

### Symptom-based workshop manual

Service 205/20 ENU 3735

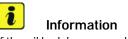
# Transmission Symptom - Oil Leaks on Automatic Transmission: Observe Specified Procedure (SY 205/20)

Model Line:	Cayenne (9YA/9YB)
Model Year:	As of 2018
Concerns:	Automatic transmission
Symptom:	Oil leaks are found on the vehicle in the area of the automatic transmission. The location and cause of the problem cannot always be clearly determined.
Background:	We have discovered that the location and cause could not always be clearly determined in the dealer organization when attempting to resolve the complaint "Oil leak". As a result, some of the repair measures that were carried out were not always effective.
	An oil-contaminated oil pan, for example, may also be caused by oil migrating from the threaded connection on the oil line. <b>Information</b> Oil leaks on the transfer box are described in the document $\Rightarrow$ <i>Technical Information 'Transmission symptom - Oil leaks on transfer box: Observe specified procedure (SY 206/20)'.</i>
Remedial Action:	Find oil leaks and carry out the relevant repair measure.
Preparatory	work

Work Procedure:

### Information

- Oil leaks must be clearly identifiable and reproducible.
- Engine oil and coolant must have reached operating temperature during a test drive.
- 1 Document the original complaint condition with meaningful photos.
- 2 Attach documentation to PQIS line.
- 3 Clean automatic transmission and transfer box thoroughly.



If the oil leak has spread so that the oil pan is also contaminated  $\Rightarrow$  *Oil migration*, proceed as follows in the event of a complaint:

• Check that the screws on the ATF pan are accessible and are seated correctly with the specified tightening torque and secure properly if necessary.

• Clean the area of the ATF pan extremely thoroughly as oil penetration of the ATF pan seal can result in incorrect interpretation.

4 Spray large areas of the automatic transmission and transfer box with SpotCheck around the suspected leakage points.



Oil migration

- 5 Perform a test drive.
- 6 Locate the oil leak:
  - The oil leak is located on the transfer box, continue with ⇒ *Technical Information 'Transmission symptom Oil leaks on transfer box: Observe specified procedure (SY 206/20)'*
  - The oil leak is located on the automatic transmission, continue with ⇒ *Technical Information 'Oil leaks on automatic transmission'*.
  - The oil leak cannot be clearly identified, continue with ⇒ *Technical Information 'Oil leaks on automatic transmission'*.
- 7 Produce photo documentation of the leakage point located using SpotCheck.
- 8 Attach documentation to PQIS line.

#### Oil leaks on automatic transmission



#### Information

Traces of oil on the ATF pan can occur as a result of oil migration. Only in rare cases is the ATF pan seal defective.

1 Check for oil leaks on the underside of the ATF pan  $\Rightarrow$  Crack in ATF pan.

If a crack is discovered, replace the ATF pan, see  $\Rightarrow$  Technical Information 'Replacing ATF pan'.



Crack in ATF pan

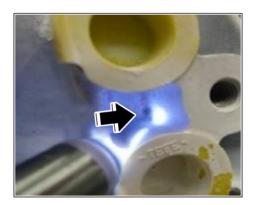
### Information

An oil-contaminated oil pan may also be caused by oil migrating from the threaded connection on the oil line.

- 2 Check for oil leaks on the flange of the ATF cooling line  $\Rightarrow$  *Flange leaking* or  $\Rightarrow$  *Transmission housing porous.* 
  - 2.1 In the case of oil leaks on the flange, replace both sealing rings, see  $\Rightarrow$  *Technical Information 'Replacing sealing ring on ATF cooling line'*.
  - 2.2 In the case of oil leaks between the flanges (transmission housing porous), replace the automatic transmission, see  $\Rightarrow$  *Technical Information 'Replacing automatic transmission'*



Flange leaking



Transmission housing porous

3 Check for oil leaks on the ATF cooling lines  $\Rightarrow$  Friction welded joint for ATF cooling line faulty or  $\Rightarrow$  Friction welded joint for ATF cooling line PHEV faulty.

In the case of oil leaks on the friction welded joint (production fault), replace the relevant ATF cooling line, see  $\Rightarrow$  *Technical Information 'Replacing ATF cooling line'*.



