

**AC05 - Replacing Wheel Hubs and Wheel Bearings on Rear Axle (Recall Campaign)**

Note: **THIS RECALL REQUIRES THE CUSTOMER BE PROVIDED A PORSCHE MOBILITY VEHICLE AS ALTERNATIVE TRANSPORTATION FOR THE DURATION OF THE REPAIR. PLEASE CHECK YOUR DEALERSHIP'S MOBILITY VEHICLE AVAILABILITY BEFORE SCHEDULING A RECALL APPOINTMENT WITH ANY CUSTOMER.**

Model Year: **2010**

Vehicle Type: **911 GT3 (997)**

Equipment: Central wheel lock (I-no. 430)

Concerns: **Wheel hubs and wheel bearings on rear axle**

Information: This is to inform you of a Recall Campaign on the above-mentioned vehicles.

**Current market observation shows that the race track usage profile of many vehicles in the 911 model line now comes close to that of pure GT3 racing vehicles (e.g. GT3 Cup).**

**The component stresses associated with race track use and competitive driving are much higher than for a sporty driving style on public roads.**

The **revision intervals for race track use** ⇒ *Technical Information 'AC0500 Revision intervals for race track use'* must therefore be observed, particularly for highly stressed chassis components, in the same way as is required for GT3 racing vehicles.

If these revision intervals are not observed, the failure of highly stressed components and breakage of the hubs on the rear axle, for example, cannot be ruled out, particularly in the case of components in advanced stages of wear.

**In order to standardize revision intervals, the wheel hubs on the rear axle will be replaced by standard wheel hubs on the affected vehicles with central wheel lock.**

Action Required: Replace wheel hubs and wheel bearings on rear axle.

1. **BOTH WHEEL HUBS ON THE REAR AXLE WILL REQUIRE REPLACEMENT EVEN IF THEY HAVE PREVIOUSLY BEEN REPLACED UNDER WARRANTY.**
2. Provide a Porsche mobility vehicle to the owner for the duration of the repair.

Affected Vehicles: The VIN(s) can be checked by using PIWIS Vehicle Information link to verify if the campaign affects the vehicle. This campaign is scope specific to the VIN! Failure to verify in PIWIS may result in an improper repair. This campaign affects 510 vehicles in North America.

Note: PARTS DISTRIBUTION

1. For dealerships with 2 or more VINS on the affected vehicle list, all parts (excepting Molykote Longterm 2 plus grease, Optimoly TA grease, and Optimoly HT grease) will be or have already been all or partially automatically allocated to your dealership.
2. Dealerships with only 1 VIN on the affected vehicle list must order recall parts via PAV.
3. If any of the greases are required, they may be ordered through your parts ordering system.

## Parts Info:

Part No.	Designation Purpose	Qty.
997.331.607.04	⇒ Wheel hub for rear axle	2 ea.
999.053.055.02	⇒ Wheel bearing for rear axle	2 ea.
999.084.449.09	⇒ Hexagon nut, M12 x 1.5 For securing tie rod to wheel carrier For securing lower wishbone to wheel carrier	4 ea.
900.378.322.01	⇒ Hexagon-head bolt, M12 x 70 For securing upper wishbone to wheel carrier For securing spring strut to wheel carrier	6 ea.
999.084.445.01	⇒ Lock nut, M12 x 1.5 For securing upper wishbone to wheel carrier For securing spring strut to wheel carrier	6 ea.
999.084.643.01	⇒ Hexagon nut, M10 For securing connecting link for anti-roll bar to wheel carrier	2 ea.
999.073.449.01	⇒ Cheese head bolt, M10 x 1 x 49 For securing drive shaft to transmission	12 ea.
999.084.641.01	⇒ Hexagon nut, M22 x 1.5 For securing drive shaft to wheel hub	2 ea.
999.067.040.01	⇒ Cheese head bolt, M12 x 1.5 x 95 For securing brake calliper to wheel carrier	4 ea.

## Materials:

Required grease – usually available in the Porsche dealership:

Part No.	Designation Purpose	Qty.
G .052.778.A2	Molykote Longterm 2 plus grease ⇒ For greasing speed sensor	As much as required (approx. 1 ml per vehicle)

000.043.004.00	Optimoly HT grease ⇒ For greasing drive shaft splines ⇒ For greasing thread on axle nuts	As much as required (approx. 4 grams per vehicle)
000.043.020.00	Optimoly TA grease (aluminum grease) ⇒ For greasing wheel hub and central bolt	As much as required (approx. 10 grams per vehicle)

- Tools:
- 9794 - Assembly aid**
  - 9796 - Socket wrench**
  - Nr. 90 Pos. 3 - Torque wrench** (10 – 60 Nm/7.5 – 44 ftlb.)
  - Nr. 90 Pos. 5 - Torque wrench** (20 – 120 Nm/15 – 89 ftlb.)
  - Nr. 91 Pos. 1 - Torque wrench** (160 – 800 Nm/118 - 592 ftlb.)
  - 9546 - Screwdriver**
  - 9558 - Insert for torque wrench**
  - 9560 - Press-out tool**
  - Nr. 87-1 Pos. 1 - Puller set**
  - 9247 - Pressure pieces (4 ea.)**
  - Nr. 111 - Removal tool**
  - P297a - Press-out mandrel**
  - VW 415 A - Tube**
  - VW 433 - Press tool**
  - Nr. 147-2 - Test card**

Work Procedure: See Attachment "A".

Claim Submission: See Attachment "B".

