

MAINTENANCE SCHEDULE

This schedule is intended as a guide only. You must establish a schedule appropriate to your riding style and conditions.

WHAT TO DO	NORMAL	RACE
	(In Hours)	
CHECK FOR DAMAGE - See page 3.	BEFORE AND AFTER EVERY RIDE	
BOOT INSPECTION - See page 18.		
TIGHTENING TORQUE CHECK - Use a torque wrench: Upper/lower clamp bolts: 7-9 Nm, 62-80 In Lbs Wheel axle bolt: 15.0 Nm, 133.0 In Lbs	AFTER FIRST RIDE CHECK EVERY 4-5 RIDES	
CLEAN/RE-OIL AIR FILTER - See page 18.	50	25
CLEAN/ RE-GREASE TELESCOPE - See page 20.	50	25
NEEDLE BEARING RESET * See page 21.	25	25
Damping cartridge oil and seal change *	100	50
Inspect, replace frame bumper	AS NEEDED	
SCHEDULE PROFESSIONAL FORK SERVICE * ANNUALLY (Minimum) Annually, or when problems are indicated you must have your Lefty fork serviced through a Cannondale Dealer or an Authorized Headshok Service Center. Your fork should be disassembled by a suspension professional and evaluated for internal and external part wear and damaged parts replaced with new ones. It should also include any work described in any technical bulletins or product recalls. PLEASE NOTE: Cannondale provides professional services through Cannondale dealers for Headshok /Lefty suspension forks. Please ask your dealer about the service programs available for your model fork.		



WARNING

FREQUENT MAINTENANCE AND INSPECTION IS IMPORTANT TO YOUR SAFETY. YOU CAN BE SEVERELY INJURED, PARALYZED OR KILLED RIDING ON A BROKEN OR POORLY MAINTAINED FORK. Ask your Cannondale Dealer to help you develop a complete fork maintenance program, one that suits where and how you ride.

IMPORTANT INFORMATION ABOUT RIDING IN WET, HUMID, OR COASTAL CONDITIONS

Before and after rides, frequently, inspect and renew grease under fork boot and service the air filter. Inspect the boot for rips and tears. Check the folds. If the boot is damaged or not attached securely by the clamps/zip ties, water or contaminants can enter. The boot should be removed and the fork should be immediately dried and re-greased to stop any damage occurring due to moisture.

ANYTIME THE FORK BECOMES SUBMERGED

Stop riding it. The fork is not water tight. A moving submerged fork can accumulate water inside. If your fork has been submerged, you should perform checks immediately.

DO NOT STORE YOUR LEFTY FOLLOWING A WET RIDE WITHOUT FIRST PERFORMING THE CHECKS ABOVE. SERIOUS DAMAGE CAN OCCUR.

Cleaning

Clean using only a mild soap and water solution. Clean water and common liquid dish washing soap will work best. Be sure to cover the adjusters with a clean plastic bag secured with a rubber band or masking tape. Spray off heavy dirt before wiping. Spray indirectly.

NOTICE

- **DO NOT USE A PRESSURE WASHER.** Use a low pressure garden hose. Power washing will force contaminants into the fork promoting corrosion, immediately damaging, or result in accelerated wear.
- **DON'T DRY WITH COMPRESSED AIR FOR THE SAME REASON.**

Frame Bumper

The Lefty frame bumper is located on the outer tube between the clamps. The bumper cushions the frame from contact with the fork. Replace it with a new one if it ever becomes damaged, torn, or missing.

REPLACEMENT: Before replacement, gently clean the Lefty outer tube with warm soapy water and wipe dry. Remove the backing from the new bumper, position and affix by pressing firmly against the outer tube.

IMPORTANT: Be sure to position the bumper so that when the handlebar is rotated to the left, the bumper prevents fork contact with the the frame. Frame damage can result from using the wrong bumper or positioning a bumper incorrectly. Ask your Cannondale Dealer for help.



ORDER NO.	KIT DESCRIPTION
HD215/	KIT,FRAME BUMPER, LEFTY STD (for standard clamp width Lefty)
KH074/	KIT,FRAME BUMPER, LEFTY XL (for tall clamp width Lefty)

Boot Inspection

The fork boot protects the internal parts (inner tube, races, lubricant, needle bearings, and other internal parts) from contamination and damage. It is a barrier to water, dirt, dust, mud, or grit encountered while riding. If the boot is loose or damaged; dirt, water, dust, salt spray or other contaminants will quickly ruin the fork.

