Carpet Knife Xti Assembly Manual and Parts list

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Center Pivot

Bag 1

1 Center Pivot Base

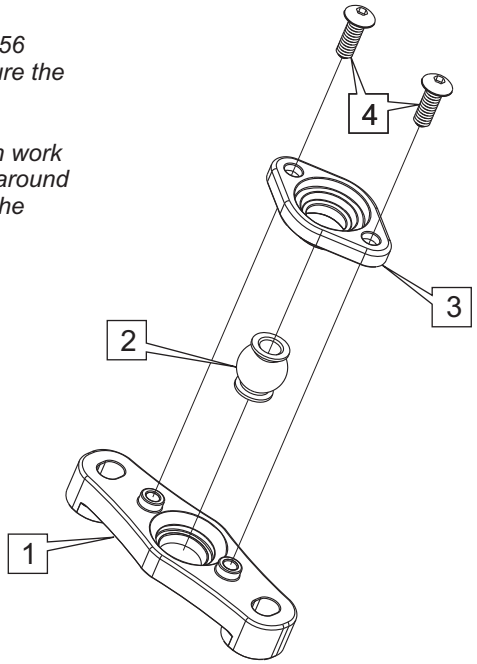
Center Pivot Cap 3

Alum Pivot ball 2

2-56 Button Head 4

Assemble the Molded Center Pivot assembly as shown. Tighten the 2-56 button head screws [4] enough to remove any up and down play, be sure the flanged pivot ball [2] pivots freely.

Note - Sometimes it is helpful to **slightly over-tighten the screws, then work the ball around by hand, and then loosen the screws so the ball floats around very free. Do not over-tighten the screws too much or you could warp the pivot socket.*



Center Pivot

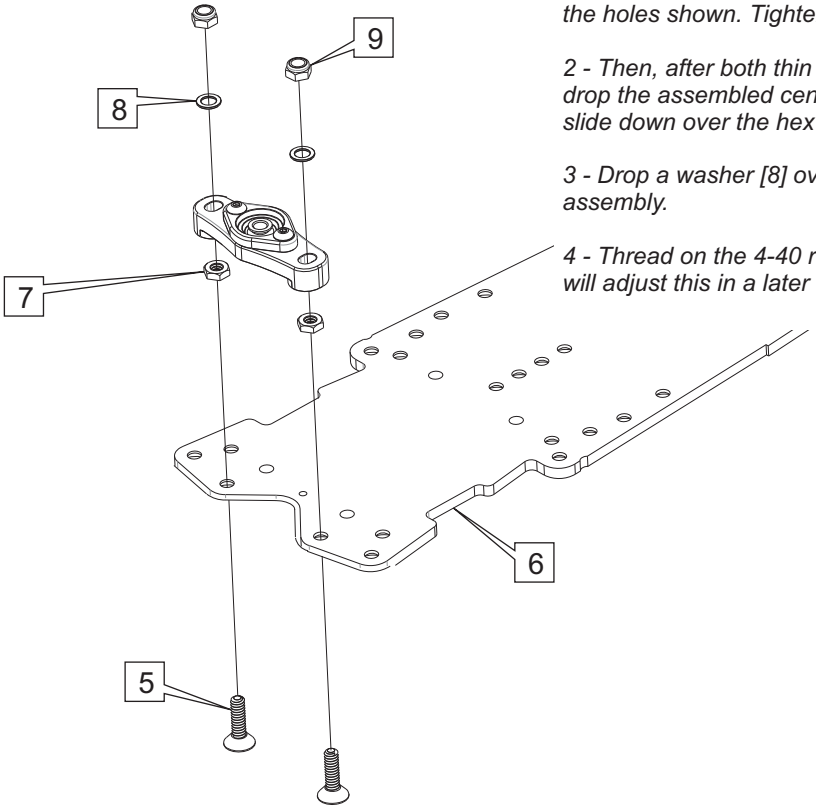
Bag 1

4-40 x ½" FH Steel 5

4-40 Thin Hex Nut 7

Washer 8

Red Locknut 9



1 - Place the 4-40 x ½" screws [5] through the graphite chassis [6] in the holes shown. Tighten a 4-40 thin hex nut [7] down fairly tight.

2 - Then, after both thin hex nuts are tight on the 2 mounting screws, drop the assembled center pivot over the screws. The assembly should slide down over the hex nuts, not sit on top of them.

3 - Drop a washer [8] over each screw above the center pivot assembly.

4 - Thread on the 4-40 red locknuts [9]. Do not tighten them yet as we will adjust this in a later step.

Bag 2

12 *4-40 x 5/16" FH steel*

Red Low-Profile Ball 11

9 *Red Locknut*

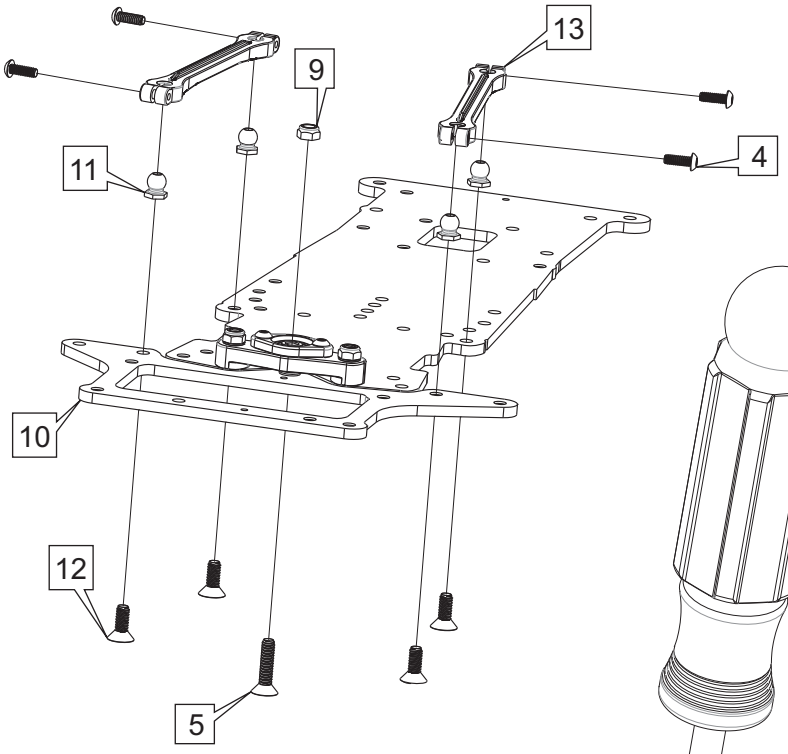
5 *4-40 x ½" FH Steel*

2-56 Button Head 4

1 - In Bag 2, find the graphite bottom plate [10]. Secure it to the pivot ball assembly with the ½" flat head screw [5] and tighten it with the red locknut [9].

2 - Find the 4 red low profile balls [11]. Secure them as shown with the steel 5/16" screws [12]. Next, look at the plastic side links [13] so that when you pop the links on the balls, the larger hole will be facing out, and the smaller hole facing the center of the car.

3 - Insert the 2-56 button head screws [4] into the side links from the outsides of the chassis as shown. The screw should easily slide through the larger outside hole, and then thread into the smaller inner hole. Only tighten them enough so that the links will not pop off the balls. ***You want the links to pivot very freely without any drag.***



Setting the One-piece links

1. *Be sure the 2 aluminum locknuts on top of the center pivot are slightly loose. There should be a washer under each alum locknut. Notice that the center pivot "floats" or moves slightly on the 2 screws. This "floating" allows the links to "free up". This ensures that the rear bottom plate pivots freely on the links and center pivot ball. This is a crucial step when setting up the Xti.*

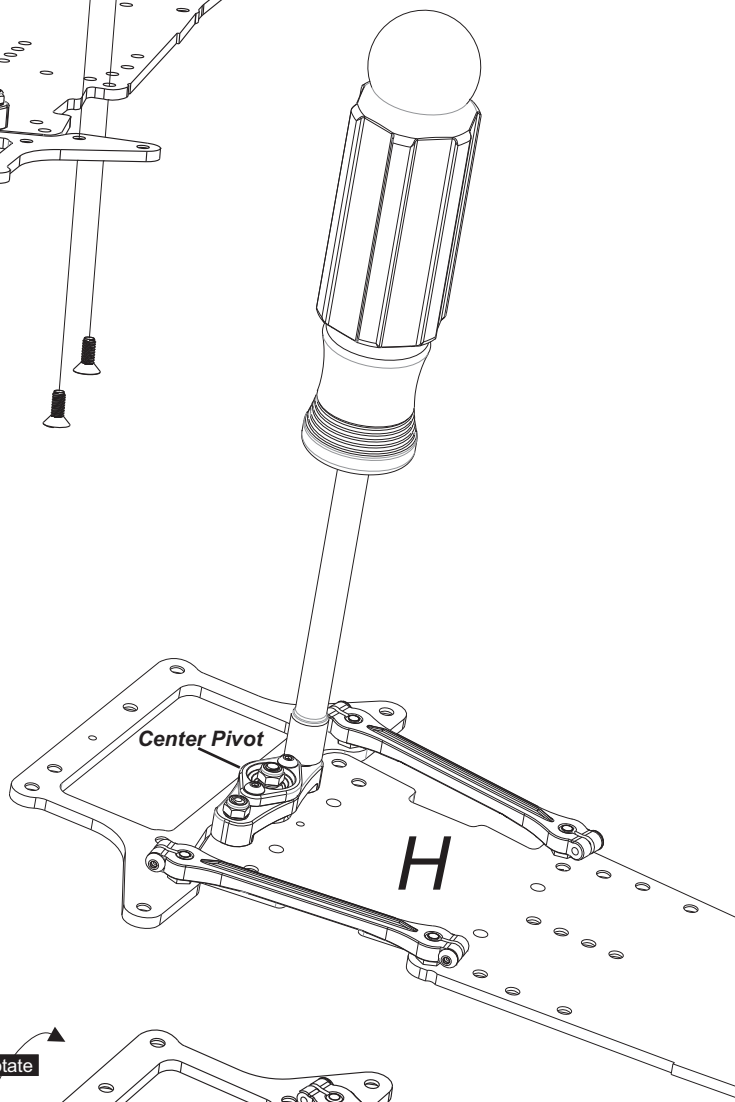
2. *Snap the 2 links on the balls as shown above. They should rock freely on the pivot balls.*

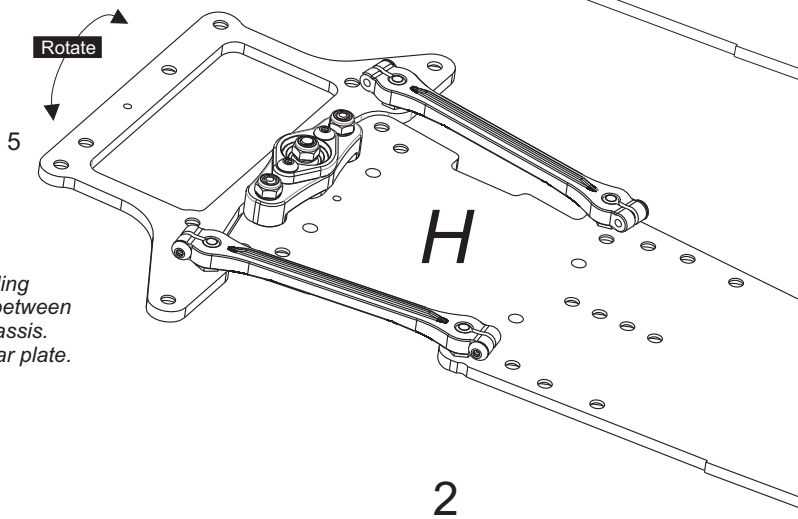
3. *Place the chassis/rear bottom plate assembly on a flat surface. No tires and no diff on the car! A smooth table or desk should do. Be sure that the rear bottom plate and chassis are in a straight line, flat against the table, again, no tires on the car. Lightly "tap" the chassis and rear pod releasing any tension in the links. Keep the chassis flat on the table for step 4.*

4. *Holding the chassis at the hold point "H" (not the rear pod) by pressing the chassis down to the table. Slowly tighten the 2 locknuts that secure the center pivot. For now, just lightly snug one side then the other.*

5. *Pick up the car and check the pivoting action of the rear lower plate. Rotate the rear plate from side-to-side. It should move free without binding or "clicking". If it does not, loosen the pivot locknuts and repeat steps 3+4.*

   If it rotates smoothly, then set the chassis back on the table and continue to tighten the locknuts on the center pivot more securely. Do this by again holding the chassis down to the table at the hold point "H". Alternating back and forth between the two lock nuts, fully tighten the lock nuts that hold the center pivot to the chassis. The handling of the Xti hinges (pun intended!) on the free movement of this rear plate. Be sure that the rear links and rear plate are free and not binding in any way.





