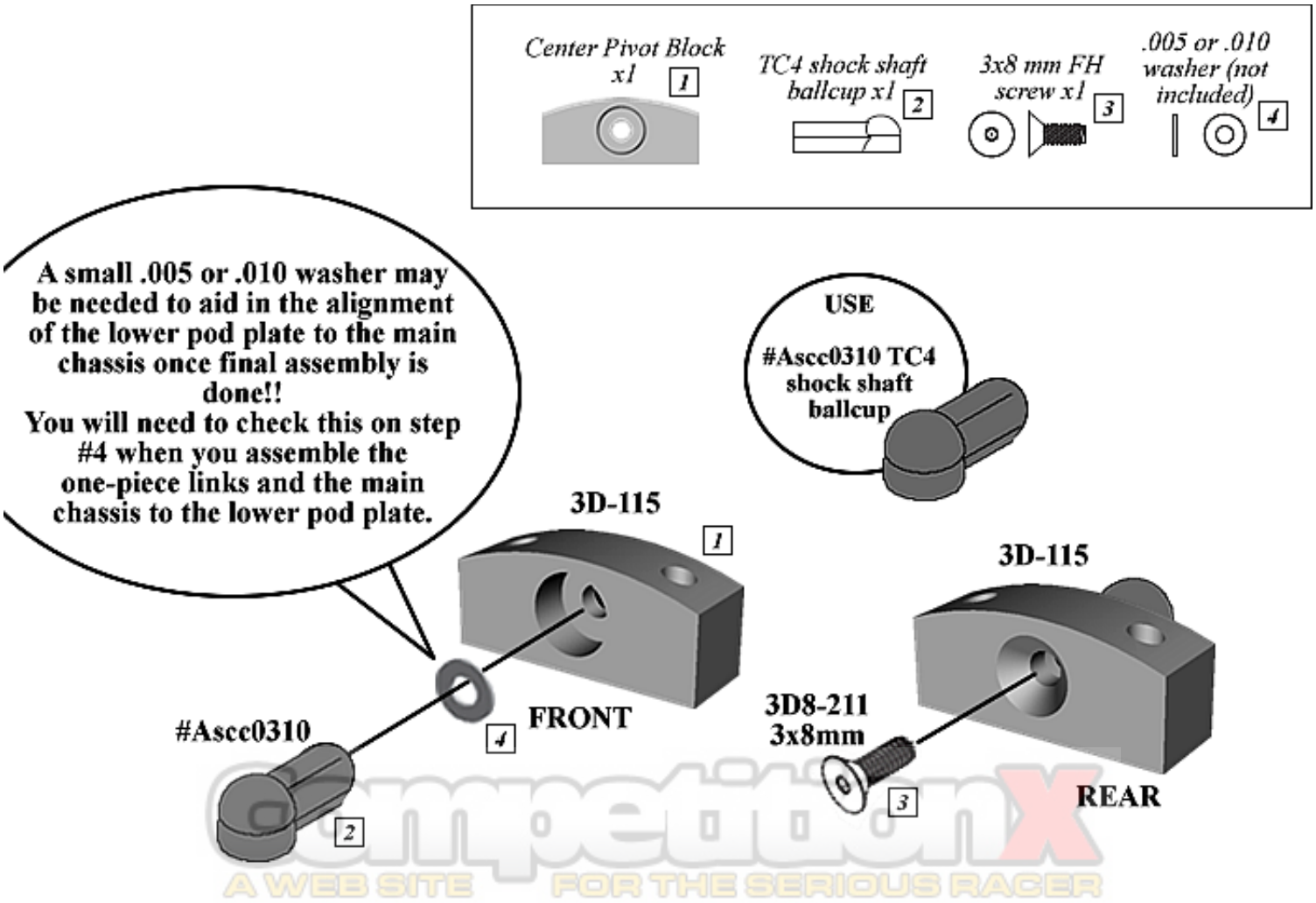
STEP 1

Slide and twist the TC4 shock shaft ballcup (2) into the cutout of the Center pivot block (1). Holding the ballcup ***securely*** tighten the 3mm screw (3) into the ballcup from the rear of the pivot block. Make sure you have fully tightened the screw!

NOTE: After joining the lower rear pod plate to the main chassis using the center pivot block and one-piece links in step #4 you may have to add a small .005 or .010 shim (4) behind the ballcup to adjust the length. The diagram below shows where you will need to add this shim if its needed.



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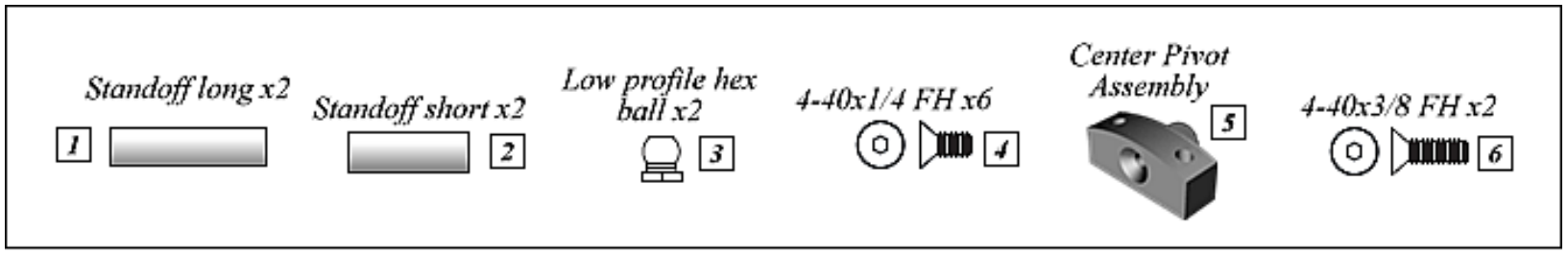
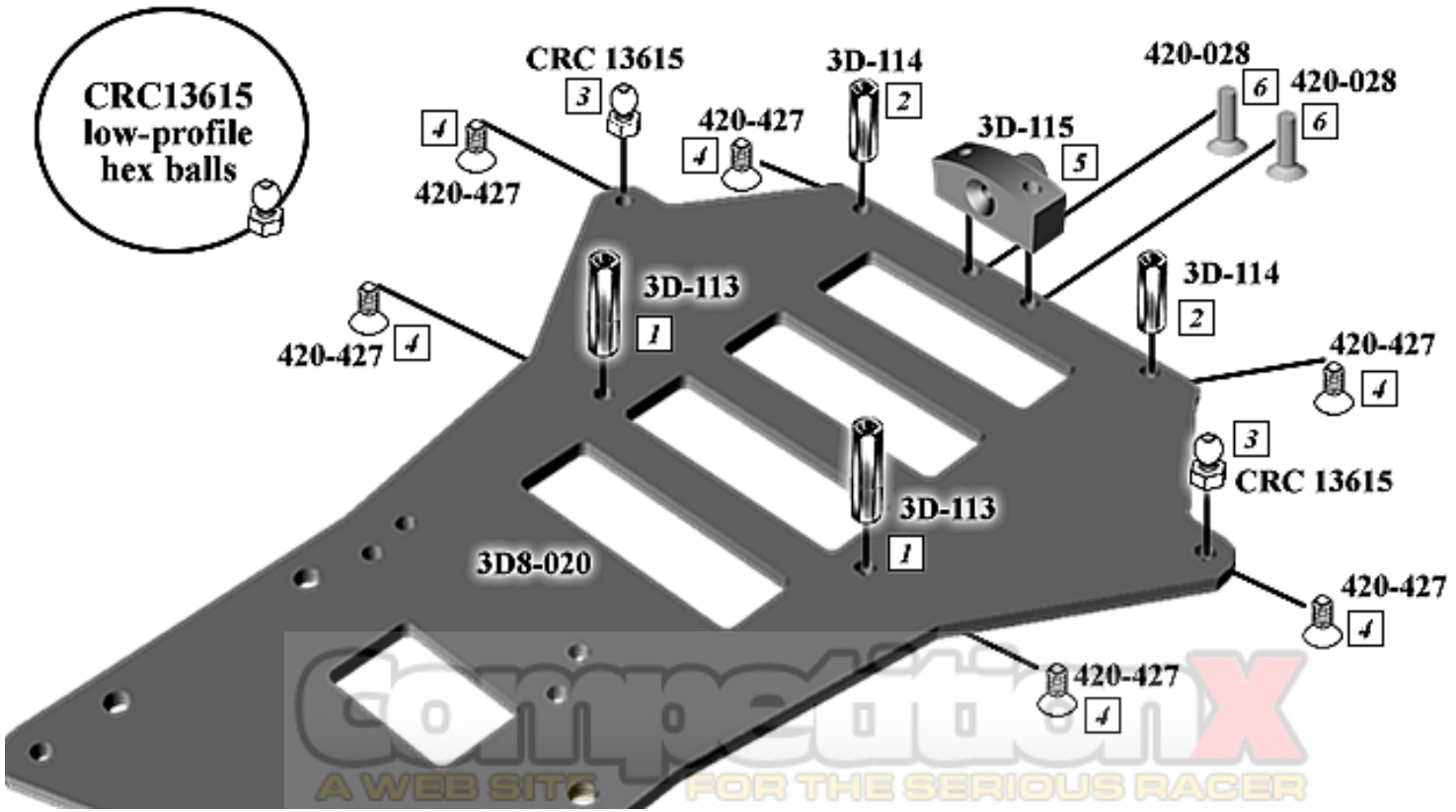
STEP 2

