GRAMMER

Consistency of TLD Identification on Grammer Drawings

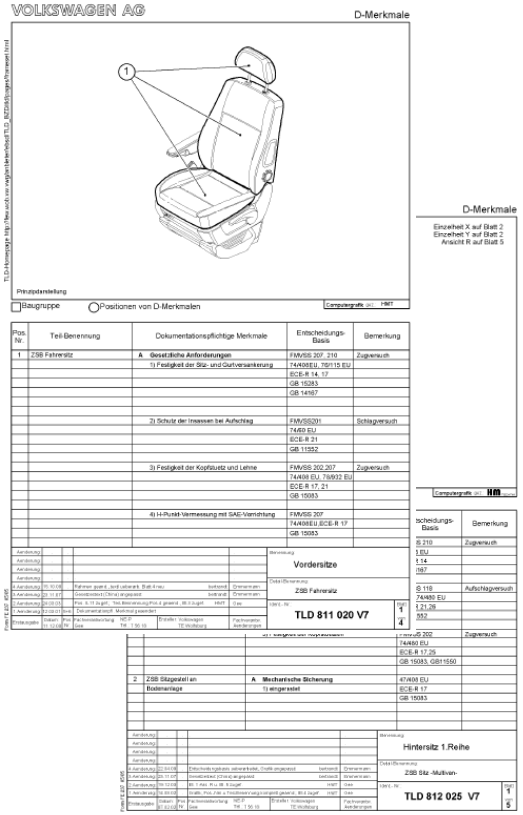
Attachment to W_015_026_ Specification_and_Identification_of_ Special_Characteristics

Consistency of drawings in the special case of TLD

for use in the VW group

Technical Guideline Documentation (TLD)

Continuously replacing the previous D-characteristics
in the VW group



Consistency of Special Characteristics in the VW Group

Number system

TLD 812 025 V7

8 Main group
12 Sub-group
025 Consecutive number

V Brand/Production Location

V = Volkswagen	A = Audi	E = VW Brazílie	K = Karmann
L = Seat, Španělsko	M = VW Mexiko	R = VW Argentina	S = VW Jižní Afrika
T = Škoda	C = Bugatti	Y = Bentley	D = VW Šanghaj Anting

7 Vehicle type
1 Passenger car (Pkw)
7 Utility vehicle (Nfz)
8 Multi purpose vehicle (MPV)

Technische Leitlinie Dokumentation
Haupt- und Untergruppeneinteilung für TLD

TE-Wob._Wolf
Tel.: 2 49 84
Stand: 03.2007

Hauptgruppen		Untergruppen							
1	Motor + Aggregate-lagerung	00	01	02	03	04	05	06	07
		Übersicht	Hilfsrahmen	Zusatzrahmen (Gelände-wagen)	Aggregat-lagerung	Abgasanlage	Kraftstoff-leitung (Motorraum)	—	—
2	Kraftstoff-anlage	00	01	02	03	04	05	06	07
		Übersicht	Kraftstoff-anlage	—	—	—	—	—	—
3	Getriebe	00	01	02	03	04	05	06	07
		z.Z. keine dokumentationspflichtigen Teile vorhanden							
4	Vorder-achse, Lenkung	00	01	02	03	04	05	06	07
		Übersicht	Vorderachse	Hilfsrahmen mit Zahn-stangen-lenkung	Lenkung	Servoöl-behälter	—	—	—
5	Hinter-achse	00	01	02	03	04	05	06	07
		Übersicht	Hinterachse	—	—	—	—	—	—
6	Niveau-regulierung, Räder, Bremsen	00	01	02	03	04	05	06	07
		Übersicht	Brems-anlage	Räder und Reifen	Niveauregel-anlage/ Luft-federung	—	—	—	—
7	Fußhebel-werk, Handbremse Schalt-betätigung	00	01	02	03	04	05	06	07
		Übersicht	Fußhebel-werk	Handbremse/ Feststell-bremse	Schalt-betätigung	—	—	—	—
8	Aufbau	00	01	02	03	04	05	06	07
		Übersicht	Karosserie-Rohbau	Verschluß-systeme Front- u. Heckklappe	Türschlösser, Türscharniere, Türverriegelung	Verglasung	Sonnen-blende	Rückhalte-systeme	Innen-ausstattung
		08	09	10	11	12	13	14	15
		ZSB Stoßfänger/ Anhänge-vorrichtung	Innen-verkleidung	Spiegel	Vordersitz	Hintersitz (1.Reihe)	Hintersitz (2.Reihe)	Hintersitz (DoKa)	Montage-teile
		16	17	18			50	51	52
		Cabrio-verdeck	—	—	—	—	—	reserviert für	
		53		59	60*	61*	62	63	64
		Campingaufbau —			Übersicht (AUDI)	Karosserie-Rohbau (AUDI)	—	—	—
9	Elektrische Anlage	00	01	02	03	04	05	06	07
		Übersicht	Bremslicht- und Hand-brems-schalter	Außenleuchten Glühlampen und Scheinwerfer	Anzeigegeräte Bedienteile Lenkstock-schalter	Windschutz-scheiben-wischer, Waschsystem	Elektrische Anlagen	Innenraum-leuchten und Zentralelektrik	—
		08	09	10	11	12	13	14	15
		Batterie	Elektrik-Airbag	Elektrische Bauteile, Seiten-Airbag	Elektronische Bauteile, ESP, ADR..	—	—	—	—
0	Fahrzeug Gesamt	00	01	02	03	04	05	06	07
		Übersicht	Fahrzeug-Gesamt	—	—	—	—	—	—
		08	09	10	11	12	13		
		—	—	—	Bauzustands-dokumentation BZD	—	—		

* TLD-Nr. reserviert für AUDI

TLD sheets of VW

Technical Guideline Documentation (TLD)

TLD has no independent applicability.

