PRO2 SC10sw SHORT WHEELBASE

1:10 Scale 2WD Electric Off Road Ready-to-Run Short Course

TEAM ASSOCIATED

1:10 Scale 2WD Electric Off Road Ready-to-Run Short Course Manual

#700040 Pro2 SC10sw White, RTR & #700041 Pro2 SC10sw Black, RTR

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 RTR. 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.

:: RTR Features

- 2.4GHz 2-channel radio with new DVC (Dynamic Vehicle Control) receiver featuring built-in adjustable gyro
- High-torque, metal-gear Reedy Servo with spring style servo saver
- Powerful Reedy 3300kV brushless motor
- Water-resistant high-power Reedy brushless speed control with T-plug connector and LiPo low voltage cutoff
- Water-resistant enclosed receiver box
- Lightweight street stock inspired wheels
- High grip all terrain tires
- Durable and lightweight aluminum top shaft
- Low center-of-gravity molded composite chassis with hook-and-loop battery straps that accommodate both NiMH and 2/3s LiPo battery packs
- Metric hardware throughout
- 22 precision rubber-sealed ball bearings
- Impact absorbing front and rear bumpers
- Adjustable body mounts
- Rear CVA drive shafts for more reliability
- Aluminum 12mm big bore coil-over shock absorbers
- 2.6:1 ratio gearbox with heavy-duty sealed gear differential and externally adjustable slipper clutch
- Rugged steel turnbuckles for adjustable camber and front toe-in
- Adjustable suspension geometry
- Vertical ball ends for roll center adjustments, front and rear
- Many Factory Team options already available!

:: Additional

Your new RTR comes factory assembled including radio gear, motor, and ESC. However, there are some items you will need to complete your kit (refer to catalog section for suggestions):

- AA-size batteries for transmitter (x4)
- Peak Detection Charger or LiPo Compatible Charger
- 6 cell NiMH battery pack or 2S LiPo battery pack w/High Current T Plug.

Tools included:

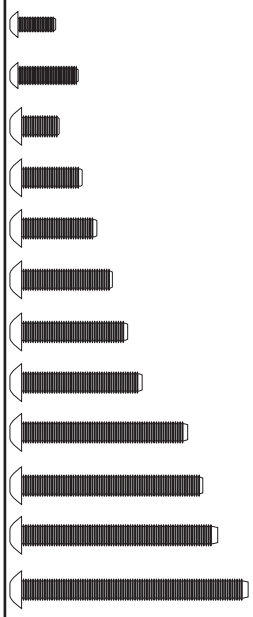
- Allen wrenches 1.5mm, 2.0mm, 2.5mm
- 12mm Shock Tool
- Multi-wrench

:: Other Helpful Items

- Green Slime shock lube (AE # 1105)
- Thread Locking Compound (AE # 1596)
- Silicone Diff Fluid (Refer to catalog for complete listings)
- 7 Piece Hex Driver Set (AE # 1650)
- FT Dual Turnbuckle Wrench (AE #1114)
- Calipers or a Precision Ruler
- FT Nut Drivers (AE #1666 - 1668, used with #1650 handle)
- FT Tire Adhesive, medium (AE # 1597)
- Silicone Shock Fluid (Refer to catalog for complete listings)
- Body Scissors (AE # 1737)
- FT Hex Wrenches (AE # 1650)
- Needle Nose Pliers
- Reamer / Hole Punch
- Wire Cutters
- Soldering Iron
- Ride Height Gauge
- Hobby Knife

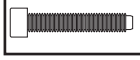
:: Hardware - 1:1 Scale View

Button Head (bhcs)



2x4mm (31510)
2.5x8mm (31521)
3x5mm (31530)
3x8mm (31532)
3x10mm (25211)
3x12mm (89202)
3x14mm (25187)
3x16mm (89203)
3x22mm (25189)
3x24mm (89204)
3x26mm (89205)
3x30mm (91478)

Cap Head (shcs)



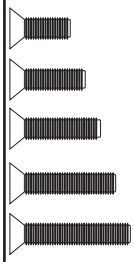
2.5 x 14mm (71032)

Clips



E-clip 1/8 (6299)

Flat Head (fhcs)



3x8mm (25201)
3x10mm (25202)
3x12mm (25203)
3x14mm (89208)
3x16mm (25204)

Set Screws



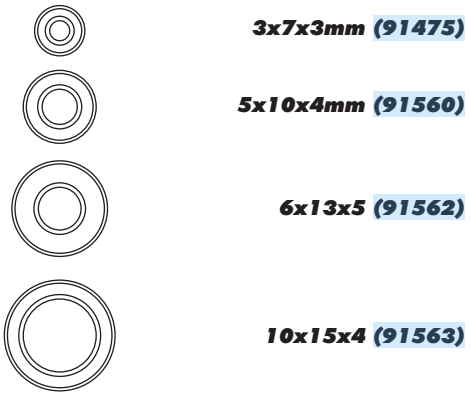
3x3mm (25225)

Shims and Washers



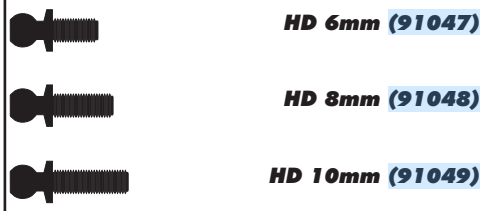
Servo Mount Washer (89218) (.250 x .125 x .815)
FT Ballstud Washer, Aluminum (0.5mm) (31381)
FT Ballstud Washer, Aluminum (1mm) (31382)
FT Ballstud Washer, Aluminum (2mm) (31383)
3x6x0.5mm Washer (89218)

Ball Bearings



3x7x3mm (91475)
5x10x4mm (91560)
6x13x5 (91562)
10x15x4 (91563)

Ballstuds



HD 6mm (91047)
HD 8mm (91048)
HD 10mm (91049)

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)
M4 Locknut w/Flange (91378)
FT M4 Locknuts w/Flange, Blue (31551)

Notes:

:: Table of Contents

1..... Cover

2..... Introduction

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

4..... Table of Contents

5 - 6.....Quick Start Guide

7.....Front Top Plate and Steering Build

8 - 9.....Front Suspension Build

9 - 10.....Rear Suspension Build

10 - 11.....Gear Differential Build

11 - 12.....Gearbox Build

12.....Slipper Build

13.....Gearbox Install

14.....Rear Hub and CVA Build

14 - 15.....Turnbuckles Build

15 - 17.....Shocks Build

17 - 19.....Electronics Build

19 - 20.....Bumpers and Chassis Braces Build

20 - 21.....Tires and Body Build

21.....Tuning Tips

22..... Back Cover

:: Notes



This symbol indicates a special note or instruction 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

:: Quick Start Guide

Battery Charging Steps and Safety:

Remove the battery from the vehicle before charging.
Place battery on a fire resistant surface.
Avoid any contact with water or other liquids.
Be sure to select the correct charging mode for the type of battery you are charging.

ALWAYS use a compatible charger for charging your batteries.

Caution: Never leave the battery unattended while charging. Always disconnect the charger from the power source when finished charging.

Caution: Always disconnect the battery when you are finished driving the vehicle.



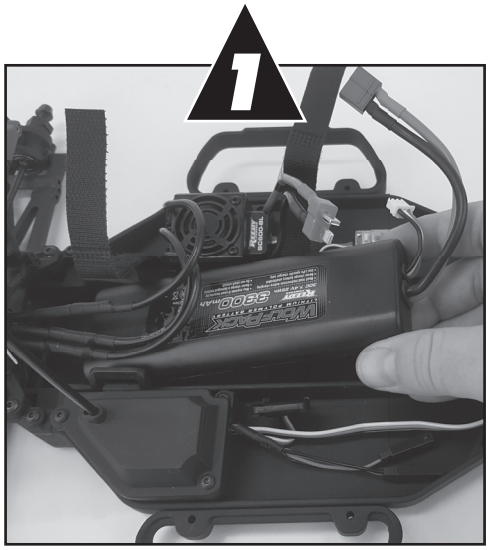
Peak Detection Quick Charger

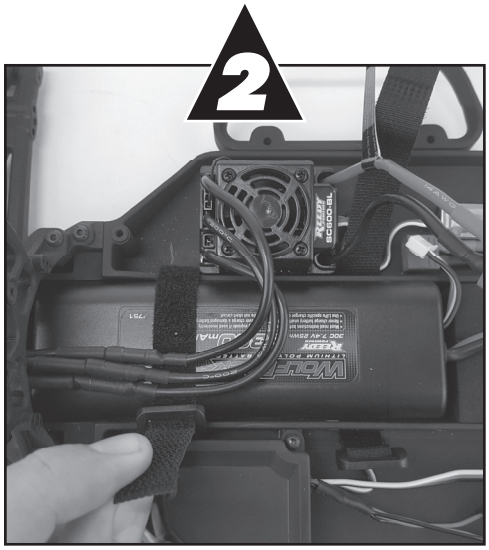
:: Quick Start Guide - (cont.)

Battery Installation:

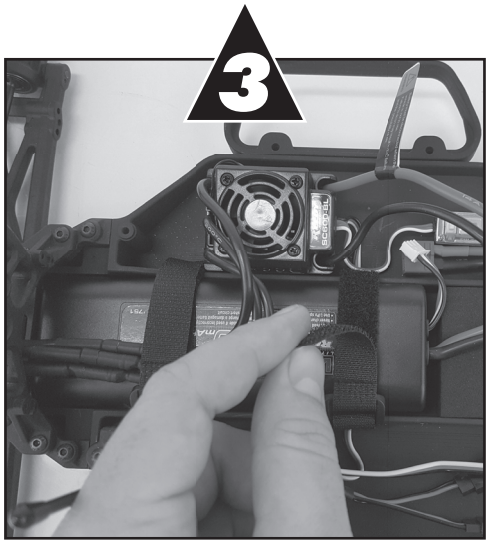
1. Install the battery with the battery wires directed towards the front of the vehicle.
2. Secure the hook and loop strap near the rear shock tower. Pull the strap over the motor wires for added security.
3. Secure the hook and loop strap near the front shock tower.

You may move the foam pad to either the front or the rear of the battery compartment to adjust the weight balance of the vehicle.

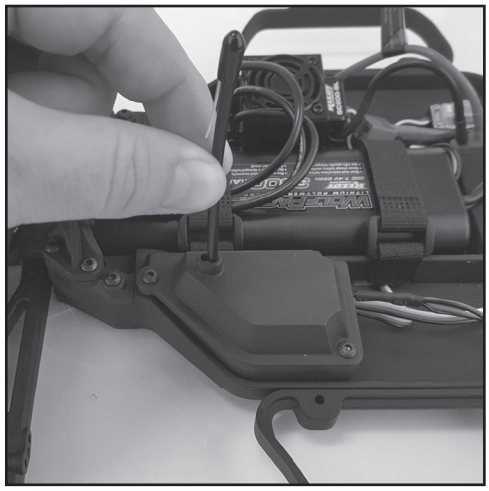




:: Quick Start Guide - (cont.)

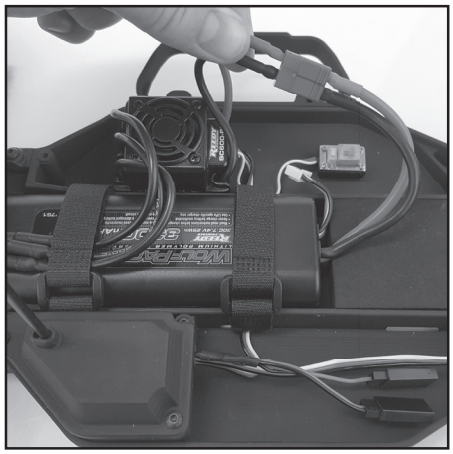


Install antenna wire through antenna tube, then install antenna tube as shown.



:: Quick Start Guide - (cont.)

Battery Notes and Tip:

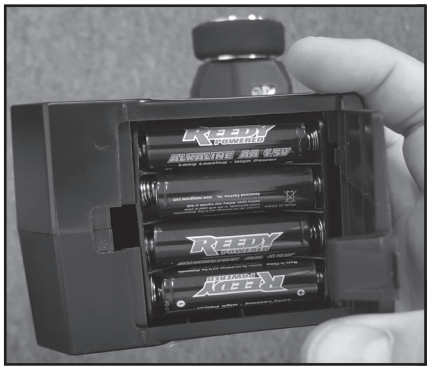


Connect the battery as shown.
Disconnect the battery when not in use!

LiPo: LiPo batteries (lithium polymer) are high current rechargeable batteries. LiPo batteries offer extended run time and peak performance over NiMH batteries. They require a peak detection charger designed specifically for LiPo batteries.
These batteries require special care and handling.
LiPo batteries are recommended for advanced users only!
ALWAYS charge a LiPo battery in LiPo mode.

If using a 3S LiPo battery, use a smaller pinion gear as a starting point (use part #1335 17T Pinion). This provides the gear ratio suggested for the more powerful 3S LiPo battery. Gearing will depend on the surface you are running on, and the size of the track/area that you are driving in.

Radio System Tuning and Controls:





On/Off Switch

RULE: Transmitter on First/Vehicle on Second, Vehicle off First/ Transmitter off Last!

1) Slide the battery cover to remove cover.
2) Install alkaline or rechargeable AA size batteries into the battery holder.
3) Slide the battery cover back into place making sure it is completely closed and secure.
4) Turn the power ON. If the power indicator LED fails to light, check the batteries for insufficient contact or incorrect polarity.

:: Quick Start Guide - (cont.)

Radio System Tuning and Controls:

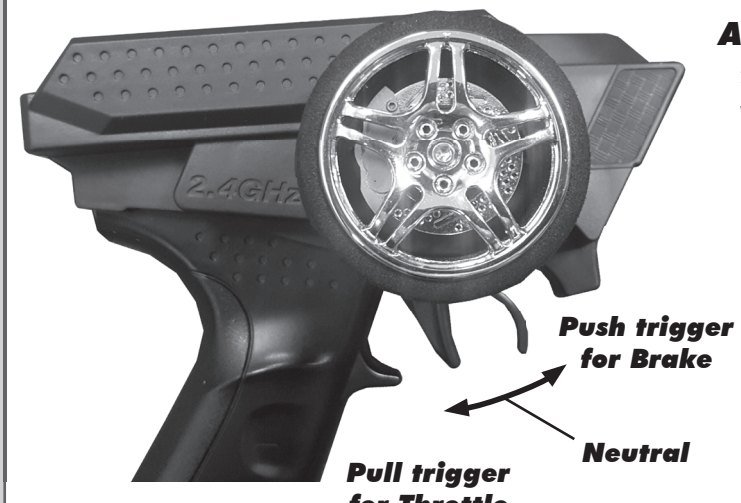
DO NOT hold the trigger when turning on the radio.

