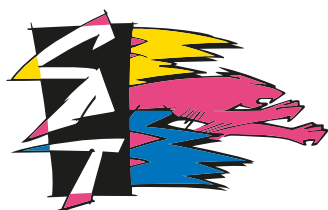


# Cougar 2

**WORKS** *Classic*



## Instruction Manual ISS01



[www.racing-cars.com](http://www.racing-cars.com)

**Schumacher**

71-73 Tenter Road  
Moulton Park  
Northampton  
NN3 6AX



## IMPORTANT SAFETY NOTES

- We strongly recommend that anyone driving RC cars, or organising events, should obtain third party liability insurance. In the UK this can be done by joining the BRCA. [www.brca.org](http://www.brca.org)
- This product is not suitable for children under the age of 14, without the direct supervision of a responsible adult.
- Select an area for assembly that is away from the reach of small children.
- The parts in this kit are small and can be swallowed by children causing choking and possible internal injuries.
- Exercise care when using hand tools and sharp instruments during assembly.
- Carefully read all manufacturers warnings and cautions for any additional items used in the construction.
- In line with our policy of continuous development the exact details of the kit may vary.
- DO NOT use this car on public roads or in places where it can interfere with traffic, people or animals.
- Always check the operation of the radio with the wheels off the ground, before using the car.
- Make sure the radio and car batteries are fully charged before use.
- Disconnect and remove the battery from the car when not in use.
- Always store and charge LiPo batteries in a fireproof container.
- DO NOT put fingers or any objects inside rotating or moving parts as this may cause injury.
- Make sure the charger is correctly set for the type of battery you are using.
- Incorrect charging may cause a fire.
- Insulate all exposed electrical wiring. Exposed or damaged wires can cause short circuits and fire.
- The motor and speed controller can become hot during use. DO NOT touch them immediately after using your car as this may cause injury.

## ADDITIONAL ITEMS REQUIRED



2S Shorty LiPo Battery



Motor and Pinion Gear



Battery Charger



Radio Equipment



Steering Servo



Tyre/CA Glue



Electronic Speed Controller



Polycarbonate Paint

## TOOLS REQUIRED

1.5mm Hex Driver - U2789

2.0mm Hex Driver - U2790

2.5mm Hex Driver - U2791

3.0mm Hex Driver - U2792

5.5mm M3 Nut Driver - U2795

7.0mm M4 Nut Driver - U2796

Body Reamer - U2818

Pliers - CR528

Side Cutters - CR527

Soldering Iron - CR275

Solder - U3107

Curved Scissors - CR044

Wiha PZ1 x80mm Screwdriver - HW011



## ICON KEYS



CORE RC High Performance Lithium Grease 10ml - CR752



CORE RC Medium Strength Thread Lock 3ml - CR520



CORE RC Molybdenum Thrust Race Grease - 10ml - Pot - CR755



CORE RC Low Strength Thread Lock 3ml - CR865



Caution/Important note. Please read.



Information. Please read.



Front Left of car.



Front Right of car.



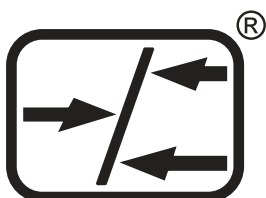
Rear Left of car.



Rear Right of car.



Additional information that will help you build a faster race car.



**racing-cars.com**

### BAG A - Step 01

**A x4**

1/8th 'E' Clip



**B x4**

M3 Washer



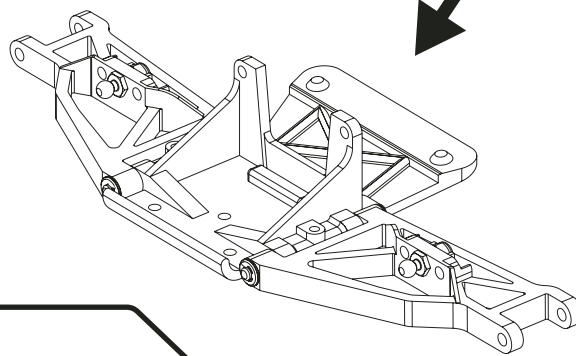
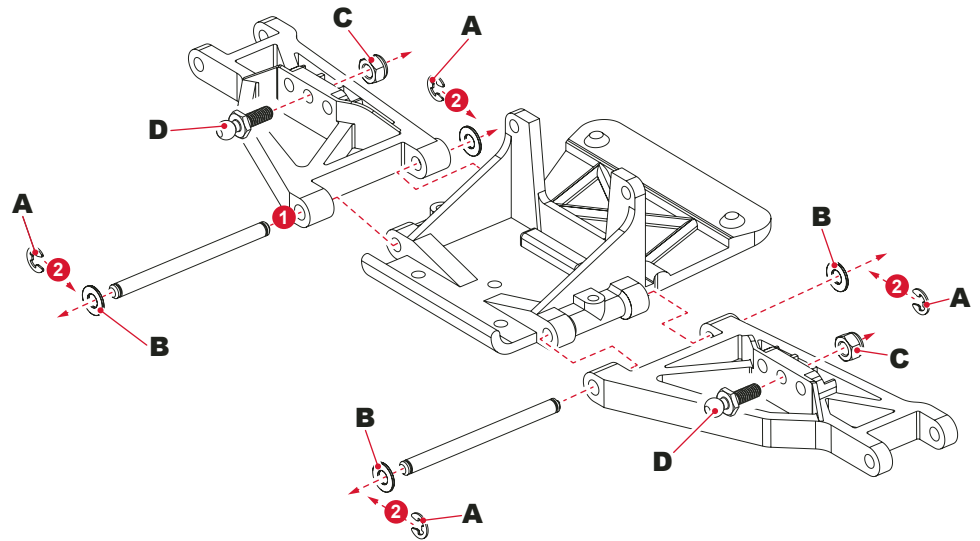
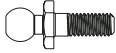
**C x2**

M3 Nyloc Steel Nut



**D x2**

Ball Stud Long



#### RACE TIP

Ensure the wishbones move freely with minimum play.

### BAG A - Step 02

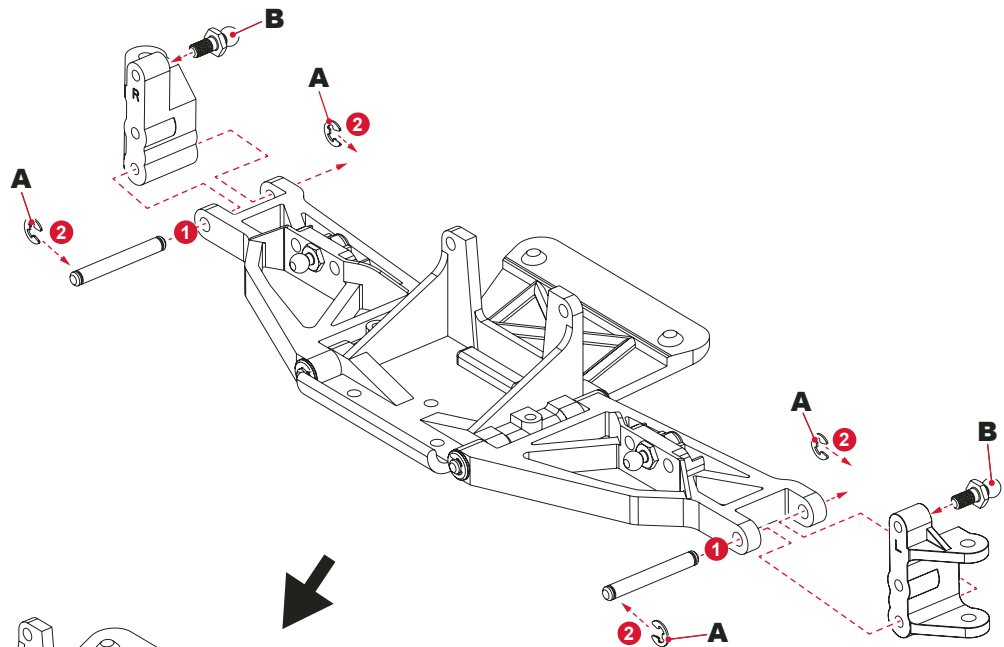
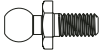
**A x4**

1/8th 'E' Clip

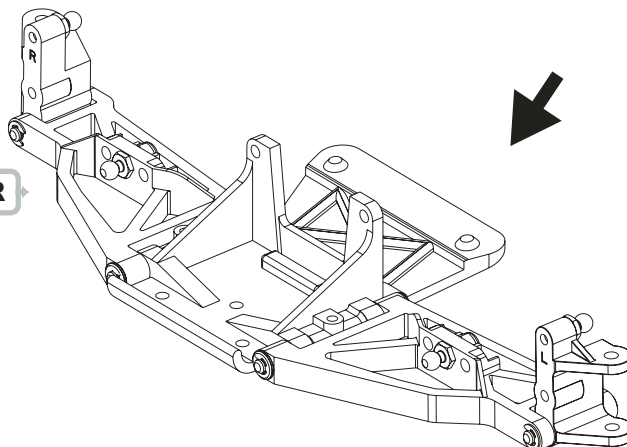


**B x2**

Ball Stud Short



FR



FL



#### RACE TIP

Ensure the hub carriers move freely with minimum play.

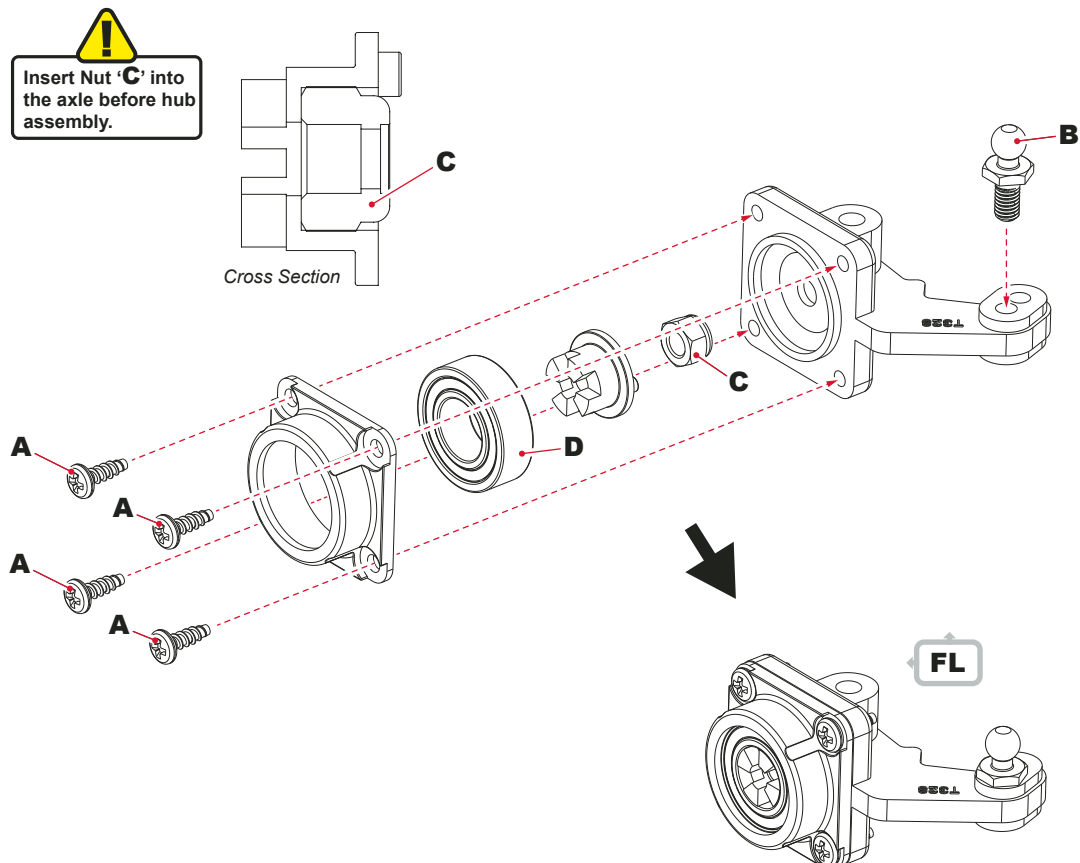
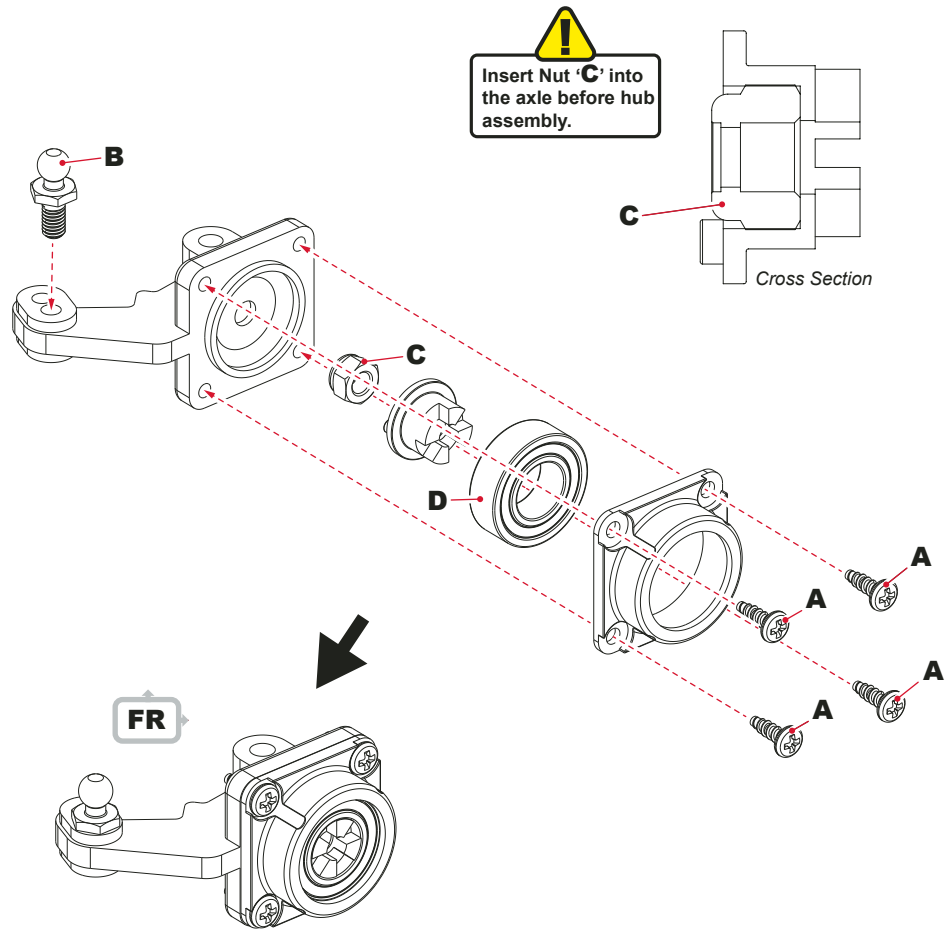
**BAG A - Step 03**

**A x8**   
No2x 1/4" Pan Hd Screw

**B x2**   
Ball Stud Short

**C x2**   
M3 Nyloc Nut

**D x2**   
Ø8 x Ø16 x 5mm Bearing



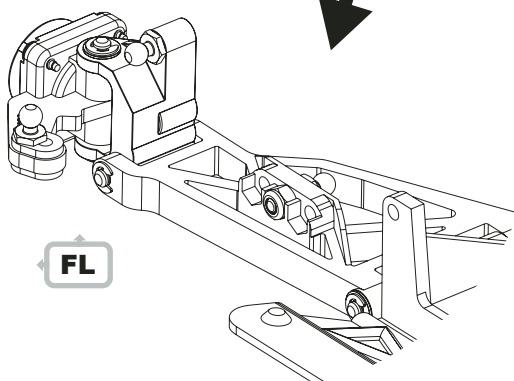
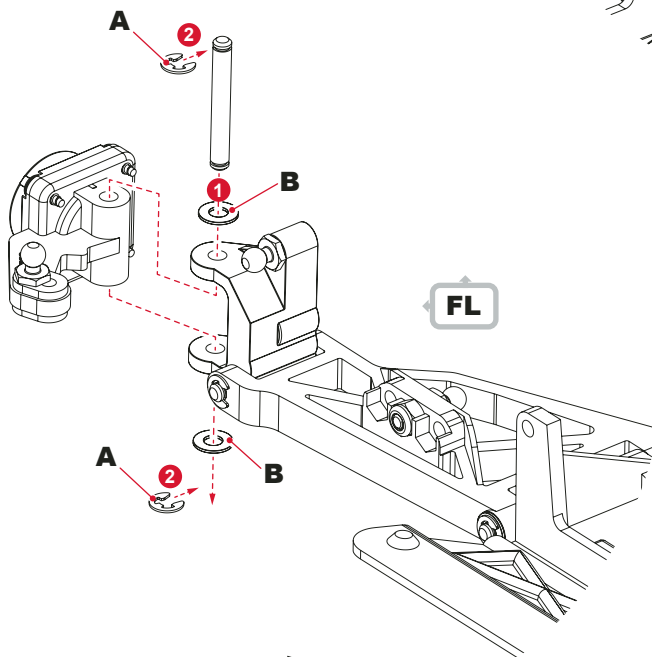
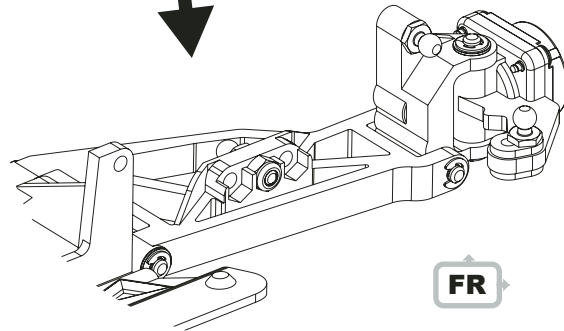
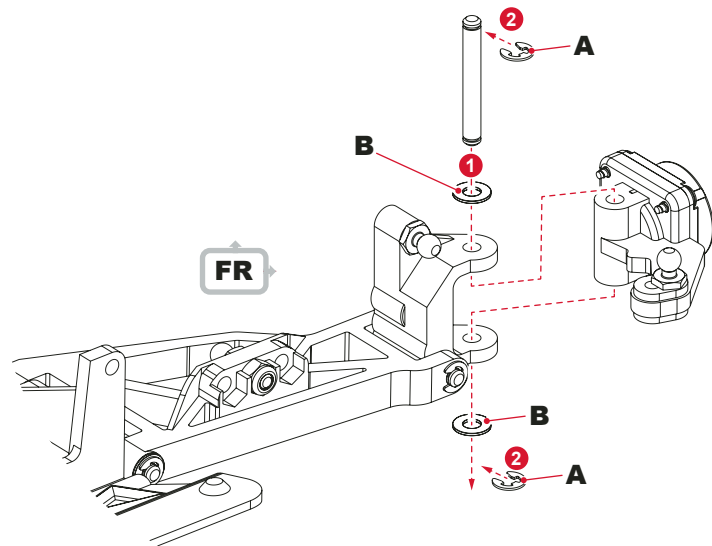
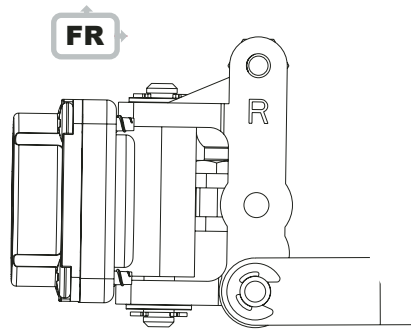


**BAG A - Step 04**
**A x4**

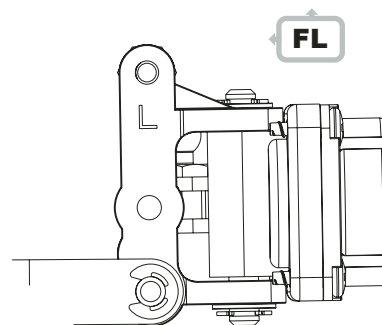
1/8th 'E' Clip


**B x4**

M3 Washer

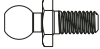

**RACE TIP**

Ensure the hubs move freely with minimum play.



**BAG A - Step 05****A x2**

M3 x 6 Pan Hd Screw

**B x2**

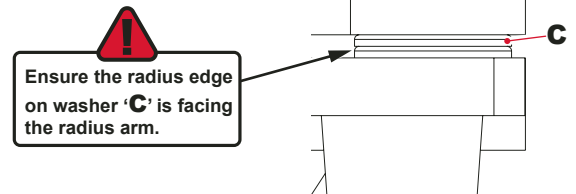
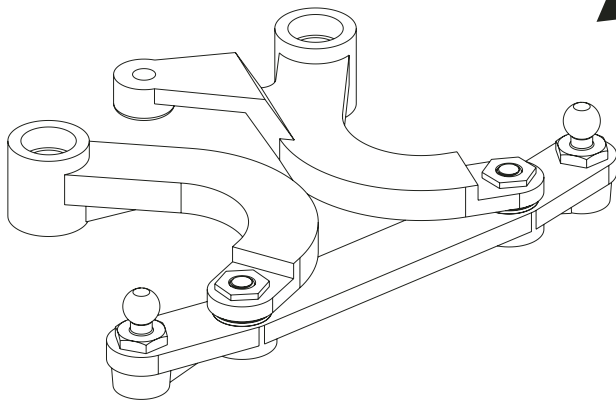
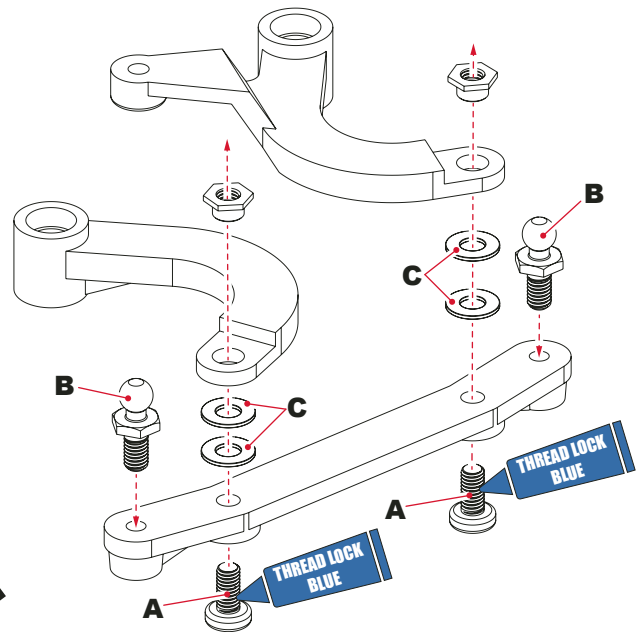
Ball Stud Short

**C x4**

M3 Washer

**RACE TIP**

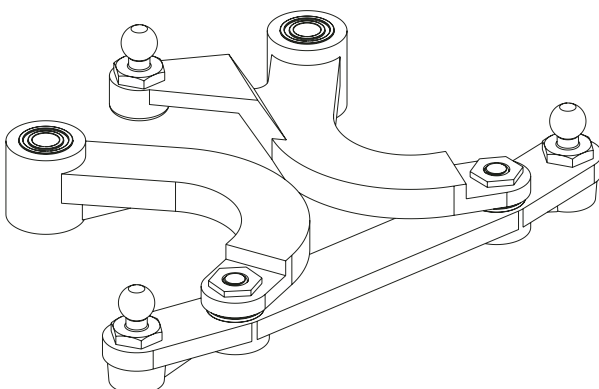
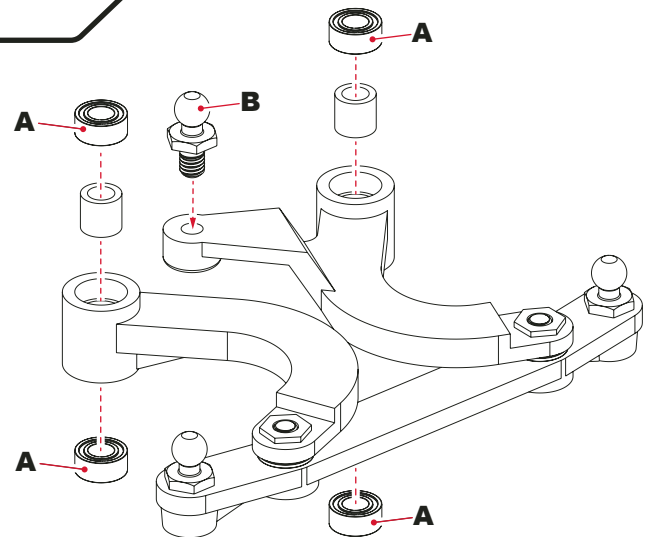
Tighten the steering arms so that they move freely with minimum play.

