

AVALANCHE
SUSPENSION

AVA
ADVANTAGE

PROGRAM

Making suspension better for everyone.



Models Included:

Lyrik

RC2L, RC2 DH, RC, R

2010-2012

Thank You for purchasing an Avalanche Advantage Cartridge Kit. The following instructions are intended for those experienced with the mechanics of suspension service. Please follow the instructions carefully and thoroughly. If there are any please contact Avalanche Down Hill Racing for further assistance.

Do not dispose of waste oil inappropriately! Contact your local recycling center for information on proper disposal.

Disclaimer

Avalanche Suspension Inc. is not responsible for any damages to you or others from riding, transporting or other use of your Avalanche Advantage Rockshox Lyrik 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 Lyrik cartridge kit fork breaks or malfunctions, Avalanche Suspension Inc. will assume no liability or obligation beyond the repair or replacement of your fork.

Before getting started you will need to locate the following tools and consumables:

Tools:

6 point sockets: 24mm , 15mm

Open end wrench : ½ in

Hex Keys : 2mm , 5mm

[Snap Ring plier](#) (Craftsman Model

Number #47412)

Small Flat blade Screw driver

Coat hanger or welding wire

Drill bit : 10mm

Soft face hammer

In-Lbs Torque wrench

Graduated Cylinder (Optional)



Small tape measure or ruler

Consumables:

Rubber Gloves

[Spectro oil 85/150](#)

