

***DT SWISS***

*COMPONENTS*

***SINC***

TECHNICAL MANUAL

V2019.02

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# 1. USER INFORMATION

## 1.1 VALIDITY

This manual describes the component specified on the front page and the footer. It is valid for the construction level of the component on the 18.02.19.

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



### **NOTICE**

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

## 1.3 TARGET GROUP

This manual is intended for end users and dealers.

It offers the possibility for experienced users to carry out small maintenance works on their own. If there are any doubts concerning the own skills, a DT Swiss service center should be contacted.

Warranty will expire if works are not done 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 backside provides a list of the DT Swiss service centers. A list of all DT Swiss service centers can be found at [www.dtswiss.com](http://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 user and service information is 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.

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.

Instructions begin with the table «Preparatory Steps» and end with the table «Closing Steps». The instructions in these tables must be carried out.

## 1.6 CROSS REFERENCES

In order to simplify the use of this manual, some text is edited as hypertext. Whenever the text is formatted blue and underlined, it is a reference to a chapter. If the text is formatted black and underlined, it is a reference to a figure. After clicking you will be automatically redirected to the target of the reference.

Example: Click here: „1. User Information“ on page 3 to jump to the beginning of this chapter.

## 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 sealings requires mild cleaners. Always consider the instructions of the respective cleaner.

DT Swiss recommends the following cleaners:

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

Use soap water or similar mild cleaners for external cleaning.

### TOOLS

To ensure a damage-free mounting and dismounting of the components, only use the tools which are mentioned in this manual. The tools must be in good order and condition.

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 dismounting of the components can only be ensured if the tools are working properly and if the conditions of the tools are perfect.

Always keep the tools in their original packaging or adequate devices to save them from damages.

## 1.8 ENVIRONMENTAL PROTECTION

Whenever possible, waste has to be avoided. 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 DISCLAIMER

The operations described in this manual should only be performed by experts. The user is liable for any damage or consequential damage caused by wrong maintained or wrong installed components. If you have doubts, please contact your allocated DT Swiss pro level service center.

## 1.10 WARRANTY (EUROPE)

In addition to the general guarantee required by law, DT Swiss AG based in Biel/Switzerland, provides a guarantee for 24 months from the date of purchase. DT Swiss AG shall reject any liability for both indirect damage caused by accidents and consequential damage.

Any contradictory or extended national rights of the purchaser are not affected by this warranty. Place of performance and jurisdiction is Biel/Switzerland. Swiss law shall apply.

Submit any warranty claims to your retailer or a DT Swiss service center. Any defects recognized by DT Swiss AG as a warranty claim will be repaired or replaced by a DT Swiss service center.

Warranty and guarantee claims can only be made by the original purchaser with a valid sales receipt.

- There shall be no claim under the guarantee for:
- Normal wear and tear caused by use of the components
- Incorrect assembly
- Incorrect or nonexistent maintenance
- Incorrectly completed repairs
- Use of unsuitable products
- Modification of components
- Incorrect use or misuse
- Carelessness
- Leasing, commercial use or use in competitions
- Damage caused by accidents
- Delivery and transport damage
- Modification, defacing or removal of the serial number

## **1.11 LIMITED EQUIPMENT WARRANTY (USA)**

DT Swiss LTD makes every effort to assure that its product meets high quality and durability standards and warrants to the original retail consumer/purchaser of our product that each product is free from defects in materials and workmanship as follows:

**2 YEAR LIMITED WARRANTY ON THIS DT SWISS PRODUCT.**

This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities or to a lack of maintenance.

DT SWISS LTD LIMITS ALL IMPLIED WARRANTIES TO THE PERIOD OF TWO YEARS FROM THE DATE OF INITIAL PURCHASE AT RETAIL. EXCEPT AS STATED HEREIN, ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS ARE EXCLUDED. SOME STATES MAY NOT ALLOW LIMITATIONS ON HOW LONG THE IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. DT SWISS LTD SHALL IN NO EVENT BE LIABLE FOR DEATH, INJURIES TO PEOPLE OR PROPERTY OR FOR INCIDENTAL, CONTINGENT, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING FROM THE USE OF OUR PRODUCTS. SOME STATES MAY NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

To take advantage of this warranty, the product or part must be returned for examination, postage prepaid, to the dealer where you bought the product or to a DT Swiss service center. Proof of purchase date and an explanation of the complaint must accompany the product. If our inspection discloses a defect, DT Swiss will either repair or replace the product or refund the purchase price, if we cannot readily and quickly provide a repair or replacement. DT Swiss will return repaired product or replacement at DT Swiss expense, but if it is determined there is no defect, or that the defect resulted from causes not within the scope of this warranty, then the user must bear the cost of shipping. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Legal venue and place of performance is Biel (Switzerland). Swiss law shall apply. Subject to technical changes. Please keep the user manual and warranty for future use.

