

Trailer Hitch – Mechanical (1D6)

Revision: This bulletin replaces bulletin Group 6, 3/15 dated March 12, 2015.

Model Year: **As of 2014 up to 2018**

Information: **Retrofitting**

Restrictions:

- **NOT** in conjunction with stainless steel rear panel (2JX)



Figure 1

Note: The Macan can be retrofitted with a trailer hitch. Note the following special features:

- Permissible hook load of 440 lbs (200 kg)
- Plug socket preparation for USA version
- Payload following installation, restricted by higher vehicle curb weight!
- Gross vehicle weight and axle load must not be exceeded!



Information

Further information/technical values, instructions for using the trailer hitch and "Driving with a trailer" can be found in the:

- Macan Owner's Manual, topics: "Trailer Hitch", "More Safety and More Driving Pleasure" and "Weights"
- Vehicle registration documents

Part Info: **95B.044.802.31**

⇒ Towbar system – mechanical – USA (1D6), set

Parts List:

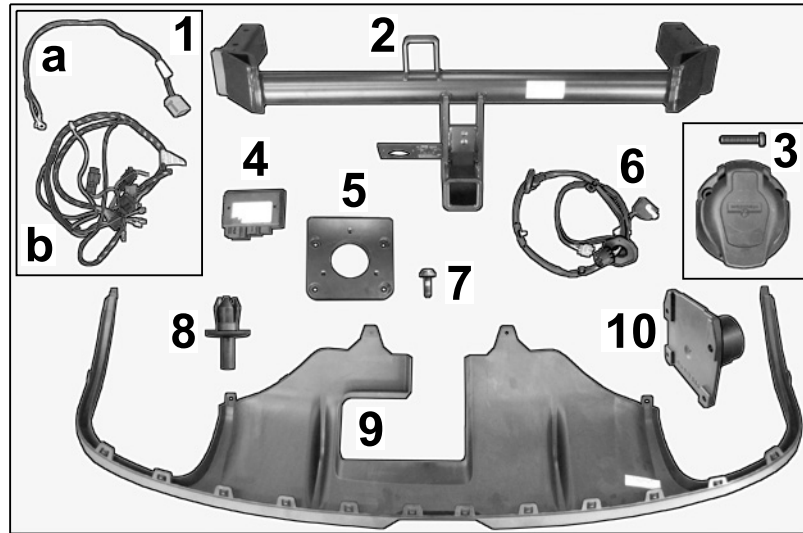


Figure 2

95B.044.802.35	1 x	Wire harness (⇒ Figure 2-1-) consisting of:
— — —	1 x	Ground line for trailer hitch ⇒ Figure 2-1a-
— — —	1 x	Wire harness for control unit ⇒ Figure 2-1b-
8R0.800.491.A	1 x	Trailer hitch ⇒ Figure 2-2-
999.650.893.40 ¹	1 x	7-pin socket with 3 screws ⇒ Figure 2-3-
4H0.907.383.M	1 x	Control unit for mechanical trailer hitch ⇒ Figure 2-4-
7L5.945.205 ¹	1 x	Adapter for metal plate ⇒ Figure 2-5-
95B.971.124.A ¹	1 x	Wire harness ⇒ Figure 2-6-
N. 910.742.01	4 x	Screw, M5 x 16 ⇒ Figure 2-7-
N .038.549.4	2 x	Expansion rivet, A8 x 12 ⇒ Figure 2-8-
95B.807.834D 1E0	1 x	Rear panel, black ⇒ Figure 2-9-
7L5.971.885 ²	1 x	Cap ⇒ Figure 2-10-
7L0.803.593	1 x	Stopper for cover, square (not shown)
N . 907.721.02	4 x	Bolt, M10 x 105 x 45 (not shown)
95B.971.124 ¹	1 x	Wire harness (not shown)

¹ Not in USA (1D6) set² Only contained in set 95B.044.802.31.

