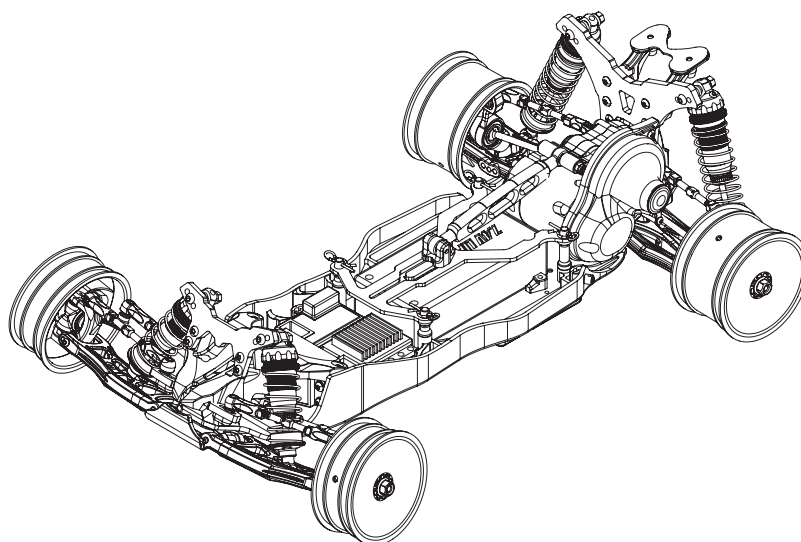


COMPETITION GRADE HIGH PERFORMANCE RADIO CONTROL RACING CAR CHASSIS KIT

FIREBOLT DM2

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.

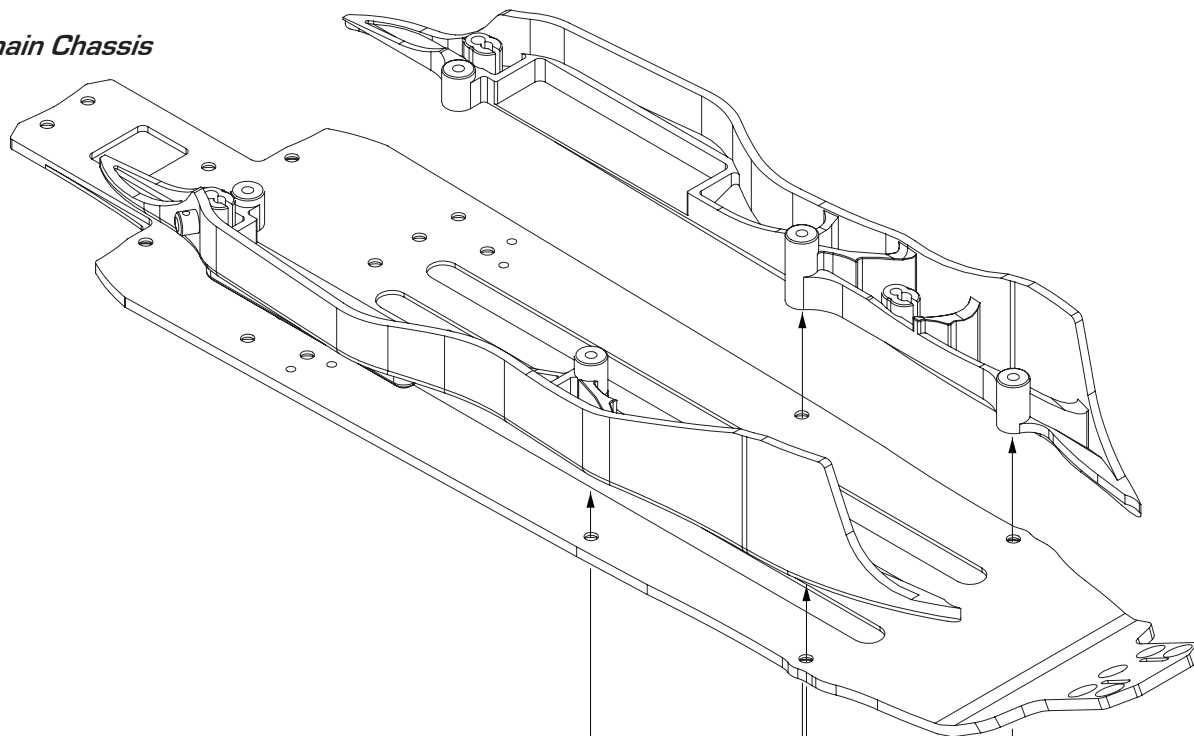
Need help or support.

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.vbcrcracing.com

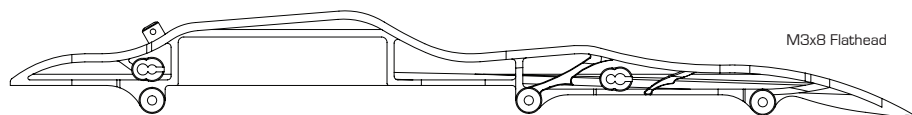


1

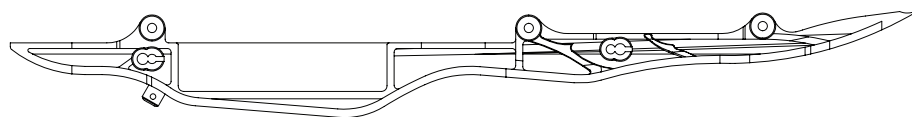
Assmbling the main Chassis



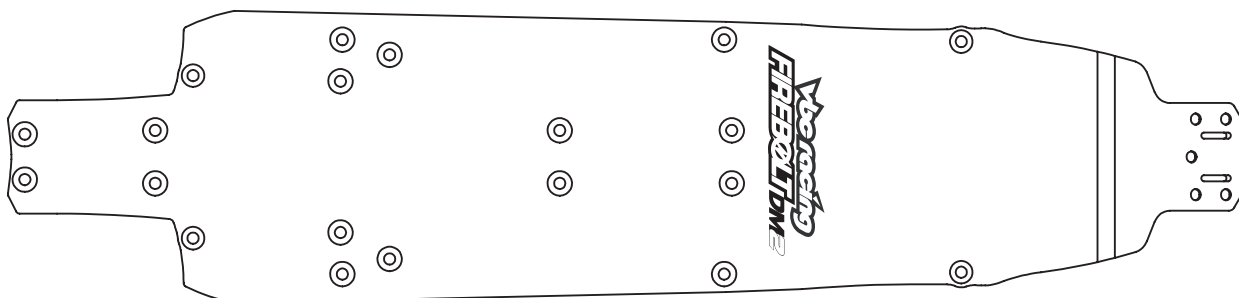
M3x8 Flathead Screw C-02-SC-F0308 x 4



Side Guard, Left A-03-VBC-6016 x 1



Side Guard, Right A-03-VBC-6017 x 1



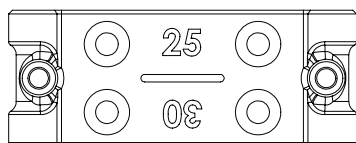
Firebolt DM2 7075 Main Chassis B-02-P60180 x 1

2

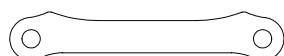
Front Suspension Assembling



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



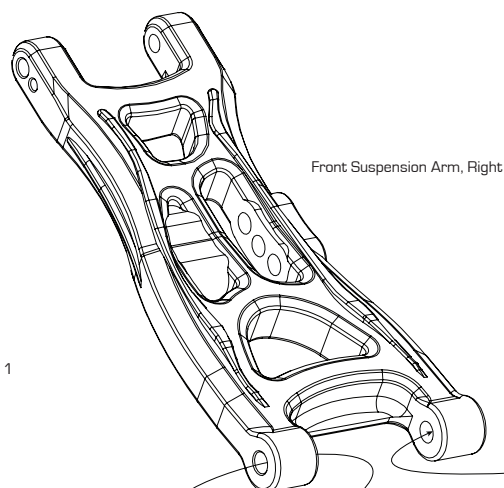
Front Suspension Arm Mount A-03-VBC-6014 x 1



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



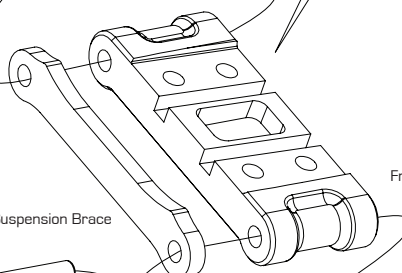
M3x3 Set Screw C-02-SC-SS-0303 x 2



Front Suspension Arm, Right

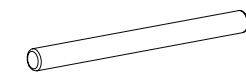


3x35mm Suspension Pin

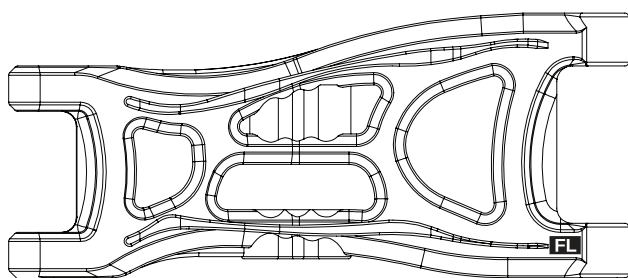


Front Suspension Arm Mount

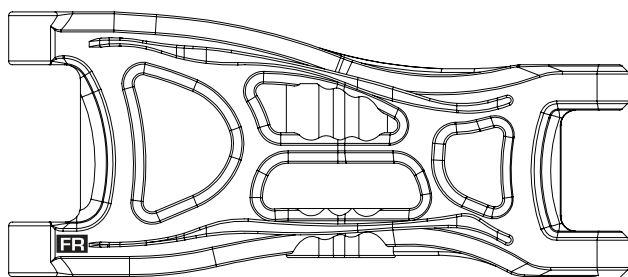
Firebolt Alum Front Suspension Brace



3x35mm Suspension Pin

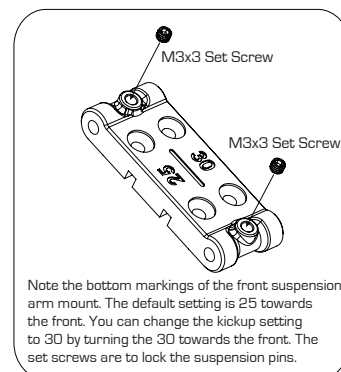


Front Suspension Arm, FL A-03-VBC-6045 x 1



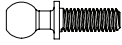
Front Suspension Arm, FR A-03-VBC-6044 x 1

Front Suspension Arm, Left



3

Front Suspension Assembly



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



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



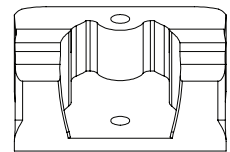
M3x14 Flathead Screw C-02-SC-F0314 x 2



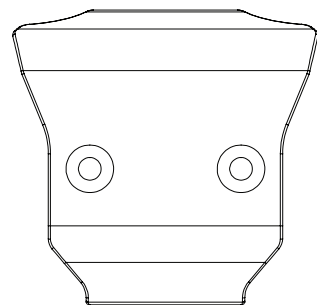
M3x8 Roundhead Screw C-02-SC-R0308 x 1



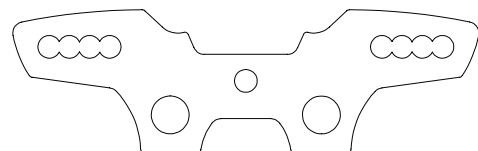
Firebolt Alum Front Camber link Mount B-02-VBC-6013 x 2



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

M3x8 Roundhead Screw

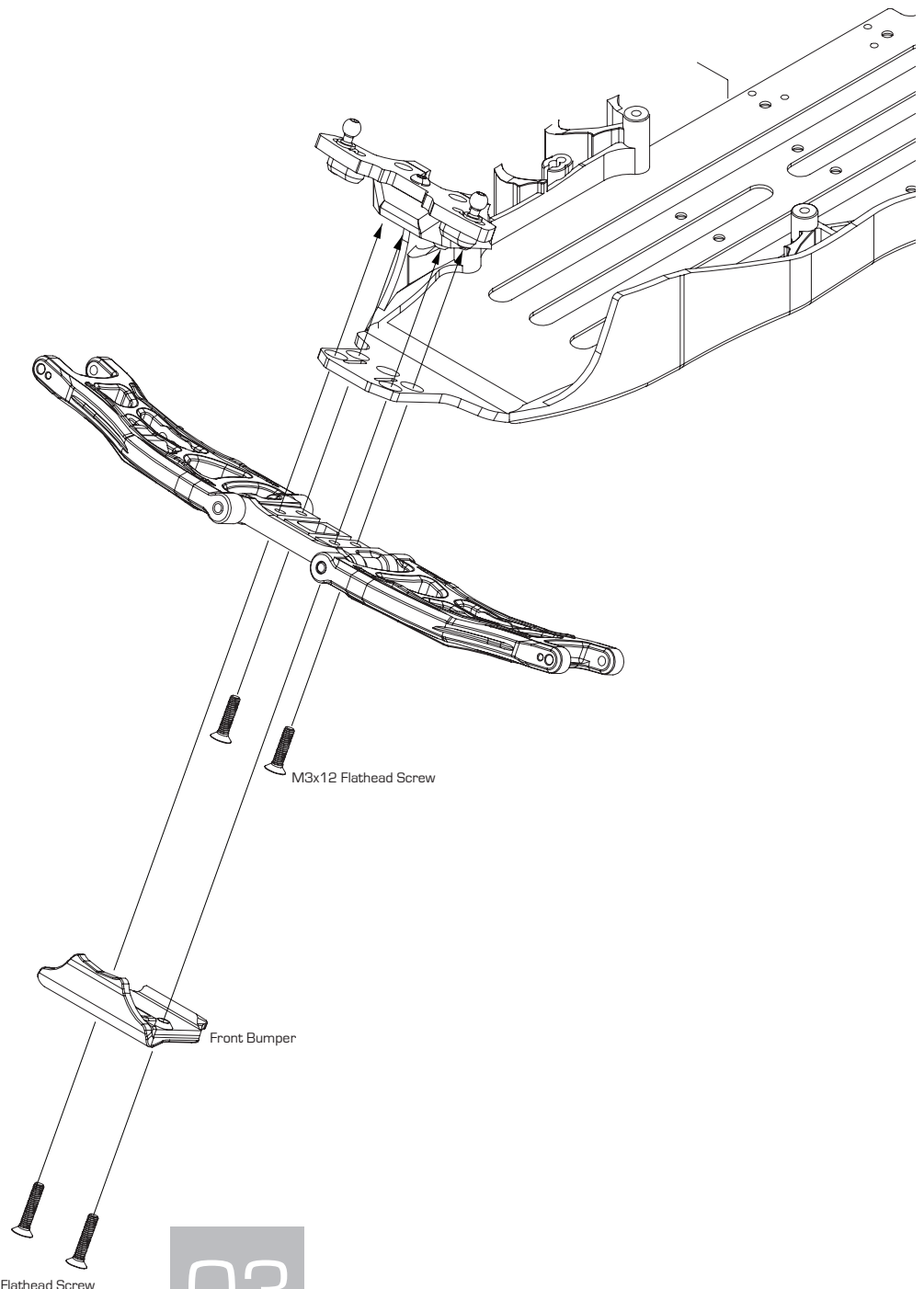
4.7x15mm Ball Connector

4.7x15mm Ball Connector

Firebolt Graphite Front Camber Link Plate

Firebolt Alum Front Camber link Mount

Front Center Bulkhead



M3x14 Flathead Screw

4

Front Steering Assembly



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



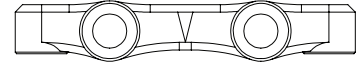
5x8 Ball Bearings C-02-BB-0805-B x 4



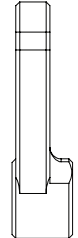
4.7x12mm Ball Connector B-02-VBC-5015 x 3