Shop rags

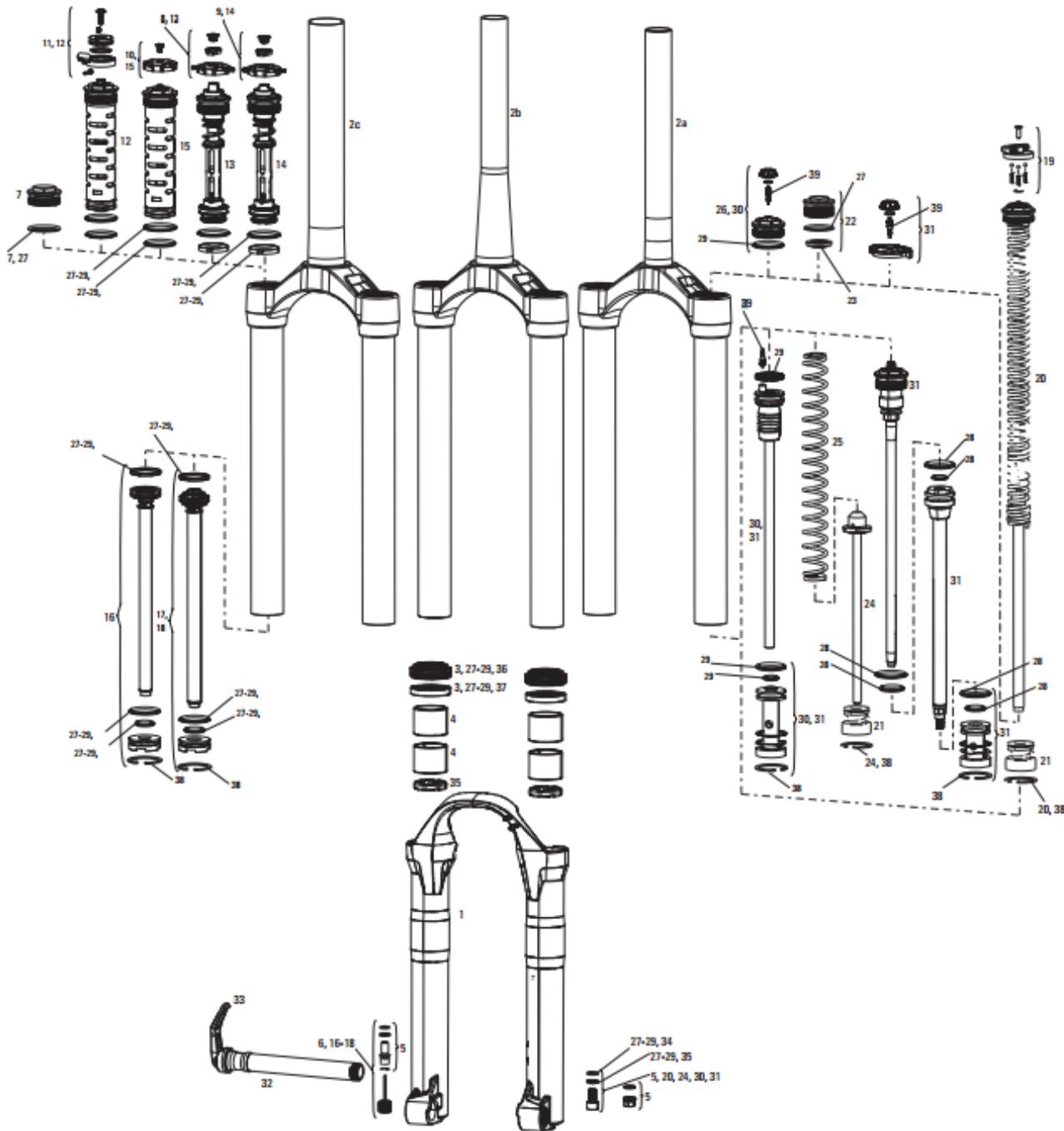
Isopropyl alcohol

Water proof grease (Bel Ray)

Silicon RTV

Rock Shox Lyrik Cartdige Kit

LYRIK (2010-2012)

