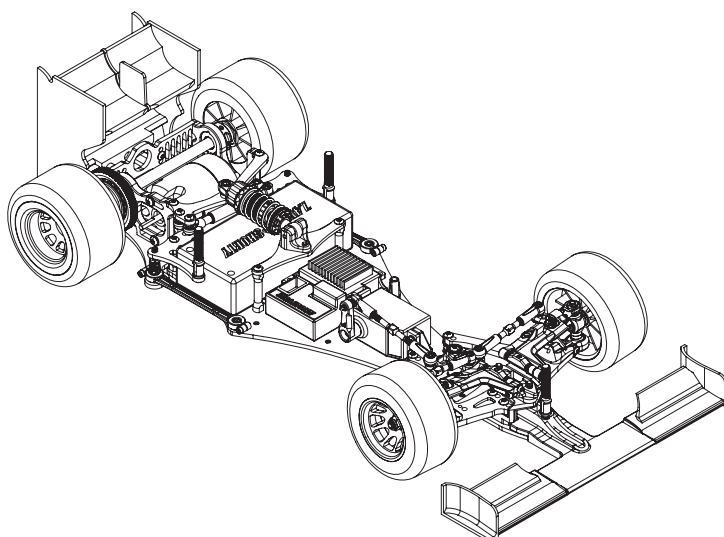


COMPETITION GRADE HIGH PERFORMANCE RADIO CONTROL RACING CAR CHASSIS KIT

# LIGHTNING FX

1/10 SCALE ELECTRIC COMPETITION FORMULA CAR KIT



INSTRUCTIONS MANUAL

*vbc racing*



Thank you for purchasing VBC Racing product.

**Things that we should remind you.**

This VBC Racing kit is a high performance, racing grade car kit intended for experienced racers. The kit compose of VBC formulated composite materials, top quality full carbon fiber chassis and high grade 7075 material which will give you a competitive edge over the others.

Novice racer should seek advice from more experienced racer before assembly.

Always keep this instruction manual handy at all times for quick reference even after completing the assembly.

**Before your assembly, sand the chassis edges.**

Sand the chassis edges with #600 sand paper and apply CA glue to the edges and counter sink holes.

**Need help or support.**

If you need help or you would like to leave us a comment, please email to our support team: [support@vbc-racing.com](mailto:support@vbc-racing.com) or visit our web site [www.vbcrcracing.com](http://www.vbcrcracing.com)



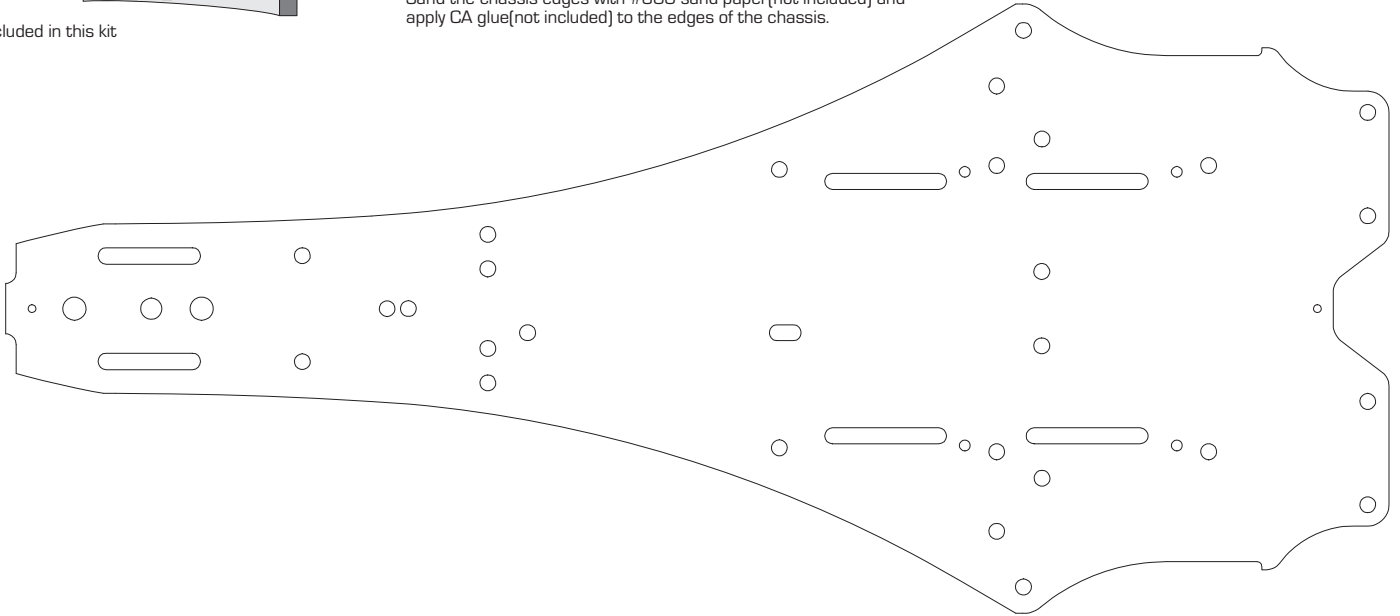
# 1

## Graphite Edges Protection Procedure

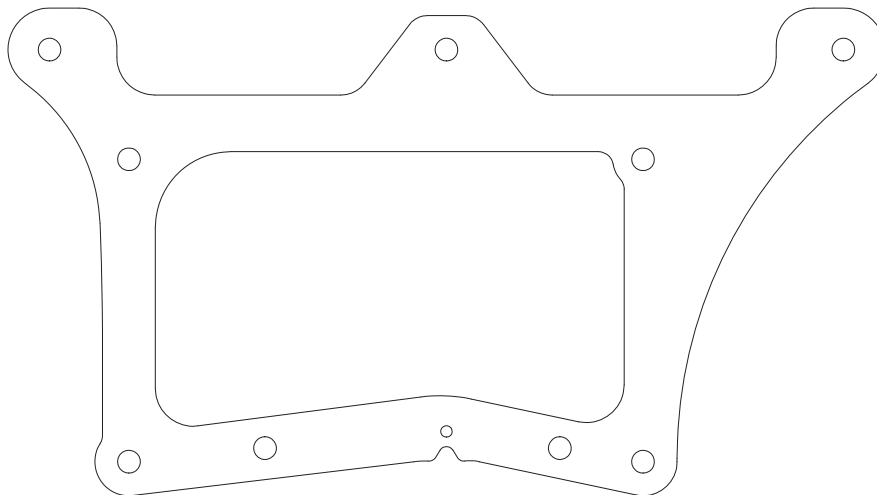


\*Not included in this kit

Sand the chassis edges with #600 sand paper(not included) and apply CA glue(not included) to the edges of the chassis.



A-01-P50625 Lightning FX Main Chassis

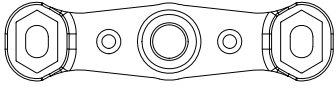


A-01-P50603 Lightning FX Lower Pod Plate

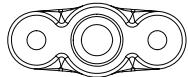
Sand the below graphite edges with #600 sand paper and apply CA glue to the edges.