**BAG A - Step 06****A x4**

Ø1/8" x Ø1/4" Bearing


**B x1**


Ball Stud Ultra Short




# BAG A - Step 07

**A x2**   
M3x 20 Pan Hd Screw

**B x2**   
M3 Steel Nut

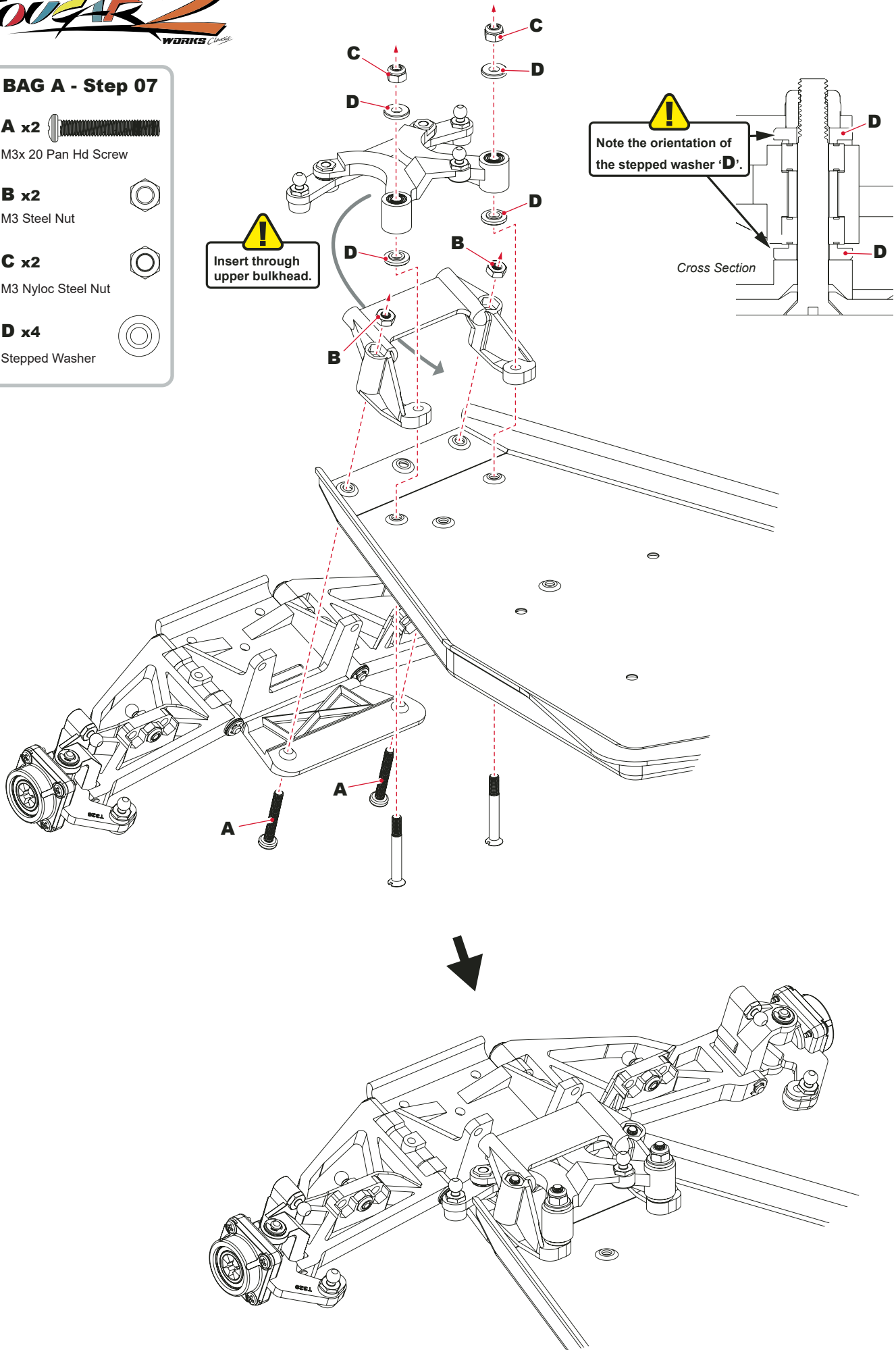
**C x2**   
M3 Nyloc Steel Nut

**D x4**   
Stepped Washer

 Insert through upper bulkhead.

 Note the orientation of the stepped washer 'D'.

Cross Section



# BAG A - Step 08

**A x2** 

M3x 20 Cap Hd Screw

**B x4** 

M3 Steel Nut

**C x2** 

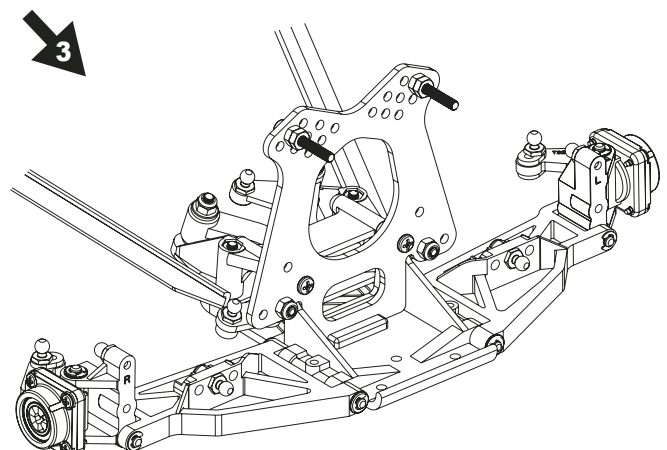
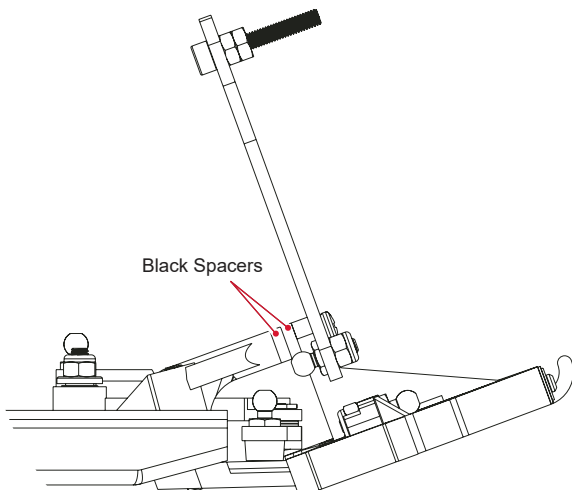
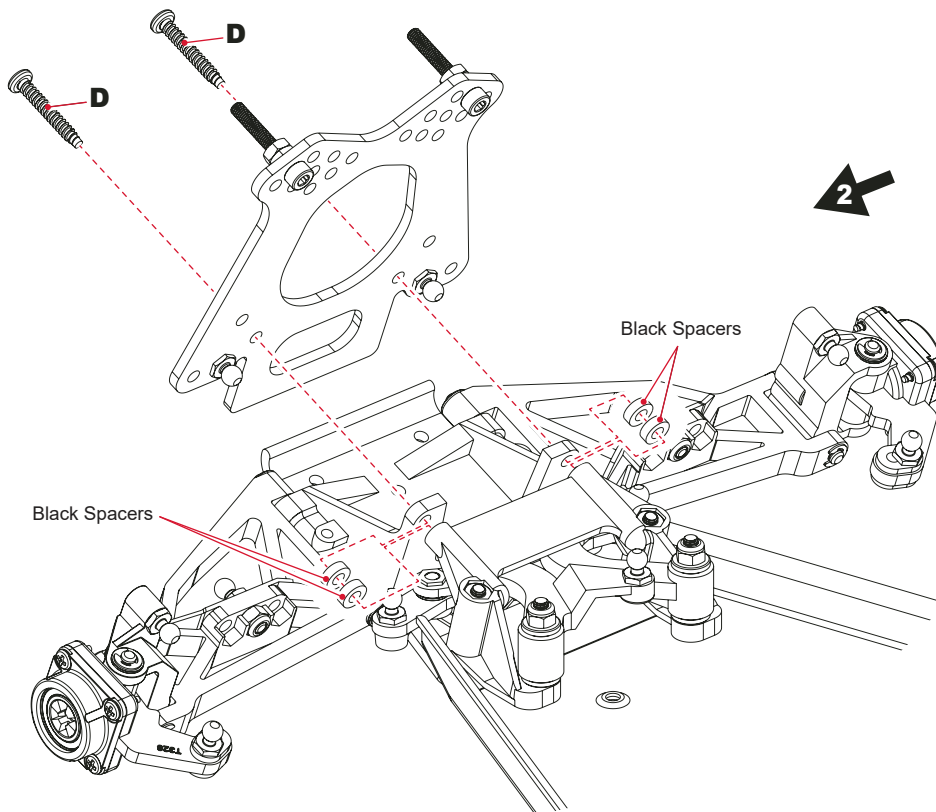
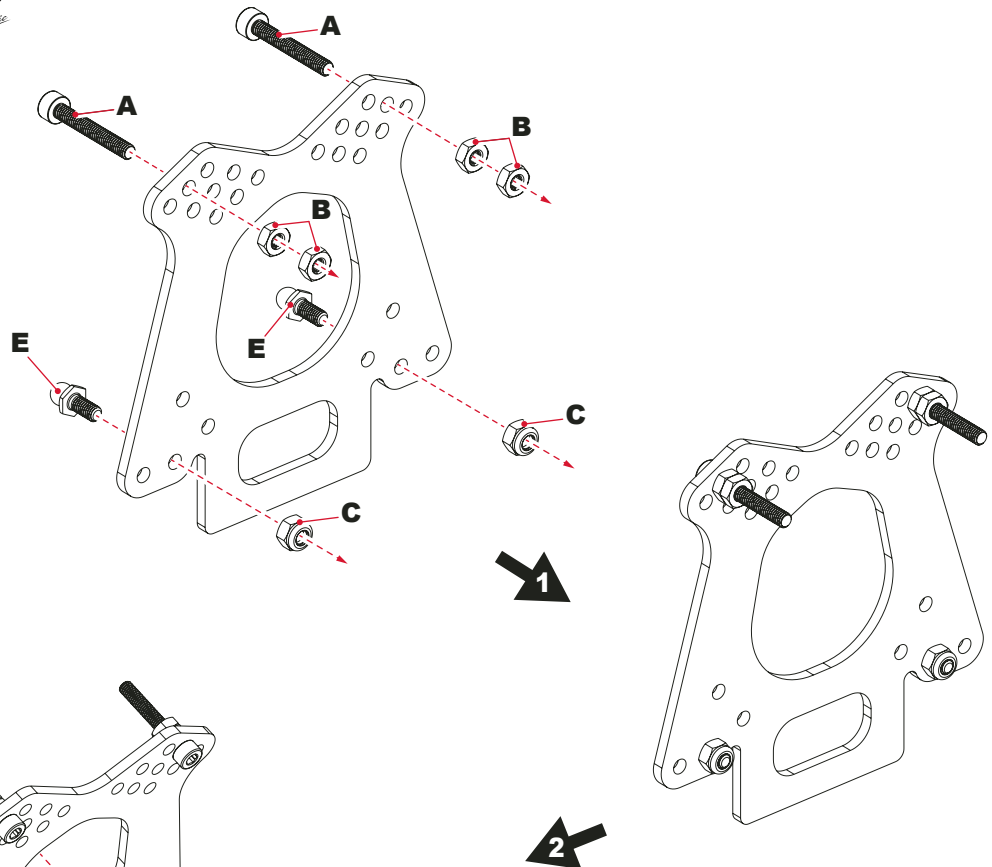
M3 Nyloc Steel Nut

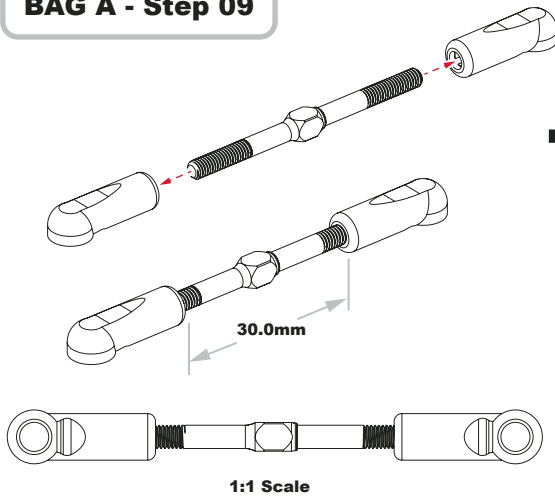
**D x2** 

No4x 3/4" Pan Hd Screw

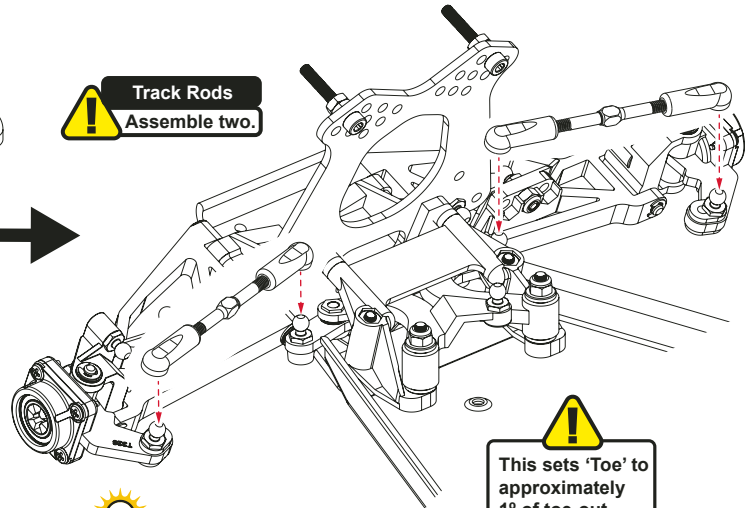
**E x2** 

Ball Stud Short

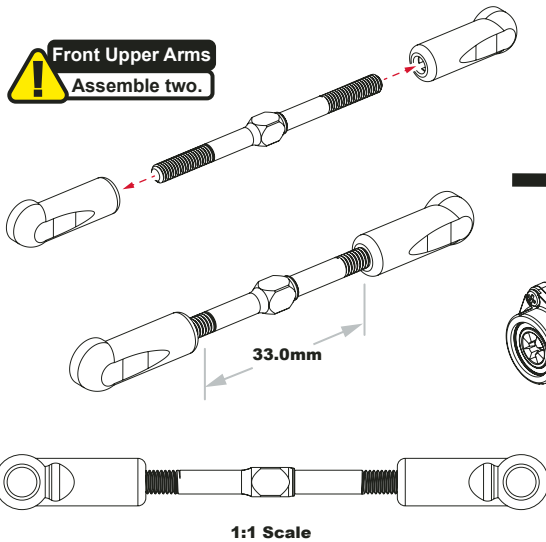


**BAG A - Step 09**


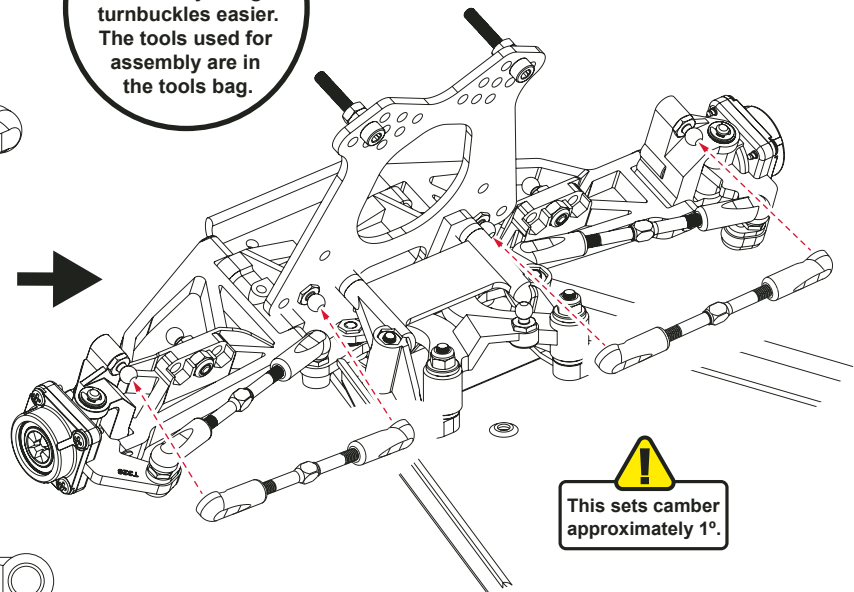
**Track Rods**  
Assemble two.



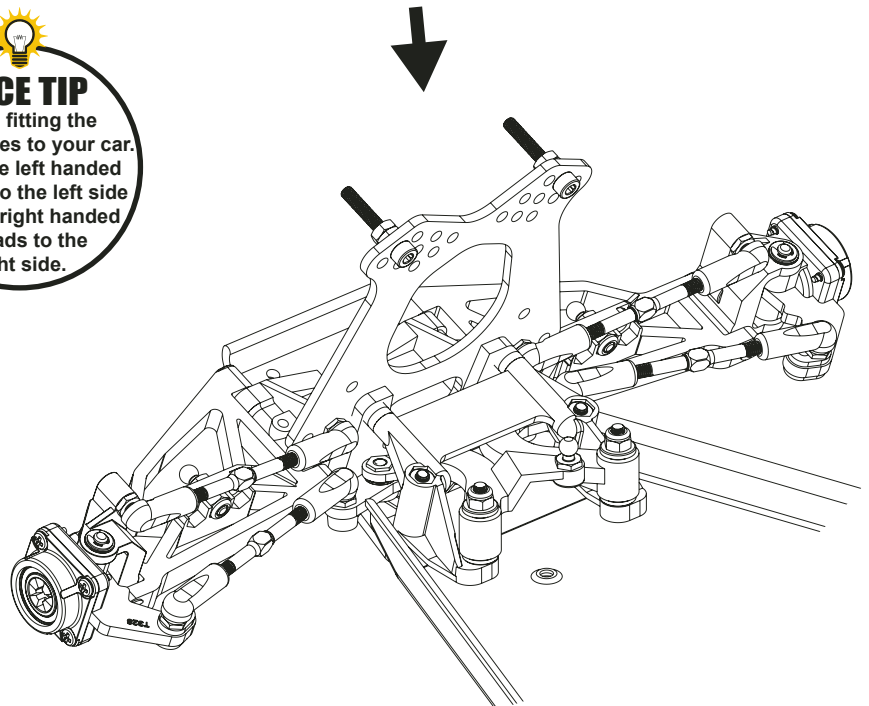
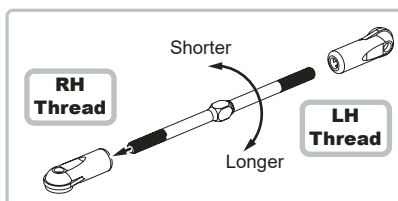
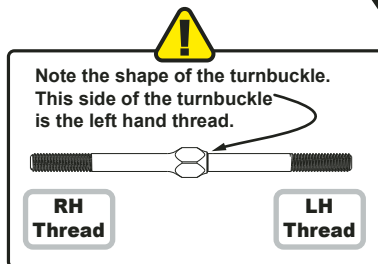
**RACE TIP**  
Greasing the threads will make adjusting the turnbuckles easier. The tools used for assembly are in the tools bag.



**Front Upper Arms**  
Assemble two.




**RACE TIP**  
When fitting the turnbuckles to your car. Place the left handed threads to the left side and the right handed threads to the right side.




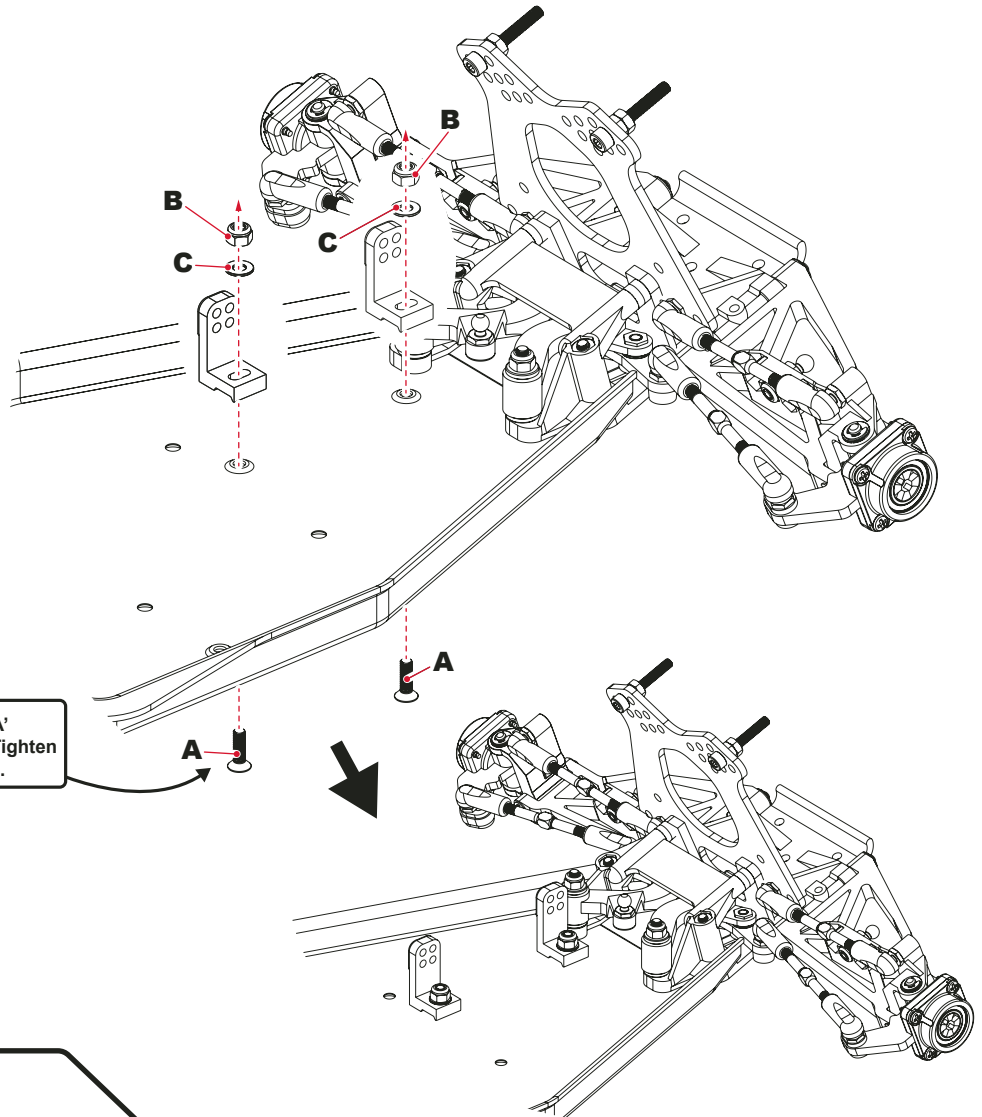



### BAG B - Step 10

**A x2**   
M3 x 10 Csk Hd Screw

**B x2**   
M3 Nyloc Steel Nut

**C x2**   
M3 Washer

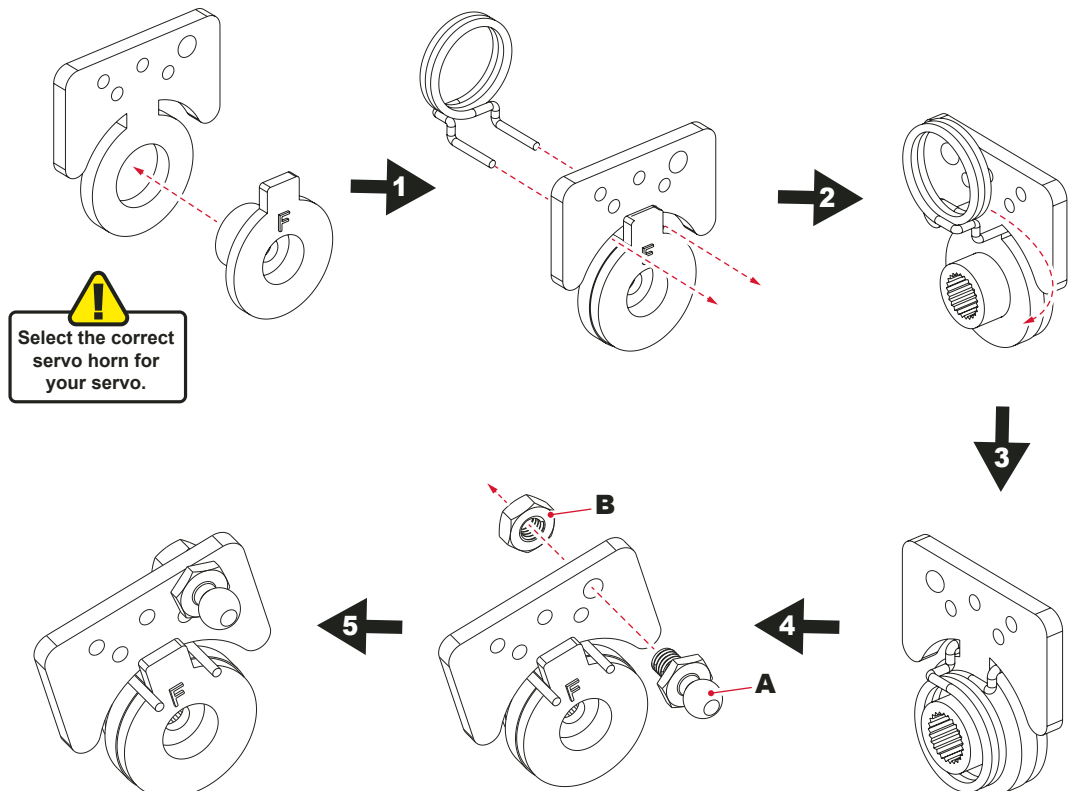


  
Leave screws 'A'  
loose for now. Tighten  
later in step 11b.

### BAG B - Step 11a

**A x1**   
Ball Stud Ultra Short

**B x1**   
M3 Steel Nut



  
Select the correct  
servo horn for  
your servo.