Rear X-Pod

Bag 3

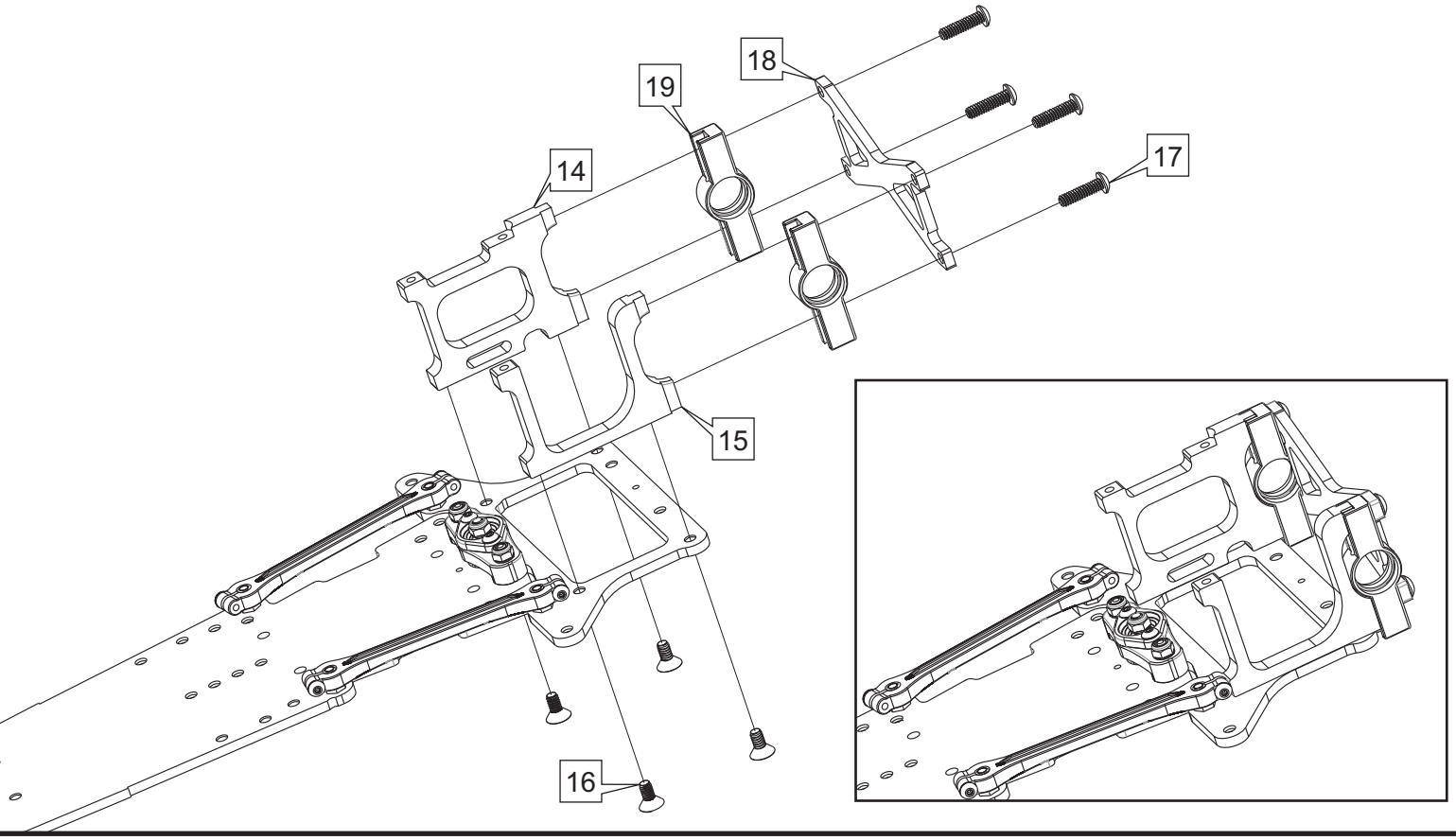
16 — *4-40 x 3/16" Flat Head*

16 — *4-40 x 7/16" Button Head*

1 - Install the Motor Plate [14] and Left Side Pod Plate [15] using 4 3/16" flat head screws [16] to attach the pod plates to the Graphite Bottom Plate [10]. Keep an eye on these screws during the first few runs of your car. They tend to loosen until they "seat" and then they WILL stay tight.

2 - Insert 4 7/16" button head screws [17] through the Graphite "X" Brace [18] and then through the Ride Height Sliders [19] and then lightly tighten them into the rear pod plates [14 & 15].

**Note - Although we are using steel screws in this kit, you may opt to use optional aluminum screws in the future. We do NOT recommend using thread lock in any aluminum to aluminum application. The best way to keep these tight is by keeping a close watch on their tightness after your first few runs. In time, the screw will naturally "seat" and stay tight.*



Tweak Plates

Bag 4

21 — *4-40 x 3/8" set screw*

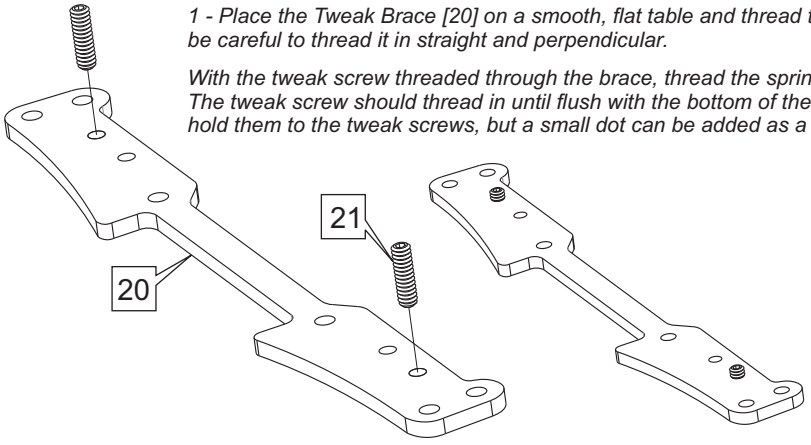
Molded Plastic Spring Holder

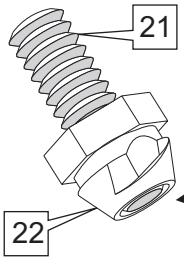
22

Insert Tweak Screws in Brace Assembly

1 - Place the Tweak Brace [20] on a smooth, flat table and thread the Tweak set screws [21] into the brace per the illustration. Try to be careful to thread it in straight and perpendicular.

With the tweak screw threaded through the brace, thread the spring holder [22] onto the tweak screw as shown in the illustration. The tweak screw should thread in until flush with the bottom of the spring holder. These spring holders do not require super glue to hold them to the tweak screws, but a small dot can be added as a precaution if you wish.

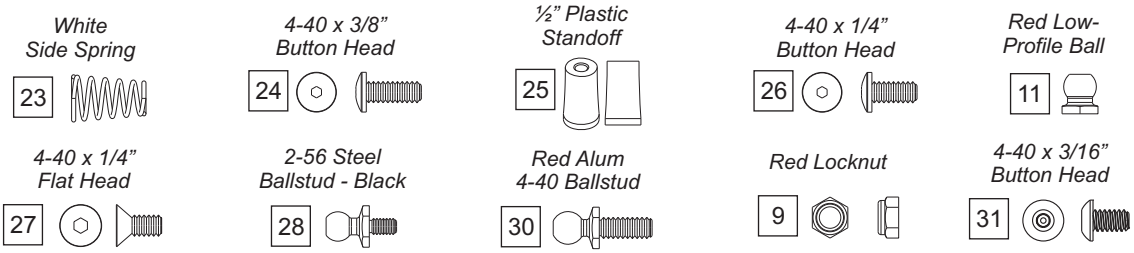




Thread the set screw in until flush with the bottom of the holder.

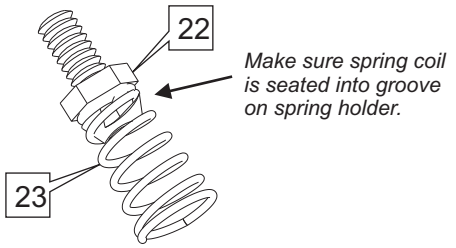
Tweak Plates

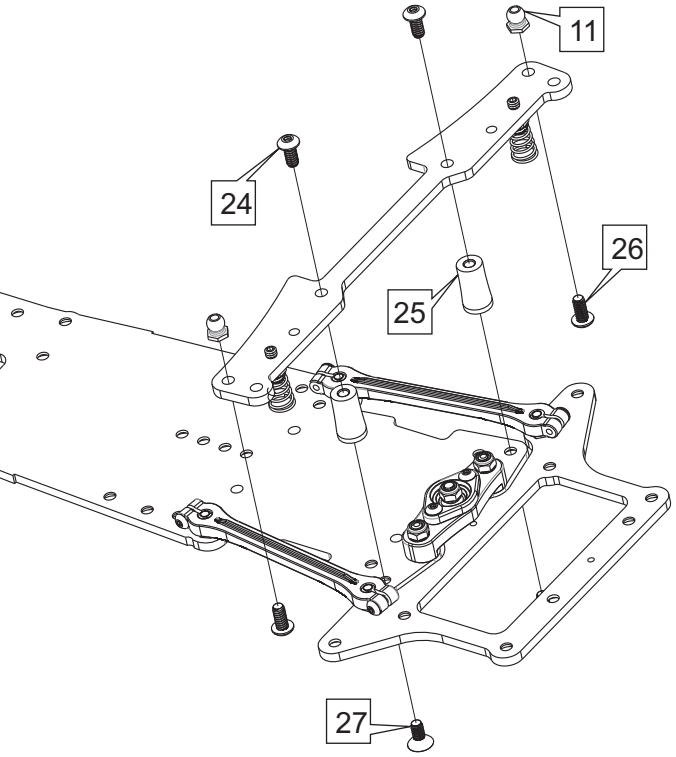
Bag 4



Attach Spring to Holder

Push the spring [23] into the groove on the plastic holder [22]. Make sure that the first coil sits into the angled groove. This allows the spring to sit flat on the bottom plate. If the spring coil is not properly seated in the groove, the spring will sit on an angle and make the car difficult to tweak properly.