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



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

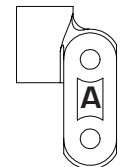


M3x16 Roundhead Screw C-02-SC-R0316 x 2

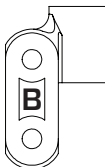


M3x16 Roundhead Screw

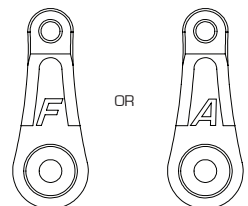
Assembling Front Part



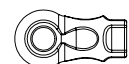
Servo Mount, Left A-03-VBC-6018 x 1



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



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



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



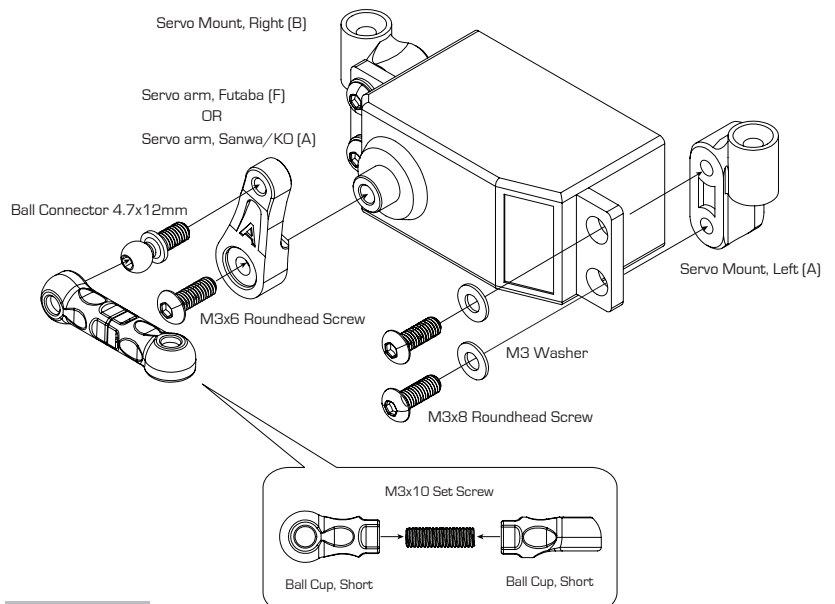
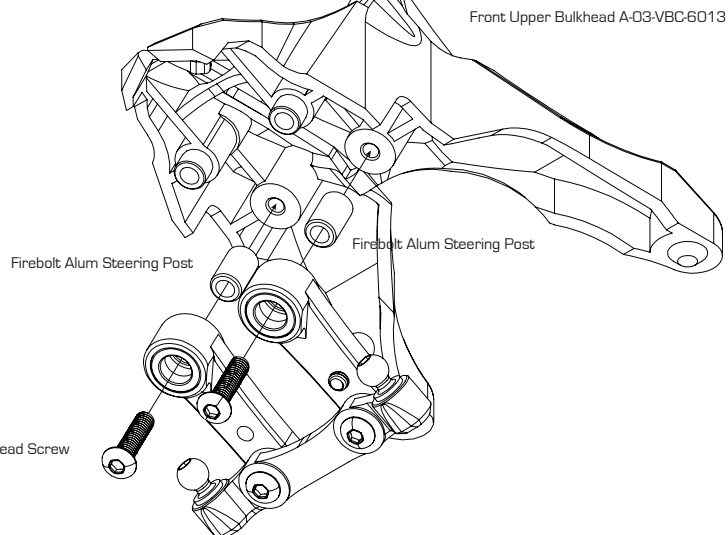
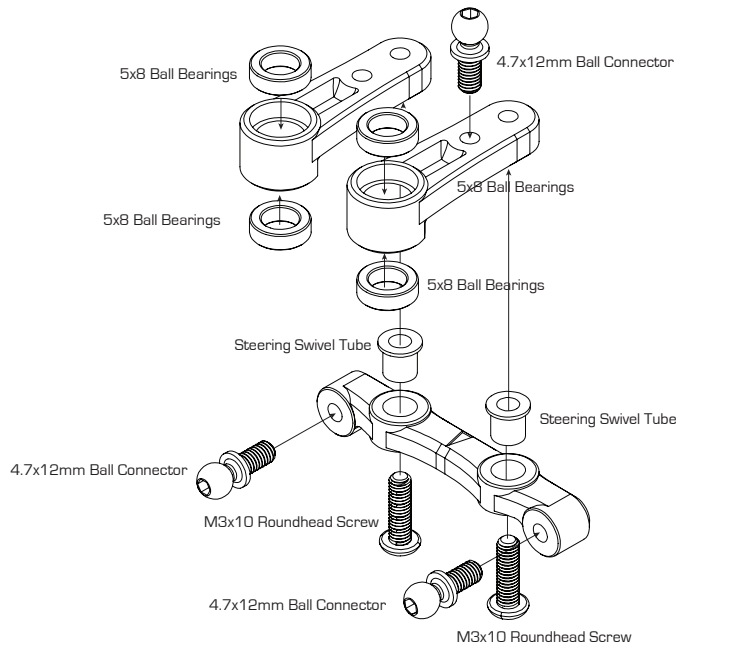
M3x8 Roundhead Screw C-02-SC-R0308 x 4



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

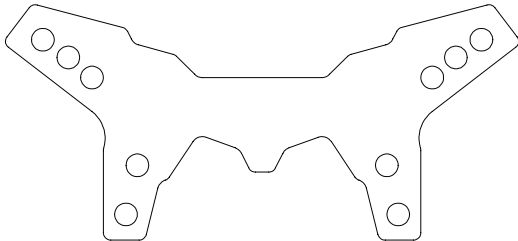


Ball Connector 4.7x12mm B-02-VBC-5015 x 1



7

Front Damper Mount Assembly



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



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



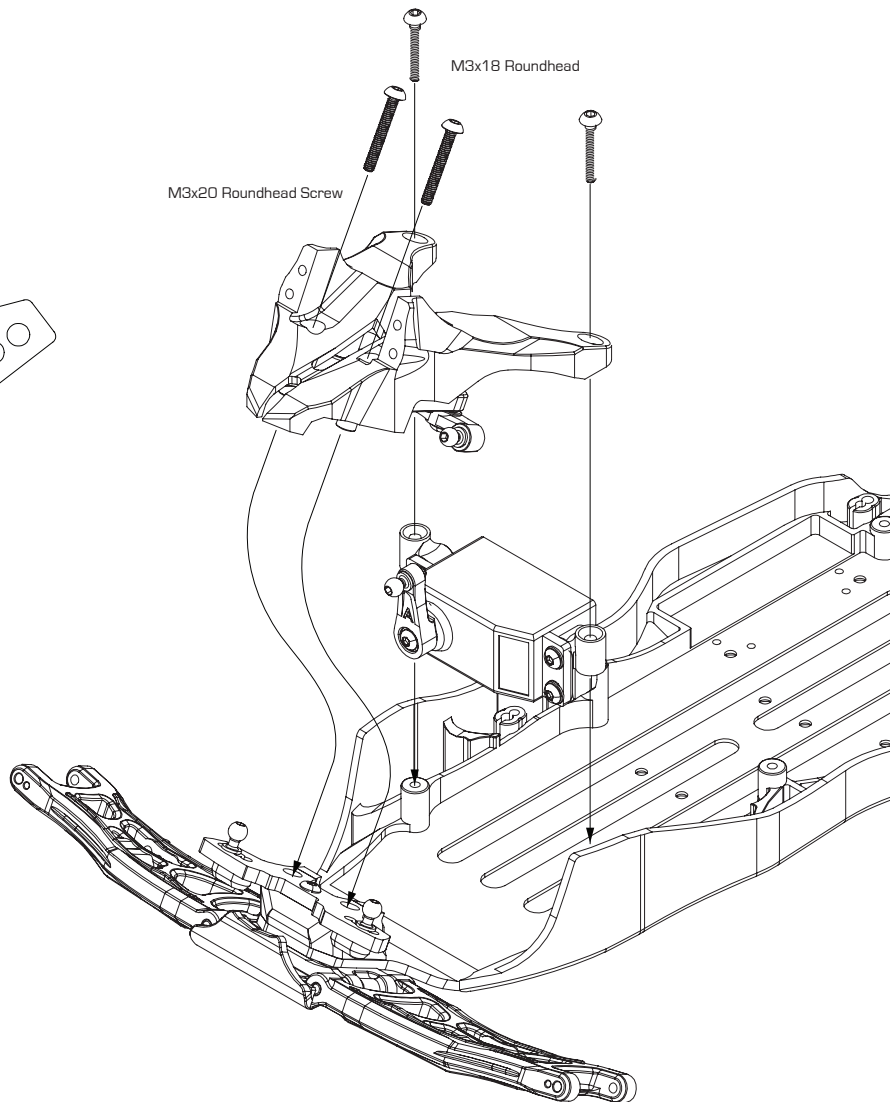
M3x18 Roundhead Screw C-02-SC-R0318 x 2



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

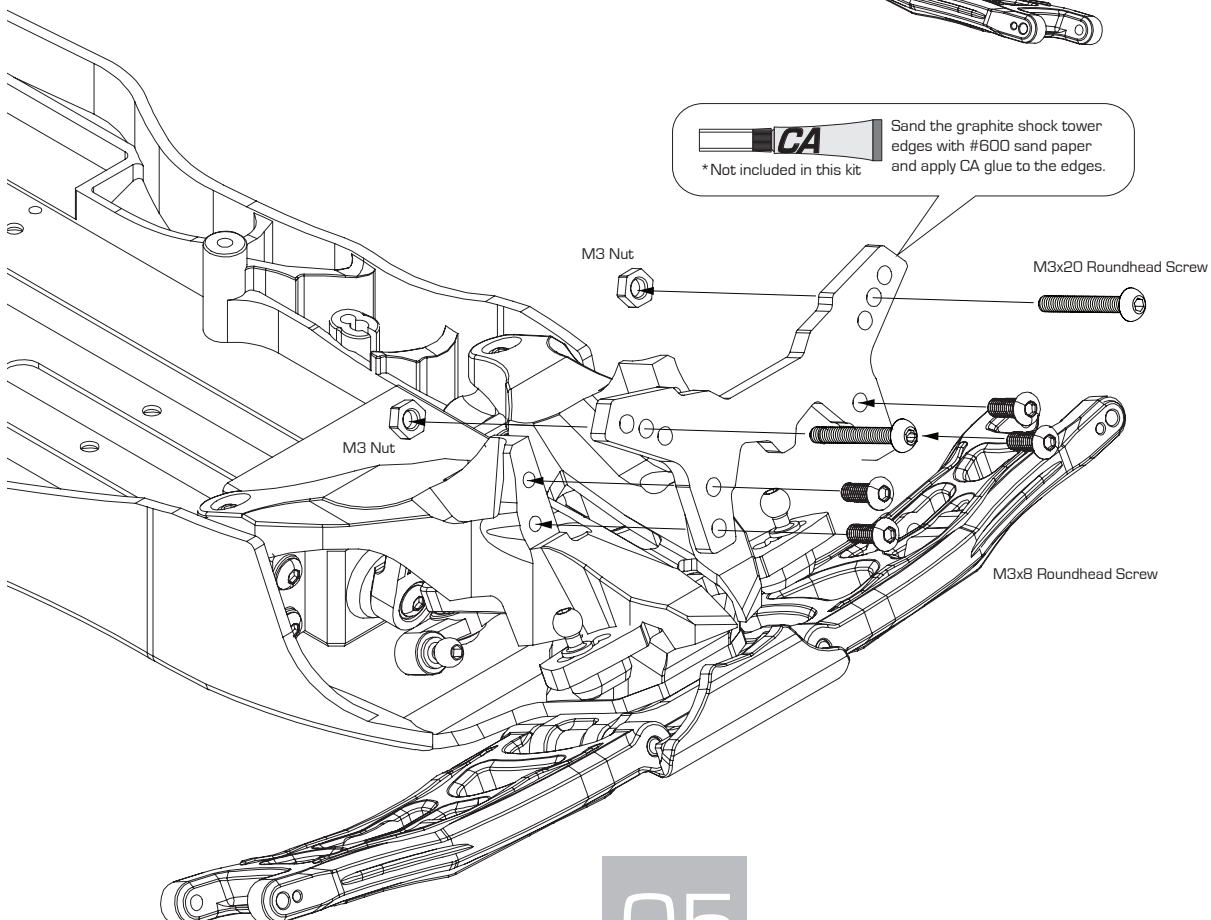


M3 Nut C-02-SC-FN03 x 2



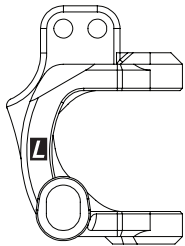
Sand the graphite shock tower edges with #600 sand paper and apply CA glue to the edges.

*Not included in this kit.

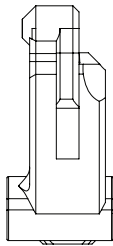


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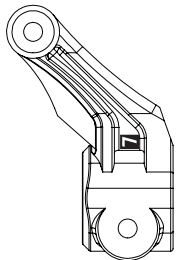
Front Knuckle Assembly



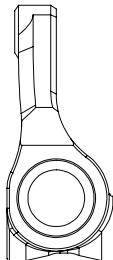
C-hub, Left A-03-VBC-6020 x 1



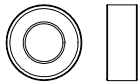
C-hub, Right A-03-VBC-6021 x 1



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



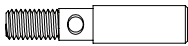
Steering Knuckle, Right A-03-VBC-6025 x 1



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



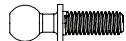
Aluminium Front Axle Washer B-02-VBC-6005 x 2



