



# **SF1-F**

**1/10 EP FWD CAR KIT**

**REMAKER**

# The very beginning.

We can't really believe this day has come. Firstly, we want to send a massive thank-you to you, for being a part of this new journey, as we embark on becoming one of the leading model racing car manufacturers in the world. Designed Ryan Maker, combines 15 years of international level competitive driving with 8 years of engineering and manufacturing experience in the industry to bring you the first pure bred RC MAKER FWD Racing Car, the SP1-F. For us, this new journey is born off a very long term vision, fuelled by Ryan's passion for R/C Racing and Designing.

This kit is designed for accomplished and new racing enthusiasts who are looking to get the most out of their time at the track. The SP1-F is competitive, easy to work on and will feature a great global support network to help you get the most out of your new chassis.

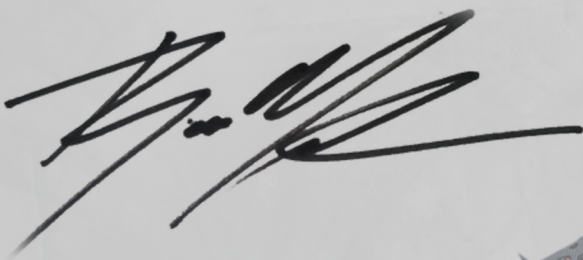
We plan to develop the SP1-F throughout its life, and therefore will not be releasing new cars every year like some brands. The SP1-F Kit will be updated with new components as we develop the cars, and only when there is a large platform change, will we consider releasing a new model.

In this kit, is everything you need to drop the SP1-F Kit on the track and be competitive. Of course, there are option parts, but they are exactly that... options! They are by no means required to make the car competitive, and we are very proud of the fact that this chassis is one of, if not the most complete chassis out of the box.

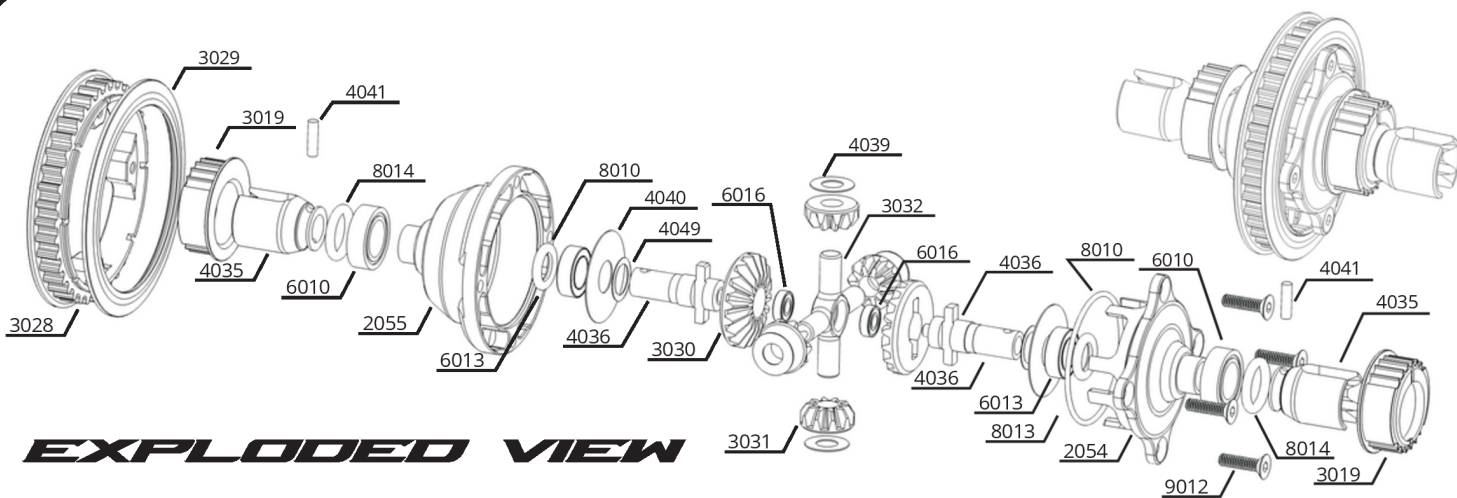
If there are any issues with the build, or you just have an enquiry related to the SP1 or SP1-F, we will be more than happy to set things straight, just send us an email [support@rcmaker.com.au](mailto:support@rcmaker.com.au)

**The time has come, let's get to it!**

**DESIGNER**  
RYAN MAKER



# STEP 1 - GEAR DIFF

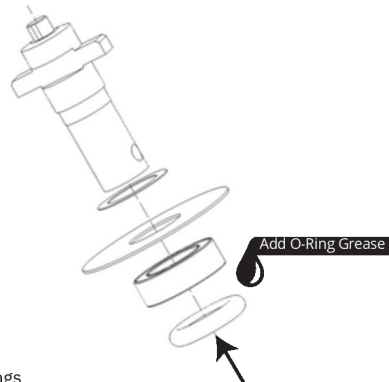


## BAG A PARTS LIST

SKU	Description	QTY
2054	Diff Housing 1	1
2055	Diff Housing 2	1
3019	Diff/Spool Eccentric	2
3028	38 Tooth Spool/Diff Pulley	1
3029	38 Tooth Spool/Diff Pulley Side	1
3030	Internal Diff Gear Large	2
3031	Internal Diff Gear Small	4
3032	Diff Cross Pin	1
4021	1.6 x 6mm Diff Outdrive Pin	2
4035	Diff Outdrive	2
4036	Diff Output Shaft	2
4039	Diff Satellite Gear Shim	4
4040	Diff Main Gear Shim	2
4049	4x6x0.2mm Stainless Steel Shim	2
6010	6x10x3mm Metal Shield Bearing	2
6013	5x8x2.5mm Metal Shield Bearing	2
6016	2x5x1.5mm Metal Shield Bearing	2
8010	Diff Outdrive Internal O-Ring	2
8013	Diff Housing O-Ring	1
8014	Diff Outdrive Pin Retainer O-Ring	2
9012	M2 x 8mm Flat Head Screw	4

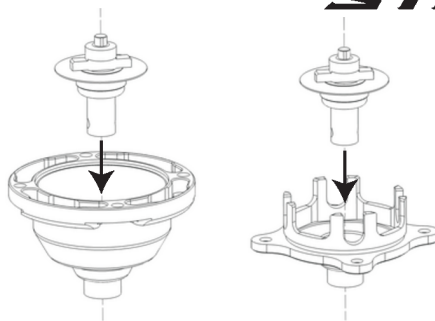
## STEP 1.1

MAKE 2



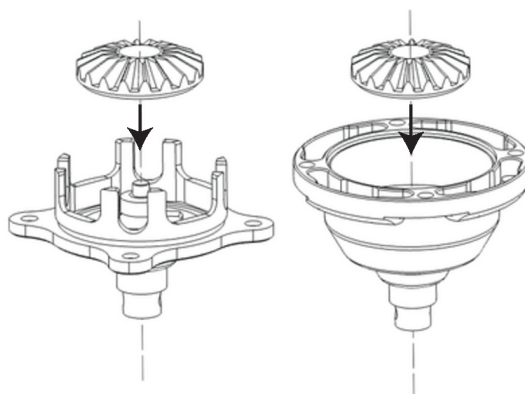
1. Add O-Ring Grease to 8014 O-rings
2. Install 4049 Shim, 4040 Shim, 6013 Bearing and 8010 O-ring onto 4036 shaft
3. Make 2 of this assembly

## STEP 1.2



1. Install assembled output shafts into diff halves
2. Push down and rotate to ensure free movement and correct seating

## STEP 1.3



1. Insert large diff gear and locate onto cross pin
2. Repeat for both diff halves

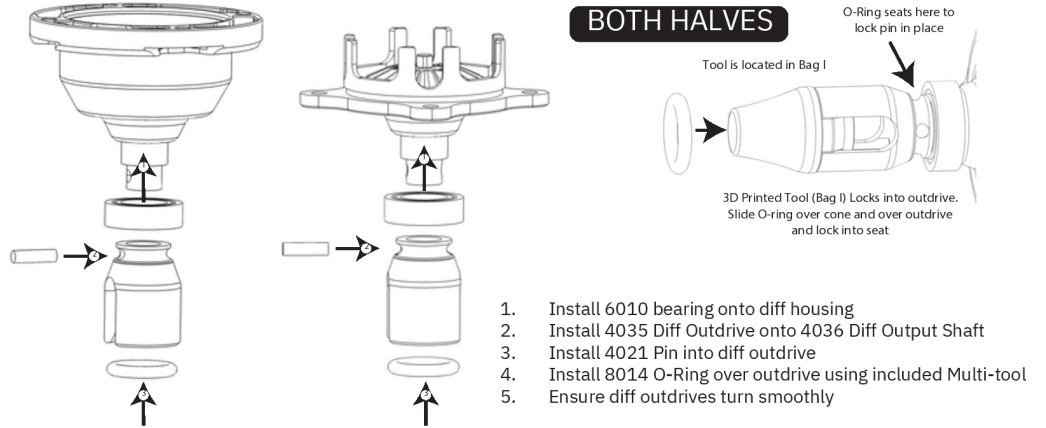
# STEP 1 - GEAR DIFF

## BAG A PARTS LIST

SKU	Description	QTY
2054	Diff Housing 1	1
2055	Diff Housing 2	1
3019	Diff/Spool Eccentric	2
3028	38 Tooth Spool/Diff Pulley	1
3029	38 Tooth Spool/Diff Pulley Side	1
3030	Internal Diff Gear Large	2
3031	Internal Diff Gear Small	4
3032	Diff Cross Pin	1
4021	1.6 x 6mm Diff Outdrive Pin	2
4035	Diff Outdrive	2
4036	Diff Output Shaft	2
4039	Diff Satellite Gear Shim	4
4040	Diff Main Gear Shim	2
4049	4x6x0.2mm Stainless Steel Shim	2
6010	6x10x3mm Metal Shield Bearing	2
6013	5x8x2.5mm Metal Shield Bearing	2
6016	2x5x1.5mm Metal Shield Bearing	2
8010	Diff Outdrive Internal O-Ring	2
8013	Diff Housing O-Ring	1
8014	Diff Outdrive Pin Retainer O-Ring	2
9012	M2 x 8mm Flat Head Screw	4

## STEP 1.4

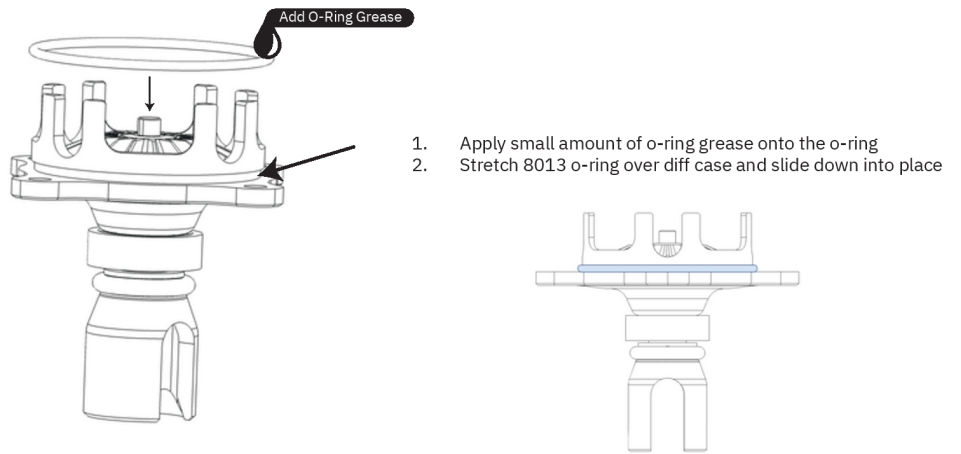
### BOTH HALVES



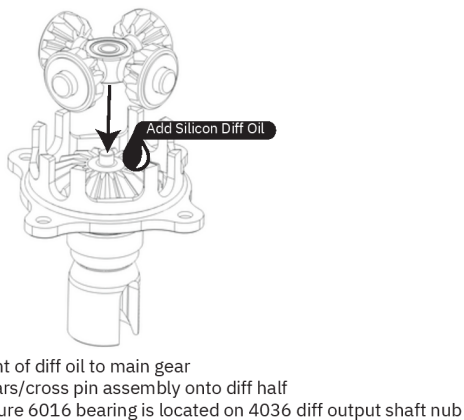
## STEP 1.5



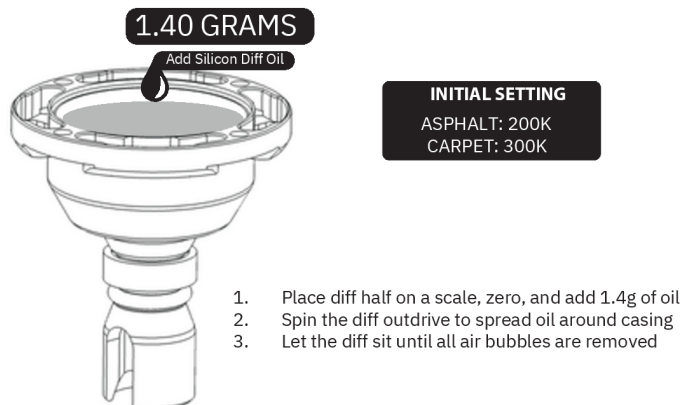
## STEP 1.6



## STEP 1.7



## STEP 1.8

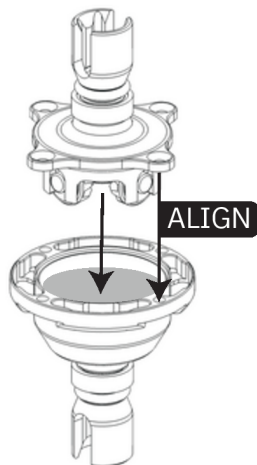


# STEP 1 - GEAR DIFF

## BAG A PARTS LIST

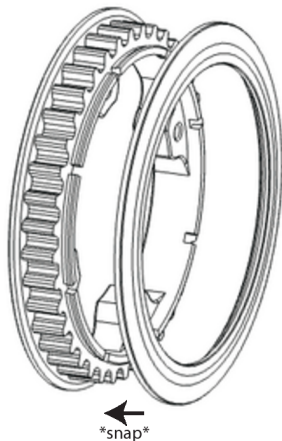
SKU	Description	QTY
2054	Diff Housing 1	1
2055	Diff Housing 2	1
3019	Diff/Spool Eccentric	2
3028	38 Tooth Spool/Diff Pulley	1
3029	38 Tooth Spool/Diff Pulley Side	1
3030	Internal Diff Gear Large	2
3031	Internal Diff Gear Small	4
3032	Diff Cross Pin	1
4021	1.6 x 6mm Diff Outdrive Pin	2
4035	Diff Outdrive	2
4036	Diff Output Shaft	2
4039	Diff Satellite Gear Shim	4
4040	Diff Main Gear Shim	2
4049	4x6x0.2mm Stainless Steel Shim	2
6010	6x10x3mm Metal Shield Bearing	2
6013	5x8x2.5mm Metal Shield Bearing	2
6016	2x5x1.5mm Metal Shield Bearing	2
8010	Diff Outdrive Internal O-Ring	2
8013	Diff Housing O-Ring	1
8014	Diff Outdrive Pin Retainer O-Ring	2
9012	M2 x 8mm Flat Head Screw	4

## STEP 1.8



1. Install small diff half into oil filled large diff half ensuring satellite gears stay in place
2. Lightly rotate the smaller half backwards and forwards to interlock halves
3. Push diff half down so it's fully seated and align screw holes

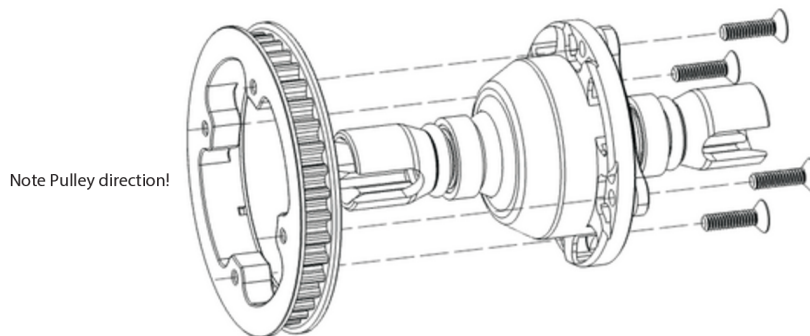
## STEP 1.9



Note orientation of pulley side!

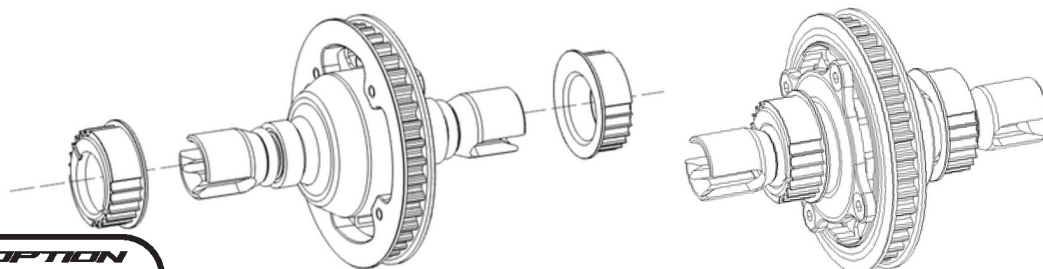
1. Snap pulley side onto main pulley

## STEP 1.10



1. Locate 3029/3028 diff pulley into housing in correct orientation (pulley side facing the diff)
2. Use 9012 screws to attach pulley to diff and seal diff halves together
3. Tighten screws in a cross pattern to seat and seal the assembly. Do not overtighten!
4. Wipe any excess oil and ensure smooth diff action

## STEP 1.11



1. Install 3019 eccentrics on to 6010 bearings on each side of the diff
2. Put diff assembly aside for installation in later steps

### OPTION PART



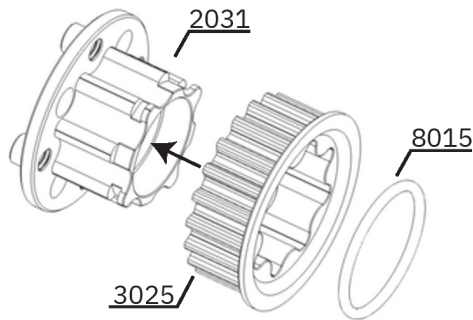
2064 - Alu Diff/Spool Eccentrics

# STEP 2 - LAYSHAFT & DRIVESHAFTS

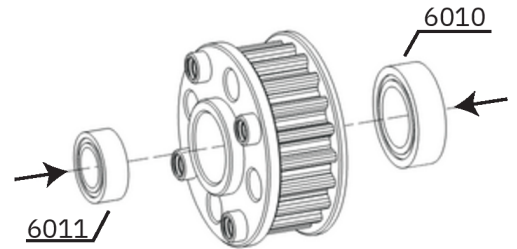
## BAG B PARTS LIST

SKU	Description	QTY
2010-F	Aluminium Motor Mount	1
2031	Centre Layshaft Pulley Housing	1
3025	Centre Layshaft Pulley	1
4010	Front Driveshaft	2
4012	Front Axle	2
4013	Rear Axle	2
4014	Front Driveshaft Coupling	2
4015	Front Driveshaft Stud	4
4017	1.6x9mm Front Driveshaft Pin	4
4019	Front Driveshaft Spring Clip	5
4020	Inner Driveshaft Coupler	4
4021	1.6 x 6mm Inner Driveshaft Coupler Pin	2
4048	M1.2 Driveshaft e-Clips	10
6010	6x10x3mm Metal Shield Bearing	1
6011	4x7x2.5mm Metal Shield Bearing	1
6015	1.5x4x2mm Metal Shield Bearing	4
8015	Layshaft Pulley O-Ring	1
9015	M2.5 x 8mm Button Head Screw	1

## STEP 2.1

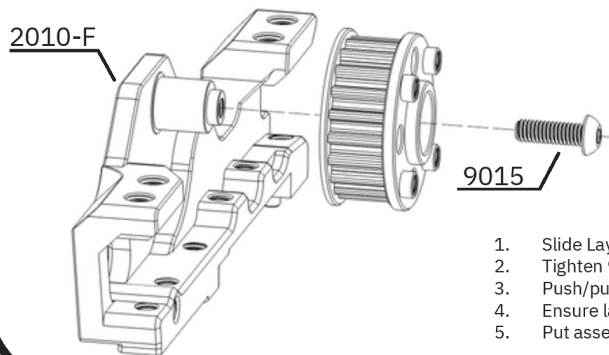


1. Slide 3025 pulley on to 2031 pulley housing
2. Stretch 8015 o-ring over pulley housing lugs until the o-ring is in place and secures pulley



1. Push 6010 Bearing into layshaft housing firmly from behind
2. Push 6011 Bearing into layshaft housing

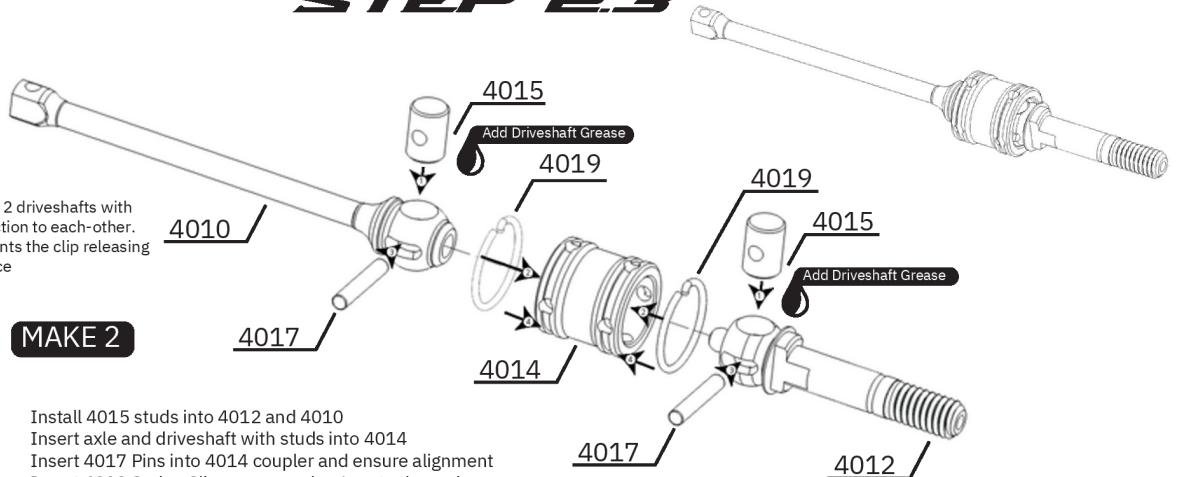
## STEP 2.2



1. Slide Layshaft assembly onto motormount and seat firmly
2. Tighten 9015 Screw to fix layshaft in place
3. Push/pull firmly on layshaft to ensure bearings are seated
4. Ensure layshaft is spinning freely
5. Put assembly to the side to install on chassis later

## STEP 2.3

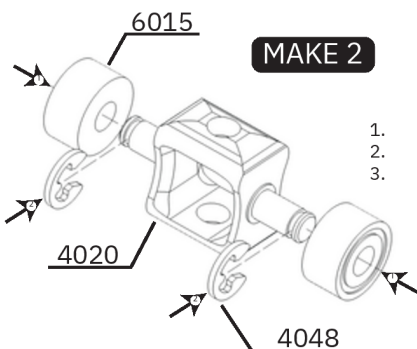
TIP: It's a good idea to make the the 2 driveshafts with spring clips facing the opposite direction to each-other. Install on the correct side that prevents the clip releasing under high RPM from centrifugal force



**MAKE 2**

1. Install 4015 studs into 4012 and 4010
2. Insert axle and driveshaft with studs into 4014
3. Insert 4017 Pins into 4014 coupler and ensure alignment
4. Insert 4019 Spring Clips over coupler. Locate the end of the clip into the spare pin coupler hole. Work around the clip and clip it into position on the coupler

