



2014
Technical Manual

2014-10-23

General Installation



INTRODUCTION

No two riders are alike. That's why at Rocky Mountain, our bikes are built according to different platforms for different riding styles. The bikes may be different, but they all share our commitment to quality and innovation; bikes that are built by people who love to ride for people who love the ride.

OUR MISSION

Our goal is simple: build a high-grade quiver of bikes that riders will love to ride. It's the approach we take when we design, test, and build our extreme freeride bikes, our road racers, or any of our city bikes.

Whether you're looking for that certitude and grit to stick that big drop on the North Shore, the faith that you can push just a little harder to win your category, or the peace of mind in knowing you have the reliability in your city bike to take you on your daily commute, you need to have confidence in your bike to really love the experience.

So, to ensure that every rider who rides a Rocky Mountain bicycle has the confidence that they have the best bike there is, we employ a higher standard of manufacturing. Visit our R&D design and testing facility in Vancouver, BC, Canada, and you'll see this adherence to quality for yourself.

General Installation



Scheduled Maintenance

In order to enjoy your Rocky Mountain bicycle to the fullest and to increase the service life of your parts, we recommend that you carry out scheduled maintenance on your bicycle.

The chart below states the recommended intervals for an average use of the bicycle:

	Every Ride	20 hrs	80 hrs
Check Tire Pressure	x		
Check Wheel QR / Axles	x		
Check Brake Function	x		
Inspect Frame for Damage	x		
Check Bolt Torque		x	
Inject Grease in Pivots (where applicable)		x	
Check Brake Pads		x	
Full Pivot Service			x
Inspect Chainring / Cog Wear/Chain Wear			x
Fork Service	As per fork manufacturer's specifications		
Rear Shock Service	As per shock manufacturer's specifications		

Please keep in mind that extreme dry (desert) or wet (rain forest or pressure washer) conditions warrant that you decrease the interval between full pivot service procedures.

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LUBRIFICATION

Grease is required where the bolts contacts metal such as a bearing or the frame. We strongly recommend *Bel-Ray waterproof grease*.

FRAME AND LINKAGE BEARING INSTALLATION

Warning: This is a difficult procedure that needs to be done by an experienced mechanic. Without a proper press and press-in tools parts can get damaged very easily. If there is any uncertainty understanding this procedure, contact Rocky Mountain Bicycles for assistance at: 1.800.663.2512

-To begin, ensure that all surfaces are clean, dry and free of any contaminants. It is recommended to use Loctite Primer 7649 on any linkage pieces and the bearings before installing bearings. This will speed the cure time but mostly will ensure proper cure of retaining compound.

-Once the primer is dry, apply Loctite Bearing Retaining Compound 638 or red or green Loctite or equivalent to each linkage piece just before each bearing is pressed in. Ensure that the bearings have completely bottomed out in the linkage before assembling linkage to frame.

Again, caution should be taken as these bearings need to be pressed in square to the pivot using proper tools.

IGUS BUSHINGS EXPLAINED

Rocky Mountain Bicycles have been using low maintenance IGUS Bushings for many years. They are used to assist the rotation of our custom 12mm thru-bolt hardware. There are 3 lengths of these bushings, 8, 10 and 15mm and all have a 12mm inside diameter with a 14mm outside diameter.

*** For the procedure to install ABC™ Igus Angular Contact Bushings found on Element, Thunderbolt, Instinct and Altitude, please see page 6 of this document.***

All IGUS bushing exterior surfaces must be greased. We strongly recommend **Bel-Ray waterproof grease**.

After washing the bike with water the bushing area should be sprayed lightly with WD-40 to disperse water, wiped clean to prevent dirt buildup and then re-greased. **Caution:** prolonged exposure to water can cause the bushings to swell.

General Installation



INSTALLATION

The process for installation and removal is quite simple. They are a mild friction fit and do not need any special tools to install or remove. To install the bushings, using a pivot thru-bolt works best. Slip the bushing with the round starter edge towards the frame over the thru-bolt, insert the thru-bolt with the bushing against the base of the bolt head and the round starter edge against the frame, into the pivot mount hole and tap lightly until the bushing is FLUSH with the face of the pivot mount. Once the bushings are installed, grease them with the recommended lubricant.

REMOVAL

Using a round metal dowel, gently punch the bushings through from the opposite side. Always replace with new bushings when re-installing.

SEATPOST INSERTION EXPLAINED

Seat post must be inserted at least 100mm (4 inches) on all full suspension frames for warranty to remain valid; this is to ensure maximum support of the saddle during riding.

HARDWARE AND TORQUE SPECIFICATION

All custom hardware (alloy thru-bolts, screws, and nuts) requires the use of LOCTITE 243 (blue) a medium strength thread-lock. The torque specification unless otherwise stated is 100 to 110 in*lbs or 11.3 to 12.4 N*m. Non custom hardware (steel bolts) requires the use of LOCTITE 243 (blue), a medium strength thread-lock. The torque specification unless otherwise stated is 60 to 80 in*lbs or 6.7 to 9.0 N*m.

General Installation



SUSPENSION SETUP

To maximize suspension performance, the sag (the amount the shock compresses under rider weight) must be set correctly. A good starting point is to inflate the rear shock with one psi per pound of rider body weight. We recommend the following sag percentages:

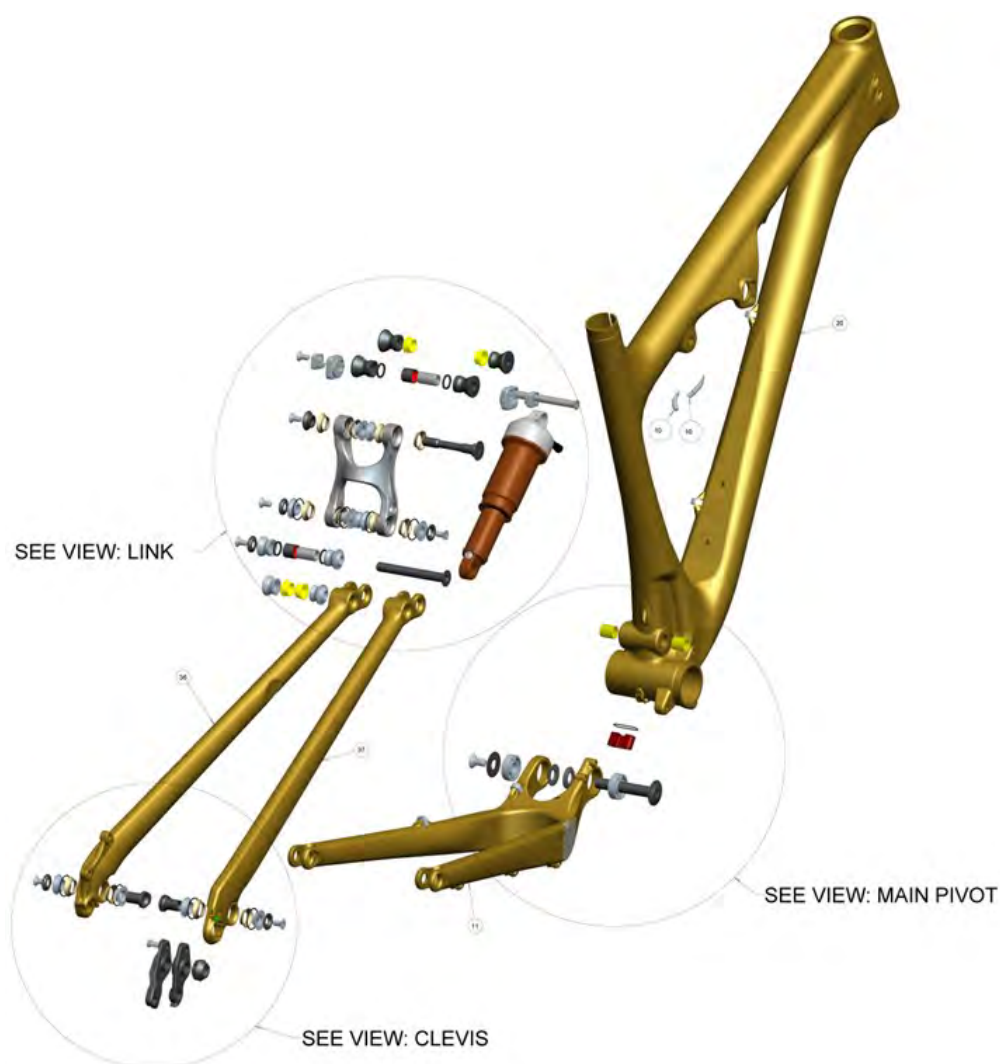
Platform	Sag %
Element	30%
Thunderbolt	25%
Instinct	
	25-30%
Altitude	25-30%
Slayer	25-30%
Slayer SS	25-30%
Flatline WC	25-30%

Please refer to your rear shock owner's manual for additional shock tuning information.

General Installation



ASSEMBLY INSTRUCTION FOR ABC BUSHING FRAMES (ELEMENT, THUNDERBOLT, ALTITUDE AND INSTINCT)



PREFACE

This next section is an example only, and intended to provide general information for the assembly of ABC bushing frame platforms.

At all times, the latest revision of the specific exploded Bill of Materials (B.O.M.) drawing shall be taken as current and accurate.

1.0 Hardware



1.1 "ONE---TOOL" HARDWARE

The bikes feature custom aluminum self-centering and countersunk hardware. With one-tool tightening, this system eases assembly and helps prevent the hardware from loosening off during a ride.

*Note: during assembly, make sure the keyed portion of the bolt is engaged and locked in place first, then tighten the screw.



Fig. 1.1.1 – Custom bolts



Fig. 1.1.2 – "One Tool" self centering, countersunk hardware.



1.2 ANGULAR BUSHING CONCEPT (ABC)

Some of the bikes feature ABC bushings for most moving pivots and a sleeve bushing with sealed ball bearings at the main pivot. This pivot system is expected to save approximately 80 grams over the previous design, by removing the cartridge bearings and instead using lightweight polymer bushings. This system minimizes wear and is significantly stiffer than normal ball bearings.

This system consists of 4 main parts, the ABC Bushings, Alloy Angular Contact Washers and the Alloy Through Bolt as seen in figures 1.2.1. and 1.2.2

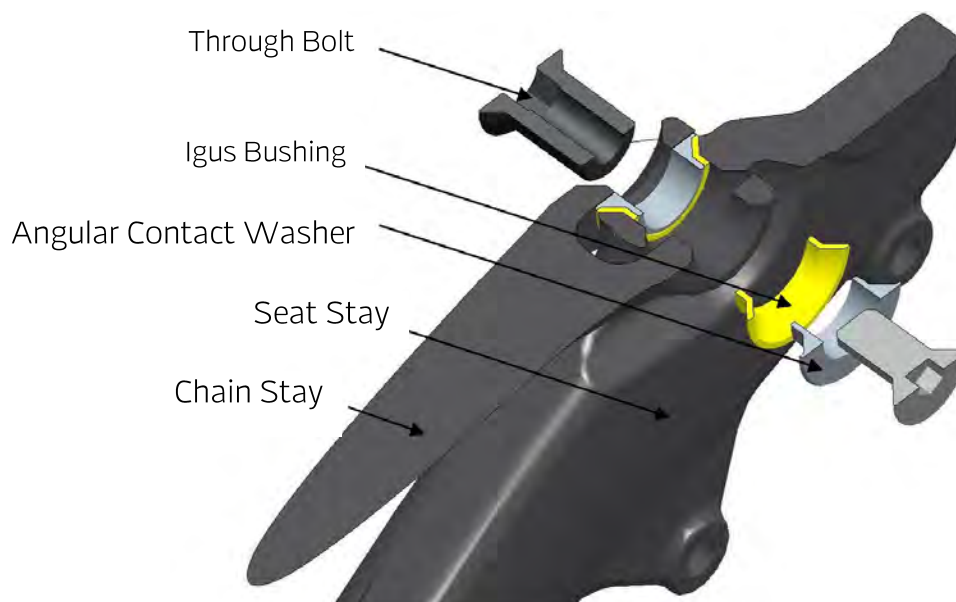


Figure 1.2.1 Chainstay / Seatstay pivot Cross-Section

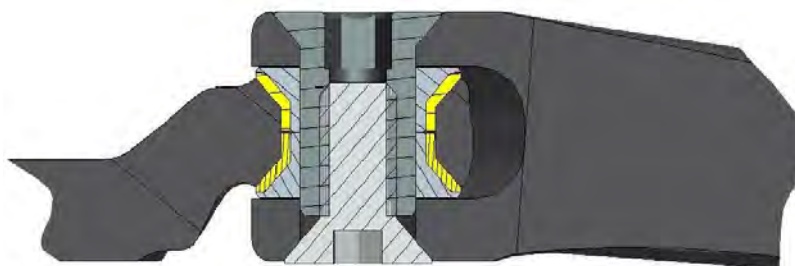


Figure 1.2.2 Chainstay / Seatstay pivot Cross-Section assembled

1.0 Hardware

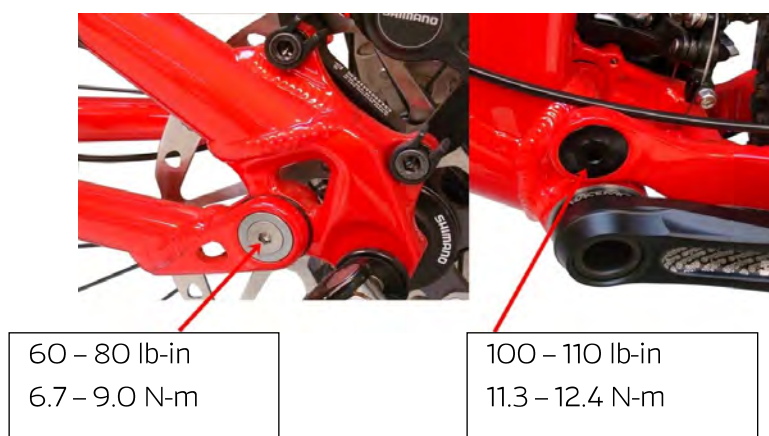
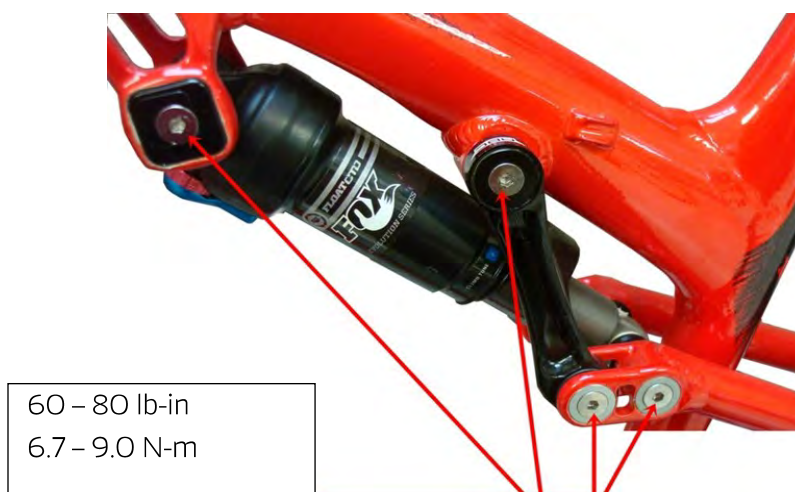


1.3 TORQUE SPECIFICATIONS

The following table states recommended torque specifications for a lubricated pivot assembly. Using a torque wrench, tighten fasteners to the following torque specs:

Fig. 1.3.1 Recommended tightening torque spec. (coated w. blue loctite 243).

Screw Material	Screw Size	Thread pitch	N-m	lb-in	Lb-ft	kg-cm
Stainless Steel (316)	M5	0.8	3.7 - 4.0	32 - 35	2.7 - 3.0	38 - 41
Stainless Steel (316)	M6	1.0	6.7 - 9.0	60 - 80	5 - 6.7	69 - 92
Steel Gr.10.9, Zinc plated	M6	1.0	6.7 - 9.0	60 - 80	5 - 6.7	69 - 92
AL7075-T6, Anodized	M8	1.25	11.3 - 12.4	100 - 110	8.3 - 9.1	115 - 126
AL7075-T6, Anodized	M10	1.25	14 - 22	125 - 200	10.4 - 16.6	144 - 230



1.0 Hardware



1.4 FASTENER ASSEMBLY

Assemble all fasteners with medium strength loctite 243 (blue) as a coating, to prevent galling of threads and/or backing off of the screws while riding.



Fig. 1.4.1 Apply enough Loctite 243 to evenly coat the threads of the screws



The first step in assembling the frame is to assemble the rear triangle. The following image shows the hardware required to assemble a complete frame.



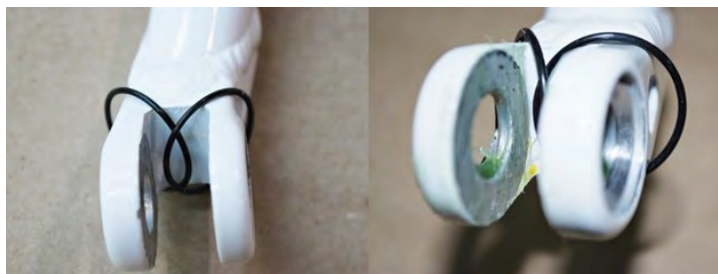
2.0 Frame Assembly



2.1 REAR TRIANGLE ASSEMBLY

The rear triangle is assembled in the following steps:

Prepare the chain stay for assembly by pre-positioning the O-rings and greasing the inner surfaces of the chain stay pivots.



Prepare the seat stays by pressing the bushings in dry.



Grease the bushings, place the ABC washers then grease them.



2.0 Frame Assembly



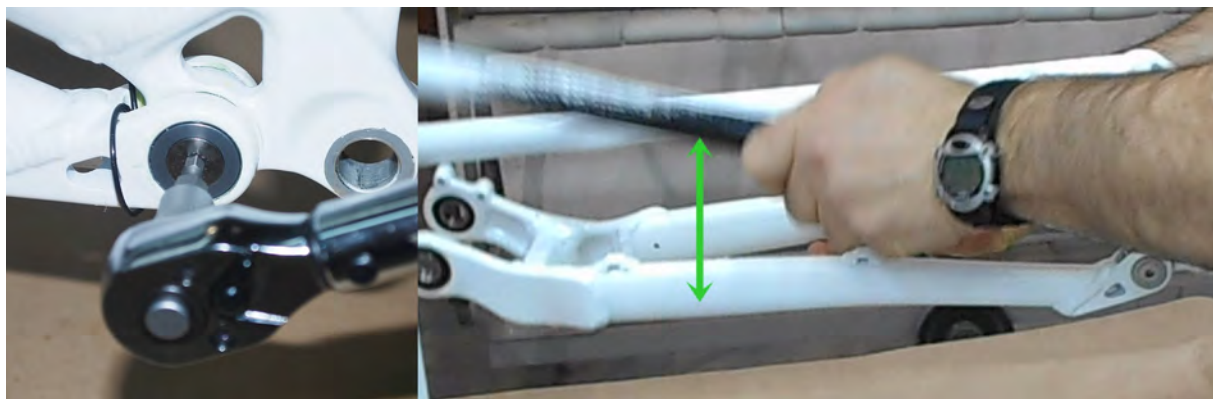
Assemble the chain stay and seat stays together making sure not to pinch the O-rings and then align the stays using the 9.7mm drift tool. Insert the "L" bolt into the chain stay.



Grease the conical washer then apply loctite 243 (blue) to the screw.



Tighten the screw and torque it to 60 - 80 in-lbs or 6.7 - 9.0 N-m. Afterwards position the O-rings and check that the seat stays move smoothly without any lateral play.



2.0 Frame Assembly



2.2 ASSEMBLING THE MAIN PIVOT

The rear triangle is assembled in the following steps:

Insert the sleeve bushing into the main pivot chamfered end first. These bushings have a much tighter tolerance than the previous version and will require more force to insert.



Grease the front triangle pivot surface and the chain stay bearing surfaces.



2.0 Frame Assembly



Place the angular washers onto the bearings with the washer's small diameter side facing the bearings and grease the washer. Slide the chainstay onto the main pivot while being careful not to drop the washers when positioning the parts. Then align both parts with the 11.7mm drift tool



Insert the main pivot bolt making sure that it is well greased and apply loctite 243 (blue) to the screw.



Then tighten the screw and torque it to 100 - 110 in-lbs or 11.3 – 12.4 N-m.



2.0 Frame Assembly



2.3 ATTACHING THE REAR SHOCK TO THE SEAT STAYS (ALTITUDE / INSTINCT)

Insert the shock bolt into the drive-side seat stay, and then place a greased shock spacer onto the bolt with the conical face towards the seat stay.



Place the rear shock with the adjustments facing forward and downwards onto the bolt and then place the second greased shock spacer onto the bolt with the conical face towards the non-drive-side seat stay.