## 2. COMPATIBILITY



The SINC Ceramic conversion kits are available in eleven different versions. Each kit includes ceramic ball bearings to convert one set of wheels or hubs.

Set	compatible with	article number	included ball bearings	
			amount	measurements
1	RRC and RR DICUT® wheels up to MY 2015	HSBSCK01NXXXXX	1	Ø15 / 28 x 7 mm
			3	Ø15 / 24 x 5 mm
2	180 non disc-brake hubs	HSBSCK02NXXXXX	1	Ø15 / 28 x 7 mm
			1	Ø25 / 24 x 5 mm
			2	Ø17 / 26 x 5 mm
3	RC SPLINE® wheels 240s non disc-brake hubs	HSBSCK03NXXXXX	2	Ø17 / 26 x 5 mm
			2	Ø15 / 28 x 7 mm
4	SPLINE® ONE wheels up to MY 2016 240s disc-brake hubs	HSBSCK04NXXXXX	2	Ø18 / 30 x 7 mm
			2	Ø15 / 28 x 7 mm
5	240s disc-brake IS classic hubs	HSBSCK05NXXXXX	4	Ø15 / 28 x 7 mm
6	XRC 1250 SPLINE® wheels 180 disc-brake Center Lock hubs	HSBSCK06NXXXXX	2	Ø18 / 30 x 7 mm
			1	Ø15 / 24 x 5 mm
			1	Ø15 / 28 x 7 mm
7	RRC and RR DICUT® wheels from MY 2016 on	HSBSCK07NXXXXX	3	Ø15 / 24 x 5 mm
			1	Ø15 / 26 x 7 mm
8	SPLINE® Mon Chasseral wheels SPLINE® 1200 wheels SPLINE® ONE wheels MY 2017	HSBSCK08NXXXXX	1	Ø15 / 24 x 5 mm
			1	Ø15 / 26 x 7 mm
			2	Ø17 / 26 x 5 mm
9	DICUT® 1100 wheels MY2018 DICUT® 1400 wheels MY2018	HSBSCK09NXXXXX	3	Ø15 / 24 x 5 mm
			1	Ø15 / 26 x 7 mm
10	SPLINE® 1100 wheels MY 2018 SPLINE® 1400 wheels MY 2018	HSBSCK10NXXXXX	2	Ø17 / 26 x 5 mm
			1	Ø15 / 24 x 5 mm
			1	Ø15 / 26 x 7 mm
11	DICUT® 1400 TRACK MY 2018	HSBSCK11NXXXXX	4	Ø15 / 26 x 7 mm

Following hubs are not convertible:

- 240s Oversize
- 240s Predictive Steering
- SPLINE® RC disc brake 5/100 mm, 5/135 mm
- SPLINE® RC 46 H

### 3. CONVERTING THE FRONT WHEEL

- Preparatory Steps:**
- Dismount the brake disc
  - Clean the hub

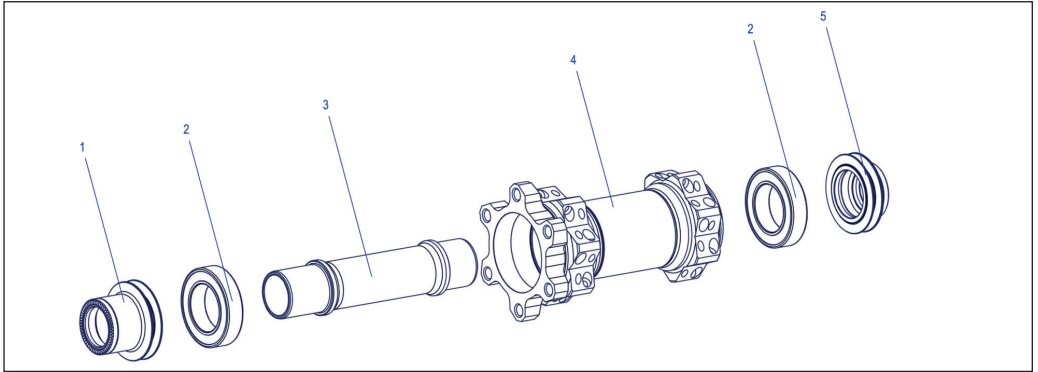



figure 1: front wheel hub

- |                |             |                 |
|----------------|-------------|-----------------|
| 1 adapter left | 3 axle      | 5 adapter right |
| 2 ball bearing | 4 hub shell |                 |