# 2

## Pivot Brace Assembly Part 1



Pivot Brace (bottom) A-03-VBC-5007 x 1



Pivot Brace (cover) A-03-VBC-5008 x 1



M2x6 Cap Head C-02-SC-R2.0x6 x 2



Pivot Balls A-03-VBC-1027 x 5



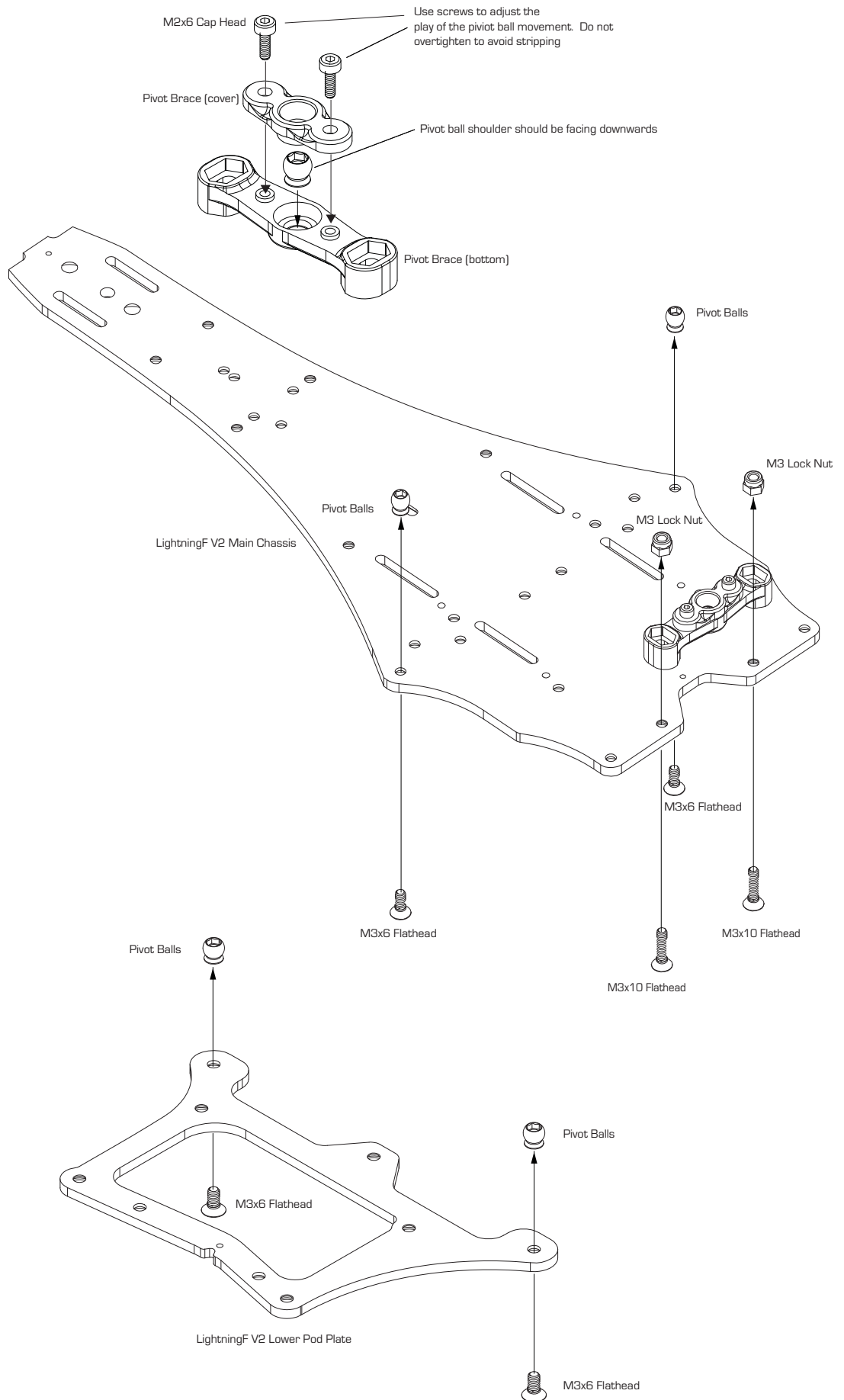
M3x6 Flathead C-02-SC-F0306 x 5



M3 Locknut C-02-SC-NN03 x 2



M3x10 Flathead C-02-SC-F0310 x 2

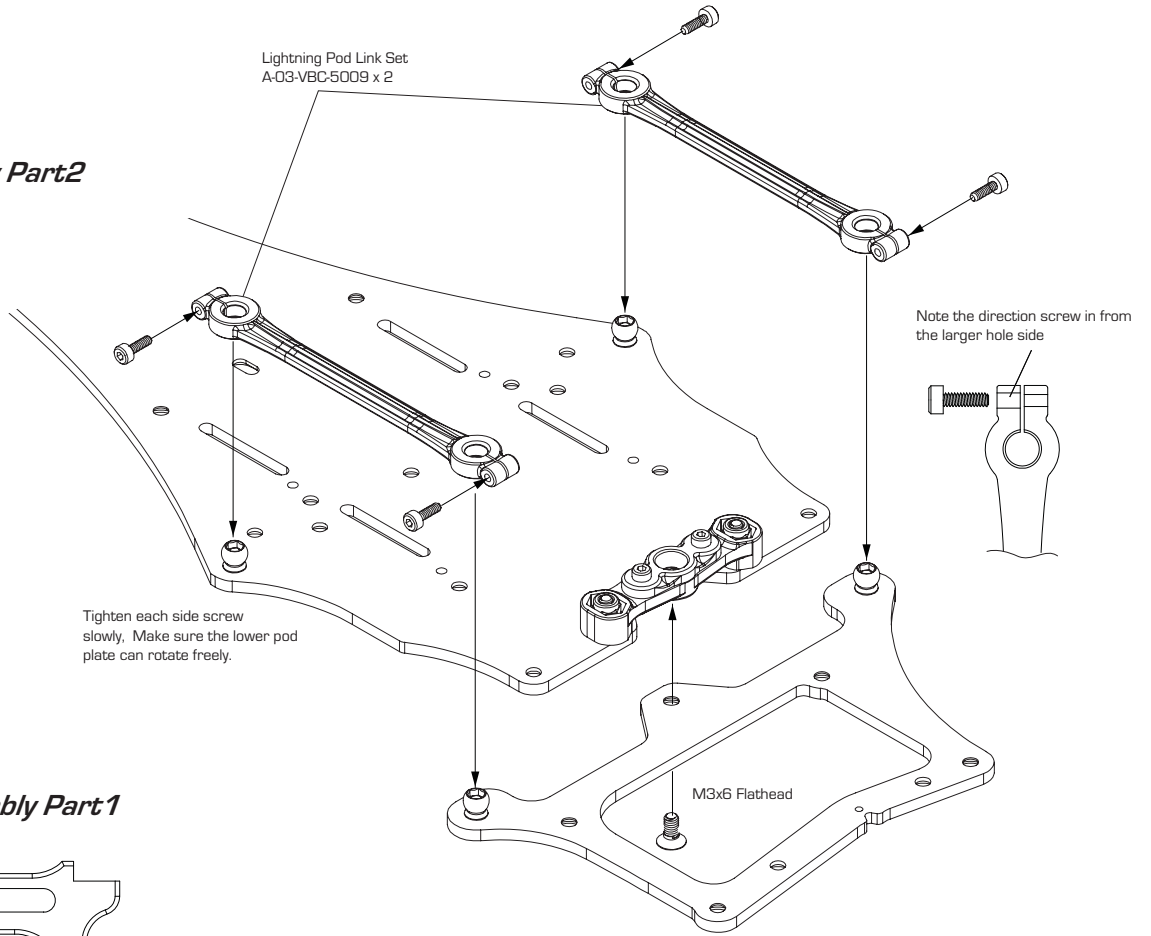


# 2

## Pivot Brace Assembly Part2

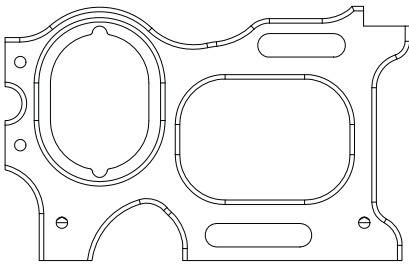
 M2x6 Cap Head C-02-SC-R2.0x6 x 4

 M3x6 Flathead C-02-SC-F0306 x 1

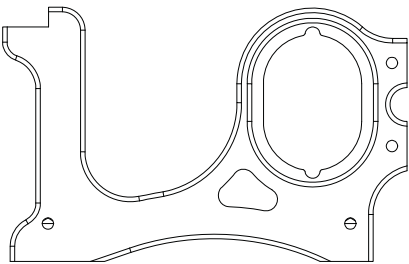


# 3

## Rear Bulkhead Assembly Part1

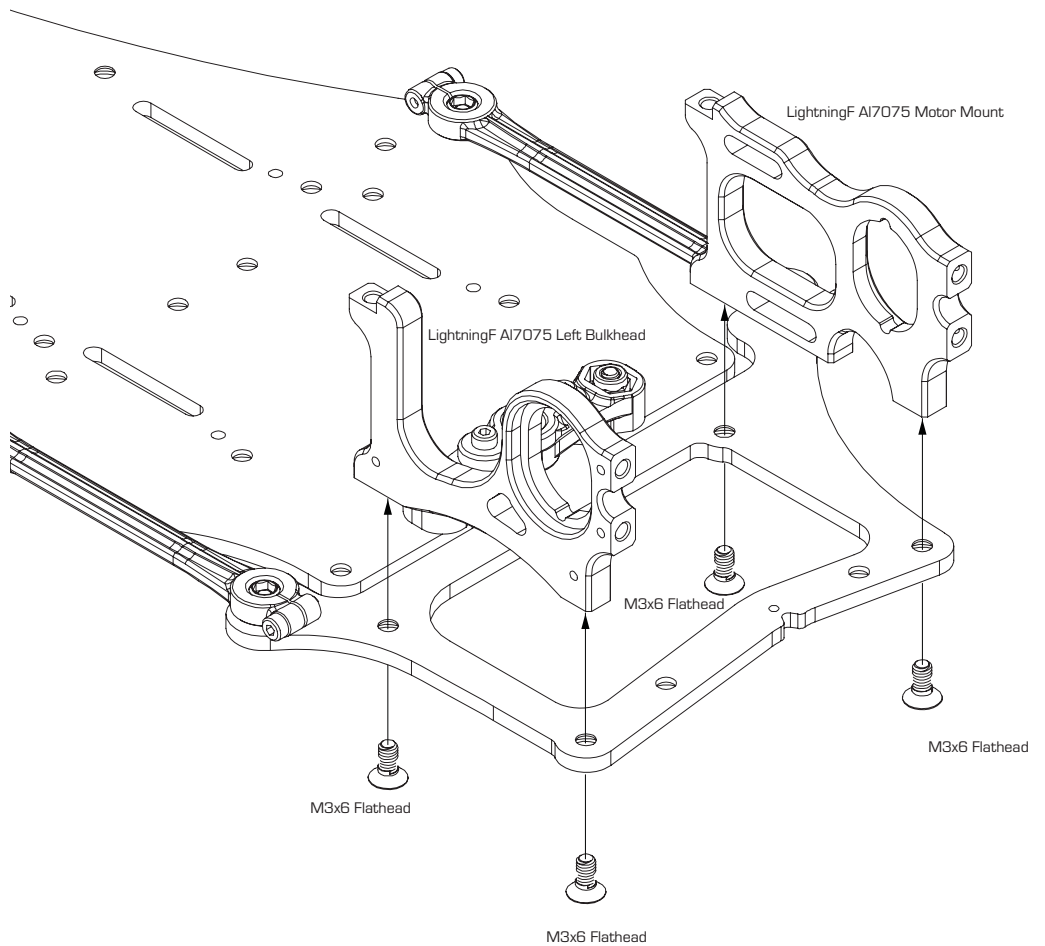


LightningF AI7075 Motor Mount B-02-VBC-5128



LightningF AI7075 Left Bulkhead B-02-VBC-5129

 M3x6 Flathead C-02-SC-F0306 x 4



# 3

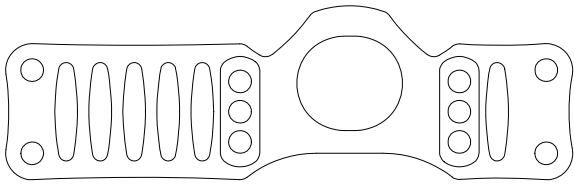
## Rear Bulkhead Assembly Part2



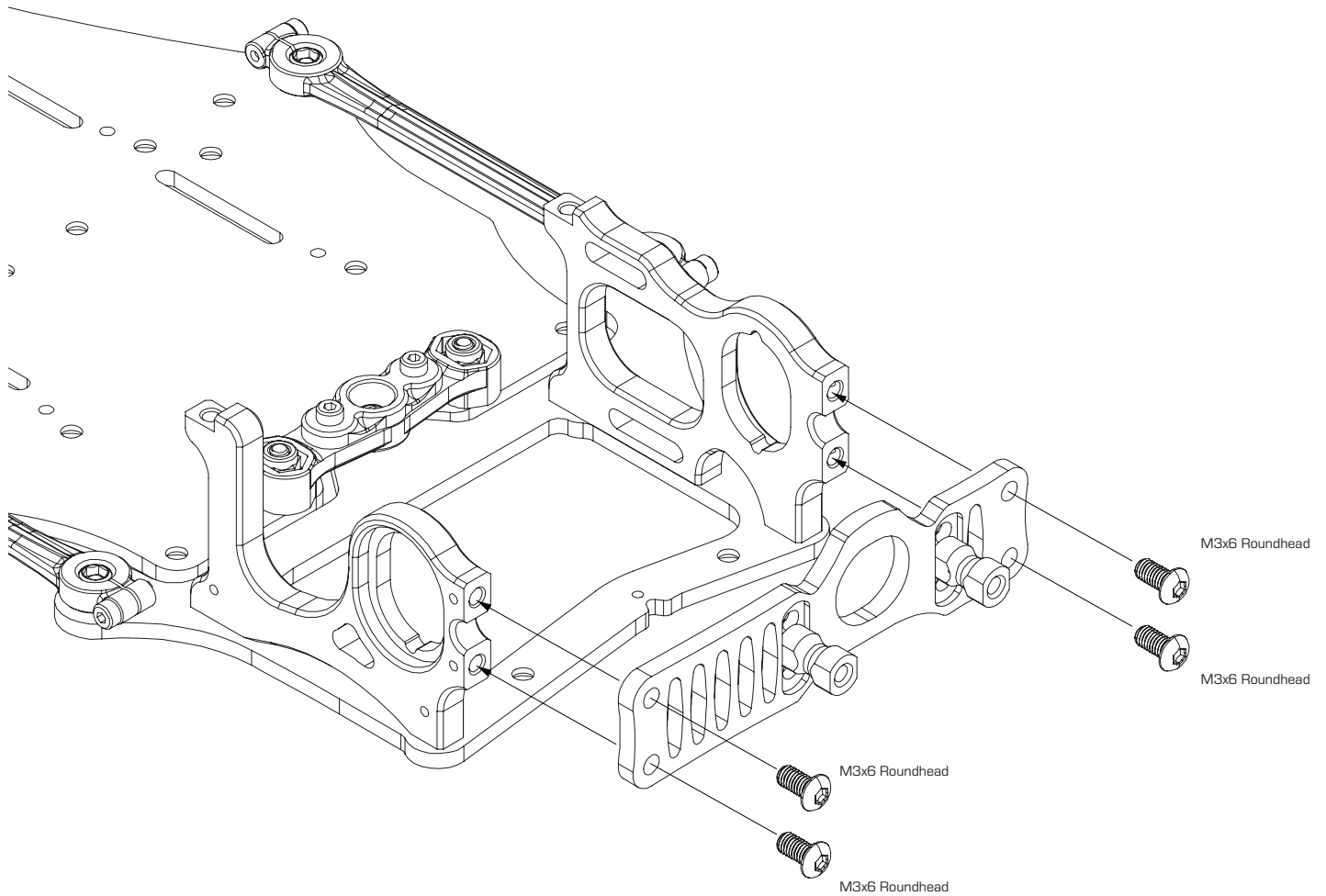
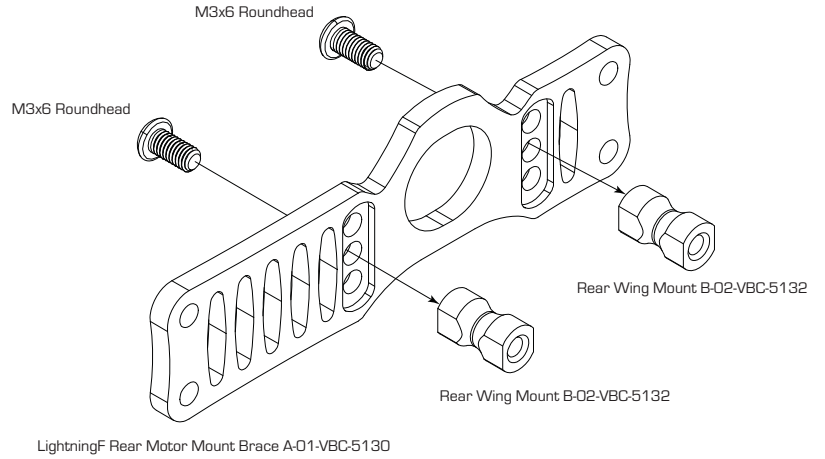
M3x6 Roundhead C-02-SC-R0306 x 6



Rear Wing Mount B-02-VBC-5132 x 2

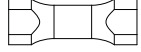


LightningF Rear Motor Mount Brace A-01-VBC-5130 x 1



# 4

## Rear Chassis Brace Assembly



17mm Aluminum Standoff B-02-VBC-5005 x 2



M3x6 Flathead Screw C-02-SC-F0306 x 2



4.7mm Ball Nuts B-02-VBC-5020 x 2



M3x6 Roundhead C-02-SC-R0306 x 6



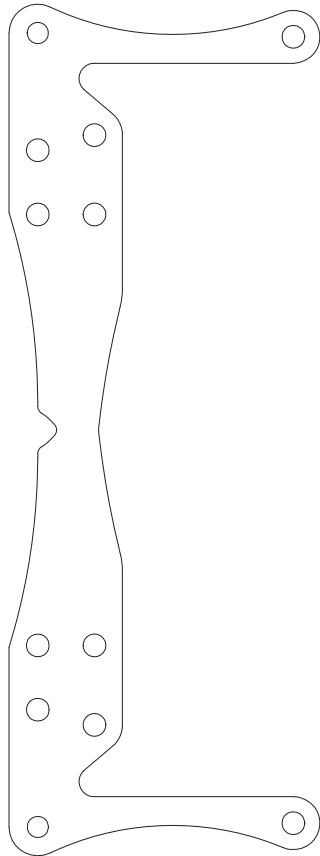
Aluminum Side Spring Retainer B-02-VBC-5074 x 2



