

12s SPROCKETS

WARNING!

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.

1 - TECHNICAL SPECIFICATIONS

12 SPEED™	MIN. SPROCKET 11	
	MAX. SPROCKET 34	
	TIGHTENING TORQUE	
	<i>SUPER RECORD™</i> <i>CHORUS™</i>	
	40 Nm (354 in.lbs)	

2 - COMPATIBILITY

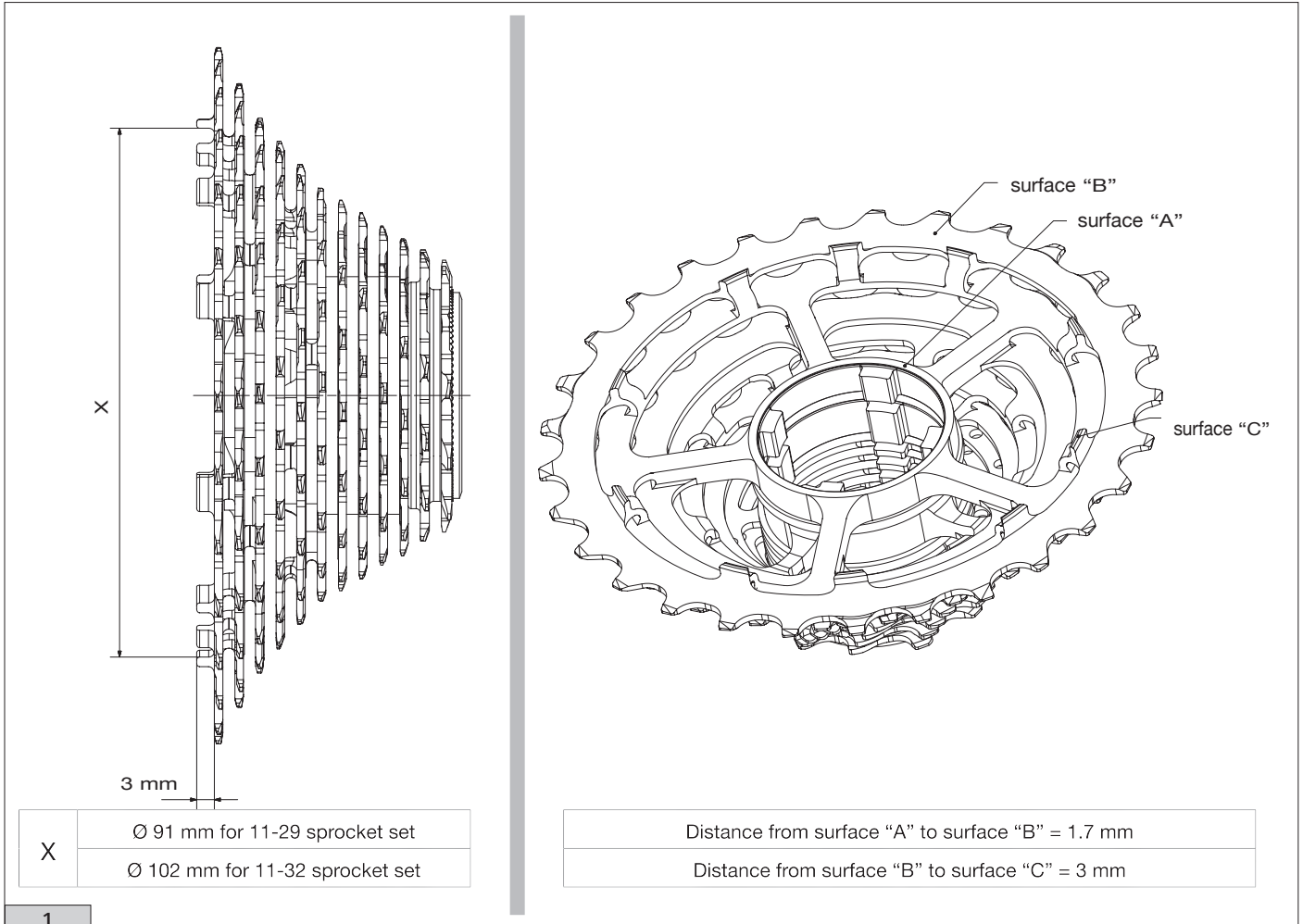
12 SPEED™	SPACERS: <i>12s</i>	
	CHAIN: <i>12s</i>	
	FIXING RING: <i>12s</i>	

WARNING!

Different combinations from those included in the table could cause the malfunction of the drivetrain and result in an accident, personal injury or death.

