

Made in the USA by Custom Works RC Products, LLC 760-B Crosspoint Drive Denver, NC 28037 www.CustomWorksRC.com

REQUIRED READING

Thank You and Congratulations on purchasing this **INTIMIDATOR GBX**! Within this kit you will find a race winning car with over 17 years worth of **CUSTOM WORKS** design and quality. In order for you to realize this race car's winning potential it is important to follow the written text along with the pictures included. The steps required to build this car are very easy, as long as you read before you build.

The instructional format for building this car is to open each bag in alphabetical order. Each bag of parts will be broken down into "Steps" in the manual. All parts and hardware needed to complete all steps for each separate bag, will be found in each individual bag. There is no need to steal screws from other bags. In the rare event you need to look in a different bag for a certain part, it will be noted clearly.

This car has the capability of being built so that the motor is located in either a REAR or MID-MOTOR configuration. You do not need to decide which version youi would like to build yet as the car can be converted very simply and easily from one to another. The instructions will build the car in the "REAR Motor" format to completion of the build. At the end of assembly we will instruct how to convert to the MID-MOTOR set-up if that is what you prefer. Generaly the rear motor configuration will provide the most traction on surfaces that are low bite or bumpy. When racing on a high bite smooth surface the mid motor configuration will usually be faster as it will give the car a more balanced weight bias from front to rear.

All hardware (screws, washers, nuts, etc...) are referred to by size and type in the instructions. To help clarify which screw or nut the instruction is calling for refer to the HARDWARE REFERENCE supplement. The size of the screw or nut should match the "shadow" of the same piece very closely.

Screw ID's are: FH=Flat Head BH=Button Head SH=Socket Head SS=Set Screw

Do **<u>NOT</u>** use power screwdrivers to drive screws into parts. The fast rotation speed can easily melt and strip plastic parts or cross-thread into the aluminum parts.

Lightly sand the edges of the graphite pieces using a medium grade sandpaper to avoid splinters. Run a thin bead of Super Glue around the edges to give pieces greater durability.

SUGGESTED TOOLS

Medium Sandpaper Hobby Scissors Small Needle Nose Pliers 3/16" Wrench .110" Drill Bit X-Acto Knife Phillips Head Screw Driver Blue Loctite Blue Loctite 3/16" Drill Bit

Bag <u>A</u>

Step #1: Begin by checking the fit of the Suspension Pin in the Suspension Mounts. The Suspension Mounts are machined to a VERY close tolerance and may be tight on the pin at first. If it is tight, slide the pin in and out to clear any burrs that may remain. After checking that the Suspension Pin spins freely in all four holes, slide (1) #4233 Suspension Pin thru the front of the #3252 Suspension Arm and thru the lower hole on the #2204 Suspension Mount as shown in **Figure #1**. You will notice the Suspension Arms have a notch on one side of them, that notch faces up when Arms are mounted correctly.

Step #2: Repeat Step #1 with #3252 Suspension Arm facing opposite direction from Suspension Mount. This will make a Left and Right side front suspension for the car.

Stepped side of Suspension Arm faces the front of the car. NOTE:

Step #3: Add one #5203 E-clip to each end of the Suspension Pins as shown in Figure #2.

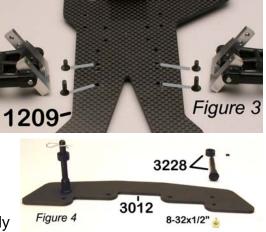
Step #4: Attach Suspension Mounts to the #1210 Enforcer GBX Chassis with (2) 3/8" FH Screws in the forward holes of the chassis and (2) 1/4" FH Screws in the rear holes of the mount. Refer to Figure #3 for visual.

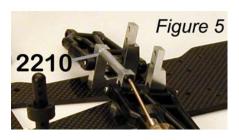
Step #5: Attach the #3012 Wide Front Bumper to the chassis as shown in Figure #4 with (2) 8-32 X 1/2" FH Screws and (2) #5206 8-32 Locknuts thru the forward most holes on the chassis. Attach the #3228 Long Body Mounts to the outer edges of the bumper with (2) 8-32 X 1/2" FH Screws. Thread the 4-40 X 3/16" SS into the Collar part of the way, slide the collar over the Body Mount and tighten the Set Screw. You will set the final height when you mount your body.

Step #6: Attach the #2210 Front Mount Brace with (2) 1/2" BH screws to the #2204 Suspension Mount as shown in Figure #5.

Step #7: Attach the #1237 Front Shock Tower to the Suspension Mount with (4) 1/4" BH Screws. Note countersunk holes on tower are to face to the front of the car as shown in Figure #6.











Bag B

Castor Blocks / Suspension Tie-Rods

For the next 7 steps you will be building Right and Left steering assemblies.

Step #1: Press the #7201 Front Axle into the #3202 Steering Block. Align holes in both parts as shown in **Figure #7** so that they will allow #7202 King Pin to slide thru in the next step.

Step #2: Place the Steering Block with Front Axle into #3203 Castor Block as shown in **Figure #8**. Slide the King Pin thru the #3203 Castor Block and Steering Block. Attach an e-clip to each end of the King Pin.

Step #3: Thread one 6/32 x 1/8" set screw into the back of the #7201 Front Axle as shown in **Figure #9**. You should now have a Right and Left Steering Assembly as shown in **Figure #10**.

Step #4: Press the Pivot Ball into the #5228 Ball End, then thread the Ball Ends onto each end of the #5221 Turnbuckle. When completed it should look like the Camber Links in **Figure #11**.

NOTE: The Turnbuckles have <u>normal</u> threads on one side of the turnbuckle, and <u>reverse</u> threads on the other. Mark the Ball End with the NORMAL threads so you remember which way to turn the Turnbuckle for adjusting the Camber Link with supplied tie-rod wrench.

Step #5: Attach the Camber Link by sliding a 1/2" BH Screw thru the Ball End, followed by (3) #5212 Washers, then screw into the top of the Castor Block as shown in **Figure #12**.

Step #6: Mount the steering assembly to the #3250 Suspension Arm by sliding #4237 Outer Suspension Pin thru the Suspension Arm and Castor Block. Add one eclip to each end of the pin as shown in **Figure #13**.



Step #7: Pass one 4-40 X 1/2" FH Screw thru the front of the Shock Tower in the upper camber link hole. On the backside of the Shock Tower, slide (1) #5212 Washer and then the Ball End from the Camber Link onto the 3/8" FH screw. Fasten to car by threading on (1) #5205 4-40 Locknut. The finished assembly should look like that in **Figure #14**. Repeat for other side of car.



Steering Assembly

<u>Step #1:</u> Press the Pivot Balls into the #5214 Ball End, then thread the Ball Ends onto each end of the #5221 Turnbuckles. When completed it should look like the Steering Links in **Figure #15**. Make 2 of these.

Step #2: Assemble the Steering Links on each end of the #3207 Steering Rack Slide using (1) 3/8" 2-56 SH Screw with (1) #2 Washer between the screw head and Ball End. Insert (1) 2-56 Locknut into the hexagon hole on the backside of the Steering Rack Slide and tighten the 3/8" 2-56 SH Screw to it. Refer to **Figure #15** for example.