Like standards and other specifications, the TLD must be specified on the drawing to be applicable.

Special characteristics

- Retention periods extended
- Verification of the characteristic via capability test or 100% testing
- Yearly re-qualification instead of 3-5 year periods in dependence of OEM

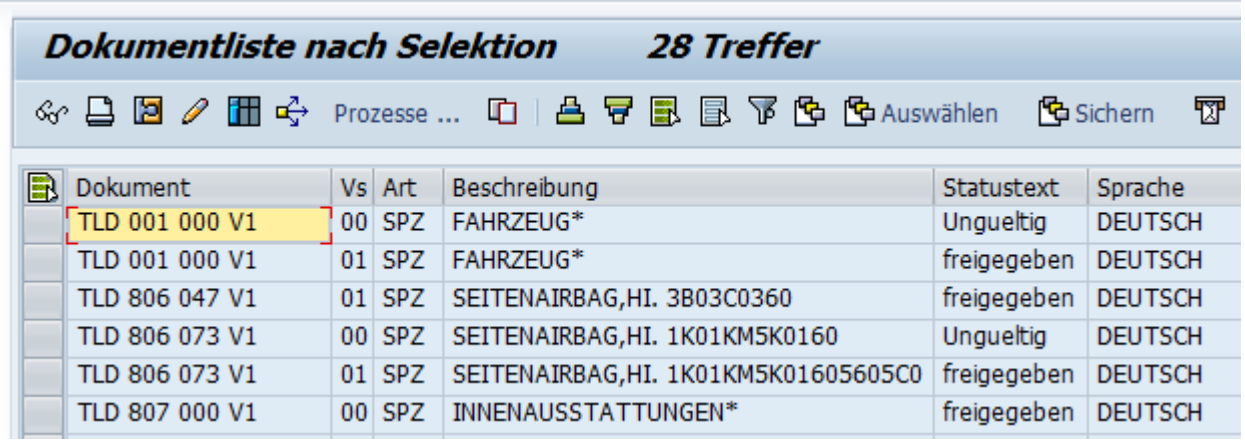
Archiving of TLD sheets

TLDs are handled like VW customer specifications.

Archiving under the original VW number in SAP-DVS.

Each designer & product developer who specifies TLDs in his drawing is responsible for procurement and forwarding to the standards office (veronika.heimler@grammer.com).

Access in SAP via ZCV04, document type SPZ



Dokument	Vs	Art	Beschreibung	Statustext	Sprache
TLD 001 000 V1	00	SPZ	FAHRZEUG*	Ungueltig	DEUTSCH
TLD 001 000 V1	01	SPZ	FAHRZEUG*	freigegeben	DEUTSCH
TLD 806 047 V1	01	SPZ	SEITENAIRBAG,HI. 3B03C0360	freigegeben	DEUTSCH
TLD 806 073 V1	00	SPZ	SEITENAIRBAG,HI. 1K01KM5K0160	Ungueltig	DEUTSCH
TLD 806 073 V1	01	SPZ	SEITENAIRBAG,HI. 1K01KM5K01605605C0	freigegeben	DEUTSCH
TLD 807 000 V1	00	SPZ	INNENAUSSTATTUNGEN*	freigegeben	DEUTSCH

Consistency from the assembly drawing down to the part drawings

TLD characteristics must be broken down from the assembly drawing to the level where the characteristic is created.

Characteristics in the assembly drawing fall into 3 possible categories

a) The characteristic is created at the customer after delivery;
Does not pertain to the delivery scope of Grammer

b) Characteristic is created at Grammer;
Pertains to the scope of delivery / scope of manufacturing of Grammer

c) Characteristic is created at the supplier;
Pertains to the delivery scope of the supplier

Consistency of Special Characteristics in the VW Group

a) Does not pertain to the delivery scope of Grammer

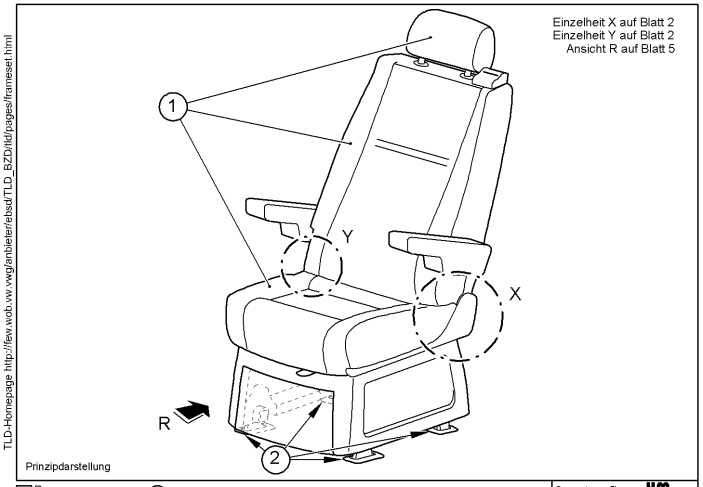
No further documentation of the characteristic

