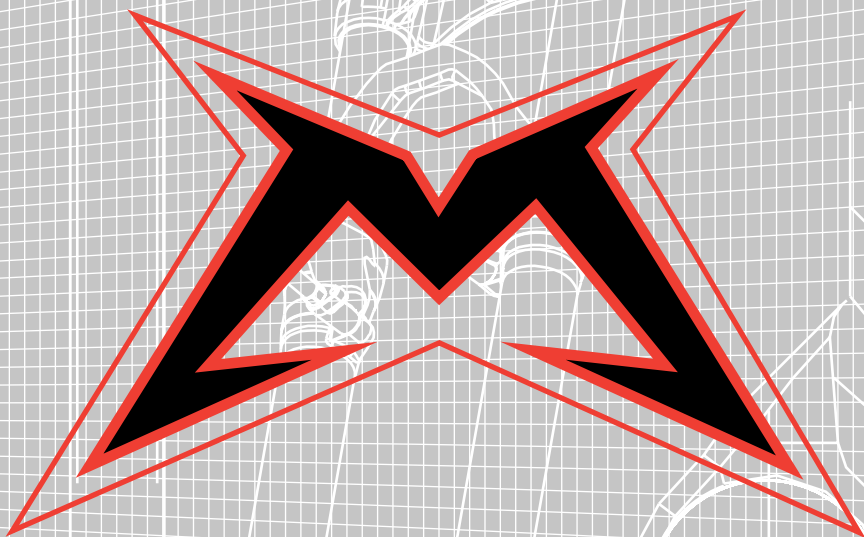


SPORTS



PREMIUM SUSPENSION

OWNERS MANUAL

DEVELOPING SINCE 1949



General warnings for owners manual



WARNING

Failure to follow these instructions could result in failure of the product, an accident, personal injury or death.

1. USE OF THE MANUAL

- Carefully read, follow and understand the instructions given in this manual. It is an essential part of the product, and you should keep it in a safe place for future reference.
- If the use and maintenance instructions provided in this manual are not properly performed, or if the other instructions in this manual are not followed, an accident could occur, resulting in an accident, serious injury or death.
- Please be advised that suspension system installation and repair requires specialized knowledge, tools and experience. General mechanical aptitude may not be sufficient to properly install or repair your suspension system. Please have your suspension system installed and/or serviced only by an authorized Marzocchi Service Center.
- Never make any modification whatsoever to any component of your suspension system.

A. GENERAL SAFETY RECOMMENDATIONS

- Be sure to use the correct suspension system for your style of riding. Check the "Intended Use Instructions" in this manual.
- Please note that there are inherent risks associated with downhill, free ride, cross country, marathon, trekking, dirt jumping and urban style riding. You could be seriously injured or killed while engaged in those riding styles. Learn how to ride, never ride beyond your capabilities, be sure to use the proper safety equipment, and be sure that all your riding equipment is in excellent condition.
- The lifespan of Marzocchi products depends on many factors, such as riding style and riding conditions. Impacts, falls, improper use or harsh use in general may compromise the structural integrity of the suspension system

and significantly reduce its lifespan. Please have your bicycle regularly inspected by a qualified mechanic for any oil leaks, cracks, deformation, or other signs of fatigue. The frequency of inspection depends on many factors; check with your authorized Marzocchi representative to select a schedule that is best for you. If the inspection reveals any deformation, cracks, impact marks, stress marks or bent parts, no matter how slight, immediately have a Certified Marzocchi Repair Center inspect the forks before you ride again.

- When installing or removing your bicycle from a bicycle carrier (roof rack or rear hitch mount), be sure that you fully loosen the quick release fastener on the carrier. In addition, be sure that your bicycle is lifted from or installed on the carrier in a perfectly vertical direction. If the quick release fastener is not fully loosened, or if there is any bending action while installing or removing your bicycle, you will scratch, bend or otherwise damage your suspension system.
- If you strike at any speed any overhead object, such as a parking garage, bridge, tree limb or other abutment, with your bicycle while your bicycle is attached to a bicycle carrier, you can damage your forks. Have your forks inspected by an authorized Marzocchi Service Center before you ride.
- Always wear a properly fitted and fastened bicycle helmet that has been approved by ANSI or SNELL, and any other safety equipment necessary for your riding style.

B. BEFORE EVERY RIDE

- Check that none of the components to your suspension system, or the remainder of your bicycle, are bent, deformed, cracked or otherwise damaged.
- Check to be sure that all quick release fasteners, nuts and bolts are properly adjusted. Bounce the bicycle on the ground and listen and look for anything which may be loose.
- Be sure that your wheels are perfectly

centered. Spin the wheels to be sure that they do not wobble up and down or from side to side, and that they do not make contact with the fork legs or brake pads while rotating.

- Learn and follow the local bicycle laws and regulations, and obey all traffic signals, signs and laws while you ride.

DO NOT RIDE YOUR BICYCLE IF IT DOES NOT PASS THIS PRE-RIDE TEST. CORRECT ANY CONDITION BEFORE YOU RIDE.

INTENDED USE INSTRUCTIONS

SELECT THE CORRECT FORK FOR YOUR RIDING STYLE AND RIDE PROPERLY

Marzocchi suspension forks are among the most durable and technologically advanced forks on the market today. However, no fork can withstand misuse, abuse or improper use that, over a short period of time, can cause your forks to fail when you least expect it.

It is critical that you select and use the fork that is appropriate for your riding style, and that you use the fork properly.

1. Identify Your Riding Style:

Trekking: Trekking is similar to XC riding but not as aggressive as XC. It involves slower riding and no riding over obstacles such as rocks, roots, or depressions. You should only attach generators and racks to the designated mounting points provided on the forks. Never make any modification to your fork to attach any equipment.

Cross Country (XC)/Marathon: Riding along hilly trails where some bumps and smaller obstacles, such as rocks, roots, or depressions, may be encountered. XC riding does not include jumps or “drops” (riding off rocks, fallen trees or ledges) from any height. XC forks must only be used with tires specifically designed for cross country riding, or disk, rim or linear pull brakes.

Free Ride (FR): This riding style is for skilled riders and involves aggressive slopes, large obstacles, and moderate jumps. Free Ride forks should be used only with disk brakes as well as frames, wheels and other components specifically designed for Free Riding. The disk brakes must be attached to the designated mounting points provided on the fork. Never make any modification to your fork to attach any equipment.

Dirt Jumper (DJ) / Urban Riding: This “BMX” or “motocross” style riding is only for the most skilled riders and involves jumping from one mound of dirt to another. It also includes riding over and around “urban obstacles” such as man-made or other concrete structures. These forks should be used only with disk brakes, as well as frames, wheels and other components specifically designed for this riding style. The disk brakes must be attached to the designated mounting points provided on the fork. Never make any modification to your fork to attach any equipment.

Down Hill (DH) / Extreme Free Ride: This discipline is only for professional or highly skilled riders. It includes for relatively high jumps or “drops” and negotiating larger obstacles such as boulders, fallen trees or holes. These forks should be used only with disk brakes, as well as frames, wheels and other components specifically designed for this riding style. The disk brakes must be attached to the designated mounting points provided on the fork. Never make any modification to your fork to attach any equipment.



