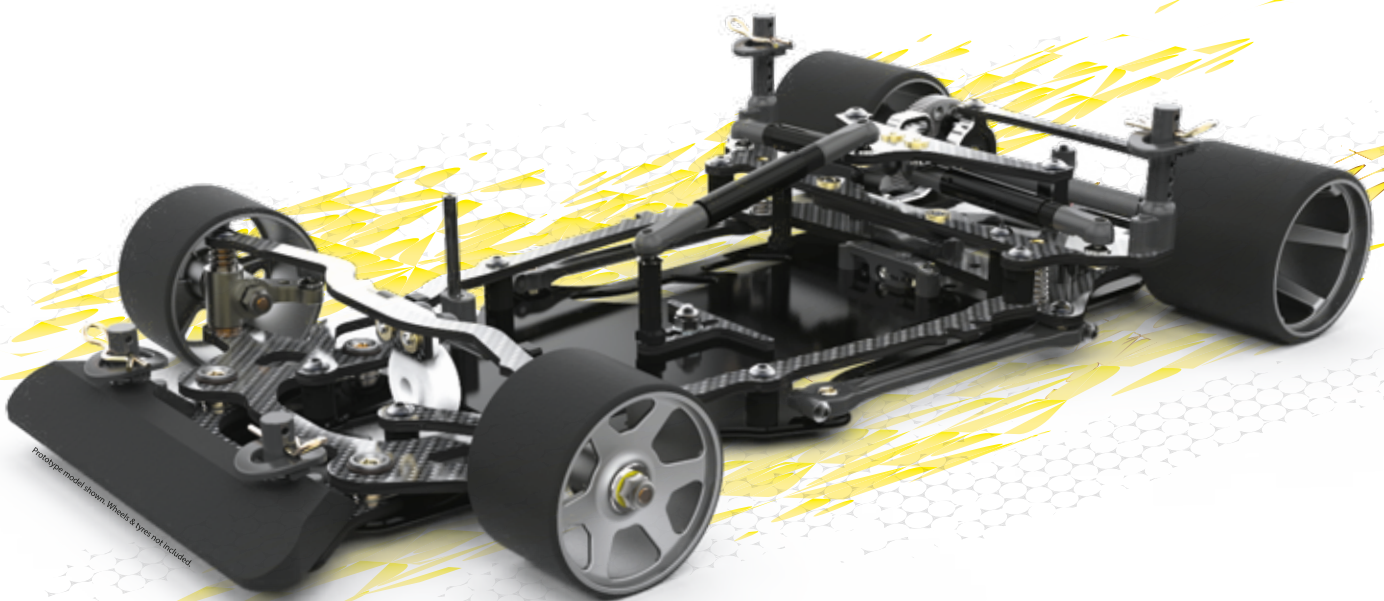


ECLIPSE 4

WORLD CLASS 1/12TH PRO LMP CHASSIS



Instruction Manual



Prototype model shown. Wheels & tires not included.



PERFORMANCE AND TECHNOLOGY

Schumacher

racing-cars.com

S1580_{ISS1}

Additional Items Required

Transmitter and Receiver



E.S.C



Servo



Motor

1S Li-Po Battery



Charger



Bodyshell



CORE RC Paint
CR600 to CR631
CR666 to CR672



CR522 CORE RC
Pro Tyre Glue + 2 Nozzles



Tyres



Soldering Iron
CR266 40w
CR275 80w

U3107 - Solder

AM701011 - Low Profile 4mm Connector 24K - pk2
AM701012 - Low Profile 5mm Connector 24K - pk2



CR288
CORE RC Silicone Wire Black 16 AWG - 1Mtr



AM190003 Reamer With End Cap For Lexan Body

U4229 Steel Spanner - 5.5mm/3.9mm



CR044 Curved Body Scissors



AM150155 Nut Driver 5.5 (M3)
AM150170 Nut Driver 7.0 (M4)



AM110115 Allen Wrench 1.5
AM110120 Allen Wrench 2.0
AM110125 Allen Wrench 2.5
AM110130 Allen Wrench 3.0

ECLIPSE4

WORLD CLASS 1/12TH PRO LMP CHASSIS

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

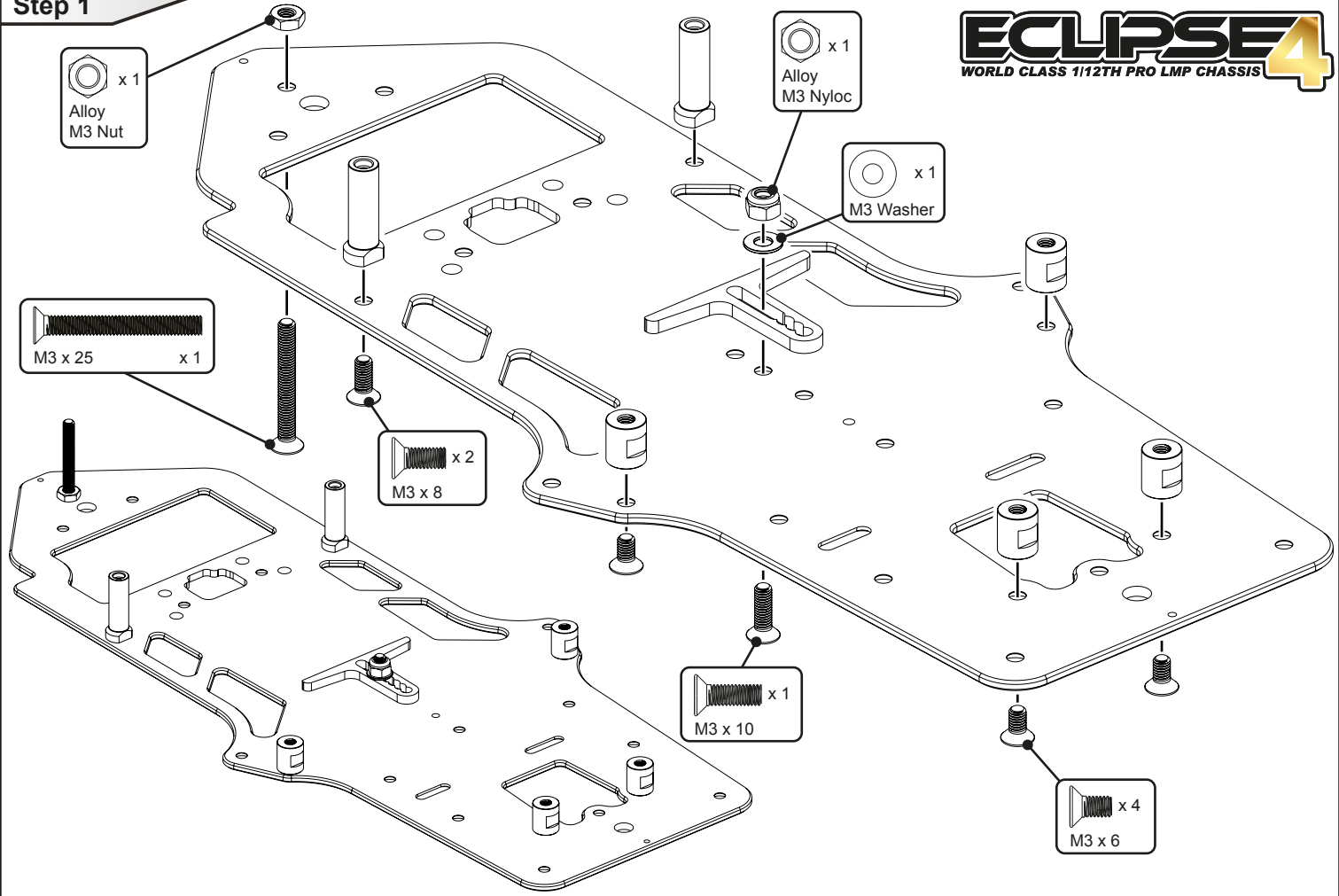
PLEASE NOTE THAT SOME OF THE PRODUCT RANGES BELOW ARE ONLY AVAILABLE IN THE UNITED KINGDOM.



