

WLE7 - Replacing Double Clutch Transmission (Workshop Campaign)

Vehicle Type: **Panamera 4 E-Hybrid (971)**

Model Year: **2018**

Equipment: Transmission type C0DS5

Subject: **Double clutch transmission**

Information: **There is a possibility that the affected vehicles were installed with a double clutch transmission on which a seal between the transmission bell housing and thrust block is missing. This can result in internal leaks in the double clutch transmission at transmission fluid temperatures greater than 80 °C/ 176 °F.**

If this happens, it will not be possible to engage any other gear initially after engaging transmission range "P" due to the reduced oil pressure. It will not be possible to continue driving until the transmission fluid temperature has cooled down.

Remedial Action: Replace double clutch transmission.

Affected Vehicles: Only vehicles assigned to the campaign (see also PCSS Vehicle Information). There are 4 vehicles affected by this campaign.



WARNING

Incorrect handling of high-voltage components

- Electric shock
 - Short circuit
 - Fire
 - Explosion
- ⇒ Only appropriately trained and authorized persons are permitted to work on high-voltage vehicles and components.
- ⇒ Required qualification: High voltage technician or high voltage expert.
- ⇒ Observe national requirements and legislation for this work.
- ⇒ Always use insulated tools, e.g. VAS 6883 High-voltage tool set when working on these components.
- ⇒ Observe general warning notes for working on the high-voltage system. ⇒ *Workshop Manual '2X00IN General warning notes for working on the high-voltage system'*

Parts required

Parts Info:	Part No.	Designation – Use	Qty.
	9A7300115BX	⇒ 8-speed double clutch transmission for vehicles with hybrid drive transmission type (C0DS5)	1 ea.
	9A700863500	⇒ Internal hexagon round-head bolt, M8 x 40 – Electric drive motor to double clutch transmission	14 ea.
	9A7301131	⇒ Seal – Electric drive motor to double clutch transmission	1 ea.
	9A700839600	⇒ Hexagon-head bolt, M12 x 100 x 30 – Bolts on transmission	5 ea.
	N 91153202	⇒ 12 point socket, AM10 x 95 – Bolts on transmission	4 ea.
	012409413	⇒ Circlip – Connecting shaft	1 ea.
	N 10750001	⇒ Internal hexagon round-head countersunk screw, M6 x 16 – Heat shield on transmission	4 ea.
	N 10551901	⇒ Hexagon-head bolt, M10 x 30 – A strut to body	2 ea.
	N 90440003	⇒ Hexagon-head bolt, M8 x 35 – A-strut to body	2 ea.
	N 91251301	⇒ Hexagon flange bolt, M10 x 60 – Transmission support	6 ea.
	N 91244301	⇒ Combination screw, M12 x 1.5 x 90 – Front-axle carrier to body	8 ea.
	N 91260401	⇒ Combination screw, M10 x 45 – Front-axle carrier to body	2 ea.
	N 10628301	⇒ Hexagon flange bolt – Lower wishbone to spring strut	2 ea.

PAF104029	⇒ Hexagon collar nut – Steering gear	2 ea.
WHT005819	⇒ Hexagon collar nut, self-locking – Wheel carrier to upper wishbone	2 ea.
9A757374903	⇒ O-ring, 16.25 x 2.5 – Refrigerant line in engine compartment	2 ea.
99970755741	⇒ O-ring, 11.0 x 2.5NX – Refrigerant line in engine compartment and condenser	2 ea.
95557374900	⇒ Round seal, 9.5 x 2.5 – Refrigerant line for condenser	1 ea.
9A700819800	⇒ O-ring, 15 x 3.6 – Oil line to transmission	2 ea.
9A700489400	⇒ O-ring, 31.42 x 2.62 – Cardan shaft to double clutch transmission	1 ea.
9A752572202	⇒ Circlip – Cardan shaft to double clutch transmission	1 ea.
WHT005156	⇒ O-ring, 28 x 2 – Cardan shaft to rear axle differential	1 ea.
9A750730100	⇒ Circlip – Cardan shaft to rear axle differential	1 ea.
N 10664503	⇒ Hexagon flange bolt, M8 x 45 – Strut reinforcement	2 ea.
WHT008539	⇒ Hexagon flange bolt (duo), M10 x 80 – Torque support and dome strut	2 ea.
N 10625901	⇒ Collared cheese head bolt with multiple-tooth head, M10 x 70 – Torque support	1 ea.
N 10261311	⇒ Hexagon nut, M10 – Dome strut	1 ea.
WHT004955A	⇒ Internal hexagon round cheese head bolt, M8 x 30 – Steering column universal joint	1 ea.
WHT004572	⇒ Collared cheese head bolt with hexagon socket head for fixed calliper, M14 x 1.5 x 135 – Brake calliper	4 ea.
971253115B	⇒ Seal – Primary catalytic converter to turbocharger	2 ea.