Attach two long standoffs (1) to the main chassis using two 4-40x1/4 flat head screws (4). Attach two short standoffs (2) to the main chassis using two 4-40x1/4 flat head screws (4). Attach two low profile hex balls (3) to the main chassis using two 4-40x1/4 flat head screws. Attach the center pivot block assembly to the main chassis using two 4-40x3/8 flat head screws.

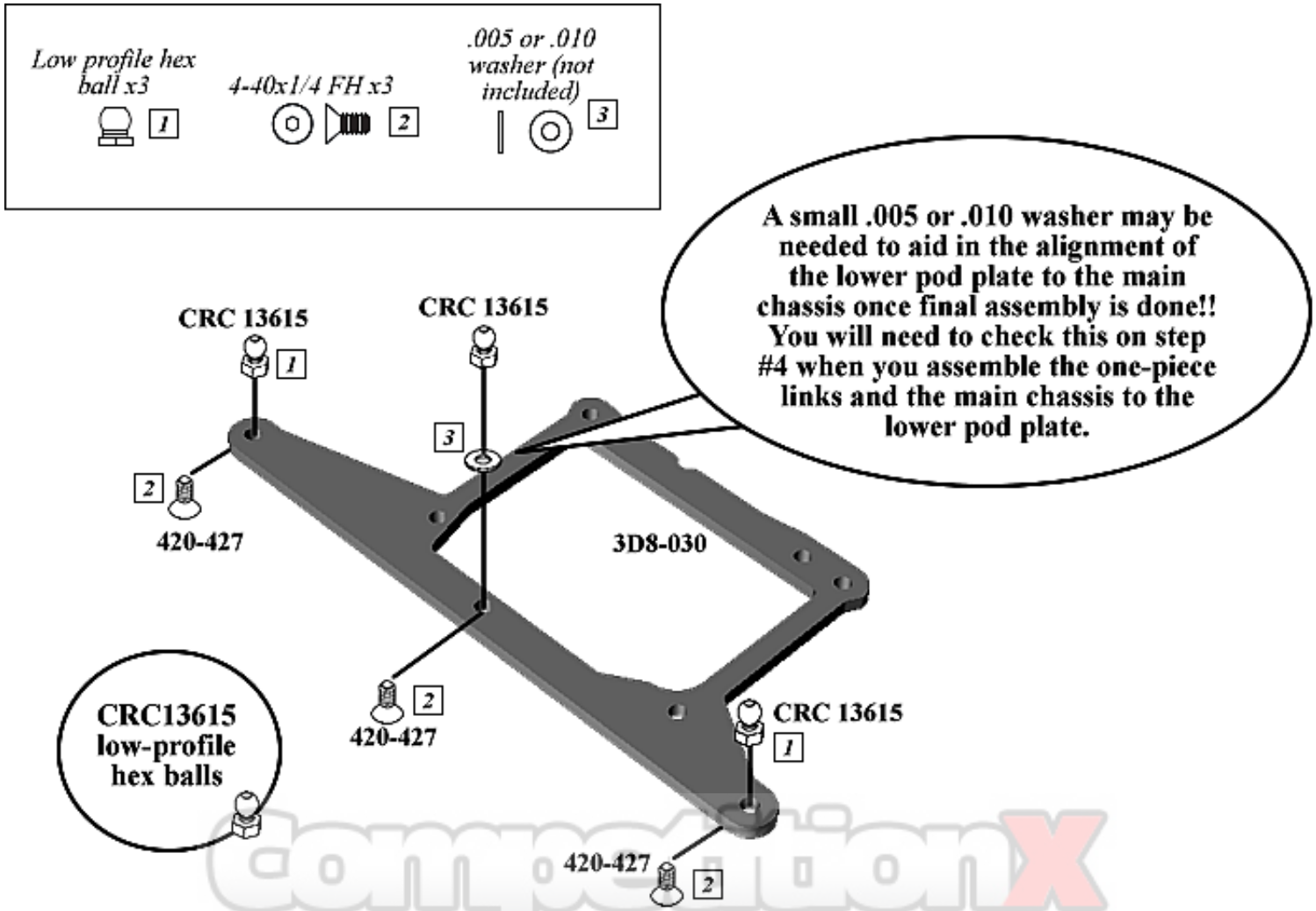




STEP 3

Attach three low profile hex balls (1) to the lower pod plate using three 4-40x1/4 flat head screws (2).

NOTE: After joining the lower rear pod plate to the main chassis using the center pivot block and one-piece links in step #4 you may have to add a small .005 or .010 shim (3) behind the ballcup to adjust the length. The diagram below shows where you will need to add this shim if its needed.



