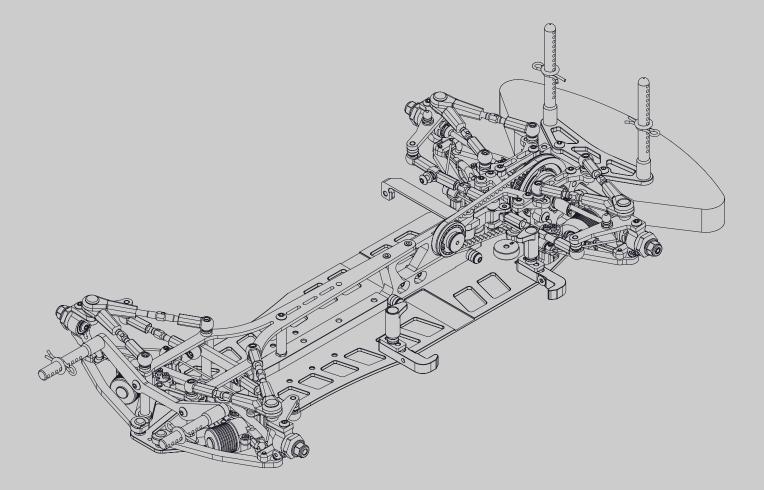




1/10-SCALE FRONT-WHEEL DRIVE TOURING CAR



INSTRUCTION MANUAL



INTRODUCTION

Congratulations on purchasing your Awesomatix car! The A800FX Evo car was produced by UAB Awesomatix company. The A800FX Evo car utilises many unique features, including some patented innovations. The car is released in two versions: A800FXA Evo with an aluminium alloy lower deck and A800FXC Evo with the carbon fiber lower deck.

BEFORE YOU START

The A800FX Evo car is the high-quality, innovative 1/10-scale front-wheel drive touring car and should be built only by persons with previous experience building R/C model racing cars.

This is not a toy and is not intended for use by children without direct supervision of a responsible, knowledgeable adult. Read the instruction manual carefully and fully understand it before beginning assembly. If you have any problems or questions please do not hesitate to contact the Awesomatix team at support@awesomatix.com. If, for any reason, you decide that you do not want your A800FX Evo car you must not begin assembly.

Your A800FX Evo car cannot be returned to UAB Awesomatix for a refund or exchange if it has been fully or partially assembled.

This kit is a radio controlled model racing product and could cause harm and personal injury.

The A800FX Evo car is designed for use on r/c car race tracks. It should not be used in general public areas.

Awesomatix Innovations accept no responsibility for any injuries caused by making or using this kit.

Due to policy of continuous product development the exact specifications of the kit may vary.

Awesomatix Innovations do reserve all rights to change any specifications without prior notice. All rights reserved.

ASSEMBLY NOTES

Before starting each build-stage check that you have the right quantity and size of items for the build-stage. To assist you with the assembly of your A800FX Evo car we have included full-size images of all the small hardware parts laid out so that you can place items on top of the images to check are they correct size/length. You can find the useful tips and pictures of A800FX Evo assembling on the Internet site: https://site.petitrc.com/reglages/awesomatix/setupa800fx/

GENERAL PRECAUTIONS

- Many of the items in this kit are small enough to be accidentally swallowed and are therefore potential choking hazards, making them potentially fatal. Please ensure that when assembling the kit you do so out of the reach of small/young children.
- Take care when building, as some parts may have sharp edges.
- Please read this manual carefully to understand which ancillary items (tools, electrics, electronics etc) are used with this kit.
- Awesomatix Innovations accept no responsibility for the operation of any such ancillary items.
- · Exercise care when using tools and sharp instruments.
- · Follow the operating instructions for the radio equipment at all times.
- Never touch rotating parts of the car as this may cause injury.
- Keep the wheels of the model off the ground when checking the operation of the radio equipment.
- To prevent any serious personal injury and/or damage to property, be responsible when operating all remote controlled models.
- The model car is not intended for use on roads or areas where its operation can conflict with or disrupt pedestrian or vehicular traffic.
- Do not run your car in poor light or if it goes out of sight. Any impairment to your vision may result in damage to your car or, worse, injury to others or their property.
- As a radio controlled device, your car is subject to radio interference from things beyond your control. Any such interference may cause a loss of control of your car so please consider this possibility at all times.
- When not using RC model, always disconnect and remove battery.
- · Insulate any exposed electrical wiring to prevent dangerous short circuits.
- Take maximum care in wiring, connecting and insulating cables. Make sure cables are always connected securely.

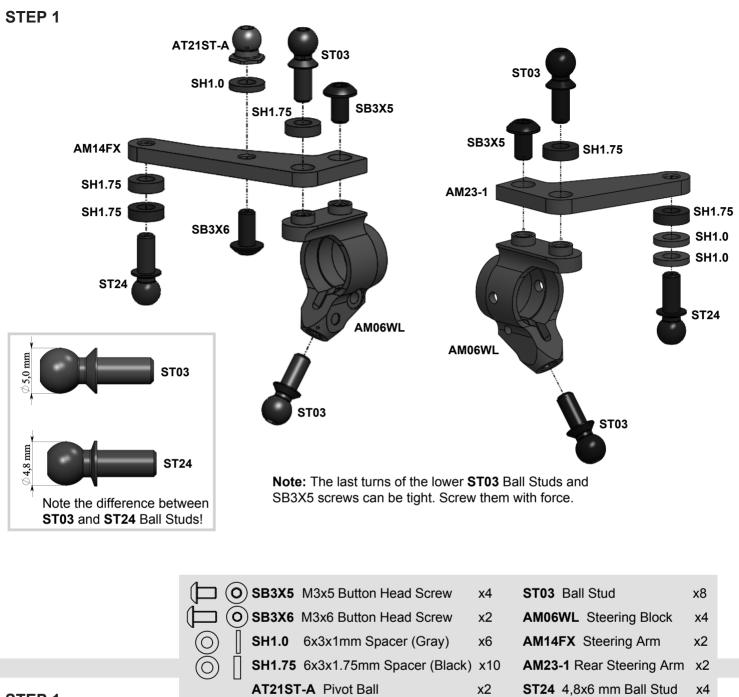
Check connectors for if they become loose and if so reconnect them securely. Never use R/C models with damaged wires. A damaged wire is extremely dangerous and can cause short-circuits resulting in fire.

EQUIPMENT RECOMMENDED (NOT INCLUDED)

- Radio Transmitter
- Radio Receiver
- Electronic Speed Control
- Steering Servo
- Electric Motor
- Pinion Gear (64 or 48 Pitch)
- Spur Gear (64 or 48 Pitch)
- 7.4 V Li-Po Shorty Battery
- 190mm Body Shell
- Touring Car Wheels, Tires, Inserts

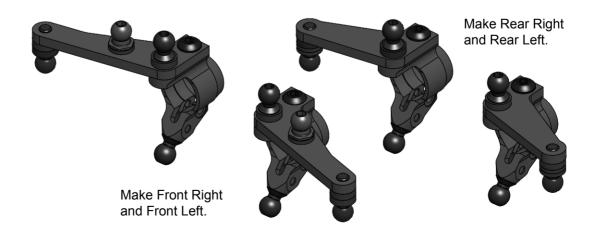
- TOOLS RECOMMENDED (NOT INCLUDED)
- 1.5mm, 2.0mm Hex Driver
- 5.5mm, 9mm, 3/8", 10mm Wrenches
- Callipers
- Hobby Knife
- Camber Gauge
- Ride Height Gauge
- Thin CA Glue
- Thread Lock
- Diff Silicone Oil
- Joint Grease