9A725372500	⇒ V-band clamp – Primary catalytic converter to turbocharger	2 ea.
95511110830	⇒ Clamp – Catalytic converter to exhaust system	2 ea.
9A700499500	⇒ Hexagon nut, M12 x 1.5 – Tie rod to wheel carrier	2 ea.
N 10609207	⇒ Hexagon collar nut	2 ea.
N 10629602	⇒ Hexagon flange bolt, M10 x 35 – Subframe	4 ea.
N 91257801	⇒ Hexagon-head bolt, M8 x 80 – For securing anti-roll bar to steering gear	1 ea.
N 10435506	⇒ Hexagon collar nut, self-locking, M8 – For securing anti-roll bar to steering gear/transmission support	1 ea.
N 10784702	⇒ Hexagon flange bolt – Steering gear	2 ea.
N 91006202	⇒ Hexagon-head bolt, M10 x 32 (combination) – Anti-roll bar	4 ea.
N 10793603	⇒ Hexagon flange bolt, M12 x 1.5 x 60 – Anti-roll bar to connecting link	2 ea.
N 0150818	⇒ Hexagon collar nut – Anti-roll bar to connecting link	2 ea.

Additional parts required **if the camber on the front axle must be corrected** during suspension alignment:



Information

The camber on the front axle cannot be adjusted, but must be centered evenly within the tolerance range by moving the front-axle carrier.

After correcting the camber, the front-axle carrier must be screwed to the body using **new fastening screws**.

We recommend that you keep **one set of fastening screws** available **for each affected Porsche dealer** in order to prevent delays in carrying out this campaign.

Part No.	Designation – Use	Qty.
N 91244301	⇒ Combination screw, M12 x 1.5 x 90 – Front-axle carrier to body	8 ea.
N 91260401	⇒ Combination screw, M10 x 45 – Front-axle carrier to body	2 ea.

Materials: **Required materials** (usually already available at the Porsche dealer):

Part No.	Designation – Use	Qty.
00004330515	⇒ Coolant additive, 1 liter	As much as required (approx. 0.5 liter required per vehicle)
00004321044	⇒ Pentosin FFL-8, 1-liter container – ATF for transmission	As much as required (approx. 0.2 liter required per vehicle)
00004330539	⇒ Klüberplus Gel grease, 100g/ 3.5 oz tube – O-rings	As much as required (approx. 10 grams/ 0.35 oz required per vehicle)
00004320707	⇒ Optimol Paste MF grease, 100g/ 3.5 oz tube – Oxygen sensor	As much as required (approx. 10 grams/ 0.35 oz required per vehicle)
00004330122	⇒ Anti Seize AS 040P mounting paste, 10g/ 0.35 oz container – Engine/transmission flange	As much as required (approx. 10 grams/ 0.35 oz required per vehicle)

Required tools

Tools:

Special tools:

Designation/Comment	Use
VAS 6558A High-voltage test adapter	Removing and installing engine
VAS 6558/9-6 -High-voltage test adapter HVA 280	
VAS 6883 - Insulated Tool Set	
VAS 6832 Master Gear unit elevating platform	
VAS 6832/7 Assembly fixture - Panamera G2	
VAS 6928 Socket wrench set, 39-piece	
Spring Band Clamp Pliers	
T10187 - Press-out tool	Removing wishbone at the wheel carrier
9889 - Press-off tool	Removing and installing cardan shaft
9799 - Impact puller	Connecting shaft (removing transmission)
VAS 6096/2 Vacuum pump	Draining/filling coolant and bleeding the cooling system
9696 - Filling device	
VAS 6889 Spring Band Clamp Pliers	
VAS 6931 Transmission and Engine Jack	Removing and installing exhaust system
T40178B - Oil gauge tester	Checking engine-oil level
VAS 6262A Adapter for Oil Filling	Checking and topping up ATF
VAS 6262/2 Adapter for Filling ATF Oil	
Suitable air-conditioning servicing unit, e.g. VAS 581 001 Air-conditioning service unit R1234yf	Draining and filling in refrigerant
Suitable air-conditioning servicing unit, e.g. VAS 6746A Air-conditioning service station R134a	
VAS 6350/4 Calibration Unit for Lane Change Assist	Calibrating driver assistance systems
9900 - PIWIS Tester 3	On-board diagnosis (OBD)
VAS 5908 Battery Charger, 90 A	
VAS 6826 Steering wheel balance	Performing suspension alignment
VAS 6918 Quick-Clamping Unit	
9229/1 - Puller hook	
T10188 - Open-end spanner insert	

General tools:

- Torque wrench, 2 – 10 Nm (1.5 – 7.5 ftlb.), e.g. **VAG 1783 Torque wrench, 2-10 Nm (1.5-7.5 ftlb.)**
- Torque wrench, 6 – 50 Nm (4.5 – 37 ftlb.), e.g. **VAG 1331A Torque wrench, 6-50 Nm (4.5-37 ftlb.)**
- Torque wrench, 40 – 200 Nm (30 – 148 ftlb.), e.g. **VAG 1332 Torque wrench, 40-200 Nm (30-148 ftlb.)**
- Torque angle torque wrench, e.g. **9768 - Electronic torque wrench, 2 - 100 Nm/1.5 - 74 ftlb.**

Replace double clutch transmission

Information
Handling high-voltage lines:

- Do not support yourself or your tools on high-voltage lines and their components.
- Work involving metal-removing, deforming and sharp-edged tools close to high-voltage components and lines is prohibited.
- Work involving heat sources such as welding, soldering, hot air and thermal bonding close to high-voltage components and lines is prohibited.
- High-voltage lines must not be extensively bent or kinked.

- Work Procedure: 1 Remove engine ⇒ *Workshop Manual '100119 Removing and installing engine (V6 Hybrid)'*
- 2 Remove double clutch transmission from engine ⇒ *Workshop Manual '373427 Removing and mounting double clutch transmission (V6 Hybrid)'*
- 3 Remove peripheral parts on the double clutch transmission to be replaced and install them on the new double clutch transmission ⇒ *Workshop Manual '373455 Replacing double clutch transmission (Hybrid)'*
- 4 Install new double clutch transmission ⇒ *Workshop Manual '373419 Removing and installing double clutch transmission (V6 biturbo)'*
- 5 Install engine ⇒ *Workshop Manual '100119 Removing and installing engine'*
- 6 Re-program and calibrate PDK control unit ⇒ *Workshop Manual '373455 Replacing double clutch transmission'*
- 7 Enter the campaign in the Warranty and Maintenance booklet.

- References: ⇒ *Workshop Manual '1X00IN Technical values (V6 biturbo)'*
 ⇒ *Workshop Manual '100119 Removing and installing engine'*
 ⇒ *Workshop Manual '103719 Removing and installing torque support'*

