

Cougar

Classic



Instruction Manual ISS01



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
- 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



Radio Equipment



Motor and Pinion Gear



2S Shorty LiPo



Battery Charger



Steering Servo



Electronic Speed Controller



Pro Tyre Glue



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
- 1/4" Nut Driver - AM150263
- Body Reamer - U2818
- Pliers - CR528
- Side Cutters - CR527
- Soldering Iron - CR275
- Solder - U3107
- Curved Scissors - CR044



ICON KEYS

LITHIUM GREASE CORE RC High Performance Lithium Grease 10ml - CR752

THREAD LOCK CORE RC Medium Thread Lock 3ml - CR520

CA GLUE CORE RC 522 Pro Tyre Glue 20g + 2 Nozzles - CR522



Caution/Important note. Please read.



Left-Hand Side of car



Right-Hand Side of car



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



Set up Sheet - Refer to page 36.



www.racing-cars.com

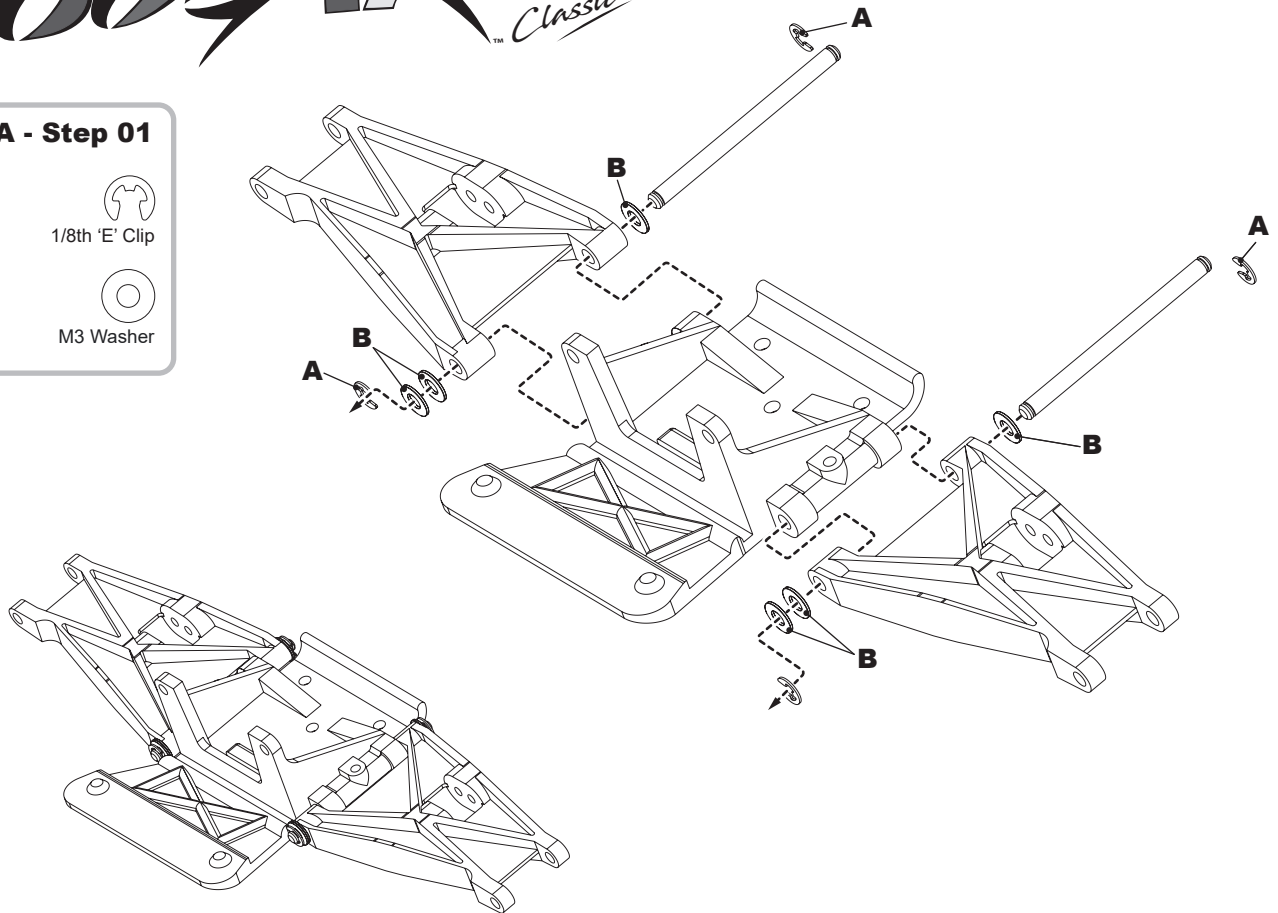


BAG A - Step 01

A x4



B x6



BAG A - Step 02

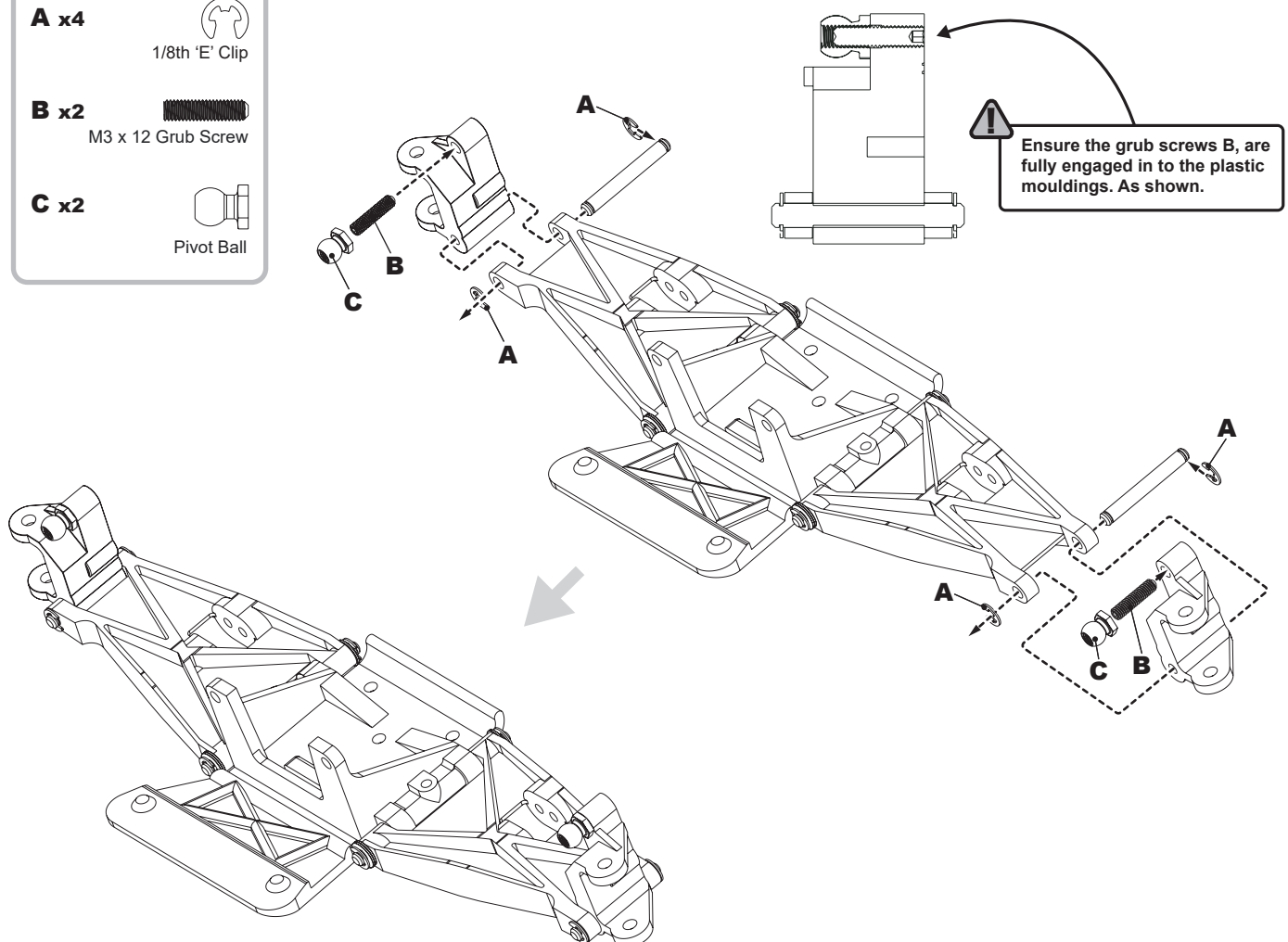
A x4



B x2



C x2



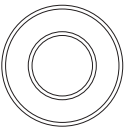
BAG A - Step 03

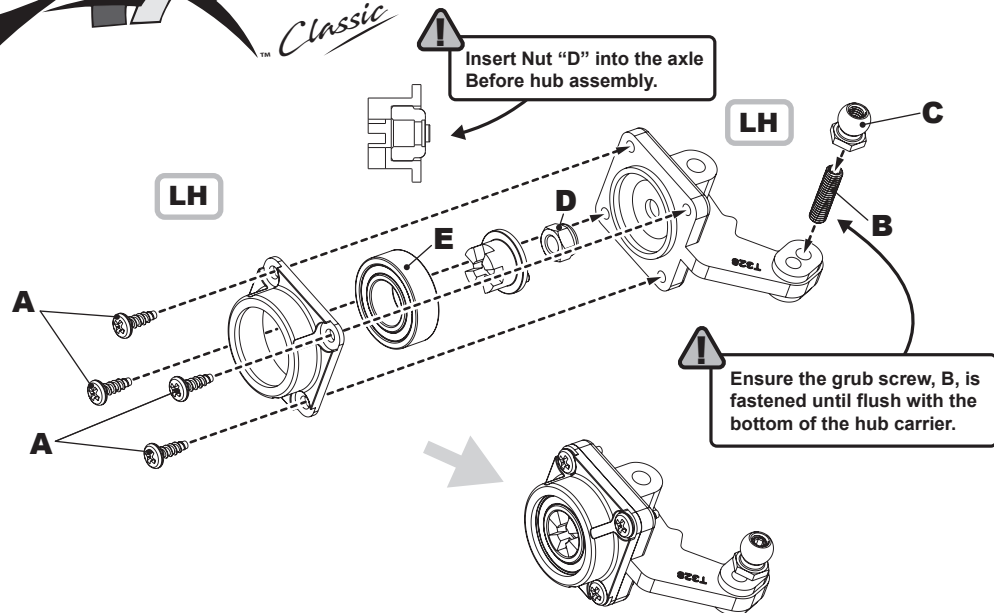
A x4 
No2x 1/4" Pan Hd Screw

B x1 
M3 x 12 Grub Screw

C x1 
Pivot Ball

D x1 
M3 Nyloc Nut

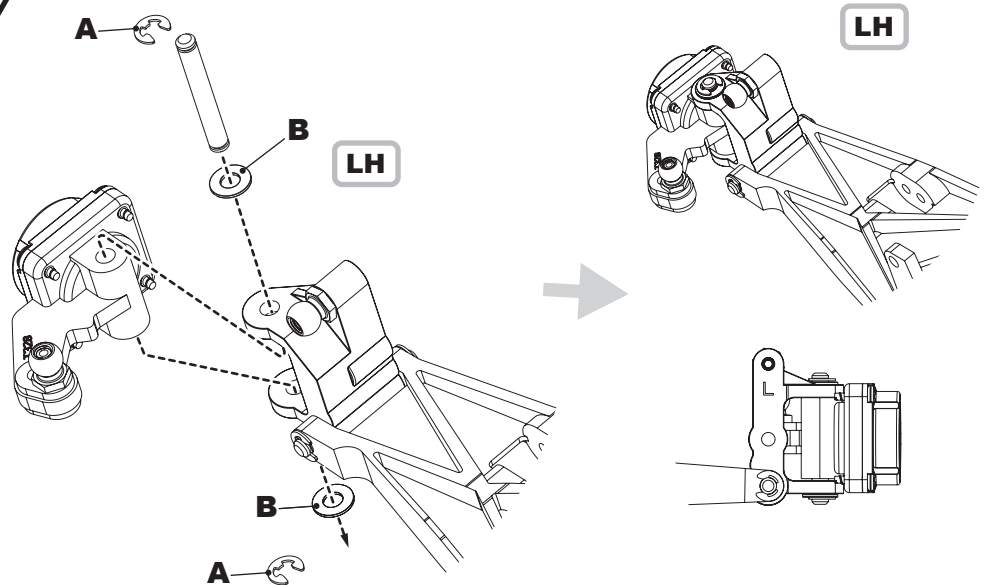
E x1 
Ø8 x Ø16 x 5mm Bearing



BAG A - Step 04

A x2 
1/8th 'E' Clip

B x2 
M3 Washer



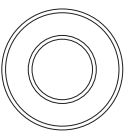
BAG A - Step 05

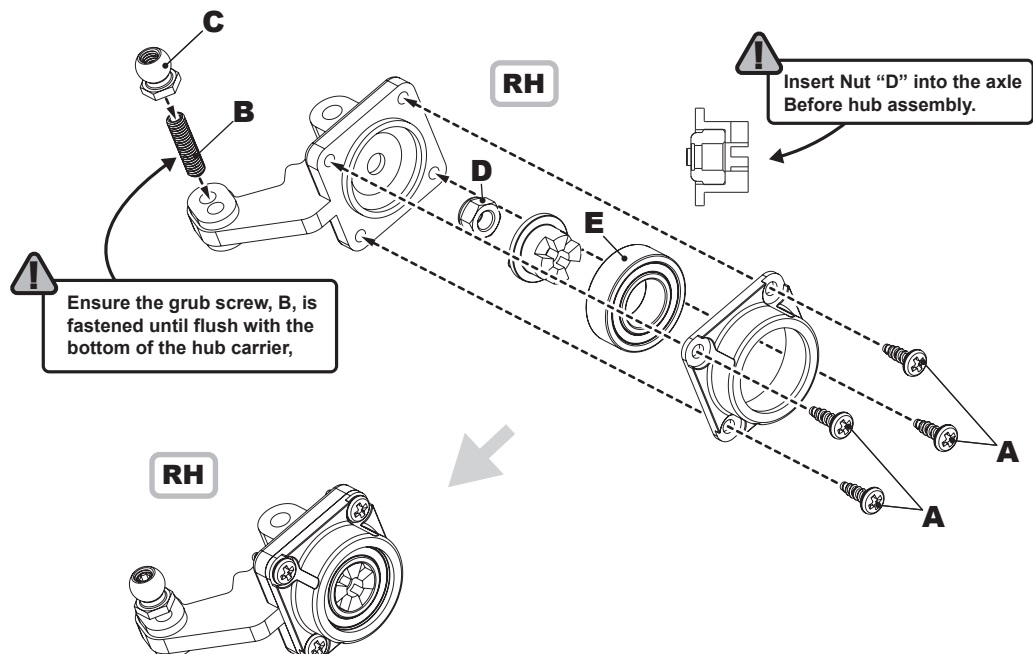
A x4 
No2x 1/4" Pan Hd Screw

B x1 
M3 x 12 Grub Screw

C x1 
Pivot Ball

D x1 
M3 Nyloc Nut

E x1 
Ø8 x Ø16 x 5mm Bearing



BAG A - Step 06

A x2

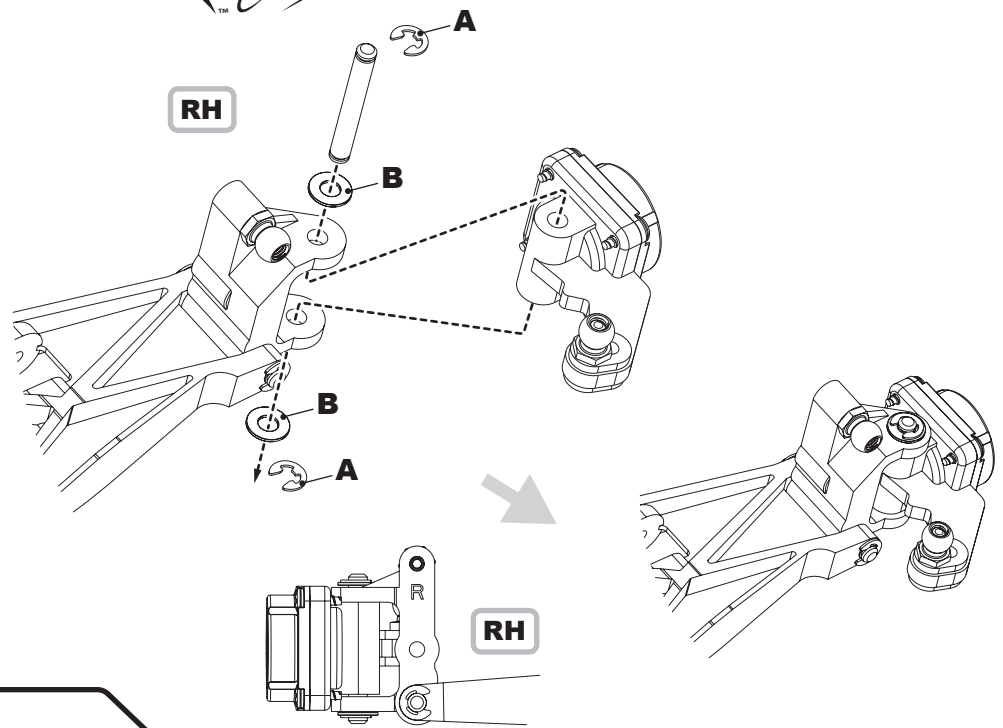


1/8th 'E' Clip

B x2



M3 Washer



BAG A - Step 07

A x2

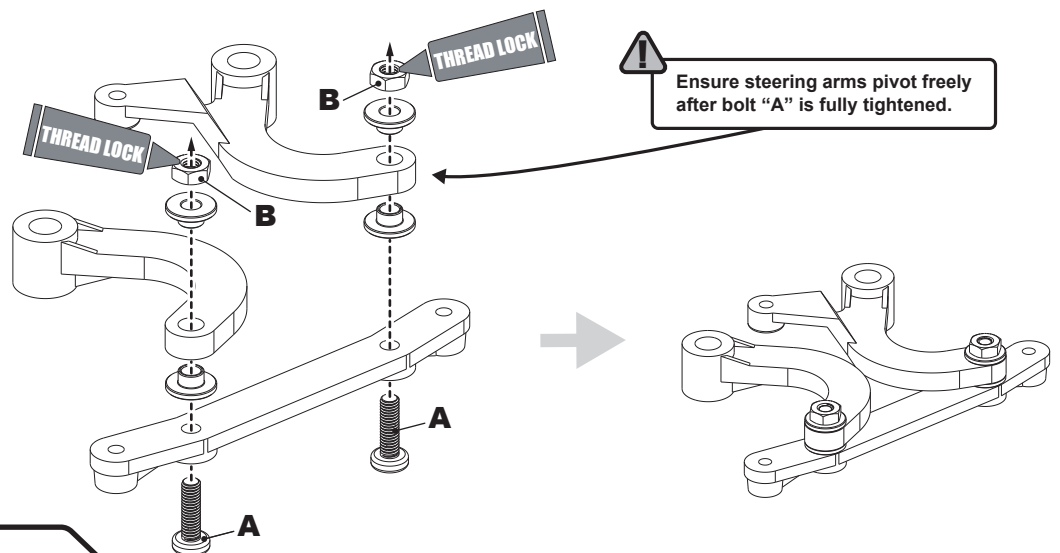


M3 x 10 Pan Hd Screw

B x2



M3 Steel Nut



BAG A - Step 08

A x2



M3 x 12 Grub Screw

B x1

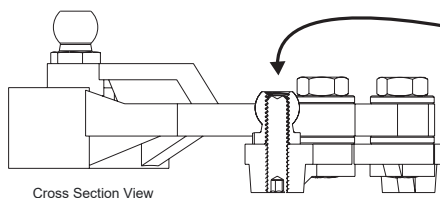
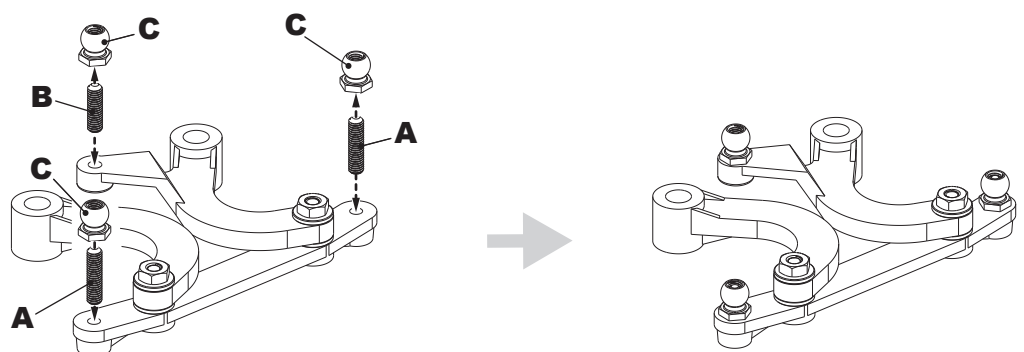


M3 x 10 Grub Screw

C x3



Pivot Ball



Cross Section View

Ensure the grub screws A & B, are fully engaged in to the plastic mouldings. As shown.

