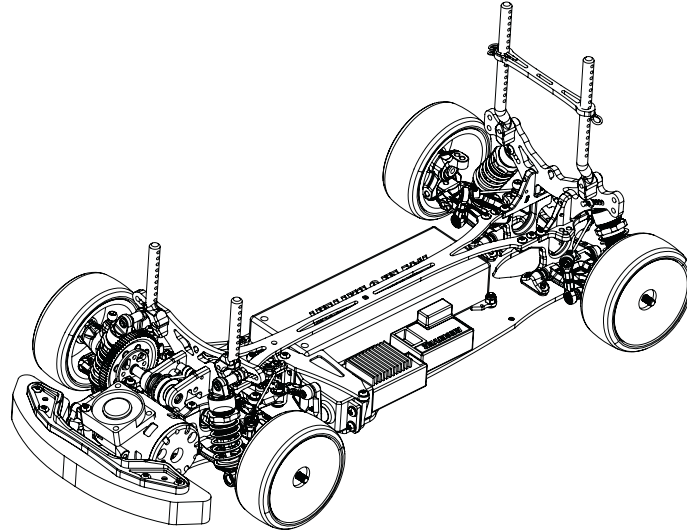


COMPETITION GRADE HIGH PERFORMANCE RADIO CONTROL RACING CAR CHASSIS KIT

F12V12E

DESIGNED IN CO-OPERATION WITH WORLD CHAMPION SURIKARN CHAIDAJ Suriya



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 or visit our web site www.vbcrcracing.com



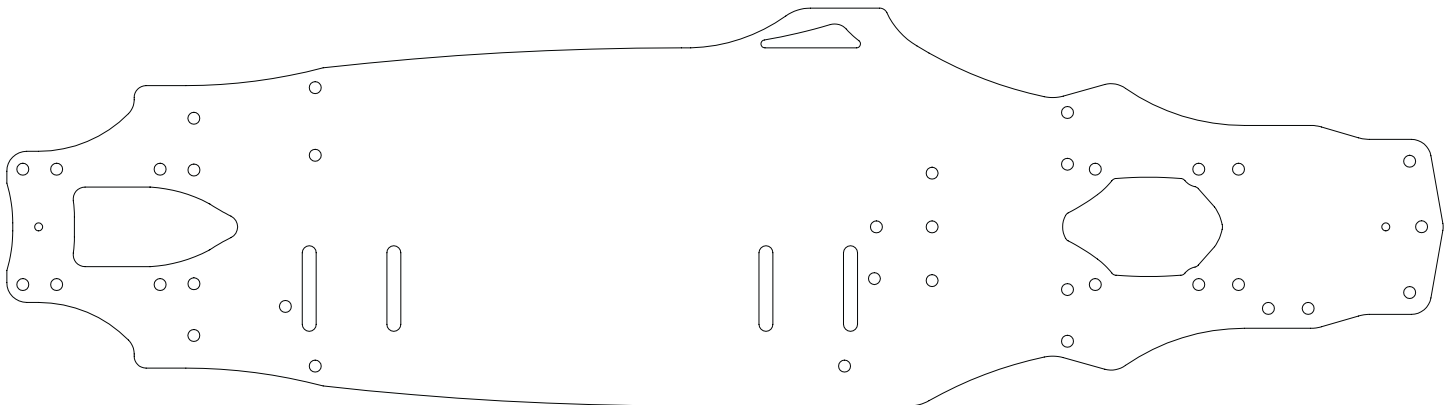
1

Graphite Edges Protection Procedure

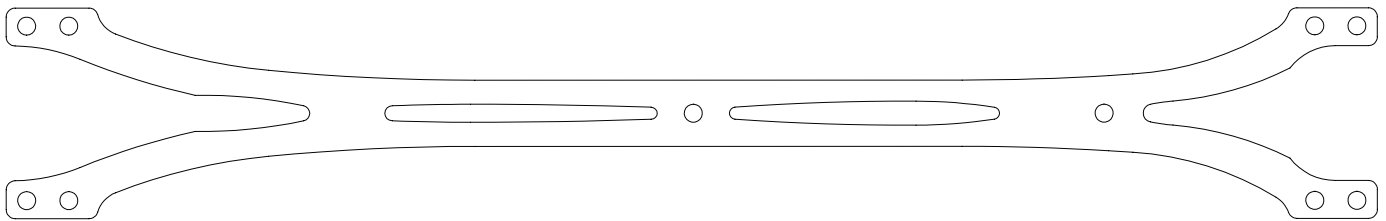


*Not included in this kit

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

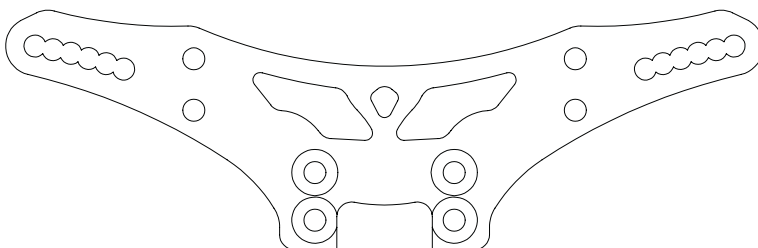


A-01-VBC-2002-25 FFTwelve Graphite Main Chassis

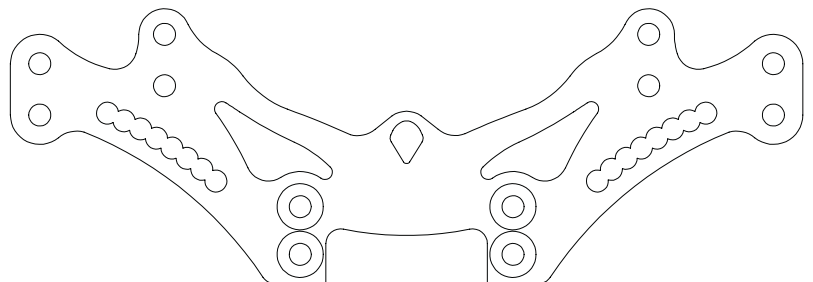


A-01-VBC-2001-20 FFTwelve Upper Deck

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



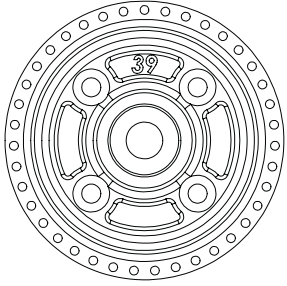
A-01-VBC-2003-35 FFTwelve Graphite Front Shock Tower



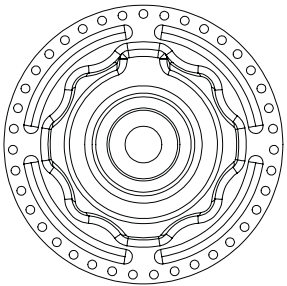
A-01-VBC-2004-35 FFTwelve Graphite Rear Shock Tower

2

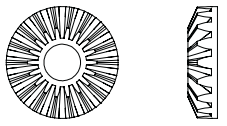
Gear Differential Assembly



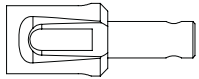
Gear Diff Housing A-03-VBC-2005 x 1



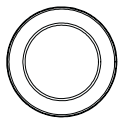
Gear Diff Pulley 39T A-03-VBC-2006 x 1



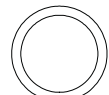
Diff Gear 18T A-03-VBC-0019 x 2



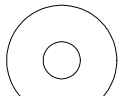
Lightweight Hardened Gear Diff Cup B-02-VBC-0099 x 2



10x15mm Ball Bearing C-02-BB-1510-B x 2



10x13x0.2mm Shim x 4



15x0.3 Shim B-02-VBC-0077 x 2



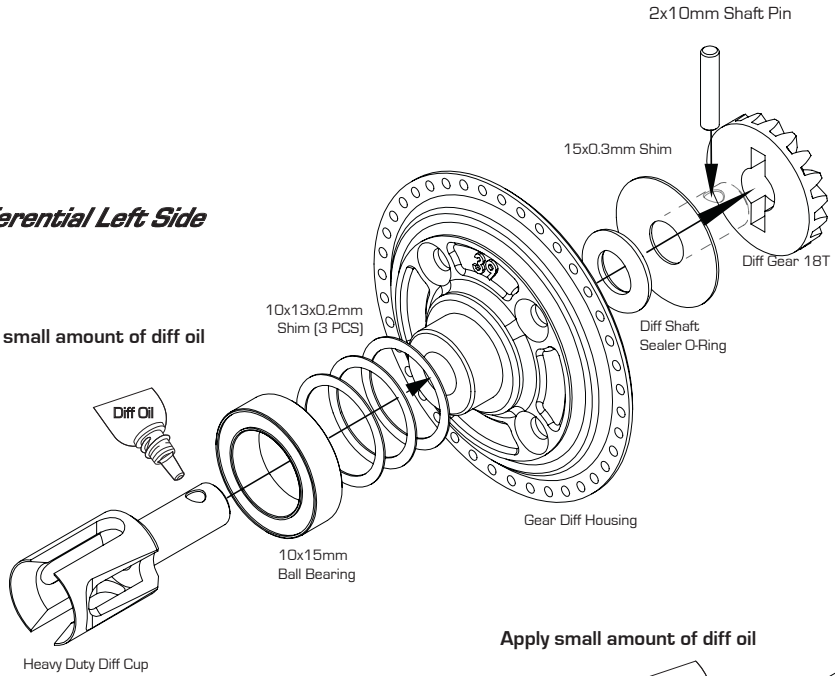
M2x10 Shaft Pin B-02-VBC-0020 x 2



Diff Shaft Sealer O-Ring B-03-VBC-0006 x 2

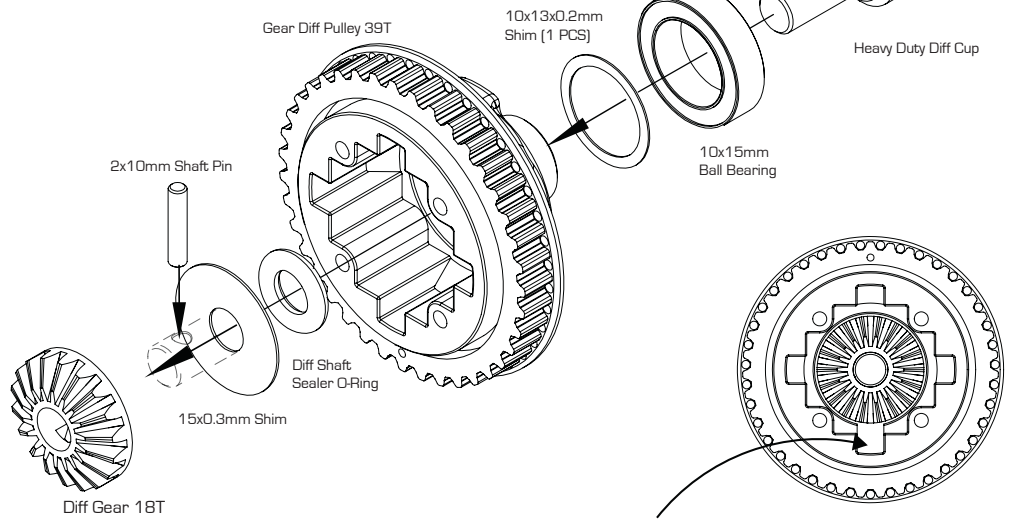
Differential Left Side

Apply small amount of diff oil

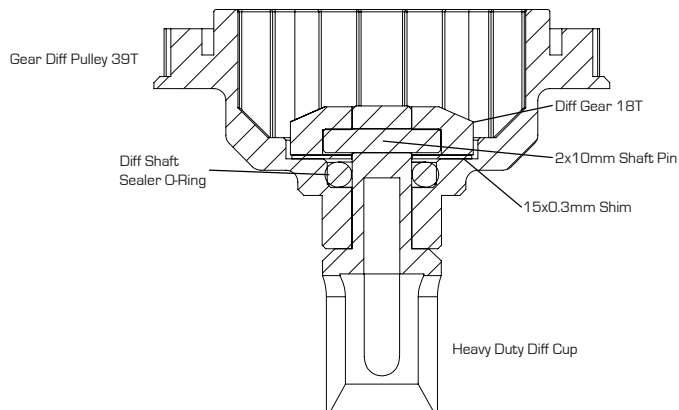


Differential Right Side

Apply small amount of diff oil



NOTICE : Insert 2x10mm Shaft Pin Direction



Differential Left Side Assembly Cross Section

2

Gear Diff Assembly Continue



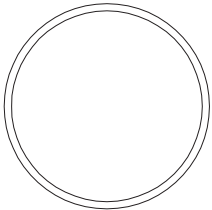
Diff Gear 10T A-03-VBC-0018 x 4



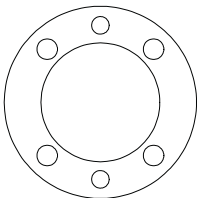
9.5x0.2mm Shim B-02-VBC-0078 x 4



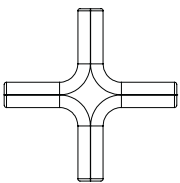
M2.6x10 Flathead Screw C-02-SC-F2.6x10 x 4



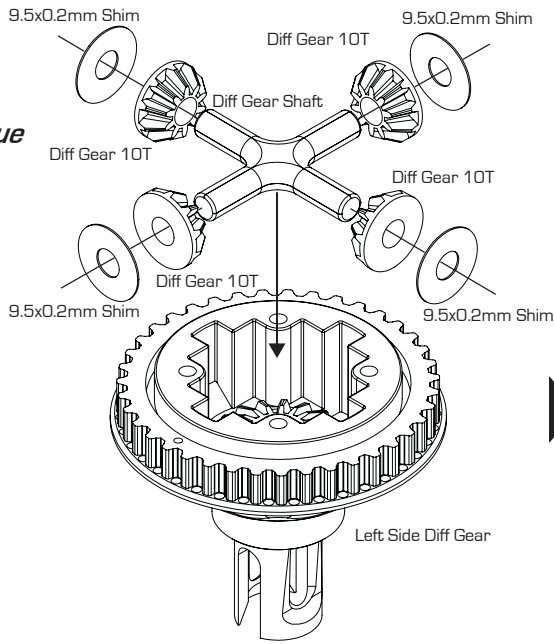
Diff Housing Sealer O-Ring B-03-VBC-0005 x 1



Seal Gasket B-03-VBC-0004 x 1

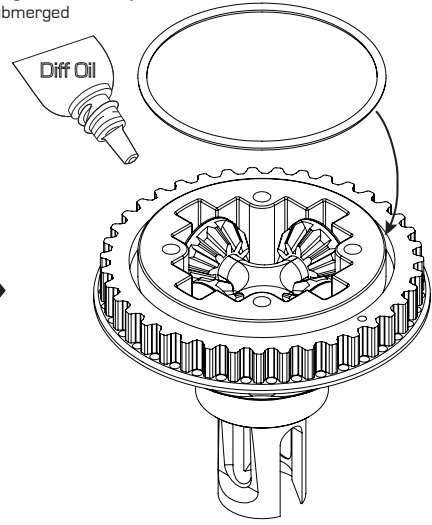


Diff Gear Shaft A-03-VBC-0020 x 1

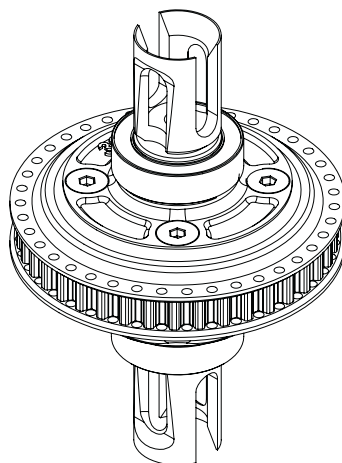


Fill with supplied gear diff oil until the gear diff are fully submerged

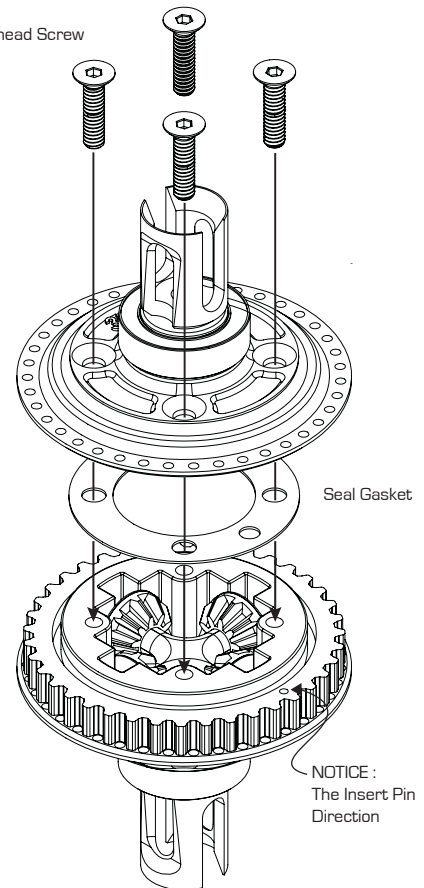
Diff Housing Sealer O-Ring put inside the gap



COMPLETED ASSEMBLY GEAR DIFF



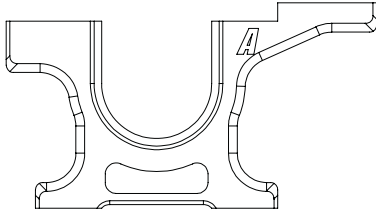
M2.6x10mm Flathead Screw



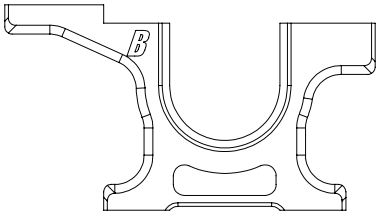
NOTICE :
The Insert Pin
Direction

3

Rear Bulkhead And Center Suspension Mount Assembly



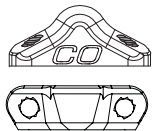
FFTwelve Lower Bulkhead (A) B-02-VBC-2007 x 2



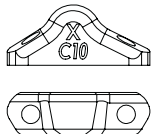
FFTwelve Lower Bulkhead (B) B-02-VBC-2008 x 2



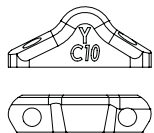
Center Suspension Mount Shim (1mm) x 4
A-01-VBC-0038



Center Suspension Mount x 2
B-02-VBC-0062



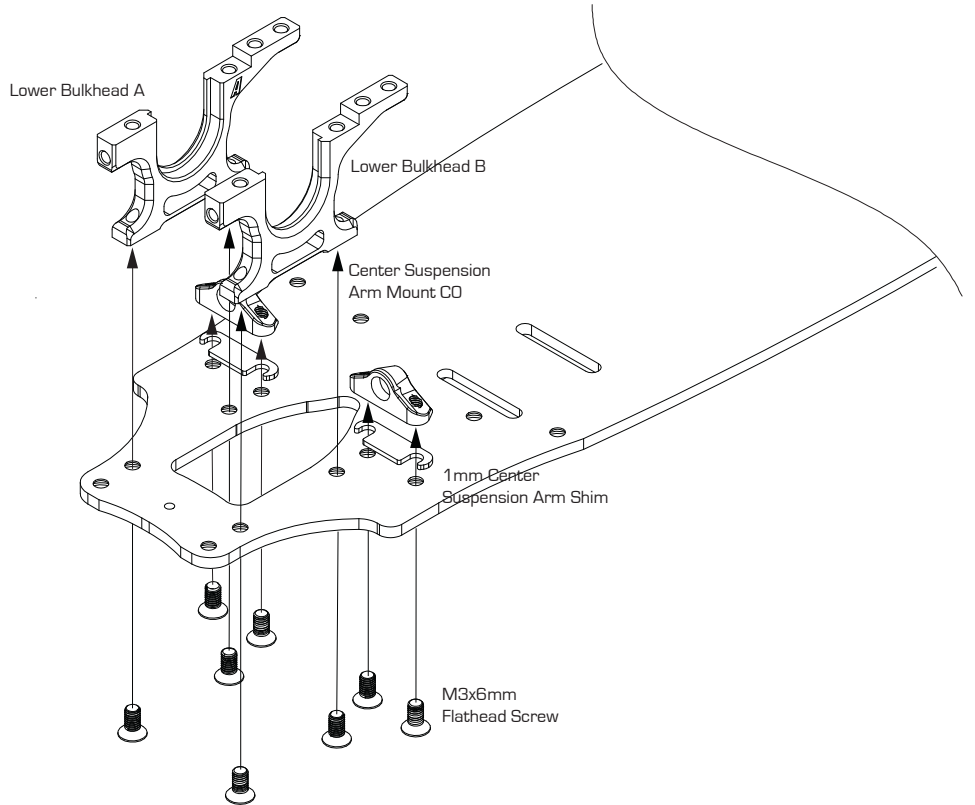
Center Suspension Mount (X-C10) x 1
D-05-VBC-0066



Center Suspension Mount (Y-C10) x 1
D-05-VBC-0066

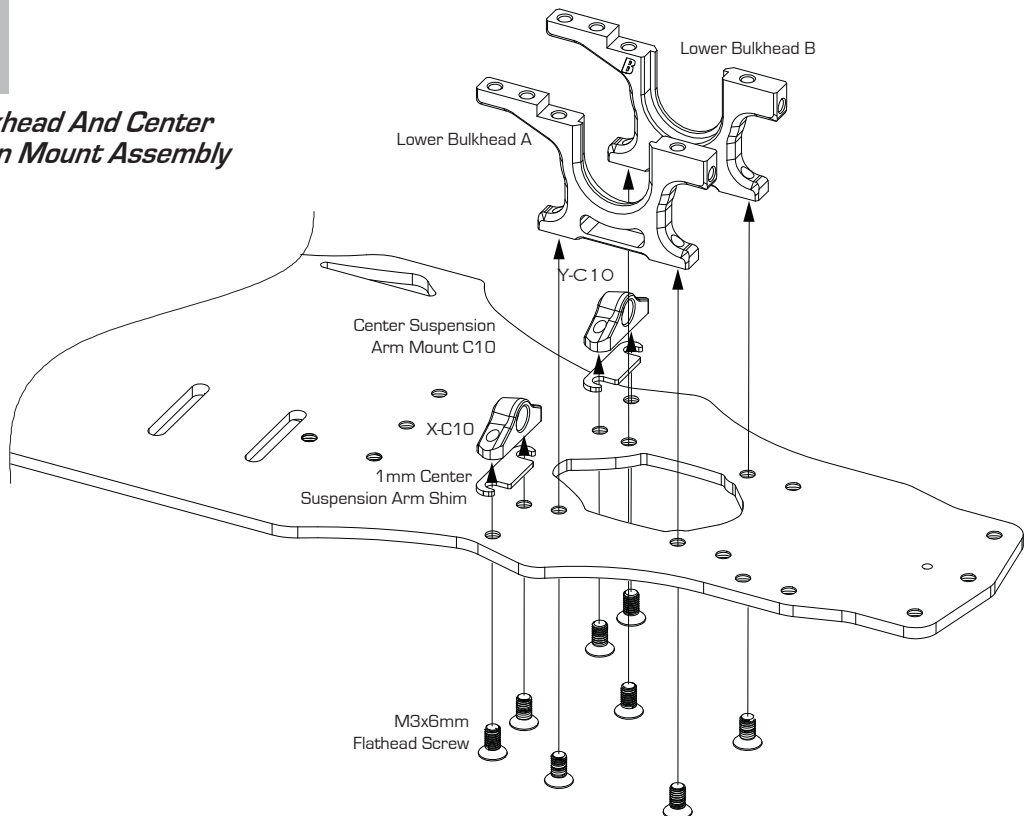


M3x6 Flathead C-02-SC-F0306 x 16



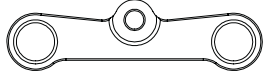
4

Front Bulkhead And Center Suspension Mount Assembly

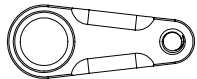


5

Steering System Assembly



Steering Assembly Travel Plate B-02-VBC-2009 x 1



Steering Travel Arm B-02-VBC-0053 x 2



Steering Assembly Pole B-02-VBC-2010 x 2



Ball Connector B-02-VBC-0045 x 3



Steering Cone Washer B-02-VBC-0089 x 2



T2 7075 Spacer B-02-VBC-0019-20 x 2



M3x6 Roundhead C-02-SC-R0306 x 2



M3x10 Set Screw C-02-SC-SS-0310 x 2



M3x6 Set Screw C-02-SC-SS-0306 x 1



M3x42mm Turnbuckle B-02-VBC-0037 x 2



Turnbuckle Cup A-03-VBC-0039 x 4

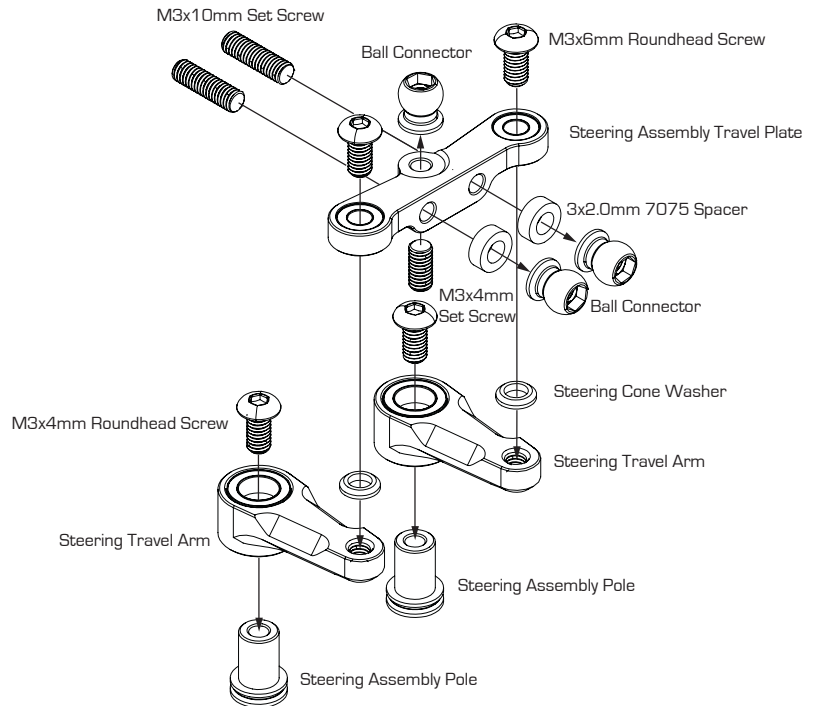


M3x6 Flathead Screw C-02-SC-F0306 x 2



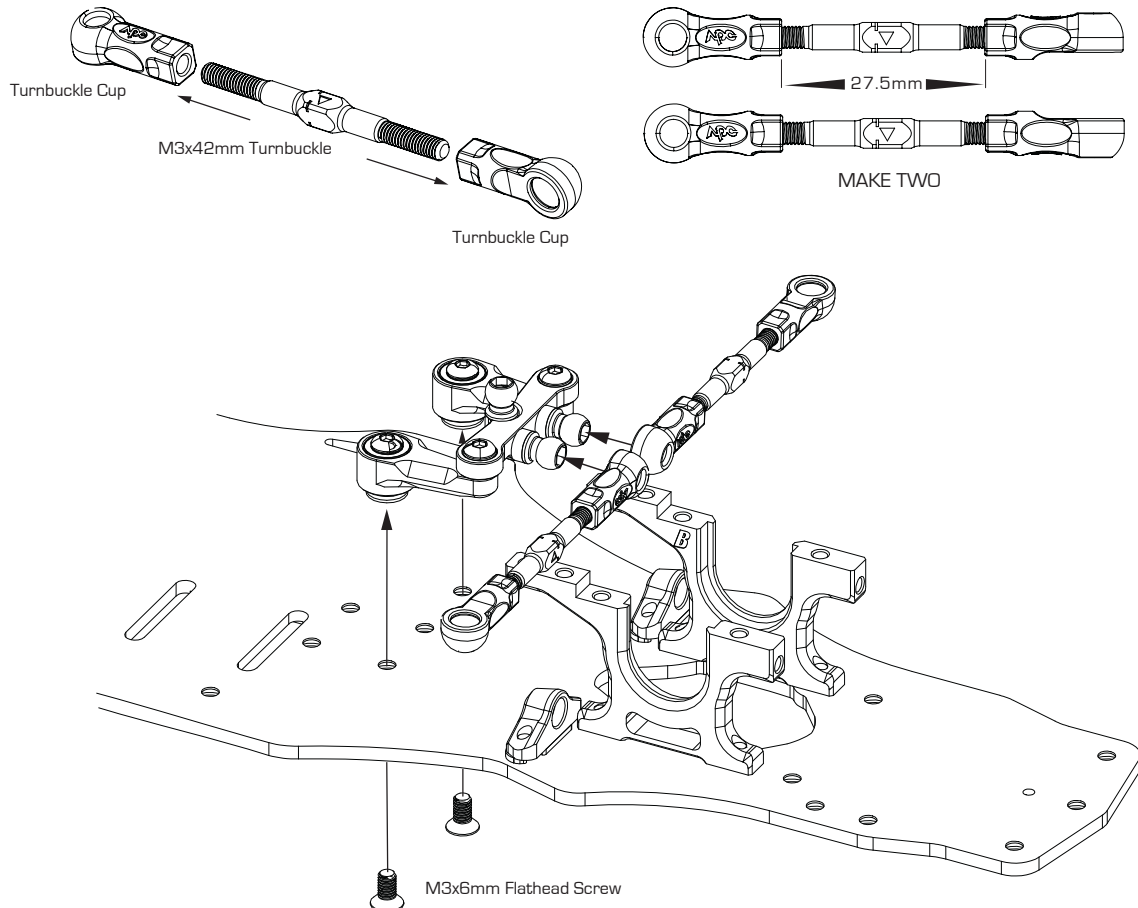
M3x4 Roundhead C-02-SC-R0304 x 2

Steering System Assembly



6

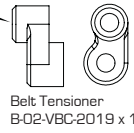
Steering System Assembly



7

Transmission Assembly

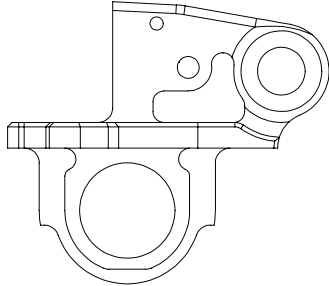
DIRECTION TO INSTALL BALL BEARINGS



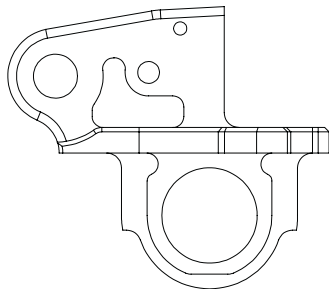
3x6mm Ball Bearing

3x5x0.1mm Shim

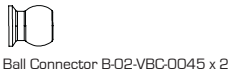
M3x10mm Roundhead Screw



FFTwelve Front Gear Box (A) B-02-VBC-2023 x 1



FFTwelve Front Gear Box (A) B-02-VBC-2024 x 1



Ball Connector B-02-VBC-0045 x 2



M3x10 Set Screw C-02-SC-SS-0310 x 2



3x6x2.5mm Bearing C-02-BB-0603-25 x 2



3x5x0.5mm Shim B-02-VBC-2020 x 1



M3x8 Roundhead C-02-SC-R0308 x 1



5x7x0.5mm Spacer B-02-VBC-2015 x 1



2x8mm Shaft Pin B-02-VBC-2013 x 1



7mm Shaft O-Ring B-03-VBC-2014 x 1



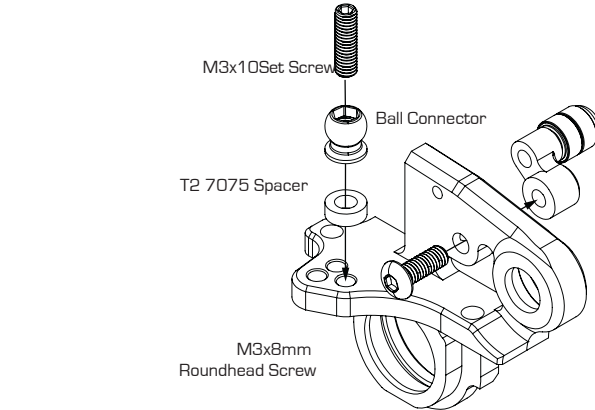
Center Drive Shaft B-02-VBC-2017 x 1



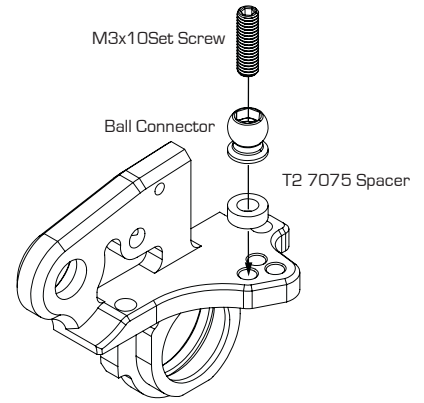
4x10x4mm Bearing C-02-BB-1004-40 x 1



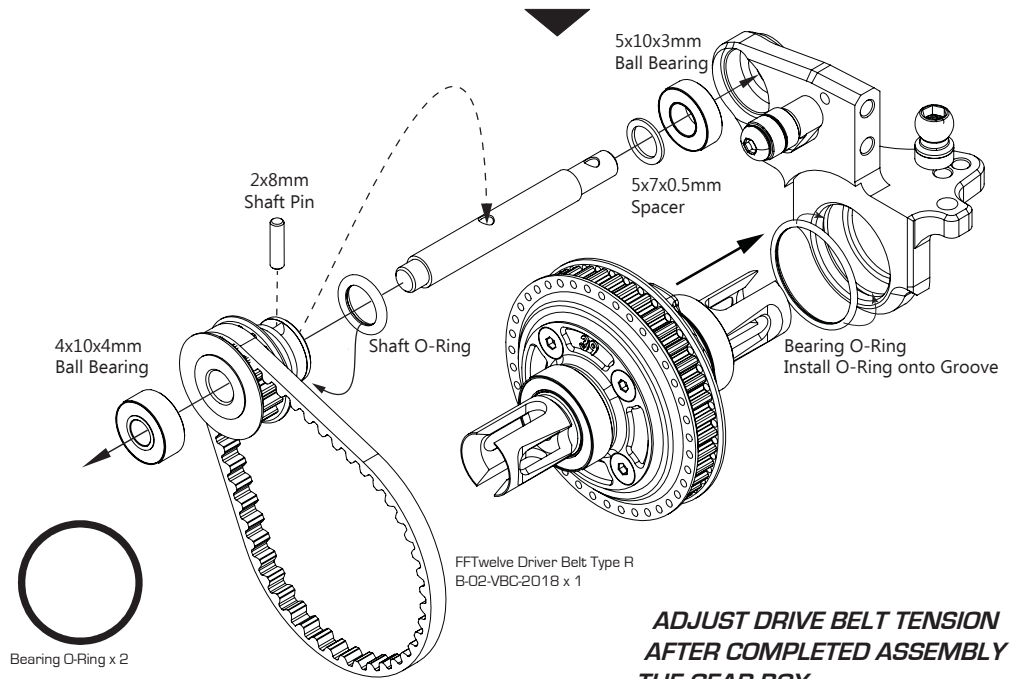
T2 7075 Spacer B-02-VBC-0019-20 x 2



FF12 Front Gear Box A



FF12 Front Gear Box B

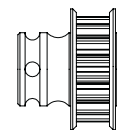


FFTwelve Driver Belt Type R B-02-VBC-2018 x 1

ADJUST DRIVE BELT TENSION AFTER COMPLETED ASSEMBLY THE GEAR BOX



Bearing O-Ring x 2



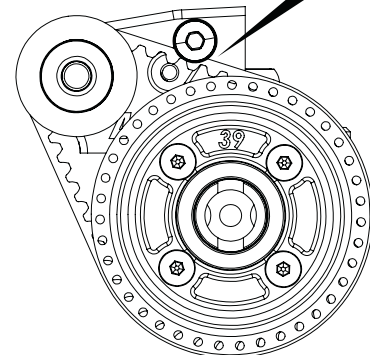
16T Alum Center Belt Pulley B-02-VBC-2012 x 1



M3x10 Roundhead C-02-SC-R0310 x 1



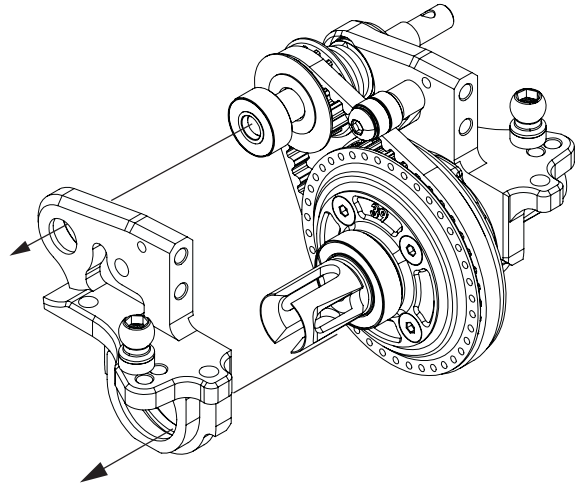
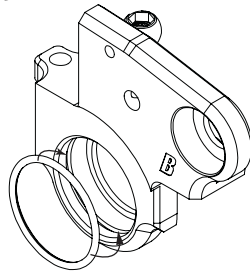
5x10x3mm Bearing C-02-BB-1005-30 x 1



8

Front Damper Stay Assembly

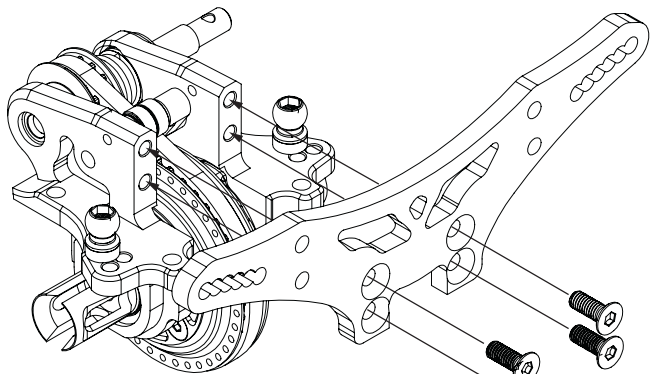
Bearing O-Ring
Install O-Ring onto Groove



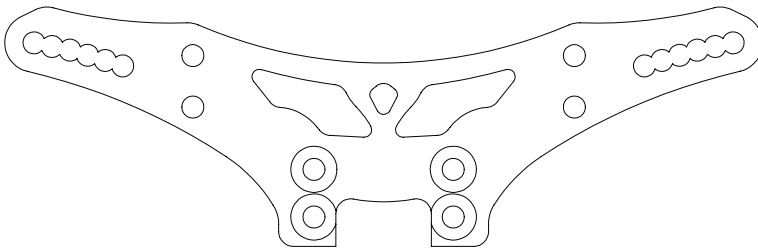
M3x8 Flathead C-02-SC-F0308 x 4



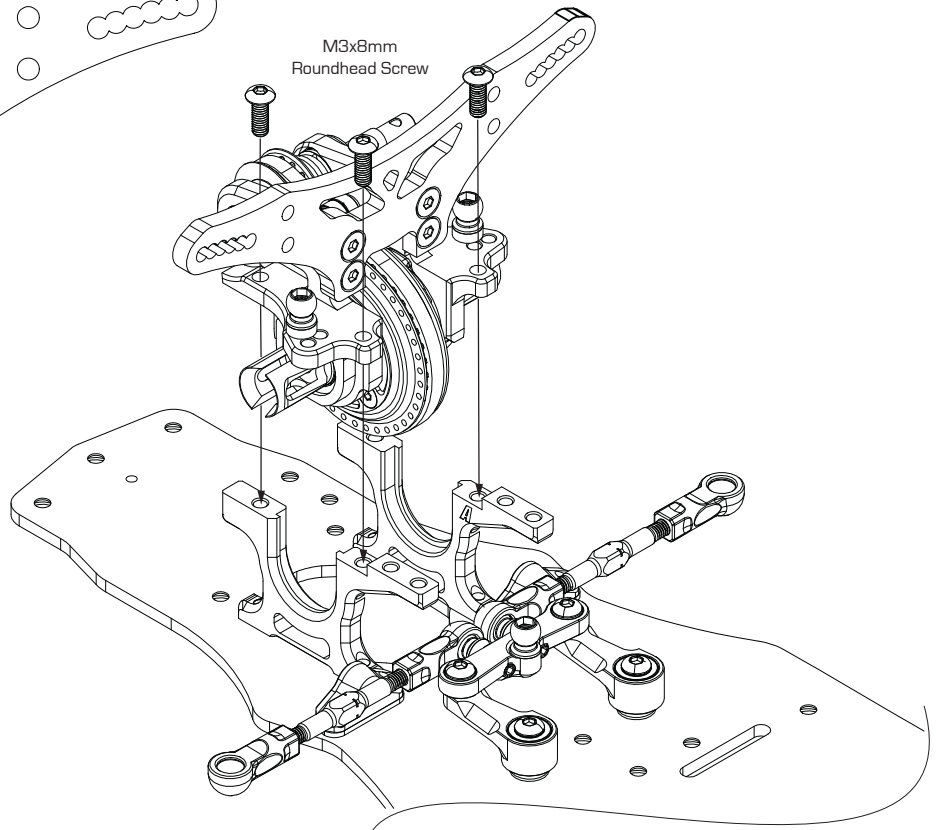
M3x8 Roundhead C-02-SC-R0308 x 3



M3x8mm
Flathead Screw



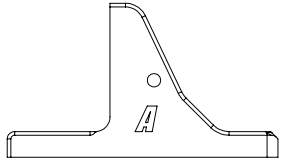
FFtwelve Graphite Front Shock Tower
A-01-VBC-2003-35 x 1



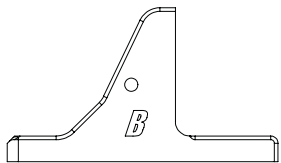
M3x8mm
Roundhead Screw

9

Upper Bulkhead And Rear Damper Stay Assembly



FFTwelve Rear Upper Bulkhead Set (A)
B-02-VBC-2025 x 1



FFTwelve Rear Upper Bulkhead Set (B)
B-02-VBC-2026 x 1

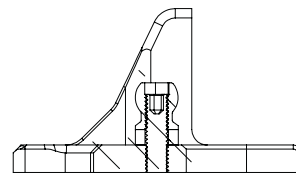
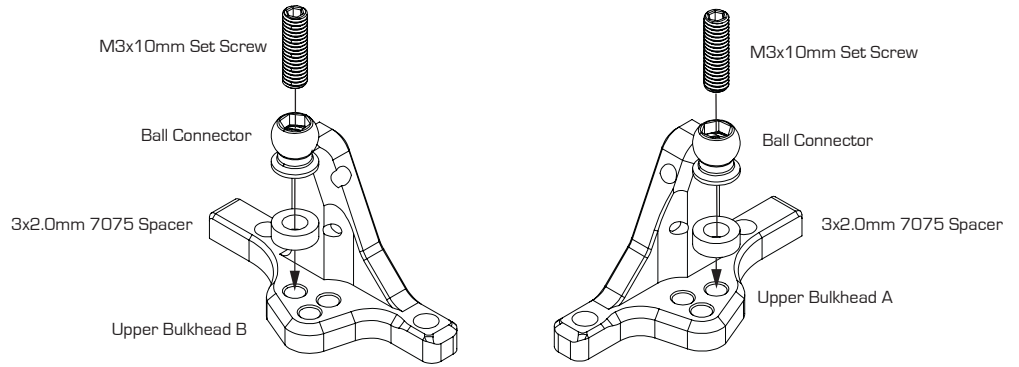


Ball Connector B-02-VBC-0045 x 2

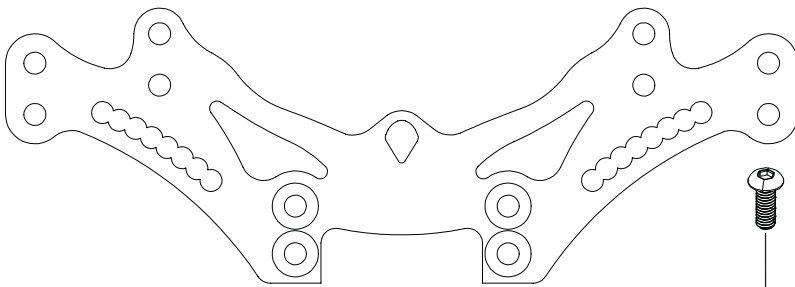


T2 7075 Spacer B-02-VBC-0019-20 x 2

Upper Bulkhead Assembly



Rear Damper Stay Assembly



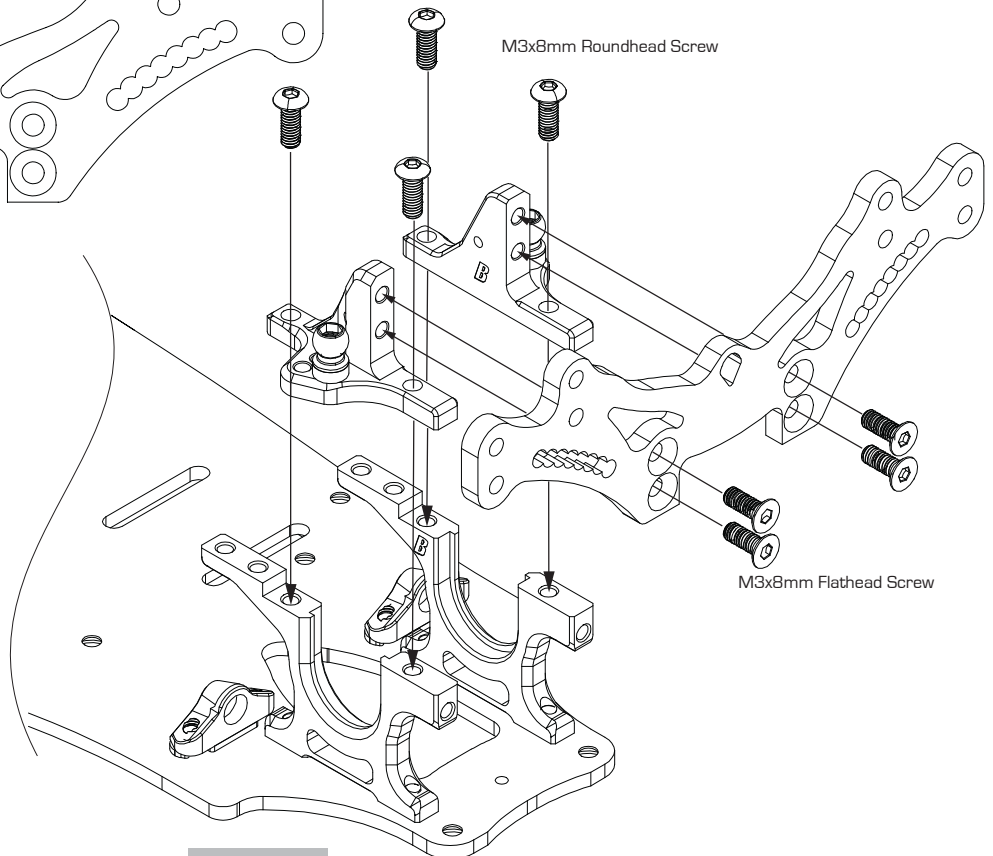
FFTwelve Graphite Rear Shock Tower
A-01-VBC-2004-35 x 1



M3x8 Flathead C-02-SC-F0308 x 4



M3x8 Roundhead C-02-SC-R0308 x 4



10

Rear Suspension Arm Assembly



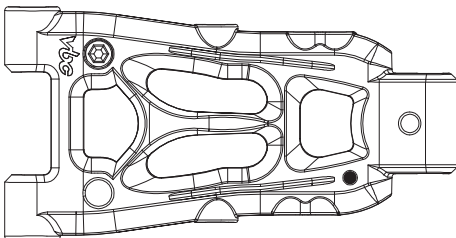
Ball Connector B-02-VBC-0045 x 4



M3x10 Set Screw C-02-SC-SS-0310 x 4



M4x10 Set Screw C-02-SC-SS-0410 x 4



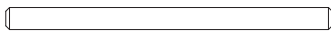
Rear Suspension Arm A-03-VBC-0050 x 2



Suspension Arm Spacer T2 Composite A-03-VBC-0052 x 2



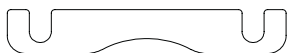
Suspension Arm Spacer T1 Composite A-03-VBC-0051 x 4



Suspension Arm Pin B-02-VBC-0029 x 2



Arm Pin Pivot Ball B-02-VBC-0035 x 4



1mm Suspension Shim A-01-VBC-0037 x 1



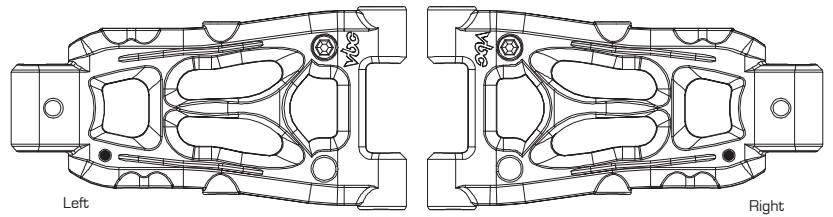
E25 Suspension Mount B-02-VBC-0061-25 x 1



M3x6 Flat Head Screw C-02-SC-F0306 x 2



Front



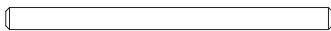
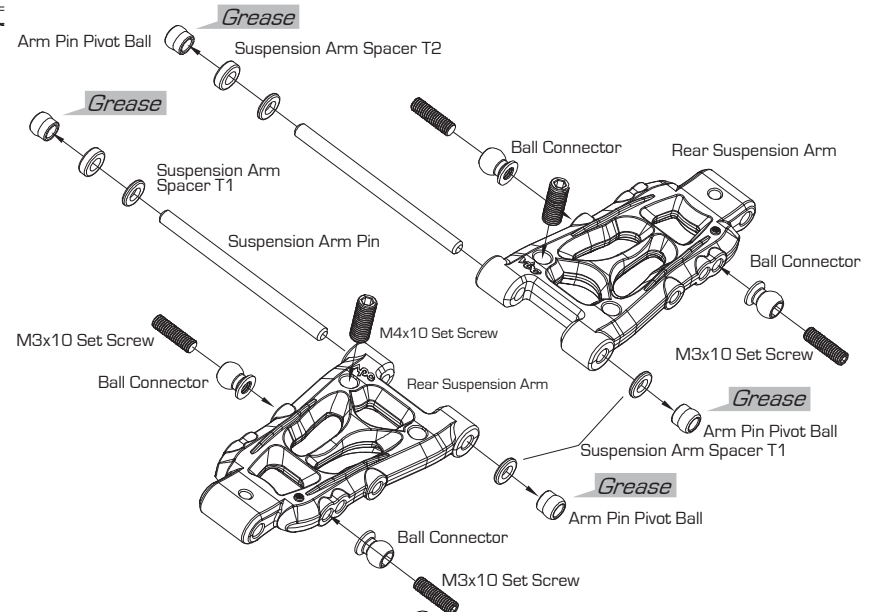
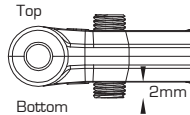
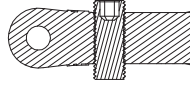
Rear Suspension Arm top view

Left

Right

Make sure the black markings are in the same direction on the left and right suspension arms

Insert M4x10 Set Screw from the top of the suspension arm for adjusting down stop. Initial setting is 2mm measuring from the bottom part of the arm for both sides.



Suspension Arm Pin B-02-VBC-0029 x 2



Arm Pin Pivot Ball B-02-VBC-0035 x 4



1mm Suspension Shim A-01-VBC-0037 x 1

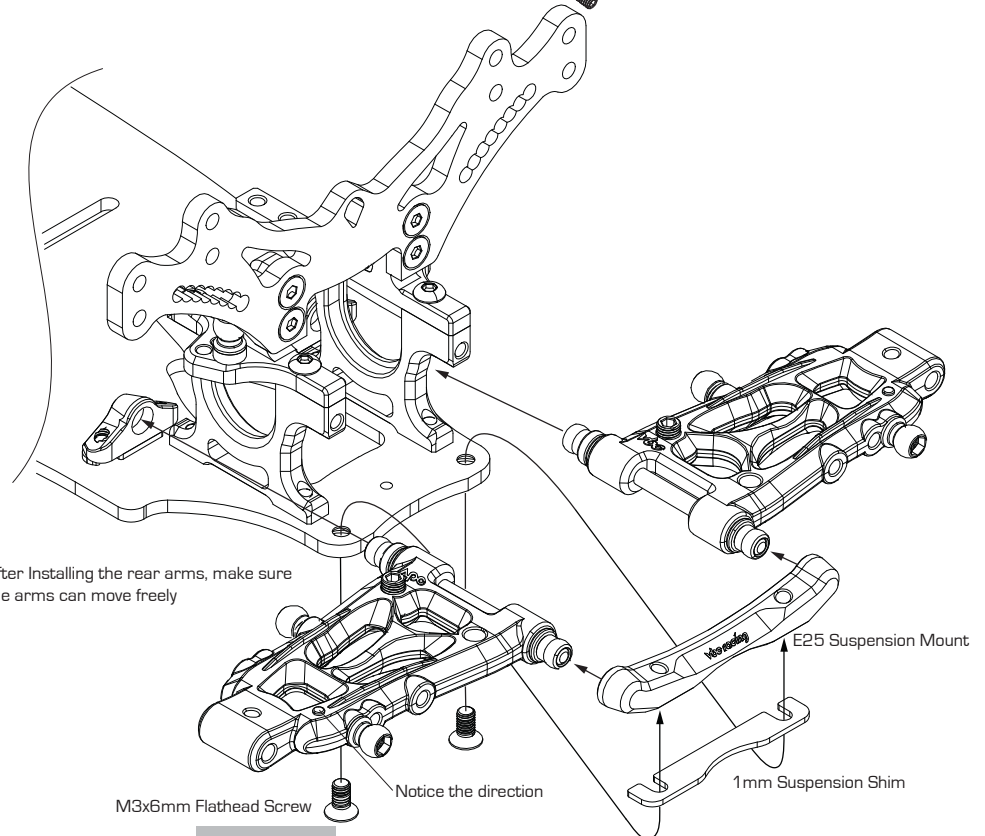


E25 Suspension Mount B-02-VBC-0061-25 x 1



M3x6 Flat Head Screw C-02-SC-F0306 x 2

After installing the rear arms, make sure the arms can move freely



M3x6mm Flathead Screw

Notice the direction

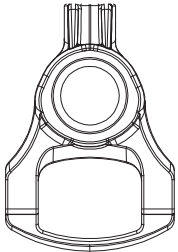
1mm Suspension Shim

E25 Suspension Mount

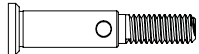
11

Rear Suspension Upright Assembly

Rear Suspension Arm Assembly



Rear Suspension Upright A-03-VBC-0037 x 2



Rear Wheel Axle B-02-VBC-2027 x 2



5x10mm Ball Bearings C-02-BB-1005-B x 4



Ball Connector B-02-VBC-0045 x 2



M3x10 Set Screw C-02-SC-SS-0310 x 2



T2 7075 Spacer B-02-VBC-0019-20 x 2



M1.6x4 Screw C-02-SC-R1.6x4 x 2



0 Offset Hex Wheel Hub B-02-VBC-0051 x 2



M2x10 Shaft Pin B-02-VBC-0020 x 2



M3x32mm Turnbuckle B-02-VBC-0036 x 2



Turnbuckle Cup A-03-VBC-0039 x 2



Turnbuckle Cup S A-03-VBC-0056 x 2



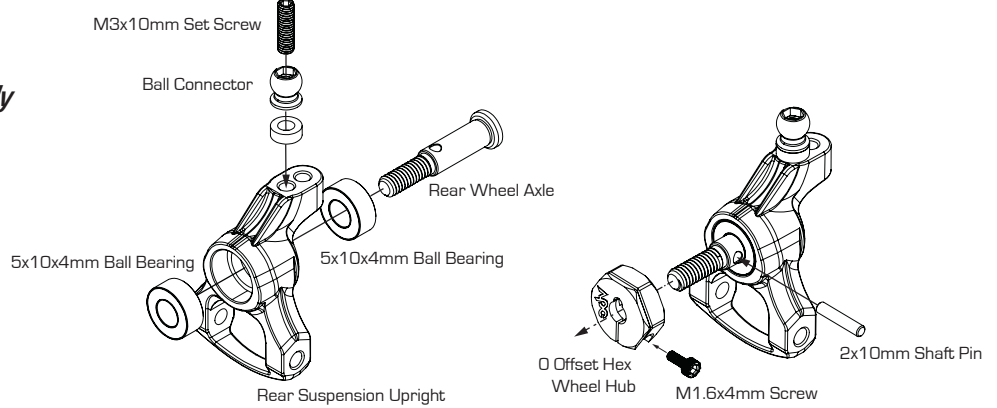
M3x23 Upright Pin B-02-VBC-0032 x 2



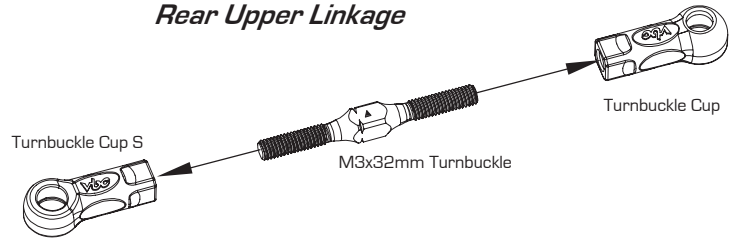
3x5x0.5mm Shim B-02-VBC-0093 x 2



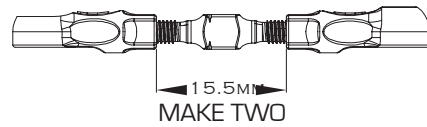
M3x6 Set Screw C-02-SC-SS-0306 x 2



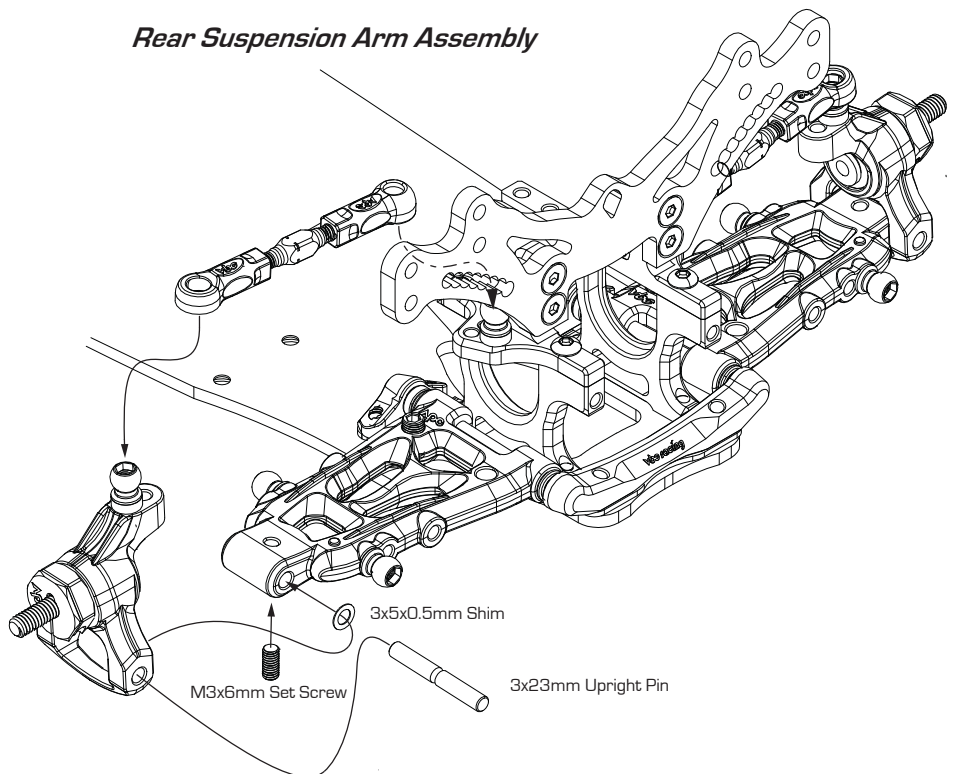
Rear Upper Linkage



Optional: Tie Rod Wrench Set D-05-VBC-0048 (not included)

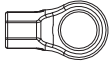


Rear Suspension Arm Assembly

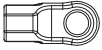


12

Front Suspension Arm Assembly



Turnbuckle Cup Open Type L A-03-VBC-0041 x 2



Turnbuckle Cup Open Type S A-03-VBC-0040 x 2



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



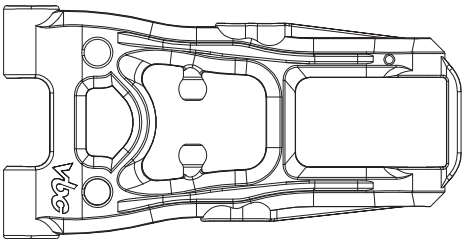
Suspension Arm Spacer T2 A-03-VBC-0052 x 2



Arm Pin Pivot Ball B-02-VBC-0035 x 4



Suspension Arm Pin B-02-VBC-0029 x 2



Front Suspension Arm A-03-VBC-0024 x 2



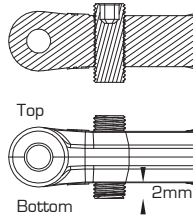
Ball Connector B-02-VBC-0045 x 2



M3x10 Set Screw C-02-SC-SS-0310 x 4



M4x10 Set Screw C-02-SC-SS-0410 x 2



Top

Bottom

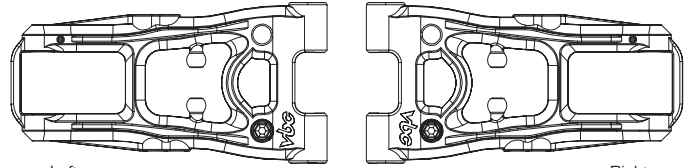
2mm

Insert M4x10 set screw from the top of the suspension arm for adjusting down stop. Initial setting is 2mm measuring from the bottom part of the arm for both sides.

Front



Front Suspension Arms top view



Left

Right

Make sure the black markings are in the same direction on the left and right suspension arms

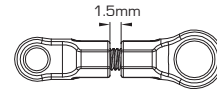
Front Anti-Roll Bar Connector

Ball Connector Open Type S

Ball Connector Open Type L

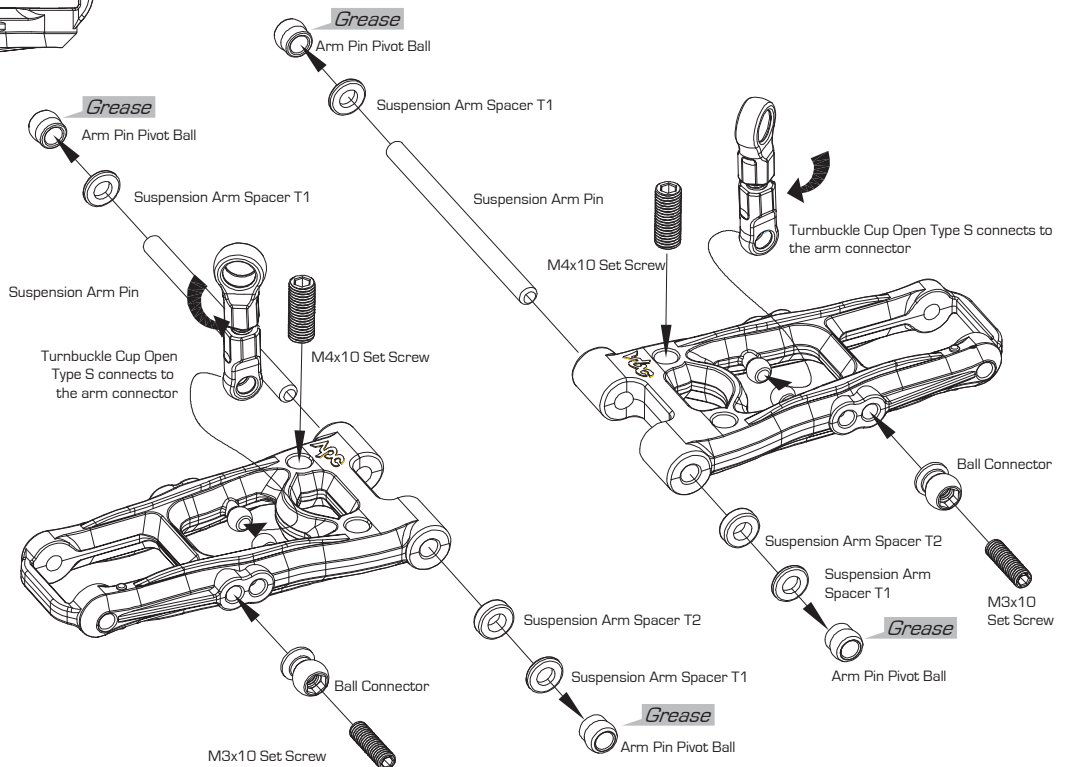


M3x10 Set Screw



1.5mm

MAKE TWO

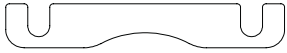


13

Front Suspension Arm Assembly



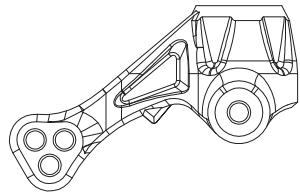
E10 Suspension Mount B-02-VBC-0061-10 x 1



1mm Suspension Shim A-01-VBC-0037 x 1



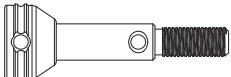
M3x6 Flat Head Screw C-02-SC-F0306 x 2



Steering Block Version 2 A-03-VBC-0079 x 2



Inner Axle B-02-VBC-0024 x 2



Wheel Axle B-02-VBC-0025 x 2



Axle Joint B-02-VBC-0026 x 2



Axle Lock Spring B-02-VBC-0027 x 2



5x10mm Ball Bearing C-02-BB-1005-B x 4



M2x12 Shaft Pin B-02-VBC-0022 x 2



M2x10 Shaft Pin B-02-VBC-0020 x 2



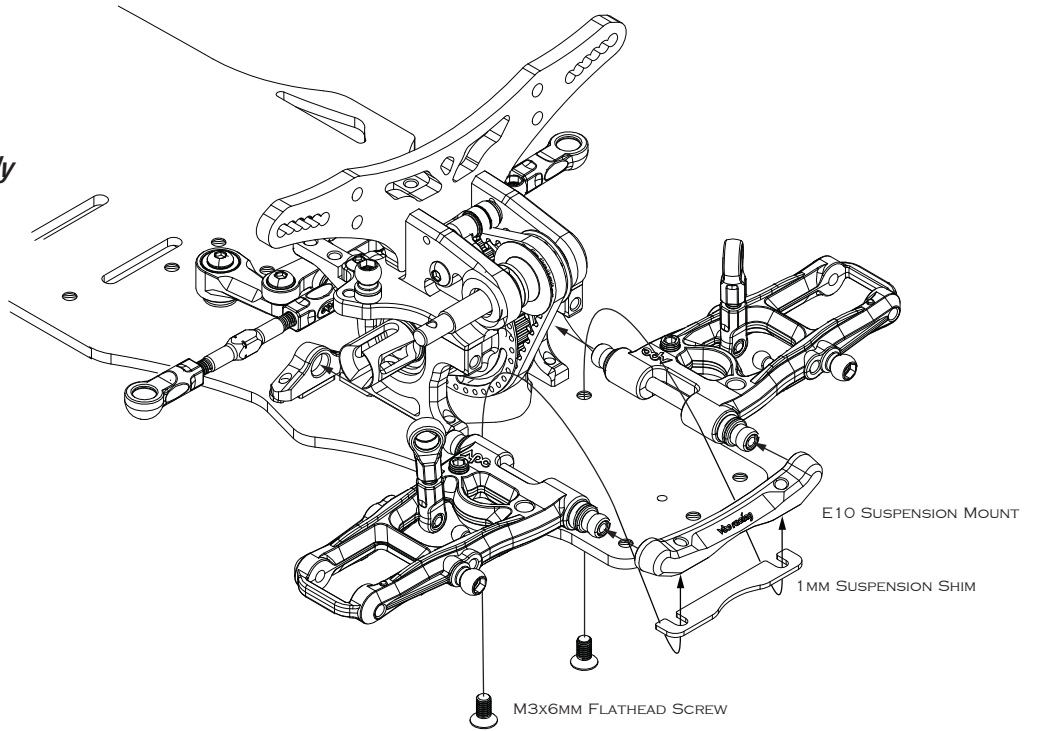
Shaft End Shoe A-03-VBC-0038 x 2



M3x2 Set Screw C-02-SC-SS-0302 x 2

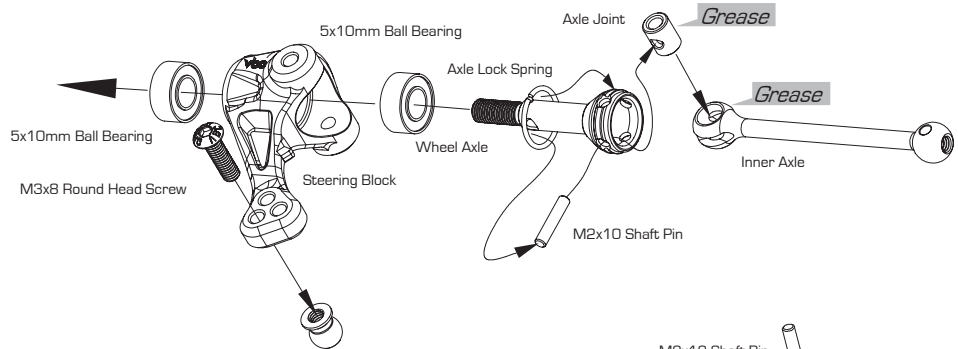


0 Offset Hex Wheel Hub B-02-VBC-0051 x 2

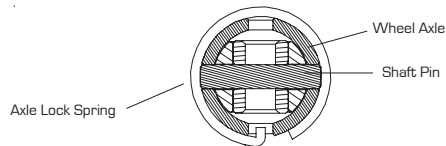


Left & Right Steering Block Assembly

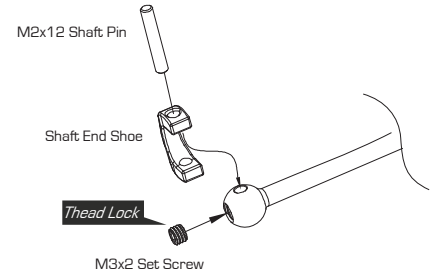
Left Steering



Joint cross section



Make sure the Axle Lock Spring is place correctly onto the Wheel Axle



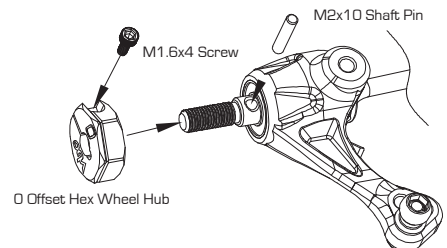
Ball Connector B-02-VBC-0045 x 2



M3x8 Round Head Screw C-02-SC-R0308 x 2

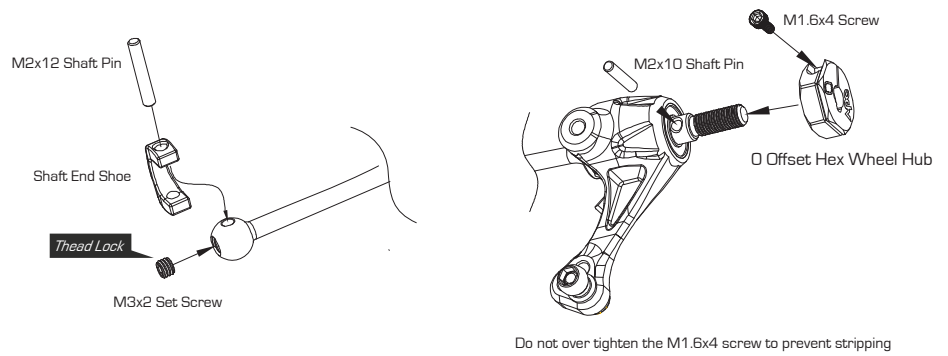
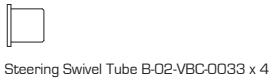
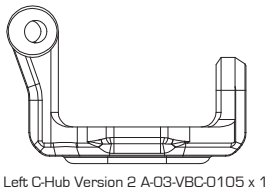
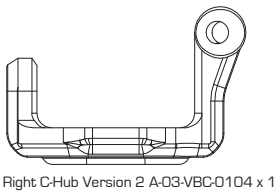
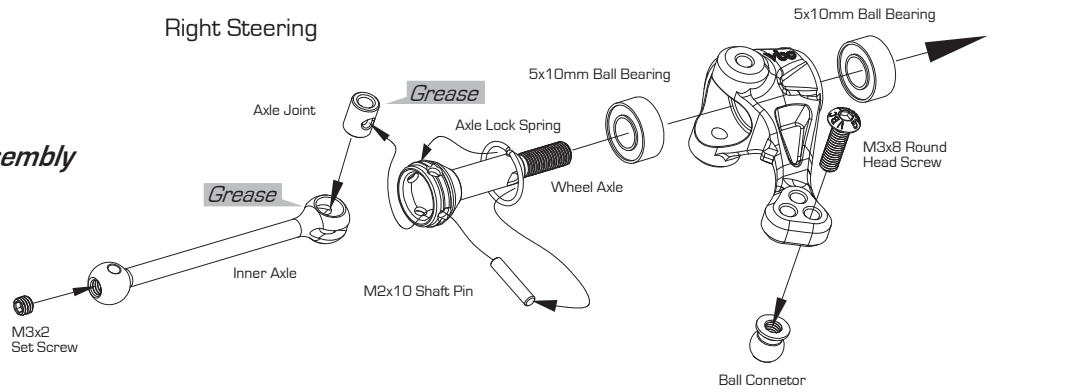


M1.6x4 Screw C-02-SC-R1.6x4 x 2

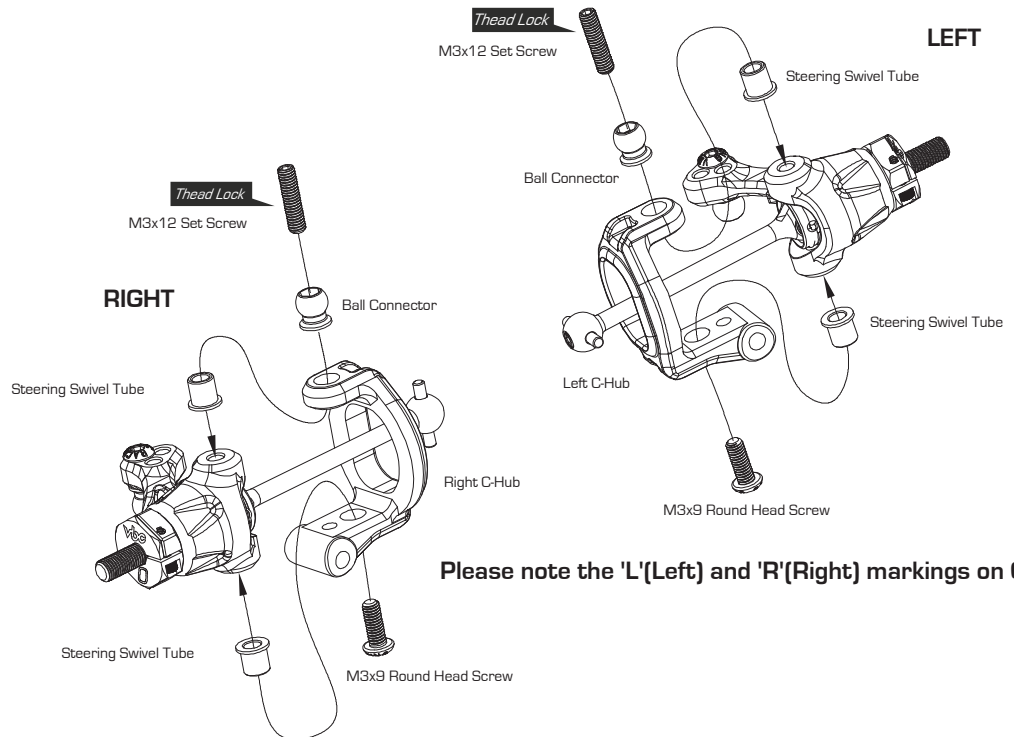


13

Front Suspension Arm Assembly



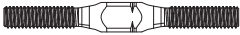
Left & Right C-Hub Assembly



Please note the 'L'(Left) and 'R'(Right) markings on C-Hubs

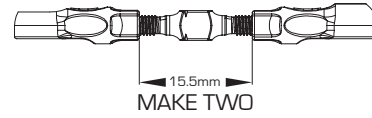
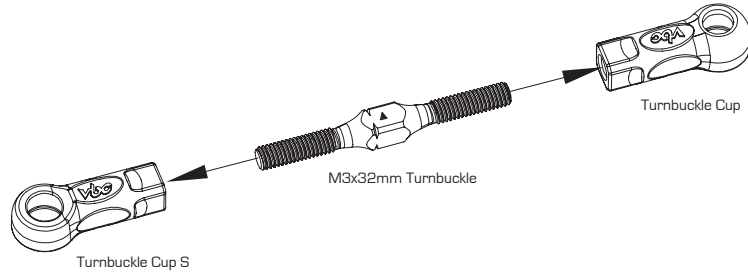
14

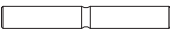
Front Suspension Arm Assembly


M3x32mm Turnbuckle B-02-VBC-0036 x 2

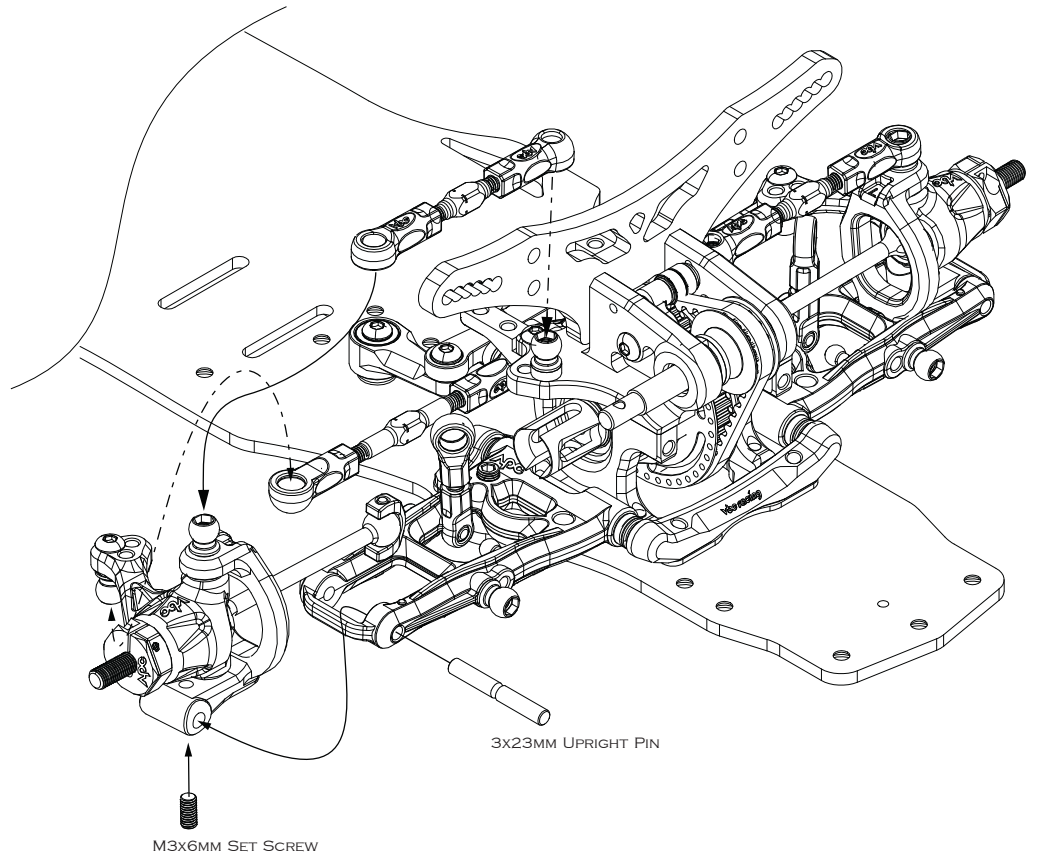

Turnbuckle Cup A-03-VBC-0039 x 2


Turnbuckle Cup S A-03-VBC-0056 x 2



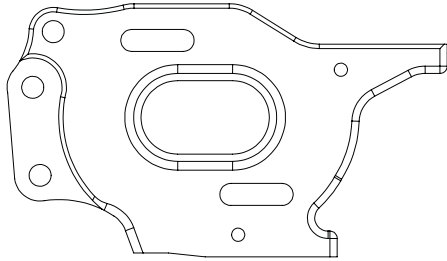

3x23 Upright Pin B-02-VBC-0032 x 2


M3x6 Set Screw C-02-SC-SS-0306 x 2

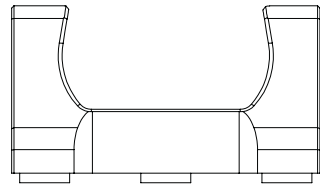


15

Motor Mount Assembly



FFTwelve Motor Mount B-02-VBC-2029 x 1



FFTwelve Alum Front Bumper Mount B-02-VBC-2031 x 1



M3x6 Flathead C-02-SC-F0306 x 2

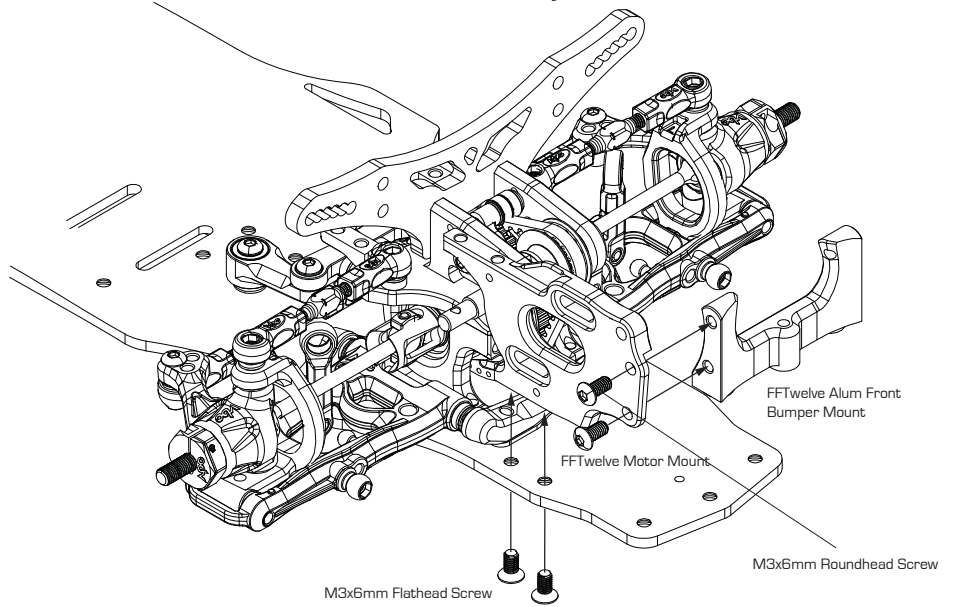


M3x6 Roundhead C-02-SC-R0306 x 2



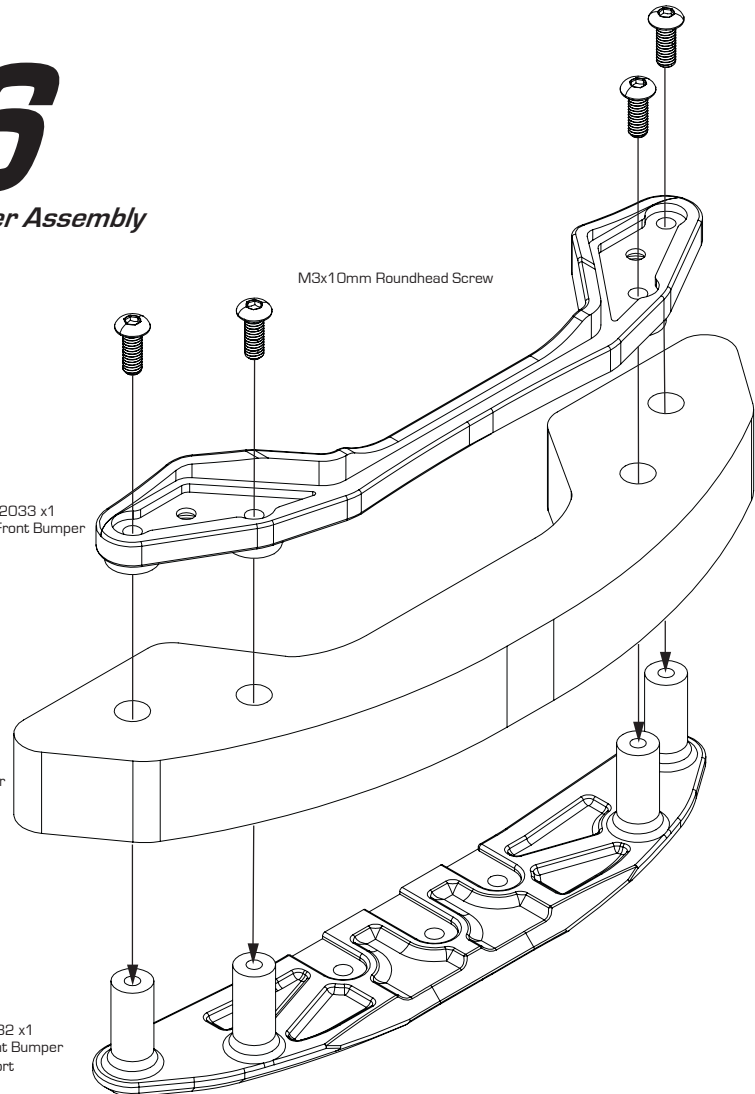
M3x10 Roundhead C-02-SC-R0310 x 4

Motor Mount Assembly



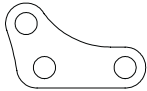
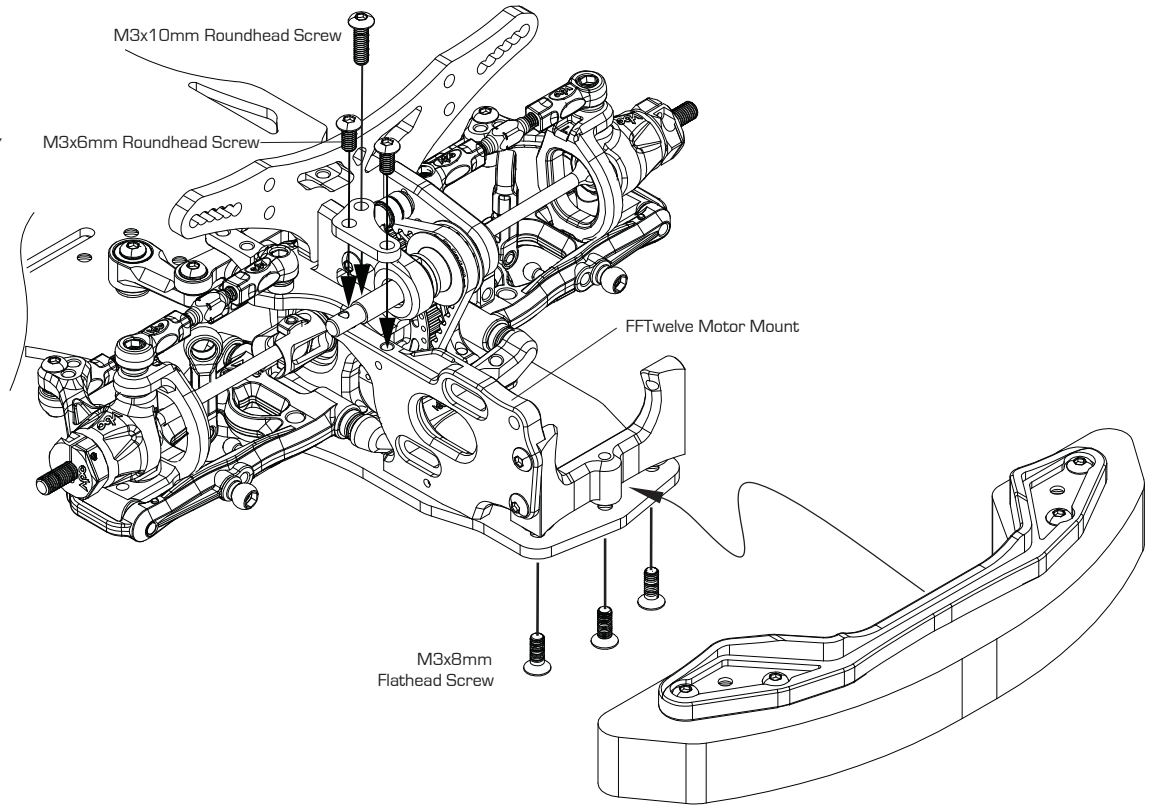
16

Front Bumper Assembly



16

Front Bumper Assembly



Graphite Motor Mount Support
B-02-VBC-2030 x 1



M3x10 Roundhead C-02-SC-R0310 x 1



M3x6 Roundhead C-02-SC-R0306 x 2



M3x8 Flathead C-02-SC-F0306 x 3

Cooling Fan Installation

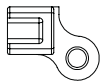
**** 30x30x10mm Cooling Fan is not included**



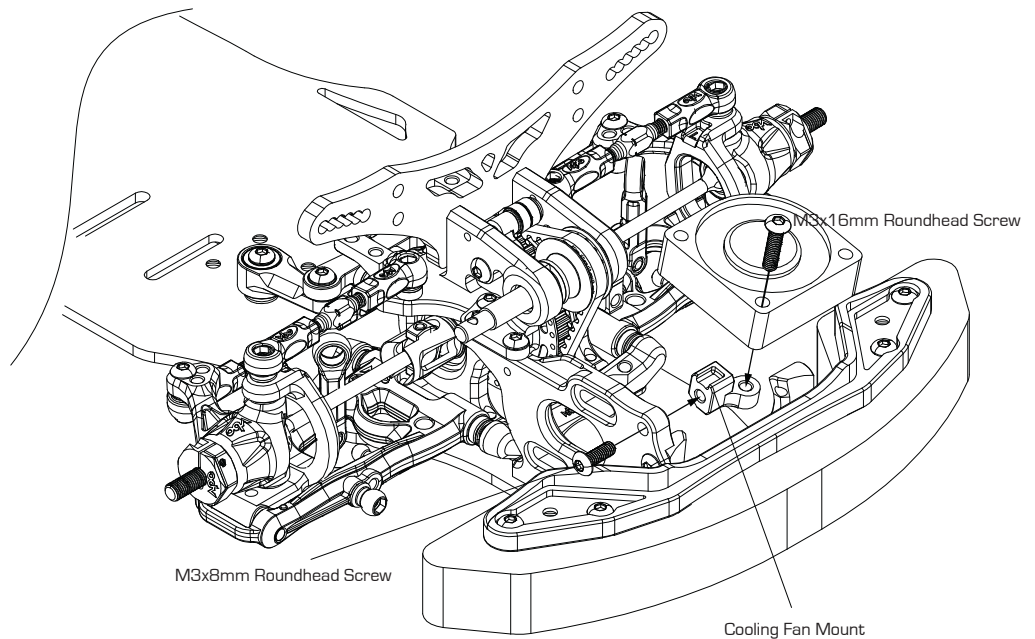
M3x8 Roundhead C-02-SC-R0308 x 1



M3x16 Roundhead C-02-SC-R0316 x 1

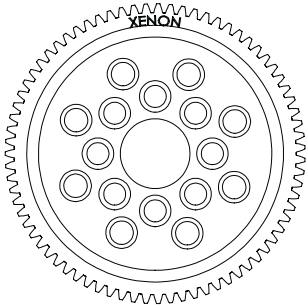


Plastic Front Cooling Fan Mount
A-03-VBC-2034 x 1

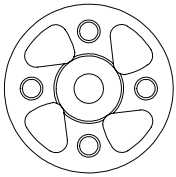


17

Spur Gear Assembly



Xenon Racing 48Pitch Spur Gear 75T
B-03-VBC-2040 x 1



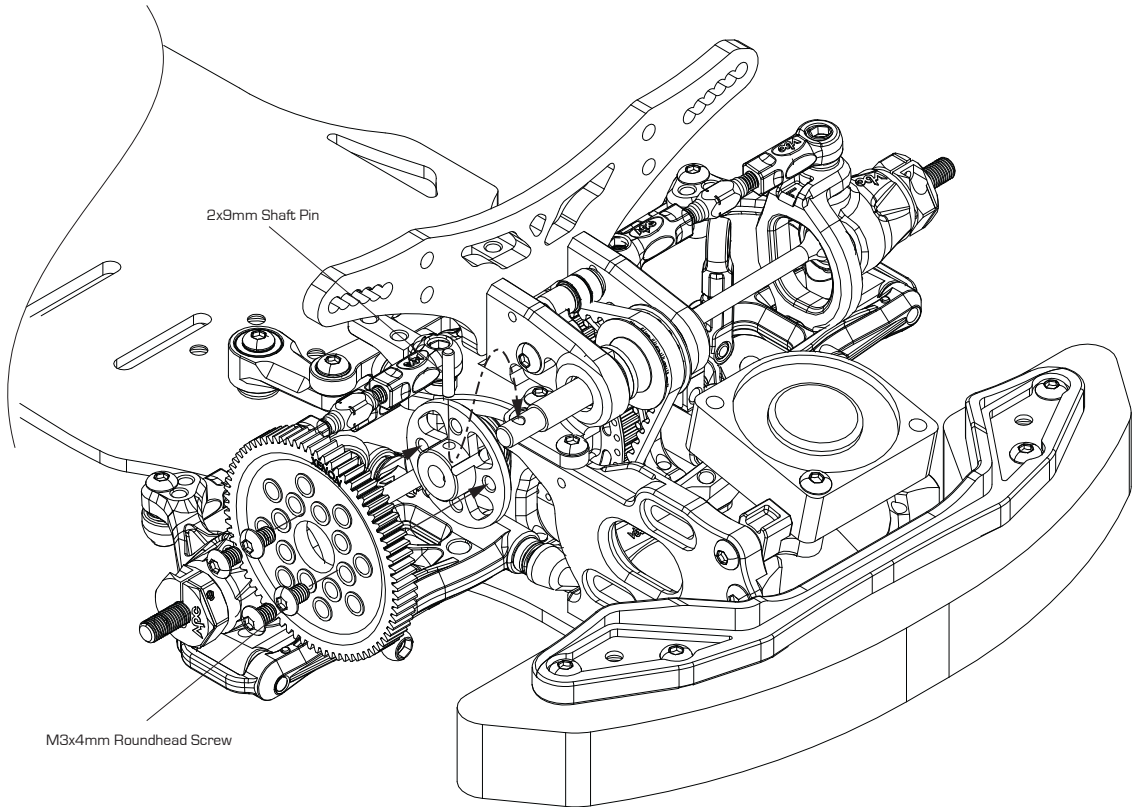
Alum Spur Gear Adaptor B-02-VBC-2037 x 1



2x9mm Shaft Pin B-02-VBC-2038 x 1



M3x4 Roundhead C-02-SC-R0304 x 4



Gear Ratio Chart

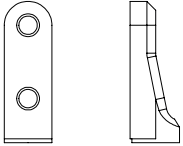
Choose the gear ratio according to the motor used or running surface condition.

Pinion Gear	Gear Ratio (Spur Gear 75T)	27T	6.77 : 1
		28T	6.53 : 1
20T	9.14 : 1	29T	6.30 : 1
21T	8.71 : 1	30T	6.09 : 1
22T	8.31 : 1	31T	5.90 : 1
23T	7.95 : 1	32T	5.71 : 1
24T	7.62 : 1	33T	5.54 : 1
25T	7.31 : 1	34T	5.38 : 1
26T	7.03 : 1	35T	5.22 : 1

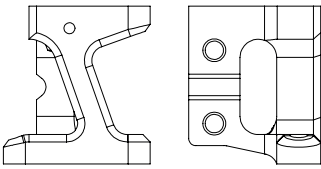
** Internal Gear Ratio : 2.4375

18

Servo Assembly



FFTwelve Alum Servo Mount
B-02-VBC-2042 x 1



FFTwelve Alum Center Servo Mount
B-02-VBC-2041 x 1



M3x8 Roundhead Screw C-02-SC-R0308 x 3



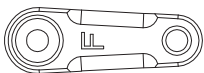
M3x6 Roundhead Screw C-02-SC-R0306 x 5



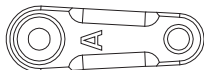
Ball Connector B-02-VBC-0045 x 1



Servo Spacer 1mm A-03-VBC-0032 x 1
Servo Spacer 2mm A-03-VBC-0033 x 1



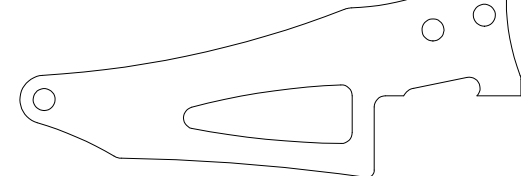
Servo Horn Type F (Futaba)
A-03-VBC-0053 x 1



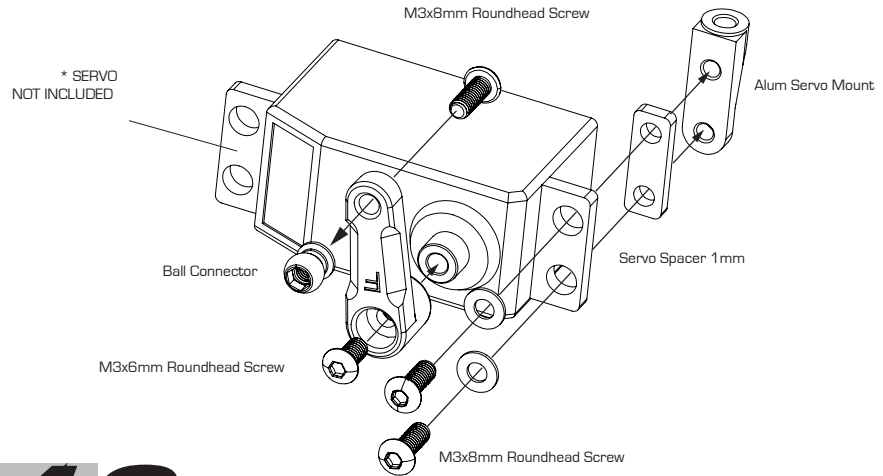
Servo Horn Type A (Sanwa/KO)
A-03-VBC-0054 x 1



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

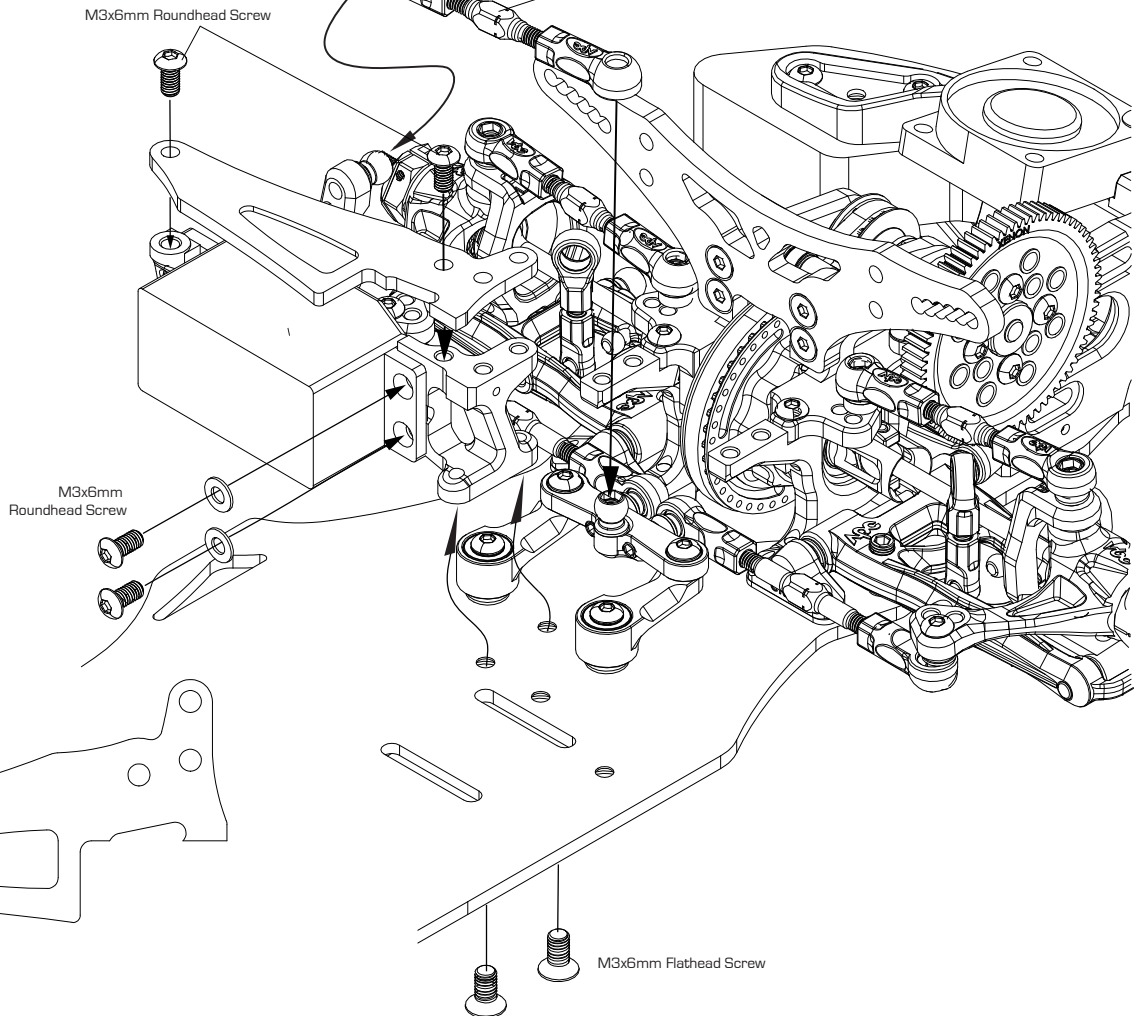
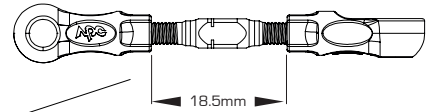


Graphite Servo Mount Plate
A-01-VBC-2043 x 1



19

Servo Linkage Assembly



20

Front And Rear Stabilizer Mount Assembly



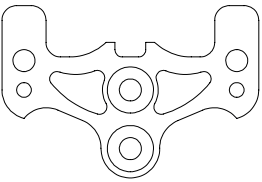
Stabilizer Connector B-02-VBC-0047 x 4



Stabilizer Collar B-02-VBC-2048 x 2



M3x3mm Set Screw C-02-SC-SS-0303 x 8



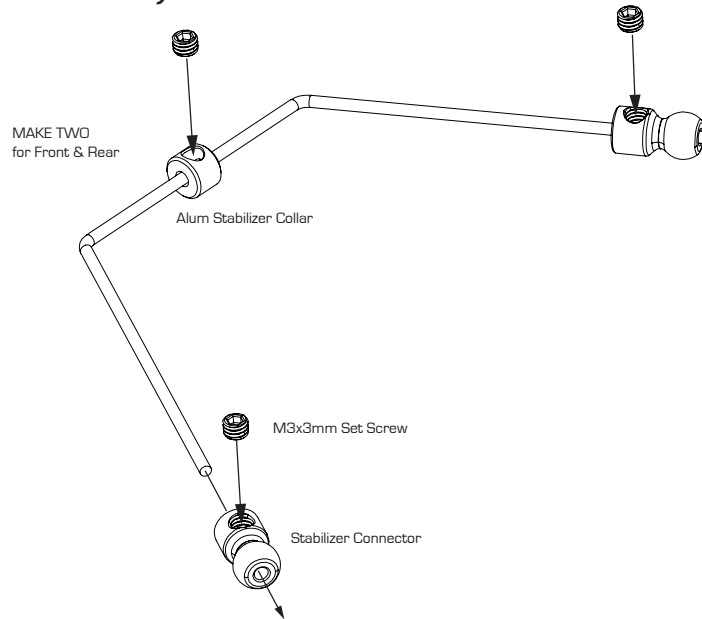
Graphite Stabilizer Mount Plate A-01-VBC-2050 x 1



Plastic Front Stabilizer Mount A-03-VBC-2051 x 2

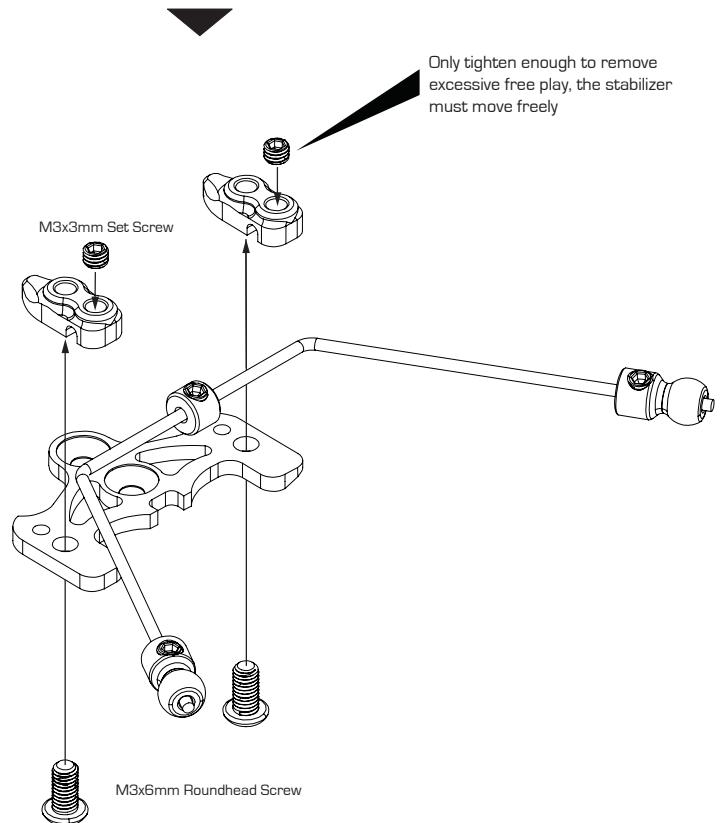
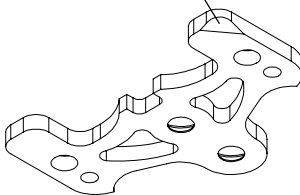


M3x6 Roundhead Screw C-02-SC-R0306 x 2



Stabilizer Wires D-05-VBC-2047
1.4mm Stabilizer Wire (Front)
1.2mm Stabilizer Wire (Rear)

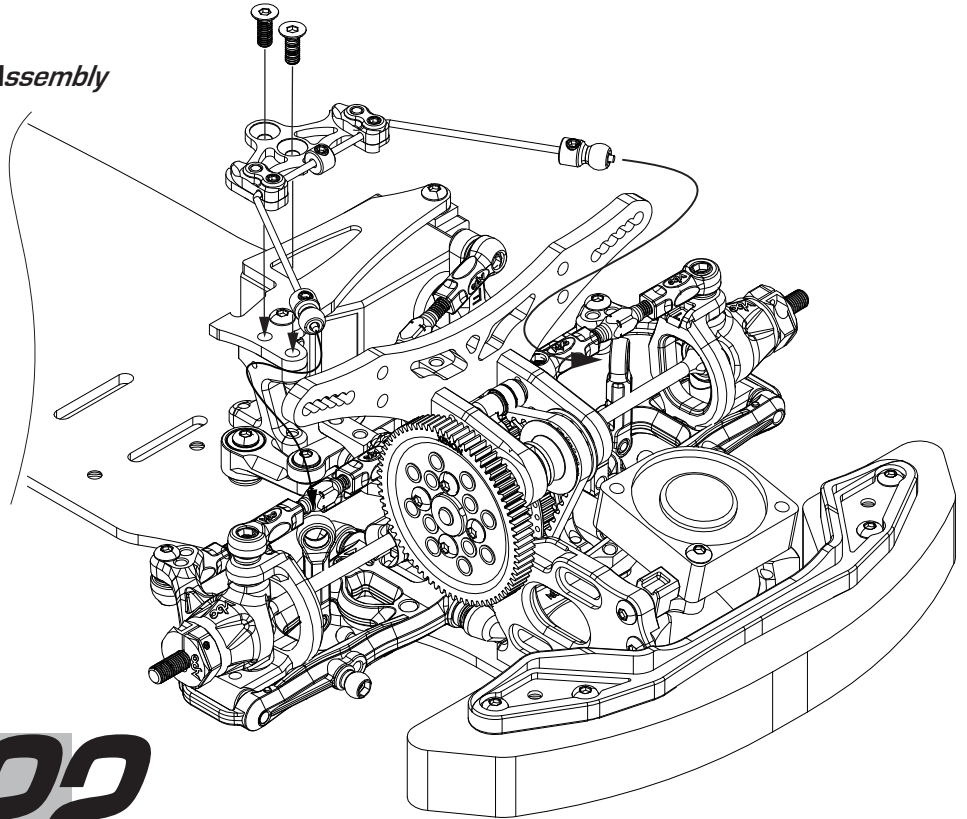
In order to affect the servo linkage movement, please smooth cut the edge on bottom of plate



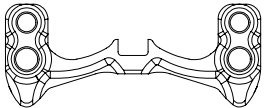
21

Front And Rear Stabilizer Mount Assembly

M3x8mm Flathead Screw



M3x8 Flathead Screw C-02-SC-F0308 x 2



Plastic Rear Stabilizer Mount
A-03-VBC-2052 x 1



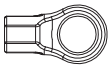
M3x3mm Set Screw C-02-SC-SS-0303 x 2



M3x8 Roundhead Screw C-02-SC-R0308 x 2

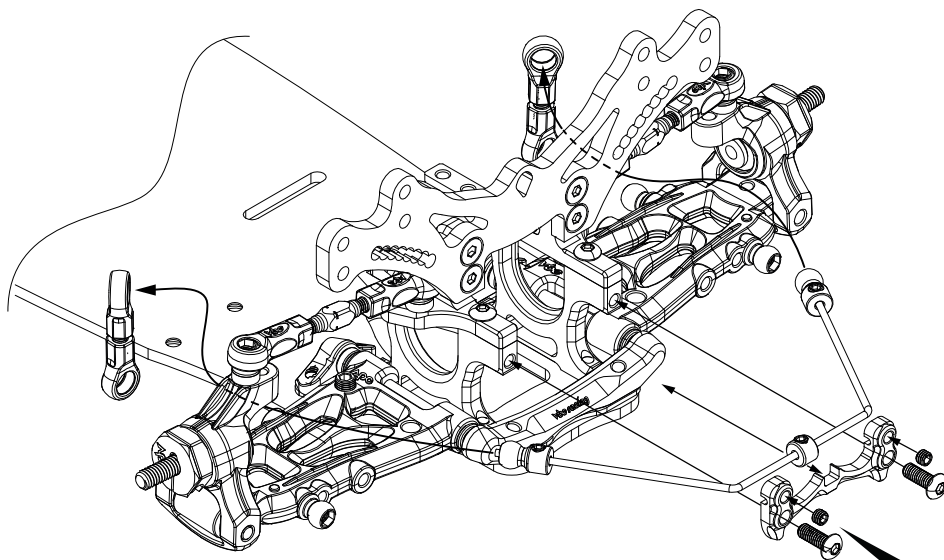


M3x10mm Set Screw C-02-SC-SS-0310 x 2

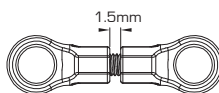


Turnbuckle Cup Open Type L A-03-VBC-0041 x 4

22



MAKE TWO TIE RODS

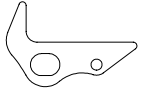


Note the double ring face to ball connector

Only tighten enough to remove excessive free play, the stabilizer must move freely

23

Upper Deck And Battery Guard Assembly



Graphite Adjustable Battery Guard
A-01-VBC-2058 x 1



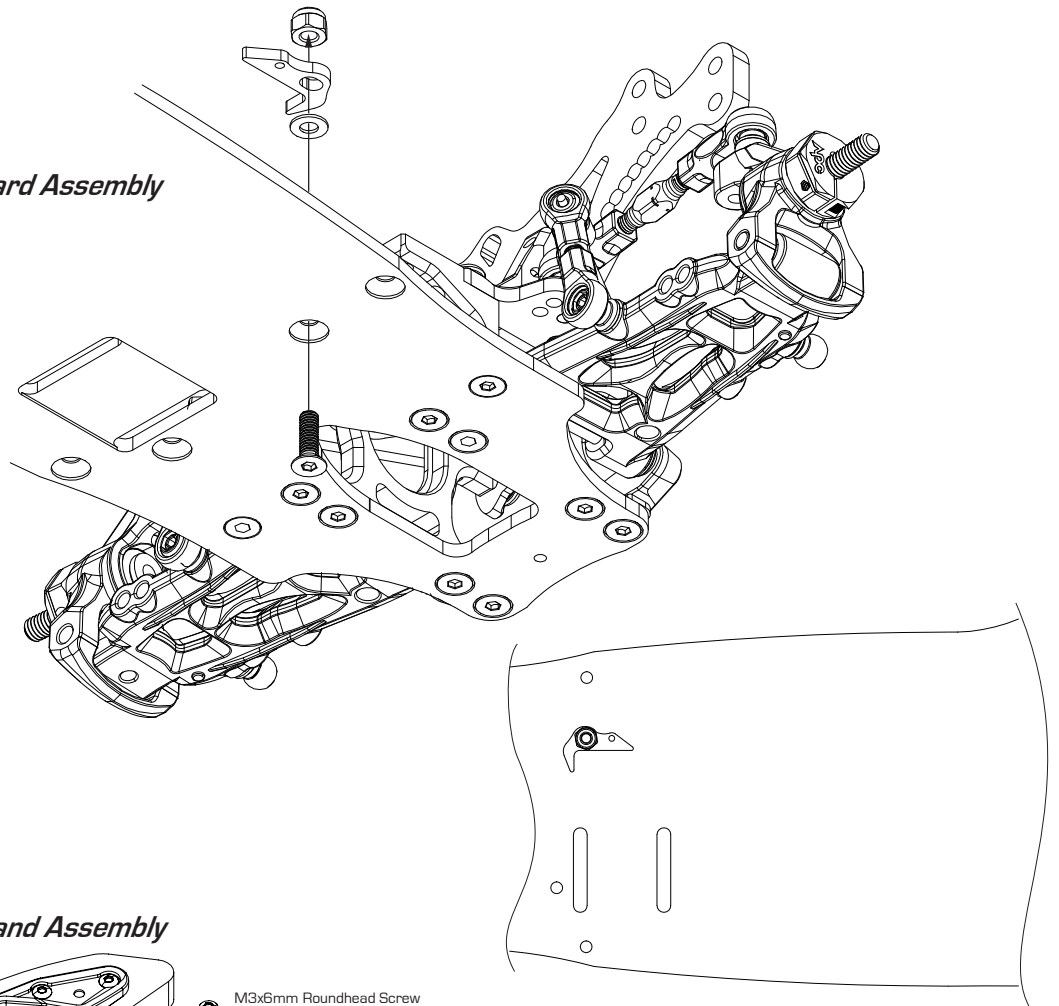
3mm Spacer



M3 Lock Nut C-02-SC-NN03 x 1

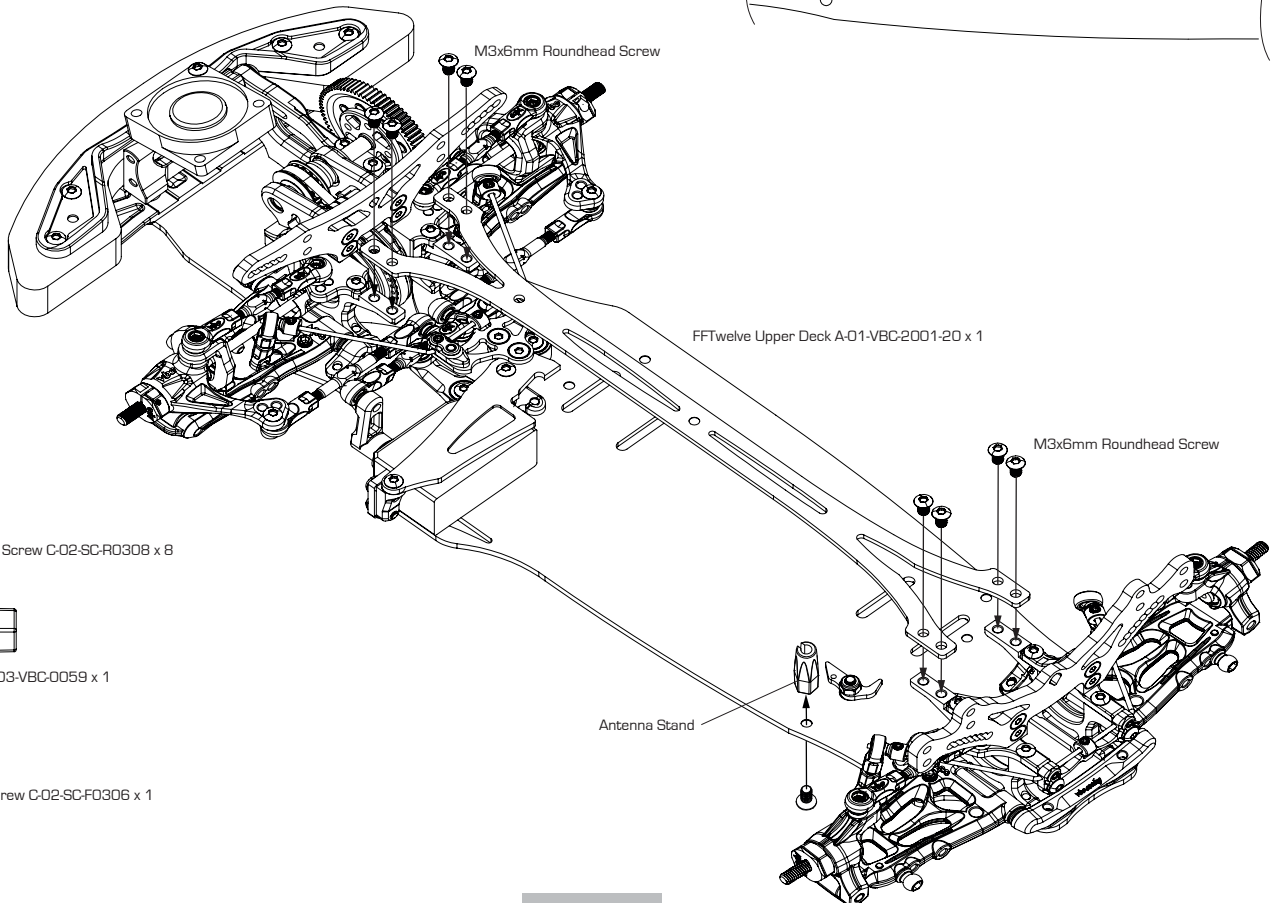


M3x10 Flathead Screw C-02-SC-F0310 x 1



24

Upper Deck And Antenna Stand Assembly



M3x6mm Roundhead Screw

FFTwelve Upper Deck A-01-VBC-2001-20 x 1

M3x6mm Roundhead Screw



M3x6 Roundhead Screw C-02-SC-R0308 x 8



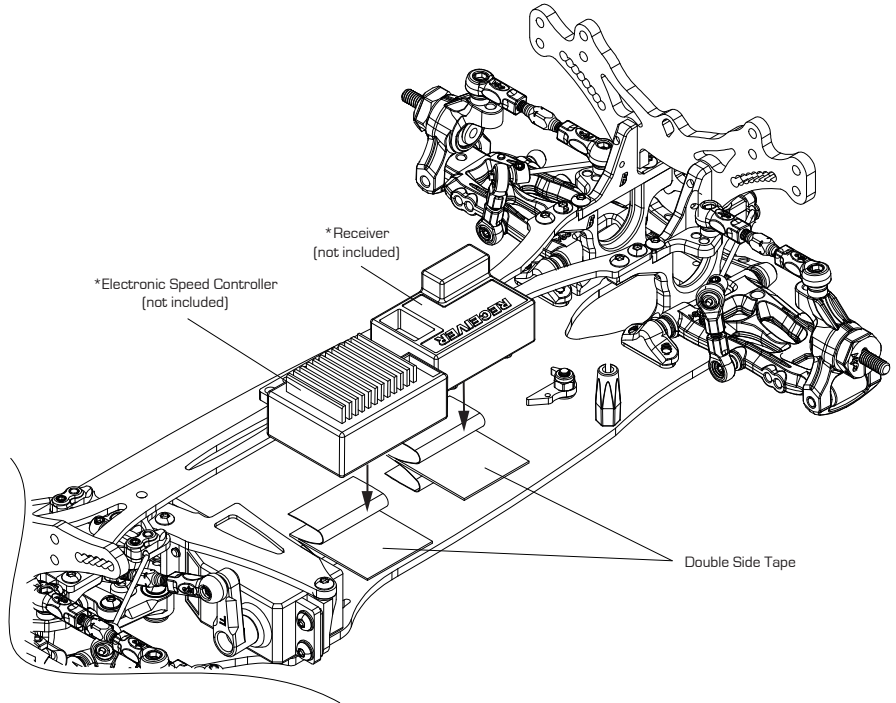
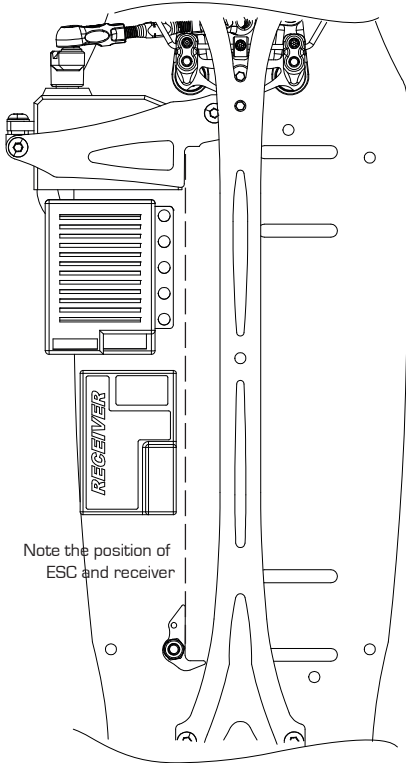
Antenna Stand A-03-VBC-0059 x 1



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

25

Receiver And ESC Installation

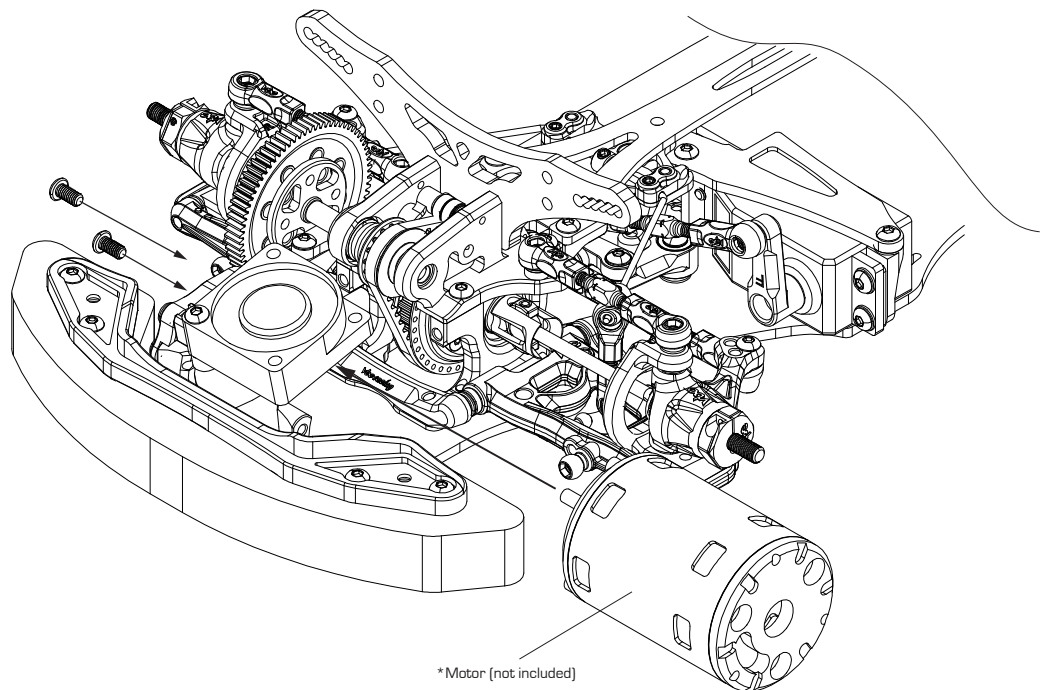


26

Motor Installation



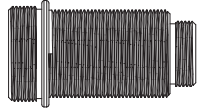
M3x6 Roundhead Screw C-02-SC-R0308 x 2



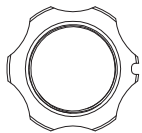
27

Assemble Oil Shocks

MAKE 4 SHOCKS



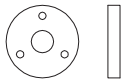
Shock Body B-02-VBC-0039 x 4



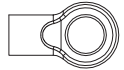
Shock Height Adjuster B-02-VBC-0042 x 4



Shock Bottom Cap B-02-VBC-0041 x 4



Shock Piston (3 holes) A-03-VBC-0045 x 4



Shock Bottom Connector A-03-VBC-0066 x 4



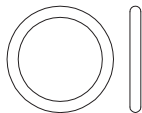
Shaft Cap A-03-VBC-0046 x 4



Shaft Guide A-03-VBC-0058 x 4



Shock Shaft B-02-VBC-0043 x 4



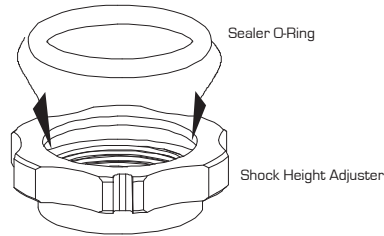
Sealer O-Ring B-03-VBC-0002 x 4



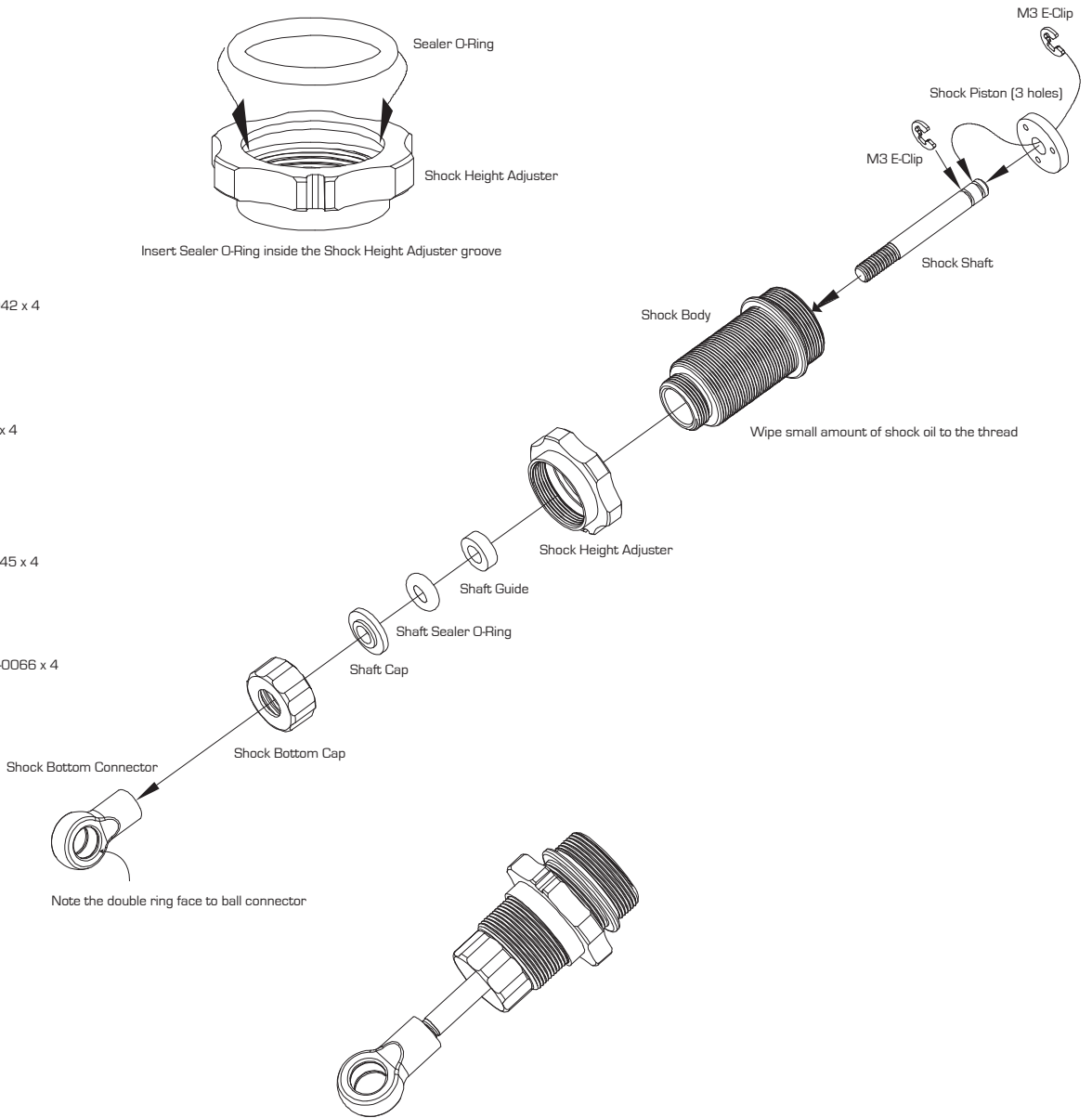
Shaft Sealer O-Ring B-03-VBC-0012 x 4



M3 E-Clip B-02-VBC-0044 x 8



Insert Sealer O-Ring inside the Shock Height Adjuster groove



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

28

Assemble Oil Shocks Part 2



Shock Top Connector A-03-VBC-0042 x 4



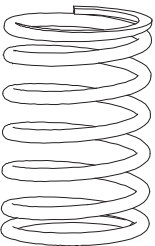
Spring Bottom Support A-03-VBC-0043 x 4



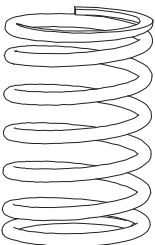
Oil Sealer Cap B-03-VBC-0011 x 4



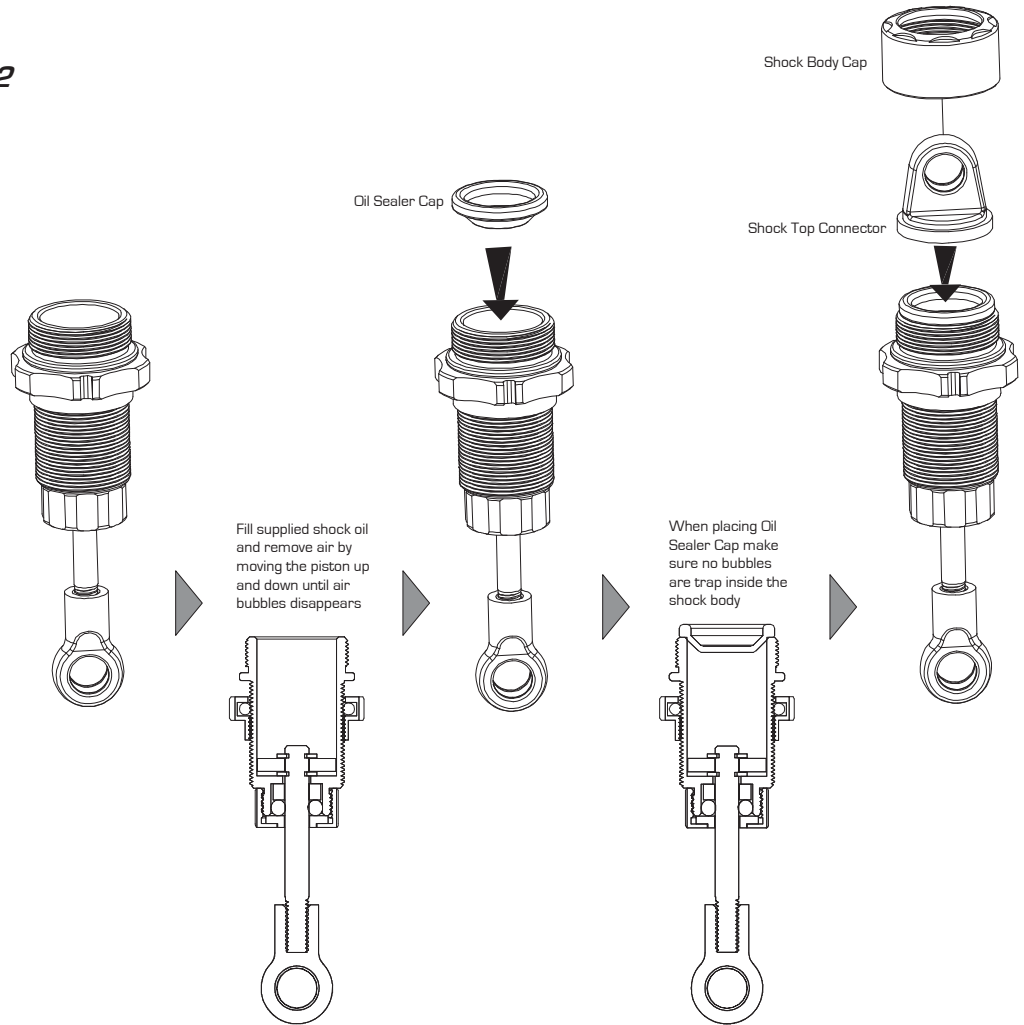
Shock Body Cap B-02-VBC-0040 x 4



Shock Spring Orange (For Front) x 2



Shock Spring Green (For Rear) x 2

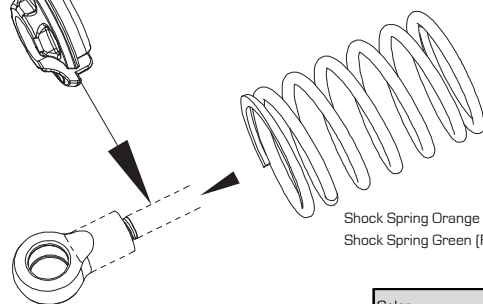


Fill supplied shock oil and remove air by moving the piston up and down until air bubbles disappears

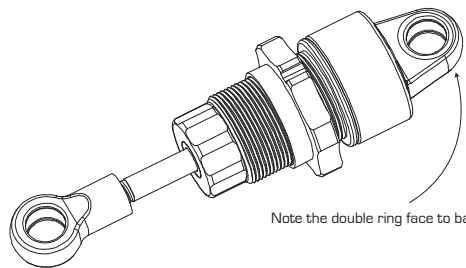
When placing Oil Sealer Cap make sure no bubbles are trap inside the shock body



Spring Bottom Support



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



Note the double ring face to ball connector

Optional VBC Racing Shock Springs:

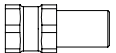
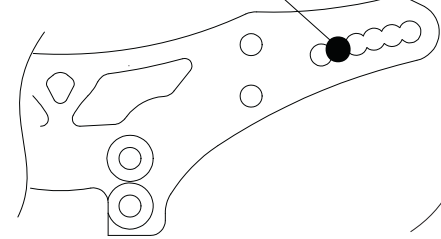
- Shock Spring Green SOFT B-02-VBC-0073-D
- Shock Spring Red MED-SOFT B-02-VBC-0073-C
- Shock Spring Orange MED-HARD B-02-VBC-0073-A
- Shock Spring White HARD B-02-VBC-0073-B

Color	Green B-02-VBC-0073-D	Red B-02-VBC-0073-C	Orange B-02-VBC-0073-A	White B-02-VBC-0073-B
Rate lb/in	16.20	17.10	18.10	21.90
Rate gf/mm	289	305	323	392
Coils	6.75	6.5	6.25	5.5

29

Damper Set Assembly

Basic setup damper position



Alum Shock Mount Post
B-02-VBC-2054 x 2



M3x6 Roundhead Screw C-02-SC-R0306 x 4



M3x10mm Set Screw C-02-SC-SS-0310 x 2

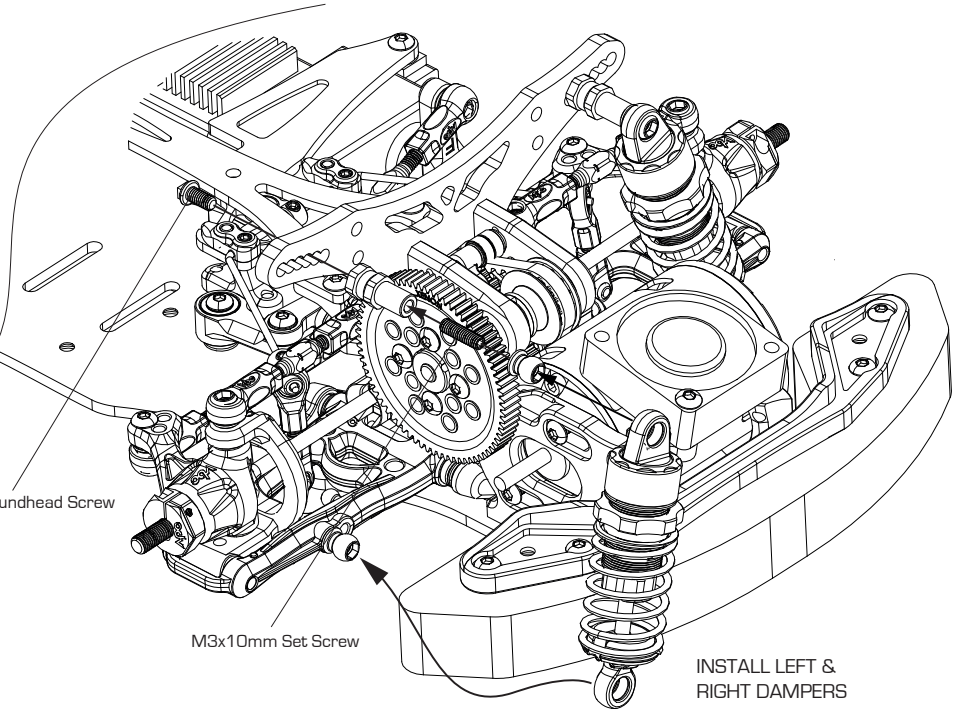


Ball Connector B-02-VBC-0045 x 4

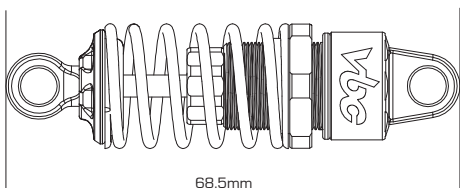
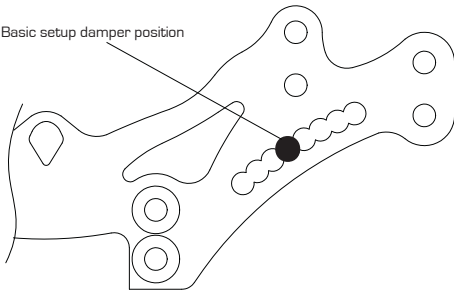
M3x6mm Roundhead Screw

M3x10mm Set Screw

INSTALL LEFT & RIGHT DAMPERS

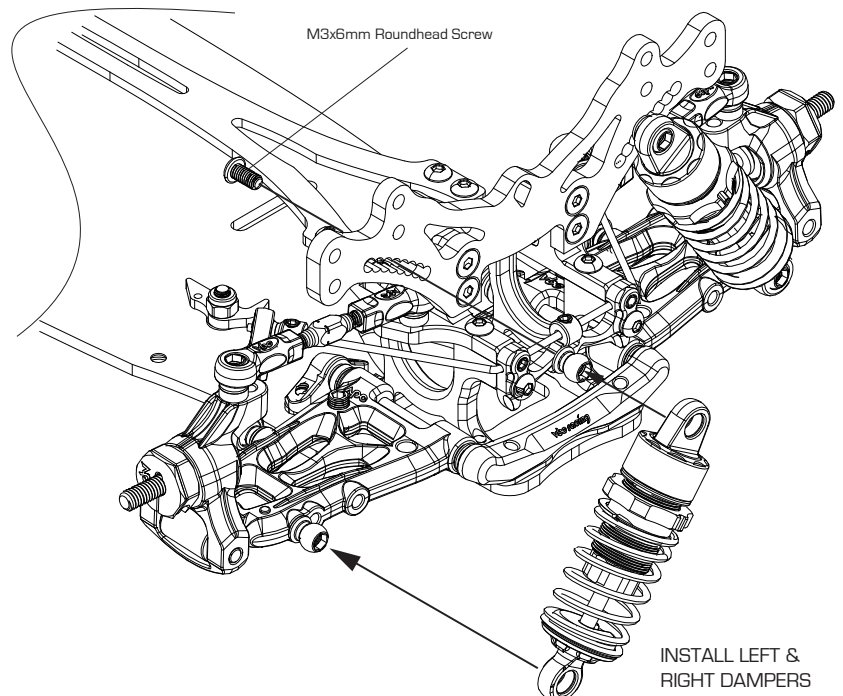


Basic setup damper position



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

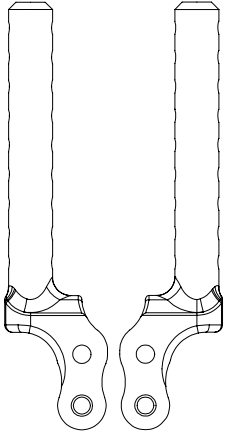
M3x6mm Roundhead Screw



INSTALL LEFT & RIGHT DAMPERS

30

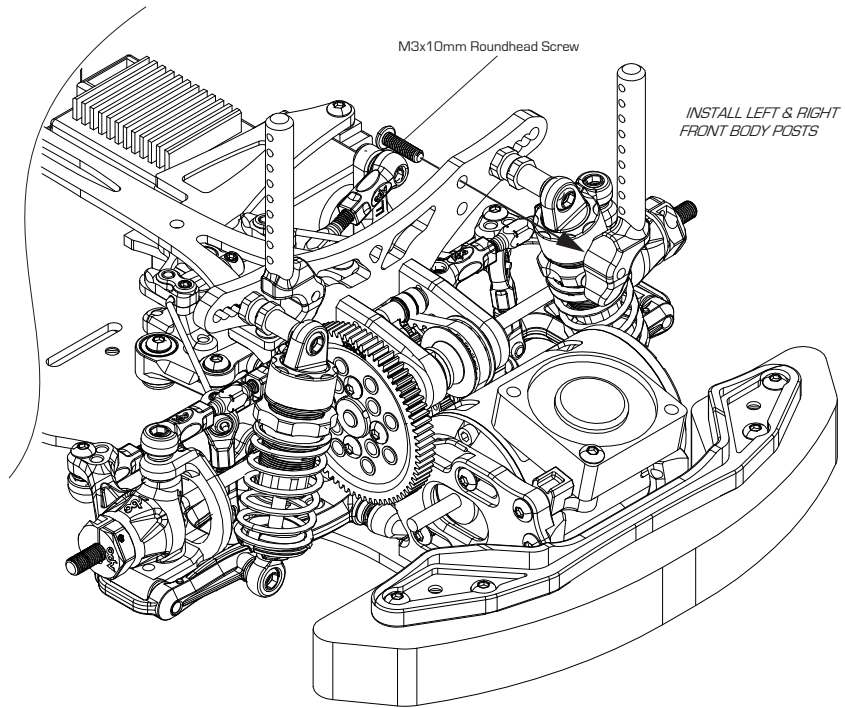
Front Body Post Assembly



Front Body Post, L&R A-03-VBC-2055 x 2

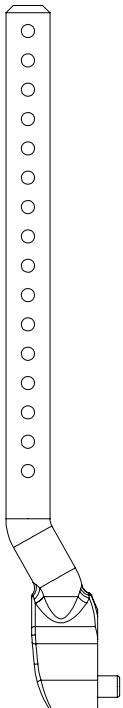


M3x10 Roundhead Screw C-02-SC-R0310 x 4

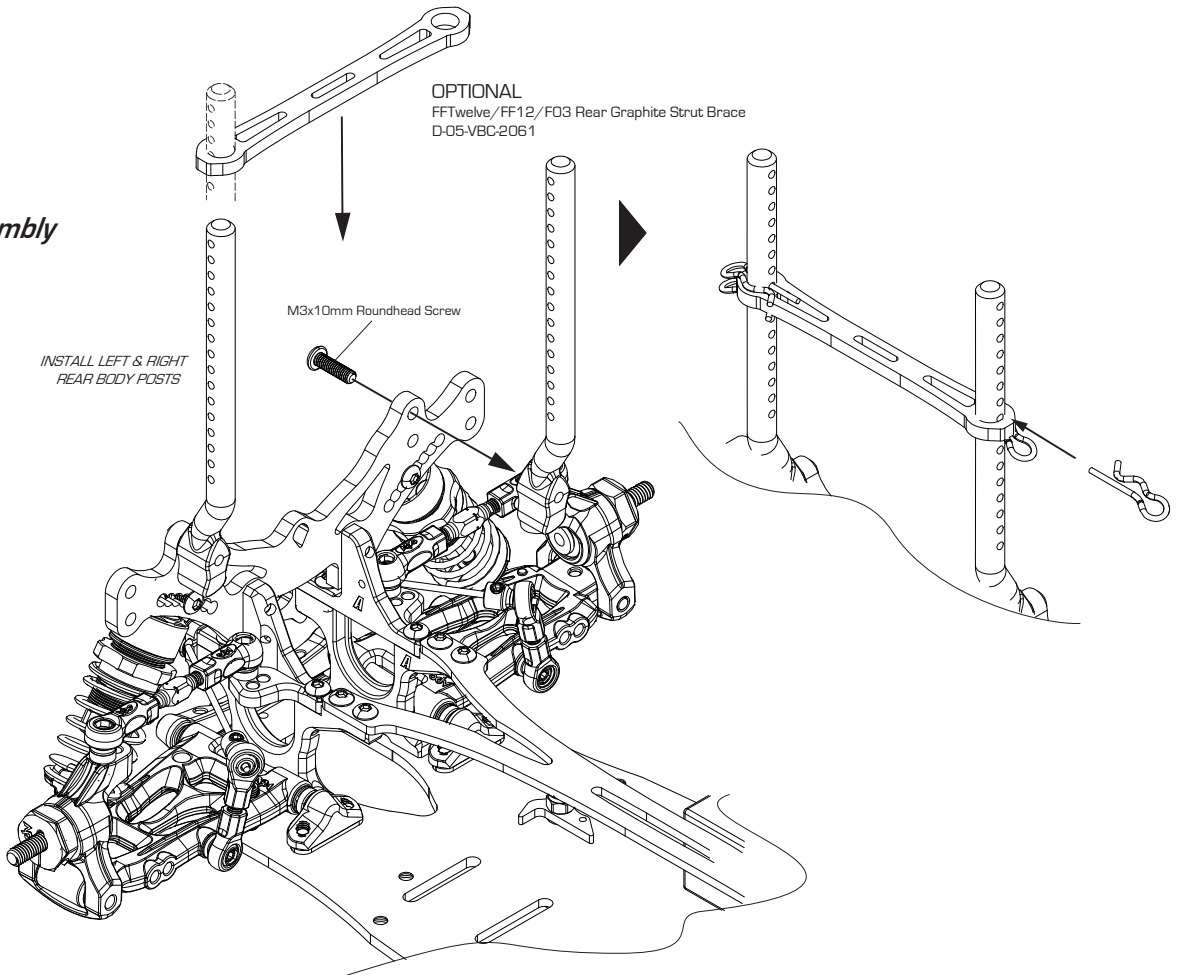


31

Rear Body Post Assembly

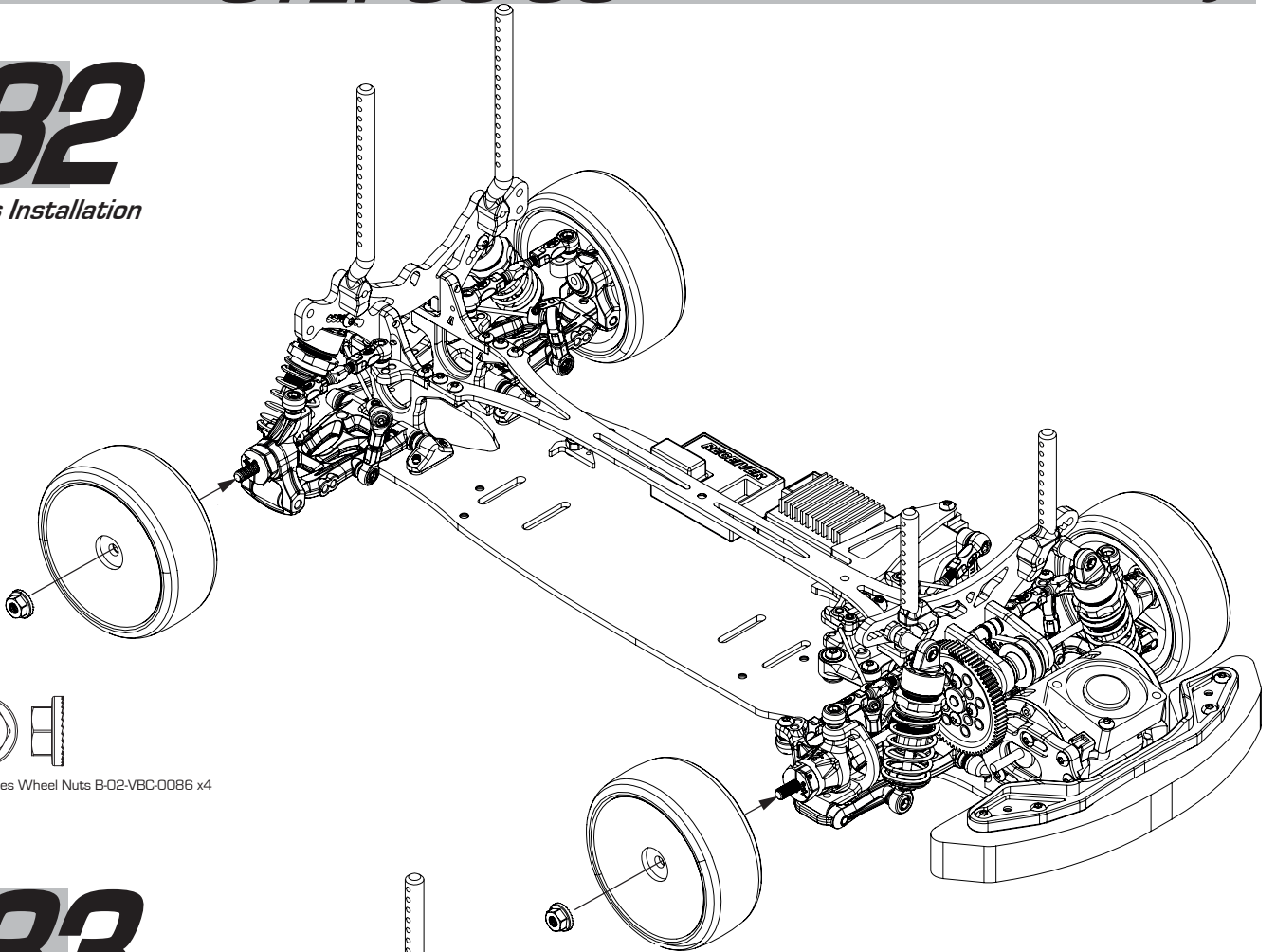


Rear Body Posts A-03-VBC-2056 x 2



32

Tires Installation

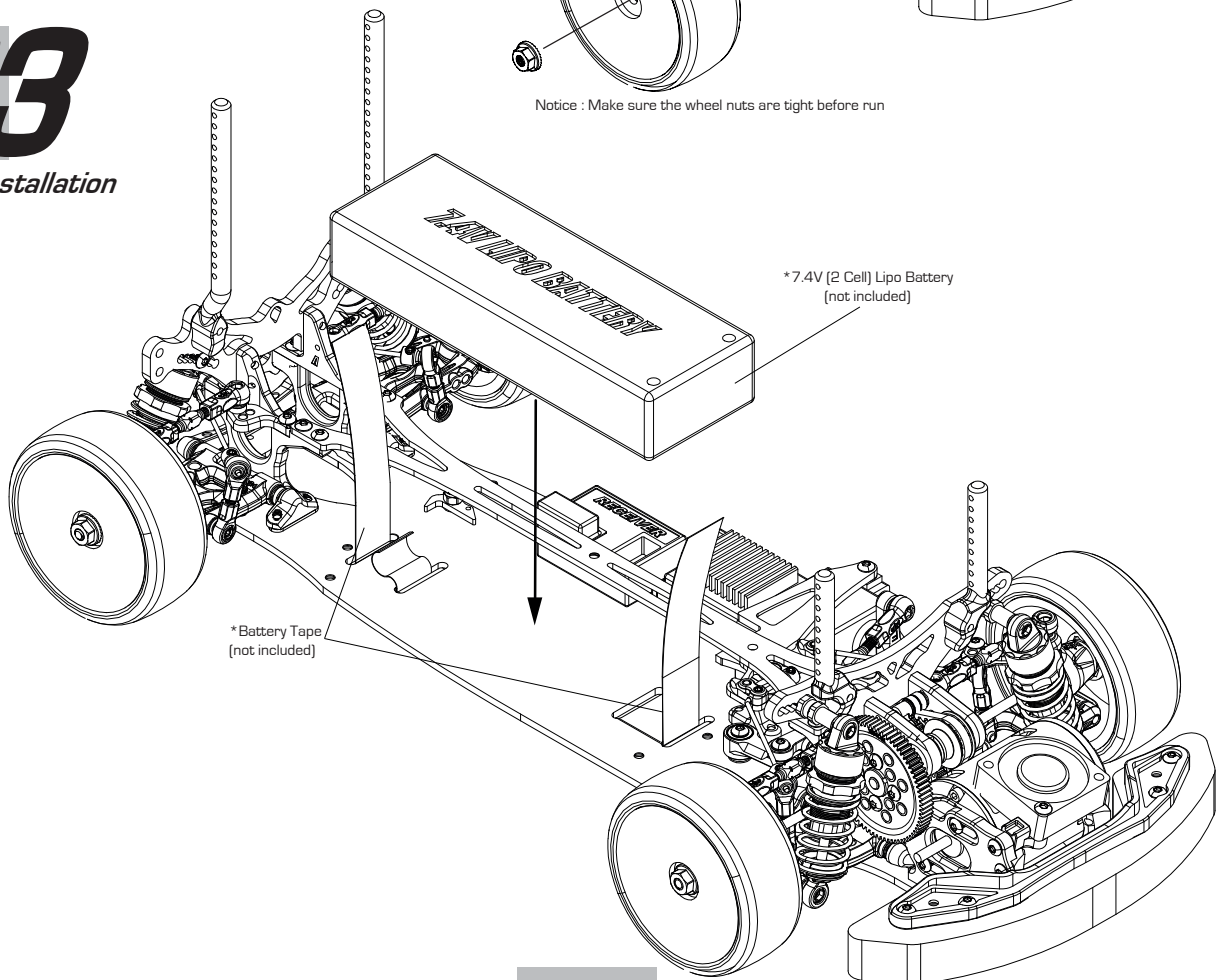


M4 Flanges Wheel Nuts B-02-VBC-0086 x4

Notice : Make sure the wheel nuts are tight before run

33

Battery Installation



*7.4V (2 Cell) Lipo Battery
(not included)

*Battery Tape
(not included)

PARTS LIST



FOR ONLINE ORDERS, PLEASE VISIT OUR WEBSITE WWW.VBCRACING.COM OR VISIT YOUR NEAREST HOBBY STORE. PLEASE VISIT OUR WEBSITE FOR THE LATEST VBC WILDFIRE OPTION PARTS.

Order Number	Package Descriptions	Parts Number	Parts Descriptions
A01-VBC-2001-20	FFTwelve Upper Deck	A-01-VBC-2001-20	FFTwelve Upper Deck
A01-VBC-2002-25	FFTwelve Graphite Main Chassis	A-01-VBC-2002-25	FFTwelve Graphite Main Chassis
A01-VBC-2003-35	FFTwelve Graphite Front Shock Tower	A-01-VBC-2003-35	FFTwelve Graphite Front Shock Tower
A01-VBC-2004-35	FFTwelve Graphite Rear Shock Tower	A-01-VBC-2004-35	FFTwelve Graphite Rear Shock Tower
D05-VBC-2005	Gear Differential 39T Set	A-03-VBC-2005 A-03-VBC-2006 A-03-VBC-0018 A-03-VBC-0019 A-03-VBC-0020 B-03-VBC-0004 B-03-VBC-0006 B-03-VBC-0005 C-02-SC-F2-6x10 B-02-VBC-0020 B-02-VBC-0077 B-02-VBC-0078	Gear Diff Housing Gear Diff Pulley 35T Diff Gear 10T Diff Gear 18T Diff Gear Shaft Seal Gasket Diff Shaft Sealer O-Ring Diff Housing Sealer O-Ring M2 5x10 Flathead Screw M2x10 Shaft Pin 1.5x0.3mm Shim 9.5x0.2mm Shim
D05-VBC-0061	Lightweight Hardened Gear Diff Cup Set	B-02-VBC-0099 B-02-VBC-0020	Lightweight Hardened Gear Diff Cup M2x10 Shaft Pin
C02-BB-1510B	10x15 Ball Bearing	C-02-BB-1510-B	10x15 Ball Bearing
B-02-VBC-2007	FFTwelve Lower Bulkhead (A)	B-02-VBC-2007	FFTwelve Lower Bulkhead (A)
B-02-VBC-2008	FFTwelve Lower Bulkhead (B)	B-02-VBC-2008	FFTwelve Lower Bulkhead (B)
B-02-VBC-0062	Center Suspension Mount (C0)	B-02-VBC-0062	Center Suspension Mount (C0)
D05-VBC-0066	Center Suspension Mount (X-C10, Y-C10)	B-02-VBC-0062-X10 B-02-VBC-0062-Y10	Center Suspension Mount (X-C10) Center Suspension Mount (Y-C10)
A01-VBC-0038	Center Suspension Mount Shim (1mm)	A-01-VBC-0038	Center Suspension Mount Shim (1mm)
D05-VBC-2011	FFTwelve Steering System	B-02-VBC-2009 B-02-VBC-0053 B-02-VBC-2010 B-02-VBC-0089 B-02-VBC-0045 C-02-BB-0805-B C-02-BB-0603 B-02-VBC-0092 B-02-VBC-0019-20 B-02-VBC-0019-10 C-02-SC-R0306 C-02-SC-F0306 C-02-SC-S0306 C-02-SC-S0310	Steering Assembly Travel Plate Steering Travel Arm Steering Assembly Pole Steering Cone Washer Ball Connector 5x8 Ball Bearing 3x6 Ball Bearing 5x8x0.2mm Shim T2 7075 Spacer T1 7075 Spacer M3x6 Roundhead Screw M3x8 Flathead Screw M3x8 Set Screw M3x10 Set Screw
B-02-VBC-0037	M3x42mm Turnbuckle (Titan)	B-02-VBC-0037	M3x42mm Turnbuckle (Titan)
D05-VBC-2016	FFTwelve 7075 Center Pulley Set	B-02-VBC-2012 B-02-VBC-2013 B-03-VBC-2014 B-02-VBC-2015	16T Alum Center Belt Pulley 2x8mm Shaft Pin 7mm O-Ring 5x7x0.5mm Spacer
B-02-VBC-2017	FFTwelve Center Drive Shaft Set	B-02-VBC-2017	FFTwelve Center Drive Shaft Set
B-03-VBC-2018	FFTwelve Drive Belt Type R	B-03-VBC-2018	FFTwelve Drive Belt Type R
D05-VBC-2021	FFTwelve Alum Belt Tensioner Set	B-02-VBC-2019 C-02-BB-0803-25 B-02-VBC-2020 C-02-SC-R0308	Belt Tensioner 3x6x0.5mm Bearing 3x5x0.5mm Shim M3x8 Roundhead Screw
D05-VBC-2022	Mid Shaft Bearing Set	C-02-BB-1004-40 C-02-BB-1005-30	4x10x4 Ball Bearing 5x10x3 Ball Bearing
B-02-VBC-2023	FFTwelve Front Gear Box (A)	B-02-VBC-2023	FFTwelve Front Gear Box (A)
B-02-VBC-2024	FFTwelve Front Gear Box (B)	B-02-VBC-2024	FFTwelve Front Gear Box (B)
B-02-VBC-2025	FFTwelve Rear Upper Bulkhead Set	B-02-VBC-2025	FFTwelve Rear Upper Bulkhead Set
B-02-VBC-2026	FFTwelve Rear Upper Bulkhead Set	B-02-VBC-2026	FFTwelve Rear Upper Bulkhead Set
D05-VBC-0016	Suspension Arm Set (Composite Hard)	A-03-VBC-0024 A-03-VBC-0050 A-03-VBC-0051 A-03-VBC-0052	Front Suspension Arm (Composite) Rear Suspension Arm (Composite) Suspension Arm Spacer T1 (Composite) Suspension Arm Spacer T2 (Composite)
B-02-VBC-0032	M3x23 Upright Pin	B-02-VBC-0032	M3x23 Upright Pin
B-02-VBC-0029	Suspension Arm Pin	B-02-VBC-0029	Suspension Arm Pin
B-02-VBC-0035	Arm Pin Pivot Ball	B-02-VBC-0035	Arm Pin Pivot Ball
A-03-VBC-0037	Rear Suspension Upright (Composite)	A-03-VBC-0037	Rear Suspension Upright (Composite)
B-02-VBC-2027	Rear Wheel Axle	B-02-VBC-2027	Rear Wheel Axle
C02-BB-1005B	5x10 Ball Bearing	C-02-BB-1005-B	5x10 Ball Bearing
B-02-VBC-0051	0 Offset Hex Wheel Hub	B-02-VBC-0051 C-02-SC-R1.6x4	0 Offset Hex Wheel Hub M1.6x4 Screw
A-03-VBC-0079	Steering Block Version 2 (Composite)	A-03-VBC-0079	Steering Block Version 2 (Composite)

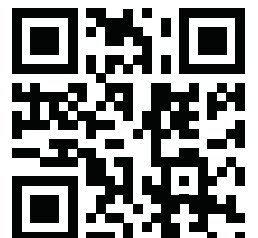
D05-VBC-0064	CHub Set Version 2 (Composite)	A-03-VBC-0104 A-03-VBC-0105	Right CHub Version2 (Composite) Left CHub Version2 (Composite)
B-02-VBC-0033	Steering Swivel Tube	B-02-VBC-0033	Steering Swivel Tube
A-03-VBC-0039	Turnbuckle Cup (Grey)	A-03-VBC-0039	Turnbuckle Cup
A-03-VBC-0056	Turnbuckle Cup S (Grey)	A-03-VBC-0056	Turnbuckle Cup S
B-02-VBC-0036	M3x32mm Turnbuckle	B-02-VBC-0036	M3x32mm Turnbuckle
B-02-VBC-0045	Ball Connector	B-02-VBC-0045	Ball Connector
B-02-VBC-0061-10	E10 Suspension Mount	B-02-VBC-0061-10	E10 Suspension Mount
B-02-VBC-0061-25	E25 Suspension Mount	B-02-VBC-0061-25	E25 Suspension Mount
D05-VBC-2028	FFTwelve Suspension Mount Shims	A-01-VBC-0037 A-01-VBC-0038	Suspension Mount Shim (1mm) Center Suspension Mount Shim (1mm)
A-03-VBC-0038	Shaft End Shoe	A-03-VBC-0038	Shaft End Shoe
D05-VBC-0042	Drive Axle Set for Front/Rear (Pair)	B-02-VBC-0024 B-02-VBC-0025 B-02-VBC-0026 B-02-VBC-0027 B-02-VBC-0020 B-02-VBC-0020-12 C-02-SC-S0302	Inner Axle Wheel Axle Axle Joint Axle Lock Spring M2x10 Shaft Pin M2x12 Shaft Pin M3x2 Set Screw
B-02-VBC-0019-20	T2 7075 Spacer	B-02-VBC-0019-20	T2 7075 Spacer
B-02-VBC-2029	FFTwelve Motor Mount	B-02-VBC-2029	FFTwelve Motor Mount
B-02-VBC-2031	Graphite Motor Mount Support	B-02-VBC-2030	Graphite Motor Mount Support
B-02-VBC-2031	FFTwelve/FF03 Alum Front Bumper Mount	B-02-VBC-2031	FFTwelve/FF03 Alum Front Bumper Mount
D05-VBC-2035	FFTwelve Bumper Pack	A-03-VBC-2032 A-03-VBC-2033 A-03-VBC-2034	Front Bumper Bottom Support Bumper Top Plate FFTwelve Plastic Front Cooling Fan Mount
B-03-VBC-2036	FFTwelve /FF03 Front Foam Bumper	B-03-VBC-2036	FFTwelve /FF03 Front Foam Bumper
D05-VBC-2039	Alum Spur Gear Adaptor	B-02-VBC-2037 B-02-VBC-2038 C-02-SC-R0304	Alum Spur Gear Adaptor 2-3mm Shaft Pin M3x4 Roundhead Screw
B-03-VBC-2040	48P Spur Gear 75T	B-03-VBC-2040	48P Spur Gear 75T
D05-VBC-0018	Servo Horn Set (Composite)	A-03-VBC-0053 A-03-VBC-0054 A-03-VBC-0032 A-03-VBC-0033	Servo Horn Type F (Composite) Servo Horn Type A (Composite) Servo Spacer 1mm Servo Spacer 2mm
D05-VBC-2044	FFTwelve Servo Mount	B-02-VBC-2041 B-02-VBC-2042 A-01-VBC-2043	Alum Center Servo Mount Alum Servo Mount Graphite Servo Mount Plate
D05-VBC-2047	FFTwelve/FF03 Front & Rear Stabilizer Wire Set, 1.2mm & 1.4mm	B-03-VBC-2045 B-03-VBC-2046	FFTwelve/FF03 Front Stabilizer 1.2 & 1.4 FFTwelve/FF03 Rear Stabilizer 1.2 & 1.4
D05-VBC-2049	Stabilizer Connector/Collar Set	B-02-VBC-0047 B-02-VBC-2048 C-02-SC-S0310 C-02-SC-S0303 A-03-VBC-0040 A-03-VBC-0041	Stabilizer Connector Stabilizer Collar M3x10 Set Screw M3x3 Set Screw Turnbuckle Cup Open Type S Turnbuckle Cup Open Type L
D05-VBC-2053	Front & Rear Stabilizer Mount Set	A-01-VBC-2050 A-03-VBC-2051 C-02-SC-S0303 A-03-VBC-2052 C-02-SC-S0303	Graphite Stabilizer Mount Plate Plastic Front Stabilizer Mount M3x3 Set Screw Plastic Rear Stabilizer Mount M3x3 Set Screw M3x8 Roundhead Screw
D05-VBC-0024	WildFire Shocks Set	B-02-VBC-0039 B-02-VBC-0042 B-02-VBC-0041 A-03-VBC-0057 A-03-VBC-0044 A-03-VBC-0045 A-03-VBC-0066 A-03-VBC-0046 A-03-VBC-0058 B-02-VBC-0043 B-03-VBC-0002 B-03-VBC-0012 B-02-VBC-0044 A-03-VBC-0042 A-03-VBC-0043 B-03-VBC-0011 B-02-VBC-0040 B-02-VBC-0073-C	Shock Body Shock Height Adjuster Shock Bottom Cap Shock Piston (1 hole) Shock Piston (2 holes) Shock Piston (3 holes) Shock Bottom Connector Shaft Cap Shaft Guide Shock Shaft Sealer O-Ring (Shock) Shaft Sealer O-Ring M3 E-Clip Shock Top Connector Spring Bottom Support O1 Sealer Cap Shock Body Cap Shock Spring (Orange-Medium Soft)
B-02-VBC-2054	Alum Front Shock Mount Post, 2 pcs	B-02-VBC-2054	Alum Shock Mount Post
D05-VBC-2057	FFTwelve Body Posts Pack	A-03-VBC-2055 A-03-VBC-2056 B-02-VBC-0076	Front Body Post, L&R Rear Body Post Body Clip
D05-VBC-2059	FFTwelve Battery Side Guard Set	A-01-VBC-2058 B-02-VBC-0019-20 C-02-SC-F0310 C-02-SC-N033 A-03-VBC-0059	Graphite Adjustable Battery Guard T2 7075 Spacer M2x10 Flathead Screw M3 Lock Nut Antenna Stand
D05-VBC-2061	FFTwelve/FF12/FF03 Rear Graphite Strut Brace	A-01-VBC-2057 B-02-VBC-0076	FFTwelve/FF12/FF03 Rear Graphite Strut Brace Body Clip
A-02-VBC-2060	FFTwelve Decals	A-02-VBC-2060	FFTwelve Decals



COMPETITION GRADE HIGH PERFORMANCE RADIO CONTROL RACING CAR CHASSIS KIT

FTWELVE

1/10 ELECTRIC BELT-DRIVEN FRONT WHEEL DRIVE COMPETITION CAR KIT



Instruction Book P-2001.0 VBC Racing FTWELW FWD Touring Car Kit D-05-VBC-0074