- ⇒ Workshop Manual '108319 Removing and installing engine cover (design cover) (V6 biturbo)'
- ⇒ Workshop Manual '170101 Checking engine-oil level'
- ⇒ Workshop Manual '170117 Draining and filling engine oil'
- ⇒ Workshop Manual '193817 Draining and filling coolant (includes bleeding)'
- ⇒ Workshop Manual '2X00IN Technical values (V6 biturbo)'
- ⇒ Workshop Manual '2X00IN Work instructions after disconnecting the battery'
- ⇒ Workshop Manual '242719 Removing and installing air-cleaner cowl'
- ⇒ Workshop Manual '247319 Removing and installing oxygen sensor downstream of catalytic converter (V6 biturbo)'
- ⇒ Workshop Manual '260119 Removing and installing exhaust system'
- ⇒ Workshop Manual '261219 Removing and installing heat shield for turbocharger (V6 biturbo and monoturbo)'
- ⇒ Workshop Manual '261420 Removing and installing heat shields'
- ⇒ Workshop Manual '267319 Removing and installing catalytic converter (V6 BT)'
- ⇒ Workshop Manual '267619 Removing and installing primary catalytic converter (V6 biturbo)'
- ⇒ Workshop Manual '270619 Removing and installing battery'
- ⇒ Workshop Manual '279319 Removing and installing high-voltage line from air-conditioning compressor to connection point in front left wheel housing'
- ⇒ Workshop Manual '279319 Removing and installing high-voltage line from power electronics to electric motor'
- ⇒ Workshop Manual '3X00IN Technical values - Transmission'
- ⇒ Workshop Manual '370235 Checking and topping up ATF'
- ⇒ Workshop Manual '373427 Removing and mounting double clutch transmission (V6)'
- ⇒ Workshop Manual '386219 Removing and installing ATF cooling line (front section)'
- ⇒ Workshop Manual '393519 Removing and installing rear cardan shaft'
- ⇒ Workshop Manual '4X00IN Lifting the vehicle'
- ⇒ Workshop Manual '4X00IN Tightening torques for front axle'
- ⇒ Workshop Manual '4X00IN Tightening torques for brake hydraulic system'
- ⇒ Workshop Manual '407719 Removing and installing front anti-roll bar (PDCC)'
- ⇒ Workshop Manual '408619 Removing and installing strut (dome strut)'
- ⇒ Workshop Manual '421319 Removing and installing strut'
- ⇒ Workshop Manual '440519 Removing and installing wheel'
- ⇒ Workshop Manual '449503 Performing front and rear suspension alignment'
- ⇒ Workshop Manual '4495TW Adjustment values for suspension alignment'
- ⇒ Workshop Manual '473919 Removing and installing front brake calliper'
- ⇒ Workshop Manual '489055 Replacing power-steering gear'
- ⇒ Workshop Manual '503819 Removing and installing lock carrier'
- ⇒ Workshop Manual '505619 Removing and installing front wheel housing liner'
- ⇒ Workshop Manual '519219 Removing and installing cover for front underbody'
- ⇒ Workshop Manual '519319 Removing and installing cover for centre underbody'
- ⇒ Workshop Manual '519419 Removing and installing cover for rear underbody'
- ⇒ Workshop Manual '536919 Removing and installing rear wheel housing liner'
- ⇒ Workshop Manual '551419 Removing and installing cable for front lid lock'
- ⇒ Workshop Manual '553319 Removing and installing front lid seal'
- ⇒ Workshop Manual '635519 Removing and installing rear apron'

- ⇒ *Workshop Manual '700219 Removing and installing front trim panel (engine compartment)'*
- ⇒ *Workshop Manual '703919 Removing and installing cover for front lock support'*
- ⇒ *Workshop Manual '8X00IN Technical values - Air conditioning'*
- ⇒ *Workshop Manual '828019 Removing and installing electric passenger compartment heater'*
- ⇒ *Workshop Manual '870317 Draining and filling refrigerant R134a'*
- ⇒ *Workshop Manual '870317 Draining and filling refrigerant R1234yf'*
- ⇒ *Workshop Manual '905019 Removing and installing horn'*
- ⇒ *Workshop Manual '917025 Programming (calibrating) control unit for Lane Change Assist'*

Warranty processing

Scopes 1 and 2: Not relevant for this vehicle type.

Scope 3: Replace double clutch transmission

Working time:

Replacing double clutch transmission

Labor time: **1666 TU**

- Includes:
- Removing and installing double clutch transmission
 - Removing peripheral parts on the double clutch transmission to be replaced and installing them on the new double clutch transmission
 - Removing and installing engine
 - 2X00IN Isolation from supply prior to performing maintenance tasks on e-hybrid vehicles
 - Draining and filling refrigerant
 - Removing and installing front trim panel (engine compartment)
 - Removing and installing engine cover (design cover)
 - Removing and installing strut (A-strut)
 - Removing and installing air-cleaner cowl
 - Removing and installing front wheel housing liner
 - Removing and installing ATF cooling line
 - Removing and installing exhaust system
 - Removing and installing rear cardan shaft
 - Draining and filling coolant
 - Removing and installing electric passenger compartment heater
 - Removing and installing torque support
 - Removing and installing front brake calliper
 - Removing and installing primary catalytic converters
 - Removing and installing control unit for Lane Change Assist
 - Calibrating control unit for Lane Change Assist
 - Connecting and disconnecting battery charger

