

A GUIDE TO UNDERSTANDING YOUR VEHICLES APPROVAL

Important to know at the start of your journey with a new builder or car. Whether resto-mod or complete new build from the ground up, here we enclose some key information that you must be aware of before entering into any form of negotiation or agreement to purchase a bespoke vehicle.

Below we have created a summary of the areas that Casmin Group will review before agreeing to work with a new vehicle builder and then introduce to any of our clients. Due to continual changes in homologation requirements this document provides an overview of current processes at time of publishing and is not to be relied upon as a reference or authority regarding vehicle homologation in Europe.

1) VEHICLE HOMOLOGATION IN EUROPE

Vehicle homologation in Europe refers to the process of certifying that a vehicle model complies with all the relevant technical and safety regulations required for it to be legally sold and registered in the European Union (EU).

Key points about vehicle homologation in Europe

- **Type Approval:** The homologation process culminates in a "type approval" certification, which allows the vehicle model to be marketed and sold across the EU without further testing.
- **Regulatory Compliance:** Homologation ensures the vehicle meets all applicable EU regulations and directives covering areas like emissions, safety, noise, and more.
- **Single Market Access:** With a type approval, the vehicle can be registered and sold in any EU member state without additional approvals. This facilitates the free movement of vehicles within the EU single market.
- **Mandatory Requirement:** Without homologation, a vehicle cannot be legally sold or registered for use on public roads in Europe. It is a mandatory process for all new vehicle models.
- **Motorsport Homologation:** In addition to road vehicles, homologation also applies to vehicles used in motorsports competitions to ensure they meet the relevant technical regulations.)

2) DIFFERENCES IN VEHICLE HOMOLOGATION REQUIREMENTS WORLDWIDE

The vehicle homologation process can vary significantly between different countries and regions around the world. Here are some key differences:

- **Safety and Emissions Standards**
 - The specific safety, emissions, and other technical requirements that vehicles must meet can differ across countries. For example, the safety standards in Europe (EU regulations) may not be identical to those in the United States (FMVSS) or China.
 - Manufacturers often need to undergo additional country-specific homologation testing to ensure compliance with local regulations.

- Approval Authorities
 - The government agencies or regulatory bodies responsible for overseeing the homologation process can vary. In some countries it may be the transportation ministry, while in others it could be an industry ministry or specialized automotive authority.
 - The specific procedures and documentation required by these approval authorities also differ between countries.
- Motorsport Homologation
 - In addition to road vehicles, homologation requirements also exist for vehicles used in motorsports competitions. However, the specific technical regulations and approval processes can differ between racing sanctioning bodies and countries.
- Legal Implications
 - In some legal systems, homologation by a judicial authority may be required before certain agreements or actions can proceed. The precise legal meaning and effects of homologation can vary.

3) RESTO-MOD & SMALL SERIES HOMOLOGATION REQUIREMENTS

You will need to ensure that your builder has obtained the relevant documentation and met all necessary requirements to complete the modification work on a vehicle to meet all legal requirements set by either the EU and/or the country the car is designed and built for.

Further information is available in the resources section at the end of this document

Regulatory Compliance:

- Resto mod vehicles in Europe must still comply with the relevant EU regulations and directives for vehicle safety, emissions, and technical specifications.
- This means the vehicle modifications must meet the type approval requirements set by the European Commission and national authorities.

Homologation Process:

- To be legally registered and driven on public roads in Europe, resto mod vehicles must go through the homologation process where vehicle hard points or safety equipment has been changed from the original homologated specification given to the original equipment manufacturer (OEM).
- This involves testing and certification by accredited technical services like the TÜV organisations to verify compliance with EU regulations.

Maintaining Original Design:

- While resto mod vehicles are modernised and upgraded, they must still maintain the core design and styling of the original classic vehicle.
- Significant changes to the body, chassis, or other core elements may increase costs of the conversion as these will require additional homologation over what the OEM certified when the original vehicle left the factory.

Emissions and Safety Standards:

- Resto mod vehicles need to meet the EU emissions and safety standards at the date of the original vehicle release by the OEM. Where any element of the vehicle has been swapped out (powertrain) or safety features such as airbags have been removed, this will require additional certification through a relevant authorising body.
- Achieving this balance between classic styling and modern performance/safety is a key challenge for resto mod builders in Europe.

Documentation and Approvals:

- Detailed documentation on the vehicle modifications will be required to help determine compliance and what additional homologation processes the vehicle may need to be approved for.

4) VOLUME RELATED TESTING

Whether the vehicle you are choosing is a one-of-a-kind or a run of 100+ vehicles, this will also impact the level of testing required for your vehicle.

IVA Vehicle Testing (Individual Vehicle Approval) is a process used in Europe to certify vehicles that are not part of standard mass production or do not meet the typical type-approval process required for most vehicles. The IVA scheme ensures that such vehicles meet necessary safety, environmental, and roadworthiness standards before being used on public roads.

IVA testing is typically required for:

- **Imported Vehicles:** Vehicles brought from outside the EU/EEA, especially non-type-approved models or vehicles that were built for markets with different regulations (e.g., the U.S.).
- **Custom-Built or Modified Vehicles:** These include kit cars, rebuilt vehicles, or heavily modified vehicles that deviate from the manufacturer's original specifications.
- **Prototypes or Low-Volume Production Vehicles:** Vehicles built in small numbers or one-off prototypes that don't undergo standard type approval.
- **Specialized Vehicles:** Such as ambulances, fire trucks, or hearses that require unique configurations.
- **Classic Cars:** If they've been altered or are being registered in a new country.

How Does IVA Testing Work?

- **Application:** Vehicle owners or manufacturers apply to the relevant authority in their country for an IVA test. In the UK, for example, this is managed by the Driver and Vehicle Standards Agency (DVSA).
- **Inspection:** The vehicle undergoes a detailed inspection. It includes checks on:
 - **Safety Standards:** Brakes, lights, seatbelts, airbags, and structural integrity.
 - **Environmental Standards:** Emissions and noise levels.
 - **Design Features:** Mirrors, tires, speedometer, and more.
- **Compliance:** The vehicle must meet specific standards to pass the IVA test. If it fails, modifications or repairs must be made, and the vehicle can be retested.
- **Certification:** Once approved, the vehicle receives an IVA certificate. This certification allows the vehicle to be registered and legally driven in the respective country.

IVA Testing in Europe

- **EU-Wide Standards:** While the IVA process itself is not standardized across Europe, it is aligned with EU vehicle safety and environmental regulations. Countries have their own procedures but must ensure vehicles meet EU directives.
- **Non-EU Countries:** For countries like the UK (post-Brexit), the IVA process ensures vehicles meet local regulations while being broadly in line with EU requirements.

Benefits of IVA Testing

- Provides a pathway for unique, imported, or modified vehicles to be road-legal.
- Ensures safety and environmental compliance.
- Offers flexibility for low-volume manufacturers and custom vehicle builders.

RESOURCES

In Europe, the key authorising bodies responsible for overseeing the vehicle homologation process are:

A) European Commission (EC)

The European Commission is the central regulatory authority that sets the overall framework and requirements for vehicle type approval in the European Union.

The EC adopts the necessary directives and regulations that define the technical specifications and testing procedures for vehicle homologation.

B) The TÜV (Technischer Überwachungsverein) organisations are a group of independent technical inspection associations that play a key role in the vehicle homologation process in Europe. The main TÜV organizations involved include:

- TÜV Rheinland
 - One of the largest and most well-known TÜV organizations, headquartered in Germany.
 - Provides a wide range of testing, inspection, and certification services for products, systems, and services.
 - Serves as a Notified Body for EU type approval of vehicles and components.
- TÜV SÜD
 - Another major TÜV group, also based in Germany.
 - Offers product testing and certification services, including for automotive applications.
 - Operates testing laboratories and facilities across Europe.
- TÜV NORD
 - The TÜV organization based in Hanover, Germany.
 - Focuses on industrial, automotive, and human resources/education sectors.
 - Conducts testing and inspections for vehicle homologation.

C) National Approval Authorities

Each EU member state has a designated national authority responsible for granting type approval certificates to vehicle manufacturers.

These national approval authorities evaluate vehicle models for compliance with EC regulations and issue the official type approval documentation.

D) Technical Services

The national approval authorities rely on specialised "technical services" to conduct the actual testing and inspections required for homologation.

These technical services are accredited organisations that have the expertise and equipment to verify a vehicle's compliance with all applicable regulations.

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