The boot is an important protection, so before every ride do the following:

1. Check the boot for damage cracking, splits, or tears. Be sure to check in the folds of the boot.

Check carefully in the folds.

Check for any cables or lines rubbing the boot.

Make sure the brake rotor does not rub or contact the boot.
2. Check the attachment of the boot at the top and bottom. The upper and lower boot lips should be fitted over the lower collar and fork lip. NO PART OF THE FORK INNER TUBE (lower leg) SHOULD BE EXPOSED.
3. Replace clamps as required. Always tighten securely, but do not over-tighten the clamps. Replacement cable clamps are available through a Cannondale Dealer.

IMPORTANT:

If you find boot damage, the area under the fork should also be inspected for damage. And, the damaged boot must be replaced with a new one before riding. Do not try to fix it.



Clean/Re-Oil Air Filter

The air filter assembly is located over breather air holes in the outer tube. The air filter assembly stops the passage of dirt and water which would damage the internal fork components.

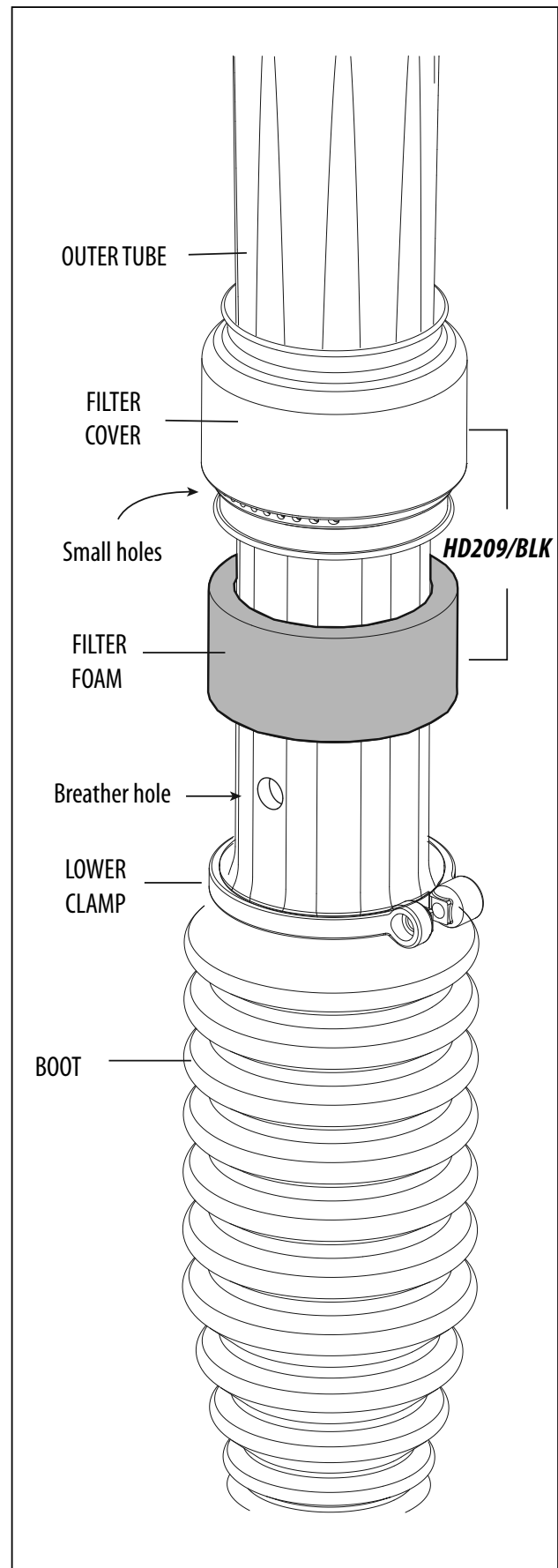
The cleaning procedure is the same for carbon or alloy outer tube forks.

To clean and re-oil air filter

- Loosen and remove both the upper and lower clamps.
Return the lower clamp to the top of the boot and secure it to seal out water.
- Slide the air filter cover up off the foam element.
- Slide the foam element up off the breather hole.
- Cover the breather hole by applying a ring of vinyl tape around the tube.
- Using warm clean soapy water, massage the foam air filter element. Preventing water or soap from entering the holes in the outer tube or into top of the boot. This will clean the foam of accumulated dirt or dust.
- Repeat the process with clean warm water to rinse the foam. Gently squeeze the foam element to remove the water.
- Allow the foam element to dry completely, and massage in a high-quality foam air filter oil.
- Remove the tape covering the hole and slide the foam element back into position over the breather hole.
- Slide the boot back over the foam element. The lower filter cover lip should be lapped over the top of the boot. The small holes in the filter cover should be positioned on the fork so they are at the sides to prevent plugging from dirt or debris thrown by the front wheel.