BAG A - Step 09

A x2



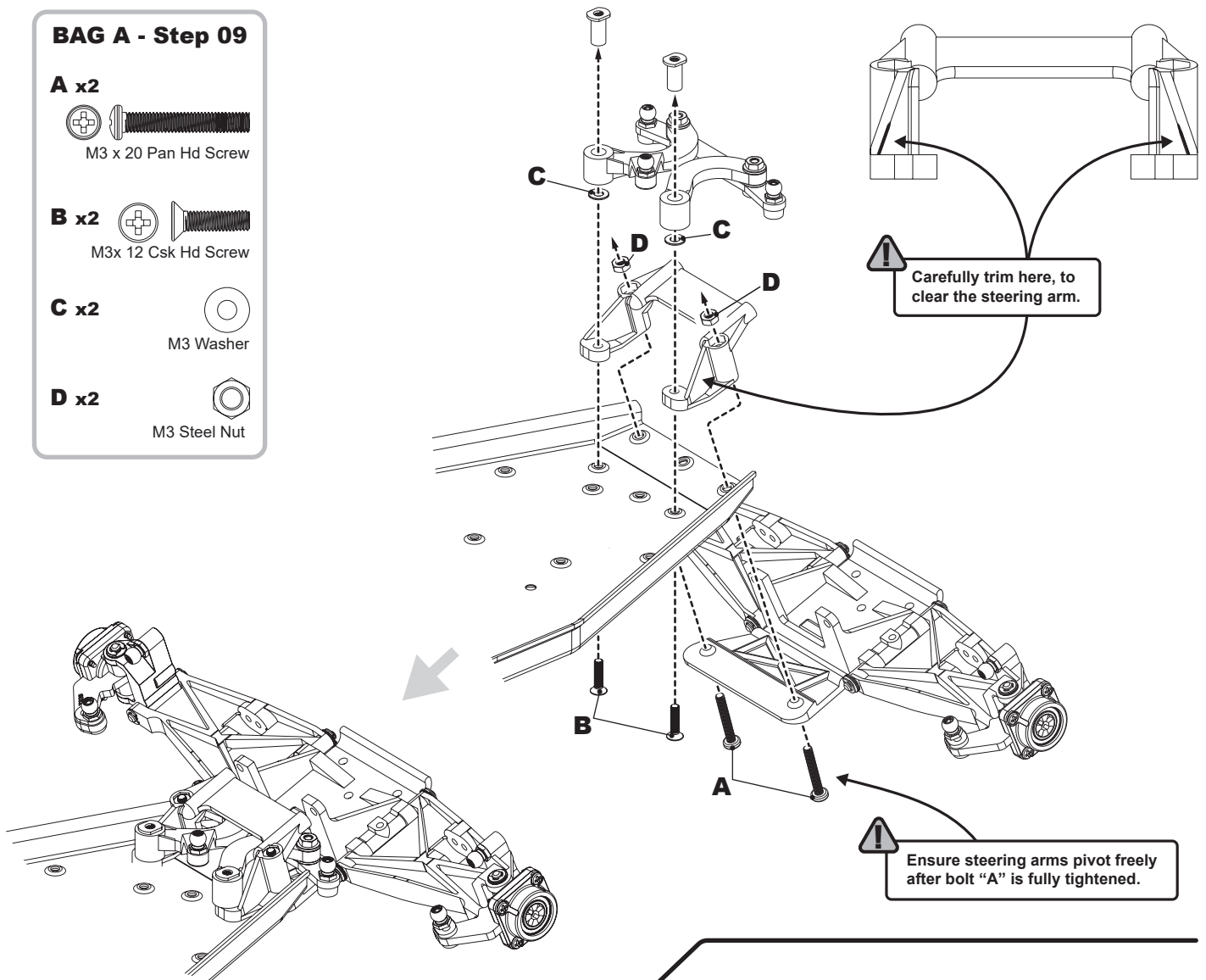
B x2



C x2

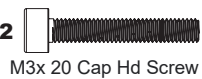


D x2



BAG A - Step 10a

A x2



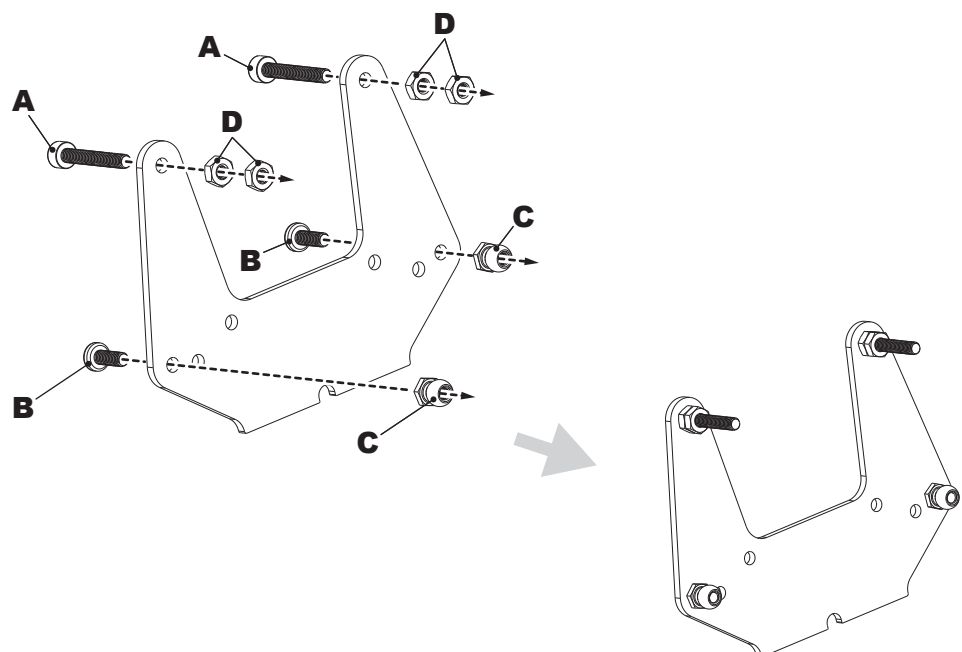
B x2



C x2



D x4

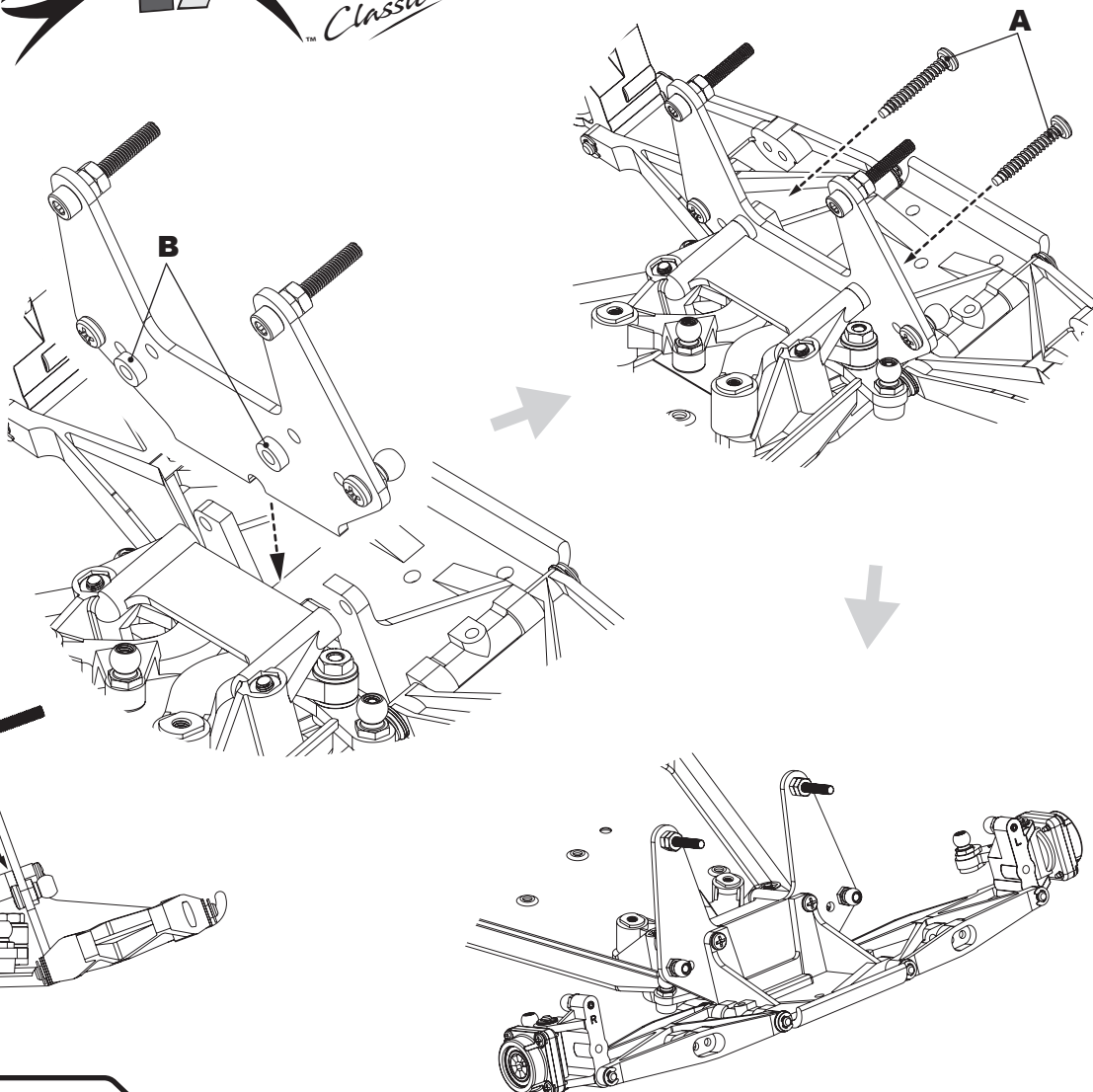


BAG A - Step 10b

A x2



B x2

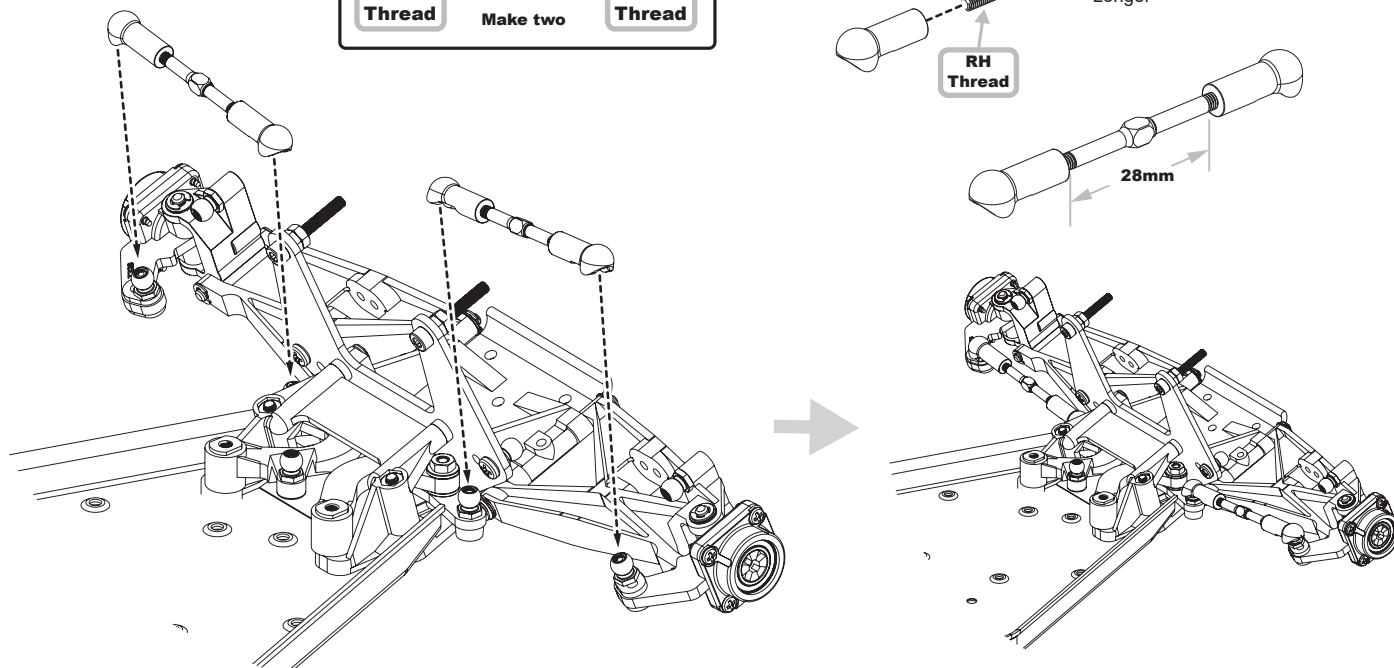
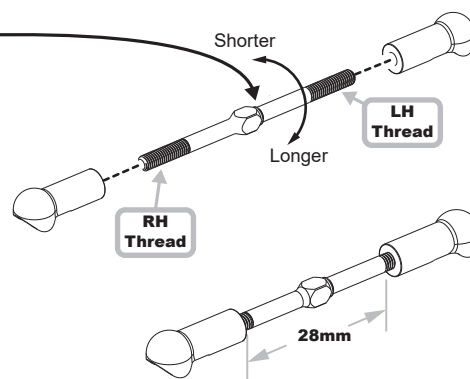
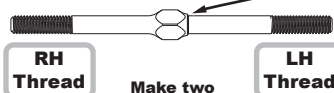


Note placement of M3 Rake Spacer.

BAG B - Step 11



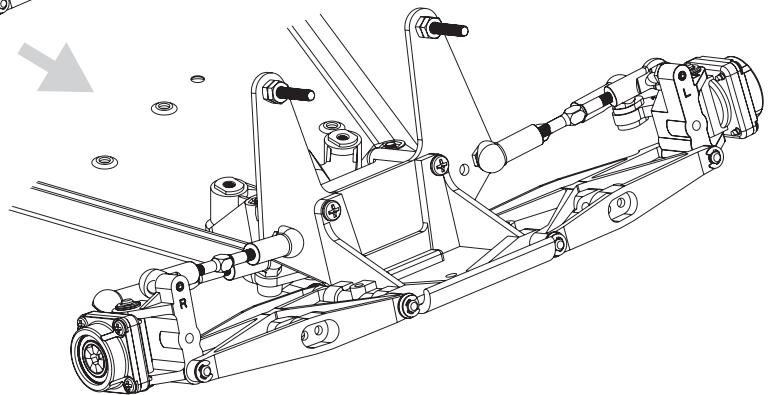
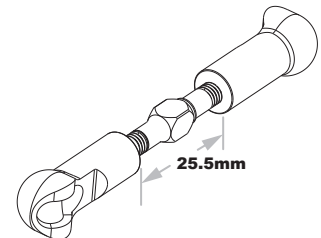
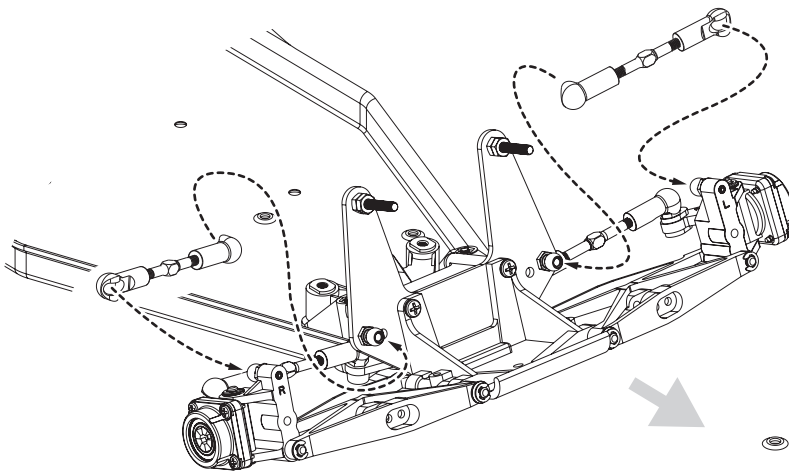
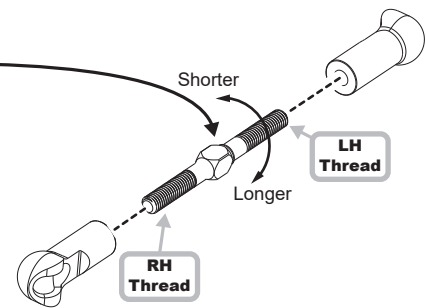
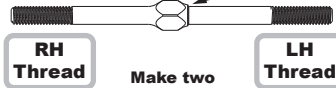
Note the shape of the turnbuckle. This side of the turnbuckle is the left hand thread.



BAG B - Step 12



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

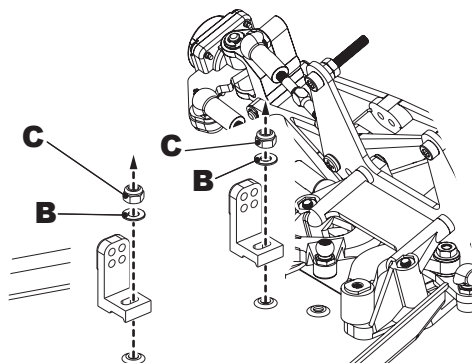


BAG B - Step 13

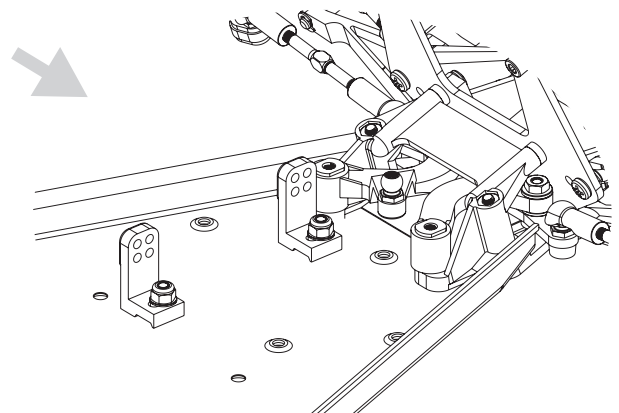
A x2 
M3x 10 Csk Hd Screw

B x2 
M3 Washer

C x2 
M3 Steel Nyloc Nut



Leave screws, "A" loose for now.
Tighten in Step 14.



BAG B - Step 14

A x1 
M3 x 8 Pan Hd Screw

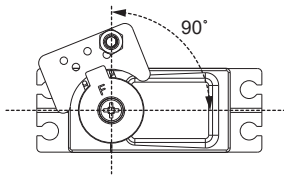
B x2 
No4x 3/8" Pan Hd Screw

C x1 
Pivot Ball

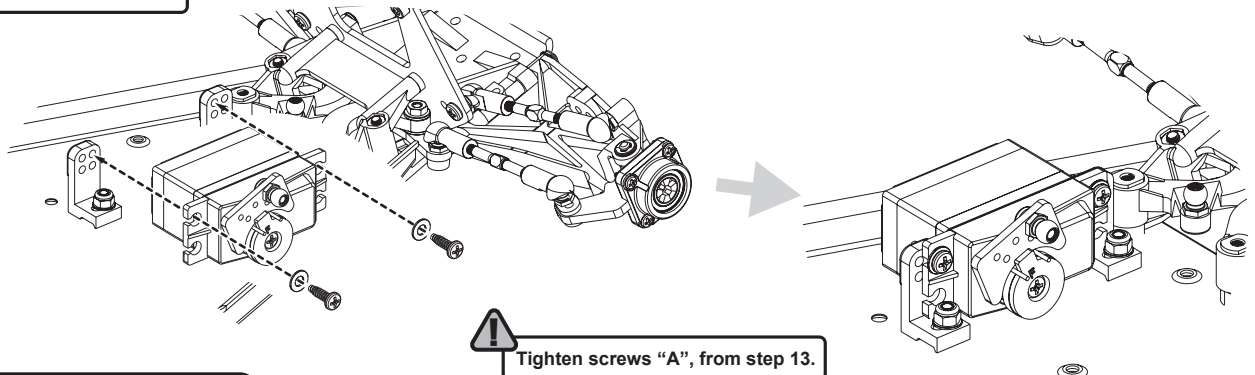
D x2 
M3 Washer

Select the correct servo horn for your servo.

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



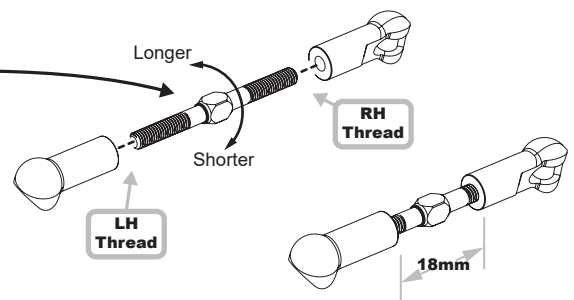
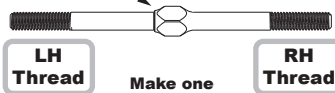
! Set steering trim to align servo horn as shown above.



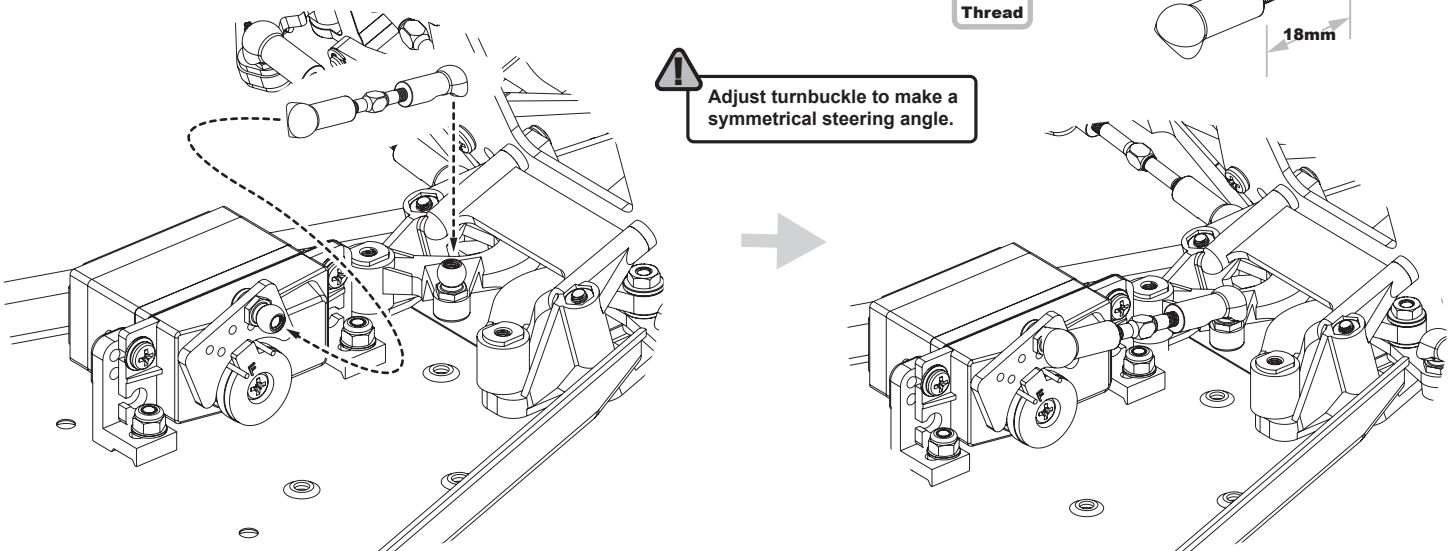
! Tighten screws "A", from step 13.

BAG B - Step 15

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



! Adjust turnbuckle to make a symmetrical steering angle.

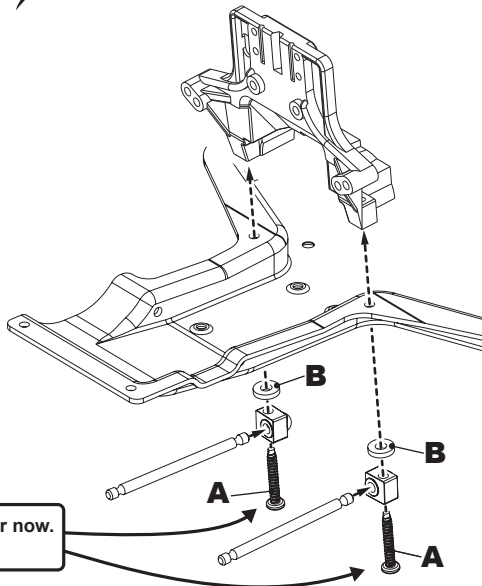


BAG B - Step 16

A x2



B x2



Leave screws, "A" loose for now.
Tighten in Step 18.

BAG B - Step 17

A x1



B x1



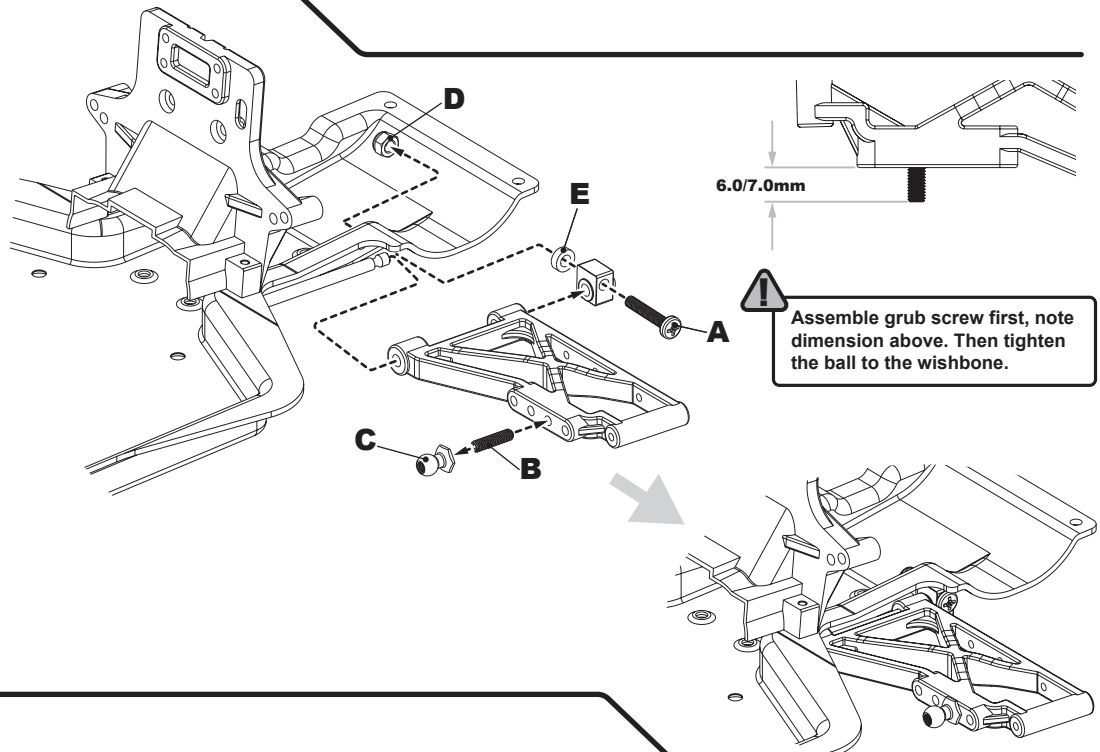
C x1



D x1



E x1



Assemble grub screw first, note
dimension above. Then tighten
the ball to the wishbone.

BAG B - Step 18

A x1



B x1



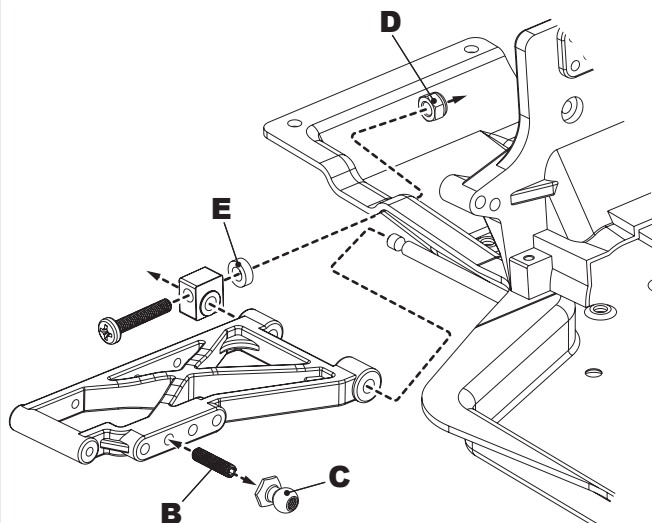
C x1



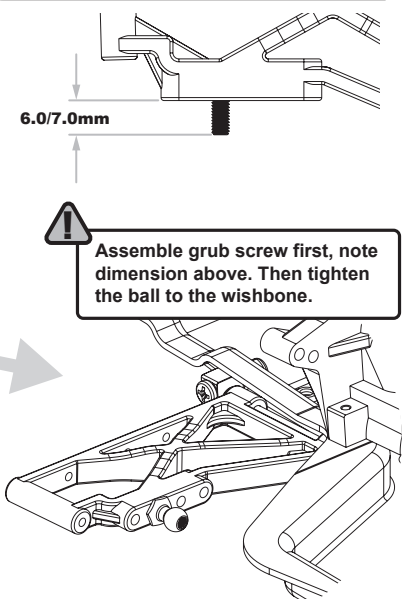
D x1



E x1



Tighten screws "A", from step 16.



Assemble grub screw first, note
dimension above. Then tighten
the ball to the wishbone.