## STEP 2.4

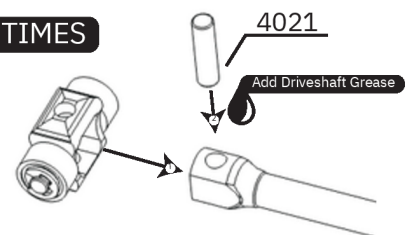


**MAKE 2**

1. Slide 6015 Bearings over 4020 Coupler
2. Use small pliers to attach 4048 e-Clips
3. Extra e-Clips are provided!

## STEP 2.5

**2 TIMES**



1. Slide coupler assembly over driveshaft end
2. Align holes and insert 4021 Pin to connect
3. Repeat step for both front driveshafts
4. Put aside and ensure pin doesn't fall out

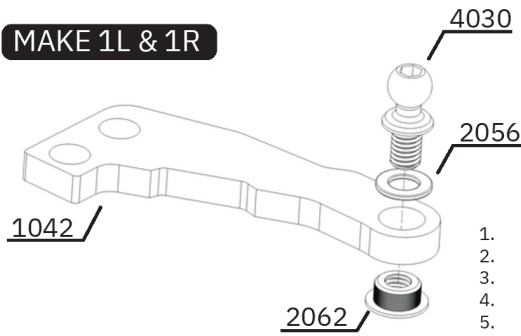
# STEP 3 - HUBS

## BAG C PARTS LIST

SKU	Description	QTY
1014	Rear Steering Arms	2
1042	Front Steering Arms	2
2014	Wheel Hub	4
2034	4.0mm Wheel Hex	4
2056	3x5.5x0.5mm Shim	6
2057	3x5.5x1.0mm Shim	6
2062	M3 Threaded Insert	4
4026	4.8mm Male Upper Hub Ball Stud	4
4027	5.0mm Male Lower Hub Ball Stud	4
4030	4.3x10.3mm Male Ball Stud	2
4031	4.3x13.8mm Male Ball Stud	2
4046	6x8x0.05mm Stainless Steel Shim	6
4050	6x8x0.1mm Stainless Steel Shim	5
6010	6x10x3mm Metal Shield Bearing	8
8016	Wheel Hex Washer	4
9010	M2x6mm Cap Head Screw	4
9030	M3x4mm Low Profile Button Head Screw	4

### STEP 3.1

MAKE 1L & 1R



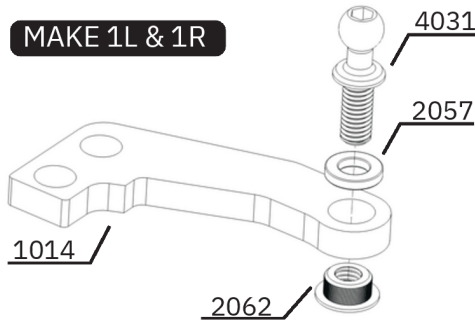
View after installation



1. Push 2062 lightly into the 4.5mm hole of 1042
2. Screw 4030 with 2056 underneath, into 2062
3. Screw 4030 to pull 2062 into the arm and tighten
4. 2062 will now remain in the carbon permanently
5. Make a LEFT and RIGHT mirrored pair

### STEP 3.2

MAKE 1L & 1R



View after installation



1. Push 2062 lightly into the 4.5mm hole of 1014
2. Screw 4031 with 2057 underneath, into 2062
3. Screw 4031 to pull 2062 into the arm and tighten
4. 2062 will now remain in the carbon permanently
5. Make a LEFT and RIGHT mirrored pair

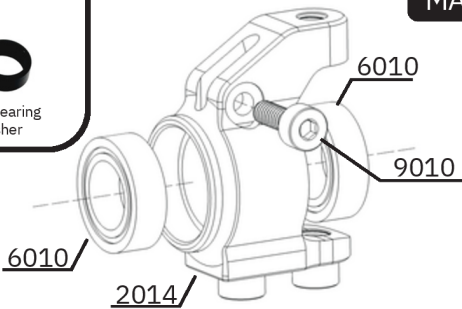
### STEP 3.3

OPTION PART



2041 - Hub Bearing Crush Washer

MAKE 4

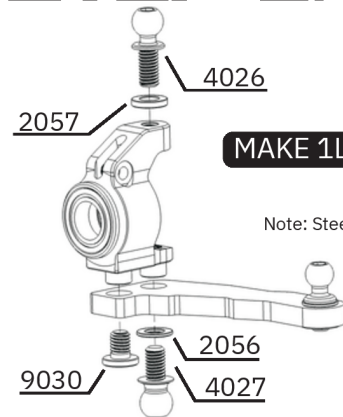


1. Press a 6x10x3 Bearing into each side of the hub
2. Insert and tighten 9010 Hub Screw
3. Repeat for all 4 hubs

Note: 9010 is optional and not mandatory. Using 9010 will stiffen the hub and reduce bearing play.

### STEP 3.4

MAKE 1L & 1R



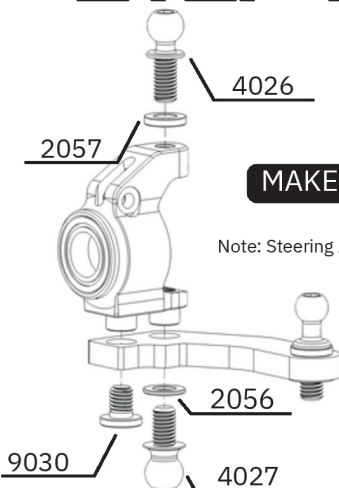
Note: Steering Arm Orientation

1. Complete using front steering arms from Step 4.1
2. Screw in 4026 & 4027 Ball Studs with correct shims
3. Screw in 9030 Screws
4. Make 1 LEFT and 1 RIGHT hub assembly

### STEP 3.5

MAKE 1L & 1R

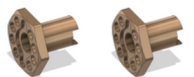
Note: Steering Arm Orientation



1. Complete using rear steering arms from Step 4.2
2. Screw in 4026 & 4027 Ball Studs with correct shims
3. Screw in 9030 Screws
4. Make 1 LEFT and 1 RIGHT hub assembly

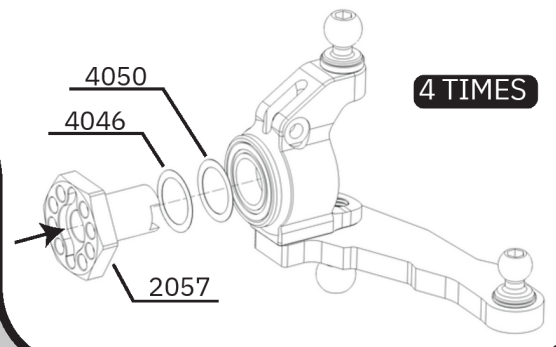
### STEP 3.6

OPTION PART



2034-1 - 3.5mm Wheel Hex

4 TIMES



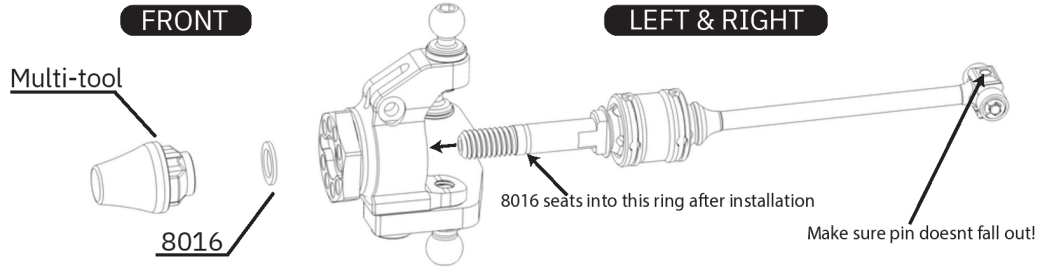
1. Insert 1x 4046 and 1x 4050 Shim onto 2034 wheel hex
2. Slide 2034 Wheel Hex into 6010 bearings in hub
3. Repeat for all 4 wheel hubs (2 Front & 2 Rear) and put aside

# STEP 3 - HUBS

## BAG C PARTS LIST

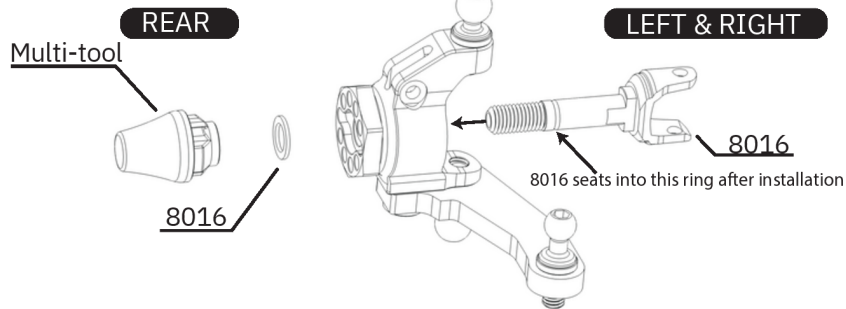
SKU	Description	QTY
1014	Rear Steering Arms	2
1042	Front Steering Arms	2
2014	Wheel Hub	4
2034	4.0mm Wheel Hex	4
2056	3x5.5x0.5mm Shim	6
2057	3x5.5x1.0mm Shim	6
2062	M3 Threaded Insert	4
4026	4.8mm Male Upper Hub Ball Stud	4
4027	5.0mm Male Lower Hub Ball Stud	4
4030	4.3x10.3mm Male Ball Stud	2
4031	4.3x13.8mm Male Ball Stud	2
4046	6x8x0.05mm Stainless Steel Shim	6
4050	6x8x0.1mm Stainless Steel Shim	5
6010	6x10x3mm Metal Shield Bearing	8
8016	Wheel Hex Washer	4
9010	M2x6mm Cap Head Screw	4
9030	M3x4mm Low Profile Button Head Screw	4

## STEP 3.7



1. Insert front CVD assembly into front hub assembly and interlock hex and axle on flat spots
2. Push 8016 carbon washer over axle and push firmly in place with multi-tool whilst holding driveshaft
3. 8016 is designed to be quite tight. If its difficult to get on, try flipping it over
4. Once 8016 is seated for the first time, it will be mated to the axle and easier to install in future
5. Repeat steps for left and right front hubs

## STEP 3.8



1. Insert 4013 Rear axle from Bag B into front hub assembly and interlock hex and axle on flat spots
2. Push 8016 carbon washer over axle and push firmly in place with multi-tool whilst holding axle
3. 8016 is designed to be quite tight. If its difficult to get on, try flipping it over
4. Once 8016 is seated for the first time, it will be mated to the axle and easier to install in future
5. Repeat steps for left and right rear hubs

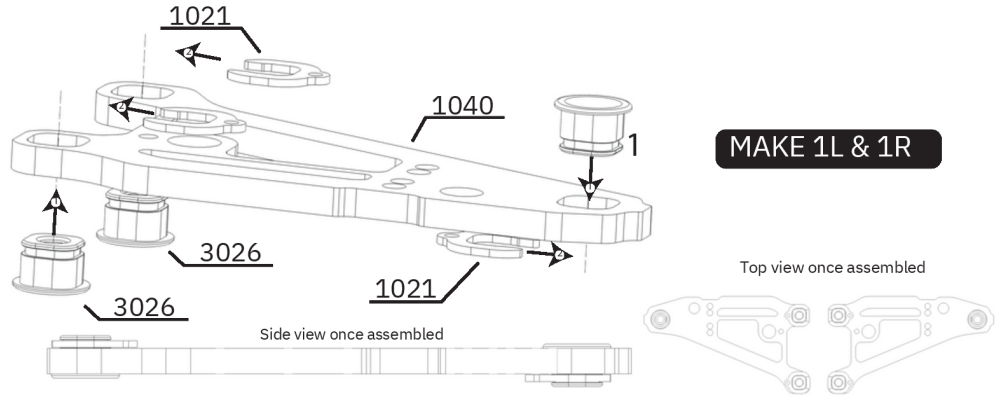


# STEP 4 - LOWER ARMS, BULKHEADS & CHASSIS

## BAG D PARTS LIST

SKU	Description	QTY
1012	Rear Suspension Arm	2
1015	Split Front Upper Bulkheads (L & R)	2
1017	Upper Bulkhead/Body Mount Rear	1
1021	Suspension Arm Clips	12
1033	2.2mm Standard Carbon Chassis	1
1035	2.2mm Carbon Topdeck - Front	1
1036	2.2mm Carbon Topdeck - Rear	1
1038	Carbon Rear Chassis T Brace	1
1040	Front Suspension Arm	2
2011	Rear Left Bulkhead	1
2012	Rear Right Bulkhead	1
2013	Front Bulkhead	2
2017	Outer Shock Attachment	4
2028	4.3mm x 11.8mm Ballstud	4
2035	Upper Bulkhead Inserts - 1 Dot	8
2045-F	Rear Battery Stopper and Topdeck Post Mount	1
2057	3x5.5x1.0mm Shim	6
2058	3x5.5x2.0mm Shim	4
2059	3x8x0.5mm Shim	4
2060	3x8x1mm Shim	4
2062	M3 Threaded Insert	4
3010	Droop Screw Inserts	4
3026	5.0mm Lower Arm Ball Cup	12
4028	4.8mm Female Upper Suspension Ball	8
4029	5.0mm Female Lower Suspension Ball	8
4030	4.3x10.3mm Male Ball Stud	2
4031	4.3x13.8mm Male Ball Stud	4
4043	Topdeck Motormount Screw	2
7015	300 Bando Drive Belt	1
9011	M2x5mm Button Head Screw	4
9014	M2.5x5mm Button Head Screw	12
9018	M3x6mm Button Head Screw	17
9019	M3x8mm Button Head Screw	9
9023	M3 x 5mm Flat Head Screw	3
9024	M3 x 6mm Flat Head Screw	21
9028	M3 x 8mm Grub Screw	4
9029	M4 x 8mm Grub Screw	4

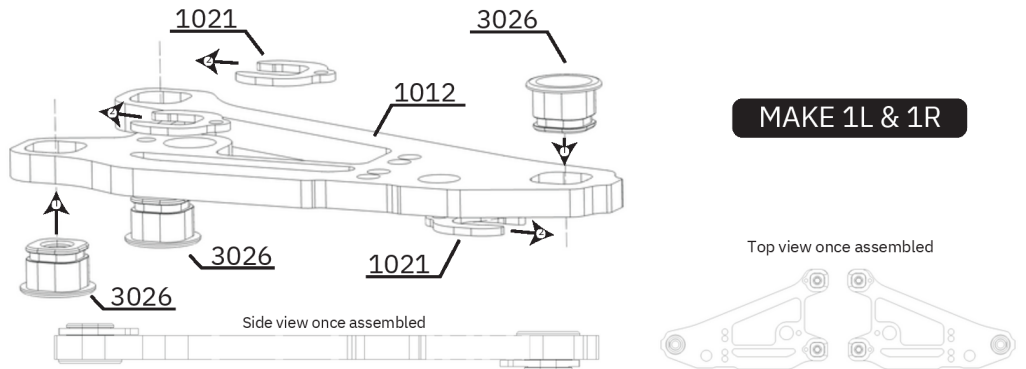
### STEP 4.1



**MAKE 1L & 1R**

1. Slide 3026 Ball Cups into 1011 Front Arm with outer arm ball cup installed from the opposite side
2. Install 1021 Arm Clips on 3026 Ball Cups as shown and ensure they're seated firmly
3. Repeat steps 1 and 2 to make a mirrored copy, 1 left and 1 right

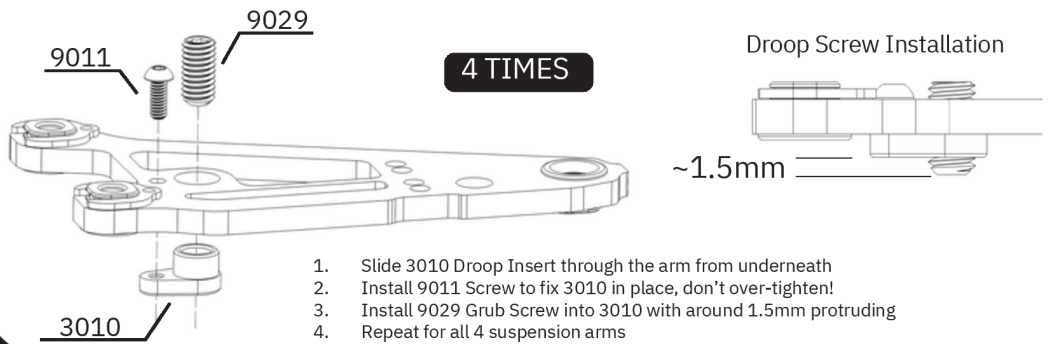
### STEP 4.2



**MAKE 1L & 1R**

1. Slide 3026 Ball cups into 1012 Rear Arm with outer arm ball cup installed from the opposite side
2. Install 1021 Arm Clips on 3026 Ball Cups as shown and ensure they're seated firmly
3. Repeat steps 1 and 2 to make a mirrored copy, 1 left and 1 right

### STEP 4.3

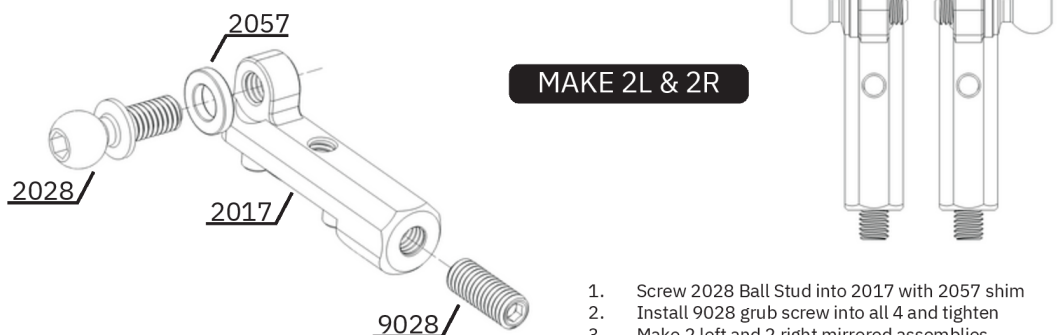


**4 TIMES**

Droop Screw Installation

1. Slide 3010 Droop Insert through the arm from underneath
2. Install 9011 Screw to fix 3010 in place, don't over-tighten!
3. Install 9029 Grub Screw into 3010 with around 1.5mm protruding
4. Repeat for all 4 suspension arms

### STEP 4.4



**MAKE 2L & 2R**

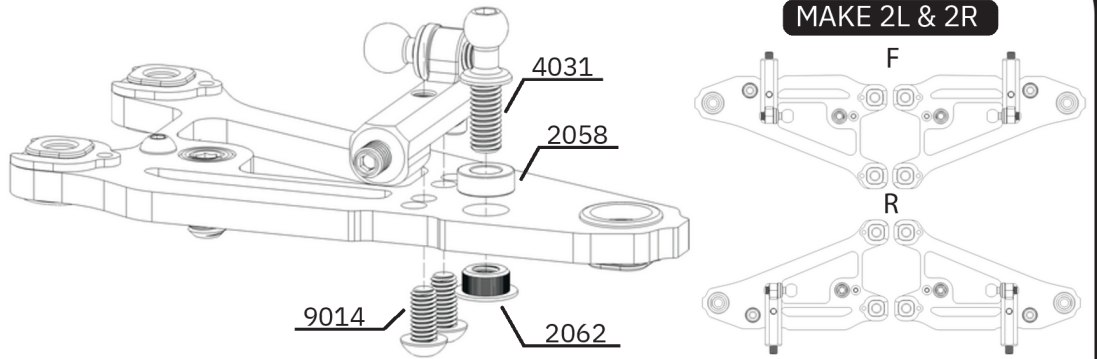
1. Screw 2028 Ball Stud into 2017 with 2057 shim
2. Install 9028 grub screw into all 4 and tighten
3. Make 2 left and 2 right mirrored assemblies

# STEP 4 - LOWER ARMS, BULKHEADS & CHASSIS

## BAG D PARTS LIST

SKU	Description	QTY
1012	Rear Suspension Arm	2
1015	Split Front Upper Bulkheads (L & R)	2
1017	Upper Bulkhead/Body Mount Rear	1
1021	Suspension Arm Clips	12
1033	2.2mm Standard Carbon Chassis	1
1035	2.2mm Carbon Topdeck - Front	1
1036	2.2mm Carbon Topdeck - Rear	1
1038	Carbon Rear Chassis T Brace	1
1040	Front Suspension Arm	2
2011	Rear Left Bulkhead	1
2012	Rear Right Bulkhead	1
2013	Front Bulkhead	2
2017	Outer Shock Attachment	4
2028	4.3mm x 11.8mm Ballstud	4
2035	Upper Bulkhead Inserts - 1 Dot	8
2045-F	Rear Battery Stopper and Topdeck Post Mount	1
2057	3x5.5x1.0mm Shim	6
2058	3x5.5x2.0mm Shim	4
2059	3x8x0.5mm Shim	4
2060	3x8x1mm Shim	4
2062	M3 Threaded Insert	4
3010	Droop Screw Inserts	4
3026	5.0mm Lower Arm Ball Cup	12
4028	4.8mm Female Upper Suspension Ball	8
4029	5.0mm Female Lower Suspension Ball	8
4030	4.3x10.3mm Male Ball Stud	2
4031	4.3x13.8mm Male Ball Stud	4
4043	Topdeck Motormount Screw	2
7015	300 Bando Drive Belt	1
9011	M2x5mm Button Head Screw	4
9014	M2.5x5mm Button Head Screw	12
9018	M3x6mm Button Head Screw	17
9019	M3x8mm Button Head Screw	9
9023	M3 x 5mm Flat Head Screw	3
9024	M3 x 6mm Flat Head Screw	21
9028	M3 x 8mm Grub Screw	4
9029	M4 x 8mm Grub Screw	4

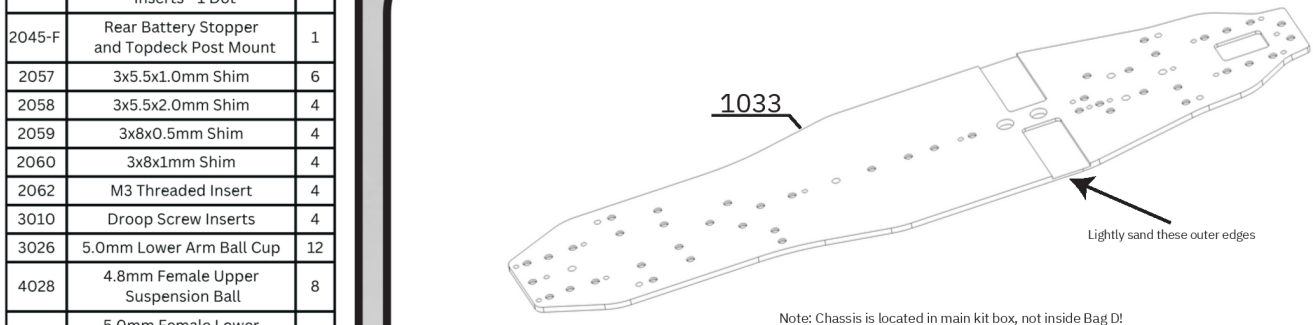
## STEP 4.5



MAKE 2L & 2R

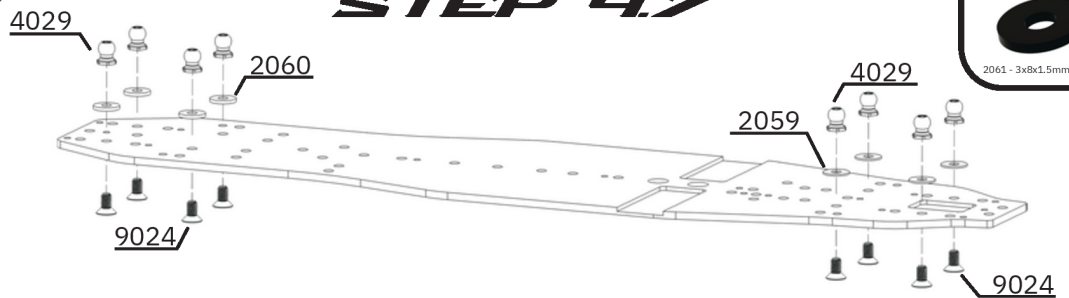
1. Push assembly from Step 4.4 into arms from above (ball stud facing inwards). Note, these can vary in tightness when pushed into the arm. All that matters is that there should be no play inside the arm to prevent tweaking under load.
2. Push assembly in until fully seated by hand and then install 9014 screws from underneath the arm and tighten
3. Ensure L & R assemblies are installed on L & R Arms in the correct orientation as in diagram above
4. Firmly push 2062 Insert from underneath the arm.
5. Install 4031 Ball stud from above the arm with 2058 underneath, and tighten 4031 to pull 2062 into the arm
6. Repeat for all 4 arms in a mirrored orientation as per diagram above

## STEP 4.6



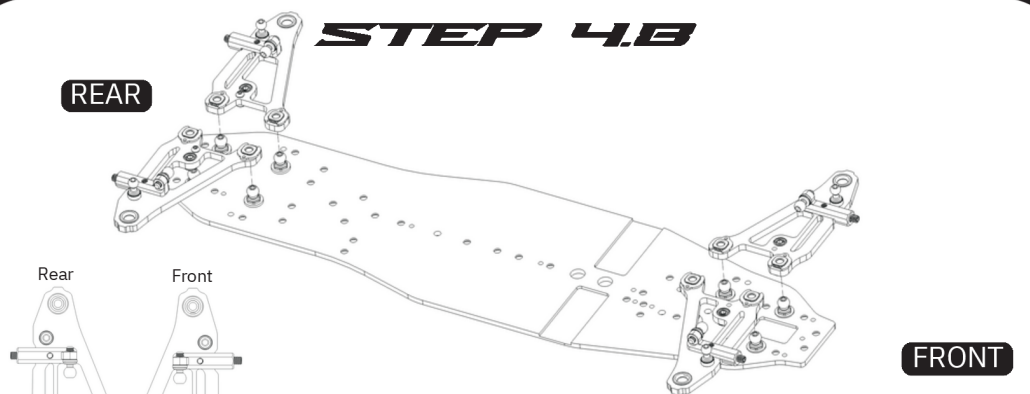
1. Lightly sand the edges of the chassis to remove sharp edges
2. After sanding, use a wet cloth to wipe away carbon dust. Wear a mask during this process!