WARNING

Ride only in areas specifically designated for your riding style.

2. Select the Correct Fork for Your Riding Style from the Table Below.

Please see your Marzocchi retailer, or contact Marzocchi directly, if you require assistance in selecting the correct fork.

Tab 1: 2004 Fork Riding Categories and Intended USE

XC/Marathon	Free Riding	DJ/Urban Riding	Down Hill/Extreme Free Riding	Trekking
Marathon SL Marathon S	Z-150 Free Ride Z-150 FR SL Z-150 Drop-Off Z.1 FR SL Z.1 FR Z.1 Drop-Off I Z.1 Drop-Off II Z.1 Wedge	Dirt Jumper I Dirt Jumper II Dirt Jumper III	Monster T Super Monster	TXC TXC ECC
MX Comp MX Pro	Shiver SC	Shiver SC	Super T Pro	
MZ Comp MZ Race	Drop Off Comp	Street DJ	Junior T	
EXR Comp EXR Pro EXR Supra	Drop-Off Triple		888 R 888 RR 888 RT	
			Shiver DC	

3. Do Not Misuse or Abuse Your Forks

Do not misuse or abuse your forks. Learn how to ride, and always ride within your abilities. An out-of-control ride puts the equivalent of years of hard use on your forks after only a few rides.

Learn how to properly flow around obstacles on the trail. Hitting obstacles such as rocks, trees or holes straight on puts forces on your fork it was not designed to absorb.

Landing improperly after a jump or drop also puts forces on your fork it was not designed to absorb. You should **only** perform jumps or drops when a transition or down ramp is available to help your bicycle absorb the impact forces generated during the landing, and both wheels should smoothly make contact with the transition or down ramp at the same time. Any other type of landing is dangerous, as it could result in a component part failure and an accident. The steepness and length of the transition or down ramp depends on the height from which you jump or drop. Every situation is different for every rider; consult with an experienced rider before attempting any jump or drop.



WARNING

Failure to properly flow around obstacles on the trail, or failure to properly land after a jump or drop could cause your forks to fail, resulting in a loss of bicycle control and serious injury or death to the rider.

Your forks require regular maintenance and repair. The harder you ride, the more often you must inspect and maintain your forks. **If your forks are bent, deformed, cracked, or chipped, no matter how slight, immediately have a Certified Marzocchi Repair Center inspect the forks before you ride again.**



REMEMBER

*Even forks made out of solid metal will fail if they are misused, abused, or improperly used!
Extreme use can eventually wear out and break even the strongest components.*



“Ride fast, yet ride Smart”

Use and maintenance instruction manual

English

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1 INTRODUCTION - GENERAL SAFETY REGULATIONS

Before reading this manual please carefully read the information contained in the "Safety regulations for the manual's user" section.

The information contained in the "Safety regulations for the manual's user" section will have to be followed for both, the MARZOCCHI PREMIUM SUSPENSION forks' and maintenance.

If you have any questions regarding the care and maintenance of your suspension system, please contact your nearest service center directly. A list of service centers can be found at

the end of this manual or on the Internet page www.marzocchi.com.

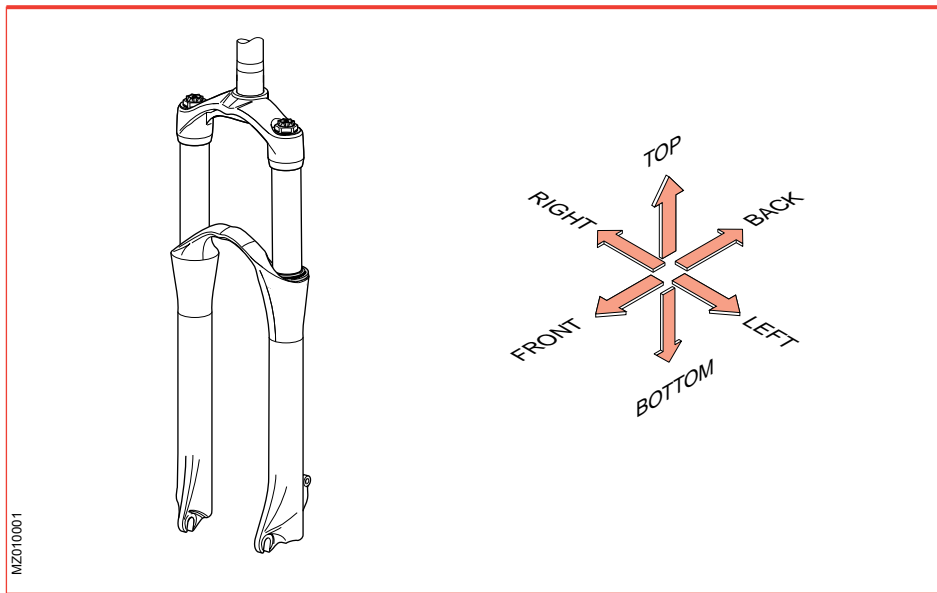
This manual does not explain how to assemble/disassemble the fork from the bicycle, the wheel, the steering set or any other component directly or indirectly associated with the fork that are not actually a part of the fork.

MARZOCCHI reserves the right to make changes to the products, at any time and without prior notice to improve the products or to meet any productive or commercial requirements.

The user is the only person responsible for the correct application of the assembly instructions in the present manual.

1.1 Conventions

1.1.1 Orientation of the fork



MZ010001

1.1.2 Editorial pictograms



ATTENTION

Descriptions preceded by this symbol contain information, instructions or procedures, which, if not respected, can cause damage or bad function to the fork, accidents to the user (even fatal ones) or damage to the environment.



NOTE

Descriptions preceded by this symbol contain information, prescriptions or procedures recommended by MARZOCCHI for the best fork's use.

1.2 Use application of the PREMIUM SUSPENSION forks

You will find in the following table the use applications of MY2004 MARZOCCHI PREMIUM SUSPENSION forks.



ATTENTION

Do not use forks for an application that is different from the one provided by the manufacturer.

For further information concerning the specific fork's use, please refer to the "Safety regulations for the user".

Table 1: Use application of the MY 2004 PREMIUM SUSPENSION forks

	MARATHON CROSS COUNTRY	FREERIDE	DIRT JUMPER URBAN	DOWN HILL FREE RIDE EXTREME	TREKKING
Drop-Off Comp		●			
Drop-Off Triple		●		●	
EXR Comp	●				
EXR Pro Air	●				
EXR Pro Coil	●				
EXR Supra	●				
MZ Comp	●				
MZ Race	●				
TXC					●
TXC ECC					●

2 TECHNICAL INFORMATION

2.1 Fork's external components

The MY 2004 MARZOCCHI Premium Suspension forks range includes many different models, having from 28 to 32 mm legs diameter and travels up to 150 mm. Apart from a few exceptions, the MARZOCCHI Premium Suspension forks range consists of two main assemblies:

- the stanchion tubes / steering crown assembly, which are assembled under pressure.
- the magnesium-casted sliders/arch monolith assembly.

