

Instruction Manual





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







Electronic Speed Control









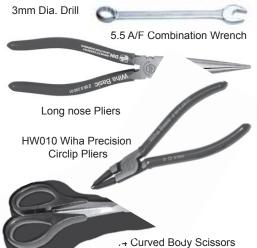


Tyres and Inserts

Tools

U2818
Schumacher Body Reamer

3mm Dia. Drill





U2789 Hex Driver - 1.5mm

Soldering Iron



Schumacher Racing stocks and distributes the following manufacturers products and full product listings are available on our website at www.racing-cars.com.

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













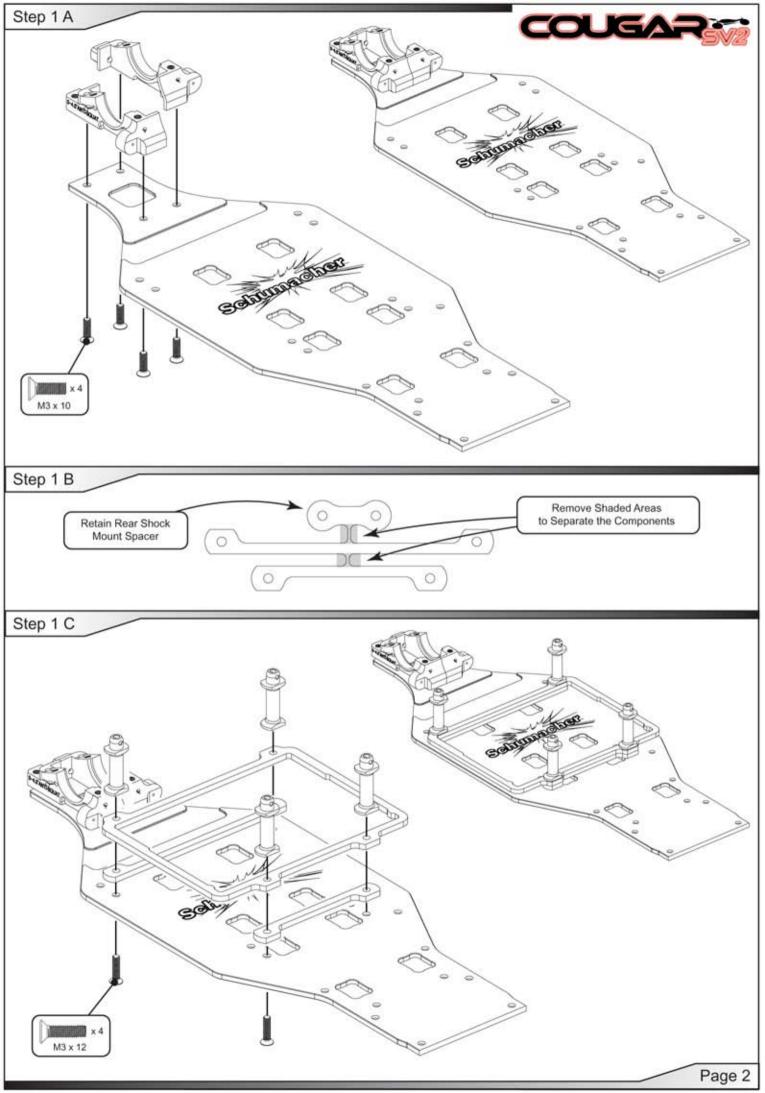


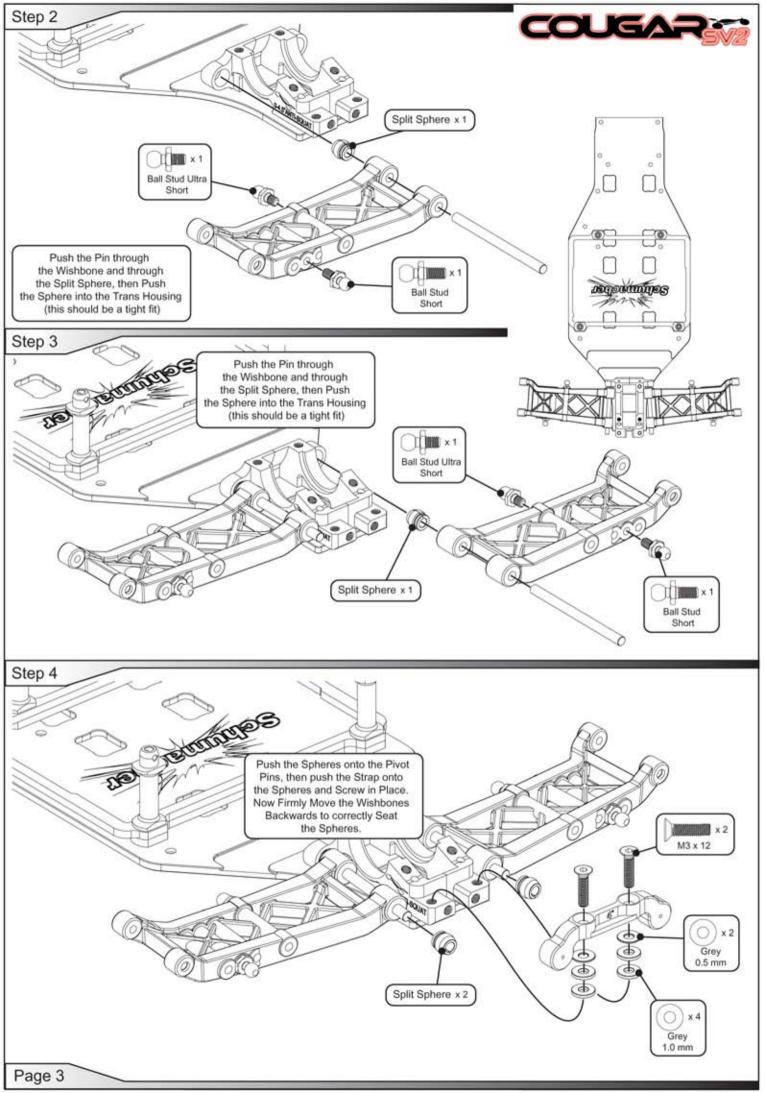
IMPORTANT SAFETY NOTES

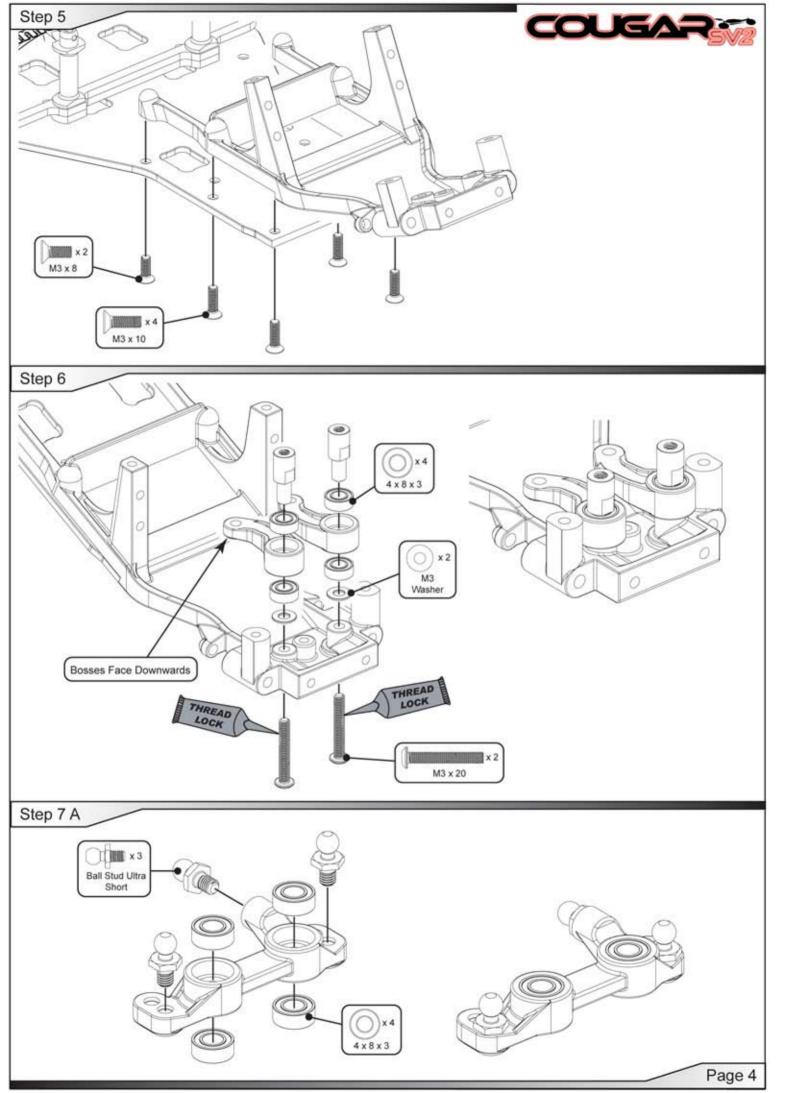
- This product is not suitable for children under the age of 14, without the direct supervision of an adult.
- Select an area for assembly that is away from the reach of small children. The parts in this kit are small and can be swallowed by children causing choking and possible internal injuries.

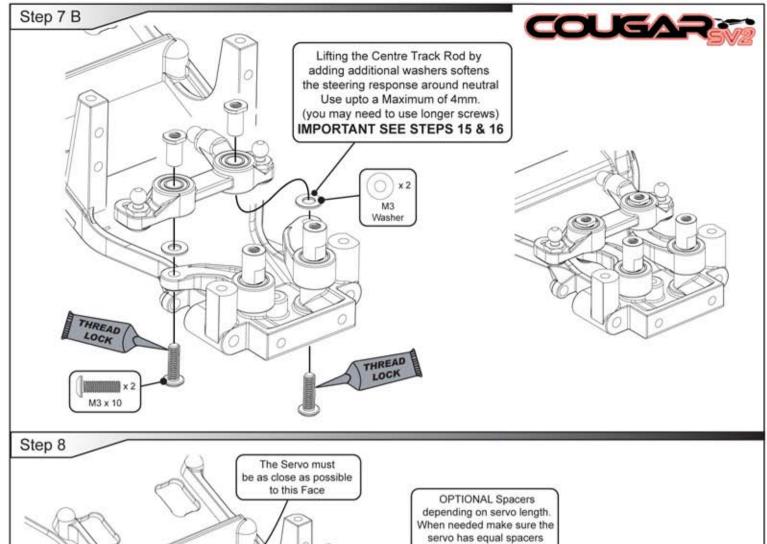
U3107 - Solder

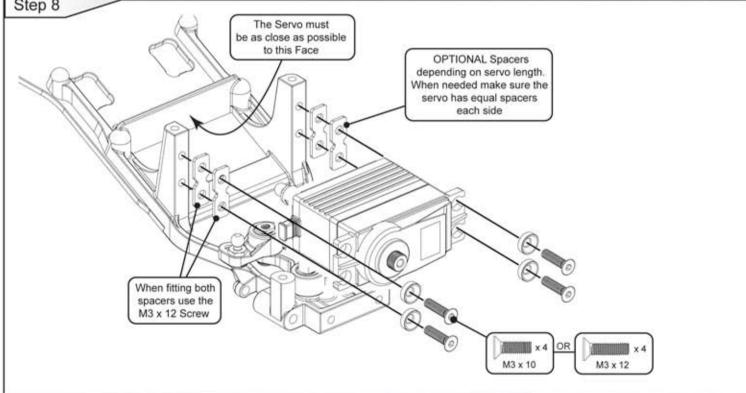
- Exercise care when using hand tools and sharp instruments during assembly.
- Carefully read all manufacturers warnings and cautions for any additional parts used in the construction.
- In line with our policy of continuous development the exact details of the kit may vary.

