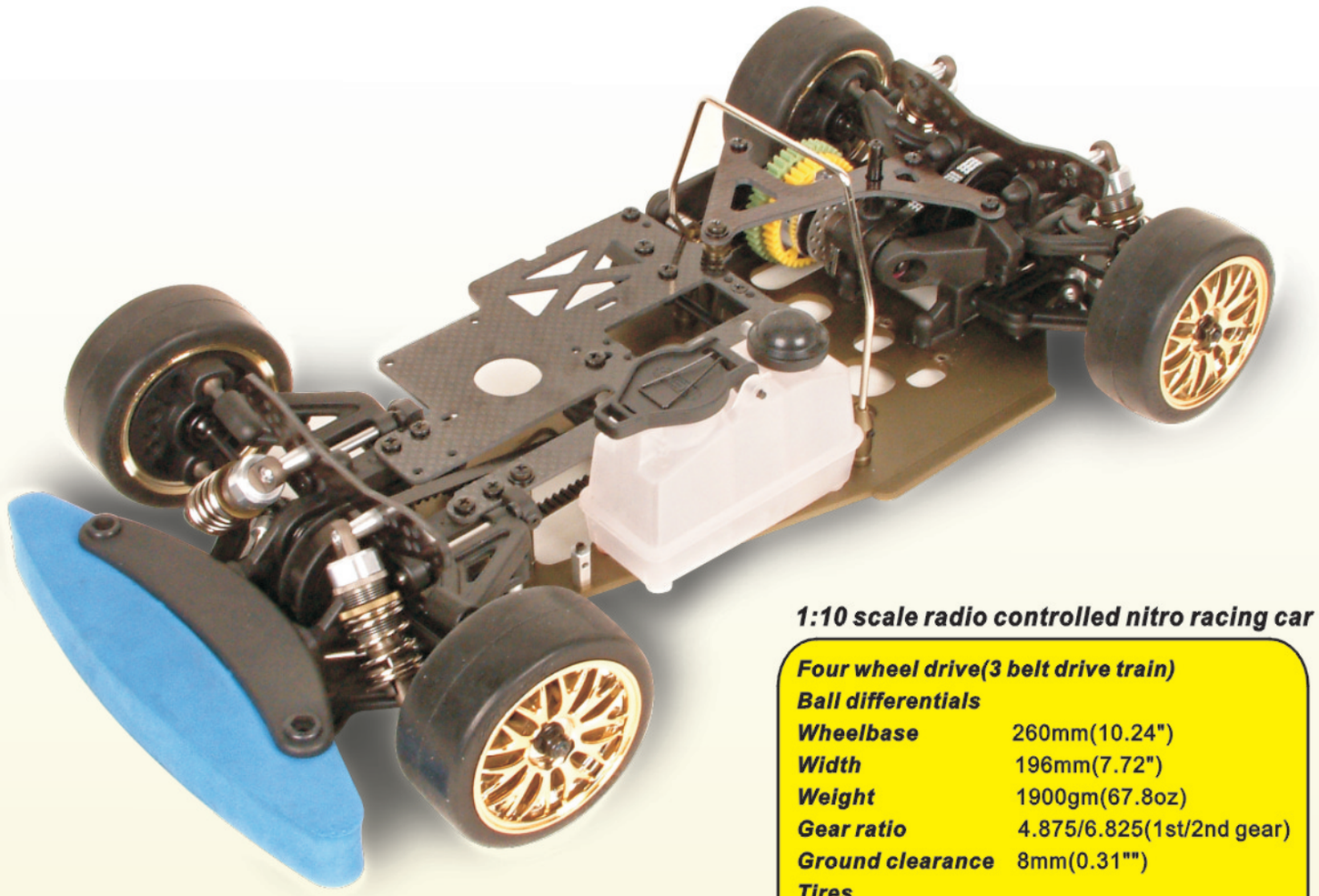
CT-4 R

CEN®
THE SMART SOLUTION



1:10 scale radio controlled nitro racing car

Four wheel drive(3 belt drive train)	
Ball differentials	
Wheelbase	260mm(10.24")
Width	196mm(7.72")
Weight	1900gm(67.8oz)
Gear ratio	4.875/6.825(1st/2nd gear)
Ground clearance	8mm(0.31"")
Tires	
26mm(1.02")width x 65mm(2.56")diameter	

CEN Racing has changed the Nitro Sedan racing world. CEN introduces the all newly designed CT4. This State-of-the-art racing sedan incorporates months of extensive testing from all parts of the world to bring you the fastest, most reliable car on the market. This high-performance racing kit comes standard with all the upgrades and hop-up parts that racers demand. The CT4's on-track performance surpasses all other models in its class. Many tuning options have been built into the chassis design to allow the driver to adjust to any track conditions.

Please take your time when building this kit. There are many steps that require close attention to small details to ensure correct assembly. Please build the car as instructed first. Then make changes to the set-up as the track conditions or driving styles require. There are addition options available to further tune the car available separately from CEN Racing. All these items are available through your local CEN Dealer.

For information on new products and upgrade parts, please check out our website at www.cenracing.com. If you have any questions during assembly please feel free to call CEN Racing to answer any questions you may have.

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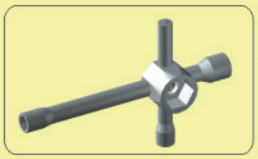
Printed In Taiwan

G00104003
20031101

TOOLS

The following tools are necessary to make assembly & maintenance of your new R/C car. both easier & more enjoyable. For your safty, exercise care when using any hand tools, sharp instruments, or power tools during construction. Always use safty glasses. If you have any questions, please consult your local hobby shop or experienced friend.

Hexagon wrench (kit tools supplied)
1.5mm, 2mm, 2.5mm,4mm.



Cross wrench (hexagon socket tools)
5.5mm, 7mm, 8mm, 10mm, 12mm, 17mm.

Hobby scissors
For cutting and trimming the car's body, decals.

Grease
Lubrication of gears; reduces friction.

Glue
Use to glue tires onto the wheels; temporary repairs.

! Always use hand and eye protection with cyanoacrylic glue.

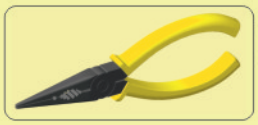
Threadlock
For locking screws and nuts to prevent loosening.

Hobby knife
Use for trimming and cutting.

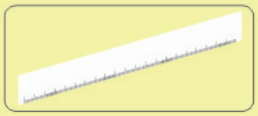
! This knife cuts plastic and fingers with equal ease, so be careful

Flat blade screwdriver

Phillips screwdriver



Needle nose pliers
Clamping parts during assembling and disassembling



Ruler

Soldering iron (40~50 watts) and a small amount of solder.

! Be careful iron is very hot

Liquid dish soap

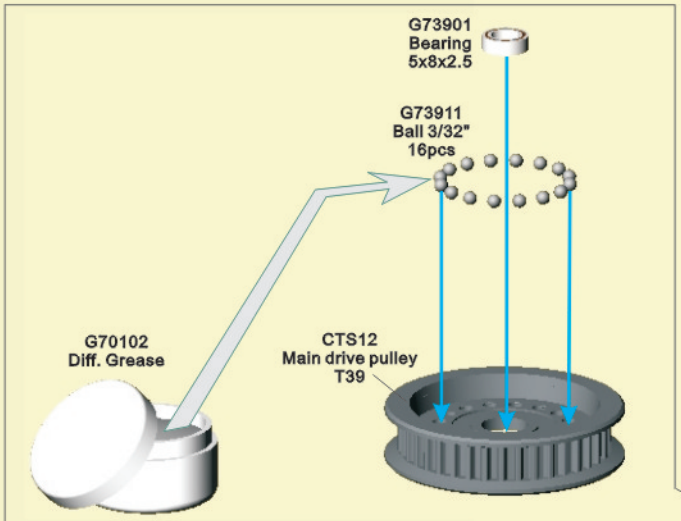
Hand drill
2mm, 3mm, 6mm.

SAFETY PRECAUTIONS

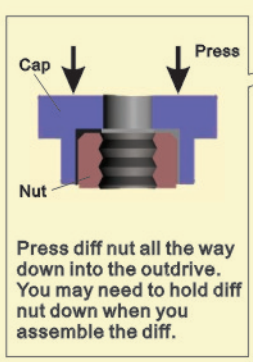
- This radio controlled model is not a toy. For yours and others safty, the following guidelines and cautions should be followed carefully.
  WARNING: Do not operate R/C car in the following locations:
  1. Street
  2. Crowded area; keep away from children.
  3. Indoors or an unventilated room.

  SUGGESTION: Outside in a large open area without obstructions; R/C race track.
- This kit uses many kinds of small parts, sharp tools, large polybag, and chemical materials. Please keep these and other potentially harmful items away from children.
- Use only FCC approved ground frequency crystals in the R/C unit.
- Do not operate a Gas powered car in a residential area. The noise could disturb the peace.
- If you are operating several cars together, check the frequencies to make sure none are the same. Operating the cars on the same frequency can cause radio interference and loss of control of the car.
- If the car is not operating properly, stop immediately and check the condition of the car.
- To avoid damage to the R/C equipment, or losing control of the car, avoid running in or near water.
- To always maintain control of your car and to avoid a jump start, Please do the following:
  1. ON - First turn on the transmitter, then the car's receiver. 2. OFF - Turn off the car's receiver, then the transmitter.
- Do not touch the R/C car after operation, as the engine, muffler, electric motor, battery, and speed controller will be very hot! Allow to cool before handling. While charging your car's battery, it could become hot. Carefully read your battery charger's instructions for proper use.
- When the R/C car is in operation, do not touch any of its moving parts such as drive shafts, wheel ,etc., as the rotating parts can cause serious injury.
- After operation of the R/C car, it is necessary to remove the battery for protection of the R/C equipment.
- Paint and grease are extremely flamable, keep away from sources of ignition. Do not puncture or throw away spray paint cans into garbage.

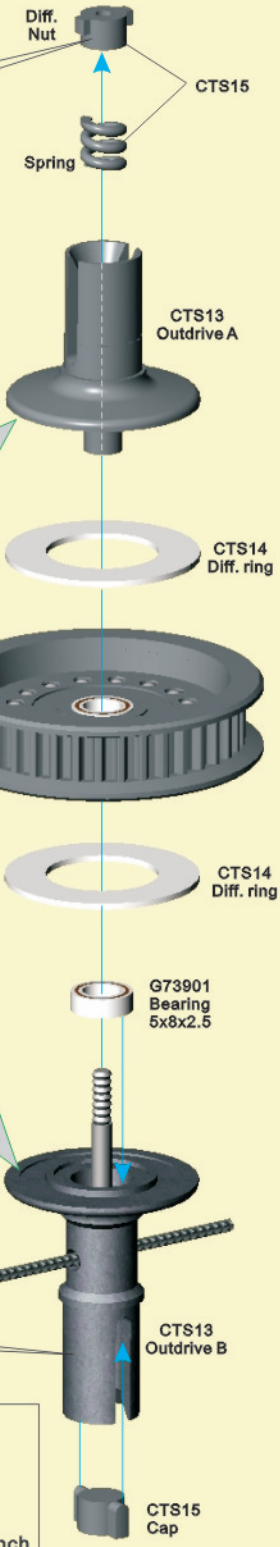
BAG 01 — Ball Differential (CTS11) x2pcs

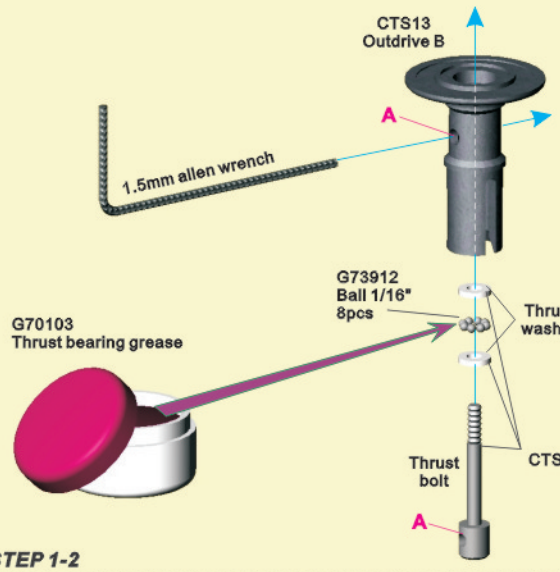


STEP 1-1
1. Insert one 5x8x2.5 bearing into the center of main drive pulley.
2. Install all 16 3/32" diff balls into the main drive pulley.



Press diff nut all the way down into the outdrive. You may need to hold diff nut down when you assemble the diff.

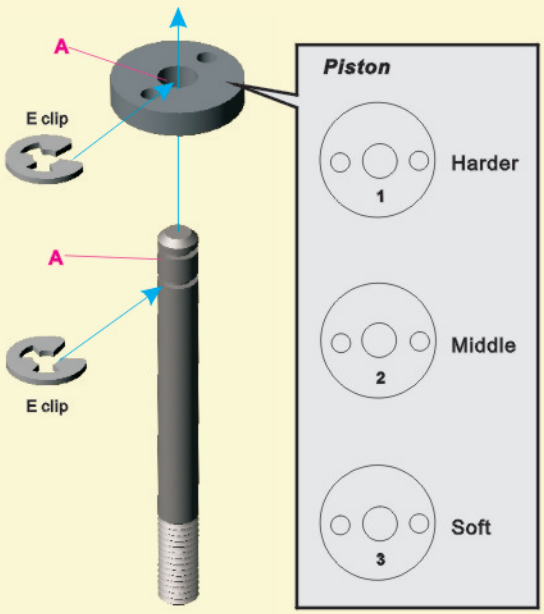




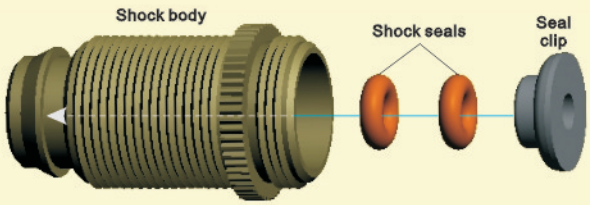
STEP 1-2
1. Find one thrust bolt and install one thrust washer onto the bolt.
2. Next apply a generous amount of thrust bearing grease G70103 to the top of the washer; the grease will also help keep the balls in place.
3. Place eight 1/16" balls onto the washer with grease applied. The grease will help hold the balls in place.
4. Finish the step by sliding the second washer on top of the thrust balls.
5. Insert the thrust assembly into the CTS13 outdrive B and temporarily hold in place with 1.5 mm allen wrench as shown.

STEP 1-3
1. First install one 5x8x2.5 bearing into the outdrive B.
2. Apply a small amount of diff grease G70102 to both outdrives where the diff rings will be placed. This will help hold them in place for easier assembly.
3. Put one CTS14 diff ring onto each outdrive.
4. Next apply diff grease to each 3/32" ball on both sides of the pulley.
5. Install the diff spring into the outdrive A followed by the diff nut.
   ** Using a pair of pliers gently compress the diff spring a couple of times before installing. This helps to "seat" the spring.
6. Carefully tighten the entire differential assembly together. Be sure to "work" the differential as you slowly tighten the diff until you just feel the spring bottom out. Next loosen the diff 1/8 to 1/4 of a turn.
7. Repeat the following steps for the second differential.
   * After the first or second runs with newly built or rebuilt diffs, re-tighten the diffs and loosen 1/8 to 1/4 of a turn as instructed in step 6. This is needed, as all the parts will "seat" in place. After this there is no need to re-adjust.

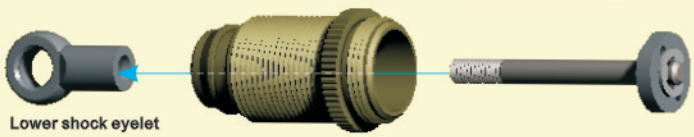
BAG 02 Shocks (G84290) x4pcs



STEP 2-1
1. Install one piston onto the shock shaft using 2 "E" clips.

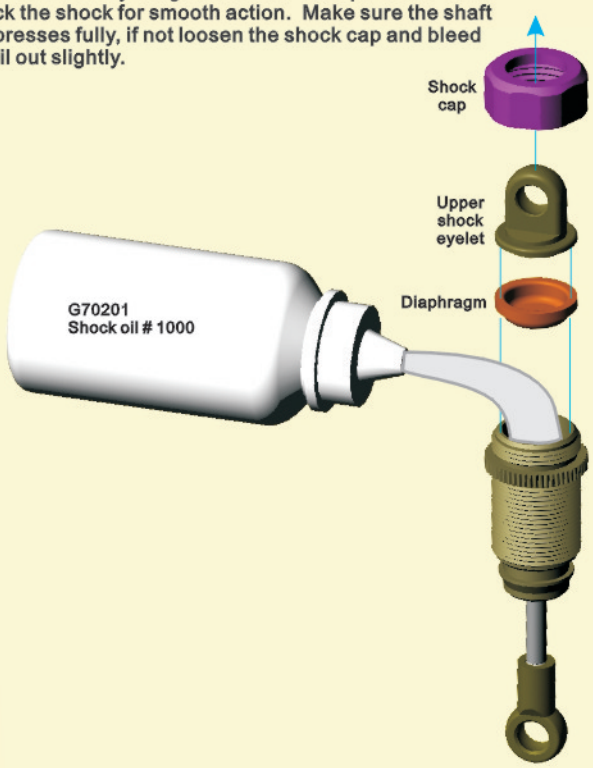


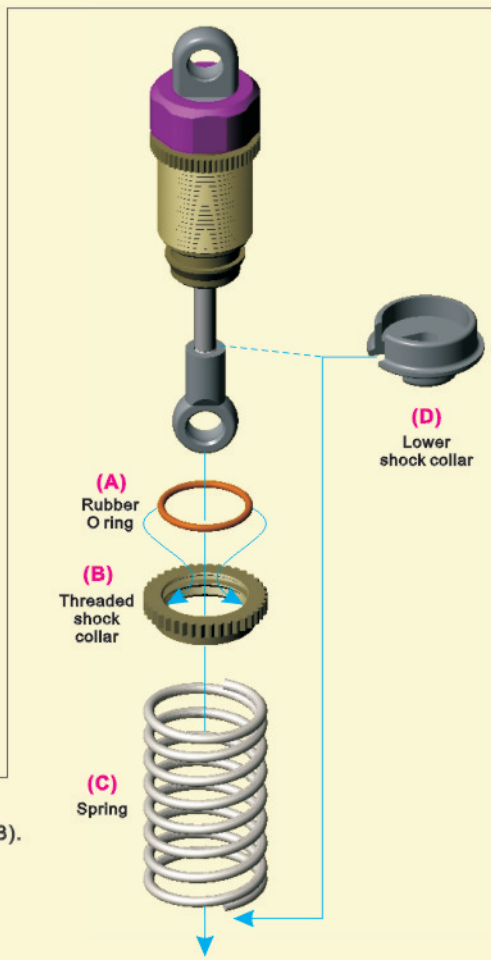
STEP 2-2
1. Install two shock seals into the shock body followed by the seal clip.
   ** Make sure the seals are not twisted and are fully seated.