Example:
Seat is locked in place in the vehicle

No verification by Grammer
Exception note on assembly drawing possible
e.g. D: TLD xxx is applicable except for: item 2
See text module from library

VOLKSWAGEN AG

D-Merkmale



Baugruppe Positionen von D-Merkmalen Computergrafik

TLD-Homepage http://few.wob.vw.vwg/anbieter/elsud/TLD_BZD/ild/pages/frameset.html

Pos. Nr.	Teil-Benennung	Dokumentationspflichtige Merkmale	Entscheidungs-Basis	Bemerkung
1	ZSB Sitz -Multivan-	**A Gesetzliche Anforderungen**	FMVSS 210	Zugversuch
		1) Festigkeit der Sitz- und Gurtverankerung	76/115 EU	
			ECE-R 14	
			GB 14167	
		2) Schutz der Insassen bei Aufschlag	FMVSS 118	Aufschlagversuch
			74/60,74/480 EU	
			ECE-R 21,26	
			GB 11552	
			GB 15083, GB11550	
2	ZSB Sitzgestell an	**A Mechanische Sicherung**	47/408 EU	
	Bodenanlage	1) eingerastet	ECE-R 17	
			GB 15083	

2 Aenderung	19.12.03	Bl. 1 Ans. R u. Bl. 5 zugef.	HMT	Gee	Ident.-Nr.: TLD 812 025 V7	Blatt 1 von 5
1. Aenderung	14.08.02	Grafik, Pos.-Nrn.u.Teil-Benennung komplett geaend.; Bl.4 zugef.	HMT	Gee		
Erstausgabe	Datum: 07.02.02	Pos. Nr.	Fachverantwortung: NE-P Gee Tel.: 7 56 18	Ersteller: Volkswagen TE Wolfsburg	Fachverantw. Aenderungen	

Form FE 237

Consistency of Special Characteristics in the VW Group

b) Pertains to the delivery scope of Grammer at assembly level

Documentation down to the level where the characteristic can / must be verified

Example:
Tightening torques on assembly drawing with identification as D-characteristic

No reference to TLD on the part drawing for screw / metal part

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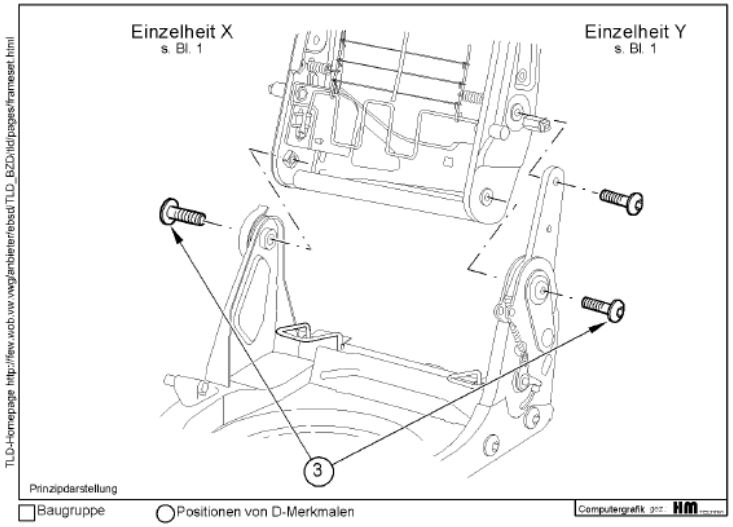
D-Merkmale



Pos. Nr.	Teil-Benennung	Dokumentationspflichtige Merkmale	Entscheidungs-Basis	Bemerkung
3	ZSB Lehnenrahmen an	A **Schraubverbindung**	FMVSS 207, 210	
	ZSB Untergestell	1) Drehmoment, Winkel oder Laengung	74/408, 76/115 EU	
			ECE-R 14, 17	
			GB 14167	
			GB 15083	

Pos. Nr.	Teil-Benennung	Dokumentationspflichtige Merkmale	Basis	Bemerkung
3	ZSB Lehnenrahmen an	A **Schraubverbindung**	FMVSS 207, 210	.
	ZSB Untergestell	1) Drehmoment, Winkel oder Laengung	74/408, 76/115 EU	
			ECE-R 14, 17	
			GB 14167	
			GB 15083	

Bemerkung:
Benennung: Hintersitz 1.Reihe
Detail-Benennung: ZSB Sitz -Multivan-
Ident-Nr.: TLD 812 025 V7
Blatt 2