Side Spring (Soft/Silver) A-03-VBC-1047 x 2



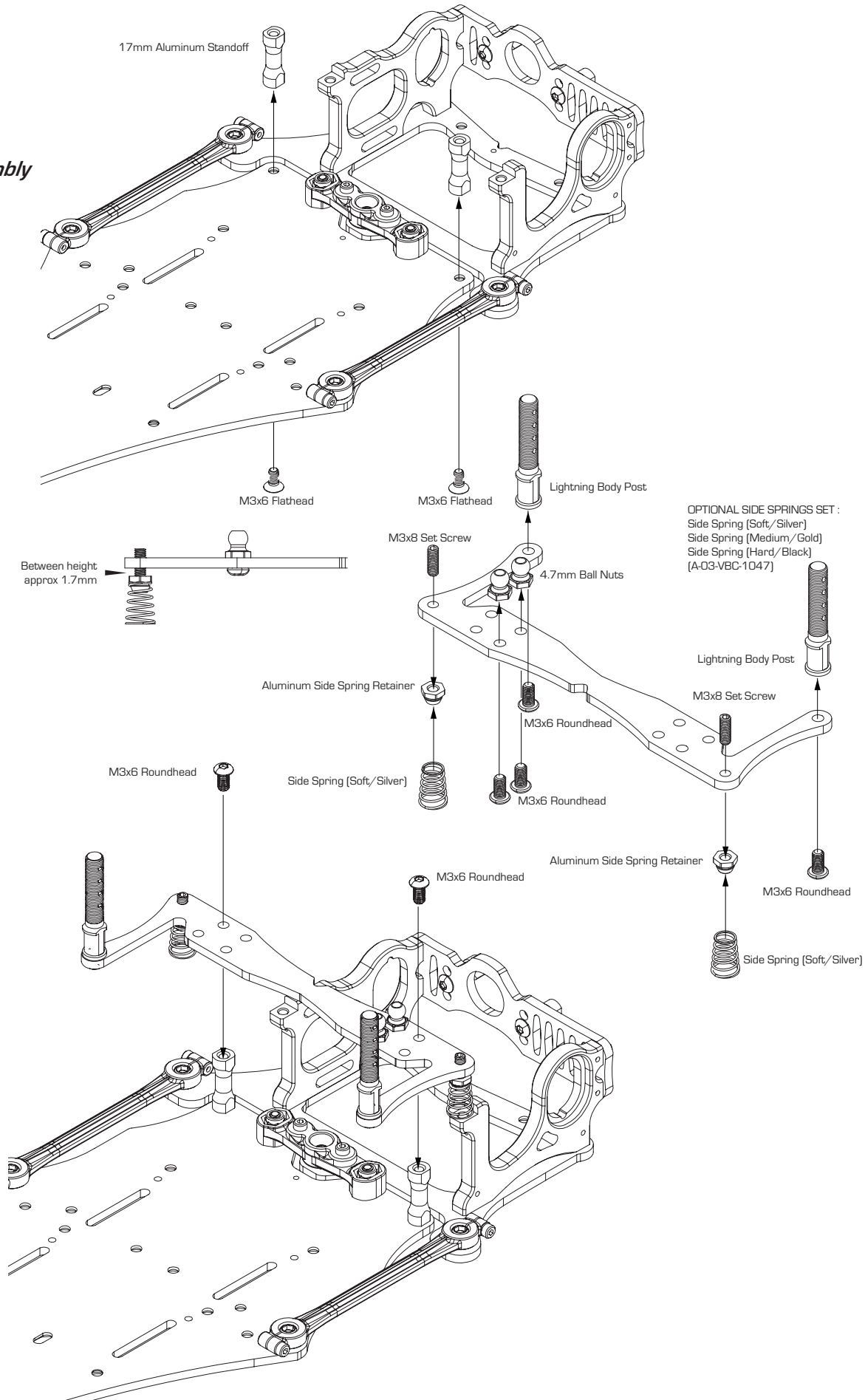
M3x8 Set Screw C-02-SC-SS-0308 x 2



Lightning FX Rear Chassis Brace A-01-P50616 x 1



Lightning Body Post A-03-VBC-5010 x 2



# 5

## Side Damper Tube Assembly



Ball Connector B-02-VBC-0045 x 1



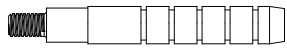
T2 7075 Spacer B-02-VBC-0019-20 x 1



M3x6 Roundhead C-02-SC-R0306 x 4



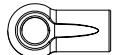
M3x10 Flathead C-02-SC-F0310 x 2



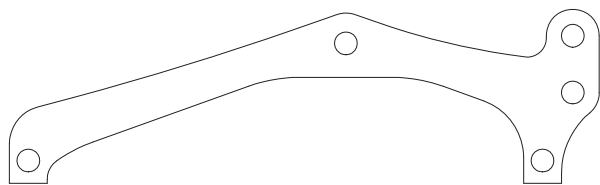
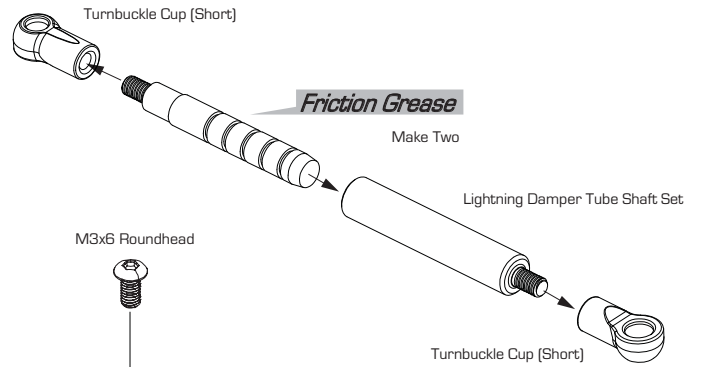
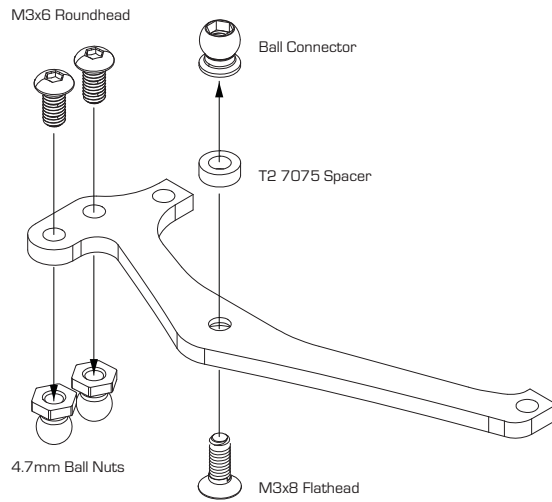
Lightning Damper Tube Shaft B-02-VBC-5018 x 2



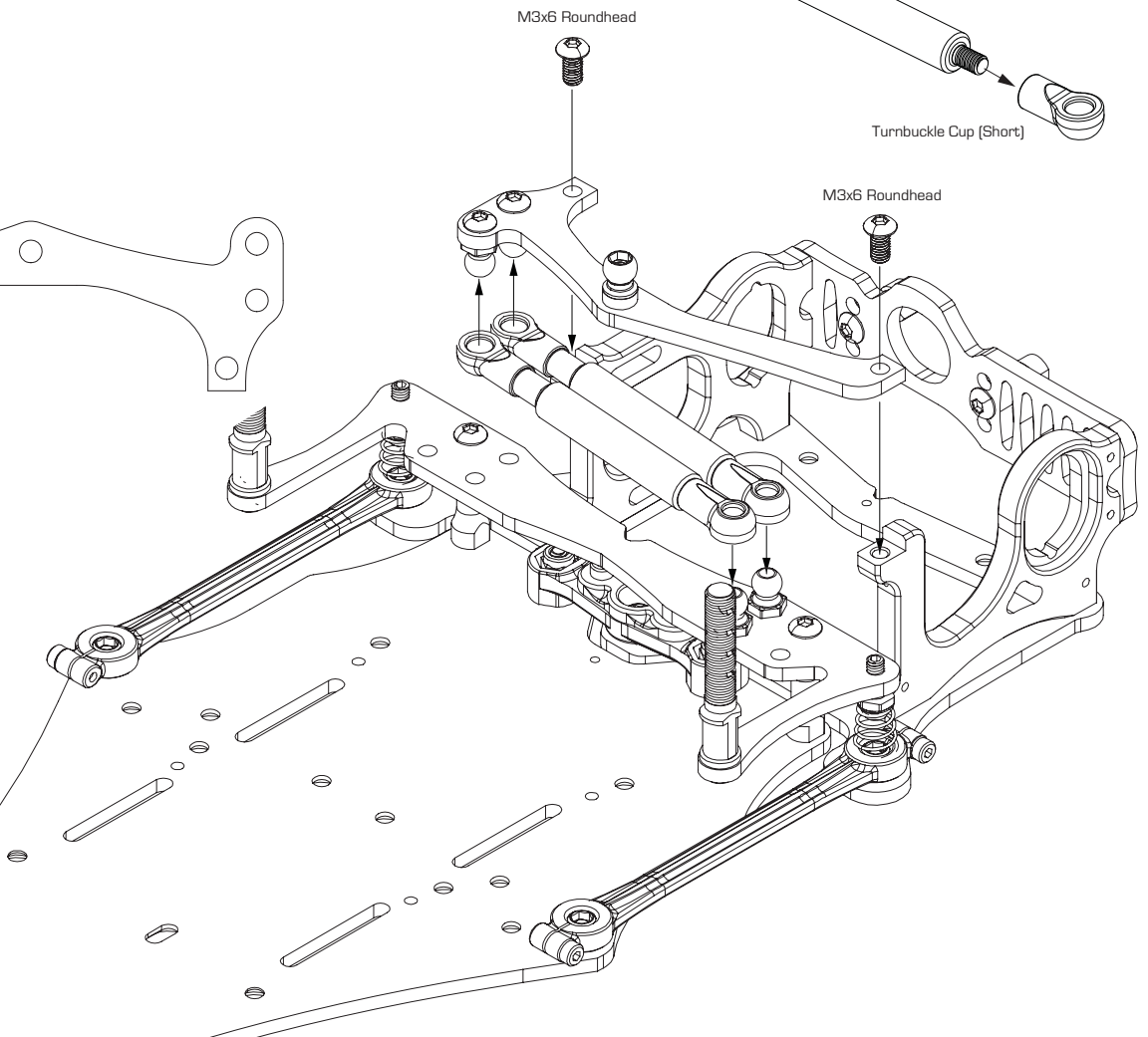
Lightning Damper Tube B-02-VBC-5019 x 2



Turnbuckle Cup (Short) A-03-VBC-5021 x 4



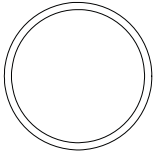
Lightning FX Upper Pod Plate A-01-P50624 x 1





# 6

## Ball Differential Assembly



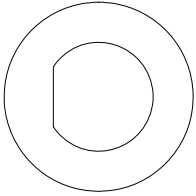
Differential Seal O-ring B-02-VBC-5082 x 2



Ball Bearing Flanged 3/8"x1/4"  
C-02-BB-3814F x 3



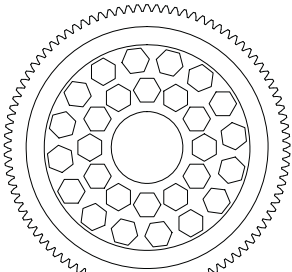
Ball Bearing 3/8"x1/4" C-02-BB-3814 x 1



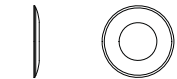
Differential Drive Ring B-02-VBC-1001 x 2



1/8" Differential Balls C-02-DB-0801 x 16



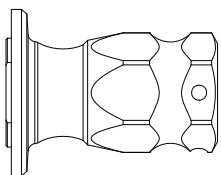
64 Pitch 93T Spur Gear C-02-VBC-5077 x 1