The main components are made of aluminium alloy or magnesium; these are lightweight alloys that help reducing the fork's weight.

2.1.1 Fender

MARZOCCHI offers the option of the integrated fender for all 32 mm diameter legs forks. The fender mounted to the underside of the crown helps protecting the rider against debris from the front tire.

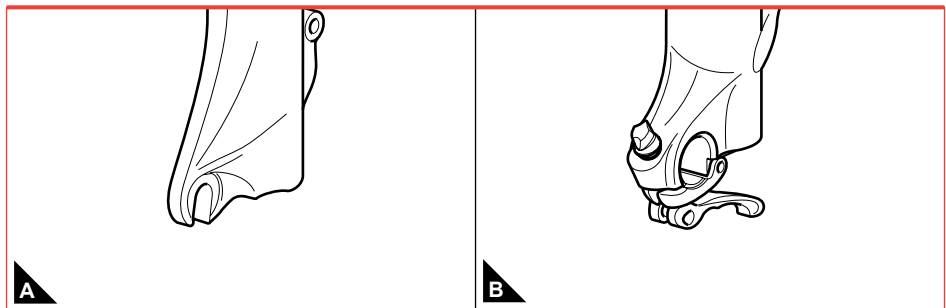
2.1.2 Wheel axle securing system

The system for securing the wheel axle to the fork sliders can be standard, with traditional dropouts or with the QR20 Plus system.

Forks using this system must have a suitable hub with 110 mm width spacing and a 20 mm wheel axle.

The MARZOCCHI QR20 Plus system: it is the new, sophisticated version of the QR20 system that fully wraps the 20 mm wheel axle, offering maximum stiffness, while still providing an easy way to remove the wheel.

The new QR20 Plus 20 mm axle system uses a forged aluminium hinge that is attached to the lower part of the slider. The quick-release forged aluminium lever makes opening and closing the flap routine. The 20 mm wheel axle can be the quick-release type or the bolt-on type.



Marzocchi Premium Suspension securing systems: (A) traditional dropout, (B) QR20 Plus.

Table 2: MZ - Series

TRAVEL (C)	mm	80	100
A (max)	mm	468	488
A (min)	mm	388	388

MZ Series

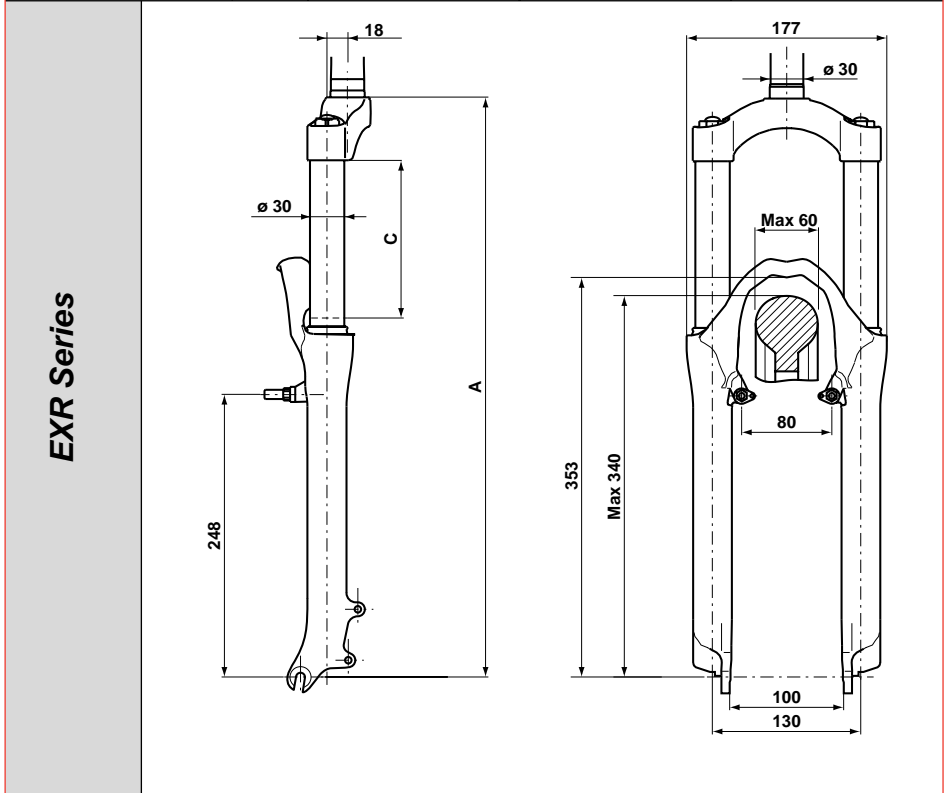
Disk brake mounts		● XC International Standard for 6" disk
V-brake fit		● Integrated
Drop out type	Standard	●
	QR 20 Plus	—
Accessories		—
● = current ○ = option — = not available		

⚠ ATTENTION

Marzocchi reserves the right to modify data and features quoted in the table here above, if needed for technical and/or commercial requirements. The dimensions indicated in the drawing are only given as indicative. Please check on the internet page www.marzocchi.com for updated information.

Table 3: EXR - Series

TRAVEL (C)	mm	85	105	120
A (max)	mm	458	478	493
A (min)	mm	373	373	373



Disk brake mounts		● XC International Standard for 6" disk
V-brake fit		● Removable
Drop out type	Standard	●
	QR 20 Plus	—
Accessories		—
● = current ○ = option — =not available		

⚠ ATTENTION

Marzocchi reserves the right to modify data and features quoted in the table here above, if needed for technical and/or commercial requirements. The dimensions indicated in the drawing are only given as indicative. Please check on the internet page www.marzocchi.com for updated information.

Table 4: Drop Off Comp Series

TRAVEL (C)	mm	110	130
A (max)	mm	498	518
A (min)	mm	388	388

Drop-Off Comp Series

Disk brake mounts		● XC International Standard for 6" disk
V-brake fit		—
Drop out type	Standard	●
	QR 20 Plus	—
Accessories		Integrated fender

● = current ○ = option — = not available

⚠ ATTENTION

Marzocchi reserves the right to modify data and features quoted in the table here above, if needed for technical and/or commercial requirements. The dimensions indicated in the drawing are only given as indicative. Please check on the internet page www.marzocchi.com for updated information.