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

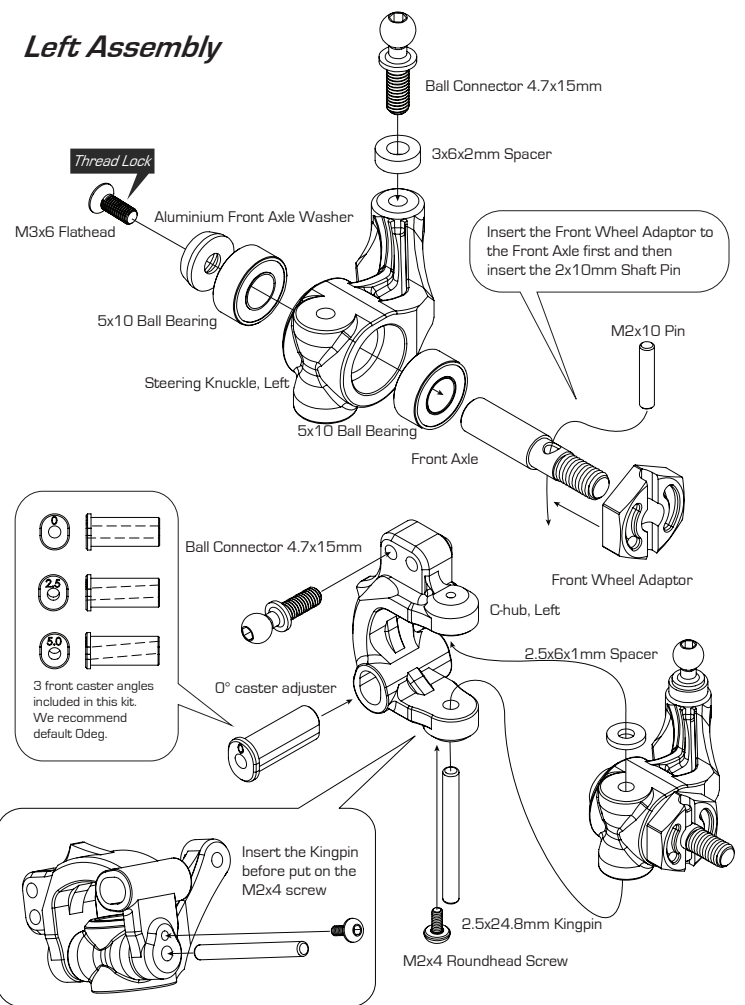


M2x4 Roundhead Screw C-02-SC-R0204 x 2

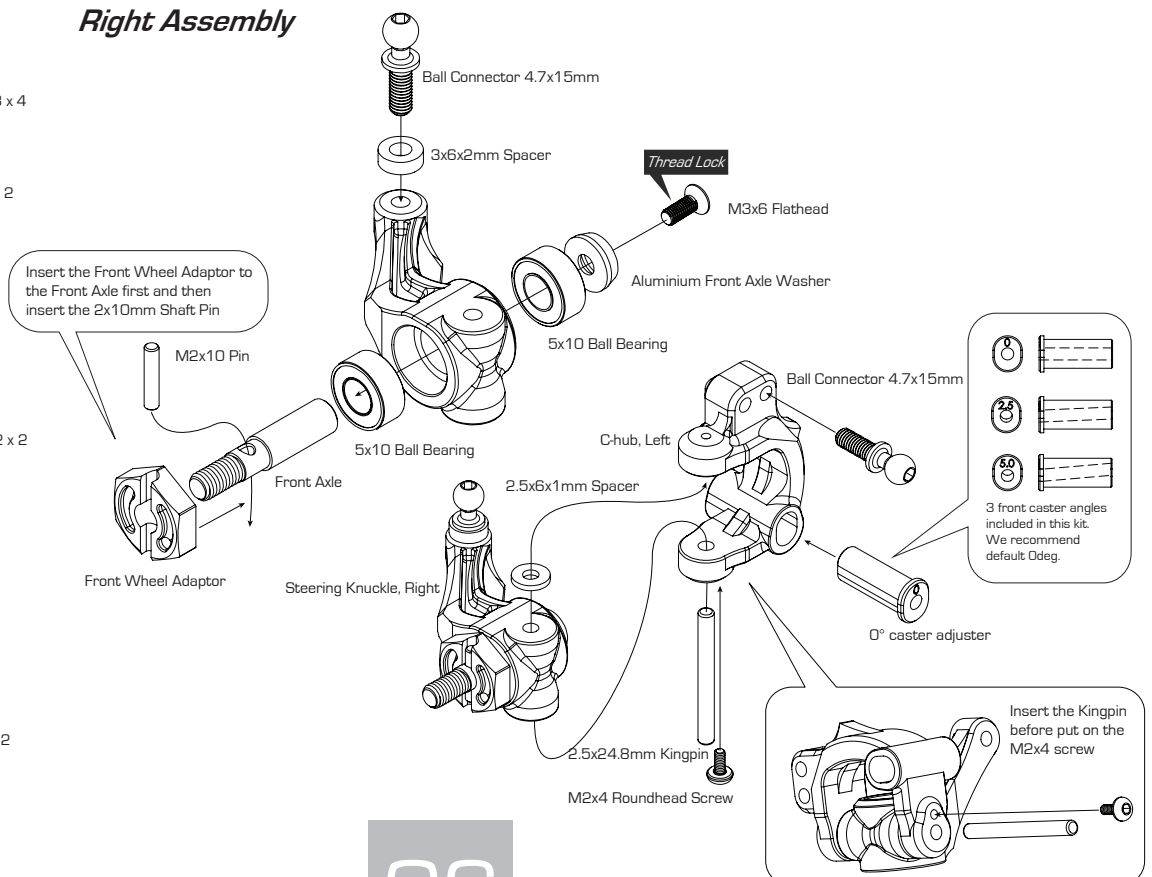


M3x6 Flathead Screw C-02-SC-F0306 x 2

Left Assembly



Right Assembly



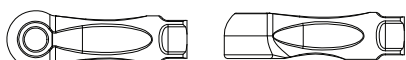
9

Steering System Assembly

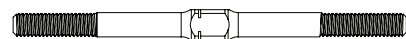
M2x4 Roundhead Screw C-02-SC-R0204 x 2



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



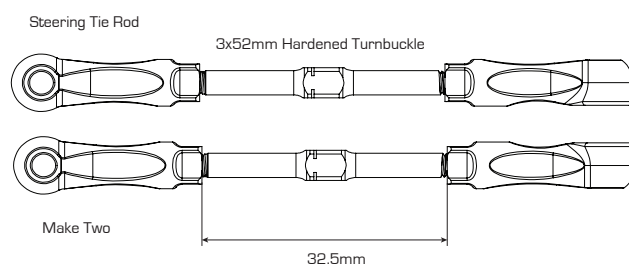
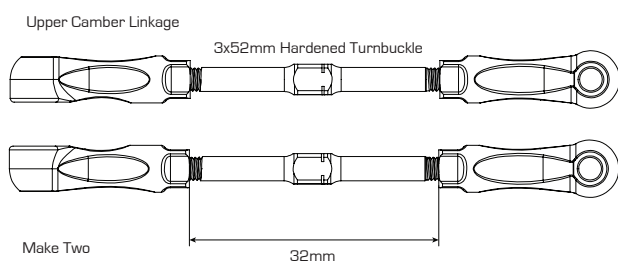
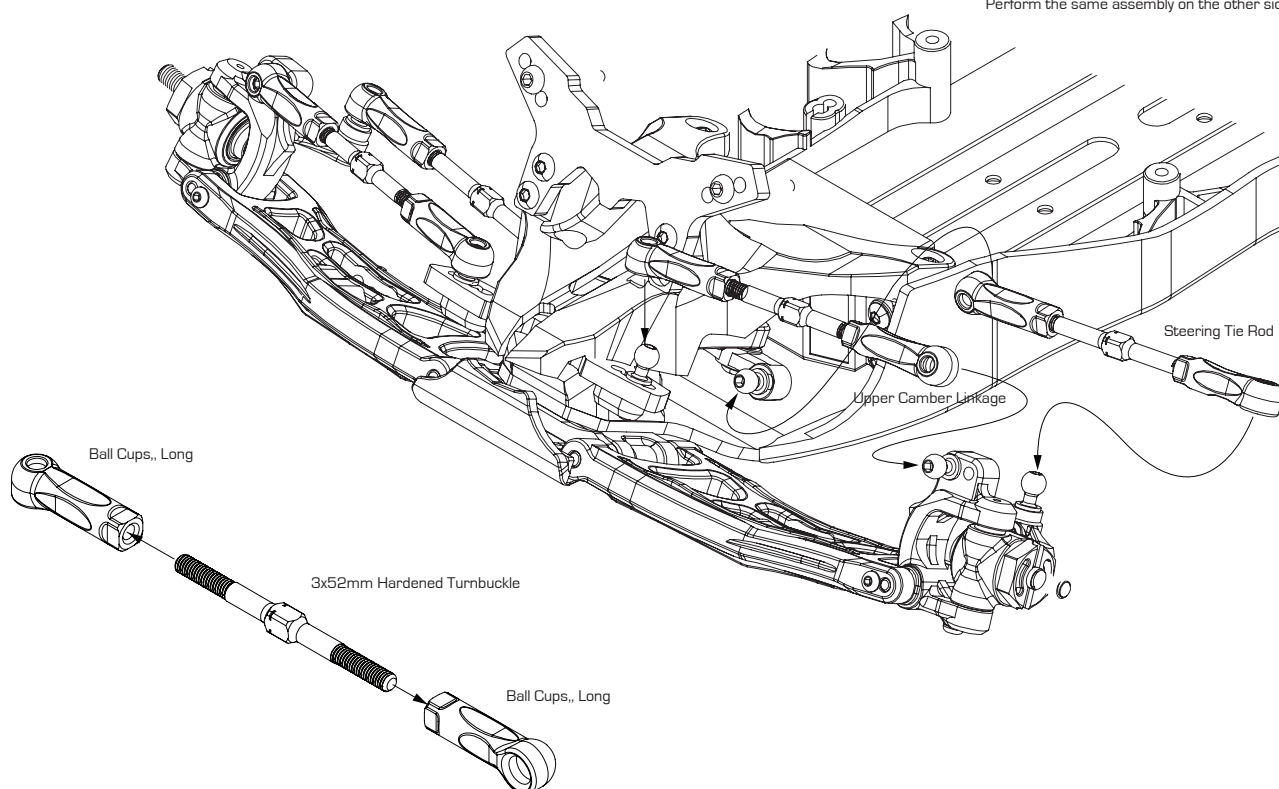
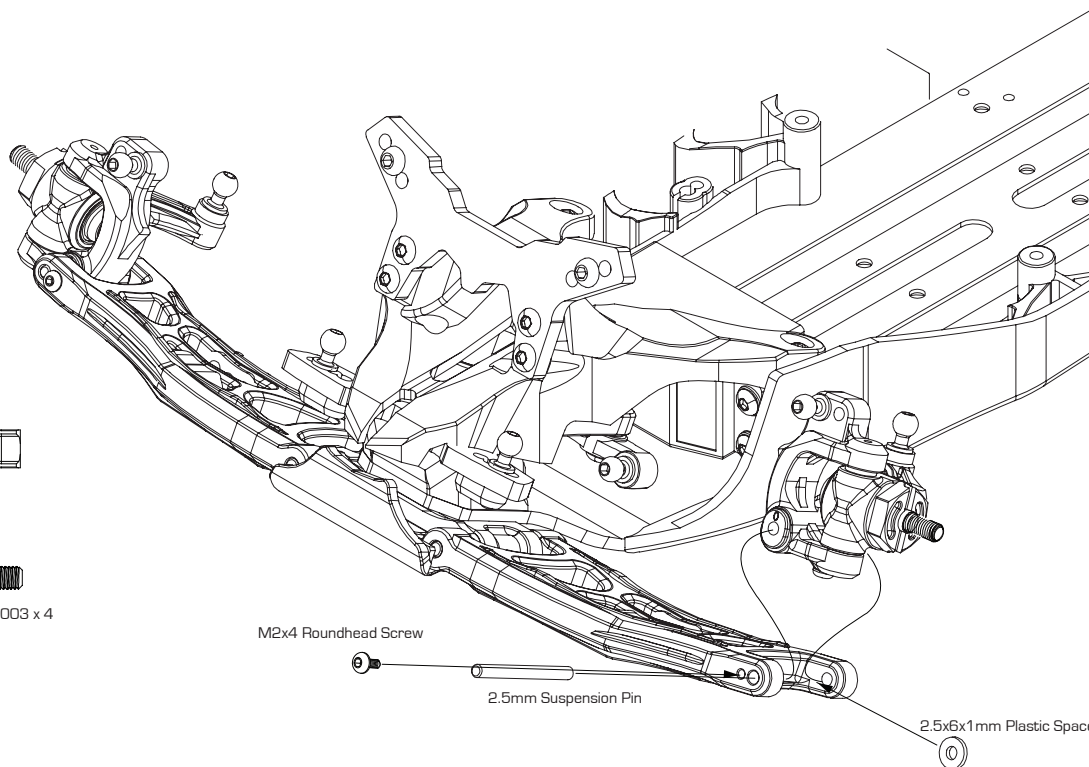
Ball Cups, Long A-03-VBC-6030 x 8



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

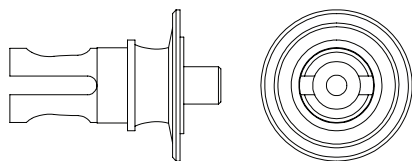


2.5x27.8mm Suspension Pin C-02-VBC-6016 x 2

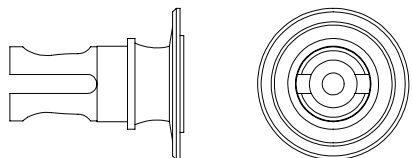


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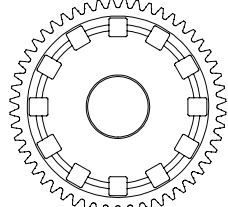
Rear Differentials Assembly



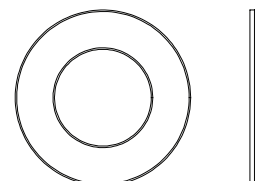
FireboltDM Diff Joint A C-02-VBC-6012 x 1



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



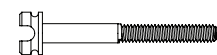
Firebolt 52T Composite Ball Diff Gear A-03-P60545 x 1



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



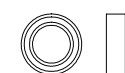
Diff Spring C-02-VBC-6024 x 1



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



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



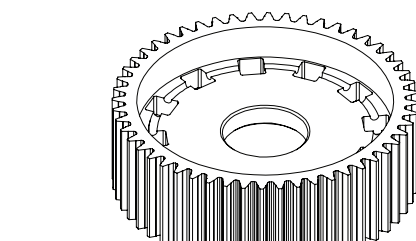
5x8 Ball Bearings C-02-BB-0805-B x 2



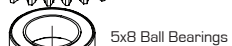
M1.0x4x6 O-ring R-02-VBC-6036 x 1



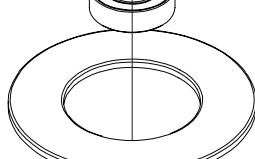
5x8 Ball Bearings



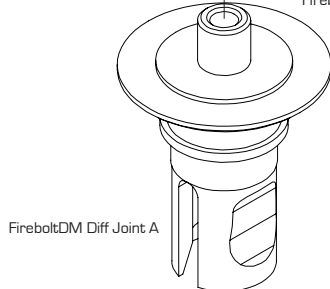
Firebolt 52T Ball Diff Gear



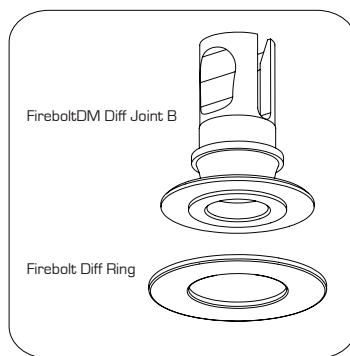
5x8 Ball Bearings



Firebolt Diff Ring

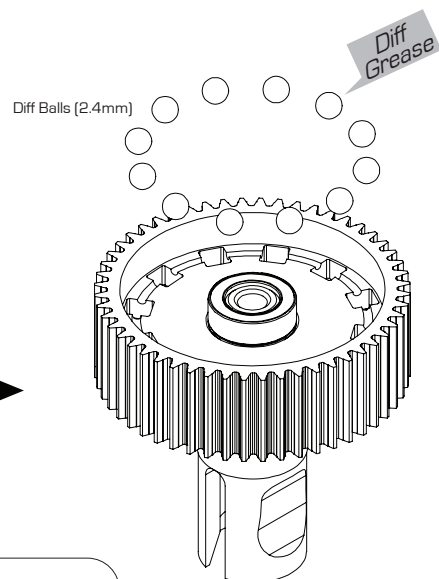
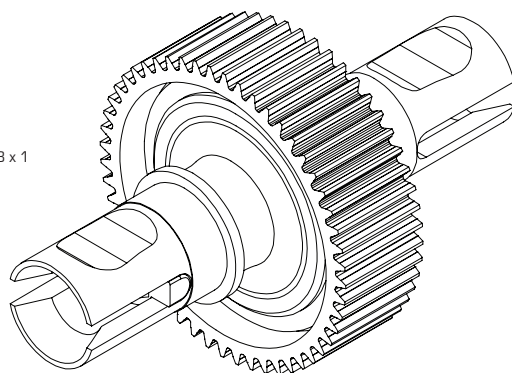


FireboltDM Diff Joint A



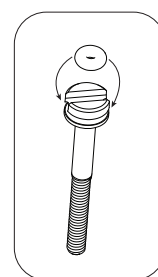
FireboltDM Diff Joint B

Firebolt Diff Ring

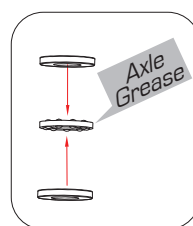


Diff Balls (2.4mm)

Diff Grease



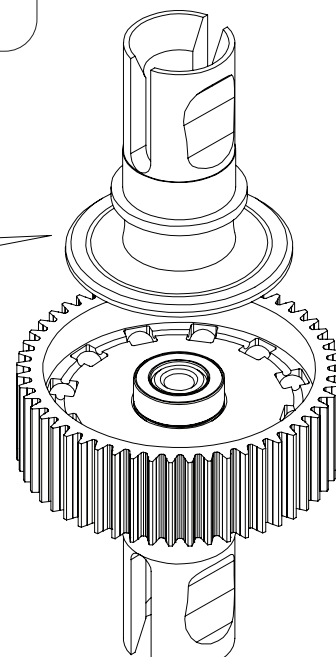
M1.0x4 O-ring



Firebolt Thrust Balls Bearing

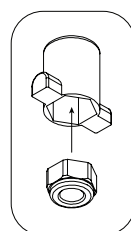
Ball Diff Screw

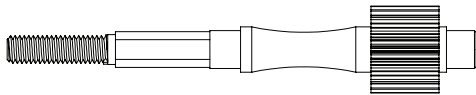
Axle Grease



Diff Spring

Ball Diff Nut

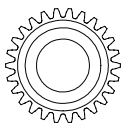


11**Installing gears**

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



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



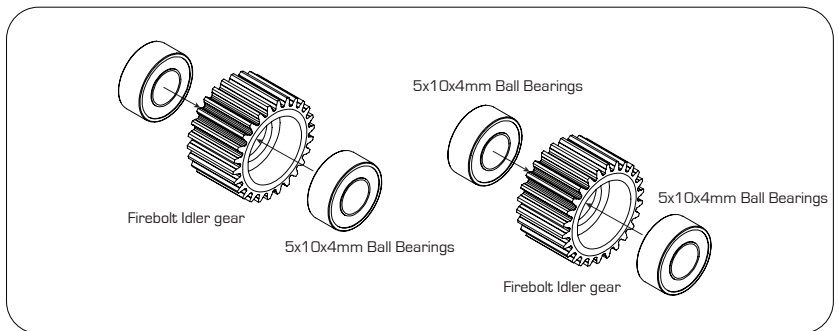
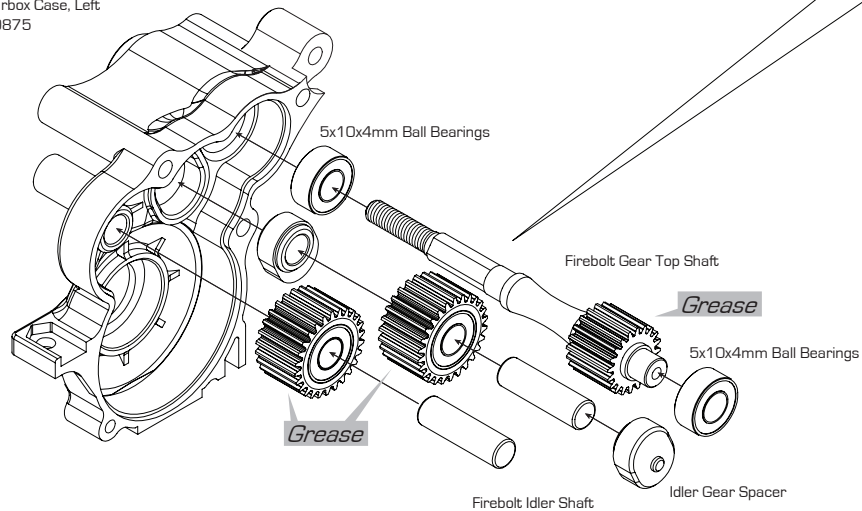
Firebolt Composite Idler gear A-03-P60646 x 1



