



DELTA XE

SPRITE TL

GILA XE/TL/CL

CAPA XE/TL/CL

Congratulations on your purchase of a new RST suspension fork. Renowned for unparalleled value and reliability, your RST fork can provide you years of riding enjoyment. This manual will provide guidelines for the proper installation, assembly and disassembly, tuning, and maintenance of your RST fork. We advise you to read it thoroughly to become familiar with your fork. Please be sure to follow all recommendations, important notes and warnings to ensure an enjoyable and trouble-free riding experience.

WARRANTY

RST warrants its products to be free of defects in materials or workmanship for a period of one year from the original date of purchase or two years from the date of manufacturing, whichever comes first. The warranty in USA is 12 months. Regions outside of USA will be subject to the local regulations of each region. This warranty is extended to the original owner only and is subject to the following terms and conditions:

Terms and Conditions

The warranty does not cover cosmetic or structural damage arising from abuse or misuse including, but not limited to, damage caused by crashes and/or collisions, owner neglect, improper installation and/or assembly, improper maintenance, alterations, modifications, additions, changes to the original product, or other excessive, improper or abnormal conditions. Wear and tear from normal use or environmental exposure is not covered by this warranty. RST will repair or replace, at its sole discretion, any part(s) or product(s) deemed defective under the terms of this warranty. In the event a product needs to be replaced and is discontinued or not available, RST reserves the right to replace the product with one of equal value. No credits or refunds will be issued.

This product is not intended for use in stunt riding, ramp jumping, acrobatics, or similar activities. The user assumes the risk of any personal injury, product damage/failure, and any other loss, which may occur under such use. RST shall not be held responsible for any incidental or consequential damages, which may occur from such use.

Warranty Repair

Warranty claim procedures will vary from country to country. To file a warranty claim, please contact your local RST distributor for specific instructions. A copy of the original sales receipt must accompany a warranty claim.

Installation Instructions

RST strongly recommends the fork to be installed by a qualified technician with the proper tools. Improperly installed forks are extremely dangerous and can result in loss of control of the bicycle that could result in possible serious and/or fatal injuries.

Important: Always use safety eyeglasses when working on a fork

Tools needed:

- 4, 5, 6 mm hex key wrenches
- Tape measure
- Soft face mallet
- Silicon or Teflon fortified grease
- Headset race setter
- Hacksaw
- Marker
- File
- Cutting guide
- Star nut driver
- Torque wrench

Torque specifications:

- | | | |
|-------------------------|---------------|----------------|
| ● Stanchion clamp bolts | 70-80 in-lb | (8-9.2 Nm) |
| ● Steerer clamp bolts | 90-95 in-lb | (10-10.7 Nm) |
| ● Top Cap Assemblies | 25-30 in-lb | (2.8-3.4 Nm) |
| ● Brake pivot bolts | 110-120 in-lb | (11.3-13.5 Nm) |

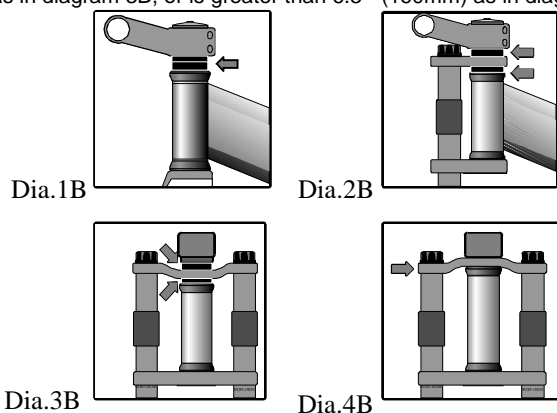
- Dropout bolts 60-70 in-lb (6.7-8 Nm)