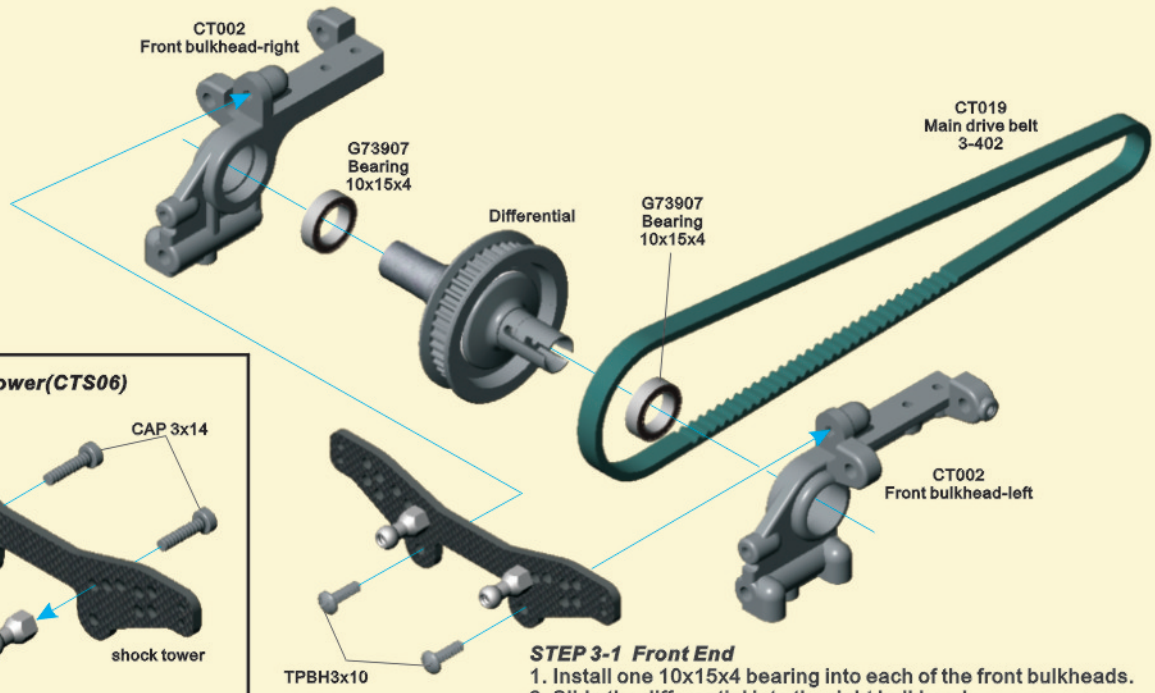
STEP 2-3
1. Apply a small amount of shock oil onto the threads of the shock shaft.
2. Carefully insert the shafts through the shock body.
   ** Be careful not to tear or damage the seals.
3. Thread the shock eyelet onto the shock shaft.
   ** Make sure to screw the eyelets on equally on all shocks.

STEP 2-4
1. Fill the shock body with the supplied shock oil (G70201). Gently work the shaft up and down to work out all the air bubbles. When no bubbles are remaining add oil to completely fill the shock.
2. Put the rubber diaphragm on top of the oil with the rounded side towards the oil.
3. Put the plastic shock eyelet into the shock cap.
4. Screw the shock cap all the way down. Loosen the shock cap about 1/2 turn and push the shock shaft all the way up slowly. When the shaft in all the way in tighten the shock cap. Hold the shock shaft in until finished tightening the cap.
5. Check the shock for smooth action. Make sure the shaft compresses fully, if not loosen the shock cap and bleed the oil out slightly.





STEP 2-5
1. Push rubber "O" ring (A) into the slot on the inside of the threaded shock collar (B).
2. Carefully thread the threaded collar onto the shock body.
   ** Make sure not to cross thread the collar when threading onto the shock body.
3. Install the shock spring (C) followed by the lower shock collar (D).
4. Repeat three more times, once for each shock.

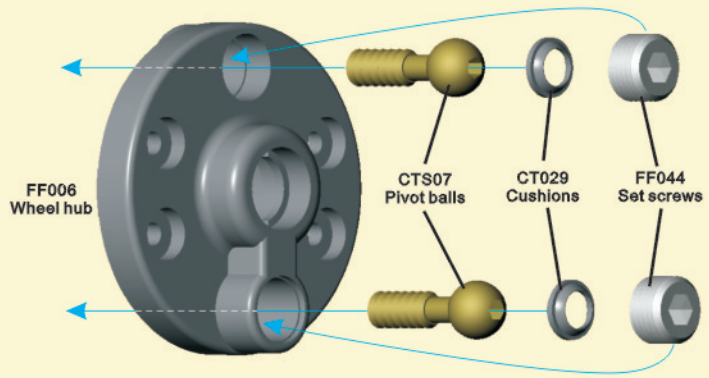


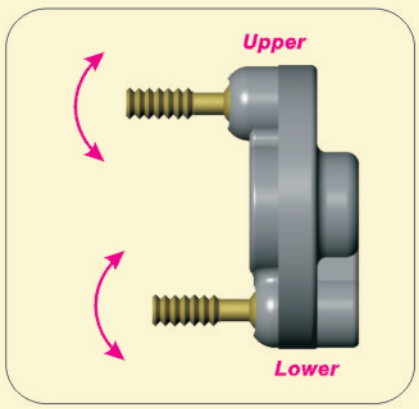
Front shock tower(CTS06)

1. Screw 2 ball posts (FFS006) into the shock tower as pictured.

STEP 3-1 Front End

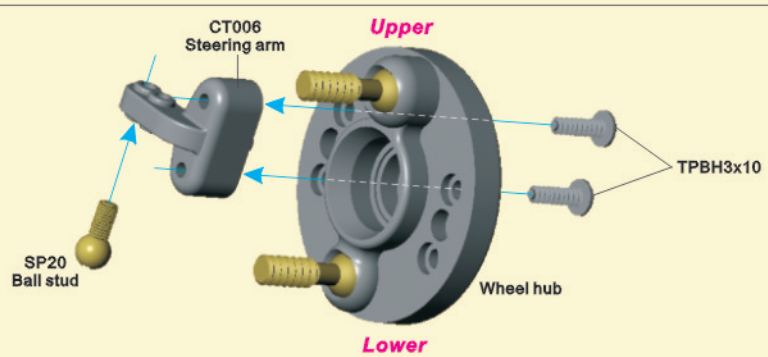
1. Install one 10x15x4 bearing into each of the front bulkheads.
2. Slide the differential into the right bulkhead.
3. Install the main drive belt around the differential.
4. Now put the left side bulkhead onto the differential.
5. Secure the front shock tower to the left and right bulkheads using two 3x10 screws.

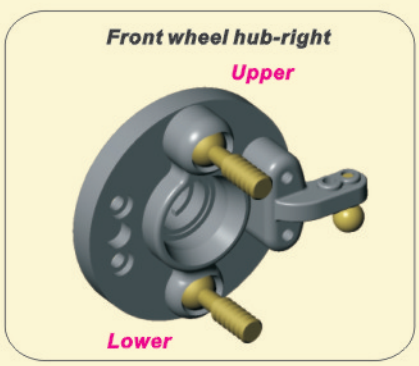




STEP 3-2 Wheel hub x4pcs

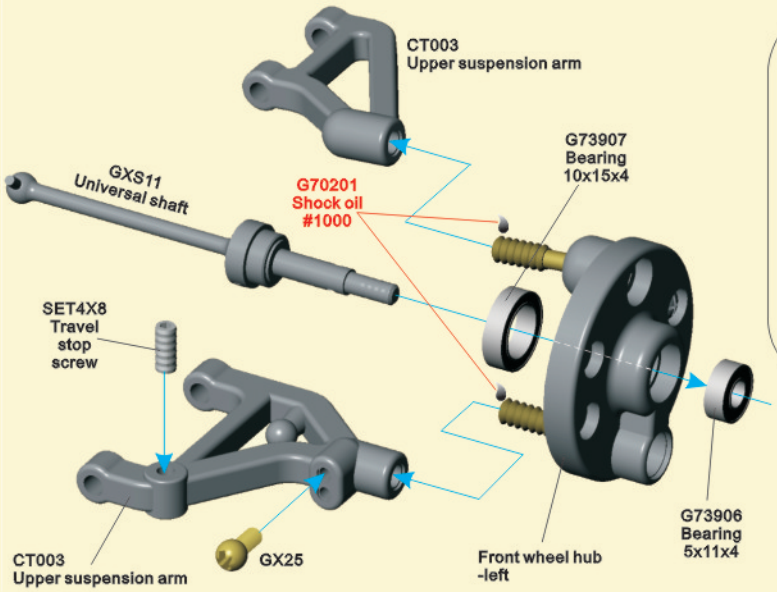
1. Install two CTS07 pivot balls into each wheel hub.
2. Follow the CTS07 pivot balls with the CT029 pivot ball cushions. Make sure the cushion is installed with the rounded side towards the ball.
3. Install the two FF044 large setscrews with the rounded side towards the plastic cushion. Tighten them down until there is no play and the pivot balls pivot freely.
4. Repeat for each remaining wheel hub.
5. **Use two hubs for the next set of instructions and the remaining two for the rear suspension assembly.

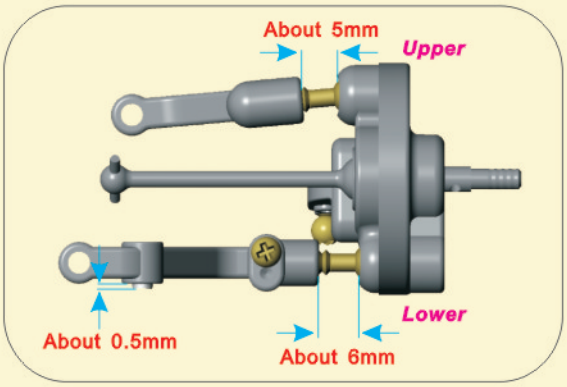


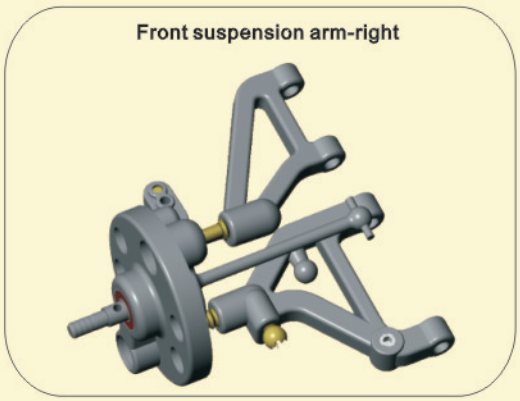


STEP 3-3 Front wheel hub-left

1. Secure one CT006 steering arm onto both front hubs with two 3x10 button screws. The CT006 steering arm is shown on the left side. Reverse for the right side.
2. Install one SP20 ball stud into the outer hole on each steering arm.

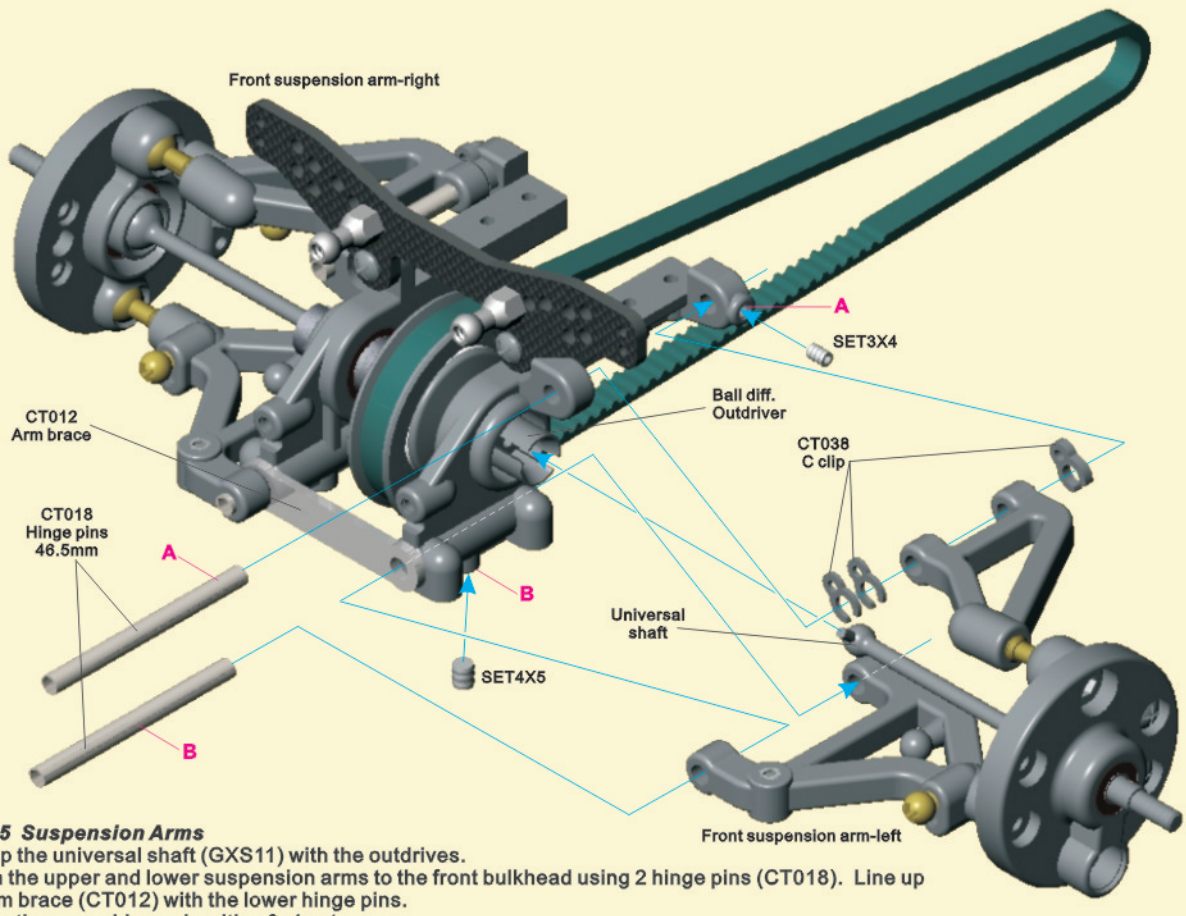






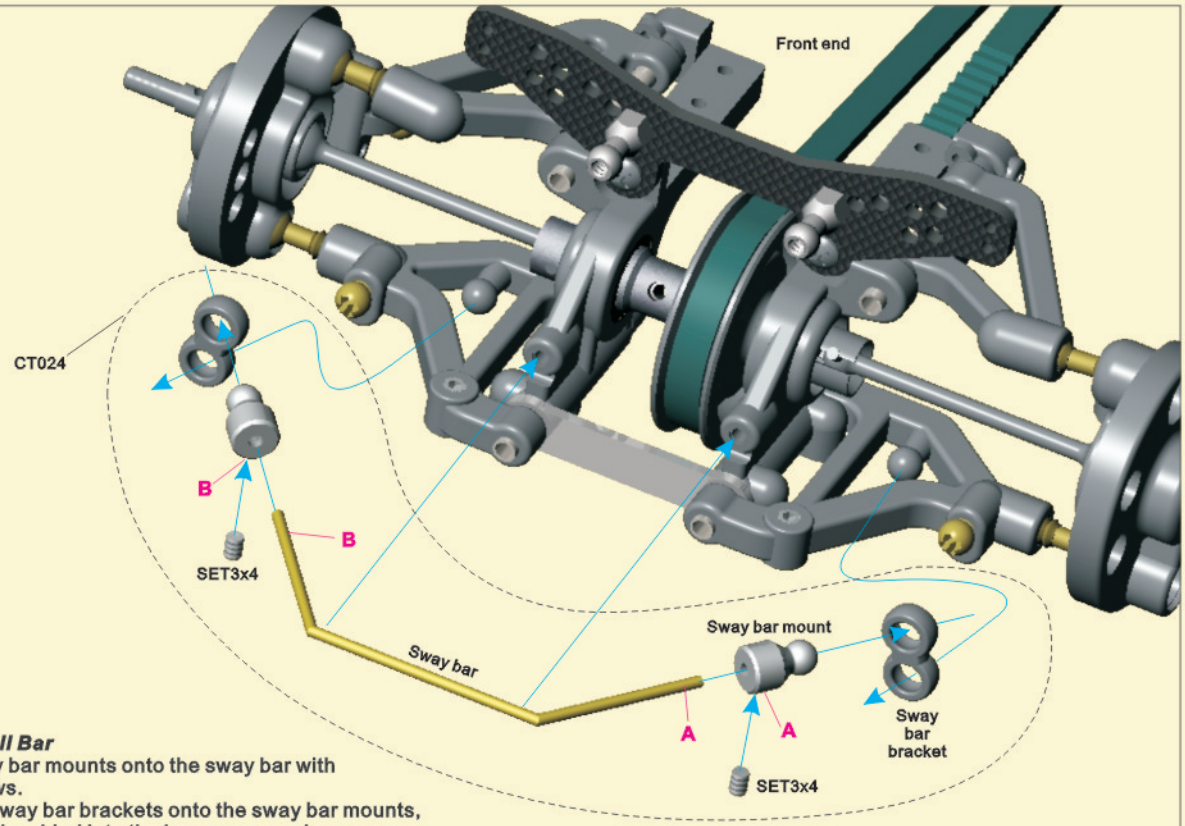
STEP 3-4 Front suspension arm-left

1. Now with the wheel hubs assembled, screw the pivot balls into the upper and lower suspension arms. Notice the direction of the wheel hubs. Screw the pivot balls in until you have a 5mm space between the hub and the upper suspension arm. For the bottom you want a 6mm space between the lower arm and the hub.
2. Install the 4x8 travel stop screw into the lower suspension arms. Tighten down until .5mm of the setscrew sticks out past the bottom of the suspension arm.
3. Install 5x11x4 bearing and 10x15x4 bearing into each hub as shown.
4. Slide one GXS11 universal shaft through both bearings and the hub.



STEP 3-5 Suspension Arms

1. Line up the universal shaft (GXS11) with the outdrives.
2. Attach the upper and lower suspension arms to the front bulkhead using 2 hinge pins (CT018). Line up the arm brace (CT012) with the lower hinge pins.
3. Secure the upper hinge pin with a 3x4 setscrew.
4. Secure the lower hinge pin with a 4x5 setscrew.
5. Find the thin plastic "C" clips/spacers. Install two thin clips in front of the upper suspension arm and one thick one behind the arm. Match the spacing for the other side.