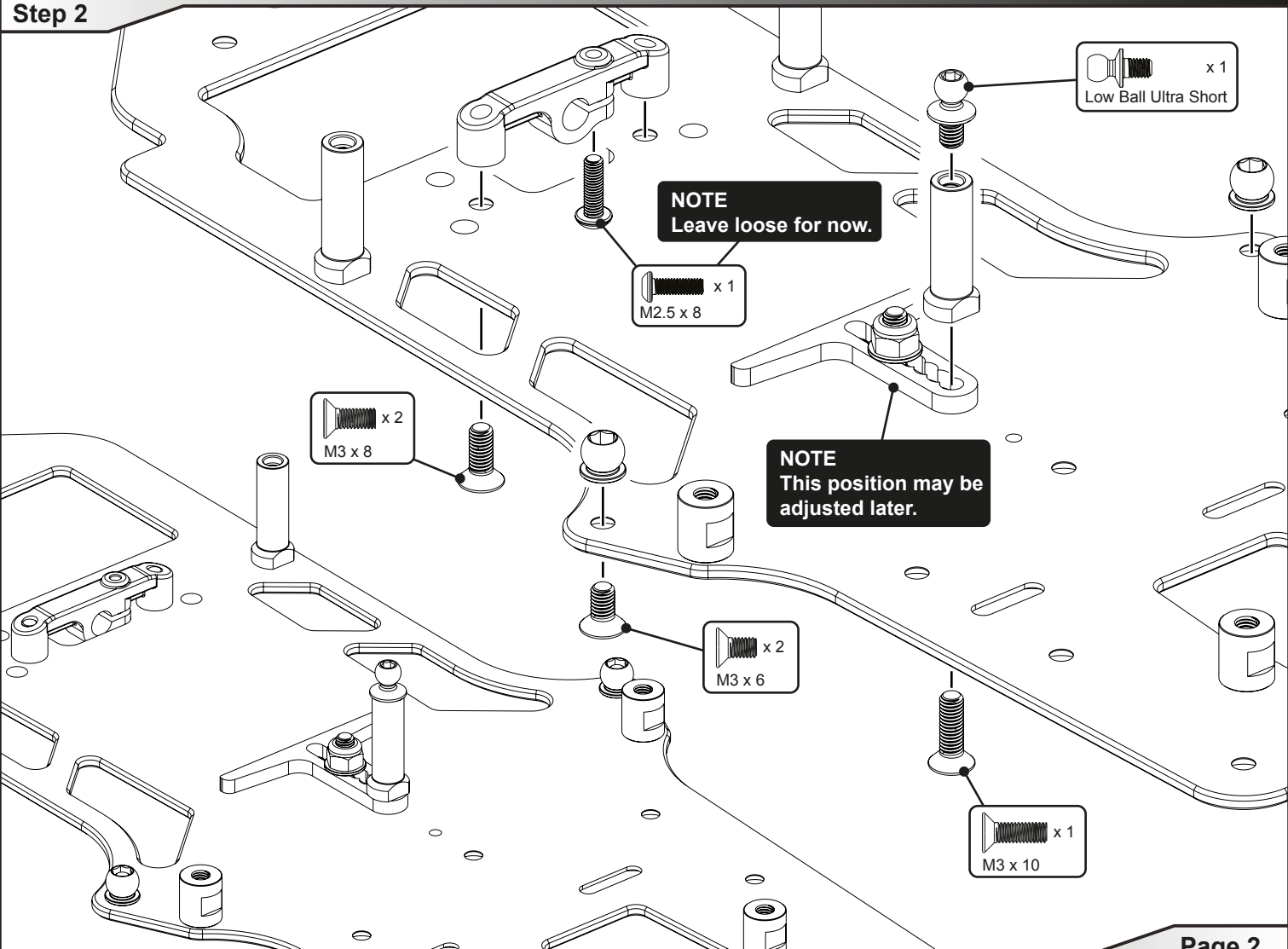
IMPORTANT SAFETY NOTES

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

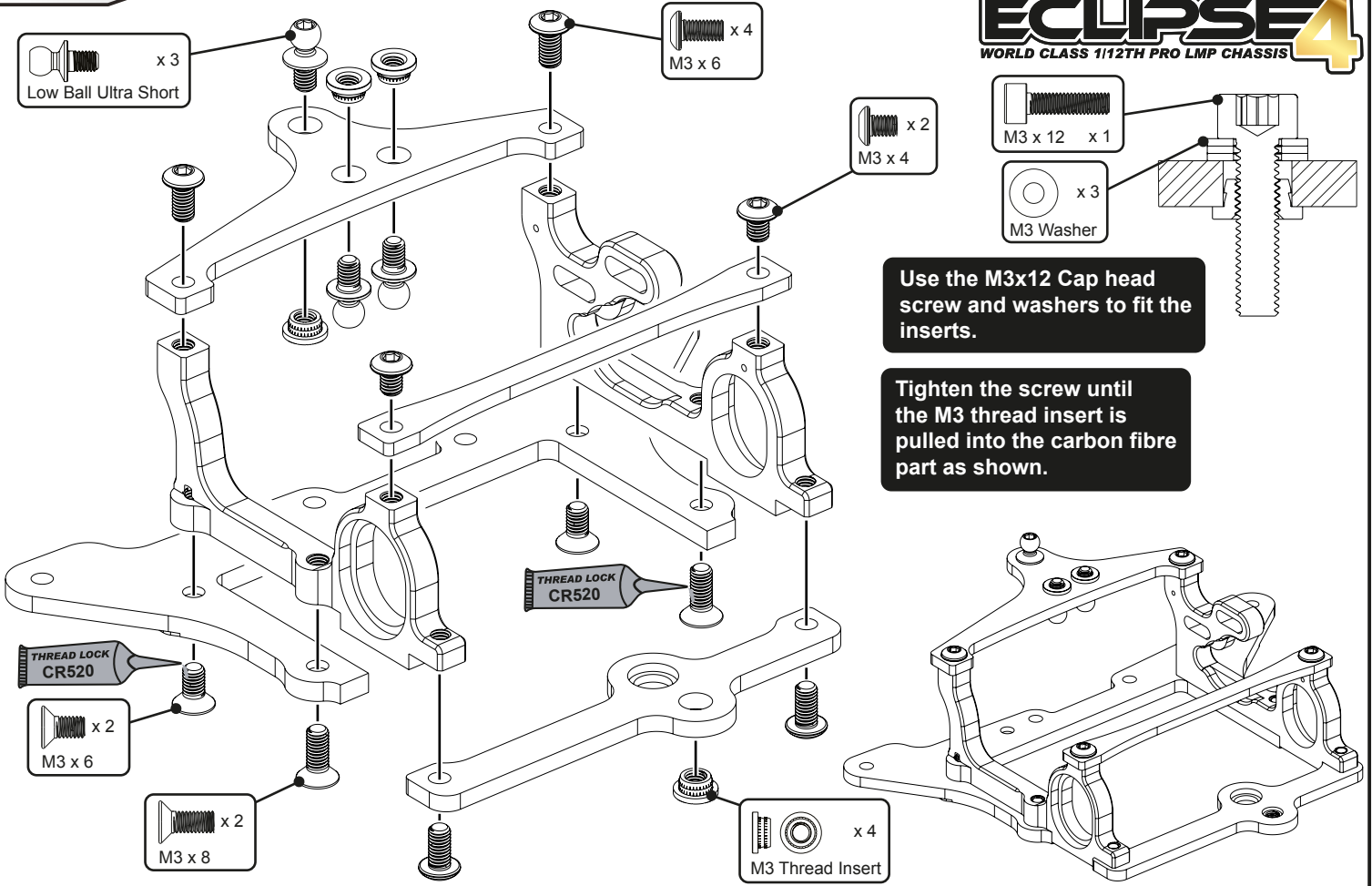
Step 1



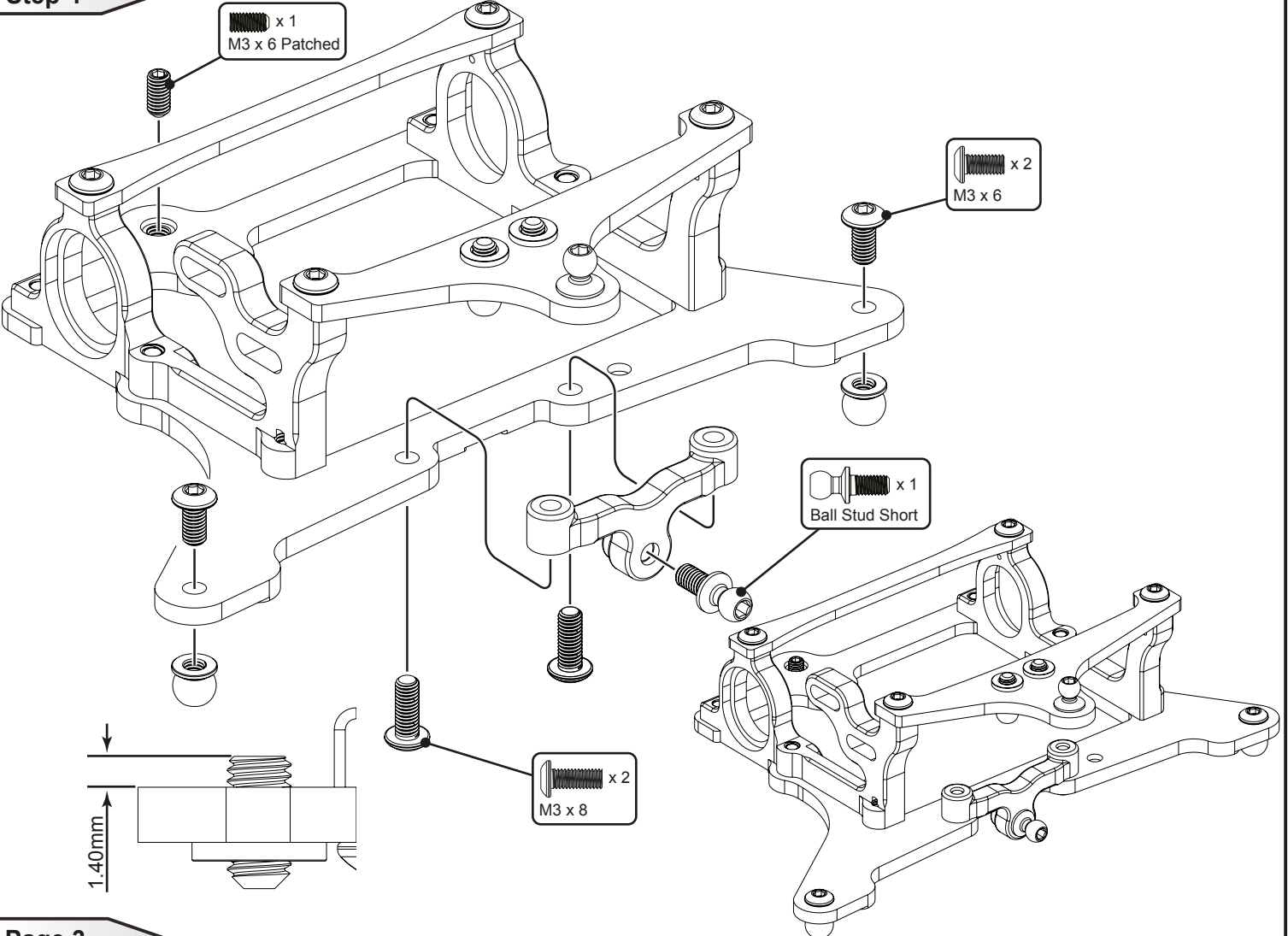
Step 2



Step 3



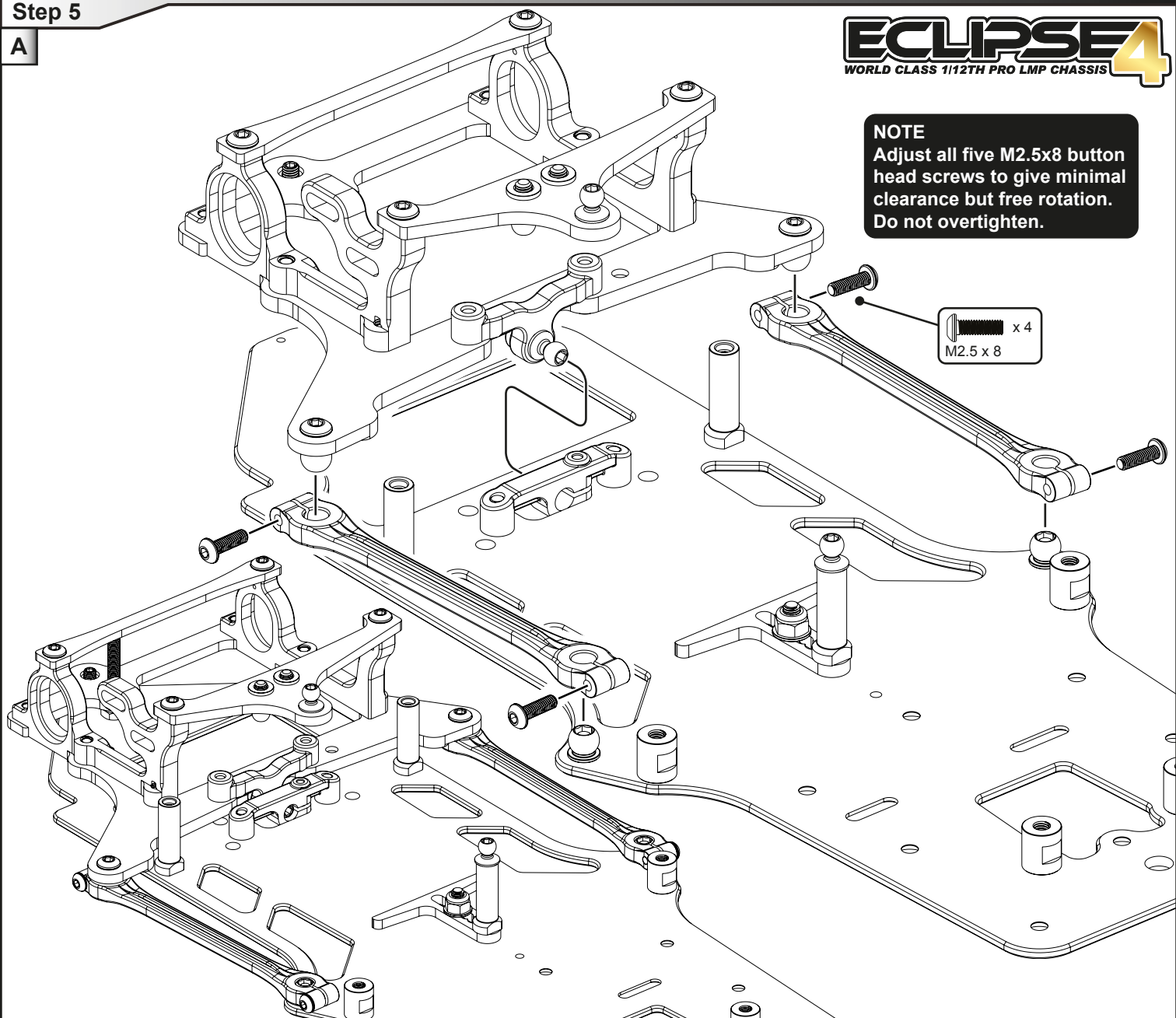
Step 4



Step 5

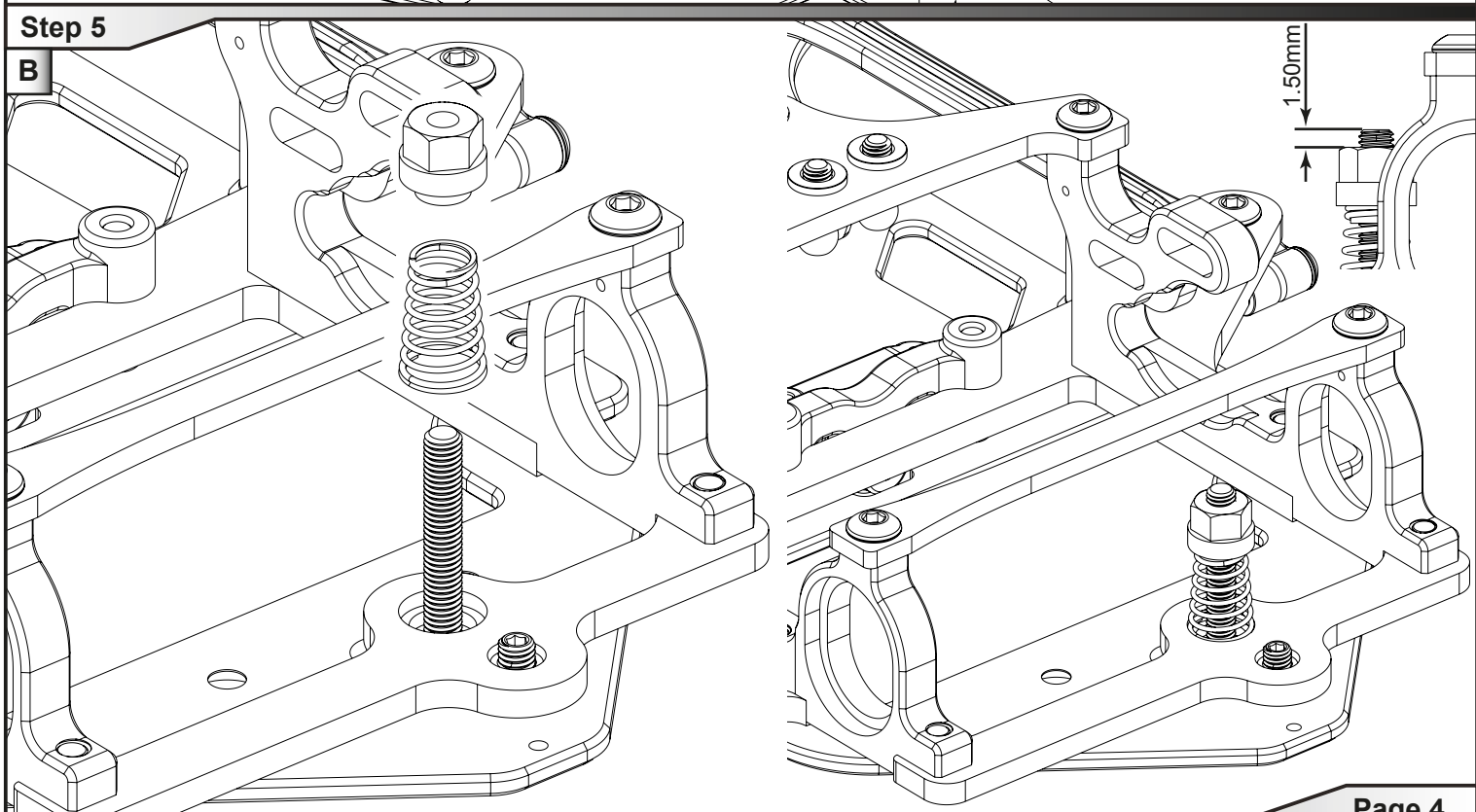
A

NOTE
Adjust all five M2.5x8 button head screws to give minimal clearance but free rotation. Do not overtighten.