Single crown

1. For the aftermarket crown, make sure the steerer tube is fully seated in the crown. Torque the steerer clamp bolts 90-95 in-lb (10-10.7Nm).
2. Install the headset-bearing race as per manufacturer's instructions.
3. Install the steerer tube/crown assembly into the frame.
 - A. For threadless steerer tubes, install headset completely, spacers (if needed), and stem as per manufacturer's instructions.
 - B. For threaded steerer tubes, install upper headset bearing cup and spacers (if needed) as per manufacturer's instructions.
4. Mark steerer tube at the lowest exposed section.
 - A. For threadless steerer tubes, mark just above the stem.
 - B. For threaded steerer tubes, mark just above the upper headset bearing cup/ spacers.
5. Cut steerer tube to length.
 - A. For threadless steerer tubes, cut 1/8" (3.2mm) below the bottom edge of the mark and install star nut with star nut driver.
 - B. For threaded steerer tubes, cut 3/16" (4.8mm) above the top edge of the mark.
6. Re-install the steerer tube/crown assembly. Adjust headset, tighten stem, and install spacers as per manufacturer's instructions. Torque all bolts per manufacturer's specifications before use.

Dual crown

1. Make sure the steerer tube is fully seated in the lower crown. Torque the steerer clamp bolts 90-95 in-lb (10-10.7Nm).
2. Install the headset-bearing race as per manufacturer's instructions.
3. Install the steerer tube-crown assembly with the headset, upper crown, stem, and any spacers (if needed) as per manufacturer's instructions. See diagram 1B. If distance B2 is 5.75" to 6.3" (146 –160mm), use a horizontal or flat upper crown. See diagram 2B. If the distance is less than 5.75" (145mm) as in diagram 3B, or is greater than 6.3" (160mm) as in diagram 4B, an upper drop-crown with a different height will need to be used.



4. Mark steerer tube at the top of the stem and remove.
5. Cut steerer tube 1/8" (3.2mm) below the bottom edge of the mark.
6. Install star nut using a star nut driver as per manufacturer's instructions.
7. Re-install the steerer tube/crown assembly. Adjust headset, tighten upper crown and stem, and install spacers (if needed) as per manufacturer's instructions. Torque all bolts per manufacturer's specifications before use.

Notes on brake installation:

1. Always comply with the instructions provided by the brake manufacturer.
2. If your brakes require the use of a cable housing stop, then only route the cable and housing through the housing stop on the brace. Do not use any other housing stops (i.e. on frame, headset, or stem.)
3. If your brakes require the use of a straddle cable and carrier, then make sure there is at least 0.6" (15mm) clearance between the top of the straddle cable carrier and the bottom of the brake cable housing stop on the fork brace.

Warning: Failure to comply with these requirements may result in loss of control of the bicycle that could result in serious and/or fatal injuries.

Tire clearance:

Maximum tire size is 2.2" (56mm) wide and 13.5" (343mm) radius. Make sure to check tire size whenever changing tires. To check tire clearance, remove the MCU and/or spring stacks and compress the fork completely. The crown must have at least a 1/4" (6.4mm) clearance above the tire when the fork is fully compressed.

Warning: Too large of a tire will cause the tire to come into contact with the crown during full compression which may result in loss of control of the bicycle that could result in serious and/or fatal injuries.

Disassembly

- 4, 5, 6, 8 mm hex key wrench
- 19 mm open end wrench
- Retaining ring pliers
- Torque wrench

1. Remove brake assembly as per manufacturer's instructions.
2. Remove MCU or spring assembly by turning adjuster cap counter-clockwise. Some forks may require the crown stanchion clamp bolts to be loosened slightly to ease the removal of the adjuster knob.
3. Loosen crown stanchion clamp bolts and remove fork from crown(s)
4. Turn fork upside down to remove any spacers.

5. Remove dropout bolts with a 4 mm hex key. It is necessary to hold the compression bolt in place with an 8 mm hex key inserted through the top of the stanchion.
6. Remove boots and remove stanchions from outer leg assemblies.
7. Remove bottom-out bumpers.
8. Remove retaining rings from the bottom of the stanchions.
9. Remove compression bolts.
10. Turn stanchions upside down to remove compression bolt assembly.