Friction welded joint for ATF cooling line faulty

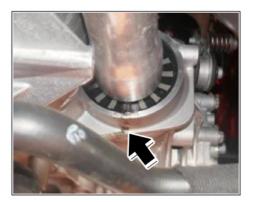
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Friction welded joint for ATF cooling line PHEV faulty

4 Check for oil leaks around the protective tube for drive shaft  $\Rightarrow$  *Drive-shaft sealing ring damaged (front protective tube)* and  $\Rightarrow$  *Drive-shaft sealing ring damaged (rear protective tube)*.

In the case of damage, replace both drive-shaft sealing rings, see  $\Rightarrow$  *Technical Information 'Replacing drive shaft sealing ring'*.



Drive-shaft sealing ring damaged (front protective tube)



Drive-shaft sealing ring damaged (rear protective tube)

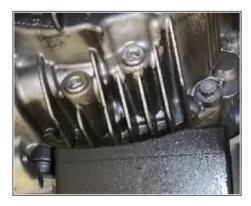
5 Check for oil leaks around the output shaft to the transfer box  $\Rightarrow$  *Oil migration* and  $\Rightarrow$  *Oil leak on output-shaft sealing ring.* 

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- 5.1 In the case of damage, replace the output shaft sealing ring, see  $\Rightarrow$  *Technical Information 'Replacing output shaft sealing ring'*.
- 5.2 In the case of damage, replace the transfer-gear sealing ring, see  $\Rightarrow$  Technical Information 'Transmission symptom - Oil leaks on transfer box: Observe specified procedure (SY 206/20)'



Oil migration



Oil leak on output-shaft sealing ring

#### Replacing sealing ring on ATF cooling line

- Work Procedure: 1 Replace sealing ring on ATF cooling line at the flange, see  $\Rightarrow$  Workshop Manual '386219 Removing and installing ATF cooling line'.
  - 2 Check and top up ATF, see  $\Rightarrow$  Workshop Manual '370235 Checking and topping up ATF'.

#### Parts Info: Parts required:

Part No.	Designation - Location	Qty.
N 90666003	$\Rightarrow$ O-ring – ATF cooling line	2 ea.
PAF82595100	$\Rightarrow$ Screw – Center underbody cover	2 ea.
PAB39800803	⇒ Cover – ATF pan	1 ea.
	or	
PAB398008B	⇒ Cover (transmission number A2901, A3001, A4002, A20P1, A30P1) – ATF pan	1 ea.
PAF00072900	⇒ Hexagon socket head bolt – Front underbody cover	3 ea.
PAB32154900	$\Rightarrow$ Screw plug – Checking and topping up ATF	1 ea.

Materials:	Required materials (usually already available at the Porsche dealer):		
	Part No.	Designation – Use	Qty.
	0004321054	$\Rightarrow$ Transmission oil (gearwheel set) – Checking and topping up ATF	20 liter/ 5.28 gal container <sup>1)</sup>

<sup>1)</sup> approx. 0.1 liter/ 3.38 fl oz required per vehicle.

Invoicing: For documentation and warranty invoicing, enter the labor operations, PQIS coding and relevant part numbers specified below in the warranty claim:

APOS	Labor operation	I No.
37350100	Checking automatic transmission	
38621900		
37023555	Checking and topping up ATF	

PQIS coding:

Location (FES5)	38620	ATF cooling line
Damage type (SA4)	5043	Oil leak

References:  $\Rightarrow$  Workshop Manual '386219 Removing and installing line for ATF cooling'

 $\Rightarrow$  Workshop Manual '370235 Checking and topping up ATF'

 $\Rightarrow$  Technical Information '370235 Transmission symptom - Oil leaks on transfer box: Observe specified procedure (SY 206/20)'

#### **Replacing ATF cooling line**

Work Procedure: 1	Replace ATF cooling line, see $\Rightarrow$ Workshop Manual '386219 Removing and installing ATF cooling
	line'.

2 Check and top up ATF, see  $\Rightarrow$  Workshop Manual '370235 Checking and topping up ATF'.

#### Parts Info: **Parts required:**

Part No.	Designation - Location	Qty.
PAF82595100	⇒ Screw – Center underbody cover	2 ea.
PAB39800803	⇒ Cover – ATF pan	1 ea.