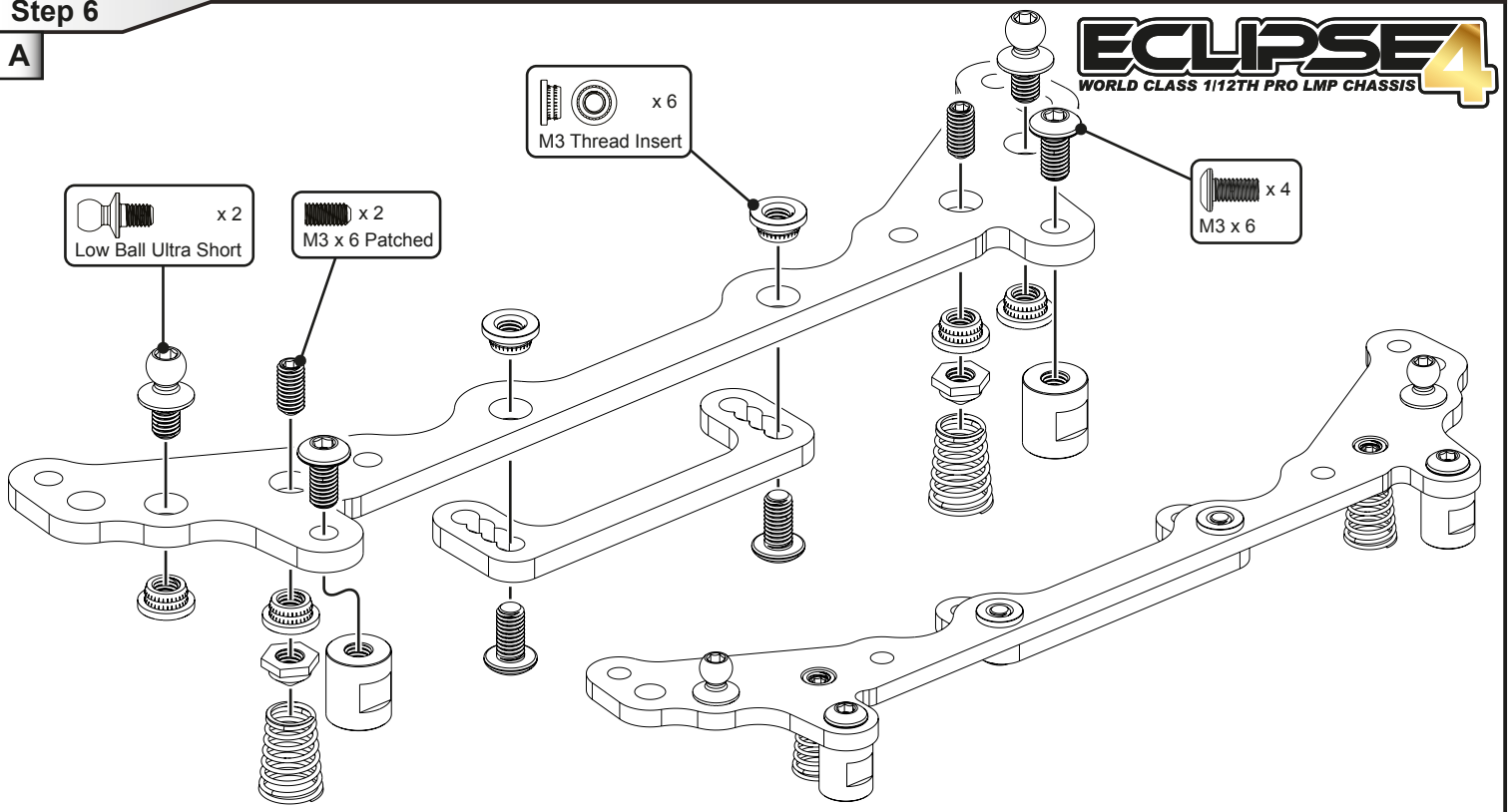
Step 5

B



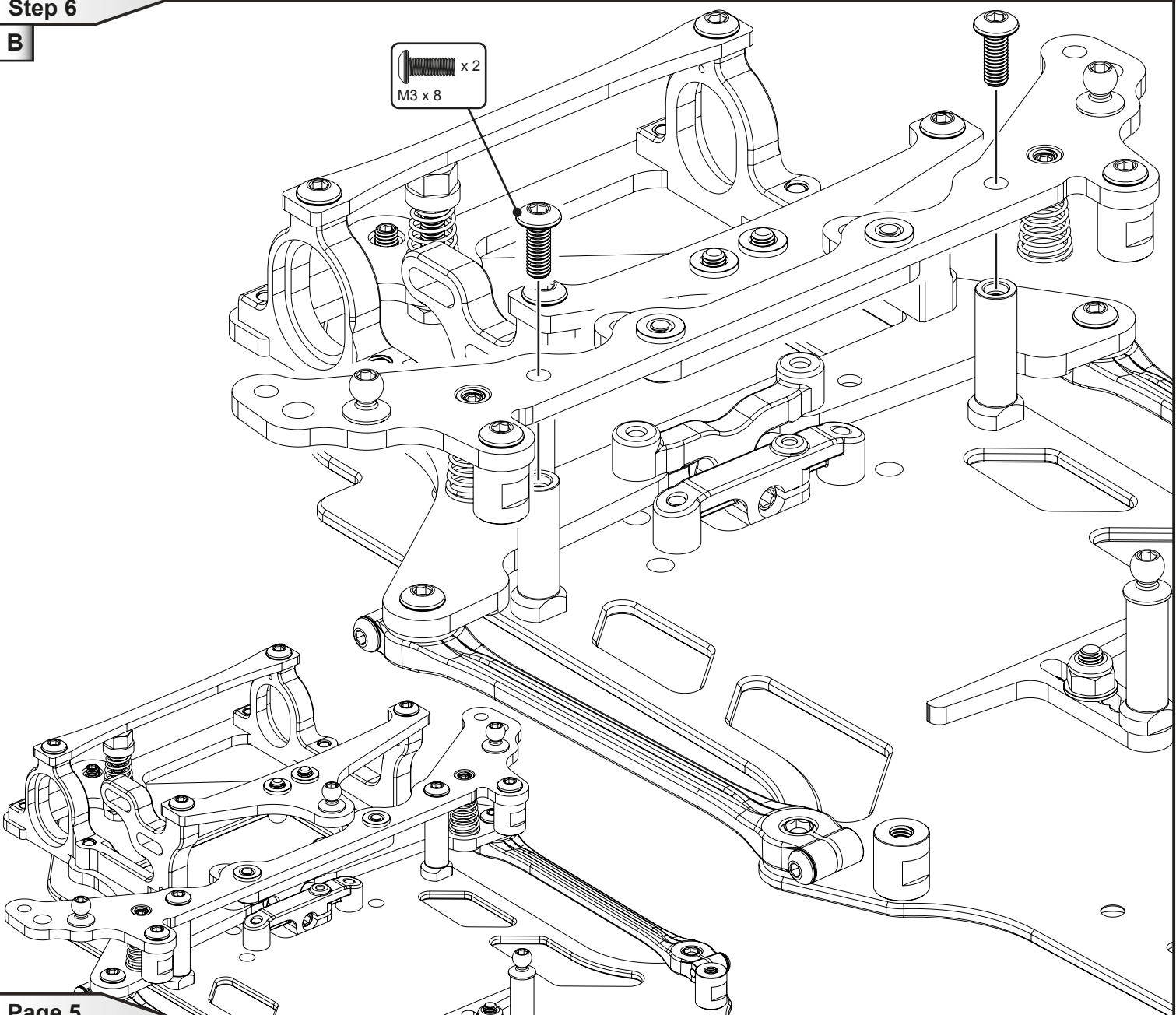
Step 6

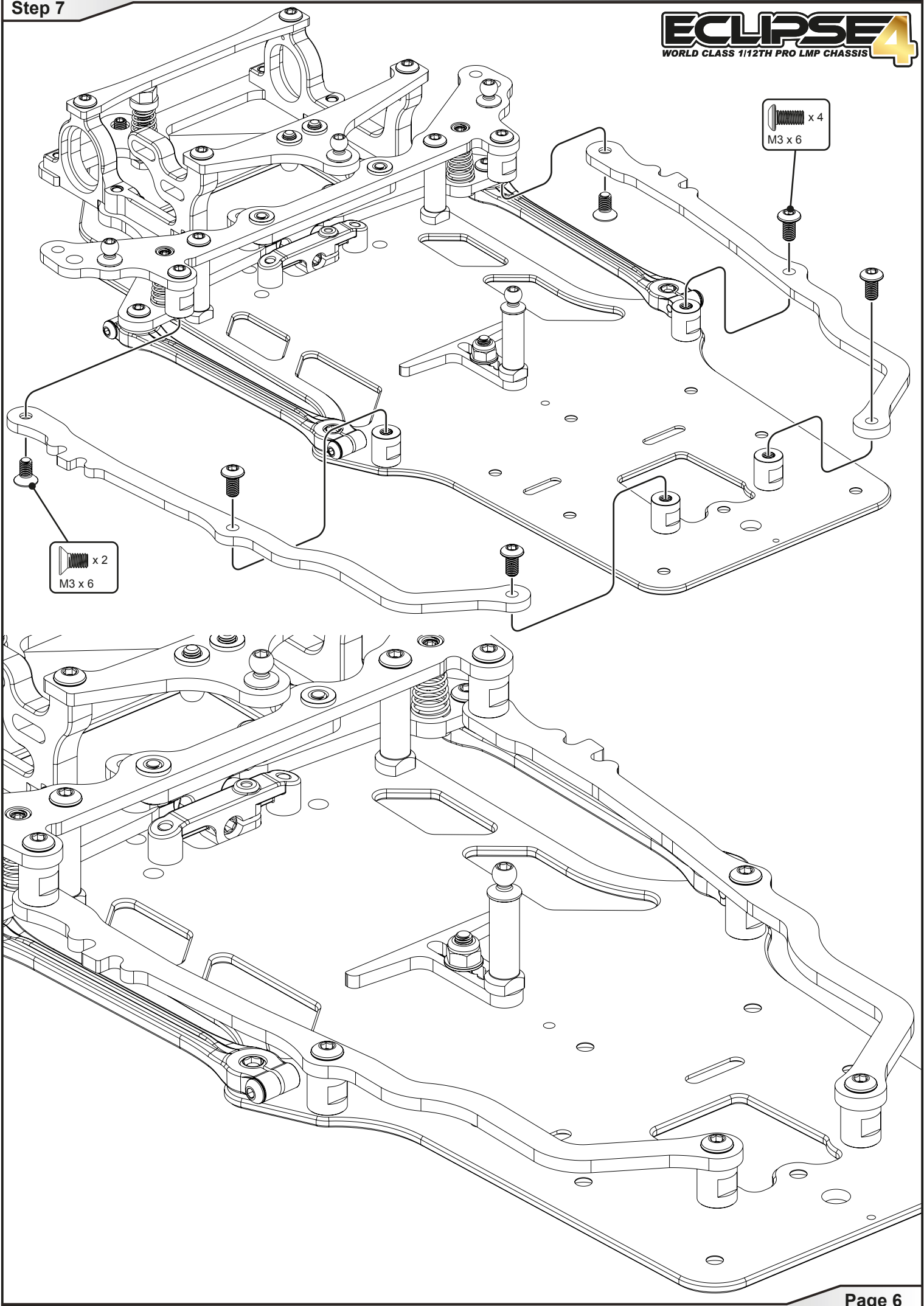
A



Step 6

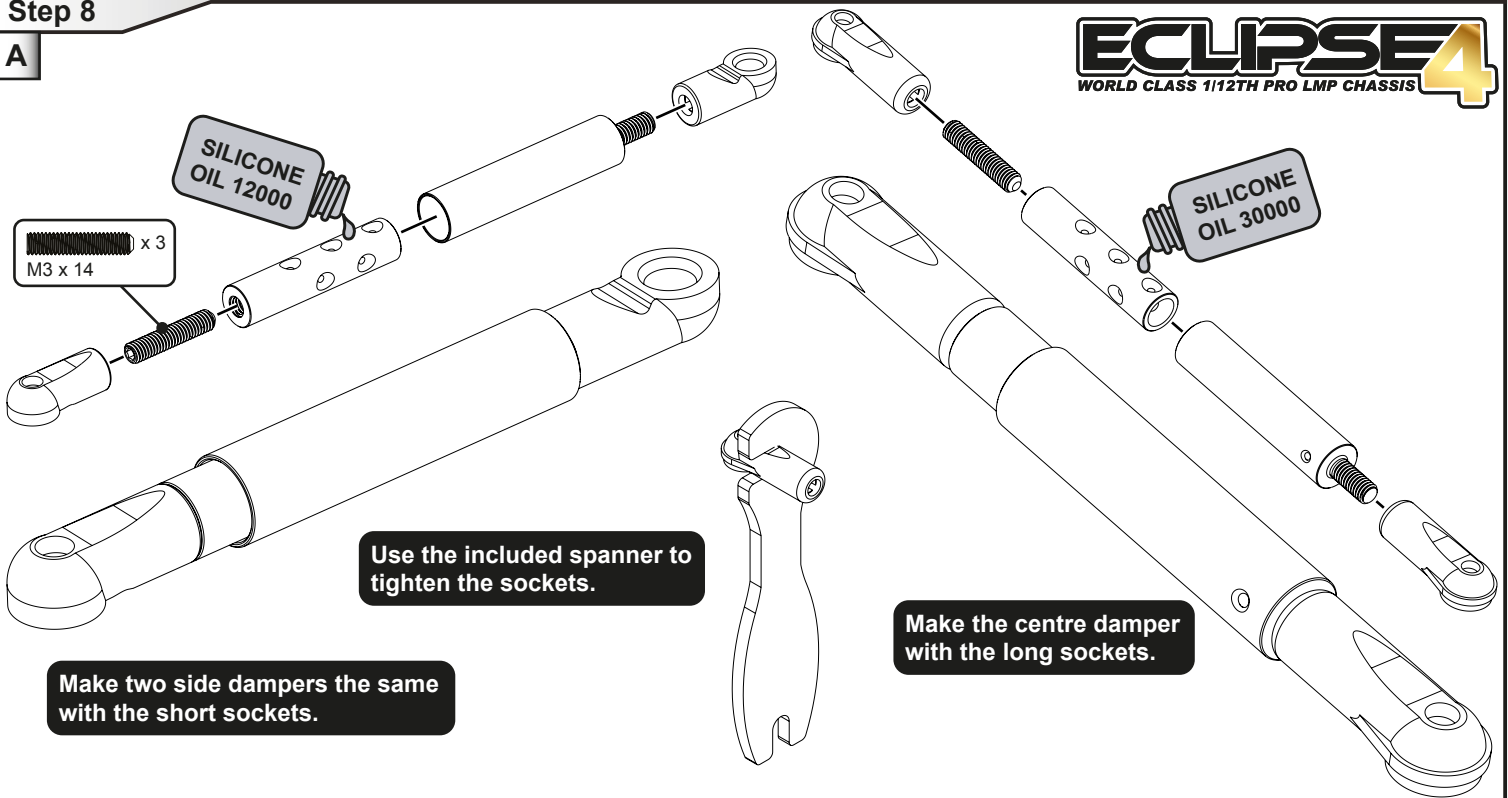
B





Step 8

A



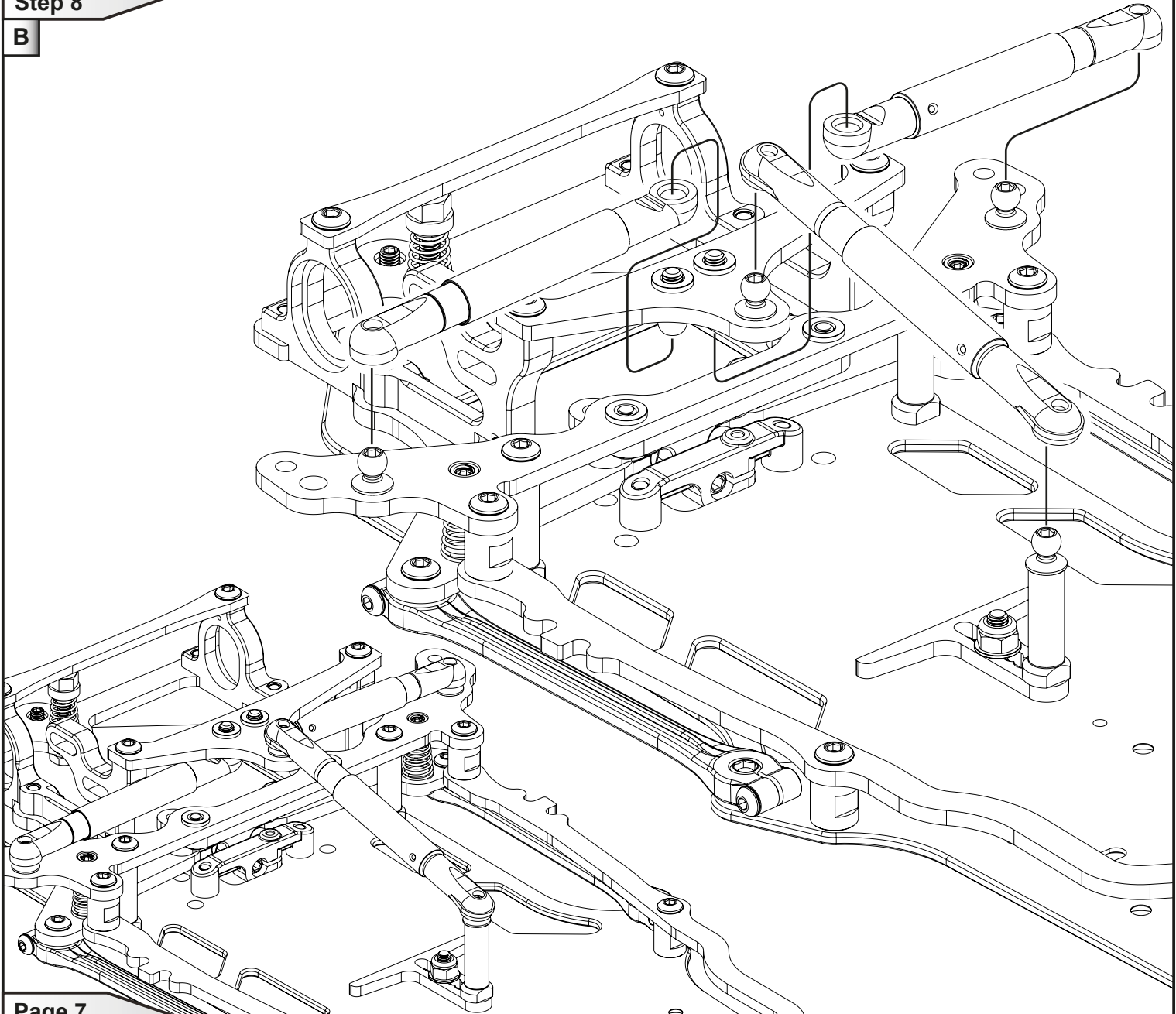
