

***DT* SWISS**

PREDICTIVE STEERING
TECHNICAL MANUAL

V2022.05

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1. GENERAL

1.1 VALIDITY

This manual describes the component specified on the front page and the footer. This manual is valid for the design of the product as of 01.06.22. Deviations are possible and all items are subject to technical changes.

1.2 SAFETY

The safety instructions are classified as follows:



DANGER

...indicates a hazardous situation that, if not avoided, will result in death or serious injury.



CAUTION

... indicates a hazard with a medium level of risk which, if not avoided, may result in minor or moderate injury.



NOTICE

... indicates a potentially hazardous situation that may result in damage to property.

1.3 TARGET GROUP

This manual is intended for the user of the component and dealers. This manual offers the experienced user the possibility to carry out minor service work himself. If you have any doubts about your own abilities, you should definitely contact a specialist or a DT Swiss Service Center.

Any warranty claims will lapse if work is not carried out properly.

1.4 LAYOUT

The cover page and the footing provide information about the type of product and manual as well as the version of the manual. The DT Swiss contact details can be found on the back. A list of all DT Swiss service centers can be found at www.dtswiss.com.

This manual is intended for being printed as an A5 booklet. Only print this manual if electronic usage is not possible.

1.5 DT SWISS MANUAL CONCEPT

The DT Swiss manuals are split into the following types of manuals:

- User Manual: Information for the end user on how to install and use the component.
- Technical Manual: Detailed information for the end user and the dealer on how to maintain the component, spare parts and technical data.

1.6 HOW TO USE THE MANUAL

The steps described in this manual must be carried out in the order they are shown. If steps are ignored or executed in a wrong order, the function of the component cannot be guaranteed.

1.7 GENERAL MAINTENANCE INFORMATION

Unless otherwise specified, moving parts, threads, O-rings and seals must be greased before assembly.

CLEANING

For an optimal result of the maintenance works, every component that will be disassembled must be cleaned. Only use cleaners which do not damage the components. Especially the cleaning of O-rings and seals requires mild cleaners. Observe the instructions for use of the respective cleaner.

DT Swiss recommends the following cleaners:

- Motorex Rex
- Motorex Swissclean
- Motorex OPAL 2400, 3000 OPAL, OPAL 5000

Use soap water or similar mild cleaners for external cleaning.

TOOLS

To ensure a damage-free mounting and dismantling of the components, only use the tools which are mentioned in this manual. Special tools are indicated at the beginning of a chapter in the table "Required material".

The use of different tools is at the discretion of the user. If components are damaged by the usage of differing tools, the user is liable.

DT Swiss special tools are precision tools. Damage-free mounting and dismantling of the components can only be ensured if the tools are working properly and if the condition of the tools are perfect. Always keep the tools in their original packaging or adequate devices to prevent damage.

1.8 ENVIRONMENTAL PROTECTION

The statutory regulations shall apply. Whenever possible, avoid creating waste. Waste, especially carbon, lubricants, cleaners and any other fluids must be disposed in an environmentally compatible manner. Only print this manual if electronic usage is not possible.

1.9 EXCLUSION OF LIABILITY

The activities listed in this manual may only be carried out by persons with sufficient specialist knowledge. The user is liable for any damage or consequential damage caused by wrongly maintained or installed components. If you have doubts, please contact your region's DT Swiss pro level service center.

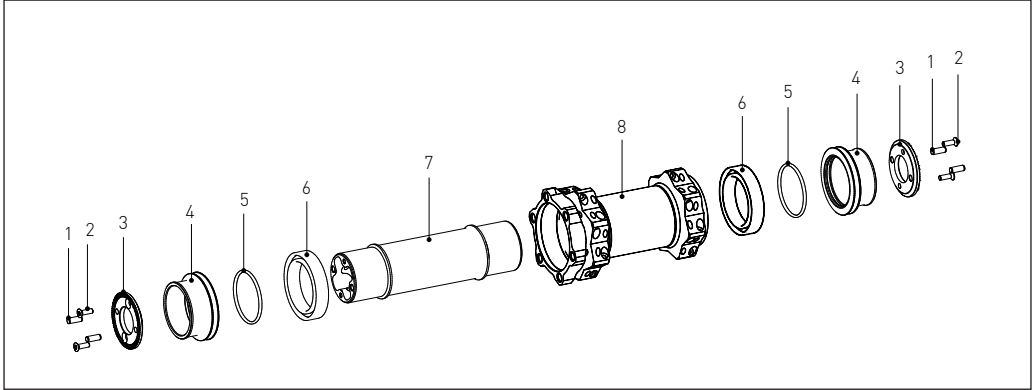
1.10 WARRANTY

Warranty conditions, see www.dtswiss.com

2. SERVICING THE FRONT HUB 240 PREDICTIVE STEERING


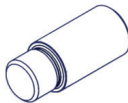
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|--------------------------|------|
| Preparatory Steps: | Link |
| Dismount the brake rotor | |
| Clean the hub | |