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	or	
PAB398008B	⇒ Cover (transmission number A2901, A3001, A4002, A20P1, A30P1) – ATF pan	1 ea.
PAF00072900	⇒ Hexagon socket head bolt – Front underbody cover	3 ea.
PAB32154900	$\Rightarrow$ Screw plug – Checking and topping up ATF	1 ea.
Additional parts requi	red (V6 mono and biturbo without PHEV):	
Part No.	Designation – Location	Qty.
PAB31781800	$\Rightarrow$ Oil supply line – ATF cooling	1 ea.
	or	
PAB31781700	$\Rightarrow$ Oil return line – ATF cooling	1 ea.
Additional parts requi	red (V6 monoturbo PHEV):	
Part No.	Designation – Location	Qty.
PAB317801A	⇒ Oil pressure line – ATF cooling	1 ea.
Additional parts requi	red (V8 biturbo without PHEV):	
Part No.	Designation – Location	Qty.
PAB31781810	$\Rightarrow$ Oil supply line – ATF cooling	1 ea.
	or	
PAB31781710	⇒ Oil return line – ATF cooling	1 ea.

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Additional parts required (V8 biturbo PHEV):

	Part No.	Designation – Location	Qty.
	9Y0317817	$\Rightarrow$ Oil pressure line – ATF cooling	1 ea.
		or	
	9Y0317818	⇒ Oil pressure line – ATF cooling	1 ea.
Materials:	Required materials (u	sually already available at the Porsche dealer):	
	Part No.	Designation – Use	Qty.
	0004321054	$\Rightarrow$ Transmission oil (gearwheel set) – Checking and topping up ATF	20 liter/ 5.28 gal container <sup>1)</sup>

<sup>1)</sup> approx. 0.5 liter/ 16.9 fl oz required per vehicle.

Invoicing: For documentation and warranty invoicing, enter the labor operations, PQIS coding and relevant part numbers specified below in the warranty claim:

APOS	Labor operation	I No.
37350100	Checking automatic transmission	
38621900		
37023555	Checking and topping up ATF	

#### PQIS coding:

Location (FES5)	38620	ATF cooling line
Damage type (SA4)	1521	Crack/ tear

References:  $\Rightarrow$  Workshop Manual '386219 Removing and installing line for ATF cooling'

 $\Rightarrow$  Workshop Manual '370235 Checking and topping up ATF'

 $\Rightarrow$  Technical Information '370235 Transmission symptom - Oil leaks on transfer box: Observe specified procedure (SY 206/20)'

#### **Replacing automatic transmission**

Work Procedure: 1 Replace automatic transmission, see  $\Rightarrow$  Workshop Manual '373555 Replacing automatic transmission'.

2 Check and top up ATF, see  $\Rightarrow$  Workshop Manual '370235 Checking and topping up ATF'.

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Parts Info:	Part No.	Designation – Use	Qty.
	OFxxx <sup>1)</sup>	$\Rightarrow$ 8-speed automatic transmission	1 ea.
	PAF911296	$\Rightarrow$ 12-point socket – Automatic transmission	4 ea.
	N 91129801	$\Rightarrow$ 12-point socket – Automatic transmission	1 ea.
	N 91150701	$\Rightarrow$ 12-point socket – Automatic transmission	2 ea.
	N 91153201	$\Rightarrow$ 12-point socket – Automatic transmission	1 ea.
	N 91129201	$\Rightarrow$ 12-point socket – Automatic transmission	1 ea.
	N 10314506	$\Rightarrow$ Hexagon flange bolt – Starter	1 ea.
	PAF911296	⇒ 12-point socket – Starter	1 ea.
	PAF911511	$\Rightarrow$ Hexagon-head bolt (combination) – Front-axle support	4 ea.
	WHT005372	$\Rightarrow$ Cheese head bolt with multiple-tooth head – Front-axle support	2 ea.
	PAF00072900	$\Rightarrow$ Hexagon socket head bolt – Front underbody cover	3 ea.
	N 10518405	$\Rightarrow$ Cheese head bolt with multiple-tooth head – Universal joint	1 ea.
	WHT006662	$\Rightarrow$ Hexagon-head bolt (combination) – Power-steering gear	2 ea.
	WHT002305	⇒ Square nut – Power-steering gear	2 ea.
	WHT006151	$\Rightarrow$ Hexagon collar nut, self-locking – Tie-rod ball	2 ea.
	9A700837900	⇒ Tie-wrap – Brake disc air guide	4 ea.
	WHT006917	$\Rightarrow$ 12-point socket – Connecting link for anti-roll bar	2 ea.