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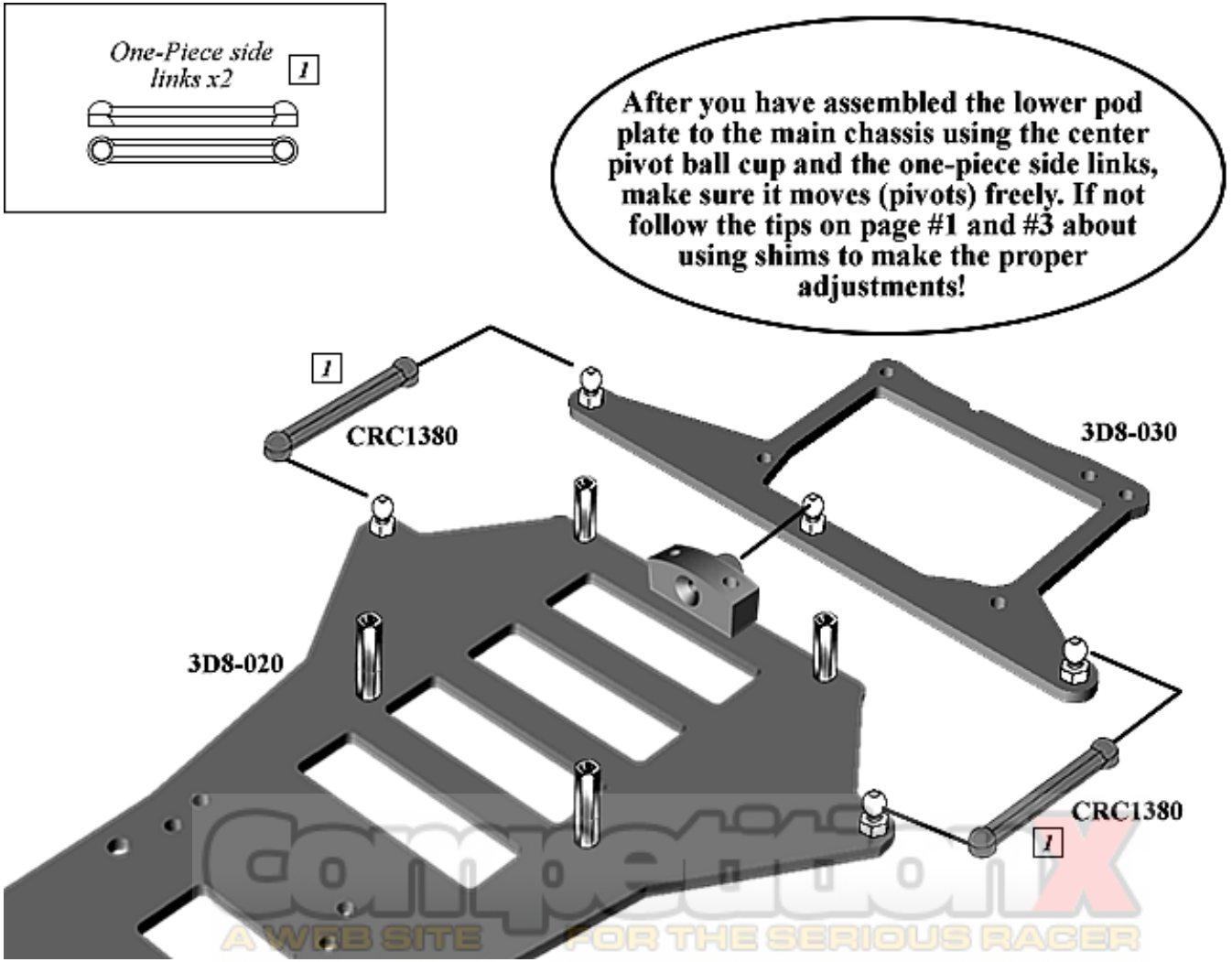
STEP 4

Snap two one-piece side links (1) to the hex balls on the main chassis and the hex balls on the lower pod plate.

NOTE: After you have attached the one-piece side links you will need to make sure that the lower rear pod plate pivots freely. If it feels a little bound up you will need to follow the tips on step #1 and step #3 about using shims to make the proper adjustments.



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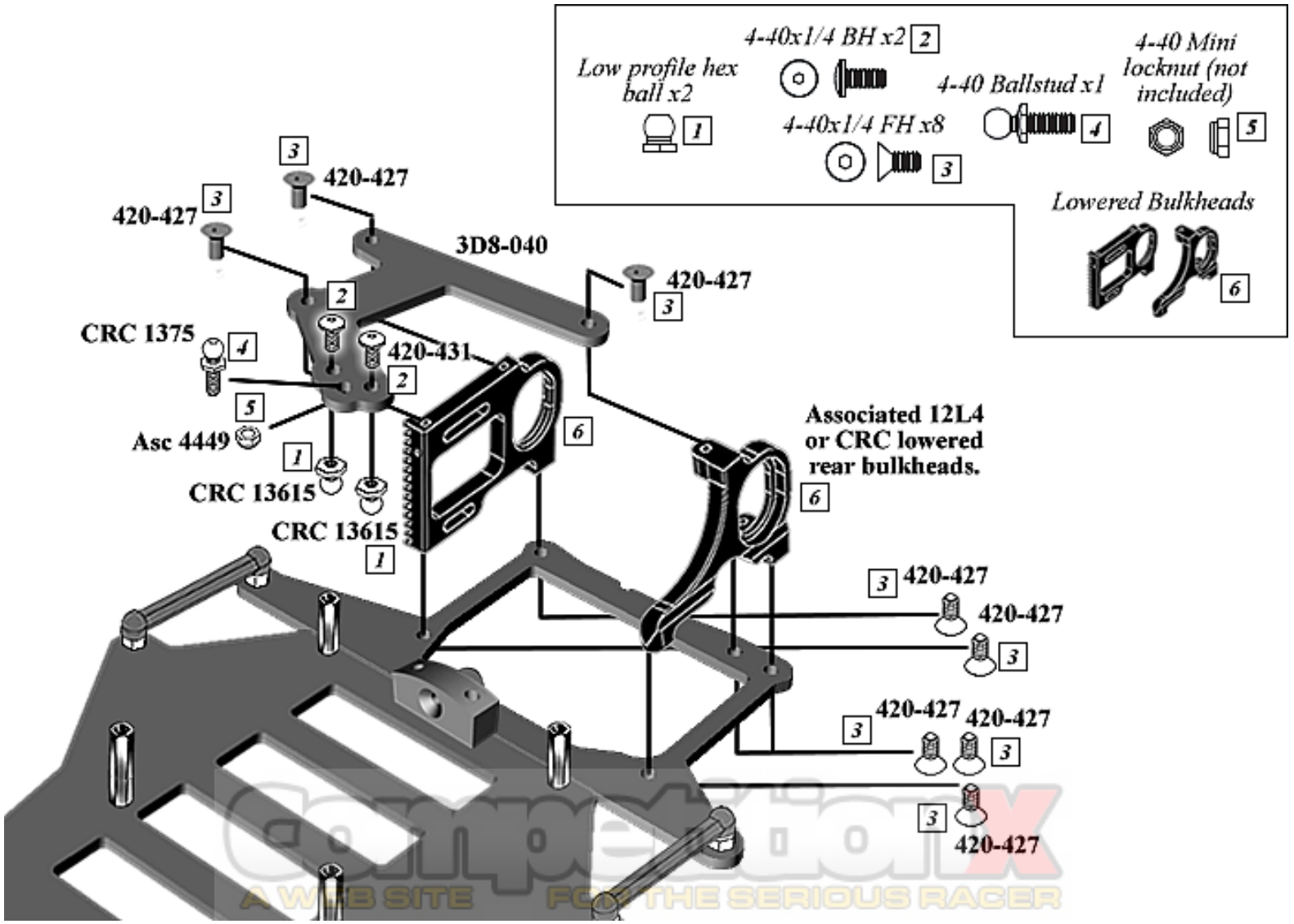
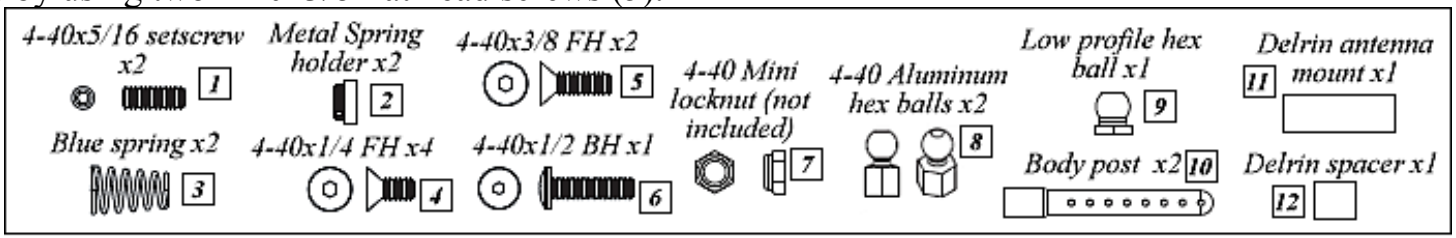
STEP 5

