

BAG C

TOOLS USED

1/16", 3/32"

REMOVE THESE PARTS FOR: Steps 19-21



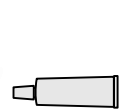
2368, qty 1
lower transmission case



6292, qty 4
4-40 x 3/8 screw



2262, qty 1
main drive shaft



6591, qty 1
Stealth lube



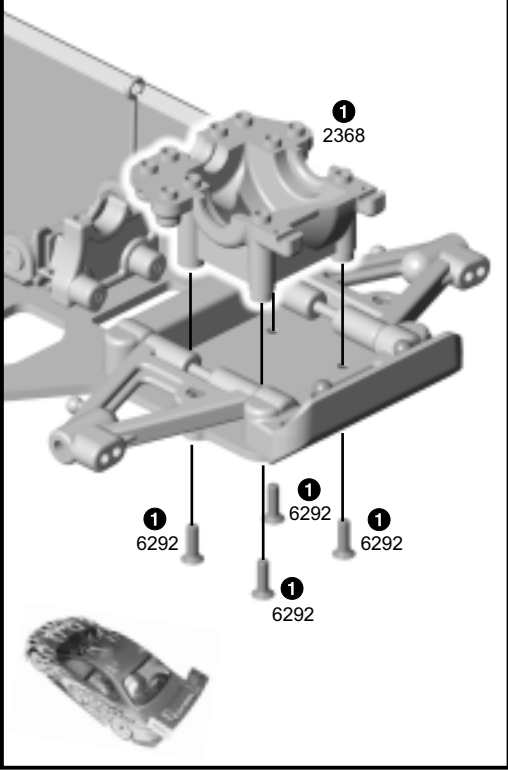
6924, qty 8
4-40 x 3/8 screw



2269, qty 1
bearing cap

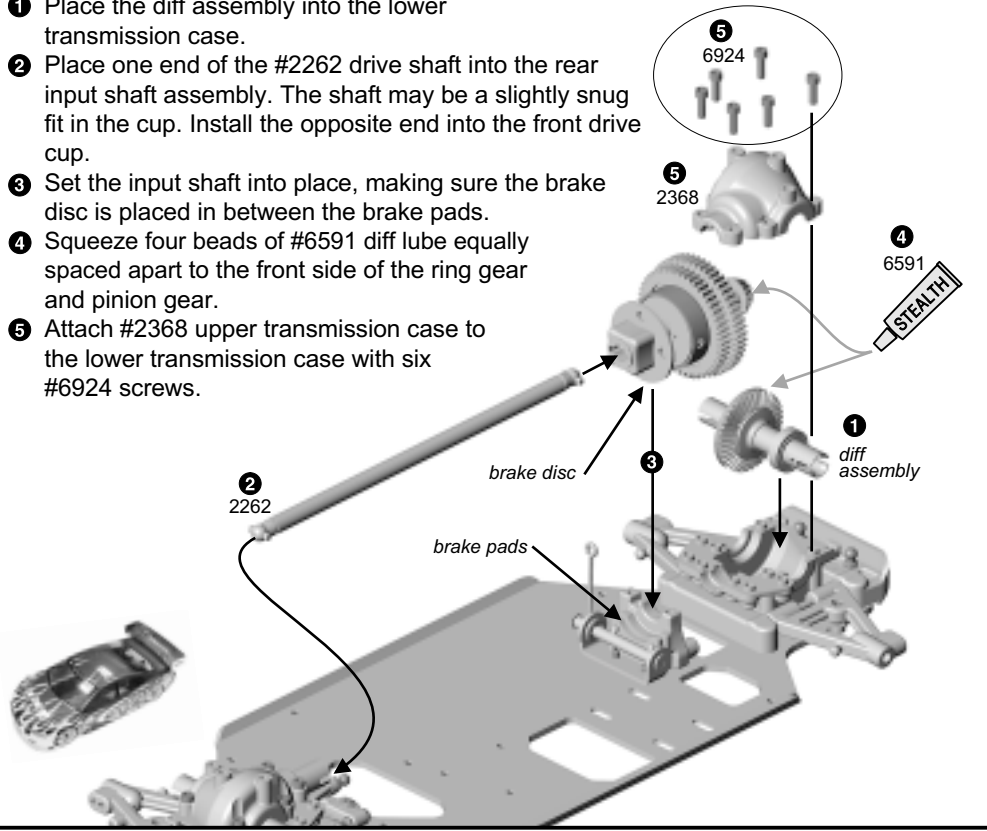
step 19

- 1 Attach #2368 lower transmission case to the chassis with four #6292 screws.



step 20

- 1 Place the diff assembly into the lower transmission case.
- 2 Place one end of the #2262 drive shaft into the rear input shaft assembly. The shaft may be a slightly snug fit in the cup. Install the opposite end into the front drive cup.
- 3 Set the input shaft into place, making sure the brake disc is placed in between the brake pads.
- 4 Squeeze four beads of #6591 diff lube equally spaced apart to the front side of the ring gear and pinion gear.
- 5 Attach #2368 upper transmission case to the lower transmission case with six #6924 screws.



step 21

- 1 Align the #2269 bearing cap over the bearing and attach with two #6924 screws. Do not overtighten.



BAG D

TOOLS USED

1/16", 3/32"

REMOVE THESE PARTS FOR: Steps 1-5

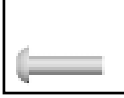


2254, qty pr front chassis braces, left & right



2254, qty pr rear chassis braces, left & right

1:1



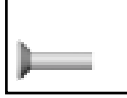
6917, qty 8 4-40 x 3/8 screw

1:1



2260, qty 1 handle

1:1

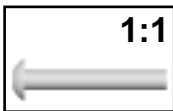


6292, qty 6 4-40 x 3/8 screw

1:1



5407, qty 2 red O-ring



7413, qty 4 4-40 x 3/4 screw



2250, qty 2 tower (front or rear)



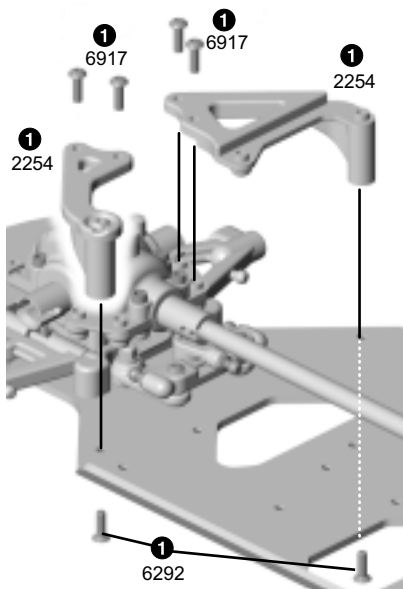
7260, qty 4 4-40 nut



6924, qty 6 4-40 x 3/8 screw

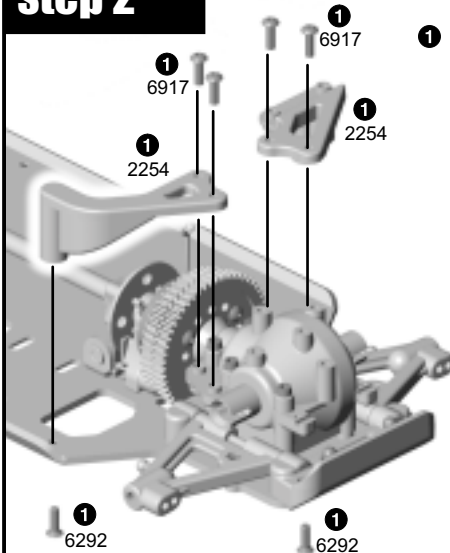
step 1

- 1 Attach #2254 right & left front chassis braces to the transmission case with #6917 screws and to the chassis with #6292 screws.



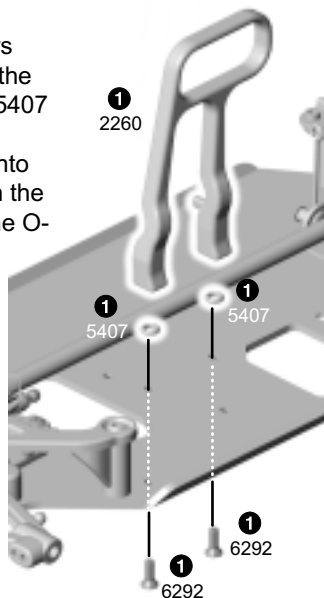
step 2

- 1 Attach #2254 right & left rear chassis braces to the transmission case with #6917 screws and to the chassis with #6292 screws.



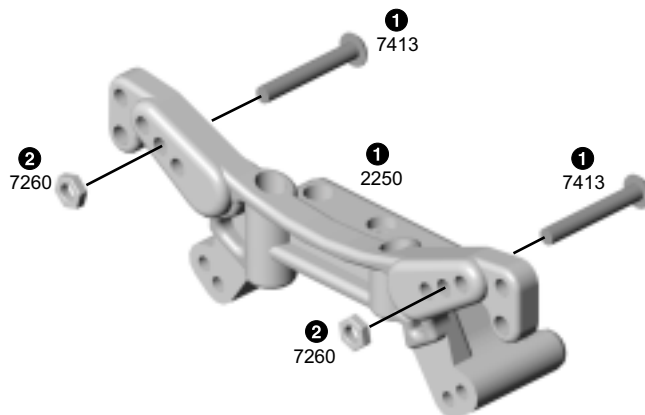
step 3

- 1 Push the #6292 screws through the bottom of the chassis and place a #5407 O-ring on each screw.
- 2 Place #2260 handle onto the screws and tighten the screws to compress the O-rings.



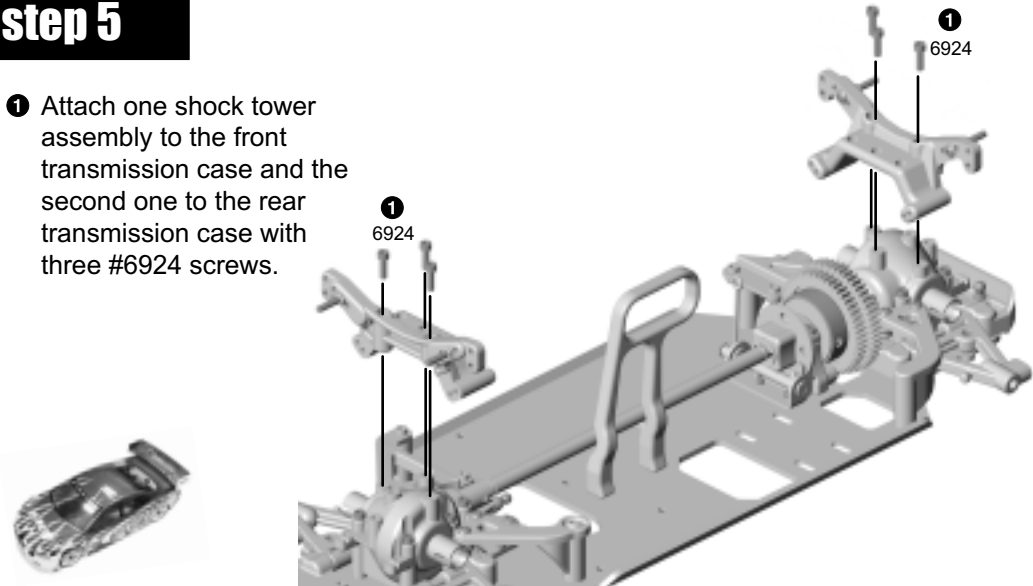
step 4

- 1 Install the #7413 screws through the middle hole on the #2250 front / rear tower.
- 2 Then thread on the #7260 nuts and tighten.
- 3 Repeat step for second tower.



step 5

1 Attach one shock tower assembly to the front transmission case and the second one to the rear transmission case with three #6924 screws.



TOOLS USED

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BAG E

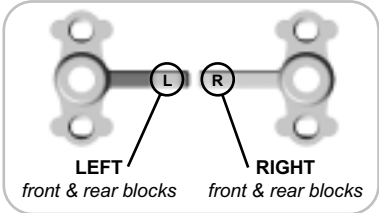
REMOVE THESE PARTS FOR: Step 1

6588, qty 1 black grease	3886, qty 4 CVD axle	7381, qty 4 CVD coupling	7381, qty 4 CVD cross pin	3888, qty 4 CVD dogbone	7381, qty 1 MIP threadlock	7381, qty 4 CVD set screw	
3977, qty 8 3/16 x 3/8 bearing, rubber sealed	2247, qty 2 pr steering/hub carrier left and right	3965, qty 4 bearing spacer	7368, qty 4 thin spacer	7369, qty 4 roll pin	6273, qty 2 ball end (silver)	7260, qty 2 4-40 plain nut	2257, qty 2 rear toe ball end (gold)

step 1

CVD ASSEMBLY

- Spread some Associated #6588 black grease inside the #3886 axle hole where shown, then on the #7381 coupling and insert the coupling into the axle.
- Slide the #3886 axle into the #3888 dogbone, aligning the cross pin holes.
- Insert the #7381 cross pin, making sure it is evenly spaced on both sides of the dogbone.
- Add a small drop of MIP thread lock to the #7381 set screw. Angle and turn the CVD so the set screw can be screwed in with the Allen wrench.
- Repeat steps for the three remaining CVDs.