BAG B - Step 19

A x14

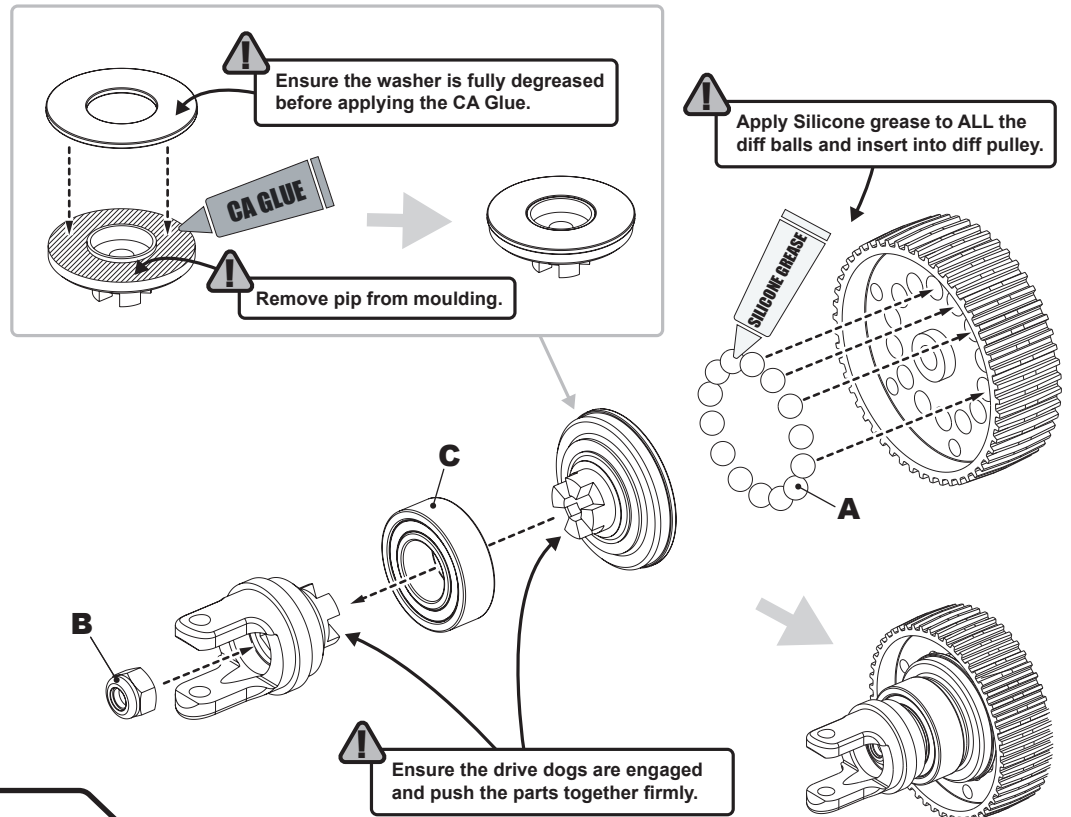
3mm Diff Ball

B x1

M3 Nyloc Nut

C x1

Ø8 x Ø16 x 5mm Bearing



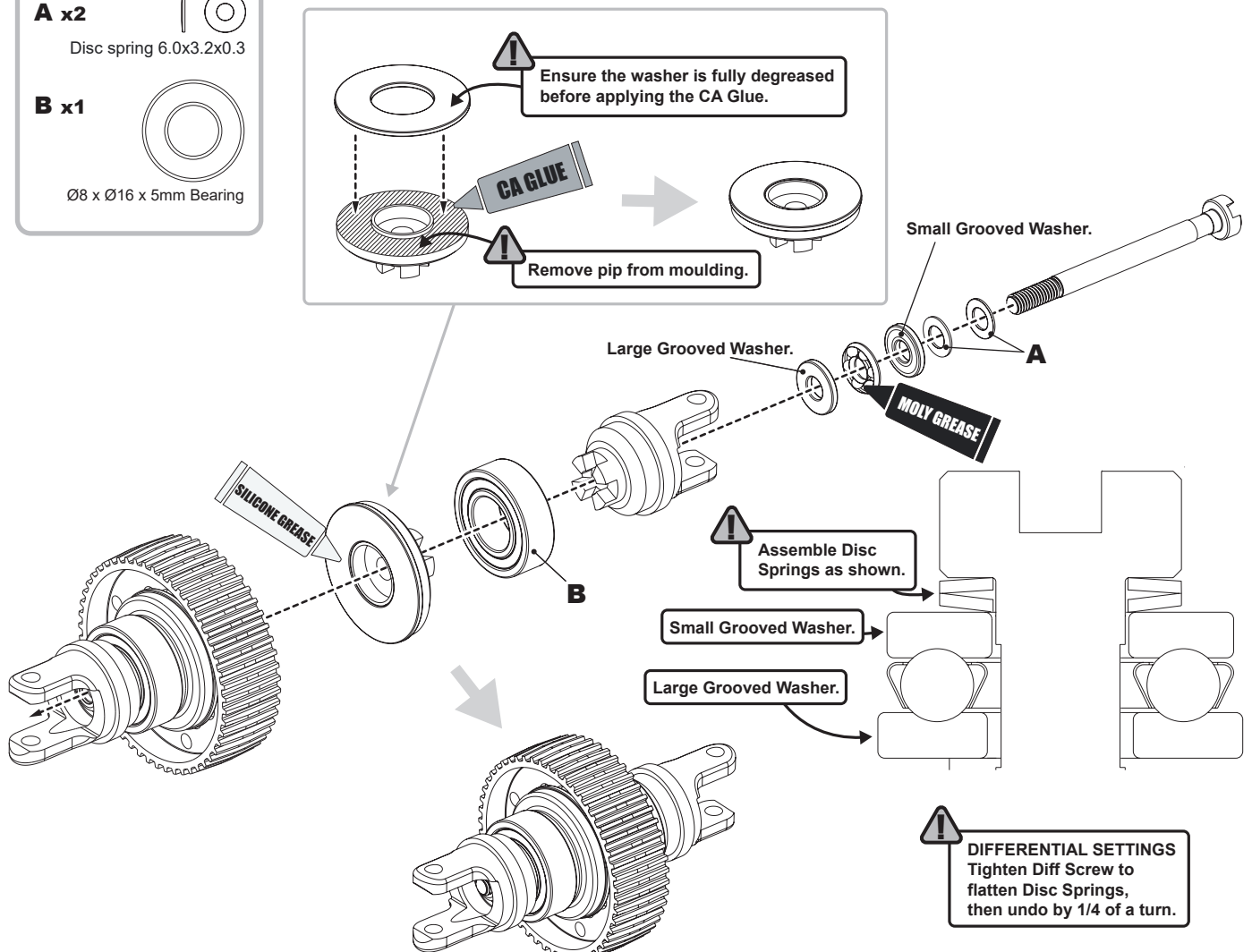
BAG B - Step 20

A x2

Disc spring 6.0x3.2x0.3

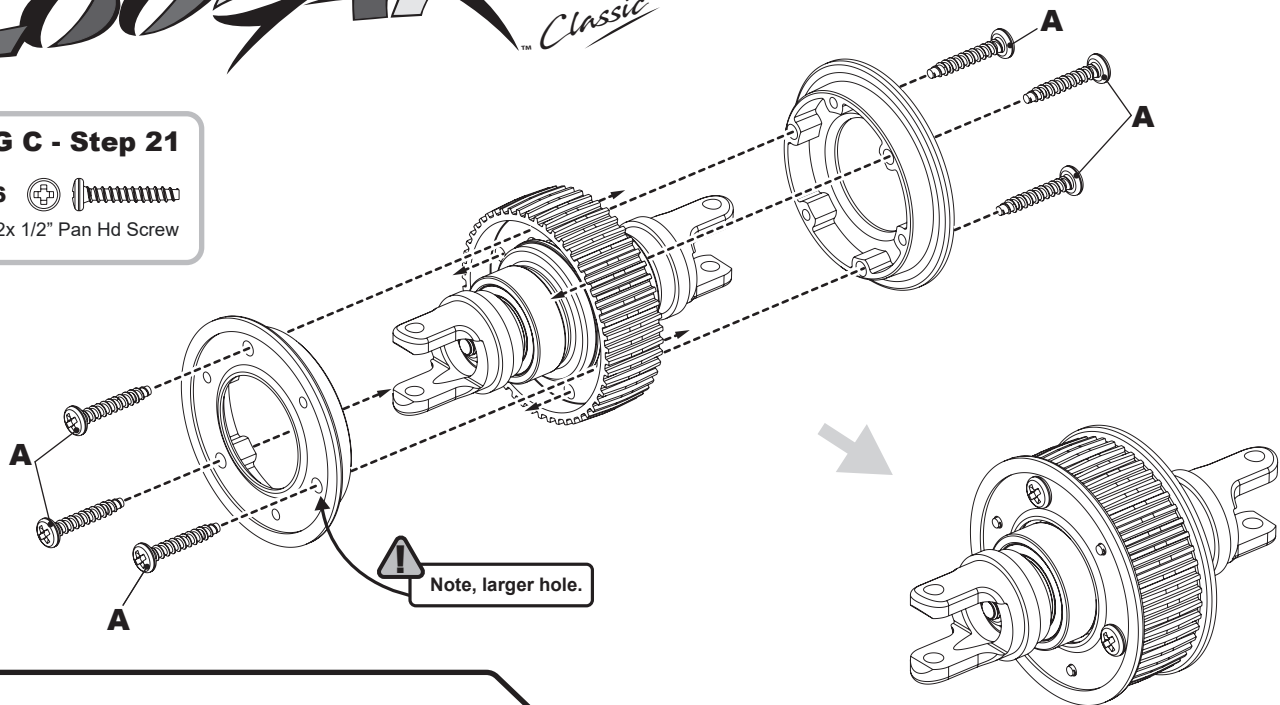
B x1

Ø8 x Ø16 x 5mm Bearing



BAG C - Step 21

A x6  
No2x 1/2" Pan Hd Screw

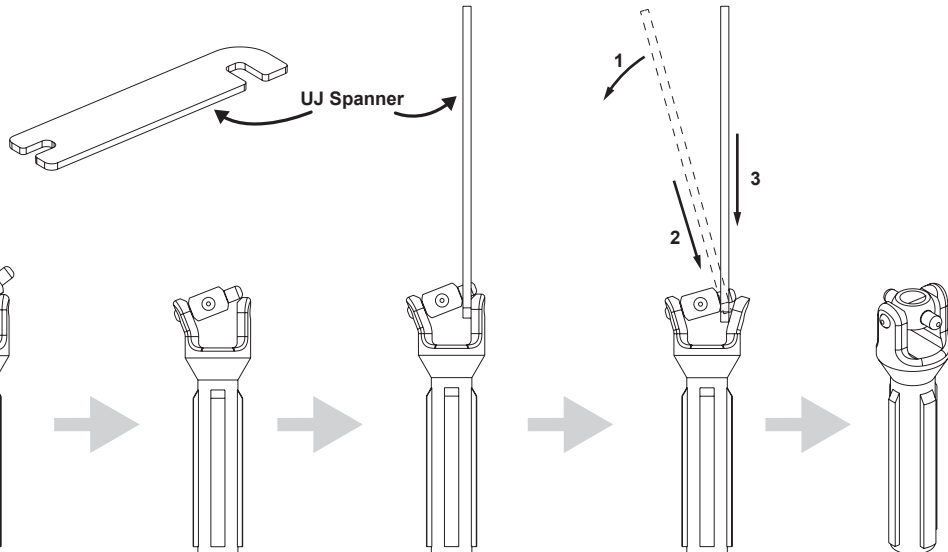


BAG C - Step 22a

Make Two Pieces



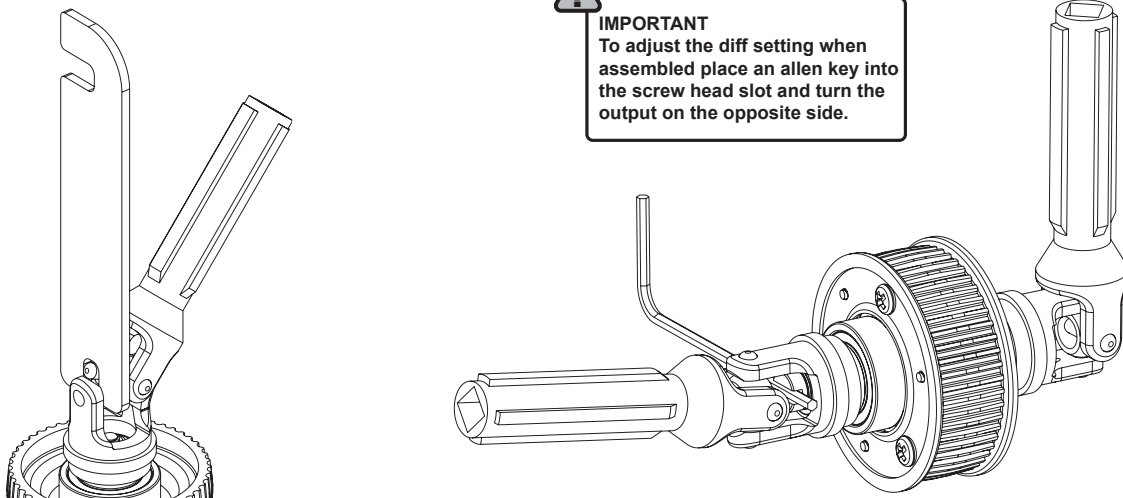
IMPORTANT
The sequence of drawings below shows the assembly procedure of all universal joints, driveshafts, axles and diff outputs. Warming the plastic parts will help make the assembly easier.



BAG C - Step 22b



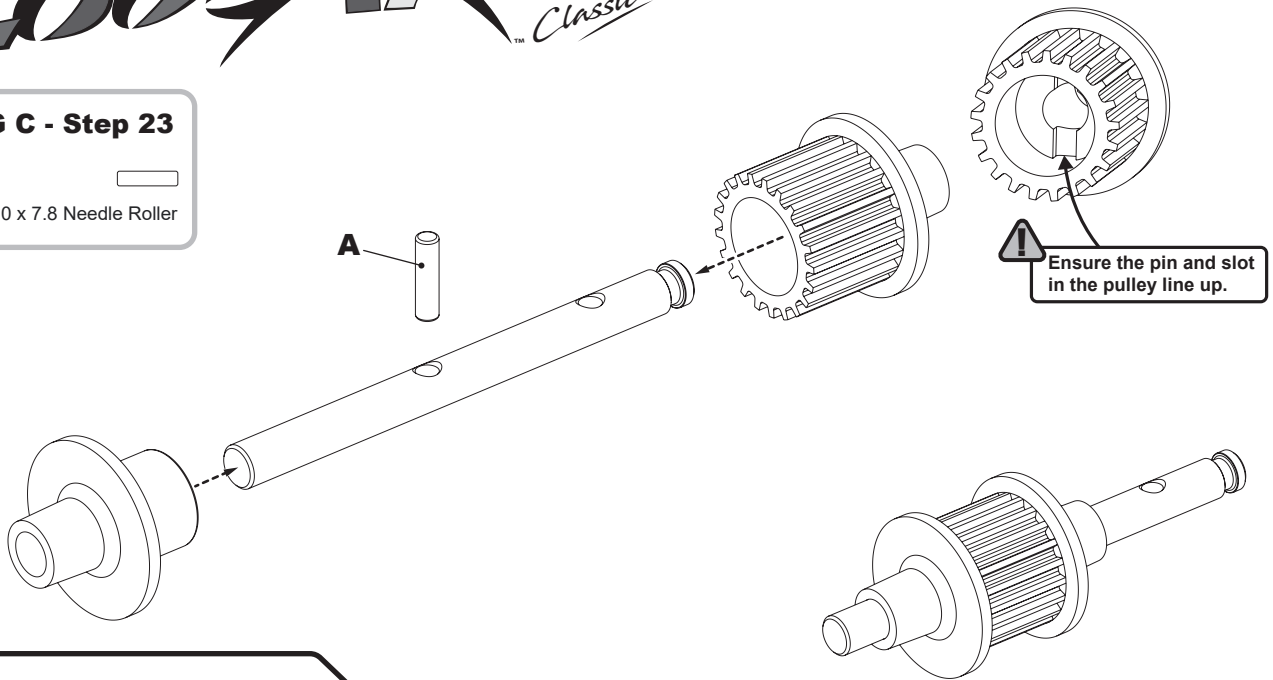
IMPORTANT
To adjust the diff setting when assembled place an allen key into the screw head slot and turn the output on the opposite side.