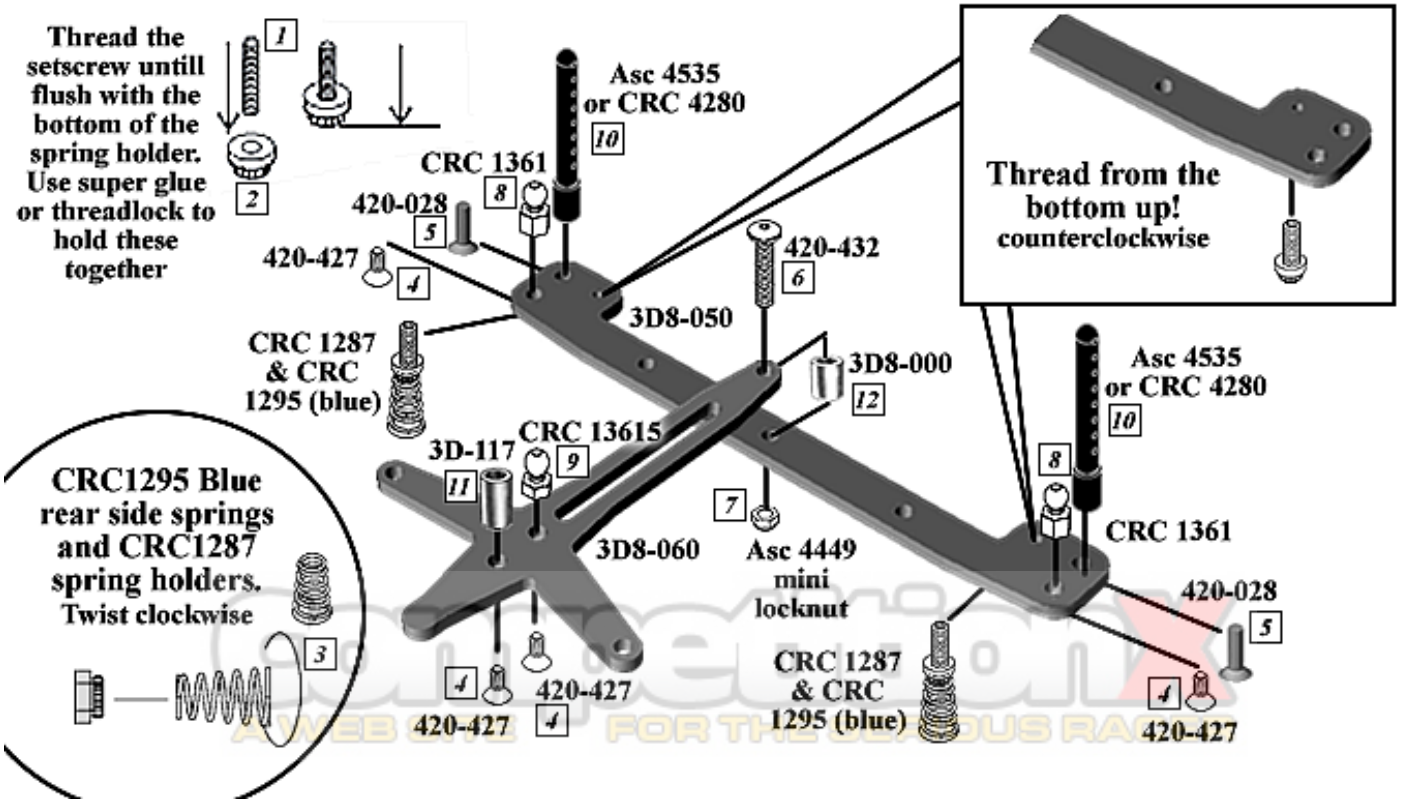
Attach two low profile hex balls (1) to the upper pod plate using two 4-40x1/4 button head screws(2). Attach one 4-40 aluminum ballstud (4) to the upper pod plate using a 4-40 mini locknut (5). Attach the lowered rear bulkheads (6) to the lower pod plate using five 4-40x1/4 flat head screws (3). Attach the upper pod plate to the lowered bulkheads (6) using three 4-40x1/4 flat head screws (3).



STEP 6

Assemble the spring holders using the 4-40x5/16 setscrews (1) and the metal spring holders (2) as noted in the diagram below. Attach the blue side springs (3) to the spring holders by twisting them clockwise. Thread the spring holders to the dampener plate by threading them from the bottom up counterclockwise. Attach one low profile hex ball (9) and the delrin antenna mount (11) to the battery brace using two 4-40x1/4 flat head screw (4). Attach the battery brace to the dampener plate by sliding the 4-40x1/2 button head screw (6) through the battery brace, through the delrin spacer (12), then through the dampener plate and secure with a 4-40 mini locknut (9)- leave it slightly loose to allow the battery brace to swivel . Attach two 4-40 aluminum hex balls (8) to the dampener plate using two 4-40x1/4 flat head screws (4). Attach the body posts (10) to the dampener plate by using two 4-40x3/8 flat head screws (5).





STEP 7

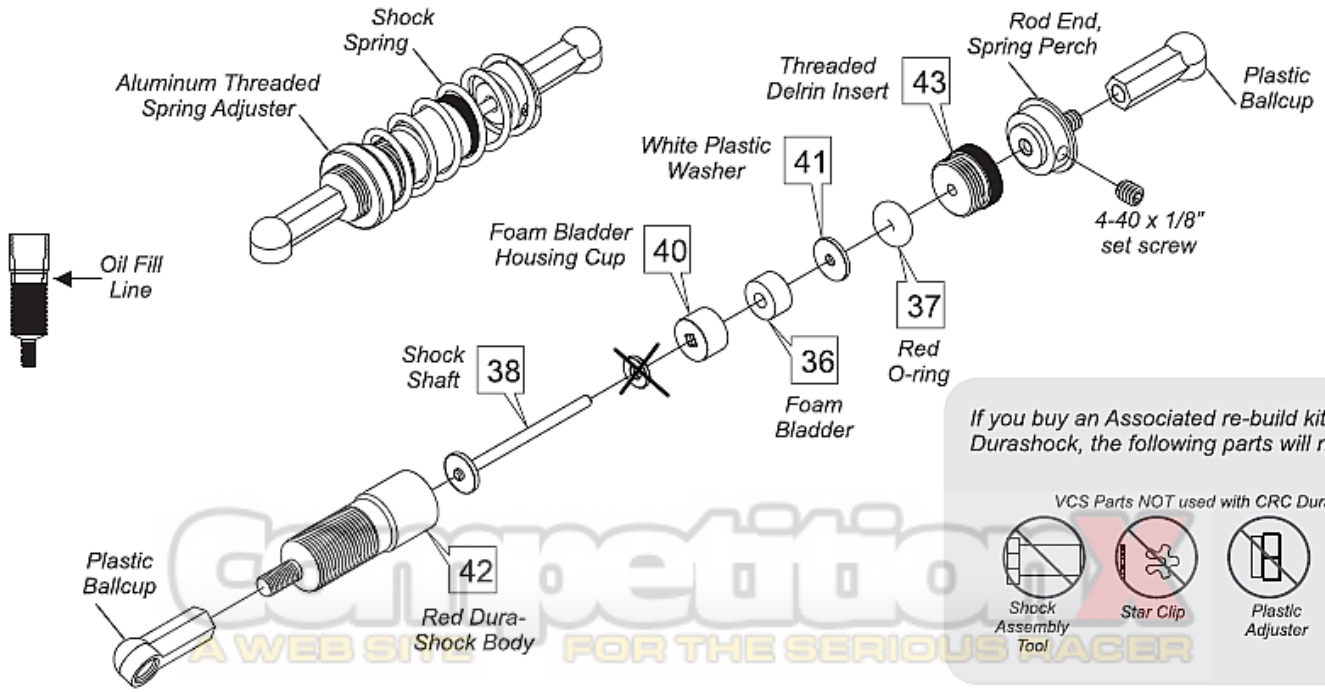
Assemble the CRC dura shock as shown in the diagram below.