Required Material	Specification	Quantity
tools, see chap. 5, page 26	-	
DT Swiss multi-purpose grease	 20g HXTXXX00NMG20S	as required



#### NOTE

#### RISK OF DAMAGING THE ADAPTERS!

To avoid damages, only use grind clamping jaws, aluminum clamping jaws or special tools to clamp the adapters.



### 3.1 REMOVING THE ADAPTER

1. Clamp one of the adapters ([figure 1/5](#)) into a vice.
2. Pull off the wheel, respectively the hub.
3. Clamp the second adapter into the vice.
4. Pull off the wheel, respectively the hub.



### 3.2 DISMOUNTING THE BEARINGS AND THE AXLE

1. Slide the disassembly tool onto the axle ([figure 1/3](#)).
2. Tap the bearing ([figure 1/2](#)) out of the hub shell using the disassembly tool and a hammer.



3. Put the axle into the hub shell.



4. Put the short installation cylinder onto the axle.

→ When using the installation cylinder, the bearing cannot cant. Thus the bearing seat will not get damaged.

5. Put the disassembly tool onto the axle.



6. Tap out the second bearing (figure 1/2) using the disassembly tool and a hammer.



### 3.3 CLEANING AND DEGREASING ALL PARTS

1. Clean all parts of the hub (see „CLEANING“ on page 4).

### 3.4 MOUNTING BEARINGS AND AXLE



#### NOTE

#### RISK OF DAMAGING THE CERAMIC BEARINGS!

Ceramic bearings must be installed with special care.

- The assembly force may only be applied on the outer ring of the bearing.
- Tap in the bearings with slight hammer strokes.
- Only use original DT Swiss tools.
- The tools must be in good order and condition.



On front wheel hubs, the ball bearing on the brake side must always be mounted first.

1. Slightly grease the seating of the bearings and the inner surface of the hub shell using multipurpose grease.



2. Put the installation cylinder into the vice.
3. Put the axle ([figure 1/3](#)) onto the installation cylinder.
4. Put the non-disc side of the hub shell onto the installation cylinder and the axle.



5. Slightly grease the bearing (figure 1/2) and put it onto the disc side with the colored side facing outwards.



6. Put the installation cylinder onto the bearing.



7. Tap the bearing into the hub shell with slight hammer strokes.



8. Remove the installation cylinder from the hub.



9. Put the disc side of the hub with the axle onto the installation cylinder.

10. Slightly grease the bearing (figure 1/2) and put it with its colored side facing outwards onto the non-disc side.



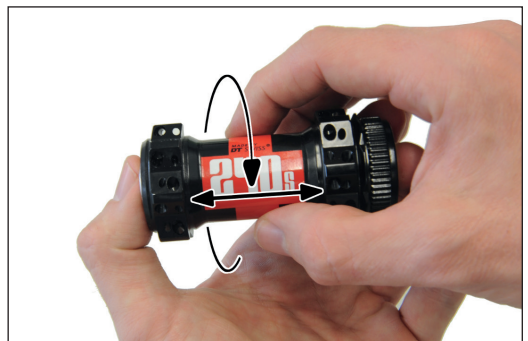
11. Put the disassembly tool onto the axle.
12. Put the installation cylinder onto the bearing.
  - The disassembly tool centers the installation cylinder on the axle.



13. Drive the second bearing into the hub shell with slight hammer strokes.
14. Remove the tools from the hub.



15. Check the bearing.
  - A slight resistance must be felt when turning the hub.
  - The hub must not have axial play.
16. If necessary drive in the bearing on the non-disc side or loosen the bearing.
17. Repeat previous steps until the hub is turning smoothly.