# BAG B - Step 11b

**A x1**

M3 x 8 Pan Hd Screw

**B x2**

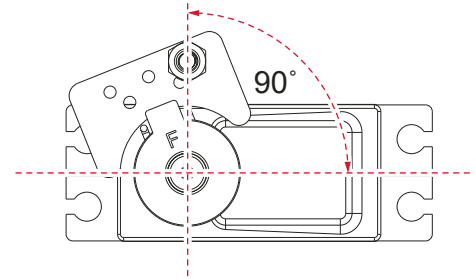
M3 Washer

**C x2**

No4x 3/8" Pan Hd Screw

**!**  
Make sure your servo  
is set to neutral before  
starting this step.

**!**  
Set steering trim to align servo  
horn as shown below.

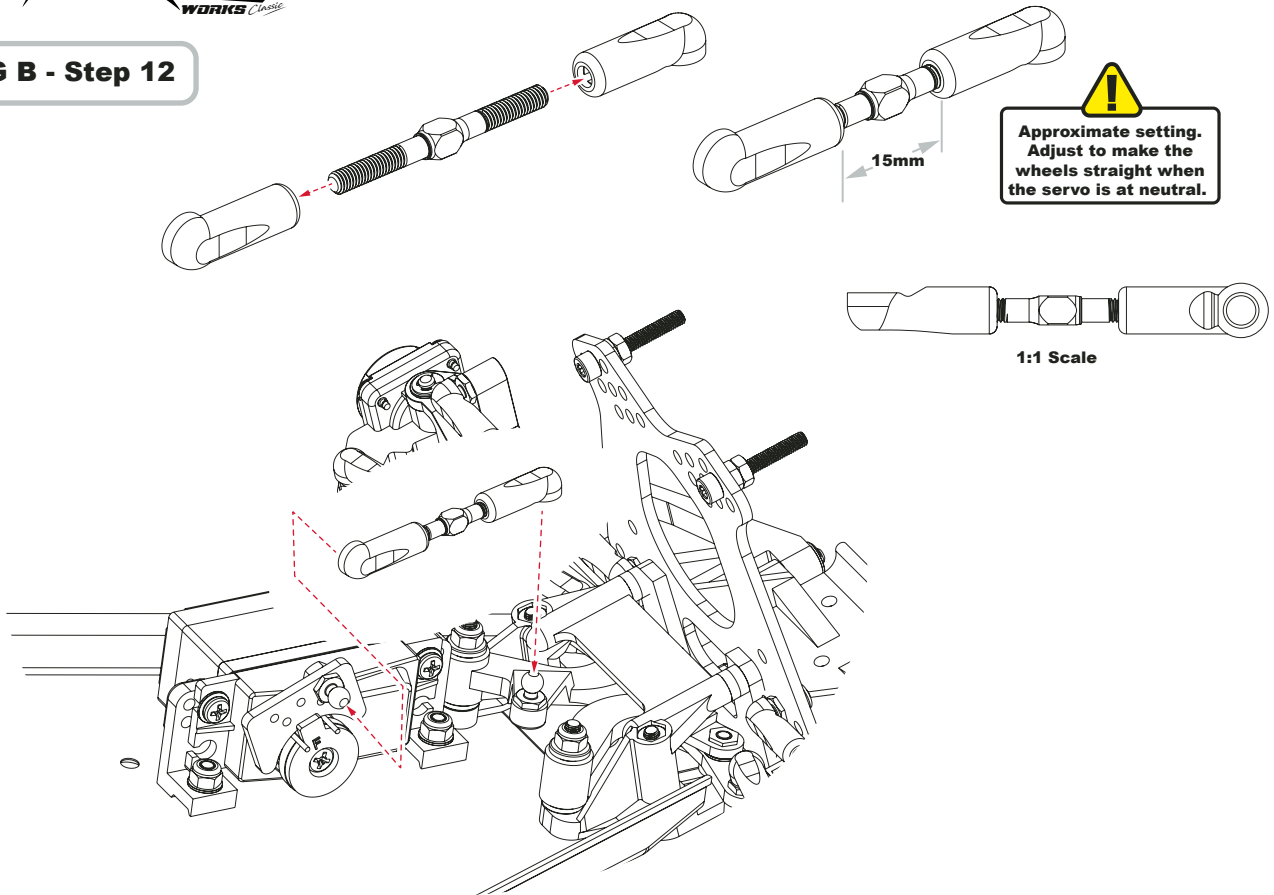


**1**


**!**  
Tighten screws  
'A' from step 10


**2**


## BAG B - Step 12

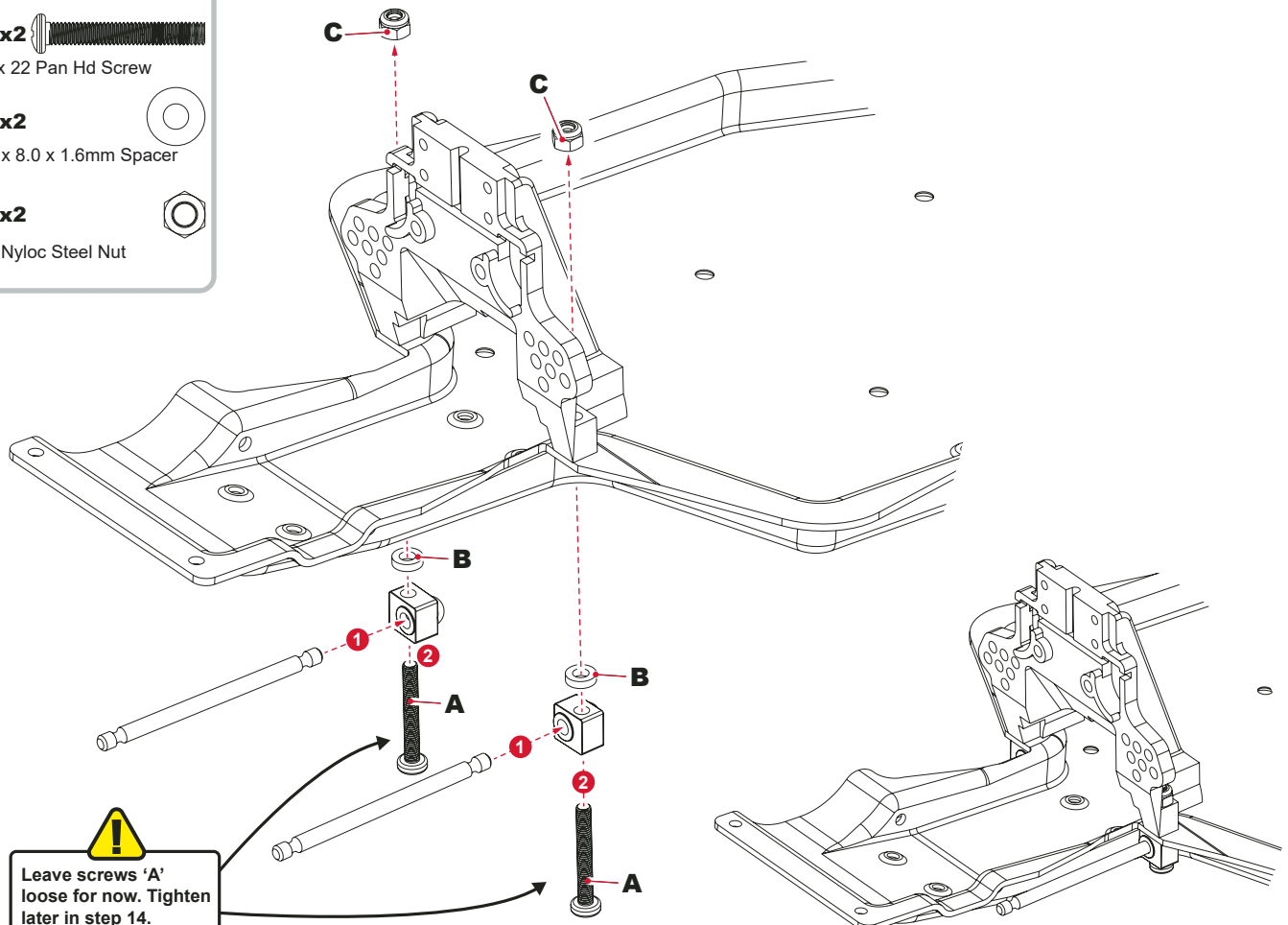


## BAG B - Step 13

**A x2**   
M3x 22 Pan Hd Screw


**B x2**   
3.5 x 8.0 x 1.6mm Spacer


**C x2**   
M3 Nyloc Steel Nut



### BAG B - Step 14

**A x2**   
M3 x 16 Pan Hd Screw

**B x2**   
M3 Nyloc Steel Nut

**C x2**   
Ball Stud Short

Black Spacer Sprue  
(Loose in box)

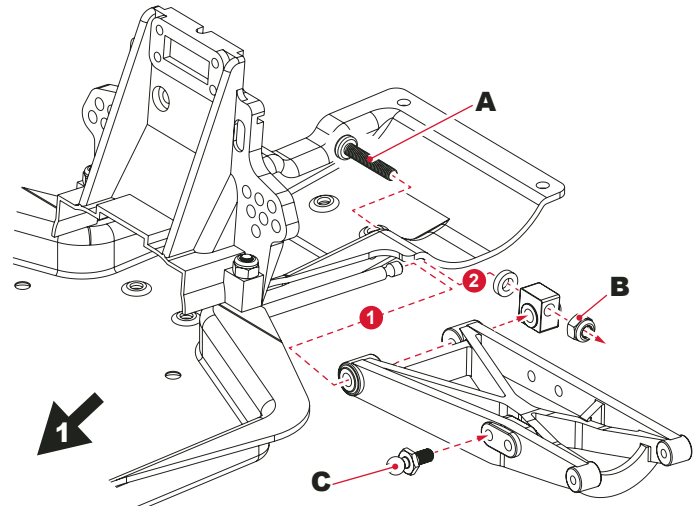
4.0mm
3.0mm
2.0mm
1.5mm
1.0mm

Use 1.5mm

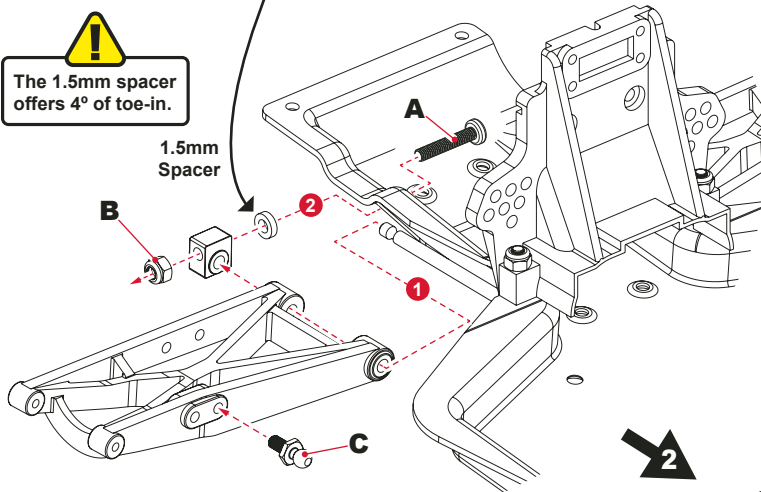


The 1.5mm spacer offers 4° of toe-in.

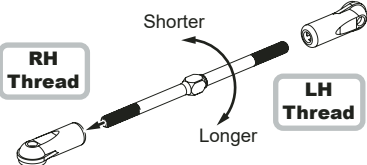
1.5mm  
Spacer



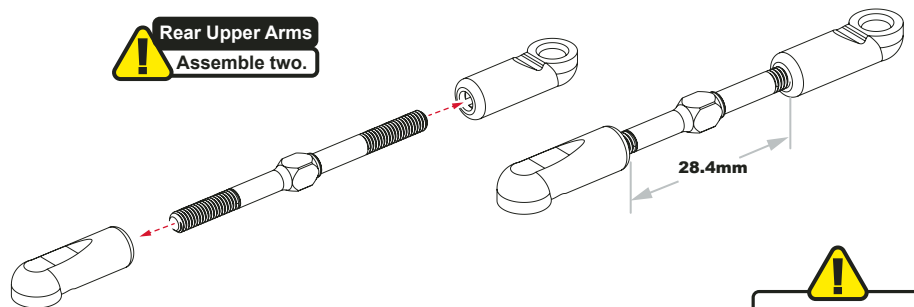
Tighten screws 'A' from step 13.



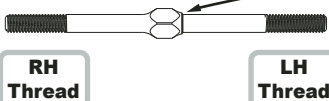
### BAG B - Step 15



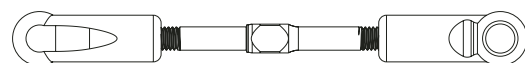
**Rear Upper Arms**  
Assemble two.



Note the shape of the turnbuckle.  
This side of the turnbuckle  
is the left hand thread.



This sets camber  
approximately 1°.



1:1 Scale

# BAG B - Step 16

**A x2** 

M3x 20 Cap Hd Screw

**B x4** 

M3 Steel Nut

**C x2** 

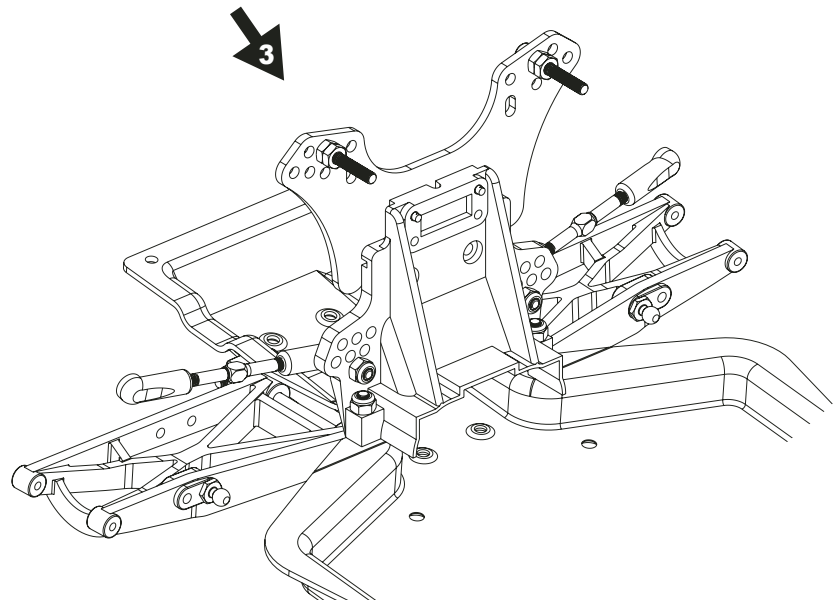
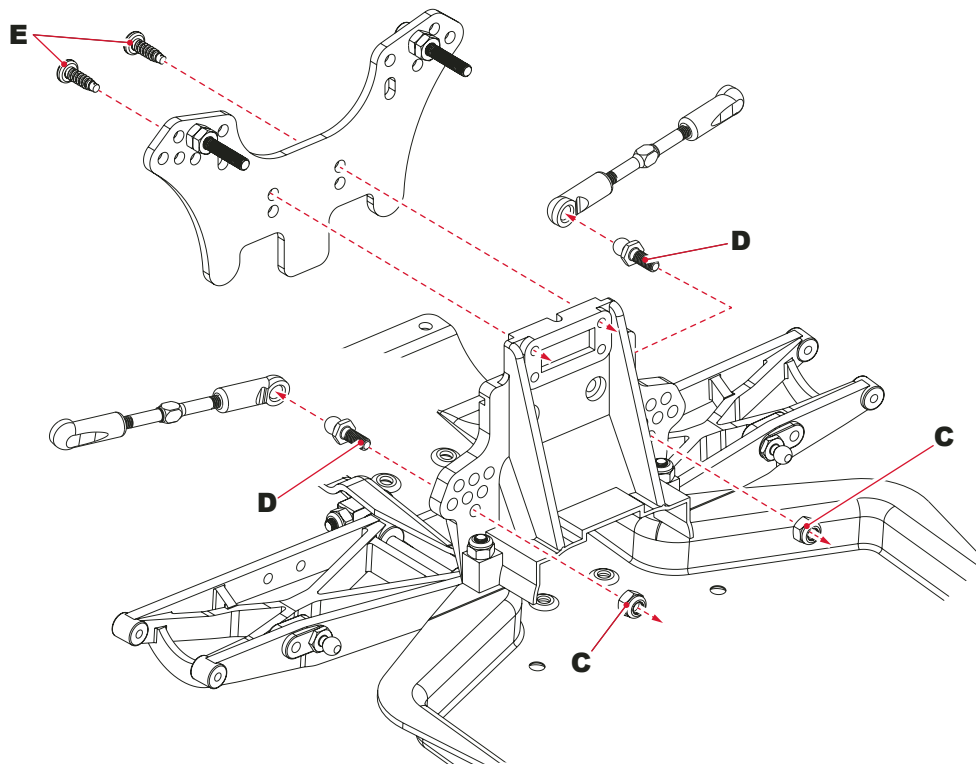
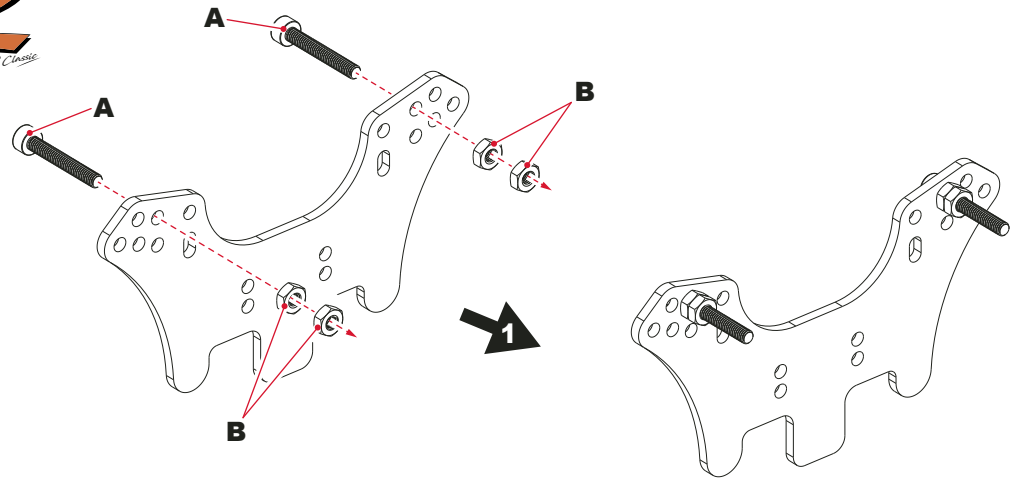
M3 Nyloc Steel Nut

**D x2** 

Ball Stud Long

**E x2** 

No4x 3/8" Pan Hd Screw





**BAG B - Step 17****A x12**

3mm Chrome Steel Balls

**B x1**

M3 Steel Nut

**C x1**

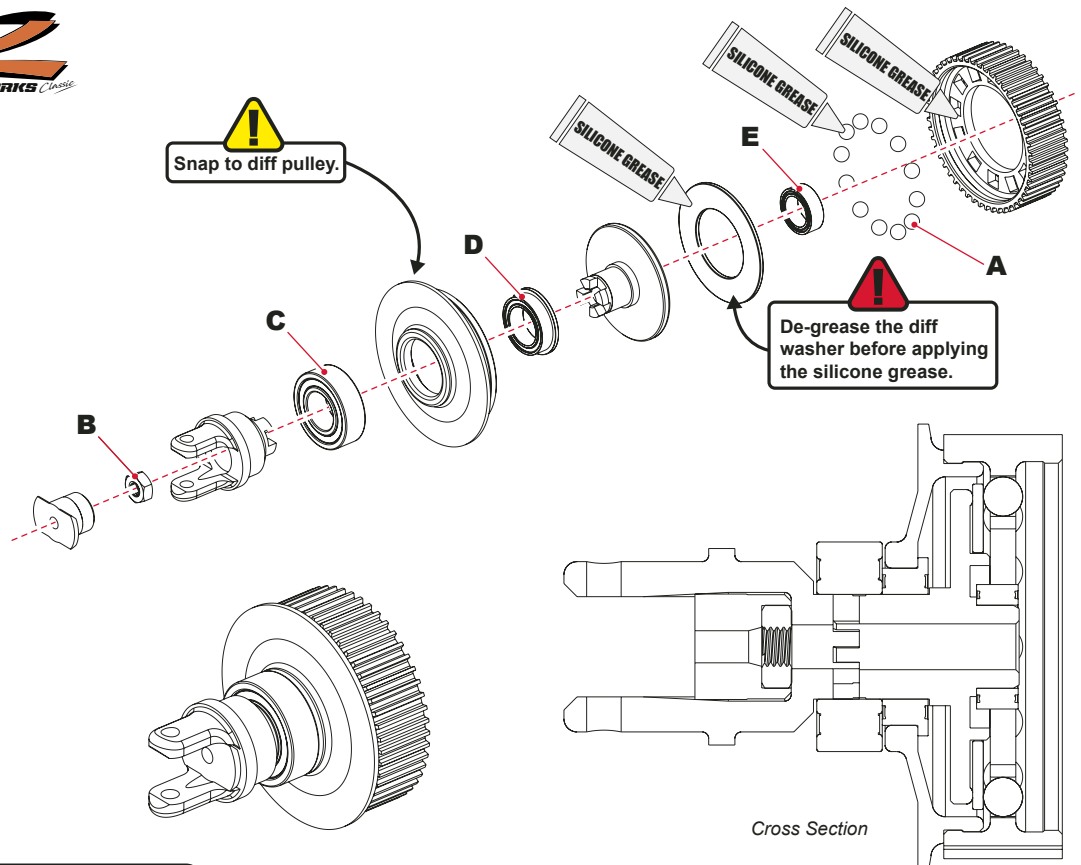
Ø8 x Ø16 x 5mm Bearing

**D x1**

Ø8 x Ø12 FL Bearing

**E x1**

Ø1/4" x Ø3/8" x 1/8" Bearing

**BAG B - Step 18****A x1**

M3x 45 Csk Hd Screw

**B x2**

Disc spring washer

**C x1**

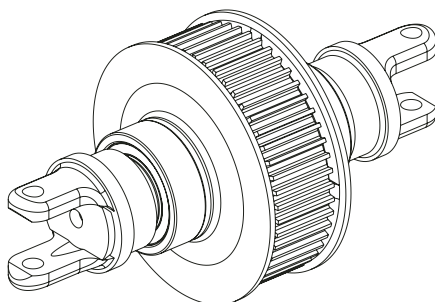
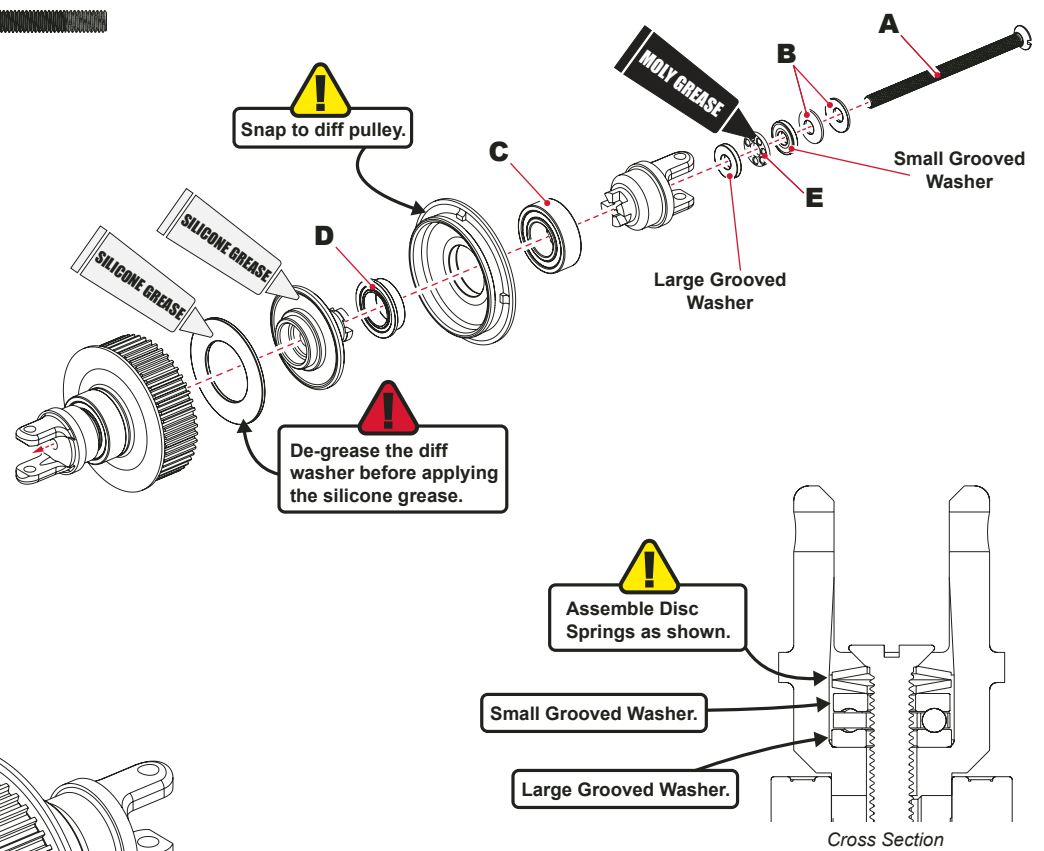
Ø8 x Ø16 x 5mm Bearing