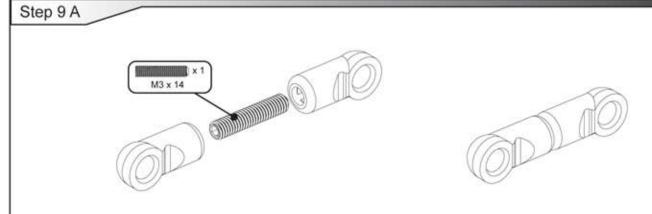


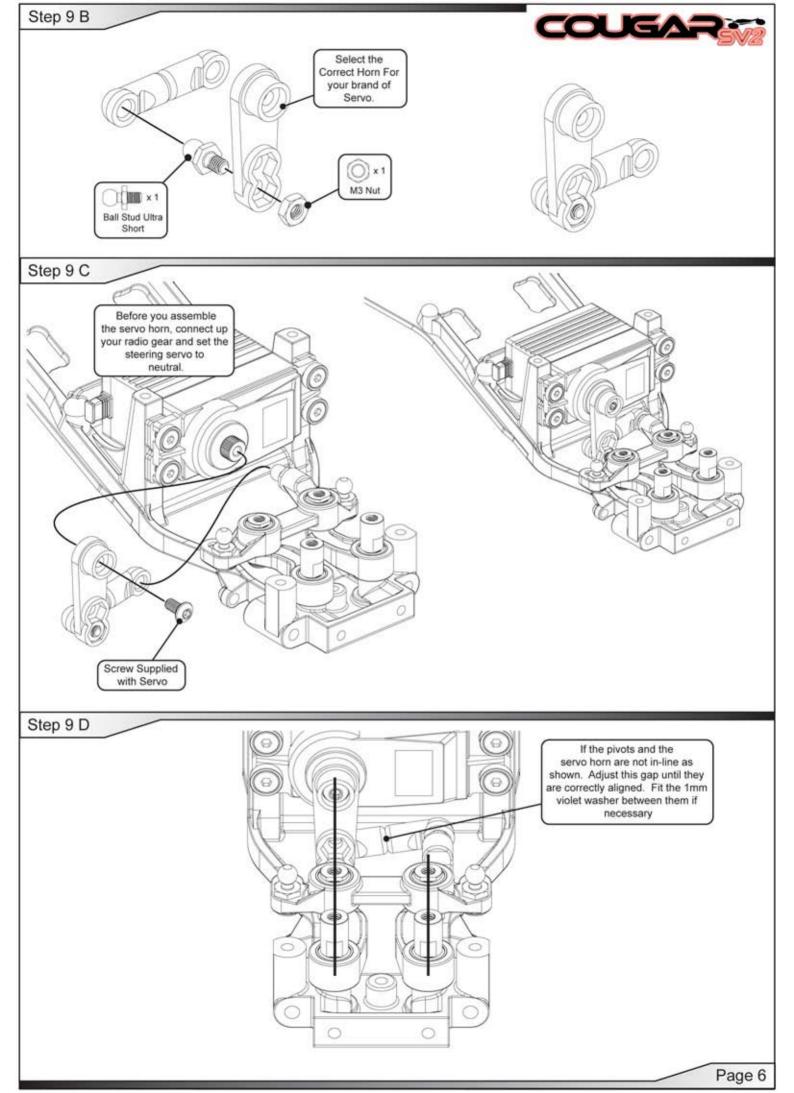


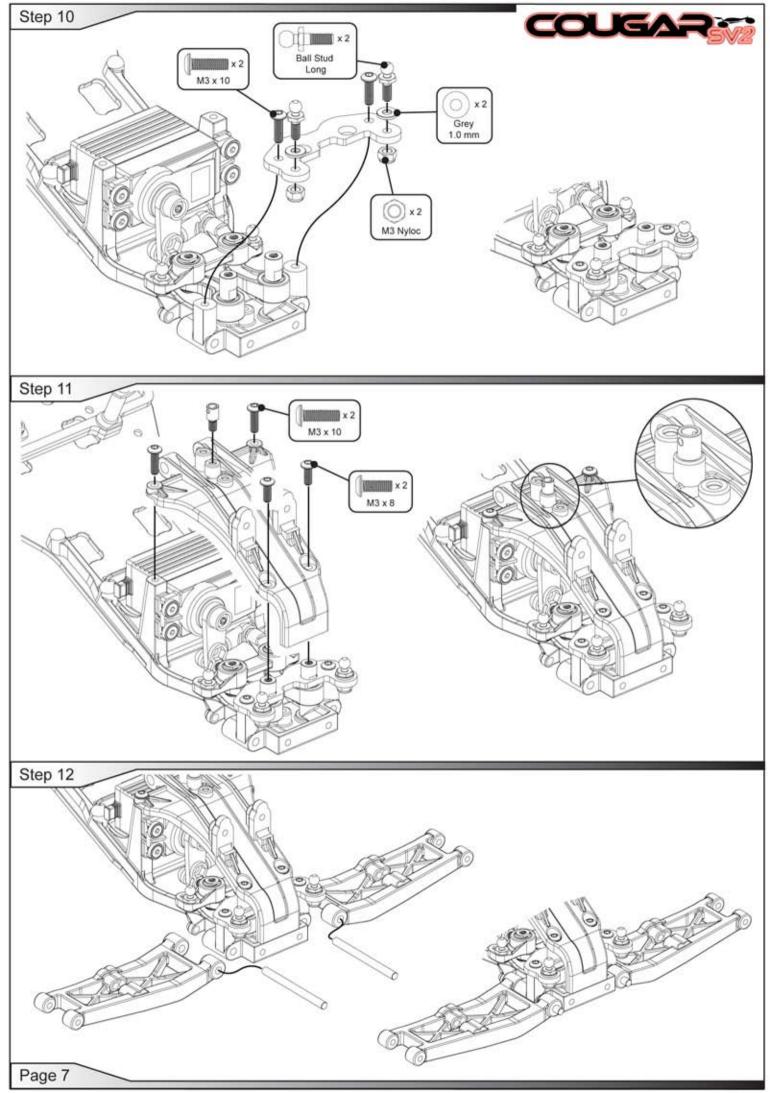


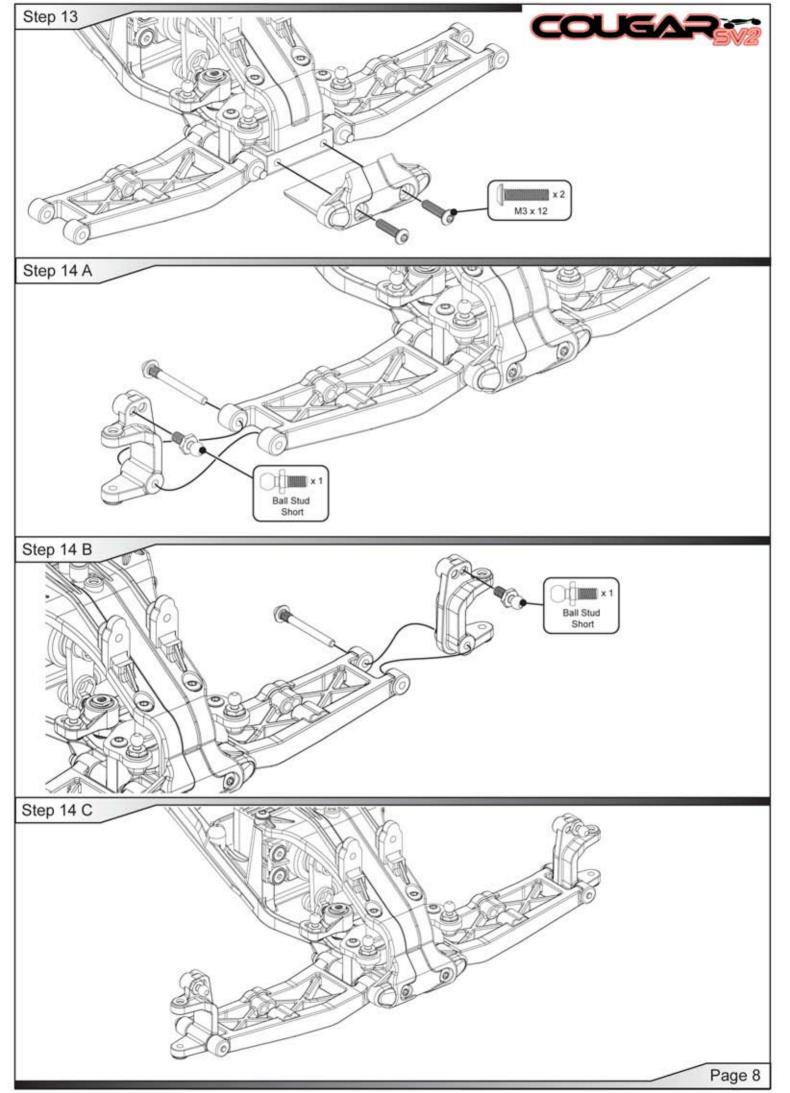


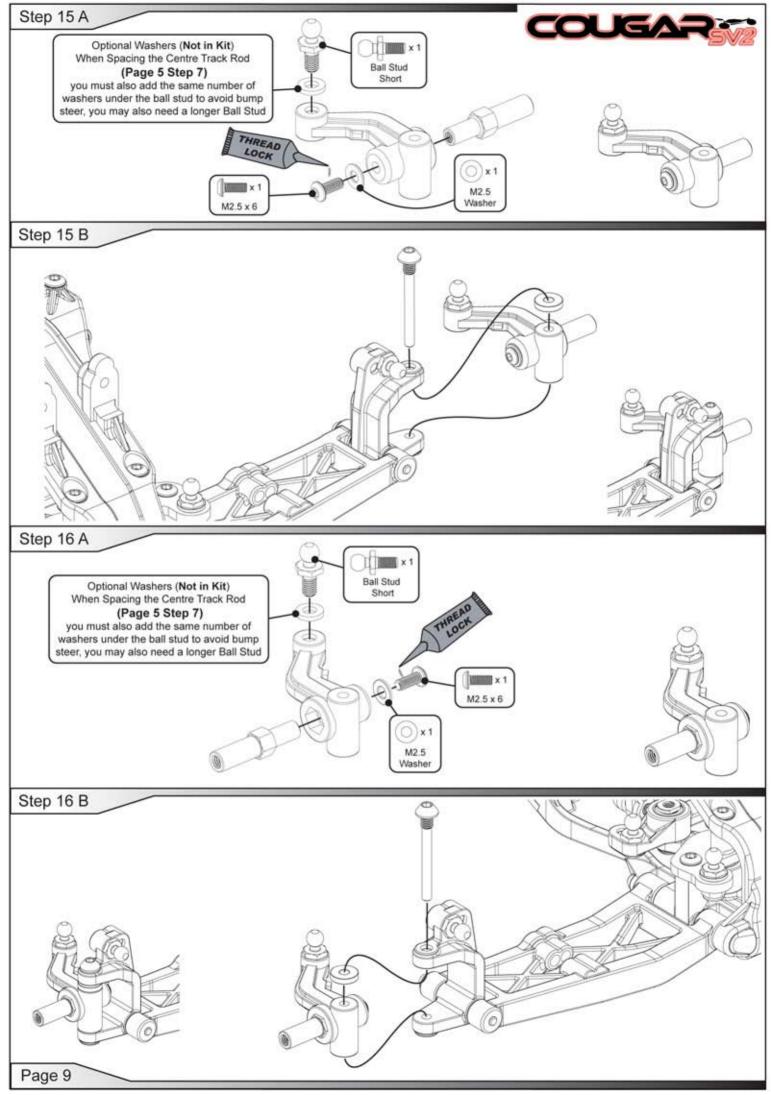


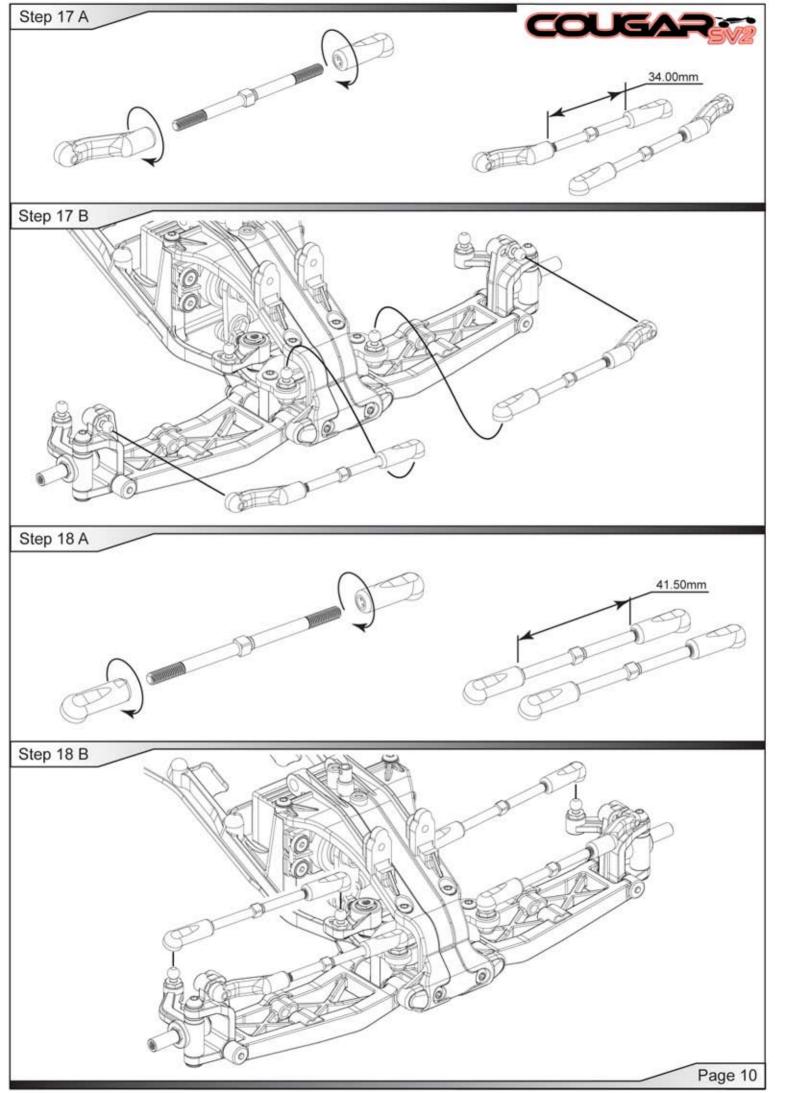


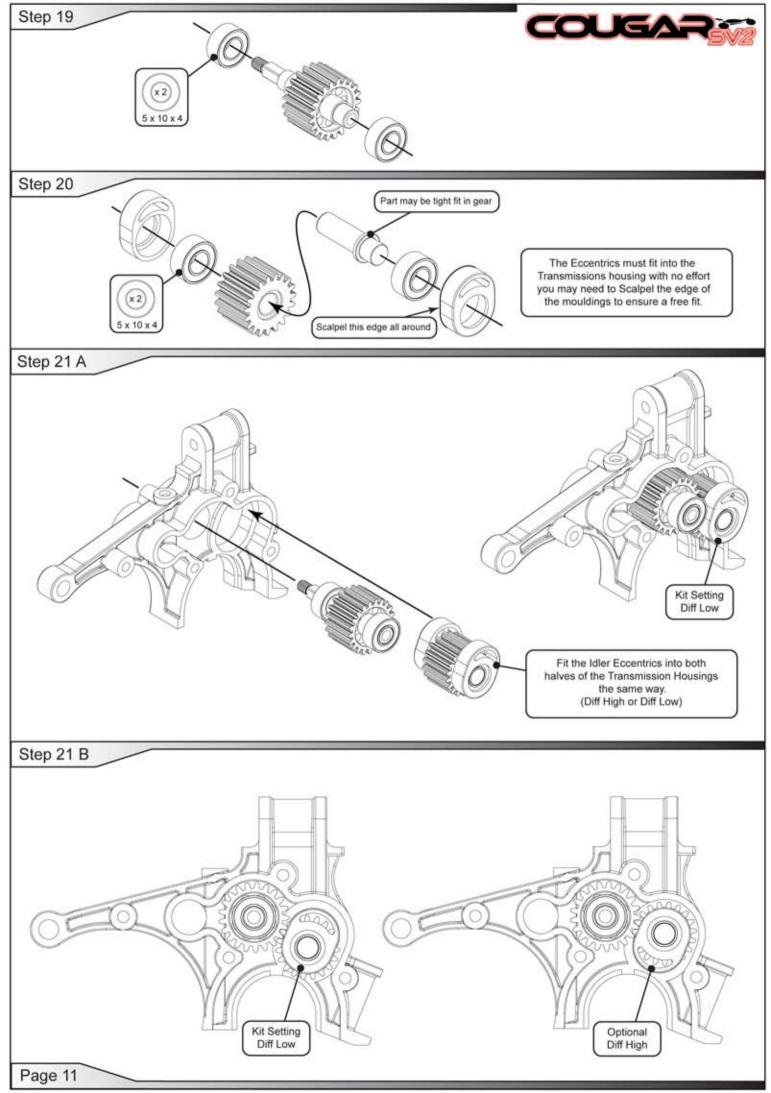


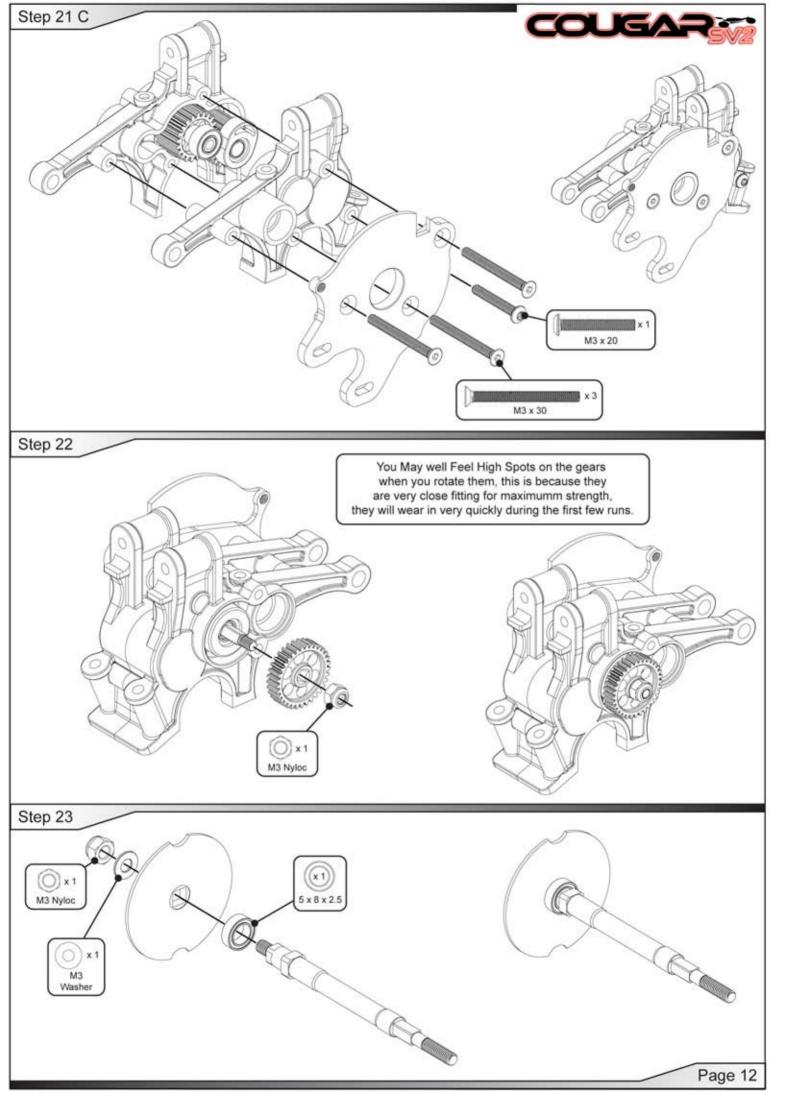


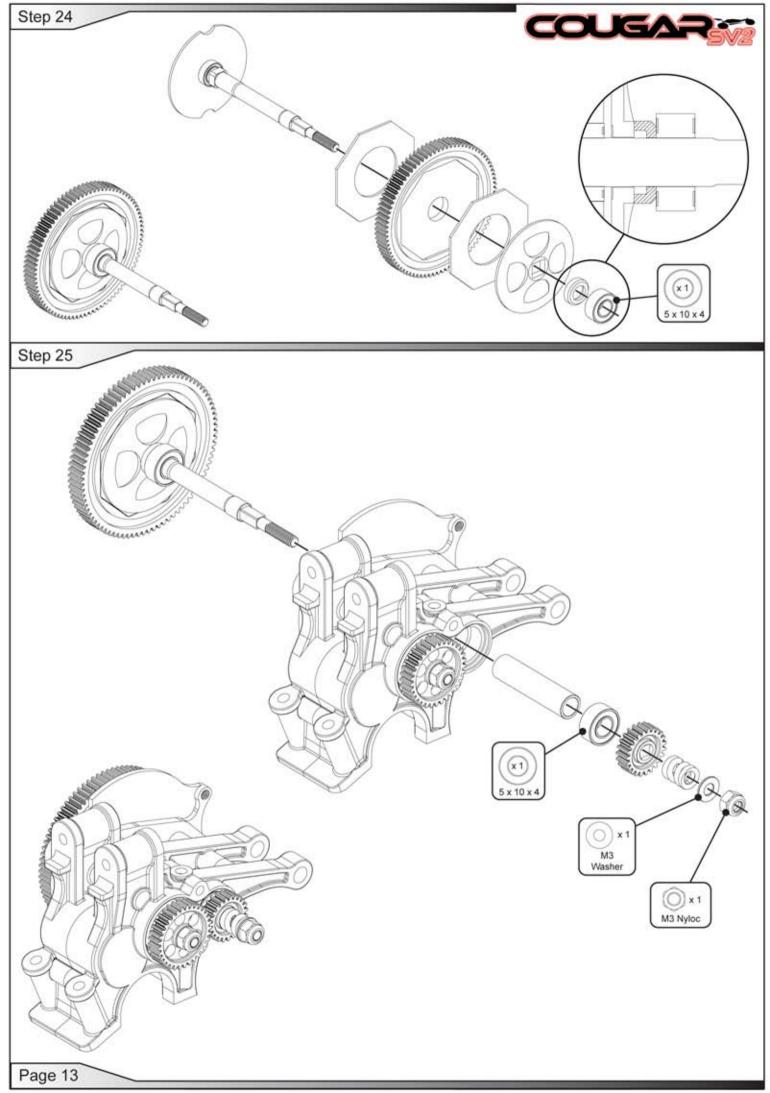


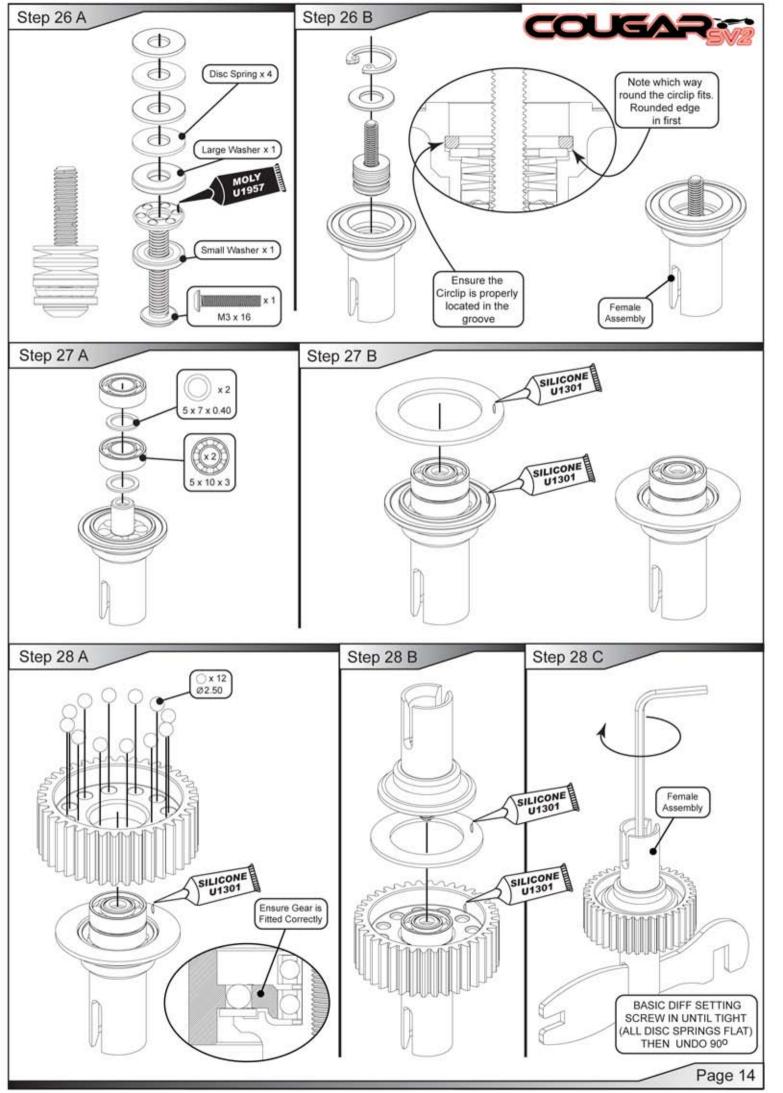


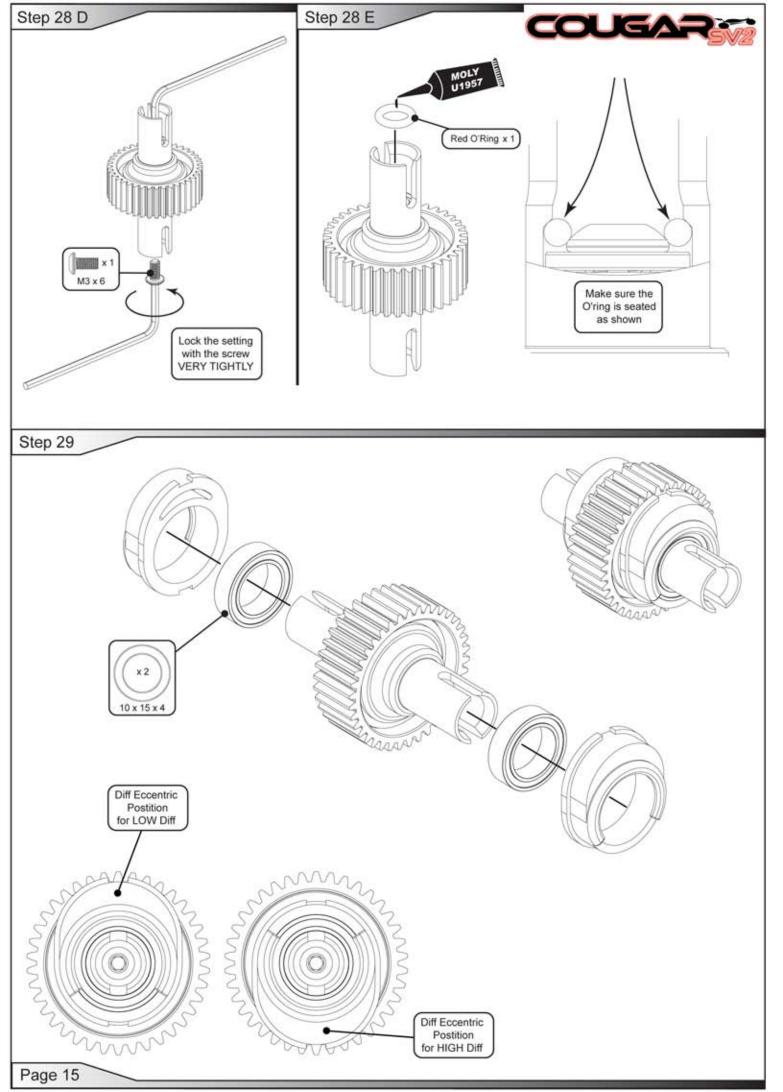


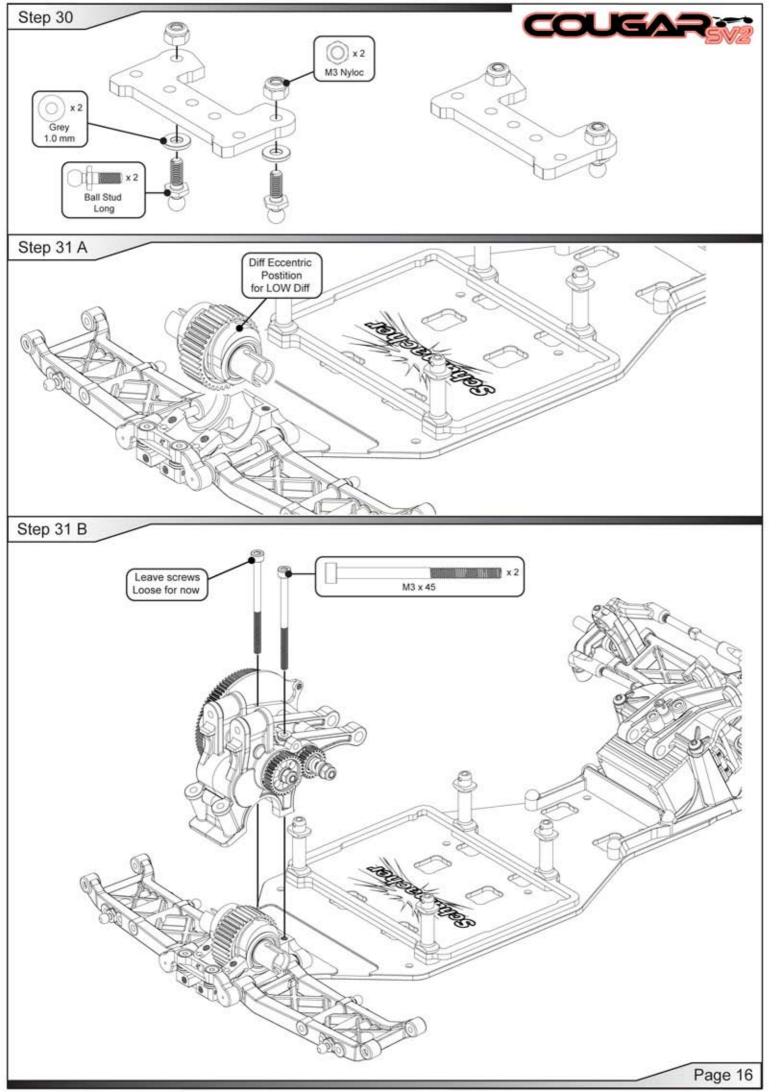


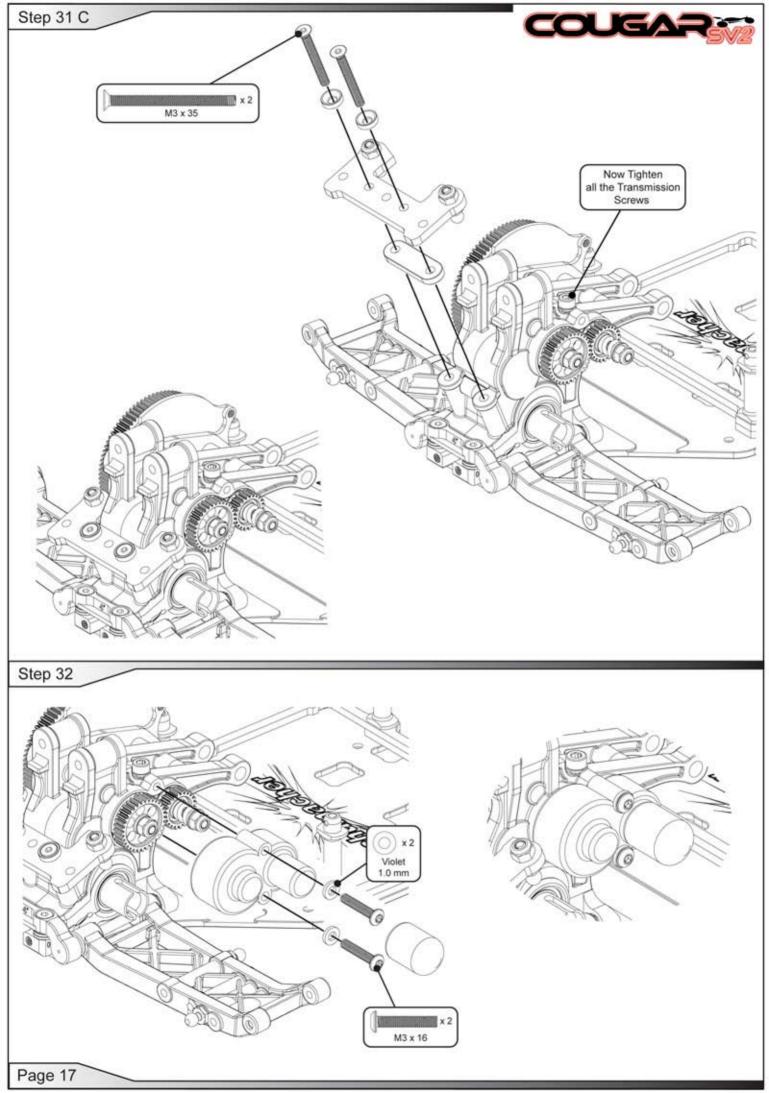


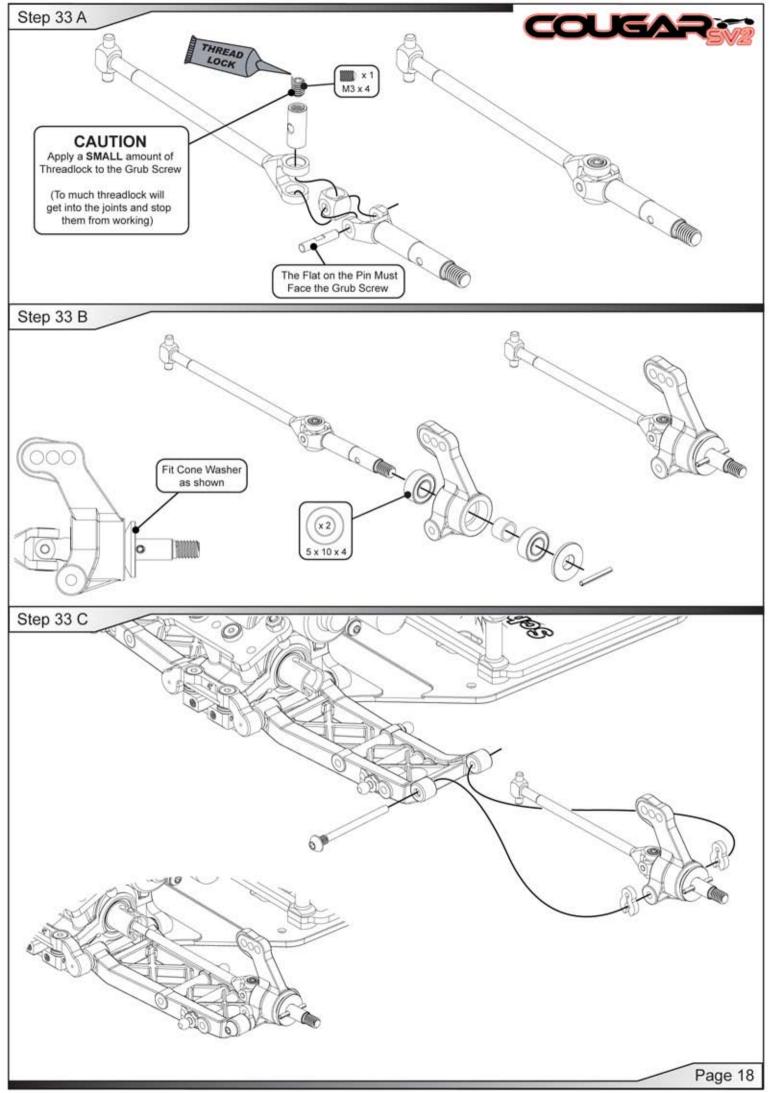


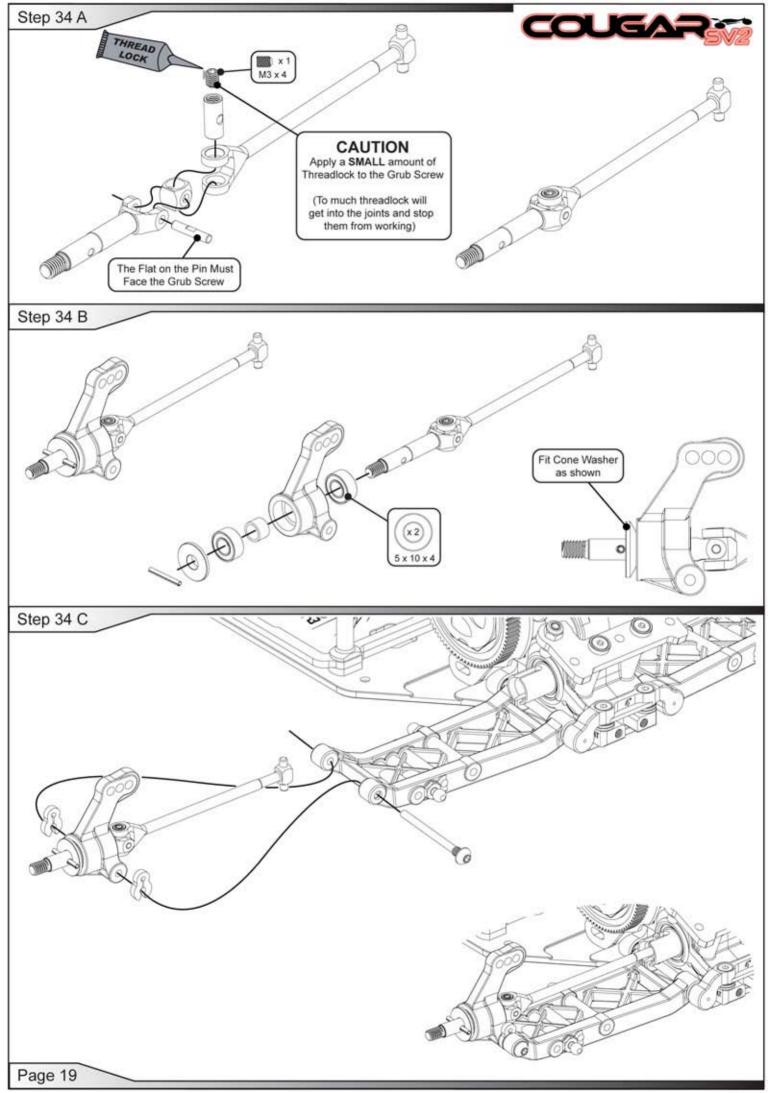


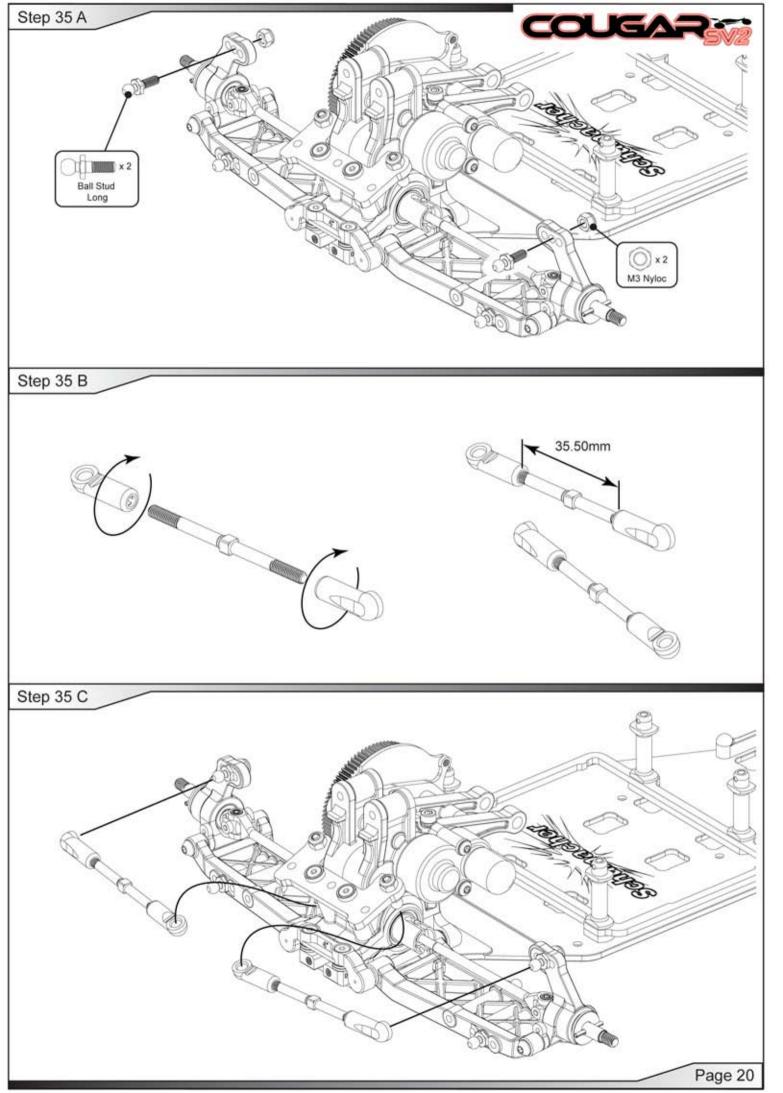


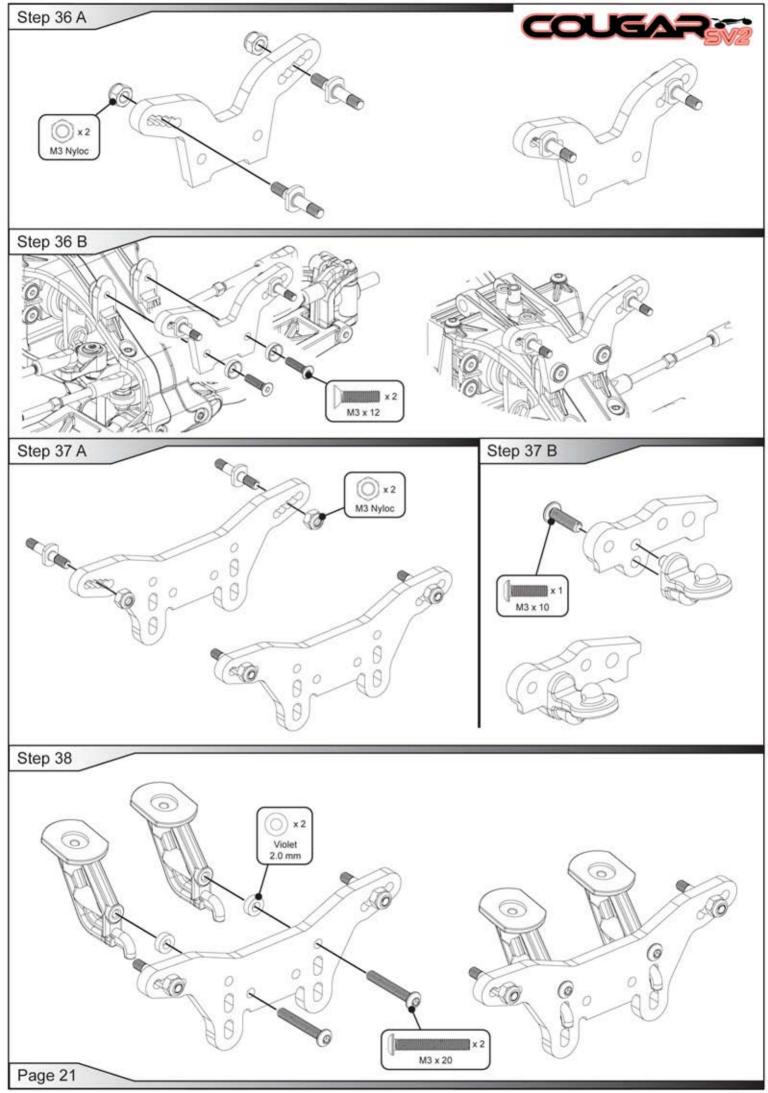


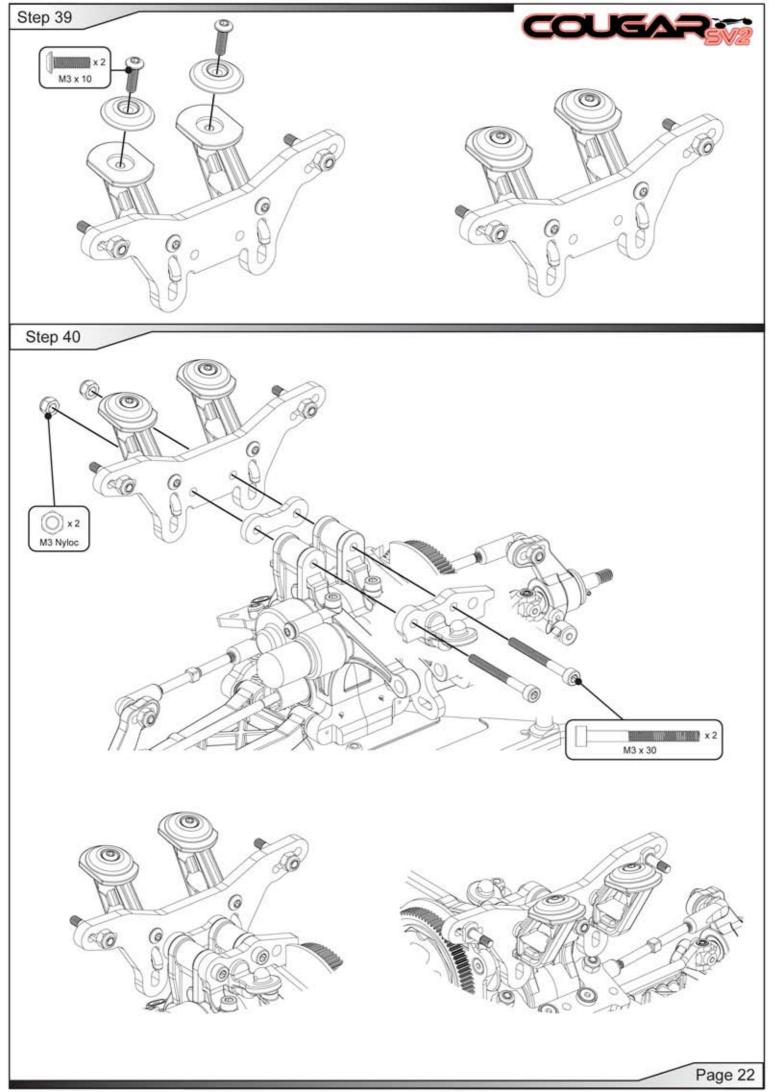












Cougar - SV2 -PRO CF 1-10 Off Road 2WD - Kit K124 Cougar - SV2 -PRO CF 1-10 Off Road 2WD - Assembled CHASSIS PARTS U1042 Aerial Mount - Universal U119 Aerial Tube - Pack 4 U122 Velcro 1/2metrex16mm. U2231 Servo Horns U3689 Bottom Plate - Cougar SV U3690 