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#### or

PAF007423	$\Rightarrow$ 12-point socket – Connecting link for PDCC anti-roll bar	2 ea.
PAF102861	$\Rightarrow$ Hexagon nut, self-locking – Connecting link for anti-roll bar	2 ea.
	or	
PAF015081	$\Rightarrow$ Hexagon nut – Connecting link for PDCC anti-roll bar.	2 ea.
9A725372510	$\Rightarrow$ Clamp – Primary catalytic converter / particle filter	1 ea.
9A725311507	$\Rightarrow$ Seal – Primary catalytic converter / particle filter	1 ea.
PAF82595100	$\Rightarrow$ Screw – Center underbody cover	2 ea.
PAF107722	⇒ Hose clamp – Rear cardan shaft	1 ea.
PAF107599	$\Rightarrow$ Cheese head bolt with multiple-tooth head – Rear cardan shaft	6 ea.
95534919121	$\Rightarrow$ Plate – Rear Cardan shaft	3 ea.
N 91175601	$\Rightarrow$ Cylinder install bolt with multiple-tooth head – Front-axle drive shaft	12 ea.
PAF82595100	$\Rightarrow$ Screw – Center underbody cover	2 ea.
PAB32154900	$\Rightarrow$ Screw plug – Checking and topping up ATF	1 ea.

<sup>1)</sup> Part number varies depending on transmission type

#### Additional parts required (V6 monoturbo):

Part No.	Designation – Location	Qty.
9A725372510	$\Rightarrow$ Clamp – Primary catalytic converter/particle filter	1 ea.
9A725311507	$\Rightarrow$ Seal – Primary catalytic converter/particle filter	1 ea.

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PAB25311520	$\Rightarrow$ Seal – Primary catalytic converter	1 ea.
	or	
PAB253115	$\Rightarrow$ Seal – Particle filter	2 ea.
N 91130802	$\Rightarrow$ Hexagon collar nut, self-locking – Primary catalytic converter	3 ea.
	or	
N 91130802	$\Rightarrow$ Hexagon collar nut, self-locking – Particle filter	6 ea.
N 10665001 <sup>1)</sup>	$\Rightarrow$ Countersunk screw with internal serration – High-voltage line for power electronics	3 ea.
N 91069601 <sup>1)</sup>	<ul> <li>⇒ Internal hexagon round-head countersunk screw</li> <li>– High-voltage line for power electronics</li> </ul>	3 ea.

<sup>1)</sup> Only for vehicles with hybrid drive

#### Additional parts required (V6 biturbo):

Part No.	Designation - Location	Qty.
PAB25372500	$\Rightarrow$ Clamp – Primary catalytic converter/particle filter	2 ea.
9A725311500	$\Rightarrow$ Seal – Primary catalytic converter/particle filter	2 ea.
PAB25311500	$\Rightarrow$ Seal – Primary catalytic converter/particle filter	2 ea.
PAF911308	$\Rightarrow$ Hexagon collar nut, self-locking – Primary catalytic converter/particle filter	6 ea.

#### Additional parts required (V8 biturbo):

Part No.	Designation – Location	Qty.
PAB25372500	$\Rightarrow$ Clamp – Primary catalytic converter/particle filter	2 ea.
9A725311500	$\Rightarrow$ Seal – Primary catalytic converter/particle filter	2 ea.