BAG C - Step 23

A x1

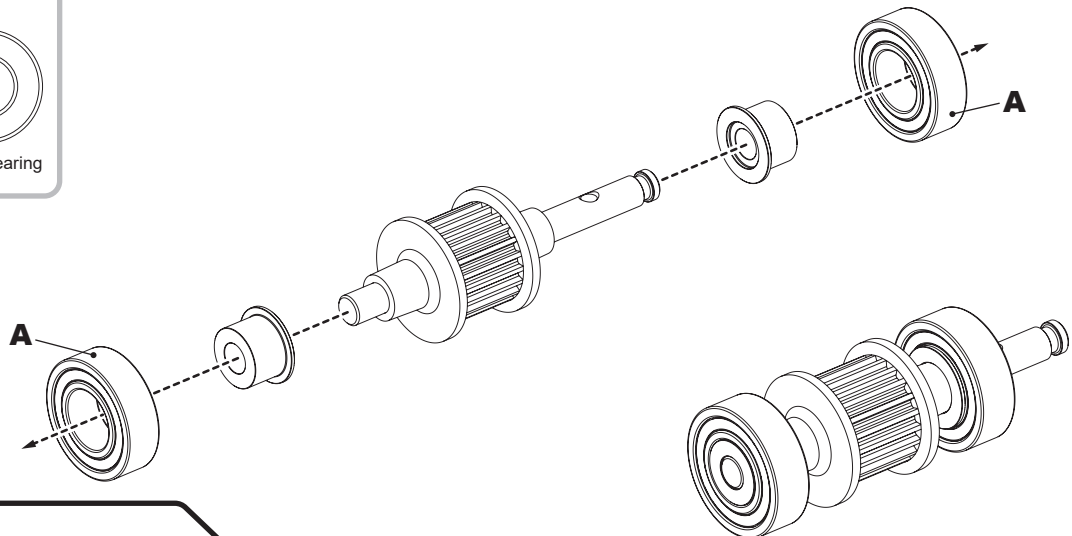
ø2.0 x 7.8 Needle Roller



BAG C - Step 24

A x2

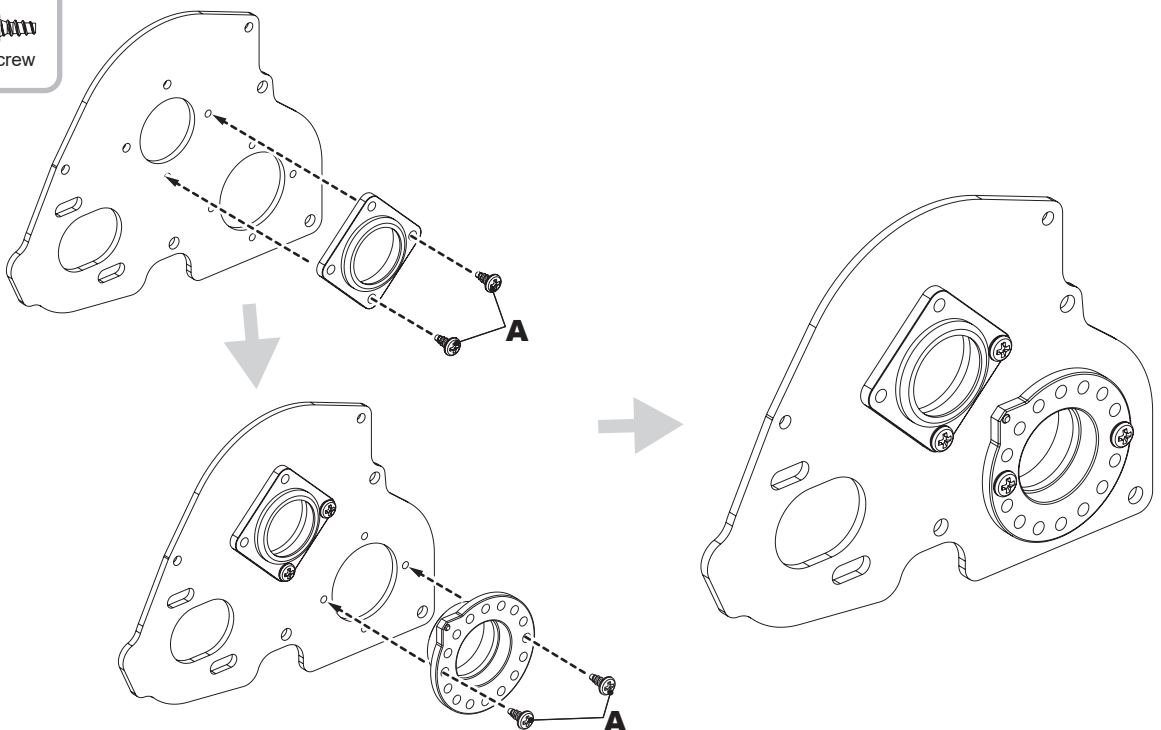
Ø8 x Ø16 x 5mm Bearing



BAG C - Step 25

A x4

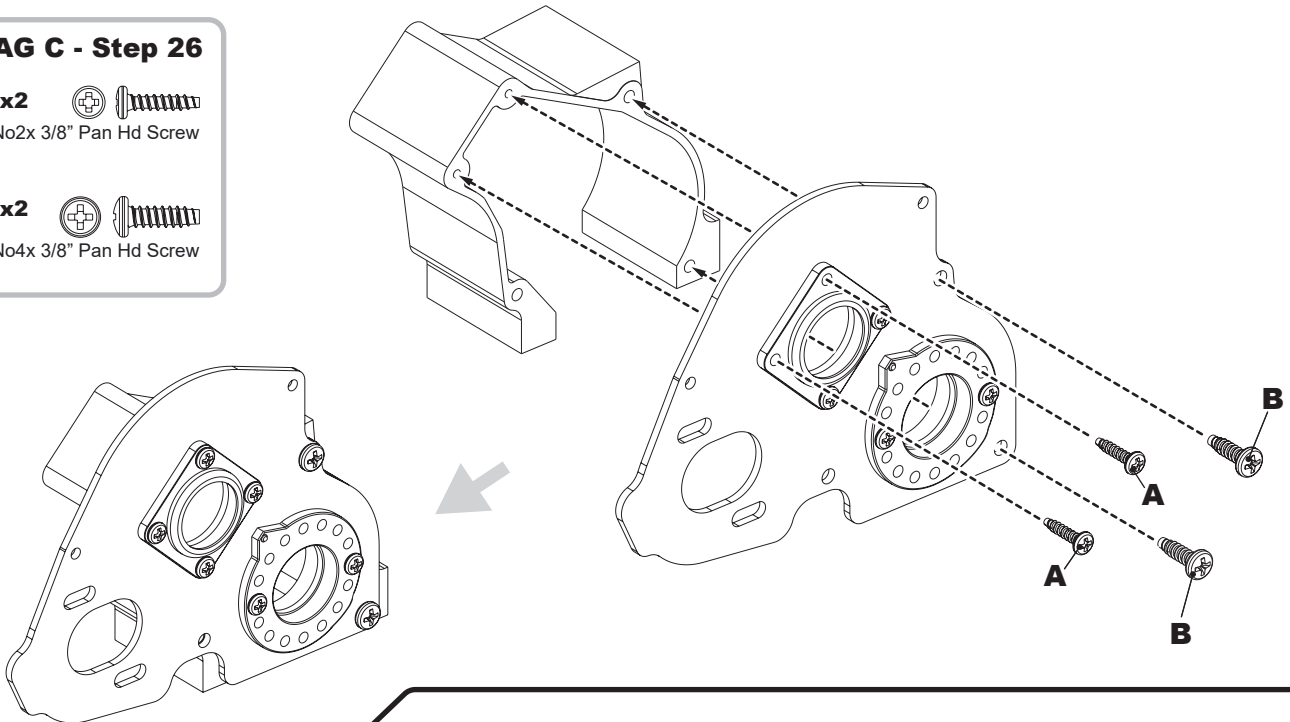
No2x 3/16" Pan Hd Screw



BAG C - Step 26

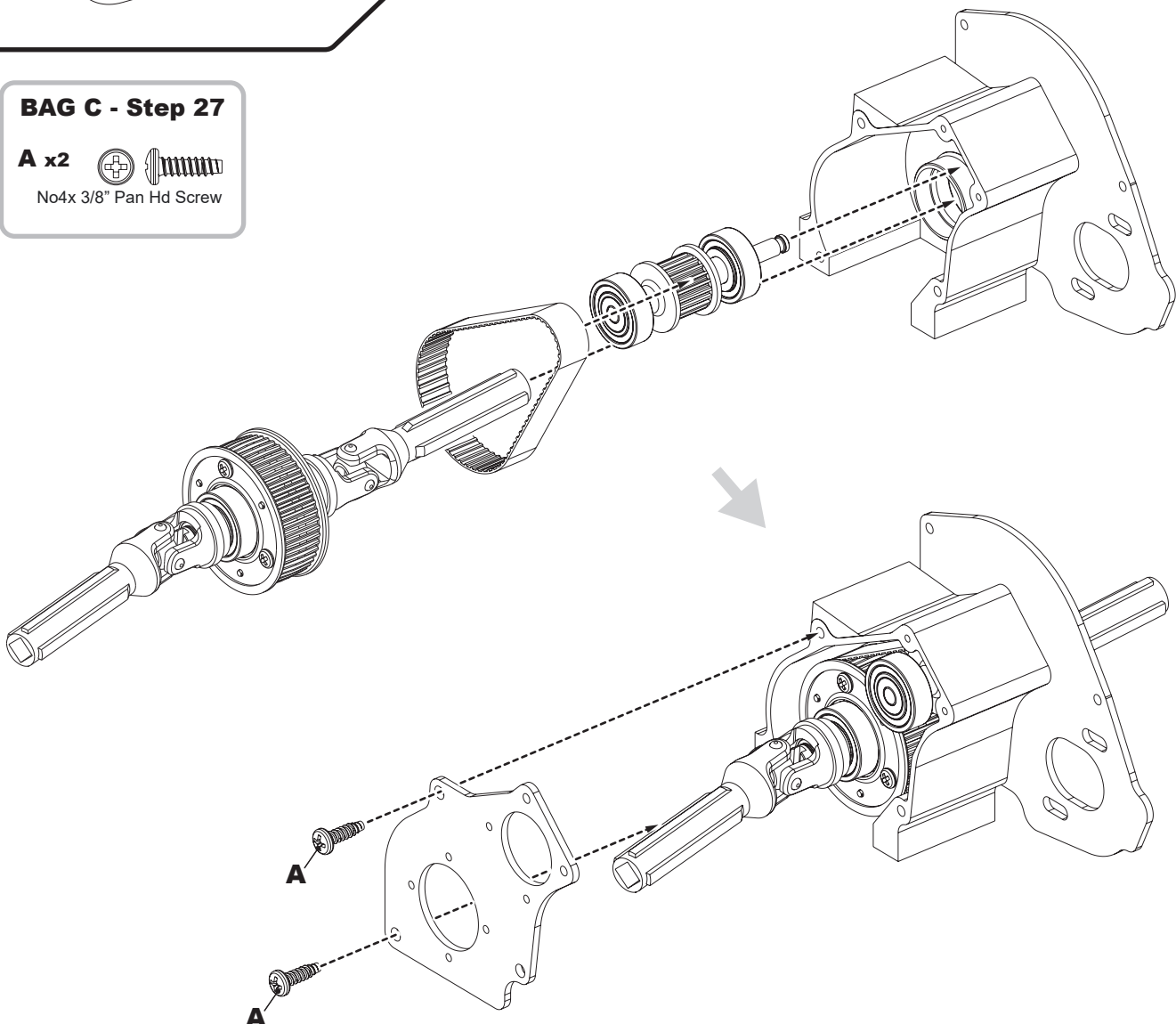
A x2 
No2x 3/8" Pan Hd Screw

B x2 
No4x 3/8" Pan Hd Screw



BAG C - Step 27

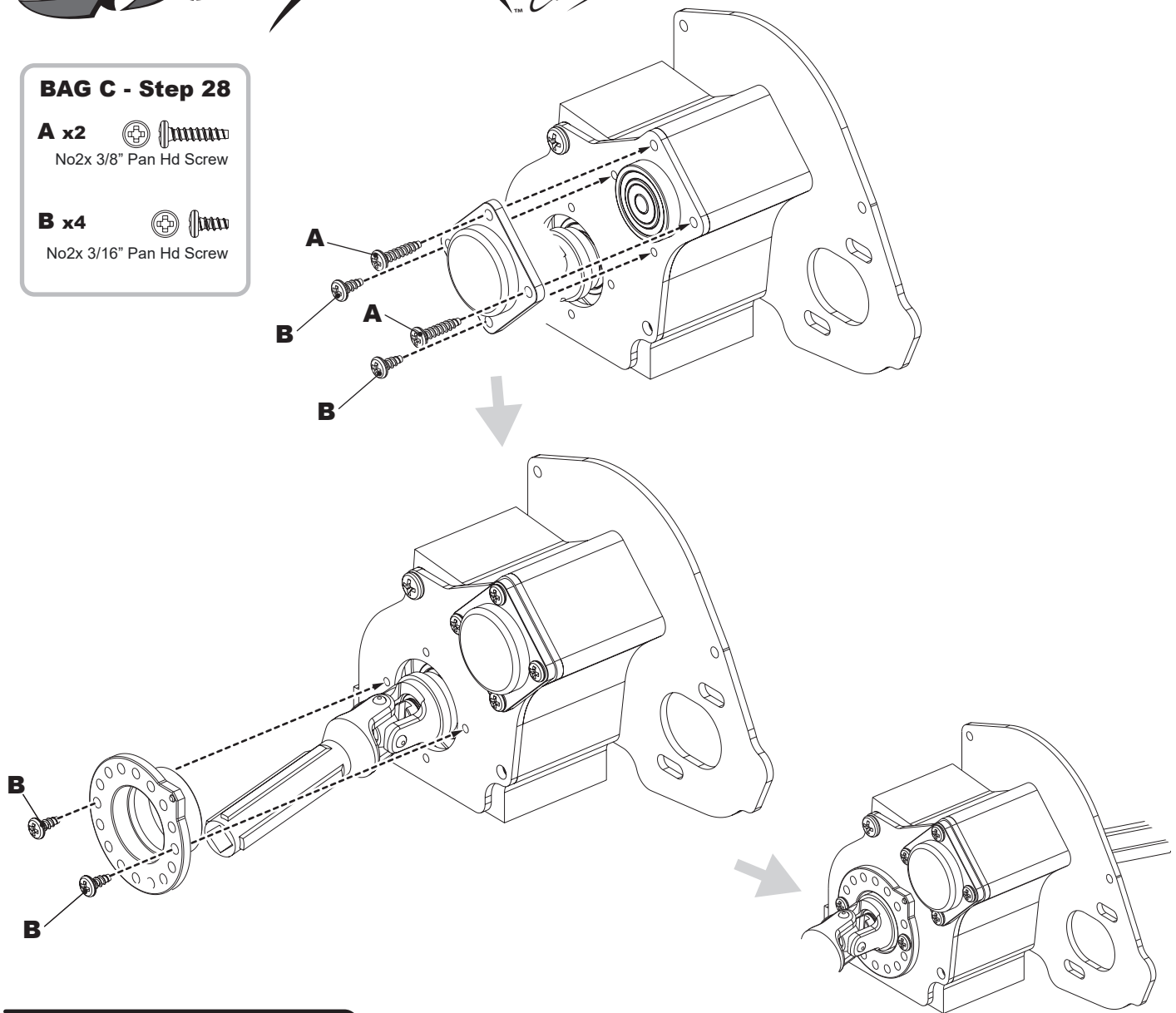
A x2 
No4x 3/8" Pan Hd Screw



BAG C - Step 28

A x2 
No2x 3/8" Pan Hd Screw

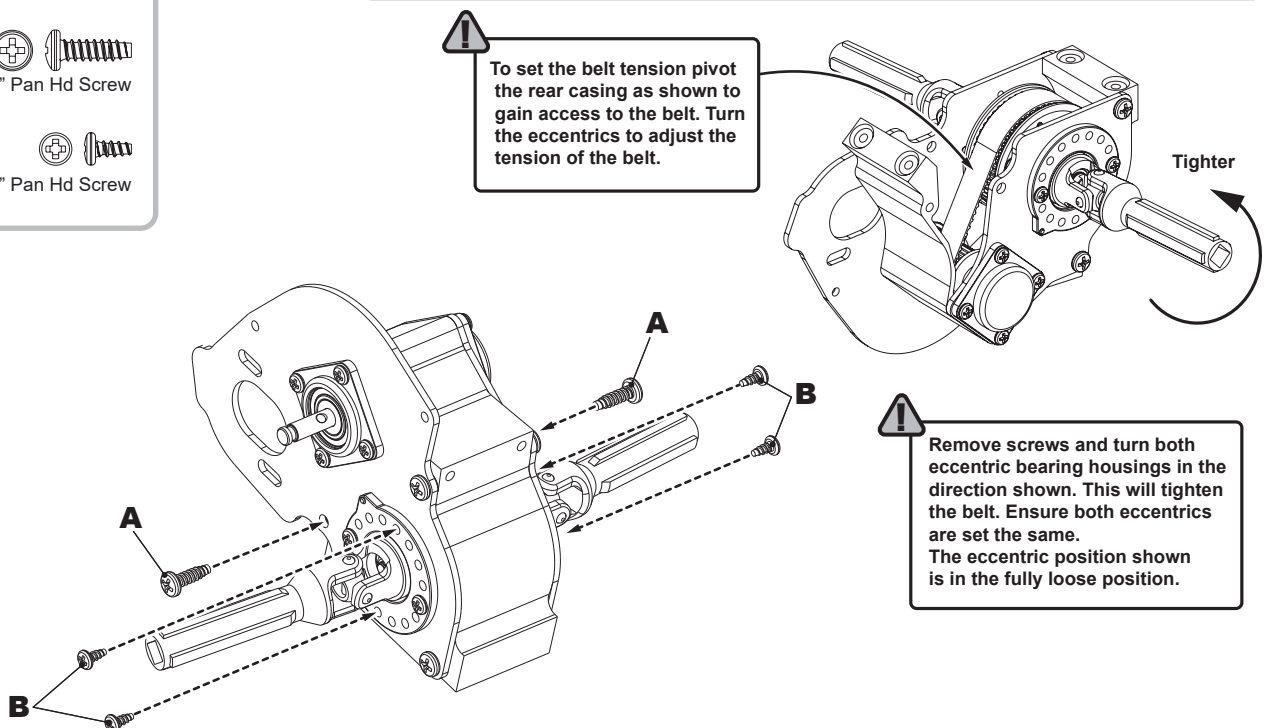
B x4 
No2x 3/16" Pan Hd Screw



BAG C - Step 29a

A x2 
No4x 3/8" Pan Hd Screw

B x4 
No2x 3/16" Pan Hd Screw



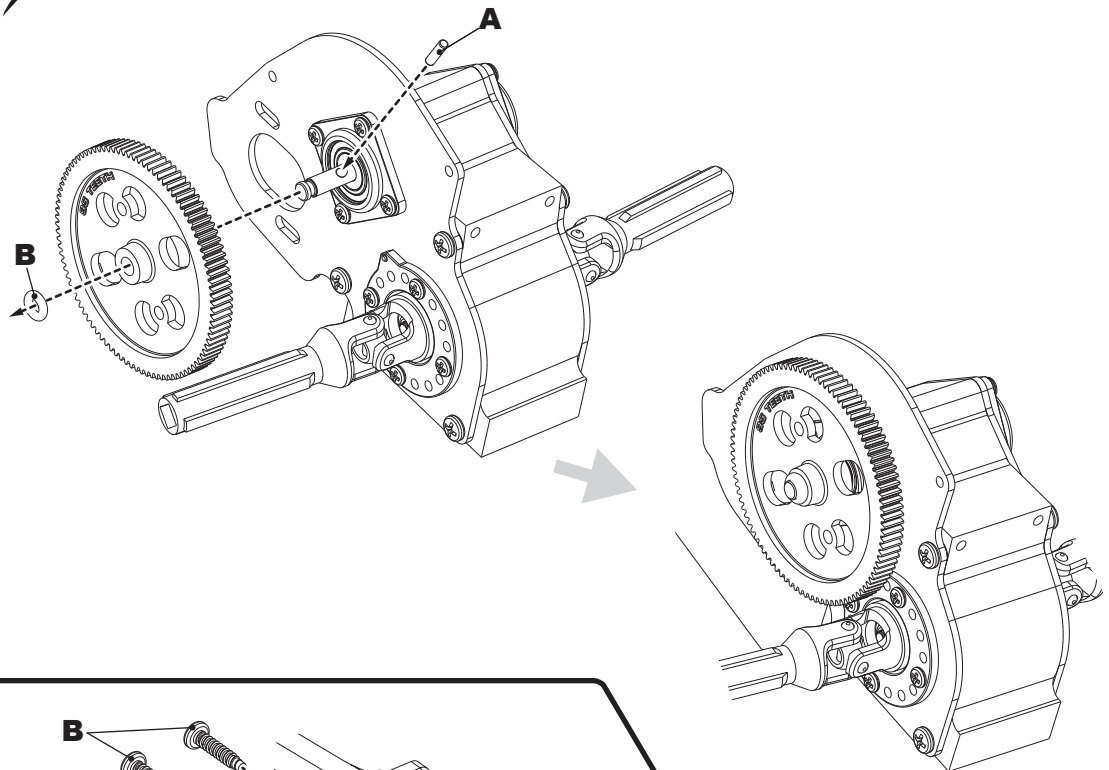
BAG C - Step 29b

A x1

ø2.0 x 7.8 Pin

B x1

'O' Ring ø3 x 1.8



BAG C - Step 30

A x2



No4x 3/8" Pan Hd Screw

B x2

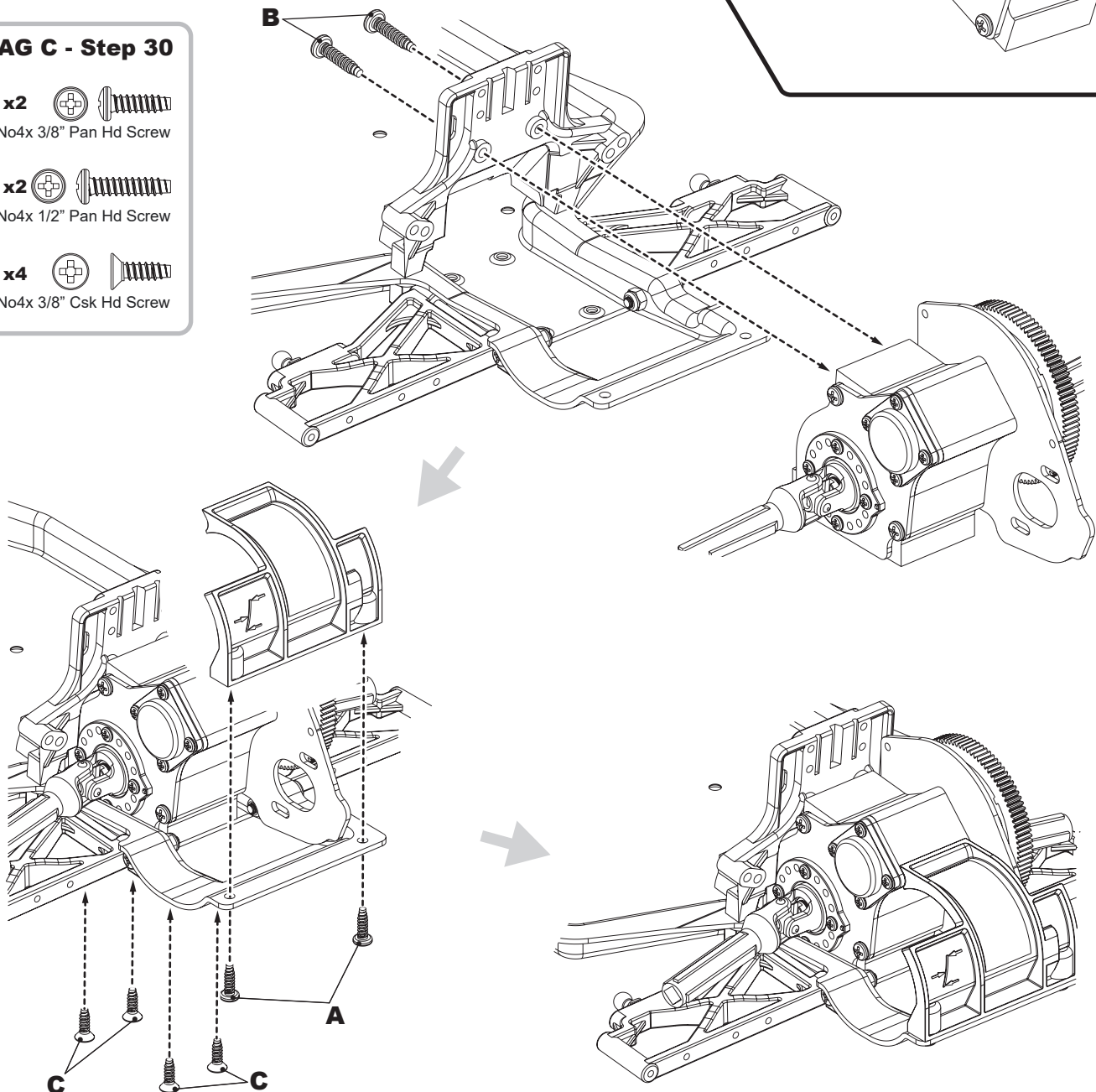


No4x 1/2" Pan Hd Screw

C x4



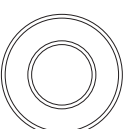
No4x 3/8" Csk Hd Screw

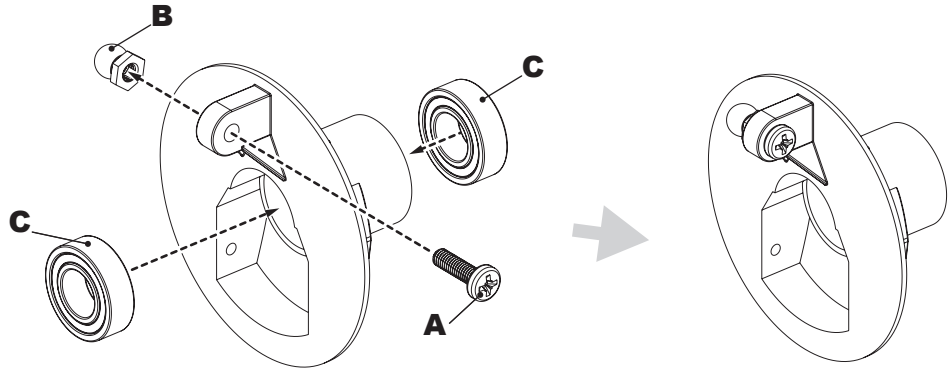


BAG D - Step 31

A x1 
M3 x 10 Pan Hd Screw

B x1 
Pivot Ball

C x2 
Ø8 x Ø16 x 5mm Bearing

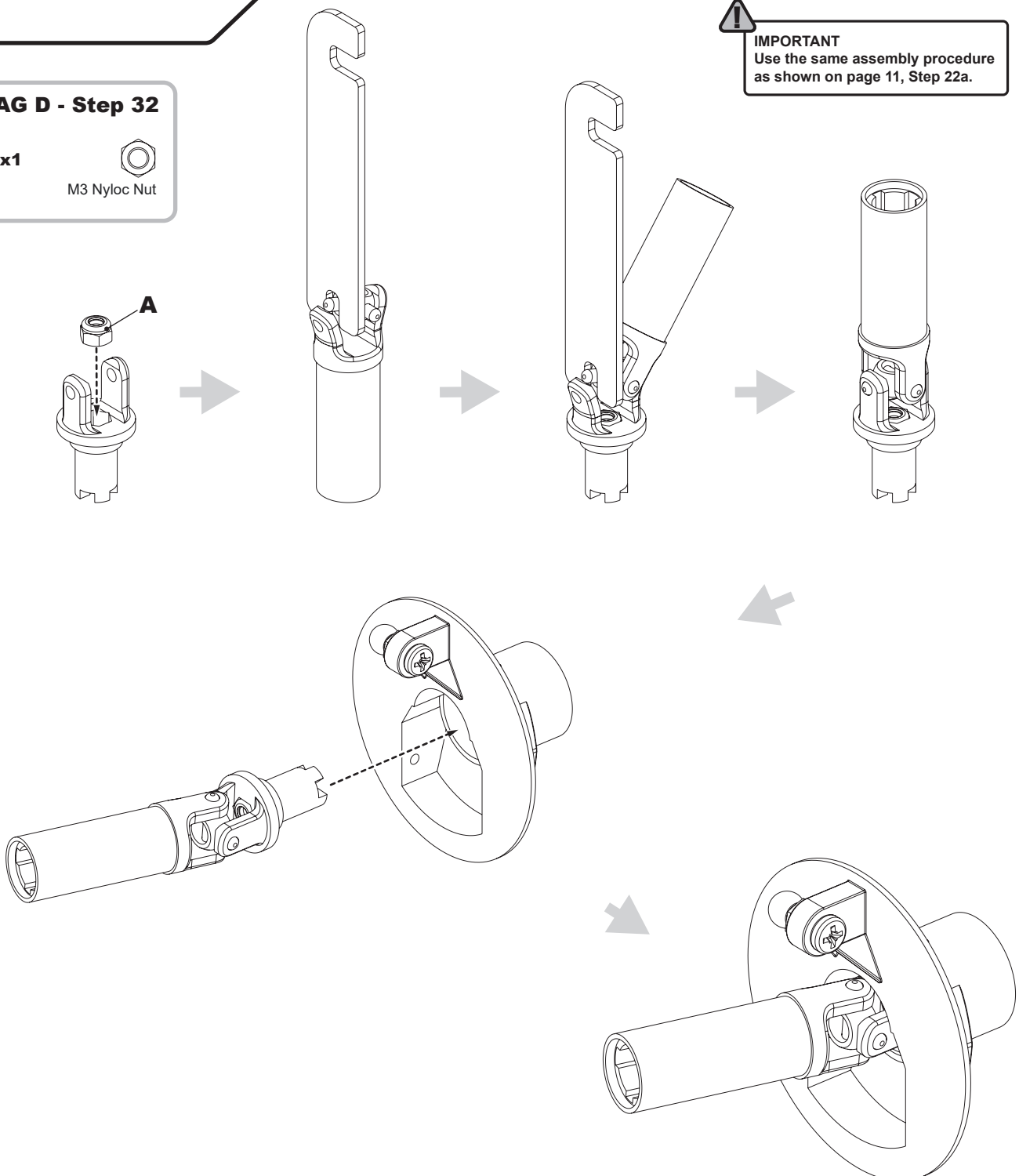


BAG D - Step 32

A x1 
M3 Nyloc Nut



IMPORTANT
Use the same assembly procedure
as shown on page 11, Step 22a.



BAG D - Step 33

A x1



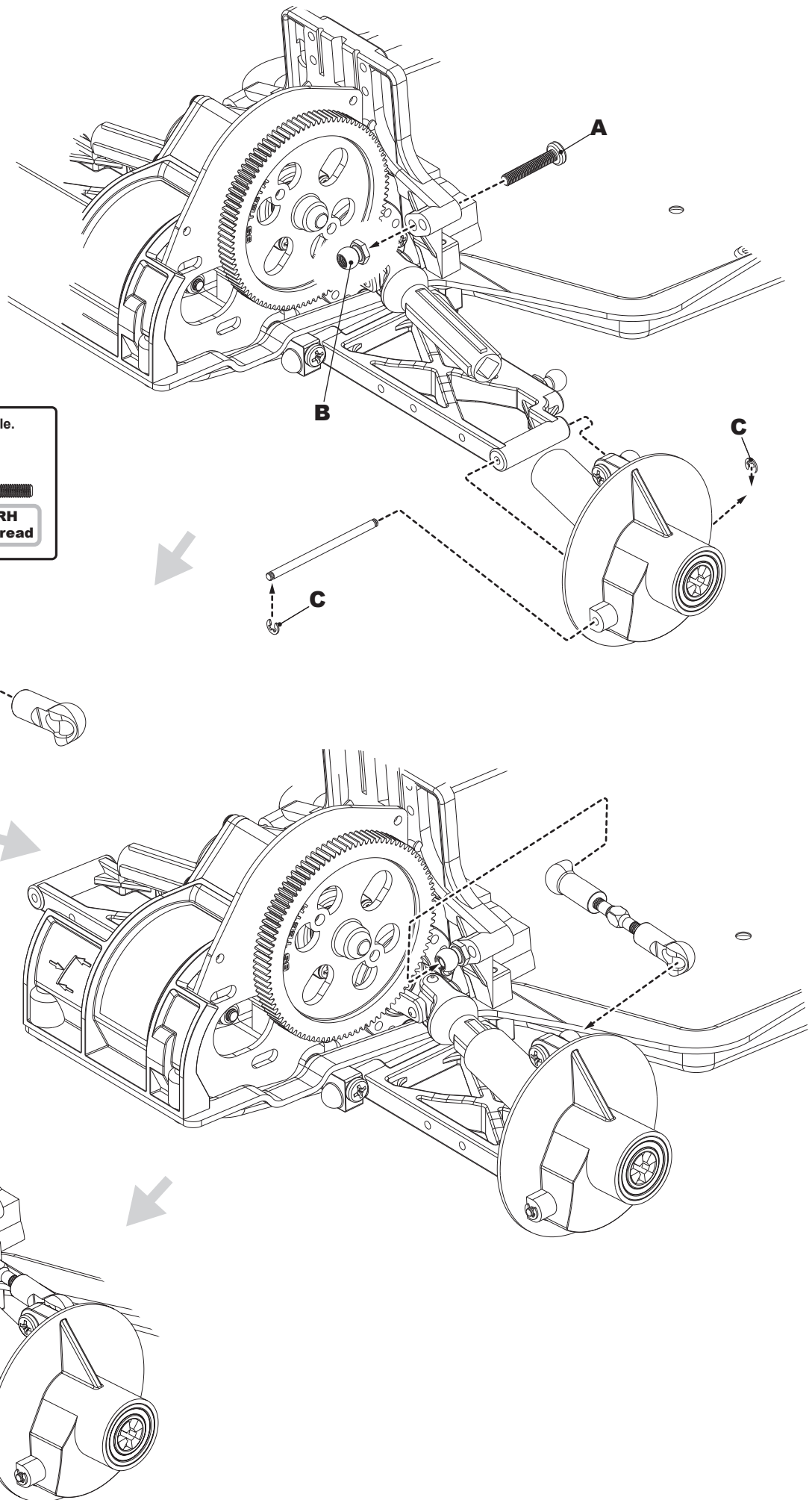
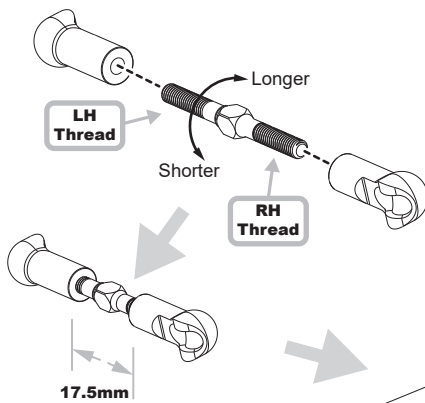
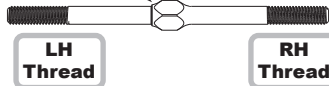
B x1



C x2



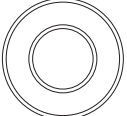
Note the shape of the turnbuckle.
This side of the turnbuckle
is the left hand thread.

