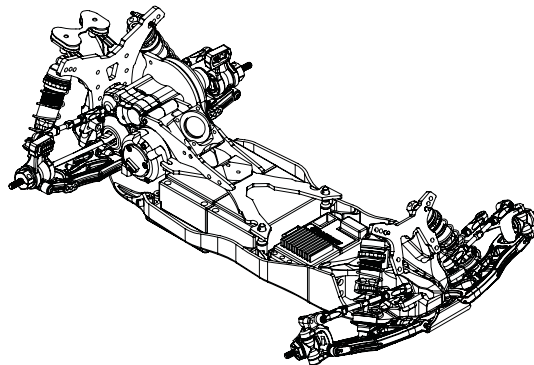


COMPETITION GRADE HIGH PERFORMANCE RADIO CONTROL RACING CAR CHASSIS KIT

FIREBOLT DM

1/10 RWD ELECTRIC COMPETITION OFFROAD BUGGY 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 7075 aluminum chassis and high grade full carbon fiber 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 carbon fiber parts edges.

Sand the 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: info@vbc-racing.com or visit our web site www.vbc-racing.com



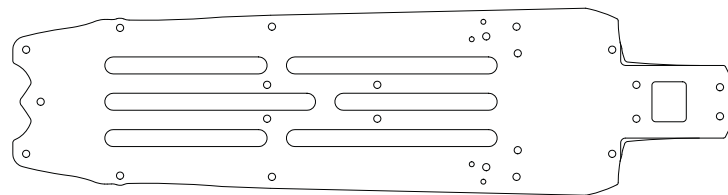
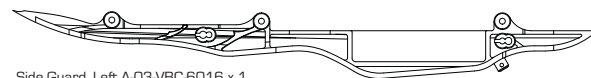
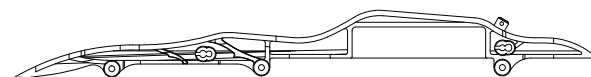
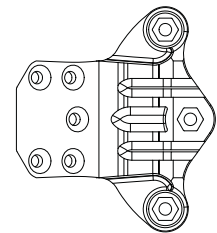
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1

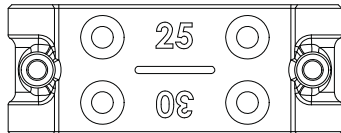
Asssembling the main Chassis



2

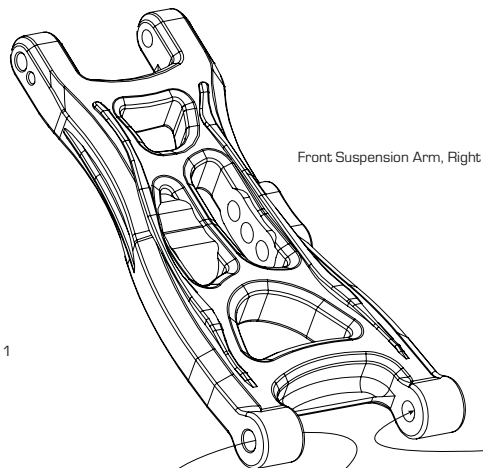
Front Suspension Assembling

3x35mm Suspension Pin C-02-VBC-6015 x 2



Firebolt Alum Front Suspension Brace B-02-VBC-6012 x 1

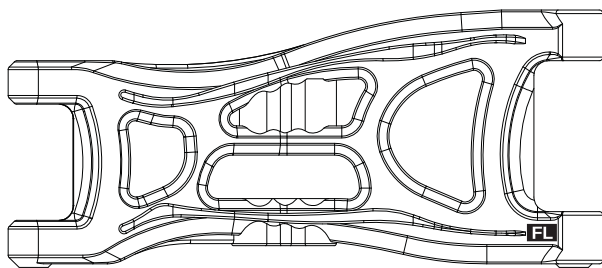
M3x3 Set Screw C-02-SC-SS-0303 x 2



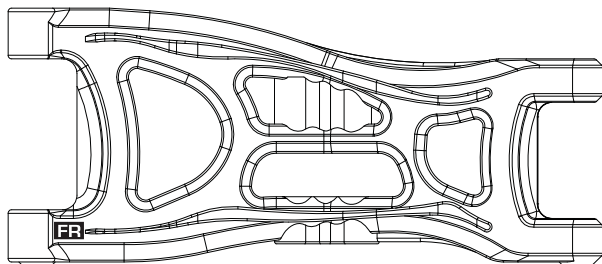
3x35mm Suspension Pin

Firebolt Alum Front Suspension Brace

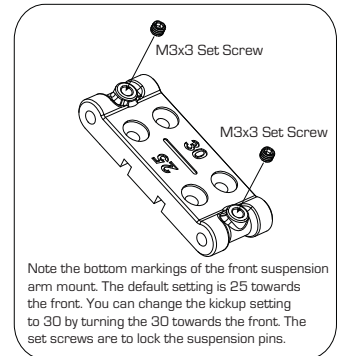
3x35mm Suspension Pin



Front Suspension Arm, FL A-03-VBC-6045 x 1



Front Suspension Arm, FR A-03-VBC-6044 x 1

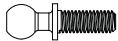


Front Suspension Arm Mount

Front Suspension Arm, Left

3

Front Suspension Assembly



4.7x15mm Ball Connector C-02-VBC-6008 x 2



M3x12 Flathead Screw C-02-SC-F0312 x 2



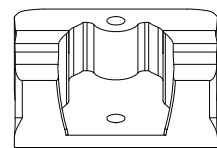
M3x16 Flathead Screw C-02-SC-F0316 x 2



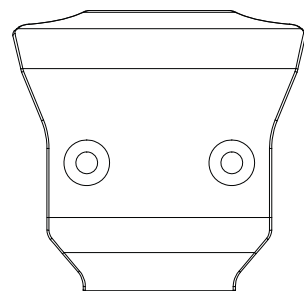
M3x8 Roundhead Screw C-02-SC-R0308 x 1



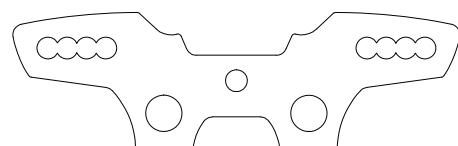
Firebolt Alum Front Camber link Mount B-02-VBC-6013 x 2



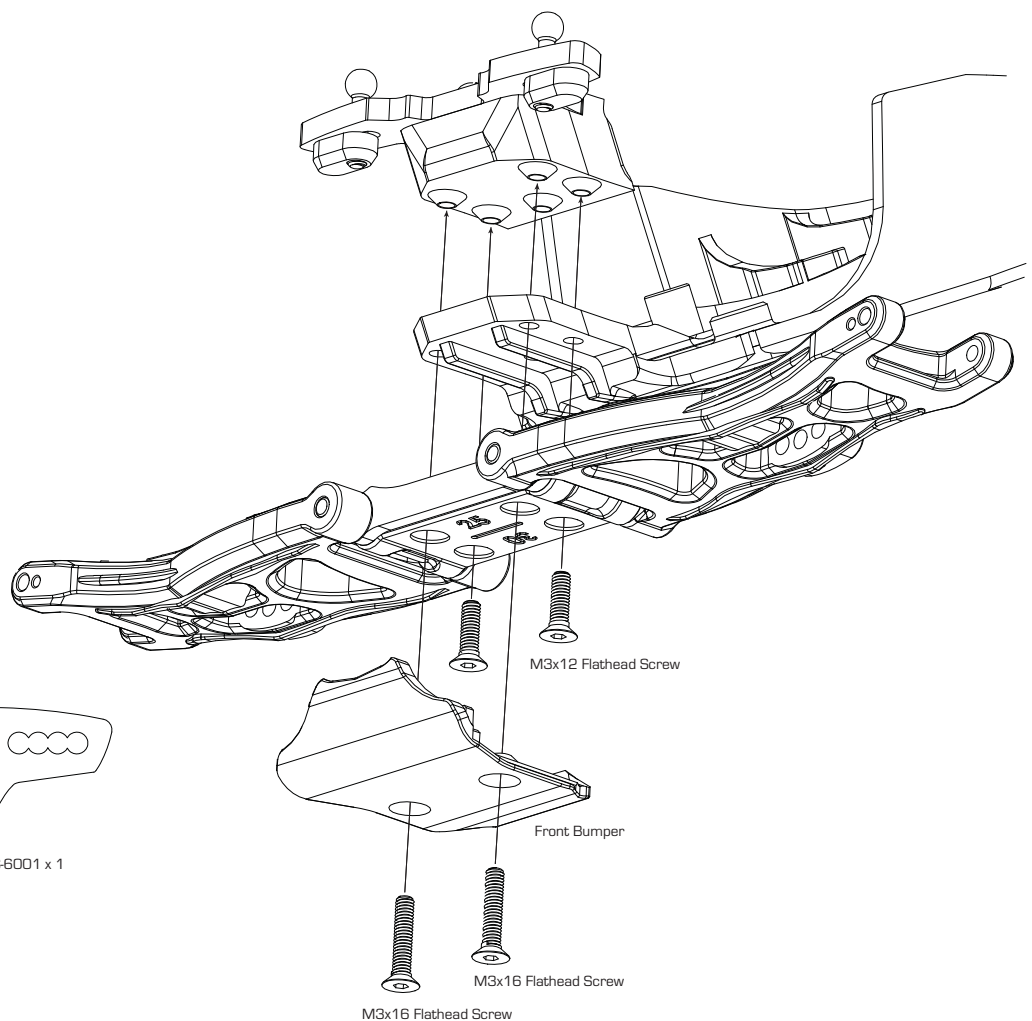
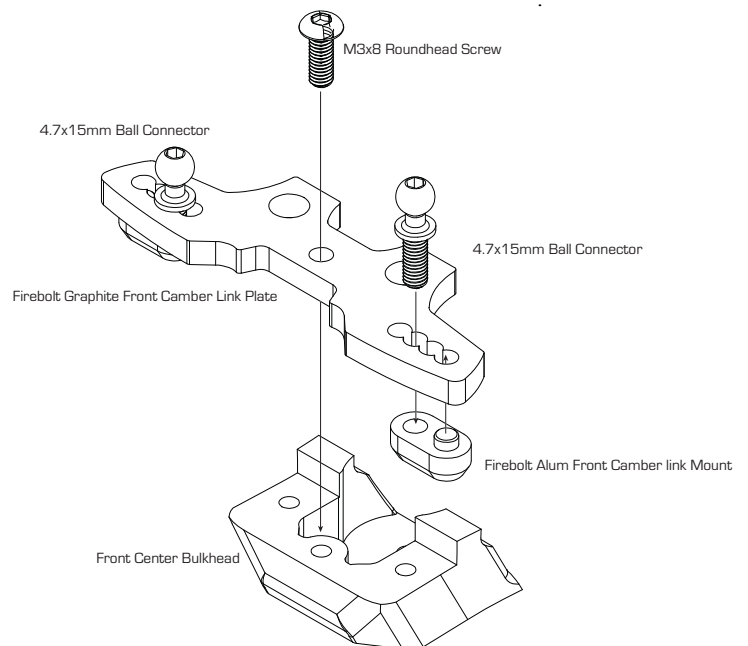
Front Center Bulkhead A-03-VBC-6046 x 1



Front Bumper A-03-VBC-6011 x 1



Firebolt Graphite Front Camber Link Plate A-01-VBC-6001 x 1



4**Front Steering Assembly**

Steering Swivel Tube B-02-VBC-0033 x 2



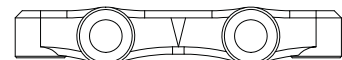
5x8 Ball Bearings C-02-BB-0805-B x 4



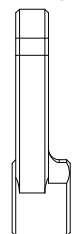
4.7x12mm Ball Connector B-02-VBC-5015 x 3



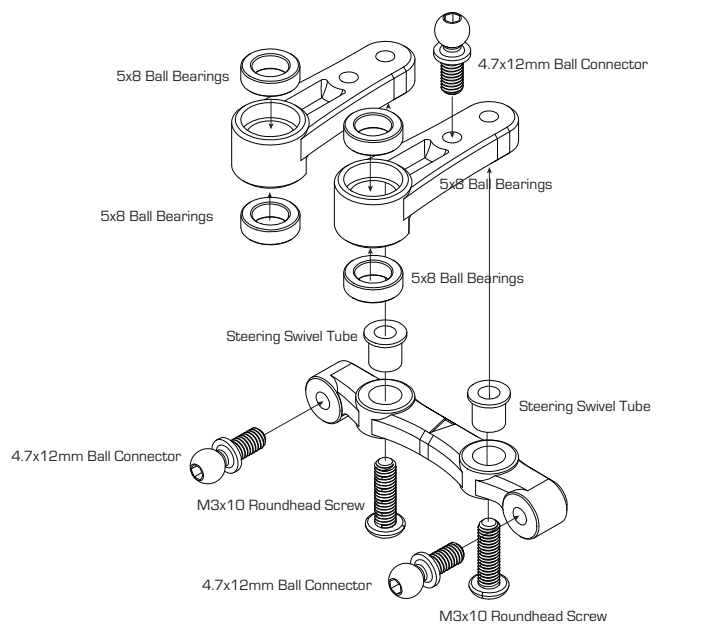
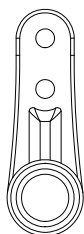
M3x10 Roundhead Screw C-02-SC-R0310 x 2



Steering Center Bridge A-03-VBC-6022 x 1



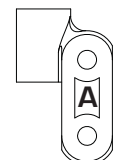
Steering Arm A-03-VBC-6028 x 2

**5**

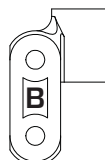
Firebolt Alum Steering Post B-02-VBC-6011 x 2



M3x16 Roundhead Screw C-02-SC-R0316 x 2

6**Assembling Front Part**

Servo Mount, Left A-03-VBC-6018 x 1

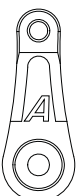


Servo Mount, Right A-03-VBC-6019 x 1



Servo arm, Futaba [F] A-03-VBC-6034 x 1

OR



Servo arm, Sanwa/KO [A] A-03-VBC-6035 x 1



Ball Cup, Short A-03-VBC-6029 x 2



M3x6.5 Spacer B-02-VBC-5093 x 4



M3x6 Roundhead Screw C-02-SC-R0306 x 1



M3x8 Roundhead Screw C-02-SC-R0308 x 4

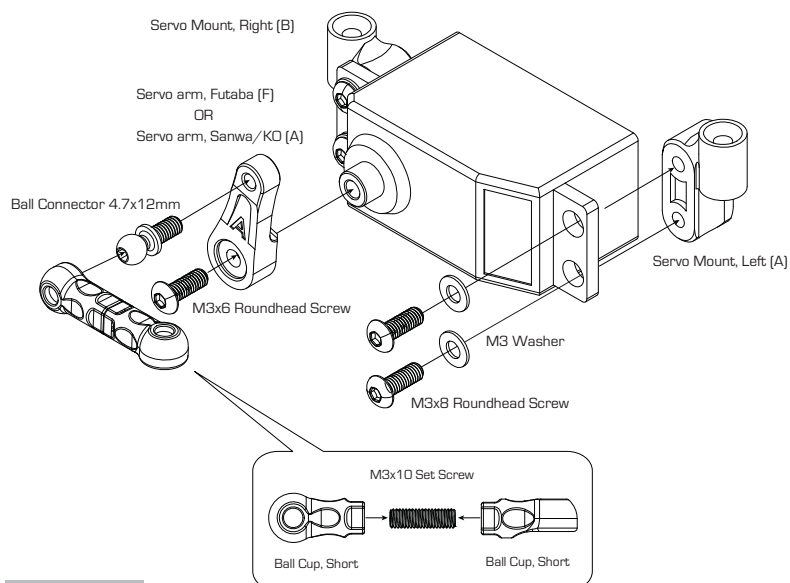
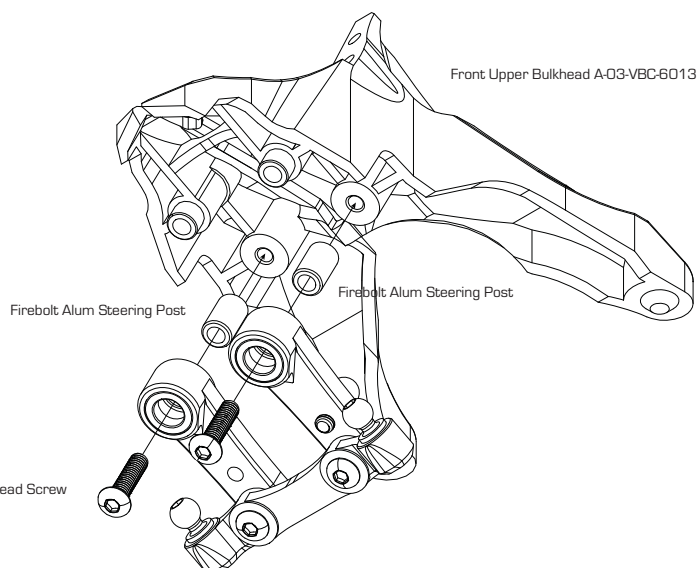


M3x10 Set Screw C-02-SC-SS-0310 x 1



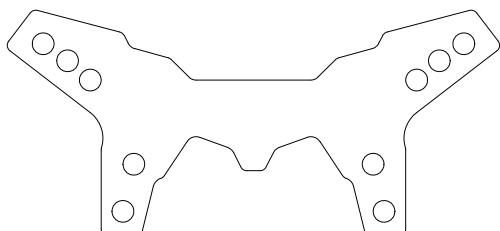
Ball Connector 4.7x12mm B-02-VBC-5015 x 1

