2003

MANITOU

LUXE

COMP ELITE SUPER

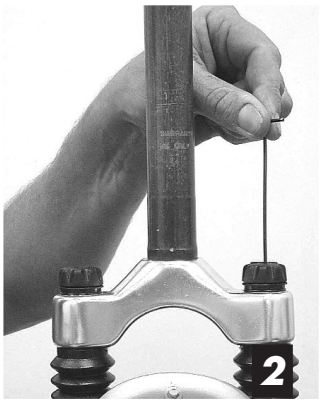
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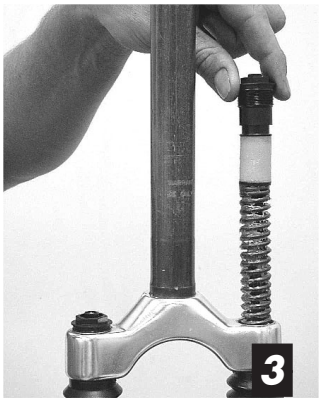
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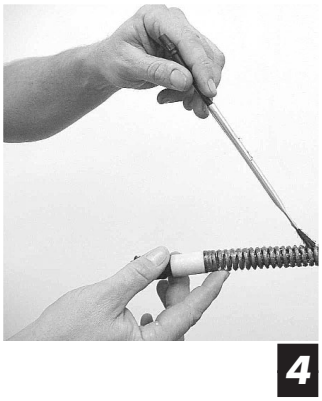
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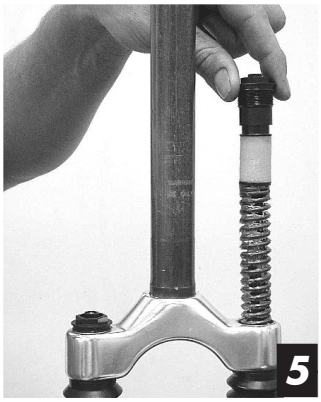
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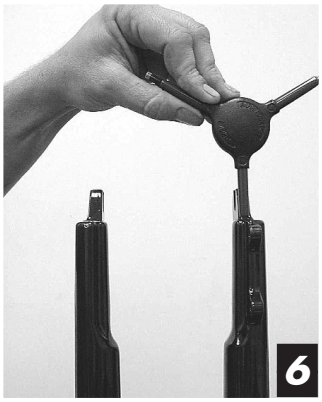

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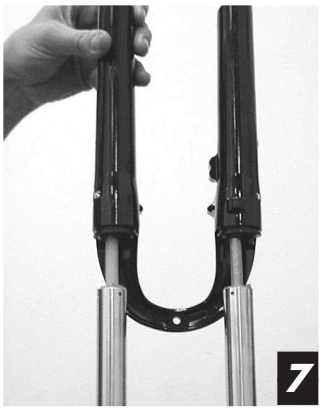

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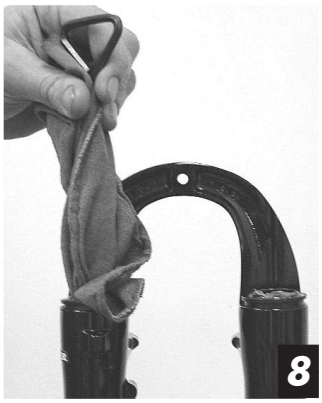

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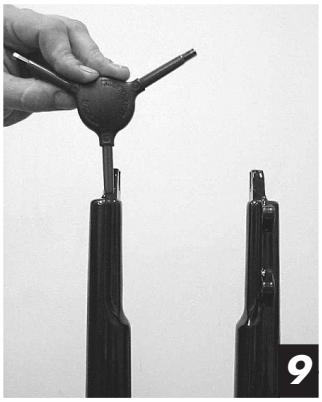

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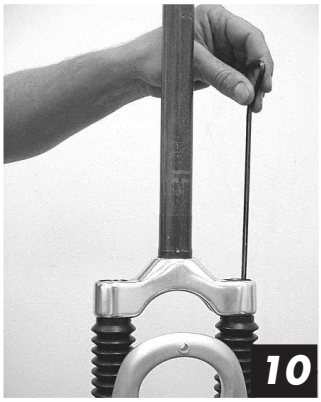