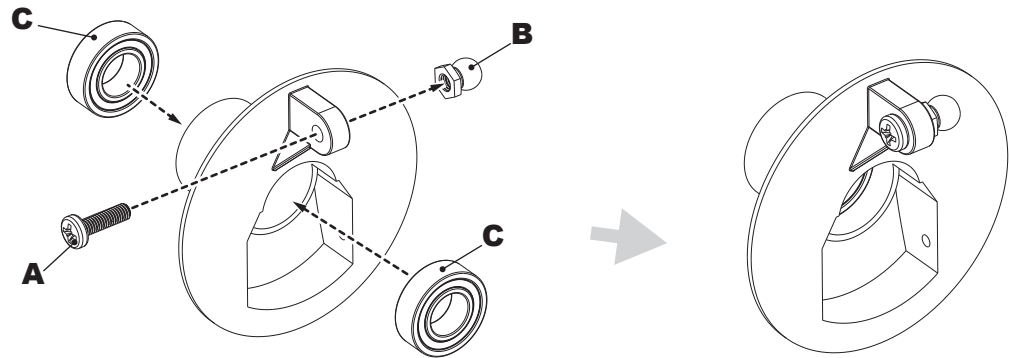


BAG D - Step 34

A x1 
M3 x 10 Pan Hd Screw

B x1 
Pivot Ball

C x2 
Ø8 x Ø16 x 5mm Bearing

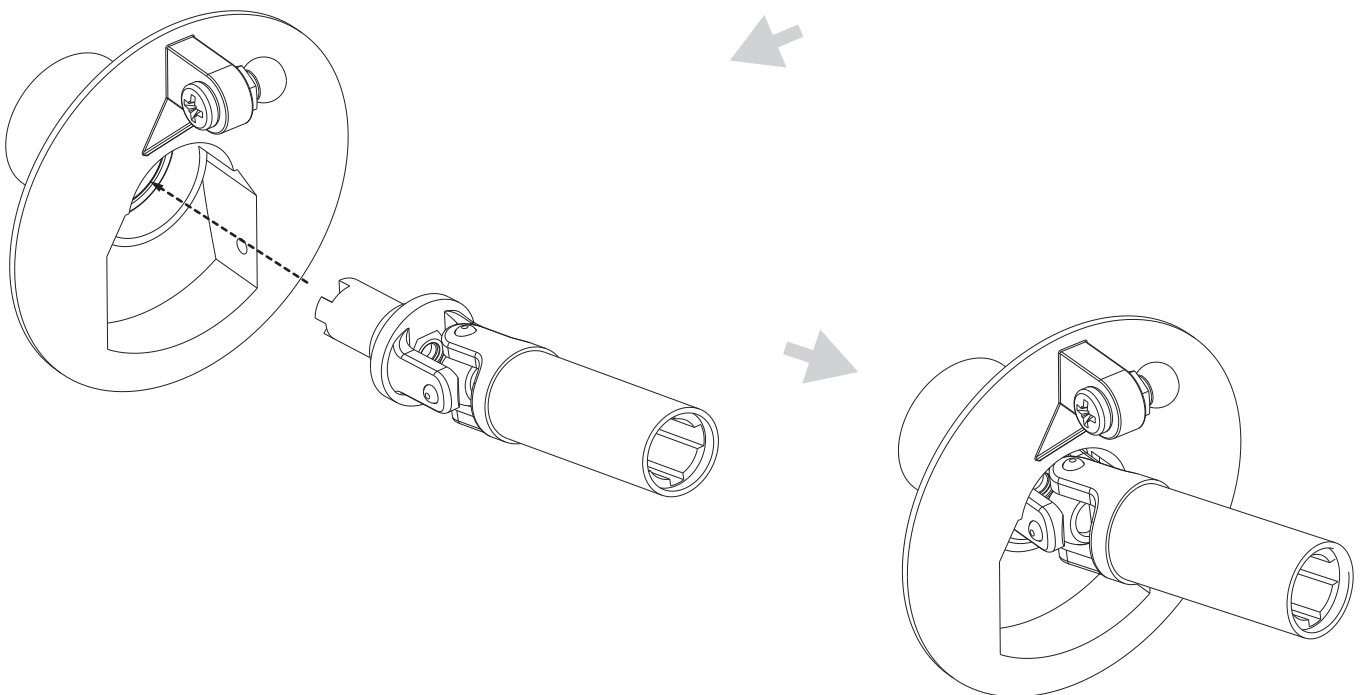
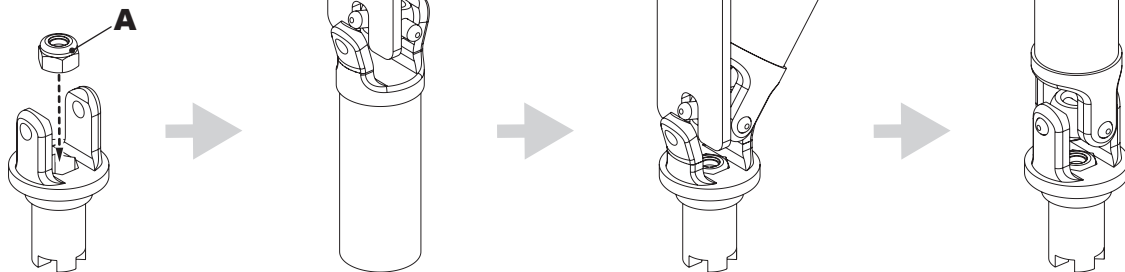


BAG D - Step 35

A x1 
M3 Nyloc Nut



IMPORTANT
Use the same assembly procedure
as shown on page 11, Step 22a.



BAG D - Step 36

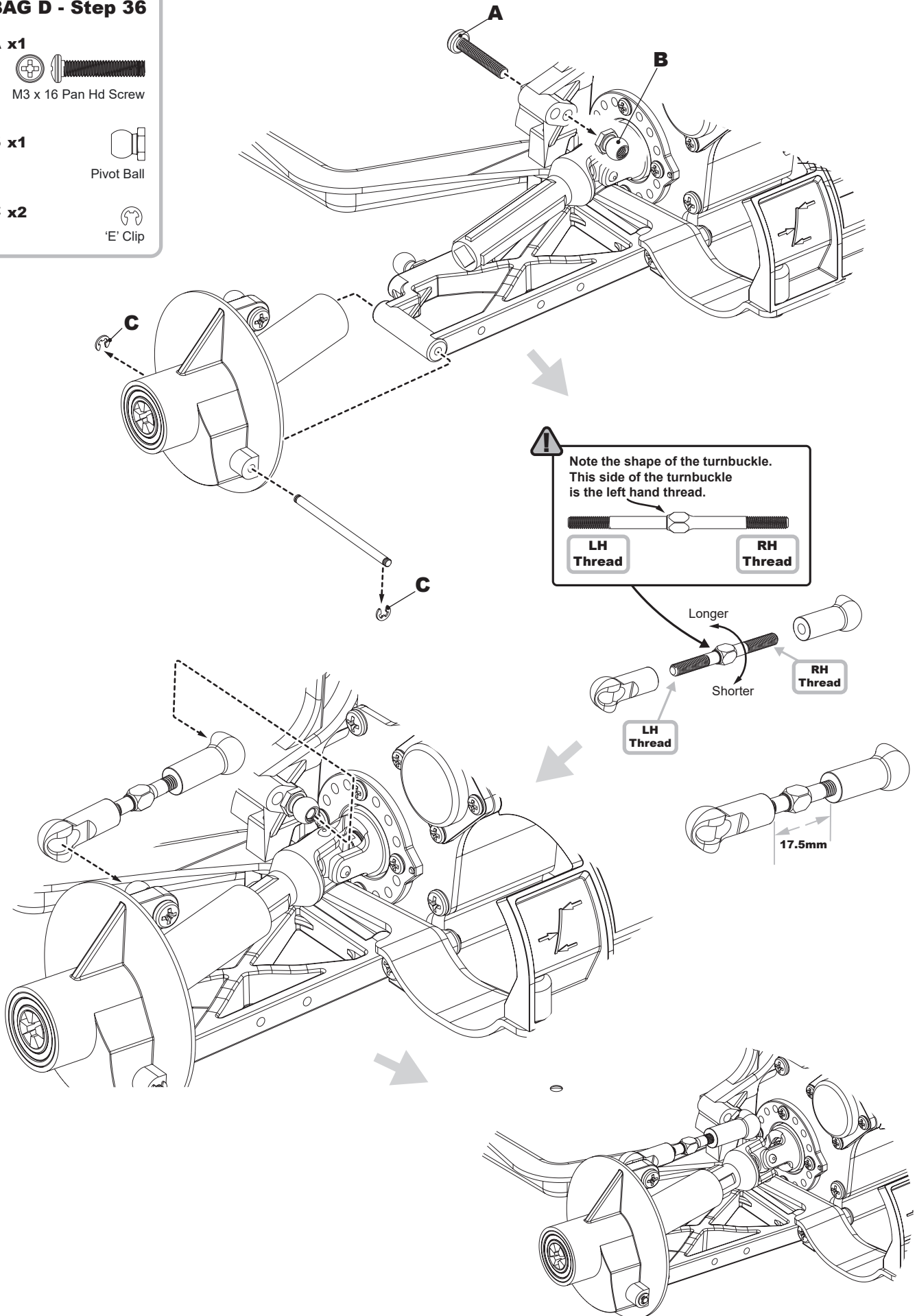
A x1



B x1

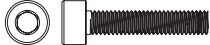


C x2



BAG D - Step 37a

A x2



M3 x 16 Cap Hd Screw

B x2

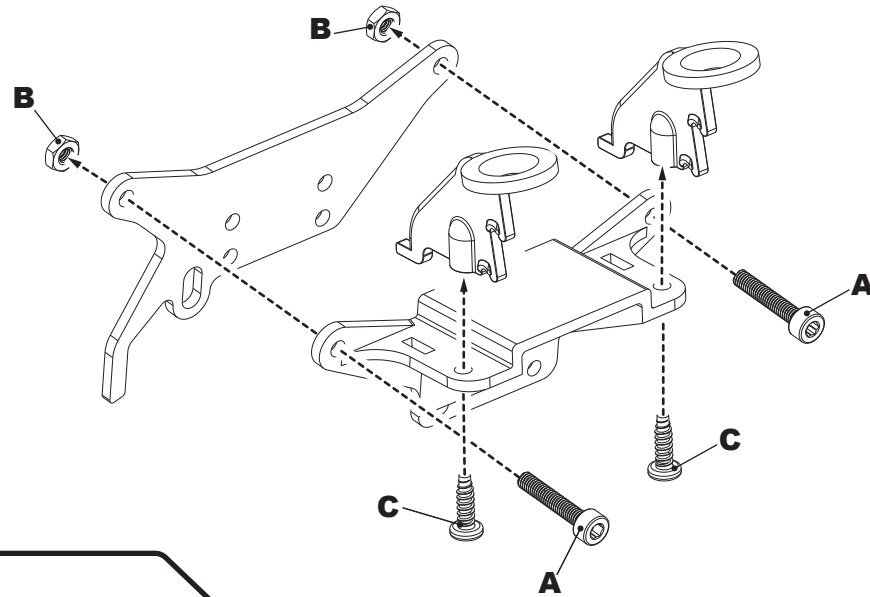


M3 Nut

C x2



No4x 3/8" Pan Hd Screw

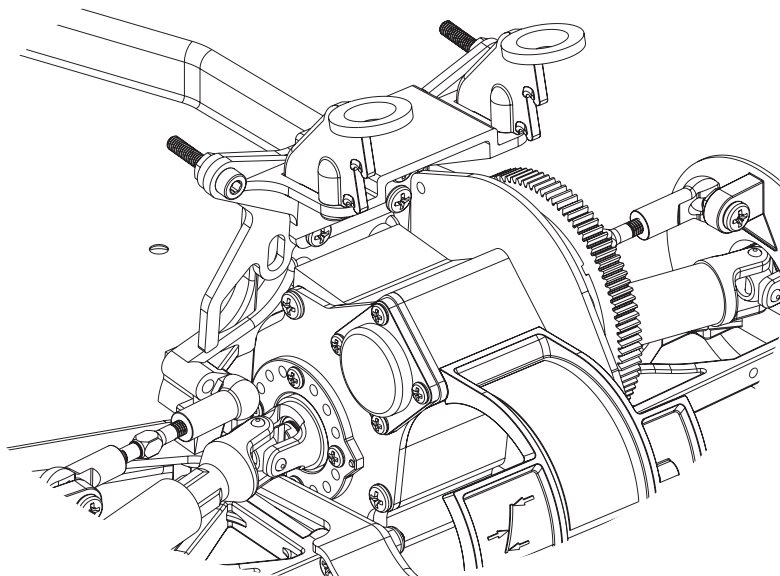
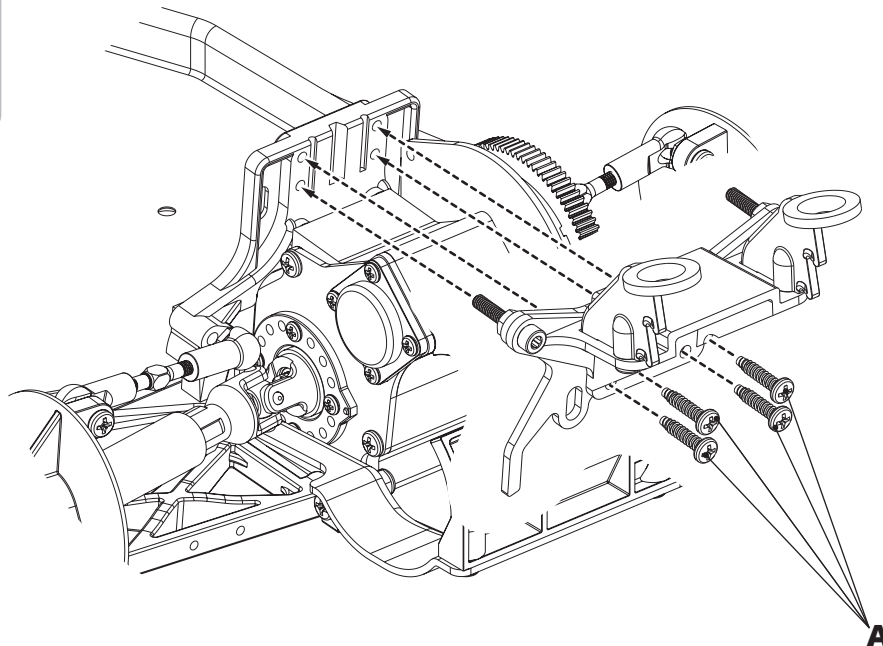


BAG D - Step 37b

A x4



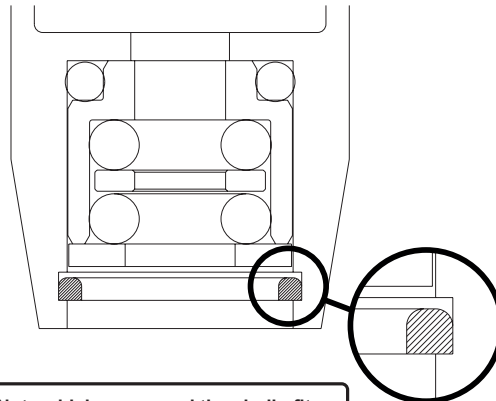
No4x 1/2" Pan Hd Screw



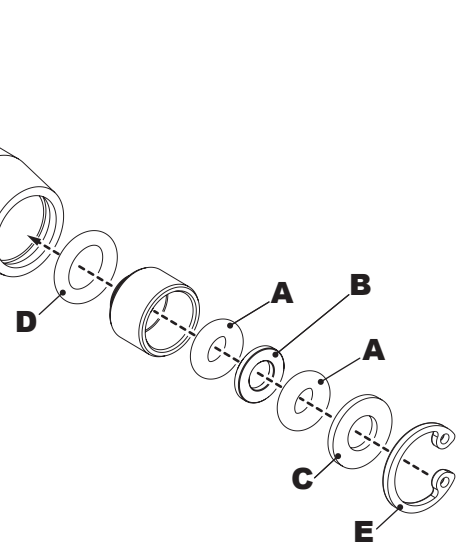
BAG D - Step 38

- A x4** 
'O' Ring Red Small
- B x2** 
Black Washer 0.75mm
- C x2** 
White Washer 0.80mm
- D x2** 
'O' Ring Red Large
- E x2** 
Circlip

! Make two shocks the same.

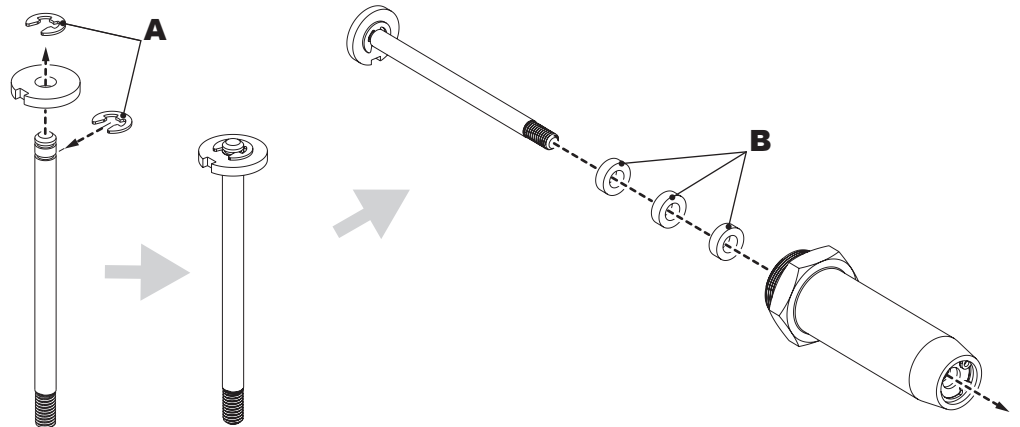


! Note which way round the circlip fits. Rounded edge in first. Do not over squeeze it. Ensure the circlip is properly located in the groove.



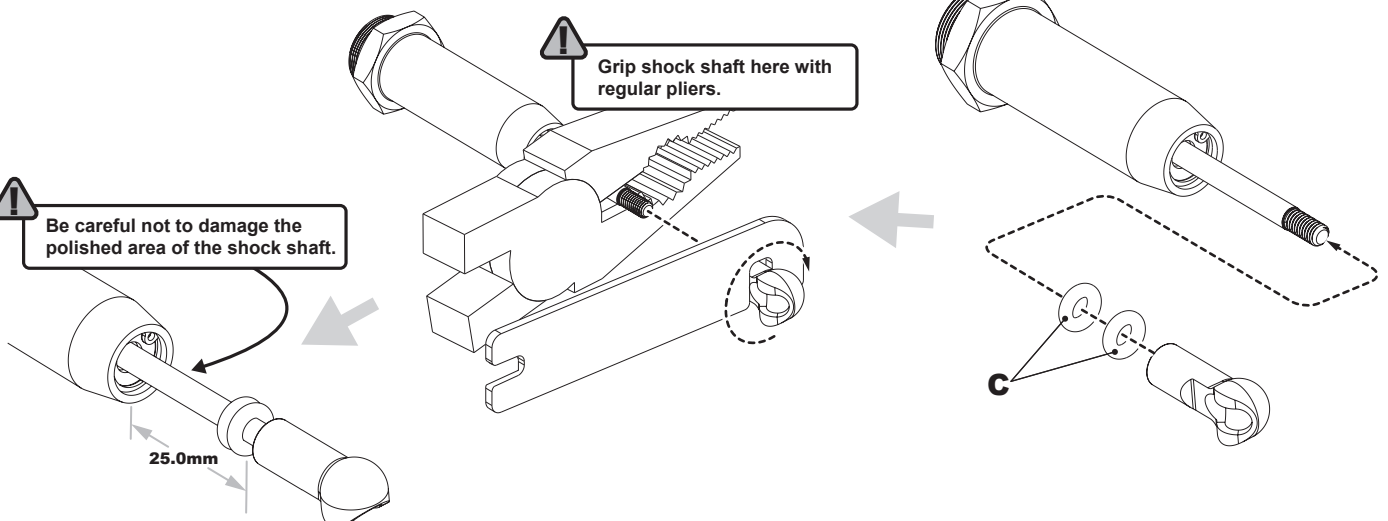
BAG D - Step 39

- A x4** 
1/8th 'E' Clip
- B x6** 
White Washer 2.0mm
- C x4** 
'O' Ring Black

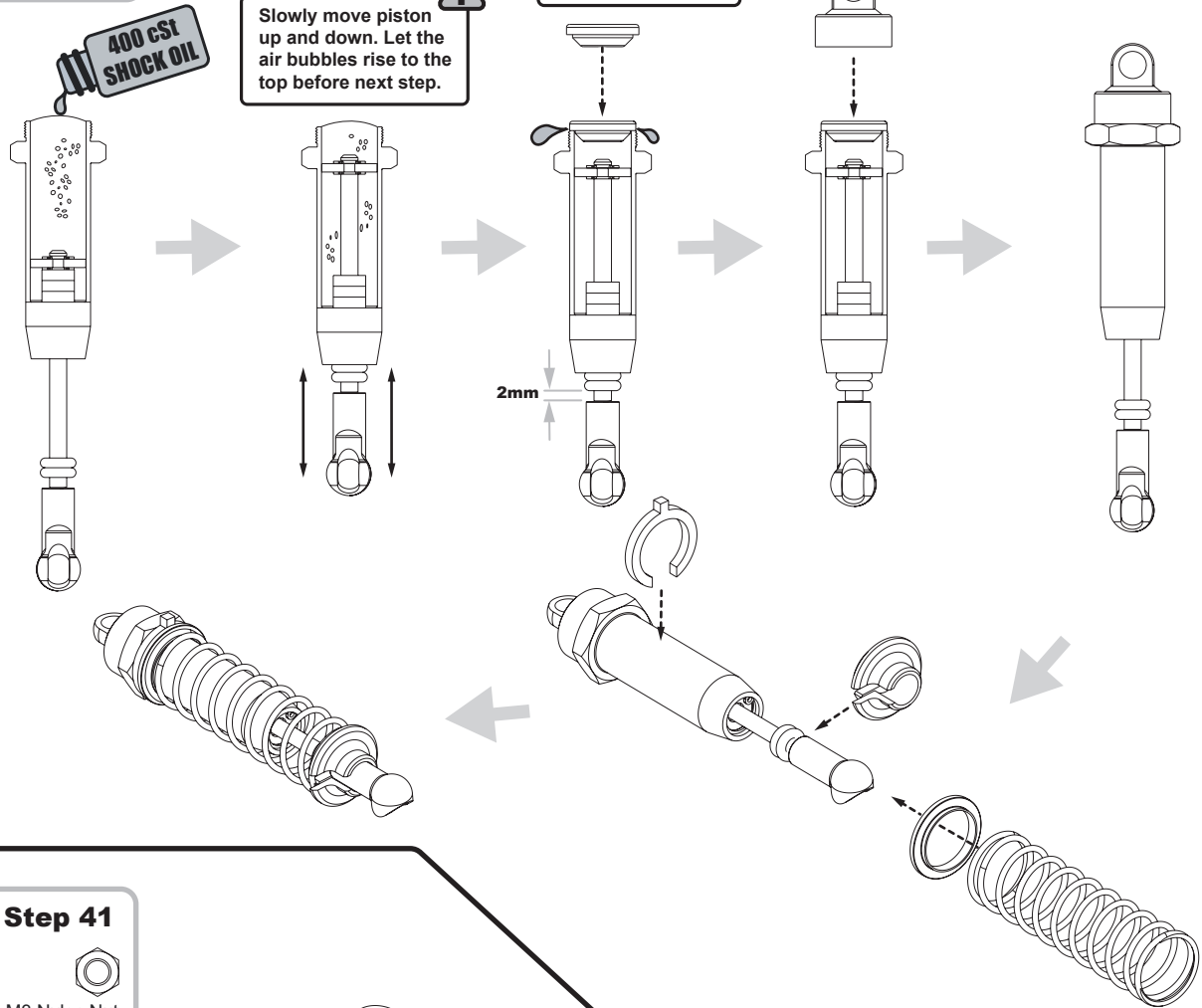


! Grip shock shaft here with regular pliers.

