

# COUGAR KF2

EVEN FURTHER IN FRONT

## Instruction Manual



**Schumacher**  
racing-cars.com

71-73 Tenter Road  
Moulton Park  
Northampton  
NN3 6AX  
U.K.





## Additional Items Required

Transmitter and Receiver  
(Batteries NOT included)



CR151 - CODE 2.4G 2 Stick 3Ch Tx+Rx  
CR152 - CODE 2.4G 2 Stick 3Ch Receiver ONLY



Servo

E.S.C



Motor

Pinion Gear



Li-Po Battery



CR161 UAC50 Charger 12v/110-240v 6A



Paint

CR522 CORE RC  
Pro Tyre Glue + 2 Nozzles

Tyres and Inserts



Soldering Iron  
CR266 40w  
CR275 80w

U3107 - Solder

G796 Male Connector Plugs (pk 2)

SPW1403  
High Current 14AWG Wire

U2818  
Schumacher Body Reamer

U4229 Steel Spanner - 5.5mm/3.9mm

CR044 Curved Body Scissors

U2795 M3 Nut Driver  
U2796 M4 Nut Driver

U2789 Hex Driver - 1.5mm  
U2790 Hex Driver - 2.0mm  
U2791 Hex Driver - 2.5mm

# COLGAR KF2

EVER FURTHER IN FRONT

Schumacher Racing stocks and distributes the following manufacturers products and full product listings are available on our website at [www.racing-cars.com](http://www.racing-cars.com)

PLEASE NOTE THAT SOME OF THE PRODUCT RANGES BELOW ARE ONLY AVAILABLE IN THE UNITED KINGDOM.



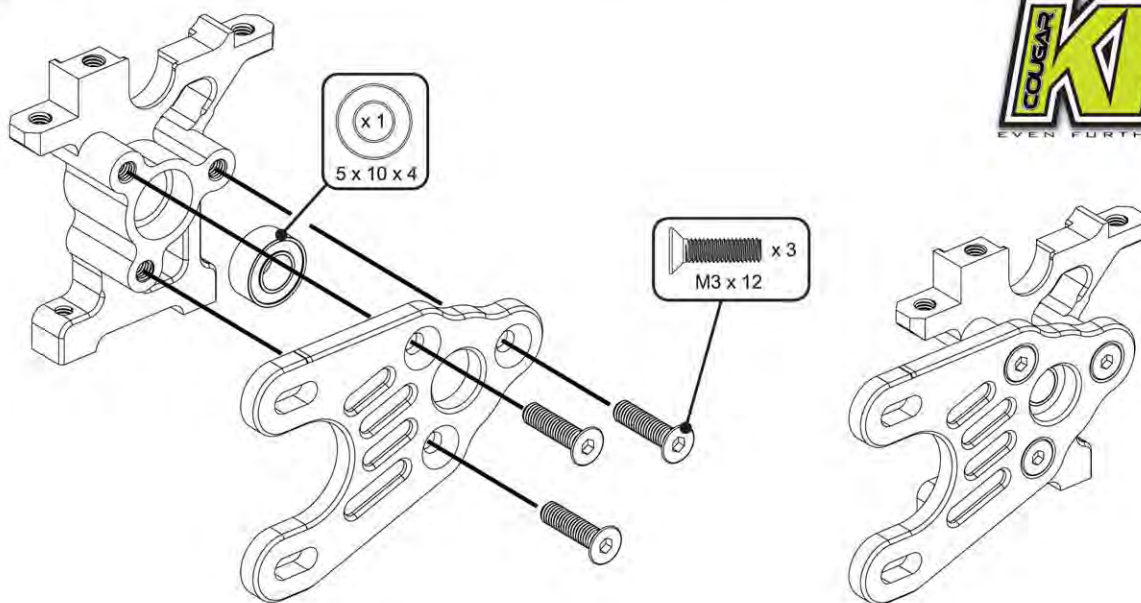
### IMPORTANT SAFETY NOTES

- 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.



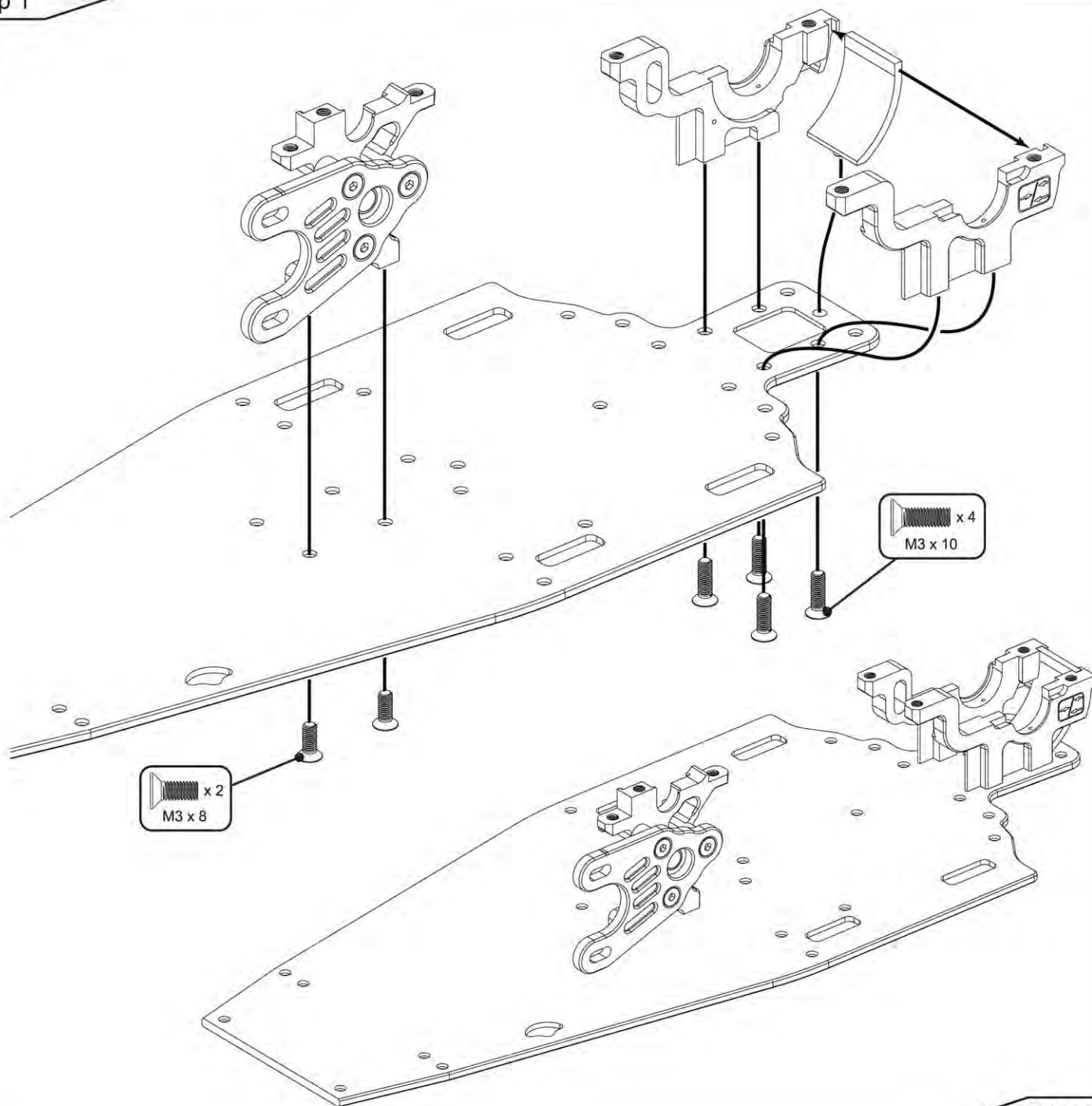
Step 1

A



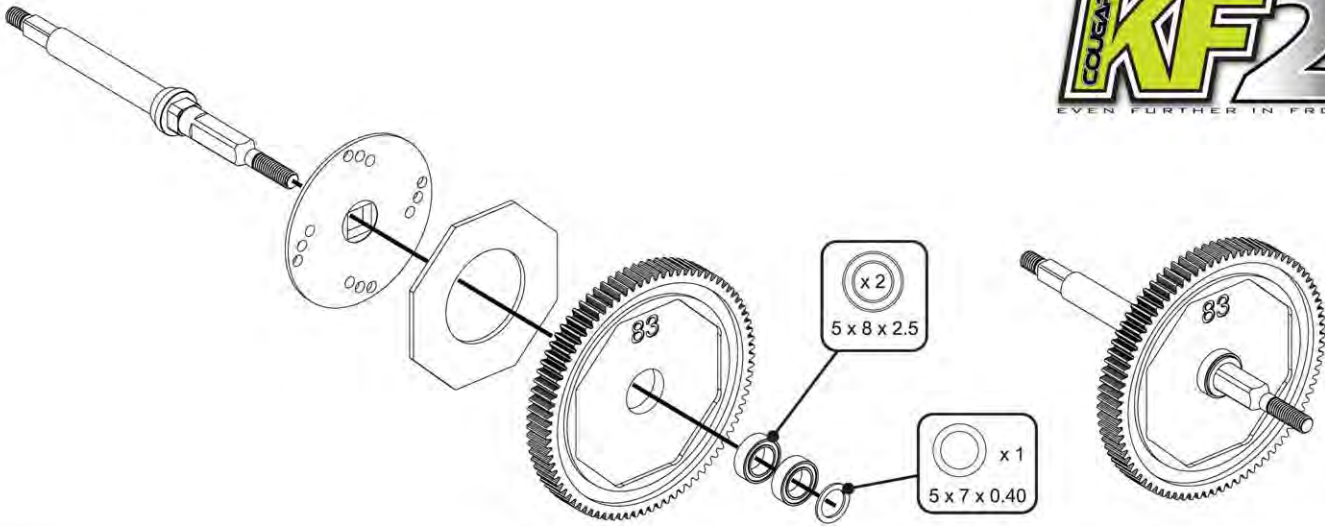
Step 1

B



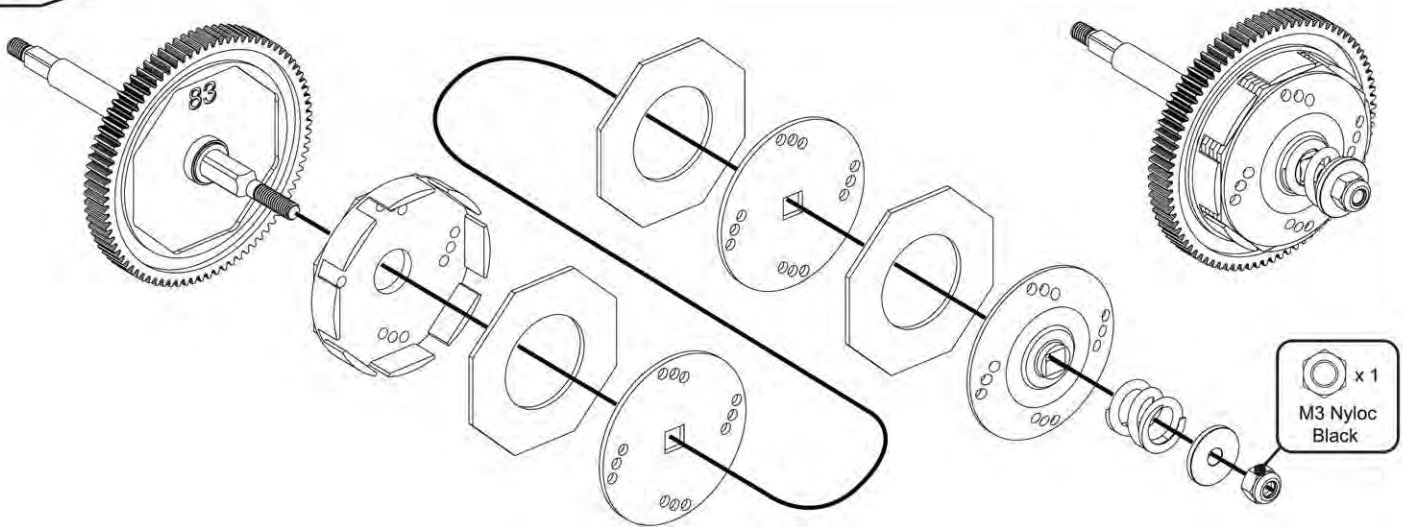
Step 2

A



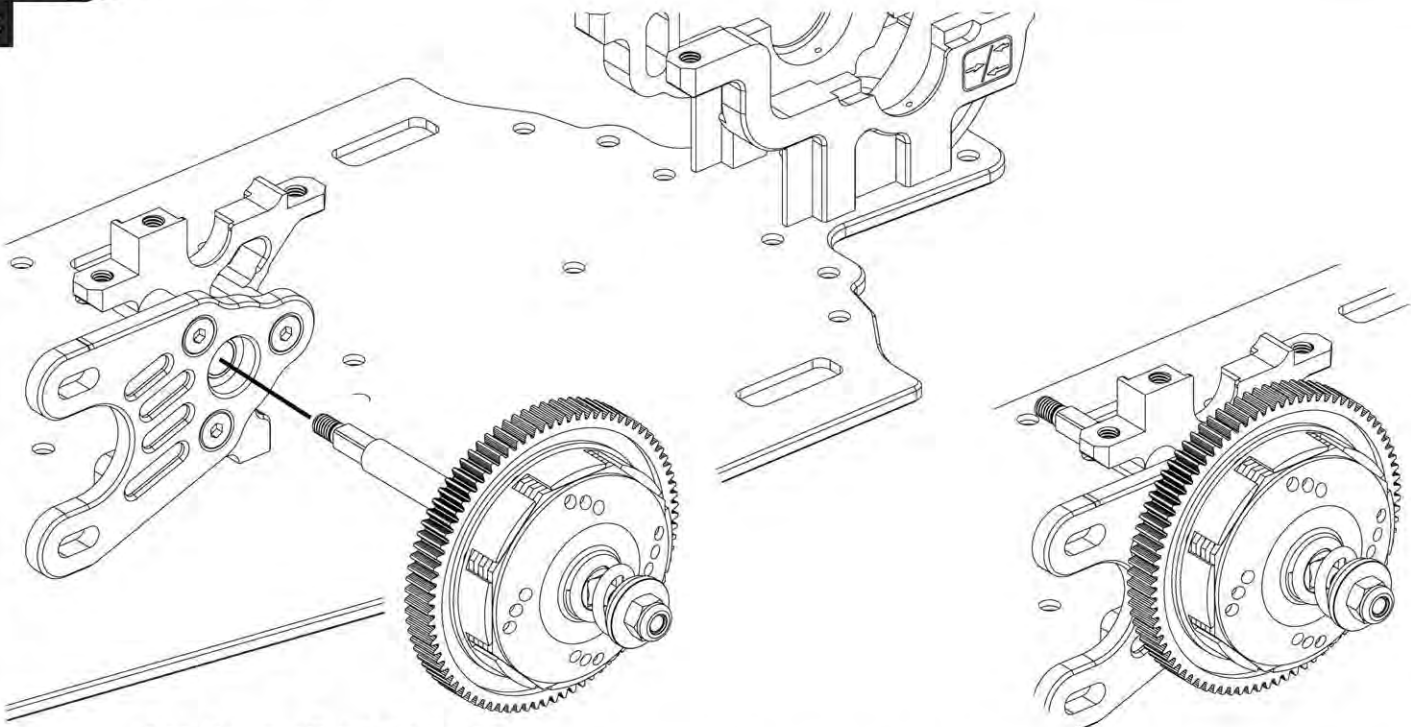
Step 2

B



Step 2

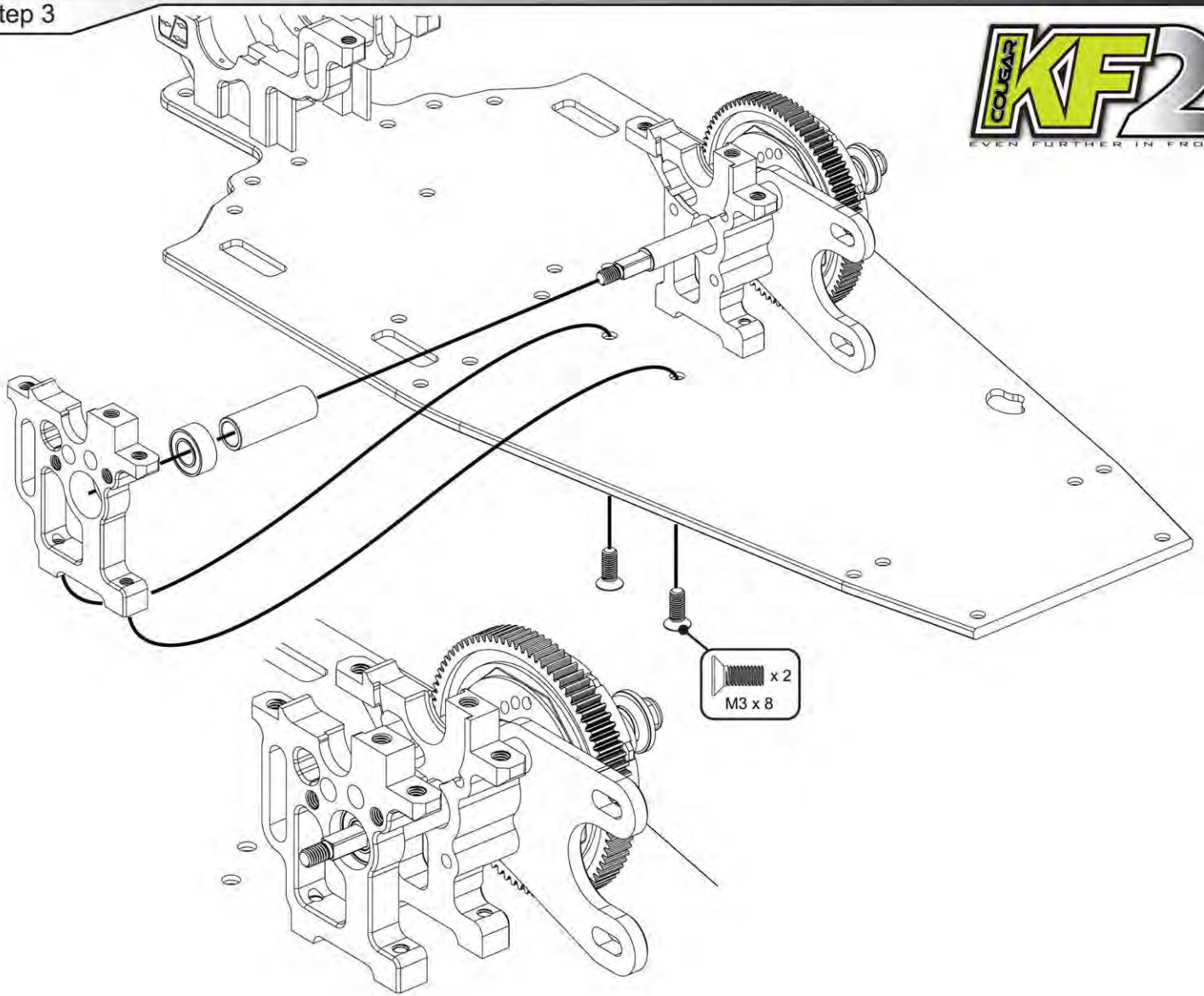
C



**Set the nut flush for now.  
Read the car settings later in the manual before setting the slipper clutch.**

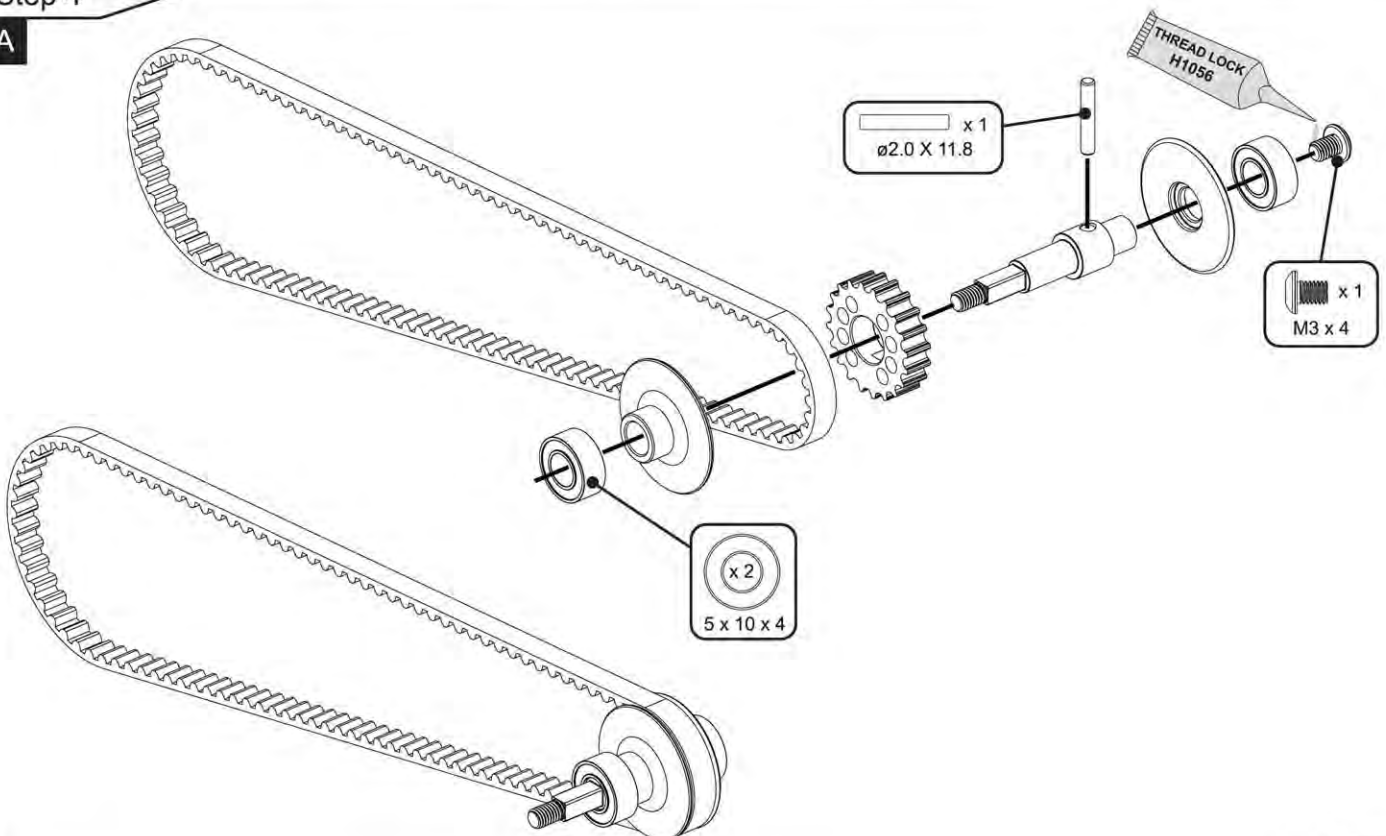


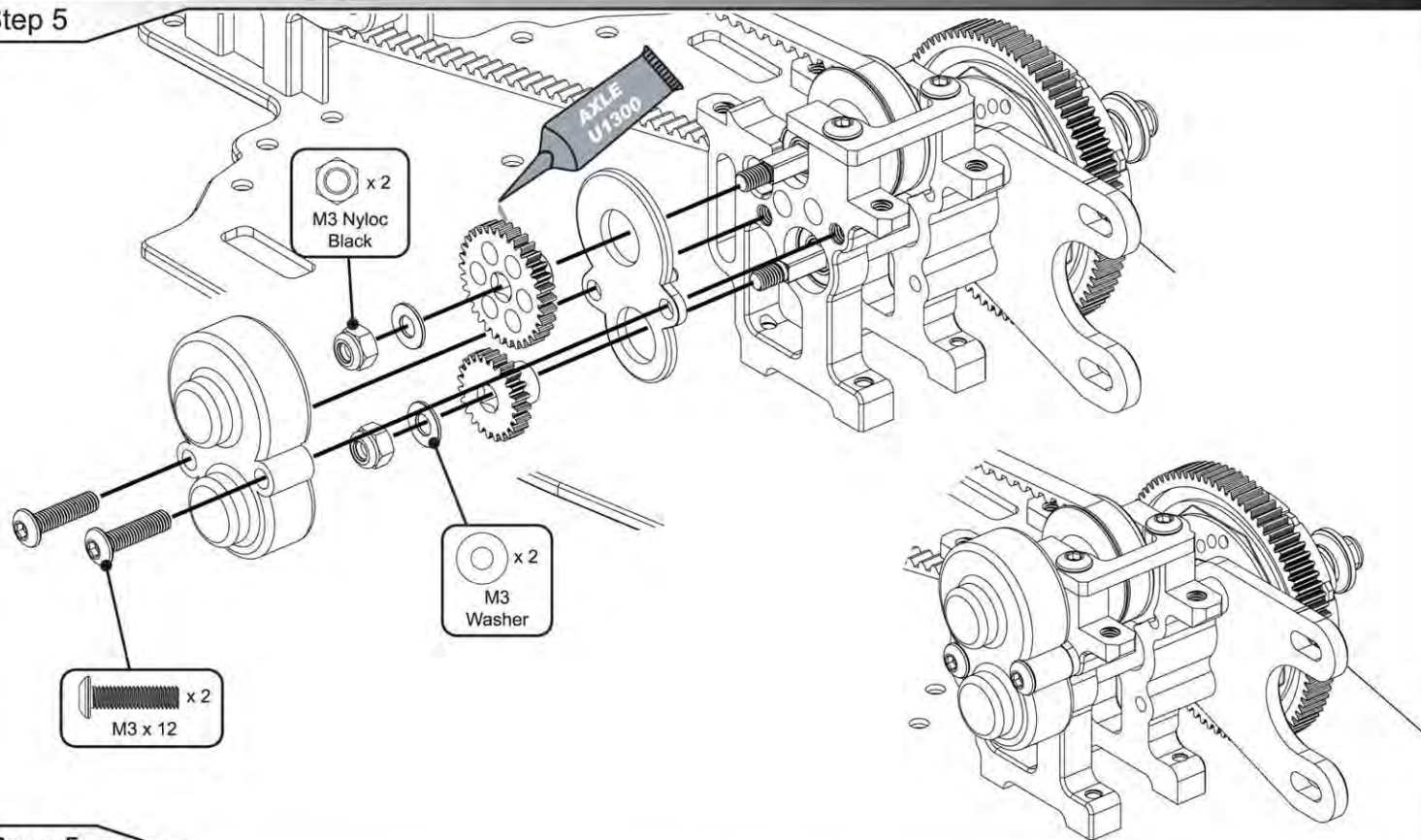
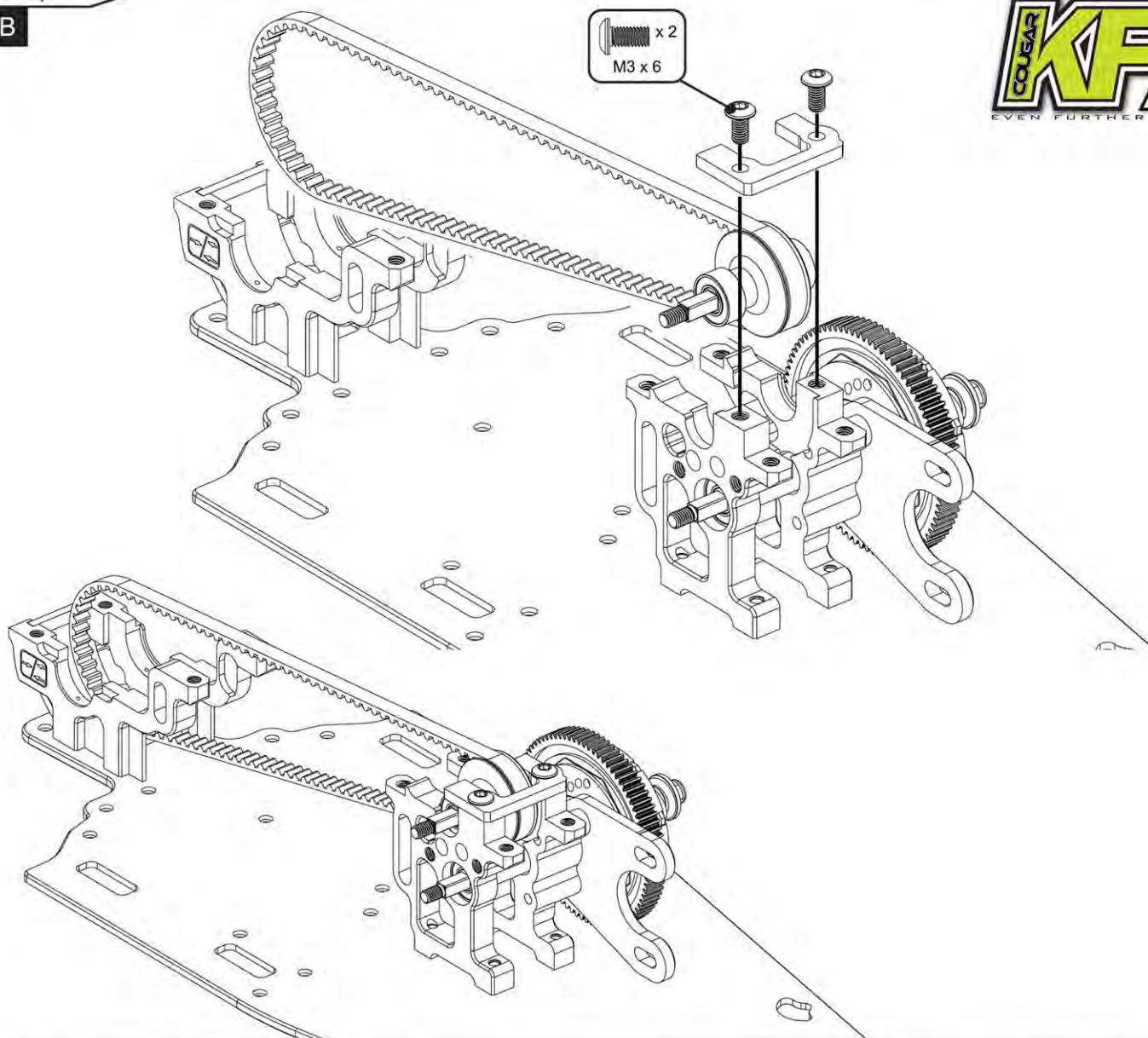
Step 3