Step #3: On the remaining turnbuckle thread one #5228 ball end and one #5229 ball end, these are the two shortest ends in the bag. Now install the Servo Linkage to the raised hole on the #3207 Steering Rack Slide using (1) 1/2" 2-56 SH Screw with (1) #2 Washer on each side of the Ball End. IInsert (1) 2-56 Locknut into the hexagon hole on the backside of the #3207 Steering Rack Slide and tighten the 1/2" 2-56 SH Screw to it. Refer to **Figure #15** for example.

Figure 16

Step #4: Install the Steering Rack Slide into the Steering Rack with the raised hole on the Steering Rack Slide to the LEFT. The Steering Rack Slide

should move FREELY in the Rack. If it does not, check for flashing on the Slide OR pry open the Rack with your fingers. You should now have

the Steering Assembly built as seen in Figure #16.

NOTE: You will need to adjust the length of all of these rods after the car is completely assembled and your radio is installed.

<u>Step #5:</u> Mount the now completed Steering Assembly to the chassis using (2) 3/8" FH Screws.

Step #6: Mount the Steering Links to each Steering Block using (1) 1/2" 2-56 SH Screw with (1) #2 Washer on <u>each side</u> of the Ball End. On the other side of the Steering Block Arm add (1) 2-56 Locknut. Your car should now look like the picture in **Figure #17**.







Bag D

Rear Bulkhead

Step #1: Attach the #2224 Top Plate Block to the #1241 Shock Tower using (2) 1/4" BH Screws as shown in **Figure #18**.

Step #2: Attach #2218 Camber Link Stand-Off to the same side of the #1240 Shock Tower as the #2224 Top Plate Block using (2) 3/8" BH Screws. Mount the Camber Link Stand-Offs in the upper most holes as shown in **Figure #19**.

Step #3: Slide (2) 1/2" BH Screws thru the bottom holes on the #1240 Shock Tower in the same direction as the screws from Steps #1 & #2 Slide the #1211 Graphite Shock Tower Spacer over

Steps #1 & #2. Slide the #1211 Graphite Shock Tower Spacer over the screws. Thread screws into the #2220 Transmission Spacer Mount as shown in **Figure #20**.



Rear Suspension Arms and Mounts

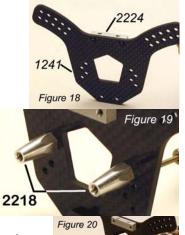
Step #1: Remove flashing and burrs from the #3250 Suspension Arms than attach to the #2222 Toe-Block with a #4234 1/8" X 7/8" Suspension Pin as shown in **Figure #21**. Add one #5230 1/8" E-Clip to each end of the Suspension Pin. This clip is slightly LARGER than the clips used so far in the kit.

Step #2: Mount the "Rear Bulkhead" from Bag "D" to the rear of the chassis using (6) 1/2" FH Screws passing thru the bottom of the chassis. The Rear Bulkhead should be mounted with the Shock Tower facing toward the FRONT of the car. The (2) rear screws passing thru the chassis, should pass thru the rear most holes on the #2220 Transmission Spacer Mount as shown in **Figure #22**. If all is done correctly, (2) holes from the Transmission Spacer will be visible in the REAR oval slot in the chassis as shown in **Figure #23**.

Step #3: Mount the #2222 Toe Blocks to the chassis by aligning the rear screw passing thru the chassis and #2220 Transmission Spacer Mount with the threaded hole closest to the (3) Dimples on the Toe Block. By mounting the screw in the hole with the (3) Dimples next to it, you are mounting the Toe Block on the car so that the rear wheel will have 3° of Toe-IN. If the screw were to thread into the hole with (1) Dimple

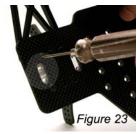
next to it, the rear wheel would have 1^o Toe-IN. Refer to **Figure #24** for example of mounting options. Continue to fasten the other screws.

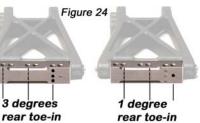
NOTE: More Toe-IN increases rear traction while hurting straight line speed. Less Toe-IN decreases rear traction while improving straight line speed.











Bearing Carriers/Camber Links/Drive Train

Step #1: Open the bag containing the #7210 CVD's and build them according to the instructions.

NOTE: Save the extra axle shims included in the bag, they will be used in Step #2

Step #2: Press (2) #1226 3/16"X 3/8" Unflanged Bearing into each side of the #3241 Bearing Carrier. Following the sequence of part in **Figure #25**, first slide (2) of the THIN axle shims that were packaged in the #7210 "CVD Bag". Now slide the CVD Axle thru the bearings in the carrier. Finish this step by sliding (1) THICK Shim and (1) THIN Shim from the "CVD Bag" onto the axle. Make (2) of these.

Step #3: To secure the axle, press the #7204 Roll Pin into the hole in the axle that is close to the outer bearing in the #3241 Bearing Carrier. Although it can be difficult at times, the best way we have found to do this is to get the Roll Pin into position directly over the hole by holding in the entire piece as shown in **Figure #26**. With the piece on its side and the roll pin in position, use the pliers to squeeze the Roll Pin into the axle. When complete, equal parts of the Roll Pin should be on both sides of the axle. Make (2) of these.

Step #4: Partially slide (1) #4235 Suspension Pin thru the remaining holes in the end of the Suspension Arm. Add (2) #4236 Rear Carrier Shims to the Suspension Pin then slide the Suspension Pin thru the BOTTOM holes on the Bearing Carrier. After the pin is thru the Bearing Carrier place (2) more Rear Carrier Shims between the Bearing Carrier and the Suspension Arm. To finish assembly add (1) #5230 E-Clip to each end of the Suspension Pin. There should now be 2 Shims on each side of the Bearing Carrier as shown in **Figure #27**. Do this step to both sides of the car.

NOTE: There are extra .010" thick Shims enclosed, these are to be used if the Rear Carrier Shim does not take out all of the play. You want the Bearing Carrier to be free as it pivots on the pin, but not slide forward/backward on it excessively. Also the Bearing Carriers can fit on either side of the car; this is no RIGHT or LEFT side to this part.

Step #5: Press the Pivot Ball into the Ball End, then thread the #5213 Ball Ends onto each end of the #5222 Turnbuckles. When completed it should look like the Camber Links in **Figure #28**. Make 2 of these.











Step #6: Attach one end of the Camber Link to the Aluminum Stand-Off already assembled on the Shock Tower with (1) 3/8" BH Screw. Attach the other end of the Camber Link with (1) 1/2" BH Screw to the FRONT of the Bearing Carrier and thru the OUTER-MOST hole. Tighten (1) 4-40 Locknut to the Screw on the back side of the Bearing Carrier as shown in **Figure #29**.

You have now completed building this kit thru Bag "F". The Rear of your car should look like the one shown in **Figure #30**. Take a break, have a Coke!



Differential Assembly

Step #1: Apply a generous amount of #4391 Diff Lube into the diff ball holes on the #4356 Diff Gear. With Diff Lube in holes, press the (12) #4357 Diff Balls into the holes on the Diff Gear. Be sure to spread out the grease that was pushed out when installing the Diff Balls. Finally press (1) #1229, 5/32" X 5/16" Bearing into the center of the Diff Gear as shown in **Figure #31**.