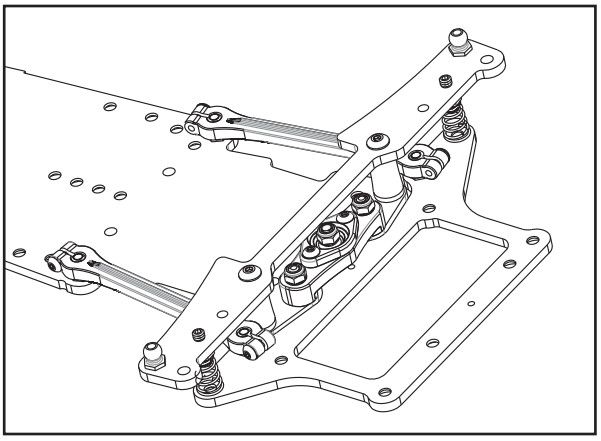


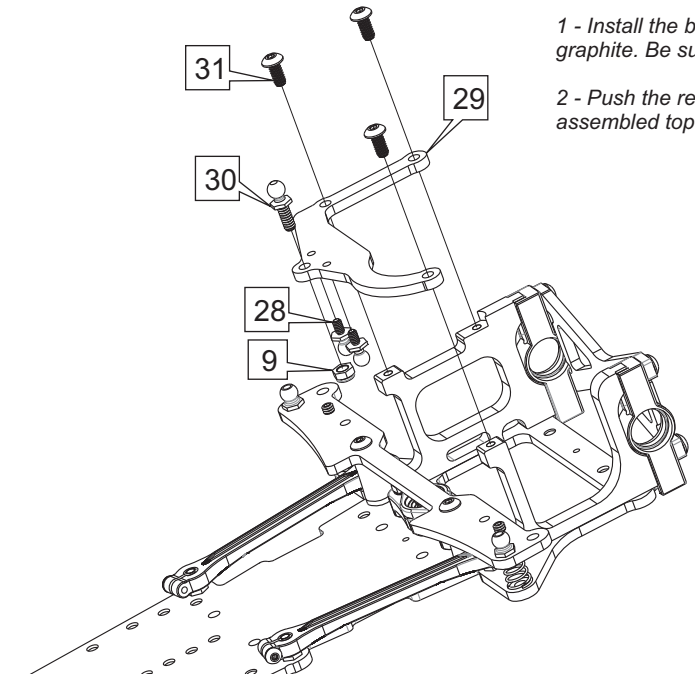
Assemble the Tweak Plates

1 - Use the 3/8" button head screws [24] to fasten the plastic standoffs [25] to the graphite tweak plate [20].

2 - Slide the 1/4" button head screws [26] up through the tweak plate [20] and tighten a red low-profile ball [11] to the screw as shown in the illustration. Make sure to use the forward hole on the tweak plate. The body mounts will go in the rear hole in a later step.

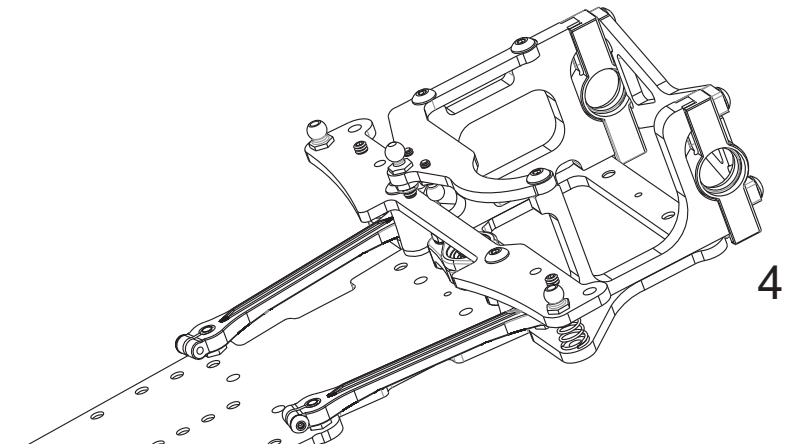
3 - Slide the 1/4" flat head screws [27] up through the chassis and thread into the plastic standoffs [25].





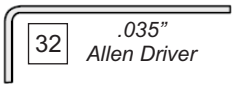
1 - Install the black 2-56 ballstuds [28] into the graphite top plate [29]. These steel balls thread into the graphite. Be sure to start them straight and square and turn them in slowly so they do not strip or break.

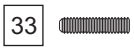
2 - Push the red ballstud [30] through the graphite top plate. Use a red locknut [9] to secure it. Attach the assembled top plate to the Pod Plates using 3 3/16" button head screws [31].

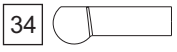


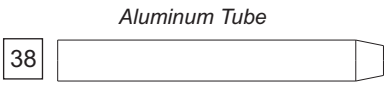
Damper Tubes

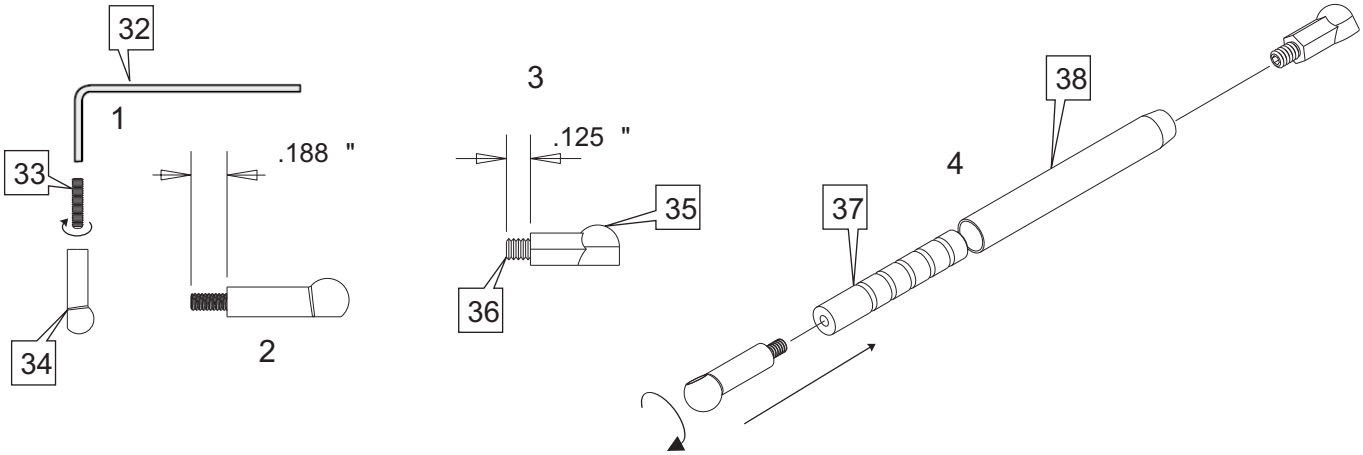
Bag 5









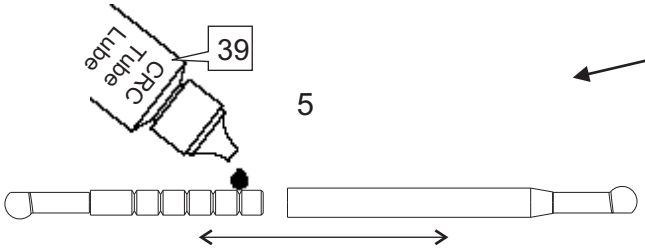


1 - Use the small .035" allen key [32] to drive the 2-56 set screw stud [33] into the thin plastic ball cup [34].

2 - Leave about 3/16" (half the set screw length) protruding from the ball cup.

3 - Do the same for the short 4-40 ballcup [35]. Use the 4-40 x 5/16" set screw [36] and the slighty larger .050" allen key. Leave about 1/8" protruding.

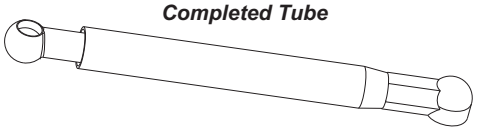
4 - Thread the 2 ball cups into their respective tube halves per the diagram. Finger tighten.



5 - Add CRC Tube Lube [39] to each slot on the delrin plunger [37]. Build the tube and be sure it has smooth, damped action.

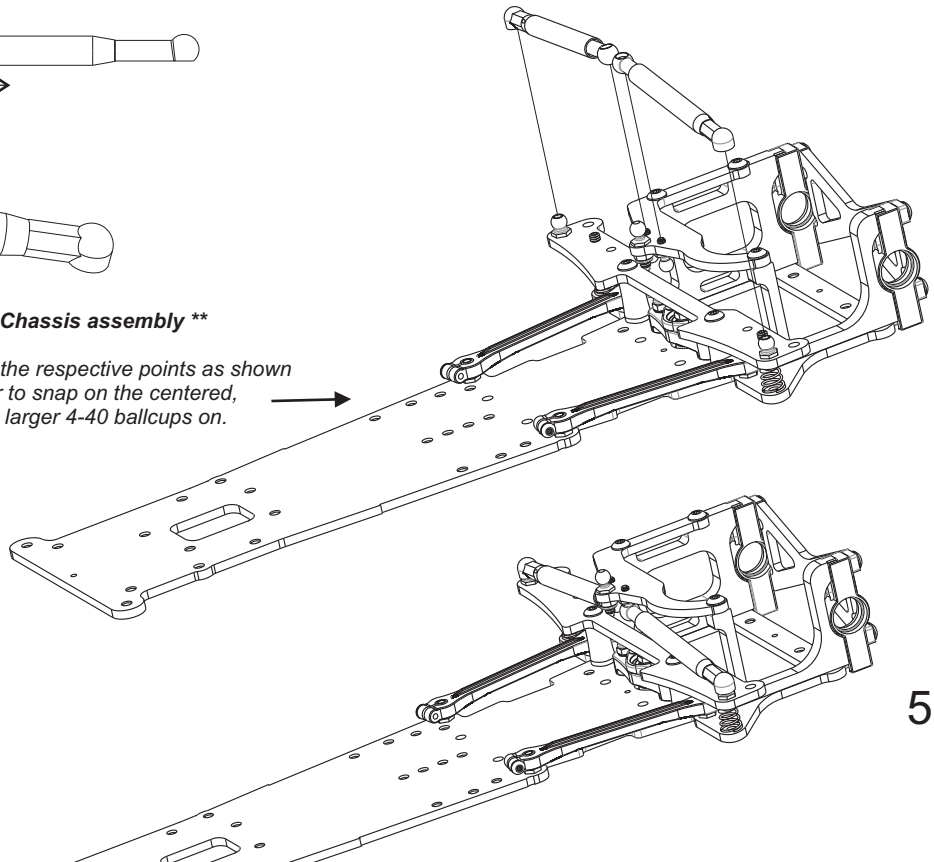
**** **Note**: fill only the slots, not the entire aluminum tube [38]. ****

Completed Tube



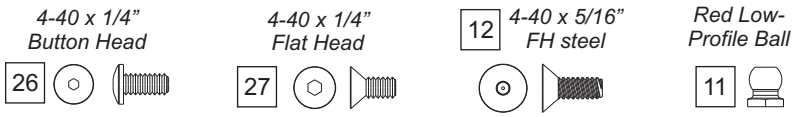
***** Adding the Damper Tubes to the Chassis assembly *****

Snap the assembled & lubed damper tubes on the respective points as shown in the diagram to the right. You will find it easier to snap on the centered, smaller 2-56 ball studs first, then pop the outer, larger 4-40 ballcups on.



