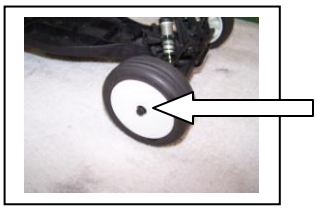
X - 6 SQUARED INSTRUCTIONS

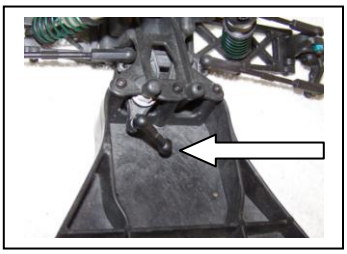
B4 DISASSEMBLY

FRONT END

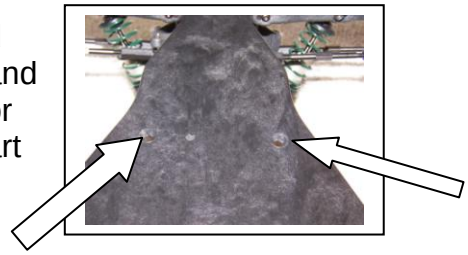
1) Take off the body and wing. Save all the body clips and wing angle shims for re-use. Remove the front wheels. Leave the wheel bearings inside the wheels. Save the wheels and nuts for re-use.



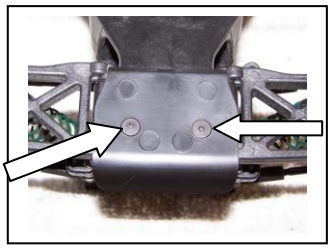
2) Disconnect the servo link from the servo horn. Leave it connected to the steering bell crank.



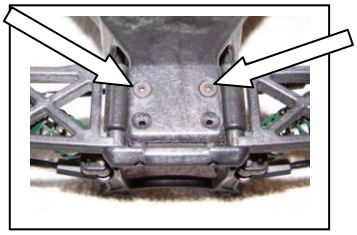
3) Remove the two bolts from under the chassis that hold the servo in, and remove the servo. Leave the posts and servo horn attached. Save the two flat-head screws for re-use. One way not to lose them is to thread them part way back into the posts so they will be right there later.



4) Remove the two flat head screws that hold on the front bumper. Take off the bumper. Save it and the two screws for re-use.

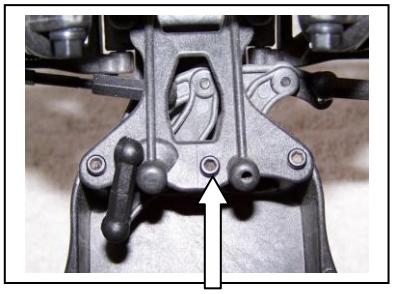


5) Remove the two flat head screws which hold the bulkhead to the chassis. Save them for re-use.

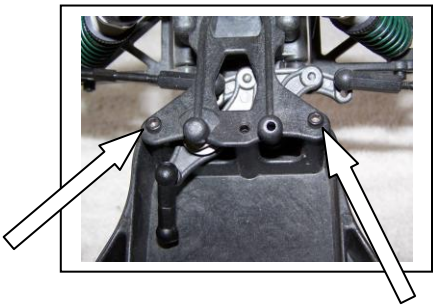


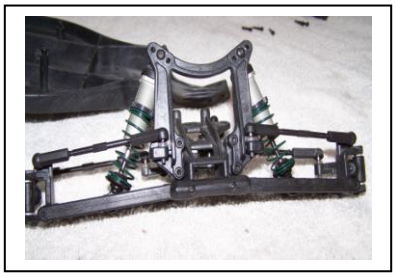
PetitRC.com Radio Controlled Cars Website

6) From the top of the car, remove the center screw holding the top plate to the post on the B4 chassis. Save the screw for re-use.



7) Remove the two side top plate screws. Save them for re-use. Carefully remove the front end and steering assembly, and set it aside for re-use. Make sure the steering linkage stays in place.

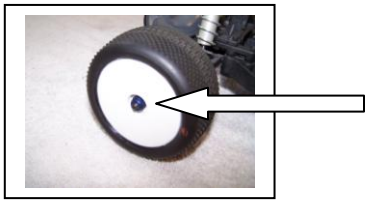




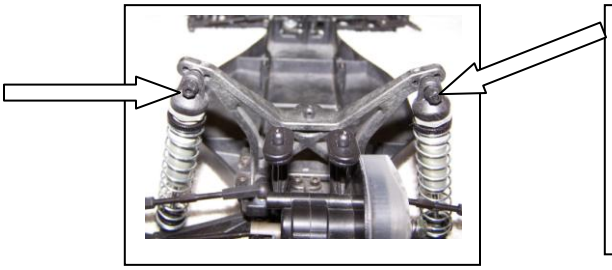
That's it! Let's do the rear of the car.

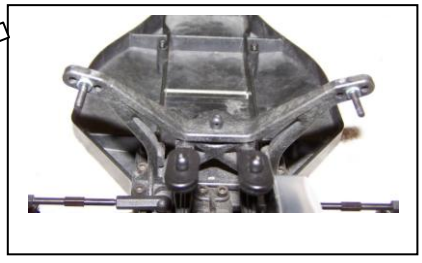
REAR CVDs & HUB CARRIERS

8) Remove the wheels and tires. Save them and the nuts for re-use.



9) Remove the two nuts that hold the top of the rear shocks on. Save them for re-use. Slide the shocks off the bolts, and save the mounting bushings for re-use.





PetitRC.com Radio Controlled Cars Website

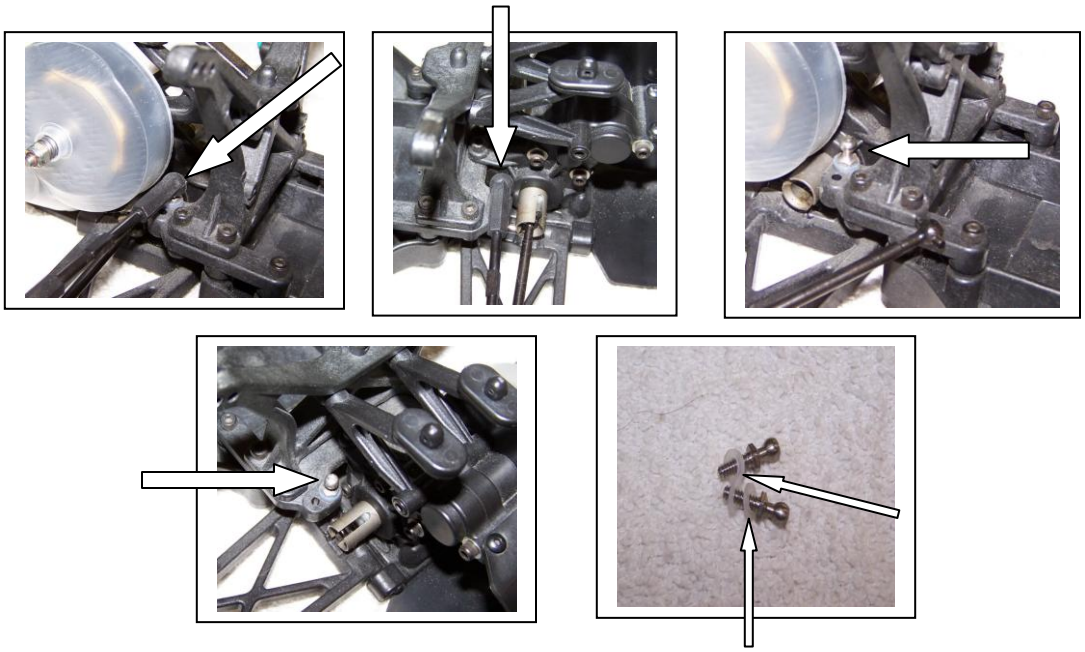
10) Remove the nuts that hold the shock bolts in the tower. Remove the bolts, and save the bolts, nuts, bushings and plastic nuts for re-use.



11) Remove the bolt that holds the bottom of each rear shock to the rear control arm. Set the shocks and bolts aside for re-use. Do not lose the bushing in the bottom shock eyes.

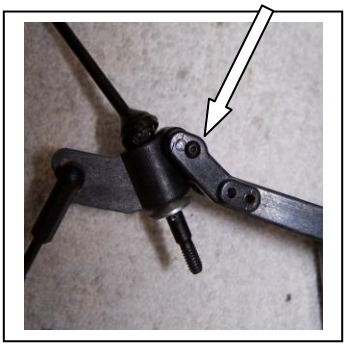
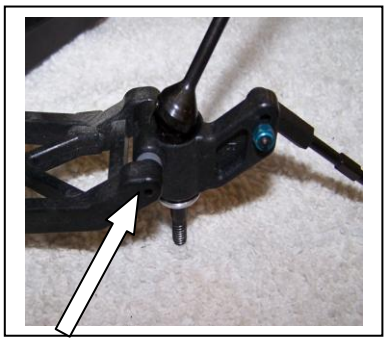


12) Remove the inner camber link ball cups from their studs. Leave them attached to the turnbuckle and leave the other end of the link attached to its ball stud at the hub carrier. Then remove the ball studs. Save the ball studs and any washers that were under them for re-use.



PetitRC.com Radio Controlled Cars Website

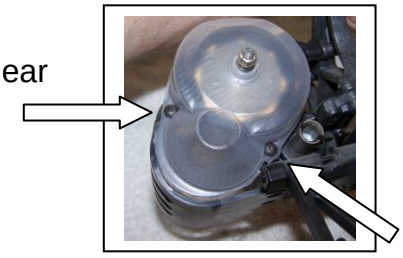
13) From the outside end of the front of the rear control arm, remove the little 2-56 screw that holds in the hub carrier. Don't lose it! Now, from the rear of the control arm, use your wrench to push the hinge pin forward so you can remove the pin. The hub carrier, with camber link and CVD assembled, will fall off. Save the spacers. Set all these parts, hub carrier assembly, hinge pin, spacer(s) and little screw, aside for re-use.


14) Repeat for the other side.

TRANSMISSION

15) Remove the two button head screws that secure the gear cover. Remove the cover. The cover and screws will not be needed.



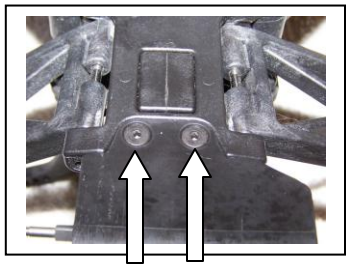
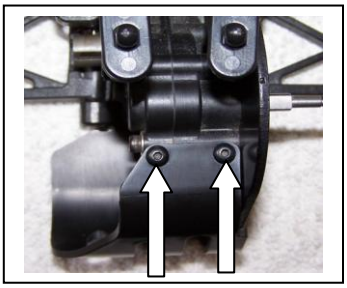
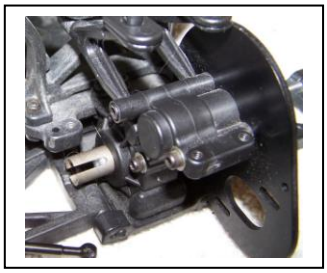
16) Remove the slipper nut, then the spring, slipper plate, slipper pad, spur gear, inside slipper pad, and inside slipper plate. Save all these parts for re-use.