Step 4

A

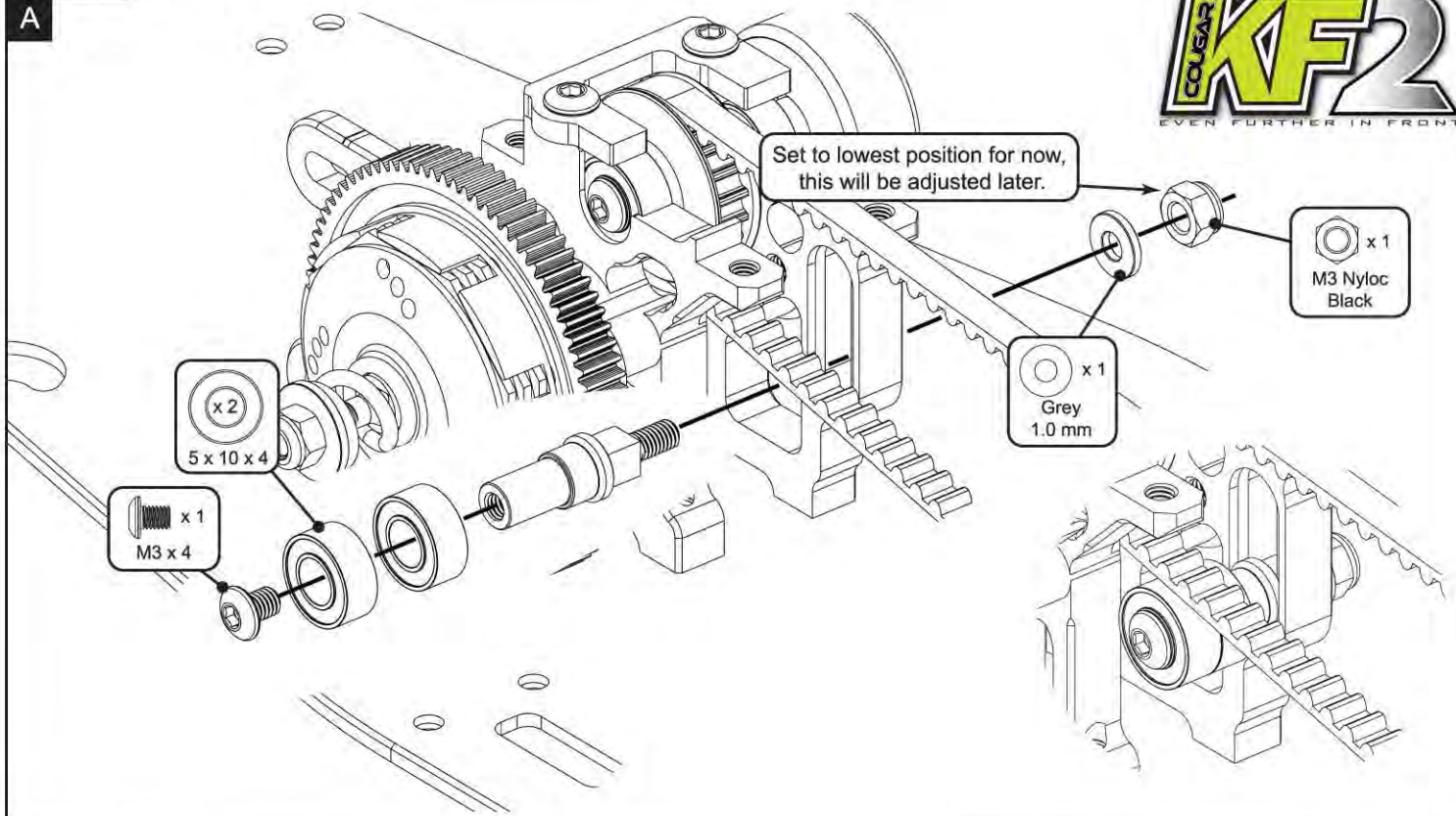






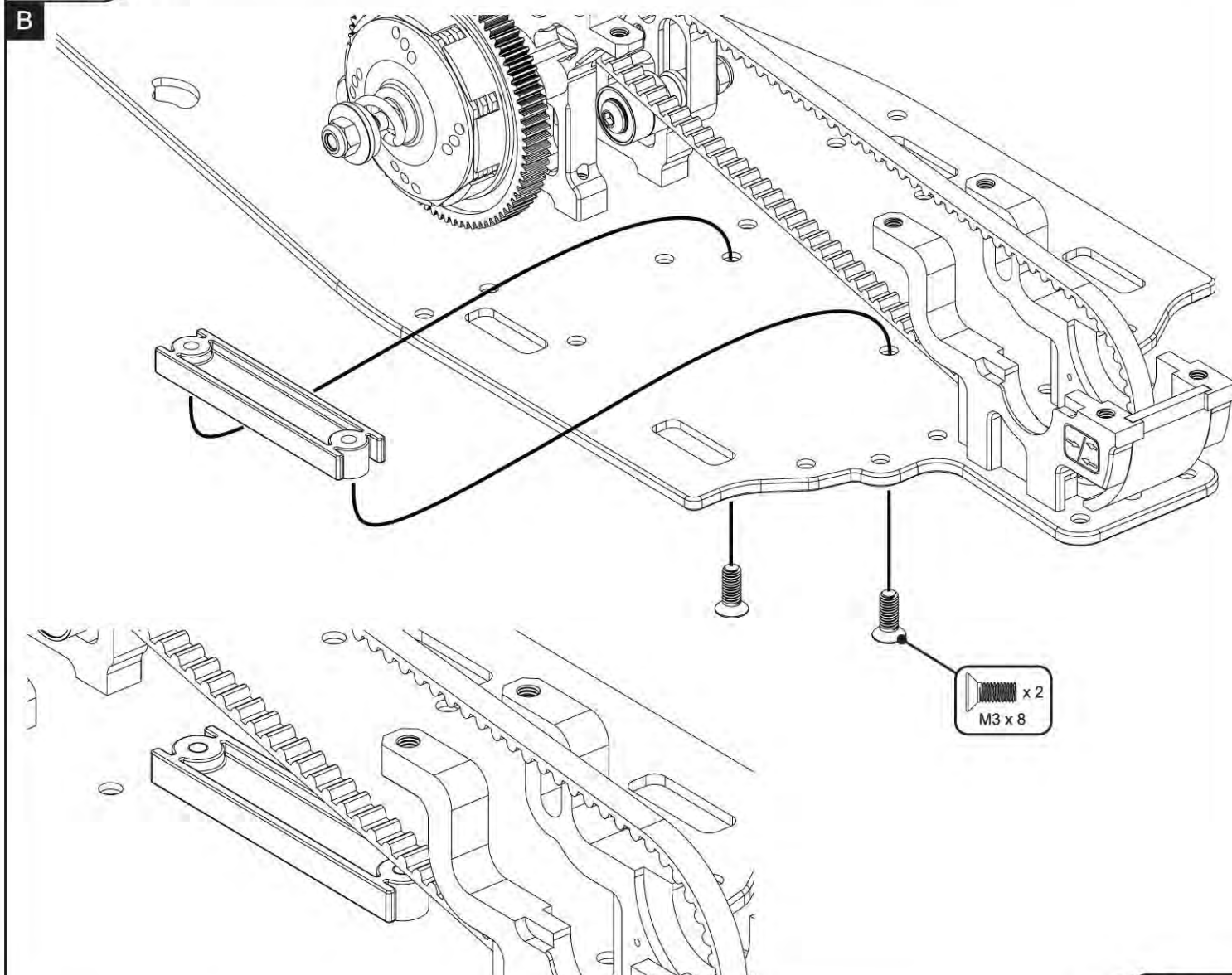
Step 6

A



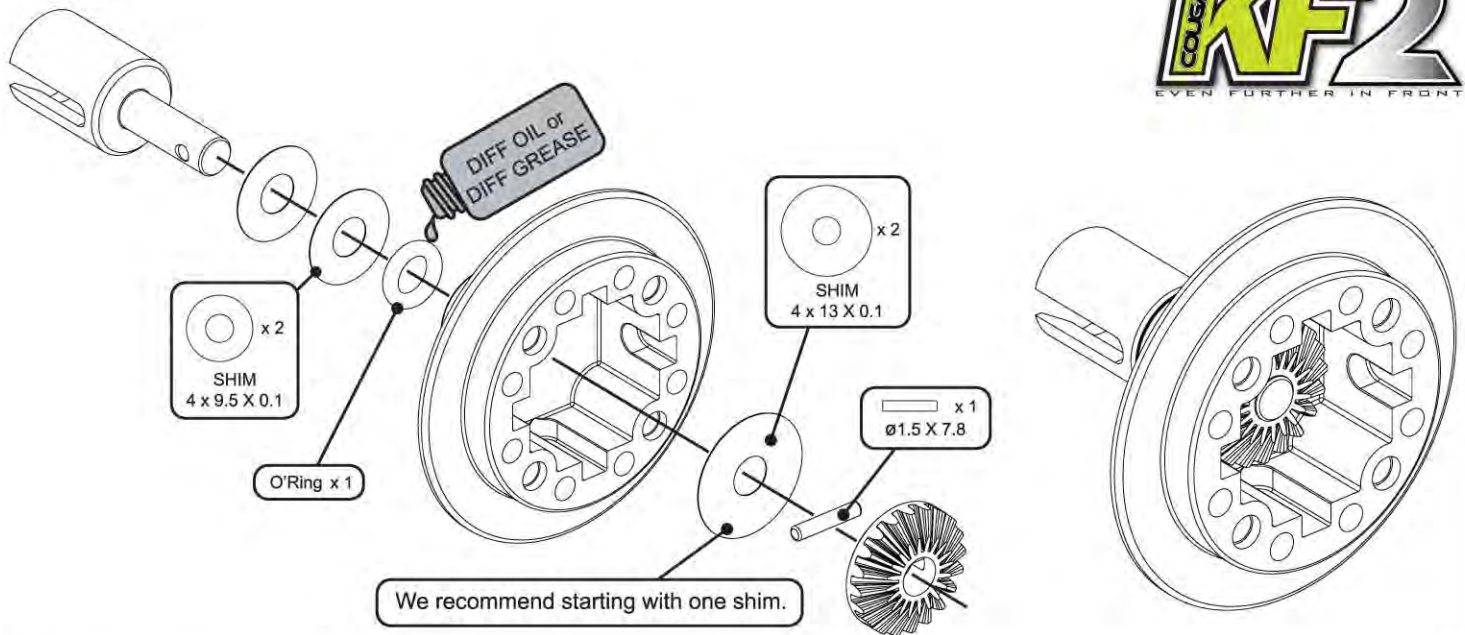
Step 6

B

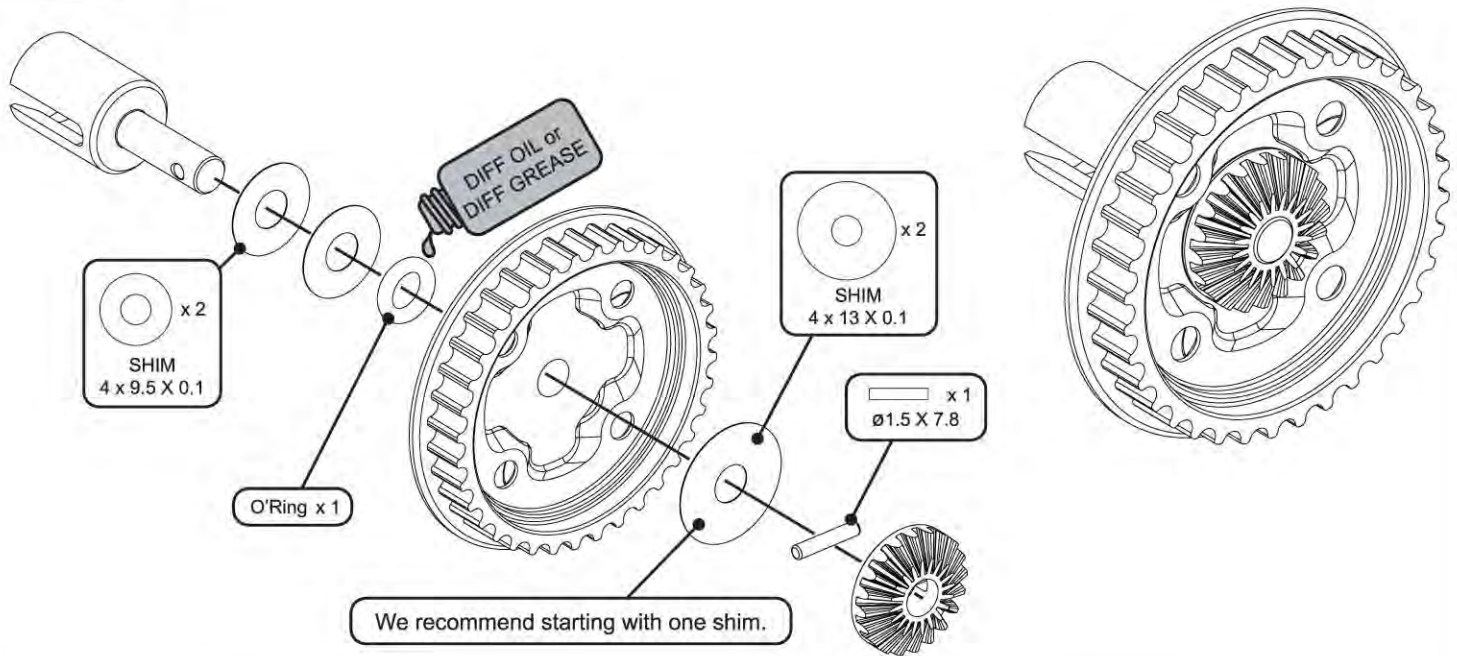




## Step 7



## Step 8



## CORE R/C Silicone Oil

CORE RC high grade 100% pure silicone oil for shocks and gear diffs.

>>Available in a massive range of 28 viscosities from the lightest 100cSt shock oil to the heaviest 300,000cSt diff oil.

>>Extremely temperature resistant in both warm and cold conditions.

>>Fully sealed bottles for best transport without leakage, and super easy to use lid for easy precise pouring.

>>Large capacity 60ml bottle for less trips to the shops!

CR221 - CORE R/C Silicone Oil - 7000 cSt - 60ml

CR222 - CORE R/C Silicone Oil - 10000 cSt - 60ml

CR229 - CORE R/C Silicone Oil - 12000 cSt - 60ml

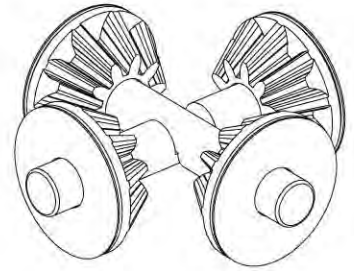
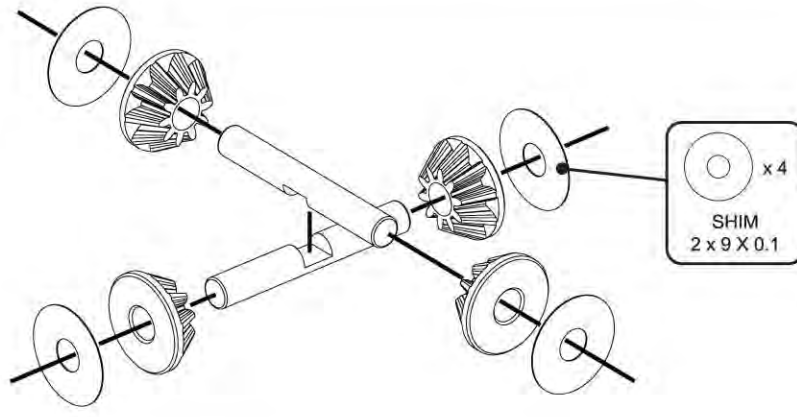
CR230 - CORE R/C Silicone Oil - 15000 cSt - 60ml





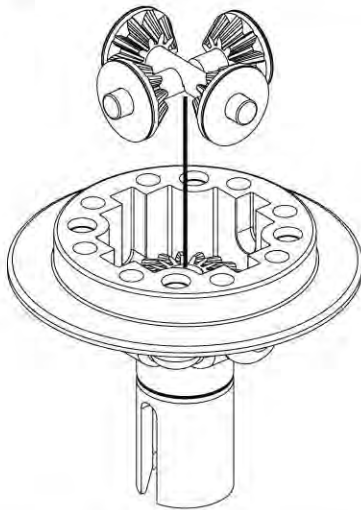
Step 9

A

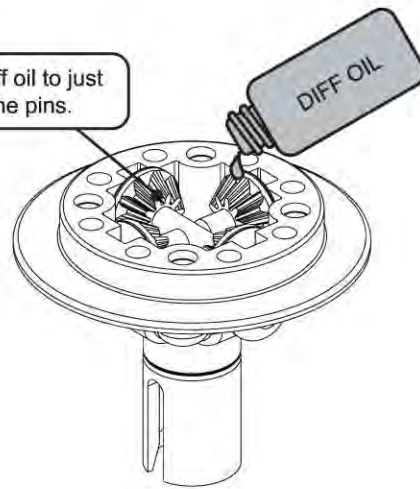


Step 9

B



Fill with diff oil to just cover the pins.



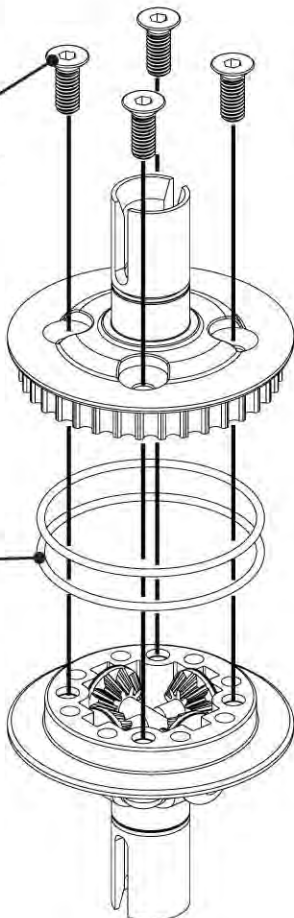
Step 9

C

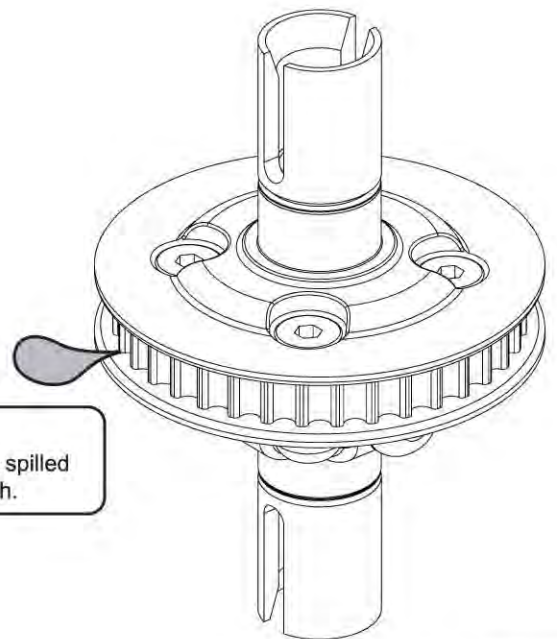
M3 x 8 x 4

Feel the diff for internal gear mesh.  
If too loose go back to Step 8 and add a shim between the housing and the bevel gear.  
If too tight remove a shim from between the housing and the bevel gear.

Large O'Ring x 2

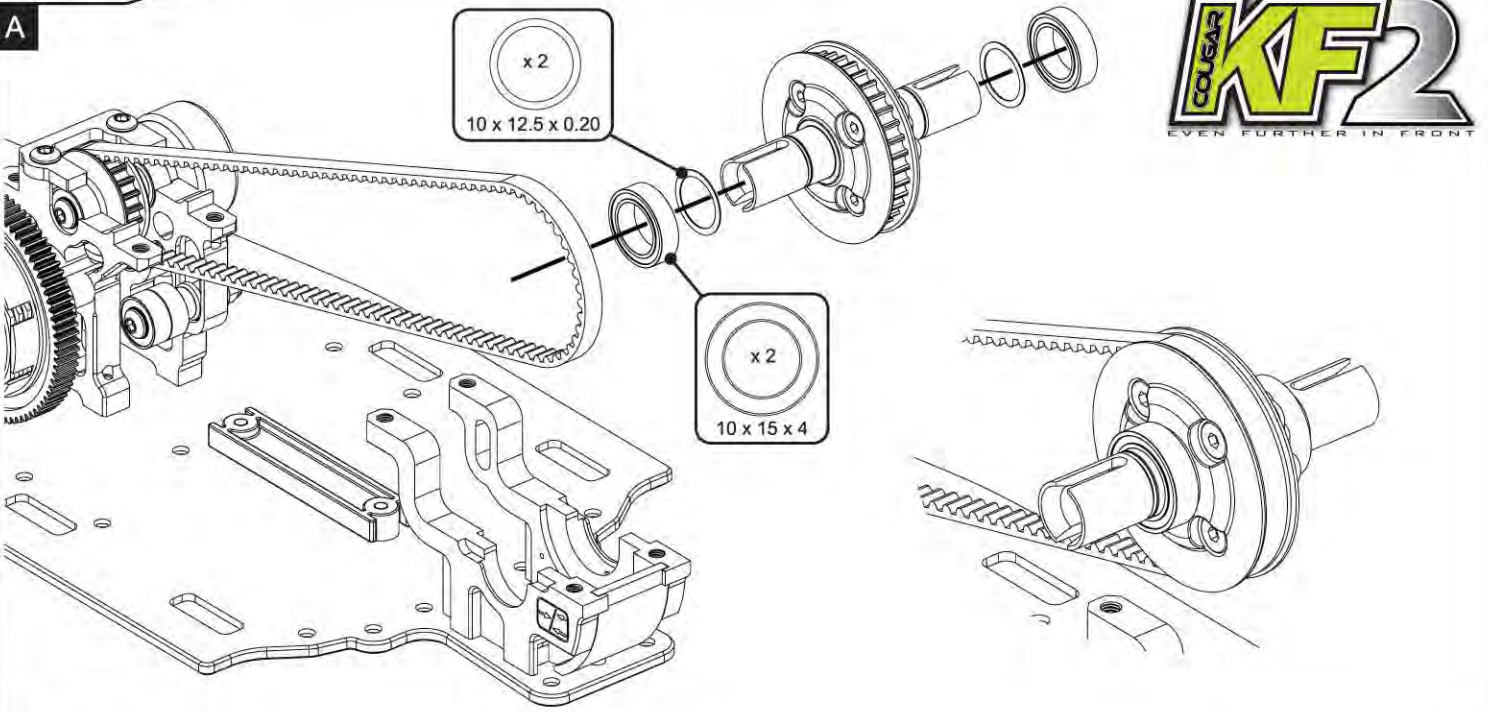


**IMPORTANT**  
Remove any oil that has spilled onto the pulley teeth.



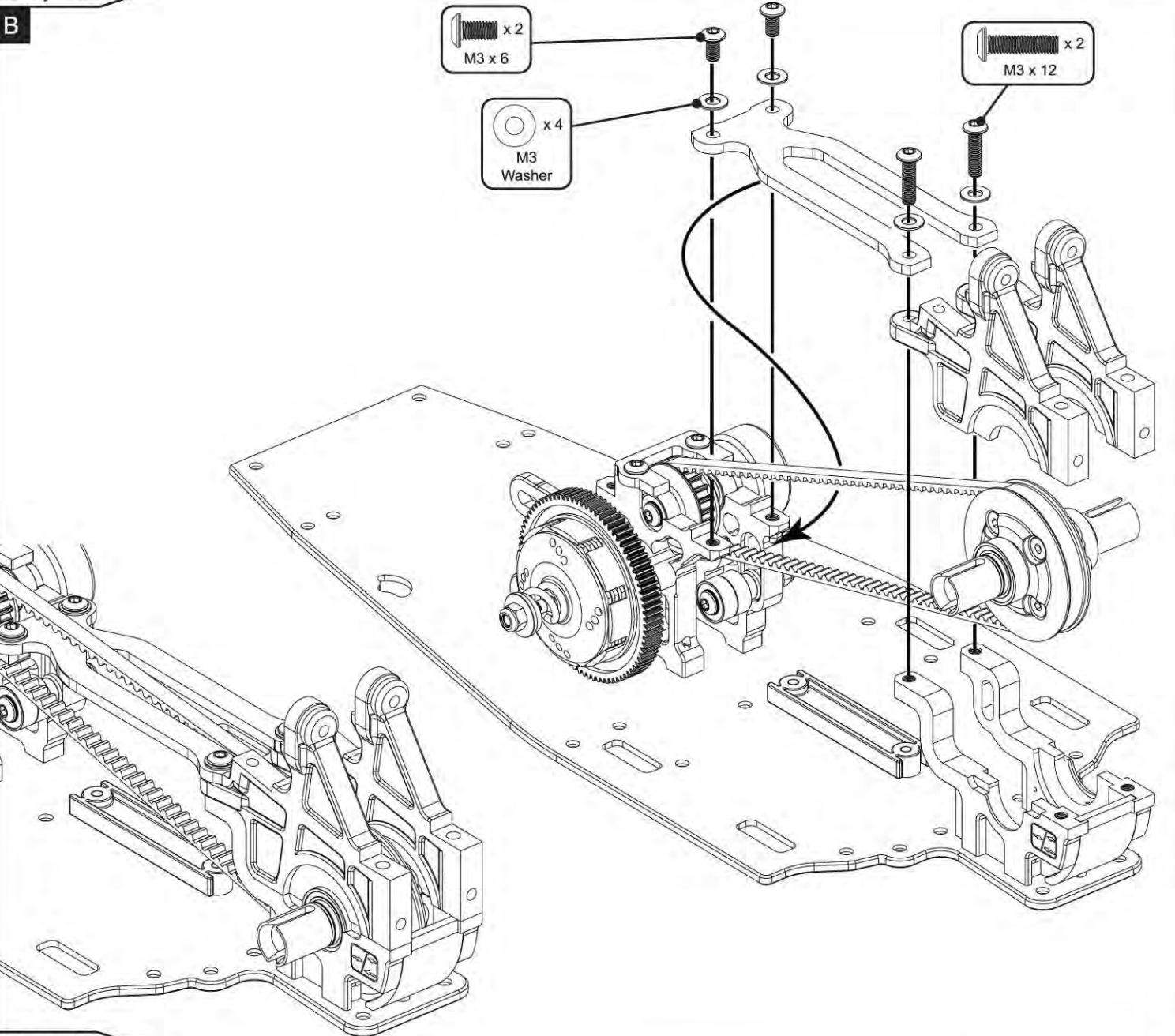
Step 10

A



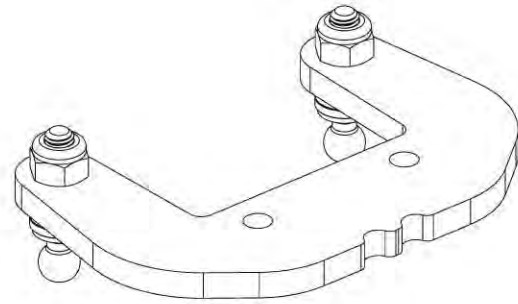
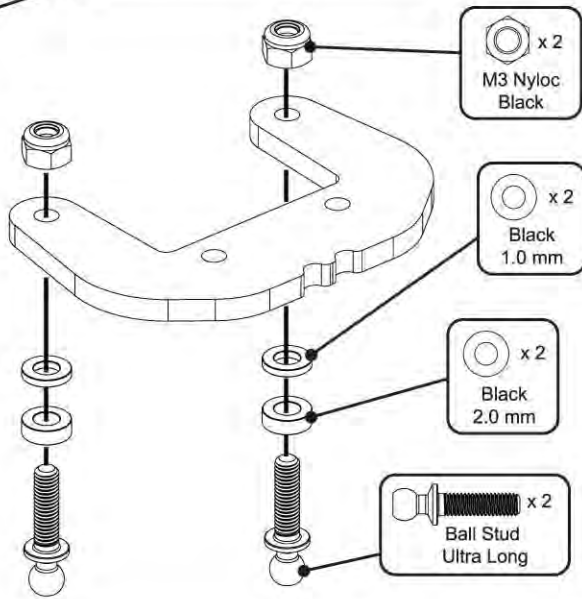
Step 10

B

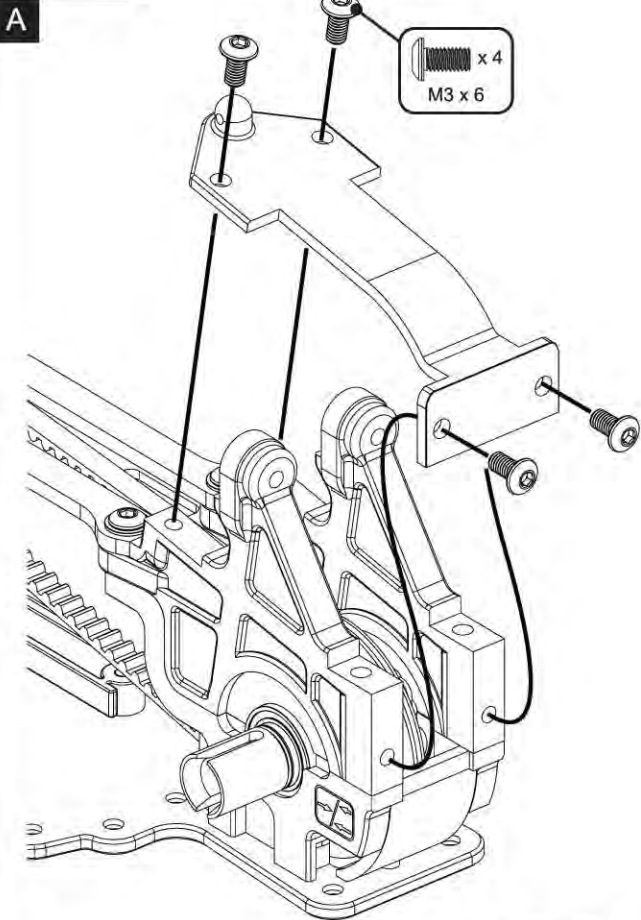




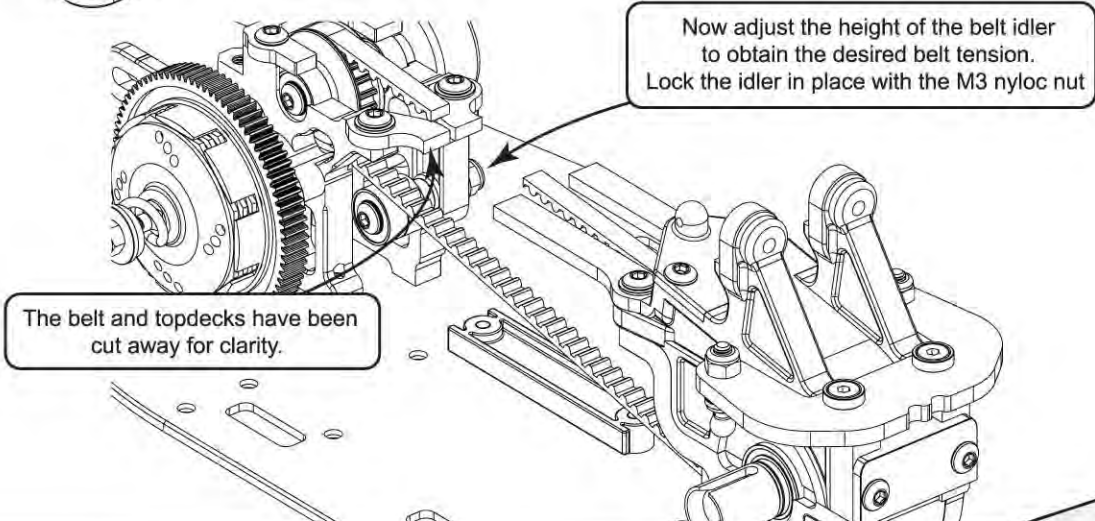
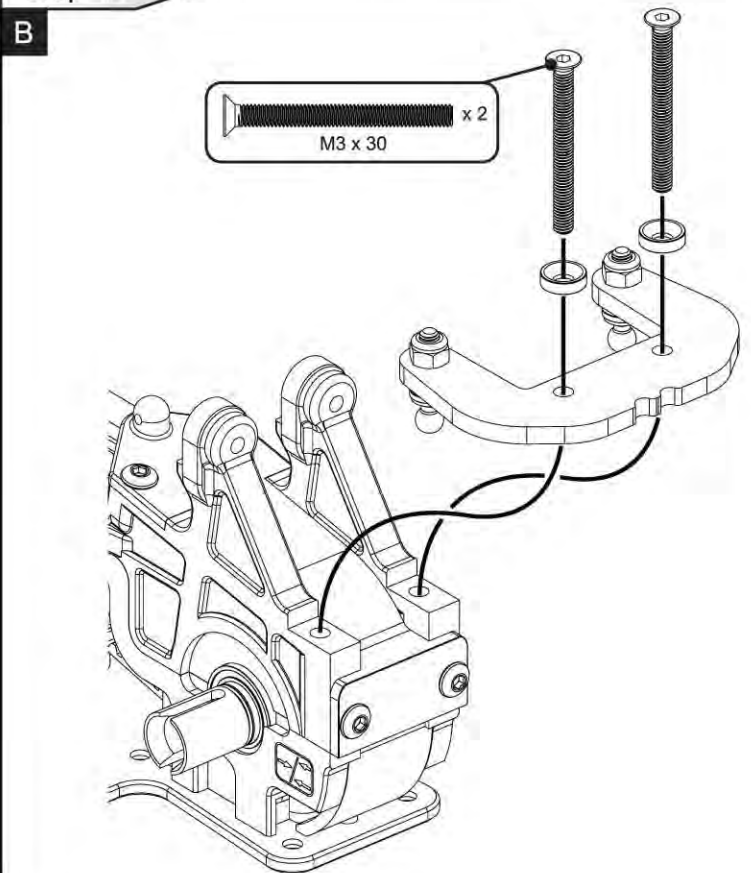
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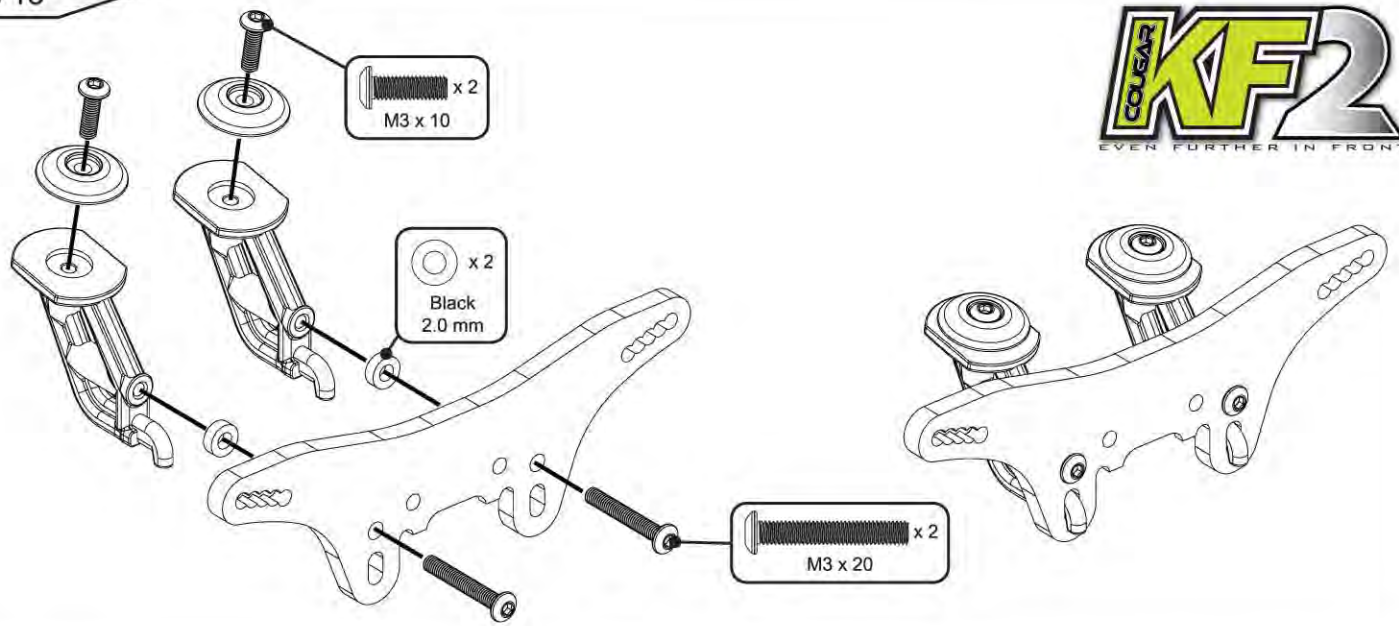
Step 12



