

AVALANCHE

SUSPENSION

AVA

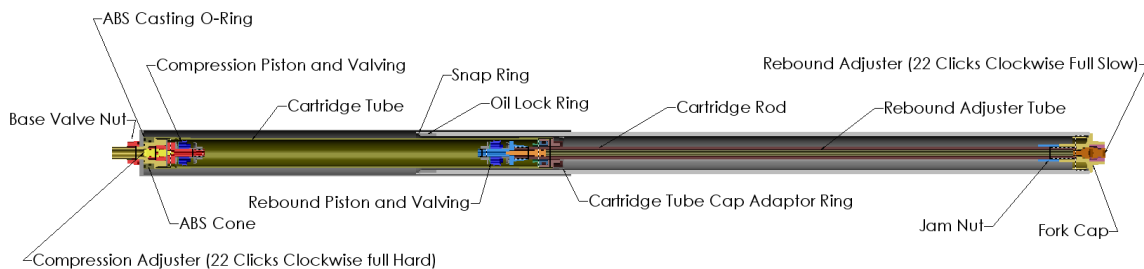
ADVANTAGE

PROGRAM

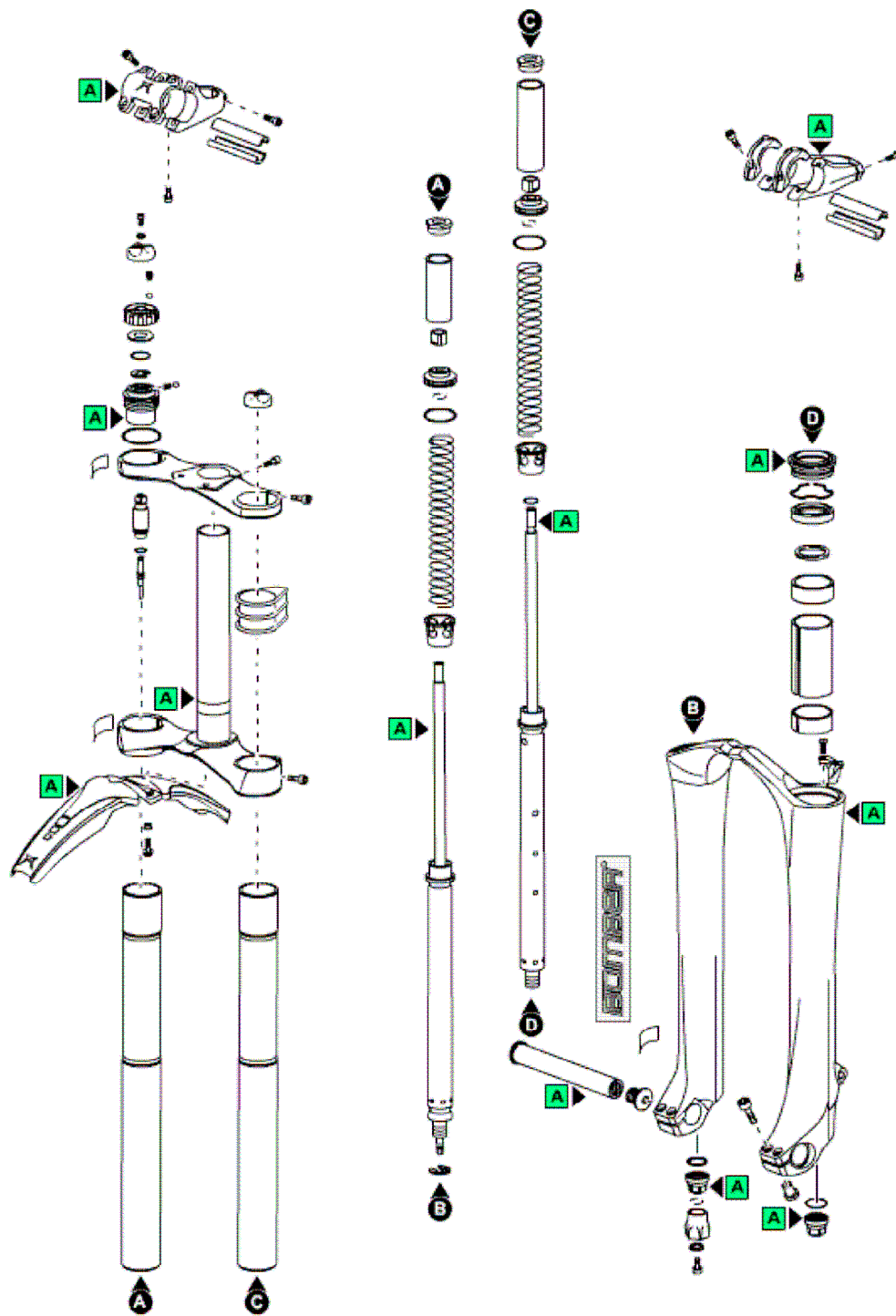
Making suspension better for everyone.