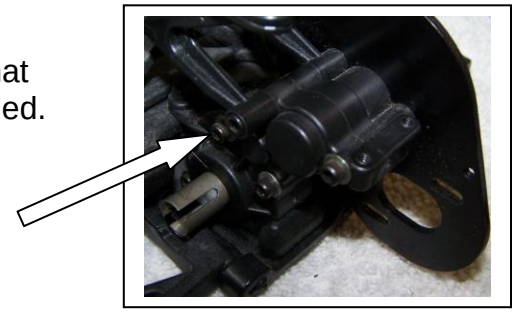


PetitRC.com Radio Controlled Cars Website

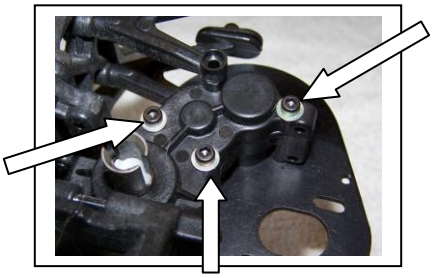
17) From under the car remove the two flat head screws that hold the motor guard. Then, from above, remove the two button head screws that hold the motor guard to the top rear of the transmission. The motor guard and screws will not be needed.

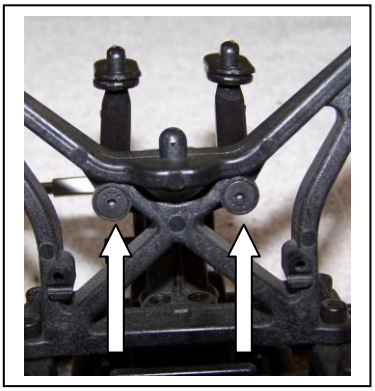
18) Remove the long bolt through the transmission that holds the wing mounts. This bolt will not be needed.



19) Remove the three bolts that go through the transmission and hold the motor plate on. Save the bolts for re-use in A12, but the plate will not be needed.

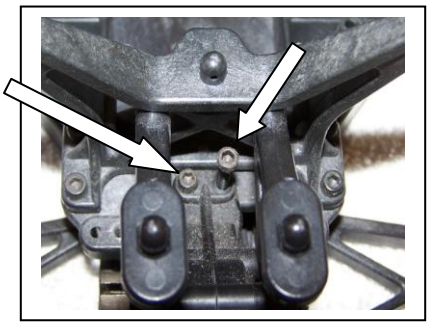


20) From the front of the shock tower, loosen the two flat head screws that hold the wing mounts to the tower.



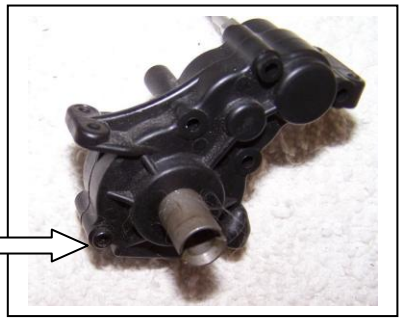
PetitRC.com Radio Controlled Cars Website

21) From the top, put your wrench down between the wing mounts and remove the two cap head screws that secure the transmission to the shock tower. You should now be able to remove the transmission from the car.

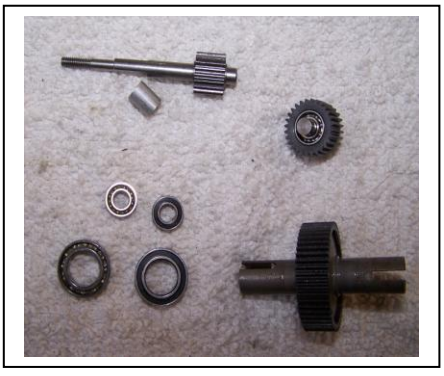




22) Remove the bottom bolt that holds together the two halves of the transmission case and carefully separate the case halves. Save this bolt for re-use in A10.




23) As the case halves come apart, remove and save all of the following parts: Top shaft, spacer, and two 3/8 X 3/16 bearings, Idler gear, two more 3/8 X 3/16 bearings, & idler shaft, Ball differential and two ½ X 5/8 outdrive bearings. You will need all the parts from inside the transmission but the two case halves will not be needed.



That's it! You have now removed all the parts needed to build your X – 6 Squared!

PetitRC.com Radio Controlled Cars Website

BAG A

TRANSMISSION ASSEMBLY

Let's do this first because the parts are right in front of us.

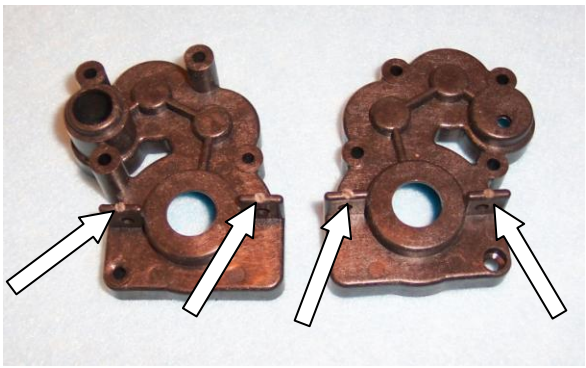
CLEAN IT UP!

A1) We suggest you clean and inspect all your B4 transmission parts at this time. You might want to re-build the diff. If you re-lube the bearings, make sure the outside is clean and dry so they do not attract dirt. You need the following items from your B4: the assembled diff with both outdrive bearings (6903), the idler gear (9360) with its shaft (9361) and two 3/16 X 3/8 bearings (6906), and the top shaft (9601) with its spacer (9602) and two 3/16 X 3/8 bearings (6906).



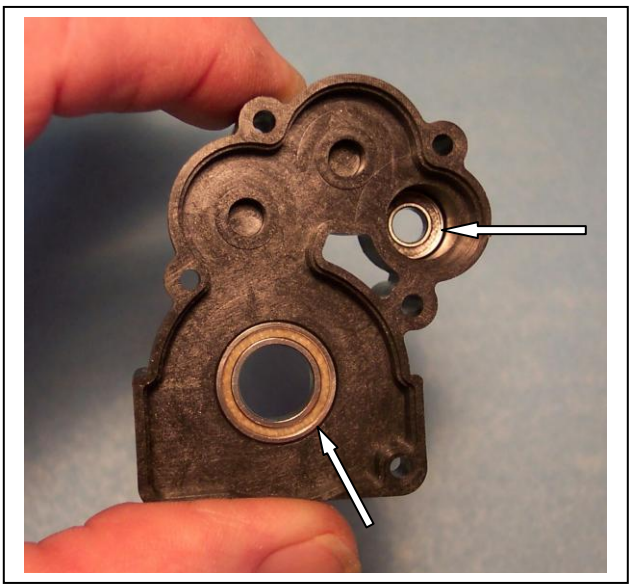
ASSEMBLE THE X – 6 Sq. TRANSMISSION

A2) Remove the transmission case (XF5001) from Bag A and separate the two halves. Note the small round ejector pin bosses on the mounting tabs. You may wish to file these flat for ease of installation in the buggy.

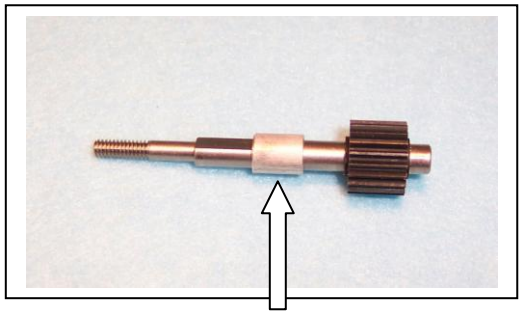


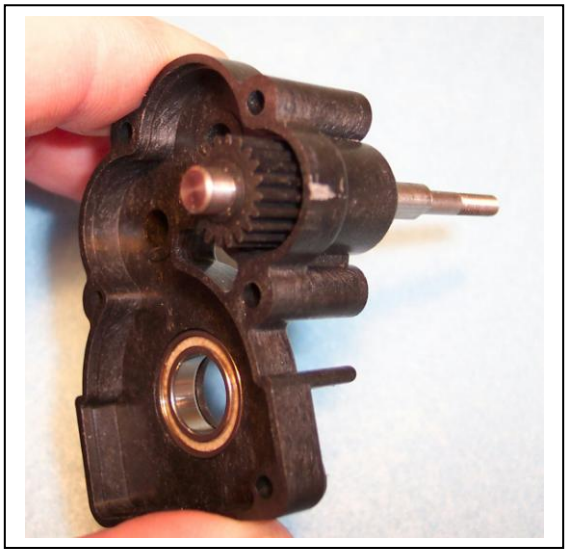
PetitRC.com Radio Controlled Cars Website

A3) Install a 3/8 X 3/16 (6906) bearing all the way into the top shaft boss in the left transmission case half. The Team pushes them in with the shank of an Allen driver or, better yet, with a socket. See Inst. A5. Install an outdrive bearing (6903) in its boss.



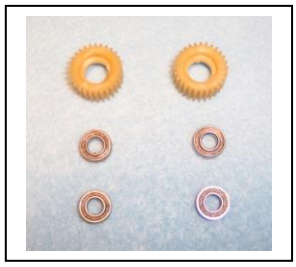
A4) Make sure the spacer (9602) is on the top shaft (9601) and slide the shaft with spacer through the bearing in the transmission case.