Use the included spanner to tighten the sockets.

Make the centre damper with the long sockets.

Make two side dampers the same with the short sockets.

Step 8

B

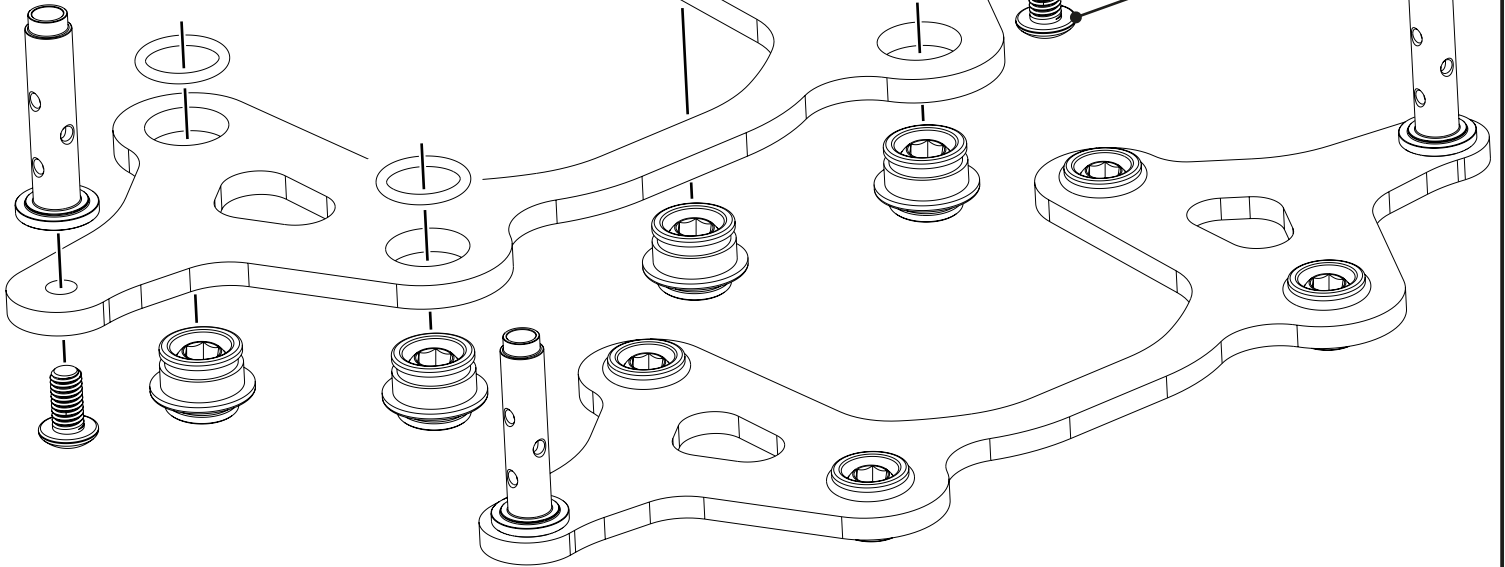


Step 9

Be careful to ensure the o-rings are fully seated and concentric.