NOTICE

- DO NOT USE SPRAY CLEANERS.
- COVER BREATHER HOLE. MAKE SURE THE BOOT LOWER CLAMP IS SECURE.



Clean/Re-Grease Telescope

Periodically, or whenever the fork is ridden in extreme conditions or is submerged, perform the following procedure.

To clean and re-grease

1. Release all air pressure through Schrader valve in bottom of fork.
2. Remove the front wheel.
3. Carefully release the upper and lower zip ties securing the fork boot. If the boot is secured with a band clamp, loosen and remove the clamp.
4. Lift the unsecured boot up to expose the inner tube .
5. Wipe off the old grease with a dry shop towel.
5. Re-apply a fresh heavy coating of grease. Any clean high-quality bicycle bearing grease selected for riding temperatures and environment can be used.

We assemble forks at our factory using

LUBRIPLATE GR-132.

http://www.lubriplate.com/pdf/pds/3_4%20GR-132.pdf

Cycle the fork several times between applying grease to the new grease is worked into the bearings.

7. Reposition the boot and replace the upper and lower clamps.

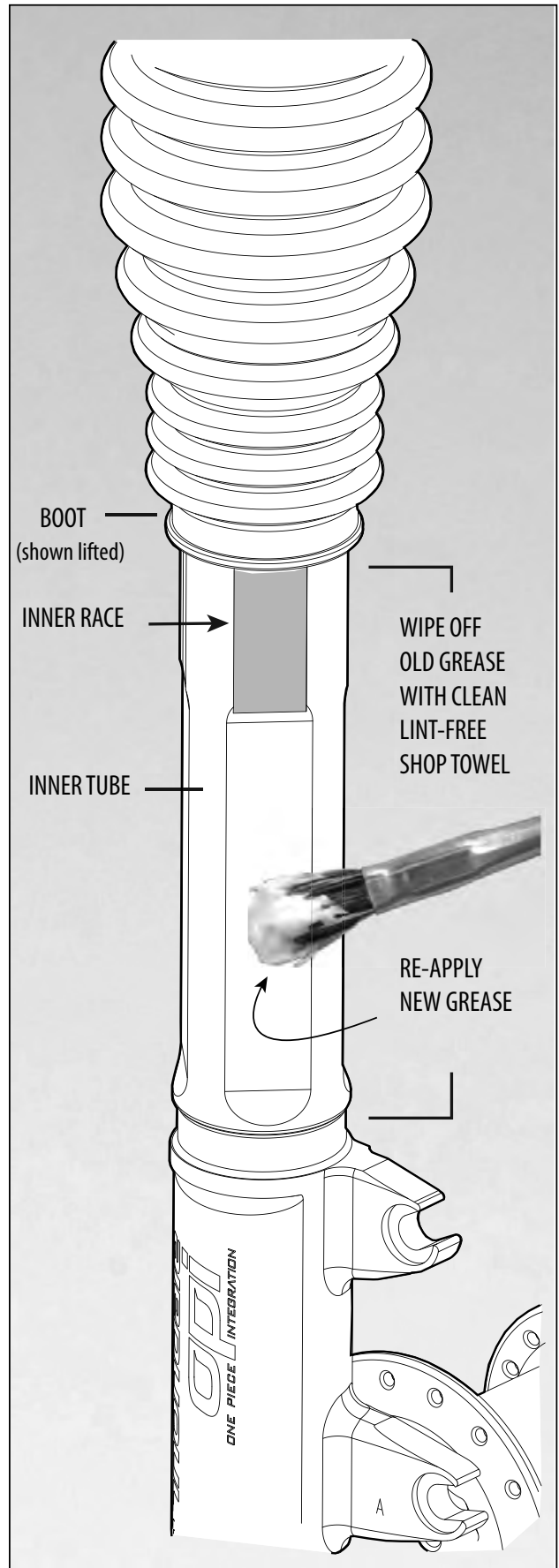
NOTICE

- **DO NOT USE SPRAY CLEANERS OR ABRASIVES. USE A CLEAN SHOP TOWEL ONLY.**

NOTE: Make sure the clamps are secure without over-tightening. A loose clamp may allow water or dirt to pass behind the boot. If the clamps are too tight, boot damage can occur.