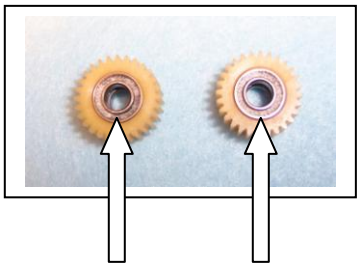


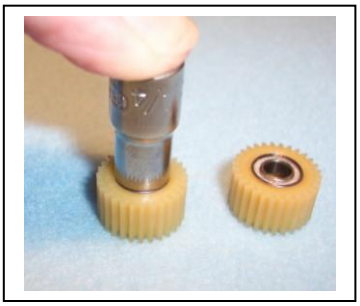


PetitRC.com Radio Controlled Cars Website

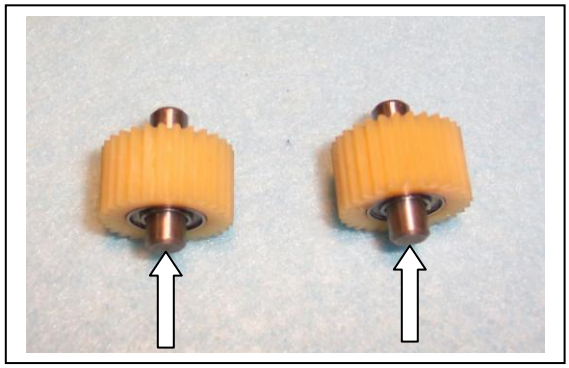
A5) Gather the idler pulley (9360) from your B4, the idler pulley from Bag A, the two 3/8 X 3/16 bearings (6906) from your B4 and the two 3/8/ X 3/16 bearings from Bag A (left photo) Install two bearings in each idler pulley, one from each side. (center) If a bearing is hard to install, we suggest a socket where the OD of the socket matches the diameter of the outer race of the bearing so you do not push on the balls or the inner race. (right)

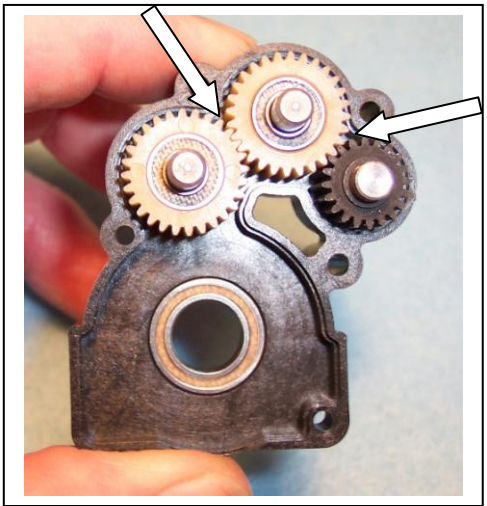




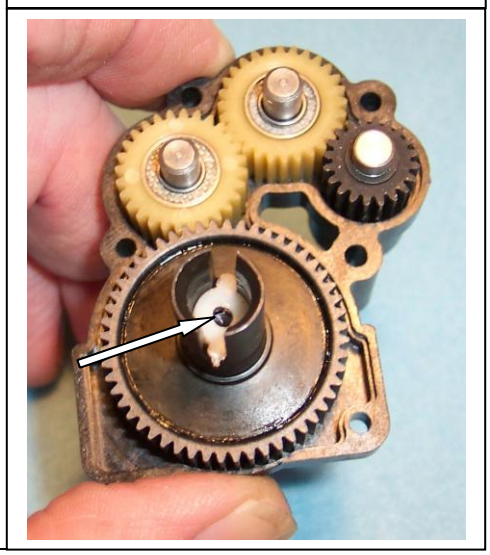


A6) Slide the idler shaft (9361) through the bearings in one idler pulley and the idler shaft from Bag A (XF5201) through the other. Then install the shafts with the two pulleys into their bosses in the left transmission case. Be certain to mesh all the gears properly.



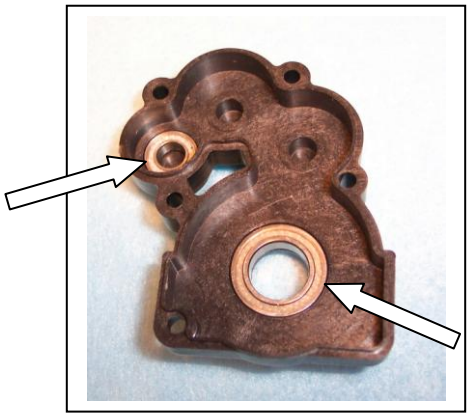


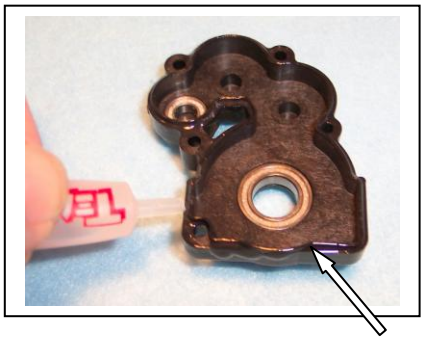
A7) Insert the diff through the outdrivebearing in the left transmission case half. The head of the diff screw should be up (arrow). Make sure all the gears are properly meshed and the trans rotates freely.



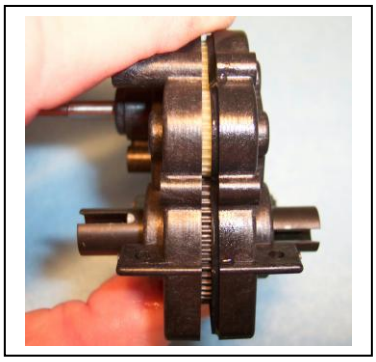
PetitRC.com Radio Controlled Cars Website

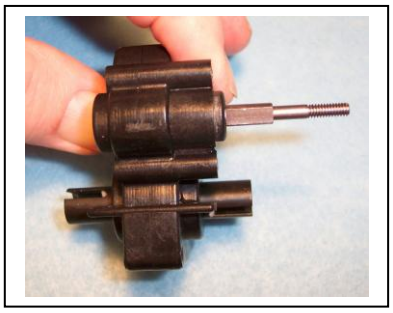
A8) In the right side of the transmission case, insert the remaining 3/8 X 3/16 bearing (6906) in the top shaft boss and the remaining outdrive bearing (6903) in its boss. Place a small bead of inexpensive grease around the mating surface of the right transmission half. This grease only helps keep dirt out, it does not lubricate anything. Grease attracts dirt; paradoxically this grease is used to seal out dirt, so be thorough, but don't use more than is needed. A little touch means so much.





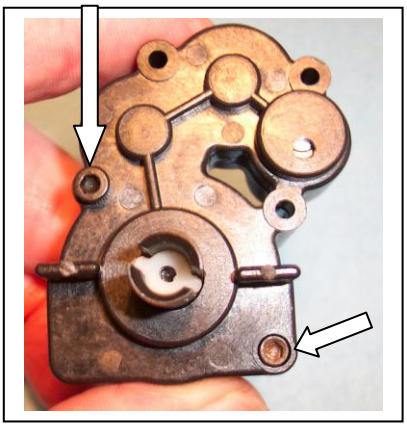
A9) Some Team drivers put a small amount of AE Stealth Lube on the teeth of their diff gear to lubricate the transmission. Other Team drivers do not, saying the trans is freer without the grease. Pay your money and take your pick. Carefully put the two halves of the transmission together. Make sure everything rotates very freely. Later is not the time to repair a binding transmission. Wipe excess grease off the outside of the case.



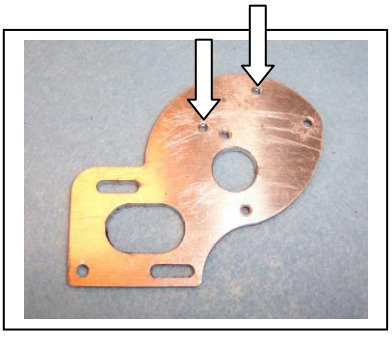


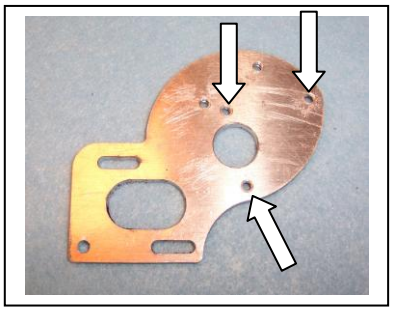
PetitRC.com Radio Controlled Cars Website

A10) Install the 4-40 X 3/8” (XF6001) bolt in the corner (short arrow) and the 4-40 X ½” bolt (from instruction # 22) in the rear center of the transmission (long arrow). Leave them finger tight until step A12. Make sure the head of the 3/8” bolt is fully down in its boss and no part of the bolt protrudes on either side. This part of the transmission must fit into the “box” at the rear of the chassis.

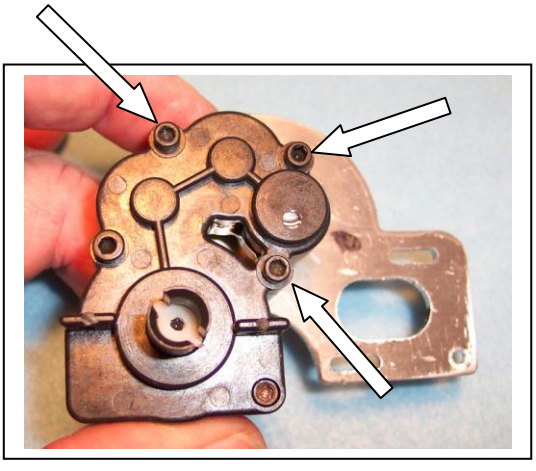


A11) The motor plate (XF1232) has two extra 4-40 tapped holes which are useful to install a fan for the motor (left photo). The arrows in the right photo point to the three holes that attach the plate to the transmission. Team drivers put a drop of thread lock in these holes prior to the next step. Thread lock on the long bolts will come off going through the transmission, so a drop here works best.





A12) Insert the three 4-40 X 1” screws (from instruction # 19) through the transmission case, threading them into the motor plate finger tight. Check once again to ensure the transmission rotates freely but without excessive slop. This is your last chance! Now put the final torque on all five transmission bolts.

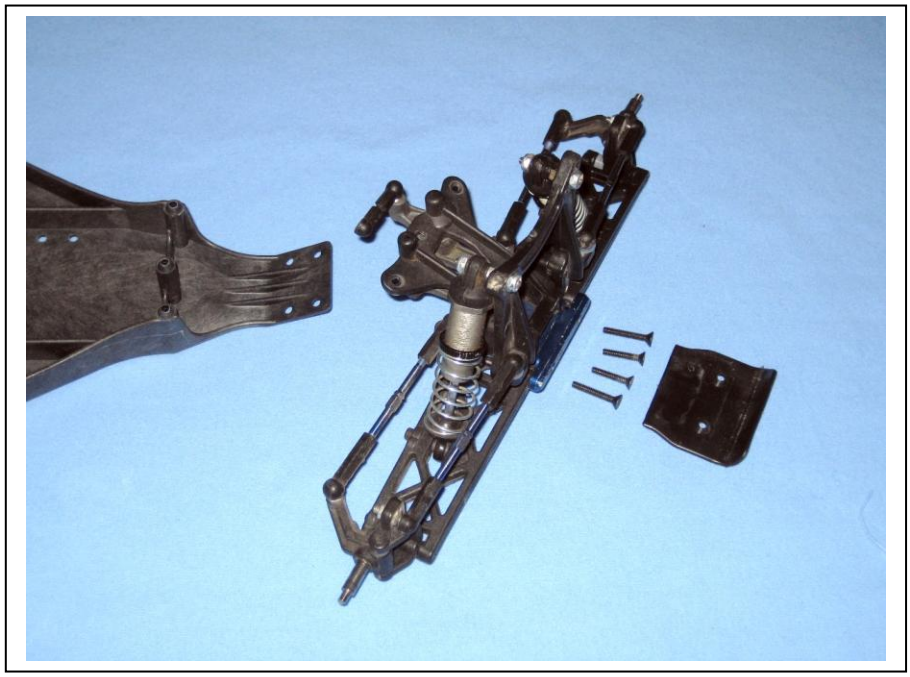


OK, transmission’s done now, so let’s set it aside and put on the front end.

