



P/N 042114

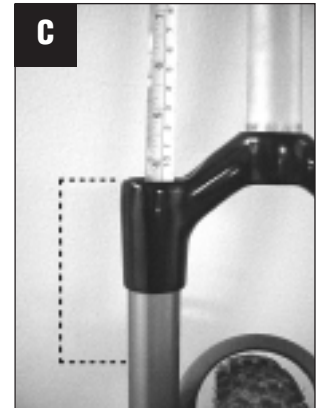
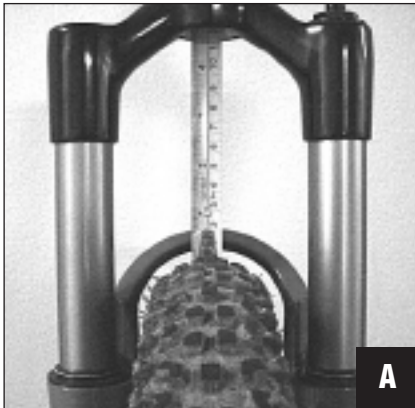
# SKAREB

## 2004 OWNERS' MANUAL

Skareb Platinum  
Skareb Super  
Skareb Elite  
Skareb Comp



28209 Avenue Stanford, Valencia, California 91355  
661 257-4411 | fax 661 294-4179 | [www.answerproducts.com](http://www.answerproducts.com)



## MANITOU SUSPENSION FORKS

**CONGRATULATIONS ON CHOOSING THE LATEST IN SUSPENSION TECHNOLOGY AVAILABLE, A 2004 MANITOU FORK.** This fork is fully assembled and ready to be installed onto your bicycle. It comes equipped with a 1 $\frac{1}{8}$ -inch threadless steerer tube and may also be available in a disc brake only version. A handlebar-mounted reflector must be used for on-road use, which is not included with your fork.

### 2004 MANITOU SKAREB FORK LINE

SKAREB COMP .....80 OR 100 MM TRAVEL / AIR SPRING / FLUID FLOW DAMPING (REBOUND ADJUST) / SOLID CROWN / RA CASTING

SKAREB ELITE .....80 OR 100 MM TRAVEL / AIR SPRING / FLUID FLOW DAMPING (REBOUND ADJUST) / HOLLOW CROWN / RA CASTING

SKAREB SUPER .....80 OR 100 MM TRAVEL / AIR SPRING / TPC LOCKOUT / HOLLOW CROWN / RA CASTING

SKAREB PLATINUM .80 OR 100 MM TRAVEL / AIR SPRING / AIR VOLUME ADJUST / TPC LOCKOUT / HOLLOW CROWN / RA CASTING

You can also download this manual at [www.answerproducts.com](http://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 PREVIOUS RIDING OR ASSEMBLY. DO NOT RIDE YOUR BICYCLE IF THE FORK SHOWS ANY SIGNS OF BENDING, CRACKING, CREAKING, 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 TO HAVE YOUR FORK SHIPPED DIRECTLY AT (800) 423-0273.**

**IMPORTANT:** The Manitou 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, contact your dealer.

## CONSUMER SAFETY INFORMATION

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 continued use. 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 Customer Service at (800) 423-0273. 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.

Do not use the fork if any parts are broken, bent, cracked, or you suspect may be damaged. Contact your dealer or Answer Products Customer Service at (800) 423-0273 if you have any questions concerning the integrity or condition of your fork.

Answer Products recommends that you periodically inspect your fork for wear and damage. Inspect the crown, inner legs, outer legs, dropouts 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, 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 with original purchase receipt to the place of purchase. 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

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 CANNOT BE REMOVED FROM THE CROWN. REPLACEMENT OF THE ENTIRE CROWN/STEERER ASSEMBLY MUST BE DONE TO INCREASE STEERER TUBE LENGTHS OR CHANGE DIAMETERS. REMOVING AND REPLACING THE STEERER TUBE OR STANCHIONS WILL RESULT IN AN UNSAFE CONDITION AND SHOULD NEVER BE DONE.**

### BREAK-IN

Your new fork is designed to break in during your first few rides (about 20 hours total riding time). Prior to break-in, you may notice your fork feels tight and slightly notchy. Following the break-in period, your fork will feel much smoother and will react to bumps much better than when you first put it on your bike. After 20 hours, you may want to recheck adjustments (where applicable) to fine tune the fork completely.