**D x1**

Ø8 x Ø12 FL Bearing

**E x1**

Thrust F1/8 x 5/16 x 9/64



**Warning:**

**DIFFERENTIAL SETTINGS**  
Tighten Diff Screw to  
flatten Disc Springs,  
then undo by 1/4 of a turn.

### BAG C - Step 19

**A x2**

'O' Ring 4.0 x 1.5mm



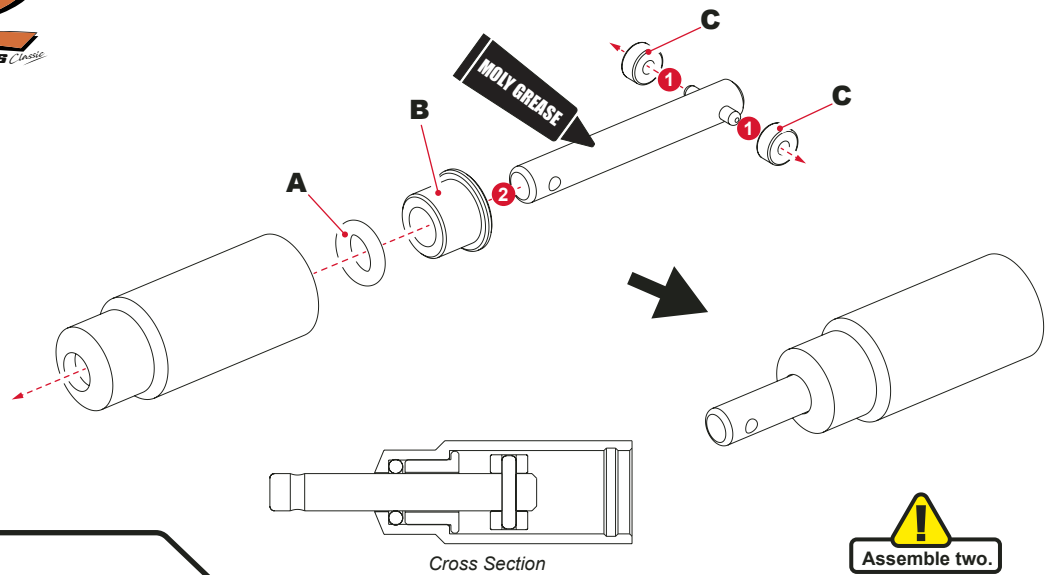
**B x2**

Roller Driveshaft Bush



**C x4**

Roller Driveshaft Roller



### BAG C - Step 20

**A x2**

'O' Ring 6.0 x 1.5mm



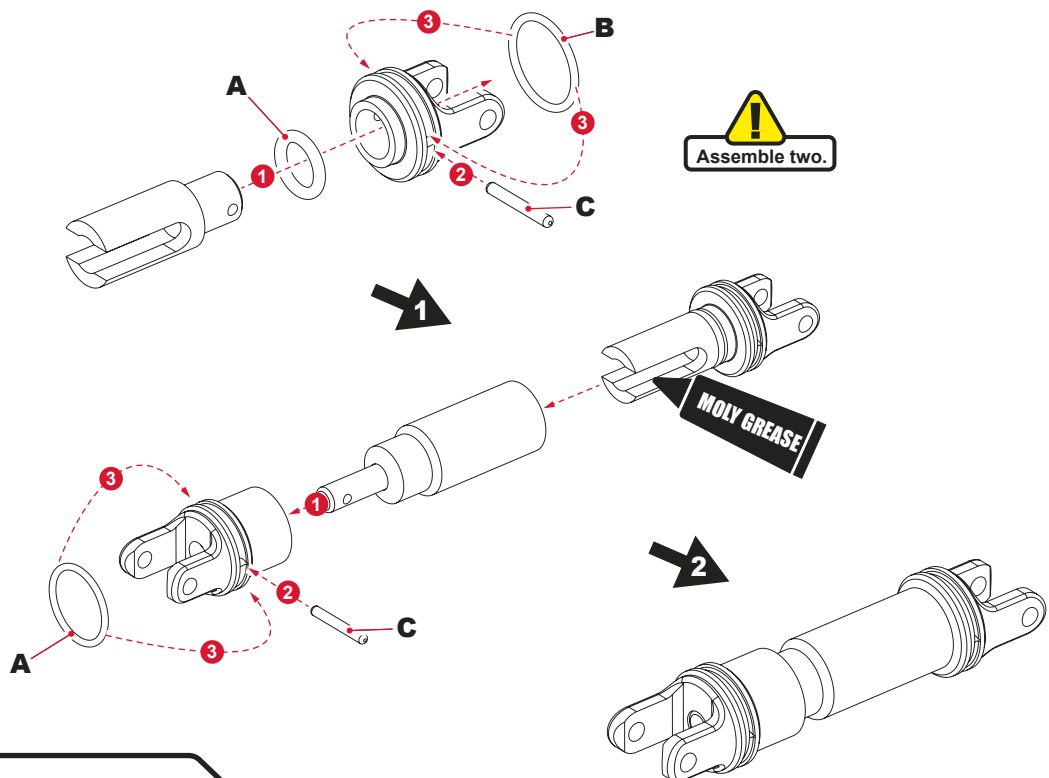
**B x4**

'O' Ring 9.0 x 1.6mm



**C x4**

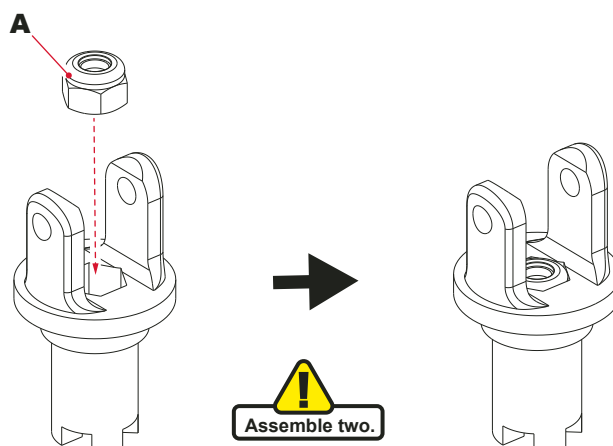
Needle Roller 1.5 x 11.8mm



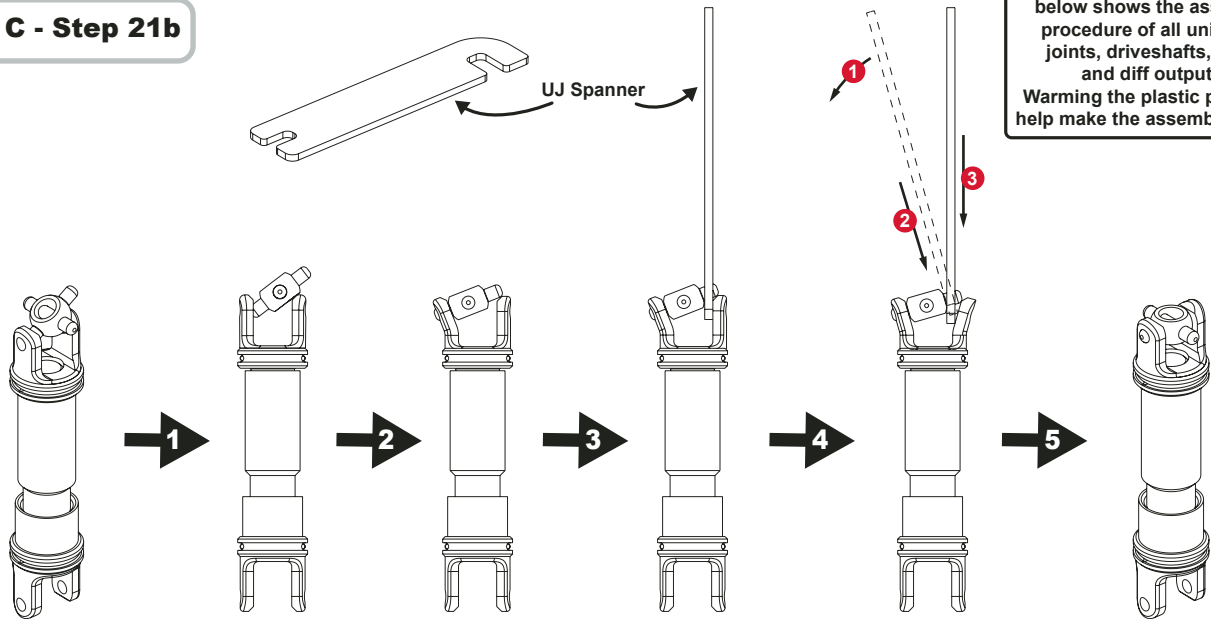
### BAG C - Step 21a

**A x2**

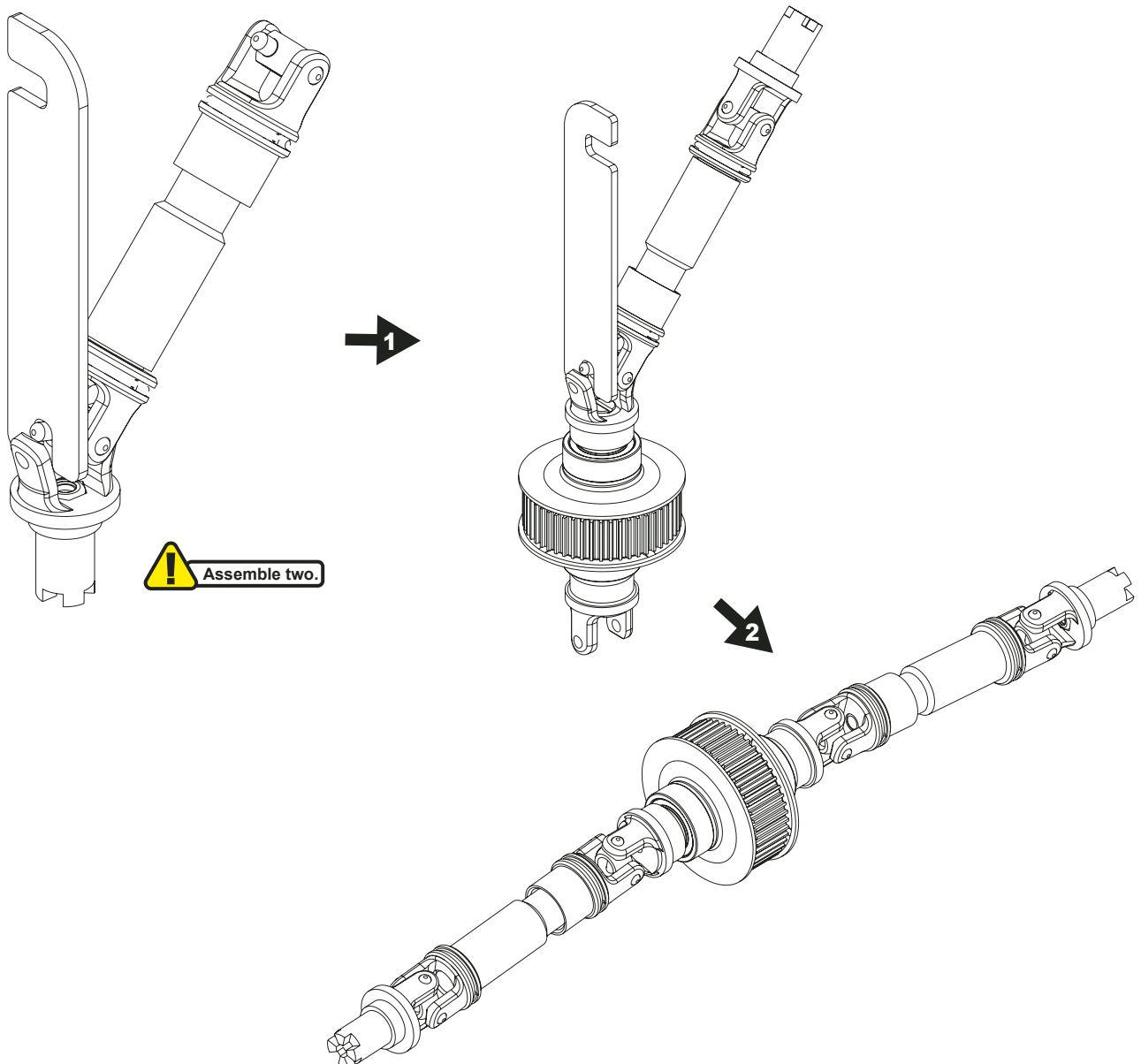
M3 Nyloc Steel Nut



## BAG C - Step 21b



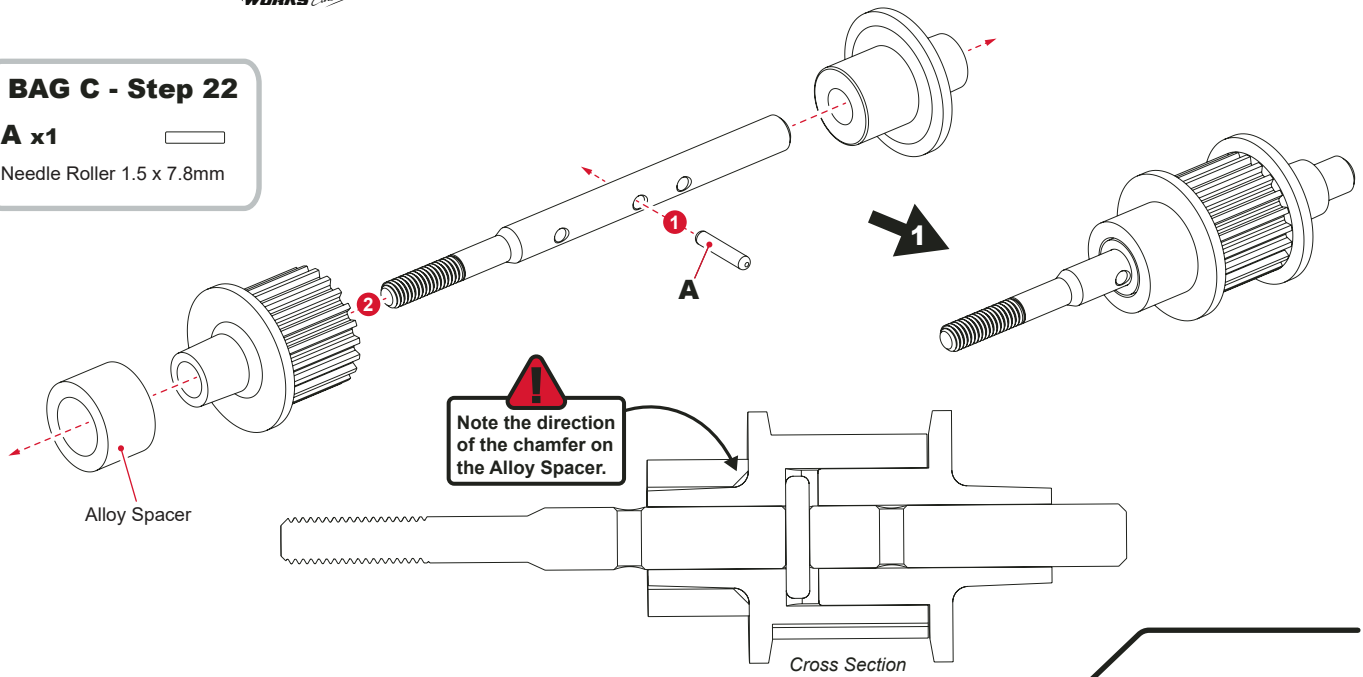
**!** Assemble two.



### BAG C - Step 22

**A x1**

Needle Roller 1.5 x 7.8mm



### BAG C - Step 23

**A x5**

No2x 3/16" Pan Hd Screw

**B x2**

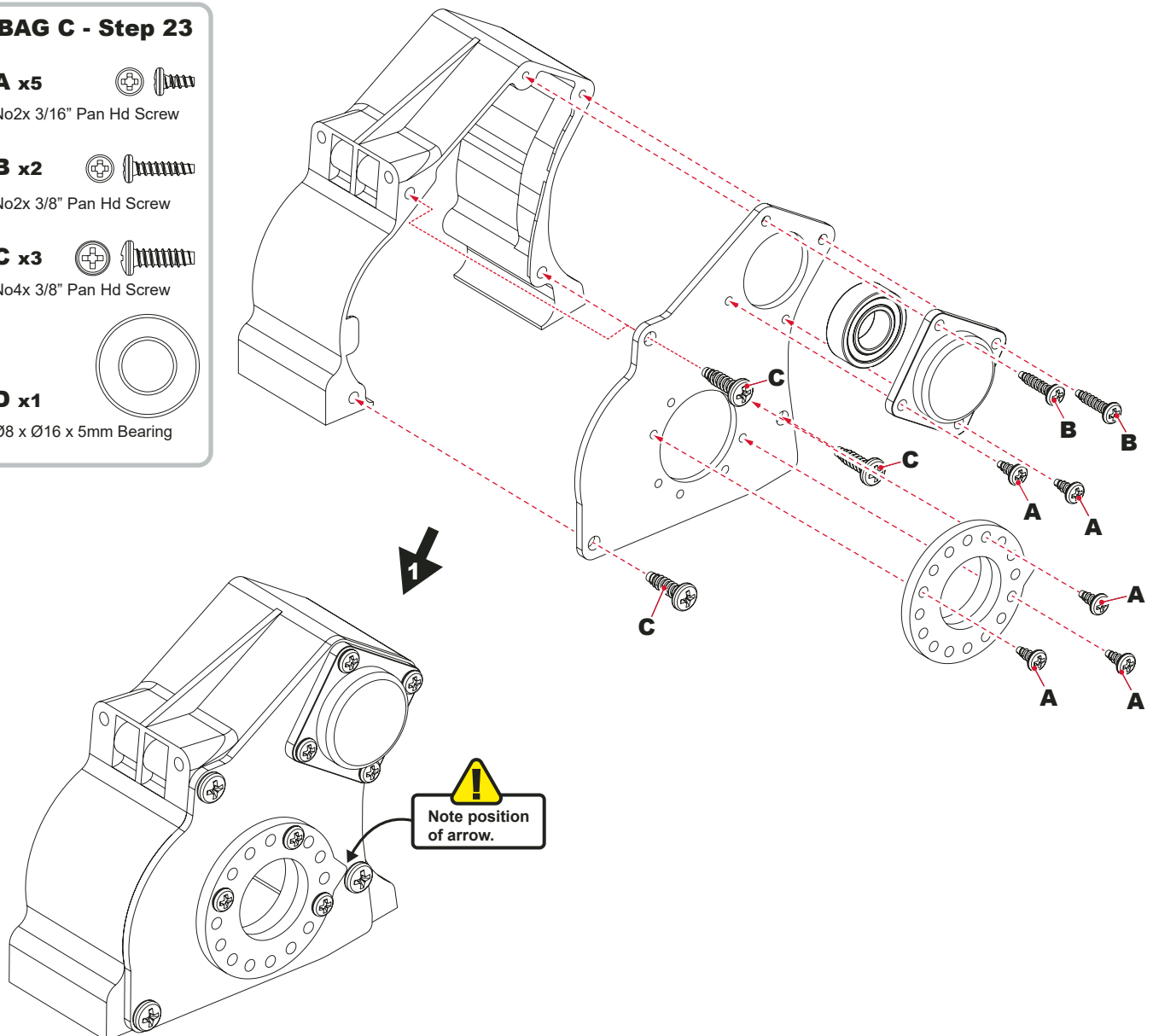
No2x 3/8" Pan Hd Screw

**C x3**

No4x 3/8" Pan Hd Screw

**D x1**

Ø8 x Ø16 x 5mm Bearing



# BAG C - Step 24a

**A x5**



No2x 3/16" Pan Hd Screw

**B x2**



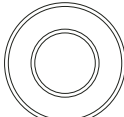
No2x 3/8" Pan Hd Screw

**C x3**



No4x 3/8" Pan Hd Screw

**D x1**

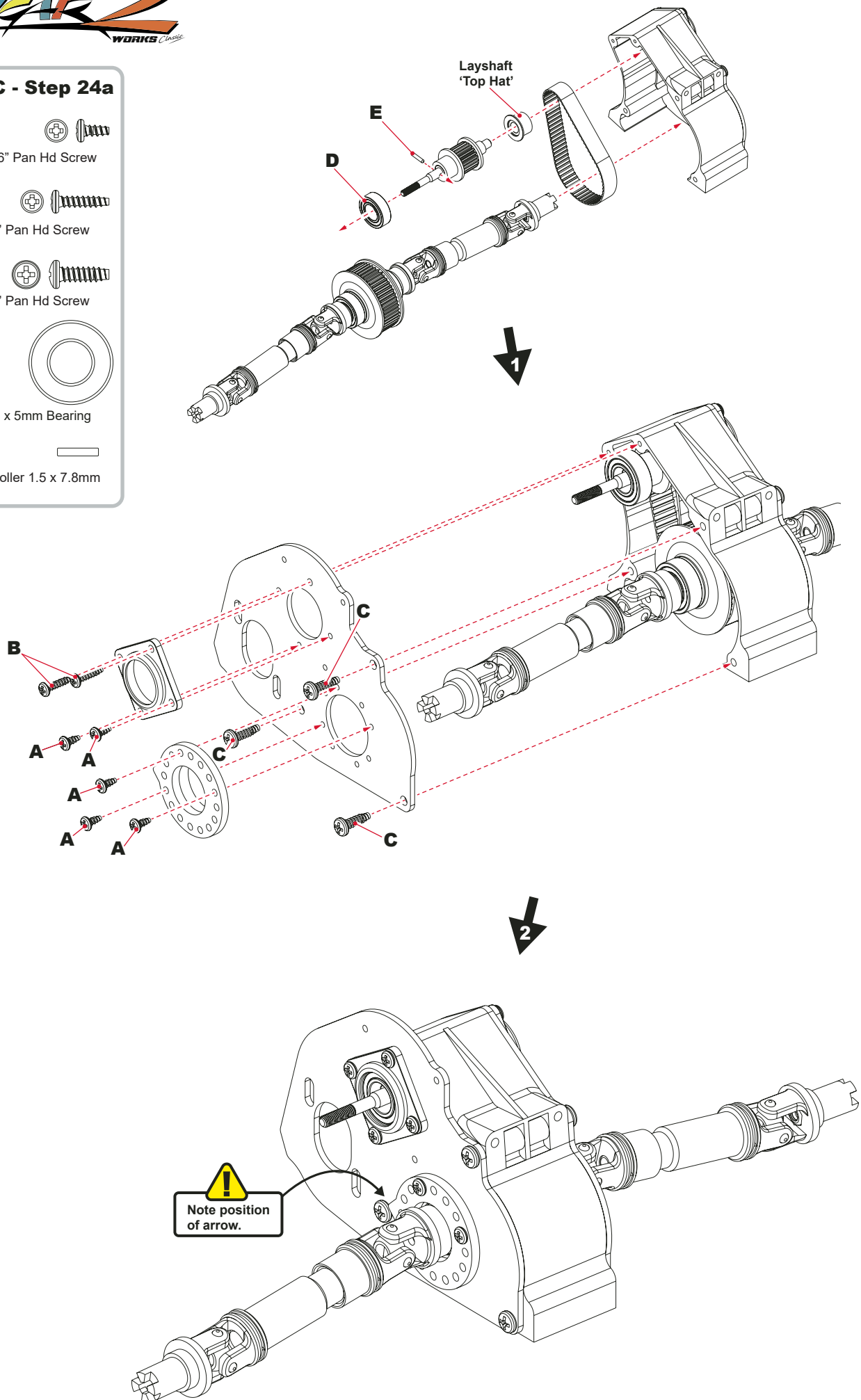


Ø8 x Ø16 x 5mm Bearing

**E x1**



Needle Roller 1.5 x 7.8mm



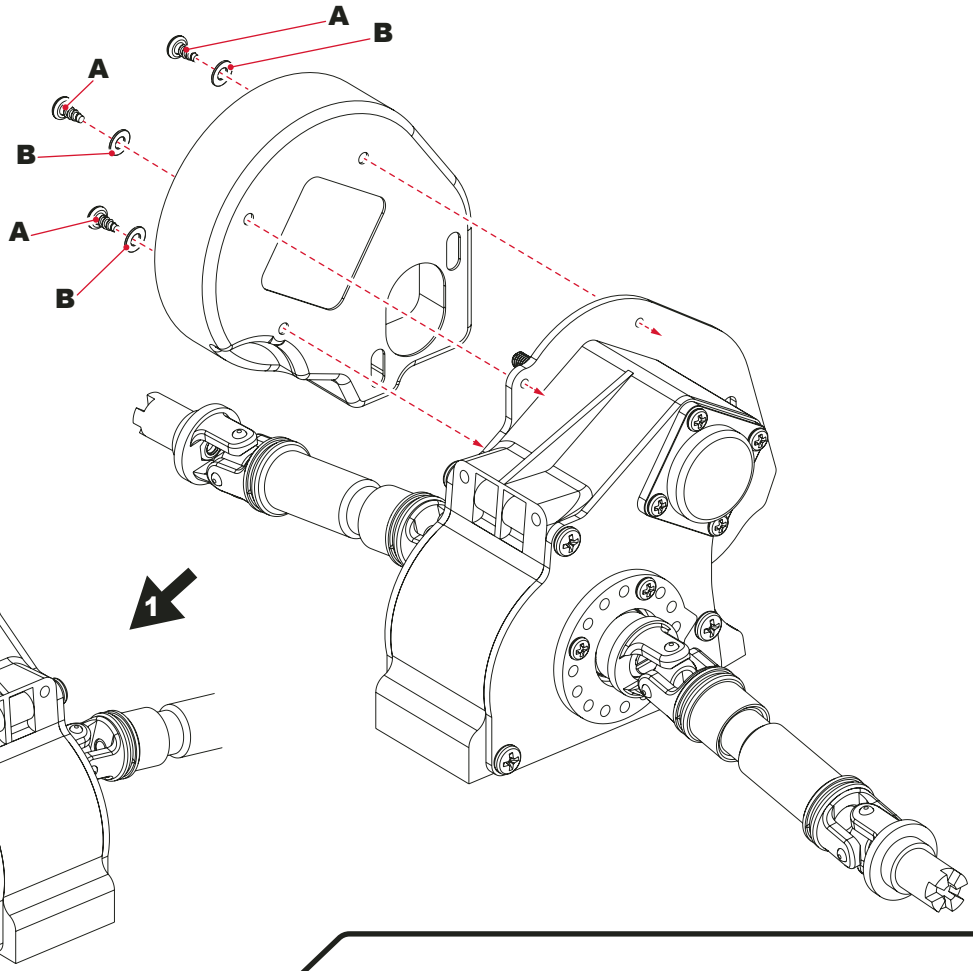


**BAG C - Step 24b****A x3**

No2x 3/16" Pan Hd Screw

**B x3**

M2 Washer

**BAG C - Step 25****A x2**

M3 Nyloc Steel Nut

**B x2**

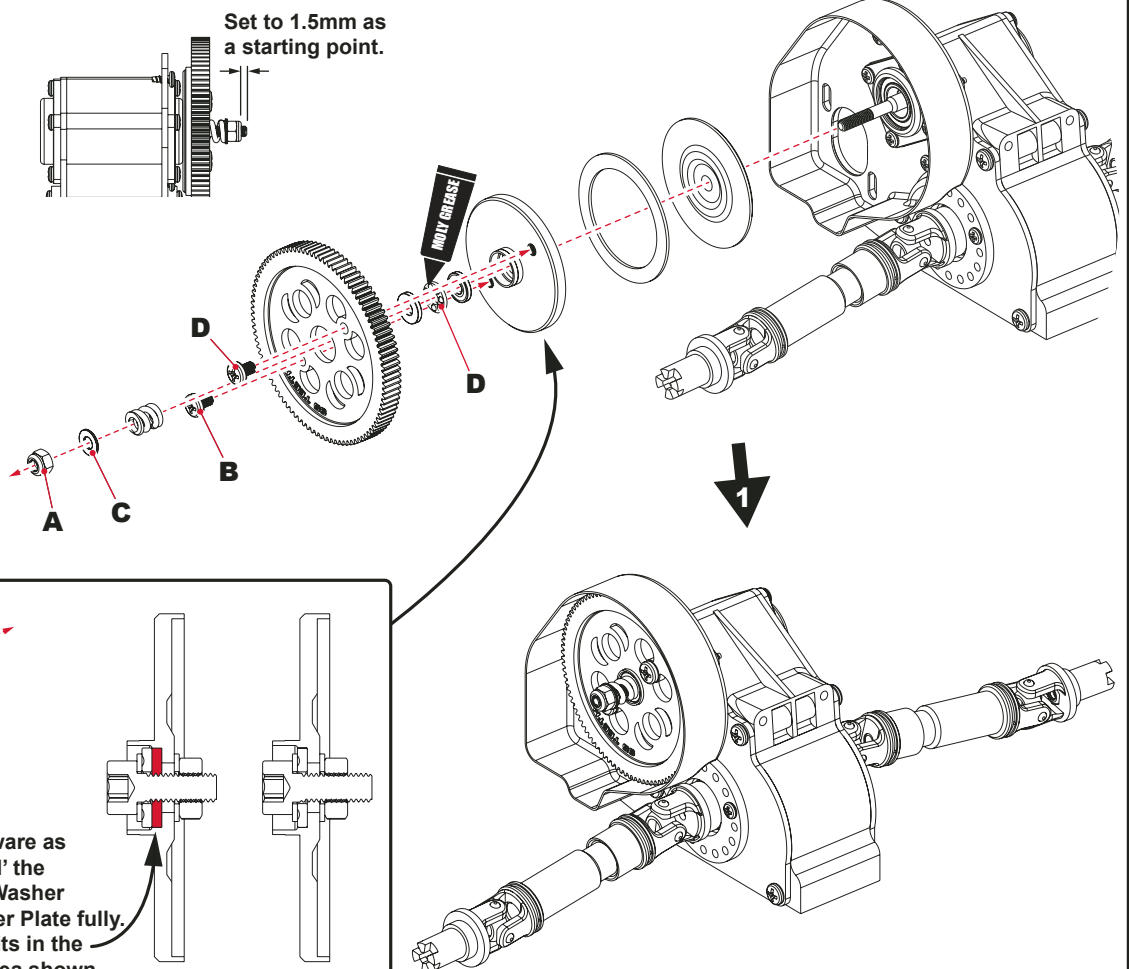
M3x 4 Pan Hd Screw

**C x1**

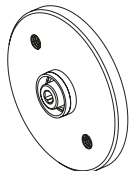
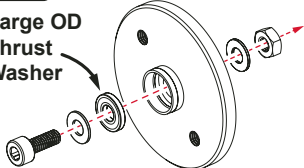
M3 Washer

**D x1**

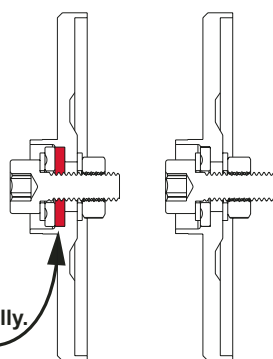
Thrust Bearing



**Large OD  
Thrust  
Washer**



Use the hardware as shown to 'pull' the Thrust Race Washer into the Slipper Plate fully. Make sure it fits in the red shaded area shown.