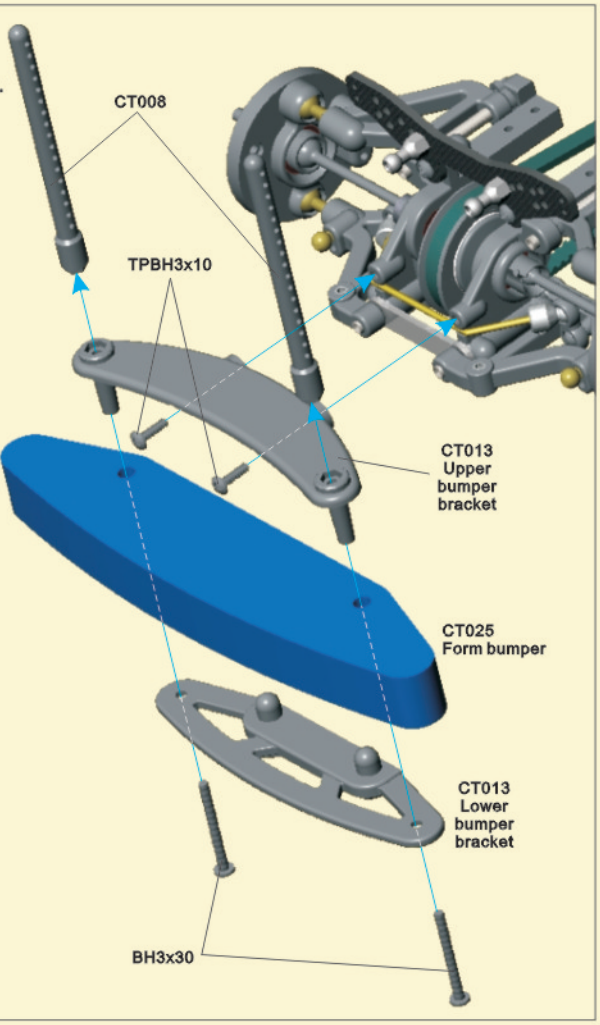


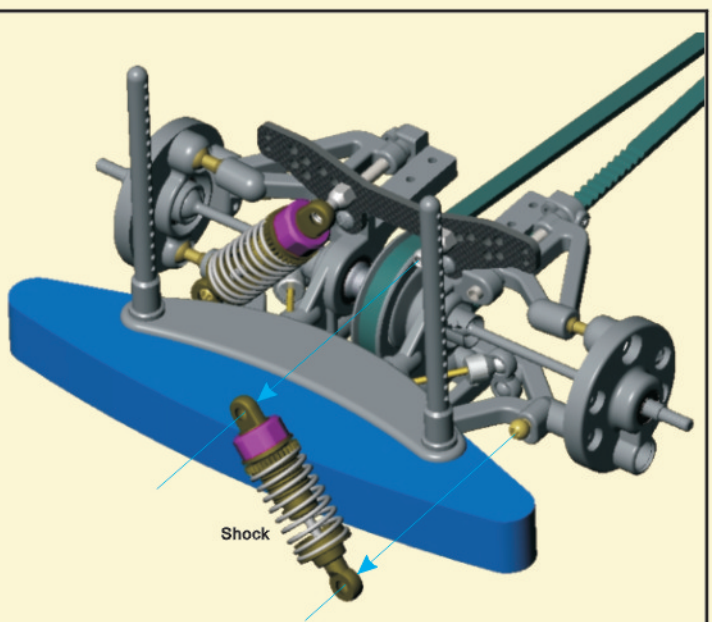
STEP 3-6 Anti-Roll Bar

1. Secure two sway bar mounts onto the sway bar with two 3x4 setscrews.
2. Clip the plastic sway bar brackets onto the sway bar mounts, then onto the ball molded into the lower suspension arm.

STEP 3-7 Front Bumper

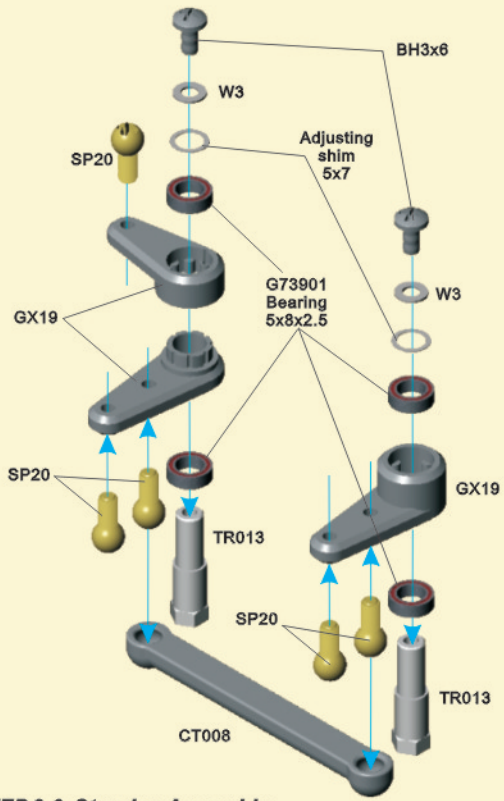
1. Secure the upper bumper bracket to the front bulkhead with two 3x10 screws.
2. Next slide the foam bumper onto the bottom side of the upper bumper bracket.
3. Now install the lower bumper bracket, secure with 2 3x30 screws. These screws are also used to secure the front body mounts as shown in the picture.





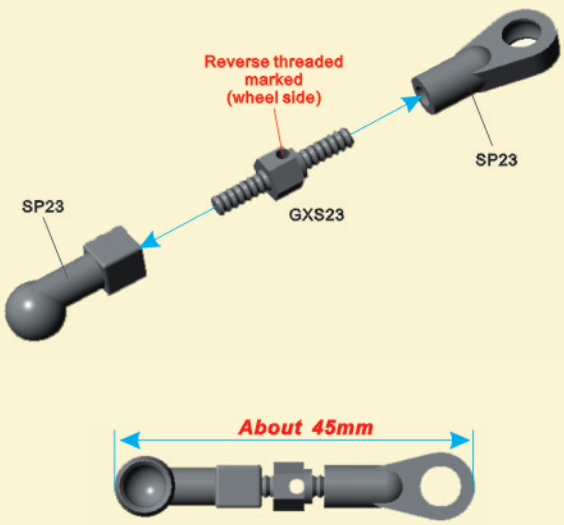
STEP 3-8 Shock

1. With the bumper assembly in place, next install your front shocks. Gently snap the upper and lower shock mounts onto the ball studs.



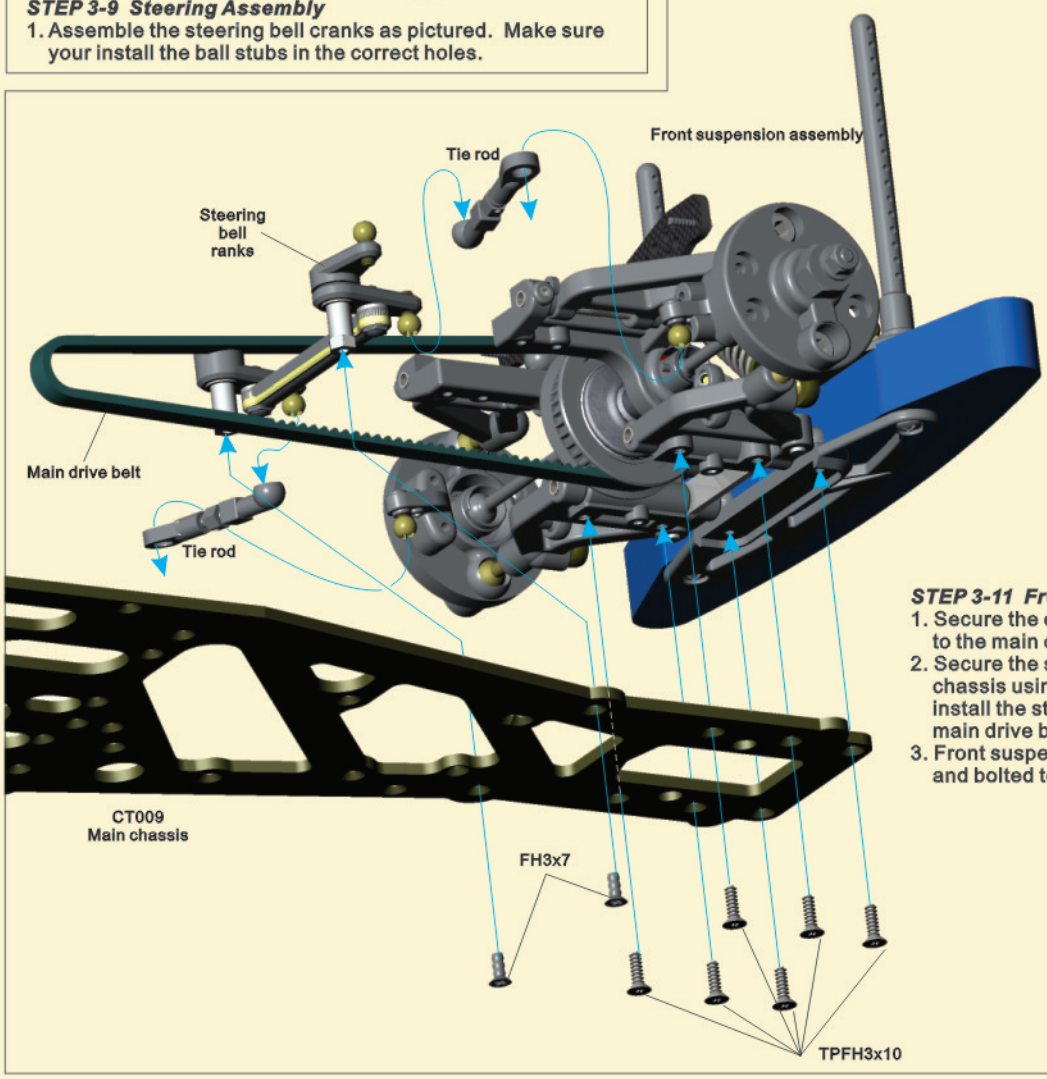
STEP 3-9 Steering Assembly

1. Assemble the steering bell cranks as pictured. Make sure your install the ball stubs in the correct holes.



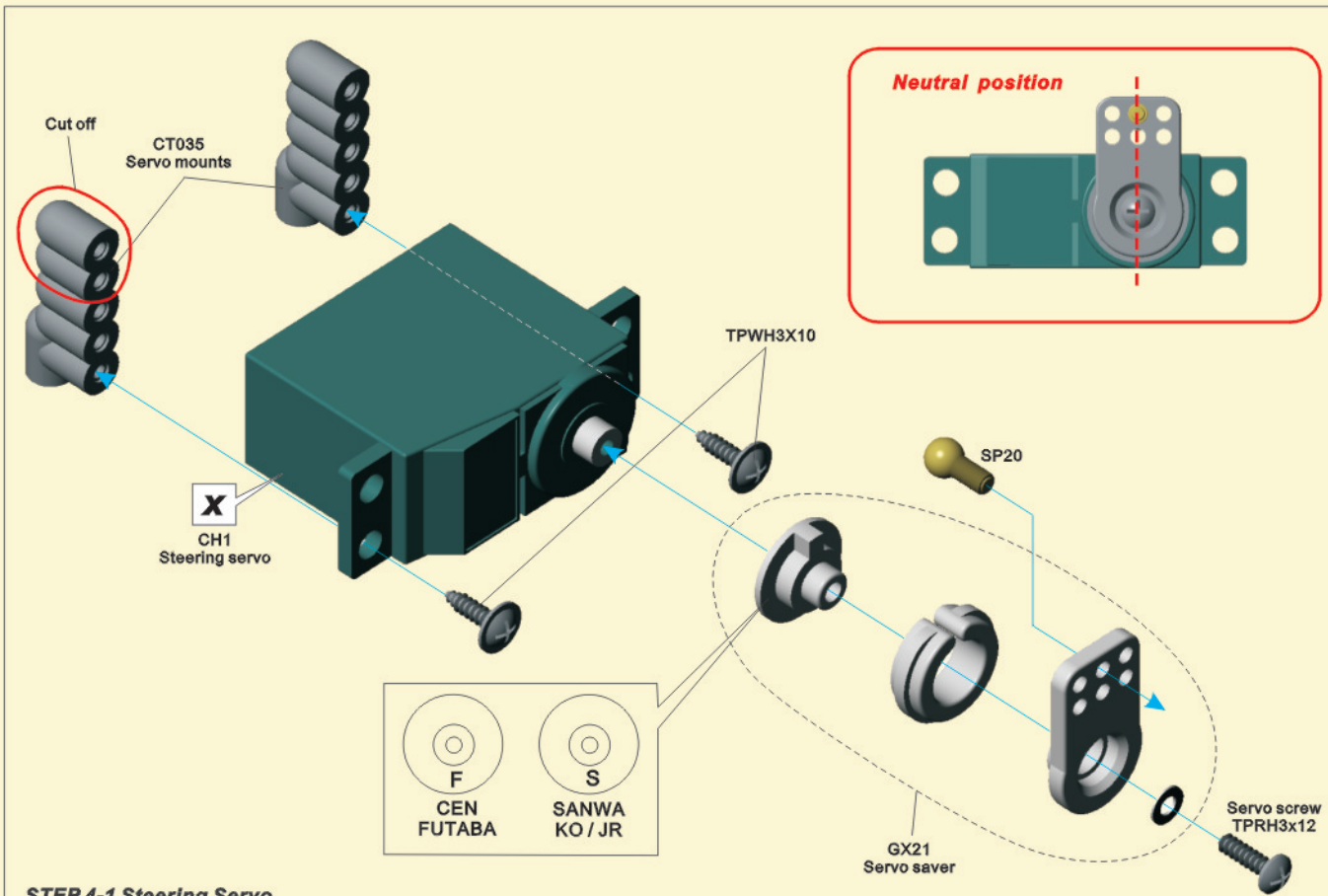
STEP 3-10 Tie Rod

1. Thread one plastic eyelet and one ball cup onto each tie rod. Thread the rod in equally on each side. Total length of rod should equal 45mm.



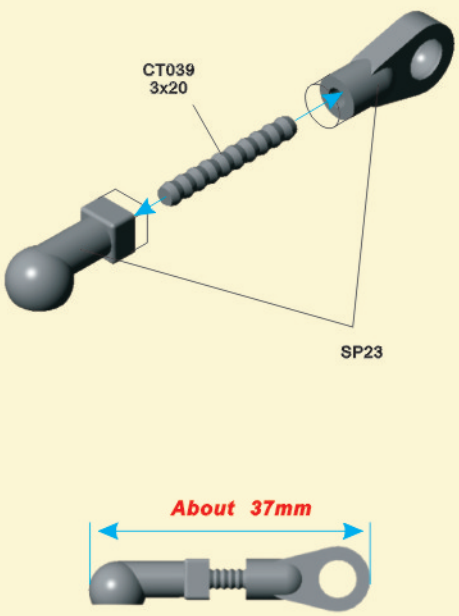
STEP 3-11 Front End

1. Secure the entire front suspension assembly to the main chassis using 6 3x10 screws.
2. Secure the steering assembly onto the chassis using 2 3x7 screws. Make sure to install the steering assemble through the main drive belt.
3. Front suspension should now be finished and bolted to the chassis.



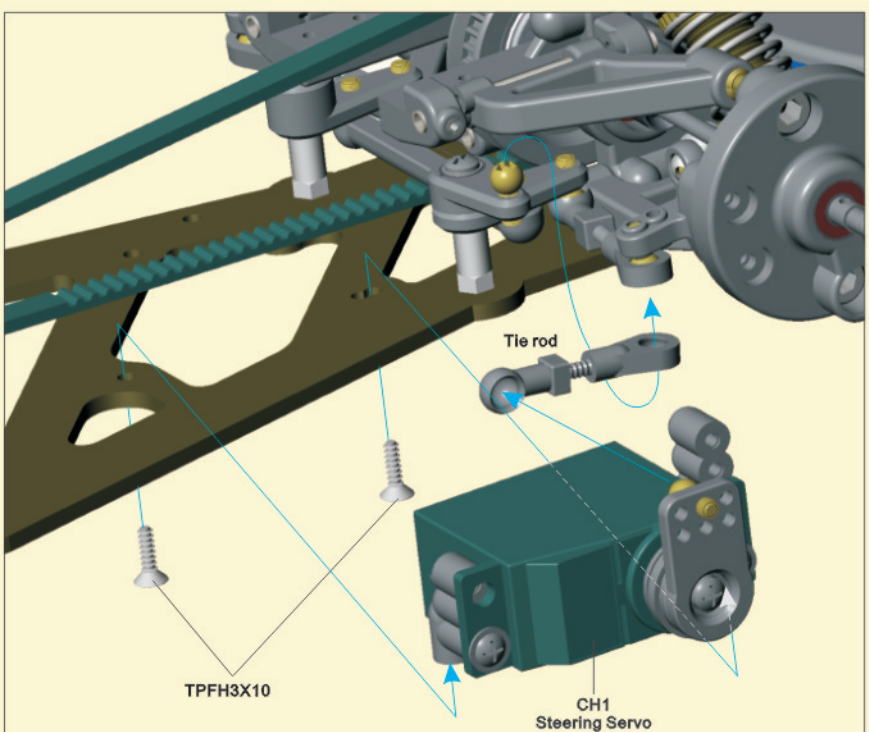
STEP 4-1 Steering Servo

1. Mount the servo to the CT035 servo mounts with two 3x10 screws. Mount the servo in the lowest hole available.
2. Assemble the GX21 servo saver as shown. Center your servo and put the servo saver onto the servo.
3. Secure with 3x12 screw and washer.