### 3.5 PUTTING ON THE ADAPTERS

1. Grease the bearings and the inner surface of both adapters ([figure 1/1, 5](#)).



2. Put both adapters ([figure 1/1, 5](#)) onto the hub by hand.  
→ If the adapters have different lengths, the longer adapter must be put to the brake side.



**Closing Steps:** Mount the brake disc

## 4. CONVERTING THE REAR WHEEL

- Preparatory Steps:**
- Dismount the cassette
  - Dismount the brake disc
  - Clean the hub

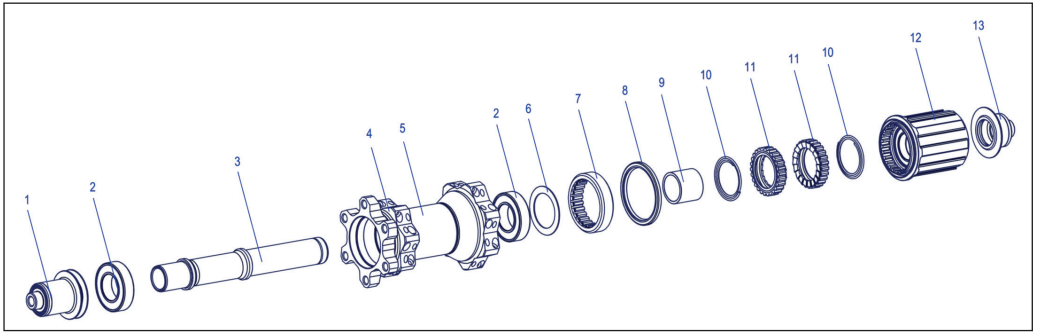




figure 2: rear wheel hub

- |                |                          |                  |
|----------------|--------------------------|------------------|
| 1 adapter left | 6 shim ring              | 11 star ratchet  |
| 2 ball bearing | 7 ring nut               | 12 rotor         |
| 3 axle         | 8 seal hub shell / rotor | 13 adapter right |
| 4 hub shell    | 9 spacer                 |                  |
| 5 sticker      | 10 spring                |                  |

Required Material	Specification	Quantity
tools, see chap. 5, page 26	-	
DT Swiss multi-purpose grease	 20g HXTXXX00NMG20S	as required
DT Swiss special grease for ratchet system®	 20g HXTXXX00NSG20S	as required



### NOTE

#### RISK OF DAMAGING THE ADAPTERS!

To avoid damages, only use grind clamping jaws, aluminum clamping jaws or special tools to clamp the adapters.

#### 4.1 REMOVING ADAPTERS, ROTOR AND THE RATCHET SYSTEM®

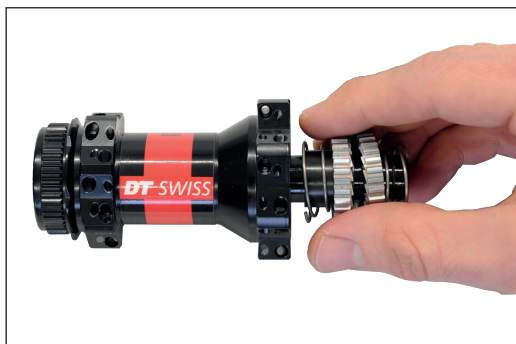
1. Clamp the left adapter ([figure 2/1](#)) into a vice.
2. Pull off the wheel, respectively the hub.
3. Clamp the right adapter ([figure 2/13](#)) into a vice.
4. Pull off the wheel, respectively the hub.  
→ Take care that the rotor does not fall off.



5. Pull the rotor ([figure 2/12](#)) off the hub.



6. Take the springs ([figure 2/10](#)), the star ratchets ([figure 2/11](#)) and the spacer ([figure 2/9](#)) off the hub.



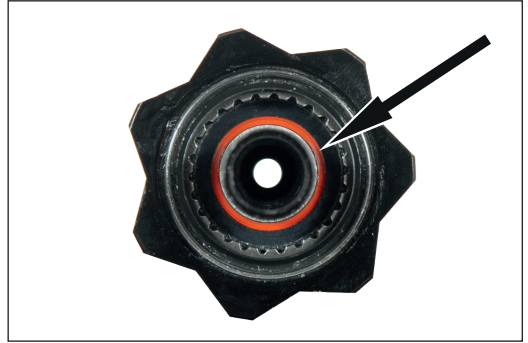


## 4.2 CHECKING THE HUB VERSION

**i**

Some hubs from model year 2015 on are using ball bearings with a smaller outer diameter on the drive side. The bearing on the drive side can be changed without dismantling the ring nut. On all further hubs, the ring nut must be dismantled to change the bearing. Check the hub version before starting further maintenance works.

