

**BALLISTIC**



**SUSPENSION  
FORK  
MANUAL**

**Get ready to  
have a blast! .....**

Please read this instruction manual thoroughly before using your new Ballistic suspension forks. It contains some very important information on the correct installation and usage of the fork. After reading this instruction manual, please be sure to keep it in a safe place for future reference. Suspension forks can dramatically improve the comfort and control of your bicycle, but they can also change the way that it handles, so always be sure to exercise caution and good judgement when getting used to your new set-up. Please follow the installation and maintenance guidelines included in this manual carefully look after your forks and enjoy them!

**FITTING + INSTALLATION**

We recommend that your Ballistic fork be installed by a qualified bicycle mechanic. If you are going to fit and install the fork yourself, please read carefully the guidelines below before starting. We also recommend that you have the completed installation inspected by qualified bicycle mechanic.

**Steerer tubes**

Do you have the correct diameter, length, and style of steer tube to suit your frame? Cutting a steerer tube for the first time is not a lot of fun or for the faint of heart.

If you use a threaded steertube always make sure that the lowest part of the handlebar stem is inserted at least 10mm beyond the threaded section of the steerer tube. You do not want to have the stem wedge pressing into the threaded section of the steerer tube.

**Headsets**

Headsets come in a number of different styles

and dimensions. Make sure that the headset that you use matches the dimensions of your fork and frame.

Do not try to install a non threaded headset on a threaded steerer tube. Ensure that the lower bearing race has seated correctly onto the fork crown. Clean and grease headset bearings, install and adjust correctly as per manufacturers instructions.

### Brakes

While most brakes will work with your fork, there are combinations of rims, brakes and straddle cables that may not allow correct braking action. Carefully read, follow and check with the instructions provided with your brakes. Always use a new front brake cable and housing cut to length, flowing smoothly from the brake lever to the cable stop on the fork brace.

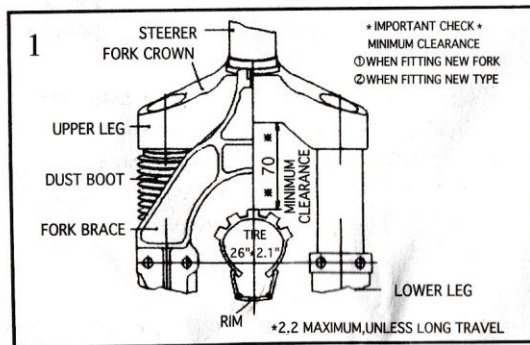
Do not use the cable stops built into the handlebar stem or into the headset, use only the cable stop on the fork brace.

Ballistic forks are compatible with Magura hydraulic brakes. An up-grade kit is available through your local dealer.

### Wheel/tyre

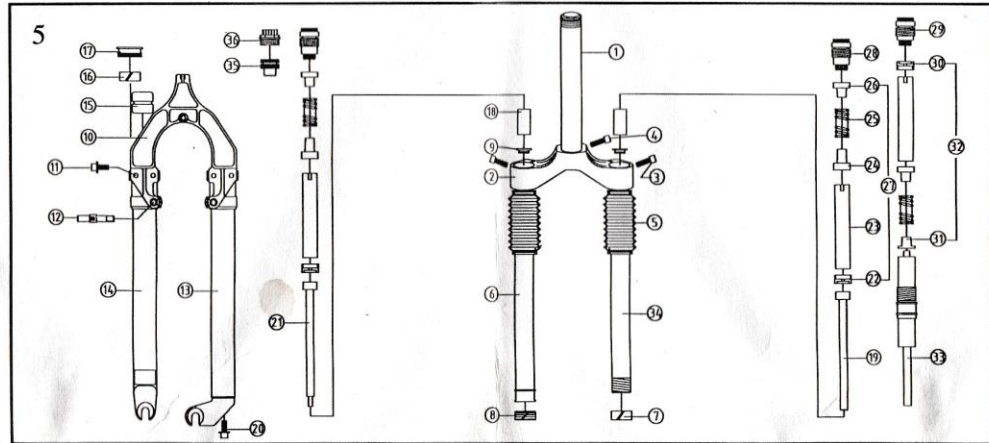
When fitting the wheel/tyre ensure that the quick release lever is tight.

Important: Check that the tyre clearance, (the distance between top of tyre and bottom of crown) is minimum 70mm. If there is insufficient clearance injury may result.---SEE FIG.1.