Table 5: Drop Off Triple

TRAVEL (C)	mm	150												
A (max)	mm	538												
A (min)	mm	388												
Drop-Off Triple														
	<table border="1"> <tr> <td>Disk brake mounts</td> <td>● XC International Standard for 6" disk</td> </tr> <tr> <td>V-brake fit</td> <td>—</td> </tr> <tr> <td rowspan="2">Drop out type</td> <td>Standard</td> <td>●</td> </tr> <tr> <td>QR 20 Plus</td> <td>—</td> </tr> <tr> <td>Accessories</td> <td>Integrated fender Direct mount handlebar clamp (long or short)</td> </tr> <tr> <td colspan="2">● = current ○ = option — = not available</td> </tr> </table>		Disk brake mounts	● XC International Standard for 6" disk	V-brake fit	—	Drop out type	Standard	●	QR 20 Plus	—	Accessories	Integrated fender Direct mount handlebar clamp (long or short)	● = current ○ = option — = not available
Disk brake mounts	● XC International Standard for 6" disk													
V-brake fit	—													
Drop out type	Standard	●												
	QR 20 Plus	—												
Accessories	Integrated fender Direct mount handlebar clamp (long or short)													
● = current ○ = option — = not available														

⚠ ATTENTION

Marzocchi reserves the right to modify data and features quoted in the table here above, if needed for technical and/or commercial requirements. The dimensions indicated in the drawing are only given as indicative. Please check on the internet page www.marzocchi.com for updated information.

Table 6: TXC - Series

TRAVEL (C)	mm	60	80
A (max)	mm	466	486
A (min)	mm	406	406

TXC Series		
	Disk brake mounts	● XC International Standard for 6" disk
V-brake fit	● Integrated	
Drop out type	Standard	●
	QR 20 Plus	—
Accessories	—	
● = current ○ = option — = not available		

English

2

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⚠ ATTENTION

Marzocchi reserves the right to modify data and features quoted in the table here above, if needed for technical and/or commercial requirements. The dimensions indicated in the drawing are only given as indicative. Please check on the internet page www.marzocchi.com for updated information.

2.2 Fork's internal components and fork's operation

Inside MARZOCCHI forks you will find coil springs, air or MCU elastomers as a spring system.

The damping load that is generated during the fork legs compression and rebound, can be adjusted by MCU elastomers, or by special hydraulic valve pumping rods, which operate according to compression speed (Speed Sensitive Valving).

Pumping rods can be controlled by external or internal adjusters, or they can have a fixed setting.

Pumping rods are fully plunged in oil (Open Bath System).

The Open Bath System provides proper lubrication and cooling of the inner sliding parts; furthermore, the oil volume works as a damping and setting element.

The Open Bath system reduces the maintenance frequency compared to a sealed cartridge system.

On the models using MCU elastomers a correct inside lubrication is made by means of grease.

Stanchion tubes are guided in the sliders-arch monolith by two teflon-coated bushings, free from static friction.

The seal system prevents oil or grease leaks and contamination from particles entering the fork. It uses a special dual-lip oil seal and a dust seal at the top of each slider.

You will find here below the different fork damping systems:

ECC: the Extension Control Cartridge offers “on-the-fly” adjustment of the rebound damping.

SSV: the Speed Sensitive Valve (SSV) uses 5 valve circuits to control damping rates based on the fork's compression and rebound speed as well as the fork's position in the travel.

Table 7: Premium Suspension forks damping systems

Fork	Damping system	
	Right leg	Left leg
MZ Comp	/	/
MZ Race	/	/
EXR Comp Air	SSV non-adjustable pumping rod	/
EXR Comp Coil	SSV non-adjustable pumping rod	/
EXR Pro	SSV non-adjustable pumping rod	/
EXR Supra	SSV pumping rod with external adjustment	SSV non-adjustable pumping rod
Z.1 Drop-Off Comp	SSV non-adjustable pumping rod	/
Z.1 Drop-Off Triple	SSV non-adjustable pumping rod	/
TXC	SSV pumping rod with internal adjustment	/
TXC ECC	SSV pumping rod with internal adjustment	ECC cartridge

3 INSTALLATION

3.1 Installing on the frame

The fork is supplied with "A-Head Set" (threadless) steer tube to be cut according to frame size it will be used on.

Installing the fork on the bicycle frame is a very delicate operation that must be carried out by specialized personnel.



ATTENTION

The assembling on the frame and the steer tube adjustment must be carried out in compliance with the manufacturer's instructions. Improper installation may jeopardize the safety of the rider.

Marzocchi does not guarantee the installation and refuses all responsibility for damages and/or accidents that may be caused by an incorrect installation.

The steer tube must be pressed into the crown; its replacement must be carried out by one of our service centers only, using the required tools.



ATTENTION

In case of improper installation of the steer tube into the crown, the rider might lose control of his/her bicycle, thus jeopardizing his/her safety.



ATTENTION

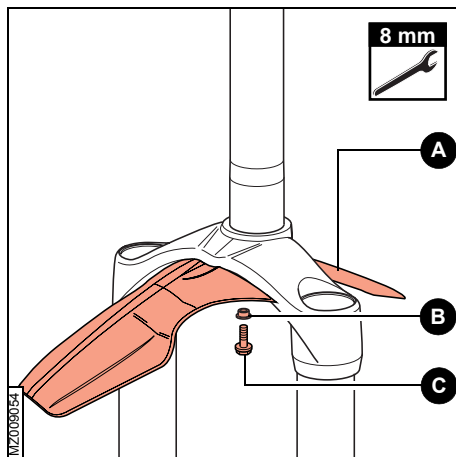
In the DropOff Triple model, the steering crown is fixed with screws to the stanchion tubes. During installing, you will have to verify that, keeping the fork's legs fully compressed at bottom end, the distance between the tire (inflated) and the lower part of the lower crown must be bigger than 4 mm.

Additionally, the maximum length of the steering tube between the two crowns shall be less than 184 mm.

3.2 Fender installing

The Ø 32 mm legs forks can be equipped with an integrated fender. The fender can be provided with the fork or purchased separately.

When assembling the fender (A) you must insert the small support bushing (B) between the screw and the fender as shown in the picture, and tighten the screws (C) with a 8 mm Allen wrench to the required torque (see Table - Tightening Torques).



3.3 Installing the brake system

Installing the brake system is a very delicate operation that must be carried out by specialized personnel.



ATTENTION

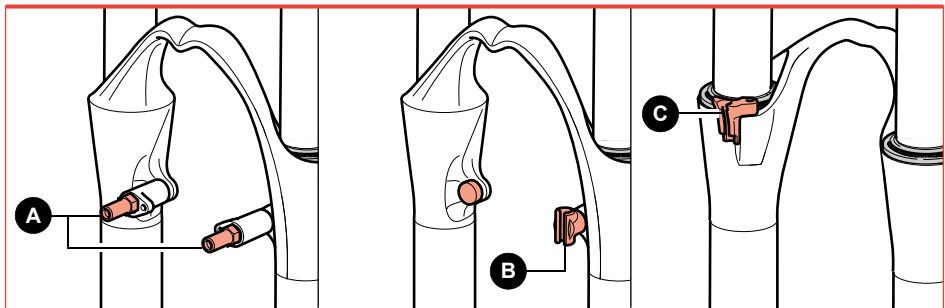
Marzocchi does not guarantee the assembly and refuses all responsibility for damages and/or accidents that may be caused by an incorrect assembly.

Improper installation of the disk brake system can overstress the caliper mountings, which may break. The brake system assembling must be carried out in compliance with the brake system's manufacturers instructions. Improper installation may jeopardize the safety of the rider.