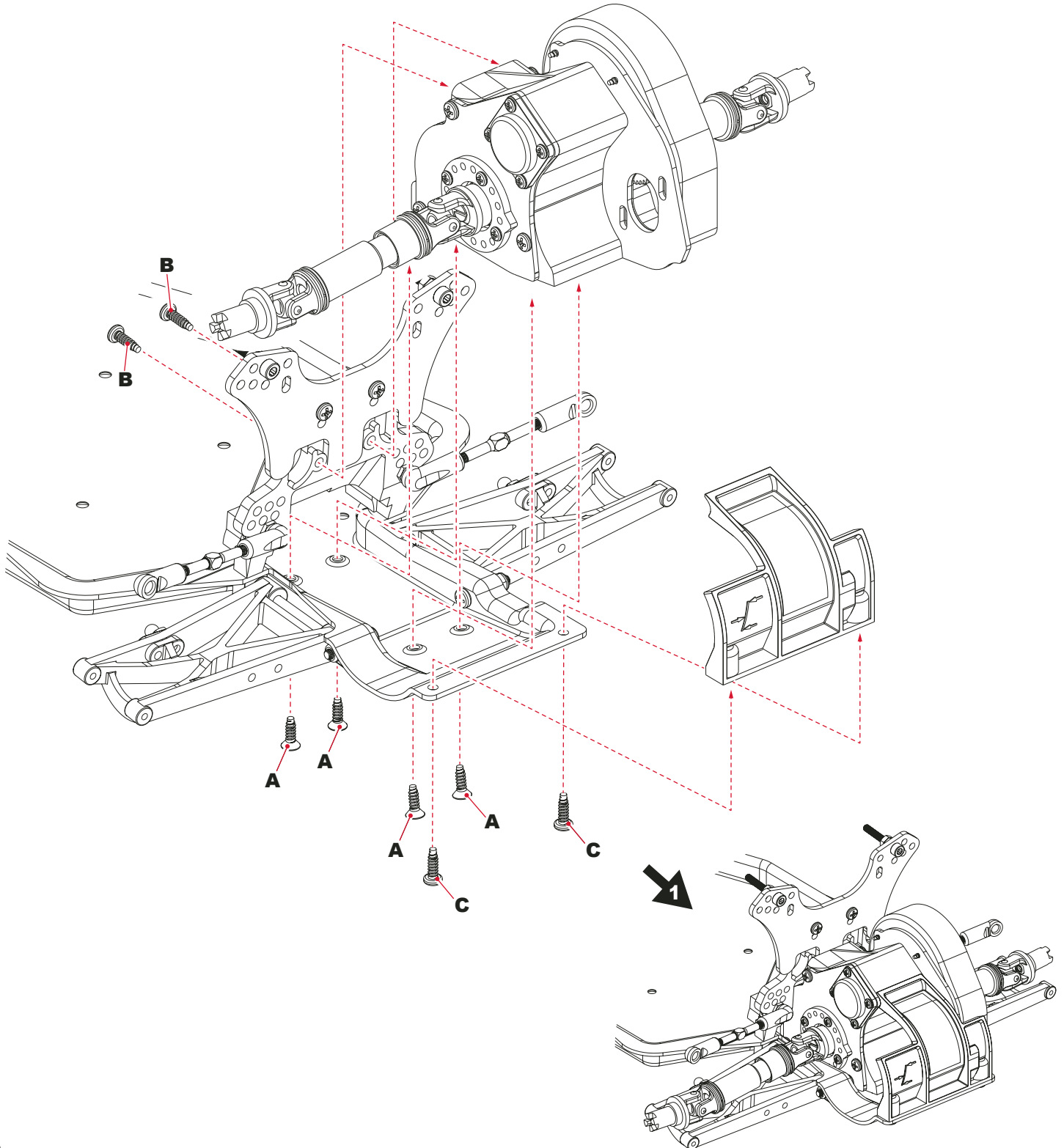
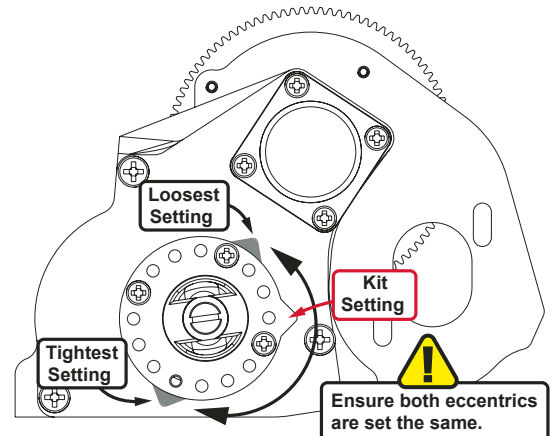
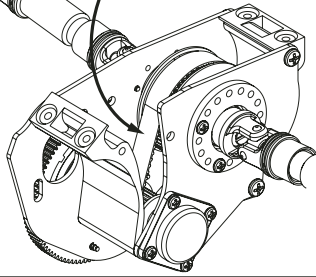
# BAG C - Step 26

**A x4**    
No4x 3/8" Csk Hd Screw

**B x2**    
No4x 1/2" Pan Hd Screw

**C x2**    
No4x 3/8" Pan Hd Screw

 To check the belt tension pivot the rear casing as shown to gain access to the belt. Turn the eccentrics to adjust the tension of the belt.



**BAG C - Step 27**
**A x2**

Ball Stud Long

**B x4**

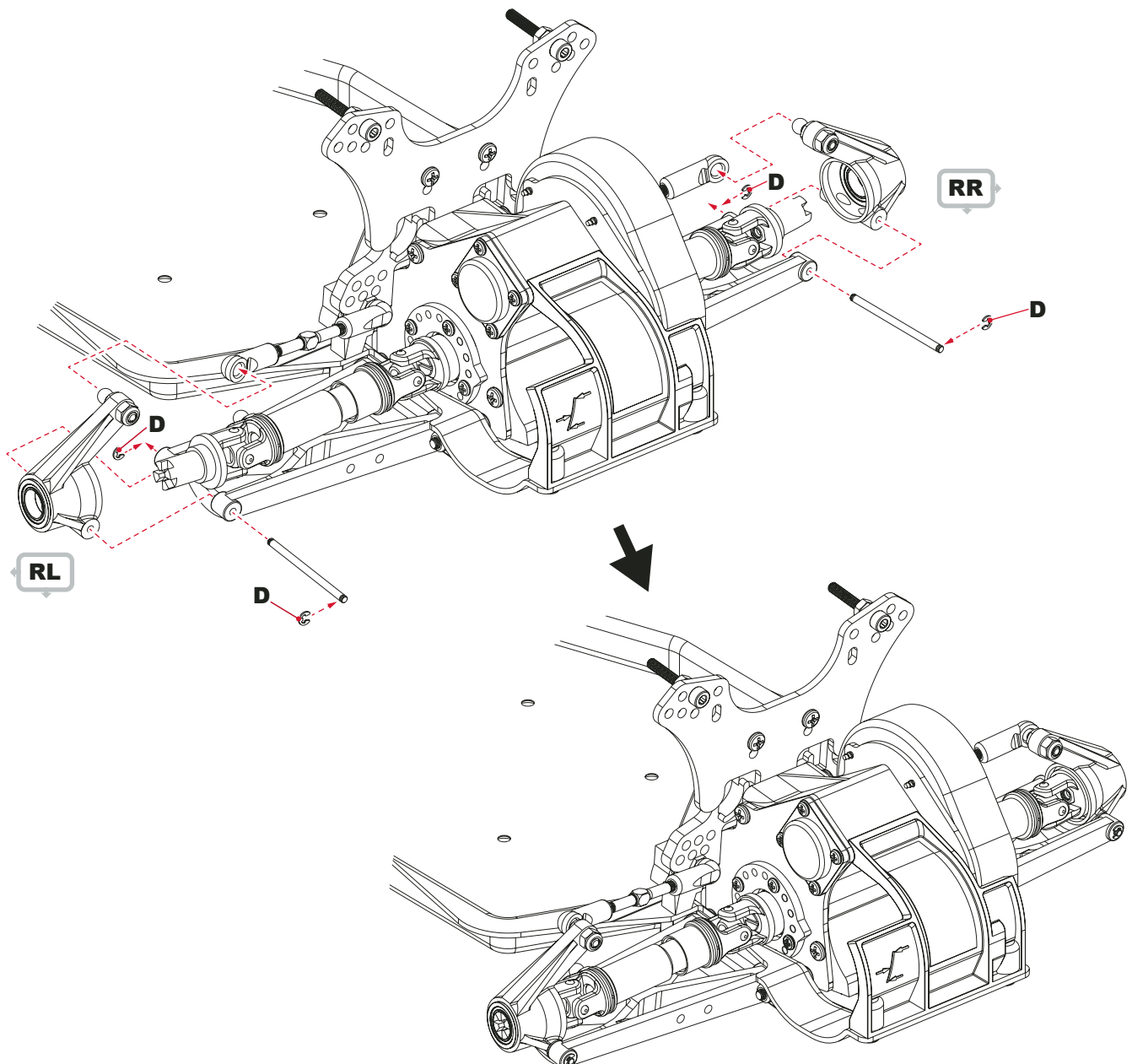
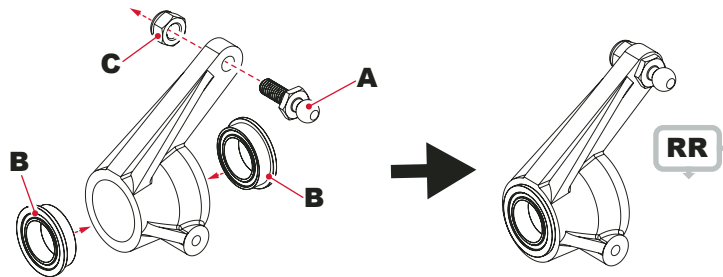
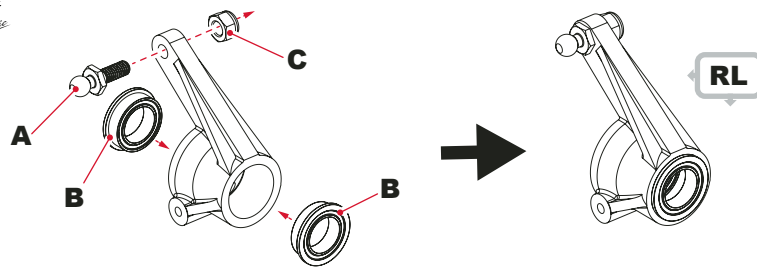
Ø8 x Ø12 FL Bearing

**C x2**

M3 Nyloc Steel Nut

**D x4**

Circlip



**BAG D - Step 28****A x4**

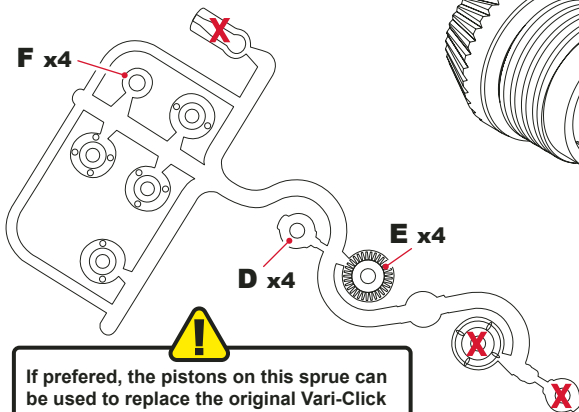
'O' Ring 9.0 x 1.0mm

**B x4**

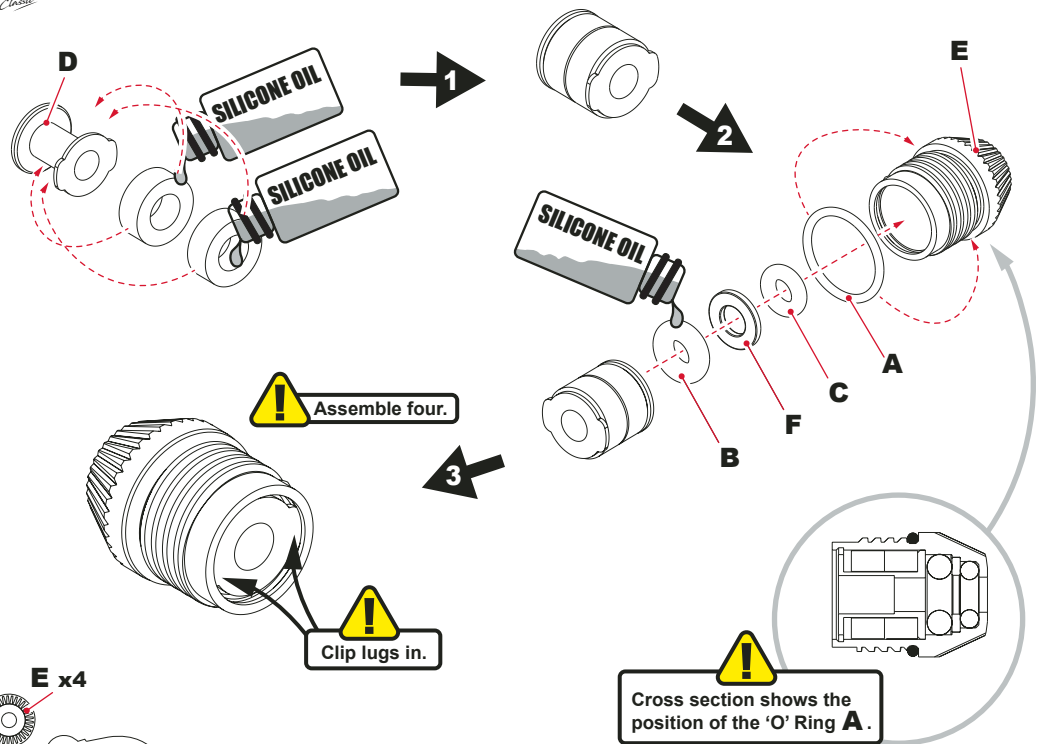
'O' Ring 3.3 x 2.4mm

**C x4**

'O' Ring Red



If preferred, the pistons on this sprue can be used to replace the original Vari-Click pistons featured in Step 29.



Assemble four.

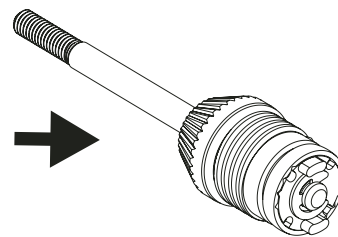
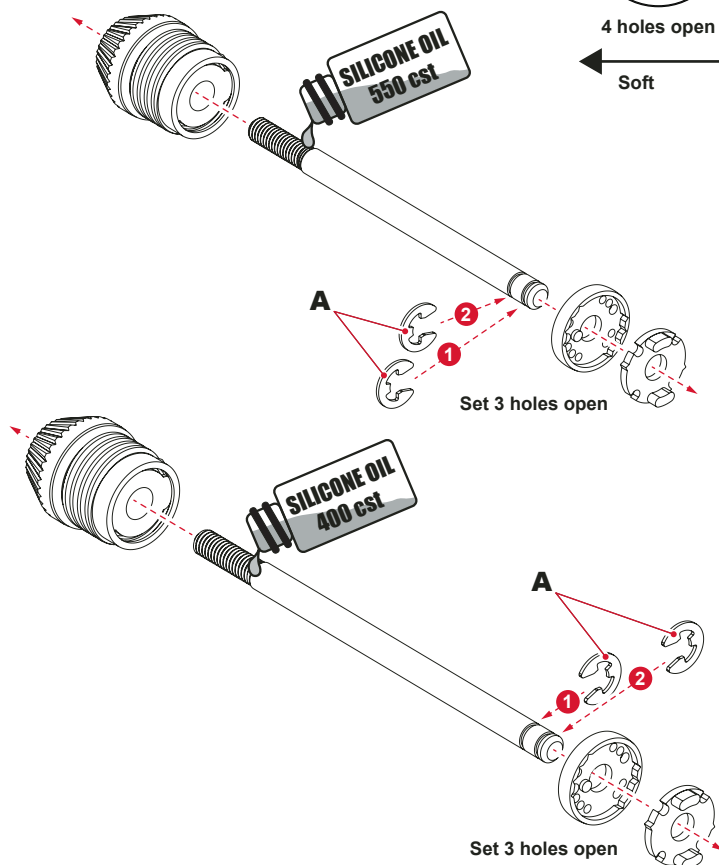
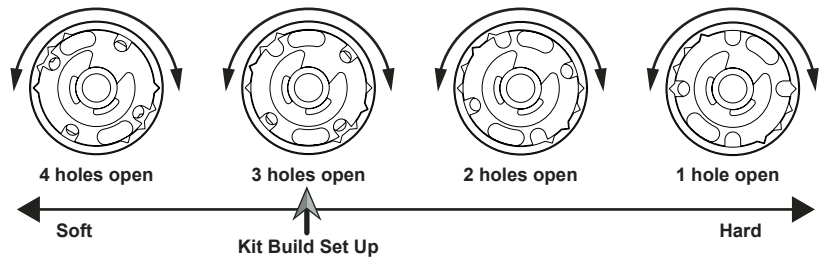
Clip lugs in.

Cross section shows the position of the 'O' Ring A.

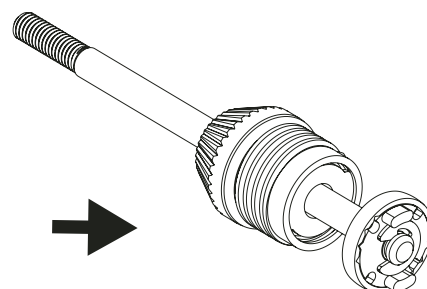
**BAG D - Step 29****A x8**

1/8th 'E' Clip

Vari-Click Piston Settings. Rotate into the correct position.



Short Rods  
Assemble two.

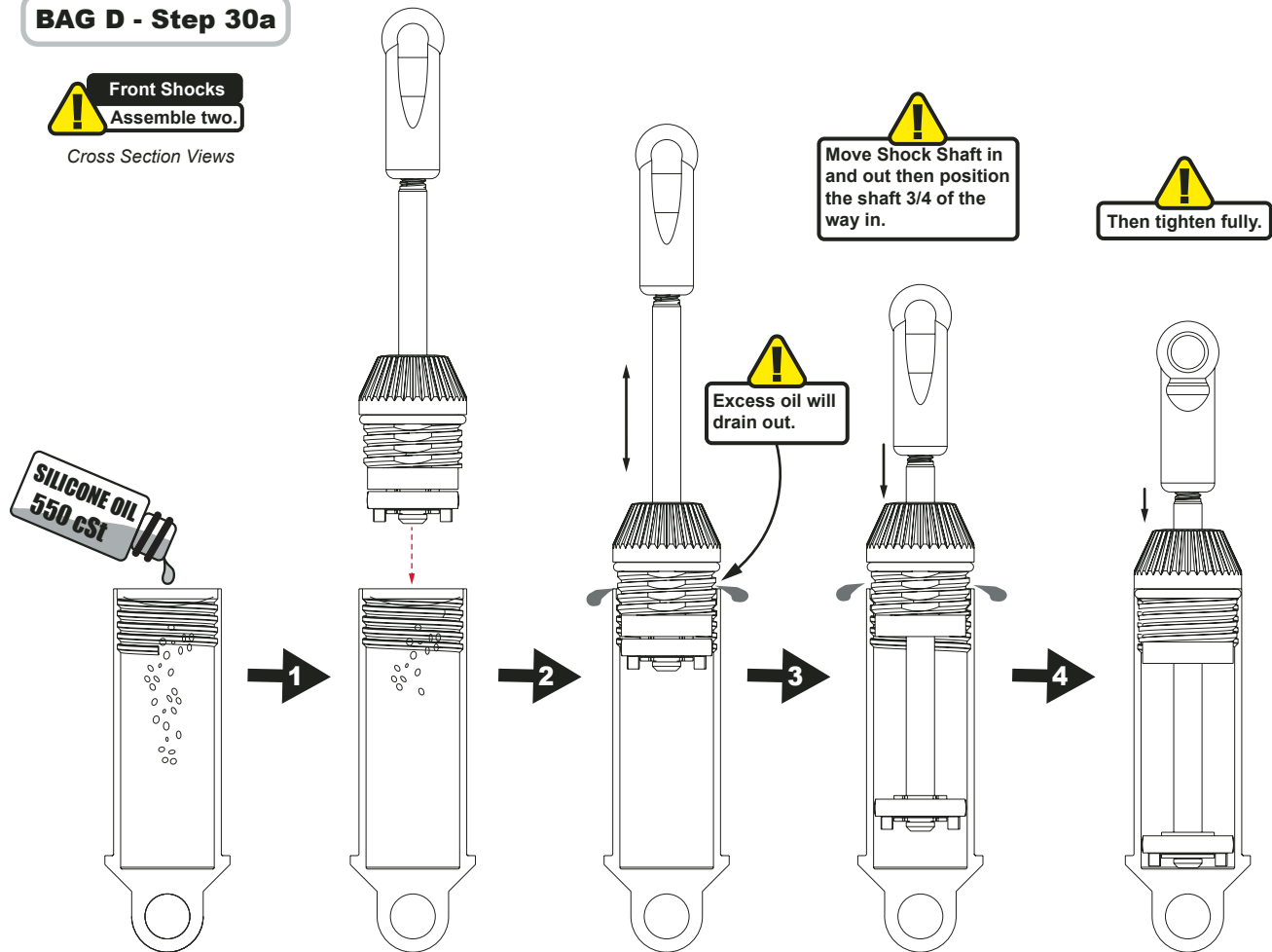


Long Rods  
Assemble two.