CRC Dura-Shock Assembly Instructions

****Pre assembly inspection - Take the shock shaft and slide it through the black Delrin insert. Be sure the shaft slides through freely. If the shaft drags on the Delrin, simply spin an X-acto Knife tip in each end of the delrin piece. The knife will remove the small manufacturing burr that occasionally forms right near the end of the hole.*

1 - Using 25 - 30 weight silicone oil, soak the foam bladder [36] in oil. Squeeze the foam to ensure the oil has soaked in. Wet the red O-ring [37] as well.
2 - Populate the shock shaft [38] in this order; ~~white washer [39]~~, plastic cup [40] (open end away from piston), soaked foam sponge [36], small washer [41], & the pre-oiled red O-ring [37].
3 - Hold the shock body [42] upright and fill the body with oil to the line shown. Place the populated shaft in the oil slowly.
4 - Press the shaft slowly until it stops at the bottom of the shock. Slip the Delrin insert [43] over the shaft and begin to thread into the shock body.
5 - The insert will stop threading, hydro-locking as the shock has too much oil. Oil will spill out.
6 - Allow the oil to bleed out, tightening and loosening the delrin insert while keeping the shaft fully depressed inside the body. This will bleed the shock.
7 - When the shock is fully bled, no oil will leak and the shaft will rebound out very slowly when fully depressed. The shock shaft will rebound out 1/8".
8 - Be sure that the shock is fully bled, any "pressure" from being overfilled with oil will cause the shock to leak during the first few uses .

****Post assemble notes: Some oil may seep out of the shock near the Delrin insert. This is simply some remnants of the oil bleed process. Just wipe it off after the first couple uses, and it should go away. This also may happen if the shock was built with too much oil in it. Be sure to bleed fully.*



If you buy an Associated re-build kit for the CRC Durashock, the following parts will not be used;

VCS Parts NOT used with CRC Dura-Shock

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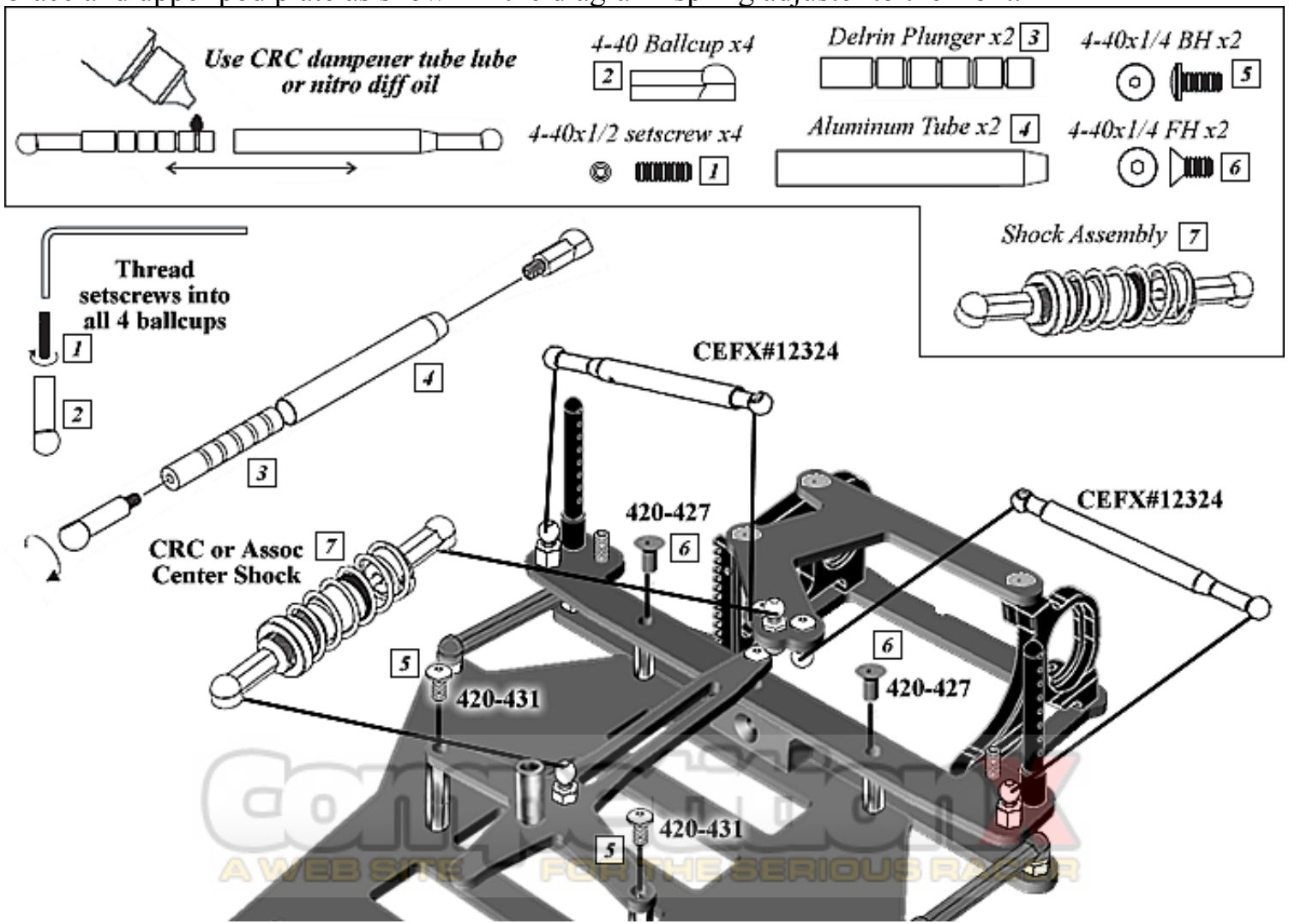
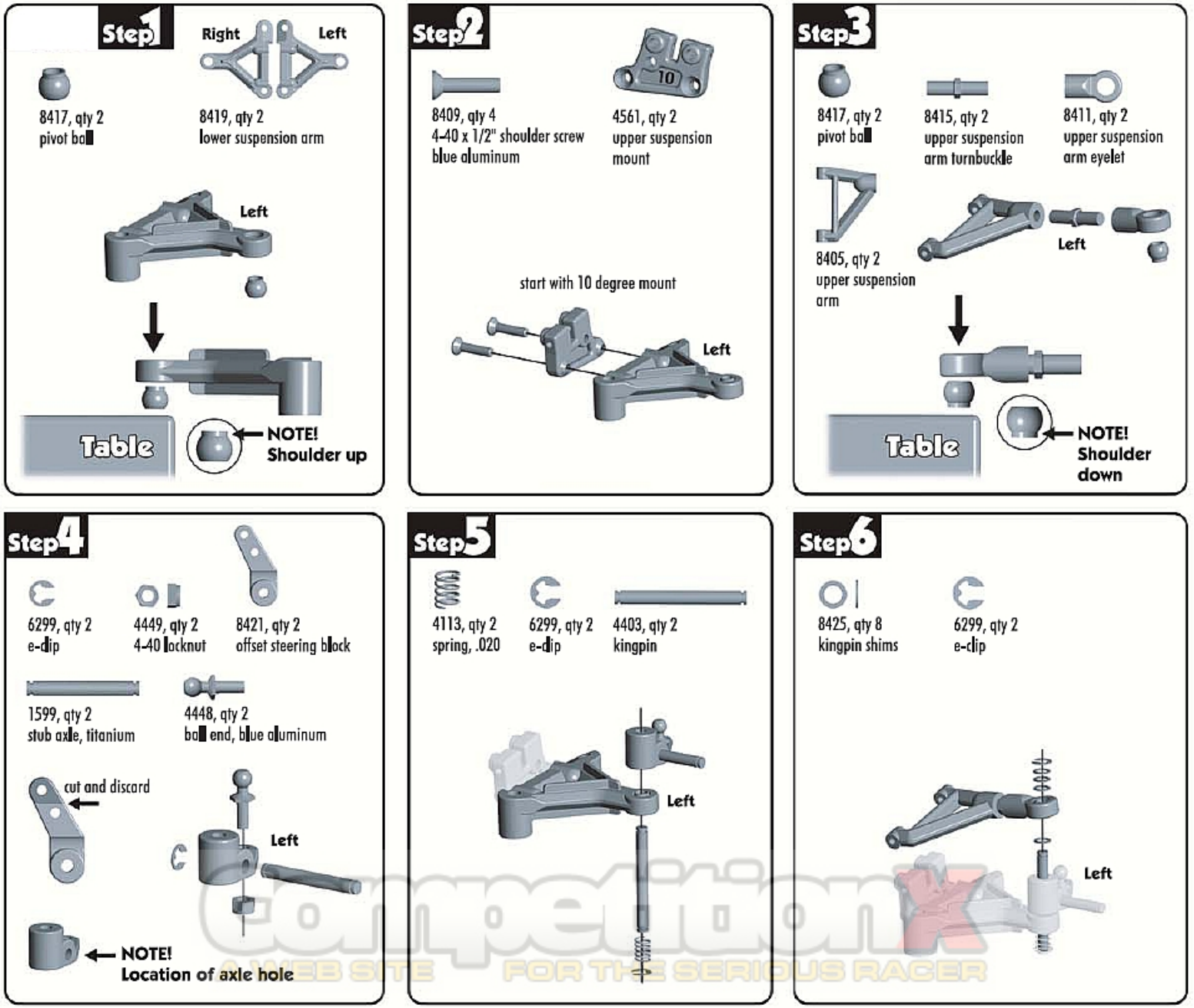
STEP 8