Top Deck

Bag 6



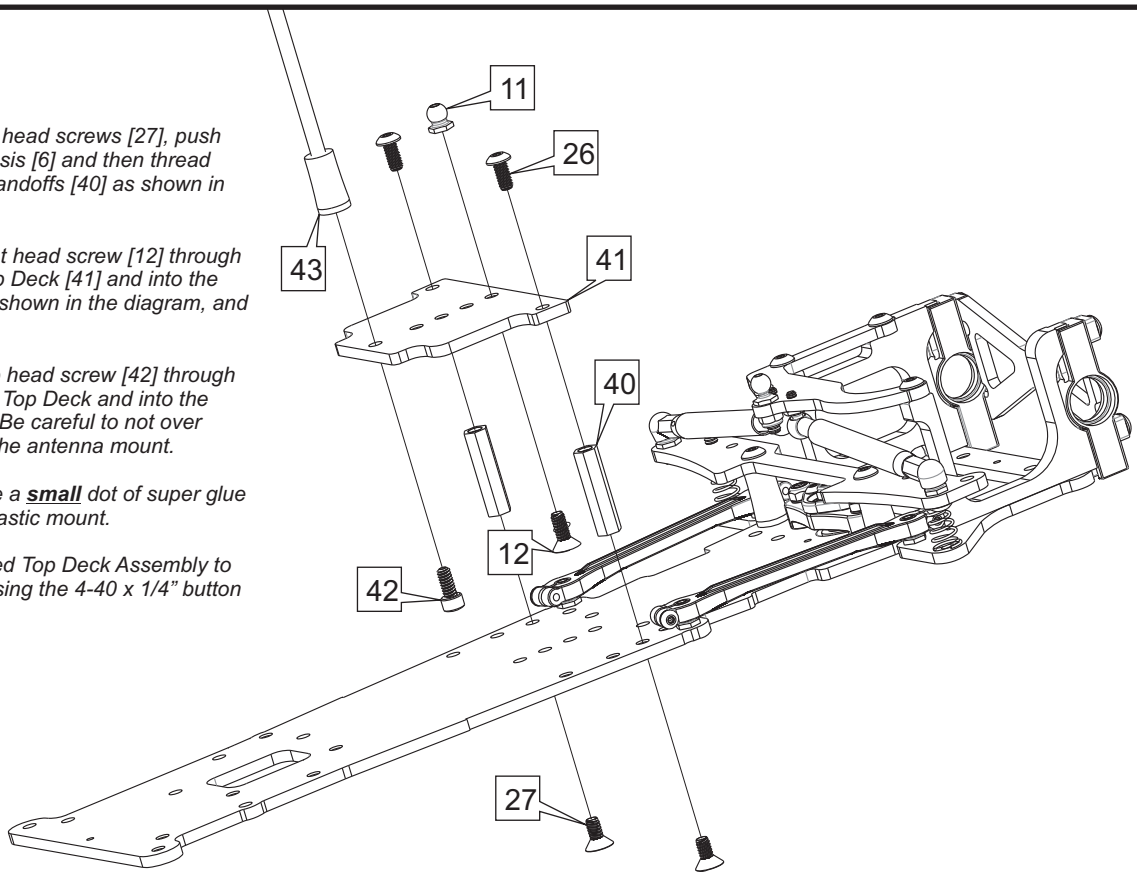
1 - Using the 4-40 x 1/4" flat head screws [27], push the screws through the chassis [6] and then thread them into the 3/4" tall hex standoffs [40] as shown in the diagram.

2 - Insert the 4-40 x 5/16" flat head screw [12] through the rear most hole of the Top Deck [41] and into the Red Low-profile Ball [11] as shown in the diagram, and tighten.

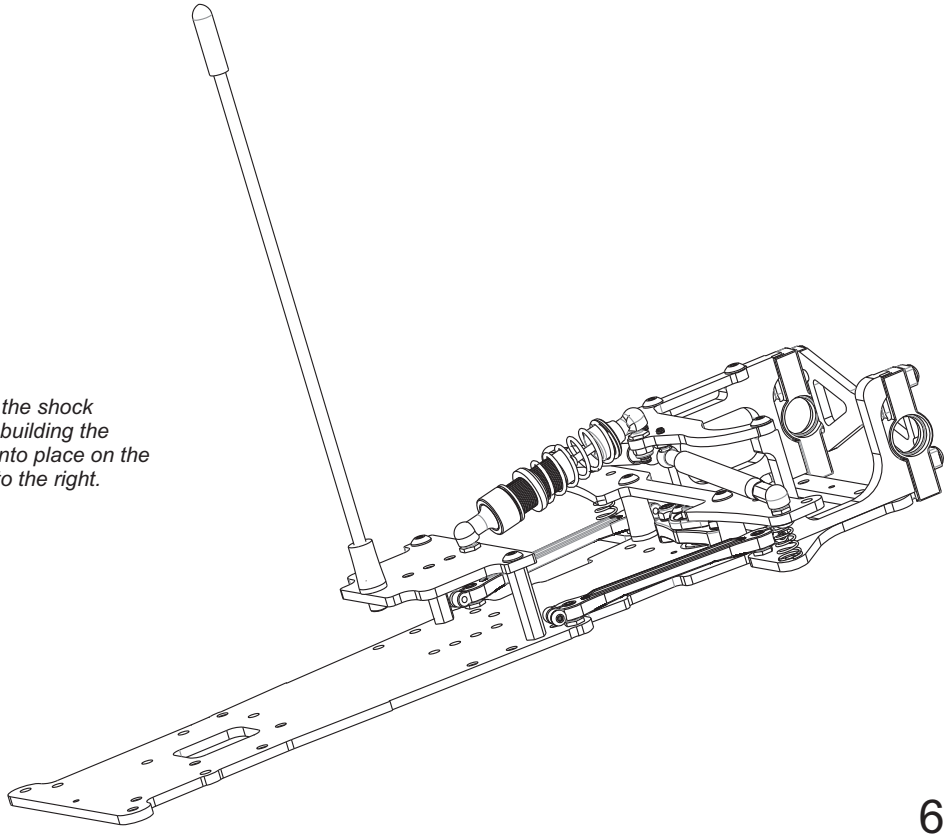
3 - Insert the 4-40 x 1/4" cap head screw [42] through the forward most hole in the Top Deck and into the Plastic Antenna mount [43]. Be careful to not over tighten this screw and strip the antenna mount.

NOTE *- it is advised to use a* ***small*** *dot of super glue to hold the antenna in the plastic mount.*

4 - Last, mount the completed Top Deck Assembly to the two hex standoffs [40] using the 4-40 x 1/4" button head screws [26].



**Note* - The picture to the right shows the shock snapped into place as well. We will be building the shock in the next step and it will snap into place on the two ball studs as shown in the picture to the right.*



CRC Encore Shock

*1 - Thread the spring adjuster nut [44] onto the shock body [45] as shown. *This needs to be installed first or you will not be able to get it on later after the lower end of the shock is assembled!**

2 - Insert only 1 of the small o-rings [46] into the lower end of the shock body [45]. Next, install the bottom shock plug [47] and tighten the bottom shock cap [48].

3 - Insert 1 of the small e-clips [49] into the lower groove of the shock shaft [50]. Slide the piston [51] over the shaft until it stops against the e-clip and then secure it in place with the other e-clip in the end groove. Next, slide the other small o-ring [46] over the shock shaft and up against the piston. This o-ring acts as a travel limiter.

4 - Put a small dab of the included shock oil on the threads of the shock shaft to lube it and then slide the shock shaft through the bottom end of the shock carefully so you do not damage the o-ring with the threads on the shock shaft. Pull the shaft all the way through until the piston bottoms out in the shock body.

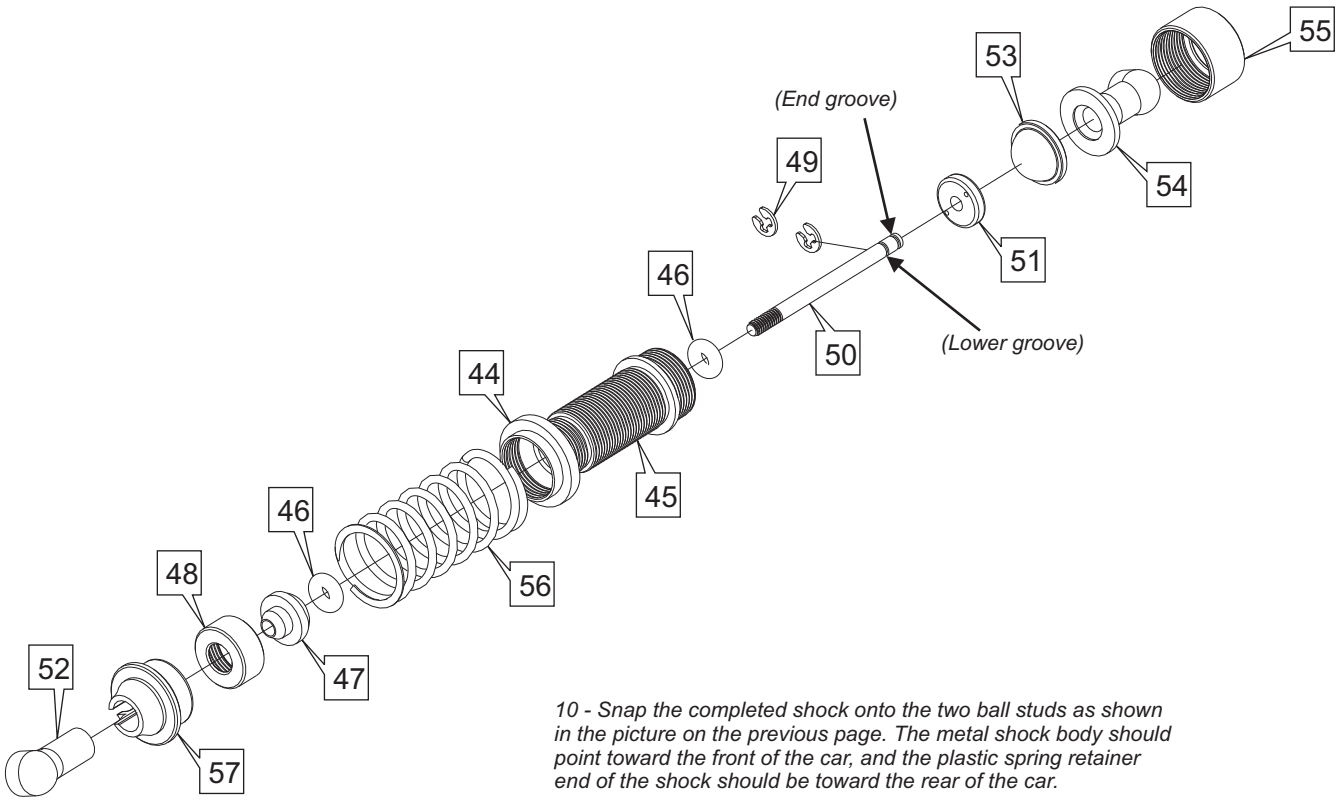
*5 - Wipe off any excess oil from the threads of the shock shaft and then thread on the shorter of the 2 included ballcups [52]. *If you need to hold the shaft with pliers, be sure to wrap a rag around the shaft first so the pliers do not damage the shaft. If there is any damage to the shaft, the sharp edges will damage the o-ring and cause the shock to leak.*

6 - Now with the shaft still fully extended, hold the shock body upright and fill with the included shock oil. Press the shaft in about half way and then return it to full extension. Look inside the shock and you will notice small air bubbles in the oil. This is the rest of the air that was trapped below the piston. Allow enough time for the air bubbles to work their way to the surface and pop.

7 - Once satisfied that all of the air is out of the shock, top off with oil and then insert the shock bladder [53] by laying one side into the oil and then rolling your finger across the top of the bladder to expel any excess air and/or oil.

*8 - Insert the flanged ballcup [54] into the upper shock cap [55] and then tighten this down over the shock bladder, being careful to not knock the bladder off its seat and allowing air to enter the shock. *Double check that the shock is working smoothly through its range of motion and that you can fully compress the shock. If it binds up before being fully compressed, then it has too much oil and you will need to crack the top cap loose and expel a very small amount of oil and re-tighten.*

9 - Slide the shock spring [56] over the shock body and keep in place by clicking the spring retainer [57] over the shock shaft and sliding it down over the short ballcup to keep it in place.