Tools:	Nr.88 - Torque angle torque wrench	VAS 6933 Disassembly tool
	9900 - PIWIS Tester 3	Steel drill bit, Ø up to 8.0 mm
	Saw or vibrating knife	Drill
	Plastic wedge	Round/flat file
	Electric torch	Flat scraper
	Knife	

- Assembly:
- 1 Preparatory work
 - 1.1 Remove rear apron (⇒ *Workshop Manual '635519 Removing and installing rear apron*).
 - 1.2 Remove center luggage compartment trim panel (luggage compartment cover) (⇒ *Workshop Manual '700619 Removing and installing centre luggage compartment trim panel (luggage compartment cover)*).
 - 1.3 Remove side trim panel for luggage compartment (loadspace cover) (⇒ *Workshop Manual '700619 Removing and installing side trim panel for luggage compartment (luggage compartment cover)*).
 - 1.4 Remove cover for rear lock carrier (⇒ *Workshop Manual '703919 Removing and installing cover for rear lock carrier*).
 - 1.5 Remove side trim panel for luggage compartment at the right side (⇒ *Workshop Manual '700319 Removing and installing side trim panel for rear luggage compartment*).
 - 1.6 Remove rear bumper (⇒ *Workshop Manual '635019 Removing and installing rear bumper*).
 - 1.7 Disconnect the battery (⇒ *Workshop Manual '2X00IN Work instructions after disconnecting the battery*).
 - 2 Electrical work in passenger compartment
 - 2.1 Route and connect ground line

- 2.1.1 Disconnect pin connector socket, green (towbar system preparation) from the holder from the rear (⇒ *Figure 3*).

- 1 – Pin connector socket, green (towbar system preparation)
- 2 – Bracket
- 3 – Plug (socket) towbar system plug socket

- 2.1.2 Unlock pin connector socket (preparation) and push line BL 2.5² out of pin 6.

- 2.1.3 Unlock a new green pin connector socket (ground line) and push line BL 2.5² into chamber 6.

Lock the new green pin connector housing (ground line).

- 2.1.4 Install green pin connector socket (ground line) into the holder from the rear (⇒ *Figure 4 -Arrow-*).

- 1 – Ground line
- 2 – Cap nut for ground pin 42

- 2.1.5 Route ground line to ground pin 42 (rear, right) (⇒ *Figure 4*).

- 2.1.6 Install cable ring eyelets onto ground pin 42 and fasten loosely with cap nut (⇒ *Figure 4-2-*).
An additional cable ring eyelet will be installed on ground pin 42 later.

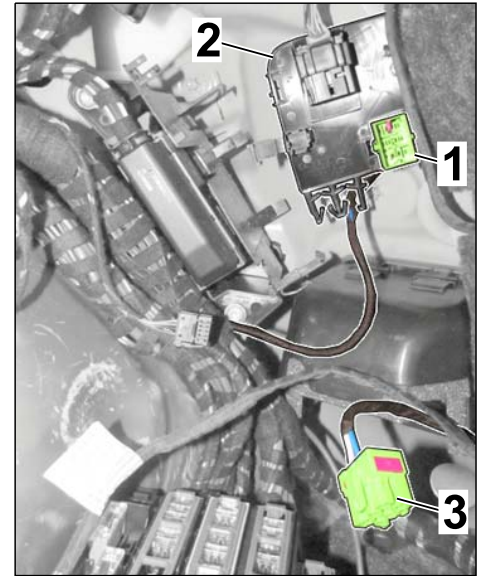


Figure 3

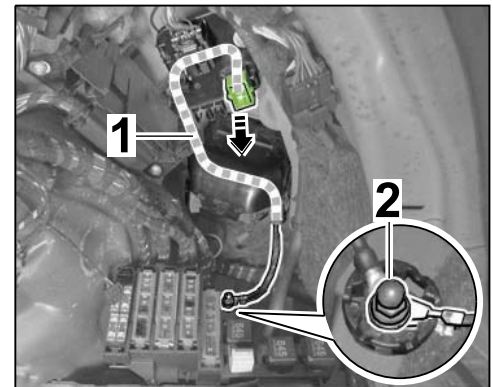


Figure 4

2.2 Install and connect towbar system control unit

2.2.1 Clip towbar system control unit into bracket (⇒ *Figure 5*).

- 1 – Trailer hitch control unit
- 2 – Towbar system preparation
- 3 – Main wire harness
- 4 – Bracket