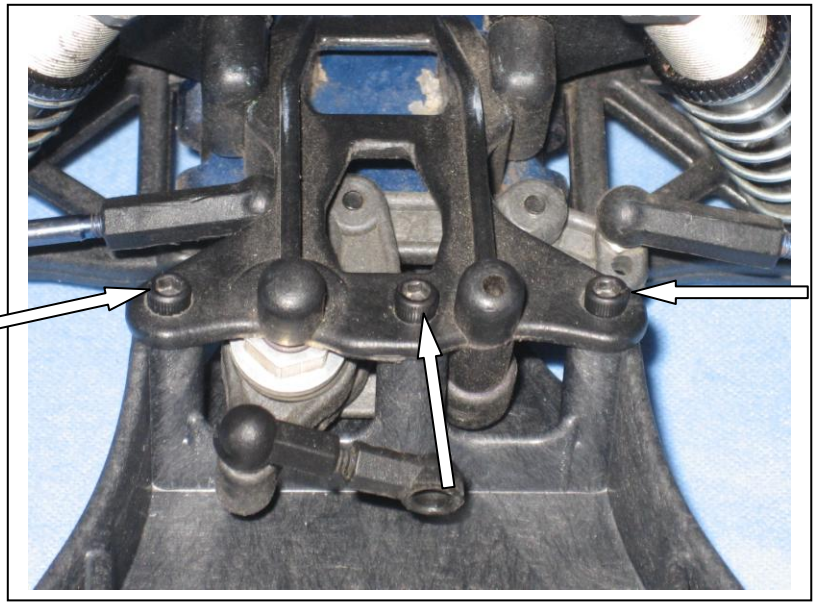
PetitRC.com Radio Controlled Cars Website

FRONT END INSTALLATION

A13) Position the B4 front suspension and steering over the front of the chassis (XF1005) just as it was on your B4. Be careful that the steering assembly remains in place and that the bulkhead (9563) stays in position with the top plate (9566). The top plate should fit snugly over the center post in the chassis and on the bosses at each side of the front of the chassis.

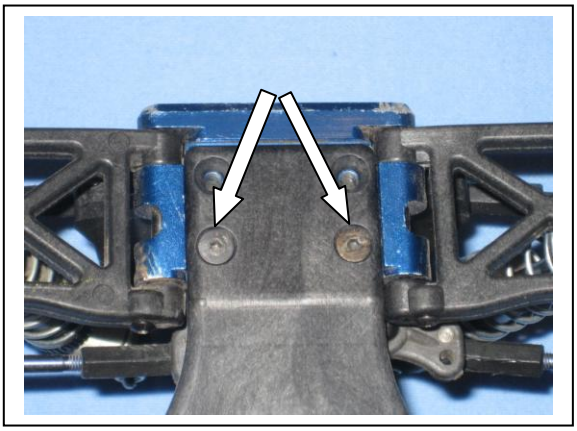


A14) Secure the top plate with the three screws you took out from the B4. Leave these screws finger-tight for now.

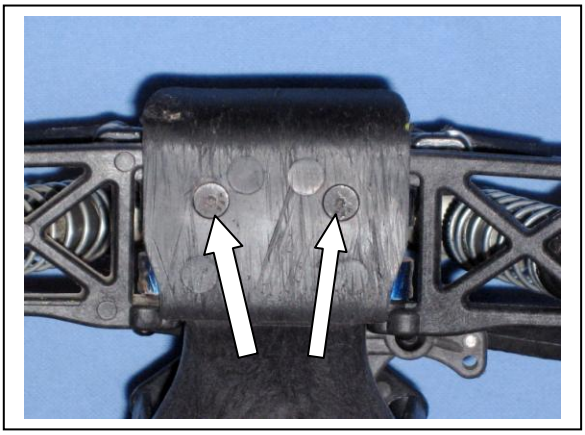


PetitRC.com Radio Controlled Cars Website

A15) Carefully turn the chassis & front suspension over. Install the two 5/8” flat head screws you removed from the bulkhead back into the rear-most of the four holes at the front of the chassis.

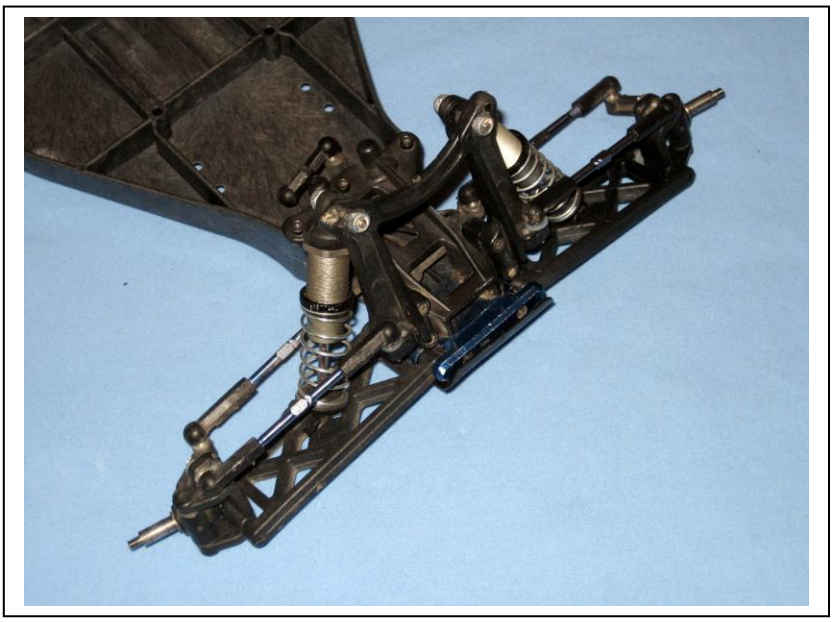


A16) Place the front bumper (9562) in position and secure it with the two 5/8” flat head screws you took out.



A17) Now secure the three screws for the top plate that you left finger tight in step A14 above

That’s it -- front end is done.



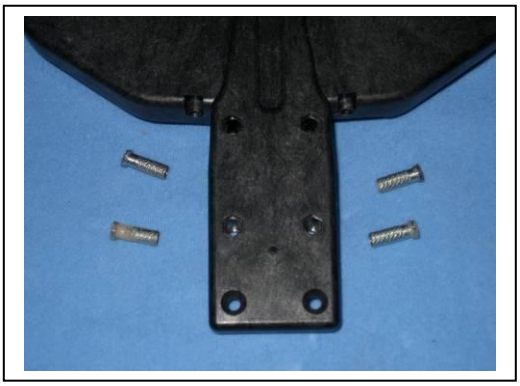
PetitRC.com Radio Controlled Cars Website

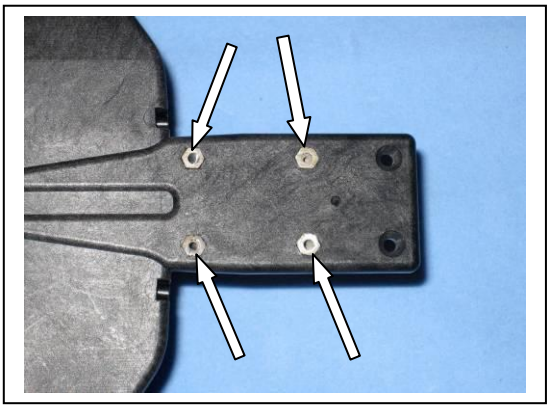
BAG B

BULKHEAD & TRANSMISSION

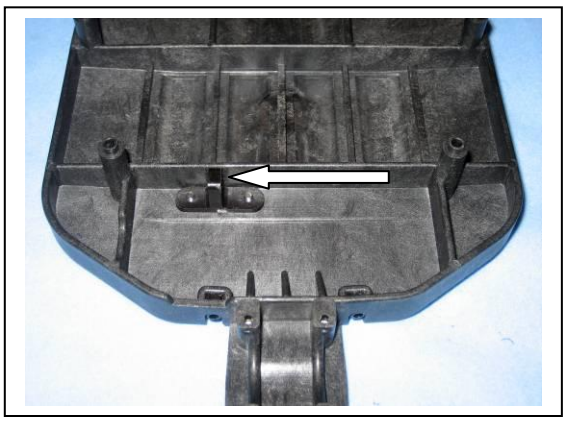
PREPARATION

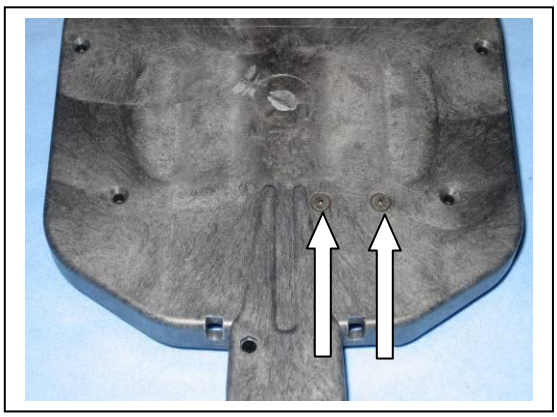
B1) Install four ½" threaded inserts (XF6300) in the rear of the chassis from the bottom. Make sure the hex of each insert seats properly in the chassis. You may have to tap lightly to fully seat the inserts. The inserts should remain in place through the transmission install, and it's easiest to do them now. The rearmost holes in the chassis will be used later – they do not have hexes for the inserts.





B2) Install the motor plate support bracket (XF1130) using two 4-40 X ¼" flat head screws (XF6021). The screws come up from underneath the chassis and thread into the support. Notice the support is off-set to the left.

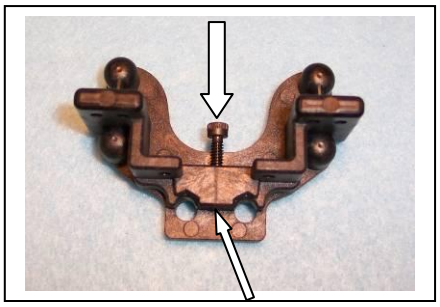


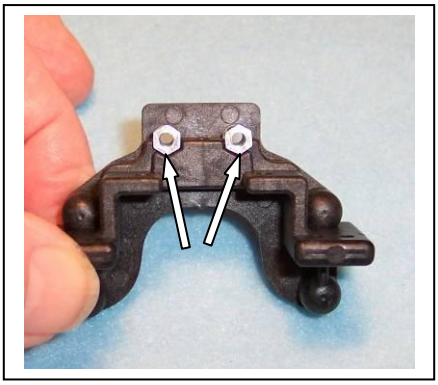


PetitRC.com Radio Controlled Cars Website

BULKHEAD

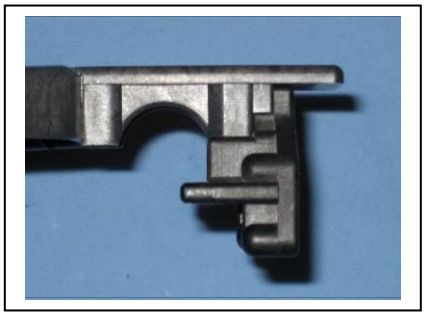
B3) Pre-tap the four holes in the rear of the bulkhead (XF1310). Install a 4-40 X 5/8" cap head screw (XF6003) in the rear center hole of the bulkhead. Put the screw in until the threads are almost ready to emerge from the part. (Left photo) Then turn the bulkhead upside down and place the two 3/8" threaded inserts (XF6300) in their holes. The hexes face forward and fit in the molded hexes in the bulkhead. Note that half of the hex is molded into the bulkhead and half into the chassis. Keep the bulkhead upside down for instruction B4.