O-ring x 4

x 2
M3 x 6

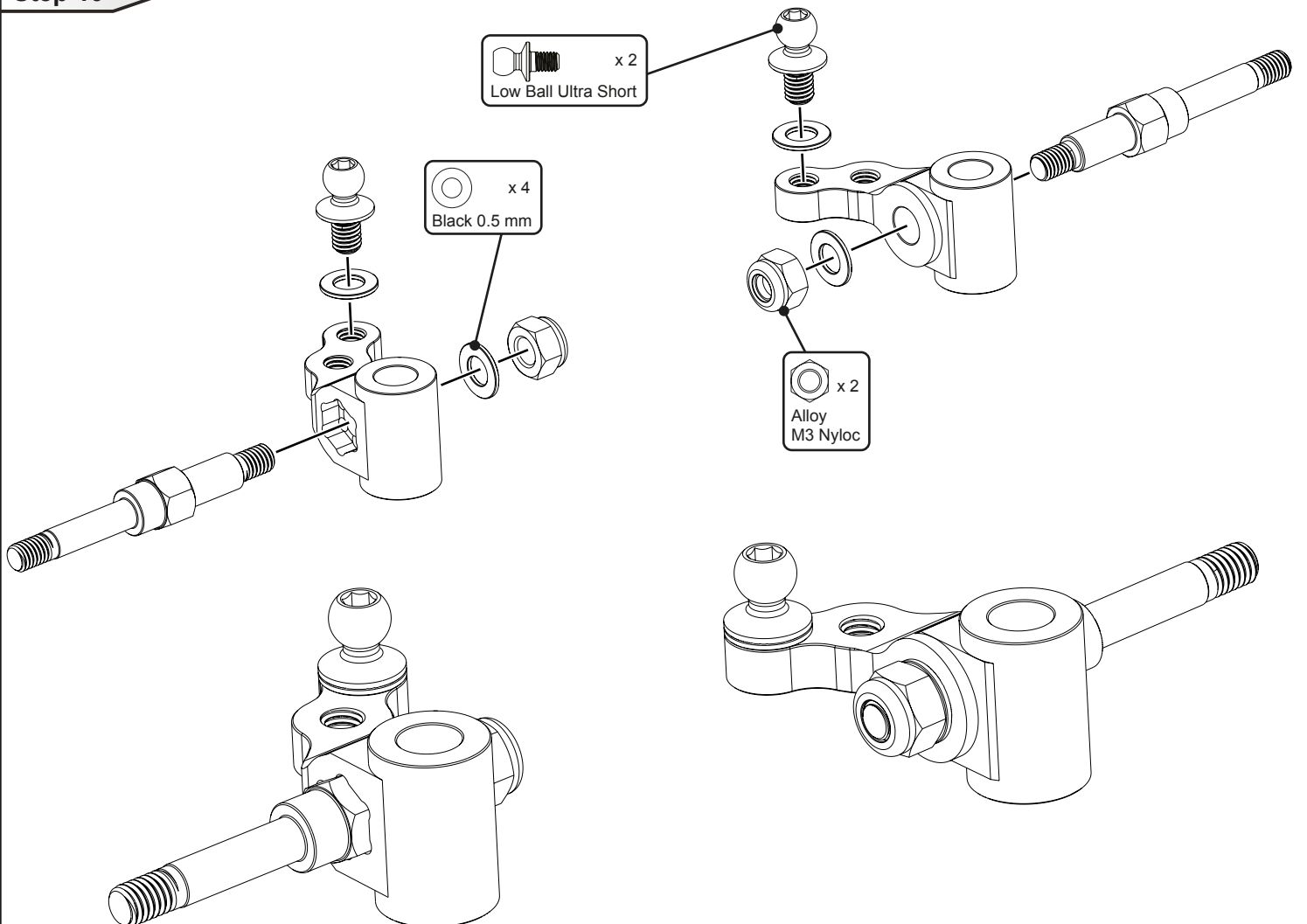


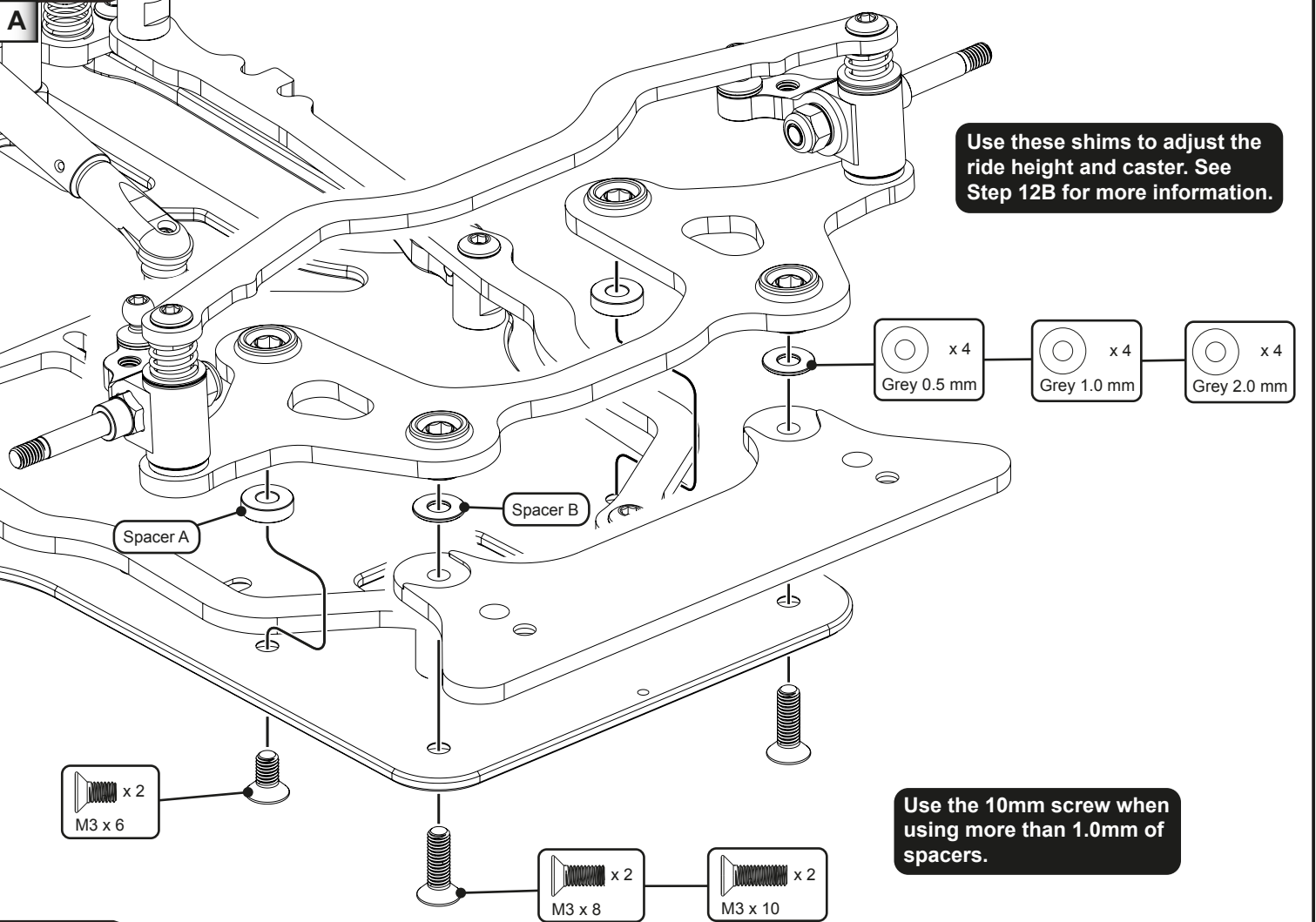
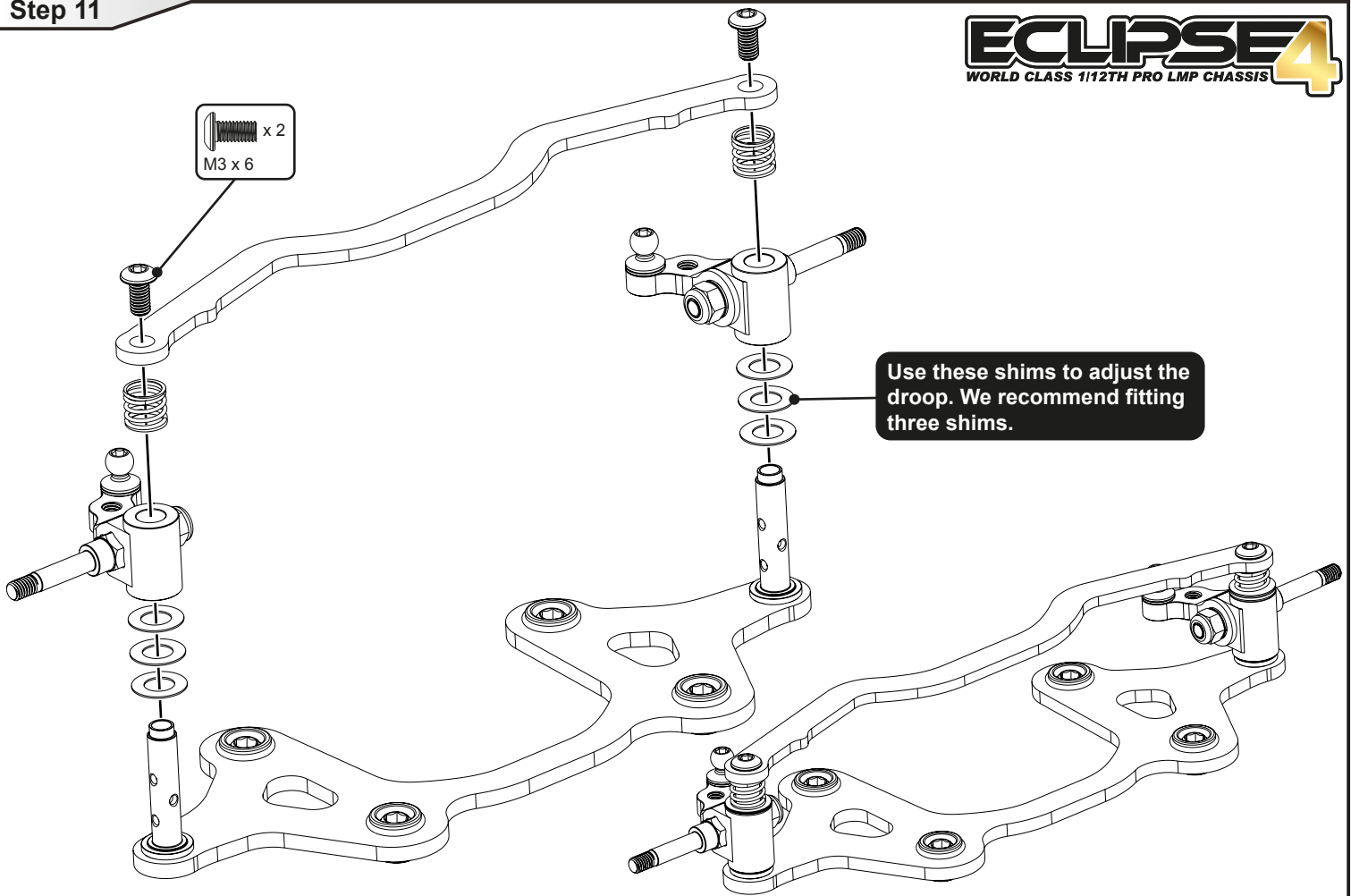
Step 10

x 2
Low Ball Ultra Short

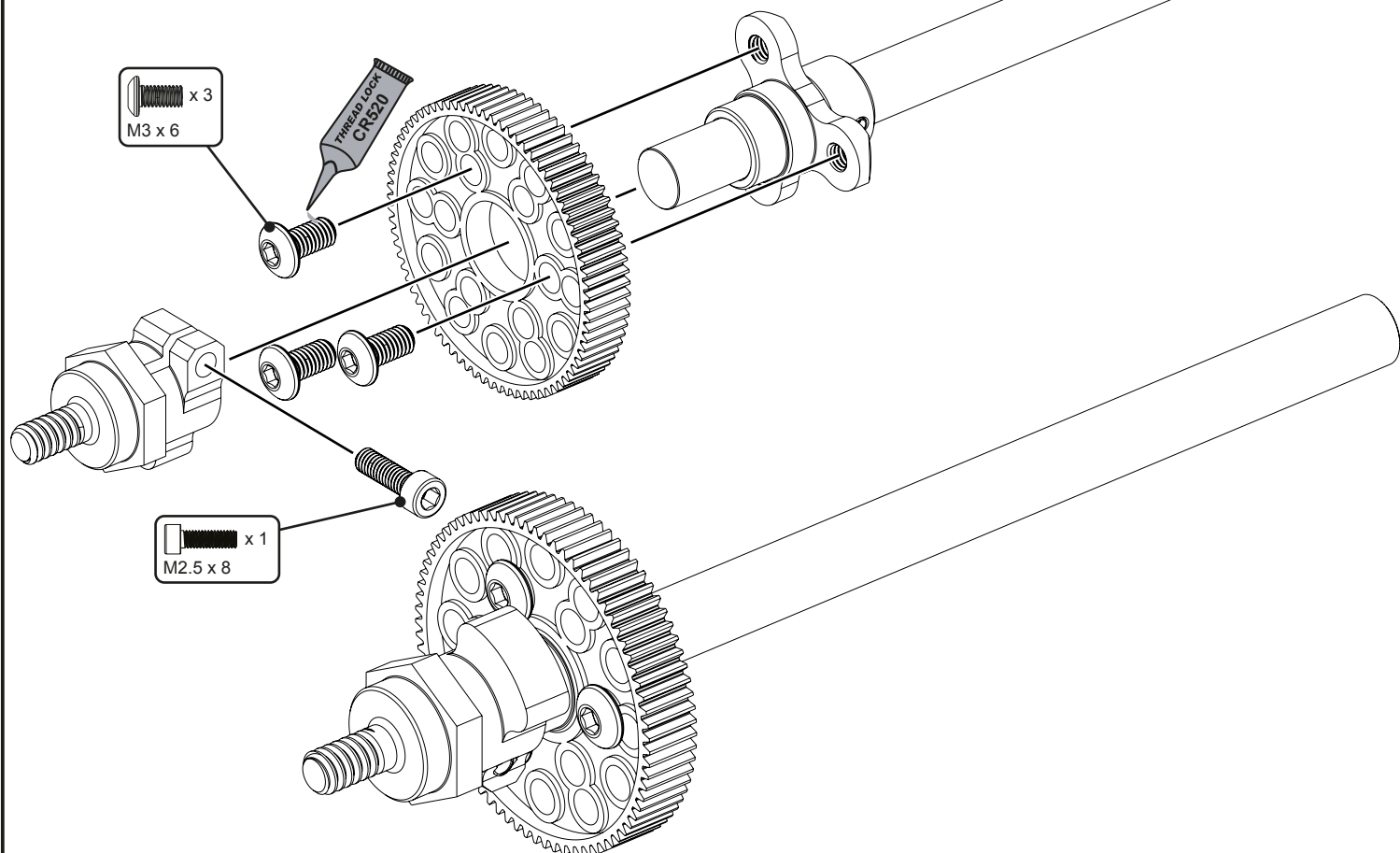
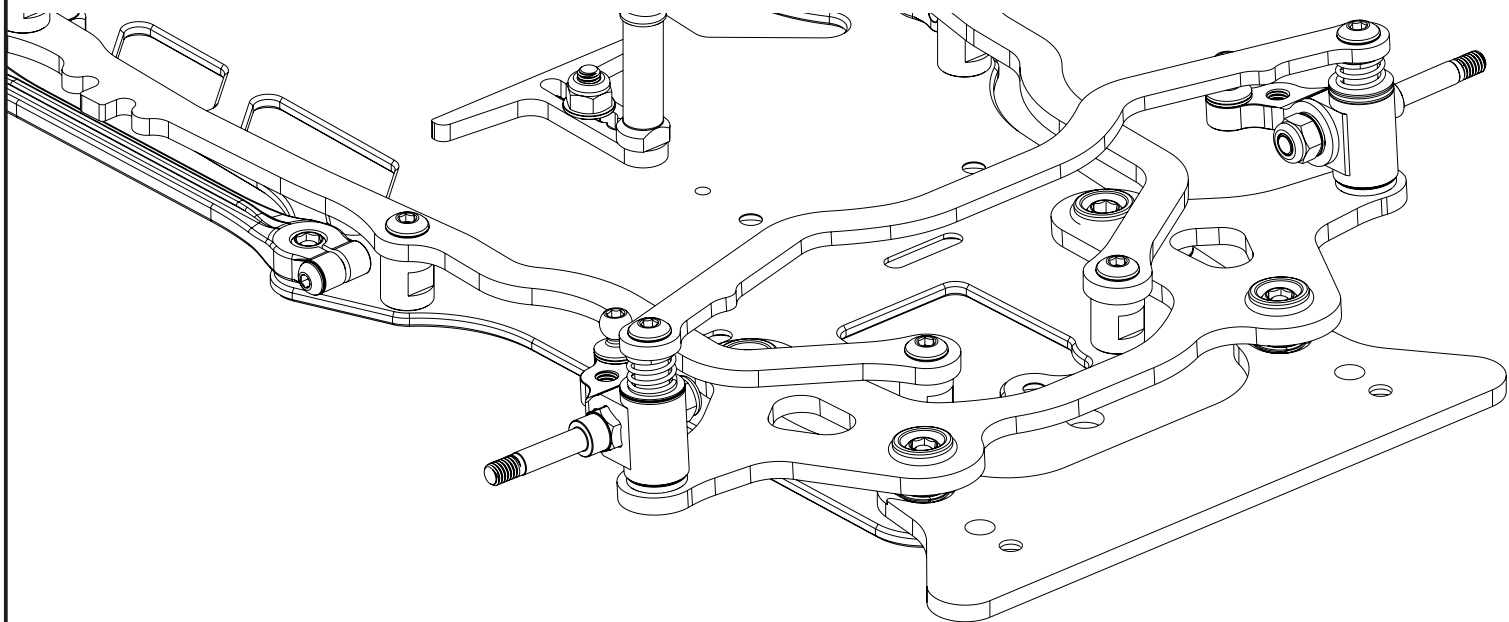
x 4
Black 0.5 mm