Only use brake systems that are complying with the fork's specifications, considering that:

- *On the MZ and TXC forks the V-Brake system adapters are integrated into the monolith casting.*

- *On \varnothing 32 mm stanchions forks you can exclusively assemble disk brake systems.*
- *The EXR forks can be previously provided with disk brake assembling accessories or with Cantilever or V-Brake systems assembling accessories. Specialized personnel only can change one brake system type into the other one. On the bolts thread (A) a special thread-lock treatment is applied; removed bolts can therefore never be reused, as they lose such treatment.*
- *In case of assembling of disk brake system, make sure before every ride that the brake system tubes do not interfere with the moving parts and on the models provided with the proper mounting (EXR (B), DropOff Comp and Triple (C)) the tube is correctly connected to the mounting itself.*



3.4 Wheel installing with a standard fork's end

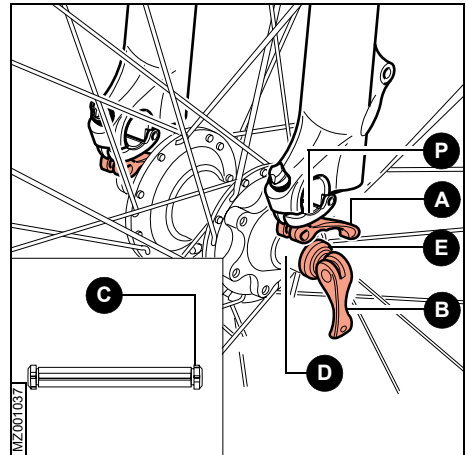


ATTENTION

Install the wheel in compliance with the bike manufacturer's instructions.

For correct fork function after wheel installing you will need to:

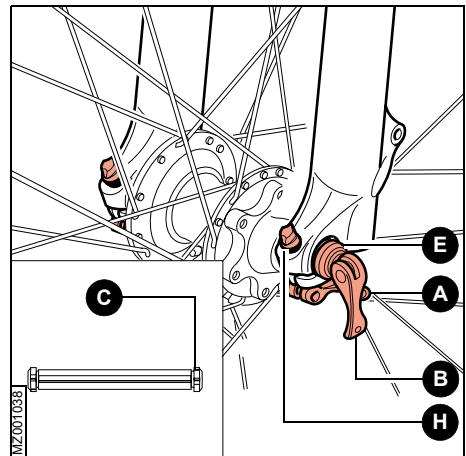
- Check the correct fork-wheel alignment by fully compressing the fork a few times.
- Lift the front wheel, turn the wheel a few times to verify the correct alignment with the disk brake or the Cantilever/V-Brake brake pads.



3.5 Wheel installing with a QR20 Plus fork

For correct fork function, please follow the instructions here below when installing the wheel:

- Release the securing system on both legs by pushing the levers (A) downwards and open the flap (P).
- For quick-release hubs, open the release lever (B).
- For threaded cap hubs, unscrew the cap (C) as much as needed to insert the wheel axle through the fork wheel axle clamp.
- Insert the wheel axle (D) through the fork wheel axle clamp.
- Make sure that the wheel axle supporting bushings (E) are centered in the sliders' seat.
- If the wheel axle is provided with quick-release system, lock the wheel with the quick-release lever (B); otherwise, tighten the cap positioned on the axle side using a 6 mm Allen key to the required tightening torque (see Table - Tightening Torques).
- Verify the correct settling of the supporting bushings (E).
- Check the correct fork-wheel alignment, by fully compressing the fork a few times.
- Lift the front wheel; turn the wheel a few times to verify the correct alignment with the disk brake.
- Lock the securing system by pulling the levers (A) upwards and adjust clearance through the adjusters (H), if needed.













4 MAINTENANCE

4.1 Problems - Diagnosis - Solutions







This paragraph indicates some of the problems that may arise during the fork's use, as well as the possible causes of these problems and the suggested solutions.

Always check this table before working on the fork.

Table 8: Problems - Diagnosis - Solutions

Problem	Diagnosis	Solution
Fork has too much sag	Spring rate too soft or fork oil too fluid	 Add spring preload by replacing the preload tube
		 Check the oil height
		 Change to stiffer spring rate
		Increase air pressure
Forks bottoms too easily, but it has the recommended sag	Not enough compression damping	 Increase compression damping by changing oil level
Fork bottoms too easily; needs more than maximum preload to attain proper sag	Spring rate too soft or fork oil too fluid	 Check oil height
		 Get stiffer springs
		Increase air pressure
Fork does not get full travel	Spring rate too stiff or fork oil too high	 Check oil height
		 Get softer spring
		Decrease air pressure
Fork extends too quickly; harsh top-out after impacts	Not enough rebound damping	Increase rebound damping
		 Replace oil (SAE 7,5) with a higher viscosity
Fork gets easily to travel end	Not enough compression damping	Increase compression damping at travel end via the proper adjuster
Front wheel wants to tuck under while cornering	Too much rebound damping; spring rate too soft	Decrease the rebound damping
		 Increase spring rate
Fork "packs up" or stays down in travel during multiple impacts	Too much rebound damping	Decrease rebound damping
Knocking sound during rebound, but no harsh top-out	Too much rebound damping	Decrease rebound damping




English
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Problem	Diagnosis		Solution
Oil "ring" on stanchions	Oil seals are contaminated		Replace all seals
Heavy amount of oil on stanchions; oil dripping down legs	Seals are damaged, stanchions could be damaged		Replace all seals and have the stanchions inspected
Fork is sticky; fork does not perform as new	Oil seals are contaminated; fork needs to be serviced		Replace all seals
Oil leakage from the bottom	Loose bottom nut/screw		Tighten bottom nut/screw
	O-ring damaged		Replace O-ring
Loss of sensitivity	Worn sliding bushings		Replace sliding bushings
	Old oil		Change oil



Operations to be carried out at MARZOCCHI authorized centres

Table 9: Periodical maintenance table

General maintenance operation		Use	
		Intense	Normal
Check screws tightening up to required torque		Before every ride	
Clean the sliders		After every ride	
Air pressure control		Before every ride	10 hours
Check the oil seals		25 hours	50 hours
Oil change		50 hours	100 hours
Oil seals replacement		50 hours	100 hours



Operations to be carried out at MARZOCCHI authorized centres

4.2 General safety regulations

- After a complete breakdown, always use new, original Marzocchi seals when reassembling.
- To tighten two bolts or nuts that are near each other, always follow the sequence 1-2-1 using the required tightening torque (see Table - Tightening Torques).
- Never use flammable or corrosive solvents to clean the parts, as these could damage the seals. If necessary use specific detergents that are not corrosive, not flammable or have a high flash point, compatible with the seals materials and preferably biodegradable.
- If you are planning not to use your fork for a long time, always lubricate the forks components that are in contact with some fork's oil.
- Never pour lubricants, solvents or detergents which are not completely biodegradable in the environment; these must be collected and kept in the relevant special containers, then disposed of according to the regulations in force.
- Use only metric spanners, not imperial spanners, which may have similar sizes, but can damage the bolts and make it impossible to unscrew them.
- Use the correct size and sort of screwdriver to unscrew slotted or crosshead screws.
- When using a screwdriver to assemble or disassemble metal stop rings, o-rings, sliding bushings or seal segments, avoid scratching or cutting the components with the screwdriver tip.
- Do not carry out any maintenance and / or adjustment operations that are not explained in this manual; if necessary, have such operations carried out by an authorized service centre.
- Only proceed to maintenance/overhaul operations if you are sure you are able to do it and you have got the right tools. If this is not the case, or if you are unsure, please contact

an authorized service center, where specialized technicians with the right tools and original spare parts will service and overhaul your fork, putting it back into its original working conditions.