! Be careful not to damage the polished area of the shock shaft.



BAG D - Step 40



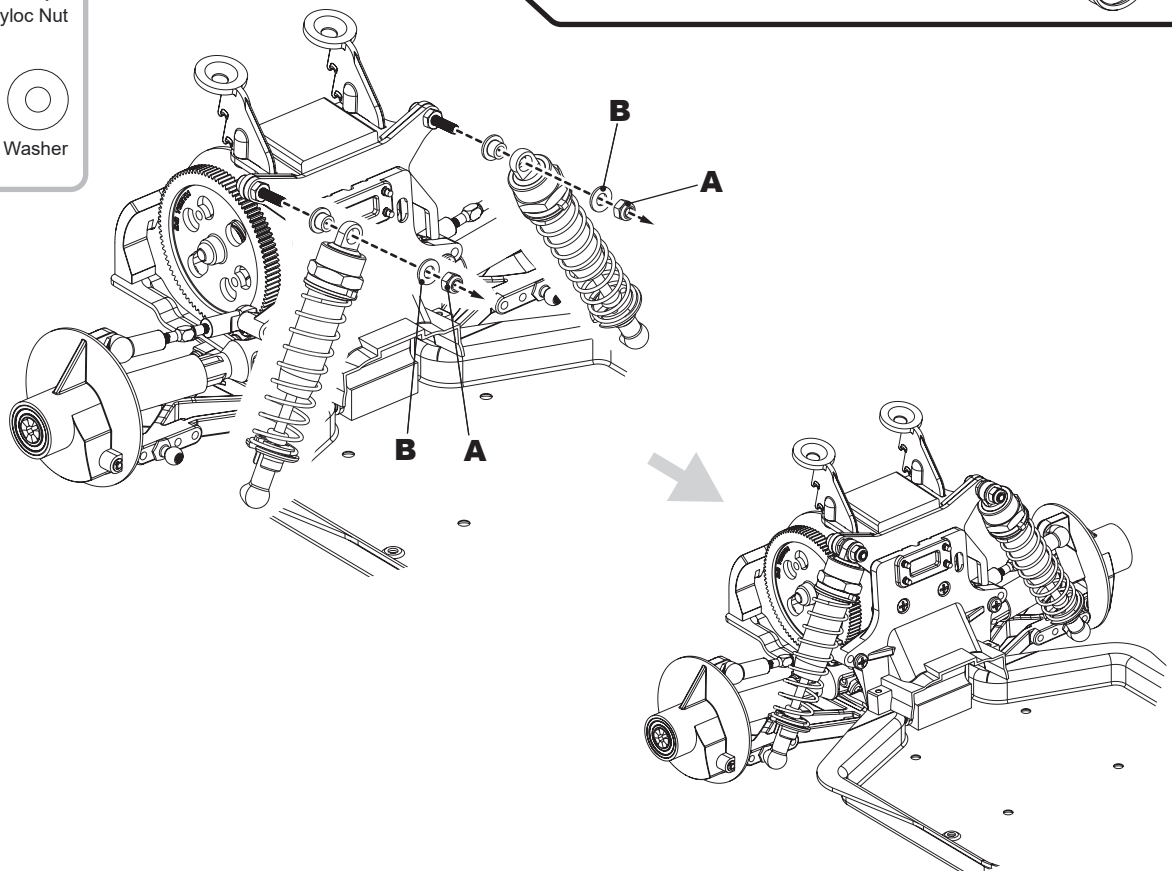
BAG E - Step 41

A x2

M3 Nyloc Nut

B x2

8mm Plastic Washer



BAG E - Step 42

A x4

'O' Ring Red Small

B x2

Black Washer 0.75mm

C x2

White Washer 0.80mm

D x2

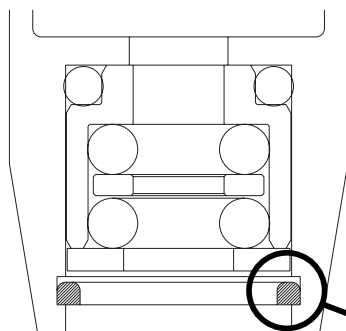
'O' Ring Red Large

E x2

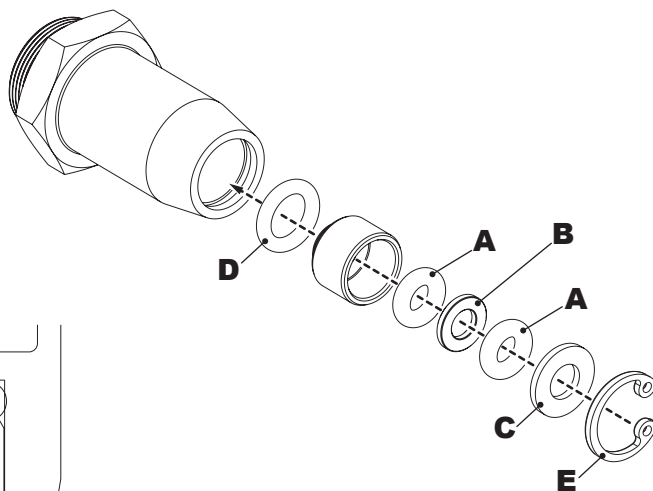
Circlip



Make two shocks the same.



Note which way round the circlip fits. Rounded edge in first. Do not over squeeze it. Ensure the circlip is properly located in the groove.



BAG E - Step 43

A x4

1/8th 'E' Clip

B x6

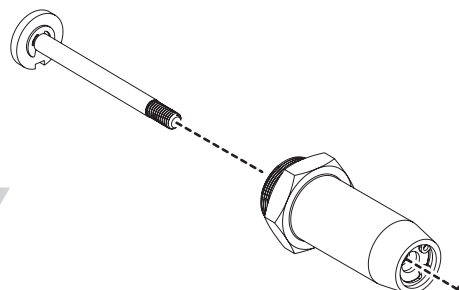
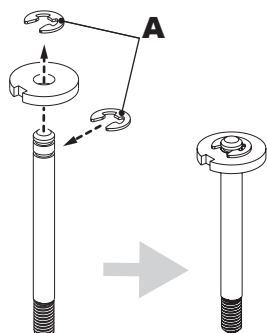
White Washer 2.0mm

C x6

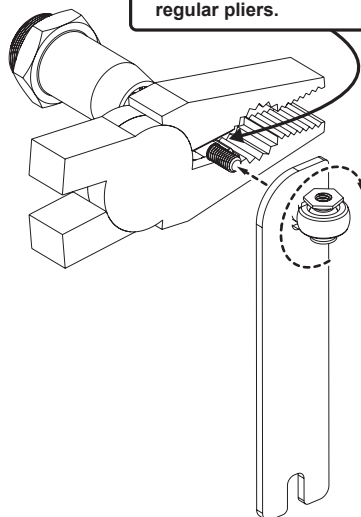
'O' Ring Black

D x2

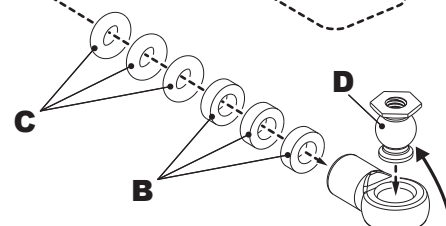
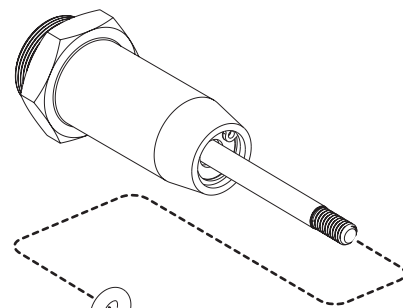
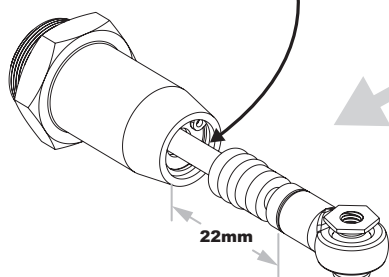
Rose Joint



Grip shock shaft here with regular pliers.

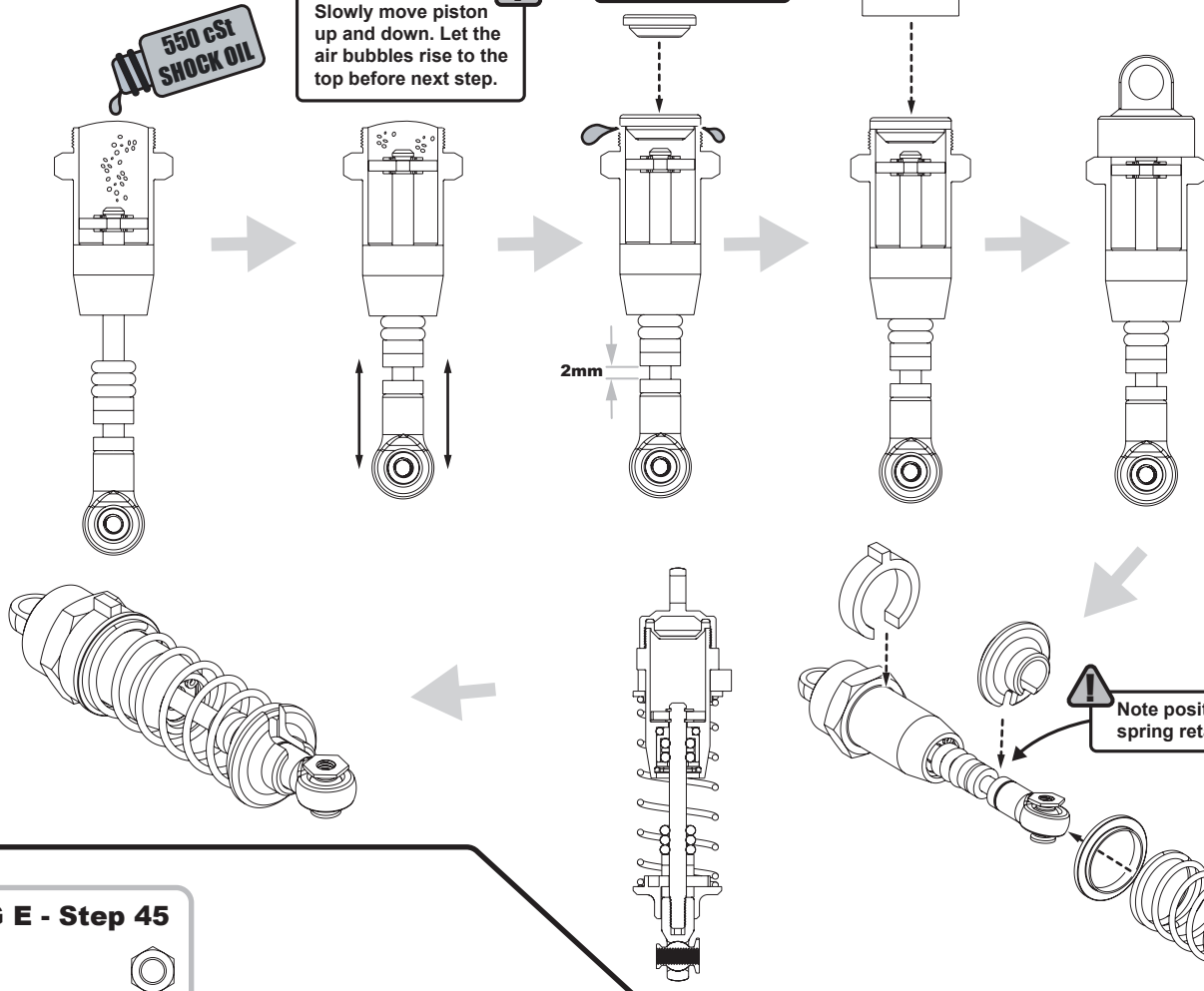


Be careful not to damage the polished area of the shock shaft.



Carefully insert using regular pliers or shock shaft pliers.

BAG D - Step 44



BAG E - Step 45

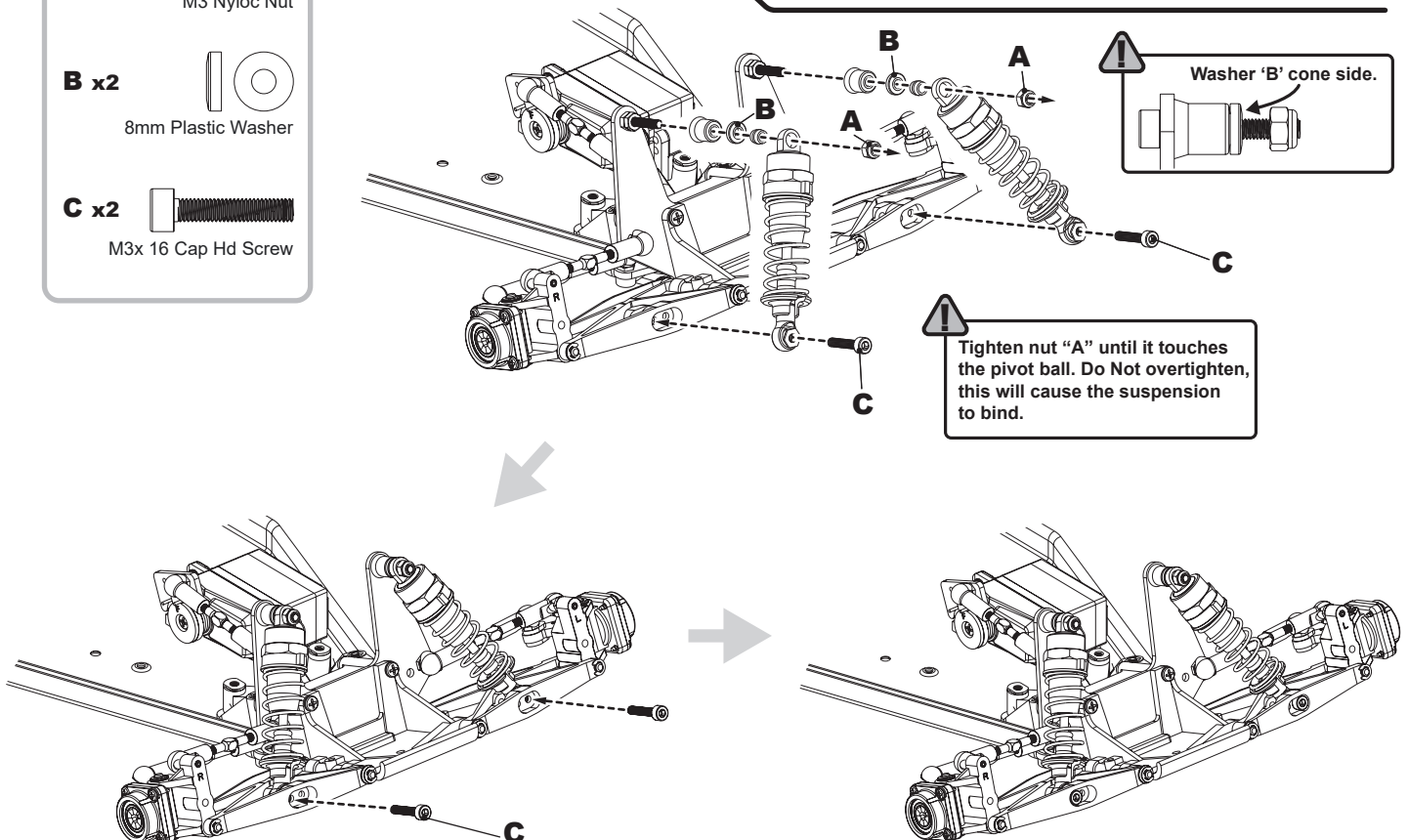
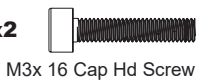
A x2



B x2



C x2

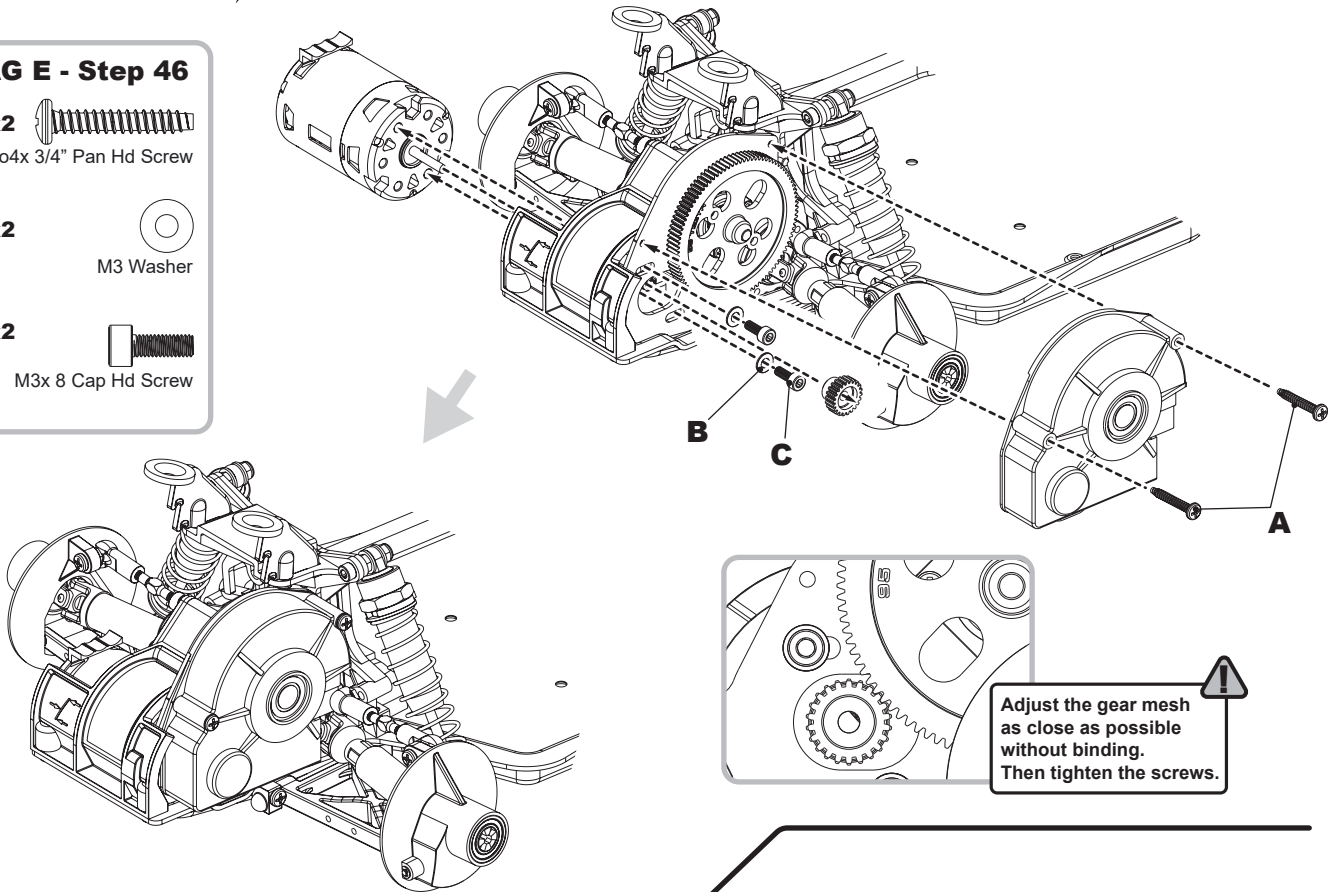


BAG E - Step 46

A x2 
No4x 3/4" Pan Hd Screw

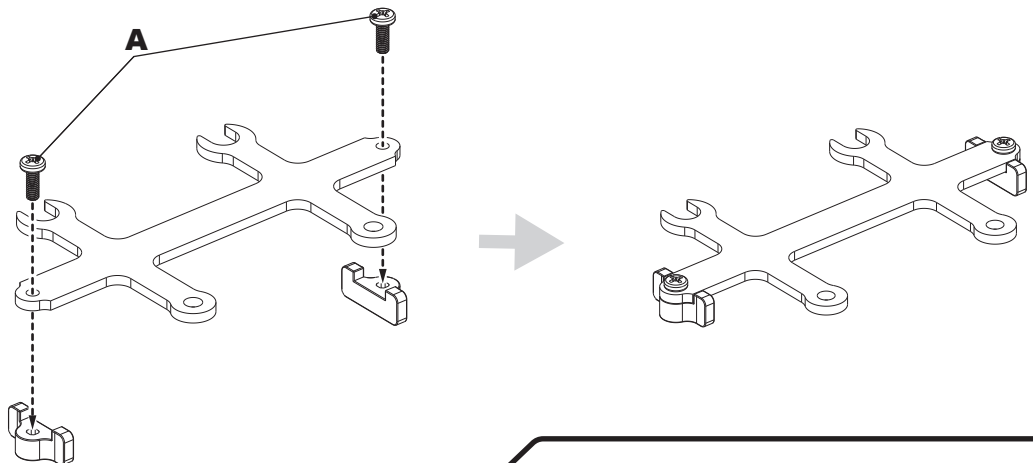
B x2 
M3 Washer

C x2 
M3x 8 Cap Hd Screw



BAG E - Step 47

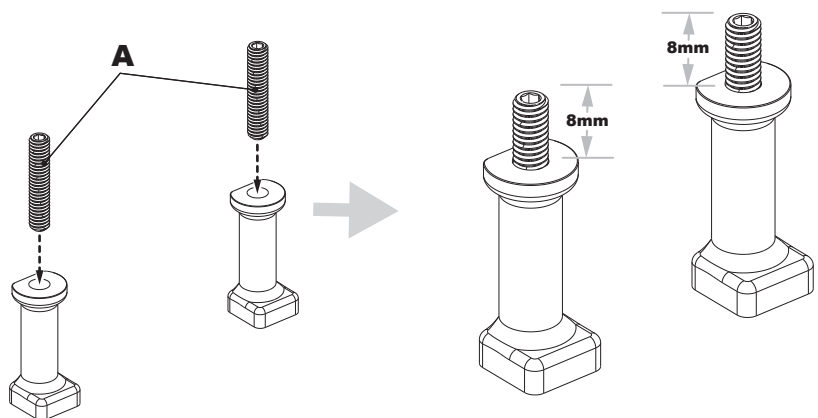
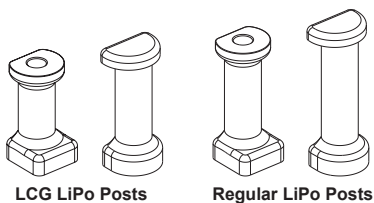
A x2 
M3 x 8 Pan Hd Screw



BAG E - Step 48

A x2 
M3 x 20 Grub Screw

 The kit contains regular and LCG LiPo posts. The short Posts are for LCG LiPo's.