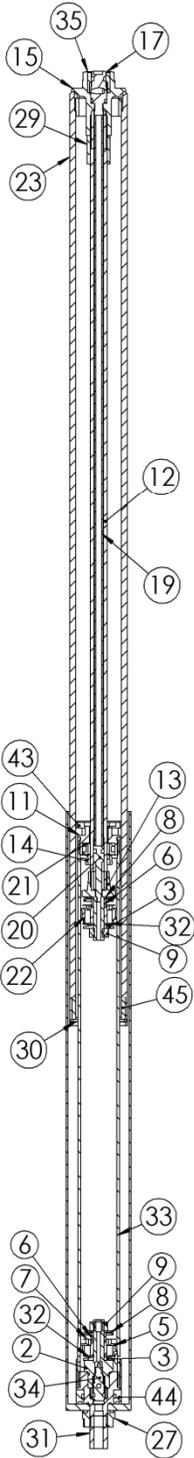


AVALANCHE

ADVANTAGE



No.	Part Number	Description
1	11.4015.555.010	Lower Leg, Lyrik RC2L, Black (170mm max travel)
1	11.4015.555.020	Lower Leg, Lyrik RC2L, White (170mm max travel)
1	11.4015.555.030	Lower Leg, Lyrik RC2L, Matte Black (170mm max travel)
1	11.4015.555.040	Lower Leg, Lyrik RCDH, Black (170mm max travel)
1	11.4015.555.050	Lower Leg, Lyrik RCDH, White (170mm max travel)
1	11.4015.555.060	Lower Leg, Lyrik RCDH, Matte Black (170mm max travel)
1	11.4015.070.000	Domain/Lyrik Lower Leg Diffusion Black (180mm max travel) no decals
1	11.4015.224.000	Domain/Lyrik Lower Leg White (180mm max travel) no decals
1	11.4015.069.000	Domain/Lyrik Lower Leg, Black (180mm max travel) no decals
2a	11.4015.411.070	CSU, U-Turn, Black Crown, AL Steerer 1 1/8" - Lyrik
2a	11.4015.411.080	CSU, U-Turn, White Crown, AL Steerer 1 1/8" - Lyrik
2a	11.4015.411.090	CSU, Coil/Solo Air, Black Crown, AL Steerer 1 1/8" - Lyrik
2a	11.4015.411.100	CSU, Coil/Solo Air, White Crown, AL Steerer 1 1/8" - Lyrik
2a	11.4015.411.120	CSU, 2-Step, White Crown, AL Steerer 1 1/8" - Lyrik
2a	11.4015.411.210	CSU, 2-Step/Dual Position Air, Gloss Black Crown, AL Steerer 1 1/8" - Lyrik
2b	11.4015.411.130	CSU, U-Turn, Black Crown, AL Steerer Tapered - Lyrik
2b	11.4015.411.140	CSU, U-Turn, White Crown, AL Steerer Tapered - Lyrik
2b	11.4015.411.150	CSU, Coil/Solo Air, Black Crown, AL Steerer Tapered - Lyrik
2b	11.4015.411.160	CSU, Coil/Solo Air, White Crown, AL Steerer Tapered - Lyrik
2b	11.4015.411.180	CSU, 2-Step, White Crown, AL Steerer Tapered - Lyrik
2b	11.4015.411.190	CSU Black Crown AL Steerer Tapered - Lyrik 2-Step 180
2b	11.4015.411.220	CSU, 2-Step/Dual Position Air, Gloss Black Crown, AL Steerer Tapered - Lyrik
2c	11.4015.411.010	CSU, U-Turn, Black Crown, AL Steerer 1.5" - Lyrik
2c	11.4015.411.020	CSU, U-Turn, White Crown, AL Steerer 1.5" - Lyrik
2c	11.4015.411.030	CSU, Coil/Solo Air, Black Crown, AL Steerer 1.5" - Lyrik
2c	11.4015.411.040	CSU, Coil/Solo Air, White Crown, AL Steerer 1.5" - Lyrik
2c	11.4015.411.060	CSU, 2-Step, White Crown, AL Steerer 1.5" - Lyrik
2c	11.4015.411.200	CSU, 2-Step/Dual Position Air, Gloss Black Crown, AL Steerer 1.5" - Lyrik
3	11.4015.067.000	Domain/Lyrik Dust Seal/Oil Seal Kit
4	11.4015.065.000	Domain/Lyrik Bushing Kit
5	11.4015.403.030	Shaft Fastener Kit (Alum) - 2012 Lyrik/Totem (shaft bolts and air shaft nut) (compatible with all Lyrik models and years)
6	11.4015.074.000	Domain/Lyrik/Totem/10-12 Boxxer RC - External Rebound Adjuster Knob & Shaft Bolt Kit
7	11.4015.351.000	LyrikR Rebound Top Cap
8	11.4015.547.060	Knob Kit, Compression Damper, Mission Control - 2012 Lyrik/Totem
9	11.4015.547.070	Knob Kit, Compression Damper, Mission Control DH - 2012 Lyrik/Totem
10	11.4015.367.000	Adjuster Knob, Motion Control IS Compression Damper (2010-2012 Boxxer, Domain, Lyrik, Totem)
11	11.4015.528.010	Remote Spool and Clamp Kit - 2011 Lyrik 180 RLR (for remote compression damper)
12	11.4015.415.070	Compression Damper Remote (Motion Control IS) - 2011 Lyrik 180 RLR (compatible with all Lyrik models and years)
13	11.4015.544.150	Compression Damper, Mission Control (w/ Floodgate) - 2012 Lyrik (includes comp knobs, compatible with all Lyrik models and years)
14	11.4015.544.160	Compression Damper, Mission Control DH (no Floodgate) - 2012 Lyrik (includes comp knobs, compatible with all Lyrik models and years)
15	11.4015.544.170	Compression Damper, Motion Control IS - 2012 Lyrik (includes comp knobs, compatible with all Lyrik models and years)
16	11.4015.416.010	Rebound Damper, Motion Control IS - Lyrik/2010-2012 Totem (compatible with all Lyrik models and years) (includes rebound adjuster knob)
17	11.4015.416.020	Rebound Damper, Mission Control/Mission Control DH - 2010-2012 Lyrik (Alum Shaft) (compatible with all Lyrik models and years) (includes rebound adjuster knob)
18	11.4015.416.040	Rebound Damper and Seal Head - 2011-2012 Lyrik 180 RLR Plus (alum shaft, includes rebound adjuster knob)
19	11.4310.717.000	U-Turn Travel Adjuster Knob Aluminum (Coil) Lever
20	11.4015.099.000	Lyrik U-Turn Spring Assy X-Soft Silver
20	11.4015.097.000	Lyrik U-Turn Spring Assy Soft Yellow
20	11.4015.096.000	Lyrik U-Turn Spring Assy Med Red (Standard)
20	11.4015.095.000	Lyrik U-Turn Spring Assy Firm Blue
20	11.4015.098.000	Lyrik U-Turn Spring Assy X-Firm Black
21	11.4015.458.010	Lyrik Coil/U-Turn Top Out Assembly
22	11.4015.420.010	Top Cap, Coil - 2010-2011 Lyrik
23	11.4015.043.000	Domain/Lyrik Spring PreLoad Spacers qty 2
24	11.4015.421.010	Spring Shaft Assy, 170mm - 2010-2011 Lyrik
25	11.4015.422.010	Spring, Coil, 170mm, X-Soft Silver - 2010-2011 Lyrik
25	11.4015.422.020	Spring, Coil, 170mm, Soft Yellow - 2010-2011 Lyrik
25	11.4015.422.030	Spring, Coil, 170mm, Medium Red - 2010-2011 Lyrik
25	11.4015.422.040	Spring, Coil, 170mm, Firm Blue - 2010-2011 Lyrik
25	11.4015.422.050	Spring, Coil, 170mm, X-Firm Black - 2010-2011 Lyrik
26	11.4015.083.000	Lyrik Air Top Cap Kit
27	00.4315.032.090	AM 2012 Fork Service Kit, Basic (includes dust seals, foam rings, o-ring seals) - Lyrik Coil
28	00.4315.032.110	AM 2012 Fork Service Kit, Basic (includes dust seals, foam rings, o-ring seals) - Lyrik Dual Position Air
29	00.4315.032.100	AM 2012 Fork Service Kit, Basic (includes dust seals, foam rings, o-ring seals) - Lyrik Solo Air
ns	11.4015.419.010	Service Kit, Solo Air - 2010-2011 Lyrik
ns	11.4015.465.010	Service Kit, 2-Step Air - Lyrik NEW 2010-2011 (includes updated air piston, new piston coil spring, floating piston assy, seal head assy)
No.	Part Number	Description
30	11.4015.556.010	Air Spring (Solo Air) Assembly/Air Top Cap Kit, 160mm/170mm/180mm - 2010-2012 Lyrik (includes 160 and 180 base plates)
31	11.4015.551.030	Dual Position Air Spring 160mm/Top Cap/Aluminum Adjuster Knob Assembly (complete) - 2012 Lyrik
31	11.4015.551.040	Dual Position Air Spring 170mm/Top Cap/Aluminum Adjuster Knob Assembly (complete) - 2012 Lyrik
31	11.4015.551.050	Dual Position Air Spring 180mm/Top Cap/Aluminum Adjuster Knob Assembly (complete) - 2012 Lyrik
32	00.4315.013.030	Maxle Lite FR 20mm, Black (35mm/40mm, Chassis) 2011
33	11.4311.722.020	Lever/Wedge Kit, Maxle Lite 20mm (32mm/35mm/40mm) 2011
ns	11.4015.425.010	Maxle Lite FR Axle/Wedge Kit (Domain/Lyrik/Totem) 2010
ns	11.4015.075.000	Domain/Lyrik/Totem Maxle Axle/Wedge Kit
ns	11.4015.205.000	Domain/Lyrik Upper Tube/Spring Sleeve
34	11.4015.259.000	Crush Washer 8mm, Qty 50
35	11.4015.260.000	Crush Washer Retainer, Qty 50
36	11.4015.066.000	Domain/Lyrik/Boxxer (35mm) Dust Seal Qty 20
37	11.4015.200.000	Lyrik/Domain/Boxxer (35mm) Oil Seal Qty 20
38	11.4015.558.020	Retaining Ring, Upper Tube, 35mm - Qty 2
39	11.4308.327.002	Schrader Valve Core Qty 2
ns	11.4309.073.000	Kit Disk Brake Cable Accessory
ns	00.4315.023.010	High-Pressure Fork/Shock Pump (300 psi Max) RockShox
ns	00.4315.022.010	Schrader Valve Removal Tool Rockshox



