



S12-1M

1/10 2WD EP Buggy with Middle Transmission



SWORKz S12-1M INSTRUCTION MANUAL



INSTRUCTION

The S12-1M chassis platform is designed for racing. It features a mid-front gear box with a lower position spur gear system. The motor position is 65mm away from the traditional gear box (S12-1R) improving the cornering speed when racing on carpet tracks.

The S12-1M also features a 3mm 7075 chassis layout that allows up to 4 different battery positions. The buggy comes with a 6mm aluminum front shock tower and all the lower arm holders are made of strong aluminium.

SWORKz designed a Pure Oil Shock System (no shock bladders) for quicker shock response and improved suspension feel.

The S12-1M comes standard with the innovative Eaglet body designed for more rear grip and steering response. The Eaglet body provides a well balance feel in both mid-motor and rear-motor configurations.

The S12-1M platform was designed from the ground up and is the perfect buggy for the serious racer and weekend hobbyist alike. The smart and efficient design incorporated with a cost-effective and user friendly platform was our primary goal from the beginning of the S12-1M project. We now introduce to you the SWORKz S12-1M.....

Congratulations on your purchase of the new SWORKz S12-1M 1/10 scale off-road racing buggy pro kit.

Please read this manual thoroughly, before you attempt to start or drive your S12-1M. This manual contains step-by-step instructions to help you complete, prepare for startup, and fine-tune your buggy. Updates, setups, and product news will be posted on our website (www.sworkz.com),

As always, if you should ever have any questions or need help with your S12-1M, please feel free to contact our official SWORKz dealers and distributors. You may also contact us at any time for the most up to date information and support.

S12-1M Chassis Features:

1. 3mm 7075 aluminum F.C.S.S. Chassis Design. with B.H.C.(Black Hard Coated)
2. New 1/10 2WD Lay Down Transmission Gear Box System with Middle Front Motor Position.
3. New 3 Pads Slipper Clutch System Design.
4. Standard with Gear Diff System.
5. Full Oil System Big Bore Shocks.
6. Standard with 6mm 7075 Aluminum Front Shock Tower and Rear 4mm Pro-composite Carbon Fiber Shock Tower.
7. New Strengthen Material arms with new suspension geometry.
8. Includes both 12mm and 14mm Hex Wheel Hub System.
9. C-Hub Steering System Design.
10. New Adjustable Steering Plate with New Bell Crank System.
11. Full Aluminum Arm Holders and Toe in Plates.
12. Fits 2 types of Li-Po batteries. (Saddle pack and Shorty park)
13. Standard with SWORKz 1/10 Sonic Lexan 6.5" Wing.(2 sets)
14. Standard with S12-1 Eaglet Style Body Shell with Top Wing.

Specification	
Length:	415mm
Width:	248mm
Height:	45mm
Ground Clearance:	48mm
Wheelbase:	280-283mm
Track:	F:248mm / R:243mm
Gear Ratio:	S:82/21T
Weight:	1480g~1580g



WARRANTY

Your SWORKz S12-1M kit warranty covers workmanship and manufacturing defects of the original and unmodified parts. Warranty claims resulting from crashes, abuse, improper operation, improper mounting, improper adjustment or lack of maintenance will not be honored.

Contact your local hobby shop or SWORKz distributor for all claims and questions. Claims must be well documented. All Claims are subject to expert examination approval by SWORKz



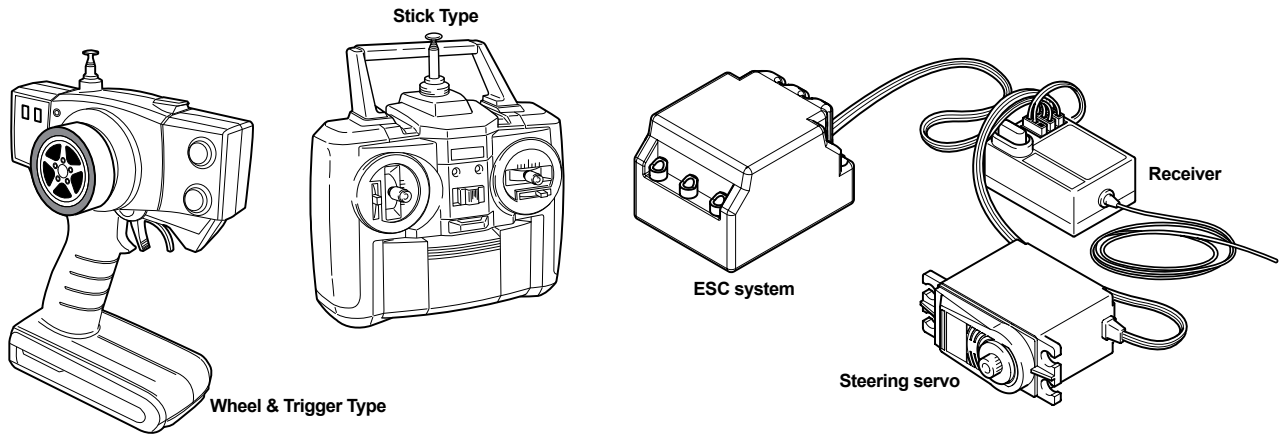
Instruction	2
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Operation guide	13
Assembly steps	14-33
Blank set-up sheet	34
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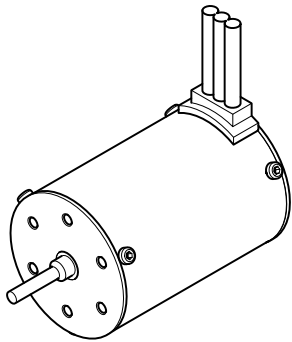
**This radio control racing car is not a toy!
This high-performance R/C model is recommended for ages
14 and older.**

Required Equipment for Operation

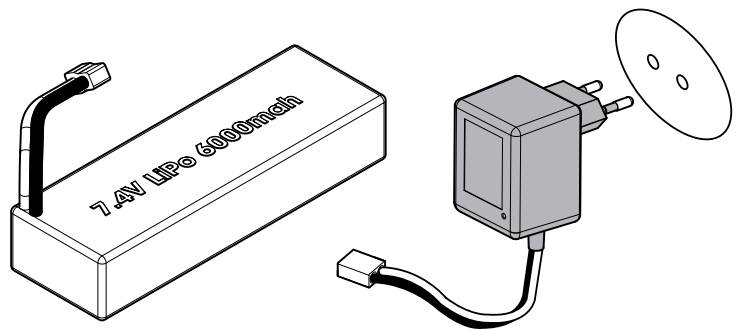
Radio Gear



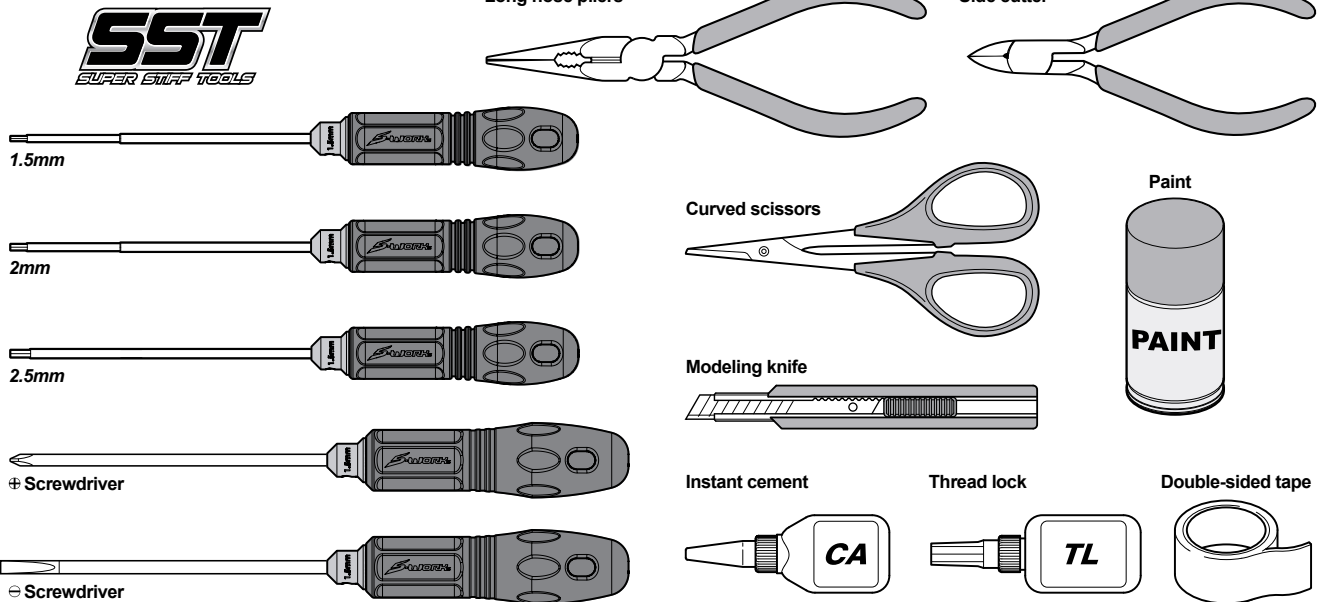
Breshless Motor



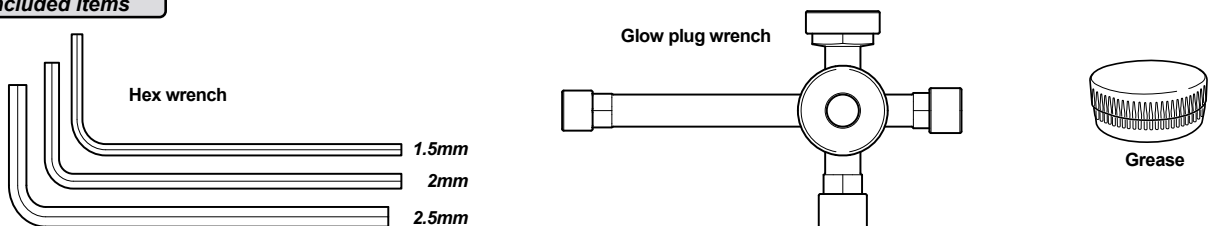
Charger and LiPo Battery



Tools Recommended



Included items





106014
M2x6mm Hex Scket OH/TP Screw x8



106020
M2.5x5mm Hex Socket OH/TP Screw x14



106010
M3x6mm Hex Socket OH/TP Screw x12



106001
M3x8mm Hex Socket OH/TP Screw x7



106002
M3x10mm Hex Socket OH/TP Screw x16



106008
M3x12mm Hex Scket OH/TP Screw x8



106005
M3x15mm Hex Scket OH/TP Screw x4



108020
M2x4mm FH/ST HEX Screw x4



108006
M3x8mm FH/ST HEX Screw x23



108003
M3x10mm FH/ST HEX Screw x6



108001
M3x12mm FH/ST HEX Screw x8



108005
M3x14mm FH/ST HEX Screw x4



108015
M3x16mm FH/ST HEX Screw x2



104004
M3x3mm Set Screw x3



104012
M3x12mm Set Screw x5



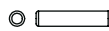
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M4x4mm Set Screw x2



330331
Steering Linkage Ball Stud 4.1mm x10



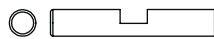
330664
Steering Linkage Ball Stud 5mm x4



330283
Pin M2x10mm x4



330285
Pin M2x14mm x2



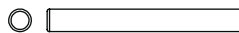
330279
Bevel Gear Shaft x2



330525
Reaw Lower Arm Hinge Pin (3x44mm) x2



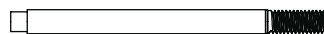
330537
Front Hub Carriers Hinge Pin x4



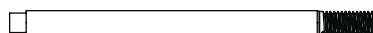
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Front Hub Carriers Hing Pin x4



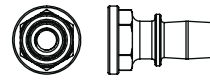
330300
Rear Upper Sus. Arm Turnbuckles x6



330532
Shock Shaft S x2



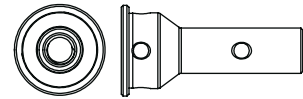
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Shock Shaft L x2



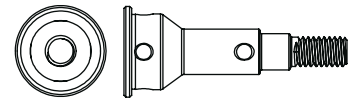
330312A
Aluminum Shock Cap Studk x2



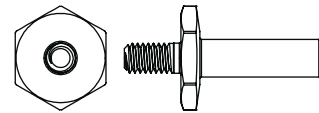
330597
Aluminum Shock Cap Studk x2



330294
CVD Axle x2



330581
CVD Axle x2



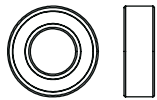
330534
Steering Hub Hinge Pin x2



116015
Bushing 5x8x2.5mm x4



116010
Bushing 5x10x4mm x8



116017
Ball Bearing 6x12x4mm x2



116013
Ball Bearing 10x15x4mm x4



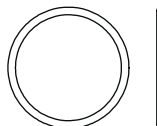
400018A
Shock Seal O-ring 3x6.6mm x8



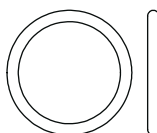
400002
O-ring S5 4.8x1.5 x2



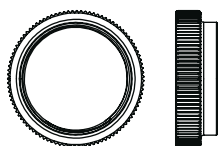
410049
Shock Seal Cap O-ring 8x10x1mm x4



410047
S102 Shock Cap O-Ring (SP) x4



400014
O-Ring 1.5x13.5mm x6



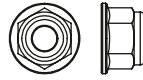
330304A
Aluminum Shock Spring Adjust Nut x4



103004
M2.5 Nut Lock x4



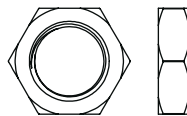
103003
M3 Nut Lock x2



103005
Flange M3 Nut Lock x1



103002
Flange M4 Nut Lock x4



330298A
S104 Wheel Nut 14mm x2



101012
Washer M3x6xT0.5mm x4



101011
Shock Washer 2.6x6x0.5mm x4



101026
Insert M3x6xT1.5mm x2



2502394
Washer M3x7xT1mm x6



330305
Shock Washer 3.3x6.7x1mm x4



101004
Shim 3.5x10x0.2mm x4



101020A
3mm Countersunk Washers (RD) x8



330528
CVD Joint x2



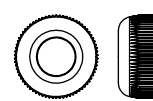
330134
Shock Ball Stud x4



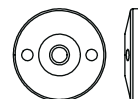
330545
Shock Washer 3.3x6.5x2.5mm x8



115135
Slipper clutch Spring x1



330544
Aluminum Shock Seal Cover x4



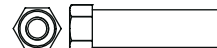
330547
Shock Piston 1.5mmx2 holes x4



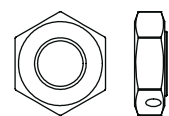
2502401
Arm Hinge Pin Insert x4



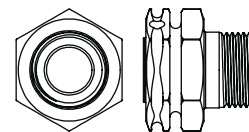
116015
Servo Saver Bushing 3x4mm x2



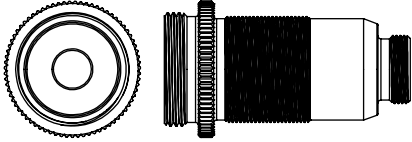
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Servo Saver Post x2



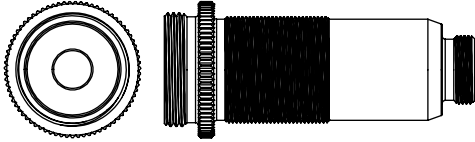
330582
Wheel Hub x2



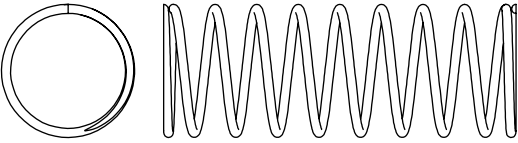
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Wheel Hub x2



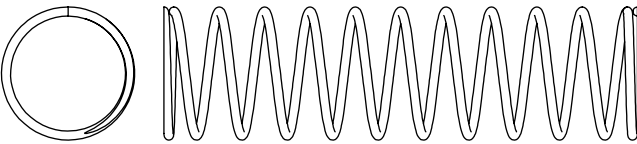
330530
S104EVO/102 Shock Body (S) **x2**



330529
S104EVO/102 Shock Body (L) **x2**



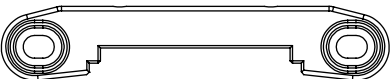
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S104EVO/S102 Front Shock Spring(1.3P5.5) **x2**



115091
S104EVO/S102 Rear Shock Spring(1.2Px6.0) **x2**



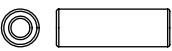
330654
Rear Lower Arm Holder **x1**



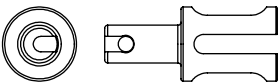
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Front Lower Suspension Plate **x1**



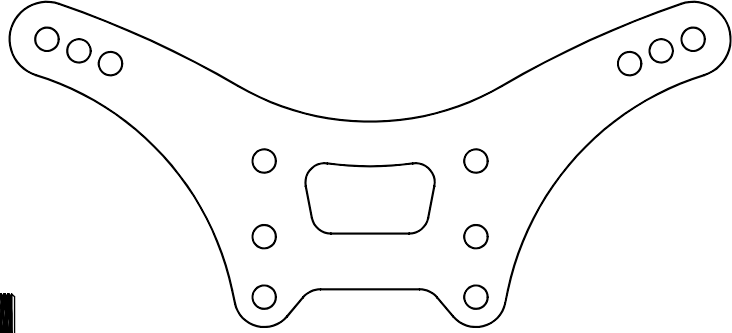
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Front Lower Arm Holder **x1**



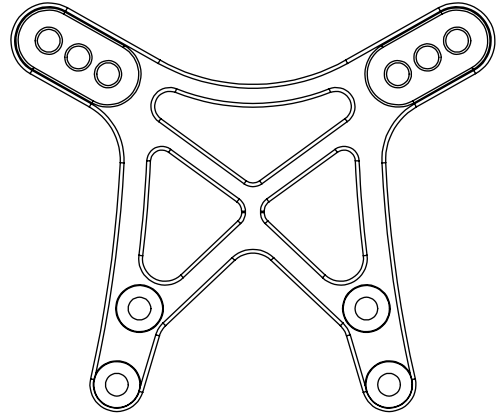
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Battery Case Support **x1**



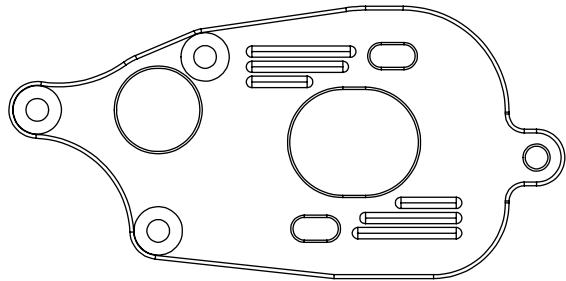
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Front/Rear Diff. Outdrive **x2**