x 2
Alloy
M3 Nyloc

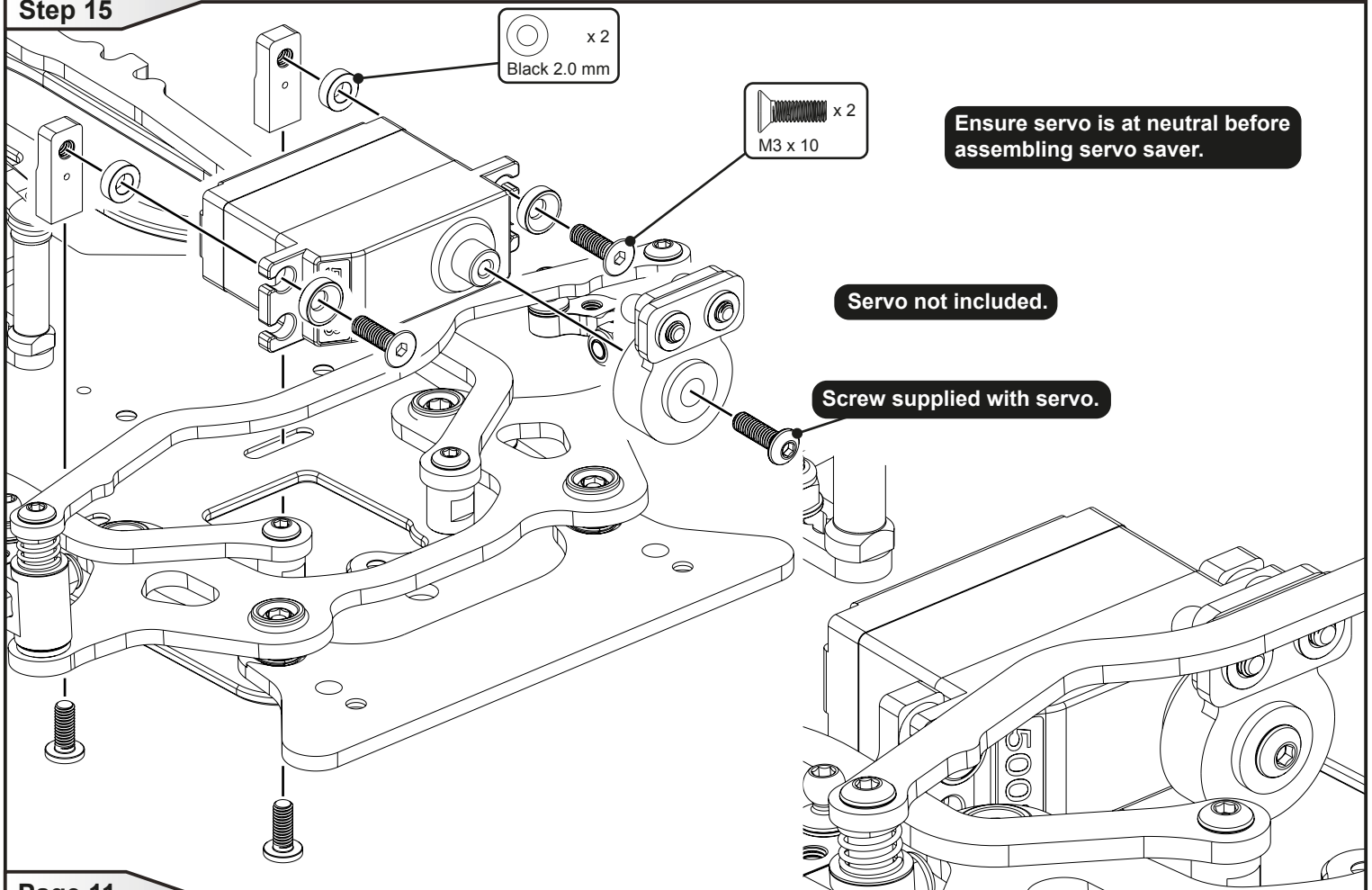
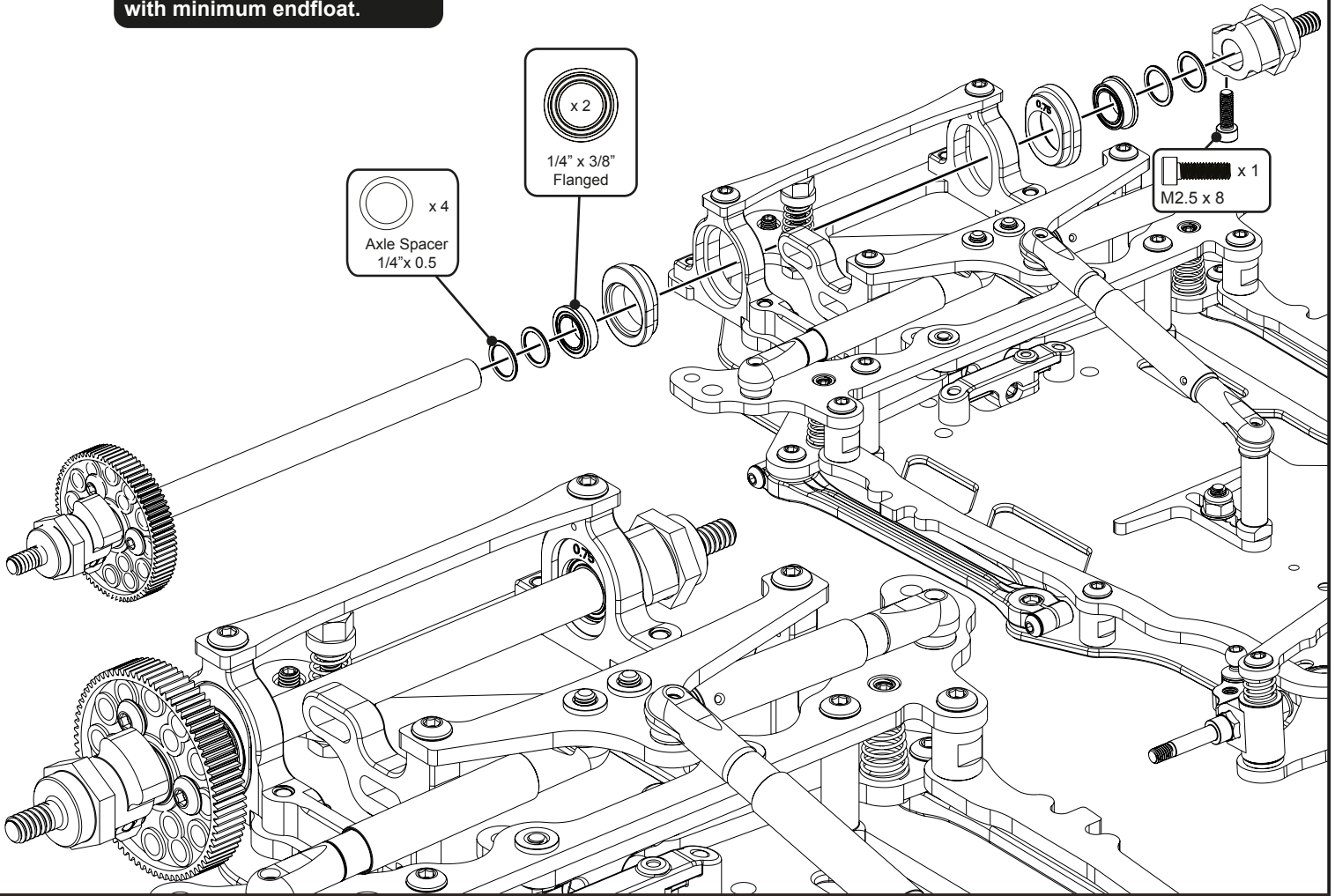




Ride Height and Caster Chart				
Tyre Size (mm)	Ride Height (mm)	Caster	Spacer A (mm)	Spacer B (mm)
39.5	3.00	3°	0.00	0.00
41.5	3.00	3°	1.00	1.00
43.5	3.00	3°	2.00	2.00
39.5	3.00	4°	0.00	0.50
41.5	3.00	4°	1.00	1.50
43.5	3.00	4°	2.00	2.50
39.5	3.00	5°	0.00	1.00
41.5	3.00	5°	1.00	2.00
43.5	3.00	5°	2.00	3.00



Ensure the spool rotates freely with minimum endfloat.



Step 16

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

A

RH Thread

LH Thread

Shorter Link

LH Thread

RH Thread

Longer Link

Screw the sockets onto the turnbuckle, until no threads are visible, and then undo them to the desired length. This allows for easier adjustment on the car. Greasing the threads will also help.

Right Hand Trackrod

Left Hand Trackrod

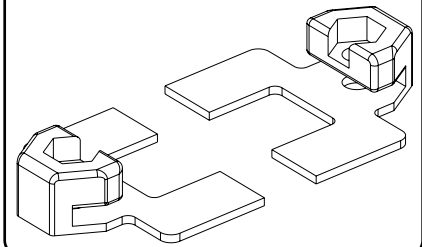
16.15mm

Step 16

B

The servo may now be secured centrally. Look at the axles to check alignment. (Wheels make this easier to check.)

