Granting and effectiveness of type approvals and the operating licences for the individual vehicle.

TUNE IT SAFE! – The campaign for safe tuning in Germany

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Granting and effectiveness of type approvals and the operating for the individual vehicle

TUNE IT SAFE! – The campaign for safe tuning

Sevilla, 15-17 May 2013

Gerd Mylius
Agenda

1. Life cycle: From commissioning to decommisioning.

2. Responsibilities during the life cycle.

3. Tune it safe.

4. Technical change and appraisal.

5. Summary.
1. Life cycle of passenger cars

Whole-Vehicle Typ-Approval  
Registration  
Use  
End of live  
Recycling

CITA International Conference | Sevilla | Gerd Mylius
2. Safety over the complete vehicle lifecycle

Responsibility for security levels

Lifecycle Steps

- Idea
- Launch
- Sale
- Recycling

Technical Inspection Body

- Type Approval
- CoP
- PTI

Driver

OEM

Repair & Maintenance

++ Tuning ++ Tuning ++
3. The initiative for safe and serious tuning

The initiative is supported by the German Federal Ministry of Transport, HANKOOK Tires Germany, the VDAT (Association of Automobile Tuners), the DVR (German Traffic Safety Council), DEKRA, the Essen Motor Show (World Trade Fair for automotive, tuning, motorsport and Classics), German police in North Rhine Westphalia and the TÜV Rheinland Group
The initiative for safe and serious tuning

Each year, TUNE IT! SAFE! is on tour in Germany with a new campaign car in police look, and speaks for safe and secure tuning.
Tour Dates 2013

TUNE IT! SAFE! On Tour

9. to 12. Mai 2013 Tuning World Bodensee Friedrichshafen

28. to 30. Juni 2013 Tuning Expo Saarbrücken Saarbrücken

12. to 22. September 2013 IAA Frankfurt

Impressions of TÜV Rheinland
Tuning is popular in Germany

Car enthusiasts spend more than 4.4 billion euro each year on the personalization of their vehicles. And the trend continues.

In 2012: 1,282,573 approval certificates
Ranking of modified vehicle parts

Germany market 2012

- Alloy wheels: 73
- Chassis: 65
- Muffler: 53
- Bodywork: 51
- Engine: 46
- Headlight: 36
- Interior: 72

Source: VDAT
Tuning fans, particularly the younger ones, need a lot of information.

Everything is possible!
Tuning fans, particularly the younger ones, need a lot of information.

Not everything is permitted.
Technical change and appraisal

National law in Germany
„Straßenverkehrs-Zulassungs-Ordnung“
(StVZO)

Road Traffic Licensing Regulation
In which cases does the type approval expire after technical changes have been made?

1. If the **type of vehicle** covered by the type approval is **changed**

2. If road users are **supposed** to be exposed to risks

3. If there is a **deterioration in exhaust emission or noise behaviour**
In which cases does the type approval expire after technical changes have been made?

1. If the **type of vehicle** covered by the type approval is changed

**Example:**

- passenger car
- motor caravan
What does the term "technical change" mean?

"Change" is understood to include:

• **Change** in the narrow sense, i.e. parts are designed differently

• **Replacement** of parts, i.e. the vehicle is furnished with parts that are not covered by the type approval

• **Addition** of parts, i.e. parts are newly installed on the vehicle

• **Removal** of parts, i.e. parts are removed from the vehicle
Typical examples of technical changes of passenger cars are:

- Change to type of bodywork
- Change to wheel-tire combination
- Improved performance
- Installation of special steering wheels
- Installation of replacement sound absorbers
- Installation of spoilers
- Raising/lowering of chassis
- Installation of other seats/seat belts
Definition of "changes"

**Changes** that result in the termination of the type approval need deliberate action directed towards change
Definition of "changes"

Changes in the state of a vehicle due to **wear and repair** are not to be understood as "changes" as defined in Art. 19 Clause 1 StVZO.
In which cases does the type approval expire after technical changes have been made?

2. If road users are **supposed** to be **exposed to risks**
In which cases are road users supposed to be exposed to risks?