Idler Gear Spacer A-03-P60188 x 2



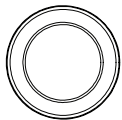
5x10 Ball Bearings C-02-BB-1005-B x 4

DM2 Gearbox Case, Left
A-03-P60875**12****Gearbox Assembly**

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



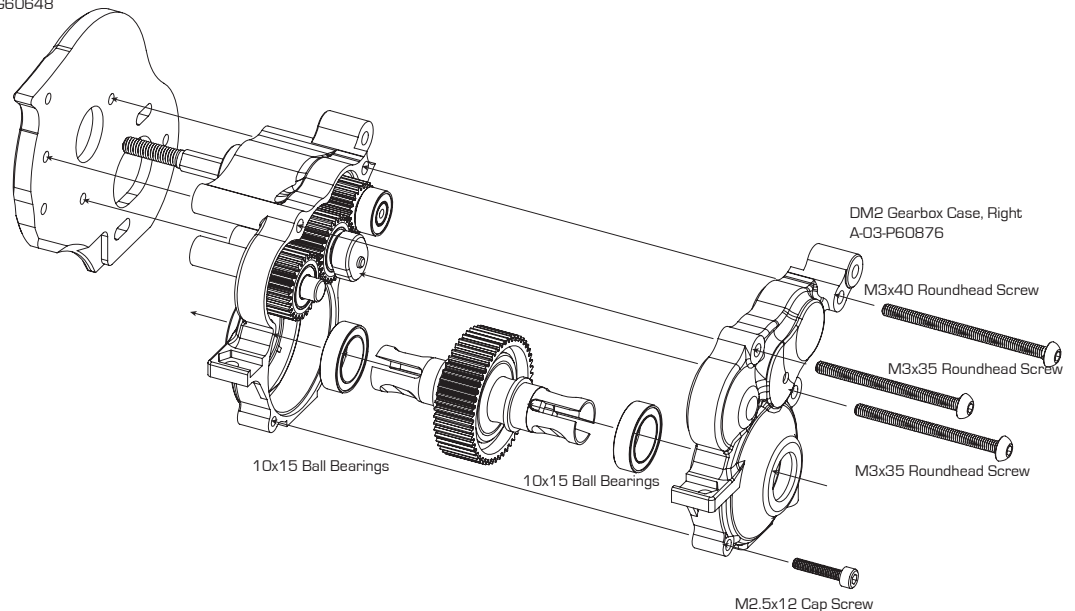
M3x40 Roundhead Screw C-02-SC-R0340 x 1



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



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

Firebolt Extreme Lightweight Aluminium Motor Plate
B-02-G60648DM2 Gearbox Case, Right
A-03-P60876

M3x40 Roundhead Screw

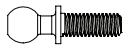
M3x35 Roundhead Screw

M3x35 Roundhead Screw

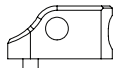
M2.5x12 Cap Screw

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



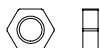
M3x12 Roundhead Screw C-02-SC-R0312 x 4



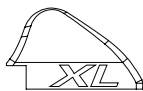
M3x10 Roundhead Screw C-02-SC-R0310 x 4



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



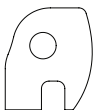
M3 Hex Nut C-02-SC-FN03 x 2



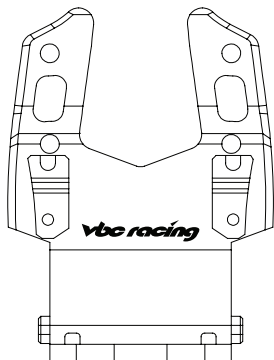
Firebolt Alum Rear Suspension Mount, XL B-02-VBC-6002 x 1



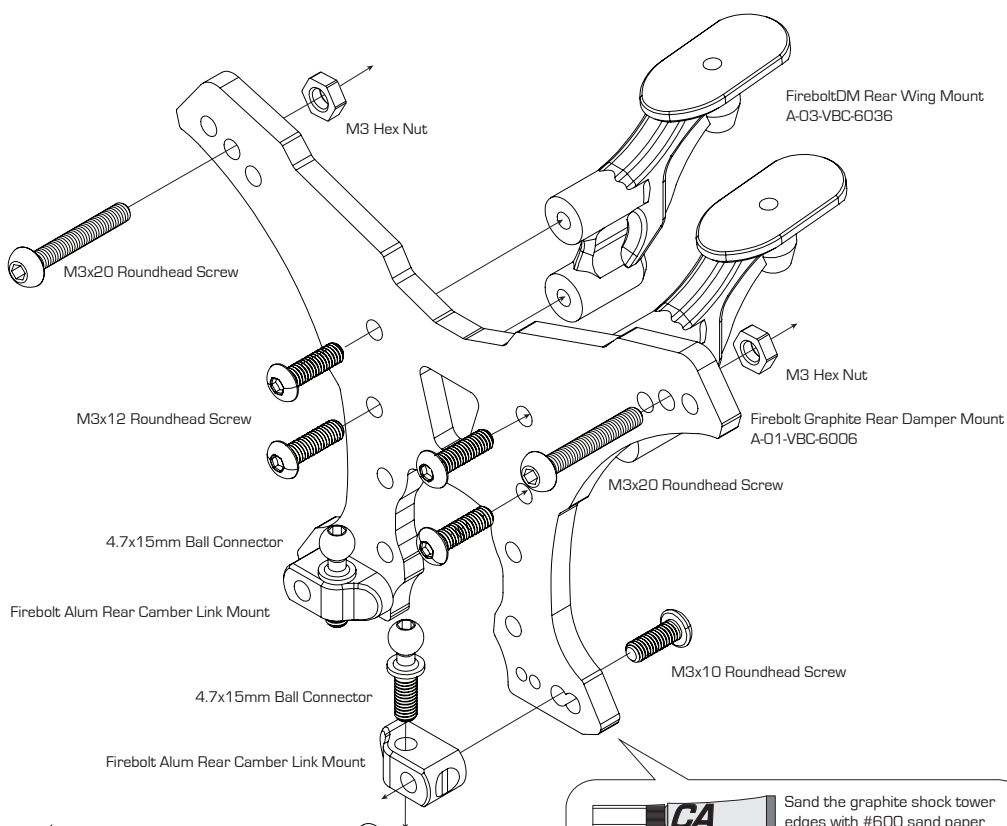
Firebolt Alum Rear Suspension Mount, XR B-02-VBC-6001 x 1



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

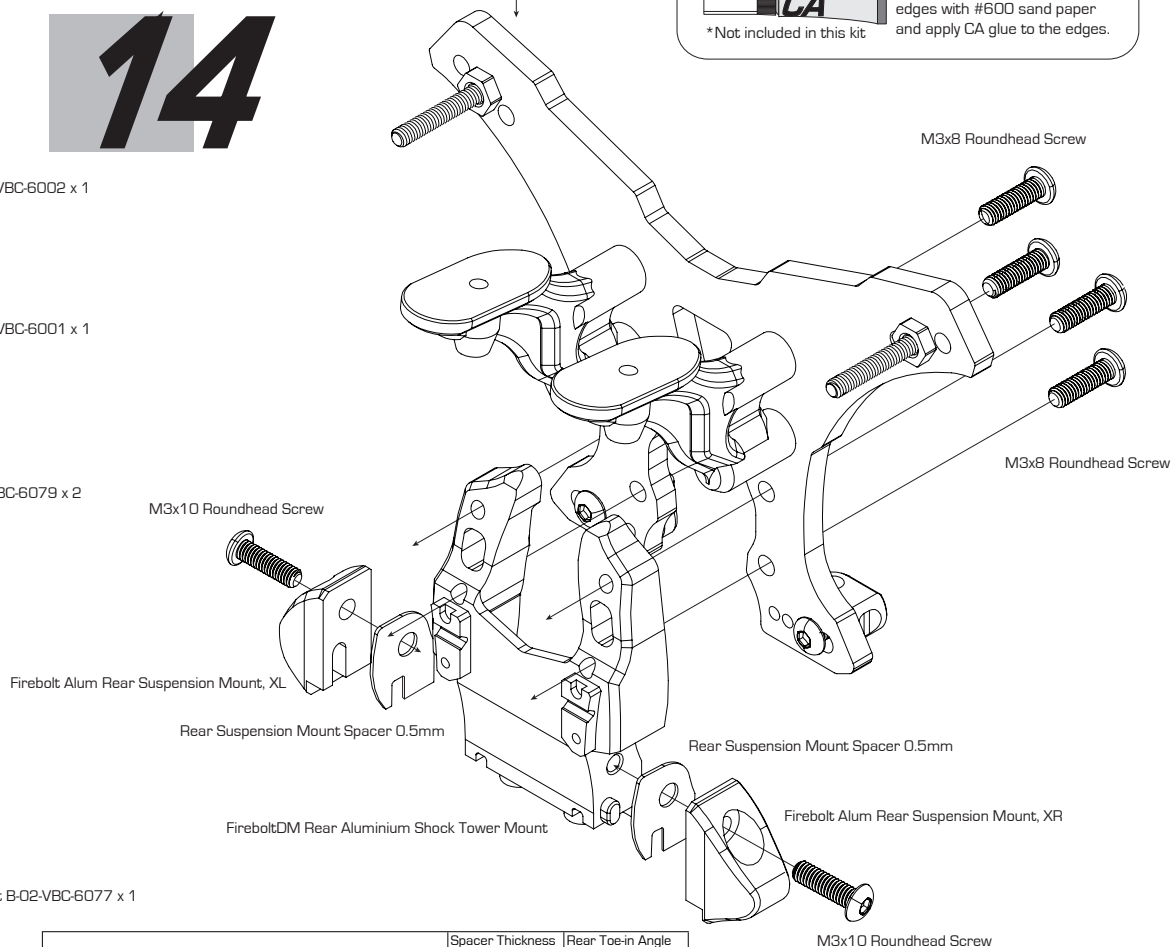


FireboltDM Rear Aluminium Shock Tower Mount B-02-VBC-6077 x 1



 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



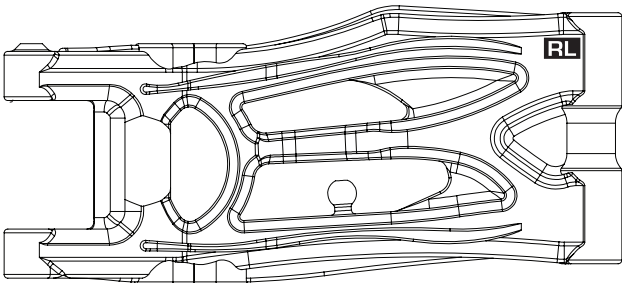
3x6x1.2mm Plastic Spacer A-03-VBC-6055 x 4



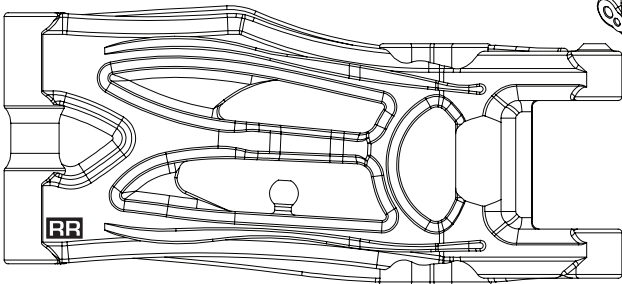
3x44.5mm Suspension Pin B-02-VBC-0029 x 2



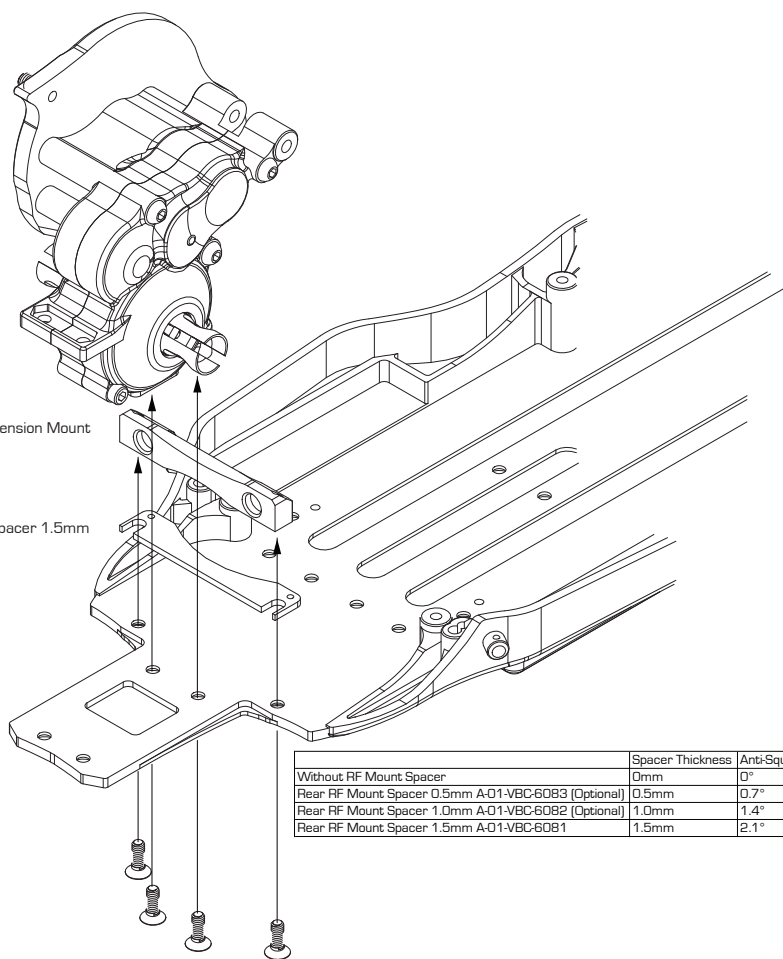
Arm Pin Pivot Ball B-02-VBC-0035 x 4



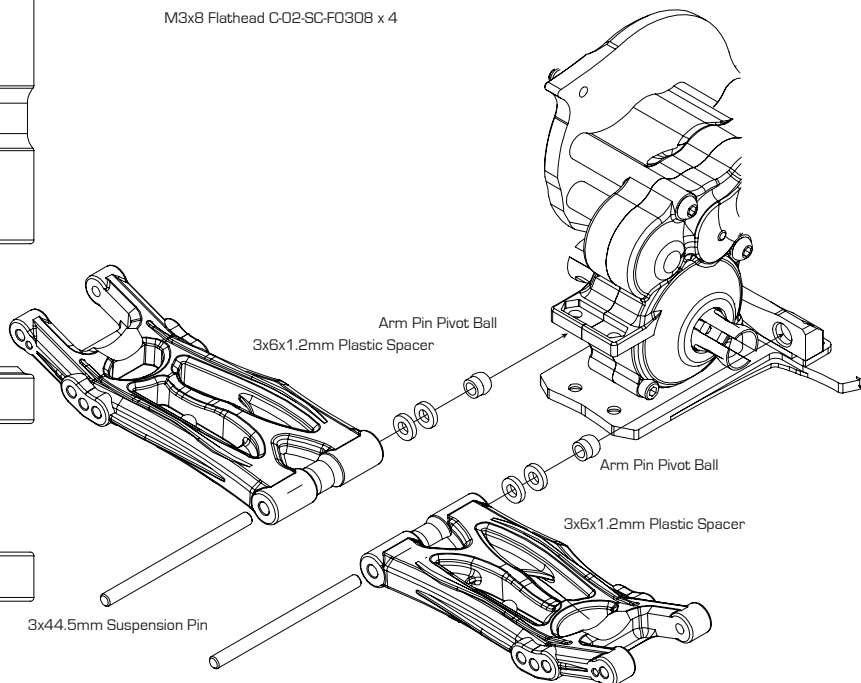
Firebolt Rear Suspension Arm, RL A-03-VBC-6026 x 1