Models Included:
Marzocchi 888
35mm - 2005 and older
35mm - 2006 and newer



Exploded view - 888 RC2X - 200



Rif. Code	Quantity
1 522244AA	3
2 528154	2
3 520313	2
4 549104LA	1
5 549086KR	2
6 523338BZ	2
7 701533/C	2
9 501536LA	1
11 7051211/R	1
12 533167	2
13 523236	2
14 528031>B	2
16 538038>A	2
17 529194	2
18 538124	2
19 522406	2
20 547717	1
20 547665	1
20 547698	1
21 521142TW>A	2
21 520341	1
22 5321153>A	1
23 850956/C	1
24 520349LA	1
26 5141398/C	1
27 5181298	2
29 517153	2
30 529220	2
31 528030	3
32 528260	2
33 5321353	2
34 5321354	2
35 5321193SS/R>A	1
35 5321193RS/R>A	1
35 5321193RR/R>A	1
35 5321193TD/R>A	1
35 5321193TI/R>A	1
36 520344PN	14
37 507665/C	2
38 528051	2
39 520178PN	11
43 528180	2
44 5321357	2
45 528050	2
48 703746LA/C	1
49 5141137>A	4
50 525007	4
51 531072	2
52 526145>A	4
53 502587LA	1
54 508997/C	1
54 703745LA/C	1
55 8501031/C	1
56 526262RX	2
57 520396AR	2
58 505084LA	1
59 5321199AC	1
61 505108LA	1
62 505085LA	1
63 505107LA	1
64 526157KR	1
65 526158KR	1
66 8501030/C	1
69 520278	1
70 523011	1
72 505083LA	1
73 850881/C	1
84 549090KR>B	1
88 547713	1
88 547711	1
88 547712	1
90 547705	1

Important info before you start:

The intent is to replace the compression damper because if it was still in place, even with just a little amount of oil it would have heavy damping affects to the forks overall feel, this is due to the end of stroke bottoming control feature. The rebound damper however will not have any damping at the end of stroke when 50 cc of oil or less is in the fork leg, plus the rebound adjuster plunger rod can be removed and or can be set to full fast to further any possible additional damping to the fork.

Some of the pictures show removing the left damper, it is important to check that you remove the compression damper regardless of which leg it is installed in, in this case the previous owner switched the dampers to the opposite leg, please check to be sure, the compression damper has a series of drill holes down the tube in the older forks.

You could drill holes in the lower part of the compression damper tube, and it would defeat the damping, if you need to use the compression damper for the dummy leg.

Preparing your 888 for the Avalanche Advantage Cartridge upgrade kit

The following steps will help guide you through the disassembly process and show you how to install the new cartridge:



Using a 15 mm socket loosen the base nut of the Compression leg



Remove the nut



Pull the slider tube and damper rod from lower legs



Dump any remaining oil from the damper and lower casting



Pull the damper and spring assembly from the upper slider tube, it will take a good deal of pulling to overcome the o-ring friction to remove it