Consistency of Special Characteristics in the VW Group

b) Pertains to the delivery scope of Grammer at assembly level

Documentation down to the level where the characteristic can / must be verified

Example:
Correct ECE label on the child safety seat
Identification as D-characteristic on assembly drawing

No identification as D-characteristic on the drawing of the label

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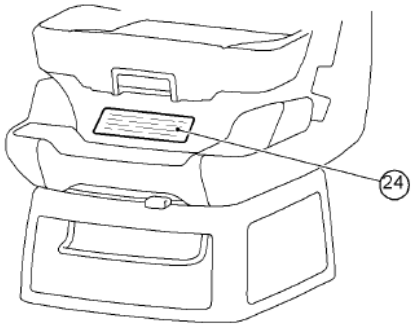
D-Merkmale

Nur fuer integrierten Kindersitz

Ansicht R
s.Bl.1



Prinzipdarstellung,
Lage der Bauteile kann unterschiedlich sein

Baugruppe Positionen von D-Merkmalen

Pos. Nr.	Teil-Benennung	Dokumentationspflichtige Merkmale	Entscheidungs-Basis	Bemerkung
24	Kinderrueckhaltesystem	A Uebereinstimmung	77/541 EU	.
		1) ZSB Kinderrueckhaltesystem nach	ECE-R 14	
		Freigabe		

24	Kinderrueckhaltesystem	A Uebereinstimmung	77/541 EU	.
		1) ZSB Kinderrueckhaltesystem nach	ECE-R 14	
		Freigabe		

Bemerkung:
Benennung: Hintersitz 1.Reihe
Detail-Benennung: ZSB Sitz -Multivan-
Ident-Nr: TLD 812 025 V7
Blatt 5

Consistency of Special Characteristics in the VW Group

c) Pertains to the delivery scope of Grammer at part level

Documentation of the characteristic across all drawings from the assembly to sub-assemblies to the individual part as D-characteristic

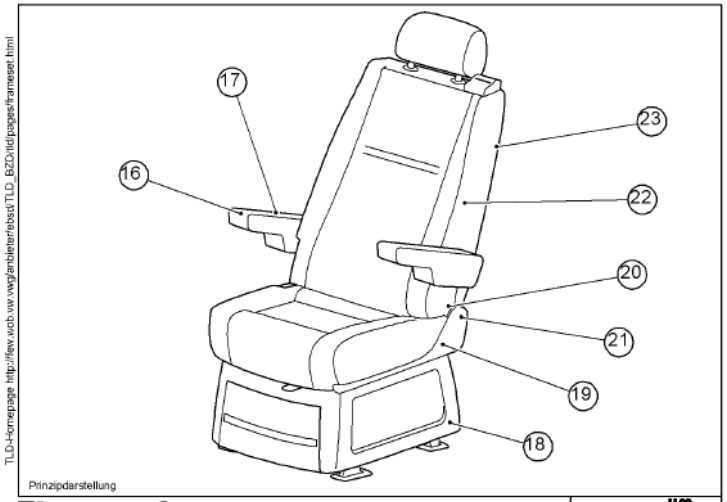
Example:
Fire protection as per FMVSS302 / TL 1010 / …

- on assembly drawing TLD as D-characteristic

- the TLD xxx is specified for the part as D-characteristic with item 16 TL1010

VOLKSWAGEN AG

D-Merkmale



Prinzipdarstellung

☐ Baugruppe ◯ Positionen von D-Merkmalen

Computergrafik

Pos. Nr.	Teil-Benennung	Dokumentationspflichtige Merkmale	Entscheidungs-Basis	Bemerkung
16	ZSB Armlehne, li./re.	A Brennverhalten	FMVSS 302	
		1) TL 1010	GB 8410	
17	Abdeckblende, Armlehne li./re.	siehe Pos. 16	siehe Pos. 16	
18	Verkleidung, Fussraum li./re.	siehe Pos. 16	siehe Pos. 16	
19	Verkleidung l./re.	siehe Pos. 16	siehe Pos. 16	
20	Verkleidung, Abdeckband	siehe Pos. 16	siehe Pos. 16	
21	Griff, Lehnenverstellung hinten	siehe Pos. 16	siehe Pos. 16	
22	ZSB Rueckwand, Lehne	siehe Pos. 16	siehe Pos. 16	

Nr.	Teil-Benennung	Dokumentationspflichtige Merkmale	Basis	Bemerkung
16	ZSB Armlehne, li./re.	A Brennverhalten	FMVSS 302	
		1) TL 1010	GB 8410	

Bemerkung

Benennung: Hintersitz 1.Reihe

Detail-Benennung: ZSB Sitz -Multivan-

Ident-Nr.: TLD 812 025 V7

Blatt: 4

Consistency of Special Characteristics in the VW Group

At Grammer, a TLD can currently be specified on a drawing in 3+1.

D: die TLD xxx yyy Vz ist vollstaendig gueltig / ... IS COMPLETELY VALID

1. The TLD is applicable **across the board**.

D: die TLD xxx yyy Vz ist gueltig, bis auf: / ... IS VALID, EXCEPT:

Pos.: 11, 22, ...

