RC8 B4.2 TEAM KIT

RC8 B4.2 EURO KIT

TEAM ASSOCIATED

1:8 Scale 4WD Nitro Off Road Competition Buggy Kit Manual

#80954 RC10B4.2 Team Kit and #80956 RC10B4.2 EURO Team Kit

WeAreAE CHAMPIONS by DESIGN AssociatedElectrics.com

TEAM ASSOCIATED

:: 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

- New molded height-adjustable gearboxes front and rear
- New offset hubs and updated rear suspension arms to accommodate new hub geometry
- New -4mm chassis in FWB configuration
- (Euro Spec) New V2 FWB chassis
- New high-volume center differential
- New long chassis brace options
- New high-downforce wing
- Now includes FT hard-anodized aluminum shock bushings
- Updated brake pad material and brake spring
- Soft blend material suspension arms
- 8-degree KPI steering blocks included
- 44/13 ring and pinion gear sets
- 92mm universal driveshafts with 17mm outdrives
- 19mm diameter HTC internal differential gear set
- (Euro Spec) 20mm diameter HTC internal differential gear set
- Optimized setup for tracks with loose dirt and large bumps
- (Euro Spec) Optimized setup for high-speed and high-grip tracks

:: Additional

Your new RC8B4.2 Kit comes as a kit. There are some items you will need to complete your kit (refer to website for suggestions):

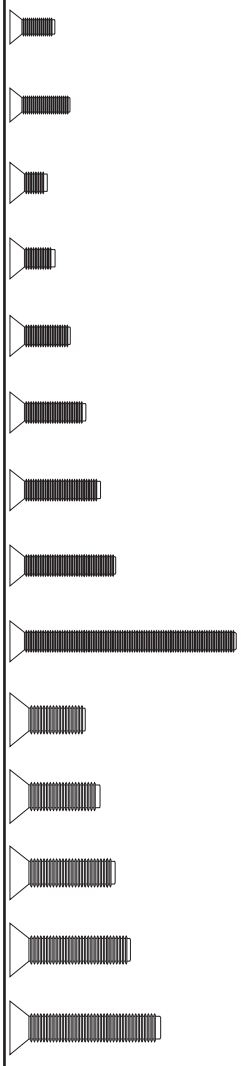
- 4.8-7.4v receiver battery (Flat style NiMH, Flat style LiPo, Flat style LiFe)
- 2 or 3 channel radio/transmitter set with switch (2.4GHz recommended)
- Model car fuel (20-30% nitro recommended)
- .21 class rear exhaust engine
- 1:8 scale buggy wheels / tires
- Polycarbonate-specific paint
- CA (cyanoacrylic) glue - (#1597)
- Starter box - (#1751)
- Exhaust system
- Fuel bottle - (#1747)
- Reamer / hole punch
- Thread-locking compound - (#1596)
- Throttle and Steering servos
- Transmitter batteries
- Glow igniter - (#27377)
- Needle-nose pliers
- Ride height gauge
- Hobby knife

:: Other Helpful Items

- Silicone Shock/Diff Fluids (Refer to website for complete listings)
- Shock Pliers
- Reamer / Hole Punch - (#1499)
- FT Hex Wrenches - (#1518)
- Wire Cutters
- Body Scissors (AE #1737)
- FT Nut Drivers - (#1519)
- Calipers or a Precision Ruler

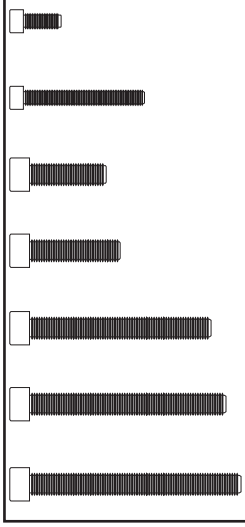
:: Hardware - 1:1 Scale View

Flat Head (fhcs)



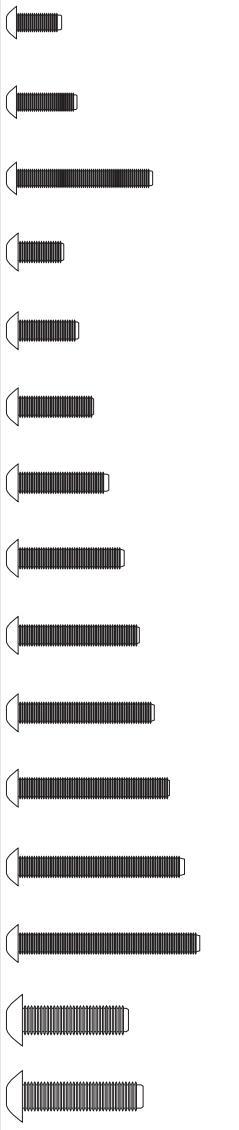
2.5x6mm (4675)
2.5x8mm (31448)
3x5mm (31540)
3x6mm (31541)
3x8mm (25201)
3x10mm (25202)
3x12mm (25203)
3x14mm (89208)
3x30mm (89212)
4x10mm (81262)
4x12mm (89214)
4x14mm (89217)
4x16mm (81263)
4x20mm (81264)

Socket Head (shcs)



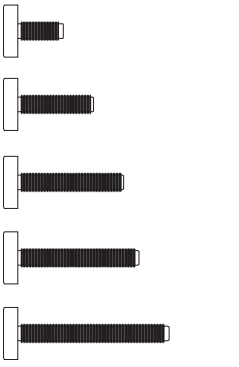
2x5mm (31511)
2x16mm (7184)
3x10mm (25620)
3x12mm (89454)
3x24mm (89225)
3x26mm (89226)
3x28mm (89227)

Button Head (bhcs)



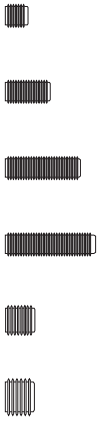
2.5x6mm (31520)
2.5x8mm (31521)
2.5x18mm (81259)
3x6mm (31531)
3x8mm (31532)
3x10mm (25211)
3x12mm (89202)
3x14mm (25187)
3x16mm (89203)
3x18mm (2308)
3x20mm (25188)
3x22mm (25189)
3x24mm (89204)
4x14mm (81260)
4x16mm (81261)

LP Socket Head (lp shcs)



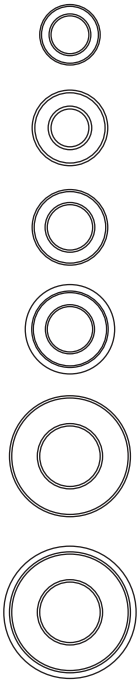
3x6mm (41089)
3x10mm (41090)
3x14mm (41094)
3x16mm (41093)
3x20mm (41091)

Set Screws



3x3mm (25225)
3x6mm (81257)
3x10mm (4671)
3x12mm (81258)
4x4mm (7732)
5x4mm (89221)

Ball Bearings



5x8x2.5mm (8680)
5x10x4mm (91560)
6x10mm (31404)
6x12x4mm (91561)
8x16x5mm (91564)
8x16x5mm flanged (91565)

Nuts (lock/plain)



M3 Nut (91477)
M3 Alum. Locknut, Blue (31550)
M3 Locknut, Black (25215)

M3 Locknut w/Flange (25612)
FT 3mm Locknuts, Blue(25392)

FT M4 Locknut, Blue (31551)
M4 Locknut, Serrated (91738)

:: Table of Contents

1..... Cover

2..... Introduction

3..... 1:1 Hardware "Fold Out"

4..... Table of Contents

5 - 7.....Differentials Build
(Bags 1.1, 1.2)

7 - 8.....Shocks Build
(Bag 2.1)

9.....Turnbuckles Build
(Bags 3.1, 3.2)

10 - 11.....Steering / Chassis Build
(Bag 4.1)

11 - 14.....Front Gearbox Build
(Bags 5.1, 5.2, 5.3)

14 - 15.....Steering Blocks Build
(Bags 6.1, 6.2)

16 - 18.....Rear End Build
(Bags 7.1, 7.2, 7.3)

19.....Rear Hubs Build
(Bags 8.1, 8.2)

20 - 21.....Center Bulkhead Build
(Bag 9.1)

21 - 22.....Linkages Build
(Bag 10.1)

22 - 23.....Radio Tray Build
(Bag 11.1)

24 - 26.....Clutch / Filter Build
(Bags 12.1, 12.2)

26 - 27.....Fuel Tank Build
(Bags 13.1, 13.2)

27 - 28.....Wheels / Tires / Body
(Misc.)

29..... Droop Settings

30..... Back Cover

:: Notes

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

This symbol indicates a specific build order in the manual.

This symbol indicates a Racers Tip.



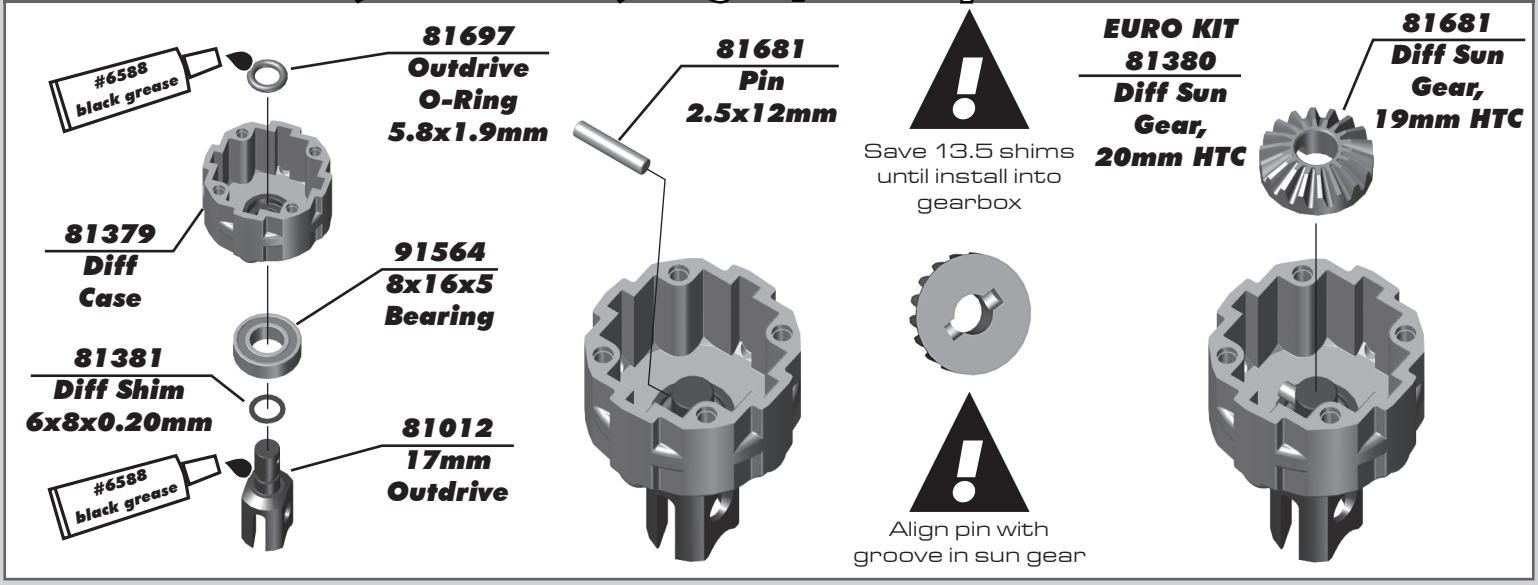
There is a 1:1 hardware foldout page in the front of the manual. To check the size of a part, line up your hardare with the correct drawing until you find the exact size. Each part in the foldout has a number assigned to it for ordering replacement parts.

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

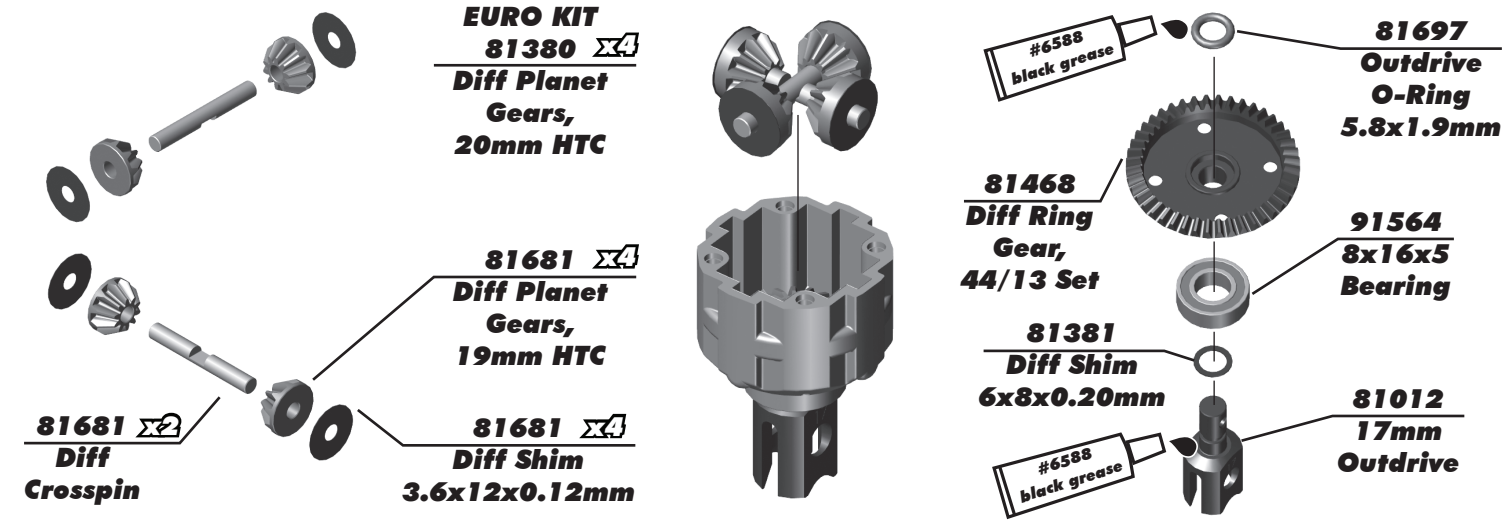
Customer Service
Tel: 949.544.7500
Fax: 949.544.7501

http://www.RC10.com • http://twitter.com/Team_Associated • http://www.instagram.com/teamassociatedrc/ • http://www.facebook.com/TeamAssociated/

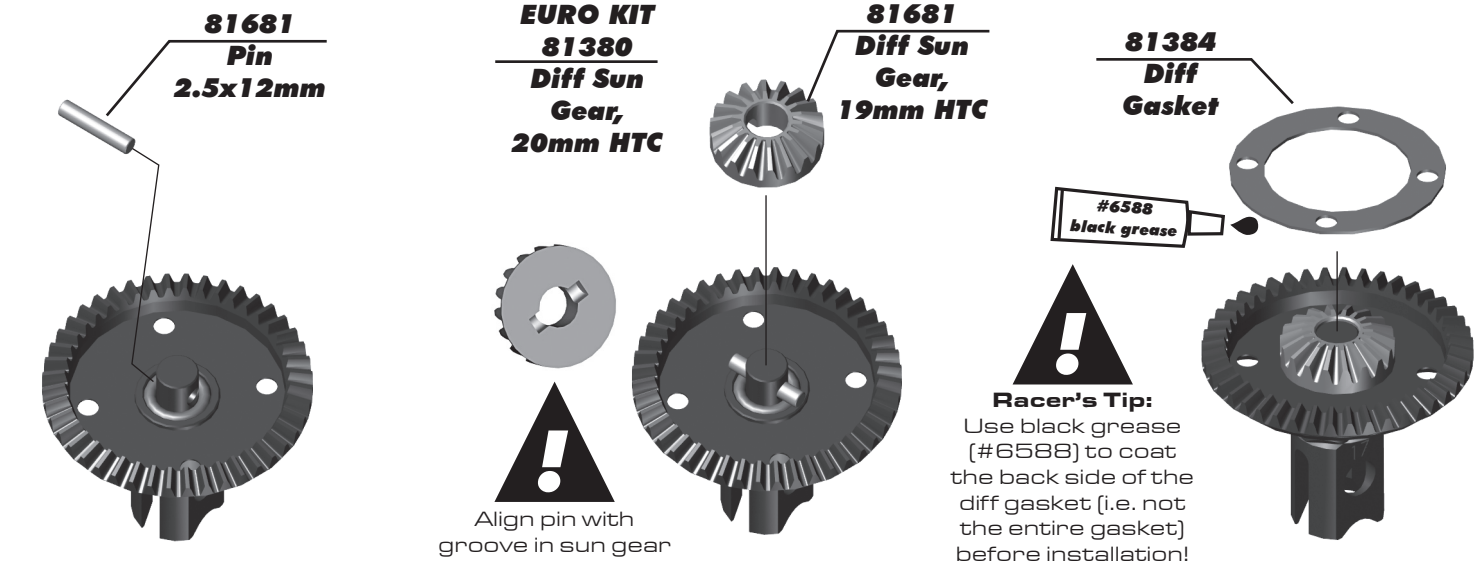
:: Differential Build (Front and Rear) - Bag 1.1, 1.2 - Step 1



:: Differential Build (Front and Rear) - Bag 1.1, 1.2 - Step 2



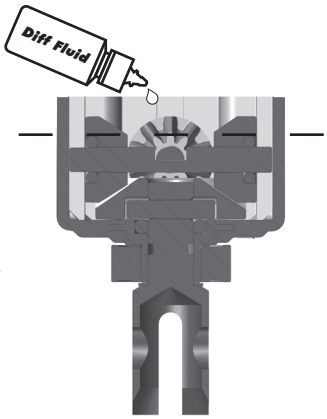
:: Differential Build (Front and Rear) - Bag 1.1, 1.2 - Step 3



:: Differential Build (Front and Rear) - Bag 1.1, 1.2 - Step 4



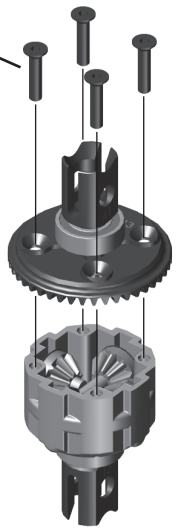
Racer's Tip:
Fill diff above the cross pins, below the planet gears as shown.



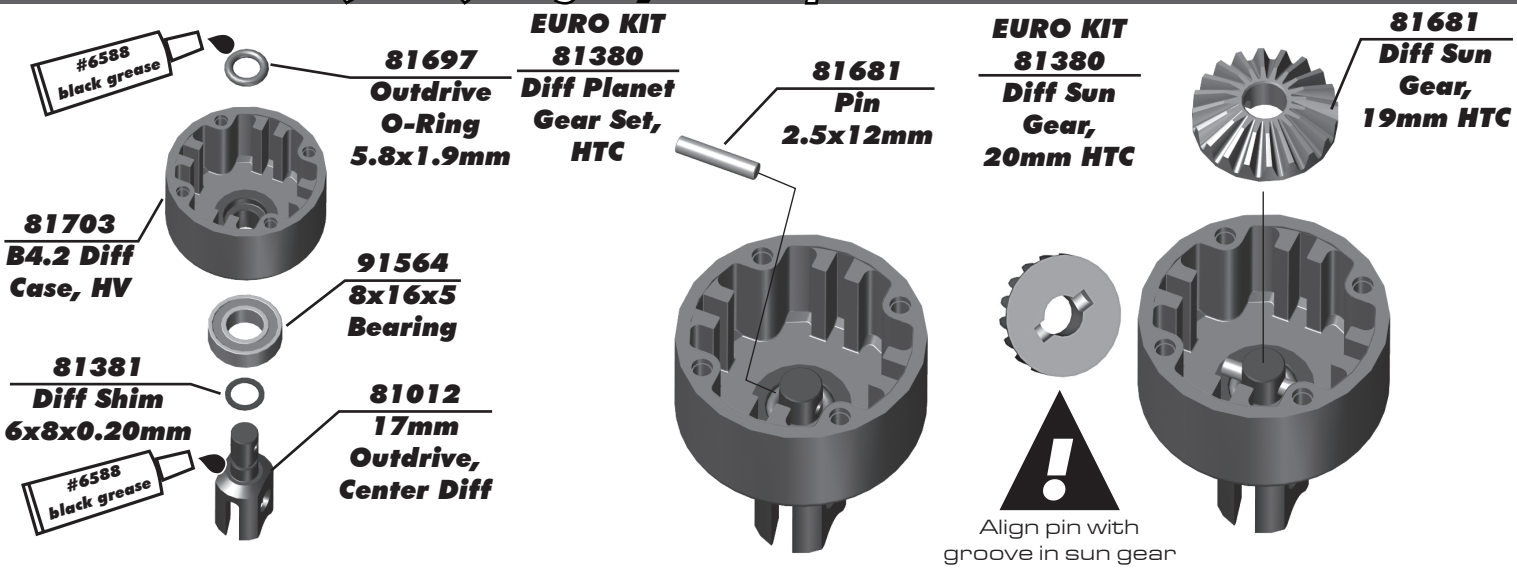
Front Diff Fluid:
Team Kit - 10,000cst #5455
Euro Kit - 60,000cst #5458