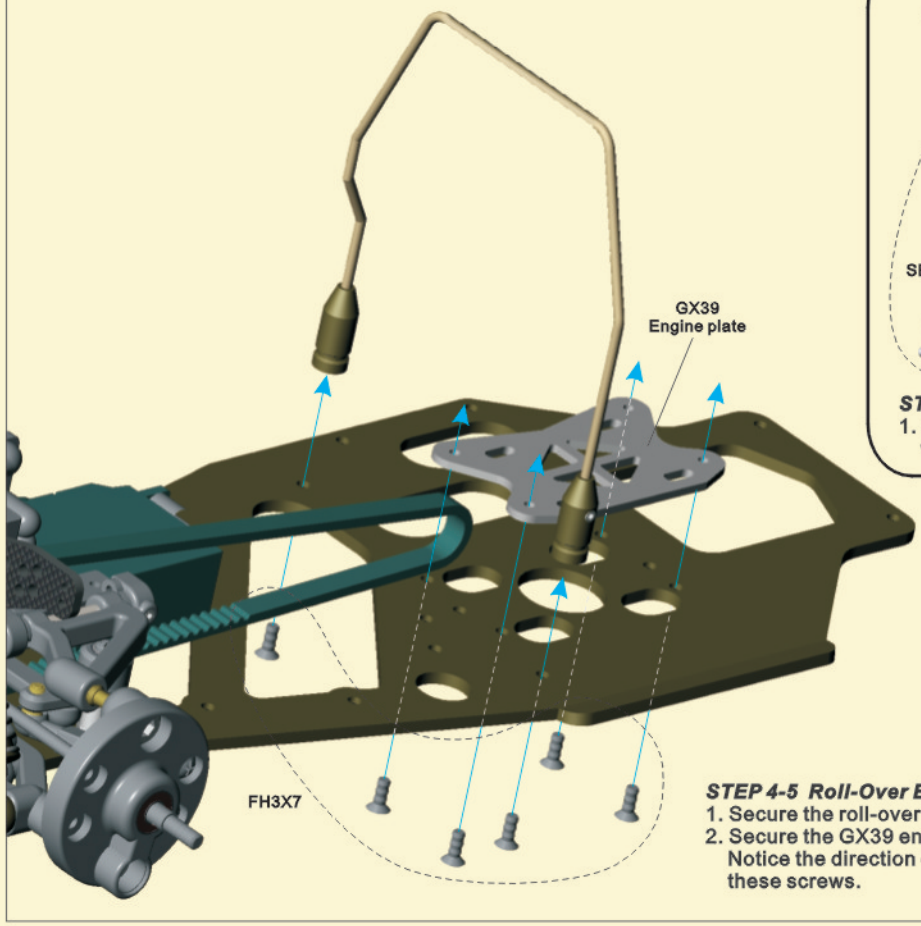
STEP 4-2 Tie Rod

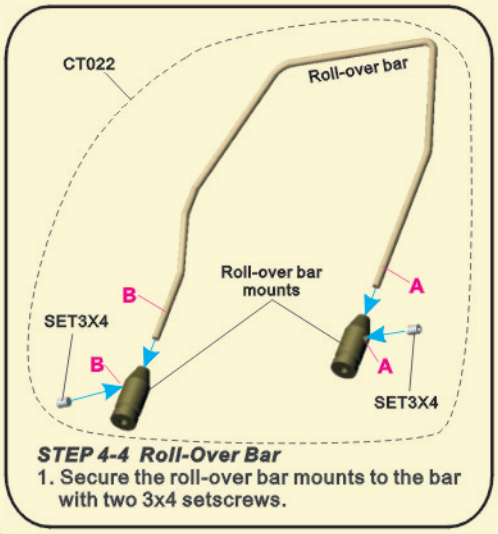
1. Thread one ball cup and one eyelet onto the CT039 tie rod.
2. Thread both sides on equally to the length of 37mm.



STEP 4-3 Ch1 Steering Servo

1. Secure the servo to the chassis using two 3x10 screws.
2. Snap the CT039 tie rod onto the ball stud on the steering bellcrank and then onto the servo saver.



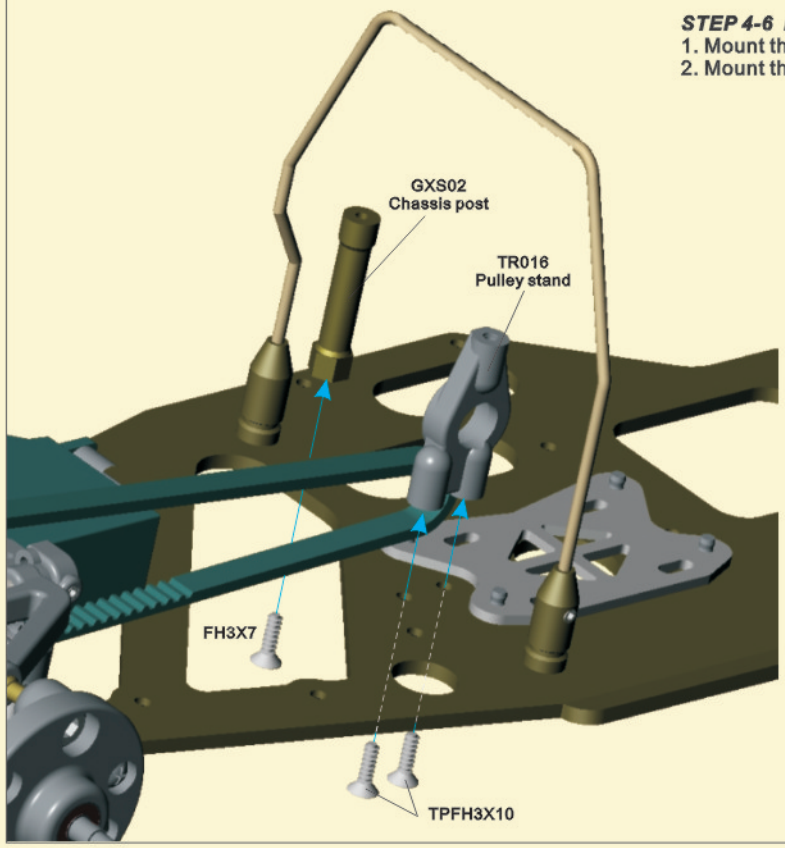


STEP 4-4 Roll-Over Bar

1. Secure the roll-over bar mounts to the bar with two 3x4 setscrews.

STEP 4-5 Roll-Over Bar

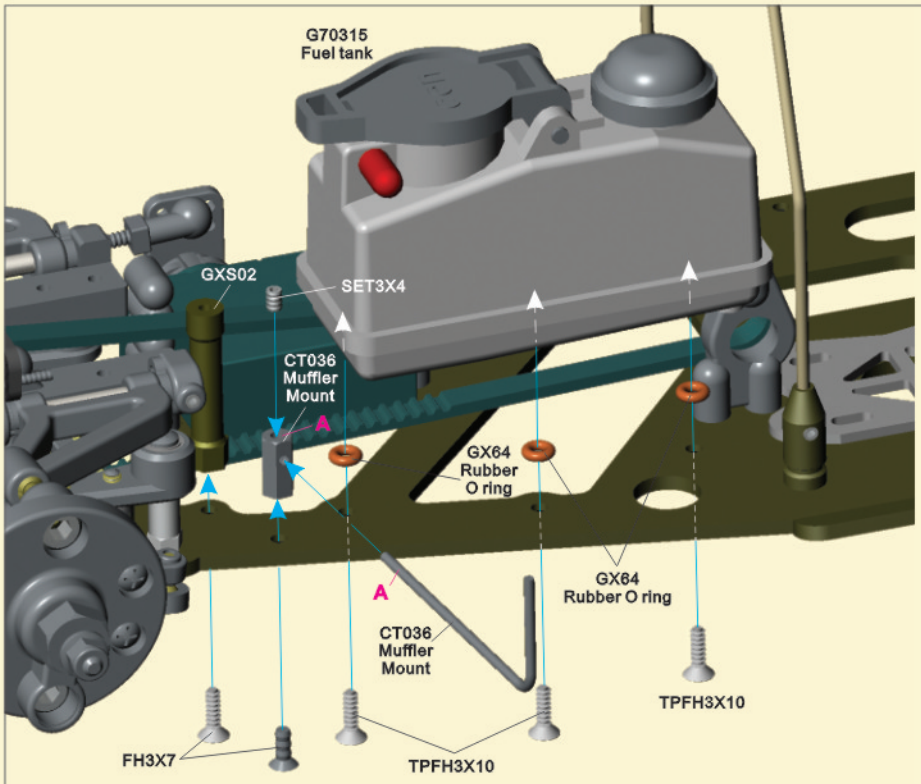
1. Secure the roll-over bar to the chassis with two 3x7 screws.
2. Secure the GX39 engine plate to the chassis with four 3x7 screws. Notice the direction of the plate. ** Thread lock recommended on these screws.



STEP 4-6 Pulley Stand

1. Mount the GXS02 chassis post to the chassis using one 3x7 screw.
2. Mount the TR016 pulley stand to the chassis using two 3x10 screws.

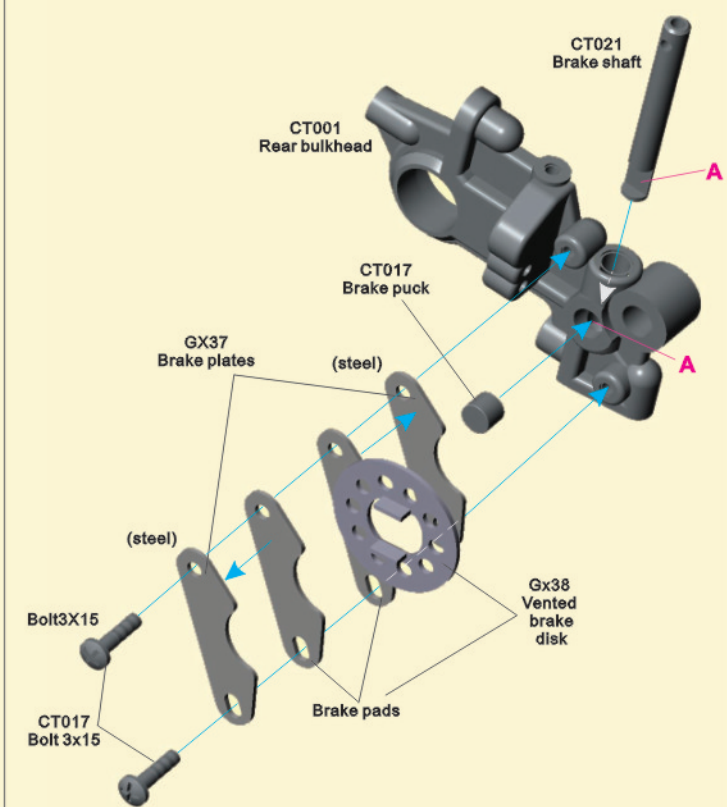
BAG 05 *Engine-Fuel Tank*



STEP 4-7 Fuel Tank

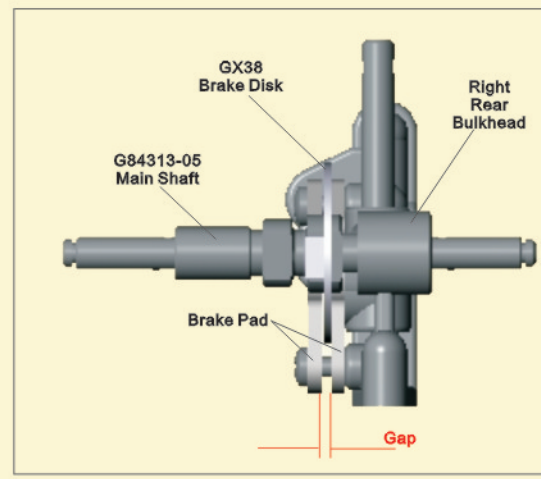
1. Secure the fuel tank to the chassis using three GX64 rubber "O" rings and three 3x10 screws.
2. Secure the muffler mount with one 3x7 screw
3. Secure the wire to the mount with one 3x4 setscrew.
4. Mount the chassis post with one 3x7 screw

BAG 04 *Rear End-Main Shaft*



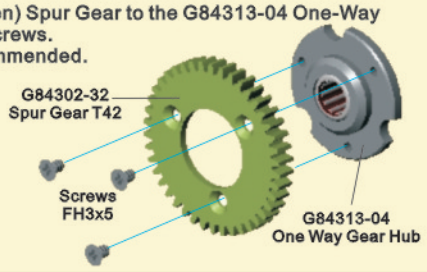
STEP 5-1 Brake Pad

1. Install the brake shaft (CT021) into the rear bulkhead (CT001).
2. Insert the brake puck (CT017) into the rear bulkhead (CT001) making sure it matches up with the flat spot on the brake shaft (CT021). The flat spot is marked (A).
3. Match up one brake pad to each brake plate. ** Recommend using CA glue to secure the pad to each plate. Make sure you glue them on the correct side.
4. Secure the brake pads to the bulkhead with two 3x15 screws. Don't tighten screws yet, final adjustment will be done later. ** Notice that one screw hole is slotted, this should be installed towards the bottom.

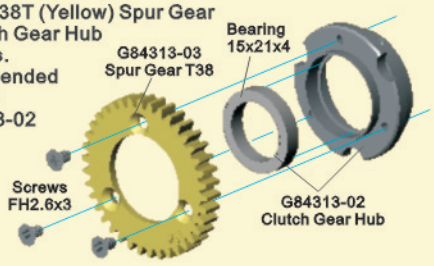


G84313 2-speed Automatic Transmission

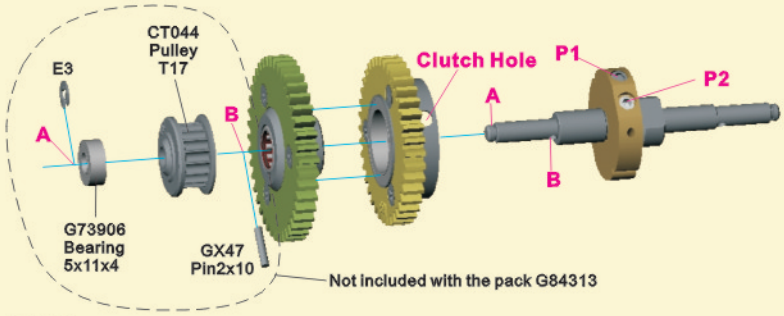
STEP 5-2
1.Secure the 42T (Green) Spur Gear to the G84313-04 One-Way Hub using 3 FH3x5 screws.
* Thread lock is recommended.



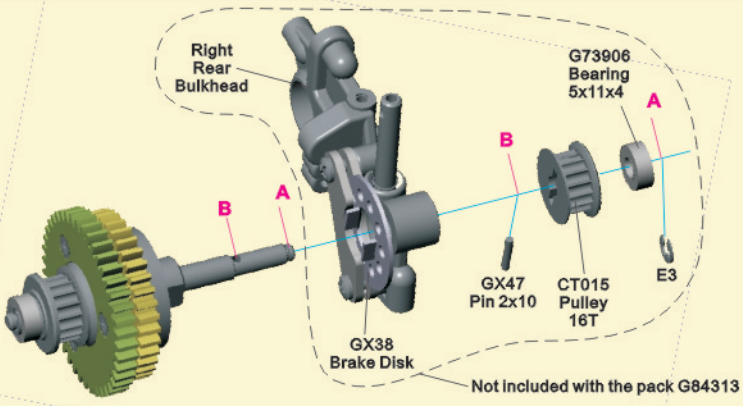
STEP 5-3
1.Secure the G84313-03 38T (Yellow) Spur Gear to the G84313-02 Clutch Gear Hub using 3 FH2.6x3 screws.
*Thread lock is recommended
2.Next push one 15x21x4 bearing into the G84313-02 Clutch Gear Hub.



STEP 5-4
1.Assemble each clutch shoe as show in the diagram.
2.Tighten the 2x12 screw all the way down then unscrew 31/2 turns out. Do this on both clutch shoes. These screws are to be threaded into the opposite clutch shoe.
** *Tightening or loosening the 2x12 screws located on each clutch shoe will allow you to adjust the shift point. Try to adjust the two screws evenly on each shoe.*
3.Drop one ball into the center hole on each clutch shoe. Start the setscrew just to hold the ball in place. Final adjustment will be made later.
4.Slide the clutch shoes onto the Main Shaft.
5.Now its time to tighten the 4x5 setscrews. You want to tighten them down until you see the shoe lift up slightly off the main shaft. Then repeat for the other side.



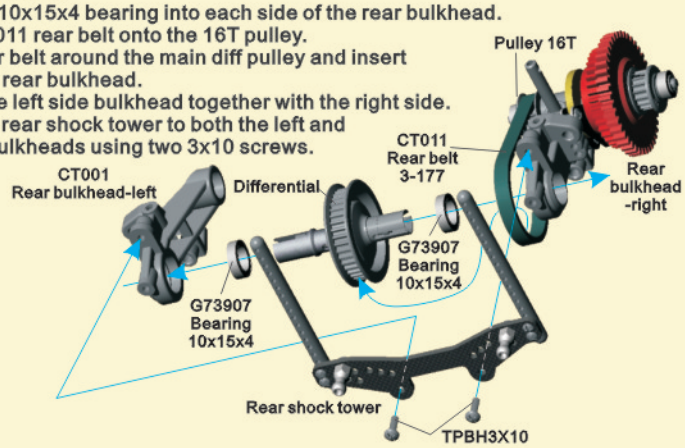
STEP 5-5
1.At this point you should have the clutch shoes assembled and mounted on the main shaft.
2.Put the two gear hubs with spur gears together.
3.Next put the gears onto the main shaft.
4.Insert one 2x10 pin into the hole marked "B" on the main shaft.
5.Install one 17T pulley followed by the 5x11x4 bearing. Secure everything with one E clip.

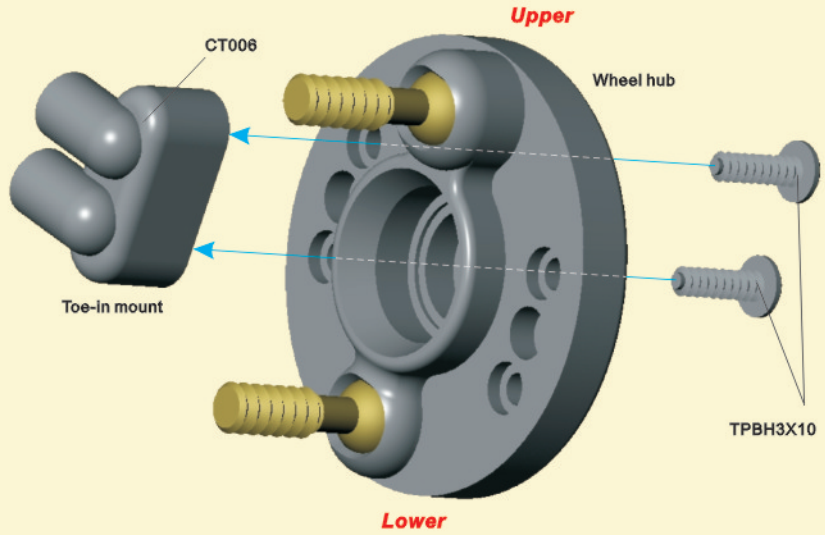


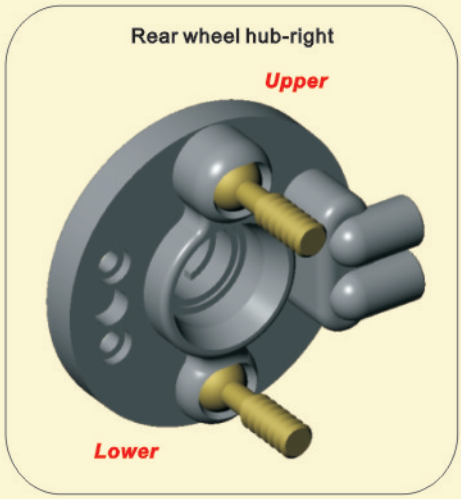
STEP 5-6
1.Put the entire main shaft assembly through the right rear bulkhead.
2.Put one 2x10 pin into the hole marked "B"
3.Put the 16T pulley onto the main shaft lining up the pin with the slot in the pulley.