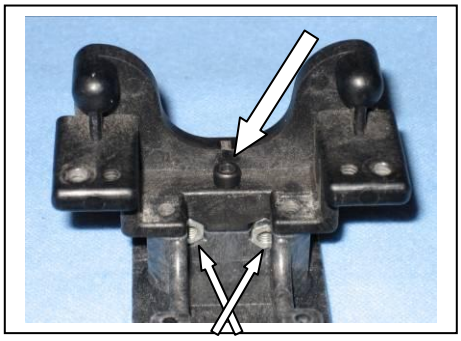




B4) Turn the chassis upside down and mate the bulkhead to the chassis. If the bulkhead does not fit perfectly, check B5 below. Take care that the threaded inserts remain in their hexes in the bulkhead and go into their hexes in the chassis. This is a pain to do, but most likely you'll only have to do it once. When you've got it right, secure the bulkhead by finishing installation of the 5/8" cap head from B3 above.

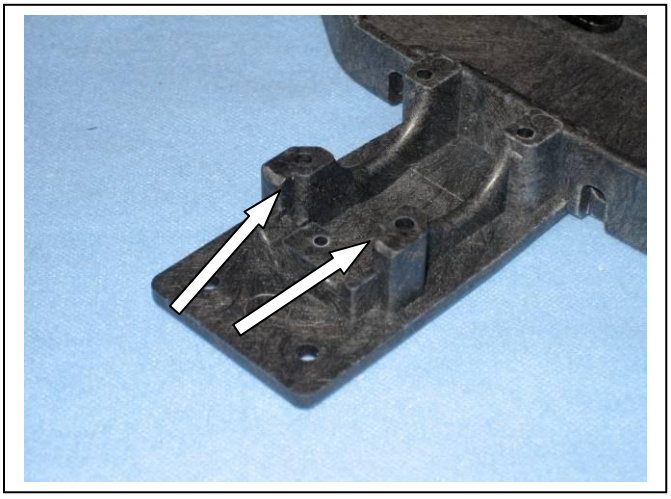






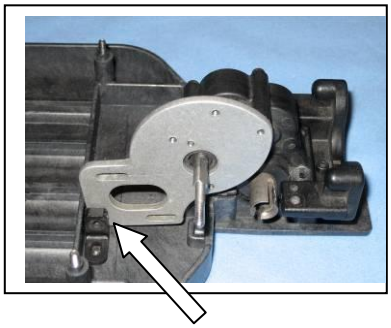
PetitRC.com Radio Controlled Cars Website

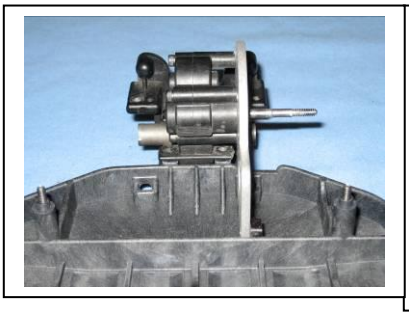
B5) **NOTE:** Tolerances are tight where the chassis mates with the bulkhead. Most bulkheads fit OK, but some are slightly oversized in one small spot. If you have one of these, please lightly run a file over the back inside corners at the top of the chassis' transmission "box" to ensure proper fit.

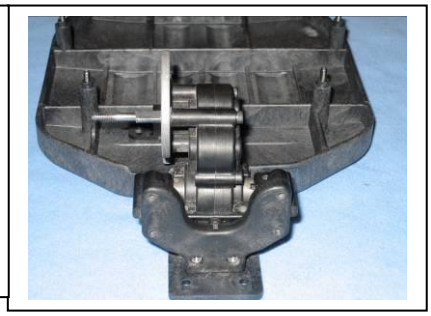


INSTALL THE TRANSMISSION

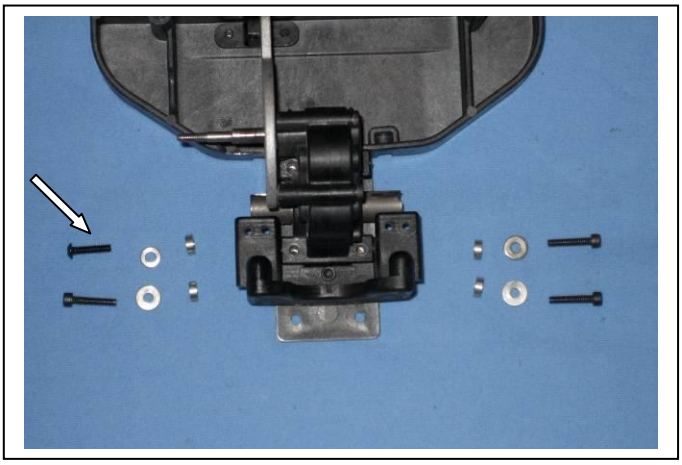
B6) Place the assembled transmission and motor plate in its box. It should be a snug fit but should slide up and down without too much force. Check that nothing is catching. The motor plate should be snug against the right side of the motor plate support.





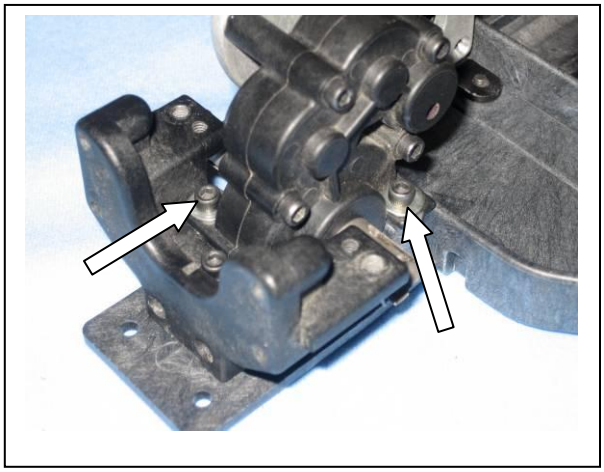


B7) Remove the transmission from the buggy. Check the Tuning Section and Set-Up sheets to determine how high you will mount your transmission and select the proper shims from the bag of shims (XF5700). Assemble three 4-40 X 5/8" cap head bolts (XF6003), one 4-40 X ½" button head bolt (XF6043), four flat washers (XF6080), and the shims. Note that the short button head screw will be at the left front (arrow).

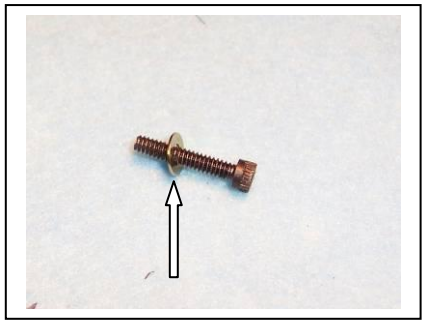


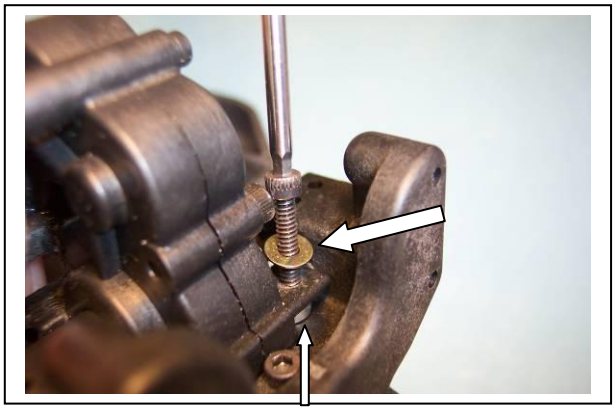
PetitRC.com Radio Controlled Cars Website

B8) Place the shims for the left rear and right front transmission bolts on their chassis bosses. Slide the transmission down over them and install two 4-40 X 5/8" cap head bolts and flat washers. Leave these bolts finger tight for now.



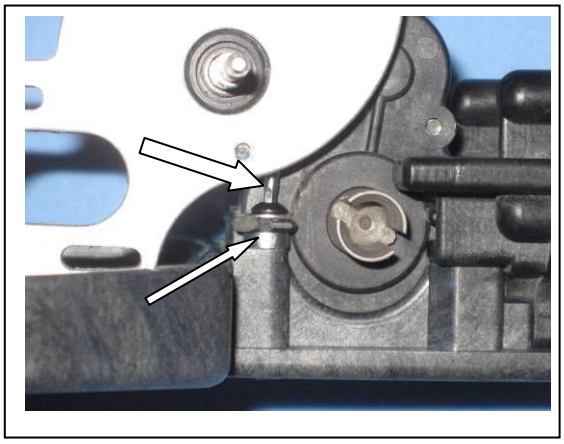
B9) Place a flat washer about half way on the last 4-40 X 5/8" cap head bolt. Slide the spacer under the right rear transmission mounting tab (small arrow). Put the bolt in so the washer is beneath the transmission case bolt (large arrow), then install the bolt finger tight. The head of this bolt will rub on the case bolt a bit, but that's OK.

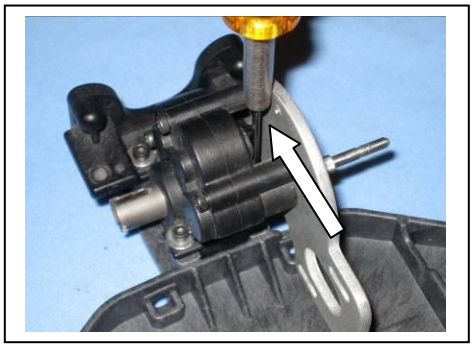


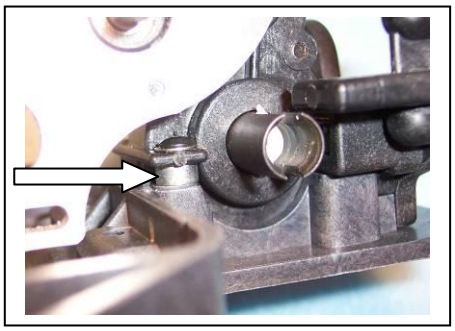


PetitRC.com Radio Controlled Cars Website

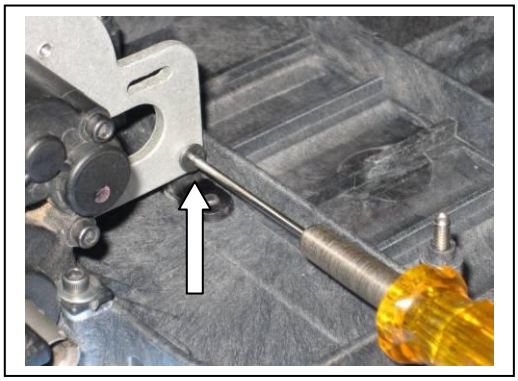
B10) Place the final spacer under the left front transmission mounting tab. Put the washer on the 4-40 X ½" button head bolt and engage the bolt with your wrench. Work the wrench down between the transmission and the motor plate to install this screw. Be careful not to strip the threads in the insert. When the left front bolt is properly engaged in its insert, apply final torque to all four transmission mounting bolts.

