



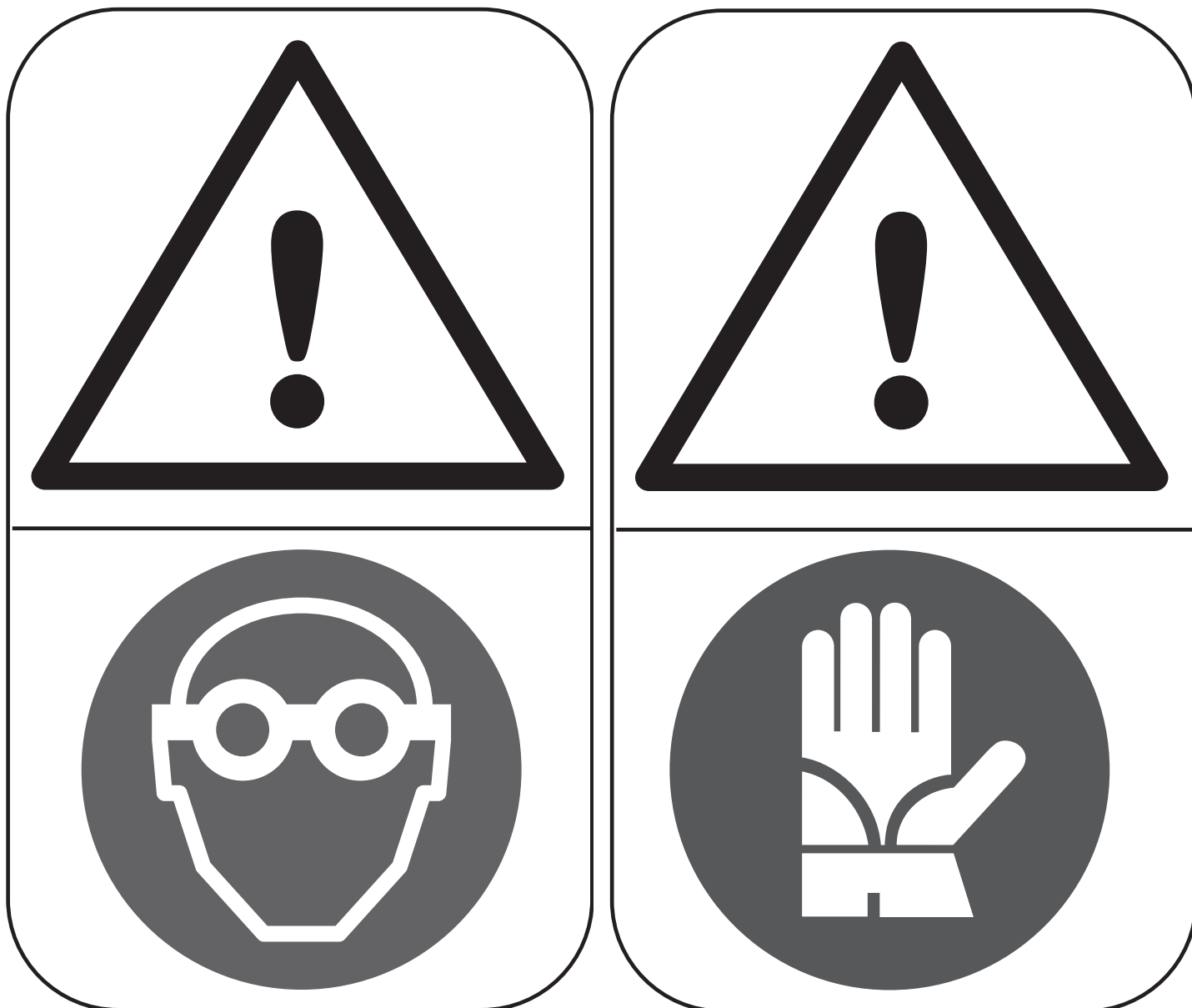
## **TECHNICAL MANUAL - 5**

### **WHEELS**

**REMOVAL AND REFITTING WHEEL REAR HUB  
(CUP-CONE BEARINGS)**

## WARNING!

Always wear protective gloves and glasses while working on the bicycle.



### THIS TECHNICAL MANUAL IS INTENDED FOR USE BY PROFESSIONAL MECHANICS.




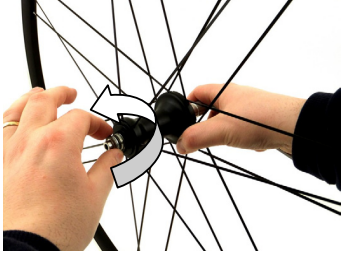
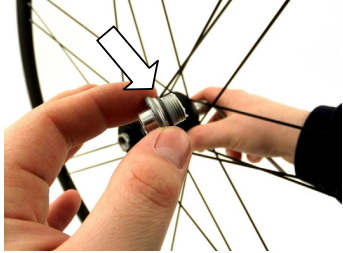







Anyone who is not a qualified professional for bicycle assembly must not attempt to install and operate on the components independently due to the risk of carrying out incorrect operations which could cause the components to malfunction, resulting in accidents, physical injury or even death.