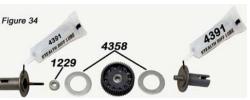
Step #2: Using the #4364 Left Diff Outdrive Hub, press the #4362 Diff Spring into the slotted end of the Diff Hub followed by the #4361 T-Nut as shown in **Figure #32**.

Step #3: Following along with **Figure #33**, slide (1) #4360 Diff Thrust Washer onto the #4361 2-56 Diff Bolt. Apply a good amount of #4388 Black Grease to the Thrust Washer on the side facing away from the bolt head. Now stick (6) #4359 Diff Thrust Balls into the Black Grease on the Thrust Washer. Slide the remaining Thrust Washer onto the Diff Bolt. There should be enough Black Grease to hold the Thrust Balls in place during assembly. Now carefully slide the entire Bolt into the outdrive

end of the #4365 Right Diff Outdrive Hub without losing any Thrust Balls. Finally insert the Bolt Cover.

Step #4: Insert (1) #1229, 5/32" X 5/16" Bearing into the Right Outdrive Hub. Apply a very thin coat of Diff Grease to the flat area on BOTH the Right AND Left Outdrive Hubs as shown in **Figure #34**. Now place (1) #4358 Diff Drive Ring on both areas with the thin coat of

Diff Lube. Slide the Diff Gear onto the Right Outdrive Hub. Finally slide Left Outdrive Hub over the Diff Bolt and onto the Diff Gear. Tighten the Diff Bolt to the T-Nut but not all the way. Check to make sure the Diff Plates are still in their seat on the Outdrive Hubs and rotate the Diff Hub several times as you tighten the bolt. Follow Step #5 for instruction on how to finish tightening the Diff Bolt.





4364

4362



Step #5: As shown in **Figure 34a**, place the 1/16" wrench used earlier throgh the slot in the opposite Diff Outdrive. As you tighten the Diff Bolt, you should notice the T-Nut stubs moving closer to the end of the Diff Hub slot. While the T-Nut is moving closer to the end of the slot, the spring behind the T-Nut is being compressed. When the T-Nut reaches the bottom of the slot, the spring should be fully compressed.

Figure 34a

Pay attention to feeling when the spring is fully compressed, you DO NOT WANT TO OVERTIGHTEN THE BOLT. When the spring is fully compressed, loosen the Diff Bolt 1/8 of a turn, No more or less. Your Diff should spin smoothly with the hubs turning in opposite directions.

NOTE: After running the car once or twice, check the adjustment of the Diff.

Bag H

Transmission Casing

Step #1: Separate the #4352 Transmission Halves

from the each other, and insert (1) #1226, 3/16" X 3/8" Bearing to the top of each case and (1) #1230, 3/8" X 5/8" Bearing to the bottom of each case as shown in **Figure #35**.

Step #2: Following **Figure #36**, place (1) THIN Washer over the long shaft on the #4368 Top Drive Shaft and slide it thru the TOP of the Right Side Transmission Half. Install the #4355 Idler Gear Shaft into the recessed hole between the two bearings on the Right Side Transmission

Half. Press (2) #1226, 3/16" X 3/8" Bearings into each side of the #4354 Idler Gear and slide that onto the Idler Gear Shaft. Now install the Right Side Diff Hub (Hub with Diff Bolt) into Right Transmission Half. Finally place (1) THICK and (1) THIN Washer on the short shaft on the Top Drive Shaft and align the entire Left Side Transmission Half over all 3 gears.

Step #3: Install (1) 3/8" FH Screw into the very bottom of the Left Side Transmission Half as shown in **Figure #37** and thread it in until it is tight. Press the #4369 Roll Pin into the hole in the Top Gear Shaft so that equal parts of the Roll Pin stick out of the axle, just as when installing the Roll Pins on the CVD axles.

Step #4: First slide (3) 1" SH Screws thru the Left Transmission Half, then on the Right Transmission Half, slide (3) #4352 Motor Plate Spacers on the screws sticking thru with "stepped-down" end toward the transmission as shown in **Figure #38**.









Step #5: As shown in **Figure #39**, position the #2225 Motor Plate on the Transmission and tighten to it with the (3) 1" SH Screws from Step #4. The Motor Plate Spacers will be BETWEEN the Transmission and Motor Plate





Slipper-Clutch Assembly

Follow the parts as they are laid out in sequence in **Figure #40** for Steps #1 thru #5.

<u>Step #1:</u> Slide the #4371 Inner Clutch Hub onto the Top Drive Shaft and align the slot over the Roll Pin.

Step #2: Place the #4373 Clutch Disc onto the Inner Clutch Hub with the #4372 Outer Clutch Hub on top.

<u>Step #3:</u> Install (1) #4376, 3/16" X 3/8" Bushing on the shaft followed by (1) Silver Washer, (1) Thick Gold Washer, and (1) Silver Washer (#4375).

Step #4: Slide on #4374 Torque Control Spring and secure all of the above with (1) #5245 5-40 Lock-nut until the top of the nut is flush with the end of the Top Drive Shaft.

<u>Step #5:</u> Attach the #4881 Spur Gear with (2) #5250 3/16" BH Screws.



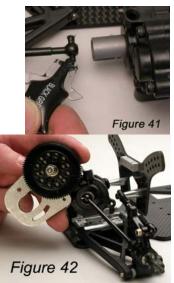
Mounting Transmission

Step #1: Using the Black Grease used to build the Diff, place a small amount on both Dog-Bone Pins as shown in **Figure #41**.

Step #2: Bringing the Transmission in from the BACK of the car, place each Dog-Bone into the Outdrive Hub and set the Transmission onto the Gearbox Spacer Plate as shown in **Figure #42** with the Motor Plate to the RIGHT side of the car.

<u>Step #3:</u> Fasten the Transmission to the car with (2) 1/2" SH Screws from underneath the Chassis and thru the Gearbox Spacer Plate as shown in **Figure #43**.







Step #4: Hold the part as shown in **Figure #44** and take note of the position of the entire part. Be sure to look at the "square" in the center of the piece and which side the countersunk holes are positioned. Mount the #1004 Rear Body Mount on the end of the Transmission Brace with (2) 3/8" BH Screws and (2) 4-40 Lock-nuts.

Step #5: Mount the (2) #3229 Rear Body Posts to the Rear Body Mount using the (2) 8-32 x 1/2" Flat Head Screws provided. As shown in Figure 44a be sure to mount the Body Post Collars to the post and secrure with one of the 4-40 set screws. Do not tighten as you will set the height of the Post Collar when mounting the body.

Step #6: Place (2) 3/8" FH Screws in the countersunk holes and thread them into the Top Plate Block mounted to the Shock Tower. Slide (2) 1" SH Screws through the holes directly behind the countersunk ones and through the #2227 Transmission Brace Spacer and into the Transmission Case. The brace should look as shown in **Figure #45**.



Mounting and Building Shocks

For the following 5 Steps, you will complete each Step (4) Times.

Step #1: Mount (1) #1403 Black O-ring into the groove on the #1402 Threaded Shock Collar as shown in **Figure #46**. Add a drop of Shock Oil to the O-ring and thread it onto the #1401 Threaded Shock Body with the "shoulder" facing down.