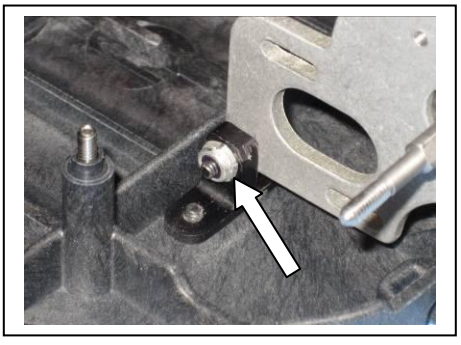






B!!) Install the ½" flat head (XF6023) through the motor plate and motor plate support. You may need to loosen the two bolts that hold the support in the car. Secure with the flat washer (XF6080) and lock nut (XF6071). Remember to re-tighten the motor plate support bolts when this step is finished. Some drivers foolishly leave this bolt out, but it is very important to prevent chassis flex and bending the motor plate.





B12) Re-assemble the spur and slipper assembly just as it was on the B4.

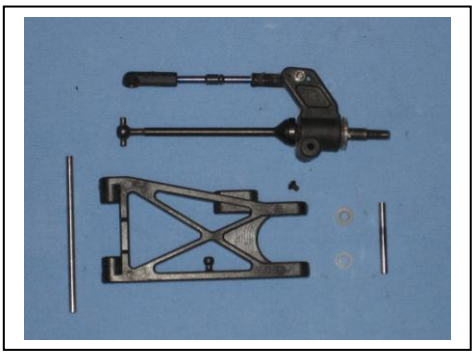
PetitRC.com Radio Controlled Cars Website

BAG C

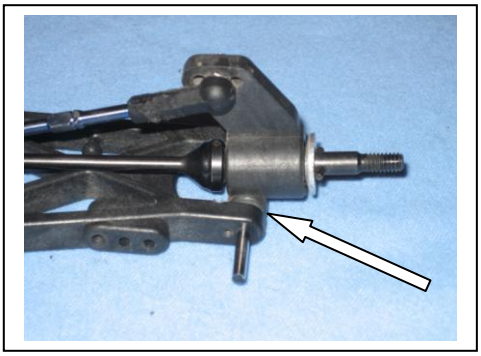
REAR SUSPENSION

ASSEMBLE THE HUB CARRIERS

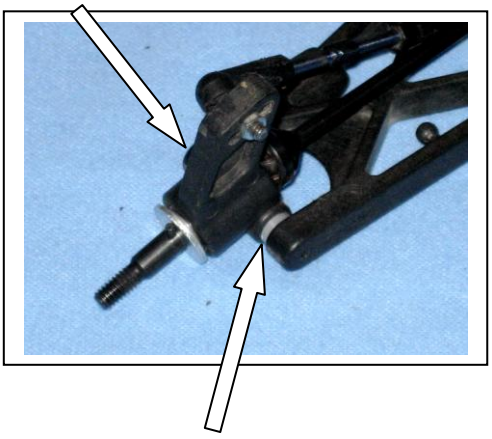
C1) We'll do the right arm first. Assemble the left hub Carrier marked "L" (9584) to the right control arm. AE hub carriers have 0 degrees of toe-in, so they're identical. Swapping them makes the camber links straighter. .X – 6 Sq. control arms (XF3012) also are inter-changeable; put the shock mounting holes to the rear. You'll need the hinge pin (9622), two spacers (4187) and the little 2-56 button head screw.



C2) Check the Tuning Section and Set-Up sheets for hub spacing. These instructions show hub in the center. Slide the hinge pin in from the rear, add one spacer (4187) (arrow), then start the pin through the hub carrier.

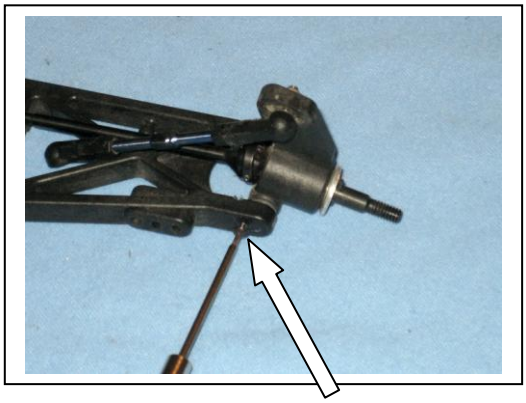


C3) Place the second spacer (4187) between the hub carrier and the front of the control arm and slide the hinge pin the rest of the way through.



PetitRC.com Radio Controlled Cars Website

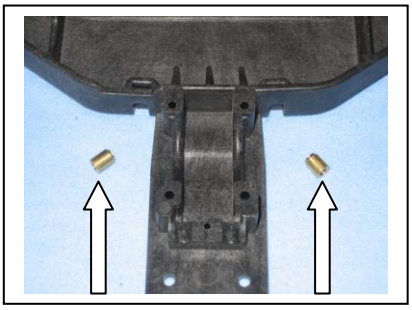
C4) Secure the hinge pin with the 2-56 screw. Be careful not to strip the hole for the screw – don't be a gorilla here.

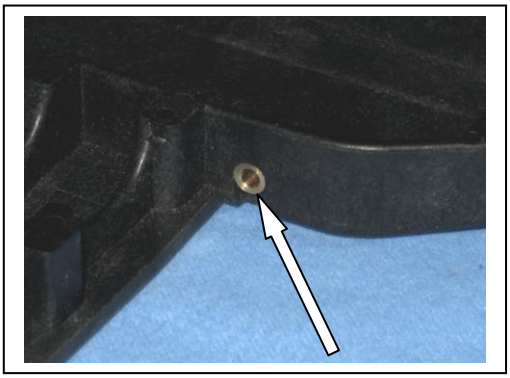


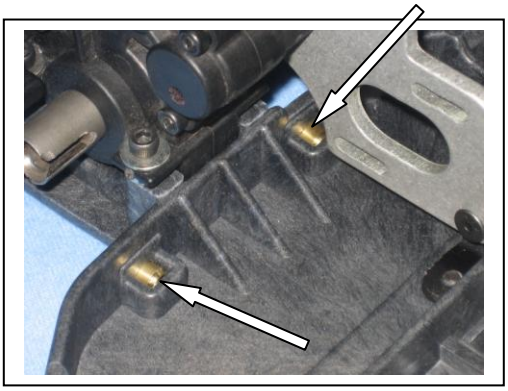
C5) Repeat C1 through C4 for the left side.

ASSEMBLE CONTROL ARMS TO THE X – 6 Sq.

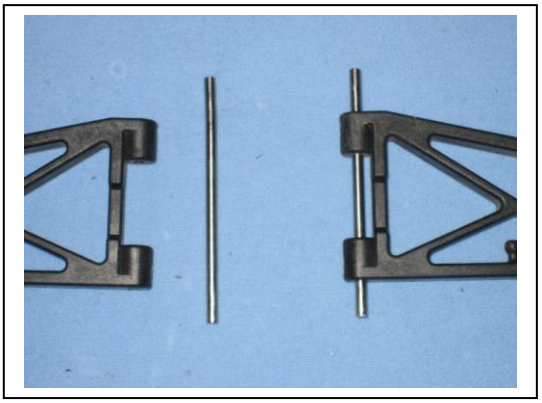
C6) Bag C contains two brass bushings (XF6142). Insert the brass bushings into the rear of the chassis, one on each side of the transmission box. Photos show the transmission out for clarity.

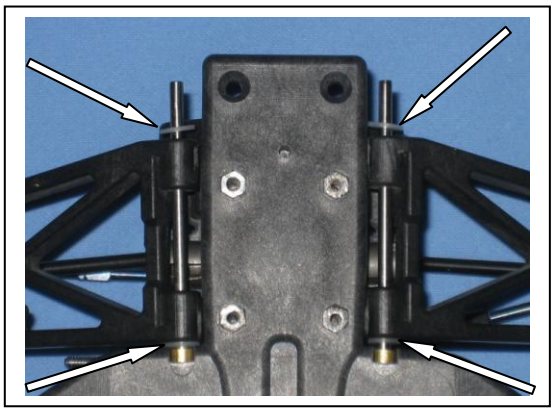






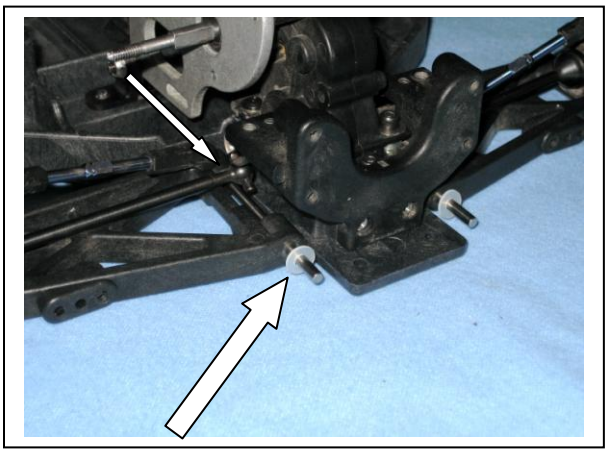
C7) Place the Lunsford Ti hinge pins (XF6141) in the two rear control arms. Insert the front end of the hinge pins into the bushings. Check the Tuning Section and Set-Up sheets. Here we have placed spacers in front of the arms and behind them.



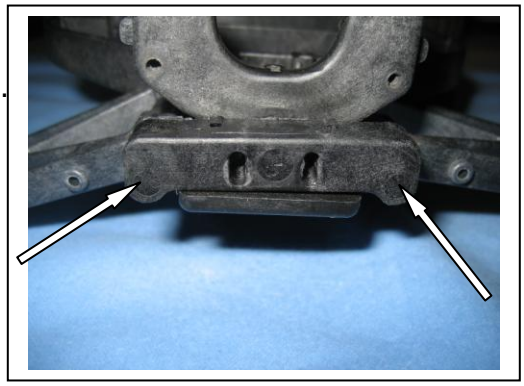


PetitRC.com Radio Controlled Cars Website

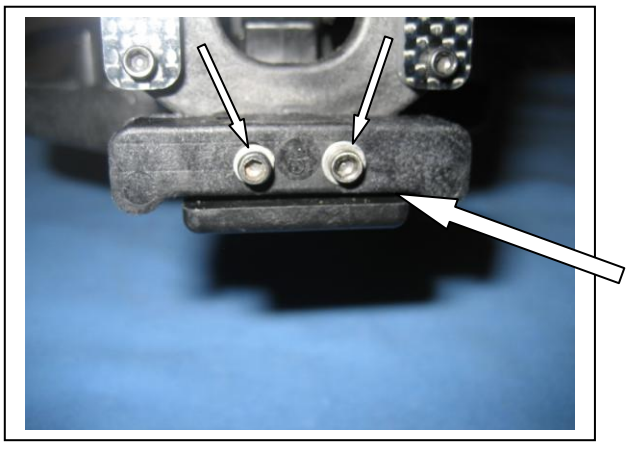
C8) Another photo of the arms in the X -6 Sq. Note the forward spacer (small arrow). Some Team drivers keep at least one .010" spacer in front of the arm to act as a washer. Additional spacers may be added in front of the arm. When the front of the arm is set, put spacers on the rear to shim the arm against the toe-in bar in step A9 below (large arrow). Again, some Team drivers always keep at least one small spacer on the back to act as a washer.



