



2004 OWNER'S MANUAL
MANITOU Q
MANITOU QR
MANITOU QRL



PN 042107

• ENGLISH

CONGRATULATIONS ON CHOOSING A 2004 MANITOU Q REAR SHOCK. This aftermarket Manitou Q air shock is fully assembled and ready to be installed onto your bicycle. Special mounting hardware and a specific shock length are needed for each bicycle. To find out which shock is right for you, visit your local Manitou dealer or check out our online specs at www.answerproducts.com. Before riding, take the time to read this manual on set-up, use, and service of your shock.

2004 MANITOU Q SHOCK LINE

Q.....AIR PRESSURE ADJUSTMENT ONLY

Q-R.....AIR PRESSURE AND REBOUND ADJUSTMENT

Q-RL.....AIR PRESSURE, REBOUND, AND LOCKOUT ADJUSTMENT



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 SHOCK WILL REDUCE THE POSSIBILITY OF INJURY OR POSSIBLE DEATH. PRIOR TO RIDING YOUR BICYCLE, YOU SHOULD INSPECT YOUR SHOCK TO ENSURE THAT NO DAMAGE HAS OCCURRED DURING THE COURSE OF RIDING. DO NOT RIDE YOUR BICYCLE IF THE SHOCK 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 HAVE ANY PROBLEMS WITH THIS SHOCK, CONTACT A MANITOU AUTHORIZED DEALER WHO CAN ARRANGE FOR SHIPMENT TO ANSWER PRODUCTS, OR YOU MAY CALL ANSWER TO HAVE IT SHIPPED DIRECTLY AT 800-423-0273.

WARRANTY INFORMATION

Any Answer Products shock 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 shock 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 shock to the place of purchase. In the USA, dealers should call Answer Products for a return authorization number (RA#) at 800-423-0273. 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.



WARNING

OPENING THE REAR SHOCK WITHOUT RELEASING PRESSURE SHOULD NOT BE DONE. DOING SO WILL RESULT IN SERIOUS INJURY.

If your shock ever loses oil, air pressure, or begins to make noise, stop riding the shock and have the shock inspected by an authorized Manitou dealer or contact Answer at 800-423-0273.



WARNING

DO NOT ATTEMPT TO PULL APART YOUR Q SHOCK IF IT IS COMPRESSED OR WILL NOT RETURN ON ITS OWN TO ITS ORIGINAL LENGTH. SERIOUS INJURY CAN RESULT.

IMPORTANT: A part of your Manitou Q shock is pressurized with nitrogen and should never be opened except by an authorized service center. The portion of the shock that is charged with nitrogen does not need to be opened in order to perform cleaning and lubrication.



WARNING

CHECK FRAME AND SEAT POST FOR SHOCK CLEARANCE.

When the shock compresses, its position within the frame will change. Always check for adequate clearance between the shock and frame/seat post for the entire stroke/motion of the shock. Be careful not to lower the seat post below the bottom of the seat tube. It is the responsibility of the user to check for adequate clearance between the shock and frame/seat post for the entire stroke/motion of the shock. If your bicycle offers multiple shock mounting options, it is the user's responsibility to make sure that any mounting options also offer adequate clearance between the shock and frame/rocker/seat post.

SETTING UP YOUR Q SHOCK

MEASURING SAG

One of the most important things you can do when you receive your new shock is set the sag. To check sag, measure the distance between the centers of the shock mounting bolts (eye-to-eye length of your shock) and record this measurement. Check the chart below to make sure it correlates with one of the shocks listed.

Next, sit on the bike in a normal riding position near a wall to steady yourself. Without bouncing on the saddle or pedals, distribute your weight on the saddle and pedals in a normal riding position while holding the handlebars. Have a friend measure new distance between the two points described above and record it. If you do not have a helper, the sag can be measured by using the o-ring on the Q shock damper body. Simply move the o-ring up against the canister, sit on the bike and then get off the bike as smoothly as possible. Sag can then be measured as the distance from the canister to the displaced o-ring with a tape measure or calipers. Check this measurement against the chart below and determine the sag measurement for you or calipers.

SAG CHART					
Shock Length		Shock Travel		25% Sag	
Inches	mm	Inches	mm	Inches	mm
6.0	152	1.25	32	0.31	8.0
6.5	165	1.5	38	0.38	9.6
7.5	190	2.0	51	0.50	12.7
7.875	200	2.0	51	0.50	12.7

ADJUSTING SAG

Adjusting the sag of your Q shock requires a high-pressure air shock pump such as Manitou's own (part #85-4069). With this pump you can change the air pressure in the shock. Increasing air pressure will make the shock stiffer and will decrease sag. Add/decrease air pressure in the main air spring to achieve the desired amount of sag.

To install air pressure in the main air spring, remove the air cap from the Schrader valve and attach the pump to the Schrader valve. You can damage the pump by turning it on too far, so as soon as the gauge registers pressure, screw 1/2 turn more and pump to the desired level. You can use the micro adjust feature on the Manitou air shock pump to fine tune your air pressure. After removing the pump, be sure to reinstall the Schrader valve cap.

ADJUSTING REBOUND DAMPING (Q-R and Q-RL only)

The rebound adjuster on Q-R and Q-RL shocks is the blue knob. Turning the knob in, or clockwise, increases rebound damping and slows the extension of the shock. Turning the knob out, or counterclockwise, decreases rebound damping and speeds the extension of the shock. The proper rebound setting depends on your weight and riding style, but the rebound speed should not be so fast that it feels like the rear end of the bike is kicking back, or so slow that the shock feels sluggish and slow to absorb bumps.

ADJUSTING THE LOCKOUT (Q-RL only)

The lockout adjuster on the Q-RL shock is the red lever. Turning the lever to the left opens the lockout and allows the shock to function normally. Pushing the lever to the right closes the lockout.

HARDWARE MAINTENANCE

From time to time it may be necessary to replace your Q-shock mounting hardware. Check to see if this is necessary by lifting up on the bike's seatpost to feel for play. Any kind of a clunk that feels similar to a loose headset may require replacement of your shock hardware. For replacement, visit your Authorized Manitou Dealer or contact Answer Products directly. Hardware part numbers and contact information located at the end of this document.

SERVICE SCHEDULE

Suggested Service for Manitou Shocks

Normal Conditions – Short/Infrequent Rides

- Clean shock body after every ride.
- Clean and regrease air canister every 3 months.
- Send to service center for oil change and inspection every year.

Normal Conditions – Long/Frequent Rides

- Clean shock body after every ride.
- Clean and regrease air canister every 2 months.
- Send to service center for oil change and inspection every year.

Severe Conditions (mud, rain, snow, extreme dust) – Short/Infrequent Rides

- Clean shock body after every ride.
- Clean and regrease air canister every 2 months.
- Send to service center for oil change and inspection every year.

Severe Conditions (mud, rain, snow, extreme dust) – Long/Frequent Rides

- Clean shock body after every ride.
- Clean and regrease air canister every month.
- Send to service center for oil change and inspection every year.

For updates and tuning information, visit our website at www.answerproducts.com.

Included with your Q air shock purchase are two (one for each shock end) of the following hardware kits:

HARDWARE KIT		Part #
6.0 X 22.2	2 Piece	85-6101
8.0 X 22.2	2 Piece	85-6209

Additional kits can be ordered from Answer Products for an additional \$5 per shock end or \$10 per shock.

For new hardware, contact Answer Products at 800-423-0273, or www.answerproducts.com, or write to us at: Answer Products, 28209 Avenue Stanford, Valencia, CA 91355, USA.