The actual product may differ from what is illustrated, as the specific purpose of these instructions is to explain the procedures for using the component.



# TECHNICAL MANUAL - 5

PROCEDURE	REVISION	DESCRIPTION
1	03/10/ 2024	REMOVAL AND REFITTING WHEEL REAR HUB (CUP-CONE BEARINGS)
<b>PRODUCTS ON WHICH THE PROCEDURE SHOULD BE APPLIED</b>		
Refer to the "Table of Technical Manuals for Wheels", available at <a href="http://www.campagnolo.com">www.campagnolo.com</a> / section "Technical Documentation - Technical Manuals".		

		
<p><b>1</b></p> <p>Remove the cover from the side of the adjustment ring nut with a small flat-bladed screwdriver.</p>	<p><b>2</b></p> <p>► To remove the freewheel body see Technical Manual 4 (from 1 to 6)</p>	<p><b>3</b></p> <p>Insert the two hex wrenches inside the hex-drive of the Of the axle and end cap then firmly unscrew. The right side (on the opposite side of the adjustment ring nut) remains fixed, the left side end cap rotates counter-clockwise to loosen the end cap.</p>
		
<p><b>4</b></p> <p>Loosen the axle end cap (adjustment ring nut side).</p>	<p><b>5</b></p> <p>While removing the end cap, make sure you do not lose the spacer.</p>	<p><b>6</b></p> <p>Use a screwdriver with a 2.5mm hex insert to loosen the screw of the adjustment ring nut.</p>
		
<p><b>7</b></p> <p>The indication that the adjustment ring nut will be loosened will be when the slot in the nut has a visible gap. Do not remove the screw from the adjustment ring nut.</p>	<p><b>8</b></p> <p>Loosen the adjustment ring nut counter-clockwise and at the same time hold the axle on the opposite side.</p>	<p><b>9</b></p> <p>Push the axle inside the body of the hub until it reaches the other side.</p>
		
<p><b>10</b></p> <p>Remove the axle from the body of the hub.</p>	<p><b>11</b></p> <p>Remove the cone and the adjustment cone from the body of the hub.</p>	<p><b>12</b></p> <p>► To replace the cups see Technical Manual 2 (from 17 to 65)</p>

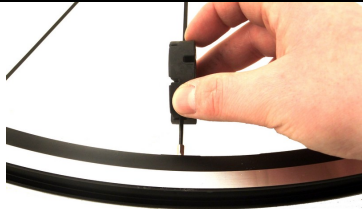
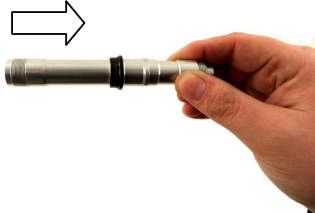


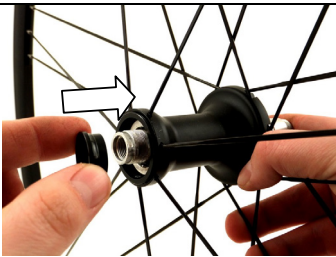



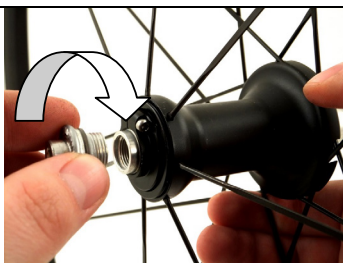
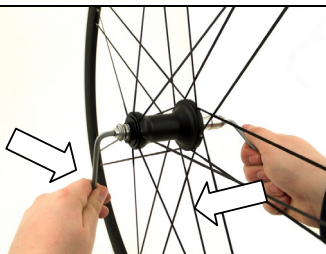

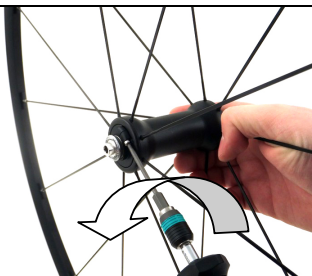
# TECHNICAL MANUAL - 5

PROCEDURE	REVISION	DESCRIPTION
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**1** 03/10/ 2024 REMOVAL AND REFITTING WHEEL REAR HUB (CUP-CONE BEARINGS)

## PRODUCTS ON WHICH THE PROCEDURE SHOULD BE APPLIED

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<p><b>13</b></p> <p>► <i>To replace the spoke see Technical Manual 3 (from 1 to 19)</i></p>	<p><b>14</b></p> <p>Insert the cone on the rear axle following the direction it should be inserted in. The larger diameter should face the axle.</p>	<p><b>15</b></p> <p>Check the cone is mates correctly into the bearing retaining ring.</p>
		
<p><b>16</b></p> <p>Insert the axle inside the body of the hub on the ratchet ring side.</p>	<p><b>17</b></p> <p>Insert the second cone onto the axle following the direction it should be inserted in. The larger diameter should face the outside of the hub's body.</p>	<p><b>18</b></p> <p>Insert the adjustment cone onto the axle mating into the cone from 17. The direction it should be inserted in. The larger diameter should face the outside of the hub's body.</p>
		