- If parts classified as not presenting a hazard are **installed improperly**
- If **improperly designed parts** are installed correctly
- If changes have a **considerable effect on** properties or characteristics of the vehicle, e.g. handling, steering behaviour, braking performance, safety of use, design of contour, passenger safety, fire behaviour and fire resistance, negative effect on the strength of parts.
In which cases does the type approval expire after technical changes have been made?

3. If there is a **deterioration** in exhaust emission or noise behaviour
In which cases does the type approval not expire after technical changes have been made?

• If the officially recognised inspector entrusted with the assessment confirms that the change satisfies the relevant requirements. **Assessments are to be made on a case-by-case basis.**

• If an officially recognised inspector of a technical testing centre or an inspection engineer of an officially authorised inspection organisation was called in to **accept the change** in accordance with a specified procedure on the basis of an official test certificate.

• If an **official "test certificate"** covering the change is in hand and the certificate does not require an acceptance of the change to be made.
What does the term "official test certificates" mean?

- General type approval for vehicle parts (Art. 22 StVZO)
- General design certification for vehicle parts (Art. 22a StVZO)
- EC type approval for vehicle parts
- ECE approvals for vehicle parts
- Expert opinions on parts prepared by an accredited Technical Service
- "Excerpts" from the general type approval for vehicle types
- "Excerpts" from WVTA (EC type approval) for vehicles
Expert opinions on parts prepared by an accredited Technical Service

„Teilegutachten“

Certificate on Parts
Example: mounting a spoiler

Potential hazards

- Worsening of **driving, steering and braking**
- Insufficient clearance
- Insufficient clearance between wheel/tyre combination
- Inadmissible impact to the field of view of the rear-view mirror
- Worsening of behaviour in fire (fire safety)
- Negative change of contour
Example: **mounting a spoiler**

**Parts designation**

3.7 Genehmigte Teile sind an folgender Kennzeichnung zu erkennen:
3.7.1 Teile mit ABG (§ 22a) haben ein Prüfzeichen, bestehend aus
- einer Wellenlinie von drei Perioden
- einem oder zwei Kennbuchstaben
- einer Nummer, und soweit erforderlich, zusätzlichen Zeichen.
ZB: Kupplungskugel mit Halterung:

\[ M\text{ 4280} \]

3.7.2 Teile mit ABE (§ 22) haben ein Typzeichen, bestehend aus
- den Buchstaben „KBA“
- einer Ziffernfolge (Genehmigungsnummer).
ZB: Sonderrad:

\[ \text{KBA 40986} \]

3.7.3 Teile mit EBE (§ 22) oder mit EBG (§ 22a) haben eine Kennzeichnung, bestehend aus
- einem Unterscheidungszeichen der Prüfstelle und
- einer Prüfnummer.
ZB: TP 28 123456

3.7.4 Teile mit EWG-OG haben eine Genehmigungszeichen, bestehend aus
- einem Rechteck mit dem Buchstaben „e“
- der Kennzahl oder den Kennbuchstaben des genehmigenden Mitgliedsstaats,
- einer Bauartgenehmigungsnr u
- ggf zusätzlichen Zeichen.
ZB: Verbindungseinrichtungen für land- oder forstwirtschaftliche Zgm:

[![Image of parts designation examples](image_url)](image_url)
Example: **mounting a spoiler**

**Confirmation of proper installation or mounting**

Sample entries / Vehicle registration certificate:

<table>
<thead>
<tr>
<th>FzSchein/FzBrief</th>
<th>ZZiff. 33</th>
</tr>
</thead>
</table>
SUMMARY

- Cars can and will be changed individually
- Depending on the changes of vehicles the road safety may be affected
- The methods practiced in Germany prevented these negative influences on vehicle safety
- The methods give legal certainty for all parties
MOBILITY IS OUR PASSION
Thank you for your attention!

VW Golf II, five speed transmission, year of manufacture: 1985 for sale
kilometre reading: 5 km
well kept, travelled only in first and reverse gear, original tyres and brakes, no replacement necessary
price: can be discussed, but: collection by the buyer!!! ....