Connecting and disconnecting PIWIS Tester
 Re-programming and calibrating PDK control unit
 Performing on-board diagnosis using the PIWIS Tester
 Performing suspension alignment and adjusting the vehicle
 Carrying out an extended test drive

Parts required:

9A7300115BX	8-speed double clutch transmission	1 ea.
9A700863500	Internal hexagon round-head bolt, M8 x 40	14 ea.
9A7301131	Seal for transmission cover	1 ea.
012409413	Circlip	1 ea.
N 10750001	Internal hexagon round-head countersunk screw, M6 x 16	4 ea.
9A700839600	Hexagon-head bolt, M12 x 100 x 30	5 ea.
N 91153202	12 point socket, AM10 x 95	4 ea.
N 10551901	Hexagon-head bolt, M10 x 30	2 ea.
N 90440003	Hexagon-head bolt, M8 x 35	2 ea.
N 91251301	Hexagon flange bolt, M10 x 60	6 ea.
N 91244301	Hexagon flange bolt with hexagon socket head (duo), M12 x 1.5 x 90	8 ea.
N 91260401	Hexagon flange bolt with hexagon socket head (duo), M10 x 45	2 ea.
N 10628301	Hex flange bolt	2 ea.
PAF104029	Hexagon collar nut	2 ea.
WHT005819	Hexagon collar nut	2 ea.
9A757374903	O-ring, 16.25 x 2.5	2 ea.
99970755741	O-ring, 11.0 x 2.5	2 ea.
95557374900	Round seal, 9.5 x 2.5	2 ea.
9A700819800	O-ring, 15 x 3.6	2 ea.
9A700489400	O-ring, 31.42 x 2.62	1 ea.
9A752572202	Circlip	1 ea.
WHT005156	O-ring, 28 x 2	1 ea.
9A750730100	Circlip	1 ea.
N 10664503	Hex flange bolt, M8 x 45	2 ea.

WHT008539	Hexagon flange bolt (duo), M10 x 80	2 ea.
N 10625901	Collared cheese head bolt with multiple-tooth head, M10 x 70	1 ea.
N 10261311	Hexagon nut, M10	1 ea.
WHT004955A	Internal hexagon round cheese head bolt, M8 x 30	1 ea.
WHT004572	Collared cheese head bolt with multiple-tooth head, M14 x 1.5 x 135	4 ea.
971253115B	Seal	2 ea.
9A725372500	V-band clamp	2 ea.
95511110830	Clamp	2 ea.
9A700499500	Hexagon nut, M12 x 1.5	2 ea.
N 10609207	Hexagon collar nut	2 ea.
N 10629602	Hex flange bolt, M10 x 35	4 ea.
N 91257801	Hexagon-head bolt, M8 x 80	1 ea.
N 10435506	Hexagon collar nut, self-locking, M8	1 ea.
N 10784702	Hexagon flange bolt	2 ea.
N 91006202	Hexagon-head bolt, M10 x 32 (combination)	4 ea.
N 10793603	Hexagon flange bolt, M12 x 1.5 x 60	2 ea.
N 0150818	Hexagon collar nut	2 ea.
Additional parts required if the camber on the front axle must be corrected:		
N 91244301	Combination screw, M12 x 1.5 x 90	8 ea.
N 91260401	Combination screw, M10 x 45	2 ea.
Materials required:		
00004330515	Coolant additive (1-liter container)	0.5 ea. (= approx. 0.5 liter)
00004321044	Pentosin FFL-8 (1-liter container)	0.2 ea. (= approx. 0.2 liter)
00004330539	Klüberplus Gel grease (100g/ 3.5 oz tube)	0.1 ea. (= approx. 10 g/ 0.35 oz)
00004320707	Optimol Paste MF grease (100g/ 3.5 oz tube)	0.1 ea. (= approx. 10 g/ 0.35 oz)

00004330122	Anti Seize AS 040P mounting paste (10g/ 0.35 oz container)	1 ea. (= approx. 10 g/ 0.35 oz)
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⇒ Damage Code WLE7 066 000 2

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