Rear Diff Fluid:
Team Kit - 5,000cst #5453
Euro Kit -10,000cst #5455

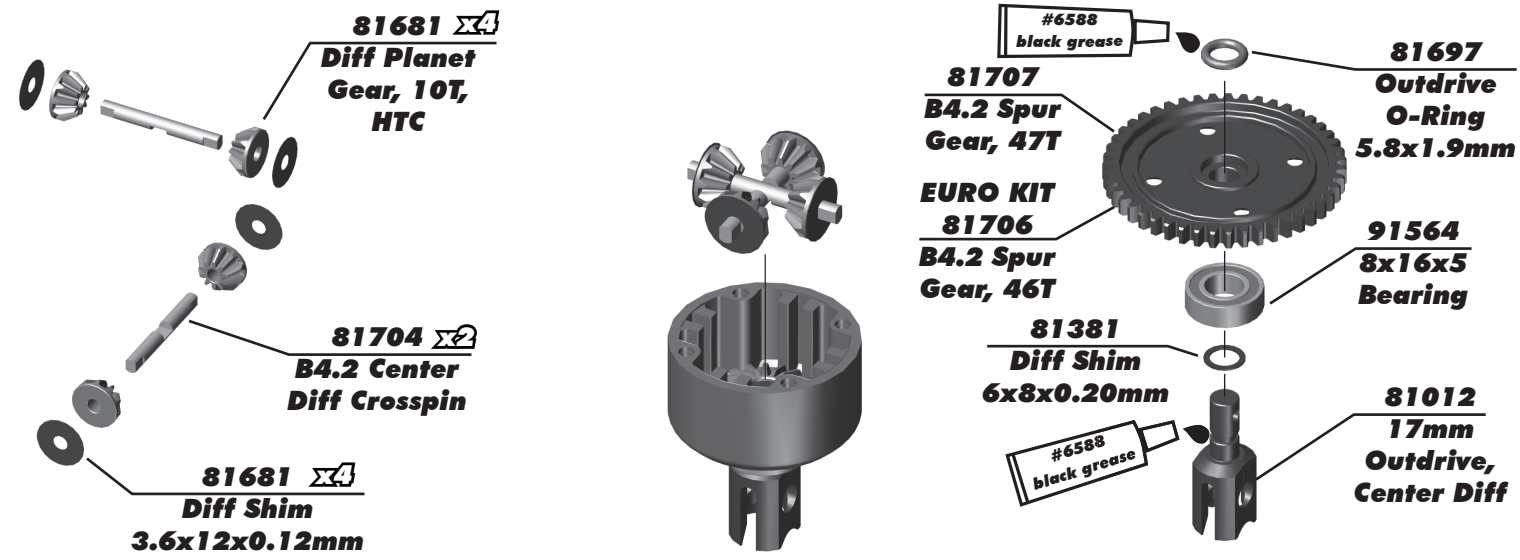
25202 x4
M3x10mm
FHCS



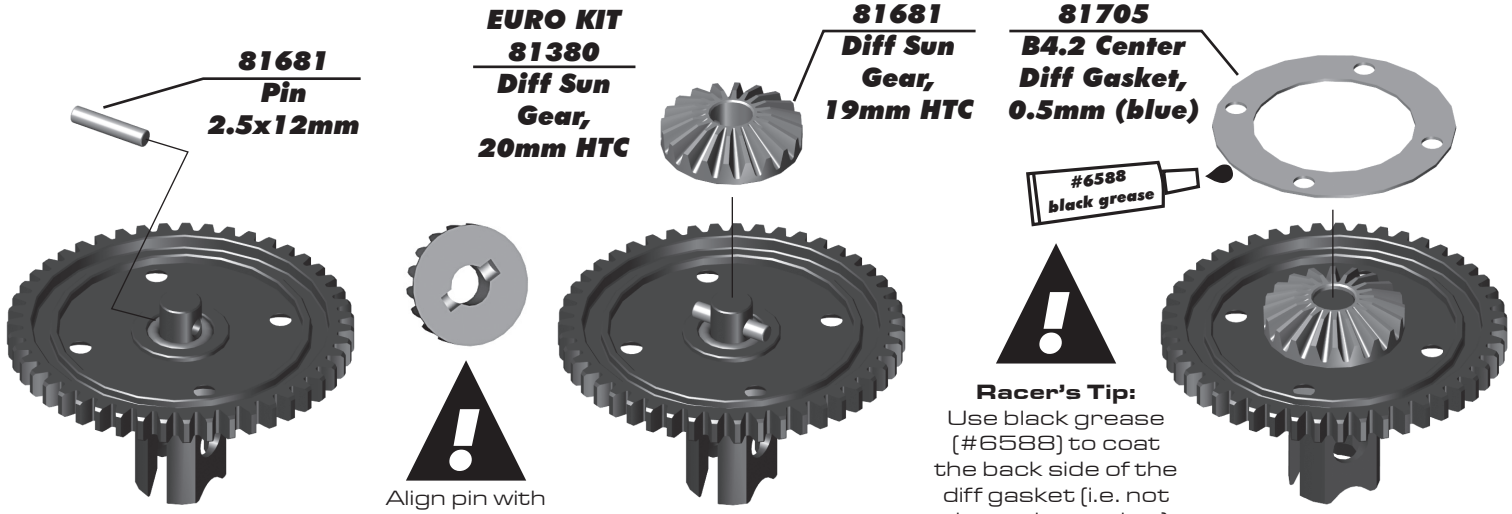
:: Differential Build (Center) - Bag 1.1, 1.2 - Step 5



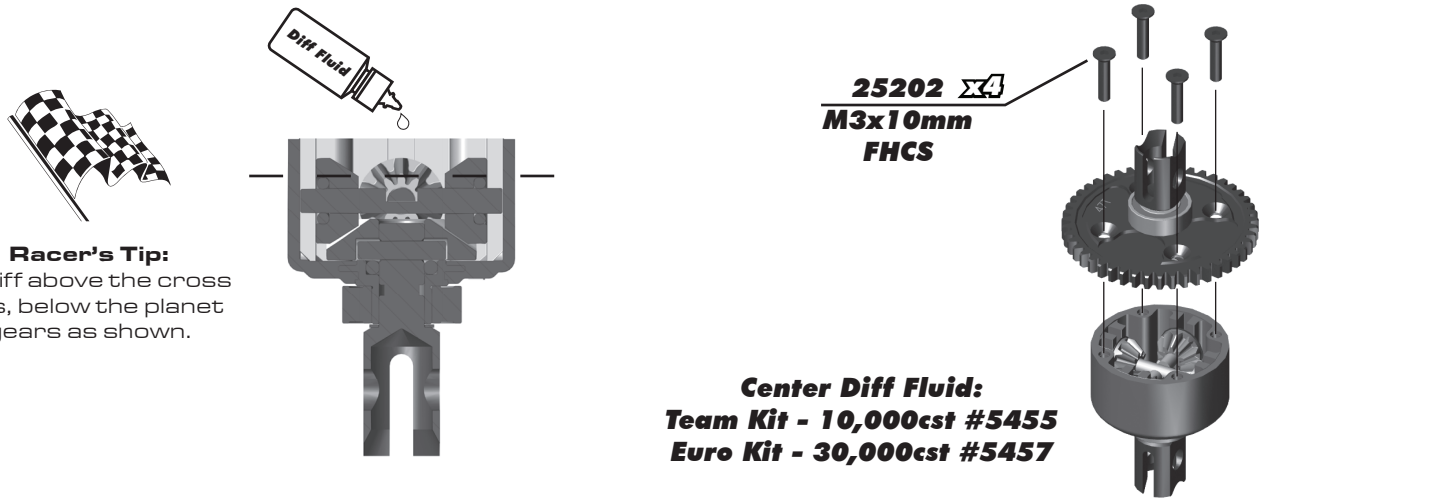
:: Differential Build (Center) - Bag 1.1, 1.2 - Step 6



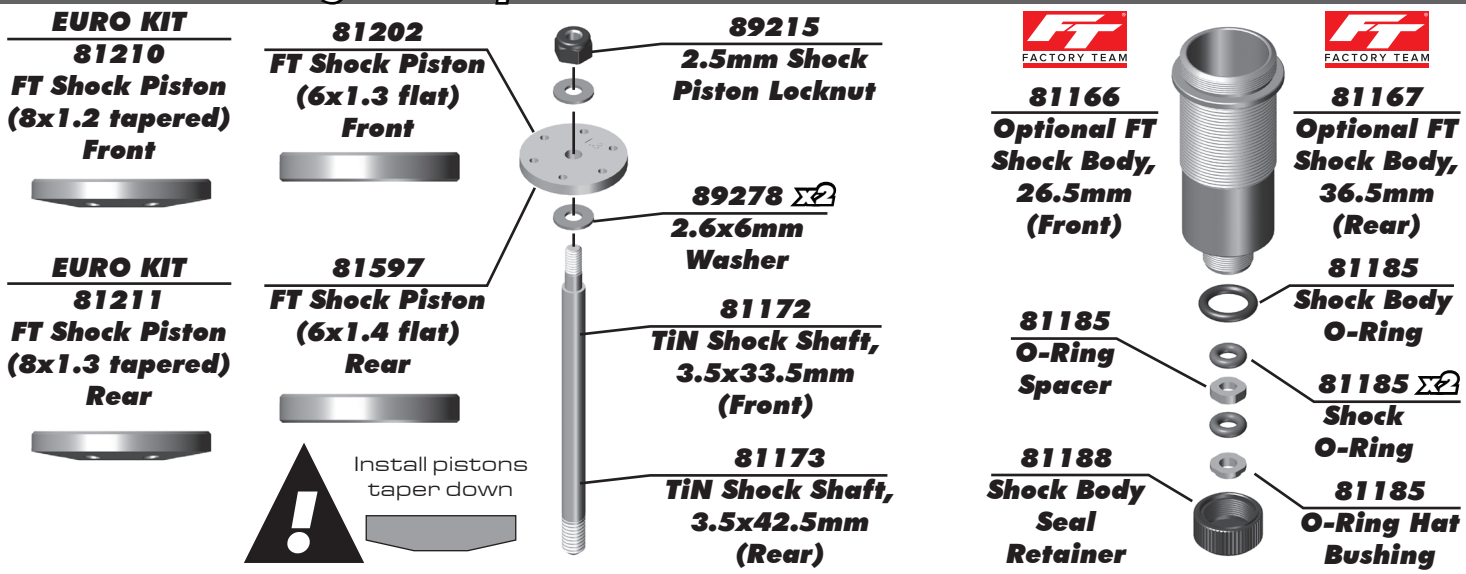
:: Differential Build (Center) - Bag 1.1, 1.2 - Step 7



:: Differential Build (Center) - Bag 1.1, 1.2 - Step 8



:: Shocks Build - Bag 2.1 - Step 1



:: Shocks Build - Bag 2.1 - Step 2

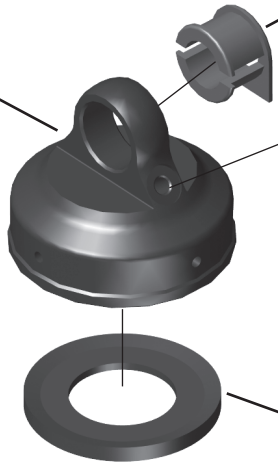
Racer's Tip:
Use green slime (#1105) to lube the o-rings before installation!



81190
Shock Boots

81562
Rod End Ball

81621
Shock Rod End
Front: +2
Rear: +2



81452
RC8B3.2
Shock Cap

81512
Shock Cap Insert

91492
M2x4mm BHCS

91492
Gasket
2

1
81184
Emulsion Seal

EURO KIT
81453
16mm Stiff Bladder



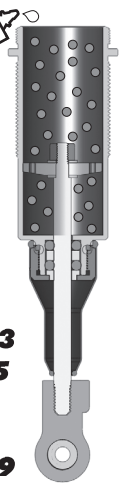
When installing the emulsion seal, make sure it is correctly seated within the shock cap as shown.

:: Shocks Build - Bag 2.1 - Step 3

Racer's Tip:
Euro Kit comes with bladder style shocks. There is a different bleeding procedure for this styleof shock build.

shock fluid

Fill to top of shock body.



Front Shock Fluid:
Team Kit - 40wt #5423
Euro Kit - 50wt #5435

Rear Shock Fluid:
Team Kit - 35wt #5429
Euro Kit - 45wt #5430

Tighten to snug, may be a small gap when sealed.



Bleed Procedure:
Remove bleeder screw
Tilt shock so bleed hole is the highest point and slowly compress the shaft.

Stop about 3mm from full compressed, install the screw, and check that the shock is not pressurized.
If so, bleed out a small amount more.



:: Shocks Build - Bag 2.1 - Step 4

The springs come with a colored marking pre-installed for easy identification



shock fluid

EURO KIT
81223
16mm Front Spring, White (5.10lb/in)
L70, 9.25T, 1.6D

EURO KIT
81229
16mm Rear Spring, White (4.10lb/in)
L86, 11.0T, 1.6D

81221
Spring Collar O-Ring, 20mm

81221
Spring Collar, 20mm

81659
16mm Front Spring, Green (4.85lb/in)
L68, 8.00T, 1.5D

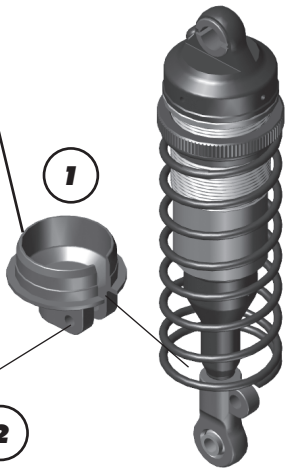
81663
16mm Rear Spring, Green (3.60lb/in)
L83, 10.0T, 1.5D

81512
Spring Cup

1

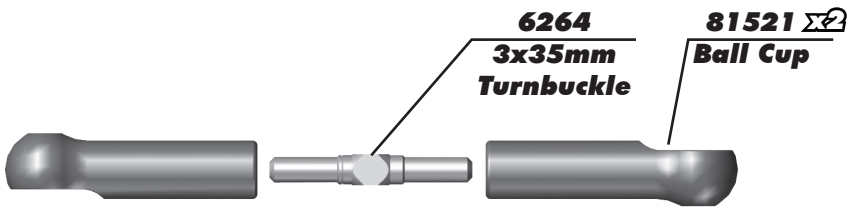
25211
M3x10mm BHCS

2

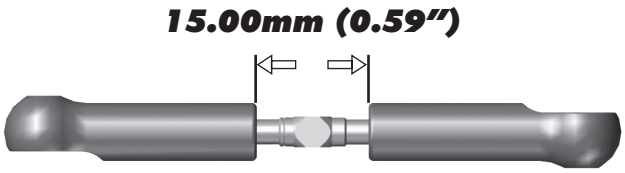


:: Turnbuckles Build - Bag 3.1- Step 1

Steering Servo Turnbuckle

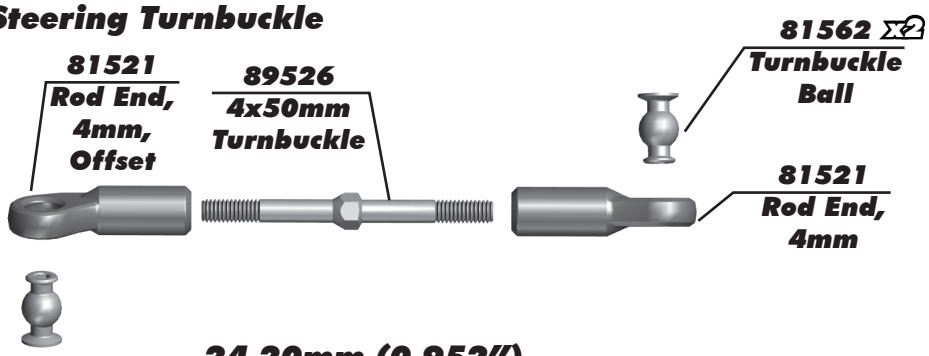


Set aside until page 22



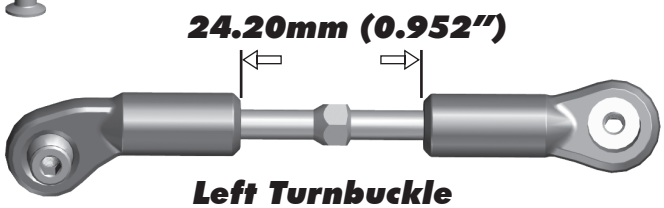
:: Turnbuckles Build - Bag 3.1 - Step 2

Steering Turnbuckle

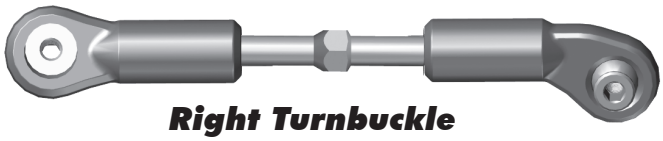


Note the direction of turnbuckle ball

Set aside until page 15



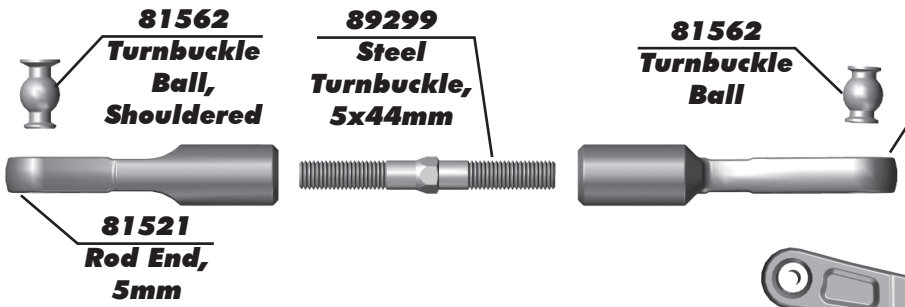
Left Turnbuckle



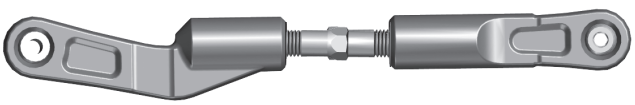
Right Turnbuckle

:: Turnbuckles Build - Bag 3.1 - Step 3

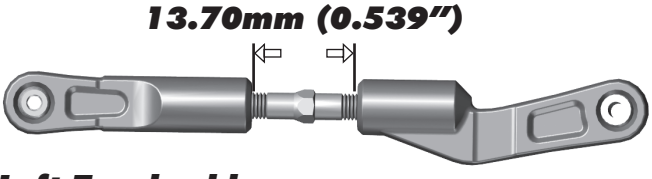
Rear Hub Turnbuckle



Set aside until page 19

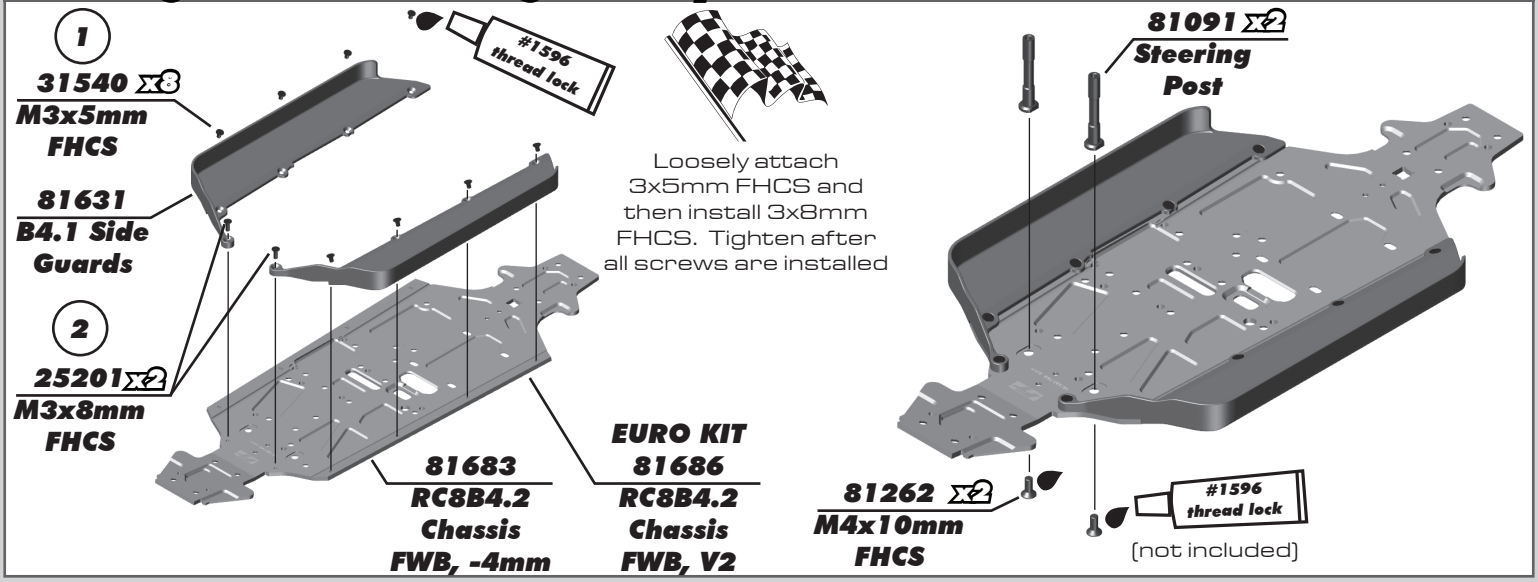


Right Turnbuckle

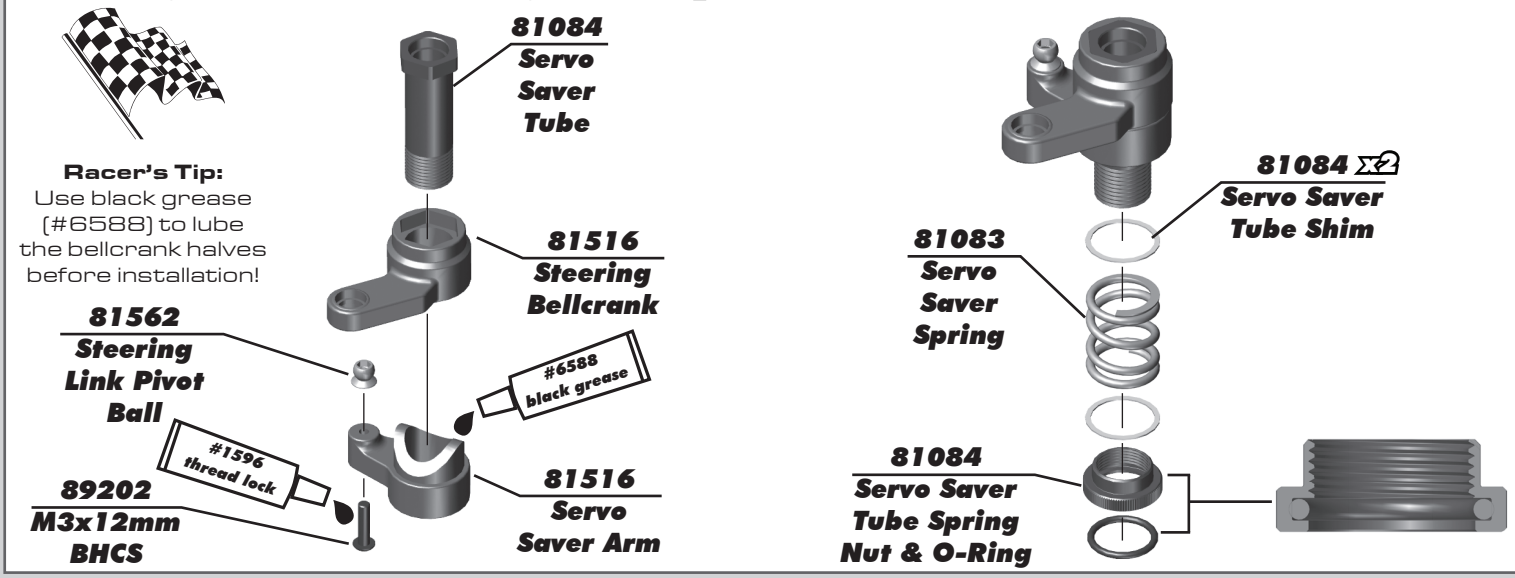


Left Turnbuckle

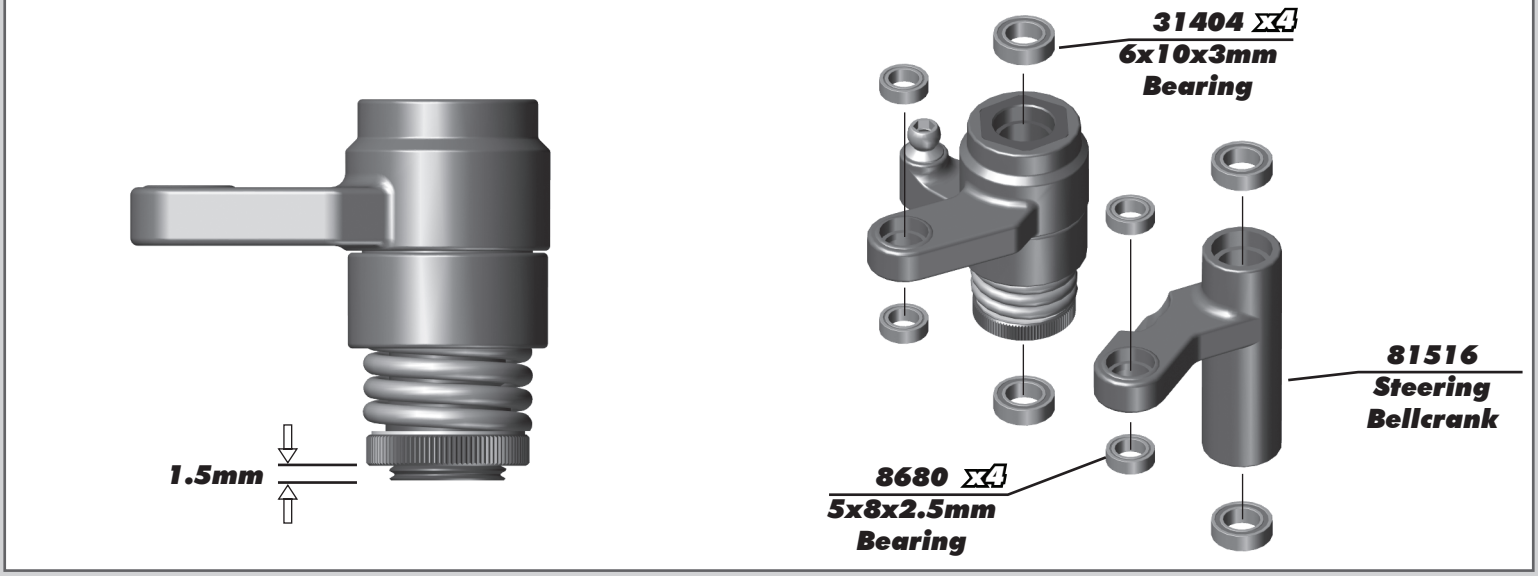
:: Steering / Chassis Build - Bag 4.1 - Step 1