2.0 Frame Assembly



Now fully insert the shock bolt and then place a greased conical washer onto the non-drive-side seat stay.



Apply Loctite 243 to the screw and torque it to 60 - 80 in-lbs or 6.7 - 9.0 N-m .



2.0 Frame Assembly



2.4 ATTACHING THE LINK TO THE SEAT STAYS (ALTITUDE/ INSTINCT)

Press 8 bushings dry into the link as shown below. Grease the 4 lower bushings, install the 4 ABC washers and grease them as well.



Place 2 O-rings onto each seat stay as shown and then grease all faces of the seat stays.



Position the link onto both stays making sure not to pinch the O-rings and align the stays using the 9.7mm drift tool. Then insert the sleeve bolts from the inboard side of both of the seat stays .



2.0 Frame Assembly



Place a greased conical washer onto each seat stay then apply Loctite 243 to the screw and torque it to 60 - 80 in-lbs or 6.7 - 9.0 N-m.



Position the O-rings over the ABC washers as shown below.



2.0 Frame Assembly



2.5 ATTACHING THE LINK TO THE TOP TUBE (ALTITUDE/INSTINCT)

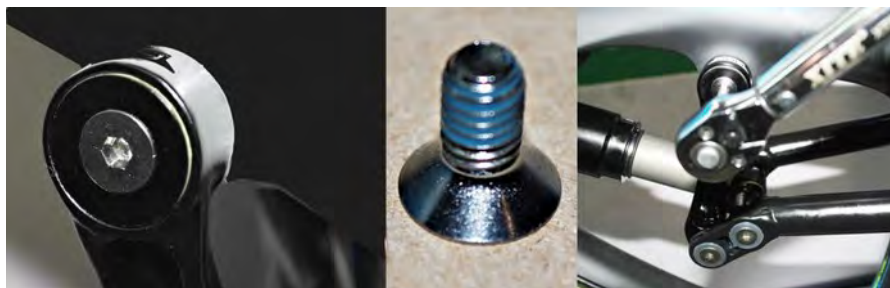
Grease the 2 inboard bushings, then place 2 ABC washer onto them. Grease the outside surfaces of the 2 washers and the top tube pivot surfaces. Position the link over the top tube pivot and align with the 9.7mm drift tool.



Grease the outboard bushings, then insert the top tube pivot sleeve bolt into the link from the drive side.



Position the counter-sunk ABC washer then apply Loctite 243 to the screw and torque it to 60 - 80 in-lbs or 6.7 - 9.0 N-m.



2.0 Frame Assembly

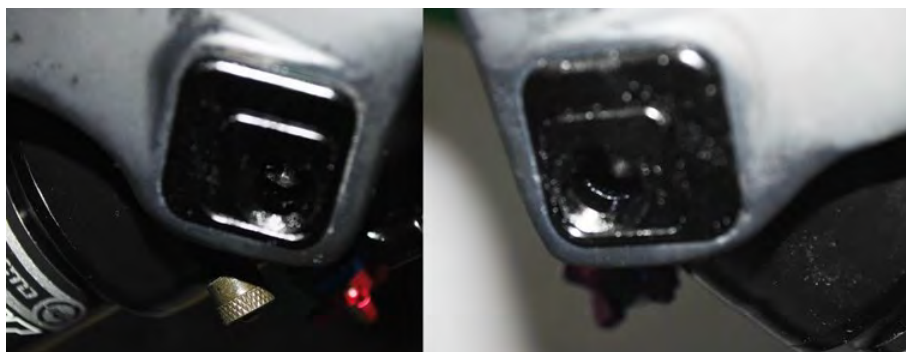


2.6 ATTACHING THE REAR SHOCK TO THE RIDE-9 SYSTEM (ALTITUDE/INSTINCT)

Grease the shock spacers and position them on the rear shock then pre-align them with the Ride-9 system.



Install the Ride-9 chips making sure that the shock bolt hole has the same orientation on both sides.



Insert the 7.7mm drift tool from the non-drive-side to align the shock eye then insert the top shock bolt from the drive side.



2.0 Frame Assembly



Tighten the screw then torque it to 60 - 80 in-lbs or 6.7 - 9.0 N-m. Do not put Loctite on this screw as you will possibly change your bike's geometry regularly.



2.0 Frame Assembly



2.7 ATTACHING THE REAR SHOCK AND THE LINK TO THE SEAT STAY (ELEMENT/THUNDERBOLT)

The major difference between the Altitude/Instinct frame shown previously and the Element/Thunderbolt is that the Element/Thunderbolt frame has a single clevis on the seat stays and both the shock and the link are attached to it. There is also the absence of the Ride-9 system.



Press 8 bushings dry into the link, they should be a snap-fit. Then grease the 4 lower bushings and place 4 ABC washers on them. Grease the outside surface of the washers and place an O-ring on the inward facing ABC washers.



2.0 Frame Assembly



Place an O-ring on the outward facing clevis of each seat stay and grease all surfaces.



Grease both sides of the lower shock spacers and place them on the shock then carefully position the shock between both seat stays keeping enough pressure on the seat stays to hold the shock in place. An adjustable strap such as a toe-clip strap or a plastic tie-strap can be used for this.



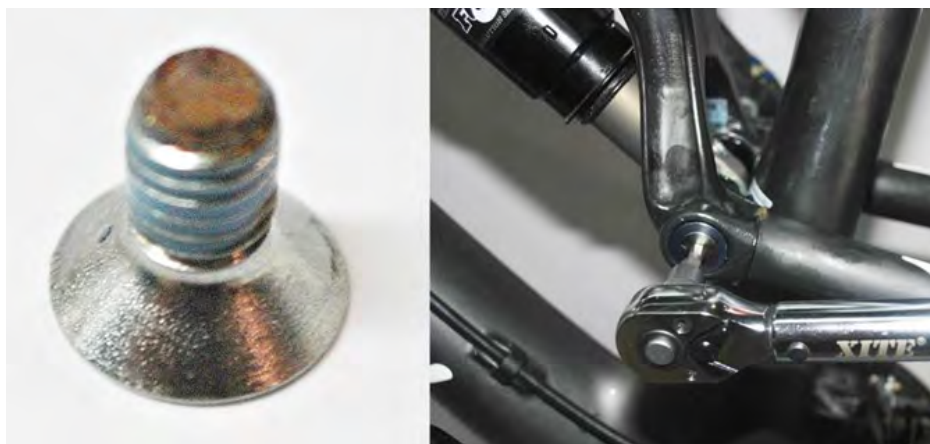
2.0 Frame Assembly



Insert the lower portion of the link into the seat stays, being careful to keep the ABC washers and inboard O-rings in place. Insert the 9.7mm drift tool to align the link and shock together then insert the lower shock bolt from the drive side.



Place a greased conical washer onto the non-drive-side seat stay then apply Loctite 243 to the screw and torque it to 60 - 80 in-lbs or 6.7 - 9.0 N-m.



2.0 Frame Assembly

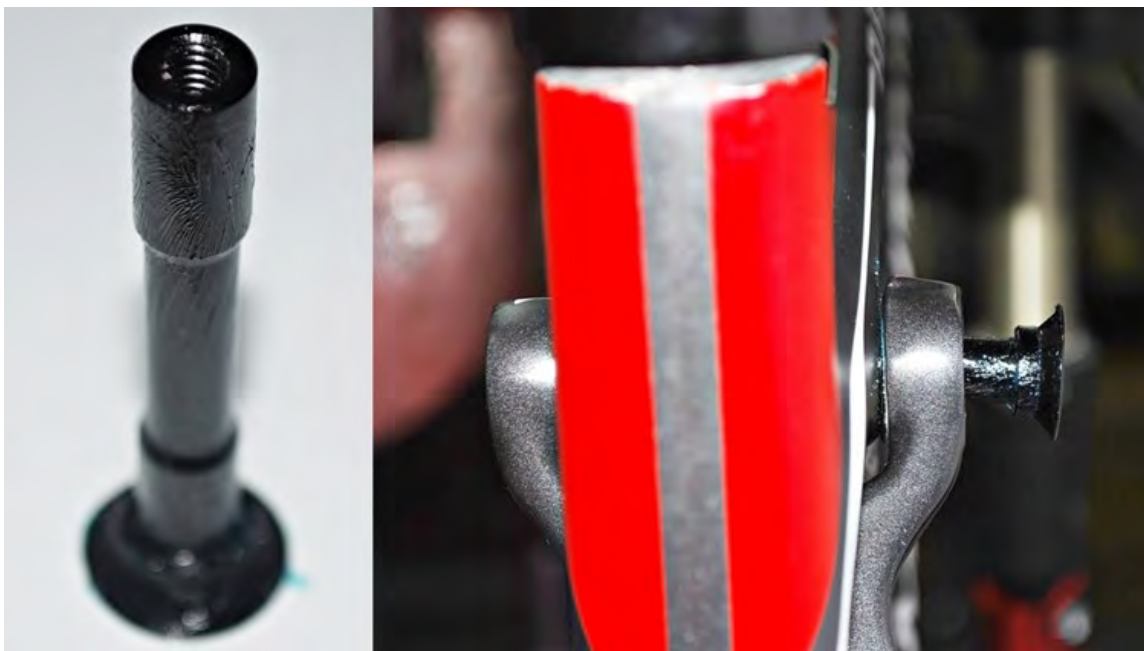


2.8 ATTACHING THE LINK TO THE TOP TUBE (ELEMENT/THUNDERBOLT)

Grease the 2 inboard bushings, then place 2 ABC washers on them and grease the outer surfaces of the ABC washers. Position the link on the top tube then insert the 9.7mm drift tool to align the parts.



Grease the sleeve bolt and insert it from the drive side into the link and top tube.



2.0 Frame Assembly



Grease the non-drive-side bushing and place a counter-sunk ABC washer onto it.



Apply Loctite 243 to the screw and torque it to 60 - 80 in-lbs or 6.7 - 9.0 N-m.



2.0 Frame Assembly

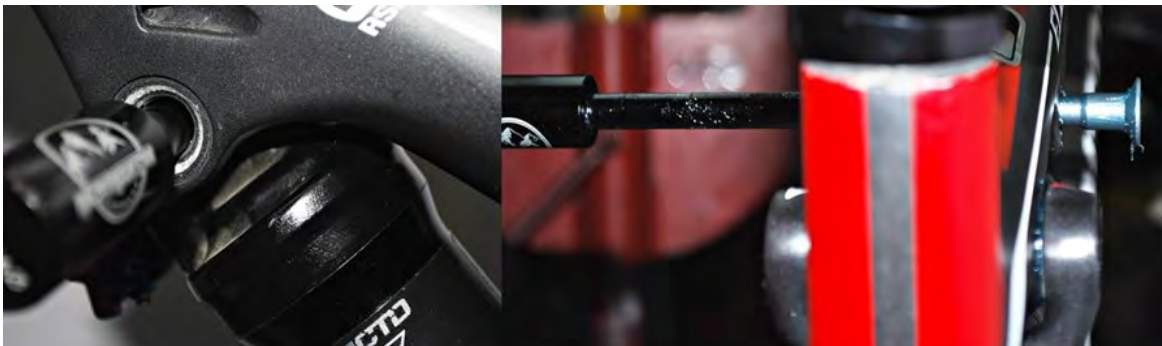


2.9 ATTACHING THE REAR SHOCK TO THE TOP TUBE (ELEMENT/THUNDERBOLT)

Grease the inside of the forward shock spacers, and place them on the shock. Grease the outside of the shock spacers.



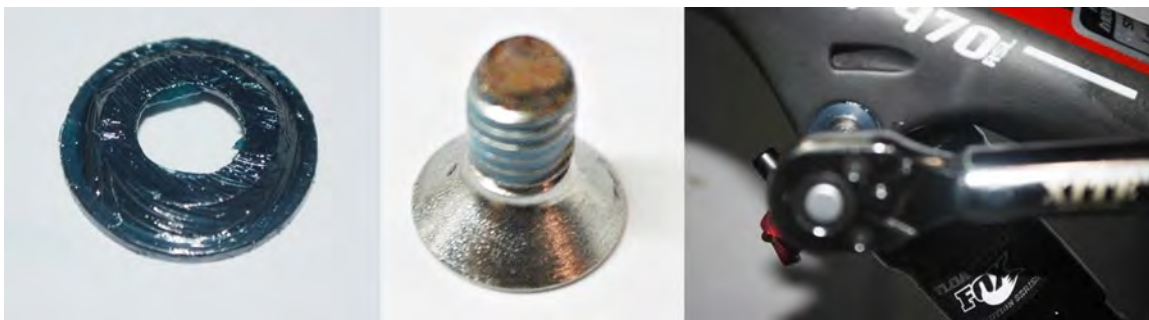
Position the forward end of the shock between the top tube pivots and then insert the 9.7mm drift tool to align the parts. Insert the greased sleeve bolt into the pivot from the drive side.



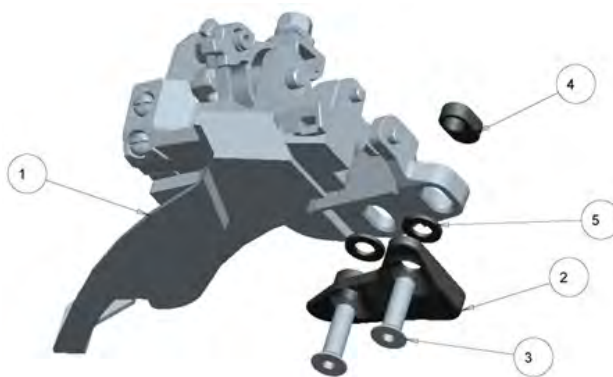
2.0 Frame Assembly



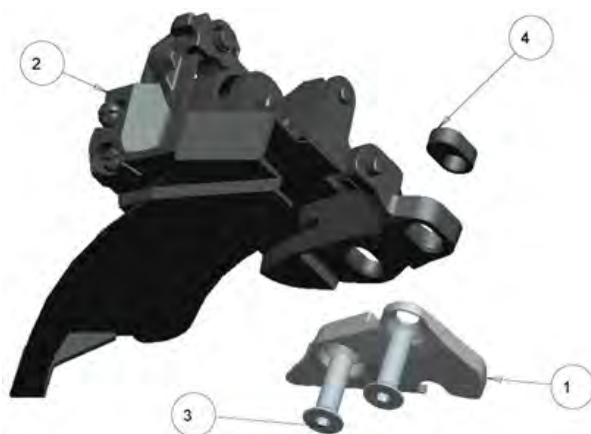
Place a greased conical washer on the non-drive-side, then apply Loctite 243 to the screw and torque it to 60 - 80 in-lbs or 6.7 - 9.0 N-m.



FRONT DERAILLEUR KITS



SHIMANO 2-SPEED FRONT DERAILLEUR KIT FOR 39T/27T CRANK ONLY			
#	QTY	PART NO.	DESCRIPTION
1	1	N/A	SHIMANO E-MOUNT FD, 2 SPEED.
2	1	1091042PMG	2-SPEED SHIMANO ANTI-CHAINDROP PLATE, E-MOUNT, AL6061-T6
3	2	180565FBY-018	FLAT HEAD C'SUNK SOCKET SCREW, M5-0.8 X 16mm
4	1	180473	E-TYPE FD SLOT SPACER, FOR THRU BOLT; AL6061
5	2	180049FBY	STEEL WASHER, M8, ZP, M5.

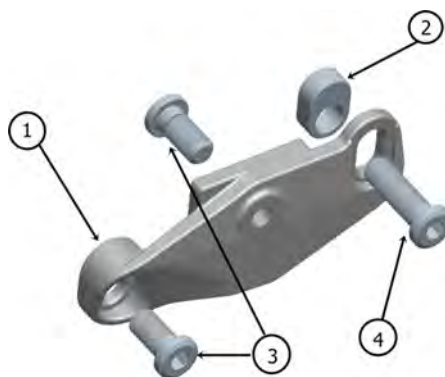


SHIMANO 3-SPEED FRONT DERAILLEUR KIT			
#	QTY	PART NO.	DESCRIPTION
1	1	1091040	ANTI-CHAINDROP PLATE, DIRECT E-MOUNT, AL6061-T6, HARD BLACK ANO
2	1	N/A	FRONT DERAILLEUR, 3-SPEED, E-TYPE, WITHOUT BB PLATE
3	2	180565FBY-018	FLAT HEAD C'SUNK SOCKET SCREW, M5-0.8 X 16mm
4	1	180473	E-TYPE FD SLOT SPACER, FOR THRU BOLT; AL6061

FRONT DERAILLEUR KITS

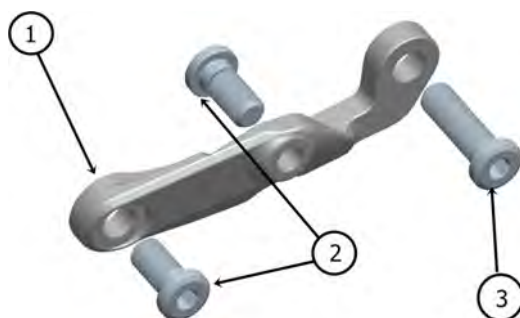


SRAM 2-SPEED & 3-SPEED FRONT DERAILLEUR KIT			
#	QTY	PART NO.	DESCRIPTION
1	1	180573PMG	E-TYPE FD SPACER, FOR SRAM; AL6061-T6. OD:8.5; ID:5.2; T:4.
2	2	180574FBY	DOMED HEAD CAP SCREW, M5X20MM. ZINC PLATED FABORY
3	1	N/A	SRAM E-MOUNT FD. 2-SPEED OR 3-SPEED

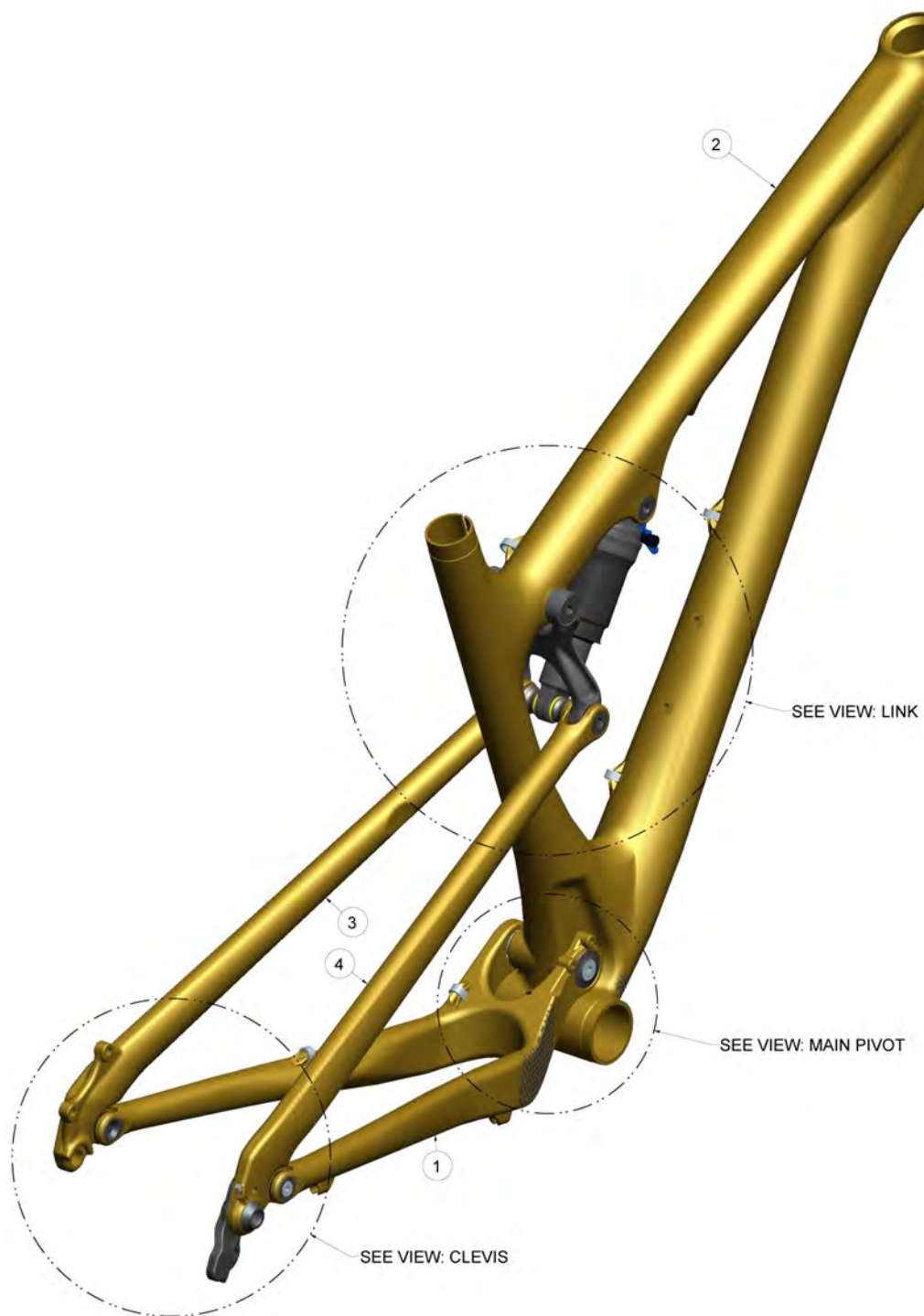


SLAYER KIT FOR SHIMANO 2-SPEED FRONT DERAILLEUR			
#	QTY	PART NO.	DESCRIPTION
1	1	1091019AST	E-TYPE F DER PLATE BOLT ON FOR SHIMANO
2	1	180473	E-TYPE FD SLOT SPACER, FOR THRU BOLT; AL6061
3	2	180474-010	FLAT HEAD C'SUNK SOCKET SCREW, M5-0.8 X 10mm
4	1	180474-016	FLAT HEAD C'SUNK SOCKET SCREW, M5-0.8 X 16mm

