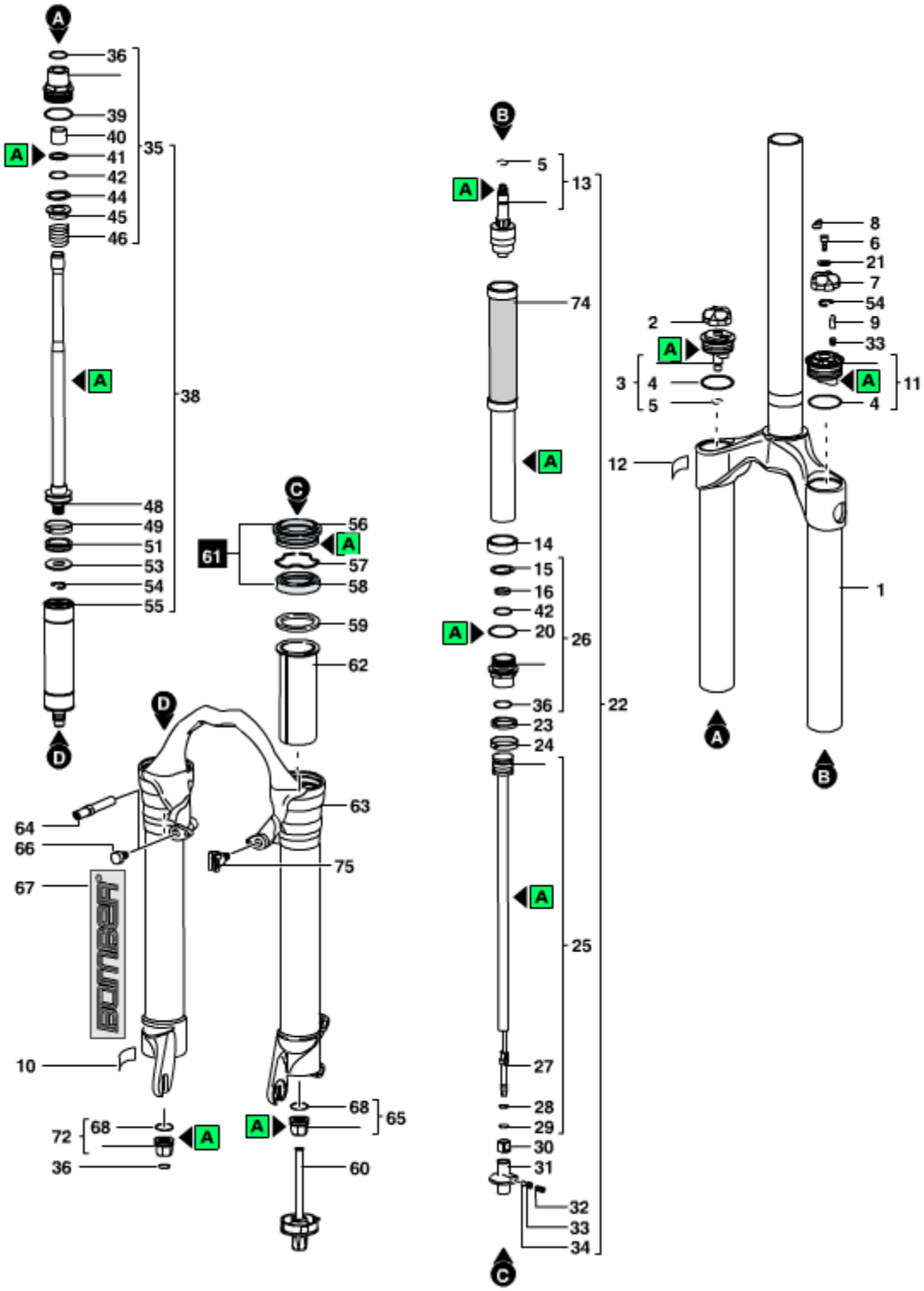
2005 - Marathon Race

Technical instructions

2005 - **Marathon Race**

Exploded view - Marathon Race 80



Rif.	Code	Quantity
1	818260/E	1
1	818260/R	1
2	549073AD	1
3	701257/C	1
4	528226	2
5	528247	1
6	520363	1
7	549083AD	1
8	531075	1
9	5321084	1
10	547645	1
11	701246/C	1
12	547638	1
12	547642	1
12	547634	1
13	726024/C	1
14	5321295	1
15	523294	1
16	522448	1
20	528018	2
21	522244AA	1
22	703724/C	1
23	524189	1
24	524185	1
25	309729/R	1
26	804097/R	1
27	5321274	1
28	528193	1
29	528223	1
30	521142IW>A	1
31	5321264	1
32	520220KV	1
33	5141137>A	2
34	525007	1
35	804093/R	1
36	528115	2
37	528239>A	1
38	703725/C	1
39	528174	1
42	528271	2
44	523272BZ	1
45	536103	1
46	5141237	1
48	309730/R	1
49	524176	1
51	528272	1
53	522429	1
54	523295	2
55	5181350/R	1
56	533301	2
57	523261	2
58	528172NOK>B	2
59	522288	2
60	810059>A	1
61	850690	1
62	850693	1
63	5321286SZ	1
63	5321286SR	1
64	5321055QF>A	2
65	5321270	1
66	5321106	1
67	547601	1
68	528046	2
72	5321320	1
73	528030	1
74	5181349/R	1
75	5321158>A	1

Marathon Race 80 - Oil levels

Position	Oil type	Quantity (cc)
Right fork leg	SAE 7,5 - 550013	20
Left fork leg	SAE 7,5 - 550013	40