Loosen the fork cap from the damper rod and jam nut



Remove the jam nut



Pull back the spring retainer cap to expose the clip grooves



Remove the clip by sliding it off the rod



Remove the spring retainer



Remove the spring centering plastic washer and spring



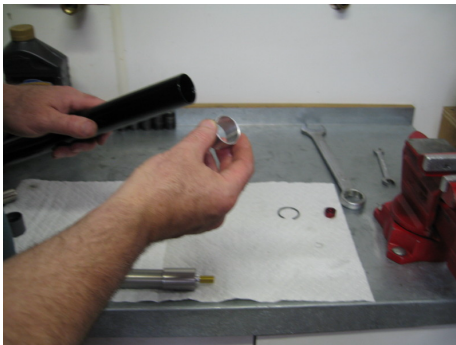
Remove the spring spacer perch and set aside this will be used to assemble the cartridge kit



Remove the spring spacer caps



Shown above are the parts you need to assemble the cartridge kit, note that the spring and spring spacer perch will be reused from the original setup



Install the oil lock ring with the inside chamfer facing out/down, look for an arrow or blue dots to depict the chamfered end



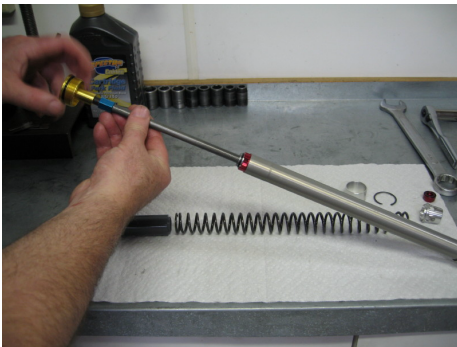
Shown installed with the chamfer facing out



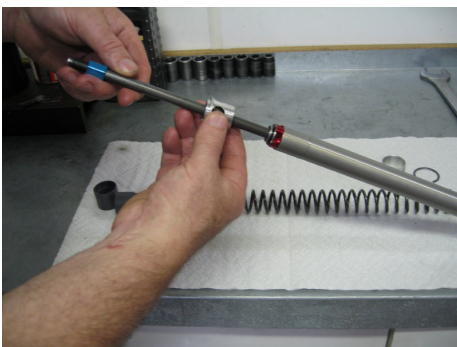
Install the snap ring



Clean and grease the seals before assembling the slider tube



Remove the fork cap



Install the spring perch with the small side facing the cartridge tube cap



It should fit snugly over the insert o-ring on the end of the cartridge cap



Install the spring over the rod, if your fork is 2005 and older the springs will be 306 mm long, for 2006 and newer the spring will be 340 mm long



Install the spacer kit, use either the 5 mm preload cap or the 10 mm preload cap depending on your weight and spring rate that you have selected, generally heavier riders will need the 10 mm preload spacer cap



Install the fork cap



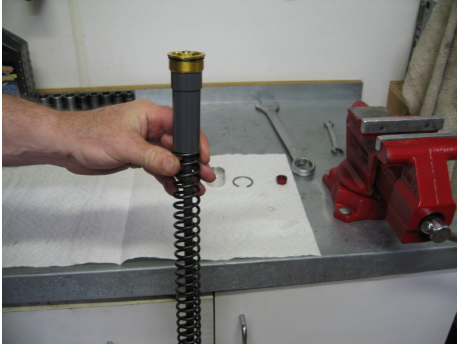
Pull the lower spacer down to expose the jam nut, make sure the jam nut is all the way down before tighten the fork cap to the rod



Insert a 13 mm or 1/2 inch wrench between the preload spacers



Tighten the jam nut up to the cap, snug up gently. The rod can be damaged if over tightened



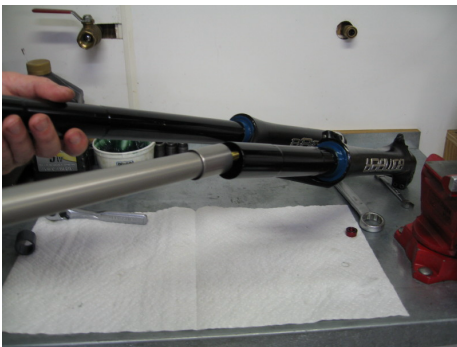
Installed it should look like this, the upper spacer cap up in the fork cap, the lower spacer up in the upper spacer, and the spring centered in the lower spacer



Apply some RTV or thick grease to the o-ring to help hold it to the ABS cone bottom