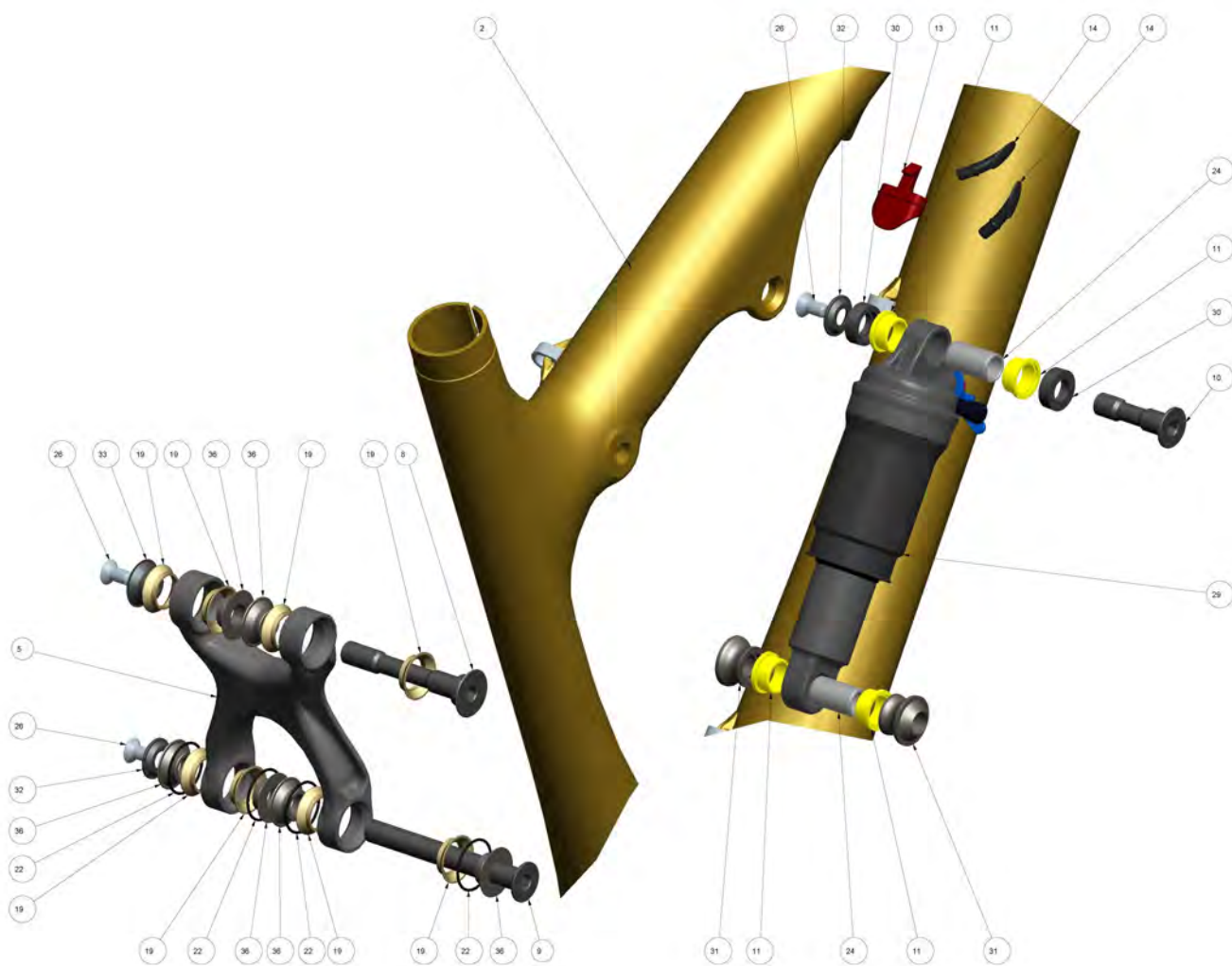
FRONT DERAILLEUR KITS



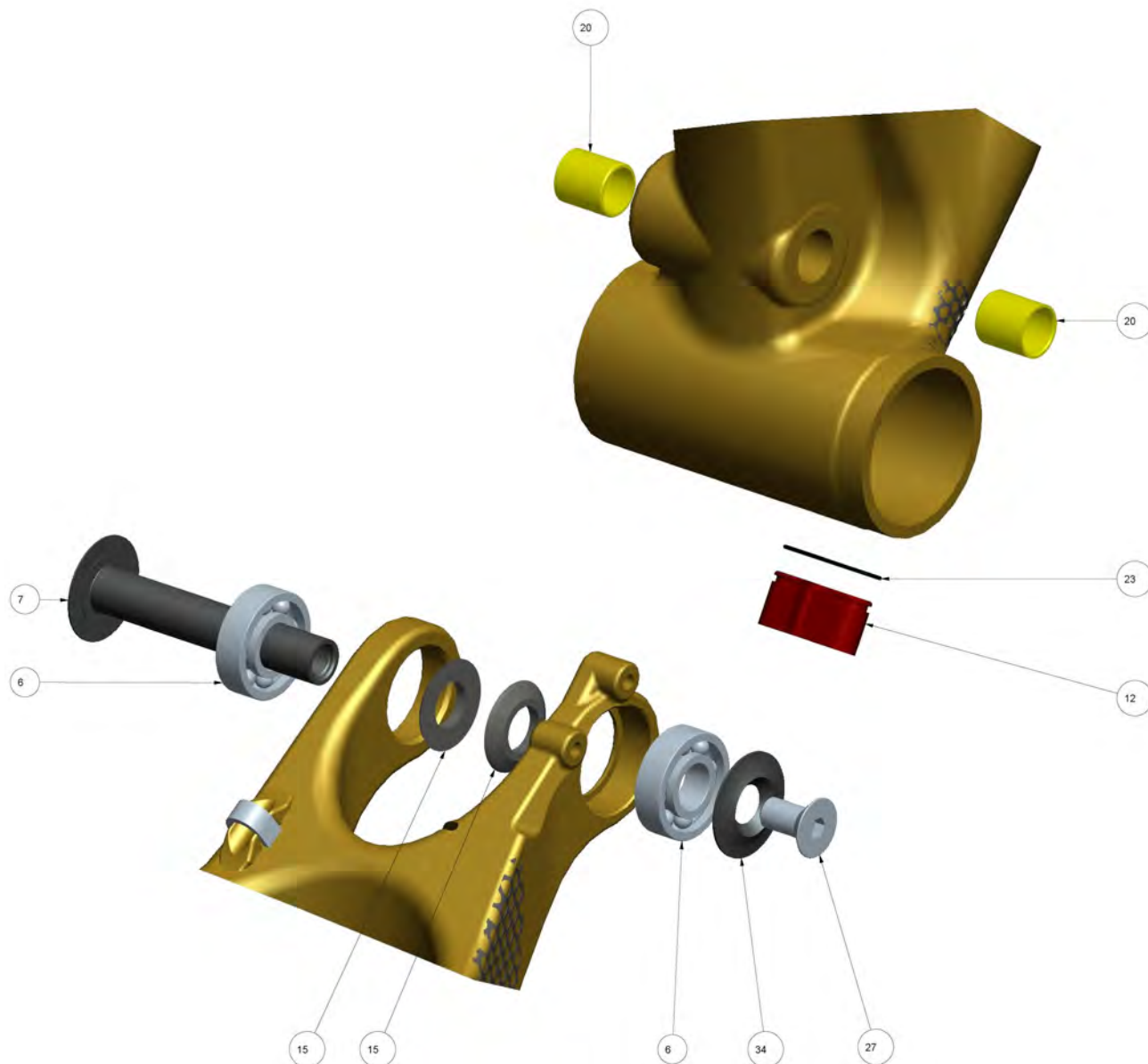
SLAYER KIT FOR SRAM 2-SPEED FRONT DERAILLEUR			
#	QTY	PART NO.	DESCRIPTION
1	1	1091028	E-TYPE FD SPACER, FOR SRAM; AL6061-T6. OD:8.5; ID:5.2; T:4.
2	2	180474-010	FLAT HEAD C'SUNK SOCKET SCREW, M5-0.8 X 10mm
3	1	180474-016	FLAT HEAD C'SUNK SOCKET SCREW, M5-0.8 X 16mm



LINK VIEW

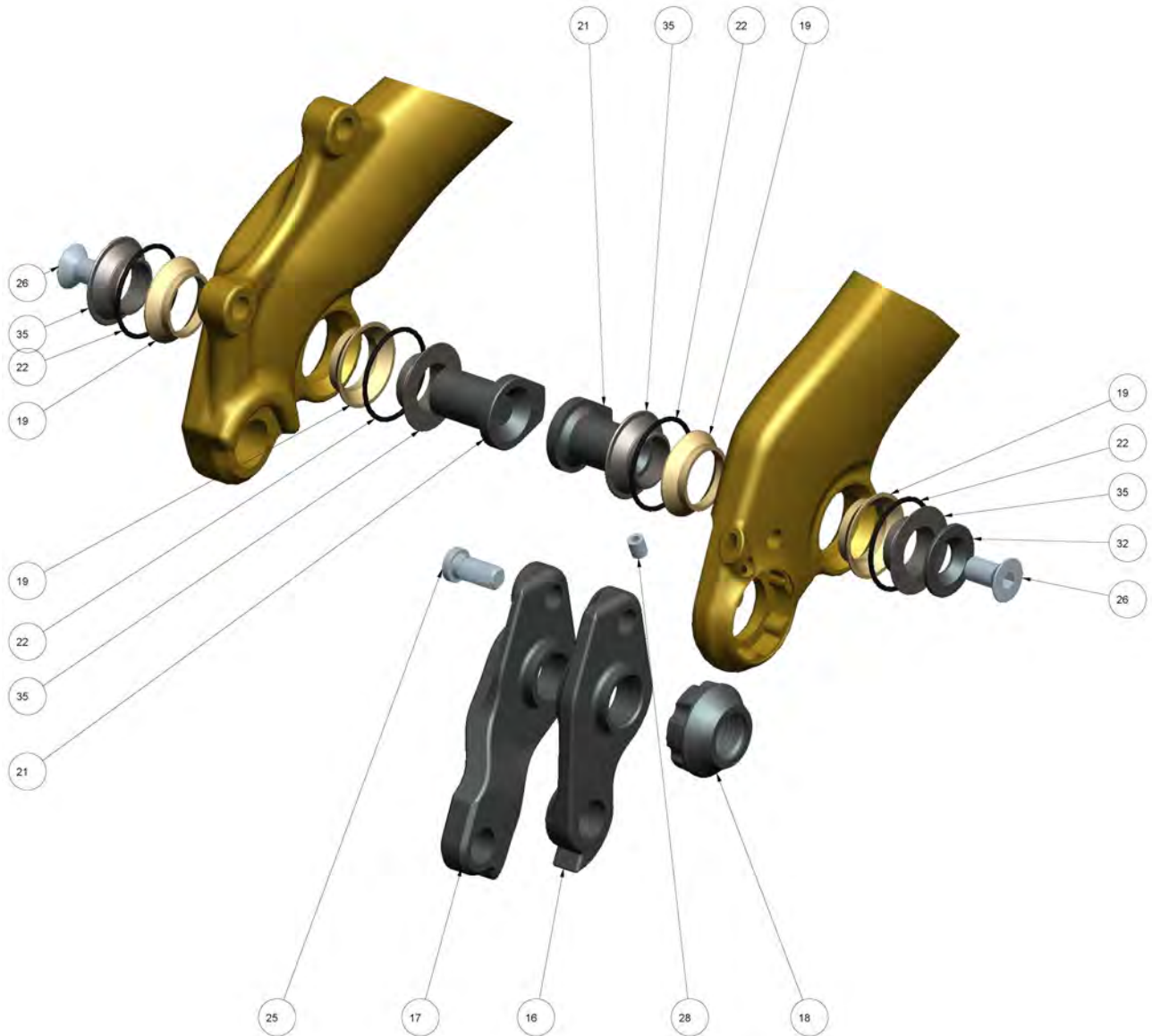


MAIN PIVOT VIEW





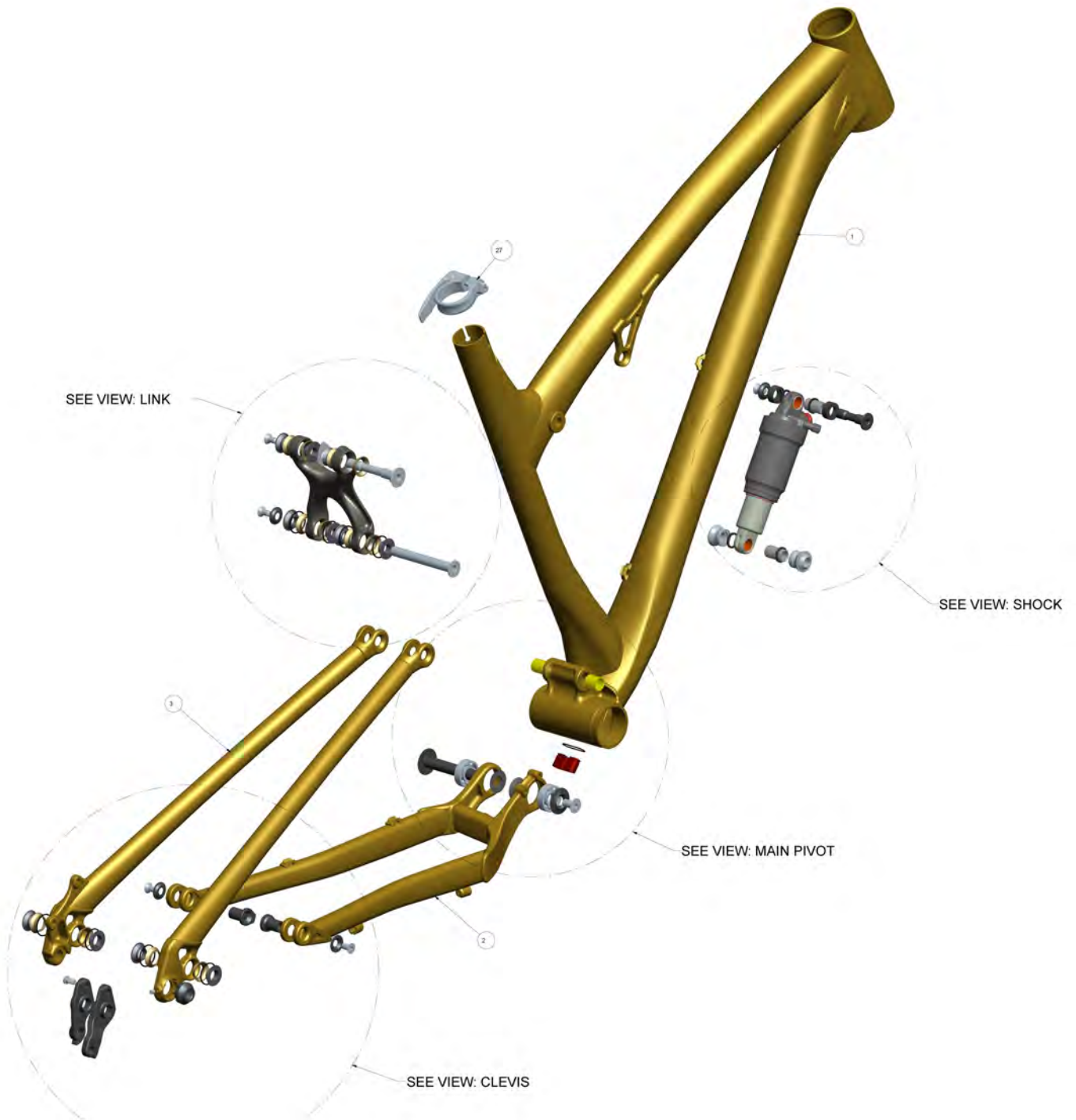
CLEVIS VIEW





Item #	QTY	PART NO.	DESCRIPTION
1	1	1053150PMG	2013 ELEMENT 29 CARBON CHAINSTAY
2	1	1063231PMG	2013 ELEMENT 29 CARBON FRONT TRIANGLE, SIZE 17.0"
3	1	1053179PMG	2013 ELEMENT 29 CARBON SEAT STAY, LEFT
4	1	1053180PMG	2013 ELEMENT 29 CARBON SEAT STAY, RIGHT
5	1	1092182	ELEMENT ALLOY 1-PIECE TOP LINK, 95MM LONG.
6	2	181063	BEARING - 12X28X8; 6001-2RS
7	1	180466-070	28mm FLANGE HD, THRU. BLT; INTERNAL M8X1.25 - OD:12X70mm
8	1	180492 UAT	C'SUNK HD, THRU BOLT. OD:12MM X 68, INT. M6 THREAD, AL7075-T6, HARD BLACK ANO.
9	1	180496 UAT	C'SUNK HD, THRU BOLT. OD:10MM X 85, INT. M6 THREAD, AL7075-T6, HARD BLACK ANO.
10	1	180527	ELEM WC SHOCK BOLT, OD:10MM, L: 41MM. AL7075-T6 HARD BLACK ANO
11	4	N/A	FOX_IGUS_BUSHING
12	1	1092019	INTERNAL CABLE STOP INSERT, AL7005, HARD BLACK ANO.
13	1	1093000	INTERNAL CABLE TOP TUBE RUBBER INSERT
14	2	1093001	INTERNAL CABLE PORT PLUG, RUBBER
15	2	180545	CONICAL WASHER - ID, 12MM, OD-24, 3.0MM THK.
16	1	1092020	DER. HANGER: (FOR SHIMANO 12mm X 142mm O.L.D.), HARD BLACK ANO.
17	1	1093002	DER. HANGER: (FOR SHIMANO 12mm X 142mm O.L.D.) DIRECT MOUNT., HARD BLACK ANO.
18	1	180448	2011 SLAYER: RH DROPOUT NUT SHIMANO 142mm HARD BLACK ANO.
19	12	1805444 IGS	IGUS ANGULAR CONTACT BEARING, J3
20	2	1804016 IGS	BUSHING - IGUS i-glide J350-1214-15: ID:12, OD:14, L:15
21	2	180463-021	KEY HD C'SUNK "L" BOLT - INT M6-1.0 THREAD; OD:12mm X 21mm; AL7075-T6, HARD BLACK
22	8	180543	O-RING, ID 20MM, W:1.25. NITRILE.
23	1	180572	O-RING ID:14MM, W:1.5MM, NITRILE RUBBER
24	2	111989 FOX	SHOCK PIN: ID:10 x 22.2mm LONG; STAINLESS STEEL
25	1	180487-012	CUSTOM LOW FLAT HEAD SHOULDER SCREW; M6-1.0 X 12mm; STAINLESS STEEL
26	5	180566-012 FBY	FLAT HEAD C'SUNK SOCKET SCREW, M6-1.0 X 12mm, A4/316 SS, 55060.060.012
27	1	180567-016 FBY	FLAT HEAD C'SUNK SOCKET SCREW, M8-1.25 X 16mm, A4/316 SS, 55060.080.016
28	1	180571 FBY	SET SCR., FLT. PT., M4 x 0.7 x 5mmL. ZINC PLATED. 07860.040.006
29	1	N/A	REAR SHOCK. 22.2 X M10 STEEL PINS FRONT/REAR.
30	2	3113000	SHOCK SPACER, FOR FOX IGUS, FRONT. AL7075-T6, HARD BLACK ANODIZE.
31	2	3113001	SHOCK REDUCER, REAR, FOR FOX IGUS., AL7075-T6, HARD BLACK ANODIZE.
32	4	180476 AST	C'SUNK WASHER: (for M6 screw) ID:6 x OD:18 x 3.0mm THK.
33	1	180494UAT	WASHER FOR ANGULAR POLY. BRG. HARD BLACK ANO
34	1	180499AST	BEARING CAP - OD:28 M8, AL6061-T6. HARD BLACK ANO
35	4	180490PMG	WASHER FOR ANGULAR POLY. BRG. HARD BLACK ANO
36	6	180493UAT	WASHER FOR ANGULAR POLY. BRG. HARD BLACK ANO

