

CARBON ROAD FORK INSTALLATION GUIDE

WARNING! IMPORTANT NOTICE. READ CAREFULLY.

Congratulations! The Specialized fork you have chosen is among the finest of advanced composite products available in cycling. Carbon fiber is a very special material that requires particular care for proper installation.

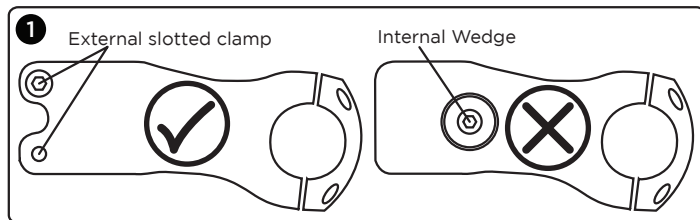
Please read the following instructions. If you have any doubt regarding your mechanical ability and/or installation of this product, visit your local authorized dealer. Specialized recommends that the stem be installed on the fork using a torque wrench, by a qualified mechanic.

Please read the following Warnings. Because the failure to follow any Warning may result in a catastrophic failure of the fork, resulting in serious personal injury or death, this phrase may not be repeated in connection with each Warning.

PREPARING THE COMPONENTS

Inspect the fork and stem to ensure that there are no burrs or sharp edges that can damage the surface in contact with each other. Remove any burrs or sharp edges using fine grit sandpaper. All edges in contact with the steerer tube should be rounded out to eliminate any stress points.

Warning! Burrs and sharp edges can damage the carbon and alloy surfaces of the components. Any deep scratches or gouges in the stem or fork can weaken the components.



NOTE: Specialized recommends using an external slotted clamp style stem. Internal wedge clamp style stems can cause damage to the steerer tube if improperly installed. (fig. 1)

PREPARING THE FORK

Forks without an integrated crown race: Before installing the crown race at the base of the steerer tube, apply a small amount of grease to the contact surface.

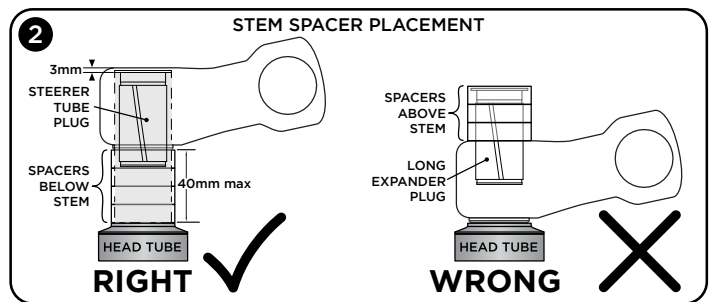
Using a crown race installation tool, seat the crown race onto the base of the steerer tube. Do not place the fork dropouts against any surface to brace the fork when seating the crown race. This can damage the fork dropouts. It is recommended that the fork be held by the legs when installing the crown race.

All forks: Following the headset manufacturer's instructions (for Specialized headsets, refer to the frame installation guide), insert the headset into the frame. Place the fork in the frame, followed by the desired amount of headset spacers and the stem. **Do not apply any grease to the steerer tube.**

NOTE: Do not install more than 40mm (1.5") stack height of headset spacers. Exceeding this limit can compromise the strength of the steerer tube. (fig.2)

Unless the desired stem height is already determined, it is recommended that the initial installation of the fork be done with the maximum allowed stack height (40mm) to allow the greatest range of adjustability. Spacers can be placed above or below the stem to adjust your position. Once a more precise stem height is determined, a second cut can be made to eliminate any spacers that may have been placed above the stem to achieve the desired position.

Warning! Do not permanently place stem spacers above the stem. Placing spacers above the stem defeats the purpose of the expander plug's ability to support the steerer tube and stem.



CUTTING THE FORK STEERER TUBE

Forks with carbon fiber steerer tubes: Once the initial stem height is achieved, make a mark on the steerer tube at the top of the stem. The actual cutting line must be placed 3mm below the mark (to make room for the Specialized 48mm Long Expander Plug. See Fig. 2).

Wrap the area where you intend to cut the fork with several layers of masking tape. This will limit the amount of fraying of the fibers, resulting in a cleaner cut. Once you've wrapped the layers of tape, determine the precise location of the desired cut with a pen mark on the tape.

Forks with alloy steerer tubes: Cut the steerer tube 2mm below the top of the stem, since there is no need to use an expander plug.

NOTE: To avoid fraying the composite fibers, Specialized recommends using a carbon-specific saw blade. A fine tooth (36 teeth) saw blade is also acceptable.