2. The TLD is applicable **except for the excluded** items.

D: aus der TLD xxx yyy Vz ist/sind nur gueltig: / FROM ... IS/ARE ONLY VALID:

Pos. 11 + kurze Beschreibung vom Merkmal + optional betreffende Norm
SHORT DISCREPTION FROM FEATURE + OPTIONAL MENTIONED STANDARD
Pos. 22 Brennverhalten [PART] nach TL1010
Pos. 33 Festigkeit der Kopfstuetze
STRENGTH OF THE HEADREST
Pos. 33 ...

3. The TLD is only applicable to the **explicitly stated** items.

   The respective item must be briefly described.
   Optionally describe relevant standard, except for TL 1010, which must always be described.

   Tightening torques and forces must be entered unless they are already specified on the drawing.

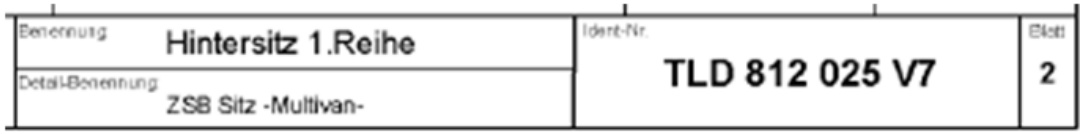
D: Brennverhalten nicht in TLD beschriebener Bauteile nach TL1010
BURNING BEHAVIOR NOT ... DESCRIBED PARTS ACC. ...

4. Not all parts are described in the TLD, but the flammability must still be verified.
   Can never be specified independently on the drawing, only in connection with a TLD.

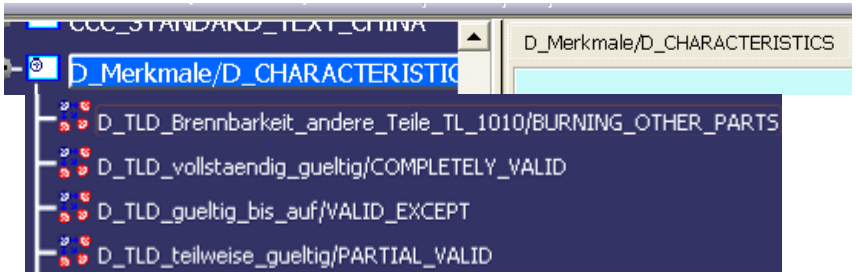
Consistency of Special Characteristics in the VW Group

Required writing convention on the Grammer drawing → as in VW document with blanks, but without dots

TLD XXX YYY ZZ correct
TLD XXXYYYZZ incorrect
TLD.XXX.YYY.ZZ incorrect



As a basis, **only** predefined text modules may be used from the library.
Q:\catiabibliothek\LIBRARYS\GRAMMER\2D\GAG_AUTOMOTIVE_LIBRARY.catalog
D_Merkmale/D_CHARACTERISTICS



Tip: To spare the CAD designers the effort of drafting the TLD entries anew, these are collected on VCxyz.

The selected TLD must be recorded in SAP.

Consistency of Special Characteristics in the VW Group

GRAMMER

Counting of D-characteristics on the drawings:

- One D-characteristic is counted in the title block for each TLD
- Other D-characteristics also count as one in the title block

D-Kennz./D-SIGN
D1
Fehlende Masse nac

D: Brennbarkeit nach TL 1010
BURNING BEHAVIOR ACC. TO ...

- **No** TLD is selected for this drawing
- Only the flammability is a D-characteristic

D-Kennz./D-SIGN
D2
Fehlende Masse nac

D: aus der TLD 811 045 V1 ist/sind nur gueltig: / FROM ... IS/ARE ONLY VALID:

Pos. 22 Brennverhalten Schaumteil nach TL1010 / BURNING BEHAVIOR ACC. ...
Pos. 33 Festigkeit der Kopfstuetze
STRENGTH OF THE HEADREST

D: Brennverhalten nicht in TLD beschriebene Bauteile nach TL1010
BURNING BEHAVIOR NOT ... DISCRIBE PARTS ACC. ...

- There is **one** TLD selected for this drawing
- The parts not described in the TLD must be **additionally** tested in accordance with TL 1010

D-Kennz./D-SIGN
D3
Fehlende Masse nac

D: aus der TLD 811 045 V1 ist/sind nur gueltig: / FROM ... IS/ARE ONLY VALID:

Pos. 08 Brennverhalten Bezug nach TL1010 / BURNING BEHAVIOR ACC. ...
Pos. 16 Oberflaeche der Magnet-einheit oelfrei
MAGNET UNIT SUREFACE OIL FREE

D: die TLD 812 046 V1 ist vollstaendig gueltig / ... IS COMPLETELY VALID

D: Brennverhalten nicht in TLD beschriebene Bauteile nach TL1010
BURNING BEHAVIOR NOT ... DISCRIBE PARTS ACC. ...