C9) Your X – 6Sq. has been supplied with two toe-in bars, 3 degrees and 4 degrees (XF3211). . Check the Tuning Section and Set-Up sheets to determine which you will use. Engage the rear of the hinge pins in their holes in the toe-in bar. The bar will extend across the back of the chassis.

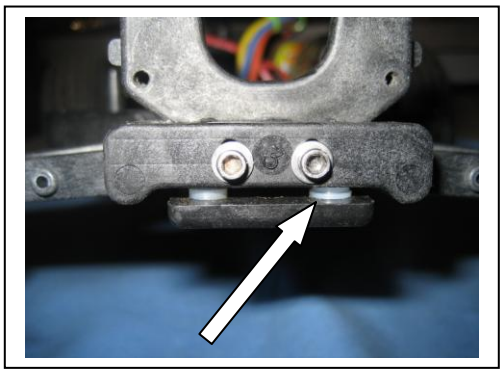


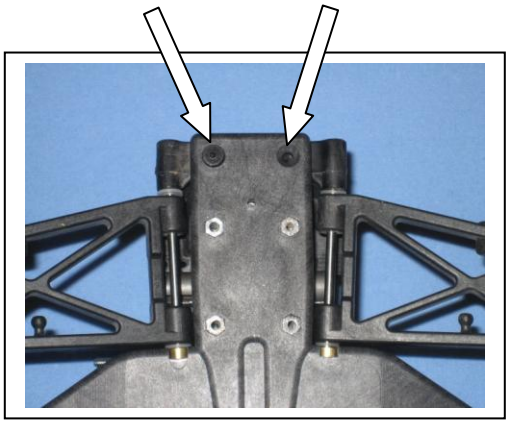
C10) Secure the toe-in bar with two 4-40 X ¾" cap head screws (XF6004) and flat washers (small arrows). Leave the screws finger-tight for now. The bar must be free to move up and down in its slots and there should be a gap between the bar and the chassis (large arrow).



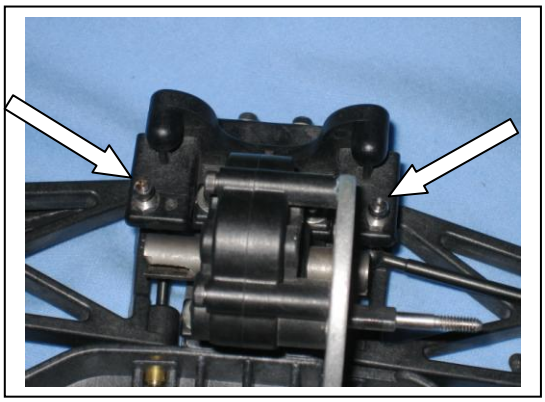
PetitRC.com Radio Controlled Cars Website

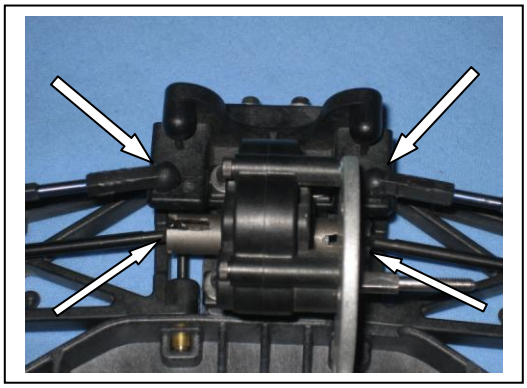
C11) Consult the Tuning Section and Set-Up sheet to determine how many shims you will use under the toe-in bar to set anti-squat. You have a bag with four 060" and two .030" shims (XF3250) which allow you to make .030" increments from zero to .150". In the left photo, we have a .030" and a .060" to make .090". Secure the toe-in bar and shims from below with the two 4-40 X 3/8" flat head screws (XF6022). Then, secure the two cap head screws from C10 above..





C12) Install the two ball studs in their holes in the bulkhead. Consult the Tuning Section and Set-Up sheet to determine which hole and number of washers. Be sure the dogbones are properly engaged in the outdrives and press the ball cups over the ball studs.





Almost finished now. This thing is sooo dialed…

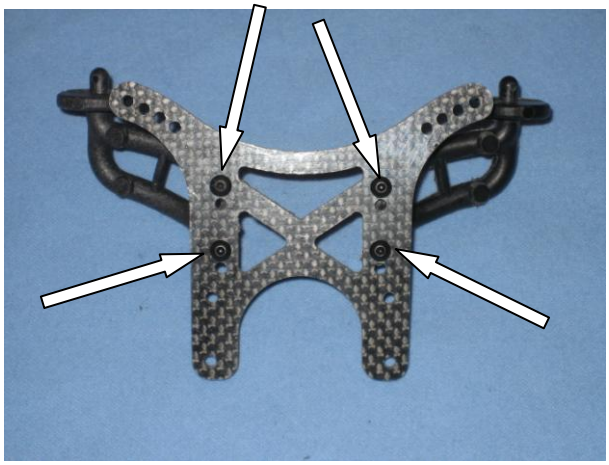
PetitRC.com Radio Controlled Cars Website

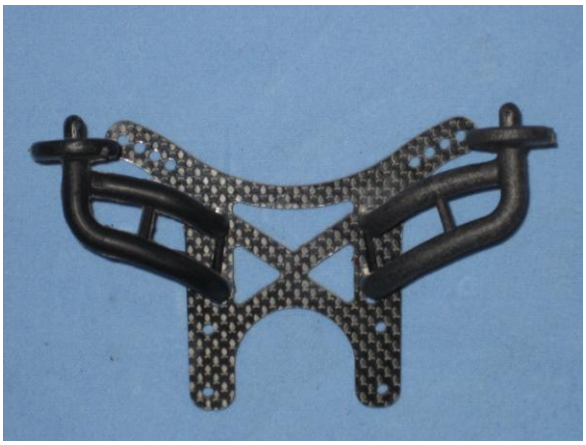
BAG D

FINISH IT UP

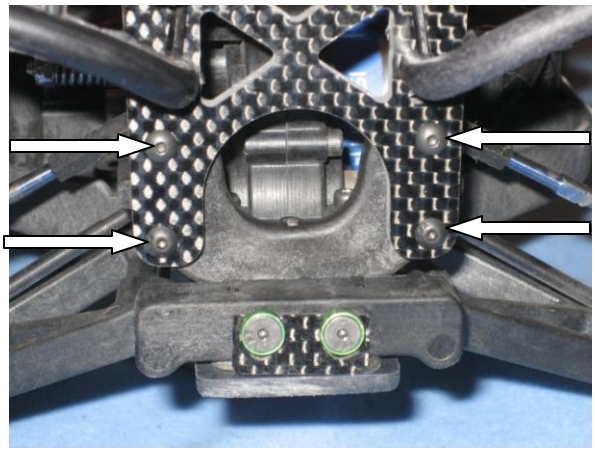
REAR TOWER & SHOCKS

D1) Install the wing mounts (XF3500) to the shock tower using four 4-40 X 1/2" cap head screws (XF6002).. Here we have used the upper set of holes.





D2) Install the tower, with wing mounts To the rear, using four 4-40 X 1/2" cap head bolts (XF6002). In a few bulkheads these screws have stripped when over-tightened, so don't be a gorilla here.



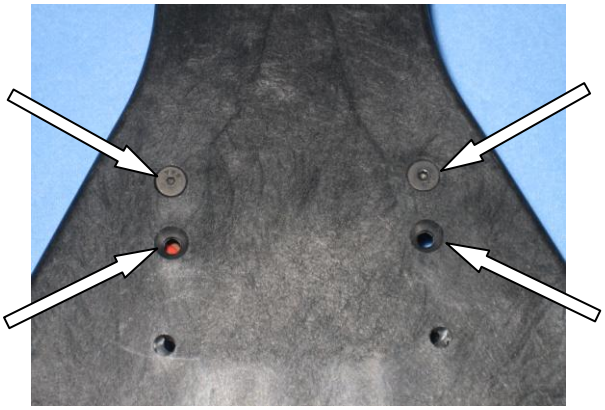
PetitRC.com Radio Controlled Cars Website

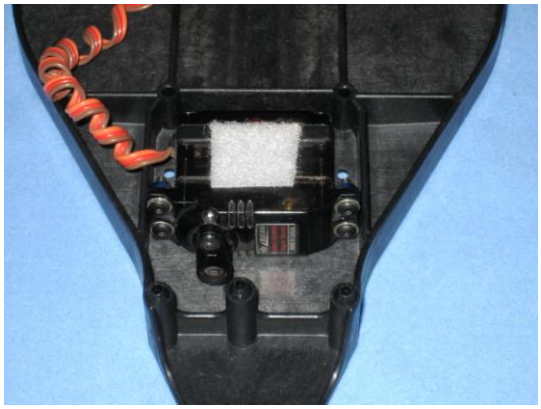
D3) Install the rear shocks to the front of the shock tower and the rear of the control arms using all the parts saved from your B4.



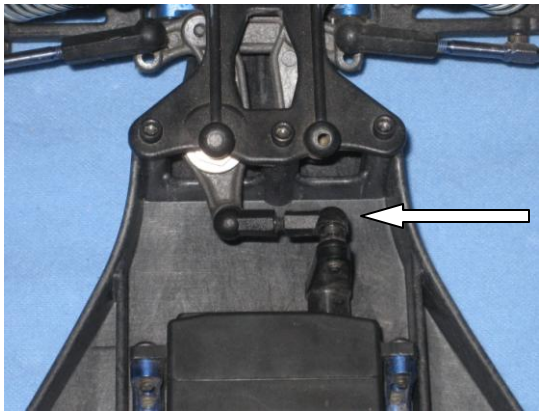
ELECTRONICS

D4) As a tuning option, we have included two sets of mounting holes for the servo, forward and back. Check the Tuning Section and Set-up sheet to see which you will use. These photos show the servo in the forward position. The servo installs with the two saved flat-head screws from the bottom just as in the B4.



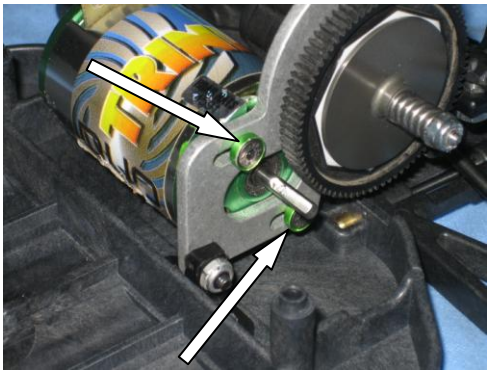


D5) Re-attach the servo link just as it was in your B4.