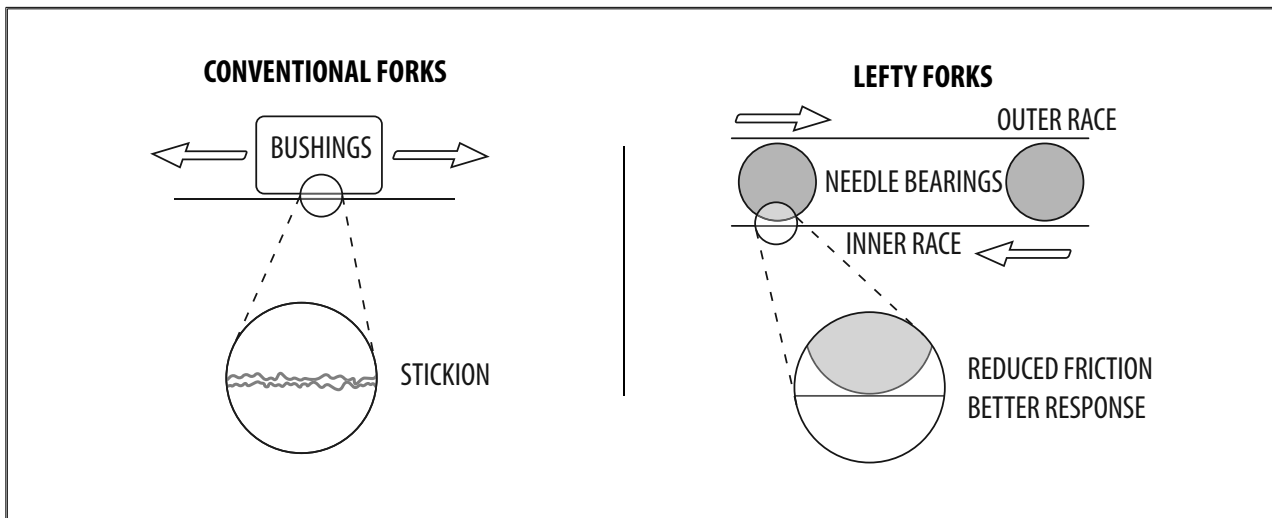
HD225/

KIT,GREASE,LUBRIPLATE



LEFTY NEEDLE BEARING RESET

The unique advantage of the Lefty telescopic fork structure is the utilization of 4 needle bearing cages. Each cage contain 22 precision stainless steel needle bearings. The use of needle bearings requires less surface area to make the telescope perform smoothly and efficiently. This is accomplished through rolling versus sliding and results in less friction. Less friction means smoother travel, pure and simple. Compare that with conventional forks that use bushings in their stanchions. These bushings have more contact with the sliding part of the scope, which generates friction. That friction causes a heat build-up within the fork and robs performance.