- Only use original spare parts.
- Work in a clean, ordered and well-lit place; if possible, avoid servicing outdoors.
- Polished surfaces need to be periodically treated with some "polishing compound" to be kept as bright as new.
- Carefully check there are no metal shavings or dust in the work area.
- Do not modify the fork's components.

4.3 Cleaning the fork legs



NOTE

The manufacturer lubricates the fork dust seal with some grease, which makes the stanchion tubes slide easier, especially when the fork has not been used for a long time. When using the suspension system, such grease can melt and stick to the stanchions, looking like an oil leak, although it is not.

Clean using specific, biodegradable, not corrosive and not flammable detergents.

- After every use, carefully clean the fork paying special attention to the stanchion tubes and the dust seals.



ATTENTION

Mud and dust, if not eliminated immediately, may cause serious damage to the suspension system.

In the Premium Suspension forks with $\varnothing 32\text{mm}$ legs, it is also possible to clean the seat of the dust seal as described below.



ATTENTION

Do not clean the seat of the dust seal on the models with $\varnothing 28\text{mm}$ and $\varnothing 30\text{mm}$ legs.

- With a small screwdriver prize the dust seal (B) off the slider (C), without scratching the stanchion tube.
- Slide the dust seal along the stanchion tube and clean inside the dust seal and its seat on the slider with a jet of compressed air.



NOTE

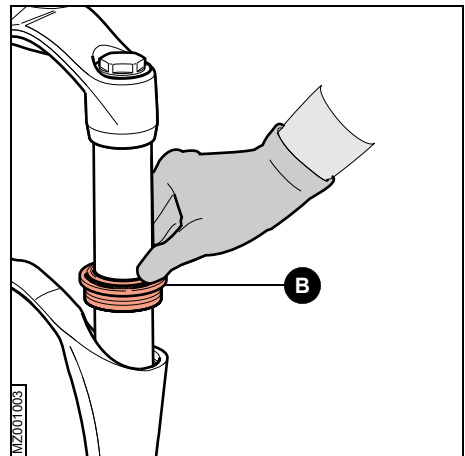
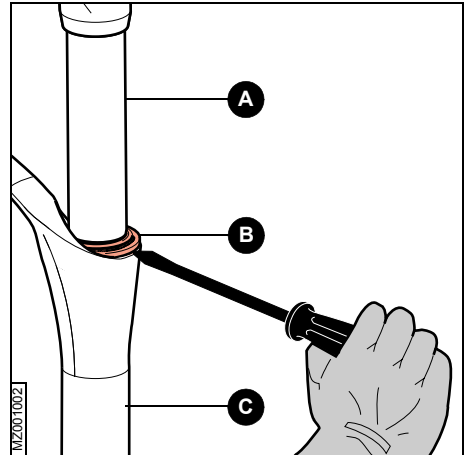
It is advisable to tilt the fork leg to make it easier to remove foreign matters.



ATTENTION

Never use metal tools to clean any particles of dirt.

- Compress the fork legs slightly and remove any traces of dirt from the stanchion tubes.
- Lubricate the dust seal and the visible surfaces of the oil seal with silicone grease.



- Re-assemble the dust seal (B) in its seat on the stanchion tube, pressing it home with your hands.

5 ADJUSTMENTS

⚠ ATTENTION

Please visit our web site www.marzocchi.com for any information concerning the travel increase kit and for different spring rates (K).

Table 10: MY04 adjustments table

Fork	PLi	PLe	A+	Pre	PRI	ECC
Drop-Off Comp			●			
Drop-Off Triple			●			
EXR Comp			●			
EXR Pro Air			●			
EXR Pro Coil	●					
EXR Supra			●	●		
MZ Comp		●				
MZ Race	●					
TXC			●		●	
TXC ECC			●		●	●
<i>See paragraph</i>	<i>5.1.1</i>	<i>5.1.2</i>	<i>5.1.3</i>	<i>5.2</i>	<i>5.3</i>	<i>5.4</i>

Table 11:Key

PLi	Internal Preload	Internal Preload
PLe	External Preload	External Preload
A+	Positive Air Preload	Positive Air Preload
Pre	External rebound register	External rebound register
PRI	Internal rebound register	Internal rebound register
ECC	Extension control cartridge	Extension control cartridge

5.1 Preload

To make the most of the fork's travel, the sag given by the rider's weight must remain between 10% and 20% of the total travel length for the cross country forks and between 20% and 30% for the free ride forks.

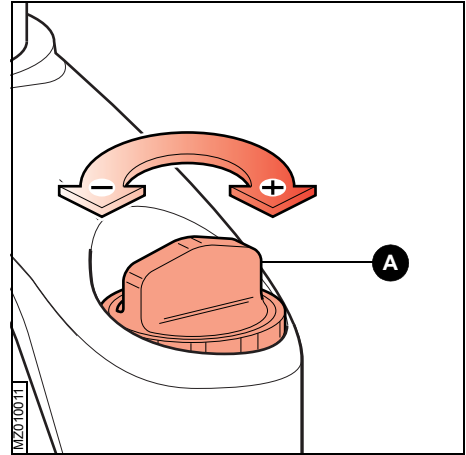
To reach these values, you will need to use the preload adjusters of the springs (see paragraph 5.1.1 and paragraph 5.1.2 for forks having mechanical preload) or to modify the fork's pressure (see paragraph 5.1.3 for forks having air preload).

5.1.1 Spring preload with external adjustment



NOTE

The fork is set to the minimum preload by the manufacturer, i.e. the knob is completely turned counterclockwise. However, the spring is slightly preloaded to help counteracting static load.



By turning the knob (A) on the top of the fork's leg, you can modify the spring preload to adjust the initial setting according to the rider's weight and needs.

- By turning the knob clockwise, the preload spring can be increased up to the maximum value.
- By turning the knob counterclockwise, you will reduce the preload spring down to the minimum value.



ATTENTION

Do not force the adjustment knob past its limits (A).

5.1.2 Spring preload with internal adjustment



NOTE

The fork is set to the minimum preload by the manufacturer, i.e. the adjuster is completely turned counterclockwise. However, the spring is slightly preloaded to help counteracting static load.

To adjust the initial setting according to the rider's weight and needs, you will have to remove the plastic protection cap (A) and turn the adjuster (B), using a 4 mm Allen key.