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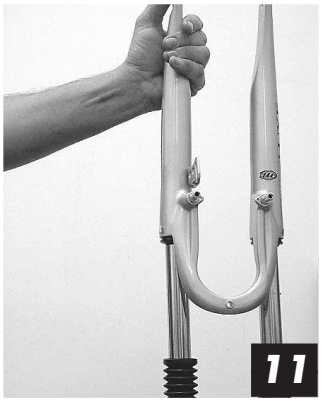

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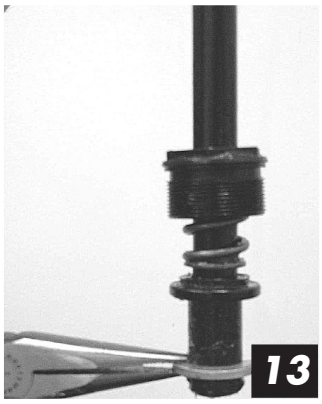

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MANITOU SUSPENSION FORKS

CONGRATULATIONS ON CHOOSING A 2003 MANITOU LUXE SUSPENSION FORK. This Manitou fork is fully assembled and ready to be installed onto your bicycle. It comes equipped with a 1 1/8-inch threadless steerer tube and is available with a V-brake-style hangerless arch. The LUXE has Dynamo mounts for use with a lighting system. A handlebar-mounted reflector must be used for on-road use, which is not included with your fork.

2003 MANITOU LUXE FORK LINE

LUXE COMP .....50 MM TRAVEL / ALUMINUM CASTING / COIL AND MCU SPRINGS / SINGLE CROWN

LUXE ELITE .....50 MM TRAVEL / MAGNESIUM CASTING / COIL AND MCU SPRINGS / SINGLE CROWN

LUXE SUPER .....50 MM OR 75 MM TRAVEL*/ MAGNESIUM CASTING / COIL AND MCU SPRINGS / SINGLE CROWN

*Preset from the factory, but changeable. See the Dealer Service Addendum section "Convertible Travel – LUXE Super".

You can also download this manual at www.answerproducts.com.

GENERAL WARNING **BICYCLING IS A HAZARDOUS ACTIVITY THAT REQUIRES THAT THE RIDER STAY IN CONTROL OF HIS OR HER BICYCLE AT ALL TIMES. READING THIS MANUAL ENTIRELY, AND PROPERLY MAINTAINING YOUR BICYCLE AND SUSPENSION FORK, WILL REDUCE THE POSSIBILITY OF INJURY OR POSSIBLE DEATH. PRIOR TO RIDING YOUR BICYCLE, YOU SHOULD INSPECT YOUR SUSPENSION FORK TO ENSURE THAT NO DAMAGE HAS OCCURRED DURING THE COURSE OF RIDING. DO NOT RIDE YOUR BICYCLE IF THE FORK SHOWS ANY SIGNS OF BENDING, CRACKING, LEAKING, OR IF IT IS MISSING ANY OF THE ORIGINALLY SUPPLIED COMPONENTS. ANY FALL FROM YOUR BICYCLE CAN RESULT IN SERIOUS INJURY OR EVEN DEATH. FOLLOWING THESE INSTRUCTIONS CAN HELP YOU REDUCE THE RISK OF BEING INJURED. IF YOU ARE A MODERATE OR AGGRESSIVE OFF-ROAD RIDER, OR RIDE AT LEAST THREE TIMES A WEEK OVER ROUGH TERRAIN, ANSWER RECOMMENDS RETURNING YOUR SUSPENSION FORK EVERY 2 YEARS FOR A THOROUGH INSPECTION AND UPDATE. TAKE YOUR FORK TO A MANITOU AUTHORIZED DEALER WHO CAN ARRANGE FOR SHIPMENT TO ANSWER PRODUCTS, OR YOU MAY CALL ANSWER AT (661) 257-4411 TO HAVE YOUR FORK SHIPPED DIRECTLY.**