Option Part (recommended for sanwa servo)
U7680 - Sanwa Servo Spacer (pr)



Electric - Off Road Cars

K192 Eclipse 4 - 1/12th Circuit - Kit

Chassis Parts

U119 Aerial Tube - Pack 4
U4627 Chassis Post Long - SS GT/At/Ecl
U4773 Aerial Mount - CAT K2
U4950 Body Posts - Eclipse (4pcs)
U4964 C/F - Pod Rear Brace - Eclipse
U7486 Alloy Servo Mounts - Eclipse 2
U7885 LiPo 'O' Ring - Atom 2 (pr)
U7895 25T Servo Saver Assembly - Atom 2
U7896 23T Servo Saver Assembly - Atom 2
U7913 C/F Rear Lipo Stop - Atom 2
U7917 C/F Rear Spring Hanger - Atom 2
U7930 C/F Bumper Mount - Eclipse 3
U7931 Foam Bumper - Eclipse 3
U7935 C/F Camber Strap 1.5 Deg - Eclipse 3
U7938 Chassis Post 8mm - Eclipse 3 (pr)
U8140 C/F Front Beam - Eclipse 4
U8141 C/F Pod Base - Eclipse 4
U8142 C/F Multi Mount - Eclipse 4
U8143 C/F Damper Mount - Eclipse 4
U8144 C/F Front LiPo Stop - Eclipse 4
U8145 C/F Top Decks 2.5mm - Eclipse 4 (pr)
U8149 Alloy Chassis - Eclipse 4
U8150 King Pin - Eclipse 4 (pr)
U8154 Manual - Eclipse 4

Bodyshells and Decals

MT014001 Montech M12 Body 1/12th carpet
MT016014 Montech M16 Body 1/12th carpet
MT018013 Montech M18 Carpet Body
MT018013L Montech M18 Carpet Body Light Weight
MT019016 Montech M20 - 1/12 Clear Body Standard
MT019016L Montech M20 - 1/12 Clear Body La Leggera
TB60025 Bomber LMP Body Type Ketter - Light Weight
TB60027 Bomber LMP Body Type Ketter - Ultra Light
U8155 Decals - Eclipse 4

Suspension

U4254 Ball Grippa Sockets Pro - Mi5 - pk8
U4274 Pro Ball Stud Short - pk4
U4302 Ball Socket Short (Black) - Mi5 - pk4
U4814 Front Axle - Atom
U4847 Rear Spring Seat - At/Ecl
U4851 Side Spring Seat (pr) - Atom/Eclipse
U4865 Kingpin Shim Set - Atom
U4968 Ball Sockets Low Profile -Eclipse - pk4
U7315 Titanium Turnbuckle - 35mm - Silver - pr
U7787 Shock Top Ball Dia 5.5mm - Mi7 (pk4)
U7832 Ball Stud Low (Ultra Short) (pk4)
U7871 Pivot Mouldings - Atom 2
U7872 Side Link - Atom 2 (pr)
U7933 Alloy Hub Carrier - Eclipse 3 (pr)
U8087 Alloy Damper Body - Icon
U8088 Damper Rod - Icon
U8156 Pivot Ball - Eclipse 4 (pk4)

Transmission

CR515 Kimbrough - Spur Gear 76T - 64DP - #199
U4972 Ride Height Adjusters- 0.00, 0.50, 1.00, 1.50 4prs
U4973 Ride Height Adjusters- 0.25, 0.75, 1.25, 1.75 4prs
U7483 Trans Housing LH - Eclipse 2
U7484 Trans Housing RH - Eclipse 2
U7899 Diff Spacer Set - Atom 2
U8151 C/F Spool Axle - Eclipse 4
U8152 Alloy Hex Wheel Clamp - Eclipse 4

Bearings and Balls

U4980 Ball Bearing - 1/4x3/8x1/8 Flanged Shielded - (pr)
U4981 Ball Bearing-1/8x5/16 Flanged Yellow -(pr)

Springs

U4838 Rear Springs Black - Soft - At/Ecl - pr
U4839 Rear Springs Silver - Med/Soft - At/Ecl - pr
U4840 Rear Springs Gold -Med/Hard - At/Ecl - pr
U4841 Rear Springs Nickel - Hard - At/Ecl - pr
U4842 Front Springs Black - Soft - Atom (pr)
U4843 Front Springs Silver - Medium - Atom (pr)
U4844 Front Springs Gold - Hard - Atom (pr)
U4845 Spring Tuning Set Front - Atom
U4846 Spring Tuning Set Rear - At/Ecl
U7322 Rear Spring Red Dot-Hard/Ultra-Atom/Eclipse-pr
U7323 Rear Spring Black - Ultra - Atom/Eclipse - pr
U7489 Front Springs White - Ultra - Atom/Eclipse 2 (pr)
U8130 Front Spring Red Dot - Eclipse 3 (pr)
U8131 Front Spring Green Dot - Eclipse 3 (pr)

Hardware

U1552 SPEED PACK - R Clips
U1606 SPEED PACK - Servo Tape - 30pk
U2812 M4 Nyloc Wheel Nut - Black Alloy (pk4)
U3021 SPEED PACK - M3x6 Csk Hd - (pk10)
U3022 SPEED PACK - M3x8 Csk Hd - (pk10)
U3023 SPEED PACK - M3x10 Csk Hd - (pk10)
U3131 SPEED PACK Alloy Spacers - M3x7mm 0.5;1;2mm (pk18)
U3572 SPEED PACK - M3x14 Grub Screw pk4
U4155 SPEED PACK - M3 Csk Washers - Black Alloy (pk10)
U4156 SPEED PACK - M2.5 x 8 Cap SS (4 pcs)
U4210 SPEED PACK - Pinion Grub Screw Set pk10
U4241 SPEED PACK - M3 Alloy Nyloc Nuts - Black - pk10
U4862 Black Alloy Washers 0.50mm (pk12)
U4983 SPEED PACK Servo Screws (2pcs)
U4984 SPEED PACK M3 Alloy Nuts - Black - pk10
U4987 SPEED PACK Needle Roller 1.5x11.8 (pk8)
U7102 SPEED PACK - M3x4 Button Hd (pk10)
U7103 SPEED PACK - M3x6 Button Hd (pk10)
U7104 SPEED PACK - M3x8 Button Hd (pk10)
U7105 SPEED PACK - M3x10 Button Hd (pk10)
U7113 SPEED PACK - M3x10 Cap Hd (pk10)
U7125 SPEED PACK - M3x25 Csk Hd (pk10)
U7689 M3 Brass Inserts - pk10
U7707 M3 Steel Washers (pk10)
U7710 M3 Black Alloy Washers 1.00mm (pk10)
U7711 M3 Black Alloy Washers 2.00mm (pk10)
U7743 M2.5 X 8 Button Screws (pk10)
U7884 M3x6 Grub Screw Dome End (pk4)
U8133 6 x 1 'O'ring (pk10)

Option Parts

AM364090	Super Diff Gear 64P 90T
AM364092	Super Diff Gear 64P 92T
AM364094	Super Diff Gear 64P 94T
AM364096	Super Diff Gear 64P 96T
AM364098	Super Diff Gear 64P 98T
AM364100	Super Diff Gear 64P 100T
AM364102	Super Diff Gear 64P 102T
AM364104	Super Diff Gear 64P 104T
AM364106	Super Diff Gear 64P 106T
AM364108	Super Diff Gear 64P 108T
AM364110	Super Diff Gear 64P 110T
AM364112	Super Diff Gear 64P 112T
AM364114	Super Diff Gear 64P 114T
AM364116	Super Diff Gear 64P 116T
CR280	Ti Pro Ball Studs - Short - (pr)
CR310	Alloy Csk Hex Screws M3 x 6 pk10
CR311	Alloy Csk Hex Screws M3 x 8 pk10
CR312	Alloy Csk Hex Screws M3 x 10 pk10
CR313	Alloy Csk Hex Screws M3 x 12 pk10
CR314	Alloy Button Head Hex Screws M3 x 6 pk10
CR315	Alloy Button Head Hex Screws M3 x 8 pk10
CR316	Alloy Button Head Hex Screws M3 x 10 pk10
CR320	Titanium Csk Hex Screws M3 x 6 pk10
CR321	Titanium Csk Hex Screws M3 x 8 pk10
CR322	Titanium Csk Hex Screws M3 x 10 pk10
CR327	Titanium Button Head Hex Screws M3 x 6 pk10
CR328	Titanium Button Head Hex Screws M3 x 8 pk10
CR329	Titanium Button Head Hex Screws M3 x 10 pk10
CR509	Kimbrough - Thin Pro/Gear 88T - 64DP-#709
CR513	Kimbrough - Spur Gear 78T - 64DP - #202
CR664	Alloy Motor Spacer - 1mm - pk2
J016	Contact Truer Arbour & Clamp - 1/12hex
U1954	Pro - Thrust Bearing
U2135	M4 Nyloc Wheel Nut - Purple Alloy (pk4)
U2810	M4 Nyloc Wheel Nut - Red Alloy (pk4)
U2811	M4 Nyloc Wheel Nut - Blue Alloy (pk4)
U3582	Precision Balance Pivot Set
U4112	S/Steel Shims 1/4x5/16x0.004-SS/At/Ecl
U4328	Impact Servo Saver
U4650	M3 Nyloc Nut Steel - Black
U4808	1/8" Chrome Steel Ball -At/Ecl - pk12
U4809	Ball Bearing - 1/4x3/8x1/8 Shield - (pr)
U4811	1/8" Silicone Nitride Ball (pk12)
U4837	SPEED PACK M2.5x10 Cap Hd (pk8)
U4855	Diff Washer - Atom/Eclipse - pr
U4861	Diff Rebuild Kit - Atom/Eclipse
U4970	C/F Rear Axle - Eclipse
U4974	LH Wheel Clamp - Eclipse
U4975	RH Washer Carrier - Eclipse
U7298	Alloy Rear Wheel Screws - Atom/Eclipse (pk6)
U7453	30/40mm Fan Mount Kit - ATOM
U7680	Sanwa Servo Spacer - Eclipse 2 (pr)
U7690	Pro Ball Bearings 1/4 x 3/8 x 1/8 FI Shielded
U7691	Pro Ball Bearings 1/8 x 5/16 x 9/64 FI Shielded
U7709	M3 Black Alloy Washers 0.75mm (pk10)
U7712	M3 Black Alloy Washers 3.00mm (pk10)
U7774	M3 Alloy Washer Black 1.5 mm (pk10)
U7825	Titanium Pivot Ball 5.5mm Low (pr)
U7828	Titanium Ball Stud Low (Ultra Short) (pk4)

Option Parts Cont....

U7883	Steel Diff Axle - Atom 2
U7897	Alloy Pivot Spacer 1mm - Atom 2 (pr)
U7918	Alloy Pivot Mount - Atom 2
U7919	Alloy Pivot Block - Atom 2
U7934	C/F Camber Strap 1.0 Deg - Eclipse 3
U7936	Titanium King Pin - Eclipse 3 (pr)
U7937	Titanium Front Axle - Eclipse 3 (pr)
U7940	C/F Chassis - Eclipse 3
U7943	Alloy Spacer Clip 0.5mm (pk4)
U7944	Alloy Spacer Clip 0.75mm (pk4)
U8065	M3 Alloy Thread Inserts - pk8
U8119	Servo Screw 10mm (pr)
U8126	Mass Damper Shaft
U8128	Mass Damper Weight 23g
U8129	Mass Damper Weight 12g
U8137	Mass Damper Set
U8139	C/F Top Deck 2.0mm - Eclipse 4 (pr)
U8146	Alloy Fan Mount - Eclipse 4 (pr)
U8153	Ride Height Shim 0.20mm - Eclipse 4 (pk4)
U8171	Eclipse 4 Ball Diff Set