<u>Step #2:</u> Soak the #1411 VC Foam with the Shock Oil and install it onto the VC Bobbin as shown in **Figure #47**.

Step #3: Remove the #1405 Shock Pistons with the "2" on them from the parts tree as shown in **Figure #48**. Be SURE to REMOVE ANY BURRS on the Shock Piston, or your shock will NOT work correctly. Add a #5230 E-Clip to each side of the #2 Shock Piston on the #1413 Shock Shaft. Install (1) #1406 O-ring over the threads on the TOP of the Shock Body. Both of these are shown in **Figure #49**.

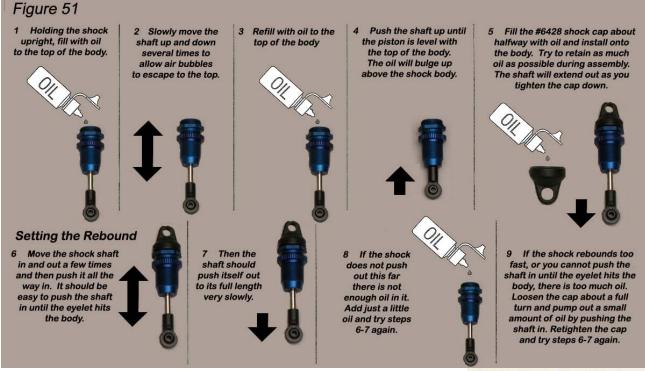


Step #4: Following the sequence of parts in **Figure #50**, slide the VC Bobbin from Step #2 on the Shock Shaft and then (2) #1250 O-Rings. Add a couple drops of oil to the O-Rings and insert the entire Shock Assembly into the Shock Body and FIRMLY pull the Shock Shaft through in order to "seat" the VC Bobbin. Finally press the #1409 Pivot Ball into



the Eyelet and thread it onto the Shock Shaft. Be sure when holding the Shock Shaft with pliers to use a rag to cover the shaft so the pliers don't scar it.

<u>Step #5:</u> To fill the Shocks with oil and complete their assembly follow the picures and text provided in **Figure 51**.



Step #6: Using Silver Springs on Rear and Gold Springs on Front, slide the spring over the shock shaft and on to the shock body. Compress the spring and than add the #1407 Spring cup by sliding it on the shaft through the notch in the spring cup. The cup should than slide down over the shock eyelet until it bottoms out. Release the spring and your shock should now look like the one at the top of **Figure 52**.

Step #7: On the Rear Shock Tower, Insert (1) 4-40x7/8" SH Screw thru the lower/middle hole on each side of the Shock Tower as shown in **Figure #53**. Thread on (1) #2214 Shock Stand-Off onto each screw with the shoulder on the spacer facing AWAY from the Shock Tower.





Step #8: On the Front Shock Tower, Insert (1) 4-40x7/8" SH Screw thru the upper hole on each side of the Shock Tower as shown in **Figure #54**. Thread on (1) #2214 Shock Stand-Off onto each screw with the shoulder on the spacer facing AWAY from the Shock Tower.

<u>Step #9:</u> Mount the Rear Shocks by placing the Shock Cap End of the shock onto the mount on the Shock

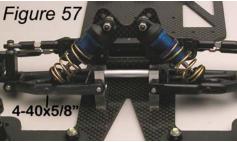
Figure 55

Tower. Insert (1) #1408 Shock Bushing on the mount and into the Shock Cap and fasten with (1) 4-40 Lock-nut as shown in **Figure #55**. Following **Figure #56** mount the Eyelet end of the Shock with (1)

1/2" SH Screw and (1) #5212 Washer to the INNER most hole on the Suspension Arm.

Step #10: Mount the Front Shocks by

placing the Shock Cap End of the shock onto the mount on the Shock Tower. Insert (1) #1408 Shock Bushing on the mount and into the Shock Cap and fasten with (1) 4-40 Lock-nut as shown in **Figure #57**. Mount the Eyelet end of the Shock in between the supports in the Suspension Arm with (1) 5/8" SH Screw.





Battery Cradle

Step #1: On the #3224 Battery Cradle trim the excess lexan off at the trim lines, leaving the sides even with the bottom of the battery cradles. Trim the ends along the top of the corner, leaving the flat base with the hole dimples for mounting. Drill an1/8" hole on all (4) dimple marks as shown in **Figure #58**.

Step #2: Insert (4) 3/8" FH Screws thru the bottom of the chassis. There are multiple locations to mount the Battery Cradle in the car, we want to mount the Cradle with it CENTERED in the chassis and all the way BACK as shown in **Figure #59**.

<u>Step #3:</u> Slide the #3009 Velcro Strap over the #2004 Battery Strap Mount and thread the (4) screws from Step#2 to the Strap Mount as shown in **Figure #60**.

<u>Note:</u> If you allready have your radio and electronic equipment you may proceed to the next page. If you wish to install it at a later point than proceed to page XX. In our experience, radio installation is much easier without the cage and body attached.







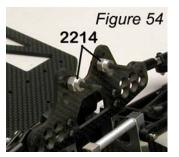


Figure 56



Bag M

Radio and Motor Installation

The following steps will guide you through the process of installing your radio equipment. While the installation we show will provide the most versatile use of your new GBX ENFORCER it is important to understand that radio equipment comes in a variety of shapes and sizes. Always follow the recomendations of your radio or electronic equipments manufacturer regarding their use and operation. For alternate installations consult your hobby dealer or you can find more information on our website.

STEP #1: Remove the Servo Saver Spline adapters from Bag M along with the #5242 Servo Saver. Determine which of the 3 Spline Adapters fits your particular brand of servo by sliding it over the spline on top of the servo.

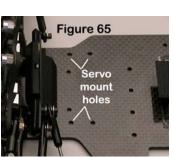
STEP #2: Slide the #5212 Washer over one of the 4-40 X 3/8" Button Head screws and insert the screw down through the top of the servo saver using the middle and innermost hole. Now attach the #2218 Stand-off to the servo saver being sure to align one of the flat spots of the hex up against the body of the servo saver as shown in Figure 61.

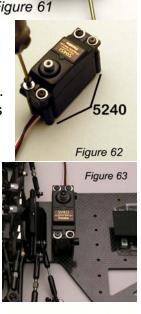
STEP #3: Using the 4-40 X 3/8" screws and 4 washers, mount the servo to the #5240 Servo Mounts as shown in Figure 62 being sure to place the open slots of the mounts toward the bottom of the servo. Now set the servo on the chassis in the approximate position shown in Figure 63.

STEP #4: Now attach the Steering linkage from the steering rack to the Stand-off using a 3/8" button head screw as shown in Figure 64. Now you will place the servo

saver over the servo spline and position the servo based on the following considerations. mount the servo as close to the Steering Rack as possible so that the servo linkage is as parrallel as possible to the steering slider when looking down from top. The servo must be as far right as possible in the car but not so far that it will intrude with the mounting of the cage and body in the upcoming steps. Refer to Figure 63 for approximate position.

STEP #5: You will now need to measure the hole spacing on the bottom of the servo mounts so that you can mark their positions on the graphite chassis. Once you have marked those positions drill 4 holes with a .110" drill bit through the chassis as shown in **Figure 65.** If you have a countersink bit it is recomended to countersink the holes from the bottom of the chassis. You can now mount the servo using either the 3/8" Flat head screws provided or if you did not countersink the holes you can use the 4 3/8" Button head screws instead.