<p><b>19</b></p> <p>Manipulate it into position by using a small screwdriver. Push the adjustment cone in by pressing on various points of the circumference.</p>	<p><b>20</b></p> <p>Install and tighten the adjustment ring nut clockwise and hold the axle while holding the axle stationary with your right hand.</p>	<p><b>21</b></p> <p>Inspect the axle end cap. If it is damaged, replace it. Insure that the small spacer is in place and install the end cap into the axle end.</p>
		
<p><b>22</b></p> <p>Insert the two 5mm hex wrenches inside the hexagons of the hub's body and tighten firmly. The right wrench (on the opposite side of the adjustment ring nut) remains fixed, the left wrench rotates clockwise.</p>	<p><b>23</b></p> <p>Insert the cover with the larger internal diameter on the body of the hub on the adjustment ring nut side. If it is damaged, replace it.</p>	<p><b>24</b></p> <p>► <i>To adjust the hub see Technical Manual 1</i></p>

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PROCEDURE	REVISION	DESCRIPTION
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1	03/10/ 2024	REMOVAL AND REFITTING WHEEL REAR HUB (CUP-CONE BEARINGS)
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## PRODUCTS ON WHICH THE PROCEDURE SHOULD BE APPLIED

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► To mount the freewheel body see  
Technical Manual 4 (from 7 to 16)











# TECHNICAL MANUAL - 5

PROCEDURE	REVISION	DESCRIPTION
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2 03/10/ 2024 REMOVAL AND REFITTING WHEEL REAR HUB (CUP-CONE BEARINGS)

## PRODUCTS ON WHICH THE PROCEDURE SHOULD BE APPLIED

Refer to the "Table of Technical Manuals for Wheels", available at [www.campagnolo.com](http://www.campagnolo.com) / section "Technical Documentation – Technical Manuals".

<p>· If your wheel has a Quick Release pivot: refer to Technical Manual 5 – Procedure 1.</p> <p>· If your wheel has an HH12 axle: refer to the operation below.</p>		
	<p><b>1</b></p> <p>Insert the tool (UT-WHDB001 or UT-WHDB002) on the right of the axle.</p>	<p><b>2</b></p> <p>Use a cone wrench to loosen the adaptor.</p>
		
<p><b>3</b></p> <p>Put aside the adaptor and the spacer under the adaptor.</p>	<p><b>4</b></p> <p>Loosen the screw which tightens the ring.</p>	<p><b>5</b></p> <p>Working anti-clockwise, fully loosen the adjuster nut (holding the pivot stationary from the opposite side at the same time).</p>
		
<p><b>6</b></p> <p>Remove the spacer.</p>	<p><b>7</b></p> <p>Remove the cone and the adjuster cone.</p>	<p><b>8</b></p> <p>Take out the pivot from the right-hand side.</p> <ul style="list-style-type: none"> <li>· At this point, proceed as described from point 18 to point 74: Technical Manual 2 - Removal and refitting wheel front hub (cup-cone bearings).</li> <li>· After carrying out all the operations listed from point 18 to point 74, complete the procedure by referring to Technical Manual 1 - Wheel hub adjustment (cup-cone bearings)</li> </ul>

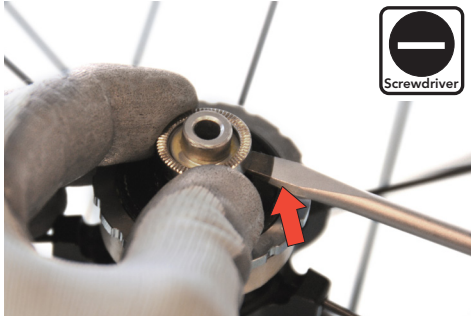




# TECHNICAL MANUAL - 5

PROCEDURE	REVISION	DESCRIPTION
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3	03/10/ 2024	REMOVAL AND REFITTING WHEEL REAR HUB (CUP-CONE BEARINGS)
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## PRODUCTS ON WHICH THE PROCEDURE SHOULD BE APPLIED

Refer to the "Table of Technical Manuals for Wheels", available at [www.campagnolo.com](http://www.campagnolo.com) / section "Technical Documentation - Technical Manuals".

		
<p><b>1</b></p> <p>Remove the left hand adaptor applying pressure outward with a flat screwdriver.</p>	<p><b>2</b></p> <p>Loosen the screw which tightens the ring.</p>	<p><b>3</b></p> <p>Working anti-clockwise, fully loosen the adjuster nut.</p>
		
<p><b>4</b></p> <p>Remove the cone and the adjuster cone.</p>	<p><b>5</b></p> <p>Take out the pivot from the right-hand side.</p>	<p><b>6</b></p> <ul style="list-style-type: none"> <li>• At this point, proceed as described from point 18 to point 74: Technical Manual 2 - Removal and refitting wheel front hub (cup-cone bearings).</li> <li>• After carrying out all the operations listed from point 18 to point 74, complete the procedure by referring to Technical Manual 1 - Wheel hub adjustment (cup-cone bearings)</li> </ul>