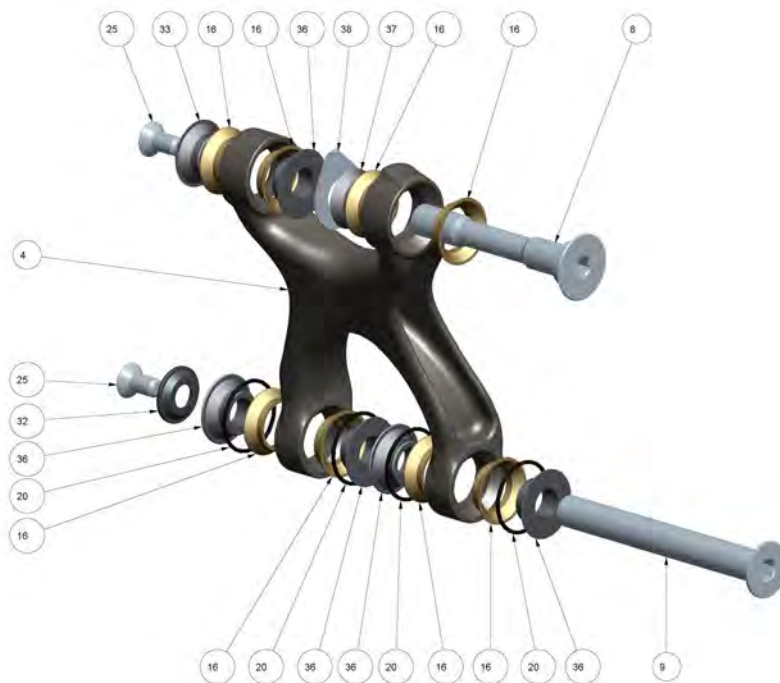
ELEMENT ALLOY



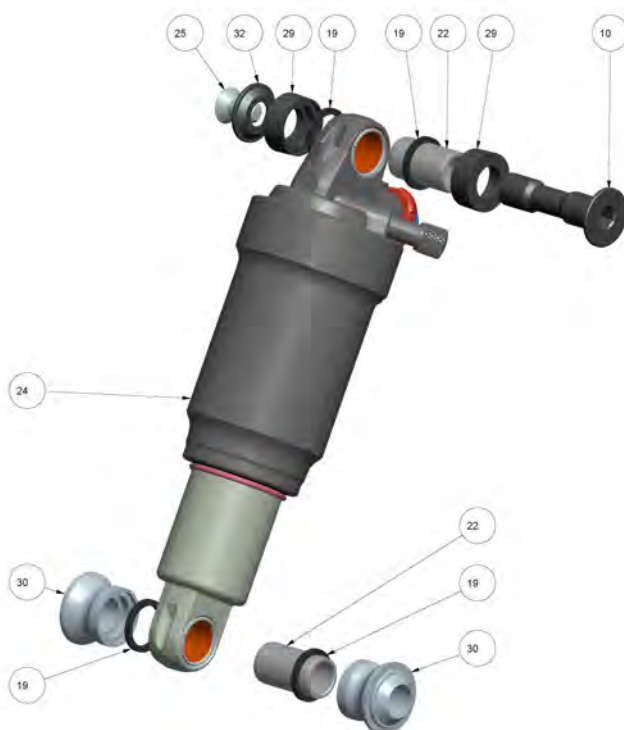
ELEMENT ALLOY



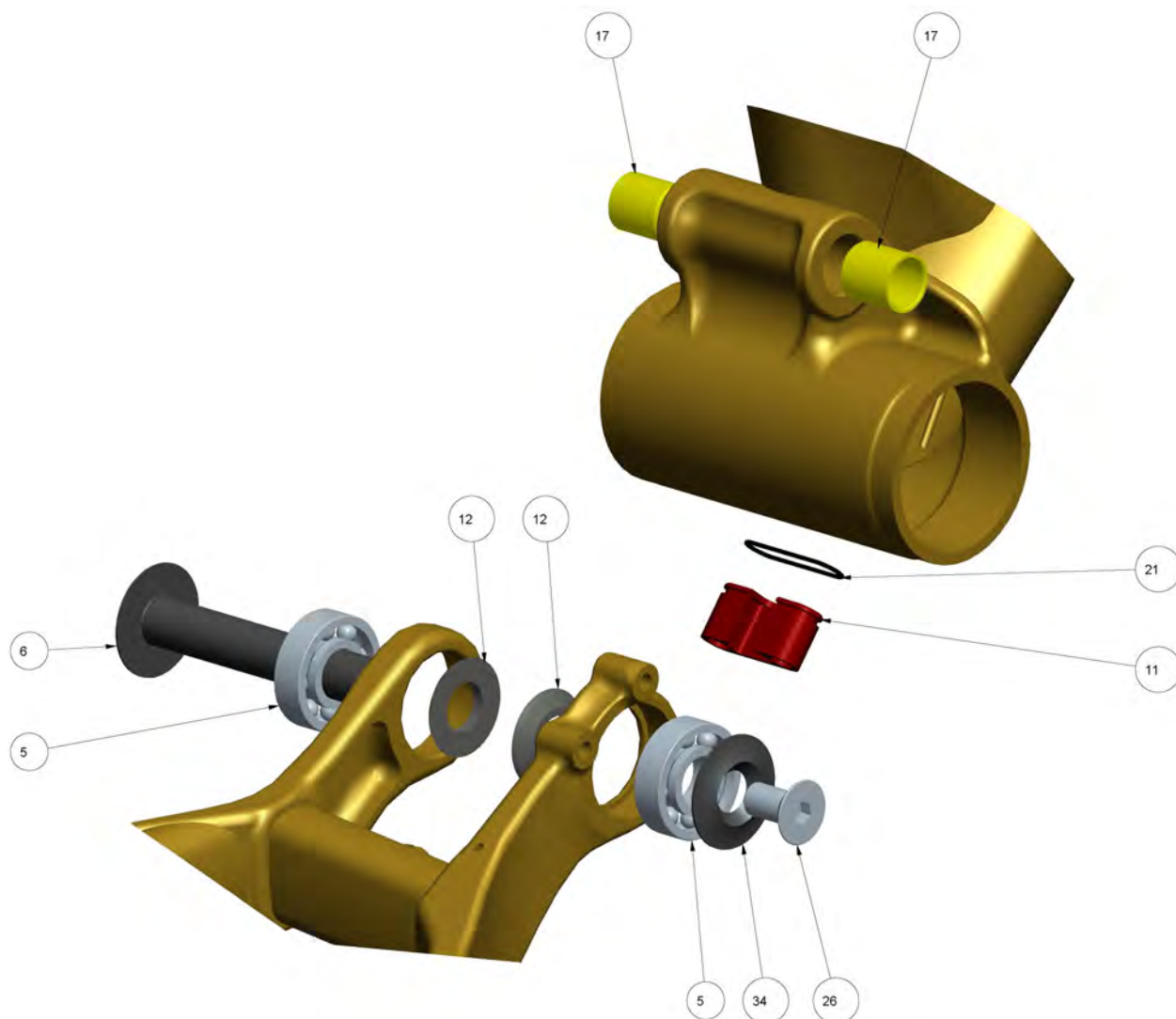
LINK VIEW



SHOCK VIEW



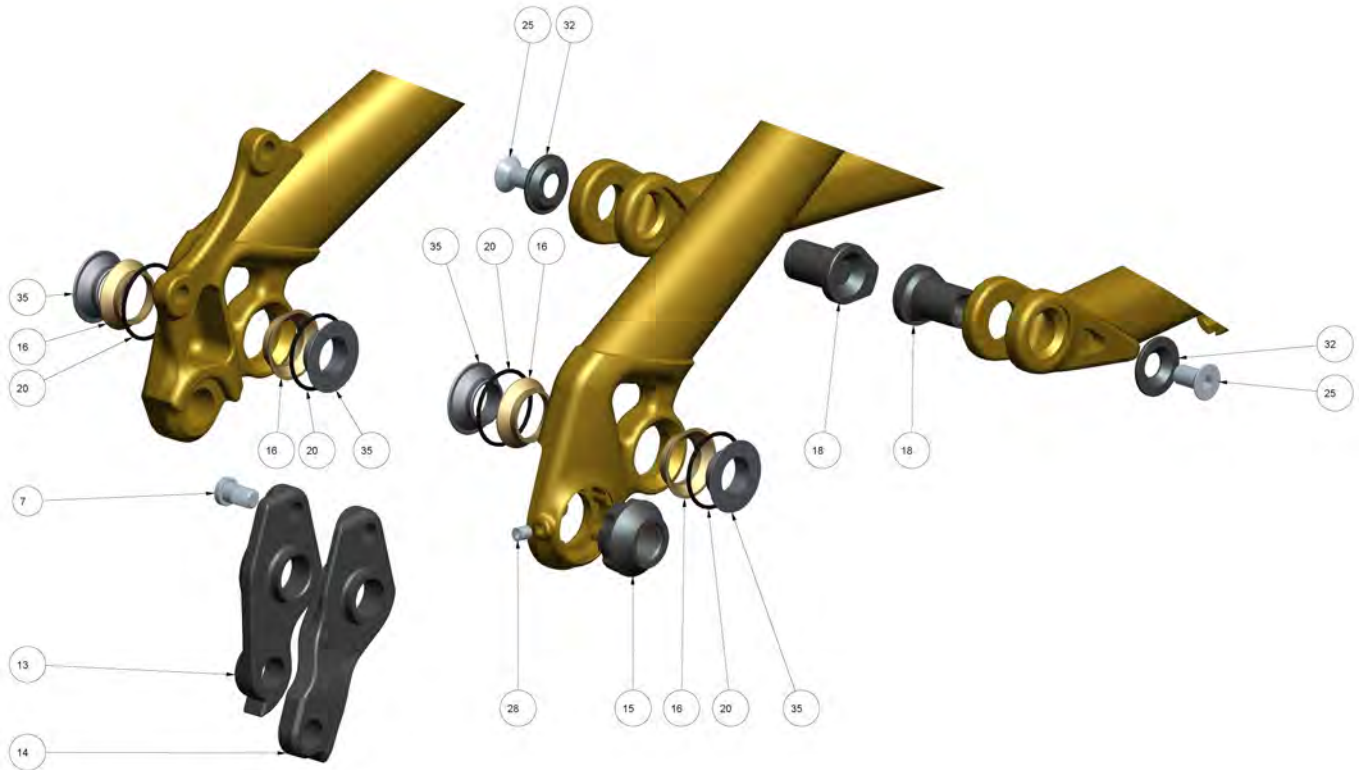
MAIN PIVOT VIEW



ELEMENT ALLOY



CLEVIS VIEW



ELEMENT ALLOY

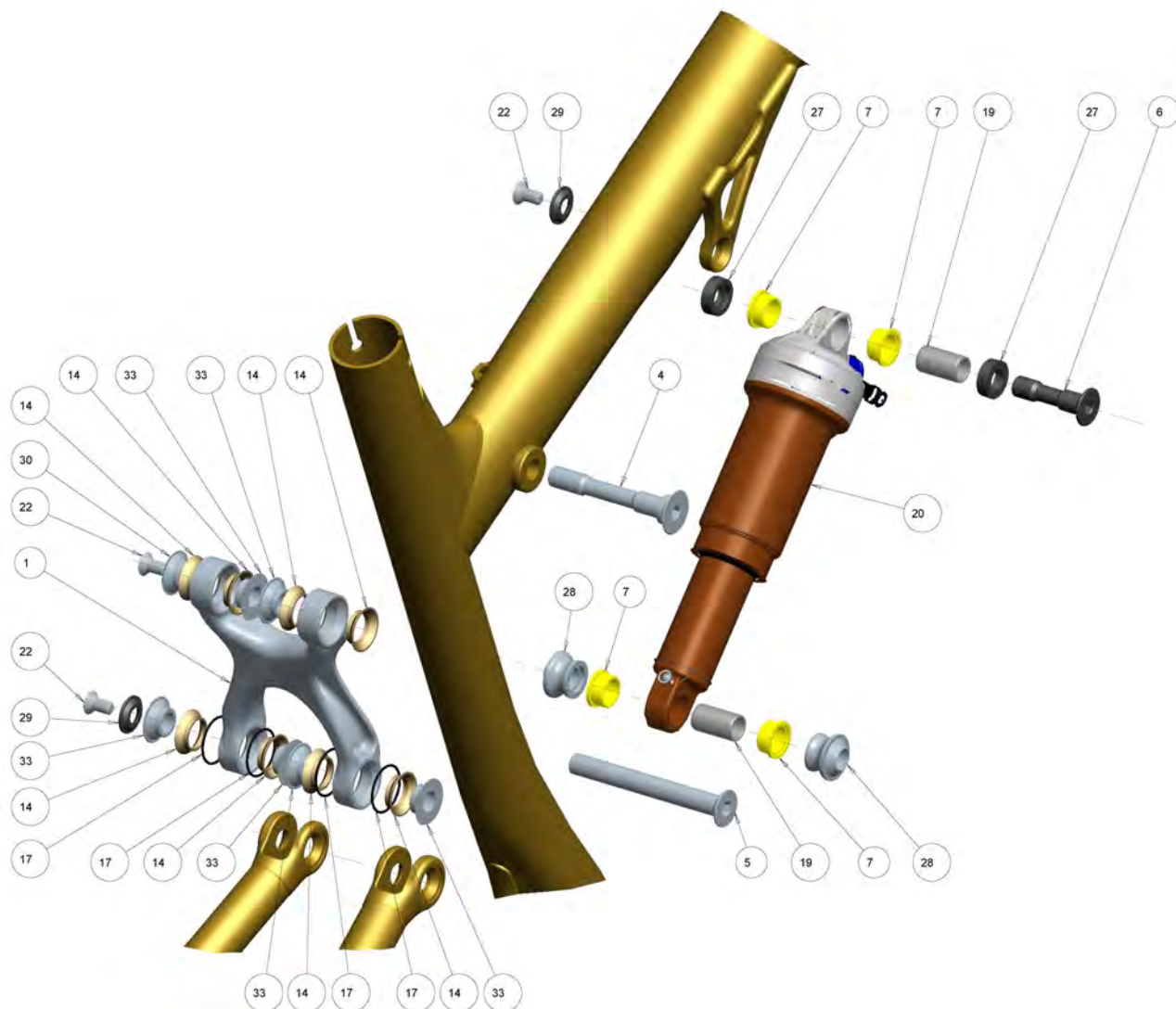


#	QTY	PART NO.	DESCRIPTION
1	1	10612004MEK	2012 ELEMENT ALLOY 29ER FRONT TRIANGLE, SIZE 18.5 (L)
2	1	1052501MEK	2012 ELEMENT ALLOY 29ER CHAINSTAY WELDMENT.
3	1	10512079-80MEK	ELEMENT ALU. "29er" L&R SEAT STAY
4	1	1092182	ELEMENT ALLOY 1-PIECE TOP LINK, 95MM LONG.
5	2	181063	BEARING - 12X28X8; 6001-2RS
6	1	180466-070	28mm FLANG HD, THRU. BLT; M8X1.25 - OD:12X70mm
7	1	180487-010	CUSTOM LOW FLAT HEAD SHOULDER SCREW, M6 X 10mm; STAINLESS STEEL
8	1	180492 UAT	C'SUNK BOLT. OD:12X68, INT M6, AL7075-T6, HARD BLACK ANO.
9	1	180496 UAT	CSUNK BOLT OD10MM X 85, INT M6 AL7075-T6, HARD BLACK ANO
10	1	180527	ELEM WC SHOCK BOLT, OD:10MM, L: 41MM. AL7075-T6 HARD BLACK ANO
11	1	1092019	INTERNAL CABLE STOP INSERT, AL7005, HARD BLACK ANO.
12	2	180545	CONICAL WASHER - ID, 12MM, OD-24, 3.0MM THK.
13	1	1092020	DER. HANGER: (FOR SHIMANO 12mm X 142mm O.L.D.), HARD BLACK ANO.
14	1	1093002	DER. HANGER: (FOR SHIMANO 12mm X 142mm O.L.D.) DIRECT MOUNT., HARD BLACK ANO.
15	1	180448	2011 SLAYER: RH DROPOUT NUT SHIMANO 142mm HARD BLACK ANO.
16	12	180444 IGS	IGUS ANGULAR CONTACT BEARING, 5.15MM LEN.
17	2	1804016 IGS	BUSHING - IGUS i-glide J350-1214-15: ID:12, OD:14, L:15
18	2	180463-021	KEY HD C'SUNK "L" BOLT - INT M6-1.0 THREAD; OD:12mm X 21mm; AL7075-T6, HARD BLAC
19	4	180522	RUBBER O-RING, FOR 12.7mm FOX SHOCK PIN
20	8	180543	O-RING, ID 20MM, W:1.25. NITRILE.
21	1	180572	O-RING ID:14MM, W:1.5MM, NITRILE RUBBER
22	2	111989 FOX	SHOCK PIN: ID:10 x 22.2mm LONG; STAINLESS STEEL
23	1	N/A	SHIMANO 142 X 12MM QUICK RELEASE AXLE.
24	1	N/A	REAR SHOCK, 6X1.25IN.
25	5	180566-012 FBY	FLAT HEAD C'SUNK SOCKET SCREW, M6-1.0 X 12mm, A4/316 SS, 55060.060.012
26	1	180567-016 FBY	FLAT HEAD C'SUNK SOCKET SCREW, M8-1.25 X 16mm, A4/316 SS, 55060.080.016
27	1	165382JDM	JD SEAT QR SEAT QR, 34.9mm, AL6061-T6, JY-009 XTR GREY ANO.
28	1	180571 FBY	SET SCR., FLT. PT., M4 x 0.7 x 5mmL. ZINC PLATED. 07860.040.006
29	2	180509	SHOCK REDUCER - FOR ID:10, OD:12.7 x 22.2mm PIN; 28mm OUTER SPAN
30	2	180495UAT	SHOCK REDUCER, REAR, STD, ID:10mm, AL7075-T6, HARD BLACK ANODIZE
31	1	N/A	SRAM E-MOUNT FD. 2-SPEED OR 3-SPEED
32	4	180476 AST	C'SUNK WASHER: (for M6 screw) ID:6 x OD:18 x 3.0mm THK.
33	1	180494 UAT	ALLOY WASHER FOR ANGULAR POLY. BRG, C'SUNK, ID:10, L:3.35, AL7075-T6, HARD BLACK
34	1	180499AST	BEARING CAP - OD:28 M8, AL6061-T6. HARD BLACK ANO
35	4	180490 PMG	ALLOY WASHER FOR ANGULAR POLY. BRG. ID:12, L:2.65, HARD BLACK ANO.
36	5	180493 UAT	ALLOY WASHER FOR ANGULAR POLY. BRG. ID:10, L:3.35, AL7075-T6, HARD BLACK ANO.
37	1	180506UAT	ALLOY WASHER FOR ANGULAR POLY. BRG, NO-FLANGE, ID:10, L:3.35, AL7075-T6, JY-009
38	1	180507UAT	WASHER, WITH ELEMENT SAG INDICATOR POINT ARROW, MAT'L: STAINLESS STEEL

THUNDERBOLT ALLOY



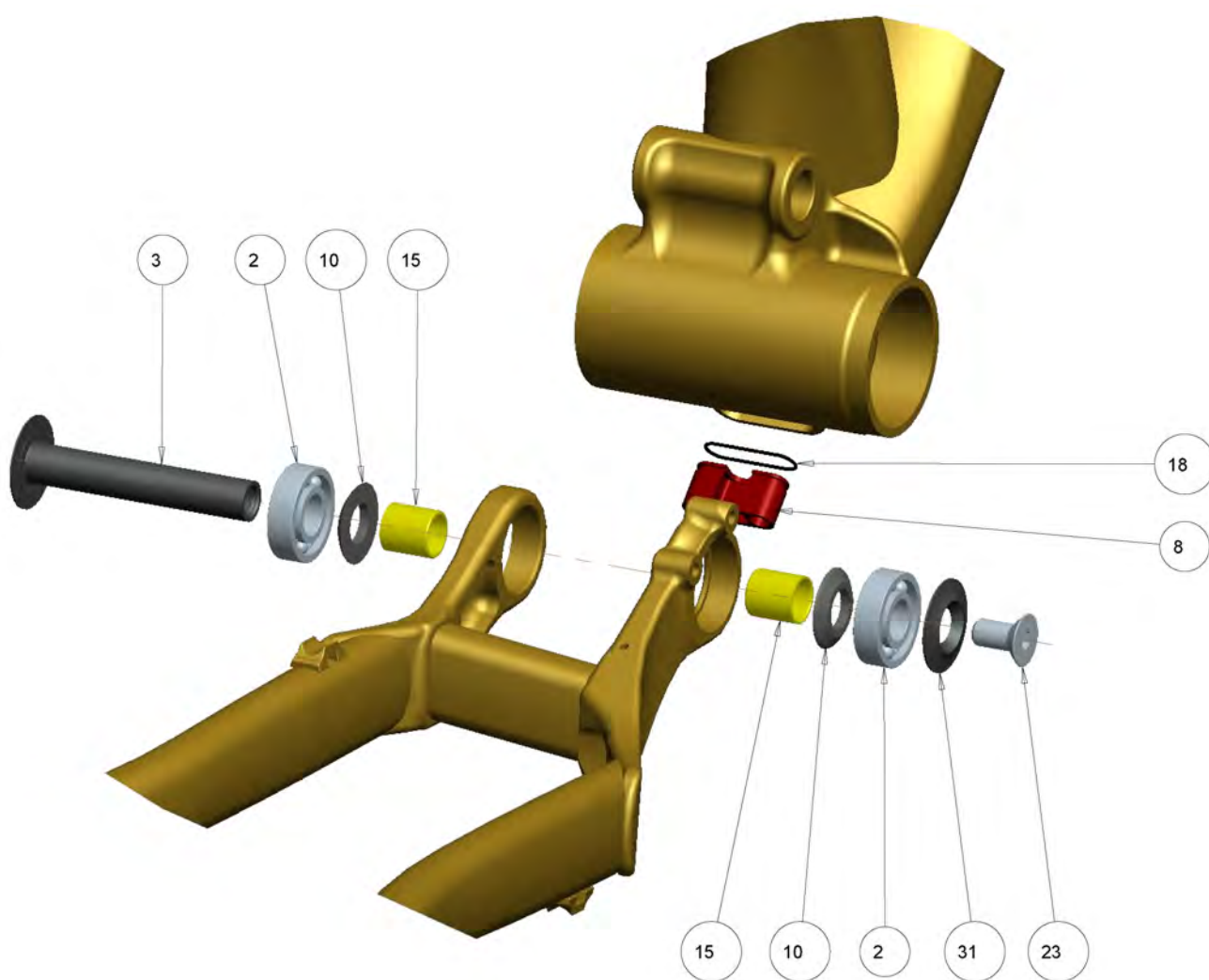
LINK VIEW



THUNDERBOLT ALLOY



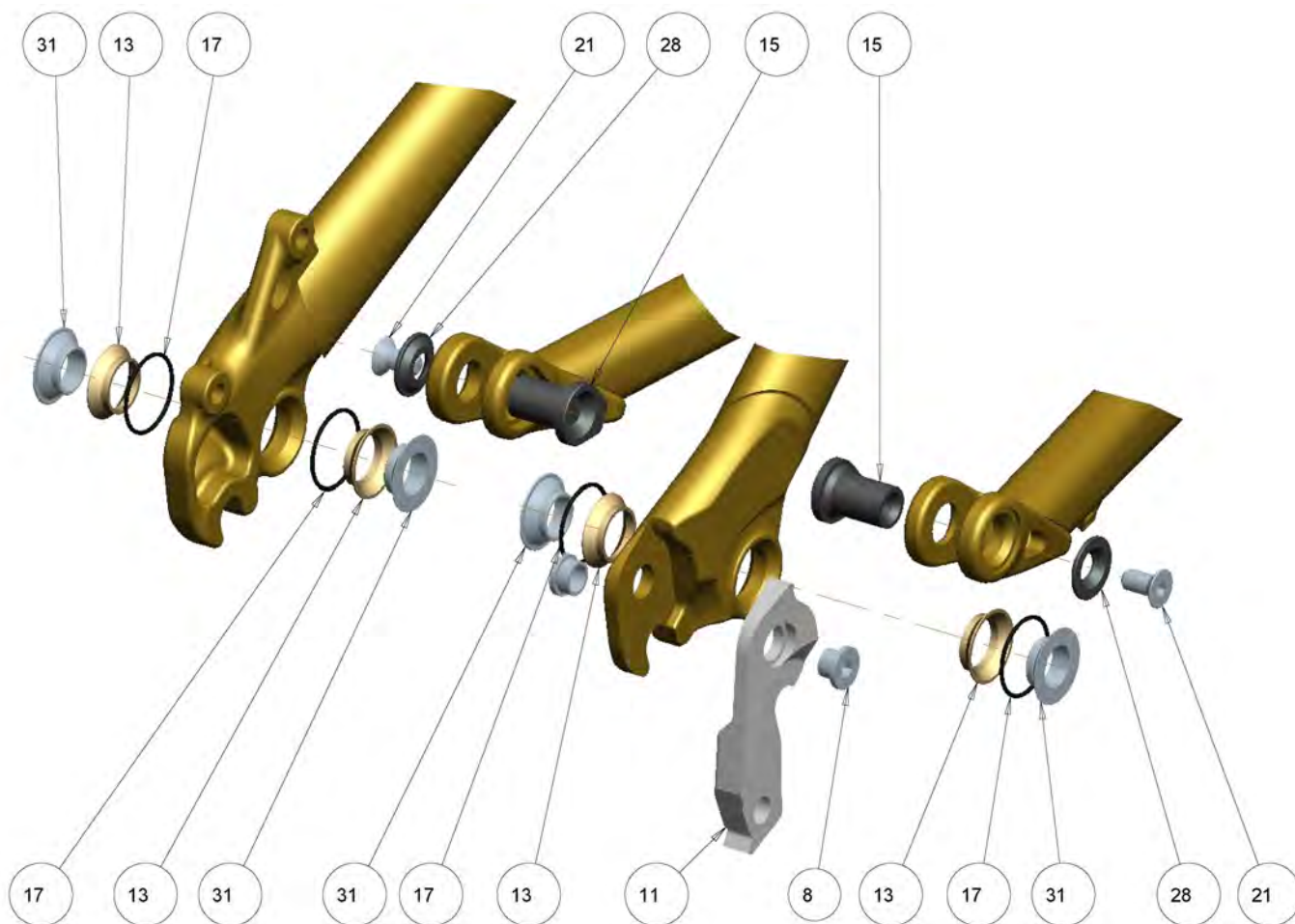
MAIN PIVOT VIEW



THUNDERBOLT ALLOY



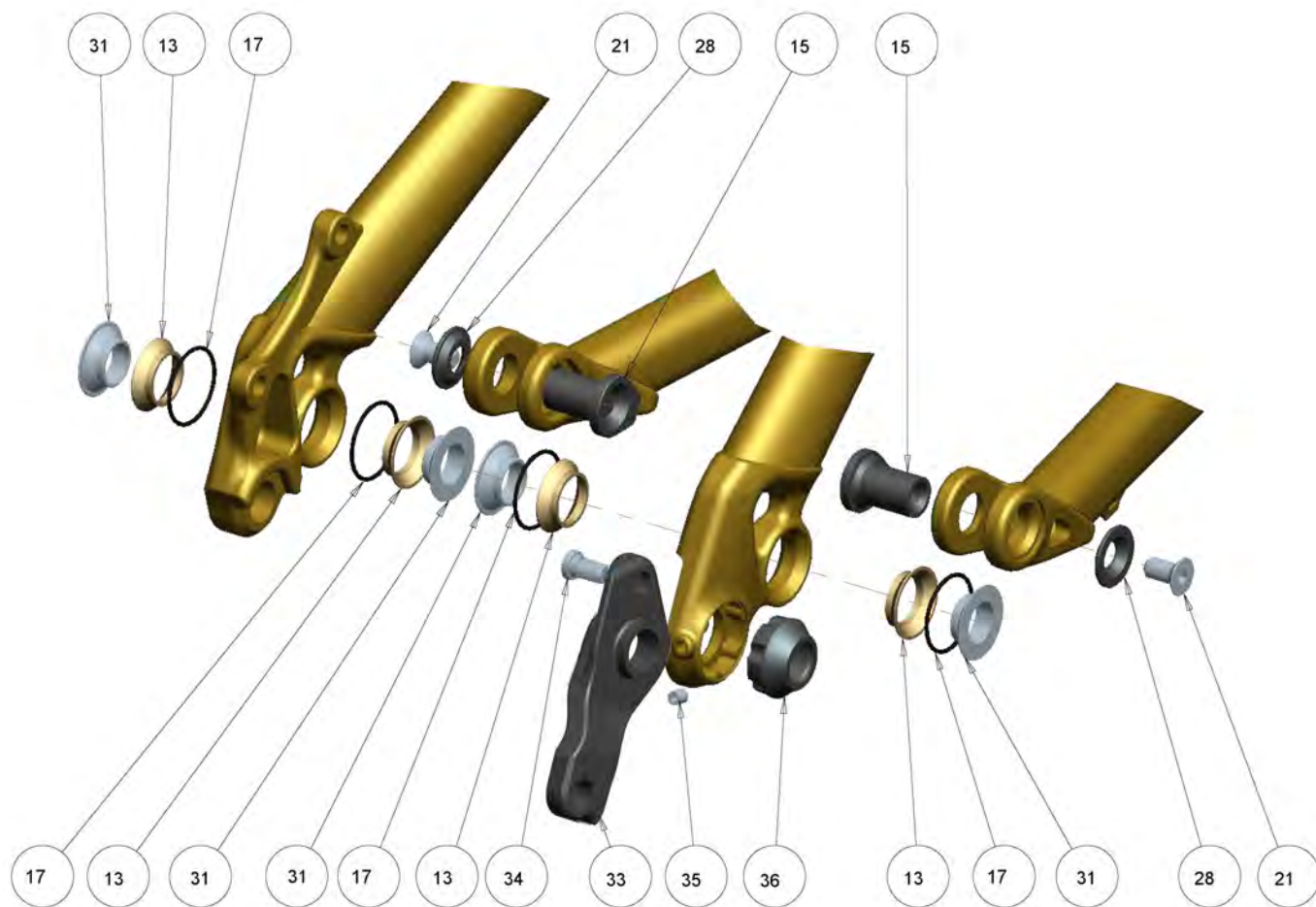
CLEVIS VIEW — OPEN DROPOUT MODELS



THUNDERBOLT ALLOY



CLEVIS VIEW — THROUGH-AXLE MODELS

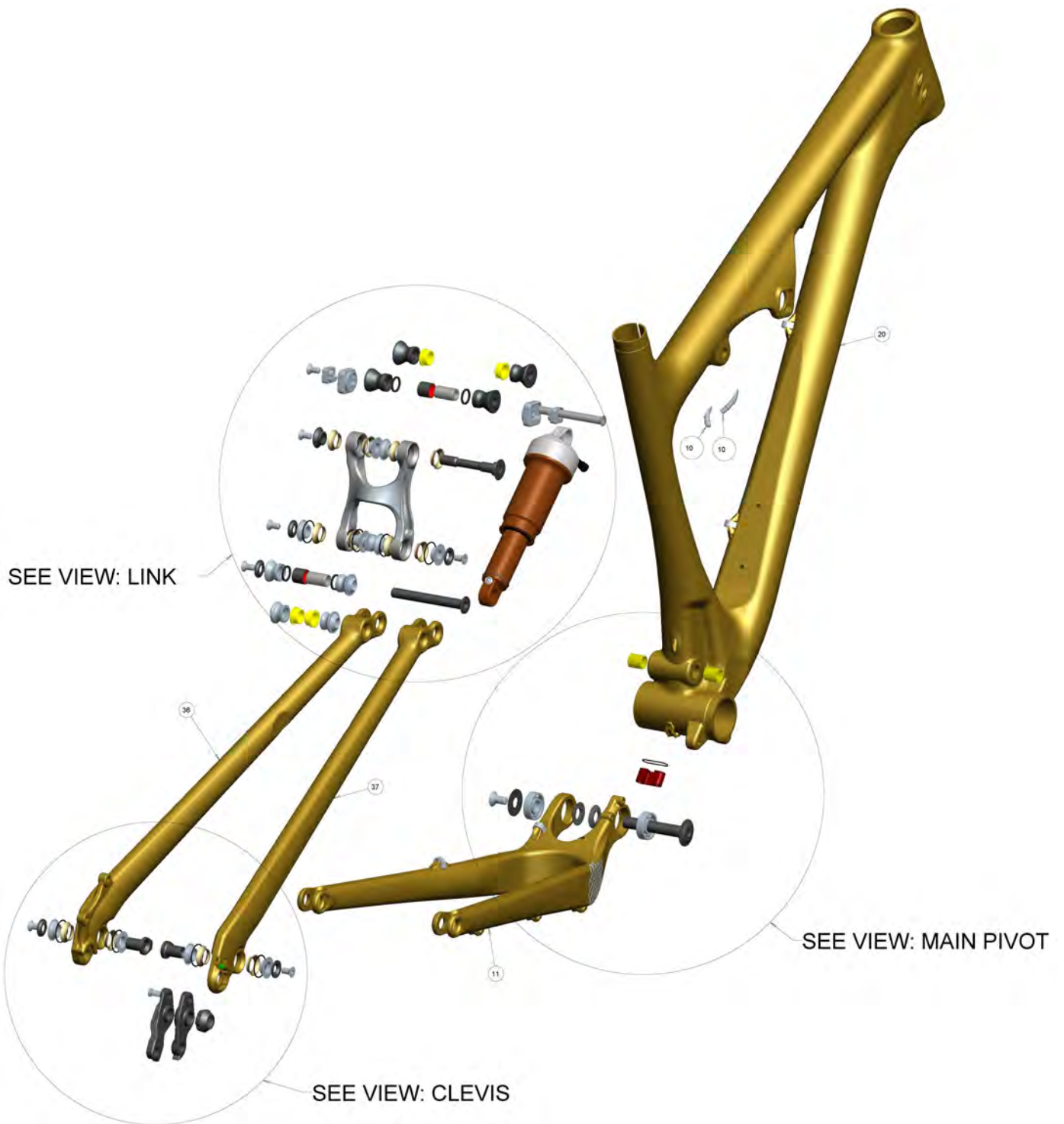


THUNDERBOLT ALLOY



#	QTY	PART NO.	DESCRIPTION
1	1	1092182	ELEMENT ALLOY 1-PIECE TOP LINK, 95MM LONG.
2	2	181063	BEARING - 12X28X8; 6001-2RS
3	1	180466-070	28mm FLANGE HD, THRU. BLT; INTERNAL M8X1.25 - OD:12X70mm
4	1	180492 UAT	C'SUNK HD, THRU BOLT. OD:12MM X 68, INT. M6 THREAD, AL7075-T6, HARD BLACK ANO.
5	1	180496 UAT	C'SUNK HD, THRU BOLT. OD:10MM X 85, INT. M6 THREAD, AL7075-T6, HARD BLACK ANO.
6	1	180527	ELEM WC SHOCK BOLT, OD:10MM, L: 41MM. AL7075-T6 HARD BLACK ANO
7	1	1092019	INTERNAL CABLE STOP INSERT, AL7005, HARD BLACK ANO.
8	1	180510RUX	CHAINRING NUT&BOLT - M8-0.75 X 5mm BOLT w/4mm LONG NUT
9	1	1054500MEK	2014 THUNDERBOLT ALLOY CHAINSTAY WELDMENT
10	2	180545	CONICAL WASHER - ID, 12MM, OD-24, 3.0MM THK.
11	1	1098095	2009 DERAILLEUR HANGER; AL7005-T6.
12	1	1064183MEK	2014 THUNDERBOLT ALLOY 650B FRONT TRIANGLE Size 18.0" (M)
13	12	1805444 IGS	IGUS ANGULAR CONTACT BEARING, J3
14	2	1804016 IGS	BUSHING - IGUS i-glide J350-1214-15: ID:12, OD:14, L:15
15	2	180463-021	KEY HD C'SUNK "L" BOLT - INT M6-1.0 THREAD; OD:12mm X 21mm; AL7075-T6, HARD BLACK
16	4	180522	RUBBER O-RING, FOR 12.7mm FOX SHOCK PIN
17	8	180543	O-RING, ID 20MM, W:1.25. NITRILE.
18	1	180572	O-RING ID:14MM, W:1.5MM, NITRILE RUBBER
19	2	111989 FOX	SHOCK PIN: ID:10 x 22.2mm LONG; STAINLESS STEEL
20	1	N/A	REAR SHOCK, 7.5" x 2.0"
21	5	180566-012	FLAT HEAD C'SUNK SOCKET SCREW, M6-1.0 X 12mm, A4/316 SS, 55060.060.012
22	1	180567-016 FBV	FLAT HEAD C'SUNK SOCKET SCREW, M8-1.25 X 16mm, A4/316 SS, 55060.080.016
23	1	1054502MEK	2014 THUNDERBOLT ALLOY SEAT STAY - OPEN DO, RIGHT
24	1	1054503MEK	2014 THUNDERBOLT ALLOY SEAT STAY - OPEN DO, LEFT
25	2	N/A	SHOCK BUSHING, ID:12.7mm, OD:15mm, L:12.7mm, STEEL
26	2	180509	SHOCK REDUCER - FOR ID:10, OD:12.7 x 22.2mm PIN; 28mm OUTER SPAN
27	2	180495UAT	SHOCK REDUCER, REAR, STD, ID:10mm, AL7075-T6, HARD BLACK ANODIZE
28	4	180476 AST	C'SUNK WASHER: (for M6 screw) ID:6 x OD:18 x 3.0mm THK.
29	1	180494UAT	WASHER FOR ANGULAR POLY. BRG. HARD BLACK ANO
30	1	180499AST	BEARING CAP - OD:28 M8 , AL6061-T6. HARD BLACK ANO
31	4	180490PMG	WASHER FOR ANGULAR POLY. BRG. HARD BLACK ANO
32	6	180493UAT	WASHER FOR ANGULAR POLY. BRG. HARD BLACK ANO
33	1	1093002	DER. HANGER: (FOR SHIMANO 12mm X 142mm O.L.D.) DIRECT MOUNT., HARD BLACK ANO.
34	1	180487-010	CUSTOM, LOW FLAT HEAD SHOULDER SCREW; M6-1.0 X 10mm; STAINLESS STEEL
35	1	180571FBV	SET SCR., FLT. PT., M4 x 0.7 x 5mmL. ZINC PLATED. 07860.040.006
36	1	180448	2011 SLAYER: RH DROPOUT NUT SHIMANO 142mm HARD BLACK ANO.