2218





Figure 61

STEP #6: Now you can attach the servo saver to the servo using the screw that came with the servo to hold the saver on. Your steering servo and linkage should now look like that shown in **Figure 66.**

STEP #7: Attach a piece of your favorite brand of servo tape to the back of your Electronic Speed Control and mount it to the front of the top plate as shown in **FIGURE 67.**

STEP #8: Now thread your antenna wire through the base of the antenna mount and than through the antennae tube as shown in **Figure 68.** Secure the antennae mount to the chassis with a 4-40 X 1/4" Flat head screw through the hole at the right rear side of the battery cradle.

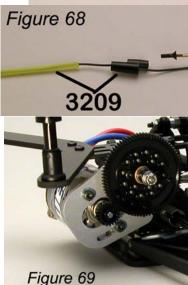
NOTE: Your choice of motor and the size of track you are racing on will determine the size of the pinion gear you will require for this car. Consult your favorite hobby dealer or another racer for the best pinion and motor combination for your track and application or you can find additional information on our website at www.CustomWorksRC.com.

STEP #9: Mount your motor to the motor plate using the provided #5208 3MM Screws and 2.5MM Hex Wrench. Now install your pinion gear so that the teeth line up evenly with the spur gear. As shown in **Figure 69** move the motor forward sliding the pinion into the spur gear and secure the screws being sure to leave just enough play in the gears to allow them to rock slightly.

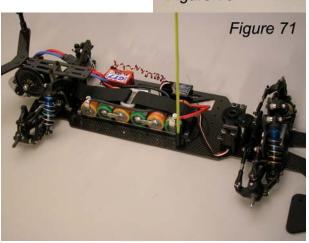
STEP #10: Assemble your battery pack as per the manufacturers instructions, place it in the battery cradle and secure it with the strap as shown in **Figure 70**.

NOTE: You will need to follow the manufacturers instructions regarding hooking up your receiver and electronic speed control connetions. After soldering your motor and battery pack in the car it should look like **Figure 71.**









Bag N

Tire and Wheel Installation

<u>NOTE:</u> In this step you will be using a fast drying super glue type adhesive to secure the tires and wheels to each other. Be very careful with this process as the glue can tend to run very easilly through the tire and may glue your finger to the tire or wheel before you know it. You must follow the directions and precautions provided by the glue manufacturer to insure a secure bond.

STEP #1: Using a reamer or the previously used .110" drill bit. Drill a hole in the center of each of the 4 wheels as shown in **Figure 72.**

STEP #2: If using foam inserts place them inside the tire before mounting on wheels. Now place the wheels inside each of the tires and work both beads of the tire into the channels on the outside edge of the rim. After all 4 tires are completed peel back a portion of the tire from the wheel and apply an even bead of tire glue between the wheel and the tire as shown in **Figure 73.** Repeat this step several times working your way around the tire until it is secure. Now set the wheel and tire down **BUT be sure to PLACE THE FRESHLY GLUED SIDE UP** until it has

dried completely. You may repeat this process now for the remaining 3 tires. Once dry it is a good idea to go back and re-seal the edges by applying another small bead of glue and letting it run around the edge of the tire at the gap between tire and wheel.

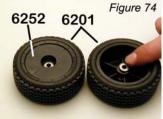
<u>STEP #4:</u> Once the tires have completely dried you may now mount them to the car. Place one #1226 Bearing into each side of the front wheels as shown in **Figure 74.**

STEP #5: Refer to **Figure 75** and place one 3/16" shim over the front axle followed by the front wheel and than another 3/16" shim. Now secure with one 8-32 Locknut, be very careful to not overtighten the nut. you want to tighten it just enough to eliminate any slop from side to side but no more. Repeat for other side of car.

STEP #6: Now slide one of the rear wheels onto the rear axle as shown in

Figure 76. Be sure to index the roll pin in the axle so that it slides into the drive slot molded in the back of the wheel. Now secure with a #5207 locknut. Be sure not to over tighten as you can bend the roll pin.









Congratulations!!

You have now completed the assembly process of your new Custom Works Intimidator GBX kit. In the next section of this manual you will find instructions for converting this car to a Mid-Motor Configuration as well as some basic setup hints and advice. It is important to remember that all tracks and racing surfaces are different. Therefore the suggestions we give you are general



in nature and should by no means be treated as the only options.

Rear Motor TO Mid-Motor Conversion

<u>Step #1</u>: Remove the (2) 1/4" FH Screws and (2) 1" SH Screw from the top of the Transmission Mount Brace. From underneath the chassis, remove the (2) 1/2" SH Screws from the Transmission Spacer Plate that are threaded into the Transmission.

Step #2: Disassemble the Slipper Clutch, remove the (3) 1" SH Screws and (1) 3/8" FH Screw that hold the Transmission Halves together. Flip the Top Drive Shaft so the shaft sticks out of the LEFT transmission half. Remember to leave the shims on the Top Drive Shaft, NOT in the Transmission Halves so that you maintain the same spacing. Finally flip around the Diff Gear assembly so that

the Diff Bolt end also sticks out the LEFT transmission half. Now thread the (1) 3/8" FH Screw back into the transmission and slide the (3) 1" SH Screws in from the RIGHT side so that the Motor Plate mounts on the LEFT side. Remount the Motor

Plate with spacers and Re-assemble the Slipper Clutch. In **Figure #90** you will see complete versions of the transmission set up for Rear or Mid-Motor.

Step #3: Remove the (6) 1/2" FH Screws that are holding on the Transmission Spacer Plate and Rear Toe Blocks. Turn around the Rear Bulkhead assembly so that the Shock Tower is facing toward the REAR of the car. Flip the Rear Toe Blocks so that the dimples on the Rear Toe Blocks once again are toward the REAR of the car. The (2) rear screws passing thru the chassis, should pass thru the rear most holes on the Transmission Spacer Mount as shown in **Figure #91**.

Step #4: If all is done correctly, (2) holes from the Transmission Spacer will be visible in the FRONT oval slot in the chassis as shown in **Figure #92**. Re-attach the Rear Toe Blocks with the (6) 1/2" FH Screws.

Figure 90

Rear Motor Configuration

Front Motor Configuration



Step #5: Bringing the Transmission in from the FRONT of the car, place each Dog-Bone into the Outdrive Hub and set the Transmission onto the Gearbox Spacer Plate as shown in **Figure #93** with the Motor Plate to the RIGHT side of the car.

Step #6: Fasten the Transmission back to the car with the 2 4-40X1/2" SH Screws from underneath the Chassis and thru the Gearbox Spacer Plate as you did in Step #2. Re-attach the Transmission Brace with the "square" facing toward the back. The lexan Tail Tank Mount will now be attached where the holes line up over the Top Plate Block on the Shock Tower. Use (2) 3/8" BH Screws with Washers to tighten the Tail Tank Mount to the Top Plate Block. Your car should now look like the car shown in **Figure 94**.