IMPORTANT: **The LUXE fork is an off-road fork, and as such, does not come with proper reflectors for on road use. Have your dealer or mechanic install proper reflectors to meet the Consumer Product Safety Commission's (C.P.S.C.) Requirements for Bicycles if the fork is going to be used on public roads at any time. If you have questions regarding C.P.S.C. Standards or would like to purchase a reflector bracket kit contact your dealer.**

CONSUMER SAFETY INFORMATION

1. Never remove or have the steerer tube or stanchions removed from the crown. The steerer tube and stanchions (inner legs) are press fit at the factory. Press fit inner legs have higher performance versus bolt-in inner legs, but can not be pressed out. Pressing them out will permanently damage the crown beyond repair and render it unsafe for any use.
2. Never attempt to thread a threadless steerer tube. Cutting threads will weaken the steerer tube and cause an unsafe condition. The only safe thing to do is to obtain the proper crown/steerer from your dealer, or contact Answer Warranty at (661) 257-4411.
3. Any other alteration or modification to your fork should be considered unsafe. Contact Answer Customer Service prior to modifying your fork in any way for safety information.
4. Do not use the LUXE fork if any parts are broken, bent, cracked, or you suspect may be damaged. Contact your dealer or Answer Customer Service at (661) 257-4411 if you have any questions concerning the integrity or condition of your fork.
5. Answer Products recommends that you inspect your fork before every ride for wear and damage. Inspect the crown, inner legs, outer legs dropout and brake arch areas for cracks or damage.

WARRANTY INFORMATION

Any Answer Products fork found by the factory to be defective in materials and/or workmanship within one year from the date of purchase (or two years in EU countries) will be repaired or replaced at the option of the manufacturer, free of charge, when received at the factory with proof of purchase, freight prepaid. This warranty does not cover breakage, bending, or damage that may result from crashes or falls. This warranty does not cover any fork that has been subject to misuse or whose serial number has been altered, defaced or removed. This warranty does not cover paint damage. Any modifications made by the user will render the warranty null and void. This warranty is expressly in lieu of all other warranties, and any implied are limited in duration to the same duration as the expressed warranty herein. Answer Products shall not be liable for any incidental or consequential damages. If for any reason warranty work is necessary, return the fork to the place of purchase. In the USA, dealers should call Answer Products Customer Service for a return authorization number (RA#) at (661) 257-4411. At that time, instructions for repair, return, or replacement shall be given. Customers in countries other than USA should contact their dealer or local distributor.

INSTALLATION INSTRUCTIONS

Ensure that the proper steerer tube has been delivered on your LUXE fork first. The steerer tube may need to be cut to length to fit your bicycle head tube. If you are not familiar with this procedure, or do not have the proper tools to cut the steerer tube, it is recommended that you seek a dealer with a qualified bicycle mechanic to perform installation.

WARNING **THE STEERER TUBE AND STANCHIONS (INNER LEGS) ARE A ONE TIME PRECISION PRESS FIT AT THE FACTORY AND CAN NOT BE REMOVED FROM THE CROWN. REPLACEMENT OF THE ENTIRE CROWN/STEERER ASSEMBLY MUST BE DONE TO CHANGE STEERER TUBE LENGTHS OR DIAMETERS. REMOVING AND REPLACING THE STEERER TUBE OR STANCHIONS WILL RESULT IN AN UNSAFE CONDITION AND SHOULD NEVER BE DONE.**

FORK INSTALLATION

1. Remove the old fork from your bicycle.
2. Measure and cut the steerer tube to fit your bicycle head tube. You can use your old fork as a guide for cutting the steerer tube length.
3. Remove the headset crown race from the old fork and press onto the LUXE steerer tube until the race is seated over the crown.
4. Clean and lubricate the headset bearings and races.
5. Install the lower bearings (if applicable) on the fork crown race.
6. Insert the steerer tube into the head tube of the frame.
7. Install the upper bearings, stem spacers, and stem.
8. Install the stem cap and bolt. Tighten the bolt to headset manufacturer's specifications.
9. Install the handlebars to desired height and the torque stem pinch screws or stem clamping system to manufacturer's specifications.
10. Install the brakes and adjust per the manufacturer's instructions.
11. For all LUXE forks, adjust the front wheel quick release to clear the 0.275" (7 mm) thick secondary catch dropout. The quick release must be tightened after it is properly seated into the dropout counter bores to manufacturer's specifications. Ensure that there is adequate thread engagement (4 or more threads with the release adjusted to lock).