Step 12

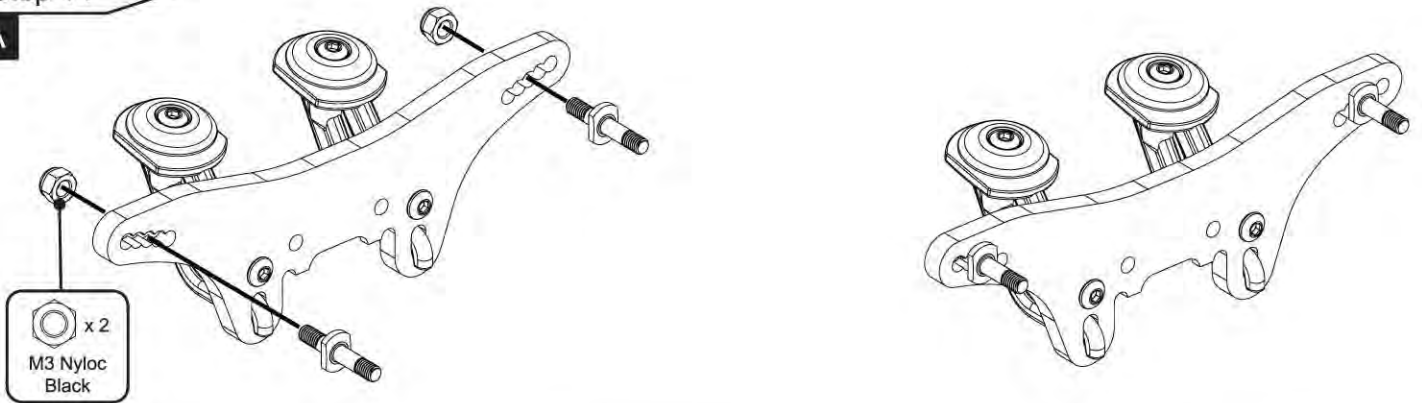


Step 13



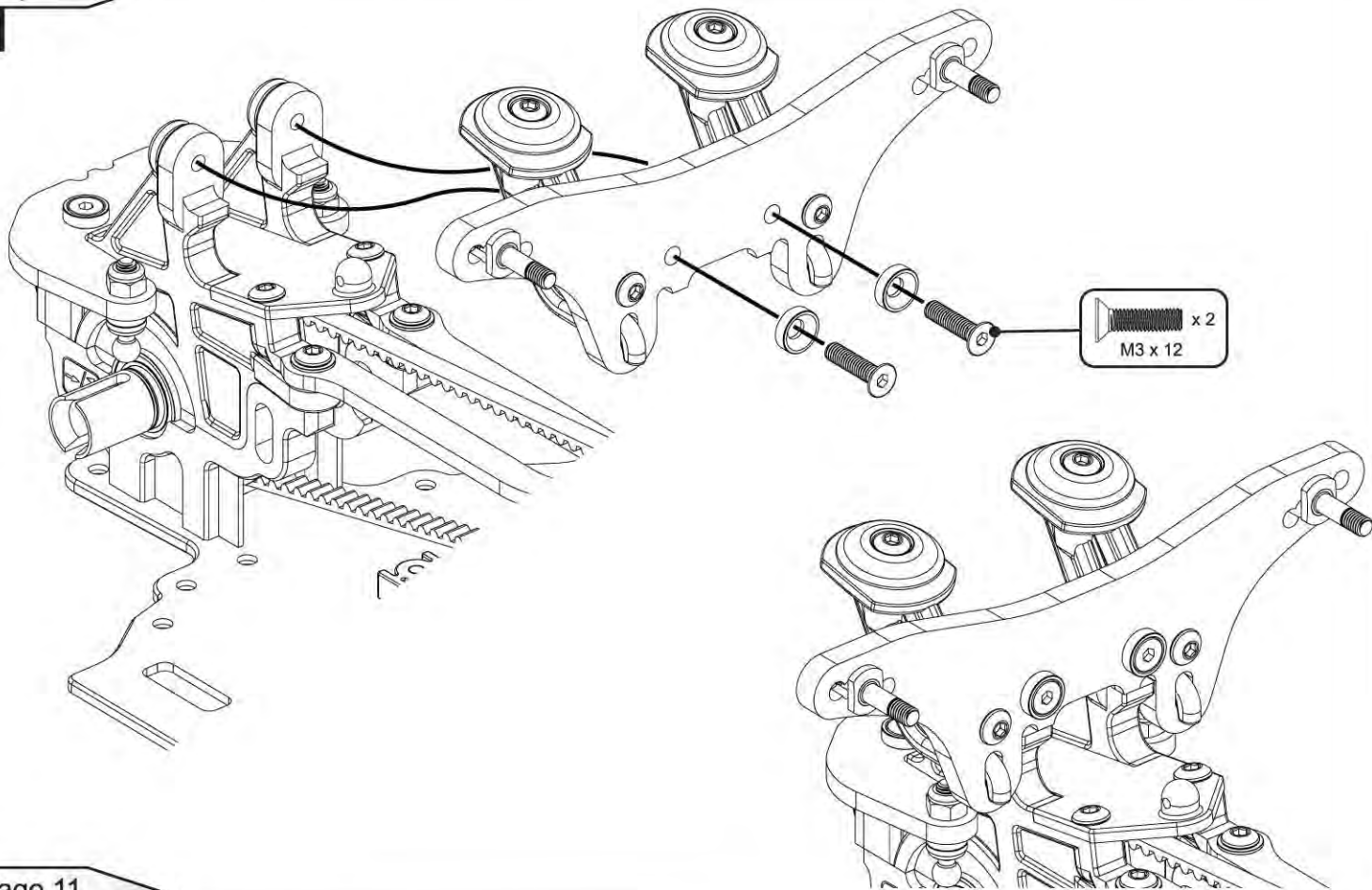
Step 14

A

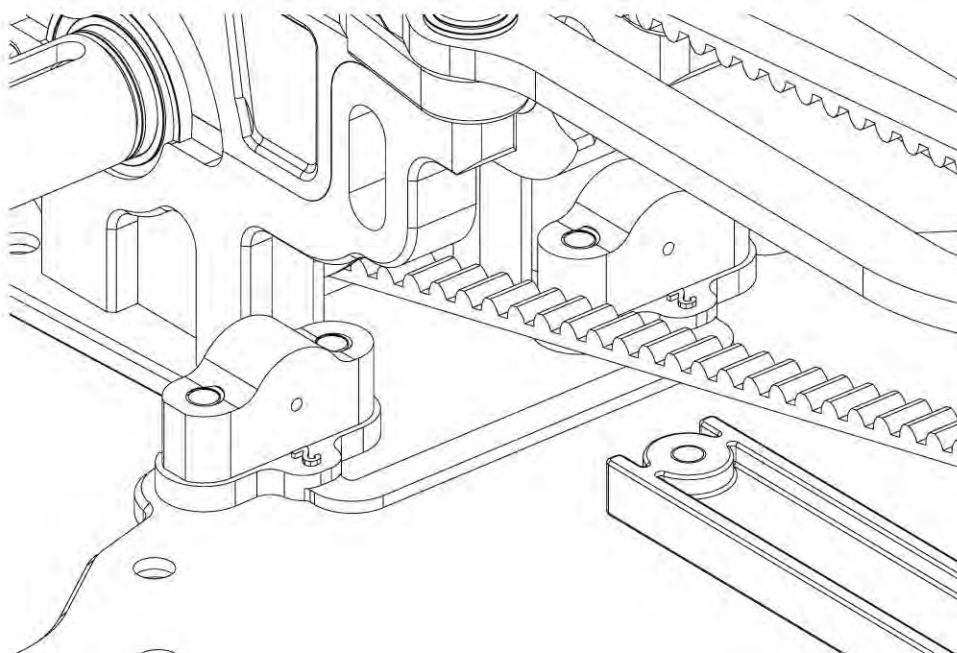
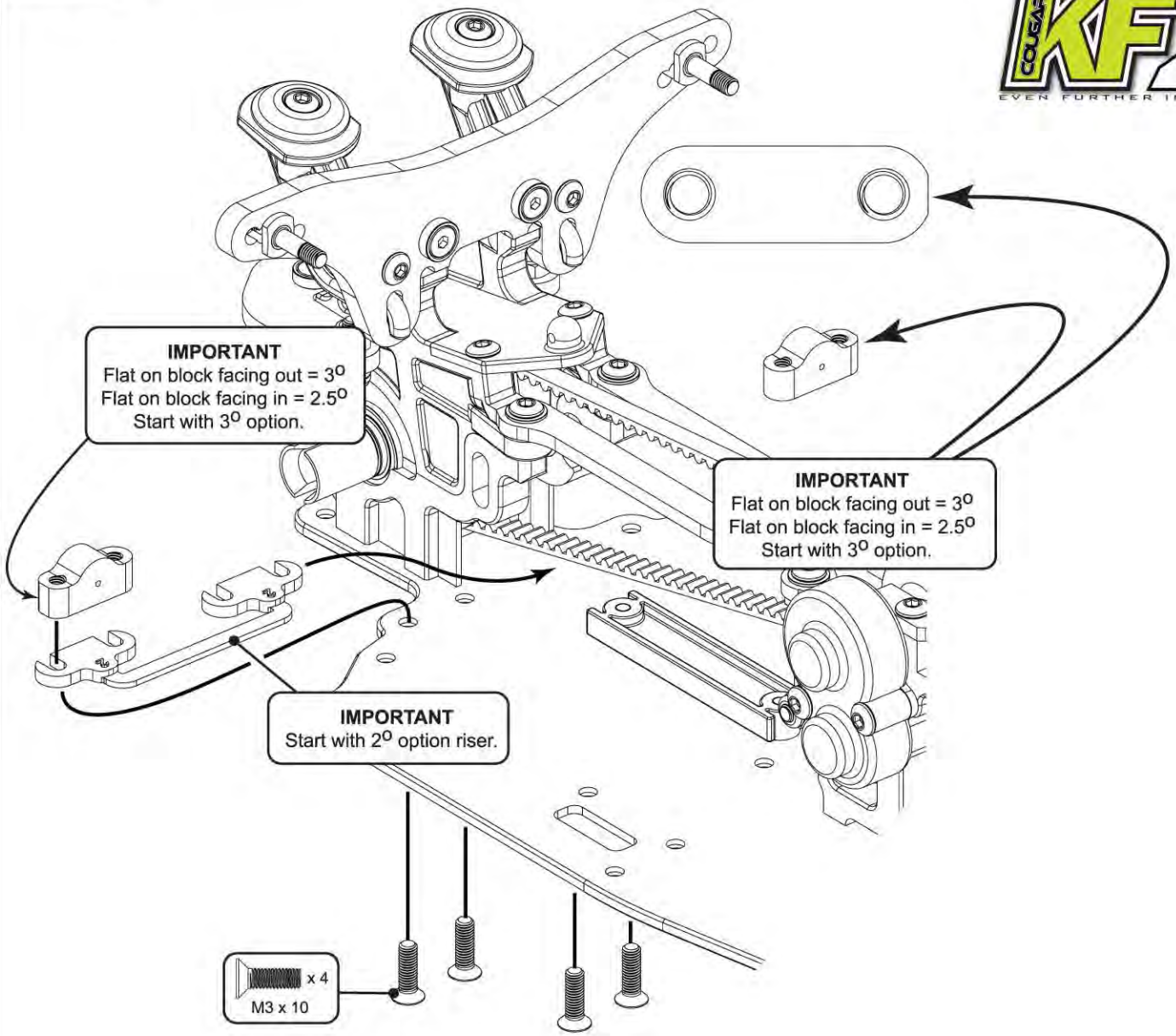


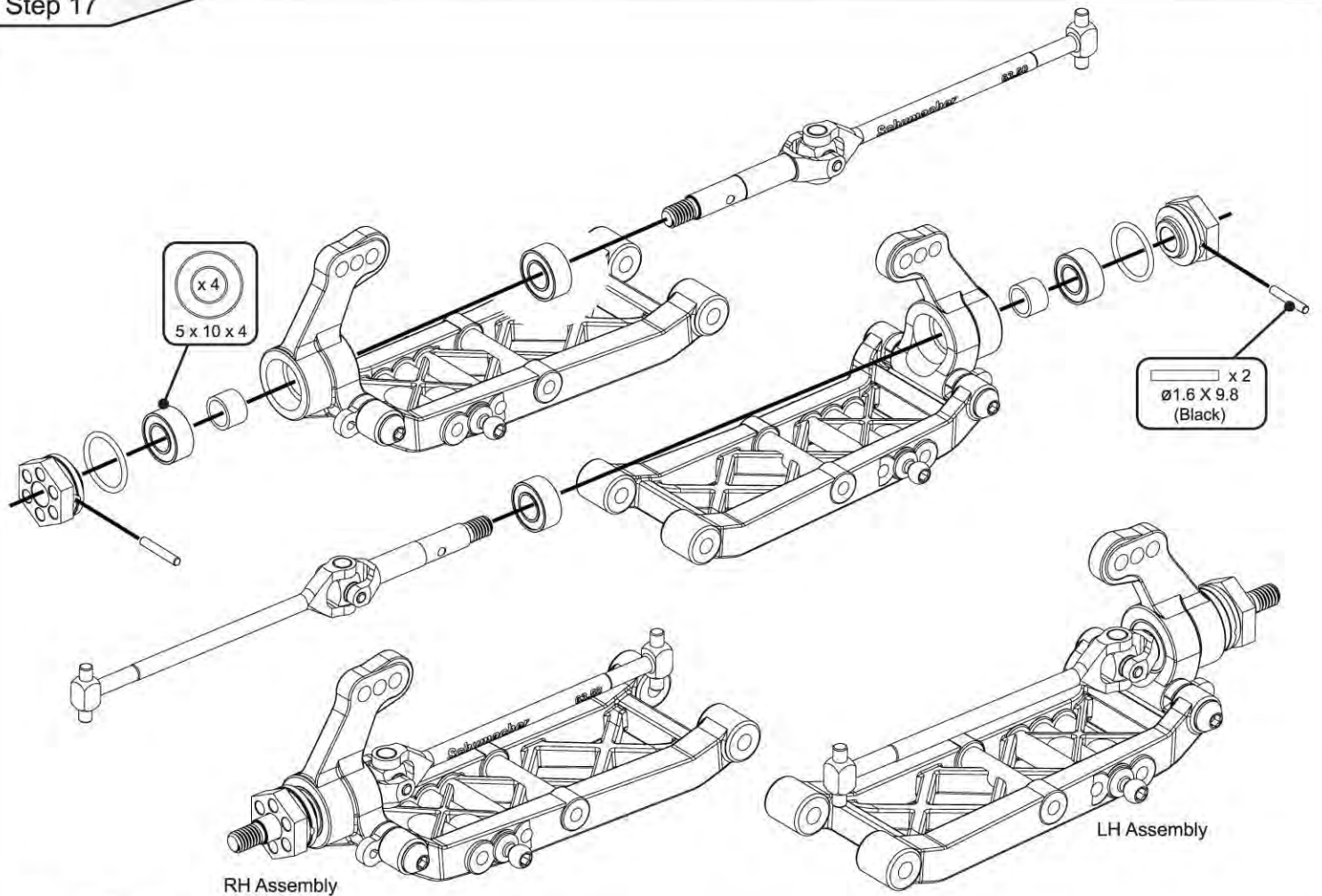
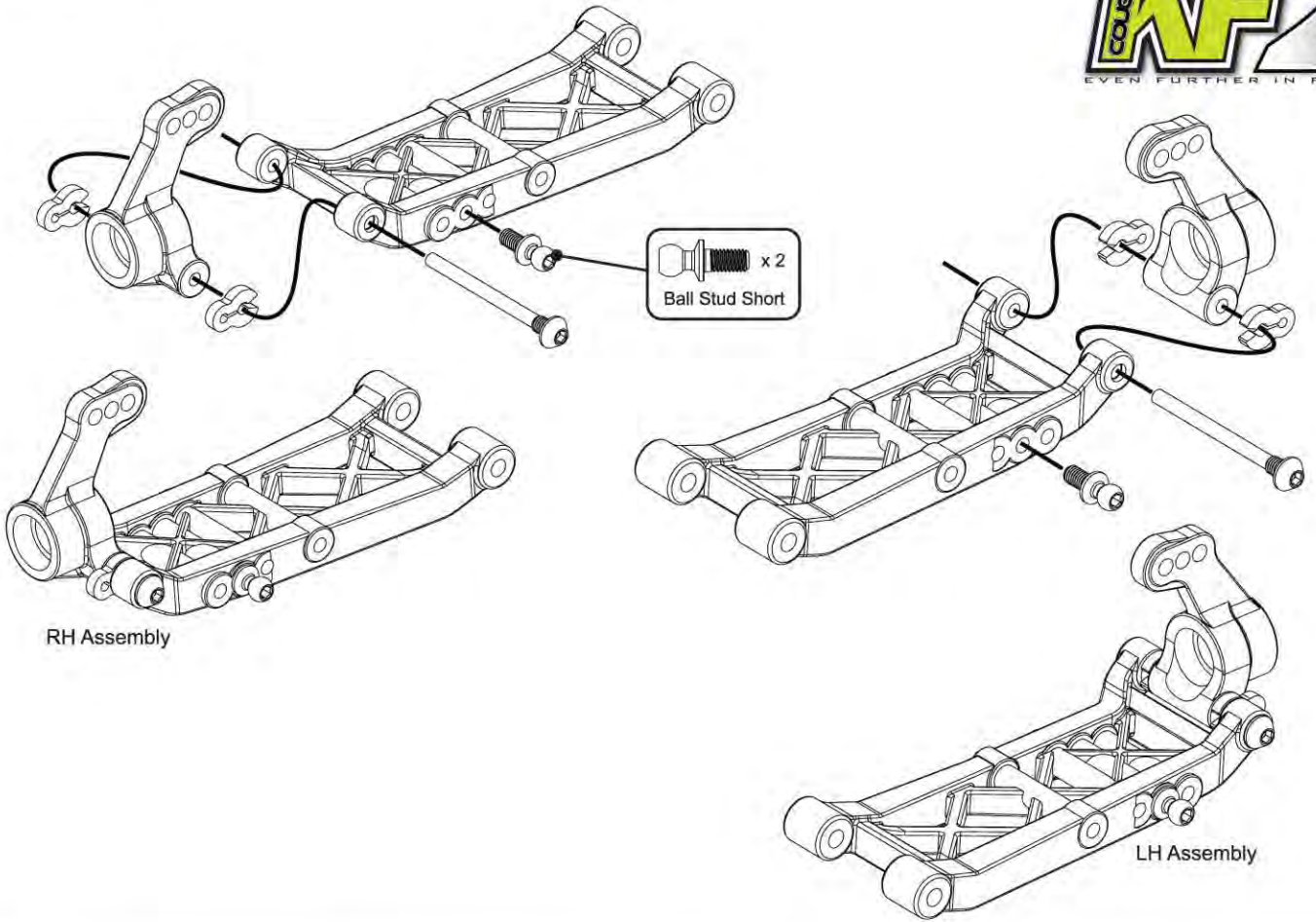
Step 14

B





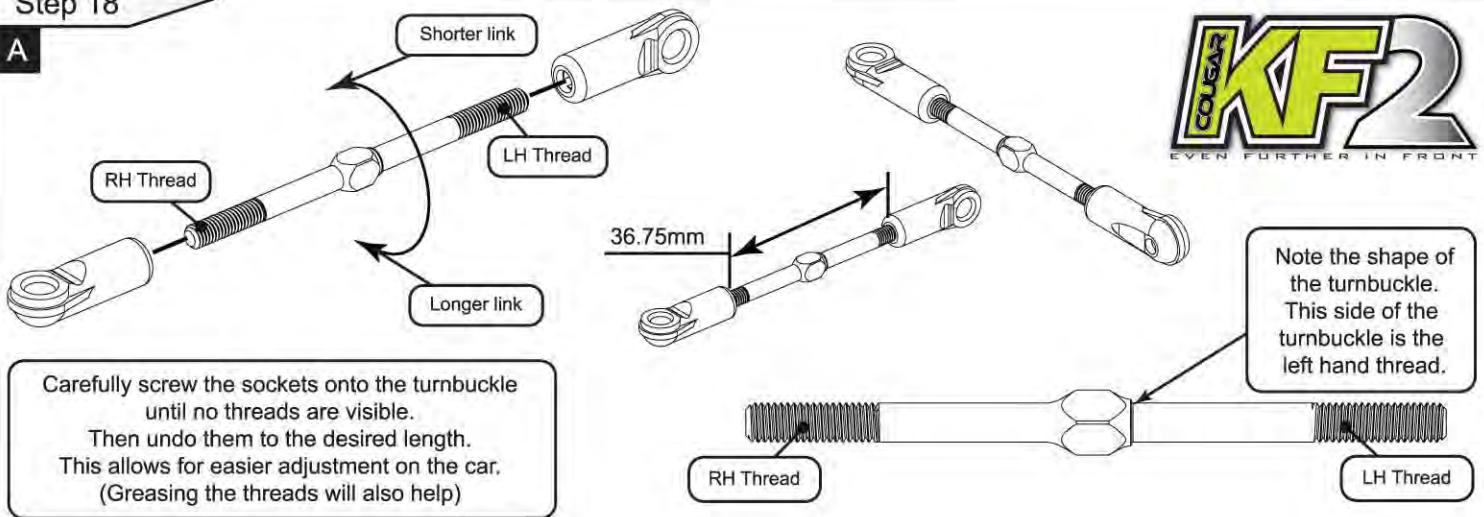






Step 18

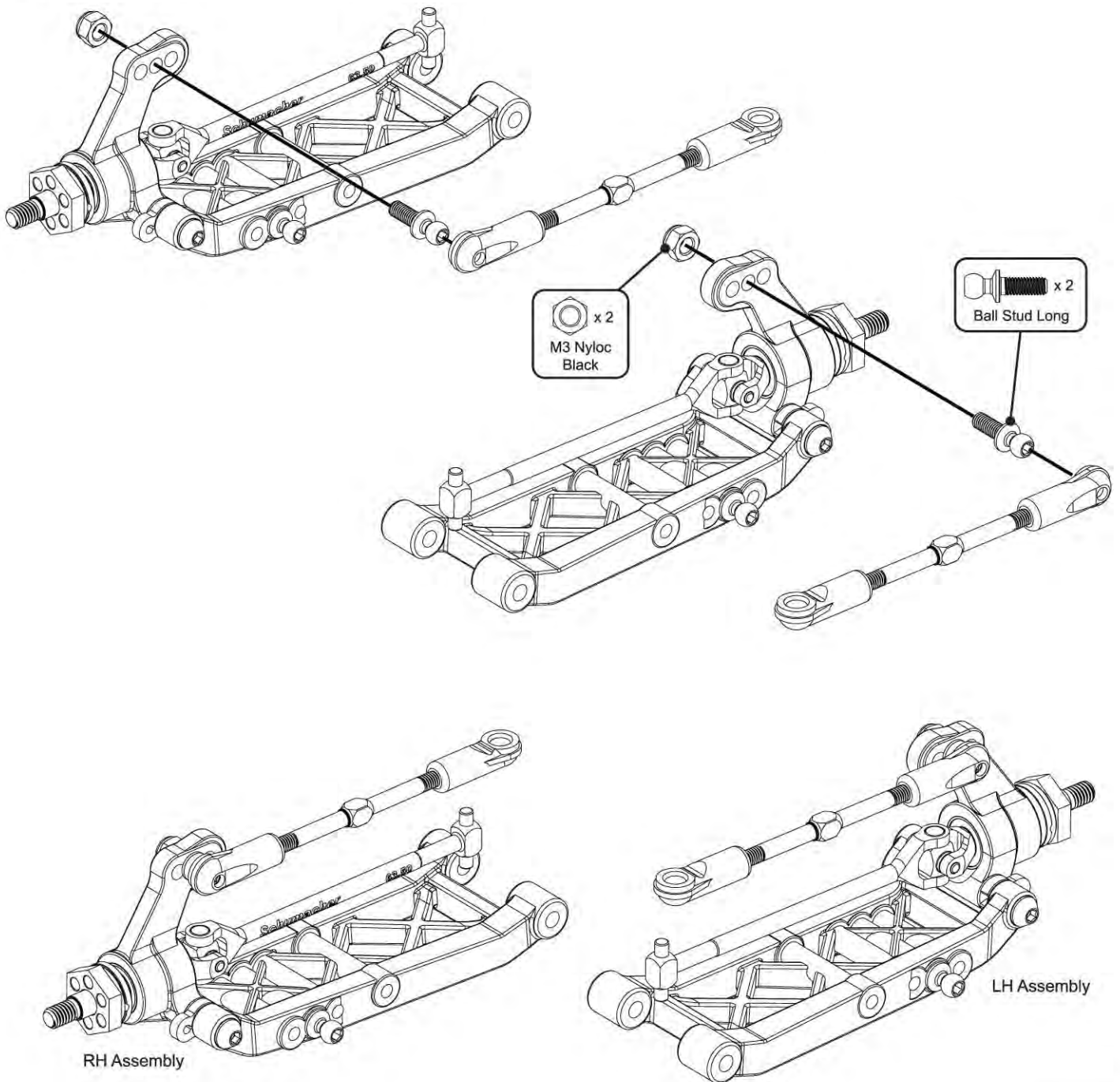
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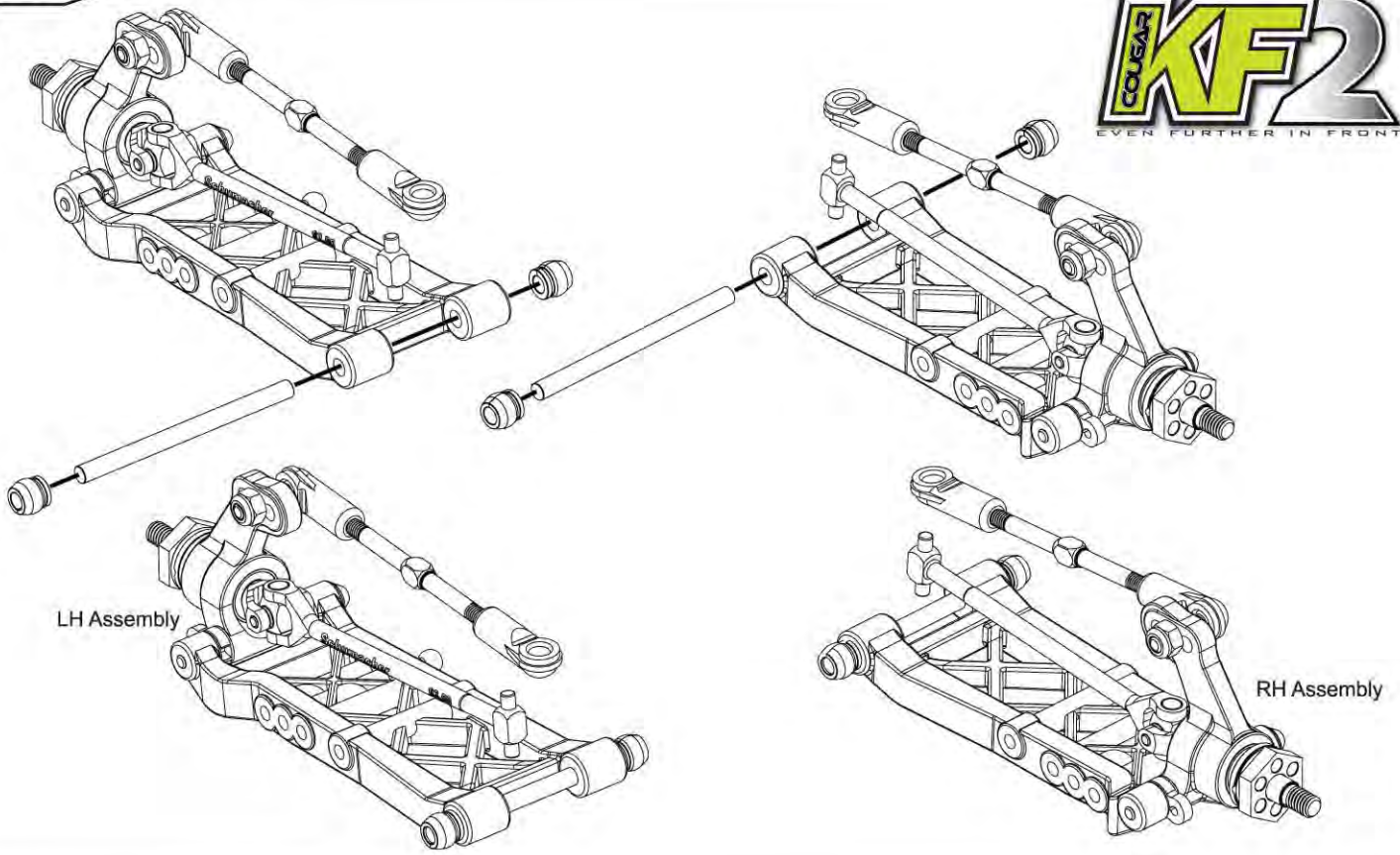
Carefully screw the sockets onto the turnbuckle until no threads are visible. Then undo them to the desired length. This allows for easier adjustment on the car. (Greasing the threads will also help)