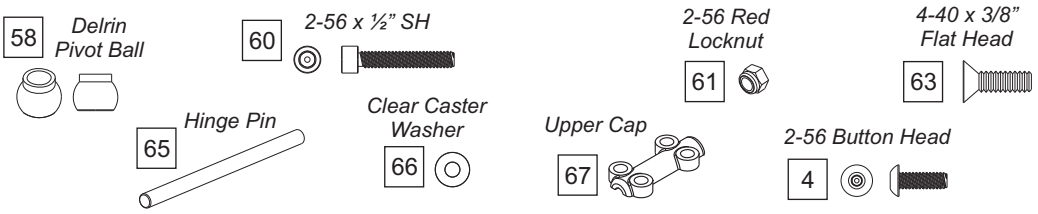


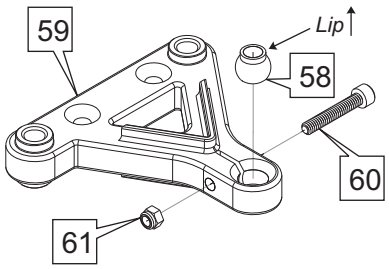
10 - Snap the completed shock onto the two ball studs as shown in the picture on the previous page. The metal shock body should point toward the front of the car, and the plastic spring retainer end of the shock should be toward the rear of the car.

Squeeze the ball cups over the ball studs with pliers. Do not push down on the shock in the center and try to pop both ball cups on at once or damage to the shock and shock shaft will occur.

CRC Pro-Strut Front End

Bag F





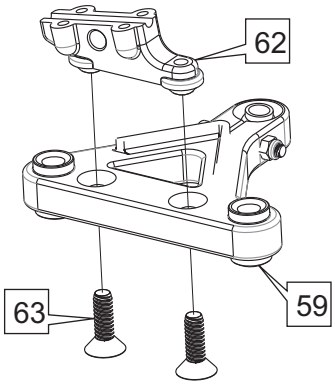
1 - Pop the delrin pivot ball [58] into the lower arm [59]. Place the arm on a strong table and push the ball in with the back of screwdriver handle. Or preferably, you can use CRC's 4279 Ball Popper Pivot Ball Tool. Notice the "lip" of the delrin pivot ball is pointing upward. The diagram to the left represents a right side lower arm. For the left side, flip the second arm over and be sure the pivot ball is installed with the lip again facing up.

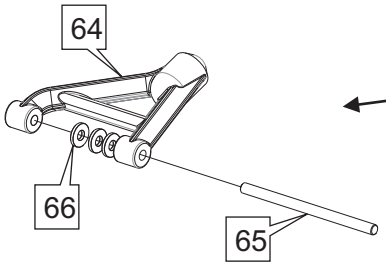
2 - Once the ball is popped in, insert the black 2-56 clamp screw [60] through the hole in the lower arm. Thread the 2-56 red locknut [61] onto the black screw. Tighten the screw slowly, continuously checking the pivot ball. When it begins to bind, back the 2-56 screw off a bit. The ball should be free to pivot with just a bit of drag. There is no need to have this ball super loose, a slight drag will be just the right amount of clamping force.

Check this fit after a few runs as the ball will wear and require additional clamping force.

1 - Install the upper A-arm mount [62] with the amount of Dynamic Caster desired. The options are 0, 5 and 10 degrees. The part shown to the right is the 5 degree version and is a good starting point. The 10 will angle down more toward the front of the car with the 0 being parallel to the chassis. The general thought is the more Dynamic Caster, the more steering the car will have at corner entry.

2 - Locate the 4-40 x 3/8" flat head screws [63] and insert them through the lower arm [59], and then thread the screw into the upper A-arm mount [62]. Be sure NOT to over tighten.

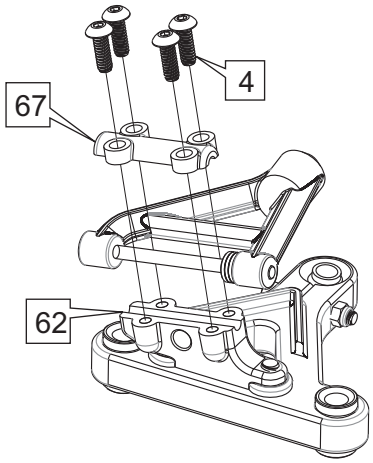




1 - Break the mold tree from the upper A-arm [64]. You can clean up the mold gates with a hobby knife or rotary tool.

2 - Locate the upper arm hinge pin [65] and slide it into one half of the upper arm. Locate 3 small clear plastic caster washers [66]. Push the hinge pin through the 3 washers. Then continue to push the hinge pin all the way into the upper arm.

If the fit of the upper arm on the hinge pin is tight, you will want to loosen the fit of the hinge pin in the upper arm, not in the arm mount (pictured below). The upper clamp and arm mount need to squeeze the pin so it doesn't fall out. If the fit is tight and the arm doesn't pivot freely, then work on the fit with just the upper arm and hinge pin. Set the caster washers aside so you don't lose or damage them. This fit can be freed up by heating the hinge pin with a heat gun or hair dryer, or you can clamp the hinge pin into a rotary tool and spin the pin in the plastic as if it were a drill bit. The heat created will set the plastic to the shape of the pin without removing material and making too much play in the arm.

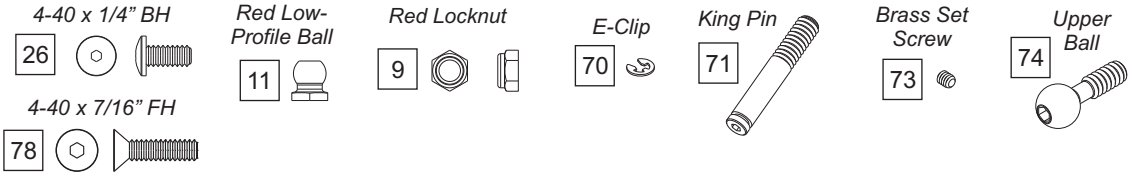


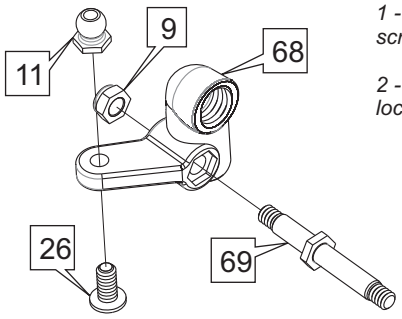
3 - Now, install the arm/pin/washer assembly onto the upper arm mount [62]. Put the hinge pin in the channel. At this point you can set your starting caster setting by moving these washers forward and back. The position shown to the left will result in a competitive handling. Moving some to the front will decrease steering from the center to exit of the corner. This helps smooth out the car on extremely high bite tracks.

4 - Install the upper cap [67] with 4 black 2-56 button head screws [4]. The upper cap is the "clamp" for the hinge pin. Be sure to tighten so that any gap is gone, however, do not tighten beyond that point as damage can occur to the upper a-arm mount holes.

Pro-Strut Front End

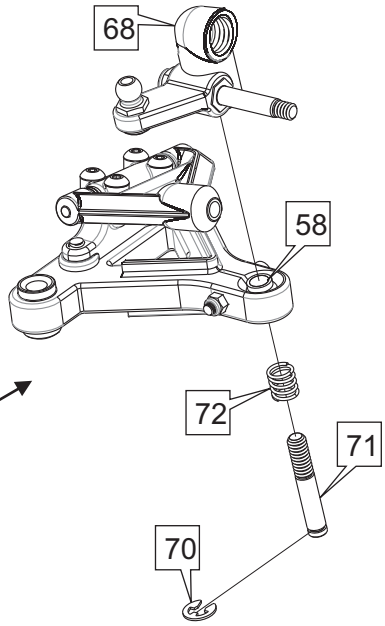
Bag F

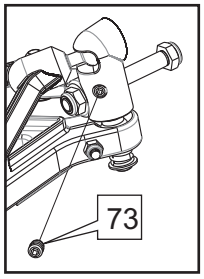




1 - Build up the left and right steering blocks [68] as shown to the left. Start by threading the 1/4" button head screw [26] through the steering arm of the block [68] and into the red low profile ball [11].

2 - Then, slide the steel stub axle [69] into the steering block as shown, and secure it in place using the red 4-40 locknut.

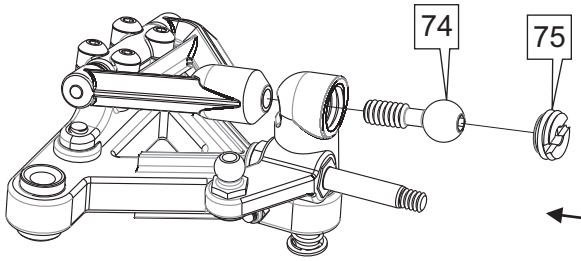




1 - Locate the e-clip [70] and snap it into the groove of the King Pin [71]. Slide the Front End Spring [72] down over the threaded end of the King Pin until it rests against the e-clip.

2 - Using either the included Allen key, or your own .050" hex wrench, slide the King Pin/spring/e-clip assembly through the lower arm pivot ball [58], & then thread it into the steering block [68]. Thread it in until the front spring just touches the lower arm pivot ball. You do not want any preload on this spring, but you don't want play either. Only run the king pin in until the spring just touches the ball.

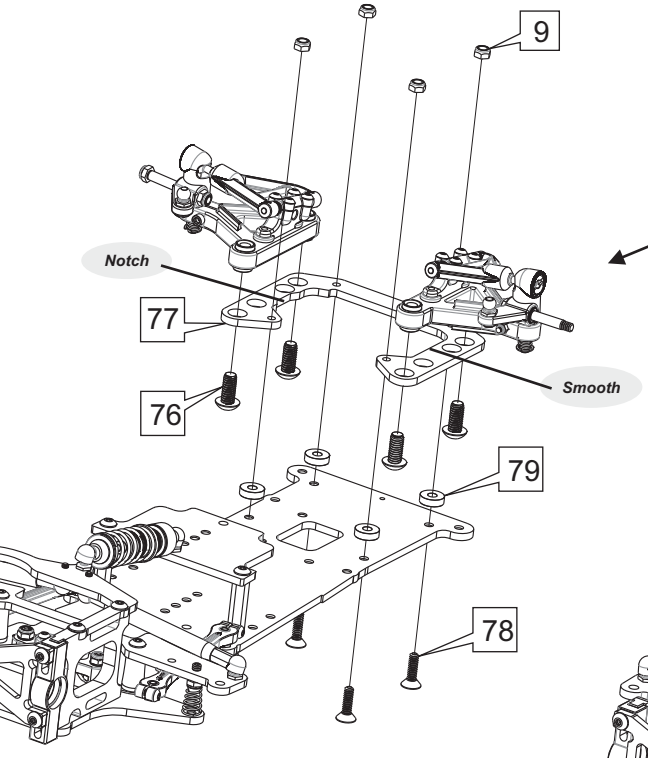
3 - Once happy with the king pin/spring preload position, lock the king pin with the 4-40 brass set screw [73] through the hole in the side of the steering block.



1 - Take the upper pivot ball [74] and push it though the steering block and thread into the upper arm. Thread it in so there are no threads showing.

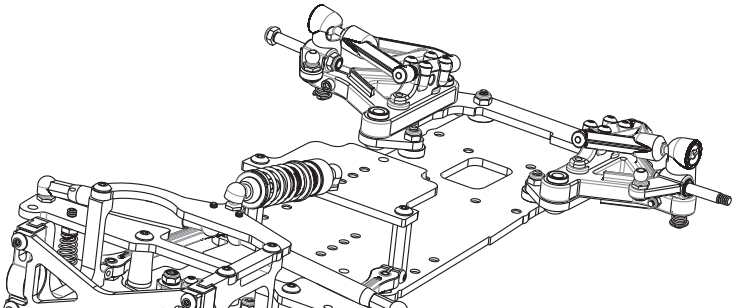
2 - Take the slotted capture insert [75] and thread it into the steering block. THIS IS A BIT TRICKY .... as the insert must be fitted at a down angle as shown to the left. DO NOT try to insert it horizontally into the steering block. It is actually threaded in at a down angle toward the center of the car.

3 - Tighten this capture insert so that the steering movement is bound and slow. Yes, we are actually slightly over tightening this piece FOR NOW. With the steering movement bound from over tightening, move the steering to it's limits, back and forth. What we are doing is "breaking in" the upper ball/capture insert. After a minute or so of break in, loosen the insert just enough so the steering is free. Not too much or you will induce excessive free play.