Information

Wire harness for trailer hitch preparation is secured to the main wire harness in the luggage compartment at the right ⇒ *Figure 4 -3-*.

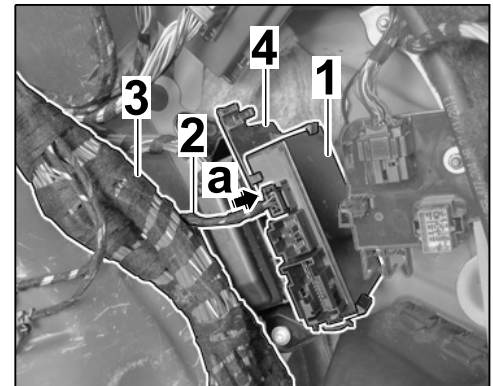


Figure 5

2.2.2 Disconnect towbar system preparation connector from main wiring harness.

2.2.3 Connect towbar system preparation plug to the trailer hitch control unit (⇒ *Figure 5 -a-*).

2.3 Prepare control unit wire harness for installation

- A** – Wire harness for control unit (Not for USA)
- B** – Wire harness for control unit (USA version)
- 1** – Branch for electric towbar system button

2.3.1 Complete wire harness USA version (⇒ *Figure 6 -B-*).

2.4 Connect branch for power supply (control unit wiring harness)

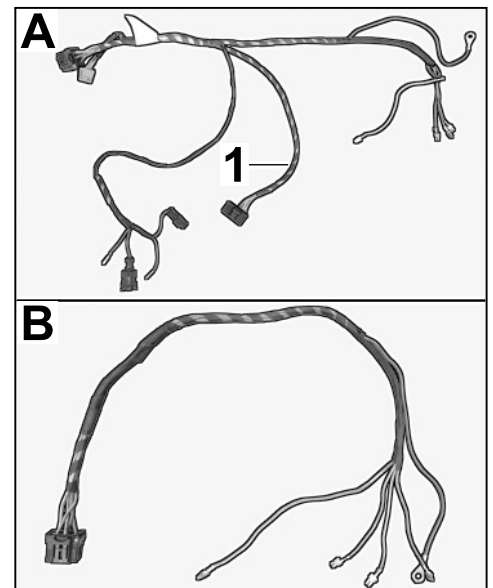


Figure 6

2.4.1 Loosening fuse box in the luggage compartment

- 1 – Hexagon nut
- 2 – Fuse box (luggage compartment)

Remove hexagon nut (⇒ *Figure 7*).

Pull fuse box (boot) out of the openings on the longitudinal member (⇒ *Figure 7-a*).

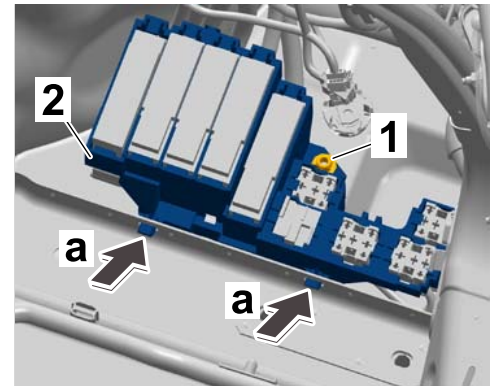


Figure 7

2.4.2 Release locks of fuse strip C and fuse strip B. Remove fuse strips B / C by pulling them down (⇒ *Figure 8 -Arrows-*) out of the fuse box.