Rear shock tower
1. Screw in 2 ball post (FFS006) onto the rear shock tower. Notice the hole pictured.
2. Secure the rear body mounts with 2 2x8 screw on each side.

STEP 5-7 Rear End
1. Install one 10x15x4 bearing into each side of the rear bulkhead.
2. Put the CT011 rear belt onto the 16T pulley.
3. Put the rear belt around the main diff pulley and insert diff into the rear bulkhead.
4. Next put the left side bulkhead together with the right side.
5. Secure the rear shock tower to both the left and right side bulkheads using two 3x10 screws.



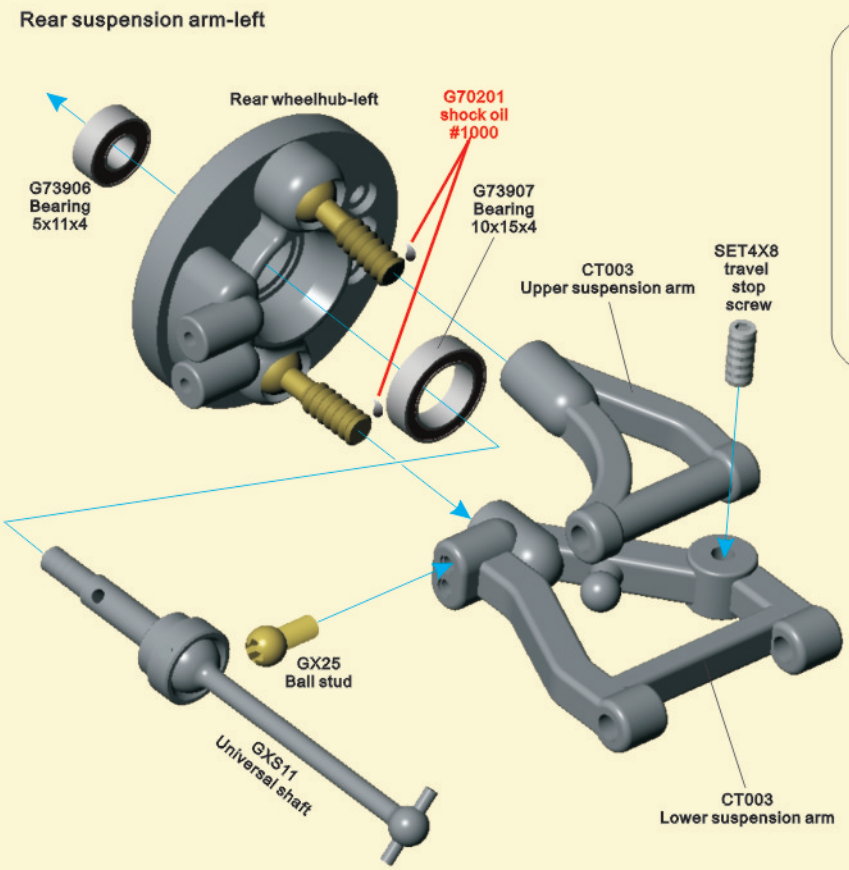


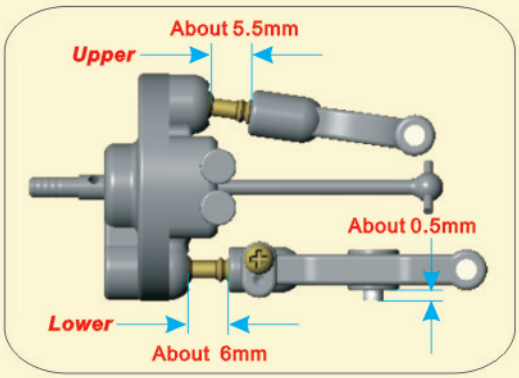


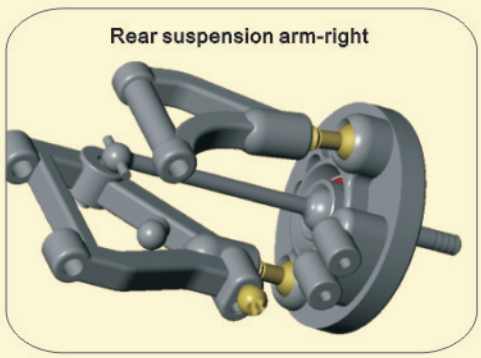
Use the remaining two wheel hubs that were assembled earlier for the following steps.

STEP 5-8 Rear wheel hub-left

1. Mount one toe-in mount onto each wheel hub using 3x10 screws. ** Note the direction of the wheel hub. The long pivot cup goes on top on both the left and the right side.

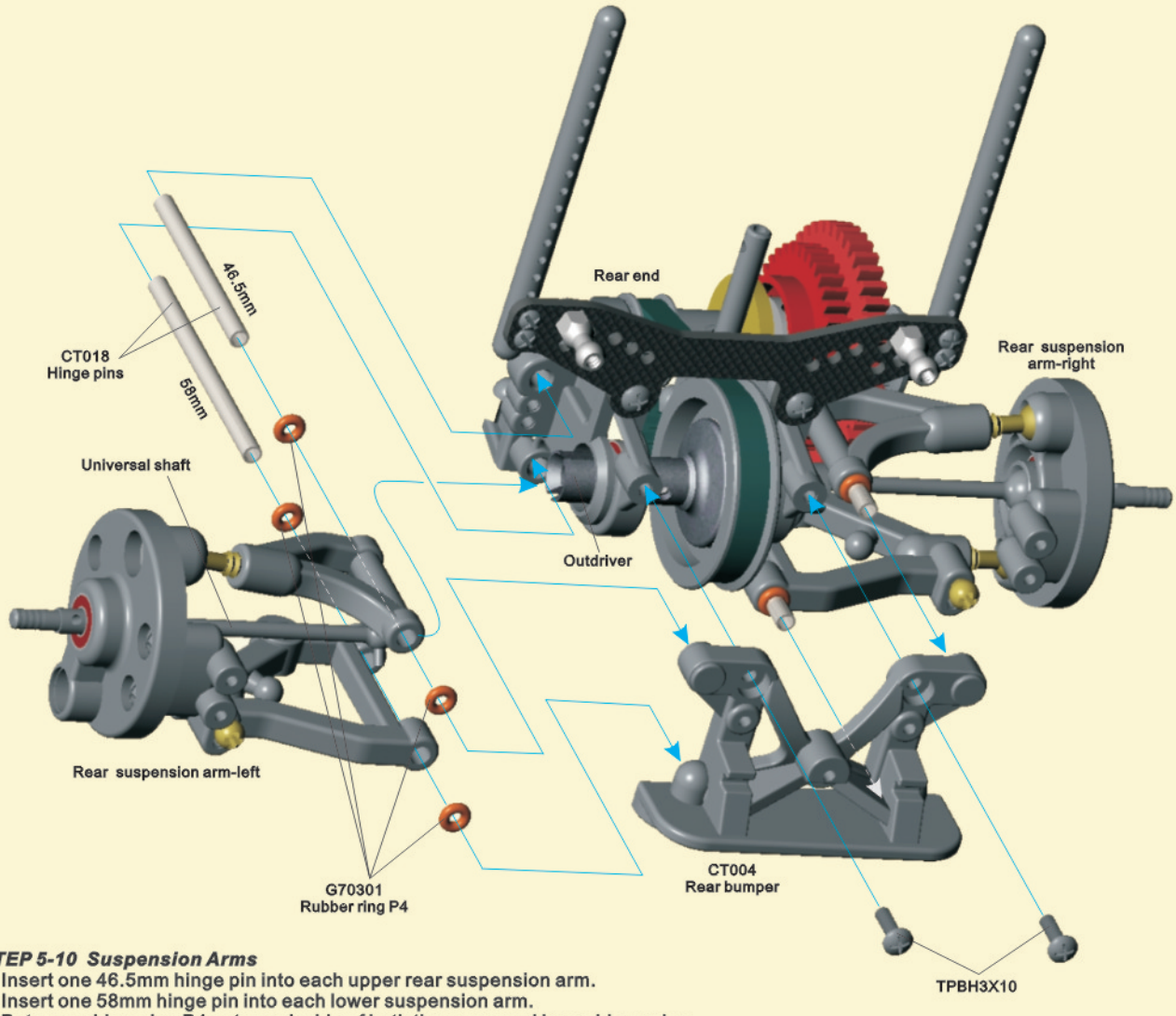






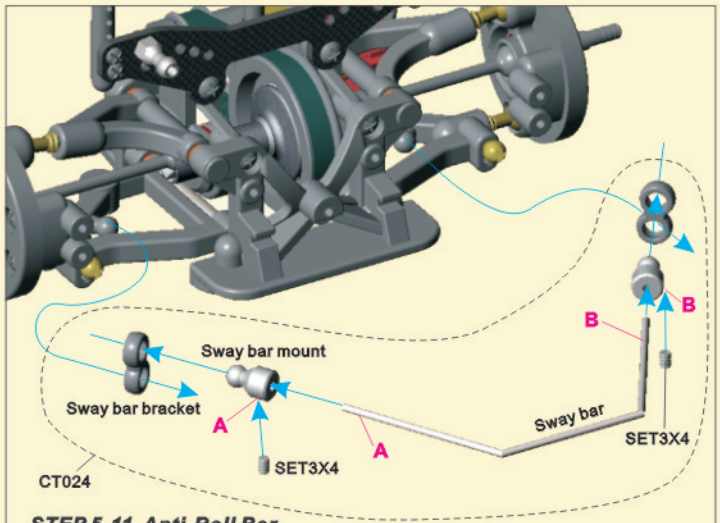
STEP 5-9 Rear Suspension Arms

1. Screw the upper and lower rear suspension arms onto the pivot balls. The long pivot cup will be threaded into the upper suspension arm on both sides.
2. Screw the pivot balls in until you have a 5.5mm space on the upper arms and 6mm space on the lower arm.
3. Screw in one GX25 threaded ball into the upper hole on the lower suspension arm.
4. Screw in one 4x8 setscrew into each lower suspension arm. Screw setscrew down until the screw sticks out 0.5mm.
5. Install 5x11x4 bearing and 10x15x4 bearing into each hub as shown.
6. Put the universal shafts through the wheel hub.



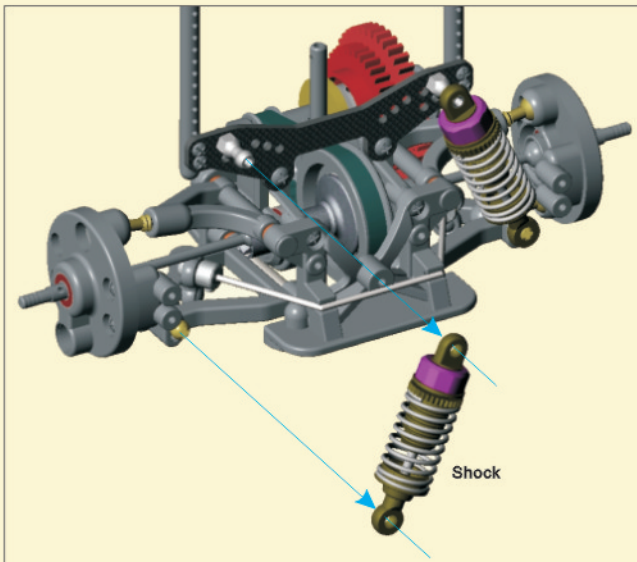
STEP 5-10 Suspension Arms

1. Insert one 46.5mm hinge pin into each upper rear suspension arm.
2. Insert one 58mm hinge pin into each lower suspension arm.
3. Put one rubben ring P4 onto each side of both the upper and lower hinge pins.
4. Next put the upper and lower hinge pins into the rear bulkhead lining up the universal shaft with the outdrivers.
5. With the rear hinge pins in place, now put the rear bumper on. Carefully line up the hinge pins and push the rear bumper on.
6. Secure the bumper with two 3x10 screws.



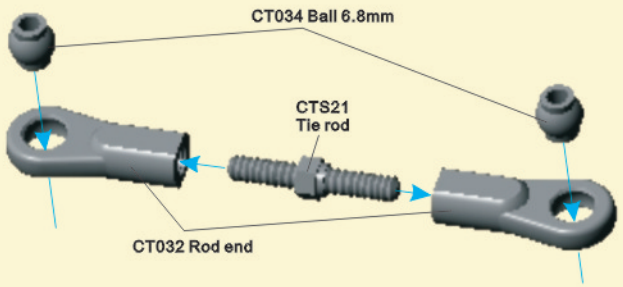
STEP 5-11 Anti-Roll Bar

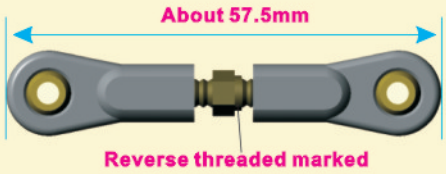
1. Secure one sway bar mount to each end of the sway bar using 3x4 setscrews.
2. Clip one sway bar bracket onto each sway bar mount.
3. Snap the lower sway bar bracket to the molded ball studs in the lower suspension arms.



STEP 5-12 Shock

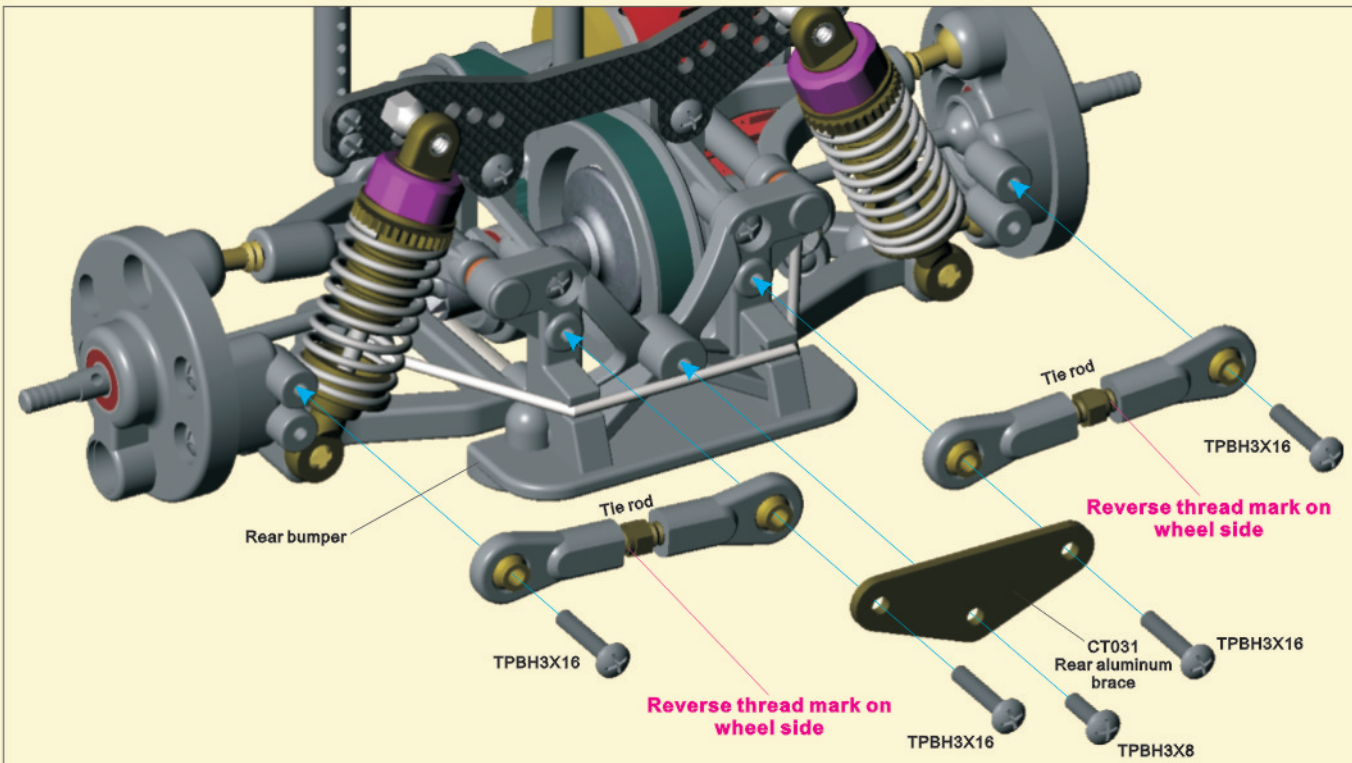
1. Snap the shocks onto the studded balls on the upper shock tower and the lower suspension arms.





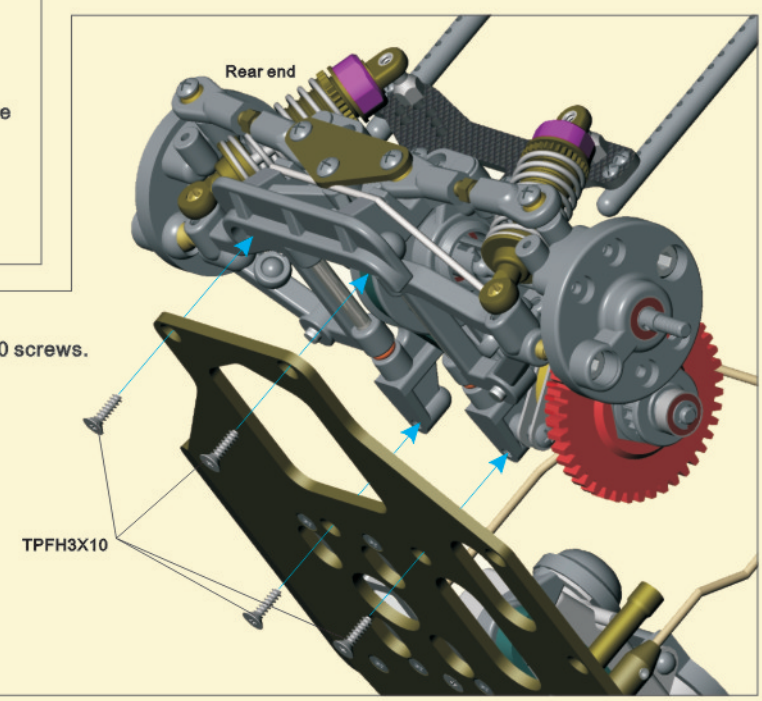
STEP 5-13 Tie Rod

1. Thread two plastic CT032 rod ends, onto each CTS21 tie rod. Screw the rod ends, on equally and to the length of 57.5mm.