STEERING / HUB CARRIER ASSEMBLY

- Slide one #3977 bearing onto the axle. Slide the axle assembly into the back of the #2247 steering/hub carrier
- Slide in a #3965 bearing spacer
- Install the second #3977 bearing into the steering / hub carrier, followed by one #7368 thin spacer.
- Insert the #7369 roll pin into the axle.
- Repeat steps 6-9 for the three remaining steering / hub carriers.
- FRONT:** Thread a #6273 ball end into the bottom of one right and one left steering / hub carriers for the front. Add a #7260 plain nut.
- REAR:** Thread a #2257 rear toe ball end into the bottom of one right and one left steering / hub carriers for the rear. Add a #2257 large plain nut.

FRONT
Use this hole in the front steering/hub carriers

REAR
Use this hole in the rear steering/hub carriers

BAG E

TOOLS USED

REMOVE THESE PARTS FOR: Steps 2-4



2246, qty 8 pivot ball



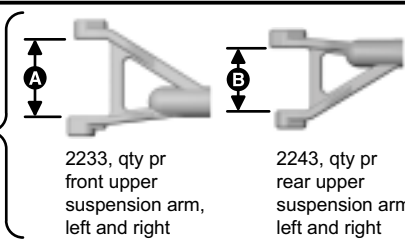
2249, qty 8 socket cap



6924, qty 16 4-40 x 3/8 screw

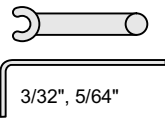
1:1

Compare the front and rear upper arms. Opening A (front upper arm) is wider than opening B (rear upper arm)



2233, qty pr front upper suspension arm, left and right

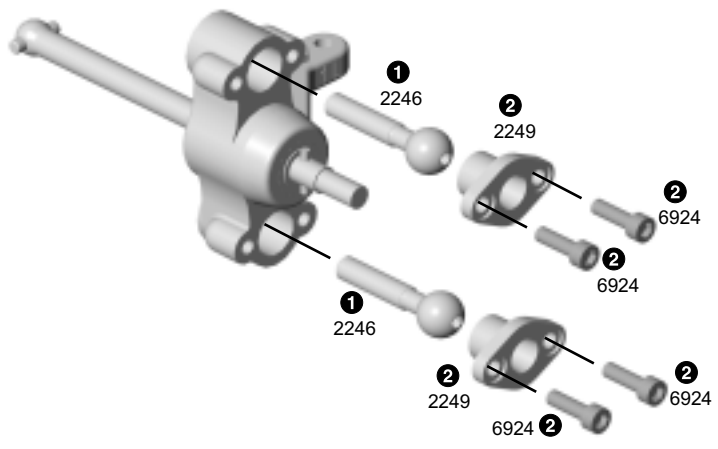
2243, qty pr rear upper suspension arm, left and right



3/32", 5/64"

step 2

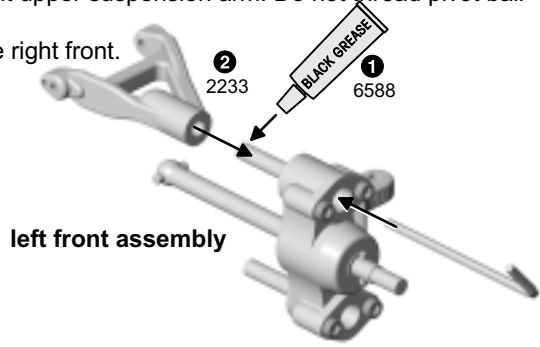
- 1 Insert one #2246 pivot ball into the upper socket and one into the lower socket of the steering / hub carrier assemblies.
- 2 Insert the #2249 socket caps and secure them down with #6924 screws. Tighten the socket cap screws so that the pivot ball moves freely without any binding or excess play.
- 3 Repeat for the remaining three steering / hub carriers.



step 3

FRONT UPPER SUSPENSION ARM

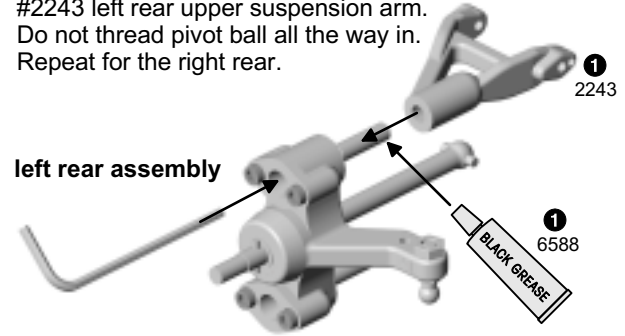
- 1 Add a small amount of #6588 black grease to the end of the threads on the pivot ball.
- 2 Use your 5/64" Allen wrench to screw the pivot ball into the #2233 left front upper suspension arm. Do not thread pivot ball all the way in.
- 3 Repeat for the right front.



step 4

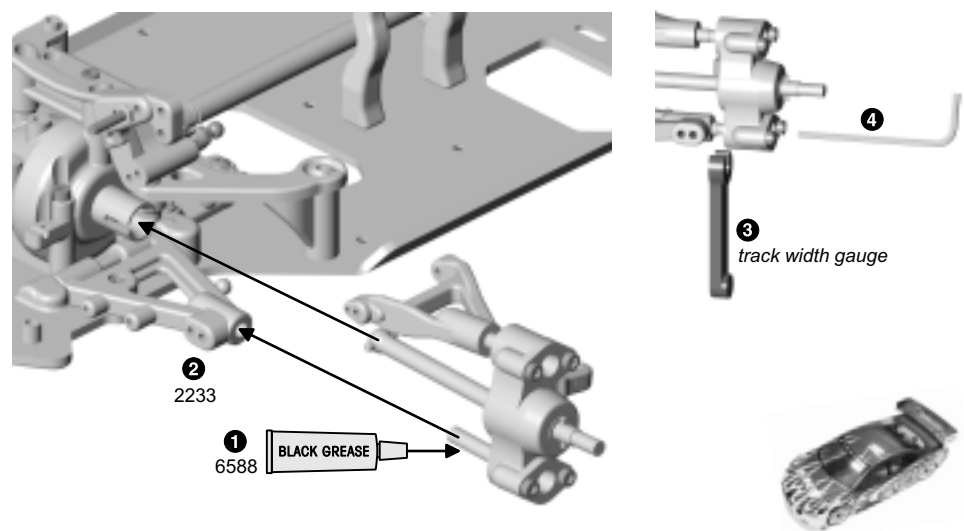
REAR UPPER SUSPENSION ARM

- 1 Add a small amount of #6588 black grease to the end of the threads on the pivot ball.
- 2 Use your 5/64" Allen wrench to screw the pivot ball into the #2243 left rear upper suspension arm. Do not thread pivot ball all the way in.
- 3 Repeat for the right rear.



step 5

- 1 Add a small amount of #6588 black grease to the end of the threads on the pivot ball.
- 2 Use your Allen wrench to screw the pivot ball into the #2233 front lower suspension arm.
- 3 Slide your supplied track width gauge in between the steering / hub carrier assembly and the lower arm.
- 4 Use your 5/64" Allen wrench to tighten the pivot ball until the gauge is sandwiched in between the two. Turn the pivot ball counter clockwise until the gauge can be removed.
- 5 Repeat for the lower suspension arms for the right front, left rear, and the right rear.



1:1

2235, qty 2
front hinge pin

1:1

1:1

1:1

TOOLS USED

REMOVE THESE PARTS FOR:
Steps 6-



9146, qty 4
2/56 x 3/16 screw



2239, qty 4
caster clip

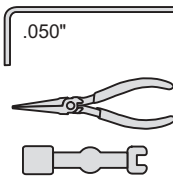
2235, qty 2
rear hinge pin



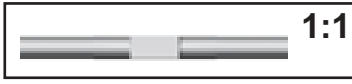
6274, qty 4
ball cup,
black



2251, qty 4
ball cup,
gray



6264, qty 2
steering link
turnbuckle

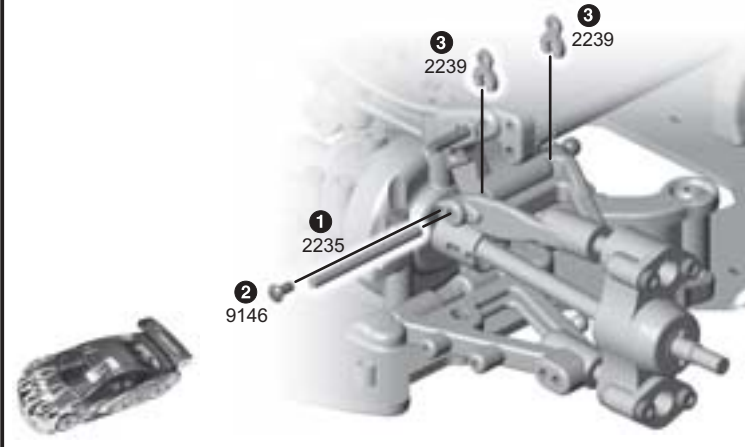


2253, qty 2
rear toe
turnbuckle



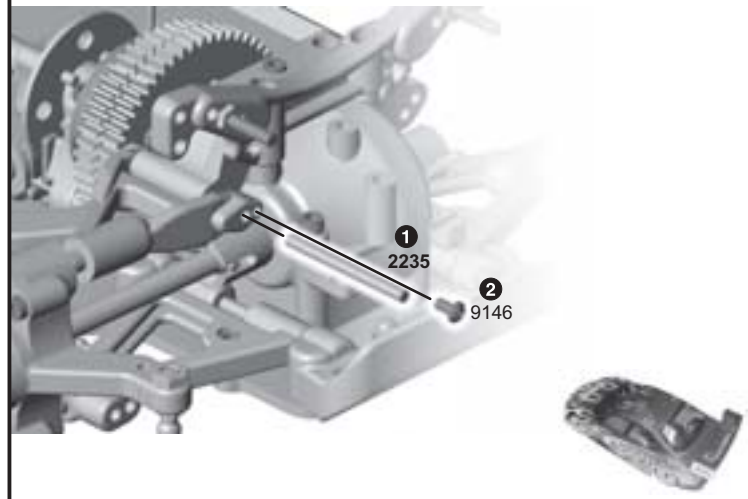
step 6

- Line up the #2233 front upper suspension arm with the inner hole on the shock tower, making sure the CVD dogbone is in the slots of the outride. Push a #2235 hinge pin into the arm and the shock tower.
- Fasten #9146 screw into the upper arm. The screw holds in the hinge pin.
- Clip in the two #2239 caster clips. Place one on each side of the tower. This sets your caster at 9 degrees.
- Repeat step 6 for the right front.



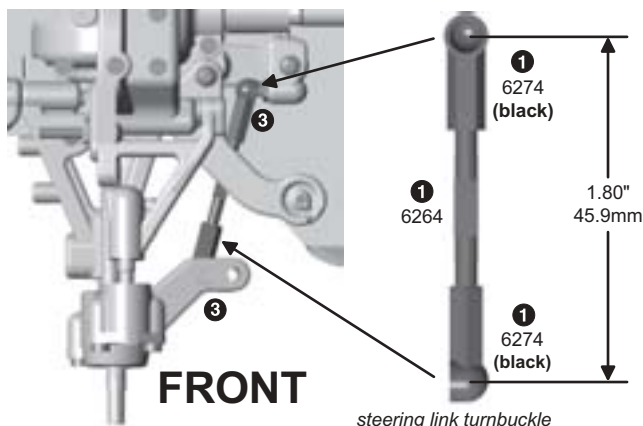
step 7

- Line up the #2243 rear upper suspension arm with the inner hole on the shock tower, making sure the CVD dogbone is in the slots of the outrides. Push #2235 hinge pin into the arm and the tower.
- Fasten #9146 screw into the upper arm.
- Repeat step 7 for the right rear.



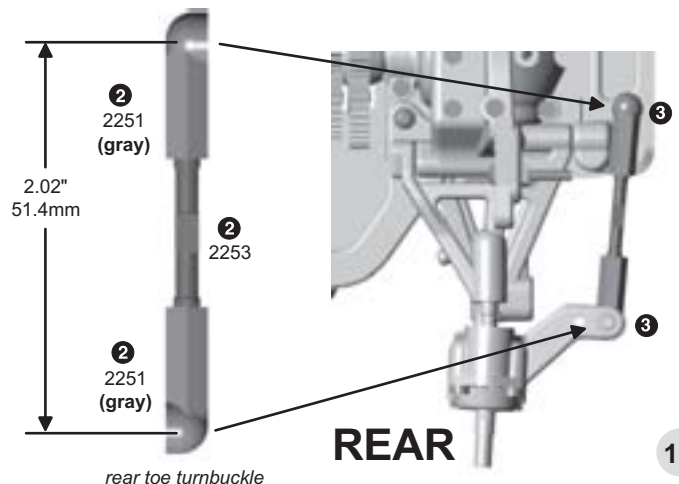
step 8

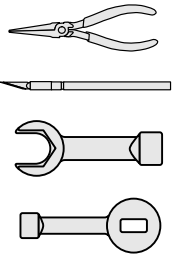
- Twist the #6274 ball cups onto the #6264 turnbuckle until you get the dimension shown (steering turnbuckle). Assemble both turnbuckles.
- Twist the #2251 gray ball cups onto the #2253 rear toe turnbuckle until you get the dimension shown (rear toe turnbuckle). Assemble both turnbuckles. This results in 2° rear toe.
- Snap all four turnbuckles into place where shown.