M3x16 Roundhead Screw



7

Front Damper Mount Assembly



Graphite Front Damper Mount A-01-VBC-6004 x 1



M3x20 Roundhead Screw C-02-SC-R0320 x 4



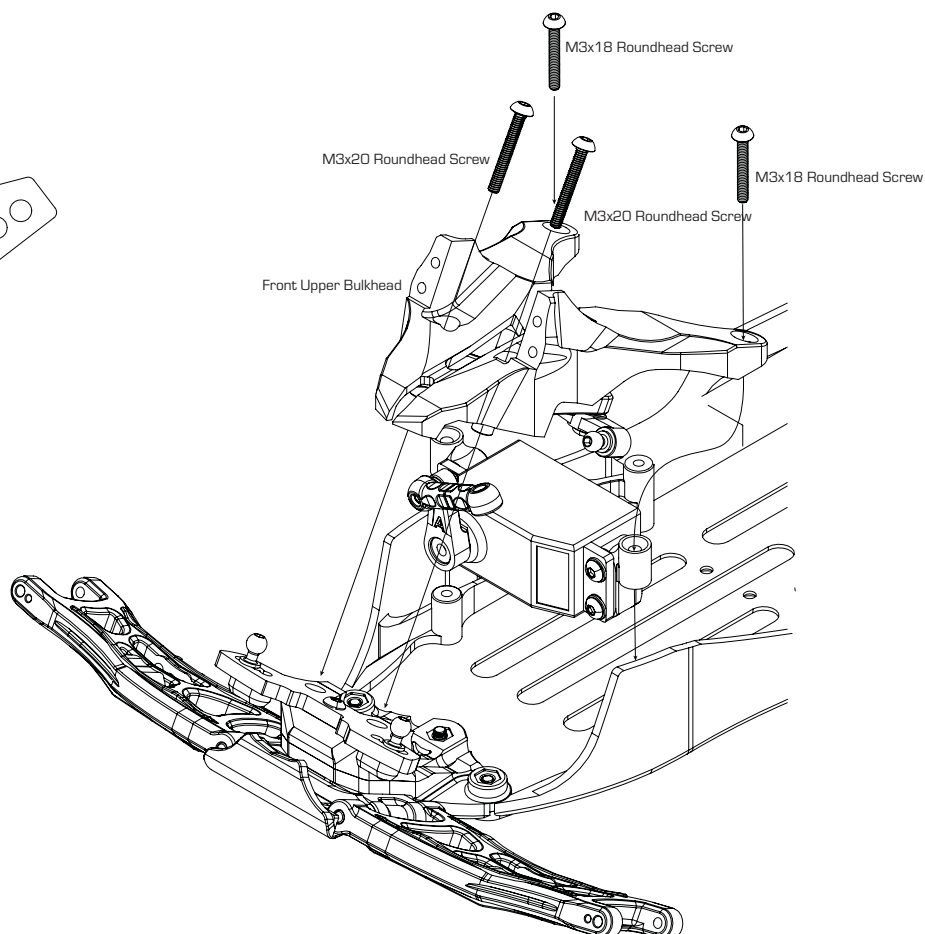
M3x18 Roundhead Screw C-02-SC-R0318 x 2



M3x8 Roundhead Screw C-02-SC-R0308 x 4

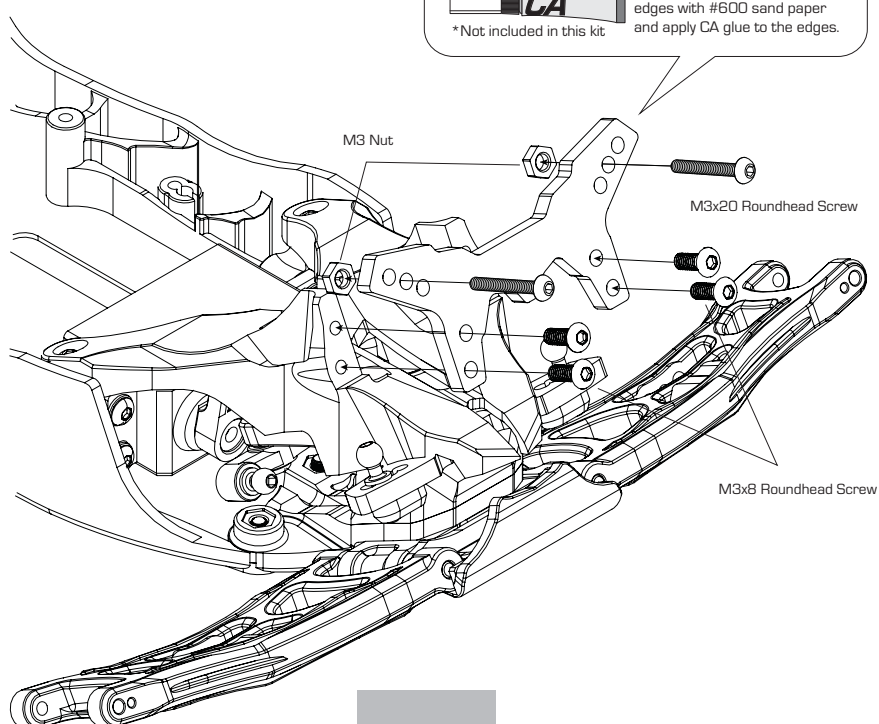


M3 Nut C-02-SC-FN03 x 2



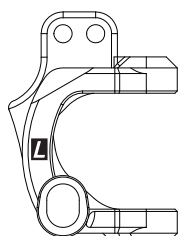
*Not included in this kit

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

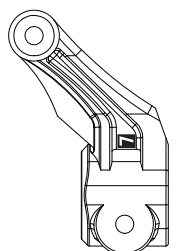
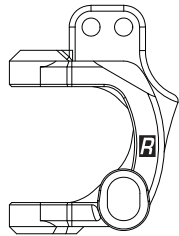
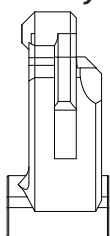


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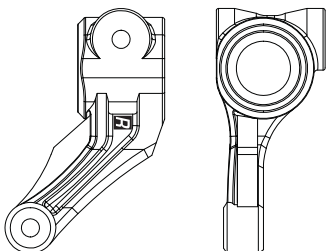
Front Knuckle Assembly



C-hub, Left A-03-VBC-6020 x 1



Steering Knuckle, Left A-03-VBC-6024 x 1



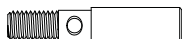
Steering Knuckle, Right A-03-VBC-6025 x 1



5x10 Ball Bearing C-02-BB-1005-B x 4



Aluminium Front Axle Washer B-02-VBC-6005 x 2



Front Axle C-02-VBC-6006 x 2



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



Ball Connector 4.7x15mm C-02-VBC-6008 x 4



3x6x2mm Plastic Spacer A-03-VBC-6056 x 2



0° caster adjuster A-03-VBC-6031 x 2
 2.5° caster adjuster A-03-VBC-6032 x 2
 5° caster adjuster A-03-VBC-6033 x 2



2.5x6x1mm Plastic Spacer A-03-VBC-6052 x 2



Front Wheel Adaptor A-03-VBC-6057 x 2



2.5x24.8mm Kingpin C-02-VBC-6018 x 2

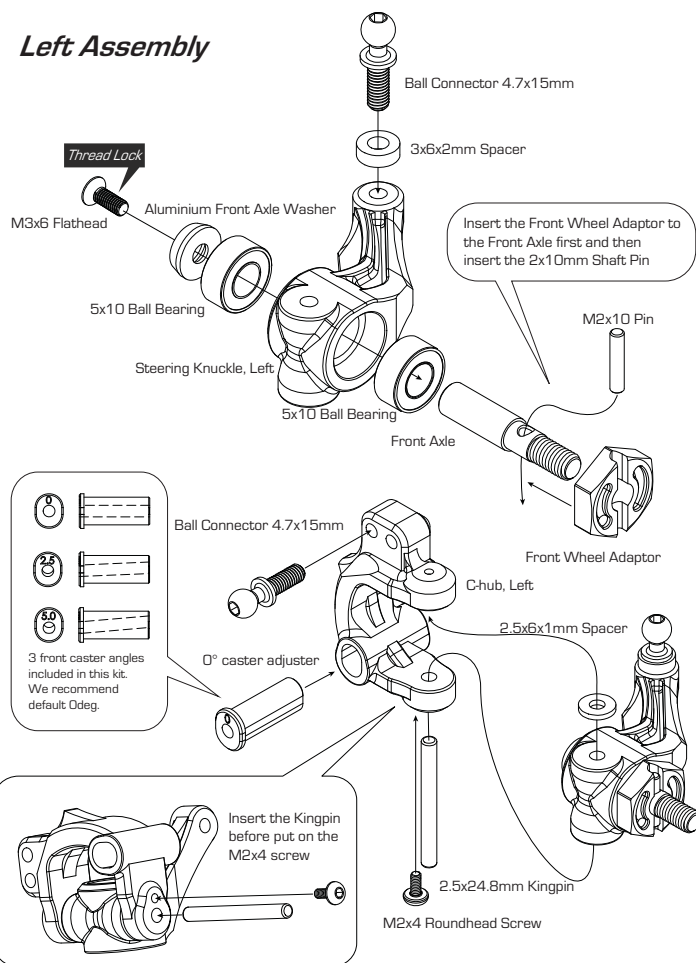


M2x4 Roundhead Screw C-02-SC-R0204 x 2

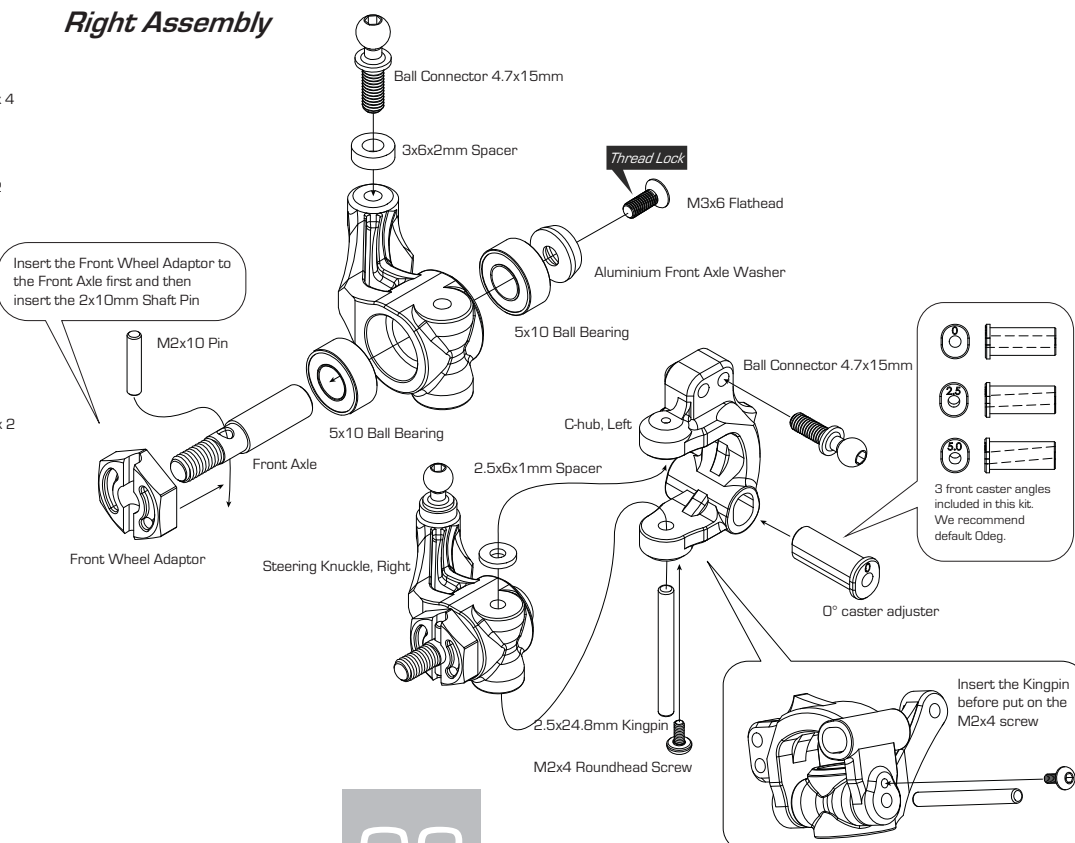


M3x6 Flathead Screw C-02-SC-F0306 x 2

Left Assembly



Right Assembly

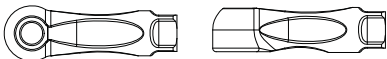


9**Steering System Assembly**

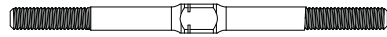
M2x4 Roundhead Screw C-02-SC-R0204 x 2



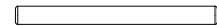
2.5x6x1mm Plastic Spacer A-03-VBC-6052 x 2



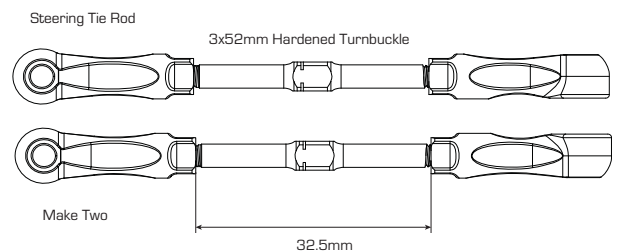
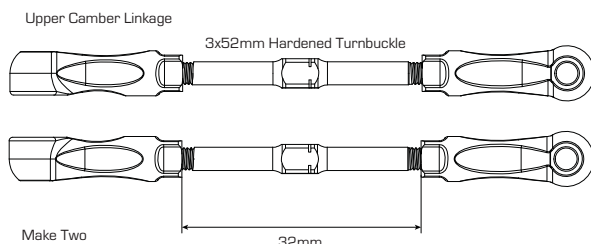
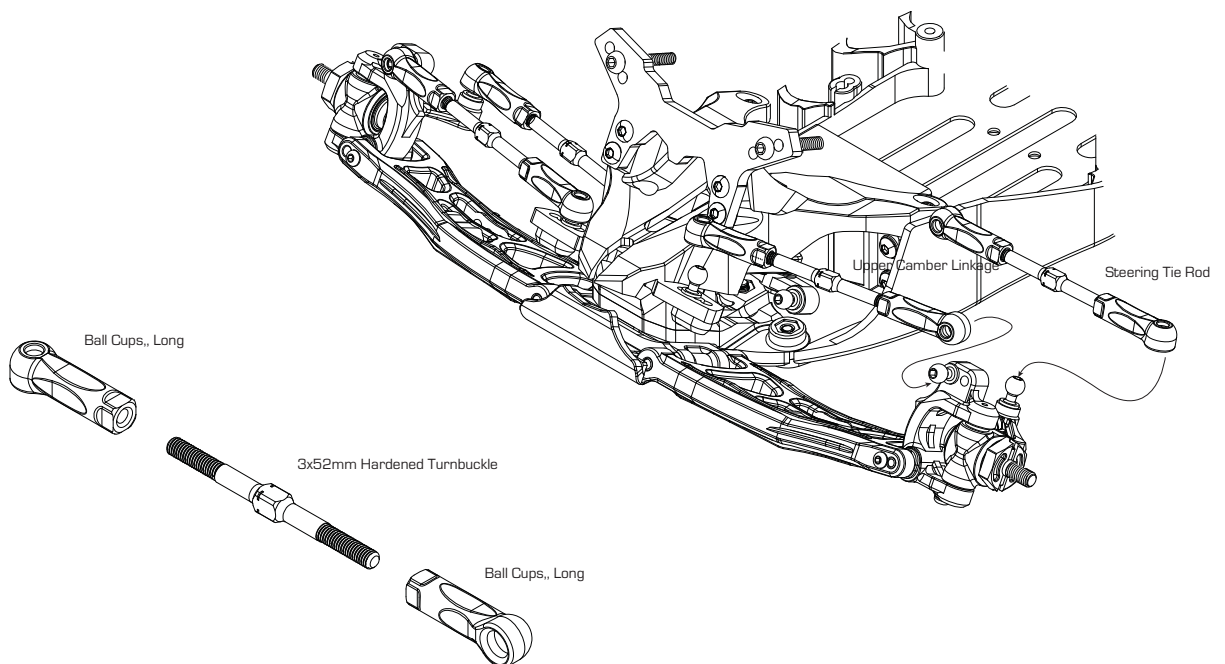
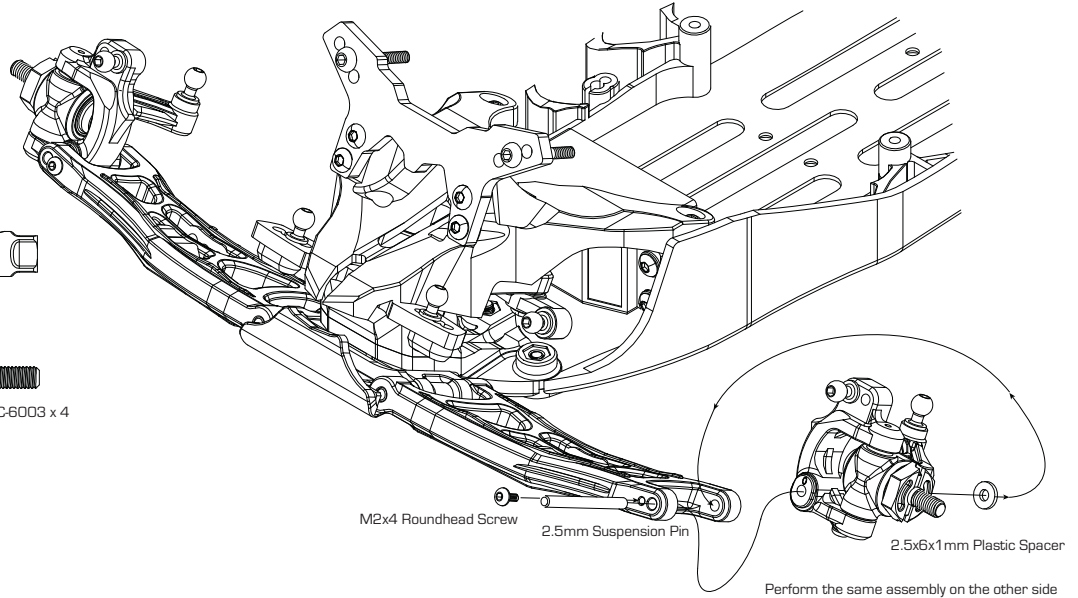
Ball Cups, Long A-03-VBC-6030 x 8