If using optional battery for transmitter, be sure to plug it in correctly. Plugging in a battery backwards can cause damage.

Refer to Radio owners manual for more in-depth instructions on radio operation and functions.



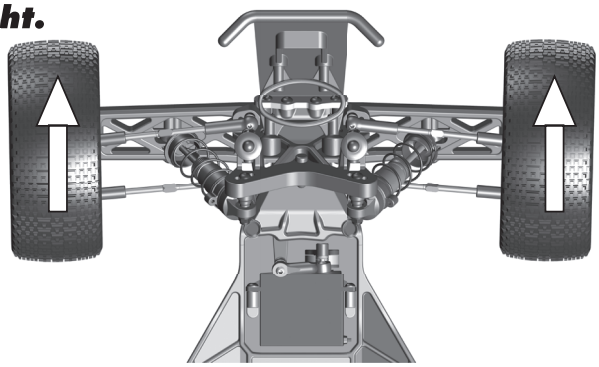
Adjust steering trim so front wheels point straight.



Push trigger for Brake

Neutral

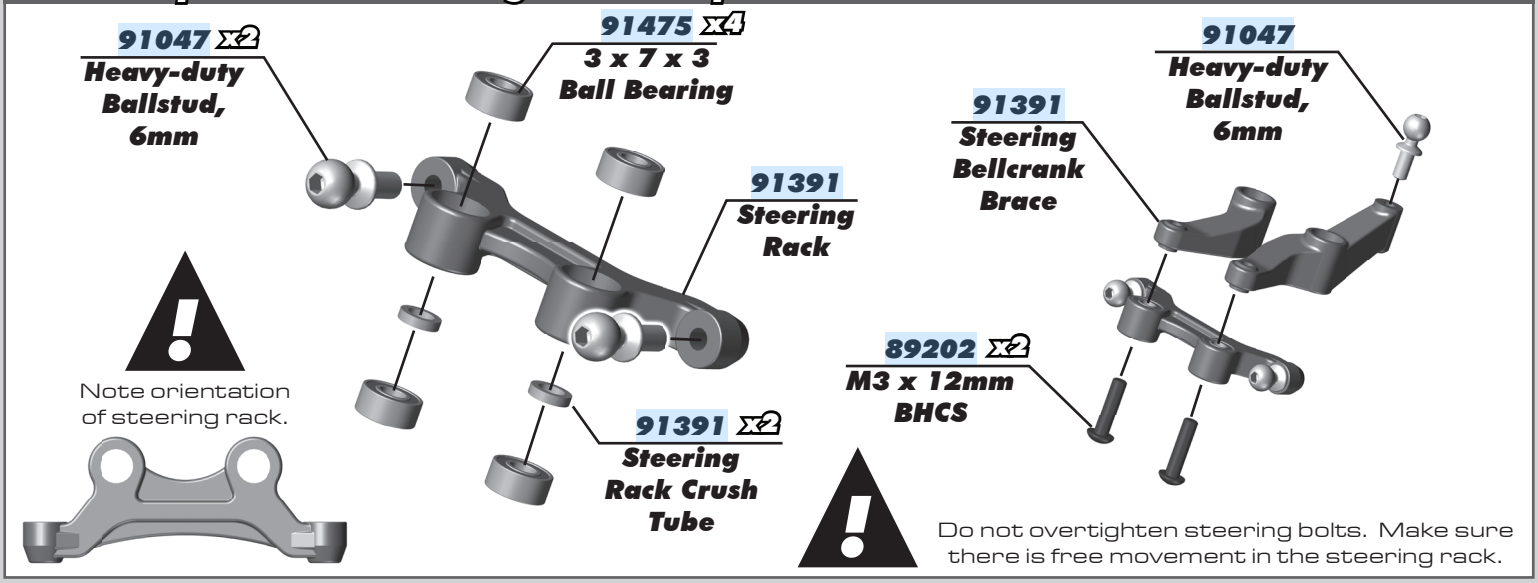
Pull trigger for Throttle



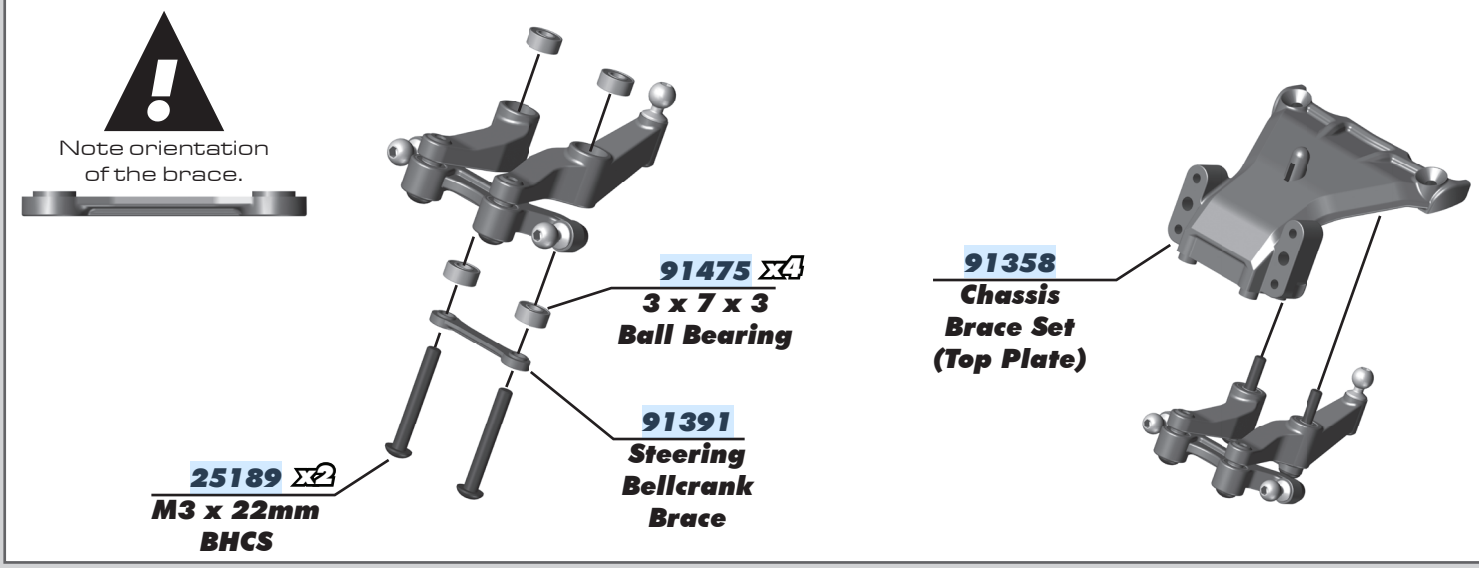
Throttle set to Neutral!

Install body and body clips. Ready to go!

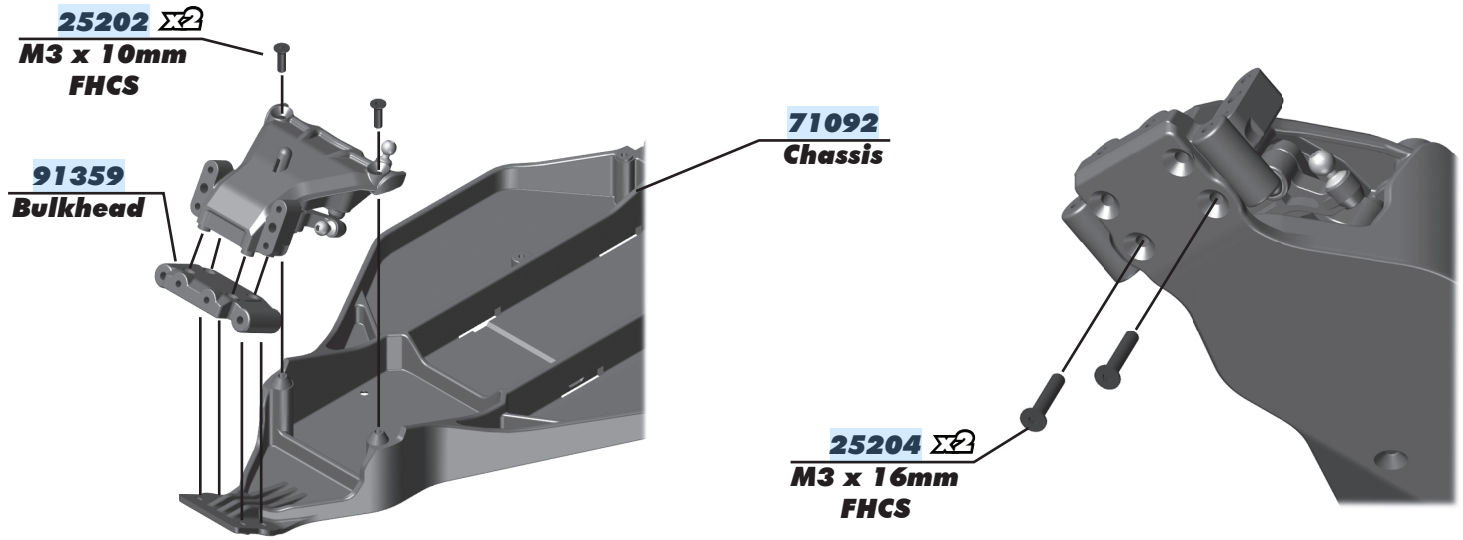
:: Front Top Plate and Steering Build - Step 1



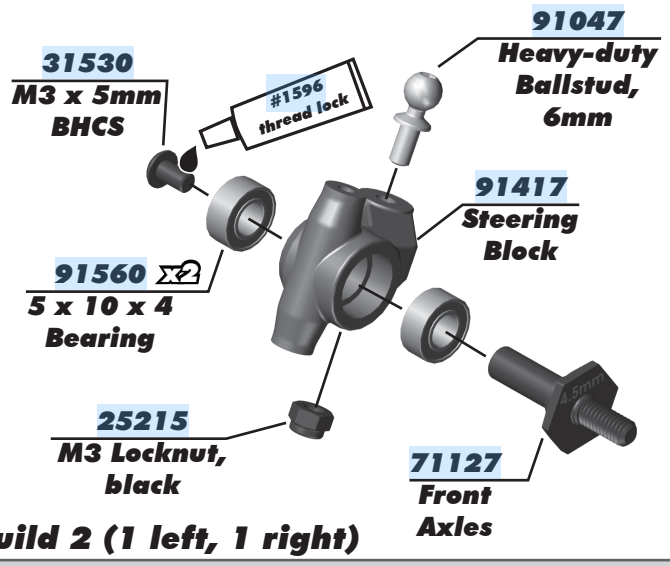
:: Front Top Plate and Steering Build - Step 2



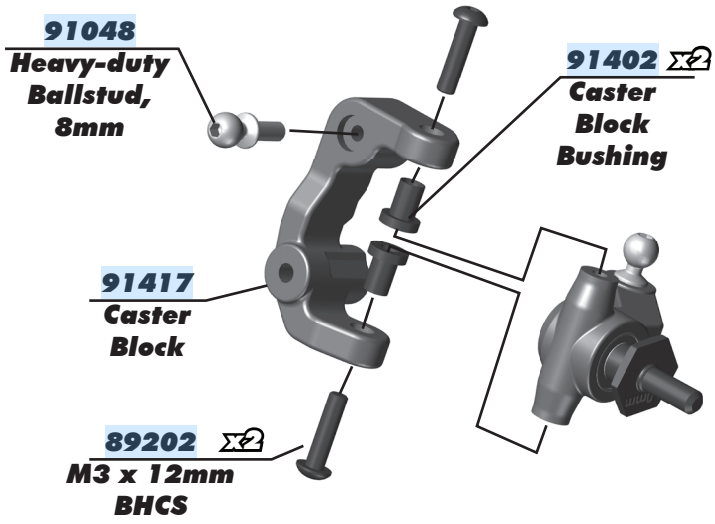
:: Front Top Plate and Steering Build - Step 3



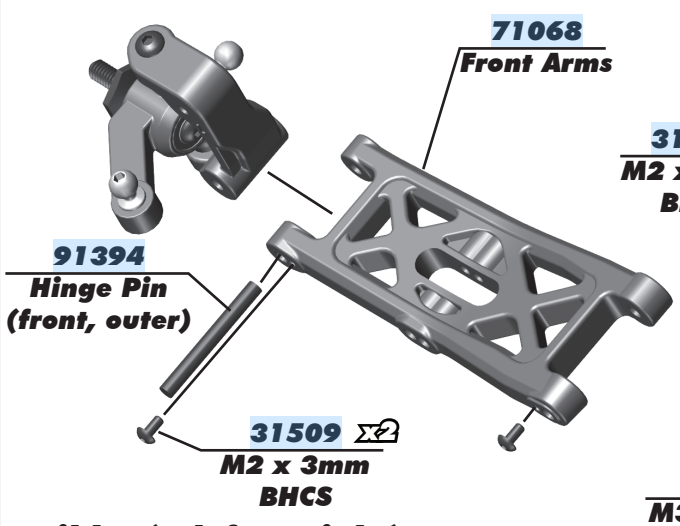
:: Front Suspension Build - Step 1



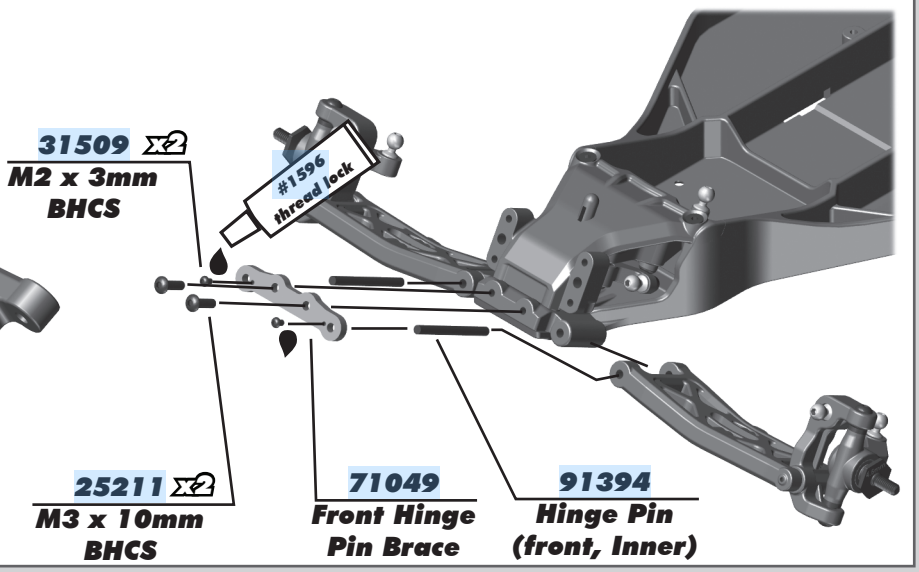
Build 2 (1 left, 1 right)