### FORK INSTALLATION

1. Remove the old fork from your bicycle.
2. Measure and cut the steerer tube to fit your bicycle head tube (see **WARNING** above). 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.
4. Install headset and fork per headset manufacturer's instructions.
5. Install the handlebars and stem to the stem and handlebar manufacturer's instructions.
6. Install the brakes per the brake manufacturer's instructions.
7. To install the front wheel adjust the front wheel quick release to clear the secondary dropout safety tabs. Secure wheel per quick release manufacturer's instructions.
8. Install the brake cable per brake manufacturer instructions. Ensure that the front brake cable is properly routed. Make sure the brake line is not crimped or contacts the tire as the fork moves through its travel.



### WARNING

**WHEN INSTALLING THE WHEEL WITH A PROPERLY INFLATED TIRE, CHECK TO MAKE SURE THE FORK ACHIEVES MINIMUM TIRE CLEARANCE.**

1. **MEASURE FROM THE HIGHEST POINT ON THE TIRE TO THE BOTTOM OF THE BRAKE ARCH, SEE FIGURE A. SEE TABLE 1 FOR MINIMUM BRAKE ARCH CLEARANCE.**
2. **MEASURE THE TIRE AT MAXIMUM WIDTH, SEE FIGURE B. SEE TABLE 1 FOR MAXIMUM TIRE WIDTH.**

**TABLE 1: WHEEL CLEARANCE**

MINIMUM BRAKE ARCH CLEARANCE (See Figure A)	MAXIMUM TIRE WIDTH (See Figure B)
5 mm	55 mm

**IMPORTANT:** Failure to properly route and securely attach the front brake cable to the fork can cause serious injury or death. This fork should not be used if any parts appear to be or are damaged. Contact your local dealer or Answer Products for replacement parts.

## INITIAL SET-UP

### MEASURING TRAVEL

To determine which travel your 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. See Table 2 to determine travel.

FORK TRAVEL	SEAL TO CROWN MEASUREMENT
80 mm	Around 96 mm
100 mm	Around 116 mm

### MEASURING SAG

You'll need a tape measure, a pencil, a piece of paper and a helper.

1. Measure the distance from the front axle's centerline to the bottom of the upper crown when no one's sitting on the bike and write this distance 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 your feet on the pedals.
3. Subtract the second measurement from the first. The resulting measurement is the static sag (See Table 3).
4. On all SKAREB forks, remove the air cap located on the top of the left leg and, using a dedicated shock pump (Manitou part #85-4069), inflate the fork with the desired pressure (75% of rider weight for 80 mm travel forks, or 50% of rider weight for 100 mm). Be aware that sometimes air systems lose a small amount of pressure when the pump is removed, so you may want to check exactly how much your pump loses by reinstalling it after you have set and checked pressure.
5. If adjusting the preload or air pressure does not provide the proper sag you may require a new ride kit. Please see recommended ride kits below.

FORK TRAVEL	SAG
80 mm	12-16 mm
100 mm	18-24 mm

### REBOUND DAMPING ADJUSTMENT

Rebound adjusters on Manitou forks are located on the bottom of the right fork leg. Turning the knob clockwise (as you are looking at the fork from the bottom) increases rebound damping, while turning the knob counterclockwise decreases rebound damping.

### COMPRESSION DAMPING ADJUSTMENT – TPC LOCKOUT

For TPC with lockout forks, a simple turn of the knob located on top of the right leg is all that is needed to add compression damping and activate the lockout. Turning the knob clockwise (as you are looking from a rider's position) increases compression damping and activates the lockout, while turning the knob counterclockwise decreases compression damping and deactivates the lockout. The last 1/2 turn of the knob activates the lockout, while the initial part of the knob's travel increases or decreases compression damping.

### SPV DAMPING ADJUSTMENT

With SPV damping, your suspension's compression damping characteristics and position sensitivity can be set with an SPV pump (Manitou part #85-4161). For proper function of your SPV damping system use the following procedure.

