

No. 02-09

# **Type-Approval Procedure**

Information System of the German Type-Approval Authority

This IST replaces the IST 02-02.

# Installation and operating instructions for mechanical coupling devices

## Question or problem:

In the procedure of granting national type-approvals as well as according to the Directive 94/20/EC, the Directive 89/173/EEC, appendix IV, the Directive 74/150/EEC and the Directive 97/24/EC, chapter 10, information have to be provided which inform the user about the required measures for the proper assembly and about the right and sure operation of mechanical coupling devices.

Below there are some examples of compilation of these information.

## Result:

# Assembly handbook and installation instruction

#### 1. General notes

- Device designation
- Type, specification if necessary
- Approval mark (e.g. requirement of the Directive 89/173/EEC)
- characteristic values, if necessary in tabular form (e.g. requirement of the Directive 89/173/EEC with respect to the test procedure)
- Notes on regulations or alike (e.g. Directive 94/20/EC, Appendix VII; in this case the wording of the directive should be used or a note should be added: "The assembly of the mechanical coupling device to the vehicle should follow the requirements of Annex VII of 94/20/EC."
- Description of other vehicle parts or of the vehicles to which the mechanical coupling device may be mounted.

## 2. Information and requirements for assembly

- Drawings of the devices (e.g. simple exploded assembly drawings)
- Drawings for illustration of assembly (e.g. as exploded assembly drawings)
- Minimum bolting torque for screw joints
- Description of welding procedures
- Description of the required welded seam quality
- Operations scheduling the assembly (e.g. removing of corrosion protection substances)
- Procedure of assembly
- Check of functional capability

## 3. Information for operation

- Information for operating the mechanical coupling device
- Information for interlocking

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## **Kraftfahrt-Bundesamt**



- Information for protecting the mechanical coupling device in use
- Information about the control device
- Requirements for hydraulic systems

# 4. Information for operation

- Description of the devices with which the mechanical coupling may be connected to, e.g. by notification of the classes of the devices, the normative reference to which the devices must comply or the manufacturer and types of devices
- Description of the further coupling devices which may be attached, e.g. coupling heads in the case of a drawbar approval or the coupling device in the case of an approval for a mounting device
- Description of limit dimensions which have to be adhered after the attachement of further devices, e.g. self-supporting length up to the coupling point

#### 5. Information for maintenance

- Function and display of wear indicators
- Check of wearing parts
- Cleaning
- Lubrication
- Reparation und replacement

#### 6. Further notes

- Information about possible checks of assembly (e.g. at welding connections) by technical expert if this is demanded by type approval (applicable only for national type approval).
- In case of coupling devices for assembly on towing vehicles:
  Information about possible required correction of vehicle documentation by the registration authority (§ 13, para. 1 FZV) e.g. by take-over of the text of the regulation or by the sentence:
  "On the claims of the § 13 Fahrzeug-Zulassungsverordnung FZV with regard to the data in the motor vehicle registration certificate with respect to the approved trailer load (no. O.1 and O.2) as well as on the approved coupling load (no. 13) are pointed out".
- In addition to that, explanations for the required measures (calculation of the trailer load due to the D value formula and comparison with the corresponding data of the vehicle documentation). An example for calculation may be helpful.

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