

# Technical Information Service 196/23 ENU WPS3 2

# WPS3 - Replacing HV Voltage Converter (Workshop Campaign)

Model Line: Taycan (Y1A / Y1B)

Model Year: As of 2020 up to 2022

Concerns: **HV voltage converter** 

Cause: On the affected vehicles, the high-voltage battery including the high-voltage battery

control unit (BMCe) was not replaced in conjunction with the HV voltage transformer.

When switched off, this can lead to an "Elevated vehicle electrical system – service required" warning message in the instrument cluster and reduced driving readiness. There are no malfunctions while

driving.

Action: Replace HV voltage converter.

Affected Only vehicles assigned to the campaign (see also PCSS Vehicle Information).

Vehicles:

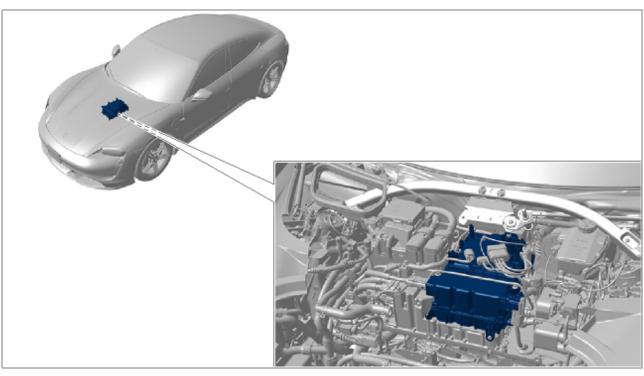


#### Information

Please note that the WPS3 workshop campaign is carried out in conjunction with the WPL8 workshop campaign if possible. In this case, Scope 1 must be invoiced. In case the WPL8 workshop campaign has already been carried out, Scope 2 must be invoiced.

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Installation Position:



HV voltage converter installation position

# Required parts and materials

Parts Info: Part No. Designation Number

- Location

Only for vehicles with the following equipment: HV voltage converter for low booster (M-No. KM1) and rear-wheel drive (M-No. 1X2)

9J1915539CK  $\Rightarrow$  HV voltage converter for low booster 1 piece

Only for vehicles with the following equipment: HV voltage converter for low booster (M-No. KM1) and all-wheel drive (M-No. 1X1)

9J1915539DP  $\Rightarrow$  HV voltage converter for low booster 1 piece

Only for vehicles with the following equipment: HV voltage converter for high booster (M-No. KM2) and rear-wheel drive (M-No. 1X2)

9J1915539DN  $\Rightarrow$  HV voltage converter for high booster 1 piece

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Only for vehicles with the following equipment: HV voltage converter for high booster (M-No. KM2) and all-wheel drive (M-No. 1X1)

9J1915539CN  $\Rightarrow$  HV voltage converter for high booster 1 piece

Additionally required parts:

N 10261307  $\Rightarrow$  M10 hexagon nut 2 pieces

- Wiper arm

PAF912040  $\Rightarrow$  Hexagon-head bolt M8 x 50 4 pieces

- (Dome) strut to spring strut mount

Materials: Required materials (usually already available in the Porsche Center):

Part No.DesignationQuantity00004330516⇒ Coolant additive, 20-liter/ 5.28 gal container0.03 piece

- Cooling system

# Required tool

Tools: • Threaded bolts for installing wheel

- Assembly wedge
- Plastic wedge
- Torque wrench, 2–10 Nm (1.5–7.5 ftlb.), e.g.V.A.G 1783 torque wrench, 2–10 Nm (1.5–7.5 ftlb.)
- Torque wrench, 6–50 Nm (4.5–37 ftlb.), e.g. V.A.G 1331A torque wrench, 6–50 Nm (4.5–37 ftlb.)
- Torque wrench 40–200 Nm (30–148 ftlb.), e.g. V.A.G 1332A Torque wrench 40–200 Nm (30–148 ftlb.)
- Battery charger with a current rating of at least 90 A, e.g. VAS 5908 battery charger 90 A
- P90999 PIWIS Tester 4
- VAS 6883 Insulated tool set
- VAS 6558A High-voltage test adapter
- VAS 6558A/27 Set of Kelvin clamps and test probes
- VAS 6410 Contact surface cleaning set
- VAS 6558/9-6A High-voltage test adapter
- T40262 Locking cap
- Pole terminal puller
- 3093 Hose clamp
- VAS 6675A Funnel
- VAS 531 011 Cooling system service equipment
- VAS 6096/2 Vacuum pump

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#### Country-specific tools:

- VAS 6558/10-1 High-voltage test adapter
- VAS 6558/14A High-voltage test adapter
- VAS 6558/17A High-voltage test adapter
- VAS 6558/10-2 High-voltage test adapter
- VAS 6558/18A High-voltage test adapter
- VAS 6558/13A High-voltage test adapter
- VAS 6558/22 High-voltage test adapter

## Replacing HV voltage converter

Work Procedure:



#### Information

For vehicles for which the WPL8 workshop campaign and WPS3 workshop campaign are carried out together, no separate **vehicle analysis log (VAL)** needs to be created for WPS3 workshop campaign. In this case, only one VAL before and one VAL after the activities should be created and returned.

