CAMPAGNOLO<sup>®</sup> HIDDENSET<sup>™</sup> SYSTEM INTEGRATION<sup>™</sup> HEADSET OWNER'S MANUAL SUPPLEMENT

Congratulations and thanks for your purchase of a Cannondale road bicycle featuring System Integration (SI) and the Campagnolo Hiddenset headset. You have invested in a frame which uses an integrated head tube, fork, and headset system that is considerably lighter than a conventional head tube configuration. The addition of an all-carbon fork steerer tube on some models further increases the weight savings and vibration damping of the SI fork.

This supplement contains important and useful information regarding the proper operation, care, and maintenance of your SI Hiddenset. Please read it carefully and follow its instructions for miles of safe, high performance riding. If you have any questions about your fork or the contents of this manual, don't hesitate to contact us. See the back page for phone numbers and E-mail contacts.

WARNING: The steering system is very important to the safety of any bicycle and Cannondale strongly recommends that any work be performed by an authorized Cannondale dealer. The following instructions are provided for persons who have a good knowledge of bicycle specific mechanical procedures and who are equipped with the proper tools and equipment. Incorrect installation or service may reduce bicycle performance, and could lead to injury or death. If you have any doubts about your ability to perform the following procedures, contact your local authorized Cannondale dealer.

## **REQUIRED TOOLS:**

Metric hex wrench set Good quality bicycle bearing grease Hack saw to trim steerer tube length Cannondale star nut installation tool KT014/ (for carbon steerer forks) -or-Star-fangled nut installation tool such as Park -TNS-1 (for alloy steerer forks) Threadless steerer cutting guide such as Park SG-6 Torque wrench

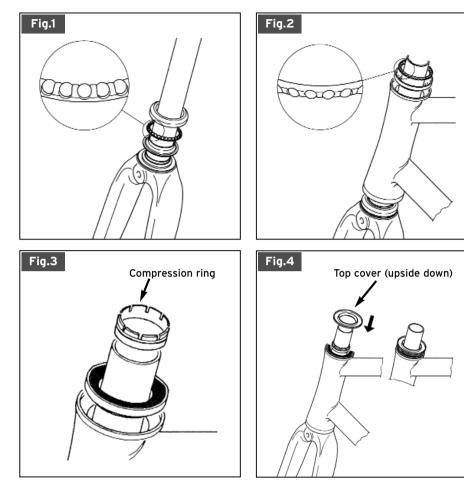
## PREPARATION OF THE FRAME AND FORK

## CAUTION: Do not mill or "face" the frame's head tube! You will damage the frame and possibly render it unusable for the SI Campagnolo Hiddenset!

Cannondale has prepared both the frame and fork at our factory during their manufacture. There is no need to mill or "face" the head tube because it has been properly machined to exact tolerances to accommodate the Campagnolo Hiddenset bearings. Additionally, the fork crown race has been installed on the fork so there is no need to remove or reinstall it. Important: You must only use a Cannondale SI fork with a 1 1/8" threadless steerer tube on a Cannondale SI road bike frame.

## STEERER TUBE LENGTH

To calculate the length of the steerer tube of the fork, install the headset following the instructions below. Mount the stem using the desired number of headset spacers, and mark the steerer tube where it exits the top of the stem. Then cut the steerer tube (using a hack saw and threadless steerer cutting guide) 2-3mm lower than the mark you made. The top of the steerer tube should be 2-3mm below the top of the stem clamp when the system is assembled. Install the star nut device into the steerer tube only after being sure that the steerer tube is the proper length. Note: The minimum steerer tube length with a carbon steerer is 160mm. On size 48cm and 50cm frames, you will need to use headset spacers under the stem to preserve this minimum steerer length.



1. Open both bearing cartridges and grease the bearing retainers using a good quality bicycle bearing grease. Reassemble the lower bearing cartridge with the bearing retainer oriented as shown in Fig. 1. Install the lower bearing cartridge on the fork.

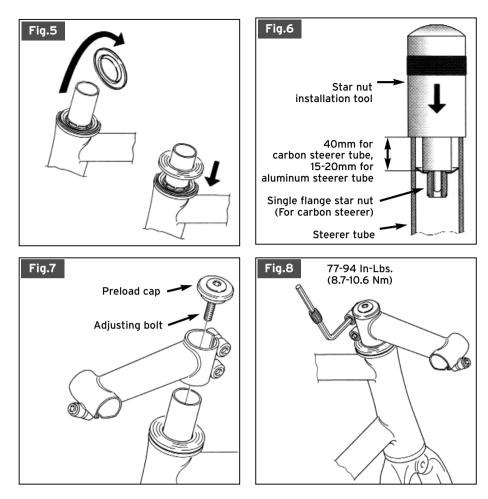
2. Insert the fork steerer tube through the bicycle head tube and, as shown in Fig.2, insert the bearing cartridge with the bearing retainer correctly oriented. Note that the bearing cartridges drop into the machined "cups" in the head tube, they do not need to be pressed in and should fit snugly, but not tightly, into the head tube.

3. Then install the white plastic compression ring with the cuts facing up, as show in Fig. 3.

4. Use the top cover (marked "MADE IN ITALY BREV. INT. CAMPAGNOLO") turned upside down to press the white plastic compression ring down the steerer tube and into the top of the bearing cartridge. See Fig. 4.

5. After installing the compression ring, remove the top cover, turn it right side up, and place it over the upper headset bearing and compression ring. See Fig. 5.

6. Install any desired headset spacers and the handlebar stem. Press the stem down firmly against the spacers and the top cover of the headset. Note: With a carbon steerer tube, you must not use more than one 5mm spacer above the stem. The preload cap must support the inside of the steerer tube.



7. Make sure that the top of the steerer tube sits below the top of the stem steerer clamp by 2-3mm. If it is necessary to shorten the steerer tube, mark the steerer tube where it exits the top of the stem. Then use a hack saw and threadless steerer cutting guide to trim the steerer tube 2-3mm below the mark that you made.

8a. FOR CARBON STEERER TUBE SI FORKS Press the included special single flange star nut (kit # KB506/) down into the top of the fork steerer tube until the top of the star nut is 40mm below the top of the fork steerer tube. Use Cannondale carbon steerer nut installation tool # KT014/ for best results. See Fig. 6. 8b. FOR ALUMINUM STEERER TUBE SI FORKS – Press a standard star-fangled-type nut down into the top of the fork steerer tube until the top of the star nut is 15-20MM below the top of the fork steerer tube. You can use any star-fangled nut installation tool, such as the Park TNS-1. See Fig. 6.

9. Install the preload cap and adjusting bolt into the top of the steerer tube. Then adjust the headset by tightening the adjusting bolt so that the fork rotates freely but without play. See Fig. 7.

10. After adjusting the headset bearing preload, adjust the stem to the correct position and tighten the stem fixing bolts to 77-94 In-Lbs (8.7-10.6 Nm). See Fig. 8.

Please note that this manual is meant to supplement, not replace, your bicycle owner's manual. The bicycle owner's manual contains valuable information regarding safe operation, adjustment, and maintenance of your bicycle, as well as more complete warranty information. Please read the bicycle owner's manual thoroughly before riding your bicycle, and keep it and this booklet for future reference.

For complete information regarding your Cannondale Limited Warranty, please refer to your Cannondale Bicycle Owner's Manual.

For warranty related questions or for more information on this or any Cannondale product, please feel free to contact us.

USA and Canada:	(800) BIKE-USA
Europe (EC):	(31) 541-573580
Japan:	(81) 722-99-9399
Australia:	(61) 2-9979-5851

http://www.cannondale.com custserv@cannondale.com

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