## STEP 4.7



1. Install 4029 Balls onto chassis with correct 8mm diameter shims underneath
2. Use a 2.5mm hex driver or 5.5mm nut driver to hold 4029 while tightening 9024 screws

## STEP 4.8



Note shape difference to identify front and rear arms

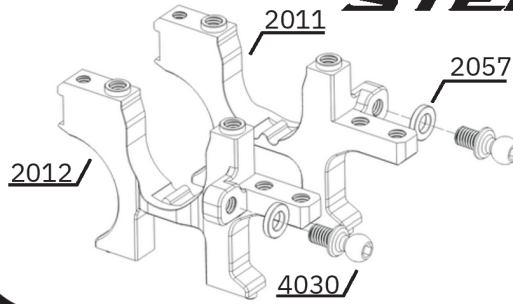
1. Pop assembled arms onto balls. Note which ones are front and rear!
2. To do this, place each arm on top of chassis balls, with the chassis on a flat surface, press down firmly directly on top of each ball cup to pop it onto the ball. Ensure arms move freely

# STEP 4 - LOWER ARMS, BULKHEADS & CHASSIS

## BAG D PARTS LIST

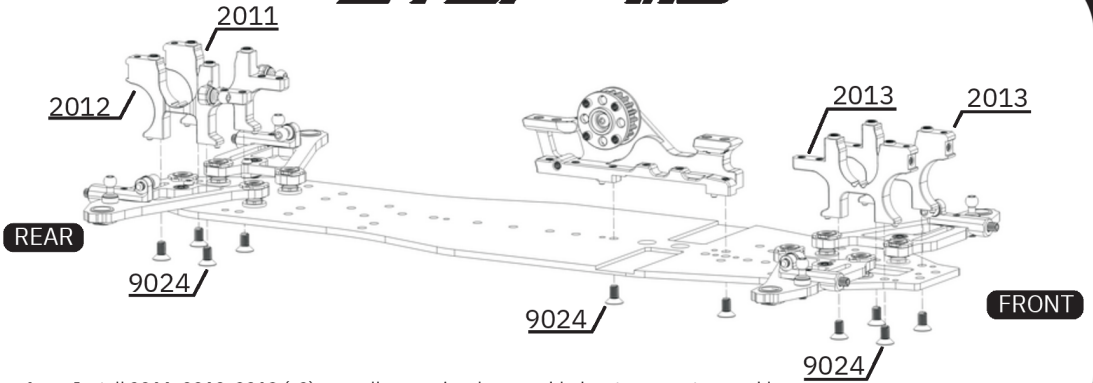
SKU	Description	QTY
1012	Rear Suspension Arm	2
1015	Split Front Upper Bulkheads (L & R)	2
1017	Upper Bulkhead/Body Mount Rear	1
1021	Suspension Arm Clips	12
1033	2.2mm Standard Carbon Chassis	1
1035	2.2mm Carbon Topdeck - Front	1
1036	2.2mm Carbon Topdeck - Rear	1
1038	Carbon Rear Chassis T Brace	1
1040	Front Suspension Arm	2
2011	Rear Left Bulkhead	1
2012	Rear Right Bulkhead	1
2013	Front Bulkhead	2
2017	Outer Shock Attachment	4
2028	4.3mm x 11.8mm Ballstud	4
2035	Upper Bulkhead Inserts - 1 Dot	8
2045-F	Rear Battery Stopper and Topdeck Post Mount	1
2057	3x5.5x1.0mm Shim	6
2058	3x5.5x2.0mm Shim	4
2059	3x8x0.5mm Shim	4
2060	3x8x1mm Shim	4
2062	M3 Threaded Insert	4
3010	Droop Screw Inserts	4
3026	5.0mm Lower Arm Ball Cup	12
4028	4.8mm Female Upper Suspension Ball	8
4029	5.0mm Female Lower Suspension Ball	8
4030	4.3x10.3mm Male Ball Stud	2
4031	4.3x13.8mm Male Ball Stud	4
4043	Topdeck Motormount Screw	2
7015	300 Bando Drive Belt	1
9011	M2x5mm Button Head Screw	4
9014	M2.5x5mm Button Head Screw	12
9018	M3x6mm Button Head Screw	17
9019	M3x8mm Button Head Screw	9
9023	M3 x 5mm Flat Head Screw	3
9024	M3 x 6mm Flat Head Screw	21
9028	M3 x 8mm Grub Screw	4
9029	M4 x 8mm Grub Screw	4

## STEP 4.9



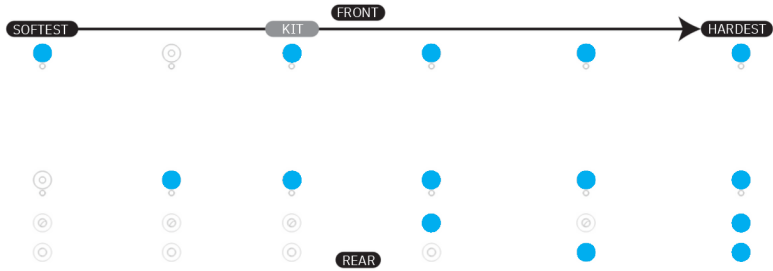
1. Install 4030 Ball Studs into 2012 and 2013 bulkheads with 2057 shims underneath

## STEP 4.10

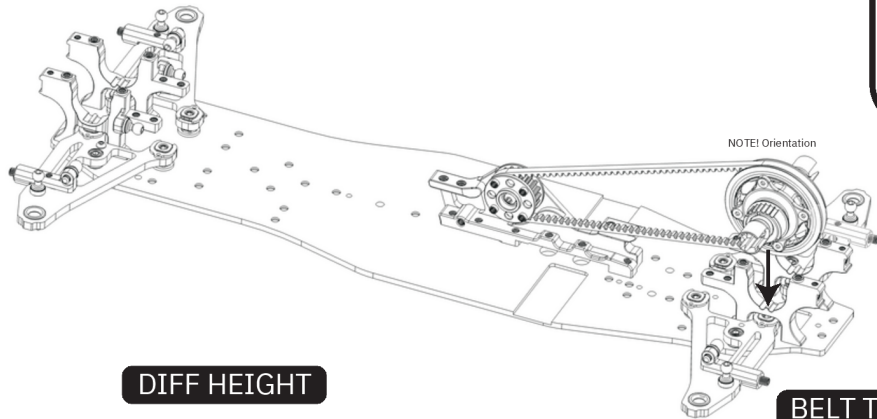


1. Install 2011, 2012, 2013 (x2), as well as previously assembled motor-mount assembly
2. Locate bulkheads and motormount into locating pin holes on chassis and tighten all 9024 screws

## MOTOR-MOUNT FLEX OPTIONS



## STEP 4.11

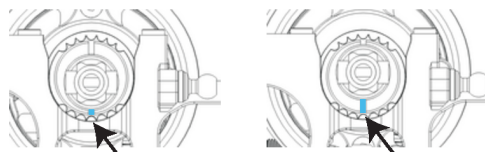


### OPTION PART



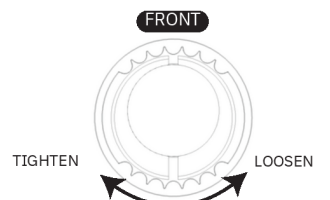
7016 - 300 Low Friction Drive Belt

### DIFF HEIGHT



Initial Position for Carpet (Diff Low) Initial Position for Asphalt (Diff High)

### BELT TENSION



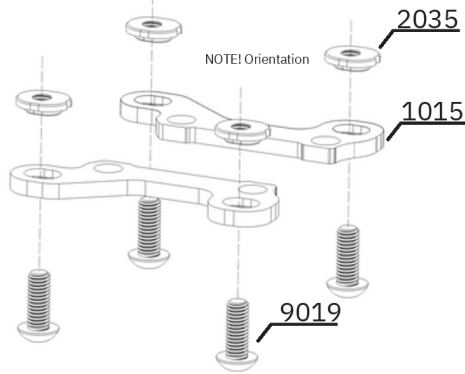
1. Install 7015 Belt onto centre pulley
2. Insert the previously built diff assembly onto the other end of the belt, and slide diff into the bulkheads in correct orientation
3. Locate the eccentric in the correct way up for your type of surface. Central setting provides an initial belt setting
4. Turning the eccentric either way from centre will adjust the belt tension at the selected diff height
5. When setting your desired belt tension, take into account that the belts will stretch slightly after a few runs

# STEP 4 - LOWER ARMS, BULKHEADS & CHASSIS

## BAG D PARTS LIST

SKU	Description	QTY
1012	Rear Suspension Arm	2
1015	Split Front Upper Bulkheads (L & R)	2
1017	Upper Bulkhead/Body Mount Rear	1
1021	Suspension Arm Clips	12
1033	2.2mm Standard Carbon Chassis	1
1035	2.2mm Carbon Topdeck - Front	1
1036	2.2mm Carbon Topdeck - Rear	1
1038	Carbon Rear Chassis T Brace	1
1040	Front Suspension Arm	2
2011	Rear Left Bulkhead	1
2012	Rear Right Bulkhead	1
2013	Front Bulkhead	2
2017	Outer Shock Attachment	4
2028	4.3mm x 11.8mm Ballstud	4
2035	Upper Bulkhead Inserts - 1 Dot	8
2045-F	Rear Battery Stopper and Topdeck Post Mount	1
2057	3x5.5x1.0mm Shim	6
2058	3x5.5x2.0mm Shim	4
2059	3x8x0.5mm Shim	4
2060	3x8x1mm Shim	4
2062	M3 Threaded Insert	4
3010	Droop Screw Inserts	4
3026	5.0mm Lower Arm Ball Cup	12
4028	4.8mm Female Upper Suspension Ball	8
4029	5.0mm Female Lower Suspension Ball	8
4030	4.3x10.3mm Male Ball Stud	2
4031	4.3x13.8mm Male Ball Stud	4
4043	Topdeck Motormount Screw	2
7015	300 Bando Drive Belt	1
9011	M2x5mm Button Head Screw	4
9014	M2.5x5mm Button Head Screw	12
9018	M3x6mm Button Head Screw	17
9019	M3x8mm Button Head Screw	9
9023	M3 x 5mm Flat Head Screw	3
9024	M3 x 6mm Flat Head Screw	21
9028	M3 x 8mm Grub Screw	4
9029	M4 x 8mm Grub Screw	4

## STEP 4.12



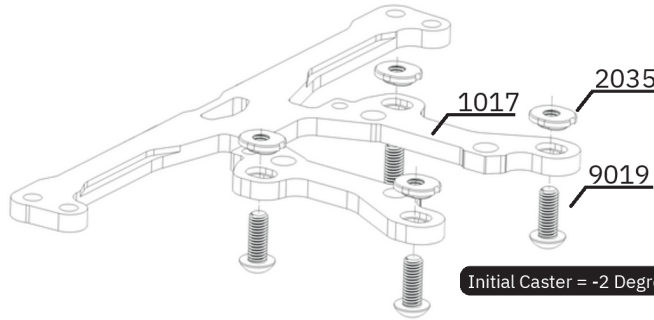
Initial Caster = 4 Degrees

1. Press 2035 pills firmly into 1015 upper bulkhead ensuring correct pill orientation
2. Apply a small amount of medium strength thread lock near the base of 9019 screws as pictured
3. Tighten 2035 pills in place firmly with 9019 screws inserted from underneath the upper bulkhead

### OPTION PART



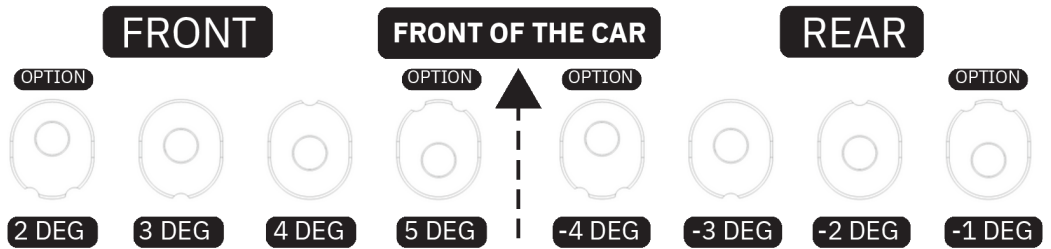
## STEP 4.13



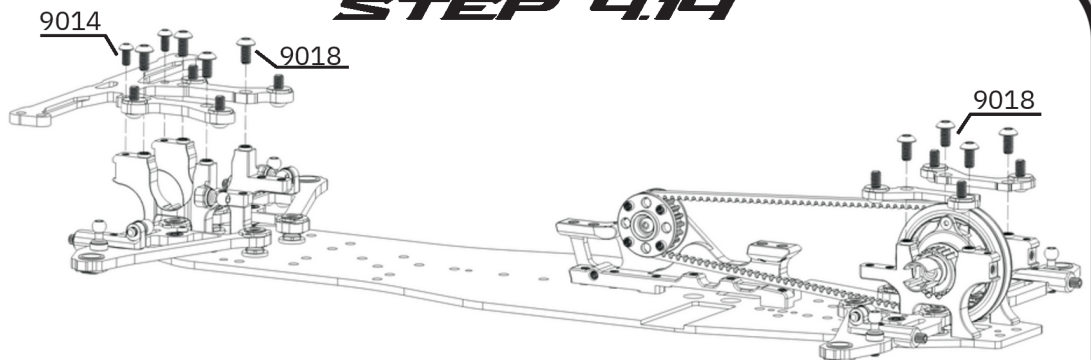
Initial Caster = -2 Degrees

1. Install 2035 pills into 1017 upper bulkhead ensuring correct pill orientation
2. Apply a small amount of medium strength thread lock near the base of 9019 screws as pictured
3. Tighten 2035 pills in place firmly with 9019 screws inserted from underneath the upper bulkhead

## CASTER ADJUSTMENT



## STEP 4.14



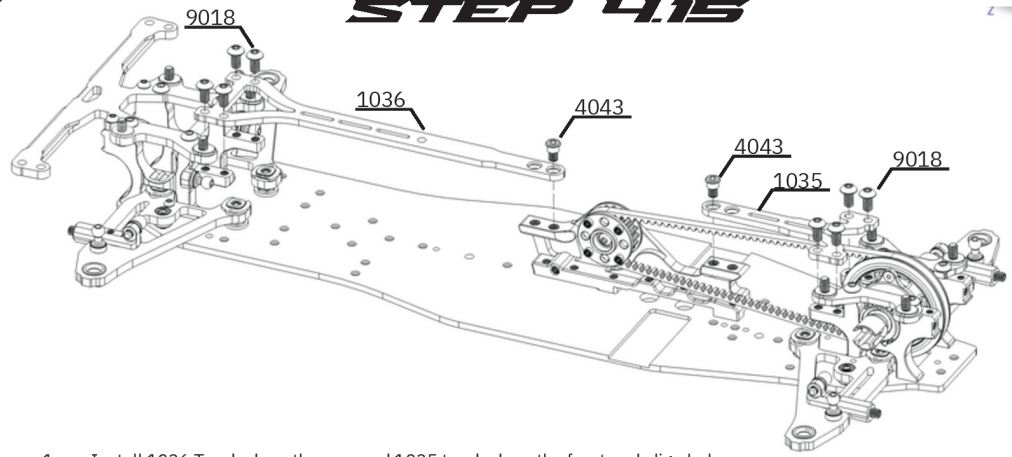
1. Press upper bulkhead assemblies onto bulkhead lugs in correct orientation
2. Install and tighten 9018 and 9014 screws to secure upper bulkheads in place

# STEP 4 - LOWER ARMS, BULKHEADS & CHASSIS

## BAG D PARTS LIST

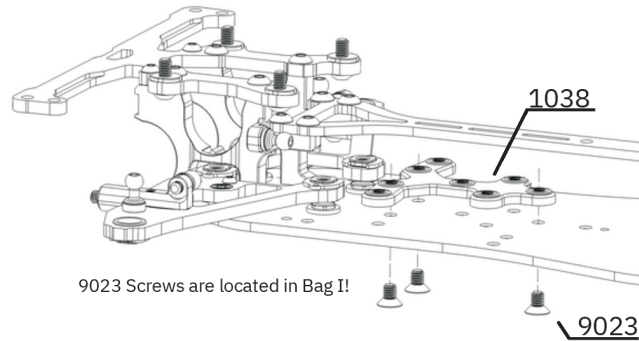
SKU	Description	QTY
1012	Rear Suspension Arm	2
1015	Split Front Upper Bulkheads (L & R)	2
1017	Upper Bulkhead/Body Mount Rear	1
1021	Suspension Arm Clips	12
1033	2.2mm Standard Carbon Chassis	1
1035	2.2mm Carbon Topdeck - Front	1
1036	2.2mm Carbon Topdeck - Rear	1
1038	Carbon Rear Chassis T Brace	1
1040	Front Suspension Arm	2
2011	Rear Left Bulkhead	1
2012	Rear Right Bulkhead	1
2013	Front Bulkhead	2
2017	Outer Shock Attachment	4
2028	4.3mm x 11.8mm Ballstud	4
2035	Upper Bulkhead Inserts - 1 Dot	8
2045-F	Rear Battery Stopper and Topdeck Post Mount	1
2057	3x5.5x1.0mm Shim	6
2058	3x5.5x2.0mm Shim	4
2059	3x8x0.5mm Shim	4
2060	3x8x1mm Shim	4
2062	M3 Threaded Insert	4
3010	Droop Screw Inserts	4
3026	5.0mm Lower Arm Ball Cup	12
4028	4.8mm Female Upper Suspension Ball	8
4029	5.0mm Female Lower Suspension Ball	8
4030	4.3x10.3mm Male Ball Stud	2
4031	4.3x13.8mm Male Ball Stud	4
4043	Topdeck Motormount Screw	2
7015	300 Bando Drive Belt	1
9011	M2x5mm Button Head Screw	4
9014	M2.5x5mm Button Head Screw	12
9018	M3x6mm Button Head Screw	17
9019	M3x8mm Button Head Screw	9
9023	M3 x 5mm Flat Head Screw	3
9024	M3 x 6mm Flat Head Screw	21
9028	M3 x 8mm Grub Screw	4
9029	M4 x 8mm Grub Screw	4

### STEP 4.15



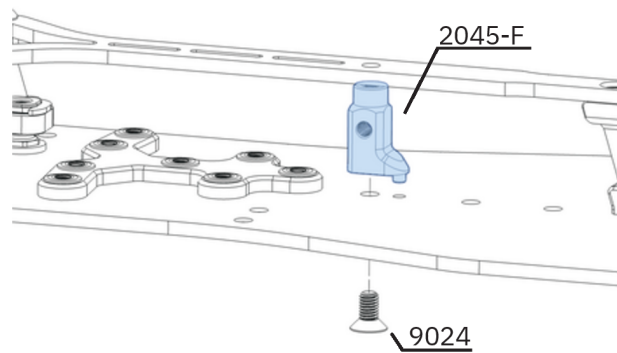
1. Install 1036 Topdeck on the rear and 1035 topdeck on the front and align holes
2. Install 4043 screws into the inner holes on the topdeck (closest to the layshaft) and tighten
3. Install 9018 screws in topdeck ends. With the chassis on a flat surface, tighten 9018 screws and ensure car sits flat.

### STEP 4.16



1. Install 1038 with 9023 screws which can be found in Bag I
2. Screws can be added, removed or moved to adjust flex across the rear section of the chassis

### STEP 4.17



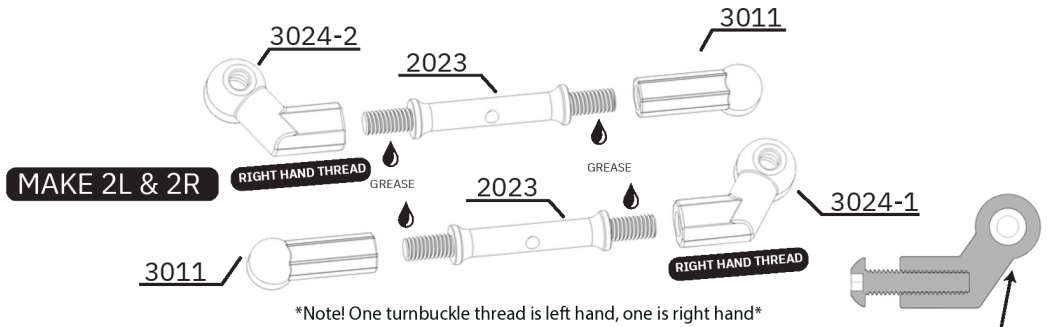
1. Install 2045-F with 9024 screws. Screws can be added, removed or moved to adjust flex across the rear section of the chassis
2. An M3x10mm Button Head screw (not included) can be used with 5mm (not included) of shims to connect the topdeck to 2045-F for added stiffness to the rear topdeck

# STEP 5 - UPPER ARMS, TURNBUCKLES & ROCKERS

## BAG E PARTS LIST

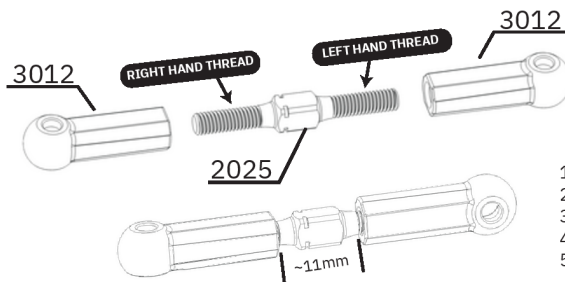
SKU	Description	QTY
2015	Suspension Rocker Arm FL/RR	2
2016	Suspension Rocker Arm FR/RL	2
2023	Suspension Rocker Turnbuckle	4
2024	Steering Turnbuckle	2
2025	Rear Toe/Servo Turnbuckle	2
2057	3x5.5x1.0mm Shim	8
2063	3x4.4x0.5mm Rocker Shim	4
3011	4.3x13mm Ball Cup	5
3012	4.3x16mm Ball Cup	8
3017	Upper Arm A	2
3018	Upper Arm B	2
3020	Upper Arm Ball Cup Front	2
3021	Upper Arm Ball Cup Rear	2
3024-1	Offset Ballcup 1	3
3024-2	Offset Ballcup 2	2
4032	4.3x8.1mm Male Ball Stud	4
4033	M4 Upper Arm Adjuster Screw	4
4037	Rocker Arm Sleeve	4
6011	4x7x2.5mm Metal Shield Bearing	8
9016	M2.5x14mm Button Head Screw	2
9021	M3x12mm Button Head Screw	4

### STEP 5.1



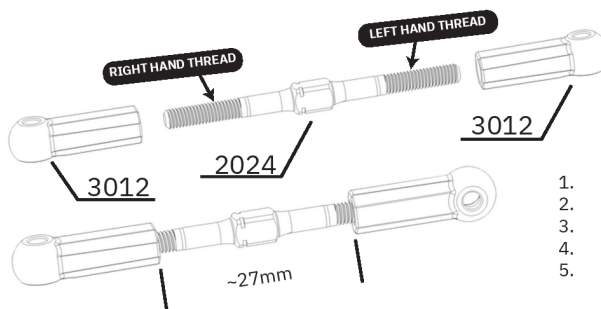
1. Tap threads into 3024-1 and 3024-2 with 9021 screw, and install these on right handed thread turnbuckles
2. Do this by threading the 9021 screw into 3024-1 and 3024-2 most of the way, and then undoing it all the way
3. Insert 1.5mm tip or thin wire into 2023 to hold turnbuckle whilst ball cups are installed
4. Tighten all ball cups completely until both sides are tight and aligned in the same direction
5. Make 4 links, 2 left and 2 right
6. These links don't get adjusted!