TUNING TIPS: These are some general guidelines for optimizing handling performance. None of these "tips" are EVER set in stone. On any given day this manual or any chassis engineering book or guru can be proved wrong by the almighty stop watch. A good way to approach chassis set-up is to try one change, practice it, think how the car felt different from before, and compare lap times from the stop watch....this will never fail.

Car Is Loose (oversteers):

Increase Wing Angle Add Spoiler to Wing Softer Rear Spring Heavier Front Spring Use Front Sway Bar Try Harder Front Compound Tire Try Softer Rear Compound Tire Move Battery to Center of Car Raise Front Ride Height Lower Rear Ride Height Thread Shock Collar DOWN on Right Front Thread Shock Collar UP on Right Rear Increase Rear Toe Increase Castor

Car Pushes (understeers):

Decrease Wing Angle Decrease Spoiler on Wing Heavier Rear Spring Softer Front Spring Use Rear Sway Bar Try Softer Front Compound Tire Try Harder Rear CompoundTire Move Battery to Left of Center Lower Front Ride Height Raise Rear Ride Height Thread Shock Collar UP on Right Front Thread Shock Collar DOWN on Right Rear Decrease Rear Toe Decrease Castor

Car Is Erratic:

Bent Suspension Pins: Remove shocks to check free movement Bound Ball Joint: Should spin free on balls while mounted to the car. Bent or Loose Camber Links Wore out Bearings or Completely Seized Bearings Chunked Tire: Check to see if Foam or Rubber Tire is still glued to wheel. Loose Screws: Especially Chassis Screws, add Blue Loctite to prevent. Shocks: Either Bound-up or Out of Oil. Must swivel freely on mounts. Foreign Objects: Unlucky Dirt/Stones preventing Suspension or Steering Movement. Blown Differential Radio Problem: Bad Servo, Weak Servo Saver Spring, Transmitter Pot blown. **<u>Caster</u>**: Angle of the kingpin in relation to a vertical plane as viewed from the side of the car. Increasing the angle will make the car more stable out of the turn and down the straights and increase steering entering a turn. Decreasing the angle will make the car feel more "touchy" at high speeds and help steering while exiting the turn.

Front Toe IN: Front edge of car tires point *toward* the chassis as viewed from above the car. Settles and makes steering reaction less aggressive especially on acceleration. Easier set-up to drive and works well for bumpy tracks. **Front Toe OUT:** Front edge of car tires point *away* from the chassis as viewed from above the car. Increases aggressiveness of car especially on entry to the turn. Works well on smooth, high bite tracks where rear traction is not a problem.

Camber (Front or Rear): Angle by which the tire and wheel contacts the racing surface when viewed from the Front or Rear of the car. Oval cars generally always have the Right Side tires leaning TOWARD the chassis and the Left Side tires leaning AWAY from the chassis. In oval racing jargon, more camber means more angle TOWARD the chassis on the Right Side and more angle AWAY from the chassis on the Left Side. Starting from 0 Degrees (tire standing straight up) ADDING camber in the oval fashion will increase traction when cornering however remember too much of anything is generally a bad thing. Camber is usually adjusted (especially Foam tires) when one edge of the tire is wearing more than the other.

Camber Gain: Angle of the Camber Link relative to the Suspension Arm. Lowering the camber link on the shock tower OR raising the camber link on the castor block will INCREASE the camber angle of the tire when the suspension is compressed. Raising the camber link on the shock tower OR lowering the camber link on the castor block will DECREASE the camber angle of the tire when the suspension is compressed. There is not a "correct" set-up and once again too much of anything is generally bad. This will help change the "feel" of the car thru the turns.

Camber Link Length: Comparing this to the length of the Suspension Arm from each pivot point and keeping the Camber the same, making the link *shorter* will decrease traction for that corner of the car while making it *longer* will increase traction for that corner of the camber link is equal to or greater than the Suspension Arm pivots, the gain of traction ends. Also a shorter camber link will increase camber gain and a longer decrease camber gain.

Shock Angle: Leaning the shock toward the car is effectively like changing to a *softer* spring. Standing the shock closer to vertical is effectively like changing to a *stiffer* spring. Try when the car is working well and when one spring change is TOO much for your set-up.

<u>Ride Height:</u> Check by pushing the chassis down once or twice to simulate bumps on the track. Having the front end *higher* than the rear will make the car increase rear traction especially out of the turn. Having the front end *lower* than the front will make the car increase front traction especially entering the turn. Generally its safe to start the car with the ride heights even.

<u>Rear Toe-In:</u> Front edge of car tires point *toward* the chassis as viewed from above the car. Increasing the angle toward the car will increase rear traction while decreasing front traction. Decreasing the angle will do the opposite.

Wheelbase (Front End): Wheelbase is the distance between the front and rear axles. Running the entire front end assembly in the forward position makes the wheelbase longer and therefore more stable on long/fast tracks with flowing turns. Running the entire front end assembly in the rear position make the wheelbase shorter and therefore more suitable for short-tracks where you are constantly turning.

Wheelbase (Rear End): This adjustment uses the plastic spacers on the kingpin the rear bearing carrier rides on. With the spacers in front of the carrier it will lengthen the wheelbase but will increase steering. If the spacers are behind the carrier it will shorten the wheelbase but increase rear traction. This is completely backwards from how it works for the Front End only because in the rear of the car you have the weight of the motor and the torque it creates. Shortening the wheelbase here makes more of the car hang over the rear tires and promotes more weight transfer.

48 Pitch				Spur Gear				
Pinion	66	68	70	72	75	78	81	84
12	13.20	13.60	14.00	14.40	15.00	15.60	16.20	16.80
13	12.18	12.55	12.92	13.29	13.85	14.40	14.95	15.5
14	11.31	11.66	12.00	12.34	12.86	13.37	13.89	14.40
15	10.56	10.88	11.20	11.52	12.00	12.48	12.96	13.4
16	9.90	10.20	10.50	10.80	11.25	11.70	12.15	12.6
17	9.32	9.60	9.88	10.16	10.59	11.01	11.44	11.8
18	8.80	9.07	9.33	9.60	10.00	10.40	10.80	11.2
19	8.34	8.59	8.84	9.09	9.47	9.85	10.23	10.6
20	7.92	8.16	8.40	8.64	9.00	9.36	9.72	10.0
21	7.54	7.77	8.00	8.23	8.57	8.91	9.26	9.60
22	7.20	7.42	7.64	7.85	8.18	8.51	8.84	9.16
23	6.89	7.10	7.30	7.51	7.83	8.14	8.45	8.77
24	6.60	6.80	7.00	7.20	7.50	7.80	8.10	8.40
25	6.34	6.53	6.72	6.91	7.20	7.49	7.78	8.06
26	6.09	6.28	6.46	6.65	6.92	7.20	7.48	7.75
27	5.87	6.04	6.22	6.40	6.67	6.93	7.20	7.47
28	5.66	5.83	6.00	6.17	6.43	6.69	6.94	7.20
29	5.46	5.63	5.79	5.96	6.21	6.46	6.70	6.95
30	5.28	5.44	5.60	5.76	6.00	6.24	6.48	6.72
31	5.11	5.26	5.42	5.57	5.81	6.04	6.27	6.50
32	4.95	5.10	5.25	5.40	5.63	5.85	6.08	6.30
33	4.80	4.95	5.09	5.24	5.45	5.67	5.89	6.11
34	4.66	4.80	4.94	5.08	5.29	5.51	5.72	5.93
35	4.53	4.66	4.80	4.94	5.14	5.35	5.55	5.76

64 Pitch				Spur Gear		1. Contraction 1. Con		
Pinion	78	81	85	88	93	96	100	104
16	11.70	12.15	12.75	13.20	13.95	14.40	15.00	15.60
17	11.01	11.44	12.00	12.42	13.13	13.55	14.12	14.68
18	10.40	10.80	11.33	11.73	12.40	12.80	13.33	13.87
19	9.85	10.23	10.74	11.12	11.75	12.13	12.63	13.14
20	9.36	9.72	10.20	10.56	11.16	11.52	12.00	12.48
21	8.91	9.26	9.71	10.06	10.63	10.97	11.43	11.89
22	8.51	8.84	9.27	9.60	10.15	10.47	10.91	11.35
23	8.14	8.45	8.87	9.18	9.70	10.02	10.43	10.85
24	7.80	8.10	8.50	8.80	9.30	9.60	10.00	10.40
25	7.49	7.78	8.16	8.45	8.93	9.22	9.60	9.98
26	7.20	7.48	7.85	8.12	8.58	8.86	9.23	9.60
27	6.93	7.20	7.56	7.82	8.27	8.53	8.89	9.24
28	6.69	6.94	7.29	7.54	7.97	8.23	8.57	8.91
29	6.46	6.70	7.03	7.28	7.70	7.94	8.28	8.61
30	6.24	6.48	6.80	7.04	7.44	7.68	8.00	8.32
31	6.04	6.27	6.58	6.81	7.20	7.43	7.74	8.05
32	5.85	6.08	6.38	6.60	6.98	7.20	7.50	7.80
33	5.67	5.89	6.18	6.40	6.76	6.98	7.27	7.56
34	5.51	5.72	6.00	6.21	6.56	6.78	7.06	7.34
35	5.35	5.55	5.83	6.03	6.38	6.58	6.86	7.13
36	5.20	5.40	5.67	5.87	6.20	6.40	6.67	6.93
37	5.06	5.25	5.51	5.71	6.03	6.23	6.49	6.75
38	4.93	5.12	5.37	5.56	5.87	6.06	6.32	6.57
39	4.80	4.98	5.23	5.42	5.72	5.91	6.15	6.40
40	4.68	4.86	5.10	5.28	5.58	5.76	6.00	6.24
41	4.57	4.74	4.98	5.15	5.44	5.62	5.85	6.09
42	4.46	4.63	4.86	5.03	5.31	5.49	5.71	5.94
43	4.35	4.52	4.74	4.91	5.19	5.36	5.58	5.80
44	4.25	4.42	4.64	4.80	5.07	5.24	5.45	5.67
45	4.16	4.32	4.53	4.69	4.96	5.12	5.33	5.55
46	4.07	4.23	4.43	4.59	4.85	5.01	5.22	5.43
47	3.98	4.14	4.34	4.49	4.75	4.90	5.11	5.31

GEAR RATIO CHARTS:

The Charts to the right give you final drive gear ratios for your car. The Transmission gear reduction is 2.40 to 1 with this car. To calculate the Drive Ratio you divide your spur gear by your pinion gear and than multiply by 2.40.

Your ideal gear ratio will vary greatly depending on the track size, surface type, amount of traction available, and your choice of motor. For best results consult your local hobby dealer or a fellow racer at your local track for the ideal choice of gear ratio for your application.

Good Luck!



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Sept. 2004 PRICE LIST

Part#	Description	Price	Part#	Description	1	Price
0916	Intimidator GBX Kit	\$ 495.00	4356	Diff Gear	\$	2.50
1004	Rear Body Mount	\$ 12.00	4357	Carbide Diff Balls (12)	\$	12.00
1209	Intimidator GBX Chassis	\$ 100.00	4358	Diff Rings for GBX	\$	2.00
1211	Shock Tower Spacer	\$ 4.00	4359	Diff Thrust Balls 5/64" (6)	\$	2.00
1226	Bearings 3/16" X 3/8" (2)	\$ 12.00	4360	Diff Thrust Washers (2)	\$	3.00
1229	5/32x5/16 bearings (2)	\$ 13.00	4361	Diff Thrust Bolt, Cover and T-nut	\$	2.00
1230	3/8x5/8 bearings (2)	\$ 7.00	4362	Diff Spring	\$	2.00
1237	Intimidator Front Shock Tower	\$ 18.00	4364	Left Diff Outdrive Hub	\$	7.50
1238	GBX Transmission Brace	\$ 16.00	4365	Right Diff Outdrive Hub	\$	7.50
1241	Intimidator GBX Rear Shock Tower	\$ 20.00	4368	Top Drive Shaft	\$	9.00
1250	Silicone O-Rings (8)	\$ 2.50	4369	Top Shaft Roll Pin (6)	\$	2.00
1400	GX Threaded Shock Set (pr)	\$ 30.00	4370	Top Shaft Shim Set (6)	\$	2.00
1401	Threaded Shock Body (pr)	\$ 14.00	4371	Inner Torque Clutch Hub	\$	7.50
1402	Threaded Shock Collar	\$ 4.00	4372	Outer Torque Cluch Hub	\$	7.50
1403	Threaded Collar O-ring (4)	\$ 4.00	4373	Clutch Disc	\$	3.00
1404	Plastic Shock Cap	\$ 2.50	4374	Torque Control Spring & Nut	\$	2.00
1405	Shock Piston Set	\$ 3.00	4375	Thrust Bearing (3)	\$	2.00
1406	Shock Cap O-ring	\$ 2.00	4376	3/16x3/8 Bushing (2)	\$	2.00
1407	Shock Spring Cups (4)	\$ 5.00	4388	Black Grease	\$	2.50
1408	Shock Bushings (4)	\$ 1.00	4391	Diff Lube	\$	2.50
1409	Shock Eyelet and Pivot Ball (2)	\$ 3.00	4881	48 pitch 81 Tooth Spur Gear	\$	4.00
1411	GX Shock Rebuild Kit (4)	\$ 4.00	5004	Set Screw 6-32 (10)	\$	2.00
1413	Shock Shaft .35	\$ 3.00	5201	Screw Pack 2-56 Assorted	\$	3.50
1442	GX Silver Spring 14.5 lb. (pair)	\$ 3.00	5202	Screw Pack 4-40 Assorted	\$	5.50
1444	GX Gold Spring 19.5 lb. (pair)	\$ 3.00	5203	Small E-Clip front	\$	4.00
2004	Battery Strap Mounts (pair)	\$ 12.00	5204	Aluminum Locknut 2-56 (10)	\$	5.00
2204	Front Suspension Mount	\$ 19.00	5205	Aluminum Locknut 4-40 (10)	\$	5.00
2210	Suspension Mount Brace	\$ 5.00	5207	Steel Locknut 8-32	\$	2.00
2214	Shock Standoff (2)	\$ 4.00	5208	Motor Screw 3x6mm	\$	3.00
2218	Camber Link Standoff (2)	\$ 11.00	5210	#2 Flat Washer (20)	\$	2.00
2220	Transmission Spacer Mount	\$ 20.00	5212	#4 Flat Washer (20)	\$	2.00
2222	Rear Toe-Block 1-3 degree (2)	\$ 29.00	5213	Camber Link Ball End long (4)	\$	5.50
2224	GBX Top Plate Block	\$ 9.00	5214	Ball End for Tie Rod	\$	3.50
2225	GBX Motor Mount Plate	\$ 19.00	5221	Titanium Turnbuckle .900" (2)	\$	10.00
2227	GBX Transmission Brace Spacer	\$ 13.00	5222	Titanium Turnbuckle 1.500" (2)	\$	10.00
3009	Battery Strap Long	\$ 6.00	5228	Camber Link Ball End short (4)	\$	5.50
3012	Universal Bumper	\$ 8.00	5229	Short Ball End 2-56 ball (4)	\$	3.50
3202	Front Steering Block (pair)	\$ 4.00	5230	1/8" E-Clip	\$	2.00
3203	25 Degree Caster Block (pair)	\$ 5.00	5240	Servo Mounts	\$	2.50
3207	Steering Rack Assembly	\$ 9.00	5245	5-40 Locknut for Slipper	\$	2.00
3224	Battery Cradle 6-cell	\$ 4.00	5250	4-40x3/16" Button Head (6)	\$	2.00
3228	Long Body Mounts	\$ 3.00	6201	Sticker Tire front (2)	\$	12.00
3229	Short Body Mounts	\$ 3.00	6211	Sticker Tire rear (2)	\$	13.00
3240	Rear A-Arms GX Series (pair)	\$ 7.00	6252	Front Wheel for rubber tire	\$	8.50
3241	Rear Axle Carrier GX Series (pair)	\$ 7.00	6253	Rear Wheel for rubber tire	\$	8.50
3252	Front Suspension Arm (pair)	\$ 10.00	7047	Shims Assorted	\$	5.00
4233	Inner Front Suspension Pin (4)	\$ 7.00	7201	Front Axle	\$	7.50
4234	GBX Inner Rear Suspension Pin (2)	\$ 4.00	7201	Front King Pin (2)	\$	3.00
4235	GBX Outer Rear Suspension Pin	\$ 4.00	7202	Drive Pin for Rear Axle (10)	φ \$	2.00
4236	Rear Carrier Shims	\$ 4.00 \$ 3.00	7204	MIP CVD Drive System (pair)	\$	30.00