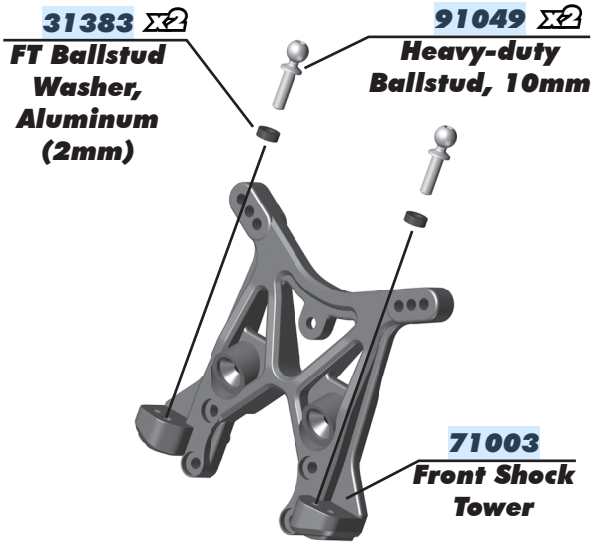
:: Front Suspension Build - Step 2

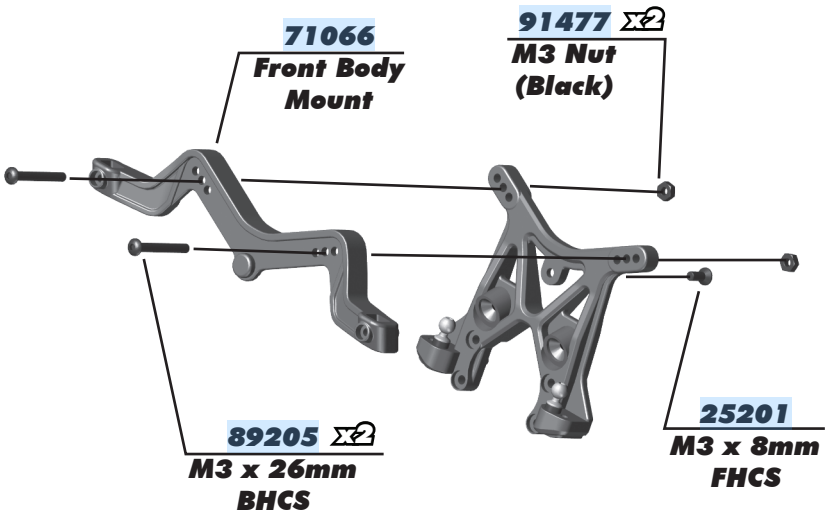


Build 2 (1 left, 1 right)

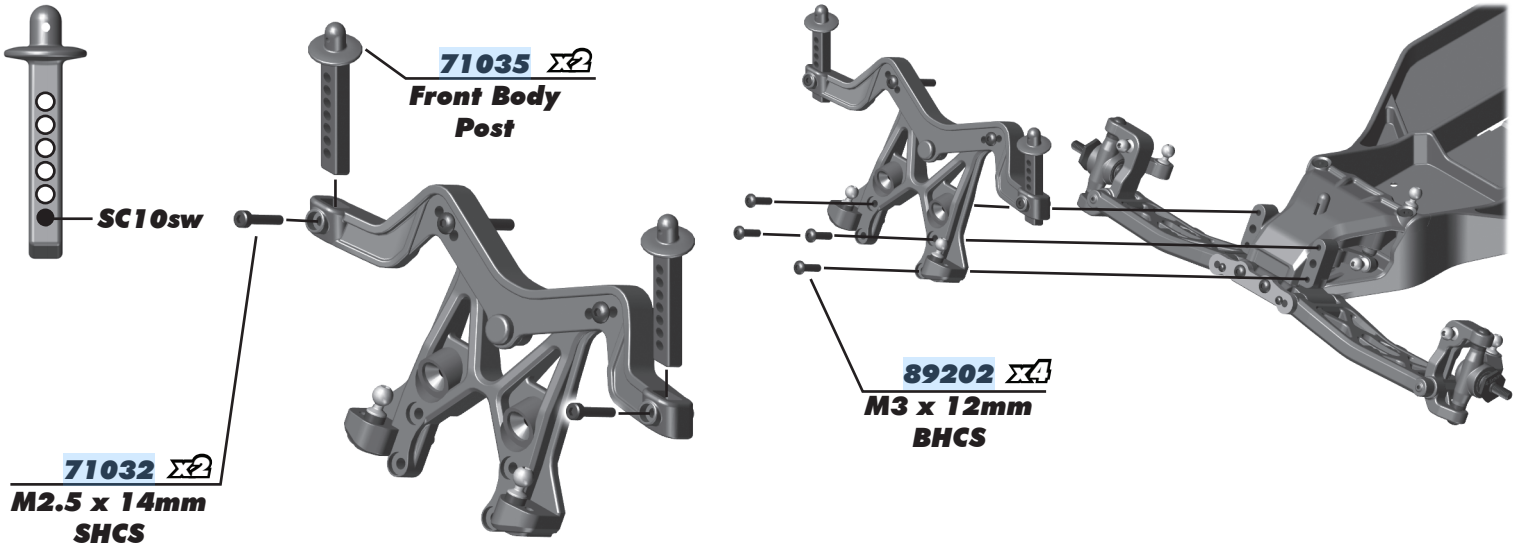


:: Front Suspension Build - Step 3

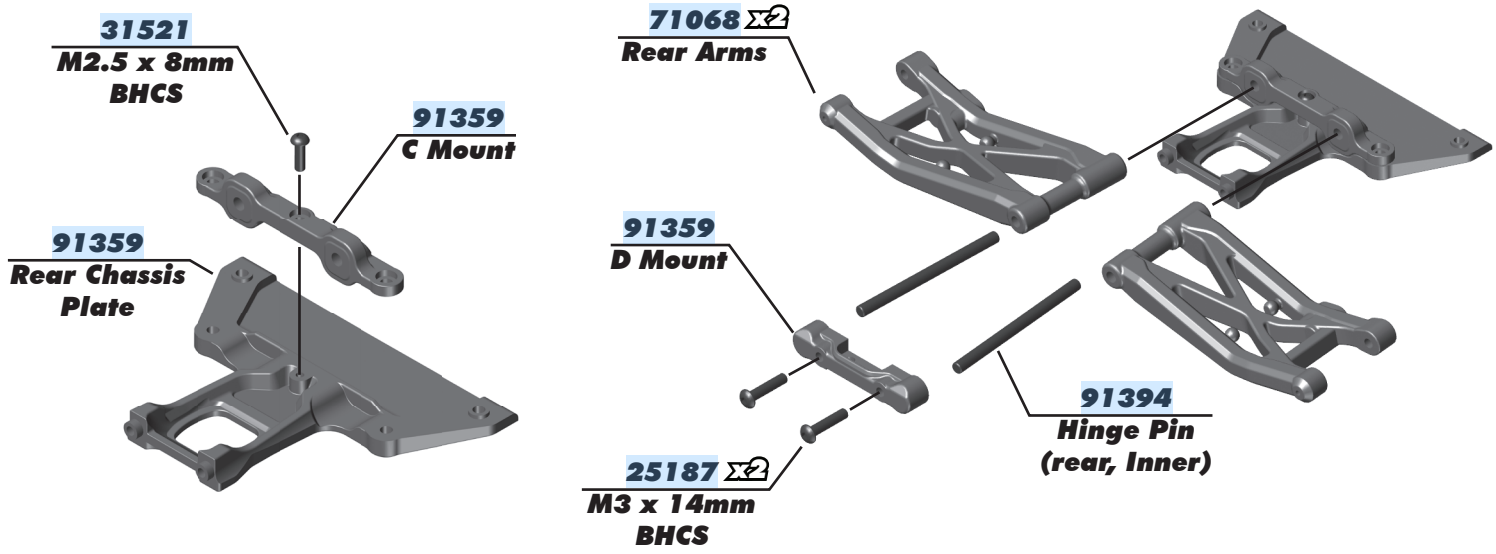




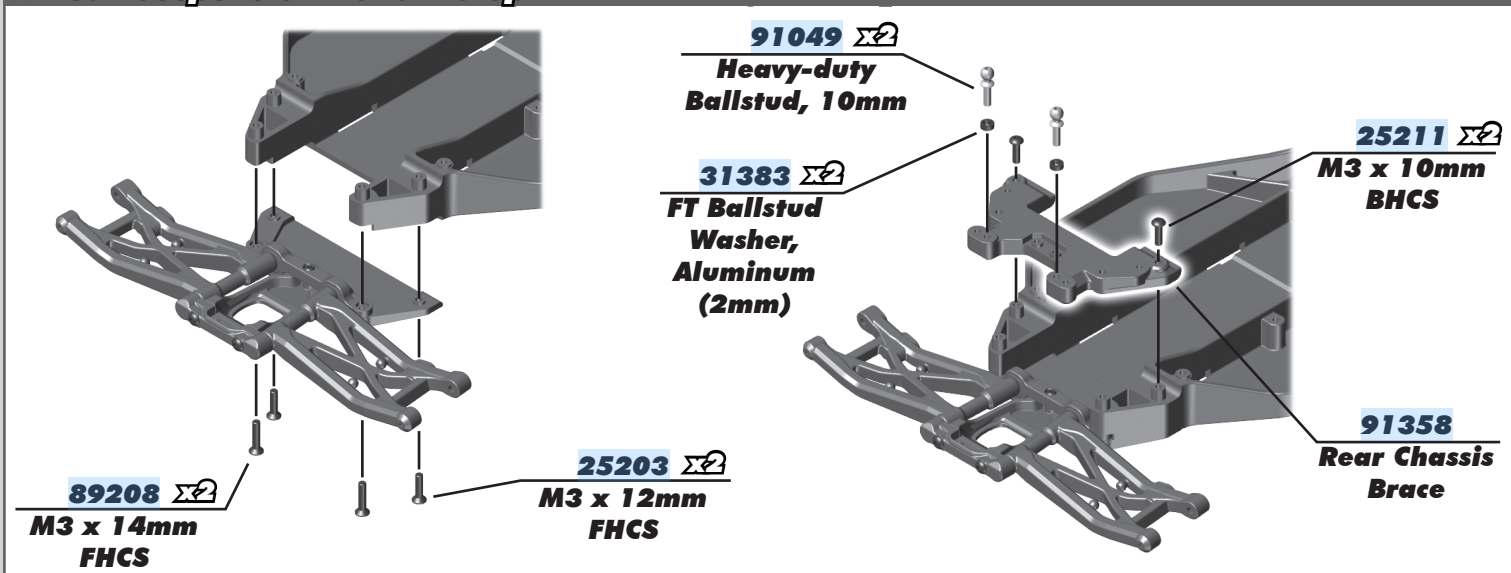
:: Front Suspension Build - Step 4



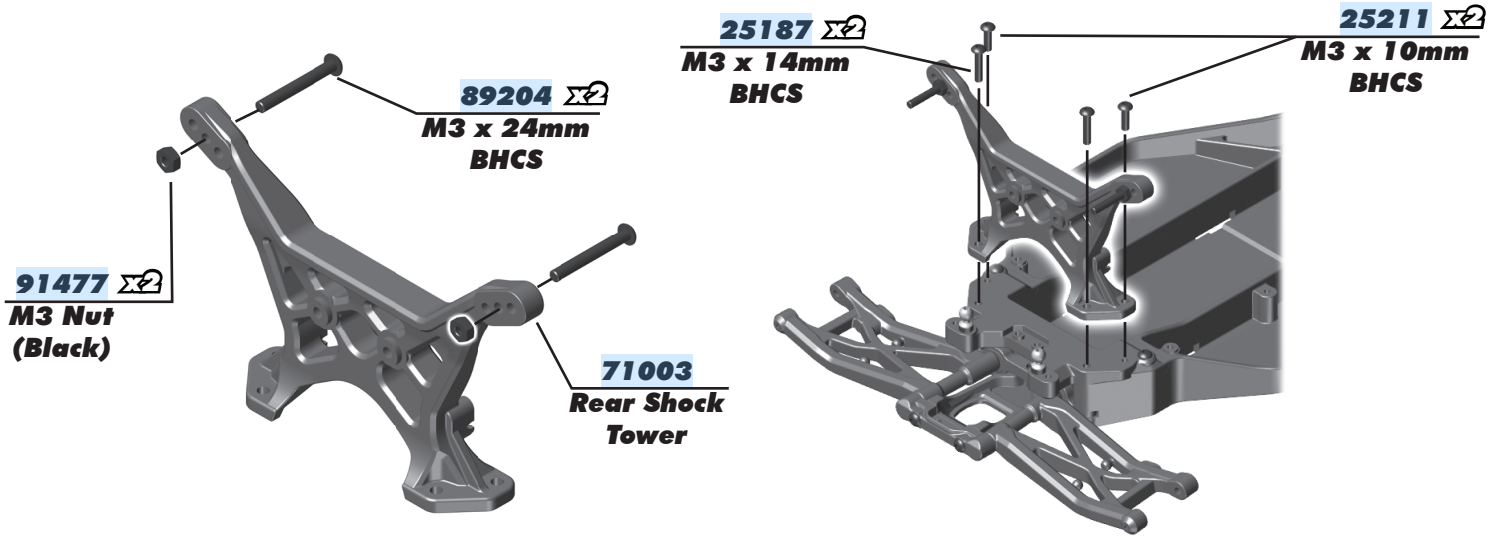
:: Rear Suspension Build - Step 1



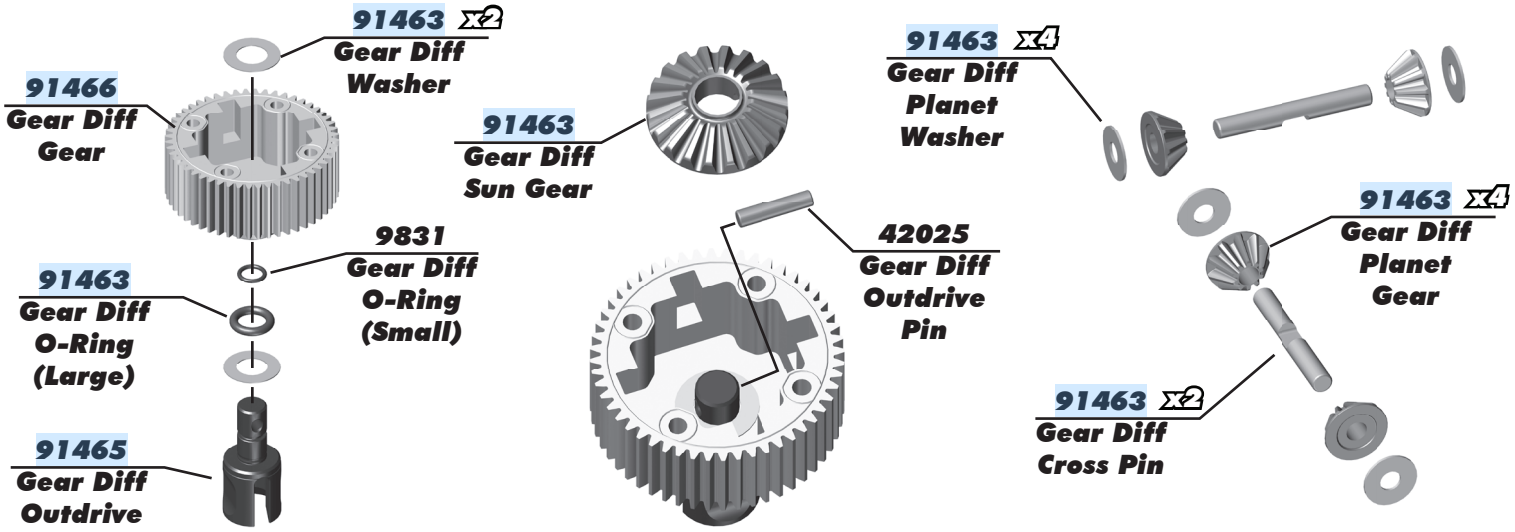
:: Rear Suspension Build - Step 2



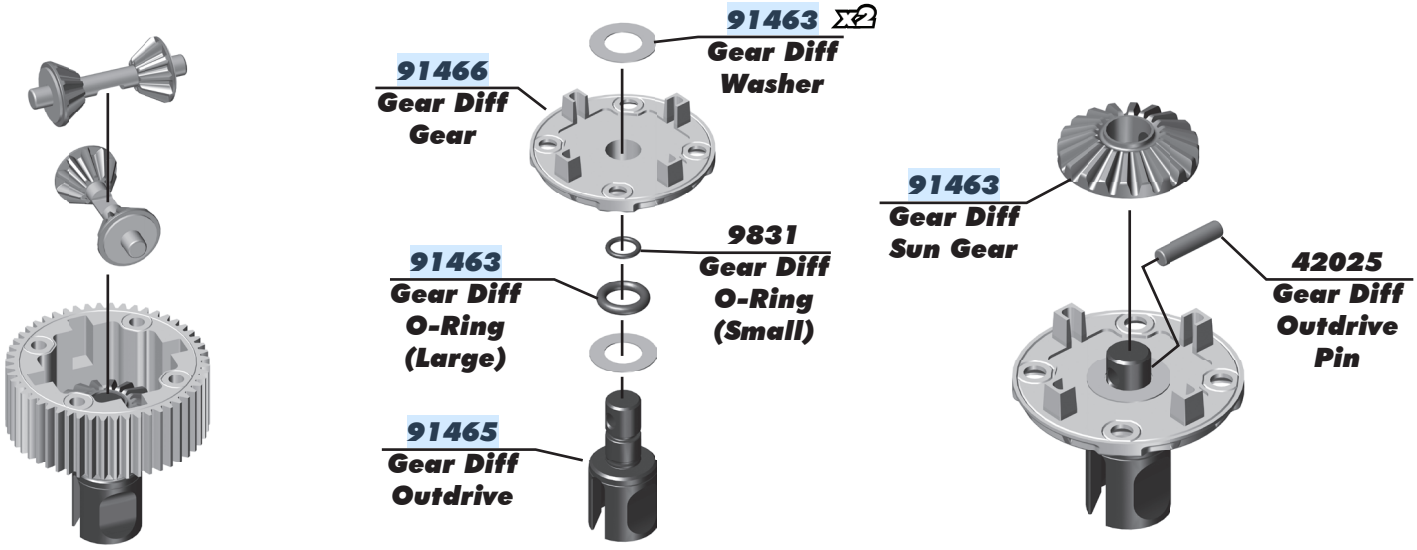
:: Rear Suspension Build - Step 3



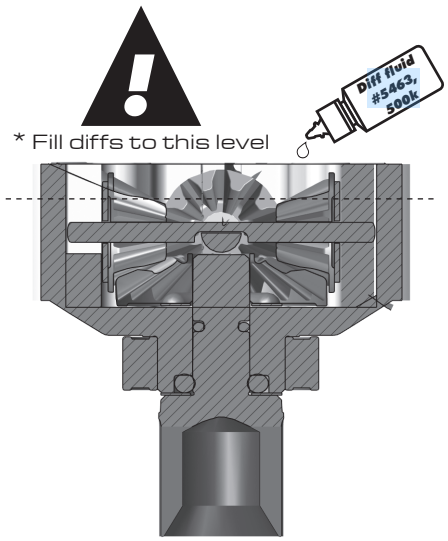
:: Gear Diff Build - Step 1

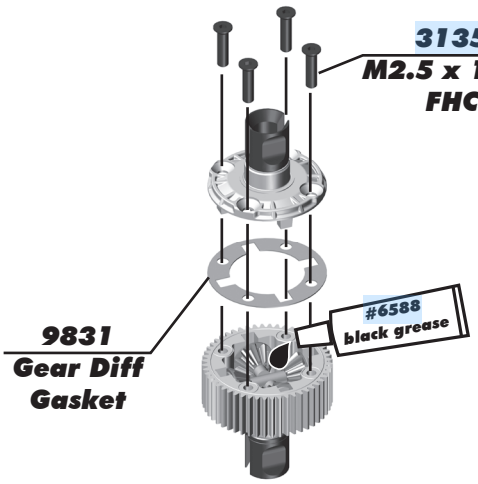


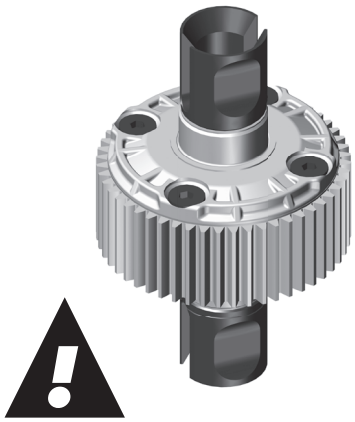
:: Gear Diff Build - Step 2



:: Gear Diff Build - Step 3

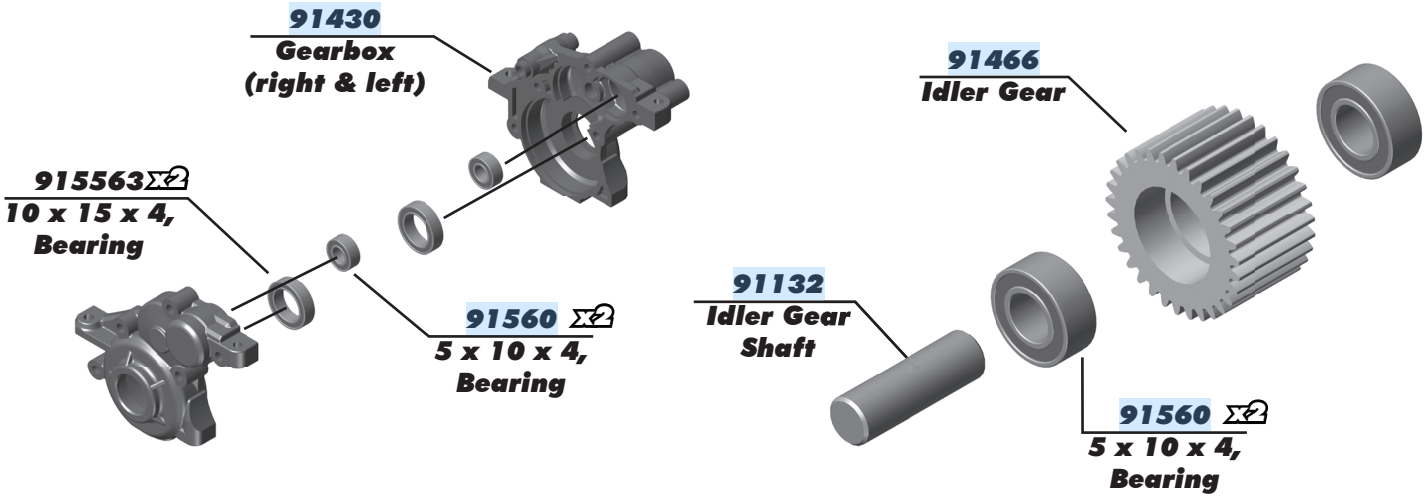






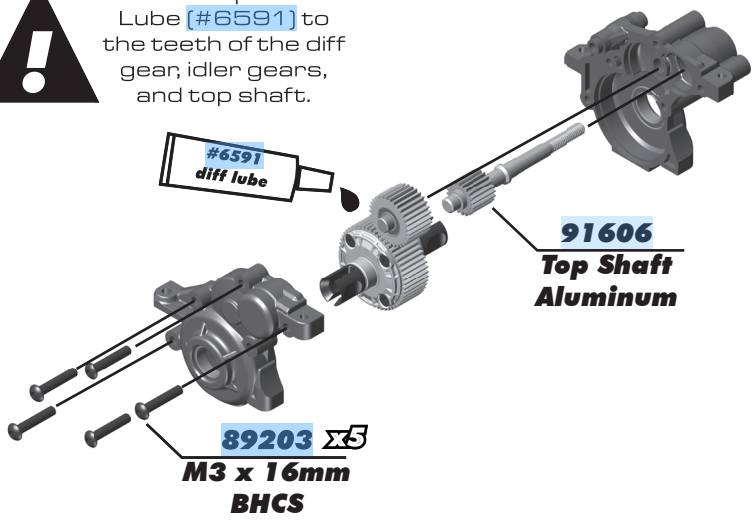
* Ensure free outdrive rotation before installation!

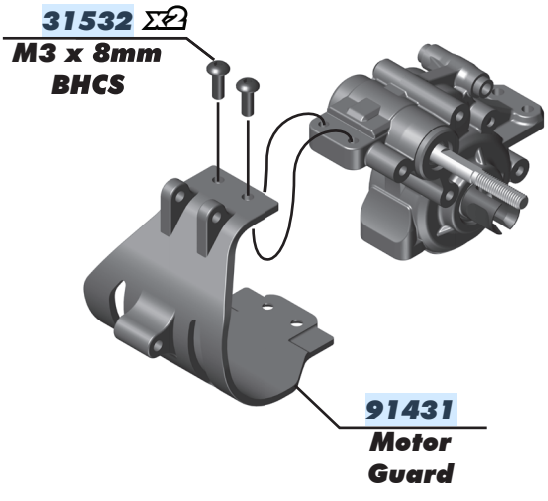
:: Gearbox Build - Step 1



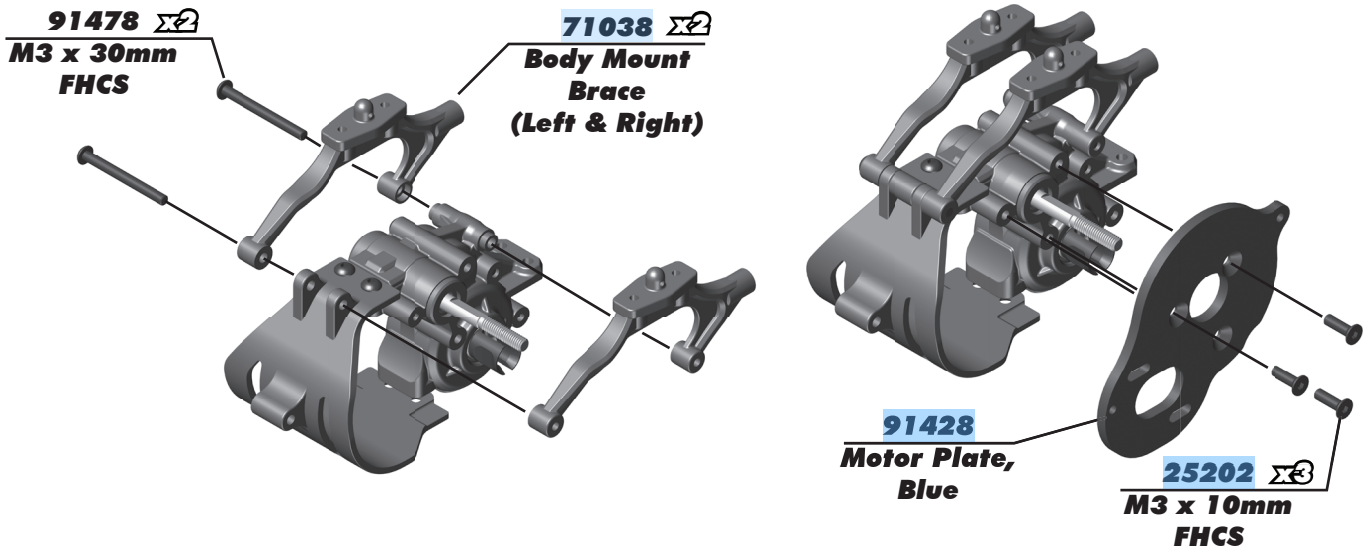
:: Gearbox Build - Step 2

Add a drop of Diff Lube [#6591] to the teeth of the diff gear, idler gears, and top shaft.





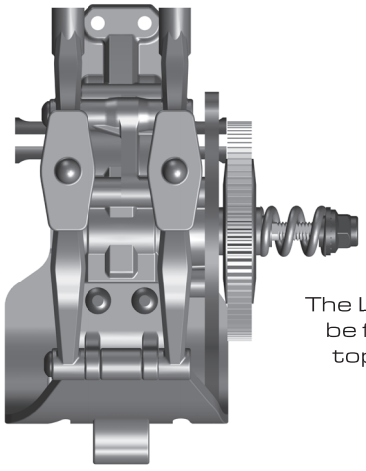
:: Gearbox Build - Step 3



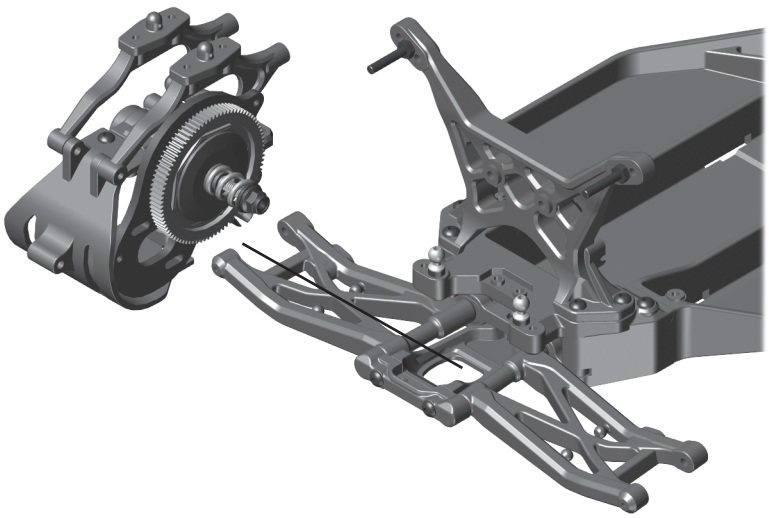
:: Slipper Build - Step 1



:: Gearbox Install - Step 1

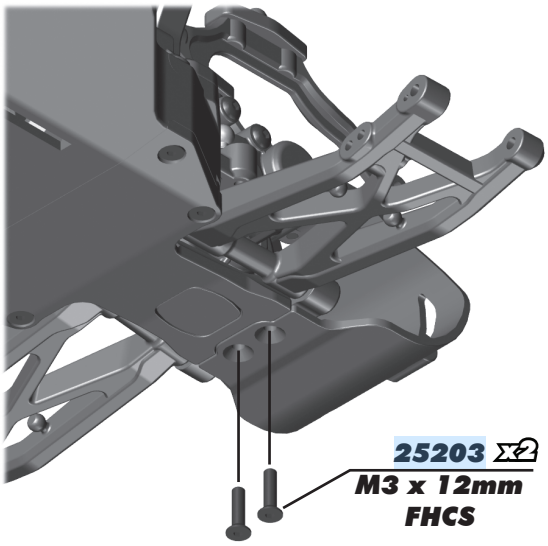


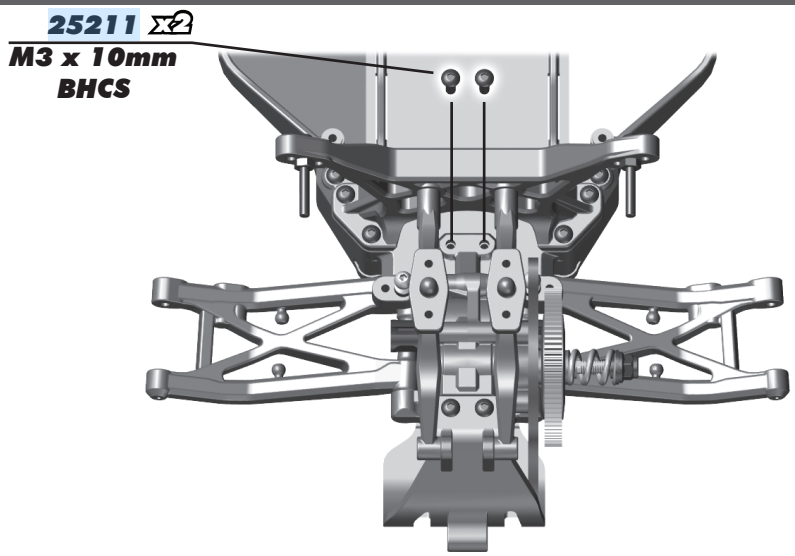
The Locknut should be flush with the top shaft when installed.



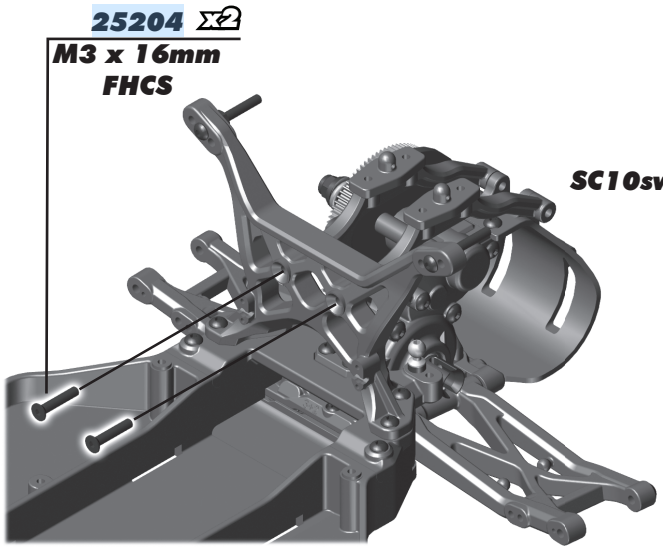
See page 23 for gear mesh, and slipper clutch setting instructions!

:: Gearbox Install - Step 2

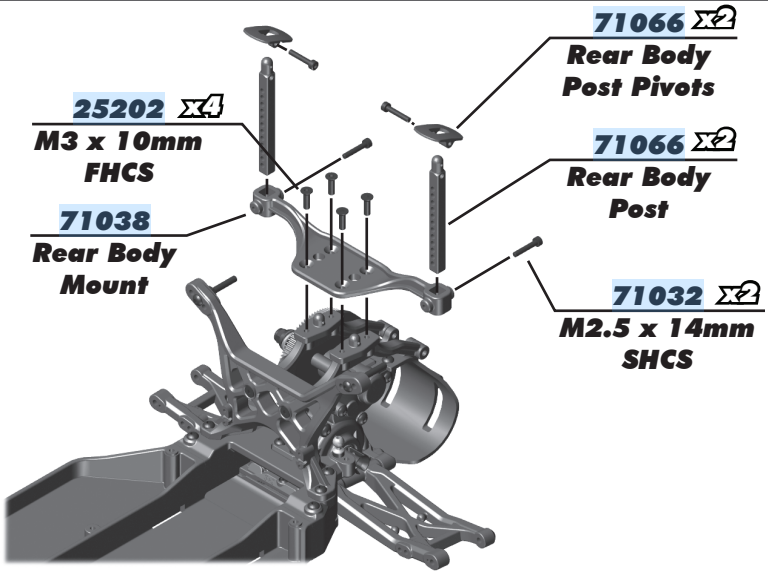




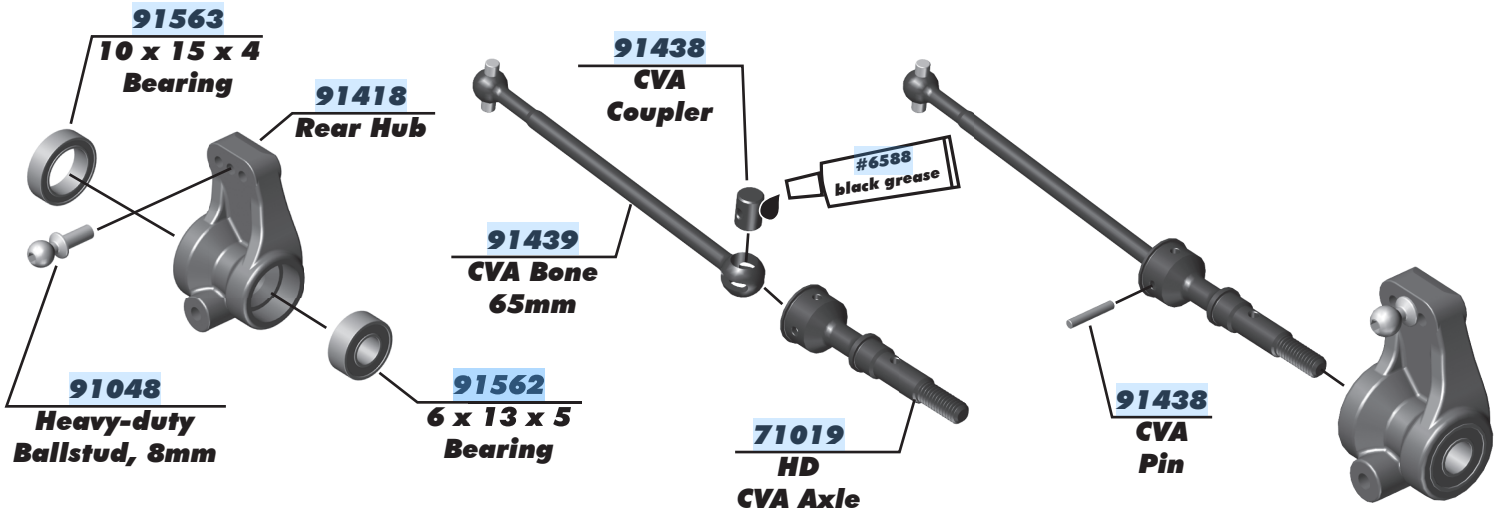
:: Gearbox Install - Step 3







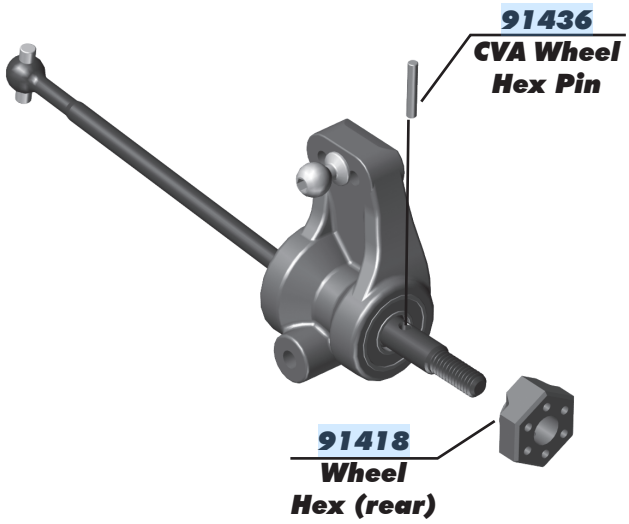
:: Rear Hub and CVA Build - Step 1



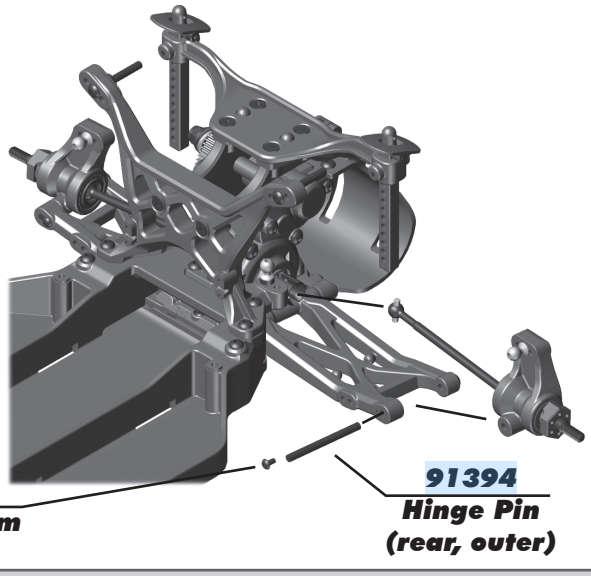
Build x2 (right and left side)

Build x2 (right and left side)

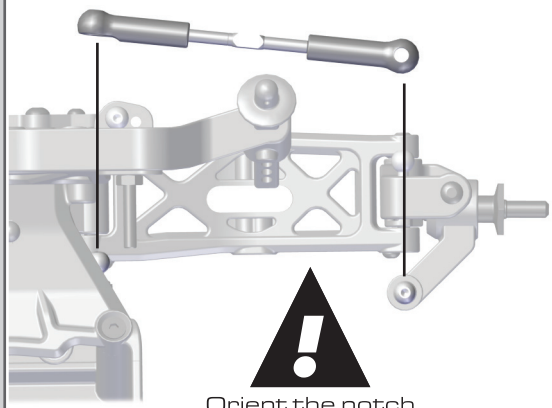
:: Rear Hub and CVA Build - Step 2



Build x2 (right and left side)



:: Turnbuckles Build - Step 1

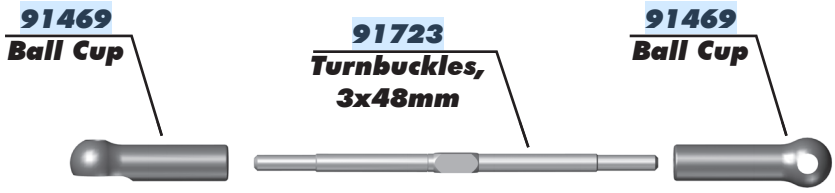


Orient the notch to the left throughout the car. It indicates which end has the left hand threads!

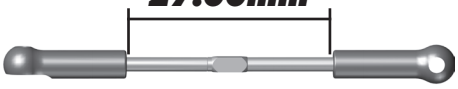




Racers Tip: Use black grease (#6588) on the threads of the turnbuckles for easier ball cup installation!

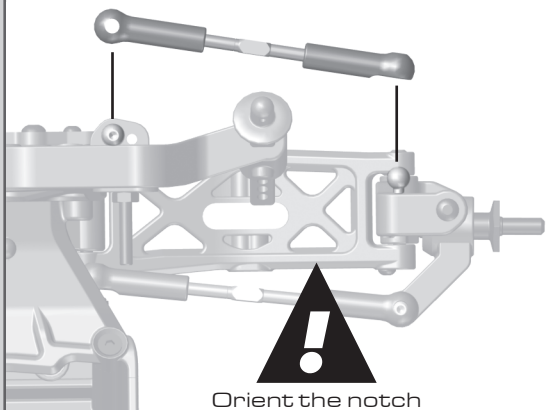


Steering Turnbuckle
27.00mm



Build x2 (right and left side)

:: Turnbuckles Build - Step 2

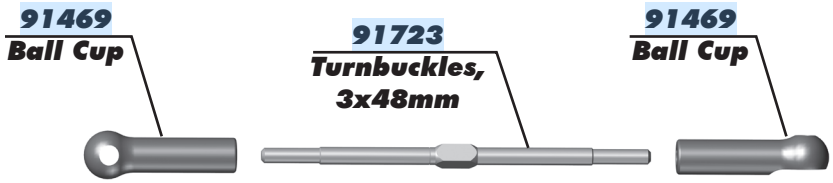


Orient the notch to the left throughout the car. It indicates which end has the left hand threads!

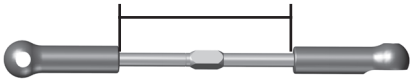




Racers Tip: Use black grease (#6588) on the threads of the turnbuckles for easier ball cup installation!

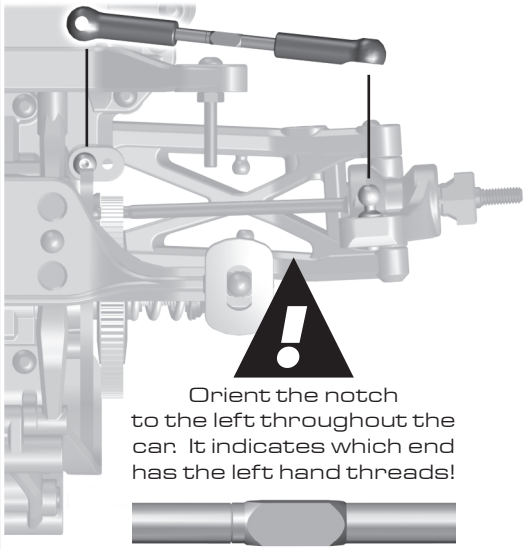


Front Camber Turnbuckle
23.00mm



Build x2 (right and left side)

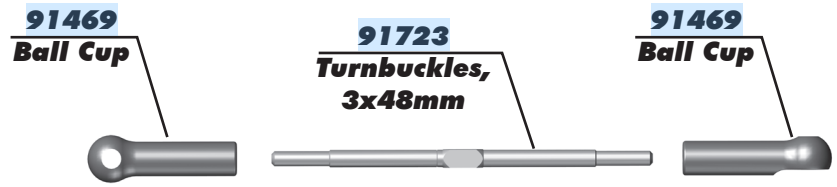
:: Turnbuckles Build - Step 3



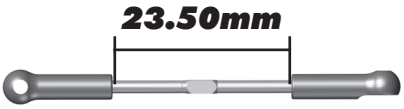
Orient the notch to the left throughout the car. It indicates which end has the left hand threads!



Racers Tip:
Use black grease (#6588) on the threads of the turnbuckles for easier ball cup installation!

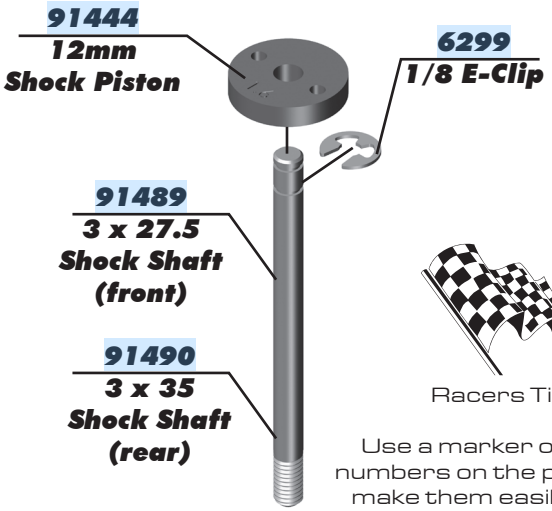


Rear Camber Turnbuckle



Build x2 (right and left side)

:: Shocks Build - Step 1

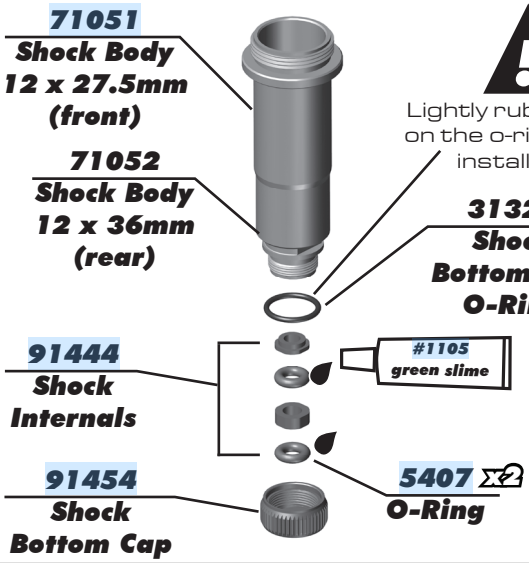


Racers Tip:

Use a marker over the numbers on the pistons to make them easily visible!



:: Shocks Build - Step 2



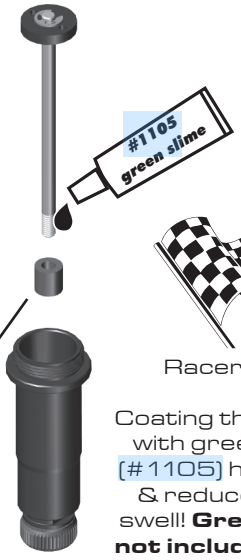


Lightly rub shock oil on the o-ring before installation!

31327
Shock Bottom Cap O-Ring

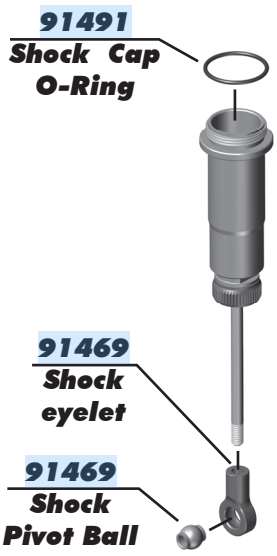


71086
6mm Spacer (Rear Only)

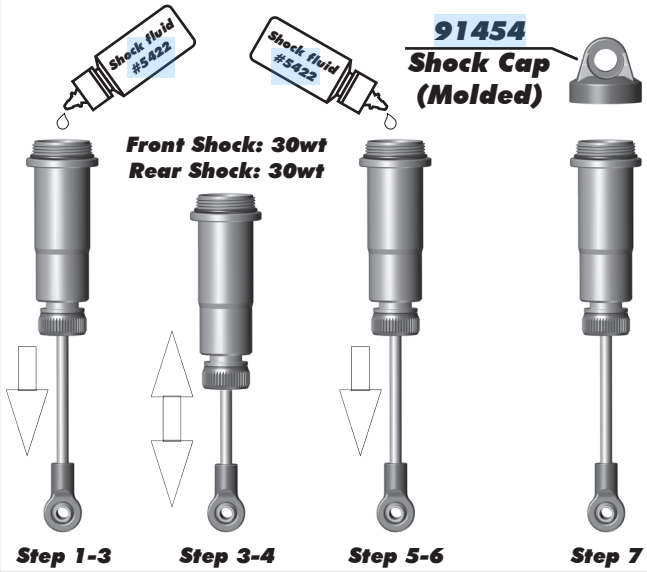


Racers Tip:

Coating the o-rings with green slime (#1105) helps seal & reduce o-ring swell! **Green slime not included in kit!**



:: Shocks Build - Step 3

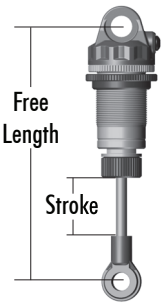


91454
Shock Cap (Molded)

Shock Bleeding Steps:

1. Pull shock shaft down.
2. Fill shock body 3/4 full with silicone fluid.
3. Slowly move the shock shaft up and down to remove air from under piston.
4. Wait for bubbles to come to surface.
5. Fill shock body to top with silicone fluid.
6. Place a drop of oil in the cap and on cap threads.
7. Install cap and tighten completely.
8. Slowly compress shaft all the way to the top. If there is pressure at the top of the stroke, there is too much oil or air. You must bleed it out.
9. Slowly pull shaft out.
10. Unscrew the cap 3/4 turn and tilt the shock at a slight angle.
11. Slowly compress the shaft to push out excess oil and air. You should see bubbles coming out from under the cap.
12. With the shaft compressed, tighten the cap and re-check for pressure at the top of the stroke. If there is still pressure, repeat steps 9 thru 11.

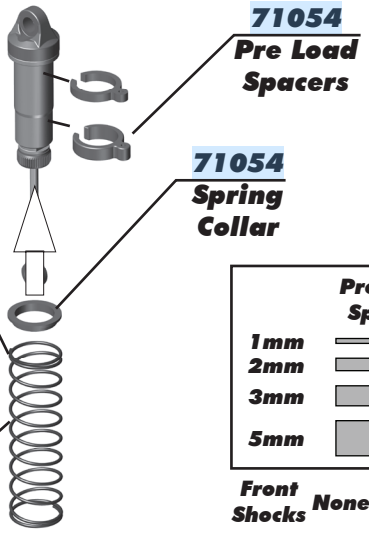




Stroke
Front: 26.0mm
Rear: 35mm

Free Length
Front: 86.25mm
Rear: 103.50mm

:: Shocks Build - Step 4

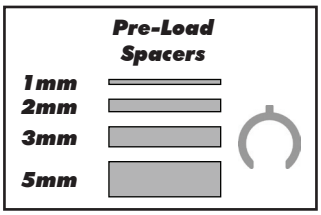


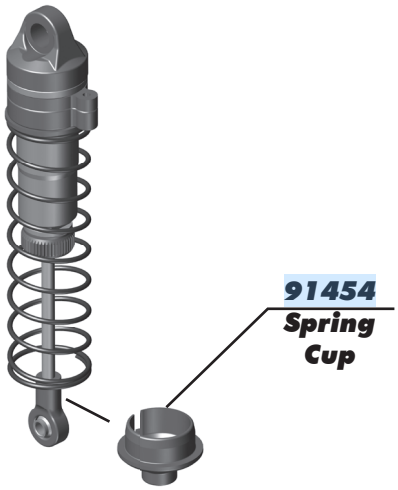
71054
Pre Load Spacers

71054
Spring Collar

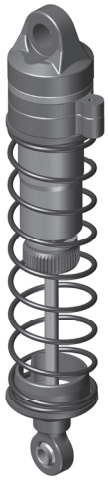
91636
12mm front spring (54mm), White (4.10lb)

91639
12mm rear spring (72mm), Green (2.20lb)



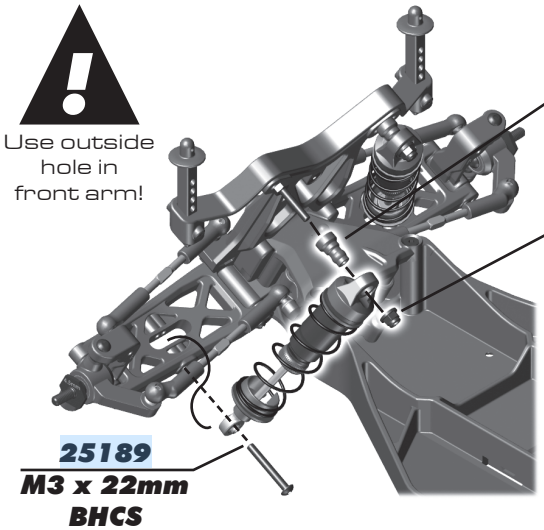


91454
Spring Cup



Build x2 front and x2 rear shocks

:: Shocks Build - Step 5



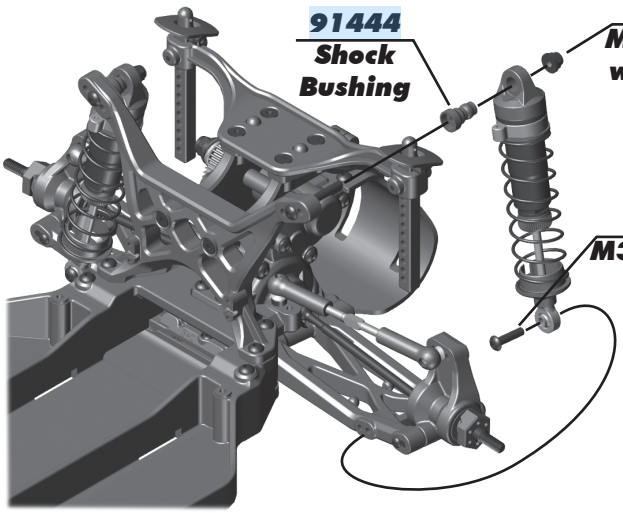
Use outside hole in front arm!

91444
Shock Bushing

25612
M3 Locknut, with flange (black)

25189
M3 x 22mm BHCS

Build x2 (right and left side)



91444
Shock Bushing

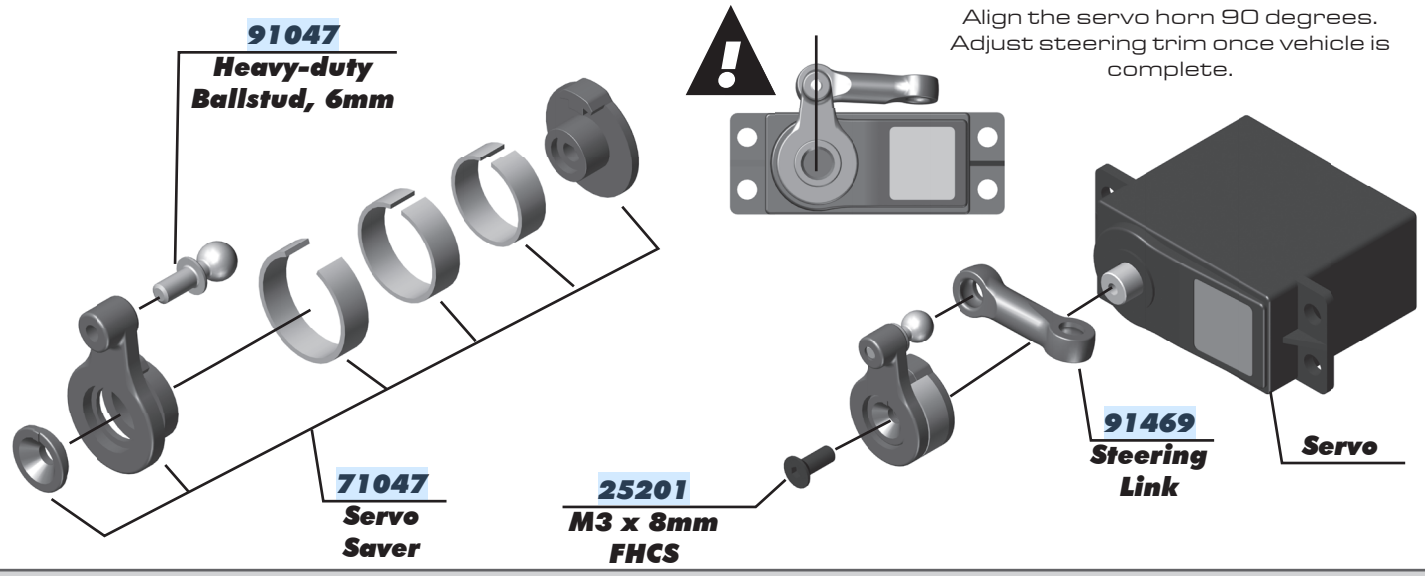
25612
M3 Locknut, with flange (black)

89202
M3 x 12mm BHCS

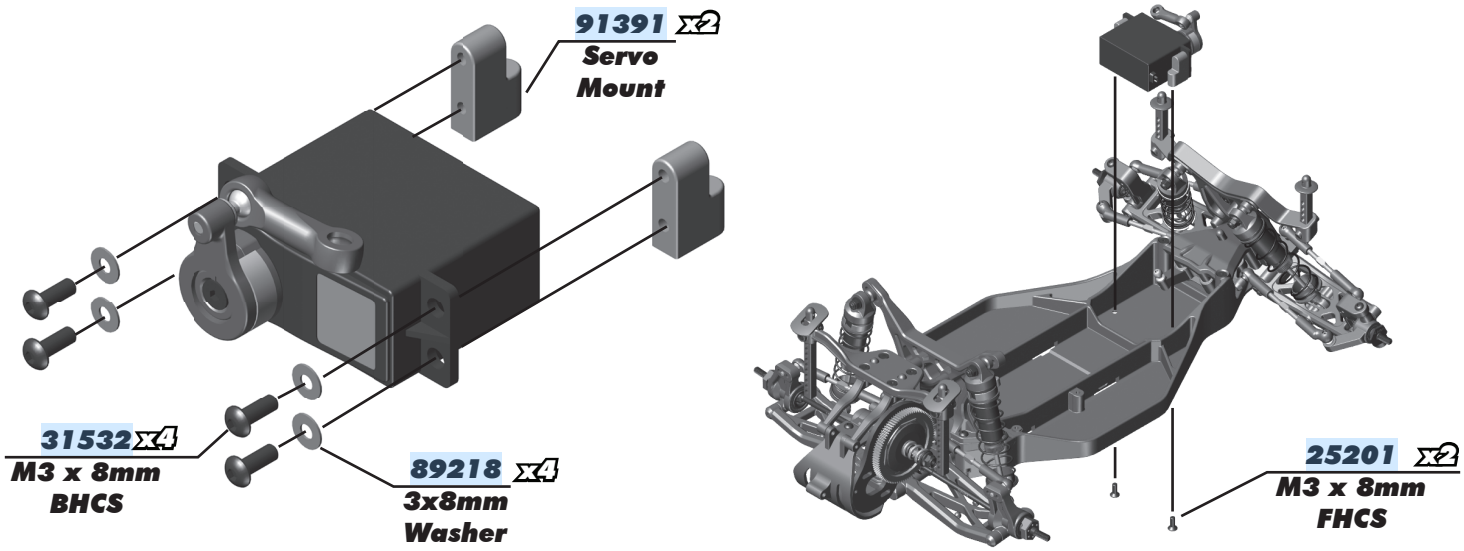
Use outside hole in rear arm!

Build x2 (right and left side)

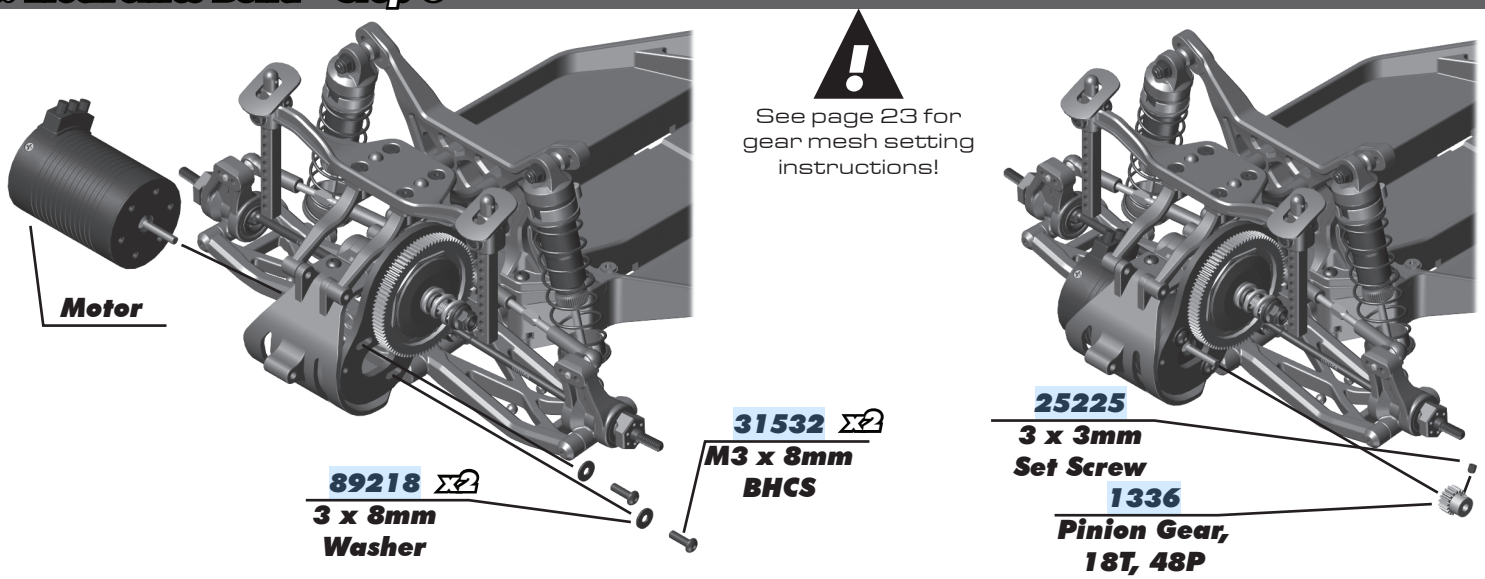
:: Electronics Build - Step 1



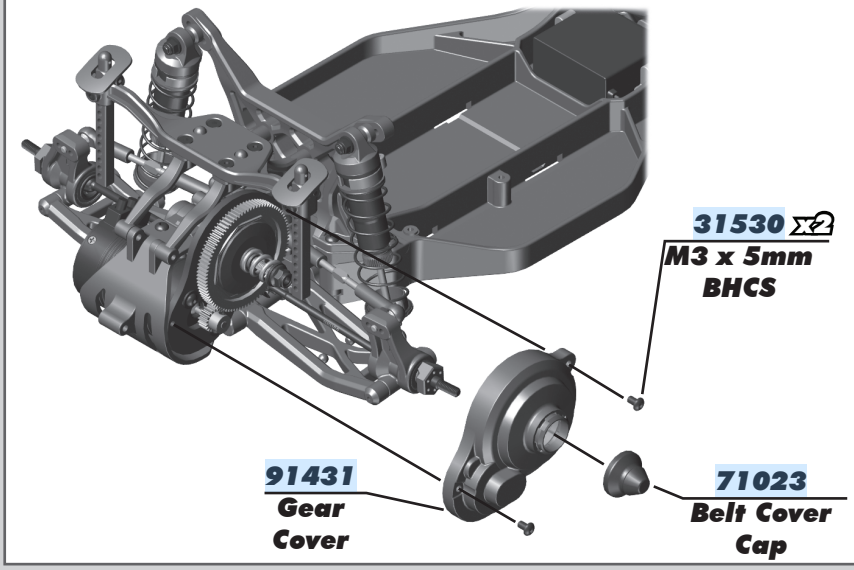
:: Electronics Build - Step 2

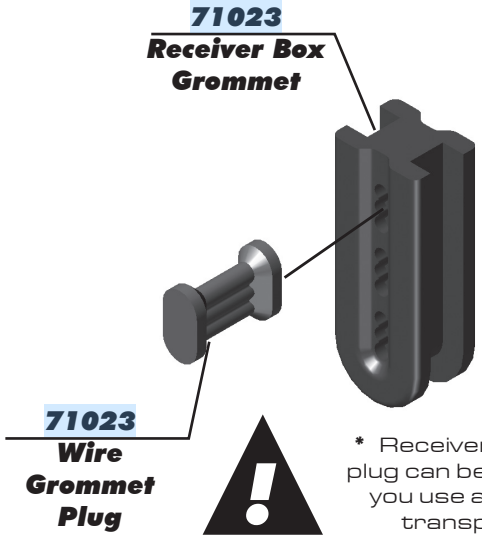


:: Electronics Build - Step 3



:: Electronics Build - Step 4

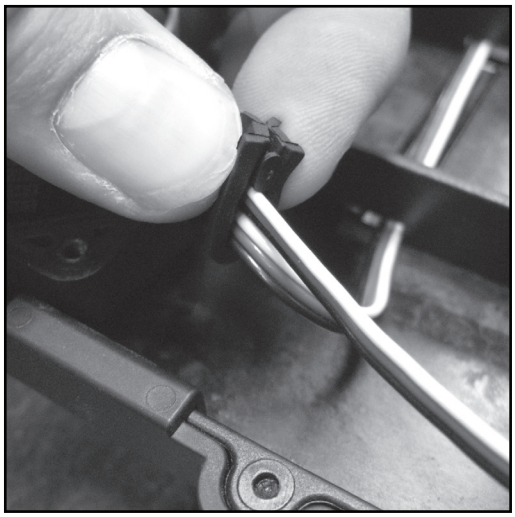


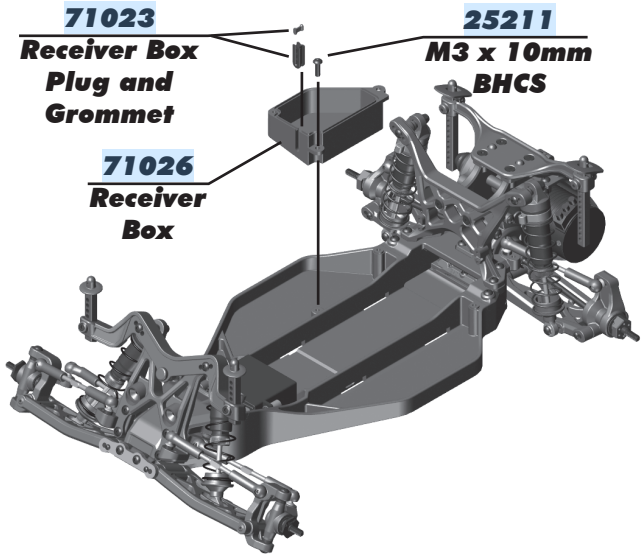


* Receiver grommet plug can be removed if you use a personal transponder!

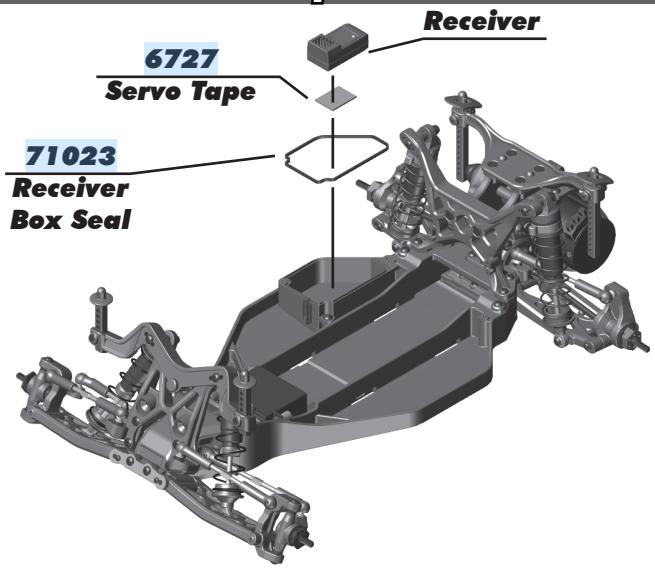
:: Electronics Build - Step 5

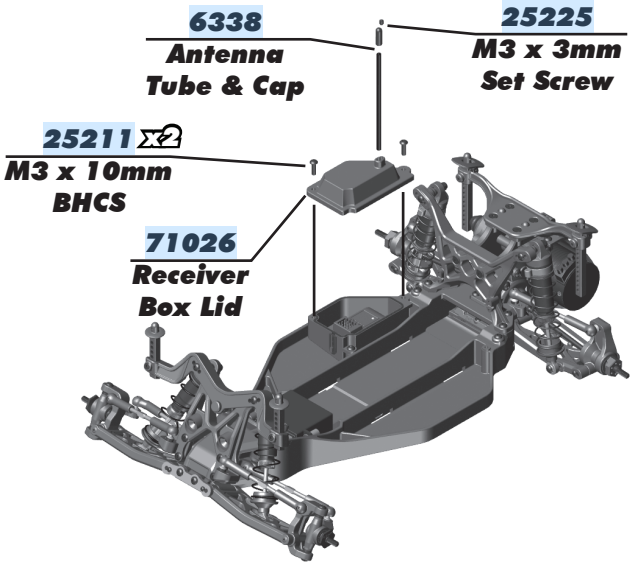
* Install the ESC wires and the Servo wires into the wire grommet before installing the grommet into the receiver box!