Spare part list - Marathon Race 80

Rif.	Code	Description	Q.ty in the model
1	818260/E	**CROWN+STAN+AL.STEM MARAT.RAC05**	1
1	818260/R	**CROWN+STANCH.MARATH.RACE 05**	1
2	549073AD	**ALUMINUM KNOB**	1
3	701257/C	**AIR PLUG UNIT-MARAT.SL'05**	1
4	528226	**O-RING**	2
5	528247	**O-RING**	1
6	520363	**SCREW**	1
7	549083AD	**TST KNOB 05**	1
8	531075	**RUBBER**	1
9	5321084	**SPIN**	1
10	547645	**PAR STICKER -EXTERNAL**	1
11	701246/C	**PLUG UNIT- MARATHON SL ECC04**	1
12	547638	**AIR STICKER 05**	1
12	547642	**TST STICKER 05-TOP**	1
12	547634	**TST STICKER 05-EXTERNAL**	1
13	726024/C	**COMPRESS.ADJUSTER UNIT 2005**	1
14	5321295	**TST NUT**	1
15	523294	**STOP RING**	1
16	522448	**WASHER**	1
20	528018	**O-RING**	2
21	522244AA	**WASHER**	1
22	703724/C	**CARTRIDGE-MARATH RACE 05**	1
23	524189	**PISTON RING**	1
24	524185	**PISTON RING**	1
25	309729/R	**PISTON SHAFT MARAT.RACE 05**	1
26	804097/R	**PILOT BUSHING UNIT**	1
27	5321274	**INNER ROD**	1
28	528193	**O-RING**	1
29	528223	**O-RING**	1
30	521142IW>A	**NUT**	1
31	5321264	**BOTTOM PLUG**	1
32	520220KV	**ALLEN BOLT**	1
33	5141137>A	**SPRING**	2
34	525007	**SET SCREW, REAR SHOCK**	1
35	804093/R	**PILOT BUSHING UNIT**	1
36	528115	**O-RING**	2
37	528239>A	**O-RING**	1
38	703725/C	**CARTRIDGE**	1
39	528174	**O-RING**	1
42	528271	**SEAL**	2
44	523272BZ	**STOP RING**	1
45	536103	**SPRING GUIDE**	1
46	5141237	**REBOUND SPRING**	1
48	309730/R	**PISTON SHAFT**	1
49	524176	**PISTON RING**	1
51	528272	**OIL SEAL**	1
53	522429	**WASHER**	1
54	523295	**STOP RING**	2

55	5181350/R	**BODY**	1
56	533301	**DUST SEAL DIA.30**	2
57	523261	**STOP RING**	2
58	528172NOK>B	**OIL SEAL DIA.30**	2
59	522288	**UPPER WASHER**	2
60	810059>A	**ADJUSTER UNIT 05**	1
61	850690	**OIL SEAL KIT M/ARCH**	1
62	850693	**MTB BUSHING KIT**	1
63	5321286SZ	**PEARL MONOLITE**	1
63	5321286SR	**SILVER DUST MONOLITE**	1
64	5321055QF>A	**CANTILEVER PIN**	2
65	5321270	**NUT UNIT**	1
66	5321106	**RUBBER**	1
67	547601	**LH.RH LABELS MARATH.RACE 05**	1
68	528046	**O-RING**	2
72	5321320	**NUT UNIT**	1
73	528030	**O-RING**	1
74	5181349/R	**BODY -MARATH RACE 05**	1
75	5321158>A	**CABLE GUIDE**	1

Technical characteristics: Technical characteristics

Single-crown fork with ø 30mm legs.

Available travels: 80 mm.

Right fork leg damping element: air.

Left fork leg damping element: air.

Right fork leg damping system: DOPPIO-AIR cartridge.

Left fork leg damping system: TST cartridge.

The stanchion tubes are pressed into the crown with a cryogenic process.

New sliding system to improve stiffness and operation.

Lubrication and cooling of the parts subject to friction with a specially formulated oil.

Steer tube: aluminium, 1-1/8", threadless.

Crown: BAM® aluminium alloy forged and CNC machined.

Stanchions: anodised aluminium.

Sliders: forged in aluminium and CNC machined.
Arch: cast in pressure die-cast aluminium alloy, CNC machined.
Sliders and arch are assembled in a one-piece structure with undeniable advantages in terms of weight and stiffness.

Sliding bushings: made of friction-free and wear-free material.

Seals: computer designed oil seals that guarantee maximum seal in any condition.

Oil: specially formulated oil that prevents foam and keeps the viscosity unchanged while offering high performance; free from static friction.

Dropout type: standard.

Disk brake mount: XC International Standard for 6" disk.

V-Brake fit: fixed type.

Max wheel size: 2.2" x 26".

BAM® : Bomber Aerospace Material: special alloy coming from the aerospace industry.

Warnings: Instructions for use

MARZOCCHI forks are based on an advanced technology coming from the company's years long experience in the professional mountain bike industry.
For the best results, we recommend inspecting and cleaning the area below the dust seal and the stanchion tube after every use and lubricating the parts with some silicone oil.
MARZOCCHI forks usually offer the best performances since the very first rides. Notwithstanding this, a short running-in period may be necessary (5-10 hours) to adjust the internal couplings. This precaution will lengthen your fork's life and guarantee its best performances.
We recommend changing the oil at least every 100 hours.
The forks with a polished finish must be treated periodically with polishing paste to keep the exterior shining like new.