- There are **two** TLDs selected for this drawing
- The parts not described in the TLD must be **additionally** tested in accordance with TL 1010

D-Kennz./D-SIGN
~~D1~~
Fehlende Masse nac

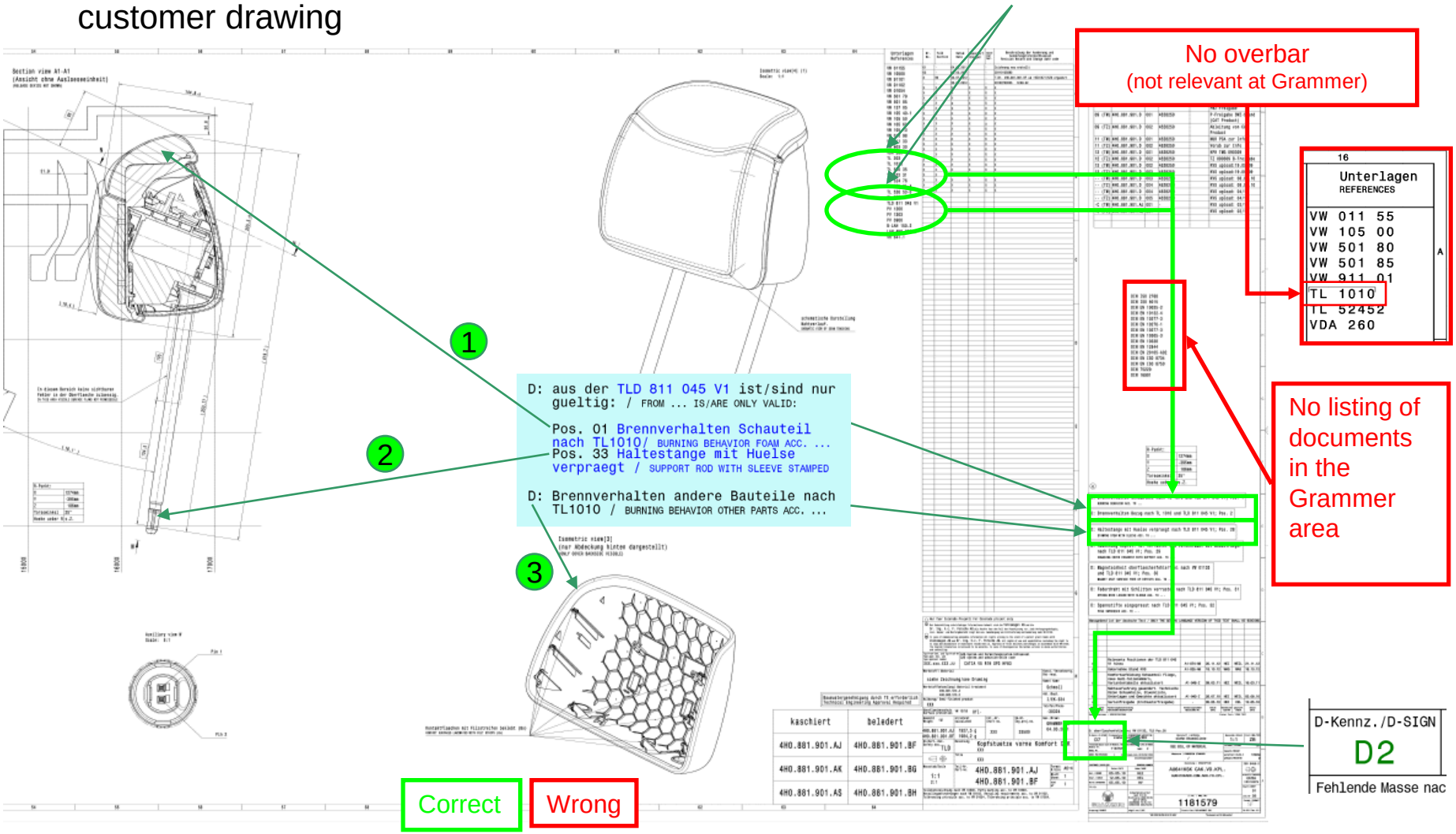
~~D: Brennverhalten nicht in TLD beschriebene Bauteile nach TL1010
BURNING BEHAVIOR NOT ... DISCRIBE PARTS ACC. ...~~