Front Bumper - Cougar SV U3691 Servo Spacer - Cougar SV U3692 Top Deck Mounts - Cougar SV U3694 Rear Bumper - Cougar SV U3695 Pivot; Top Deck - Cougar SV pr U3702 Alloy Posts; Saddle LiPo - Cougar SV pk4 U3850 Wing Mount - Off Road New U3990 Alloy Chassis - Cougar SV2 U3992 Alloy Motor Plate - Cougar SV2 U4000 Rear Body Mount - Cougar SV2 U4002 C/F Top Deck Cells Forward - SV2 U4033 Post Caps - Cougar SV2 U4038 Instr Manual - Cougar SV2 U4043 Saddle/Shorty C/F Parts - Cougar SV2 **BODY AND DECALS** U4003 Decal sheet - Cougar SV2 pk2 U4052 Window Mask - Cougar SV2 U5106 Long Wing; Max Aero U5109 Bodyshell + Decals - Cougar SV2 U5110 Undertray - Cougar SV2 SUSPENSION U2722 Ball Grippa Joints - U/Sh Stud 4prs U2989 Ball Grippa Sockets - (pk 8) U3137 Shock Mounting Post - (pr) U3213 Turnbuckle Adjuster; Gold - 53mm (pr) U3214 Turnbuckle Adjuster; Gold - 60mm (pr) U3311 Axle Spacers - 2prs U3479 Ball Grippa Sockets Short - (pk 8) U3499 Roll Bar Blocks - Mi4 pk4 U3706 Rod End Ball + Socket - Cougar SV2 pr U3708 Quick Clip 2.4mm - Cougar SV pk4 U3709 Radius Arms - Cougar SV U3710 Centre Track Rod - Cougar SV U3712 Yokes: 0 deg - Cougar SV U3713 Wishbones; Front Kit - Cougar SV U3715 Pivot Pin; Screw Type 25mm pr U3716 Pivot Pin; Screw Type 32mm pr U3717 Steering Pivots - Cougar SV pk4 U3718 Pivot Pin; 38mm - Cougar SV U3719 Pivot Pin; 45mm - Cougar SV U3720 Front Axles - Cougar SV pr U3723 Alloy Rear Strap; 4 deg - Cougar SV U3729 WishbonePivot Spheres - Cougar SV pk4 U3730 Ball Socket; Offset - Cougar SV U3997 C/F Front Shock Mount - Cougar SV2 U3999 C/F Link Mounts; Kit Fr + Rr - Cougar SV2 U4001 C/F Rear Shock Mount - Cougar SV2 U4027 Front Bulkhead - Cougar SV2 U4028 Front Hub Carriers - Cougar SV2 U4031 Front Body Post - Cougar SV2 U4036 Hub Carrier: Rear - Cat/Cougar SV2 pr Rear Roll Bar Kit - Cougar SV2 U4041 U4055 Wishbones; Rear Kit - Cougar SV2

SHOCKS

U750

U851

U3660 Big Bore Shocks; Med - Assembled Big Bore Shocks; Long - Assembled

Ball Grippa Joints - Short Stud 8prs

Ball Grippa Joints - Long Stud 8prs



SHOCKS Cont...