**BAG D - Step 30a**

**Front Shocks**  
Assemble two.

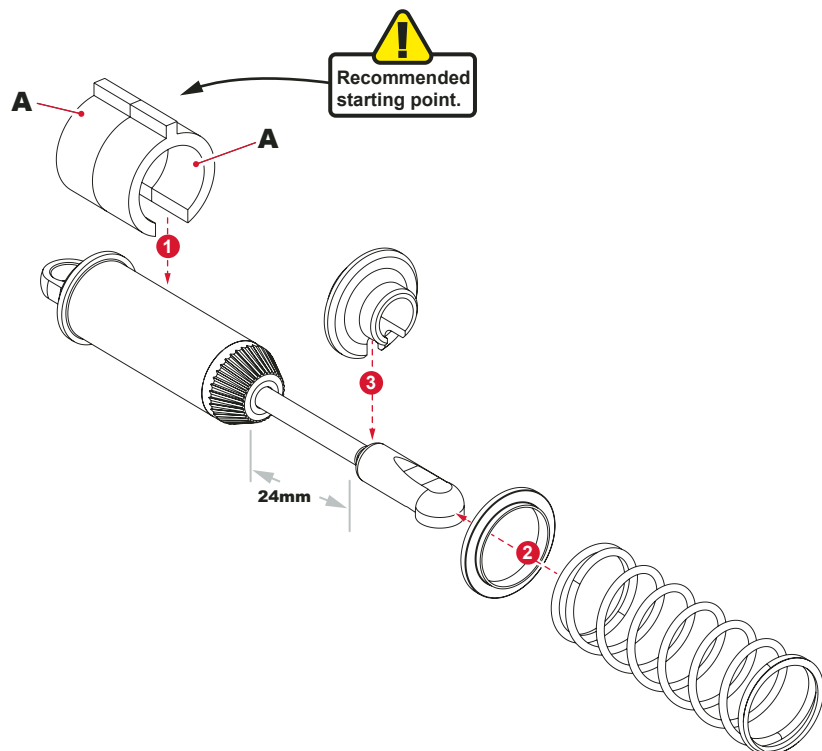
Cross Section Views


**BAG D - Step 30b**

**A x4**

Shock Spacer 8mm

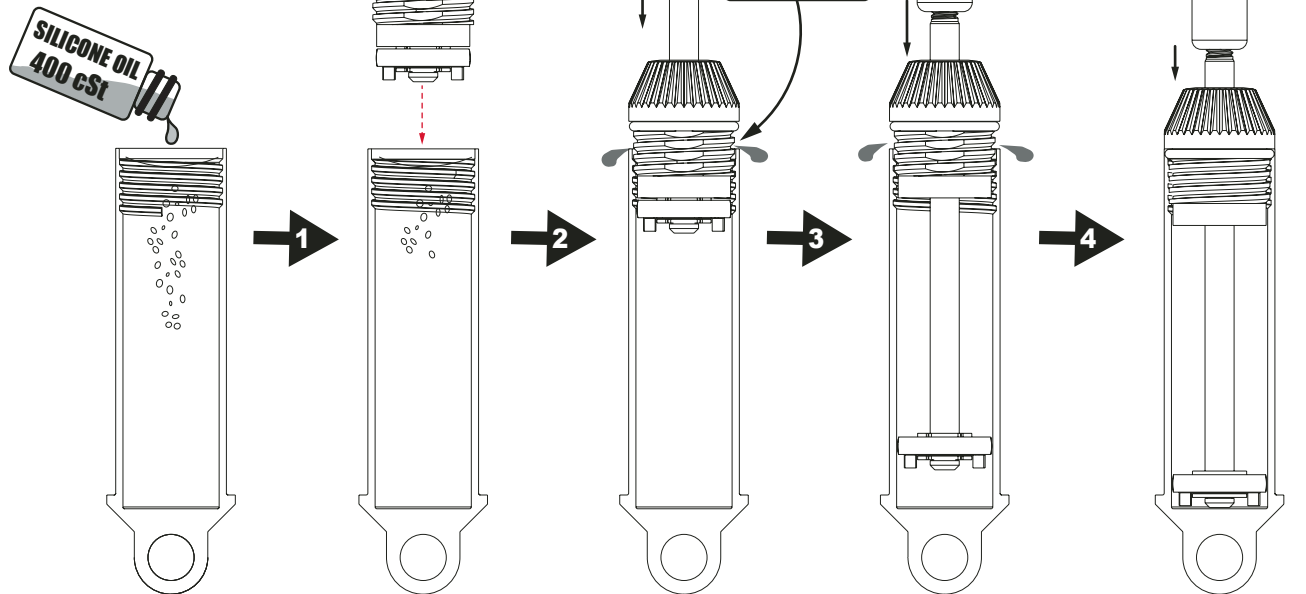
**Front Shocks**  
Assemble two.





**BAG D - Step 30c**

**! Rear Shocks**  
**Assemble two.**  
 Cross Section Views


**BAG D - Step 30d**
**A x2**

Shock Spacer 8mm

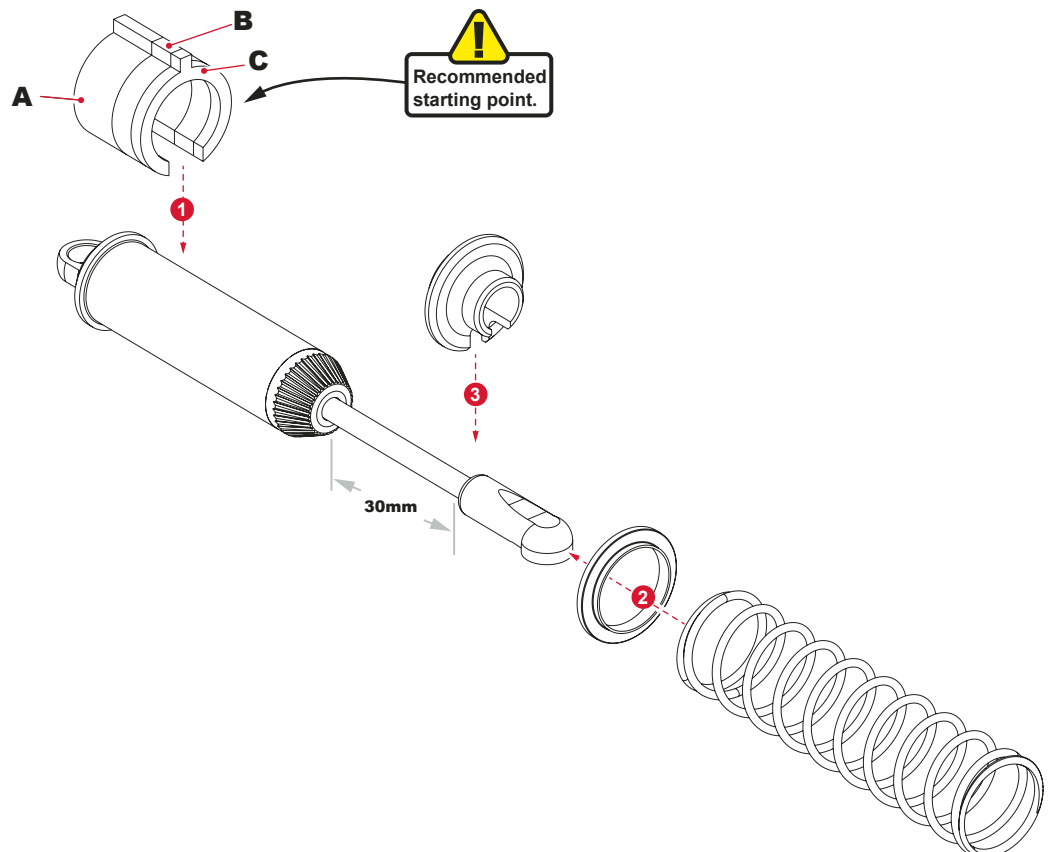
**B x2**

Shock Spacer 4mm

**C x2**

Shock Spacer 2mm

**! Rear Shocks**  
**Assemble two.**

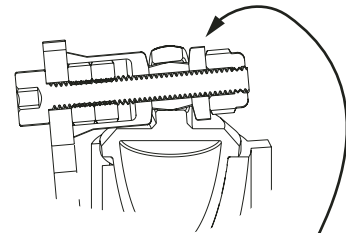


**BAG D - Step 31b**
**A x4**

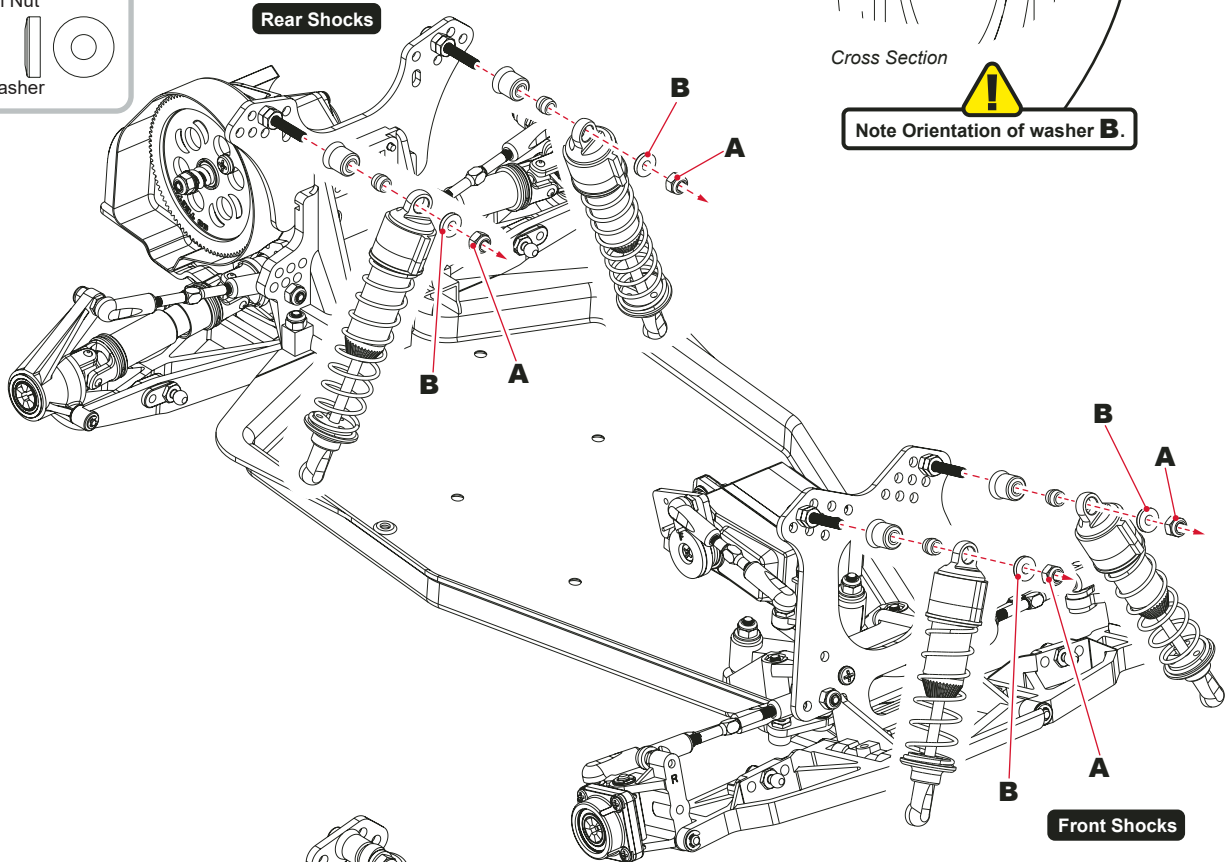
M3 Nyloc Steel Nut

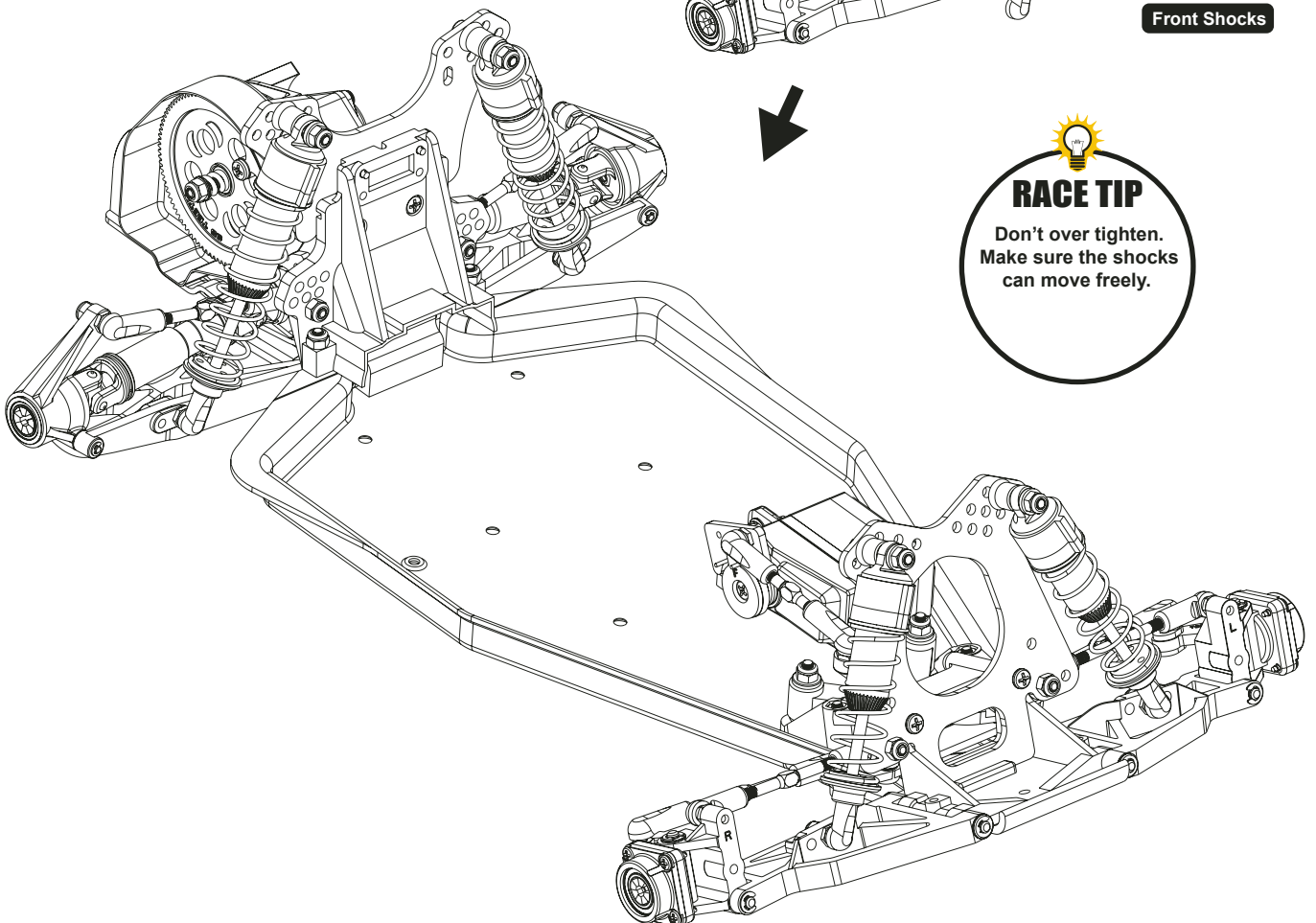
**B x4**

8mm Plastic Washer


**Rear Shocks**


Cross Section


**Note Orientation of washer B.**

**RACE TIP**

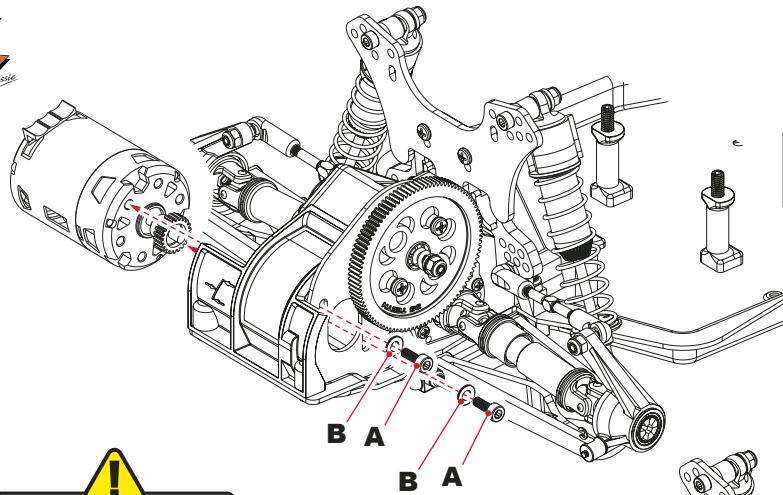
 Don't over tighten.  
Make sure the shocks  
can move freely.


**BAG D - Step 32a****A x2**

M3x 8 Cap Hd Screw

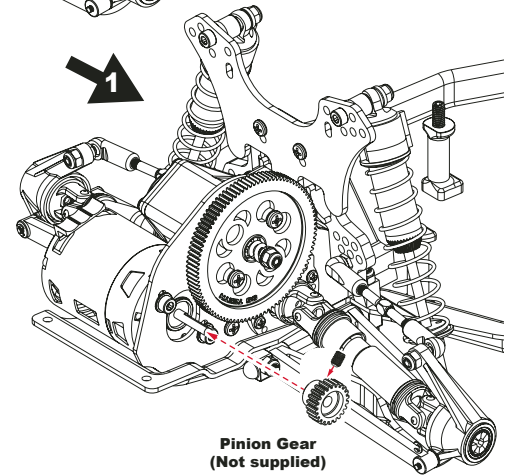
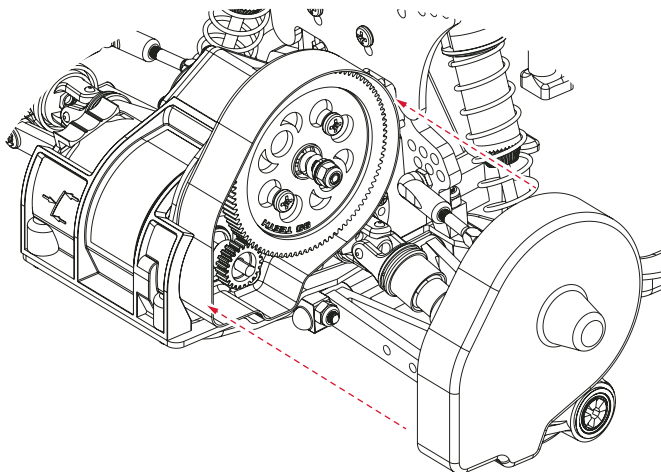
**B x2**

M3 Washer



**!**  
Gear cover removed  
in view, for clarity.

**!**  
The Pinion is not  
included but it should  
be assembled before  
the next step.

**BAG D - Step 32b**

**Pinion Gear  
(Not supplied)**

**RACE TIP**

We recommend  
using battery tape  
to ensure the gear  
cover is properly  
attached.

**COUGAR 2 Works Classic Gear Chart Standard Transmission**

Motor Limit 10.5 Brushless

Minimum Tooth Sum 110T - Maximum Tooth Sum 122T - Internal Ratio 2.428:1

		17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
U327	86								8.71	8.36	8.04	7.74	7.46	7.21	6.97	6.74	6.53
U326	89					10.3	9.83	9.4	9.01	8.65	8.32	8.01	7.72	7.46	7.21	6.98	6.76
U325	92		12.42	11.76	11.18	10.64	10.16	9.72	9.31	8.94	8.60	8.28	7.98	7.71	7.45		
U324	95	13.58	12.82	12.15	11.54	10.99	10.49	10.04	9.62	9.23	8.88	8.55					

**COUGAR 2 Works Classic Gear Chart Pro-Transmission**

Motor Limit 6.5 Brushless

Minimum Tooth Sum 110T - Maximum Tooth Sum 122T - Internal Ratio 2.428:1

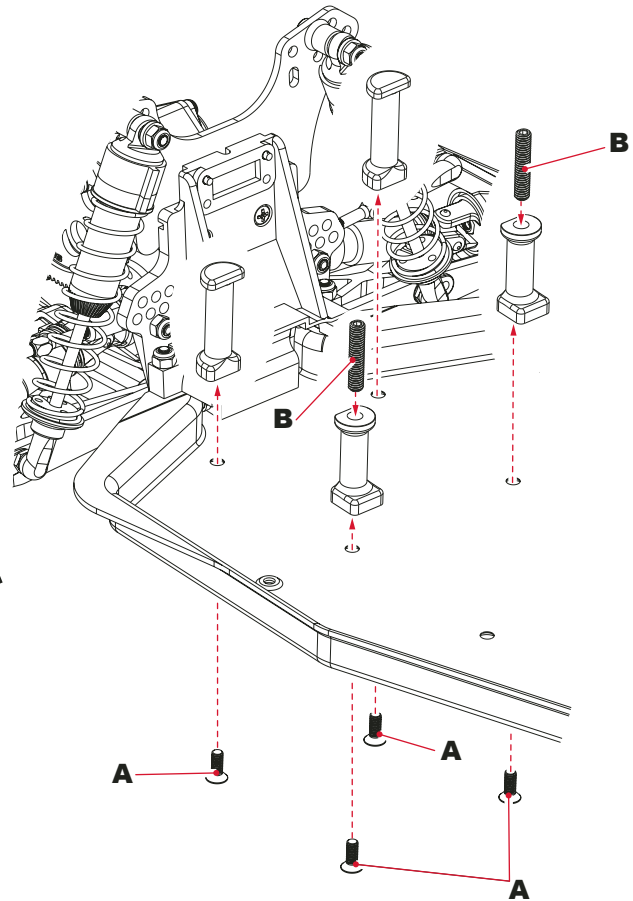
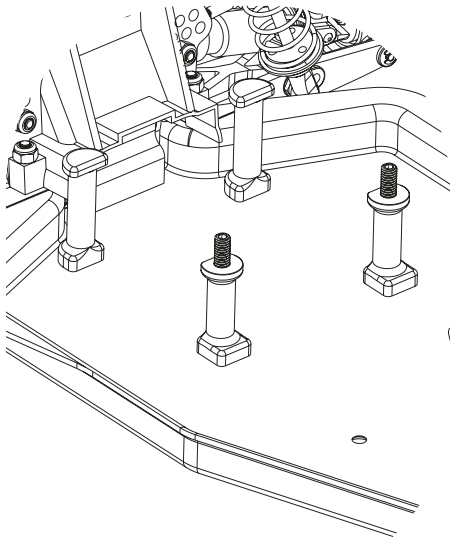
		17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
U7615	80														6.48	6.27	6.08
U3351	83											7.47	7.20	6.96	6.72	6.51	6.30
U7154	89					10.30	9.83	9.40	9.01	8.65	8.32	8.01	7.72	7.46	7.21	6.98	6.76
U4163	95	13.58	12.82	12.15	11.54	10.99	10.49	10.04	9.62	9.23	8.88	8.55					

**BAG D - Step 32c**
**A x4**

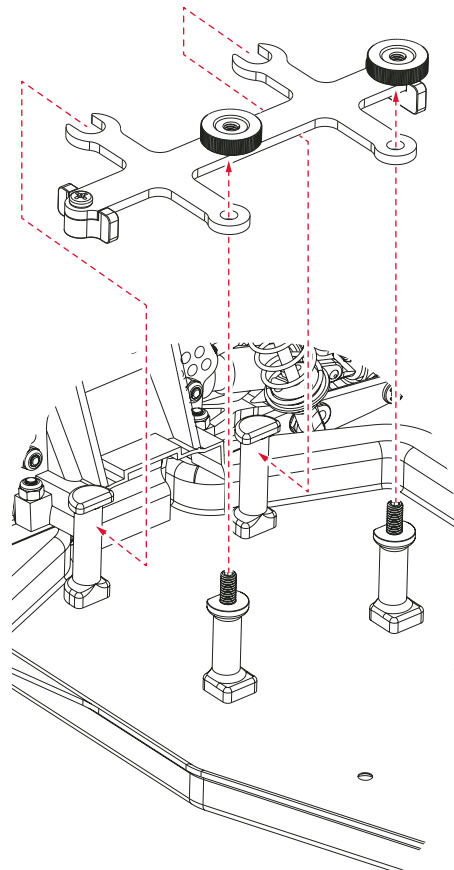
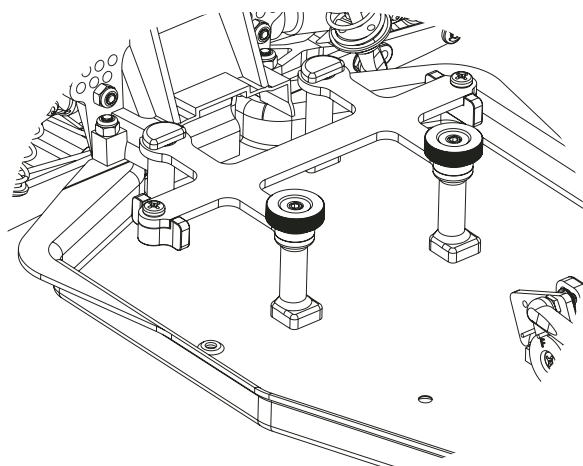
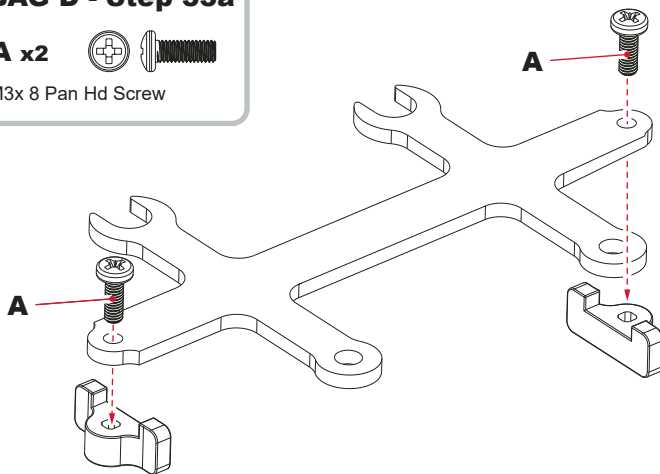
M3x 8 Csk Hd Screw