1. Check, if the shim ring can be removed.
  - If the shim ring cannot be removed, the ring nut has to be dismantled to change the bearing.
  - If the shim ring can be removed, the ring nut doesn't have to be dismantled to change the bearing.

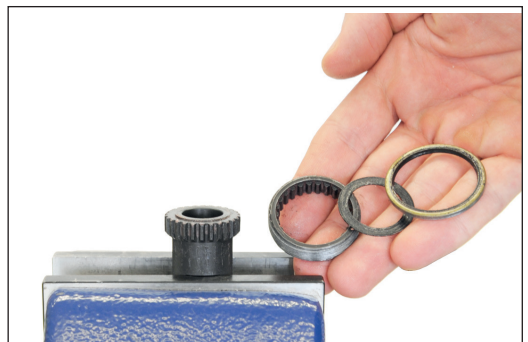
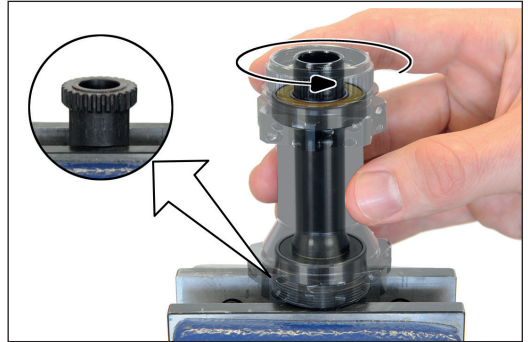


## 4.3 DISMOUNTING THE RING NUT (IF REQUIRED)

**i**

The ring nut gets tightened while pedaling. Therefore it might be very hard to loosen the ring nut. We recommend to loosen the ring nut only when the wheel is complete.

1. Clamp the ring nut tool into the vice in its high position.
2. Put the drive side of the hub onto the tool.
3. Turn the hub counter clockwise and unscrew the ring nut ([figure 2/7](#)).
  - The sealing ([figure 2/8](#)) sitting in front of the ring nut will be released from its press fit while unscrewing the ring nut.
4. Remove the hub from the tool.
5. Remove the ring nut ([figure 2/7](#)), the sealing ([figure 2/8](#)) and the shim ring ([figure 2/6](#)).



#### 4.4 DISMOUNTING THE BEARING ON THE NON DRIVE-SIDE

1. Tap out the bearing on the non drive side ([figure 2/2](#)) with slight hammer strokes onto the axle.



2. Remove the bearing from the axle.



## 4.5 DISMOUNTING THE BEARING ON THE DRIVE SIDE

1. Slide the short end of the axle ([figure 2/3](#)) into the bearing ([figure 2/2](#)) on the drive side.
  2. Slide the short installation cylinder onto the axle.  
→ When using the installation cylinder, the bearing cannot cant. Thus the bearing seat will not get damaged.
  3. Tap out the bearing with slight hammer strokes.
  4. Remove the installation cylinder from the hub.
- 
5. Remove the bearing from the axle.



## 4.6 CLEANING AND CHECKING THE PARTS

The wear of the star ratchet starts at its outer diameter. If there is only low wear, the star ratchets can be further used. In this case the start ratchets must be checked regularly in short intervals.

In case of heavy wear, the star ratchets must be changed immediately.

1. Clean the star ratchets, check for wear and change them if necessary.
2. Check the rotor ([figure 2/12](#)) for damages.  
→ Grooves from the cassette are no damages. These are normal signs of usage.
3. Remove bad notches from the rotor using a file.
4. Clean the rotor. Metal filings must be removed completely.



## 4.7 MOUNTING THE BEARING ON THE DRIVE SIDE



### NOTE

#### RISK OF DAMAGING THE CERAMIC BEARINGS!

Ceramic bearings must be installed with special care.

- The assembly force may only be applied on the outer ring of the bearing.
- Tap in the bearings with slight hammer strokes.
- Only use original DT Swiss tools.
- The tools must be in good order and condition.



Some hubs from model year 2015 on are using ball bearings with a smaller outer diameter on the drive side. The bearing on the drive side can be changed without dismounting the ring nut.