# ASSEMBLY DRAWING

DIAGRAM	PART NAME	NO OF PART PER FORK
1	STEERING TUBE	1
2	FORK CROWN	1
3	FORK CROWN BOLTS	4 (FOR STANCHION TUBE)
4	FORK CROWN BOLTS	2 (FOR FORK STEM)
5	DUST BOOT	2
6	STANCHION TUBE	2 (TYPE I)
7	PTFE LOWER BEARING	2 (FOR XL-600A I / PRO-800A I)
8	NYLON LOWER BEARING	2 (FOR XL-410A I / XL-450A I)
9	PUSH ROD GUIDE	2
10	FORK BRACE	1
11	FORK BRACE BOLT	4
12	CANTILEVER PIVOT	2
13	LEADING DROPOUT LEG	2 (XL-600A I / PRO-800A I)
14	CENTER DROPOUT LEG	2 (XL-410A I / XL-450A I)
15	BOTTOM OUT CUSHION	2
16	PTFE UPPER BEARING	2
17	BOOT/BEARING RETAINER	2
18	REBOUND ELASTOMER	2
19	PUSH ROD	2 (FOR XL-600A I / PRO-800A I)
20	PUSH ROD BOLT	2 (FOR XL-600A I / PRO-800A I)
21	PUSH ROD	2 (FOR XL-410A I / XL-450A I)
22	MCU/PUSH ROD GUIDE	2
23	SINGLE MCU	2
24	MCU/SPRING GUIDE	2
25	SPRING	2
26	PRELOAD ADJUSTER /SPRING GUIDE	2
27	MCU/SPRING KIT	2
28	ADJUSTER KNOB	2 (FOR TYPE I)
29	ADJUSTER KNOB	1 (FOR AC TYPE)
30	MCU/ADJUSTER KNOB GUIDE	1
31	CARTRIDGE/SPRING GUIDE	1
32	MCU/SPRING KIT (SET)	1
33	ALLOY BODY OIL CARTRIDGE	1
34	STANCHION TUBE	1 (FOR AC TYPE)
35	INTERNAL ADJUSTER CAP	2
36	FORK CAP	2



3

## CHECK LIST

### a) Check Brakes

-Before every ride the user should check to make sure that there are no problems with the breaking operation.

### b) Check Steering

-Before every ride the user should check to make sure that there are no problems with the steering.

### c) Handling

-The use of any front suspension fork will result in a slight difference in bicycle handling, and care should be taken while learning the feel of their "new" bicycle.

### d) Do not use a damaged fork

-If the fork is damaged in anyway, the user should have the fork repaired or replaced.

### e) Inspection

-It is very important to inspect all bolts casual riders should check bolts every 50 hours frequent riders every 20 hours and racers after every event periodically to ensure proper tightness. Proper torque fitting are shown below.

-Fork brace fixing bolts. 100-120 kg-cm/7.23~8.68 ft-lb/9.8~11.76 N-M.

-Crown clamping bolts. 120-140 kg-cm/8.68~10.12 ft-lb/11.76~13.72 N-M.

If for any reason the rider feels that there is something wrong with the fork, the rider should immediately stop using it and take it to the dealer from which it was purchased for inspection.

## ADJUSTING THE BALLISTIC FORK

It is possible to 'tune' your Ballistic suspension fork to suit your riding preference & weight.

There are 2 stages of adjusting the fork.

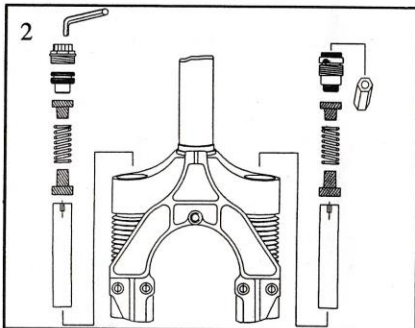
1) Coarse tuning-by changing the hardness's of the MCU elastomer or springs.

2) Fine tuning-this is adjusted by the pre-load screw or external adjuster knobs.

## COARSE TUNING

If the fork feels too hard or soft and cannot be set right using the pre-load adjuster or external adjuster knobs, it is possible to change the hardness of the

springs or MCU elastomer to match your desired ride. Disassembly of the fork is not required, simply unscrew the adjustable until it is loose and remove the MCU elastomer & springs. By removing, replacing and exchanging the springs or MCU elastomer with either harder or softer units you will discover your "ideal" set up. Some experimentation will be required. Before replacing the spring and the adjustable unit, apply some grease to the spring and replace. -SEE FIG.2.



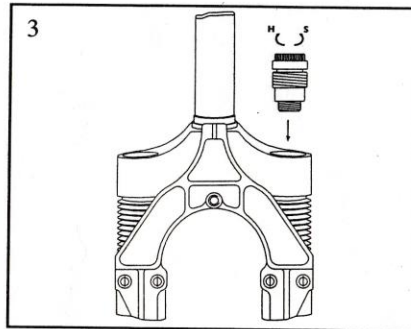
**FINE TUNING**

If your fork with internal preload adjuster, remove the cap in the top of each fork leg. Using the tool supplied with your fork or (6mm allen key) screw the adjuster up or down.

If your fork with external adjuster knobs, just turn the knobs directly. -SEE FIG.3.

Clockwise=harder, Counter clockwise= softer

The preload adjusters do not have to be set exactly the same but match them by eye.



**MAINTENANCE**

Do not use the Ballistic fork if any parts are damaged. Before you ride, check the following points.

- 1) Headset bearings
- 2) Brake cable is correctly seated.
- 3) Brakes are correctly adjusted-(Pad onto rim)
- 4) Quick release is tight.
- 5) Check for obvious damage.
- 6) Keep the fork clean.

The Ballistic fork is a low maintenance design. To ensure long life periodic maintenance is recommended.

**UPGRADE KITS**

Your Ballistic dealer will be able to offer you a full range of after sales service, tuning and upgrade kits which will include; hard elastomer, soft elastomer, long travel conversion, top plugs, Magura adaptors, dust boots, adjustment tools and titanium lightening kits.