Salsa Moto Ace™ S.U.L.” Threadless Stem Installation

WARNING
You must have a threadless fork and headset system to use this stem. Period. Using this stem on a threaded steerer is potentially catastrophic due to the reduced wall thickness of threaded steereders. Don’t do it.

Read these instructions completely before attempting to install your new Salsa Moto Ace S.U.L. two-bolt stem. The Stiff Upper Lip handlebar clamp design is different than most other 2-bolt stems on the market and requires a different method of assembly. Incorrect installation can result in serious damage to your bike and your body; Salsa Cycles suggests installation be performed by a professional bicycle mechanic.

PREPARATION
Before removing your old stem and handlebar, note the angle of the bars and the position of the brake levers and shifters. If the old stem has a removable front cap, component removal is not necessary. Just unbolt the front cap and remove the handlebar. If the old stem does not have a removable front cap, remove the components from one side of the handlebar and loosen the handlebar binder bolts (if any) on the stem. Remove the old stem from the steerer while holding onto the fork, so as not to fall onto the floor or your foot. If you have a non-removable front cap type stem, remove the handlebar clamp bolt, and carefully remove the handlebar. A scratch or gouge in a handlebar can compromise its structural integrity and may cause a catastrophic failure. A scratched, gouged, or cracked handlebar must be replaced.

Before installation, make sure the headset is properly installed and in good condition. The stem’s steerer clamp-to-steerer and handlebar clamp-to-handlebar mating surfaces must be clean and free of any dirt, lubricants and/or retaining compounds. Measure the outside diameter of the steerer to make sure the stem will fit; the 1-1/8” diameter of the steerer corresponds to the lip and groove until it locks the front cap against the stem, and then torque it to 110–120 inch-pounds. Now torque the opposite clamp bolt to 110–120 inch-pounds. Align the stem with your front wheel and tighten the steerer clamp bolt. If headset play exists, loosen the steerer clamp bolt and tighten the top cap anchor bolt 1/4 turn. Re-tighten the steerer clamp bolt and re-check for headset play. If there is still play, repeat this adjustment procedure until the headset is adjusted properly. When you have achieved proper headset adjustment and stem/wheel alignment, torque the steerer clamp bolt to 95–110 inch-pounds. Hold the front wheel between your legs and make a strong attempt to rotate the stem. If it moves, recheck the torque of the steerer clamp bolt and re-adjust as necessary. Always check all stem clamp bolts before each ride as part of a complete bicycle safety inspection.

INSTALLATION
Apply a thin layer of grease to the stem’s steerer clamp bolt threads and the handlebar clamp bolt threads. The threadless headset and fork of choice should be installed on the bike already. Slide the S.U.L. stem onto the fork steerer (any desired spacers and/or a front brake cable hanger, if applicable, should go on first), and make sure everything is slid on as far as it will go by hand and seated. If the steerer is too short, there will be insufficient clamping surface for the stem to be installed securely – discontinue the installation and get a longer fork steerer, shorter stack headset, use fewer spacers, etc.

Otherwise, grease the 6mm top cap anchor bolt and place the top cap onto the stem. Feed the anchor bolt through the top cap and gently thread it into the stem nut in the fork (as installed by the headset mfgr’s instructions) with a 5mm hex wrench until it is finger-tight. Loosen the steerer clamp bolt completely. Preload the headset by tightening the top cap anchor bolt in the manner specified by the manufacturer’s instructions. Lastly, again tighten the steerer clamp pinch bolt just enough to hold everything in place in preparation for the handlebar installation.

Install the handlebar by sandwiching the handlebar between the stem and the stem front cap. The groove on the inside of the front cap should be in a position so that it mates with the matching lip of the stem. Whether the lip is on the top or the bottom will depend on which stem angle you choose, but it does not matter as long as the lip of the stem and groove of the cap mate properly. Thread both handlebar clamp bolts through the front cap and into the stem, then advance the bolts 3–4 turns so that the bolt heads are down inside the counter-bore of the top cap but not yet seated or snugged down. Center the handlebar and rotate it to the desired position. Here’s where you’ll be doing things differently than you are used to: Tighten the clamp bolt that corresponds to the lip and groove until it locks the front cap against the stem, and then torque it to 110–120 inch-pounds. Now torque the opposite clamp bolt to 110–120 inch-pounds. Align the stem with your front wheel and tighten the steerer clamp bolt. If headset play exists, loosen the steerer clamp bolt and tighten the top cap anchor bolt 1/4 turn. Re-tighten the steerer clamp bolt and re-check for headset play. If there is still play, repeat this adjustment procedure until the headset is adjusted properly. When you have achieved proper headset adjustment and stem/wheel alignment, torque the steerer clamp bolt to 95–110 inch-pounds. Hold the front wheel between your legs and make a strong attempt to rotate the stem. If it moves, recheck the torque of the steerer clamp bolt and re-adjust as necessary. Always check all stem clamp bolts before each ride as part of a complete bicycle safety inspection.

S.U.L. clamp bolt must
be tightened completely
before tightening non-
S.U.L. clamp bolt

Stiff Upper Lip (S.U.L.)
Salsa Cycles Limited Lifetime Warranty

This Salsa® product is warranted against defects in materials and workmanship for the lifetime of the product subject to the limitations detailed below. This limited warranty is expressly limited to the repair or replacement of the original product, at the option of Salsa Cycles, and is the sole remedy of the warranty. This limited warranty applies only to the original purchaser of the Salsa® product and is not transferable.

In no event shall Salsa Cycles be liable for any loss, inconvenience or damage, whether direct, incidental or consequential or otherwise resulting from breach of any express or implied warranty or condition, of merchantability, fitness for a particular purpose, or otherwise with respect to this product except as set forth herein.

This warranty does not cover the following:
- damage due to improper assembly or follow-up maintenance or lack of skill, competence or experience of the user or assembler
- products that have been modified, neglected, used in competition or for commercial purposes, misused or abused, involved in accidents or anything other than normal use
- damage or deterioration to the surface finish, aesthetics or appearance of the product
- normal wear and tear
- labor required to remove and/or re-fit and re-adjust the product within the bicycle assembly

This warranty gives the consumer specific legal rights, and those rights and other rights may vary from state to state.