AW/SOMVIIX

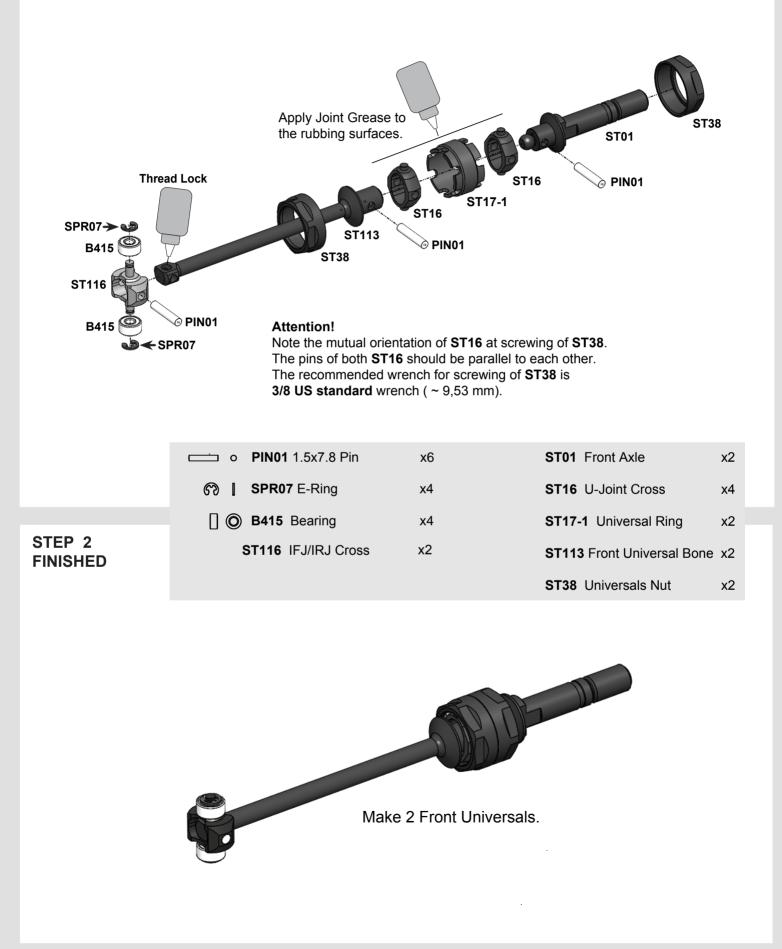


STEP 1 FINISHED

Note: Use other combinations of **SH0.5**, **SH1.0** and **SH1.75** Spacers under appropriate Pivot Balls and Ball Studs to adjust your car set-up to better suit different track conditions.

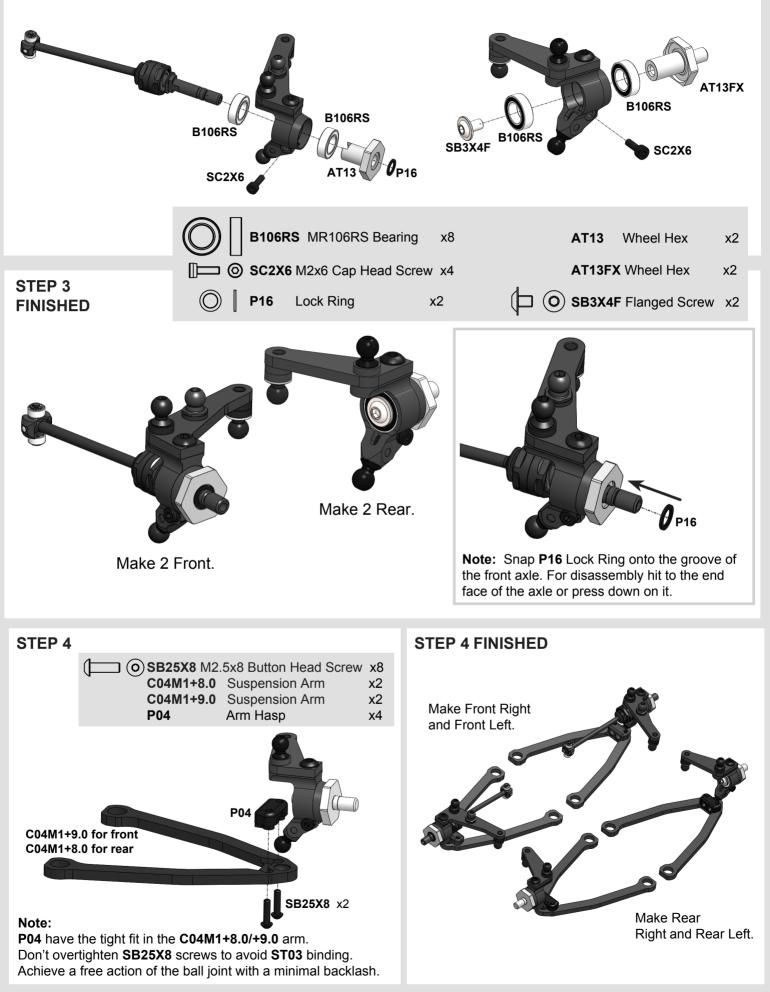






STEP 3







STEP 5 Assembling of the Dampers

Note: We recommend to use 500 cst pure silicone oil for D2.2-S-P dampers of this kit.

- 1) Stretch and place **OR18V** o-ring in the groove of the **AT40-1** cup.
- 2) Insert P63 piston into AT41-2 vane cavity. Align the outer face of P63 piston with the outer edge of AT41-2 vane cavity. Keep AT41-2 in vertical position and add a drop of oil into the outer conical hollow of P63 piston to fill this hollow fully.

3) Stand AT42-1 case up and fill ~1/2 of volume with the desirable silicone oil. Insert AT41-2 vane into AT42-1 case slowly full way down.
4) Add more silicone oil. The oil should cover the AT41-2 vane completely. It is highly recommended the damper should be placed into a

shock air remover. Otherwise let the damper sit for ~ 30min to allow air bubbles to escape. 5) With the damper still exactly vertical (important !), screw **AT40-1** cup into the **AT42-1** case with a 9mm socket wrench until full threaded. Do not force the **AT40-1** cup - once aligned, it will screw on easily. The excessive oil should go out through the gap between **AT40.1** and **AT41.2**. Places den't remute this ell from the between **AT40.1** on this steps!

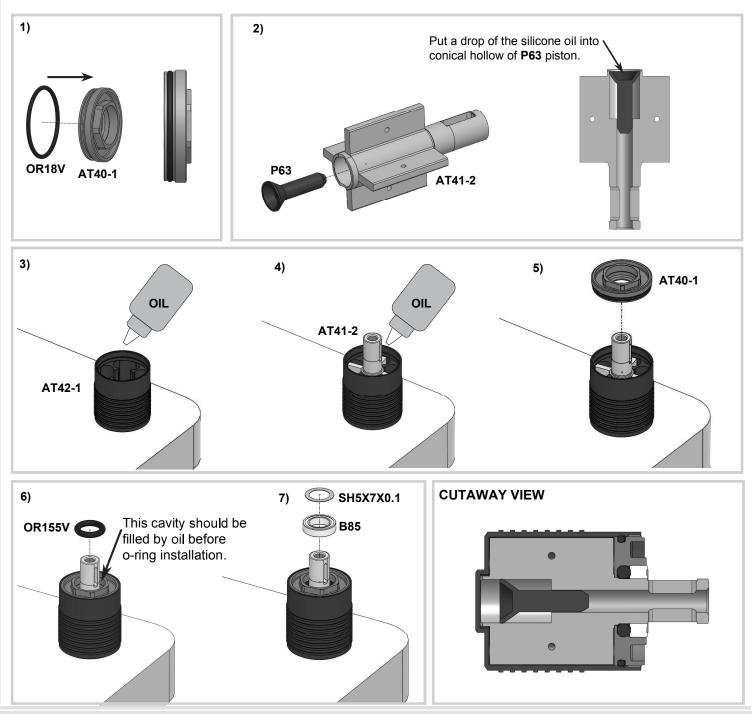
between AT40-1 and AT41-2. Please don't remove this oil from the bearing's cavity of AT40-1 on this stage!

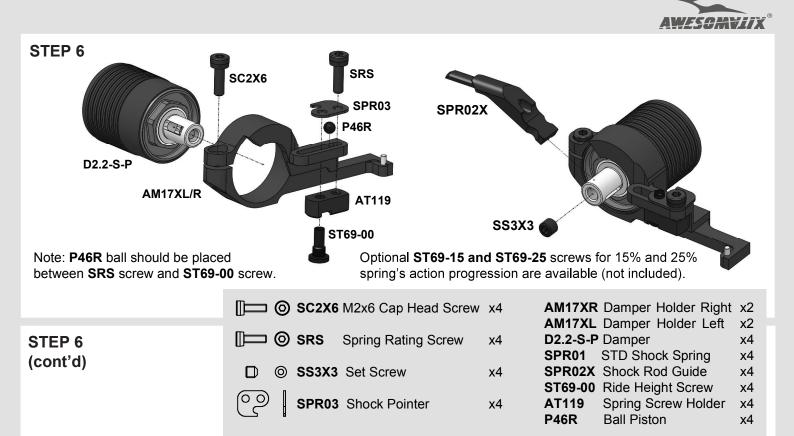
6) Place **OR155V** o-ring into **AT40-1** cup. You can use a piece of an appropriate tube to press o-ring slowly and fully into cavity.