### STEP 5.2



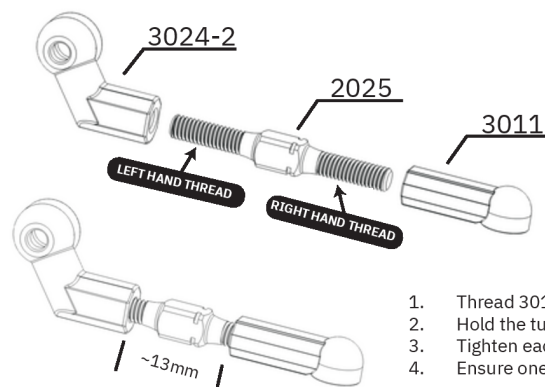
1. Thread 3012 Ball Cups onto 2025 turnbuckle
2. Hold the turnbuckle with a 4mm turnbuckle wrench
3. Tighten each side equally until a gap of roughly 11mm
4. Ensure one ball cup is at 90 degrees to the other
5. Make mirrored copies, one left and one right

### STEP 5.3



1. Thread 3012 Ball Cups onto 2024 turnbuckle
2. Hold the turnbuckle with a 4mm turnbuckle wrench
3. Tighten each side equally until a gap of roughly 27mm
4. Ensure one ball cup is at 90 degrees to the other
5. Make mirrored copies, one left and one right

### STEP 5.4

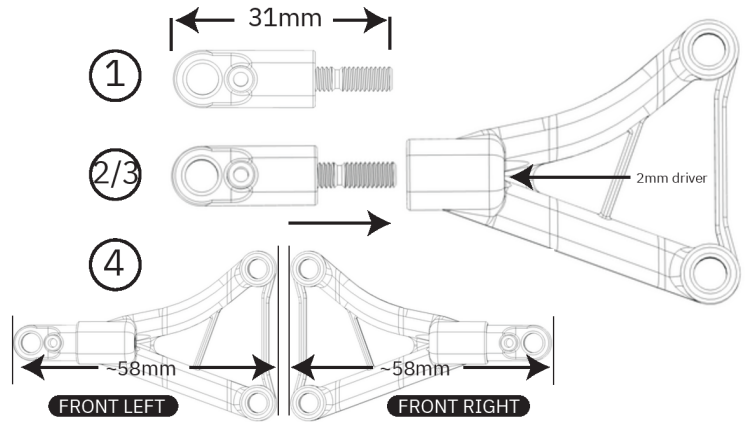
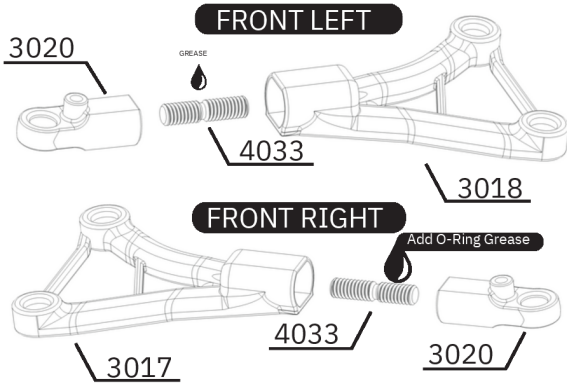


1. Thread 3011 and 3024-2 Ball Cups onto 2025 turnbuckle
2. Hold the turnbuckle with a 4mm turnbuckle wrench
3. Tighten each side equally until a gap of roughly 13mm
4. Ensure one ball cup is at 90 degrees to the other like diagram

# STEP 5 - UPPER ARMS, TURNBUCKLES & ROCKERS

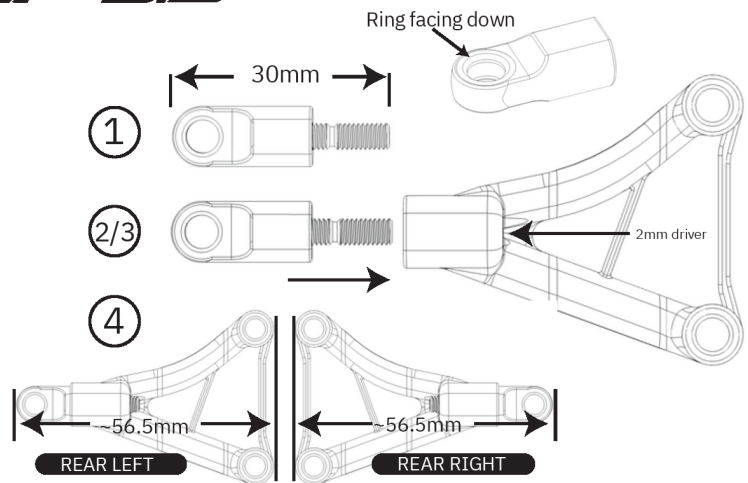
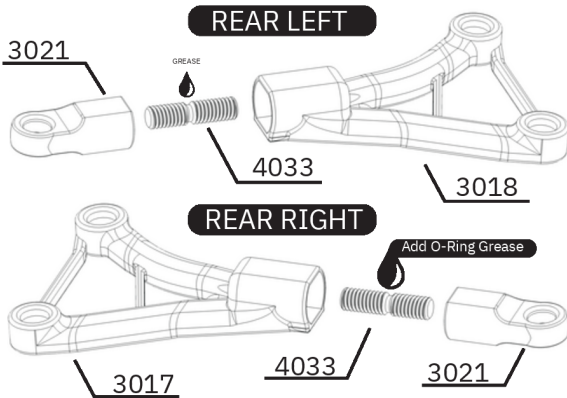
**BAG E**

## STEP 5.5



1. Apply grease to 4033 and screw into 3020 all the way, then back it out to a total length of 31.5mm
2. Insert 2mm wrench through arm hole at arrow, and attach 4033/3020 assembly to the tip and screw into arm
3. Tighten 3020 until flush with the arm cavity, hold 3020 whilst tightening 4033 ensuring 2mm hole is facing up
4. Keep tightening 4033 pulling 3020 into the arm until the total length of the arm is roughly 58mm
5. Repeat steps above for mirrored copy on the other side, giving you a pair of front upper suspension arms

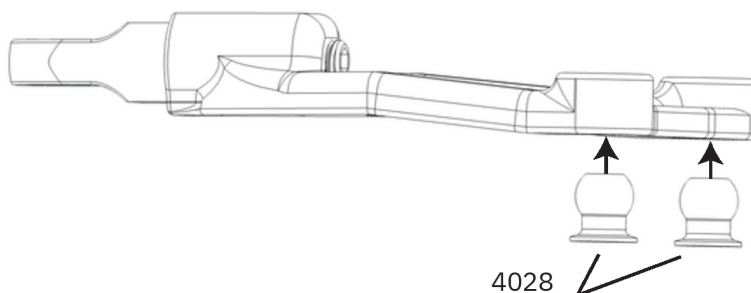
## STEP 5.6



1. Apply grease to 4033 and screw into 3021 all the way, then back it out to a total length of 31.5mm
2. Insert 2mm wrench through arm hole at arrow, and attach 4033/3021 assembly to the tip and screw into arm
3. Tighten 3021 until flush with the arm cavity, hold 3021 whilst tightening 4033 ensuring ball ring is facing down
4. Keep tightening 4033 pulling 3021 into the arm until the total length of the arm is roughly 56.5mm
5. Repeat steps above for mirrored copy on the other side, giving you a pair of front upper suspension arms

## STEP 5.7

### FRONT & REAR ARMS



1. Insert 4028 Ball studs (left over from Bag D) into front and rear arm assemblies from underneath using wide jaw/ball cup pliers Repeat process for all 4 upper arms

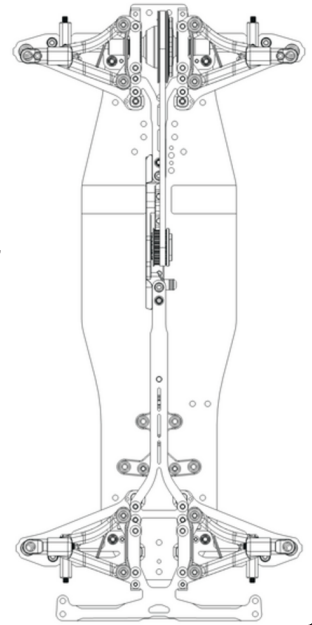
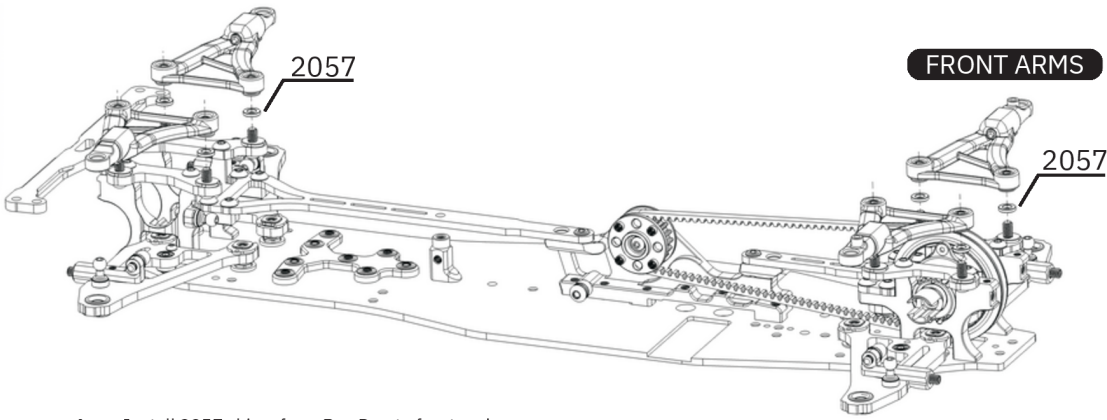
# STEP 5 - UPPER ARMS, TURNBUCKLES & ROCKERS

## STEP 5.8

**BAG E**

### REAR ARMS

### FRONT ARMS

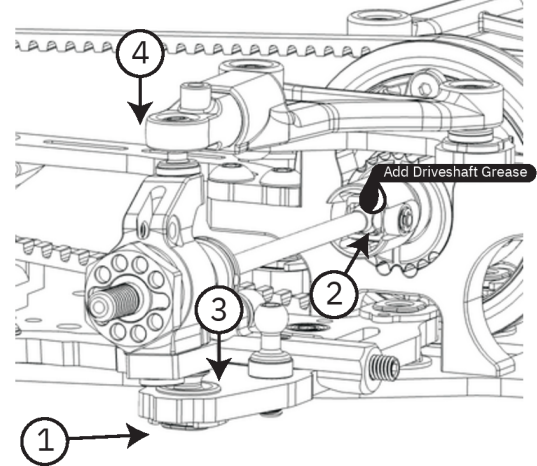
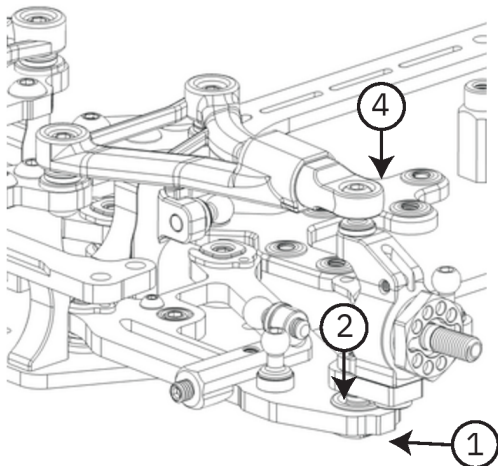


1. Install 2057 shims from Bag D onto front and rear upper arm screws
2. Tighten upper arms onto upper bulkheads in correct orientation. Curved part of upper arm should be facing the front of the car for both front and rear

## STEP 5.9

### REAR HUBS

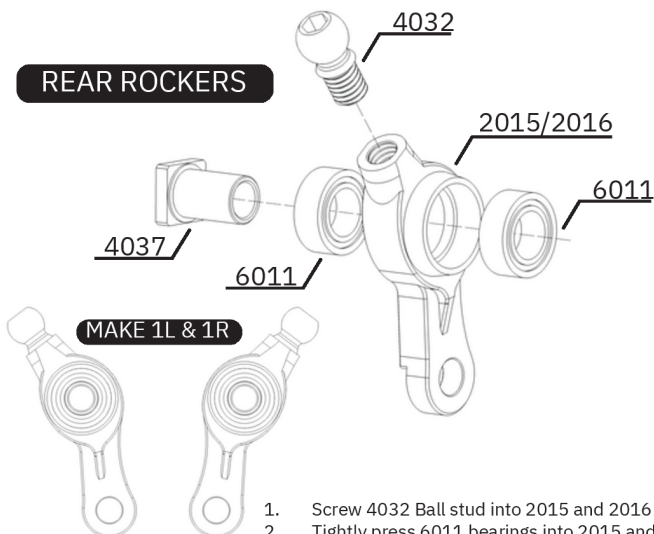
### FRONT HUBS



1. With the chassis on a flat, hard surface, use a 10mm droop block directly under the outer ball cup to support the arm.
2. (Front Only) Insert front driveshaft inner into diff outdrive cup ensuring pin stays in place. Add some grease/oil to the joint
3. Press down firmly on the hub to pop the hub into the outer arm ball cup. Steering arms should all be facing the centre

## STEP 5.10

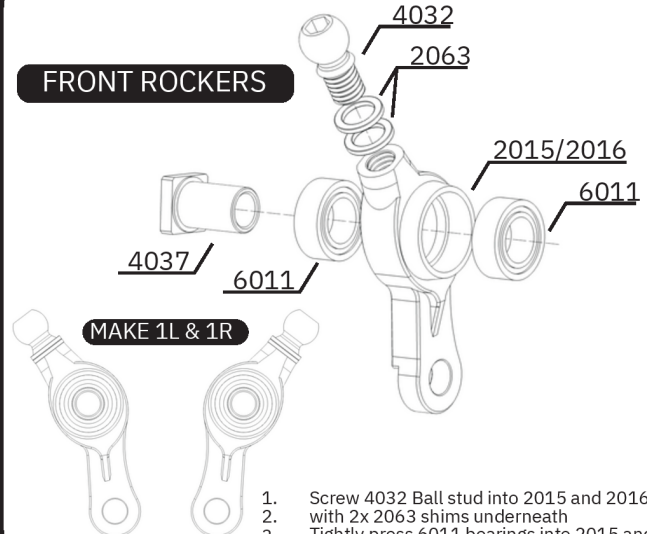
### REAR ROCKERS



1. Screw 4032 Ball stud into 2015 and 2016 rockers
2. Tightly press 6011 bearings into 2015 and 2016
3. Slide 4037 into 2015 and 2016 from behind
4. Make a mirrored pair of rear rockers

## STEP 5.11

### FRONT ROCKERS



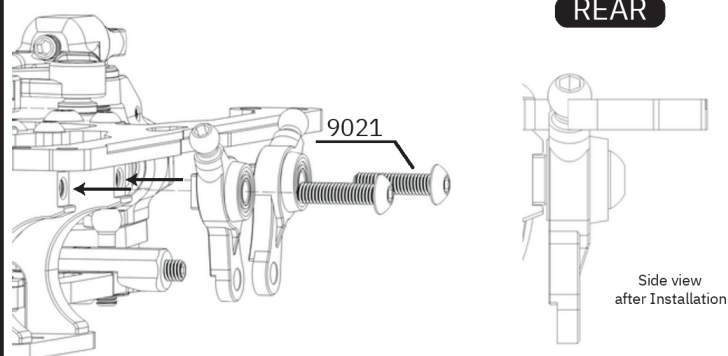
1. Screw 4032 Ball stud into 2015 and 2016 rockers with 2x 2063 shims underneath
2. Tightly press 6011 bearings into 2015 and 2016
3. Slide 4037 into 2015 and 2016 from behind
4. Slide 4037 into 2015 and 2016 from behind
5. Make a mirrored pair of front rockers



# STEP 5 - UPPER ARMS, TURNBUCKLES & ROCKERS

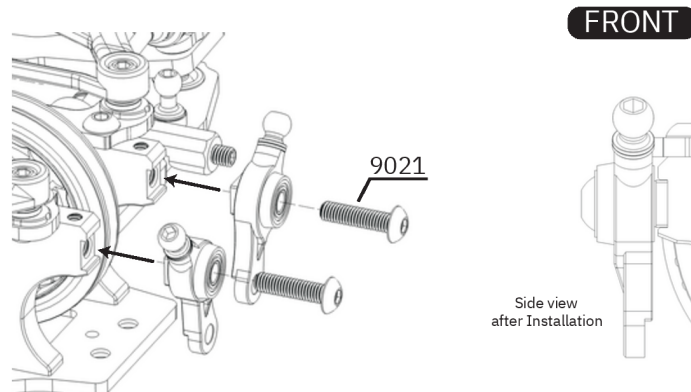
## BAG E

### STEP 5.12



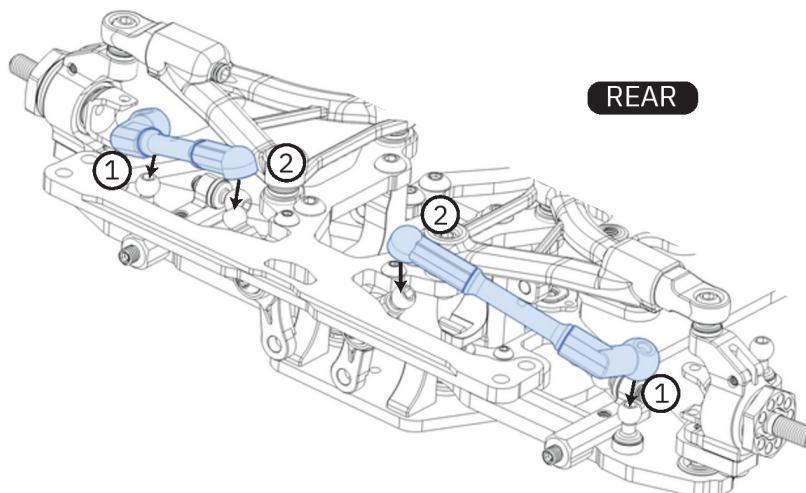
1. Insert 9021 screws into rocker assembly and partially tighten
2. Once the rocker sleeve is close to the bulkhead, align the square of the rocker sleeve and bulkhead, and tighten 9021 screw

### STEP 5.13



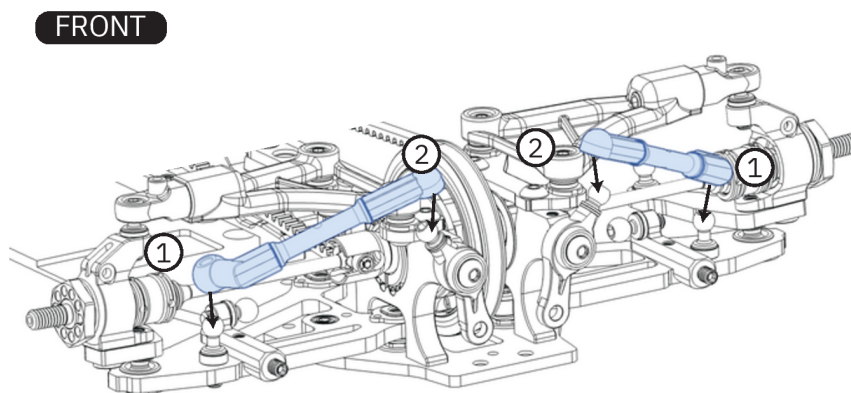
1. Insert 9021 screws into correct rocker assembly and partially tighten
2. Once the rocker sleeve is close to the bulkhead, align the square of the rocker sleeve and bulkhead, and tighten 9021 screw

### STEP 5.14



1. Select a pair (left and right) of rocker turnbuckles and snap onto balls in order (1 first, then 2)
2. Use wide jaw pliers to pop joint 1 on first. Take care as it is quite tight!
3. Pop on joint 2 with fingers. Ensure all joints move freely as the suspension arms move up and down

### STEP 5.15

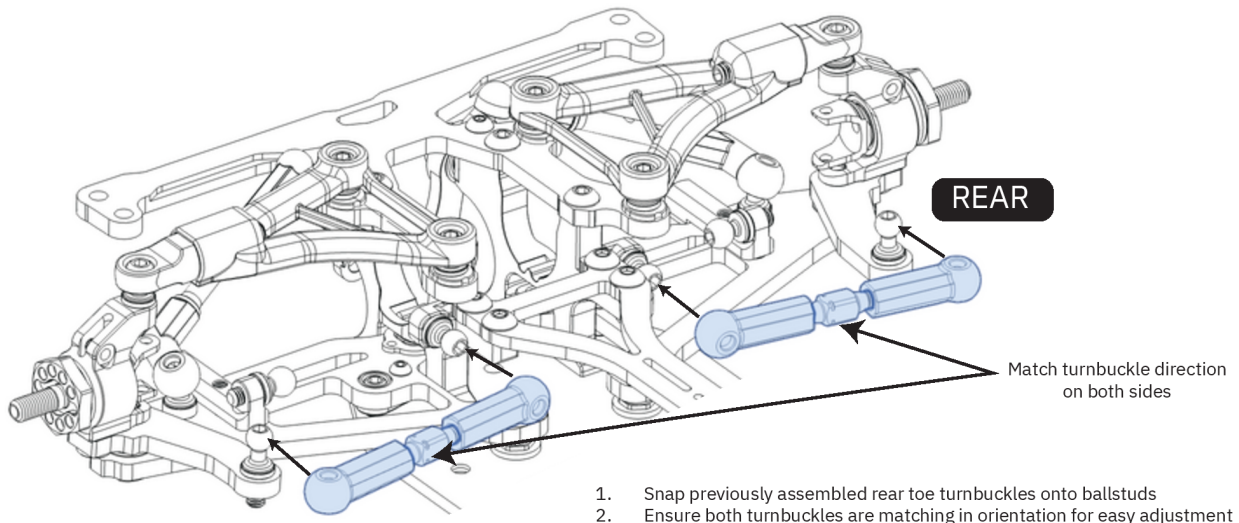


1. Select final pair of rocker turnbuckles and snap onto balls in order (1 First, then 2)
2. Use wide jaw pliers to pop joint 1 on first. Take care as it is quite tight!
3. Pop on joint 2 with fingers. Ensure all joints move freely as the suspension arms move up and down