Step 18

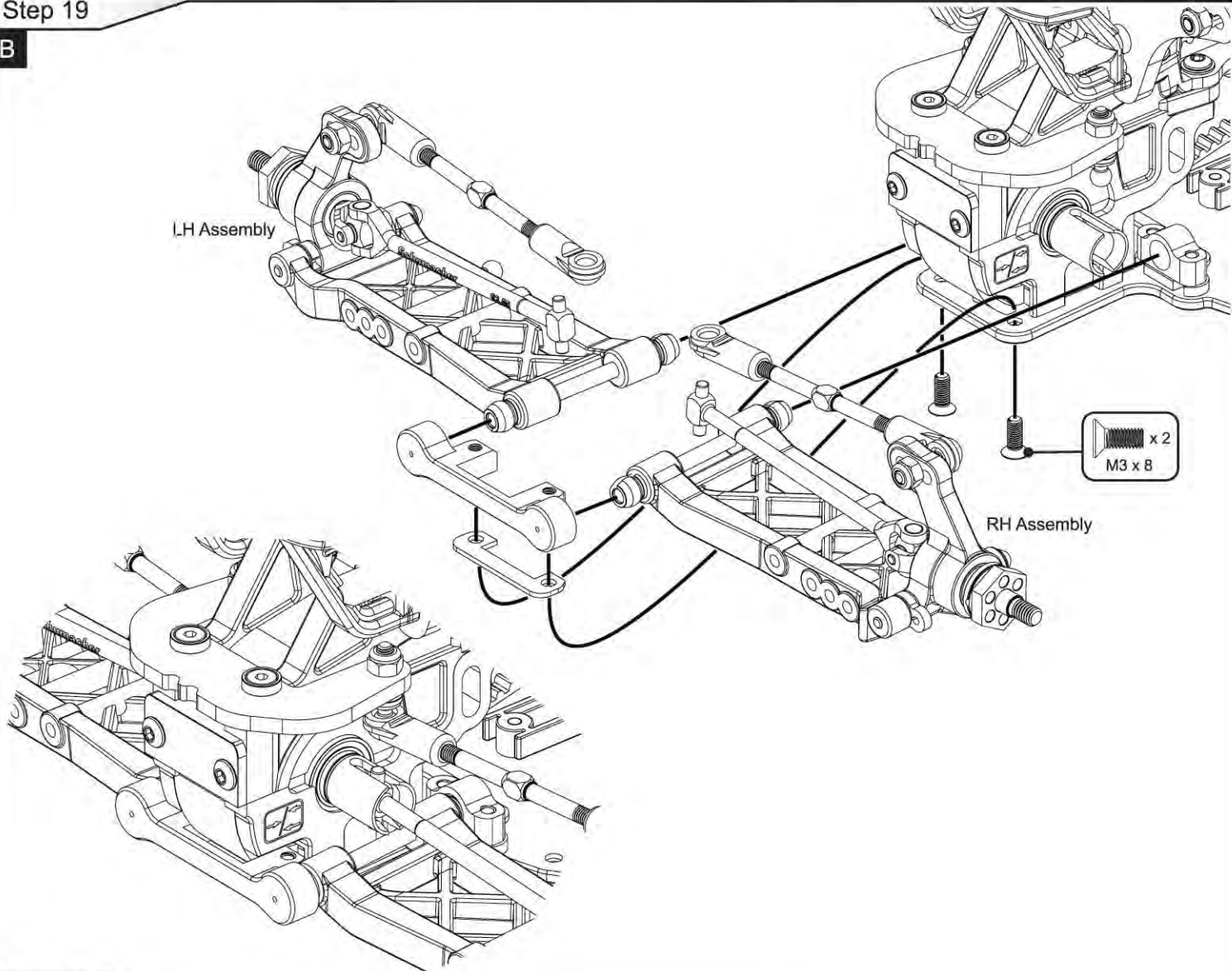
B



A

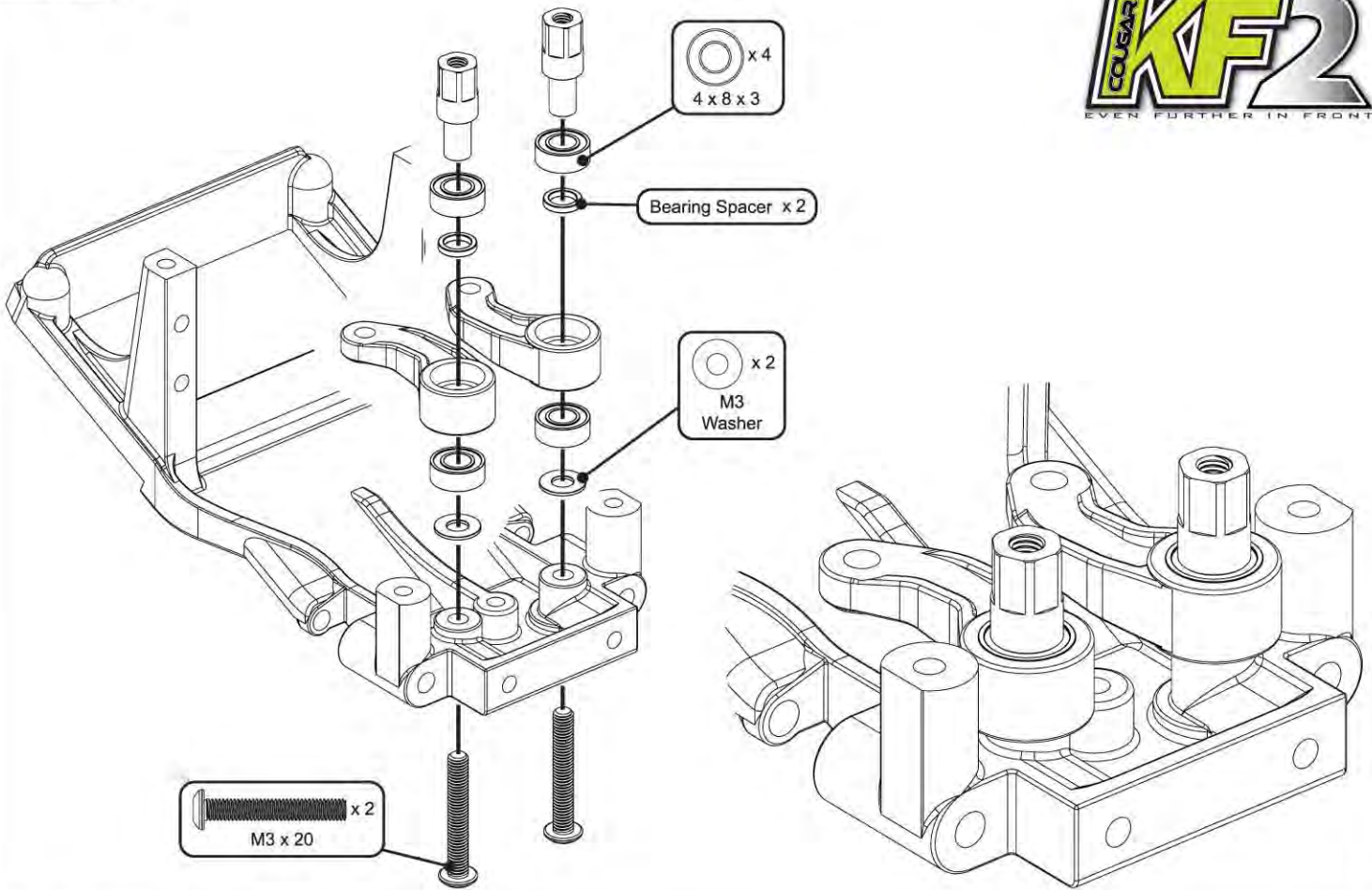


B

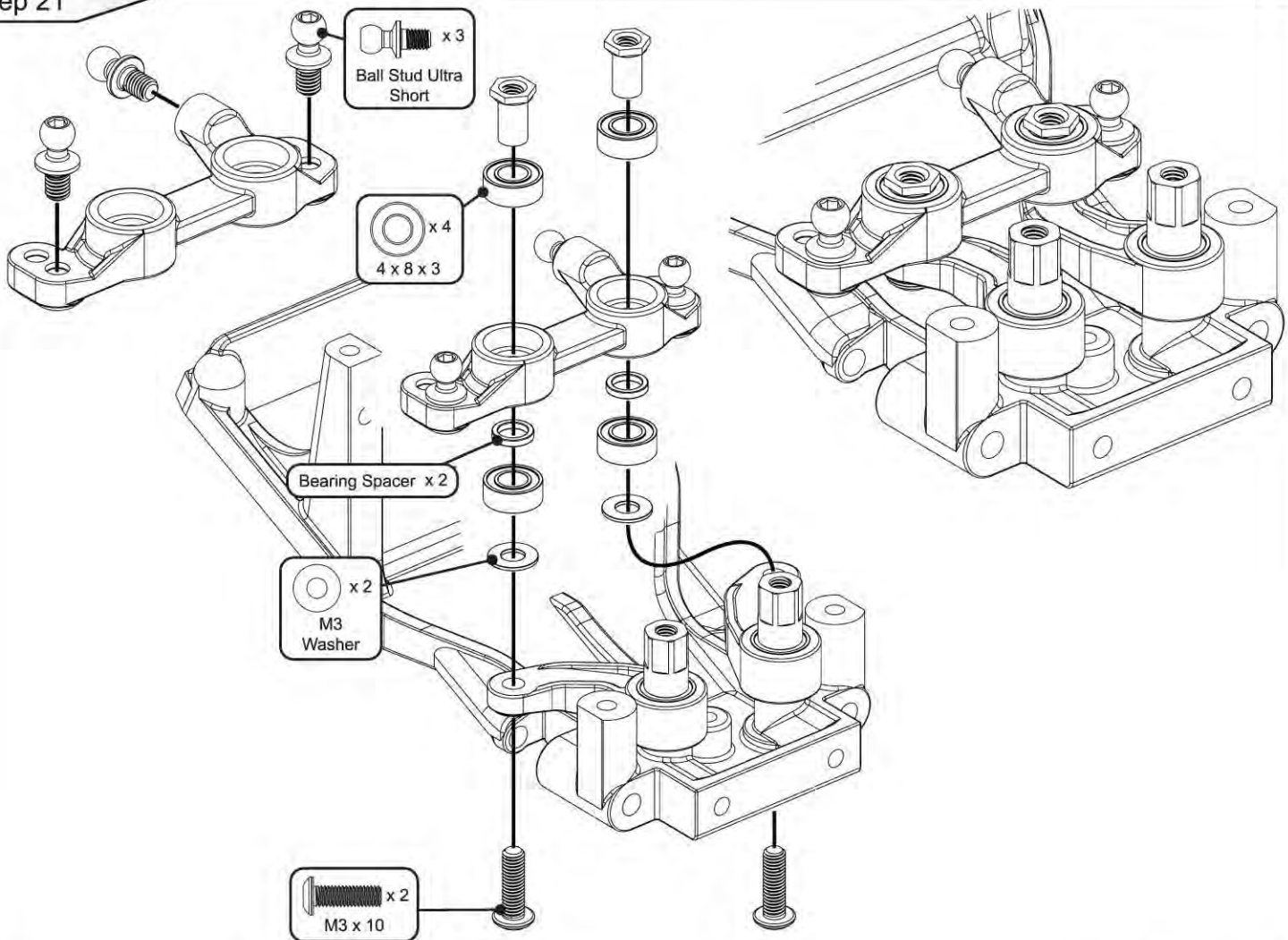




Step 20

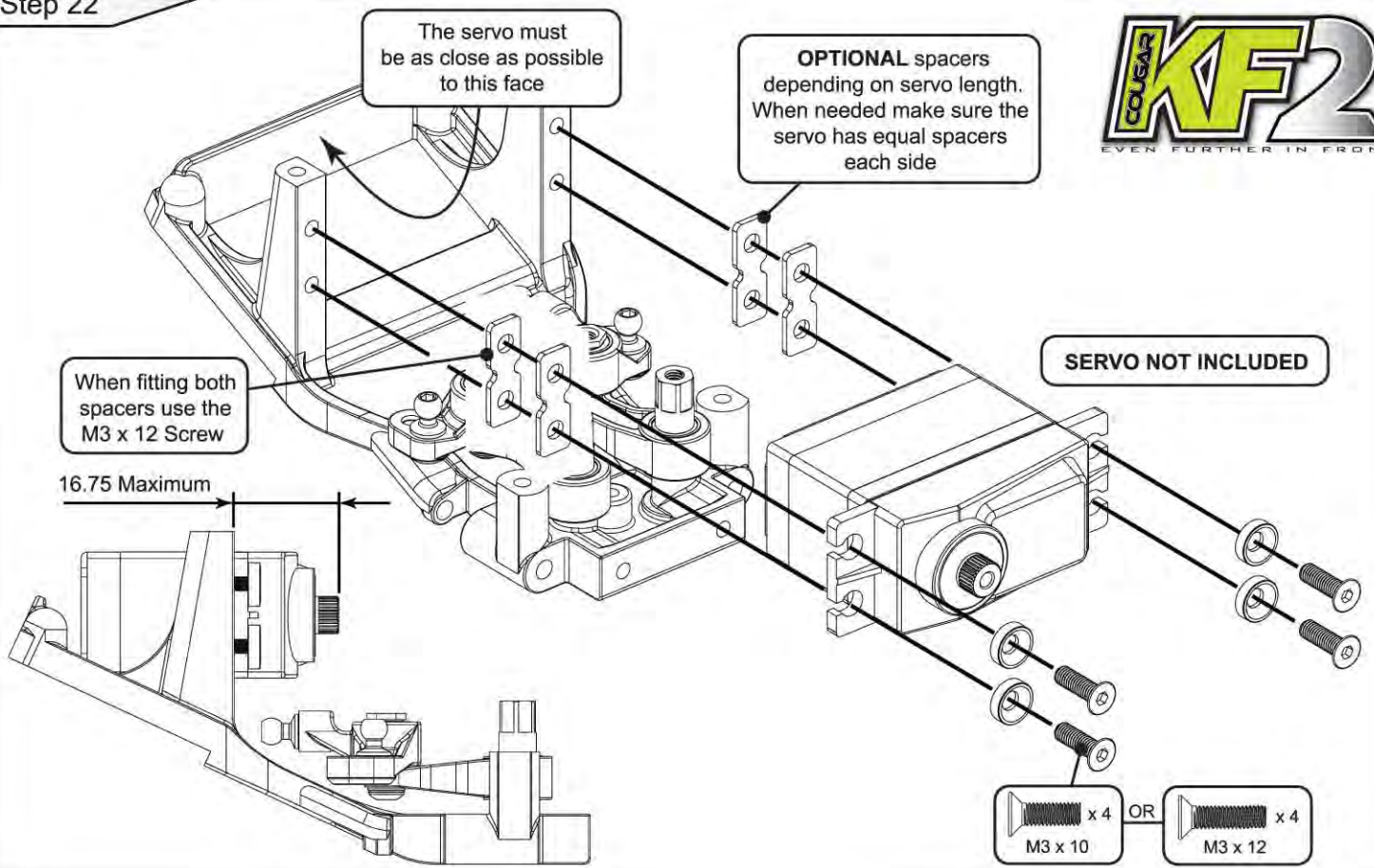


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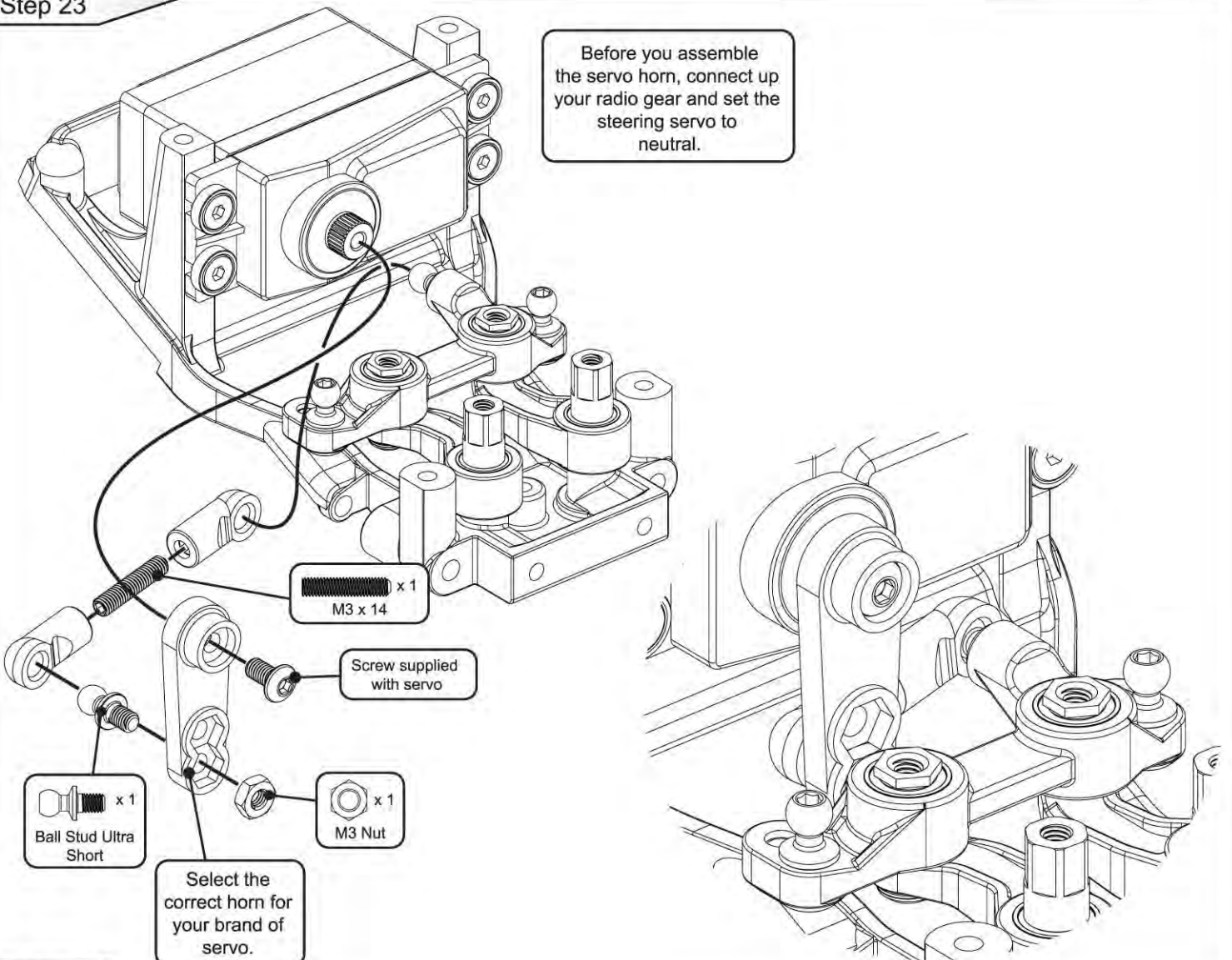




Step 22

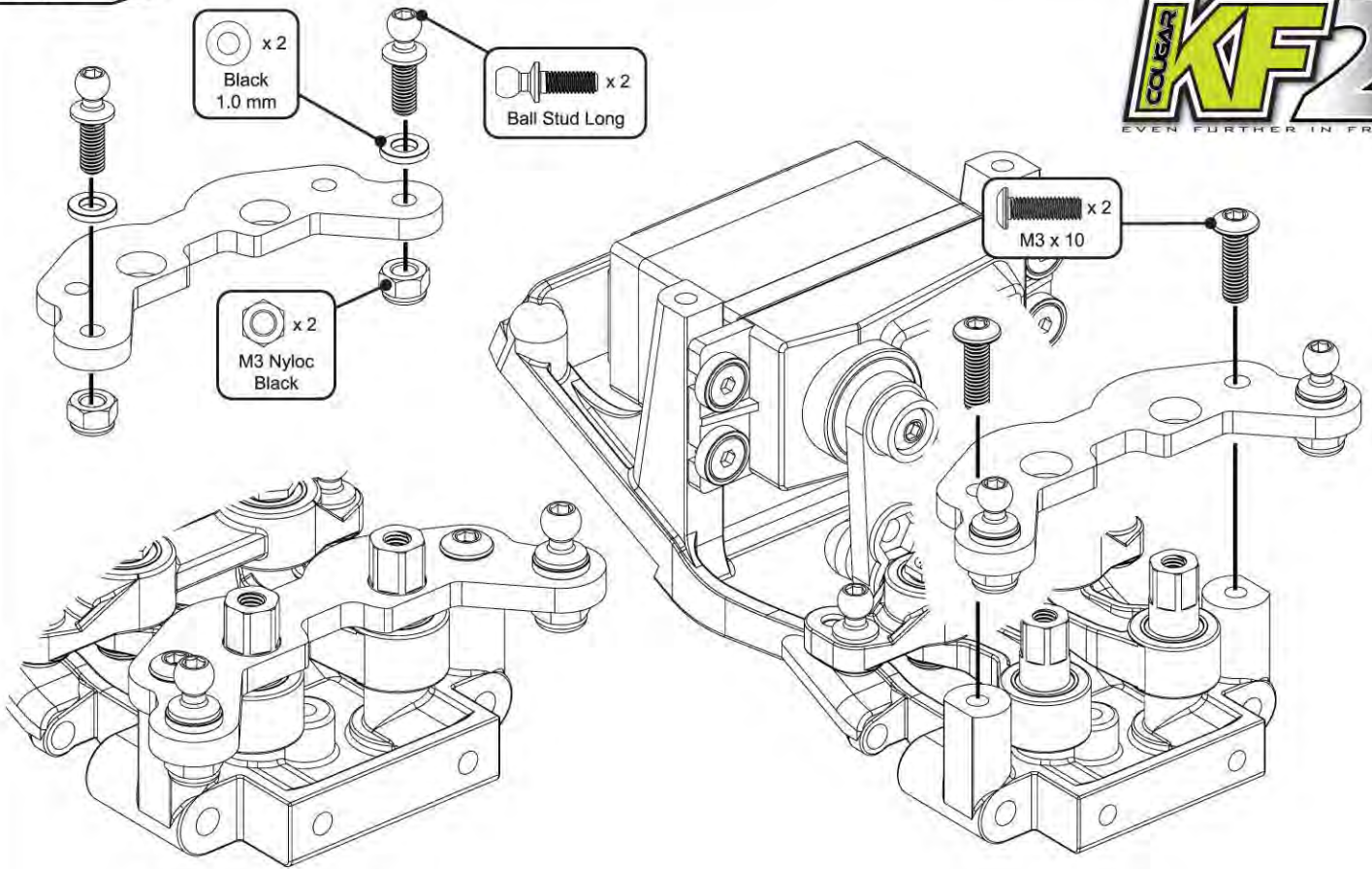


Step 23

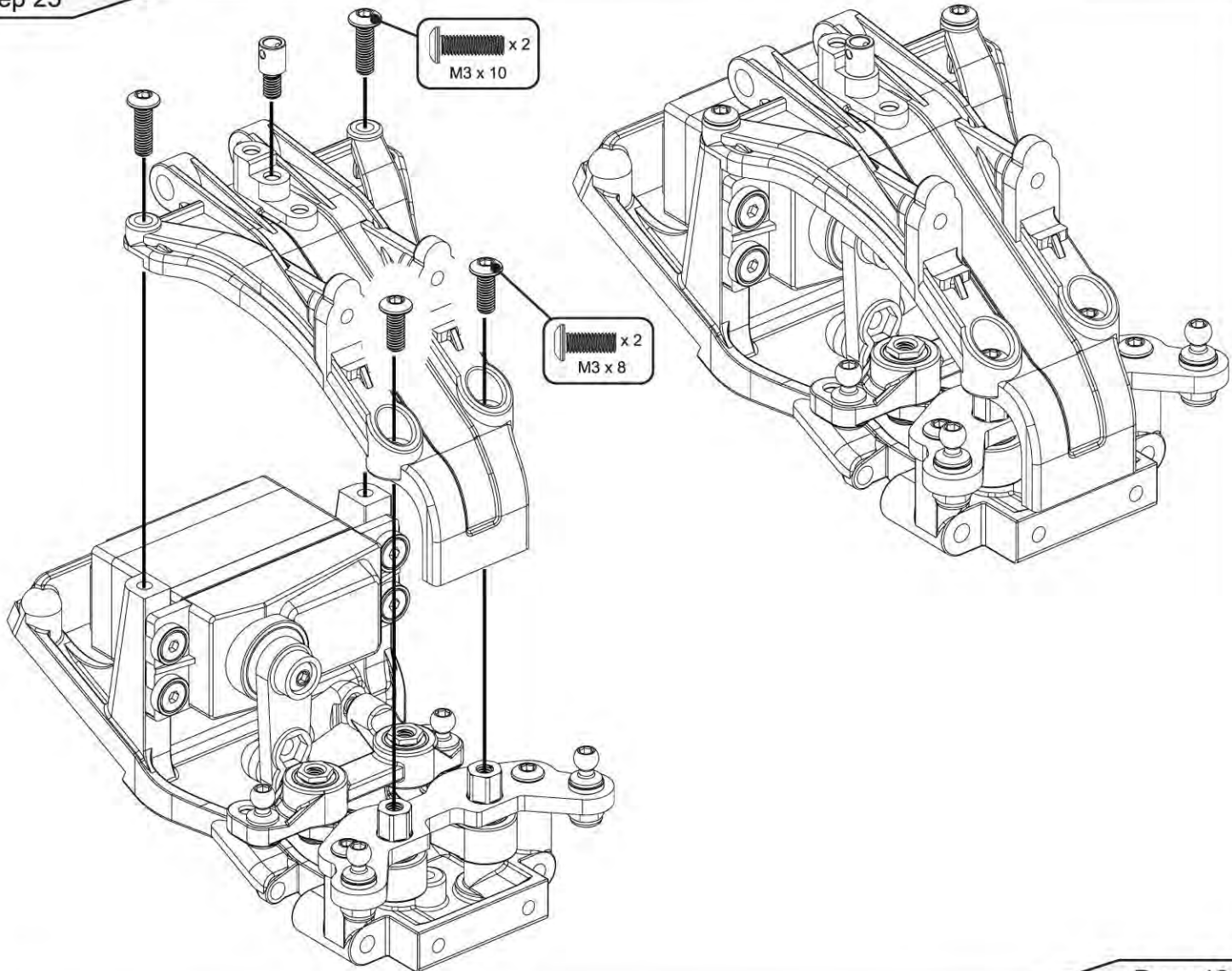




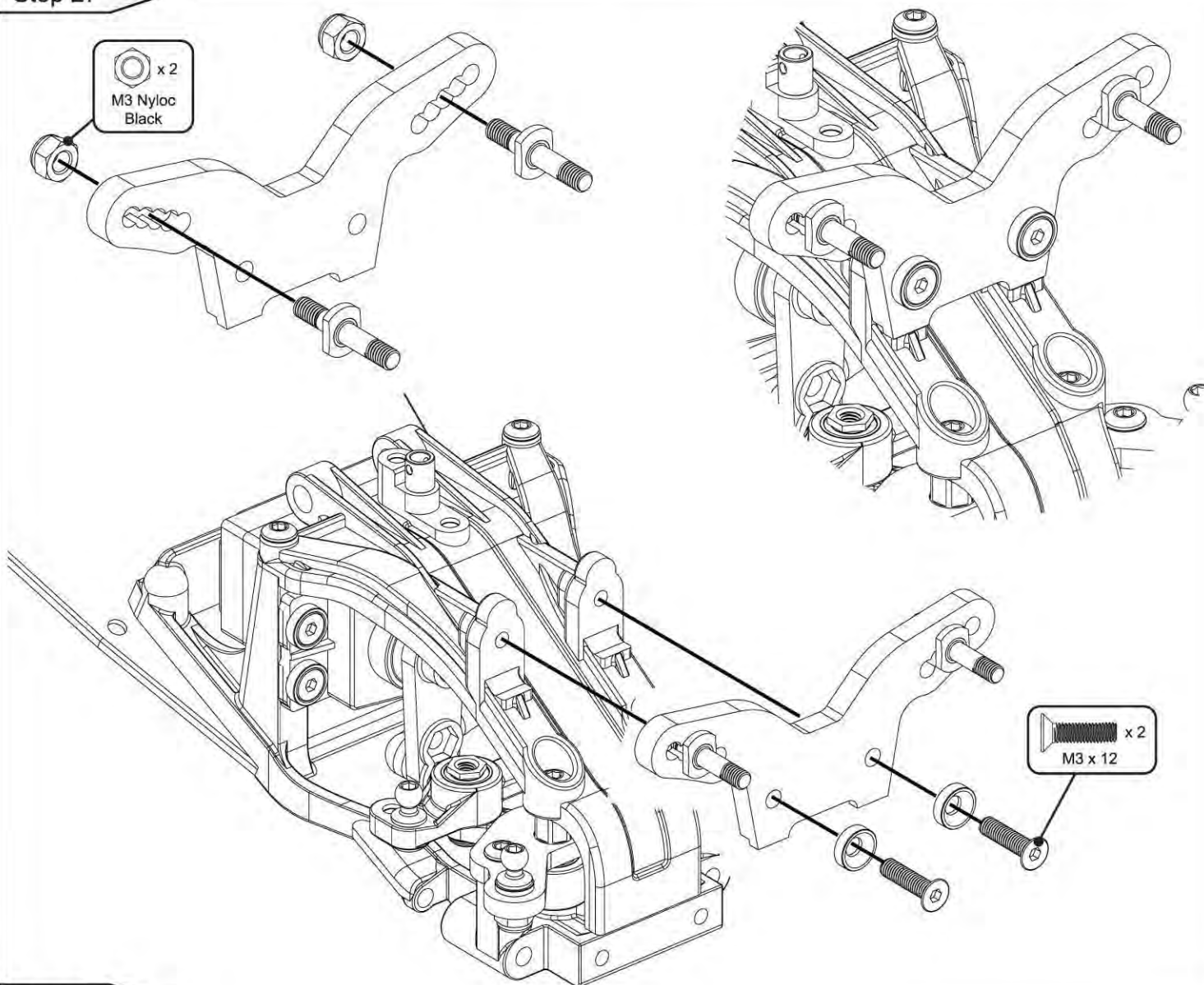
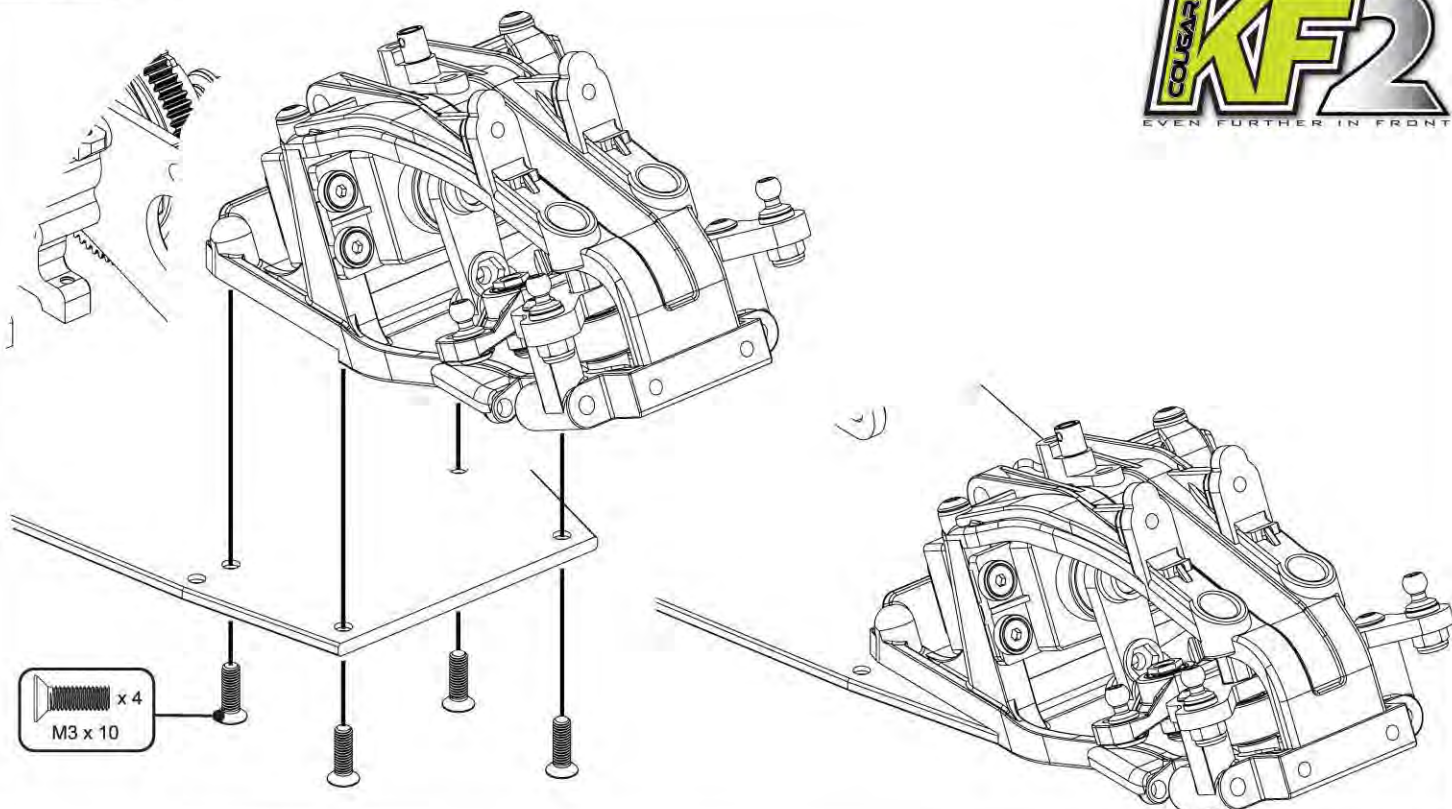
Step 24



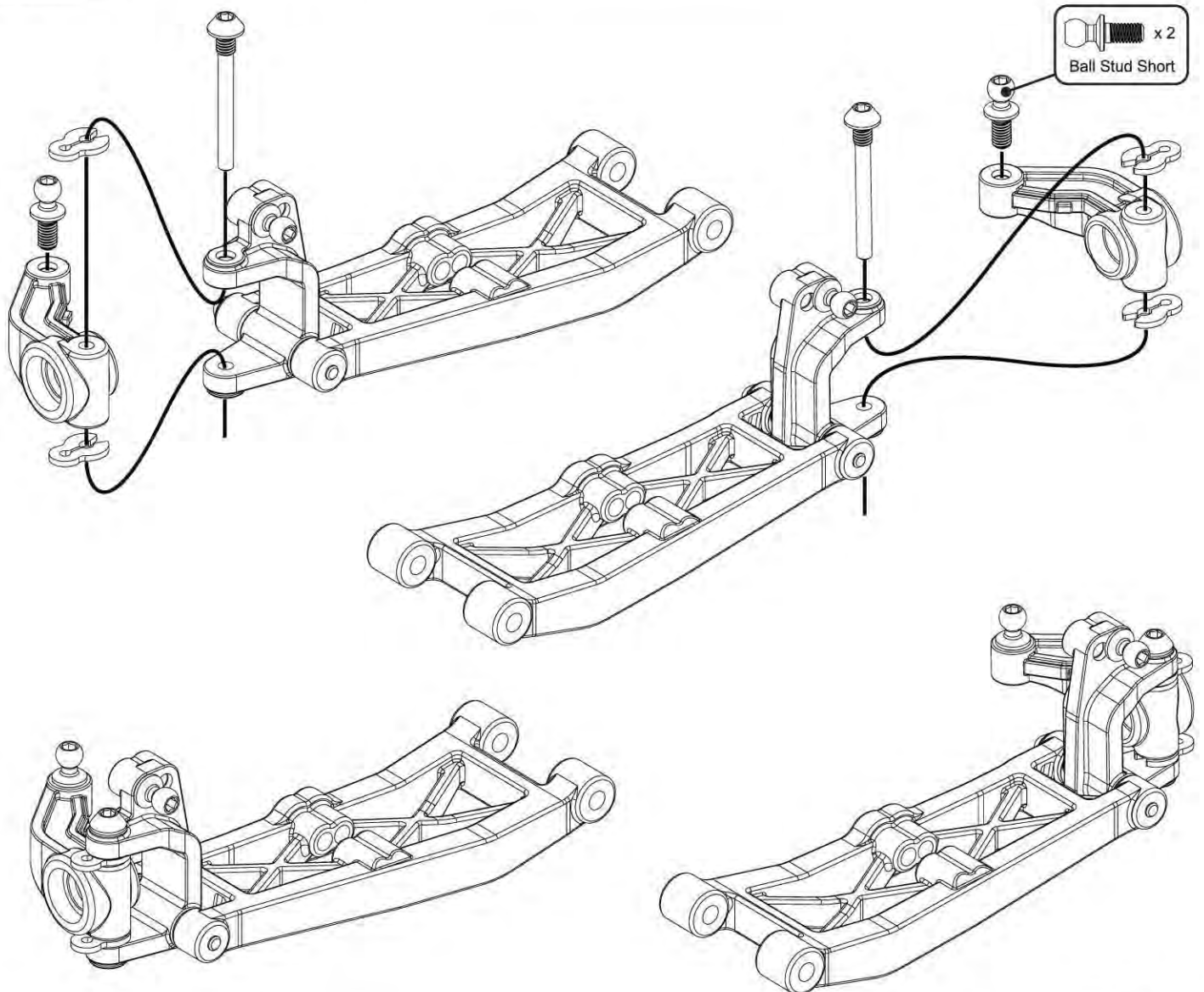
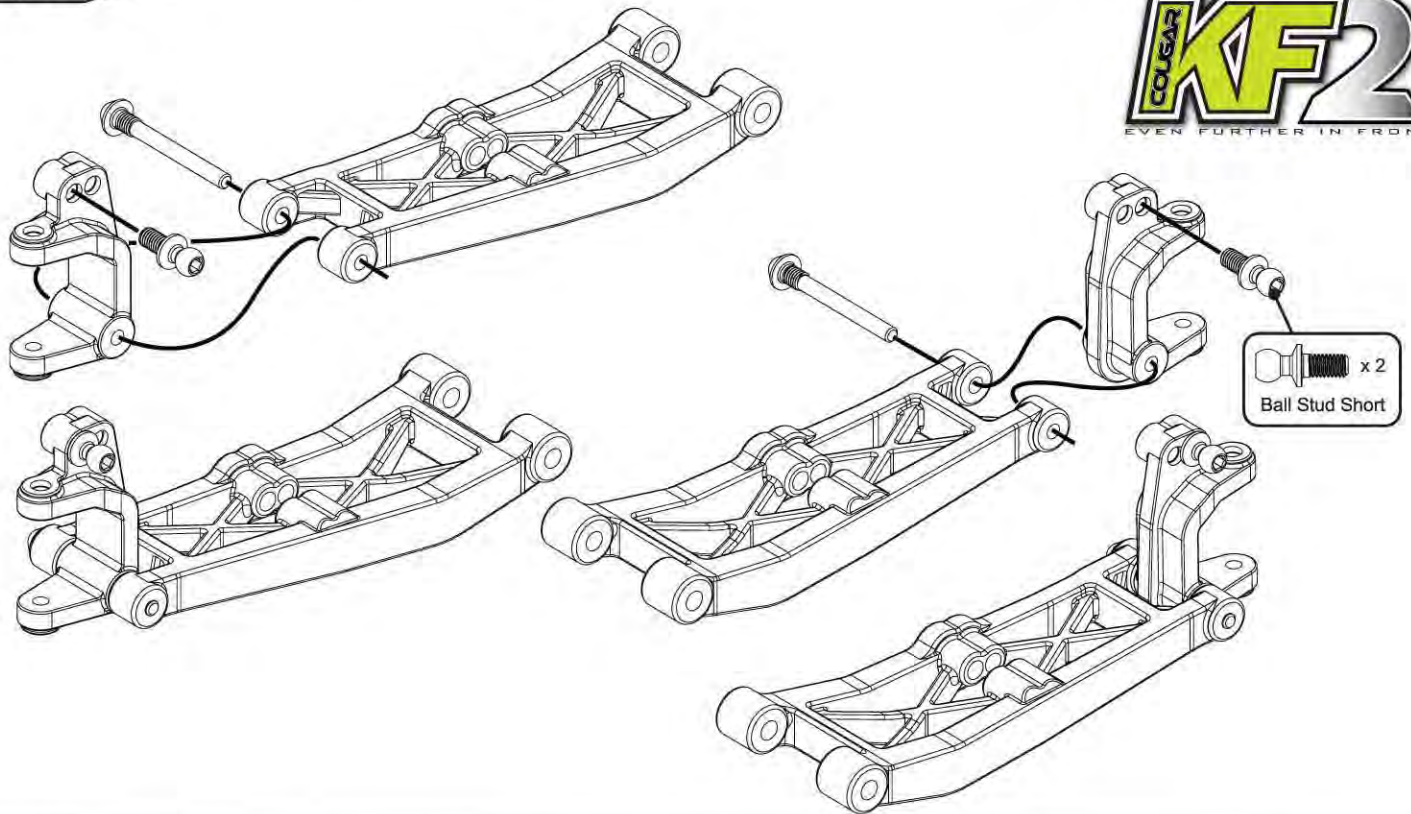
Step 25