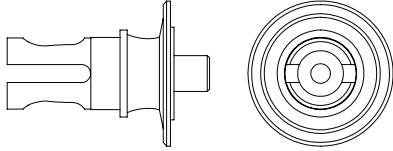


3x52mm Hardened Springsteel Turnbuckle C-02-VBC-6003 x 4

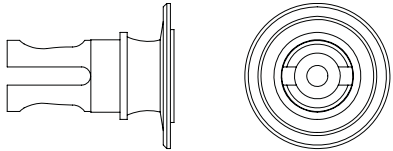


2.5x27.8mm Suspension Pin C-02-VBC-6016 x 2

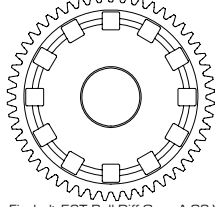


10**Rear Differentials Assembly**

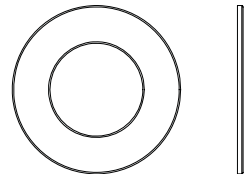
FireboltDM Diff Joint A C-02-VBC-6012 x 1



FireboltDM Diff Joint B C-02-VBC-6013 x 1



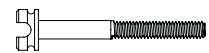
Firebolt 52T Ball Diff Gear A-03-VBC-6005 x 1



Firebolt Diff Ring C-02-VBC-6023 x 2



Diff Balls [2.4mm] C-03-VBC-6004 x 12



Ball Diff Screw C-02-VBC-6014 x 1



M2.6 Lock Nut C-02-VBC-6029 x 1



Diff Spring C-02-VBC-6024 x 1



Ball Diff Nut A-03-VBC-6042 x 1



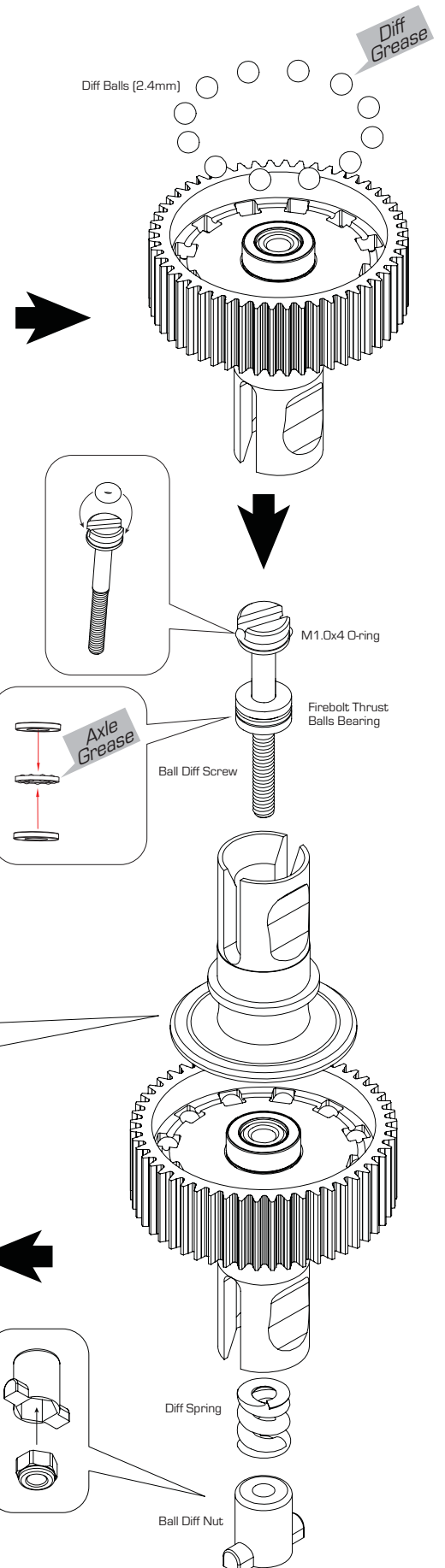
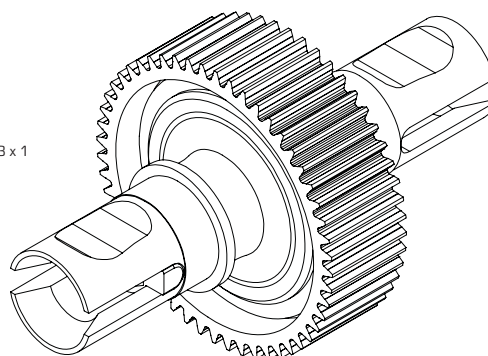
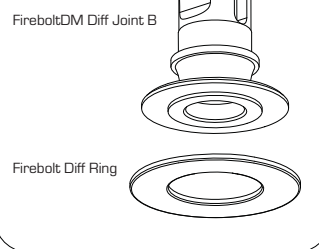
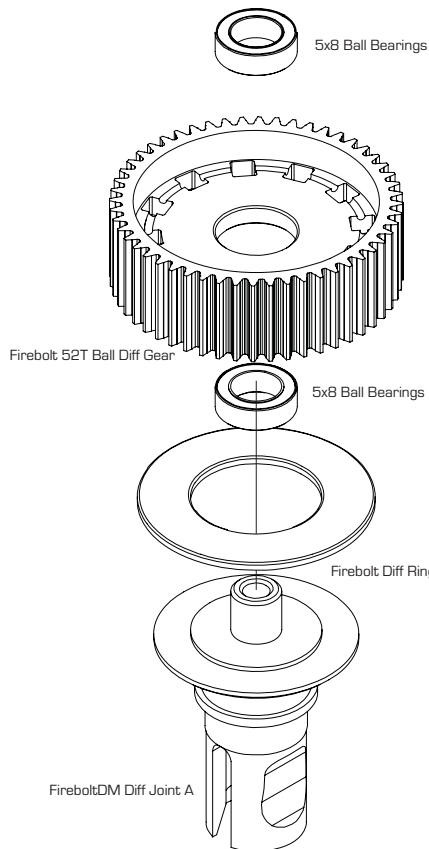
Firebolt Thrust Balls Bearing Set C-03-VBC-6003 x 1

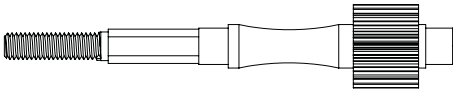


5x8 Ball Bearings C-02-BB-0805-B x 2



M1.0x4x6 O-ring R-02-VBC-6036 x 1

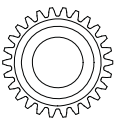


11**Installing gears**

Firebolt Gear Top Shaft C-02-VBC-6005 x 1



Firebolt Idler Shaft C-02-VBC-6002 x 2



Firebolt Idler gear A-03-VBC-6008 x 2



Idle Gear Spacer A-03-VBC-6007 x 2



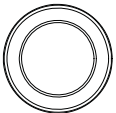
5x10 Ball Bearings C-02-BB-1005-B x 6

12**Gearbox Assembly**

M3x35 Roundhead Screw C-02-SC-R0335 x 2



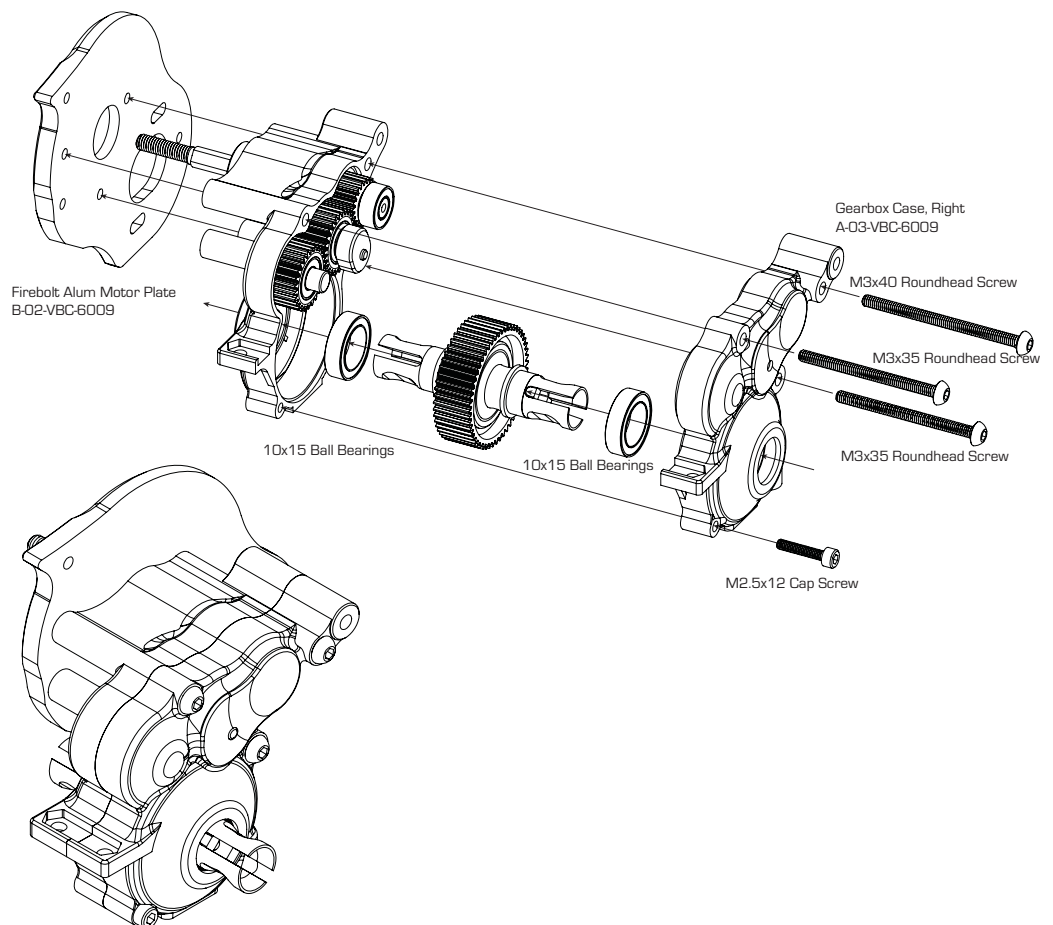
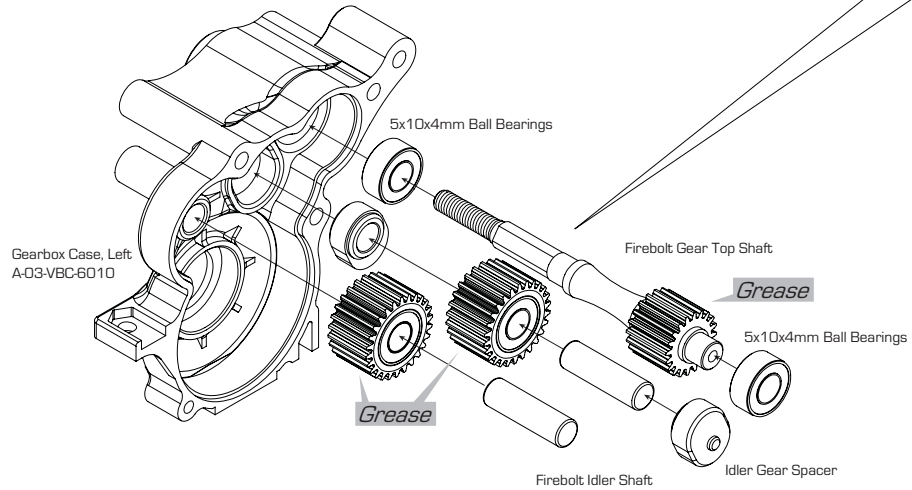
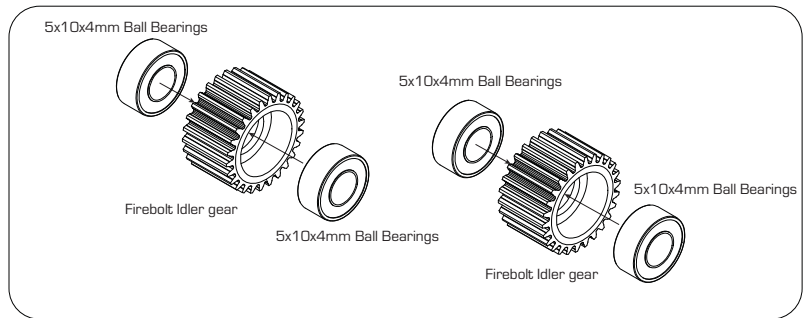
M3x40 Roundhead Screw C-02-SC-R0340 x 1



10x15 Ball Bearings C-02-BB-1510-P x 2

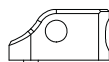


M2.5x12 Cap Screw C-02-SC-R2512 x 1



13**Rear Suspension Assembly**

4.7x15mm Ball Connector C-02-VBC-6008 x 2



Firebolt Alum Rear Camber Link Mount B-02-VBC-6010 x 2



M3x20 Roundhead Screw C-02-SC-R0320 x 2



M3x12 Roundhead Screw C-02-SC-R0312 x 4



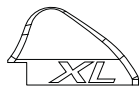
M3x10 Roundhead Screw C-02-SC-R0310 x 4



M3x8 Roundhead Screw C-02-SC-R0308 x 4



M3 Hex Nut C-02-SC-FN03 x 2



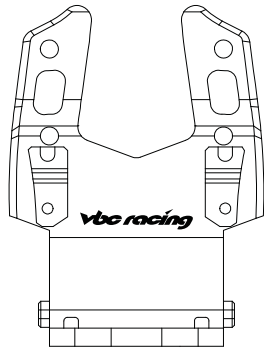
Firebolt Alum Rear Suspension Mount, XL B-02-VBC-6002 x 1



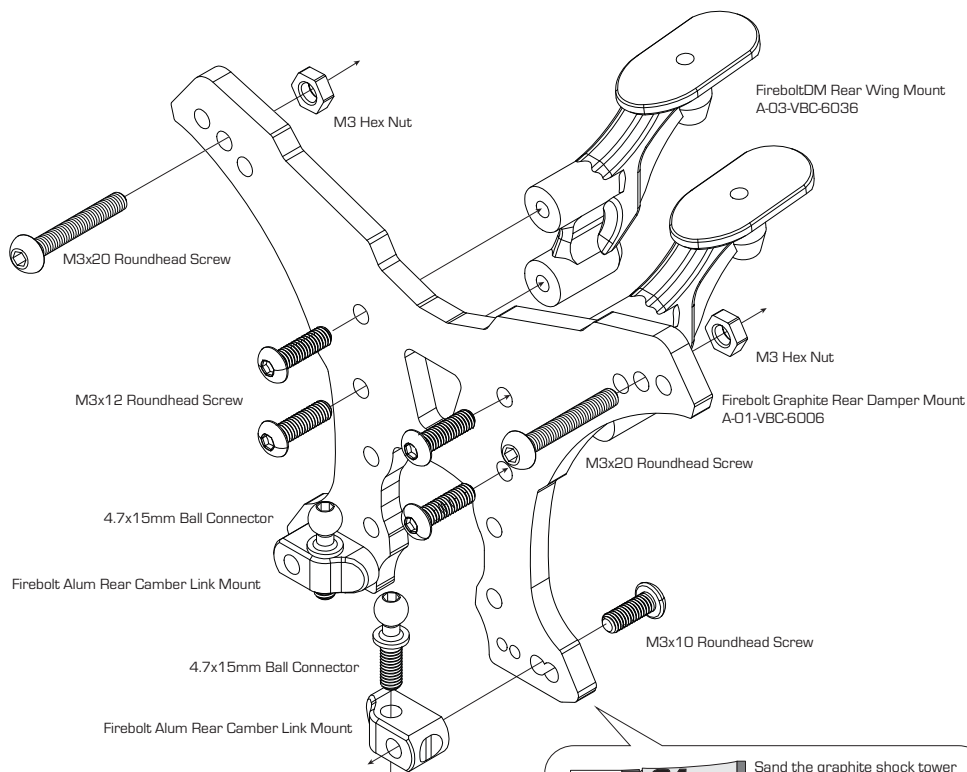
Firebolt Alum Rear Suspension Mount, XR B-02-VBC-6001 x 1