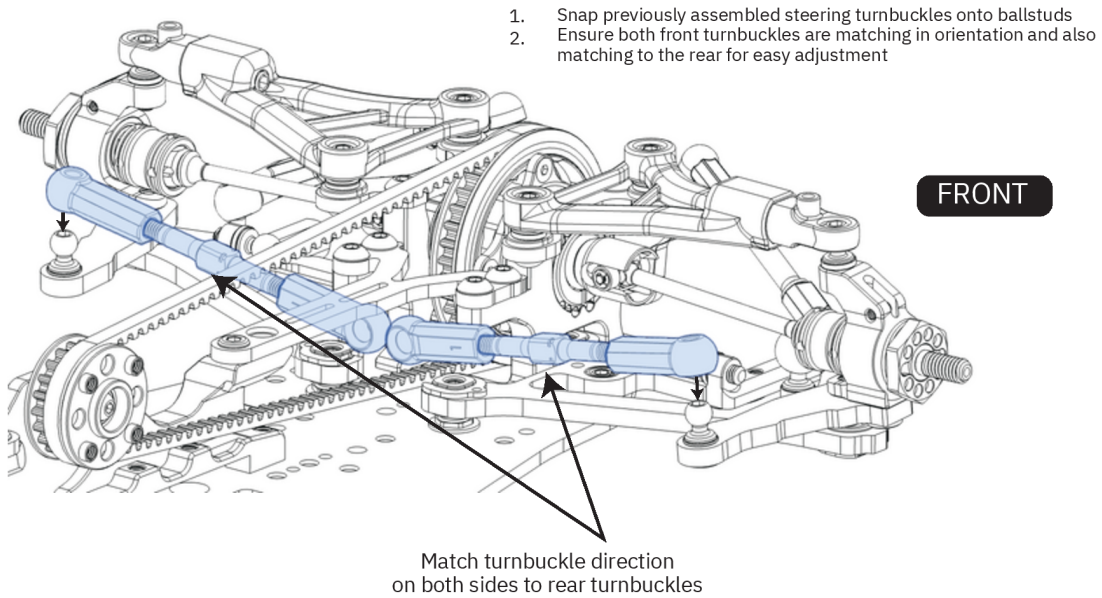
# STEP 5 - UPPER ARMS, TURNBUCKLES & ROCKERS

**BAG E**

## STEP 5.16



## STEP 5.17

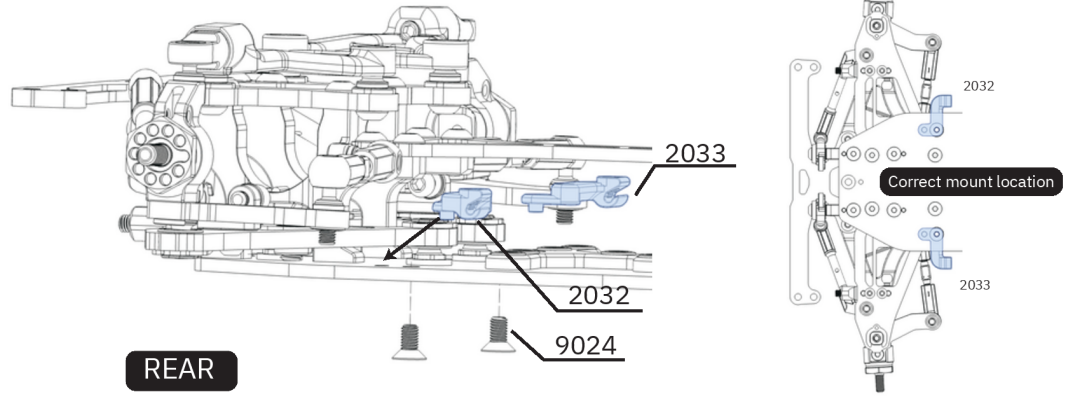


# STEP 6 - ANTI-ROLL BARS, STEERING RACK & SERVO MOUNT

## BAG F PARTS LIST

SKU	Description	QTY
1034	Floating Servo Brace	1
1041	Weight Spacers	2
2019	Steering Rack	1
2020	Steering Rack Arm	2
2021	Steering Rack Post	2
2027	4.3x8.5mm Ballstud	4
2029-F	Floating Servo Mount Inner	1
2032	Anti-Roll Bar Holder FL/RR	2
2033	Anti-Roll Bar Holder FR/RL	2
2044-F	Servo Mount Battery Holder Bracket	1
2046	Anti-Roll Bar Adapter	4
2056	3x5.5x0.5mm Shim	2
3008	Anti-Roll Bar Ball Cup Open	4
3009	Anti-Roll Bar Ball Cup Closed	4
4022	Anti-Roll Bar (1.0mm)	1
4023	Anti-Roll Bar (1.1mm)	1
4024	Anti-Roll Bar (1.2mm)	1
4030	4.3x10.3mm Male Ball Stud	2
4031	4.3x13.8mm Male Ball Stud	1
4032	4.3x8.1mm Male Ball Stud	1
5020-F	Front Bulkhead Balance Weight (32g)	2
6013	5x8x2.5mm Metal Shield Bearing	4
7011	Anti Roll Bar Stopper	4
9017	M3 x 5mm Button Head Screw	4
9018	M3 x 6mm Button Head Screw	5
9023	M3 x 5mm Flat Head Screw	5
9024	M3 x 6mm Flat Head Screw	5
9025	M3 x 8mm Flat Head Screw	4
9027	M3 x 3mm Grub Screw	8
9028	M3 x 8mm Grub Screw	1

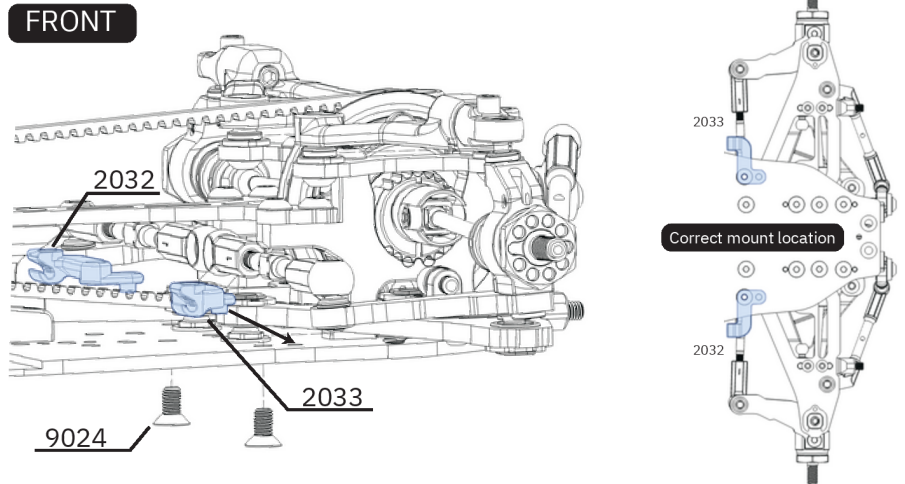
### STEP 6.1



REAR

1. Insert 2032 and 2033 locating lugs into chassis locating holes on each side
2. Install and tighten 9024 screws to attach anti roll bar holders to chassis

### STEP 6.2



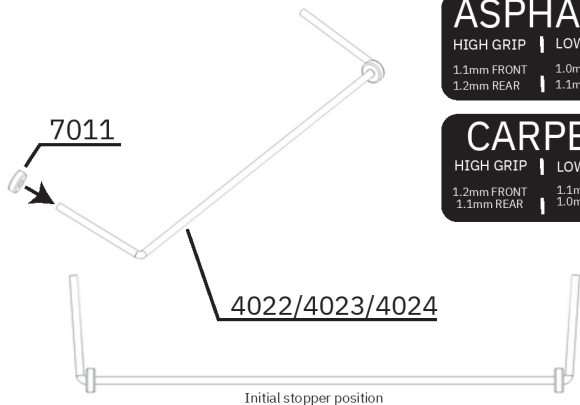
FRONT

1. Insert 2032 and 2033 locating lugs into chassis locating holes on each side
2. Install and tighten 9024 screws to attach anti roll bar holders to chassis

OPTION PART

4025 - 1.3mm Anti-roll bar

### STEP 6.3



Initial Setting

**ASPHALT**

HIGH GRIP | LOW GRIP  
1.1mm FRONT | 1.0mm FRONT  
1.2mm REAR | 1.1mm REAR

**CARPET**

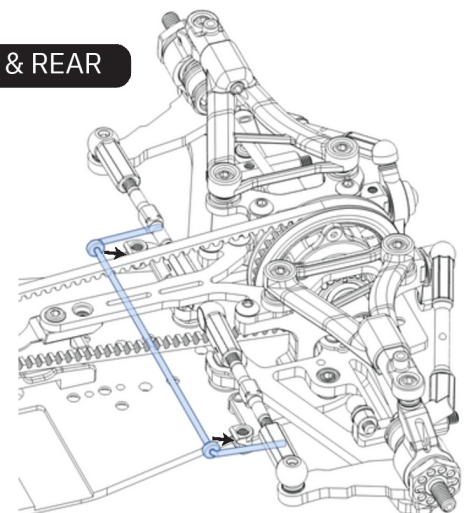
HIGH GRIP | LOW GRIP  
1.2mm FRONT | 1.1mm FRONT  
1.1mm REAR | 1.0mm REAR

Initial stopper position

1. Select initial front and rear anti-roll bars for your track condition
2. Check anti-roll bar is flat on glass, twist lightly if necessary to flatten wire
3. Pierce 7011 Stoppers over anti roll bars and slide into position
4. Repeat for both selected front and rear anti-roll bars

### STEP 6.4

FRONT & REAR



1. Insert anti-roll bar under the belt and slide into mount slots
2. Locate 7011 stoppers so the roll bar is central, has minimal play and has free movement
3. Repeat for both front and rear anti-roll bars

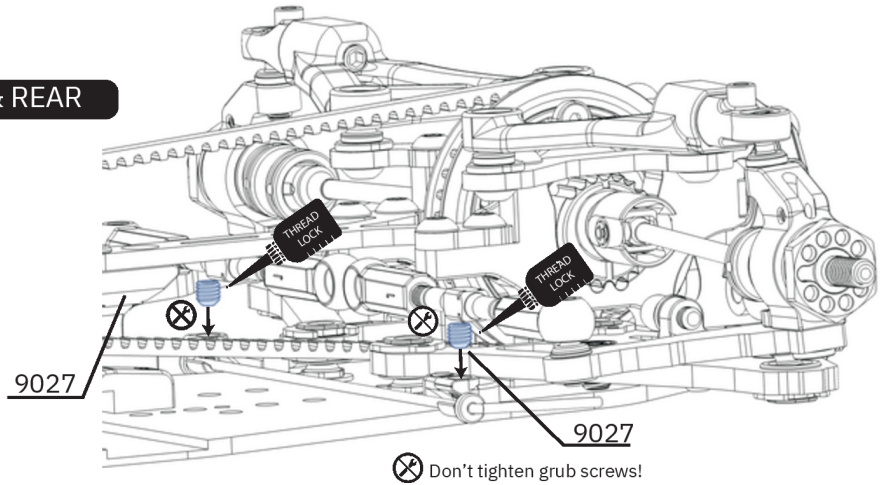
# STEP 6 - ANTI-ROLL BARS, STEERING RACK & SERVO MOUNT

## BAG F PARTS LIST

SKU	Description	QTY
1034	Floating Servo Brace	1
1041	Weight Spacers	2
2019	Steering Rack	1
2020	Steering Rack Arm	2
2021	Steering Rack Post	2
2027	4.3x8.5mm Ballstud	4
2029-F	Floating Servo Mount Inner	1
2032	Anti-Roll Bar Holder FL/RR	2
2033	Anti-Roll Bar Holder FR/RL	2
2044-F	Servo Mount Battery Holder Bracket	1
2046	Anti-Roll Bar Adapter	4
2056	3x5.5x0.5mm Shim	2
3008	Anti-Roll Bar Ball Cup Open	4
3009	Anti-Roll Bar Ball Cup Closed	4
4022	Anti-Roll Bar (1.0mm)	1
4023	Anti-Roll Bar (1.1mm)	1
4024	Anti-Roll Bar (1.2mm)	1
4030	4.3x10.3mm Male Ball Stud	2
4031	4.3x13.8mm Male Ball Stud	1
4032	4.3x8.1mm Male Ball Stud	1
5020-F	Front Bulkhead Balance Weight (32g)	2
6013	5x8x2.5mm Metal Shield Bearing	4
7011	Anti Roll Bar Stopper	4
9017	M3 x 5mm Button Head Screw	4
9018	M3 x 6mm Button Head Screw	5
9023	M3 x 5mm Flat Head Screw	5
9024	M3 x 6mm Flat Head Screw	5
9025	M3 x 8mm Flat Head Screw	4
9027	M3 x 3mm Grub Screw	8
9028	M3 x 8mm Grub Screw	1

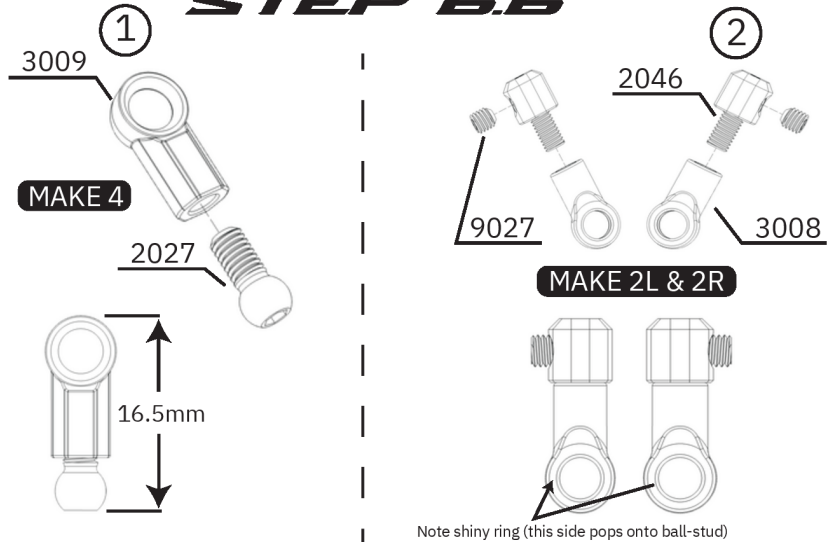
## STEP 6.5

### FRONT & REAR



1. Apply medium strength thread lock to 9027 grub screws
2. Thread grub screws into anti-roll bar mount
3. Tighten grub screws slowly whilst moving the anti-roll bar
4. As soon as anti roll bar movement tightens, undo grub screw until the anti roll bar movement is perfectly free-moving again
5. Repeat above steps for both front and rear anti-roll bars

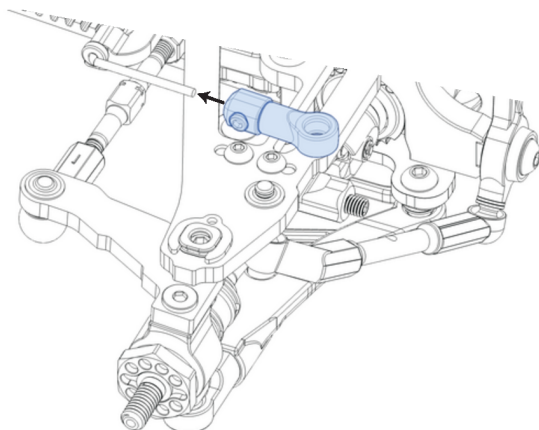
## STEP 6.6



1. Screw 2027 into 3009 until total length of 16.5mm. Make 4pcs.
2. Screw 3008 onto 2046 all the way and align. Make 2 pairs.
3. Thread 9027 into 2046 only one turn

## STEP 6.7

### FRONT & REAR LEFT & RIGHT



1. Slide anti-roll bar adapter assembly over anti-roll bar with grub screw facing outwards
2. Push adapter assembly all the way on and tighten grub screw whilst assembly is parallel to the chassis
3. Repeat for all 4 corners of the car, ensuring grub screw faces outwards and shiny ring on ball cup faces the arm

# STEP 6 - ANTI-ROLL BARS, STEERING RACK & SERVO MOUNT

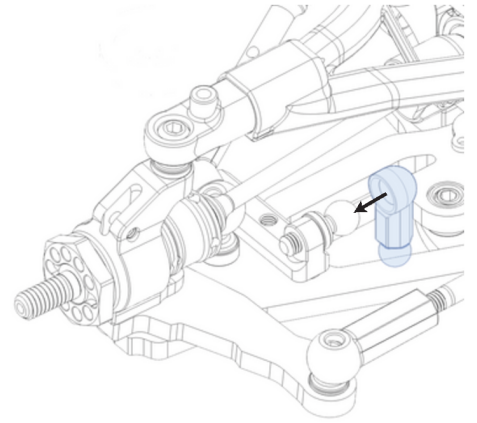
## BAG F PARTS LIST

SKU	Description	QTY
1034	Floating Servo Brace	1
1041	Weight Spacers	2
2019	Steering Rack	1
2020	Steering Rack Arm	2
2021	Steering Rack Post	2
2027	4.3x8.5mm Ballstud	4
2029-F	Floating Servo Mount Inner	1
2032	Anti-Roll Bar Holder FL/RR	2
2033	Anti-Roll Bar Holder FR/RL	2
2044-F	Servo Mount Battery Holder Bracket	1
2046	Anti-Roll Bar Adapter	4
2056	3x5.5x0.5mm Shim	2
3008	Anti-Roll Bar Ball Cup Open	4
3009	Anti-Roll Bar Ball Cup Closed	4
4022	Anti-Roll Bar (1.0mm)	1
4023	Anti-Roll Bar (1.1mm)	1
4024	Anti-Roll Bar (1.2mm)	1
4030	4.3x10.3mm Male Ball Stud	2
4031	4.3x13.8mm Male Ball Stud	1
4032	4.3x8.1mm Male Ball Stud	1
5020-F	Front Bulkhead Balance Weight (32g)	2
6013	5x8x2.5mm Metal Shield Bearing	4
7011	Anti Roll Bar Stopper	4
9017	M3 x 5mm Button Head Screw	4
9018	M3 x 6mm Button Head Screw	5
9023	M3 x 5mm Flat Head Screw	5
9024	M3 x 6mm Flat Head Screw	5
9025	M3 x 8mm Flat Head Screw	4
9027	M3 x 3mm Grub Screw	8
9028	M3 x 8mm Grub Screw	1

## STEP 6.8

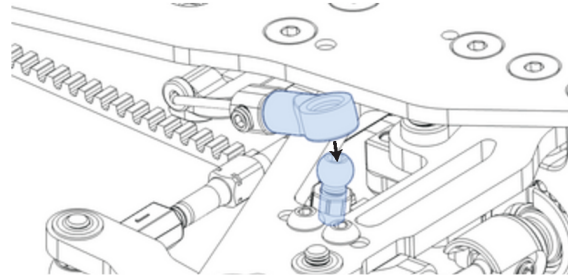
### FRONT & REAR LEFT & RIGHT

1. Install previously assembled ball cup assembly onto ball
2. Ensure link is facing downwards through the hole in the arm
3. Repeat for all 4 corners of the car



## STEP 6.9

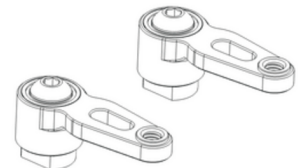
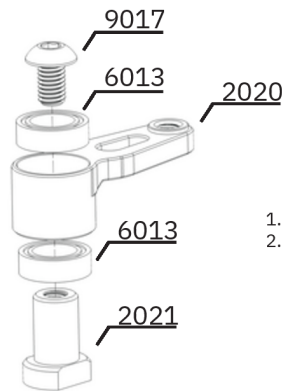
### FRONT & REAR LEFT & RIGHT



1. Pop Anti-roll bar ball cup onto ball so that the system is connected
2. Repeat for all 4 corners of the car and ensure free movement of suspension and anti-roll bar system

## STEP 6.10

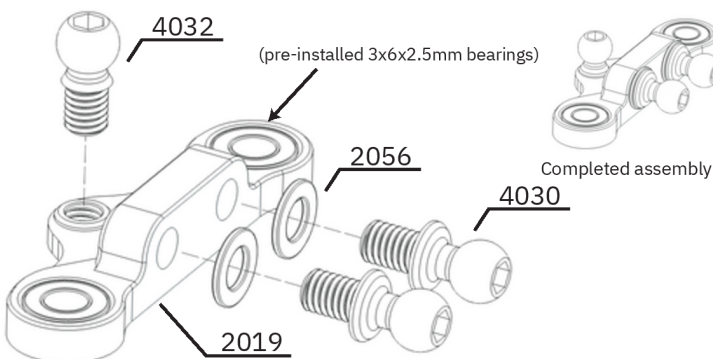
### MAKE 2



Completed assembly

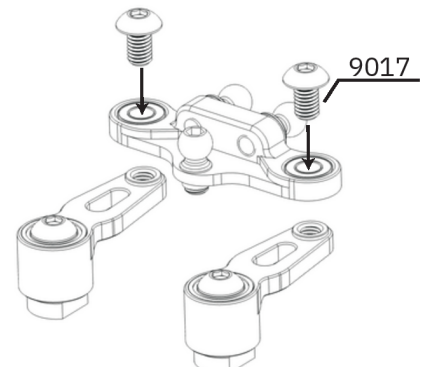
1. Press fit 6013 bearings inside 2020 firmly
2. Slide 2021 into assembly and tighten 9017 screw whilst holding 2021 with a 5.5mm spanner

## STEP 6.11



1. Tighten 4032 ball stud into 2019 from correct side
2. Install 4030 ball studs into 2019 with 2056 shims as the initial setting

## STEP 6.12



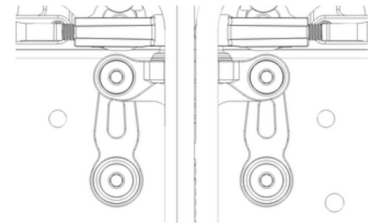
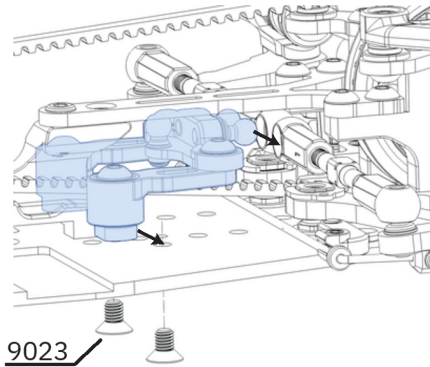
1. Attach steering rack to bellcrank arms with 9017 screws
2. Ensure free movement on all pivot points

# STEP 6 - ANTI-ROLL BARS, STEERING RACK & SERVO MOUNT

## BAG F PARTS LIST

SKU	Description	QTY
1034	Floating Servo Brace	1
1041	Weight Spacers	2
2019	Steering Rack	1
2020	Steering Rack Arm	2
2021	Steering Rack Post	2
2027	4.3x8.5mm Ballstud	4
2029-F	Floating Servo Mount Inner	1
2032	Anti-Roll Bar Holder FL/RR	2
2033	Anti-Roll Bar Holder FR/RL	2
2044-F	Servo Mount Battery Holder Bracket	1
2046	Anti-Roll Bar Adapter	4
2056	3x5.5x0.5mm Shim	2
3008	Anti-Roll Bar Ball Cup Open	4
3009	Anti-Roll Bar Ball Cup Closed	4
4022	Anti-Roll Bar (1.0mm)	1
4023	Anti-Roll Bar (1.1mm)	1
4024	Anti-Roll Bar (1.2mm)	1
4030	4.3x10.3mm Male Ball Stud	2
4031	4.3x13.8mm Male Ball Stud	1
4032	4.3x8.1mm Male Ball Stud	1
5020-F	Front Bulkhead Balance Weight (32g)	2
6013	5x8x2.5mm Metal Shield Bearing	4
7011	Anti Roll Bar Stopper	4
9017	M3 x 5mm Button Head Screw	4
9018	M3 x 6mm Button Head Screw	5
9023	M3 x 5mm Flat Head Screw	5
9024	M3 x 6mm Flat Head Screw	5
9025	M3 x 8mm Flat Head Screw	4
9027	M3 x 3mm Grub Screw	8
9028	M3 x 8mm Grub Screw	1

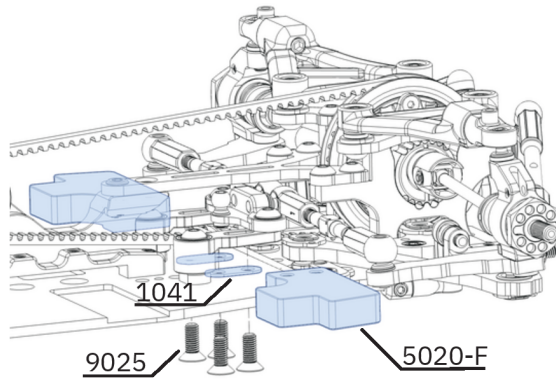
### STEP 6.13



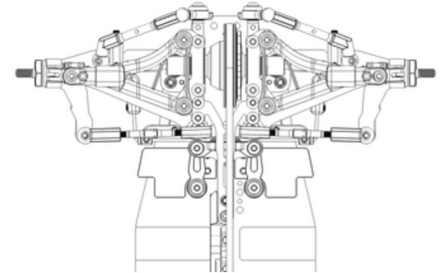
Completed installation

1. Insert steering bellcrank assembly and attach with 9023 screws
2. Pop inner steering link ballcups onto steering ballstuds. This is easiest to do when the steering rack is at full lock each way

### STEP 6.14

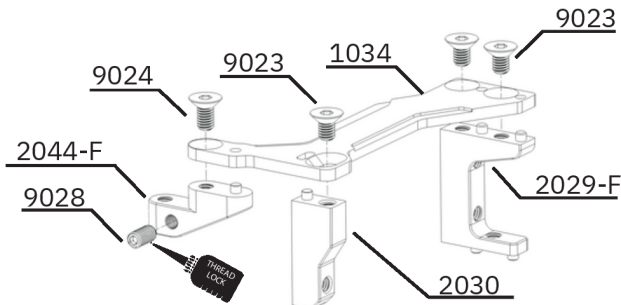


1. Install 5020-F Weights with 1041 shim underneath
2. Use 9025 screws through chassis and shim to attach weights to the chassis on both sides



Completed installation

### STEP 6.15



1. Locate 1034 Servo brace onto 2029-F and 2030 locating pins
2. Install 2x inner 9023 screws to fix in place
3. Install outer 9023 screw into 2030 but keep it slightly loose until servo is fitted
4. Use 9024 screw to attach 2044-F, install 9028 with thread lock into 2044-F until flush

### STEP 6.16

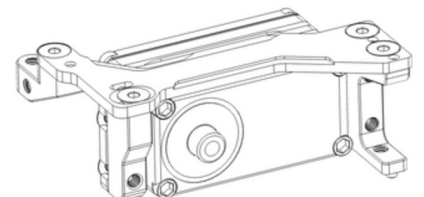
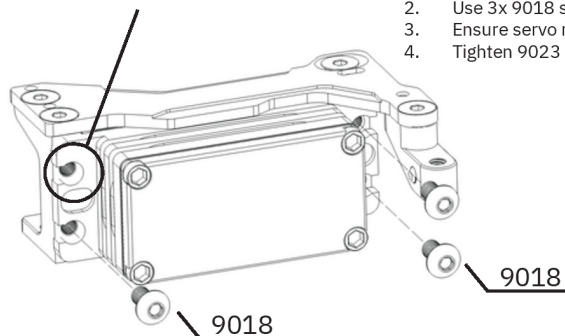
This screw is not used to provide sufficient pinion gear clearance

1. Install desired low profile servo in the correct orientation
2. Use 3x 9018 screws to install servo into servo holder as in diagram
3. Ensure servo remains square inside the mount after screws are tightened
4. Tighten 9023 outer screw from previous step

#### RECOMMENDED RC MAKER PART



RCM-FFWR-B or RCM-FFWR-C

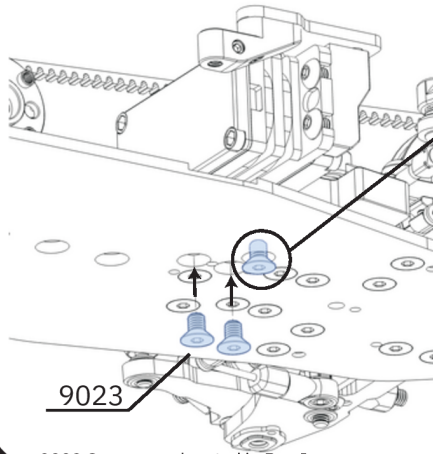


# STEP 6 - ANTI-ROLL BARS, STEERING RACK & SERVO MOUNT

## BAG F PARTS LIST

SKU	Description	QTY
1034	Floating Servo Brace	1
1041	Weight Spacers	2
2019	Steering Rack	1
2020	Steering Rack Arm	2
2021	Steering Rack Post	2
2027	4.3x8.5mm Ballstud	4
2029-F	Floating Servo Mount Inner	1
2032	Anti-Roll Bar Holder FL/RR	2
2033	Anti-Roll Bar Holder FR/RL	2
2044-F	Servo Mount Battery Holder Bracket	1
2046	Anti-Roll Bar Adapter	4
2056	3x5.5x0.5mm Shim	2
3008	Anti-Roll Bar Ball Cup Open	4
3009	Anti-Roll Bar Ball Cup Closed	4
4022	Anti-Roll Bar (1.0mm)	1
4023	Anti-Roll Bar (1.1mm)	1
4024	Anti-Roll Bar (1.2mm)	1
4030	4.3x10.3mm Male Ball Stud	2
4031	4.3x13.8mm Male Ball Stud	1
4032	4.3x8.1mm Male Ball Stud	1
5020-F	Front Bulkhead Balance Weight (32g)	2
6013	5x8x2.5mm Metal Shield Bearing	4
7011	Anti Roll Bar Stopper	4
9017	M3 x 5mm Button Head Screw	4
9018	M3 x 6mm Button Head Screw	5
9023	M3 x 5mm Flat Head Screw	5
9024	M3 x 6mm Flat Head Screw	5
9025	M3 x 8mm Flat Head Screw	4
9027	M3 x 3mm Grub Screw	8
9028	M3 x 8mm Grub Screw	1

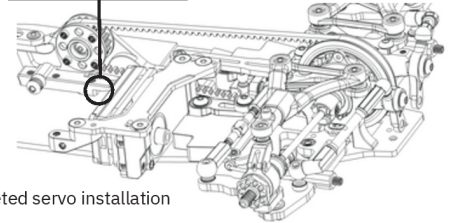
### STEP 6.17



9023 Screws are located in Bag I

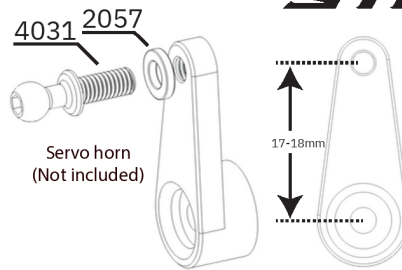
1. Loosen circled screw a few turns to allow steering rack to raise
2. Whilst pushing on 9023 screw to raise rack, slide servo mount assembly into position and locate servo mount pins into chassis
3. Install 9023 screws (found in Bag I) into servo mount to fix servo assembly to chassis
4. Re-tighten 9023 screw into steering rack Feed servo wire underneath motor-mount as depicted below

ROUTE SERVO WIRE HERE



Completed servo installation

### STEP 6.18

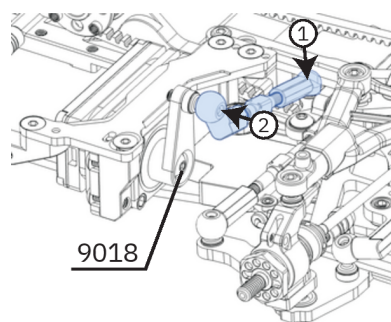


Servo horn (Not included)

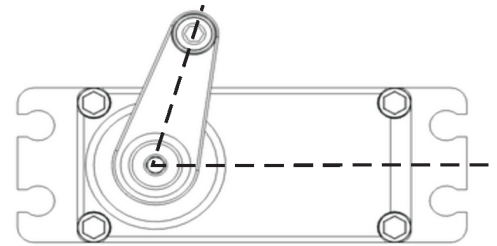
17-18mm

1. Select your own servo horn (we suggest 17-18mm height)
2. Screw 4031 Ball stud into servo horn with 2057 Shim (Located in Bag I) behind Tighten 4031 tightly or use thread lock to prevent loosening
- 3.

### STEP 6.19



9018



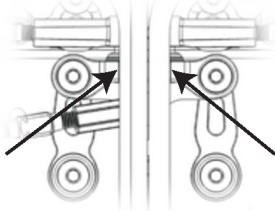
Initial central steering servo horn position

1. Attach previously assembled steering turnbuckle to steering bellcrank
2. Attach recently assembled servo horn to steering turnbuckle ball cup
3. Ensure servo is powered on and trim and sub trim are at zero
4. Attach servo horn in position that most centralises the steering rack as closely as possible
5. Tighten servo horn onto servo firmly with 9018 screw

## STEERING SETUP

These steps can be completed after the car is finished with electronics installed.

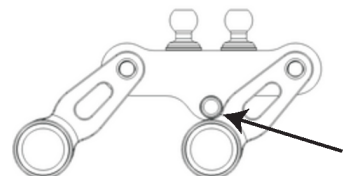
### STEP 1 - CENTRALIZING STEERING RACK



With steering and sub trim at 0, use the sub-trim function on the transmitter to centralise the steering rack. This can be done by eyeing the steering rack from above and aligning the rack against the topdeck.

### STEP 2 - SETTING END POINTS

The steering lock is limited by the stopper on the steering bellcrank. With your steering dual rate on 100%, navigate to the steering EPA section on your transmitter. Adjust the end points for both left and right until the stopper just touches, and back it off very slightly until you have a very minimal amount of play in the wheel whilst at full steering lock.

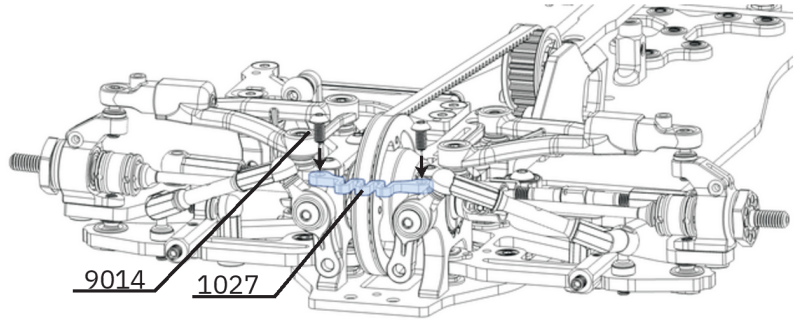


# STEP 7 - BATTERY MOUNTS, BUMPER & FLEX BRACE

## BAG G PARTS LIST

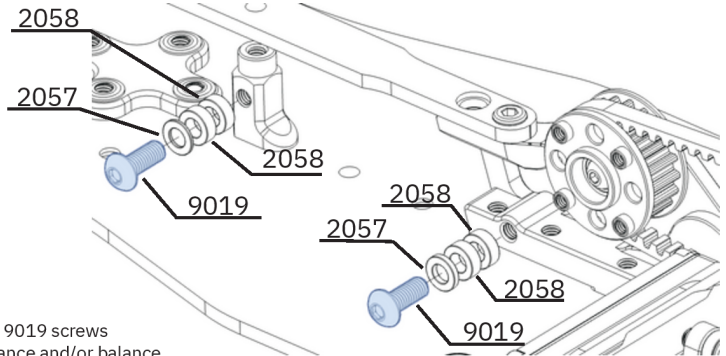
SKU	Description	QTY
1018	Front Bumper Mount	1
1023	Battery Holder Spacer	1
1025	Battery Swivel Hold Down	2
1027	Medium Front Bulkhead Flex Brace	1
1030	Lower Bumper Mount Brace	1
1037	Battery Holder - Rear	1
1041	Weight Spacers	2
2022	Battery Post	1
2040	Rear Body Mount Spacer	2
2056	3x5.5x0.5mm Shim	2
2057	3x5.5x1.0mm Shim	5
2058	3x5.5x2.0mm Shim	5
2062	M3 Threaded Insert	5
3013	Front Body Posts	2
3014	Rear Body Posts	2
3022	Front Lower Bumper Mount	1
3023	Rear Bumper	1
5022-F	Front Bumper Weights (10g)	4
7018	3D Pro Honeycomb Front Bumper	1
9018	M3 x 6mm Button Head	2
9019	M3 x 8mm Button Head	5
9020	M3 x 10mm Button Head	6
9022	M3 x 16mm Button Head	2
9024	M3 x 6mm Flat Head	1
9025	M3 x 8mm Flat Head	2

## STEP 7.1



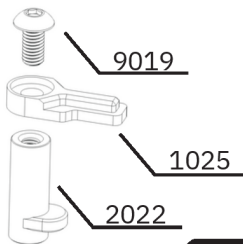
1. Attach 1027 flex brace onto bulkheads with left over 9014 screws from Bag D
2. Tighten 9014 screws left over from Bag D whilst holding 1027 to ensure it doesn't twist

## STEP 7.2



1. Attach 2057 and 2058 shims with 9019 screws
2. Adjust as necessary for spur clearance and/or balance

## STEP 7.3

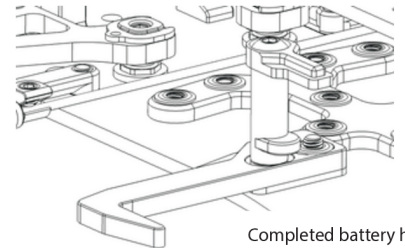
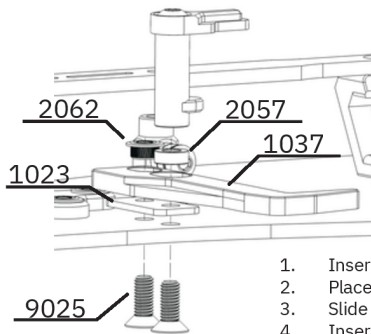


**MAKE 1**

Initial Height (no shims) = 18mm

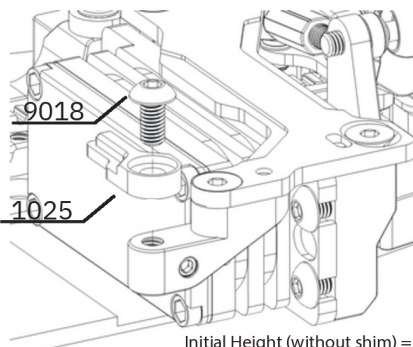
1. Attach 1025 to 2022 with 9019 Screw
2. Add shims between 1025 and 2022 to adjust height for different batteries

## STEP 7.4



1. Insert 9025 screws through chassis
2. Place 1023 spacer on first, with angle facing rear outside
3. Slide 1037 battery hook over screws, insert 2062 nut and tighten loosely
4. Insert battery post with 2057 underneath and tighten with outer 9025 screw
5. Adjust battery holders as necessary as per instructions below

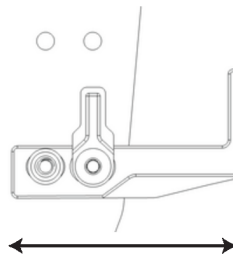
## STEP 7.5



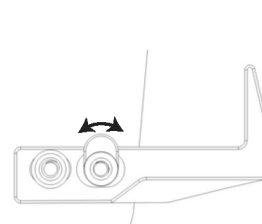
1. Attach 1025 with 9018 screw
2. Insert shim underneath and adjust to battery height as necessary

## BATTERY ADJUSTMENT

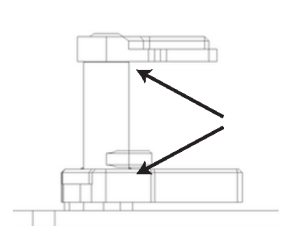
Width adjustment



Length adjustment



Height adjustment



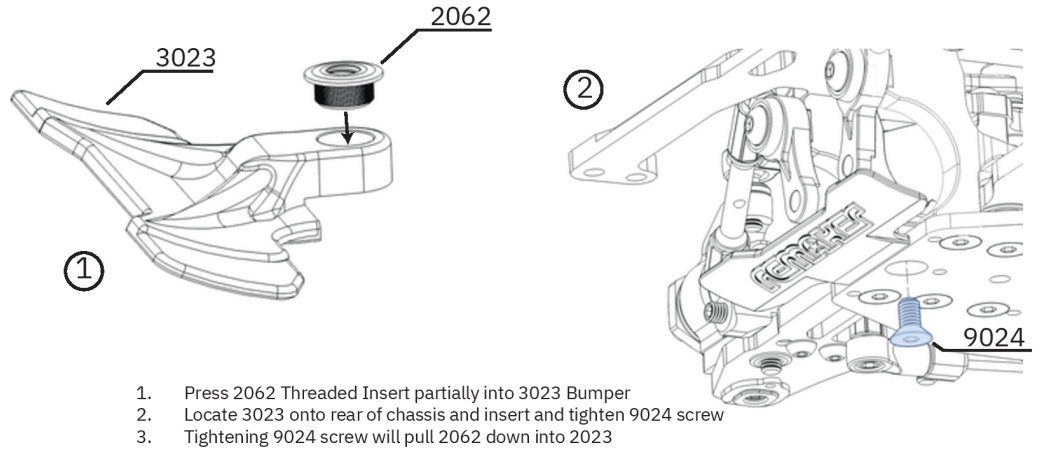


# STEP 7 - BATTERY MOUNTS, BUMPER & FLEX BRACE

## BAG G PARTS LIST

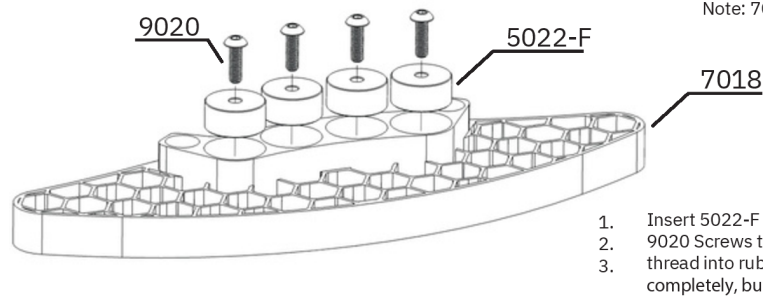
SKU	Description	QTY
1018	Front Bumper Mount	1
1023	Battery Holder Spacer	1
1025	Battery Swivel Hold Down	2
1027	Medium Front Bulkhead Flex Brace	1
1030	Lower Bumper Mount Brace	1
1037	Battery Holder - Rear	1
1041	Weight Spacers	2
2022	Battery Post	1
2040	Rear Body Mount Spacer	2
2056	3x5.5x0.5mm Shim	2
2057	3x5.5x1.0mm Shim	5
2058	3x5.5x2.0mm Shim	5
2062	M3 Threaded Insert	5
3013	Front Body Posts	2
3014	Rear Body Posts	2
3022	Front Lower Bumper Mount	1
3023	Rear Bumper	1
5022-F	Front Bumper Weights (10g)	4
7018	3D Pro Honeycomb Front Bumper	1
9018	M3 x 6mm Button Head	2
9019	M3 x 8mm Button Head	5
9020	M3 x 10mm Button Head	6
9022	M3 x 16mm Button Head	2
9024	M3 x 6mm Flat Head	1
9025	M3 x 8mm Flat Head	2

## STEP 7.6



1. Press 2062 Threaded Insert partially into 3023 Bumper
2. Locate 3023 onto rear of chassis and insert and tighten 9024 screw
3. Tightening 9024 screw will pull 2062 down into 2023

## STEP 7.7



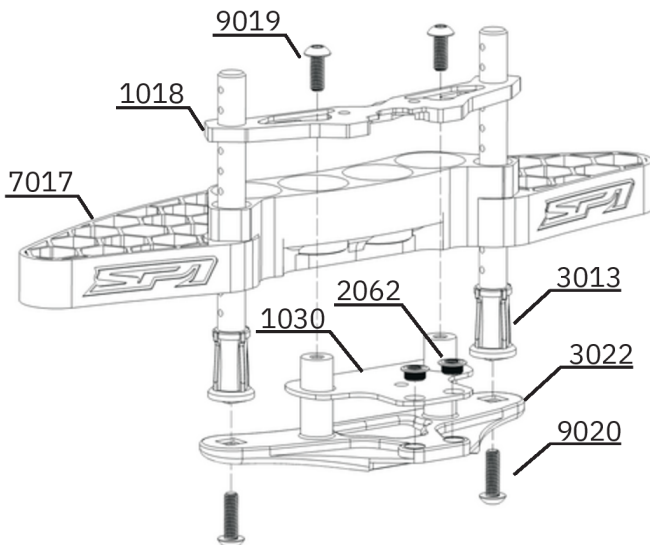
Note: 7018 is located in main kit box, not inside Bag G!

1. Insert 5022-F Weights into 7018 Bumper Use 9020 Screws to fix weights into bumper Screws thread into rubber, they won't tighten completely, but enough to hold weights in place
- 2.
- 3.

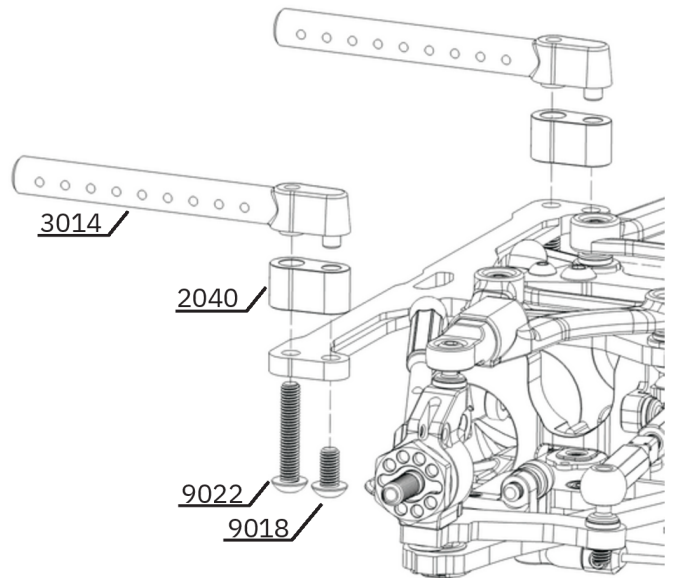
## STEP 7.8

1. Align and tighten 2040 onto rear body mount with 9024 screw. Ensure M3 thread is facing downwards!
2. Insert 9022 Screw through Rear Body Mount and 2040 and tighten 3014 Body Post down onto 2040
3. The body height is adjustable by placing 3x5.5mm shims underneath 2040

## STEP 7.9



1. Attach 3013 body posts into 3022 bumper with 9020 screws with pin holes parallel to bumper
2. Slide 1030 plate onto 3022 and press 2062 inserts in firmly (don't worry if they don't go all the way)
3. Slide 7017 Honeycomb bumper down on to 3022 all the way
4. Locate 1018 onto body posts and slide all the way down
5. Insert 9019 screws into 3mm holes in 1018 and tighten to pull the assembly together
6. Put the front bumper to the side, we will attach in a later step after the shocks are attached

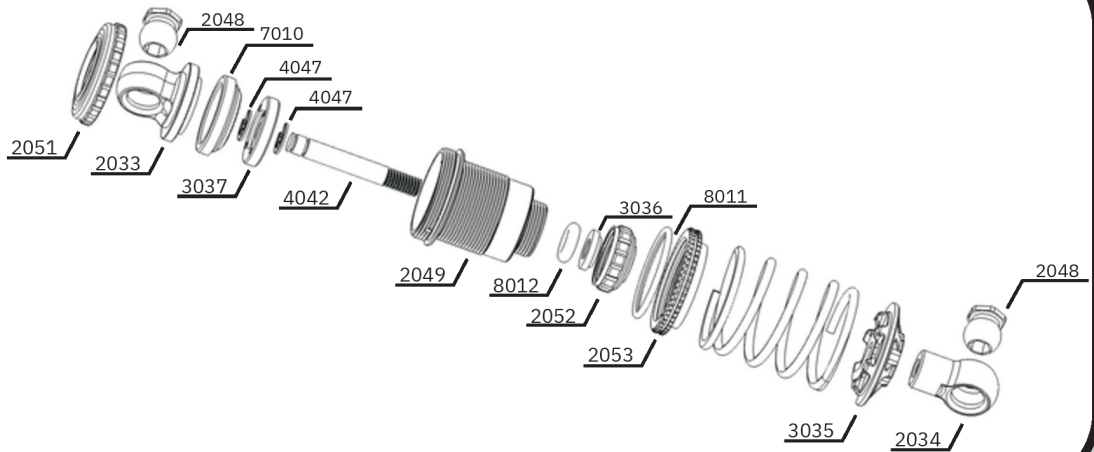


# STEP B - SHOCKS

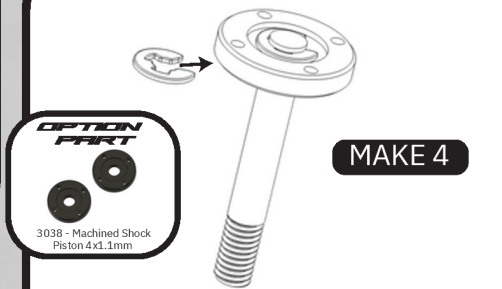
## BAG H PARTS LIST

SKU	Description	QTY
2048	5.8mm Shock Ball	8
2049	Linear Shock Body	4
2051	Shock Top Cap	4
2052	Shock Bottom Cap	4
2053	Shock Collar	4
3033	Shock Upper Ball Cup	4
3034	Shock Lower Ball Cup	4
3035	Shock Spring Retainer	4
3036	Shock Guide	4
3037	Shock Piston 4x1.1mm	4
4042	Shock Shaft	4
4047	M3 e-Clip	10
7010	Soft Shock Bladder	4
8011	Shock Collar O-Ring	4
8012	Shock Bottom O-Ring	4
11002	Shock Spring Linear - C2.2	2
11006	Shock Spring Linear - C2.6	2

## EXPLODED VIEW



### STEP B.1



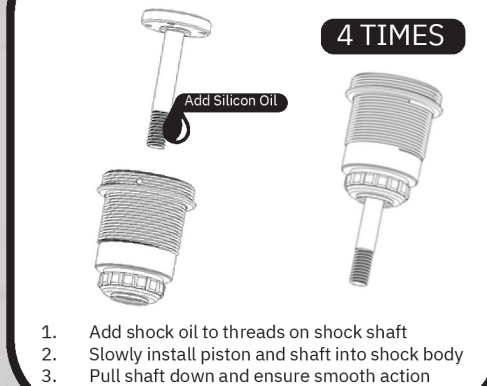
1. Install upper 4047 M3 e-clip
2. Slide 3037 piston on from threaded end (recess up)
3. Install lower M3 e-clip

### STEP B.2



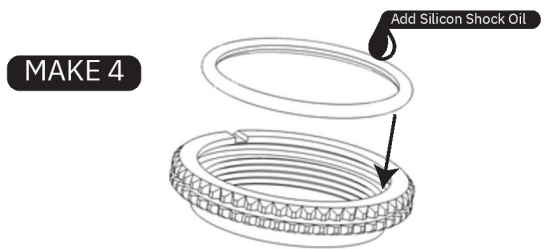
1. Oil 8012 O-Ring with desired shock oil
2. Install 3036 Guide and 8012 O-Ring into 2049 body
3. Thread 2052 Lower Shock Cap onto body and tighten

### STEP B.3



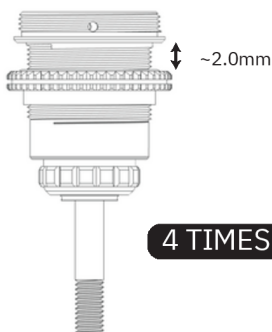
1. Add shock oil to threads on shock shaft
2. Slowly install piston and shaft into shock body
3. Pull shaft down and ensure smooth action

### STEP B.4



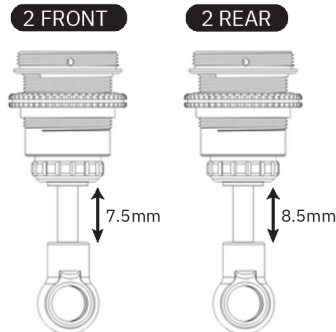
1. Add silicon shock oil to 8011 O-Rings
2. Install 8011 O-Ring into slot in 2053 collar

### STEP B.5



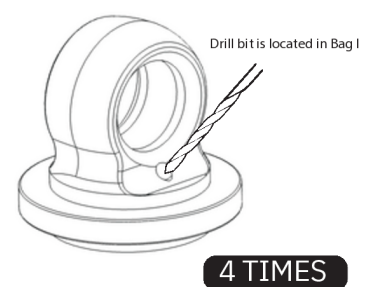
1. Thread shock collar onto shock body
2. Tighten until roughly 2mm from body ridge

### STEP B.6



1. Thread 2034 Shock ends onto shock shaft
2. Use shock shaft pliers to avoid shaft damage
3. Make 2 Front and 2 Rear at 7.5mm and 8.5mm

### STEP B.7



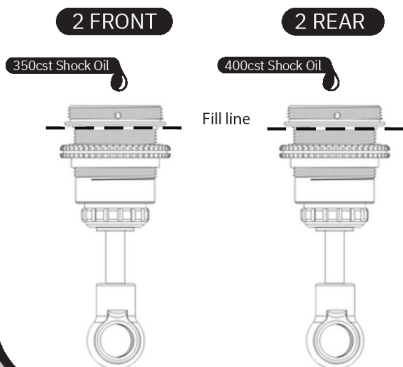
1. Use included 1mm drill bit to drill through dimple
2. Drill on roughly same angle as above
3. Ensure hole is clear of swarf

# STEP B - SHOCKS

## BAG H PARTS LIST

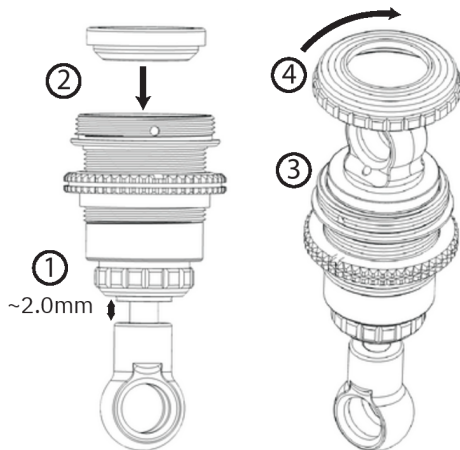
SKU	Description	QTY
2048	5.8mm Shock Ball	8
2049	Linear Shock Body	4
2051	Shock Top Cap	4
2052	Shock Bottom Cap	4
2053	Shock Collar	4
3033	Shock Upper Ball Cup	4
3034	Shock Lower Ball Cup	4
3035	Shock Spring Retainer	4
3036	Shock Guide	4
3037	Shock Piston 4x1.1mm	4
4042	Shock Shaft	4
4047	M3 e-Clip	10
7010	Soft Shock Bladder	4
8011	Shock Collar O-Ring	4
8012	Shock Bottom O-Ring	4
11002	Shock Spring Linear - C2.2	2
11006	Shock Spring Linear - C2.6	2

## STEP B.8



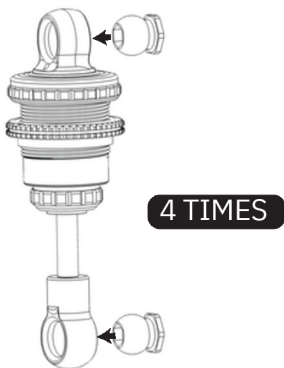
1. Using a shock stand or vacuum pump, fill shocks up with 350cst front and 400cst rear oil until just under body ridge
2. Pump piston up and down several times until air is visible in the body, and pull shaft all the way down
3. Set shocks aside or use vacuum pump to remove air

## STEP B.9



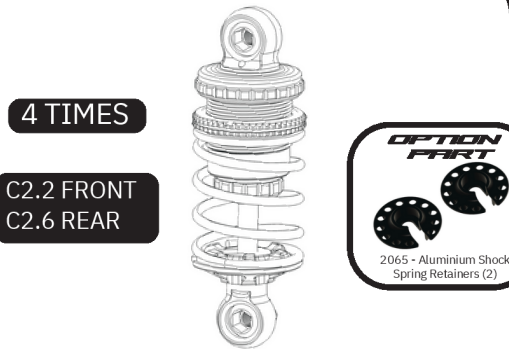
1. Push shaft up until 2mm from fully compressed
2. Install and push 7010 bladder down fully into the shock body
3. Install 3033 upper ball cup into bladder and push down lightly
4. Thread on 2051 top cap slowly and tighten while keeping shaft up
5. Ensure smooth feeling without air bubbles
6. If air bubbles are present, refill and repeat bleeding process

## STEP B.10



1. Using suitable pliers, install 5.8mm balls into cups
2. Ensure the balls are popped in on the shiny side of the cup on both top and bottom

## STEP B.11



1. Install correct spring onto front or rear shock
2. Clip 3035 Spring retainer into place

## SPI LINEAR SPRING CHART

FRONT	SOFT
Shock Spring Linear - C2.1	
Shock Spring Linear - C2.2	
Shock Spring Linear - C2.3	
Shock Spring Linear - C2.4	
Shock Spring Linear - C2.5	
Shock Spring Linear - C2.6	
Shock Spring Linear - C2.7	
Shock Spring Linear - C2.8	HARD

## SPI PROGRESSIVE SPRING CHART

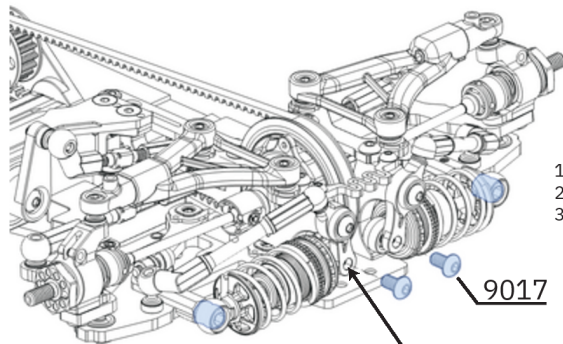
FRONT	SOFT
Shock Spring Progressive - C2.0-2.3	
Shock Spring Progressive - C2.2-2.5	
Shock Spring Progressive - C2.4-2.7	
Shock Spring Progressive - C2.6-2.9	HARD

# STEP 9 - FINAL ATTACHMENTS

## BAG 1 PARTS LIST

SKU	Description	QTY
2043-F	Motor Mount Adapter	1
9013	M2.5 x 4mm Button Head	4
9018	M3 x 6mm Button Head	6
9024	M3 x 6mm Flat Head	2
9025	M3 x 8mm Flat Head	2
13001	1mm Drill Bit	1
13002	Diff/Axle Multi Tool	1

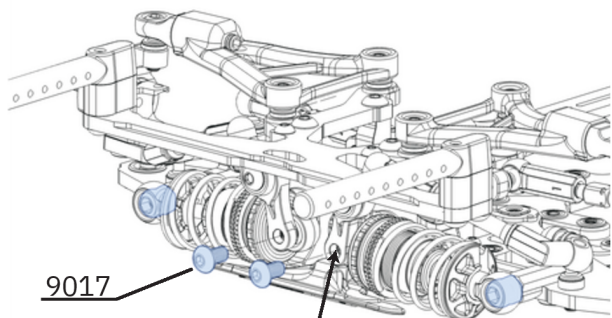
## STEP 9.1



1. Attach front shock assemblies to front rockers and arms
2. Use 9017 screws to attach shock top to rockers
3. Use 3mm hex driver to attach shock bottom to arm

Shock ball keys into rocker arm to prevent ball spinning when tightening

## STEP 9.2

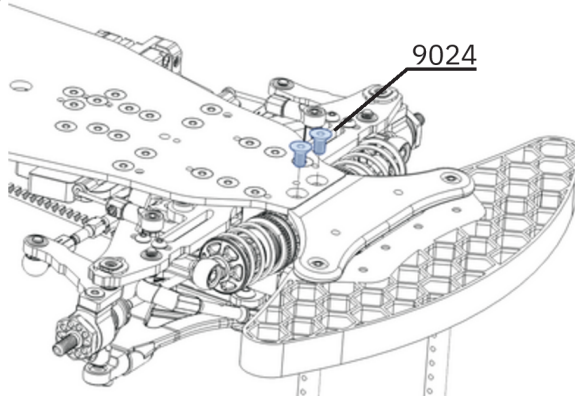


9017

Shock ball keys into rocker arm to prevent ball spinning when tightening

1. Attach rear shock assemblies to rear rockers and arms
2. Use 9017 screws to attach shock top to rockers
3. Use 3mm hex driver to attach shock bottom to arm

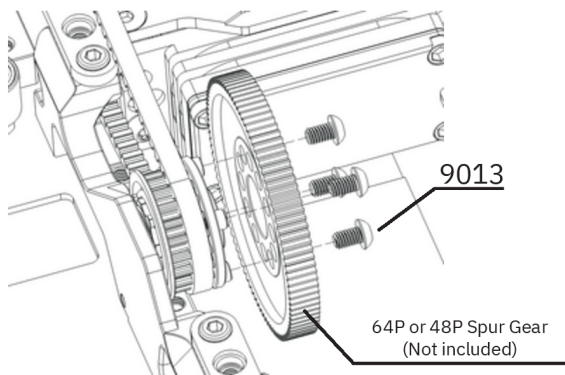
## STEP 9.3



9024

1. Attach front bumper by screwing 9024 screws into bumper

## STEP 9.4

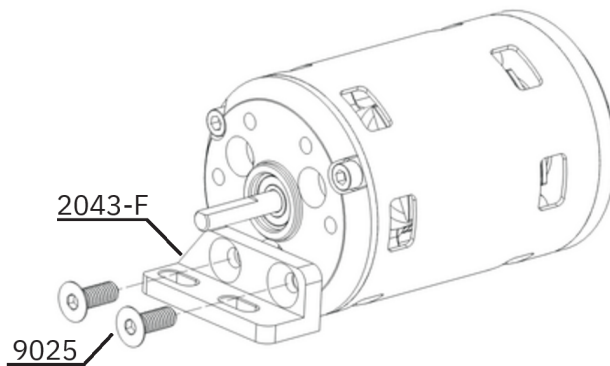


9013

64P or 48P Spur Gear (Not included)

1. Attach spur gear (not included) to layshaft with 4x 9013 screws

## STEP 9.5

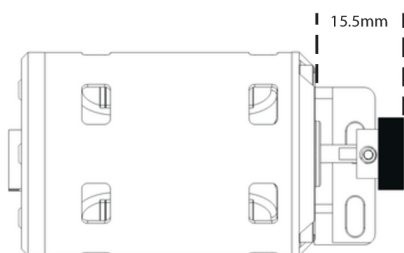


2043-F

9025

1. Attach motor (not included) to 2043-F Motor mount adapter with 9025 screws
2. Ensure motor tabs are facing your intended direction

## STEP 9.6

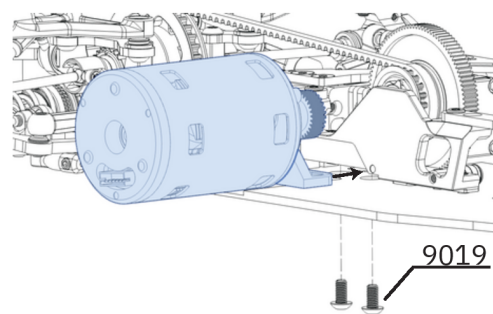


15.5mm

Internal Ratio =  $38/20 = 1.9$

1. Attach pinion gear (not included) to motor with a gap of 15.5mm as above
2. Slide under motormount to quickly check alignment with spur gear and adjust as necessary for perfect alignment with spur gear

## STEP 9.7

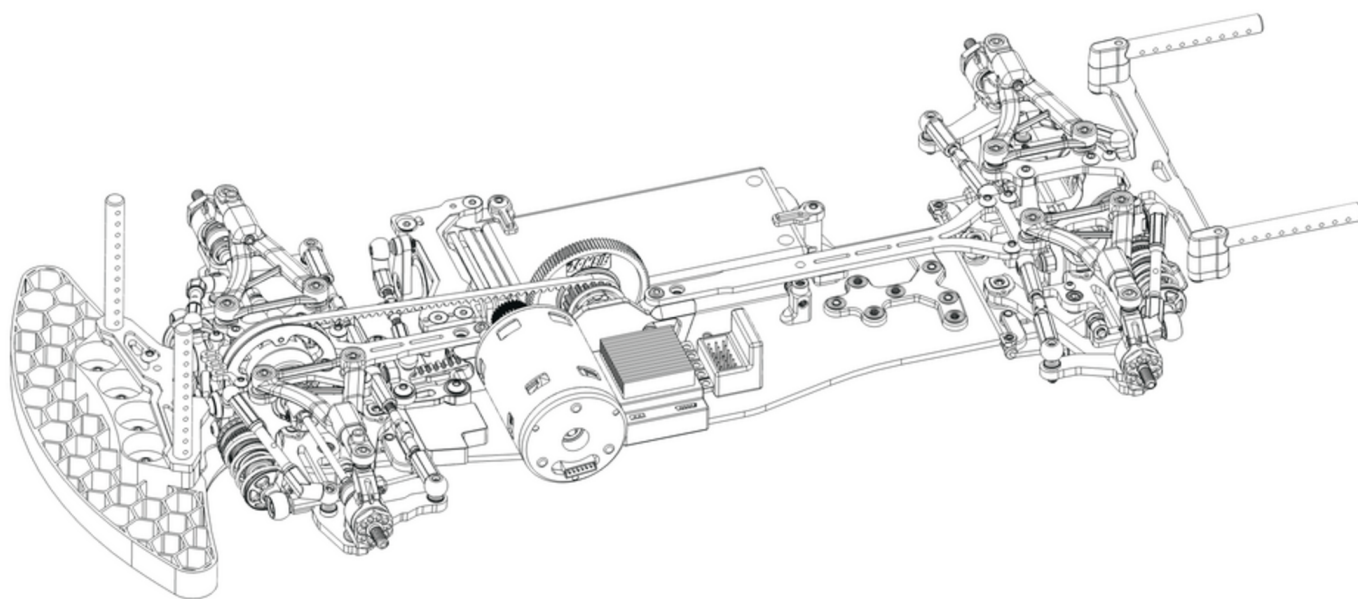
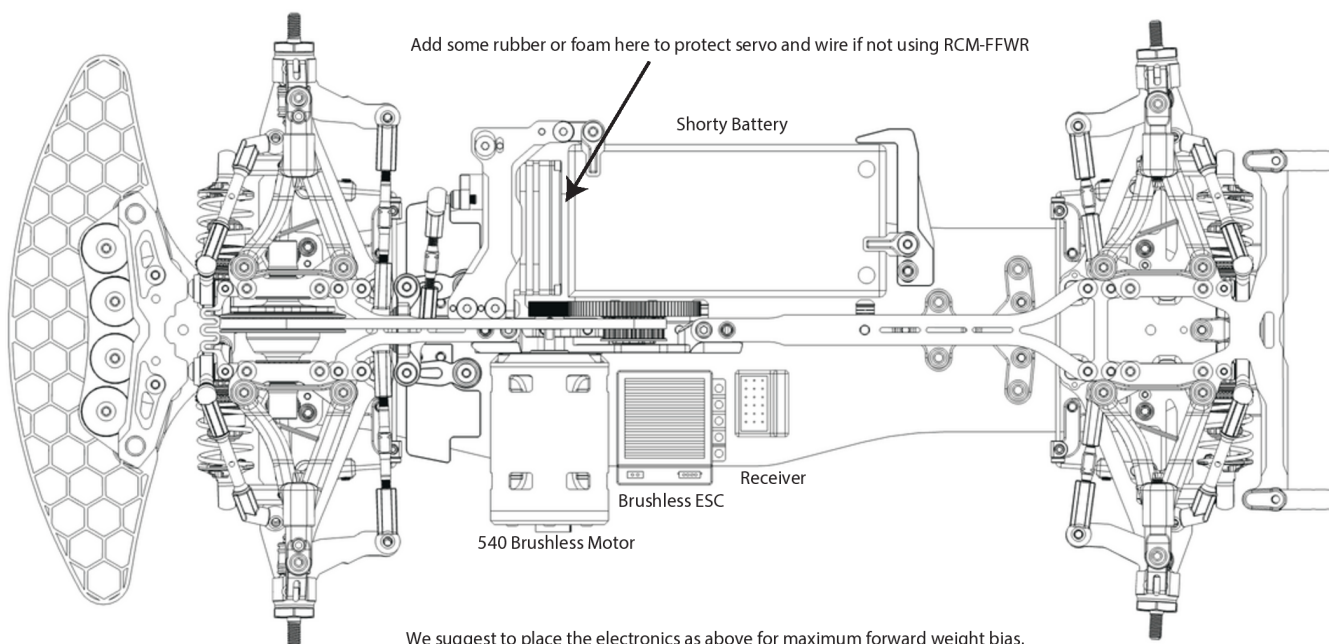


9019

1. Slide motor into position under motormount and align slots with holes
2. Ensure servo wire is as far back as possible and not being impacted
3. Insert 9019 screws from underneath to without tightening fully
4. Slide motor forwards/backwards to set gear mesh and tighten screws

# STEP 9 - FINAL ATTACHMENTS

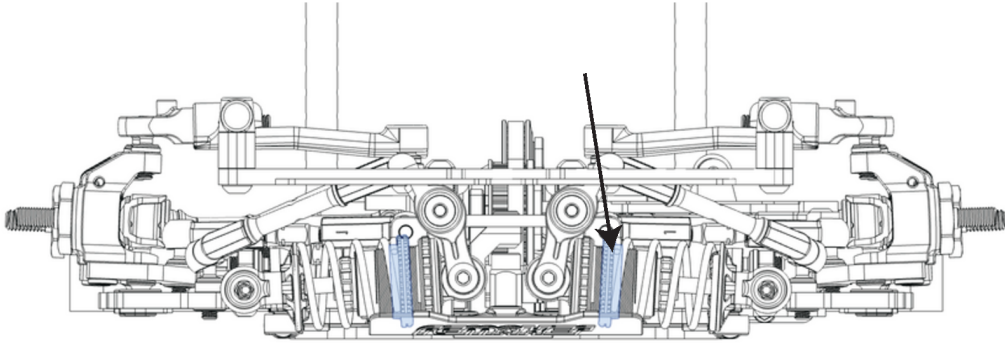
## ELECTRONICS PLACEMENT



**WE HOPE YOU ENJOYED THE BUILD  
OF YOUR BRAND NEW SPI-F!**

# ADJUSTMENT INFORMATION

## RIDE HEIGHT



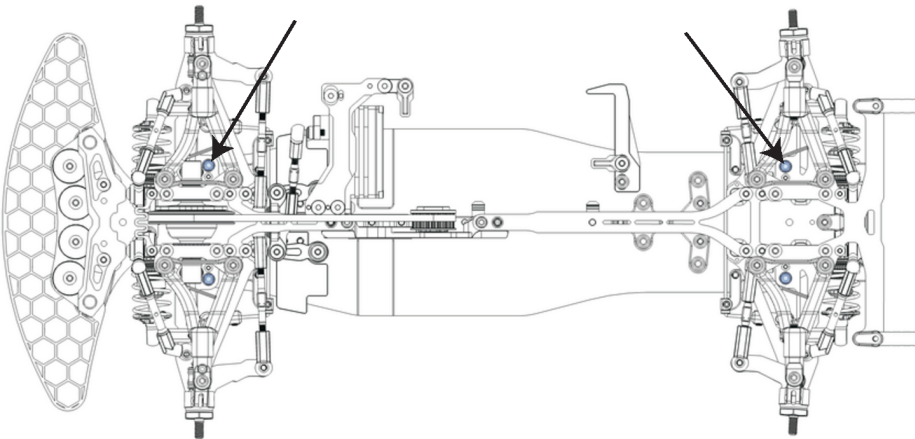
Ride height is adjusted with the shock collars. Screwing the collar down increases the ride height, screwing the collar up reduces the ride height.

Because the shocks are laid down, they need to be adjusted opposite directions to have the same result.

Eg. To increase ride height, the right shock collar needs to be screwed towards you, while the left needs to be screwed away from you.

Whilst confusing at first, this quickly becomes second nature!

## DROOP

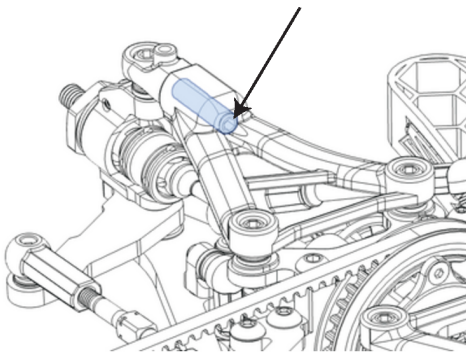


Droop adjustment is done via the top of the car. Simply use a 2mm hex driver down into the droop screw.

Unscrew = more droop  
Screw = less droop

Droop is measured from underneath the most outer part of the suspension arm, or off the axle. Both methods require 10mm blocks under the chassis.

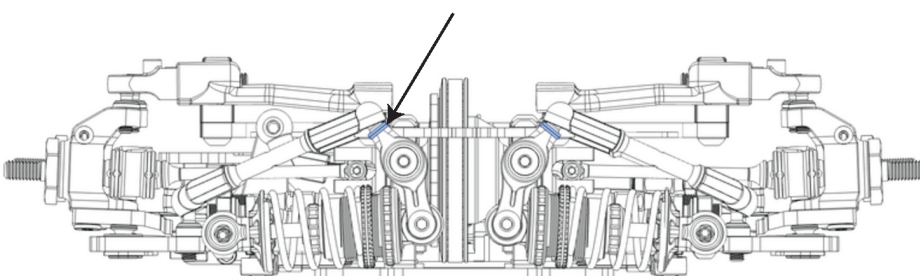
## CAMBER



Camber is adjusted simply with a 2mm ball driver or 2mm allen key.

Unscrew = less camber  
Screw = more camber

## SHOCK RATE



Shock rates can be finely adjusted by adding or removing shims under the top rocker arm link. This adjusts the amount of leverage the arm has over the shock, thus changing both the dampening and spring rate at the same time. This could be equated to laying over or standing up a shock on a conventional touring car.

More shims = more leverage = softer

Less shims = less leverage = harder

DRIVER	DATE	BEST LAP	LAYOUT
TRACK	CLASS	BEST RUN	LAPS
EVENT	RESULT Q	F	SURFACE
			TRACTION

### TRANSMISSION

FRONT DIFF OIL  cst

SPUR PINION FDR

### SHOCKS

FRONT	REAR
SPRING	
cst <input type="checkbox"/> wt <input type="checkbox"/>	cst <input type="checkbox"/> wt <input type="checkbox"/>
OIL	
<input type="checkbox"/> MACHINED	<input type="checkbox"/> MACHINED
HOLE IN CAP <input type="checkbox"/>	HOLE IN CAP <input type="checkbox"/>
mm REBOUND	mm
<input type="checkbox"/> PROGRESSIVE	<input type="checkbox"/> PROGRESSIVE
LINEAR BODY	LINEAR
mm LENGTH	mm

### TIRES

FRONT TIRES

REAR TIRES

ADDITIVE

ADDITIVE TIME Fr min/Rr min

WARMER TIME Fr min/Rr min

WARMER TEMP Fr deg/Rr deg

### BODY

TYPE

WEIGHT

WING

POSITION WINDSCREEN TO FRONT POST HOLE mm HEIGHT GROUND TO TOP OF REAR WING mm

### ELECTRONICS

SERVO

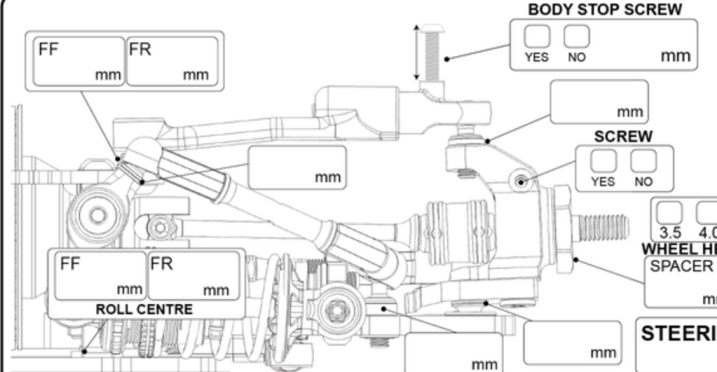
ESC

MOTOR

BATTERY

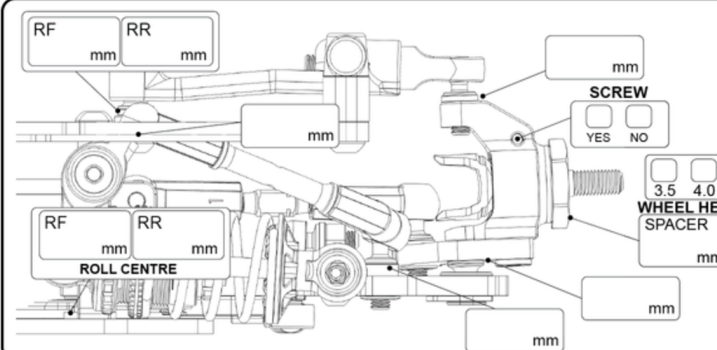
### NOTES

### FRONT



CAMBER	deg
TOE OUT	deg
RIDE HEIGHT	mm
DROOP	mm
ARM <input type="checkbox"/> AXLE <input type="checkbox"/>	
DIFF HEIGHT	HIGH <input type="checkbox"/> LOW <input type="checkbox"/>
ANTI-ROLL BAR	mm
STEERING ANGLE	IN OUT

### REAR



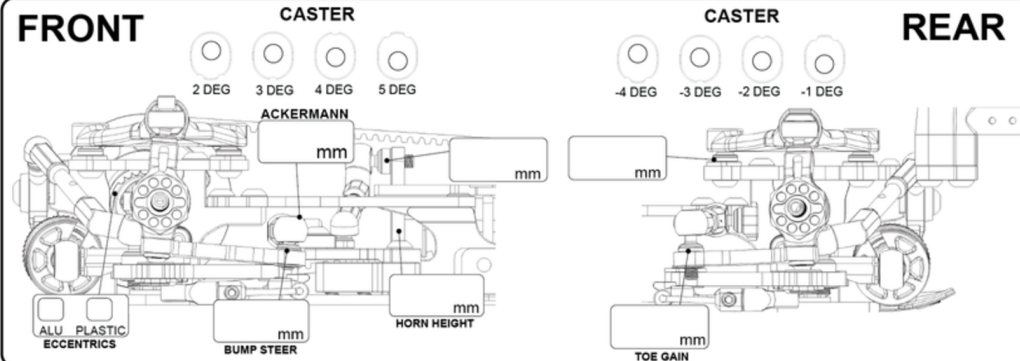
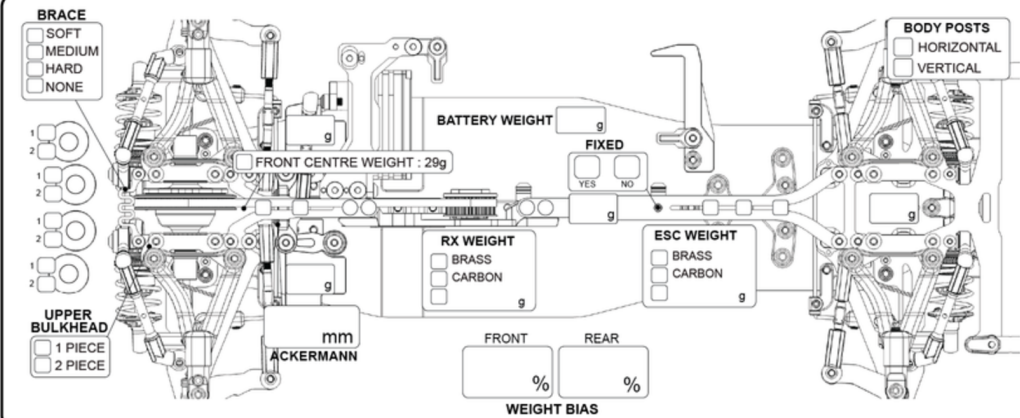
CAMBER	deg
TOE IN	deg
RIDE HEIGHT	mm
DROOP	mm
ARM <input type="checkbox"/> AXLE <input type="checkbox"/>	
DIFF HEIGHT	HIGH <input type="checkbox"/> LOW <input type="checkbox"/>
ANTI-ROLL BAR	mm

### FRONT CASTER

2 DEG 3 DEG 4 DEG 5 DEG

### REAR CASTER

-4 DEG -3 DEG -2 DEG -1 DEG

FRONT	REAR	TOPDECK	CHASSIS
MOTORMOUNT		STD CARBON (2.2mm)	STD CARBON (2.2mm)
SPUR		OTHER	HARD CARBON (2.2mm)
			OTHER

# PARTS LIST

## Carbon Fiber

SKU	Description	QTY SPARES	QTY SP1 KIT	QTY SP1-F KIT
1010	2.2mm Standard Carbon Chassis	1	1 (CF Kit)	-
1011	Front Suspension Arm	1	2	-
1012	Rear Suspension Arm	1	2	2
1013	Front Steering Knuckles (w/Inserts)	2	2	-
1014	Rear Steering Knuckles (w/Inserts)	2	2	2
1015	Split Front Upper Bulkheads (L & R)	2	2	1
1017	Upper Bulkhead/Body Mount Rear	1	1	1
1018	Front Bumper Mount	1	1	1
1019	2.2mm Carbon Topdeck - Front	1	1	-
1020	2.2mm Carbon Topdeck - Rear	1	1	-
1021	Suspension Arm Clips	10	12	12
1022	Floating Servo Brace	1	1	-
1023	Battery Holder Spacer	2	2	1
1024	Battery Holder (1F & 1R)	2	2	-
1025	Battery Swivel Hold Down	2	2	2
1027	Medium Front Bulkhead Flex Brace	1	1	1
1029	0.5mm x 7.5mm Carbon Weight Shim	5	2	-
1030	Lower Bumper Mount Brace	1	1	1
1031	1-Piece 2.2mm Front Upper Bulkhead	1	1	1
1033	2.2mm Standard Weave CF Chassis	1	-	1
1034	Floating Servo Brace	1	-	1
1035	2.2mm Carbon Topdeck - Front	1	-	1
1036	2.2mm Carbon Topdeck - Rear	1	-	1
1037	Battery Holder - Rear	1	-	1
1038	Carbon Rear Chassis T Brace	1	-	1
1040	Front Suspension Arm	1	-	2
1041	Weight Spacer Set	2	-	1
1042	Front Steering Knuckles (w/Inserts)	2	-	2

## Aluminium

2010	Motor Mount	1	1	-
2010-F	Motor Mount - SP1-F	1	-	1
2011	Rear Left Bulkhead	1	1	1
2012	Rear Right Bulkhead	1	1	1
2013	Front Bulkhead	1	2	2
2014	Outer Wheel Hub	2	4	4
2015	Rocker Arm FL/RR	1	2	2
2016	Rocker Arm FR/RL	1	2	2
2017	Outer Shock Attachment FR/RL	1	4	4
2019	Steering Rack	1	1	1
2020	Steering Rack Arm	1	2	2
2021	Steering Rack Post	1	2	2



SKU	Description	QTY SPARES	QTY SP1 KIT	QTY SP1-F KIT
2022	Battery Posts	2	2	1
2023	Turnbuckles - Rockers	2	4	4
2024	Turnbuckles - Steering	2	2	2
2025	Turnbuckles - Rear Steering	2	3	3
2026	Spool Housing	1	1	-
2027	4.3mm x 8.5mm Ballstud	2	4	4
2028	4.3mm x 11.8mm Ballstud	2	4	4
2029	Floating Servo Mount Inner	1	1	-
2029-F	Floating Servo Mount Inner - SP1-F	1	-	1
2030	Floating Servo Mount Outer	1	1	1
2031	Centre Layshaft Pulley Housing	1	1	1
2032	Anti-Roll Bar Holder FL/RR	1	2	2
2033	Anti-Roll Bar Holder FR/RL	1	2	2
2034	4.0mm Wheel Hex	2	4	4
2035	Upper Bulkhead Inserts - 1 Dot	4	8	8
2040	Rear Body Mount Spacer	2	2	2
2042	2.0mm Aluminium Chassis	1	1 (Alu Kit)	-
2043-F	Motor Mount Adapter	1	-	1
2044-F	Servo Mount Battery Holder Bracket	1	-	1
2045-F	Rear Battery Stopper and Topdeck Post Mount	1	-	1
2046	Anti Roll Bar Adapter	2	4	4
2048	5.8mm Shock Ball	4	8	8
2049	Shock Body	2	4	4
2051	Shock Top Cap	1	4	4
2052	Shock Bottom Cap	1	4	4
2053	Shock Collar	1	4	4
2054	Diff Housing 1	1	1	1
2055	Diff Housing 2	1	1	1
2056	3x5.5x0.5mm Shim	10	10	10
2057	3x5.5x1.0mm Shim	10	20	20
2058	3x5.5x2.0mm Shim	10	10	10
2059	3x8x0.5mm Shim	10	4	4
2060	3x8x1mm Shim	10	8	8
2062	M3 Threaded Insert	10	13	12
2063	3x4.4x0.5mm Rocker Shim	10	4	4

## Plastic

3008	Anti-Roll Bar Ball Cup Open	2	4	4
3009	Anti-Roll Bar Ball Cup Closed	2	4	4
3010	Droop Screw Inserts	4	4	4
3011	4.3 x 13mm Ball Cup	2	5	5
3012	4.3 x 16mm Ball Cup	10	8	8
3013	Front Body Posts	2	2	2
3014	Rear Body Posts	2	2	2
3017	Upper Arm FL/RR SP1, FR/RR SP1-F	1	2	2

SKU	Description	QTY SPARES	QTY SP1 KIT	QTY SP1-F KIT
3018	Upper Arm FR/RL SP1, FL/RL SP1-F	1	2	2
3019	Diff/Spool Eccentric	4	4	2
3020	Upper Arm Ball Cup Front	2	2	2
3021	Upper Arm Ball Cup Rear	2	2	2
3022	Front Lower Bumper Mount	1	1	1
3023	Rear Bumper	1	1	1
3024-1	Offset Ballcup 1 (SP1 Servo, FL & RR)	2	3	2
3024-2	Offset Ballcup 2 (SP1-F Servo, FR & RL)	2	2	3
3025	Centre Pulley	1	1	1
3026	Lower Arm Ball Cup	10	12	12
3028	38 Tooth Spool/Diff Pulley Set	1	2	1
3030	Internal Diff Gear Large	2	2	2
3031	Internal Diff Gear Small	4	4	4
3032	Diff Cross Pin	1	1	1
3033	Shock Upper Ball Cup	2	4	4
3034	Shock Lower Ball Cup	2	4	4
3035	Shock Retainer	2	4	4
3036	Shock Guide	4	4	4
3037	Shock Piston 4 Holes 1.1mm	2	4	4

## Steel

4010	Front Driveshaft	1	2	2
4011	Rear Driveshaft	1	2	-
4012	Front Axle	1	2	2
4013	Rear Axle	1	2	2
4014	Front Driveshaft Coupling	2	2	2
4015	Front Driveshaft Stud Rear	2	4	4
4016	Driveshaft Stud 1.6 x 9mm	2	2	-
4017	Front Driveshaft Pin	4	4	4
4018	2.0mm Rear Driveshaft Pin	2	2	-
4019	Front Driveshaft Spring Clip	4	4	4
4020	Inner Driveshaft Coupler	1	4	2
4021	1.6 x 6mm Inner Driveshaft Coupler/Diff Outdrive Pin	4	6	6
4022	Anti-Roll Bar (1.0mm)	1	1	1
4023	Anti-Roll Bar (1.1mm)	1	1	1
4024	Anti-Roll Bar (1.2mm)	1	1	1
4026	4.8mm Male Upper Hub Ball Stud	4	4	4
4027	5.0mm Male Lower Hub Ball Stud	4	4	4
4028	4.8mm Female Upper Suspension Ball	4	8	8
4029	5.0mm Female Lower Suspension Ball	4	8	8
4030	4.3 x 10.3mm mm Male Ball Stud	4	6	6
4031	4.3 x 13.8mm Male Ball Stud	4	6	6
4032	4.3 x 8.1mm Male Ball Stud	4	5	5
4033	M4 Upper Arm Adjuster Screw	2	4	4
4034	Spool Outdrive	2	2	-

SKU	Description	QTY SPARES	QTY SP1 KIT	QTY SP1-F KIT
4035	Diff Outdrive	2	2	2
4036	Diff Output Shaft	2	2	2
4037	Rocker Arm Sleeve	2	4	4
4038	Centre Tensioner Sleeve	1	2	-
4039	Diff Satellite Gear Shim	4	4	4
4040	Diff Main Gear Shim	2	2	2
4042	Shock Shaft	2	4	4
4043	Motormount Screw	2	2	2
4044	4x6x0.2mm Stainless Steel Shim	5	3	-
4045	4x6x0.5mm Stainless Steel Shim	5	2	-
4046	6x8x0.05mm Stainless Steel Shim	10	10	10
4047	3mm Shock Piston E-Clips	10	10	10
4048	1.2mm Driveshaft E-Clips	10	15	10
4049	5x7x0.1mm Stainless Steel Shim	2	2	2
4050	6x8x0.1mm Stainless Steel Shim	10	10	10

### Brass

5012	Front Centre Weight	1	1	-
5013	Rear Centre Weight	1	1	-
5020-F	Front Bulkhead Balance Weight L/R (32g)	2	-	2
5022-F	Front Bumper Weights (10g)	2	-	4

### Bearings

6010	6x10x3mm Metal Shield	4	13	11
6011	4x7x2.5mm Metal Shield	4	11	8
6012	4x8x3mm Metal Shield	2	1	1
6013	5x8x2.5mm Metal Shield	2	4	4
6015	1.5x4x2mm Metal Shield	4	8	4
6016	2x5x1.5mm Metal Shield	2	2	2

### Foam/Rubber

7010	Soft Shock Bladder	4	4	4
7011	Anti Roll Bar Stoppers	10	4	4
7012	Foam Bumper	1	1	-
7013	351 Kevlar Bando Drive Belt	1	2	-
7015	300 Kevlar Bando Drive Belt	1	-	1
7018	3D Pro Honeycomb Front Bumper	1	-	1
7019	3D Pro Bumper Spacers	2	2	-

### O-Rings/Washers

8010	Diff Outdrive Internal O-Ring	2	2	2
8011	Shock Collar O-Ring	2	4	4
8012	Shock Bottom O-Ring	4	4	4
8013	Main Diff O-Ring	2	1	1

SKU	Description	QTY SPARES	QTY SP1 KIT	QTY SP1-F KIT
8014	Diff Outdrive Pin Retainer O-Ring	2	2	2
8015	Layshaft Pulley O-Ring	2	1	1
8016	Wheel Hex Washer	10	4	4

### Screws

9010	M2 x 6mm Cap Head	5	4	4
9011	M2 x 5mm Button Head	10	8	4
9012	M2 x 8mm Flat Head	5	4	4
9013	M2.5 x 4mm Button Head	5	4	4
9014	M2.5 x 5mm Button Head	10	12	12
9015	M2.5 x 8mm Button Head	5	1	1
9016	M2.5 x 14mm Button Head	5	2	-
9017	M3 x 5mm Button Head	10	4	4
9018	M3 x 6mm Button Head	10	23	24
9019	M3 x 8mm Button Head	10	13	10
9020	M3 x 10mm Button Head	5	2	6
9021	M3 x 12mm Button Head	5	4	4
9022	M3 x 16mm Button Head	5	2	2
9023	M3 x 5mm Flat Head	5	5	10
9024	M3 x 6mm Flat Head	10	30	27
9025	M3 x 8mm Flat Head	10	2	6
9026	M3 x 10mm Flat Head	5	2	1
9027	M3 x 3mm Grub Screw	10	10	8
9028	M3 x 8mm Grub Screw	5	4	5
9029	M4 x 8mm Grub Screw	5	4	4
9030	M3x4mm Low Profile Button Head	5	4	4

### Spare Sets

10001	Complete Diff Set	1		
10002	Front Driveshaft Set	1		
10003	Rear Driveshaft Set	1		
10004	Shock Set	2		
10005	Progressive Shock Set	2		
10006	Floating ESC Plate Set - Brass	1		
10007	Floating ESC Plate Set - Carbon	1		
10008	Floating Electronics Plate Set - Brass	1		
10009	Floating Electronics Plate Set - Carbon	1		
10010	Floating Electronics Plate Set - Brass	1		
10011	Floating Electronics Plate Set - Carbon	1		
10012	Complete Driveline Bearing Set	1		
10013	Complete Driveline Bearing Set	1		
10014	Premium Ceramic/ABEC 7 Bearing Set (Option)	1		
10015	Premium Ceramic/ABEC 7 Bearing Set (Option)	1		

## Shock Springs

SKU	Description	QTY SPARES	QTY SP1 KIT	QTY SP1-F KIT
11001	Shock Spring Linear - C2.1	2	-	-
11002	Shock Spring Linear - C2.2 (Kit Front SP1-F)	2	-	2
11003	Shock Spring Linear - C2.3 (Kit Front SP1)	2	2	-
11004	Shock Spring Linear - C2.4	2	-	-
11005	Shock Spring Linear - C2.5	2	-	-
11006	Shock Spring Linear - C2.6 (Kit Rear SP1-F)	2	-	2
11007	Shock Spring Linear - C2.7 (Kit Rear SP1)	2	2	-
11008	Shock Spring Linear - C2.8	2	-	-
11009	Shock Spring Progressive - C2.0-2.3	2	-	-
11010	Shock Spring Progressive - C2.2-2.5	2	-	-
11011	Shock Spring Progressive - C2.4-2.7	2	-	-
11012	Shock Spring Progressive - C2.6-2.9	2	-	-

## Option Parts

1026	Soft Front Bulkhead Flex Brace	1		
1028	Hard Front Bulkhead Flex Brace	1		
1032	2.2mm Stiff Weave CF Chassis	1		
2034-1	3.5mm Wheel Hex	2		
2036	Upper Bulkhead Inserts - 2 Dot	4		
1039	2.2mm Stiff Weave CF Chassis	1		
2041	Crush Washer	2		
2050	Progressive Shock Body	2		
2061	3x8x1.5mm Shim	10		
2064	Aluminium Eccentrics	2		
2065	Aluminium Shock Retainer	2		
3038	Machined Shock Piston (4x1.1mm)	2		
3039	3D Pro Hood Support	1		
4025	Anti-Roll Bar (1.3mm)	1		
5010	Front Weight Set (1L & 1R)	2		
5011	Rear Weight Set (1L & 1R)	2		
5014	Full Size Battery Weight Set (1F & 1R)	2		
5016	Shorty Battery Weights Set (1F & 1R)	2		
5018	Floating Electronics Plate Bulkhead Floating	1		
5019	Electronics Plate Brass Plate Floating	1		
5019-C	Electronics Plate Carbon Plate Floating	1		
5019-F	Electronics Plate Brass Plate Floating	1		
5019-F-	Electronics Plate Carbon Plate Front Centre	1		
C 5021-F	Balance Weight (29g) w/Shim	1		
7014	351 Low Friction Bando Drive Belt	1		
7016	300 Low Friction Bando Drive Belt	1		
7017	3D Pro Honeycomb Front Bumper	1		