Make sure it fits in the groove completely



Insert gently into the slider tube



Try to line the gold 10 mm adaptor with the bottom hole in the casting



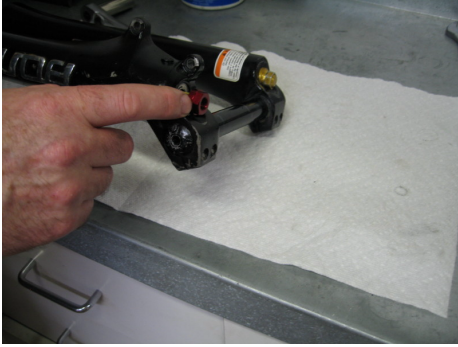
Once aligned push it through



Shown with the 10 mm adaptor extended out of the bottom



Prepare the 10 mm adaptor nut with RTV or grease to help secure the -014 o-ring



Install the red adaptor nut with the o-ring



Tighten by hand to make sure the o-ring seats cleanly



Tighten the adaptor nut to 10-15 inch-lbs



Pour the desired amount of oil in the upper slider tube, see chart for appropriate amount and type of oil



Install fork cap



Tighten fork cap snugly

In the following next few steps an alternate method of setting the oil height for a wet assembly (i.e. some oil coating the internals)



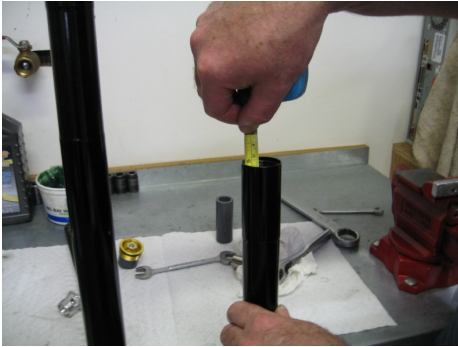
Remove the fork cap



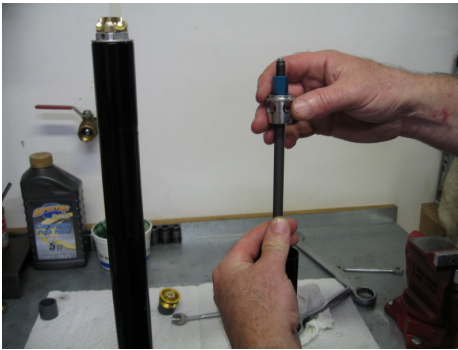
Remove the preload spacers



Remove the spring and spring perch



With the tube and rod fully collapsed pour oil and pump the slider tube and cartridge rod until all air bubbles are removed and measure down until the desired measurement is reached, standard is 130 mm from the top, see chart for optional levels



Install the spring perch with the small side down, pull the rod all the way up



Install the spring, tilting the fork at a shallow angle will keep the rod from dropping down while installing the spring



While holding the rod install the spring spacer, small end down



Install the fork cap and upper preload spacer



Pull the lower spacer down to expose the jam nut, make sure the jam nut is all the way down before tighten the fork cap to the rod, tighten the jam nut to the fork cap



When assembled the parts should fit nicely together

The rebound leg can be modified 3 ways:

- 1) Do nothing except turn the rebound to full fast and compression (some models) to full soft to take out any affects of the rebound damper in that leg.
- 2) Remove all but 50 cc of oil to lighten fork and still provide lubrication for bushings and seals and remove the rebound adjuster plunger to take out any affects of the rebound damper in that leg
- 3) Add our anti-bottoming system to that leg to balance out bottoming control. and do either of the above.

The rebound cartridge makes a good spring spacer and provides a way for the topout spring to function, maintains preload adjustment and keeps the fork from coming apart.

You could drill holes in the lower part of the compression damper tube, and it would defeat the damping, if you need to use the compression damper for the dummy leg.

The fork can now be reassembled with the crowns and installed on your frame as described by your owner's manual.

Adjustments and internal settings are described in more detail in the following pages. The fork cap adjuster is the low speed rebound and the standard setting is 12 clicks out (counterclockwise) from full hard. The 10 mm adaptor bolt contains the low speed compression adjuster and the standard setting is 12 clicks out (counterclockwise) from full hard. It can be turn by inserting a small (3.75 mm wide max) flat blade screwdriver up into the lower leg adaptor bolt.