Attach the dampener plate unit to the main chassis using two 4-40x1/4 flat head screws (6) and the battery brace using two 4-40x1/4 button head screws (5). Thread the 4-40x1/2 setscrews (1) to the 4-40 ballcups (2) a little over half way into the ballcups. Thread the ballcups with the setscrews in them to the delrin plungers (3) and the aluminum tubes (4). Apply CRC dampener tube lube or nitro silicone diff lube to the delrin plungers (3) and insert them into the aluminum tubes- some lube will escape through the tiny hole in the aluminum tubes wipe this off with a towel. Snap the finished dampener tubes to the dampener plate and upper pod plate as shown in the diagram below- aluminum tube to the outside. Attach the shock assembly to the battery brace and upper pod plate as shown in the diagram- spring adjuster to the front.



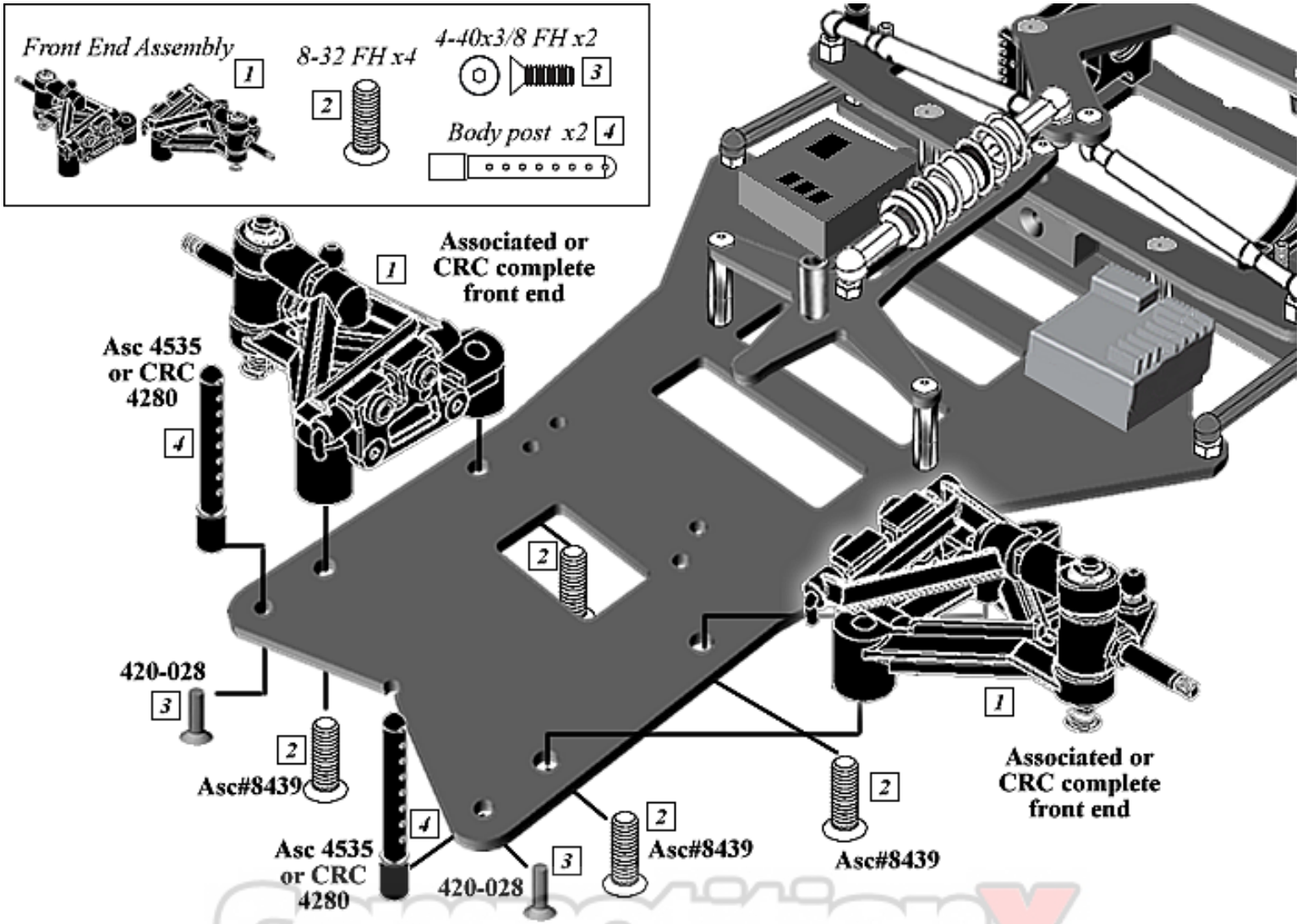
STEP 9

Assemble the front end kit as shown in the diagram below.



STEP 10

Attach the front end assembly (1) to the main chassis using four 8-32 flat head screws (2). Attach the body posts (4) to the main chassis using two 4-40x3/8 flat head screws (3).



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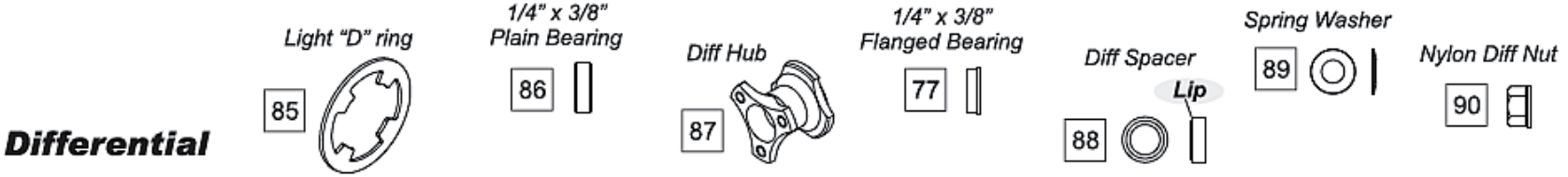
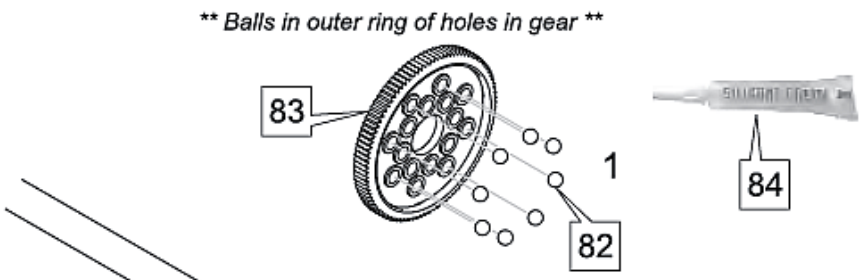
STEP 11

Assemble the differential as shown in the diagram below.



