

VOLKSWAGEN GROUP

VDA 4939 V. 3.1 – VW 1.1

User manual

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Introduction

This user manual supplements VDA recommendation VDA 4939 from Version 3.1 in describing the special requirements and regulations of the Volkswagen Group. The chapters of the manual correspond to the chapters of the VDA recommendation.

In general, the VDA standards have been applied with regard to layout, e.g., the font sizes, font type and spacing in the sheet format. Goods recipients and goods dispatchers can agree deviations bilaterally if this makes sense or is technically necessary with regards to the process. Regulations that deviate from the VDA recommendation and this Volkswagen guideline must always be approved by the goods recipient.

In general, the size (data field length) and formats (numeric or alphanumeric) of the data must be copied unchanged from the delivery call-off to the label and the data matrix code.

Important: The specification regarding the presentation of the packaging items on the Shipment bill in chapter 3.3 must be observed!

1. Brief description of documents

1.1 Implementation

The VDA recommendation applies.

1.2 Aims

The VDA recommendation applies.

1.3 Basis and definitions

As specified in the VDA recommendation, the legal requirements of German and European law have been taken into consideration. Any nationally applicable regulations have priority over the regulations for the shipment documents. In this case, the documents required on a national level and the shipment documents must be handed to the carrying agency driver so that a simple and standardised goods receipt check can be conducted. The shipment documents can be omitted in this case if the goods recipient agrees to this.

In addition to this, the stipulations of the VDA recommendation apply.

2. Document and information flow in the delivery process

2.1 Document assignment

The VDA recommendation applies.

2.1.1 Document types

2.1.2 Document creation and format

The standard paper format is A4. The use of letter format can be requested by the goods recipient.

2.1.3 Document language

The VDA recommendation applies.

2.2 Interaction of EDI and documents

If VDA 4913 or DESADV 98A are used as the ASN, the regulations on interaction of VDA 4987 and VDA 4939 from Version 3.1 apply regardless of this for the creation of shipment documents.

The specifications on the shipment documents must correspond with the content of the respective ASN in all cases.

2.2.1 Shipment document

The VDA recommendation applies.

2.3 Document and information flow

In addition to the determinations of the VDA recommendation, the regulations of the “General Shipping Regulation” of the goods recipient must be observed where available. If there is no separate shipping regulation available for the goods recipient, the regulations of the VDA recommendation generally apply. Goods recipients and goods dispatchers can agree deviations to this bilaterally.

2.4 Creating and scanning the 2D code

The VDA recommendation applies.

3. Document scheme and structure

3.1 Document concept and layout

3.1.1 General form regulations

The stipulations of the VDA recommendation apply. Goods recipients and goods dispatchers can agree deviations to this bilaterally.

3.1.1.1 Use of fonts

The stipulations of the VDA recommendation apply. Goods recipients and goods dispatchers can agree deviations to this bilaterally.

3.1.1.2 Use of character sets

The VDA recommendation applies.

3.1.1.3 Numeric formats

In general, the rules of the VDA recommendation apply.

Quantity units for which decimal places make no sense such as “items” should be specified as integers. Decimal figures for the “item” or “set” unit of quantity are permissible, but should be avoided.

A full stop or a comma can be used as the decimal separator. The creator of the label can select which. Separators for thousands are not used in general.

3.1.2 Use of data blocks

The VDA recommendation applies.

3.2 Shipment master

In general, all relevant address and weight data is to be printed. A detailed overview can be found in the data matrix in section [3.7](#).

Block A – header data

In a deviation from the VDA regulations, the complete address data of the supplier and the customer are permissible.

Block B – address and reference data of the involved partners

The VDA recommendation applies. The data of the ultimate customer must be entered for the delivery of the Genuine Parts Direct Delivery Process (VAB-DPP process ID).

Block C – additional information on the shipment

The VDA recommendation applies.

Block D – list of loading units and packages in the shipment

The VDA recommendation applies. Gross, net and tare weights should be specified completely with decimal places to avoid inconsistencies.

Block E – comments

The VDA recommendation applies.

Block F – hazardous goods specifications

The VDA recommendation applies.

Block G

The VDA recommendation applies.

Block H – receipt information

In normal cases, the stipulations of the VDA recommendation apply, in cases of doubt the stipulations of the goods recipient's respective shipping regulation apply.

3.3 Shipment items

Block A – header data

The VDA recommendation applies.

Block B – item data

The VDA recommendation applies.

Line A – article data

The VDA recommendation applies.