Warnings: General safety rules

After disassembling the forks, 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, and tighten to the required tightening torque.
Before reassembly, wash all new and old components and dry them with some compressed air, making sure there are neither breaks nor burrs.
Never use flammable or corrosive solvents when cleaning the forks, as these could damage the fork's seals. If you must use a solvent, use biodegradable detergents that are not corrosive, non-flammable, or have a high flash point.
Before reassembling, always lubricate those components that are in contact with the fork's oil.
If you are planning not to use your forks for a long period of time, always lubricate those components that are in contact with the fork's oil.
Always collect and keep any lubricants, solvents, or detergents, which are not completely biodegradable in the environment. These materials should be kept in appropriate containers, and disposed of according to local laws.
Always grease the seal lips before reassembling.
All of the components of Marzocchi forks require the use of metric tools. Use only metric tools. Imperial (US) tools may have similar sizes, but can damage the bolts, making them impossible to loosen or tighten.
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.
Only use original Marzocchi spare parts.
Before servicing the fork, we recommend washing the fork thoroughly.
Work in a clean, organized, and well-lit place. If possible, avoid servicing your forks outdoors.
Carefully check to see that your work area is free of dust and metal shavings from any component of the forks.
Never modify your fork in any way.

Warnings: Fitting the fork onto the frame

The fork is supplied with "A-Head Set" steer tube to be cut to size according to frame being used.
Fitting the fork onto the bike frame is a very delicate operation that must be carried out at one of our service centres only.
The assembling on the frame and the adjustment of the steer tube must be carried out following the instructions of the steering set manufacturer.
A wrong installation can be dangerous for the rider.
Marzocchi does not guarantee the assembly and accepts no liability for damage and/or accidents arising from a wrong installation.
The steer tube must be pressed into the crown; its replacement must be carried out by one of our service centres using the adequate tools.
A wrong installation of the steer tube into the crown may cause the rider to lose the control of the bike and lead to serious personal injury.

Warnings: Installing the disk brake

Installing the brake system is a delicate and critical operation that must be carried out by an authorized Marzocchi Service Center.
Marzocchi is not responsible for the installation and accepts no liability for damage and/or accidents arising from this operation.
Improper installation of a disk brake system can overstress the caliper mountings, which may cause the caliper mountings to break, resulting in loss of control of the bicycle, an accident, personal injury, or death. Be sure that the brake system installation is also performed in strict compliance with the instructions provided by the brake system manufacturer.
Improper installation can result in an accident, personal injury, or death.
Use only brake systems that comply with the forks specifications.

The brake cable must never touch the crown and stanchions.

Warnings: Installing the V-brake

Installing the brake system is a very delicate operation that must be carried out at our specialised service centres only.
Marzocchi does not guarantee the installation and accepts no liability for damage and/or accidents arising from a wrong installation.
Improper installation of the disk brake system can overstress the caliper mountings, which may break. The installation of the brake system must be carried out following the instructions of the brake system manufacturer. Improper installation can be dangerous for the rider.
Use only brake systems in accordance with the fork specifications.

Warnings: Assembling the wheel

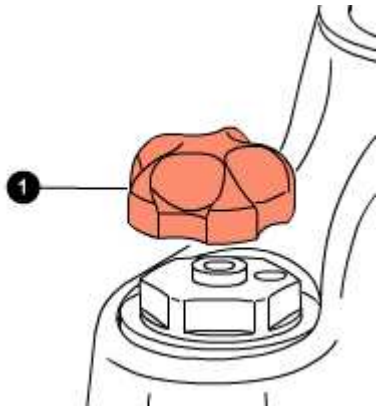
Install the wheel following the instructions of the manufacturer.
For a correct operation of the fork, install the wheel and proceed with the following checks:
Check the correct fork-wheel alignment by fully compressing the fork a few times. The wheel should not come into contact with any parts of the fork.
Lift the front wheel above the ground; turn the wheel a few times to verify the correct alignment and the distance from the disk brake or the V-brake pads. Read the instructions of the brake system manufacturer for the correct specifications.

Dismantling: Removing the top caps

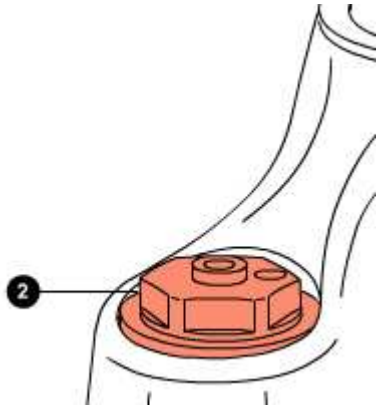
Put the fork in the vice in vertical position, fixing it by the dropouts.

Dismantling: Removing the top right cap

Remove the protection cap (**1**).

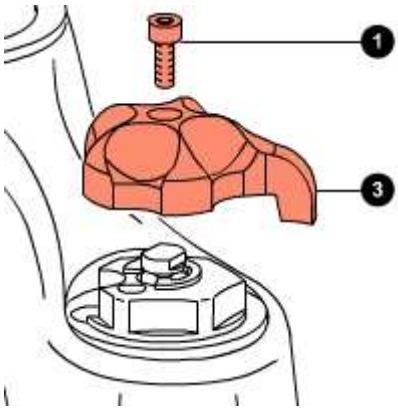


Using a small pin screwdriver, blow the air off the fork leg, pushing on the air valves.
Fully unscrew lock cap (**2**) with a 21mm socket spanner.
Now you can remove the caps from the cartridge rods. We recommend doing this operation after having pulled the cartridge off the arch-slider assembly.