U3662 Big Bore Shock Body; Med pr U3663 Big Bore Shock Body; Long pr U3664 Big Bore Shock Cap; Off Road pr U3665 Big Bore Shock Seal Housing pr U3666 Big Bore Shock Adjusting Collar pr 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 U3770 Big Bore Rounded Pistons; 3 Hole pr U3771 Big Bore Rounded Pistons; 5 Hole pr

SHOCK OILS

U3937 Shock Mouldings

CR200 CORE R/C Silicone Oil - 100cSt - 60ml CR201 CORE R/C Silicone Oil - 150cSt - 60ml CR202 CORE R/C Silicone Oil - 200cSt - 60ml CR203 CORE R/C Silicone Oil - 250cSt - 60ml CR204 CORE R/C Silicone Oil - 300cSt - 60ml CR205 CORE R/C Silicone Oil - 350cSt - 60ml CR206 CORE R/C Silicone Oil - 400cSt - 60ml CR207 CORE R/C Silicone Oil - 450cSt - 60ml CR208 CORE R/C Silicone Oil - 500cSt - 60ml CR209 CORE R/C Silicone Oil - 550cSt - 60ml CR210 CORE R/C Silicone Oil - 600cSt - 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 G035 Pure Silicone Shock Oil - 35w Pure Silicone Shock Oil - 40w G040 G045 Pure Silicone Shock Oil - 45w

Pure Silicone Shock Oil - 50w

U3673 Big Bore Spring Tuning Set; Med 7prs

SHOCK SPRINGS

G050

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 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

U3687 Big Bore Spring; Long - 4.0 pr

Big Bore Spring; Long - 3.5 pr

TRANSMISSION

U3686

U3334 Cone; Rear Wheels pr U3335 Covers; Idler Gears - CAT SX U3348 Gear; CNC 80t Spur - Slipper U3349 Gear; CNC 81t Spur - Slipper U3350 Gear; CNC 82t Spur - Slipper U3351 Gear; CNC 83t Spur - Slipper U3361 Roll Pins Set 2x3/8+4x1/2 - CAT SX U3364 Slipper Pad; PTFE Octagon pr Sealing Cap; Slipper Adjust - CAT SX pk3 Thrust Bearing F3x8G SiNi Balls U3740 Diff Washers; 18mm - Cougar SV

U3772 Alloy Trans Hsg 4.5deg; LH - Cougar SV

U3773 Alloy Trans Hsg 4.5deg; RH - Cougar SV



		Cont	

U3862	Gear; Steel 33T - Cat SX3/Cougar SV2
U3865	Gear; Steel 23T - Cat SX3/Cougar SV2

U3993 Axle - Cougar SV2

U3996 Bone - Cougar SV2

U4004 Diff Gear; 38T CNC - Cougar SV2 U4005 Diff Output; Female - Cougar SV2 U4006 Diff Output; Male - Cougar SV2

U4007 Diff; Assembled Pro Spec - Cougar SV2

U4025 Driveshaft - Cougar SV2 (pr)

U4026 Eccentrics; Diff + Idler - Cougar SV2 U4032 Transmission Pivot Set - Cougar SV2

U4037 Idler Gear + Shaft - Cougar SV2

U4039 Layshaft 21T - Cougar SV2 U4040 Diff Screw Set Cougar SV2 U4044 Slipper Set - Cougar SV2

U4045 Spacers; Slipper - Cougar SV2 U4046 Spur Gear Cover - Cougar SV2

U4048 Transfer Shaft - Cougar SV2

U4049 Transmission Housings - Cougar SV2

U4050 UJ Parts - Cougar SV2

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.

U2318 29T Steel Pinion - 48 D.P. U3414 Pinion; Hard Alloy 48dp - 14T

U3415 Pinion; Hard Alloy 48dp - 15T U3416 Pinion; Hard Alloy 48dp - 16T

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

BEARINGS AND GREASE

U1301 Silicone Diff Lube - Pot

U1411 Ball Bearing - 4x8x3 Shielded. (pr)

U1957 Moly Axle Grease - Pot

U2148 Ball Bearing - 5x10x4 Shielded (pr)

U2459 Diff Balls; T/C 2.5mm pk12

U2698 Ball Bearing - 5x10x4 Rubber Sealed. (pr)
U2699 Ball Bearing - 10x15x4 - Rubber Sealed. (pr)

U2862 Ball Bearing - 5x10x4 Cerramic. (pr)

U3016 Ball Bearing - 10x15x4 - Shielded. (pr)
U3017 Ball Bearind - 10x15x4 - Cerramic. (pr)

U3019 Diff Balls; Ceramic Nitride 2.5mm (pk12)
U3075 Ball Bearing - 4x8x3 Rubber Sealed. (pr)

BEARINGS AND GREASE Cont...

U3136 Ball Bearing - 5x8x2.5 - Shielded. (pr)
U3386 Ball Bearing - 4x8x3 Cerramic. (pr)

U3737 Ball Bearing 3/16x3/8 Shielded. (pr) U3855 Ball Bearing - 5x10 Open (pr)

U3994 Ball Bearing 3/16x3/8 Rubber Sealed. (pr)

SPEED PACKS

CR024 CORE RC - Serrated M4 Steel Wheel Nut pk4

U1544 SPEED PACK - Short M3; Cap Hd U1545 SPEED PACK - M3 Cap Hd 16;20mm

U1546 SPEED PACK - M3 Cap Hd 25;30;35;45mm

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

U2128 SPEED PACK - Grub-Set Screws M3 M4

U2207 SPEED PACK - M3x35 Csk + Nuts

U2356 SPEED PACK - M3x16-30 Csk Screws (pk12)

U2760 SPEED PACK - M3 Button Hd; 4 to 20

U2858 Alloy M3x6 Spacer Set; 0.5; 1; 2; 3mm - 16pcs

U2947 SPEED PACK - M2.5 Washers (pk8)

U2988 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 Allen Hi-T

U3131 Alloy Spacers M3x7mm 0.5;1;2mm (pk18)

U3572 SPEED PACK - M3x14 Grub Srew pk4 U3753 SPEED PACK - M2.5x6 Button Hd pk8

U3753 SPEED PACK - M2.5x6 Button Hd pk8 U3754 SPEED PACK - M2.5x10 Csk Hd pk8

U3755 SPEED PACK - M3x16 HT Button Hd

SPEED SECRETS

CR035 CORE RC - Serrated Alloy M4 Nuts; Blue pk 4

CR036 CORE RC - Serrated Alloy M4 Nuts; Purple pk 4

CR043 CORE RC - Silver X-Weights 16pcs

CR058 CORE RC - Black X-Weights 16pcs

MR-CSOFFROAD MR33 Car Stand Off Road

S500B Schumacher BANNER 6x3ft

U1573 Titanium Turnbuckle; purple - 53mm (pr)

U1574 Titanium Turnbuckle; purple - 60mm (pr)

U1954 Thrust Bearing F3x8G Super Pro

U3605 Alloy Rear Hubs; 1 deg - CAT/Cougar SV

U3611 Alloy Spring Seat - All shock types pr

U3701 Alloy Posts; Stick LiPo - Cougar SV pk2

U3722 Alloy Rear Strap; 3 deg - Cougar SV

U3724 Alloy Rear Strap; 5 deg - Cougar SV

U3727 Forward Shock Conversion Kit - Cougar SV

U3758 Yokes; 5 deg - Cougar SV

U3782 HD Diaphragm - pk4

U3861 Gear; Steel 35T - Cat SX3/Cougar SV2

U3863 Gear ; Steel 31T - Cat SX3/Cougar SV2

U3864 Gear; Steel 25T - Cat SX3/Cougar SV2

U3866 Gear; Steel 21T - Cat SX3/Cougar SV2

U3929 Alloy Yokes 7.5 Deg - Cougar

U3934 Hub Carrier; Zero Trail - Cougar SV

U3991 Alloy Gearbox Cases - Cougar SV2

U3998 C/F Link Mount Options; Fr + Rr - Cougar SV2 Set 6

U4029 Front Lipo Stop - Cougar SV2

U4030 Lower Trans (High) - LH - Cougar SV2

U4034 Lower Trans (High) - RH - Cougar SV2

U4035 CF Top Deck Cells Rearward - Cougar SV2

U4042 Roll Bar Set - Cougar SV2

U4047 Stick Pack Conversion Set - Cougar SV2

U4053 Wishbones Front Medium - Cougar SV2

U4054 Wishbones Rear Medium - Cougar SV2

Spare Parts

TEAM CLOTHING

G331L T Blue - Large

G331M T Blue - Medium

G331S T Blue - Small Man

G331XL T Blue - X-Large

G331XXL T Blue - XX-Large

G331XXXL T Blue - XXX-Large

G331XXXXL T Blue - XXXX-Large

G334 Cap - Black; Meduim 58cm

Cap - Black; Large 62cm G335

G336L Sweat - Large

G336M Sweat - Medium

G336S Sweat - Small

G336XL Sweat - X-Large

G336XXL Sweat - XX-Large

Coffee Mug - Schumacher Logo

G338 2 Tone Beanie Knitted Hat G339L Jacket - 3 Layer Softshell; Black - L 44inch

G339M Jacket - 3 Layer Softshell; Black - M 41inch

G339S Jacket - 3 Layer Softshell; Black - S - 38inch

G339XL Jacket - 3 Layer Softshell; Black - XL 46inch

G339XS Jacket - 3 Layer Softshell; Black - XS - 34inch

G339XXL Jacket - 3 Layer Softshell; Black - XXL 48inch G339XXXL Jacket - 3 Layer Softshell; Black - XXXL 50inch

ELECTRICAL ACCESSORIES

AN530400HV Digital BL Servo 10.7Kg for 1/10th Steering

AN530410HV Digital BL Servo 22Kg for 1/8 & 1/10 Buggy/Truggy 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 CR115 CORE RC Silicone Wire 12g - Red/Black/Blue 3x50cm

CR119 Heatshrink 1.5mm dia Black - 20pcs

CR120 Heatshrink 2.0mm dia Black - 20pcs

CR124 Heatshrink 6.0mm dia Black - 20pcs CR125 Heatshrink 6.0mm dia Red - 20pcs

CR126 Heatshrink 6.0mm dia Blue - 20pcs

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

CR162 CORE RC Sensor Checking Widget

ED199502 EDS Ultra Bright L.E.D. Light Stand

G837 Mini Temp Gun - 420F 230C

GM7987 Servo HBS 790 BB, MG

GM7990 Servo HBS 860 BB, MG

GM7991 Servo HBS 870 BB, MG

GM94411 GM Soldering Station 90W ESD

CHARGERS

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

Charger 240v UK; 7.2/Tx/Croc 1.2-12v

NR91400 Sigma Power Charger

NR91555 Stealth Touch Evolution Charger

GM6468.GB Ultramat 16S + 3076

BRUSHLESS MOTORS

GM97296 GM Pro 6.5T - Star Wind

NR90550 Cobra Brushless Motor - 6.5T

NR90652 PURE Evolution BL - 8.5t

NR90662 PURE Evolution BL - 7.5t

NR90672 PURE Evolution BL - 6.5t

NR90673 PURE Evolution BL - 6.5t OCTA WIND





Schumacher 3 Layer Soft Shell Team Jacket - Black

G339XS - Extra Small - 34" Chest

G339S - Small - 38" Chest

G339M - Medium - 41" Chest G339L - Large - 44" Chest

G339XL - Extra Large - 46" Chest

G339XXL - Double Extra Large - 48" Chest

G339XXXL - Triple Extra Large - 50° Chest



Team "T" Shirt Blue G331S - Blue Small Man G331M - Blue Medium G331L - Blue Large G331XL - Blue Extra Large G331XXL - Blue XX Large G331XXXL - Blue XXX Large G331XXXXL - Blue XXXX Large



G338 Team 2 Tone Beanie Knitted Hat

Team Hooded Sweat Shirt G336S - Small G336M - Medium

G336L - Large

G336XL - Extra Large

G336XXL - Double Extra Large





G334 - Medium - 58cm G335 - Large - 62cm

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BRUSHLESS MOTORS Cont...

NR90683 PURE Evolution BL - 5.5t OCTA WIND NR90693 PURE Evolution BL - 4.5t OCTA WIND SP000015 Ultra Sportsman Version 3.0 Sensor Motor 10.5R SP000016 Ultra Sportsman Version 3.0 Sensor Motor 13.5R SP000017 Ultra Sportsman Version 3.0 Sensor Motor 17.5R SP000025 Ultra Sportsman Version 3.0 Sensor Motor 5.5R SP000027 Ultra Sportsman Version 3.0 Sensor Motor 7.5R SP000028 Ultra Sportsman Version 3.0 Sensor Motor 8.5R SP13865V3 Speed Passion V3.0 Comp BL Motor; 6.5T SP13875V3 Speed Passion V3.0 Comp BL Motor; 7.5T SP13885V3 Speed Passion V3.0 Comp BL Motor; 8.5T

BRUSHLESS ACCESSORIES

GM2894.9 Sensor Adaptor Cable - Gm-Evo2/Novak-M NR90639 Pure Evo Spec Racing 1S Lipo Tuning Rotor NR92500 USB Bridge - Speedo Firmware Update Device NR92512 Cooling Fan; Low Profile - Include Mounting Screws 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 SP138MS105 10.5R Stator for Competition Version 3.0 Motor SP138MS135 13.5R Stator for Competition Version 3.0 Motor SP138MS175 7.5R Stator for Competition Version 3.0 Motor SP138MS215 21.5R Stator for Competition Version 3.0 Motor SP162803 SP - Sensor Cable 250mm SPSB428 Sensor unit with Team protect for V3.0 motor

BRUSHLESS SPEED CONTROLLERS

GM97163 GM Genius 75 BL-ESC
GM97164 GM Genius 90 BL ESC 90 Amp V2010
GM97168 GM Genius 120 BL-ESC 120 Amp V2010
NR90905 Pearl Evolution V2 Brushless ESC
NR90915 Pearl Evolution Racing Spec V2 - B/less Speed Cont
NR90955 Pearl Evolution ISTC V2 Brushless ESC
SPEXT98802B Speed Passion GT V2.0 ESC - Blue
SPEXT98802LPBSpeed Passion LPF V2.0 ESC - Blue
SPEXT98802LPF Speed Passion LPF V2.0 ESC - Carbon Look
SPEXT98802LPSSpeed Passion LPF V2.0 ESC - Silver
SPEXT98802PRO Speed Passion GT V2.0 ESC - Carbon Look
SPEXT98802S Speed Passion GT V2.0 ESC - Silver

BATTERIES AND ACCESSORIES

CR059 CORE RC - Safe Charge Pouch 23x30cm
CR147 CORE RC T-Trx Battery Adaptor
G718 GP Alkaline AA Pencell; Card 4
G721 AA Pencell 2500NiMh - Card 4
GM99009 Lipo-saddle V-Maxx 60C 2x1S3P/5600 3, 7V G4
GM99010 Lipo-Akku V-Maxx 60C 2S2P/6200 G3,5/G4
GM99011 Lipo-Akku V-Maxx 60C 2S2P/6200 G4
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
MR-SB MR33 Lipo Bag
NR99948 NOSRAM LiPo 5000 Saddle - 7.4V 50C

NR99951 Lipo 6200 Big Mama X-treme Race H/case 65C-7.4V

ED181002 Chassis Droop Gauge Blocks 20mm for 1/8,1/10 (2)

NR99983 VTEC Lipo TX-Pk Sanwa M11-X/MX-3X-7.4V

SLR5545H SP 5300mah 45C Racing Lipo Hardcase

CR033 CORE RC - Safe Charge Pouch 18x22cm

TOOLS

HW010 Circlip Pliers; Internal - Wiha
CR100 Shock Shaft Pliers - Purple
CR101 Shock Shaft Pliers - Black
CR102 Magnetic Parts Tray - Purple
CR103 Magnetic Parts Tray - Black
CR148 CORE RC - Polybutler Pit Box; Black

TOOLS Cont...