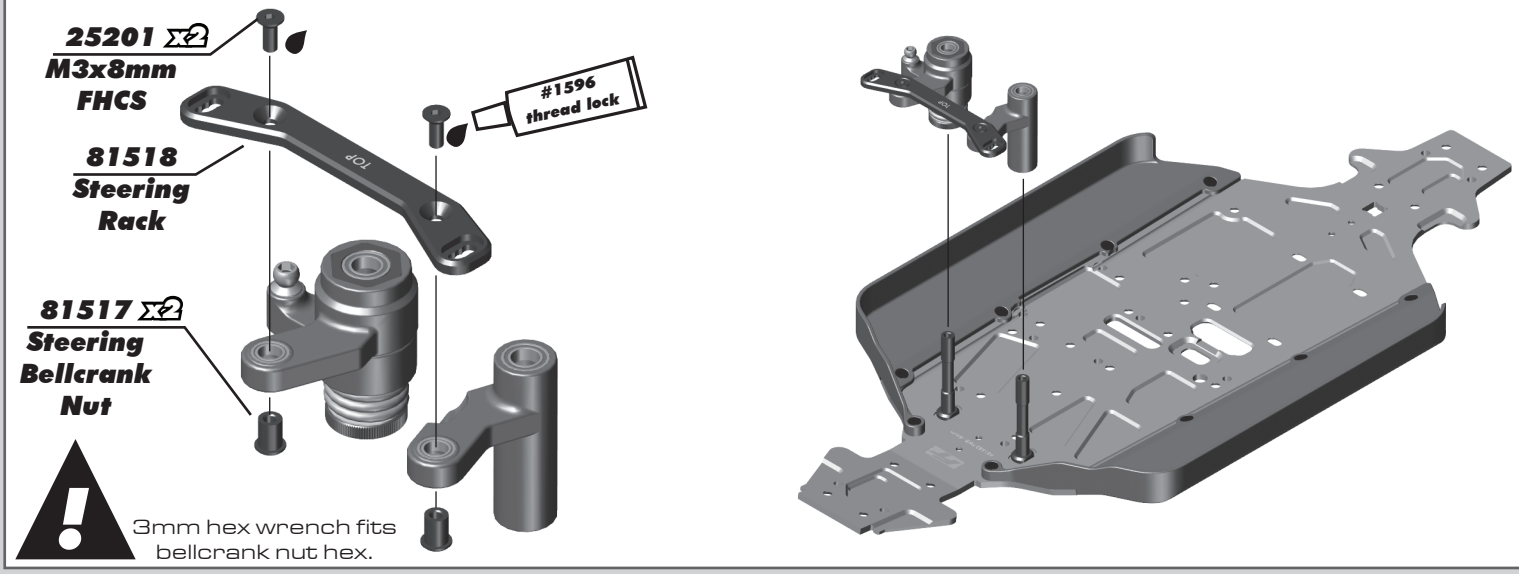
:: Steering / Chassis Build - Bag 4.1 - Step 2



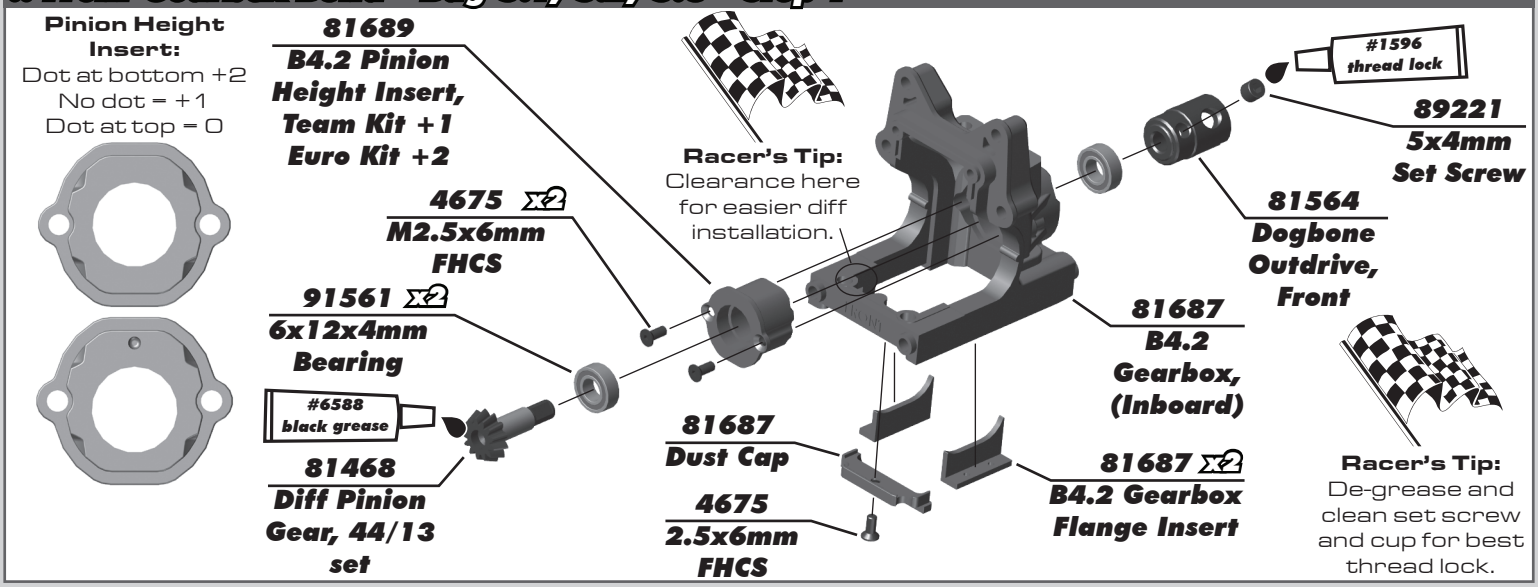
:: Steering / Chassis Build - Bag 4.1 - Step 3



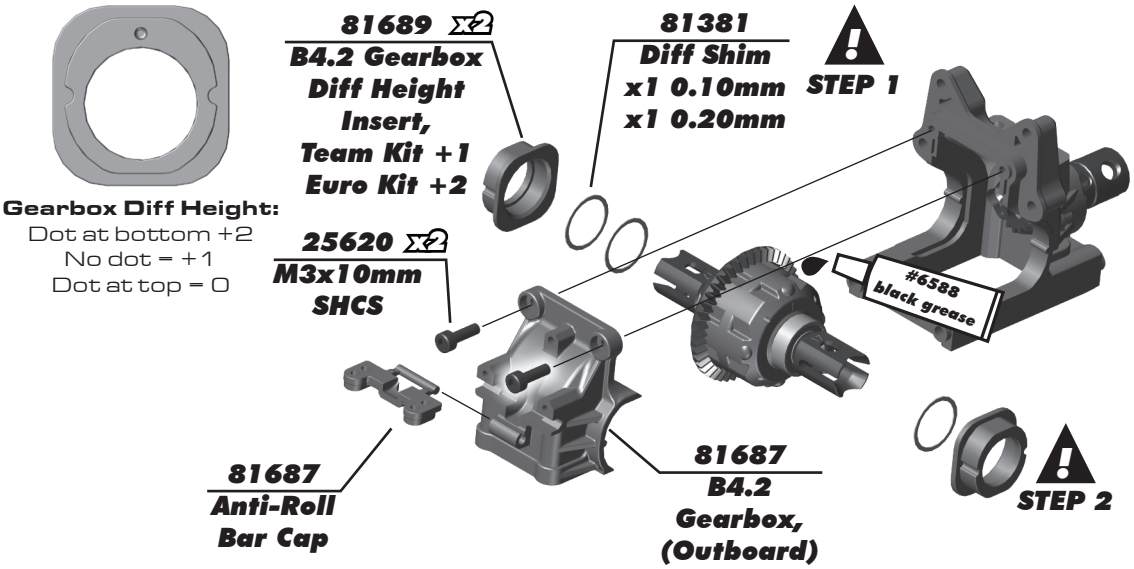
:: Steering / Chassis Build - Bag 4.1 - Step 4



:: Front Gearbox Build - Bag 5.1, 5.2, 5.3 - Step 1



:: Front Gearbox Build - Bag 5.1, 5.2, 5.3 - Step 2

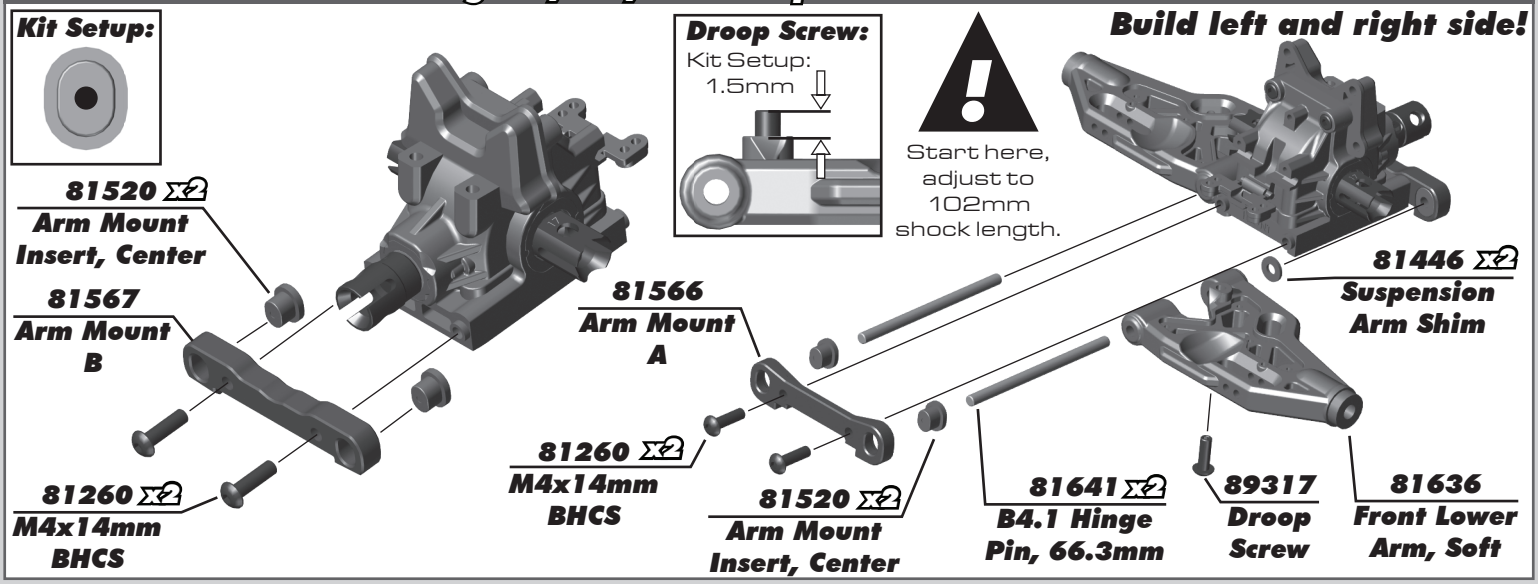


Step 1:
Add shims on the ring gear side to TIGHTEN gear mesh. Subtract shims on this side to LOOSEN gear mesh.
NOTE:
Start 1 x thick 0.2mm + 1 thin 0.1

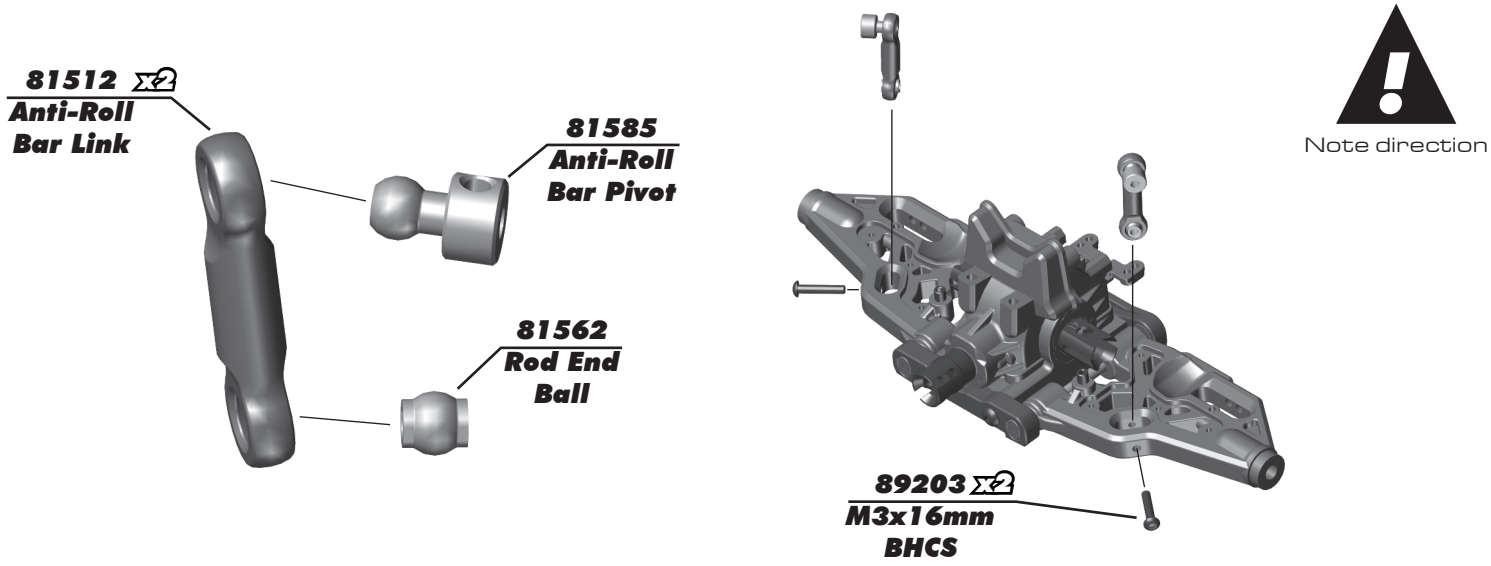
Step 2:
Add or subtract shims here to finalize diff side to side play once gear mesh is set from Step 1.
Recommended diff "side-to-side" clearance (gearbox assembly) 0.10 - 0.25mm.
Start with 1 x 0.1 mm.

Note:
0.1 mm shim can be used for fine tuning of gear mesh

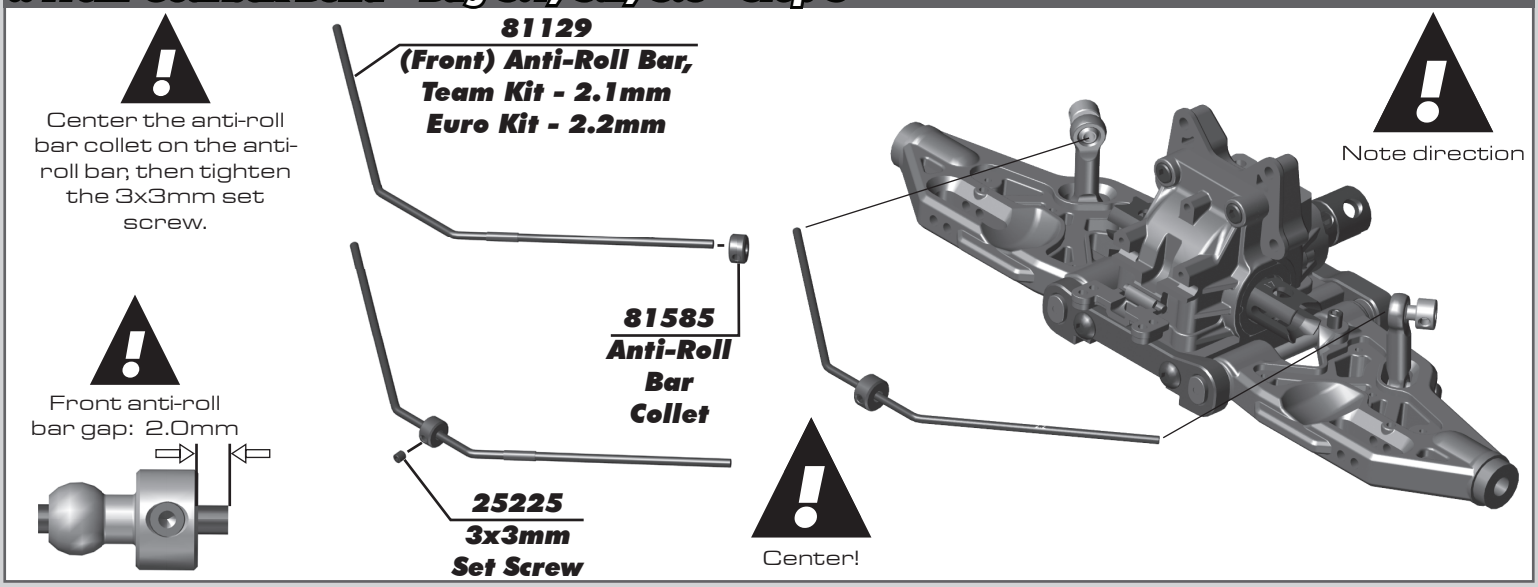
:: Front Gearbox Build - Bag 5.1, 5.2, 5.3 - Step 3



:: Front Gearbox Build - Bag 5.1, 5.2, 5.3 - Step 4

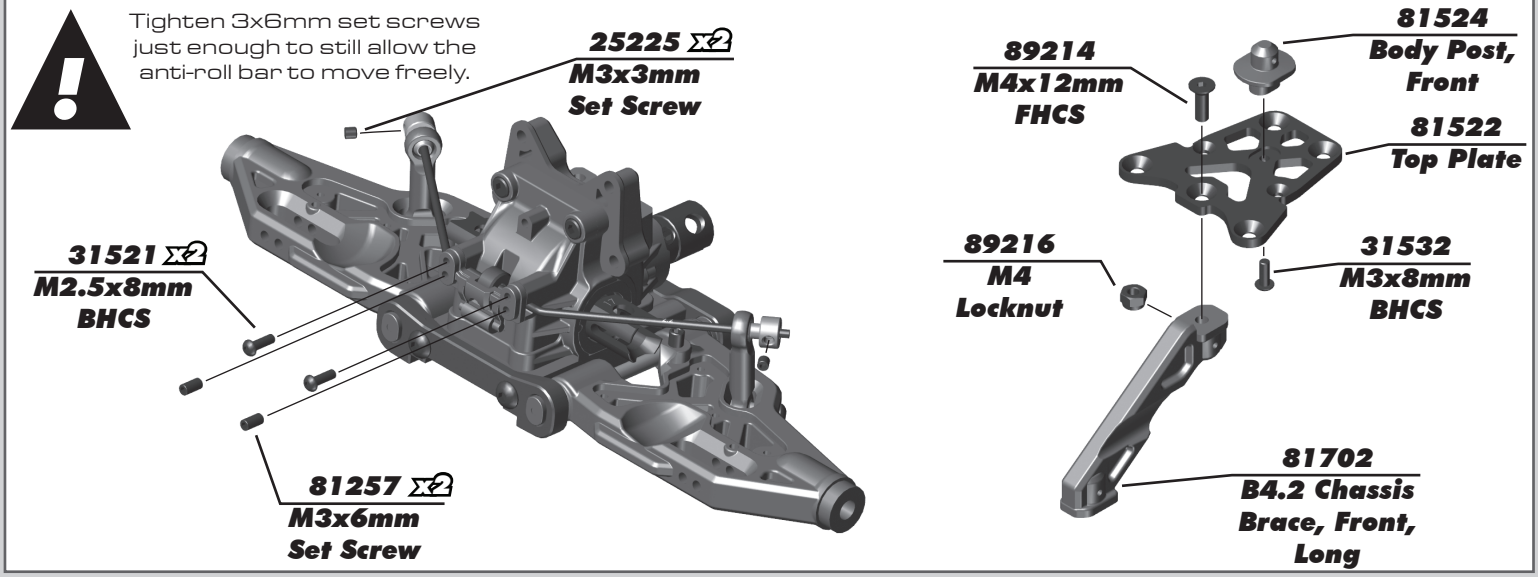


:: Front Gearbox Build - Bag 5.1, 5.2, 5.3 - Step 5

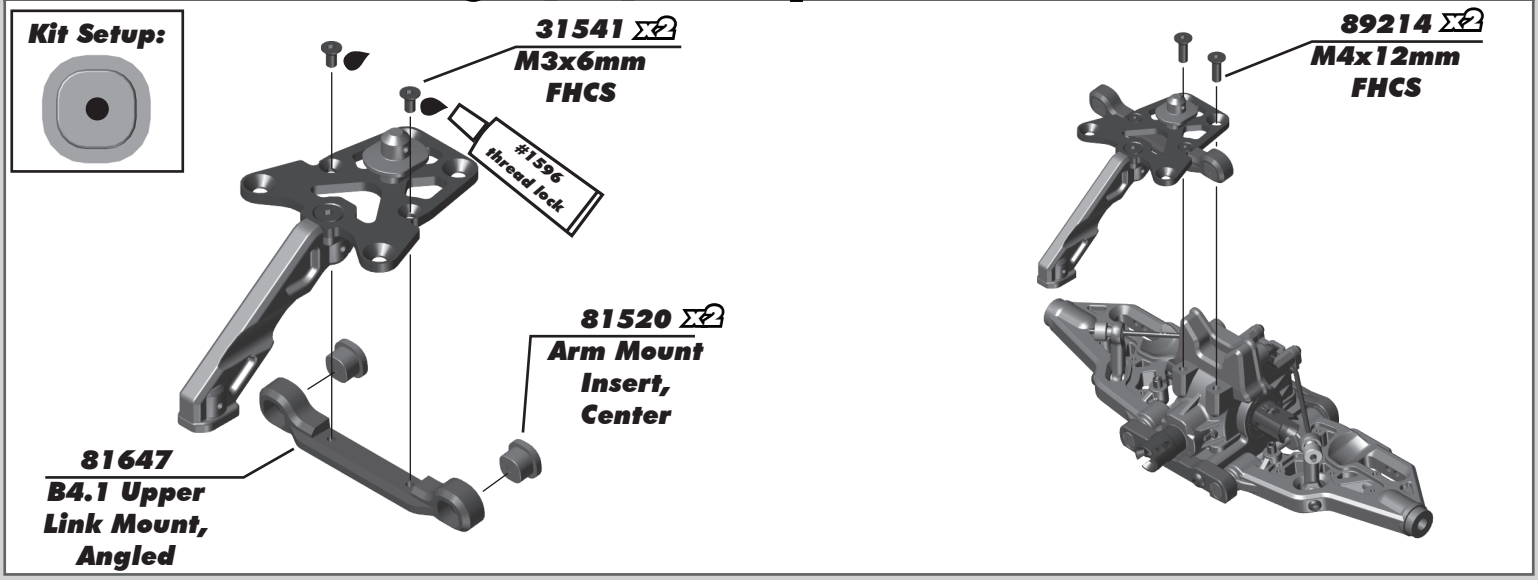


:: Front Gearbox Build - Bag 5.1, 5.2, 5.3 - Step 6

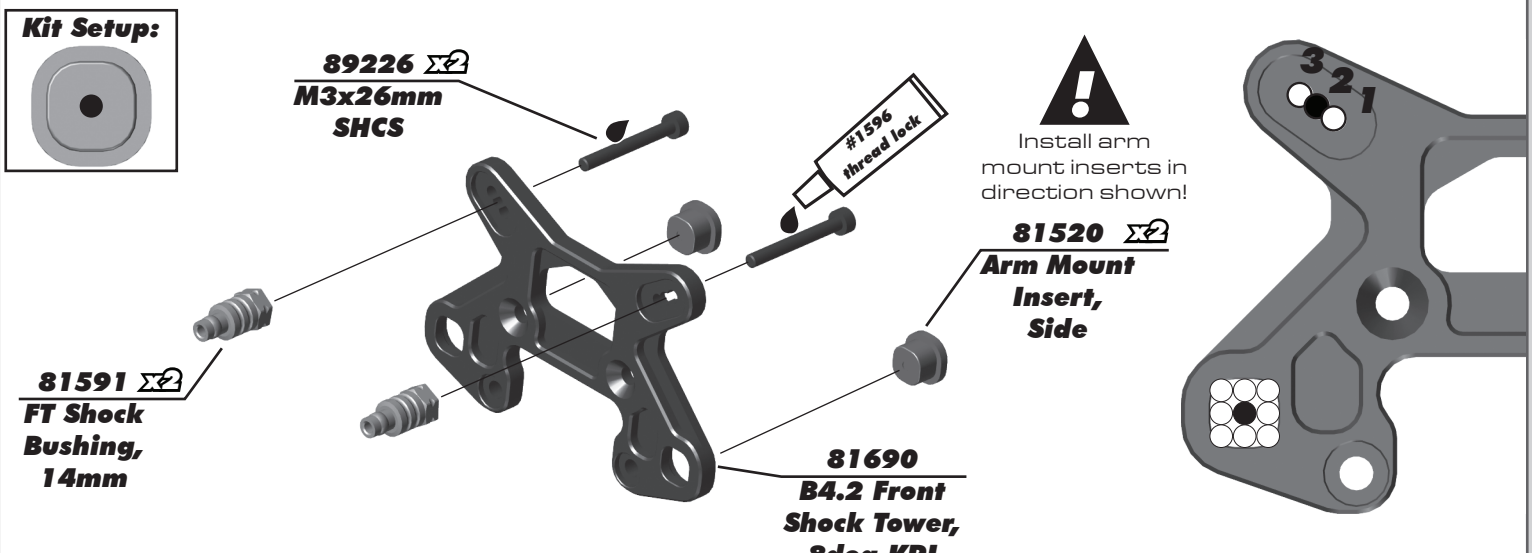
Tighten 3x6mm set screws just enough to still allow the anti-roll bar to move freely.



:: Front Gearbox Build - Bag 5.1, 5.2, 5.3 - Step 7

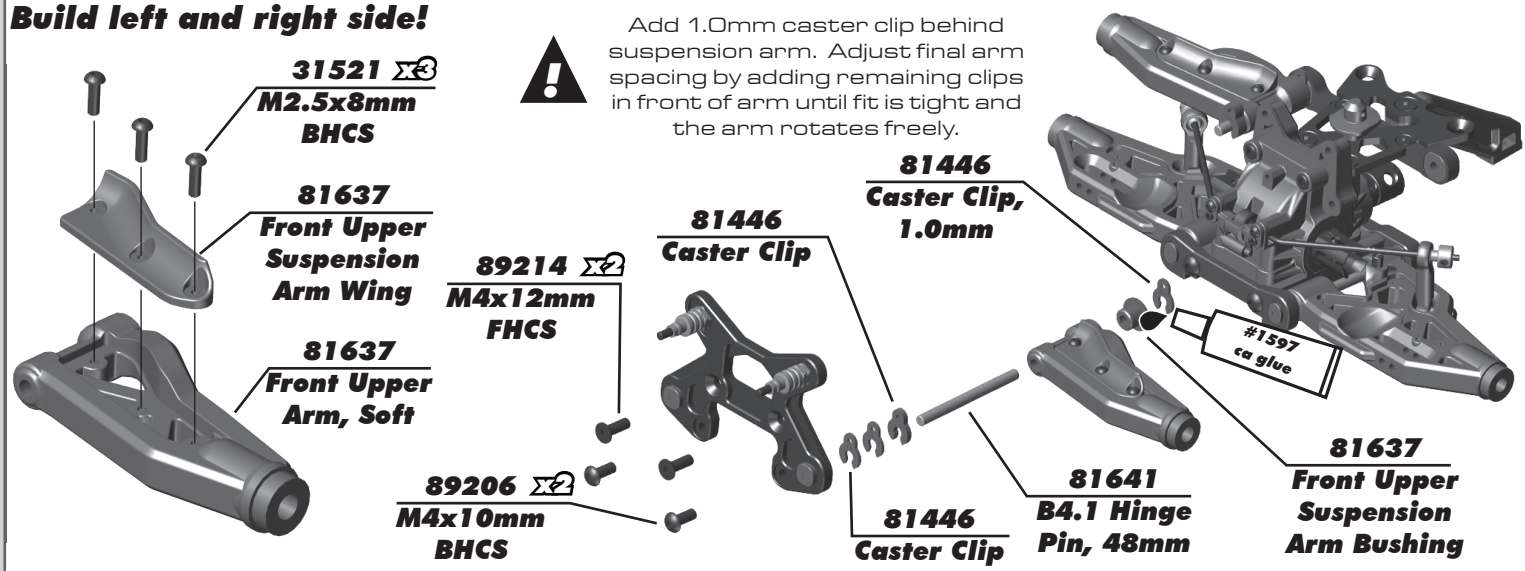


:: Front Gearbox Build - Bag 5.1, 5.2, 5.3 - Step 8



:: Front Gearbox Build - Bag 5.1, 5.2, 5.3 - Step 9

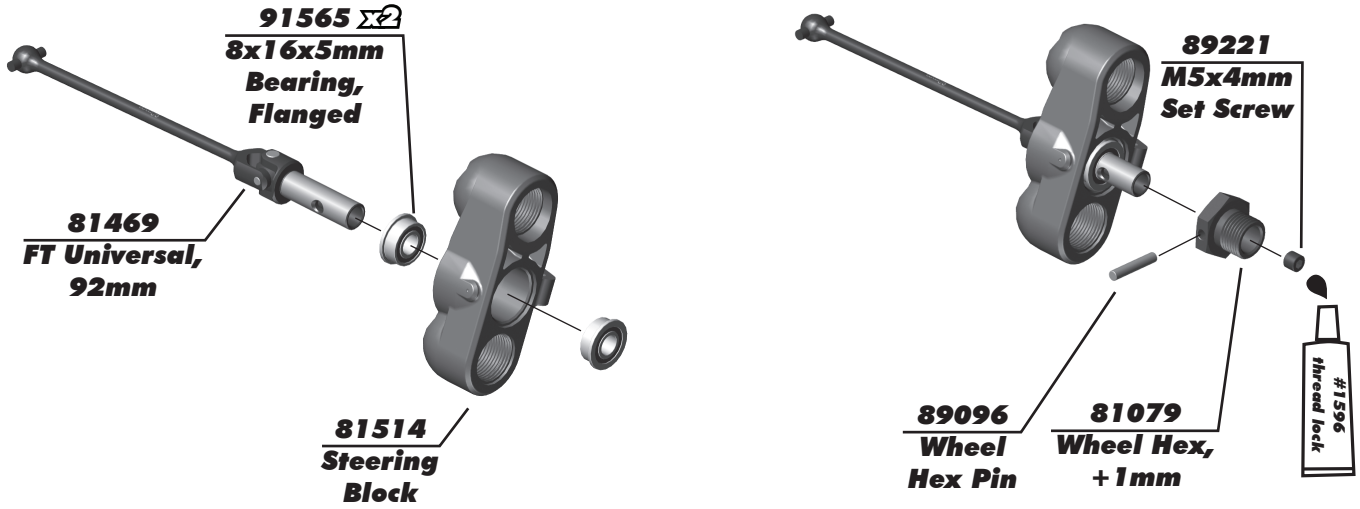
Build left and right side!



Add 1.0mm caster clip behind suspension arm. Adjust final arm spacing by adding remaining clips in front of arm until fit is tight and the arm rotates freely.

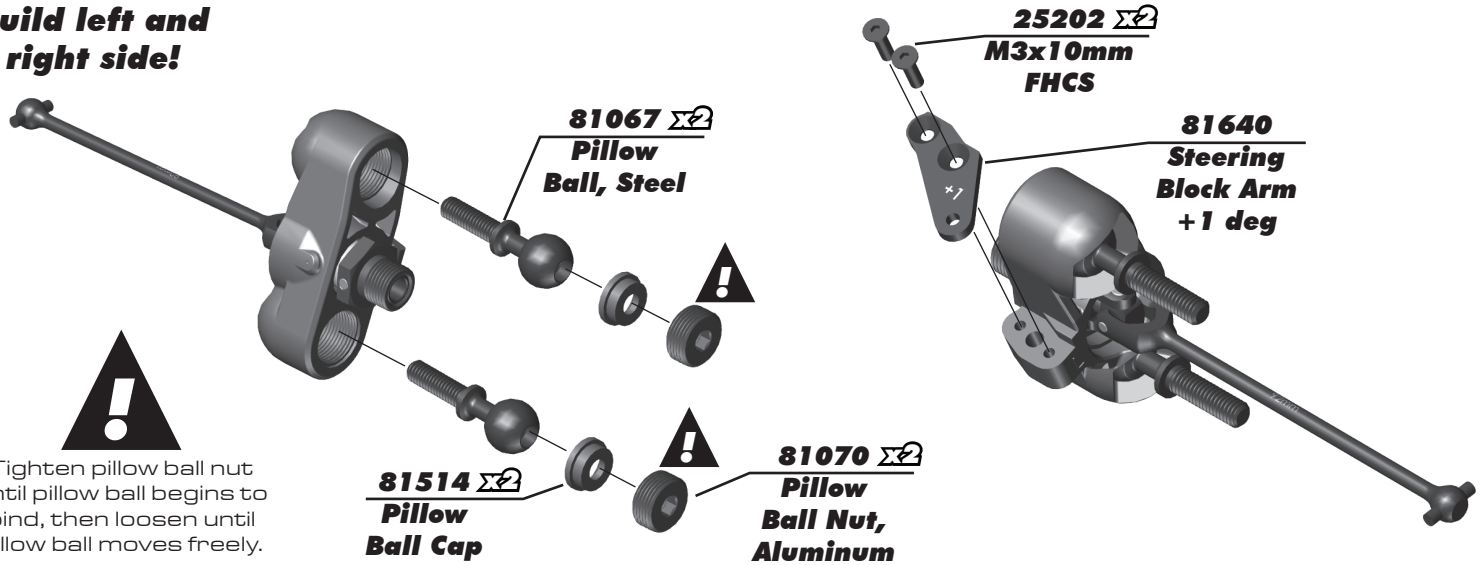
:: Steering Blocks Build - Bag 6.1 - Step 1

Build left and right side!



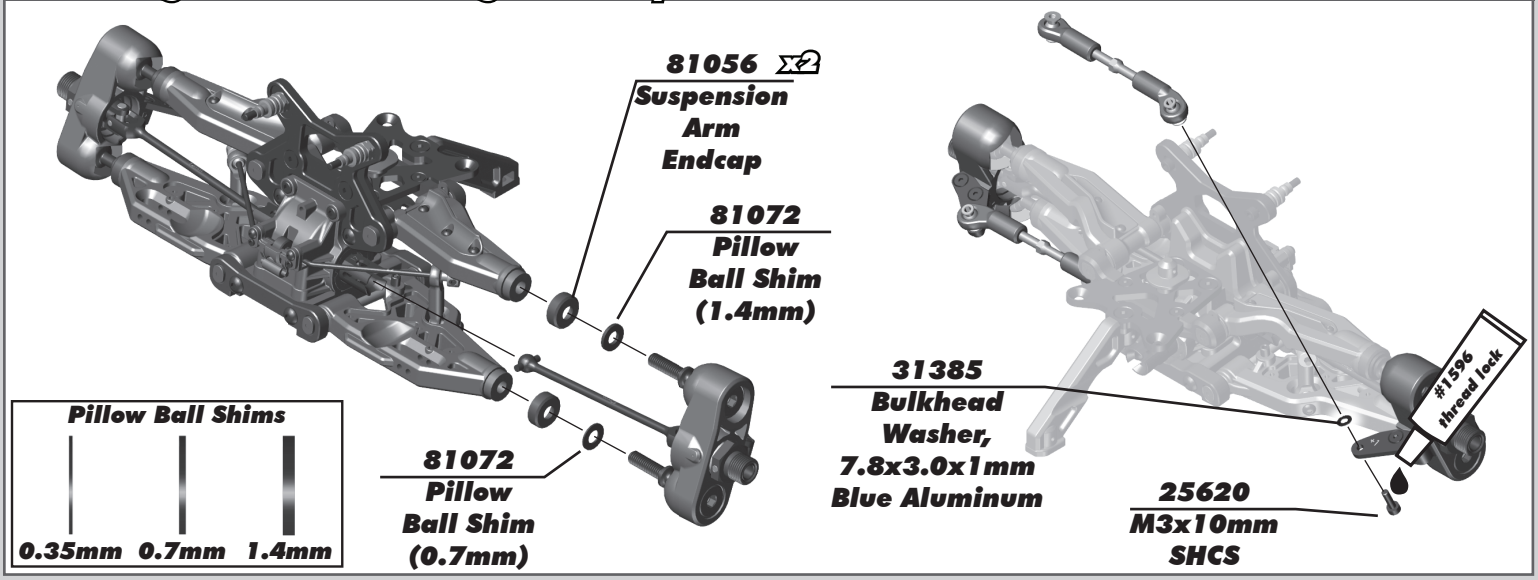
:: Steering Blocks Build - Bag 6.1 - Step 2

Build left and right side!

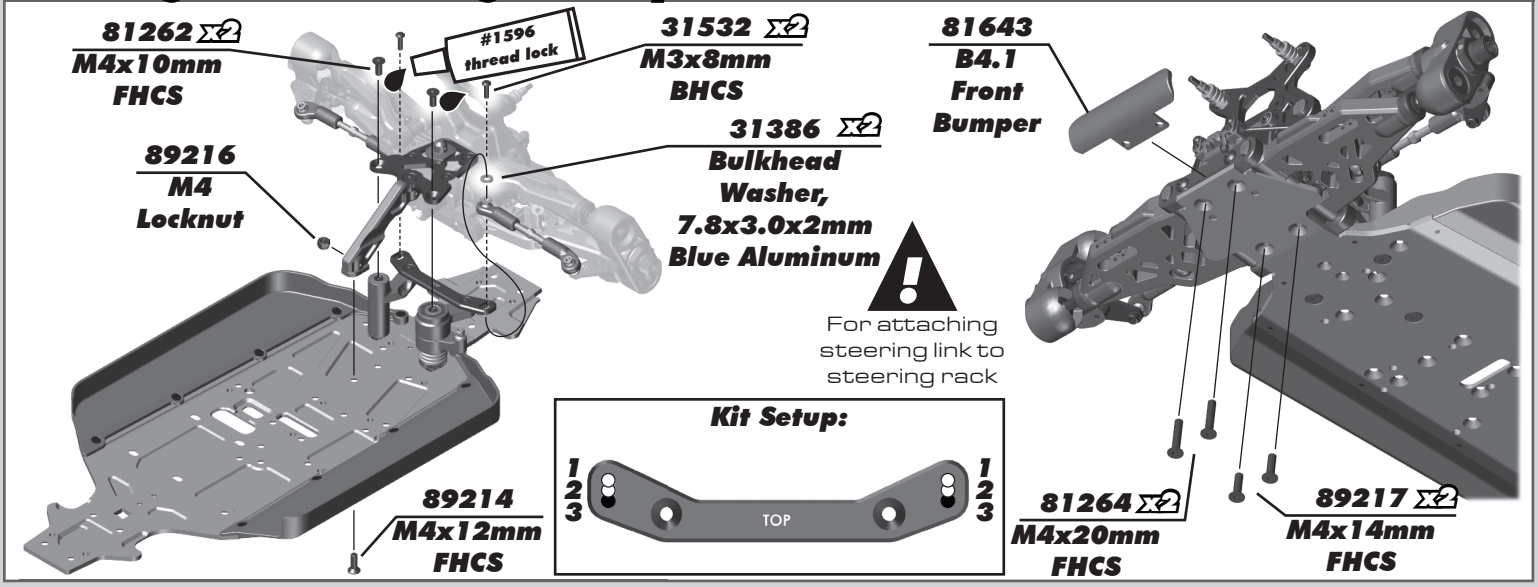


Tighten pillow ball nut until pillow ball begins to bind, then loosen until pillow ball moves freely.

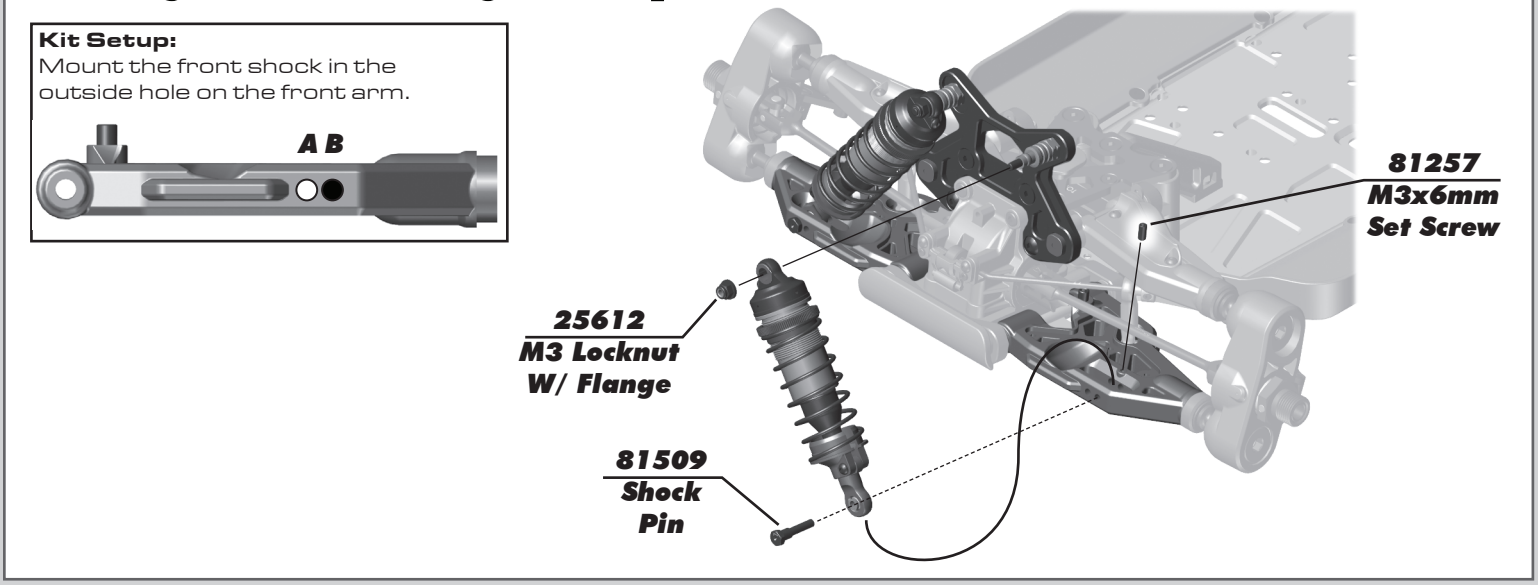
:: Steering Blocks Build - Bag 6.1 - Step 3



:: Steering Blocks Build - Bag 6.1 - Step 4

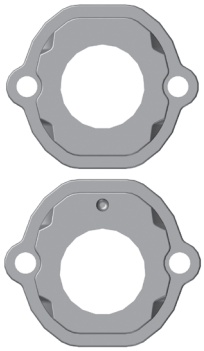


:: Steering Blocks Build - Bag 6.1 - Step 5



:: Rear End Build - Bag 7.1, 7.2, 7.3 - Step 1

Pinion Height Insert:
Dot at bottom +2
No dot = +1
Dot at top = 0



81689
B4.2 Pinion Height Insert, Team Kit 0 Euro Kit +1

Racer's Tip:
Clearance here for easier diff installation.

4675 x2
M2.5x6mm FHCS

#6588 black grease

81468
Diff Pinion Gear, 44/13 set

81688
Dust Cap

4675
M2.5x6mm FHCS

81688 x2
B4.2 Gearbox Flange Insert

81688
B4.2 Gearbox, (Inboard)

91561 x2
6x12x4mm Bearing

#1596 thread lock

81565
Dogbone Outdrive, Rear

89221
M5x4mm Set Screw

Racer's Tip:
De-grease and clean set screw and cup for best thread lock.

:: Rear End Build - Bag 7.1, 7.2, 7.3 - Step 2



Gearbox Diff Height:
Dot at bottom +2
No dot = +1
Dot at top = 0

81689 x2
B4.2 Gearbox Diff Height Insert, Team Kit 0 Euro Kit +1

81381
Diff Shim x1 0.10mm x1 0.20mm

STEP 1

25620 x2
M3x10mm SHCS

81688
Anti-Roll Bar Cap

81688
B4.2 Gearbox, (Outboard)

#6588 black grease

STEP 2

Step 1:
Add shims on the ring gear side to TIGHTEN gear mesh. Subtract shims on this side to LOOSEN gear mesh.
NOTE:
Start 1 x thick 0.2mm + 1 thin 0.1

Step 2:
Add or subtract shims here to finalize diff side to side play once gear mesh is set from Step 1. Recommended diff "side-to-side" clearance (gearbox assembly) 0.10 - 0.25mm. Start with 1 x 0.1 mm.

Note:
0.1 mm shim can be used for fine tuning of gear mesh

:: Rear End Build - Bag 7.1, 7.2, 7.3 - Step 3

Kit Setup:

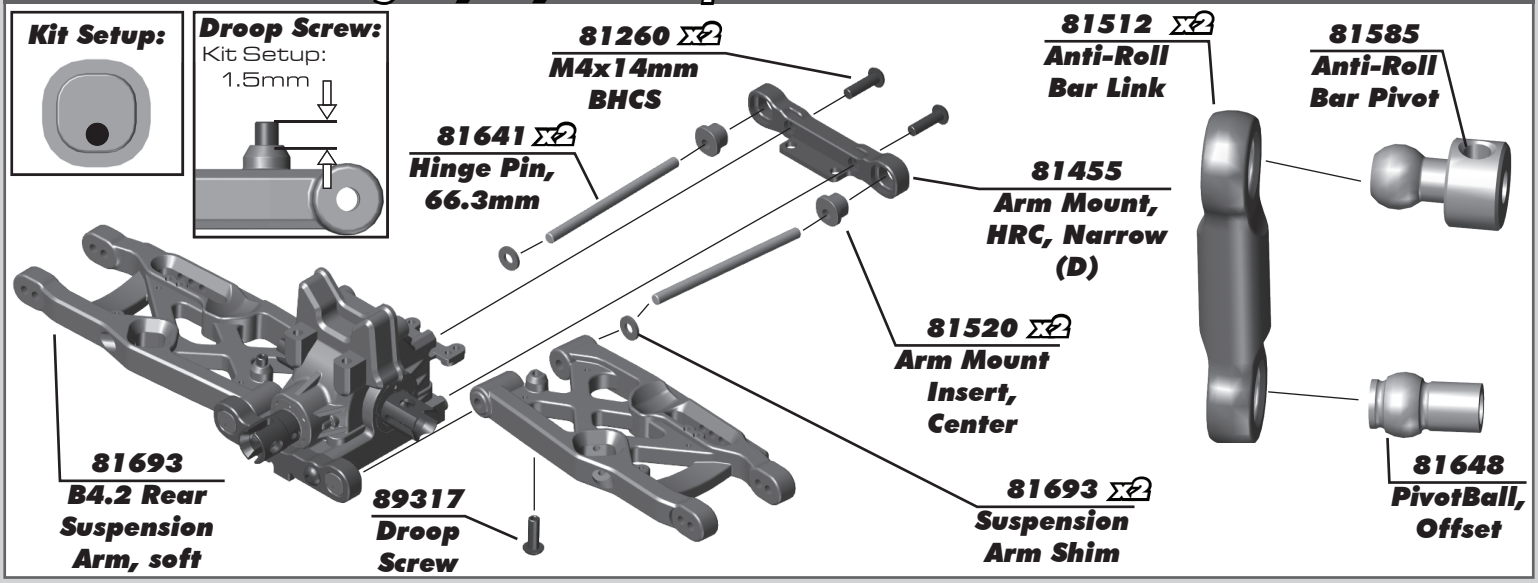


81454
Arm Mount, HRC, Narrow (C)

81260 x2
M4x14mm BHCS

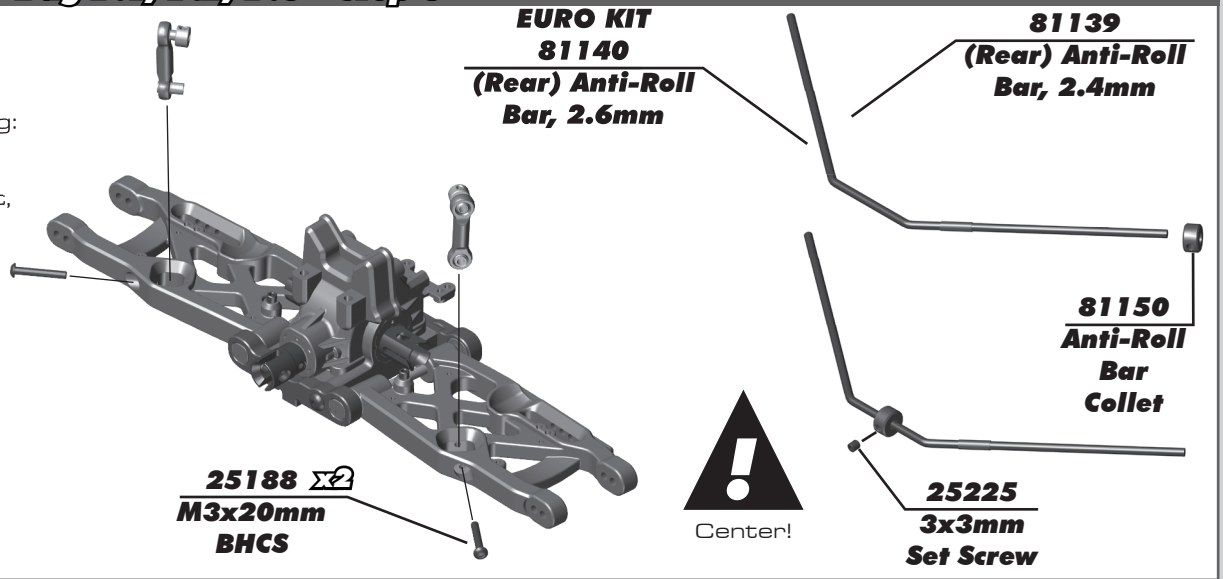
81520 x2
Arm Mount Insert, Center

:: Rear End Build - Bag 7.1, 7.2, 7.3 - Step 4

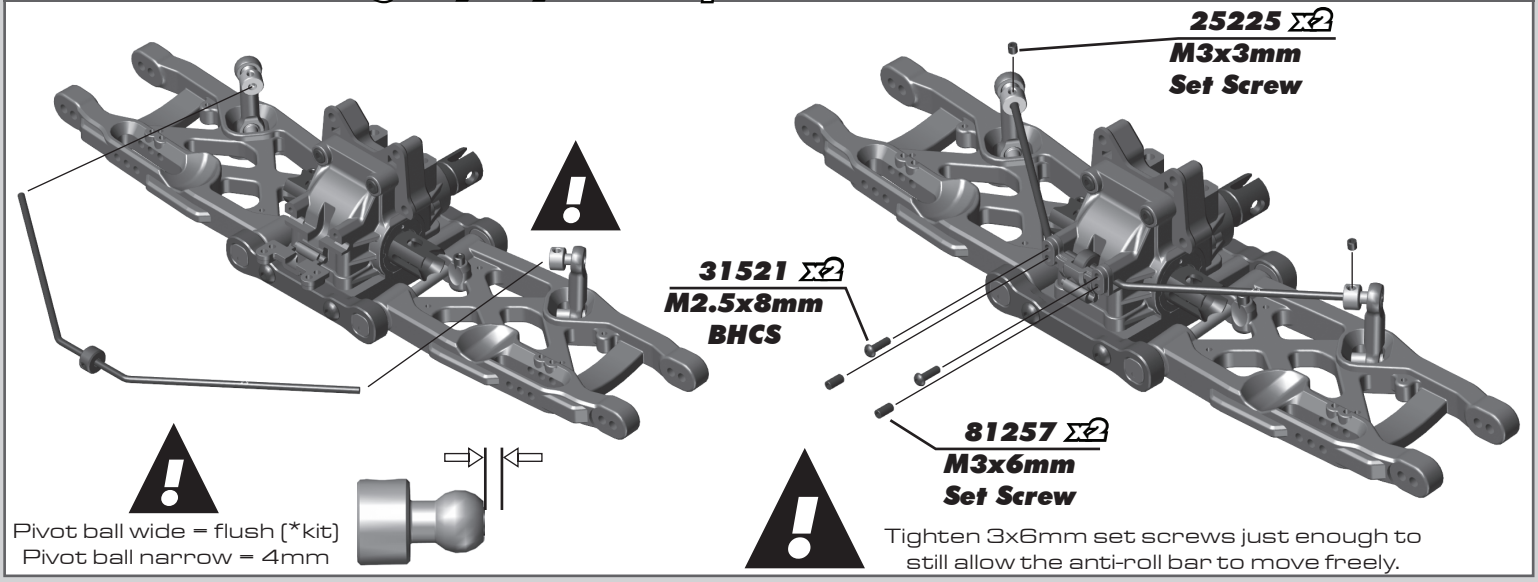


:: Rear End Build - Bag 7.1, 7.2, 7.3 - Step 5

Rear Anti-Roll Bar Tuning:
Ball wide = more rigid,
less rotation (*kit)
Ball narrow = more soft,
more rotation



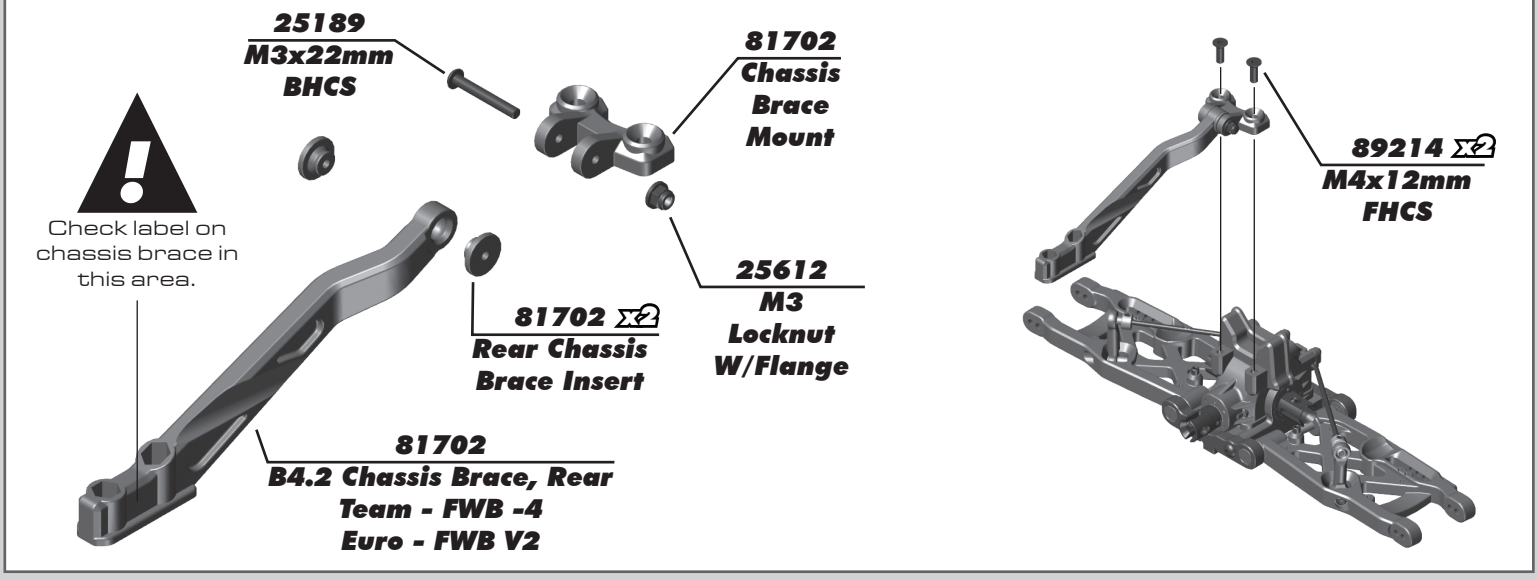
:: Rear End Build - Bag 7.1, 7.2, 7.3 - Step 6



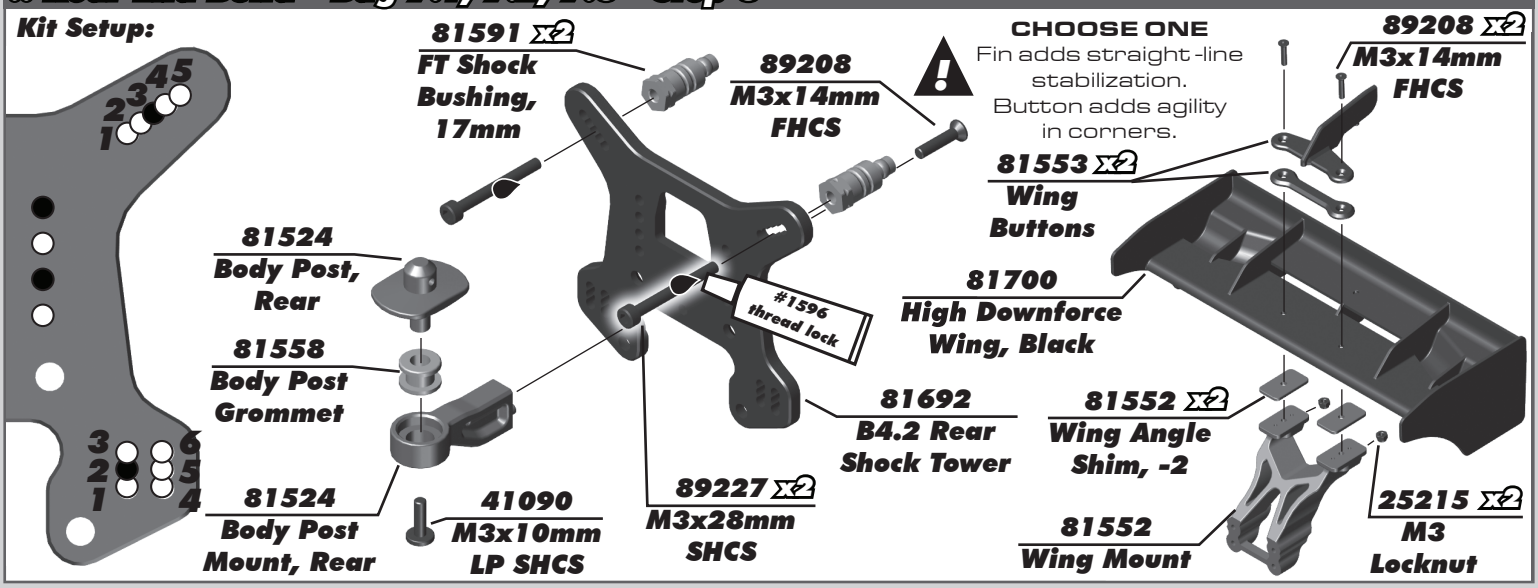
Pivot ball wide = flush (*kit)
Pivot ball narrow = 4mm

Tighten 3x6mm set screws just enough to still allow the anti-roll bar to move freely.

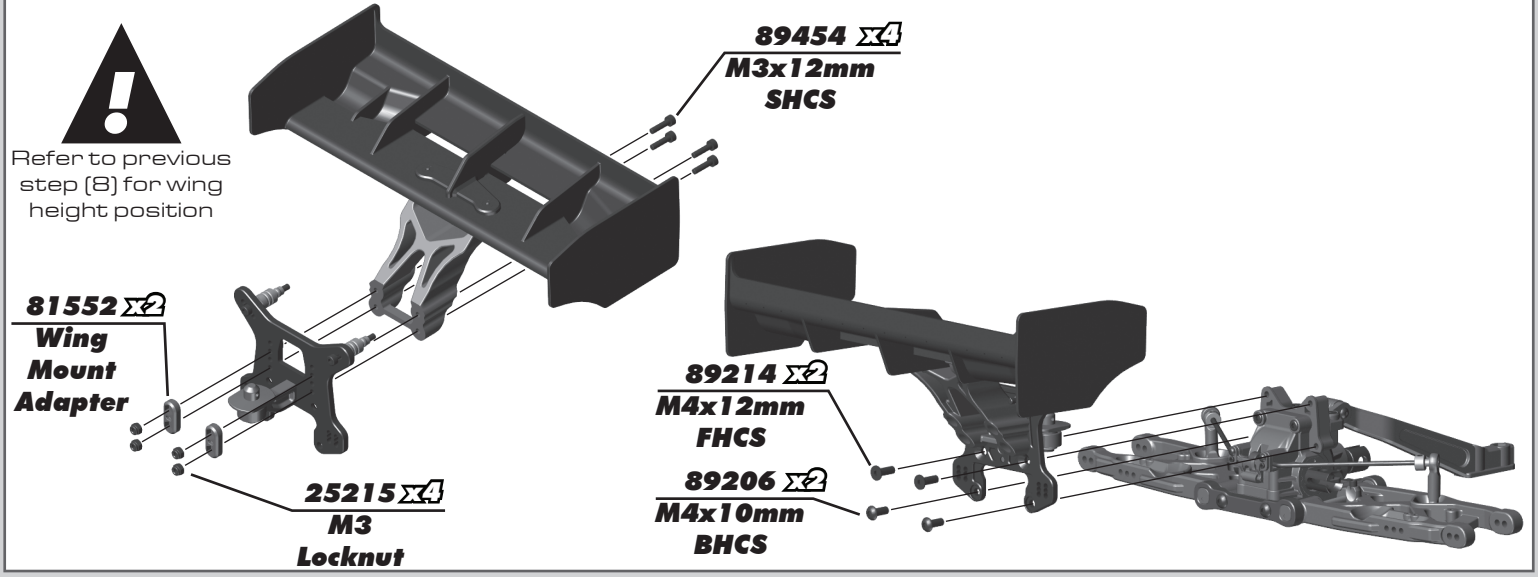
:: Rear End Build - Bag 7.1, 7.2, 7.3 - Step 7



:: Rear End Build - Bag 7.1, 7.2, 7.3 - Step 8

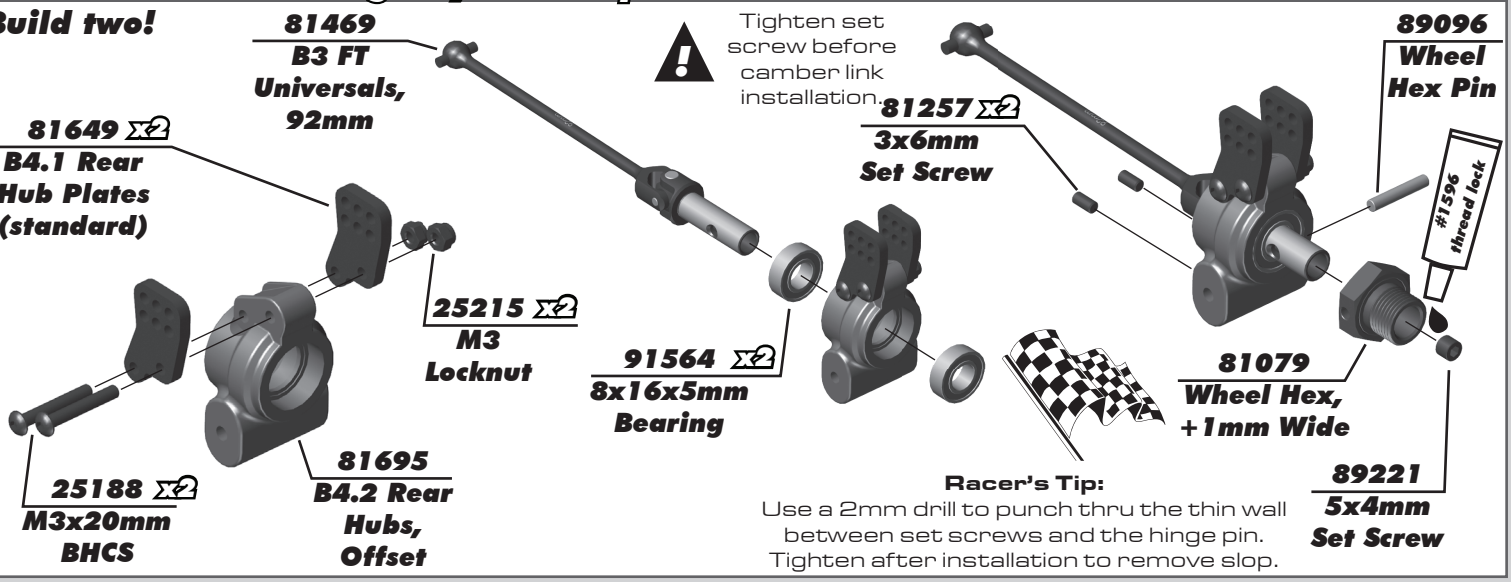


:: Rear End Build - Bag 7.1, 7.2, 7.3 - Step 9



:: Rear Hubs Build - Bag 8.1, 8.2 - Step 1

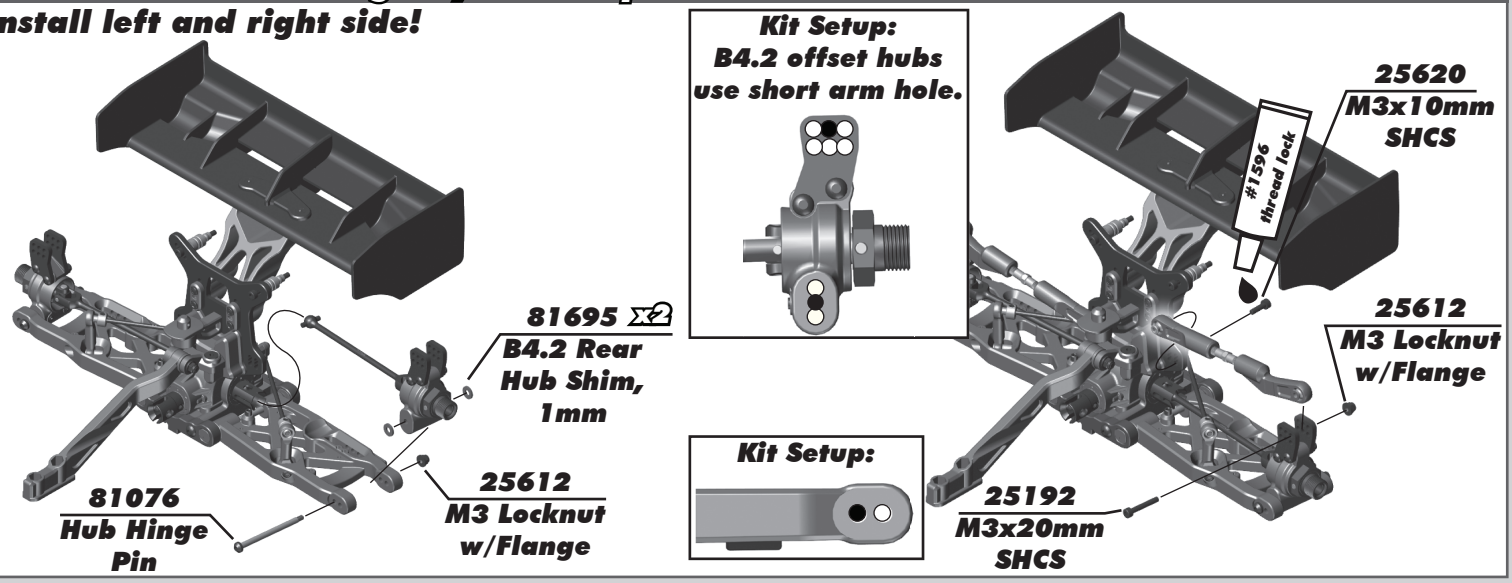
Build two!



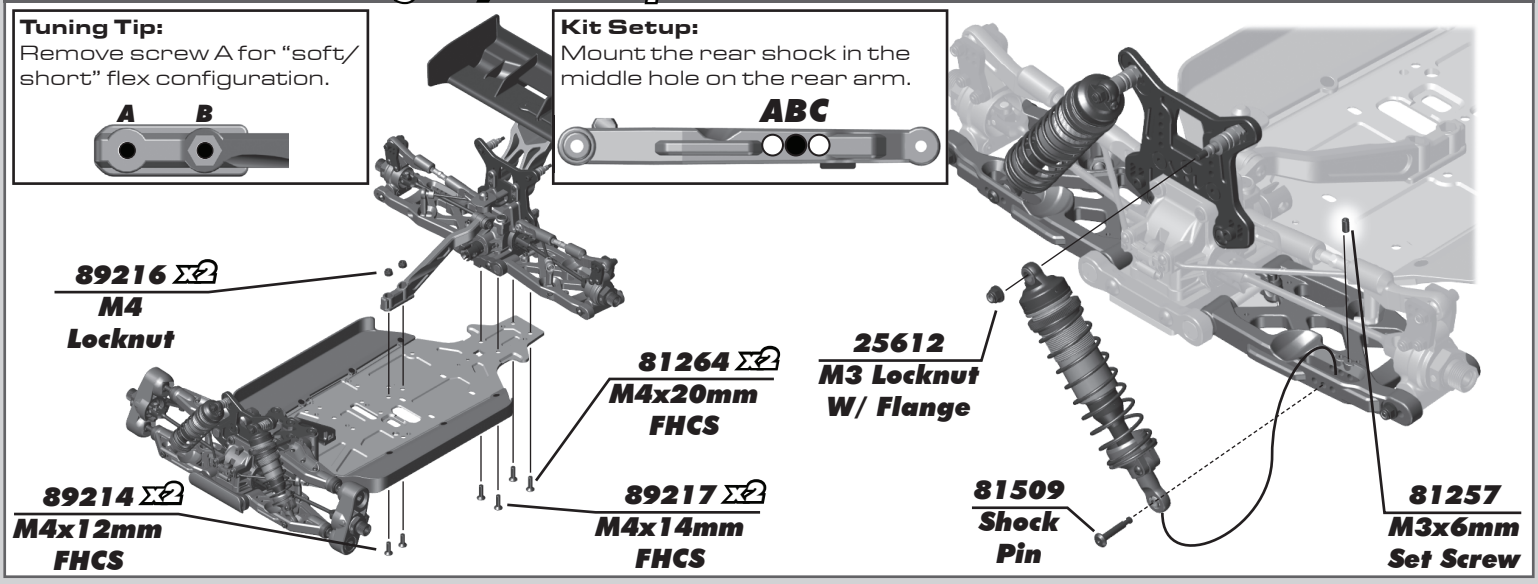
Racer's Tip:
Use a 2mm drill to punch thru the thin wall between set screws and the hinge pin. Tighten after installation to remove slop.

:: Rear Hubs Build - Bag 8.1, 8.2 - Step 2

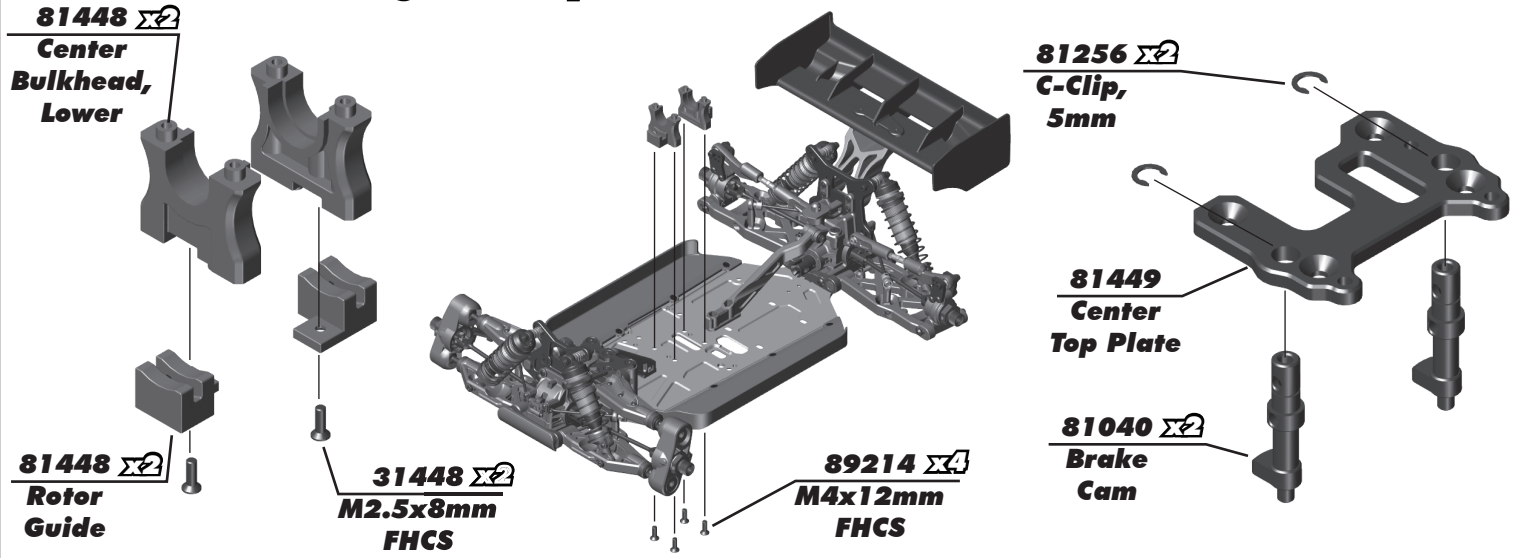
Install left and right side!



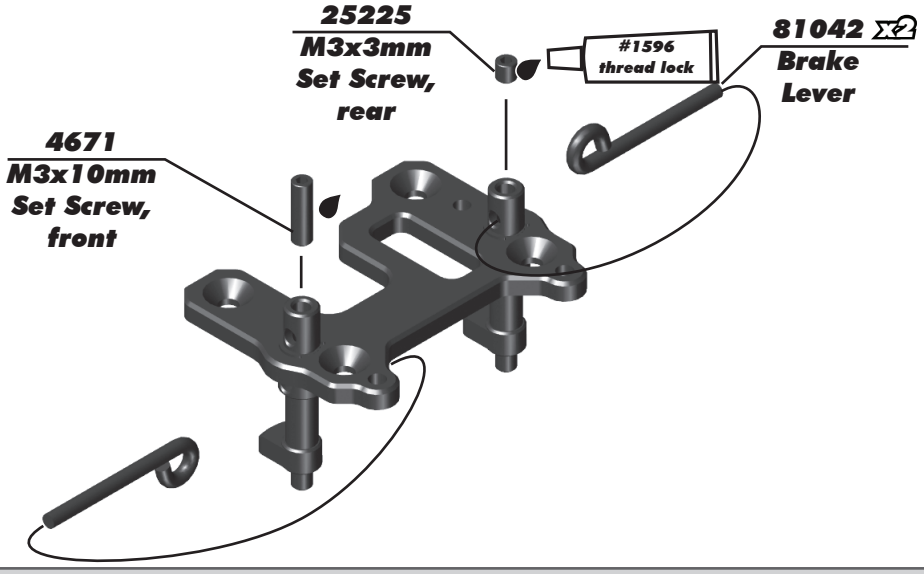
:: Rear Hubs Build - Bag 8.1, 8.2 - Step 3



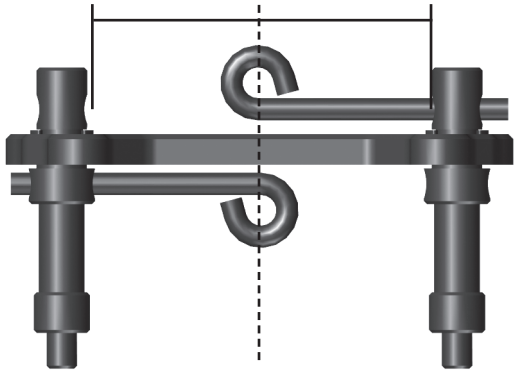
:: Center Bulkhead - Bag 9.1 - Step 1



:: Center Bulkhead - Bag 9.1 - Step 2



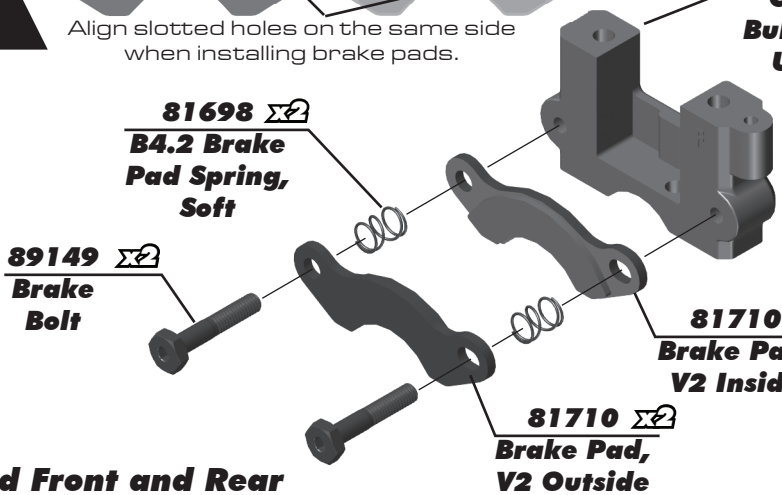
Center brake levers between the brake cams.



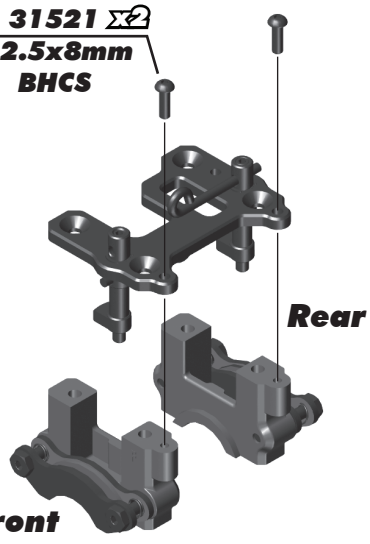
:: Center Bulkhead - Bag 9.1 - Step 3



Align slotted holes on the same side when installing brake pads.

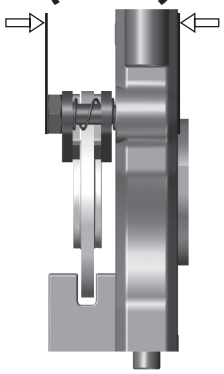


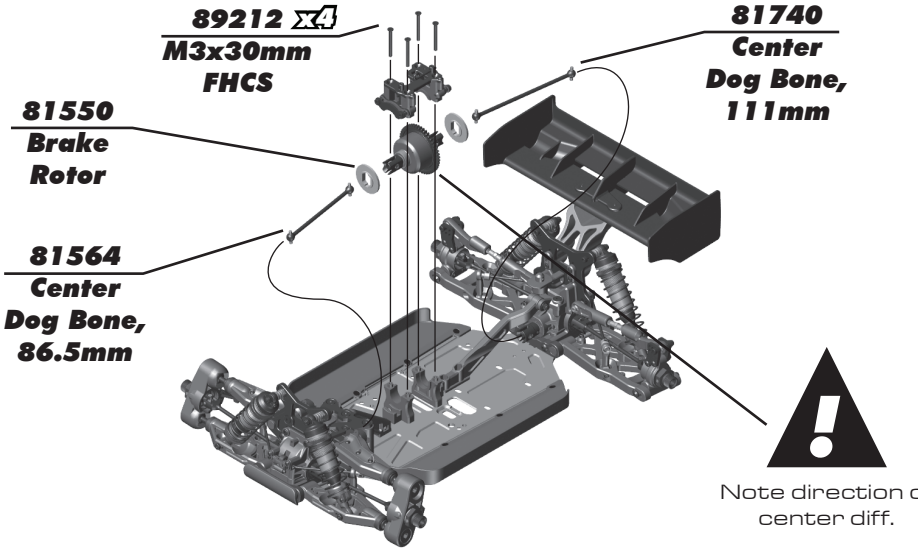
The upper center bulkheads have "F" for front and "R" for rear.



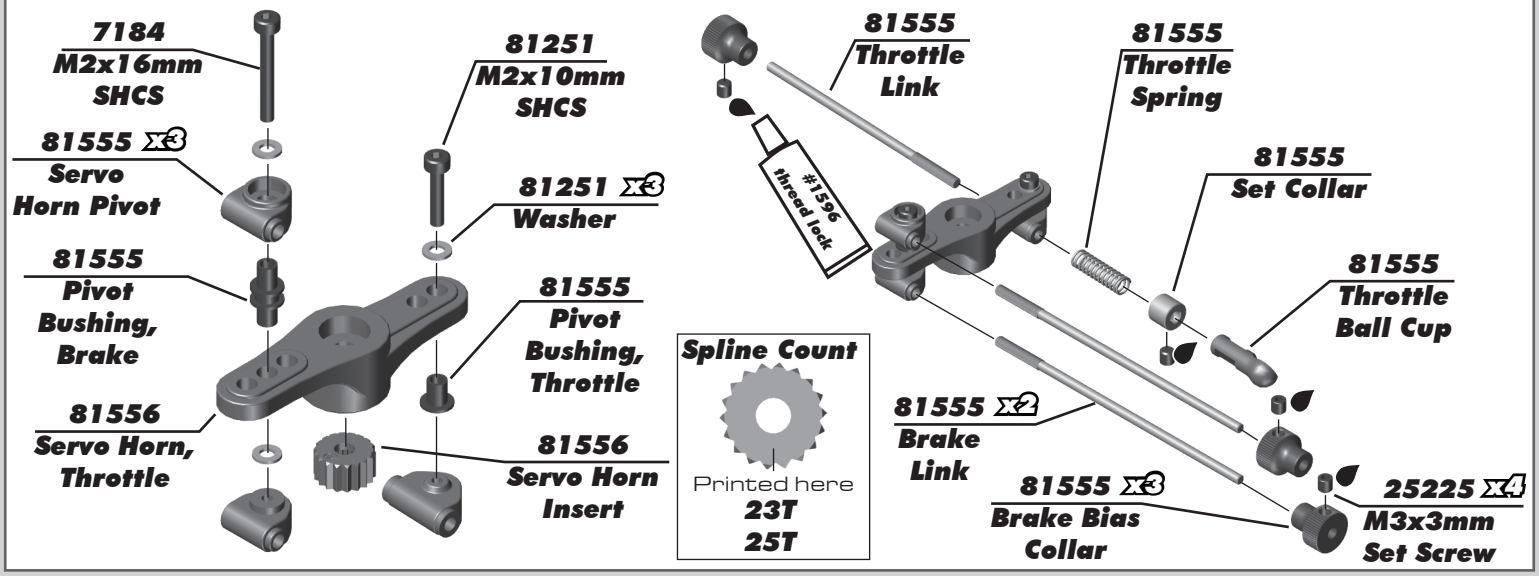
Build Front and Rear

:: Center Bulkhead - Bag 9.1 - Step 4



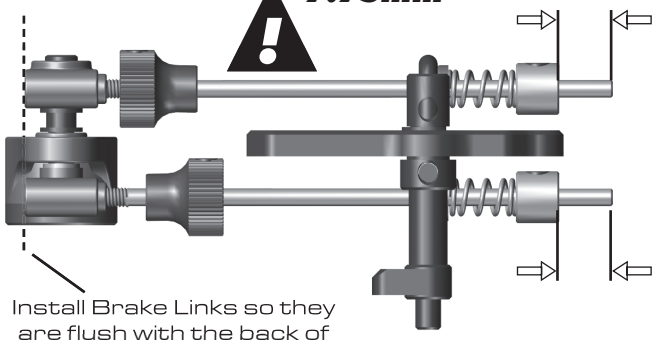


:: Linkages Build - Bag 10.1 - Step 1



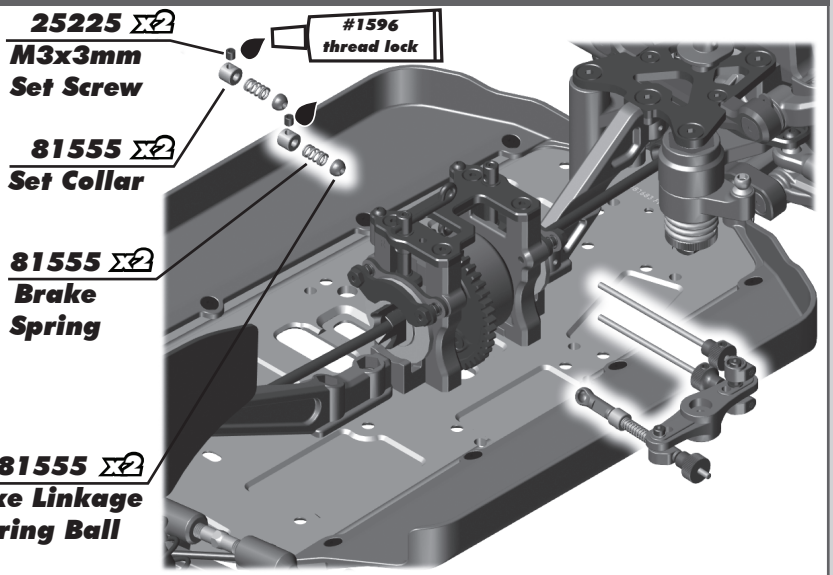
:: Linkages Build - Bag 10.1 - Step 2

Recommended Starting Positions:
Rear Brake Gap
7.75mm

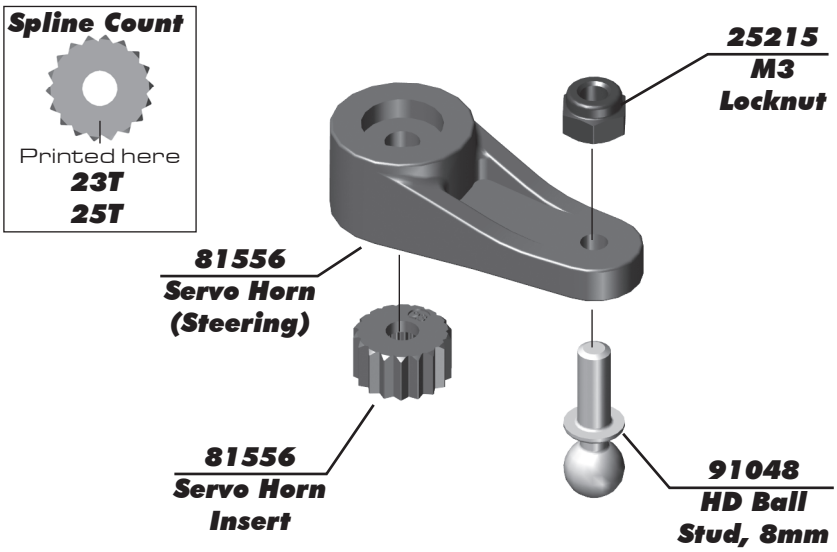


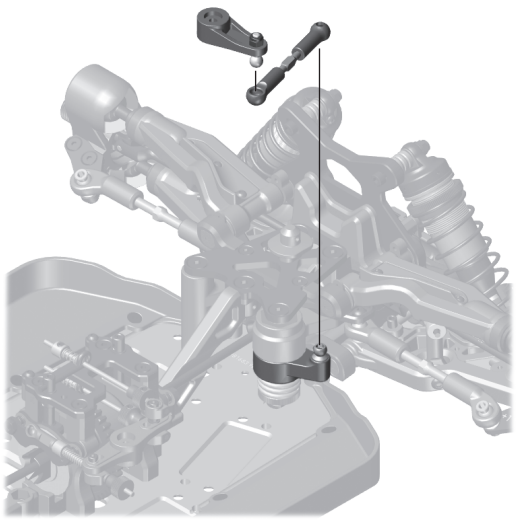
Install Brake Links so they are flush with the back of the servo horn pivots.

Front Brake Gap
7.75mm



:: Linkages Build - Bag 10.1 - Step 3

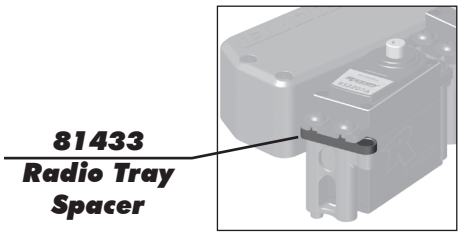


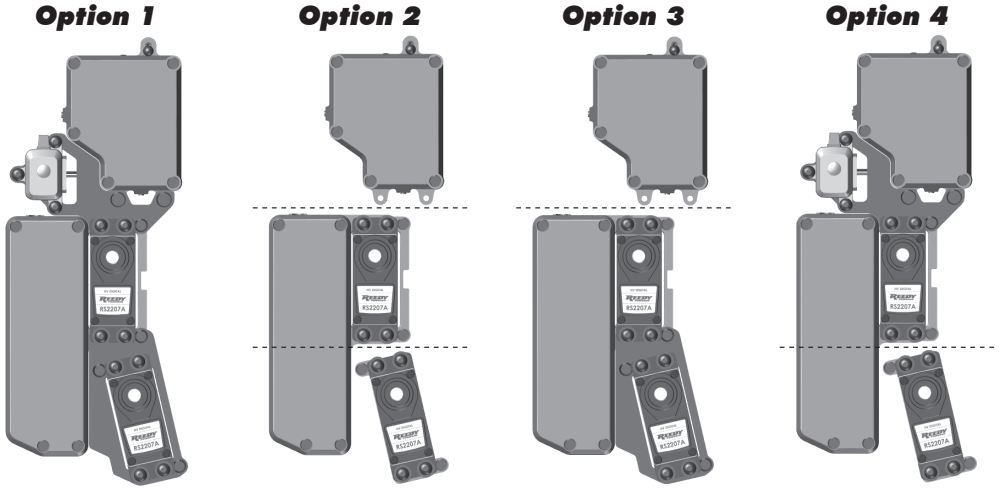


:: Radio Tray Build - Bag 11.1 - Step 1

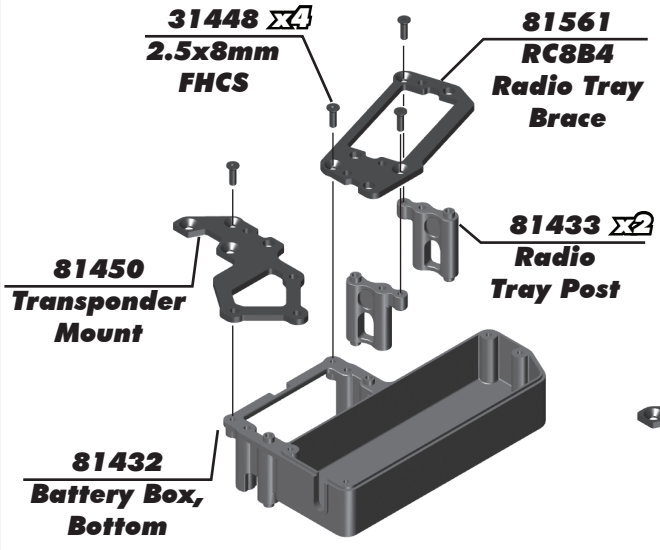
Radio Tray Configuration:
The radio tray on RC8B4 can be configured in four different ways. Each configuration changes the amount and location of flex in the chassis. Experiment with different configurations when running on different surfaces.

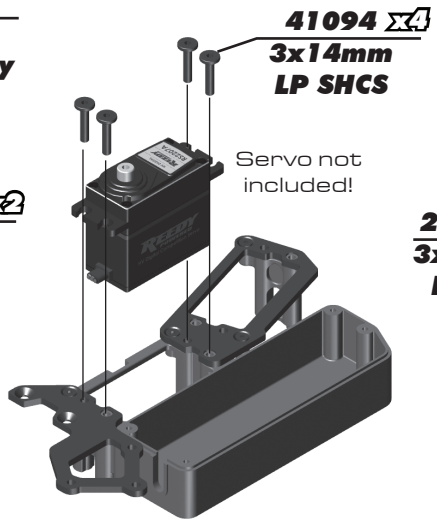
When removing either graphite radio tray brace or transponder mount, utillize included plastic shims to maintain proper servo height.

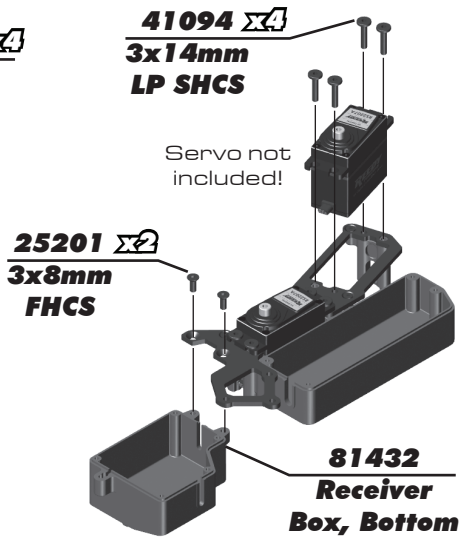




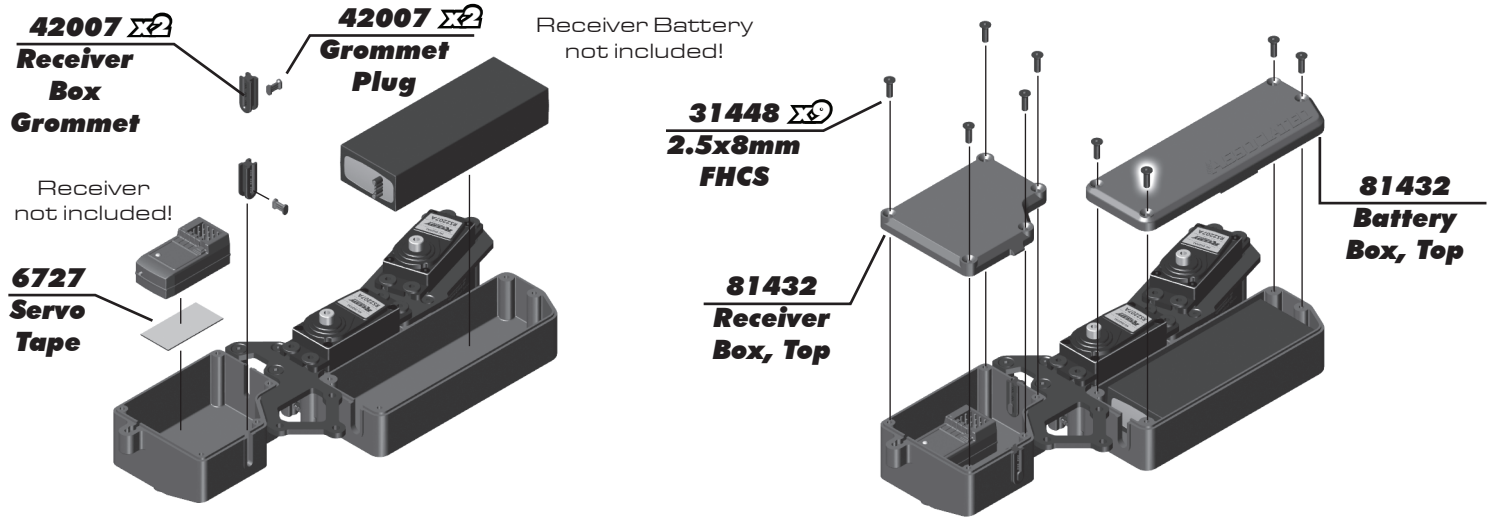
:: Radio Tray Build - Bag 11.1 - Step 2



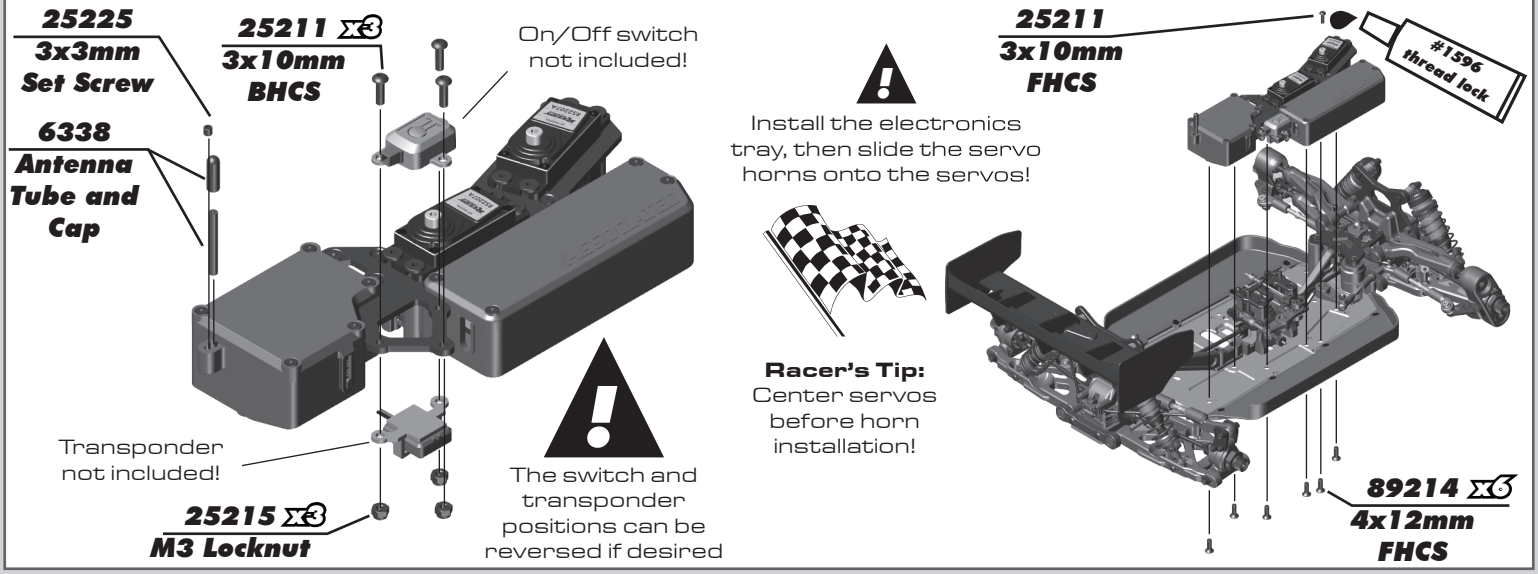




:: Radio Tray Build - Bag 11.1 - Step 3

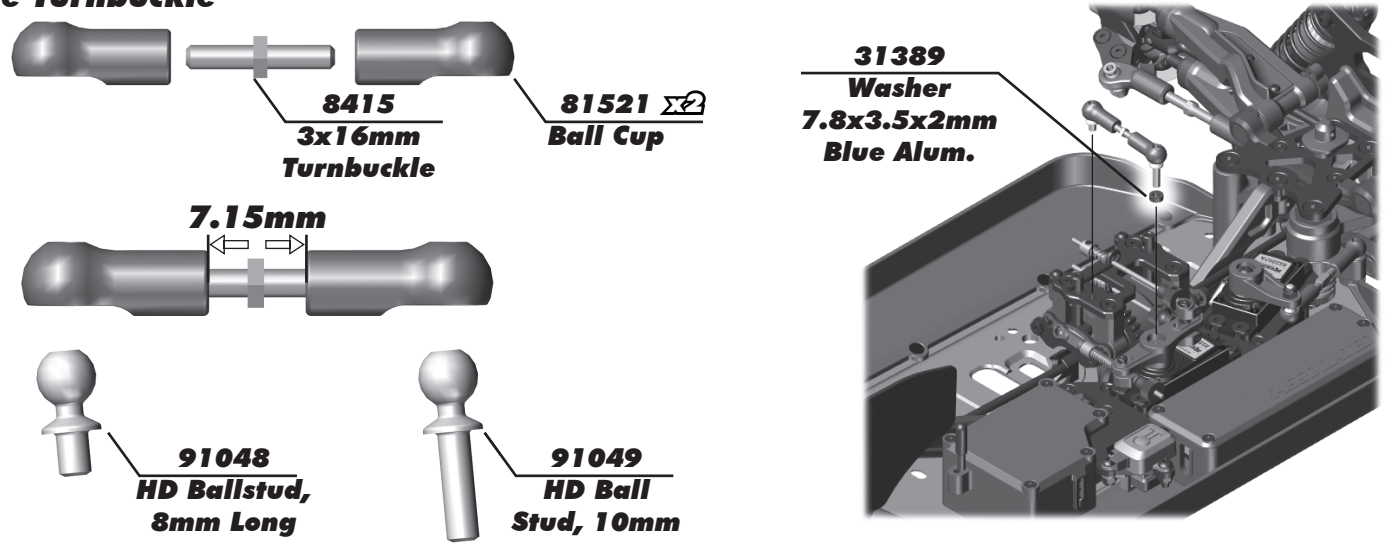


:: Radio Tray Build - Bag 11.1 - Step 4



:: Radio Tray Build - Bag 11.1 - Step 5

Throttle Turnbuckle



:: Clutch / Filter Build - Bag 12.1, 12.2 - Step 1

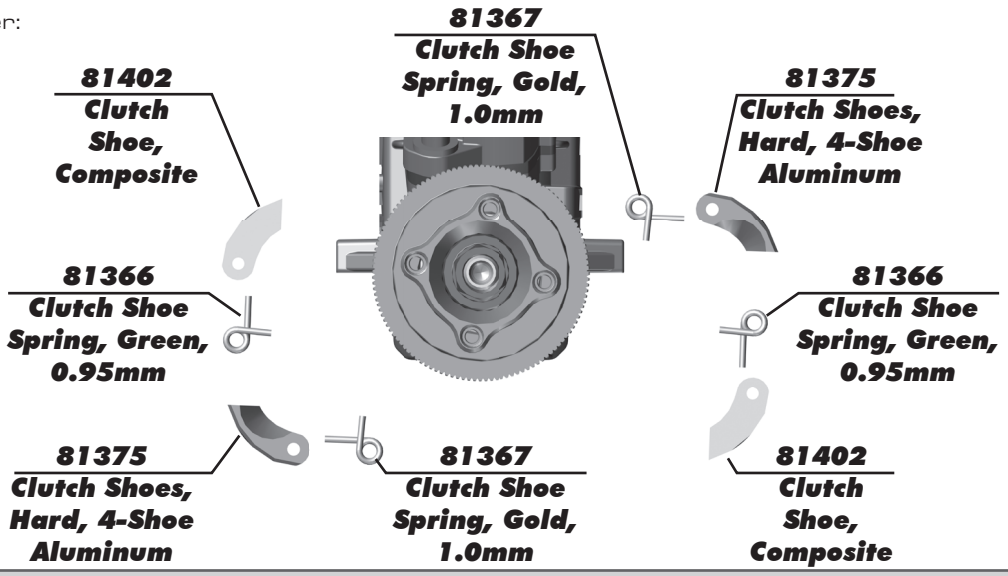


Racer's Tip:
Use a small amount of blue threadlock on the crank, do not get it into the bearing!

:: Clutch / Filter Build - Bag 12.1, 12.2 - Step 2

Clutch Shoe / Spring Installation Order:

Short end of clutch shoe spring installed into flywheel.
Long end of clutch shoe spring installed into clutch shoe.



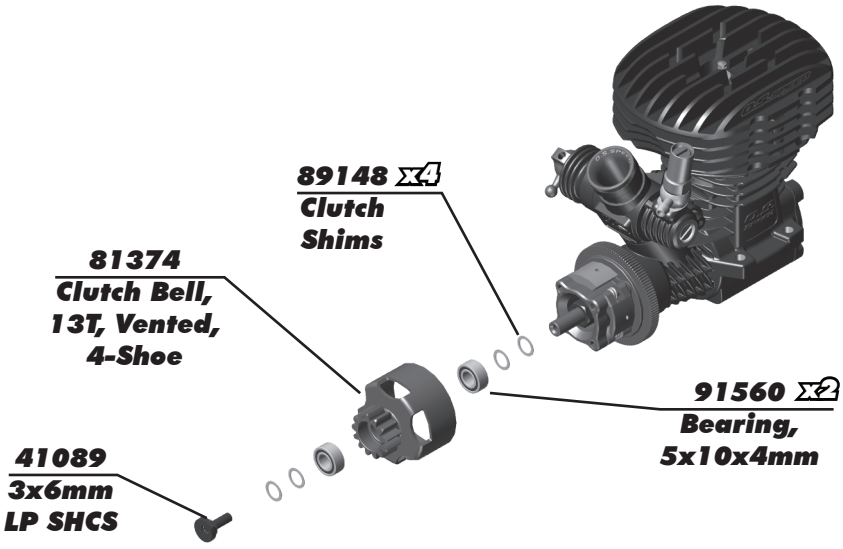
:: Clutch / Filter Build - Bag 12.1, 12.2 - Step 3

Clutch shimming instructions:

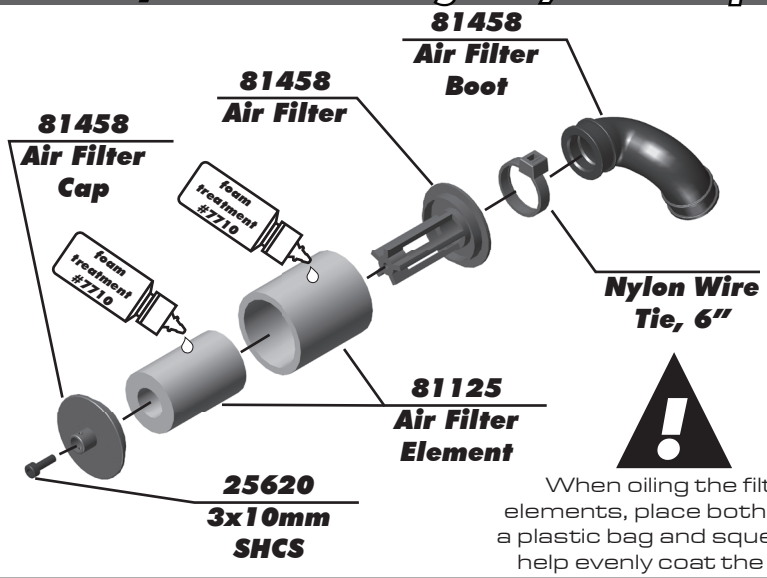
- Build assembly with shims as shown
- If clutch bell does not spin freely:
  Move shim from behind clutch bell to in front of clutch bell

-OR-

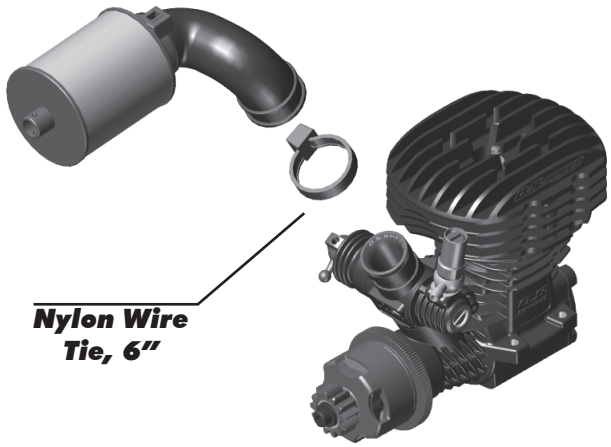
  Remove one shim from front of clutch bell
- Recommended axial play in clutch bell = 0.2mm - 0.5mm



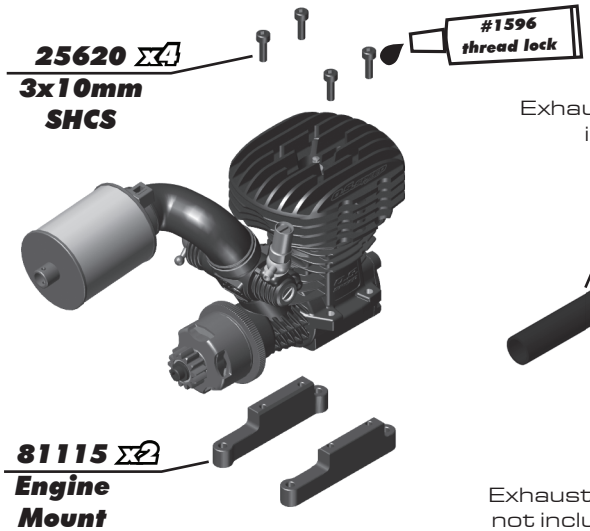
:: Clutch / Filter Build - Bag 12.1, 12.2 - Step 4



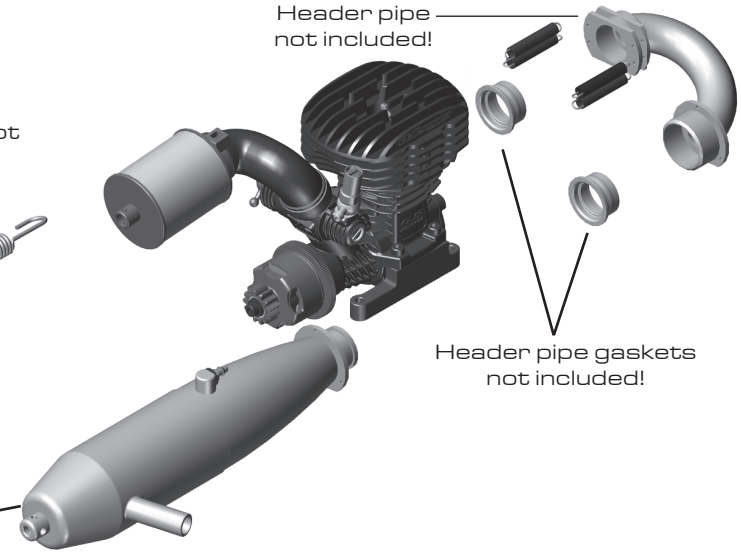
When oiling the filter elements, place both inside a plastic bag and squeeze to help evenly coat the filter.



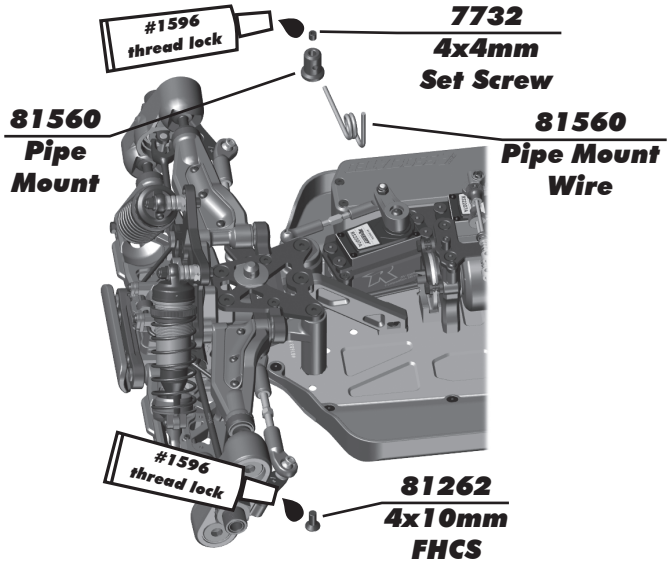
:: Clutch / Filter Build - Bag 12.1, 12.2 - Step 5

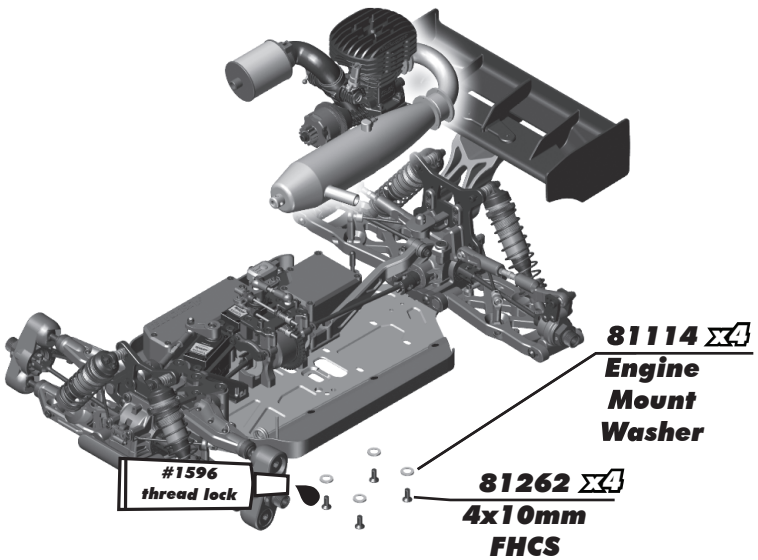






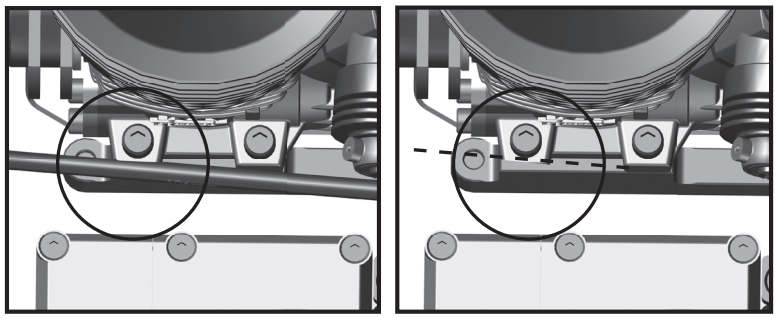
:: Clutch / Filter Build - Bag 12.1, 12.2 - Step 6

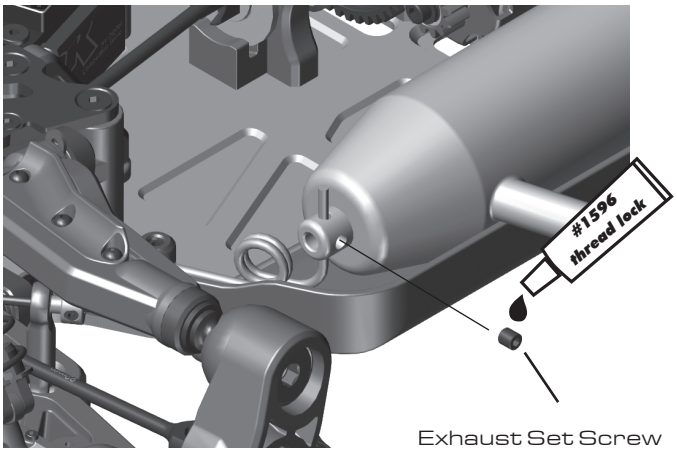




:: Clutch / Filter Build - Bag 12.1, 12.2 - Step 7

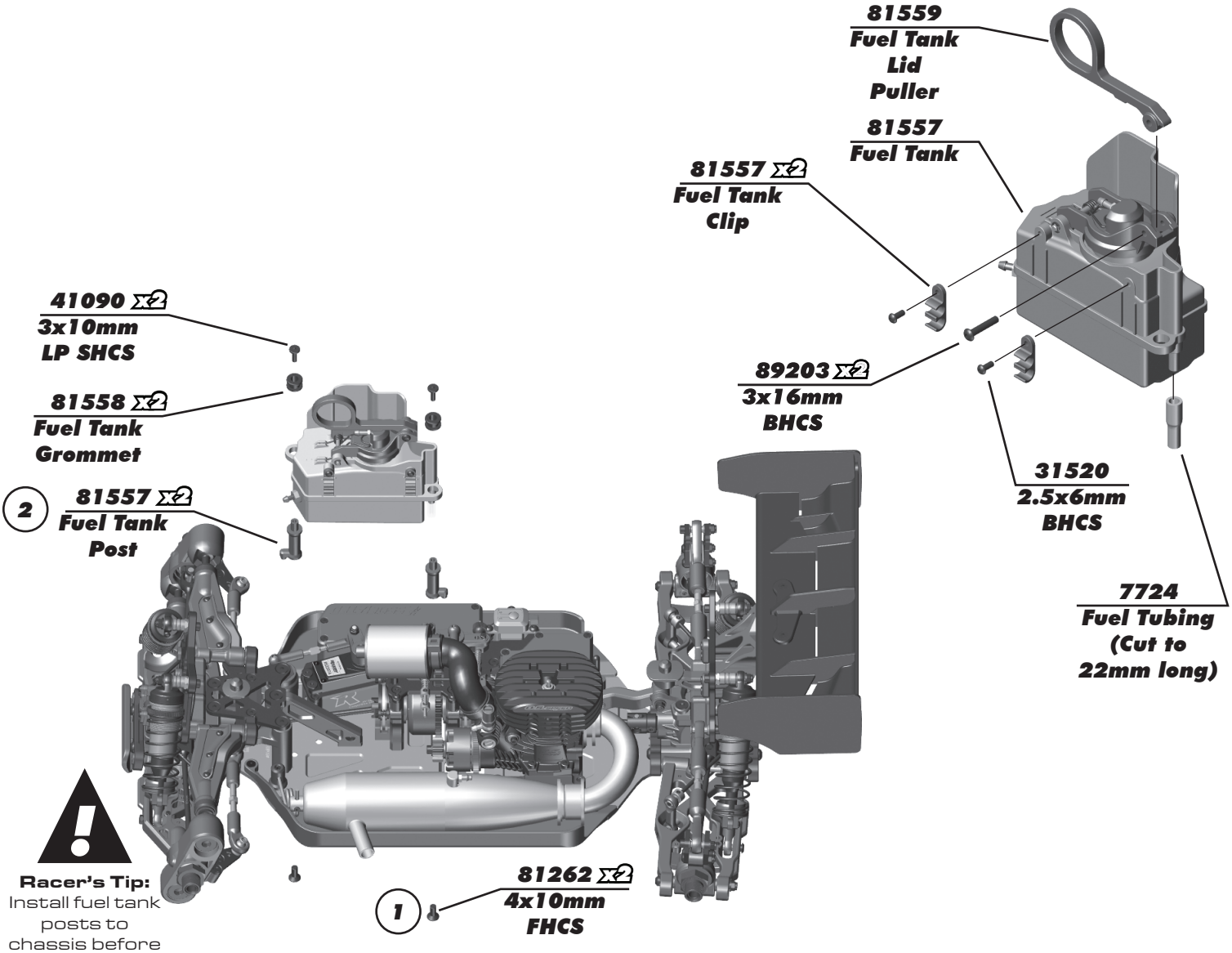
When installing your engine, make sure the rear drive shaft does not interfere with the engine block. You may need to remove material from the engine block for fitment.





Exhaust Set Screw not included!

:: Fuel Tank Build - Bag 13.1, 13.2 - Step 1

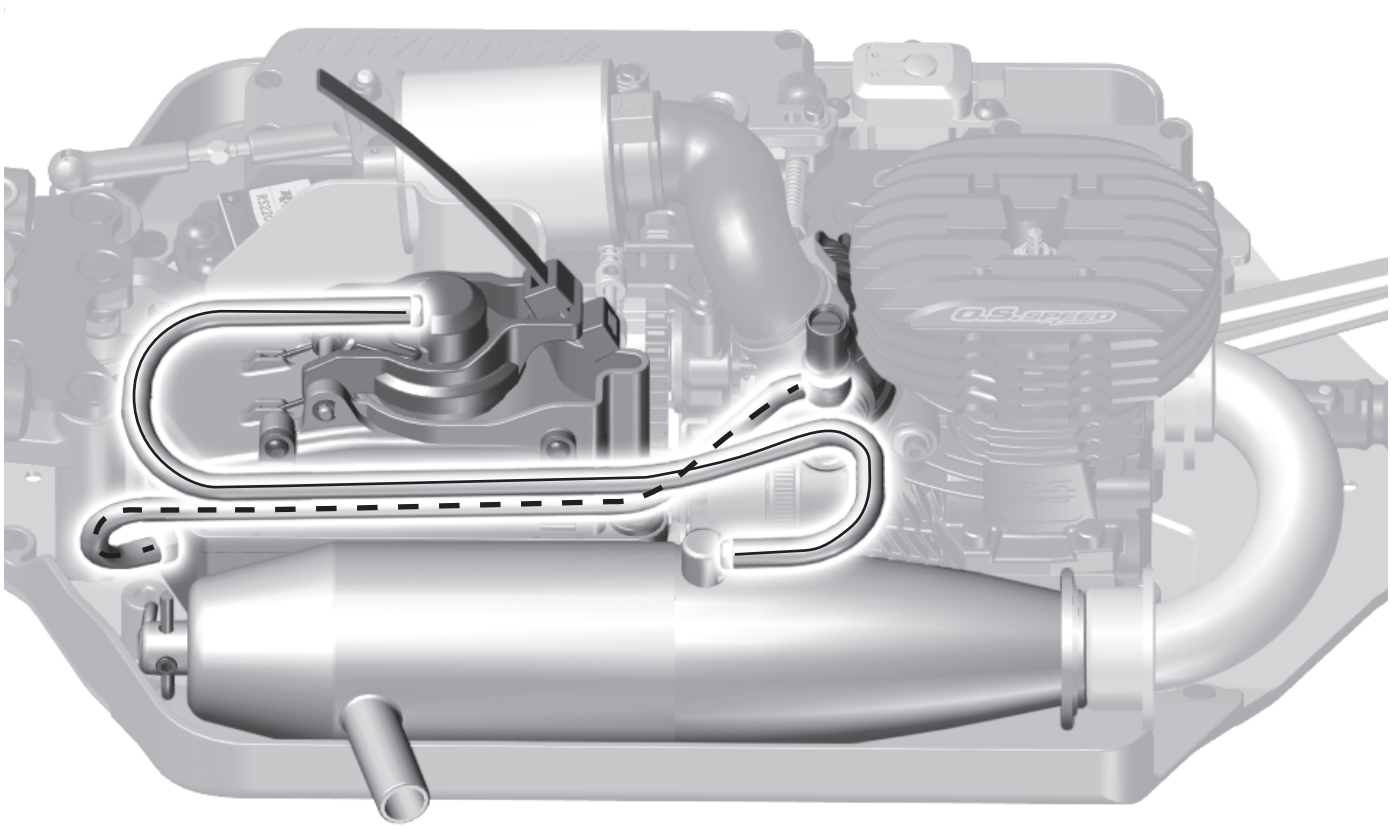


Racer's Tip: Install fuel tank posts to chassis before installing the fuel tank.

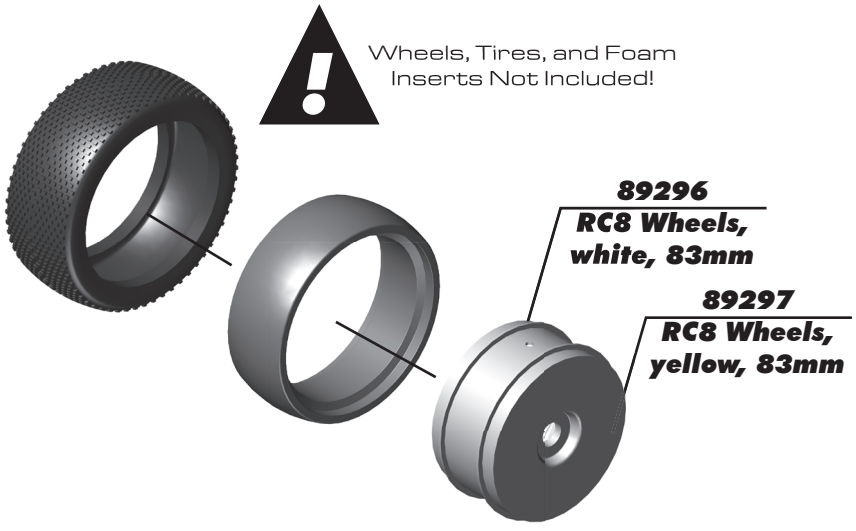
:: Fuel Tank Build - Bag 13.1, 13.2 - Step 2

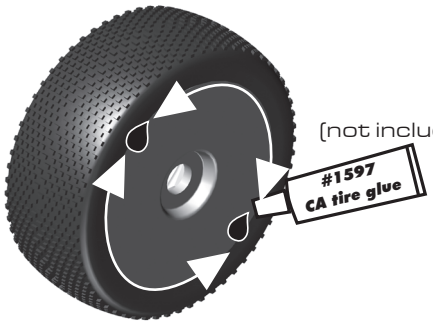
Pressure line from fuel tank lid to exhaust pipe

Fuel line from fuel tank to carburetor



:: Wheels / Tires / Body - Misc. - Step 1



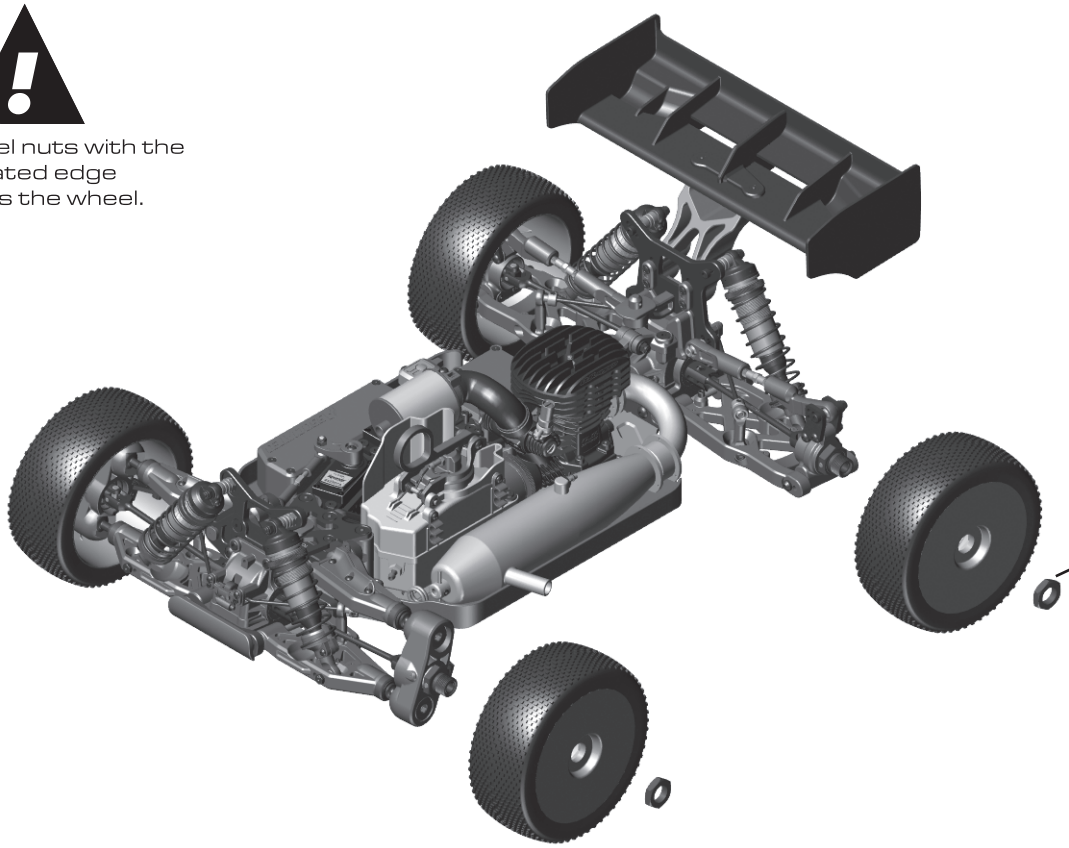


Build four wheels/ tires

Tires:
When gluing tires to wheels, use a fast-curing tire glue (CA) (AE # 1597). This is available at your local hobby shop. Make sure to clean the mounting surface of the tire and wheel with alchohol for best adhesion.

:: Wheels / Tires / Body - Misc. - Step 2

Install wheel nuts with the serrated edge towards the wheel.



81082 x4
Wheel Nuts, 17mm (Blue)

:: Wheels / Tires / Body - Misc. - Step 3

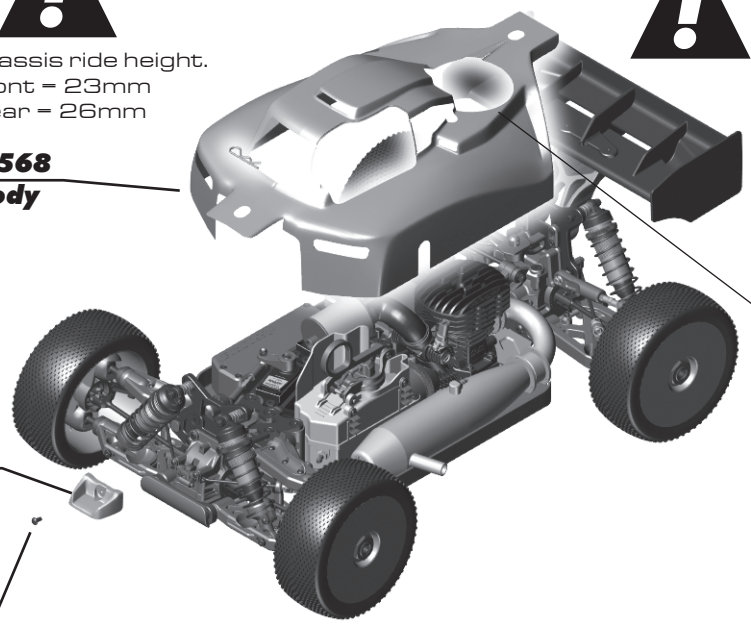
Final chassis ride height.
Front = 23mm
Rear = 26mm

2208 x2
Body Clip

81568
Body

81568
Nose Cone

31531
3x6mm BHCS



Painting Tips:

Your kit comes with a clear polycarbonate body. You will need to prep the body before you can paint it. Wash the inside thoroughly with warm water and liquid detergent. Dry the body using a clean, soft, lint-free cloth. Install the window masks on the inside of the body. (RC cars get painted on 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 RC specific paint) the paint to the inside of the body (preferably dark colors first, lighter colors last).

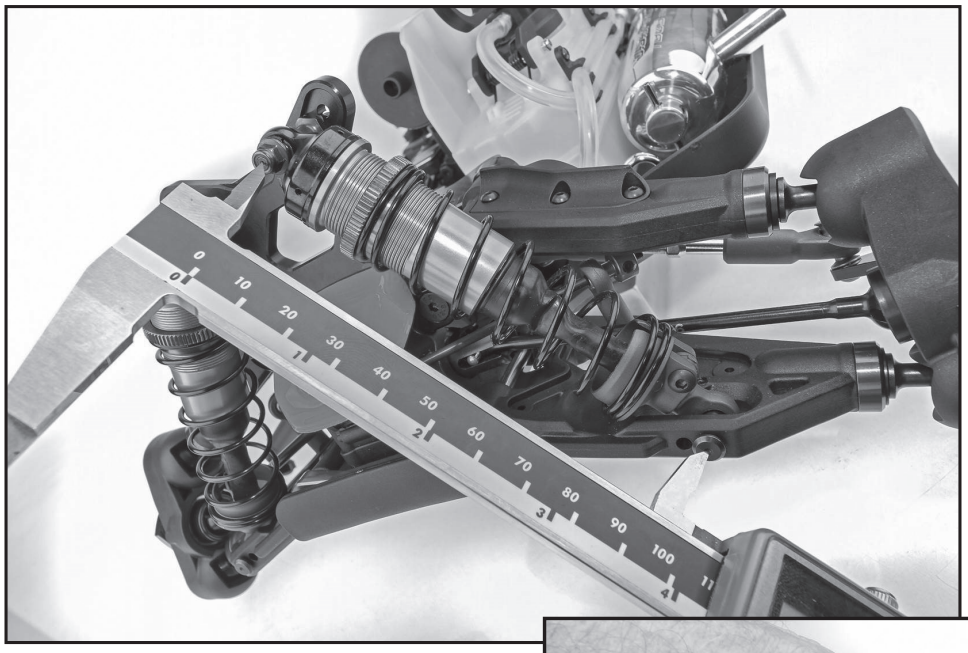
NOTE: use ONLY paint that is recommended for use with (polycarbonate) plastics. If you do not, you can destroy the polycarbonate body!

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

Kit RWB chassis uses the rear engine, tuning, and exhaust cutouts.
Please check before trimming as your engine / pipe may vary.

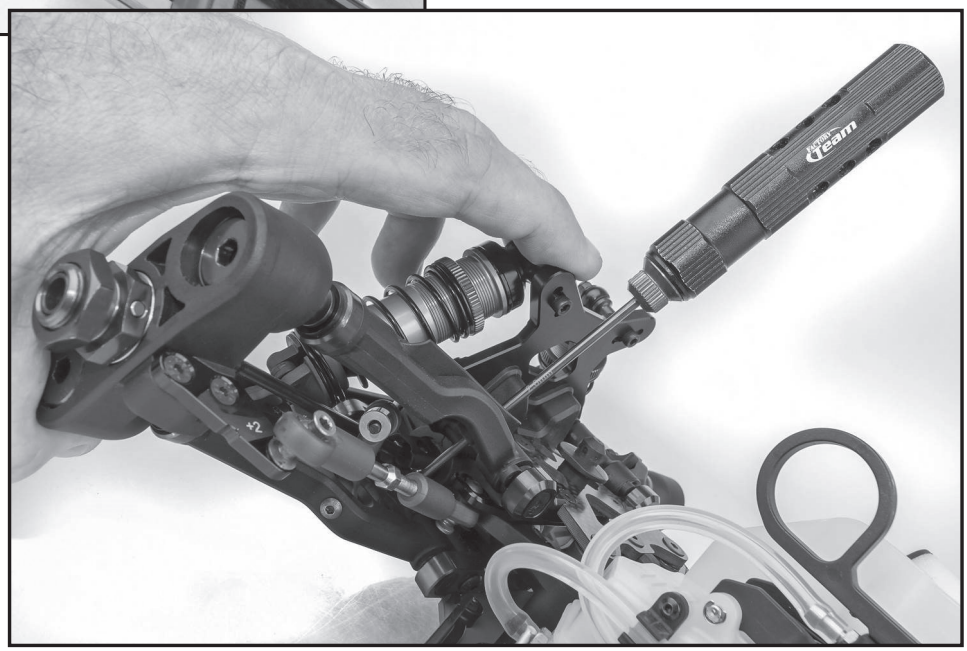
:: Droop Settings

Set droop by measuring overall length of shock (from standoff to shock pin) while the chassis is elevated above your working surface. The shocks should be fully extended.
Kit setup for front droop is 101 mm shock length, and 126mm shock length for the rear "C" hole.
If the shock length is too long, adjust by turning the droop screws clockwise.
If the shock length is too short, adjust by turning the droop screws counter-clockwise.





Racer's Tip:
Use 123mm for the middle "B" rear arm hole, and +2 or 0 eyelet.



Front Droop: Increasing front droop (loosen droop screws) will increase off-throttle steering. It also allows the front end to lift more, giving more rear grip and less front grip on-power. Remember to never loosen the screws beyond the FULL DROOP setting. Decreasing front droop (tighten droop screws) yields more on-power steering and quicker response at the expense of some stability in bumpy sections. It will also give less off-throttle steering.

Rear Droop: Increasing rear droop (loosen droop screws) will increase traction in bumpy sections, but will reduce high-speed stability. Remember to never loosen the screws beyond the FULL DROOP setting. Decreasing rear droop (tighten droop screws) will increase stability in high speed sections, but will reduce stability in bumpy sections.

Setup Sheets:

To find different setups for your kit, visit our website, https://www.associatedelectrics.com/teamassociated/and click on the "Setup Sheets" link, and then the link to your model. Our team of professional drivers help develop these setups at races worldwide. Additionally, most drivers have a "base" setup that they use as a starting point for most races. Try running some of our base setups or look for track conditions and tires that are similar to your local track and replicate that setup. Remember, each adjustment has a purpose, so copy everything from the setup sheet and then make adjustments based on the recommendations in here.

ASSOCIATED ELECTRICS
Since 1964

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

call: (949) 544-7500 - fax: (949) 544-7501

Check out the following web sites for all of our kits, current products, new releases, setup help, tips, and racing info!

www.AssociatedElectrics.com

FOLLOW US ON SOCIAL MEDIA

TeamAssociated	@TeamAssociatedRC	@Team_Associated	@Associated_Electrics	TeamAssociatedRC	TeamAssociated
ReedyPower	@ReedyPower	@ReedyPower		ElementRC	Reedy
ElementRC	@Element_RC				Element-rc
FactoryTeam51	@FactoryTeam_RC				