Set-up Options:

Oil Type:

Recommended oil:

[Golden Spectro 85/150 Cartridge Fork Fluid 5wt or equivalent](#)

Pro Honda HP Fork Oil 5wt

Pro Circuit Fork Fluid PC-01

Yamalube 01 Suspension Oil / KYB 01

Bel-Ray Fork Fluid 5wt

There are many others that we have not tested but as long as they say for Cartridge Forks and or 85/150 rating, or at 40C of 15-17 cSt then they will work fine, all 5 wt fork oils are not the same so beware of lesser quality oils that may foam up easily

Oil height: Dry assembly:

Standard volume: oil height method is more reliable (approx 300 ml)

Optional Stiffer volume: approx. 320 ml

Optional Softer volume: approx. 280 ml

Wet/already assembled:

Standard height from top fully compressed: 130 mm

Optional Stiffer height from top fully compressed: 115 mm

Optional Softer height from top fully compressed: 150 mm

Compression and Rebound Settings:

These are rough starting points, adjustments will vary from rider to rider

Standard:

Compression 12 clicks out from full clockwise

Rebound 12 clicks out from full clockwise

Downhill roots/rocky conditions:

Compression 17 clicks out from full clockwise

Rebound 15 clicks out from full clockwise

All Mountain smooth/drops conditions:

Compression 8 clicks out from full clockwise

Rebound 10 clicks out from full clockwise

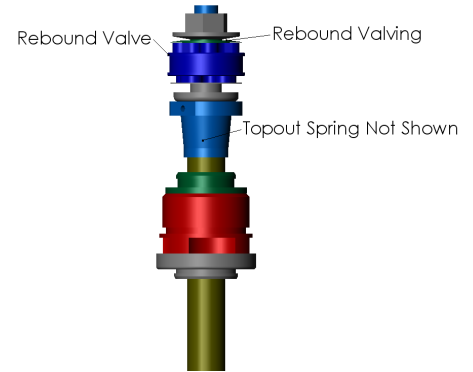
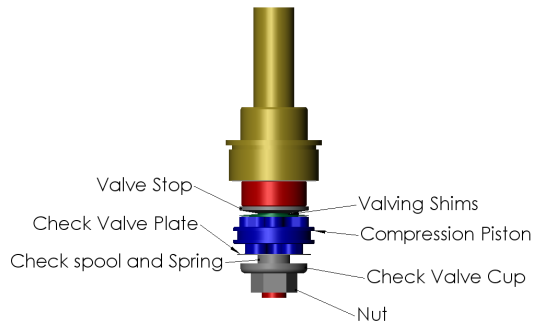
Urban large drops to flat conditions:

Compression 5 clicks out from full clockwise

Rebound 8 clicks out from full clockwise

Revalving the Cartridge Kit:

For more details see above link to 20 mm Cartridge Revalving Procedure:



**Standard Valving:
6mm ID Shims**

Compression	Rebound
17x.10	17x.10
15x.10	11x.10
16x.10	9x.10
14x.10	16x.10
13x.10	14x.10
12x.10	12x.10
11x.10	10x.10
10x.10	8x.20
8x.20	

Optional Stiffer Compression/Slower Rebound Valving:

Compression	Rebound
17x.10	17x.10
16x.10	17x.10
15x.10	12x.10
14x.10	10x.10
13x.10	16x.10
12x.10	14x.10
11x.10	12x.10
10x.15	10x.10
8x.20	8x.20

Optional Softer Compression/Faster Rebound Valving:

Compression	Rebound
17x.10	17x.10
11x.10	10x.10
16x.10	8x.10
14x.10	15x.10
12x.10	13x.10
10x.10	11x.10
8x.20	9x.10
	8x.20

Disclaimer

Avalanche Suspension Inc. is not responsible for any damages to you or others from riding, transporting or other use of your Avalanche Advantage or mountain bike. User fully understands that mountain bike riding and/or racing is dangerous and hard on equipment. In the event your Avalanche Advantage cartridge kit fork breaks or malfunctions, Avalanche Suspension Inc. will assume no liability or obligation beyond the repair or replacement of your fork.



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