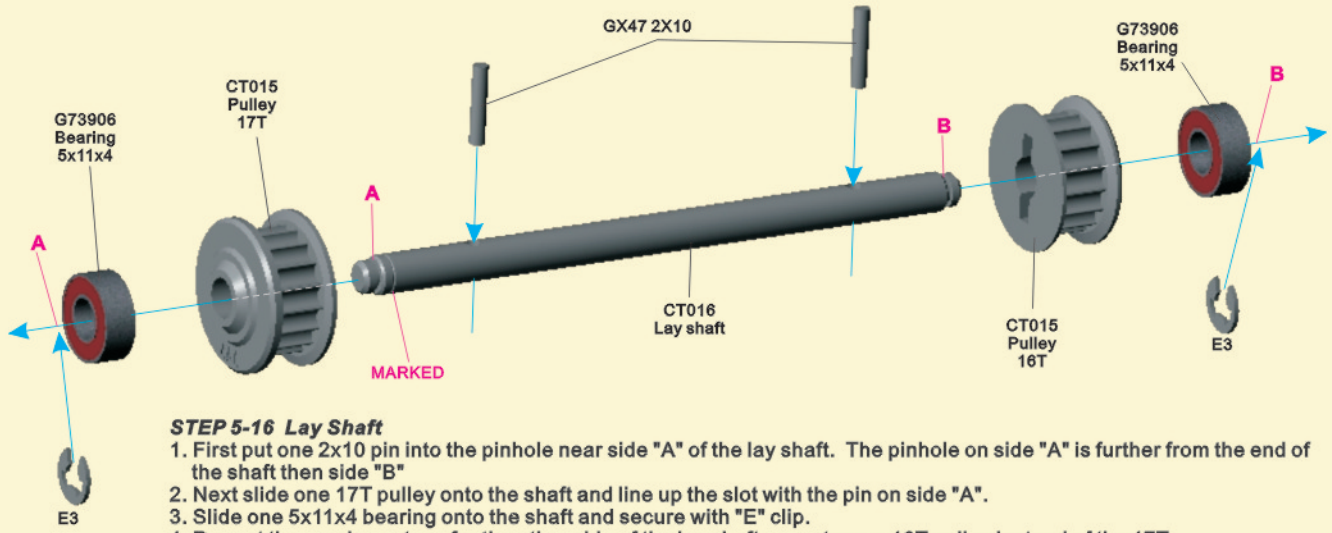
STEP 5-14 Rear Toe-in Tie Rods

1. Secure the two toe-in tie rods to the rear bumper using two 3x16 screws,one 3x8 screw and the rear aluminum brace.
2. Secure the other side of the toe-in tie rods to the wheel hub using one 3x16 screw on each side. ** If you have optional adjustable tie rods they are marked with a little groove by the hex, put the mark to the same side of the car for easier adjusting.



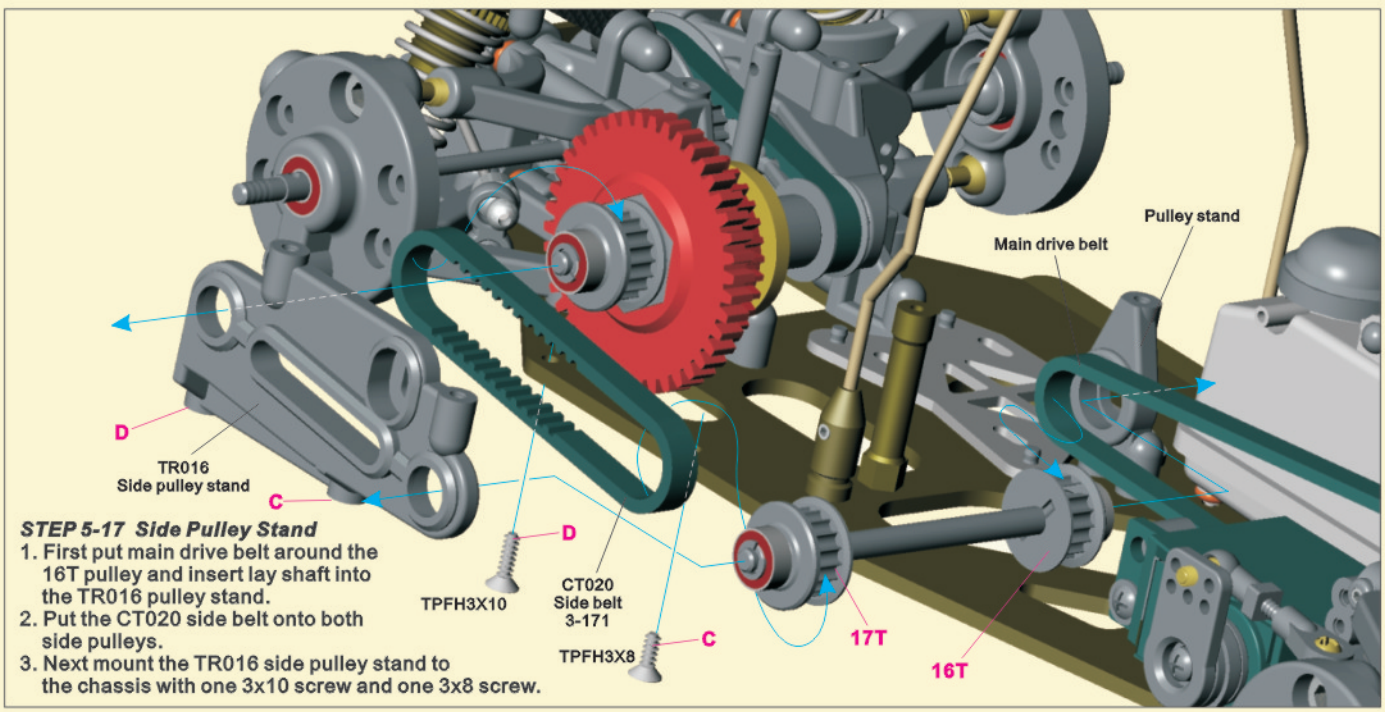
STEP 5-15 Rear End

1. Secure the rear end assembly to the chassis using four 3x10 screws.



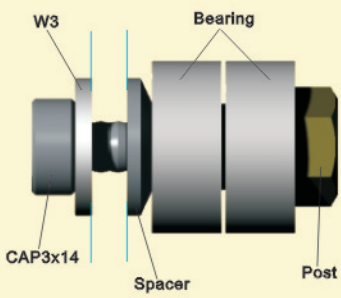
STEP 5-16 Lay Shaft

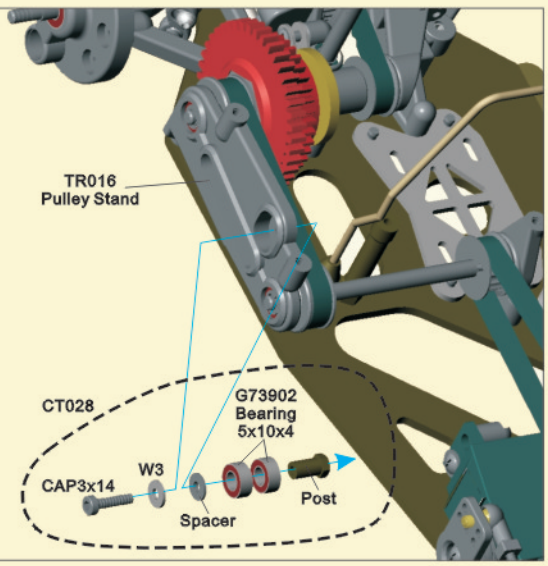
1. First put one 2x10 pin into the pinhole near side "A" of the lay shaft. The pinhole on side "A" is further from the end of the shaft then side "B"
2. Next slide one 17T pulley onto the shaft and line up the slot with the pin on side "A".
3. Slide one 5x11x4 bearing onto the shaft and secure with "E" clip.
4. Repeat the previous steps for the other side of the lay shaft except use a 16T pulley instead of the 17T



STEP 5-17 Side Pulley Stand

1. First put main drive belt around the 16T pulley and insert lay shaft into the TR016 pulley stand.
2. Put the CT020 side belt onto both side pulleys.
3. Next mount the TR016 side pulley stand to the chassis with one 3x10 screw and one 3x8 screw.



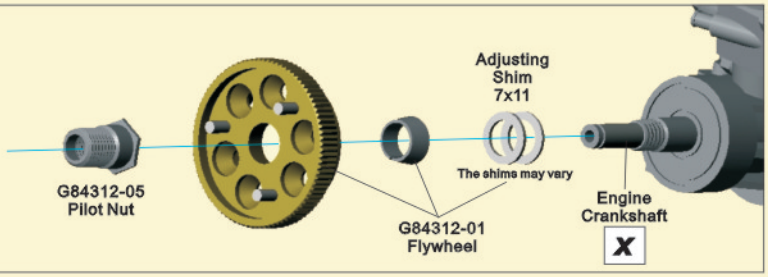


STEP 5-18 Tension Parts

1. First put one washer onto the 3x14 screw.
2. Insert the screw with washer through the TR016 pulley stand.
3. Put the following items onto the post in this order. The post will then be threaded onto the 3x14 screw on the backside of the TR016 pulley stand.
   1. Two 5x10x4 bearings 2. One coned washer
4. Secure to the backside of the TR016 pulley stand as instructed. Use picture to the right for more detail

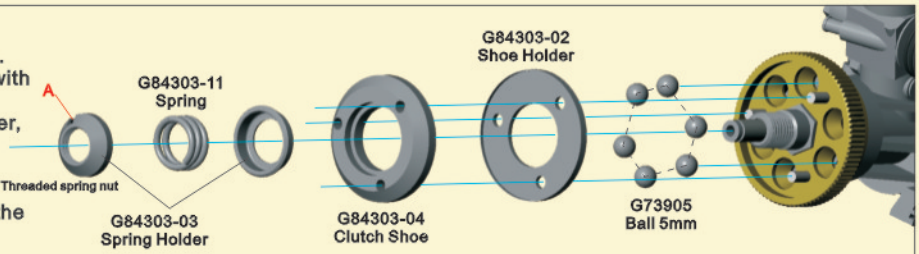
**Put only enough pressure on the belt as needed to prevent skipping. Looser belt equals less resistance.*

STEP 6-1 (1)
1. Put two 7x11 shims onto the crankshaft.
2. Next slide the coned shaped collet on.
3. Finish this step by securing the flywheel with the pilot nut.

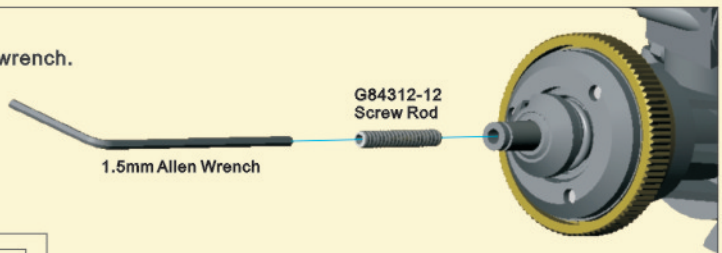


STEP 6-1 (2)
1. Put six 5mm balls into holes on the flywheel.
2. Following the balls, install the shoe holder with the flange facing the clutch shoe.
3. Finish this step by installing the spring holder, then the spring, followed by the threaded spring nut.

Note: The more tension you put on the spring the later the clutch will engage.



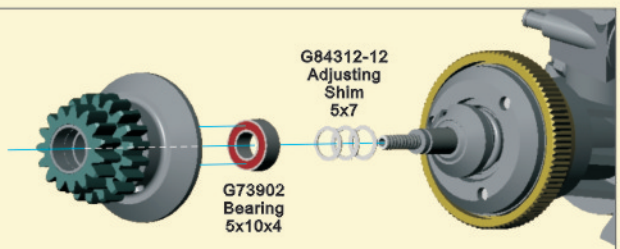
STEP 6-1 (3)
1. Screw the threaded rod into the crankshaft using a 1.5mm allen wrench.
   ** Recommend using thread lock.



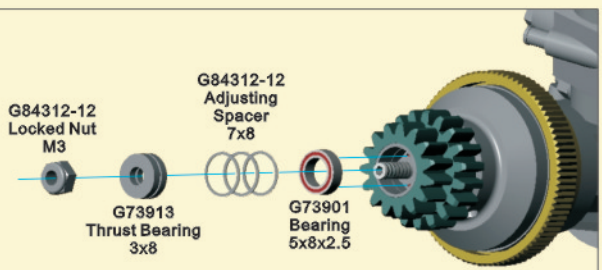
STEP 6-1 (4)
1. Thread the 2nd gear onto the clutch bell; get as tight as you can.
   ** Thread lock is recommended**
2. Put a spacer on the bell followed by the 1st pinion gear. Once again get as tight as you can.
   Thread lock is recommended

FFS015	T15 (standard)
FFS014	T14
FFS016	T16 (not included)
FFS034	T11 (not included)

G84302-35	T19(standard)
G84302-07	T18
G84303-10	T20(not included)
G84308-17	T17(not included)
G84309-14	T14(not included)

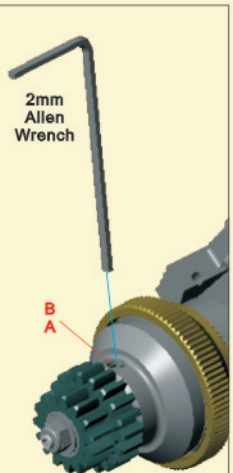


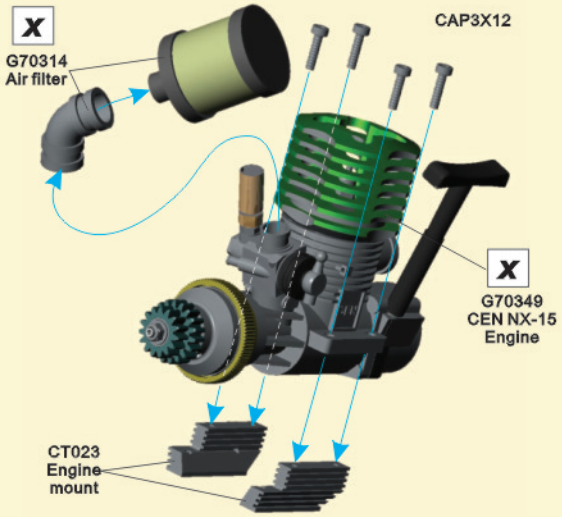
STEP 6-1 (5)
1. Put adjustment shims onto the pilot shaft. Amount of shims will vary.
2. Insert a 5x10x4 bearing into the clutch bell.



STEP 6-1 (6)
1. Install the second bearing (5x8x2.5) into the outer side of the clutch bell.
2. Shim clutch bell to reduce slop(The shims may vary).
3. Finish the step with the thrust washer and 3mm lock nut.

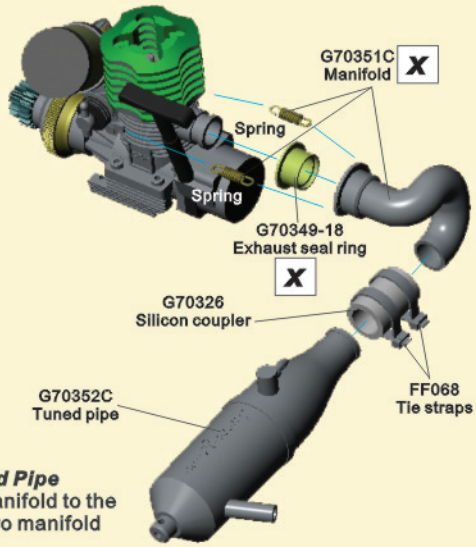
STEP 6-2
1. To adjust clutch, use a 2mm wrench to find the slot "A" in the threaded spring nut. There is a hole "B" in the clutch bell that will allow you to find and adjust the threaded spring nut.
2. How much tension you put on the spring depends on the engine, surface and overall traction. The more tension you put on the spring will allow the clutch to engage as higher RPM's. The less tension you put on the spring the earlier it will engage.





STEP 6-3 Engine Mount (For CEN .15 engine)

1. Attach the air filter to the black rubber extension.
2. Secure the air filter to the engine using a small tie strap.
3. Secure two engine mounts to the engine using four 3x12 screws.
   ** Recommend thread lock for these screws.

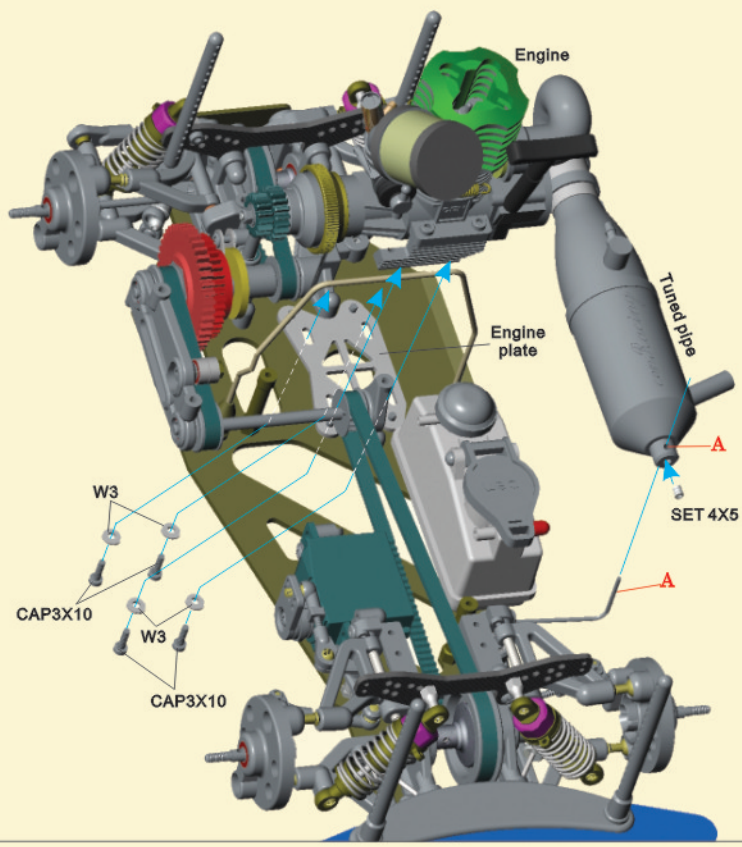


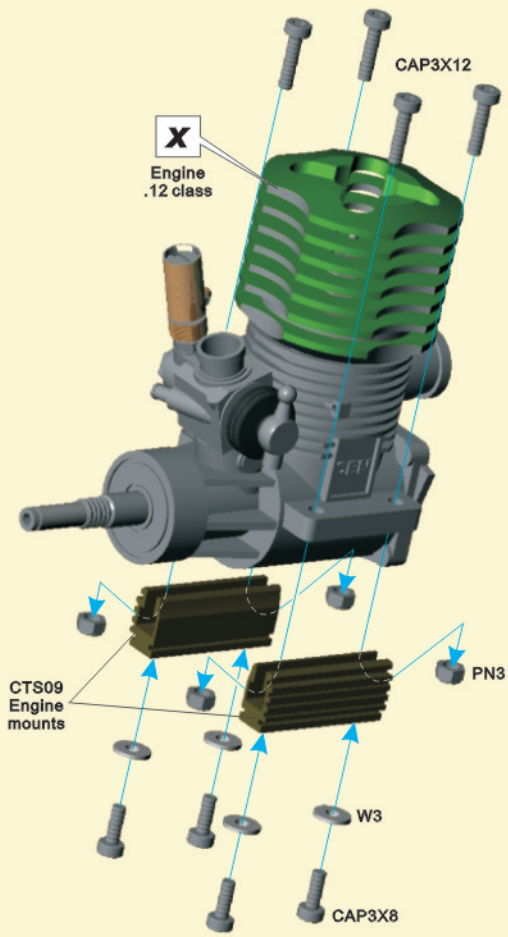
STEP 6-4 Tuned Pipe

1. Secure the manifold to the engine with two manifold springs.
2. Push the G70326 silicon coupler onto the G70352C tuned pipe.
3. Next push the tuned pipe with the silicon coupler attached onto the manifold.
4. Secure the coupler and pipe using two large FF068 tie straps

STEP 6-5

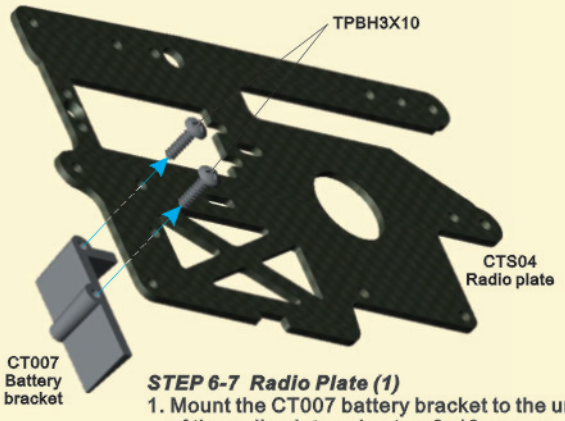
1. Secure the engine with engine mounts to the engine plate at shown in the picture.
2. Secure the engine to the plate using four 3x10 screws and washers.
   **Thread lock recommended on these screws.
3. Secure the tuned pipe to the pipe mount wire with one 4x5 screw.