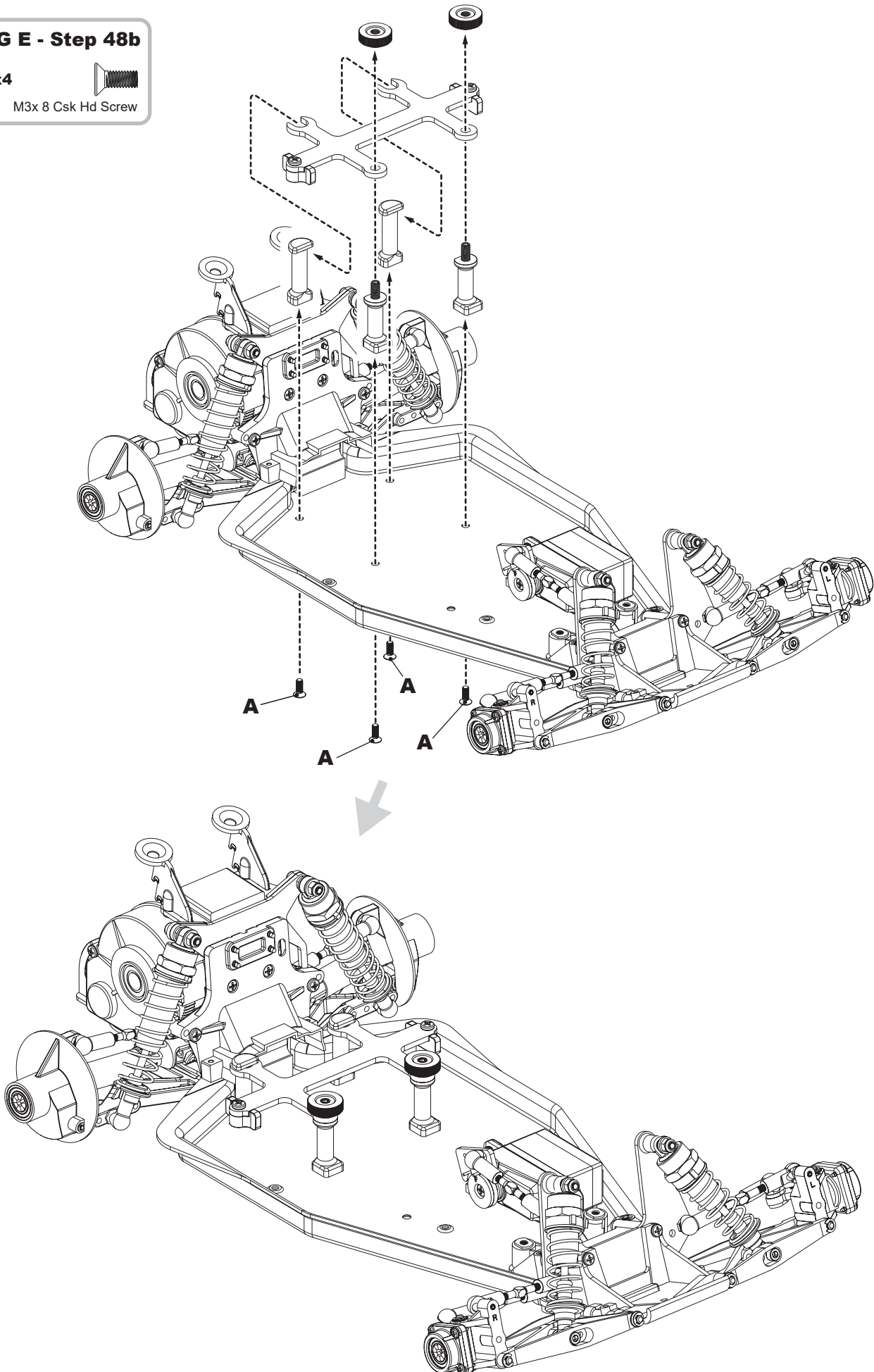


BAG E - Step 48b

A x4



M3x 8 Csk Hd Screw

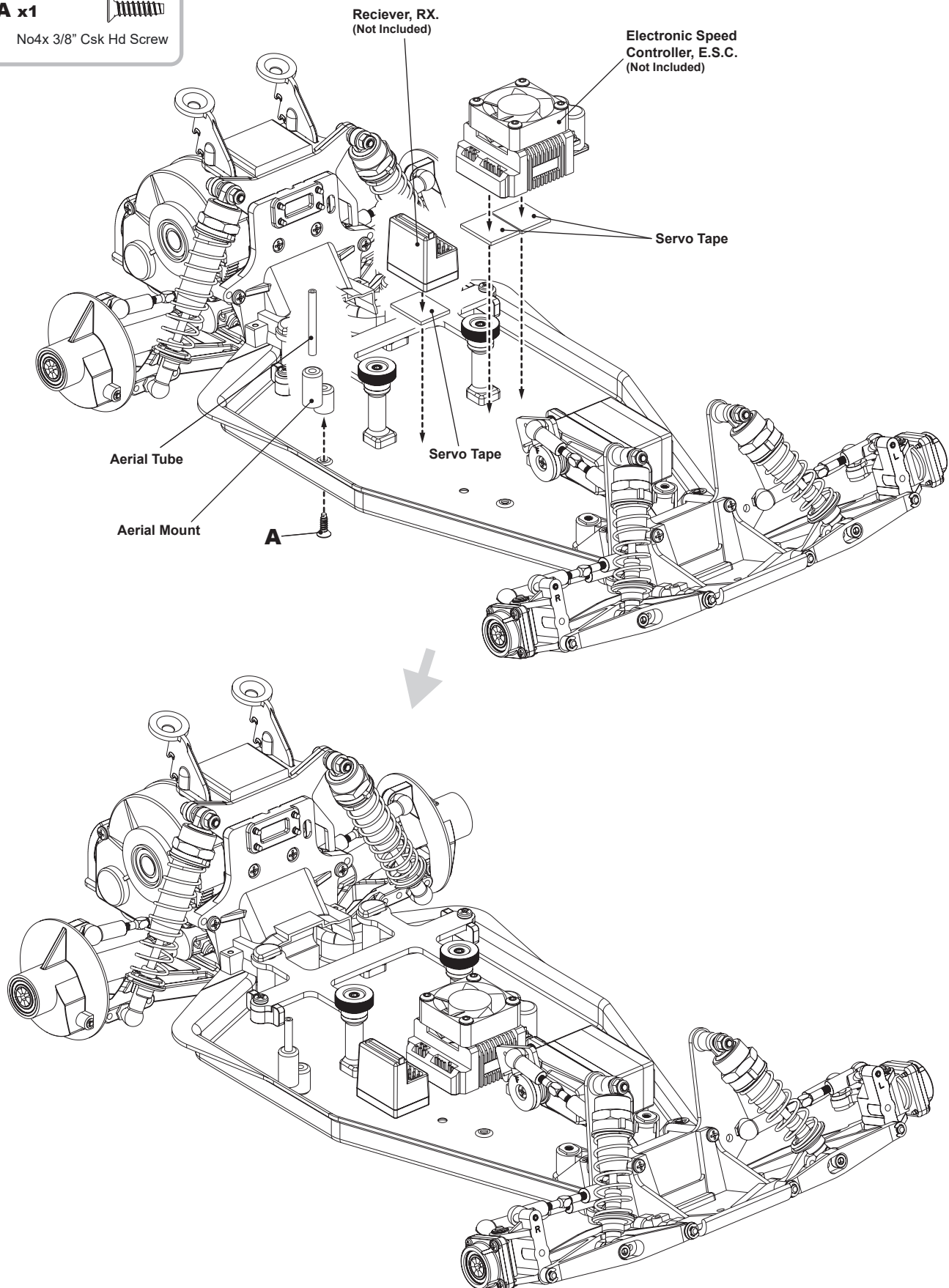


BAG E - Step 49

A x1



No4x 3/8" Csk Hd Screw



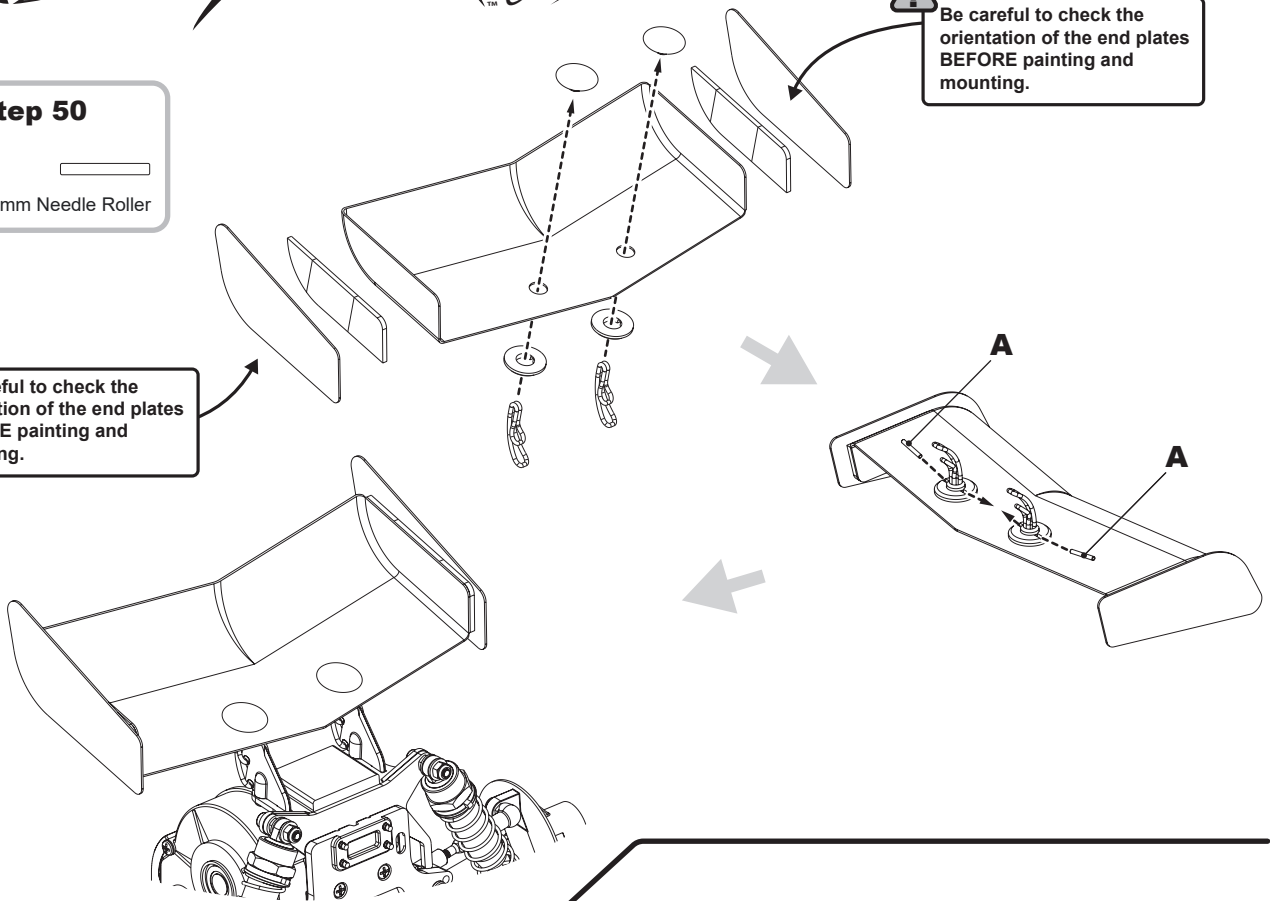
Step 50

A x2

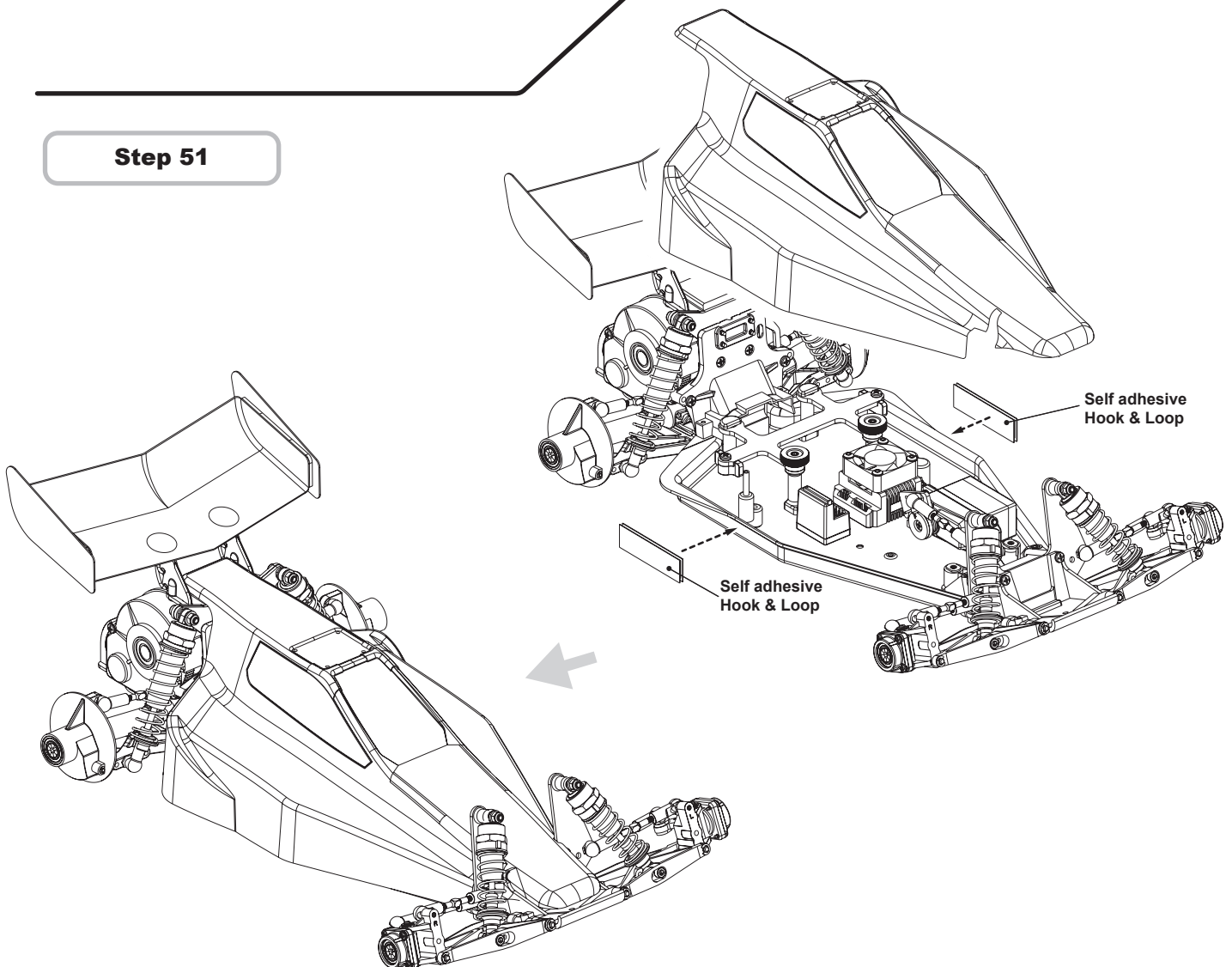
ø1.5 x11.8mm Needle Roller

Be careful to check the orientation of the end plates BEFORE painting and mounting.

Be careful to check the orientation of the end plates BEFORE painting and mounting.



Step 51



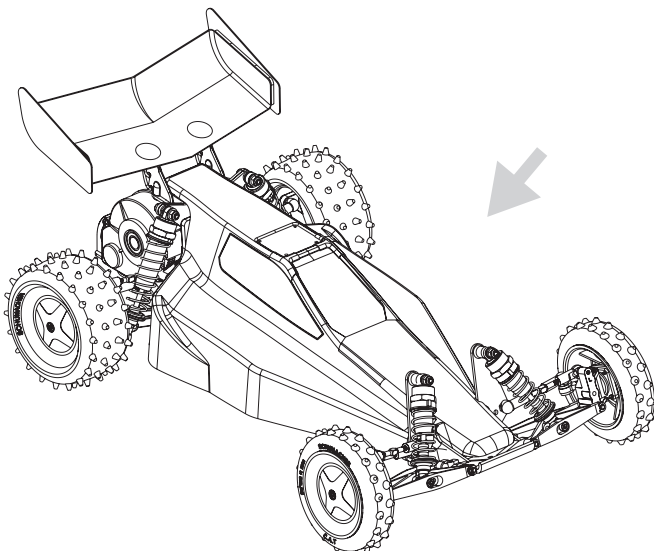
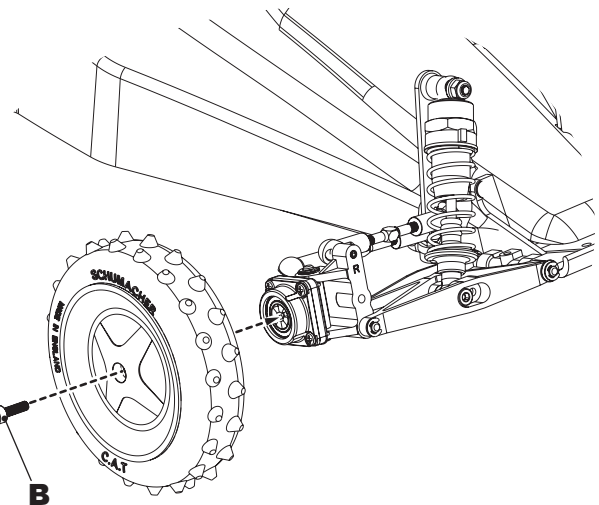
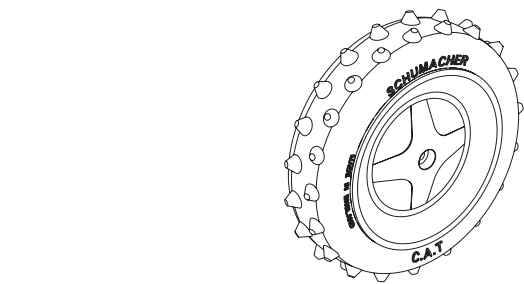
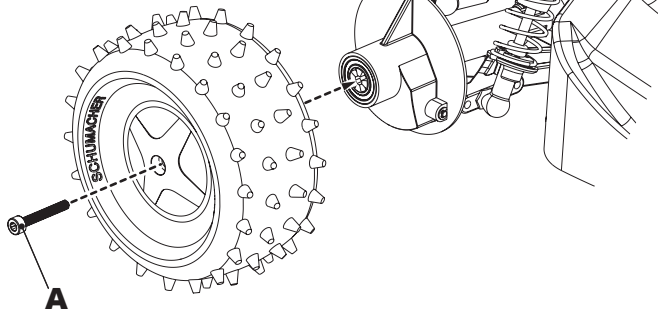
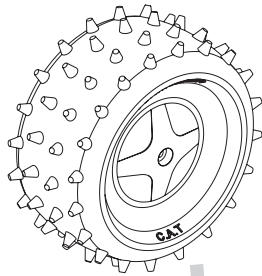
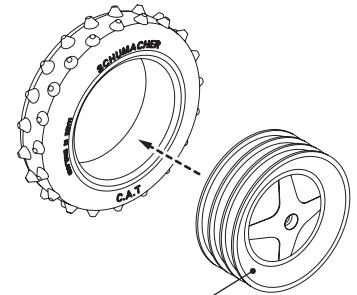
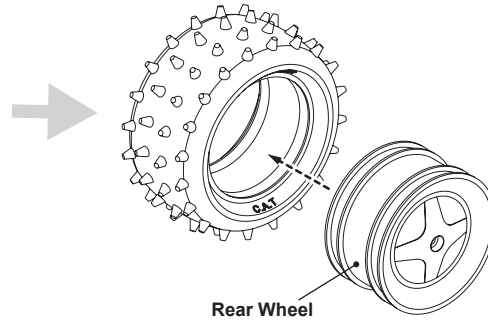
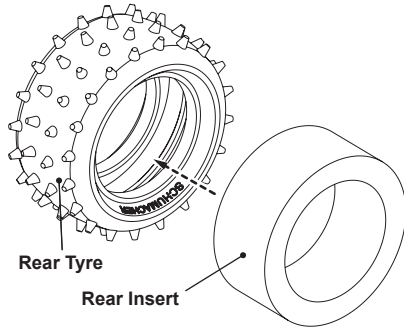
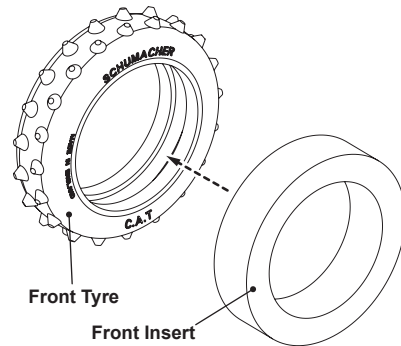
BAG E - Step 52

A x2  M3x 20 Cap Hd Screw

B x2  M3x 10 Cap Hd Screw

CA GLUE 

 If required, use CORE Tyre Glue (CR522) to stick the tyres to the wheels.



TRACK SETTINGS

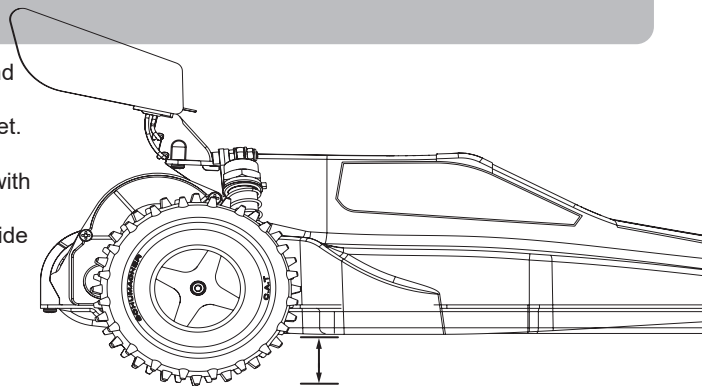
RIDE HEIGHT

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 19mm on astro, 23mm on dirt and 14-16mm 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.

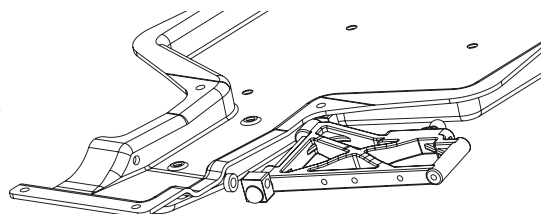


REAR TOE

See Page 09 Bag B - Step 17 & 18

The base setting for rear toe in is 3° , 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.

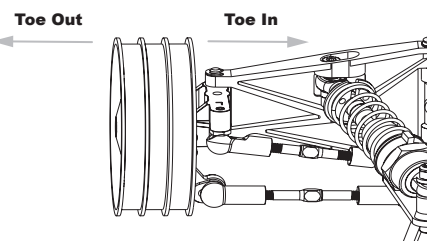
A good starting position is 1.5° on carpet and 4.0° on low grip dirt and wet astro.



FRONT TOE

See Page 06 Bag B - Step 11

Front toe should be set to 0° (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° toe out on Astro tracks.

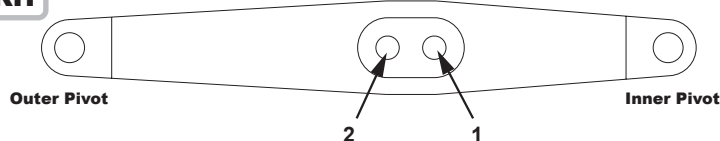


FRONT WISHBONE SHOCK MOUNTING HOLE

See Page 24 Bag E - Step 45

The outboard 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.

RH

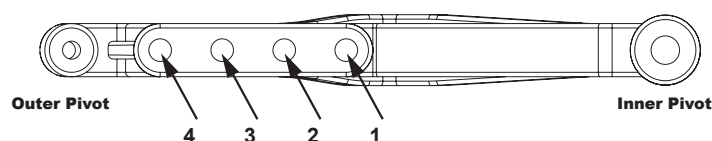


REAR WISHBONE SHOCK MOUNTING HOLE

See Page 09 Bag B - Step 17 & 18

Hole 3 works best for most track conditions giving good traction and drive through the turns whilst maintaining good stability over the bumps. Moving to hole 4 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. If the grip level is low and the track is bumpy, try the holes 1 and 2 with harder springs and thicker oil. This should help improve the handling.

RH

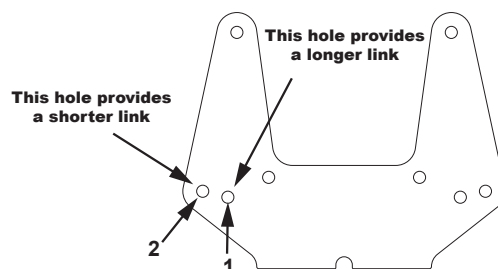


FRONT CAMBER LINKS

See Page 05 Bag A - Step 10a

The kit settings for the front camber link position (2) and length are used by the team for most tracks. A shorter front link will make the car roll less and speed up the cars initial steering response. This is a better choice for bumpy, low grip tracks.

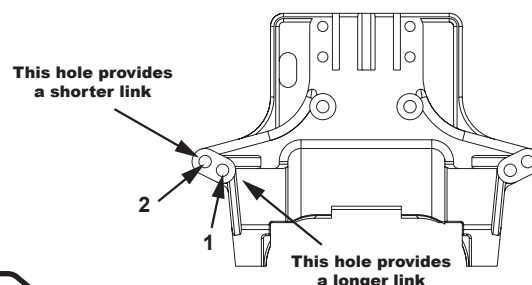
A longer front link (Hole 1) makes the front of the car roll more and offers less steering reaction at high speed. We would recommend this on fairly smooth high grip tracks.



REAR CAMBER LINKS

See Pages 17 & 19 Bag D - Step 33 & 36

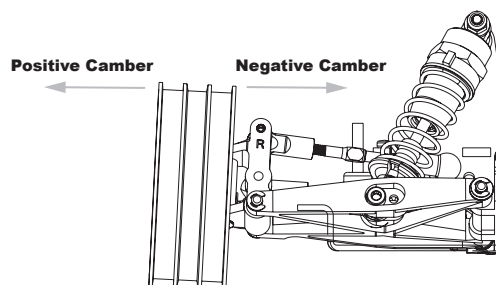
The kit setting for the rear camber link is the best compromise for most tracks. The longer link (Hole 1) will make the car roll more and gain side traction, making the car easier to drive. Shortening the rear camber link (Hole 2) will make the rear of the car roll less in the corners, and square up 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 07 Bag B - Step 12

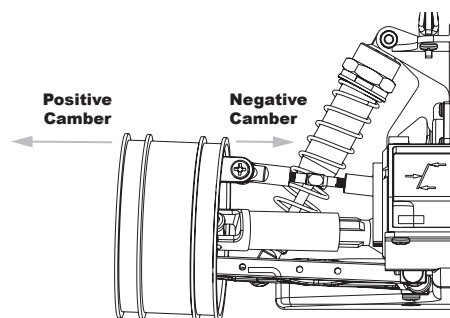
The usual team setting for static front camber is 1-2° negative at ride height (the top of the wheel is leaning inwards towards the car). Increasing the static camber will generally increase the mid corner steering, whereas decreasing the static camber usually makes the car smoother to drive by reducing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



REAR CAMBER

See Pages 17 & 19 Bag D - Step 33 & 36

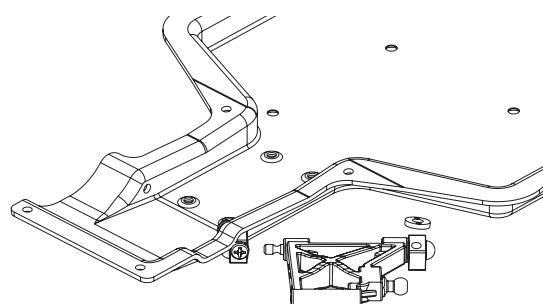
The usual team setting for static rear camber is 1° negative at ride height (the top of the tyre leaning inwards towards the car). Increasing the static rear camber will increase the traction when exiting the turns, but will be less stable at high speed. Decreasing the camber will reduce stability and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



REAR ANTI SQUAT

See Page 09 Bag B - Step 16

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.