7) Place **B85** bearing and one **SH5X7X0.1** shim onto **AT41-2** vane output shaft.

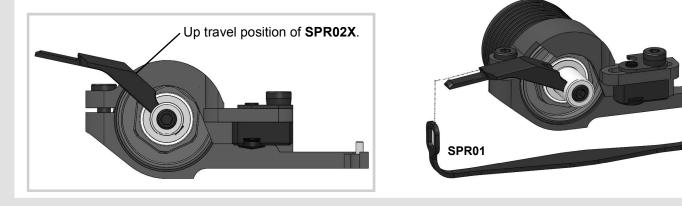
8) Clean up oil off the outer surface of the damper.

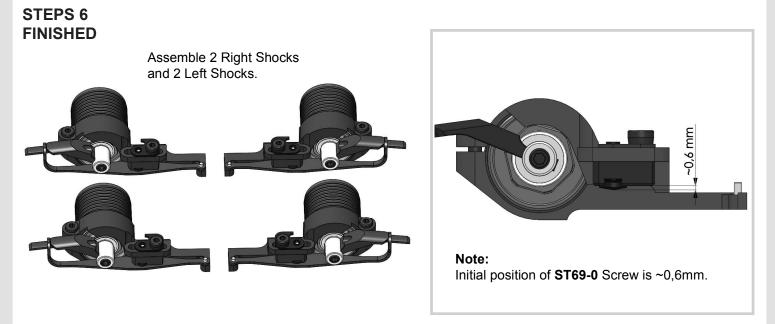
For disassembling please do all steps in the reverse order.



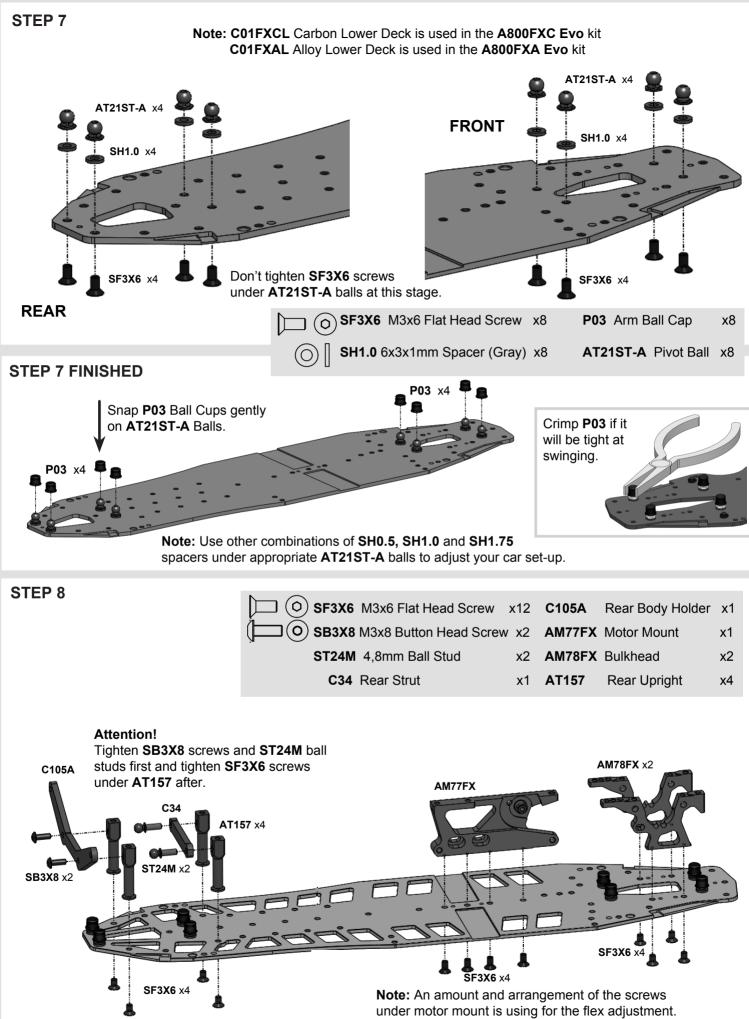


Attention! After installation of SPR02X rotate the complete D2.2-S-P damper within AM17XR/L until the maximum up travel is reached and secure SC2X6 screw in the AM17X/RL after that. At the max up travel position the SPR02X should touch the stopper on AM17X/RL !!!

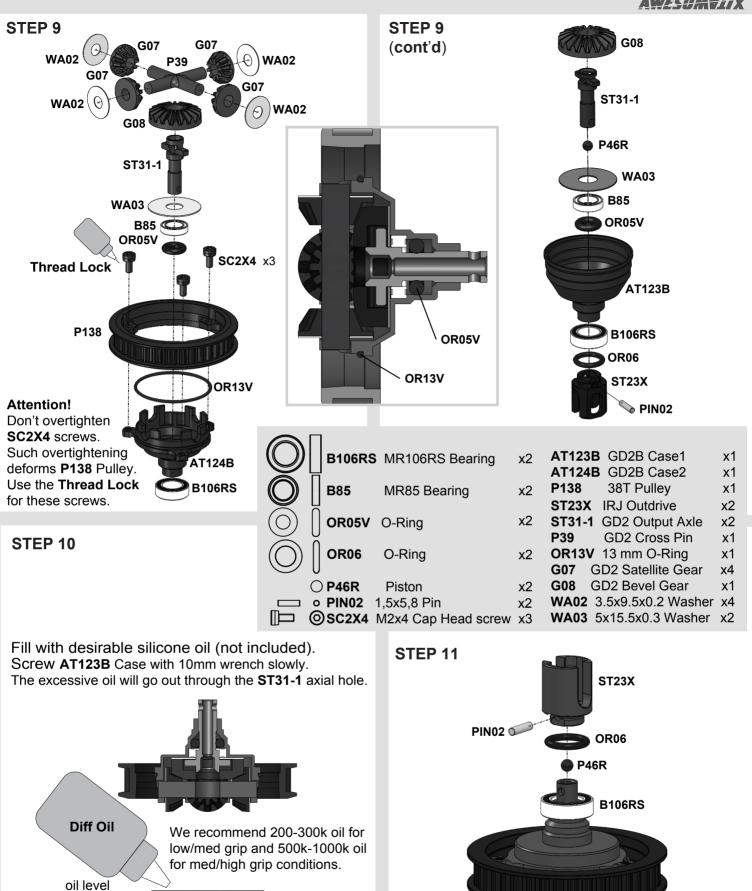






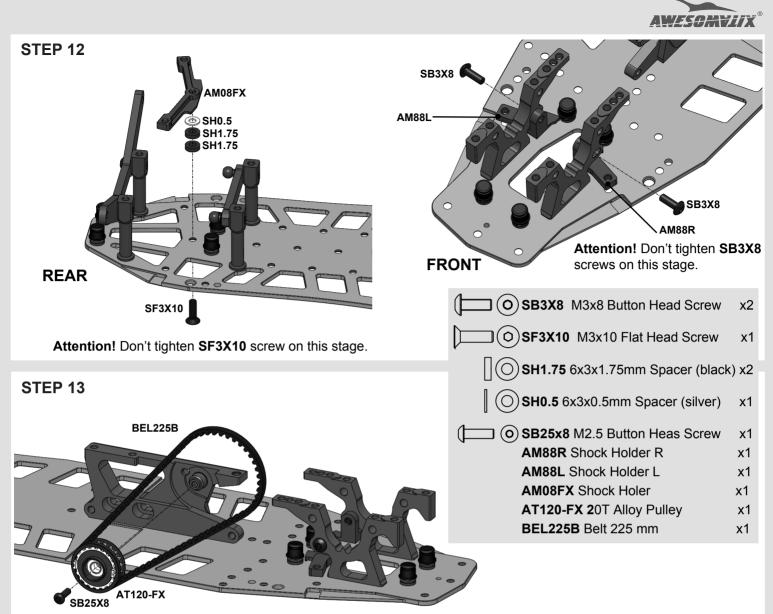




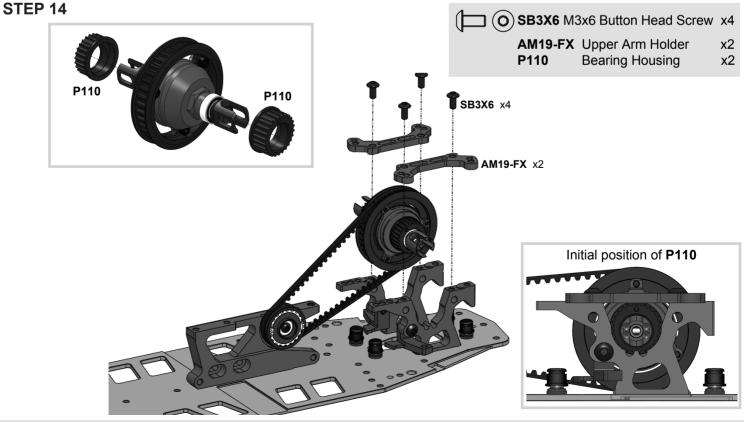


Note the initial position of **P46R** piston in this **ST31-1** axle.

