



4ZA OWNERS MANUAL FOR STEM

GENERAL

Read this manual carefully before using your 4ZA stem.

⚠️WARNING

Bicycle riding can be, and often is, extremely dangerous. Your 4ZA stem was designed and manufactured using state of the art technology and materials. It meets and exceeds the current EN-standard which apply to the product. Nevertheless, the poor condition of many of our roads, your speed on impact, dangerous climatic conditions, your weight and your dexterity as a rider are just a few of the factors which contribute to possible and even foreseeable impact energies well beyond your 4ZA stem capabilities. No stem, including your 4ZA stem, can withstand ALL such foreseeable impacts.

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⚠️WARNINGS

Read very carefully!

Keep this manual and all other documentation you received from 4ZA because they contain important information.

⚠️WARNING

No stem can withstand all foreseeable impacts. The ability of any stem, including your 4ZA stem, is limited.

⚠️WARNING

Replace your 4ZA stem after no more than three years. While the "useful life" of your 4ZA stem depends on its use and care, as a general rule, given the enormous stresses to which stems are regularly subjected, we strongly recommend that your 4ZA stem be replaced after no more than three years from its date of purchase. Should you decide to disregard our recommendation, remember that you are doing so at your own, exclusive risk!

⚠️WARNING

Your 4ZA stem is a high-tech product and must therefore be assembled only by a specialized mechanic using sophisticated, professional tools. DO NOT ATTEMPT TO ASSEMBLE YOUR 4ZA STEM YOURSELF!

Should you decide to disregard our recommendation, please follow the assembling instructions featured in this owner's manual very carefully and remember that you are doing so at your own, exclusive risk!

⚠️WARNING

Do not pair your 4ZA stem with any other handlebar but the 4ZA handlebar which was designed specifically for that purpose or use components not manufactured by 4ZA.

⚠️WARNING

Your 4ZA stem can only be used for the following cycling applications: road racing, track racing, cyclocross, cross country mountainbike, triathlon, fitness.

⚠️WARNING

Make sure you thoroughly check every component of your bicycle paying particular attention to your 4ZA stem before each and every single use. Make sure there are no cracks or deformations. Should you find any, do not use your bicycle. Take it to a professional mechanic for any and all necessary repairs/replacements.

⚠️WARNING

Make sure you submit your 4ZA stem to regular check-ups by your mechanic. It has been our experience that a large majority of accidents could have easily been avoided by a preliminary examination by a professional mechanic.

⚠️WARNING

4ZA declines any and all responsibility for injuries and/or damages caused by the failure to scrupulously respect the instructions on torque values in tightening the bolts. Any different torque can and will affect the integrity of your 4ZA stem.

⚠️WARNING

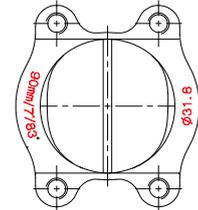
Never dispose any of your 4ZA components in the environment. Seek the advice of your local waste collection officials.

TECHNICAL INFORMATION

Compatibility

4ZA stems are designed for use with alluminium and carbon fiber steerer tubes with a 28,6mm steerer tube clamp diameter.

⚠️ Important! Do not use a reduction sleeve to alter your 4ZA stem handlebar clamp diameter. 4ZA stems are designed for use with 31,8mm handlebar clamp diameters. 4ZA stem clamp diameters are printed on the products.

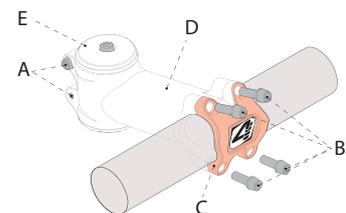


PARTS AND TOOLS

Familiarize yourself with the parts of your 4ZA stem and the tools required to assemble the handlebar on to your 4ZA stem.

Your 4ZA stem parts *

- A - Steerer Clamp bolt(s)
- B - Face Clamp bolts
- C - Face Clamp
- D - Stem Body
- E - Stem top cap



*Your 4ZA stem may differ from the model shown

Tools

- 4, 5, 6 mm Hex wrenches
- Torque wrench
- Friction paste
- Grease or titanium anti-seize for titanium bolts
- Isopropyl alcohol
- 400 grit sandpaper

PREPARE PARTS

Use isopropyl alcohol to clean the fork steerer tube, your 4ZA stem steerer clamp surface as well as the other 4ZA stem contact surfaces.

⚠ Important! Do not lubricate any of the surfaces. Remove your 4ZA stem bolts and apply grease on standard bolt threads.

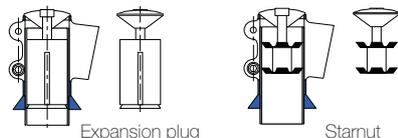
⚠ Important! While the bolts are removed, remove any burrs from your 4ZA stem steerer clamp and face clamp surfaces and smoothen with 400 grit sandpaper. Re-install the steerer clamp bolt(s) until finger tight and the bolt head contacts your 4ZA stem surface. Set aside the face clamp bolts. Install the fork onto the bike according your fork manufacturer's instructions. If the fork's steerer tube needs to be cut, adhere to the following instructions to ensure proper engagement of your 4ZA stem clamp with the steerer tube.