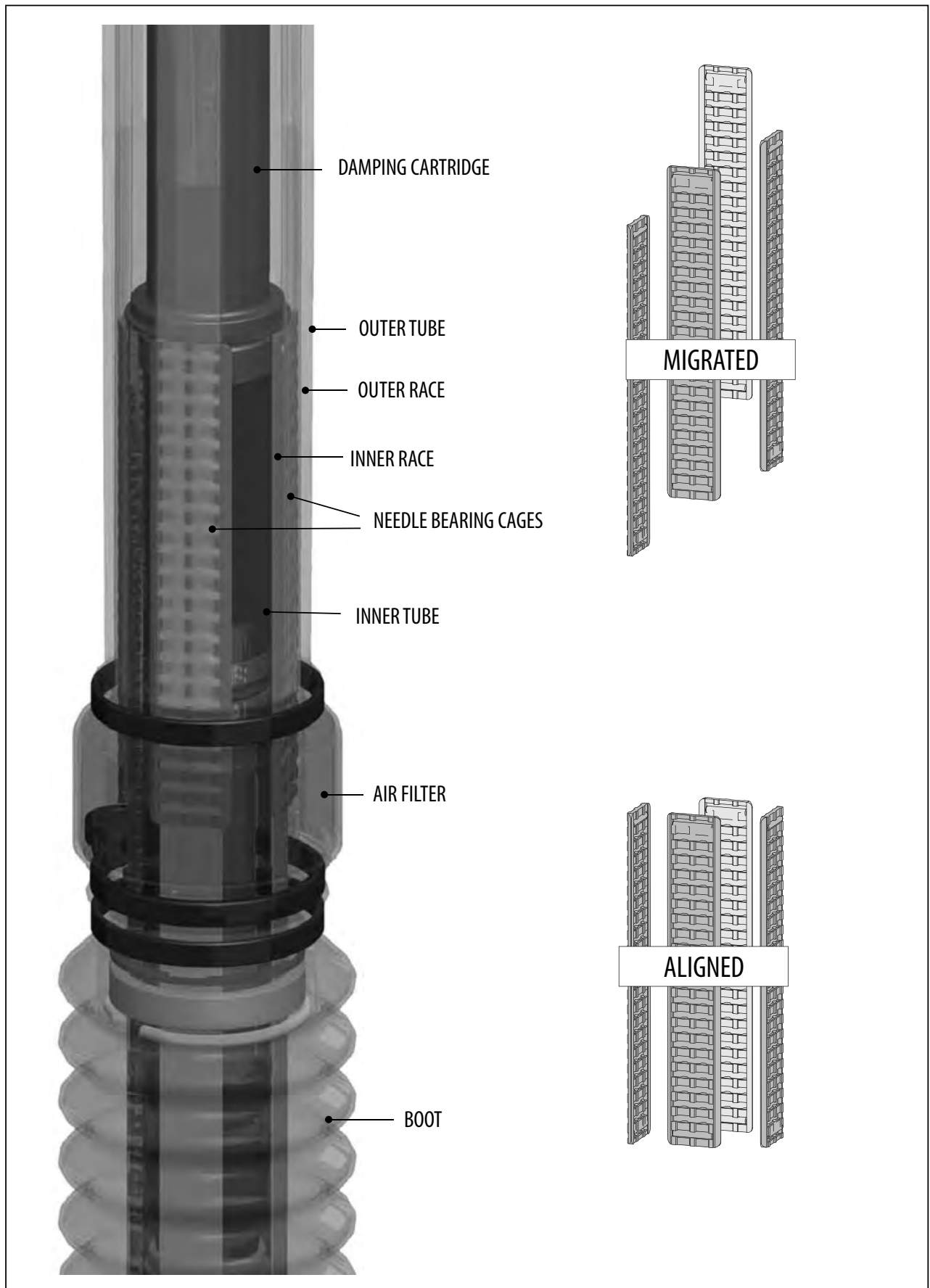


The system requires simple periodic maintenance to ensure proper bearing alignment. Why? Inside the fork the four needle bearing cages of the telescope move independently up and down between each inner and outer race pair. Bearing cage migration happens when a cage or cages shifts out of alignment up or down in relation to the others. Very slight migration would not affect travel noticeably, however, as a cage continues to move out of position relative to the others, the available travel will be reduced.

Needle bearing migration is normal and to be expected. However, if the fork in this state for extended periods, the fork can be damaged. Indications of migration are: An usual "top out" noise, reduced travel.

RESETTING NEEDLE BEARING MIGRATION

The procedure for resetting your specific Lefty needle bearings is described in the section of the supplement specific to your fork. The techniques of resetting is the same for all forks, however, dis-engaging the damping cartridge differs. We provide the information in the supplement, however, we recommend that you always have this procedure performed by your Cannondale Dealer. If migration re-occurs frequently (immediately after resetting), the cause could be damage present in the inner or outer races, bearings/cages or other fork parts. Inspection and replacement of damage parts will be required to correct a persistent problem with bearing migration.



PBR/XLR Needle Bearing Reset

The following procedure should only be completed by a professional bike mechanic.

To reset

1. Release all air pressure through Schrader valve in bottom of fork.
2. **PBR** - Remove the outer collar with the Shimano tool TL-FC32. Turn counter-clockwise.

XLR - Remove the outer collar with the Shimano tool TL-FC32. Turn counter-clockwise. After the outer collar is disconnected from the outer tube, lift the XLR hydraulic assembly up and out of the damper. **(During Re-installation) Make sure the hex end of the XLR assembly is properly aligned and engaged inside the damper before the collar is threaded back on.**

3. Compress the telescope and remove the two split rings from the top cap.
4. Fully extend the fork, and measure from top edge of outer tube to bottom edge of spindle. See right. If the length is out of specification do the following:

Firmly extend the telescope until it stops (tip - listen for the knocking at full extension to change from a hollow sound to a solid sound - this indicates full extension has been achieved). Do this several times using only moderate force, extend the lower fork leg using a pumping action.

After, you have performed this action several times, re-measure.

NOTICE

If fork is out of range following reset attempt, it may be damaged internally. The fork should be disassembled and inspected by a professional mechanic before it is ridden.

TIP: If migration re-occurs frequently (immediately after resetting), the cause could be damage present in the inner or outer races, bearings/cages or other fork parts. Inspection and replacement of damage parts will be required to correct a persistent problem with bearing migration.