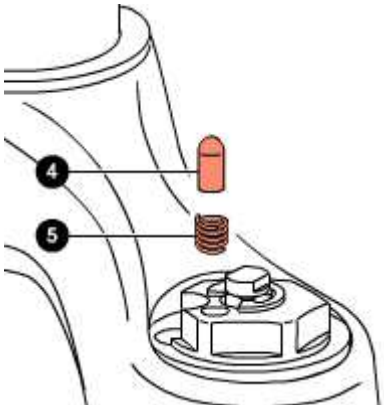


Dismantling: Removing the top left cap

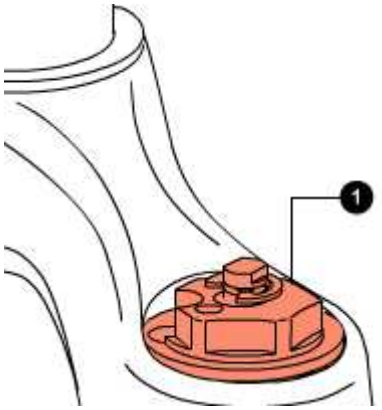
With a 2mm Allen wrench, loosen the screw (**2**) of the TST control knob.
Remove the TST control knob (**3**).



Remove pin (**4**) and spring (**5**).

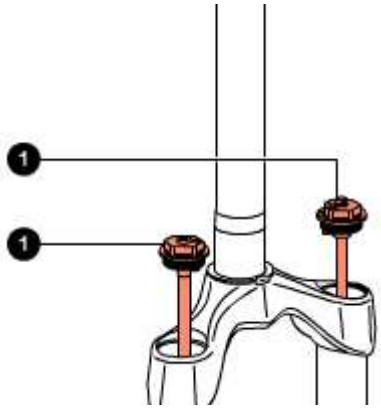


Using a small pin screwdriver, blow the air off the fork leg, pushing on the air valve.
Fully unscrew lock cap (**1**) with the 21mm socket spanner.

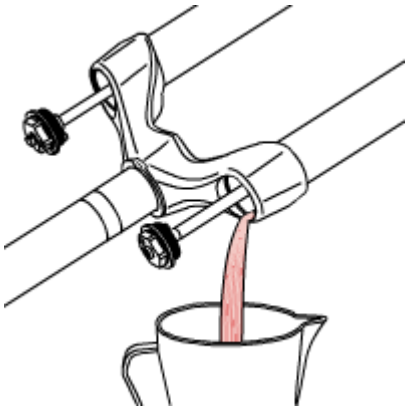


Dismantling: Draining the oil

Lift out the leg caps (**1**) from the crown unit.



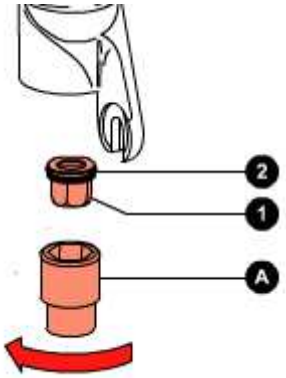
Free the fork from the vice and tip it into a container of a suitable size to drain the oil; compress the fork a few times to help the oil flow out.
Do not pour used oils on the ground.



Dismantling: Breaking down the steering crown unit / arch-slider assembly

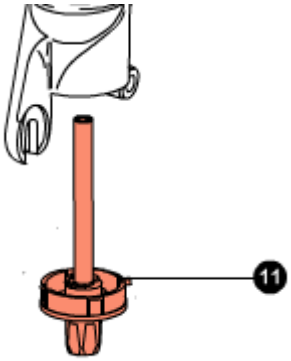
Use the special spanner to remove the bottom nuts. Do not use other tools.
Turn the arch-slider assembly upside down.

Using the special 12mm spanner (**A**), loosen the right bottom nut (**1**).
Pull out the right bottom nut (**1**) complete with O-ring (**2**).

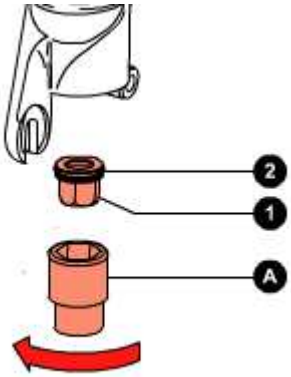


With a small flat screwdriver act on the plastic pin locking the adjustment unit.

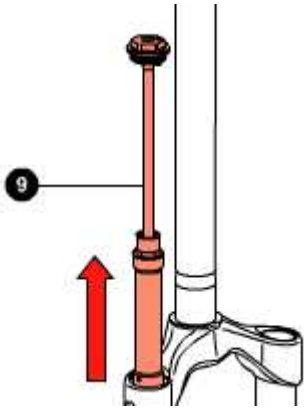
Pull the complete adjustment unit (**12**) off the left leg.



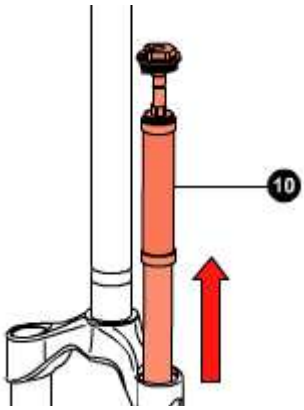
Using the special 12mm spanner (**A**), loosen the left bottom nut (**1**).
Pull out the left bottom nut (**1**) complete with O-ring (**2**).



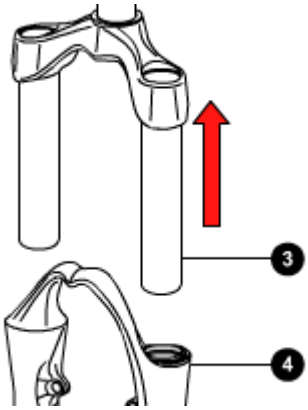
Pull the complete DOPPIO-AIR cartridge (**9**) off the right leg.



Pull the complete TST cartridge (**10**) off the left leg.



Pull the crown-stanchion unit (**3**) off the arch-slider assembly (**4**).



Dismantling: Dismantling the DOPPIO-AIR cartridge

Click here to view the video instructions.

Dismantling: Dismantling the TST cartridge

Click here to view the video instructions.