**B x2**

M4 X 20 Grub Screw


**BAG D - Step 33a**
**A x2**

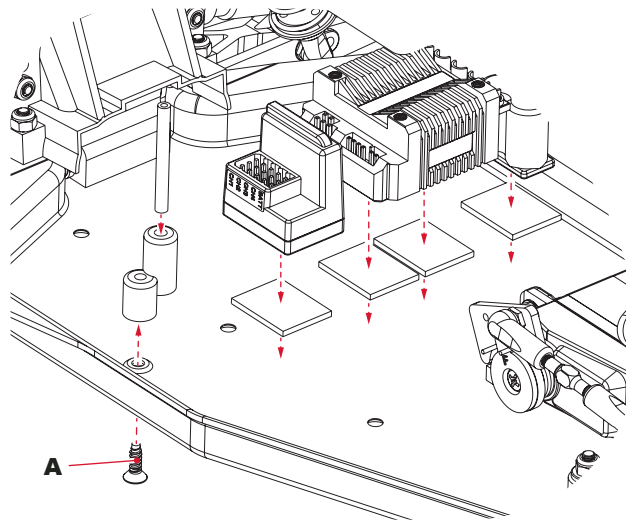
M3x 8 Pan Hd Screw





**BAG D - Step 33b**

**A x1**   
No4x 3/8" Csk Hd Screw


**BAG D - Step 34**

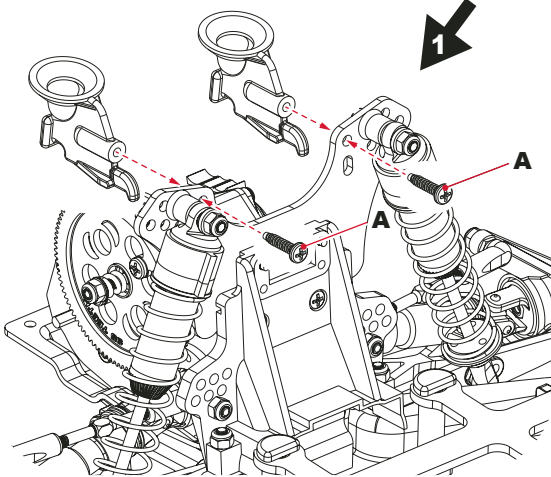
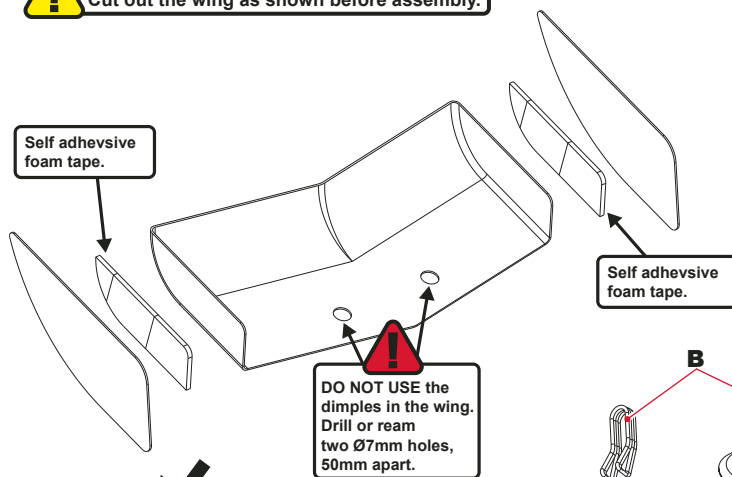
**A x2**   
No4x 1/2" Pan Hd Screw

**B x2**

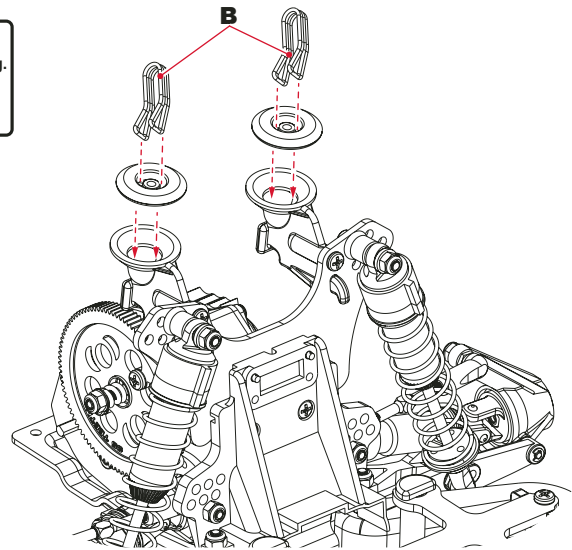
'O'ring  
ø22.1 x 1.6

**C x2**   
No4x 1/4" Pan Hd Screw

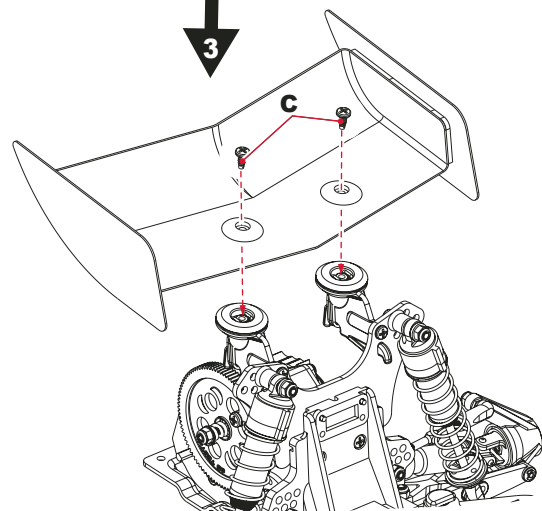
**Cut out the wing as shown before assembly.**



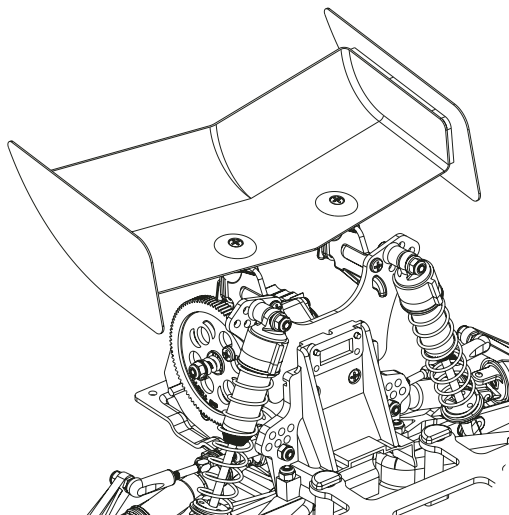
**2**



**3**



**4**



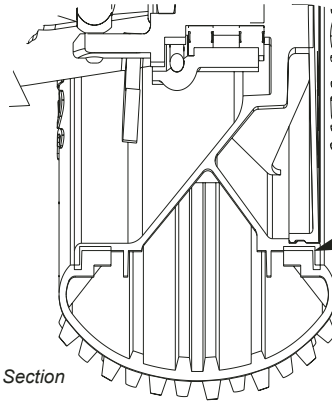


**BAG D - Step 35****A x2**

M3x 12 Cap Hd Screw

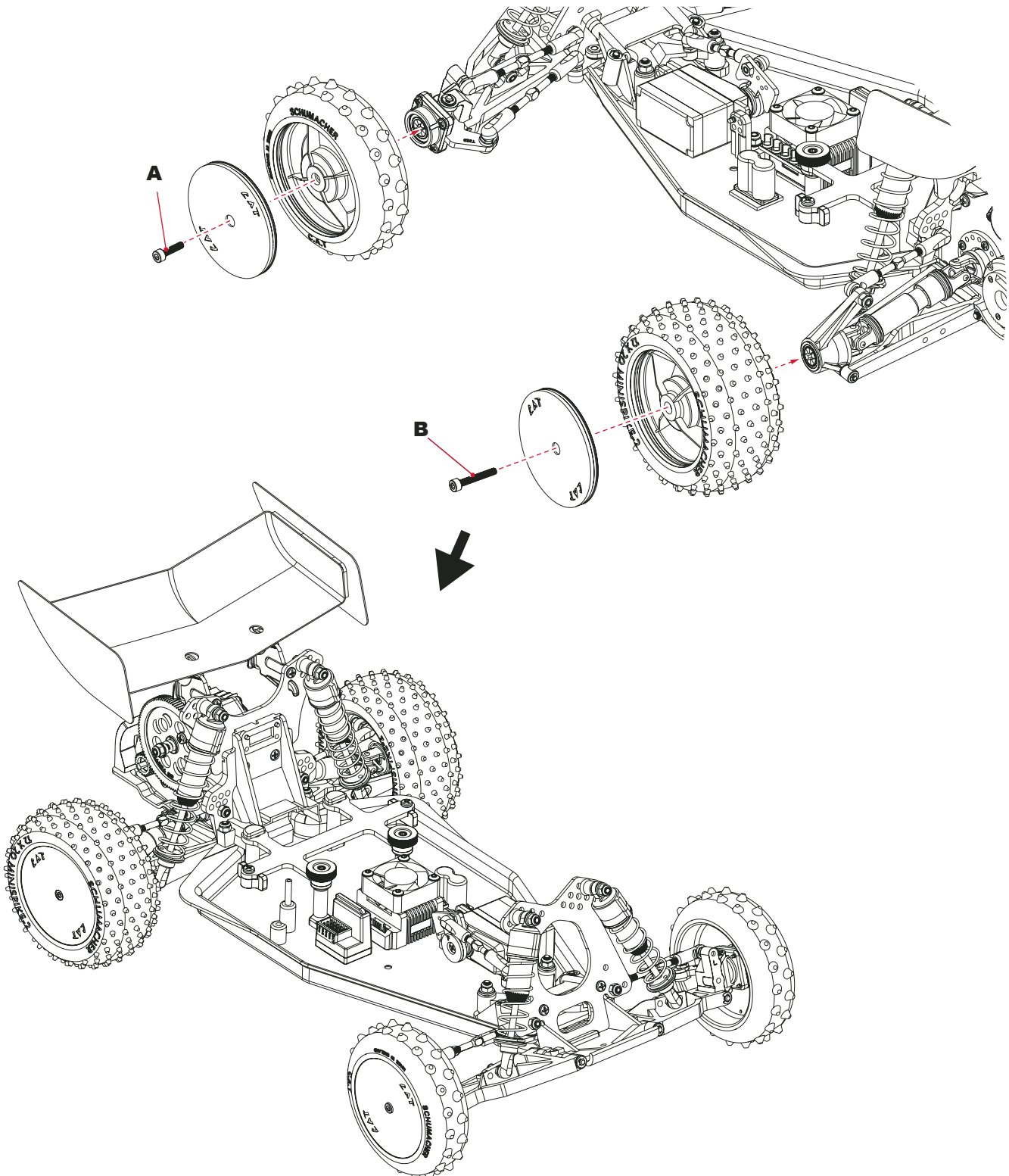
**B x2**

M3x 20 Cap Hd Screw



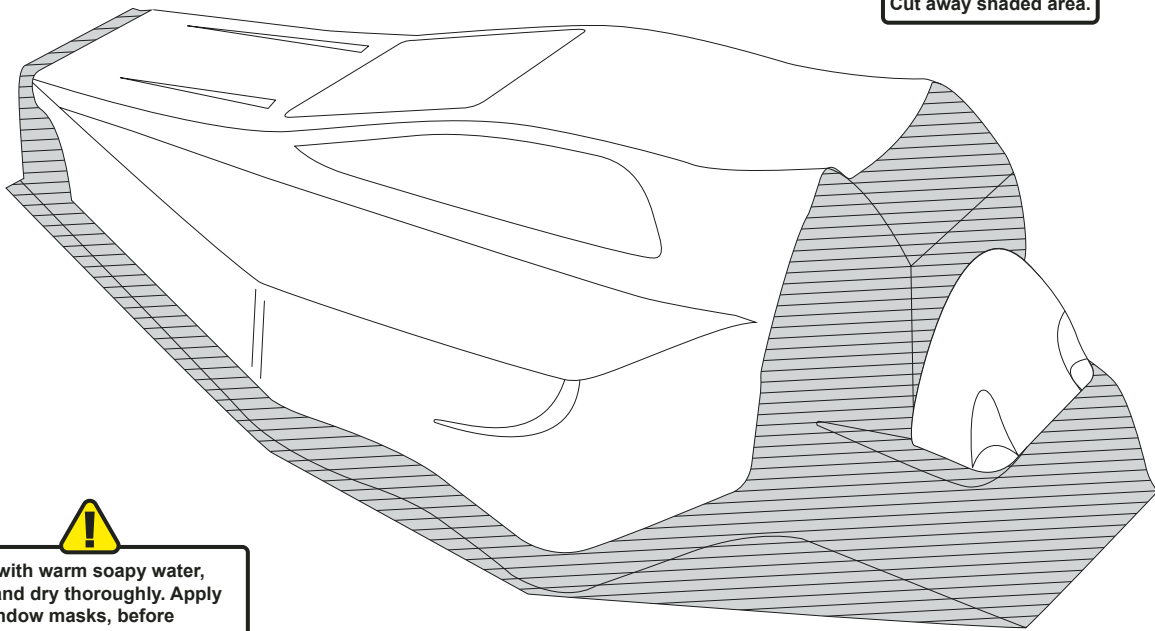
Cross Section

**!**  
Ensure the tyres  
are seated correctly  
before glueing.

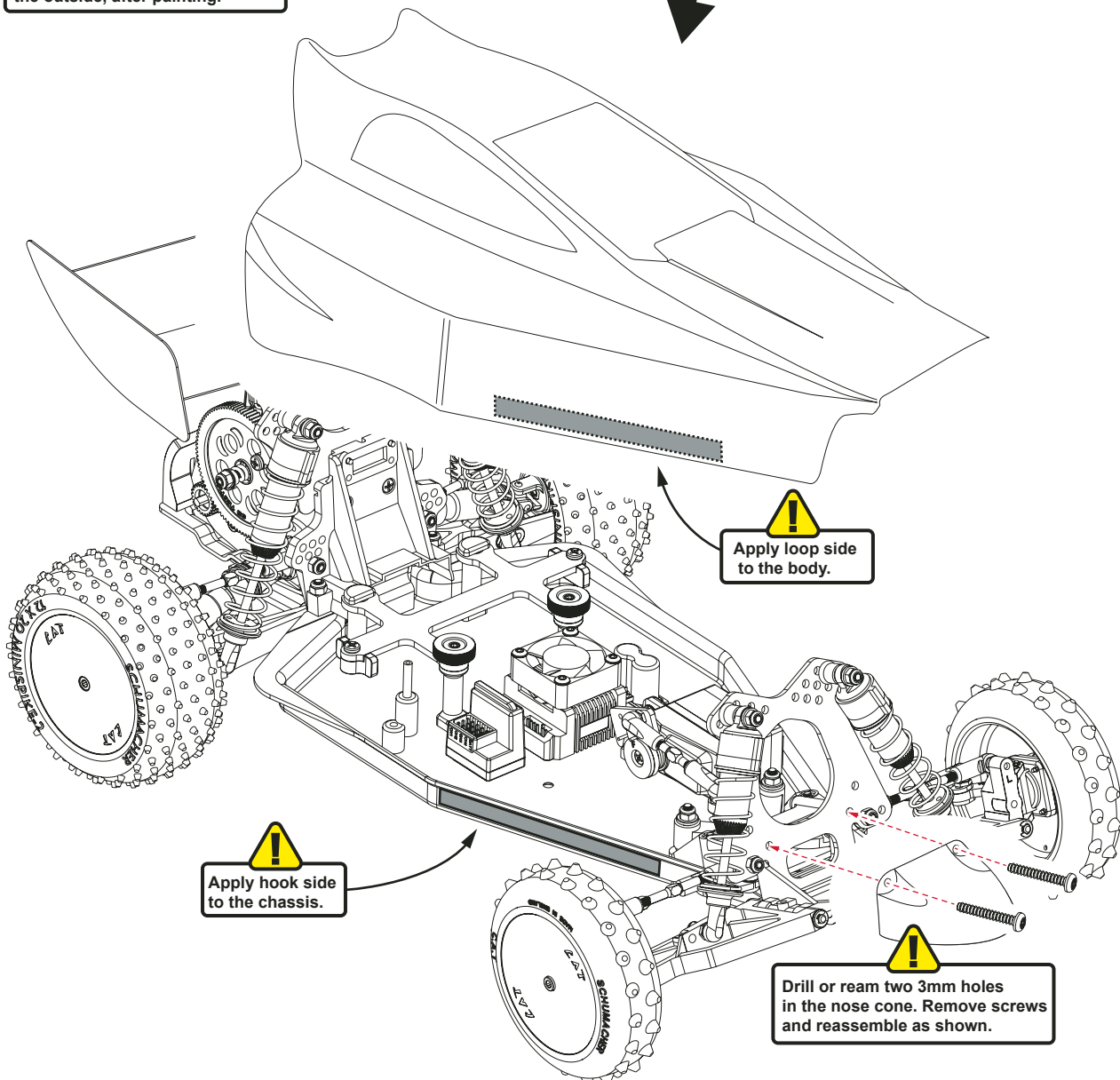




Cut away shaded area.



Wash with warm soapy water, rinse and dry thoroughly. Apply the window masks, before painting the inside. Then remove protective film from the outside, after painting.



Apply loop side to the body.



Apply hook side to the chassis.



Drill or ream two 3mm holes in the nose cone. Remove screws and reassemble as shown.

# TRACK SETTINGS

## RIDE HEIGHT

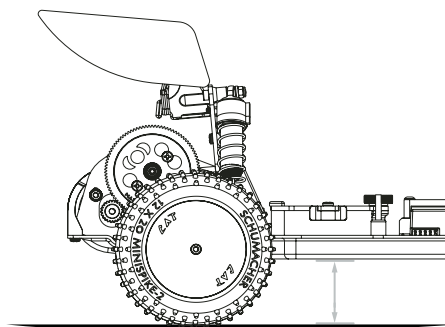
See Page 09 Bag B - Step 17 & 18

Use the spring adjusters on the shock absorbers to adjust the front and rear ride heights. With the car level, we recommend setting the ride height to around 17mm on astro, 21mm on dirt and 13-15mm on carpet. (16mm if there are large jumps in the track).

This is measured between the bottom of the chassis and the ground with the car in running trim. First press the car down on to the ground and release it once or twice to settle the suspension before adjusting the ride height. The chassis should be level when viewed from the side.

Adjusting the spring collars does not increase or decrease the spring stiffness only the preload.

If the suspension needs to be softer or harder change the spring.

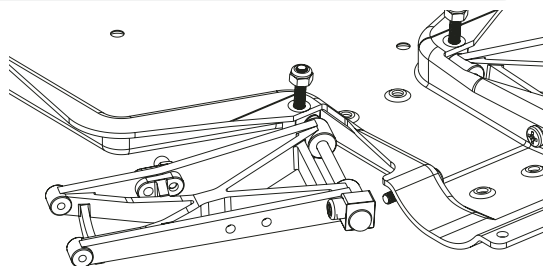


## REAR TOE

See Page 12 Bag B - Step 14

The base setting for rear toe in is  $4^\circ$ , this is a good compromise between forward traction and the car binding in the turns. This setting is fine for most tracks. You can alter the toe in by adding/removing washers behind the rear suspension mount. If you are running too much toe in, your car may suffer from instability at high speeds. Decreasing the toe in will reduce forward traction but will free the car up in the turns. Usually the team use less toe in on high grip tracks and more for low grip tracks.

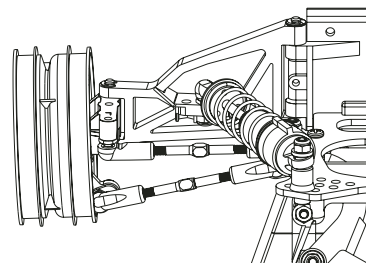
A good starting position is  $1.5^\circ$  on carpet and  $4.0^\circ$  on low grip dirt and wet astro.



## FRONT TOE

See Page 08 Bag A - Step 9

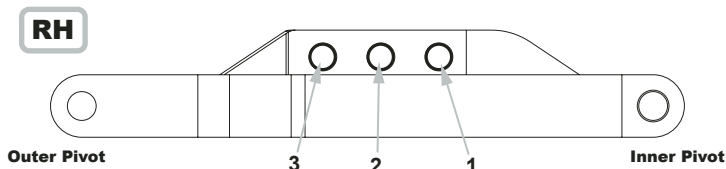
Front toe should be set to  $0^\circ$  (both front wheels pointing straight ahead) this will be the best setting for most track conditions. Adding toe out will increase initial turn in and make it smoother to drive on power. The team generally run  $1^\circ$  toe out on Astro tracks.



## FRONT WISHBONE SHOCK MOUNTING HOLE

See Page 2 Bag A - Step 1

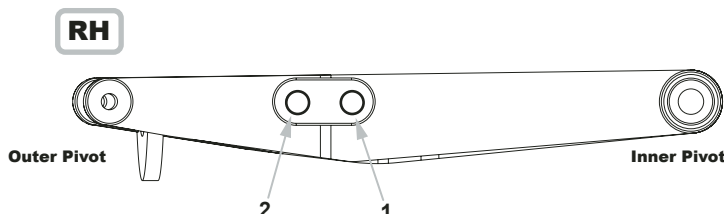
The middle hole (2) on the wishbone is the standard setting for most tracks. Moving the shock to the inner hole makes the car more reactive. It increases the initial turn in and makes the front of the car roll more through the turns. This setting also makes the front end softer.



## REAR WISHBONE SHOCK MOUNTING HOLE

See Page 12 Bag B - Step 14

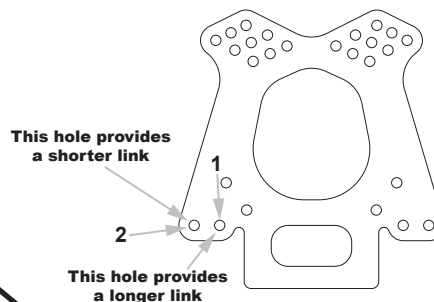
Hole 1 works best for most track conditions giving good traction and drive through the turns whilst maintaining good stability over the bumps. Moving to hole 2 on the wishbone will decrease traction but will allow the rear to free up more in the turns. This setting would usually only get used on high grip tracks and when moving the shock out you may have to change the oil and spring settings to get the same suspension feel.



## FRONT CAMBER LINKS

See Page 07 Bag A - Step 8

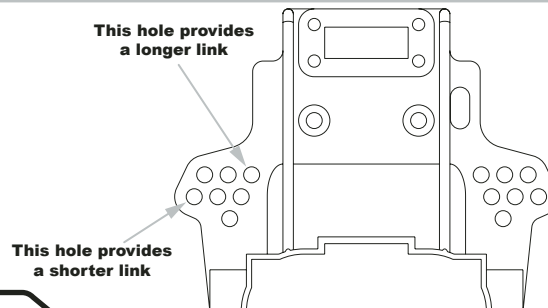
The kit settings for the front camber link position (1) and length are used by the team for most tracks. A longer front link (Hole 1) makes the front of the car roll more and offers less steering reaction at high speed. We would recommend this on fairly smooth high grip tracks. A shorter front link (2) will make the car roll less and speed up the cars initial steering response. This is a better choice for bumpy, low grip tracks.



## REAR CAMBER LINKS

See Page 13 Bag B - Step 16

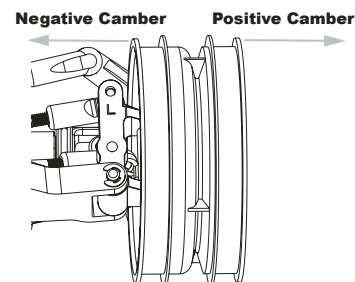
The kit setting for the rear camber link is the best compromise for most tracks. The longer links will make the car roll more and gain side traction, making the car easier to drive. Shortening the rear camber link will make the rear of the car roll less in the corners, and square up faster when accelerating away from tight turns. Longer links are generally used on high grip tracks and shorter links on low grip tracks.



## FRONT CAMBER

See Page 08 Bag A - Step 9

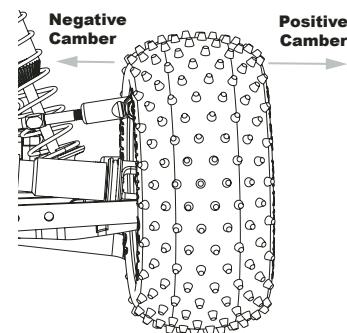
The usual team setting for static front camber is 1-2° negative at ride height (the top of the wheel is leaning inwards towards the car). Increasing the static camber will generally increase the mid corner steering, whereas decreasing the static camber usually makes the car smoother to drive by reducing the steering response.



## REAR CAMBER

See Page 12 Bag B - Step 15

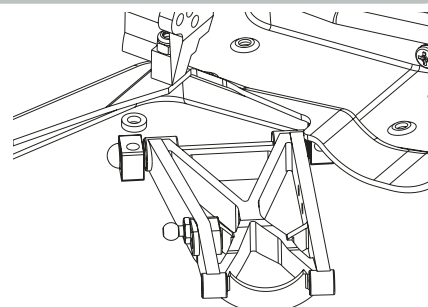
The usual team setting for static rear camber is 1° negative at ride height (the top of the tyre leaning inwards towards the car). Increasing the static rear camber will increase the traction when exiting the turns, but will be less stable at high speed. Decreasing the camber will reduce stability and traction in the turns but will be more stable at high speed.



## REAR ANTI SQUAT

See Page 11 Bag B - Step 13

The Kit build anti squat is set at 2°. This works best on most tracks. The anti-squat can be reduced by adding a washer above the front pivot block, or increased by removing the kit 1.6mm washer, (the wishbone may need to be trimmed for clearance). 1.6mm of adjustment = 2°. If you increase the anti squat angle you will find the car will support itself better through aggressive bumps and reduce over rotation on corner exit. It's best to stay between 1 and 2 degrees.