COUGAR GEAR CHART Standard Transmission



Motor Limit 17.5 Brushless

Minimum Tooth Sum 108T - Maximum Tooth Sum 120T - Internal Ratio 2.43:1

		17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
U229	95	13.57	12.82	12.14	11.54	10.99	10.49	10.03	9.61	9.23									
U230	93	13.29	12.55	11.89	11.29	10.76	10.27	9.82	9.41	9.03	8.69	8.37							
U231	89			11.38	10.81	10.29	9.82	9.40	9.01	8.65	8.31	8.01	7.72	7.45	7.20	6.97			
U8308	86						9.49	9.08	8.70	8.35	8.03	7.74	7.46	7.20	6.96	6.74	6.53	6.33	6.14

COUGAR GEAR CHART U7600 Pro Transmission Conversion



Motor Limit 6.5 Brushless

Minimum Tooth Sum 108T - Maximum Tooth Sum 120T - Internal Ratio 2.07:1

		17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
U4163	95	11.55	10.91	10.33	9.82	9.35	8.92	8.54	8.18	7.85									
U7154	89			9.68	9.20	8.76	8.36	8.00	7.66	7.36	7.07	6.81	6.57	6.34	6.13	5.93			
U3351	83									6.86	6.60	6.35	6.13	5.91	5.72	5.53	5.36	5.20	5.05
U3350	82										6.52	6.28	6.05	5.84	5.65	5.47	5.30	5.14	4.98
U3348	80												5.90	5.70	5.51	5.33	5.17	5.01	4.86
U7616	78														5.37	5.20	5.04	4.88	4.74

OPTION PARTS

U7600 - Option Pro Transmission Conversion



U7245 - Alloy Eccentric (pr)



U8302 - C/F Rear Shock Mount - Cougar Classic



U7315 - Titanium Turnbuckle - 35mm - Silver - pr

U7316 - Titanium Turnbuckle - 39mm - Silver - pr

U7317 - Titanium Turnbuckle - 45mm - Silver - pr



U7419 - Titanium M4 x 20 Grub Screw (pr)



U8299 - Ball Raced Steering Set - Cougar Classic



U7424 - Alloy Lightweight LiPo Nut - (pr)



U7243 - Alloy Washer Carrier



CR290 - 1/12 Servo Saver 23T Sanwa/KO
CR291 - 1/12 Servo Saver 25T Futaba



U8298 - CF Front Shock Mount - Cougar Classic



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SPARES LISTS

Chassis Parts

U119	Aerial Tube - Pack 4
U122	Velcro 1/2metre x 16mm
U1042	Aerial Mount - Universal
U4765	Lipo Post Nut 2pcs - Off Road
U4778	LiPo Stops 4pcs - Off Road
U7045	Lipo Posts Standard - KD,KC,L1/EVO,XLS,TC,LD/2,ST
U7046	Lipo Posts Short - KD,KC,L1/EVO,LD/2,ST
U7546	Servo Mounts (pr) - TOP CAT
U7547	Alloy Chassis - TOP CAT
U7549	Wing Mount Mouldings - TOP CAT
U7550	Shorty LiPo Strap S2 - TOP CAT
U7580	Rear Bulkhead - TOP CAT
U7588	Rear Motor Guard - TOP CAT
U8291	Front Bulkhead - Cougar Classic
U8292	Steering and Radius Arm - Cougar Classic
U8293	Manual - Cougar Classic
U8304	Servo Saver Set - Cougar Classic
U8306	Centre Track Rod - Cougar Classic

Bodys & Decals

U5147	Bodyshell + Decals + Window Mask - Cougar Classic
U5148	Wing and Endplates - Cougar Classic
U8294	Decals - Cougar Classic (pk3)

Transmission

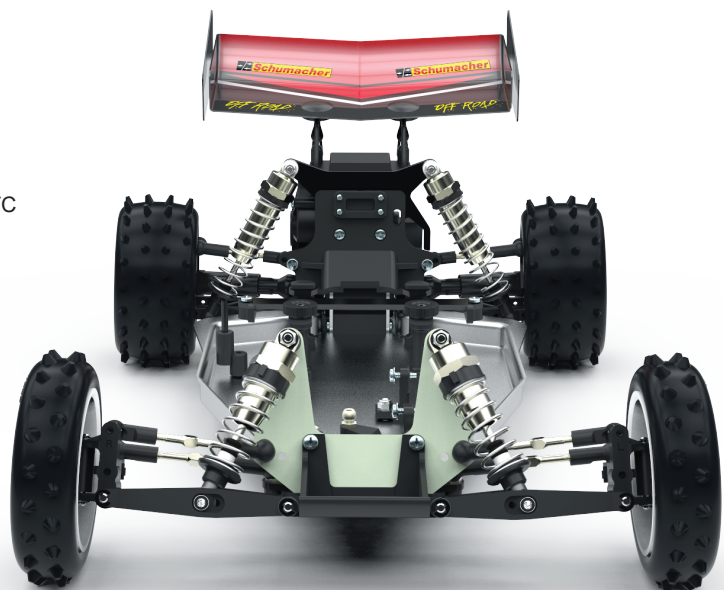
U7142	Integrator Axle - XLS,TC
U7144	Drive Shaft Mouldings 8 pcs - XLS,TC
U7152	UJ Assembly pr - XLS,TC
U7158	Integrator Washer pr - XLS,TC
U7187	Eccentrics pr - XLS,TC
U7188	Bearing Housings pr - XLS,TC
U7205	Front Washer Carrier pr - XLS,TC
U7216	Thrust Race F1/8 x 5/16 x 9/64 Grooved - XLS,TC
U7240	Pro Diff Rebuild Kit - XLS,TC
U7571	Front Axles (pr) - TOP CAT
U7586	Belt 72T 8.0 Wide (Kit) - TOP CAT
U7587	Layshaft (Kit) - TOP CAT
U7589	Gear Cover - TOP CAT
U7590	Alloy Layshaft Bush - TOP CAT
U7591	Alloy Motor Plate - TOP CAT
U7592	Alloy Cover Plate - TOP CAT
U7593	Transmission Housing - TOP CAT
U7594	Layshaft Pulley Set (Kit) - TOP CAT
U7595	Diff Pulley Set (Kit) - TOP CAT
U7596	Front Wheel Bearing Retainers (pr) - TOP CAT
U8173	Disc Spring 6 x 3.2 x 0.3mm pk8 - TC,XLS
U8279	Front Hub Carrier - Cougar Classic (pr)
U8308	86T Whisper Spur Gear Black

Bearings & Balls

U729	Chrome Steel Balls 3mm pk36-Fusion 28 turbo,XLS,TC
U2698	Ball Bearing - 5x10x4 Red Seal - (pr)
U2699	Ball Bearing - 10x15x4 Red Seal - (pr)
U3075	Ball Bearing - 4x8x3mm Red Seal - (pr)
U3136	Ball Bearing - 5x8x2.5 - Shield (pr)
U3871	Ball Bearing - 5x9x3 Red Seal - (pr)
U4084	Ball Bearing - 6x12x4 Red Seal - (pr)
U4946	Pro Ball Bearing 5 x 10 x 4 sealed - pr
U7088	Ball Bearing 5x10x4 Red Seal FL - (pr)
U7155	Bearing 8 x 16 x 5 Black Seal (pr)
U7328	Ball Bearing - 5 x 11 x 4 Red Seal - (pr)
U7725	Pro-Ball Bearing 10x15x4 Sealed - (pr)
U7726	Pro-Ball Bearing 6x12x4 Sealed - (pr)
U7729	Pro-Ball Bearing 5x9x3 Sealed - (pr)
U7730	Pro-Ball Bearing 4x8x3 Sealed - (pr)
U7997	Ceramic Ball Bearing 6 x 12 x 4 (pr)

Hardware

U1247	SPEED PACK - Wing Mount 'O' Ring
U1539	SPEED PACK - Self Tap Csk Hd
U1543	SPEED PACK - M3 Csk Hd
U1547	SPEED PACK - M3 Nuts
U1548	SPEED PACK - M3 Washers
U1551	SPEED PACK - E Clips -2 x 8pcs
U1633	SPEED PACK - Small Pins (pk)
U1960	SPEED PACK - O Rings; Various
U2885	Steering Levers Bush Set - Havoc
U3986	Suspension O'ring Tuning Set - SS/GT
U4222	Turnbuckle Adjuster HTT - 39mm - pr
U4223	Turnbuckle Adjuster HTT - 45mm - pr
U4298	Turnbuckle HT - 35mm - pr
U4651	SPEED PACK M3x10 Grub Screws (10pcs)
U4775	Pivot Ball 5.5mm - (4pcs)
U4987	SPEED PACK Needle Roller 1.5x11.8 (pk8)
U7090	SPEED PACK - M4x20 Grub Screw (pk4)
U7150	Pivot Ball 4 pcs - XLS,TC
U7165	SPEED PACK M3 x 16 SS Cap Hd (pk10)
U7166	SPEED PACK M3 x 20 SS Cap Hd (pk10)
U7209	Ball Sockets 4 pcs - XLS,TC
U7219	SPEED PACK M3 x 8 Pan Hd Pozi (pk10)
U7220	SPEED PACK M3 x 10 Pan Hd Pozi (pk10)
U7223	SPEED PACK M3 X 12 Grub (pk10)
U7226	SPEED PACK No 2 x 3/16 Pan Hd (pk10)
U7227	SPEED PACK No 2 x 1/2 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)
U7275	SPEED PACK M3 x 8 SS Cap Hd (pk10)
U7332	SPEED PACK WASHERS Dia 3.5 (pk15)
U7563	SPEED PACK - M3x16 Pan Pozi (pk10)
U7557	SPEED PACK - 2mm Circlips (pk10)
U7558	SPEED PACK - Double Sided Tape Pads (pk10)
U7259	SPEED PACK M3 x 8 Csk Pozi (pk10)
U7559	SPEED PACK - M3x10 SS Cap Hd (pk10)
U7562	SPEED PACK - M3x10 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)
U7709	M3 Black Alloy Washers 0.75mm (pk10)
U7711	M3 Black Alloy Washers 2.00mm (pk10)
U8272	SPEED PACK No 2 x 1/4 Pan Hd (pk10)



SPARES LISTS

Suspension

U322	Lower Front Susp Plate - 2WD
U748	Front Susp. Pivot Set - 2WD
U1129	Rear Pivot Blocks 1/8
U1425	Pivot Pin; grooved 44mmx1/8
U2330	Wishbone; Yoke and Strg Block; Big 6 (pr)
U3067	Yoke C Hub pr - Rascal,Riot
U3103	Pivot Pin; grooved 23mm 1/8 pr - Rascal,Riot,TC
U7367	Rod End Ball Wide & Socket pr - L1/EVO,ST
U7431	Rod End Socket (Dia 5.5mm) (pk4)
U7567	Grooved Pins 45mm (pr) - TOP CAT
U7568	Rear Wishbone LWB (pr) - TOP CAT
U7572	Rear Shock Mount - TOP CAT
U7578	Rear Hub Carriers (pr) - TOP CAT
U7584	Grooved Pins 2.0 x 34.0 (pr) - TOP CAT
U7585	Rear Shock Mount Support S2 - TOP CAT
U776	Top Bkt; Yokes;C.Tr. Rod - 2WD
U8295	Front Shock Mount F/G - Cougar
U8305	Front Wishbones - Cougar Classic (pr)

Shock Absorbers

U613	Spring Stop and Spacer Mouldings (pr)
U835	Vari Shock Seal Pack (pr)
U3937	Shock Mouldings
U4362	Small Bore Diaphragm - pk4
U7145	Rear Shock Body pr - XLS,TC
U7146	Front Shock Body pr - XLS,TC
U7147	Shock Cap pr - XLS,TC
U7148	Rear Shock Shaft pr - XLS,TC
U7149	Front Shock Shaft (pr) - CAT XLS
U7170	Shock Top Bush 4 pcs - XLS,TC
U7171	Shock Bush Internal pr - XLS,TC
U7172	Shock Rebuild Kit pr - XLS,TC
U7176	Front Pistons pr - XLS,TC
U7261	Shock Mouldings pr - XLS,TC
U7272	Shock Spring F6 Front (pr)
U7273	Shock Spring R4 Rear (pr)
U7432	Shock Spring Seat Moulded pr - L1,TC
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.

Pinions Cont.

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
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

U7597	Front Wheels White (pr) - TOP CAT
U7598	Rear Wheels White (pr) - TOP CAT
CR681	JC 5 Spoke 2.2 Rear White Wheel XLS
CR683	JC Dish 2.2 Rear White Wheel XLS
CR684	JC Spoke 2.2 Front Wheel - TOP CAT
CR685	JC Dish 2.2 Front Wheel - TOP CAT

Option Parts

CR290	1/12 Servo Saver 23T Sanwa/KO
CR291	1/12 Servo Saver 25T Futaba
U7243	Alloy Washer Carriers (pr) - CAT XLS
U7245	Alloy Eccentric (pr) - CAT XLS
U7315	Titanium Turnbuckle - 35mm - Silver - pr
U7316	Titanium Turnbuckle - 39mm - Silver - pr
U7317	Titanium Turnbuckle - 45mm - Silver - pr
U7419	Titanium M4 x 20 Grub Screw (pr)
U7424	Alloy Lightweight LiPo Nut - (pr)
U7600	Pro Transmission Conversion - TOP CAT
U7601	Pro Diff Pulley Set - TOP CAT
U7602	Pro Slipper Layshaft Set - TOP CAT
U7603	Pro Belt 47T 8.0 Wide - TOP CAT
U7604	Pro Transmission O'ring Set - TOP CAT
U7984	Alloy LiPo Posts Short pr KC,KD,LD/2,L1/EVO
U7985	Alloy LiPo Post Spacer-(4) KC,KD,LD/2,L1/EVO,ST
U8298	CF Front Shock Mount - Cougar Classic
U8299	Ball Raced Steering Set - Cougar Classic
U8302	C/F Rear Shock Mount - Cougar Classic



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



www.racing-cars.com



TYRES, WHEELS & INSERTS

Full Spike 2" CAT



T652 - Yellow Compound (pr)

Rear Full Spike 2" CAT



T650 - Yellow Compound (pr)

Slim 2 Row Stud 2"



T654 - Yellow Compound (pr)

Block Rear Tyres 2"



T692 - Blue Compound (pr)
U6786 - Yellow Compound (pr)

Block Front Tyres 2"



T693 - Blue Compound (pr)
U6787 - Yellow Compound (pr)

4WD Front Mini Spike 2



U6515 - Green Compound (pr)
U6517 - Blue Compound (pr)
U6557 - Yellow Compound (pr)
U6762 - Silver Compound (pr)

Rear Mini Spike 2



U6516 - Green Compound (pr)
U6518 - Blue Compound (pr)
U6558 - Yellow Compound (pr)
U6763 - Silver Compound (pr)

Mini Spike 2 Slim



U6549 - Blue Compound (pr)
U6550 - Green Compound (pr)
U6581 - Yellow Compound (pr)
U6761 - Silver Compound (pr)

Stagger Rib Slim



U6592 - Yellow Compound (pr)

Full Spike Front 2.2"



U6595 - Yellow Compound (pr)

Full Spike Rear 2.2"



U6596 - Yellow Compound (pr)

Mini Pin Front 2.2"



U6601 - BlueCompound (pr)
U6607 - Yellow Compound (pr)
U6777 - Silver Compound (pr)

Mini Pin Rear 2.2"



U6608 - Yellow Compound (pr)

Mini Pin Slim 2.2"



U6609 - Yellow Compound (pr)
U6779 - Silver Compound (pr)

Cut Stagger Slim



U6759 - Yellow Compound (pr)
U6765 - Green Compound (pr)

Cut Stagger Low Profile



U6770 - Yellow Compound (pr)
U6771 - Green Compound (pr)
U6775 - Silver Compound (pr)
U6776 - Blue Compound (pr)

2WD 2 Row Stud 2.2"



U6797 - Yellow Compound (pr)

Mini Pin 2 Rear



U6803 - Blue Compound (pr)
U6804 - Yellow Compound (pr)
U6805 - Silver Compound (pr)

Wide Stagger Rib



U6810 - Yellow Compound (pr)
U6811 - Silver Compound (pr)
U6846 - Blue Compound (pr)

Mini Pin 1 Rear



U6817 - Yellow Compound (pr)
U6819 - Blue Compound (pr)
U6820 - Silver Compound (pr)

Mini Pin 2 Front



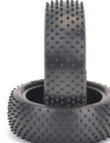
U6821 - Yellow Compound (pr)

Mini Dart Front 2WD



U6824 - Yellow Compound (pr)
U6827 - Blue Compound (pr)
U6830 - Silver Compound (pr)

Mini Dart Front 4WD



U6825 - Yellow Compound (pr)
U6828 - Blue Compound (pr)
U6831 - Silver Compound (pr)

Mini Dart Rear



U6826 - Yellow Compound (pr)
U6829 - Blue Compound (pr)
U6832 - Silver Compound (pr)

Cactus Rear



U6838 - Yellow Compound (pr)
U6842 - Silver Compound (pr)
U6844 - Blue Compound (pr)

Cactus Front



U6840 - Yellow Compound (pr)
U6843 - Silver Compound (pr)
U6845 - Blue Compound (pr)

Slim Rib Spike Front



U6847 - Yellow Compound (pr)
U6848 - Blue Compound (pr)

Mini Spike 2.0" Rear



U6849 - Yellow Compound (pr)

Cactus Fusion 4WD Front



U6855 - Yellow Compound (pr)
U6858 - Silver Compound (pr)

Honeycomb 2WD Front



U6859 - Yellow Compound (pr)

Honeycomb 4WD Front



U6861 - Yellow Compound (pr)

Honeycomb Rear



U6863 - Yellow Compound (pr)

Mezzo Rear



U6885 - Yellow Compound (pr)
U6886 - Silver Compound (pr)
U6887 - Blue Compound (pr)

Mezzo Front 4WD



U6888 - Yellow Compound (pr)
U6889 - Silver Compound (pr)
U6890 - Blue Compound (pr)

Cactus Fusion 2 4WD Front



U6895 - Yellow Compound (pr)
U6896 - Blue Compound (pr)

For the full and latest range of off-road tyres, scan the QR code.



Or visit www.racing-cars.com and check out: Products > Wheels & Tyres.

Front Slim Inserts



U6738 - Medium (pr)
U6667 - Hard (pr)

Front Medium Inserts



U6733 - Medium (pr)
U6746 - Medium Tubby (pr)
U6652 - Hard (pr)

Rear Inserts



U6734 - Medium (pr)
U6747 - Medium Tubby (pr)
U6653 - Hard (pr)
U6668 - Soft Ultra Wide (pr)
U6669 - Hard Ultra wide (pr)



Wheels

U7181 - Rear Wheel Black (pair)
U7182 - Front Wheel Black (pair)
U7289 - White Rear Wheel (pair)
U7290 - White Front Wheel (pair)
U7597 - White Front Wheel TopCat (pair)
U7598 - White Rear Wheel TopCat (pair)
CR680 - JC 5 Spoke 2.2 Front White (pr)
CR681 - JC 5 Spoke 2.2 Rear White (pr)
CR682 - JC Dish 2.2 Front White (pr)
CR683 - JC Dish 2.2 Rear White (pr)



Driver: **Kit Build** Date: **N/A** Event/Track: **N/A**
 Qualify: **N/A** Final: **N/A** Best Lap: **N/A**

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 **Dry - Mild**

TYRES

	FRONT	REAR
Tyres	T654	T650
Wheels	U7597	U7598
Inserts	U6667	U6652

Notes:

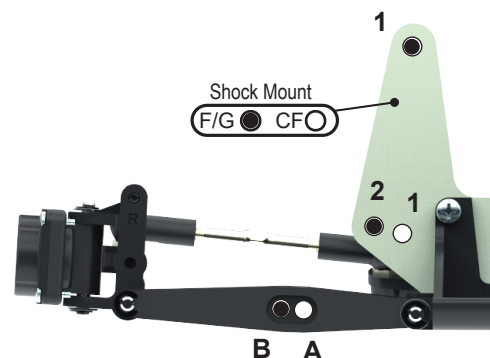
Notes:

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 **18** mm
 Toe **1.0** deg In ☐ Out ☒
 Camber **-1.0** deg
 Bump Steer Washers **0** mm
 Ball Raced Steering Y ☐ N ☒

Notes:

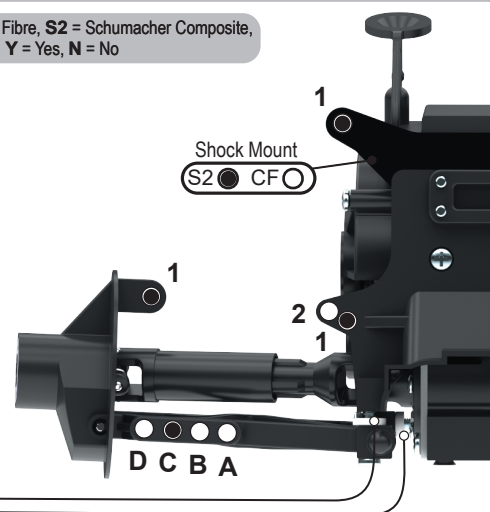


REAR SUSPENSION

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** mm
 Camber at Ride Height **-1.0** deg

Notes:

Anti Squat **1.6** mmRear Toe **2.0** mm

TRANSMISSION

Motor **HW 17.5t**
 Rotor Dia. **Std** mm
 Timing **Std** deg
 Pinion **30** t
 Spur **86** t
 TransUpgrade Y ☐ N ☒
 Slipper Clutch Y ☐ N ☒

Notes:

CHASSIS

Running Weight **9**

Notes:

EQUIPMENT

E.S.C. ☐
 Servo ☐
 RX ☐
 LiPo ☐
 Bodysell ☐

WEIGHTS

Under LiPo Y ☐ N ☒

Notes:

SHOCKS

KEY: i = Internal, e = External

	FRONT	REAR
Oil	550 cSt	400 cSt
Piston	Standard	Standard
Spring	6 lb/in	4 lb/in
Limiters (i)	0 mm	6 mm
Stroke	10.6 mm	23.5 mm
Limiters (e)	11.4 mm	3.6 mm

Notes:





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 _____

Notes:

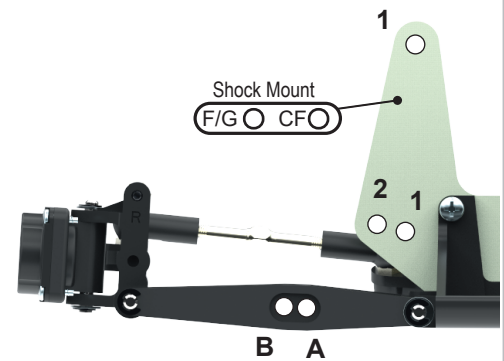
Notes:

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
 Ball Raced Steering Y ☐ N ☐

Notes:



REAR SUSPENSION

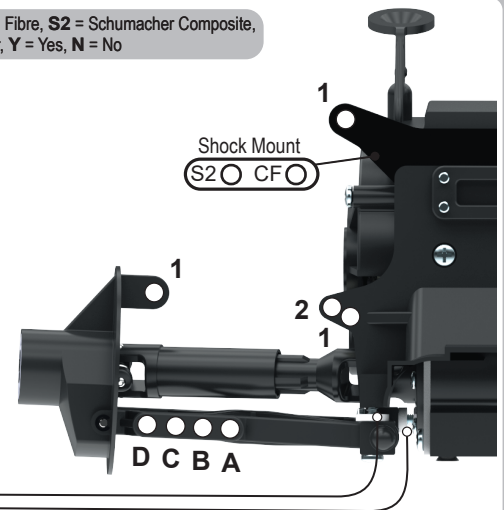
KEY: P = Plastic, A = Alloy, B = Brass, F/G = Fibre Glass, C/F = Carbon Fibre, S2 = Schumacher Composite,
 M = Medium, S = Stiff, Sh = Short, H = High, L = Low, F = Front, R = Rear, Y = Yes, N = No

Ride Height _____ mm
 Camber at Ride Height _____ deg

Notes:

Anti Squat _____ mm

Rear Toe _____ mm



TRANSMISSION

Motor _____
 Rotor Dia. _____ mm
 Timing _____ deg
 Pinion _____ t
 Spur _____ t
 TransUpgrade Y ☐ N ☐
 Slipper Clutch Y ☐ N ☐

Notes:

CHASSIS

Running Weight _____ g

Notes:

EQUIPMENT

E.S.C. _____
 Servo _____
 RX _____
 LiPo _____
 Bodysell _____

WEIGHTS

Under LiPo Y ☐ N ☐

Notes:

SHOCKS

KEY: i = Internal, e = External

FRONT REAR
 Oil _____ cSt _____ cSt
 Piston _____
 Spring _____ lb/in _____ lb/in
 Limiters (i) _____ mm _____ mm
 Stroke _____ mm _____ mm
 Limiters (e) _____ mm _____ mm

Notes:

