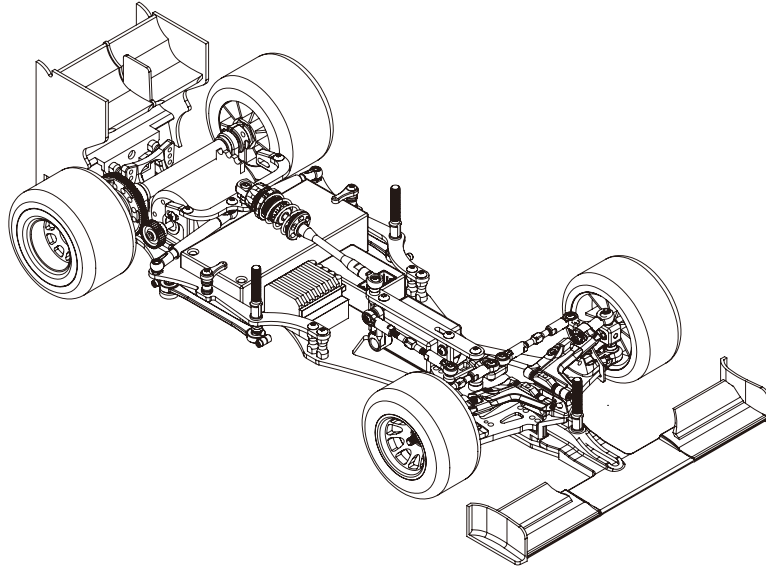


COMPETITION GRADE HIGH PERFORMANCE RADIO CONTROL RACING CAR CHASSIS KIT



1/10 SCALE ELECTRIC COMPETITION FORMULA CAR KIT



INSTRUCTIONS MANUAL



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.vbc-racing.com](http://www.vbc-racing.com)



BAG MARKED **STEP 1**



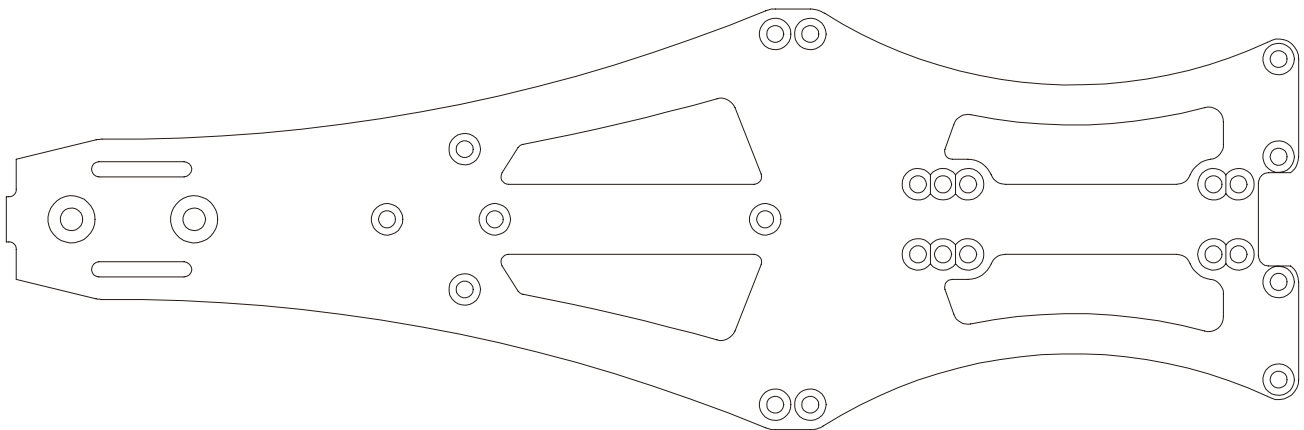
**1**

**Graphite Edges Protection Procedure**

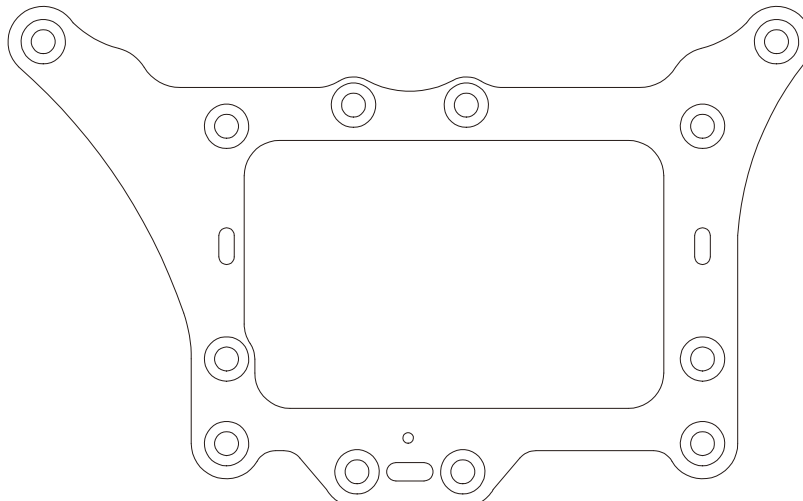


Send the chassis edges with #600 sand paper (not included) and apply CA glue (not included) to the edges of the chassis.

\*Not included in this kit



51587 FX18 Main Chassis



51585 FX18 Lower Pod Plate

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

# 2

## Pivot Brace Assembly Part 1



T0.5 7075 Spacer (Red) B02P31003 X 1



4.9mm Ball stud 6mm Thread 31517 X1



5mm Pivot Ball A-03-VBC-1027 X2



M2X6 Roundhead C-02-SC-R-0206 X1



M3x14 Flathead C-02-SC-F0314 X2



M3X6 Flathead C-02-SC-F0306 X4



M3 locknut C-02-SC-NN03 X2



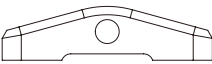
T1 7075 Spacer B-02-P30891 X1



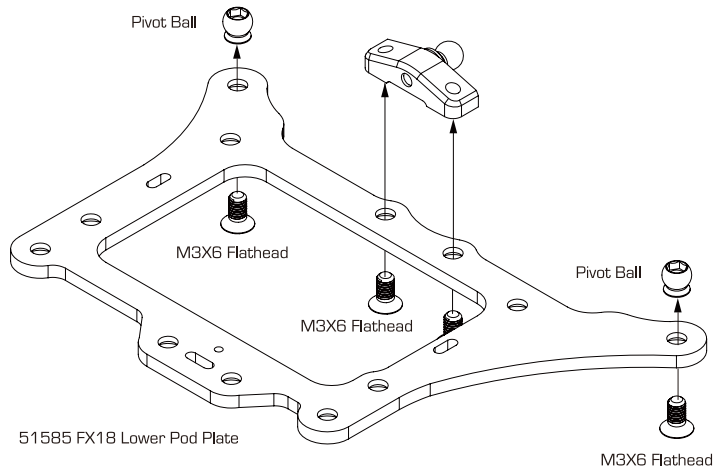
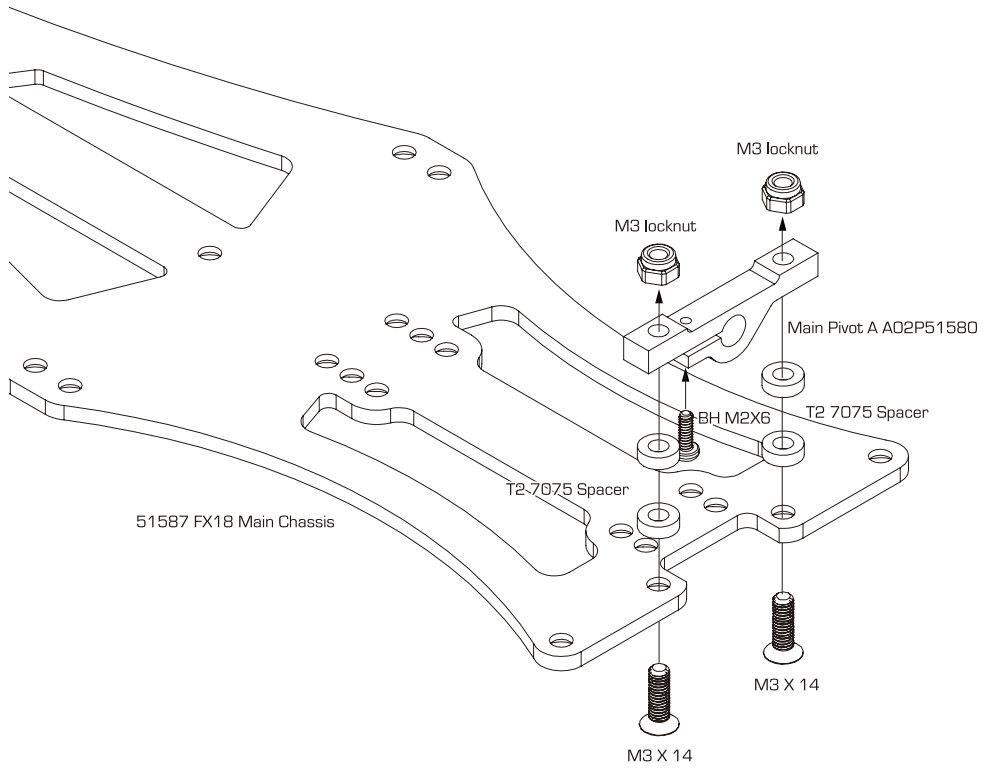
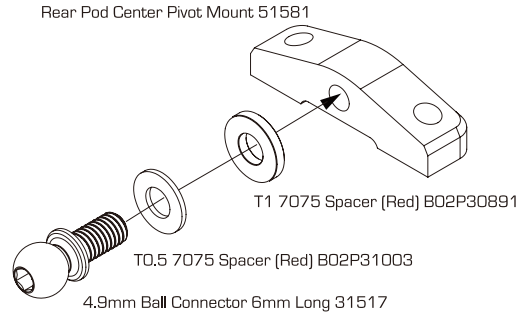
T2 7075 Spacer B-02-P30890 X4



Main Chassis Center Pivot Mount 51580 X1



Rear Pod Center Pivot Mount 51581 X1



# 2

## Pivot Brace Assembly Part2

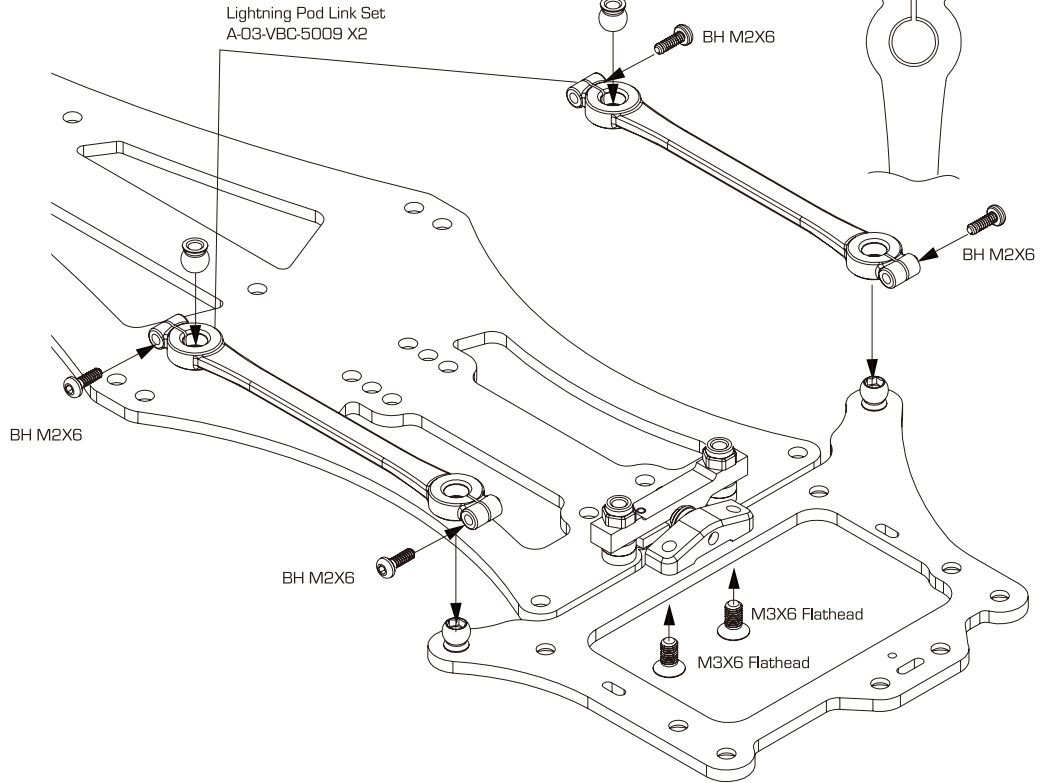
Note the direction screw in from the larger hole side