NOTE: 2003 Manitou LUXE forks are equipped with a secondary catch dropout to retain the wheel in the fork in the event the quick release comes loose.

WARNING **WHEN INSTALLING THE WHEEL OR A NEW TIRE, CHECK TO MAKE SURE THE FORK ACHIEVES MINIMUM TIRE CLEARANCE. MEASURE FROM THE HIGHEST POINT ON THE TIRE TO THE BOTTOM OF THE BRAKE ARCH. THIS MEASUREMENT SHOULD BE 5 MM FOR LUXE FORKS. (FIGURE 1)**

IMPORTANT: **A Manitou LUXE fork should not be used if any parts appear to be or are damaged. Contact your local dealer or Answer Products for replacement parts.**

MAINTENANCE

IMPORTANT: Use of fork boots is required to keep your LUXE fork performing well and the warranty in effect. Use of this fork without boots will shorten the life of the fork, decrease the time between maintenance intervals, reduce the performance and void the warranty.

IMPORTANT: Before every ride you should:

1. **Ensure that quick release skewers are properly adjusted and tight.**
2. **Wipe the inner legs and clean and check entire fork for any obvious damage.**
3. **Check the headset for proper adjustment.**
4. **Ensure that the front brake cable is properly routed and check brake adjustment.**

If you have any questions regarding your 2003 Manitou LUXE suspension fork, contact the Answer Products Customer Service Department at (661) 257-4411. You can also log on to www.answerproducts.com and download this manual or see detailed instructions on how to service your suspension fork.

Thank you again for choosing a 2003 Manitou LUXE suspension fork.

LUXE DEALER SERVICE ADDENDUM

This section is designed to help you tune and maintain your Manitou suspension fork.

MEASURING SAG To measure sag, you'll need a tape measure, a pencil and a piece of paper.

1. Measure the distance from the front axle's centerline to the bottom of the upper crown without anyone sitting on the bike and write this measurement down. (Remember the exact locations of the two points because you'll need to use them later.)
2. Have the rider sit on the bike and measure the distance between the same two points as in step one. It's important to be in the normal riding position (weight centered) with the rider's feet on the pedals.
3. Subtract the second measurement from the first. The resulting measurement is the static sag or ride height.

SAG MEASUREMENT CHART

Fork Travel	Sag
50 mm	8-12 mm
75 mm	10-14 mm

TRAVEL MEASUREMENT To determine which travel your LUXE fork is in, simply measure the distance from the top of the seal area on the lowers (or the bottom of the fork boot) to the bottom of the crown.

TRAVEL MEASUREMENT CHART

Fork Travel	Seal to Crown Measurement
50 mm	Around 4 inches or 100 mm
75 mm	Around 5 inches or 125 mm

RECOMMENDED COIL SPRINGS Once you have checked sag, you can either preload the spring via the cap on top of the left hand leg, or even better, make spring changes to accommodate for your riding style and weight.

SPRING KITS LUXE COMP	Rider Weight	Recommended Spring Kit
	100-150 lbs.	Soft ride kit (Part #85-4990)
Standard Set-up	150-170 lbs.	Medium ride kit (Part #85-4991)
	170 plus lbs.	Firm ride kit (Part #85-4992)
LUXE ELITE	**Rider Weight**	**Recommended Spring Kit**
	100-150 lbs.	Soft ride kit (Part #85-4993)
Standard Set-up	150-170 lbs.	Medium ride kit (Part #85-4994)
	170 plus lbs.	Firm ride kit (Part #85-4995)
LUXE SUPER	**Rider Weight**	**Recommended Spring Kit**
	100-150 lbs.	Soft ride kit (Part #85-4996)
Standard Set-up	150-170 lbs.	Medium ride kit (Part #85-4997)
	170 plus lbs.	Firm ride kit (Part #85-4998)

CHANGING COIL SPRINGS Once you have checked sag, you can make spring changes to accommodate for your riding style and weight.