On rear wheel hubs, the ball bearing on the drive side must always be mounted first.

If the ring nut is dismounted (model year < 2015):

1. Grease the bearing seats and the thread of the ring nut using multi-purpose grease.

If the ring nut is not dismounted (model year  $\geq$  2015):

1. Grease the bearing seat beneath the ring nut using multi-purpose grease.  
→ There must be no grease on the tothing of the ring nut!

2. Clamp the installation cylinder into the vice.
3. Slide the axle ([figure 2-3](#)) with its long end downwards into the installation cylinder.
4. Slide the non drive side of the hub shell onto the installation cylinder.
5. Put a new ball bearing ([figure 2-2](#)) with the colored side facing outwards onto the drive side of the hub shell.



6. Put the second installation cylinder onto the bearing.
7. Tap in the bearing with slight hammer strokes.



8. Remove the axle ([figure 2-3](#)) from the hub shell.



9. Grease the bearing on the drive side using multi-purpose grease.



#### 4.8 MOUNTING THE RING NUT AND THE SEAL (IF REQUIRED)

1. Put the tool for the ring nut in its lower position into the vice.
2. Put the ring nut ([figure 2-7](#)) onto the tool with its recess facing upwards.
3. Put the shim ring ([figure 2-6](#)) into the recess of the ring nut.

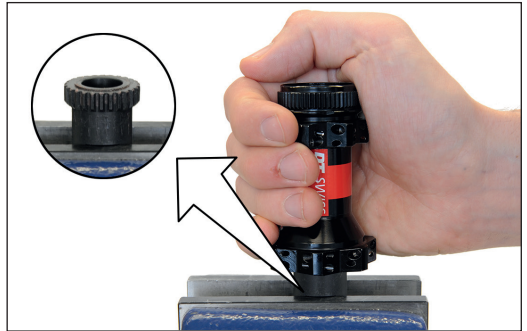


4. Put the hub onto the assembly and screw on the ring nut for about 2 turns.

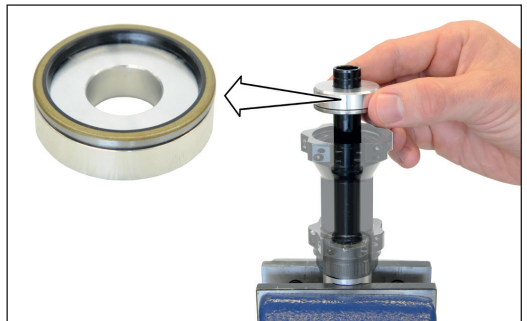


5. Release the ring nut tool, turn it 90° and clamp it into the vice in its high position.

6. Put the hub shell with the ring nut onto the tool again and tighten the ring nut as tight as possible by hand.



7. Clamp the installation cylinder into the vice.
8. Insert the axle ([figure 2-3](#)) with the short side facing down into the installation cylinder.
9. Slide the brake side of the hub onto the installation cylinder.
10. Put the seal ([figure 2-8](#)) onto the installation tool for the seal.
11. Slide the installation tool, and the seal onto the axle.



- Put on the second installation cylinder and tap in the seal.



## 4.9 MOUNTING THE BEARING ON THE NON DRIVE SIDE



### NOTE

#### RISK OF DAMAGING THE CERAMIC BEARINGS!

Ceramic bearings must be installed with special care.

- The assembly force may only be applied on the outer ring of the bearing.
- Tap in the bearings with slight hammer strokes.
- Only use original DT Swiss tools.
- The tools must be in good order and condition.

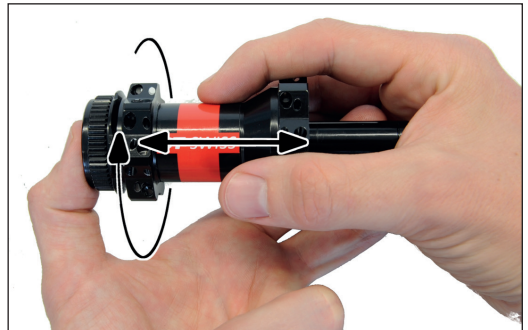
1. Clamp the ring nut tool into the vice.
2. Put the hub shell with the drive side onto the tool.
3. Slide the axle (figure 2-3) with its long end downwards into the tool.
4. Put a new bearing (figure 2-2) with the colored side facing outwards onto the hub shell.