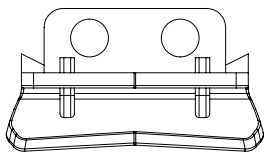


Firebolt Rear Suspension Arm, RR A-03-VBC-6027 x 1



M3x8 Flathead C-02-SC-F0308 x 4



16**Rear Suspension Assembly 2**

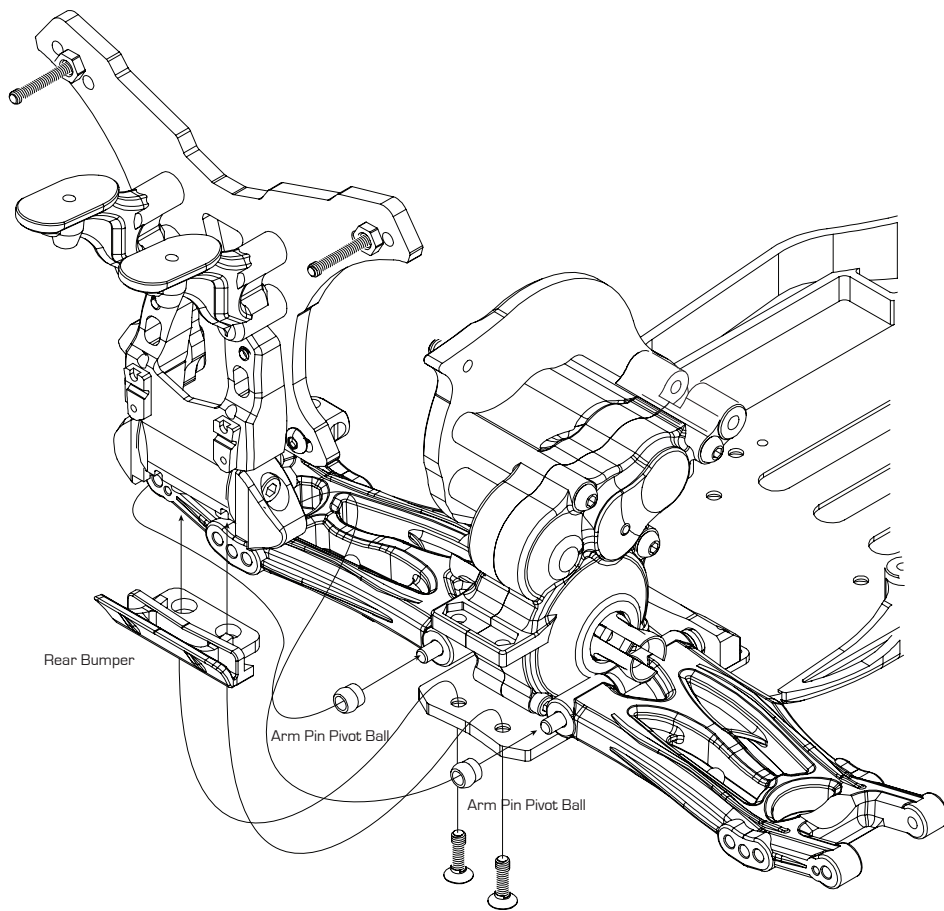
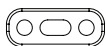
Rear Bumper A-03-VBC-6012 x 1



M3x10 Flathead C-02-SC-F0310 x 2



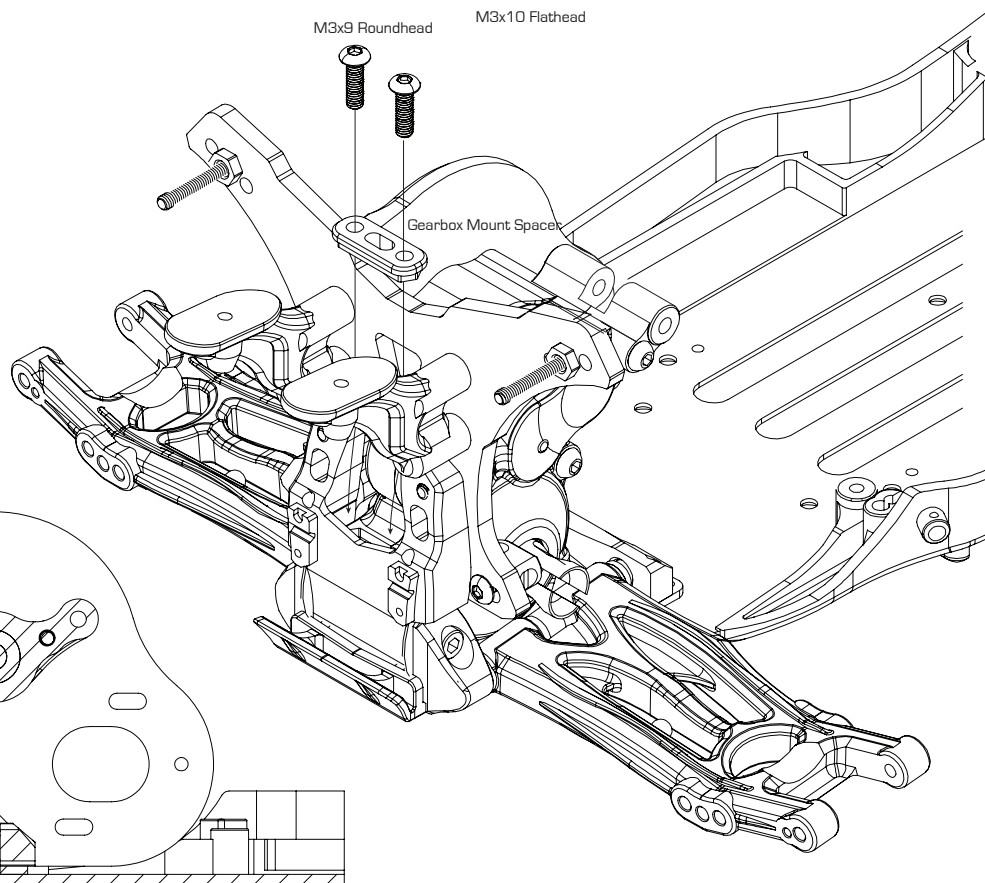
Arm Pin Pivot Ball B-02-VBC-0035 x 2

**17**

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



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

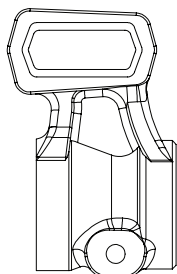


Please make sure the Gearbox Mount Spacer is recessed onto the gearbox and the M3x9 screws are tightly fastened

The gearbox case groove is recessed onto the chassis slot

18

Rear Suspension Arm Assembly



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



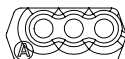
4.7x14mm Ball Connector C-02-VBC-6034 x 2



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



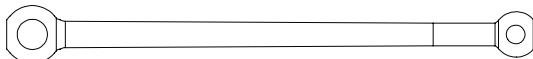
Rear Camber Link Plate (B) A-03-VBC-6051 x 1



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



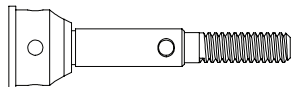
Rear Camber Link Holder (B) A-03-VBC-6049 x 1



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



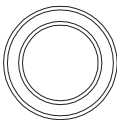
Firebolt Rear CVD Inner Joint C-02-VBC-6011 x 2



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



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



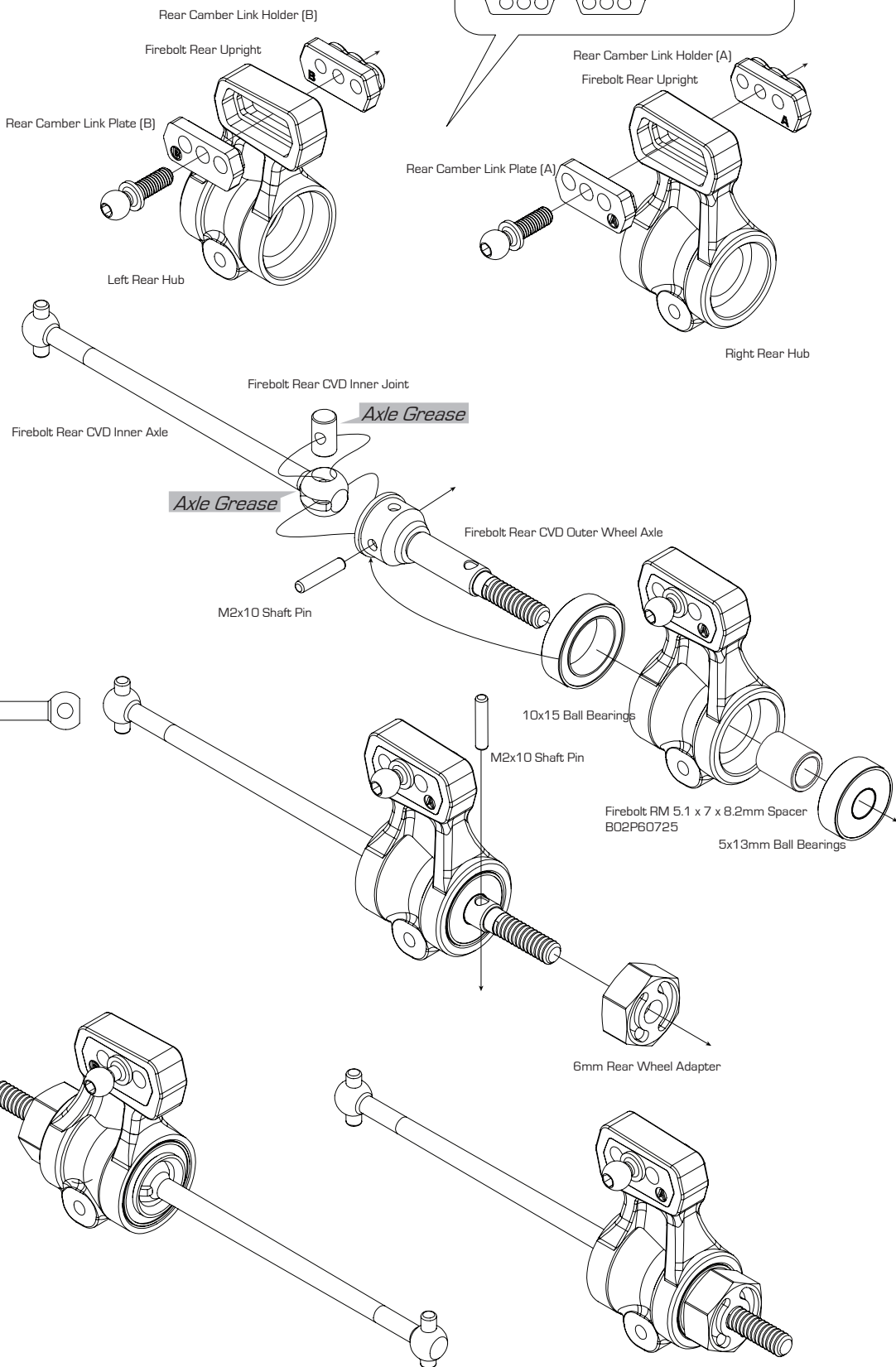
10x15 Ball Bearings C-02-BB-1510-P x 2



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

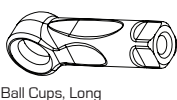


6mm Rear Wheel Adapter A-03-VBC-6069 x 2



19

Right Rear Camber Link Assembly

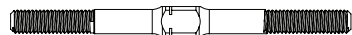


Ball Cups, Long

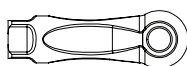
3x45mm Hardened Turnbuckle



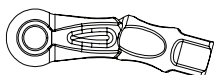
Ball Cup L Type, Long Right



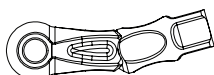
3x45mm Hardened Springsteel Turnbuckle C-02-VBC-6004 x 2



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 6



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



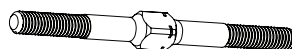
M2x4 Roundhead Screw C-02-SC-R0204 x 2

Left Rear Camber Link Assembly

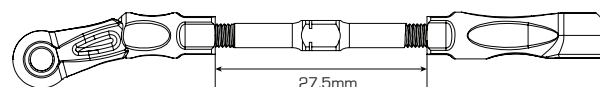


Ball Cup L Type, Long Left

3x45mm Hardened Turnbuckle



Ball Cups, Long



27.5mm

Left Rear Camber Link

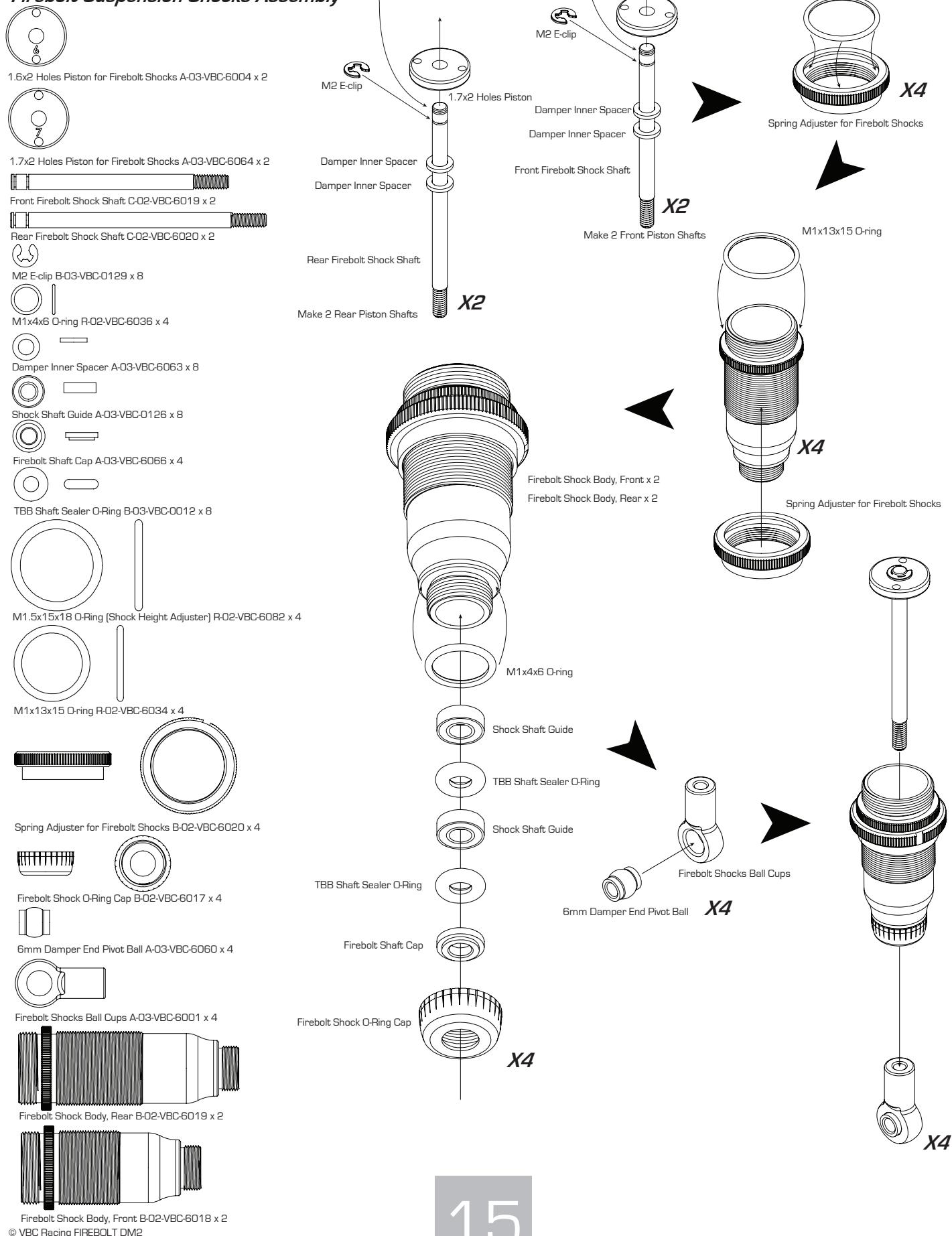
Right Rear Camber Link

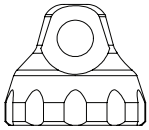
2.5x6x1mm Plastic Spacer

2.5x6x1mm Plastic Spacer

2.5x29.8mm Suspension Pin

M2x4 Roundhead Screw

20**Firebolt Suspension Shocks Assembly**

21**Front Suspension Assembly Part 1**

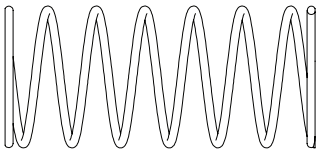
Firebolt Alum Shock Cap B-02-VBC-6021 x 4



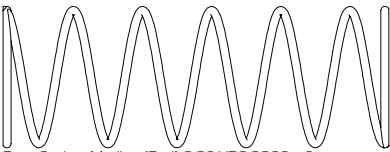
M1x1x3 O-ring R-02-VBC-6035 x 4



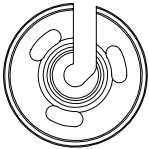
M2x4 Roundhead Screw C-02-SC-R0204 x 4



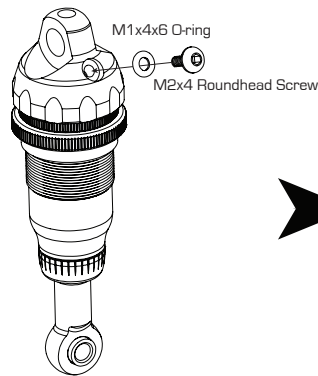
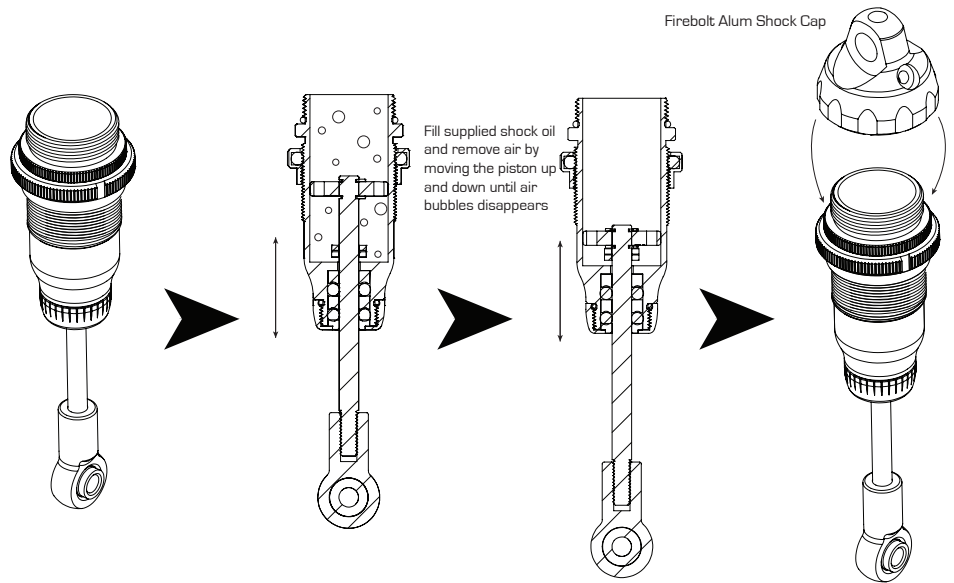
Front Spring, Medium(Red) C-02-VBC-6021 x 2