1. Start by removing the red air cap located on the top of the right leg (from the rider's perspective) and, using a dedicated SPV pump (Manitou part #85-4161), inflate the fork to 50 psi.
2. Check sag per procedure above.
3. Adjust SPV pressure. More pressure will create more compression damping, hold the bike up more and pedal better. Less pressure will create less compression damping, allow more sag, and be more responsive and supple. **Do not run SPV pressure below 30 psi or above 100 psi.**
4. Adjust SPV volume. With a 16 mm socket wrench or the SPV 16 mm volume adjust socket (part #85-3007), you can adjust the air volume in your SPV suspension. The volume adjust hex is colored red and located on top of the right leg. Turning the volume adjuster inwards will create a more progressive damping effect and make the suspension firmer from mid-stroke to bottom out. Turning the volume adjuster outwards will make the suspension more linear in compression damping and have a softer finish.

Refer to the website for specific tuning information about your SPV suspension.

## MAINTENANCE

Your fork requires periodic maintenance, cleaning and inspection. This is because moisture and contamination may build up inside the fork depending on the severity of riding conditions. To maintain top performance, it is recommended that the fork be periodically disassembled, cleaned, dried and re-lubricated. You can download service and tuning instructions on the web at [www.answerproducts.com](http://www.answerproducts.com).

	Short, Sporadic Rides	Long, Frequent Rides
<b>Normal Conditions</b>	Disassemble fork per Service Manual; clean out casting and replace Semi Bath oil every 6 months. Service FFD, TPC, and SPV damping systems by changing the damper oil every year. Grease spring stack as needed. On air fork models, check the oil level sitting on top of the air piston every 2 months per directions found on web site.	Disassemble fork per Service Manual; clean out casting and replace Semi Bath oil every 4 months. Service FFD, TPC, and SPV damping systems by changing the damper oil every year. Grease spring stack as needed. On air fork models, check the oil level sitting on top of the air piston every 6 weeks per directions found on web site.
<b>Severe Conditions</b>	Disassemble fork per Service Manual; clean out casting and replace Semi Bath oil every 4 months. Service FFD, TPC, and SPV damping systems by changing the damper oil every year. Grease spring stack as needed. On air fork models, check the oil level sitting on top of the air piston every 6 weeks per directions found on web site.	Disassemble fork per Service Manual; clean out casting and replace Semi Bath oil every 3 months. Service FFD, TPC, and SPV damping systems by changing the damper oil every year. Grease spring stack as needed. On air fork models, check the oil level sitting on top of the air piston every 4 weeks per directions found on web site.

### IMPORTANT: Before every ride you should:

1. Ensure that quick release skewers are properly adjusted and tight per quick release manufacturer's instructions.  
**NOTE: Forks with standard dropouts are equipped with dropout safety tabs to retain the wheel in the fork in the event the quick release comes loose.**
2. Wipe the inner legs and clean the fork. Check the entire fork for any obvious damage. Do not use the fork if any parts are broken, bent, cracked, or you suspect may be damaged.
3. Check the headset for proper adjustment per headset manufacturer's instructions.
4. Ensure that the front brake cable is properly routed and check brake adjustment.

### CHECKING OIL LEVEL

**IMPORTANT: Setting the proper oil level in your damped suspension fork is critical. The damping is located in the right leg of your fork. Not enough oil will allow foaming and reduce the performance. Too much oil will restrict travel and may cause damage to the system and create an unsafe riding condition. Finish reading this entire section prior to altering the oil level.**

To check the oil level, remove the compression assembly located in the top of the right leg (as you are looking at the fork from the rider's position). Leave the left side spring stack in place to keep the fork fully extended. Use a tape measure or "dip stick" to measure from the top of the fork crown down to where the oil sits (Figure C). For the correct oil level see Table 4.

FORK MODEL	OIL LEVEL
SKAREB	110 - 120 mm (4.33" - 4.72")

*NOTE: Use SAE 5WT suspension fork oil only.*

If you have any questions regarding your 2004 Manitou suspension fork in the U.S., contact the Answer Customer Service Department at (800) 423-0273. For information outside of the U.S., contact your authorized Manitou dealer or distributor.