Assembly

1. Slide stanchion end caps onto compression bolts and position assembly into stanchions. Install retaining rings into stanchions.

Important: Make sure the retaining rings are properly installed. They need to be fully seated into the groove in the stanchion with the sharp edge facing out.

2. Place top-out bumpers and top out springs onto compression bolts and push through stanchions.
3. Press bottom-out bumpers onto compression bolts.
4. Install stanchions into the outer legs assemblies.
5. While holding the compression bolts with a 8mm hex key, install the dropout bolts with a 4mm hex key.
6. Install fork assembly into crown(s).
7. Install spacers into stanchions and then install MCU or spring stacks and adjuster caps. It may become necessary to loosen the crown bolts slightly to ease the installation of the adjuster caps.

Important: Make sure all bolts are torqued to manufacturer's specifications before continuing use of the fork.

Performance Adjustments

1. RST forks are designed to compress slightly when the rider sits on the bicycle in the normal riding position. This slight compression is called "sag". This allows the fork to track the ground better on uneven terrain, especially while cornering. Recommended sag is usually 15% to 20% of total travel and varies with rider weight, riding style, and terrain. More aggressive riders may want to decrease sag to allow more usable travel to absorb bump impacts. The easiest way to measure sag is to tie a zip tie around one stanchion and sit on the bicycle in the normal riding position. Then measure the distance the zip tie has moved up the stanchion from the wiper after the rider has gotten off the bicycle.
2. RST forks are setup stock for a rider weighing approximately 160 lbs (72.7kg) to 180 lbs (81.8kg) riding various terrain. The stock setup may be modified if the rider does not fit into these qualifications or prefers a different setup.
3. Turning the preload adjuster knobs on top of the fork clockwise will increase preload on the MCU and/or spring stack. This will stiffen the initial movement of the fork by stiffening the entire stack. Therefore, turning the adjuster counter-clockwise will soften the fork.

Important: Turning the preload adjuster knobs past their stops may strip the adjuster knob and cause premature failure.

4. If turning the adjuster knobs does not set sag to the desired setting, then the fork MCU and/or spring stack will need to be modified by using springs or MCU's with different spring rates. Be sure to make only one change at a time to accurately tune the fork. Drastic changes may make tuning impossible. See the chart for MCU and/or spring information.

MCU specifications:

Rate	Density	Color	Length (mm)
Soft	55	Blue	30
Soft	55	Blue	35
Soft	55	Blue	40
Soft	55	Blue	45
Medium	65	Tan	30
Medium	65	Tan	35
Medium	65	Tan	40
Medium	65	Tan	45
Firm	80	Pink	30
Firm	80	Pink	40
Firm	80	Pink	45

Spring information:

Rate	Color	Length (mm)
Soft	Blue	130
Soft	Blue	150
Medium	Natural	130
Medium	Natural	150
Medium Firm	Orange	130
Medium Firm	Orange	150
Firm	Red	130
Firm	Red	150

Maintenance and Inspection

Important: Proper care and maintenance of your RST product is necessary for longevity and optimum performance. Failing to perform normal maintenance will greatly decrease the performance of the product and may lead to premature deterioration of the product. Lack of maintenance may also jeopardize the safe operation of your fork and will void the warranty. Therefore it is imperative to follow the instructions prescribed in this manual. Always wear safety eyeglasses when working on RST products.

Lubricants and cleaners for proper maintenance:

- Biodegradable Degreaser
- Teflon Fortified Oil
- Silicon or Teflon Fortified Grease

Warning: Do not use a lithium-based grease because it may react with some internal parts of the fork and greatly reduce the performance of the fork.