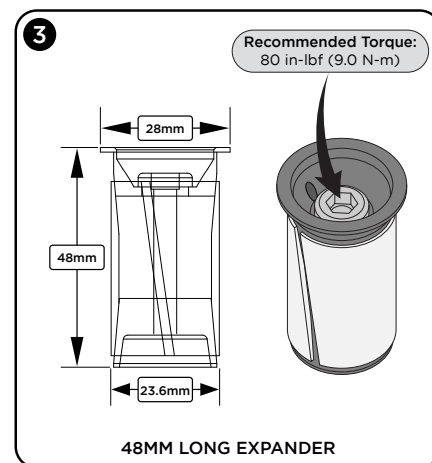
Double check all measurements to make sure the steerer tube will not be cut too short. It's easier to measure twice than to buy a new fork.

NOTE: It is very important that the steerer tube is cut straight. For best results, use a steerer tube cutting guide tool.

Once the steerer tube is cut to the desired length, be sure to remove all burrs at the top of the steerer tube by rounding out the edge with emery paper or a fine grit sand paper. Wipe off all excess dust. **Be sure not to breathe carbon dust!**

For additional information on carbon fiber preparation, please visit the tech section at www.specialized.com.

Warning! Carbon fiber steerer tubes require the use of the expander plug assembly supplied with the fork. Do not use a star nut, it can damage the inside surface of the steerer tube. Damage to the steerer tube can result in failure, causing serious personal injury or death.





CARBON ROAD FORK INSTALLATION GUIDE (cont.)



STEM NOTES

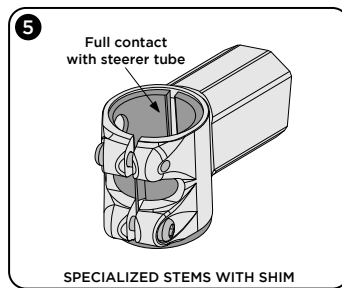
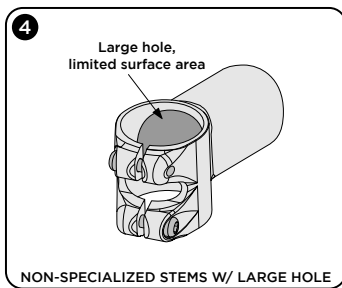
Specialized recommends against the use of stems with large bore holes in contact with the steerer tube. Large bore holes reduce the surface area and concentrate the load onto the carbon steerer tube.

Specialized recommends using the new Specialized 48mm Long Expander Plug (fig.3) with **all stems**, especially non-Specialized branded stems. Use of the Specialized Long Expander Plug will reduce chances of catastrophic failure.

NOTE ABOUT SPECIALIZED BRANDED STEMS: The continuous or near-continuous surface area of Specialized stems provides a very high amount of surface area contact with the steerer tube, which helps to evenly distribute loads.

- Specialized aluminum road stems come equipped with a shim which offers near-continuous surface contact (fig.5).
- Specialized carbon road stems and Barmac Systems have built-in continuous surface contact.

NOTE ABOUT NON-SPECIALIZED BRANDED STEMS: As we cannot test every combination, we cannot warrant this Long Expander Plug with non-Specialized branded stems. Specialized hereby disclaims all warranties, including the warranties of fitness for particular purpose and merchantability. Specialized does not warrant the use of non-Specialized stems on Specialized carbon steerer tube-equipped forks.



INSTALLING THE FORK

Install the steerer tube plug. **Recommended torque is 80 in-lbf (9.0 N-m)**. Place the fork back into the frame, place the desired amount of headset spacers to achieve proper stem height, install the stem and the top preload cap.

Note: Do not twist stem onto carbon steerer tube. This can result in damage to the composite surface, which can render the fork unsafe.

Adjust the headset to eliminate any free play, make sure that the fork still rotates freely. Align the stem with the fork. Tighten the stem's upper and lower steerer clamp bolts in an alternating pattern. Increase torque in 5 in-lbf (0.56 N-m) increments, until the specified torque is achieved. **Refer to your stem owner's manual for specific torque spec recommendations for the stem bolts.**

Install the front brake on the fork. Do not overtighten. **Recommended torque is 70 in-lbf (8 N-m)**.



Warning! Damage to composite is difficult to visually identify. If the external composite surface is dented, frayed, gouged, deeply scratched, fractured, chipped or otherwise damaged, the component should be replaced. If a fork has suffered a crash or impact, Even if no damage is visible, Specialized or an authorized Specialized dealer should inspect the product.

For additional information and warranty provisions, please visit www.specialized.com

SPECIALIZED BICYCLE COMPONENTS

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Please note all instructions are subject to change for improvement without notice.
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