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PAB25311500	$\Rightarrow$ Seal – Primary catalytic converter/particle filter	2 ea.
PAF911308	$\Rightarrow$ Hexagon collar nut, self-locking – Primary catalytic converter/particle filter	6 ea.
PAF91237901	⇒ Hexagon-head bolt – Front-axle carrier	4 ea.
PAF91184301	⇒ Hexagon-head bolt – Front-axle carrier	4 ea.
PAF007028	$\Rightarrow$ 12-point socket – Lower trailing arm	2 ea.
PAF001987	$\Rightarrow$ Hexagon nut, self-locking with washer – Lower trailing arm	4 ea.
N 10272202	$\Rightarrow$ Hexagon-head bolt (combination) – Lower trailing arm	2 ea.
N 10106402	$\Rightarrow$ Hexagon collar nut, self-locking – Lower trailing arm	2 ea.
N 10784702	⇒ Hexagon flange bolt – Lower trailing arm	2 ea.
PAF001987	$\Rightarrow$ Hexagon nut, self-locking with washer – Lower trailing arm	2 ea.
N 10665001 <sup>1)</sup>	$\Rightarrow$ Countersunk screw with internal serration – High-voltage line for power electronics	3 ea.
N 91069601 <sup>1)</sup>	$\Rightarrow$ Internal hexagon round-head countersunk screw – High-voltage line for power electronics	3 ea.
<sup>1)</sup> Only for vehicles wit	th hybrid drive	
Required materials (	usually already available at the Porsche dealer):	
Part No.	Designation – Use	Qty.
00004330537	⇒ Lubricating grease – Oxygen sensors	60 gram/ 2.12 oz tube tube <sup>1)</sup>
00004330515	$\Rightarrow$ Coolant additive	20 liter / 5.28 gal container <sup>2)</sup>
0004321054	$\Rightarrow$ Transmission oil (gearwheel set) – Checking and topping up ATF	20 liter / 5.28 gal container <sup>3)</sup>
<sup>2)</sup> approx. 0.5 liter/ 16	07 oz required per vehicle. .9 fl oz required per vehicle. 38 fl oz required per vehicle.	

<sup>3)</sup> approx. 0.1 liter/ 3.38 fl oz required per vehicle.

Materials:

# Invoicing: For documentation and warranty invoicing, enter the labor operations, PQIS coding and relevant part numbers specified below in the warranty claim:

APOS	Labor operation	I No.
37350100	Checking automatic transmission	
37355590	Replacing automatic transmission	
37023555	Checking and topping up ATF	

PQIS coding:

Location (FES5)	37350	Automatic transmission
Damage type (SA4)	3024	Porous

References: ⇒ Workshop Manual '373555 Replacing automatic transmission'

 $\Rightarrow$  Workshop Manual '370235 Checking and topping up ATF'

 $\Rightarrow$  Technical Information '370235 Transmission symptom - Oil leaks on transfer box: Observe specified procedure (SY 206/20)'

#### Replacing drive-shaft sealing ring

- Work Procedure: 1 Replace drive-shaft sealing ring (rear protective tube), see  $\Rightarrow$  Workshop Manual '393255 Replacing drive-shaft sealing ring (rear protective tube)'.
  - 2 Replace drive-shaft sealing ring (front protective tube), see ⇒ Workshop Manual '392855 Replacing drive-shaft sealing ring (front protective tube)'.
  - 3 Check and top up ATF, see  $\Rightarrow$  Workshop Manual '370235 Checking and topping up ATF'.

Parts Info:	Part No.	Designation – Use	Qty.
	PAB398001C	$\Rightarrow$ Set of seals	1 ea.
		or	
	PAB398004A	$\Rightarrow$ Set of PHEV seals	1 ea.
	PAB398189 <sup>1)</sup>	$\Rightarrow$ Radial shaft seal – Converter housing	1 ea.
	9A7398001 <sup>1)</sup>	⇒ 0-ring – Drive shaft	1 ea.
	PAB971797C <sup>2)</sup>	$\Rightarrow$ Transmission housing cover	1 ea.

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	or	
WHT006917	$\Rightarrow$ 12-point socket – Connecting link for anti-roll bar	2 ea.
9A700837900	⇒ Tie-wrap – Brake disc air guide	4 ea.
WHT006151	$\Rightarrow$ Hexagon collar nut, self-locking – Tie-rod ball	2 ea.
WHT002305	⇒ Square nut – Power-steering gear	2 ea.
WHT006662	$\Rightarrow$ Hexagon-head bolt (combination) – Power-steering gear	2 ea.
N 10518405	$\Rightarrow$ Cheese head bolt with multiple-tooth head – Universal joint	1 ea.
PAF00072900	$\Rightarrow$ Hexagon socket head bolt – Front underbody cover	3 ea.
WHT005372	$\Rightarrow$ Cheese head bolt with multiple-tooth head – Front-axle support	2 ea.
PAF911511	$\Rightarrow$ Hexagon-head bolt (combination) – Front-axle support	4 ea.
PAF911296	⇒ 12-point socket – Starter	1 ea.
N 10314506	⇒ Hexagon flange bolt – Starter	1 ea.
N 91129201	$\Rightarrow$ 12-point socket – Automatic transmission	1 ea.
N 91153201	$\Rightarrow$ 12-point socket – Automatic transmission	1 ea.
N 91150701	$\Rightarrow$ 12-point socket – Automatic transmission	2 ea.
N 91129801	$\Rightarrow$ 12-point socket – Automatic transmission	1 ea.
PAF911296	$\Rightarrow$ 12-point socket – Automatic transmission	4 ea.
N 91069601 <sup>2)</sup>	$\Rightarrow$ Internal hexagon round-head countersunk screw – Transmission housing cover	4 ea.
N 10671702 <sup>2)</sup>	$\Rightarrow$ Hexagon-head bolt (combination) – Transmission housing cover	1 ea.