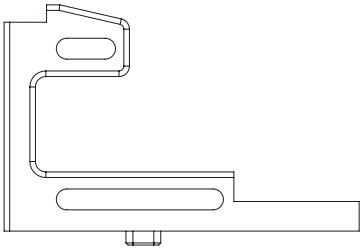
BH M2X6 C-02-SC-R-0206 X4



M3X6 Flathead C-02-SC-F0306 X2



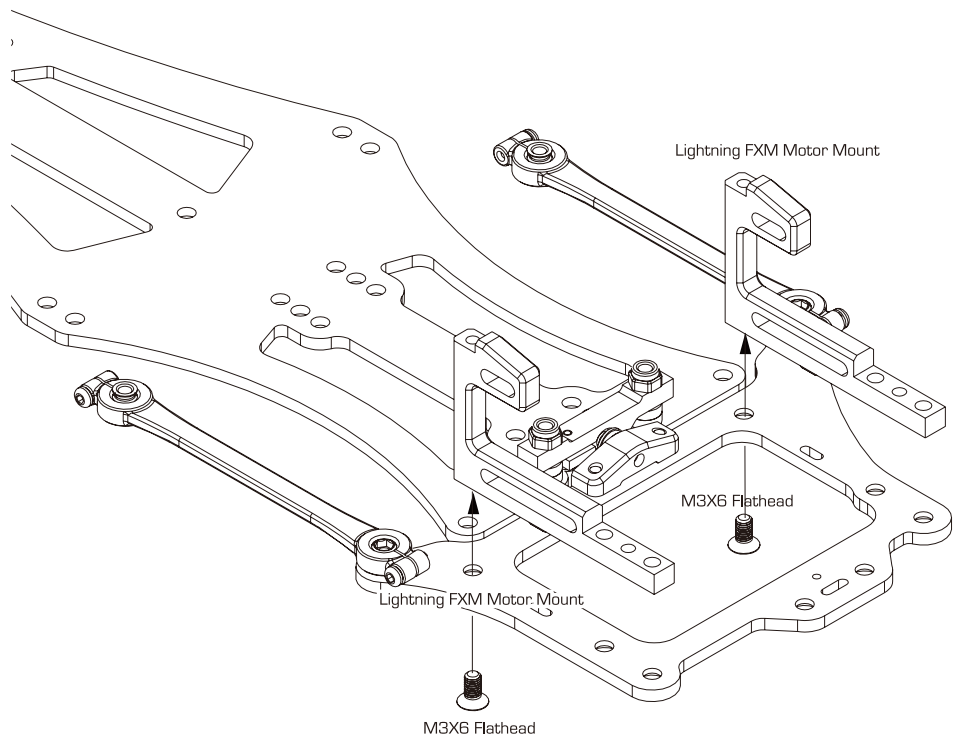
## Rear Bulkhead Assembly



Lightning FXM Motor Mount B02P51284 X2



M3X6 Flathead C-02-SC-F0306 X2

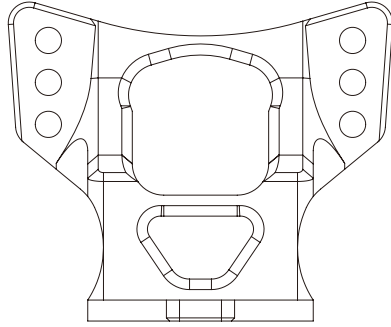
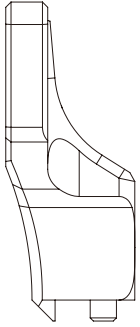




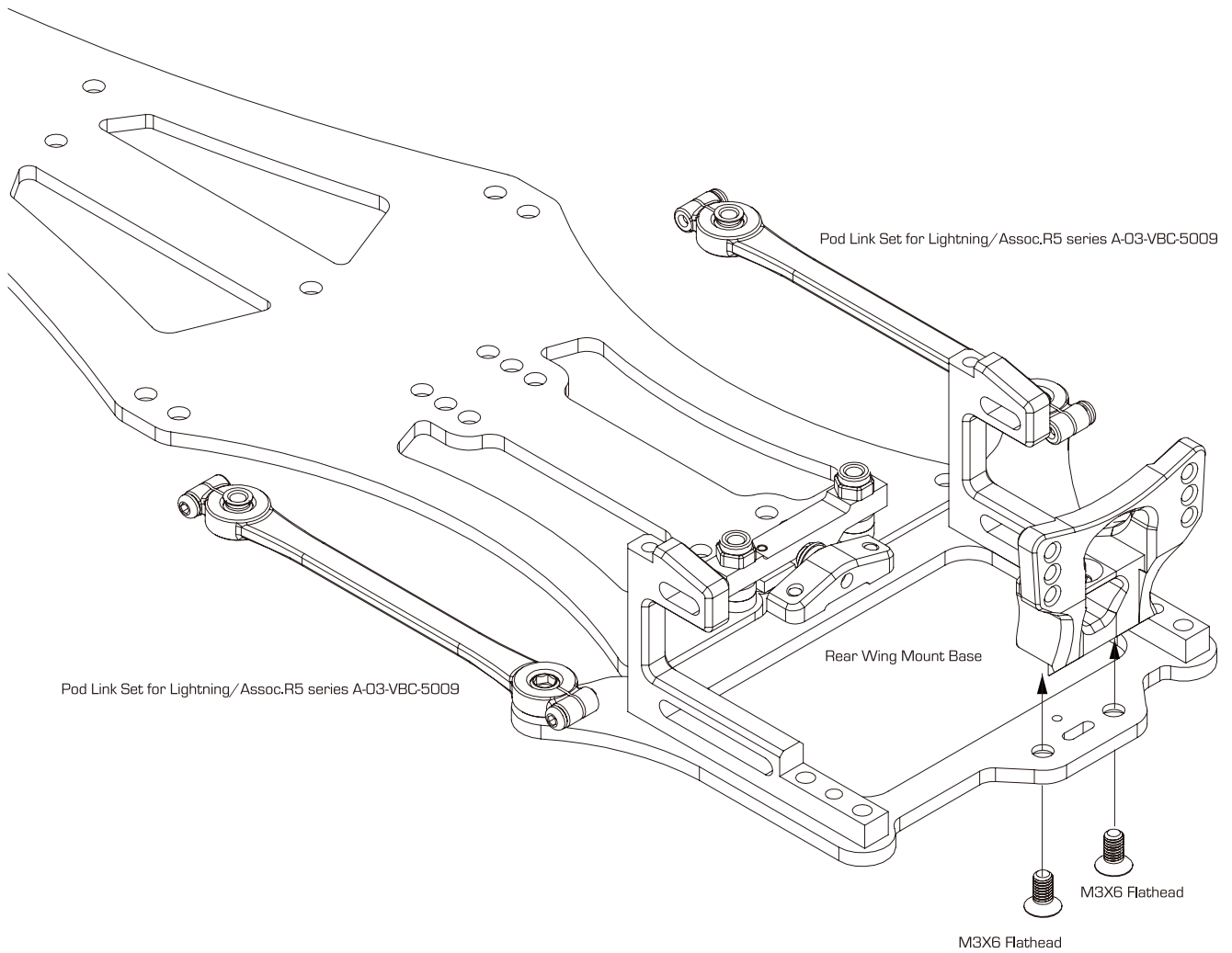
**Rear Bulkhead Assembly Part2**



M3X6 Flathead C-02-SC-F0306 X2



Rear Wing Mount Base B02P51184 X1



# 3

## Rear Chassis Brace Assembly



14mm Aluminum Standoff B-02-VBC-5073 X6



M3X6 Flathead C-02-SC-F0306 X6



4.7mm Thin Ball Nut b02P51288 X2



5mm Pivot Ball A-03-VBC-1027 X2



M3x6 Roundhead C-02-SC-R306 X8



Aluminum Side Spring Retainer B-02-VBC-5074 X2



Side Spring [soft] A-03-VBC-1047 X2



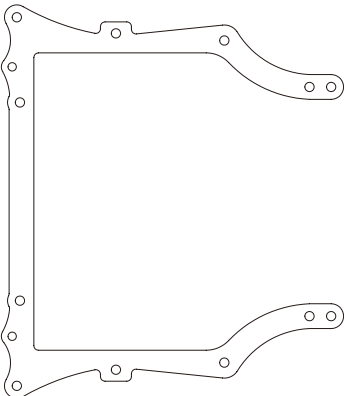
M3x10 set screw C-02-SC-SS-310 X2



M3x22 set screw C-02-SC-SS-0316 X2



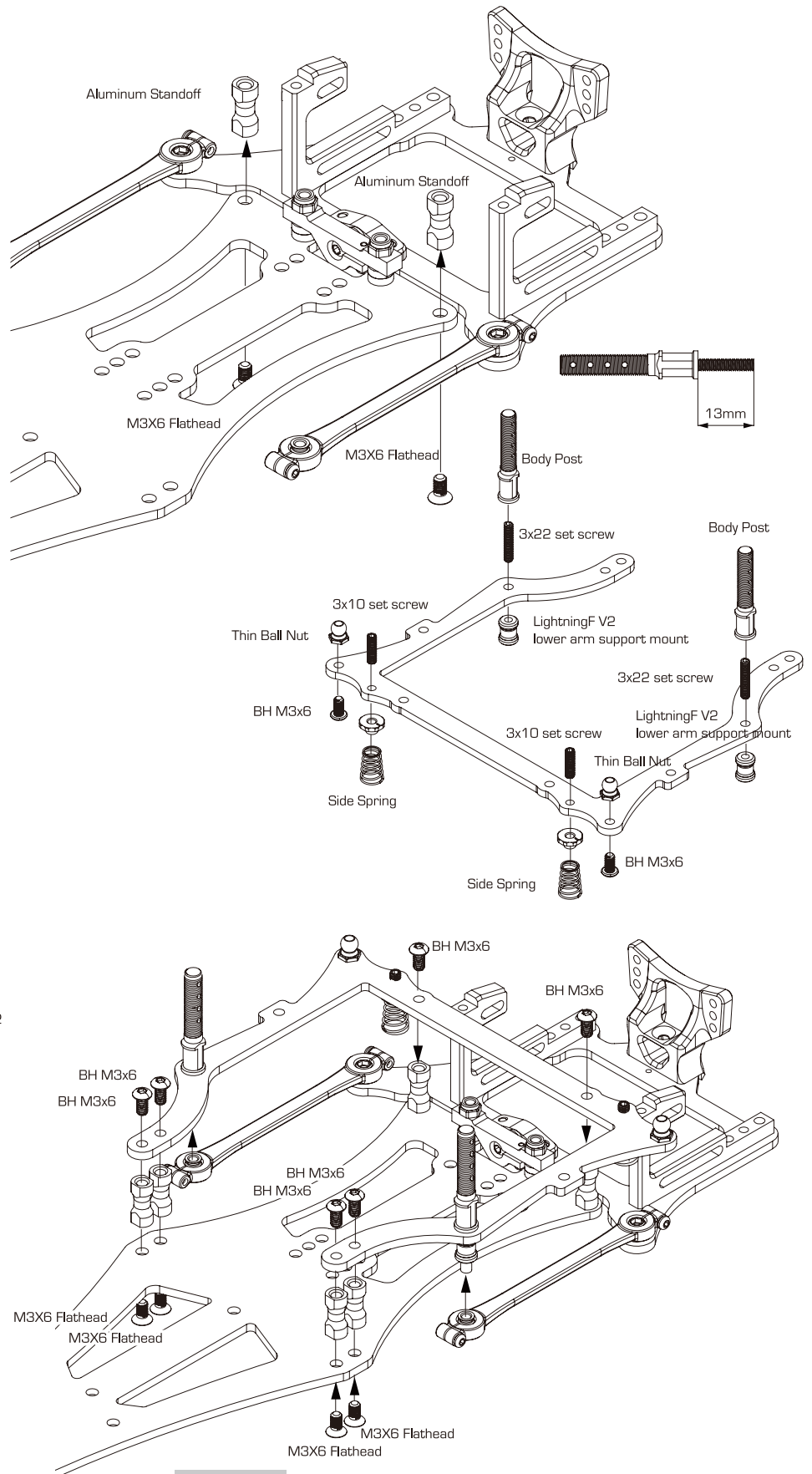
Lightning F V2 lower arm support mount B02P50607 X2