Materials List
32 mm Boxxer Cartridge Kit

ITEM NO.	QTY.	Description
2	1	comp arbor bolt
3	1	valve stop
5	1	20 comp piston
6	1	check spool
7	1	check valve
8	1	check valve cup
9	1	6 mm nut
11	1	cart tube end cap
12	1	cart rod
13	1	rebound stem
14	1	20 mm top out washer
15	1	fork cap boxxer
17	1	rebound adjuster
19	1	rebound adjuster rod
20	1	rebound needle
21	1	du bushing holder
22	1	20 rebound piston
23	1	Boxxer slider tube
27	1	Nut adapter
29	1	cart rod jam nut
30	1	31 mm snap ring
31	1	Comp bolt adapter 10mm
32	1	comp shims
33	1	cart tube
34	1	high low adj needle-1
35	1	adjuster detent THD
36	1	check valve cup
37	1	check spool
38	1	check valve
39	1	comp shims
40	1	valve stop
41	1	6 mm nut
42	1	boxxer casting dim
43	1	Cart tube end cap adaptor ring boxxer
44	1	abscone boxxer
45	1	Boxxer abs insert



*Preparing your Lyrik
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:

1. Coil forks skip step 2 & 3

2. Air forks: Remove the positive air chamber valve cap from the top cap located on the non-drive side fork leg. If the fork also has a negative air chamber, remove the valve cap located at the bottom of the non-drive side air chamber. The positive air chamber valve cap for 2-Step and Dual Position Air forks is located at the bottom of the non-drive side fork leg.

3. Depress the Schrader valve and release all of the air pressure from the air chamber. If the fork has a negative air chamber, start with the negative air chamber first, then proceed to the positive air chamber.

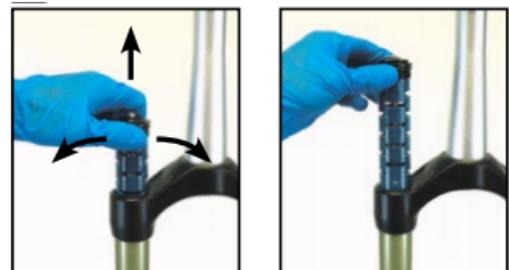
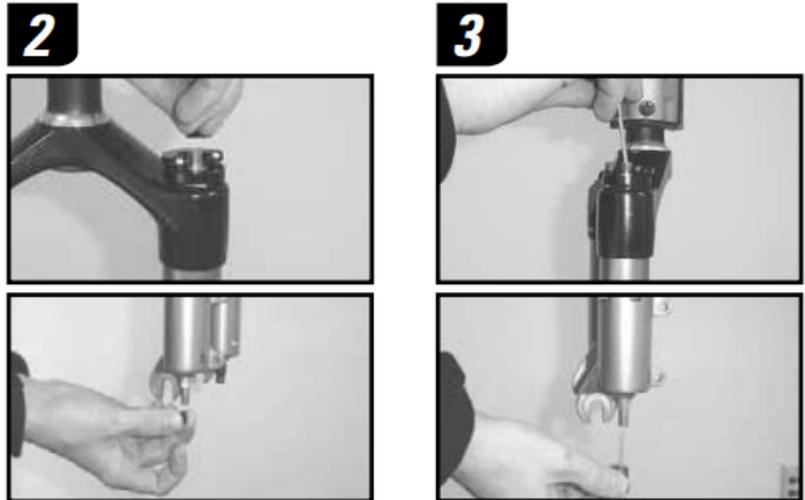
4. Remove the mission control damper.

Use a 2 mm hex to remove the screw from the compression adjuster knob. Remove the compression adjuster knob.

5. Use a 24 mm (6 point socket wrench) to unthread the compression damper top cap.

Tap External body with soft hammer to help loosen threads.