Pinions

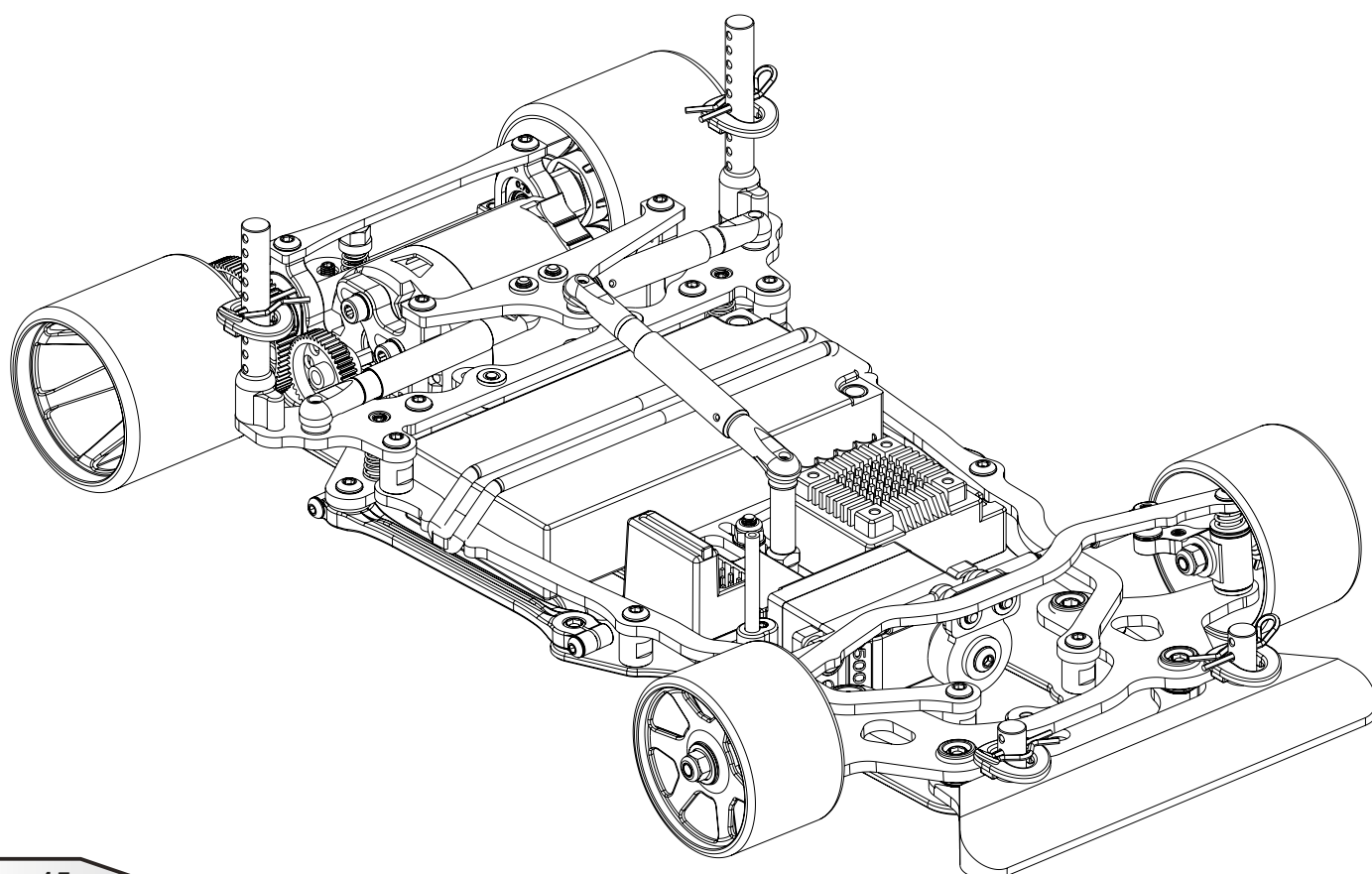
CR6418	Pinion Gear 64DP 18T (7075 Hard)
CR6419	Pinion Gear 64DP 19T (7075 Hard)
CR6420	Pinion Gear 64DP 20T (7075 Hard)
CR6421	Pinion Gear 64DP 21T (7075 Hard)
CR6422	Pinion Gear 64DP 22T (7075 Hard)
CR6423	Pinion Gear 64DP 23T (7075 Hard)
CR6424	Pinion Gear 64DP 24T (7075 Hard)
CR6425	Pinion Gear 64DP 25T (7075 Hard)
CR6426	Pinion Gear 64DP 26T (7075 Hard)
CR6427	Pinion Gear 64DP 27T (7075 Hard)
CR6428	Pinion Gear 64DP 28T (7075 Hard)
CR6429	Pinion Gear 64DP 29T (7075 Hard)
CR6430	Pinion Gear 64DP 30T (7075 Hard)
CR6431	Pinion Gear 64DP 31T (7075 Hard)
CR6432	Pinion Gear 64DP 32T (7075 Hard)
CR6433	Pinion Gear 64DP 33T (7075 Hard)
CR6434	Pinion Gear 64DP 34T (7075 Hard)
CR6435	Pinion Gear 64DP 35T (7075 Hard)
CR6436	Pinion Gear 64DP 36T (7075 Hard)
CR6437	Pinion Gear 64DP 37T (7075 Hard)
CR6438	Pinion Gear 64DP 38T (7075 Hard)
CR6439	Pinion Gear 64DP 39T (7075 Hard)
CR6440	Pinion Gear 64DP 40T (7075 Hard)
CR6441	Pinion Gear 64DP 41T (7075 Hard)
CR6442	Pinion Gear 64DP 42T (7075 Hard)
CR6443	Pinion Gear 64DP 43T (7075 Hard)
CR6444	Pinion Gear 64DP 44T (7075 Hard)
CR6445	Pinion Gear 64DP 45T (7075 Hard)

Pinions Cont....

- CR6446 Pinion Gear 64DP 46T (7075 Hard)
- CR6447 Pinion Gear 64DP 47T (7075 Hard)
- CR6448 Pinion Gear 64DP 48T (7075 Hard)
- CR6449 Pinion Gear 64DP 49T (7075 Hard)
- CR6450 Pinion Gear 64DP 50T (7075 Hard)
- CR6451 Pinion Gear 64DP 51T (7075 Hard)
- CR6452 Pinion Gear 64DP 52T (7075 Hard)
- CR6453 Pinion Gear 64DP 53T (7075 Hard)
- CR6454 Pinion Gear 64DP 54T (7075 Hard)
- CR6455 Pinion Gear 64DP 55T (7075 Hard)
- CR6456 Pinion Gear 64DP 56T (7075 Hard)
- CR6457 Pinion Gear 64DP 57T (7075 Hard)
- CR6458 Pinion Gear 64DP 58T (7075 Hard)
- CR6459 Pinion Gear 64DP 59T (7075 Hard)
- CR6460 Pinion Gear 64DP 60T (7075 Hard)
- CR6461 Pinion Gear 64DP 61T (7075 Hard)
- CR6462 Pinion Gear 64DP 62T (7075 Hard)
- U3619 Pinion; Hard Alloy 64dp - 19T
- U3620 Pinion; Hard Alloy 64dp - 20T
- U3621 Pinion; Hard Alloy 64dp - 21T
- U3622 Pinion; Hard Alloy 64dp - 22T
- U3623 Pinion; Hard Alloy 64dp - 23T
- U3624 Pinion; Hard Alloy 64dp - 24T
- U3625 Pinion; Hard Alloy 64dp - 25T
- U3626 Pinion; Hard Alloy 64dp - 26T

Pinions Cont....

- U3627 Pinion; Hard Alloy 64dp - 27T
- U3628 Pinion; Hard Alloy 64dp - 28T
- U3629 Pinion; Hard Alloy 64dp - 29T
- U3630 Pinion; Hard Alloy 64dp - 30T
- U3631 Pinion; Hard Alloy 64dp - 31T
- U3632 Pinion; Hard Alloy 64dp - 32T
- U3633 Pinion; Hard Alloy 64dp - 33T
- U3634 Pinion; Hard Alloy 64dp - 34T
- U3635 Pinion; Hard Alloy 64dp - 35T
- U3636 Pinion; Hard Alloy 64dp - 36T
- U3637 Pinion; Hard Alloy 64dp - 37T
- U3638 Pinion; Hard Alloy 64dp - 38T
- U3639 Pinion; Hard Alloy 64dp - 39T
- U3640 Pinion; Hard Alloy 64dp - 40T
- U3641 Pinion; Hard Alloy 64dp - 41T
- U3642 Pinion; Hard Alloy 64dp - 42T
- U3643 Pinion; Hard Alloy 64dp - 43T
- U3644 Pinion; Hard Alloy 64dp - 44T
- U3645 Pinion; Hard Alloy 64dp - 45T
- U3646 Pinion; Hard Alloy 64dp - 46T
- U3647 Pinion; Hard Alloy 64dp - 47T
- U3648 Pinion; Hard Alloy 64dp - 48T
- U3649 Pinion; Hard Alloy 64dp - 49T
- U3650 Pinion; Hard Alloy 64dp - 50T



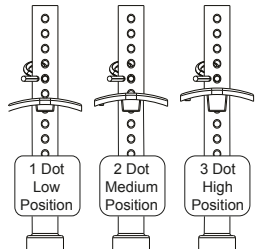
Snap the body washers onto the pins.

Attach R-clips after body washers.

Ø1.5 x 11.8 x 4

Select the correct pin height for your bodyshell.

Mark and drill your body to diameter 6.5mm for the body posts.



Select the correct body washer to fine tune the bodyshell height. Each incremental change is 1.2mm.

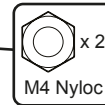
M3 x 10 x 2

The bodyposts may be trimmed for looks and aerodynamics. A sharp knife or side cutters may be used. Alternatively use AM190041 - Arrowmax Body Post Trimmer

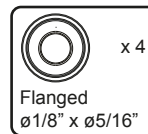
M3 x 10 x 2

The foam bumper has a chamfered front edge. This allows the bodyshell to be mounted directly on top of it, removing the need to use the body washers and increasing durability. It is also the correct height for most bodyshells.

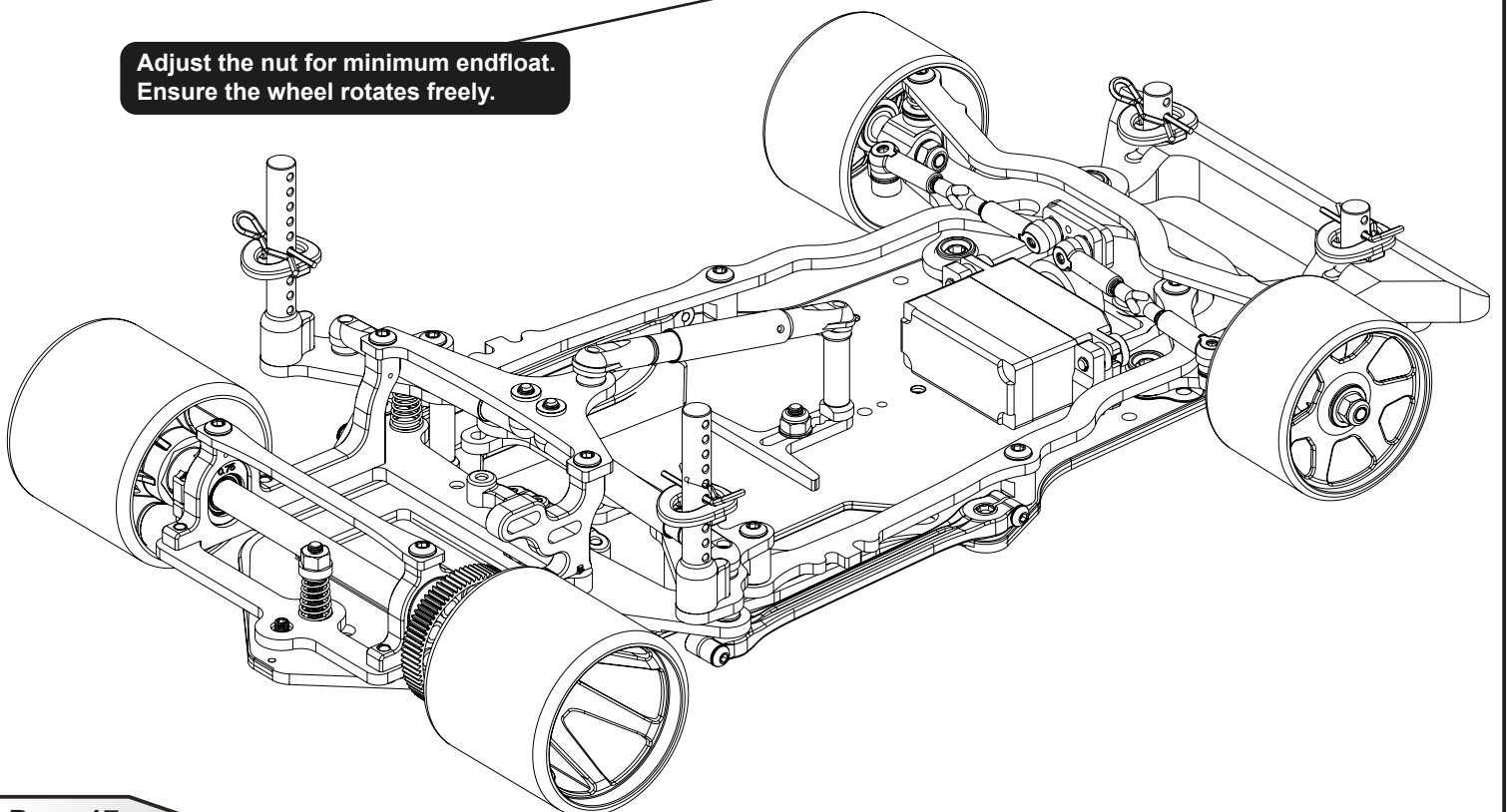
When using the differential (U8171) the three bolt rear wheels (JT2) must be used.



Wheels and tyres NOT included in the kit.



Adjust the nut for minimum endfloat.
Ensure the wheel rotates freely.



LiPo NOT included.

Motor NOT included.

Pinion NOT included.

x 2
Black 1.0 mm

ESC NOT included.

Servo Tape x 6

x 1
M3 x 4

x 2
M3 x 10

Adjust the gear mesh to be as close as possible without binding.

Transponder NOT included.

Receiver NOT included.

x 1
M3 x 6