Rear Suspension Mount Spacer 0.5mm A-01-VBC-6079 x 2

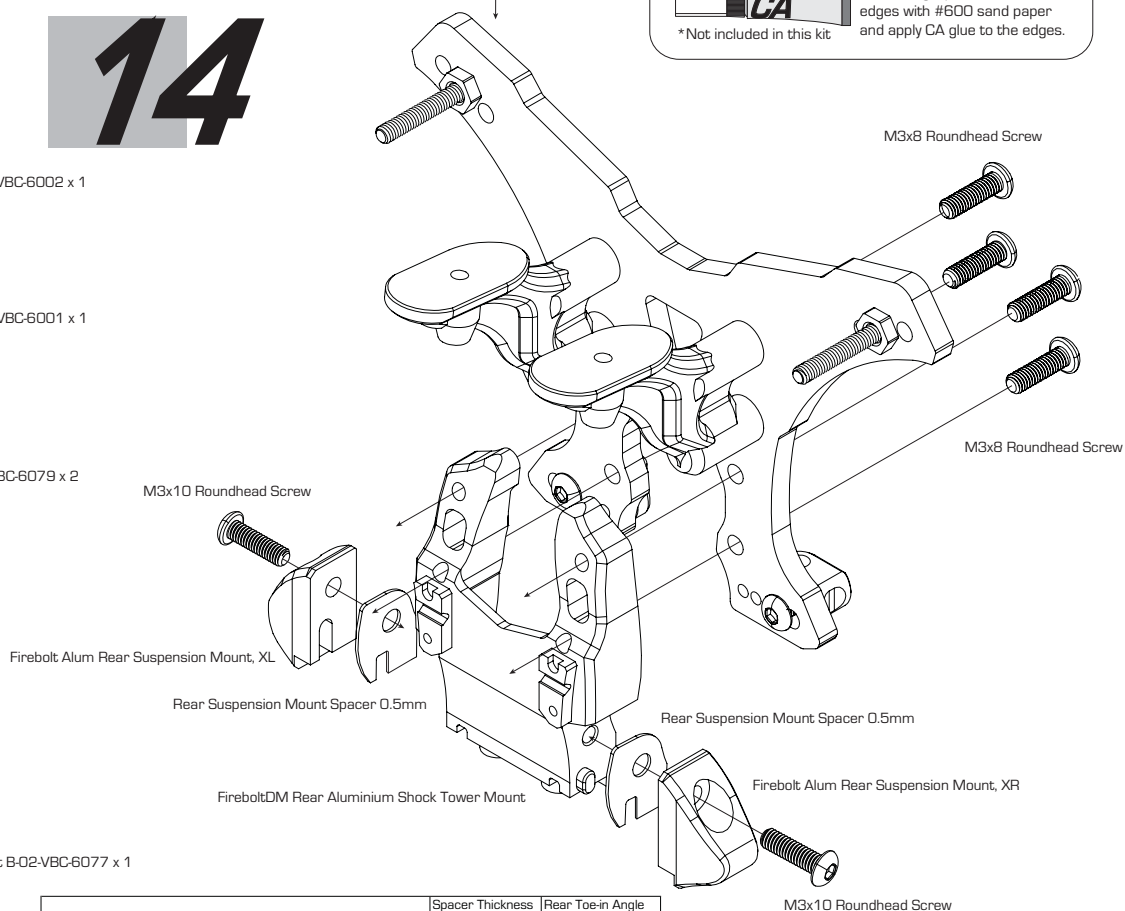


FireboltDM Rear Aluminium Shock Tower Mount B-02-VBC-6077 x 1



*Not included in this kit

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

14

	Spacer Thickness	Rear Toe-in Angle
Without Rear Suspension Mount Spacer	0mm	3.0°
Rear Suspension Mount Spacer 0.5mm A-01-VBC-6079	0.5mm	3.6°
Rear Suspension Mount Spacer 1.0mm A-01-VBC-6080(Optional)	1.0mm	4.3°
Rear Suspension Mount Spacer 0.5mm A-01-VBC-6079 + Rear Suspension Mount Spacer 1.0mm A-01-VBC-6080(Optional)	1.5mm	5.0°

15

Installing the Gearbox



M3x8 Flathead Screw C-02-SC-F0308 x 4



Firebolt Alum Rear Suspension Mount, RF B-02-VBC-6003 x 1



Rear RF Mount Spacer 1.5mm A-01-VBC-6081 x 1



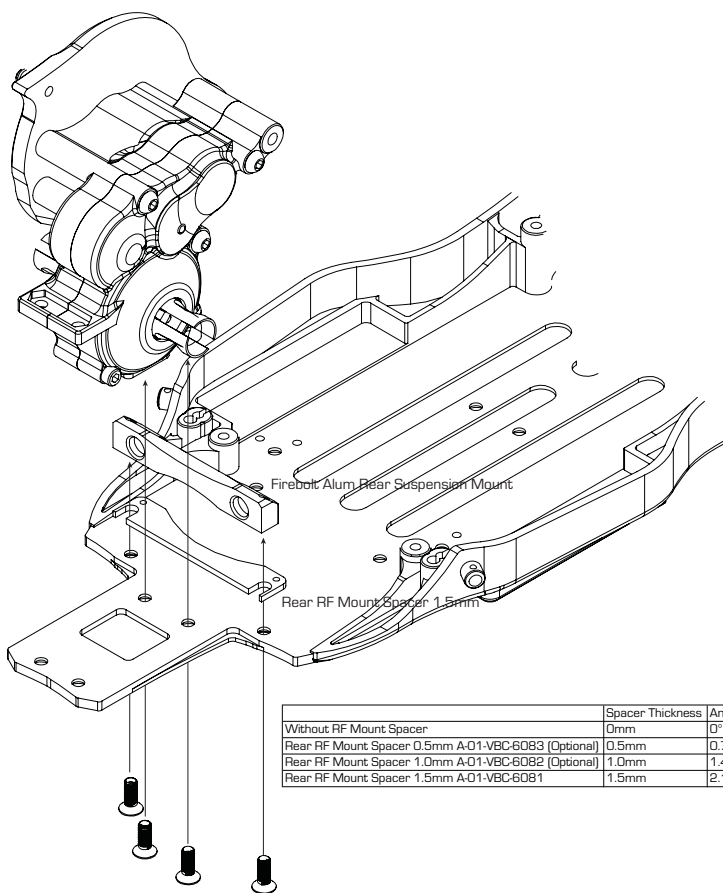
3x6x1.2mm Plastic Spacer A-03-VBC-6055 x 4



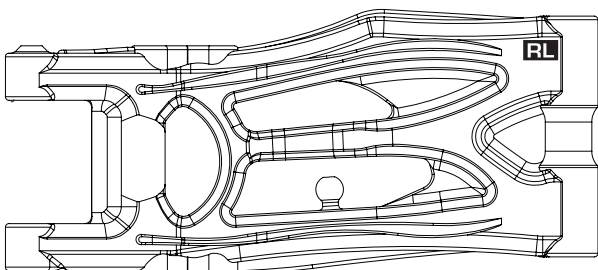
3x44.5mm Suspension Pin B-02-VBC-0029 x 2



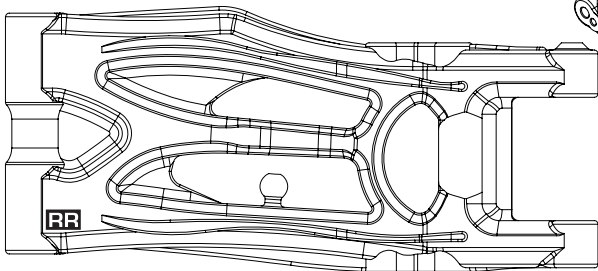
Arm Pin Pivot Ball B-02-VBC-0035 x 4



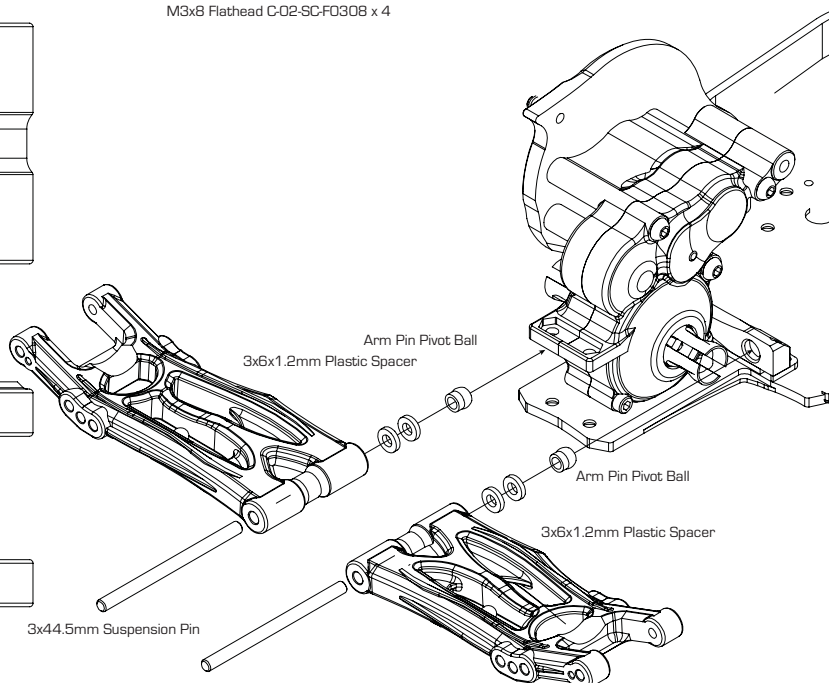
M3x8 Flathead C-02-SC-F0308 x 4

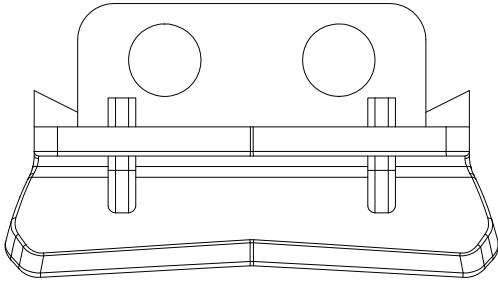


Firebolt Rear Suspension Arm, RL A-03-VBC-6026 x 1



Firebolt Rear Suspension Arm, RR A-03-VBC-6027 x 1



16**Rear Suspension Assembly 2**

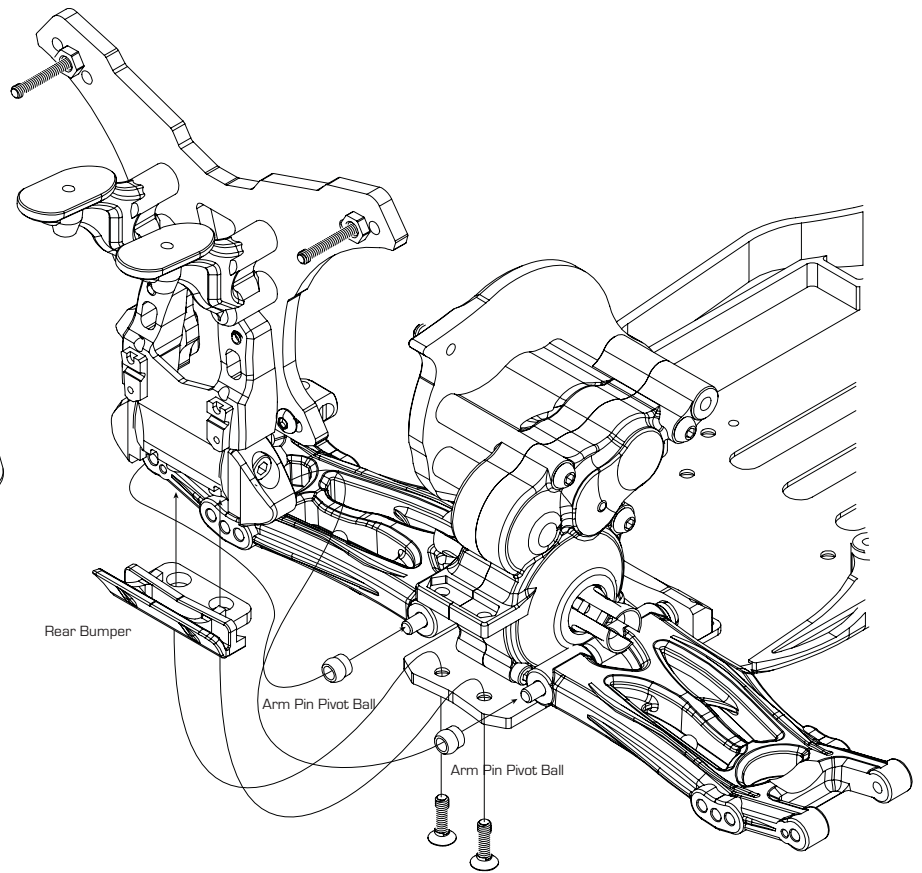
Rear Bumper A-03-VBC-6012 x 1



M3x10 Flathead C-02-SC-F0310 x 2



Arm Pin Pivot Ball B-02-VBC-0035 x 2



M3x9 Roundhead

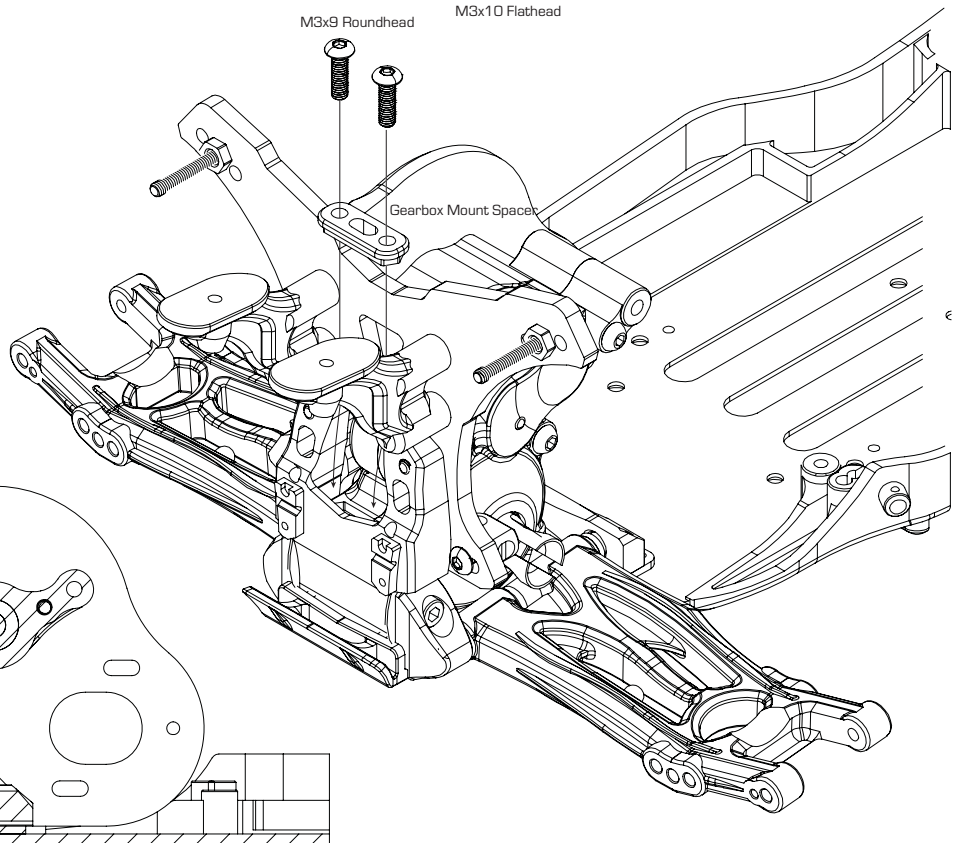
M3x10 Flathead



Gearbox Mount Spacer B-02-VBC-6078 x 1

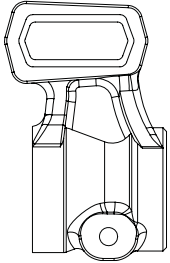


M3x9 Roundhead Screw C-02-SC-R0309 x 2



Please make sure the Gearbox Mount Spacer is recessed onto the gearbox and the M3x9 screws are tightly fastened

The gearbox case groove is recessed onto the chassis slot

18**Rear Suspension Arm Assembly**

Firebolt Rear Upright A-03-VBC-6038 x 2



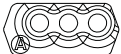
4.7x14mm Ball Connector C-02-VBC-6034 x 2



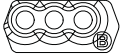
Rear Camber Link Plate (A) A-03-VBC-6050 x 1



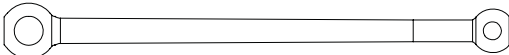
Rear Camber Link Plate (B) A-03-VBC-6051 x 1



Rear Camber Link Holder (A) A-03-VBC-6023 x 1



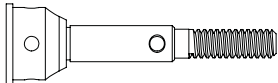
Rear Camber Link Holder (B) A-03-VBC-6049 x 1



Firebolt Rear CVD Inner Axle C-02-VBC-6010 x 2



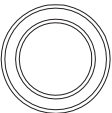
Firebolt Rear CVD Inner Joint C-02-VBC-6011 x 2



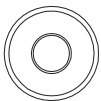
Firebolt Rear CVD Outer Wheel Axle C-02-VBC-6009 x 2