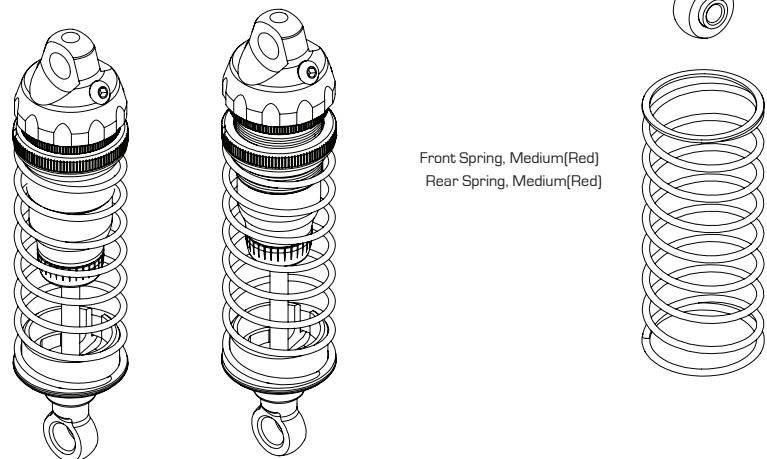
Rear Spring, Medium(Red) C-02-VBC-6022 x 2



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



Firebolt Shocks Spring Retainer



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)

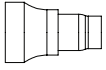
Front Spring, Medium(Red) C-02-VBC-6021

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



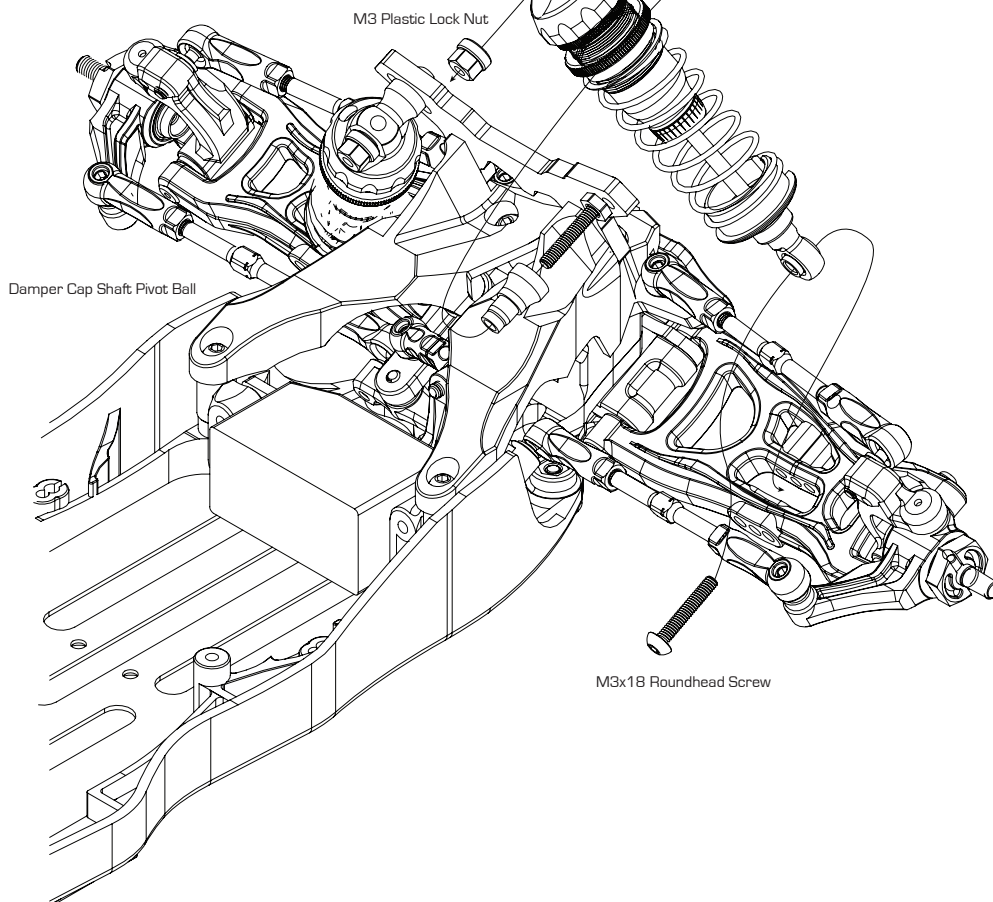
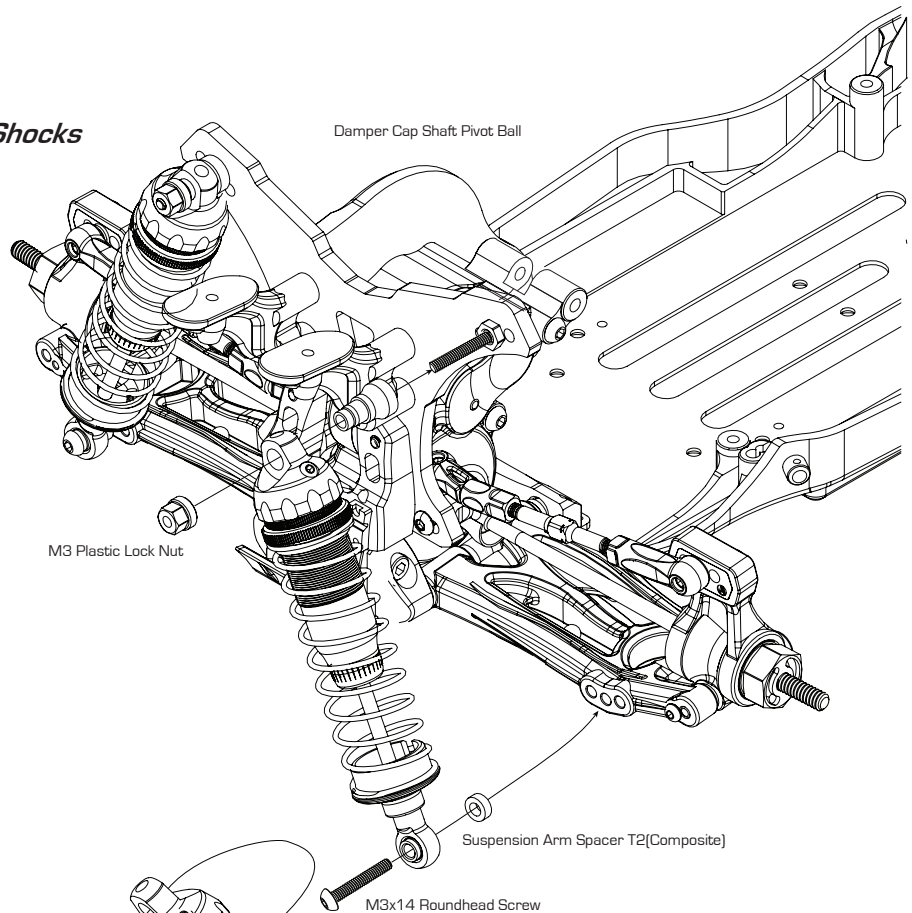
Suspension Arm Spacer T2(Composite) A-03-VBC-0052 x 2

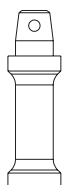
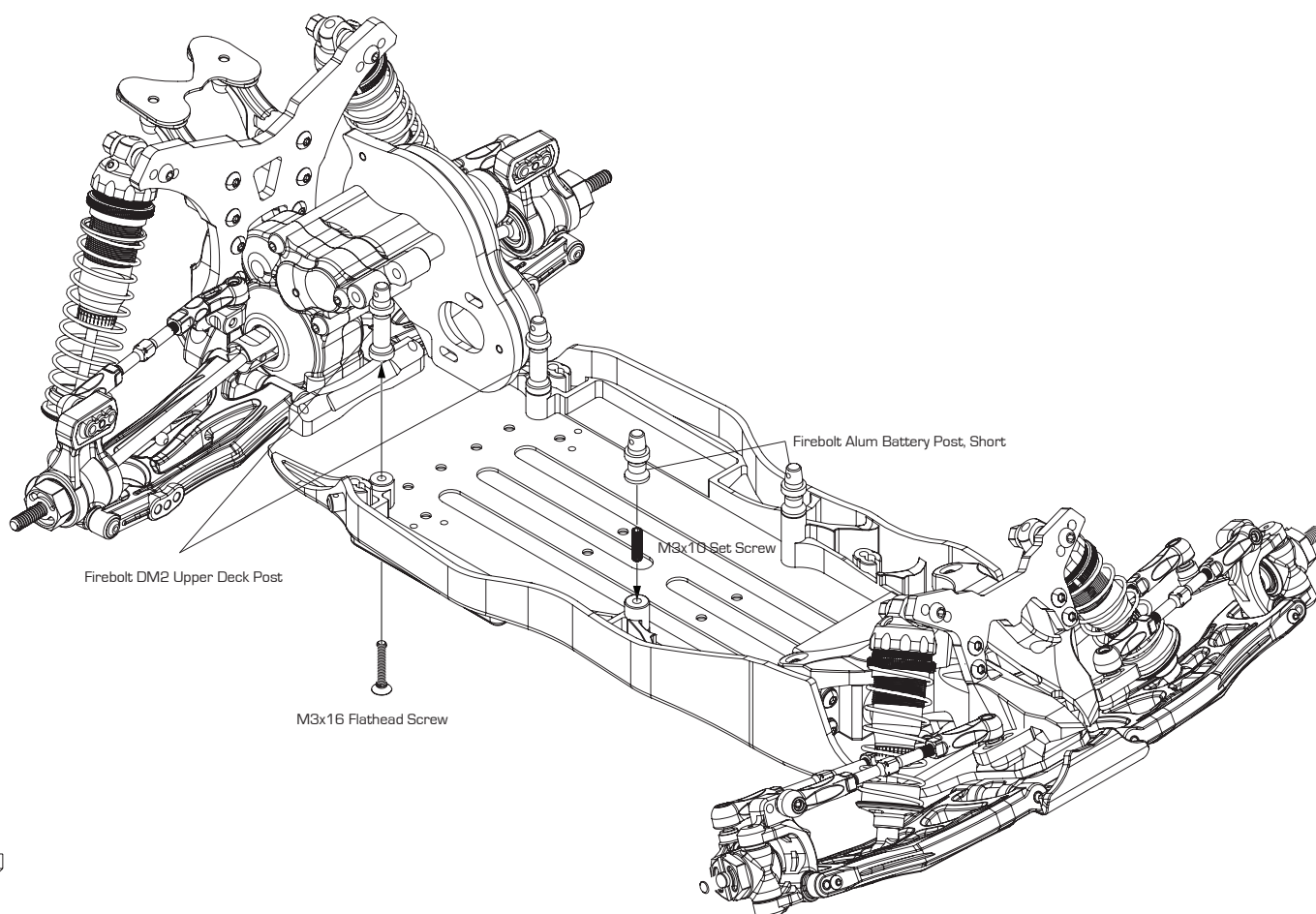


M3x14 Roundhead Screw C-02-SC-R0314 x 2

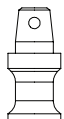


M3x18 Roundhead Screw C-02-SC-R0318 x 2



23**Battery Mount Assembly**

Firebolt DM2 Upper Deck Post
B-02-P60595 X 2



Firebolt Alum Battery Post, Short B-02-VBC-6008 x 4



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



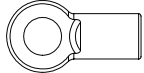
M3x16 Flathead Screw C-02-SC-F0316 x 2

24**Upper Strut Assembly**

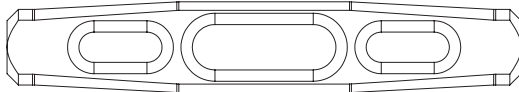
M3x10 Set Screw C-02-SC-SS0310 x 2



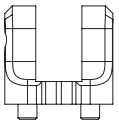
6mm Damper End Pivot Ball A-03-VBC-6060 x 2