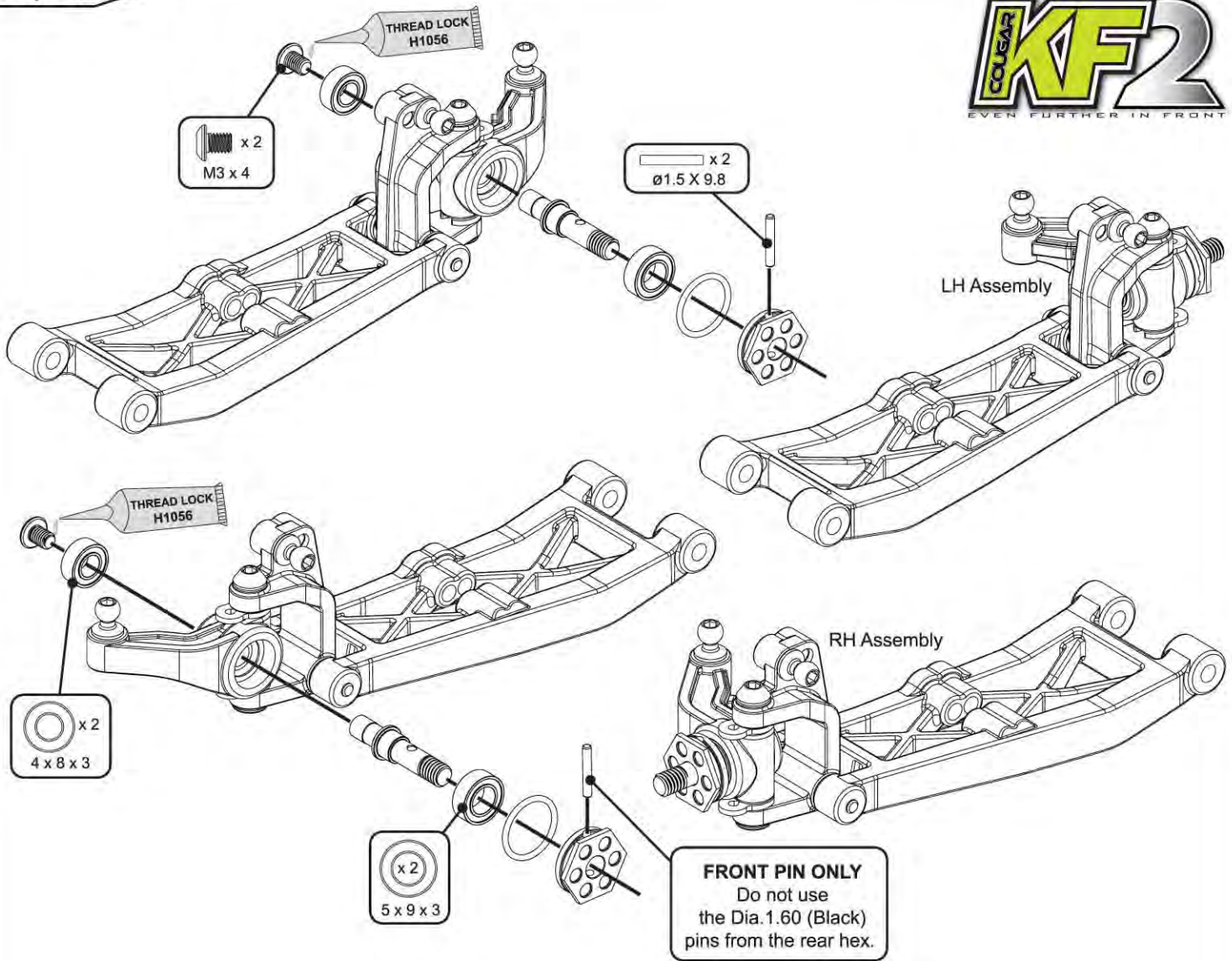




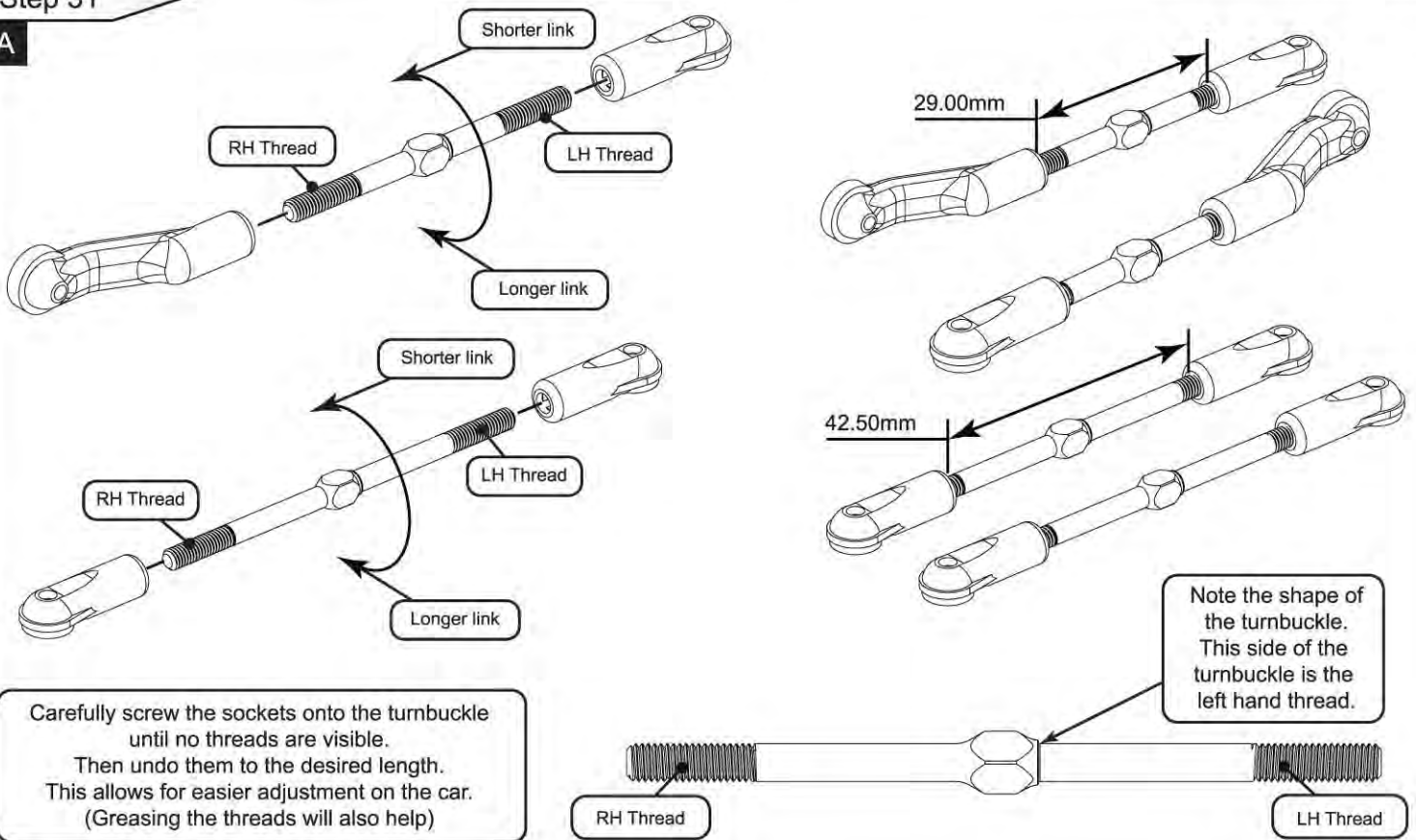








A

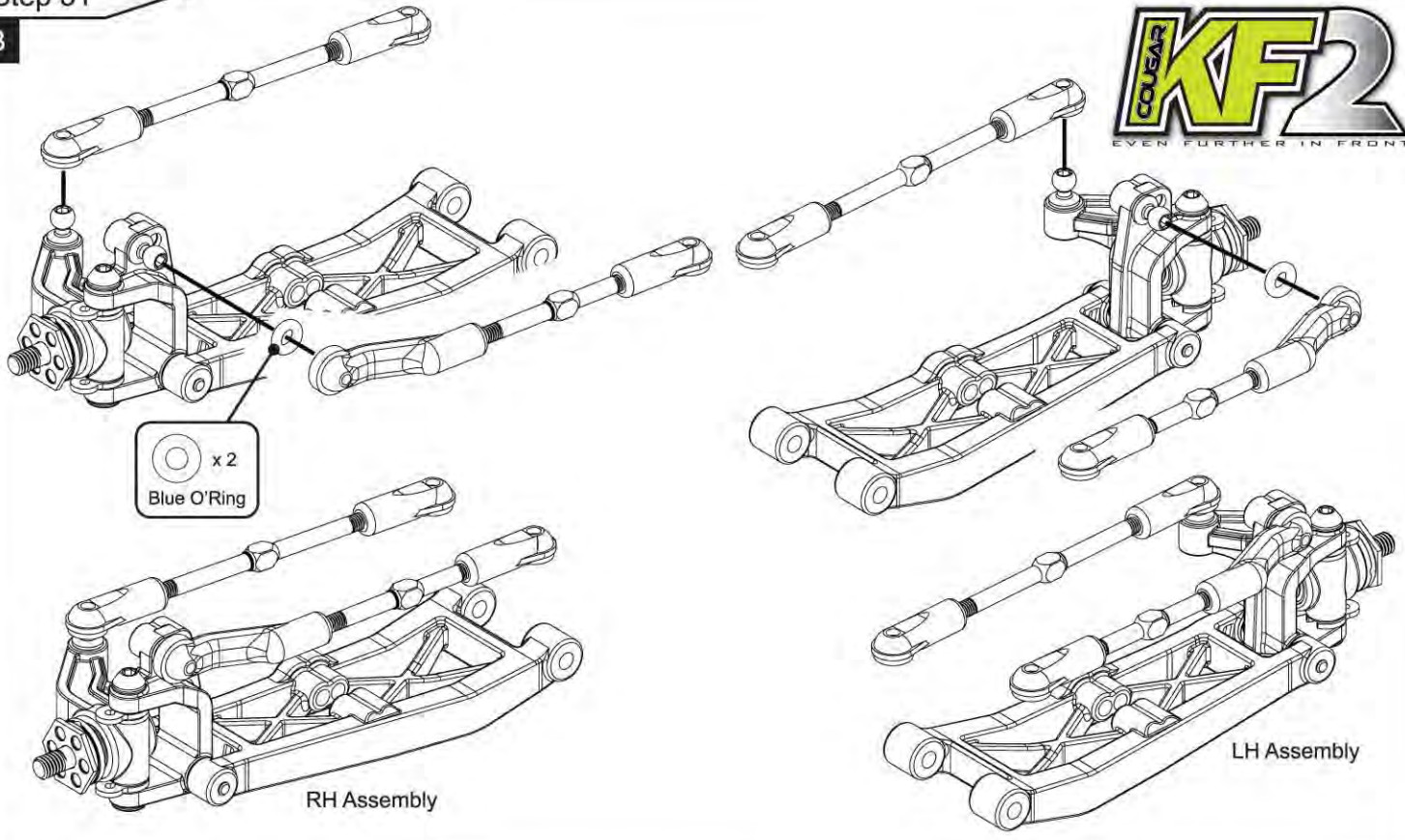


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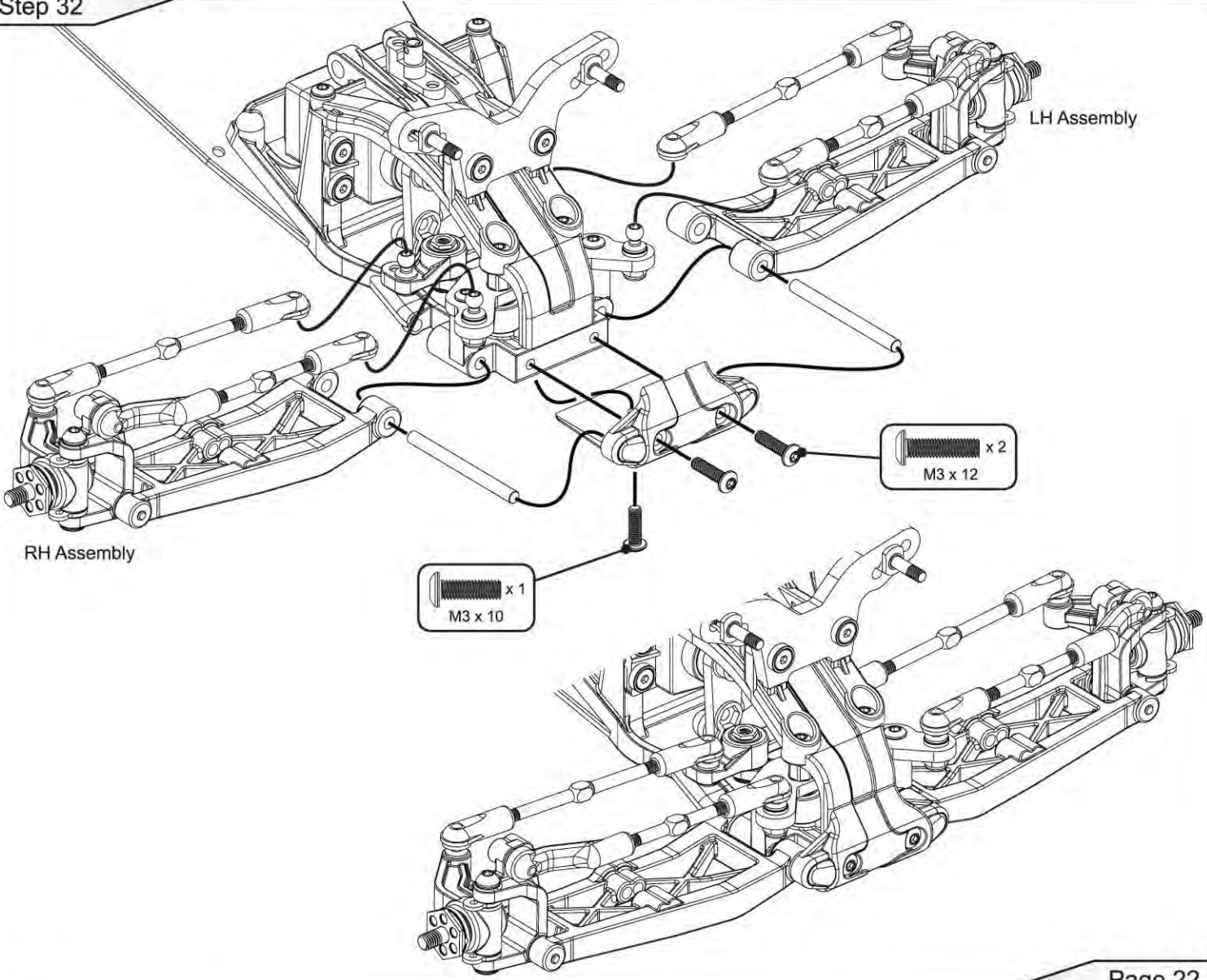


Step 31

B



Step 32





**ELECTRIC - OFF ROAD CARS**

K155 Cougar KF2 - C/F Kit  
 K156 Cougar KF2 - Assembled

**BODYSHELLS AND DECALS**

U4698 Decal Sheet - KF2  
 U5113 Wing - Talon 1/10th Off Road - White  
 U5114 Wing - Talon 1/10th Off Road - Black  
 U5115 Wing - Talon 1/10th Off Road - Carbon Look  
 U5117 Talon Wing Clear - 1/10th Off Road  
 U5127 Body Shell + Decal + Window Mask - KF2

**CHASSIS PARTS**

U119 Aerial Tube - Pack 4  
 U2231 Servo Horns  
 U3690 Front Bumper - Cougar SV/SV2/KR/KF  
 U3691 Servo Spacer - Cougar SV/SV2/KR/KF  
 U3850 Wing Mount Set - Off Road  
 U4138 C/F Link Mount; Rear 38mm Kit - CAT K1/KF  
 U4476 C/F Rear shock Mount - Cougar KF  
 U4477 C/F Front shock Mount - Cougar KF  
 U4484 LiPo Spacer - Cougar KF  
 U4659 Alloy Chassis - KF2  
 U4690 Side Pods - KF2  
 U4691 Rear Topdeck - KF2  
 U4692 Alloy Chassis Brace - KF2  
 U4693 LiPo Posts Front & Rear - KF2  
 U4695 Lipo Straps - KF2  
 U4699 Manual - KF2

**TRANSMISSION**

U2761 Diff Shims; 10x12 (pk8)  
 U3351 Gear; 83t Spur - Slipper  
 U3364 Slipper Pad; PTFE Octagon pr  
 U3867 Side Gear Cover - SX3/KF  
 U4174 Gear Diff Assembled - K1/KF  
 U4175 Gear Diff Mouldings - K1/KF  
 U4176 Gear Diff Gear Set - K1/KF  
 U4177 Gear Diff Rebuild Kit - K1/KF  
 U4178 Gear Diff Output - K1/KF  
 U4195 Driveshafts; Rear - K1/KF pr  
 U4388 Alloy Wheel Hex Rear - Off Road - pr  
 U4389 Alloy Wheel Hex Front - 2WD -pr  
 U4468 Belt Adjuster - Cougar KF  
 U4474 4mm Bando Belt 113T - Cougar KF  
 U4481 Mounts; Rear Upper Trans - Cougar KF  
 U4486 Rear Wheel Bearing Spacers - Cougar KF - (pr)  
 U4488 12mm Hex Drive Pins - Off Road  
 U4663 Rear Trans Housing RH - KF2  
 U4664 Rear Trans Housing LH - KF2  
 U4665 Layshaft Mount LH - KF2  
 U4666 Layshaft Mount RH - KF2  
 U4667 Motor Plate - KF2  
 U4668 Rear Dirt Covers - KF2  
 U4669 Layshaft - KF2  
 U4670 Slipper Cage - KF2  
 U4671 Mid Slipper Plate - KF2  
 U4672 Alloy Outer Slipper Plate - KF2  
 U4673 Slipper Spring- KF2  
 U4674 Slipper Spring Bush - KF2  
 U4675 Layshaft Spacer\_KF2  
 U4676 Idler Shaft - KF2  
 U4677 20T Pulley - KF2  
 U4678 Pulley Fence LH - KF2  
 U4679 Pulley Fence RH - KF2  
 U4680 Layshaft Bearing Retainer - KF2  
 U4681 33T Side Gear - KF2  
 U4682 23T Side Gear - KF2  
 U4705 Alloy Inner Slipper Plate - KF2

**SUSPENSION**

U3137 Shock Mounting Post - (pr)  
 U3708 Quick Clip 2.4mm - Cougar SV pk4  
 U3709 Radius Arms - Cougar - (pr)  
 U3710 Centre Track Rod - Cougar  
 U3712 Yokes; 0 deg - Cougar SV/SV2/KR/KF  
 U3715 Pivot Pin; Screw Type 25mm pr  
 U3716 Pivot Pin; Screw Type 32mm pr  
 U3718 Pivot Pin; 38mm - Cougar SV/SV2/KR/KF  
 U3719 Pivot Pin; 45mm - Cougar SV  
 U3729 Wishbone/Pivot Spheres - Cougar SV pk4  
 U4031 Front Body Post - Cougar SV2  
 U4036 Hub Carrier; Rear 0deg - Cat/Cougar pr  
 U4055 Wishbones; Rear Kit - Cougar SV2  
 U4090 Ball Socket; Offset - Cougar pk4  
 U4094 Bulkhead - Cougar  
 U4095 Wishbones Front - Long (pair) - Cougar

**SUSPENSION CONT....**

U4223 Turnbuckle Adjuster HTT - 45mm - pr  
 U4224 Turnbuckle Adjuster HTT - 60mm - pr  
 U4273 Pro Ball Stud Ultra Short - pk4  
 U4274 Pro Ball Stud Short - pk4  
 U4275 Pro Ball Stud Long - pk4  
 U4299 Turnbuckle HT - Touring 52mm - 1pr  
 U4314 SPEED PACK - Alloy Black Washers - Mi5 - 16pc  
 U4380 Front Hub Carriers - Cougar KR/KF V2 -pr  
 U4381 Quick Clip 2.4mm thin - pk4  
 U4382 Front Axle - Cougar KR/KF - pr  
 U4452 C/F Front Link Mount 50.5mm - KF/KR/SV2  
 U4461 Nut Guard Front - Cougar KF  
 U4462 Bottom Plate - Cougar KF  
 U4489 Nut Guard Rear - Cougar KF/K1 Aero  
 U4683 Suspension Block RH - KF2  
 U4684 Suspension Block LH - KF2  
 U4685 Anti-squat Spacers - KF2  
 U4686 Rear Suspension Strap - KF2  
 U4688 Steering Pivot Long - KF2  
 U4689 Steering Pivots Short - KF2  
 U4700 Pro Ball Stud - Ultra Long  
 U4704 Grey Fluted Sockets (pk8)  
 U4707 Grey Short Sockets (pk8)

**BEARINGS AND BALLS**

G200 ZX1 - Microlube  
 H1031 Bearing Blaster Aerosol 500ml  
 U1300 Axle Grease - Pot  
 U1301 Silicone Diff Lube - Pot  
 U1957 Moly Grease - Pot  
 U2698 Ball Bearing - 5x10x4 Red Sealed (pr)  
 U2699 Ball Bearing - 10x15x4 Red Sealed (pr)  
 U3075 Ball Bearing 4x8x3mm Red Sealed (pr)  
 U3136 Ball Bearing - 5x8x2.5 - Shielded (pr)  
 U3871 Ball Bearing 5x9x3 Red Seal (pr)

**BIG BORE SHOCKS**

U3667 Big Bore Shock; Seal Rebuild Kit - Off Rd pr  
 U3668 Big Bore Shock Rods; Med pr  
 U3669 Big Bore Shock Rods; Long pr  
 U3670 Big Bore Shock; 2 Hole Pistons pr  
 U3671 Big Bore Shock; 4 Hole Pistons pr  
 U3672 Big Bore Shock; 6 Hole Pistons pr  
 U3673 Big Bore Spring Tuning Set; Med 7prs  
 U3674 Big Bore Spring Tuning Set; Long 6prs  
 U3706 Rod End Ball + Socket - Cougar SV2 pr  
 U3770 Big Bore Rounded Pistons (white); 3 Hole pr  
 U3771 Big Bore Rounded Pistons; 5 Hole pr  
 U3782 HD Diaphragm Big Bore - pk4  
 U3937 Shock Mouldings  
 U4110 Off Road Shock O Ring 1/8 Silicone Pk 8  
 U4209 Vented Shock Caps - Big Bore - (pr)  
 U4285 Pro Shock Seal Blue - On Road - pk8  
 U4370 Big Bore Shock Cap (Black) - pr  
 U4371 Big Bore Shock Adjusting Collar (Black) - pr  
 U4451 Big Bore Shock Collar O-ring - pk4  
 U4490 Big Bore Shock Body Med V2 pr  
 U4491 Big Bore Shock Body Long V2 pr  
 U4492 Big Bore Shocks Med V2 - Assembled  
 U4493 Big Bore Shocks Long V2 - Assembled  
 U4701 3 Hole Piston (Black) - Off Road  
 U4702 Shock Seal Housing V2 - Big Bore  
 U4707 Grey Short Sockets (pk8)

**BIG BORE SPRINGS**

CR177 CORE RC Big Bore Spring Tuning Set; Med 5prs  
 CR178 CORE RC Big Bore Spring Tuning Set; Long 5prs  
 CR179 CORE RC Big Bore Spring; Med - 2.8 pr  
 CR180 CORE RC Big Bore Spring; Med - 3.1 pr  
 CR181 CORE RC Big Bore Spring; Med - 3.4 pr  
 CR182 CORE RC Big Bore Spring; Med - 3.7 pr  
 CR183 CORE RC Big Bore Spring; Med - 4.0 pr  
 CR184 CORE RC Big Bore Spring; Long - 1.8 pr  
 CR185 CORE RC Big Bore Spring; Long - 2.0 pr  
 CR186 CORE RC Big Bore Spring; Long - 2.2 pr  
 CR187 CORE RC Big Bore Spring; Long - 2.4 pr  
 CR188 CORE RC Big Bore Spring; Long - 2.6 pr  
 CR190 CORE RC Spring Seat - Big Bore to 13mm (4)  
 CR191 CORE RC Spring Seat - Big Bore to 14mm (4)  
 U3673 Big Bore Spring Tuning Set; Med 7prs  
 U3674 Big Bore Spring Tuning Set; Long 6prs  
 U3675 Big Bore Spring; Med - 2.0 pr  
 U3676 Big Bore Spring; Med - 2.5 pr  
 U3677 Big Bore Spring; Med - 3.0 pr



**BIG BORE SPRINGS CONT....**

U3678	Big Bore Spring; Med - 3.5 pr
U3679	Big Bore Spring; Med - 4.0 pr
U3680	Big Bore Spring; Med - 4.5 pr
U3681	Big Bore Spring; Med - 5.0 pr
U3682	Big Bore Spring; Long - 1.6 pr
U3683	Big Bore Spring; Long - 2.0 pr
U3684	Big Bore Spring; Long - 2.5 pr
U3685	Big Bore Spring; Long - 3.0 pr
U3686	Big Bore Spring; Long - 3.5 pr
U3687	Big Bore Spring; Long - 4.0 pr

**SHOCK ABSORBERS**

U2994	Violet Shock Adjuster (Small Bore Springs) (pr)
U2999	Small Bore Shock Seal Rebuild Kit
U3317	Small Bore Shock Body (Front) - Off Road - pr
U3318	Small Bore Shock Body (Rear) - Off Road - pr
U3319	Small Bore Piston 2 Hole (CNC) - Off Road - pr
U3320	Small Bore Piston 3 Hole (CNC) - Off Road - pr
U3321	Small Bore Shock Rod (Front) - Off Road - pr
U3322	Small Bore Shock Rod (Rear) - Off Road - pr
U3323	Small Bore Shock Seal Hsg (Black) - Off Road - pr
U3324	Small Bore Shock Top Cap (Purple) - Off Road - pr
U4125	Small Bore Taper Piston 1.2mm - White pr
U4126	Small Bore Taper Piston 1.3mm - Black pr
U4127	Small Bore Taper Piston 1.4mm - Red pr
U4130	Vented Shock Caps - Small Bore - (Pr)
U4150	Small Bore Shock Seal Hsg (Black) - Off Road - pr
U4151	Small Bore Shock Top Cap (Black) - Off Road pr

**SHOCK AND DIFF OIL**

CR200	CORE RC Silicone Oil - 100cSt - 60ml
CR201	CORE RC Silicone Oil - 150cSt - 60ml
CR202	CORE RC Silicone Oil - 200cSt - 60ml
CR203	CORE RC Silicone Oil - 250cSt - 60ml
CR204	CORE RC Silicone Oil - 300cSt - 60ml
CR205	CORE RC Silicone Oil - 350cSt - 60ml
CR206	CORE RC Silicone Oil - 400cSt - 60ml
CR207	CORE RC Silicone Oil - 450cSt - 60ml
CR208	CORE RC Silicone Oil - 500cSt - 60ml
CR209	CORE RC Silicone Oil - 550cSt - 60ml
CR210	CORE RC Silicone Oil - 600cSt - 60ml
CR211	CORE RC Silicone Oil - 700cSt - 60ml
CR212	CORE RC Silicone Oil - 800cSt - 60ml
CR213	CORE RC Silicone Oil - 900cSt - 60ml
CR214	CORE RC Silicone Oil - 1000cSt - 60ml
CR215	CORE RC Silicone Oil - 1300cSt - 60ml
CR216	CORE RC Silicone Oil - 2000cSt - 60ml
CR217	CORE RC Silicone Oil - 3000cSt - 60ml
CR218	CORE RC Silicone Oil - 4000cSt - 60ml
CR219	CORE RC Silicone Oil - 5000cSt - 60ml
CR220	CORE RC Silicone Oil - 6000cSt - 60ml
CR221	CORE RC Silicone Oil - 7000cSt - 60ml
CR222	CORE RC Silicone Oil - 10000cSt - 60ml
CR223	CORE RC Silicone Oil - 20000cSt - 60ml
CR224	CORE RC Silicone Oil - 30000cSt - 60ml
CR225	CORE RC Silicone Oil - 40000cSt - 60ml
CR226	CORE RC Silicone Oil - 50000cSt - 60ml
CR227	CORE RC Silicone Oil - 100000cSt - 60ml
CR228	CORE RC Silicone Oil - 300000cSt - 60ml
CR229	CORE RC Silicone Oil - 12000cSt - 60ml
CR230	CORE RC Silicone Oil - 15000cSt - 60ml
G010	Pure Silicone Shock Oil - 10w
G015	Pure Silicone Shock Oil - 15w
G020	Pure Silicone Shock Oil - 20w
G025	Pure Silicone Shock Oil - 25w
G030	Pure Silicone Shock Oil - 30w
G050	Pure Silicone Shock Oil - 50w
MR33-OIL	MR33 Oil Bag L260 x W160 x H180mm

**SPEED PACKS**

CR024	CORE RC - Serrated M4 Steel Wheel Nut pk4
CR035	CORE RC - Serrated Alloy M4 Nuts; Blue pk 4
CR036	CORE RC - Serrated Alloy M4 Nuts; Violet pk 4
CR061	Small Body Clip 1/10 - Silver (8)
CR062	Small Body Clip 1/10 - Gold (8)
CR063	Small Body Clip 1/10 - Fluorescent Yellow (8)
CR064	Small Body Clip 1/10 - Fluorescent Green (8)
CR065	Small Body Clip 1/10 - Fluorescent Red (8)
CR066	Small Body Clip 1/10 - Metallic Green (8)
CR067	Small Body Clip 1/10 - Metallic Red (8)
CR068	Small Body Clip 1/10 - Metallic Blue (8)
CR069	Small Body Clip 1/10 - Metallic Purple (8)
CR196	Core RC - Serrated Alloy M4 Nuts - Black - pk4

**SPEED PACKS CONT....**

U1544	SPEED PACK - Short M3; Cap Hd
U1545	SPEED PACK - M3 Cap Hd 16;20mm
U1547	SPEED PACK - M3 Nuts
U1548	SPEED PACK - M3 Washers
U1550	SPEED PACK - Socket Wrenches (pk3)
U1551	SPEED PACK - E Clips -2 x 8pcs
U1552	SPEED PACK - R Clips
U1606	SPEED PACK - Servo Tape - 30pk
U1633	SPEED PACK - Small Pins (pk)
U1960	SPEED PACK - O Rings; Various
U2128	SPEED PACK - Grub-Set Screws M3 M4
U2187	SPEED PACK - M3 Nyloc Nut - Purple Alloy (pk8)
U2356	SPEED PACK - M3x16-30 Csk Screws (pk12)
U2760	SPEED PACK - M3 Button Hd; 4 to 20
U2856	SPEED PACK - Sticky Cable Clips (pk10)
U2857	SPEED PACK - Small Cable Ties (pk25)
U2988	SPEED PACK - M3 Csk Washers - Purple Alloy (pk10)
U3022	SPEED PACK - M3x8 Csk Allen Hi-T
U3023	SPEED PACK - M3x10 Csk Allen Hi-T
U3024	SPEED PACK - M3x12 Csk - M3 x 10 Button Screws
U3131	SPEED PACK Alloy Spacers M3x7mm 0.5;1;2mm (pk18)
U3572	SPEED PACK - M3x14 Grub Srew pk4
U3938	SPEED PACK - Black nylon washer 2mm (pk 10)
U4124	SPEED PACK - Shims 5 x 7 x 0.4mm - pk6
U4155	SPEED PACK - M3 Csk Washers - Black Alloy (pk10)
U4210	SPEED PACK - Pinion Grub Screw Set pk10
U4241	SPEED PACK - M3 Alloy Nyloc Nuts - Black - pk10
U4351	SPEED PACK - Shims 3.2x6x0.1mm - pk8
U4650	Black Steel Nyloc Nut - (pk10)

**SPEED SECRET - OPTION PARTS**

CR043	CORE RC - Silver X-Weights 16pcs
CR058	CORE RC - Black X-Weights 16pcs
CR192	Alloy Servo Arm 25T - Futaba Short
CR193	Alloy Servo Arm 23T - KO/Sanwa Short
CR280	Ti Pro Ball Studs - Short - pair
CR281	Ti Pro Ball Studs - Ultra Short - pair
CR282	Ti Pro Ball Studs - Long - pair
S500B	Schumacher BANNER 6x3ft
U1573	Titanium Turnbuckle; purple - 53mm (pr)
U1574	Titanium Turnbuckle; purple - 60mm (pr)
U1954	Pro - Thrust Bearing
U2566	Titanium Turnbuckle - 45mm (pr)
U3019	Diff Balls; Ceramic Nitride 2.5mm (pk12)
U3348	Gear; CNC 80t Spur - Slipper
U3350	Gear; CNC 82t Spur - Slipper
U3499	Roll Bar Blocks - Mi4 pk4
U3605	Alloy Rear Hubs; 1 deg - CAT/Cougar
U3611	Alloy Spring Seat - All shock types pr
U3758	Yokes; 5 deg - Cougar
U3790	Gear; CNC 76T Spur - Slipper
U3852	Diff Output; Male - SX3/K1/KF ball diffs
U3853	Diff Output; Female - SX3/K1/KF ball diffs
U3854	Diff Screw Set; HD
U3855	Ball Bearing 5x10x3 Open (pr)
U4054	Wishbones Rear Medium - Cougar SV2
U4098	Wishbones Front - Long Med Flex - Cougar pr
U4169	C/F Link Mount; Rear 33.50mm - K1/KF
U4170	C/F Link Mount; Rear 42.50mm - K1/KF
U4172	Roll Bar Set - Rear - K1/KF - Set 4
U4196	Ball Diff Pulley & Fences - K1/KF
U4199	Ball Diff HD (Heavy Duty)- Assembled - K1/KF
U4226	Gear; CNC 71T Spur - Slipper
U4228	Alloy Yokes - 2WD - 5deg - Cougar
U4323	4mm Bando Belt 103T - KF(low grip)
U4378	Skid Plate - Cougar
U4403	Shorty Lipo Locators - KF
U4453	C/F Front Link Mount 40.5mm - KF/KR/SV2
U4454	C/F Front Link Mount 45.5mm - KF/KR/SV2
U4455	C/F Front Link Mount 60mm - KF/KR/SV2
U4494	4mm Bando Belt 117T - Cougar KF
U4510	Hex to Pin Drive Conversion - Cougar KF/KR
U4615	Alloy Upper Rear Trans (Reverser only)- KF/K1/Aero
U4616	Alloy Upper Rear Trans Housing V2 Complete- KF/K1/Aero
U4619	Alloy Center Track Rod - 2WD
U4620	Alloy Hub Carrier 2WD Front L/R - pr
U4621	Alloy Front Link Mount - 2WD
U4640	Alloy Rear Link Mount - 2WD/4WD
U4687	C/F Chassis - KF2
U4696	Fan Mount - KF2
U4697	Shorty Lipo Strap - KF2 - (pr)
U4703	Alloy Yokes Odeg - 2wd
U4706	Shorty LiPo Conversion Set - KF2
U4708	Low Grip Conversion - KF2



**PINIONS**

U2305	16T Steel Pinion - 48 D.P.
U2306	17T Steel Pinion - 48 D.P.
U2307	18T Steel Pinion - 48 D.P.
U2308	19T Steel Pinion - 48 D.P.
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.
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

**TOOLS**

CR044	CORE RC - Curved Body Scissors
CR045	CORE RC - Straight Body Scissors
CR100	Shock Shaft Pliers - Purple
CR101	Shock Shaft Pliers - Black
CR102	Magnetic Parts Tray - Purple
CR103	Magnetic Parts Tray - Black
CR148	CORE RC - Polybuter Pit Box; Black
CR233	Piston Drilling Kit-1.1-1.8mm (8 bits)
CR271	4 Way Wrench Small - 4.0,4.5,5.5,7.0mm
ED120115	Ball Allen Wrench 1.5mm x 120mm
ED181002	Chassis Droop Gauge Blocks 20mm for 1/8,1/10 (2)
ED190012	Reamer with Protection Cap for Body - 14mm
H1032	Alloy Camber Gauge - 1/10th
H1056	Loctite 243 Thread Lock 3ml
H1057	Loctite Precision Super Glue - 5g
U2789	Schumacher Hex Driver - 1.5mm
U2790	Schumacher Hex Driver - 2.0mm
U2791	Schumacher Hex Driver - 2.5mm
U2795	Schumacher M3 Nut Driver
U2796	Schumacher M4 Nut Driver
U2818	Schumacher Body Reamer
U4229	Steel Spanner - 5.5mm/3.9mm

**GENERAL ACCESSORIES**

CR197	CORE RC - Glass Setup Board
CR297	CORE RC - Neoprene Bag
CR520	Medium Thread Lock 3ml
CR521	Super Glue Activator 63ml
CR522	CORE RC - 522 Pro Tyre Glue + 2 Nozzles
G353	Schumacher Glass Setup Board
G354	Schumacher - Neoprene Bag
G355	Schumacher Hauler Bag
J003	Contact RC - Glass Setup Board
J004	Contact RC - Neoprene Bag
MR-CSOFFROAD	MR33 Car Stand Off Road
MR-SUPER GLUE	Perfect Super Glue for Rubber Tyres

**SERVOS**

KO30049	Servo - PDS-2501ICS - .12 - 7.4Kg
KO30050	Servo - PDS-2502ICS - .15 - 8.3Kg
KO30051	Servo - PDS-2511ICS - .13 - 9.6Kg
KO30052	Servo - PDS-2512ICS - .16 - 10.8Kg
KO30059	Servo - PDS-2531ICS Yellow - .13 - 9.5Kg
KO30104	Servo - RSx one 10 low profile - .10 - 10Kg
KO30105	Servo - RSx one 10 Response Low Profile-.09-7K
KO30106	Servo - RSx2 Response HC - .07 - 14.5Kg
KO30108	Servo - RSx2 Response - .07 - 14.5Kg
KO30201	Servo - BSx2 Response HC - .09 - 15.4Kg
KO30203	Servo - BSx2 Response - .09 - 15.4Kg

**ELECTRONICS**

CR162	CORE RC Sensor Checking Widget
CR195	Portable Emergency 60W Soldering Iron
CR249	Futaba Servo Wires Black
CR250	JR Servo Wires Black

**ELECTRONICS CONT...**

ED199502	EDS Ultra Bright L.E.D. Light Stand
MR33-GOLD2	4mm Gold Connectors pk 4
SK-500014	Multi-Functions Motor Dymo
SK-500015	Corner Weight System
SK-600074	LED Pit Light 11-18V DC

**CHARGERS AND DISCHARGERS**

CR031	UDC Charger Connector Set - 8pcs
CR114	UDC Balance Adaptor Set JST-XH to JST-EH 2-6S
CR161	UAC50 Charger 12v/110-240v 6A
NR91400	Sigma Power Charger
NR91555	Stealth Touch Evolution Charger
NR93160	Nosram Power Supply 13.8V / 20A
NR95815	Nosram Universal Charging Lead-Tamiya/JST Plug
NR95816	Nosram Universal Chg Lead-2S Lipo H/Case/Bal Adpt
NR95817	Nosram Universal Chg Lead- US-Style Plug
SK-100013	SKY RC - Quattro B6 Charger 50Wx4 AC/DC
SK-100046	Sky-RC Quattro B6 Charger 80Wx4 DC
SK-100064-01	T6755 Charger 7A 55W AC/DC Touch Screen
SK-100068-01	SKY RC 6 x 80+ Charger Blue Version
SK-100069	Synchronous DC Charger 1000W 40A
SK-100072-01	T6200 Charger 12A 200W DC Touch Screen
SK-100078-01	SKY RC RS16 - 180W 16A DC Charger
SK-100084	Imax B6 Mini Charger 6A 60W DC
SK-100087	Ultimate Duo Charger 500x2 - 25A DC
SK-100089	D100 Charger (2x100w) with Power Dist in AC Mode
SK-200008-01	SKY RC 15V - 4AAC Adapter
SK-200012-03	SKY RC 15V - 7AAC Adapter
SK-200013-01	eFuel 30A 540W Power Supply
SK-200015-01	eFuel 50A 1200W Power Supply
SK-200017-01	SKY RC 17A Power Supply (UK Plug)
TP1201P	100-240V AC - 12V DC, 1.0A Switching Adaptor TP103
TP1205P	100-240V AC-12V DC, 5.0A Switching Adaptor
TP14SAB-TPJXH	Balance Conn Adaptor 2S-14S JST-XH - TP1430C
TP205V	Thunder Power 2-5 Cell Lipo Smart Balancer
TP610C	Thunder Power 10 Amp DC Balance Charger
TP610C-ACDC	Thunder Power 10 Amp AC/DC Balance Charger
TP610C-BL2	Balance Conn Adaptor 2S/6S JST-XH 610C-ADC
TP820CD	Dual Port 20A DC charger/Cycler
TP8SAB-TPJXH	Balance Conn Adaptor Board 2S-8S JST-XH 820CD
TPDLC-250A	Thunder Power Balancer to Charger Data Link Cable

**BRUSHLESS MOTORS**

HW30401020043	XERUN - 1/10 Sensored BL Motor V10 - 5.5T
HW30401020044	XERUN - 1/10 Sensored BL Motor V10 - 6.5T
HW30401020045	XERUN - 1/10 Sensored BL Motor V10 - 8.5T
HW30401020064	XERUN - 1/10 Sensored BL Motor V10 - 7.5T
NR90648	Nosram Pure 2 BL - 10.5T
NR90649	Nosram Pure 2 BL - 9.5T
NR90654	Nosram Pure 2 BL - 8.5T
NR90664	Nosram Pure 2 BL - 7.5T
NR90674	Nosram Pure 2 BL - 6.5T
NR90684	Nosram Pure 2 BL - 5.5T
NR90689	Nosram Pure 2 BL - 5.0T
NR90704	Nosram Pure 2 BL - 4.0T
SK-400003-24	ARES Pro BL Motor 6.5T
SK-400003-25	ARES Pro BL Motor 7.5T
SK-400003-26	ARES Pro BL Motor 8.5T
SK-400003-27	ARES Pro BL Motor 9.5T
SP000148	1/10 Competition MMM Series 5.0R BL Motor
SP000149	1/10 Competition MMM Series 5.5R BL Motor
SP000151	1/10 Competition MMM Series 4.0R BL Motor
SP000259	Speed Passion V3.0 Comp BL Motor-6.0T
SP001224	Speed Passion Comp V4.0 Motor 5.5T
SP001226	Speed Passion Comp V4.0 Motor 6.5T
SP001227	Speed Passion Comp V4.0 Motor 7.5T
SP001228	Speed Passion Comp V4.0 Motor 8.5T
SP001229	Speed Passion Comp V4.0 Motor 9.5T
SP1385V3	Speed Passion V3.0 Comp BL Motor; 5.5T
SP1386V3	Speed Passion V3.0 Comp BL Motor; 6.5T
SP1387V3	Speed Passion V3.0 Comp BL Motor; 7.5T
SP1388V3	Speed Passion V3.0 Comp BL Motor; 8.5T
TPM-540A055	Thunder Power 5.5T Modified 540 BL Motor
TPM-540A060	Thunder Power 6.0T Modified 540 BL Motor
TPM-540A065	Thunder Power 6.5T Modified 540 BL Motor
TPM-540A075	Thunder Power 7.5T Modified 540 BL Motor
TPM-540A085	Thunder Power 8.5T Modified 540 BL Motor
TPM-540A095	Thunder Power 9.5T Modified 540 BL Motor

**BRUSHLESS SPEEDCONTROLS**

CR173	PACE 45R Brushless ESC 1s/2s
CR174	PACE 45R/60R Programming Card
CR199	PACE 60R Brushless ESC 1S/2S
HW81010130	EZRUN-35A-SL - BL ESC - for 1/10 Car & Truck
HW81010190	EZRUN-60A-SL - BL ESC - for 1/10 Car & Truck
HW81010390	EZRUN-WP-80A-SL - BL ESC - for 1/10 waterproof



**BRUSHLESS SPEEDCONTROLS CONT...**

HW81010400	EZRUN-WP-SC8 -120A BL ESC - 1/10 1/8 waterproof
HW81020010	XTREME Stock BL ESC - Blue - 60A
HW81020011	XTREME Stock BL ESC - Black - 60A
HW81020170	XERUN - V2.1 - BL ESC-120A - Blue
HW81020340	XERUN-V3.1 BL-ESC-Blue 120A
HW81020350	XERUN-V3.1 BL-ESC-Black 120A
HW81020360	XERUN-V3.1 BL-ESC-Red 120A
NR90430	NOSRAM One Brushless ESC
NR90960	Comet EVO Brushless Speed Control
NR90970	Comet HD Brushless Speed Control
SK-300044-01	Toro TS 120A ESC
SK-300062-02	Toro TS 120A Alloy ESC - Black
SP000043	Reventon-R ESC - 2S - Orange
SP000063	Reventon-R ESC - 2S - Blue
SP000064	Reventon-R ESC - 2S - Silver
SP000739	Reventon Pro ESC-2S - V1.1 Black
SP000740	Reventon Pro ESC-2S - V1.1 - Laser Blue

**BRUSHLESS ESC and MOTOR COMBO**

HW81030050	EZRUN Combo B4 - 5.5t 6000kV+ EZRun 60A SL
HW81030060	EZRUN Combo B5 - 8.5t 4000kV+ EZRun 60A SL
HW81030150	EZRUN Combo B6 - 9t 4300kV + EZRun 60A SL
SP000191	Reventon-R ESC-2S-Comp V3.0-7.5R Combo
SP000192	Reventon-R ESC-2S-Comp V3.0-8.5R Combo
SP000199	Reventon Stock Club Race 8.5 Combo Comp V3 Motor
SP001032	Reventon Pro V1.1 ESC Comp V3.0-5.5R Combo
SP001033	Reventon Pro V1.1 ESC Comp V3.0-6.0R Combo
SP001034	Reventon Pro V1.1 ESC Comp V3.0-6.5R Combo
SP001035	Reventon Pro V1.1 ESC Comp V3.0-7.5R Combo
SP001036	Reventon Pro V1.1 ESC Comp V3.0-8.5R Combo
SP001037	Reventon Pro V1.1 ESC Comp V3.0-9.5R Combo
SP001038	Reventon Pro V1.1 ESC Comp V3.0-10.5R Combo
SP001039	Reventon Pro V1.1 ESC Comp V3.0-13.5R Combo
SP001040	Reventon Pro V1.1 ESC Comp V3.0-17.5R Combo
SP001041	Reventon Pro V1.1 ESC Comp V3.0-21.5R Combo
SP001144	Reventon Pro V1.1 ESC MMM 5.0R Combo
SP001145	Reventon Pro V1.1 ESC MMM 5.5R Combo
SP001146	Reventon Pro V1.1 ESC MMM 10.5R Combo
SP001147	Reventon Pro V1.1 ESC MMM 13.5R Combo
SP001149	Reventon Pro V1.1 ESC MMM 21.5R Combo

**BRUSHLESS ACCESSORIES**

CR133	Core Sensor Lead; 80mm
CR134	Core Sensor Lead; 180mm
CR253	110mm Flat Bonded Flex Sensor Wire
CR254	150mm Flat Bonded Flex Sensor Wire
CR255	200mm Flat Bonded Flex Sensor Wire
CR256	270mm Flat Bonded Flex Sensor Wire
HW2361200	XERUN - Sensor Cable - 120mm
HW2362000	XERUN - Sensor Cable - 200mm
HW30502000014	XERUN-EZRUN-Multifunction LCD Program Box
HW30860200010	XERUN 13000rpm Fan-2510SH-5v/0.16A for 2s
HW86020010	XERUN-EZRUN - Program Card for ESC
HW86030030	XERUN - Capacitors
HW86080120	EZRUN - Heat Sink with Fan for 3660,3674 motors
HW86080130	EZRUN - Heat Sink with Fan for 4465 motors
HW86080150	XERUN Large Fan 3010HB-5V/0.18A for 2s
MR-FAN PROTECTOR	MR33 25mm Fan Protector
NR90631	PURE MR104 Ceramic BB (pr)
NR90632	PURE Small Parts Set
NR90633	PURE Sensor Assembly
NR90636	PURE Evo Alloy End Cover
NR90637	PURE Evo 694ZZ Ball Bearings (2 pcs)
NR90644	PURE Evo Tuning Sintered Rotor - 12.0mm
NR90646	PURE Evo Tuning Sintered Rotor - 13.0mm
NR92501	USB Bridge Spec2 - Speedo Firmware Update Device
NR92512	Cooling Fan; Low Profile - Include Mounting Screws
NRR925307	NOSRAM Sensor Wire HighFlex 70mm
R925315	NOSRAM Sensor Wire HighFlex 150mm
NR925320	NOSRAM Sensor Wire HighFlex 200mm
SK-300046-01	Program Box
SP000007	Muti LED Program Card Version 2.0
SP000008	Reventon Blue-Tooth" Module"
SP000009	Reventon WiFi" Module"
SP000029	Sensor Unit +20 Timing"for V3.0 Motor-Green Color"
SP000034	Sensor Unit +10 Timing" for V3.0 Motor-Red Color"
SP000041	Sensor Unit for V3.0 - 4.0T/5.0T Motor
SP000059	Sensor Unit +40 Timing for V3.0 Motor Blue
SP001130	Reventon PRO 1.1 Fan
SP162801	SP - Sensor Cable 180mm
SP162802	SP - Sensor Cable 90mm
SP162810	SP - HiPower Solder Post; 3pcs
SP162820	SP - HiPower Connector; V3.0 Motors 3pcs
SP1EB01	SP Endbell; Fixed Timing V3.0
SPAMSSC3M	SP - Super Capacitor 3 Farads 6 Volt rated
SPCBB138238	SP - Ceramic Motor Bearing
SPRM13801	Rotor; V3.0 3.5T- 8.5T 12mm Blue
SPRM13802	Rotor; V3.0 3.5T- 8.5R 12.3mm S7 Purple
SPRM13802NA	Rotor; V3.0 3.5T- 8.5T 12.3mm S7 Silver

**BRUSHLESS ACCESSORIES**

SPRM13803NA	Rotor; V3.0 3.5T- 8.5T 12.5mm Silver
SPRM13804	Rotor; V3.0 3.5T-8.5R 12.8mm Golden
SPRM13805	Rotor; V3.0 3.5T- 8.5T 13mm Green
SPRM13806	Rotor; V3.0 3.5T-8.5T 13mm S7 Orange
TPM-P1000	Thunder Power Bearing Replacement Tool
TPM-P1001	T-Power Bearing Std 1/8x3/8x5/32 (2pcs) S/M 540"
TPM-P1002	T-Power Bearing Ceramic 1/8x3/8/5/32 (2pcs)S/M540"
TPM-P1005	Thunder Power Sensor Unit w/Std Bearing S/M540/550
TPM-P1007	Thunder Power Outer Can/Case w/Screws S/M 540
TPM-P1008	Thunder Power Timing Cap w/Screws S/M540/550
TPM-P1010	Thunder Power Sensor Wire Harness 110mm
TPM-P1011	Thunder Power Sensor Wire Harness 200mm
TPM-P1012	Thunder Power Sensor Wire Harness 270mm
TPM-P1014	Thunder Power Insulator Set (Fr/Rr) S/M 540/550
TPM-R540AHT	Stock Spec 540 Hi-Torque Rotor 12.5/7.25/25.0 Grn
TPM-R540AMR	Thunder Power Mod 540 Rotor 12.2/5.2/25.0 Purple
TPM-R540AMR-S	Thunder Power Mod 540 Rotor 12.0/5.0/25.3 Gold
TPM-R540ASR	T-Power Stock Spec 540 Rotor 12.2/7.25/24.2 Red
TPM-R540AST	T-Power StockSpec Torque Rotor 12.2/7.25/25.0 Blue
TPM-S540A030	Thunder Power 3.0T Modified 540 Stator
TPM-S540A035	Thunder Power 3.5T Modified 540 Stator
TPM-S540A040	Thunder Power 4.0T Modified 540 Stator
TPM-S540A045	Thunder Power 4.5T Modified 540 Stator
TPM-S540A050	Thunder Power 5.0T Modified 540 Stator
TPM-S540A055	Thunder Power 5.5T Modified 540 Stator
TPM-S540A060	Thunder Power 6.0T Modified 540 Stator
TPM-S540A065	Thunder Power 6.5T Modified 540 Stator
TPM-S540A075	Thunder Power 7.5T Modified 540 Stator
TPM-S540A085	Thunder Power 8.5T Modified 540 Stator
TPM-S540A095	Thunder Power 9.5T Modified 540 Stator
TPM-S540A105	Thunder Power 10.5T Stock Spec 540 Stator
TPM-S540A135	Thunder Power 13.5T Stock Spec 540 Stator
TPM-S540A175	Thunder Power 17.5T Stock Spec 540 Stator
TPM-S540A215	Thunder Power 21.5T Stock Spec 540 Stator

**BATTERIES**

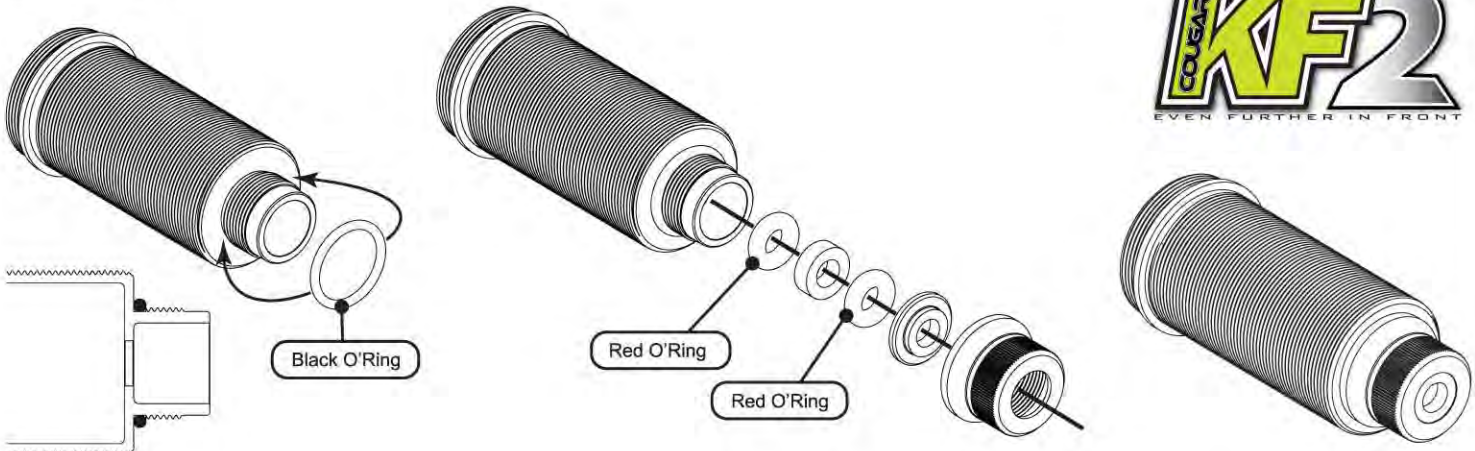
AM199502	Lipo Safe Bag (185 x 75 x 60mm)
CR007	CORE RC Silicone Wire 12g - Red/Black 2x50cm
CR008	CORE RC RED Connector with 2x4mm Tubes
CR009	CORE RC RED Connector with 2x4mm Males
CR050	CORE RC Silicone Wire 12g - Red 1 Metre
CR051	CORE RC Silicone Wire 12g - Black 1 Metre
CR052	CORE RC Silicone Wire 12g - Blue 1 Metre
CR053	CORE RC Silicone Wire 12g - Red 50 Metre Reel
CR054	CORE RC Silicone Wire 12g - Black 50 Metre Reel
CR055	CORE RC Silicone Wire 12g - Blue 50 Metre Reel
CR059	CORE RC - Safe Charge Pouch 23x30cm
CR115	CORE RC Silicone Wire 12g - Red/Black/Blue 3x50cm
CR124	Heatshrink 6.0mm dia Black - 20pcs
CR125	Heatshrink 6.0mm dia Red - 20pcs
CR170	CORE RC Lipo Locker - 17 x 8 x 7cm
CR171	CORE RC - 4000mAhR 7.4V 20C/40C Saddle Lipo.
CR287	Silicone Wire Black 14 AWG - 1Mtr
CR288	Silicone Wire Black 16 AWG - 1Mtr
CR294	CORE RC-4000mAhR 7.4V 30/60C 2S Shorty Lipo
CR295	CORE RC-5000mAhR 7.4V 30/60C 2S Saddle Lipo
G719	GP Alkaline AA Pencil; Card 8 + 4
H1046	T Connector; Red 2 Way - Male and Female
H1047	T Connector; Black 2 Way - Male and Female
H1048	T Connector; Red Sockets - pk4
H1049	T Connector; Black Sockets - pk4
IPBG2S4800V9	Intellect Shorty Lipo 4800mAh 2S- 90C- 7.4V G5
IPCC2S3500V9	Intellect-Shorty Lipo 3500mAh 2S- 90C- 7.4V G4
IPSQ2S6000V9	Intellect Lipo 6000mAh 2S-90C-7.4V-Square
IPTP2S6000V8	Intellect - Saddle Lipo 6000mAh 2S - 80C- 7.4V
MR-SB	MR33 Lipo Bag
SK-500007-01	SKY RC Lipo Pal
TP3800-2SPR65S	Thunder Power Lipo 3800mAh 2S shorty - 65C/130C
TP4P10E	Thunder Power 4 Pin Balance connector 10Extension"
TP4P8E	TP 4 Pin Balance Connector 8 Colour Coded Wires"
TP5000-2SPR65S	Thunder Power Lipo 5000mAh 2S saddle - 65C/130C
TP6P10E	Thunder Power 6 Pin Balance Connector 10Extension"
TP6P13E	TP 6 Pin Balance Connector 13 Colour Coded Wires"
TP6P4PE	Thunder Power 6 Pin Adaptor/Extension
TPLSBL	Thunder Power Lipo Charge Bag Large 9 x 12"
TPLSBS	Thunder Power Lipo Charge Bag Small 7 x 8" x 5"

**TRANSMITTERS AND RECEIVERS**

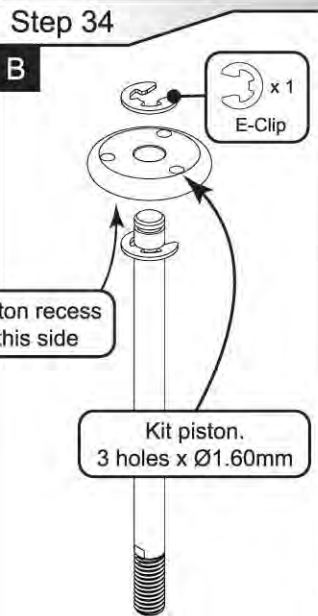
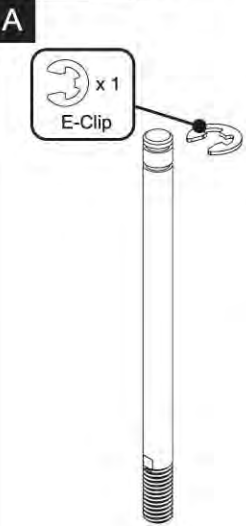
CR151	CODE 2.4G FHSS LCD 2 Stick TxRx
CR152	CODE 2.4G FHSS LCD - Rx Only
CR153	CODE 2.4G FHSS Sport 2 Stick TxRx
CR154	CODE 2.4G FHSS Sport - Rx Only
CR155	Antenna 2.4G
KO21007	KR-413FH Micro Receiver
KO80540	EX-1 Ver 3 (KIY) KR-413FH Set - TX + RX
KO80700	Esprit IV - Stick Radio Set