Sept. 2004 PRICE LIST

Sept. 2004	PRICE LIST	Co	ntinued
Part#	Part# Optional Shock Springs		Price
1440	GX Spring Assortment (9 pair)	\$	34.00
1441	GX Green Spring 12.0 lb. (pair)	\$	5.00
1443	GX Blue Spring 17.0 lb. (pair)	\$	5.00
1445	GX Red Spring 22.0 lb. (pair)	\$	5.00
1446	GX Copper Spring 25.0 lb. (pair)	\$	5.00
1452	GX Purple Spring 30.0 lb. (pair)	\$	5.00
1453	GX Yellow Spirng 35.0 lb. (pair)	\$	5.00
1454	GX White Spring 40.0 lb. (pair)	\$	5.00

Part#	Optional Parts & Miscellaneous	Price		
2221	Rear Toe-Block 0-2 degree (2)	\$	29.00	
2226	Slipper Eliminator	\$	16.00	
3204	Front Caster Blocks 20 degree (pr)	\$	5.00	
3205	Front Caster Blocks 15 degree (pr)	\$	5.00	
4226	GBX Intimidator Front Sway Bar Kit	\$	TBD	
4227	GBX Intimidator Rear Sway Bar Kit	\$	TBD	
7208	Rear Wheel Spacers .125" (2)	\$	14.00	
7209	On-Center King Pin Kit	\$	7.00	

Part#	Body Accessories	Price		
9001	Open Comp Camaro Body	\$	21.00	
9002	ASA/IROC Camaro Body	\$	21.00	
9003	Rocket Wedge	\$	21.00	
9004	Asphalt Modified Body	\$	32.00	
9005	Pro-Mod Lumina Body	\$	21.00	
9006	Pro-Mod Thunderbird Body	\$	21.00	
9007	Phantom Wedge Body	\$	21.00	
9008	Bloomquist Wedge Body	\$	32.00	
9009	Wedge Body Rear Spoiler	\$	7.00	
9010	Probe Modified Body	\$	32.00	
9011	Bullet Wedge	\$	21.00	
9017	Narrow Probe Modified Body	\$	32.00	
9032	Wing and Side Panel Brace	\$	3.00	
9901	Side Dam and Wing Mount Kit	\$	4.00	
9902	Lexan Wing Sheet	\$	4.00	

Part#	Hardware	P	rice
5250	4-40x3/16" Button Head Screw (4)	\$	2.00
5252	4-40x1/4" Button Head Screw (8)	\$	2.00
5253	4-40x3/8" Button Head Screw (8)	\$	2.00
5254	4-40x1/2" Button Head Screw (8)	\$	2.00
5255	4-40x5/8" Button Head Screw (8)	\$	2.00
5262	4-40x1/4" Flat Head Screw (8)	\$	2.00
5263	4-40x3/8" Flat Head Screw (8)	\$	2.00
5264	4-40x1/2" Flat Head Screw (8)	\$	2.00
5265	4-40x5/8" Flat Head Screw (8)	\$	2.00
5274	4-40x1/2" Socket Head Screw (4)	\$	2.00
5275	4-40x5/8" Socket Head Screw (4)	\$	2.00
5277	4-40x7/8" Socket Head Screw (4)	\$	2.00
5278	4-40x1" Socket Head Screw (4)	\$	2.00
5279	4-40x3/4 Socket w/hole (wing)	\$	7.00

Part#	T-Shirts and Sweatshirts		Price
1500M	Custom Works T-Shirt (M)	\$	18.00
1500L	Custom Works T-Shirt (L)	\$	18.00
1500XL	Custom Works T-Shirt (XL)	\$	18.00
1500XXL	Custom Works T-Shirt (XXL)	\$	20.00
1500XXXL	Custom Works T-Shirt (XXXL)	\$	20.00
1600M	Custom Works Sweat Shirt (M)	\$	25.00
1600L	Custom Works Sweat Shirt (L)	\$	25.00
1600XL	Custom Works Sweat Shirt (XL)	\$	25.00
1600XXL	Custom Works Sweat Shirt (XXL)	\$	28.00
1600XXXL	Custom Works Sweat Shirt (XXXL)	\$	28.00

Part#	Tires and Wheels	Price
6204	Street Trac Tire front (2)	\$ 12.00
6213	Qualifier Tire rear (2)	\$ 13.00
6214	Street Trac Tire rear (2)	\$ 13.00
6250	Front Wheels for Foam Tires (2)	\$ 7.00
6251	Rear Wheels for Foam Tires (2)	\$ 7.00
6270	Silver Foam front (2)	\$ 23.50
6271	Pink Foam front (2)	\$ 27.50
6272	Purple Foam front (2)	\$ 27.50
6280	Silver Foam rear (2)	\$ 26.50
6281	Pink Foam rear (2)	\$ 34.50
6282	Purple Foam rear (2)	\$ 34.50