1 - Use the large 8-32 screws [76] to mount the front suspension assembly to the graphite front end plate [77]. Make sure that you have the notched side of the front end plate to the left side of the car, and the smooth side to the right. Push the bumps on the bottom of the lower suspension arm into the holes on the front end plate. Tighten both screws firmly, but be careful not to strip the threads in the arm.

2 - Insert the 4-40 x 7/16" flat head screws [78] through the chassis, and then through one of the 2 included aluminum ride height spacers [79], and then through the Graphite Front End Plate [77]. (The drawing to the left only shows the thicker of the 2 different spacers, but there is also 8 pcs of a thinner spacer as well. Use the different spacers to adjust the front ride height of the car.) The 4-40 x 7/16" screws will slide right through the 2 rear holes of the front end plate. Secure them in place with 2 of the 4-40 red locknuts [9]. In the 2 forward holes of the front end plate, the screws will need to be threaded into the graphite and tightened before you will be able to put on the locknuts. This smaller, tighter, threaded hole keeps the front end securely located in place, so it doesn't shift in the event of a crash.



Bag 8

1/4" x 3/8" Flanged Bearing — 80

1/4" Shim — 83

Red Clamp Hub — 85

m2.5 x 6mm Socket Cap — 86

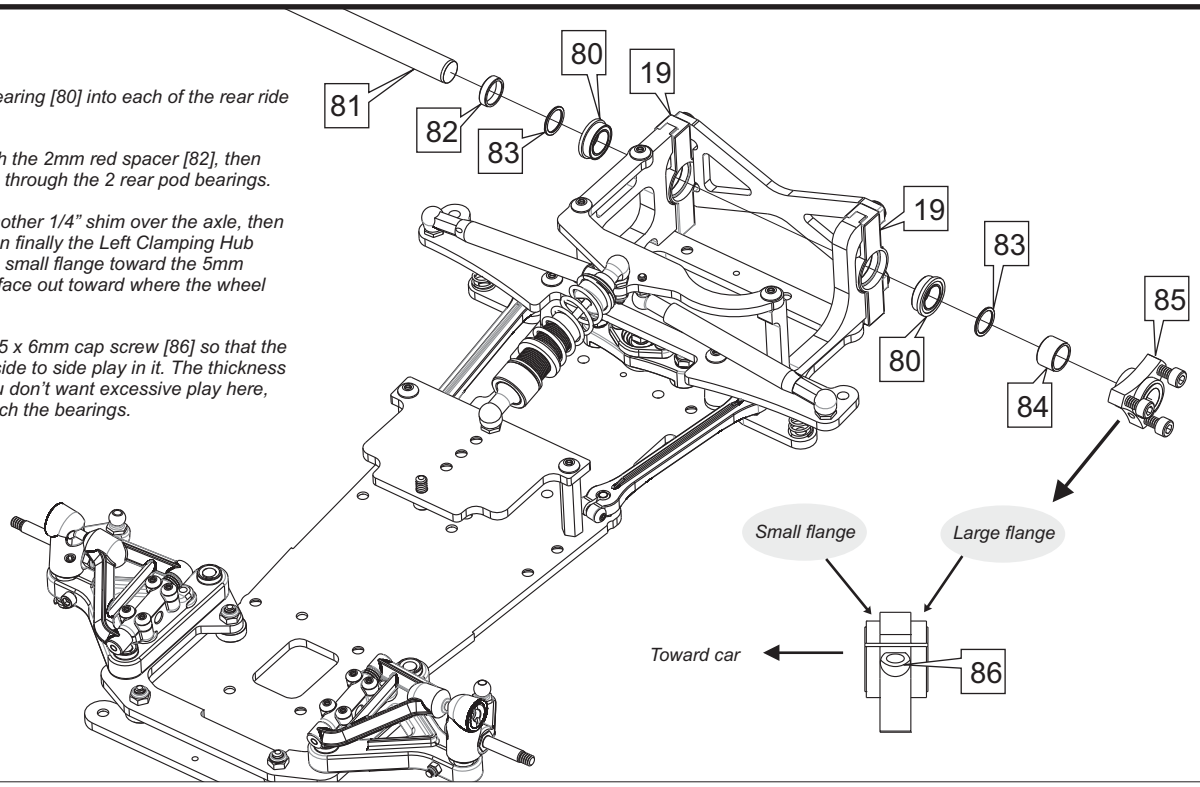
Differential Axle

1 - Insert a 1/4" x 3/8" Flanged Bearing [80] into each of the rear ride height sliders [19].

2 - Slide the rear axle [81] through the 2mm red spacer [82], then through a 1/4" shim [83] and then through the 2 rear pod bearings.

3 - On the protruding axle, slip another 1/4" shim over the axle, then the 5mm red spacer [84], and then finally the Left Clamping Hub [85]. Slip the Left Hub on with the small flange toward the 5mm spacer. The larger flange should face out toward where the wheel will mount.

4 - Lock the hub with the small 2.5 x 6mm cap screw [86] so that the axle has a very small amount of side to side play in it. The thickness of 2 sheets of paper is plenty. You don't want excessive play here, you're just making sure to not pinch the bearings.



Bag 9

1/4" x 3/8" Plain Bearing — 91

1/4" x 3/8" Flanged Bearing — 80

1/4" Shim — 83

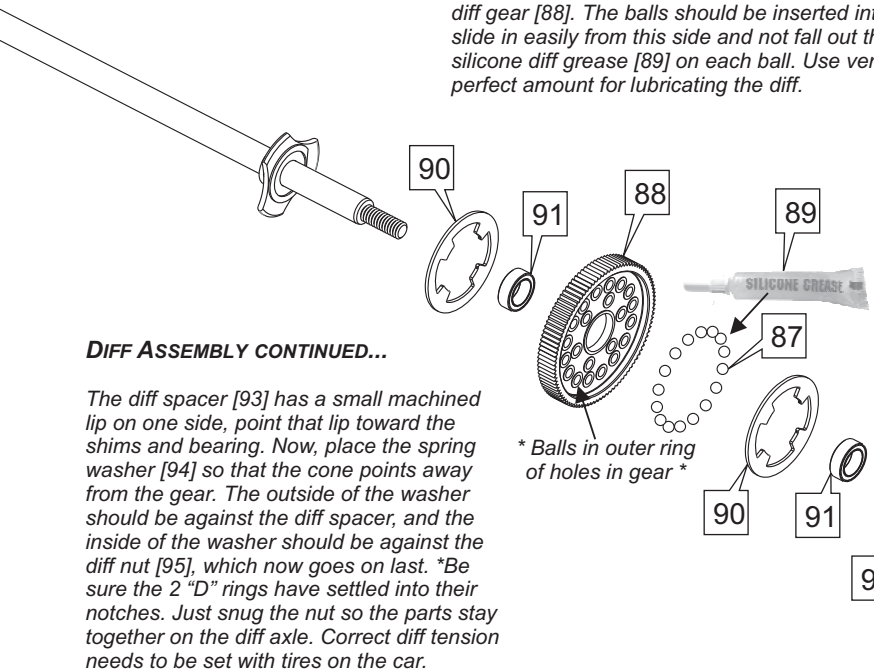
Diff Spacer — 93 (Lip)

Spring Washer — 94

Nylon Diff Nut — 95

Differential

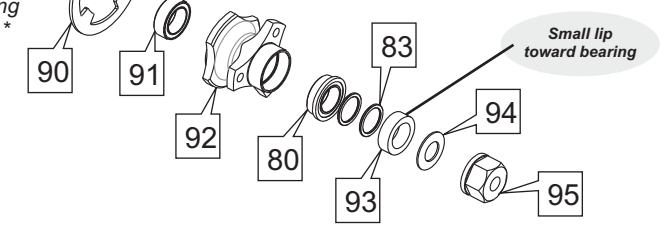
1 - INSTALL AND GREASE THE DIFF BALLS - *Pop the 3/32" diff balls [87] into each of the outer ring of holes in the diff gear [88]. The balls should be inserted into the gear from the side that does NOT say CRC on it. The balls will slide in easily from this side and not fall out the other side. After all the balls are in the gear, place a small dab of silicone diff grease [89] on each ball. Use very little! Just enough to keep the balls from falling back out will be the perfect amount for lubricating the diff.*



2 - DIFF ASSEMBLY - **(Holding the car on it's side, with the rear axle pointing upright will ease assembly of the diff.) Place 1 diff ring [90], and then a 1/4" x 3/8" plain bearing [91] over the end of the axle. Align the diff ring so that it notches into the axle flange. Place the assembled gear with the greased diff balls over the axle and push it down over the plain bearing. Next, insert the other plain bearing into the back of the Diff Hub [92]. Then, align the second diff ring with the notch on the back of the diff hub. *(place a small dab of the diff grease on the hub first to hold the ring in place.)* Now, slide the hub, bearing, & diff ring down over the axle. Next, slide a flanged bearing [80] over the axle and into the front of the diff hub. After the bearing is seated into the hub, place two 1/4" shims [83] over the axle and slide them up against the bearing.*

DIFF ASSEMBLY CONTINUED...

*The diff spacer [93] has a small machined lip on one side, point that lip toward the shims and bearing. Now, place the spring washer [94] so that the cone points away from the gear. The outside of the washer should be against the diff spacer, and the inside of the washer should be against the diff nut [95], which now goes on last. *Be sure the 2 "D" rings have settled into their notches. Just snug the nut so the parts stay together on the diff axle. Correct diff tension needs to be set with tires on the car.*



3 - Setting the Diff - *Once the tires are on: Adjust the diff nut so that the tires spin back and forth freely when holding the spur gear, but it is very difficult to slip the spur gear with your thumb when holding both tires.* ***DO NOT*** *over-tighten, or the outer diff hub bearing will get crushed and ruin the diff! Re-check diff tension after the first run.*

Body Posts

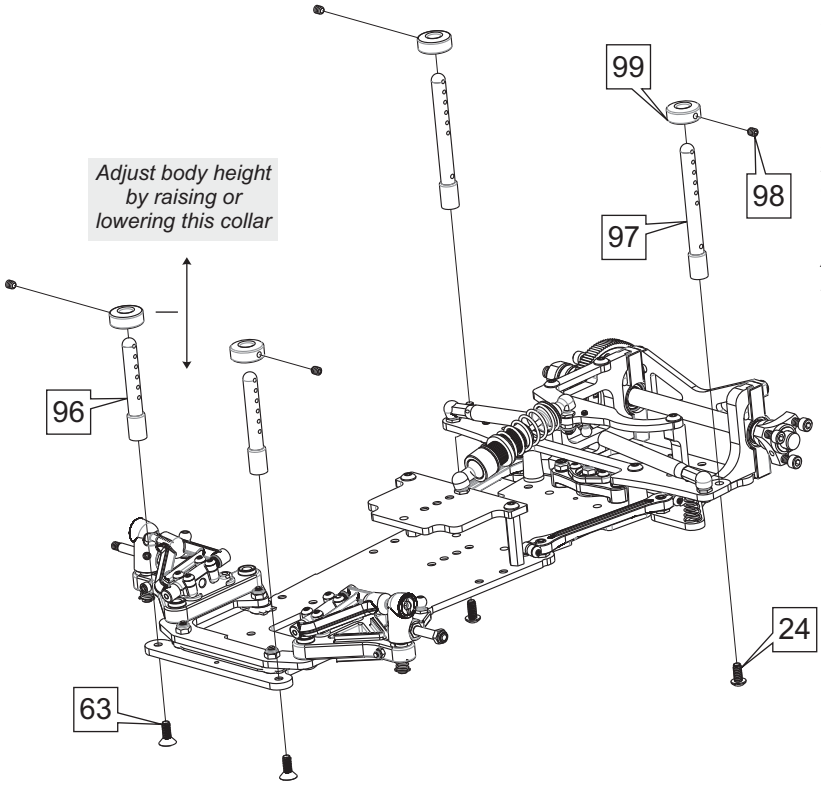
Bag 10

4-40 x 3/8" Button Head — 24

4-40 x 3/8" Flat Head — 63

4-40 x 1/8" Set Screw — 98

Body Post Collar — 99



Body Posts

Secure both of the short front body posts [96] to the chassis with the 4-40 x 3/8" flat head screws [63].