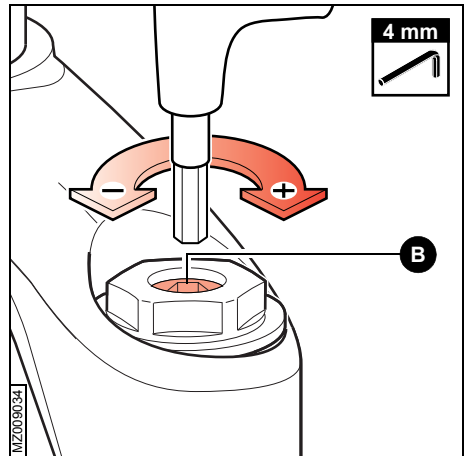
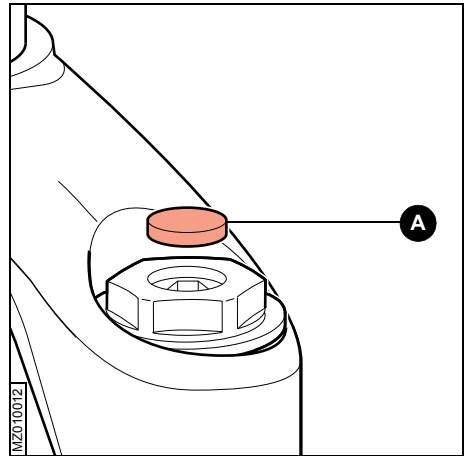
- By turning the adjuster clockwise, the preload spring can be increased up to the maximum value.
- By turning the adjuster counterclockwise, you will reduce the preload spring down to the minimum value.

Once the adjustment completed put the plastic protection cap (A) back to its seat.



ATTENTION

Do not force the adjuster past its limits (B).



5.1.3 Air preload



ATTENTION

To inflate your fork, use only the special MARZOCCHI pump with pressure gauge, which you can buy at the authorized centers. Use of improper tools might lead to improper inflating and cause improper function or damage to the fork itself.



NOTE

If you need to reduce the pressure inside the fork's leg, just push lightly on the valve pin, by means of a pointed object. Apply the same preload pressure on both legs.

By pressurizing air through the valve (A), you can adjust the damping of the forces generated during the COMPRESSION phase.

If you increase the pressure inside the fork's leg, you increase the preload. To do so, you need to:

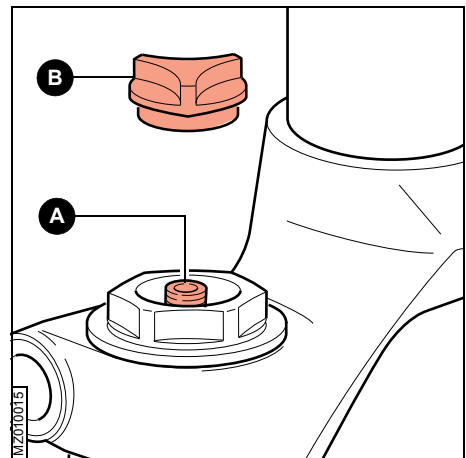
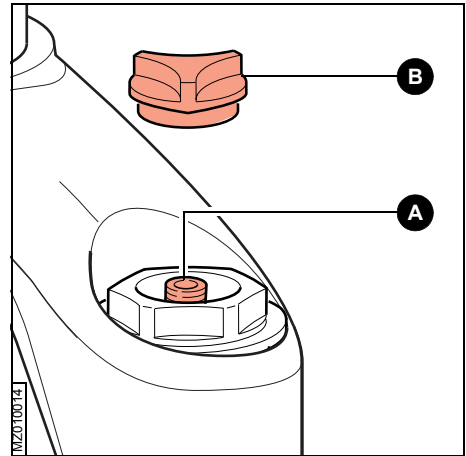
- remove the dust cap (B).
- fully tighten the threaded pump adapter.
- inflate air up to the required pressure.
- refit the dust cap (B).



ATTENTION

Respect the suggested pressures:

- **Spring forks:** see Table - Recommended air pressure for spring forks.
- **Air forks:** see Table - Recommended air pressure for air forks.

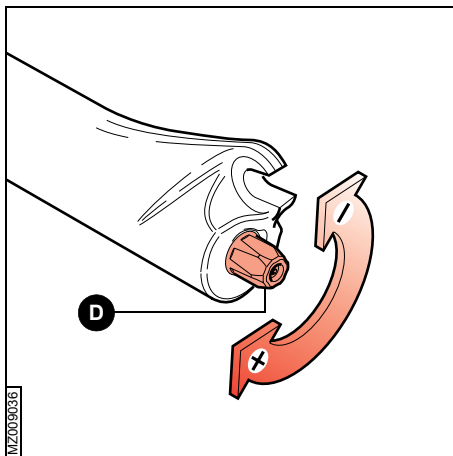


5.2 Rebound adjustment with external adjustable pumping rod

When turning the adjustment knob (D) located on the bottom of the fork's leg, you can adjust the damping during the rebound phase.

By turning on the adjustment screw you can modify the hydraulic configuration of the inner valves: this means that there will be more or less oil flowing through the valve.

- When turning the adjuster clockwise, you will increase the rebound hydraulic damping, making the fork slower during the rebound phase.
- When turning the adjuster counterclockwise, you will decrease the rebound hydraulic damping, making the fork more responsive during the rebound phase.



⚠ ATTENTION

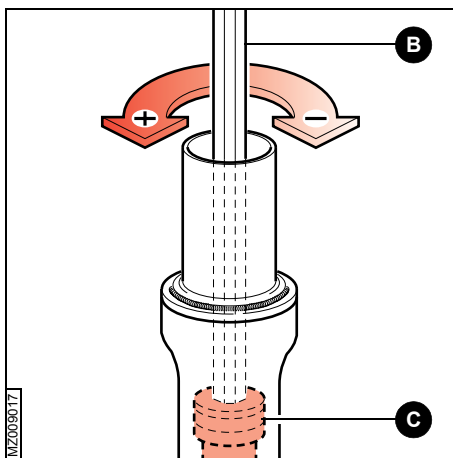
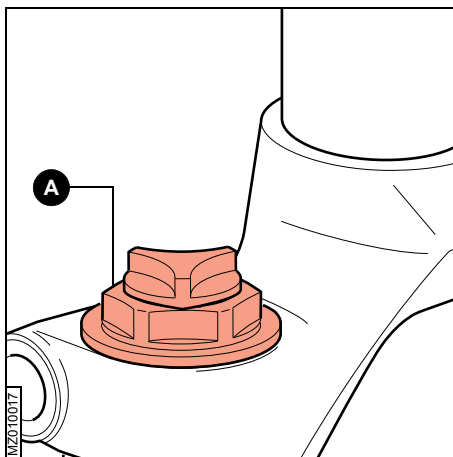
Do not force the adjustment knob (D) past its limits.

5.3 Rebound adjustment with internal adjustable pumping rod

You will find some damping rods where the rebound adjustment is located inside the stanchion tube.