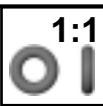
To screw ball cup onto turnbuckle:

- Grip middle of turnbuckle with needlenose pliers.
- Thread on ball cup by hand at first, then use turnbuckle tool to finish.
- Squeeze turnbuckle onto ball end with needlenose pliers.





REMOVE THESE PARTS FOR: Steps 1-4



5407, qty 8 red O-ring



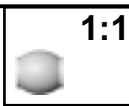
6299, qty 8 E-clip



8456, qty 4 VC foam



6428, qty 4 shock cap



7217, qty 4 shock pivot ball



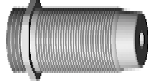
7217, qty 4 shock eyelet



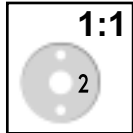
6469, qty 4 large O-ring



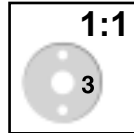
8844, qty 4 shock shaft, .39 stroke



3963, qty 4 threaded macro shock body blue



6465, qty 2 shock piston #2 rear



6465, qty 2 shock piston #3 front



8456, qty 4 VC bobbin

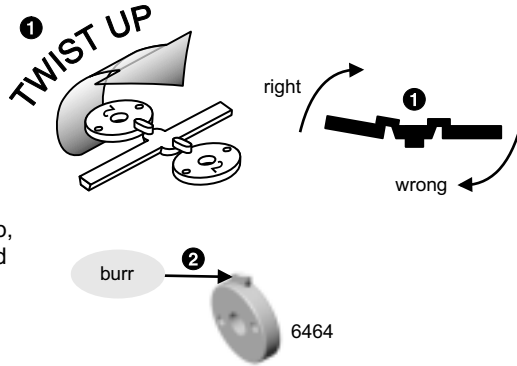


5423, qty 1 40 wt silicone oil

step 1

TRIM SHOCK PISTON

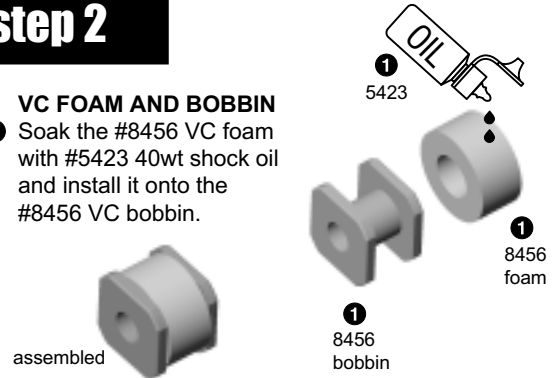
- 1 Burrs on the #6465 shock piston interfere with smooth shock action within the shock body. To remove from tree without creating burrs, twist up, not down. Remove two #2 and two #3 shock pistons.
- 2 Remove remaining burrs carefully with a hobby knife.



step 2

VC FOAM AND BOBBIN

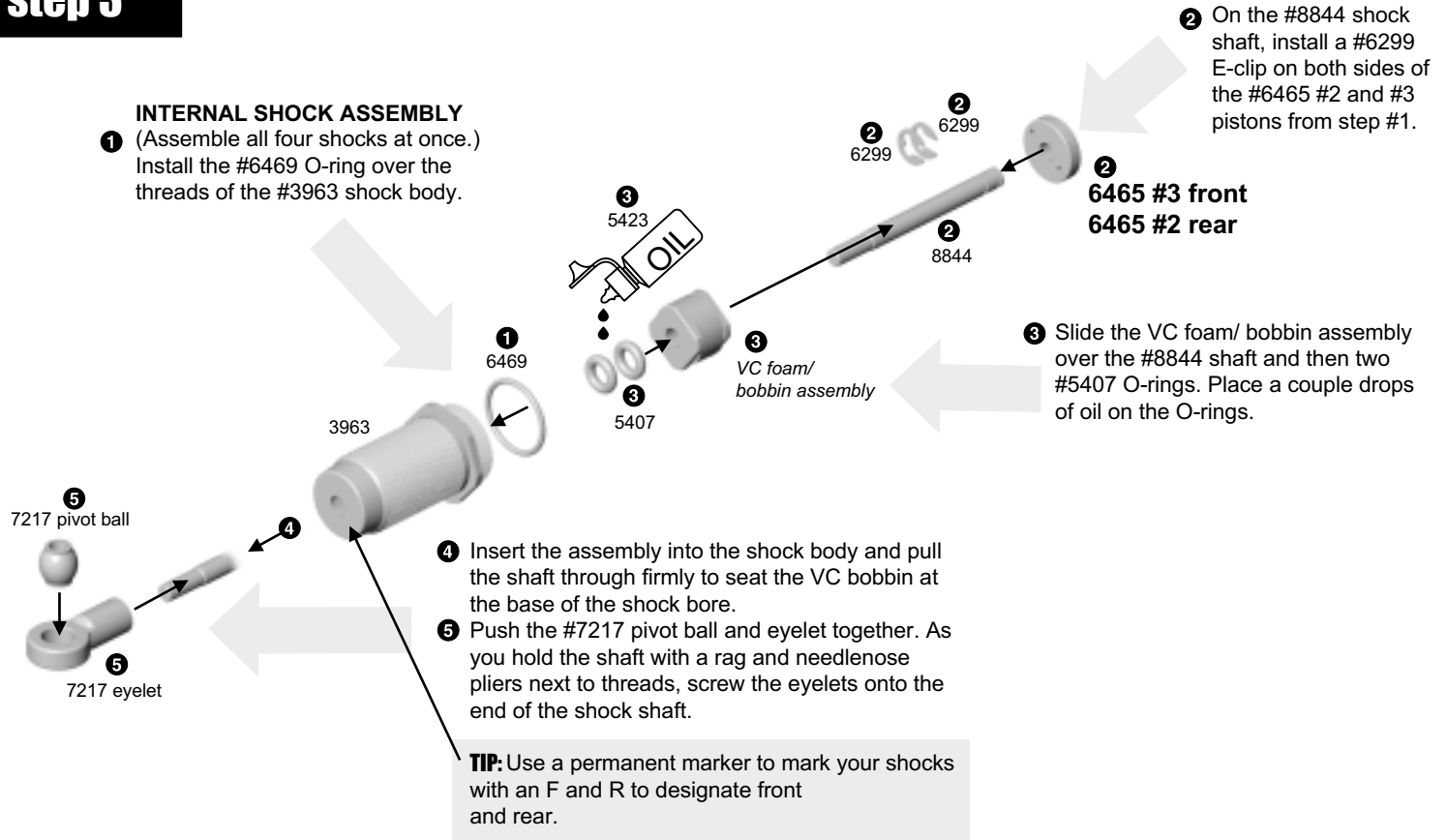
- 1 Soak the #8456 VC foam with #5423 40wt shock oil and install it onto the #8456 VC bobbin.



step 3

INTERNAL SHOCK ASSEMBLY

- 1 (Assemble all four shocks at once.) Install the #6469 O-ring over the threads of the #3963 shock body.



- 2 On the #8844 shock shaft, install a #6299 E-clip on both sides of the #6465 #2 and #6465 #3 pistons from step #1.

6465 #3 front
6465 #2 rear

- 3 Slide the VC foam/ bobbin assembly over the #8844 shaft and then two #5407 O-rings. Place a couple drops of oil on the O-rings.

- 4 Insert the assembly into the shock body and pull the shaft through firmly to seat the VC bobbin at the base of the shock bore.
- 5 Push the #7217 pivot ball and eyelet together. As you hold the shaft with a rag and needlenose pliers next to threads, screw the eyelets onto the end of the shock shaft.

TIP: Use a permanent marker to mark your shocks with an F and R to designate front and rear.

step 4









- 1 Holding the shock upright, fill with oil to the top of the body.
- 2 Slowly move the shaft up and down several times to allow air bubbles to escape to the top.
- 3 Refill with oil to the top of the body.
- 4 Push the shaft up until the piston is level with the top of the body. The oil will bulge up above the shock body.
- 5 Fill The #6428 shock cap about halfway with oil and install onto the body. Try to retain as much oil as possible during assembly. The shaft will extend out as you tighten the cap down.

SETTING THE REBOUND

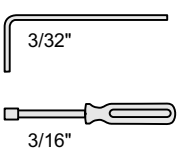
- 6 Move the shock shaft in and out a few times an then push it all the way in. It should be easy to push the shaft in until the eyelet hits the body
- 7 Then the shaft should push itself out to its full length very slowly.
- 8 If the shock does not push out this far there is not enough oil in it. Add a drop of oil and try steps 6-7 again.
- 9 If the shock rebounds too fast, or you cannot push the shaft in until the eyelet hits the body, there is too much oil. Loosen the cap about a full turn and pump out a small amount of oil by pushing the shaft in. Retighten the cap and try steps 6-7 again.
Too much oil in the shock will result in leakage.

BAG F

REMOVE THESE PARTS FOR: Steps 5-8

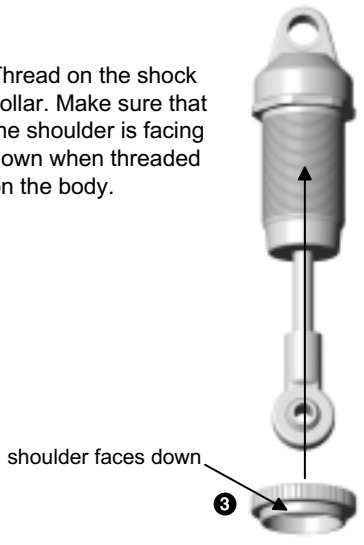
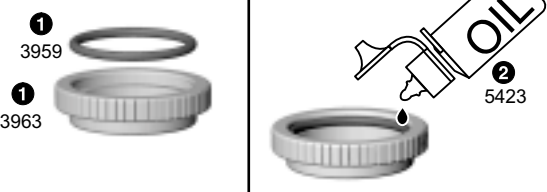
<p>1:1</p>  <p>6925, qty 4 4-40 x 1/2 screw</p>	<p>1:1</p>  <p>6472, qty 4 shock nut, small</p>	<p>1:1</p>  <p>3959, qty 4 shock collar O-ring</p>	 <p>3946, qty 2 spring, copper, front</p>	 <p>3944, qty 2 spring, gold, rear</p>
 <p>6473, qty 4 shock bushing</p>	 <p>3963, qty 4 shock collar</p>	 <p>6475, qty 4 spring cup</p>		

TOOLS USED



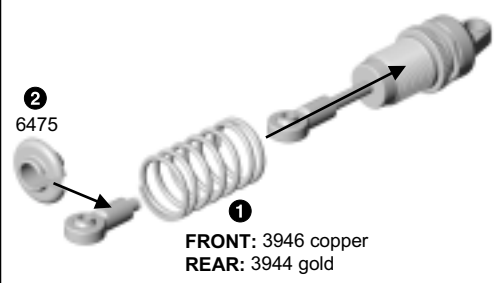
step 5

- 1 Slide one #3959 black O-ring into the groove in the #3963 threaded shock collar.
- 2 Put one drop of oil on the O-ring before you thread on the shock collar.
- 3 Thread on the shock collar. Make sure that the shoulder is facing down when threaded on the body.



step 6

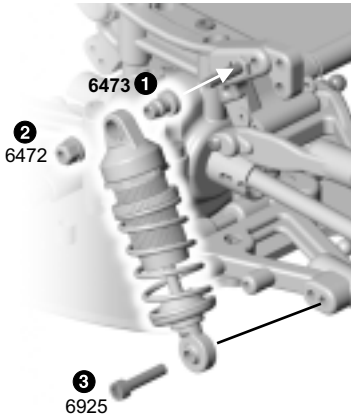
- 1 Slide the #3946 copper springs on the front shocks, and #3944 gold springs on the rear shocks.
- 2 Compress the spring to add the #6475 spring cup to all four shocks.



step 7

FRONT SHOCK MOUNTING

- 1 Add the #6473 shock bushing to the front shock tower screw shown.
- 2 Push the shock cap over the bushing and add a #6472 shock nut. **Do not over tighten or the shock will bind.**
- 3 Fasten the shock eyelet into the outer hole of the arm with a #6925 screw.
- 4 Repeat steps for second front shock.

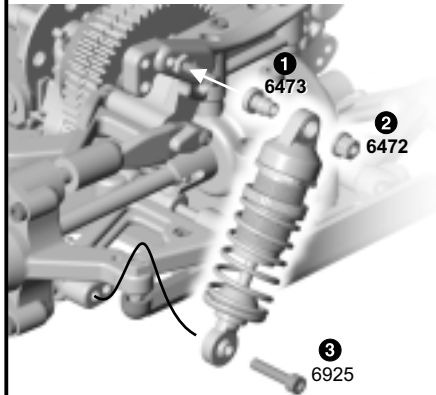


step 8

REAR SHOCK MOUNTING

- 1 Add the #6473 shock bushing to the rear shock tower screw shown.
- 2 Push the shock cap over the bushing and add #6472 shock nut. **Do not over tighten or the shock will bind.**
- 3 Fasten the shock eyelet into the outer hole of the arm with a #6925 screw.
- 4 Repeat steps for second rear shock.

Your front and rear shock collars set ride height. For more information on ride height, see page 30.



BAG G

REMOVE THESE PARTS FOR:
Step 1



7673, qty 3
4-40 x 5/16 screw



5407, qty 3
red O-ring

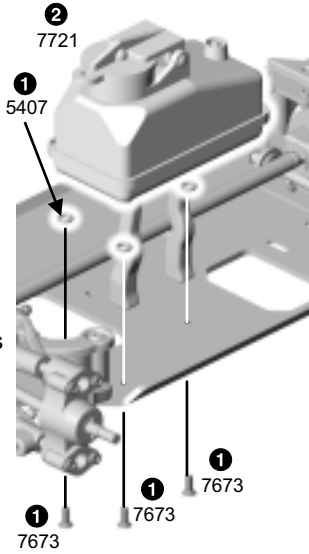


7721, qty 1
fuel tank

1/16"

step 1

- 1 Push the #7673 screws through the bottom of the chassis and place a #5407 red O-ring on each screw.
- 2 Set the #7721 tank onto the screws and tighten the screws just enough to slightly compress the O-rings so the tank can't move around.



BAG H

REMOVE THESE PARTS FOR:
Steps 1-5B



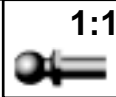
9146, qty 4
2-56 x 3/16 screw



2258, qty 1
receiver box



9180, qty 4
servo horn



3857, qty 1
short special ball end, black



7336, qty 2
servo mount



7336
offset spacer



qty 2 thin (.050")
qty 2 thick (.100")



7337, qty 8
steel washer



6917, qty 8
4-40 x 3/8 screw



2256, qty 1
radio tray



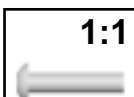
3720, qty 2
wire tie, 8"



3718, qty 1
wire tie, 12"



2238, qty 2
throttle servo spacer
med (.080")

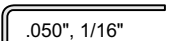


6918, qty 4
4-40 x 1/2 screw

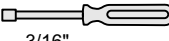


2252, qty 1
battery mount

TOOLS USED



.050", 1/16"

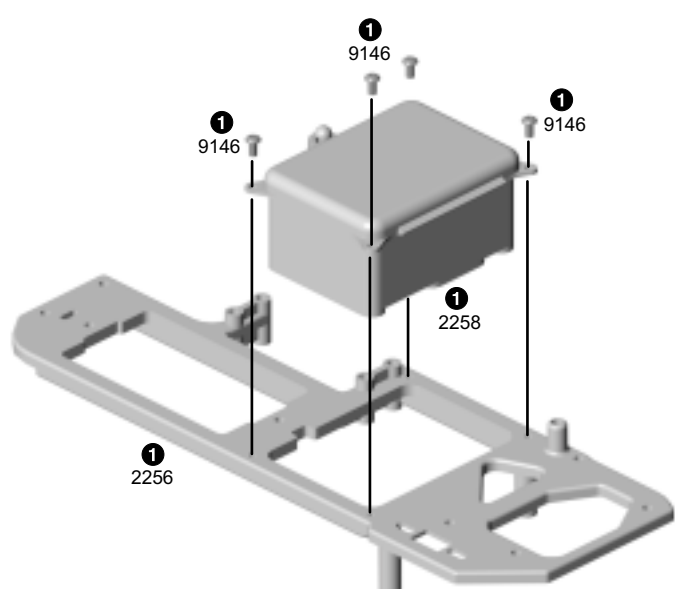


3/16"

step 1

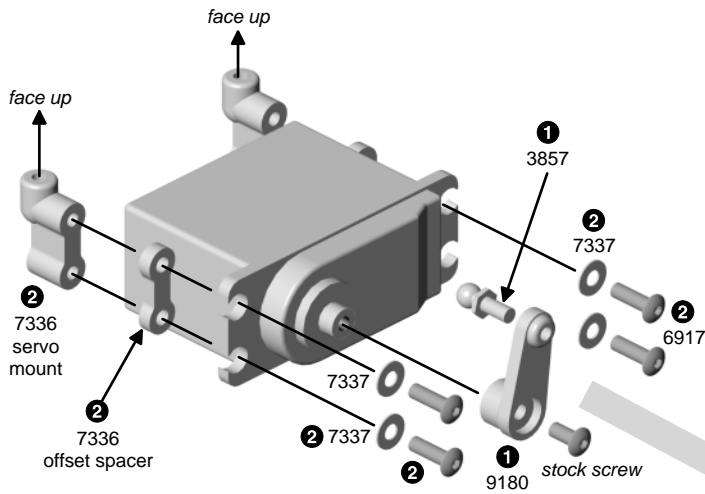
- 1 Insert #2258 receiver box into the #2256 radio tray and secure with four #9146 screws.

CAUTION: The box will fit tight.





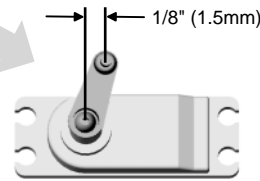
step 2

- 1 Find the appropriate #9180 servo horn for your servo from the chart at right. Install the #3857 short ball end into the servo arm. Fasten the servo arm down with the stock mounting screw that came with your servo. **DO NOT POINT IT STRAIGHT UP!** See below for correct angle.
- 2 Find the appropriate thick or thin #7336 offset spacer for your servo from the chart at right. Attach the spacer if any, in between the #7336 mount and the servo with the #7337 washers and #6917 screws.



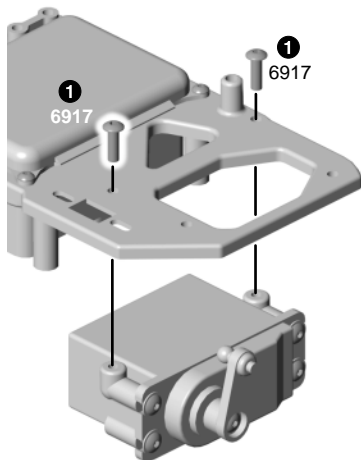
See Radio Adjustments section of manual for more info on correctly setting steering linkage.

STEERING SERVO TYPE	#7336 SPACER 	#9180 SERVO ARM 
Airtronics 94102	no spacer	A
Airtronics 94738, 94157, 94158, 94257, 94258, 94357, 94358, 94452, 94453, 94751, 94755	thick spacer	A
Hitec HS-5625MG, HS-5645MG, HS-625MG, HS645MG	no spacer	H
Hitec HS-303, HS-300BB, HS-945MG, HS-925MG, HS-5945MG, HS-5925MG, HS-525MG, HS-525BB, HS-425BB, HS-422	thin spacer	H
JR Z4725, Z4750, Z2750, Z8450, Z8550, NES-4750	no spacer	J
JR Z250, Z550	thin spacer	J
Futaba S9204, S9250, S9450, S148	no spacer	F
Futaba S3003, S9202, S9101	thin spacer	F
Futaba S9404	thick spacer	F
KO PS-401, PS-2001, PS-2004, PS-2015, PS-2173, PS-2174, PS-2123, PS-2143, PS-2144	thin spacer	J



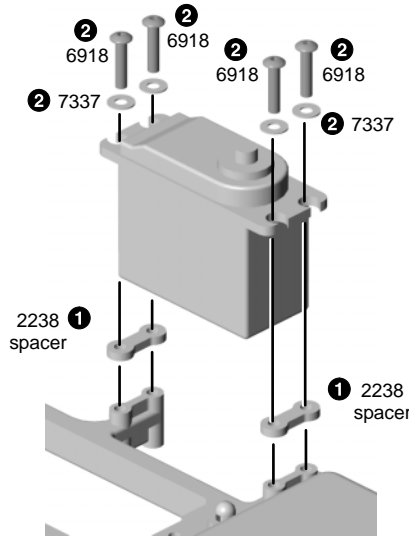
step 3

- 1 Attach the servo to the radio tray with two #6917 screws.



step 4

1 Look at the chart at right to see if a #2238 spacer is needed for your throttle servo. Attach the spacer if any, in between the radio tray and servo with the #7337 washers and #6918 screws.



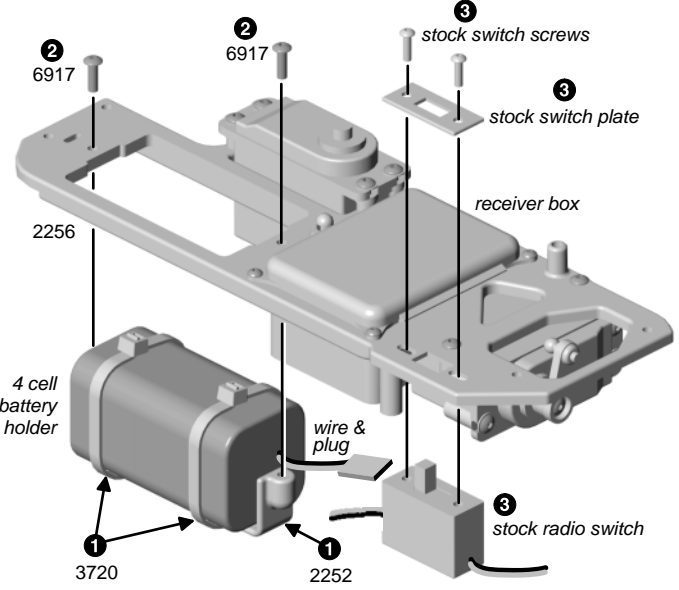
THROTTLE SERVO TYPE	#2238 SPACER	SERVO HORN
Airtronics 94102	no spacer	A
Airtronics 94738, 94157, 94158, 94257, 94258, 94357, 94358, 94452, 94453, 94751, 94755	spacer	A
Hitec HS-5625MG, HS-5645MG, HS-625MG, HS645MG HS-303, HS-300BB, HS-945MG, HS-925MG, HS-5945MG, HS-5925MG, HS-525MG, HS-525BB, HS-425BB, HS-422	no spacer	H
JR Z4725, Z4750, Z2750, Z8450, Z8550, NES-4750	no spacer	A
JR Z250, Z550	spacer	A
Futaba S9204, S9250, S9450, S148, S3003, S9202, S9101	no spacer	F
Futaba S9404	spacer	F
KO PS-401	spacer	A
KO PS-2001, PS-2004, PS-2015, PS-2173, PS-2174, PS-2123, PS-2143, PS-2144	no spacer	A

CHOOSE ONE OF THE STEPS BELOW DEPENDING ON HOW YOUR RECEIVER BATTERIES MOUNT

step 5A

USING A BATTERY HARNESS OR 5 CELL HUMP PACK

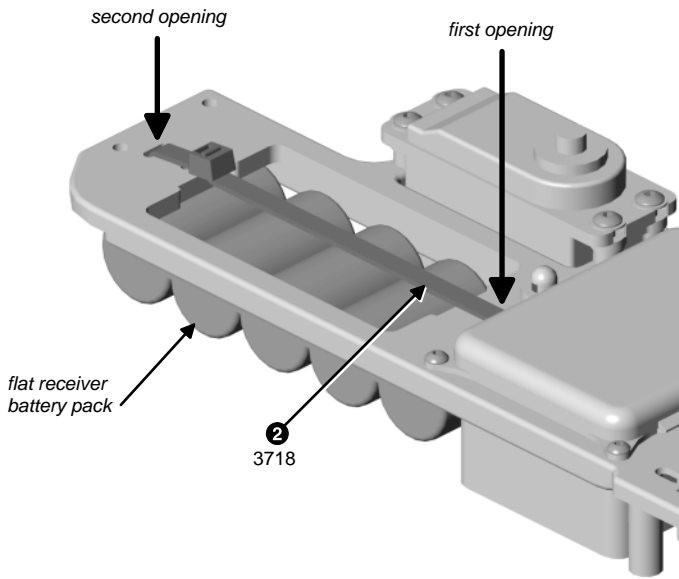
- 1 Place your batteries into your stock radio battery harness. Attach your harness to the #2252 battery mount with two #3720 wire ties, making sure the harness wires are facing the receiver box.
- 2 Place the battery harness assembly up into the radio tray and fasten down with #6917 screws.
- 3 Attach the switch to the radio tray with the stock switch screws.



step 5B

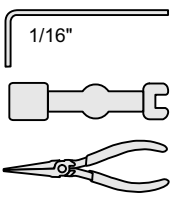
USING A FLAT 5 CELL RECEIVER PACK

- 1 Place the receiver battery underneath the radio tray as shown, making sure to place it so the battery wire is facing the receiver box.
 - 2 Secure it down with #3718 wire tie by sliding the tie into the first opening and wrapping it around the battery and sliding it up through the second opening.
- ! If you use a switch see step 5 #3 at left.

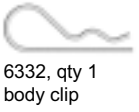


BAG H

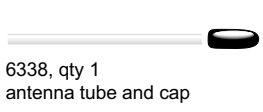
TOOLS USED



REMOVE THESE PARTS FOR: Steps 6-8



6332, qty 1
body clip



6338, qty 1
antenna tube and cap



6727, qty 1
servo tape



6917, qty 4
4-40 x 3/8 screw



6292, qty 2
4-40 x 3/8 screw



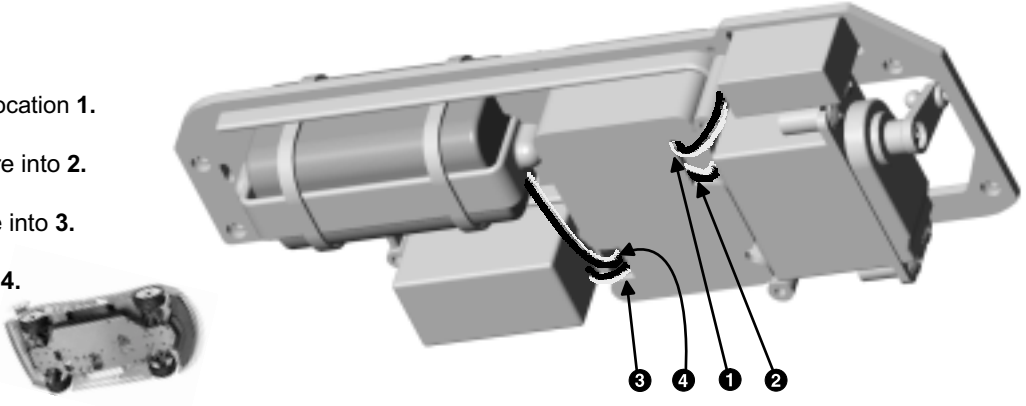
3867, qty 1
steering turnbuckle



6274, qty 2
ball cup

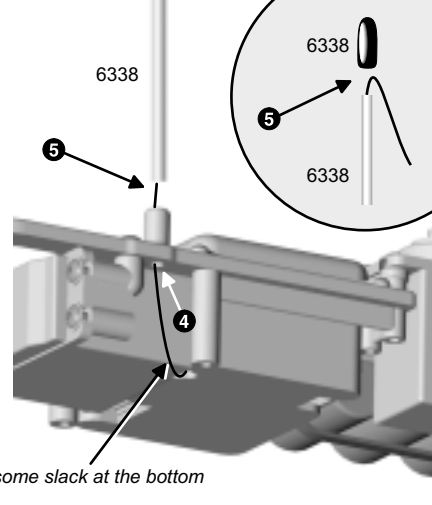
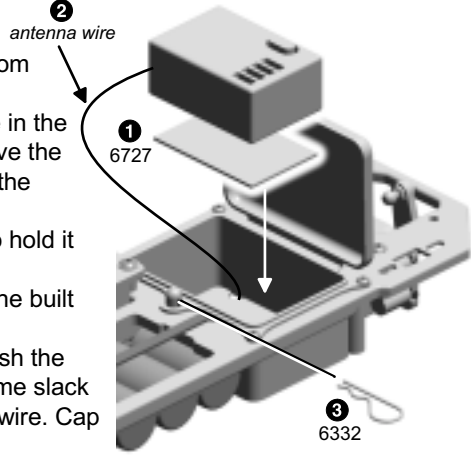
step 6

- 1 Feed your switch wires into location 1.
- 2 Feed your steering servo wire into 2.
- 3 Feed your throttle servo wire into 3.
- 4 Feed your battery wires into 4.



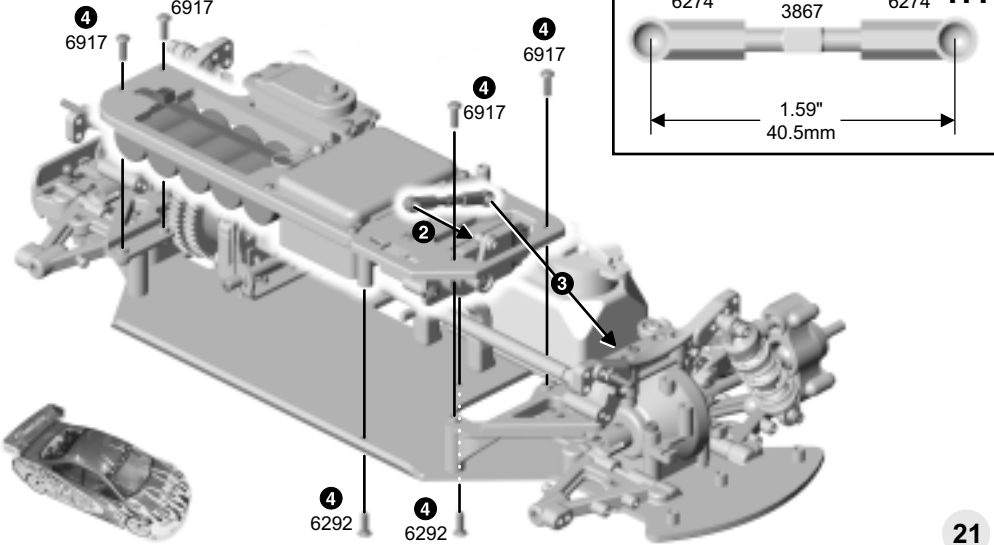
step 7

- 1 Place a piece of #6727 servo tape to the bottom of the receiver.
- 2 Feed the antenna wire through the small hole in the receiver box. Before placing the receiver, move the wire off to the side of the box and then place the receiver into the box.
- 3 Close the box and slip a #6332 body clip in to hold it shut.
- 4 Take your antenna wire and push it through the built in antenna mount in the radio tray.
- 5 Slide the wire through #6338 antenna and push the antenna tube firmly into the mount. Leave some slack at the bottom. Do not cut off excess antenna wire. Cap the other end with the black rubber cap.













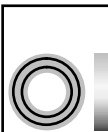
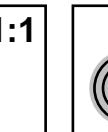






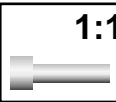


step 8

- 1 Twist #6274 ball cups onto the #3867 turnbuckle until you get the dimension shown.
- 2 Snap one end of the ball end onto the servo arm.
- 3 Place the radio tray temporarily on the chassis. Snap the second end of the turnbuckle onto the ball end of the swing rack. Now place the radio tray into place.
- 4 Before attaching screws make sure the wires from your receiver box are lying flat so they won't get smashed. Attach the radio tray with four #6917 screws for the top and two #6292 screws for the bottom.



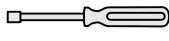
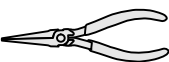
If you are using a rotary style carburetor start at step 1. If you are using a slide carburetor start at step 2.

BAG 1

 1:1 2326, qty 1 2-56 ball end	 1:1 2326, qty 1 2-56 plain nut	 1:1 7618, qty 1 collet	 2313, qty 1 SG clutch nut	 2312, qty 1 standard clutch nut	 2306, qty 2 clutch spring		
 2322, qty 1 non pull start flywheel	 2323, qty 1 pull start flywheel	 2340, qty pr pull start engine mounts	 2341, qty pr non pull engine mounts	 1:1 2320, qty 1 unflanged bearing 5 x 10 x 4	 1:1 2320, qty 1 flanged bearing 5 x 9 x 3	 2310, qty 2 clutch shoe	
 1:1 2321, qty 2 SG shim	 1:1 3934, qty 1 screw	 2299, qty 1 26 tooth pinion black	 2297, qty 1 22 tooth pinion blue	 2295, qty 1 clutch bell	 1:1 7874, qty 4 4-40 x 7/16 screw	 1:1 7773, qty 4 screw	 1:1 2321, qty 1 clutch shim

TOOLS USED

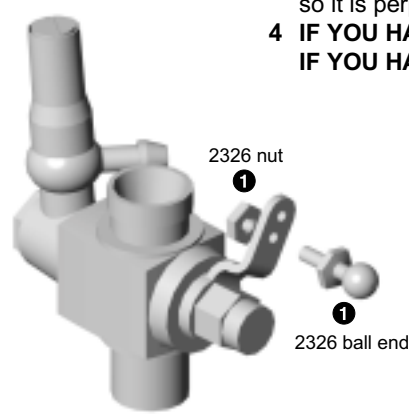
1/16", 5/64", 3/32"

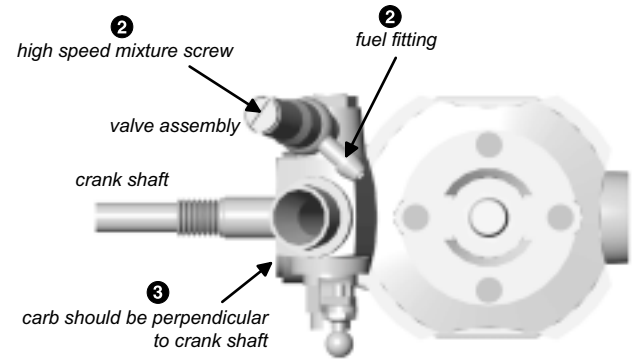
CLUTCH NUT TOOL

step 1 ROTARY CARB ONLY

1 Attach a #2326 2-56 ball end and a #2326 2-56 plain nut to the lower hole in the throttle arm pivot. If the hole is too small for the ball end, drill it out with a #43 or a 3/32 drill bit. Be careful not to get any metal or plastic shavings into the carb opening.

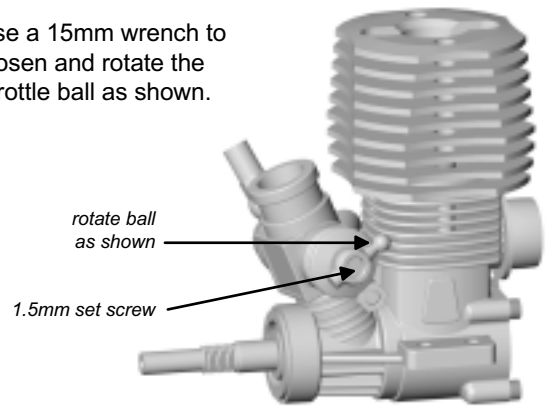


- 2** Use a wrench to loosen your high speed mixture screw. Turn the valve assembly until the fuel fitting is facing the direction shown below, then retighten the valve assembly.
- 3** Loosen the screw or clamp bolt that holds the carburetor in place. Rotate the carb so it is perpendicular to the crank shaft as shown.
- 4 IF YOU HAVE AN SG CRANK SHAFT, GO TO STEP 3.
IF YOU HAVE A STANDARD SHORT CRANK SHAFT, GO TO STEP 4.**

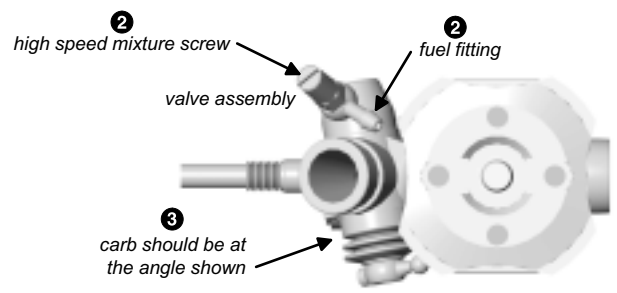


step 2 SLIDE CARB ONLY

1 Use a 15mm wrench to loosen and rotate the throttle ball as shown.



- 2** Use a wrench to loosen your high speed mixture screw. Turn the valve assembly until the fuel fitting is facing the direction shown below, then retighten the valve assembly.
- 3** Loosen the screw or clamp bolt that holds the carburetor in place. Rotate the carb so it is angled as shown below.
- 4 IF YOU HAVE AN SG CRANK SHAFT, GO TO STEP 3.
IF YOU HAVE A STANDARD SHORT CRANK SHAFT, GO TO STEP 4.**



step 3

FLYWHEEL ASSEMBLY FOR SG CRANK SHAFT

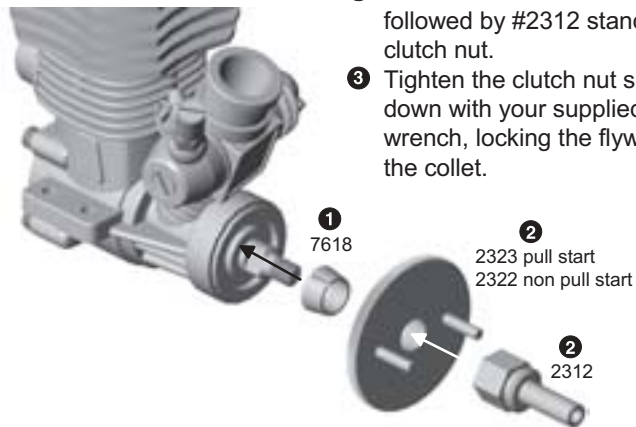
- 1 Slide on #7618 collet
- 2 Install #2322 or #2323 flywheel followed by #2313 SG clutch nut.
- 3 Tighten the clutch nut securely with your supplied wrench, locking the flywheel to the collet.
- 4 GO TO STEP 5.



step 4

FLYWHEEL ASSEMBLY FOR STANDARD SHORT CRANK SHAFT

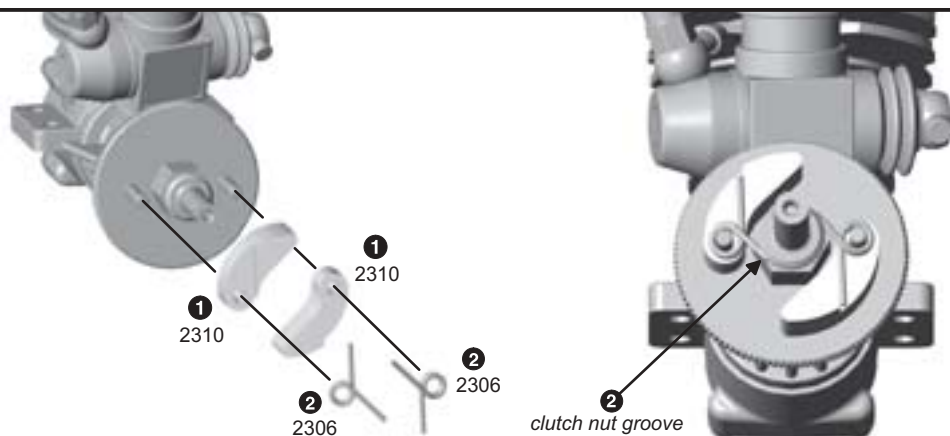
- 1 Slide on #7618 collet.
- 2 Install #2322 or #2323 flywheel followed by #2312 standard clutch nut.
- 3 Tighten the clutch nut securely down with your supplied wrench, locking the flywheel to the collet.



step 5

CLUTCH SHOE ASSEMBLY

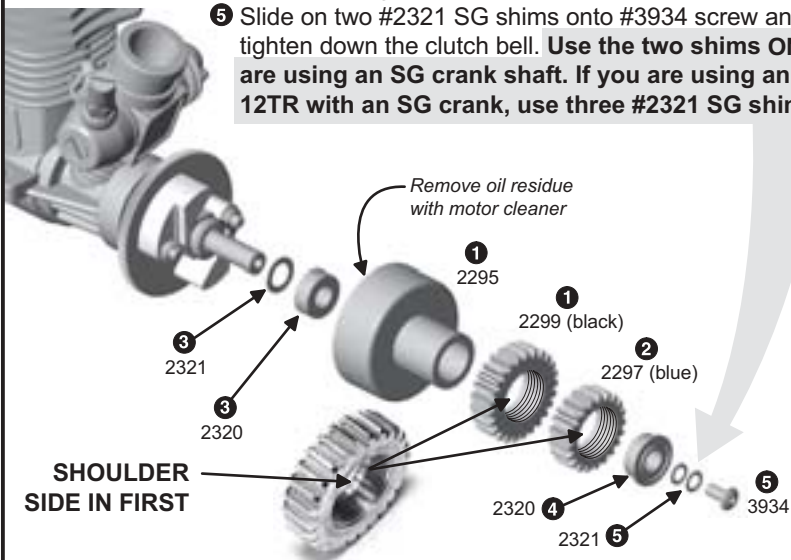
- 1 Install your #2310 clutch shoes on the flywheel clutch pins.
- 2 Place the #2306 clutch springs onto the pins on top of the clutch shoes. Use a flat head screwdriver to snap the other side of the spring into the groove of the clutch nut, as shown at far right.



step 6

CLUTCH BELL ASSEMBLY

- 1 Thread the #2299 (black) 26 tooth pinion onto the #2295 clutch bell, making sure the shoulder side of the pinions goes on first.
- 2 Thread on the second #2297 (blue) 22 tooth pinion onto the clutch bell, making sure the shoulder side of the pinions goes on first.
- 3 Slide on one #2321 clutch shim followed by #2320 non flanged clutch bearing.
- 4 Slide on the clutch bell assembly followed by #2320 flanged clutch bearing.
- 5 Slide on two #2321 SG shims onto #3934 screw and now tighten down the clutch bell. **Use the two shims ONLY if you are using an SG crank shaft. If you are using an OS Max 12TR with an SG crank, use three #2321 SG shims.**



step 7

- 1 Attach the #2340 or #2341 engine mounts to your engine with four #7874 screws.



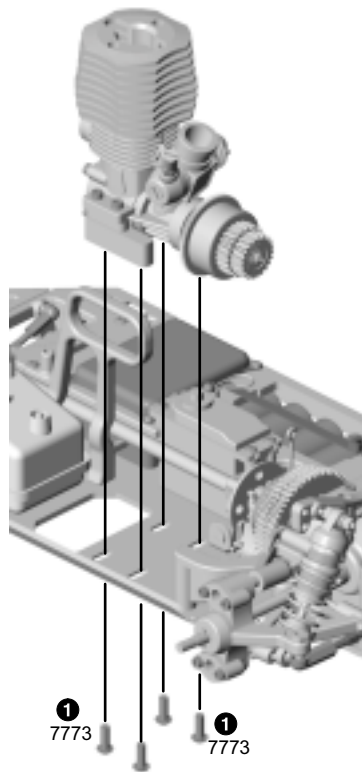
step 8

ENGINE INSTALLATION

- Place your engine assembly on top of the chassis. Attach the engine to the chassis with four #7773 screws. Do not tighten the screws yet.

GEAR MESH

- Now we set the spur-to-pinion gear spacing, otherwise known as gear mesh. Make sure you can still slide your engine, then mesh the clutch bell pinions with the spur gears. The correct gear spacing is when the pinion is close to the spur gear, but if you hold the pinion gears, you should still be able to rock the spur gears back and forth slightly with light pressure. Roll the gears and check the mesh in several different locations on the spur gear. Now tighten the four motor screws. Recheck the mesh.



step 9

If you have a rear exhaust engine, go to step 9R.

If you have a side exhaust engine, go to step 9S.

BAG I

REMOVE THESE PARTS FOR: Step 9R



2350, qty 1 rear exhaust manifold



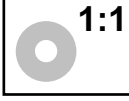
7733, qty 1 silicone tubing



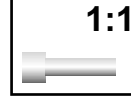
2353, qty 1 muffler



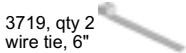
2353, qty 1 set screw



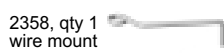
3216, qty 1 washer



6924, qty 1 4-40 x 3/8 screw



3719, qty 2 wire tie, 6"



2358, qty 1 wire mount



2357, qty 1 manifold spring

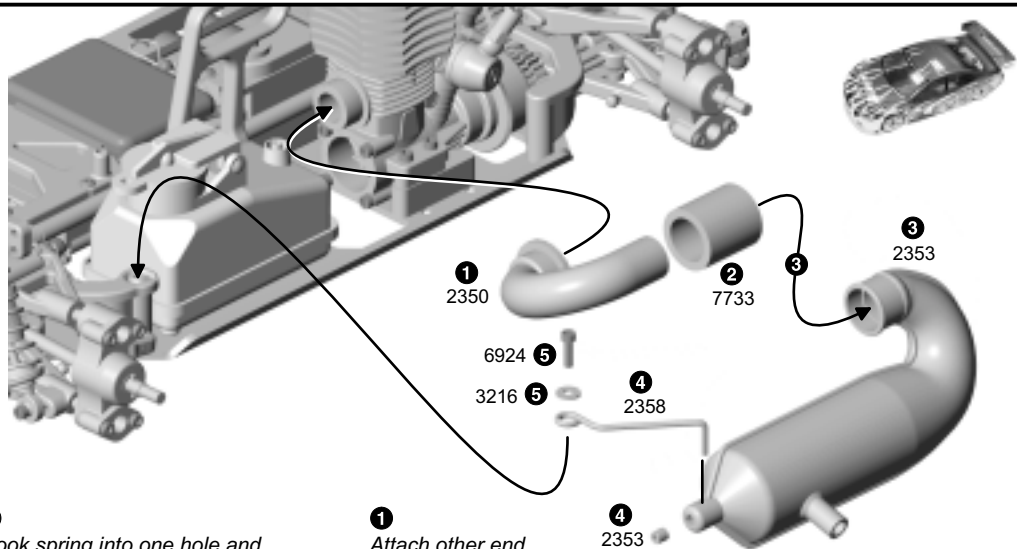
TOOLS USED

5/64", 3/32"

step 9R

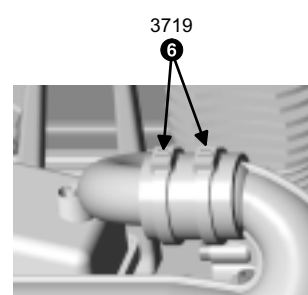
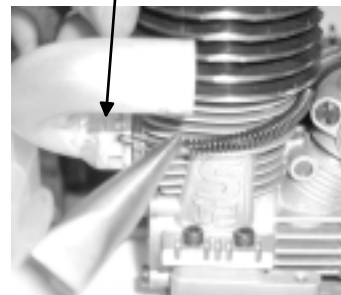
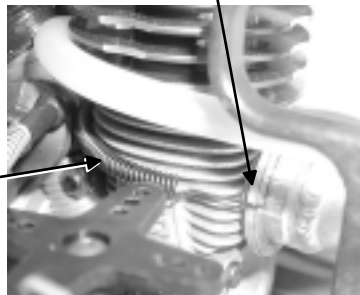
REAR EXHAUST ENGINE

- Attach the #2350 rear exhaust manifold to your engine with #2357 manifold spring--see two photos below.
- Cut a piece of #7733 silicone tubing to 1 inch in length. Slide one end of the tubing about half way onto the muffler.
- Slide the muffler with the tubing over the end of the manifold, making sure the manifold slides all the way into the muffler.
- Slide the #2358 wire mount into the muffler and secure it with a #2353 set screw.
- Attach the other end of the wire mount to the chassis brace with one #3216 washer and one #6924 screw.
- Secure the silicone tubing with two #3719 wire ties.
- GO TO BAG H STEP 10.



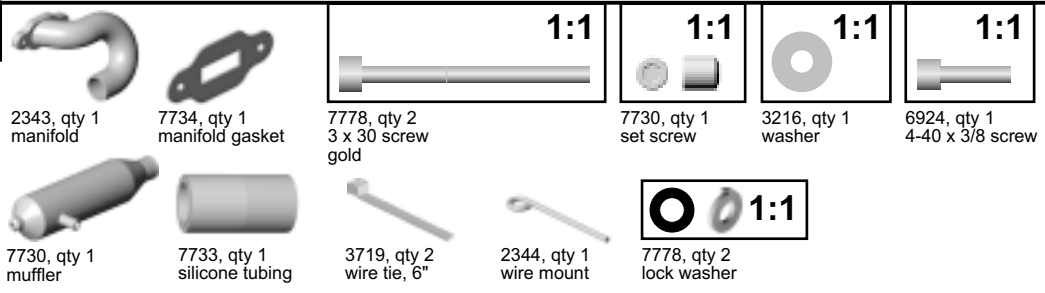
1 Hook spring into one hole and wrap around engine

1 Attach other end with pliers



BAG I

REMOVE THESE PARTS FOR: Step 9S



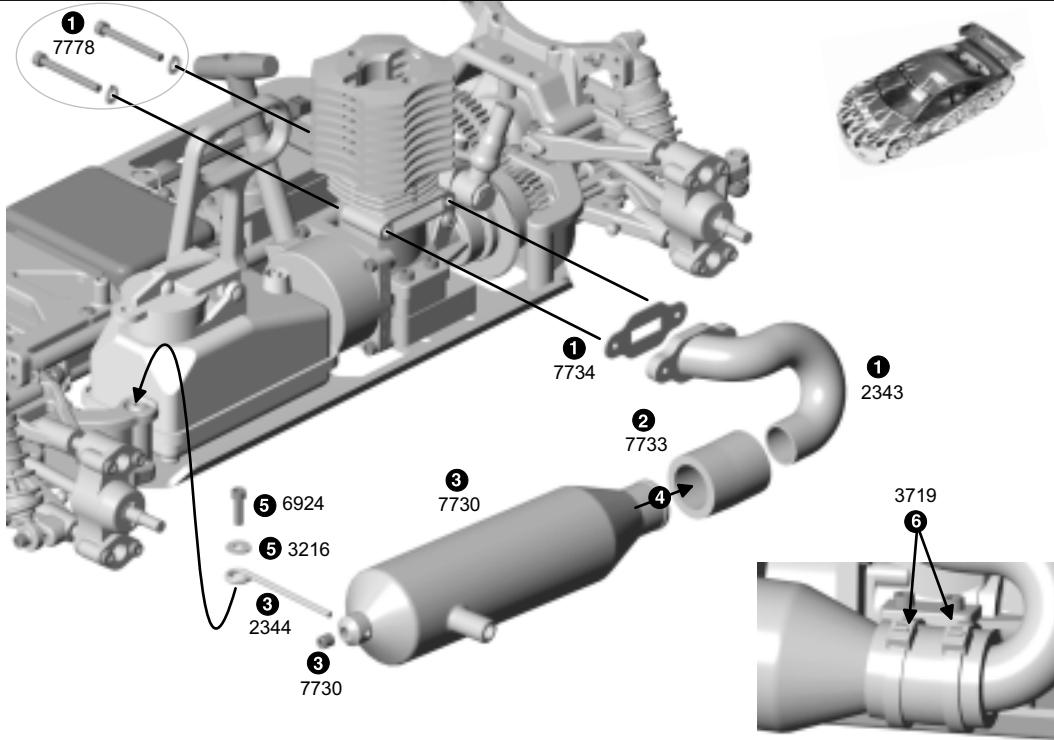
TOOLS USED

5/64", 3/32"

step 9S

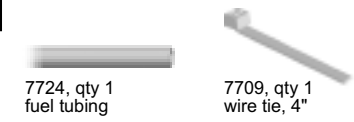
SIDE EXHAUST ENGINE

- Slide the two #7778 lock washers onto the #7778 screws. Attach the #2343 manifold to the engine with the #7734 manifold gasket in between with two #7778 screws.
- Cut a piece of #7733 silicone tubing to 1 inch in length. Slide one end of the tubing about half way onto the end of the manifold.
- Attach #2344 wire mount to the #7730 muffler with #7730 set screw.
- Slide the end of the #7730 muffler into the end of the tubing on the manifold to 1/8" from the manifold.
- Attach the other end of the wire mount to the chassis brace with one #3216 washer and one #6924 screw.
- Secure the silicone tubing with two #3719 wire ties.



BAG I

REMOVE THESE PARTS FOR: Step 10

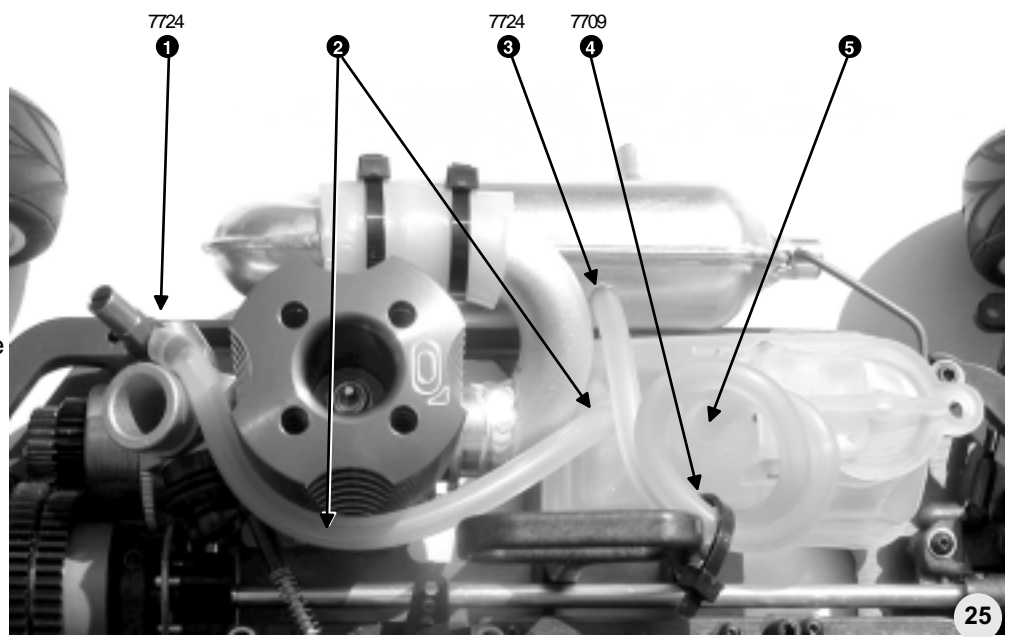


TOOLS USED

step 10

FUEL TUBING

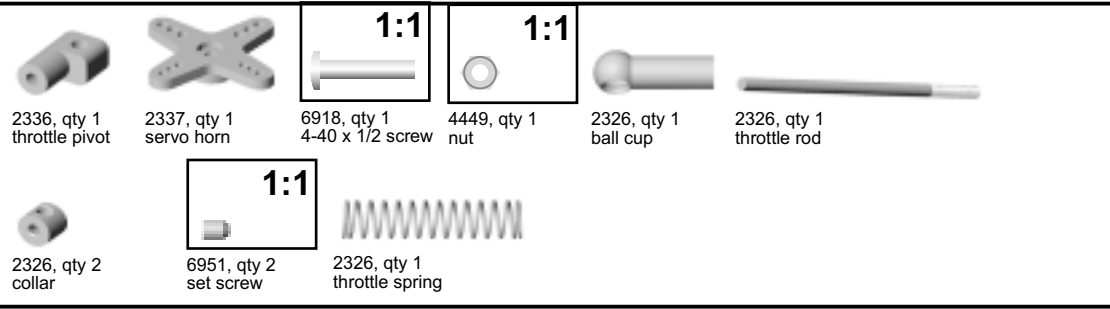
- Cut one piece of #7724 fuel tubing 4 3/4" long. Slide one end onto the fuel fitting on your engine.
- Run the fuel tubing along the side of the engine and place the second end into the first inlet of the fuel tank.
- Cut a second piece of #7724 fuel tubing 10" long. Slide one end into the hole of the muffler about 3/8".
- Wrap the fuel tubing into a small coil and to hold the coil use a #7709 wire tie. Tighten the wire tie just enough to hold the fuel tubing. Don't forget this step.
- Place the second end of tubing into the second inlet on the fuel tank.



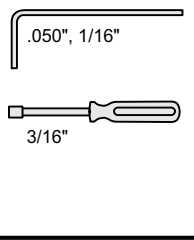
**If you have a slide carburetor, follow steps 11S-12S.
If you have a rotary carburetor, follow steps 11R-12R.**

BAG I

REMOVE THESE PARTS FOR: Step 11S



TOOLS USED

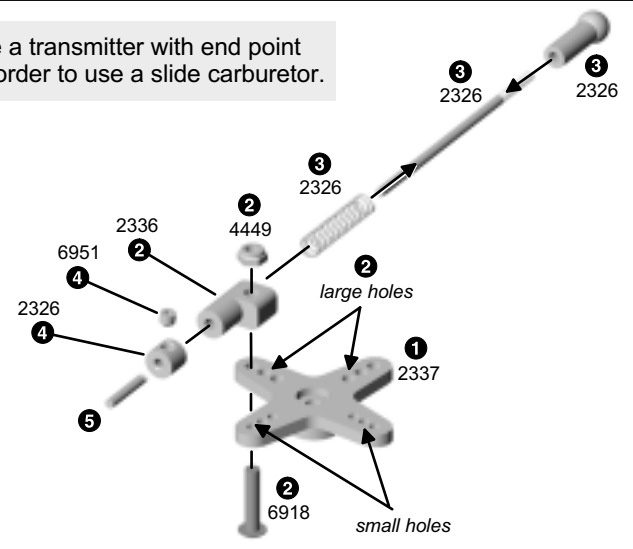


step 11S SLIDE CARB ONLY

NOTE: You must use a transmitter with end point adjustment (EPA) in order to use a slide carburetor.

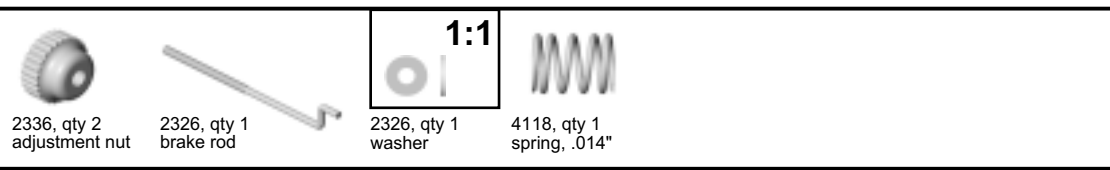
THROTTLE LINKAGE

- Choose the correct servo horn for your throttle servo from the chart on page 20, step 4.
- Notice that the servo horn has two arms next to each other with **large holes**. Thread a #6918 screw through the large outside hole of your servo horn. Attach a #2336 throttle pivot onto the screw then a #4446 nut. Only tighten the nut down enough so that the pivot can still move freely.
- Thread #2326 ball cup onto the end of the #2326 throttle rod. Slide #2326 throttle spring onto the throttle rod.
- Slide the throttle rod with the spring through the pivot and attach a #2326 collar to the rod with a #6951 set screw.
- Cut off the remaining part of the throttle rod, leaving 1/2" length protruding so you can adjust your throttle linkage.

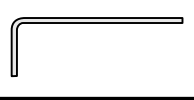


BAG I

REMOVE THESE PARTS FOR: Step 12S



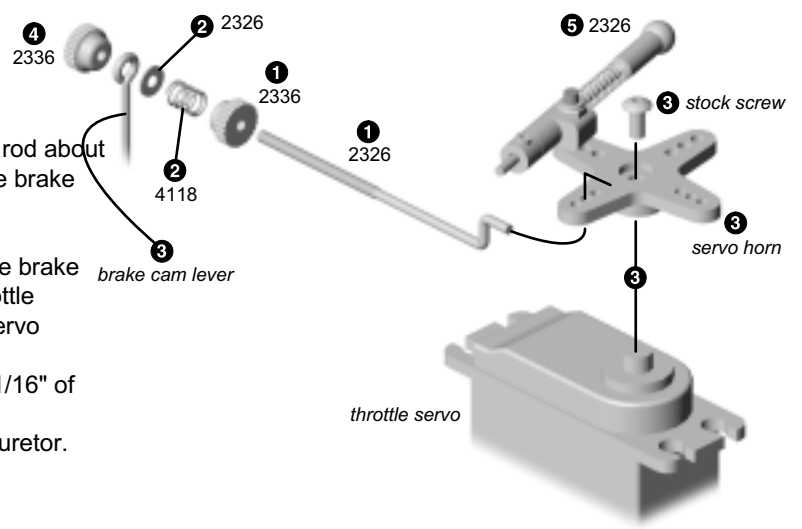
TOOLS USED



step 12S SLIDE CARB ONLY

BRAKE LINKAGE

- Thread on one #2336 adjustment nut onto the #2326 brake rod about 9/16" from the rod's threaded end. Feed the other end of the brake rod through the middle (small) hole of the servo horn.
 - Slide on #4118 spring followed by #2326 washer.
 - Slide the threaded end of the rod through the opening on the brake cam lever and then place the servo horn onto your throttle servo. Secure the servo horn to the servo with your stock servo screw.
 - Thread on the second #2336 adjustment nut so that about 1/16" of the brake cam wire protrudes from the end.
 - Attach the throttle rod ball cup onto the ball end on the carburetor.
- SKIP STEP 11R-12R AND GO TO STEP 13.**



BAG I

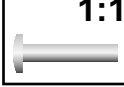
REMOVE THESE PARTS FOR: Step 11R



2336, qty 1 throttle pivot



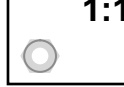
2337, qty 1 servo horn



6918, qty 1 4-40 x 1/2 screw



6466, qty 1 1/16" spacer



4449, qty 1 4-40 locknut



2326, qty 1 ball cup



2326, qty 1 throttle spring



2326, qty 2 collar



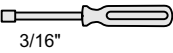
6951, qty 2 set screw



2326, qty 1 throttle rod

TOOLS USED

.050", 1/16"

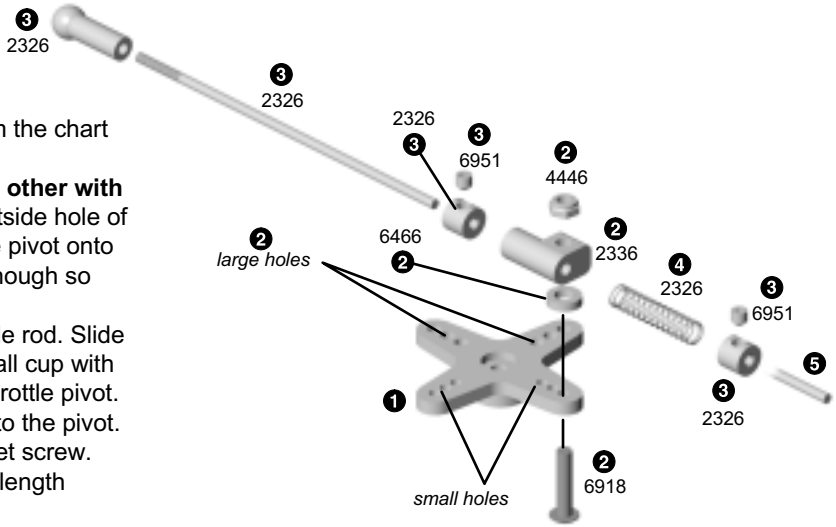


3/16"

step 11R ROTARY CARB ONLY

THROTTLE LINKAGE

- 1 Choose the correct servo horn for your throttle servo from the chart on page 20, step 4.
- 2 Notice that the servo horn has two arms next to each other with large holes. Thread a #6918 screw through the large outside hole of your servo horn. Slide a #6466 spacer and #2336 throttle pivot onto the screw then a #4446 nut. Only tighten the nut down enough so that the pivot can still move freely.
- 3 Thread a #2326 ball cup onto the end of the #2326 throttle rod. Slide on a #2326 collar and attach it 1/2" from the end of the ball cup with one #6951 set screw. Slide the throttle rod through the throttle pivot.
- 4 Slide one #2326 throttle spring onto the throttle rod next to the pivot. Attach the second #2326 collar to the rod with a #6951 set screw.
- 5 Cut off the remaining part of the throttle rod, leaving 1/2" length protruding so you can adjust your throttle linkage.

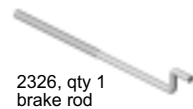


BAG I

REMOVE THESE PARTS FOR: Step 12R



2336, qty 2 adjustment nut



2326, qty 1 brake rod



2326, qty 1 washer



4118, qty 1 spring, .014"

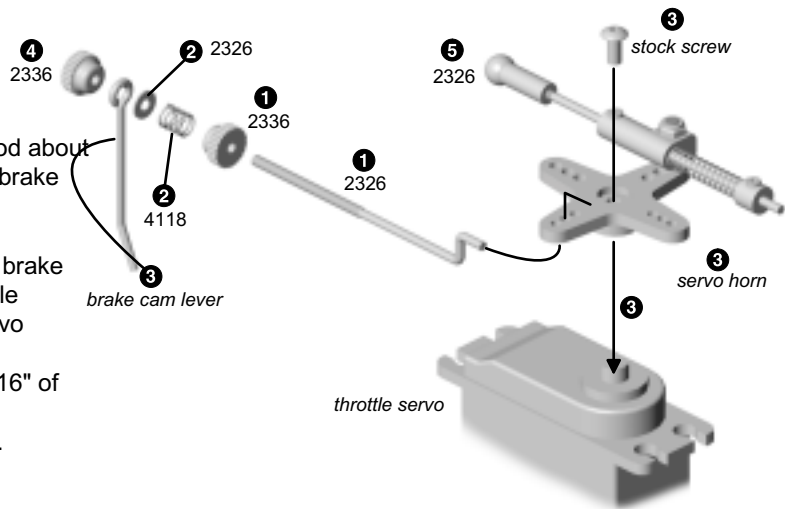
TOOLS USED

.050", 1/16"

step 12R ROTARY CARB ONLY

BRAKE LINKAGE

- 1 Thread on one #2336 adjustment nut onto the #2326 brake rod about 9/16" from the rod's threaded end. Feed the other end of the brake rod through the middle (small) hole of the servo horn.
- 2 Slide on #4118 spring followed by #2326 washer.
- 3 Slide the threaded end of the rod through the opening on the brake cam lever and then place the servo horn onto your throttle servo. Secure the servo horn to the servo with your stock servo screw.
- 4 Thread on the second #2336 adjustment nut so that about 1/16" of the brake cam wire protrudes from the end.
- 5 Attach the #2326 ball cup onto the ball end on the carburetor.

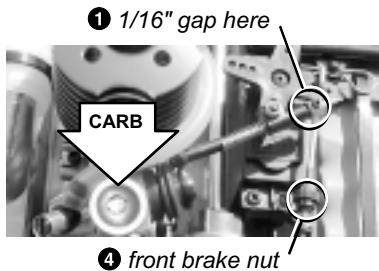


step 13

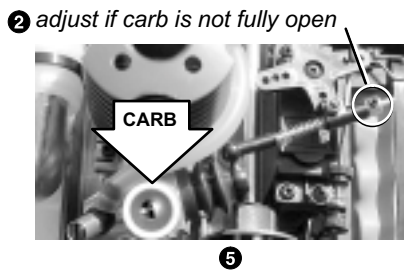
ADJUSTING THROTTLE LINKAGE

- 1 Turn on your transmitter and then the car's electronics (but don't start the engine). When at idle (trigger of transmitter not pulled), adjust the collar so there is 1/16" (1.58mm) of space between the collar and throttle pivot.
- 2 Apply full throttle (pull the trigger of your transmitter all the way back). Your carb should be almost fully open. If it is not, then adjust the collar near the throttle pivot. (You may also adjust your throttle trim according to your radio's instructions.)
- 3 Now apply the brake. Your carb should be in idle position. The spring should not be completely compressed.

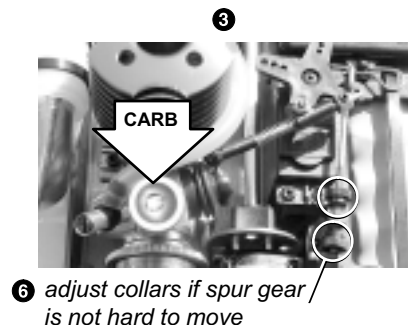
SLIDE CARB IDLE



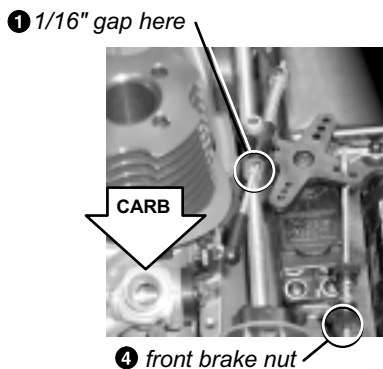
SLIDE CARB FULL THROTTLE



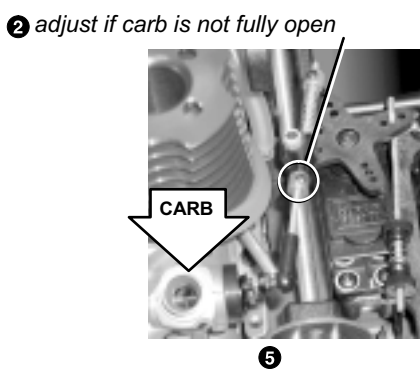
SLIDE CARB BRAKE



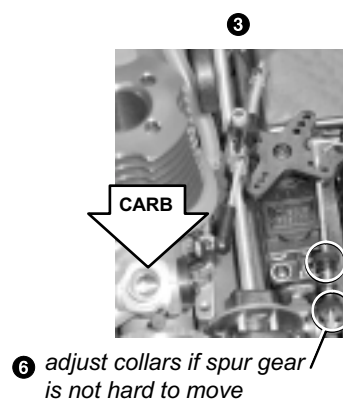
ROTARY CARB IDLE



ROTARY CARB FULL THROTTLE



ROTARY CARB BRAKE



ADJUSTING BRAKE LINKAGE

- 4 With the throttle trigger at idle, adjust the front brake nut so the brake is applied slightly. You can test this by turning the spur gear. The spur gear should have some resistance to it. Also, keep about a 1/16 gap between the back nut and the brake cam lever wire.

- 5 Now pull full throttle. The brakes should disengage immediately.

NOTE: Your NTC3 will require 2-3 tanks of fuel to sufficiently seat the brake shoes. The brakes will increase in power as this happens.

- 6 Now apply the brake fully. Your brakes should fully engage. The spur gear will be hard to move. If it is not engaged, adjust the collars or your setup in your radio to get the brakes to engage properly.

BAG J

REMOVE THESE PARTS FOR: Steps 1-3



6918, qty 2
4-40 x 1/2 screw



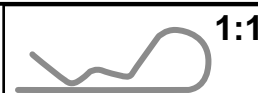
6292, qty 2
4-40 x 3/8 screw



6923, qty 3
4-40 x 3/4 screw



6924, qty 1
4-40 x 3/8 screw



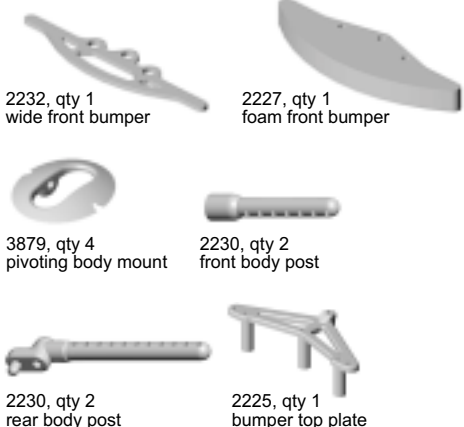
6332, qty 4
body clip



2232, qty 3
rubber pad

TOOLS USED

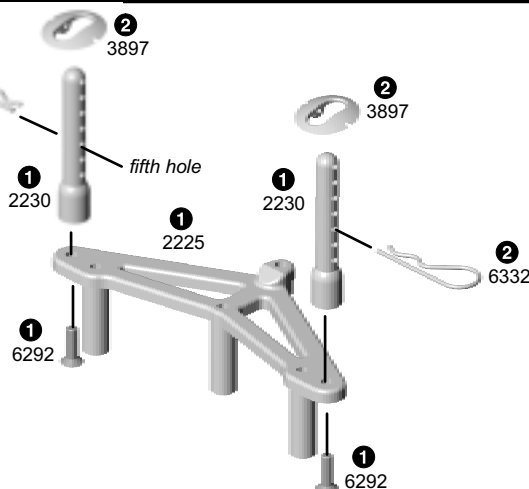
.050", 1/16"



step 1

FRONT BODY POSTS

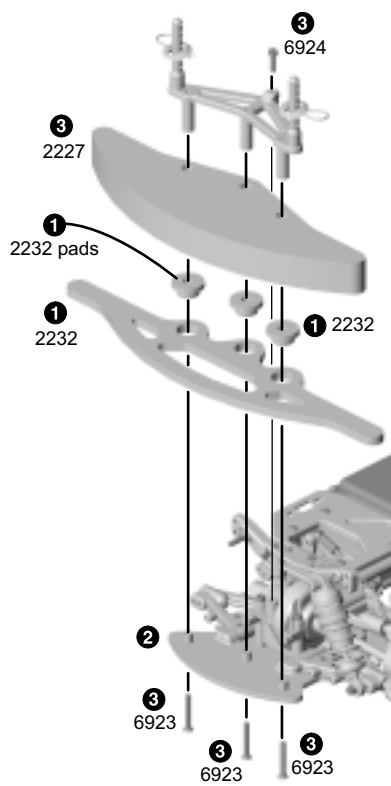
- 1 Attach #2230 front body post to the #2225 bumper top plate with two #6292 screws.
- 2 Slide the #3897 pivoting body mounts over the body post so its holes line up with the fifth hole from the top. Slide in #6332 body clip to hold it in place. You may need to readjust this depending on your body style.



step 2

FRONT BUMPER

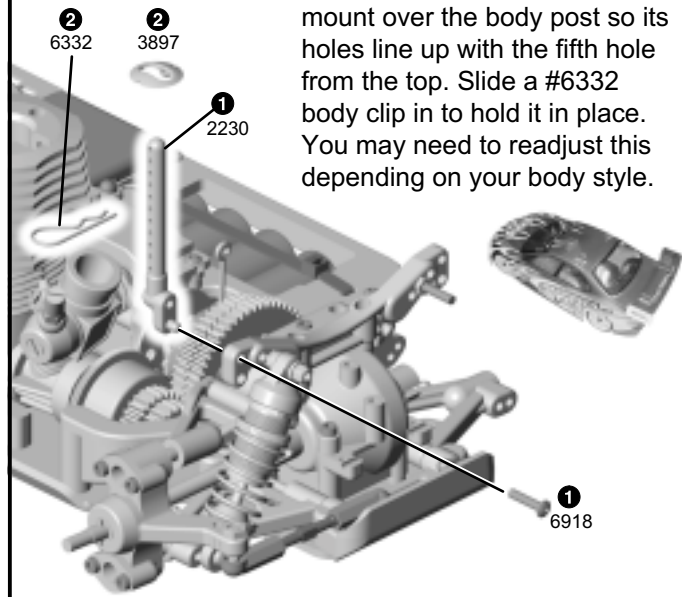
- 1 Push #2232 rubber pads into the #2232 wide front bumper, making sure the shoulder is facing up.
- 2 Place the wide front bumper onto the lower front bumper.
- 3 Slide the #2227 foam front bumper onto the bumper top plate assembly. Attach the foam and the bumper top plate to the lower bumper with three #6923 screws on the bottom and one #6924 screw on top.



step 3

REAR BODY POSTS

- 1 Place the #2230 rear body post to the front side of the rear shock tower. Attach the post with a #6918 screw.
- 2 Slide the #3897 pivoting body mount over the body post so its holes line up with the fifth hole from the top. Slide a #6332 body clip in to hold it in place. You may need to readjust this depending on your body style.



BAG K

REMOVE THESE PARTS FOR: Steps 1-2



3989, qty 4
TC wheel



3955, qty 4
foam insert



3955, qty 4
TC tire



3950, qty 4
hex adapter



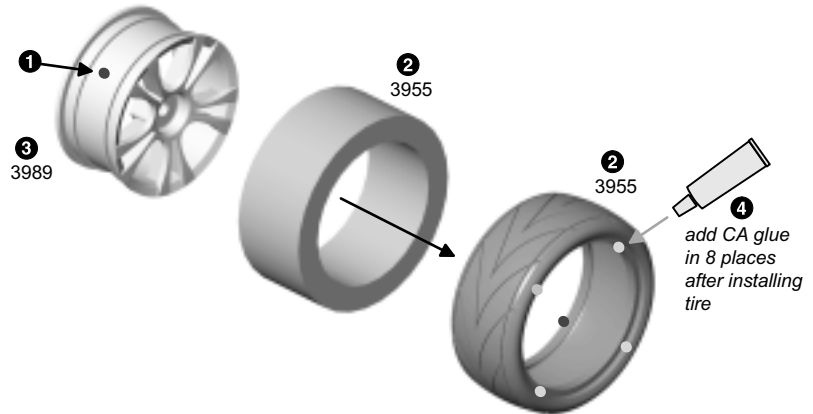
6943, qty 4
locknut

TOOLS USED



step 1

- 1 Make a 1/8" hole in one area of the #3989 TC wheel.
- 2 Push the #3955 foam insert into the #3955 tire. Make sure the insert is centered in the tire.
- 3 Install the #3955 tire and insert onto the #3989 wheel.
- 4 Glue the tire to the wheel with super glue (cyanoacrylate glue or #1597 tire adhesive) in four equally-spaced spots around the tire on both sides. **WARNING! Follow the adhesive manufacturer's instructions for proper use and safety. Wear eye and hand protection.**
TIP: Place a rubber band around the tire to hold it tight to the wheel while gluing.
- 5 Repeat steps for the three remaining tires.



step 2

- 1 Install the #3950 wheel hex drive adapter to the axle, lining up the roll pin with the slot in the hex adapter.
- 2 Slide the wheels over the axle and tighten it down with a #6943 lock nut.
- 3 Install the remaining tires.