FX18 UPPER DECK 51589 X1



Body Post A-03-VBC-5010 X2



# BAG MARKED **STEP 3**



## Side Damper Tube Assembly



T2 7075 Spacer B-02-P30890 X1



4.7mm Thin Ball Nut b02P51288 X2



Ball Connector B-02-VBC-0045 X1



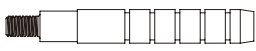
M3x6 Roundhead C-02-SC-R306 X4



M3x14 Roundhead C-02-SC-R0314 X1



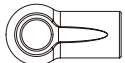
Damper Tube B-02-VBC-5019 X2



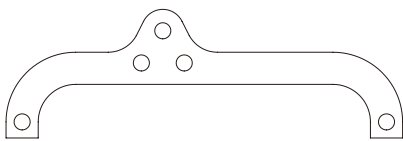
Damper Tube Shaft B-02-VBC-5018 X2



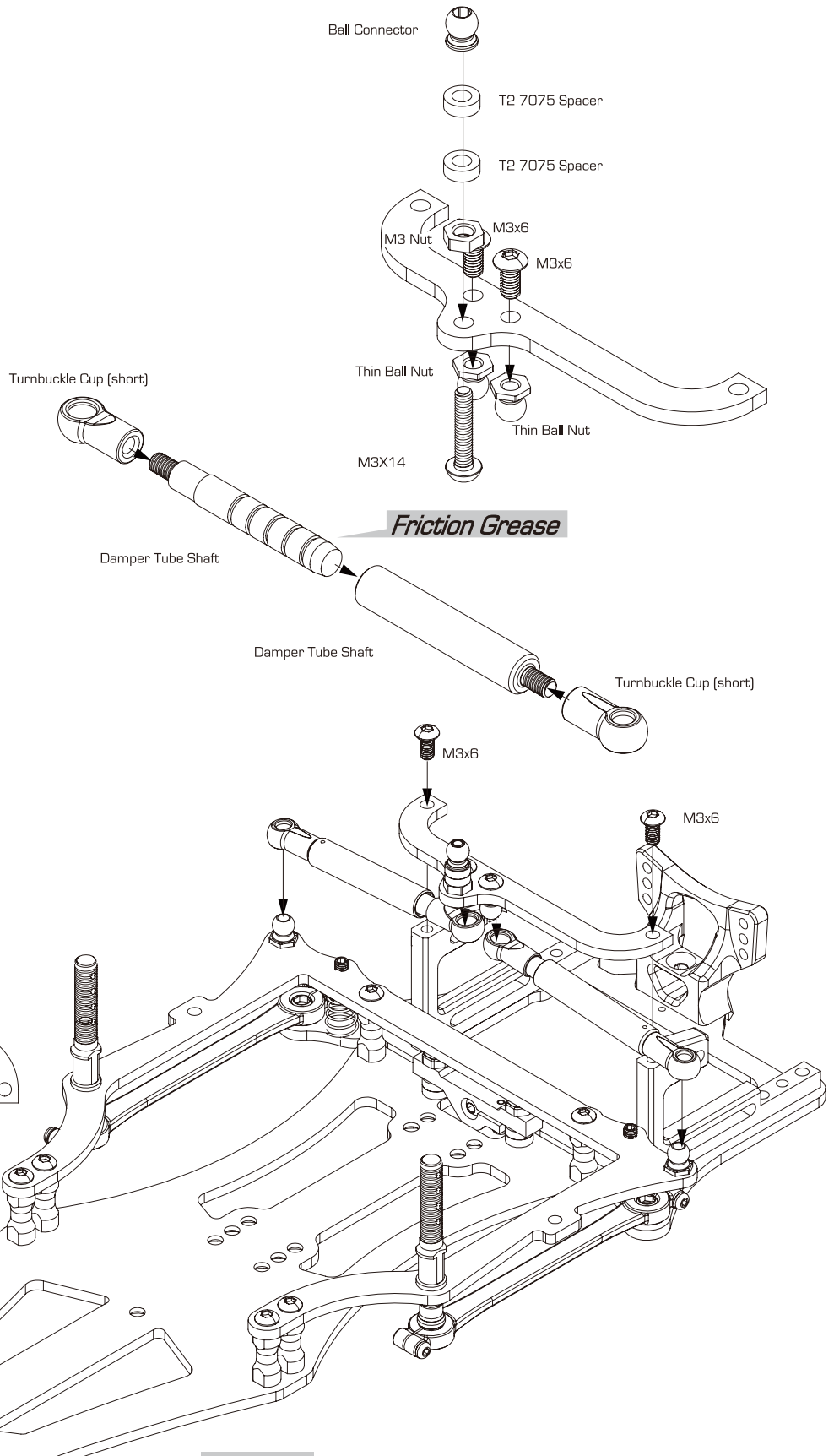
M3 Nut C-02-SC-FN03 X1



Turnbuckle Cup (short) A-03-VBC-5021 X4



FX18 Upper Pod 51590 X1

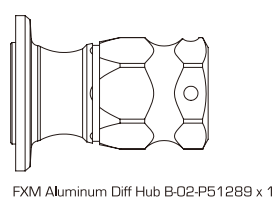
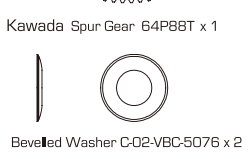
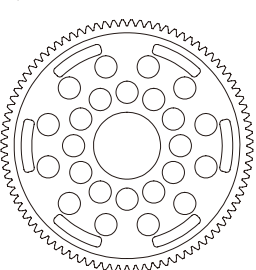
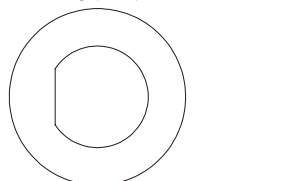
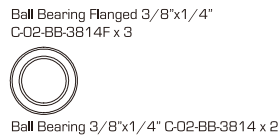
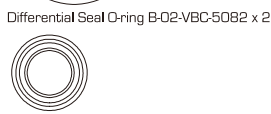


# BAG MARKED **STEP 4**



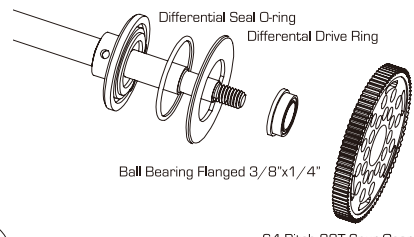
## **4**

### Ball Differential Assembly



© VBC Racing LIGHTNING FX18

Aluminium 7075 Hard Axle for Formula 51642



64 Pitch 88T Spur Gear

Differential Drive Ring

Differential Seal O-ring

Ball Bearing 3/8"x1/4"



Bevelled Washers  
Note: The Direction Of Washers

5x7x0.3 Spacer

Ball Bearing 5 x 11mm

Ball Bearing 3/8"x1/4"

M4 Lock Nut

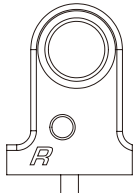
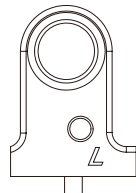
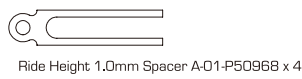
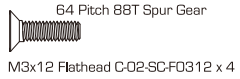
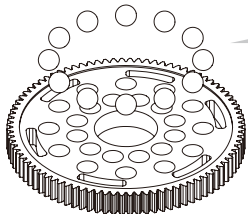
Bevelled Washers

Thrust Washer

Aluminium 7075 Hard Axle for Formula 51642

1/8" Differential Balls

Diff Grease



Ball Bearing Flanged 3/8"x1/4"

Carbon Cross Tube A01P50665  
Make Sure the Carbon Cross Tube Is Free From Turning After Assembled

FXM Rear Hub Axle Housing L

Ride Height 1.0mm Spacer A01P50968

FXM Rear Hub Axle Housing R

Ball Bearing Flanged 3/8"x1/4"

M3x12 Flathead

Insert Or Remove Ride Height Spacers to Adjust The Rear Ride Height  
Optional: Ride Height Spacer Set 1.0mm/0.5mm (4 each)  
D-05-VBC-0241

M3x12 Flathead

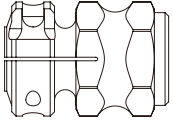
M3x12 Flathead

M3x12 Flathead

BAG MARKED **STEP 4**



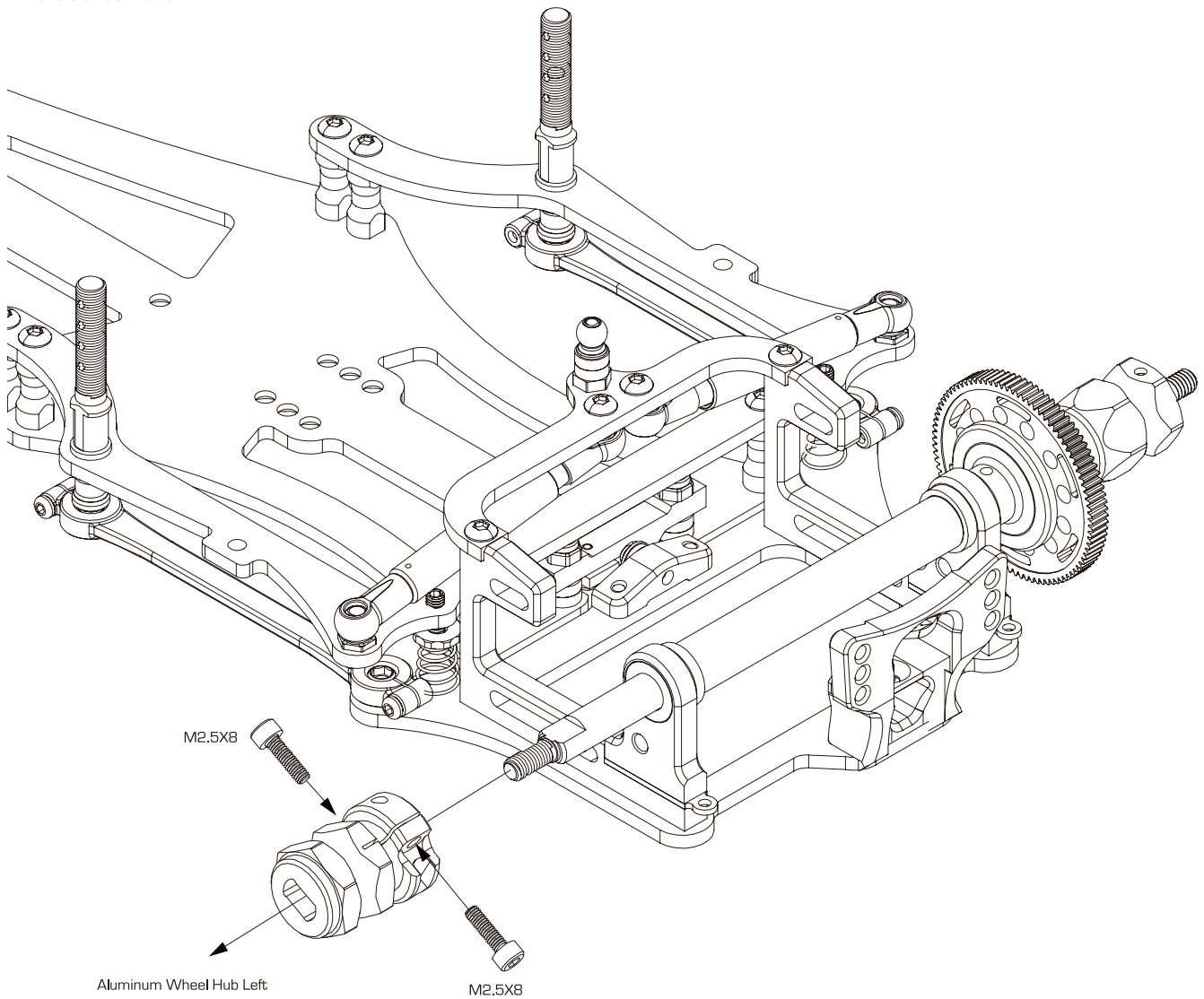
**Rear Ball Differential Assembly**



Aluminum Wheel Hub Left B-02-VBC-5122 X1

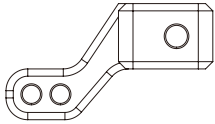


M2.5X8 C-02-SC-R2508 X2



# 5

## Steering Blocks



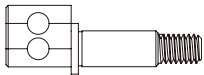
FXM ALU Steering Knuckle B02G51455 X2



4.9mm Ball stud 6mm Thread 31517 X2



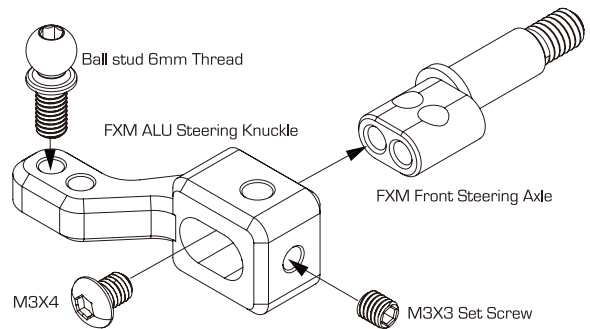
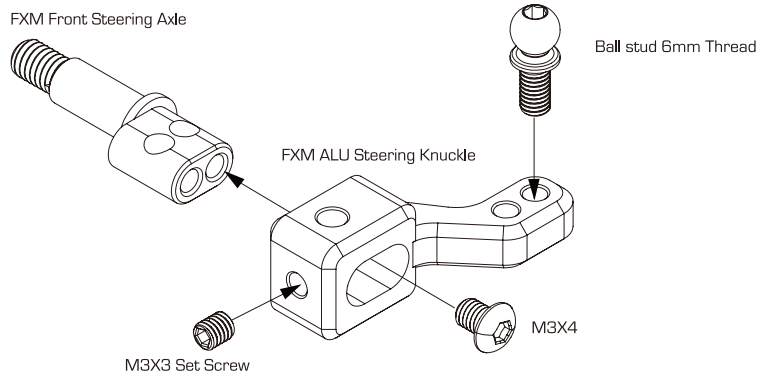
M3X4 Roundhead C-02-SC-R0304 X2



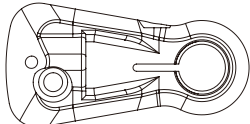
FXM Front Steering Axle C-022-G-51462 X2



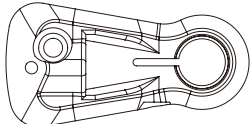
M3x3 Set Screw C-02-SC-SS-0303 X2



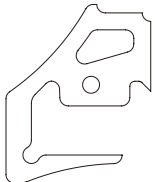
## Front End Assembly



Front Lower Arm Pivot Ball Mount (Right) A-03-VBC-1040 X1



Front lower arm pivot ball mount (Left) A-03-VBC-1039 X1



Steering Limiter V3 A01P51290 X2



M3X8 Flathead Screw C-02-SC-F0308 X2



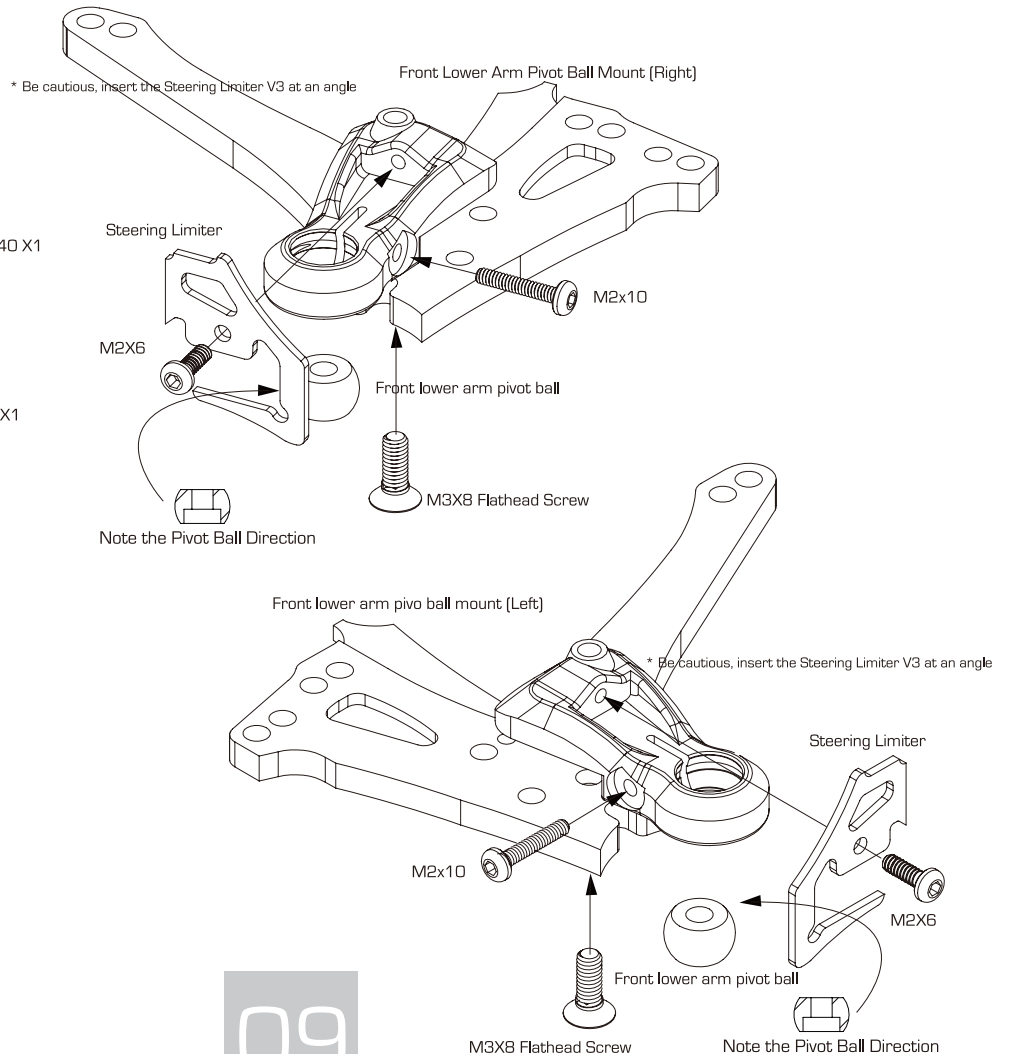
Front lower arm pivot ball A-03-VBC-1022 X2



M2X6 Roundhead C-02-SC-R-0206 X2



M2x10 Roundhead C-02-SC-R2010 X2





# BAG MARKED **STEP 5**



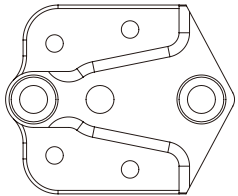
## Front End Assembly



Flash04 Front Ride Height  
1.5mm Adjustment Spacer D-05-VBC-1018 X2



M3x8 Roundhead C-02-SC-R0308 X6



Lower Arm Support A-03-VBC-1033 X1



LightningF V2 lower arm support mount B02P50607 X2



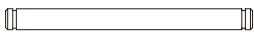
M3X6 Flathead C-02-SC-F0306 X4



Suspension Arm Composite Spacer T1 A-030VBC-0051 X4



Suspension Arm Composite Spacer T2 A-03-VBC-0052 X4



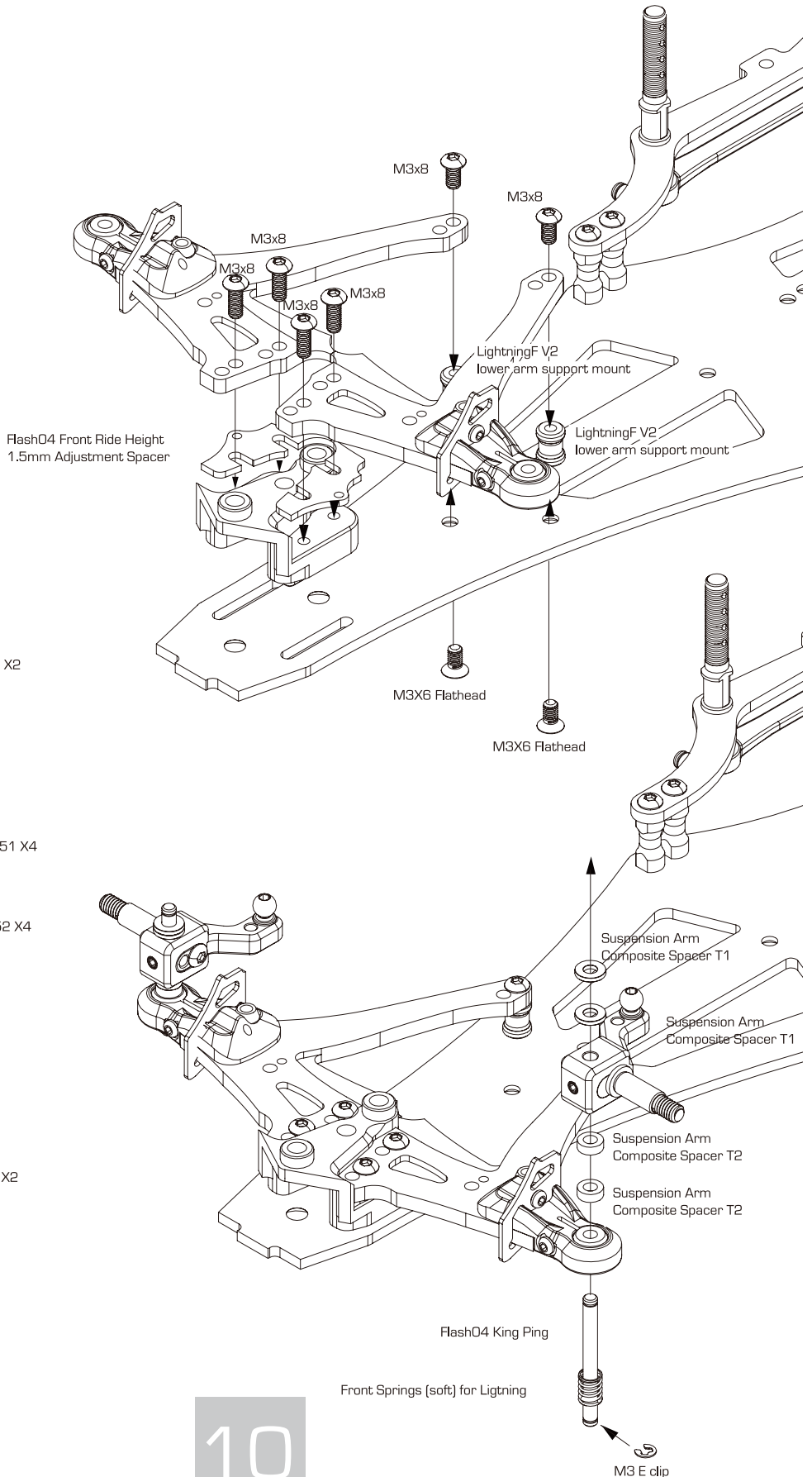
Flash04 King Ping B-02-VBC-1004 X2



M3 E clip B-02-VBC-0044 X2



Front Springs [soft] for Lightning 1-12 C-02-VBC-5041 X2



# BAG MARKED **STEP 6**

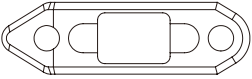


## 6

### Installing Front Caster Mount



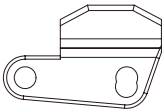
M3x8 Roundhead C-02-SC-R0308 x 4



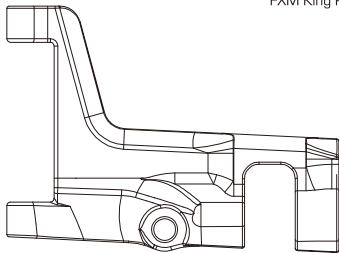
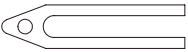
Lightning F Active Caster Mount Base B-02-P50784 x 1