1. Remove the preload adjusters by unscrewing the caps from the top of the crown/leg assembly. First, you must remove the cap by unscrewing the 2 mm fastening bolt (Figure 2). An 18 mm socket will be necessary with the LUXE to remove the preload adjuster assembly. Remember: The springs are housed in both legs of the LUXE forks.
2. With the adjuster assembly removed, the spring stack is now accessible (Figure 3).
3. Select the appropriate coil spring for your weight and riding style (refer to the above spring chart for recommended rates).
4. Apply a liberal amount of grease to the outside surface of the new coil spring and the spring couplers (what holds the springs together) (Figure 4). We recommend any thick grease. Install the new spring stack.
5. Reinstall the preload adjuster assembly, taking care not to cross-thread the cap. It should thread in by hand and lightly snug tightened (Figure 5).
6. Reinstall the preload adjuster cap.

FORK DISASSEMBLY – LUXE SUPER Disassembly of your LUXE Super fork is necessary to provide the proper service of your fork. To do this:

1. Remove the two 4 mm Allen bolts on the bottom of the fork (Figure 6).
2. Pull apart the fork, removing the casting from crown/steerer assembly (Figure 7).
3. Wipe clean the inside of the fork casting, stanchion tubes, fork boots, and crown. At the same time you do this, do a complete inspection on the fork (Figure 8).
4. Reassemble the fork and snug tighten the 4 mm bolts (Figure 9).

FORK DISASSEMBLY – LUXE COMP & ELITE Disassembly of your LUXE Comp and Elite fork is necessary to provide the proper service of your fork. To do this:

1. Remove the springs (See Changing Coil Springs above).
2. Insert a long 4 mm wrench into the fork and loosen the bolts that hold the casting to the crown/steerer tube assembly (Figure 10).
3. Pull apart the fork, removing the casting from crown/steerer assembly (Figure 11).
4. Wipe clean the inside of the fork casting, stanchion tubes, fork boots, and crown. At the same time you do this, do a complete inspection on the fork (Figure 12).
5. Reassemble the fork and snug tighten the 4 mm bolts (Figure 10).

CONVERTIBLE TRAVEL – LUXE SUPER Changing the travel from 50 to 75 millimeters or vice-versa requires the removal of the lower legs.

1. Start by removing the preload adjusters and spring (see Changing Coil Springs above).
2. Next, unthread the 4 mm bolts from the bottoms of both legs and pull the fork apart to expose the clip mechanism which allows for travel adjustment (Figure 6).
3. Remove the clip and insert it into the upper position (above the rod flange) for 75 millimeters of travel or the lower position (below the rod flange) for 50 millimeters of travel (Figure 13).

4. Reassemble the fork.

MAINTENANCE AND SERVICE When servicing the fork, take the time to inspect all parts for excessive wear or damage. There are basically three aspects of a fork that will require attention: the stanchions (inner legs), the bushings in the outer legs, and the spring stack. Inspecting any of these parts requires disassembly of the fork. Pay close attention to the bushings, which can be damaged by contamination in severe conditions. Replace any worn or damaged parts that are discovered.

SERVICE SCHEDULE – Suggested Service for Manitou forks

NORMAL CONDITIONS – Short/Infrequent Rides
- Disassemble, clean and grease fork every year.
- Grease spring stack as needed.

NORMAL CONDITIONS – Long/Frequent Rides
- Disassemble, clean and grease fork every 6 months.
- Grease spring stack as needed.

SEVERE CONDITIONS (MUD, RAIN, SNOW, EXTREME DUST) – Short/Infrequent Rides
- Disassemble, clean and grease fork every 6 months.
- Grease spring stack as needed.

SEVERE CONDITIONS (MUD, RAIN, SNOW, EXTREME DUST) – Long/Frequent Rides
- Disassemble, clean and grease fork every 3 months.
- Grease spring stack as needed.