ALTITUDE/INSTINCT CARBON

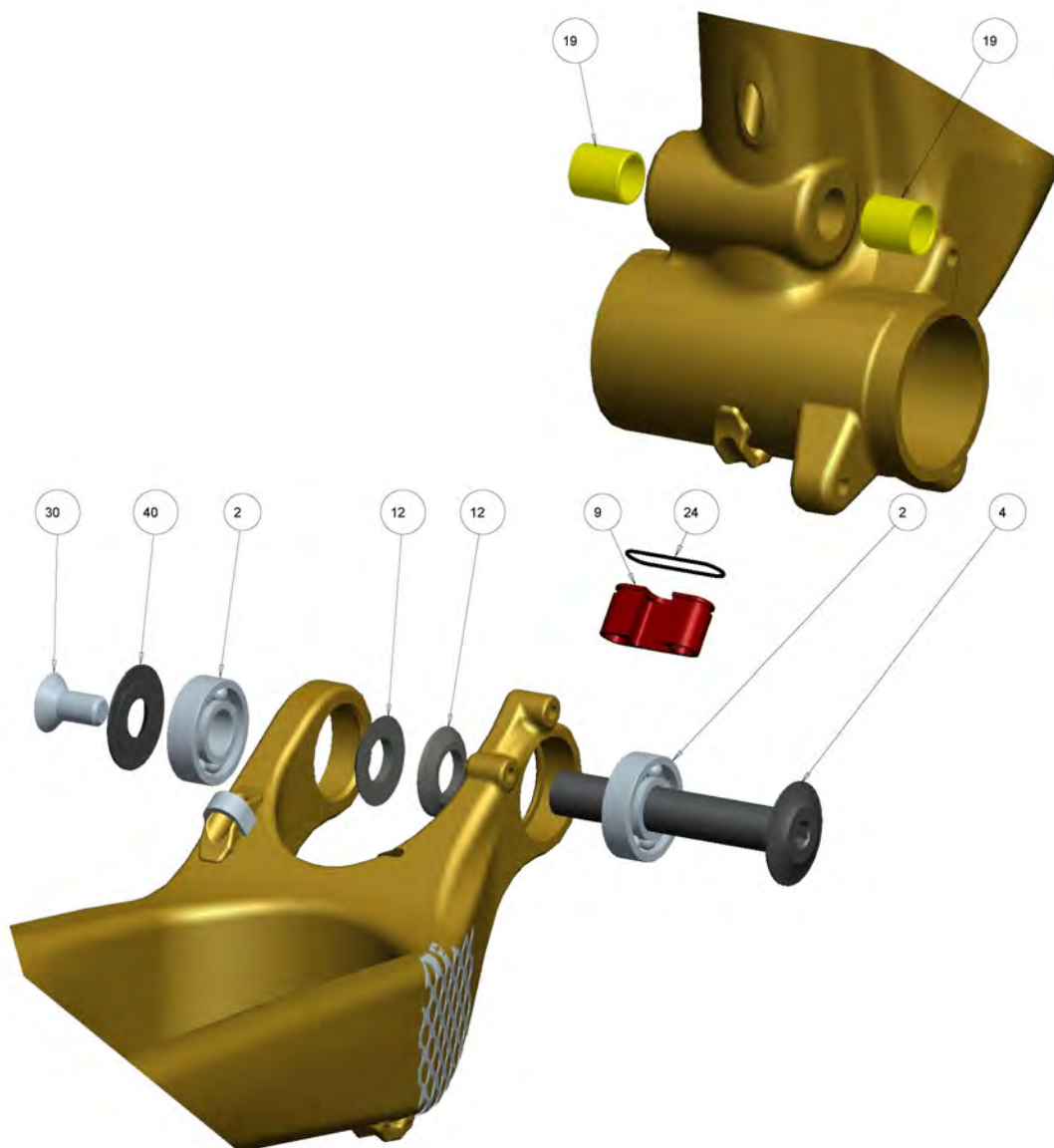


Part 34, 35, 22, 31 for use with Rock Shox shock





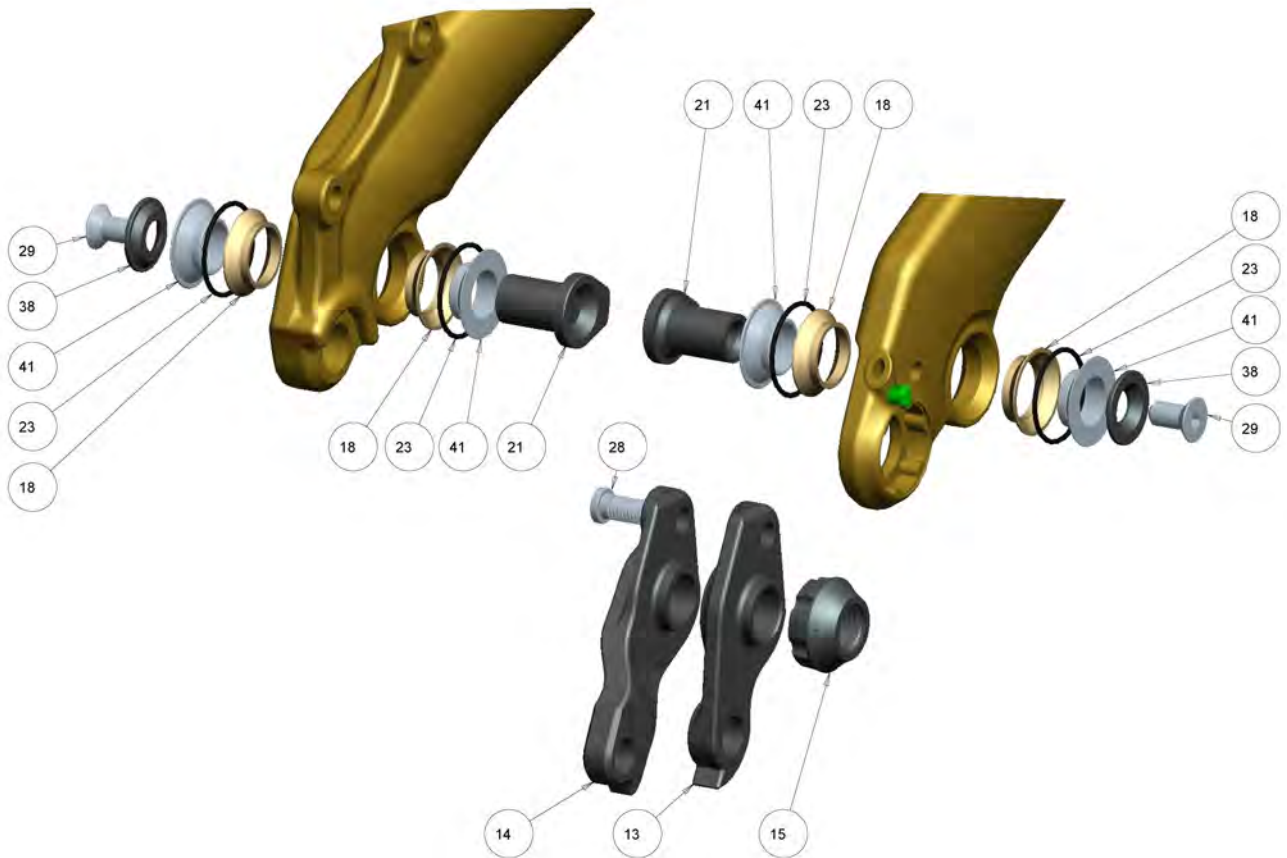
MAIN PIVOT VIEW



ALTITUDE/INSTINCT CARBON



CLEVIS VIEW

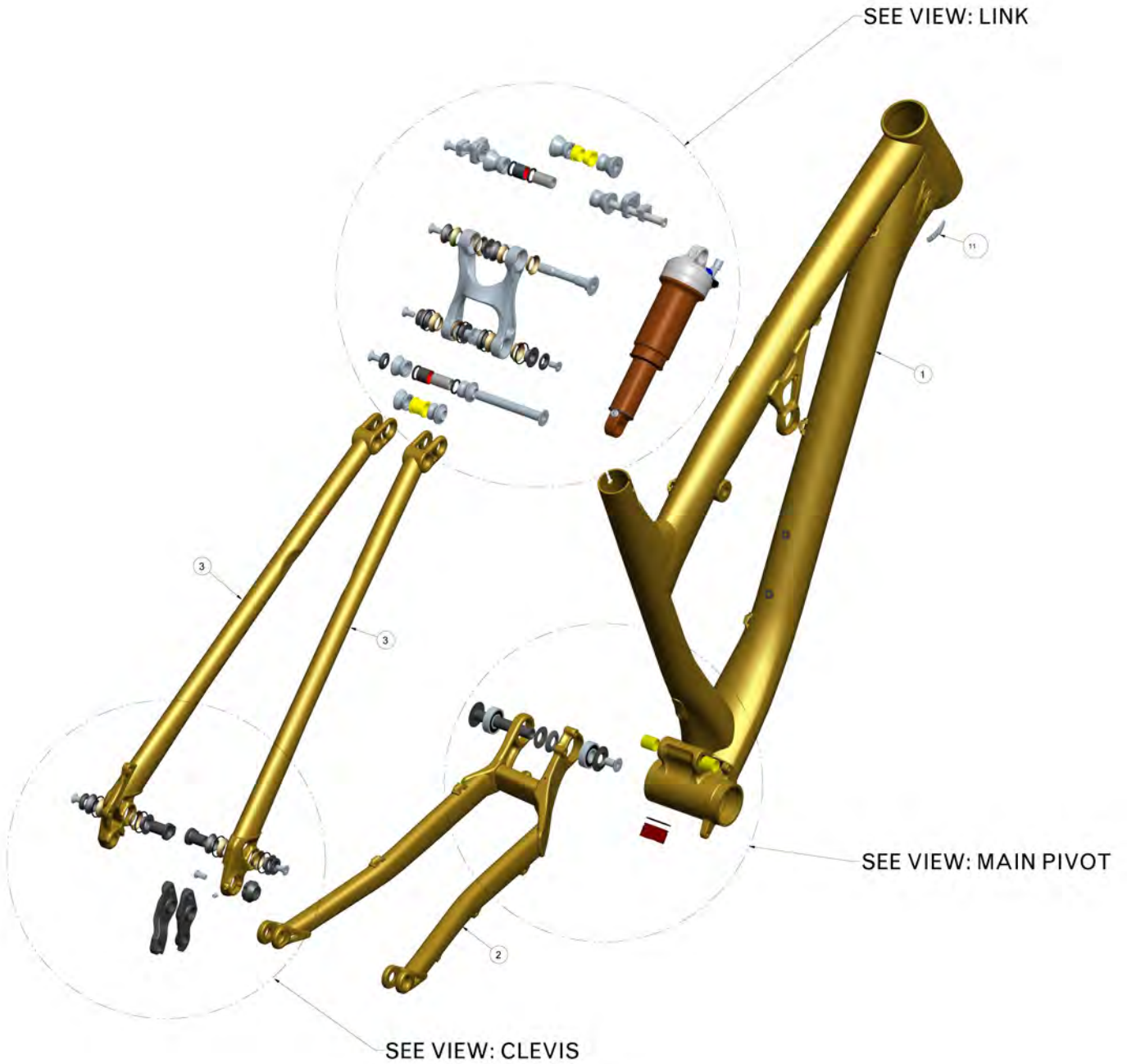


ALTITUDE/INSTINCT CARBON



#	QTY	PART NO.	DESCRIPTION
1	1	1093182	ALTITUDE & INSTINCT TOP LINK, ALLOY, 95MM LONG.
2	2	181063	BEARING - 12X28X8; 6001-2RS
3	1	180630	CUSTOM FLAT HEAD BOLT, 8MM X 60MM X M6 INT., STAINLESS
4	1	180466-070	28mm FLANGE HD, THRU. BLT; INTERNAL M8X1.25 - OD:12X70mm
5	2	180491 UAT	C'SUNK BOLT OD:10MM X 21, INT M6 AL7075-T6, HARD BLACK ANO
6	1	180492 UAT	C'SUNK BOLT. OD:12X68, INT M6, AL7075-T6, HARD BLACK ANO.
7	1	180496 UAT	C'SUNK BOLT OD10MM X 85, INT M6 AL7075-T6, HARD BLACK ANO
8	4	N/A	FOX_IGUS_BUSHING
9	1	1092019	INTERNAL CABLE STOP INSERT, AL7005, HARD BLACK ANO.
10	2	1093003	CABLE PORT RUBBER PLUG
11	1	1054510	2014 INSTINCT 29 CHAINSTAY, CARBON
12	2	180545	CONICAL WASHER - ID, 12MM, OD-24, 3.0MM THK.
13	1	1092020	DER. HANGER: (FOR SHIMANO 12mm X 142mm O.L.D.), HARD BLACK ANO.
14	1	1093002	DER. HANGER: (FOR SHIMANO 12mm X 142mm O.L.D.) DIRECT MOUNT., HARD BLACK ANO.
15	1	180448	2011 SLAYER: RH DROPOUT NUT SHIMANO 142mm HARD BLACK ANO.
16	2	180628	FLIP CHIP, INSIDE, AL7075, BLACK ANODIZE.
17	2	180629	FLIP CHIP, OUTSIDE, AL7075, BLACK ANODIZE.
18	12	1805444 IGS	IGUS ANGULAR CONTACT BEARING, J3
19	2	1804016 IGS	BUSHING - IGUS i-glide J350-1214-15: ID:12, OD:14, L:15
20	1	1064271	2014 INSTINCT29 CARBON FRONT TRIANGLE, 17.0" (M)
21	2	180463-021	KEY HD C'SUNK "L" BOLT - INT M6-1.0 THREAD; OD:12mm X 21mm; AL7075-T6, HARD BLACK
22	4	180522	RUBBER O-RING, FOR 12.7mm FOX SHOCK PIN
23	8	180543	O-RING, ID 20MM, W:1.25. NITRILE.
24	1	180572	O-RING ID:14MM, W:1.5MM, NITRILE RUBBER
25	1	111989 FOX	SHOCK PIN: ID:10 x 22.2mm LONG; STAINLESS STEEL
26	1	?	SHOCK PIN: ID:8 x 22.2mm LONG; STAINLESS STEEL
27	1	N/A	REAR SHOCK, 7.5" x 2.0"
28	1	180487-012	CUSTOM LOW FLAT HEAD SHOULDER SCREW; M6-1.0 X 12mm; STAINLESS STEEL
29	7	180566-012 FBV	FLAT HEAD C'SUNK SOCKET SCREW, M6-1.0 X 12mm, A4/316 SS, 55060.060.012
30	1	180567-016 FBV	FLAT HEAD C'SUNK SOCKET SCREW, M8-1.25 X 16mm, A4/316 SS, 55060.080.016
31	2	N/A	SHOCK BUSHING, ID:12.7mm, OD:15mm, L:12.7mm, STEEL
32	2	180631	SHOCK REDUCER, FOX IGUS - FOR ID:8, OD:12.7 x 22.2mm PIN; 56mm OUTER SPAN
33	2	3113001	SHOCK REDUCER, REAR, FOR FOX IGUS., AL7075-T6, HARD BLACK ANODIZE.
34	2	3113003	SHOCK REDUCER, STD. - FOR ID:8, OD:12.7 x 22.2mm PIN; 56mm OUTER SPAN
35	2	180495UAT	SHOCK REDUCER, REAR, STD, ID:10mm, AL7075-T6, HARD BLACK ANODIZE
36	1	1054513	2014 INSTINCT 29 SEAT STAY, CARBON, LEFT
37	1	1054512	2014 INSTINCT 29 SEAT STAY, CARBON, RIGHT
38	5	180476 AST	C'SUNK WASHER: (for M6 screw) ID:6 x OD:18 x 3.0mm THK.
39	1	180494 UAT	ALLOY WASHER FOR ANGULAR POLY. BRG, C'SUNK, ID:10, L:3.35, AL7075-T6, HARD BLACK
40	1	180499AST	BEARING CAP - OD:28 M8, AL6061-T6. HARD BLACK ANO
41	4	180490 PMG	ALLOY WASHER FOR ANGULAR POLY. BRG. ID:12, L:2.65, HARD BLACK ANO.
42	6	180493 UAT	ALLOY WASHER FOR ANGULAR POLY. BRG. ID:10, L:3.35, AL7075-T6, HARD BLACK ANO.

ALTITUDE/INSTINCT ALLOY

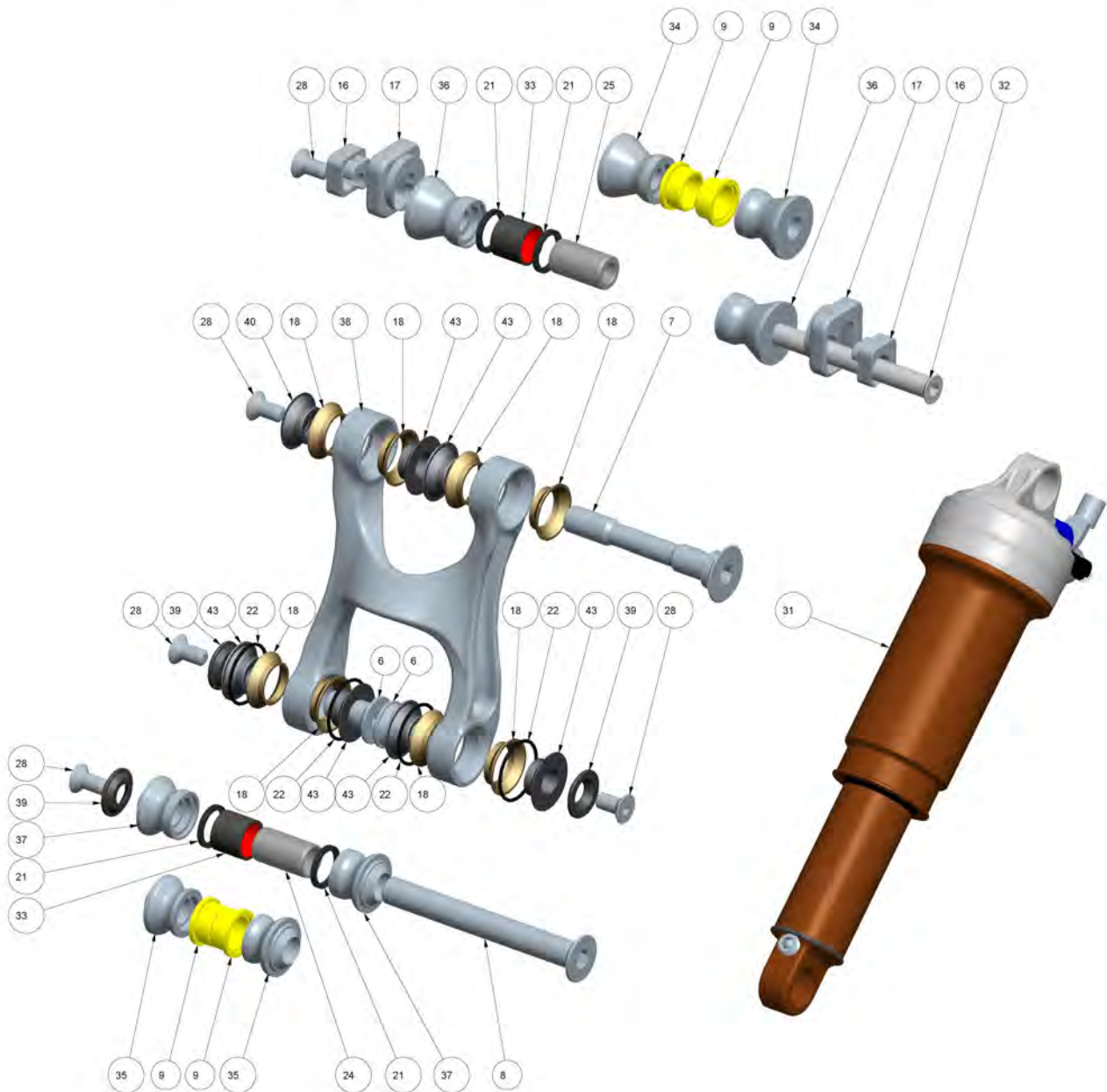


ALTITUDE/INSTINCT ALLOY



LINK VIEW

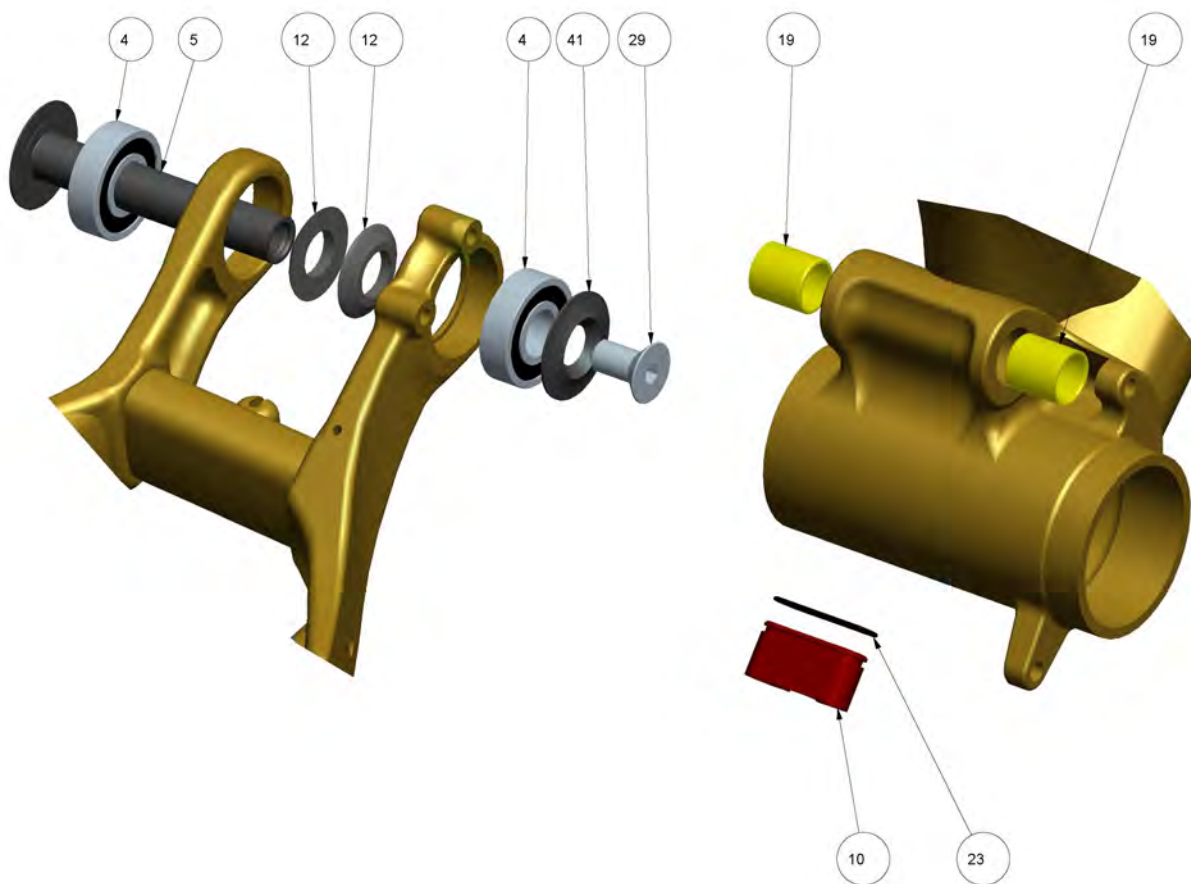
PART 9, 34, 35 FOR USE WITH FOX SHOCK
PART 21, 25, 33, 36 FOR USE WITH ROCK SHOX SHOCK



ALTITUDE/INSTINCT ALLOY



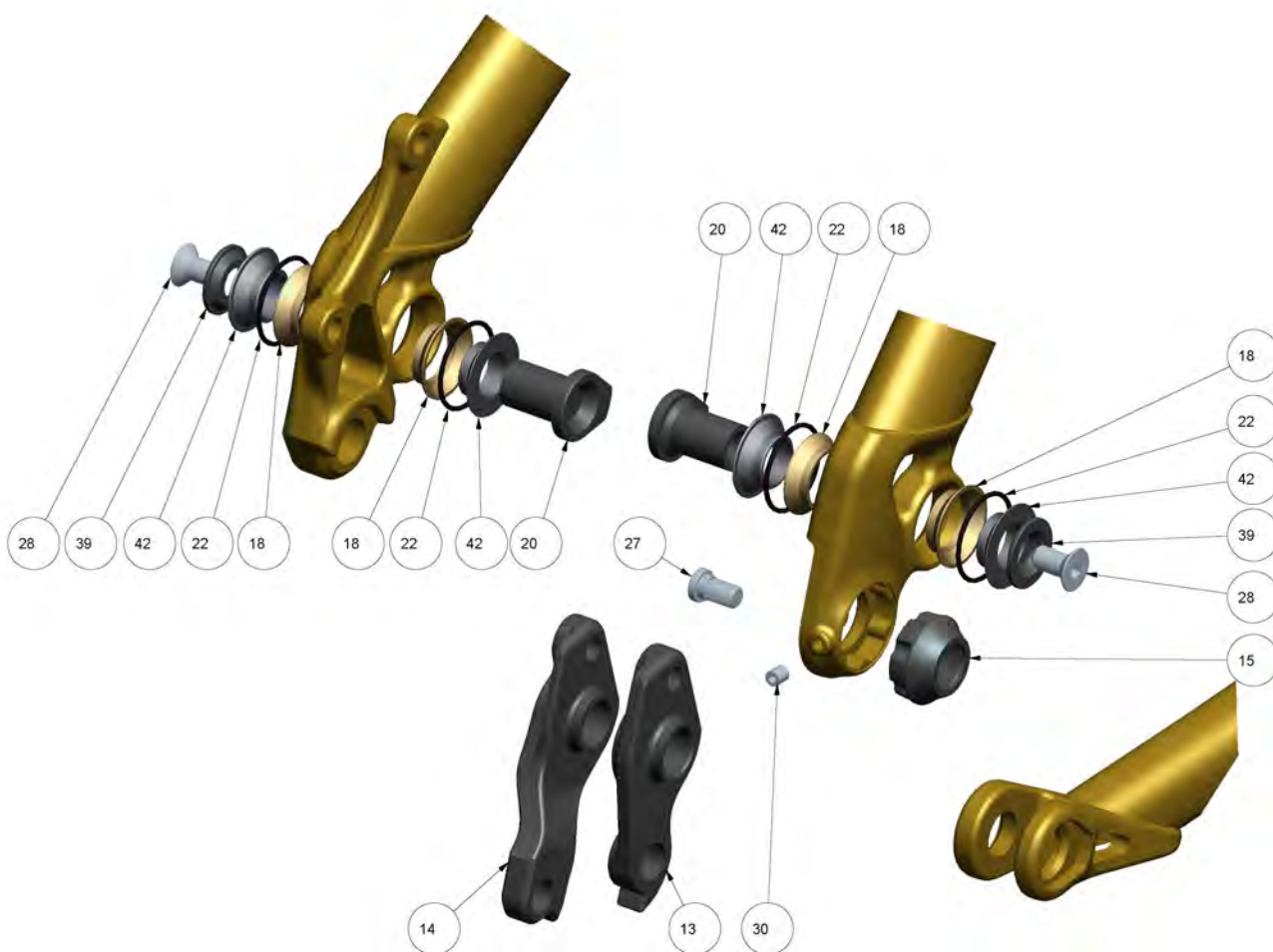
MAIN PIVOT VIEW



ALTITUDE/INSTINCT ALLOY



CLEVIS VIEW



ALTITUDE/INSTINCT ALLOY

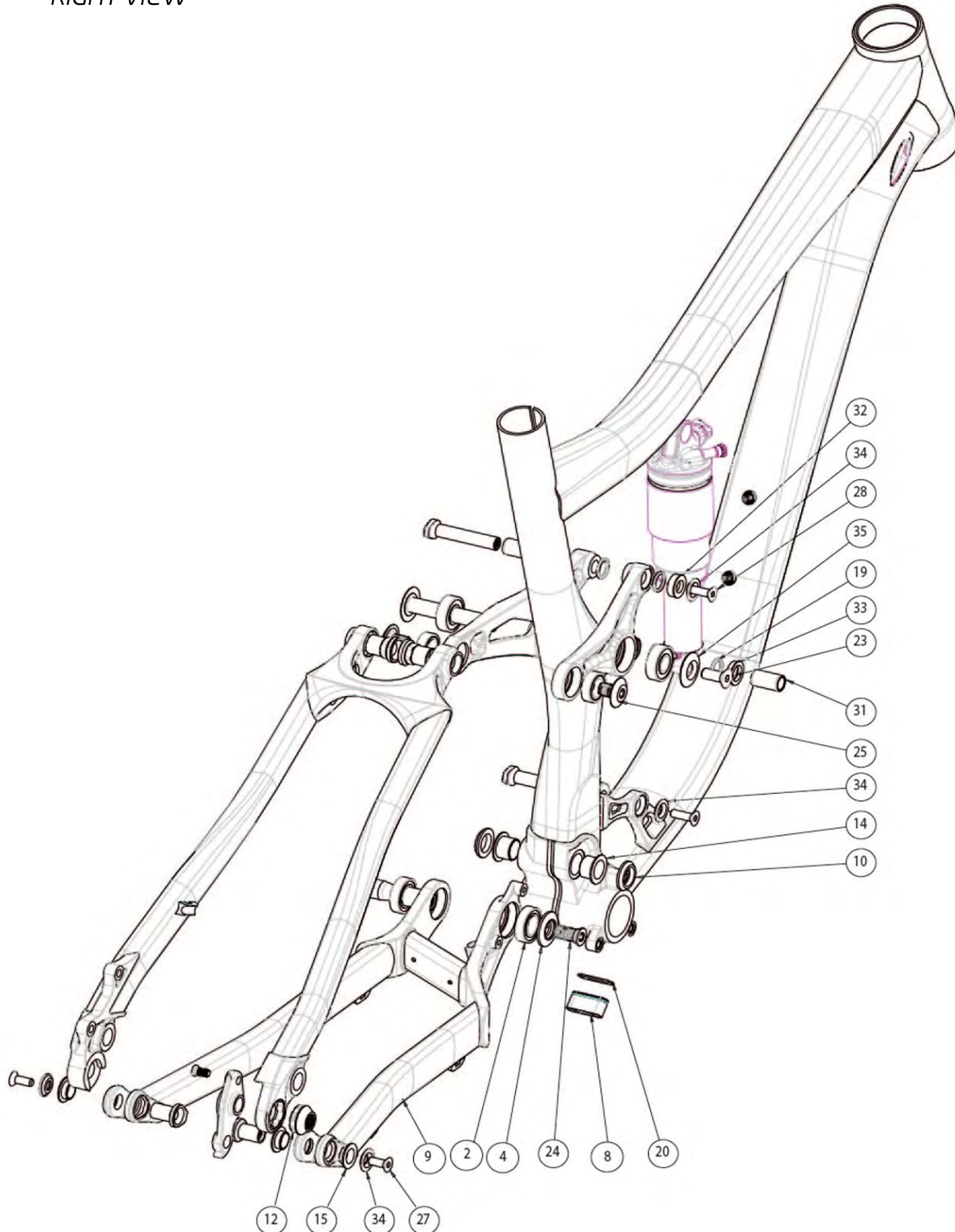


#	QTY	PART NO.	DESCRIPTION
1	1	1063132	2013 ALTITUDE 18.0" FRONT TRIANGLE
2	1	1053130MEK	2013 ALTITUDE 650b CHAINSTAY
3	1	1053132-3MEK	2013 ALTITUDE 650b SEAT STAYS, R&L, AL7005.
4	2	181063	BEARING - 12X28X8; 6001-2RS
5	1	180466-070	28mm FLANG HD, THRU. BLT; M8X1.25 - OD:12X70mm
6	2	180491 UAT	C'SUNK BOLT OD:10MM X 21, INT M6 AL7075-T6, HARD BLACK ANO
7	1	180492 UAT	C'SUNK BOLT. OD:12X68, INT M6, AL7075-T6, HARD BLACK ANO.
8	1	180496 UAT	C'SUNK BOLT OD:10MM X 85, INT M6 AL7075-T6, HARD BLACK ANO
9	4	N/A	FOX_IGUS_BUSHING
10	1	1092019	INTERNAL CABLE STOP INSERT, AL7005, HARD BLACK ANO.
11	1	1093003	CABLE PORT RUBBER PLUG
12	2	180545	CONICAL WASHER - ID, 12MM, OD-24, 3.0MM THK.
13	1	1092020	DER. HANGER: (FOR SHIMANO 12mm X 142mm O.L.D.), HARD BLACK ANO.
14	1	1093002	DER. HANGER: (FOR SHIMANO 12mm X 142mm O.L.D.) DIRECT MOUNT., HARD BLACK ANO.
15	1	180448	2011 SLAYER: RH DROPOUT NUT SHIMANO 142mm HARD BLACK ANO.
16	2	180628	FLIP CHIP, INNER
17	2	180629	FLIP CHIP, OUTER
18	12	1805444 IGS	IGUS ANGULAR CONTACT BEARING, J3
19	2	1804016 IGS	BUSHING - IGUS i-glide J350-1214-15: ID:12, OD:14, L:15
20	2	180463-021	KEY HD C'SUNK "L" BOLT - INT M6-1.0 THREAD; OD:12mm X 21mm; AL7075-T6, HARD BLAC
21	4	180522	RUBBER O-RING, FOR 12.7mm FOX SHOCK PIN
22	8	180543	O-RING, ID 20MM, W:1.25. NITRILE.
23	1	180572	O-RING ID:14MM, W:1.5MM, NITRILE RUBBER
24	2	111989 FOX	SHOCK PIN: ID:10 x 22.2mm LONG; STAINLESS STEEL
25	1	?	SHOCK PIN: ID:8 x 22.2mm LONG; STAINLESS STEEL
26	1	N/A	SHIMANO 142 X 12MM QUICK RELEASE AXLE.
27	1	180487-010	CUSTOM, LOW FLAT HEAD SHOULDER SCREW; M6-1.0 X 10mm; STAINLESS STEEL
28	7	180566-012 FBY	FLAT HEAD C'SUNK SOCKET SCREW, M6-1.0 X 12mm, A4/316 SS, 55060.060.012
29	1	180567-016 FBY	FLAT HEAD C'SUNK SOCKET SCREW, M8-1.25 X 16mm, A4/316 SS, 55060.080.016
30	1	180571 FBY	SET SCR., FLT. PT., M4 x 0.7 x 5mmL. ZINC PLATED. 07860.040.006
31	2	N/A	REAR SHOCK, FOX, 7.875"x2.25" FOR ALTITUDE, 7.5"x2.0" FOR INSTINCT
32	1	180630	C'SUNK HD, THRU BOLT. OD:8 x 72, INT. M6x1.0, STEEL, PLATED
33	2	N/A	SHOCK BUSHING, ID:12.7mm, OD:15mm, L:12.7mm, STEEL
34	2	180631	SHOCK REDUCER, FRONT, IGUS, ID:8mm, FOR 56mm WIDE, AL7075-T6, HARD BLACK ANODIZE
35	2	3113001	SHOCK REDUCER, REAR, IGUS, ID:10mm, AL7075-T6, HARD BLACK ANODIZE
36	2	3113003	SHOCK REDUCER, FRONT, STD, ID:8mm, FOR 56mm WIDTH, AL7075-T6, HARD BLACK ANODIZE
37	2	180495UAT	SHOCK REDUCER, REAR, STD, ID:10mm, AL7075-T6, HARD BLACK ANODIZE
38	1	1093182	2013 ALTITUDE/INSTINCT TOP LINK, 95MM
39	5	180476 AST	C'SUNK WASHER: (for M6 screw) ID:6 x OD:18 x 3.0mm THK.
40	1	180494 UAT	ALLOY WASHER FOR ANGULAR POLY. BRG, C'SUNK, ID:10, L:3.35, AL7075-T6, HARD BLACK
41	1	180499AST	BEARING CAP - OD:28 M8, AL6061-T6. HARD BLACK ANO
42	4	180490 PMG	ALLOY WASHER FOR ANGULAR POLY. BRG. ID:12, L:2.65, HARD BLACK ANO.
43	6	180493 UAT	ALLOY WASHER FOR ANGULAR POLY. BRG. ID:10, L:3.35, AL7075-T6, HARD BLACK ANO.