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PAF007423	$\Rightarrow$ 12-point socket – Connecting link for PDCC anti-roll bar	2 ea.
PAF102861	$\Rightarrow$ Hexagon nut, self-locking – Connecting link for anti-roll bar	2 ea.
	or	
PAF015081	$\Rightarrow$ Hexagon nut – Connecting link for PDCC anti-roll bar.	2 ea.
9A725372510	$\Rightarrow$ Clamp – Primary catalytic converter / particle filter	1 ea.
9A725311507	$\Rightarrow$ Seal – Primary catalytic converter / particle filter	1 ea.
PAF82595100	$\Rightarrow$ Screw – Center underbody cover	2 ea.
PAF107722	⇒ Hose clamp – Rear cardan shaft	1 ea.
PAF107599	$\Rightarrow$ Cheese head bolt with multiple-tooth head – Rear cardan shaft	6 ea.
95534919121	⇒ Plate – Rear Cardan shaft	3 ea.
N 91175601	$\Rightarrow$ Cylinder install bolt with multiple-tooth head – Front-axle drive shaft	12 ea.
PAF82595100	$\Rightarrow$ Screw – Center underbody cover	2 ea.
PAB32154900	$\Rightarrow$ Screw plug – Checking and topping up ATF	1 ea.
<sup>1)</sup> Not for vehicles w	ith hybrid drive	
2) $O$ of the state of the s		

<sup>2)</sup> Only for vehicles with hybrid drive

#### Additional parts required (V6 monoturbo):

Part No.	Designation – Location	Qty.
9A725372510	$\Rightarrow$ Clamp – Primary catalytic converter/particle filter	1 ea.
9A725311507	$\Rightarrow$ Seal – Primary catalytic converter/particle filter	1 ea.

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PAB25311520	⇒ Seal – Primary catalytic converter	1 ea.
	or	
PAB253115	$\Rightarrow$ Seal – Particle filter	2 ea.
N 91130802	$\Rightarrow$ Hexagon collar nut, self-locking – Primary catalytic converter	3 ea.
	or	
N 91130802	$\Rightarrow$ Hexagon collar nut, self-locking – Particle filter	6 ea.
N 10665001 <sup>1)</sup>	$\Rightarrow$ Countersunk screw with internal serration – High-voltage line for power electronics	3 ea.
N 91069601 <sup>1)</sup>	$\Rightarrow$ Internal hexagon round-head countersunk screw – High-voltage line for power electronics	3 ea.

<sup>1)</sup> Only for vehicles with hybrid drive

#### Additional parts required (V6 biturbo):

Part No.	Designation – Location	Qty.
PAB25372500	$\Rightarrow$ Clamp – Primary catalytic converter/particle filter	2 ea.
9A725311500	$\Rightarrow$ Seal – Primary catalytic converter/particle filter	2 ea.
PAB25311500	$\Rightarrow$ Seal – Primary catalytic converter/particle filter	2 ea.
PAF911308	$\Rightarrow$ Hexagon collar nut, self-locking – Primary catalytic converter/particle filter	6 ea.

#### Additional parts required (V8 biturbo):

Part No.	Designation – Location	Qty.
PAB25372500	$\Rightarrow$ Clamp – Primary catalytic converter/particle filter	2 ea.
9A725311500	$\Rightarrow$ Seal – Primary catalytic converter/particle filter	2 ea.