Before every ride, inspect the following parts:

1. Front wheel for proper installation.
2. Fork for proper installation and any visible damage.
3. Front brake for proper installation of the caliper and proper lever pull.
4. Brake pads for proper contact with the rim.
5. Headset for proper adjustment.

Every week or 8-10 hours of riding or whenever the performance of the fork has deteriorated (whichever occurs first), perform the following procedures:

1. Check proper torque on the crown bolts, brace bolts, brake studs, and dropout bolts.
2. Apply a light amount of Teflon oil to the wiper and stanchions.

Every 4 weeks or 25-30 hours of riding or whenever the performance of the fork has diminished (whichever occurs first) follow these procedures:

1. Disassemble fork and thoroughly clean grease and residue from each part.
2. Inspect all parts for damage such as cracks, abrasions, and abnormal wear and tear. Replace parts immediately, if parts are damaged or excessively worn in any way. Discontinue use of this product until the damaged or worn parts have been replaced. If all the parts are in usable condition, proceed to step 3.
3. Apply a liberal amount of grease to the upper and lower bushings, stanchions, and wipers. Fill the wiper pockets with a generous amount of grease. Do not use a lithium-based grease as it may damage the bushing material.

Bushing Replacement:

In the event that the RST fork develops excessive play between the stanchion and outer leg, the bushings may need to be replaced.

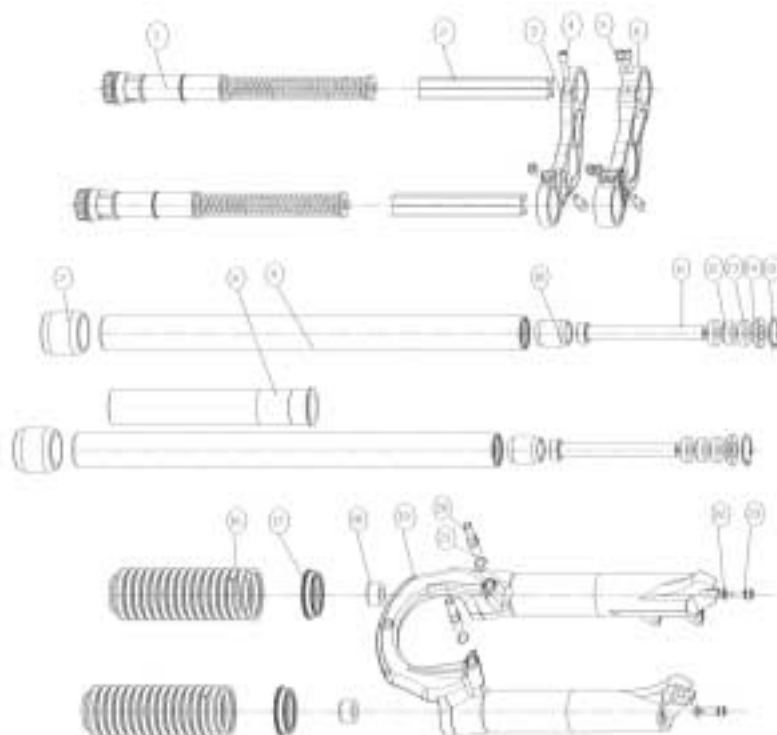
Important: Bushing replacement requires the use of special tools to remove and install the bushings. RST strongly recommends bushing replacement be performed by a qualified technician with the proper tools. Bushings installed improperly may lead to their premature failure and may result in loss of control of the bicycle that could result in possible serious and/or fatal injuries.