## SPARES LISTS

### Chassis Parts

U119	Aerial Tube - Pack 4
U322	Lower Front Susp Plate - 2WD
U1042	Aerial Mount - Universal
U2204	Wing Mount Kit
U4765	LiPo Post Nut 2pcs - Off Road
U4778	LiPo Stops 4pcs - Off Road
U7045	LiPo Posts Std - KD,KC,L1/EVO,XLS,TC,LD/2,ST,CC,PC
U7546	Servo Mounts (pr) - TC,CC
U7550	Shorty LiPo Strap S2 - TC,CC
U7588	Rear Motor Guard - TC,CC
U8291	Front Bulkhead - Cougar Classic
U8304	Servo Saver Set - Cougar Classic
U8306	Centre Track Rod - Cougar Classic
U8843	Ball Raced Steering Post (pr) - C2W
U8932	Steering Radius Arm (pr) - C2W
U8934	Chassis - C2W
U8935	Rear Bulkhead - C2W
U8937	C/F Front Shock Mount - C2W
U8938	C/F Rear Shock Mount - C2W
U8941	Centre Track Rod Pivot (pr) - C2W
U8952	Motor Plate - C2W
U8953	Cover Plate - C2W
U8956	Transmission Housing - C2W
U8963	Manual - C2W

### Bodys & Decals

U5149	Wing and End Plates - C2W
U5150	Bodyshell + Decals + Window Mask - C2W
U8962	Gear Cover (pr) - C2W
U8969	Decal - C2W

### Transmission

U324	95T QC Slipper/Visco Gear - 48 DP
U4106	Slipper Spring - SVR,KR,K1/Aero,L1/EVO/R
U7152	UJ Assembly pr - XLS,TC,CC,PC
U7260	SPEED PACK Disc Spring 8x3.2x0.5mm (pk8)
U7571	Front Axles (pr) - TC,CC
U7586	Belt 72T 8.0 Wide (Kit) - TC,CC
U7590	Alloy Layshaft Bush - TC,CC
U7594	Layshaft Pulley Set (Kit) - TC,CC
U7596	Front Wheel Bearing Retainers (pr) - TC,CC
U8931	Driveshaft Rod (pr) - C2W
U8939	Diff Outputs (pr) - C2W
U8940	Diff Mouldings (4pcs) - C2W
U8942	Ball Differential - C2W
U8944	Alloy Washer Carriers (pr) - C2W
U8945	Diff Washer (pr) - C2W
U8946	Driveshaft Body (1pc) - C2W
U8947	Driveshaft Mouldings (8pcs) - C2W
U8949	Driveshaft Bush (pr) - C2W
U8950	Driveshaft Fork (1pc) - C2W
U8954	Eccentric (pr) - C2W
U8957	Layshaft - C2W
U8958	Slipper Spacer - C2W
U8959	Slipper Drive Hub - C2W
U8960	Slipper Thrust Plate - C2W
U8961	Slipper Pad PTFE - C2W
U8972	Roller Driveshaft (pr) - C2W
U8978	Bearing Housing (pr) - C2W
U8984	95T Slipper Spur Gear - C2W

### Bearings & Balls

U729	Chrome Steel Balls 3mm pk36-F28 T,XLS,TC,CC,PC
U3704	Thrust Bearing F3x8G SiNi Balls
U4809	Ball Bearing - 1/4x3/8x1/8 Shield - (pr)
U4943	Ball Bearing - 1/8 x1/4 Shield - (pr)
U7155	Bearing 8 x 16 x 5 Black Seal (pr)

### Bearings & Balls Cont.

U7216	Thrust Race F1/8 x 5/16 x 9/64 Grvd - XLS,TC,CC,PC
U7726	Pro-Ball Bearing 6x12x4 Sealed - (pr)
U8981	Ball Diff Rebuild Kit - C2W
U8983	Ball Bearing - 8x12x3.5 Shield Flanged - (pr)

### Hardware

U1247	SPEED PACK - Wing Mount 'O' Ring
U1537	SPEED PACK - Short Self Tap Pan
U1539	SPEED PACK - Self Tap Csk Hd
U1540	SPEED PACK - Short M3 Pan Hd
U1541	SPEED PACK - Medium M3 Pan Hd
U1547	SPEED PACK - M3 Nuts
U1548	SPEED PACK - M3 Washers
U1551	SPEED PACK - E Clips -2 x 8pcs
U1565	SPEED PACK - Small Self Tap; PanHd
U1633	SPEED PACK - Small Pins (pk)
U1960	SPEED PACK - O Rings; Various
U1962	SPEED PACK - O Rings3.3x2.4ID - pk6
U4220	'O' Ring 9.0x1.0 (pk10)
U7090	SPEED PACK - M4x20 Grub Screw (pk4)
U7112	SPEED PACK - M3x8 Cap Hd (pk10)
U7164	SPEED PACK M3 x 12 SS Cap Hd (pk10)
U7166	SPEED PACK M3 x 20 SS Cap Hd (pk10)
U7215	F/G UJ Spanner - CAT XLS
U7218	SPEED PACK M3 x 6 Pan Hd Pozi (pk10)
U7219	SPEED PACK M3 x 8 Pan Hd Pozi (pk10)
U7228	SPEED PACK No 4 x 1/4 Pan Hd (pk10)
U7229	SPEED PACK No 4 x 3/8 Pan Hd (pk10)
U7230	SPEED PACK No 4 x 1/2 Pan Hd (pk10)
U7231	SPEED PACK No 4 x 3/4 Pan Hd (pk10)
U7259	SPEED PACK M3 x 8 Csk Pozi (pk10)
U7562	SPEED PACK - M3 x10 Csk Pozi (pk10)
U7563	SPEED PACK - M3x16 Pan Pozi (pk10)
U7564	SPEED PACK - M3x20 Pan Pozi (pk10)
U7566	SPEED PACK - No2x3/8 Pan Pozi (pk10)
U7707	M3 Steel Washers (pk10)
U8272	SPEED PACK No 2 x 1/4 Pan Hd (pk10)
U8275	Plastic Washer Set 1, 1.5,2,3,4mm (20 pcs)
U8498	'O' Ring 4.0x1.5 (pk10)
U8943	Stepped M3 Washer (4pcs) - C2W
U8951	Steering Bearing Spacer (pr) - C2W
U8980	'O' Ring 11.0x1.0 (pk10)
U8982	SPEED PACK - M3x22 Pan Pozi (pk10)



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## SPARES LISTS

### Suspension

U776	Top Bkt; Yokes; C.Tr. Rod - 2WD
U1129	Rear Pivot Blocks 1/8
U3067	Yoke C Hub pr - Rascal, Riot, CC
U3103	Pivot Pin; grooved 23mm 1/8 pr - Rascal, Riot, TC, CC
U3495	Ball Studs; Ultra Short - pk 4
U3496	Ball Studs; Short - pk 4
U3497	Ball Studs; Long - pk 4
U4223	Turnbuckle Adjuster HTT - 45mm - pr
U4298	Turnbuckle HT - 35mm - pr
U4303	Ball Socket Long (Black) - pk8
U4850	Low Ball Stud pk4
U7567	Grooved Pins 45mm (pr) - TC, CC, PC
U8279	Front Hub Carrier - Cougar Classic (pr)
U8299	Ball Raced Steering Set V2 - Cougar Classic
U8670	Front Inboard Pivot Pin (pr) - C2W
U8933	Front Wishbones (pr) - C2W
U8936	Rear Wishbones (pr) - C2W
U8964	Rear Hub Carrier (pr) - C2W
U8965	Rear Outer Wishbone Pin (pr) - C2W

### Shock Absorbers

U613	Spring Stop and Spacer Mouldings (pr)
U835	Vari Shock Seal Pack (pr)
U1202	Piston Rod - Long Shock (pr)
U1233	Piston Rod - Med Shock (pr)
U1310	Shock Mouldings-Vari Click Piston (pr)
U7261	Shock Mouldings pr - XLS, TC, CC, PC
U7432	Shock Spring Seat Moulded pr - L1, TC, CC, PC
U8948	Front Shock (pr) - C2W
U8966	Front Shock Body (pr) - C2W
U8967	Rear Shock Body (pr) - C2W
U8968	Piston Set - C2W
U8976	Rear Shock (pr) - C2W
U8328	Vintage Springs Short Set (7pr)
U8329	Vintage Springs Med Grey 2.7lb/in (pr)
U8330	Vintage Springs Med Blue 3.0lb/in (pr)
U8331	Vintage Springs Med Black 3.3lb/in (pr)
U8332	Vintage Springs Med Set (6pr)
U8362	Vintage Springs Med Green 3.6lb/in (pr)
U8363	Vintage Springs Med Orange 4.4lb/in (pr)
U8364	Vintage Springs Short Green 5.2lb/in (pr)
U8365	Vintage Springs Short Purple 6.9lb/in (pr)
U8366	Vintage Springs Short Orange 8.0lb/in (pr)
U8367	Vintage Springs Short Grey 3.5lb/in (pr)
U8368	Vintage Springs Short Blue 4.0lb/in (pr)
U8369	Vintage Springs Short Black 4.5lb/in (pr)

### Pinions

U2309	20T Steel Pinion - 48 D.P.
U2310	21T Steel Pinion - 48 D.P.
U2311	22T Steel Pinion - 48 D.P.
U2312	23T Steel Pinion - 48 D.P.
U2313	24T Steel Pinion - 48 D.P.
U2314	25T Steel Pinion - 48 D.P.
U2315	26T Steel Pinion - 48 D.P.
U2316	27T Steel Pinion - 48 D.P.
U2317	28T Steel Pinion - 48 D.P.
U2318	29T Steel Pinion - 48 D.P.
U2319	30T Steel Pinion - 48 D.P.
U3417	Pinion; Hard Alloy 48dp - 17T
U3418	Pinion; Hard Alloy 48dp - 18T
U3419	Pinion; Hard Alloy 48dp - 19T
U3420	Pinion; Hard Alloy 48dp - 20T
U3421	Pinion; Hard Alloy 48dp - 21T
U3422	Pinion; Hard Alloy 48dp - 22T
U3423	Pinion; Hard Alloy 48dp - 23T
U3424	Pinion; Hard Alloy 48dp - 24T
U3425	Pinion; Hard Alloy 48dp - 25T
U3426	Pinion; Hard Alloy 48dp - 26T

### Pinions Cont.

U3427	Pinion; Hard Alloy 48dp - 27T
U3428	Pinion; Hard Alloy 48dp - 28T
U3429	Pinion; Hard Alloy 48dp - 29T
U3430	Pinion; Hard Alloy 48dp - 30T
U3431	Pinion; Hard Alloy 48dp - 31T
U3432	Pinion; Hard Alloy 48dp - 32T
U3433	Pinion; Hard Alloy 48dp - 33T
U3434	Pinion; Hard Alloy 48dp - 34T
U3796	32T Steel Pinion - 48 D.P.
U3797	33T Steel Pinion - 48 D.P.
U3798	34T Steel Pinion - 48 D.P.
U3800	31T Steel Pinion - 48 D.P.

### Wheels

U8970	AeroDisc Front Wheel (pr) - C2W
U8971	AeroDisc Rear Wheel (pr) - C2W
CR684	JC Spoke 2.2 Front Wheel - TOP CAT, PC - pr
CR681	JC 5 Spoke 2.2 Rear White Wheel XLS, PC - pr
CR685	JC Dish 2.2 Front Wheel TOP CAT - pr
CR683	JC Dish 2.2 Rear White Wheel XLS, PC - pr

### Option Parts

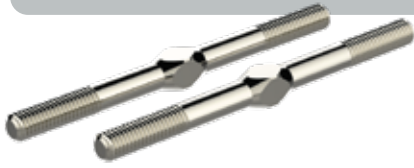
CR290	CORE RC 1/12 Servo Saver 23T Sanwa/KO
CR291	CORE RC 1/12 Servo Saver 25T Futaba
U1818	Purple Alloy Shock Seal Housing (pr)
U2365	Purple Alloy Pivot Blocks 1/8
U3850	Wing Mount Set - Off Road
U7281	Tungsten Carbide Balls 3mm (pk12)
U7317	Titanium Turnbuckle - 45mm - Silver - pr
U7419	Titanium M4 x 20 Grub Screw (pr)
U7424	Alloy Lightweight LiPo Nut - (pr)
U7952	Wing Mount Mouldings - LD2/3, L1 EVO/R
U7984	Alloy LiPo Posts Short pr KC, KD, LD/2, L1/EVO, CC
U7985	Alloy LiPo Post Spacer-(4) KC, KD, LD/2, L1/EVO, ST, CC
U8703	Pro Slipper Conversion - C2W
U8798	Ball Bearing 1.5x4x2 Shield - pr
U8817	Twin Bearing Front Hub Carrier Set (pr) - C2W
U8818	Front Anti Roll Bar Kit - C2W
U8819	Rear Anti Roll Bar Kit - C2W
U8820	C/F Front Brace - C2W
U8821	C/F Centre Track Rod - C2W
U8822	Alloy Bearing Housings (pr) - XLS, TC, CC, PC, C2W
U8906	Alloy Yokes 0deg (pr) - C2W
U8973	Pro Slipper Layshaft - C2W
U8974	Alloy Eccentric (pr) - C2W
U8979	Front Hub Carrier Mouldings (6pc) - C2W
U8985	92T Slipper Spur Gear - C2W
U8986	89T Slipper Spur Gear - C2W
U8987	86T Slipper Spur Gear - C2W
U9000	Carpet Protector Front Shock Tower - C2W
U9001	Carpet Protector Nut (pr) - C2W

For the latest spares and option parts visit.....

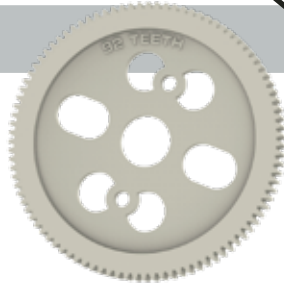
[www.racing-cars.com](http://www.racing-cars.com)



## OPTION PARTS



**U7317** Titanium Turnbuckle - 45mm - Silver - pr



**U8985** 92T Slipper Spur Gear - C2W  
**U8986** 89T Slipper Spur Gear - C2W  
**U8987** 86T Slipper Spur Gear - C2W



**U8818** Front Anti Roll Bar Kit - C2W  
**U8819** Rear Anti Roll Bar Kit - C2W



**U8973** Pro Slipper Layshaft - C2W



**U8703** Pro Slipper Conversion - C2W



**U8974** Alloy Eccentric (pr) - C2W



**U7424** Alloy Lightweight LiPo Nut - (pr)



**U8798** Ball Bearing 1.5x4x2 Shield - pr  
 (Roller Drive Shaft)



**U8817** Twin Bearing Front Hub Carrier Set (pr) - C2W



**U9001** Carpet Protector Nut (pr) - C2W



**U1818** Purple Alloy Shock Seal Housing (pr)



**U8906** Alloy Yokes 0deg (pr) - C2W



**U8822** Alloy Bearing Housings (pr) - XLS,TC,CC,PC,C2W



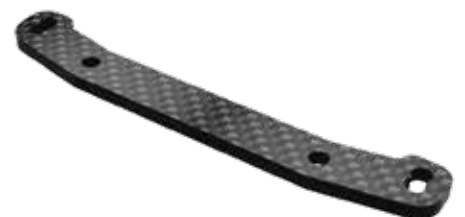
**U8820** C/F Front Brace - C2W



**U9000** Carpet Protector Front Shock Tower - C2W



**U2365** Purple Alloy Pivot Blocks 1/8



**U8821** C/F Centre Track Rod - C2W



Driver: \_\_\_\_\_ Date: \_\_\_\_\_ Event/Track: \_\_\_\_\_  
 Qualify: \_\_\_\_\_ Final: \_\_\_\_\_ Best Lap: \_\_\_\_\_

## TRACK TYPE

Grip Level ☐ High ☐ Medium ☐ Low ☐  
 Type ☐ Tight ☐ Open ☐ Mixed ☐  
 Condition ☐ Flat ☐ Bumpy ☐ Mixed ☐  
 Surface ☐ Clay ☐ Long Astro ☐ Carpet ☐  
               ☐ Grass ☐ Short Astro ☐ Mixed ☐  
 Weather \_\_\_\_\_

## TYRES

	Front	Rear
Tyres	_____	_____
Wheels	_____	_____
Inserts	_____	_____
Sidewall Glue	Front <input type="checkbox"/>	Rear <input type="checkbox"/>

Notes:

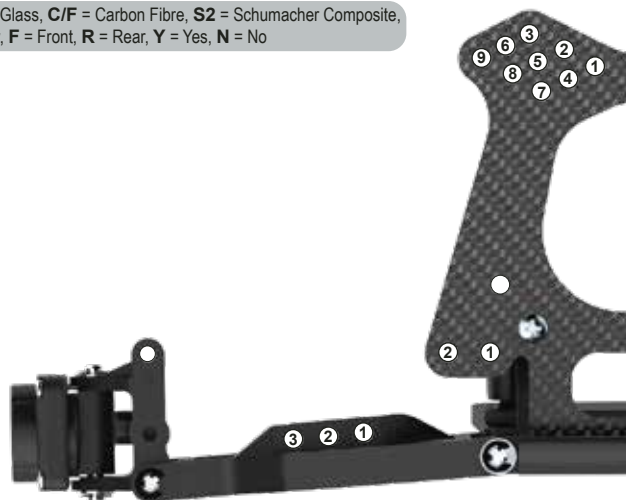
Notes:

## FRONT SUSPENSION

KEY: P = Plastic, A = Alloy, B = Brass, F/G = Fibre Glass, C/F = Carbon Fibre, S2 = Schumacher Composite,  
 M = Medium, S = Stiff, Sh = Short, H = High, L = Low, F = Front, R = Rear, Y = Yes, N = No

Ride Height \_\_\_\_\_ mm  
 Toe \_\_\_\_\_ deg In ☐ Out ☐  
 Camber \_\_\_\_\_ deg  
 Bump Steer Washers \_\_\_\_\_ mm  
 Anti Roll Bar (U8818) Yes ☐ No ☐  
 Twin Bearing Kit (U8817) Yes ☐ No ☐  
 Carbon Track Rod (U8821) Yes ☐ No ☐

Notes:

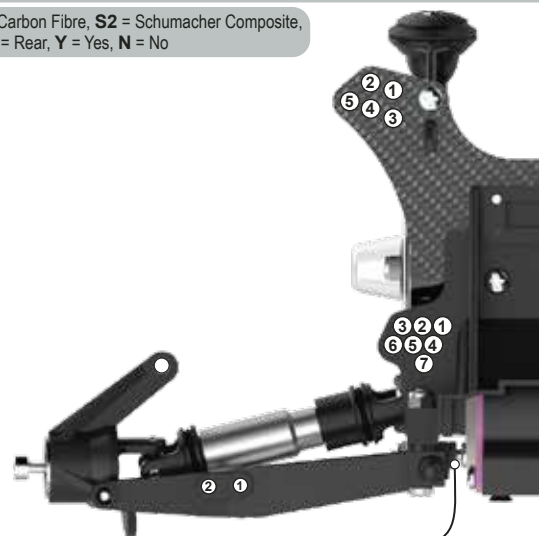


## REAR SUSPENSION

KEY: P = Plastic, A = Alloy, B = Brass, F/G = Fibre Glass, C/F = Carbon Fibre, S2 = Schumacher Composite,  
 M = Medium, S = Stiff, Sh = Short, H = High, L = Low, F = Front, R = Rear, Y = Yes, N = No

Ride Height \_\_\_\_\_ mm  
 Camber \_\_\_\_\_ deg  
 Anti-squat \_\_\_\_\_ mm  
 Anti Roll Bar (U8819) Yes ☐ No ☐  
 Shock Tower Position ☐ Low ☐ Medium ☐ High ☐  
 Alloy Pivot Block Yes ☐ No ☐

Notes:



Rear Toe \_\_\_\_\_ mm

## TRANSMISSION

Motor \_\_\_\_\_  
 Rotor Dia. \_\_\_\_\_ mm  
 Timing \_\_\_\_\_ deg  
 Pinion \_\_\_\_\_ t  
 Spur \_\_\_\_\_ t  
 Upgraded Slipper ☐ Y ☐ N ☐

Notes:

## CHASSIS

Running Weight \_\_\_\_\_ g  
 Battery Position  
   Fwd ☐ Rwd ☐  
 Wing Mount Type  
 \_\_\_\_\_

Notes:

## EQUIPMENT

E.S.C. \_\_\_\_\_  
 Servo \_\_\_\_\_  
 RX \_\_\_\_\_  
 LiPo \_\_\_\_\_  
 Bodyshell \_\_\_\_\_

## WEIGHTS

Under LiPo ☐ Y ☐ N ☐  
 Notes:

## SHOCKS

KEY: i = Internal, e = External

	FRONT	REAR
Oil	_____ cSt	_____ cSt
Piston Holes Open (F)	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/>	
Piston Holes Open (R)	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/>	
Spring	_____ lb/in	_____ lb/in
Limiters (i)	_____ mm	_____ mm
Stroke	_____ mm	_____ mm
Limiters (e)	_____ mm	_____ mm

Notes:

Driver: **Kit Setup**

Date:

Event/Track:

Qualify:

Final:

Best Lap:

## TRACK TYPE

Grip Level ☐ High ☐ Medium ☒ LowType ☐ Tight ☐ Open ☐ Mixed ☒Condition ☐ Flat ☐ Bumpy ☐ Mixed ☒Surface ☐ Clay ☐ Long Astro ☐ Carpet ☐☐ Grass ☐ Short Astro ☐ Mixed ☒Weather 

## TYRES

Front

Rear

Tyres **Stud Two Row Front** **Minispike - 2**Wheels **U8970 Front Wheel** **U8971 Rear Wheel**Inserts **U6738 Foam Insert** **U6734 Foam Insert**Sidewall Glue ☐ Front ☐ Rear ☐

Notes:

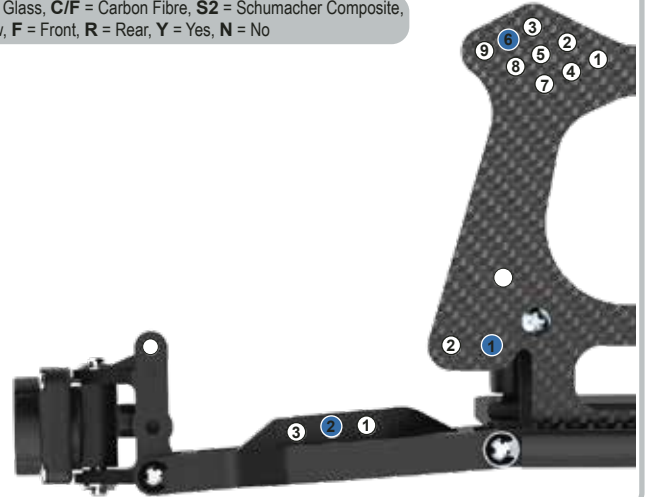
Notes:

## FRONT SUSPENSION

KEY: P = Plastic, A = Alloy, B = Brass, F/G = Fibre Glass, C/F = Carbon Fibre, S2 = Schumacher Composite, M = Medium, S = Stiff, Sh = Short, H = High, L = Low, F = Front, R = Rear, Y = Yes, N = No

Ride Height  17 mmToe  1 deg In ☐ Out ☒Camber  1 degBump Steer Washers  0 mmAnti Roll Bar (U8818) Yes ☐ No ☒Twin Bearing Kit (U8817) Yes ☐ No ☒Carbon Track Rod (U8821) Yes ☐ No ☒

Notes:

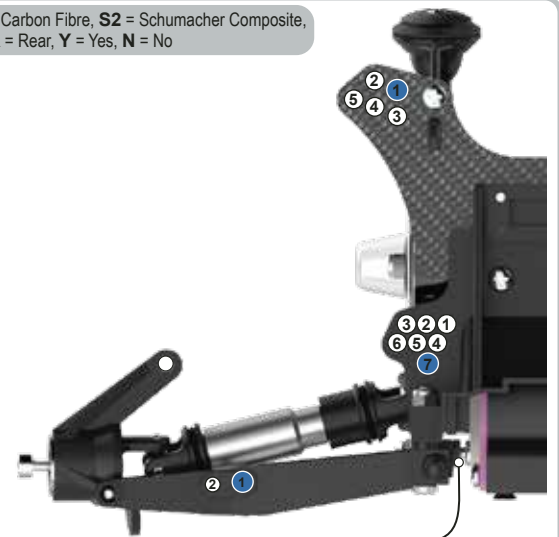


## REAR SUSPENSION

KEY: P = Plastic, A = Alloy, B = Brass, F/G = Fibre Glass, C/F = Carbon Fibre, S2 = Schumacher Composite, M = Medium, S = Stiff, Sh = Short, H = High, L = Low, F = Front, R = Rear, Y = Yes, N = No

Ride Height  18 mmCamber  1 degAnti-squat  1.5 mmAnti Roll Bar (U8819) Yes ☐ No ☒Shock Tower Position ☐ Low ☐ Medium ☒ HighAlloy Pivot Block Yes ☐ No ☒

Notes:

Rear Toe  1.5 mm

## TRANSMISSION

Motor Rotor Dia.  mmTiming  degPinion  tSpur  95 t

Upgraded Slipper

☐ Y ☒ N

Notes:

## CHASSIS

Running Weight  g

Battery Position

Fwd ☐ Rwd ☒

Wing Mount Type

Notes:

## EQUIPMENT

E.S.C. Servo RX LiPo Bodyshell **U5150**

## WEIGHTS

Under LiPo ☐ Y ☐ N ☒

Notes:

## SHOCKS

KEY: i = Internal, e = External

FRONT

REAR

Oil  550 cSt  400 cStPiston Holes Open (F) ☐ 1 ☐ 2 ☐ 3 ☒ 4Piston Holes Open (R) ☐ 1 ☐ 2 ☐ 3 ☒ 4Spring  Grey lb/in  Blue lb/inLimiters (i)  0 mm  0 mmStroke  24 mm  30 mmLimiters (e)  0 mm  0 mm

Notes: