

# 1:10 SCALE ELECTRIC COMPETITION OFF-ROAD CAR KIT INSTRUCTION MANUAL

# RC10

1989 IFMAR  
MASAMI HIROSAKA  
EDITION



14 IFMAR WORLD  
CHAMPIONSHIP TITLES

Masami Hirooka  
1989 IFMAR Off Road 2WD World Champion

WORLD CHAMPIONS.

# TEAM ASSOCIATED



Sydney, Australia



## :: Introduction

Thank you for purchasing this Team Associated product. This assembly manual contains instructions and tips for building and maintaining your new Kit. Please take a moment to read through this manual to help familiarize yourself with these steps. We are continually changing and improving our designs; therefore, actual parts may appear slightly different than in the illustrations. New parts will be noted on supplementary sheets located in the appropriate parts bags. Check each bag for these sheets before you start to build.

## :: KIT Features

Features in the RC10 89 Masami Stealth Kit:

- CNC machined aluminum chassis
- Laser etched chassis logo
- Carbon fiber top plate
- Hard anodized shock bodies
- Hard anodized shock caps
- Universal driveshafts
- Ball bearings
- 89' Stealth car front bulkhead
- 89' Stealth car rear arm mounts
- Stealth car wide front suspension arms
- CNC chassis standoffs
- Stealth transmission
- Titanium turnbuckles
- 89' Stealth car world championship replica tires
- 89' Stealth car rear suspension arms
- Adjustable battery mounts (shorty or standard)
- 89' Stealth car front and rear shock towers
- 89' Stealth car pink rear wheels
- 89' Stealth car rear wheel adaptors
- 89' Stealth car style wing mount system
- 89' Stealth car rear bulkhead
- 89' Stealth car style rear wing with side panels
- 89' Masami world championship livery decal sheet
- Replica Masami battery strap and ESC mount
- 89' Stealth car long stroke shock springs

Factory team option parts:

- Carbon fiber 89' Stealth car chassis
- CNC machined front bulkhead
- CNC machined rear arm mounts

## :: Additional

Your new RC10 Kit comes as a kit. There are some items you will need to complete your kit (refer to website for suggestions):

- R/C two channel surface frequency radio system
- Electronic Speed Control (ESC)
- Steering Servo
- Peak detection battery charger
- Retaining Ring Pliers
- Pinion gear, size to be determined by type and wind of motor you use
- R/C Electric Motor
- Servo Horn (AE #89007)
- 2S, 7.4V Lipo stick battery or 7.2V NiMH battery
- Polycarbonate specific paint
- Thread Lock (AE #1596)

Tools included:

- Allen wrenches (.035", .050", 1/16", 3/32")
- Shock building tool

## :: Other Helpful Items

- Silicone Shock Fluid (Refer to website for complete listings)
- Tire Adhesive (AE #1597)
- Shock Pliers (AE #1681)
- Wire Cutters / Hobby Knife
- Body Scissors (AE #1737)
- Green Slime shock lube (AE #1105)
- Needle Nose Pliers
- Reamer / Hole Punch (AE #1499)
- Calipers or a Precision Ruler
- Soldering Iron

**Associated Electrics, Inc.**  
**21062 Bake Parkway**  
**Lake Forest, CA 92630**

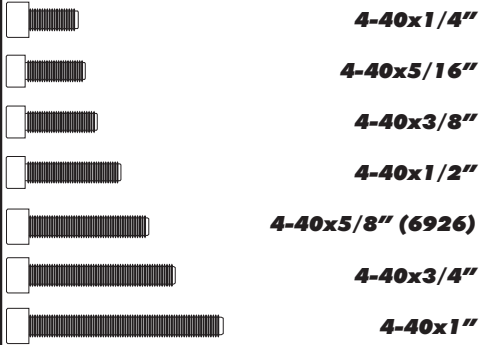


**Customer Service**  
**Tel: 949.544.7500**  
**Fax: 949.544.7501**

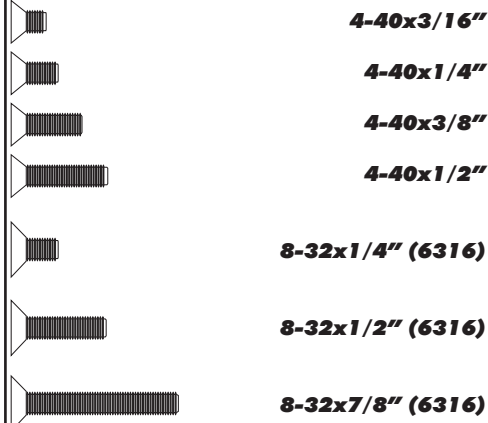


# **:: Hardware - 1:1 Scale View**

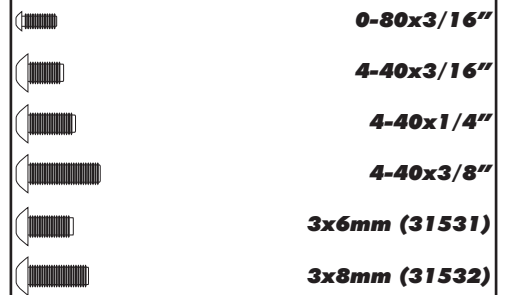
## **Cap Head (shcs)**



## **Flat Head (fhcs)**



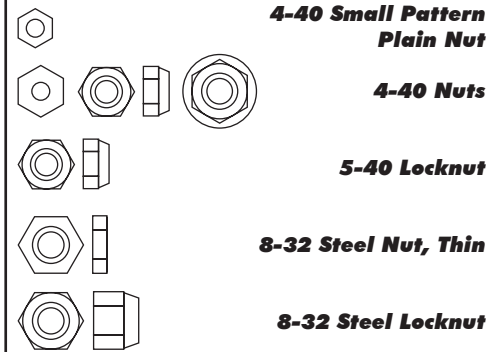
## **Button Head (bhcs)**



## **Shims and Washers**



## **Nuts (lock/plain)**



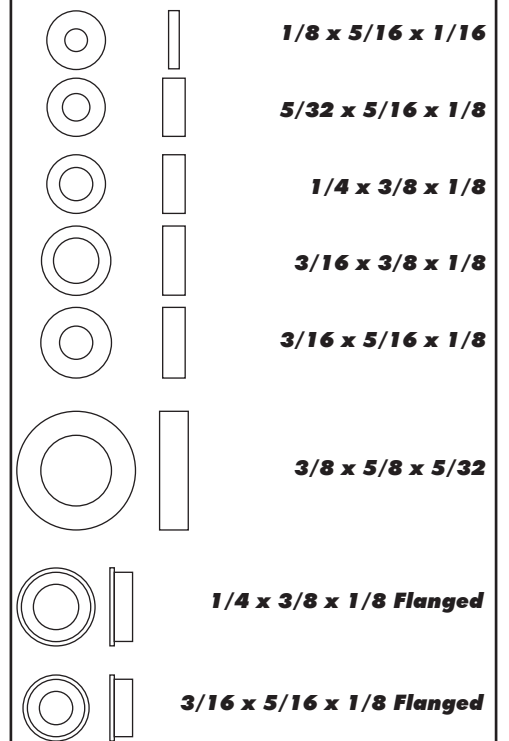
## **Set Screws**



## **Clips**



## **Bearings**



## **Diff Balls**



## **Notes:**

## :: Table of Contents

1..... Cover	11..... Turnbuckle Build (Bag E)
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5..... Servo Saver Build (Bag A)	22..... Back Cover
5..... Front Arm / Steering Build (Bag B)	
7..... Transmission Build (Bag C)	
9..... Rear Bulkhead Build (Bag D)	

For the most up to date version of this manual, please scan the QR code below.



## :: Notes



This symbol indicates a special note or instruction in the manual.



**There is a 1:1 hardware foldout page in the front of the manual. To check the size of a part, line up your hardware with the correct drawing until you find the exact size.**

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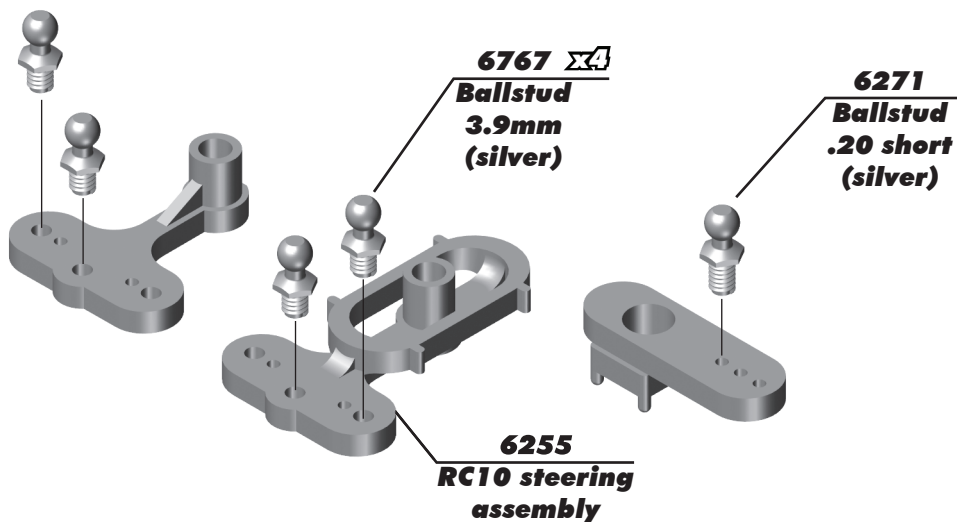
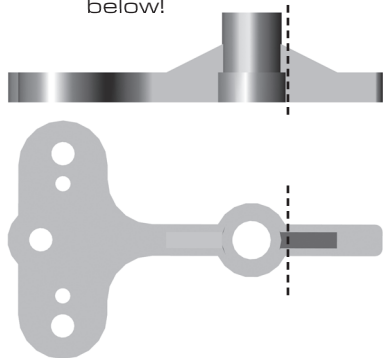
**Customer Service**  
Tel: 949.544.7500  
Fax: 949.544.7501



## :: Servo Saver Build - Bag A - Step 1



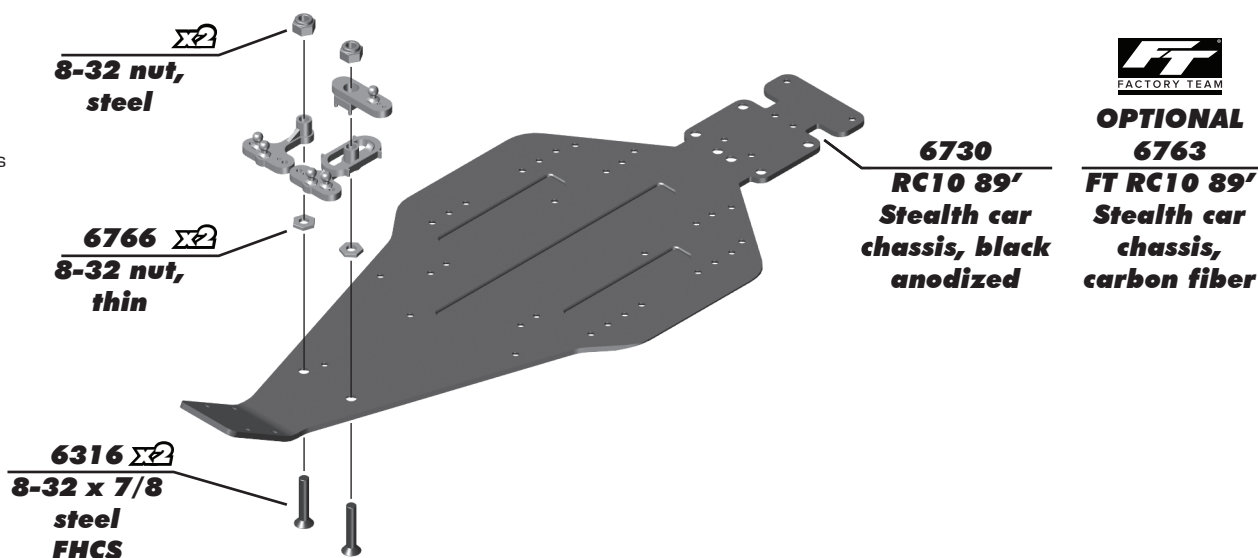
Trim the right side bulkhead as shown below!



## :: Servo Saver Build - Bag A - Step 2



Tighten 8-32 nuts until snug & bellcrank rotates freely!

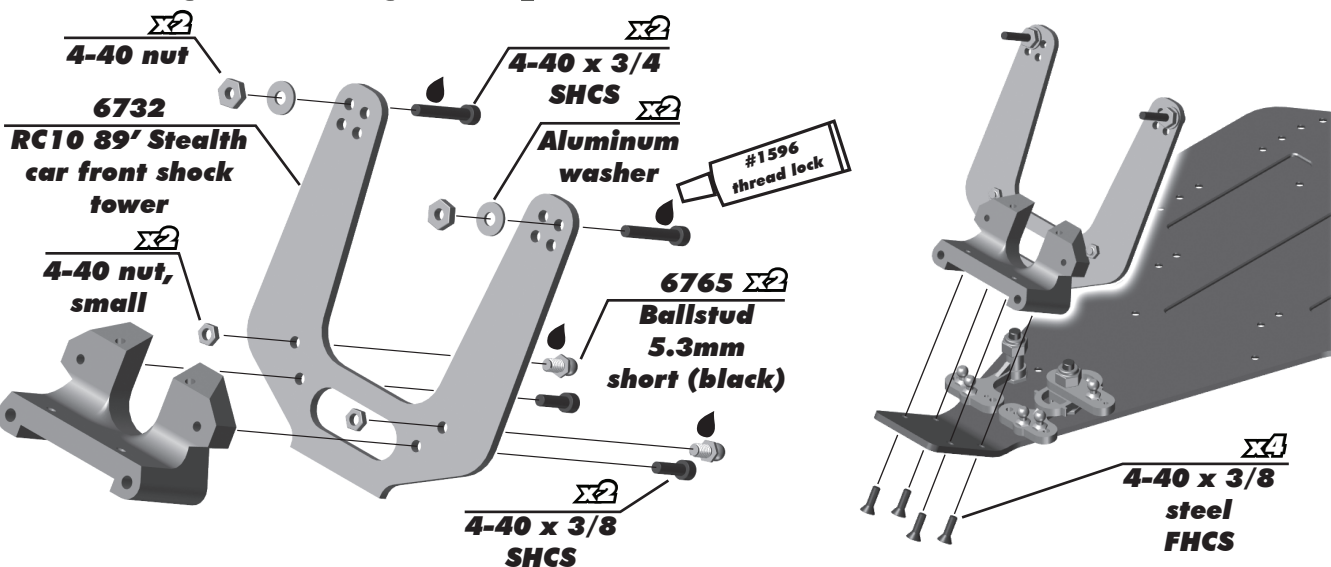


## :: Front Arm / Steering Build - Bag B - Step 1



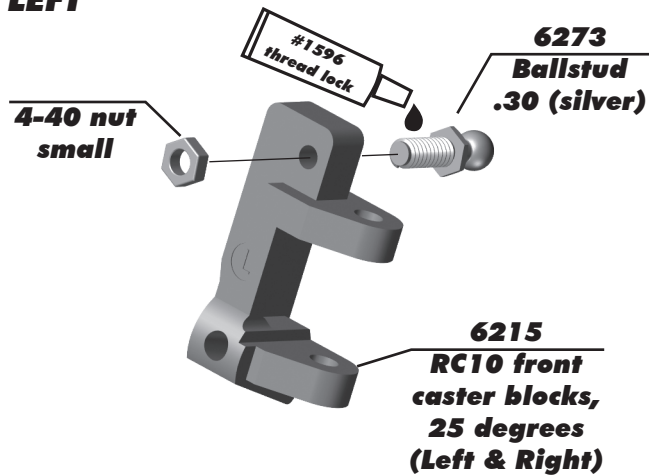
**OPTIONAL**  
**6769**  
FT RC10  
89' Stealth  
car front  
bulkhead,  
machined

**6734**  
RC10 89'  
Stealth  
car front  
bulkhead

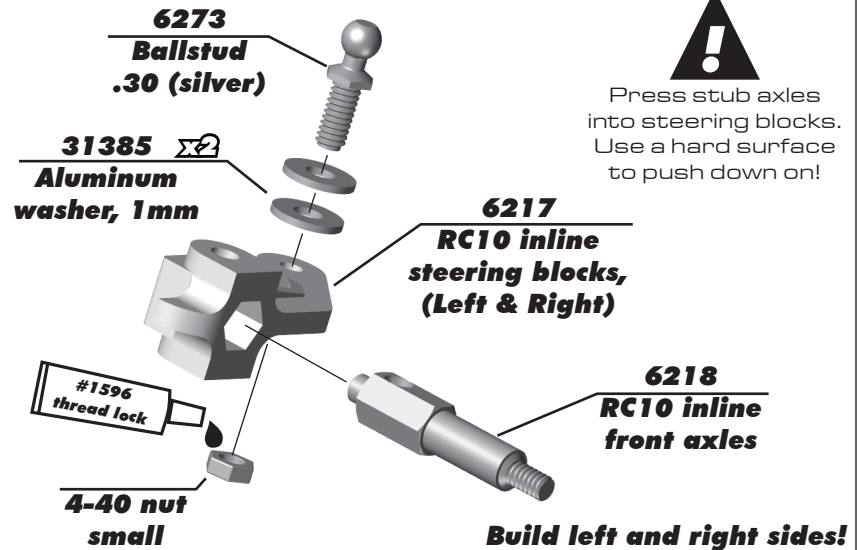


## :: Front Arm / Steering Build - Bag B - Step 2

**LEFT**

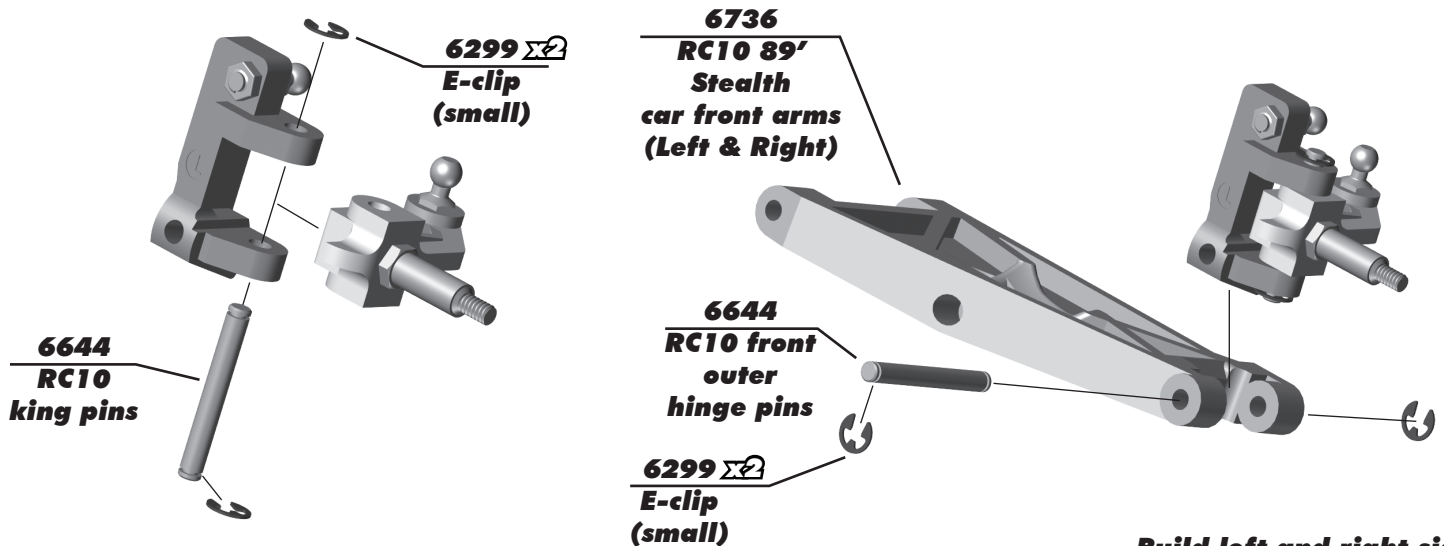


**Build left and right sides!**

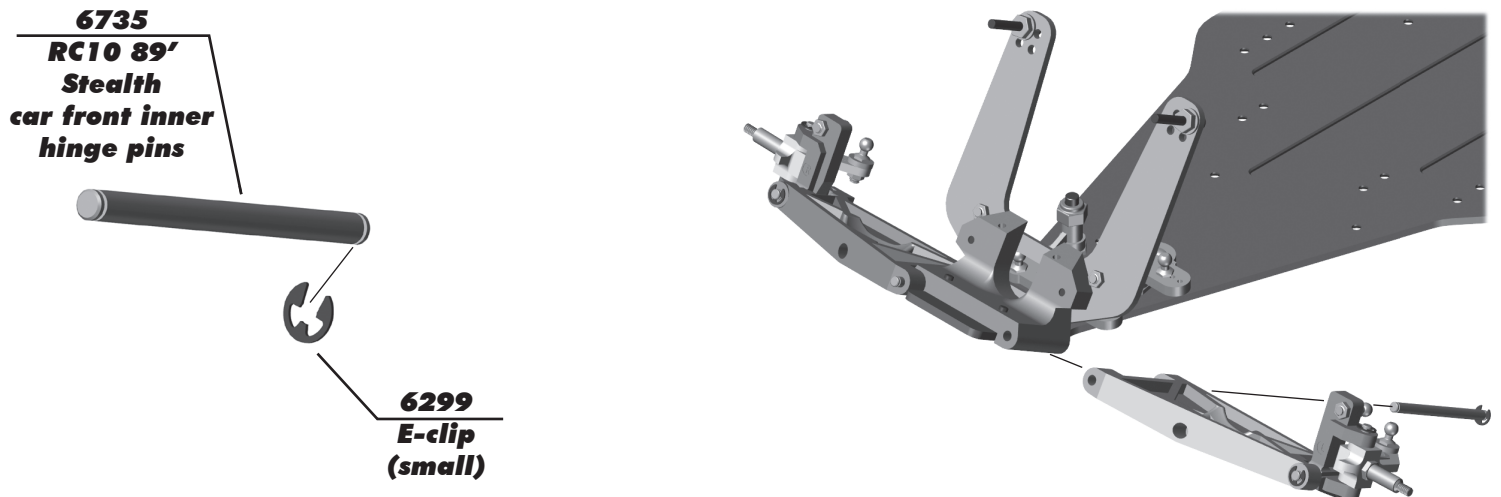


Press stub axles into steering blocks. Use a hard surface to push down on!

## :: Front Arm / Steering Build - Bag B - Step 3



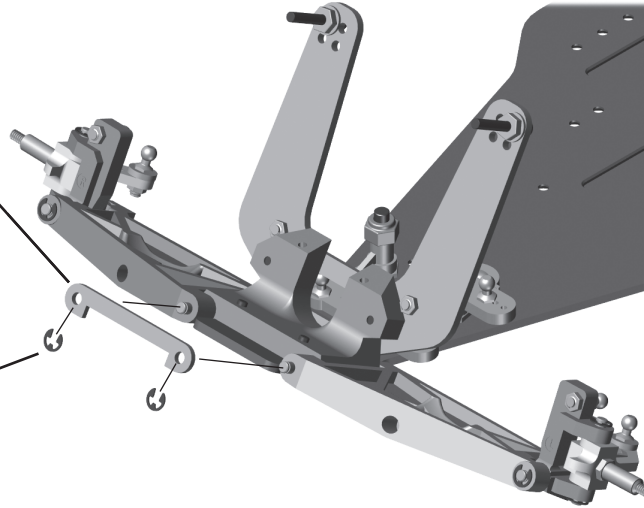
## :: Front Arm / Steering Build - Bag B - Step 4



## :: Front Arm / Steering Build - Bag B - Step 5

**6735**  
**RC10 89'**  
**Stealth**  
**car front inner**  
**hinge pin brace**

**6299**   
**E-clip**  
**(small)**



## :: Transmission Build - Bag C - Step 1

**6579**  
**Diff drive**  
**rings**

**6579**  
**Diff drive**  
**rings**

**FT DIFF LUBE**  
**#6591**

**FT DIFF LUBE**  
**#6591**

**6578**  
**Diff**  
**outdrives**

**6578**  
**Diff**  
**outdrives**



**Build Tip:**  
Install the first washer [grove up],  
add grease #6588. Install the  
caged thrust washer.  
Add grease on top of the balls,  
then install the 2nd washer  
[grooves down].

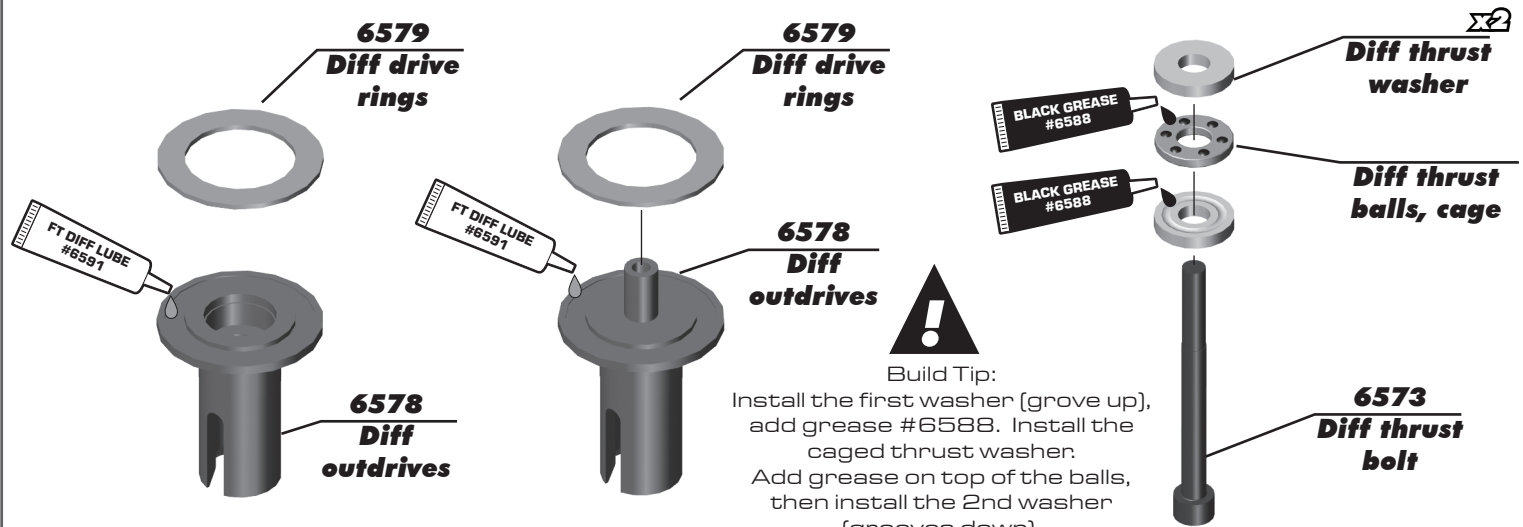
**BLACK GREASE**  
**#6588**

**BLACK GREASE**  
**#6588**


**Diff thrust**  
**washer**

**Diff thrust**  
**balls, cage**

**6573**  
**Diff thrust**  
**bolt**



## :: Transmission Build - Bag C - Step 2

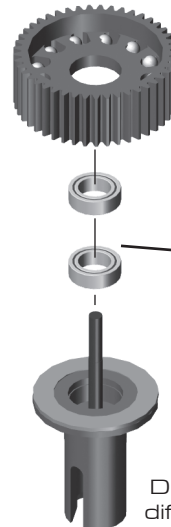
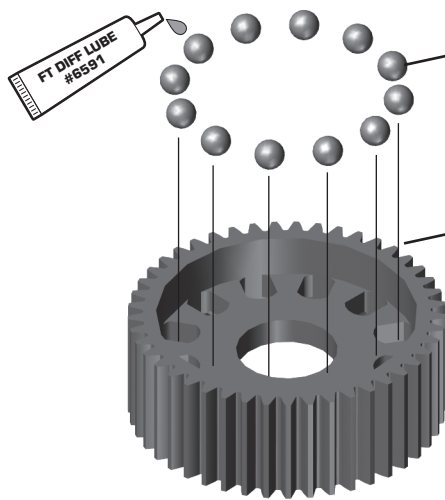
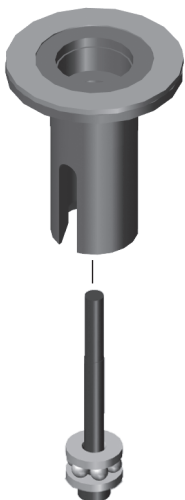
**6581**   
**Carbide diff**  
**balls, 3/32"**

**7812**  
**Diff gear**  
**45T**

**6589**   
**Bearing**  
**5/32 x 5/16**

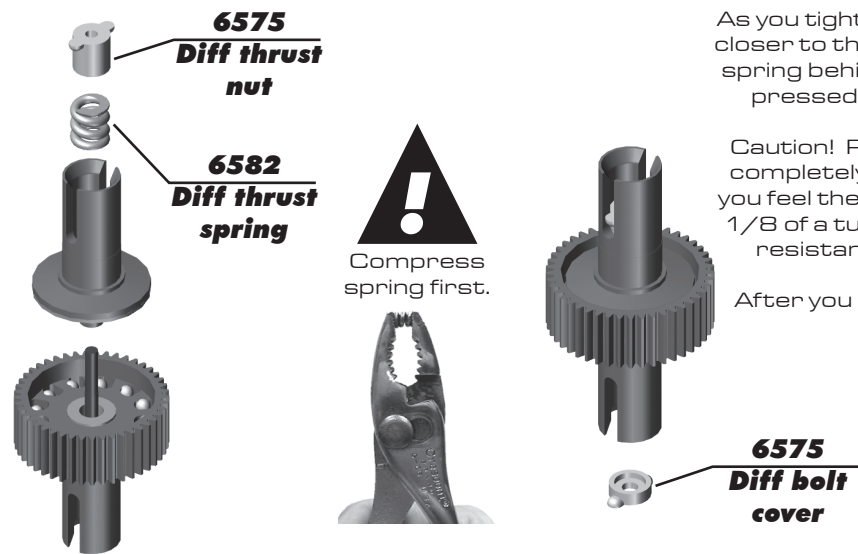


**Build Tip:**  
Do this entire step with the  
diff screw on the end of your  
wrench for better control.





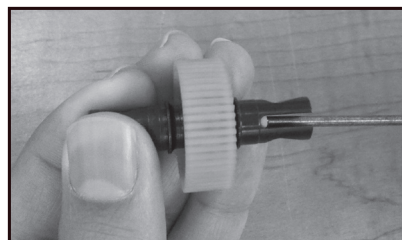
## :: Transmission Build - Bag C - Step 3



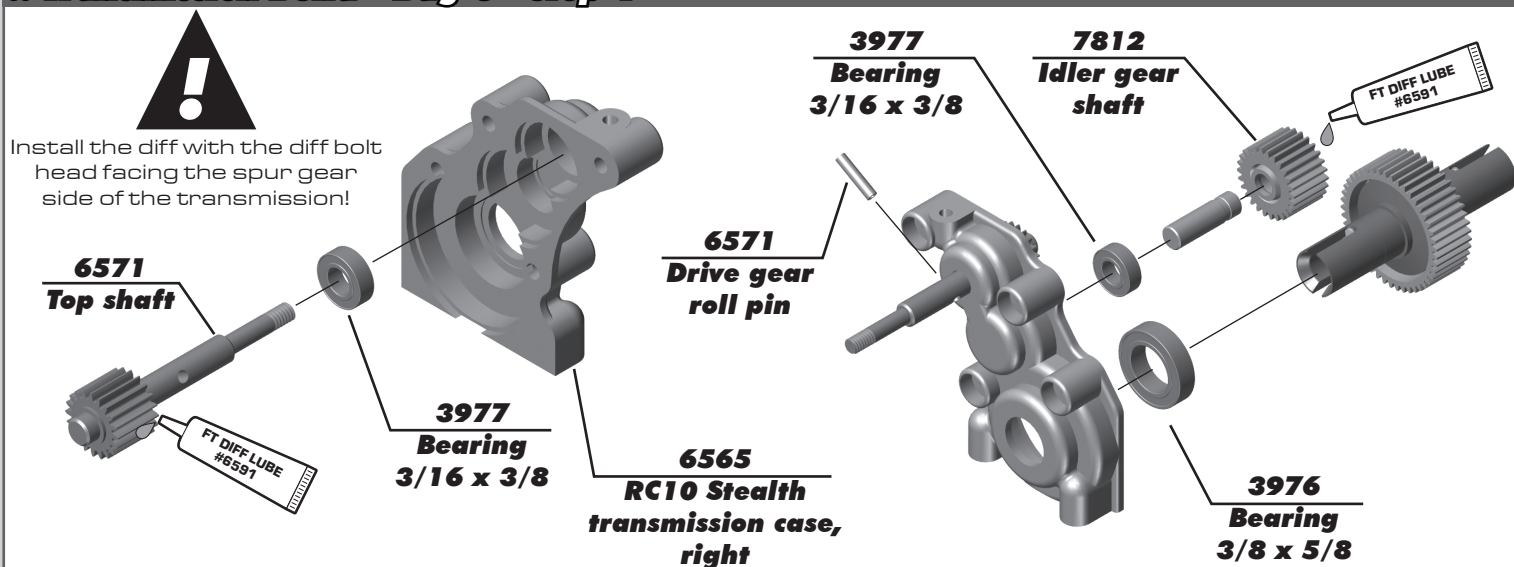
As you tighten the diff bolt, you will notice the T-nut ears moving closer to the bottom of the outdrive slot. This compresses the spring behind the T-nut. The spring should be completely compressed at the time the T-nut reaches the end of the slot.

Caution! Pay close attention to the feeling when the spring is completely compressed. Do not overtighten the bolt. When you feel the spring completely compressed, loosen the diff bolt  $1/8$  of a turn. Your diff should now operate smoothly but with resistance as the outdrives move in opposite directions.

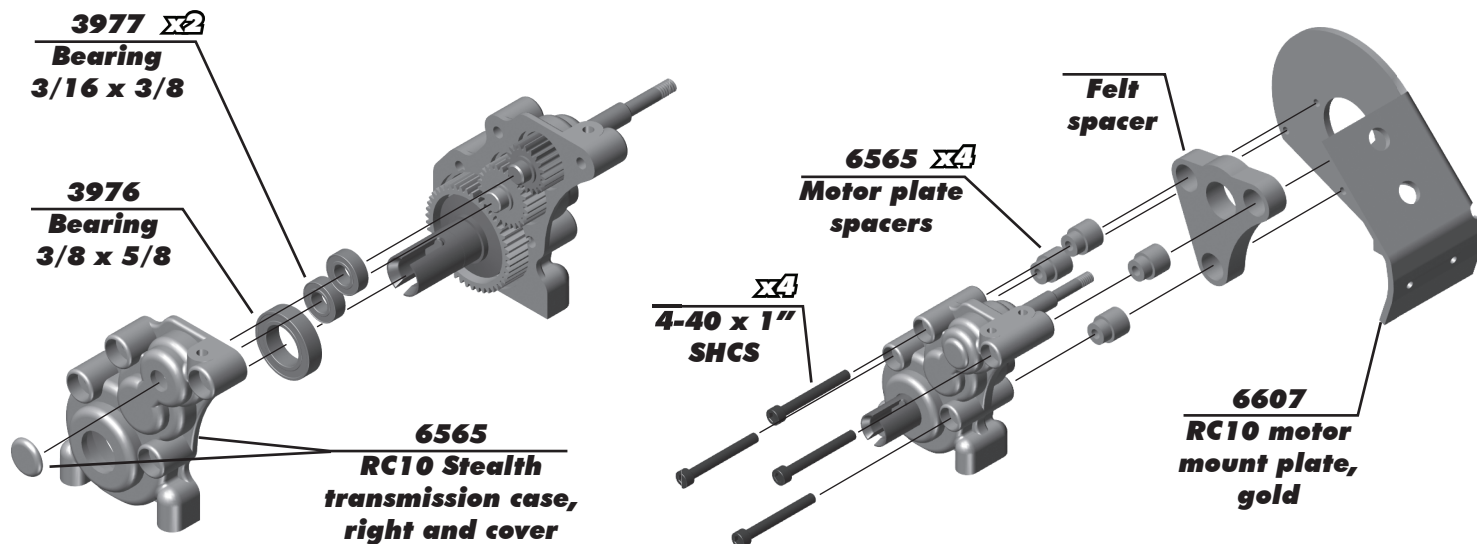
After you have driven the car once, re-check the diff setting.



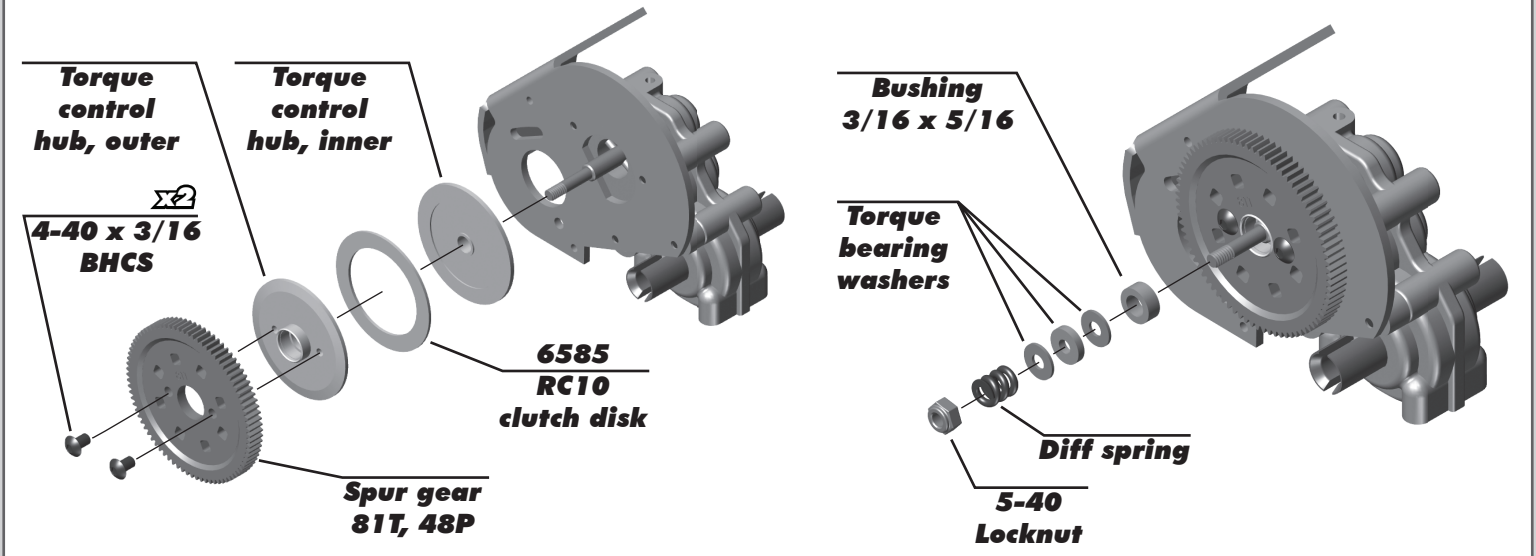
## :: Transmission Build - Bag C - Step 4



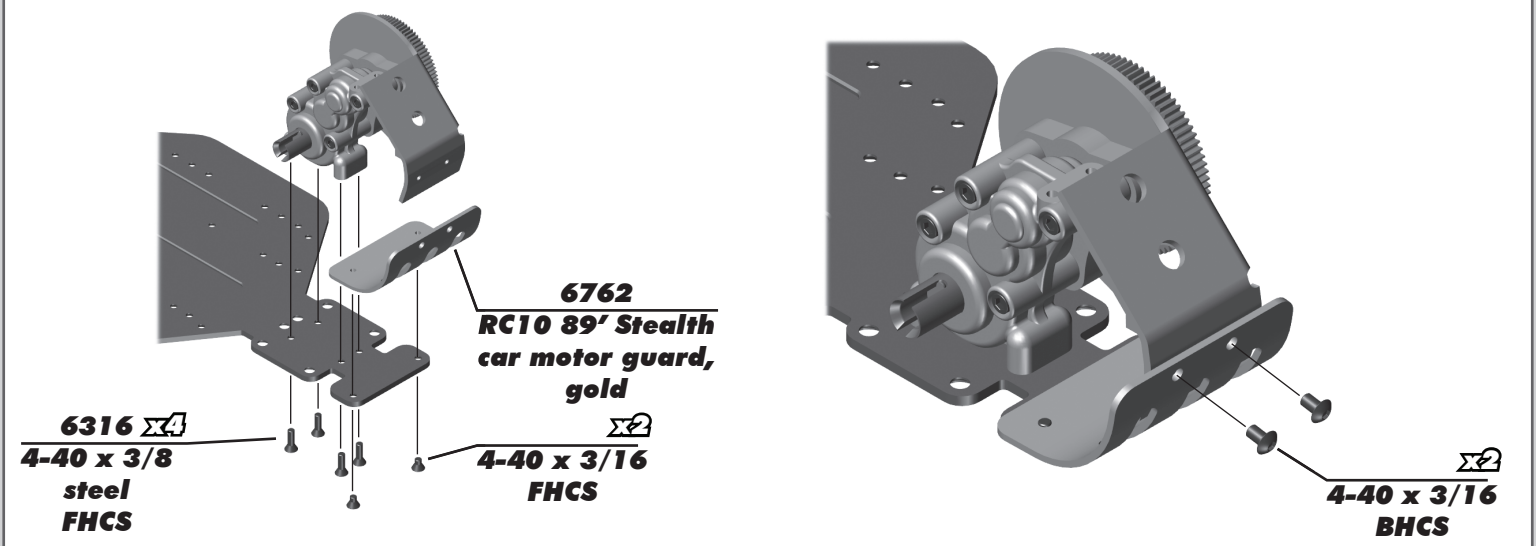
## :: Transmission Build - Bag C - Step 5



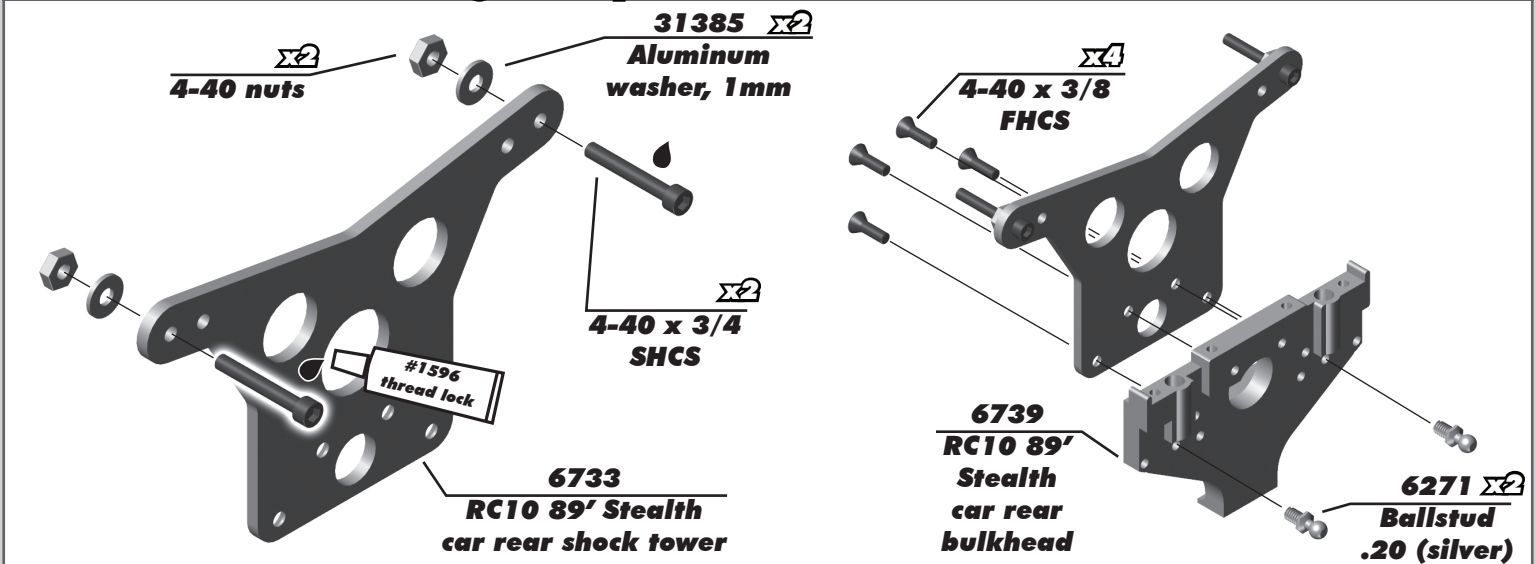
## :: Transmission Build - Bag C - Step 6



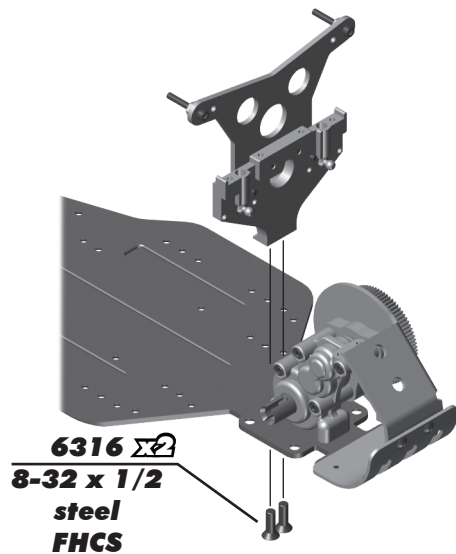
## :: Transmission Build - Bag C - Step 7



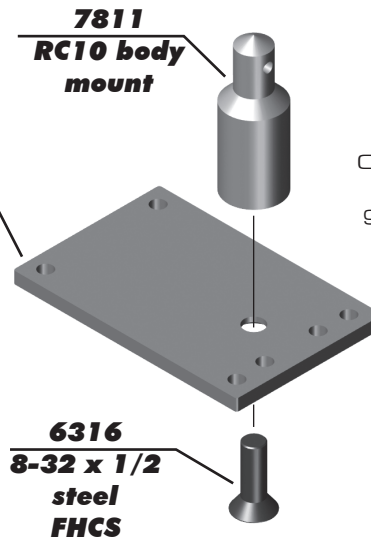
## :: Rear Bulkhead Build - Bag D - Step 1



## :: Rear Bulkhead Build - Bag D - Step 2

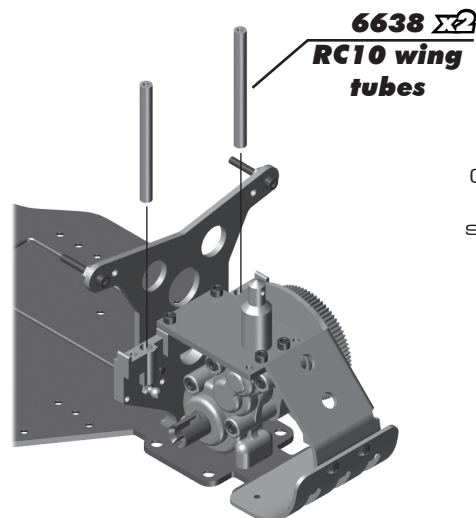
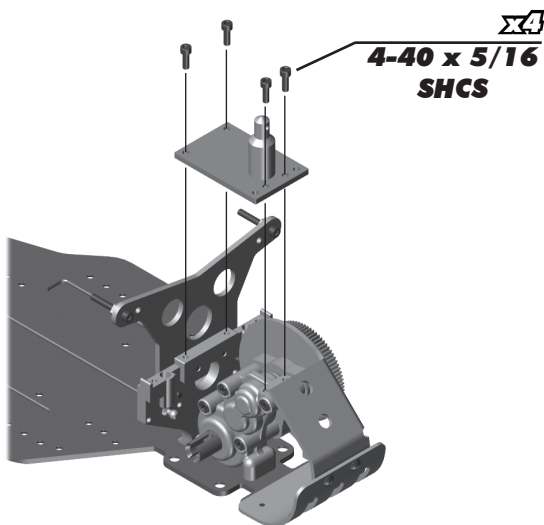


**6739**  
RC10 89' Stealth  
car transmission  
brace



Optional  
Only install rear body  
post if you are not  
going to trim off the  
rear of the body.

## :: Rear Bulkhead Build - Bag D - Step 3



Optional  
Only install wing tubes  
if you plan to use  
standard #6648 wing  
wire mounts

## :: Rear Bulkhead Build - Bag D - Step 4

**6373**  $\Sigma 3$   
Axle  
shims,  
1/4

**6639**  
RC10 rear  
hub carrier  
(Left & Right)

**6764**  
RC10 rear  
universals,  
56.5mm

**6374**  
Roll pin  
.1 dia x 3x8

**6273**  
Ballstud  
.30 (silver)

#1596  
thread lock

**4-40 nut,**  
small

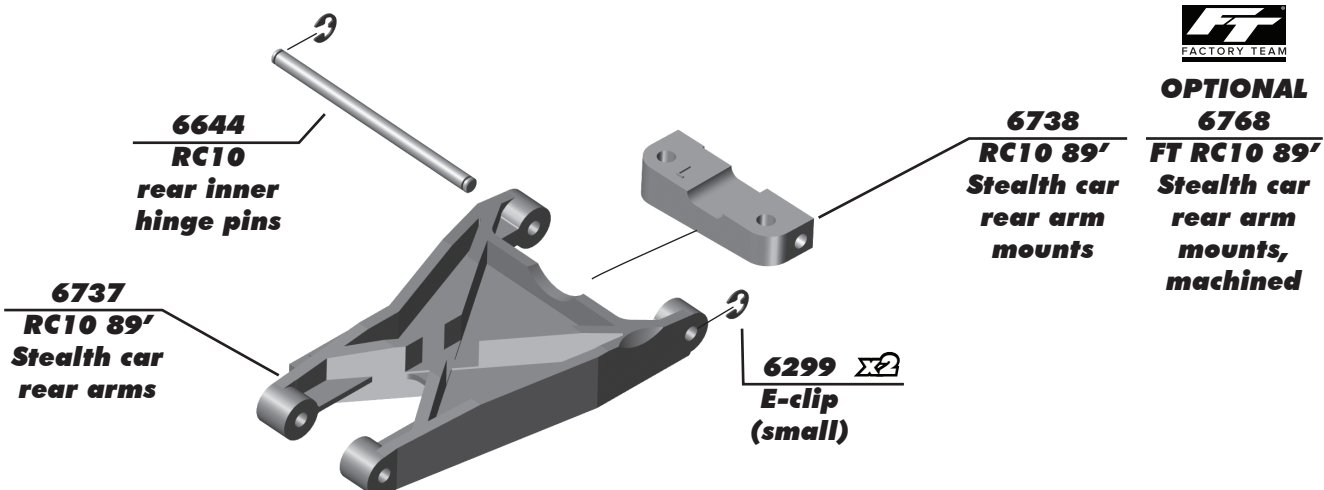
**3977**  $\Sigma 2$   
Flanged bearing  
1/4 x 3/8 x 1/8

**Build left and right sides!**

**Build left and right sides!**

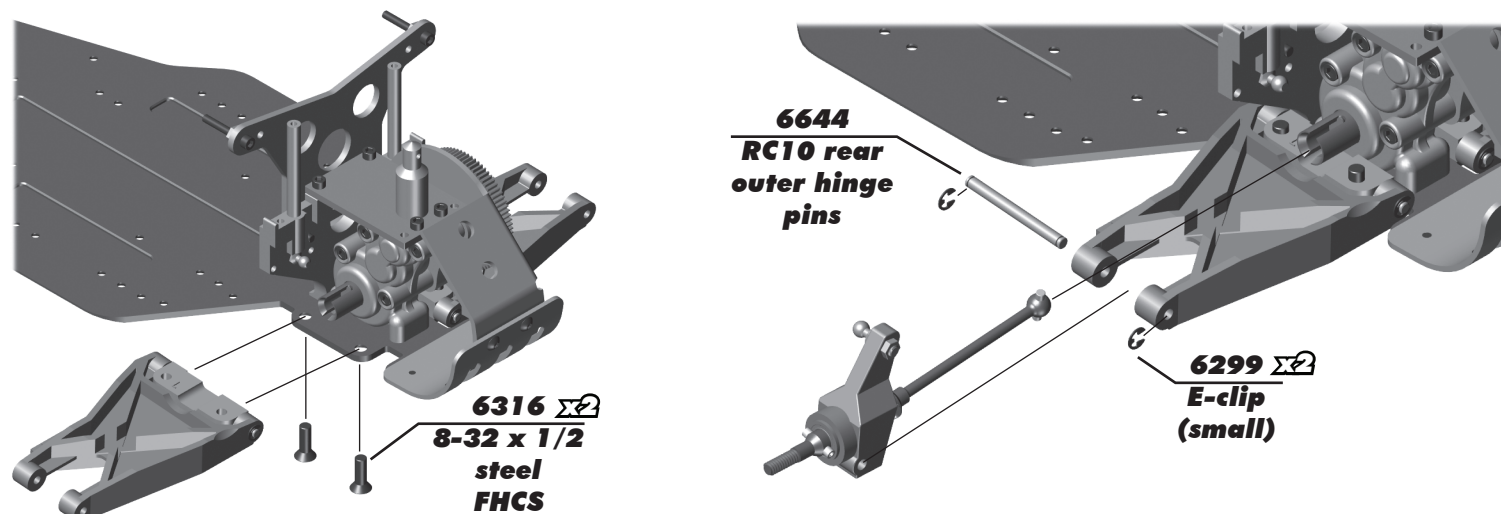


## :: Rear Bulkhead Build - Bag D - Step 5



**Build left and right sides!**

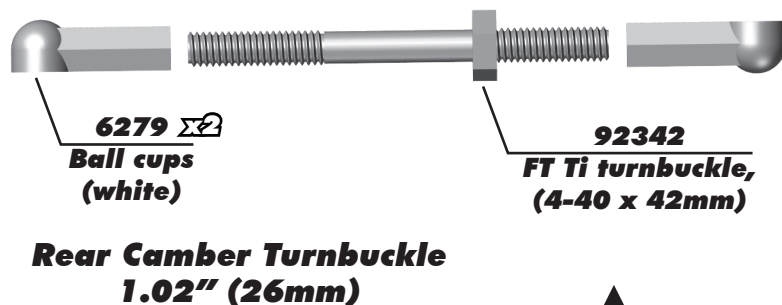
## :: Rear Bulkhead Build - Bag D - Step 6



**Build left and right sides!**

**Build left and right sides!**

## :: Turnbuckles Build - Bag E - Step 1

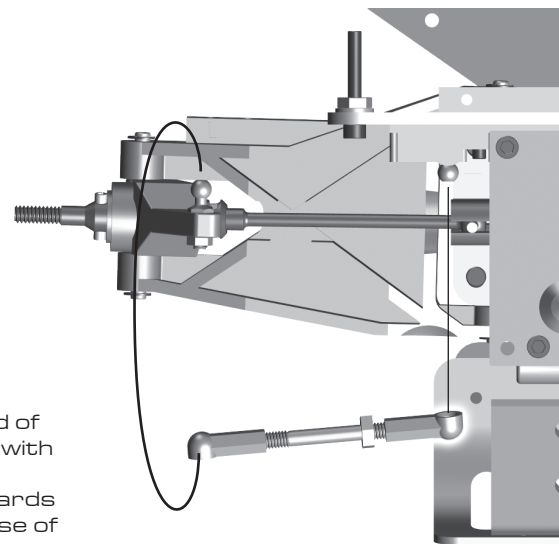


Recommended turnbuckle lengths are approximate. Final recommended settings = 0 degree Front Toe in and -2 Degree Camber Front and Rear.

**Build left and right sides!**



The adjustment nut on the end of the turnbuckles notes the side with the right hand threads. Masami mounted the nuts towards the outside of the vehicle for ease of adjustment.



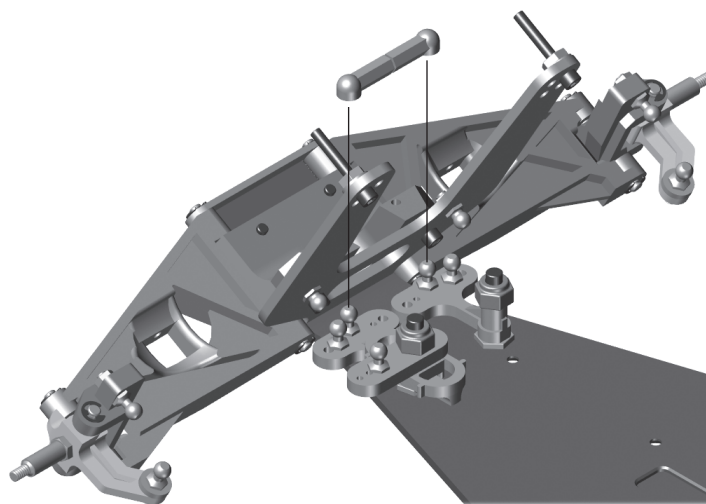
## :: Turnbuckles Build - Bag E - Step 2



**6279**  $\Sigma 2$   
**Ball cups**  
(white)

**Set screw**  
**4-40 x 5/8**

**Steering Rack Turnbuckle**  
**1.30" (33mm)**



## :: Turnbuckles Build - Bag E - Step 3



**6279**  $\Sigma 2$   
**Ball cups**  
(white)

**92343**  
**FT Ti turnbuckle,**  
**(4-40 x 52.6mm)**

**Front Camber Turnbuckle**  
**1.53" (39mm)**

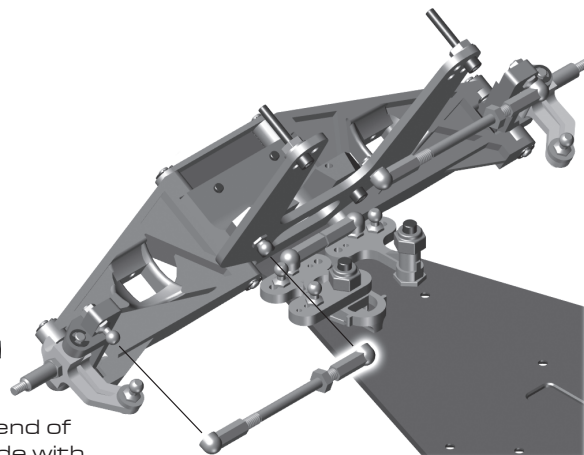


Recommended turnbuckle lengths are approximate. Final recommended settings = 0 degree Front Toe in and -2 Degree Camber Front and Rear.

**Build left and right sides!**



The adjustment nut on the end of the turnbuckles notes the side with the right hand threads. Masami mounted the nuts towards the outside of the vehicle for ease of adjustment.



## :: Turnbuckles Build - Bag E - Step 4



**6279**  $\Sigma 2$   
**Ball cups**  
(white)

**92344**  
**FT Ti turnbuckle,**  
**(4-40 x 60.1mm)**

**Steering Turnbuckle**  
**1.65" (42mm)**

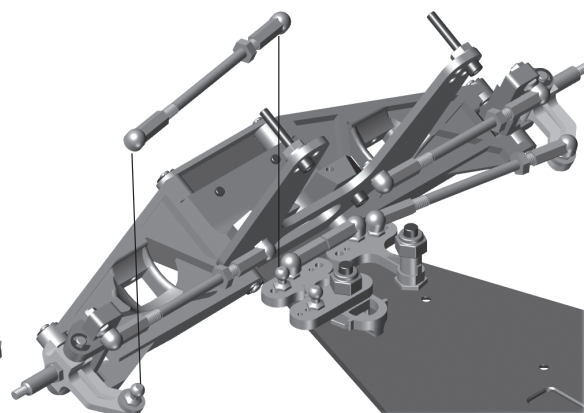


Recommended turnbuckle lengths are approximate. Final recommended settings = 0 degree Front Toe in and -2 Degree Camber Front and Rear.

**Build left and right sides!**



The adjustment nut on the end of the turnbuckles notes the side with the right hand threads. Masami mounted the nuts towards the outside of the vehicle for ease of adjustment.



## :: Turnbuckles Build - Bag E - Step 5



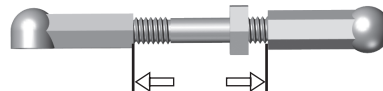
Set aside until you are installing the servo!



**6279**  $\Sigma 2$   
**Ball cups**  
**(white)**

**92341**  
**FT Ti turnbuckle,**  
**(4-40 x 35mm)**

**Servo Turnbuckle**  
**0.70" (18mm)**

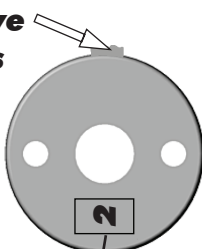


The adjustment nut on the end of the turnbuckles notes the side with the right hand threads. Masami mounted the nuts towards the outside of the vehicle for ease of adjustment.

## :: Shocks Build - Bag F - Step 1

**Remove spurs**

**Piston**



**Piston number here**  
**Use #2 = front shocks**  
**Use #1 = rear shocks**



**TIP:** Use marker to mark the piston numbers for easy identification!

**6299**  
**E-clip**  
**(small)**

**6417**  
**Shock shaft,**  
**front (1.02)**

**6416**  
**Shock shaft,**  
**rear (1.32)**

**6420/6462**  
**Shock pistons**  
**(1, 2, 3)**

**6299**  
**E-clip**  
**(small)**

**Build two front and two rear!**

## :: Shocks Build - Bag F - Step 2

**5407**  $\Sigma 2$   
**Red o-ring**

**Remove spurs**

**Front Shock**

**6436**  
**FT Hard Anodized shock body, front (1.02)**

**6420/6462**  $\Sigma 2$   
**Off-road shock rebuild kit**

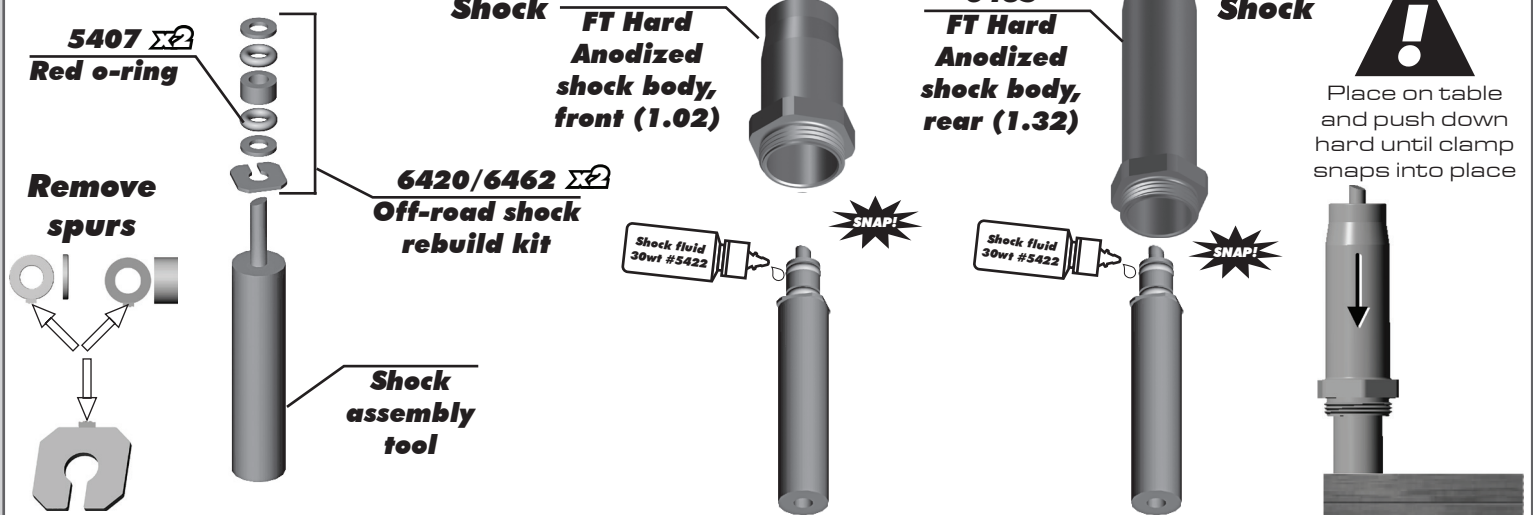
**Shock assembly tool**

**6435**  
**FT Hard Anodized shock body, rear (1.32)**

**Rear Shock**



Place on table and push down hard until clamp snaps into place





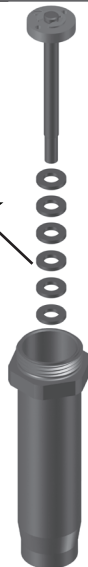
## :: Shocks Build - Bag F - Step 3

**Front Shock**



**Rear Shock**

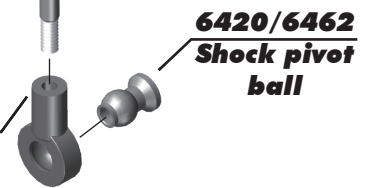
**6420/6462 X6 Shock downstops**



**6420/6462 Shock cap o-ring**



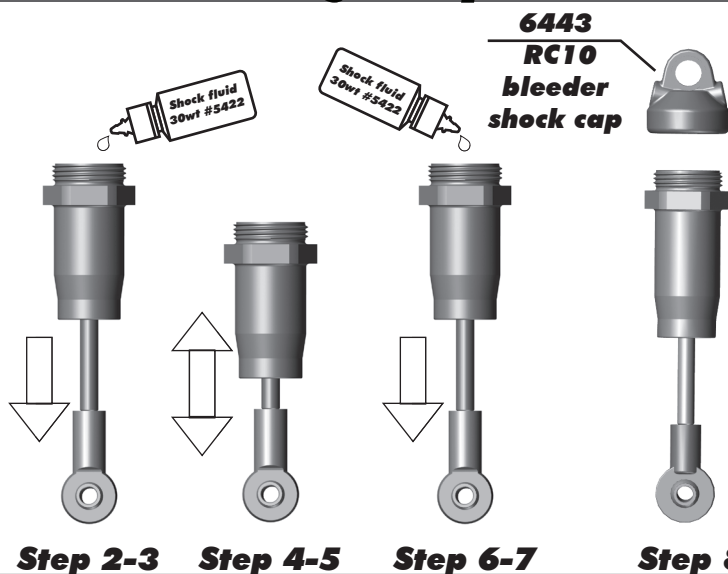
**6279 Shock rod end**



**6420/6462 Shock pivot ball**

**Build two front and two rear!**

## :: Shocks Build - Bag F - Step 4



**6443 RC10 bleeder shock cap**

### Shock Bleeding Steps:

1. Before assembly, get each bleed screw and thread it 1-2 turns into the shock cap, then remove the screw. This will make it easier when you are bleeding your shocks.
2. Pull shock shaft down.
3. Fill shock body 3/4 full with silicone shock fluid.
4. Slowly move the shock shaft up and down to remove air from under the piston.
5. Wait for bubbles to come to surface.
6. Fill shock body to top with silicone shock fluid.
7. Place a drop of oil in the cap and on cap threads.
8. Install cap (without bleed screw) and tighten completely.
9. Slowly compress shaft all the way to bleed excess silicone shock fluid out the hole in the cap (use rag around shock to catch excess fluid).
10. Install button head screw until snug while shaft is fully compressed.

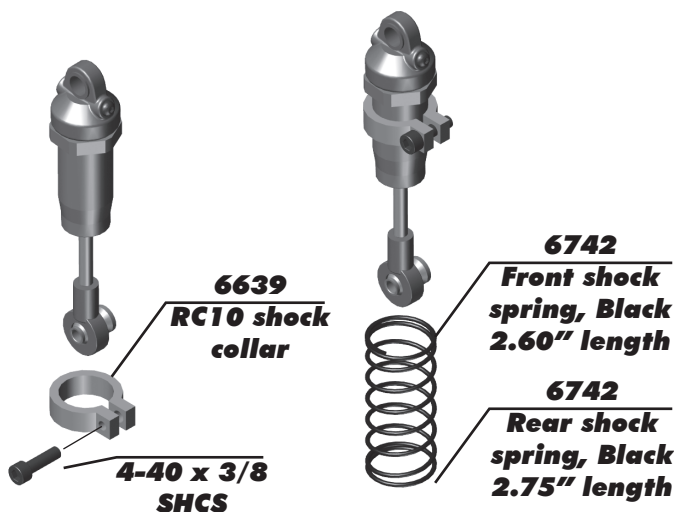
**Stroke Front: 28.5mm**

**Rear: 30mm**

**6443 2-56 x 1/8 BHCS**

**Step 9-10**

## :: Shocks Build - Bag F - Step 5



**6639 RC10 shock collar**

**4-40 x 3/8 SHCS**

**6742 Front shock spring, Black 2.60" length**

**6742 Rear shock spring, Black 2.75" length**



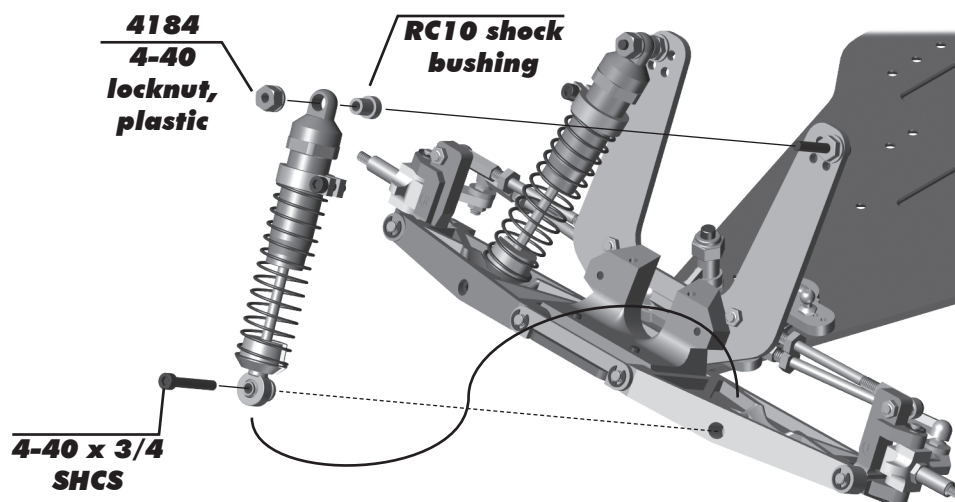
Due to various weights of electronics, these settings may change

**Front: 0mm**  
**Rear: 5.5 - 6.5mm**

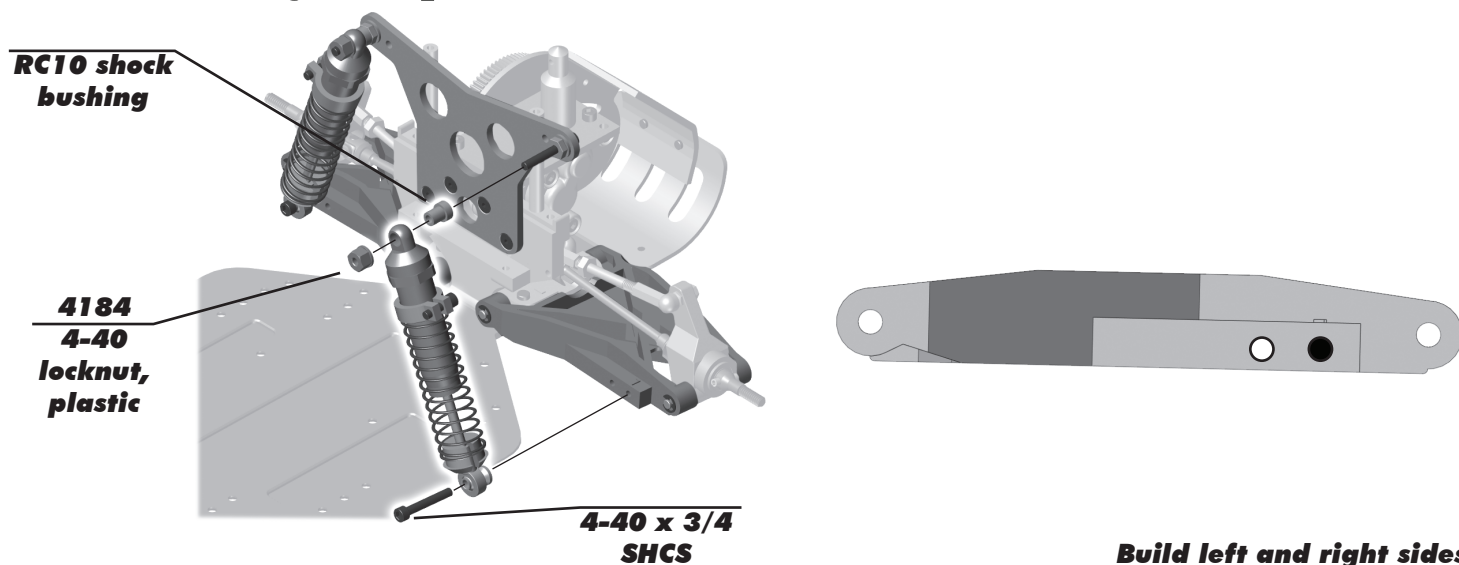
**6639 RC10 spring cup**

**Build two front and two rear!**

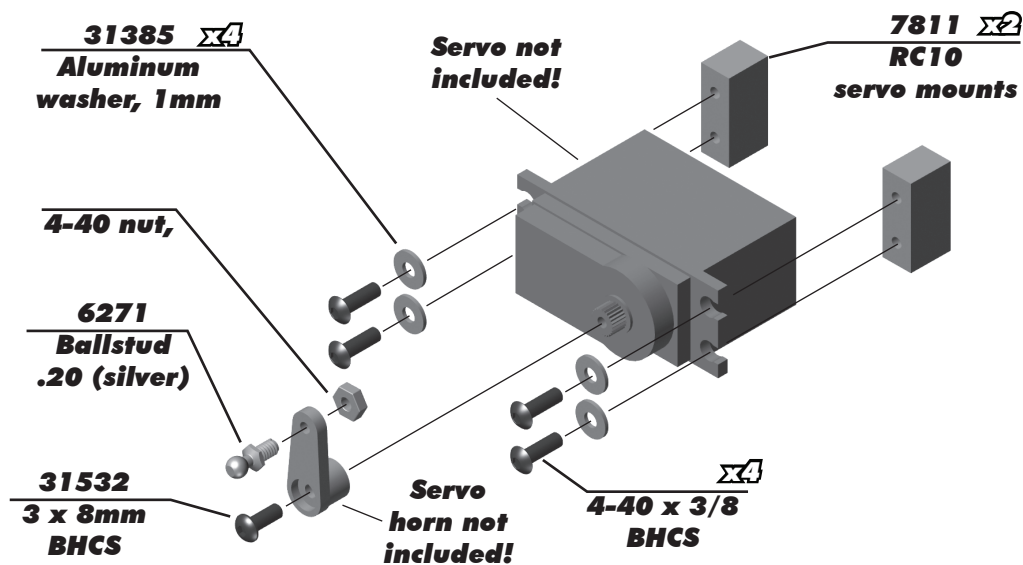
## :: Shocks Build - Bag F - Step 6



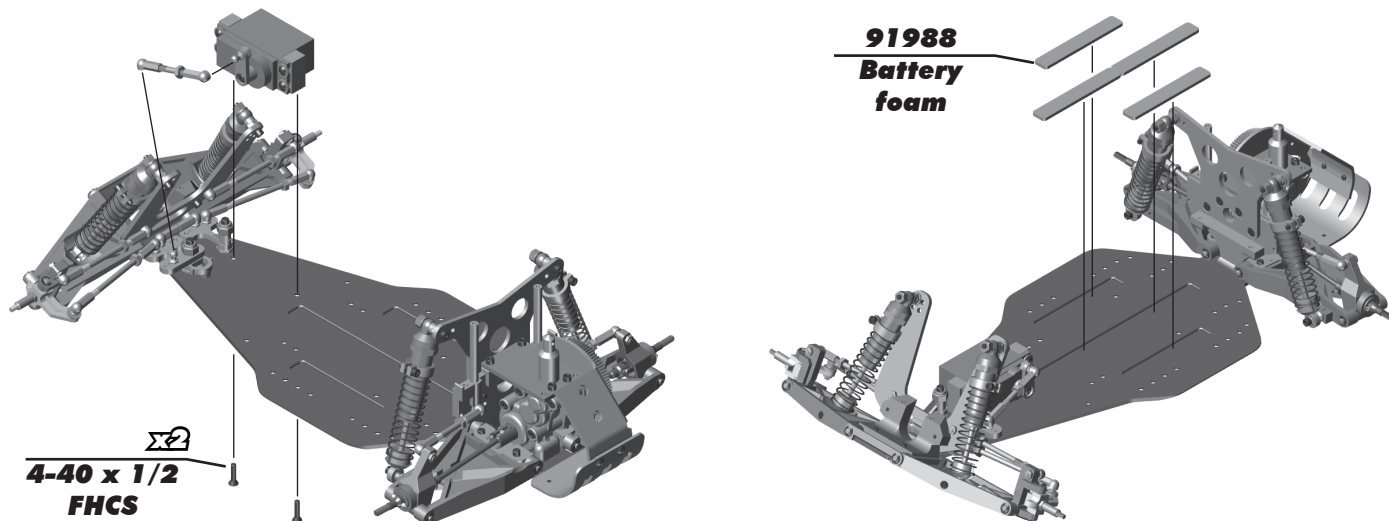
## :: Shocks Build - Bag F - Step 7



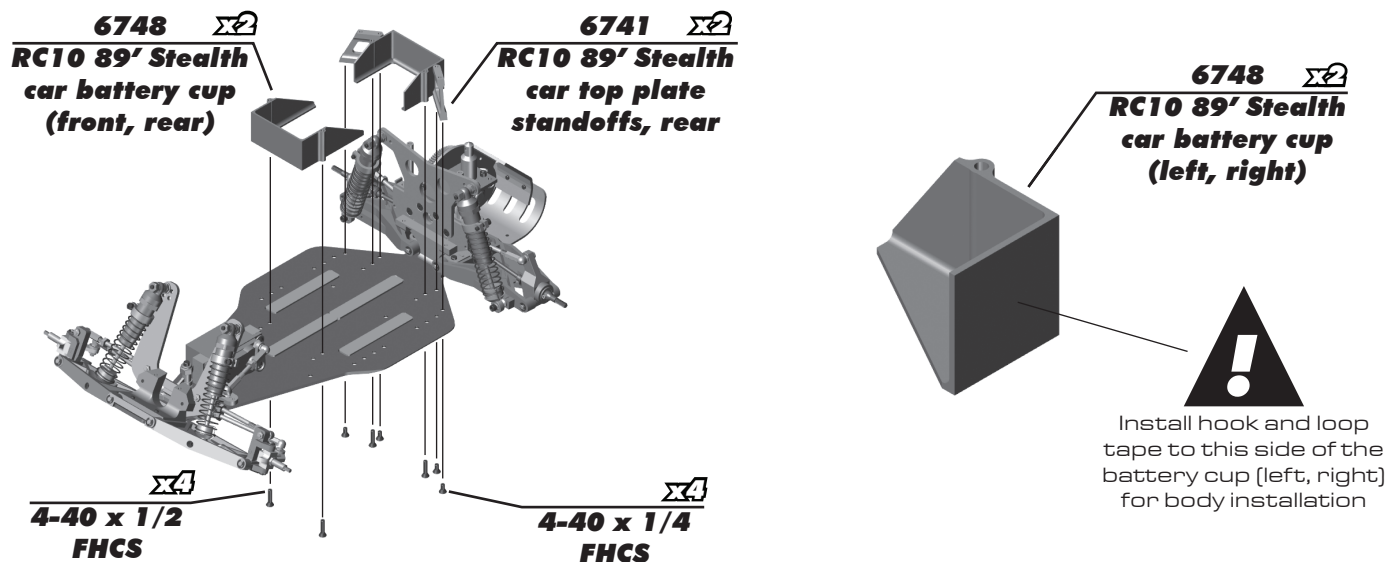
## :: Electronics Build - Bag G - Step 1



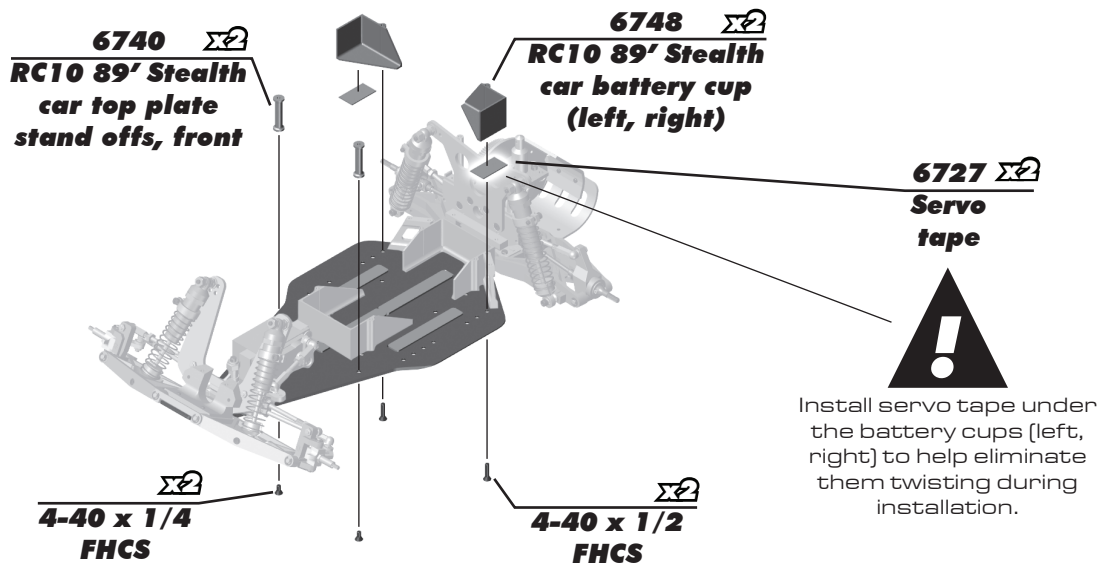
## :: Electronics Build - Bag G - Step 2



## :: Electronics Build - Bag G - Step 3



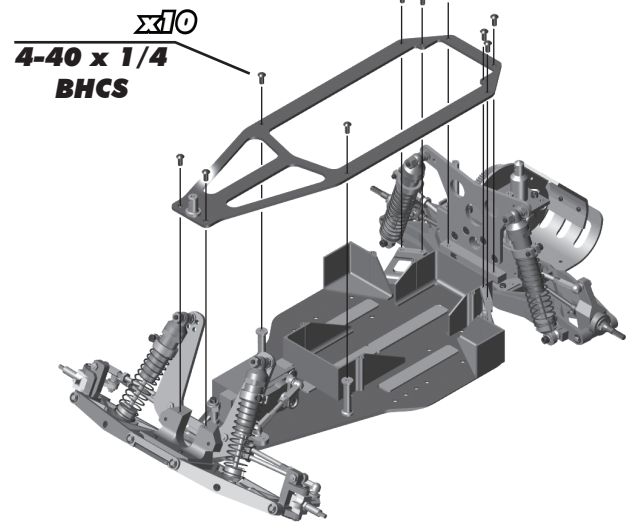
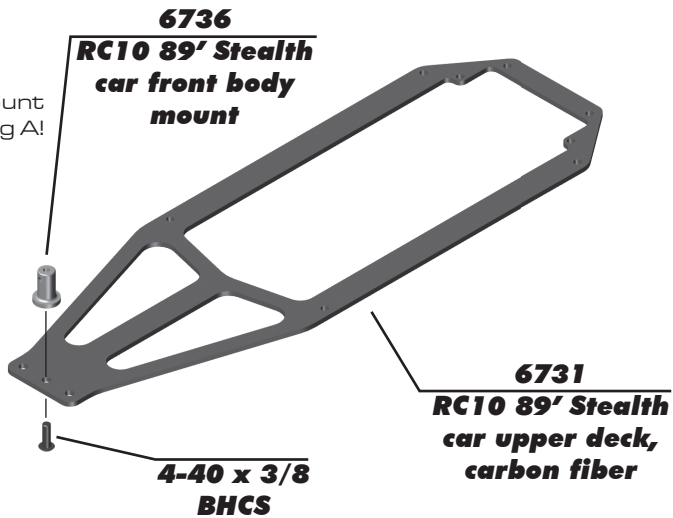
## :: Electronics Build - Bag G - Step 4



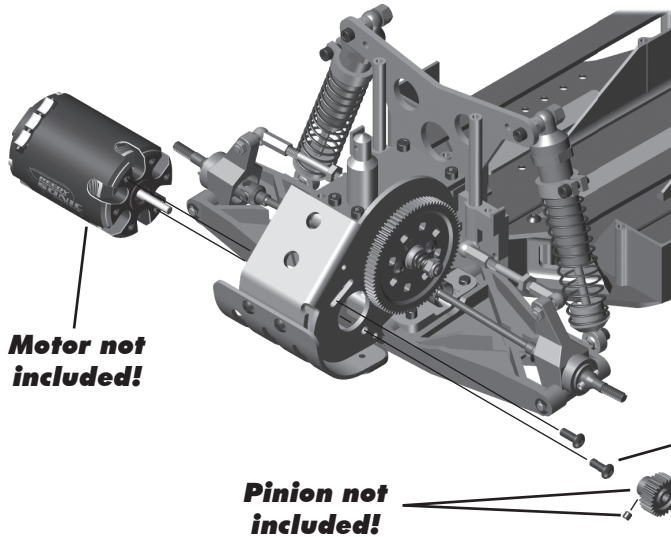


## :: Electronics Build - Bag G - Step 5

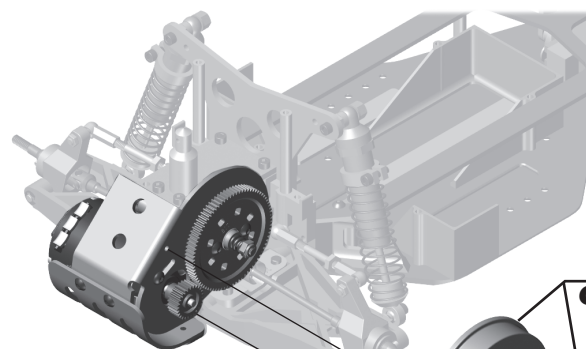
**!**  
Front body mount  
is located in bag A!



## :: Electronics Build - Bag G - Step 6



**31531** **x2**  
**3 x 6mm**  
BHCS



**x2**  
**4-40 x 3/16**  
BHCS

**!**  
Gear cover, plug,  
and hardware are  
located in bag C!

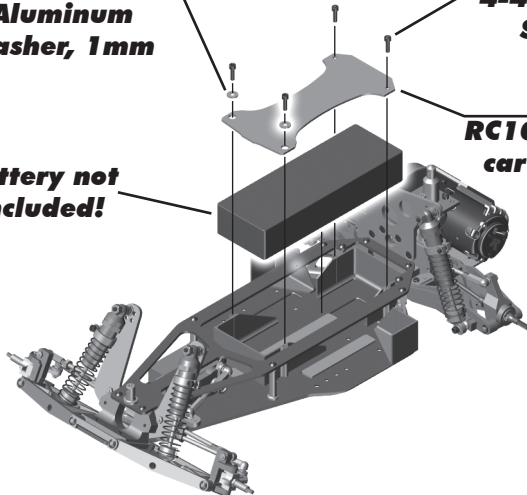
## :: Electronics Build - Bag G - Step 7

**31385** **x2**  
Aluminum  
washer, 1mm

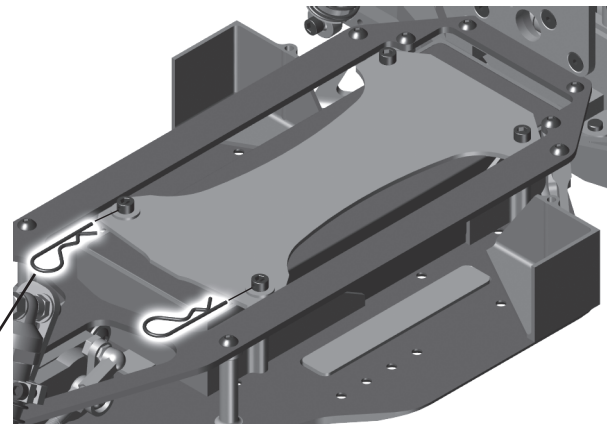
**x4**  
**4-40 x 3/8**  
SHCS

**6747**  
RC10 89' Stealth  
car ESC mount

**Battery not included!**

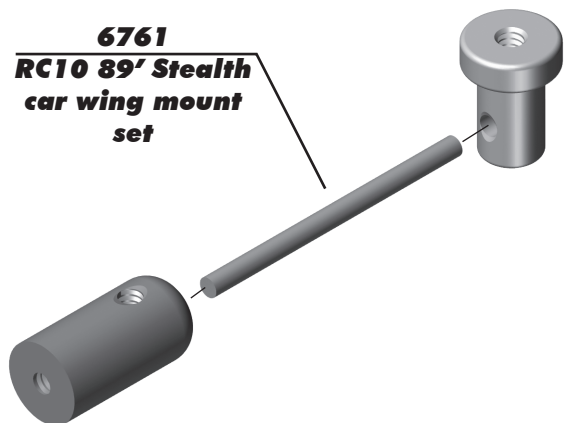


**6332** **x2**  
Body  
clip

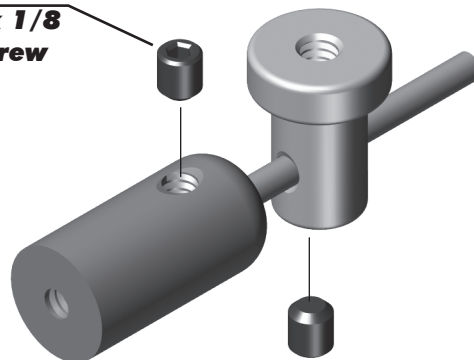


## :: Electronics Build - Bag G - Step 8

**6761**  
**RC10 89' Stealth**  
**car wing mount**  
**set**



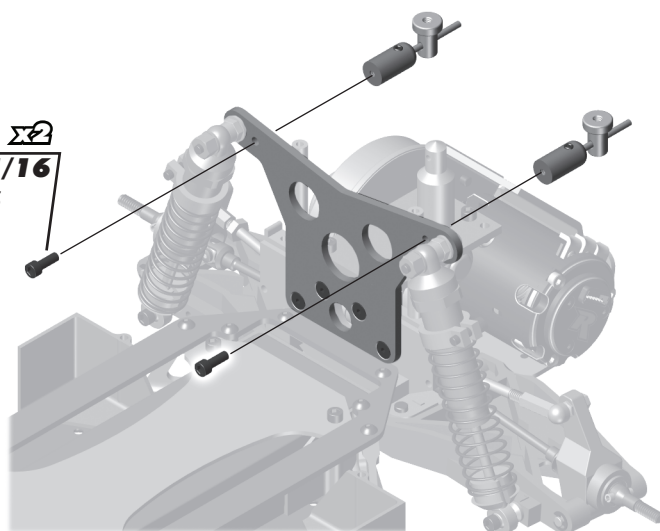
**4-40 x 1/8**  
**set screw**



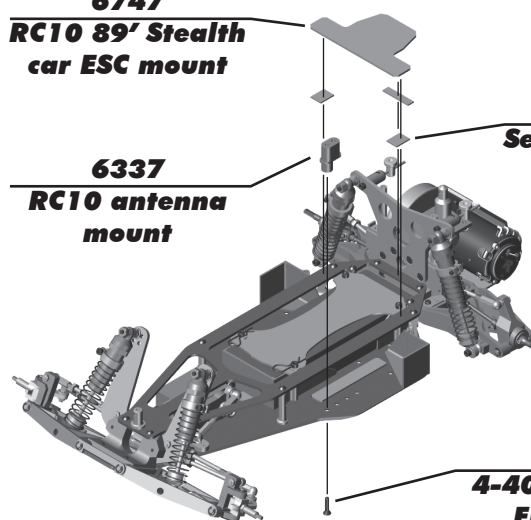
**Build 2**

## :: Electronics Build - Bag G - Step 9

**4-40 x 5/16**  
**SHCS**



**6747**  
**RC10 89' Stealth**  
**car ESC mount**



**6337**  
**RC10 antenna**  
**mount**

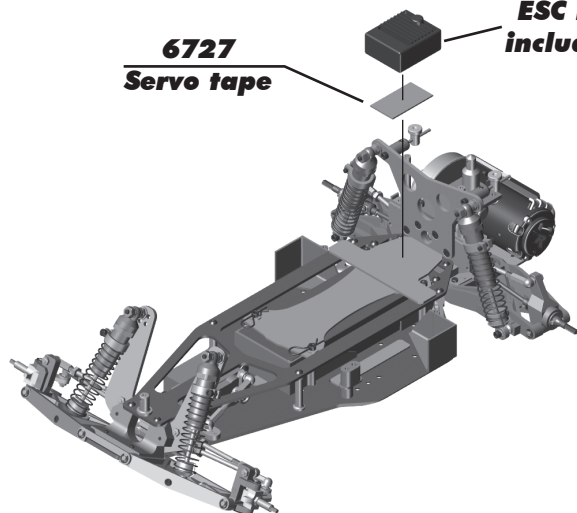
**6727** **X3**  
**Servo tape**

**4-40 x 1/2**  
**FHCS**

## :: Electronics Build - Bag G - Step 10

**6727**  
**Servo tape**

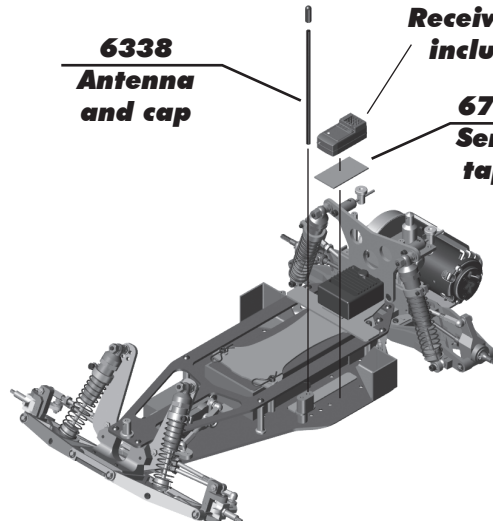
**ESC not**  
**included!**



**6338**  
**Antenna**  
**and cap**

**Receiver not**  
**included!**

**6727**  
**Servo tape**



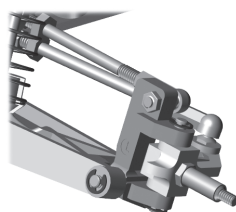
## :: Wheels / Tires and Body - Bag H - Step 1

**6759**  
**RC10 89'**  
**Stealth car**  
**front tires**



**Pro Tip!**  
Front tires may fit tight  
on the front wheels.  
Use a drop of water to  
lubricate the tire bead  
during installation.

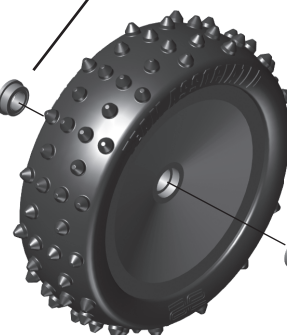
**Build 2**



**6902**   
**Flanged Bearing**  
**3/16 x 5/16 x 1/8**



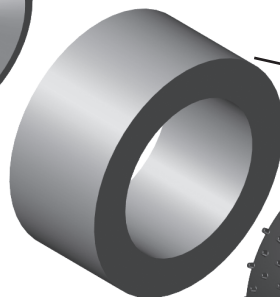
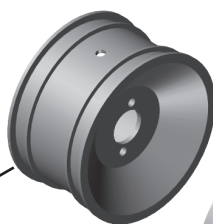
**6852**  
**Front wheels,**  
**1 Piece**



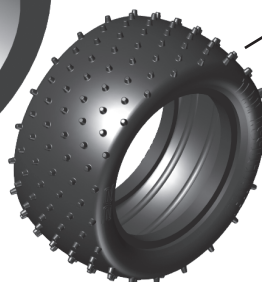
**5-40**  
**locknut**

## :: Wheels / Tires and Body - Bag H - Step 2

**6749**  
**RC10 89'**  
**Stealth car**  
**rear wheels,**  
**2.2", pink**



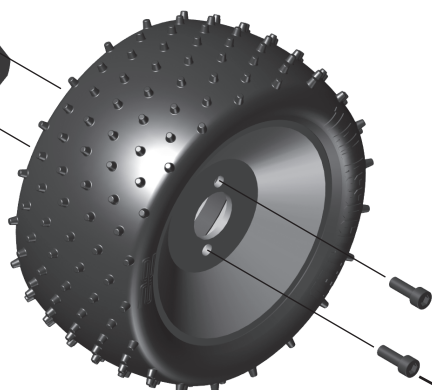
**6760**  
**RC10 89'**  
**Stealth car**  
**rear tires,**  
**and inserts**



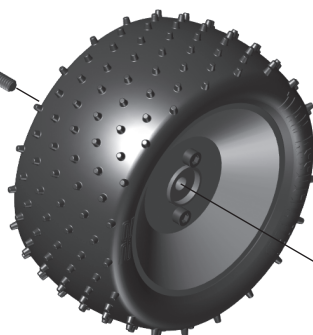
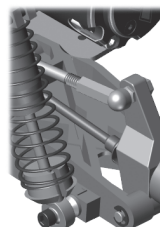
**Build 2**

## :: Wheels / Tires and Body - Bag H - Step 3

**6745**  
**RC10 89'**  
**Stealth car**  
**rear wheel**  
**hub**



**4-40 x 5/16"**  
**SHCS**



**8-32 steel**  
**locknut**

**Build 2**

## :: Wheels / Tires and Body - Bag H - Step 4

### Painting Tips:

Your RC 10 Kit comes with a clear polycarbonate body and wing. You will need to prep the body and wing before you can paint them. Wash the inside thoroughly with warm water and liquid detergent. Dry the body and wing using a clean, soft, lint-free cloth. Use high quality masking tape to make masks for the windows and install them on the inside of the body (RC cars get painted from the inside).

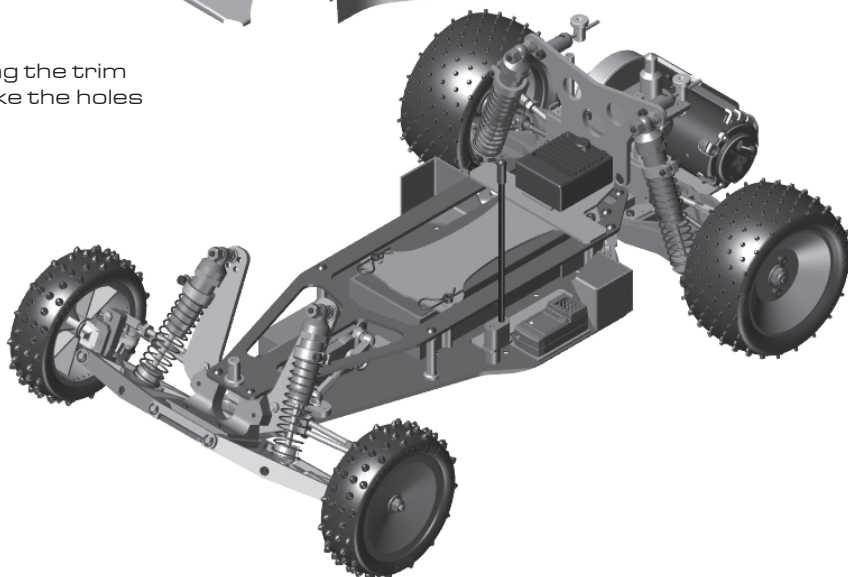
Using high quality masking tape, apply tape to the inside of the body to create a design. Spray (either rattle can or airbrush R/C specific paint) the paint to the inside of the body (preferably dark colors first, lighter colors last).

NOTE: use ONLY paint that is recommended for use with (polycarbonate) plastics. If you do not, you can destroy the plastic body and wing!!!!).

It is recommended to wear a mask while painting.

After the paint has dried, cut the body and wing along the trim lines. Make sure to drill or use a body reamer to make the holes for the body mounts, wing mounts, and antenna!

**6173**  
**RC10**  
**Protech II**  
**body, clear**



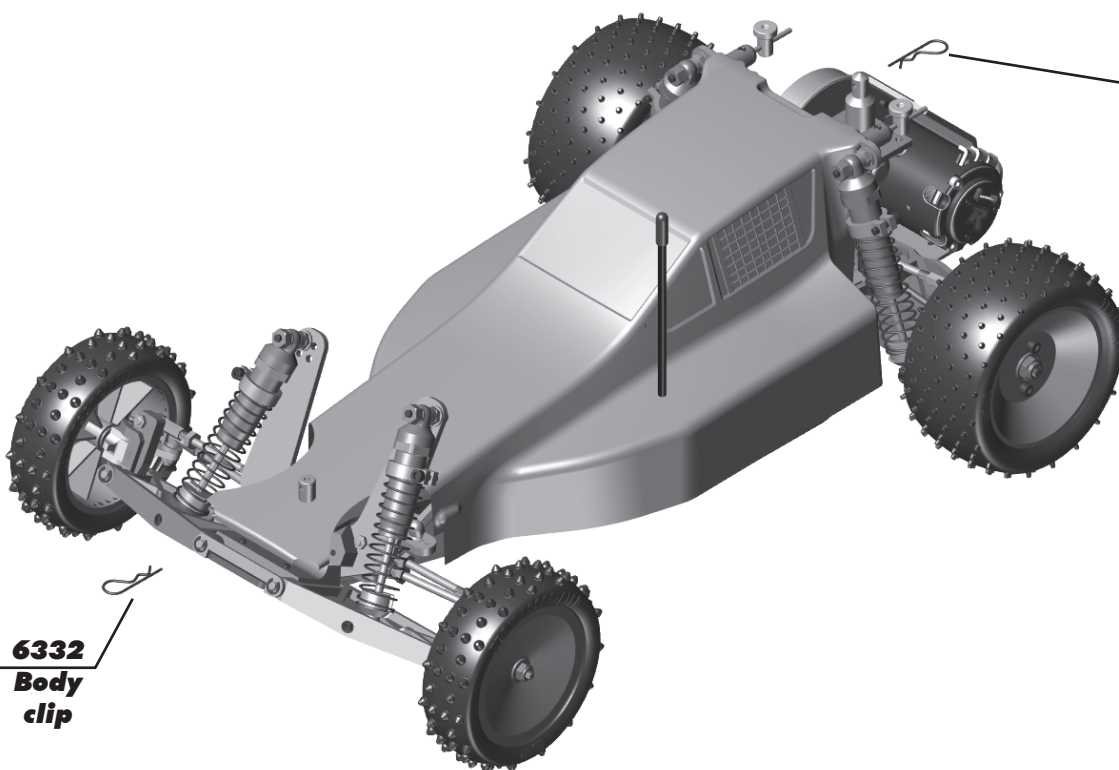
**6332**  
**Body**  
**clip**



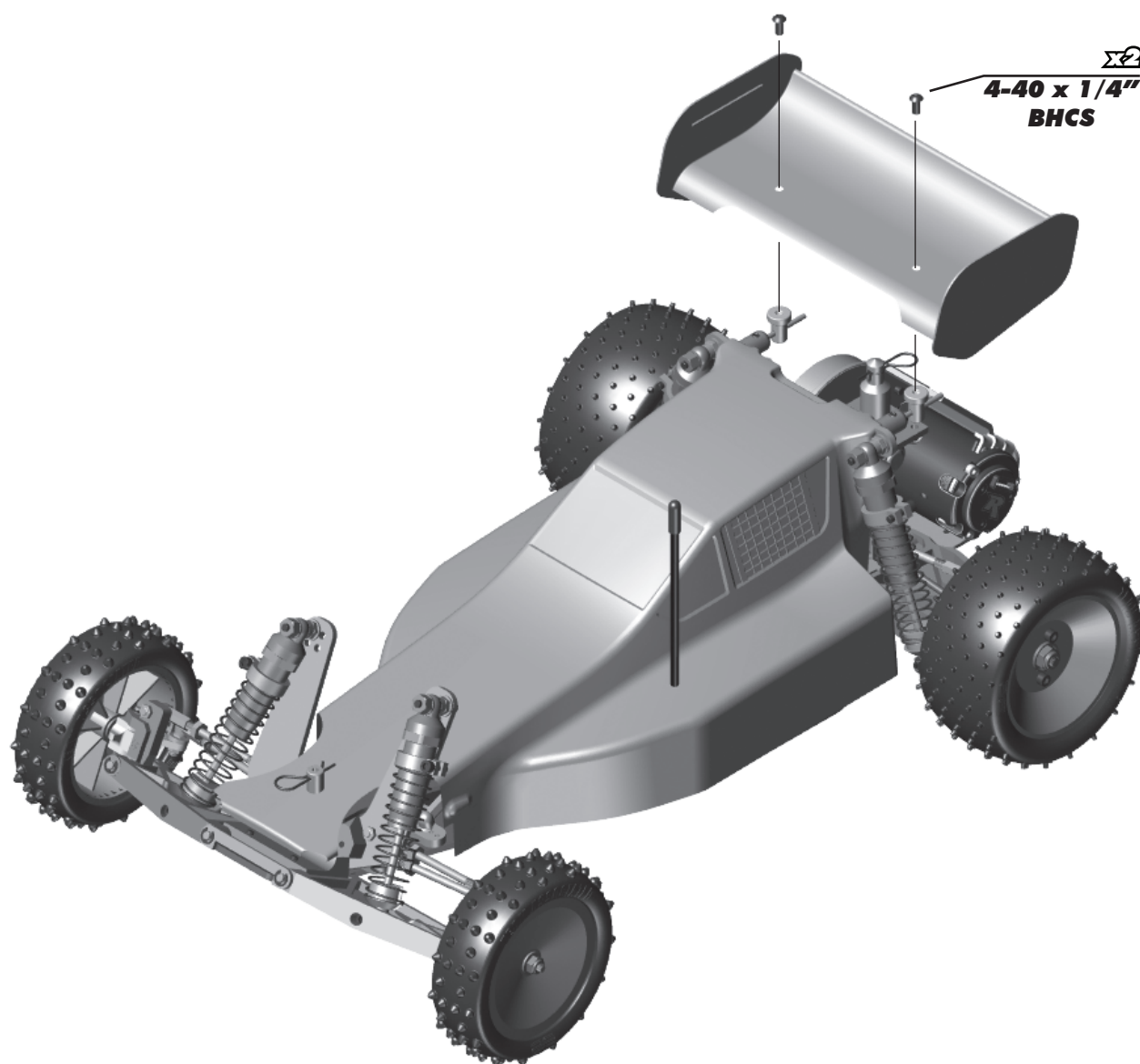
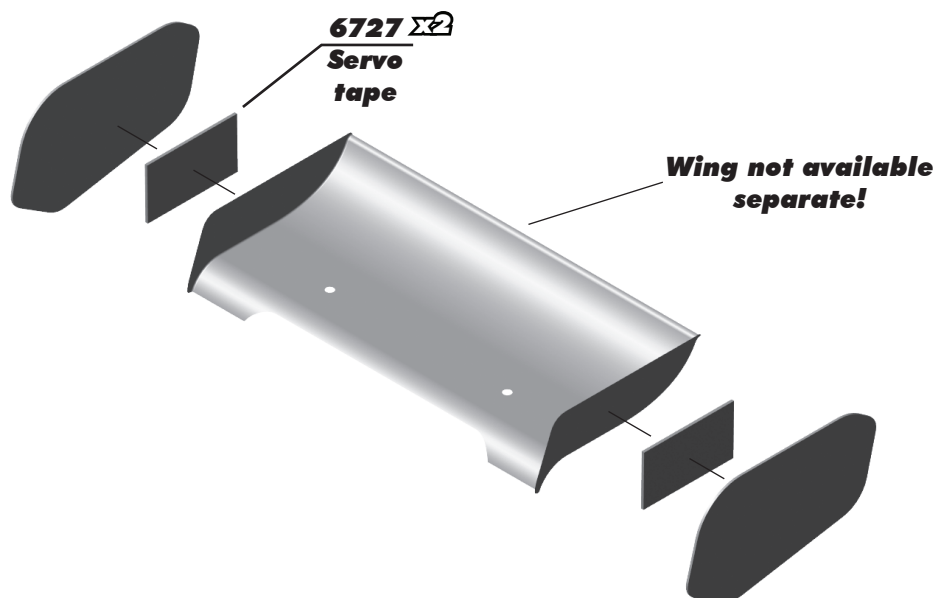
Option

Rear body clip only used if you are not trimming the rear of the body off as pictured.

**6332**  
**Body**  
**clip**





**:: Wheels / Tires and Body - Bag H - Step 5**



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