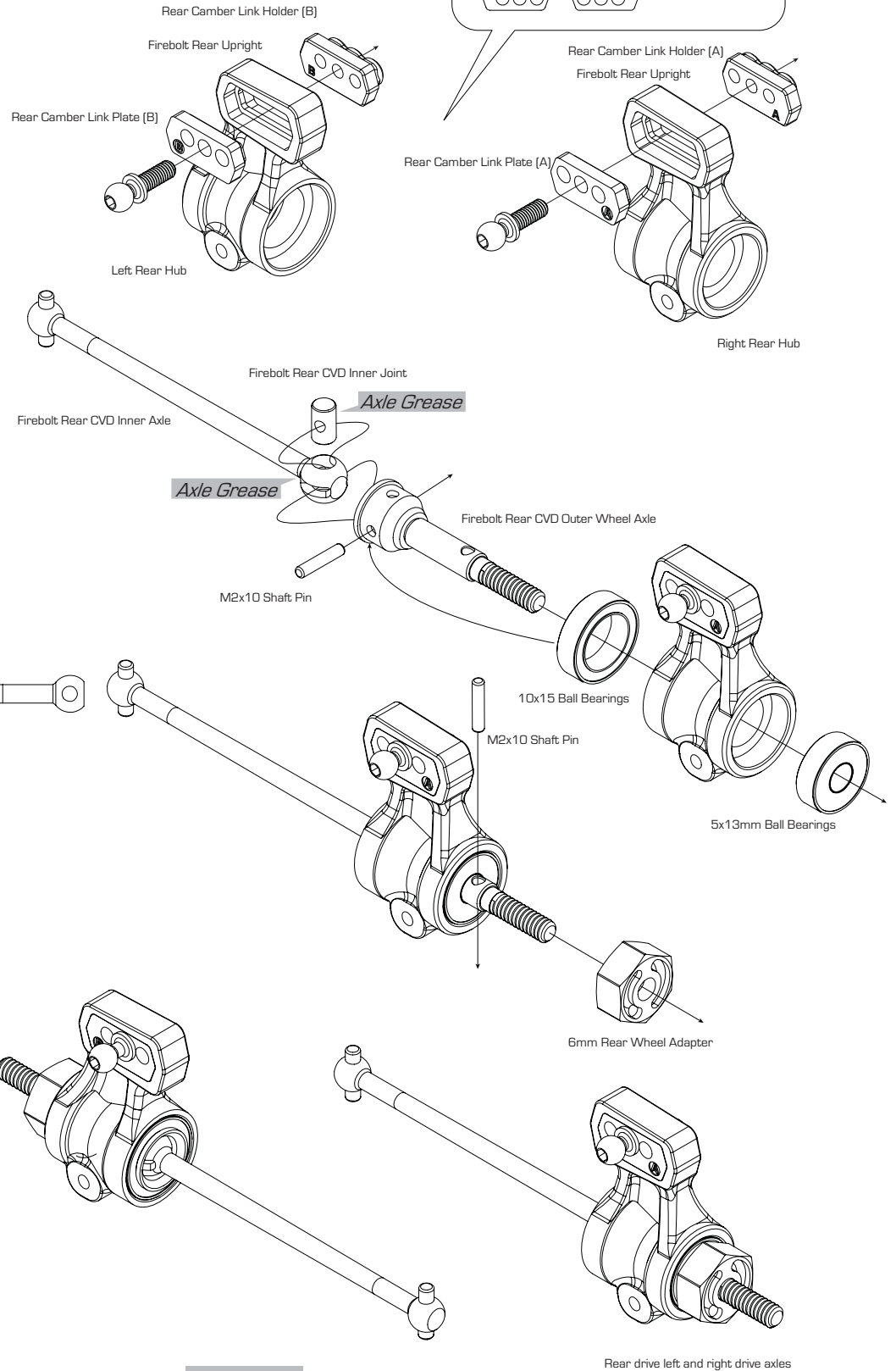
M2x10 Shaft Pin B-02-VBC-0020 x 4



10x15 Ball Bearings C-02-BB-1510-P x 2

5x13mm Ball Bearings
C-02-BB-1305-B x 2

6mm Rear Wheel Adapter A-03-VBC-6069 x 2



19

Right Rear Camber Link Assembly



Ball Cups, Long

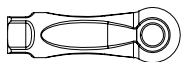
3x45mm Hardened Turnbuckle



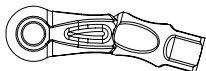
Ball Cup L Type, Long Right



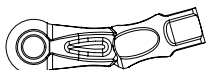
3x45mm Hardened Springsteel Turnbuckle C-02-VBC-6004 x 2



Ball Cups, Long A-03-VBC-6030 x 2



Ball Cup L Type, Long Left A-03-VBC-6048 x 1



Ball Cup L Type, Long Right A-03-VBC-6047 x 1



2.5x6x1mm Plastic Spacer A-03-VBC-6052 x 2



2.5x6x2mm Plastic Spacer A-03-VBC-6054 x 2



2.5x29.8mm Suspension Pin C-02-VBC-6017 x 2



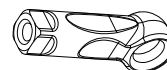
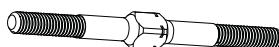
M2x4 Roundhead Screw C-02-SC-R0204 x 2

Left Rear Camber Link Assembly

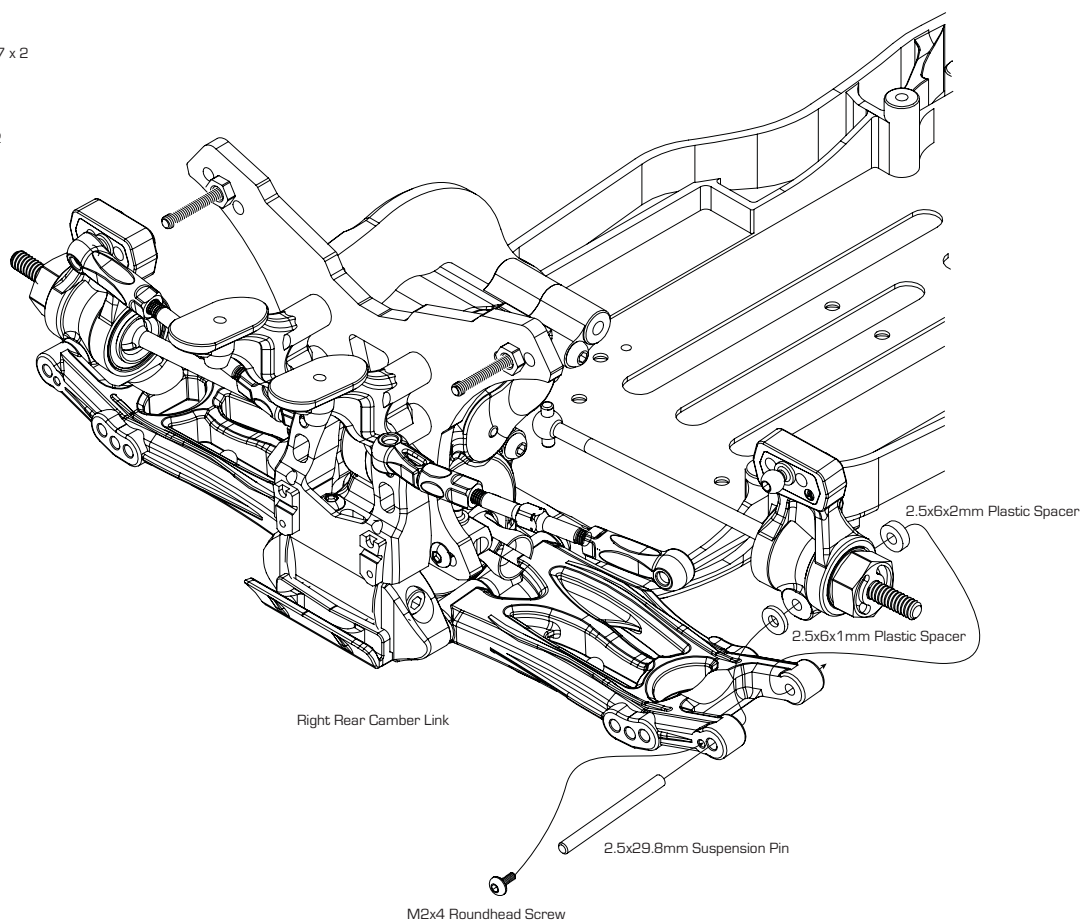
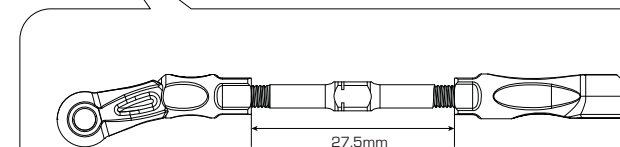


Ball Cup L Type, Long Left

3x45mm Hardened Turnbuckle



Ball Cups, Long



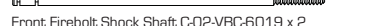
20**Firebolt Suspension Shocks Assembly**

1.6x2 Holes Piston for Firebolt Shocks A-03-VBC-6004 x 2



1.7x2 Holes Piston for Firebolt Shocks A-03-VBC-6064 x 2

Front Firebolt Shock Shaft C-02-VBC-6019 x 2



Rear Firebolt Shock Shaft C-02-VBC-6020 x 2



M2 E-clip B-03-VBC-0129 x 8



M1x4x6 O-ring R-02-VBC-6036 x 4



Damper Inner Spacer A-03-VBC-6063 x 8



Shock Shaft Guide A-03-VBC-0126 x 8



Firebolt Shaft Cap A-03-VBC-6066 x 4



TBB Shaft Sealer O-Ring B-03-VBC-0012 x 8



M1.5x15x18 O-Ring (Shock Height Adjuster) R-02-VBC-6082 x 4



M1x13x15 O-ring R-02-VBC-6034 x 4



Spring Adjuster for Firebolt Shocks B-02-VBC-6020 x 4



Firebolt Shock O-Ring Cap B-02-VBC-6017 x 4



6mm Damper End Pivot Ball A-03-VBC-6060 x 4



Firebolt Shocks Ball Cups A-03-VBC-6001 x 4



Firebolt Shock Body, Rear B-02-VBC-6019 x 2



Firebolt Shock Body, Front B-02-VBC-6018 x 2



© VBC Racing FIREBOLT DM



Firebolt Shock Body, Front B-02-VBC-6018 x 2



Firebolt Shock Body, Front B-02-VBC-6018 x 2



Firebolt Shock Body, Front B-02-VBC-6018 x 2



Firebolt Shock Body, Front B-02-VBC-6018 x 2



Firebolt Shock Body, Front B-02-VBC-6018 x 2



Firebolt Shock Body, Front B-02-VBC-6018 x 2



Firebolt Shock Body, Front B-02-VBC-6018 x 2



Firebolt Shock Body, Front B-02-VBC-6018 x 2



Firebolt Shock Body, Front B-02-VBC-6018 x 2



Firebolt Shock Body, Front B-02-VBC-6018 x 2



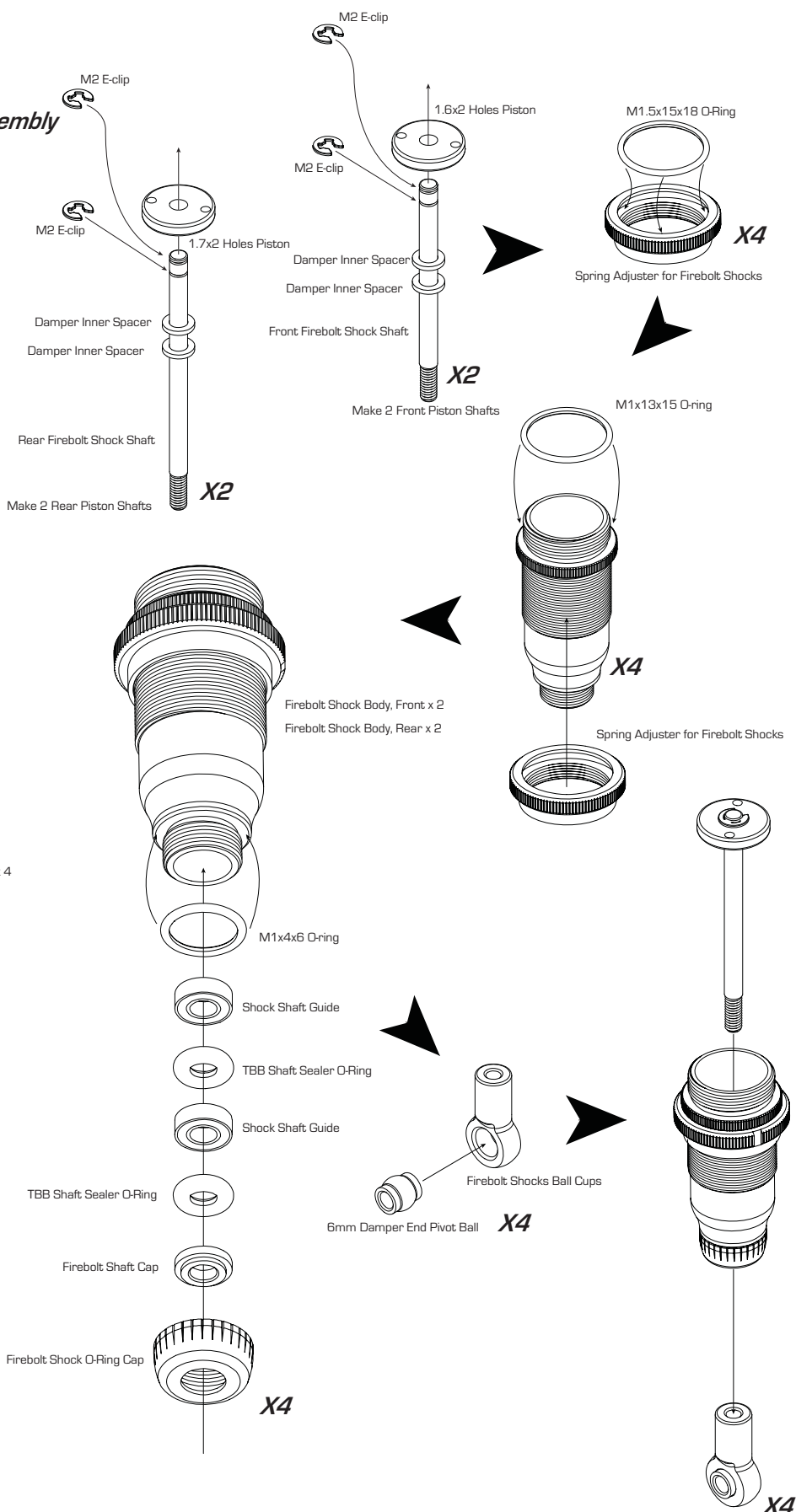
Firebolt Shock Body, Front B-02-VBC-6018 x 2

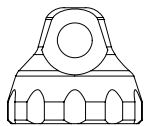


Firebolt Shock Body, Front B-02-VBC-6018 x 2



Firebolt Shock Body, Front B-02-VBC-6018 x 2



21**Front Suspension Assembly Part 1**

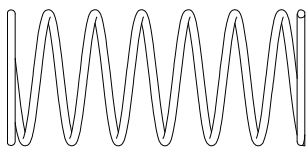
Firebolt Alum Shock Cap B-02-VBC-6021 x 4



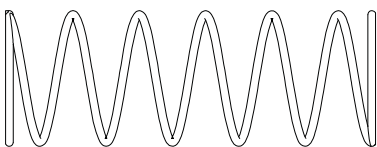
M1x3 O-ring R-02-VBC-6035 x 4



M2x4 Roundhead Screw C-02-SC-R0204 x 4



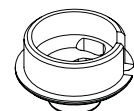
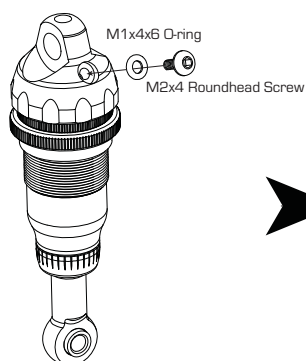
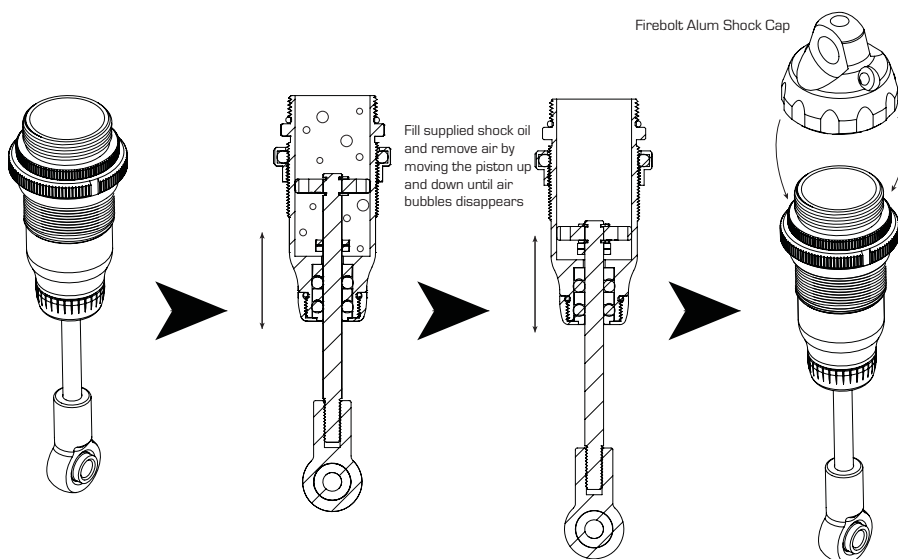
Front Spring, Medium(Red) C-02-VBC-6021 x 2