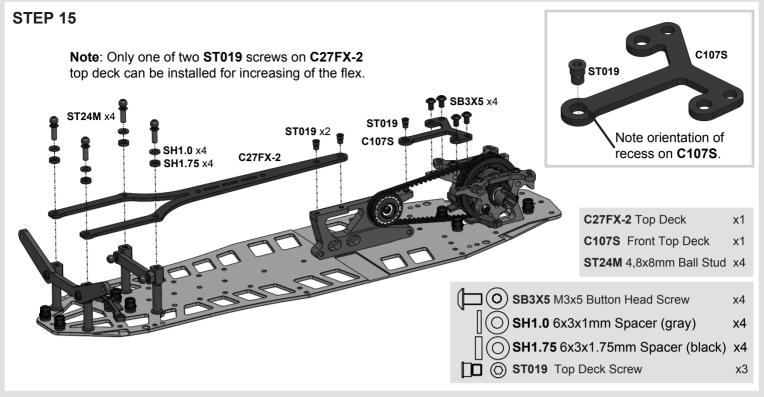




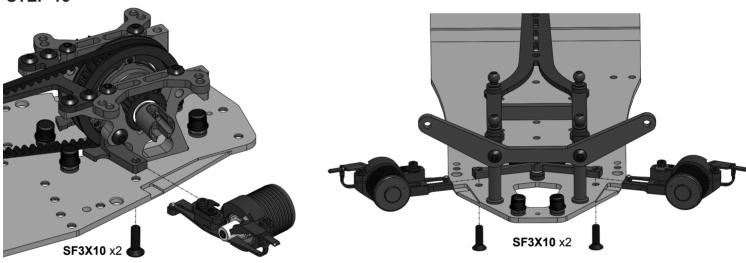
_ _ _





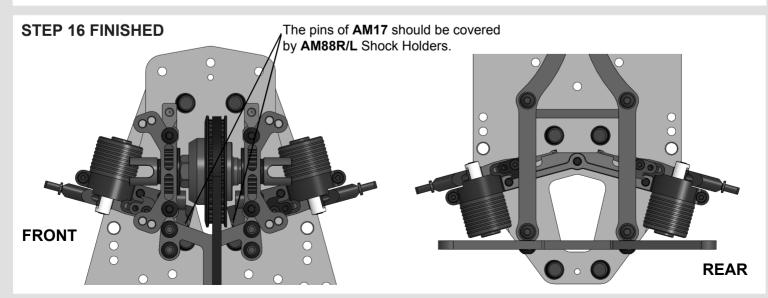


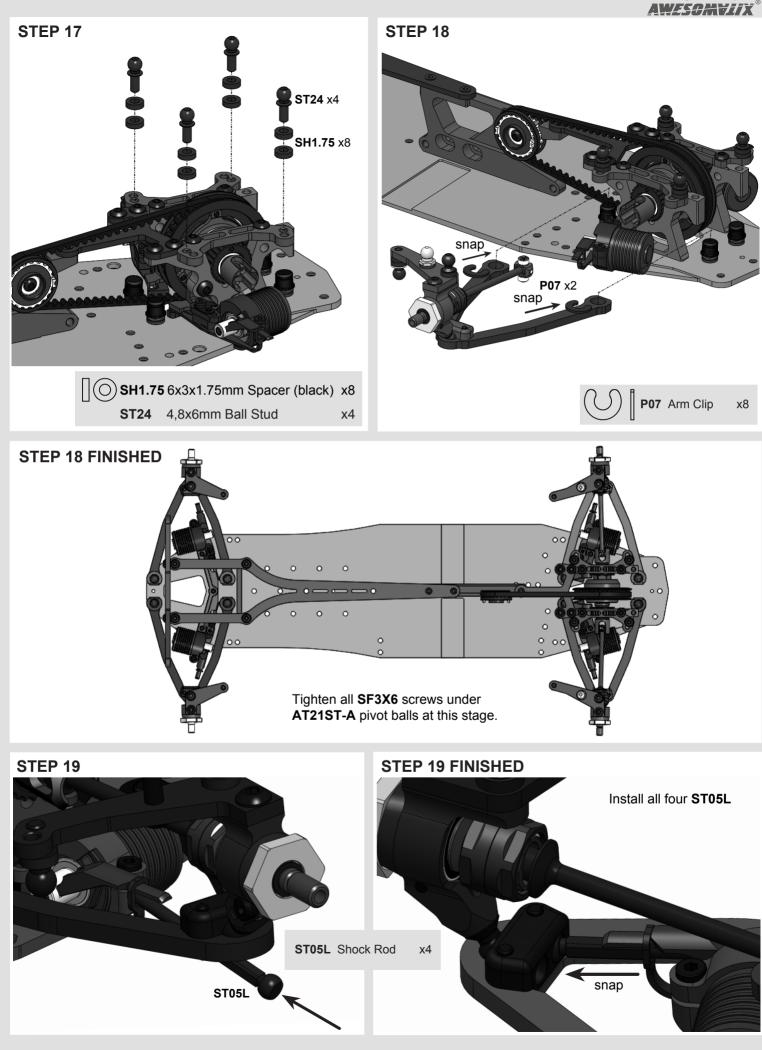
STEP 16



Attention! Tighten SB3X8 screws of AM88L/R with 2mm ball hex driver after tightening of SF3X10 screws.

Tighten all three rear SF3X10 screws now.