SLAYER



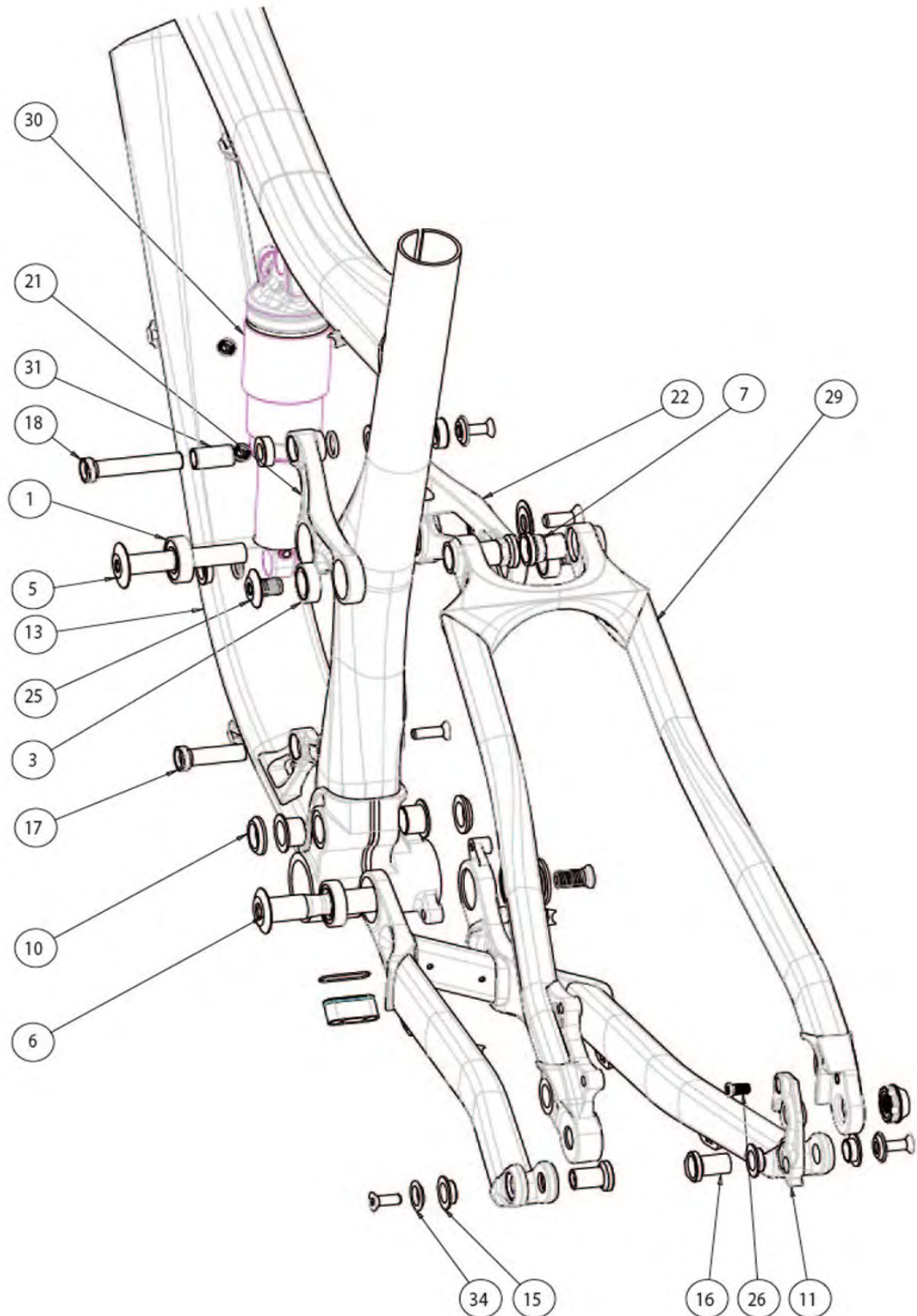
RIGHT VIEW



SLAYER



LEFT VIEW



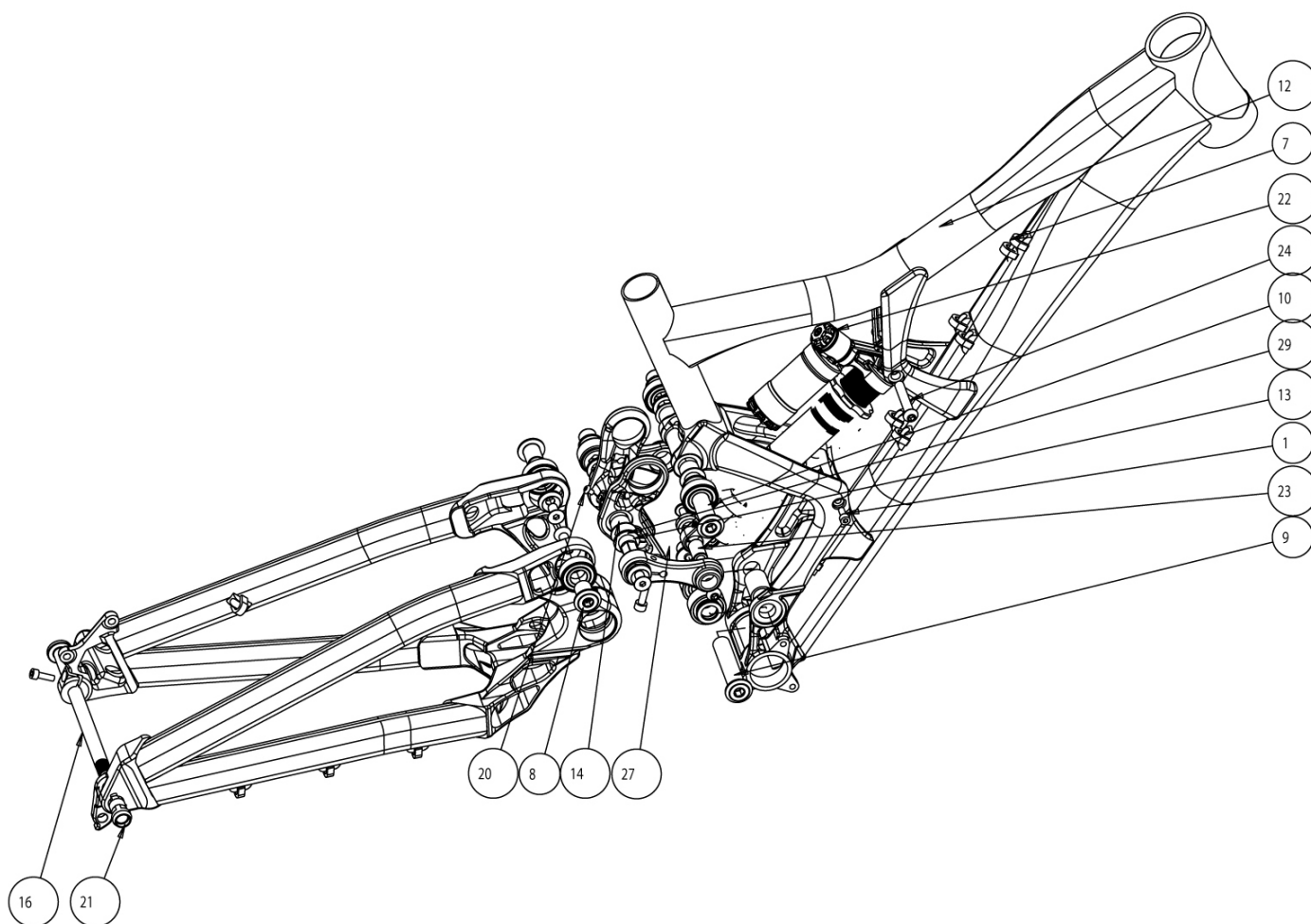


#	QTY	PART NO.	DESCRIPTION
1	2	181063	BEARING - 12X28X8; 6001-2RS
2	2	181097	BEARING; Single Row, Angular contact - ID:15 OD:28X7mm
3	2	181111	BEARING; Double Row, Angular contact - ID:15 OD:24X7mm. 3802-2RS
4	1	180477	BEARING CAP - OD:28 x M10 SCREW (HD:14), FOR 15mm AXLE
5	1	180466-070	28mm FLANGE HD, THRU. BLT; INTERNAL M8X1.25 - OD:12X70mm
6	1	180467-064	FLANGE HD BOLT (HD:28mm); INTERNAL M10X1.25 - OD:15X64mm
7	2	180489-022	C'SUNK HEX BOLT - OD:15 X 22mm. INT M10X1.25 THREAD
8	1	1092019	INTERNAL CABLE STOP INSERT
10	2	180461	CONICAL WASHER - ID:15mm, OD:23, 4.0mm THK
11	1	1092020	DER HANGER FOR SHIMANO 12mm X 142mm O.L.D.
12	1	180448	DROPOUT NUT M12-1.5 FOR SHIMANO 142mm O.L.D
14	2	180307IGS	IGUS BUSHING - ID:15, OD:17 X 12mm
15	4	180335IGS	IGUS BUSHING - ID:12, OD:14 X 5.5mm
16	2	180463-021	KEY HD C'SUNK "L" BOLT - INT M6-1.0 THREAD; OD:12mm X 21mm
17	1	180464-038	KEY HD, SHK BLT - OD:10mm X 38mm; INT M6-1.0 THREAD
18	1	180464-056	KEY HD, SHK BLT - OD:10mm X 56mm; INT M6-1.0 THREAD
19	4	180522	RUBBER O-RING, FOR 12.7mm FOX SHOCK PIN
20	1	180572	O-RING ID:14MM, W:1.5MM, NITRILE RUBBER
21	1	1091015	2011 SLAYER: ROCKERPLATE (LH)
22	1	1091016	2011 SLAYER: ROCKERPLATE (RH)
23	1	180435-020	FLAT HD SOCKET CAP SCREW, M8-1.25 X 20mm
24	1	180470-020	CUSTOM FLAT HD OD:14mm, C'SUNK SCREW; EXT M10-1.25 X 20mm
25	2	180486-014	FLANGE HD SCREW HD:24mm, M10-1.25 X 14mm
26	1	180487-010	CUSTOM, LOW FLAT HEAD SHOULDER SCREW; M6-1.0 X 10mm
27	2	180191AST-016	FLAT HEAD C'SUNK SOCKET SCREW, M6-1.0 X 16mm
28	2	180191AST-020	FLAT HEAD C'SUNK SOCKET SCREW, M6-1.0 X 20mm
30	1	N/A	REAR SHOCK - 7.875" X 2.25"
31	2	111989FOX	SHOCK PIN: ID:10 x 22.2mm LONG
32	2	180509	SHOCK REDUCER - FOR ID:10, OD:12.7 x 22.2mm
33	2	180516	SHOCK REDUCER - FOR OD:12.7 x 22.2mm
34	4	180476AST	C'SUNK WASHER: for M6 screw ID:6 x OD:18 x 3.0mm THK
35	1	180499AST	BEARING CAP - OD:28 FOR M8 SCREW

FLATLINE



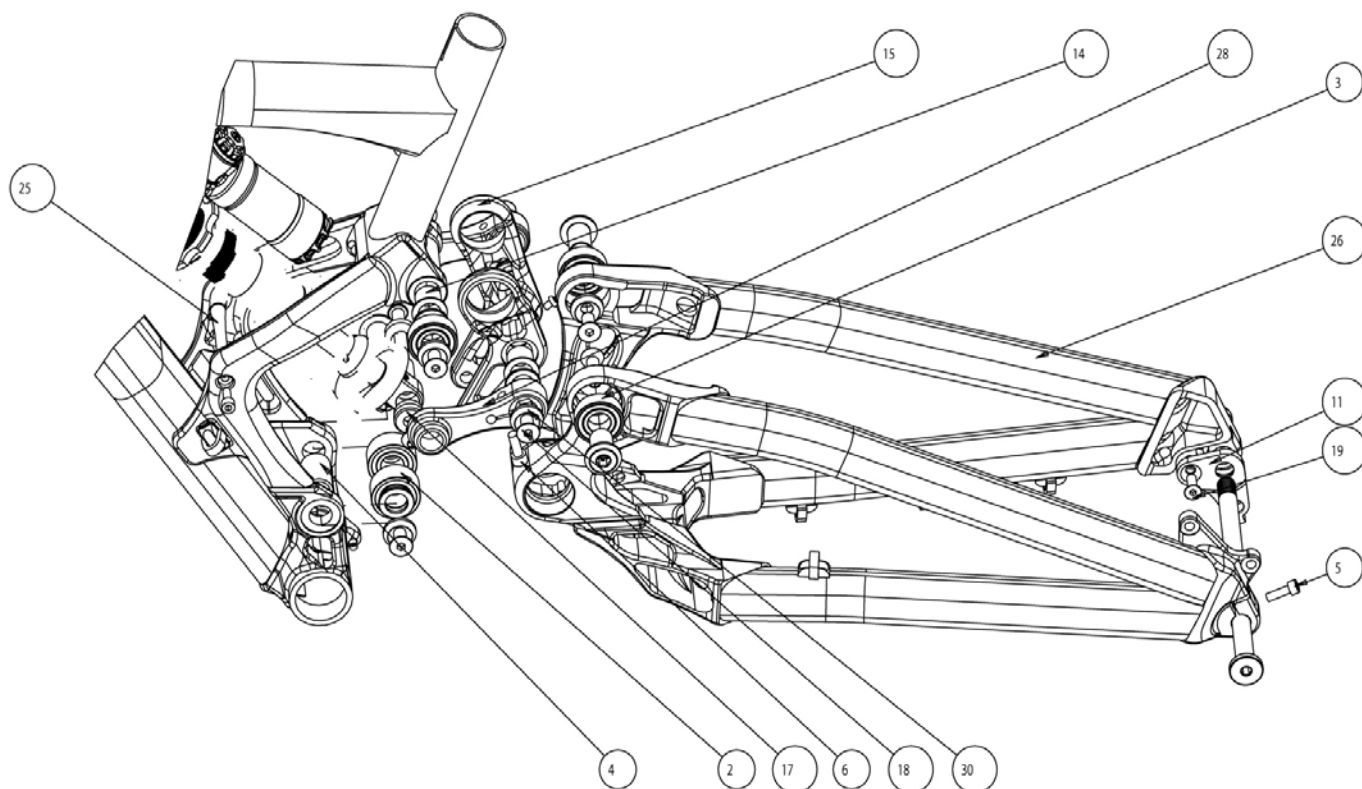
RIGHT VIEW



FLATLINE



LEFT VIEW



FLATLINE



#	QTY	PART NO.	DESCRIPTION
1	2	180443UAT	M5 X 0.8 X10MM L ALUM. CAP SCREW
2	2	181086ABI	Ball Bearings: Main Pivot, 15-32-13, 3002-2RS
3	4	181087ABI	Ball Bearings: Top Link & Tug, 15x32x9, 6002 2RS
4	1	180387UAT	Bearing Spacer, ID: 15 x 26L
5	1	180238FBY	SOCKET HEAD CAP SCREW; M5X16
6	2	180329FBY	SOCKET HEAD CAP SCREW; M6X16
8	2	180430UAT-020	FLANGE HD, THRU. BLT. M8X1.25 INT., OD15X20
9	1	180430UAT-071	FLANGE HD, THRU. BLT. M8X1.25 INT., OD15X71
10	1	180430UAT-081	FLANGE HD, THRU. BLT. M8X1.25 INT., OD15X81
11	1	180901AST	CUSTOM FLATLINE DH HANGER
13	1	180454AST	HEXAGON AXLE, 15.05MM OD
14	4	181088IGS	IGUS BUSHING, LFM-1517-17
15	1	109073	TOP LINK, 2010 WC FLATLINE
16	1	122971MRL	FLAT WORLD CUP AXLE
17	4	180312	SHOCK SPACER, REAR
18	6	180435-016	FLAT HD SOCKET CAP SCREW, M8-1.25 X 16mm
19	1	180359FBY-012	FLAT HEAD C'SUNK SOCKET SCREW, M6-1.0 X 12mm
20	1	180438AST	SOCKET HEAD CAP SCREW, M4X0.7 X 6mm
21	1	180431SH	SHIMANO NUT THREADED, M12X1.75
22	1	N/A	REAR SHOCK
23	2	111990FOX	FOX STEEL SLEEVE, 8mm BOLT X 0.501 OD
24	2	180505AIN	SLEEVE BOLT, OD:8MM x 46MM - w/M6 x 14.5MM
25	1	180428	ALU. STIFFENER ROD, RED ANO
27	1	1099023AST	TUG LINK, LEFT
28	1	1099024AST	TUG LINK, RIGHT
29	6	180287	FLAT WASHER, 15mm X 2mm THK
30	6	180338	CUSTOM M8 C'SUNK WASHER FOR FLT HD CP SCREW

WARRANTY POLICY



ROCKY MOUNTAIN BICYCLES WARRANTY POLICY

At Rocky Mountain Bicycles, we stand behind every bike we build. If anything goes wrong with your bicycle, please contact the authorized Rocky Mountain Bicycle dealer in your area. All warranty and after sale service, must be handled by an Authorized Dealer. To locate your nearest Rocky Mountain dealer, please visit our dealer locator at www.bikes.com.

WARRANTY FOR ORIGINAL OWNERS

We cover your Rocky Mountain frame from the **original date of purchase** against defects in material and workmanship.

Frame Material / Type of Use

CroMoly Steel:	Limited Lifetime*
Aluminum Hybrids:	Limited Lifetime*
Carbon Fiber:	5 years - Limited*
Aluminum – front & fully suspended	5 years - Limited*
Road & Cross bikes:	5 years – Limited*
Downhill & Freeride:	3 years - Limited*

** Please refer to limitations stated in section 4, 5, 6, 7, & 8 in our owners' manual.*

OTHER WARRANTY COVERAGE AGAINST DEFECTS IN WORKMANSHIP AND MATERIALS

Coating – paint and decals	1 year
Frame hardware, suspension, pivots and bushings	1 year
DH & Freeride frame hardware, suspension	6 months
Pivots and bushings	6 months

Please note: Non Rocky Mountain branded components are covered by the respective manufacturer's warranties.

WARRANTY POLICY



WHAT WILL VOID YOUR WARRANTY?

Warranty is **not** valid for any bicycles previously used for commercial activity such as rental, courier, police, security etc.

Installation of components, parts, or accessories not originally intended for or compatible with the bicycle (or frame) as sold.

Purchasing a Rocky Mountain Bicycle from an unauthorized dealer.

Purchasing a Rocky Mountain Bicycle or frame off third party internet sites (as eBay) no matter what the listing says.

WHAT IS NOT COVERED?

Normal wear and tear.

Damage or failure caused by accident, misuse, abuse or neglect.
Improper assembly and/or lack of proper maintenance

Extreme or improper use of your Rocky Mountain bicycle outside of its intended purpose.

Rocky Mountain Bicycles does not guarantee the compatibility of original components with a warranty replacement frame

UV rays effects (colors fading, turning yellow)

The components, parts, or accessories not compatible with the bicycle (or frame)

Details of what is not covered under warranty

A. Normal wear and tear on tires, tubes, brakes, gear cables, brake pads etc., are not covered. Your authorized Rocky Mountain dealer will inform you of what these normal maintenance items consist of.

B. Consequential damage or any damage caused by accident, misuse or abuse.

C. Improper assembly and/or lack of proper maintenance, sandblasting, sanding, grinding, wire brushing, filing, welding, brazing, drilled holes, anodizing, repainting, or chrome plating is not covered under your warranty and may void the warranty of the component manufacturers. Internal rust perforation on CroMoly steel frames is not covered under warranty.

D. You take great personal risk and shall forfeit the warranty, as outlined in the Warranty Table, when you ride in extreme terrain as depicted in mountain bike videos (i.e. riding "trials" style courses, riding ramps, doing stunts, riding on BMX tracks, riding down city stairs and embankments, or riding in other similar terrain. It is important to note that bent components, frames, forks, handlebars, seat posts, pedals, cranks and wheel rims are signs of accidents and/or abuse.

E. Labour for part replacement or changeover is not included

F. Rocky Mountain Bicycles retains the right to repair or replace at its discretion any part that is deemed a valid warranty. Please note that Rocky Mountain Bicycles cannot guarantee a colour match to the original component.

WARRANTY POLICY



EXCLUSION AND LIMITATION OF DAMAGES

THE WARRANTY OF ROCKY MOUNTAIN BICYCLES IS LIMITED TO THE REPAIR OR REPLACEMENT OF THE PRODUCTS AND DOES NOT GRANT ANY WARRANTY EITHER EXPRESSED OR IMPLIED, LEGAL OR CONVENTIONAL AND DISCLAIMS ANY AND ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSES, AND ROCKY MOUNTAIN SHALL UNDER NO CIRCUMSTANCES BE LIABLE FOR DIRECT OR INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES EVEN WHERE ROCKY MOUNTAIN HAS BEEN ADVISED OF SUCH DAMAGES AND ROCKY MOUNTAIN'S LIABILITY SHALL BE LIMITED TO \$ 50.00.

MAKING A WARRANTY CLAIM:

Please contact your original authorized Rocky Mountain dealer. If this business no longer carry or exists, please contact the closest Rocky Mountain Dealer near you. If you have purchased your Rocky Mountain bicycle from an authorized on-line retailer, you must contact them directly.

Please provide copy of **original sales receipt** for proof of **original ownership**

Please bring your **complete bicycle** to your authorized Rocky Mountain dealer for inspection. Your local dealer will provide the quickest answers and solutions for your warranty questions.

For International dealers, please contact your local distributor.

CRITICAL DIMENSIONS



TABLE 1 OF 2:

Frame	Headset	Max Fork Length	Seat Post Ø	Front Derailleur / ISCG Standard	Bottom Bracket
Element 29" RSL	IS42 IS52	120mm	30.9mm	E type Low Direct Mount S3 Bottom Pull	Press Fit BB92
Element 29"	ZS44 ZS56	120mm	30.9mm	E type Low Direct Mount S3 Bottom Pull	Press Fit BB92
Element MSL	IS42 IS52	120mm	30.9mm	E type Low Direct Mount S3 Bottom Pull	Press Fit BB92
Element 26"	ZS44 ZS56	120mm	30.9mm	E type Low Direct Mount S3 Bottom Pull	Press Fit BB92
Vertex RSL	IS42 IS52	100mm	27.2mm	34.9mm Down Swing High Clamp Bottom Pull	Press Fit BB92
Vertex	ZS44 ZS56	100mm	27.2mm	31.8mm Top Swing Low Clamp Bottom Pull	Press Fit BB92
Slayer	ZS44 ZS56	170mm	30.9mm	E type Low Direct Mount S3 Bottom Pull / ISCG 03	73mm
Slayer SS	ZS44 ZS56	130mm	30.9mm	E type Low Direct Mount S3 Bottom Pull / ISCG 03	73mm
Altitude	ZS44 ZS56	150mm	30.9mm	E type Low Direct Mount S3 Bottom Pull / ISCG 05	Press Fit BB92
Instinct	ZS44 ZS56	120mm	30.9mm	E type Low Direct Mount S3 Bottom Pull / ISCG 05	Press Fit BB92
Flatline	ZS49 ZS49 or EC49 * for Fox 40	200mm	30.9mm	ISCG 03	83mm
Flow	IS42 IS42	100mm	27.2mm	N/A	68mm
Sport Hardtail 29"	ZS44 ZS44 or EC44 * for tapered	100mm	27.2mm	31.8mm Top Swing Low Clamp Top Pull	73mm
Sport Hardtail 26"	ZS44 ZS44 or EC44 * for tapered	100mm	27.2mm	31.8mm Top Swing Low Clamp Top Pull	73mm
Edge 24"	EC34 EC34	50mm	27.2mm	31.8mm Top Swing Low Clamp Top Pull	68mm
Edge 20"	EC34 EC34	50mm	27.2mm	N/A	68mm
Solo CX	ZS44 ZS44	N/A	31.6mm	34.9mm Down Swing High Clamp Bottom Pull	68mm
Solo RSL	IS42 IS52	N/A	27.2mm	Braze On Down Swing High Clamp Bottom Pull	BB30
Prestige	IS42 IS52	N/A	27.2mm	Braze On Down Swing High Clamp Bottom Pull	BB30
Oxygen	ZS44 ZS44	N/A	31.6mm	34.9mm Down Swing High Clamp Bottom Pull	68mm
Sherpa	EC34 EC34	N/A	27.2mm	29.8mm Down Swing High Clamp Bottom Pull	68mm
Metropolis	EC34 EC34	N/A	31.6mm	34.9mm Top Swing Low Clamp Top Pull	68mm
RC	ZS44 ZS44	N/A	31.6mm	34.9mm Top Swing Low Clamp Bottom Pull	68mm
Whistler	ZS44 ZS44	80mm	27.2mm	31.8mm Top Swing Low Clamp Bottom Pull	68mm
Metro	ZS44 ZS44	N/A	27.2mm	31.8mm Top Swing Low Clamp Bottom Pull	68mm

CRITICAL DIMENSIONS



TABLE 2 OF 2:

Frame	Rear OLD	Shock Length	Shock Hardware	Disc Brake Standard	Max Tire Size **	Chainline
Element 29" RSL	142mm	6" x 1.25"	22.2 x M10 Both Ends	6" IS	29" x 2.25	50mm
Element 29"	142mm	6" x 1.25"	22.2 x M10 Both Ends	6" IS	29" x 2.25	50mm
Element MSL	135mm	7.5" x 2"	22.2 x M10 Both Ends	6" IS	26" x 2.35	50mm
Element 26"	135mm	7.5" x 2"	22.2 x M10 Both Ends	6" IS	26" x 2.35	50mm
Vertex RSL	142mm	N/A	N/A	6" IS	29" x 2.25	50mm
Vertex	135mm	N/A	N/A	6" IS	29" x 2.25	50mm
Slayer	142mm	7.875" x 2.25"	22.2 x M10 Both Ends	6" IS	26" x 2.5	50mm
Slayer SS	142mm	7.5" x 2"	22.2 x M10 Both Ends	6" IS	26" x 2.5	50mm
Altitude	142mm	7.875" x 2.25"	22.2 x M10 Shaft / 22.2 x M8 Air Can	6" IS	27.5" x 2.4	50mm
Instinct	142mm	7.5" x 2"	22.2 x M10 Shaft / 22.2 x M8 Air Can	6" IS	29" x 2.35	50mm
Flatline	150mm	9.5" x 3"	21.84 x M8 Both Ends	6" IS	26" x 2.5	57.9mm
Flow	135mm	N/A	N/A	6" IS	26" x 2.35	50mm
Sport Hardtail 29"	135mm	N/A	N/A	6" IS	29" x 2.25	50mm
Sport Hardtail 26"	135mm	N/A	N/A	6" IS	26" x 2.25	50mm
Edge 24"	135mm	N/A	N/A	6" IS	24" x 2.1	47.5mm
Edge 20"	135mm	N/A	N/A	6" IS	20" x 2.1	44mm
Solo CX	135mm	N/A	N/A	6" IS	700 x 35c	43.5mm
Solo RSL	130mm	N/A	N/A	N/A	700 x 28c * w/o fenders	43.5mm
Prestige	130mm	N/A	N/A	N/A	700 x 28c * w/o fenders	43.5mm
Oxygen	130mm	N/A	N/A	N/A	700 x 28c * w/o fenders	43.5mm
Sherpa	130mm	N/A	N/A	N/A	700 x 35c * w/o fenders	45mm
Metropolis	135mm	N/A	N/A	6" IS	700 x 38c * w/o fenders	50mm
RC	135mm	N/A	N/A	N/A	700 x 32c * w/o fenders	50mm
Whistler	135mm	N/A	N/A	6" IS	700 x 44c * w/o fenders	50mm
Metro	135mm	N/A	N/A	N/A	700 x 38c * w/o fenders	50mm

**Please note: This is ONLY A GUIDELINE. ACTUAL tire widths vary greatly for the same size. ie a 2.35" Maxxis is MUCH smaller than a 2.35" Schwalbe. Also, ACTUAL tire size can vary with construction. Entry level tires can balloon up more. Tire clearance will also vary depending on FD spec (2x10, 3x10, Shimano, SRAM...). Consumers should personally check clearance at FD and chainstay to avoid damage.

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