ED181002 Chassis Droop Gauge Blocks 20mm for 1/8,1/10 (2) H1032 Alloy Camber Gauge - 1/10th GT85 Lube and Clean Aerosol 400ml U2789 Schumacher Hex Driver - 1.5mm U2790 Schumacher Hex Driver - 2.0mm U2791 Schumacher Hex Driver - 2.5mm U2792 Schumacher Hex Driver - 3.0mm U2795 Schumacher M3 Nut Driver Schumacher M4 Nut Driver U2796 U2818 Schumacher Body Reamer

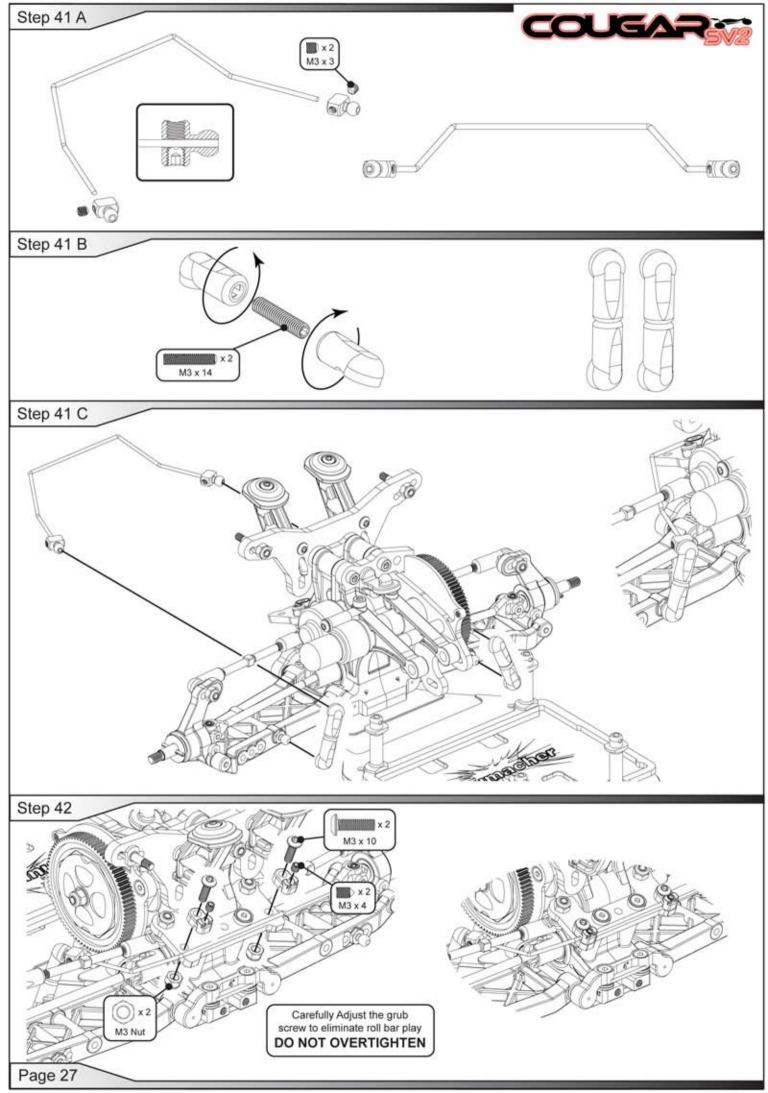
OFF ROAD TYRES

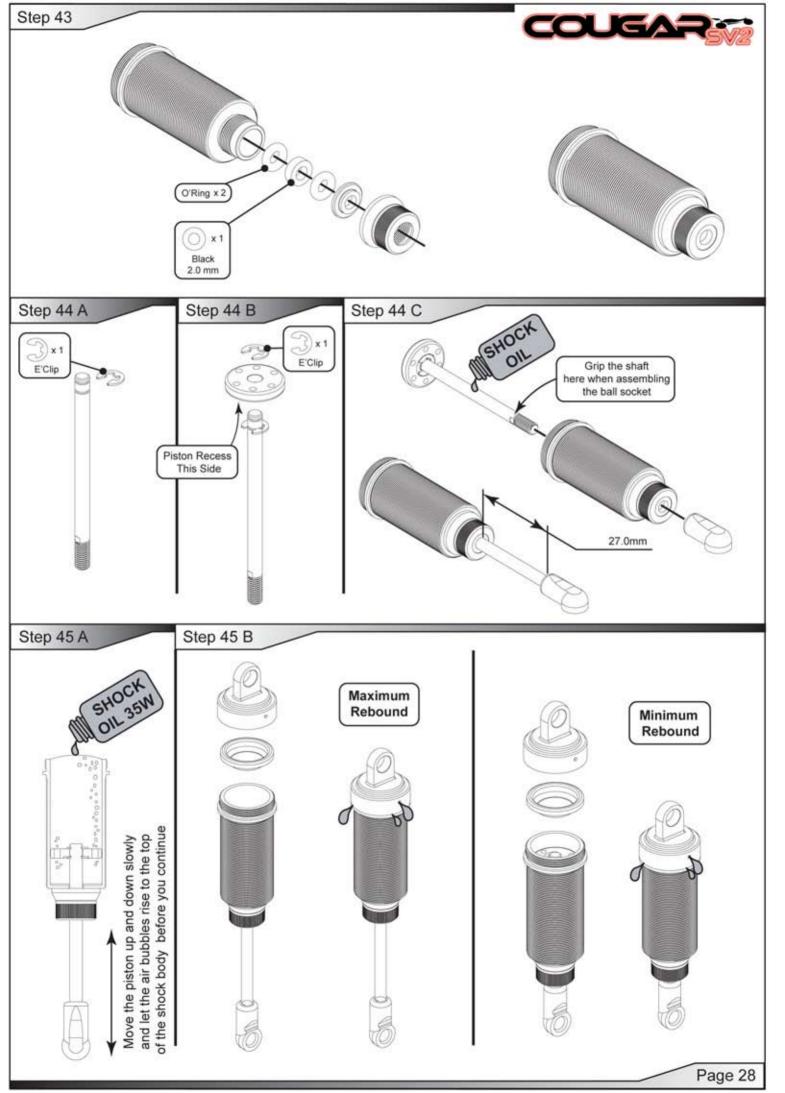
CR143 Multi Bow; 1/10 Off Rd Rear CR144 Multi Bow; 1/10 Off Rd 4WD Front CR145 Multi Block; 1/10 Off Rd Rear CR146 Multi Block; 1/10 Off Rd 4WD Front T650 Full Spike - Rear Tyres - Soft CAT (pr) T652 Full Spike - Front Tyres - Soft CAT (pr) T692 Block - Rear Tyres - Blue - CAT (pr) T693 Block - Front Tyres - Blue - CAT (pr) Mini Spike 2; Front Tyres - Green - 2.2 (pr) U6515 U6516 Mini Spike 2; Rear Tyres - Green - 2.2 (pr) Mini Spike 2; Front Tyres - Blue - 2.2 (pr) U6517 U6518 Mini Spike 2; Rear Tyres - Blue - 2.2 (pr) U6549 Mini Spike 2; Blue - Slim (pr) U6550 Mini Spike 2; Green - Slim (pr) U6557 Mini Spike 2: Front Tyres - Yellow (pr) U6558 Mini Spike 2; Rear Tyres - Yellow (pr) U6581 Mini Spike 2; standard -Yellow - Slim (pr) U6592 Stagger Rib - Yellow - Slim (pr) U6595 Full Spike - Front Tyres- Yellow - 2.2 (pr) U6596 Full Spike - Rear Tyres- Yellow - 2.2 (pr) U6601 Mini Pin - Blue - Front - 2.2 (pr) U6602 Mini Pin - Blue - Rear - 2.2 (pr) U6607 Mini Pin - Yellow - Front - 2.2 (pr) U6608 Mini Pin - Yellow - Rear - 2.2 (pr) U6609 Mini Pin - Yellow - Slim (pr) U6740 Mini Spike2 Pre-Glue; Yellow - Cat Rear (pr) U6742 Mini Pin Pre-Glue; Yellow - Cat Rear (pr) U6753 Mini Spike; Slim Yellow - Pre-Glued pr U6755 Mini Pin; Slim Yellow - Pre-Glued pr U6759 Cut Stagger - Yellow - Slim (pr) U6760 Cut Stagger; Slim Yellow - Pre-Glued pr U6761 Mini Spike 2; Silver - Slim (pr) U6762 Mini Spike 2; Front Tyres - Silver (pr) U6763 Mini Spike 2; Rear Tyres - Silver (pr) U6765 Cut Stagger Green - Slim pr U6770 Cut Stagger - Low Profile - Yellow (pr) U6771 Cut Stagger - Low Profile - green (pr)

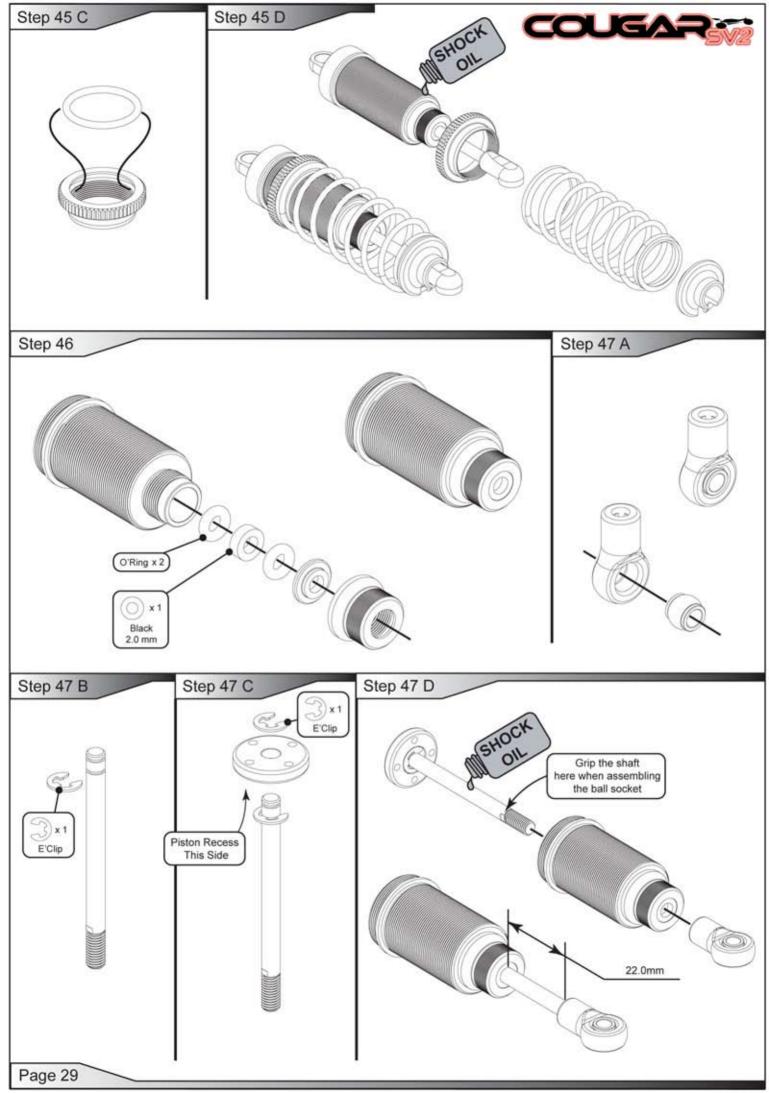
OFF ROAD WHEELS

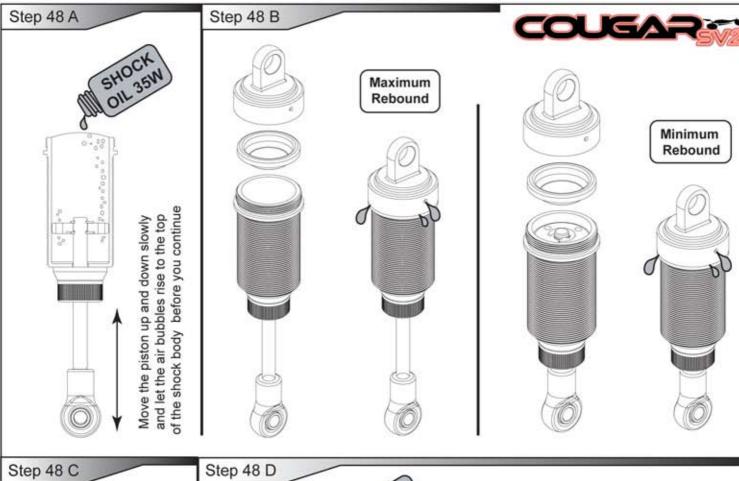
CR142 Red Moulded Insert; 1/10 Off Rd 4WD Front U3383 Wheel; Rear - Cat pr U3406 Wheel; Rear Fluro Yellow - Cat pr U3756 Med Front Wheels; White - Cougar SV Med Front Wheels; Yellow - Cougar SV U3765 U3766 Slim Front Wheels; White - Cougar SV Foam Tyre Insert; Hard - Front - CAT (pr) U6652 Foam Tyre Insert; Hard - Rear - CAT (pr) U6653 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) Foam Tyre Insert; Med - Rear - CAT (pr) U6734 U6738 Foam Tyre Insert; Med - Slim 2WD (pr) Tubby Insert; Med Front - CAT (pr) U6746 Tubby Insert; Med Rear - CAT (pr) U6747

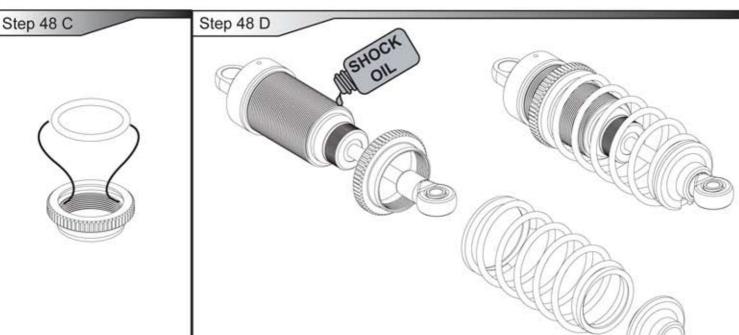
CR141 Red Moulded Insert; 1/10 Off Rd Rear









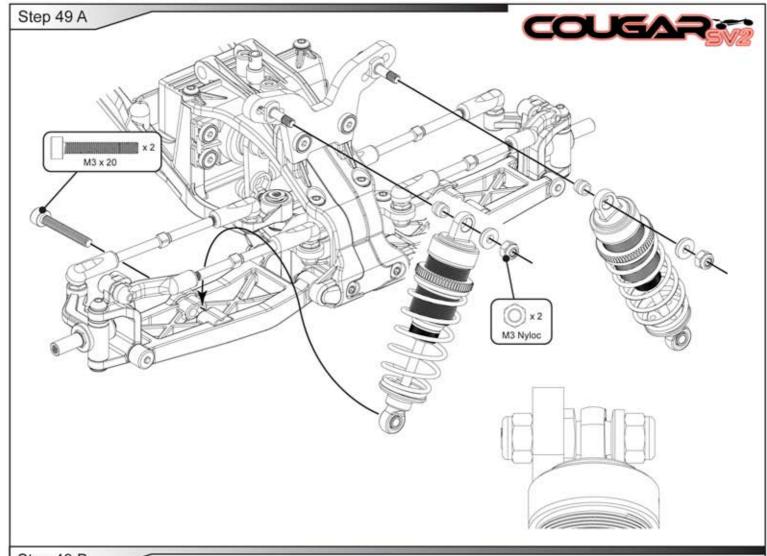


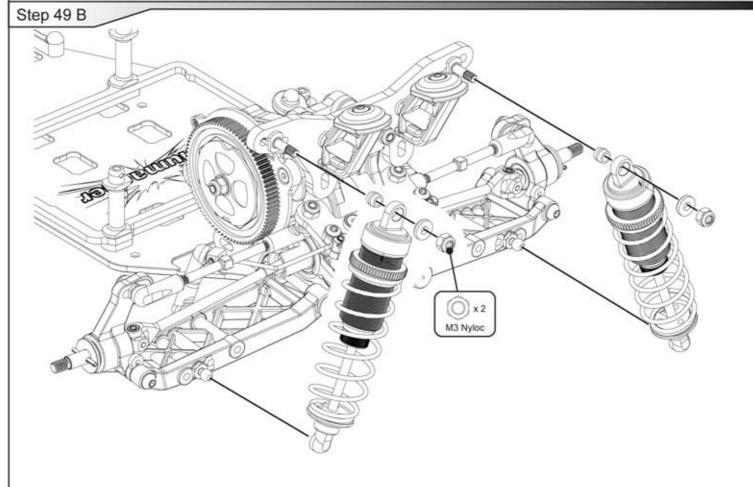


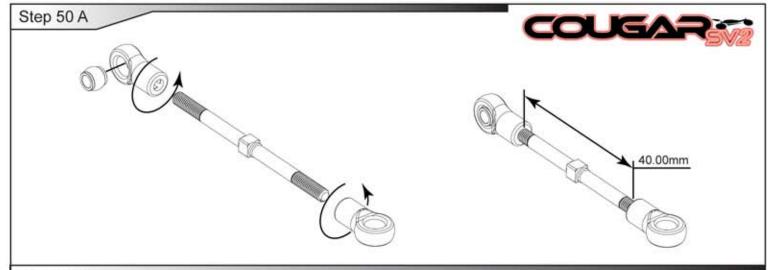


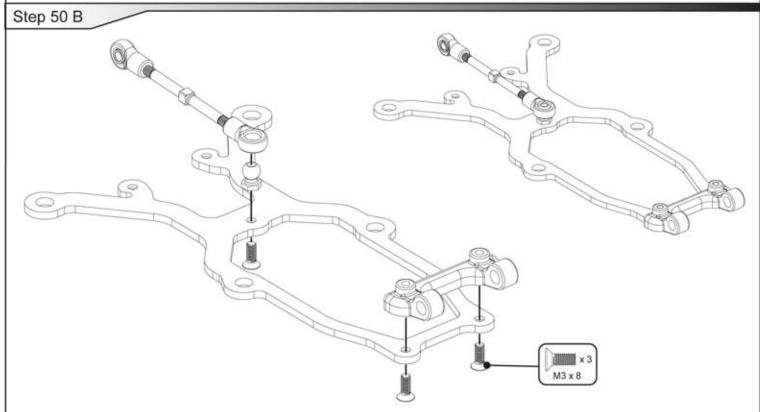
CORE-RC

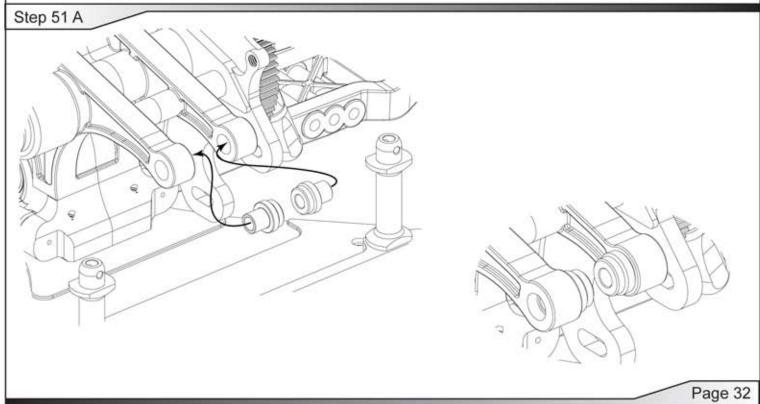
CR200 CORE R/C Silicone Oil - 100 cSt - 60ml
CR201 CORE R/C Silicone Oil - 150 cSt - 60ml
CR202 CORE R/C Silicone Oil - 200 cSt - 60ml
CR203 CORE R/C Silicone Oil - 250 cSt - 60ml
CR204 CORE R/C Silicone Oil - 300 cSt - 60ml
CR205 CORE R/C Silicone Oil - 350 cSt - 60ml
CR206 CORE R/C Silicone Oil - 400 cSt - 60ml
CR207 CORE R/C Silicone Oil - 450 cSt - 60ml
CR208 CORE R/C Silicone Oil - 500 cSt - 60ml
CR209 CORE R/C Silicone Oil - 550 cSt - 60ml
CR210 CORE R/C Silicone Oil - 600 cSt - 60ml

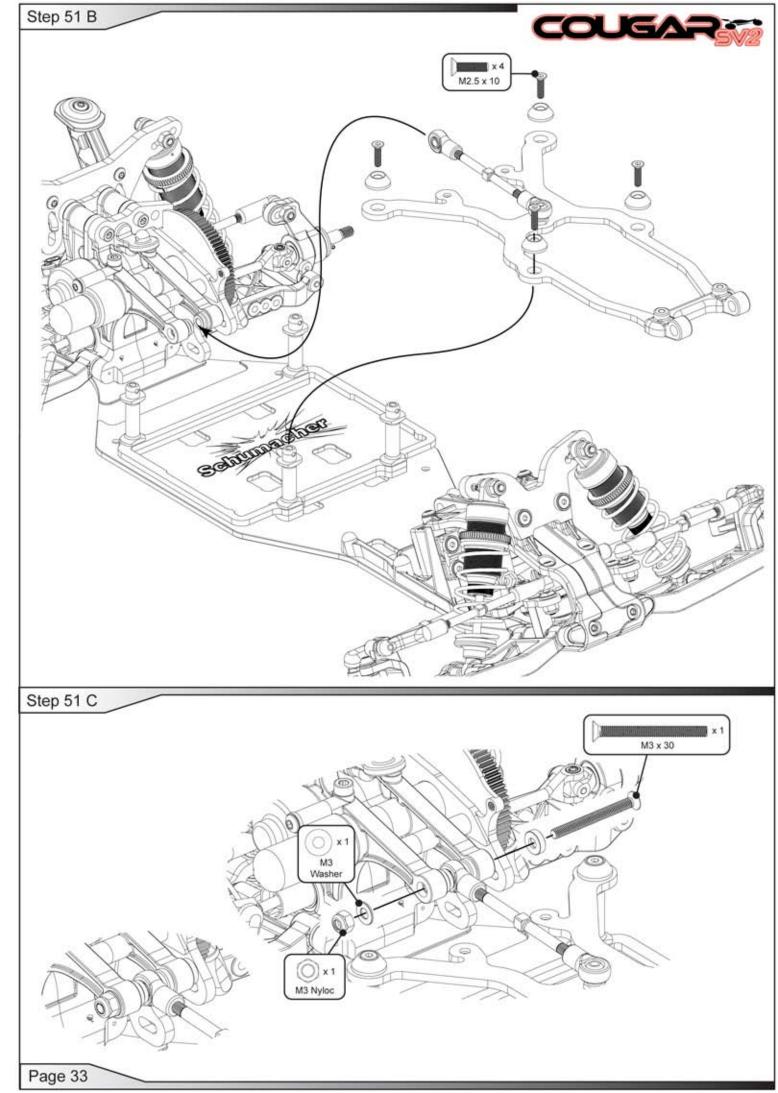


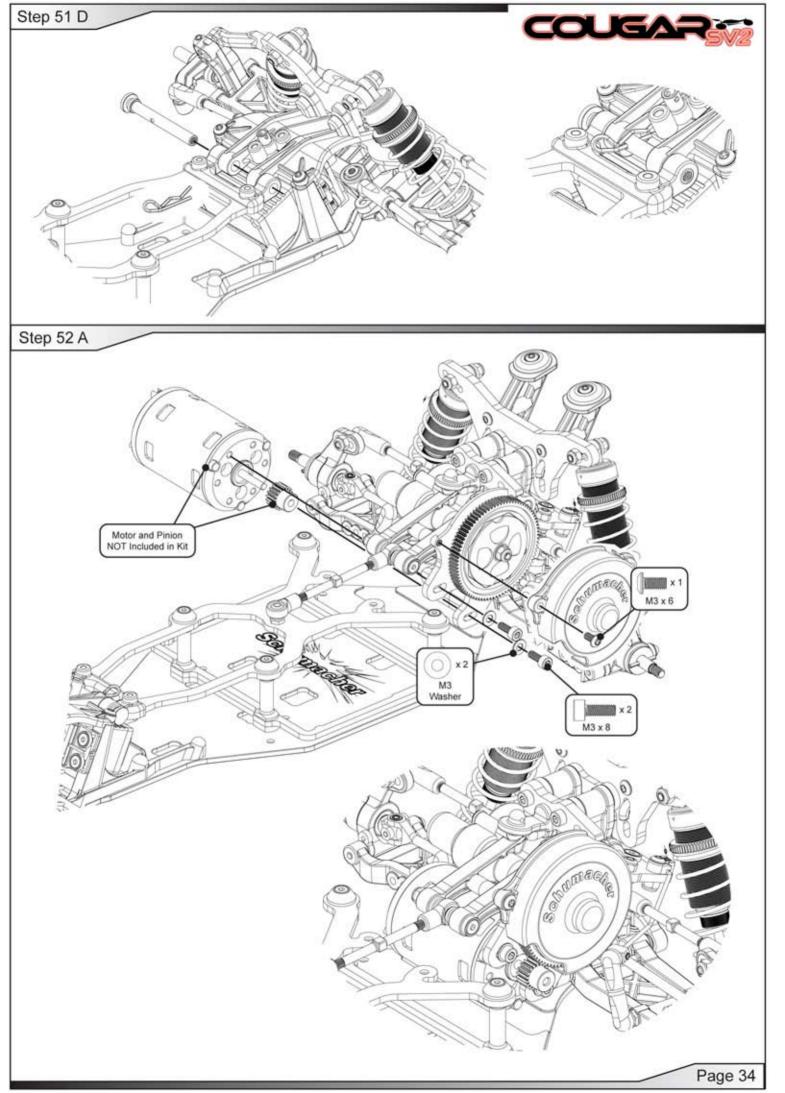


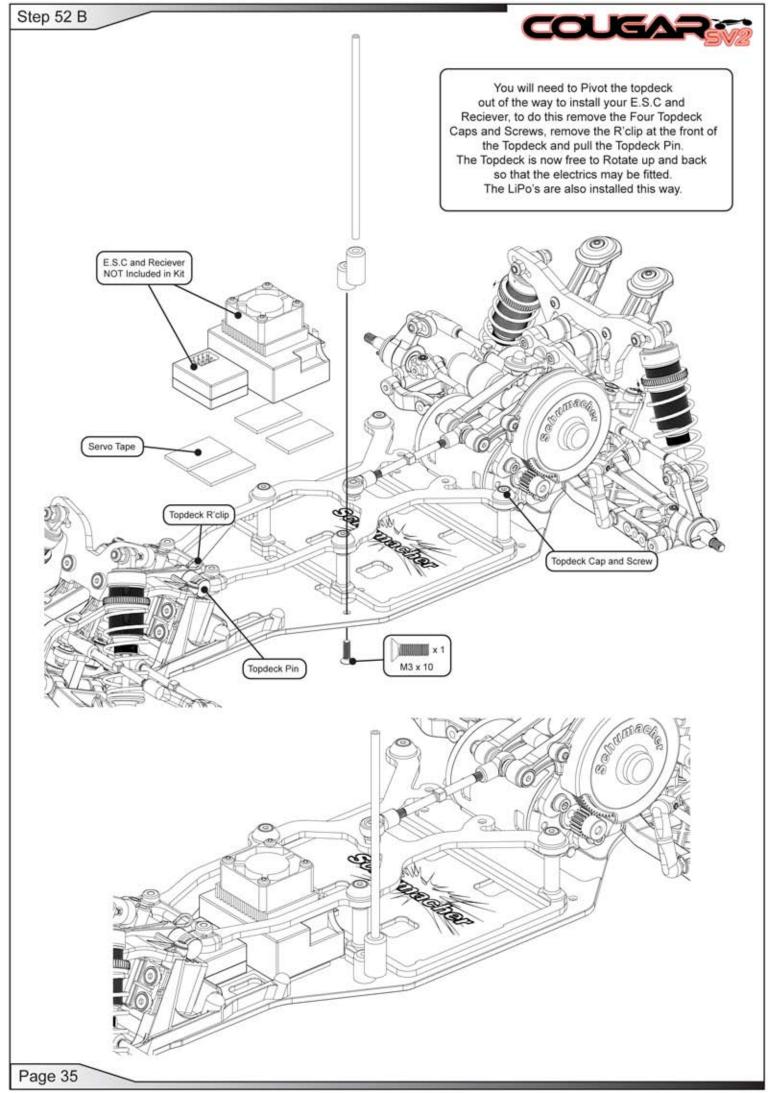


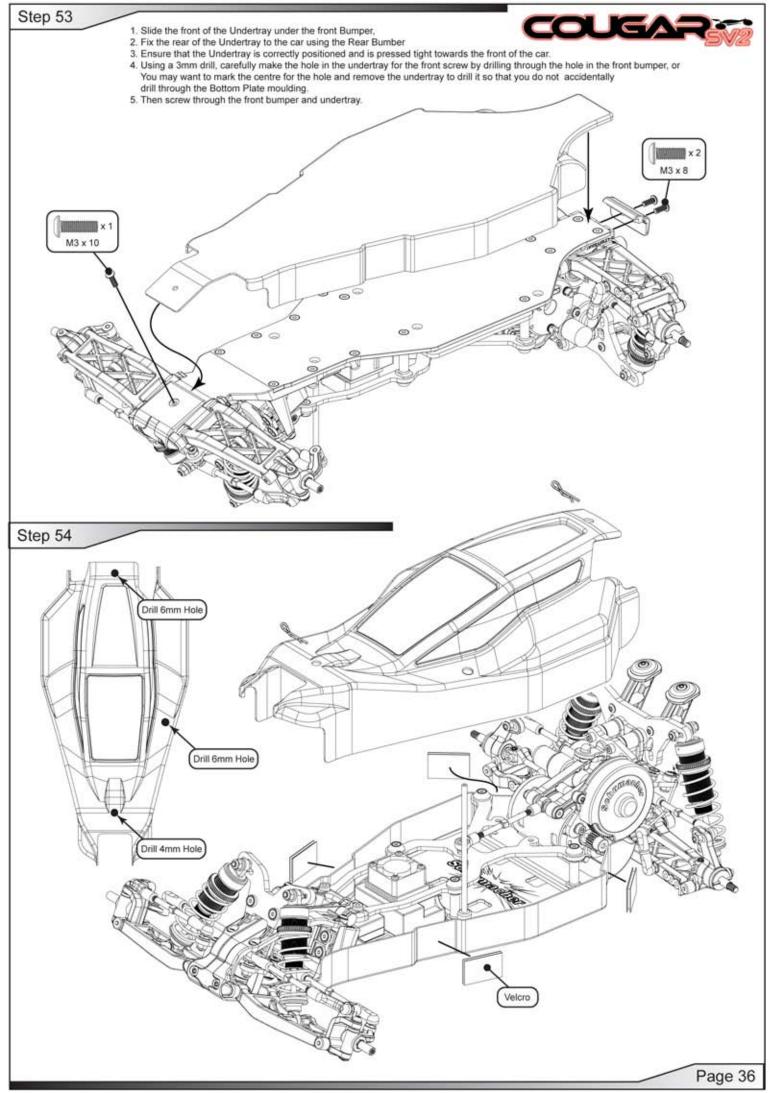


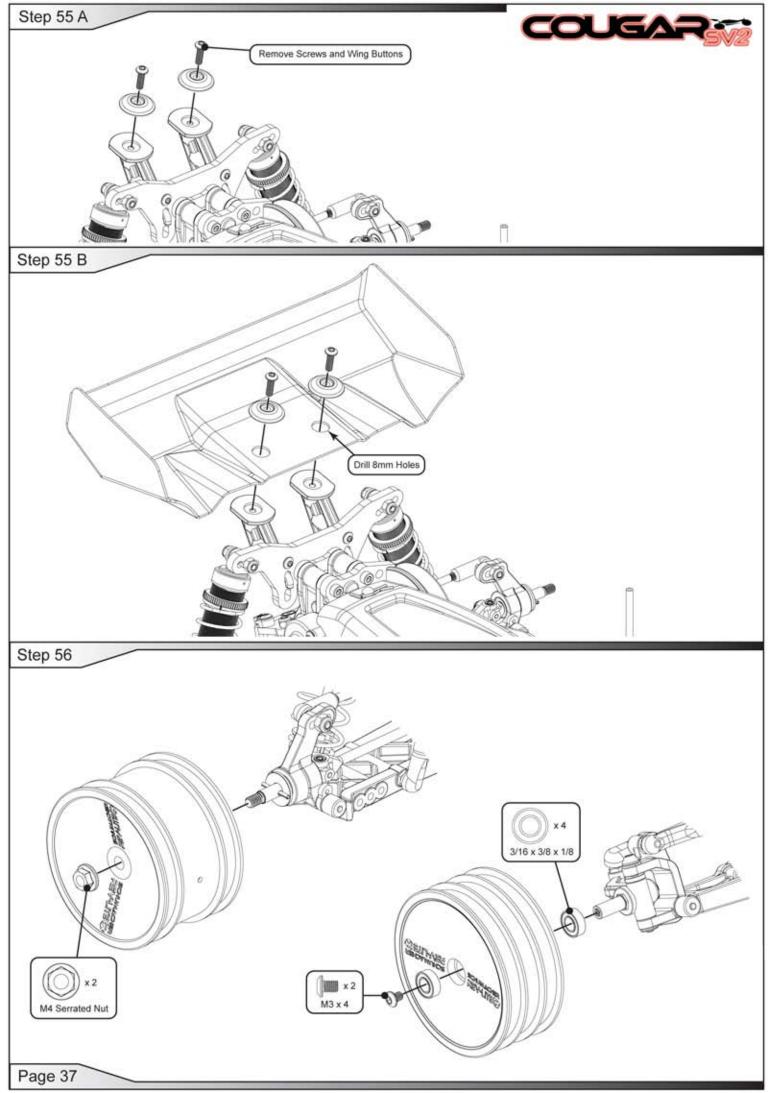








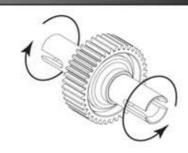






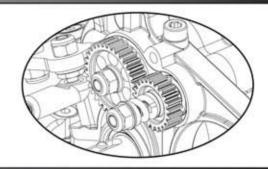
Differential

For consistent performance it is vital that the differential action should be smooth and free. The diff should be adjusted using the recommended settings in the manual. 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 re building your diff we recommend using a U1954 thrust race and U3019 ceramic nitride balls for ultimate reliability and weight saving.



Slipper Clutch

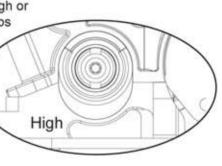
On most tracks it is best to start with the slipper on a tight setting, and gradually loosen the spring tension, until you achieve the most consistent drive away from turns without spinning the car or pulling wheelies. Make sure you still have enough drive when launching the car from the up ramps. WARNING,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



Differential height

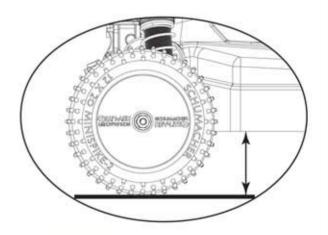
Low

It is possible to run the Cougar with the diff in the high or low position, When running on tracks with large jumps using the diff in the high position causes the driveshaft's to plunge more, The added friction of this can help make the car more stable on landing when under power. This setting could also help with traction on loose surfaces. For most normal tracks we would recommend running the diff in the low position for reduced driveshaft friction.



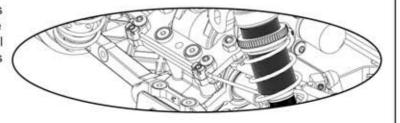
Ride height

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 20 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.



Anti Roll Bar

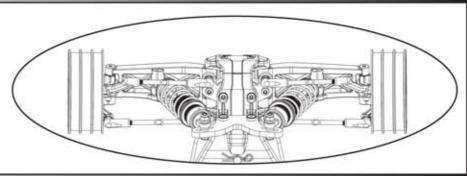
Anti roll bars are an often overlooked set up aid that allows fine tuning of the suspension without major changes to the shock and spring settings. They are mainly used to add roll stiffness to the car without affecting the handling on bumps and jumps. Running roll bars allows you to run softer suspension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





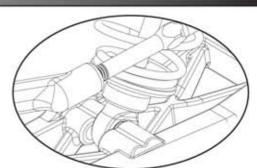
Front Toe In

Front toe in should be set to 0° (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.



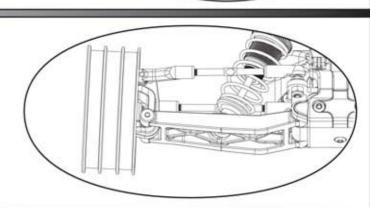
Front Wishbone Shock Mounting Hole

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° 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.

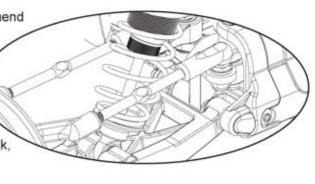


Front Camber Links

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.

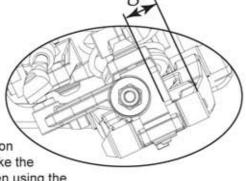
Lowering the inside ball stud will give a similar result to shortening the

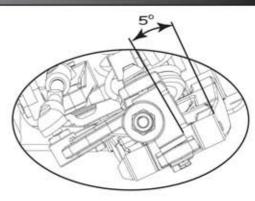
link, and raising it will give a similar result to lengthening the camber link, but with less total effect.



Front Yoke

The rake angle (kick up) is 25° on the cougar and needs adding to the castor block angle to get the total castor angle. The standard car uses a 0° castor block making the standard car 25° in total; this can be increased to 30° by using the optional 5° 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° setup.



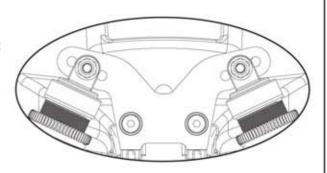


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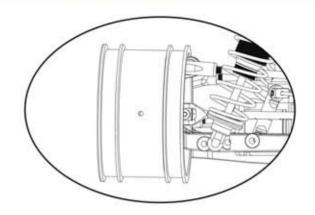
Front Shock Mount

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.



Rear Camber

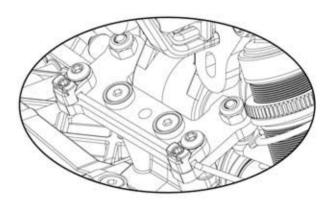
The usual team setting for static rear camber is 1° negative at ride height (the top of the tyre leaning inwards towards the car). Increasing the static rear camber will increase the traction when exiting the turns, but will be less stable at high speed. Decreasing the camber will reduce stability and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

The kit build rear camber link setting is the best compromise for most tracks. This link option 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.

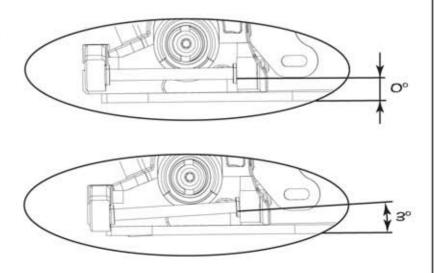
Shortening the rear camber link will make the rear of the car roll less in the corners and square up faster when accelerating away from tight turns, longer links are generally used on high grip tracks and shorter links on low grip tracks. Lowering the inside ball stud will give a similar result to shortening the link, and raising it will give a similar result to lengthening the camber link, but with less total effect.



Rear Anti Squat

The standard anti squat is adjustable from 0° to 3°.

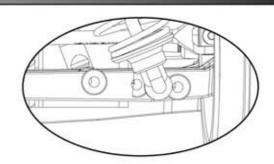
0° anti squat allows the suspension to work better over the large bumps but usually gives less power on traction. Adding more antisquat gives more forward traction up to the point where the car starts to pull wheelies. Backing off the slipper is not always an option to compensate for this as good initial bite is needed to clear big jumps. Adding antisquat seems to make the car handle better over small ripples but not so good on the tracks with large bumps. The Team have found that 3° works well on most tracks. And With optional parts this can be increased to 4.5°.





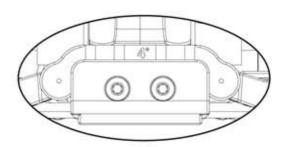
Rear Wishbone Shock mounting Hole

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.

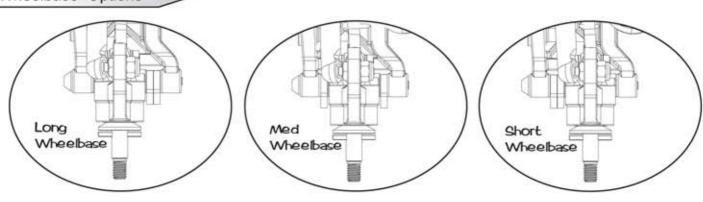


Rear Toe In

The standard rear toe in is 4° this is a good compromise between forward traction and the car binding in the turns, this setting is fine for most tracks. 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.



Wheelbase Options



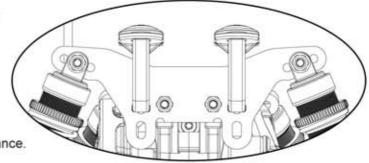
The cougar has 3 wheelbase options, short, med and long. This is adjusted by repositioning the quik clips at the rear hub carrier. Both clips at the rear move the hub forwards for short wheelbase. Both at the front for long wheelbase and one either side for med wheelbase. Running the car in short wheelbase will give more traction at the expense of stability over rough sections of the track. For better stability over the rough section run the car in long wheelbase form this will also free up the car on sweeping sections of the track.

TEAM TIP

Swapping the front wishbones from left to right gives a wheelbase increase of 1.5mm, but this also changes the steering Ackerman slightly and reduces front end grab when turning in off power.

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.





Traditionally 2WD cars from the USA have always used an internal ratio between 2.4:1 and 2.6:1

The Standard Cougar Ratio is 2.58:1 with the option to run either 2.23:1 or 3:1 with optional parts.

One advantage of these interchangeable ratio's is that it is possible to adjust the motor position whilst maintaining the same overall gearing.

3:1

We Class this as a High inertia ratio, as the layshaft for the same overall gearing will be rotating faster than the other available ratios. This will give you a smooth driving transmission, spooling up and down without major reactions from throttle input, Good for loose surfaces.



	16	17	18	19	20	21	22	23	24	25	26	27	28
83	15.56	14.65	13.83	13.11	12.45	11.86	11.32	10.83	10.38	9.96			
82	15.37	14.47	13.67	12.95	12.30	11.71	11.18	10.70	10.25	9.84	9.46		
81		14.29	13.50	12.79	12.15	11.57	11.05	10.57	10.13	9.72	9.35	9.00	
80			13.33	12.63	12.00	11.43	10.91	10.43	10.00	9.60	9.23	8.89	8.57

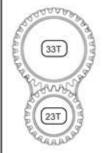
						27					
76	10.36	9.91	9.50	9.12	8.77	8.44	8.14	7.86	7.60	7.35	7.13

Tooth Sum 98 Minimum 108 Maximum

2.58:1

We Class this as a Medium inertia ratio, as the layshaft for the same overall gearing will be rotating at speeds between the other available ratios. This will result in a transmission that has a good balance of sharp response and smooth transmission.

This Kit Ratio is Reccomended for most applications



	16	17	18	19	20	21	22	23	24	25	26	27	28
83	13.40	12.61	11.91	11.28	10.72	10.21	9.74	9.32	8.93	8.58			
82	13.22	12.46	11.77	11.15	10.59	10.09	9.63	9.21	8.83	8.47	8.15		
81		12.29	11.62	11.01	10.46	9.96	9.51	9.10	8.72	8.37	8.05	7.75	
80			11.47	10.88	10.33	9.84	9.39	8.98	8.61	8.27	7.95	7.65	7.38

	22	23	24	25	26	27	28	29	30	31	32
76	8.91	8.53	8.17	7.84	7.54	7.26	7.00	6.76	6.54	6.33	6.13

Tooth Sum 98 Minimum 108 Maximum

2.23:1

We Class this as a Low inertia ratio, as the layshaft for the same overall gearing will be rotating Slower than the other available ratios. This will result in a faster reacting transmission, with sharper responses to throttle and brake input.

Good for High Grip situations.



	16	17	18	19	20	21	22	23	24	25	26	27	28
83	11.57	10.89	10.28	9.74	9.25	8.81	8.41	8.05	7.71	7.40			
82	11.43	10.76	10.16	9.62	9.14	8.71	8.31	7.95	7.62	7.31	7.03		
81		10.63	10.04	9.51	9.03	8.60	8.21	7.85	7.53	7.23	6.95	6.69	
80			9.91	9.39	8.92	8.50	8.11	7.76	7.43	7.14	6.86	6.61	6.37

).						27					
76	7.70	7.37	7.06	6.78	6.52	6.28	6.05	5.84	5.65	5.47	5.30

Tooth Sum 98 Minimum 108 Maximum











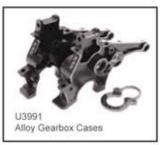
























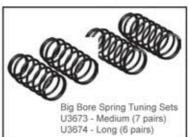




U4029 Front LiPo Stop











U3770 - 3 Hole Pistons (pair)

U3771 - 5 Hole Pistons (pair)















Thin, ideal

for tyres.

Wheels, Tyres and Inserts

2WD Slim Cut Stagger



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

2WD Slim Stagger Rib



U6592 - Yellow Compound (pair)

2WD Slim Mini Spike 2



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

2WD Slim Mini Pin



U6609 - Yellow Compound (pair)

2WD Low Profile Slim Cut Stagger



U6770 - Yellow Compound (pair) U6771 - Green Compound (pair)

2.2" Rear Full Spike



U6596 - Yellow Compound (pair)

Front Mini Spike 2



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

4WD Front Mini Pin



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

Pre-Glued

Cut Stagger on Revlite Wheels. U6760 - Slim 2wd Front - Yellow

Mini Pin on Revlite Wheels. U6742 - Rear - Yellow U6755 - Slim 2wd Front - Yellow

Mini Spike 2 on Revlite Wheels. U6740 - Rear -Yellow U6753 - Slim 2wd Front - Yellow Rear Mini Spike 2



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

Rear Mini Pin



U6608 - Yellow Compound (pair) U6602 - Blue Compound (pair)

Revlite Wheels

U3383 - Rear White U3756 - Med Front White U3766 - Slim Front White

U3406 - Rear Yellow

U3765 - Med Front Yellow U3767 - Slim Front Yellow

Off-Road Foam Inserts

U6541 - WHITE Foam Tyre Insert; Soft - Truck (pr)

U6652 - GREY Foam Tyre Insert; Hard - Front - CAT (pr)

U6653 - GREY Foam Tyre Insert; Hard - Rear - CAT (pr)

U6667 - GREY Foam Tyre Insert; Hard - Slim 2WD (pr)

U6668 - WHITE Foam Tyre Inserts; Soft - Ultra Wide (pr) U6669 - GREY Foam Tyre Inserts; Hard - Ultra Wide (pr)

U6733 - BLUE Foam Tyre Insert; Med - Front - CAT (pr)

U6734 - BLUE Foam Tyre Insert; Med - Rear - CAT (pr)

U6746 - BLUE Tubby Insert; Med Front - CAT (pr)

U6747 - BLUE Tubby Insert; Med Rear - CAT (pr)

U6738 - BLUE Foam Tyre Insert; Med - Slim 2WD (pr)