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PAB25311500	$\Rightarrow$ Seal – Primary catalytic converter/particle filter	2 ea.
PAF911308	$\Rightarrow$ Hexagon collar nut, self-locking – Primary catalytic converter/particle filter	6 ea.
PAF91237901	⇒ Hexagon-head bolt – Front-axle carrier	4 ea.
PAF91184301	⇒ Hexagon-head bolt – Front-axle carrier	4 ea.
PAF007028	$\Rightarrow$ 12-point socket – Lower trailing arm	2 ea.
PAF001987	$\Rightarrow$ Hexagon nut, self-locking with washer – Lower trailing arm	4 ea.
N 10272202	$\Rightarrow$ Hexagon-head bolt (combination) – Lower trailing arm	2 ea.
N 10106402	$\Rightarrow$ Hexagon collar nut, self-locking – Lower trailing arm	2 ea.
N 10784702	$\Rightarrow$ Hexagon flange bolt – Lower trailing arm	2 ea.
PAF001987	$\Rightarrow$ Hexagon nut, self-locking with washer – Lower trailing arm	2 ea.
N 10665001 <sup>1)</sup>	$\Rightarrow$ Countersunk screw with internal serration – High-voltage line for power electronics	3 ea.
N 91069601 <sup>1)</sup>	$\Rightarrow$ Internal hexagon round-head countersunk screw – High-voltage line for power electronics	3 ea.
<sup>1)</sup> Only for vehicles v	with hybrid drive	
Required materials	<b>s</b> (usually already available at the Porsche dealer):	
Part No.	Designation – Use	Qty.
00004330537	⇒ Lubricating grease – Oxygen sensors	60 gram/ 2.12 oz tube 1)
00004330515	$\Rightarrow$ Coolant additive	20 liter/ 5.28 gal container <sup>2)</sup>
0004321054	$\Rightarrow$ Transmission oil (gearwheel set)	20 liter/ 5.28 gal container $^{3)}$

<sup>1)</sup> approx. 2 grams/ 0.07 oz required per vehicle.

Materials:

 $^{2)}$  approx. 0.5 liter/ 16.9 fl oz required per vehicle.

 $^{3)}$  approx. 0.1 liter/ 3.38 fl oz required per vehicle.

- Checking and topping up ATF

container <sup>3)</sup>

Invoicing: For documentation and warranty invoicing, enter the labor operations, PQIS coding and relevant part numbers specified below in the warranty claim:

APOS	Labor operation	I No.
37350100	Checking automatic transmission	
39285550	Replacing drive-shaft sealing ring	
37023555	Checking and topping up ATF	

PQIS coding:

Location (FES5)	37350	Automatic transmission
Damage type (SA4)	9731	Other

References:  $\Rightarrow$  Workshop Manual '392855 Replacing drive-shaft sealing ring (front protective tube)'

 $\Rightarrow$  Workshop Manual '370235 Checking and topping up ATF'

 $\Rightarrow$  Technical Information '370235 Transmission symptom - Oil leaks on transfer box: Observe specified procedure (SY 206/20)'

#### **Replacing ATF pan**

Work Procedure: 1 Replace ATF pan, see  $\Rightarrow$  Workshop Manual '375519 Removing and installing ATF pan'.

2 Check and top up ATF, see  $\Rightarrow$  Workshop Manual '370235 Checking and topping up ATF'.

#### Parts Info: Parts required:

Part No.	Designation – Location	Qty.
PAB398009	$\Rightarrow$ Transmission oil pan with seal	1 ea.
PAF911511	$\Rightarrow$ Hexagon-head bolt (combination) – Front-axle support	4 ea.
WHT005372	$\Rightarrow$ Cheese head bolt with multiple-tooth head – Front-axle support	2 ea.
PAF00072900	⇒ Hexagon socket head bolt – Front underbody cover	3 ea.
PAF82595100	$\Rightarrow$ Screw – Center underbody cover	2 ea.

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

Part No.	Designation – Use	Qty.
0004321054	$\Rightarrow$ Transmission oil (gearwheel set) – Checking and topping up ATF	20 liter/ 5.28 gal container <sup>1)</sup>

<sup>1)</sup> approx. 0.1 liter/ 3.38 fl oz required per vehicle.