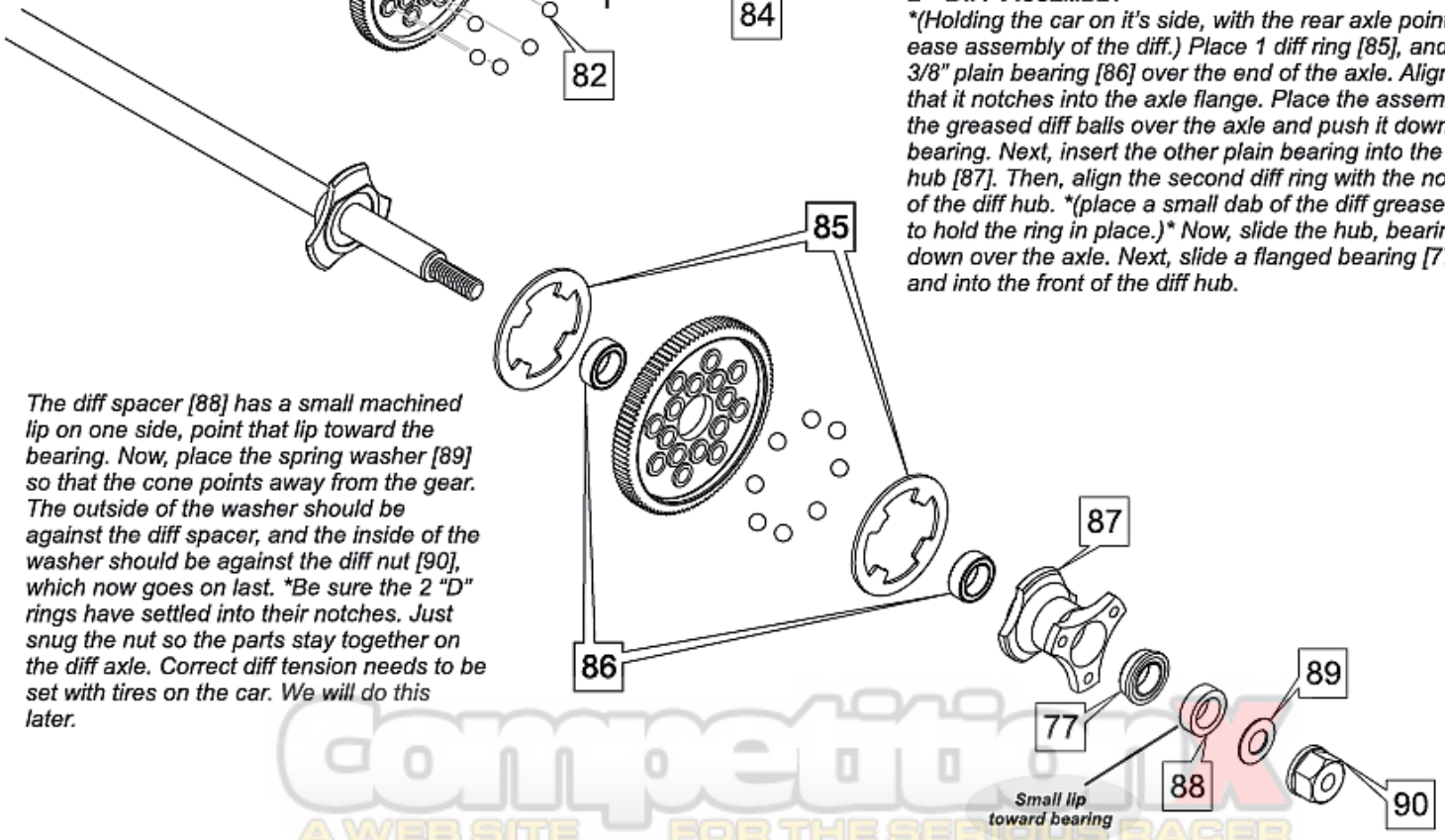


1 - INSTALL AND GREASE THE DIFF BALLS

Pop the 1/8" diff balls [82] into each of the outer ring of holes in the diff gear [83]. The balls snap into the socket. Place a small dab of silicone diff grease [84] on each ball. Use very little!

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 [85], and then a 1/4" x 3/8" plain bearing [86] 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 [87]. 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 [77] over the axle and into the front of the diff hub.*



*The diff spacer [88] has a small machined lip on one side, point that lip toward the bearing. Now, place the spring washer [89] 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 [90], 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. We will do this later.*