Troubleshooting

Problems	Causes	Solutions
Fork performance has deteriorated	Lack of proper maintenance	Refer to Maintenance and Inspection
Fork is "sticky" and moves slowly	Lack of lubrication	Refer to Maintenance and Inspection
Dark film on stanchion	Dry wiper/bushing	Refer to Maintenance and Inspection
Excessive play between stanchion and outer leg	Worn bushings	Replace bushings

DELTA-XE

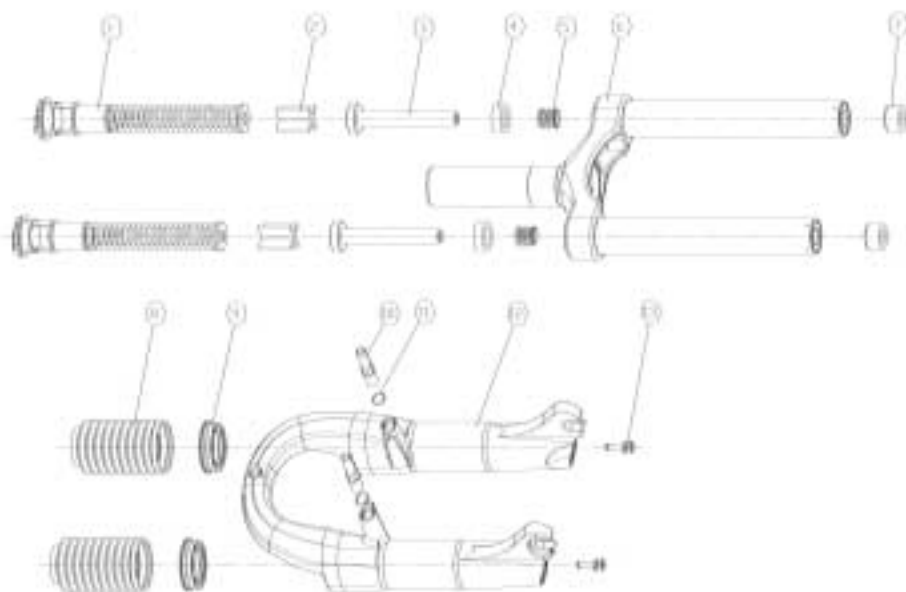
No	Description	Qty
1	MCU with coil spring string	2
2	X spacer	2
3	Upper crown	1
4	Bolt	3
5	Bolt	5
6	Lower crown	1
7	Stanchion bumper	2
8	Stem	1
9	Stanchion	2
10	Travel spacer	2
11	Compression rod	2
12	Top-out bumper	2
13	Bumper washer	2
14	Washer	2
15	C-ring	2
16	Boot	2
17	Dust wiper	2
18	Top-out bumper	2
19	Outer leg	1
20	Pivot	2
21	Washer	2
22	Washer	2
23	Bolt	2



SPRITE-TL

No Description Qty

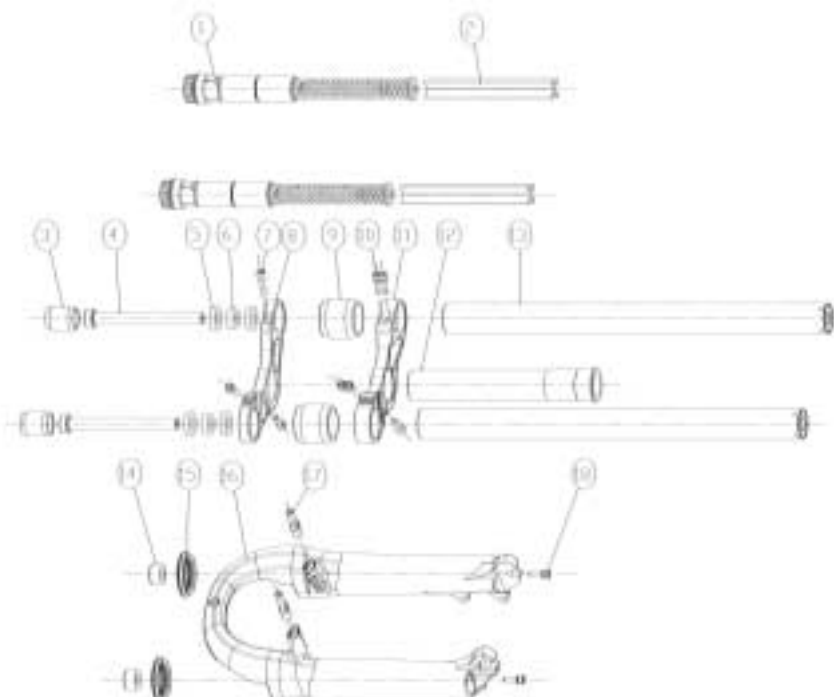
- 1 Coil spring string 2
- 2 X spacer 2
- 3 Compression rod 2
- 4 Top-out bumper 2
- 5 Rebound spring 2
- 6 Crown assembly 1
- 7 Top-out bumper 2
- 8 Boot 2
- 9 Dust wiper 2
- 10 Pivot 1
- 11 Washer 2
- 12 Outer leg 2
- 13 Bolt 2



GILA-XE

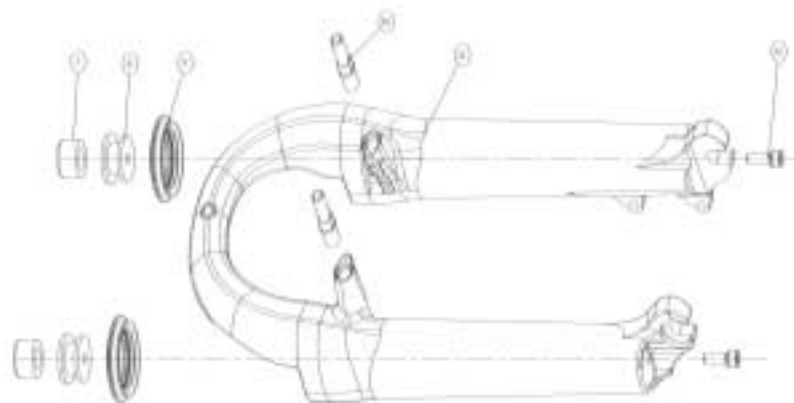
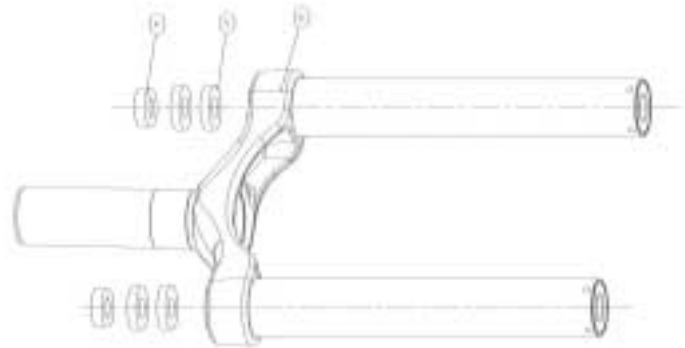
No Description Qty

- 1 MCU with coil spring string 2
- 2 X spacer 2
- 3 Travelspacer 2
- 4 Compression rod 2
- 5 Bumper washer 2
- 6 Top-out bumper 2
- 7 Bolt 3
- 8 Upper crown 1
- 9 Stanchion bumper 2
- 10 Bolt 5
- 11 Lower crown 1
- 12 Stem 1
- 13 Stanchion 2
- 14 Top-out bumper 2
- 15 Dust wiper 2
- 16 Outer leg 1
- 17 Pivot 2
- 18 Bolt 2



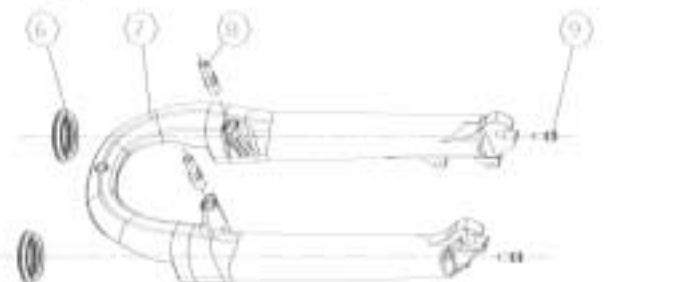
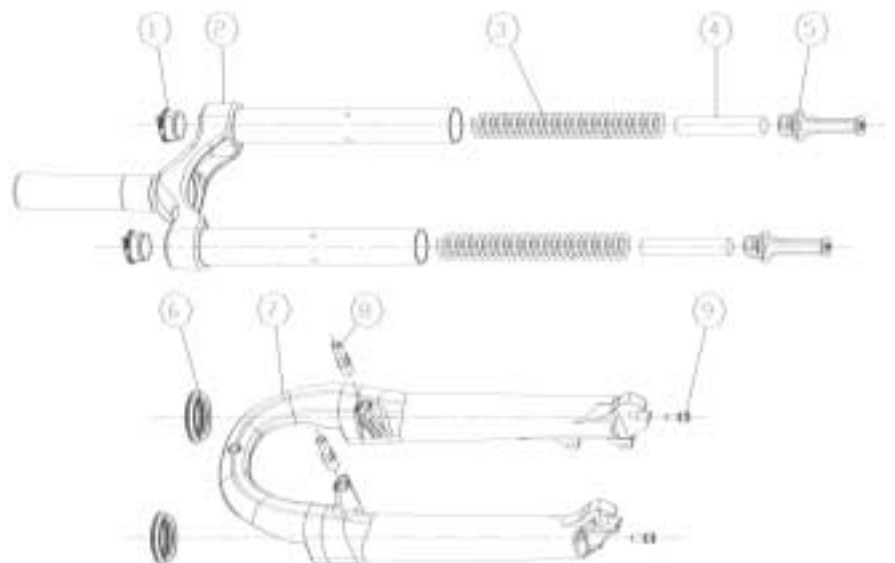
GILA-TL

No	Description	Qty
1	Coil spring string	2
2	X spacer	2
3	Compression rod	2
4	Bumper washer	2
5	Top-out bumper	2
6	Crown assembly	1
7	Top-out bumper	2
8	Bottom-out spacer	2
9	Dust seal	2
10	Pivot	2
11	Outer leg	1
12	Bolt	2