5. Put the installation cylinder onto the bearing.
6. Tap in the bearing with slight hammer strokes.



7. Check the bearing.
  - A slight resistance must be felt when turning the hub.
  - The hub must not have axial play.
8. If necessary drive in the bearing on the disc side or loosen the bearing.
9. Repeat previous steps until the hub is turning smoothly.





#### 4.10 PUTTING ON THE RATCHET SYSTEM®

1. Grease the outer and the inner tooting of the star ratchets ([figure 2-11](#)) using DT Swiss special grease.  
→ For an optimal functionality, a thin layer of grease is sufficient.



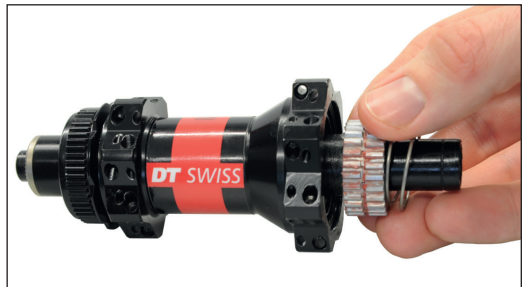
2. Grease the tooting of the rotor using DT Swiss special grease.



3. Put on the spacer ([figure 2-9](#)) and the first spring ([figure 2-10](#)).  
→ The big diameter of the spring must be placed on the bearing of the hub.



4. Put on both star ratchets ([figure 2-11](#)) and the second spring ([figure 2-10](#)).  
→ The small diameter of the spring must be placed on the star ratchet.



## 4.11 PUTTING ON THE ROTOR AND THE ADAPTERS

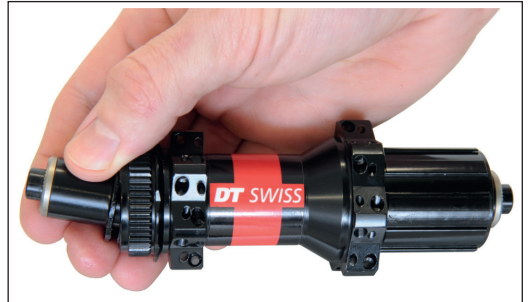
1. Put the rotor ([figure 2-12](#)) onto the hub.
2. Check if the rotor can be turned easily and if the star ratchets engage.



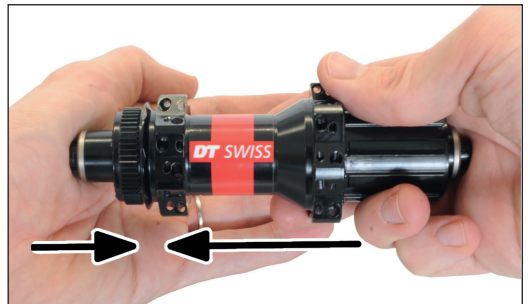
3. Grease both bearings and the contact surface of the adapters ([figure 2-1/13](#)).



4. Put both adapters ([figure 2-1/13](#)) onto the hub.  
→ The shorter adapter must be placed on the drive side.





5. Push in the adapters ([figure 2-1/13](#)) by hand.



- Closing Steps:**
- Mount the brake disc
  - Mount the cassette

## 5. CONVERTIG THE REAR WHEEL (MON CHASSERAL)

- Preparatory Steps:**
- Dismount the cassette
  - Clean the hub
  - Remove the adapters, the rotor and the ratchet system® (see [chap. 4.1 on page 16](#))
  - Dismount the bearing on the non drive-side (see [chap. 4.4 on page 18](#))
  - Dismounting the bearing on the drive side (see [chap. 4.5 on page 19](#))

Required Material	Specification	Quantity
Tools, see <a href="#">chap. 6 on page 30</a>		
DT Swiss multi purpose grease	 20g HXTXXX00NMG20S	as required
DT Swiss special grease for Ratchet System®	 20g HXTXXX00NSG20S	as required



### NOTE

#### RISK OF DAMAGING THE CERAMIC BEARINGS!

Ceramic bearings must be installed with special care.

- The assembly force may only be applied on the outer ring of the bearing.
- Tap in the bearings with slight hammer strokes.
- Only use original DT Swiss tools.
- The tools must be in good order and condition.