- 1 **CreateVehicle Analysis Log (VAL)** using the PIWIS Tester. Mark the vehicle analysis log you have created with the attribute "**Pre-VAL**" and after carrying out the campaign, return it using the PIWIS Tester.
- 2 Replace HV voltage converter. ⇒ Workshop Manual '270319 Removing and installing HV voltage converter'
- 3 Teach **new** HV voltage converter. ⇒ Workshop Manual '270355 Replace HV voltage converter'
- 4 CreateVehicle Analysis Log (VAL) using the PIWIS Tester. Mark the vehicle analysis log you have created with the attribute "Post-VAL" and after carrying out the campaign, return it using the PIWIS Tester.
- 5 Enter the campaign in the Warranty and Maintenance logbook.

## Warranty processing



#### Information

The specified labor times were determined specifically for carrying out this campaign and include all necessary preliminary and subsequent rework. The labor times may differ from the Labor times published in the Labor Operation List in PCSS.

#### Scope 1: Replacing HV voltage converter

 Valid for vehicles for which the workshop campaign was carried out in conjunction with the WPL8 workshop campaign

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Service

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Labor time: 228 TU

Labor time: 684 TU

#### Labor time:

Replacing HV voltage converter

Includes: Removing and installing strut (dome strut)

Loosening and fastening reservoir

Loosening and fastening electric passenger compartment

heater

Teaching HV voltage converter

#### Required parts:

Only for vehicles with the following equipment: HV voltage converter for low booster (M-No. KM1) and rear-wheel drive (M-No. 1X2)

9J1915539CK HV voltage converter for low booster 1 piece

Additionally required parts:

 N 10261307
 M10 hexagon nut
 2 pieces

 PAF912040
 M8 x 50 hexagon-head bolt
 4 pieces

**Required materials** (usually already available in the Porsche Center):

00004330516 Coolant additive, 20-liter/ 5.28 gal container 0.03 piece

⇒ Damage number WPS3 066 000 2

#### Scope 2: Replacing HV voltage converter

Valid for vehicles for which the WPL8 workshop campaign was already carried out

#### Labor time:

Replacing HV voltage converter

Includes: Deactivating and activating high-voltage system

Draining and filling coolant Bleeding cooling system

Removing and installing luggage compartment tray

Removing and installing front cover Removing and installing cowl panel cover Loosening and fastening front end fuse box

Disconnecting and securing ground strap for battery

Removing and installing strut (dome strut)

Loosening and fastening reservoir

Loosening and fastening electric passenger compartment

heater

Teaching HV voltage converter Creating pre- and post-VAL

Labor time: 228 TU

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# Required parts:

Only for vehicles with the following equipment: HV voltage converter for low booster (M-No. KM1) and rear-wheel drive (M-No. 1X2)

9J1915539CK HV voltage converter for low booster 1 piece

Additionally required parts:

 N 10261307
 M10 hexagon nut
 2 pieces

 PAF912040
 M8 x 50 hexagon-head bolt
 4 pieces

**Required materials** (usually already available in the Porsche Center):

00004330516 Coolant additive, 20-liter/ 5.28 gal container 0.03 piece

⇒ Damage number WPS3 066 000 2

#### Scope 3: Replacing HV voltage converter

 Valid for vehicles for which the workshop campaign was carried out in conjunction with the WPL8 workshop campaign

#### Labor time:

Replacing HV voltage converter

Includes: Removing and installing strut (dome strut)

Loosening and fastening reservoir

Loosening and fastening electric passenger compartment

heater

Teaching HV voltage converter

#### Required parts:

Only for vehicles with the following equipment: HV voltage converter for low booster (M-No. KM1) and all-wheel drive (M-No. 1X1)

9J1915539DP HV voltage converter for low booster 1 piece

Additionally required parts:

 N 10261307
 M10 hexagon nut
 2 pieces

 PAF912040
 M8 x 50 hexagon-head bolt
 4 pieces

**Required materials** (usually already available in the Porsche Center):

00004330516 Coolant additive, 20-liter/ 5.28 gal container 0.03 piece

⇒ Damage number WPS3 066 000 2

#### Scope 4: Replacing HV voltage converter

Valid for vehicles for which the WPL8 workshop campaign was already carried out

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Service

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Labor time: 684 TU

#### Labor time:

Replacing HV voltage converter

Includes: Deactivating and activating high-voltage system

Draining and filling coolant Bleeding cooling system

Removing and installing luggage compartment tray

Removing and installing front cover Removing and installing cowl panel cover Loosening and fastening front end fuse box