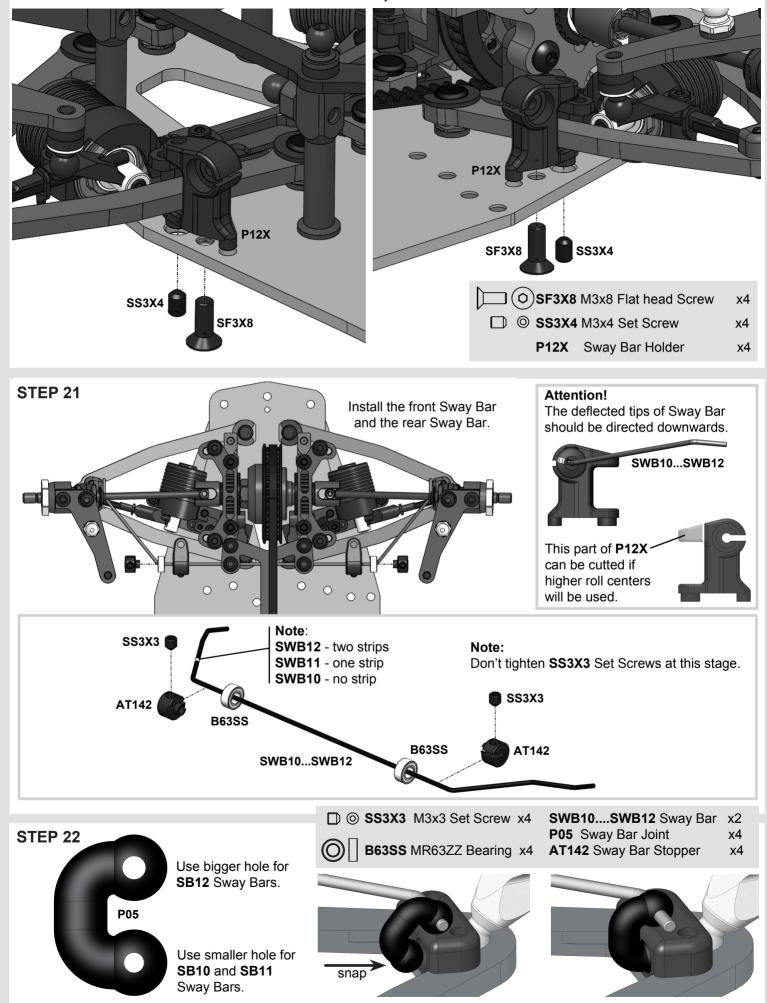




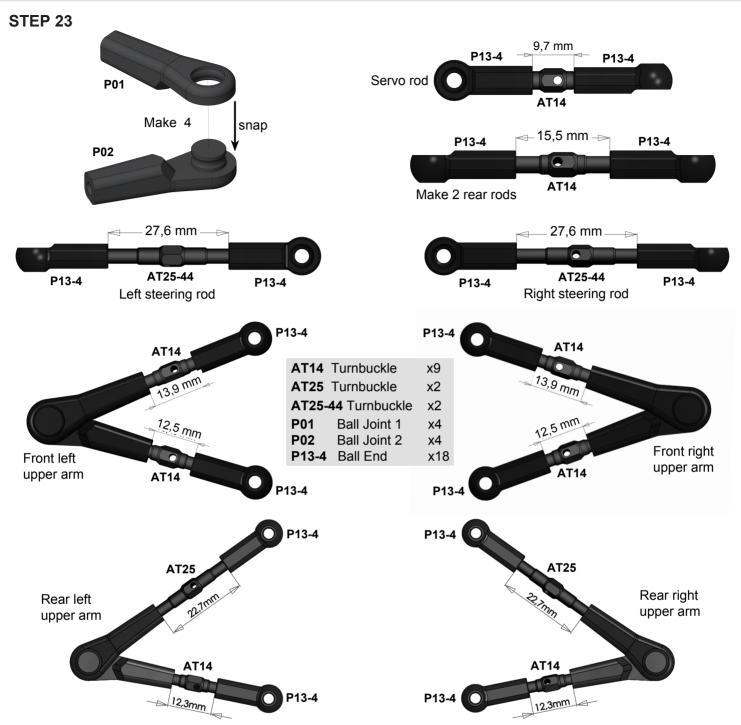




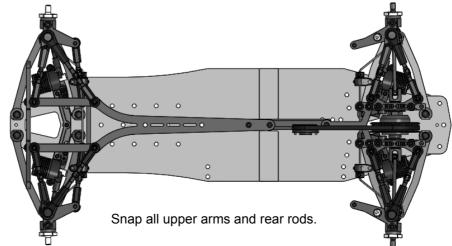
Install four P12X Sway Bar Holders.



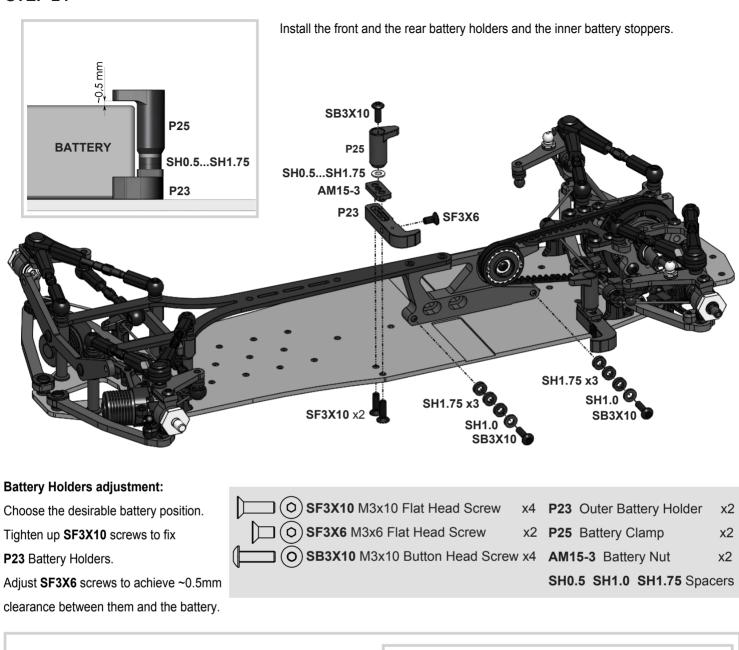
AWESOMVIIX

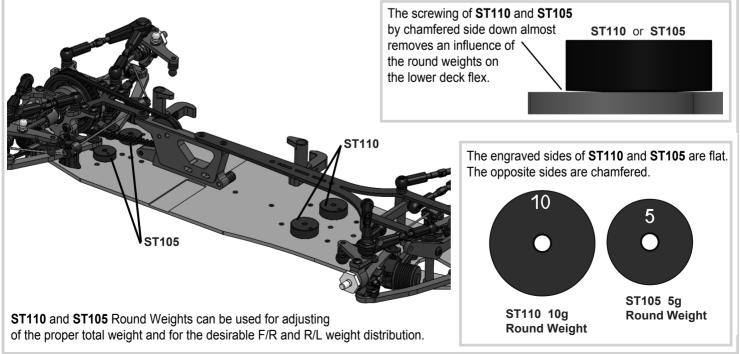


Notes: The given rods and arms sizes are approximately for 4° front caster and 0° rear caster, 2° both front and rear cambers, 1,0° rear toe-in and 1° front toe out angles. Use a setup station or angles gauge for further precise suspension geometry setting. See our recommendations on page #18 for quick and easy suspension geometry change.

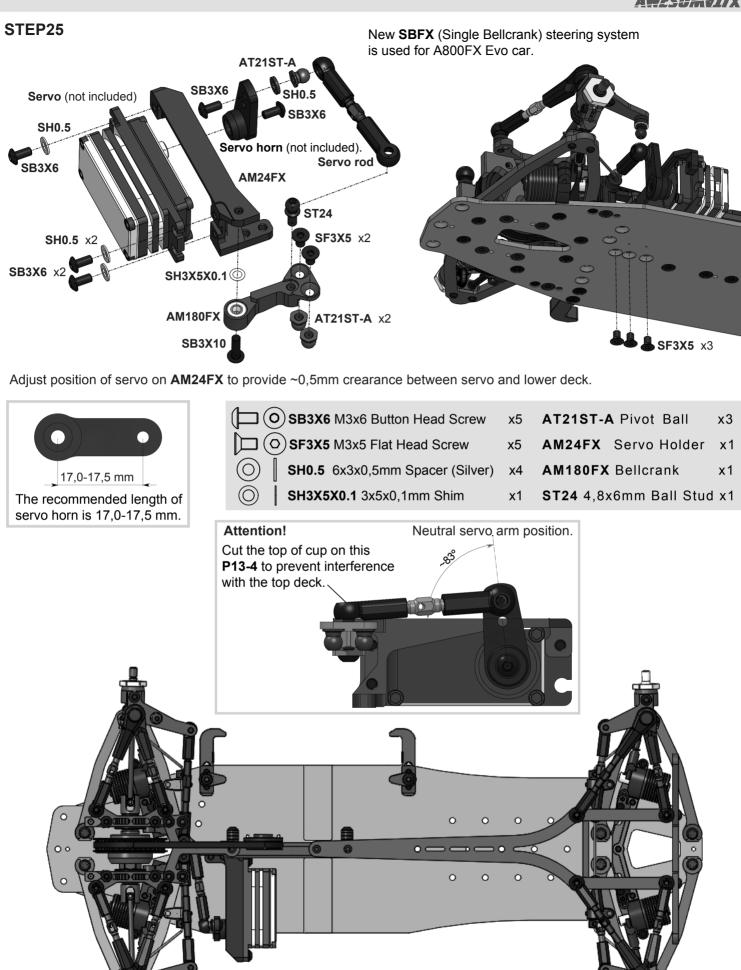


```
STEP 24
```

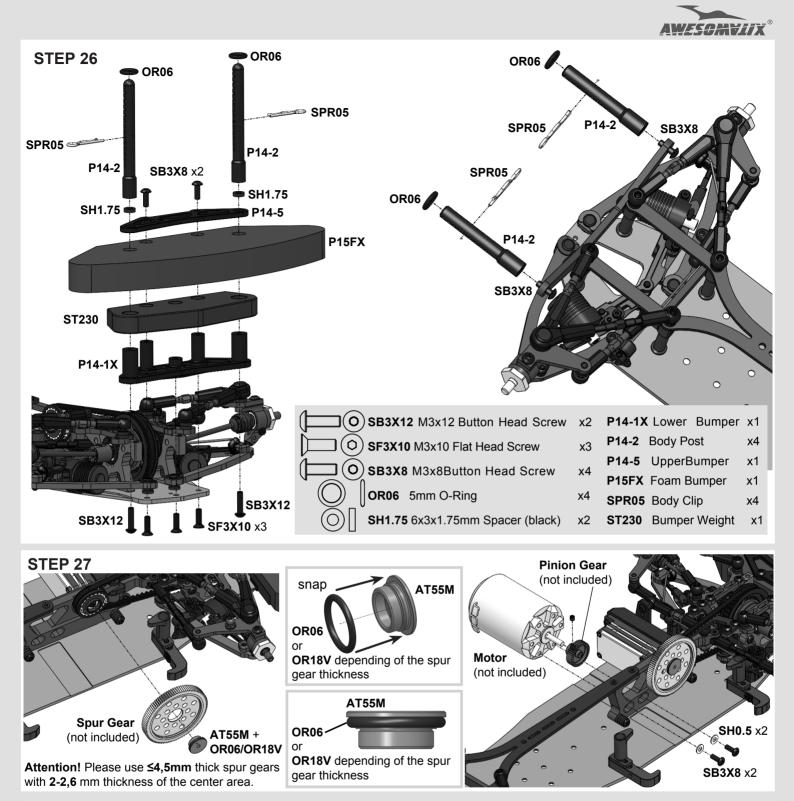








Snap steering rods.