You can also log on to [www.answerproducts.com](http://www.answerproducts.com) and download this manual or see detailed instructions on how to service your suspension fork.

<b>04 SKAREB SERVICE PART KITS</b>		
<b>04 SKAREB Damping Assemblies</b>		
85-5558	SKAREB Comp/Elite Compression Damping Assembly	
85-5559	SKAREB Super/Platinum Compression Damping Assembly	
85-4876	SKAREB Comp/Elite/Super/Platinum 80 mm Rebound Damping Assembly	
85-5308	SKAREB Comp/Elite/Super/Platinum 100 mm Rebound Damping Assembly	
<b>04 SKAREB Air Cap Assemblies</b>		
85-5271	SKAREB Comp/Elite/Super Air Cap Assembly	
85-5588	SKAREB Platinum Air Cap Assembly	
<b>04 SKAREB Crown Steer Leg Assemblies</b>		
85-5560	26" SKAREB Crown/Steer Assembly, 80 mm Travel - Steel	
85-5561	26" SKAREB Crown/Steer Assembly, 100 mm Travel - Steel	
85-5562	26" SKAREB Crown/Steer Assembly, 80 mm Travel - Blk Alloy	
85-5563	26" SKAREB Crown/Steer Assembly, 100 mm Travel - Blk Alloy	
85-4449	26" SKAREB Crown/Steer Assembly, 80 mm Travel - Blk Alloy - SPV	
85-4455	26" SKAREB Crown/Steer Assembly, 100 mm Travel - Blk Alloy - SPV	
<b>04 SKAREB Outer Leg Assemblies</b>		
85-5101	26" SKAREB Outer Leg Assembly - Silver	
85-5108	26" SKAREB Outer Leg Assembly - CDY Blue	
85-5107	26" SKAREB Outer Leg Assembly - CDY Red	
85-5564	26" SKAREB Outer Leg Assembly - Silk Blue	
85-5112	26" SKAREB Outer Leg Assembly - Silver, No Boss	
85-5119	26" SKAREB Outer Leg Assembly - CDY Blue, No Boss	
85-5118	26" SKAREB Outer Leg Assembly - CDY Red, No Boss	
85-5567	26" SKAREB Outer Leg Assembly - Silk Blue, No Boss	
<b>04 SKAREB Sticker/Knob/Seal/Bumper/Air Piston/O-Ring Kits</b>		
85-5544	SKAREB Comp Sticker Kit - Silver	
85-5545	SKAREB Comp Sticker Kit - Black	
85-4420	SKAREB Elite Sticker Kit - Silver	
85-5392	SKAREB Elite Sticker Kit - Black	
85-4436	SKAREB Super Sticker Kit - Silver	
85-4435	SKAREB Super Sticker Kit - Black	
85-4438	SKAREB Platinum Sticker Kit - Silver	
85-4437	SKAREB Platinum Sticker Kit - Black	
85-5584	SKAREB Knob Kit	
85-5585	SKAREB Platinum Knob Kit	
85-5265	SKAREB Seal Kit	
85-5266	Air Piston Kit	
85-5267	SKAREB Bumper Kit	
85-5268	SKAREB O-Ring Kit	
85-5320	End cap Assembly - Left leg	
85-5887	SKAREB SPV Assembly	
<b>04 SKAREB Ride Kits</b>		
	<b>Rider Weight Range</b>	
85-5573	SKAREB Ride Kit - X-Soft	100-125 lbs.
85-5575	SKAREB Ride Kit - Soft	125-150 lbs.
85-5577	SKAREB Ride Kit - Medium	150-190 lbs.
85-5579	SKAREB Ride Kit - Firm	190-215 lbs.
85-5581	SKAREB Ride Kit - X-Firm	215-235 lbs.
<b>04 SKAREB Compression Rods</b>		
85-5264	SKAREB Compression Rod Assembly, 80 mm	
85-5583	SKAREB Compression Rod Assembly, 100 mm	
85-4439	Air Push Rod Assembly, 80 or 100 mm	