- 1 – Fuse strip B
- 2 – Fuse strip C
- 3 – Locking mechanism

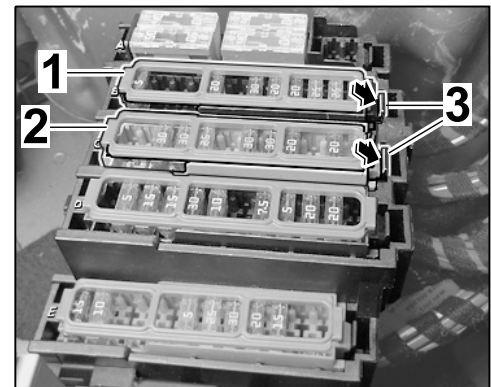


Figure 8

2.4.3 Release bottom cap from fuse strips B and C on both sides and unclip it (⇒ *Figure 9-a*).

- 1 – Locking mechanism
- 2 – Bottom cap

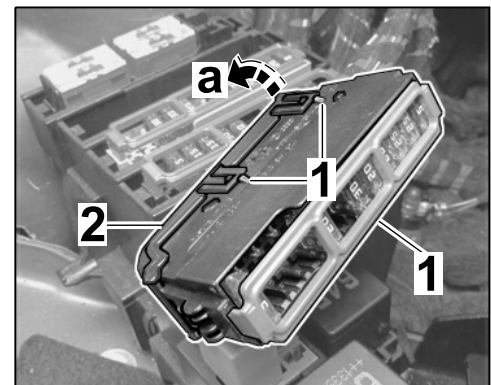


Figure 9

2.4.4 Use a screwdriver to open the secondary lock on fuse strips B and C (⇒ Figure 10-a).

- 1 - Secondary lock
- 2 - Screwdriver



Information

Ensure socket contact is seated securely.

2.4.5 Insert socket contacts into fuse strips B / C as follows:

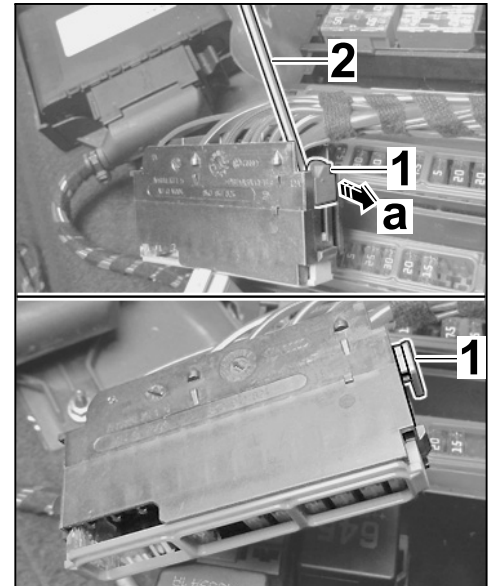


Figure 10

Fuse strip B, 1.5 mm ²		Chamber
RD/WH line	⇒	2
RD/YE line	⇒	3
RD/BU line	⇒	4

Fuse strip C, 2.5 mm ²		Chamber
RD/WH line	⇒	1

2.4.6 Close secondary lock on fuse strips B and C.

2.4.7 Install cap on fuse strips B and C.

2.4.8 Insert fuse strips C and B into the fuse box in the luggage compartment.

2.5 Secure fuse box in the luggage compartment.

- 1 – Hexagon nut
- 2 – Fuse box (luggage compartment)

2.5.1 Install fuse box (luggage compartment) into the openings on the longitudinal member (⇒ *Figure 11-a*).

2.5.2 Install hexagon nut.

2.6 Route and connect control unit wire harness.

2.6.1 Route control unit wire harness to the trailer hitch control unit.

- 1 – Ground line for trailer hitch
- 2 – Ground pin 42
- 3 – Tie-wrap

Connect plug connection (⇒ *Figure 12-a*).