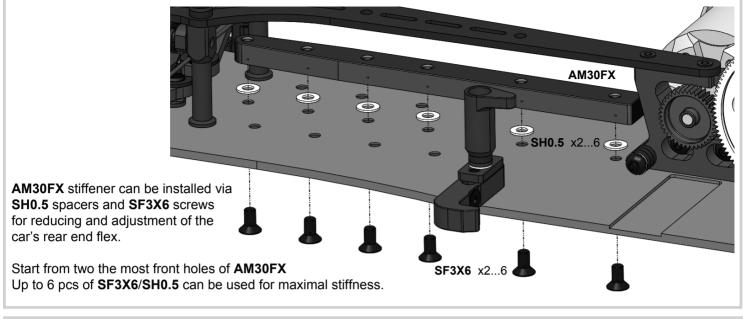
STEP 28 FINAL ASSEMBLY

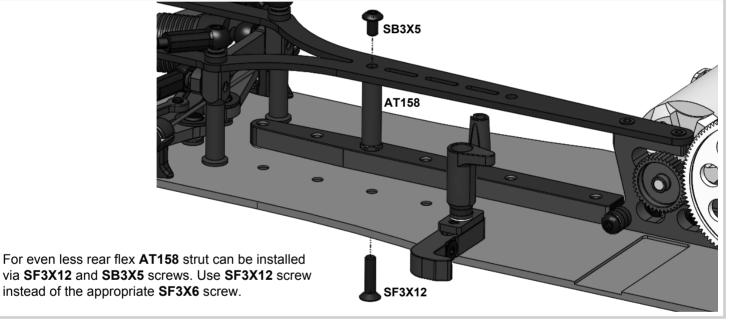
Install:

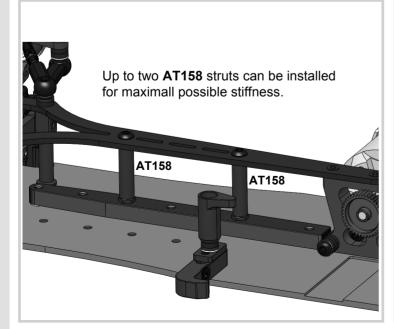
Speed controller (not included) Receiver (not included) Battery (not included) Motor Fan (not included) Transponder (not included) Wheels (not included)



REAR STIFFENER AND ADDITIONAL FRONT FLEX OPTION





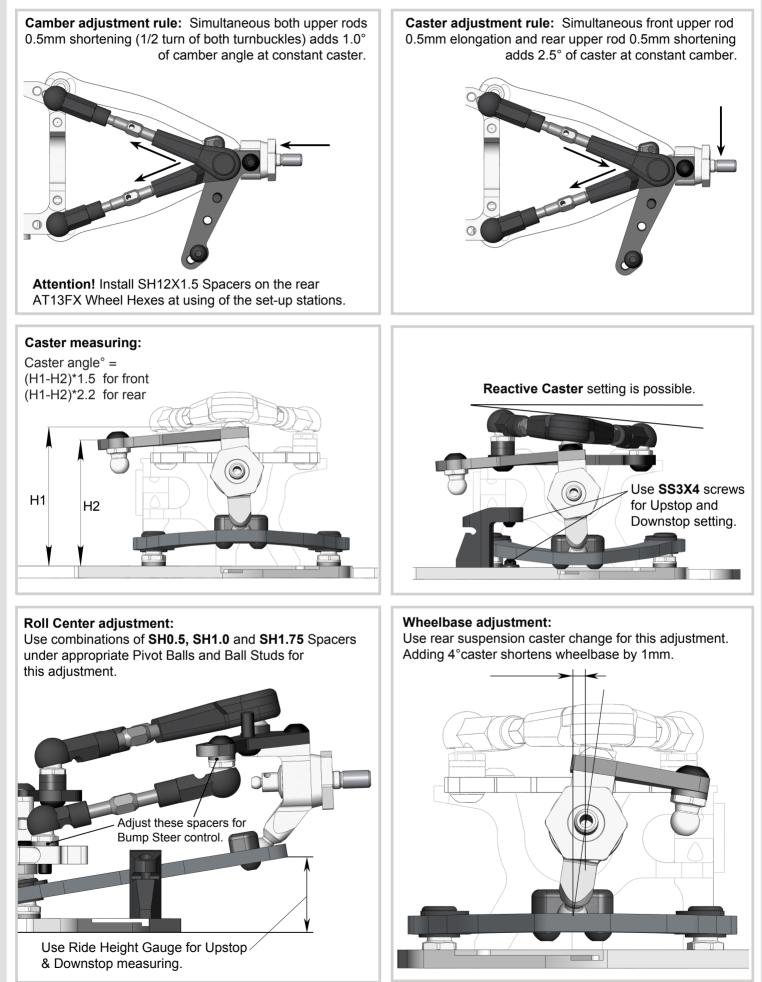


can be installed via only two SB3X5 screws instead of four. Use two ST09 collars at thus. SB3X5 ST09 SB3X5 ST09 C107S C107S C107S

For increasing of the front flex the front top deck C107S



SUSPENSION SETTING TECHNIQUE





SHOCK SETTING TECHNIQUE

Attention! Awesomatix shocks allow to adjust the damping and spring rates without replacement of the shock's fluid and spring.

1. Damping and suspension spring rate setting

Increase **A**-distance (slide the damper outward) to increase the damping and spring rates simultaneously and concordantly to each other.

Use outer **SF3X10** Flat Head Screw to unlock damper and to lock it at desirable position.

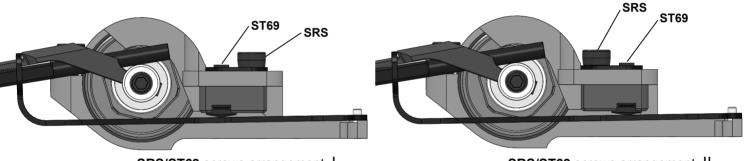
Decrease **B** distance (slide **AT119** Spring Screw Holder outward) to increase the spring rate only at the fixed damping rate value. Use **SRS** Spring Rating Screw to unlock **AT119** and to lock it at desirable position.

2. Suspension spring preload setting

Turn IN (CW) **ST69-00** screw to increase the spring preload. Turn OUT (CCW) **ST69-00** screw to decrease the spring preload. Use spring preload setting to adjust the ride height value.

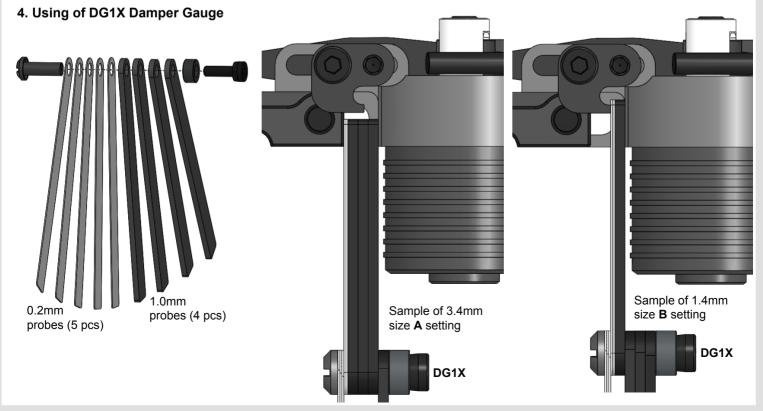
3. SRS/ST69 screws arrangements change

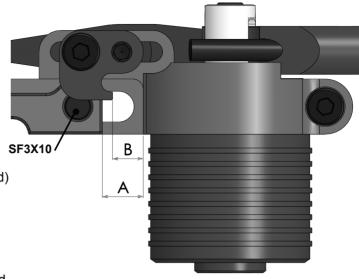
The reverse arrangement of these screws is possible for extension of the suspension spring rate range.