- May never be entered solely on the drawing

Consistency of Special Characteristics in the VW Group

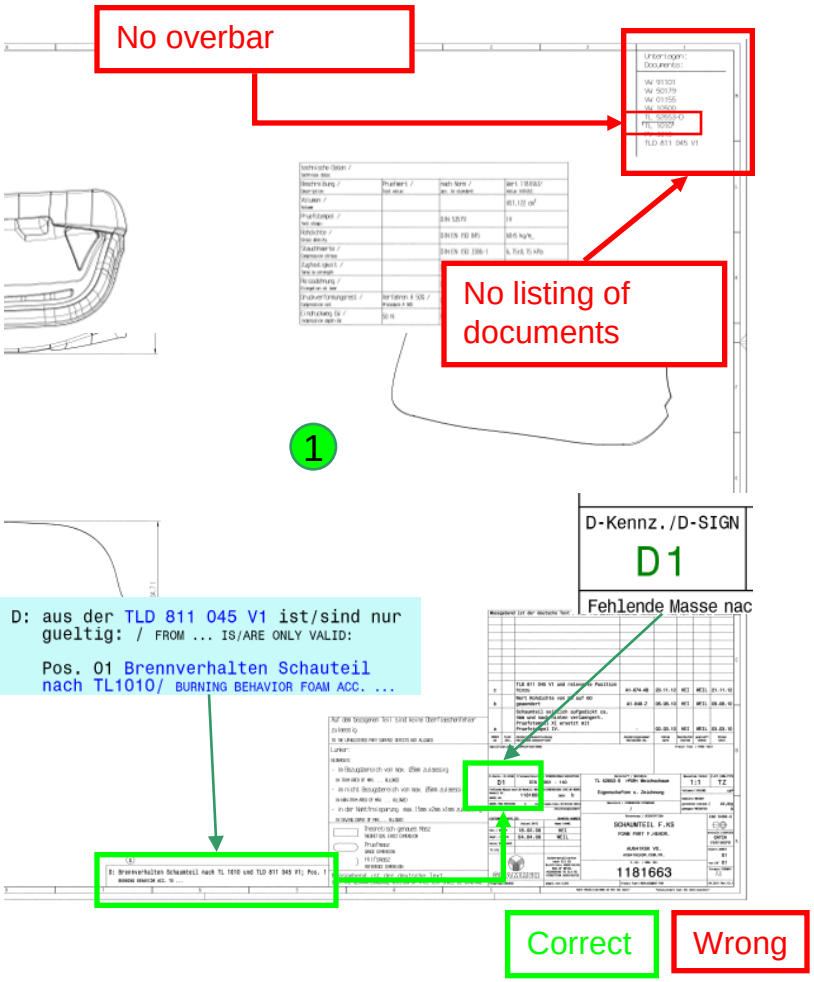
Drawing entry on customer drawing

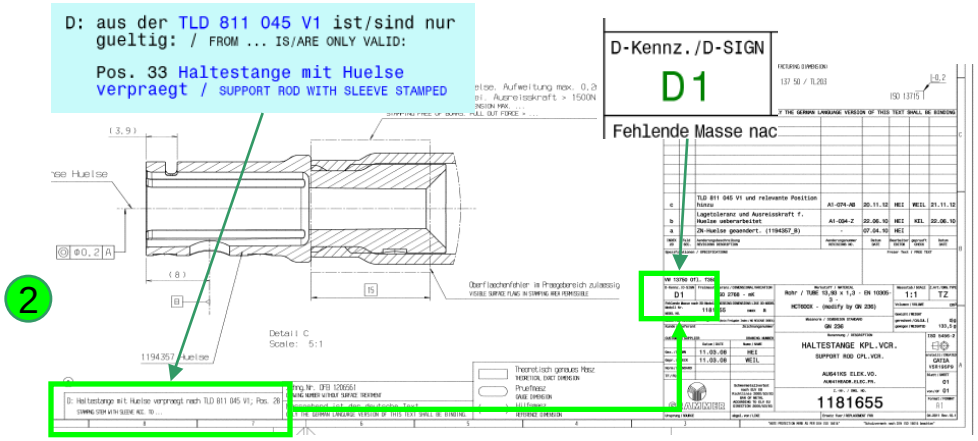
TLD 811 045 V1 and TL 1010 are specified on the customer drawing

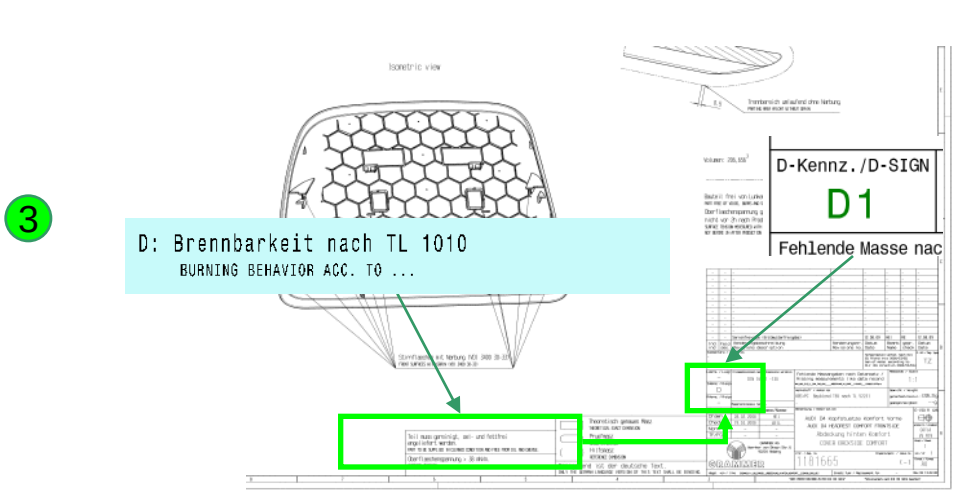


Consistency of Special Characteristics in the VW Group

Drawing entry on the respective Grammer drawings
In this case, e.g. the foam plastic part, the rear cover and the support rod with punched sleeve