⚠ Important! Be sure to account for the overall stack height of the stem, headset, and spacers prior to cutting.

Steel or aluminium steerer tube

Measure and cut the steerer tube 3mm below the top of the stem.

Use a threadless nut setter to insert the special threadless nut for a-head stem inside the fork steerer tube.



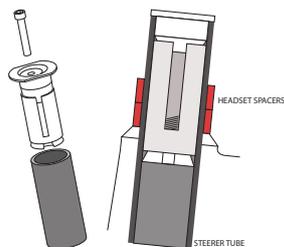
Carbon steerer tube

Measure and cut the steerer tube 3mm below the top of the stem.

Apply masking tape at the cut location to help prevent the carbon from fraying. Use a 28 tooth (minimum) blade saw and cut to the proper length. Smoothen the entire cut area with 400 grit sandpaper.

Install the 4ZA expansion plug for carbon fiber steerer tubes.

⚠ Important! Installing the 4ZA expansion plug. Remove the top cap bolt using a n°5 allen key. Now take a n°6 allen key to tighten the bolt of the expansion plug. Keep tightening it until it slide-fits in the steerer tube. The collar of the expansion plug must rest on top of the cut steerer tube. Tighten until the plug is firmly fixed and can no longer move inside the steerer tube.



INSTALLATION

Stem Installation

Carefully install your 4ZA stem and stem top cap (E) on the fork steerer tube, in line with the front wheel.

⚠ Important! Follow your headset manufacturer's instructions for proper installation of the headset compression device. Align your 4ZA stem to the bike, then preload the headset by installing the top cap bolt to the torque specified by your headset manufacturer's instructions. Headstem compression bolt should be tightened in a way that there is no noticeable tolerance on the headset when moving the fork.

Use a torque wrench to tighten the steerer clamp bolt(s) (A), in increments of one full turn, in an alternating fashion, to 5N/m (44,25 in-lb).

⚠WARNING

Do not over tighten the steerer clamp bolt(s). Over tightening the steerer clamp bolt(s) could damage the fork's steerer tube and cause it to fail, which could lead to serious injury and/or death.

Handlebar Installation

⚠WARNING

Carbon handlebars: Carbon handlebars have an area for clamping indicated by rough clear coat. Do not position the stem outside this area!!!!

In absence of this rough area, you must apply friction paste to the contact surfaces. Friction paste is designed to create friction between the contact surfaces to prevent the handlebar from slipping without over-torquing the face clamp bolts.

Failure to use friction paste could cause your handlebar to slip while riding which could lead to serious injury and/or death.

Carefully check and respect the maximum allowed torque for carbon handlebars. Excessive torque could damage the carbon layup and cause failure.

Coat each contact surface of your 4ZA stem with a moderate amount of friction paste prior to installing.

Center the handlebar in your 4ZA stem face clamp (C) and angle it to suit your personal preference. Finger tighten the face clamp bolts (B).

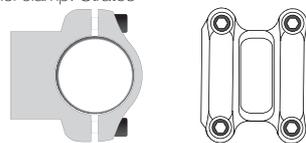
PARALLEL clamping: Stratos

Tighten each bolt one full turn, in a continuous sequence, while maintaining an equal gap on the top and bottom of your 4ZA stem face clamp max 5N/m (44,25 in-lb).

MESH Fit clamp: Cirrus and Cirrus Pro

Tighten the upper bolts first before tightening the lower 2 (as shown on the image) Max. torque 5N/m (44,25 in-lb).

Parallel clamp: Stratos



Mesh Fit clamp: Cirrus (Pro)



Install handlebar controls according to manufacturer's instructions.

SAFETY CHECKS

Check that the handlebar does not slip in the stem. Check that the handlebar controls do not slip on the handlebar. Check handlebar control cables for binding. The front wheel must be free to turn at least 90 degrees to either side of the bicycle frame. Pinch the front wheel between your knees and twist handlebar. Your 4ZA stem should not twist separately from the front wheel.

MAINTENANCE

⚠WARNING

Make sure you submit your 4ZA components to regular check-ups by your mechanic. It has been our experience that a large majority of accidents could have easily been avoided by a preliminary examination by a professional mechanic.

Clean your 4ZA components using only water and mild soap. Regularly inspect bolt torque. You should never ride with any of your 4ZA components loose. Regularly inspect components for signs of damage or fatigue. Always inspect components for damage after any crash. Signs of damage or fatigue include, but are not limited to cracks, dents, deformation, discoloration, deep scratches, or audible creaking. Discontinue use and replace any parts that show signs of damage or fatigue. Do not attempt to repair parts. If you are unsure of the integrity of your 4ZA component, have it inspected by your 4ZA dealer.

INFORMATION

Please note: 4ZA reserves the right to modify this owner's manual. Such possible modifications will be listed on 4ZA's internet site (<http://www.4za.com>) and/or are available by contacting us at 4ZA and/or your authorized 4ZA retailer. Make sure you periodically check any one of these three sources of information for possible modifications to this owner's manual.