Secure control unit wire harness with a tie-wrap (⇒ *Figure 12-3*).

2.6.2 Route cable ring eyelet of ground line for towbar system (⇒ *Figure 12-1*) to ground pin 42 (⇒ *Figure 12-2*).

2.6.3 Secure cable ring eyelets from ground line for trailer hitch and ground line from control unit wire harness to ground pin 42.

Tightening torque 9 Nm (6.5 ftlb.)

2.7 Secure towbar system as shown in Figure 13 (⇒ *Figure 13*).

- 1 – 30-amp/fuse strip C
- 2 – 20-amp/fuse strip B
- 3 – 20-amp/fuse strip B
- 4 – 20-amp/fuse strip B

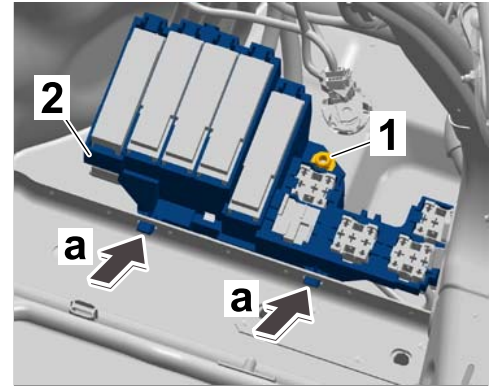


Figure 11

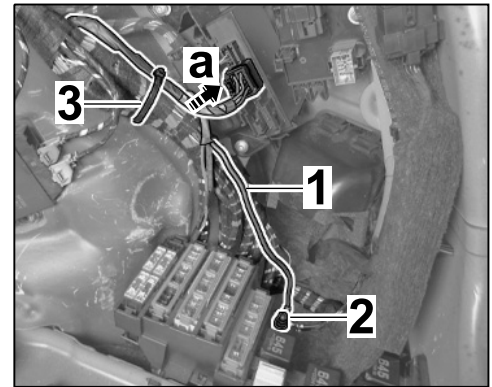


Figure 12



Figure 13

3 Install trailer hitch

3.1 **ONLY USA, Puerto Rico:**
Mount cap with four screws M5 x 16 onto holder plate of towbar system (⇒ *Figure 16*).

- 1 – Screw, M5 x 16
- 2 – Cap

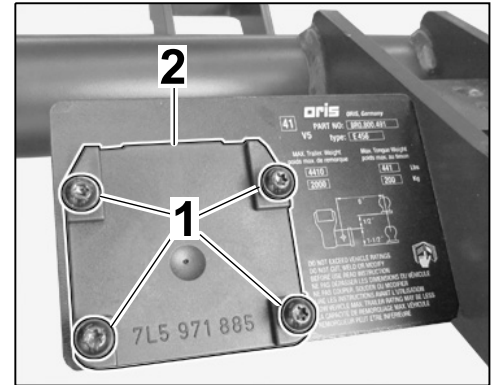


Figure 16

3.2 Remove dummy plug from rear closing panel (⇒ *Figure 17*).

- 1 – Dummy plug

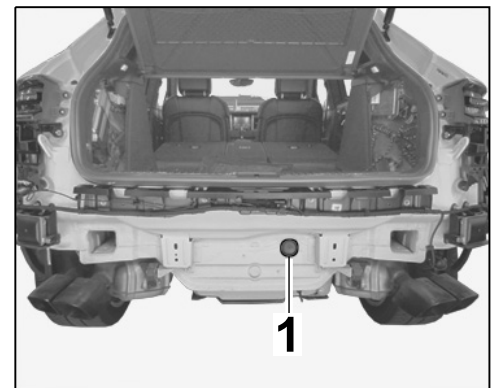


Figure 17

3.3 Install trailer hitch

3.3.1 Insert towbar system guide profile into the longitudinal member on the vehicle, position it and secure it with four new screws, M10 x 105 x 45 (⇒ *Figure 18*).