To adjust these forks, you will need to:

- remove the dust cap (A) located on the top of the fork's leg.
- insert the supplied hexagon rod (B) into the stanchion tube, making sure to center the adjustment seat (C).
- When turning the adjuster counterclockwise, you will increase the rebound hydraulic damping, making the fork slower during the rebound phase.
- When turning the adjuster clockwise, you will decrease the rebound hydraulic damping, making the fork more responsive during the rebound phase.



5.4 ECC

The ECC cartridge offers on-the-fly adjustment of the rebound damping.

Position: "LOCK"

By turning the lever (A) clockwise you will activate the ECC cartridge function. In this position the fork's legs will stay down after impacts; any other impact will make lower the fork's geometry further.

This position is only suitable for hard, steep climbs.

Position: "UNLOCK"

By turning the lever (A) counterclockwise, you will re-establish the normal fork's function and deactivate the ECC cartridge function.



ATTENTION

Do not use the LOCK position, for any reason, while riding hard downhill, as the fork could not react safely enough when hitting obstacles.

6 TABLES

Table 12: Tightening torques

Components to be tightened	Tightening Torque (Nm)
QR20 Wheel axle bolts	15 ± 1
Fork's upper caps	20 ± 1
Upper crown fixing bolts	6 ± 1
Lower crown fixing bolts	6 ± 1
Fender fixing bolts	6 ± 1
Handlebar clamp fixing bolts	10 ± 1
ECC knobs fixing bolts	2 ± 0,5
Pumping rods and cartridges fixing foot nuts/screws	11 ± 1
Cantilever bolts fixing screws	11 ± 1
Pumping rods knobs fixing screws with lower, external adjustment	2 ± 0,5

Table 13: Recommended air pressure for spring forks

Air pressure	
0 ÷ 15 psi	0 ÷ 1 bar

Table 14: Recommended air pressure for air forks

Rider's weight		Air pressure	
120 ÷ 155 lbs	55 ÷ 70 kg	30 ÷ 40 psi	2.0 ÷ 2.75 bar
155 ÷ 180 lbs	70 ÷ 80 kg	35 ÷ 45 psi	2.40 ÷ 3.10 bar
180 ÷ 210 lbs	80 ÷ 95 kg	42 ÷ 52 psi	2.90 ÷ 3.80 bar
210 ÷ 220+ lbs	95 ÷ 100+ kg	52 ÷ 65 psi	3.60 ÷ 4.5 bar

7 WARRANTY

If any component of your Marzocchi Suspension System is found to be defective in materials or workmanship within the term of this Limited Two Year Warranty (the "Agreement"), the defective component will be repaired or replaced, at the option of Marzocchi S.p.A., free of charge, within thirty (30) days after receipt of the Suspension System by an authorized Marzocchi dealer (for the USA, Marzocchi USA), freight prepaid, together with the original retail invoice or other evidence of the date of purchase.

1. NOT COVERED: This warranty does not cover damage resulting from accidents, alteration, neglect, misuse, abuse, or improper use, lack of reasonable or proper maintenance, improper assembly, repairs improperly performed or replacement parts or accessories not conforming to Marzocchi S.p.A.'s specifications, modifications not recommended or approved in writing by Marzocchi S.p.A., activities such as acrobatics, stunt jumping, ramp riding, racing, commercial use, and / or normal wear or deterioration occasioned by the use of the suspension system. Items subject to normal wear or deterioration include but are not limited to oil, dust seals, oil seals, and bushings. In addition, this warranty is void in the event that the forks are used with any rental bicycles, unless Marzocchi S.p.A provided prior approval in writing for such use. This warranty also does not include any expenses related to the transportation of the Marzocchi Suspension System to or from an authorized Marzocchi dealer (for the USA, Marzocchi USA), labor costs to remove the Marzocchi Suspension System from the bicycle, or compensation for inconvenience or loss of use while the Marzocchi Suspension System is being repaired. This warranty will be automatically void if serial number of the Marzocchi Suspension System is altered, erased, defaced or otherwise subject to any tampering.

2. PURCHASER. This warranty is made by Marzocchi S.p.A. with only the original purchaser of the Marzocchi Suspension System and does not extend to any third

parties. The rights of the original purchaser under this warranty may not be assigned.

3. TERM. The term of this warranty shall commence on the date of purchase and shall continue for a period of two (2) years from the date of the original purchase.

4. PROCEDURE. In event of a defect covered by this warranty, the purchaser should contact an authorized Marzocchi dealer or a Marzocchi Service Centre (for the USA, Marzocchi USA).

5. ENTIRE AGREEMENT. This warranty supersedes any and all oral or express warranties, statements or undertakings that may previously have been made, and contains the entire agreement between the parties with respect to the warranty of this Marzocchi Suspension System. Any and all warranties not contained in this warranty are specifically excluded.

6. DAMAGES. Except as expressly provided by this warranty, Marzocchi S.p.A. **SHALL NOT BE RESPONSIBLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES ASSOCIATED WITH THE USE OF THE MARZOCCHI SUSPENSION SYSTEM OR A CLAIM UNDER THIS AGREEMENT, WHETHER THE CLAIM IS BASED ON CONTRACT, TORT OR OTHERWISE.** The foregoing statements of warranty are exclusive and lieu of all other remedies. Some states do not allow the exclusion or limitation of incidental or consequential damages, so this limitation or exclusion may not apply to you.

7. DISCLAIMER. ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND ALL IMPLIED WARRANTIES ARISING FROM A COURSE OF DEALING, USAGE OF TRADE, BY STATUTE OR OTHERWISE, IS HEREBY STRICTLY LIMITED TO THE TERM OF THIS WRITTEN WARRANTY.

This Agreement shall be the sole and exclusive remedy available to the Purchaser with respect to this purchase. In the event of any alleged breach of any warranty or any legal action brought by the purchaser based on alleged negligence or other tortious

conduct by Marzocchi S.p.A. the Purchaser's sole and exclusive remedy will be repair or replacement of defective materials as stated above. No dealer and no other agent or employee of Marzocchi S.p.A. is authorized to modify, extend or enlarge this warranty.

8. **WARNING.** Always install, repair and use your Marzocchi Suspension System in strict compliance with it's owner's manual.
9. **OTHER RIGHTS.** This warranty gives you the specific legal rights, and you have also other rights which vary from state to state (USA only).
10. **APPLICABLE LAW.** Any disputes arising out of this agreement or the use of this Marzocchi Suspension System will be governed by the laws of the country of Italy and will be decided by the Courts of Bologna, Italy.

**NOTE**

Thank you for the purchase of this Marzocchi Suspension System. If any defect covered under the warranty appears with the agreed terms, send the Marzocchi Suspension System, postage prepaid, to an authorized dealer or to a Marzocchi Service Center (for the USA, Marzocchi USA) including a copy of the invoice or the ticket.

When doing so, please state your full name, address, date of purchase and explain the problem of defect.

The policy of Marzocchi S.p.A. is to offer courteous and efficient service with respect to warranty claims.

Please take care of your Marzocchi Suspension System and in case you suspect it can be damaged, please contact your dealer or a Marzocchi Service Center (for the USA, Marzocchi USA).

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