

## RACE FACE SYStem INSTALLATION INSTRUCTIONS

Congratulations on your purchase of the Race Face SYStem - good move! The SYStem is one of the strongest and stiffest lightweight mountain bike stems in the world. It is important, as with ANY lightweight component, to understand and follow these instructions to ensure the long-lasting performance and safety of this part!

A) TOOLS REQUIRED: 5mm allen (hex) key

## B) STEER TUBE PREPARATION:

- 1) The Race Face SYStem fits 1.125" (28.6mm) fork steer tubes ONLY.
- 2) The Race Face SYStem (XC version) requires 37.0mm (1.457\*) of exposed steer tube above all headset components and spacers to ensure adequate clamping surface. This is derived from this formula:

SYStem "stack height": 39.0mm (1.535")

subtract headset compression gap: 
- 2.0mm (0.079") (maximum)

total exposed steer tube required: = 37.0mm (1.457")

NOTE: The Race Face SYStem has a relatively low stack height at 39.0mm. This may result in a slightly lower handlebar position than heavy stems with a tall stack height. Therefore we recommend leaving your steer tube lo ng and adding 2 or 3 spacers (5mm thick), when you are assembling a new bike, or the appropriate amount when you are replacing a tall stack height stem. You can remove them later to suit, and cut the steer tube to the length accordingly, once you have become used-to the stem. Remember, you can always cut it shorter, but you can't add material if you cut the steer tube too short!!

C) INSTALLATION: "The Race Face SYStem is pre-assembled and lubed at the factory, therefore disassembly is NOT required for installation. The STEER TUBE CLAMP PINS are pressed through the left hand side of the STEER TUBE CLAMP and the EXTENSION BODY at the factory using a tight interference fit, therefore, these components should NOT be disassembled unless replacement is required.

It is important, however, to familiarize yourself with the various components of the stem to ensure that your stem assembly is complete and to understand how it works. (See exploded assembly drawing) If any components are missing, contact your dealer immediately. Do not substitute or attempt installation without all parts shown in diagram

- Completely loosen the two STEER TUBE CLAMP BOLTS with your 5mm allen key, so that only a few threads are
  engaged into the STEER TUBE CLAMP PINS. Check to make sure that the M6 FLAT WASHERS are installed under the
  both leads.
- 2) Make sure there are no shar p burrs on the top outside edge of the steer tube. File or sand to remove if necessary. Install all headset components and optional spacers onto the steer tube. Make sure the steer tube is clean and dry (no grease).
- 3) Slide the stem onto the steer tube. This is a snug fit and some back and forth rotation may be required to slide the stem down until it touches the headset spacers. You will note that this will "expand" the STEER TUBE CLAMP of the stem open slightly at the right hand dovetail. This is OK.
- 4) Install the headset's "top cap" and "compression bolt" on top of the stem. Adjust the headset pre-load as per headset manufacturer's specifications, using your 5mm allen key. (Typically until all "play" is removed, but rotation is still smooth)
- 5) Line stem up straight with front tire, then tighten both STEER TUBE CLAMP BOLTS to 11-12 ft./lbs. (15-16.25 Nm) using your 5mm allen key. Alternate back and forth between the two bolts until full torque setting is achieved.
- NOTE: As you tighten the STEER TUBE CLAMP BOLTS the STEER TUBE CLAMP will wrap around the steer tube until it bottoms out on the right hand side dovetail section of the EXTENSION BODY. As you further tighten, the angle of the dovetail forces the EXTENSION BODY back into the steer tube to ensure a "Vise-like" grip on your fork. Clearance around the bolt heads allows the movement at the dovetail, however the actual movement here is less than 1mm!
- 6) Loosen BAR CLAMP BOLTS and slide your handlebar into the clamp. (Or remove both bolt s and the HANDLEBAR CLAMP if you are installing a bar with controls and grips already installed.) Re-install BRASS INTERFACE WASHERS, HANDLEBAR CLAMP and BAR CLAMP BOLTS, and tighten bolts to 6.5-8.0 ft/lib. (9-11 N.m) using your 5mm allen key. Alternate back and forth between bolts until full torque setting is achieved. Check to ensure that the gap between the HANDLEBAR CLAMP and the EXTENSION BODY is even between the too and bottom bolts. (approx. 1-2mm).
- \*\* Make sure that the BRASS INTERFACE WASH ERS are installed between the HANDLEBAR CLAMP and the EXTENSION BODY. (Dome side facing forward on bike). The HANDLEBAR CLAMP will "bottom-out" on these washers ensuring that the BAR CLAMP BOLTS are not over tightened which could damage the HANDLEBAR CLAMP or your handlebar.

 $\textbf{\textit{CAUTION!}} \ \ \textit{Do not over-tighten BAR CLAMP BOLTS!!!} \ \textit{These bolts are threaded directly into the aluminum stem body.} \ \textit{If}$ 

one or both of these threads are damaged or stripped, the stem is unusable and potentially unsafe and hazardous to the rider!!

- D) WARNING!Pleasestrictlyadheretothefollowing.Failuretodosocouldresultinpre-maturefailureofthepart which could affect the rider's control of the bicyclean dresultinserious in jury.
- 1) The STEER TUBE CLAMP BOLTS are DIN grade 12.9; heat-treated CrMo steel with corrosion resistant cadmium plating. Size is M6x35mm. Do not substitute inferior lower strength hardware such as DIN grade 8.8 or 10.9 steel, titanium or aluminum. These materials do not have the strength required for this application. Do not substitute shorter bolt lengths. Full thread engagement is required. If replacement is required, use DIN grade 12.9 M6x35mm hardware only, or see your Race Face dealer for OEM replacement parts.
- 2) The BAR CLAMP BOLTS are DIN grade 8.8 heat-treated alloy steel with corrosion resistant cadmium plating. Size is M6x20mm. We do not recommend substituting lower strength hardware. Do not substitute aluminum hardware. Do not substitute shorter bolt lengths.
- 3) "HEADSET TOP CAP" and "HEADSET COMPRESSION BOLT" must be left in place at all times during operation of the bicycle. These components assist retention of headset adjustment, and act as a "back-up" i n the event of loose steer tube clamp bolts, or failure of the steer tube clamp.

## E) MAINTENANCE:

- 1) Check hardware periodically for tightness. Use caution not to over-tighten!
- 2) Inspect all parts of stem periodically for damage or cracks. This is a good idea with ANY and ALL lightweight aluminum bike parts. This is especially important after any vicious crashes! If you notice anything suspicious, have your Race Face dealer inspect it for you, or replace it.
- 3) Although not critical to the continuing function of the stem, re-greasing the hardware occasionally wouldn't hurt. (Say during an annual bike tune-up or overhaul). You can apply a light film of grease to the following areas - all bolt threads, underside of all bolt heads and washers and mating surfaces of the dovetail sections of extension body and steer tube clamp.
- \* wipe any excess grease away from the clamp surfaces that contact the fork's steer tube before re-installing.
- \*\* while stem is disassembled, inspect all hardware and steer clamp pins for wear or da mage. If anything is suspect, replace it. It is all inexpensive and available through your Race Face dealer. (see warnings above)
- 4) If removal of STEER TUBE CLAMP PINS is required:
  - 1) Leave stem on bike.
  - 2) Unthread STEER TUBE CLAMP BOLTS 5 or 6 turns.
  - 3) Tap bolt head with a hammer and pin will start to slide out.
  - 4) Repeat steps 2 and 3 until pins are completely separated from STEER TUBE CLAMP.
  - 5) Inspect pins for wear, thread damage, bending, etc. replace if necessary.
- 5) To re-install STEER CLAMP PINS:
  - 1) Leave stem on bike.
  - Slide STEER TUBE CLAMP BOLTS with M6 FLAT WASHERS through STEER TUBE CLAMP and EXTENSION BODY.
  - Apply grease to the outside diameter of the STEER TUBE CLAMP PINS then thread them onto the STEER TUBE CLAMP BOLTS until interference is felt.
  - 4) Tighten STEER TUBE CLAMP BOLTS WITH 5mm allen key to "draw" the pins back into place.
  - \*Alternate tightening between upper and lower bolts to ensure even loading.
  - 5) Complete set-up as per installation instructions.

## WARRANTY

- 1) The SYStem carries a limited 2 year warranty for defects in material and workmanship. Coverage begins on the user's date of original purchase.
- 2) This warranty is limited to the original purchaser. Proof of original purchase is required. This can take the form of a photocopy of the original sales receipt. Save your receipts!!!
- 3) This warranty does not cover defects arising from misuse, abuse, accidents, alterations, lack of main preventative and routine maintenance, or failure to install according to the instruction is and proper procedures.
- 4) Race Face recommends replacement of the stem after a crash involving impact on the stem.
- 5) Race Face warranties do not cover fading of colors, nor will Race Face replace non-defective sub-component pieces because they do not exactly color match the replaced defective piece. Colors vary from batch to batch and from year to year. We will however do our best to match colors with the replaced piece