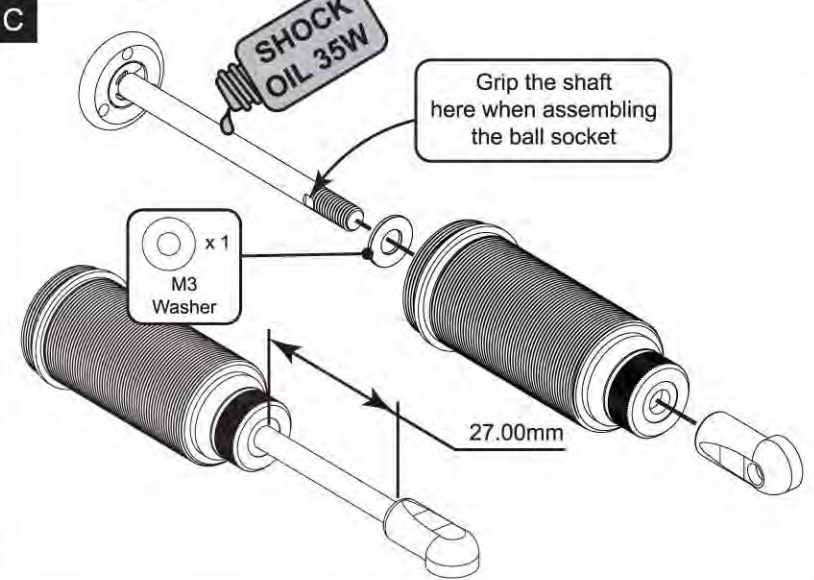
Step 33



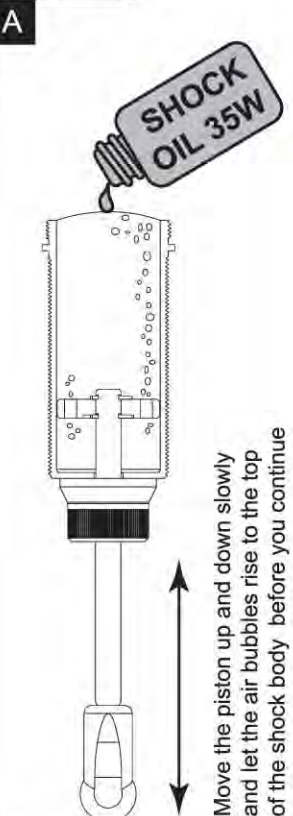
Step 34



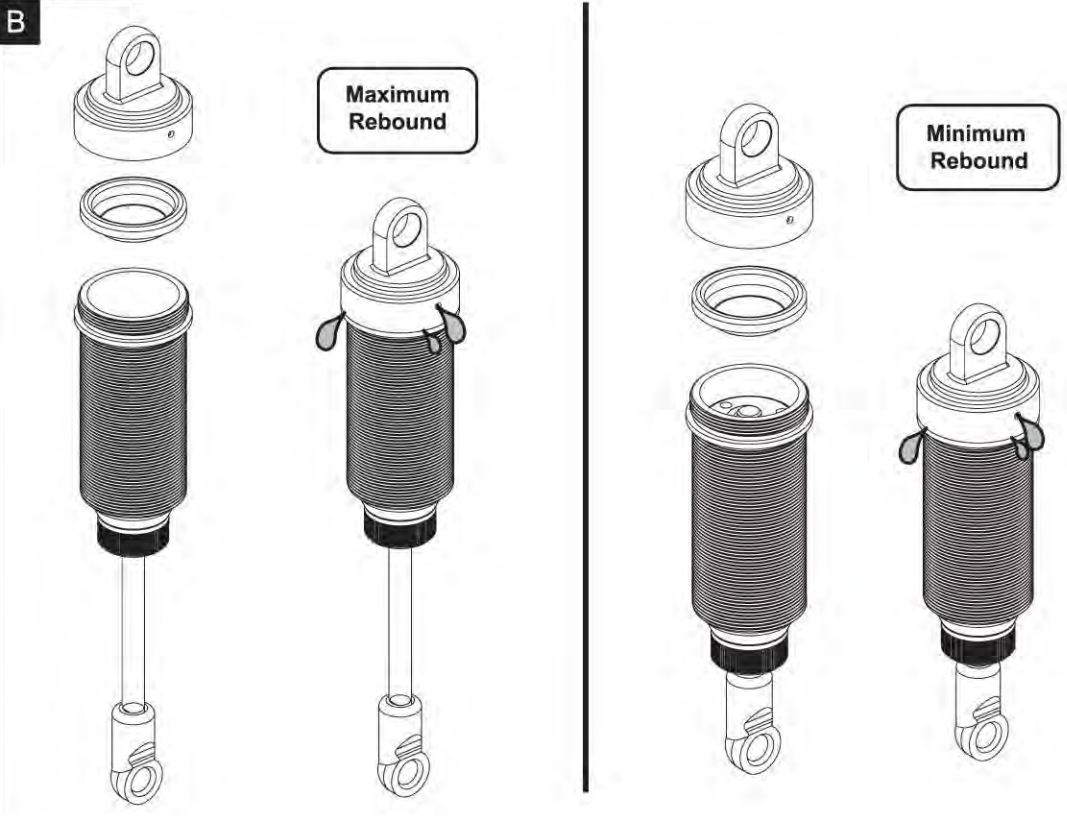
Step 34



Step 35



Step 35





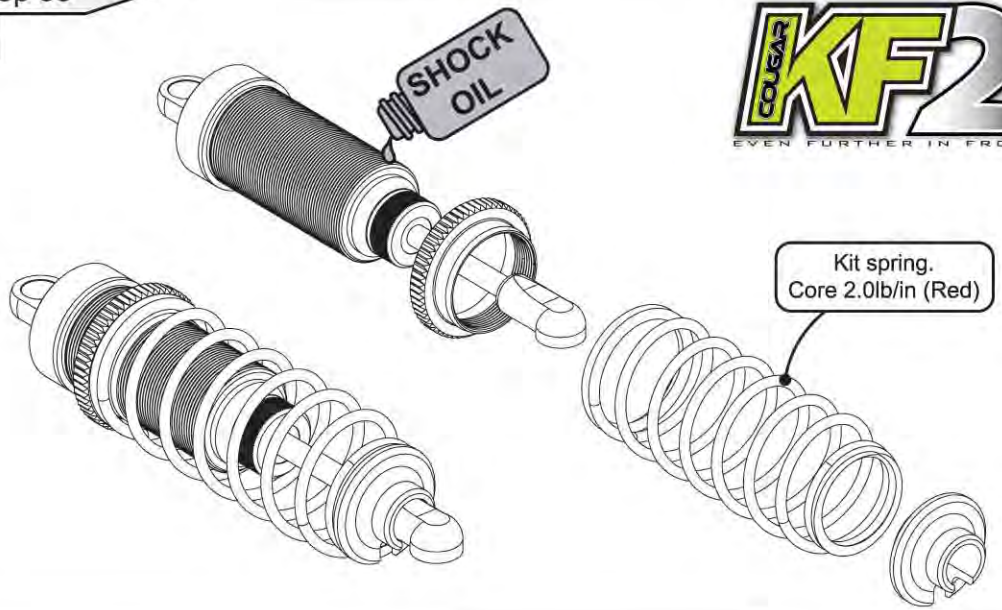
Step 35

C



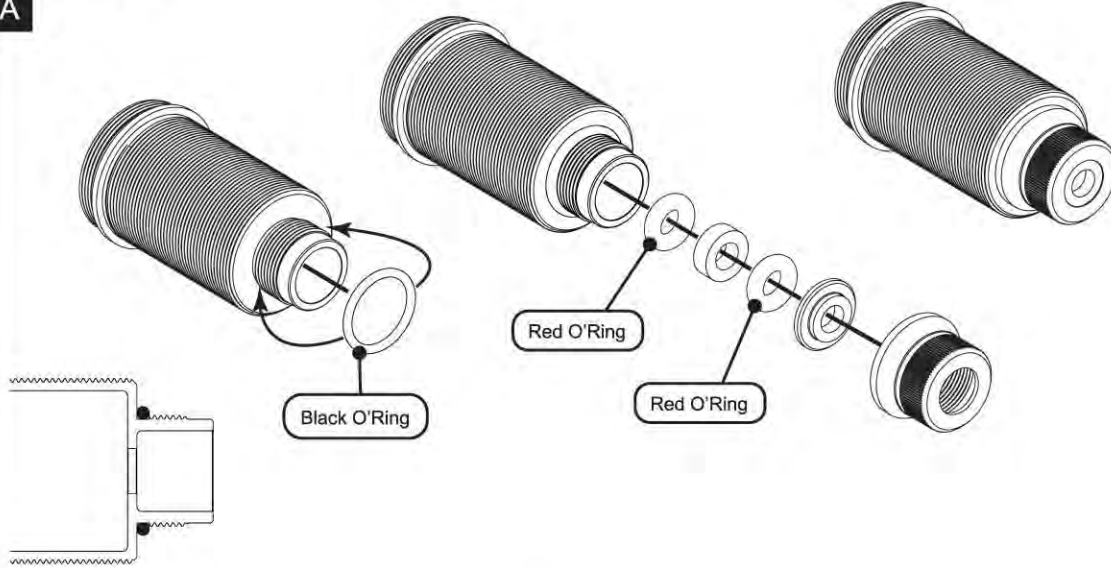
Step 35

D



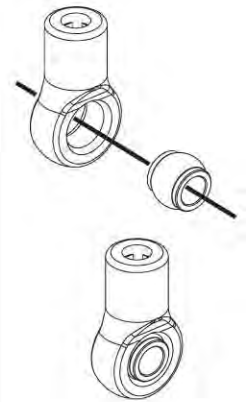
Step 36

A



Step 36

B



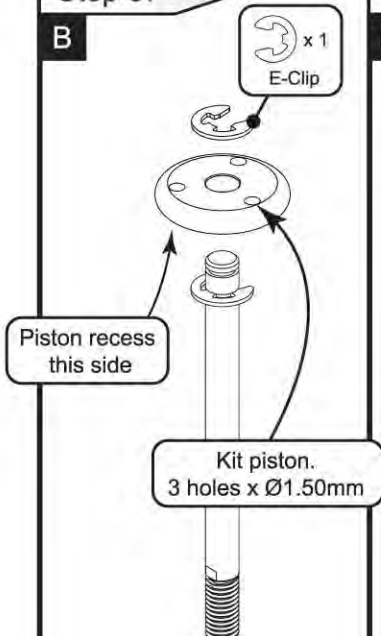
Step 37

A



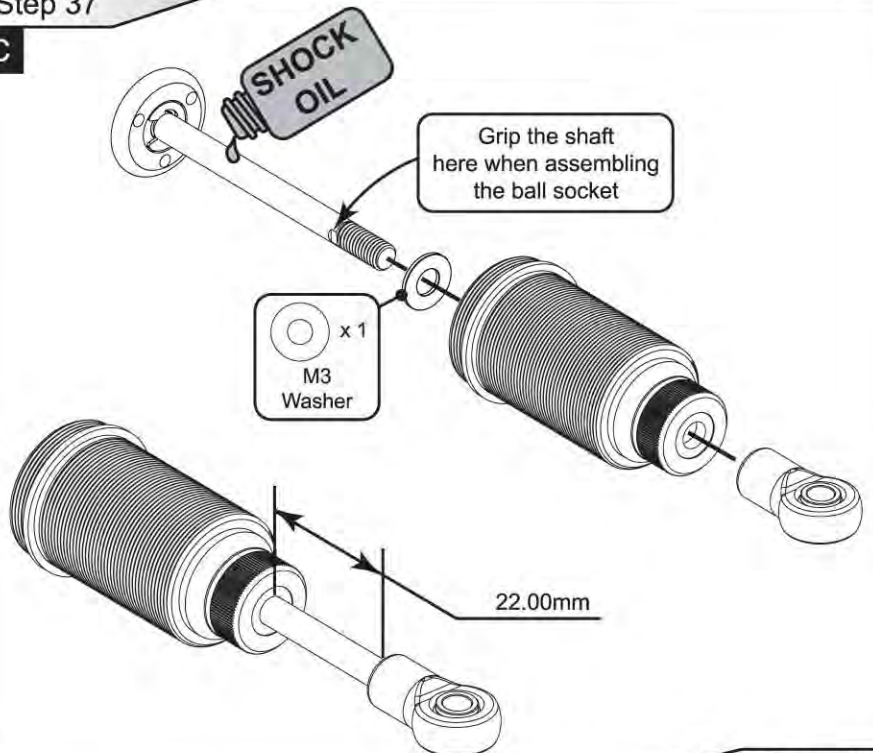
Step 37

B



Step 37

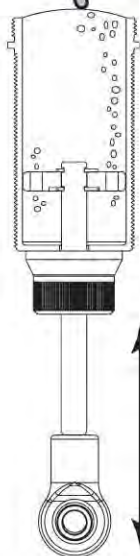
C





Step 38

A



Move the piston up and down slowly and let the air bubbles rise to the top of the shock body before you continue

Step 38

B



Maximum Rebound



Minimum Rebound



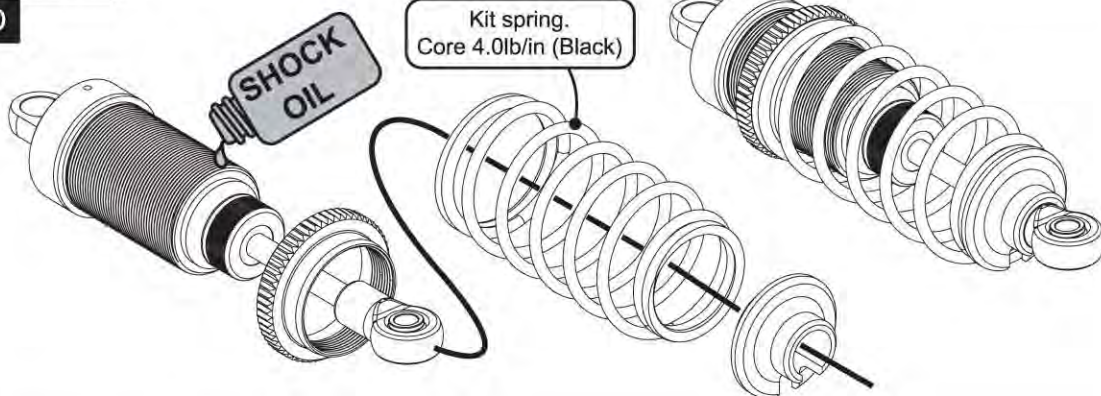
Step 38

C

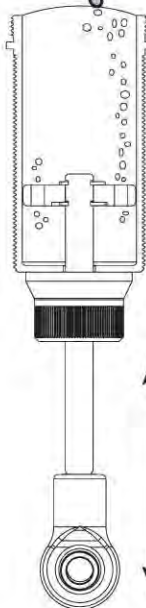
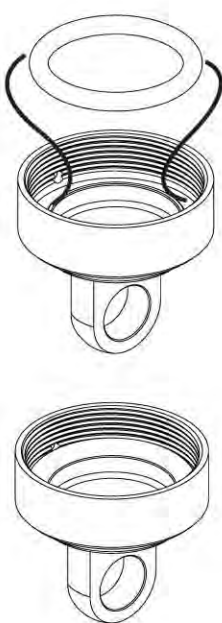


Step 38

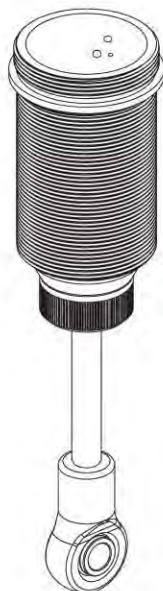
D



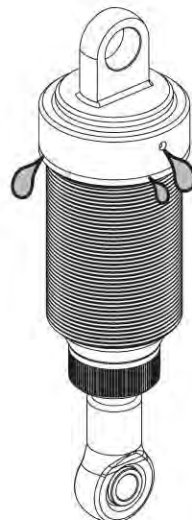
Optional Emulsion Shock



Move the piston up and down slowly and let the air bubbles rise to the top of the shock body before you continue.

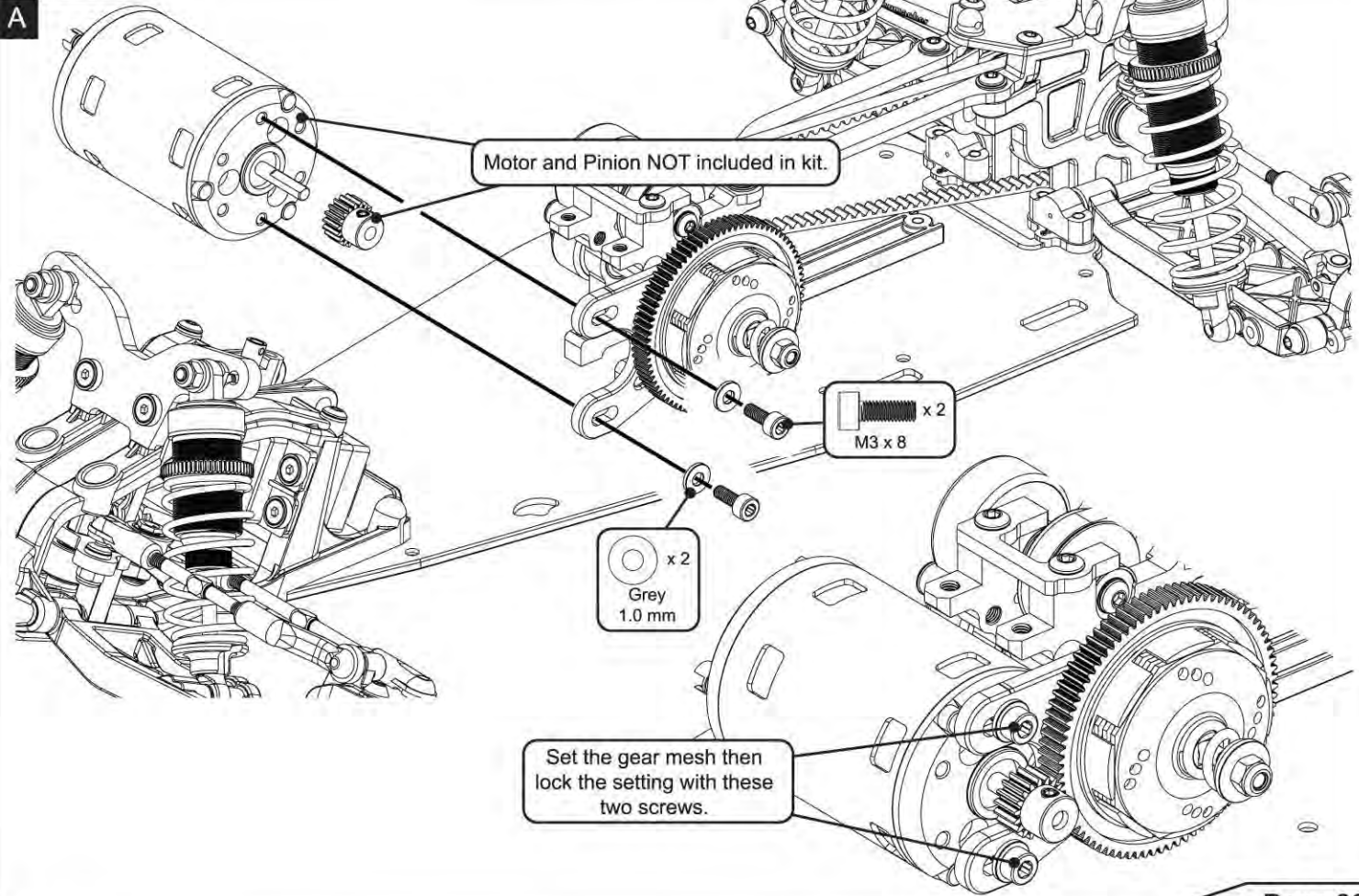
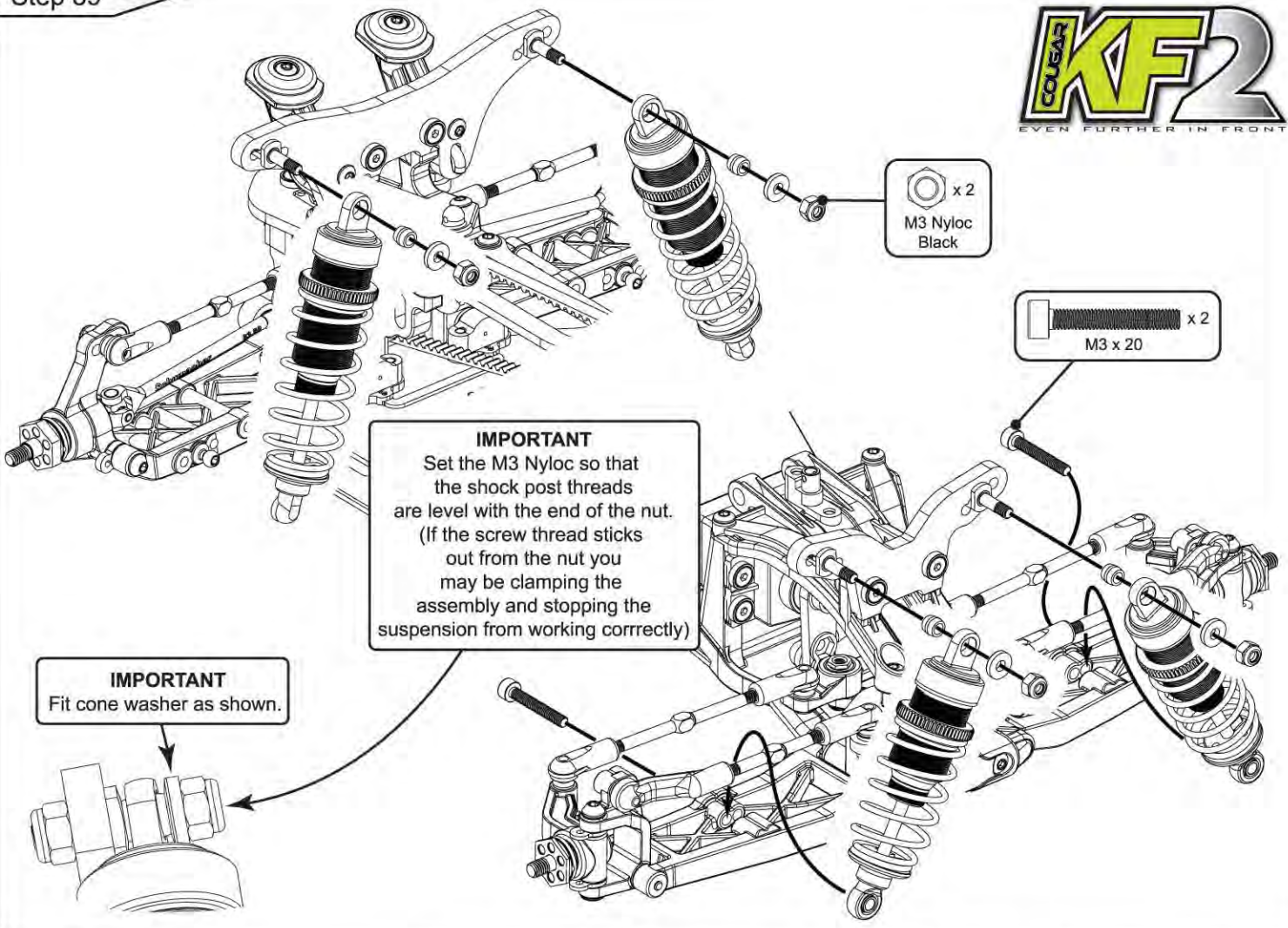


Screw the cap and O'ring onto the body. Then tighten the cap fully and undo two full turns.

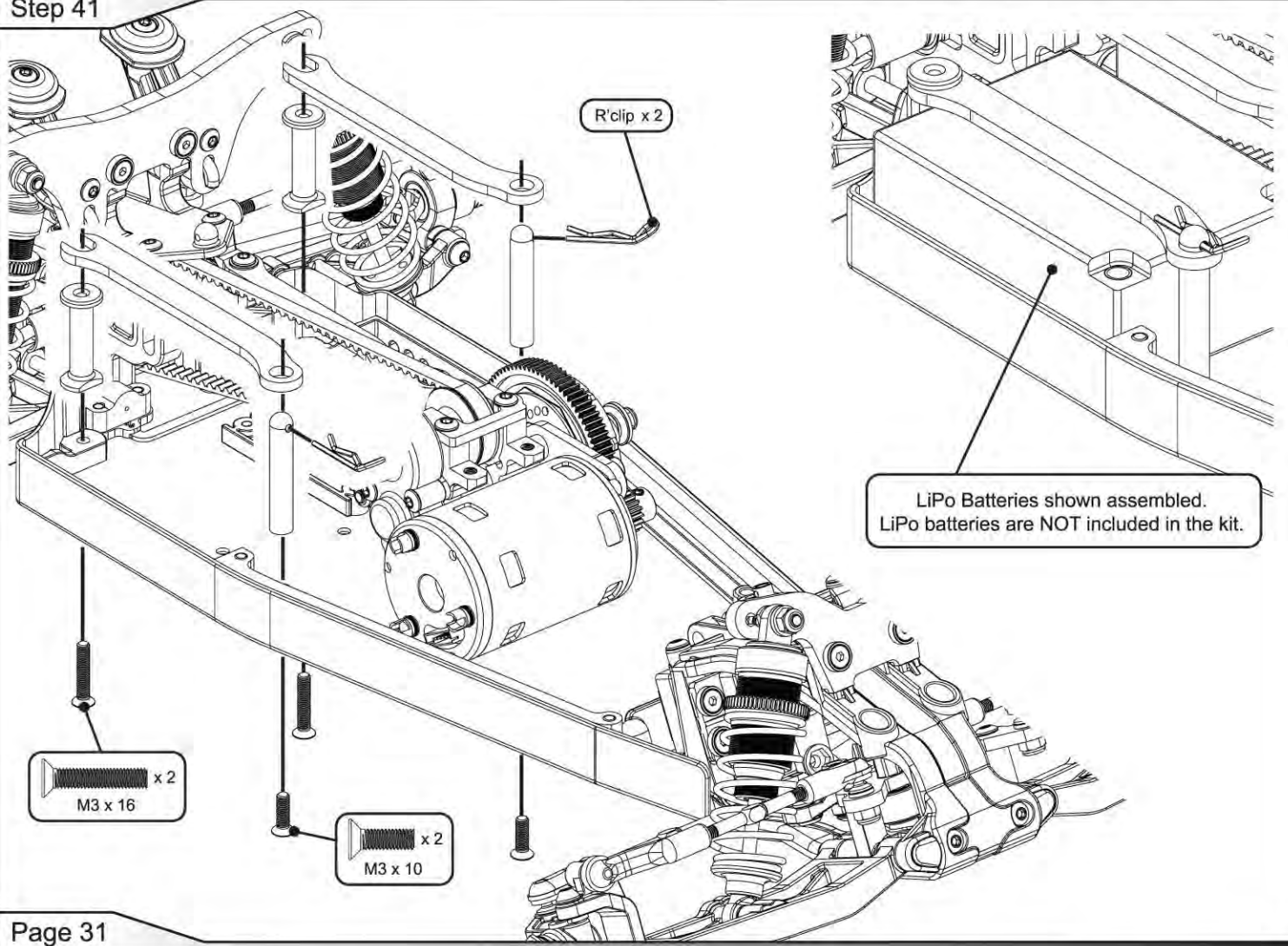
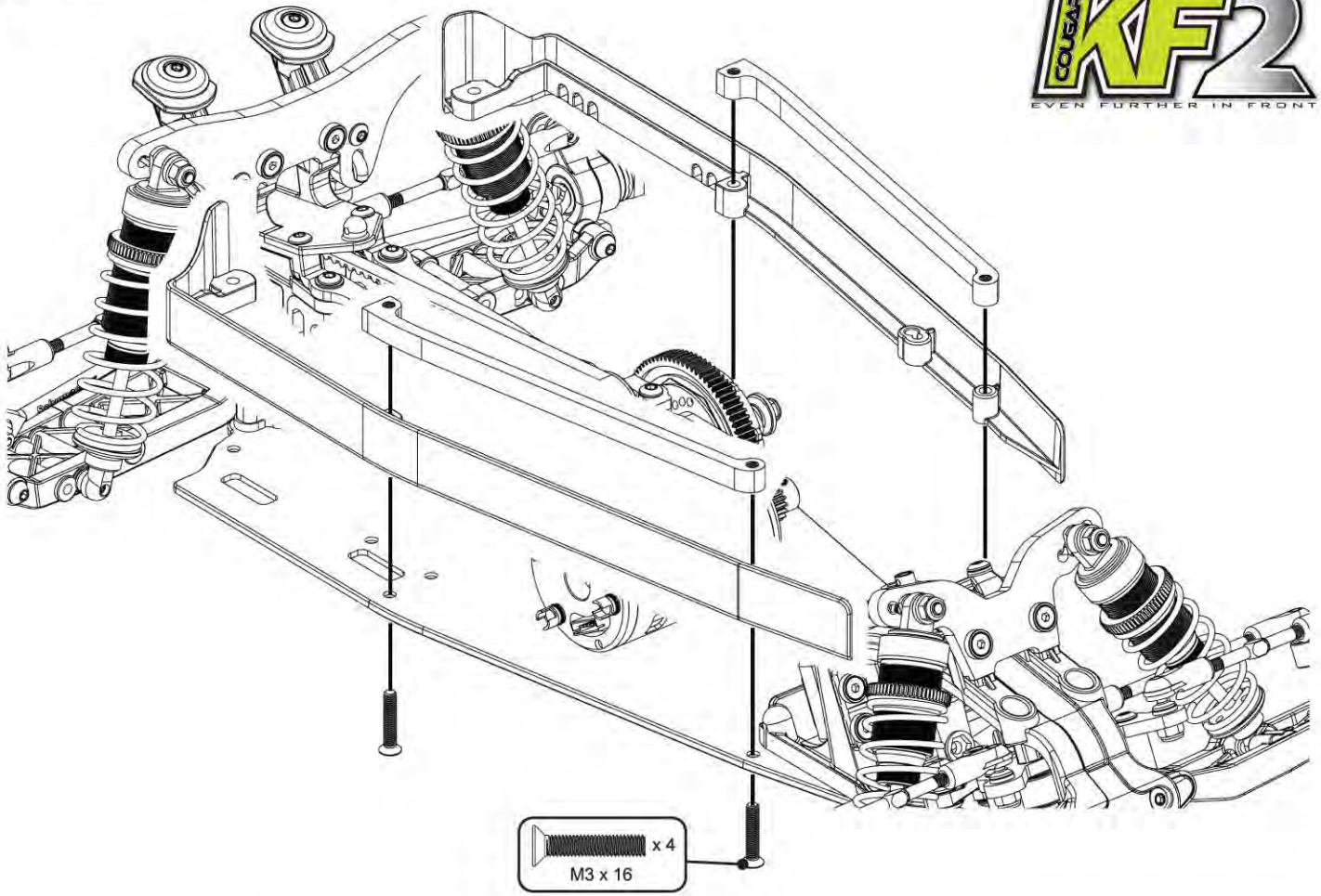


Fully compress the shaft into the body. Once the excess oil has been expelled from the shock, then fully tighten the cap.





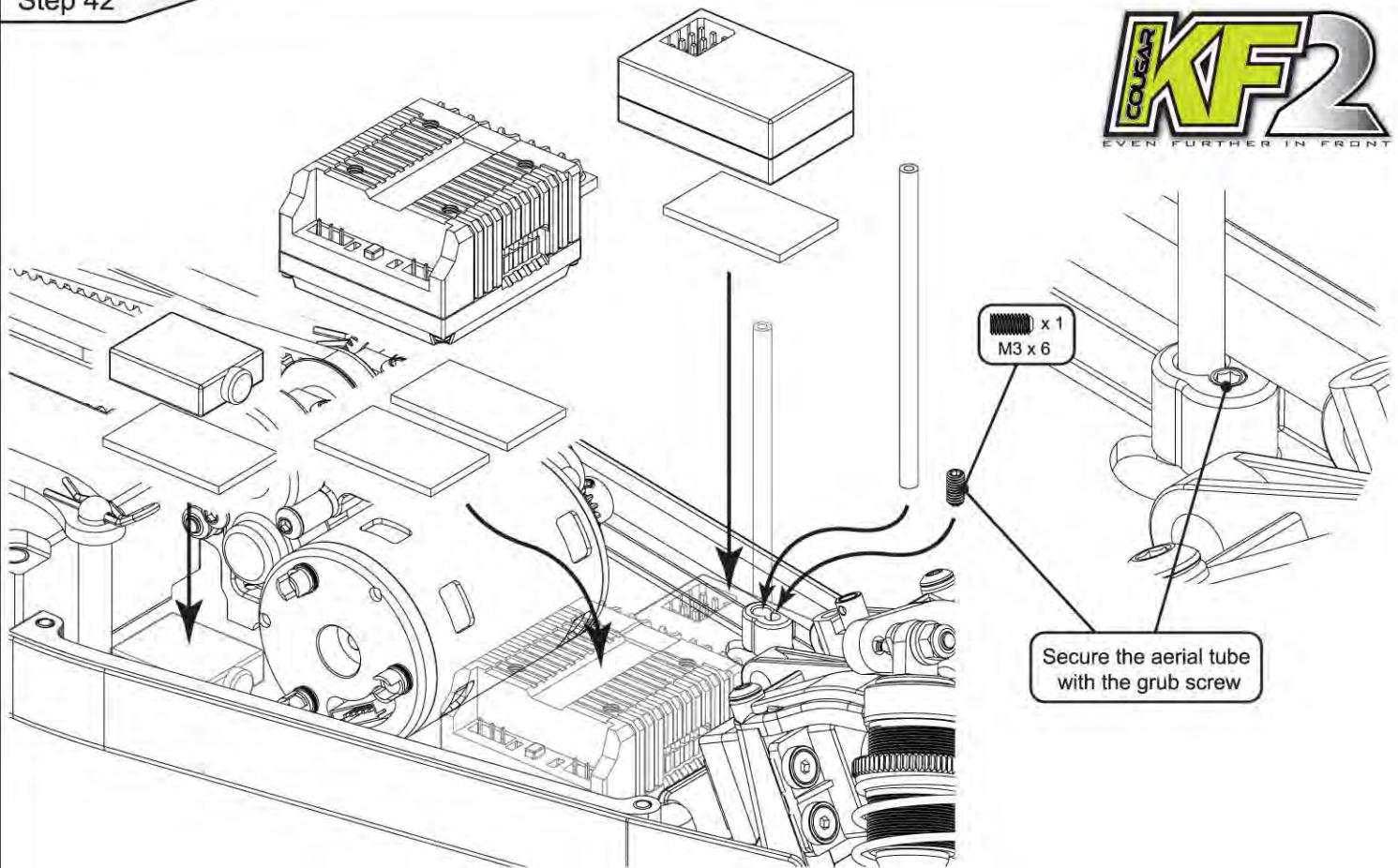




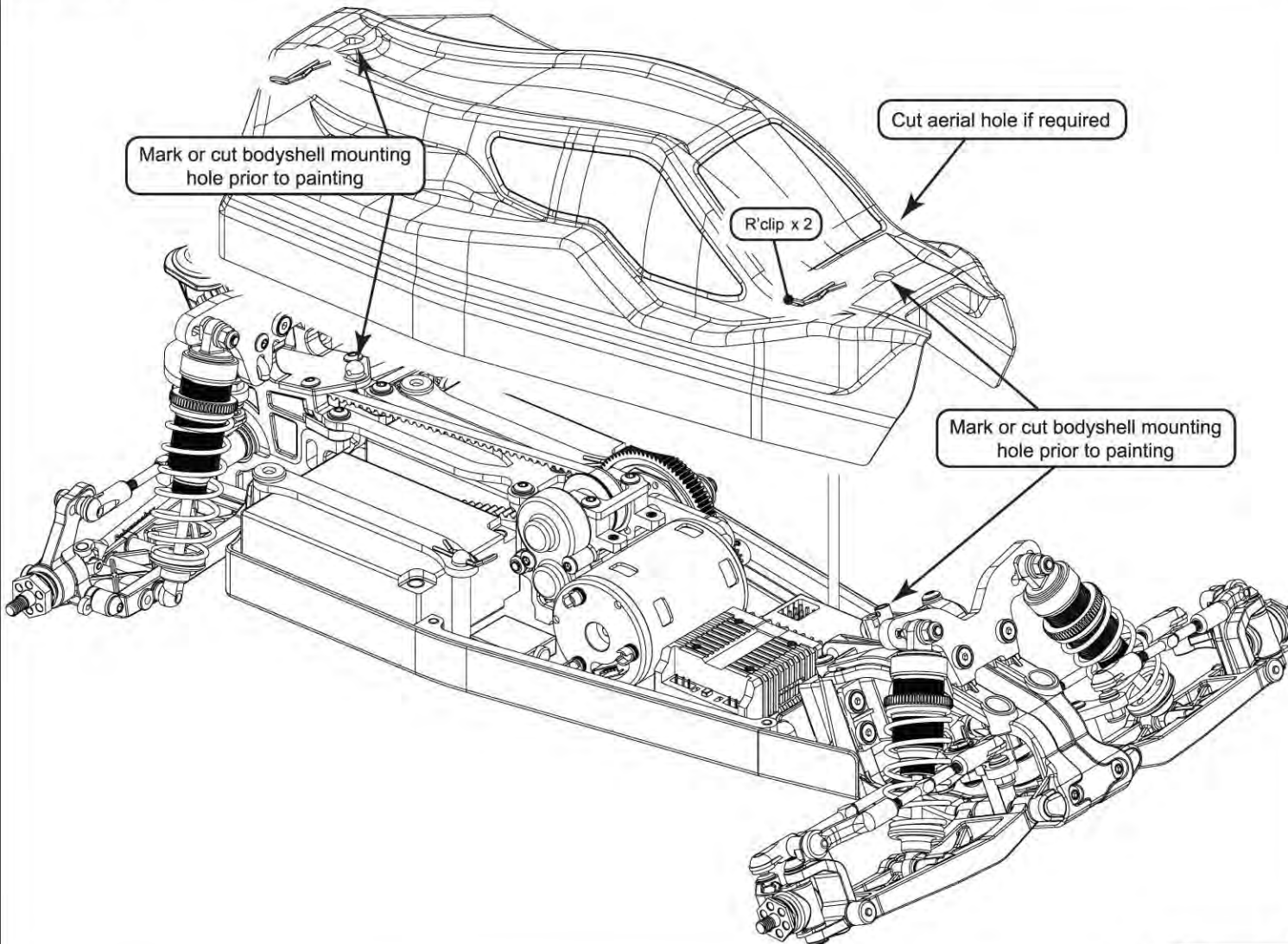
LiPo Batteries shown assembled.  
LiPo batteries are NOT included in the kit.