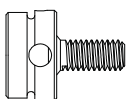
Bevelled Washer C-02-VBC-5076 x 2



Thrust Washer B-02-VBC-5125 x 1



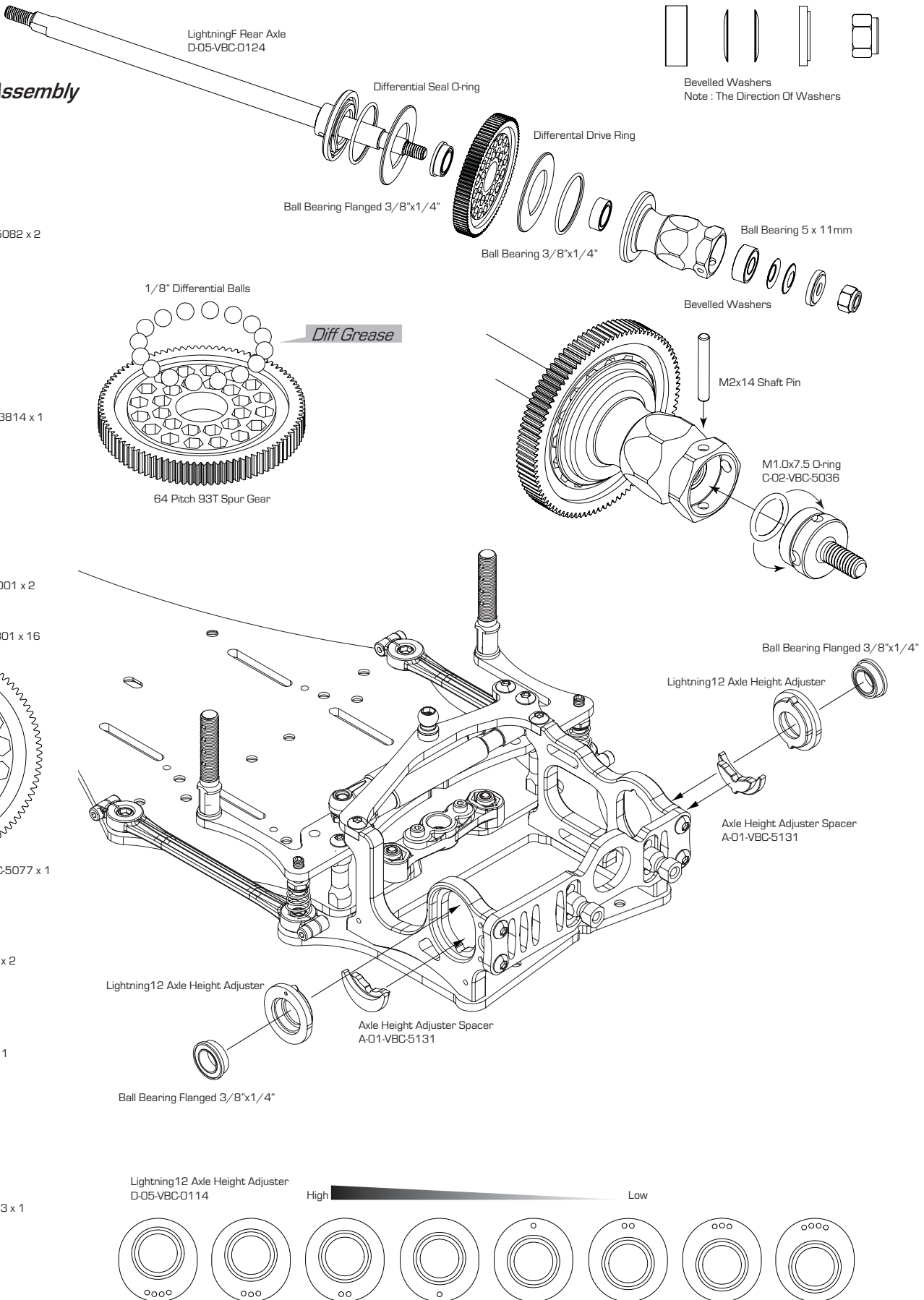
Aluminum Diff Hub B-02-VBC-5123 x 1



Hardened Differential Cap B-02-VBC-5124 x 1



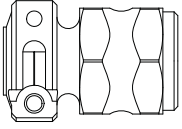
M2x14 Shaft Pin A-03-VBC-1049 x 1





# 7

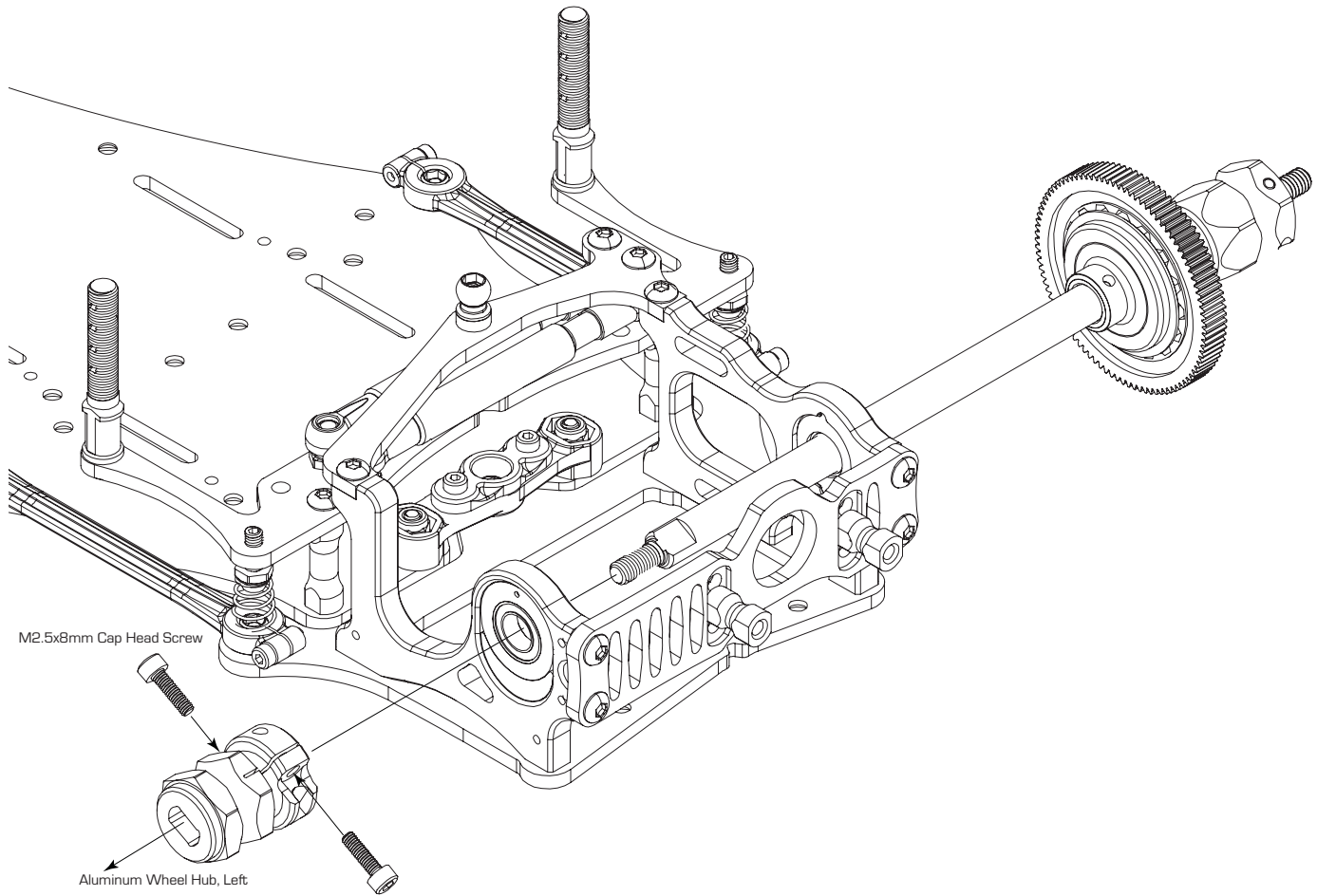
## Ball Differential Assembly



Aluminum Wheel Hub, Left B-02-VBC-5122 x 1

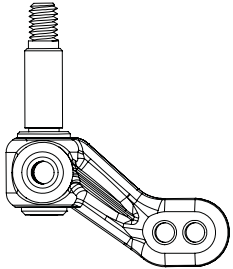


M2.5x8mm Cap Head Screw C-02-SC-R2508 x 2

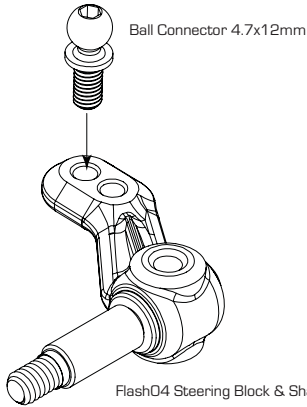


# 8

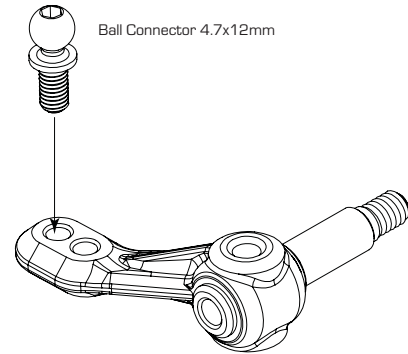
## Steering Blocks



Flash04 Steering Block & Shaft  
D-05-VBC-1003 x 2



Flash04 Steering Block & Shaft



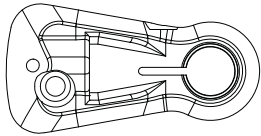
Flash04 Steering Block & Shaft



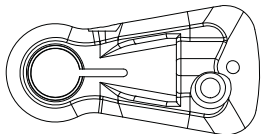
Ball Connector 4.7x12mm  
B-02-VBC-5015 x 2

# 9

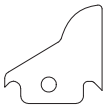
## Front End Assembly



Front Lower Arm Pivot Ball Mount (Right) D-05-VBC-1006 x 1



Front Lower Arm Pivot Ball Mount (Left) D-05-VBC-1006 x 1



Steering Limiter V2 A-01-P50789 x 2



M3x8 Flat Head Screw C-02-SC-F0308 x 2



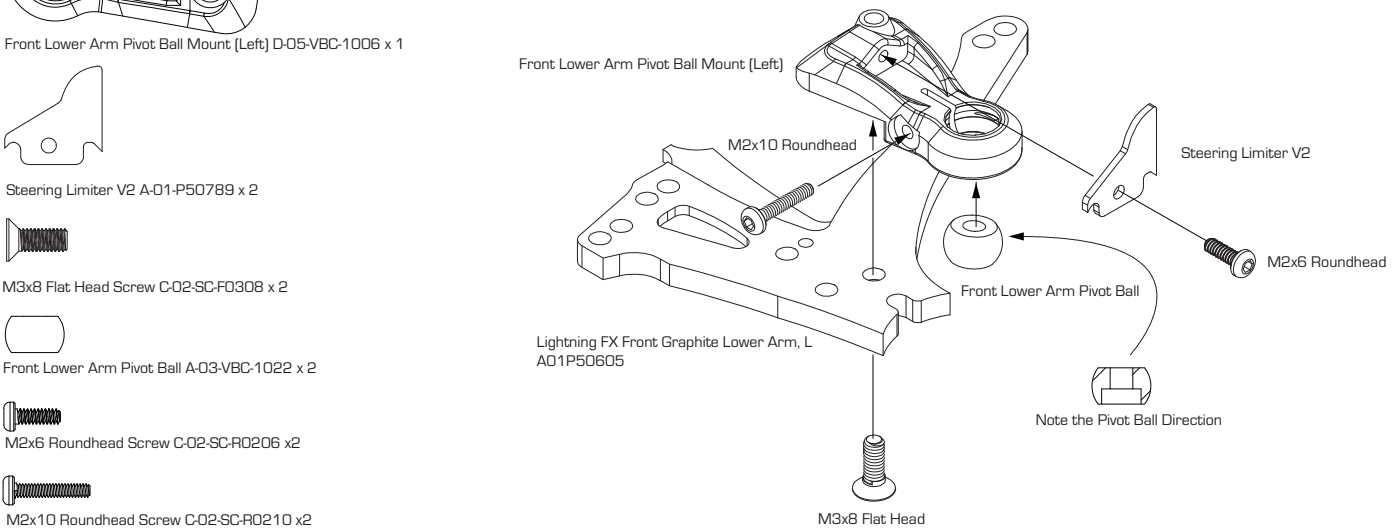
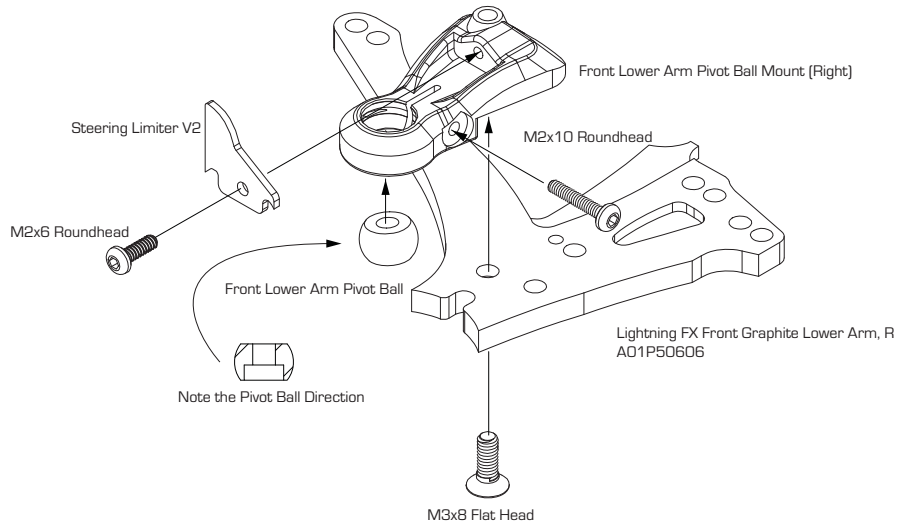
Front Lower Arm Pivot Ball A-03-VBC-1022 x 2



M2x6 Roundhead Screw C-02-SC-R0206 x 2

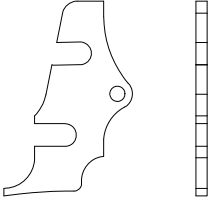


M2x10 Roundhead Screw C-02-SC-R0210 x 2



# 10

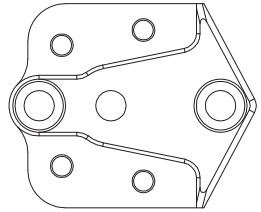
## Front End Assembly Continue



Ride Height 1.5mm Adjustment Spacer x 2  
D-05-VBC-1018



M3x8 Roundhead C-02-SC-R0308 x 4



Lower Arm support A-03-VBC-1033 x 1



Lightning FX Lower Arm Support Mount B-02-P50607 x 2



M3x6 Flathead Screw C-02-SC-F0306 x 2



Suspension Arm Spacer T2 Composite A-03-VBC-0052 x 4



Suspension Arm Spacer T1 Composite A-03-VBC-0051 x 4



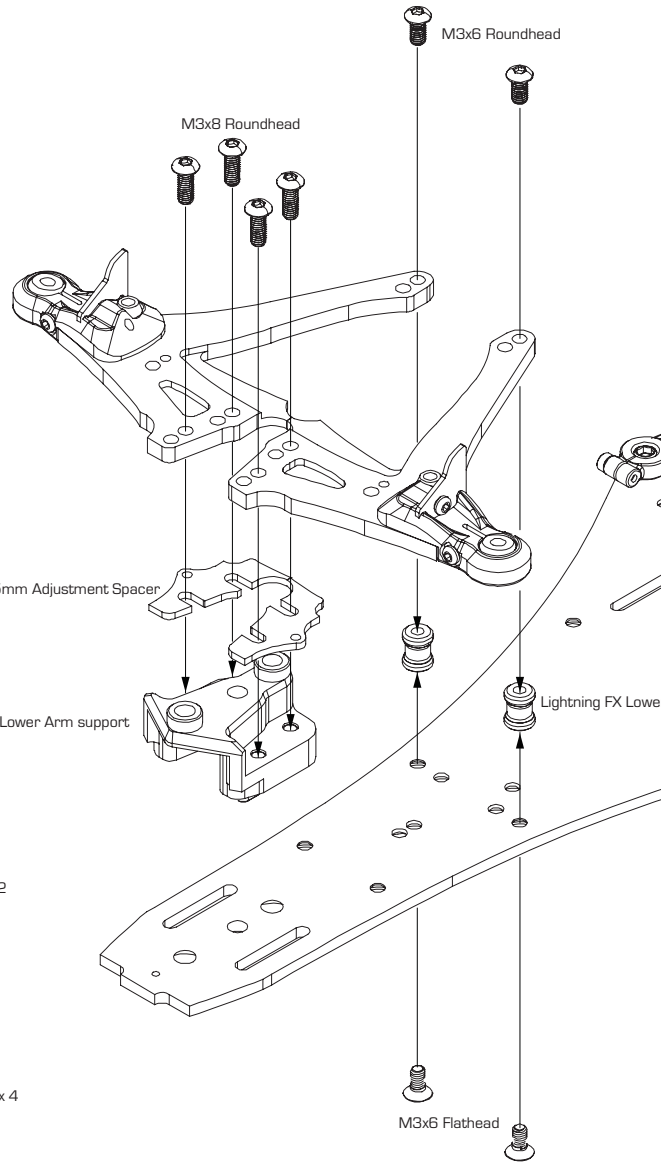
Flash04 King Pin B-02-VBC-1004 x 2



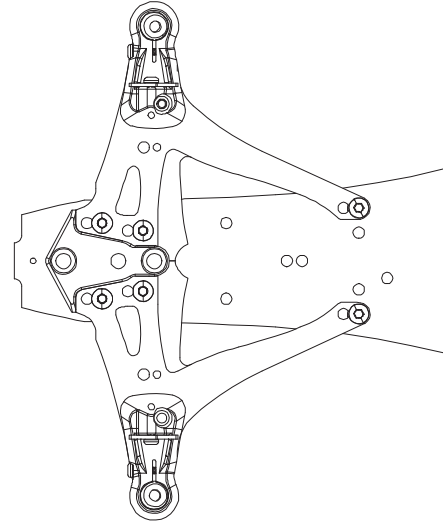
M3 E-Clip B-02-VBC-0044 x 2



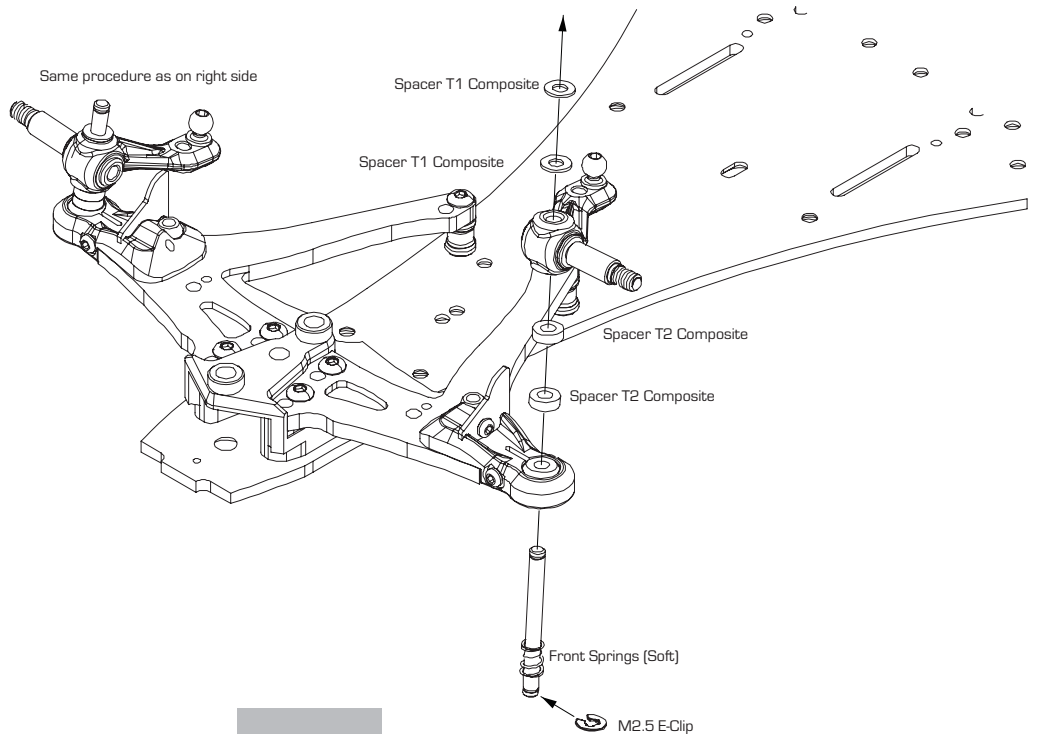
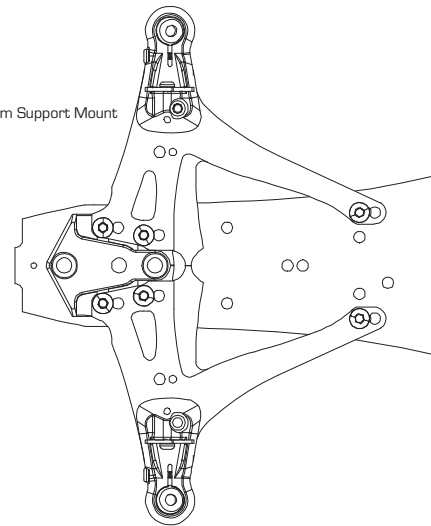
Front Springs (Soft) C-02-VBC-5041 x 2



Standard Wheel Base : Suitable for Fast Track



4mm Wheel Base : Suitable for Technical Track

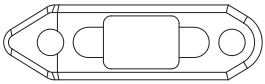


# 11

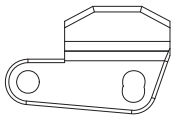
## Installing Front Caster Mount



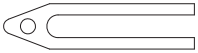
M3x8 Roundhead C-02-SC-R0308 x 4



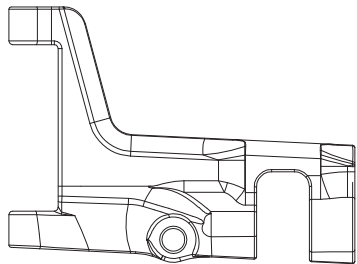
Lightning F Active Caster Mount Base B-02-P50784 x 1



Lightning F Active Caster Mount B-02-P50785 x 2



Lightning F Active Caster Shim 2.5mm A-01-P50786 x 2



Flash04 Upper Arm A-03-VBC-1035 x 2



Flash04 Upper Arm Outer Cup A-03-VBC-1031 x 2



King Pin Upper Ball A-03-VBC-1023 x 2



Super Steel Front Camber Link Turnbuckle C-02-P50790 x 2



2.6 x 5 x 1 Caster Spacer B-02-P50791 x 8



2.6 x 5 x 4 Wheelbase Spacer B-02-P50781 x 2



Lightning FX Front Upper Arm Pin C-02-P50787 x 2



M2x4 Roundhead Screw C-02-SC-R0204 x 2



M3x3mm Set Screw C-02-SC-SS-0303 x 2

M3x8 Roundhead



Lightning F Active Caster Mount

Lightning F Active Caster Shim 2.5mm

Lightning F Active Caster Mount Base

Lightning F Active Caster Shim 2.5mm

Lightning F Active Caster Mount

Upper Arm

Camber Link Turnbuckle

Make Two

King Pin Upper Ball

Upper Arm Outer Cup

Lightning FX Front Upper Arm Pin

Caster Spacer

Caster Spacer

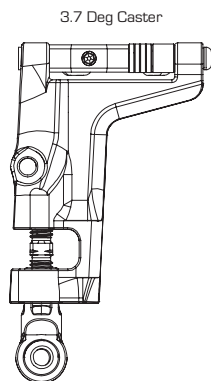
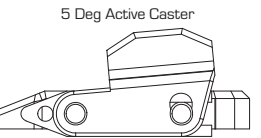
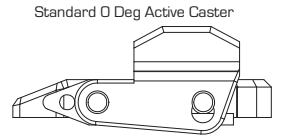
Caster Spacer

Caster Spacer

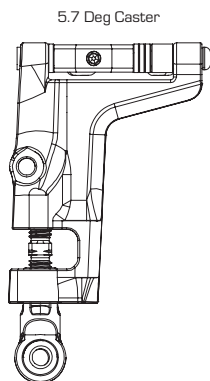
Wheelbase Spacer

M3x3mm Set Screw

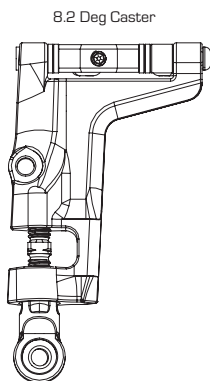
M2x4 Roundhead



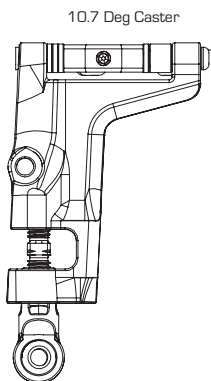
3.7 Deg Caster



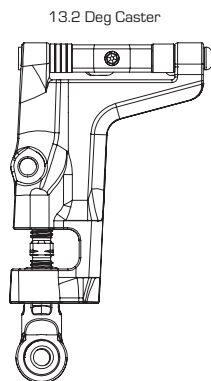
5.7 Deg Caster



8.2 Deg Caster



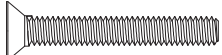
10.7 Deg Caster



13.2 Deg Caster

# 12

## Installing Front Upper Arm



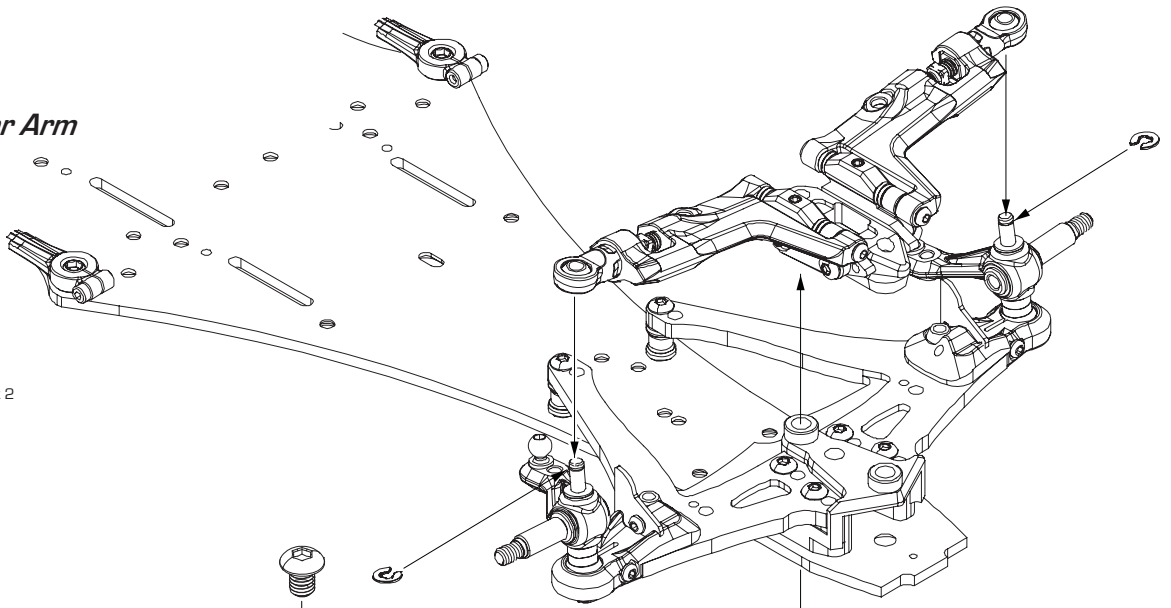
M4x28 Flathead Screw  
C-02-SC-F0428 x 1



M3 E-Clip B-02-VBC-0044 x 2

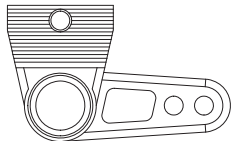


M3x3mm Set Screw C-02-SC-SS-0303 x 2



# 13

## Installing Steering System



Lightning FX Steering Arm\_A B-02-P50609 x 1



Lightning FX Steering Arm\_B B-02-P50782 x 1



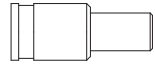
M3x4 Roundhead C-02-SC-R0304 x 1



Ball Connector 4.7x12mm  
B-02-VBC-5015 x 3



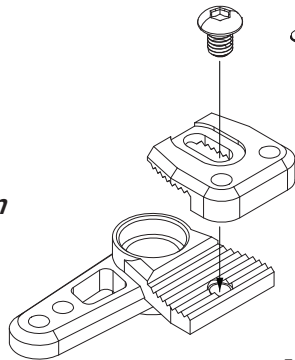
5x8 Ball Bearing C-02-BB-0805-B x 2



Lightning FX Steering Post B-02-P50627 x 1



M3x6 Flathead Screw C-02-SC-F0306 x 1



M3x4 Roundhead

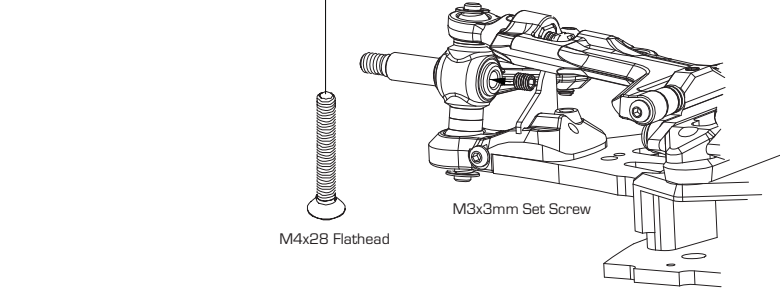
5x8 Ball Bearing

Ball Connector 4.7x12mm

Ball Connector 4.7x12mm

5x8 Ball Bearing

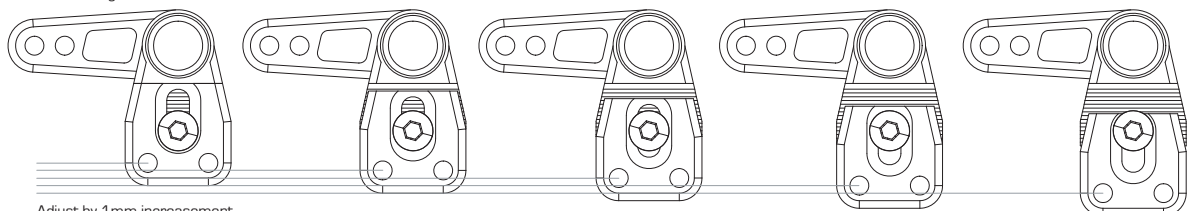
M3x6 Flathead



M4x28 Flathead

M3x3mm Set Screw

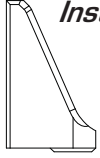
Default Setting



Adjust by 1mm increasement

# 14

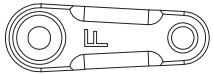
## Installing Steering Linkage



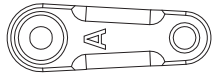
Alum Servo Mount for Low Profile Servo B-02-P50262



M3x6x0.5mm Spacer B-02-VBC-5093 x 4



Servo Horn Type F (Futaba)  
A-03-VBC-0053 x 1



Servo Horn Type A (Airtronics/KD)  
A-03-VBC-0054 x 1



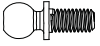
M3x8mm Round Head Screw C-02-SC-R0308 x 4



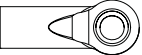
M3x6 Flathead C-02-SC-F0306 x 2



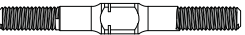
M3x6 Roundhead C-02-SC-R0306 x 1



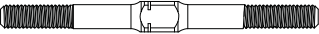
Ball Connector 4.7x12mm  
B-02-VBC-5015 x 1



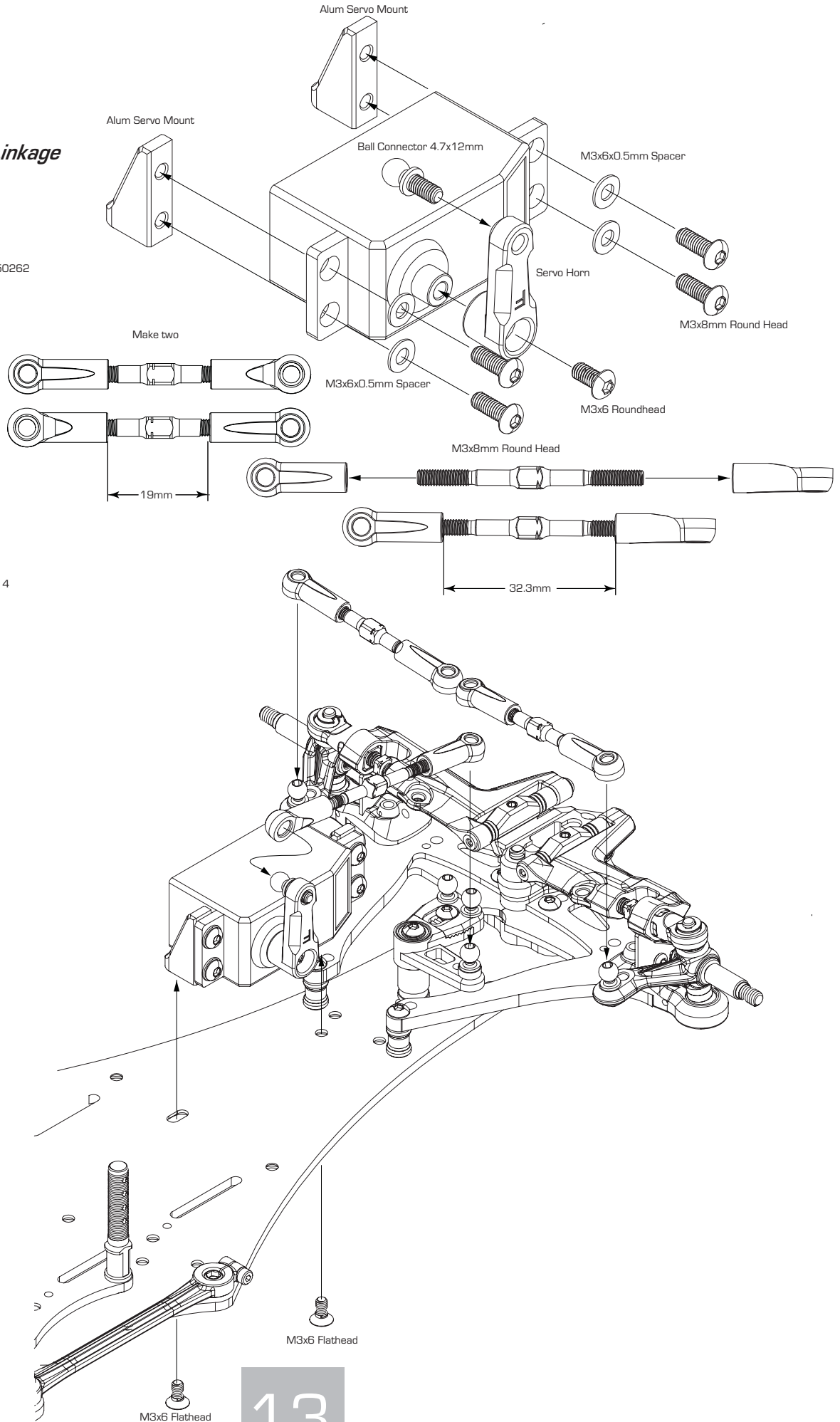
Turnbuckle Cup (Long) A-03-VBC-5016 x 6



32mm Turnbuckle B-02-VBC-5102 x 2



42mm Turnbuckle, Black B-02-VBC-5014 x 1

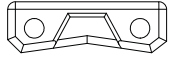




# 15

## Install Battery

### Transversal Battery Position (Default Setting)



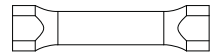
Firebolt Center Battery Stopper A-03-VBC-6074 x 1



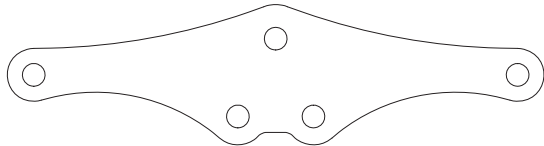
Firebolt Side Battery Stopper X A-03-VBC-6075 x 1



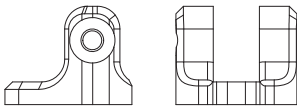
Firebolt Side Battery Stopper Y A-03-VBC-6076 x 1



LightningF Upper Deck Mount B-02-VBC-5096 x 2



Lightning FX Upper Deck AD1-P50610 x 1



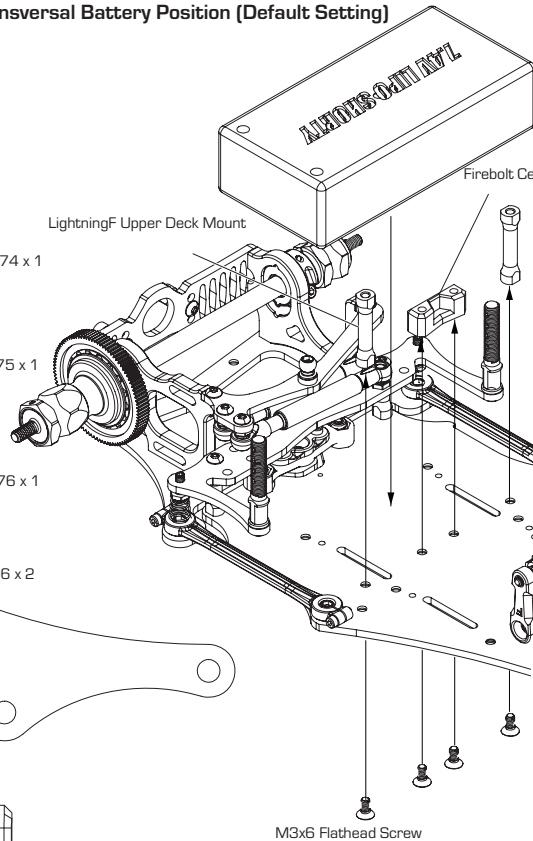
Lightning FX Center Support Mount B-02-P50792 x 1



M3x6 Flathead Screw C-02-SC-F0306 x 7



M3x6 Roundhead C-02-SC-R0306 x 2



LightningF Upper Deck Mount

M3x6 Roundhead

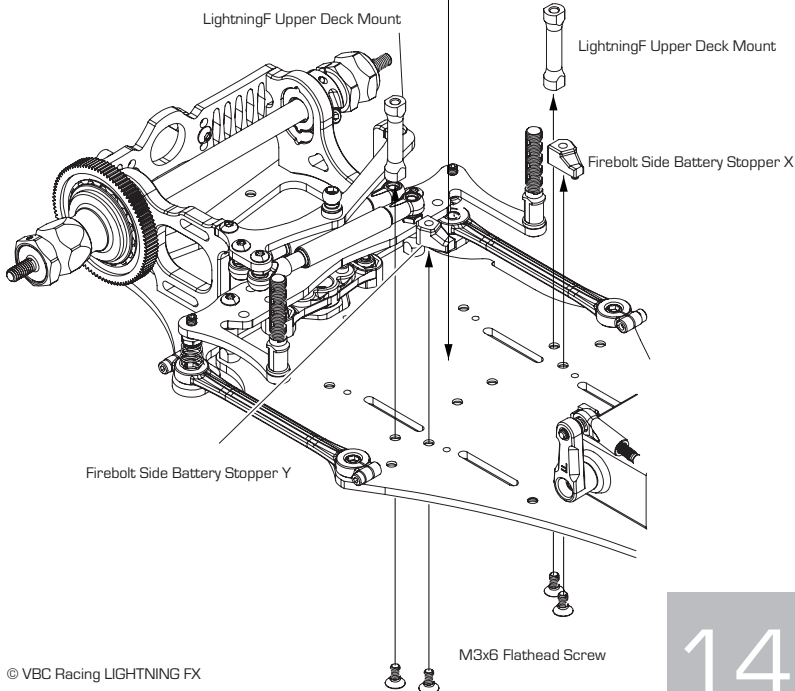
Lightning FX Center Support Mount

M3x6 Roundhead

Lightning FX Upper Deck

M3x6 Flathead Screw

### Inline Battery Position



LightningF Upper Deck Mount

LightningF Upper Deck Mount

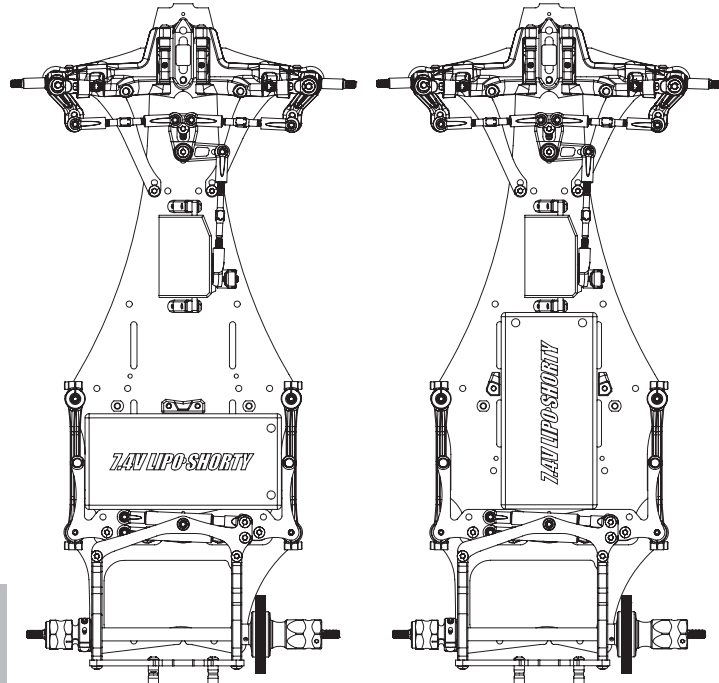
Firebolt Side Battery Stopper X

Firebolt Side Battery Stopper Y

M3x6 Flathead Screw

Transversal Battery Position (Default Setting)