SRS/ST69 screws arrangement |

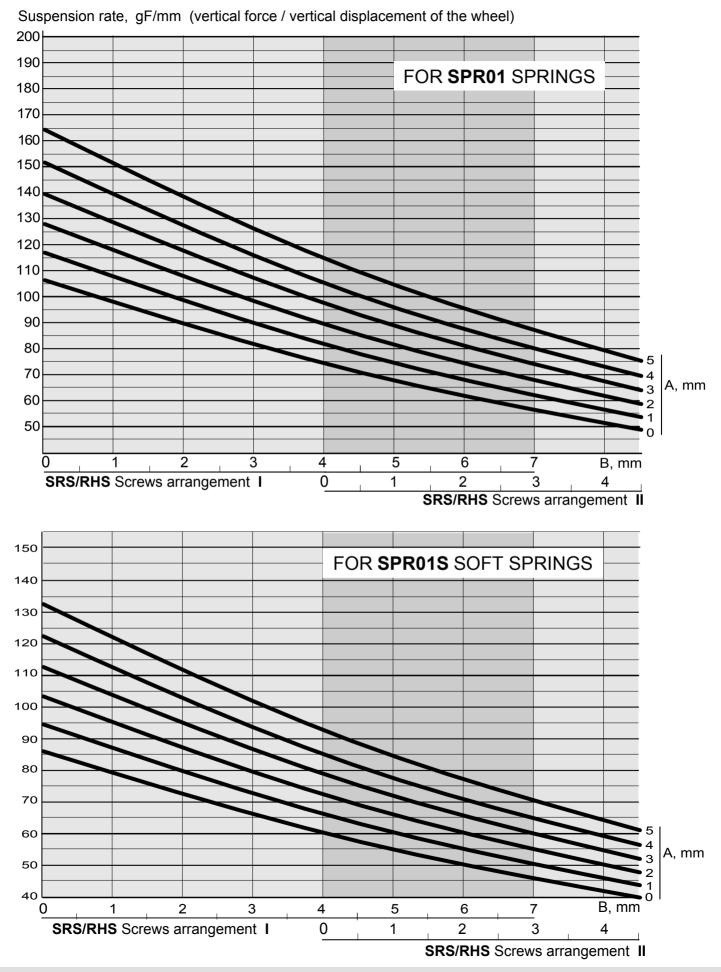
SRS/ST69 screws arrangement II







GRAPHS OF THE SUSPENSION STIFFNESS DEPENDING ON THE POSITION OF THE DAMPER (SIZE A) AND SHOCK SCREW HOLDER (SIZE B)



FINAL DRIVE RATIO CHART

DRIVE TRAIN RATIO IS 1,9

1	,9	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106
	8		•••			•••							•.			••			•.									7,19
	9																										6,88	6,94
	0																									6,59	6,65	
3	1																								6,31		6,44	
3	2																							6,06	6,12	6,18	6,23	6,29
3	3																						5,82	5,87	5,93	5,99	6,05	6,10
3	4																					5,64	5,64	5,70	5,76	5,81	5,87	5,92
5 3	5																				5,37	5,43	5,48	5,54	5,59	5,65	5,70	5,75
3	6																			5,17	5,23	5,28	5,33	5,38	5,44	5,49	5,54	5,59
13	7																		4,98	5,03	5,08	5,14	5,19	5,24	5,29	5,34	5,39	5,44
3	8																	4,80	4,85	4,90	4,95	5,00	5,05	5,10	5,15	5,20	5,25	5,30
3	9																4,63	4,68	4,73	4,77	4,82	4,87	4,92	4,97	5,02	5,07	5,12	5,16
4	0																		4,61									
2 4	1																		4,495									
, <u> </u>	2																		4,39									
	3																		4,29									4,68
	4																		4,19									
	5																		4,10							4,39		
	6																		4,01									
	7																		3,92									
_	8																		3,84									
_	9					0.40													3,76								\mid	
_	0				0.00														3,69									
_	1			2.00															3,61	3,65								
_	2		2.00																3,54									
-	3	2 OF																3,44									┢───┦	
	_					2,96																					┢───┤	
5	o	2,10	∠,80	2,83	2,87	2,90	2,94	2,97	3,01	3,04	3,07	3,11	3,14	3,18	3,21	3,25												í

64dp SPUR GEAR SIZE

AWESCHIJIX

78

6,44

6,18

5.93

79

6,82

6,53

6,25

6,00

80

7,24

6,91

6,61

6,33

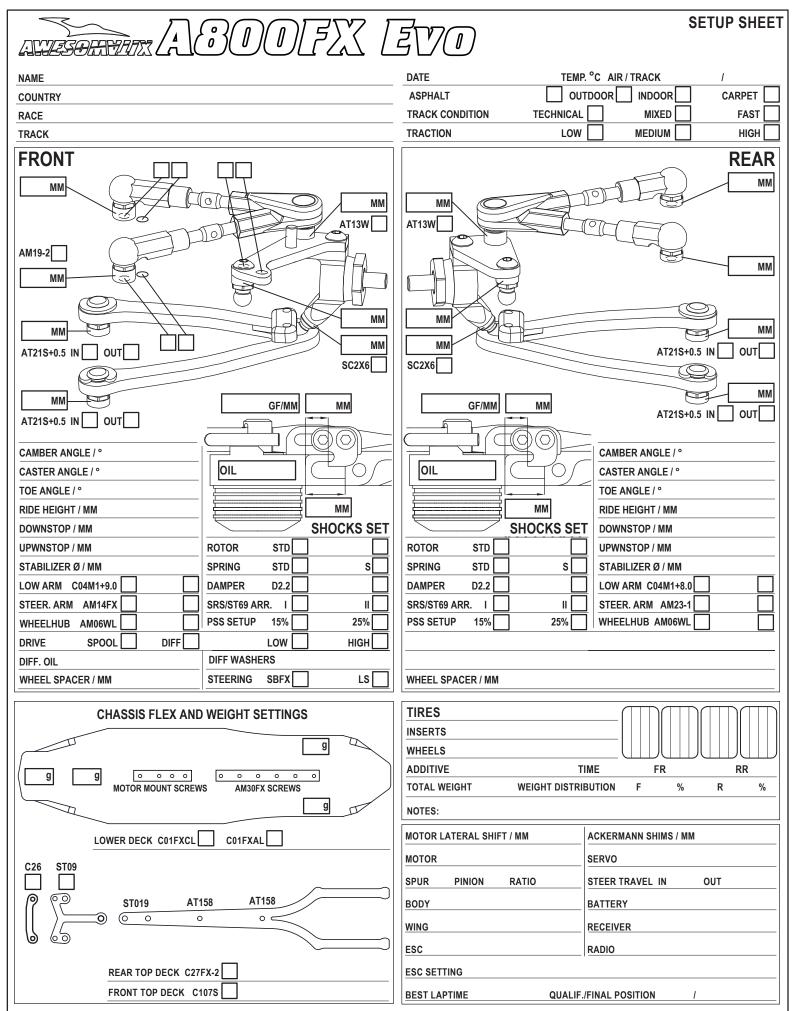
6,08

1,9 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 21 22 23 24 6,10 5,78 25 5,85 5,48 5,55 5,63 5,21 5,28 5,35 5,42 4,95 5,02 5,09 5,16 5,23 4,72 4,78 4,85 4,91 4,98 5,04 4,88 4,497 4,56 4,62 4,69 4,75 4,81 4,66 4,29 4,35 4,41 4,47 4,54 4,60 4,72