Line B – further references

The following specifications are mandatory if they are also present in the ASN. The name should always precede the reference with a colon.

Example

“Expiry date: 2016-08-16”

- Expiry date
- Parts generations status
- Software version
- Hardware version
- Batch number
- LHM-no.
- Wholesaler order number
- Individual order number
- Depot order number
- Invoice number
- Manifest no.



GIN+BU & BGM 1000 = VAB-DDP

GP special processes (drop shipment call-off) process ID: VAB-DDP

Process ID: VAB-CHA
& GIN+BU

Line C – packaging information

All similar loading units must be aggregated and printed together as one packaging item as in the example below:

Example

Three loading units of the same type, each with one VW0012 pallet, five 006428 small load containers and one 001210 lid. Each small load container contains 10 parts.

Target display on the Shipment bill

	450 PC
3 x VW0012	
3 x 001210	
45 x 006428	10 PC

The following display is not permissible

	450 PC
1 x VW0012	
1 x 001210	
15 x 006428	10 PC
1 x VW0012	
1 x 001210	
15 x 006428	10 PC
1 x VW0012	
1 x 001210	
15 x 006428	10 PC

...

The VDA specifications on grouping rules are generally applicable.

If the delivery quantity of a delivery note/delivery note item is distributed over several loading units, the total quantity should be stated once. Each partial quantity of this previous delivery note/delivery note item must be indicated with the note "Partial quantity" in the "Delivery quantity unit of quantity" column in the item number information. The partial quantity is not to be specified. (Line A)

Notes on using the TSB Generator from Version 5.0

VDA 4987 and packaging structure

If the TSB Generator is used to create the shipment document, the packaging structure of the VDA 4987 EDI message must fulfil the requirements named above so that the program can create the item sheet according to the requirements of this manual.

Other data fields

In principle, the VDA 4987 must contain ALL of the data for the label. These data include the complete addresses and weights. Address specifications should correspond to the specifications in the VDA 4984 delivery call-off. If these are not correct in exceptional circumstances such as the incomplete or incorrect address of the goods dispatcher, you can use your own master data. For details, see: [3.7](#)

3.4 Item sheet shipment document – JIS deliveries

A JIS item sheet is planned with the VDA.

3.5 2D code sheet

It is mandatory to always create the 2D code sheet and to hand it over at the request of the driver of the carrier.

3.6 List of loading units

The list of loading units can be printed at the request of the carrier picking up the shipment to conduct a manual check of the loading units. It serves solely as a replacement medium if the data of the data matrix cannot be read by the scanner. This list is not to be forwarded to the goods recipient and remains with the carrier.

3.7 Content and structure of the data fields

In principle, all of the data marked as “Required” is to be printed where applicable.
The data must correspond to the content of the respective ASN.

There are two different cases with regard to the interaction of ASN and shipment documents.

1. The shipment documents are created by in-house systems.
The mandatory and optional information of the ASN is derived from the corresponding EDI guideline.
2. VDA 4987 with the use of the TSB Generator for creating shipment documents
ALL of the fields marked as “Required” in the following table must be transmitted, even if the guideline for VDA 4987 only lists their status as “Optional”. The TSB Generator takes all of the data necessary for printing from VDA 4987. Examples: address data and weights.
No new shipment documents can be created from Version 3.1 with the old VDA 4913 and DESADV 98A message data with the TSB Generator.

Content	EDI source	Status (R = required, O = optional, D = depending)	VW comment	VDA comment	Block/ line
Shipment document – master sheet					
Block A					
Customer name	SG2 NAD+BY DE 3036	R			Block A
Customer location	SG2 NAD+BY DE 3164	R			Block A
Supplier name	SG2 NAD+SE DE 3036	R			Block A

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Supplier location	SG2 NAD+SE DE 3164	R			Block A
Supplier number	SG2 NAD+SE DE3039	R			Block A
Document date	DTM+11 DE 2380	R		CCYY-MM-DD or DD.MM.CCYY	Block A
Shipment number	SG1 RFF+CRN	R			Block A
Block B					
Goods shipper – Ship-from(SF)	SG2 NAD+SF DE 3036	R			Block B
SF name 2	SG2 NAD+SF DE 3036	O			Block B
SF street	SG2 NAD+SF DE 3042	R			Block B
SF country	SG2 NAD+SF DE 3207	R	ISO sufficient		Block B
SF post code	SG2 NAD+SF DE 3251	R			Block B
SF location	SG2 NAD+SF DE 3164	R			Block B
SF supplier number	SG2 NAD+SF DE 3039	R			Block B
SF DUNS number	SG2 NAD+SF/RFF+ANK DE 1154	R			Block B
Loading point ID	SG2 NAD+SF/LOC+9 DE 3225	R			Block B
Loading point text	SG2 NAD+SF/LOC+9 DE 3224	O			Block B
SF VAT ID	SG2 NAD+SF/RFF+VA DE 1154	O	If this is legally required, this is a mandatory entry		Block B

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Goods receiver – Ship-to (ST) name	SG2 NAD+ST DE 3036	R			Block B
ST name 2	SG2 NAD+ST DE 3036	O		The specifications for the goods recipient must be taken from SG2 NAD+UD End Customer for deliveries that fall under the scope of GP Direct Delivery Process (BGM = VAB-DDP).	Block B
ST street	SG2 NAD+ST DE 3042	R			Block B
ST country	SG2 NAD+ST DE 3207	R		ISO sufficient	Block B
ST post code	SG2 NAD+ST DE 3251	R			Block B
ST location	SG2 NAD+ST DE 3164	R			Block B
ST ID (Plant number)	SG2 NAD+ST DE 3039	R		The value from the DELJIT CALDEL NAD+CN or should be applied for GP Direct Delivery Process shipments (BGM 1000 = VAB-DDP)	Block B
ST DUNS number	SG2 NAD+ST/RFF+ANK DE 1154	O		GP drop: DUNS number of the end customer must only be specified if it is available	Block B
Unloading point ID (VW = Point of discharge) ¹	SG2 NAD+ST/LOC+11 DE 3225	R			Block B
Alternative	SG10/SG17/SG20 LOC+11 DE 3225				
Unloading point text	SG2 NAD+ST/LOC+11	O			Block B

¹ At VOLKSWAGEN the actual Unloading Point (VW = Point of Discharge) is transmitted deviant to the standard in segment LOC+7

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Alternative	DE 3224 SG10/SG17/SG20 LOC+11 DE 3224				Block B
Name of forwarder (FW)	SG2 NAD+FW DE 3036	R			Block B
FW name 2	SG2 NAD+FW DE 3036	O			Block B
FW street	SG2 NAD+FW DE 3042	R			Block B
FW country	SG2 NAD+FW DE 3207	R	ISO sufficient		Block B
FW post code	SG2 NAD+FW DE 3251	R			Block B
FW location	SG2 NAD+FW DE 3164	R			Block B
FW ID	SG2 NAD+FW DE 3039	R			Block B
FW DUNS number	SG2 NAD+FW/RFF+ANK DE 1154	R			Block B
Block C					
Shipment date and time	DTM+11 DE 2380	R		CCYY-MM-DD, HH:MM Time is optional	Block C
Shipment type (name)	SG6/TDT DE 8067 + name	R		Not the code, but the name of the code is to be printed	Block C
Process indicators	BGM DE 1000	R			Block C
Milkrun/VAB number	SG1/RFF+AAN/AVU DE 1154	D	Mandatory specification for deliveries made under the scope of the new logistics		Block C

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			concept (NLK) (process ID VAV-NLK).		
Transport number	SG6 TDT DE 8028 or SG1 RFF+AAO DE 1154	D	Mandatory specification for deliveries made under the scope of the new logistics concept (NLK) (process ID VAV-NLK).		Block C
Delivery schedule including time	DTM+2 DE 2380	R		Source DTM+2 or DTM+132	Block C
Alternatively	DTM+132 DE 2380 (LAB)	R	This value should be applied if DTM+132 is sent in the VDA 4987.	DTM+132 is calculated = shipping date + transport time (from the master data for the relation)	Block C
Transport means ID	SG6/TDT DE 8213	O			Block C
INCOTERM	SG5/TOD DE 4053 + LOC+1 DE 3225	R			Block C
Block D					
Customer packaging type	SG11/PAC DE 7065	R			Block D
LU Loading unit	SG10 CPS+++3 or CPS+++4	R		Loading units are to be indicated with an X.	Block D
Number (packages)	SG11/PAC DE 7224	R			Block D
Gross weight in kg (loading units)	SG16/MEA+AAZ+AAB DE 6314	R	See also Table 1	Decimal separator optional	Block D
Gross weight in kg (simplified loading units)	SG11/MEA+AAY+G DE 6314	R	See also Table 1	Decimal separator optional	Block D
Tare weight in kg (loading units)	SG16/MEA+AAZ+T DE 6314	R	See also Table 1	Decimal separator optional	
Tare weight in kg (simplified loading units or inner packaging)	SG11/MEA+AAY+T DE 6314	R	See also Table 1	Decimal separator optional	

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Net weight in kg (simplified loading units or inner packaging incl. COPACK)	SG11/MEA+AAY+AAL DE 6314	R	See also Table 1	Decimal separator optional	
Tare weight in kg Auxiliary packaging (PAC with code 37)	SG11/MEA+AAY+T DE 6314	R	See also Table 1	Decimal separator optional	
Loading units stacking factor	SG11/QTY+171 DE 6060	R			Block D
Delivery note number	SG17/RFF+AAU DE 1154	R			Block D
Total number of loading units	MEA+AAE DE 6314	R			Block D
Total gross weight	MEA+AAX+AAD DE 6314	R		Decimal separator optional	Block D
Total tare weight	MEA+AAX+T DE 6314	R		Decimal separator optional	Block D
Total net weight	MEA+AAX+AAL DE 6314	R		Decimal separator optional	Block D
Block F					
Dangerous goods remarks	SG19/DGS DE 7124 + FTX+AAD	D	Mandatory entry, if applicable		Block F

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Shipment item sheet

Shipment item sheet					
Line A					
Delivery note number	SG17/RFF+AAU DE 1154	R			Line A
Delivery note item number	SG17/RFF+AAU DE 1156	R			Line A
Customer article number	SG17/LIN DE 7140	R			Line A
Designation	SG17/IMD DE 7008	R			Line A
Delivery quantity	SG17/QTY+12 DE 6060	R			Line A
Quantity unit	SG17/QTY+12 DE 6411	O	Only the measurement units of the "Form EN" column should be used. In general, all measurement units of Table 2 of the VDA recommendation are permissible. The "C62" quantity unit for item for the EDI message may not be used		Line A
Construction status VW = parts generation status	SG17 PIA DE 7140	O	The parts generation status, software version and hardware version must be printed if available		Line A
Use (name)	SG17/IMD DE 7009	R		11 = series, 12 = replacement part	Line A
Order number	SG17/RFF+ON DE 1154	R			Line A
Warehouse location (Unloading	SG20/ LOC+11 DE	-			Line A

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point) ²	3225				
alternatively	SG17 LOC+7 DE 3225	R	Not used at item level at Volkswagen		Line A
Place of use	SG17/LOC+159 DE 3225	O	Mandatory entry, if available		Line A
Other references				To be printed with field labels in each case	
Line B					
Batch number	SG14/GIR+1	D	Mandatory entry, if available	Batch number: + value from GIR+1, batch no.: ...	Line B
Shelf life	SG14/DTM+361	–	Not used at Volkswagen	Shelf life: +value from SG14(2) DTM+361	Line B
Production date	SG14/DTM+94	O		Production date: + value from SG14(2) DTM+94, production date: ...	Line B
Expiry date	SG14/DTM+36	D	Mandatory entry, if available	Expiry date: +value from SG14(2) DTM+36, expiry date: ...	Line B
Wholesaler order number	SG18/RFF+UC	D	Must be printed with process ID in BGM 1000 = VAB-DDP.		Line B
Individual order number	SG18/RFF+COF	D	Must be printed with process ID in BGM 1000 = VAB-DDP.		Line B
Depot job number	SG18/RFF+AAA	D	Must be printed with process ID in BGM 1000 = VAB-DDP.		Line B
Invoice number	SG18/RFF+IV	O			Line B
Line C					
Number of packages (qty.)	SG11/PAC DE 7224	R			Line C

² At VOLKSWAGEN the field Unloading Point may have a different meaning deviant to the VDA standard. In a normal case it is an additional information belonging to the Point of Discharge in LOC+7

Transport master sheet

Necessary weight specifications for the transport master sheet

Packaging type and level	Gross	Net	Tare
Simplified handling unit	R	R	R
Loading unit	R	–	R
Intermediate level (CPS+++2)	–	–	R
Inner packaging	–	R	R
COPACK (special inner packaging)	–	R	–
Auxiliary packaging	–	–	R

Table 1

Packaging material with the same properties and the same packaging level should be shown together.

4. 2D code creation

The VDA recommendation applies.

4.1 Structure of the 2D code

The VDA recommendation applies.

4.1.1 Symbol counter

The VDA recommendation applies.

4.2 Message structure as per ISO 15434

The VDA recommendation applies.

4.2.1 Payload for coding in the data matrix

The specifications of Table 3 of the VDA recommendation apply with the following additions.

Reference data	Source in DESADV	DI	Status	Remark	Example data
Goods dispatcher DUNS (or Odette) number	NAD+SF/RFF+ANK DE 1154	13 V	R	The ID that was used to create the license plate is to be transmitted	(13 V)123456789
Milkrun/VAB number	SG1/RFF+AAN	5K	D	Mandatory for NLK processes (source NLK shipping call-off, process IDs VAB-NLK and VAB-CHA)	(5K)12345600
Transport reference number	RFF+AAO DE 1154	5K (only RFF+AAO)	D	Mandatory for NLK processes (source NLK shipping call-off, process IDs VAB-NLK and VAB-CHA)	(5K) 1234567890123
Shipment delivery schedule incl. time	DTM+2 DE 2380 or DTM+132 DE 2380	8D..002	R	YYYYMMDDHHMM Without conversion to UTC. The time can be omitted if it is not known.	(8D)201501200845002

Key:

R = required, mandatory field, must always be present

D = depending, the value must be present depending on the process.

O = optional, optional field. The value must be printed if it is required by the goods recipient and is contained in the ASN, such as the batch number.

4.2.2 Generating a data string as per ISO/ICE 15434 for coding in the data matrix

The VDA recommendation applies.

4.2.2.1 Example for generating the data matrix symbols

The VDA recommendation applies.

5. Further information (VDA: Normative References)

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http://www.vwgroupsupply.com/portal01/vw/pub?path=/content/vwkbc/de/public/informationen/elektronischer_datenaustausch/edi_guidelines.portlet.html

VDA recommendation

<https://www.vda.de/de/verband/organisation/organisation-ausschuesse/arbeitskreis-kit/ak-kit-empfehlungen.html>

Global DESADV

<http://www.odette.org/publications>

6. Appendices

See VDA recommendation

7. Changelog

Table of contents	Description	Date
Version: VDA 3.1 - VW 1.0.1		
3.3	Error in example corrected	2016-10-07
3.7	Block D, stacking factor: status O > R	2016-10-07
3.7	Block F, designation: status O > R	2016-10-07
3.7	Other references: Batch number: status R > D Expiry date: status O > D	2016-10-07
3.7	Block C, Means of transport ID: Status O >R	2016-10-07
3.7	Block F, Unit of measurement: Status O > R	2016-10-07
3.7	Construction status: Status O >R Comment new The part generation status, software status and hardware status are to be printed if in ASN transmitted	2016-10-07
4.2.1	Milkrun/VAB number Source in DESADV: AVU deleted Remark changed Transport reference number Source in DESADV: TDT deleted Shipment delivery schedule Source in DESADV: DTM+132 supplemented	2016-10-07
Version: VDA 3.1 - VW 1.0.2		
3.3	Error in example corrected	2016-12-19
Version: VDA 3.1 - VW 1.0.3		
3.3	Example for unpermissible Display of loading units on the line items sheet corrected WAS 5 x VW0012 5 x 001210 NEW 1 x VW0012 1 x 001210	2017-02-10
Version: VDA 3.1 - VW 1.1		

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Introduction	Introduction amended Important: <i>Important: The specification regarding the presentation of the packaging items on the Shipment bill in chapter 3.3 must be observed!</i>	2017-10-16
3.3	Line C Packaging information Text changes: The formulation regarding the presentation of similar loading units has been refinded.	
3.7	Ship-to ID Status: O ==> R	2017-10-16
3.7	Shipment maste bill Block B Ship-to party Old = ST ID New = ST ID (Plant number) Old: Unloading point ID EDI source: SG2 NAD+ST/LOC+11 DE 3225 New: Unloading point ID (VW = Point of discharge) EDI source: SG2 LOC+7 DE 3295 ¹ At VOLKSWAGEN the actual Unloading Point (VW = Point of Discharge) is transmitted deviant to the standard in segment LOC+7 Shipment item page Alt: Warehouse EDI source: SG2/NAD+ST LOC+7 DE 3225 Neu: Warehouse (unloading point) ² EDI-Quelle: SG20/NAD+ST LOC+7 11 DE 3225 ² At VOLKSWAGEN the field Unloading Point may have a different meaning deviant to the VDA standard. In a normal case it is an additional information belonging to the Point of Discharge in LOC+7	2017-10-16
3.7	Text changes Showing the packaging structure in the same way as on the shipment item sheet is not necessary. Packaging material with the same properties and the same packaging level should be shown together.	