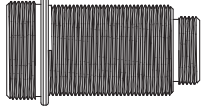
Inline Battery Position



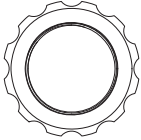


# 16

## Shock Assembly



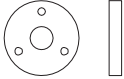
Shock Body B-02-VBC-0039 x 1



Shock Height Adjuster B-02-P30350 x 1



Shock Bottom Cap B-02-P30351 x 1



Shock Piston (3 holes) A-03-VBC-0045W x 1



6mm Damper End Pivot Ball A-03-VBC-6060 x 1



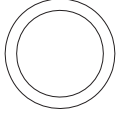
Shaft Cap A-03-VBC-0046W x 1



Shaft Guide A-03-VBC-0058W x 1



Shock Shaft B-02-VBC-0127 x 1



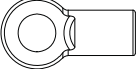
Sealer O-Ring B-03-VBC-0002 x 1



Shaft Sealer O-Ring B-03-VBC-0012 x 1



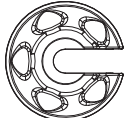
M2 E-Clip B-02-VBC-0129 x 2



Firebolt Shocks Ball Cups A-03-VBC-6001 x 1



Shock Top Connector A-03-VBC-0042W x 1



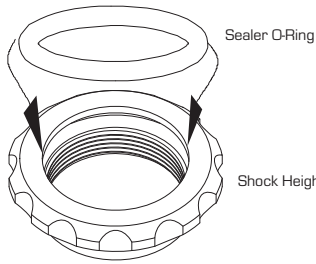
Spring Bottom Support A-03-VBC-0043W x 1



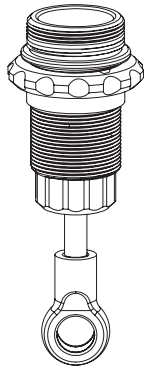
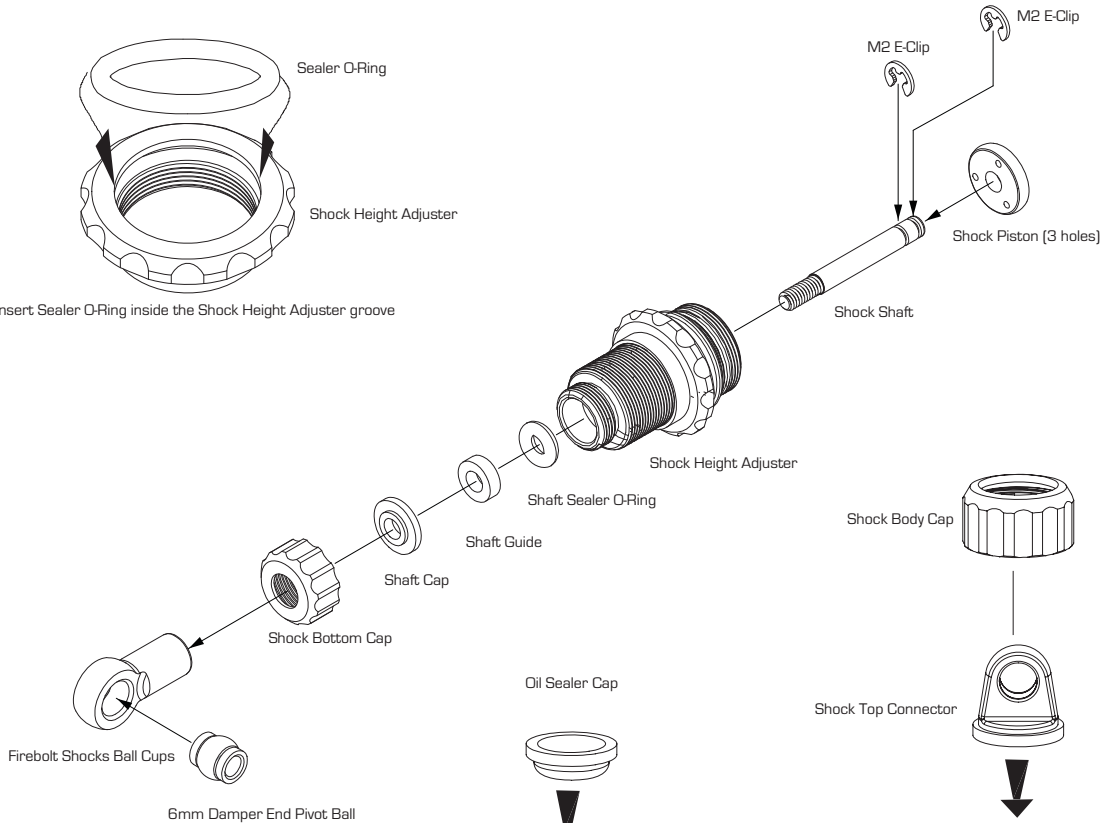
Oil Sealer Cap B-03-VBC-0011 x 1



Shock Body Cap B-02-P30349 x 1

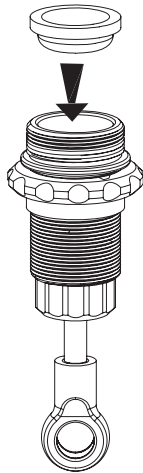


Insert Sealer O-Ring inside the Shock Height Adjuster groove



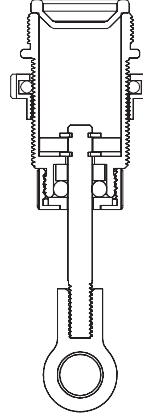
6mm Damper End Pivot Ball

Fill supplied shock oil and remove air by moving the piston up and down until air bubbles disappears

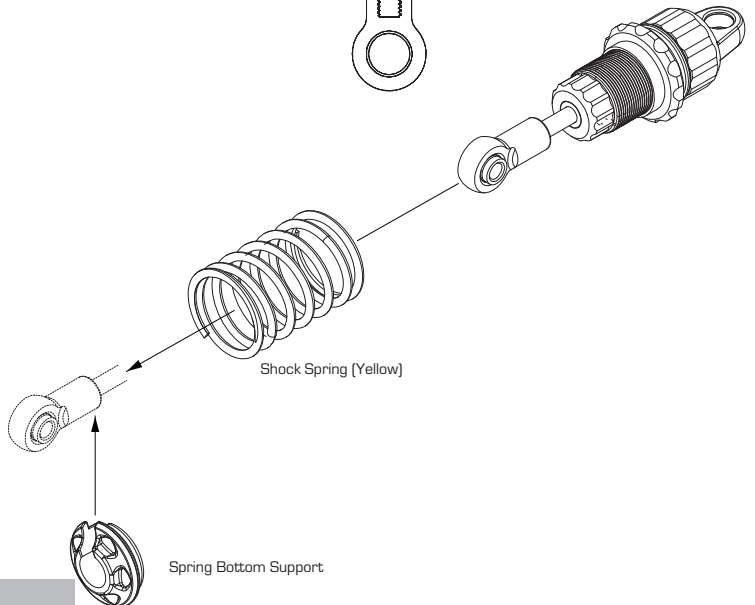


Oil Sealer Cap

When placing Oil Sealer Cap make sure no bubbles are trap inside the shock body

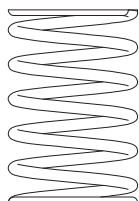


Shock Top Connector



Shock Spring (Yellow)

Spring Bottom Support



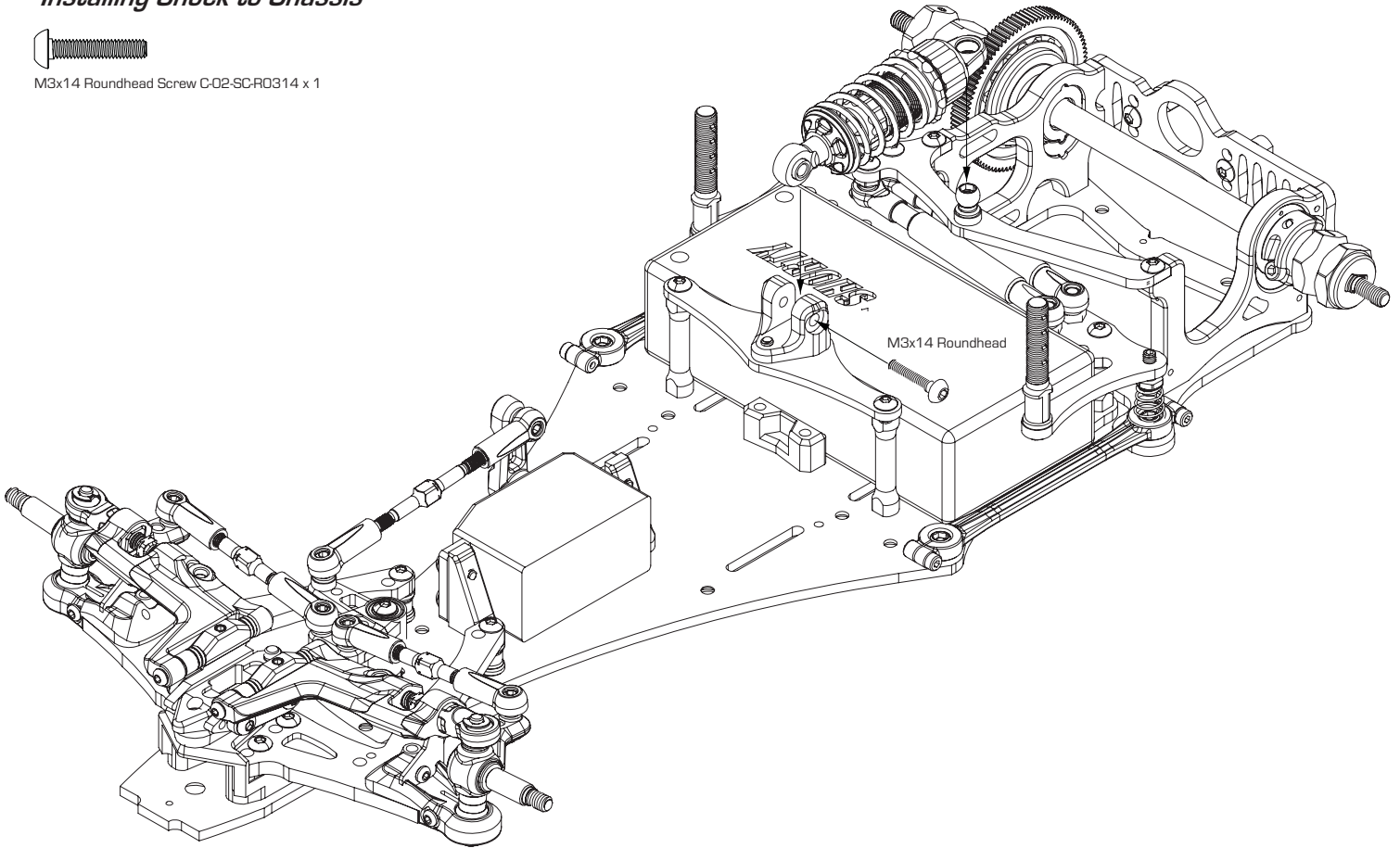
Shock Spring (Yellow) M1.5 x 14.1 x 25.5 x 7T N-01-P50822 x 1