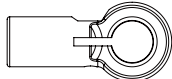
Lightning F Active Caster Mount B-02-P50785 x 2



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



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



Ball Connect for Pivot 31480 x 2



FXM King Pin Upper Ball B-02-P51286 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



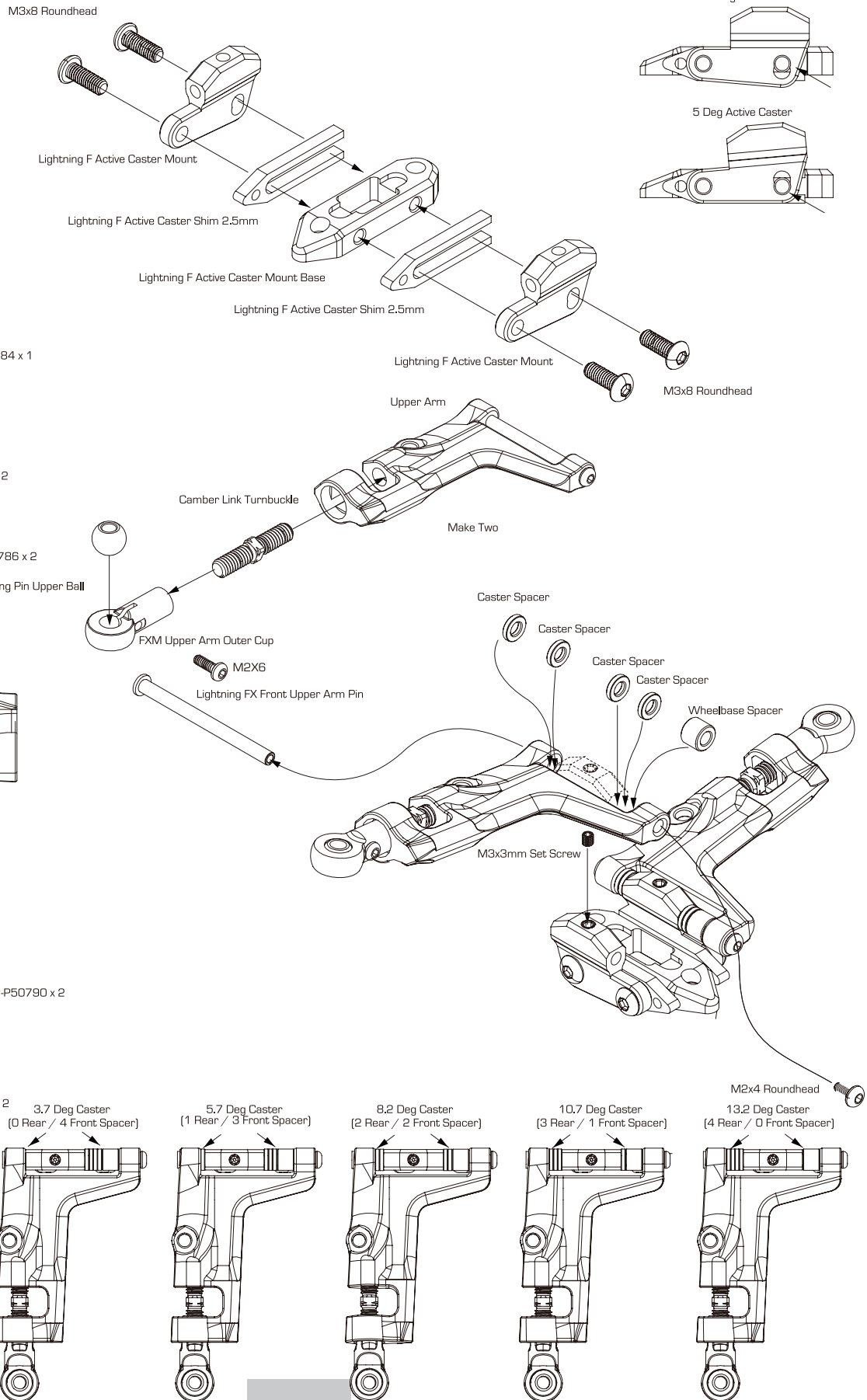
M2x4 Roundhead Screw C-02-SC-R0204 x 2



M2x6 Roundhead C-02-SC-R-0206 X2



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



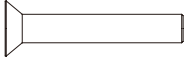


# BAG MARKED **STEP 6-7**



## 6

### Installing Front Upper Arm



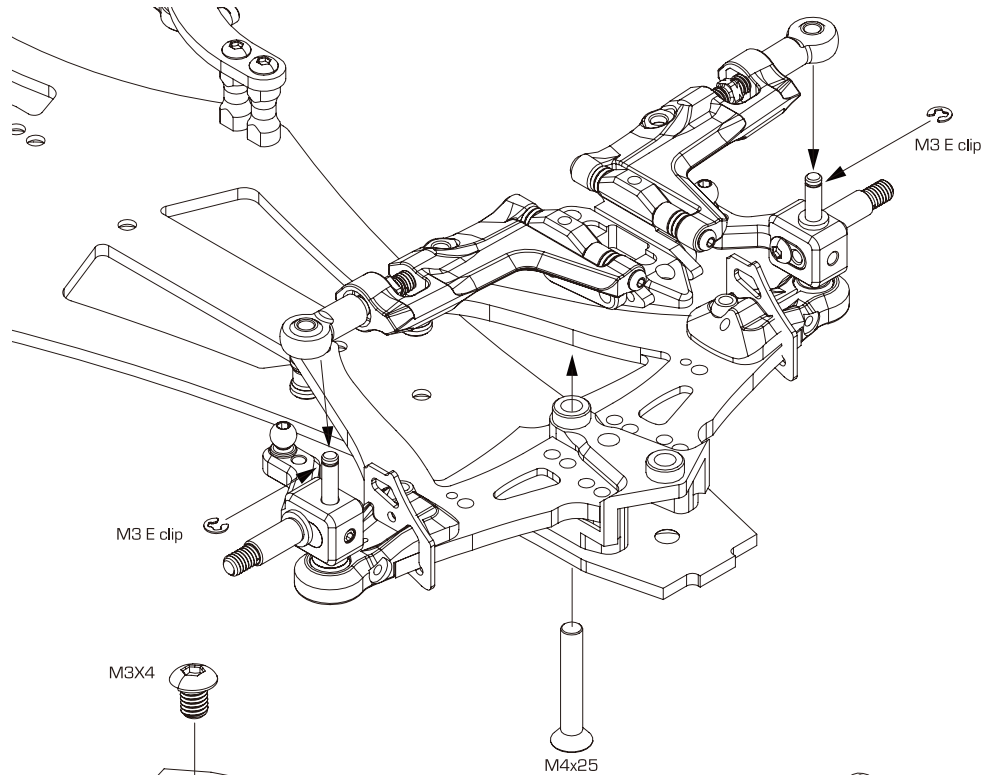
M4x25 Flathead C-02-SC-F0425 X1



M3 E clip B-02-VBC-0044 X2

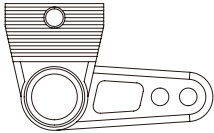


M3x3 Set Screw C-02-SC-SS-0303 X2



## 7

### Installing Steering System



LightningF V2 Steering Arm  
\_A B02P50609\_R2 X1



LightningF V2 Steering Arm  
\_B B02P50782 X1



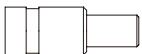
M3X4 Roundhead C-02-SC-R0304 X2



4.9mm Ball Connector 6mm Long 31517 X3



5x8x2.5 bearing C-02-BB-D0805 X2



FX18 Steering Post B02P51645 X1

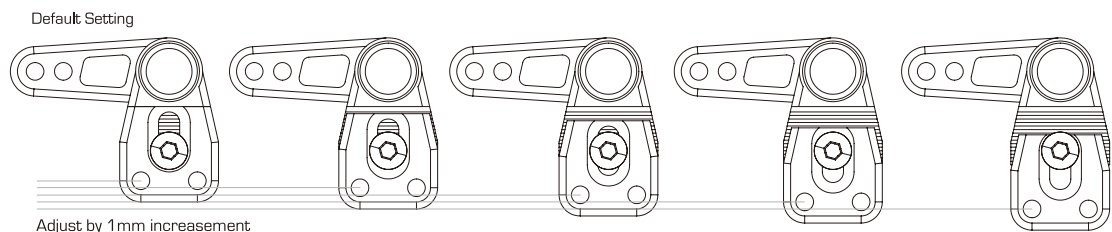
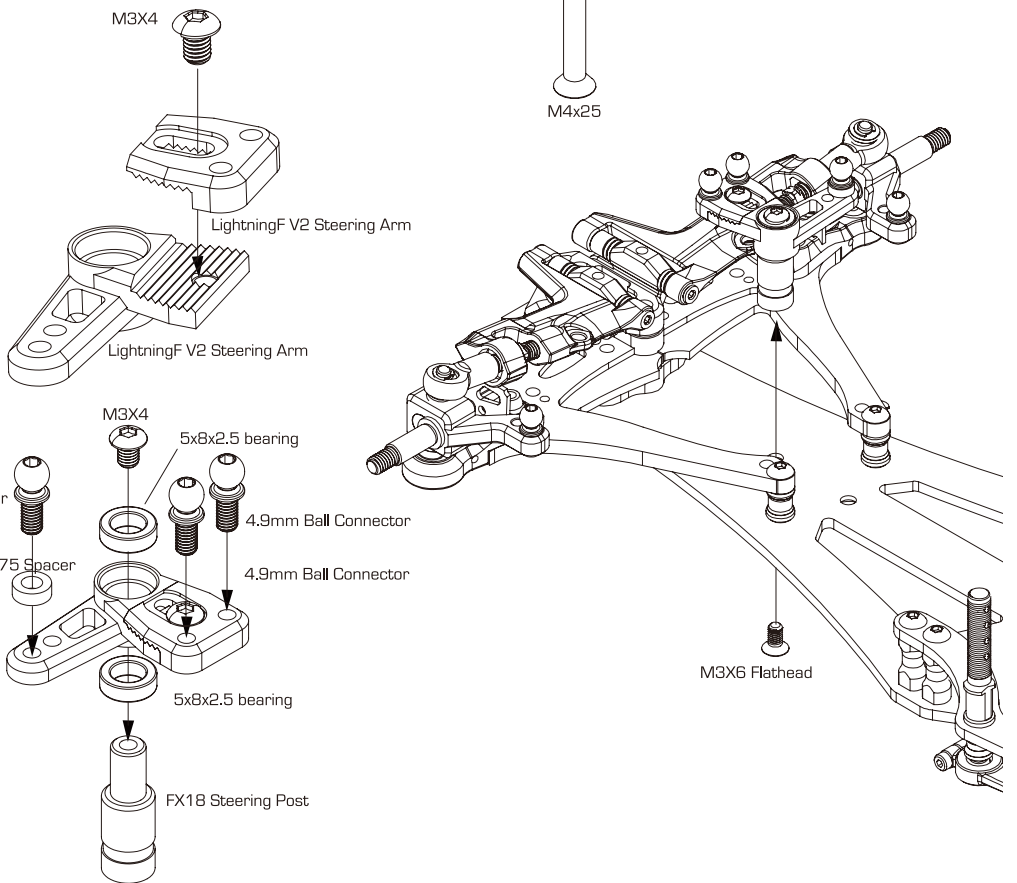


M3X6 Flathead C-02-SC-F0306 X1



T2 7075 Spacer B-02-P30890 X1

© VBC Racing LIGHTNING FX18



# BAG MARKED STEP 7



# 7

## Installing Steering Linkage



3x6x0.5 mm Steel Spacer B-02-VBC-5093 X4



4.9mm Ball Connector 6mm Long 31517 X1



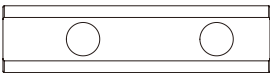
M3x6 Roundhead C-02-SC-R306 X9



M3x6 Flathead C-02-SC-F0306 X1



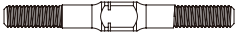
21mm Aluminum Post B02P51644 X1



Alum Servo Mount for Low Profile Servo B02P51643 X2



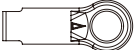
Servo horn Type F A-03-VBC-0054 X1



32mm Turnbuckle B-02-VBC-5102 X2



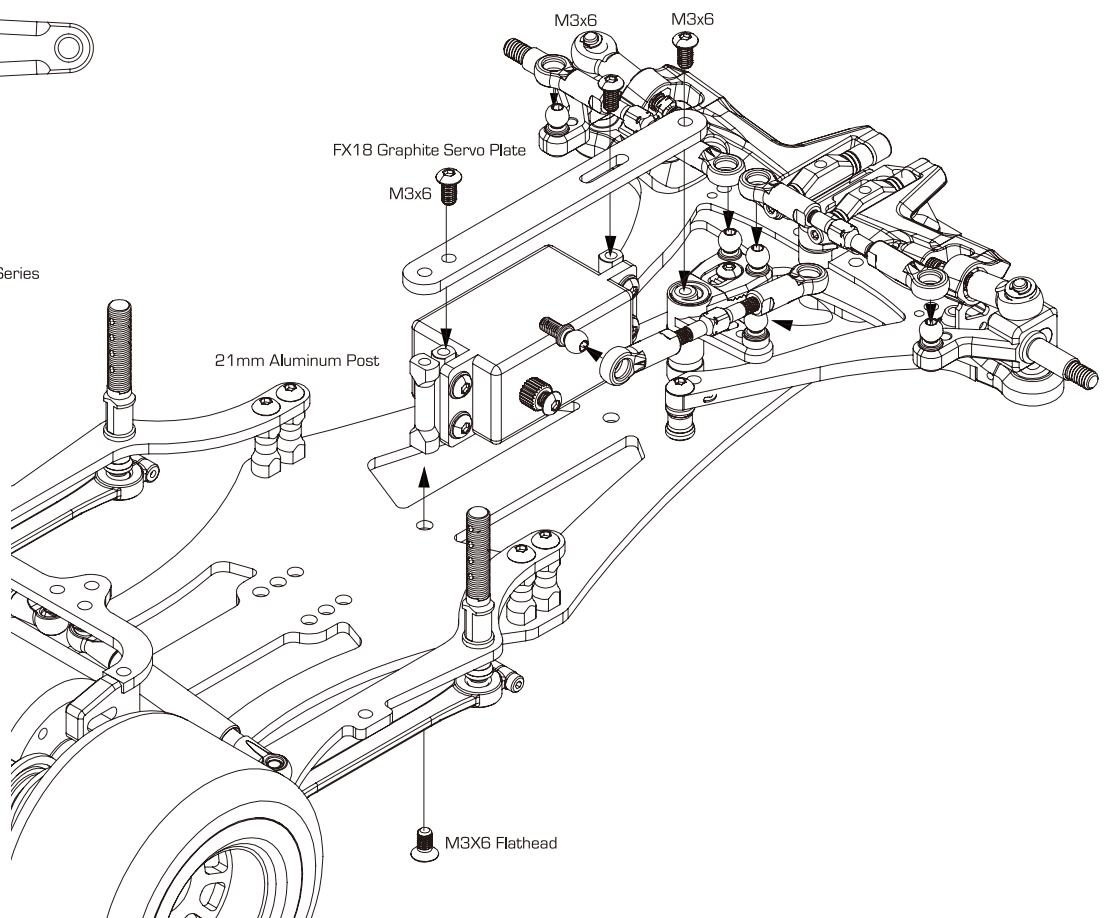
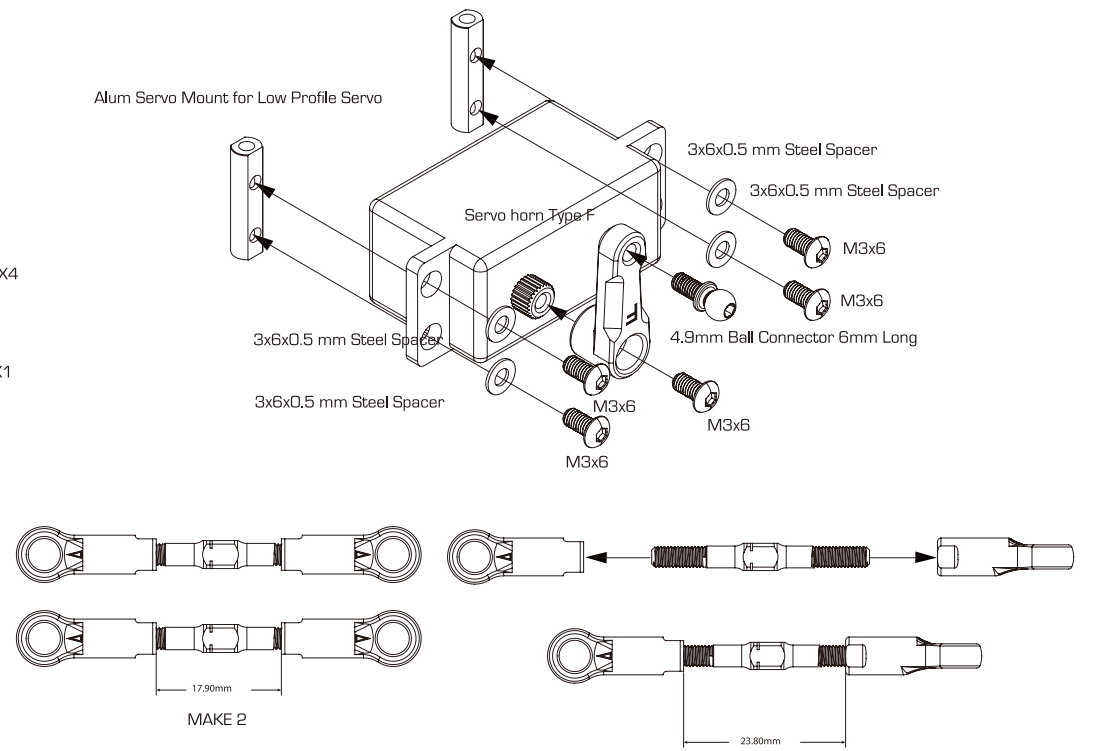
42mm Turnbuckle BK Lightning\_Assoc.R5 Series B-02-VBC-5014 X1



Ball Connector (Long) 31478 X6



FX18 Graphite Servo Plate 51588 X1

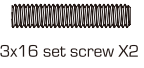


# BAG MARKED **STEP 8**



## 8

### Install Battery



3x16 set screw X2



Ball Connector B-02-VBC-0045 X1



Battery Tap 31594 X2



M3x6 Roundhead C-02-SC-R306 X2



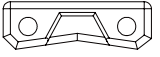
M3x8 Roundhead C-02-SC-R0308 X2



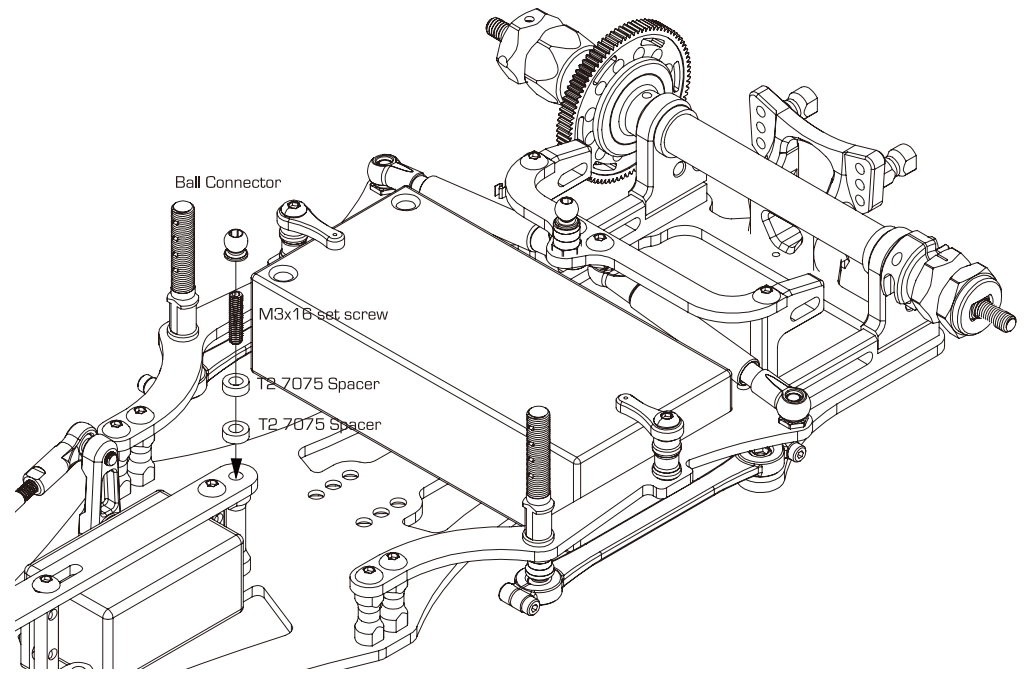
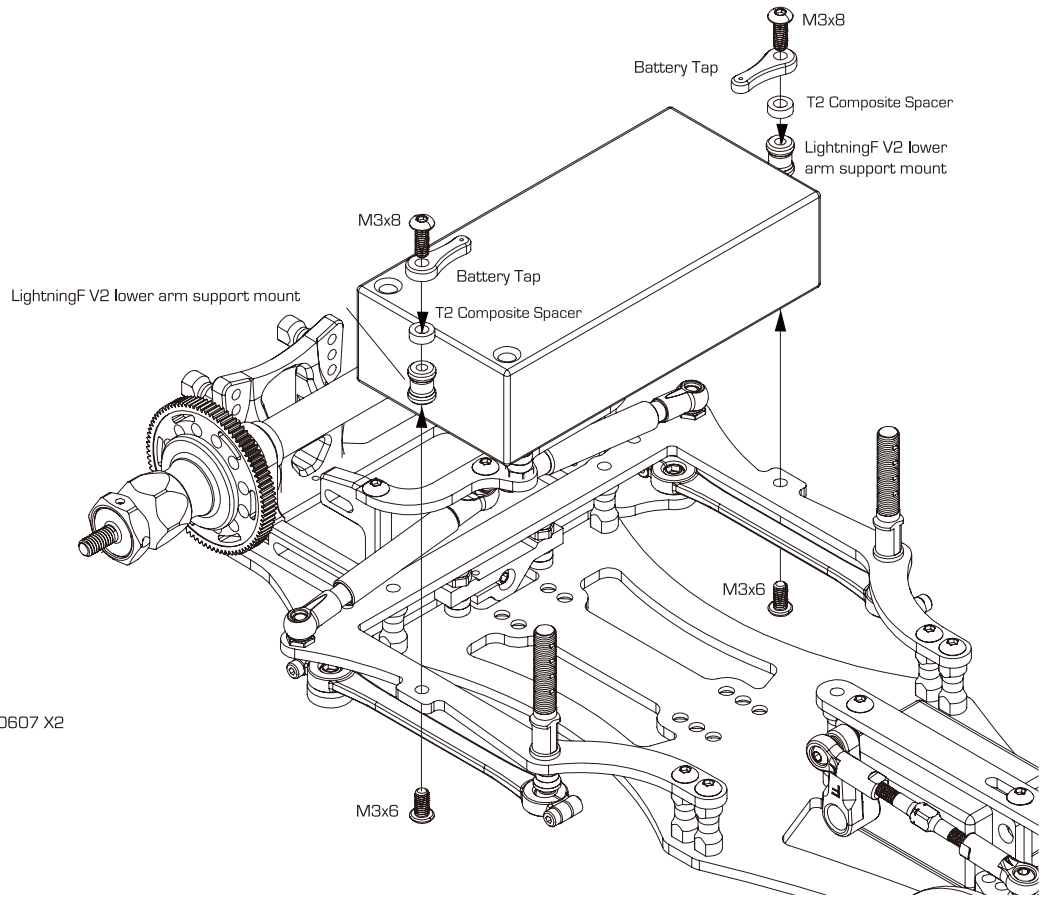
LightningF V2 lower arm support mount B02P50607 X2



T2 Composite Spacer A-03-VBC-0052 X6



Firebolt Center Battery Stopper A-03-VBC-6074 X2

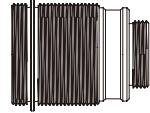


# BAG MARKED **STEP 9**

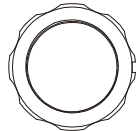


# 9

## Shock Assembly



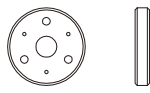
TBBS-P Shock Body(Black) 31470 x 1



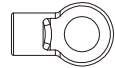
TBB Shock Height Adjuster(Black) 31636 x 1



TBB Bottom Cap(Black) 31637 x 1



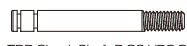
TBB Shock Piston (3 holes) A-03-VBC-0123 x 1



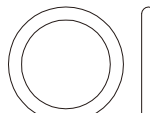
TBB Shock Bottom Connector A-03-VBC-0124 x 1



TBB Shaft Cap B-03-VBC-0125 x 1



TBB Shock Shaft B-03-VBC-0127 x 1



Sealer O-Ring (Shock Height Adjuster) B-03-VBC-0128 x 1

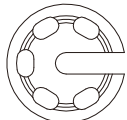


Shaft Sealer O-Ring B-03-VBC-0012 x 1



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

Shock Extender B02P31617 X1



TBB Spring Bottom Support A-03-VBC-0131 x 1

TBBS TS3.0 (Short/Silver) 31614 x 1

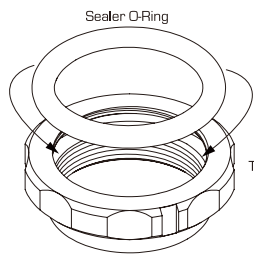


TBB Oil Sealer Cap (Medium Soft) B-03-VBC-0132 x 1



TBB Shock Body Cap(Black) 31638 x 1

TBB Shock Top Connector A-03-VBC-0130 x 1



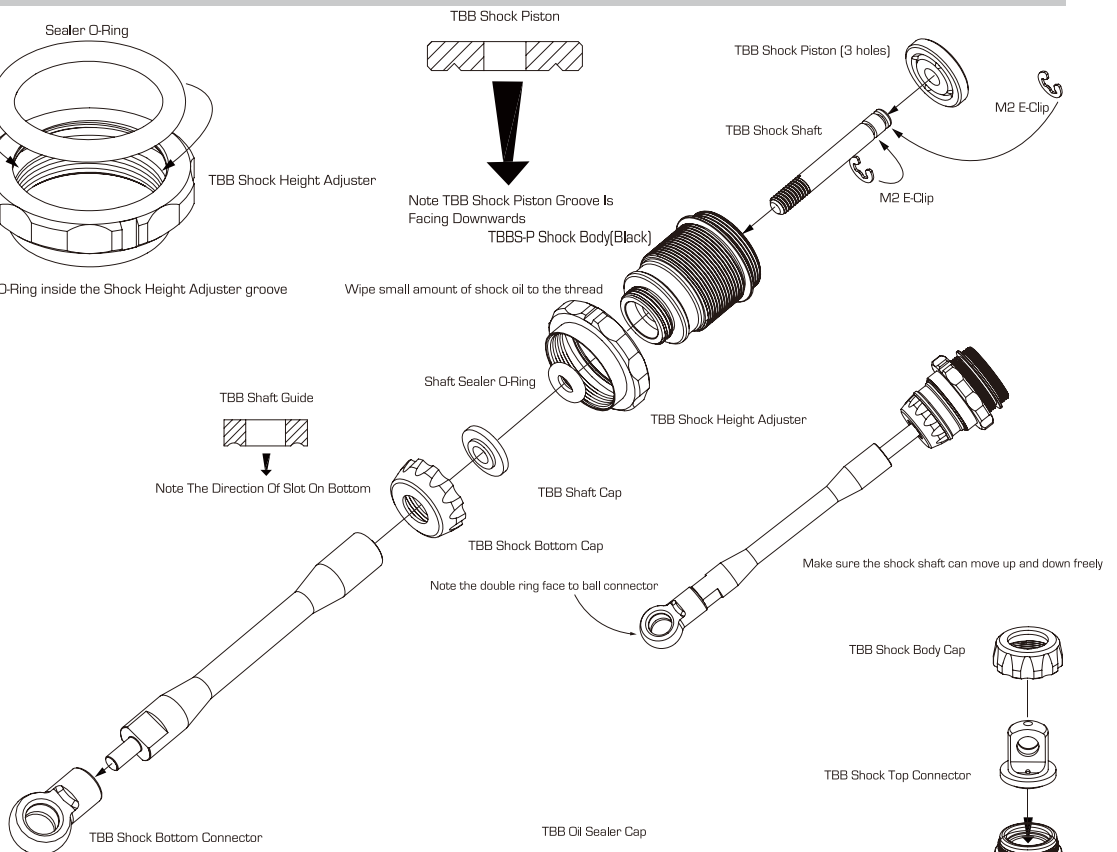
Insert Sealer O-Ring inside the Shock Height Adjuster groove



Note The Direction Of Slot On Bottom



Note TBB Shock Piston Groove Is Facing Downwards



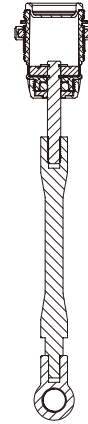
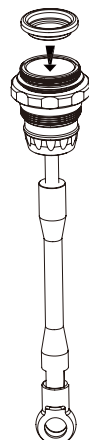
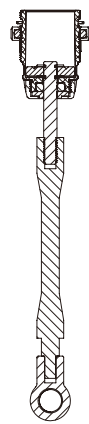
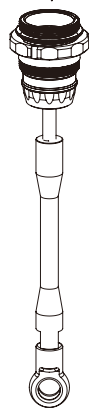
Wipe small amount of shock oil to the thread

Note the double ring face to ball connector

Make sure the shock shaft can move up and down freely

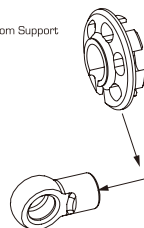
Fill supplied shock oil and remove air by moving the piston up and down until air bubbles disappears

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



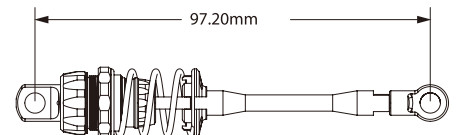
Note the double ring face to ball connector

TBB Spring Bottom Support



Shock Spring Orange (For Front)  
Shock Spring Red (For Rear)

VBC Racing TBB Shock Springs:  
TBB Shock Spring (Green - Soft) B-02-VBC-0136  
TBB Shock Spring (Red - Med. Soft) B-02-VBC-0134  
TBB Shock Spring (Orange - Med. Hard) B-02-VBC-0135  
TBB Shock Spring (White - Hard) B-02-VBC-0137

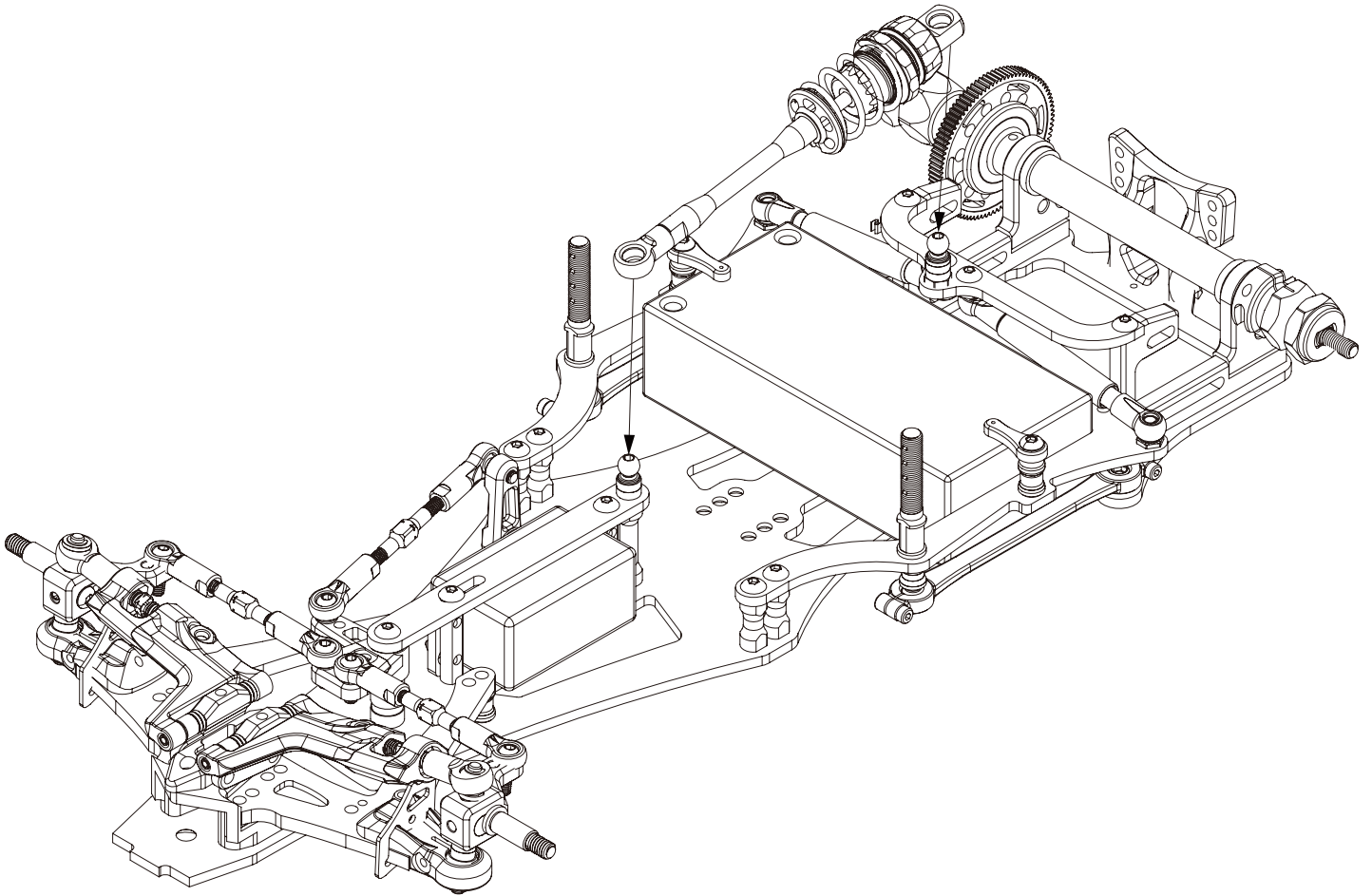


Make sure both shocks are the same length  
Note the double ring face to ball connector