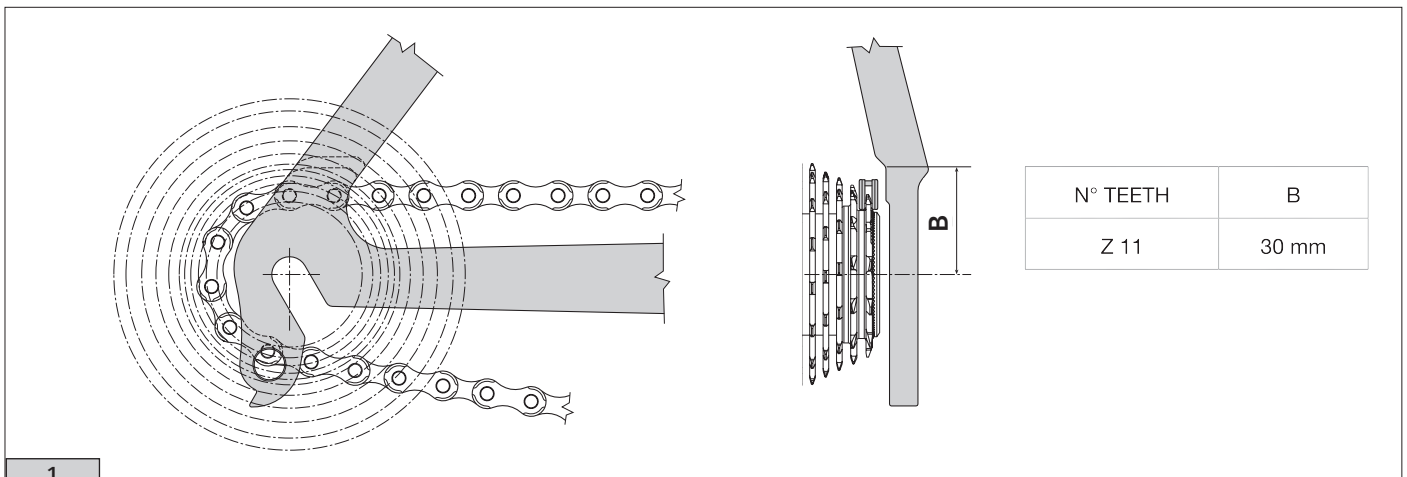
! WARNING!

The 12s sprocket sets have some appendixes (Fig.1) to reduce the risk that the chain gets stuck in the hub, in case it comes off and falls beyond the last sprocket. These appendixes protrude inward by 4.7 mm, with respect to the "A" contact surface of the sprocket set on the FW body.



1

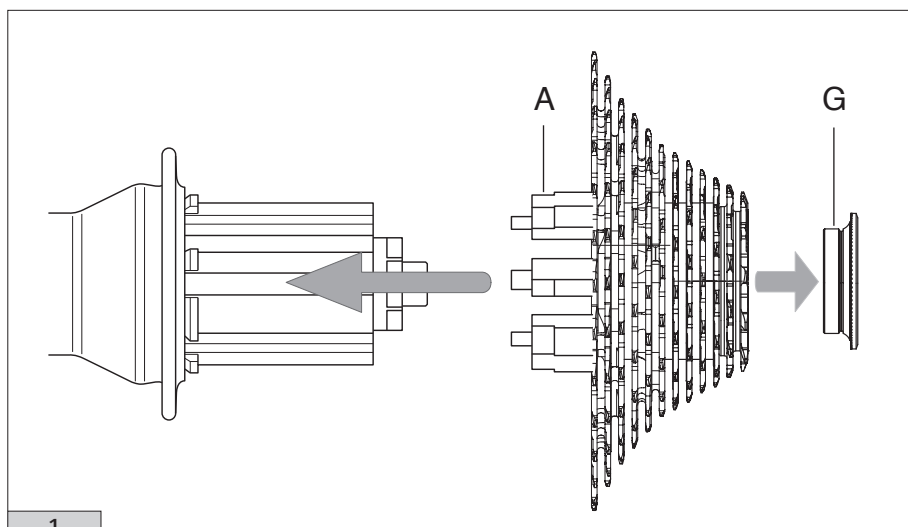
3 - INTERFACE WITH THE FRAME



1

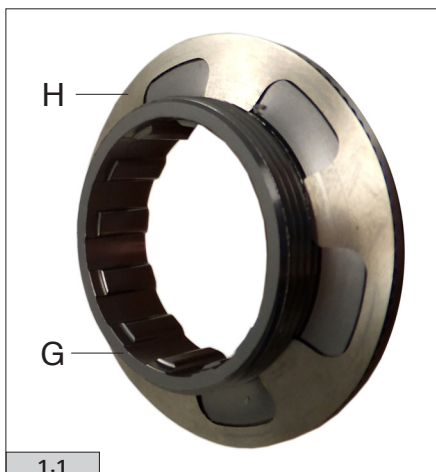
4 - 12s SPROCKETS ASSEMBLY

- The sprockets are pre-assembled and timed on the plastic support (A - Fig. 1). The ring G (Fig. 1.1) is provided with a preassembled washer (H); ensure that it is positioned as in fig. 1.
- Remove the ring (G - Fig. 1).