Assembling:

During the assembly of the pumping unit, strictly obey the instructions below.
Do not, at any times, reverse the position of the pumping elements in the fork legs (if you are unsure about anything, please refer to the relevant exploded view).

Assembling: Assembling the DOPPIO-AIR cartridge

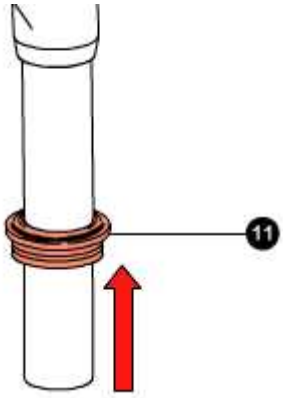
Click here to view the video instructions.

Assembling: Assembling the TST cartridge

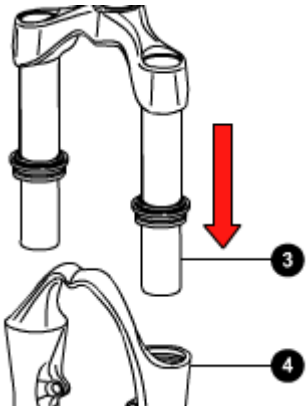
Click here to view the video instructions.

Assembling: Reassembling the steering crown unit / arch-slider assembly

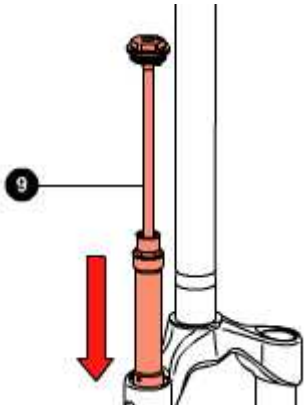
A special spanner shall be used to assemble the bottom nuts. Do not, at any times, use other tools.
Fit both dust seals (**11**) to the stanchions.



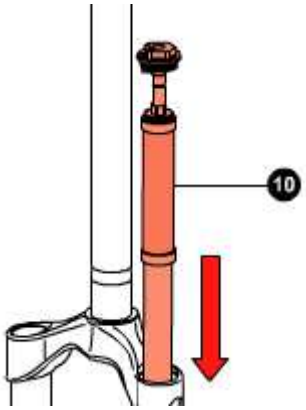
Insert the crown-stanchion unit (**3**) in the arch-slider assembly (**4**).



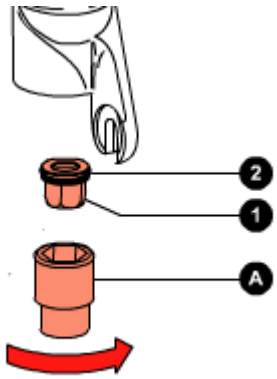
Insert the complete DOPPIO-AIR cartridge (**9**) in the right leg.



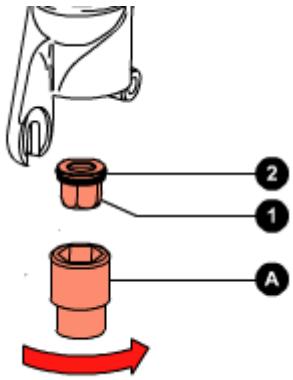
Insert the complete TST cartridge (**10**) in the left leg.



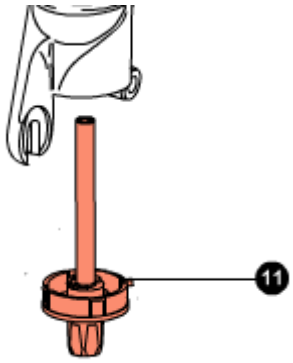
With the special 12mm spanner (**A**), tighten the right bottom nut (**1**) complete with O-ring (**2**) to the recommended tightening torque (**10 Nm ± 1**).



Using the special 12mm spanner, tighten the left bottom screw (**1**) complete with O-ring (**2**) to the recommended tightening torque (**10 Nm ± 1**).

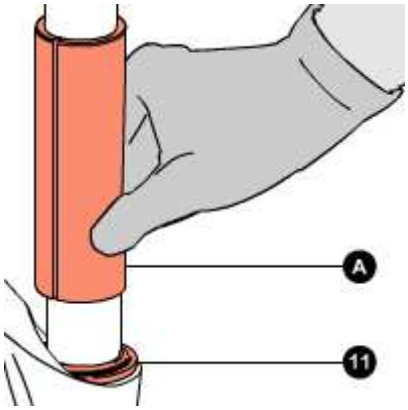


Fit the complete adjustment unit (**12**) to the left leg.



Check that the plastic pin of the adjustment group fits perfectly into its groove on the one-piece assembly.

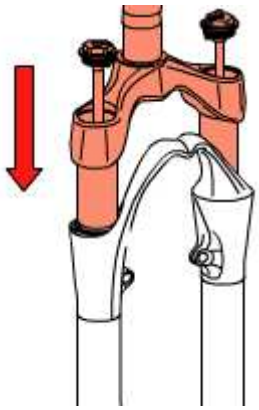
Using introducer (**A**) insert the dust seals (**11**) in their seats.



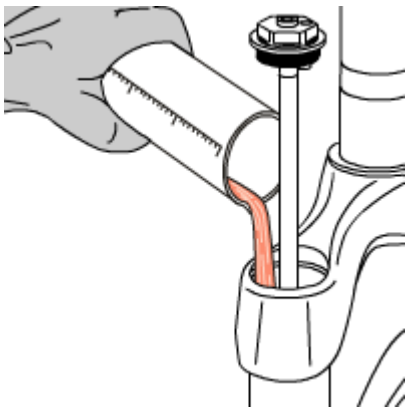
Assembling: Filling with oil

Block the fork in the vice, in perfectly vertical position.

Lower the crown-stanchion unit on the arch-slider assembly.