Firebolt Shocks Ball Cups A-03-VBC-6001 x 2



Firebolt DM2 Supporting B02-P60811 x 1



Firebolt DM2 Support Mount B-02-P60821 x 1



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



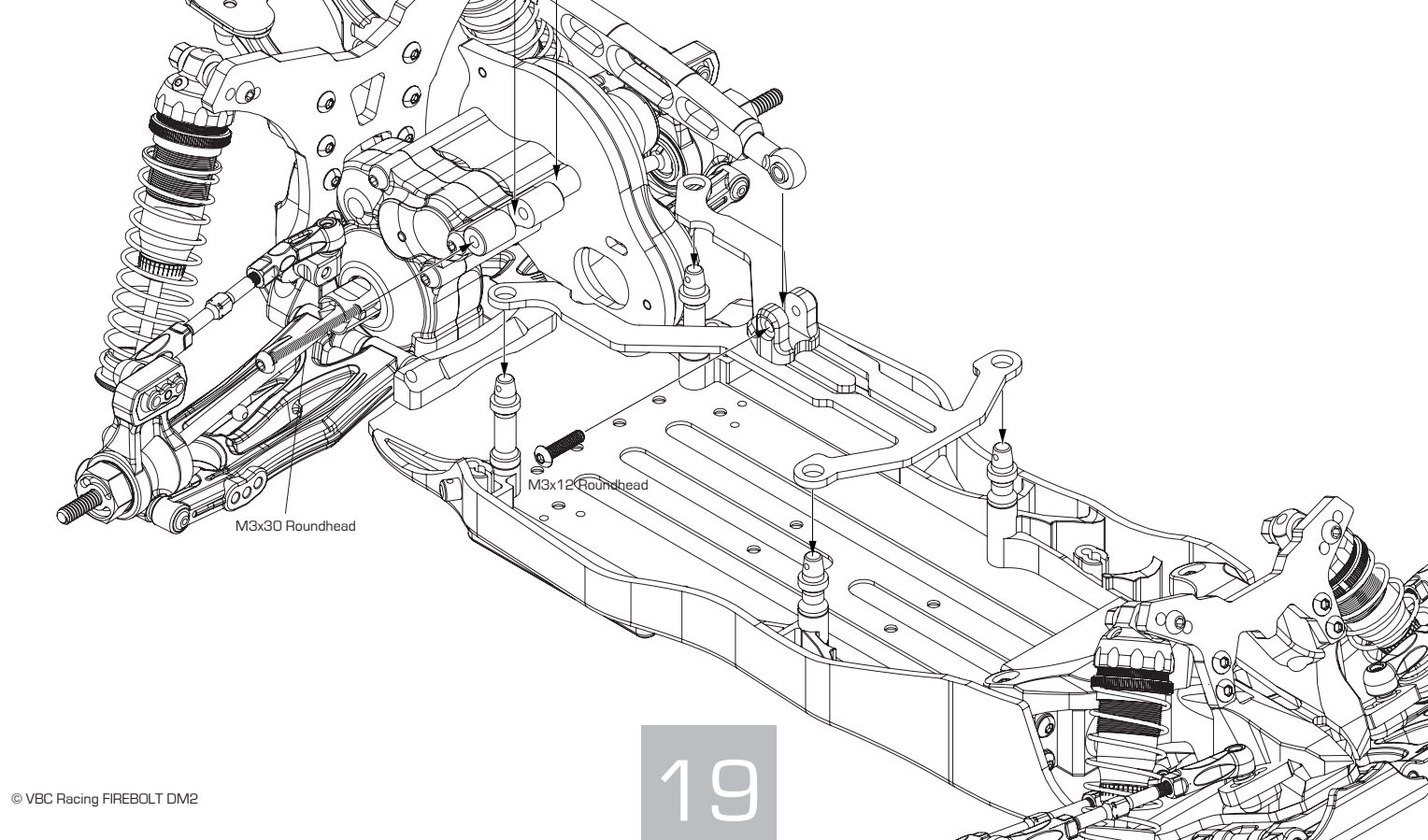
M3x12 Roundhead Screw C-02-SC-R0312 x 1

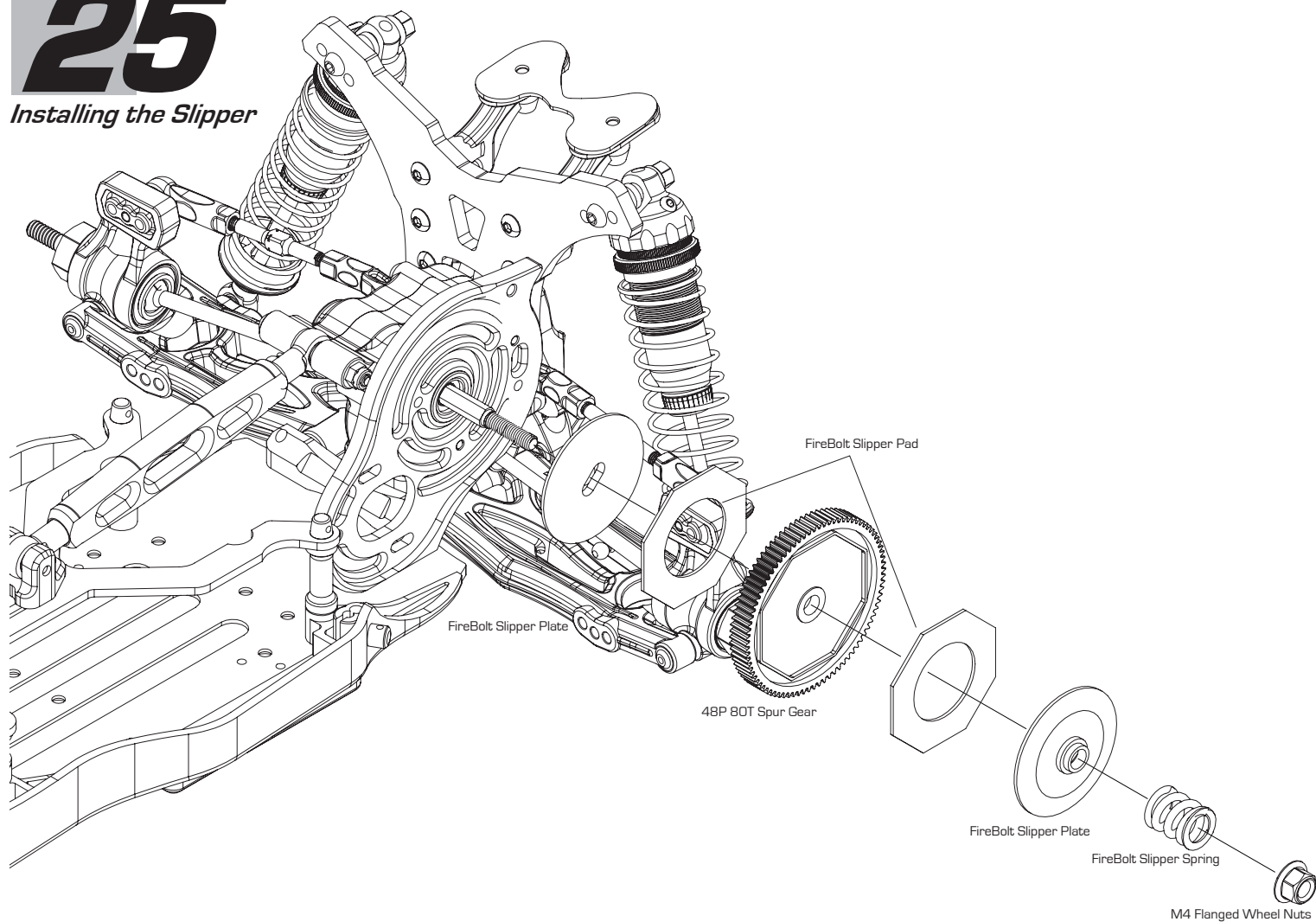


M3x30 Roundhead Screw C-02-SC-R0330 x 1



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

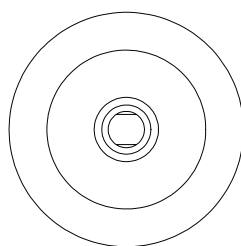


25*Installing the Slipper*

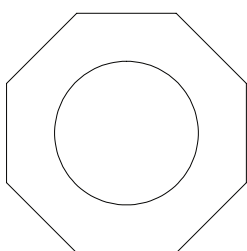
M4 Flanged Wheel Nuts B-02-VBC-0086 x 1



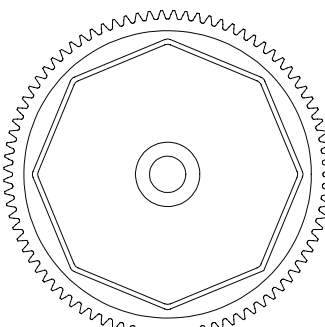
FireBolt Slipper Spring C-03-VBC-6002 x 1



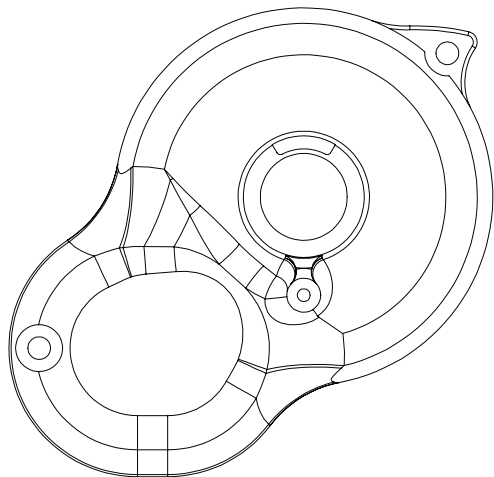
FireBolt Slipper Plate B-02-VBC-6023 x 2



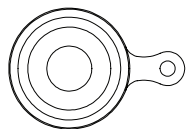
FireBolt Slipper Pad C-03-VBC-6001 x 2



48P BOT Spur Gear A-03-VBC-6105 x 1

26**Intall Gear Diff Cover**

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



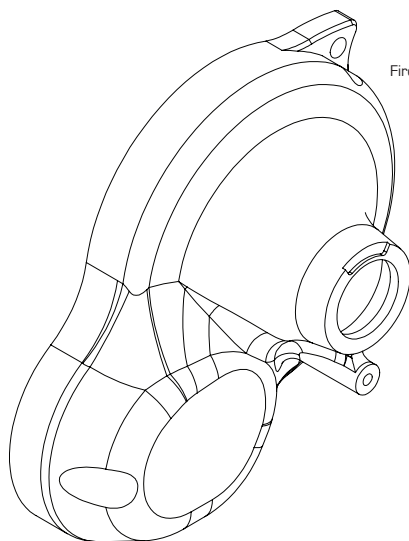
Slipper Adjust Cover Cap A-03-VBC-6043 x 1



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



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



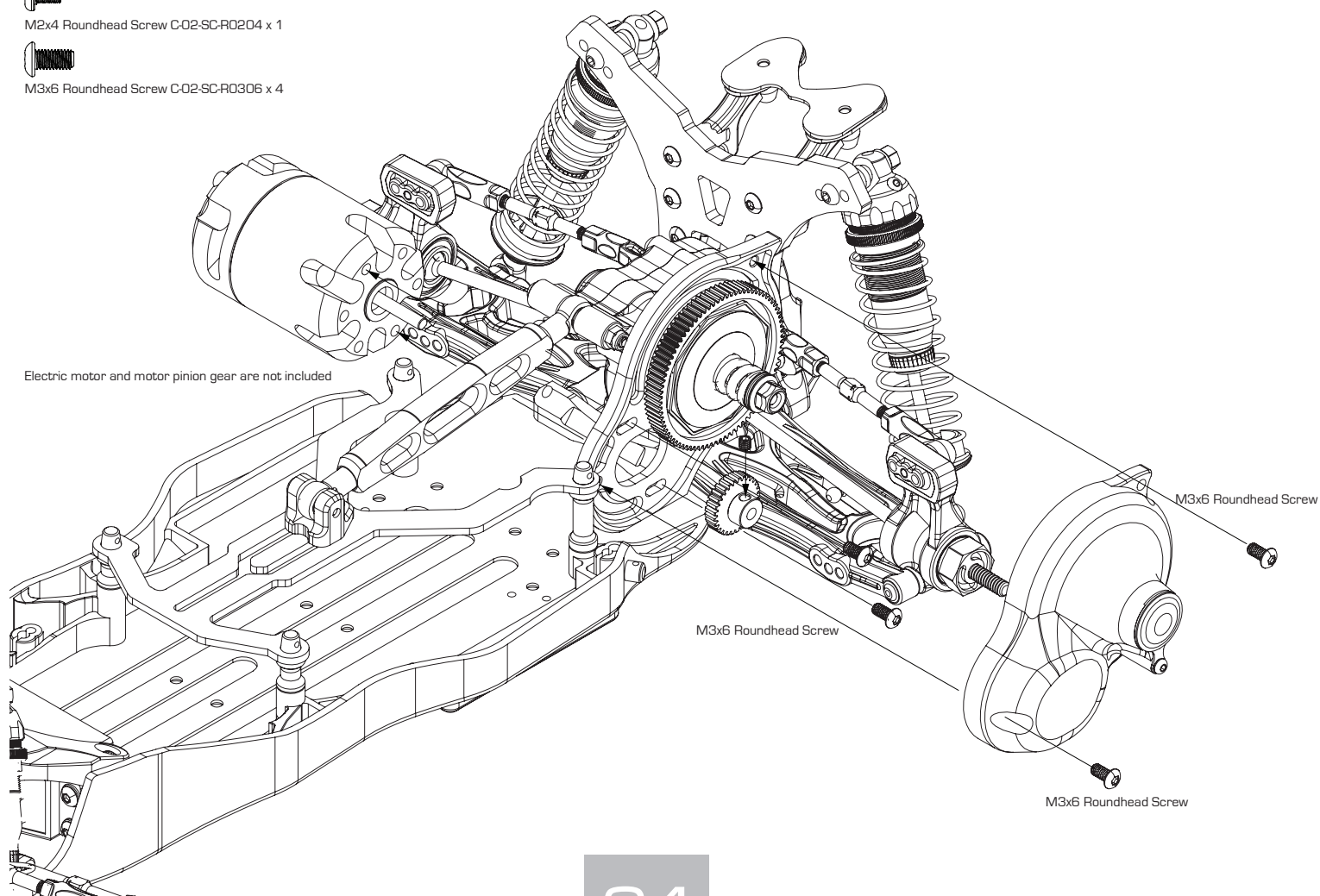
Firebolt Gear Cover



Slipper Adjust Cover Cap



M2x4 Roundhead Screw

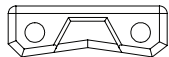


Electric motor and motor pinion gear are not included

M3x6 Roundhead Screw

M3x6 Roundhead Screw

M3x6 Roundhead Screw

27**Mounting Transmitter/ESC/Battery**

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



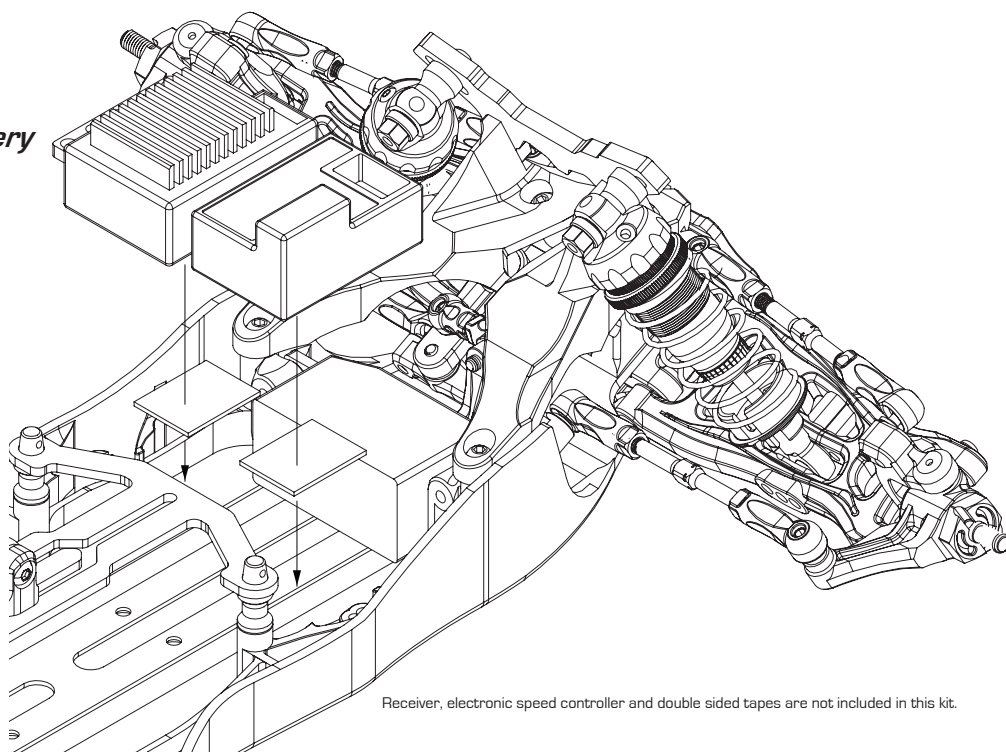
Firebolt Side Battery Stopper X A-03-VBC-6075 x 1



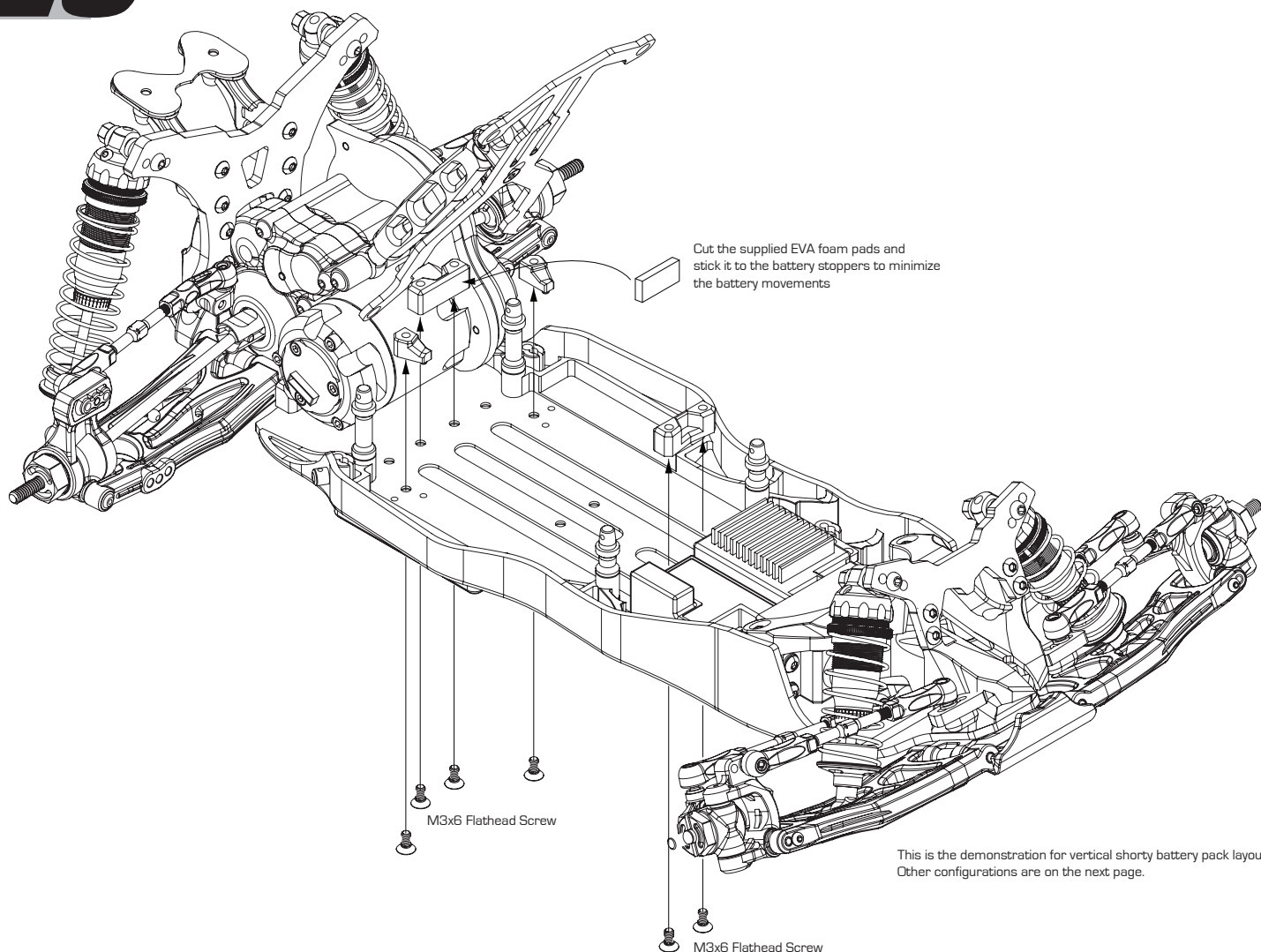
Firebolt Side Battery Stopper Y A-03-VBC-6076 x 1