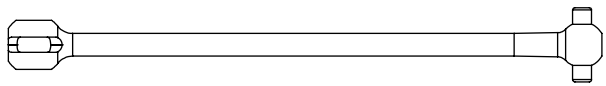
330527
S12-1 Pro Rear Carbon Fiber Shock Tower **x1**



330673
S12-1 Aluminum Pro Front Shock Tower **x1**



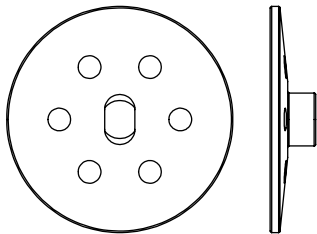
330666
Aluminum Center Slipper Clutch Mount for Motor **x1**



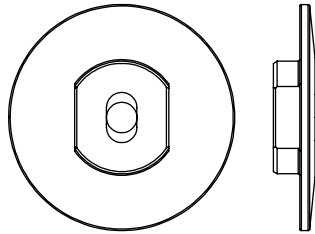
330526
F/R Drive Shaft 78mm **x4**



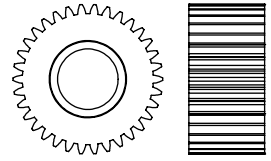
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Shock Cap **x4**



330672
S12-1 Slipper Clutch Outside Holder **x1**



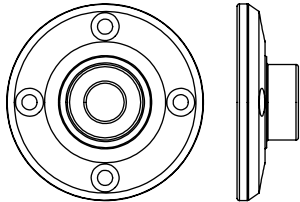
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S12-1 Slipper Clutch Inside Holder **x1**



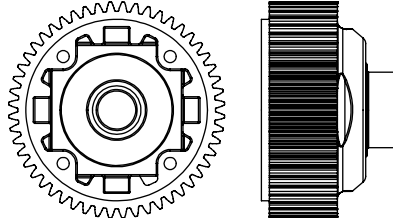
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S12-1 M Edition Idler Gear 34T **x1**



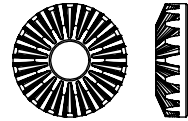
330278
Diff. Bevel Gear 10T **x4**



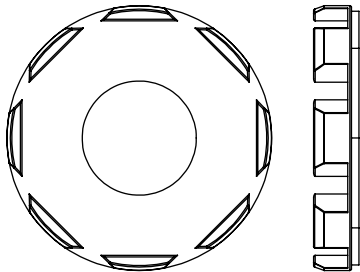
2502402-02
S12-1 Diff Case Cover **x1**



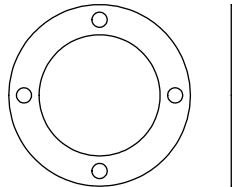
2502402-01
S12-1 Diff Case **x1**



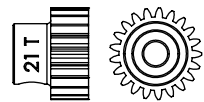
330277
Diff. Bevel Gear 18T **x2**



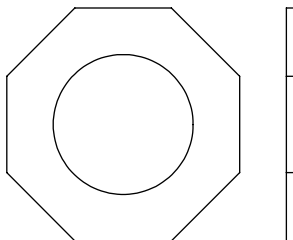
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S12-1 Slipper Clutch Case **x1**



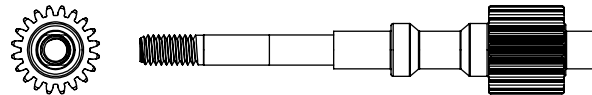
610017
Diff. Gasket(0.4T) **x1**



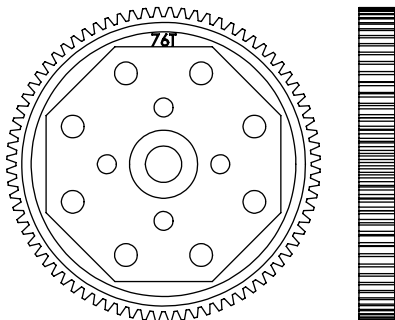
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S12-1 Motor Gear 21T **x1**



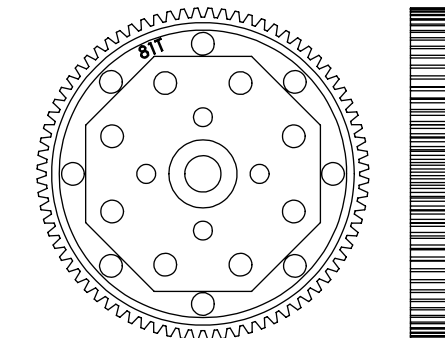
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S104 Center Slipper Clutch Pad **x1**



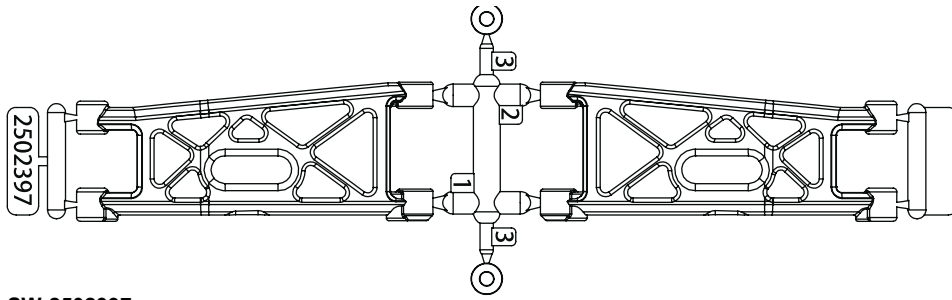
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S12-1 Aluminum Idler Gear 20T **x1**



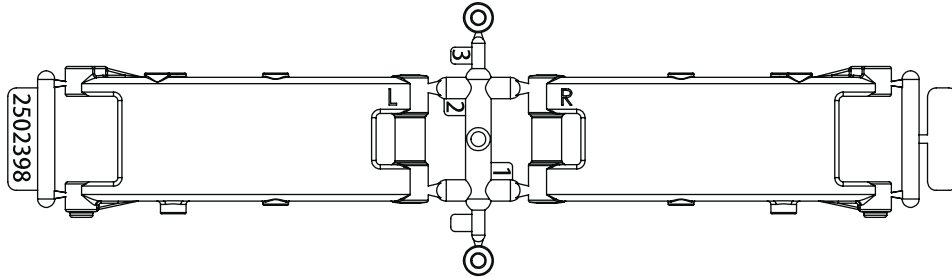
2502403-03
Center Gear Diff 76T Spur Gear **x1**



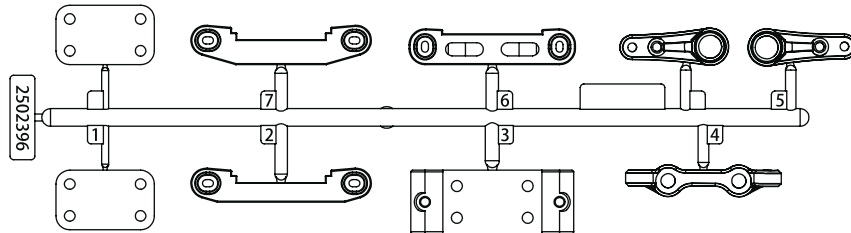
2502403-04
Center Gear Diff 81T Spur Gear **x1**



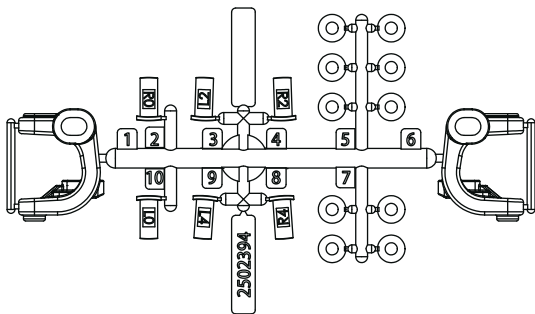
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S12-1 Front Lower Arm Set **x1**



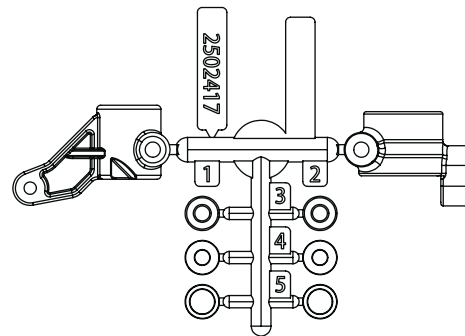
SW-2502398
S12-1 Rear Lower Arm Set **x1**



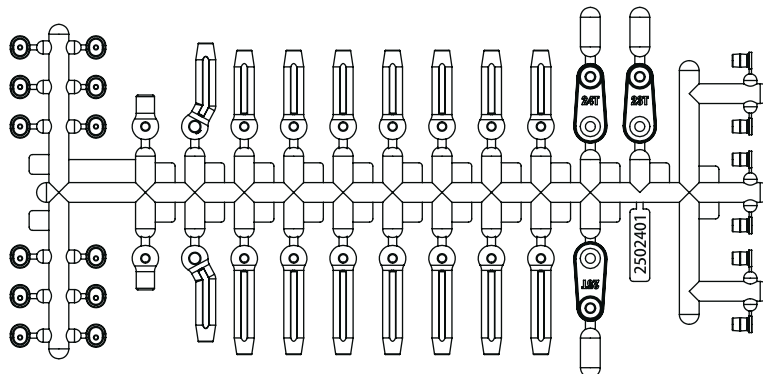
SW-2502396
S12-1 Front Lower Arm Suspension Holder and Adjust Inster Set **x1**



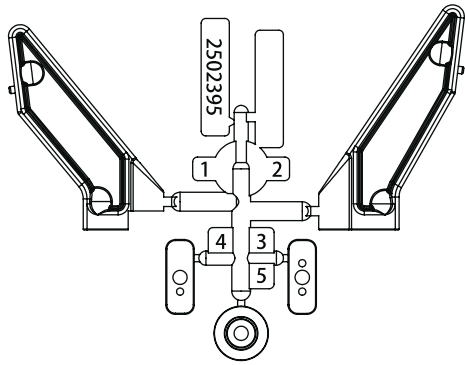
SW-2502394
S12-1 Front Steering Knuckle and Inserts Set **x1**



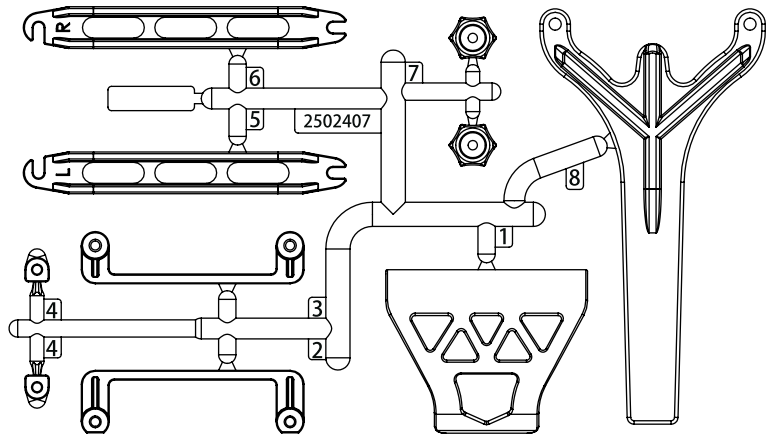
SW-2502417
S12-1 Front Steering and Rear Hubs **x1**



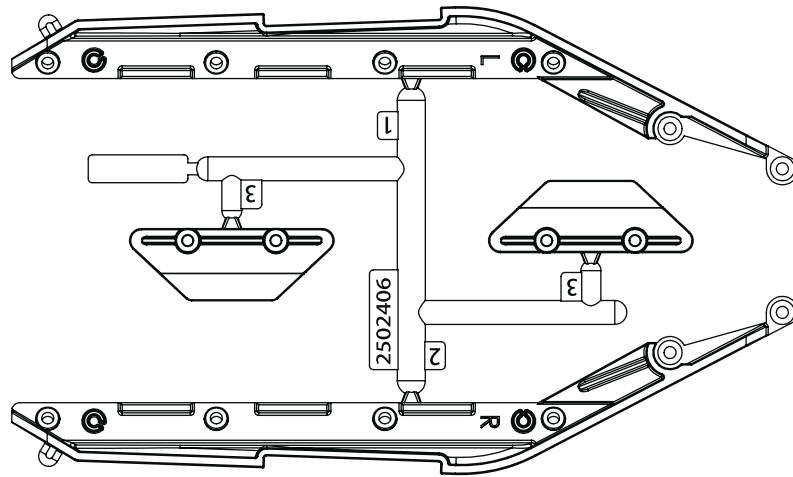
SW-2502401
S12-1 Ball End Caps and Hinge Pin Inserts **x1**



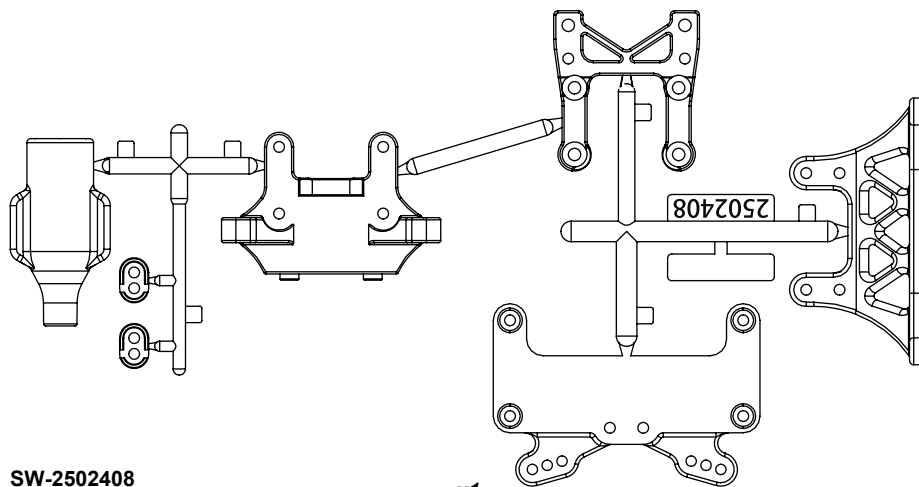
SW-2502395
S12-1 Rear Wing Mount Sets **x1**



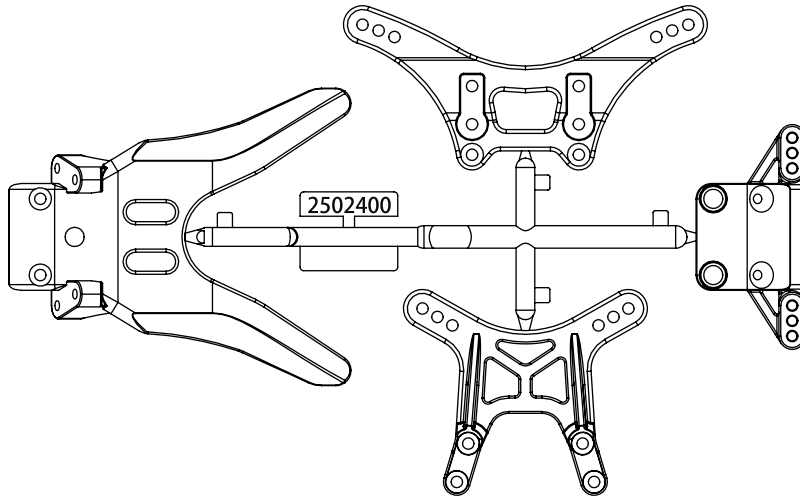
SW-2502407
S12-1 Batter Holder Parts Set **x1**



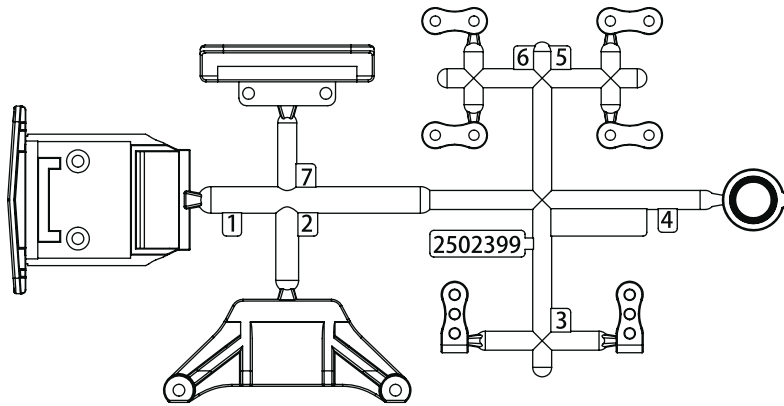
SW-2502406
S12-1 Side Guard **x1**



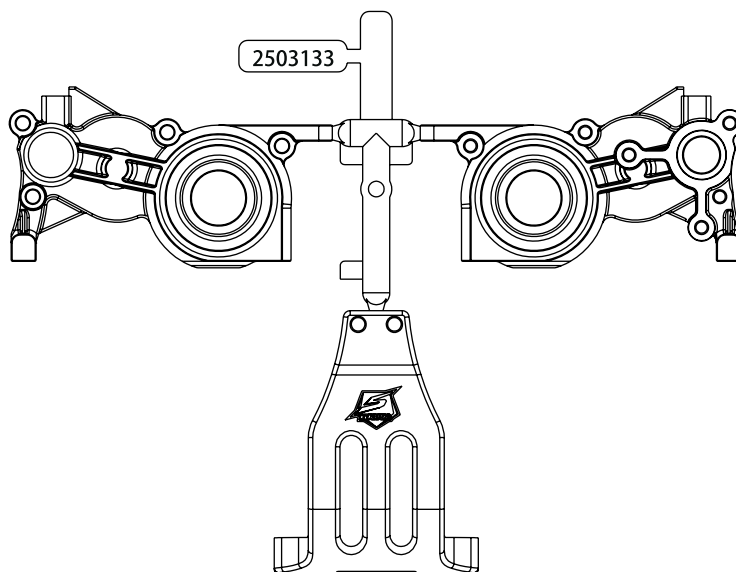
SW-2502408
S12-1 Rear Shock Tower Upper Holder Set **x1**