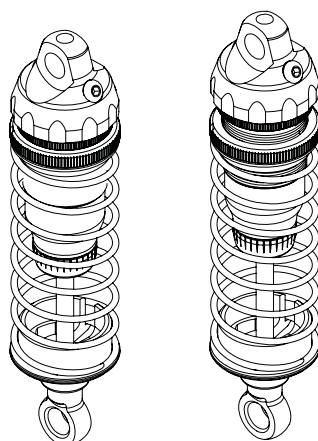
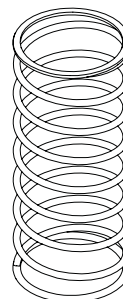
Rear Spring, Medium(Red) C-02-VBC-6022 x 2



Firebolt Shocks Spring Retainer A-03-VBC-6002 x 4

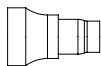


Firebolt Shocks Spring Retainer

Front Spring, Medium(Red)
Rear Spring, Medium(Red)

Repeat the above steps on the front and the rear shocks

VBC Racing Firebolt Shock Springs:
 Front Spring, Med-Soft(Green) C-02-VBC-6033(Optional)
 Front Spring, Medium(Red) C-02-VBC-6021
 Front Spring, Med-Hard(Orange) C-02-VBC-6030(Optional)
 Rear Spring, Med-Soft(Green) C-02-VBC-6031(Optional)
 Rear Spring, Medium(Red) C-02-VBC-6022
 Rear Spring, Med-Hard(Orange) C-02-VBC-6032(Optional)

22**Installing Front and Rear Suspension Shocks**

Damper Cap Shaft Pivot Ball A-03-VBC-6061 x 4



M3 Plastic Lock Nut A-03-VBC-6062 x 4



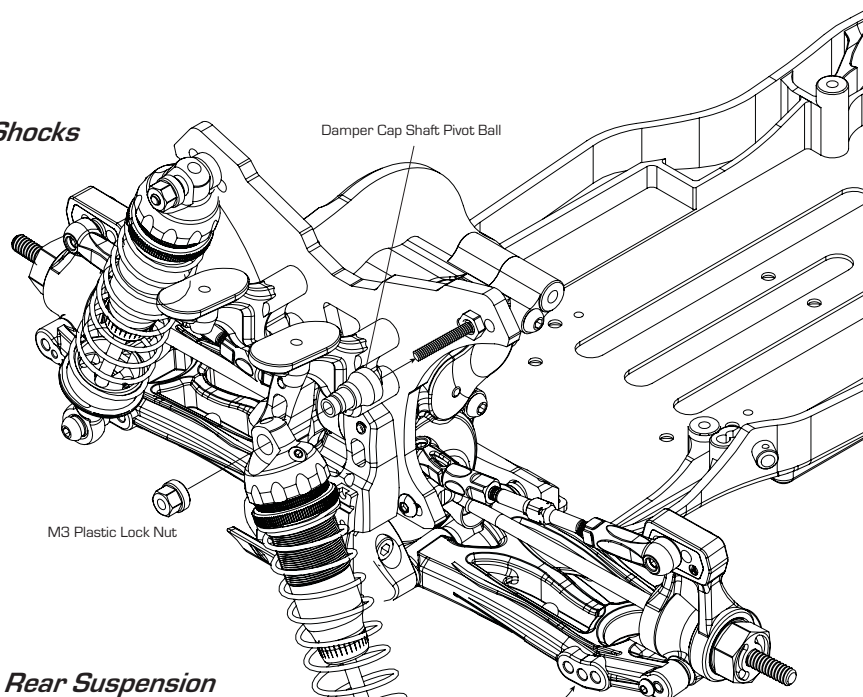
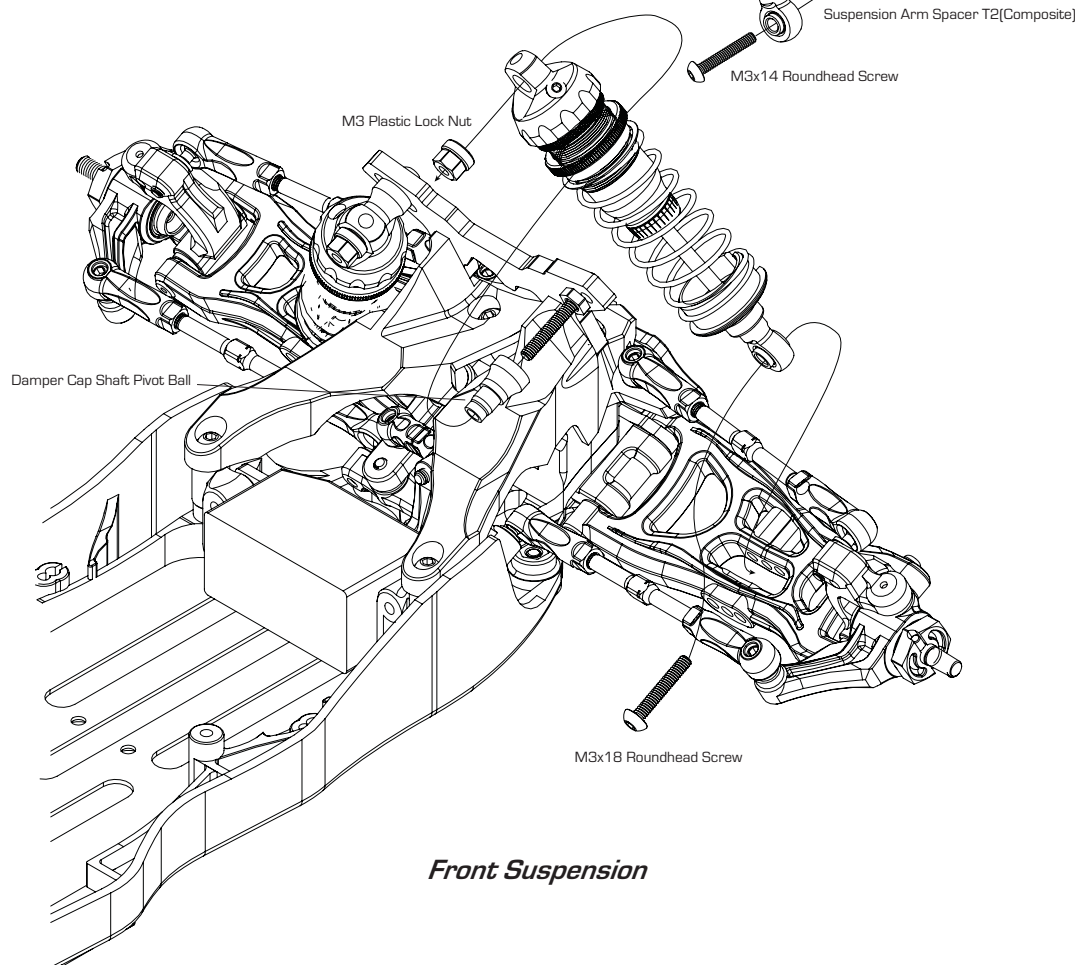
Suspension Arm Spacer T2(Composite) A-03-VBC-0052 x 2

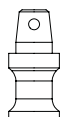
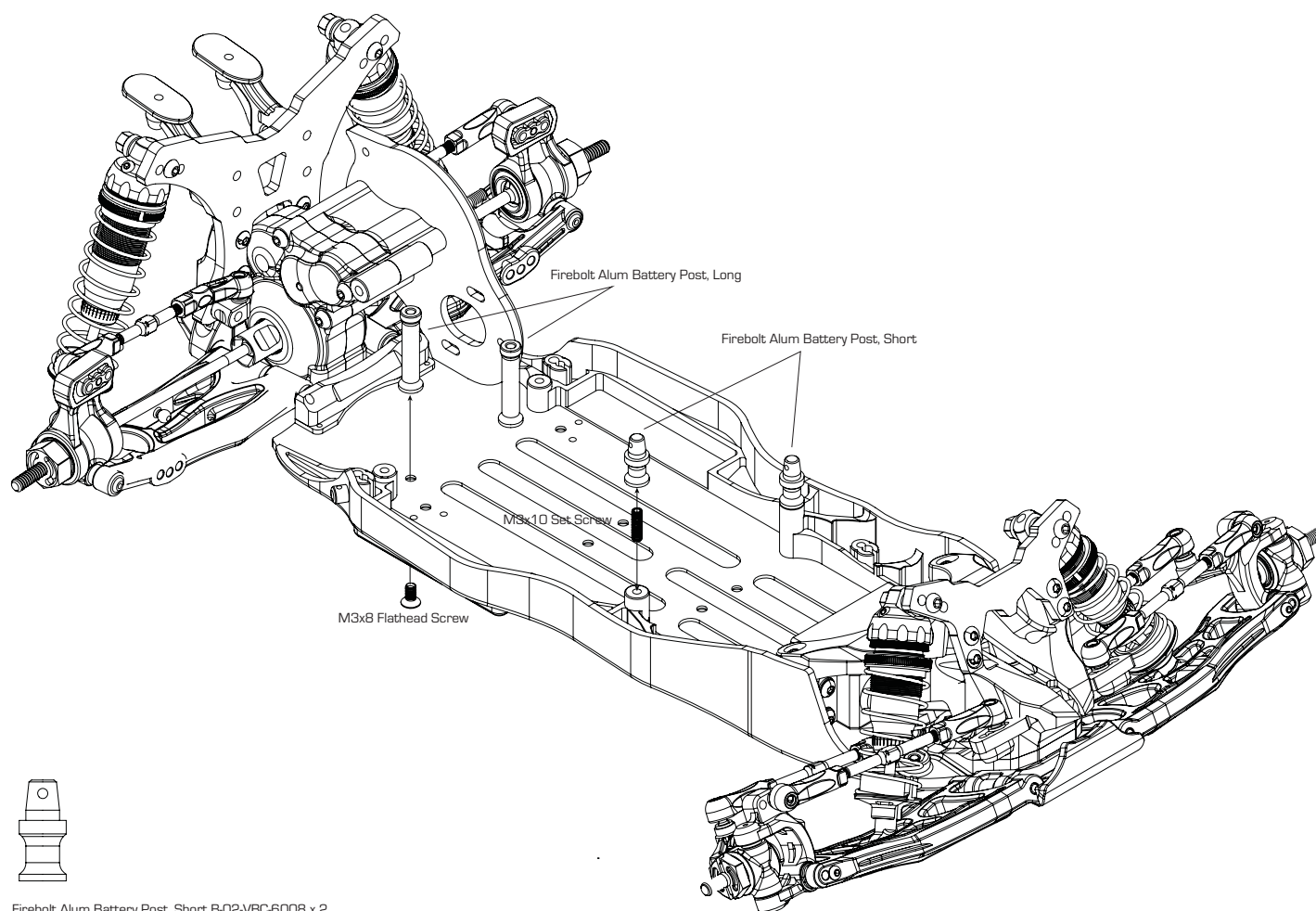


M3x14 Roundhead Screw C-02-SC-R0314 x 2



M3x18 Roundhead Screw C-02-SC-R0318 x 2

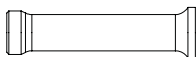
**Rear Suspension****Front Suspension**

23**Battery Mount Assembly**

Firebolt Alum Battery Post, Short B-02-VBC-6008 x 2



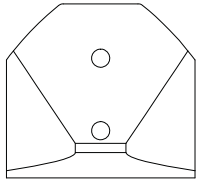
M3x10 Set Screw C-02-SC-SS-0310 x 2



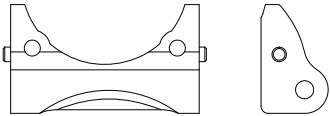
Firebolt Alum Battery Post, Long B-02-VBC-6007 x 2



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

24**Upper Strut Assembly**

Top Deck Mount A-03-VBC-6039 x 1



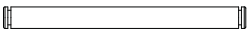
Cooling Fan Mount A-03-VBC-6040 x 1



M3x6 Round Head Screw C-02-SC-R0306 x 6



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



Firebolt Battery Mount Hinge Pin C-02-VBC-6001 x 1



M2 E-clip B-03-VBC-0129 x 2

Graphite Center Mount Plate A-01-VBC-6003

M3x6 Round Head Screw

M3x6 Round Head Screw

Cooling Fan Mount

Cooling fan and cooling fan screws are not included

Graphite Center Mount Plate A-01-VBC-6003

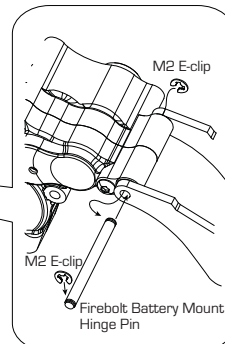
M3x6 Round Head Screw

M3x6 Round Head Screw

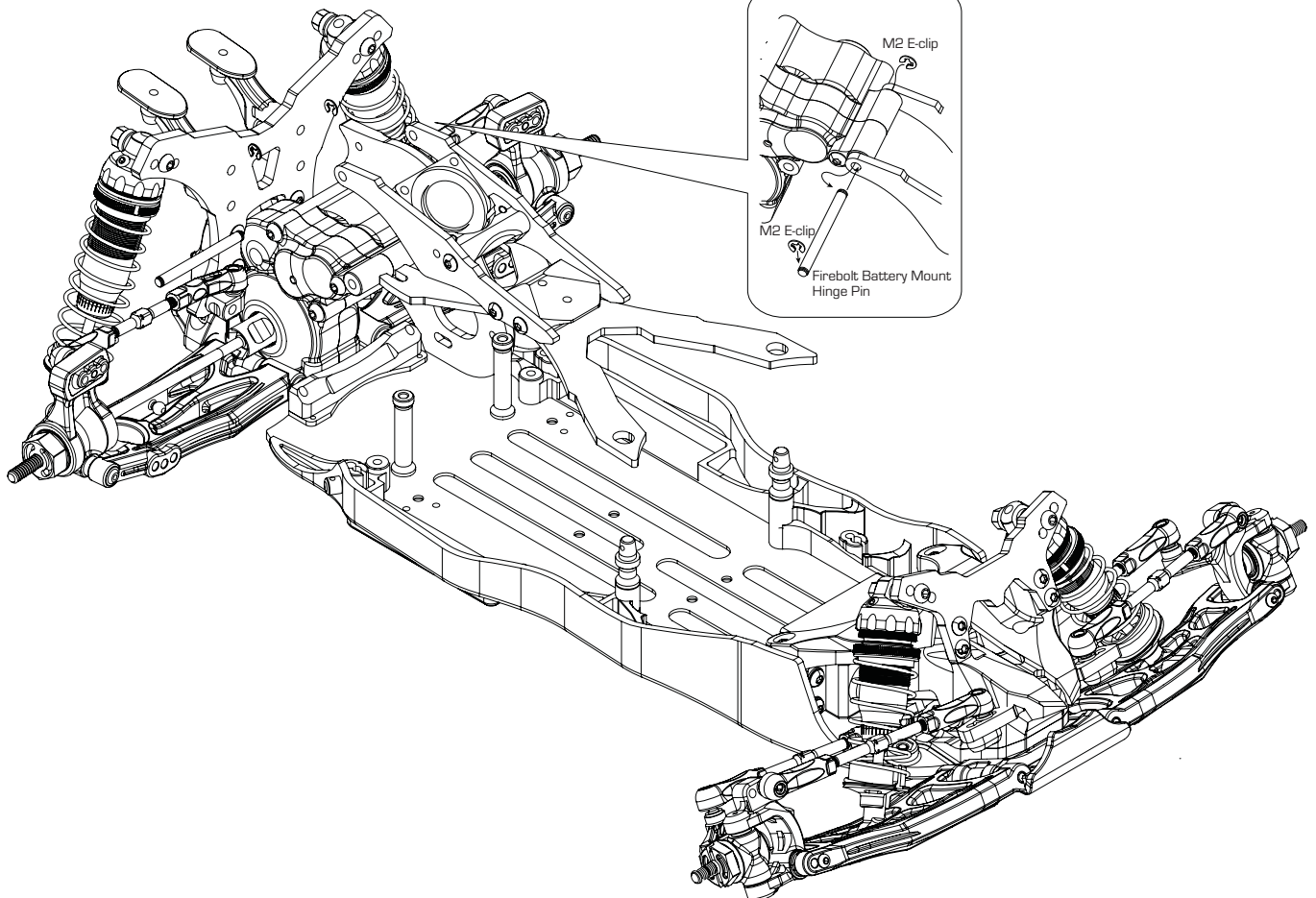
Top Deck Mount

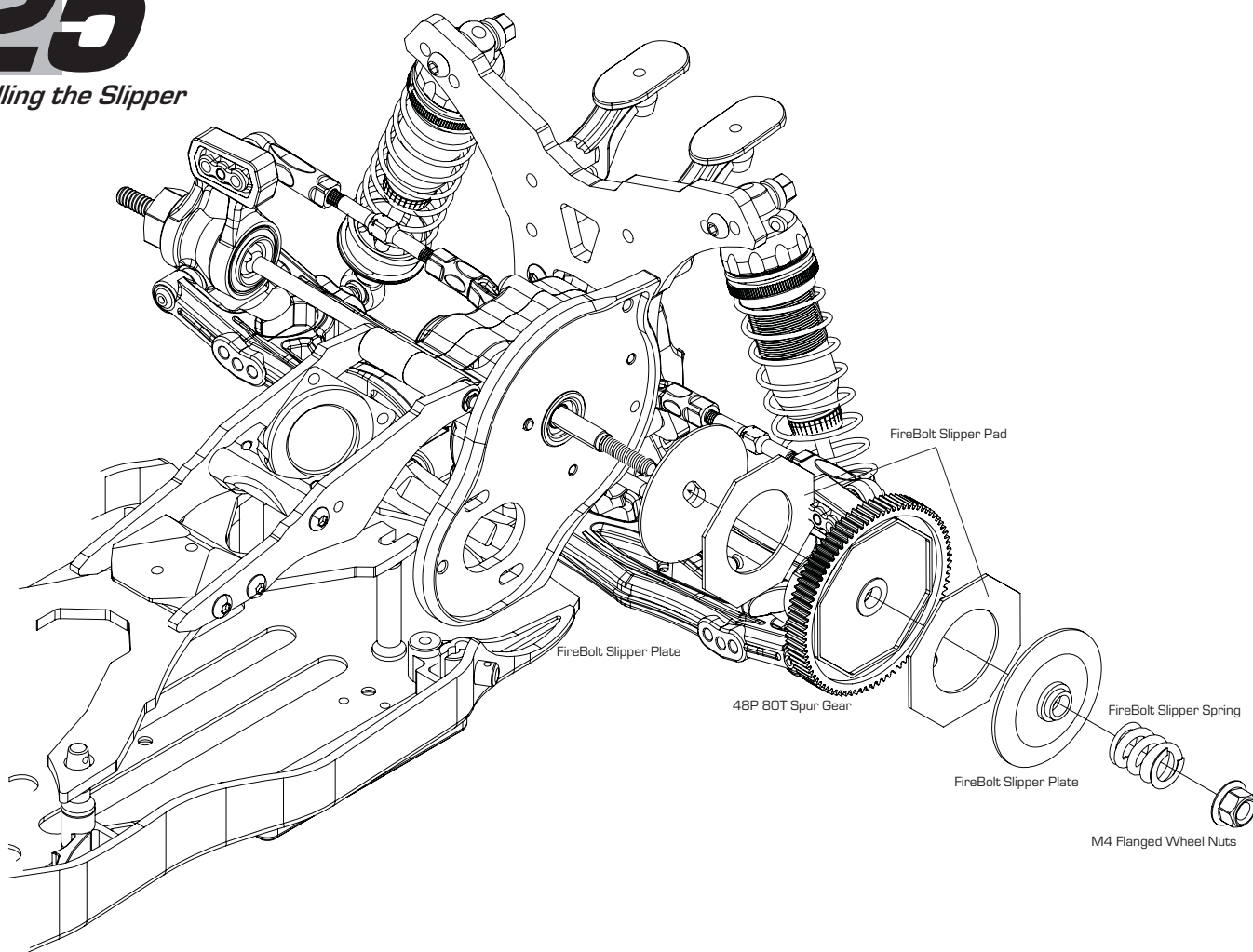
Graphite Battery Holder Plate A-01-VBC-6002

M3x8 Flat Head Screw



Firebolt Battery Mount Hinge Pin

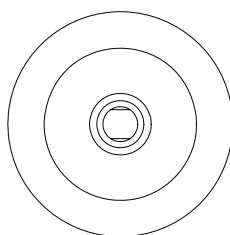


25*Installing the Slipper*

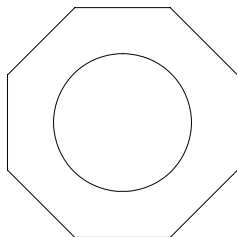
M4 Flanged Wheel Nuts B-02-VBC-0086 x 1



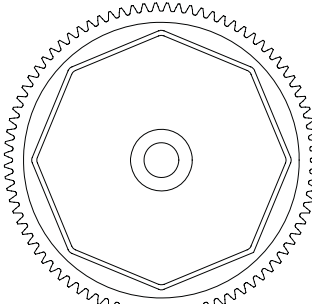
FireBolt Slipper Spring C-03-VBC-6002 x 1



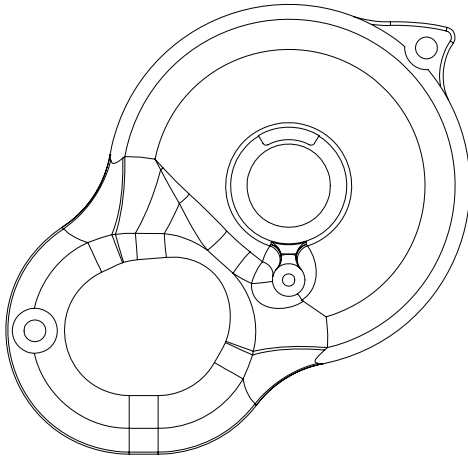
FireBolt Slipper Plate B-02-VBC-6023 x 2



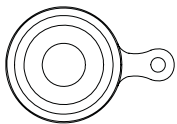
FireBolt Slipper Pad C-03-VBC-6001 x 2



48P 80T Spur Gear A-03-VBC-6105 x 1

26**Intall Gear Diff Cover**

Firebolt Gear Cover A-03-VBC-6006 x 1



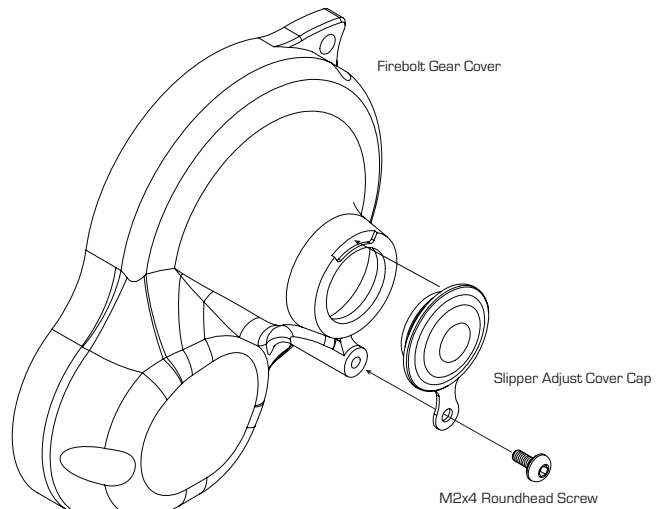
Slipper Adjust Cover Cap A-03-VBC-6043 x 1



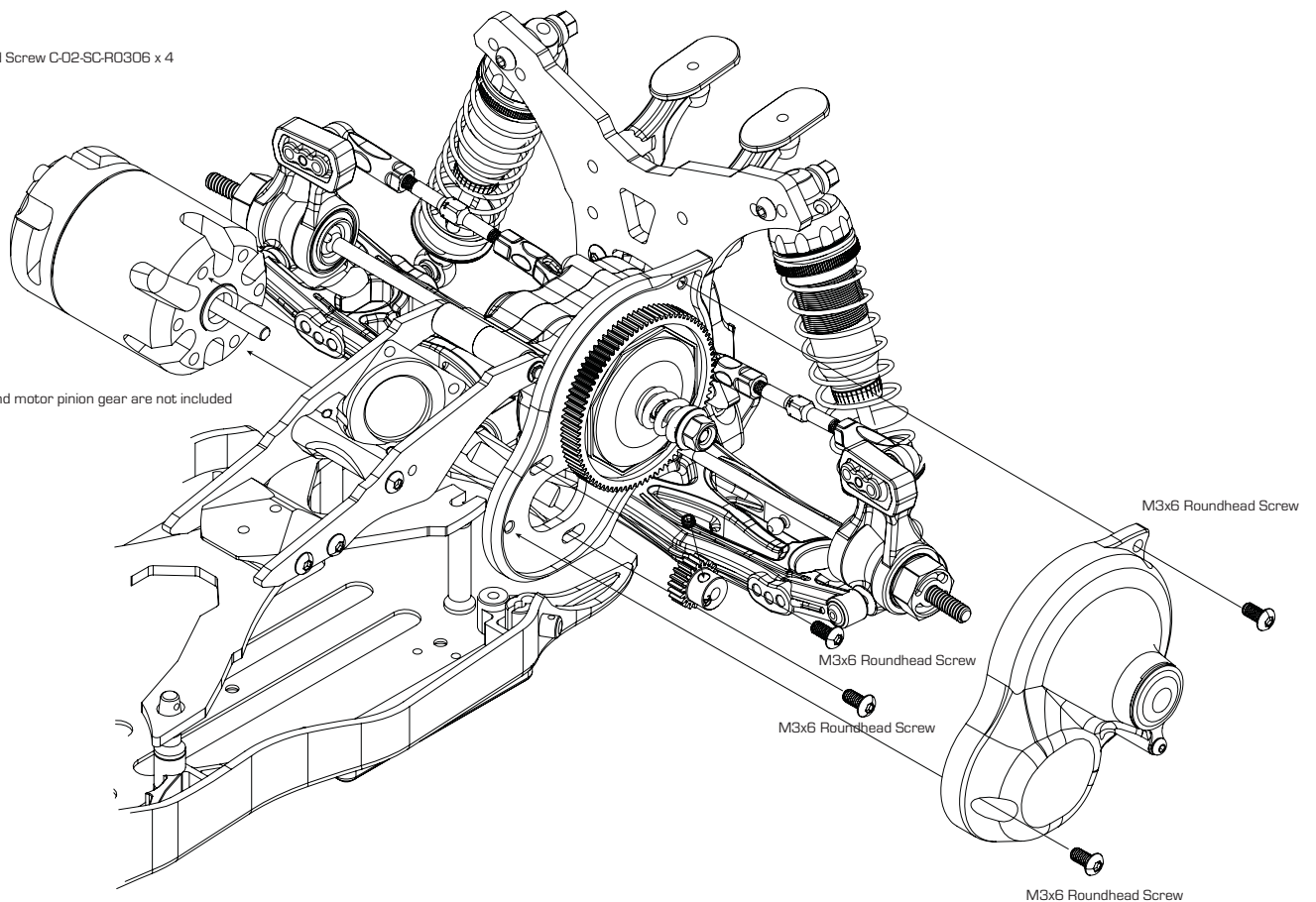
M2x4 Roundhead Screw C-02-SC-R0204 x 1

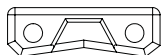


M3x6 Roundhead Screw C-02-SC-R0306 x 4



Electric motor and motor pinion gear are not included



27**Mounting Transmitter/ESC/Battery**

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



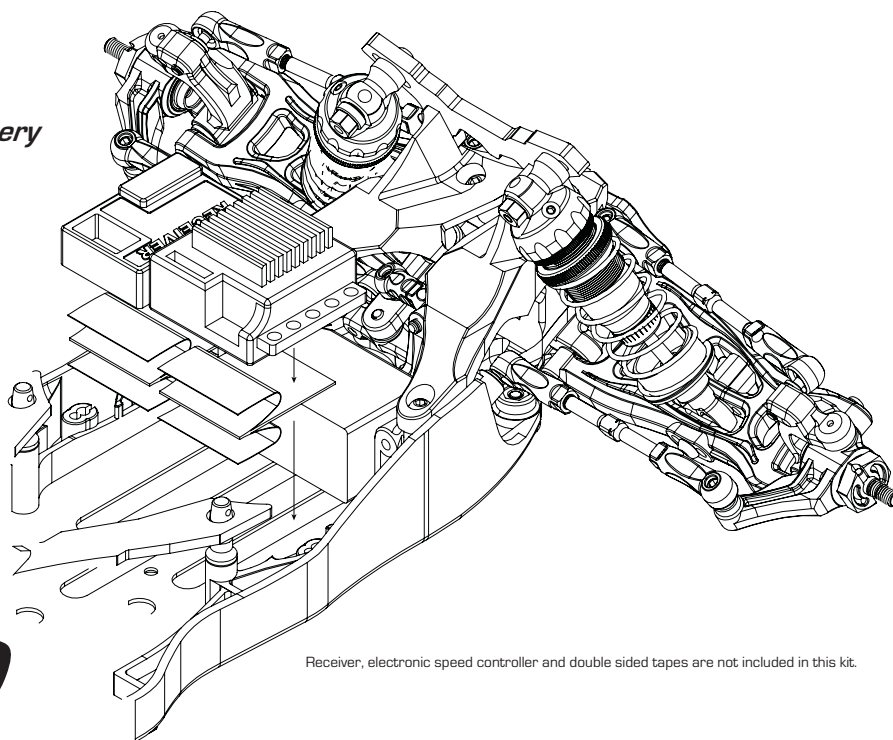
Firebolt Side Battery Stopper X A-03-VBC-6075 x 1



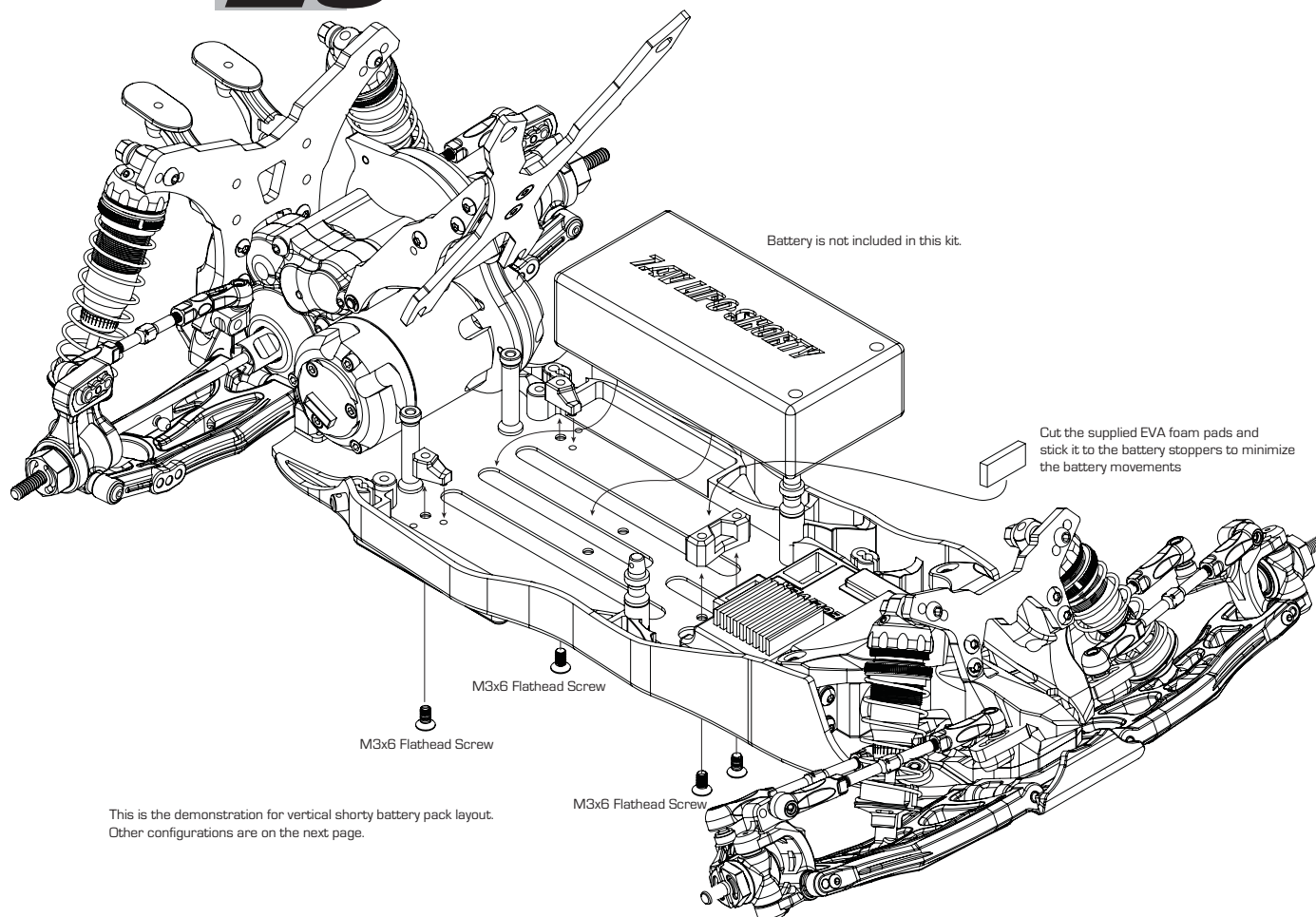
Firebolt Side Battery Stopper Y A-03-VBC-6076 x 1



M3x6 Flathead Screw C-02-SC-F0306 x 4



Receiver, electronic speed controller and double sided tapes are not included in this kit.

28

Battery is not included in this kit.

Cut the supplied EVA foam pads and stick it to the battery stoppers to minimize the battery movements

M3x6 Flathead Screw

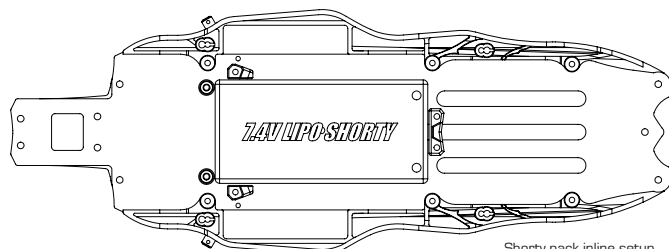
M3x6 Flathead Screw

M3x6 Flathead Screw

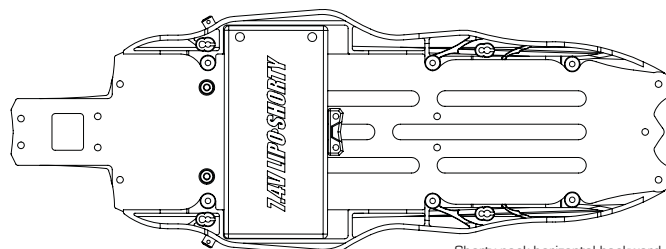
This is the demonstration for vertical shorty battery pack layout.
Other configurations are on the next page.

29**Mounting Different Battery Positions**

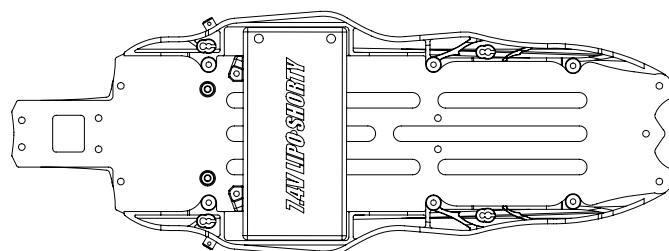
Mounting different batteries on the Firebolt by adjusting the Center and the Side Battery Stoppers



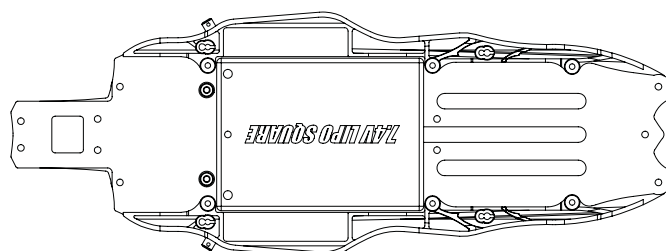
Shorty pack inline setup



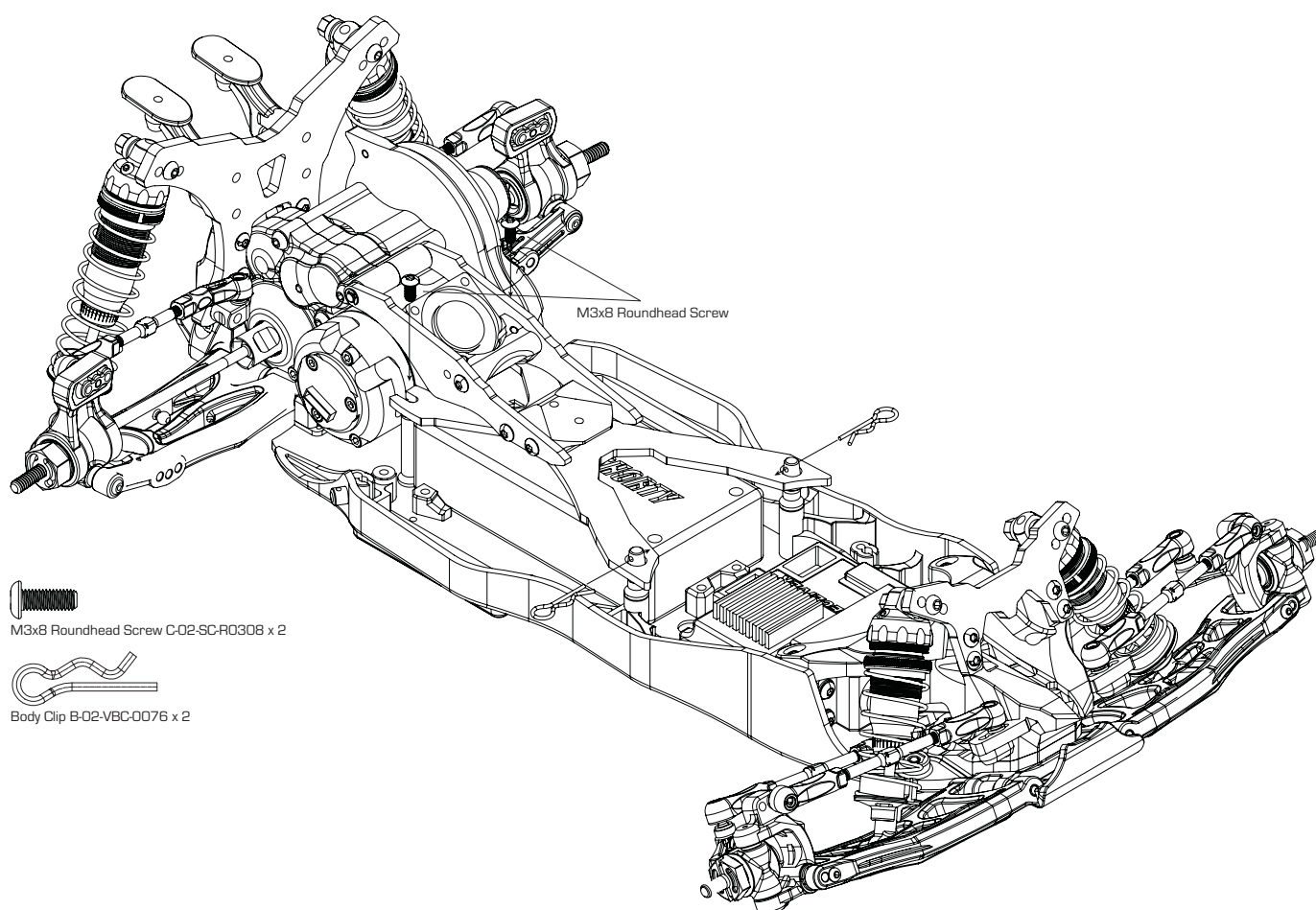
Shorty pack horizontal backward setup



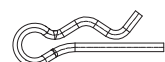
Shorty pack horizontal forward setup



Square pack setup



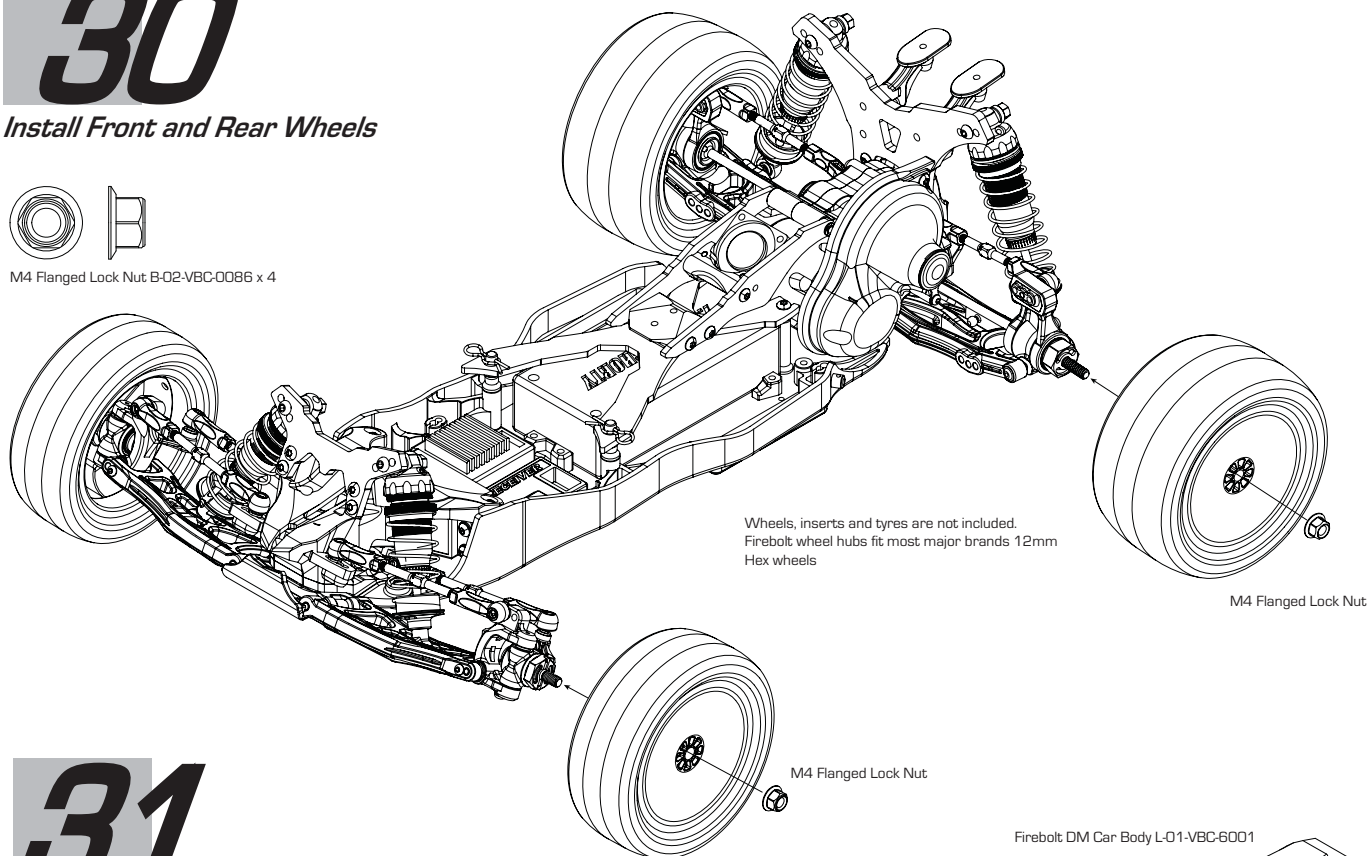
M3x8 Roundhead Screw C-02-SC-R0308 x 2



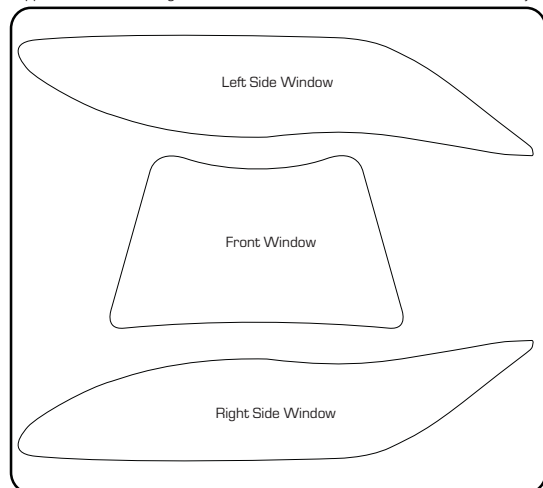
Body Clip B-02-VBC-0076 x 2

30**Install Front and Rear Wheels**

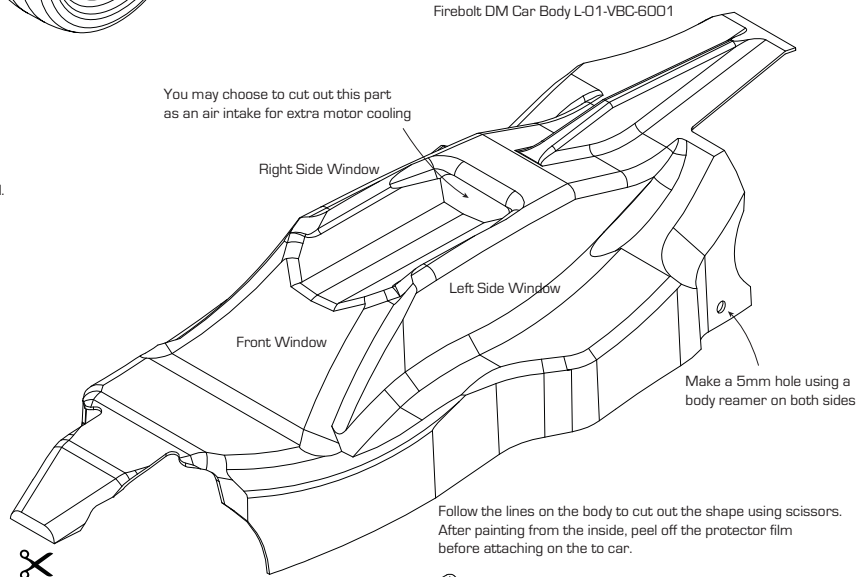
M4 Flanged Lock Nut B-02-VBC-0086 x 4

**31****Preparing the Car Body and Rear Wing**

Supplied window masking stickers. Attach the stickers from the inside of the body shell.



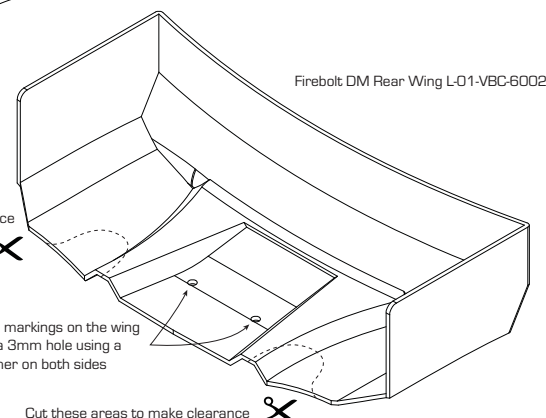
Firebolt DM Window Mask L-01-VBC-6106



Cut these areas to make clearance for the rear shocks

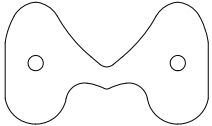
Follow the markings on the wing to make a 3mm hole using a body reamer on both sides

Cut these areas to make clearance for the rear shocks

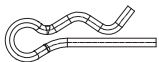


32**Installing the Car Body and Rear Wing**

M3x8 Round Head Screw C-02-SC-SS-0308 x 2



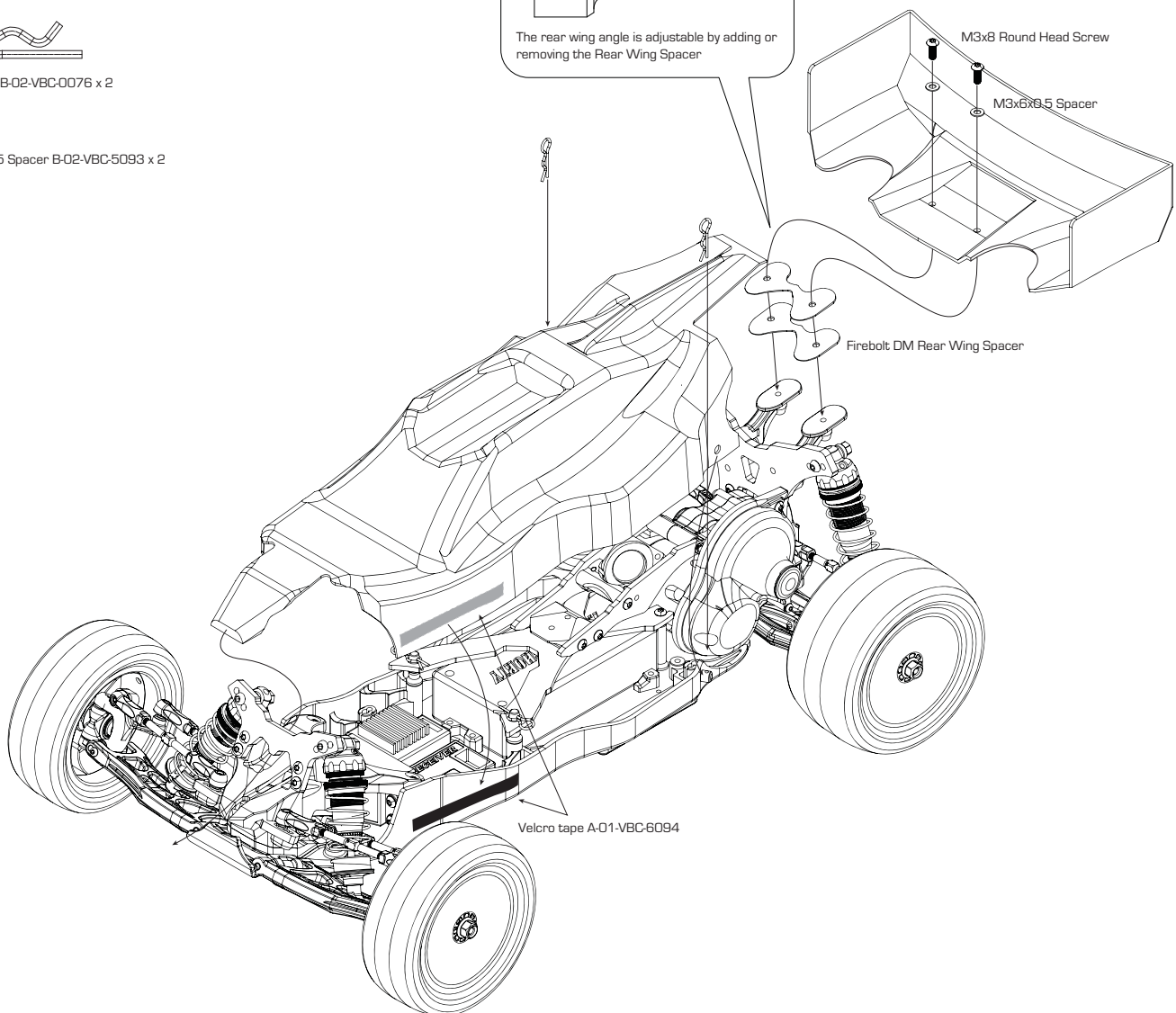
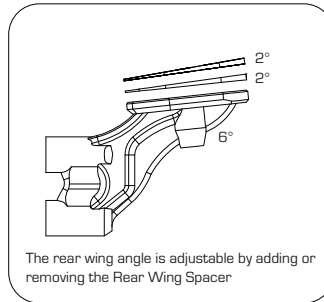
Firebolt DM Rear Wing Spacer A-03-VBC-6037 x 2



Body Clip B-02-VBC-0076 x 2



M3x6x0.5 Spacer B-02-VBC-5093 x 2





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Instruction Book P-01-VBC-CK05.1 VBC Racing FireboltDM Offroad Car Kit D-05-VBC-CK05