Attachment "A": **Work Procedure**

- 1 Remove both rear wheels ⇒ *Workshop Manual '440519 Removing and installing wheel with central bolt - section on "Removing"*.
- 2 Remove left and right wheel bearing housing (wheel carrier) on the rear axle ⇒ *Workshop Manual '425219 Removing and installing rear wheel bearing housing (wheel carrier) - section on "Removing"*.
- 3 Remove wheel hub and wheel bearing from the left and right wheel bearing housing (wheel carrier) ⇒ *Workshop Manual '425819 Removing and installing rear wheel bearing - section on "Removing"*.
- 4 Press new wheel bearing (Part No. 999.053.055.02) and new wheel hub (Part No. 997.331.607.04) into the left and right wheel bearing housing (wheel carrier) ⇒ *Workshop Manual '425819 Removing and installing rear wheel bearing - section on "Installing"*.

- 5 Install left and right wheel bearing housing (wheel carrier) on the rear axle ⇒ *Workshop Manual '425219 Removing and installing rear wheel bearing housing (wheel carrier) - section on "Installing"*.
- 6 Fit both rear wheels ⇒ *Workshop Manual '440519 Removing and installing wheel with central bolt - section on "Installing"*.
- 7 Perform suspension alignment at front and rear and make adjustments if necessary ⇒ *Workshop Manual '449503 Suspension alignment complete'*.
- 8 Enter the recall campaign in the Warranty and Maintenance booklet.

Attachment "A": **Claim Submission** - Recall Campaign AC05

1. Select the mobility option within PQIS job for reimbursement.
2. Labor, parts, and sublet will be automatically inserted when Technician is selected in WWS/PQIS. If necessary, the required part numbers will need to be manually entered into warranty system by the dealer administrator.
3. The sublet (miscellaneous item) will be inserted automatically when the technician is selected in WWS.



#### Information

The specified working time was determined specifically for carrying out this campaign and includes the time required for replacing the wheel bearings and wheel hubs on the rear axle as well as all necessary preliminary and subsequent work.

The working time may differ from the working times published in the Labor Operation List in PIWIS.

#### Working time:

Replacing wheel hubs and wheel bearings on rear axle

Labor time: **652 TU**

Includes: Removing and installing wheels on rear axle  
 Removing and installing left and right wheel bearing housing (wheel carrier) on rear axle  
 Performing suspension alignment at front and rear and making adjustments

#### Parts required:

997.331.607.04	Wheel hub for rear axle	2 ea.
999.053.055.02	Wheel bearing for rear axle	2 ea.
999.084.449.09	Hexagon nut, M12 x 1.5	4 ea.
900.378.322.01	Hexagon-head bolt, M12 x 70	6 ea.
999.084.445.01	Lock nut, M12 x 1.5	6 ea.
999.084.643.01	Hexagon nut, M10	2 ea.
999.073.449.01	Cheese head bolt, M10 x 1 x 49	12 ea.
999.084.641.01	Hexagon nut, M22 x 1.5	2 ea.

999.067.040.01	Cheese head bolt, M12 x 1.5 x 95	4 ea.
AC050000001	Expendable items (grease)	1 ea. (for warranty invoicing only)*
<p>* The WWS Warranty system will automatically add into the "Miscellaneous item" section (sublet) of the claim after the claim has been submitted.</p> <p>⇒ <b>Damage code AC05 099 000 2</b></p>		

- References:
- ⇒ *Workshop Manual '440519 Removing and installing wheel with central bolt'*
  - ⇒ *Workshop Manual '425219 Removing and installing rear wheel bearing housing (wheel carrier)'*
  - ⇒ *Workshop Manual '425819 Removing and installing rear wheel bearing'*
  - ⇒ *Workshop Manual '4201TW Tightening torques for rear axle'*
  - ⇒ *Workshop Manual '449503 Suspension alignment complete'*

**Revision intervals for race track use**

Information: The specifications for race track use described in the Supplement to the Owner's Manual "Wheels with Central Locking" are elaborated further by the following **revision intervals for race track use**. Findings from motor racing are incorporated into the usage specifications on an on-going basis.

Overview: At present, the following **revision intervals** are stipulated for **race track use**:

<b>At the latest, every 7,000 km/4,200 miles for race track use (cumulative)</b>
Replace wheel hubs and wheel bearings on rear axle ⇒ <i>Workshop Manual '425819 Removing and installing rear wheel bearing'</i>
Replace central lock bolts on rear axle ⇒ <i>Workshop Manual '440519 Removing and installing wheel with central bolt'</i>
<b>At the latest, every 14,000 km/8,400 miles for race track use (cumulative)</b>
Replace wheel bearing housing on rear axle ⇒ <i>Workshop Manual '425219 Removing and installing rear wheel bearing housing (wheel carrier)'</i>
Replace wheel hubs and wheel bearings on front axle ⇒ <i>Workshop Manual '405719 Removing and installing front wheel bearing'</i>
Replace central lock bolts on front axle ⇒ <i>Workshop Manual '440519 Removing and installing wheel with central bolt'</i>
<b>At the latest, every 28,000 km/16,800 miles for race track use (cumulative)</b>
Replace wheel bearing housing on front axle ⇒ <i>Workshop Manual '405055 Replacing front wheel bearing housing'</i>

As described in the Supplement to the Owner's Manual "Wheels with Central Locking", all components of the central wheel lock, including adjacent peripheral components, must always be checked for wear and replaced if necessary after **every** race track use ⇒ *Workshop Manual '4X00IN Central wheel lock: component assessment'*.

All **specifications and revision intervals for race track use** are described under ⇒ *Workshop Manual '4X00IN Specifications and revision intervals for race track use - vehicles with central lock'* in the Workshop Manual.

Please inform your customers about the current specifications and revision intervals for race track use.

The revision intervals are also published in the "Maintenance, Diagnostics" chapter in the Workshop Manual ⇒ *Workshop Manual '030000 Additional maintenance for race track use - vehicles with central lock'*.

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