M3x6 Flathead Screw C-02-SC-F0306 x 6



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

28

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

M3x6 Flathead Screw

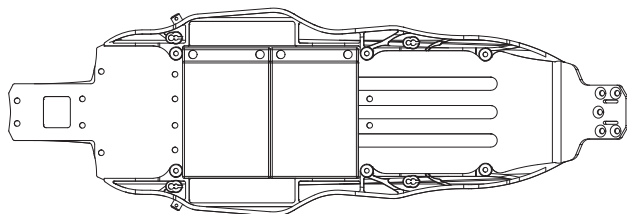
M3x6 Flathead Screw

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

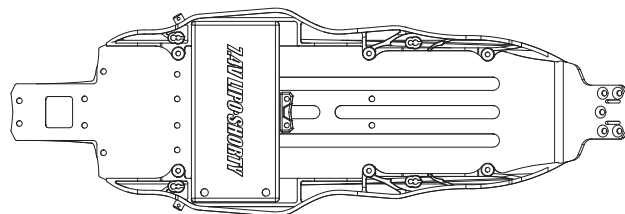
29

Mounting Different Battery Positions

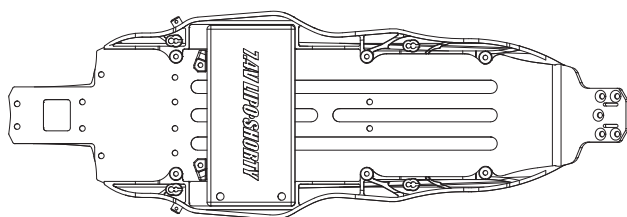
Mounting different batteries on the Firebolt by adjusting the Center and the Side Battery Stoppers



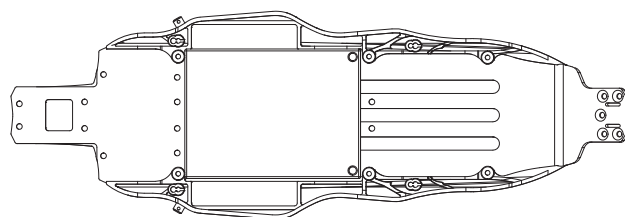
Saddlepack Setup



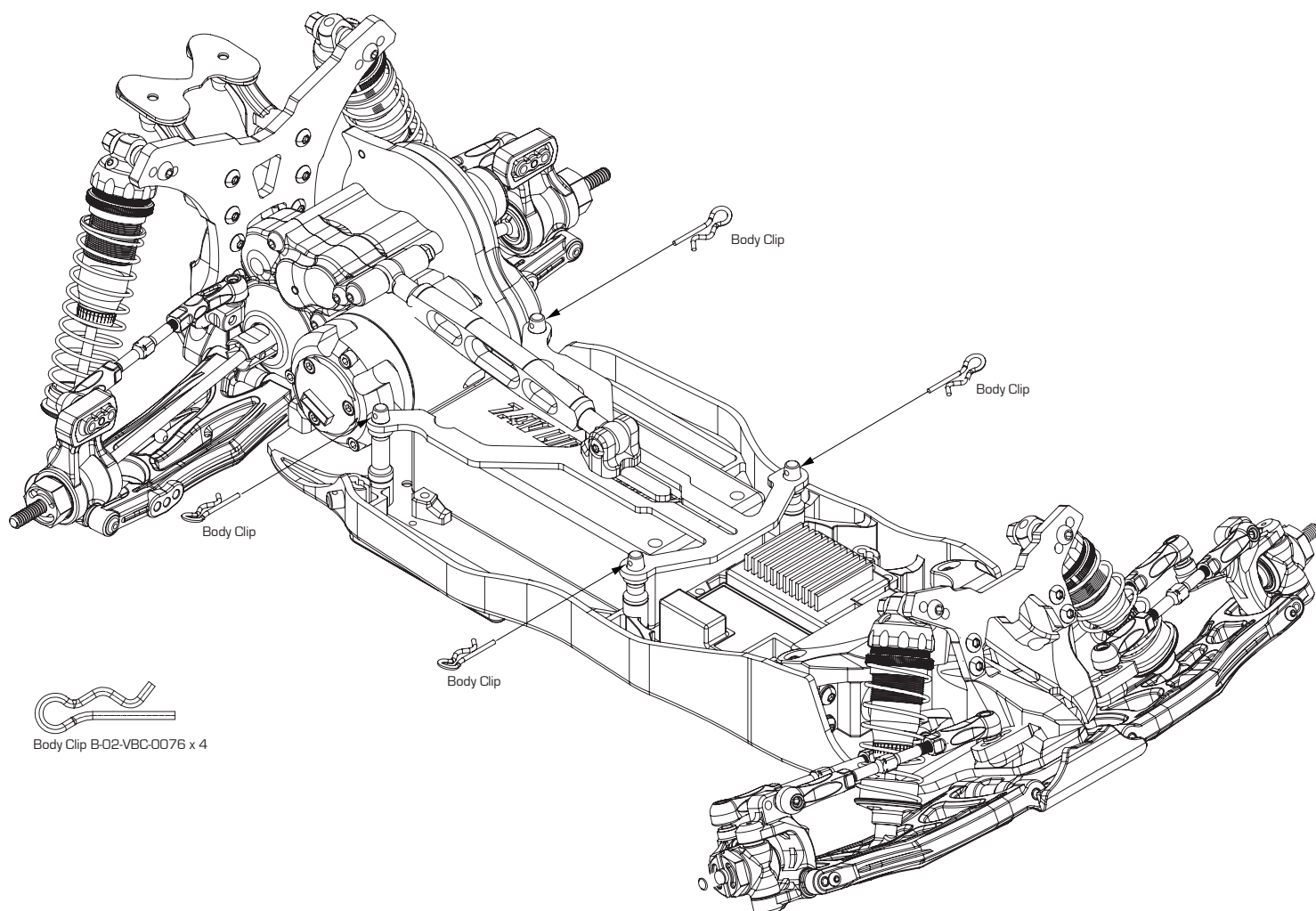
Shorty pack horizontal backward setup



Shorty pack horizontal forward setup



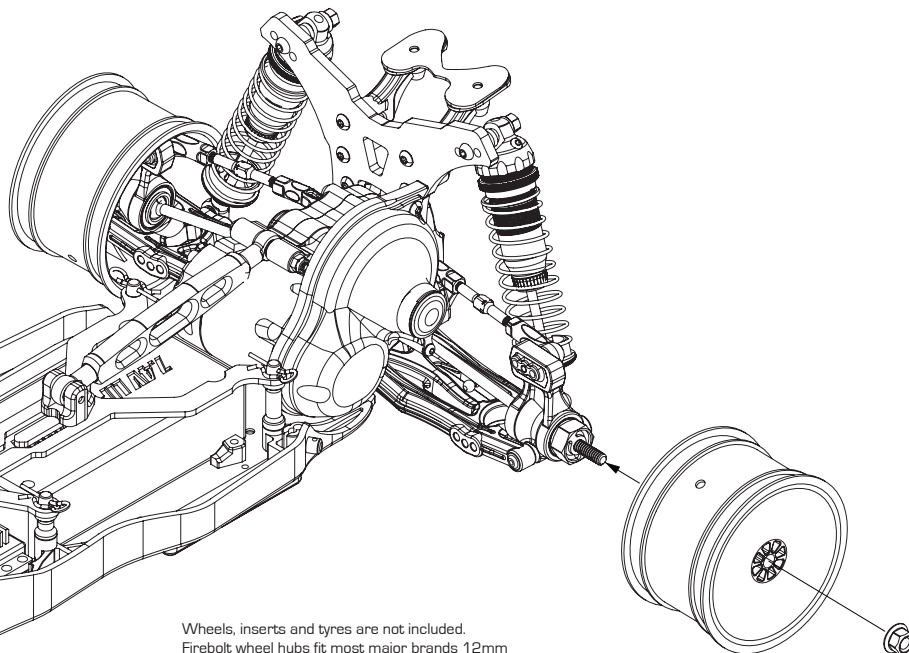
Square pack setup



Body Clip B-02-VBC-0076 x 4

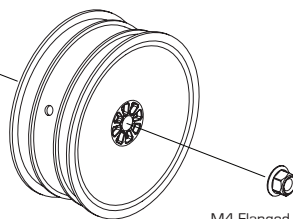
30**Install Front and Rear Wheels**

M4 Flanged Lock Nut (Steel) B-02-P60726



Wheels, inserts and tyres are not included.
Firebolt wheel hubs fit most major brands 12mm
Hex wheels

M4 Flanged Lock Nut

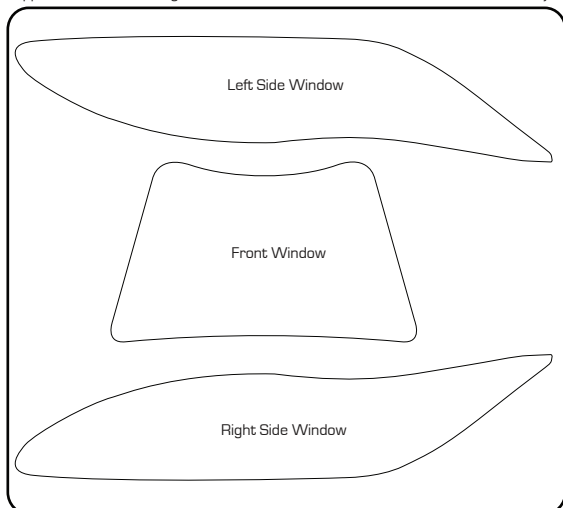


M4 Flanged Lock Nut

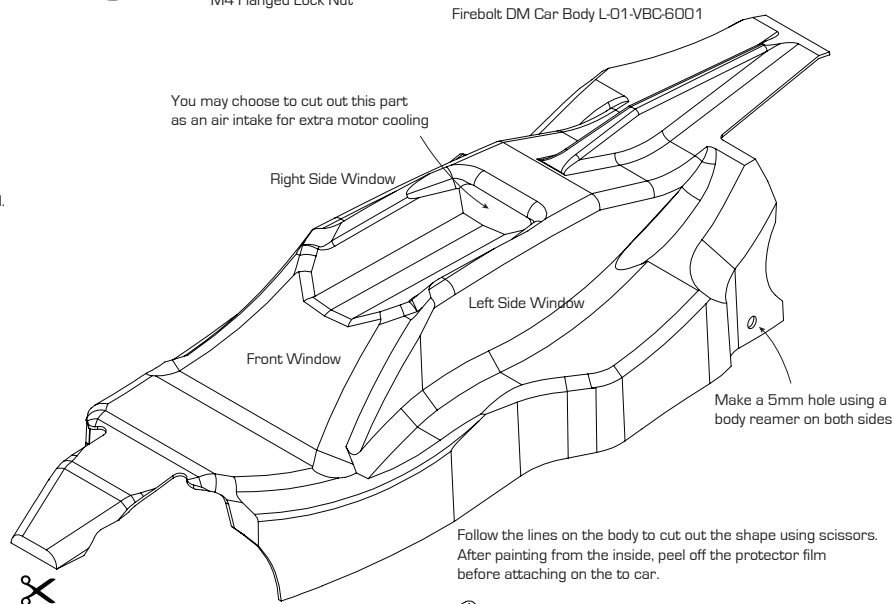
Firebolt DM Car Body L-01-VBC-6001

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



You may choose to cut out this part
as an air intake for extra motor cooling

Right Side Window

Left Side Window

Front Window

Make a 5mm hole using a
body reamer on both sides

Follow the lines on the body to cut out the shape using scissors.
After painting from the inside, peel off the protector film
before attaching on the to car.



Firebolt DM Rear Wing L-01-VBC-6002

Cut these areas to make clearance
for the rear shocks



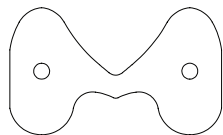
Follow the markings on the wing
to make a 3mm hole using a
body reamer on both sides

Cut these areas to make clearance
for the rear shocks

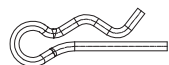


32***Installing the Car Body and Rear Wing***

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



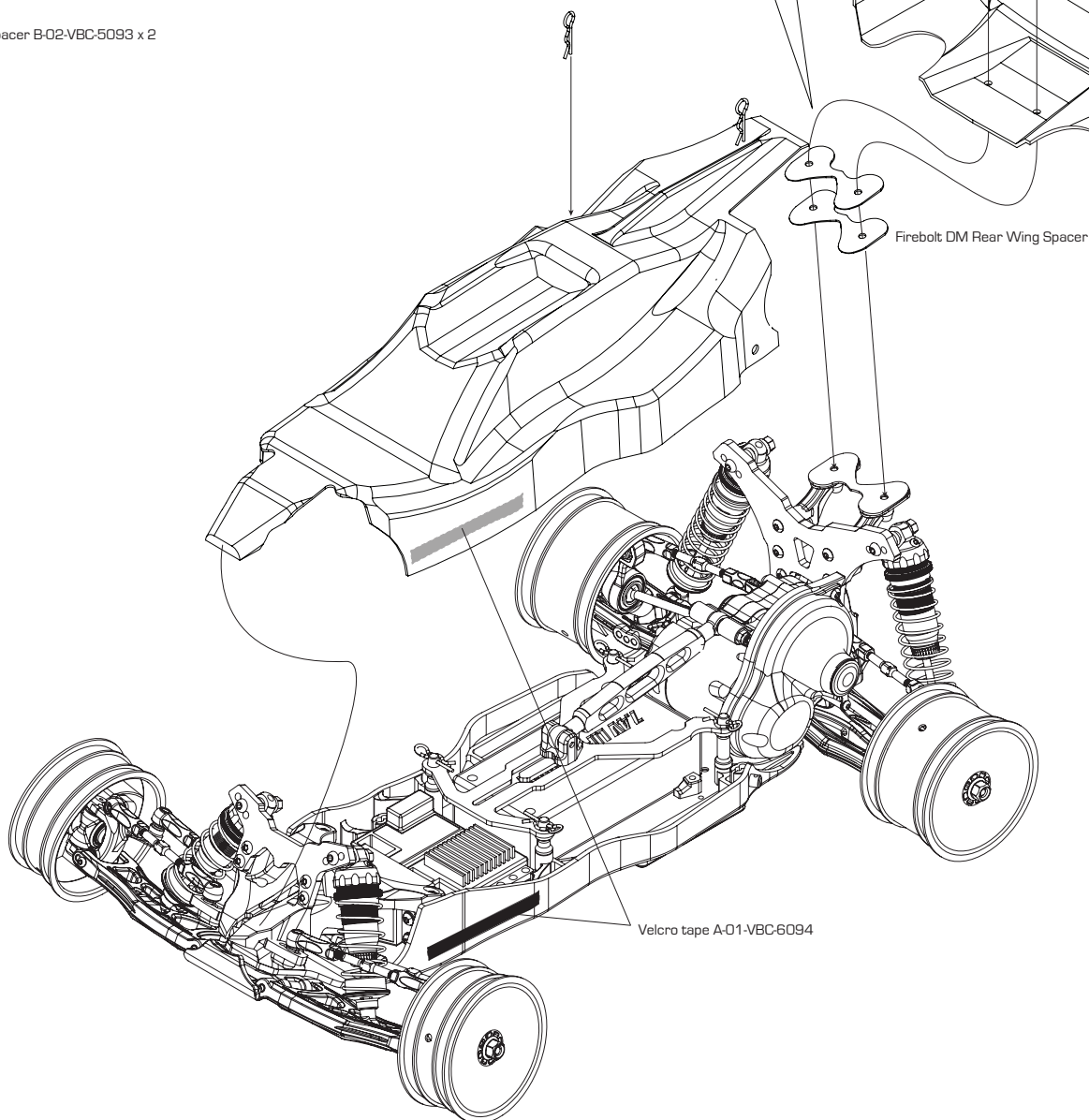
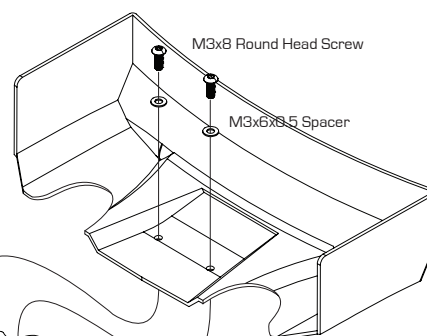
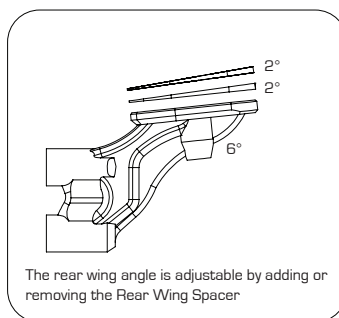
Firebolt DM Rear Wing Spacer A-03-VBC-6037 x 2



Body Clip B-02-VBC-0076 x 2



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





COMPETITION GRADE HIGH PERFORMANCE RADIO CONTROL RACING CAR CHASSIS KIT

FIREBOLT DM2

1/10 RWD ELECTRIC COMPETITION OFFROAD BUGGY CAR KIT

Instruction Book P01-P60885 VBC Racing FireboltRM Offroad Car Kit D-05-VBC-CK14