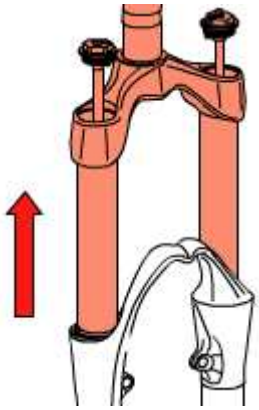


In a graduated recipient, prepare the quantity of oil to pour into the fork leg (see table).
Pour roughly 1/3 of the oil required into each stanchion, then pump the fork a few times to eliminate any traces of air.
Pour the rest of oil in.



A lower or higher volume or a type of oil other than the one recommended can change the behaviour of the fork in every phase.

Lift the crown-stanchion unit on the arch-slider assembly.

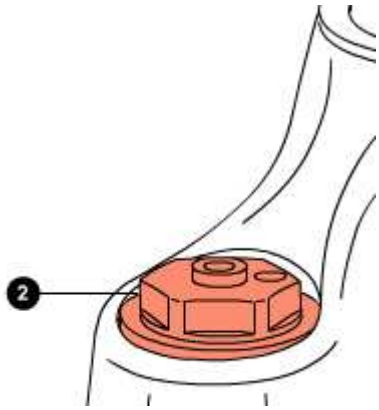


Assembling: Mounting the top caps

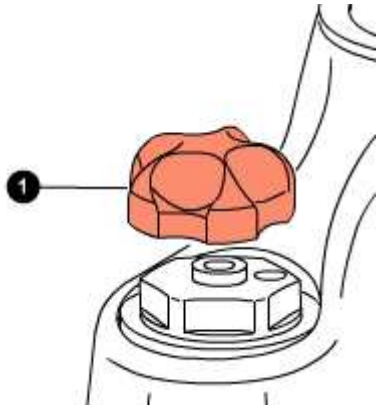
Put the fork in the vice in vertical position, fixing it by the dropouts.

Assembling: Assembling the top right cap

Check that O-ring is not damaged.
Using the 21mm socket spanner, tighten cap (**2**) to the recommended tightening torque (**10 Nm ± 1**).

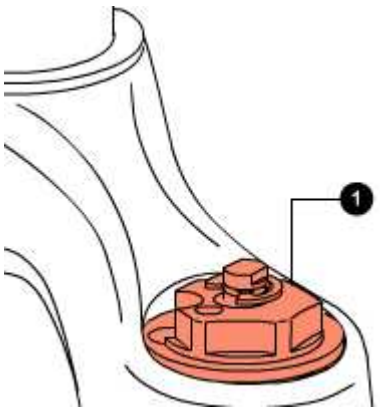


Restore the correct air pressure (see settings).
Fit the protection cap (**1**).

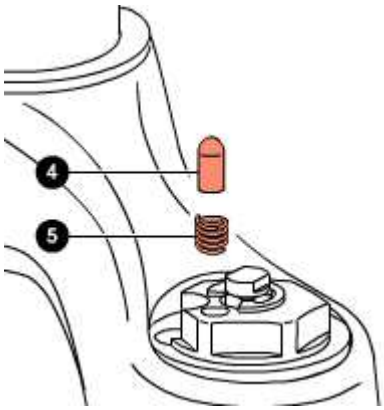


Assembling: Assembling the top left cap

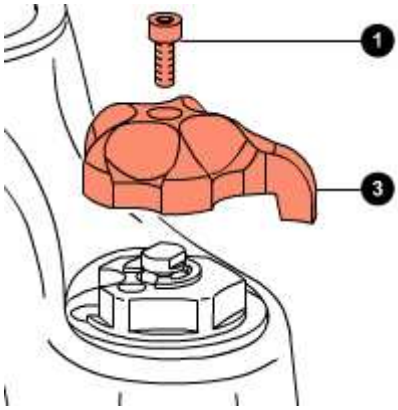
Check that O-ring is not damaged.
Using the 21mm socket spanner, tighten cap (**2**) to the recommended tightening torque (**10 Nm ± 1**).



Insert spring (**5**) and pin (**4**).



Fit the TST control knob (**3**).
Using the 2mm Allen wrench, tighten screw (**2**) of the TST control knob to the recommended tightening torque (**2 Nm ± 0.5**).
Restore the correct air pressure (see settings).


1
3

Setting: General rules for calibration

By carefully calibrating the damping system you can get the maximum performance out of the same.
This paragraph indicates the sequence of operations to perform to set up the Marzocchi forks correctly.
In order to find the best settings for you, you will need to try several times to understand where and how to make adjustments. When doing so, please ride in an open area, free from traffic, obstacles and other hazards.
The optimal setting is influenced by the geometry of the frame of the mountain bike, the weight of the cyclist, the type of terrain the bike will be used on and the type of obstacles you have to deal with, but also by subjective factors associated with your riding style; therefore it is impossible to provide objective data on the desired settings.
Nevertheless by carefully following the instructions below you will soon be able to find the optimal setting for you.
The shock absorber must be calibrated simply by using one adjuster at a time, following the order explained, noting the operations and any result step-by-step.
During setting don't force the adjusters beyond their limit of travel and don't exceed the max recommended air pressure.
To keep the pressure inside the fork's legs, only use the special MARZOCCHI pump with pressure gauge.
The use of any other pump can compromise the inflating operation and cause malfunction or damage to the fork, resulting in an accident, personal injury or death.
Once the correct setting has been found, we recommend noting the number of clicks or turns of the adjuster with respect to the "fully closed" position (adjuster fully clockwise) for a faster re-setting of your fork in case of need.