# 17

## Installing Shock to Chassis

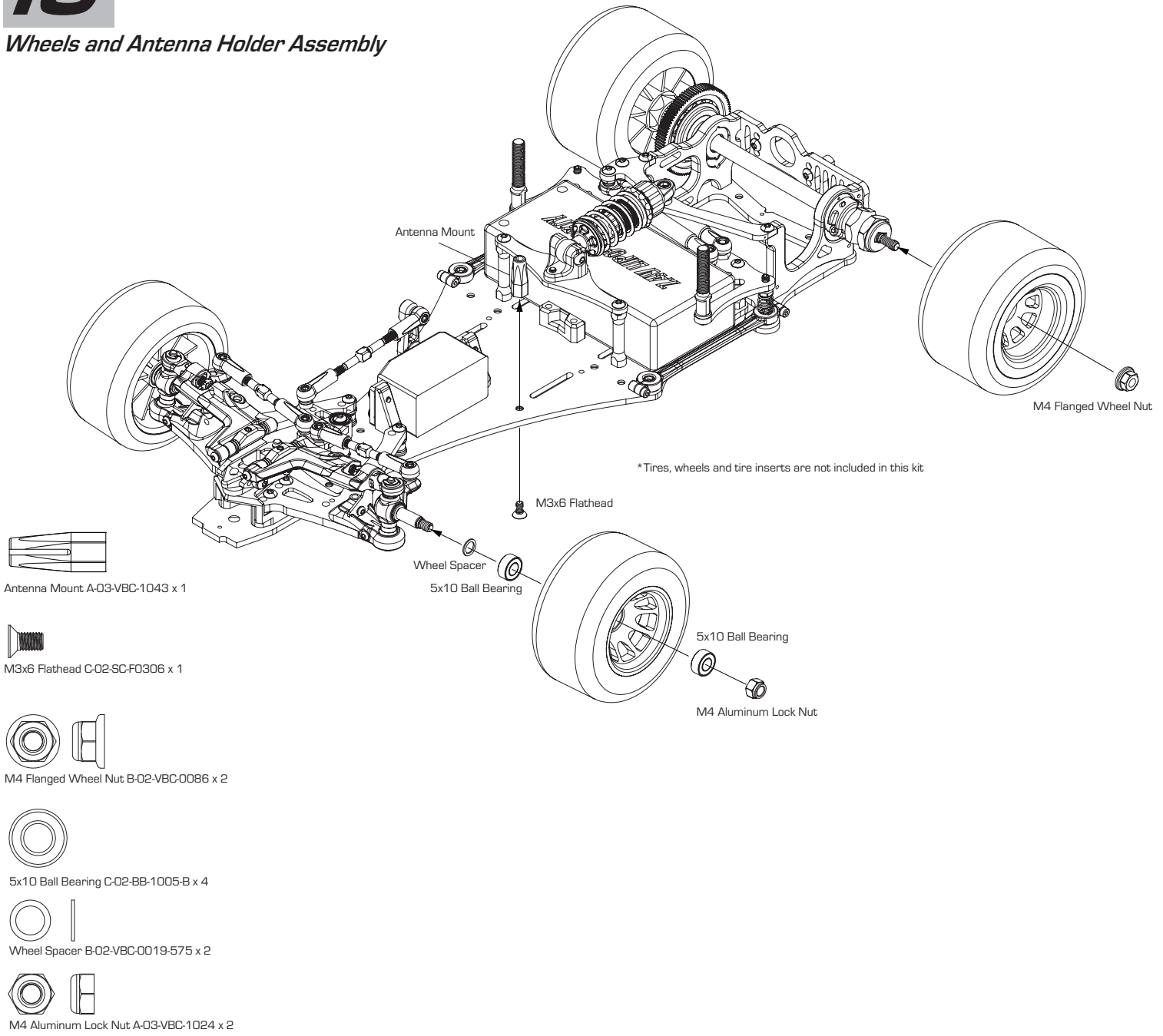


M3x14 Roundhead Screw C-02-SC-R0314 x 1



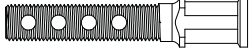
# 18

## Wheels and Antenna Holder Assembly



# 19

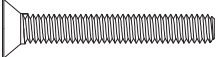
## Front and Rear Wings Assembly



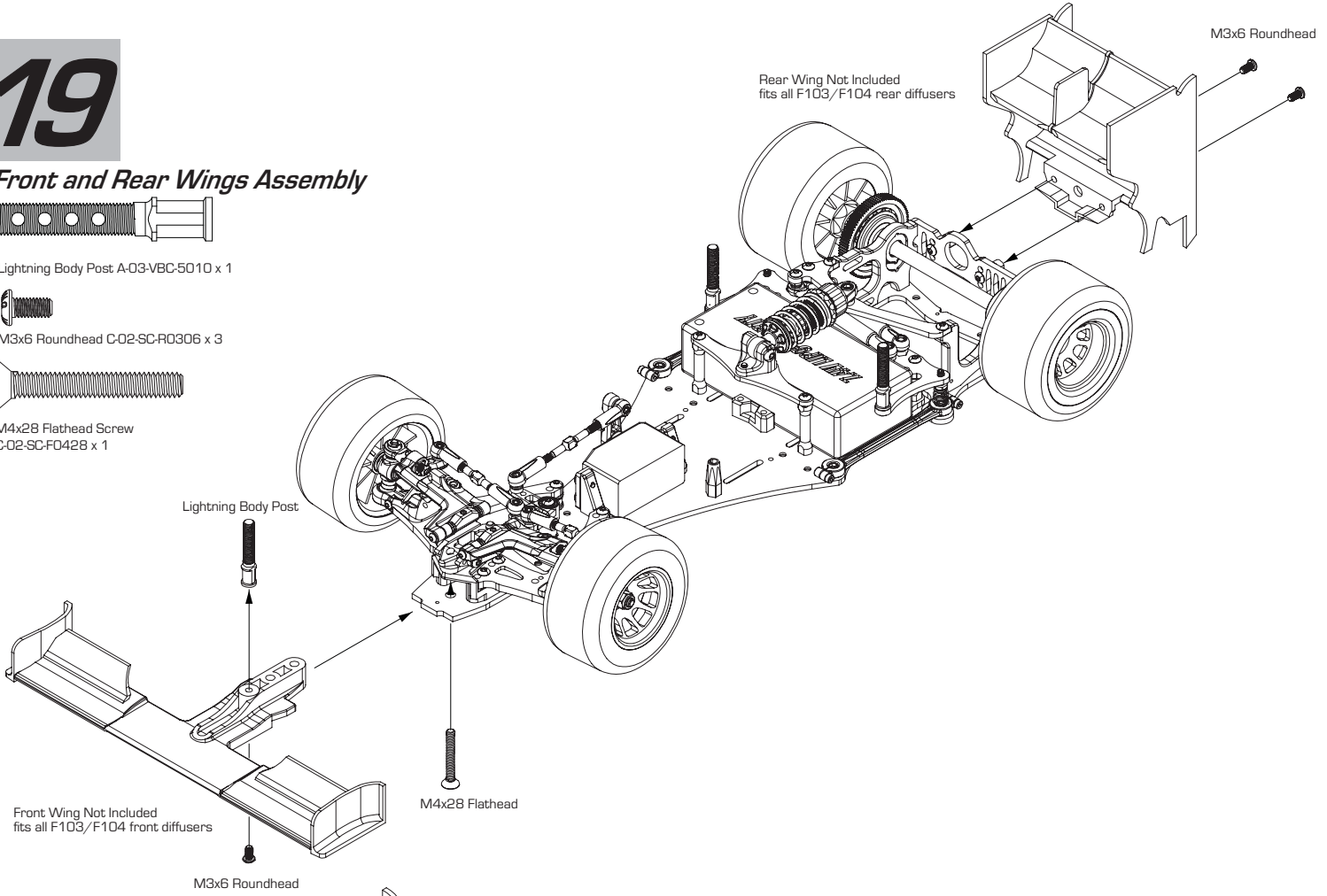
Lightning Body Post A-03-VBC-5010 x 1



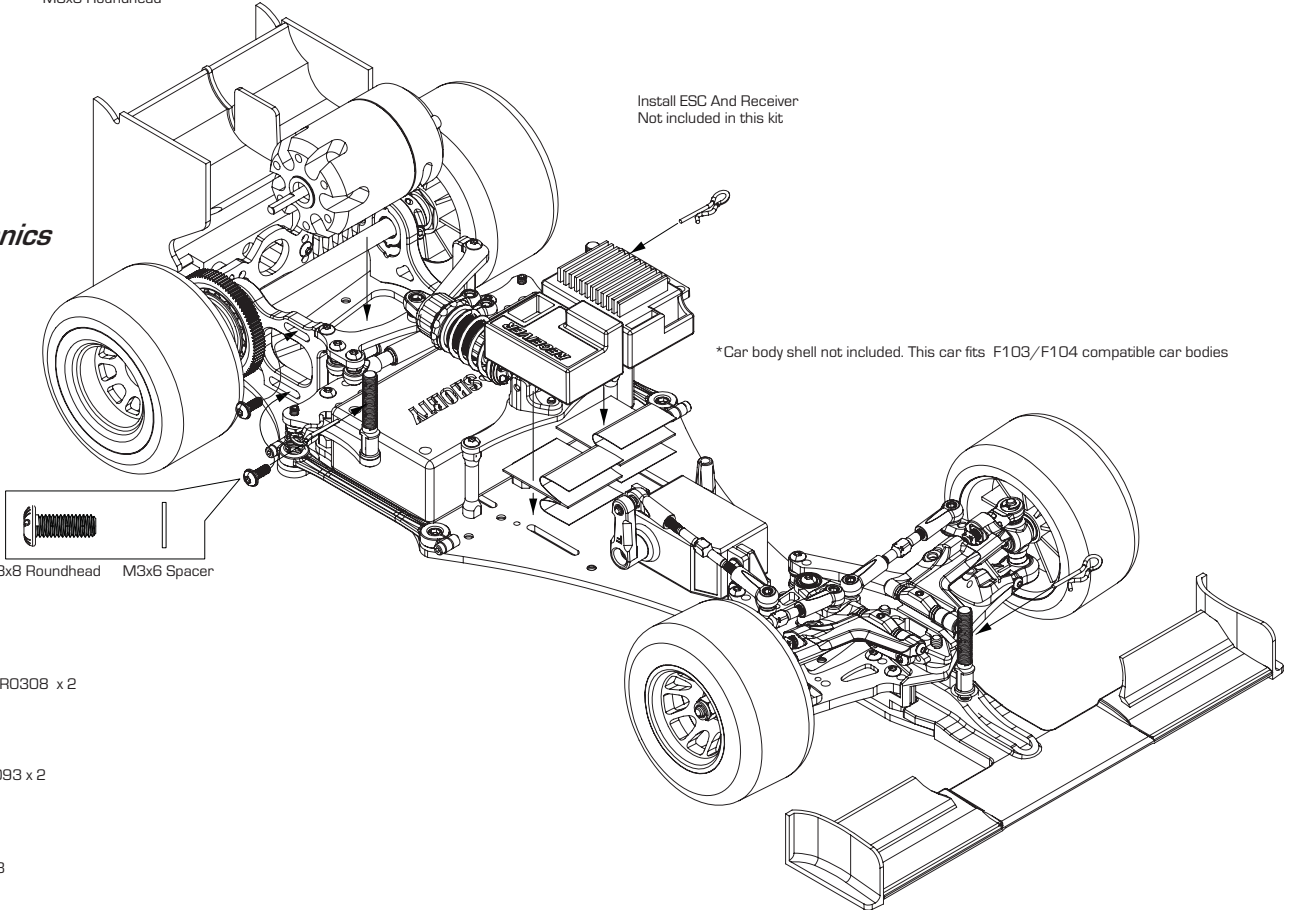
M3x6 Roundhead C-02-SC-R0306 x 3



M4x28 Flathead Screw C-02-SC-F0428 x 1



## Install Electronics



M3x8 Roundhead C-02-SC-R0308 x 2



M3x6 Spacer B-02-VBC-5093 x 2



Body Clip B-02-VBC-0076 x 3

### Installation For Lightning F Front End Conversion (Not Included)



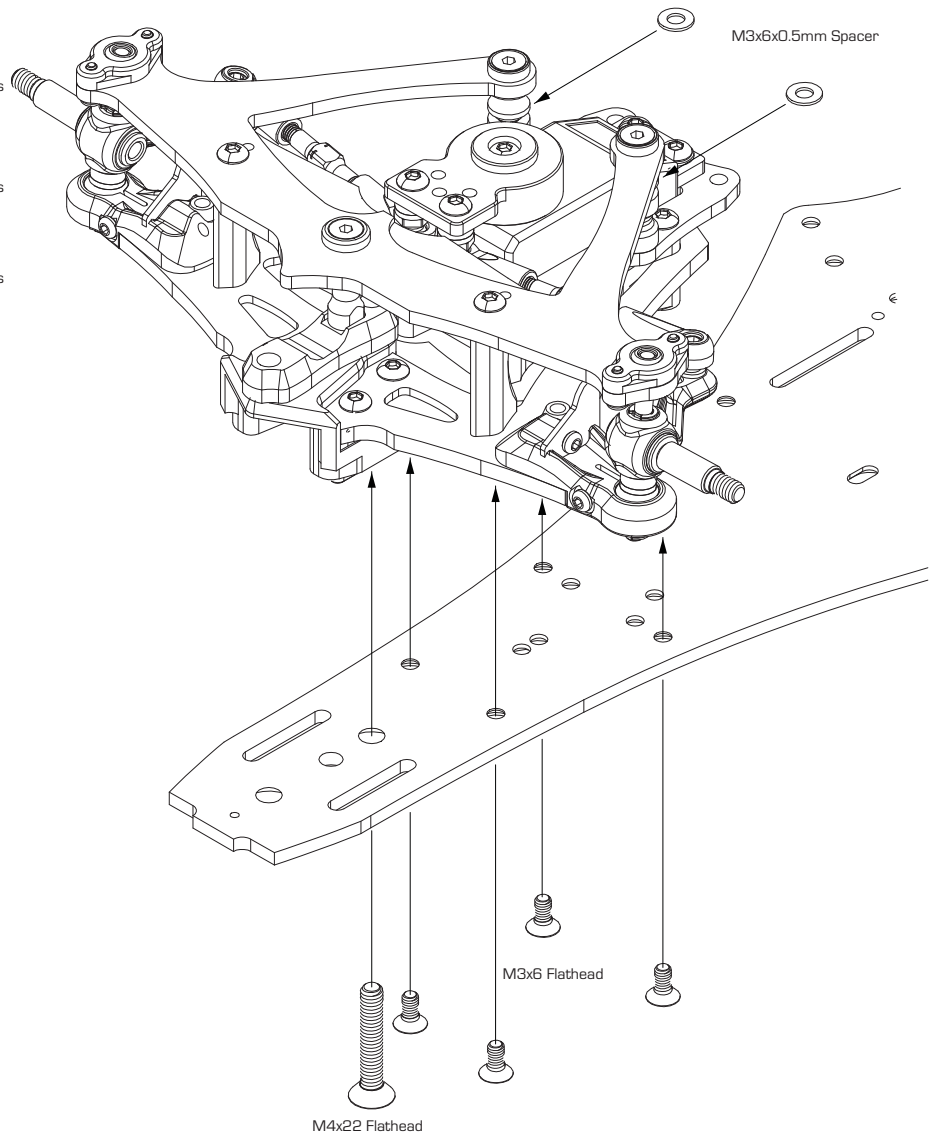
M3x6x0.5mm Spacer B-02-VBC-5093 x 2 Original Lightning F Parts



M4x22 Flathead Screw C-02-SC-F0422 x 1 Original Lightning F Parts



M3x6 Flathead Screw C-02-SC-F0306 x 4 Original Lightning F Parts





COMPETITION GRADE HIGH PERFORMANCE RADIO CONTROL RACING CAR CHASSIS KIT

**LIGHTNING FX**

1/10 SCALE ELECTRIC COMPETITION FORMULA CAR KIT

Instruction Book P01-P50824 VBC Racing Lightning FX Car Kit D-05-VBC-CK16