BAG MARKED **STEP 9**



*Installing Shock to Chassis*



# 10

## Wheels and Antenna Holder Assembly



5x7x0.5mm spacer B-02-VBC-0019-575 X2



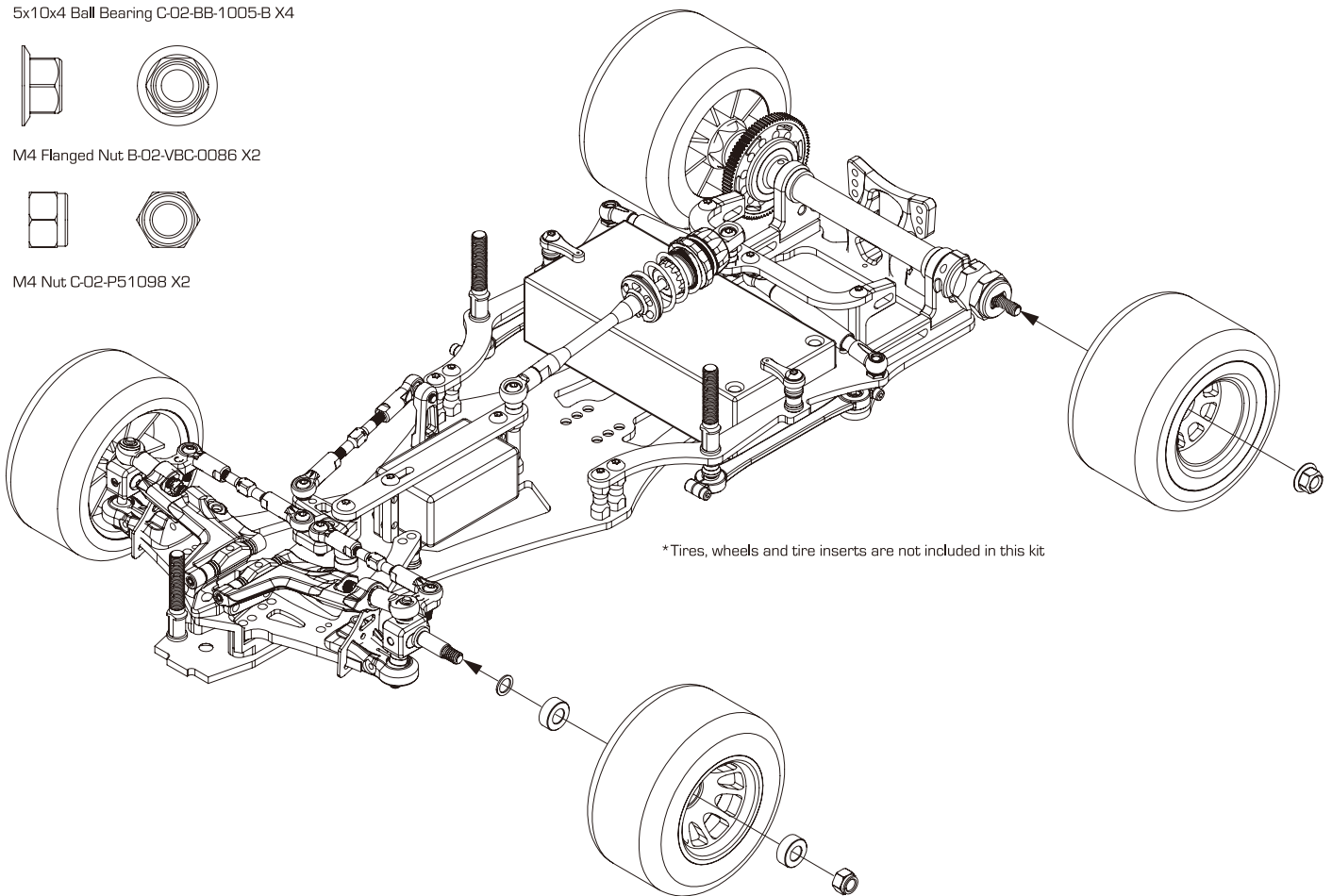
5x10x4 Ball Bearing C-02-BB-1005-B X4



M4 Flanged Nut B-02-VBC-0086 X2



M4 Nut C-02-P51098 X2





# BAG MARKED **STEP 10**



## Front and Rear Wings Assembly



3x6x0.5mm Steel Spacer B-02-VBC-5093 X2



M3X14 Roundhead Screw C-02-SC-R0314 X1



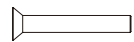
M3x8 Roundhead Screw C-02-SC-R0308 X2



M3X16 Roundhead Screw C-02-SC-R0316 X2



Body Post A-03-VBC-5010 X1



M4x28 Flathead C-02-SC-F0428 X1



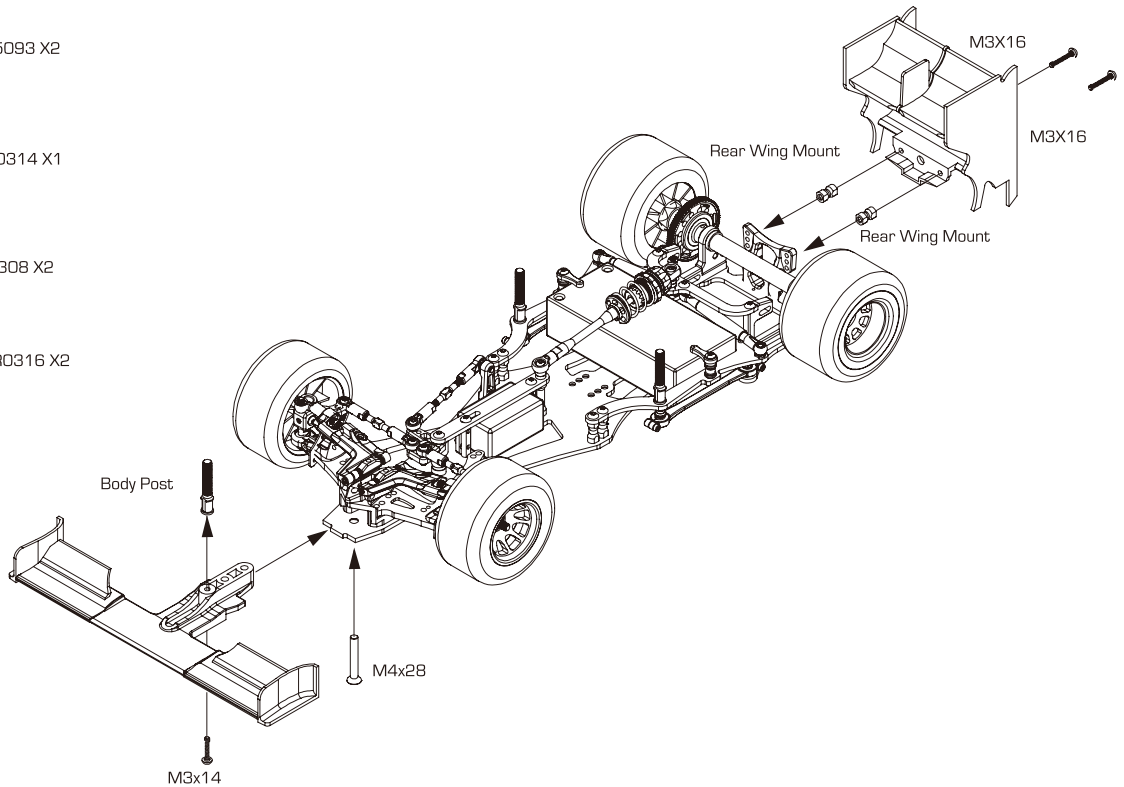
Rear Wing Mount B-02-P51287 X2



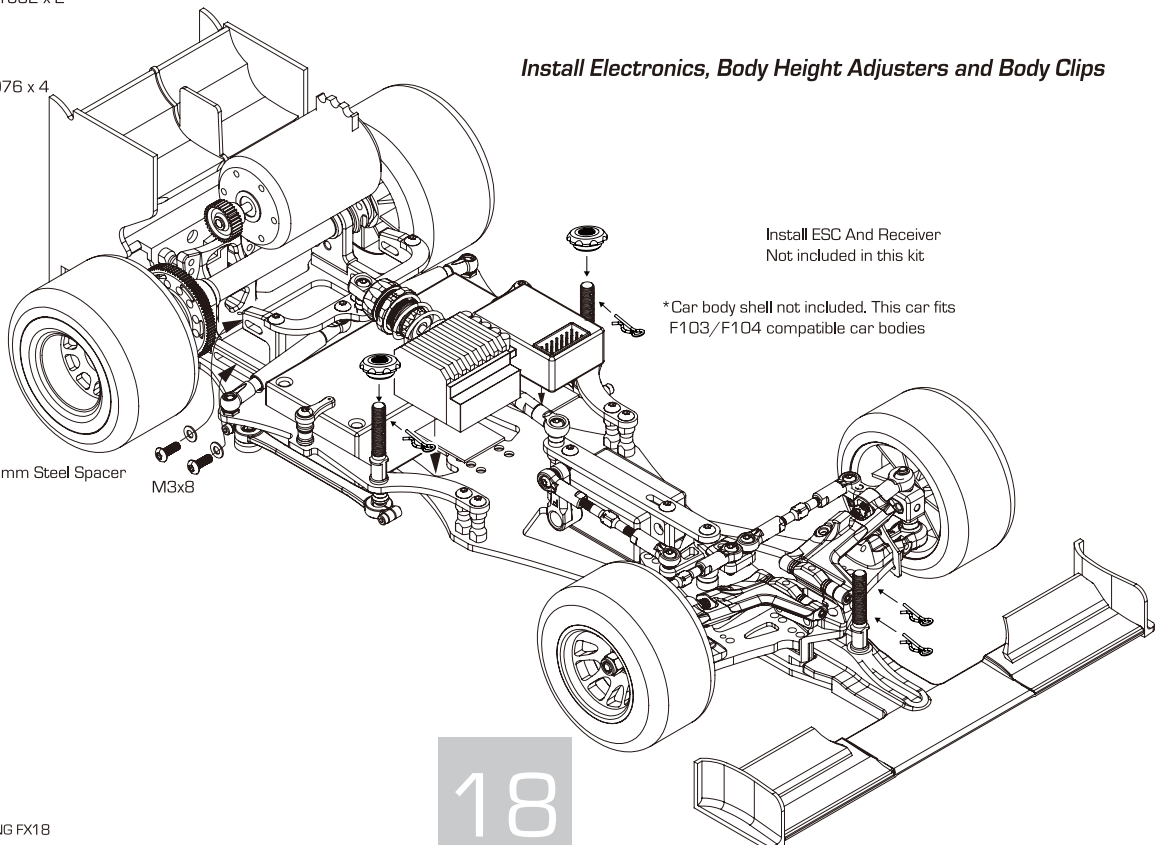
Body Height Adjuster 51582 x 2



Body Clips B-02-VBC-0076 x 4



## Install Electronics, Body Height Adjusters and Body Clips



Install ESC And Receiver  
Not included in this kit

\*Car body shell not included. This car fits  
F103/F104 compatible car bodies

3x6x0.5mm Steel Spacer

M3x8



**1/10 SCALE ELECTRIC COMPETITION FORMULA CAR KIT**



VBC Racing FX18 Lightning Car Kit D-05-VBC-CK32

**COMPETITION GRADE HIGH PERFORMANCE RADIO CONTROL RACING CAR CHASSIS KIT**