48dp SPUR GEAR

26 5,70 5,77 5,85 27 5,49 5,56 5,63 28 5,29 5,36 5,43 29 5,11 5,18 5,24 4,94 30 5,00 5,07 4,78 31 4,84 4,90 4,22 32 4,10 4,16 4,28 4,33 4,39 4,45 4,51 4,57 4,63 4,69 4,75 33 3,92 3,97 4,03 4,09 4,15 4,20 4,26 4,32 4,38 4,43 4,49 4,55 3,74 3,80 34 3,86 3,91 3,97 4,02 4,08 4,14 4,19 4,25 4,30 4,36 3,64 35 3,58 3,69 3,75 3,80 3,85 3,91 3,96 4,02 4,07 4,13 4,18 36 3,43 3,48 3,54 3,59 3,64 3,69 3,75 3,80 3,85 3,91 3,96 4,01 3,29 3,34 3,39 3,44 3,49 3,54 3,59 3,65 3,70 3,75 37 3,80 3,85 38 3,15 3,20 3,25 3.30 3.35 3,40 3.45 3,50 3,55 3.60 3,65 3,70 3,12 39 3,02 3,07 3,26 3,36 3,41 3,46 3,51 3,56 3,17 3,22 3,31 3,28 3,33 40 2,90 2,95 2,99 3,04 3,09 3,14 3,18 3,23 3,37 3,42 3,20 41 2,78 2,83 2,87 2,92 2,97 3,01 3,06 3,10 3,15 3,24 3,29

48dp PINION GEAR SIZE



COMMENTS: Editable setup sheet can be downloaded from: https://site.petitrc.com/ reglages/awesomatix/setupa800fx/



Standard Spare Parts

Parts#	Description
AM06WL	Steering Block
AM14FX	Steering Arm
AM15-3	Battery Nut
AM17XL	Damper Holder L
AM17XR	Damper Holder R
AM19FX	Upper Arm Holder
AM23-1	Rear Steering Arm
AM24FX	Central Servo Holder
AM30FX	Rear Stiffener
AM77FX	Motor Mount FWD
AM78FX	Bulkhead
AM88R	Shock Holder R
AM88L	Shock Holder L
AM180FX	Bellcrank
AT13	Wheel Hex
AT13FX	Rear Wheel Hex FWD
AT14	Turnbuckle
AT21ST-A	Pivot Ball
AT25	Turnbuckle Long
AT25-44	Turnbuckle Long 44 mm
AT40-1	Damper Cup
	Damper Vane
AT41-2	
AT42-1	Damper Case
AT55M	Spur Nut
AT119	Spring Screw Holder
	20T Alloy Pulley FWD
AT120-FX	
AT123B	GD2B Case1
AT124B	GD2B Case2
AT142	Sway Bar Stopper
AT157	Rear Upright FX
AT158	Strut FX
ST01	Front Axle
ST03	Ball Stud
ST05L	Shock Rod
ST69-00	Linear Spring Screw
ST113	IFJ Universal Bone
ST116	IFJ/IRJ Cross
ST16	U-Joint Cross
ST17-1	Universal Ring
ST019	Top Deck Screw
ST23X	IRJ Outdrive
ST24	4,8x6mm Ball Stud
ST24M	
	4,8x8mm Ball Stud
ST31-1	GD2 Output Axle
ST38	Universal Nut
ST68	Flanged Wheel Nut
ST105	Round Weight 5g
ST110	Round Weight 10g
ST230	Bumper Weight FX 130g
G07	GD2 Satellite Gear
G08	GD2 Bevel Gear
D2.2-S-P	Damper
P01	Ball Joint-1
P02	Ball Joint-2
P03	Arm Ball Cap
P04	Arm Hasp
P05	Sway Bar Joint
P07	Arm Clip
P12X	Sway Bar Holder
P13-4	Ball End
P14X	Bumper Set
P15FX	Foam Bumper FWD
P16	Lock Ring
P23	Outer Battery Holder
P25	Battery Clamp

Parts#	Description
P39	GD2 Cross Pin
P45R	Damper Piston
P46R	Diff Piston
P49	Steering Rack FWD
P56	Antenna Holder
P110	Bearing Housing
P138	
	38T Pulley
C01FXCL	Carbon Lower Deck
C01FXA	Alloy Lower Deck
C04M1+8.0	Suspension Arm
C04M1+9.0	Suspension Arm
C27FX-2	Rear Top Deck
C34	Rear Strut FX
C105A	Rear Adjustable Body Holder FX
C107S	Front Top Soft Deck FX
SWB10	Sway Bar 1,0mm
SWB11	Sway Bar 1,1mm
SWB12	Sway Bar 1,2mm
SPR01	Shock Spring
SPR02X	Shock Rod Guide
SPR03	Shock Pointer
SPR05	Body Clip
SPR07	E-Ring
SH0.5	6x3x0,5mm Spacer (silver)
SH1.0	6x3x1,0mm Spacer (gray)
SH1.75	6x3x1,75mm Spacer (black)
SH12X1.5	4x12x1,5mm Spacer
SH3X5X0.1	3x5x0,1mm Shim
WA02	3x5x0,2 Washer
WA02	5x15x0,3 Washer
PIN01	1,5x7,8 Pin
PIN01 PIN02	1,5x5,8 Pin
OR13V	1x13 mm O-ring
OR05V	GD O-Ring Medium
OR05V OR06	
	5,5mm O-RING
OR155V	Damper O-Ring 1x8mm O-ring
OR18	
B106RS	MR106RS Bearing
B85	MR85 Bearing
B84SS	MR84ZZ Bearing
B63SS	MR63ZZ Bearing
B415	B415ZZ Bearing
SRS	Spring Rating Screw
SC2X4	M2x4 Cap Head Screw
SC2X6	M2x6 Cap Head Screw
SB2.5X8	M2,5x8 Button Head Screw
SS3X3	M3x3 Set Screw
SS3X3-914	M3x3 Set Screw DIN914
SS3X4	M3x4 Set Screw
SB3X4F	M3x4 Flange Head Screw
SB3X5	M3x5 Button Head Screw
SB3X6	M3x6 Button Head Screw
SB3X8	M3x8 Button Head Screw
SB3X10	M3x10 Button Head Screw
SF3X5	M3x5 Flat Head Screw
SF3X6	M3x6 Flat Head Screw
SF3X8	M3x8 Flat Head Screw
SF3X10	M3x10 Flat Head Screw
SF3X12	M3x12 Flat Head Screw
BEL225B	Belt 225 mm Bando
DG1X	Damper Guage Set
	A800FX Evo Stickers Sheet

Optional Parts

	•	
	Parts#	Description
	C01FXCLH	Carbon Lower Deck Hard
	C04M1+1.5	Suspension Arm Long
	C04AL1+0.5	Alloy Suspension Arm
	C04AL1+1.5	Alloy Suspension Arm Long
	C04AL+8.0	Alloy Suspension Arm Long
	C04AL+9.0	Alloy Suspension Arm Long
	C07A	Carbon Bumper
	C26	Top Stiffener
	C27FX-L	Top Deck Long
	C107	Front Top Deck FX
	ST09	Upper Collar
	ST17	Universal Ring
	ST24L	4,8x10mm Ball Stud
Х	ST69-00	Linear Spring Screw
	ST113US	IFJ Universal Bone
	ST265	Bumper Weight FX 115g
	AT06	Alloy Antenna Holder
	AT13W	Wheel Hex Wide
	AT15	Bearing Spacer
	AT21ST-A	Pivot Ball Steel Short
	AT78	Damper Piston
	AT139	Fan Holder
	AT144	ULCG Battery Clamp
	AM06L	Steering Block
	AM12-1	Alloy Battery Holder
	AM14LS	Steering Arm
	AM19-2	Upper Arm Holder
	AM19-2US	Upper Arm Holder
	AM19-200	Upper Arm Holder
	AM78FXH	
	DT10-2-1	Bulkhead Heavy
	DT10-2-1 DT10-3	Bearing Housing
		Bearing Housing
	P20	Front Universal Ring
	P40F	Servo Arm (Futaba)
	P40K	Servo Arm (KO)
	P138LFA	38T Pulley Low Friction
	SB3X5AL	M3x5 Alloy Button Head Screw
	SH0.1	6x8x0.1 Shim
	SH0.25	3x6x0.25mm Shim
	SH3X5X0.5	3x5x0.5mm Shim
	SS3X5	M3x5 Set Screw
	SWB13	Sway Bar 1.3mm
	BW22	Battery Holder 22g
	T01	5.5/4 mm Wrench
	FCB	Flexible Caster Block Set
	BC1	Battery Clamp Set
	PSS	Progressive Spring System
	LSFX	Linear Steering FX Set
	BDL	Body Downtravel Limiter Set



UAB "AWESOMATIX" Email: support@awesomatix.com

All rights reserved. ©Copyright UAB "Awesomatix" 2021.