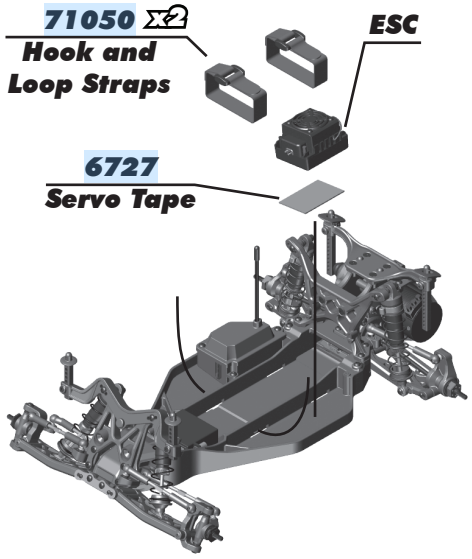


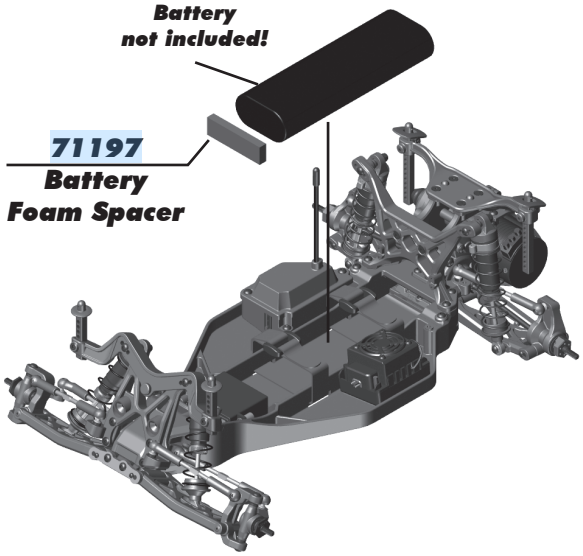
:: Electronics Build - Step 6



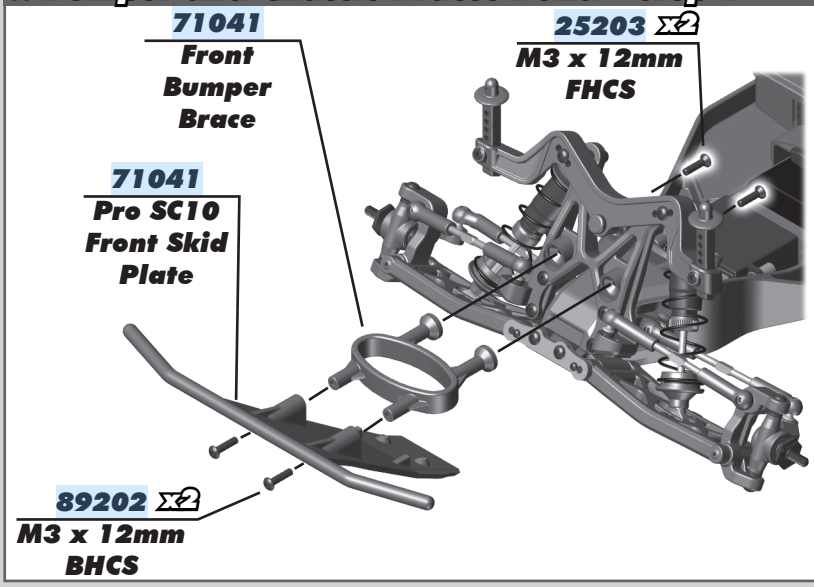


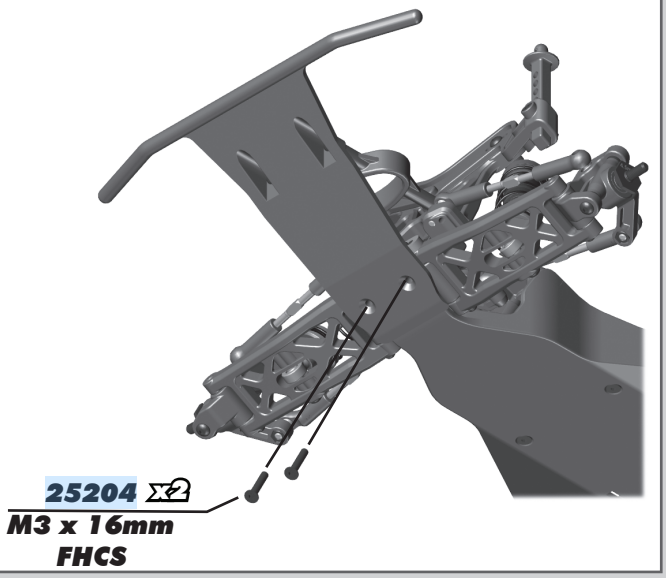
:: Electronics Build - Step 7



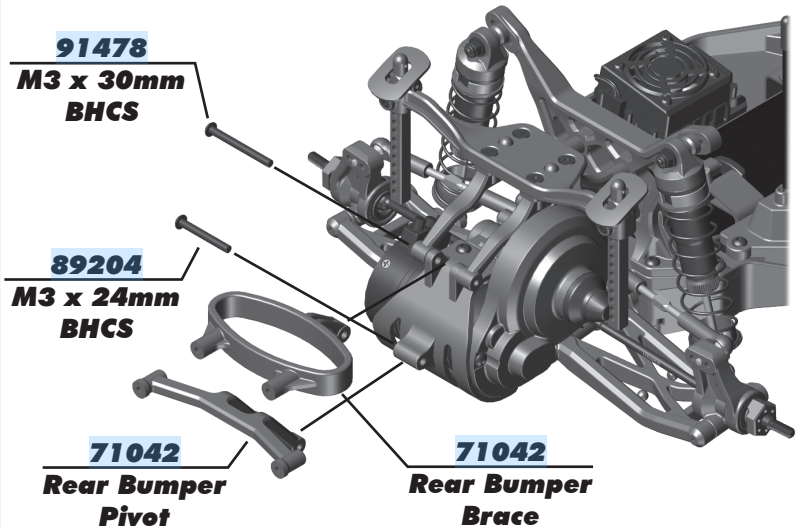


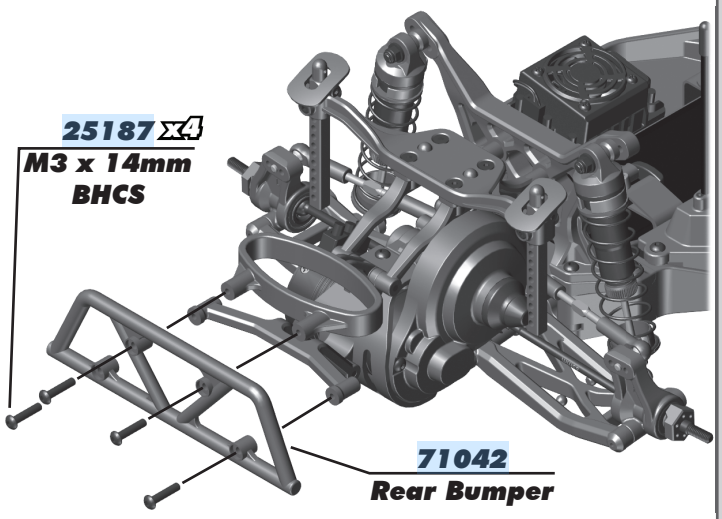
:: Bumper and Chassis Braces Build - Step 1





:: Bumper and Chassis Braces Build - Step 2





:: Tires and Body Build - Step 1

Build x4

72113
Tire, Insert, and Wheel Front, DK10/LT10

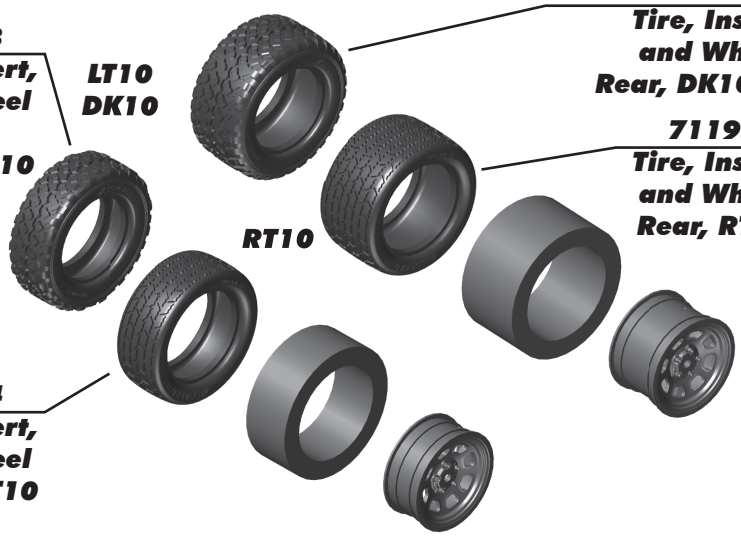
LT10
DK10

72112
Tire, Insert, and Wheel Rear, DK10/LT10

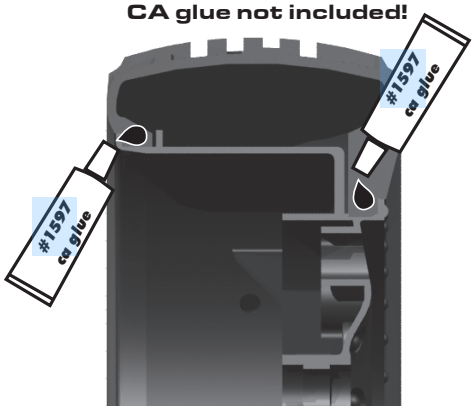
71195
Tire, Insert, and Wheel Rear, RT10

RT10

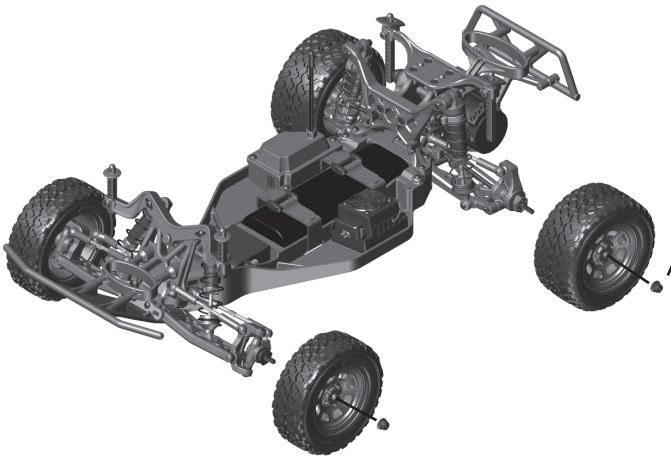
71194
Tire, Insert, and Wheel Front, RT10



Clean the tire and wheel bead. Carefully apply CA glue (tire adhesive) to the tire bead on both sides. Do one side at a time, allow it to dry before gluing the other side!
CA glue not included!

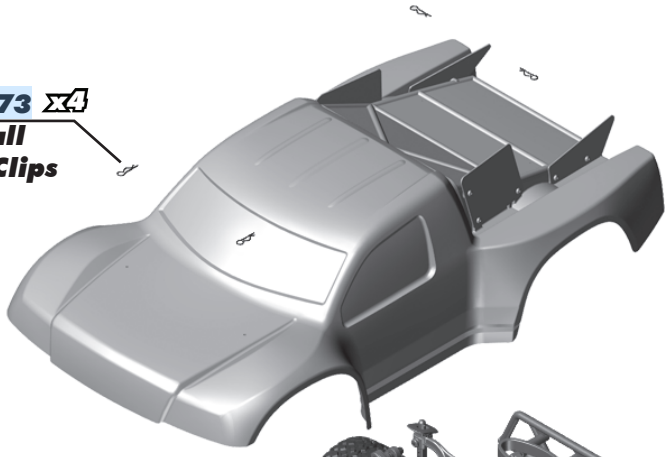


:: Tires and Body Build - Step 2

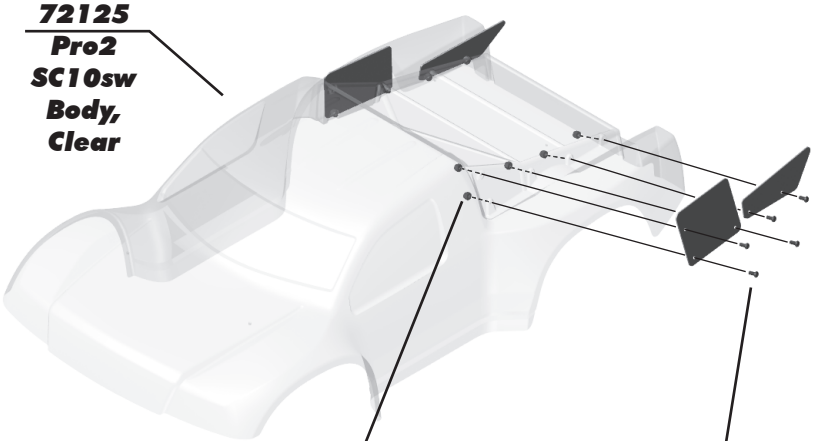


91738 x4
M4 Locknut, with flange and knurl

21173 x4
Small Body Clips

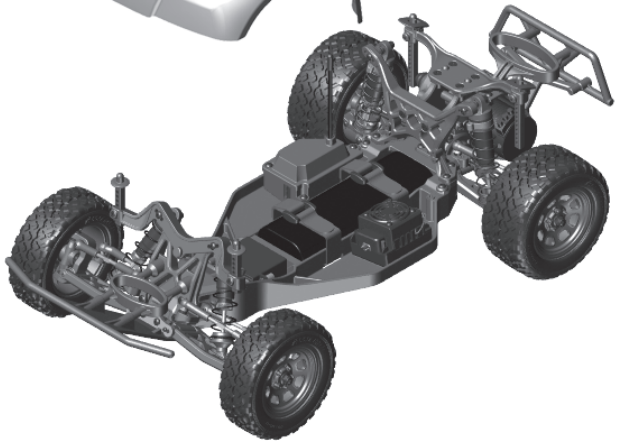


72125
Pro2 SC10sw Body, Clear



25215 x10
M3 Locknut

31532 x10
M3 x 8mm BHCS



:: Tuning Tips

Tips for Beginners:

Before making any changes to the standard setup, make sure you can get around the track without crashing. Changes to your vehicle will not be beneficial if you can't stay on the track. Your goal is consistent laps.

Once you can get around the track consistently, start tuning your vehicle. Make only ONE adjustment at a time, testing it before making another change. If the result of your adjustment is a faster lap, mark the change on the included setup sheet (make adddtional copies of the sheet before writing on it). If your adjustment results in a slower lap, revert back to the previous setup and try another change.

When you are satisfied with your vehicle, fill in the setup sheet thoroughly and file it away. Use this as a guide for future track days or conditions. Peridicaly check all moving suspension parts. Suspension components must be kept clean and move freely without binding to prevent poor and/or inconsistent handling.

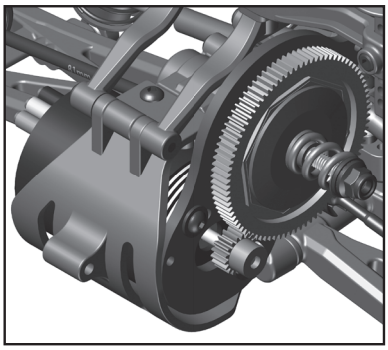
Motor Gearing:

Proper motor gearing will result in maximum performance and run time while reducing the chance of overheating and premature motor failure. The gear ratio chart lists recommended **starting gear ratios** for the most widely used motor types. Gear ratios will vary depending upon motor brand, wind, and electronic speed control. Consult your motor and electronic speed control manufacturers for more information.
Team Associated is not responsible for motor damage due to improper gearing.

Gear Ratio Chart (Internal Gear Ratio 2.60:1)

Motor	Pinion	Spur	Final Drive Ratio
17.5 Reedy Sonic Brushless	*28	*75	6.96:1
13.5 Reedy Sonic Brushless	*26	*75	7.50:1
10.5 Reedy Sonic Brushless	*24	87	9.42:1
3300kV Brushless	18	87	12.57:1

*** Optional spur gear / pinion used**



Set The Gear Mesh:

You should be able to rock the spur gear back and forth in the teeth of the pinion gear without making the pinion gear move. If the spur gear mesh is tight, then loosen the #31532 screws and move the motor away, then try again.
A gear mesh that is too tight or too loose will reduce power and damage the gear teeth.

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