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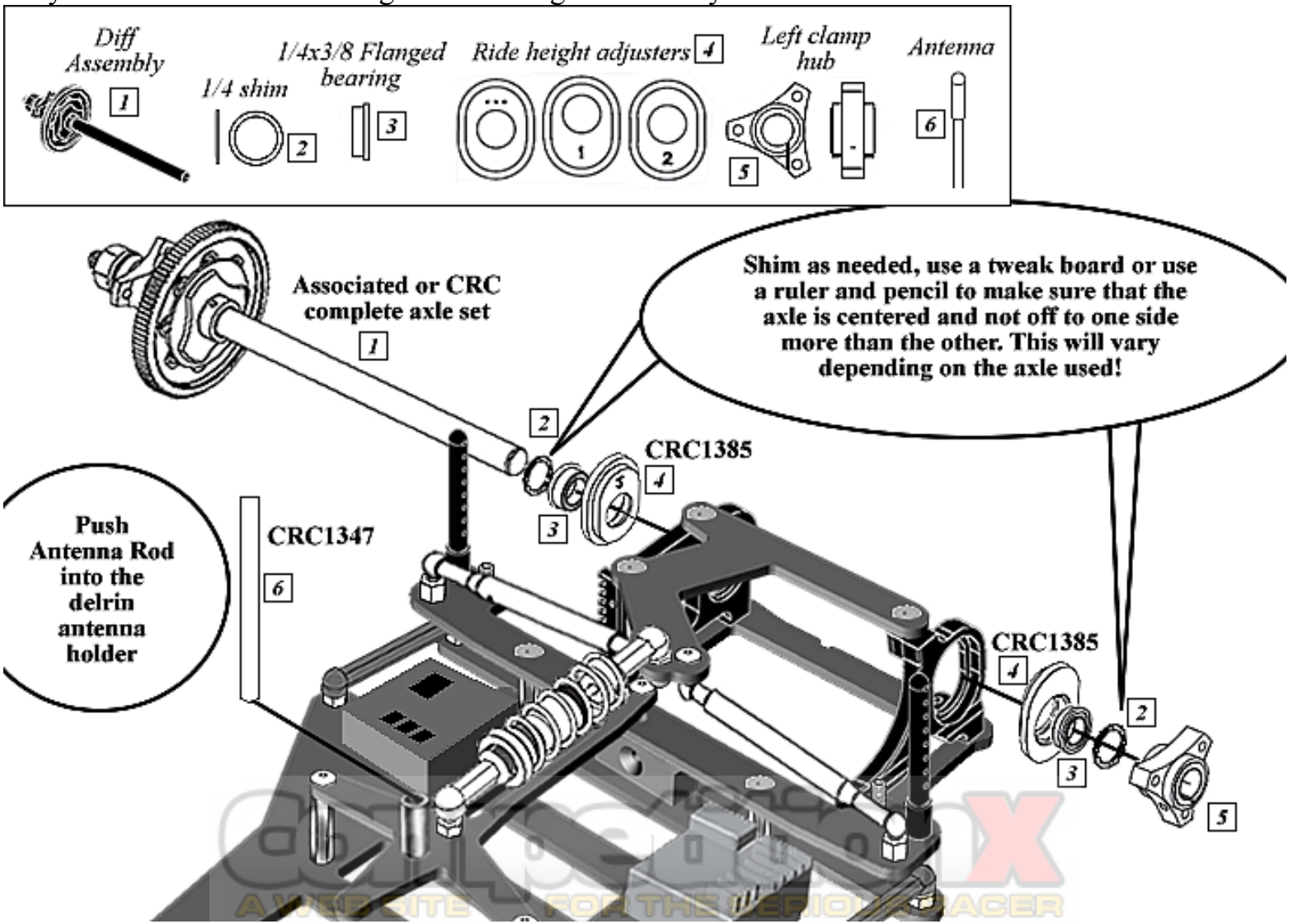
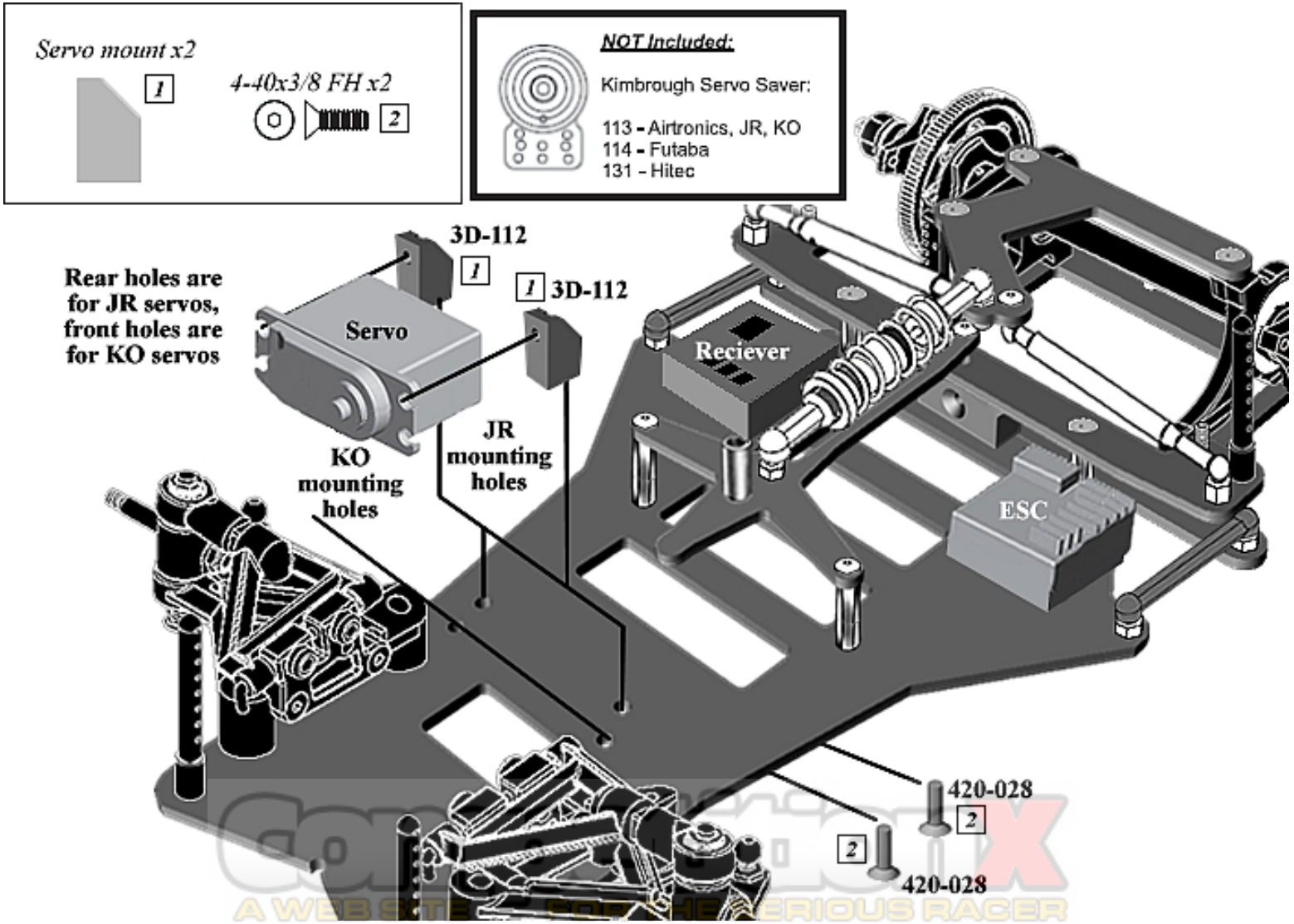
STEP 12

Install two 1/4x3/8 flanged bearings (3) into the ride height adjuster (4) and into the lowered bulkheads. Slide the diff assembly (1) through the 1/4 shims (2) through the 1/4x3/8 flanged bearing (3) and ride height adjuster (4) and do the same on the opposite side followed by the left clamping hub (5). For the 3D08 you will want to use three 1/4 shims (2) on the gear side of the axle and two 1/4 shims (2) on the clamping hub side. Install the antenna rod (6) by pushing it into the delrin antenna mount- you may need to use a hammer to get the rod to go all the way in.

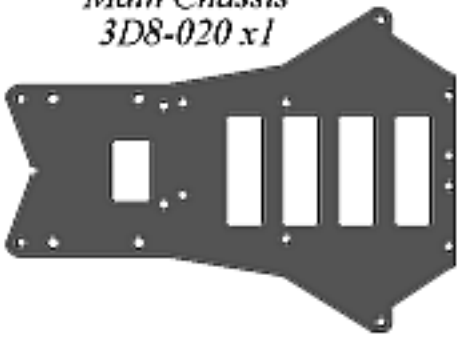


STEP 13

Install the servo using mounting two servo mounts (1) to the servo ears using any hardware you choose. Attach the servo with the servo mounts installed to the proper holes by using two 4-40x3/8 flat head screws. Install the proper servo saver to the servo and attach the turnbuckles to the front end and servo saver. Install your electronics as shown in the diagram below. Install tires of choice and body of choice.



Main Chassis
3D8-020 x1



Lower Pod Plate
3D8-030 x1

Upper Pod Plate
3D8-040 x1

Battery Brace
3D8-060 x1

Dampener Plate
3D8-050 x1

Center Pivot Block 3D-115 x1

Servo Mounts
3D-112 x2

Ball Bearing Set x9

4-40x1/4 FH Screws 420-427 x2

4-40x3/8 FH Screws 420-028 x2

4-40x1/4 BH Screws 420-431 x2

4-40x1/4 BH Screw 420-432 x1

3x8mm FH Screw 3D8-211 x1

4-40x1/2 Setscrews x4

Low Profile Hex Balls CRC13615 x8

Aluminum Hex Balls CRC1361 x2

4-40 Aluminum Ball Stud CRC1375 x1

Side Spring Holders CRC1287 x2

Blue Side Springs CRC1295 x2

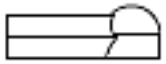
Aluminum Standoff Long 3D-113 x2

Aluminum Standoff Short 3D-114 x2

Delrin Antenna Mount 3D-117 x1

Delrin Spacer 3D8-000 x1

4-40 Plastic Ballcups x4



Dampener Set CEFX12324 x2

Ride Height Adjusters Set

One-Piece Links set CRC1380 x1

Body Posts CRC4280 x4

Antenna Mast

Bulkheads Set CRC4240

VCS Shock CRC4281

Complete Front End Kit CRC12401

Complete Diff Set CRC4220

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