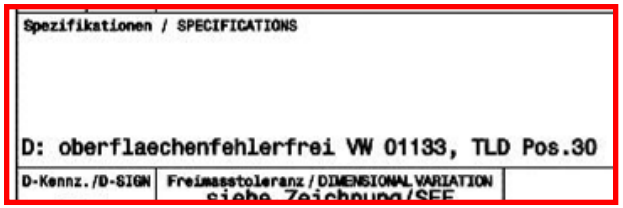




Consistency of Special Characteristics in the VW Group

Additional drawing conventions to be observed:

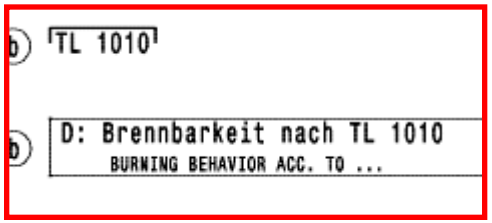
No D-characteristics may be entered under specifications in the title block



TL 1010 with overbar has no meaning at Grammer

Each characteristic must be described with text, it may not be entered solely

Specifications may not be entered twice on the drawing



Existing drawings remain unchanged if they are correct as to their contents, i.e.:

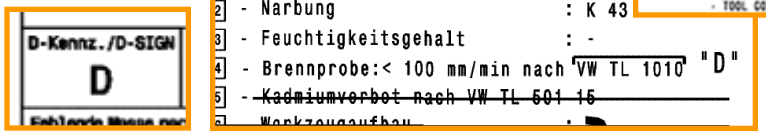
- somewhere on the drawing, at least one D: must be entered in connection with the characteristic

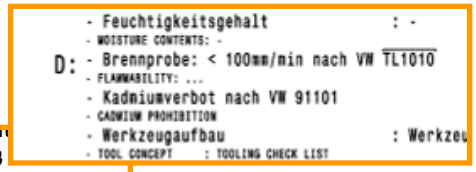
or

- a "D" must be entered in connection with the characteristic

and

- at least one D must be entered in the title block





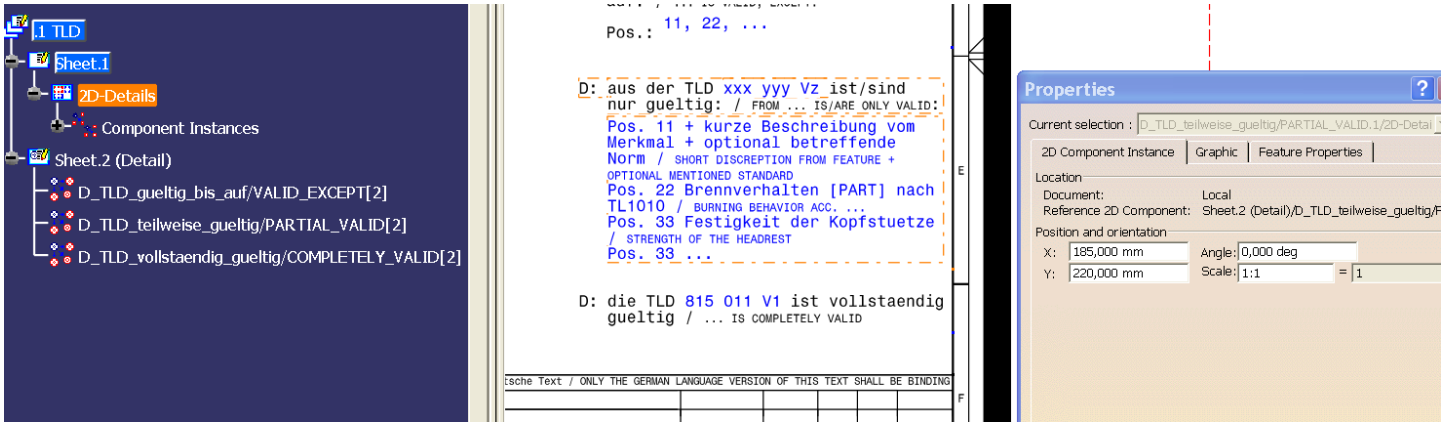
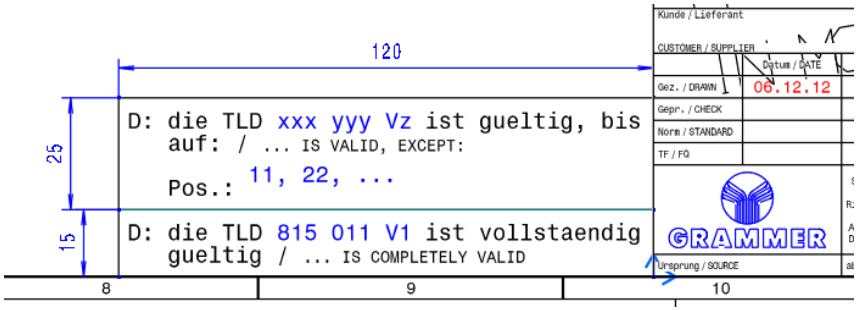
Somehow correct

Wrong

Consistency of Special Characteristics in the VW Group

Tips for CATIA:

- Insertion of the detail 0-point exactly on the right margin
- For the new drawing standard (with 2D details) exactly at X=185 mm



- The TLD details can also be easily inserted in existing text fields, since they are 5 mm in height and 120 mm in width