Invoicing: For documentation and warranty invoicing, enter the labor operations, PQIS coding and relevant part numbers specified below in the warranty claim:

APOS	Labor operation	I No.
37350100	Checking automatic transmission	
37551900	Removing and installing ATF pan	
37023555	Checking and topping up ATF	

PQIS coding:

Location (FES5)	37550	ATF pan
Damage type (SA4)	1521	Crack/tear

References:  $\Rightarrow$  Workshop Manual '375519 Removing and installing ATF pan'

 $\Rightarrow$  Workshop Manual '370235 Checking and topping up ATF'

 $\Rightarrow$  Technical Information '370235 Transmission symptom - Oil leaks on transfer box: Observe specified procedure (SY 206/20)'

#### Replacing output-shaft seal

Work Procedure: 1 Replace output-shaft seal, see  $\Rightarrow$  Workshop Manual '387055 Replacing output-shaft seal'.

2 Check and top up ATF, see  $\Rightarrow$  Workshop Manual '370235 Checking and topping up ATF'.

#### Parts Info: **Parts required:**

Part No.	Designation – Location	Qty.
9A7398189B	$\Rightarrow$ Radial shaft seal – Output shaft	1 ea.
9A7398001E	⇒ Set of seals – Output shaft	1 ea.

AfterSales	5
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# 3735 ENU 205/20

## Symptom-based workshop manual

N 91239302	$\Rightarrow$ Bi-hexagonal flange screw – Input shaft	6 ea.
PAF107722	⇒ Hose clamp – Rear cardan shaft	1 ea.
PAF107599	$\Rightarrow$ Cheese head bolt with multiple-tooth head – Rear cardan shaft	6 ea.
95534919121	⇒ Plate – Rear Cardan shaft	3 ea.
PAF00072900	⇒ Hexagon socket head bolt – Front underbody cover	3 ea.
PAB32154900	$\Rightarrow$ Screw plug – Checking and topping up ATF	1 ea.

#### Additional parts required (V6 monoturbo):

Part No.	Designation - Location	Qty.
PAB25311520	⇒ Seal – Primary catalytic converter	1 ea.
	or	
PAB253115	$\Rightarrow$ Seal – Particle filter	2 ea.
N 91130802	$\Rightarrow$ Hexagon collar nut, self-locking – Primary catalytic converter	3 ea.
	or	
N 91130802	$\Rightarrow$ Hexagon collar nut, self-locking – Particle filter	6 ea.
N 10518405 <sup>1)</sup>	$\Rightarrow$ Cheese head bolt with multiple-tooth head – Universal joint	1 ea.

<sup>1)</sup> Only for vehicles with particle filter

#### Additional parts required (V6 and V8 biturbo):

	Part No.	Designation – Location	Qty.
	PAB25311500	$\Rightarrow$ Seal – Primary catalytic converter/particle filter	2 ea.
	N 91130802	$\Rightarrow$ Hexagon collar nut, self-locking – Primary catalytic converter/particle filter	6 ea.
Materials:	<b>Required material</b>	<b>s</b> (usually already available at the Porsche dealer):	
	Part No.	Designation – Use	Qty.
	00004321030	$\Rightarrow$ Lubricating grease – Transfer box	20 gram/ 0.7 oz tube 1)
	0004321054	$\Rightarrow$ Transmission oil (gearwheel set) – Checking and topping up ATF	20 liter/ 5.28 gal container <sup>2)</sup>

<sup>1)</sup> approx. 2 grams/ 0.07 oz required per vehicle. <sup>2)</sup> approx. 0.1 liter/ 3.38 fl oz required per vehicle.

Invoicing: For documentation and warranty invoicing, enter the labor operations, PQIS coding and relevant part numbers specified below in the warranty claim:

APOS	Labor operation	I No.
37350100	Checking automatic transmission	
38705550	Replacing output-shaft seal	
37023555	Checking and topping up ATF	

PQIS coding:

Location (FES5)	38620	ATF cooling line
Damage type (SA4)	1521	Crack/ tear

References:  $\Rightarrow$  Workshop Manual '387055 Replacing output-shaft seal'

 $\Rightarrow$  Workshop Manual '370235 Checking and topping up ATF'

 $\Rightarrow$  Technical Information '370235 Transmission symptom - Oil leaks on transfer box: Observe specified procedure (SY 206/20)'

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