Disconnecting and securing ground strap for battery

Removing and installing strut (dome strut) Loosening and fastening reservoir

Loosening and fastening electric passenger compartment

heater

Teaching HV voltage converter Creating pre- and post-VAL

# Required parts:

Only for vehicles with the following equipment: HV voltage converter for low booster (M-No. KM1) and all-wheel drive (M-No. 1X1)

9J1915539DP HV voltage converter for low booster 1 piece

Additionally required parts:

 N 10261307
 M10 hexagon nut
 2 pieces

 PAF912040
 M8 x 50 hexagon-head bolt
 4 pieces

**Required materials** (usually already available in the Porsche Center):

00004330516 Coolant additive, 20-liter/ 5.28 gal container 0.03 piece

⇒ Damage number WPS3 066 000 2

## Scope 5: **Replacing HV voltage converter**

 Valid for vehicles for which the workshop campaign was carried out in conjunction with the WPL8 workshop campaign

#### Labor time:

Replacing HV voltage converter

Includes: Removing and installing strut (dome strut)

Loosening and fastening reservoir

Loosening and fastening electric passenger compartment

heater

Teaching HV voltage converter

#### Required parts:

Labor time: 228 TU

Labor time: 684 TU

Only for vehicles with the following equipment: HV voltage converter for high booster (M-No. KM2) and rear-wheel drive (M-No. 1X2)

9J1915539DN HV voltage converter for high booster 1 piece

Additionally required parts:

 N 10261307
 M10 hexagon nut
 2 pieces

 PAF912040
 M8 x 50 hexagon-head bolt
 4 pieces

**Required materials** (usually already available in the Porsche Center):

00004330516 Coolant additive, 20-liter/ 5.28 gal container 0.03 piece

⇒ Damage number WPS3 066 000 2

## Scope 6: Replacing HV voltage converter

Valid for vehicles for which the WPL8 workshop campaign was already carried out

#### Labor time:

Replacing HV voltage converter

Includes: Deactivating and activating high-voltage system

Draining and filling coolant Bleeding cooling system

Removing and installing luggage compartment tray

Removing and installing front cover Removing and installing cowl panel cover Loosening and fastening front end fuse box

Disconnecting and securing ground strap for battery

Removing and installing strut (dome strut)

Loosening and fastening reservoir

Loosening and fastening electric passenger compartment

heater

Teaching HV voltage converter Creating pre- and post-VAL

#### Required parts:

Only for vehicles with the following equipment: HV voltage converter for high booster (M-No. KM2) and rear-wheel drive (M-No. 1X2)

9J1915539DN HV voltage converter for high booster 1 piece

Additionally required parts:

 N 10261307
 M10 hexagon nut
 2 pieces

 PAF912040
 M8 x 50 hexagon-head bolt
 4 pieces

**Required materials** (usually already available in the Porsche Center):

00004330516 Coolant additive, 20-liter/ 5.28 gal container 0.03 piece

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Labor time: 228 TU

## Scope 7: Replacing HV voltage converter

 Valid for vehicles for which the workshop campaign was carried out in conjunction with the WPL8 workshop campaign

#### Labor time:

Includes:

Replacing HV voltage converter

Removing and installing strut (dome strut)

Loosening and fastening reservoir

Loosening and fastening electric passenger compartment

heater

Teaching HV voltage converter

# Required parts:

Only for vehicles with the following equipment: HV voltage converter for high booster (M-No. KM2) and all-wheel drive (M-No. 1X1)

9J1915539CN HV voltage converter for high booster 1 piece

Additionally required parts:

 N 10261307
 M10 hexagon nut
 2 pieces

 PAF912040
 M8 x 50 hexagon-head bolt
 4 pieces

**Required materials** (usually already available in the Porsche Center):

00004330516 Coolant additive, 20-liter/ 5.28 gal container 0.03 piece

⇒ Damage number WPS3 066 000 2

#### Scope 8: Replacing HV voltage converter

Valid for vehicles for which the WPL8 workshop campaign was already carried out

#### Labor time:

Replacing HV voltage converter

Includes: Deactivating and activating high-voltage system

Draining and filling coolant Bleeding cooling system

Removing and installing luggage compartment tray

Removing and installing front cover Removing and installing cowl panel cover Loosening and fastening front end fuse box

Disconnecting and securing ground strap for battery

Labor time: 684 TU

Removing and installing strut (dome strut)

Loosening and fastening reservoir

Loosening and fastening electric passenger compartment

heater

Teaching HV voltage converter Creating pre- and post-VAL

#### Required parts:

Only for vehicles with the following equipment: HV voltage converter for high booster (M-No. KM2) and all-wheel drive (M-No. 1X1)

9J1915539CN HV voltage converter for high booster 1 piece

Additionally required parts:

N 10261307 M10 hexagon nut 2 pieces
PAF912040 M8 x 50 hexagon-head bolt 4 pieces

**Required materials** (usually already available in the Porsche Center):

00004330516 Coolant additive, 20-liter/ 5.28 gal container 0.03 piece

⇒ Damage number WPS3 066 000 2

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