## 5.1 MOUNTING THE BEARING ON THE DRIVE SIDE (MON CHASSERAL)

1. Clamp the installation cylinder into the vice.
2. Slide the axle with its long end downwards into the installation cylinder.
3. Slide the non drive side of the hub shell with the ring nut mounted onto the installation cylinder.
4. Put the SINC Ceramic bearing with the colored side facing outwards onto the drive side of the hub shell.



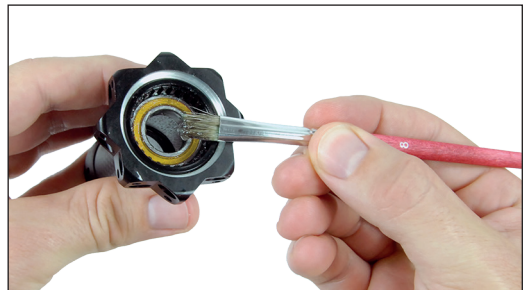
5. Put the installation cylinder onto the bearing.
6. Tap in the bearing with slight hammer strokes.



7. Remove the axle from the hub shell.



8. Grease the bearing on the drive side using multi-purpose grease.



## 5.2 MOUNTING THE BEARING ON THE NON DRIVE SIDE (MON CHASSERAL)

1. Clamp the installation cylinder into the vice.
2. Put the hub shell with the drive side onto the tool.
3. Slide the axle with its long end downwards into the tool.
4. Put the SINC Ceramic bearing with the colored side facing outwards onto the hub shell.



5. Put the installation cylinder onto the bearing.
6. Tap in the bearing with slight hammer strokes.














7. Check the bearing.
  - A slight resistance must be felt when turning the hub.
  - The hub must not have axial play.
8. If necessary drive in the bearing on the disc side or loosen the bearing.
9. Repeat previous steps until the hub is turning smoothly.



### Closing Steps:

- Put on the Ratchet System® (see [chap. 4.10 on page 25](#))
- Putting on the Rotor and the Adapters (see [chap. 4.11 on page 26](#))
- Mount the cassette

## 6. TOOLS

required for set	tool	Specification	Amount
3 / 8 / 10	tool set radial FW <ul style="list-style-type: none"> <li>• disassembly tool</li> <li>• installation cylinder</li> </ul>	HWTXXX00NTKRAS	1
		 Ø17 mm HXTXXX00N5067S	1
		 Ø17 / 26 mm HXTXXX00N5068S	2
1 / 2 / 3 / 4 / 5 / 6 / 7 / 8 / 9 / 10 / 11	disassembly tool	 Ø15 mm HXTXXX00N5031S	1
1 / 6 / 7 / 8 / 9 / 10	installation cylinder	 Ø15 / 24 x 60 mm HXTXXX00N5025S	2
7 / 8 / 9 / 10 / 11	installation cylinder	 Ø15 / 26 x 60 mm HXTXXX00N5314S	2
4 / 6	tool set Ø15 <ul style="list-style-type: none"> <li>• disassembly tool</li> <li>• installation cylinder</li> </ul>	HWTXXX00NTK15S	1
		 Ø18 mm HXTXXX00N5168S	1
		 Ø18 / 30 x 40 mm HXTXXX00N5167S	2
1 / 2 / 3 / 4 / 5 / 6	installation cylinder	 Ø15 / 28 x 35 mm HXTXXX00N5024S	2
1 / 2 / 3 / 4 / 5 / 6	tool for ring nut	 HXTXXX00N5027S	1
1 / 2 / 3 / 4 / 5 / 6	installation tool for hub seal	 HXTXXX00N5026S	1
8 (only for RC SPLINE Mon Chasseral, DICUT Mon Chasseral)	installation cylinder	 Ø15 / 24 - 37 x 45 mm HXTXXX00N9842S	1

**DT SWISS AG**

Längfeldweg 101  
CH - 2504 Biel/Bienne  
info.ch@dtswiss.com

**DT SWISS, INC.**

2493 Industrial Blvd.  
USA - Grand Junction, CO 81505  
info.us@dtswiss.com

**DT SWISS (FRANCE) S.A.S.**

Parc d'Activites de la Sarrée  
Route de Gourdon  
F - 06620 Le Bar sur Loup  
info.fr@dtswiss.com

**DT SWISS (ASIA) LTD.**

No.5, Jingke 5th Rd., Nantun District  
Taichung City 408  
Taiwan (R.O.C.)

info.tw@dtswiss.com

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