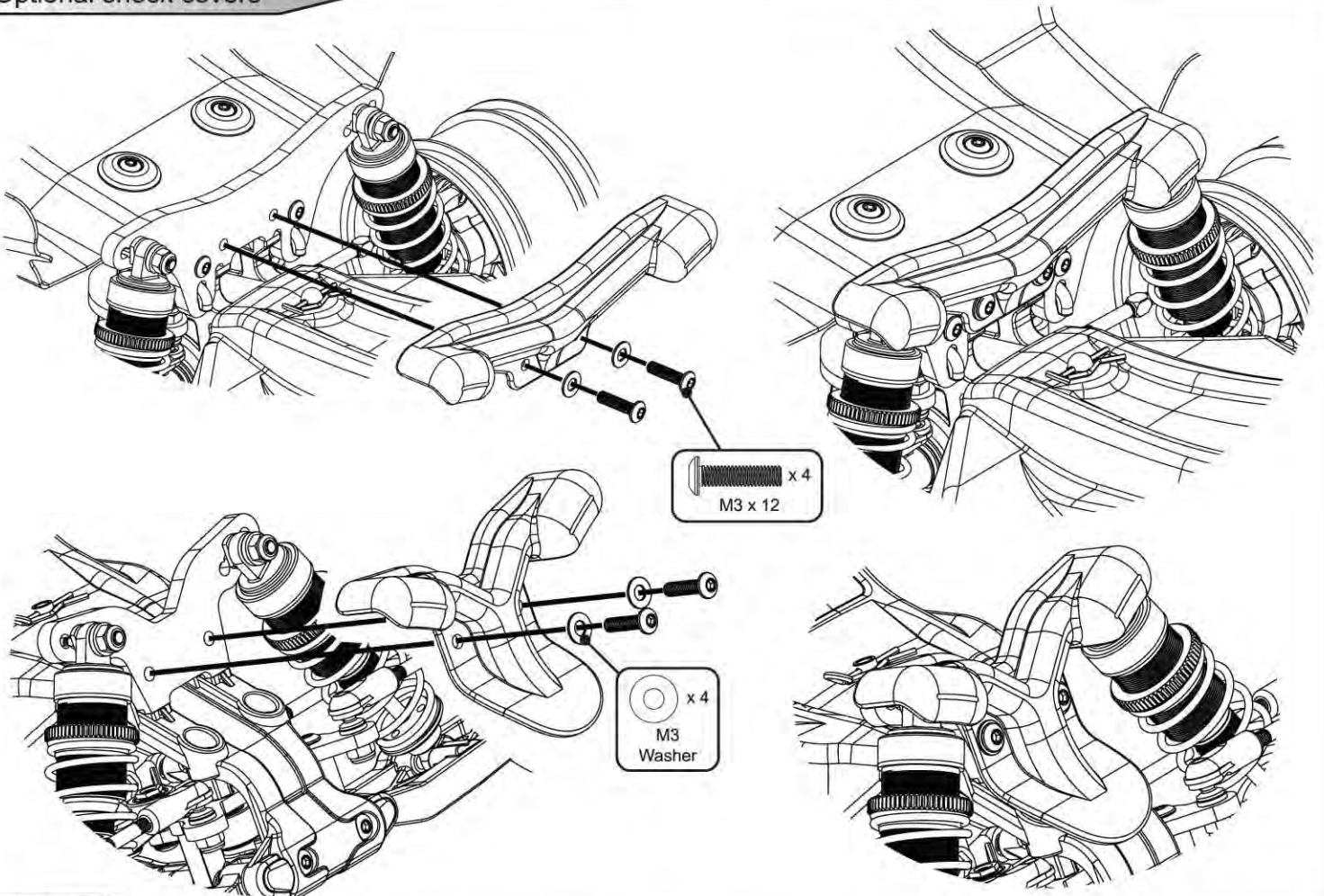
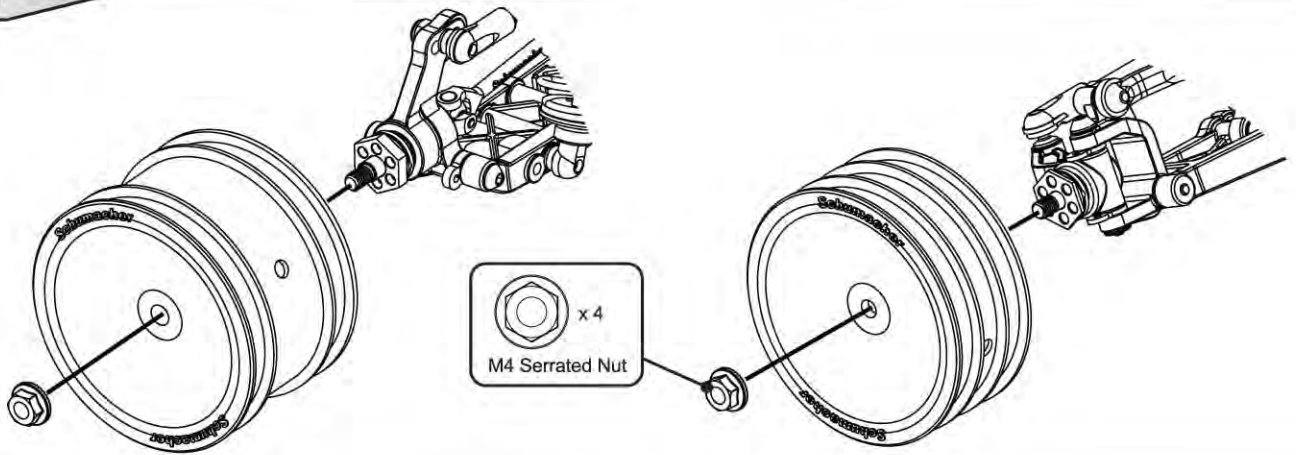
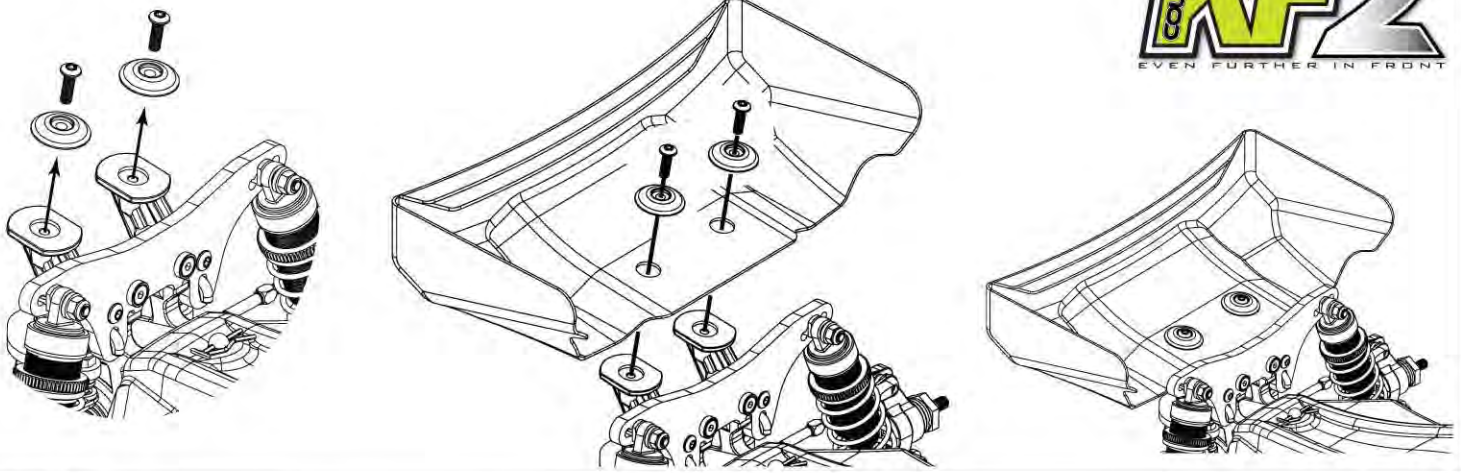
Step 42



Step 43







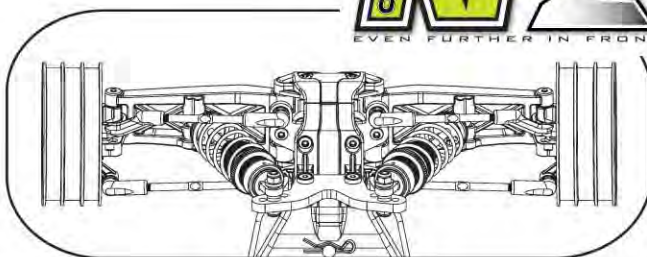


## Settings



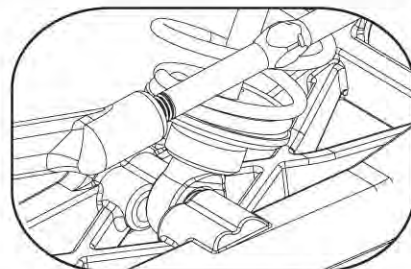
### Front Toe-In

Front toe in should be set to  $0^{\circ}$  (both front wheels pointing straight ahead) this will be the best setting for most track conditions. Adding slight toe out will increase initial turn in. Whereas slight toe in will make this initial turn in a little softer.



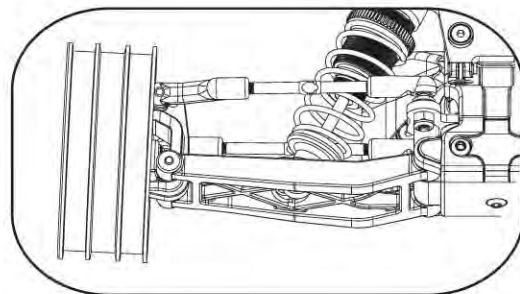
### Front Wishbone Shock Mounting Hole

The inboard hole on the wishbone is the standard setting for most tracks. Moving the shock out to the outer hole makes the car less reactive. It decreases the initial turn in and keeps the front of the car flatter through the turns. This setting also makes the front end stiffer and reduces the front suspension travel.



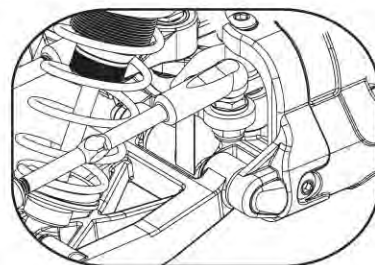
### Front Camber

The usual team setting for static front camber is  $1-2^{\circ}$  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.



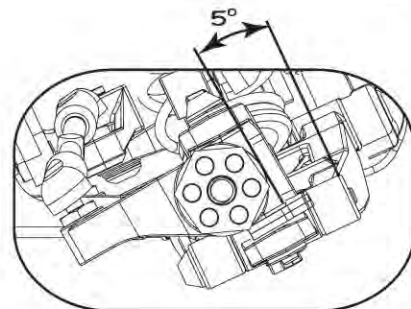
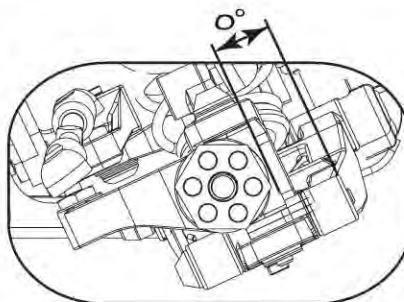
### Front Camber Links

The kit front camber link position and length are what the team recommend for most tracks. Using a long front link makes the front of the car roll more and will give less steering reaction at high speed. It is also not quite as good on very bumpy tracks. We would probably recommend this on fairly smooth high grip tracks. A shorter front link will make the car roll less and quicken the initial steering response. This is a better choice for bumpy low grip tracks. Lowering the inside ball stud will give a similar result to shortening the link, and raising it will give a similar result to lengthening the camber link, but with less total effect.



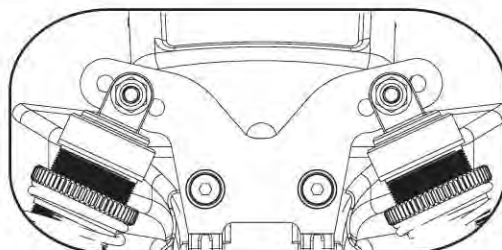
### Front Yoke

The rake angle (kick up) is  $25^{\circ}$  on the cougar and needs adding to the castor block angle to get the total castor angle. The standard car uses a  $0^{\circ}$  castor block making the standard car  $25^{\circ}$  in total; this can be increased to  $30^{\circ}$  by using the optional  $5^{\circ}$  castor block. Using more castor gives better corner entry steering but less power on steering at corner exit, and will make the steering feel a little softer than when using the standard  $25^{\circ}$  setup.



### Front Shock Mount

The middle hole on the front shock mount is the most widely used position. Moving the shock to the outer position will make the car react faster and increase the initial steering response, it may however stiffen the suspension which may require an oil and spring change so that the cars suspension feels the same. By moving the shock to the inner hole will soften the suspension and slow down the steering reaction and make the car smoother on bumpy tracks. Again you may need to alter the oil and spring combination to get the suspension correct again.





## Settings

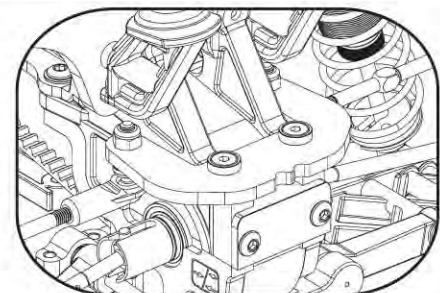
### Rear Anti Squat

The standard anti squat is set at  $2^{\circ}$ . The team have found that this works best on most tracks, and with optional parts this can be increased or decreased. Generally less anti squat allows the suspension to work better over the large bumps but usually gives less power on traction. Adding more antisquat gives more forward traction up to the point where the car starts to pull wheelies. Backing off the slipper is not always an option to compensate for this as good initial bite is needed to clear big jumps. Adding more antisquat seems to make the car handle better over small ripples but not so good on the tracks with large bumps.



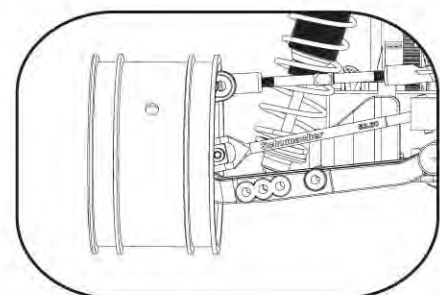
### Rear Camber Link

The kit build rear camber link setting is the best compromise for most tracks. This is the middle link option and gives good stability and straight line traction while allowing the rear of the car to free up on high speed turns. This reduces power on under steer on high grip tracks. 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. Lowering the inside ball stud will give a similar result to shortening the link, and raising it will give a similar result to lengthening the camber link, but with less total effect.



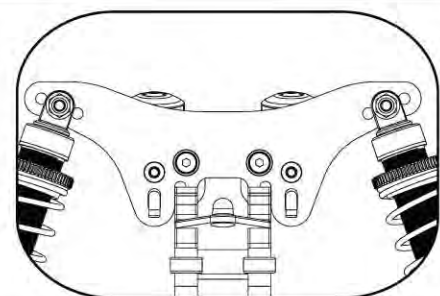
### Rear Camber

The usual team setting for static rear camber is  $1^{\circ}$  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. (Some drivers believe that adding slight positive camber where the tyre leans out at the top away from the car, will improve straight line traction on loose surfaces)



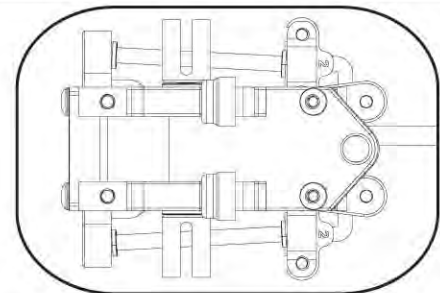
### Rear Shock Mount

The middle hole on the shock mount gives best all round results. Moving the shock to the outer hole will stiffen the suspension and increase the reaction of the steering. The downside is less compliance over bumpy sections of the track. Moving the shock to the inboard position softens the suspension and will slow the steering reaction making the car smoother over the bumps. Moving the shock to these holes may require an oil or spring change to maintain the suspension performance.



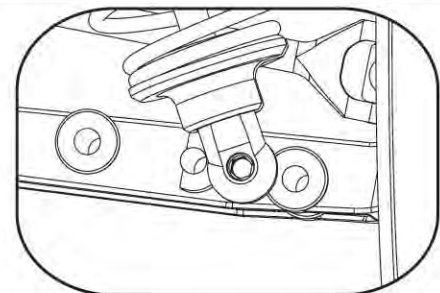
### Rear Toe-In

The standard rear toe in is  $3^{\circ}$  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 flipping the alloy blocks so that the flats face inward. 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.



### Rear Wishbone Shock Mounting Hole

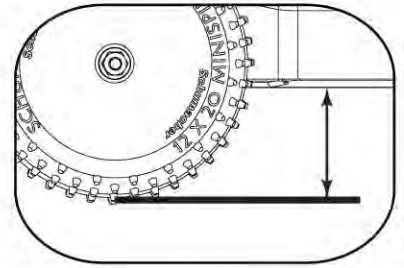
The middle hole works best for most track conditions giving good traction and drive through the turns whilst maintaining good stability over the bumps. Moving to the outer hole on the wishbone will decrease traction but will allow the rear to free up more in the turns. This setting would usually only 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.





## Ride Height

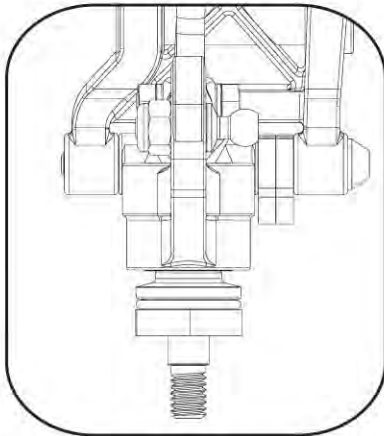
Use the spring adjusters on the shock absorbers to adjust the front and rear ride heights. We would recommend setting the ride height to around 23 mm with the car level. This is measured between the bottom of the chassis and the ground with the car in running trim. First press the car down on to the 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. So if the suspension needs to be softer or harder change the spring.



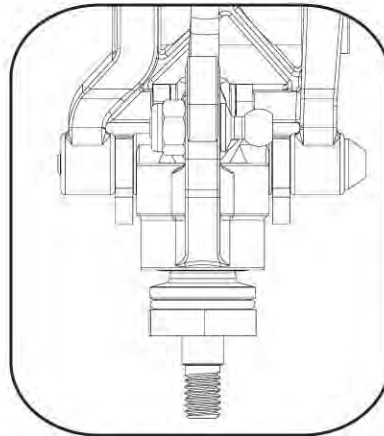
## Wheel Base Adjustment

The Cougar KF2 has 3 wheelbase options at the rear, short, med and long. The adjustment is provided by re positioning the quick clips on the outer wishbone pin. Moving the rear hub carrier forwards will give more traction at the expense of stability over rough sections of the track, and moving the hub carrier to the middle or rear position usually improves stability over the rough sections, running the car in long wheelbase form also free's up the car on sweeping sections of the track.

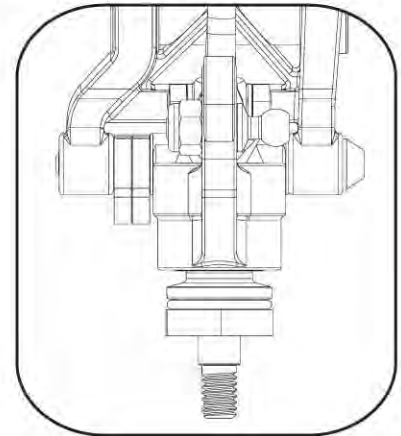
LONG



MED

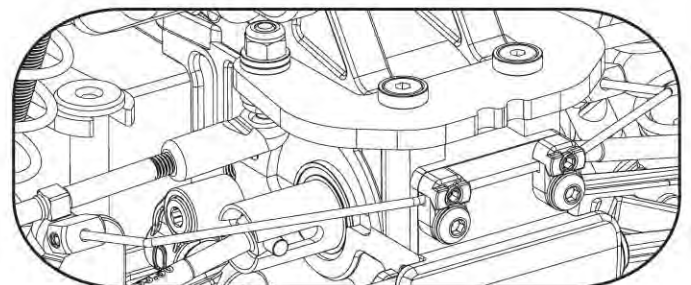


SHORT



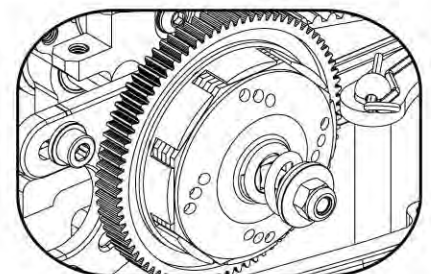
## Rear Roll Bar

Anti roll bars are an often overlooked set up aid that allows fine tuning of the suspension without major changes to the shock and spring settings. They are mainly used to add roll stiffness to the car without affecting the handling on bumps and jumps. Running roll bars allows you to run softer suspension on bumpy tracks while reducing the roll in corners thus maintaining stability through the turns.



## Slipper Clutch

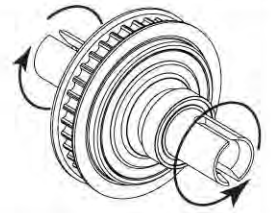
On most tracks it is best to start with the slipper on a **LOOSE** setting, and gradually tighten the spring tension, until you achieve the most consistent drive away from turns without spinning the car or pulling wheelies. Make sure you still have enough drive when launching the car from the up ramps. **WARNING**, do not run the slipper too loose as it could melt the plastic spur gear, also too tight may damage the transmission parts.





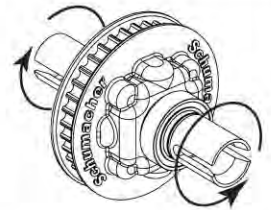
**Ball Differential**

For consistent performance it is vital that the differential action should be smooth and free. Diff adjustment is not a tuning aid and the diff should never be allowed to slip. A loose diff can usually be recognised by a "chirping" sound when powering away from turns or landing under power from large jumps. When rebuilding your ball differential we recommend using a U1954 thrust race and U3019 Ceramic Nitride balls for ultimate reliability and weight saving.



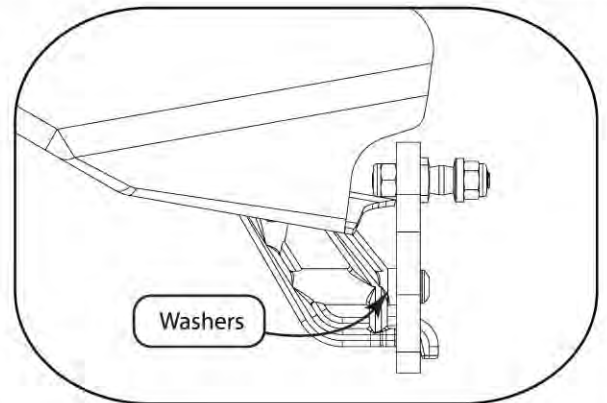
**Gear Differential**

Geared Diffs can give different driving characteristics. The handling of the diff is tuned by changing the oil. A recommended starting point is 2000 cSt (CR216). Recommended option oils would be 3,000 cSt (CR217) and 1000 cSt (CR214).



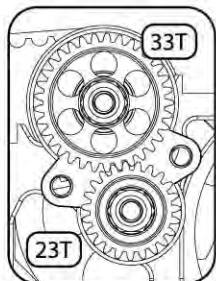
**Rear Wing Angle**

Removing the washers at the front of the wing mount will give the wing more angle and increase rear downforce, adding washers will level the wing out giving less downforce.



**Gear Ratio's (2.58:1)**

**Tooth Sum 100 Minimum 114 Maximum**



		Pinion Gear												
		17	18	19	20	21	22	23	24	25	26	27	28	29
Spur Gear	83	12.61	11.91	11.28	10.72	10.21	9.74	9.32	8.93	8.57	8.24	7.94	7.66	7.39
	82		11.77	11.15	10.59	10.08	9.63	9.21	8.82	8.47	8.15	7.84	7.56	7.30
	81			11.01	10.46	9.96	9.51	9.10	8.72	8.37	8.05	7.75	7.47	7.21
	80				10.33	9.84	9.39	8.98	8.61	8.26	7.95	7.65	7.38	7.12
	76								8.18	7.85	7.55	7.27	7.01	6.77
	71													6.32

		Pinion Gear												
		30	31	32	33	34	35	36	37	38	39	40	41	42
Spur Gear	83	7.15	6.91											
	82	7.06	6.83	6.62										
	81	6.97	6.75	6.54	6.34									
	80	6.89	6.66	6.46	6.26	6.08								
	76	6.54	6.33	6.13	5.95	5.77	5.61	5.45	5.30	5.17				
	71	6.11	5.92	5.73	5.56	5.39	5.24	5.09	4.96	4.83	4.70	4.58	4.47	4.37





**3 Layer Soft Shell Team Jacket - Black**

- G339XS Extra Small - 34 inch chest
- G339S Small - 38 inch chest
- G339M Medium - 41 inch chest
- G339L Large - 44 inch chest
- G339XL X Large - 46 inch chest
- G339XXL XX Large - 48 inch chest
- G339XXXL XXX Large - 50 inch chest



**Team Hooded Sweatshirt - Navy Blue**

- G343S Small
- G343M Medium
- G343L Large
- G343XL Extra Large



**G352 Schumacher Team Umbrella**



**Caps - Black**

- G340 Schumacher Baseball Cap
- G341 Schumacher Flat Bill Cap



**Team Polo Shirt - Navy Blue**

- G344S Small
- G344M Medium
- G344L Large
- G344XL X Large
- G344XXL XX Large
- G344XXXL XXX Large
- G344XXXXL XXXX Large
- G344XXXXXL XXXXX Large



**Team T-Shirt - Navy Blue**

- G342S Small
- G342M Medium
- G342L Large
- G342XL X Large
- G342XXL XX Large
- G342XXXL XXX Large
- G342XXXXL XXXX Large
- G342XXXXXL XXXXX Large



**G338 2 Tone Beanie Knitted Hat**



- G353 Schumacher Glass Setup Board**
- G354 Schumacher Neoprene Bag**



**G351 Schumacher Thermo Mug**



**G315 Schumacher Pit Towel**



**G310 Schumacher Rubber Pit Mat  
750mm x 500mm**



**S500B - Team Schumacher Banner 3ft x 6ft**



2WD Slim Cut Stagger



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

Low Profile  
2WD Slim Cut Stagger



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

2WD Slim Mini Spike 2



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

2WD Slim Mini Pin



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

Rear Mini Spike 2



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

2.2" Rear Full Spike



U6596 - Yellow Compound (pair)

4wd Rear 2" Block



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

Rear Mini Pin 2



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

## Wheels

- U4365 Wheel Hex Rear - (black) - Off Road
- U4366 Wheel Hex Rear - (white) - Off Road
- U4367 Wheel Hex Front - (black) - 2wd
- U4368 Wheel Hex Front - (white) - 2wd
- U4660 Wheel; Hex - Slim - 2WD - Black
- U4661 Wheel; Hex - Slim - 2WD - White



4WD Front Mini Spike 2



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

4WD Front Mini Pin



U6601 - Blue Compound (pair)  
U6607 - Yellow Compound (pair)  
U6777 - Silver Compound (pair)

Stud 2 Row Front



U6797 - Yellow Compound (pair)

		Tarmac	Carpet	Dry Astro	Dry Grass	Wet Grass	Wet Astro
2wd Slim Cut Stagger	U6759		●●	●●●	●●●	●●●	●●
	U6765					●●●	●●
2wd Low Profile Slim Cut Stagger	U6770		●●	●●●	●●●		
	U6771					●●●	●●
	U6775					●●	●●●
	U6776	●●					
2wd Slim Mini Spike 2	U6581		●●	●●●	●●●		
	U6550			●		●●●	●●
	U6549	●●				●●	●●
	U6761					●●	●●●
2wd Slim Mini Pin	U6609	●	●●●	●●			
	U6779					●●	●●●
4wd Front Mini Spike 2	U6557	●	●●	●●●	●●●		
	U6517	●●			●●●	●●●	
	U6515			●		●●●	●●
	U6762					●●	●●●
4wd Front Mini Pin	U6607	●	●●●	●●			
	U6601	●●●	●				
	U6777					●●	●●●
Stud 2 Row Front	U6797	●	●	●●	●	●	
2.2" Rear Full Spike	U6596				●●		
Rear Mini Spike 2	U6558	●	●	●●●	●●●		
	U6518	●●●			●●	●●	
	U6516			●		●●●	●●
	U6763					●●	●●●
Rear Mini Pin 2	U6803	●●●	●				
	U6804	●	●●●	●●			
	U6805					●	●●●
Rear 2" Block	U692	●●					
	U6786			●●●			

## Pre-Glued

- U6794 Mini Spike2 - Pre-Glued Yellow Rear 12mm Hex (pr)
- U6795 Mini Pin; Slim Yellow - Pre-Glued 12mm Hex (pr)
- U6801 Cut Stagger Low Pro -Yel-Pre-Glued 12mm Hex(pr)
- U6806 Mini Pin 2 - Pre-Glued Yellow Rear 12mm Hex (pr)

## Off-Road Inserts

- CR141 Red Moulded Insert; 1/10 Off Rd Rear
- CR142 Red Moulded Insert; 1/10 Off Rd 4WD Front
- U6652 Foam Tyre Insert; Hard - Front - CAT (pr)
- U6653 Foam Tyre Insert; Hard - Rear - CAT (pr)
- U6667 Foam Tyre Insert; Hard - Slim 2WD (pr)
- U6668 Foam Tyre Inserts; Soft - Ultra Wide (pr)
- U6669 Foam Tyre Inserts; Hard - Ultra Wide (pr)
- U6733 Foam Tyre Insert; Med - Front - CAT (pr)
- U6734 Foam Tyre Insert; Med - Rear - CAT (pr)
- U6738 Foam Tyre Insert; Med - Slim 2WD (pr)
- U6746 Tubby Insert; Med Front - CAT (pr)
- U6747 Tubby Insert; Med Rear - CAT (pr)





U4169 - CF Link Mount; Rear 33.50mm  
U4138 - CF Link Mount; Rear (Kit) 38.00mm  
U4170 - CF Link Mount; Rear 42.50mm



U4696 - Fan Mount - KF2

U4453 - CF Link Mount; Front 40.50mm  
U4454 - CF Link Mount; Front 45.50mm  
U4452 - CF Link Mount; Front (Kit) 50.50mm  
U4455 - CF Link Mount; Front 60.00mm



U3758  
Steering Yokes 5 degree



**Big Bore Rounded Shock Pistons**  
U3770 - 3 Hole Pistons (White) - (pr)  
U3771 - 5 Hole Pistons (pr)



**Big Bore Standard Shock Pistons**  
U3670 - 2 Hole Pistons (pr)  
U3671 - 4 Hole Pistons (pr)  
U3672 - 6 Hole Pistons (pr)

G200  
ZX1 ExtraLube  
The Ultimate Friction  
Eliminator.

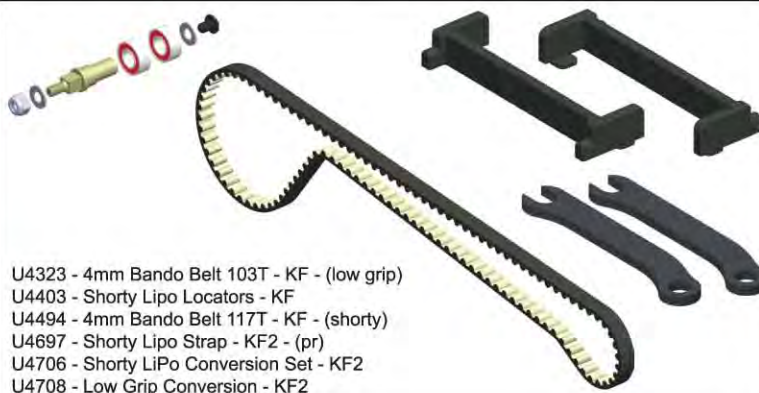


CR043 - CORE RC - Silver X-Weights 16pcs  
CR058 - CORE RC - Black X-Weights 16pcs

**Small Bore Taper Pistons**  
U4125 1.2mm - White pr  
U4126 1.3mm (Kit) - Black pr  
U4127 1.4mm - Red pr



U1301  
Silicone Diff Lube  
The best lube for  
ball diffs!



U4323 - 4mm Bando Belt 103T - KF - (low grip)  
U4403 - Shorty Lipo Locators - KF  
U4494 - 4mm Bando Belt 117T - KF - (shorty)  
U4697 - Shorty Lipo Strap - KF2 - (pr)  
U4706 - Shorty LiPo Conversion Set - KF2  
U4708 - Low Grip Conversion - KF2



U2856 - Sticky Cable Clips (Pk 10)



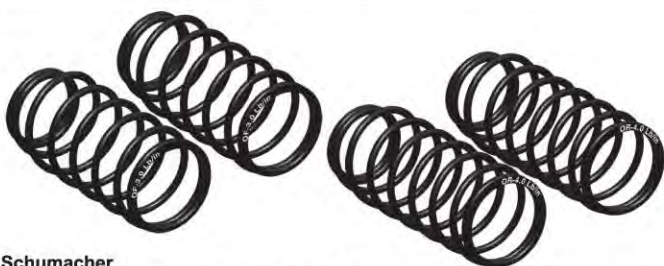
MR-CSOFFROAD - MR33 Car Stand Off Road



U4098 - Front Long Medium Flex Wishbones - Cougar (pr)  
U4054 - Wishbones Rear Medium - Cougar SV2



**Ball Differential**  
U1954 - Pro - Thrust Bearing  
U3852 - Diff Output; Male - CAT SX3  
U3853 - Diff Output; Female - CAT SX3  
U3854 - Diff Screw Set; HD  
U4196 - Diff Pulley & Fences - CAT K1  
U4199 - Diff HD - Assembled - CAT K1



**Schumacher Big Bore Spring Tuning Sets**  
U3673 - Medium (7 pairs)  
U3674 - Long (6 pairs)

**CORE RC**  
CR177 Big Bore Spring Tuning Set; Med 5prs  
CR178 Big Bore Spring Tuning Set; Long 5prs



U3782  
HD Diaphragm Big Bore - pk4



U4209 - Vented Shock Caps - Big Bore - (Pr)





U4615 - Alloy Trans Housing (Reverser only) - KF/K1/Aero



U4616 - Alloy Upper Rear Trans Housing Complete - KF/K1/Aero



U4640 - Alloy Rear Link Mount - 2WD/4WD



U3611 - CNC Alloy Shock Spring Seat (pr)



U4620 - Alloy Hub Carrier 2WD Front L/R - pr



**CORE RC**  
CR192 - Alloy Servo Arm 25T - Futaba Short  
CR193 - Alloy Servo Arm 23T - Sanwa Short

U1300  
Axle Grease  
The best general grease  
for many applications.



U4619 - Alloy Center Track Rod - 2WD



U4621 - Alloy Front Link Mount - 2WD



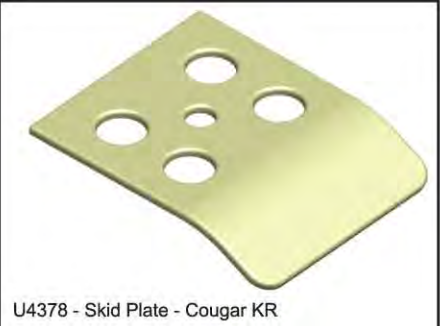
U3605 - Alloy Rear Hubs 1° (Pair)



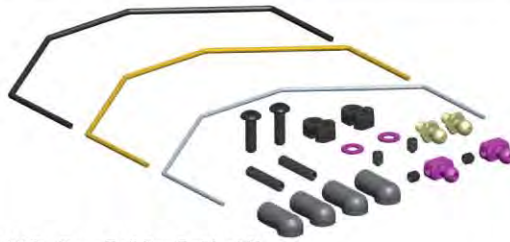
U4228 - Alloy Yokes 2WD - 5deg - Cougar  
U4703 - Alloy Yokes 2WD - 0deg - Cougar



**Purple Titanium Turnbuckles (pair)**  
U1573 - 53mm  
U1574 - 60mm  
U2566 - 45mm



U4378 - Skid Plate - Cougar KR



U4172 - Rear Roll Bar Set (set 3)  
U3499 - Roll Bar Blocks - Mi4 pk4



CR280 - Ti Pro Ball Studs - Short - pair  
CR281 - Ti Pro Ball Studs - Ultra Short - pair  
CR282 - Ti Pro Ball Studs - Long - pair



**CORE RC**  
Serrated M4 Nuts  
CR024 - Steel pk4  
CR035 - Alloy Blue pk4  
CR036 - Alloy Violet pk4  
CR196 - Alloy Black pk4



U1957  
Moly Grease  
The ultimate thrust  
race grease!

The Schumacher Hauler bag requires assembly.



G355 - Schumacher Hauler Bag  
G356 - Handle For Hauler Bag  
G357 - Small Draw for Hauler Bag  
G358 - Medium Draw for Hauler Bag  
G359 - Large Draw for Hauler Bag