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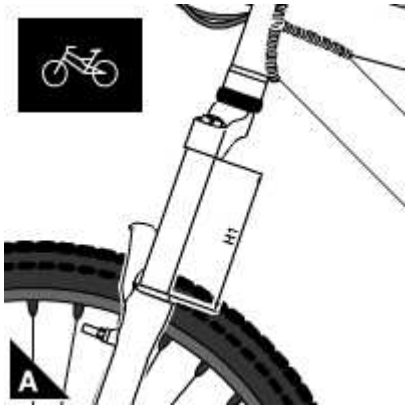
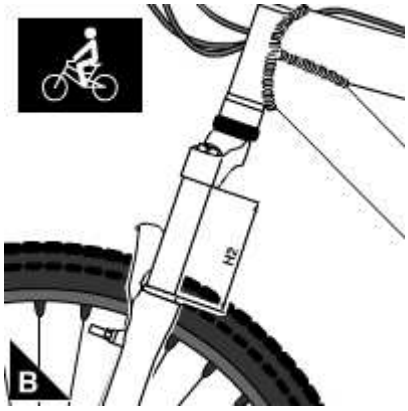
Setting: SAG

SAG means the fork bottoming under the biker's weight.
How to measure the SAG:
Follow these simple steps to measure the SAG.
On the leg portion of the fork, measure the distance between the lower crown and the dust seal (see Picture **A**). Note this value as "**H1**".
While sitting on the bike, repeat the measurement (see picture **B**). Note this value as "**H2**".
SAG = H1 - H2
How to find the best percent SAG:
The best percent SAG is 15-20% for Cross-country and All Mountain forks and 25-30% for Freeride and Downhill forks.
In order to calculate the best SAG for your own fork, you will need to make the following calculation:
SAG = T x S (**T** = total travel; **S** = suggested sinking percentage).





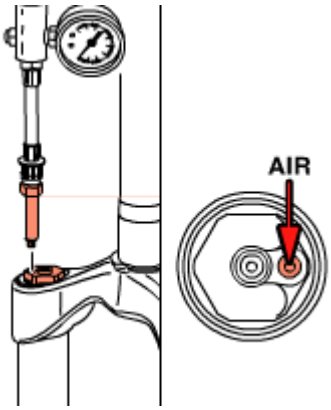
Setting: Positive air

Positive air is the elastic element of air damped forks.

Use the MARZOCCHI pump with pressure gauge to inflate the fork legs.
Using inadequate tools may lead to a wrong inflation and result in a malfunctioning or damage to the fork.
If you need to reduce the leg pressure, simply push the valve pin down with a pointed tool such as a small pin extractor.

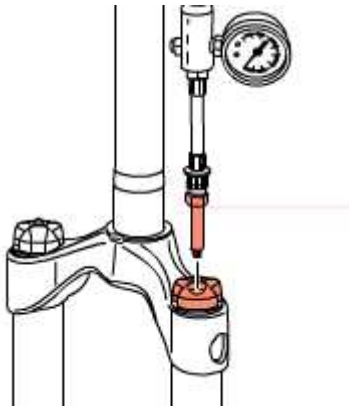
Right fork leg:

To increase the pressure in the fork leg:
Undo and remove the protection cap.
Screw the pump adapter down on the external valve and inflate till reaching the required pressure.
Refit and tighten the protection cap.



Right fork leg:

To increase the pressure in the fork leg:
Remove the rubber protection cap marked with 'AIR' and turn the TST knob to reach the air valve.
Tighten the threaded pump adapter on the air valve and inflate till reaching the required pressure.
Refit the rubber protection cap and re-calibrate using the TST adjuster.



The pressure values in the table are given as a mere example and can be changed to meet the biker’s riding style and the track condition.

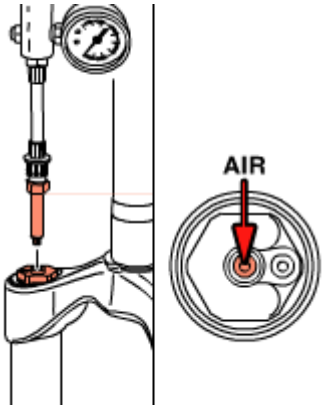
Setting: Negative air

Drawing in compressed air through the valve lets you reduce the fork's static friction.
By increasing the pressure in the fork leg, also the force that helps the fork start sliding increases.
Additionally the negative air lets you adjust the maximum travel value within a range of 20 mm.
Increasing the pressure in the fork leg reduces the travel.

Use the MARZOCCHI pump with pressure gauge to inflate the fork legs.
Using inadequate tools may lead to a wrong inflation and result in a malfunctioning or damage to the fork.
If you need to reduce the leg pressure, simply push the valve pin down with a pointed tool such as a small pin extractor.

Left fork leg:

To increase the pressure in the fork leg:
Loosen and remove the protection cap.
Screw the pump adapter down on the internal valve and inflate till reaching the required pressure.
Refit and tighten the protection cap.



The pressure values in the table are given as a mere example and can be changed to meet the biker’s riding style and the track condition.

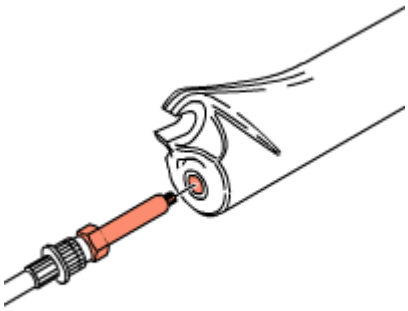
Setting: PAR

Positive air is the elastic element of air damped forks.

Use the MARZOCCHI pump with pressure gauge to inflate the fork legs.
Using inadequate tools may lead to a wrong inflation and result in a malfunctioning or damage to the fork.
If you need to reduce the leg pressure, simply push the valve pin down with a pointed tool such as a small pin extractor.