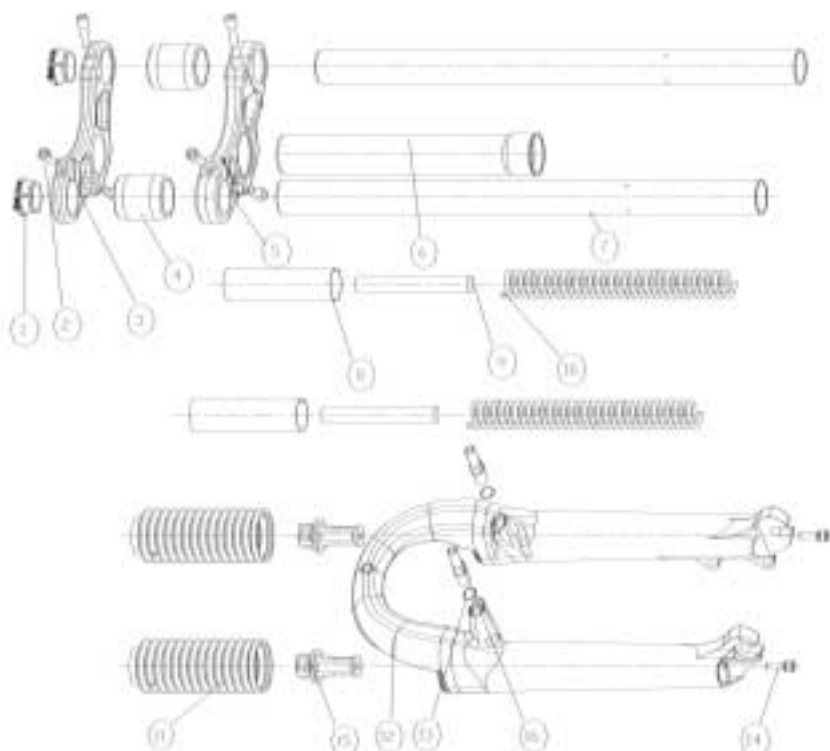
GILA-CL

No	Description	Qty
1	Dust cap	2
2	Crown assy	1
3	Spring	2
4	Spring insert	2
5	Lower spring guide	2
6	Dust seal	2
7	Outer leg	1
8	Pivot	2
9	Bolt	2



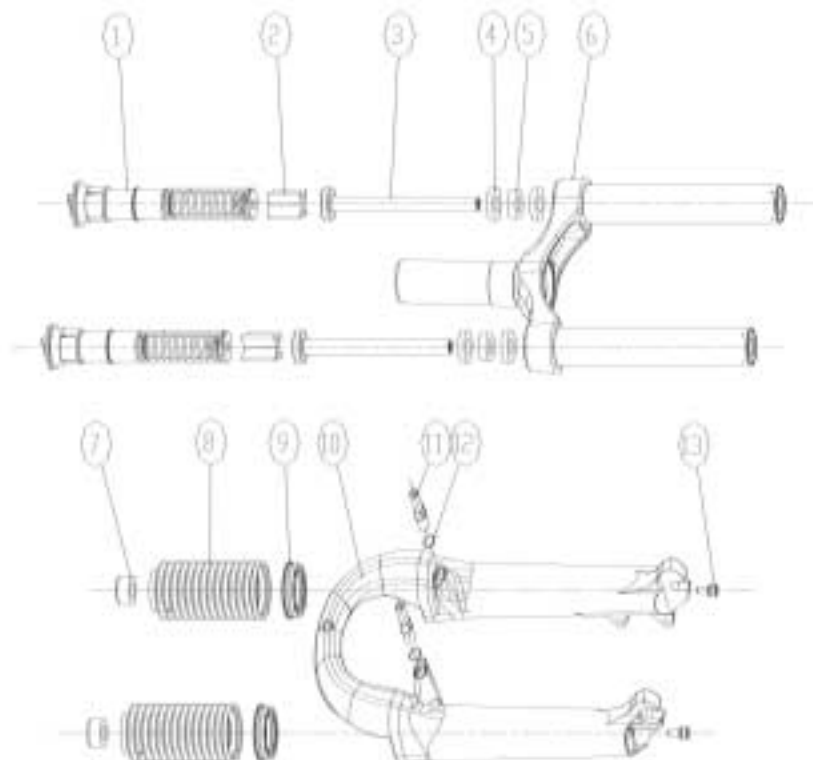
CAPA-XE

No	Description	Qty
1	Dust cap	2
2	Bolt	6
3	Upper crown	1
4	Stanchion bumper	2
5	Lower crown	1
6	Stem	1
7	Stanchion	2
8	Spring bushing	2
9	Spring insert	2
10	Spring	2
11	Boot	2
12	Outer leg	1
13	Washer	2
14	Bolt	2
15	Spring guide	2
16	Pivot	2



CAPA-TL

No	Description	Qty
1	Coil spring string	2
2	X spacer	2
3	Compression rod	2
4	Bumper washer	2
5	Top-out bumper	2
6	Crown assembly	1
7	Top-out bumper	2
8	Boot	2
9	Dust seal	2
10	Outer leg	2
11	Pivot	1
12	Washer	2
13	Bolt	2



CAPA-CL

No	Description	Qty
1	Dust cap	2
2	Crown assy	1
3	Spring bushing	2
4	Spring	2
5	Spring insert	2
6	Lower spring guide	2
7	Boot	2
8	Dust seal	2
9	Outer leg	1
10	Pivot	2
11	Washer	2
12	Bolt	2