For the longer rear body posts [97], use the 4/40 x 3/8" button head screw [24]. Mount the body posts to the holes behind the damper tubes on the Tweak Plate [20] as shown.

Thread the steel 1/8" set screw [98] into the plastic collar [99]. Adjust the collar up and down the body post to accommodate the body shell used. Lock the collar in place with the set screw.

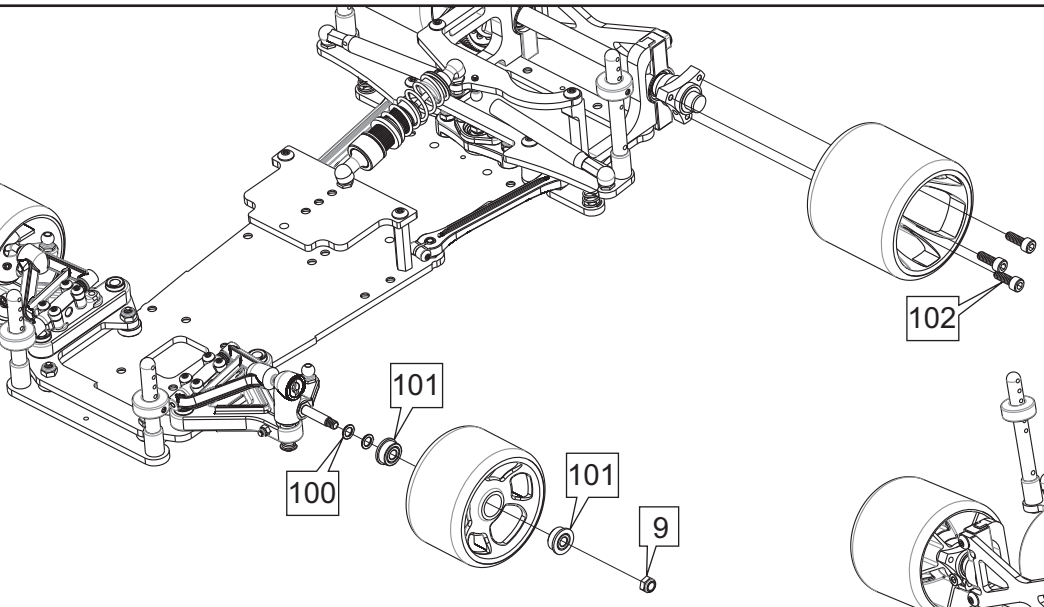
Bag 11

1/8" Shim — 100

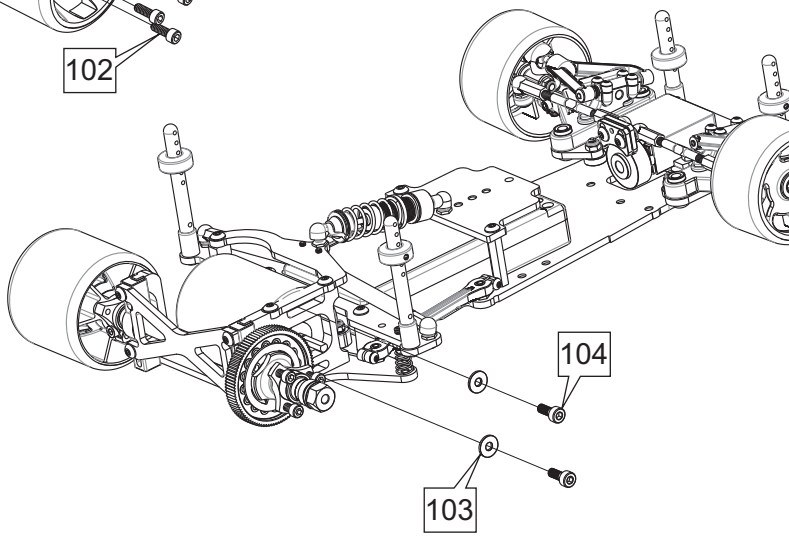
1/8" x 5/16" Flanged Bearing — 101

Red Locknut — 9

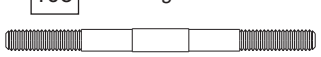
4-40 x 5/16" Red Socket Cap — 102

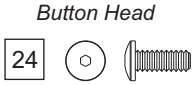


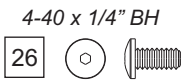
Tires and motor are NOT included with the Carpet Knife Xti. They are shown here for reference only.

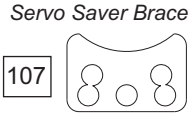


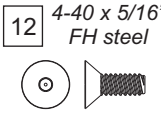
Steering

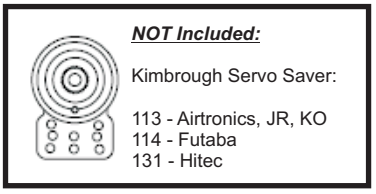


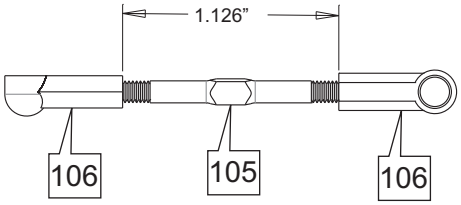












Tie-Rods

Start by assembling 2 tie rods as shown to the left. This 1.126" gap should be a good starting point for toe-in adjustment. If you do not have a set of calipers, you can line up your tie rods with the drawing on the page to get you close. Either way, you will need to adjust the final length after the car is fully ready to run.

Servo Saver Assembly -

Install the servo saver (not included) and assorted hardware in the order shown to the right. Put the 4-40 x 3/8" button head screws [24] through the narrower set of holes on the servo saver brace [107] and the middle set of holes on the servo saver as shown. The holes in the servo saver will need to be either drilled out, or can be reamed out carefully with a hobby knife by lightly setting the tip of the blade in the hole and spinning it as if it were a drill bit. Do this a little at a time from both sides until the screw will pass through the hole. Once you have the screws through the servo saver brace and servo saver, tighten the red low-profile balls [11] onto the screws.

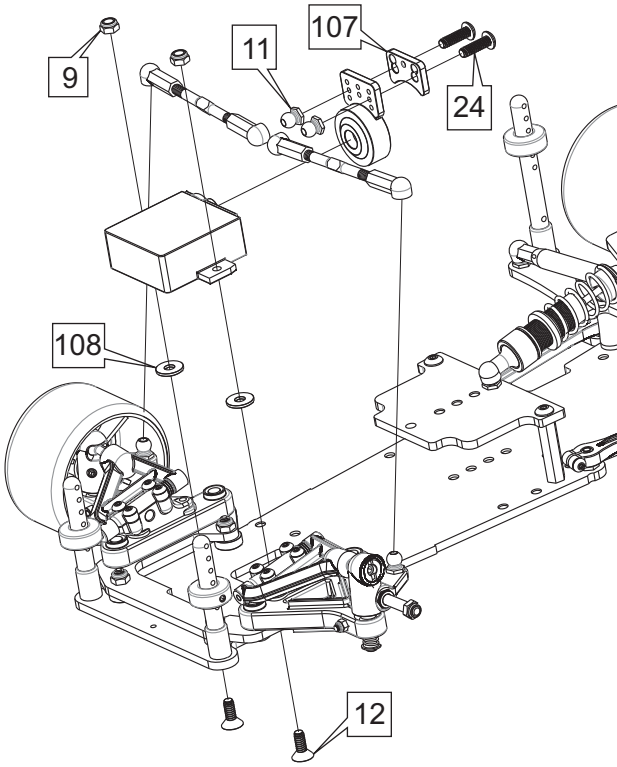
Servo Mounting -

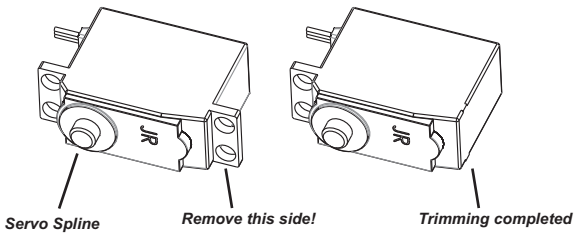
If installing an Airtronics/Sanwa 94761 or SRGHR, then continue with the following instructions and the picture on the right.

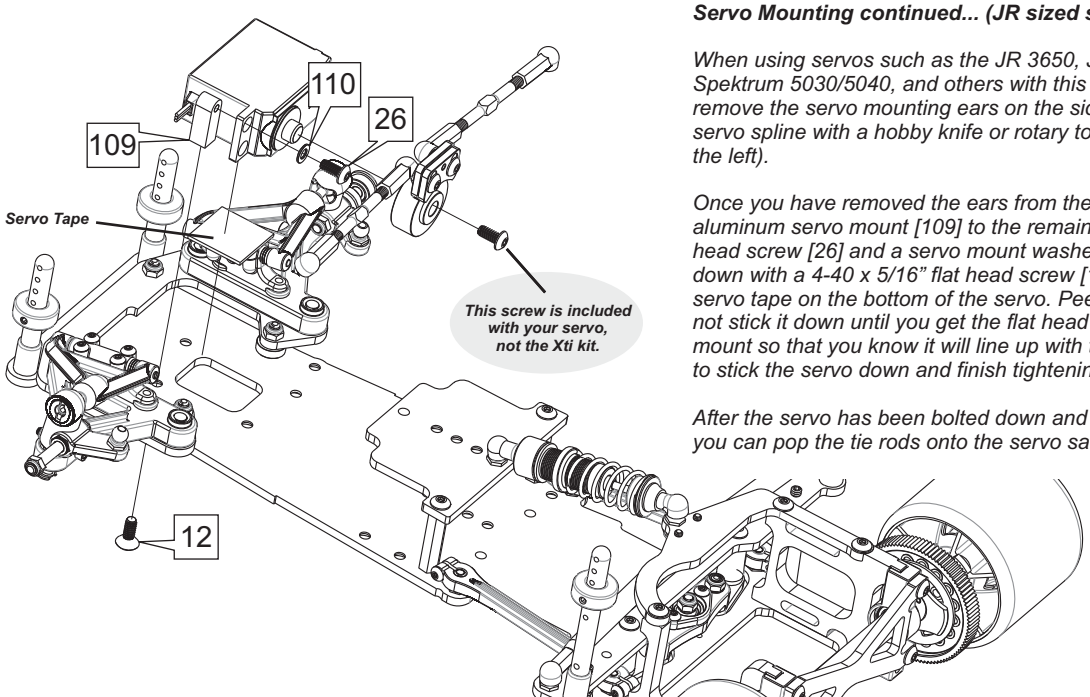
If installing a JR 3650, JR Sport MN48, Hitec 225MG, Spektrum 5030/5040, then refer to the diagram and instructions on the bottom of the page.

When installing the above referenced Sanwa Servos, insert two 4-40 x 5/16" screws [12] up through the chassis, then slide a Thin Ride Height Spacer [108] over each screw before sliding the servo down over the screws and securing in place with two 4-40 red lock nuts [9].

After the servo has been bolted down and the servo saver has been installed, you can pop the tie rods onto the servo saver and steering blocks.







Servo Mounting continued... (JR sized servos) -

When using servos such as the JR 3650, JR Sport MN48, Hitec 225MG, Spektrum 5030/5040, and others with this case design, you will need to remove the servo mounting ears on the side of the case furthest from the servo spline with a hobby knife or rotary tool (refer to diagram above and to the left).

Once you have removed the ears from the one side of the servo, bolt the red aluminum servo mount [109] to the remaining ear with a 4-40 x 1/4" button head screw [26] and a servo mount washer [110]. Before bolting the servo down with a 4-40 x 5/16" flat head screw [12], place a piece of doubled sided servo tape on the bottom of the servo. Peel the backing off of the tape, but do not stick it down until you get the flat head screw started in the red aluminum mount so that you know it will line up with the hole. Now you should be able to stick the servo down and finish tightening the flat head screw.

After the servo has been bolted down and the servo saver has been installed, you can pop the tie rods onto the servo saver and steering blocks.

Xti Spare Parts List

(Sorted by kit ID#)

ID#	Kit / Part Description	Part #	Packaged Part Description
1	Center Pivot Base	3374	Molded Center Pivot
2	Flanged Pivot Ball	4019	Aluminum Pivot Balls
3	Center Pivot Cap	3374	Molded Center Pivot
4	2-56 Button Head	3374	Molded Center Pivot
		3254	2-56 x 1/4 BH-for upper cap (10)
5	4-40 x 1/2 steel flat head	1430	1/2 x 4-40 FH Allen-SS
6	Graphite Main Chassis	3258	CK Xti Graphite Chassis
7	4-40 thin hex nut	12772	Small Hex Nuts CK Pivot Plate (10)
8	Small Washer	1276	Washers for Center Pivot Plate
9	4-40 red locknut	1412	Alum Locknuts-Red Anodized (10)
		1410	Andzd Alum Screw Set - bulk
10	Graphite Bottom Plate	3267	CK Xti Rear Bottom Plate
11	Red Low-Profile Ball	13615	Anodized Low Roll Center Balls (4)
12	4-40 x 5/16 steel flat head	1426	5/16 x 4-40 FH Allen-SS (4)
13	One-Piece side links	3280	One-Piece Clamp links-GX10/BA
14	Motor Plate	33401	Motor Plate-Xti
15	Left Side Pod Plate	33421	Left Motor Plate-Xti
16	4-40 x 3/16 flat head screws	1422	3/16 x 4-40 FH Allen-SS (4)
17	4-40 x 7/16 button head screws	1435	4-40 x 7/16 BH SS (4)
18	X-Brace	3275	X-brace - CK Xti Slider Pod
19	Ride Height Sliders	33411	Slider Piece Motor Plate-Xti
20	Graphite Tweak Plate	3271	CK Xti Rear Tweak Plate-Inline
21	Tweak Screw	3288	4-40 x 3/8" tweak screw - X cars
22	Molded Spring Holder	3387	Molded Spring Retainers-CRC
23	Side Spring	1296	Side Spring- White - Med
		1280	Rear Side Spring Set
24	4-40 x 3/8 button head screw	1436	3/8 x 4-40 BH - SS
25	Plastic Standoff	3375	Molded 1/2 Standoffs (4)
26	4-40 x 1/4 button head screw	1434	1/4 x 4-40 BH - SS
27	Steel 4-40 x 1/4" flathead	1424	1/4 x 4-40 FH Allen-SS (4)
28	Black 2-56 ballstud	1384	2-56 Ballstuds & Ballcups for Damper tubes (4)
29	Graphite Top Plate	3264	CK Xti Rear Top Plate
30	Red Ball Stud	1409	Anodized 4-40 Ball Studs (4)
31	4-40 x 3/16 button head screws	1433	3/16 x 4-40 BH - SS (4)
32	.035 allen wrench	13695	.035 Allen wrench
33	2-56 set screw stud	1397	2-56 Stud for Damper Tubes w/ .035 hex head
34	2-56 Plastic Ball Cup	1384	2-56 Ballstuds & Ballcups for Damper tubes (4)
35	Short 4-40 Ball Cup	32694	Short ball cup-(4) Gen X damper tube
36	4-40 x 5/16 Set Screw	1288	5/16 x 4-40 set screw - tubes
37	Delrin Plunger	32693	Delrin Plunger for Short Gen X Damper Tube
38	Aluminum Tube	32691	Red Aluminum Tube - Gen X (Tube Only)
	ID#'s 33-38 are all in 3269 also.	3269	Red Torpedo Tube (1) Gen X
39	CRC Tube Lube	4505	Damper Tube Lube - 5,000 wt.
40	3/4" Hex Standoff	1737	Hex Standoff - GX10 Top Deck-2
41	Top Deck	32581	CK Xti Top Deck
42	4-40 x 1/4 cap head screw	1381	1/4 x 4-40 Cap Head Screw
43	Plastic Antenna Mount	3347	Round Plastic Antenna Mount
44	Spring adjuster nut	3291	Encore Shock-Body+alum parts
45	Shock body	3291	Encore Shock-Body+alum parts
46	Small O-ring	3295	Encore Shock Rubber Parts

Xti Spare Parts List

(Sorted by kit ID#)

ID#	Kit / Part Description	Part #	Packaged Part Description
47	Bottom shock plug	3293	Encore Shock Plastic Parts
48	Bottom shock cap	3291	Encore Shock-Body+alum parts
49	Small e-clip	3294	Encore Shock E-clips (10)
50	Shock Shaft	3292	Encore Shock Shaft-hardened
51	Shock piston	3293	Encore Shock Plastic Parts
52	Short ballcup	3293	Encore Shock Plastic Parts
53	Shock Bladder	3295	Encore Shock Rubber Parts
54	Flanged ballcup	3293	Encore Shock Plastic Parts
55	Top Shock cap	3291	Encore Shock-Body+alum parts
56	Shock Spring	3299	VCS/Encore Spring Set - 6 pcs.
57	Spring retainer	3293	Encore Shock Plastic Parts
ID#'s 44-57 (less 56) are all in 3290 also.		3290	Encore Micro Shock (complete, less spring)
58	Delrin Pivot ball	3246	Delrin pivot ball (4) Pro Strut
59	Lower Arm	3247	CRC Front Arm set-up and low
60	2-56 Clamp Screw	3242	Clamp screw+nut-Pivot ball (2)
61	2-56 Locknut	3242	Clamp screw+nut-Pivot ball (2)
		1472	2-56 mini locknuts (red) (8)
62	Upper A-arm Mount	3243	Upper Arm mnt set-0,5,10 (2)
63	4-40 x 3/8 Flat head screw	1428	3/8 x 4-40 FH Allen-SS (4)
64	Upper A-arm	3247	CRC Front Arm set-up and low
65	Upper Hinge Pin	3245	CRC FE Hinge Pin (2)
66	Clear Plastic Washer	1253	Front Hinge pin washers - (8)
67	Upper Cap	3243	Upper Arm mnt set-0,5,10 (2)
68	Steering Blocks	3251	CRC Steering Block set
69	Steel Stub Axle	1236	Steel Stub Axle Set
70	E-Clip	1382	1/8 E-clips-100 pieces
71	King Pin	3250	CRC 1/12 King Pin set-polished
72	Front End Spring	3392	Front End Spring .50mm (pr.)
73	Brass Set Screw	3234	Brass 4-40 Set screws-2 pr.
74	Upper Pivot Ball	3244	CRC Big Upper Ball Stud (2)
75	Capture Insert	3251	CRC Steering Block set
76	8-32 Screws	1439	8-32 x 3/8 Steel BH (4)
77	Graphite Front End Plate	32583	CK Xti Front End Plate
78	4-40 x 7/16 flat head screw	1429	7/16 x 4-40 FH Allen-SS (4)
79	Thick Ride Height Spacers	3219	Thick Ride Height Spacers -Xti
80	1/4 x 3/8 Flanged Axle bearing	13861	1/4 x 3/8 Flanged Axle bearing (1)
		1386	1/4 x 3/8 Flanged Axle bearing (10)
81	Rear Axle	4228	Large D-ring Axle - Red
82	2mm Red Spacer	4720	Axle Spacer-Xti-2 + 5mm
83	1/4" rear axle shim	4732	1/4 Shim Set (20)
84	5mm Red Spacer	4720	Axle Spacer-Xti-2 + 5mm
85	Left Clamp Hub	3333	Super light left clamp hub-red
86	Socket Head Clamp Screw	3332	M2.5 x 6mm Cap Head Screw (6)
		3333	Super light left clamp hub-red
87	3/32" Diff Balls	1228	3/32 Diff Balls (100)
88	Diff Gear	64180	80T 64P Gear - 16x 3/32 Ball
89	Silicone Diff Grease	4205	Diff Lube - Silicone 4cc
90	Diff Ring	4202	Lightened Large D-rings
91	1/4 x 3/8 Unflanged Axle bearing	13871	1/4 x 3/8 Unflanged Axle bearing (1)
		1387	1/4 x 3/8 Unflanged Axle bearing (10)

Xti Spare Parts List

(Sorted by kit ID#)

ID#	Kit / Part Description	Part #	Packaged Part Description
92	Diff Hub	4227	Narrow Diff Hub - GenX B/L Pod
93	Diff Spacer	4121	Aerodiff Spacer collar
94	Spring Washer	4123	Belleville Spng wash-3 bolt(2)
95	Plastic Locknut	4126	8-32 Nylon Locknut (2)
96	Front Body Mounts	3378	Short (1 in.) Body Post Set w/ collars
97	Rear Body Mounts	1378	Body Post Set w/ collars (2 in.)
98	4-40 x 1/8 set screw	13783	1/8th Set Screw (6)
99	Plastic Collar		comes in - 1264, 1378, 3378, & 7728
100	1/8 front wheel shim	4731	1/8 Shim Set (20) .010 thick
101	1/8 x 5/16 Flanged Bearing	12481	1/8 x 5/16 Flanged Bearing (1)
		1248	1/8 x 5/16 Flanged Bearing (10)
102	4-40 x 5/16 Cap Head Screw	1460	4-40 x 5/16 SH Alum 7075 T6RED
103	Motor Mount Washer	1208	Motor Screw Washer (10)
104	3 x 8mm Motor Mount Screw	1207	3 x 8mm Motor Screw (4)
105	Steering Tie Rod	1317	Steering Tie Rod (2)
106	Plastic Ball Cup	1231	Steering Plastic Ballcups (8)
107	Servo Saver Brace	3376	Molded Servo Saver Brace+Spcrs
108	Thin Ride Height Spacers	3218	Thin Ride Height Spacers -Xti
109	Aluminum Servo Mount	3355	Alum Vertical Mount Set-Red
110	Servo Mount Washer	1209	Servo Mount Washer (10)

Since 1993, Calandra Racing Concepts (CRC) has been producing the finest model racing cars and products in the world. The production team that made your new Xti is not comprised of simple factory workers looking to get home from work after a long boring day. Instead, when our staff leaves their workstations for the day, they typically go to the track to work on, enjoy, drive and race the products they just had a hand in making. Whether it be at a club race or large events like National and World Championships, the experienced crew that produced your Xti can be found in the pits, wrenching on their own cars, or helping a fellow racer. Our team consists of racers and hobbyists just like you, with a passion for 1:12th racing.

Our design group leads the way with innovative ideas that make the hobby more fun, more affordable and add more performance. CRC's HR-38 rim changed the 1:12th tire world. The X-pod released on the Gen-X in 2006 is now found on all the current crop of cars. Now with the Slider Pod on the Xti, CRC has once again raised the bar.

Our professional racing team consists of multiple World and National Champions. International names like Hupo Honigl, Marc Rheinard, Elliott Harper, Andy Moore, Simo Ahoniemi and Jilles Groskamp have turned to CRC to give them the tools to win these large events. CRC race support at these events is second to none.

To enhance our knowledge data base, CRC is involved in every facet of model car racing. We make the most popular indoor racing surface, CRC Fasttrak carpet. We produce the most popular barrier system, CRC Clik Trak. Our racing tires, CRC Pro Cuts, have won national and world championships. We have indoor and outdoor race tracks and a retail hobby store. We meet new racers and learn what they need . Our products are distributed throughout the world and typically feature very competitive pricing. We strive to keep the hobby fun, affordable and yet stay very competitive in racing.

We thank you for your purchase of the CRC Xti 1:12th car. See you at the track.