from the manufacturer's original design or has a body constructed from non-original materials.

**Title** Documentary proof of motor vehicle ownership.

**Total loss vehicle** Decision made by an insurer processing an insurance claim to pay the insured for the

vehicle that has been damaged, destroyed, wrecked, or burned rather than paying for

its repair.

Vehicle identification

number

The unique series of Arabic numbers and Roman letters that is assigned to a motor vehicle for identification purposes in accordance with 49 CFR 565 and CMVSS s. 115.

In 1980 the VIN format was standardized to 17 characters.

# **Section Two** Reconstructed Vehicles

## **Definition**

A reconstructed vehicle is a vehicle that has been permanently altered from its original design construction by removing, adding, or substituting major component parts and that no longer meets the original manufacturer's specifications. These alterations could bring the vehicle out of conformity with safety standards (Canadian Motor Vehicle Safety Standards/Federal Motor Vehicle Safety Standards [CMVSS/FMVSS]) with adverse effects on the vehicle's crash compatibility, fuel system integrity, braking ability, handling, stability, steering, suspension, lighting compliance, and structural soundness, among other items. The meaning of the term "reconstructed vehicle" does not include vehicles that have been rebuilt to the original manufacturer's design specification or have undergone only minor modification such as addition, substitution, or removal of readily attachable components such as mirrors or tire and rim assemblies or by minor finishing operations.

# **Engineer's Certification**

Because vehicles are designed by the manufacturer's engineers to conform to applicable federal safety standards, any modification that alters the conforming design of the vehicle should be approved by an engineer<sup>1</sup> who has an understanding of how the changes could impact other components or systems on the vehicle as well as with the vehicle's interaction in

the North American traffic mix and environment. The engineer, licensed to practice in the jurisdiction, should provide the licensing/registration authority with a document detailing the modifications and the recommendation of the engineer regarding the safety and appropriateness of the vehicle for operation in the jurisdiction. See Appendix D for a sample of an engineer's certification.

The engineer's inspection should be completed when the design of the vehicle has been altered in such a way that it may no longer meet the safety standards, changes the gross vehicle weight rating (GVWR) or the gross axle weight rating (GAWR), or if the alterations to the vehicle are more than the addition, substitution, or removal of readily attachable components such as mirrors or tire and rim assemblies or minor finishing operations. It is recognized that many of the parts used in a reconstruction may be FMVSS approved; however, an engineer's report is recommended to consider the overall construction of the vehicle or its modifications as a whole. Examples of these alterations could be a change in the height of the vehicle or the addition of an axle.

The Working Group concluded that an engineer's certification of a vehicle provides the best safety outcome. Outsourcing safety inspections to an engineering body also ensures that all jurisdictions can implement the recommended best practice, as it does not rely on a jurisdiction having structural integrity and/or mechanical safety inspection programs. However, the group also recognizes that implementing

<sup>1</sup> The Working Group determined that engineers are the most qualified individuals to assess the overall safety impacts of major modifications resulting in a vehicle being classified as reconstructed. This inspection process could be left up to the professional associations to provide oversight and compliance enforcement and the only requirement placed on the engineer by the jurisdiction should be that he or she is licensed to practice engineering in that jurisdiction. To practice engineering in a jurisdiction an engineer must be licensed with the relevant professional association and is subject to any and all requirements and rules laid out by the related profession's acts and bylaws administered and enforced by this association. The professional associations have the authority to investigate complaints surrounding engineers acting negligently, without proper training, outside their ability, or otherwise and will do so and impose the proper sanctions.

an engineering certification requirement should include communications with the jurisdiction's engineering association to obtain their support and participation.

As an incremental measure, jurisdictions with existing inspection programs could use engineers to inspect reconstructed and replica vehicles prior to titling and registration, while maintaining a longer term objective of moving to an engineering-based safety certification.

## **Best Practices for Reconstructed Vehicles**

The following best practices prevent the registration and subsequent operation of unsafe reconstructed vehicles:

## Prior to Titling and Registration

At this point, jurisdictions should do all of the following:

- i. Create regulatory requirements that obligate an owner to declare that a vehicle has been reconstructed before it may be used on a public road. Steps should be taken to ensure that jurisdictions are notified when a vehicle has been reconstructed during the term of a registration.
- ii. Ensure that VINs on replacement parts are not connected with stolen vehicles.
- iii. Require and maintain on file certification by a professional engineer licensed in the jurisdiction that states the vehicle is fit to operate safely on a public road. See sample in Appendix D.
- iv. Require official ownership documents for the vehicle and any replacement VIN bearing parts to be presented prior to re-titling. Where official documents are not available, the owner shall legally validate ownership in accordance with the jurisdiction's practices.

- Require and maintain on file the bills of sale, receipts, or other proof of ownership for all major component parts that have been replaced.
- vi. Collect and record VINs on VIN bearing parts from other vehicles used to reconstruct the vehicle as well as any brands applied to the VIN bearing parts.

#### **Titling**

Jurisdictions should assign the following information:

- i. Year—the year of the original or primary vehicle.
- ii. Make—the make of the original or primary vehicle.
- Model—the model of the original or primary vehicle.

In addition, jurisdictions should:

- iv. Brand the vehicle "reconstructed." If the jurisdiction cannot brand the vehicle "reconstructed," indicate reconstructed on the vehicle registration document.
- v. Assign a VIN in accordance with their established procedures if there isn't a primary VIN.
- vi. Designate on the registration and/or title that an engineer's report is on file.
- vii. Carry forward any brands assigned by other jurisdictions in the past to the vehicle upon issuance of ownership documents.

# Section Three Replica Vehicles

## **Definition**

A replica vehicle is a newly constructed vehicle that resembles a specific manufacture make and model that is at least 25 years old that has been assembled using new, used, or reconditioned major component parts. These vehicles are usually built and maintained for occasional transportation, exhibits, club activities, parades, tours, and other similar use. Most jurisdictions do not allow these vehicles to be the owner's primary or daily mode of transportation.

While replica vehicles are generally used on a limited basis, there are still basic safety concerns that must be addressed. There is a distinction between replica vehicles, which are newly constructed and do not conform to federal safety or emissions standards for the year of manufacture, and reconstructed vehicles. Therefore, replica vehicles are expected to be, and should only be, used on a limited basis. If a replica vehicle is required to be inspected, the standards to inspect should align with the standards in place for the year of manufacture the vehicle resembles.

# **Consumer and Protection Challenges**

Replica and collector hobby vehicles present unique consumer protection challenges as it can be difficult or impossible for motor vehicle titling agencies to accurately differentiate between a fully original vehicle, a titled original vehicle newly restored where a negligible portion, if any, of the original vehicle remains, and one that is newly constructed from the ground up. Owners and prospective purchasers are advised to not rely solely on title documents to verify the authenticity of a collector hobby vehicle. The

Working Group therefore recommends that replica vehicles be clearly identified as "replica" on title documents; however, to align with recommended inspection and standards practices, and to aid in identifying a vehicle at roadside, other elements on the title should identify a replica vehicle similarly to the vehicle it resembles.

# **Best Practices for Replica Vehicles**

## Prior to Titling and Registration

At this point, jurisdictions should do all of the following:

- Ensure that VINs on parts used in the construction of the vehicle are not connected with stolen vehicles.
- ii. Require inspection based on the amount of use on public roads:
  - a. For *limited* use, require a mechanical safety inspection.
  - b. For *unlimited* use, in addition to a mechanical safety inspection, require the owner to provide a certification by a professional engineer licensed in the jurisdiction that states the vehicle is fit to operate safely on a public road. See sample in Appendix D.
- iii. Require official ownership documents to be presented prior to re-titling. Where official documents are not available, the owner shall legally validate ownership in accordance with the jurisdiction's practices.

- iv. Require and maintain on file the bills of sale, receipts, and other proof of ownership for major component parts used in assembling the vehicle.
- v. Collect and record VINs on VIN bearing parts from other vehicles used to assemble the vehicle.

## **Titling**

Jurisdictions should assign the following:

- i. Year—the year the vehicle resembles.
- ii. Make—the make the vehicle resembles.
- iii. Model—the model the vehicle resembles, if branded as replica. If the jurisdiction cannot brand the vehicle "replica," then use "replica" as, or in addition to, the model.

In addition, jurisdictions should:

- i. Brand the vehicle "replica." If the jurisdiction cannot brand the vehicle "replica," then use "replica" as the model.
- ii. Assign a VIN in accordance with their established procedures if a primary VIN is not available.
- iii. Designate on the registration and/or title if an engineer's report is on file.
- iv. Establish a procedure that requires the owner to certify that the vehicle will be used only for shows or parades, and not the owner's primary or daily mode of transportation *unless* the application for registration is accompanied by an engineer's certification.
- Carry forward any brands assigned by other jurisdictions upon issuance of ownership documents.

# Section Four CONCLUSION

This document will help to ensure the safety of vehicle occupants, pedestrians, and other public road users. These recommended best practices facilitate consistent registration and titling practices and provide protection for consumers. Recognizing that these vehicles are commonly transferred into and titled and registered by other jurisdictions, by adopting these best practices, jurisdictions will better support each other and the safety and consumer protection challenges reconstructed and replica vehicles present.

These best practices are the second part of a two part series. Part one outlines best practices for rebuilt (i.e., vehicles declared as a total loss and branded as salvage and subsequently repaired) and specially constructed vehicles (i.e., a newly built vehicle not built by a manufacturer and which does not resemble a specific manufacturer make or model). The best practices can be found on the AAMVA website.

# Appendix A Unconventional Vehicles Working Group Charter

#### I. NAME

The name of the working group shall be the Unconventional Vehicles Working Group, hereafter called the Working Group.

#### II. PURPOSE AND ANTICIPATED DELIVERABLES

The Working Group shall:

- Develop strategies and best practices to assist member jurisdictions in dealing with unconventional vehicles, existing and emerging, in a uniform and consistent manner.
- Deliver best practices and recommendations for regulating or restricting on-highway operation and registration of non-conforming vehicles (i.e., those that do not conform to the Canadian Motor Vehicle Safety Standards or the US Federal Motor Vehicle Safety Standards).

#### III. BACKGROUND

The Working Group was formed in 2005 to review the problems associated with a variety of unconventional and specialty vehicles that motor vehicle administrators and law enforcement officers encounter such as pocket bikes and other non-conforming motorcycles, kit cars, hot-shot rigs, off-road motor vehicles, truck-tractor recreational vehicle conversions, right-hand drive vehicles, and non-conforming mini-trucks.

In April 2007, the Working Group delivered to AAMVA the "Best Practices for Title and Registration of a New Motorcycle." This best practice set was developed to encourage a uniform and consistent registration approach for all member jurisdictions to ensure that non-conforming motorcycles (i.e., those

that do not conform to CMVSS/FMVSS as "motorcycles") are not registered for on-road use.

The group has identified the range of unconventional vehicles that require further review and is developing strategies, policies and best practices to assist member jurisdictions in dealing with these types of vehicles in a uniform and consistent manner.

#### IV. MEMBERSHIP

The Working Group shall be comprised of a chair, appointed by the Chair of the Vehicle Standing Committee. In addition, the Working Group will include members from Canada and the United States selected by the Chair of the Vehicle Standing Committee and representing the following AAMVA disciplines: Vehicle Registration and Title, Legal Services, Law Enforcement, Driver Licensing and Control, Motor Carrier Services, and Vehicle Safety and Inspection. Members from other AAMVA disciplines may be added as necessary.

The membership of the Working Group will not exceed 15 members.

Each Working Group member term shall be for two complete fiscal years – a complete fiscal year is from October 1 through September 30. Members may serve additional terms without reappointment until replaced by the Chair of the Vehicle Standing Committee.

#### V. MEETING PROCEDURES

The Working Group will meet every two months or at the call of the Working Group chair, either by teleconference or in person when necessary. Costs associated with conference calls and/or travel will be charged against the budget approved by the AAMVA Steering Committee for the Working Group.

Coordination of each Working Group meeting shall be the responsibility of the AAMVA staff liaison assigned to the working group, who shall provide notice to members prior to each meeting and maintain and publish minutes of each meeting.

The presence of two-thirds of the members, either in person or by teleconference, shall constitute a quorum. A majority vote of the members present shall constitute an official action of the Working Group.

#### VII. MEMBER RESPONSIBILITIES

All Working Group members are expected to actively participate in the Working Group's activities and meetings on a regular basis. A member who is unable to participate on a regular basis may be required by the Chair of the Vehicle Standing Committee to resign from the Working Group.

Members are to represent the interests of the AAMVA Vehicle Community.

#### **VIII. BUDGET ESTIMATE**

The estimated annual cost for this project is \$20,000 per scheduled face-to-face meeting. The number of meetings and budget will be approved annually by the AAMVA Steering Committee.

#### IX. CHARTER AMENDMENTS

All proposed amendments to the Charter shall be circulated to all Working Group members by the AAMVA staff liaison, and if approved by a majority of the Working Group, forwarded to the Steering Committee for final approval.

#### X. WORKING GROUP TERMINATION

The working group is a permanent working group of the Vehicle Committee but can be dissolved by the Vehicle Committee upon approval by the Steering Committee.

# Appendix B Unconventional Vehicles Working Group Members

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# Appendix c Survey Results from 30 Jurisdictions February 2012

Title/Registration Requirements for Non-Compliant Motor Vehicles								
VEHICLE CATEGORIES	REBUILT	RECONSTRUCTED	SPECIALLY CONSTRUCTED	REPLICA/REBODIED				
Please click ALL boxes for the items in this column that apply in your jurisdiction and specify any others for each of the four vehicle categories, as described.	Previously titled/registered vehicle rebuilt to original design by replacing major component parts with like make and model parts. May have been written off (junked) by an insurance company.	Previously titled/registered vehicle materially altered by the removal, addition or substitution of essential parts, new or used, derived from other vehicles or makes of vehicles. May not resemble specific manufacturer make or model.	New vehicle constructed from homemade parts, new or used parts from other vehicles, and may include a manufacturer's kit.  Does not resemble a specific manufacturer make or model  Category may include ubilt, replicar, replikit, etc.	New vehicle assembled with new major components licensed by the original manufacturer and other original, new or reconditioned parts.  Usually resembles a specific manufacture make/model; for example, brand new steel bodied replica 1932 Ford.				
EXAMPLES		6-0-0						
Pre-titling/ registration requirements that apply in your jurisdiction								
VIN inspection	34	34	34	27				
Assigned VIN	16	22	29	22				
Mechanical safety inspection	21	19	18	17				
Structural integrity inspection	14	13	13	9				
Original title/ registration	34	26	25	22				
Bills of sale/ receipts for major component parts, including kit	32	30	32	29				
Certificate to establish the vehicle weight	5	11	16	11				

Title/Registration Requirements for Non-Compliant Motor Vehicles (continued)							
VEHICLE CATEGORIES	REBUILT	RECONSTRUCTED	SPECIALLY CONSTRUCTED	REPLICA/REBODIED			
Manufacturer's Certificate/ Statement of Origin for new major components	15	18	24	29			
Proof of manufacturer licensing for new body or major components	1	2	3	1			
Emissions testing	8	9	9	1			
How make/model are captured in your jurisdiction's vehicle registry							
Make/model of the previously registered vehicle or major component	28	20	4	5			
Make and model that completed vehicle resembles	5	11	8	14			
How model year is captured in your jurisdiction's vehicle registry							
Model year of the previously registered vehicle or major component	29	20	7	6			
Model year of the production model the vehicle most closely resembles	4	6	4	12			
Model year same as year the vehicle passed inspection	2	5	13	6			
Model year that vehicle is registered	1	4	8	4			

# Appendix D Sample Engineer's Report

04/05/2012 07:56



PAGE 02/02



2 April 2012

MOTION ENGINEERING LTD

Department of Public Safety PO Box 6000 Fredericton NB E3B 5H1



Motion Engineering Ltd. has carried out a mechanical fitness and roadworthiness inspection on the above vehicle owned by;

The above indicated unit is configured as modified 1938 Chevrolet Coupe that has been mounted on a shortened chassis from a 1977 Monte Carlo donor vehicle. The engine is a modified 350 GN, driving through a TH350 transmission. The balance of the vehicle is sourced from OEM, aftermarket, or custom fabricated

This vehicle has been constructed using proper materials and components, and the workmanship has been properly completed. This vehicle does not warrant specific restrictions on its usage.

This vehicle is certified mechanically fit and roadworthy subject to a normal NB motor vehicle safety inspection.

D. Hoar, P.Eng.

MOTION ENGINEERING LTD.

12.03.10 cc: N Thibeault

MOTION ENGINEERING LTD.