2.1 OVERVIEW




| | | |
|----------------|----------------|-------------|
| 1 pin | 4 end cap | 7 axle |
| 2 fixing screw | 5 O-ring | 8 hub shell |
| 3 knurled disc | 6 ball bearing | |

2.2 REQUIRED TOOLS

| Tools | Specification | Quantity | Article number |
|---|---|----------|----------------|
| tool kit 240 Predictive Steering, includes | | 1 | HWTXXX00NTKPSS |
| <ul style="list-style-type: none"> installation cylinder Ø37 / 25 mm |  | 2 | HXTXXX00N5307S |
| <ul style="list-style-type: none"> disassembly tool for axle Ø18 mm |  | 1 | HXTXXX00N5168S |
| Torx T8 | | 1 | |

2.3 REQUIRED WEARING PARTS AND MATERIALS

| Wearing parts / Materials | Specification | Quantity | Article number |
|---------------------------|---|----------|----------------|
| DT Swiss universal grease |  | 20 g | HXTXXX00NMG20S |

Due to the large variety of spare parts, they cannot be listed here.

At dtswiss.com/support/product-support you will find all suitable spare parts after selecting your components.

2.4 REMOVING THE KNURLED DISCS

1. Unscrew both fixing screws of the knurled discs on both sides using a T8 Torx key.



2. Carefully loosen both knurled discs carefully using a punch.
 - The knurled disc are fixed in the axle with two pins.
 - Be careful not to damage the end caps and the axle.
3. Remove both knurled discs.



2.5 DISMOUNTING THE END CAPS, THE BEARINGS AND THE AXLE

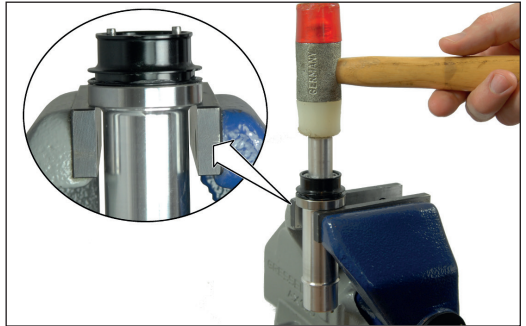
1. Place the disassembly tool on one side of the axle.
2. Tap out the bearing and one of the end caps with slight hammer strokes.



3. Remove the axle and one of the end caps.



4. Open the clamping jaws of the vise that much that the bearing rests on the jaws, but the axle is not clamped.
5. Push the disassembly tool into the axle.
6. Tap the end cap and the bearing from the axle with slight hammer strokes.



7. Insert the axle into the second ball bearing still in the hub.
8. Push the disassembly tool into the axle.



9. Tap out the bearing with slight hammer strokes.
10. Remove the bearing from the axle by hand.



2.6 CLEANING AND DEGREASING ALL PARTS

Clean all parts of the hub (see "Cleaning" on page 4).

2.7 MOUNTING BEARINGS AND AXLE

1. Put the axle in one of both installation cylinders.
2. Fit the bearing seat on the drive side of the hub onto the axle and the installation cylinder.
→ The installation cylinder must be fully seated in the bearing seat.
3. Place slightly greased, new ball bearing with the sealed (colored) side facing outward on the bearing seat of the non drive side of the hub.
4. Place the second installation cylinder on the ball bearing on the non drive side.
5. Drive the bearing completely into the hub shell with slight hammer strokes.
→ Make sure that the ball bearing does not jam.
6. Remove the installation cylinders.



7. Put the non drive side of the hub with the axle onto the installation cylinder.
8. Slightly grease the second new ball bearing and slide it onto the axle on the drive side with the sealed (coloured) side facing outwards.



9. Place the second installation cylinder on the ball bearing on the drive side.
10. Drive the bearing completely into the hub shell with slight hammer strokes.
→ Make sure that the ball bearing does not jam.
11. Remove the installation cylinders.

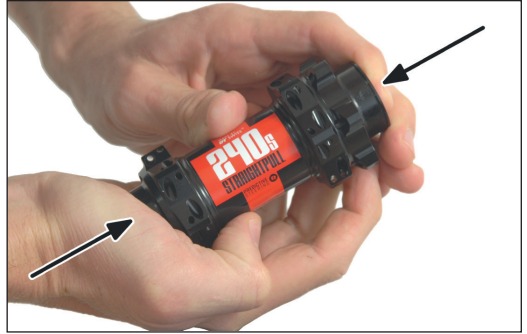


12. Check the ball bearings.
→ The hub must turn smoothly.
→ The hub must not have axial play.
13. If necessary, drive in the bearing on the non drive side or loosen the bearing.
14. Repeat previous steps until the hub is turning smoothly.



2.8 PUTTING ON THE END CAPS

1. Push the end caps onto the axle.



2. Fit the knurled discs.
3. Screw in the fixing screws of the knurled discs with a T8 Torx key and tighten with a maximum torque of 0.7 Nm.



Closing Steps:

Link

Mount the brake rotor

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