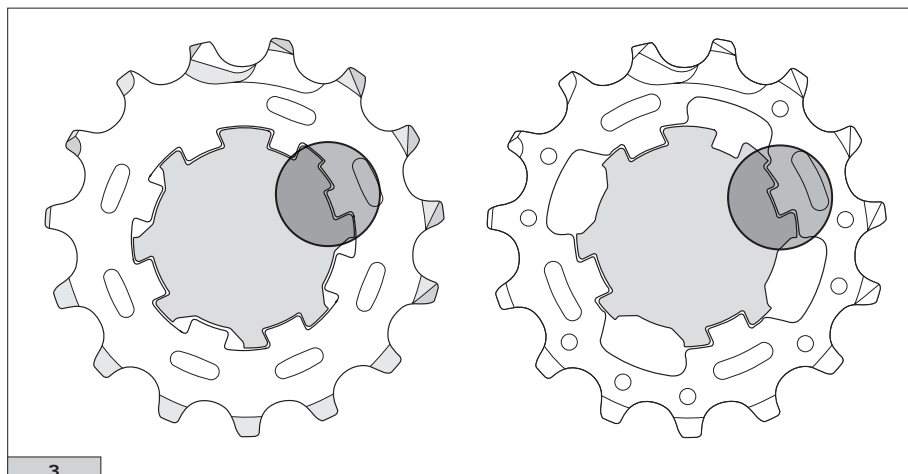


- Insert the support on the side of the freewheel body, align the spline patterns, press the sprockets onto the freewheel and extract the support (A) from the hub (Fig. 1).

- If installing the sprockets without the plastic support, install the individual or preassembled sprockets and the spacers on the sprocket body of the hub aligning the spline patterns (Fig. 2).



The profile of the freewheel body with two asymmetrical grooves (Fig. 3) ensures automatic sprocket timing since there is only one assembly option.



WARNING!

With the 12s Campagnolo® sprockets use **ONLY** the specific locking. Be sure to use the correct size locking to properly tighten the assembly. An incorrect locking could cause failure to the assembly, resulting in an accident, personal injury, or death.

SPACERS

F = 2,0 mm

11 - 29	11A-1°	12A-2°	13A	F	14A	F	15A	F	16A	F	17A-19A-21A	F	23A-26A-29A
11 - 32	11A-1°	12A-2°	13A	F	14A	F	15A	F	16A	F	17A-19A-22A	F	25A-28A-32A
11 - 34	11A-1°	12A-2°	13A	F	14A	F	15A	F	16A	F	17A-19A-22A	F	25A-29A-34A

4

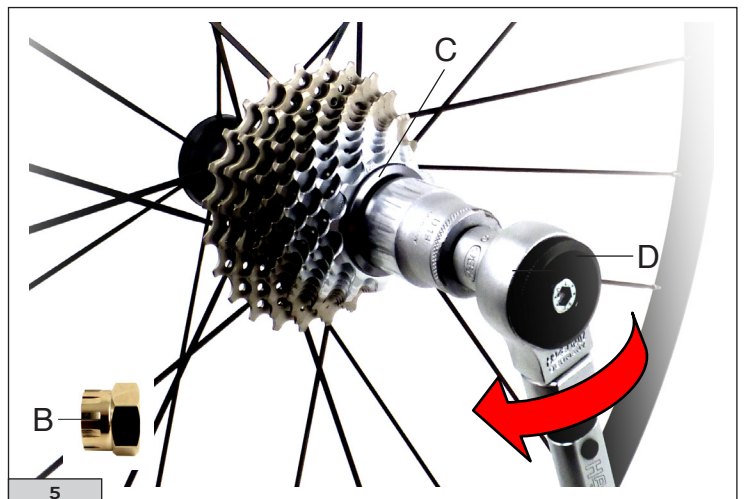
Pay attention to the exact assembly order of the spacers (Fig. 4).

NOTE

- Use Campagnolo® 12 Speed sprockets and spacers only.
- Strictly follow the table of standard compositions (Fig. 4).

Always verify to have the correct sprocket before proceeding with the assembly.

- Using a torque wrench (D - Fig. 5) equipped with Campagnolo® tool UT-BB080 (B - Fig. 5), tighten the lockring (C - Fig. 5), which is provided with the Campagnolo sprockets, on to the freewheel body to **40 Nm (354 in.lbs)**.



5 - MAINTENANCE

The life of the components depends on conditions of use and on the frequency and quality of maintenance. To keep the components in good condition, cleaning and lubrication must therefore be repeated frequently, especially if it is subjected to heavy-duty use (i.e. after washing your bicycle, after every ride in wet, dusty or muddy conditions etc.).

- Dirt seriously damage bicycles and their components. Thoroughly rinse, clean and dry your bike after using it in these conditions.

IMPORTANT: for cleaning the bicycle only use environmentally-friendly and neutral products without caustic substances and safe to use for you and for the environment.

- Never spray your bicycle with water under pressure. Pressurized water, even from the nozzle of a small garden hose, can pass seals and enter into your Campagnolo® components, damaging them beyond repair. Wash your bicycle and Campagnolo® components by wiping them down with water and neutral soap. Dry them using a soft cloth. Never use abrasive or metal pads.



WARNING!

Salt water environments (as found on winter roads and near the seaside) can cause galvanic corrosion on most bike parts. Carefully rinse, clean, dry and re-lubricate all exposed parts to avoid damage, malfunctions and accidents.