Right fork leg:

To increase the pressure in the fork leg:
Tighten the threaded pump adapter on the air valve and inflate till reaching the pressure you wish.



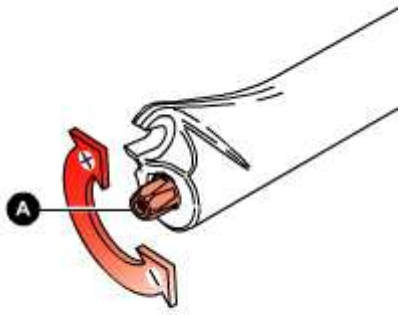
The pressure values in the table are given as a mere example and can be changed to meet the biker's riding style and the track condition.

Setting: Rebound adjustment

Right fork leg:

With the rebound adjuster you can control the return speed of the fork after compression.
The right rebound speed setting makes the bike stable letting it follow the variations in the terrain and any obstacles.
If the fork setting is too reactive this will make the rear suspension instable and the mountain bike will have a tendency to snake. A too slow setting however will cause problems when dealing with multiple obstacles where the suspension can't return to its fully extended position fast enough between one obstacle and the next.

Turning adjuster (**A**) clockwise increases the hydraulic damping making the fork slower during the rebound phase.
Turning adjuster (**A**) counter-clockwise decreases the hydraulic damping making the fork more reactive during the rebound phase.

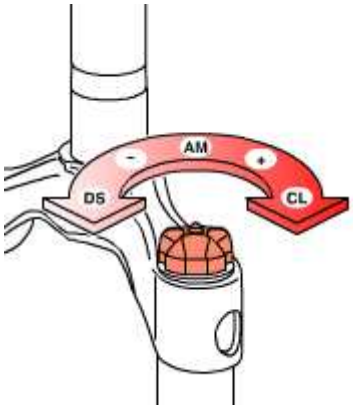


Do not force the adjuster beyond its limit of travel.

Setting: TST

Right fork leg:

The TST system lets you set the fork damping.
With the 5-position control the biker can select the best setting in relation to the track condition.
DS best downhill setting.
- , AM , + best settings for all-mountain tracks.
CL best uphill setting, with the fork blocked.



NEVER use the "**CL**" position when riding on steep downhills. Failure to comply with these instructions could cause your fork not to react safely enough when hitting an obstacle, resulting in a loss of control of the bicycle, damage and serious or lethal injury.

Tightening torques

Components	Tightening torque (Nm)
Cap locknut	6±1
Fork leg top caps	10±1
Pumping element/cartridge bottom nuts	10±1
Rebound adjustment knob fixing screws	2±0,5
Top caps on fork cartridge	6±1
TST knob locking screws	2±0,5
V-brake locking pins	9±1

Air pressures

Negative air pressure

User weight		Air pressure	
kg.	lb.	bar	psi
0 - 110+	0 - 242	5,00 - 15,00	7.250,00 - 21.750,00

Positive air pressure

User weight		Air pressure	
kg.	lb.	bar	psi
55 - 70	121 - 154	2,00 - 2,75	2.900,00 - 3.987,50
70 - 80	154 - 176	2,40 - 3,10	3.480,00 - 4.495,00
80 - 95	176 - 209	2,90 - 3,80	4.205,00 - 5.510,00
95 - 110+	209 - 242	3,60 - 4,50	5.220,00 - 6.525,00

TST leg positive air pressure

User weight		Air pressure	
kg.	lb.	bar	psi
55 - 70	121 - 154	<= 2,00	<= 2.900,00
70 - 80	154 - 176	2,00 - 2,75	2.900,00 - 3.987,50
80 - 95	176 - 209	2,75 - 3,40	3.987,50 - 4.930,00
95 - 110+	209 - 242	>= 4,20	>= 6.090,00

Progressive air pressure

User weight		Air pressure	
kg.	lb.	bar	psi
0 - 110+	0 - 242	0 - 2,00	0,00 - 2.900,00

Marathon Race 80 - Oil levels

Position	Oil type	Quantity (cc)
Right fork leg	SAE 7,5 - 550013	20
Left fork leg	SAE 7,5 - 550013	40

Diagnostics

Finding the problem	Finding the possible cause	Possible solutions proposed
Fork doesn't get full travel	Oil level too high	Check oil levels
Fork doesn't get full travel	Spring rate too stiff	Change to softer spring rate
Fork extends too quickly; harsh top-out after impacts	Rebound damping is not enough	Replace the oil (SAE 7.5) with one of higher viscosity index
Fork has too much sag	Oil is too fluid	Check oil levels
Fork has too much sag	Spring rate too soft	Change to stiffer spring rate
Fork has too much sag	Spring rate too soft	Increase spring preload by replacing the preload tube
Fork is “sticky”; fork does not perform as new	Dirty sealing rings; fork needs to be serviced	Renew all seals
Fork is too soft, but the sag is the one recommended	Compression damping is not enough	Increase compression damping by changing oil volumes
Fork is too soft, needs more than the maximum preload	Oil is too fluid	Check oil levels
Fork is too soft, needs more than the maximum preload	Spring rate too soft	Change to stiffer spring rate
Front wheel tends to tuck under while turning left or right	Spring rate too soft	Change to stiffer spring rate
Heavy amount of oil on stanchions; oil dripping down legs	Sealing rings damaged	Renew all seals
Heavy amount of oil on stanchions; oil dripping down legs	The stanchion tubes could be damaged	Have the stanchions be checked
Loss of sensitivity	Old oil	Change the oil
Loss of sensitivity	Sliding bushes worn	Renew the sliding bushes
Oil leaking from the bottom of the fork leg	Bottom nut/screw loose	Tighten the nut or screw
Oil ring on stanchions	Sealing rings dirty	Renew all seals