- 1 – Screw, M10 x 105 x 45

Screw, M10 x 105 x 45 (4 ea.):
Tightening torque 50 Nm
(37.5 ftlb.) +90° (+67.5 ftlb.)

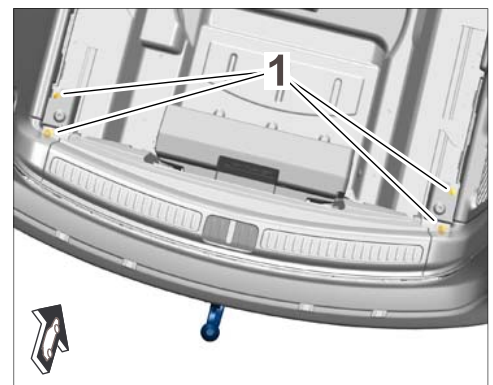


Figure 18

- 3.3.2 Guide wire harness for towbar system through rear closing panel into the boot.

1 – Cable clip

Install grommet in rear wall (⇒ *Figure 19-Arrow-*)

Install cable clip (wire harness for towbar system) on bolt (⇒ *Figure 19-1-*).

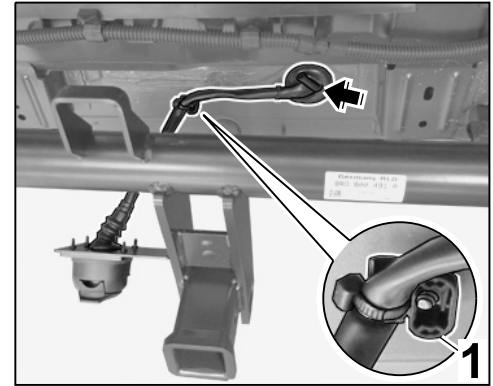


Figure 19

- 3.3.3 Route wire harness for towbar system (⇒ *Figure 20-1-*) to the towbar system control unit.

1 – Wire harness for trailer hitch
2 – Cable clip
3 – Bracket

Install cable clip (⇒ *Figure 20-2-*) on back panel.

Install wire harness for trailer hitch in the bracket (⇒ *Figure 20-3-*).

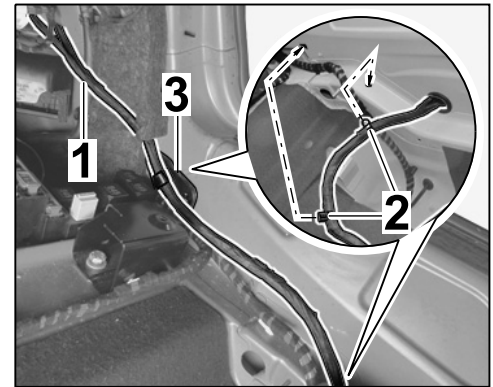


Figure 20

- 3.3.4 Connect plug to towbar system preparation (⇒ *Figure 21-1-*).

1 – Connection to towbar system preparation
2 – Towbar system control unit connection

Connect plug to the towbar system control unit (⇒ *Figure 21-2-*)

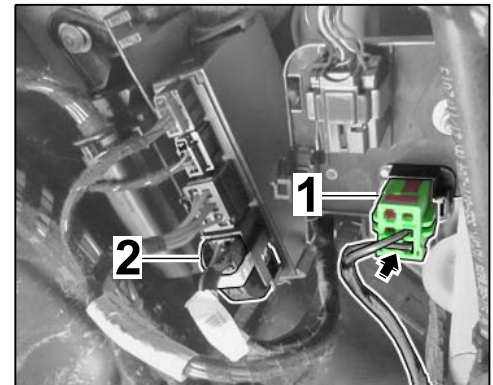


Figure 21

4 Concluding work

- 4.1 Install side trim panel for luggage compartment at the right side (⇒ *Workshop Manual '700319 Removing and installing side trim panel for rear luggage compartment'*).
- 4.2 Install cover for rear lock carrier (⇒ *Workshop Manual '703919 Removing and installing cover for rear lock carrier'*).

- 4.3 Install side trim panel for luggage compartment (loadspace cover) (⇒ *Workshop Manual '700619 Removing and installing side trim panel for luggage compartment (luggage compartment cover)*).
- 4.4 Install center luggage compartment trim panel (luggage compartment cover) (⇒ *Workshop Manual '700619 Removing and installing centre luggage compartment trim panel (luggage compartment cover)*).
- 4.5 Convert rear panel (⇒ *Workshop Manual '635619 Removing and installing rear panel*).
- 4.6 Install rear apron (⇒ *Workshop Manual '635519 Removing and installing rear apron*).

Coding: 5 Code trailer hitch

NOTICE

Voltage drop

- Risk of irreparable damage to control unit
 - Risk of damage to control unit
 - Fault entries in the control unit
 - Coding in the control unit is aborted
 - Malfunctions in control unit, even during programming
- ⇒ Switch off the ignition and remove the ignition key before disconnecting the control unit.
- ⇒ Ensure that the power supply is not interrupted during programming.
- ⇒ Connect a battery charger with a current rating of at least Nominal value 90 A to the vehicle battery.

- 5.1 Connect battery charger (⇒ *Workshop Manual '2X00IN battery trickle charging*).



Information

The **9900 - PIWIS Tester III** instructions take precedence since the description may be different with later Tester releases.

The procedure described here has been structured in general terms; different text or additions may appear on the **9900 - PIWIS Tester III**.

- 5.2 **9900 - PIWIS Tester 3** must be connected before switching on the ignition.
- 5.3 Select the required vehicle type. PIWIS Tester Diagnostics starts.
- 5.4 Maintenance of vehicle data
 - 5.4.1 Select Additional menu by pressing •F7" . Press •F11" to confirm the question "Create Vehicle Analysis Log (VAL)?".

- 5.4.2 Select the "Maintenance of vehicle data" function. Press •F12" until "PR numbers" appears in the Value group column.
- 5.4.3 In the 'Family' column: Select "Towbar system".
Open the drop-down menu in the "Value" column and select "1D6 - Towbar system without ball hitch (USA)". Press •F12" to continue.
- 5.4.4 Selected values are displayed. Press •F8" to write values.
Wait until the message "Generation of vehicle data is complete. ..." appears.
- 5.4.5 Press •F12" to switch to Report management.
- 5.4.6 Press •F10" to open the log and check that vehicle equipment "1D6 - Towbar system without ball hitch (USA)" is entered.
Close the log.
- 5.4.7 Press •F11" to switch to the control unit overview.
- 5.5 Adapt coding.
 - 5.5.1 Select all control units with •Ctrl A" .
 - 5.5.2 Switch to the "Codings/adaptations" menu.
 - 5.5.3 Select function "Automatic coding". Press •F12" to continue.
 - 5.5.4 Wait until the message "Coding has been completed successfully." appears. Press •F12" to continue.
 - 5.5.5 Switch back to the "Overview!" menu.
- 5.6 Read out the fault memories of all systems, work through any existing faults and erase the fault memories. ⇒ *Workshop Manual '0335IN Diagnostic maintenance: diagnostic system and maintenance inter...'*
- 5.7 Switch off ignition and disconnect **9900 - PIWIS Tester 3**.
- 5.8 Disconnect battery charger (⇒ *Workshop Manual '2X00IN Battery trickle charging'*)

66 90 23 03: Mechanical towbar system (1 x) installed Labor time: **235 TU**
Includes: Removing and installing rear panel, installing and coding towbar system.

91 70 25 53: Lane Change Assist control unit programmed Labor time: **47 TU**
Includes: Calibrating calibration plate on the vehicle.

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