Internal Wedge

Inspect the fork and stem to ensure that there are no burrs or sharp edges that can damage the surfaces in contact with each other. Remove any burrs or sharp edges using fine grit sandpaper.

All edges of the stem 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).

Specialized BRANDED STEMS:
- Specialized multi-position stems are equipped with a shim and offer a near-continuous surface contact, which helps to evenly distribute loads (Fig. 2).
- Specialized carbon road stems and Barmac Systems have built-in continuous surface contact, which helps to evenly distribute loads.
- Specialized SL stems with large bore holes are specifically designed in conjunction with Specialized forks with carbon steerer tubes, to ensure proper load distribution.

NON-SPECIALIZED BRANDED STEMS:
Specialized recommends against the use of non-Specialized-branded stems with large bore holes in contact with the steerer tube. Large bore holes reduce the clamping surface area and may concentrate the load onto the carbon steerer tube in an unsafe manner.

As we cannot test every combination, Specialized does not warrant the use of non-Specialized branded stems with Specialized forks (carbon steerer tubes) and Specialized Carbon steerer tube plugs, unless specified as original equipment by Specialized. Specialized hereby disclaims all warranties, including the warranties of fitness for particular purpose and merchantability.

FORK INSTALLATION

1. If the fork does not have an integrated crown race, apply a small amount of grease to the contact surface at the base of the steerer tube. Use a crown race installation tool to 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.

2. If the fork has a carbon steerer tube, install the Specialized Carbon Steerer Tube Plug (S142500007, Fig. 4) in the top of the fork’s steerer tube. Recommended torque is 80 in-lbf (9.0 Nm).

3. Install the headset. Follow the headset manufacturer’s instructions to insert the headset into the frame. For Specialized headsets, refer to the Carbon Road Frame Instruction Guide.

4. Install the fork into the head tube of the bike, then install the headset spacers and the stem. 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 apply carbon assembly compound (carbon paste) between the stem and the steerer tube. Application of carbon paste to the stem/steerer tube interface may result in a catastrophic failure of the fork, resulting in serious personal injury or death.
WARNING! Do not install more than 40mm (1.5”) stack height of headset spacers (Fig. 3). Exceeding this limit can compromise the strength of the steerer tube.

WARNING! Do not permanently place stem spacers above the stem (Fig. 3). Placing spacers above the stem defeats the purpose of the expander plug’s ability to support the steerer tube and stem.

5. Once the initial stem height is achieved, make a mark on the steerer tube directly in line with the top of the stem.
6. Remove the steerer tube plug (if cutting a carbon steerer tube) and the stem, then measure the distance from the line (marked in step 5) to the top of the steerer tube. Remove an additional 3mm of steerer tube (carbon) to make room for the Specialized carbon steerer tube plug. 2mm for alloy steerers.
7. For carbon steerer tubes, 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, based on the measurement from step 6.
8. 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.

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

9. Re-install the steerer tube plug. Recommended torque is 80 in-lbf (9.0 Nm).
10. Place the fork back into the frame, place the desired amount of headset spacers to achieve proper stem height.

WARNING! Do not apply grease or carbon assembly compound to the interface between the stem and the carbon steerer tube. Do not twist the stem onto the carbon steerer tube. This can result in damage to the composite surface, which can render the fork unsafe.

11. Install the stem and the top preload cap.
12. Adjust the headset to eliminate any free play, make sure that the fork still rotates freely.
13. Align the stem with the fork.
14. Tighten the stem’s upper and lower steerer clamp bolts in an alternating pattern. Increase torque in 5 in-lbf (0.56 Nm) increments, until the specified torque is achieved.

STANDARD STEMS: Do not exceed the maximum acceptable stem bolt torque applied to the steerer tube of 80 in-lbf (9.0 Nm). Refer to your stem owner’s manual for specific torque spec recommendations for the stem bolts.

BARMAC WEDGE: Due to the special wedge system design, the Barmac Wedge stem torque requirement of 110 in-lbf (12.4 Nm) is approved.

15. Install the front brake on the fork. For additional installation information, please refer to the brake manufacturer’s installation guides. Do not exceed the maximum torque specs listed below. If the brake manufacturer’s torque spec exceeds Specialized’s maximum torque spec, the brake is not compatible.

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.

**BRAKE INSTALLATION**

Refer to the brake manufacturer instructions for complete installation information.

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>TORQUE</th>
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</thead>
<tbody>
<tr>
<td>Center mount brake</td>
<td>70 in-lbf (7.9 Nm)</td>
<td>Rack mount (center of leg)</td>
<td>25 in-lbf (2.8 Nm)</td>
</tr>
<tr>
<td>Cantilever post mount brake</td>
<td>90 in-lbf (10.2 Nm)</td>
<td>Steerer tube plug</td>
<td>80 in-lbf (9.0 Nm)</td>
</tr>
<tr>
<td>Disc mount brake (max rotor diameter:160mm)</td>
<td>90 in-lbf (10.2 Nm)</td>
<td>Max stem torque applied to steerer</td>
<td>80 in-lbf (9.0 Nm)</td>
</tr>
<tr>
<td>15mm Thru-axle</td>
<td>106 in-lbf (12.0 Nm)</td>
<td>Under-crown fender mount</td>
<td>25 in-lbf (2.8 Nm)</td>
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**WARNING**

For the complete warranty provisions, please visit www.specialized.com.