STEP 6-6 Only use this step for .12 class engines using CTS09 Engine Mount

1. First slide two 3mm lock nuts into the grooves on each CTS09 engine mounts.
2. Secure the mounts to the engine using four 3x12 cap screws. These screws are going to screw into the 3mm locknuts that were installed into the mounts in the previous step. These screws will be tightened down later.
3. Now install the flywheel and clutch assembly as instructed earlier in steps 6-1. When clutch assembly is installed proceed to the next step.
4. Next attached the engine to the chassis using four 3x8 cap screws and washers.
5. With the 3x12 screws still loose slide the engine into alignment with the spur gears. Once you have the engine aligned correctly tighten, down the 3x12 cap screws from step 2 above.

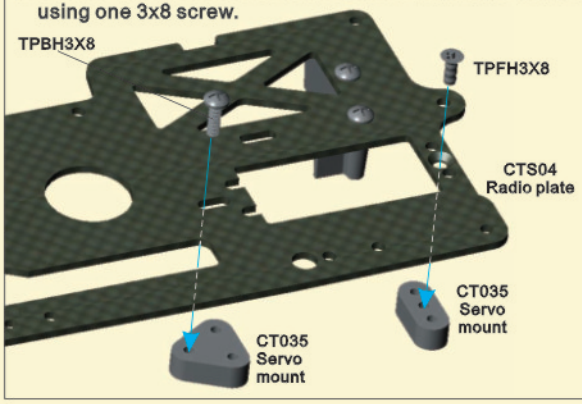


STEP 6-7 Radio Plate (1)

1. Mount the CT007 battery bracket to the underside of the radio plate using two 3x10 screws.

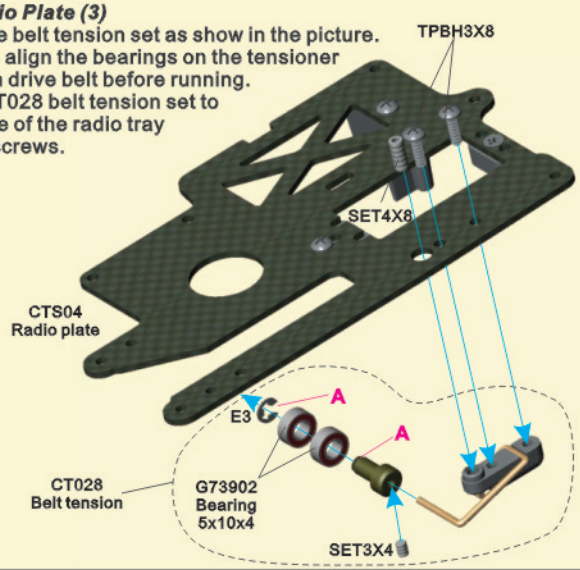
STEP 6-7 Radio Plate (2)

1. Secure the CT035 servo mounts to the underside of the radio plate using one 3x8 screw.



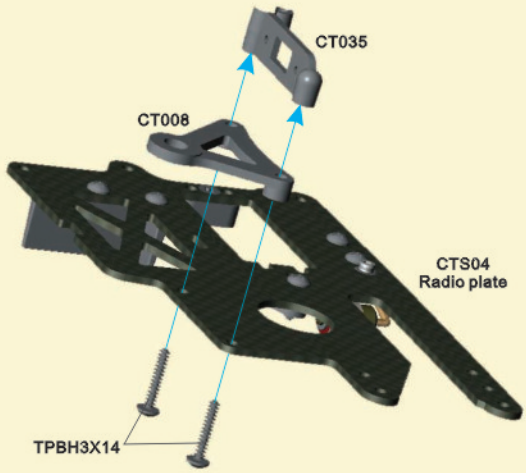
STEP 6-7 Radio Plate (3)

1. Assemble the belt tension set as show in the picture. Make sure to align the bearings on the tensioner with the main drive belt before running.
2. Mount the CT028 belt tension set to the underside of the radio tray using 2 3x8 screws.



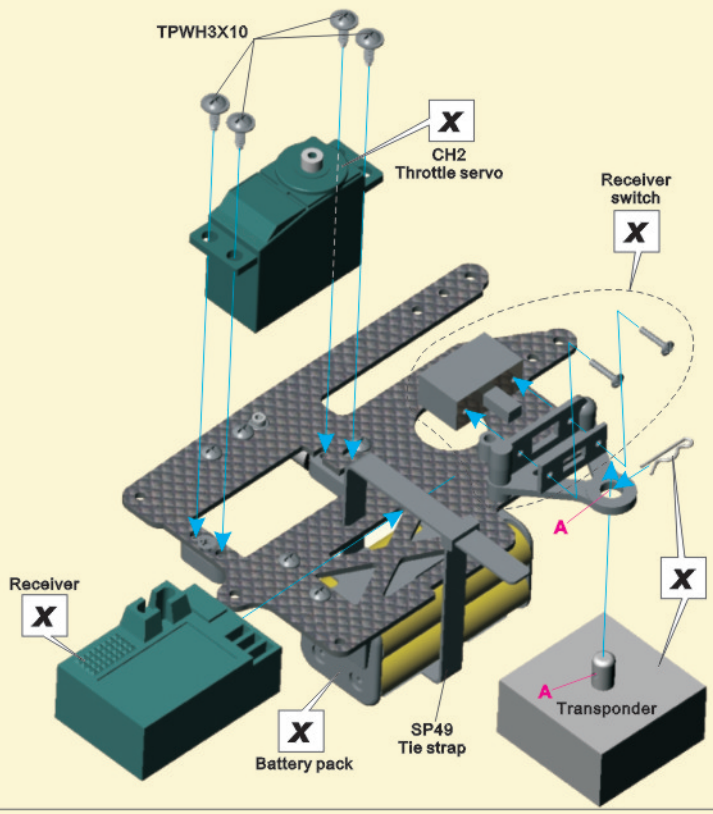
STEP 6-7 Radio Plate (4)

1. Mount your CT035, CT008 switch/transponder mount to the top of the radio tray using two 3x14 screws.



STEP 6-8 Radio Unit

1. Mount your throttle servo to the radio plate using four 3x10 screws. Notice direction of servo in picture.
2. Secure your switch to the switch mount using the screws and plate included with your switch.
3. Secure receiver and battery using one large tie strap for both items.
4. Transponder fits neatly as shown. (Transponder not included in kit.)

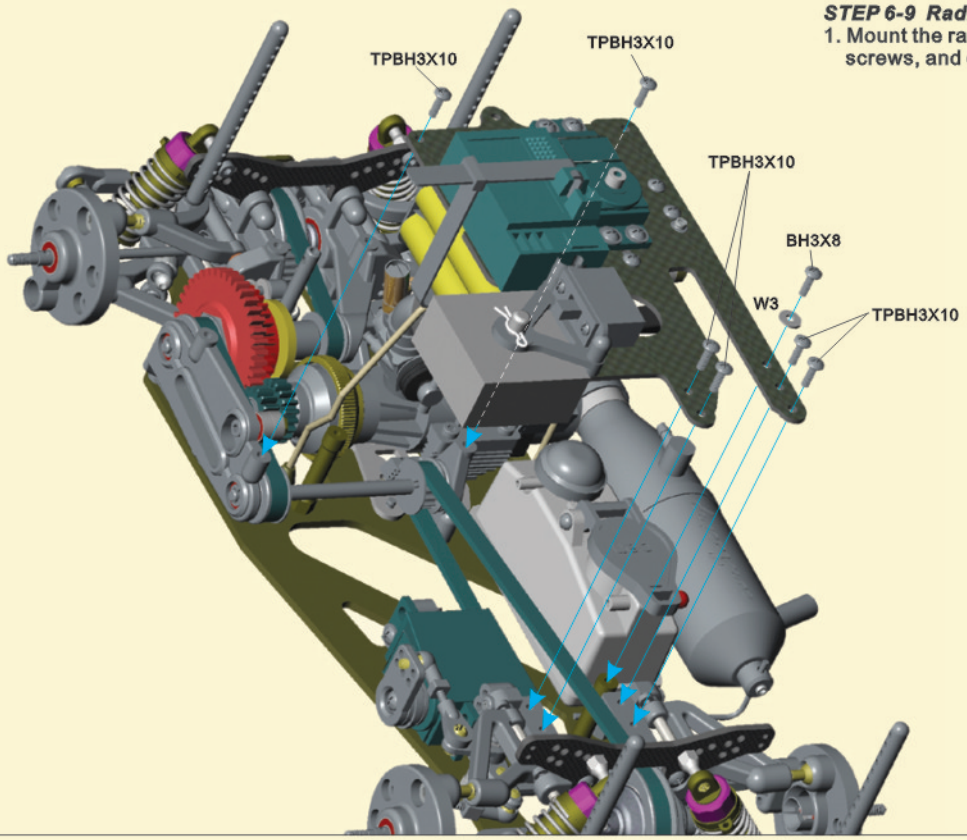


Servo sizes vary from brand and model number. Check and make sure the carburetor fully opens. If the carburetor hits the servo first loosen the mounting screws and push servo all the way forward then re-tighten. If the carburetor still hits the servo you may need to remove one of the servo mounting screws and do some minor trimming to the servo case.

BAG 06 *Chassis-Radio Plate*

STEP 6-9 Radio Plate

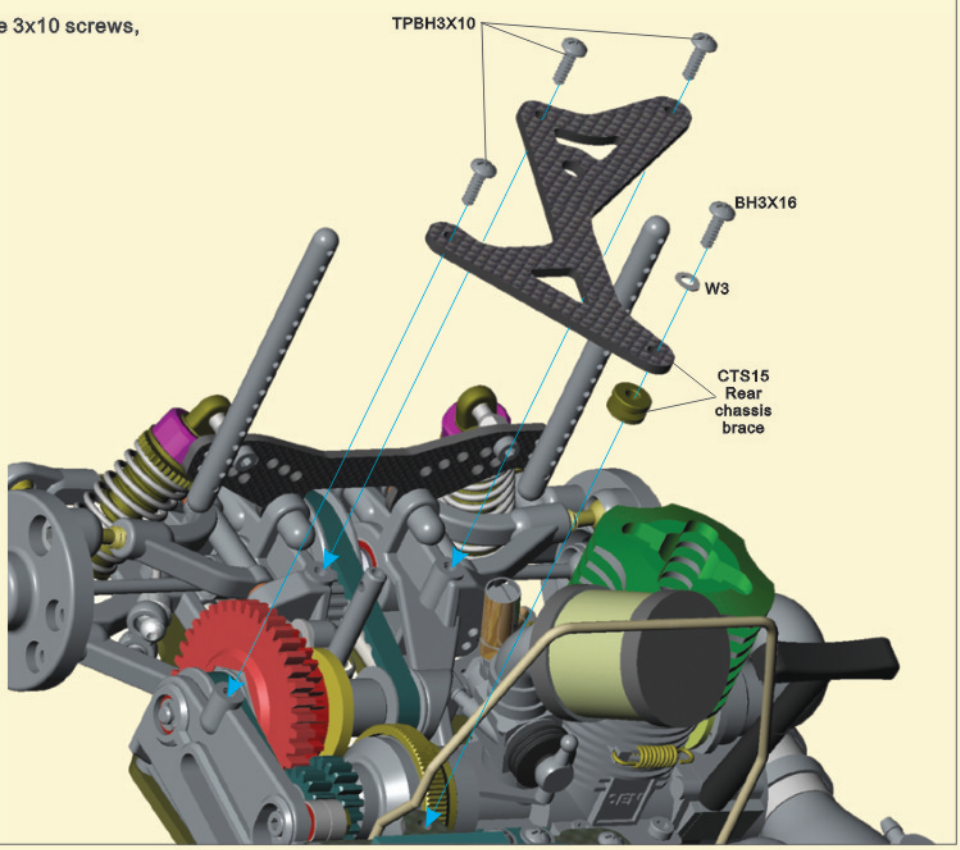
1. Mount the radio plate to your chassis using 6 3x10 screws, and one 3x8 screw and washer



BAG 04 *Rear End-Rear Chassis Brace*

STEP 6-10 Rear Chassis Brace

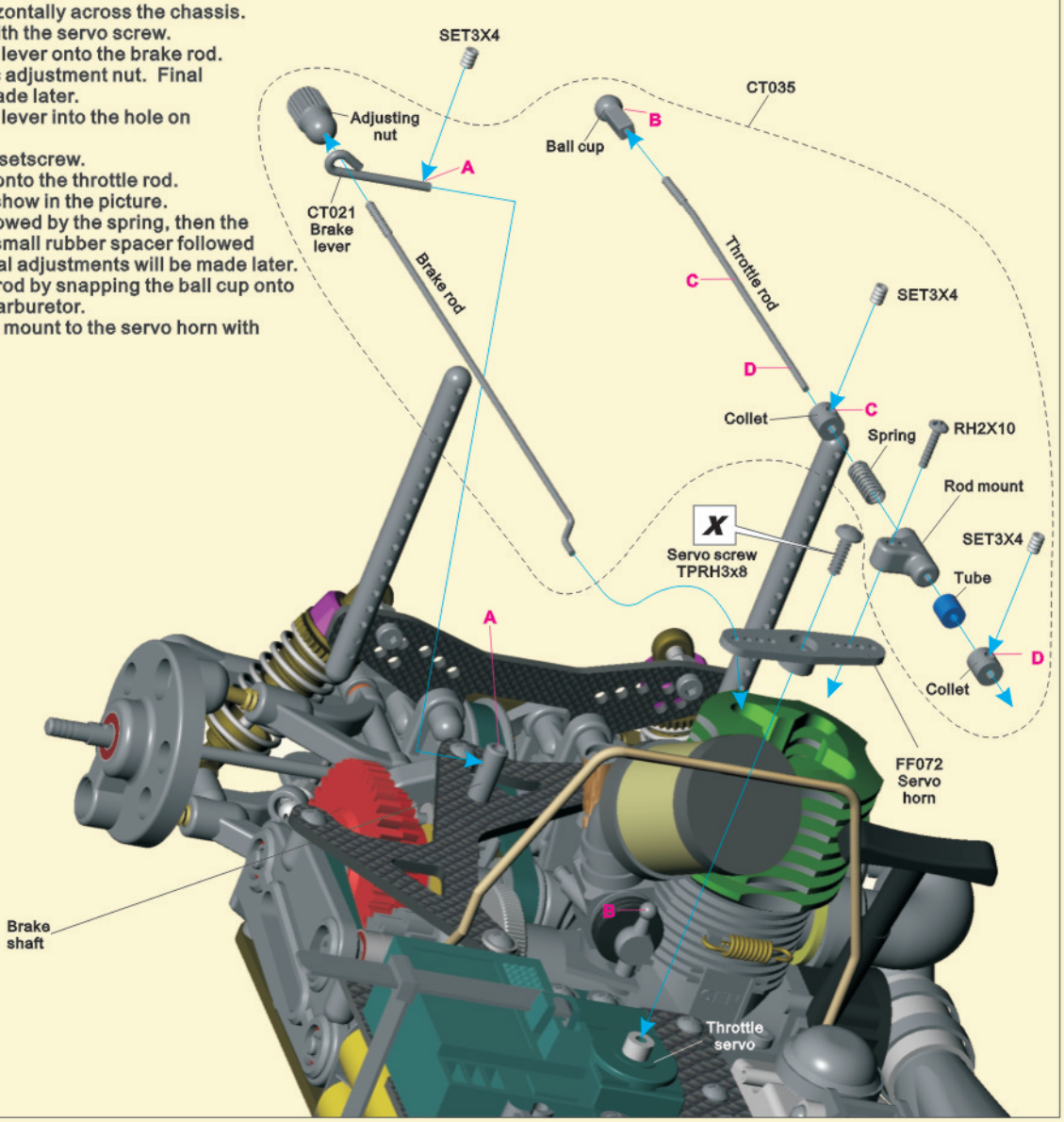
1. Mount the rear chassis brace using three 3x10 screws, one 3x16 screw and washer



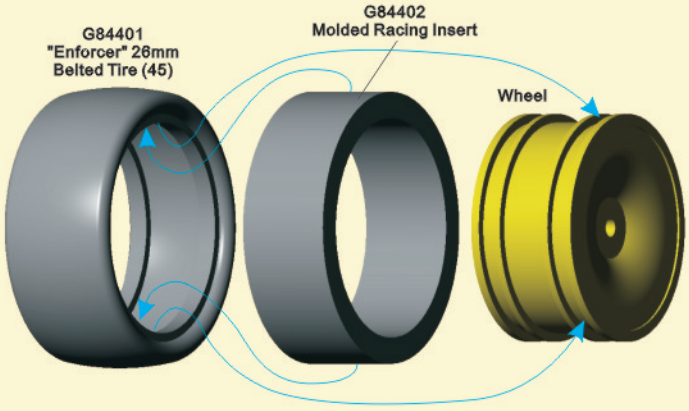
BAG 07 Radio Unit-Linkages

STEP 6-11 Linkages

1. Turn on and center your throttle servo.
2. Insert the brake rod into the 3rd hole on your servo horn.
3. Put the throttle horn onto the servo. You want the horn to be positioned horizontally across the chassis.
4. Secure servo horn with the servo screw.
5. Put the CT021 brake lever onto the brake rod.
6. Thread on the plastic adjustment nut. Final adjustment will be made later.
7. Put the CT021 brake lever into the hole on the brake shaft.
8. Secure with one 3x4 setscrew.
9. Thread one ball cup onto the throttle rod.
10. Then assemble as show in the picture.
11. First one collet, followed by the spring, then the plastic rod mount, a small rubber spacer followed by the last collet. Final adjustments will be made later.
12. Secure the throttle rod by snapping the ball cup onto the ball stud on the carburetor.
13. Next secure the rod mount to the servo horn with 2x10 screw.



BAG 08 Wheels

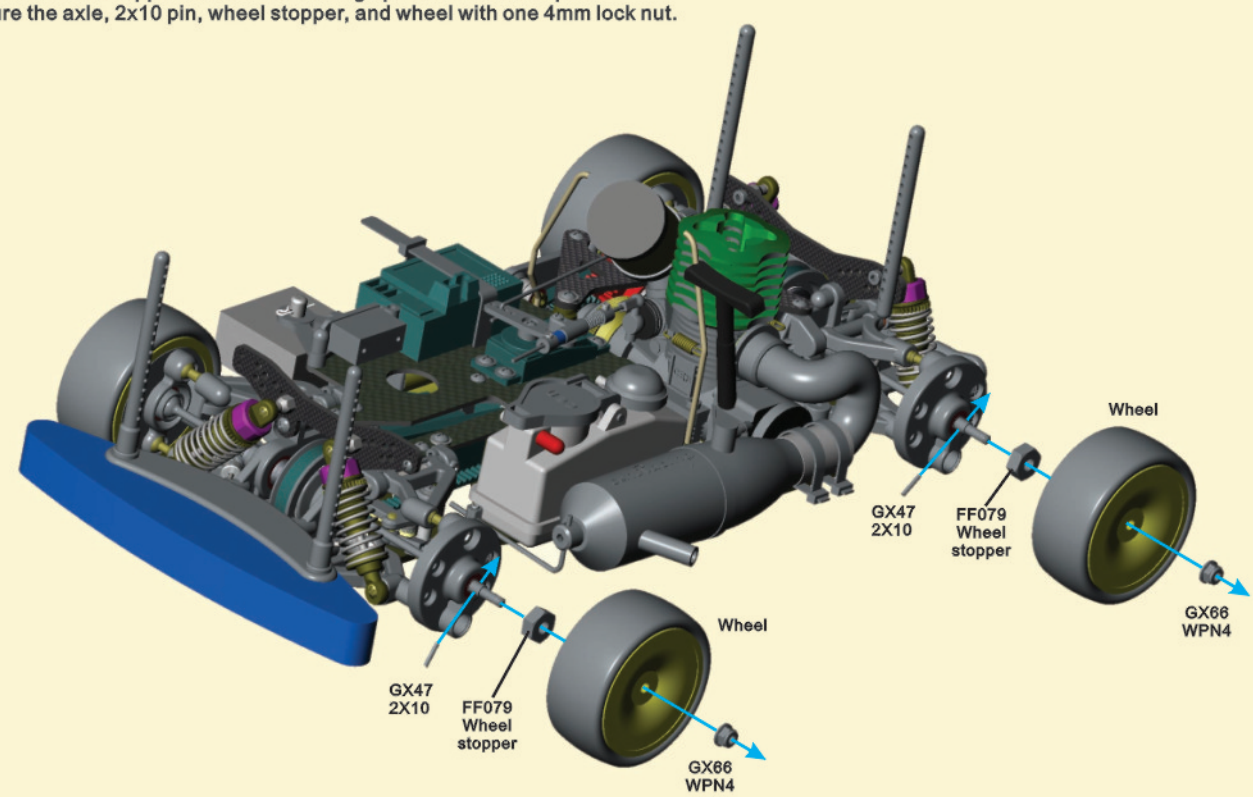


STEP 7-1 Wheel ***x4pcs***

1. Insert the inner sponge inside the rubber tire.
2. Put the tire with inner sponge onto the wheel.
3. Apply hobby glue around the tire where it meets the wheel. Lift the tire up slightly to get the glue in between the tire and the wheel.
4. **Check wheel for venting holes. If no holes are found drill small 2mm hole in wheel.

STEP 7-2

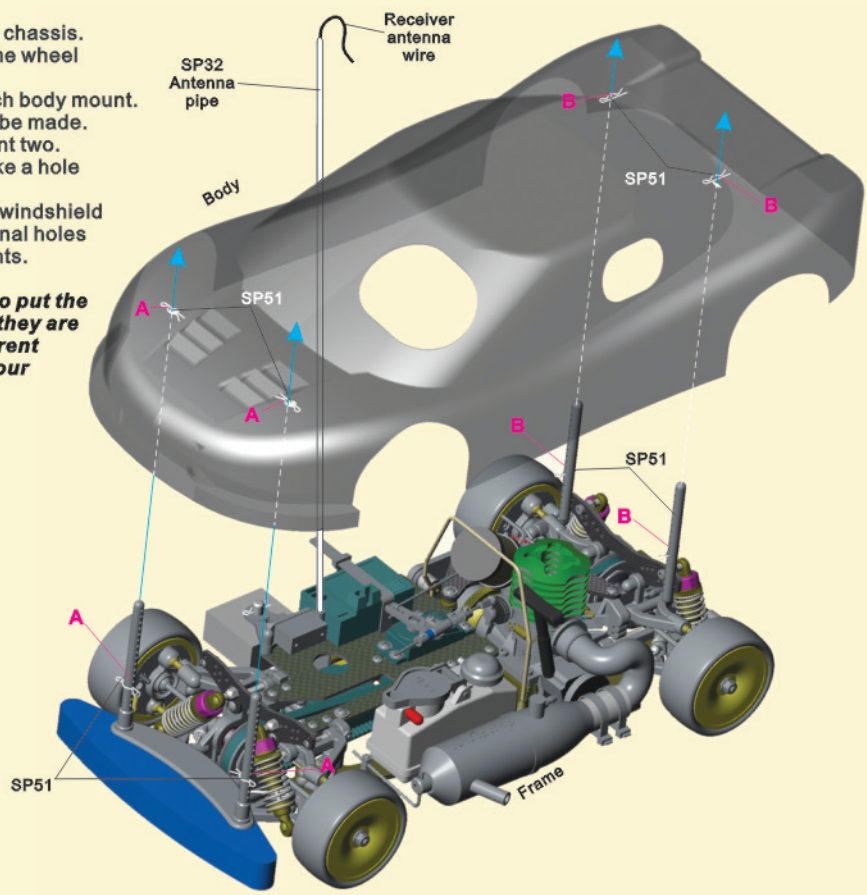
1. Install one 2x10 pin into the universal shaft as shown.
2. Slide the wheel stopper onto the axle lining up the slot with the pin.
3. Secure the axle, 2x10 pin, wheel stopper, and wheel with one 4mm lock nut.



STEP 7-3

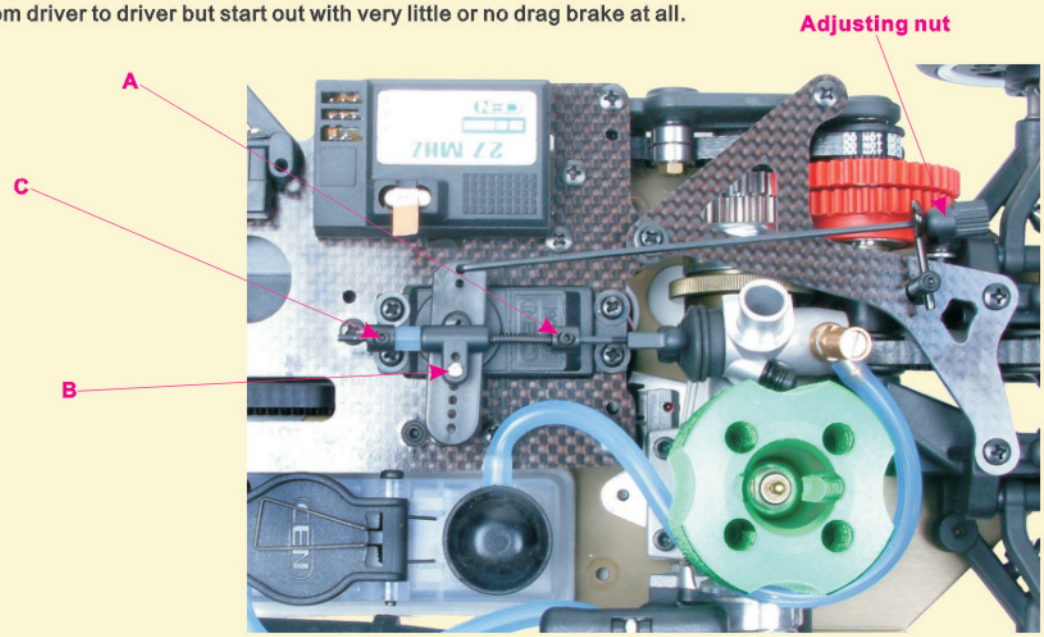
1. Line the body up how you want it to sit on your chassis. Make sure you center it from left to right and the wheel opening line up with the tires.
2. Use a felt tip marker to put ink on the tip of each body mount. This will help you mark where the hole should be made. Do the rear two holes first, and then do the front two.
3. With the body mounted correctly in place, make a hole for the antenna tube to stick through.
4. Finish your body by cutting a large hole in the windshield for fresh air to cool your engine. Make additional holes for your glow igniter and carburetor adjustments.

****Some bodies have marks to indicate where to put the holes. Before using these holes make sure they are where you need them. Bodies fit many different models of cars and may not be marked for your particular model.***

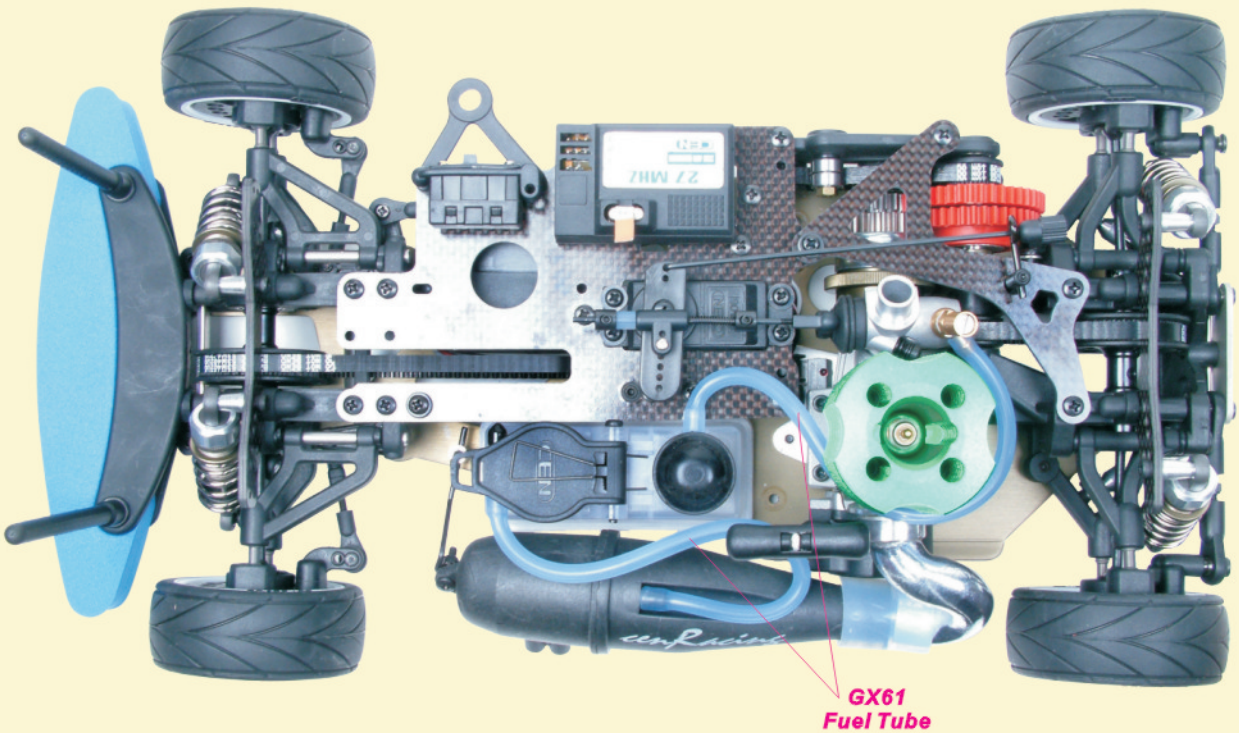


Now you need to do the final adjustments to your throttle linkage. You should have your linkage on the car as instructed in step 6-11. Turn on your radio gear and proceed with the following steps. Leave the servo in neutral unless instructed to do otherwise.

1. Loosen collet "C" and push the carburetor all the way closed (Push towards the rear of the car). Holding the carburetor closed push the collet up against the rubber tubing, leave about 1-2mm gap and tighten the setscrew to secure the collet.
2. Loosen and adjust collet "A" and slide the collet to compress the spring. Compress the spring just enough to push the carburetor all the way closed when the servo is in neutral.
3. Test your work by pulling full throttle, make sure the carburetor is completely opening up. Let go of the trigger the servo will go back to neutral. Now push the brake, the carburetor should not close anymore. If it does then adjust using either the throttle trim or put more pressure on the spring that pushed the carburetor closed.
4. Now with the throttle linkage setup adjust the drag brake using the adjusting nut at the end of the brake rod. Amount of drag brake varies from driver to driver but start out with very little or no drag brake at all.



1. Attach for first piece of fuel line from the carburetor to the fuel fitting next to the primer pump on the fuel tank.
2. Take a second piece of fuel tubing close to 12 inches long and connect it to fitting on the pipe then onto the pressure fitting on the fuel tank.
3. Your finished car should look similar to the model pictured.



Number	Name	Number	Name
	** SPARE PARTS**		** SPARE PARTS**
CT001	Rear Bulkhead	G73911	Ball 3/32"(20pcs)
CT002	Front Bulkhead	G73912	Ball 1/16" (10pcs)
CT003	Suspension Arm	G84245	Wheels(5 Spokes)
CT004	Rear Bumper	G84246	Wheels(6 Spokes)
CT006	Wheel Hub Horn	G84259	Wheels(16 Spokes)
CT007	Plastic Bracket	G84260	Wheels(10Y Spokes)
CT008	Plastic Body Post	G84290	Threaded Aluminum Shocks
CT009	Chassis	G84302-32	Spur Gear T42
CT011	Belt 3-177	G84313	2-speed Automatic Transmission
CT012	Arm Brace	G84313-01	Clutch Shoes
CT013	Front Bumper	G84313-02	Clutch Gear Hub
CT015	Pulley	G84313-03	Spur Gear T38
CT016	Lay Shaft	G84313-04	One-way Gear Hub
CT017	Brake Puck	G84313-05	Main Shaft
CT018	Suspension Hinge Pin	G84312	Centriforce Clutch
CT019	Belt 3-402	G84401	"Enforcer" 26mm Belted Tire (45)
CT020	Belt 3-171	G84402	Molded Racing Insert
CT021	Brake Cam Shaft	GX19	Steering Horn
CT022	Roll-over Bar	GX21	Servo Saver
CT024	Anti-roll Bar	GX25	Ball Screw B5.8-L
CT025	Foam Bumper	GX37	Brake Pad
CT026	Screw Set	GX38	Vented Brake Disk
CT028	Tension Parts	GX39	Engine Plate
CT029	Pivot Cushions	GX47	Pin 2x10
CT031	Rear Brace	GX61	Fuel Tube
CT032	Rod End B6.8	GX64	Oil Ring #3
CT034	Ball B6.8	GX66	Flange Nylon Nut
CT035	Controlled Linkage Parts	GXS02	Chassis Post
CT036	Muffler Mount	GXS11	Universal Swing Shaft
CT038	Caster Spacer	SP20	Ball Studs B5.8-S
CT039	Tie Rod M3x20	SP23	Ball end B5.8
CT040	Engine Mount (CEN NX-15)	SP32	Antenna pipe
CTS04	Graphite Upper Deck	SP49	Large cable tie
CTS05	Graphite Rear Chassis Brace	SP50	Small cable tie
CTS06	Graphite Shock Tower	SP51	R snap pin
CTS07	Aluminum Pivot Ball B8-M5	TR013	Steering post
CTS09	Engine Mount	TR016	Pulley stand
CTS11	Ball Differential		** TUNING PARTS**
CTS12	Pulley T39(Ball Diff.)	CT010	Aluminum Upper deck
CTS13	Diff. Outdrive Hub	CTS03	Steering Linkage
CTS14	Diff. Drive Ring	CTS08	Titanium Hinge Pins 46.5mm
CTS15	Ball Diff. Small Parts	CTS16	Aluminum Pulley T16
CTS21	Aluminum Turnbuckle M4x25	CTS17	Aluminum Pulley T17
FF006	Wheel Hubs	CTS18	Titanium Hinge Pins 58mm
FF012	Teflon Clutch Shoes	CTS20	Titanium Lay Shaft
FF044	Set Screws M9	FF080	Fiber Brake Disk (CT4-S)
FF068	Middle Cable Tie	G70314	Air filter (CT-4S)
FF079	Wheel Stopper	G70349	Engine CEN NX-15 (CT-4S)
FFS006	Ball B5.8x11	G70349-18	Exhaust Seal Ring (CT-4S)
G70102	Ball Diff. Grease	G70351C	Manifold (copper) (CT-4S)
G70103	Thrust Bearing Grease	G84262	Titanium Adj. Rod M3x20
G70201	Shock Oil #1000	G84288	Street Tire(block)
G70301	Rubber Ring #4	G84289	Street Tire(V)
G70315	Fuel Tank	GXS18	Aluminum Wheel Stopper
G70352C	Tuned Pipe (copper)	CTS23	Front One Way Shaft Set
G70326	Silicon Tube	CTS24	One Way Joint Cup
G73901	Ball bearing 5x8x2.5	CTS25	One Way Hub
G73902	Ball bearing 5x10x4	CTS26	Pulley 39T
G73906	Ball bearing 5x11x4	CTS27	Solid Shaft Set
G73907	Ball bearing 10x15x4	CTS28	Solid Shaft