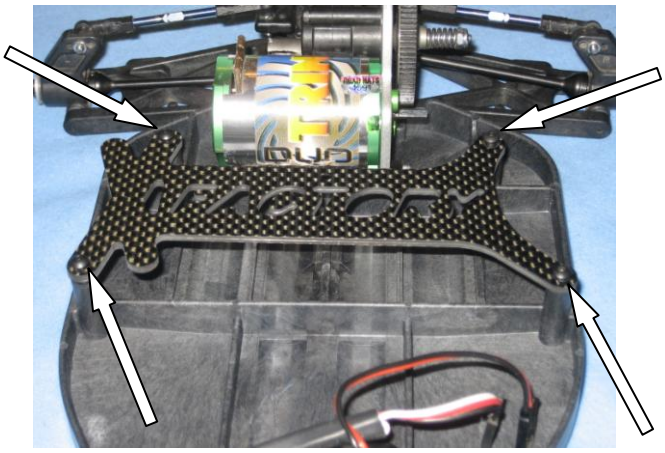


PetitRC.com Radio Controlled Cars Website

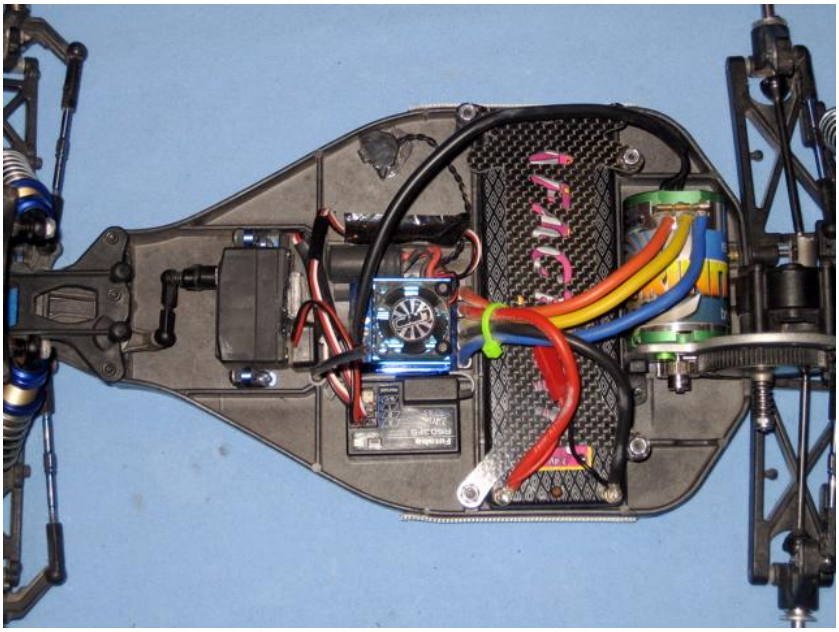
D6) Install the motor using the two motor screws from your B4.



D7) Install the battery strap (XF1223) using the 4-40 X 1" flat head screws (XF6027). There is room for the wires of your LiPo pack on the left side of the chassis.
If you will use NiMh cells, you need part # XF1224, a CF strap that fits just as the LiPo strap fits. Make up a 4 + 2 pack, and place the 4 cells in the rear and the two in front. You can shim the 2 cells anyplace in their space for weight distribution.



D8) If you are using LiPo, install the E.S.C. in the center of the chassis just ahead of the battery slot. We have supplied two antenna mounts so you may place the receiver on either side. Brian Kinwald uses the extra antenna hole to mount a blue glow stick. Cool!!!



PetitRC.com Radio Controlled Cars Website

THAT BEAUTIFUL BODY

D9) Paint the great J Concepts body (XF8021) and wing (XF8101), then remove the blue overspray shield. When you cut out the body, check to see that it clears the battery strap at the outside corners. Some LiPo batteries are tall, and you must cut a bit lower along the bottom of the body.

Check the Tuning Section to see which cut line you will use, then cut out and install the wing on the wing mounts. (Now, where are those little black washers?)

Use the Velcro on each side to hold the body. We suggest a little bit of tape underneath the body on each side where the outside battery bolt is to make sure your great paint job is not rubbed off.



D10) Put the wheels on – we won't insult you with a picture – and let's go racing!!! We suggest you read the Tuning Section at least once just to ruin everything you thought you knew about tuning. Then,

Let's show them how a really dialed buggy performs on the track!!!

PetitRC.com Radio Controlled Cars Website

TUNING SECTION

Take this for what it's worth – we make no guarantees!

TRANSMISSION HEIGHT

The X – 6 Sq. continues our adjustable height transmission. This allows you to adjust the height of the point of contact between the dogbones and the outdrives. In theory, raising this point of contact gives more forward bite and less side bite. Lowering the point of contact does the opposite: more side bite and less forward.

We are changing the angle of the dogbone in the outdrive. If you keep the ride height the same, changing the height of the outdrives changes the angle of the dogbones. On a conventional buggy, rear ride height changes are done to affect dogbone angle, and front ride height is adjusted secondly to compensate for the rear.

The New Math allows you to set dogbone angle and ride height independently. The Team usually sets transmission height first, then adjusts the remainder of the car, with front and rear ride heights based on the remainder of the set-up rather than dogbone angle considerations.

Included in Bag B is a Ziplock bag of transmission shims; four each of .030", .060", .090". and .120" Counting zero, this gives five transmission height positions. .060" is about the same as your B4.

Unfortunately, we have yet to figure out an economical way to change transmission height without moving the motor in tandem. Therefore, changing transmission height also changes the car's C.O.G. slightly, which affects handling. As with any other buggy, by the time qualifying starts it's the whole package that counts. We solicit input from the X Factory Family on this problem. The key word here is economical – nobody will buy a $600 buggy!

Important note: For all settings above .030", add equal shims under the motor plate support. You can use #4 flat washers for this purpose.

ANTI-SQUAT AND TOE-IN – More Math!

Your X – 6 Sq. has been designed to make adjustments of rear toe-in and anti-squat as easy as possible. Two toe-in bars are provided in Bag C: 3^{o} per side and 4^{o} per side. More toe-in helps the buggy develop forward traction coming out of corners, but less toe-in gives better side bite. So it's another trade-off and is an adjustment you

PetitRC.com Radio Controlled Cars Website

should make early in your set-up work for each track. There are commercially available hub carriers from RaySpeed and Racer's Edge which put different amounts of toe-in at the hub (the AE hub carriers are 0^o), so you have a wide range of options.

We have run all the way from 3^o at the pivot + 0^o at the hub = 3^o to 4^o at the pivot + 1 $1/2^o$ at the hub = 5 $1/2^o$! At 5 $1/2^o$ the rear end gets so locked up that steering reaction decreases, but you can do it. On the xx-4 it was discovered that toe-in at the pivot performs differently from toe-in at the hub, so please have at it and let us know how it works out.

Anti-squat adjusts the up-and-down angle of the rear hinge pins, thus affecting the angle of the rear hubs. This changes the way the wheels put power on the ground and changes the way the suspension works. Tilting the hinge pins so the rear is down increases forward bite, reduces side bite, makes the car jump with an higher arc and lets it accelerate better through bumpy sections. Raising the rear of the hinge pins does the opposite: less forward bite, more side bite, flatter jumps, better acceleration in smooth areas.

Bag C includes a Ziplock bag with 2 .030" shims and four .060" which allows anti-squat adjustment all the way from zero to .150". The Team no longer refers to anti-squat in degrees, but rather we discuss the number of inches of shim.

Once again, you should adjust anti-squat early in your preparation for a race, taking into consideration dogbone angle.

IT'S ALL ABOUT WEIGHT DISTRIBUTION

> "I never saw a Ferrari with the motor hanging out the back." That's a quote from Greg Hodapp, former Worlds' TQ and ROAR National Champion. Better weight distribution is the raison d'etre for the X – 6 Sq. The typical rear-motor buggy has weight distribution of about 70% on the rear wheels and 30% on the front. The X – 60 is about 60 – 40%. The New Math.

Everything about the X – 6 Sq. is different from a rear-motor buggy, and many drivers must learn to drive all over again. A rear motor acts like a pendulum, making the back of the buggy want to "come around" in corners or fly up like a bucking bronco over bumps. With the weight in the center these things no longer happen.

First, you'll carry more speed through corners. With more weight on the front wheels, the X – 6 Sq. turns in better. With no pendulum effect in the back, the rear end stays more planted. The car naturally takes a smoother "normal" racing line through corners rather than the "point-and-shoot" or "rotate" line now in use with rear-motor buggies. Watch out that you don't run into other cars slowing down for the corners!

PetitRC.com Radio Controlled Cars Website

Even though less of the X – 6 Sq's weight is on the rear, the Team runs rear springs, oils, pistons as stiff or stiffer than a "normal" buggy. (What's "normal" about the motor hanging out the back?) Initially, we thought we would run softer because of less weight back there, and we've still got bottles of 15-wt oil and Losi white springs hanging around. But as we've learned to calculate The New Math, we've gotten stiffer, and it's remarkable how close most of our set-ups are to "normal."

We're still learning in the area of set-up, so stay tuned to our web site, www.2wdrc.com for the latest set-up tweaks.

GEARING AND SLIPPER

The Team mainly uses the 78 spur gear. The 81 will fit, but to use it you should grind a bit off the ends of the dogbone pins so the pins no longer protrude from the outdrives. Under certain circumstances, we think often when the car is up-side-down, we've experienced contact between the pins and the 81 spur. It doesn't seem to bother the pins much…

We suggest initial slipper adjustment slightly looser than on the B4. Slipper and diff adjustment is critical on the X – 6 Sq. Under all circumstances, the slipper must slip before the diff, so after adjusting the slipper as you need, re-adjust the diff to suit.

Running a looser slipper allows you to get on the power harder and quicker coming out of corners and through rough sections, taking advantage of The New Math's higher speeds in these sections.

There is one advantage to a rear motor car: in the first five feet after a corner weight pivots back on acceleration reducing the car's tendency to "fishtail." On most tracks the X – 6 Sq. has no problem here (see Weight Distribution above), but on slippery surfaces (That's different from "loose.") power application is more difficult and trigger skill is required. A looser slipper helps now. It's not a real disadvantage – remember that you came through the corner faster – but many drivers will want to readjust the slipper and learn better throttle control for the occasional slippery track

That's really more than you wanted, but we can't stop talking with The Family.

PetitRC.com Radio Controlled Cars Website

We've worked very hard to improve quality on every part
of the X – 6 Sq. over our previous Kits.
These improvements have been very costly, but we
think they are important and you will like this new car.

Please, please, call or E-mail with
comments and suggestions.
Complaints go to the top of our list because
that's how we improve our products.
Suggestions from the Family are the fastest way
to new ideas for improvement and new products.
We solicit your input.

The X – 6 Sq. is the most dialed thing we've made yet, so

Let's go crush the competition!!!



PetitRC.com
Radio Controlled Cars Website