6. Remove the compression damper from the upper tube/crown by pulling up and rocking it from side



removed, clean the upper tube threads with a clean rag. to side. Once the damper is



4. Using a 5 mm Allen key loosen the bolt 4-5 turns



5. Tap gently with a hammer to unseat the damper rod



6. Loosen the screw more if necessary and tap until the rod is unseated, Remove the bolt

7. Repeat step 4 thru 6 on both fork legs, then separate the slider tubes and damper rod from lower legs



8. Remove the snap ring and rebound damper rod assembly



9. Insert a coat hanger or welding rod with a slight hook at the end
and remove the stock rubber bottom out bumper
(discard, this it will not be used)



10. Reassemble damper tubes to fork leg and bottom them



11. Bottom out against the cast lower leg. This will prevent any chips damaging the bushings and seals



12. On the Damper leg, drill with a 10 mm drill slowly blowing off the chips to avoid falling in

(Clean all parts thoroughly when finished!!)

13. In the plastic bag provided are an oil lock ring (ABS Insert) and a snap ring (Need Pictures)



14. The oil lock ring will have an arrow pointing to the chamfer; this will face out or down to prevent damage when sliding over the ABS cone.



15. Insert the snap ring



16. Grease the oil and dust seal with your choice of grease and re-assemble the slider tubes to the lower casting



17. Prepare to install the Damping Cartridge



18. First Remove the Remove the Fork Cap with a ½ open

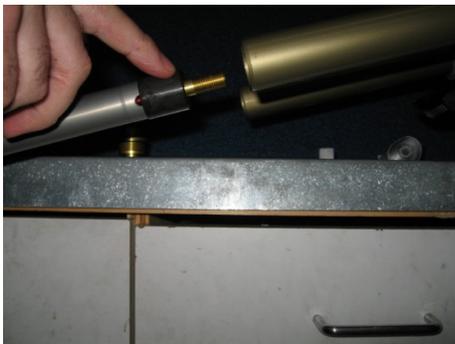
end wrench and a 15 mm ratchet



19. Apply RTV Silicone to the O-ring Groove on the bottom of the ABS Cone.

(This Will help retain the O-ring During Installation) Then Insert the Supplied A-XX O-Ring into the groove

(The kit also includes two larger O-rings to be used only if the bottom of the casting is Uneven or to Rough)



20. Guide the cartridge assembly thru the entire slider tube. Take

Care not to knock off the base O-ring



21. Line the 10 mm adaptor bolt to the lower hole



22. Push it thru until the ABS cone bottoms on the lower leg



23. Prepare the 10 mm adaptor nut with RTV to help secure the
A-014 O-ring



24. Thread the nut with the o-ring facing the lower leg



25. Tighten the nut to 10-15 (in/lbs)



26. Pour oil into upper leg allowing oil to settle into the cartridge, pull the rod and stanchion tube up and down a bit until it is filled about an **55 mm from the top fully compressed**, Lyrick stanchion not shown.



27. Cycle rod to remove any air bubbles and insert the rebound adjust rod. Fully compress the rod and stanchion tube.



28. After all air bubbles are removed and damping is smooth through out the stroke. Measure down to the top of the compressed stanchion to the oil, standard is 55 mm for Lyrik. Using a suction tool or just dump oil out until desired height is reached



29. Screw on the fork cap. **Make sure rod bottoms out before the jam nut!**



30. Bring the jam nut up to the fork cap and tighten with a slight squeeze on the two wrenches, approximately 10 in-lbs, be careful not to over tighten as , Totem shown, Lyrik similar.

these parts can easily be



31. Screw on the fork cap Hand Tight

32. Recharge the Air Spring to the desired Specs

(Tip – Use paper towel pressed between hex and socket when tighten the fork cap to avoid scraping the anodizing)

your frame as described by your owner's manuals.

The fork can now be reassembled with

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.

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 they will work fine, all 5 wt fork oils are not the same so beware of lesser quality oils that may foam up easily

Set-up Options:

Wet/already assembled:

Standard height from top fully compressed: 55 mm for Lyrik

Optional **Stiffer** height from top fully compressed: 50 mm

Optional **Softer** height from top fully compressed: 60 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



12 Davidson Road, Colchester CT 06415-1600 USA

860-537-4306

www.avalanchedownhillracing.com