SW-2502400
S12-1 Front/Rear Shock Towers and Holders **x1**



SW-2502399
S12-1 Bumper and Plastic Parts Set **x1**

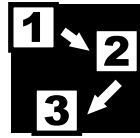


SW-2503133
S12-1 Middle Front Motor Gear Box **x1**

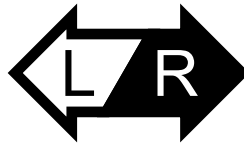
Operation Guide



Assemble front and rear



Assemble in the specified order



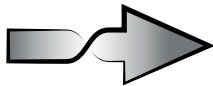
Assemble both left and right sides



Assemble for 2 sets



Assemble for 4 sets



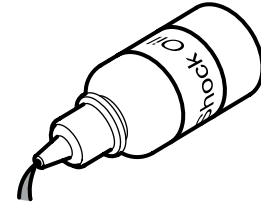
overturn



Thread Locking Compound



Grease



Pure Silicone Oil

Safety Precautions

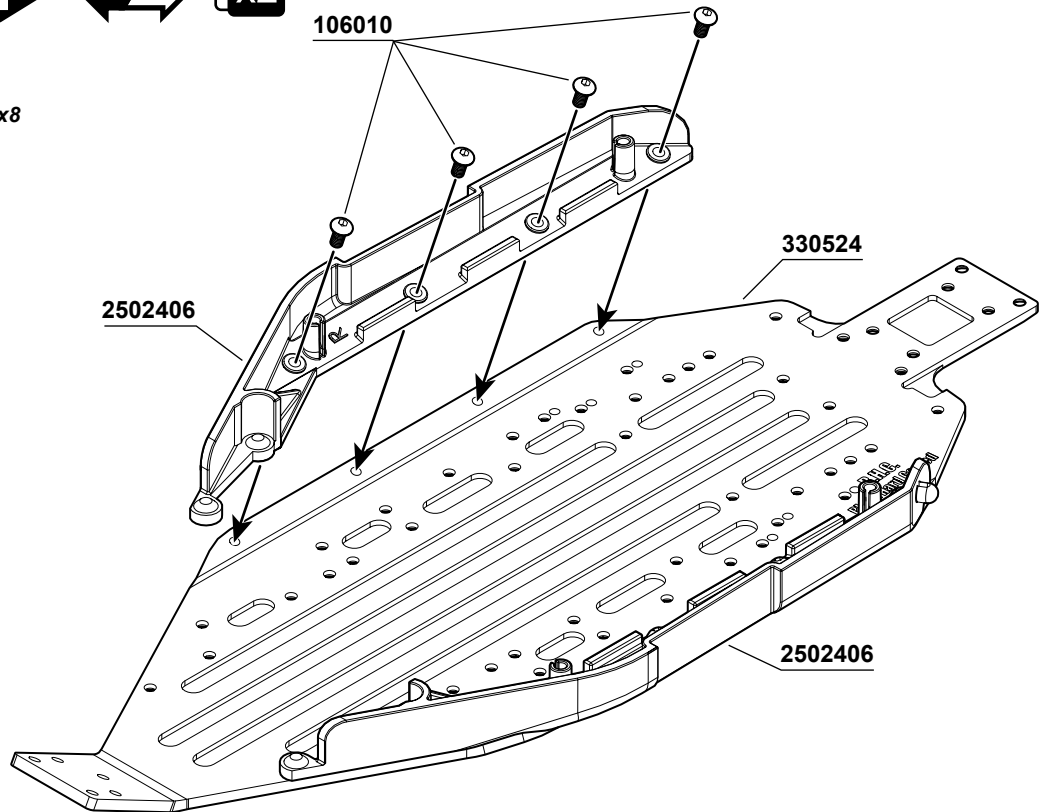
The SWORKz S12-1M is a high performance radio control model which needs to be operated with caution and common sense.

The S12-1M Pro Kit is not intended for children under the age of 14 without adult supervision. SWORKz shall not be held liable for any loss or damages, whether direct, indirect, act of nature, arising from abuse or misuse of this product or any other product required.

- The LiPO Battery can be dangerous if improperly handled.
- Always keep your LiPO Battery in a cool area and never use it near flames, sparks, or while smoking.
- Keep your LiPO Battery, and all other flammables, out of the reach of children.
- After running your car, all parts of the Motor and ESC can become extremely hot. Be careful not to touch these parts.
- This model is controlled by your radio controller and can be vulnerable to interference from many outside sources. This interference can cause a loss of control so it is necessary to operate this model in an open area to avoid personal or property damage. Always ensure turning on your radio first.
- Keep all the products included in the package out of the reach of children.
- This model contains many fast rotating parts. Never touch them during operation.
- Follow the instructions included with your radio gear.
- Never operate your model near people or property. The speed of this model has the potential to injure people and or damage property if misused.
- Always use original SWORKz spare parts and option parts.
- Always ensure that the buggy is in proper working condition before use.
- Always exercise caution when using any tools.



106010
M3x6mm Hex Socket OH/TP Screw x8



106010
M3x6mm Hex Socket OH/TP Screw x2



106002
M3x10mm Hex Socket OH/TP Screw x2



330331
Steering Linkage Ball Stud 5mm x3



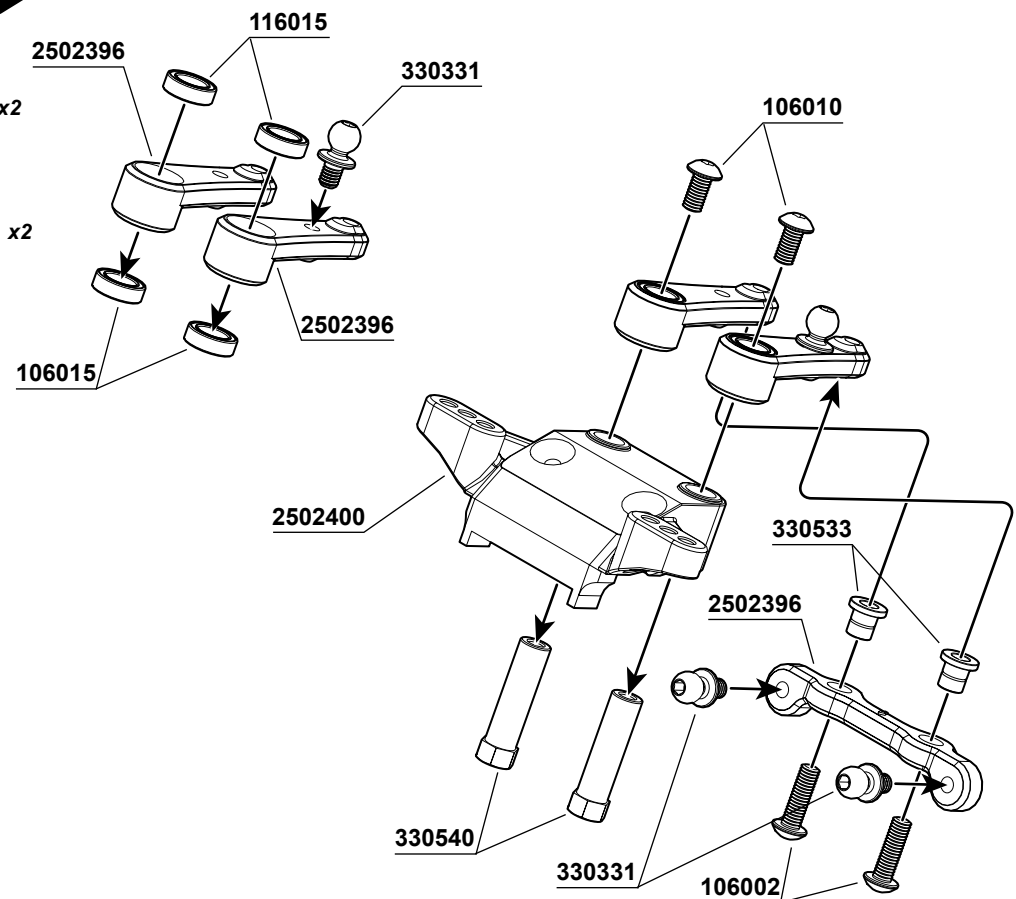
116015
Ball Bearing 5x8x2.5mm x4



330533
Servo Saver Bushing 3x4mm x2



330540
Servo Saver Post x2

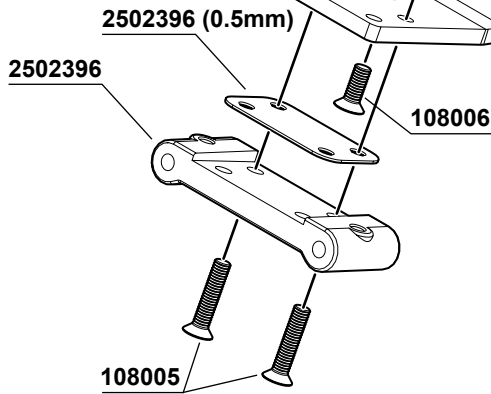




108006
M3x8mm FH/ST HEX Screw x1



108005
M3x14mm FH/ST HEX Screw x2



108006
M3x8mm FH/ST HEX Screw x3



106002
M3x10mm Hex Socket OH/TP Screw x4



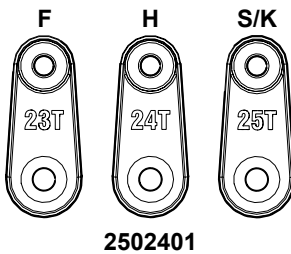
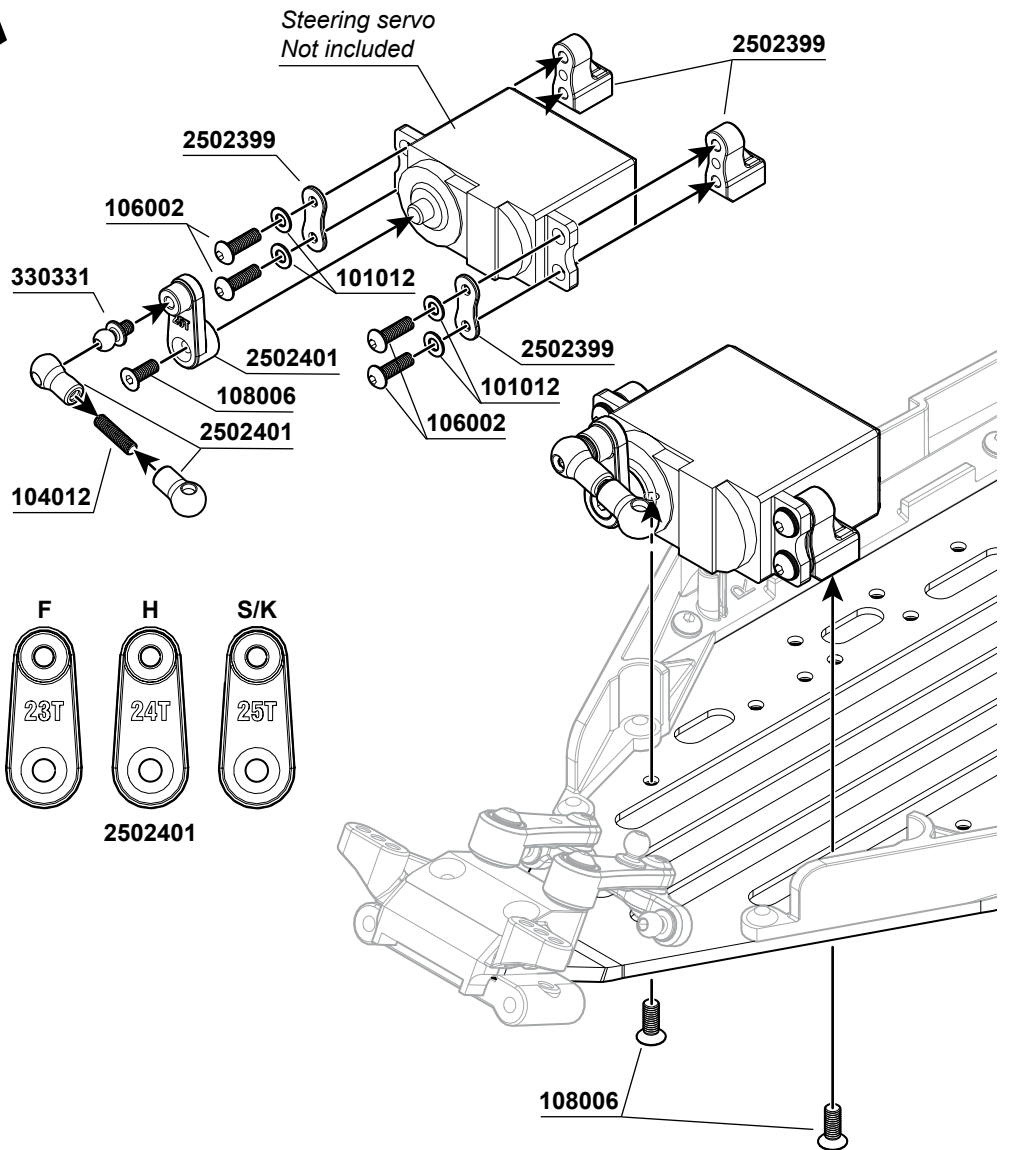
104012
M3x12mm Set Screw x1



330331
Steering Linkage Ball Stud 5mm x1



101012
Washer M3x6xT0.5mm x4



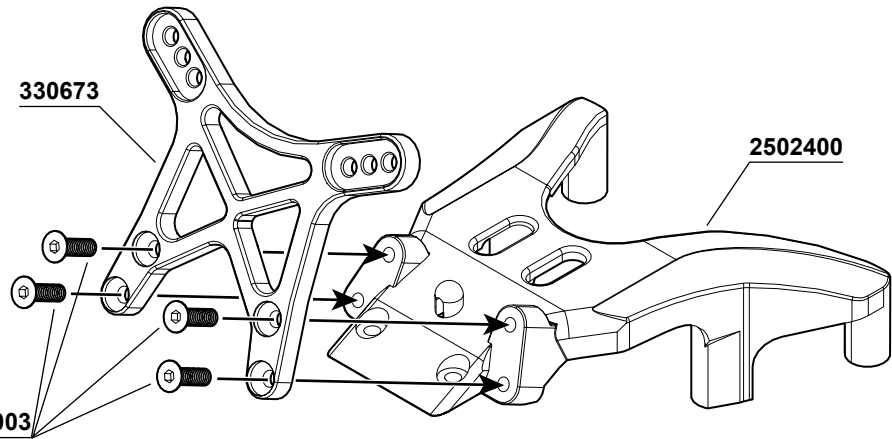


108003
M3x10mm FH/ST HEX Screw x4

330673

2502400

108003



108001
M3x12mm FH/ST HEX Screw x4



106002
M3x10mm Hex Socket OH/TP Screw x2



330664
Steering Linkage Ball Stud 10mm x2



2502394
Insert M3x7xT1mm x4

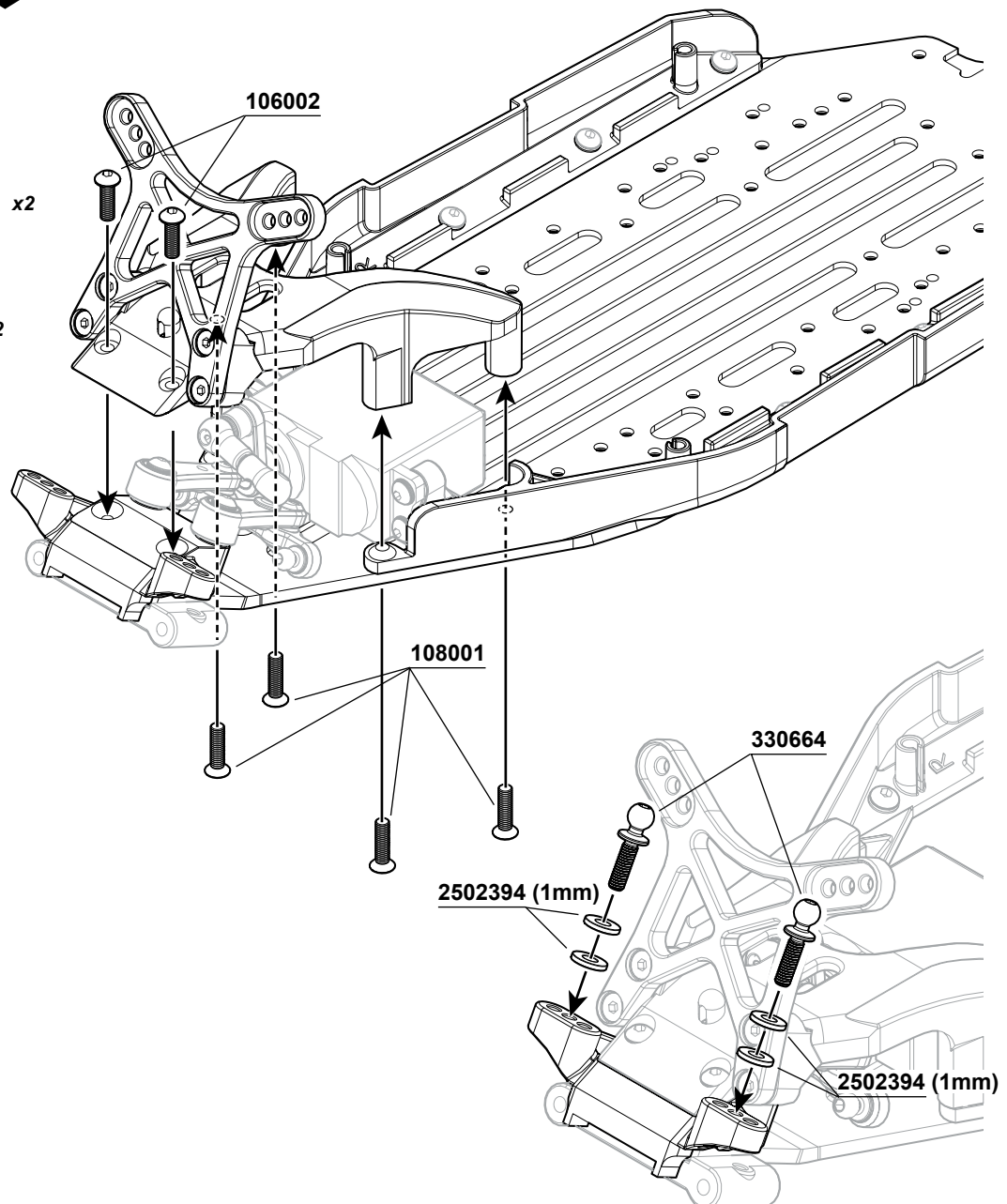
106002

108001

330664

2502394 (1mm)

2502394 (1mm)





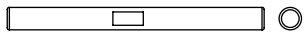
106020
M2.5x5mm Hex Socket OH/TP Screw **x2**



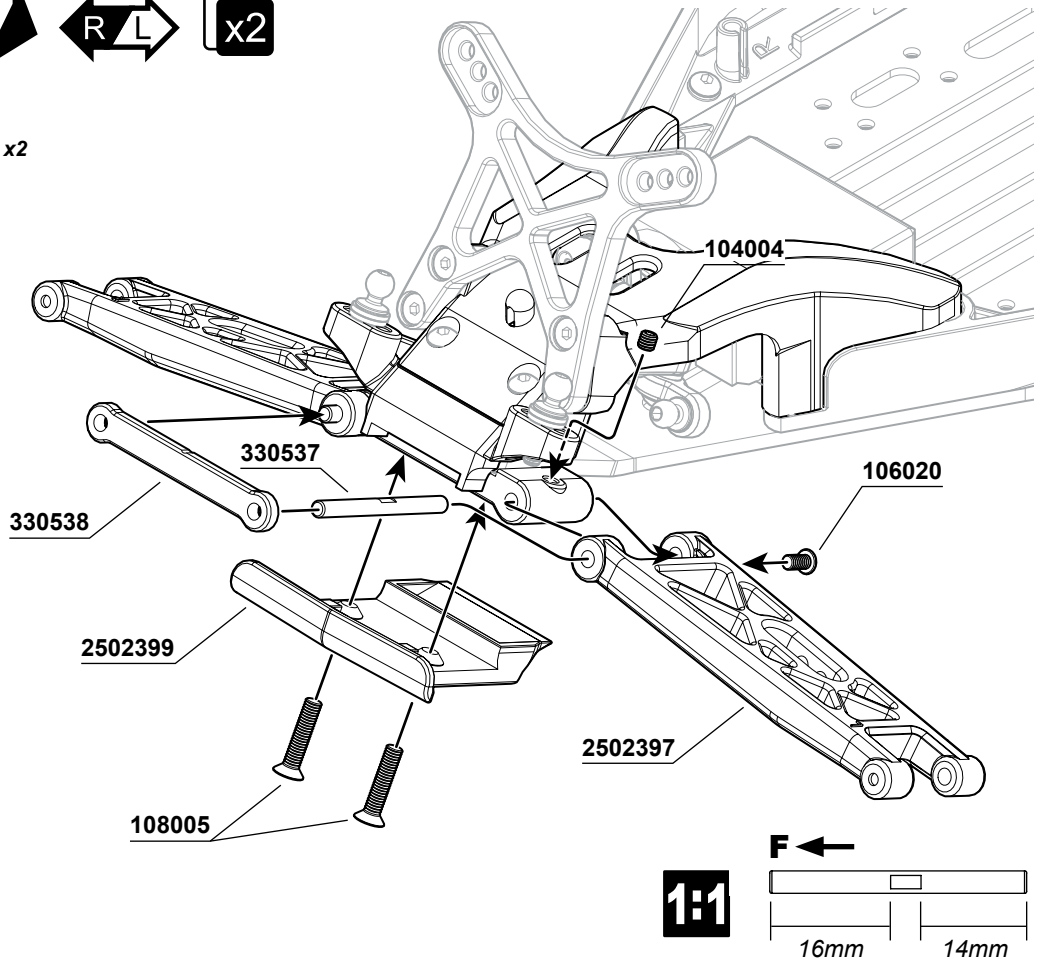
108005
M3x14mm FH/ST HEX Screw **x2**



104004
M3x3mm Set Screw **x2**



330537
Rear Hub Carriers Hing Pin **x2**



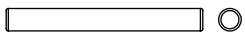
330331
Steering Linkage Ball Stud 5mm **x4**



106010
M3x6mm FH/ST HEX Screw **x2**



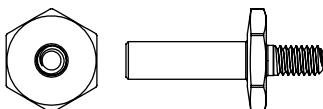
106020
M2.5x5mm Hex Socket OH/TP Screw **x2**



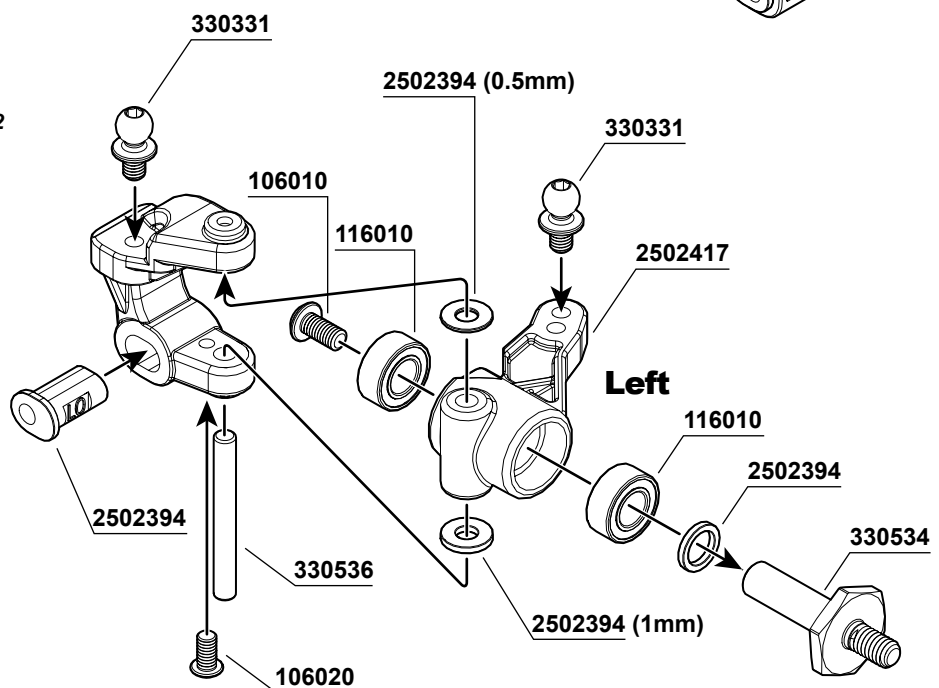
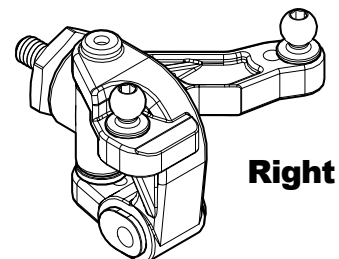
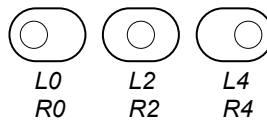
330536
Rear Hub Carriers Hing Pin **x2**



116010
Ball Bearing 5x10x4mm **x4**




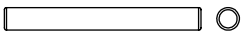
330534
Steering Hub Hinge Pin **x2**

8**R L****x2**

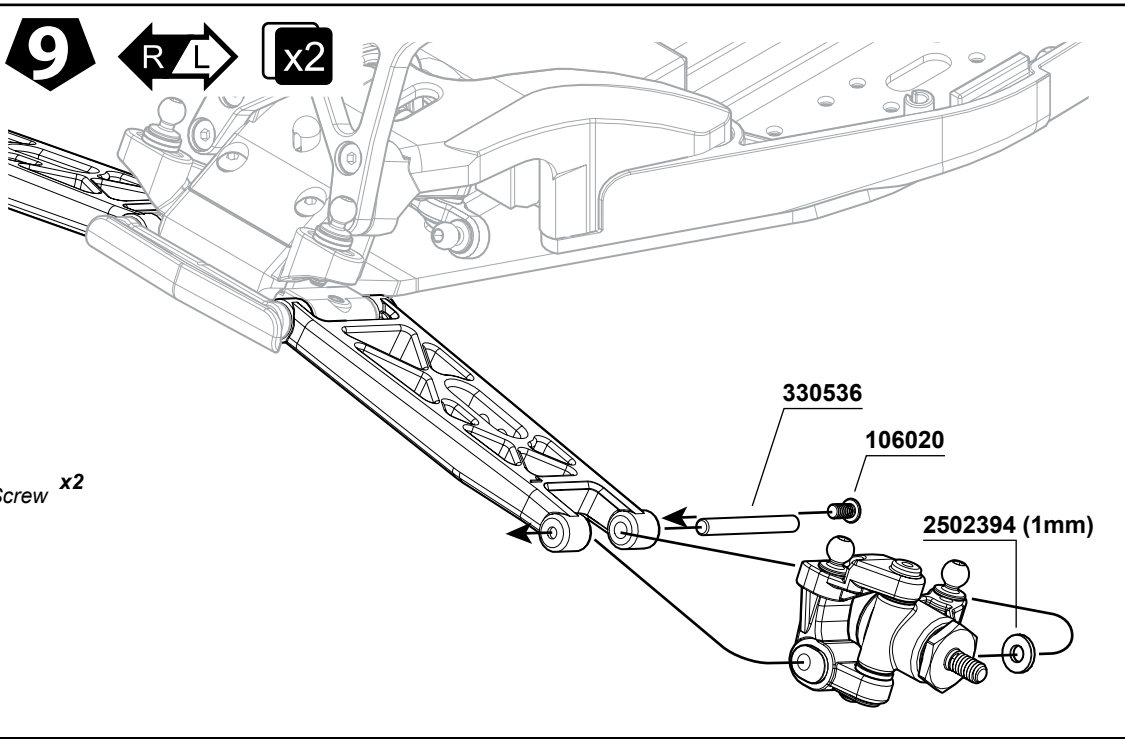
BAG D

9 **R L** **x2**

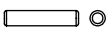
 **2502394**
Insert M3x7xT1mm x2

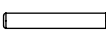
 **330536**
Rear Hub Carriers Hing Pin x2

 **106020**
M2.5x5mm Hex Socket OH/TP Screw x2

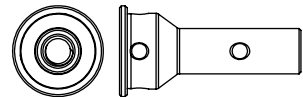


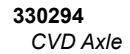
 **330528**
CVD join x2

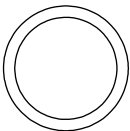
 **330283**
Pin M2x10mm x2


 **330285**
Pin M2x14mm x2

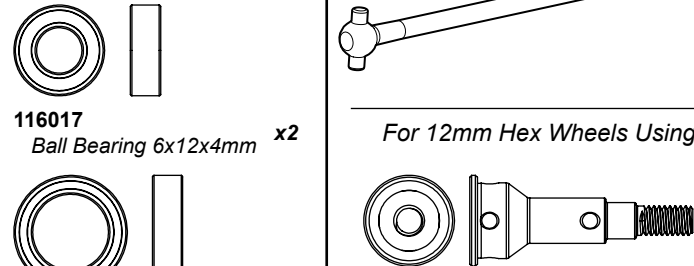
 **330331**
Steering Linkage Ball Stud 5mm x2

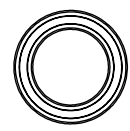
 **330294**
CVD Axle x2

 **400014**
O-Ring 1.5x13.5mm x2

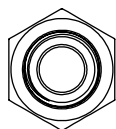
 **116017**
Ball Bearing 6x12x4mm x2

 **116013**
Ball Bearing 10x15x4mm x2


 **330581**
CVD Axle x2

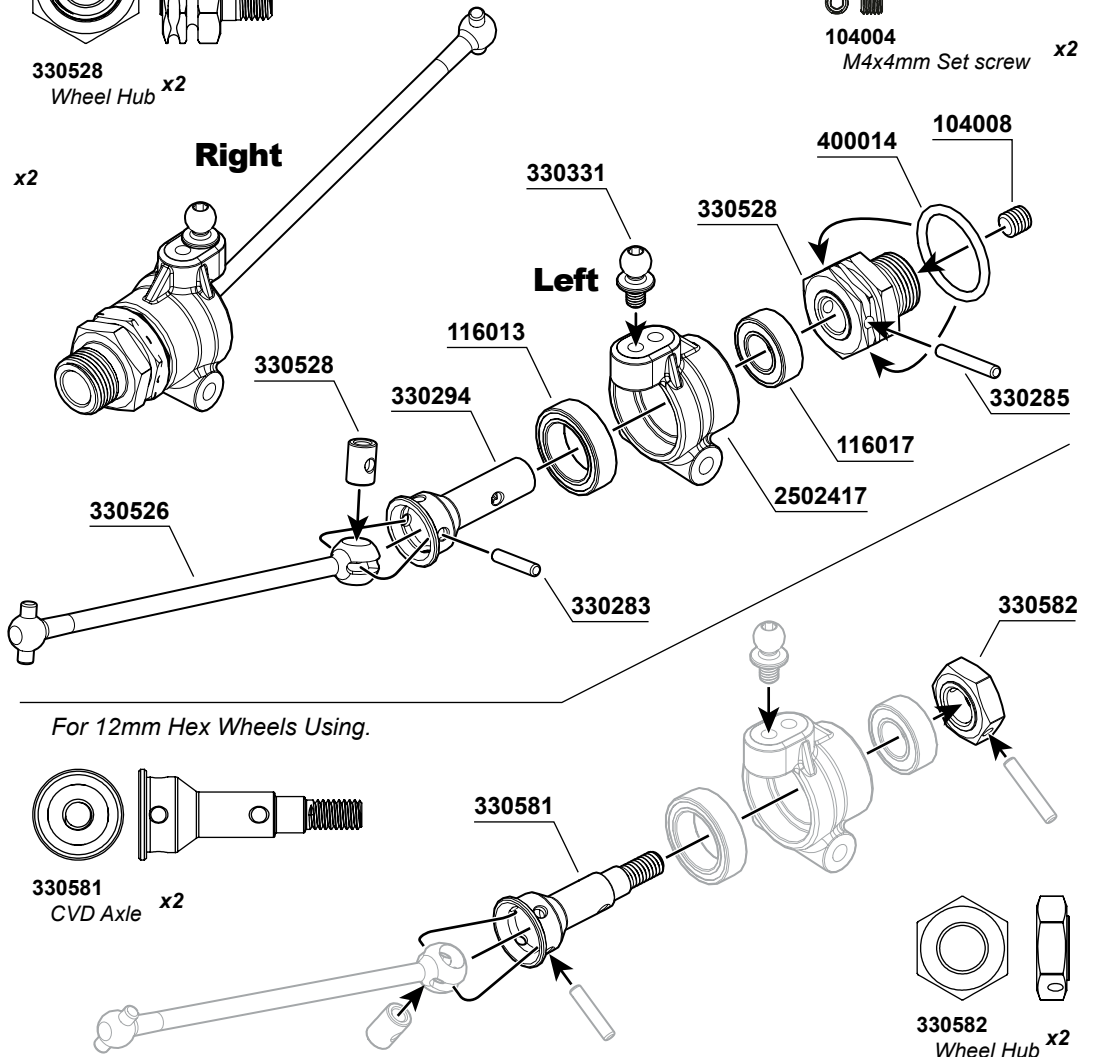
 **330582**
Wheel Hub x2

10 **R L** **x2**

 **330528**
Wheel Hub x2

 **330526**
F/R Drive Shaft 72.5mm x2

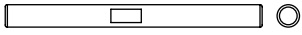
 **104004**
M4x4mm Set screw x2



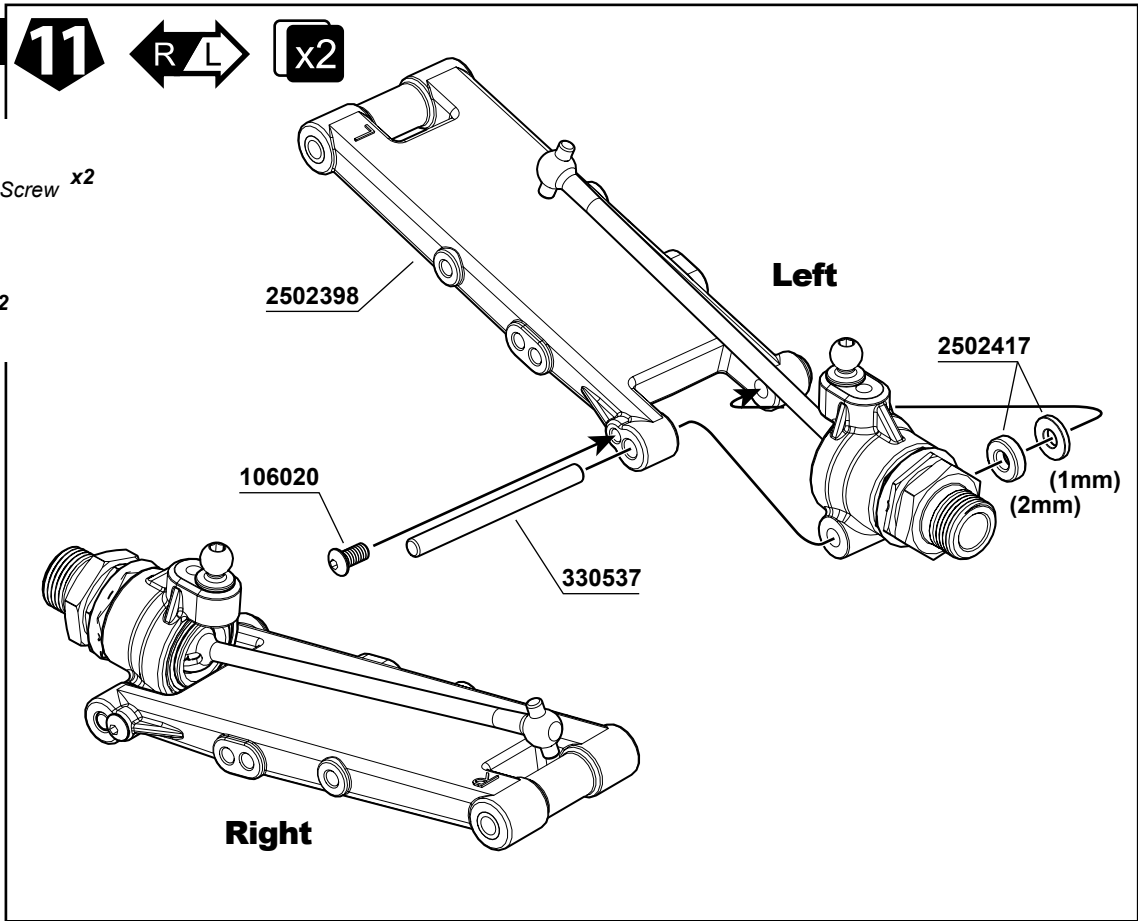
BAG F



106020
M2.5x5mm Hex Socket OH/TP Screw **x2**



330537
Rear Hub Carriers Hinge Pin **x2**



106002
M3x10mm Hex Socket OH/TP Screw **x4**



106008
M3x12mm Hex Socket OH/TP Screw **x4**



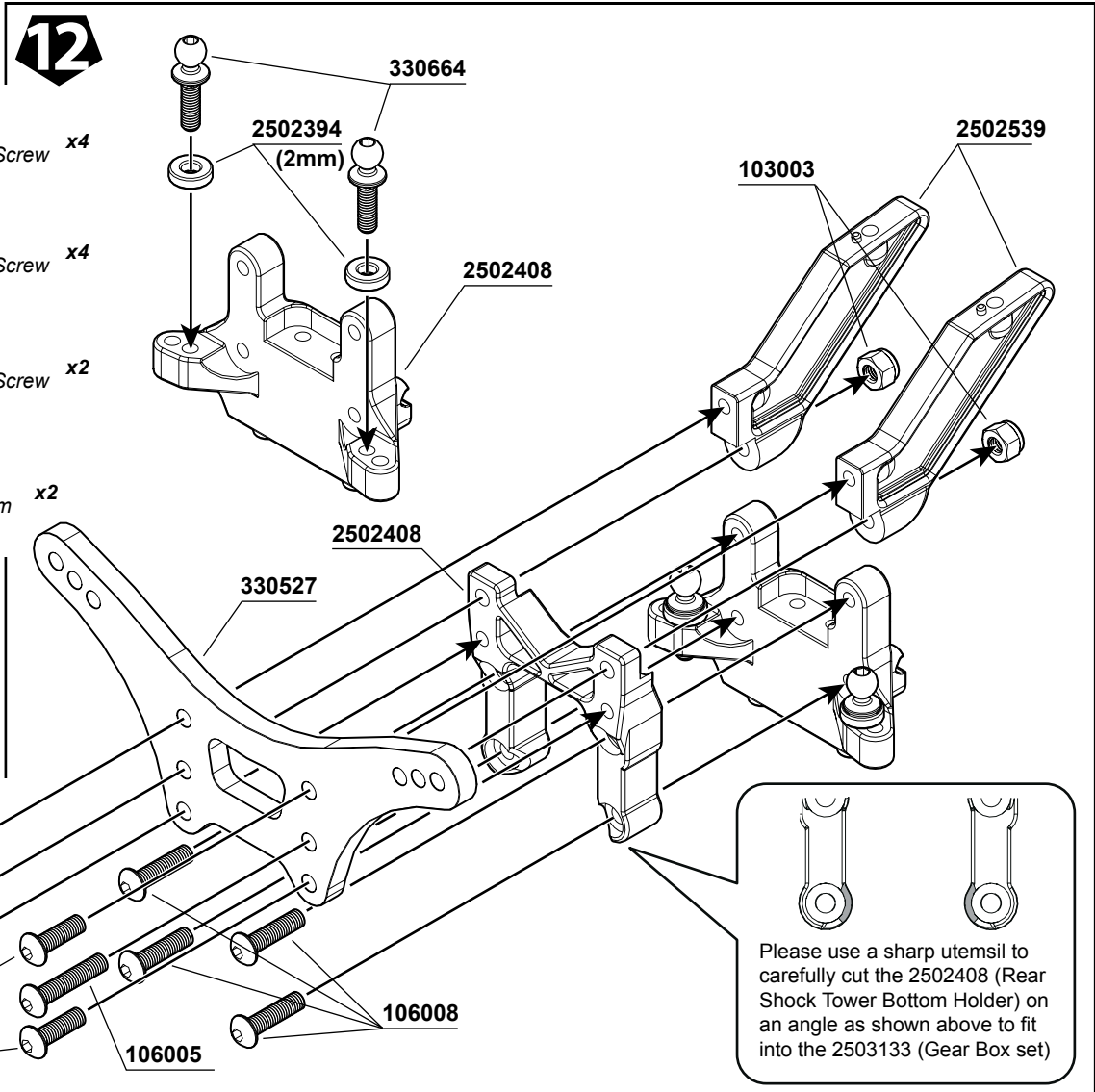
106005
M3x15mm Hex Socket OH/TP Screw **x2**



330664
Steering Linkage Ball Stud 10mm **x2**



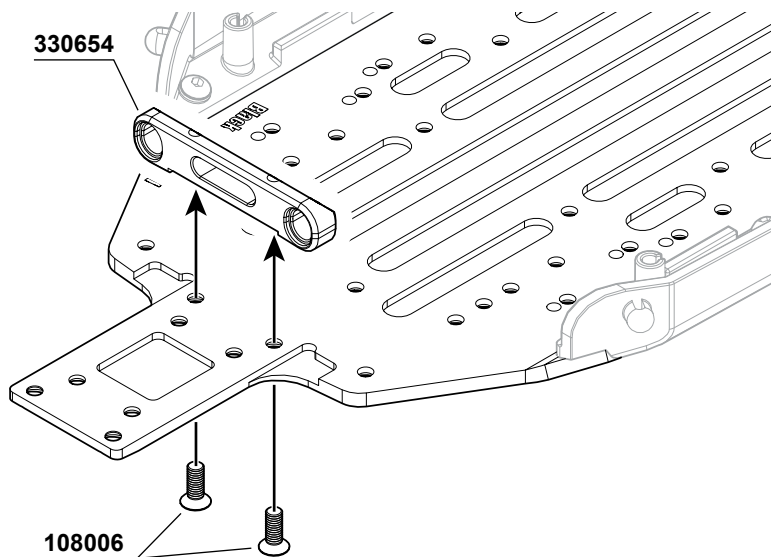
103003
M3 Nut Lock **x2**



Please use a sharp utensil to carefully cut the 2502408 (Rear Shock Tower Bottom Holder) on an angle as shown above to fit into the 2503133 (Gear Box set)



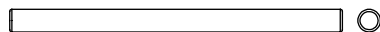
108006
M3x8mm FH/ST HEX Screw **x4**



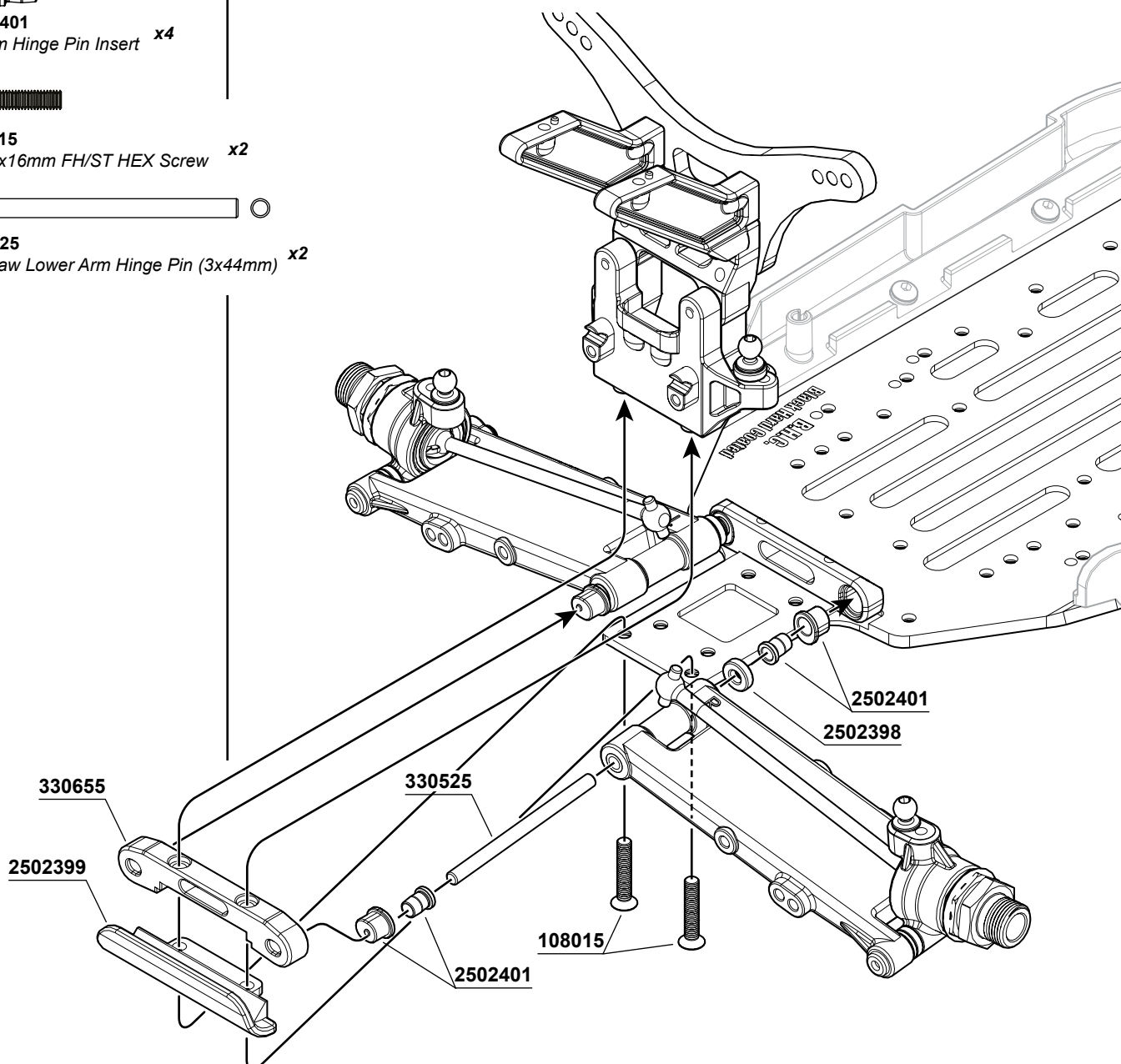
2502401
Arm Hinge Pin Insert **x4**

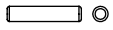


108015
M3x16mm FH/ST HEX Screw **x2**



330525
Reaw Lower Arm Hinge Pin (3x44mm) **x2**

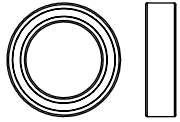
14**x2 For Rear**



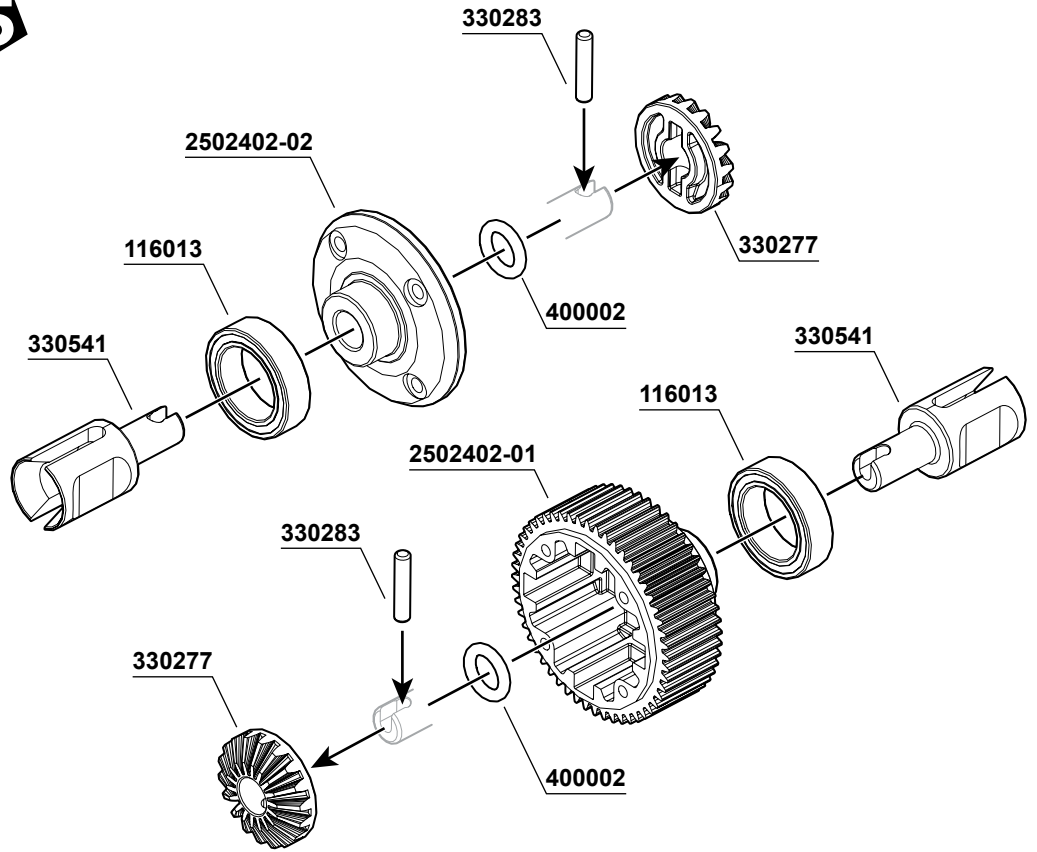
330283
Pin M2x10mm x2



400002
O-ring S5 4.8x1.5 x2



116013
Ball Bearing 10x15x4mm x2



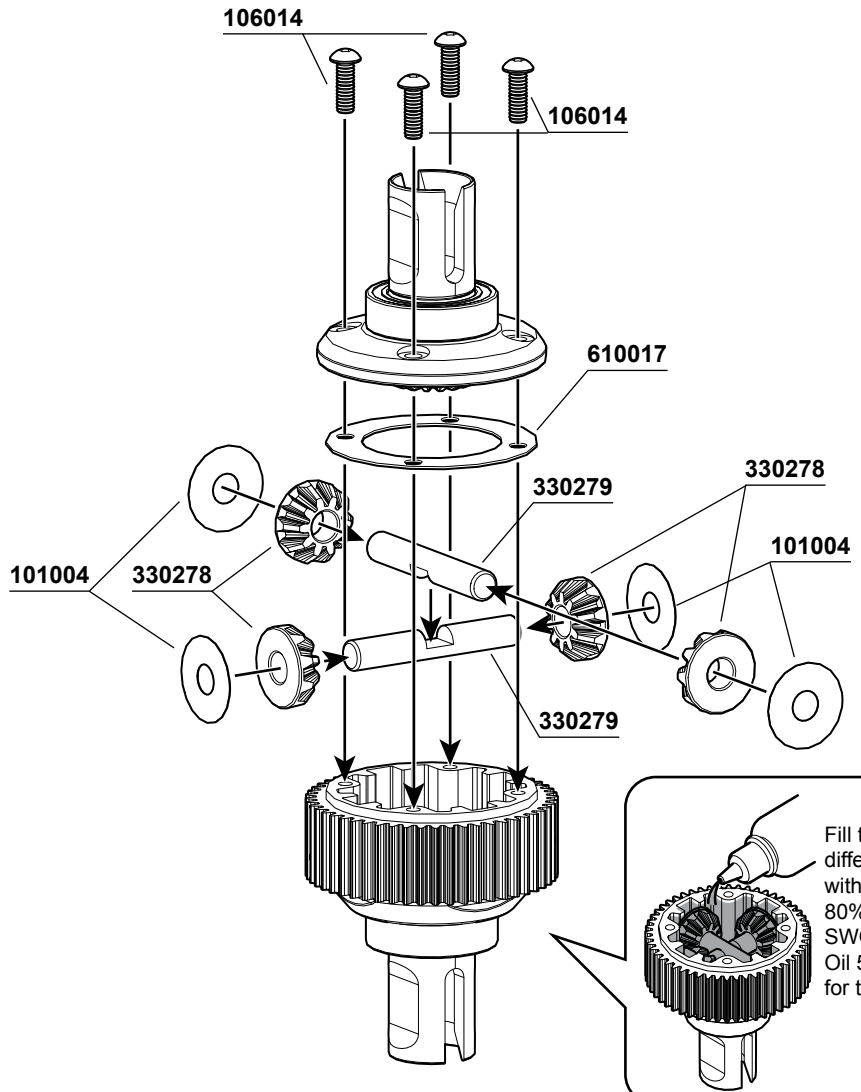
106014
M2x6mm Hex Socket OH/TP Screw x4



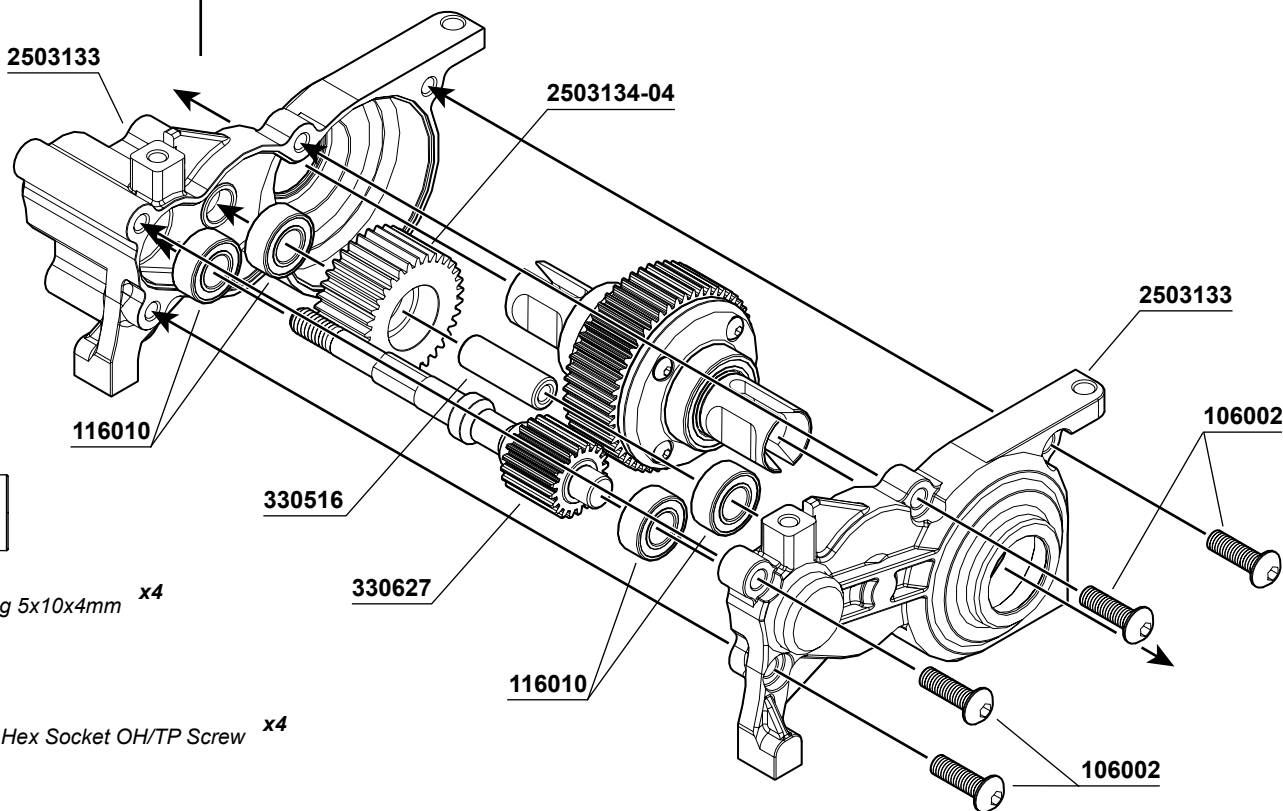
330279
Bevel Gear Shaft x2



101004
Shim 3.5x10x0.2mm x4



Fill the differentials with oil up to 80% full. Use SWORKz diff. Oil 5000 cps for the Diff.



116010
Ball Bearing 5x10x4mm x4



106002
M3x10mm Hex Socket OH/TP Screw x4

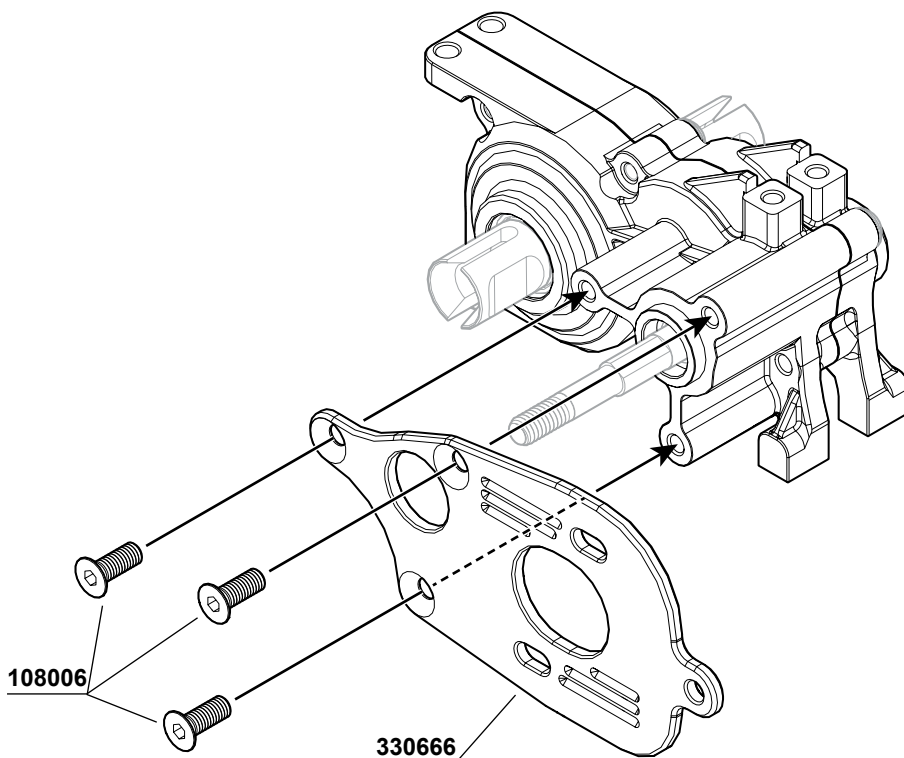
x3

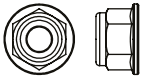
108006

330666



108006
M3x8mm FH/ST HEX Screw x3

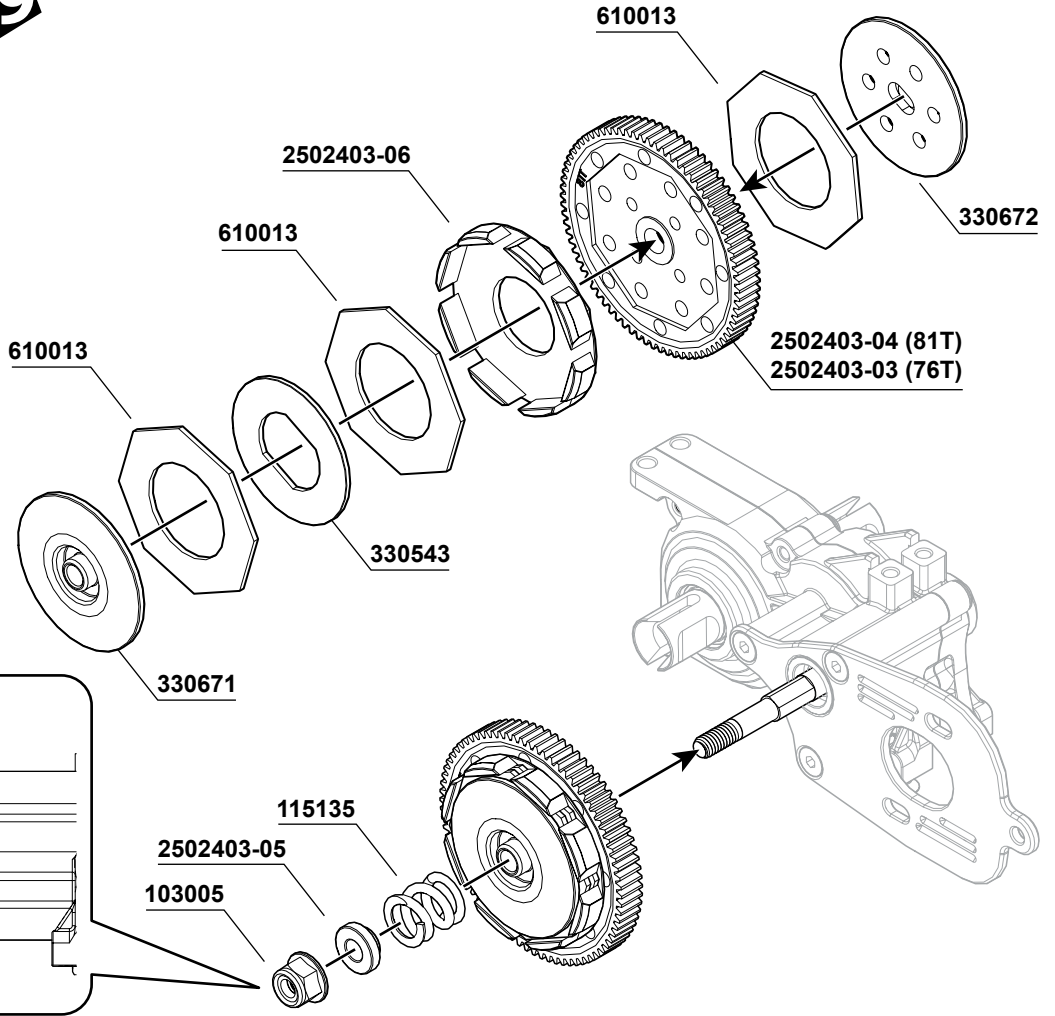




103005
Flange M3 Nut Lock x1



115135
Slippen clutch Spring x1



104004
M3x3mm Set Screw x1



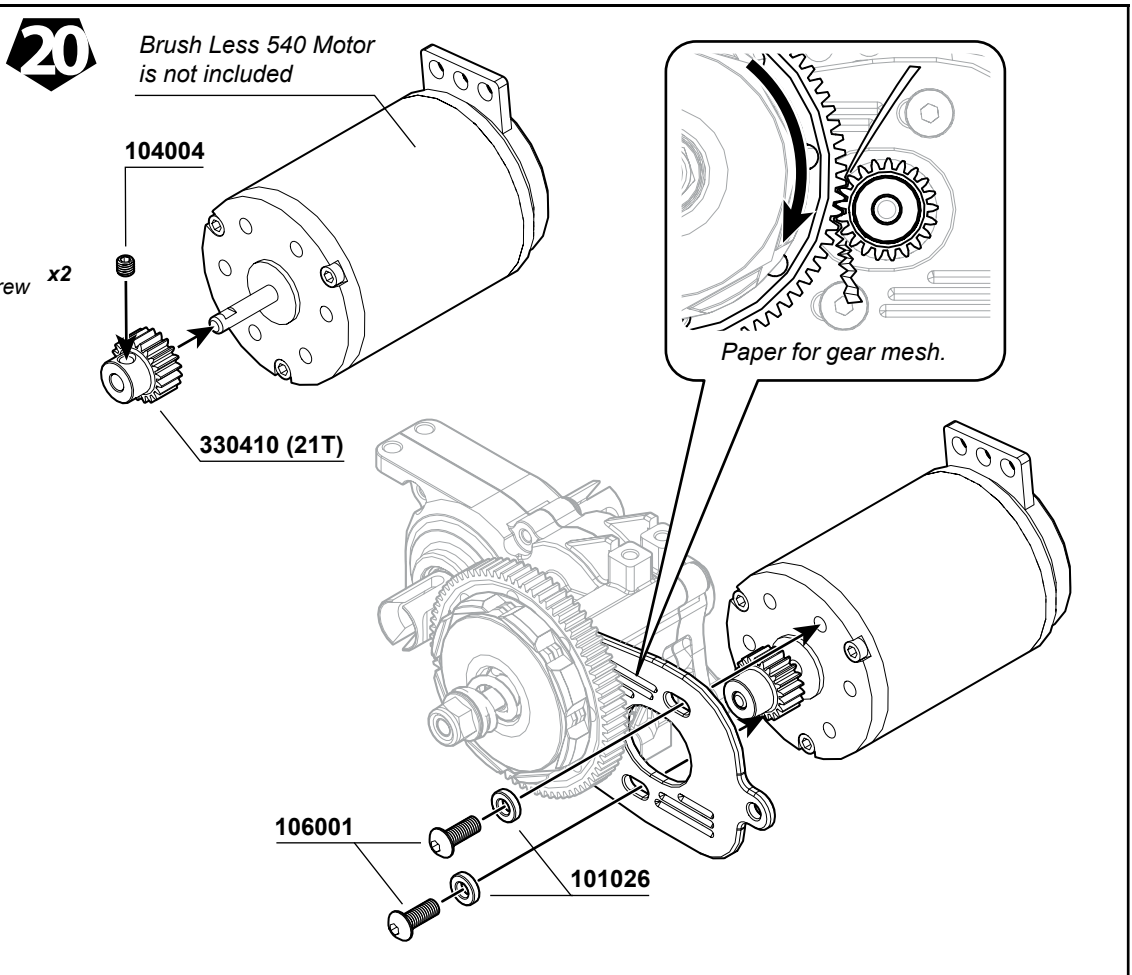
106001
M3x8mm Hex Socket OH/TP Screw x2



101026
Washer M3x6xT1.5mm x2



330410
S12-1 Motor Gear 21T x1



BAG C

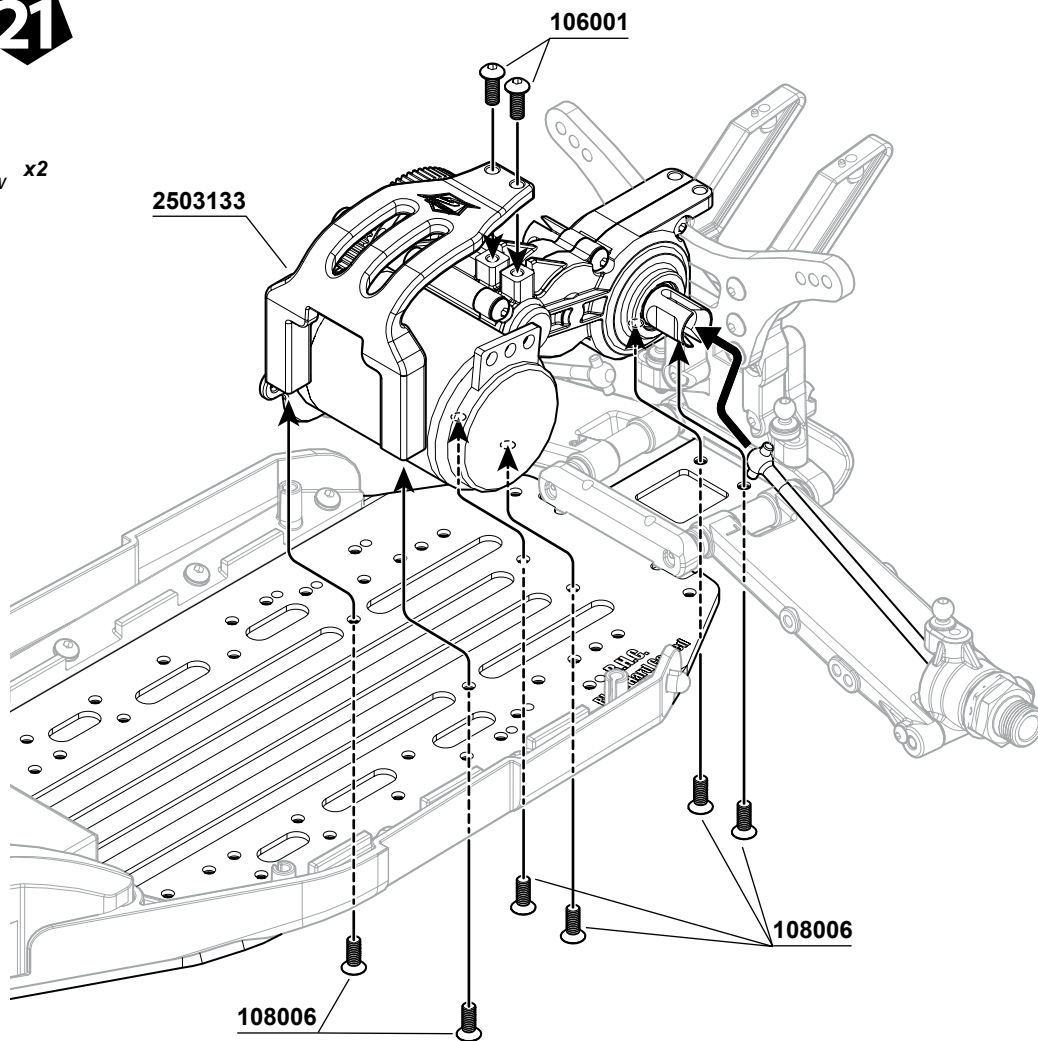
21



106001
M3x8mm Hex Socket OH/TP Screw x2



108006
M3x8mm FH/ST HEX Screw x6

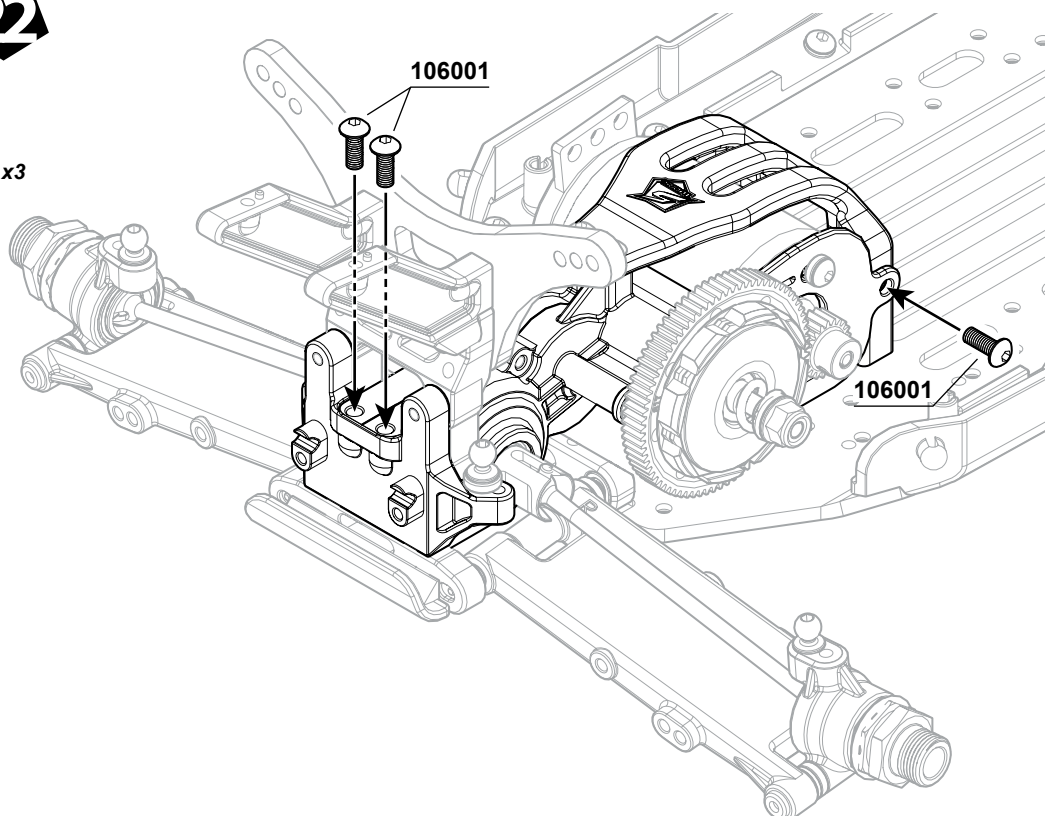


BAG F

22



106001
M3x8mm Hex Socket OH/TP Screw x3

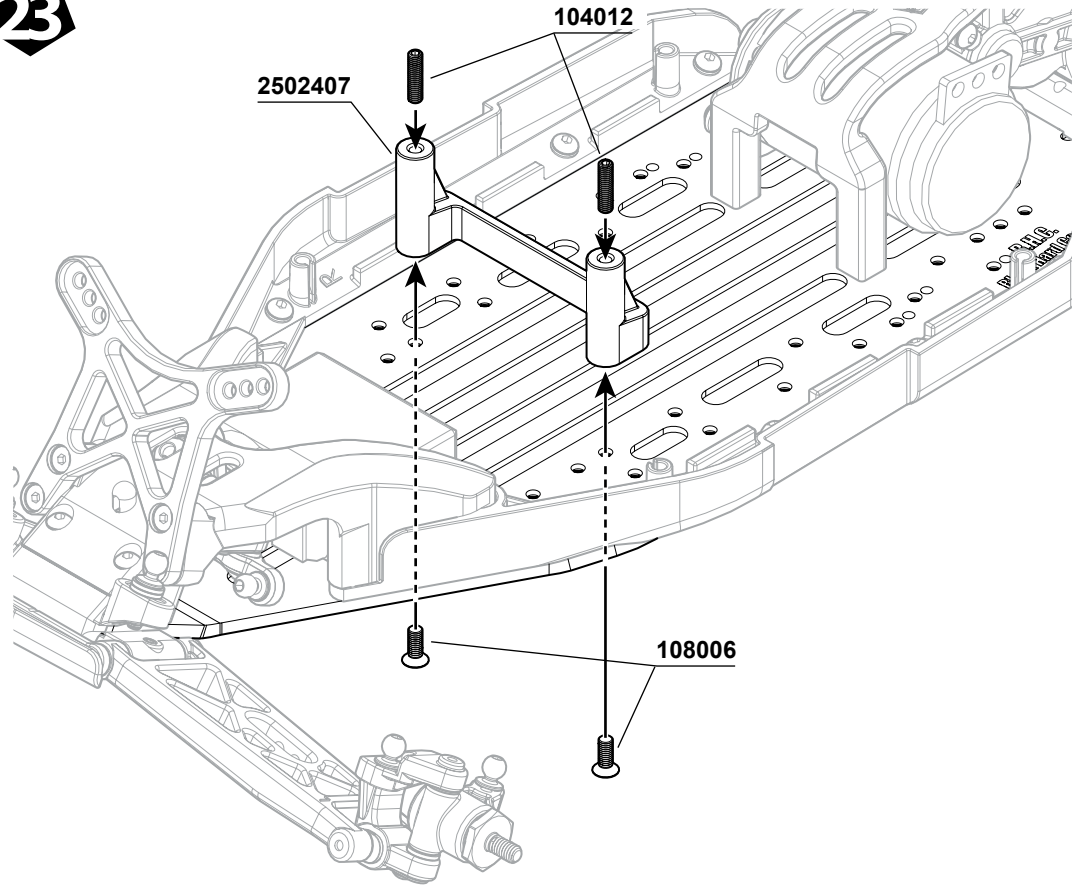




108006
M3x8mm FH/ST HEX Screw x2



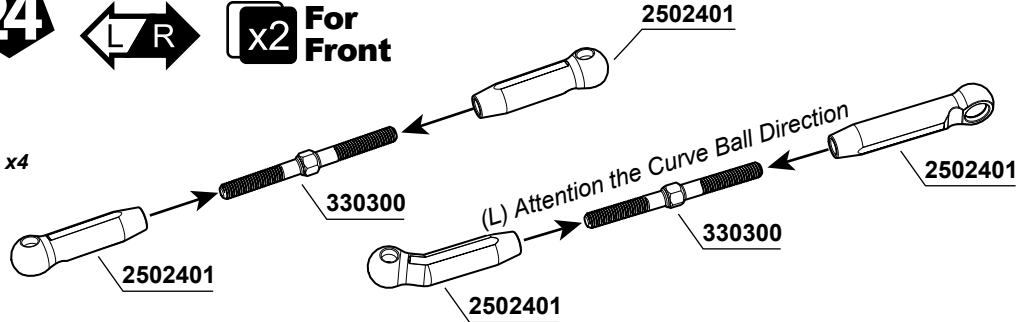
104012
M3x12mm Set Screw x2



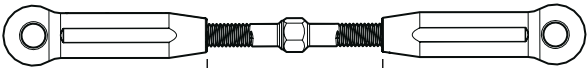
x2 For Front



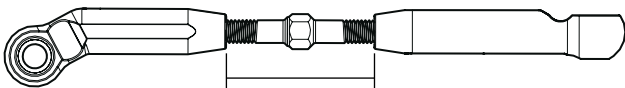
330300
Rear Upper Sus. Arm Turnbuckles x4



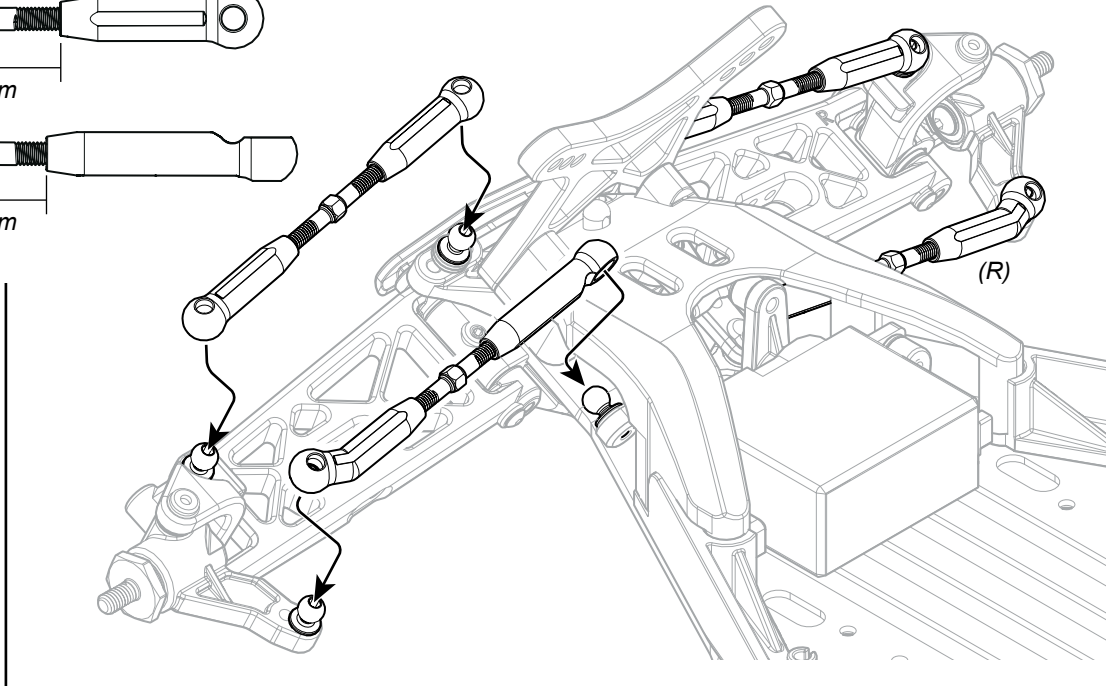
1:1



23.3mm



19.5mm



BAG D

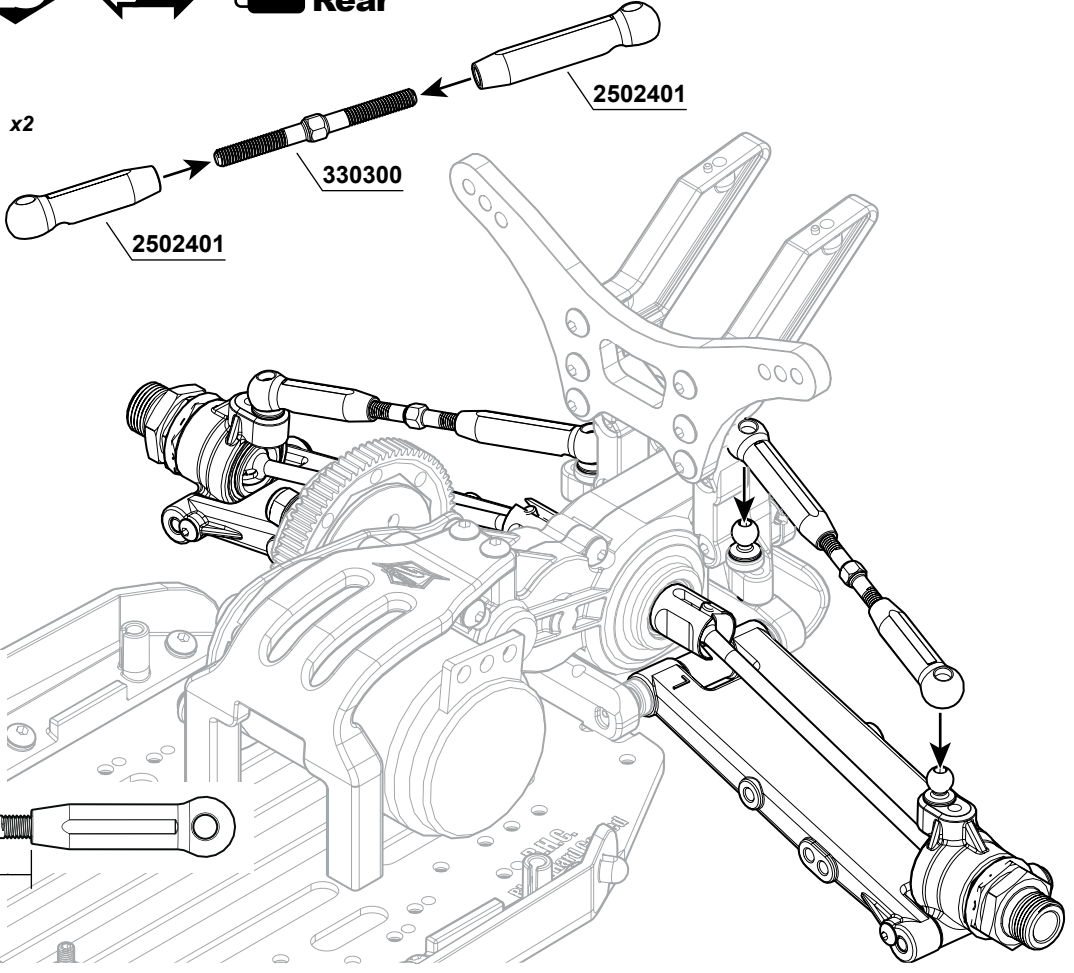
25



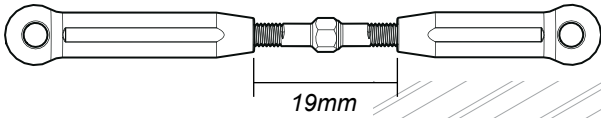
x2 For Rear



330300
Rear Upper Sus. Arm Turnbuckles



1:1



19mm

BAG E

26



x2 For Front x2 For Rear

106014
M2x6mm Hex Soket OH/TP Screw x4

330545
Shock Washer 3.3x6.5x2.5mm x8

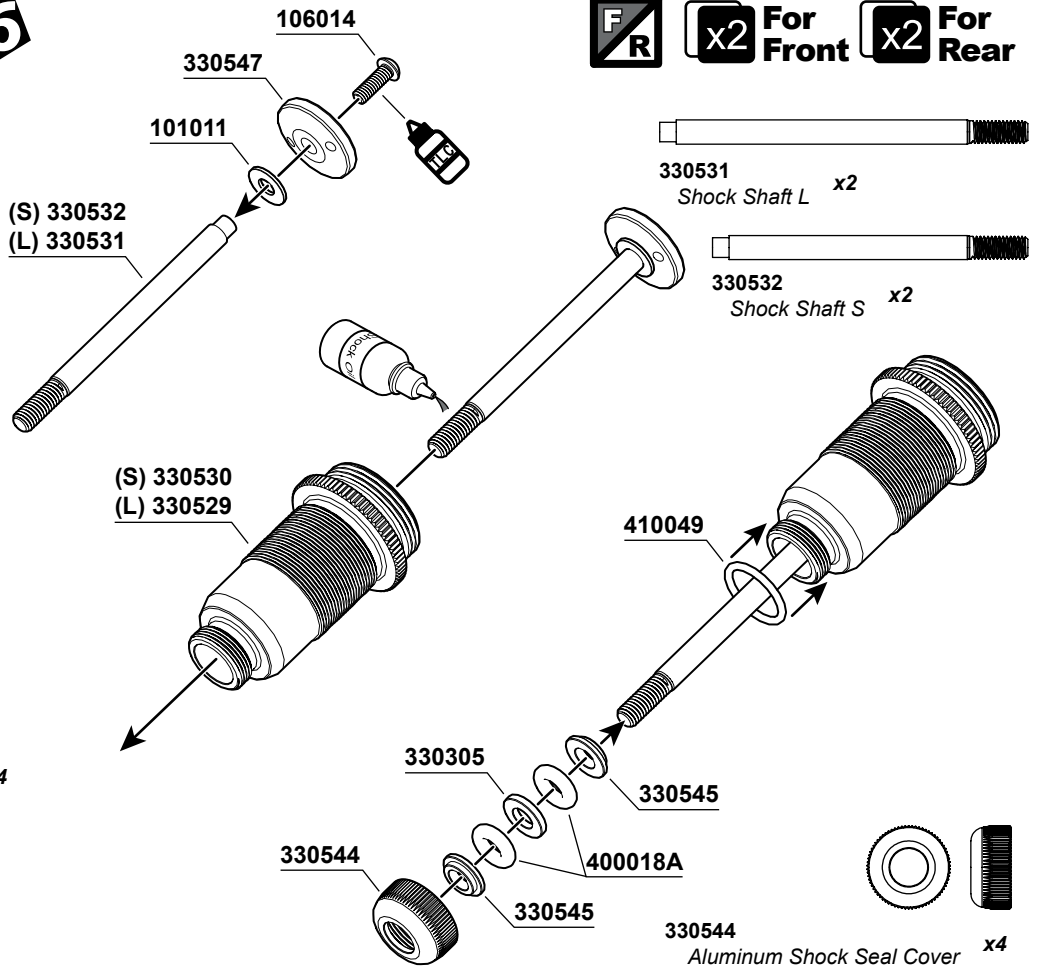
101011
Shock Washer 2.6x6x0.5mm x4

330305
Shock Washer 3.3x6.7x1mm x4

400018A
Shock Seal O-ring 3x6.6mm x8

410049
Shock Seal Cap O-ring 8x10x1mm x4

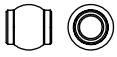
330547
Shock Piston 1.5mmx2 holes x4



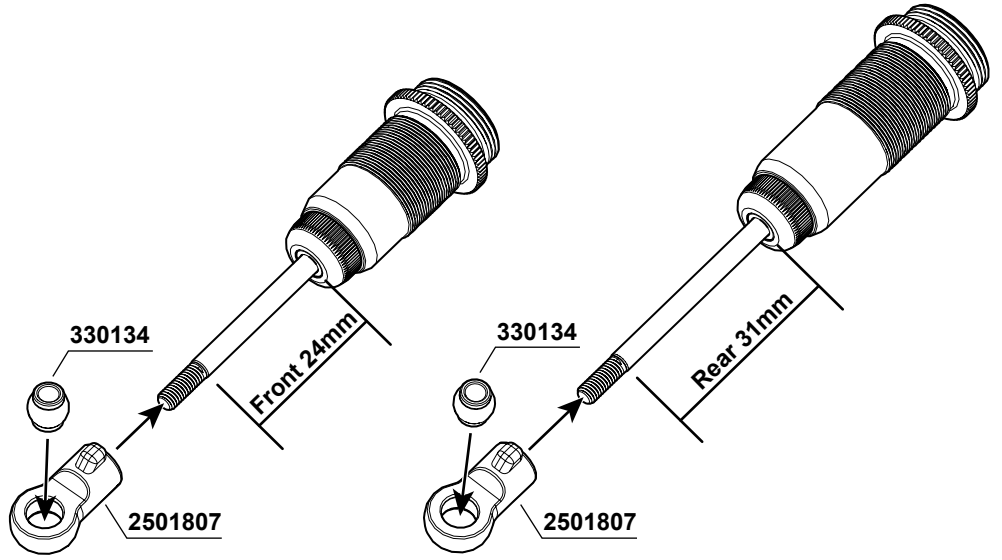
330531
Shock Shaft L x2

330532
Shock Shaft S x2

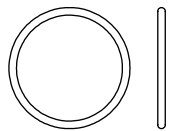
330544
Aluminum Shock Seal Cover x4



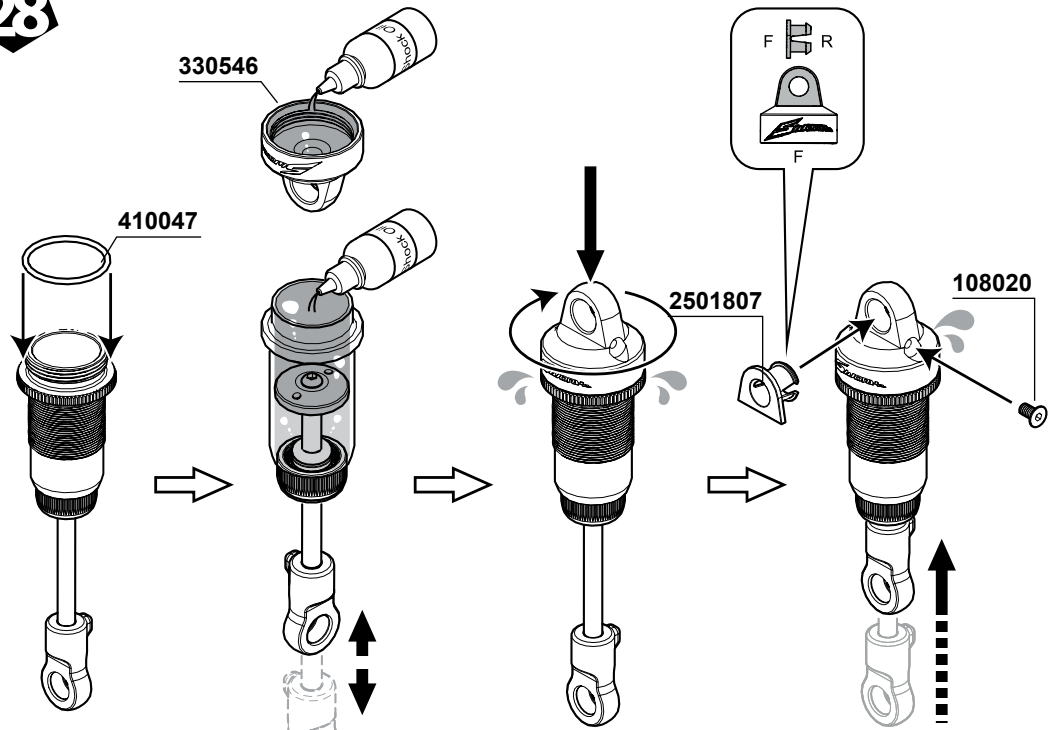
330134
Shock Ball Stud **x4**



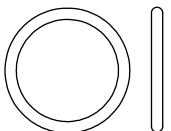
108020
M2x4mm FH/ST HEX Screw **x4**



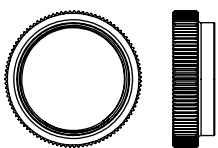
410047
S102 Shock Cap O-Ring (SP) **x4**



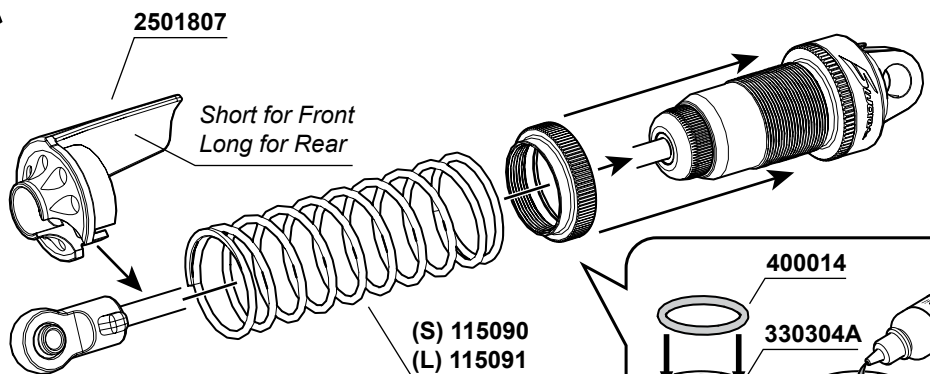
Slowly push the shock shaft to the end of shock cap. Then tight screw M2x4mm



400014
O-Ring 1.5x13.5mm **x4**



330304A
Aluminum Shock Spring Adjust Nut **x4**



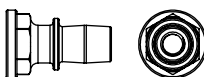


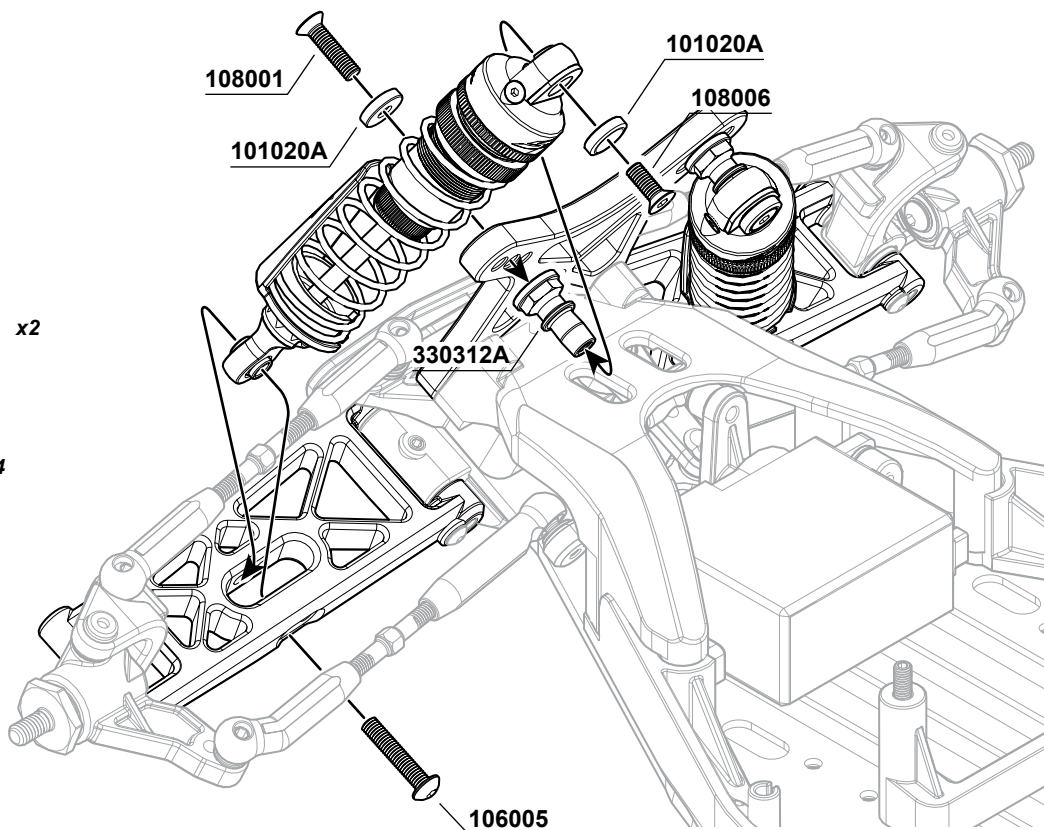
 **108006**
M3x8mm FH/ST HEX Screw x2

 **108001**
M3x12mm FH/ST HEX Screw x2

 **106005**
M3x15mm Hex Socket OH/TP Screw x2

 **101020A**
3mm Countersunk Washers (RD) x4

 **330312A**
Aluminum Shock Cap Stud x2

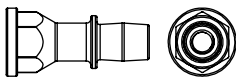


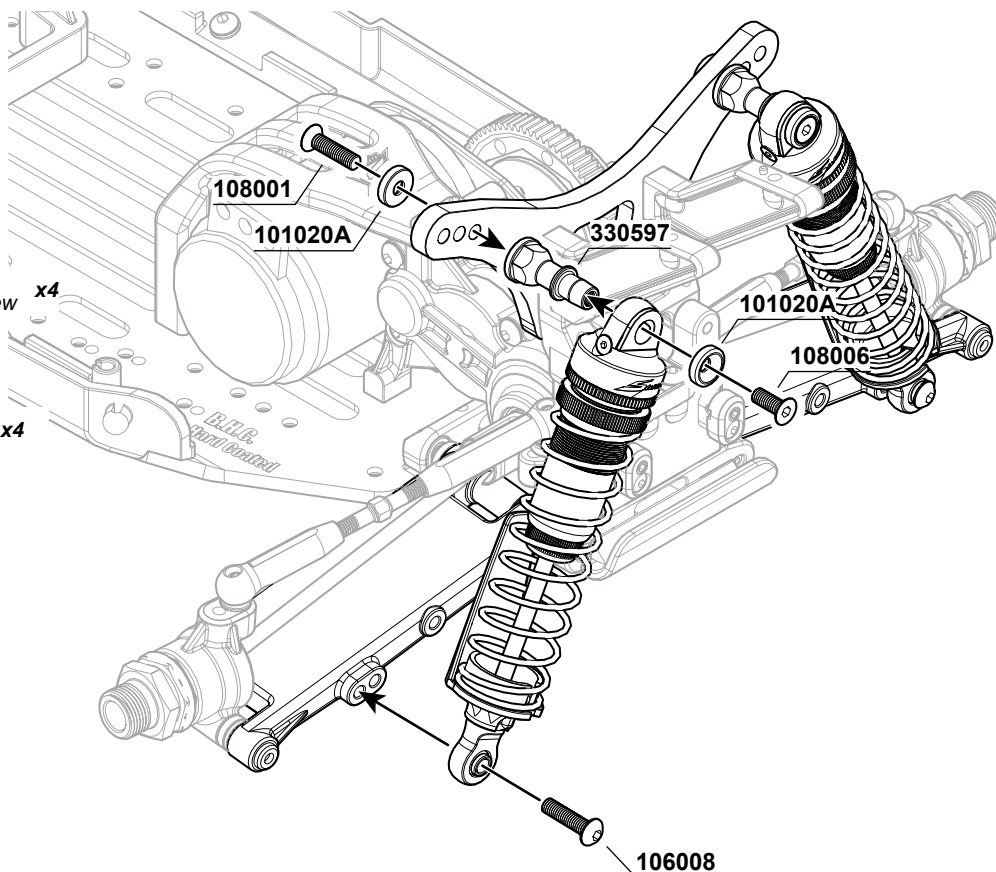
 **108006**
M3x8mm FH/ST HEX Screw x2

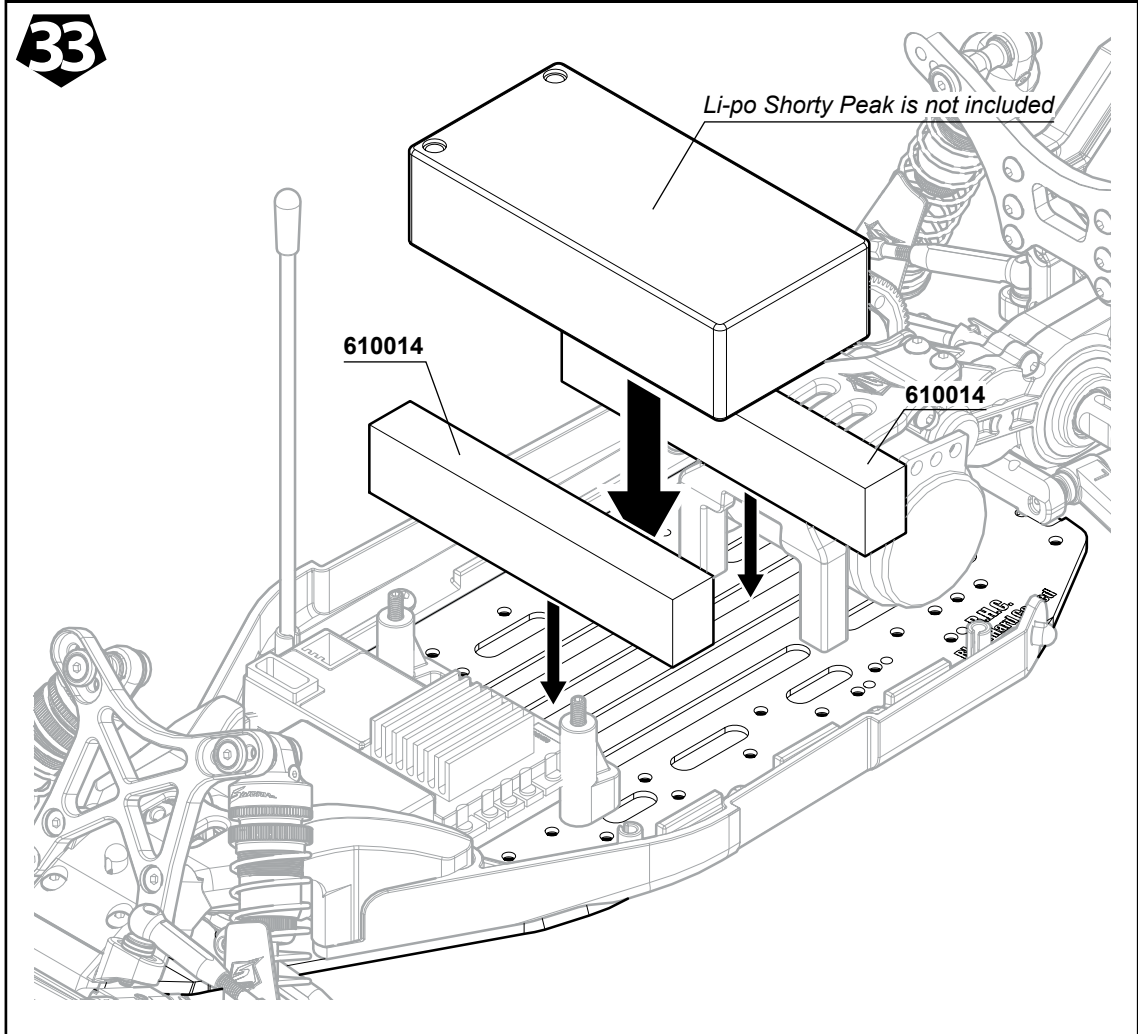
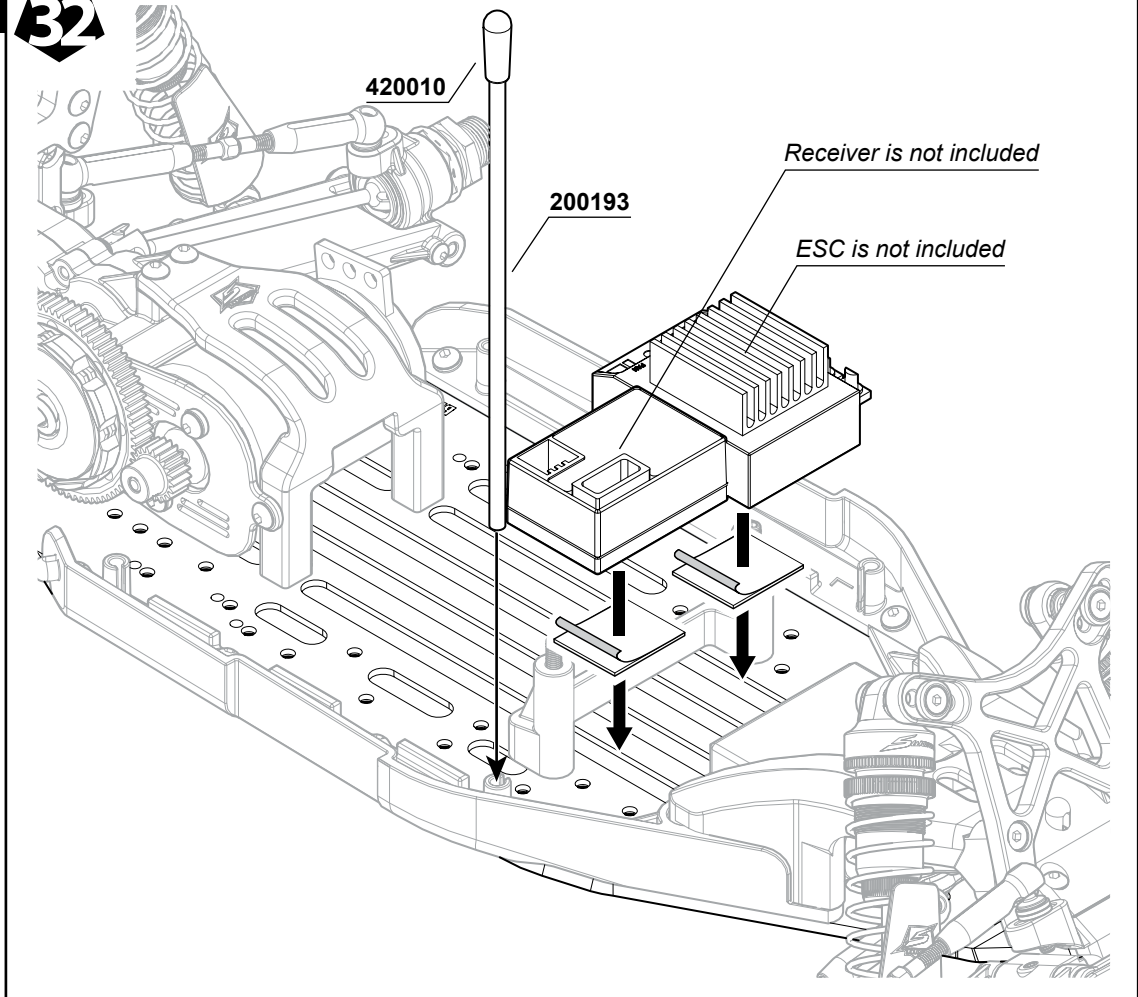
 **108001**
M3x12mm FH/ST HEX Screw x2

 **106008**
M3x12mm Hex Socket OH/TP Screw x4

 **101020A**
3mm Countersunk Washers (RD) x4

 **330597**
Aluminum Shock Cap Stud x2



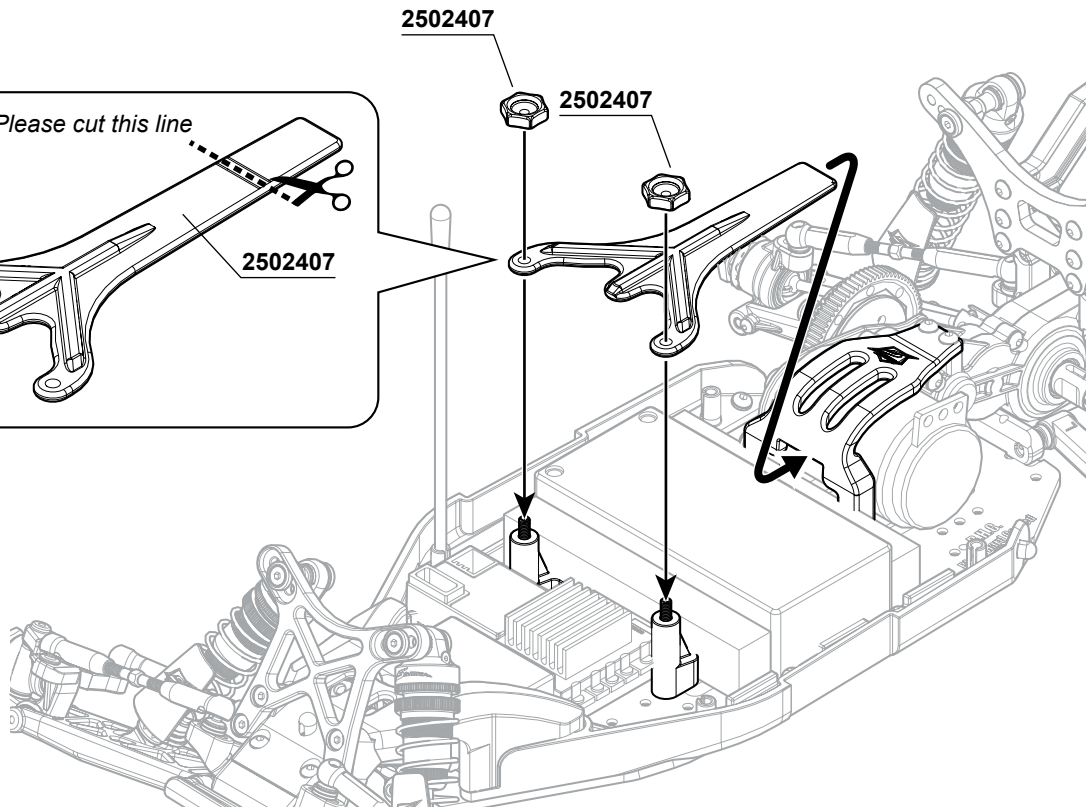
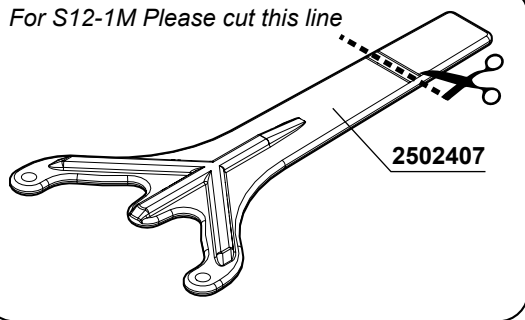


BAG A

34

BAG D

For S12-1M Please cut this line



BAG G

35

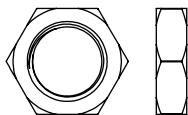


x2 For Front

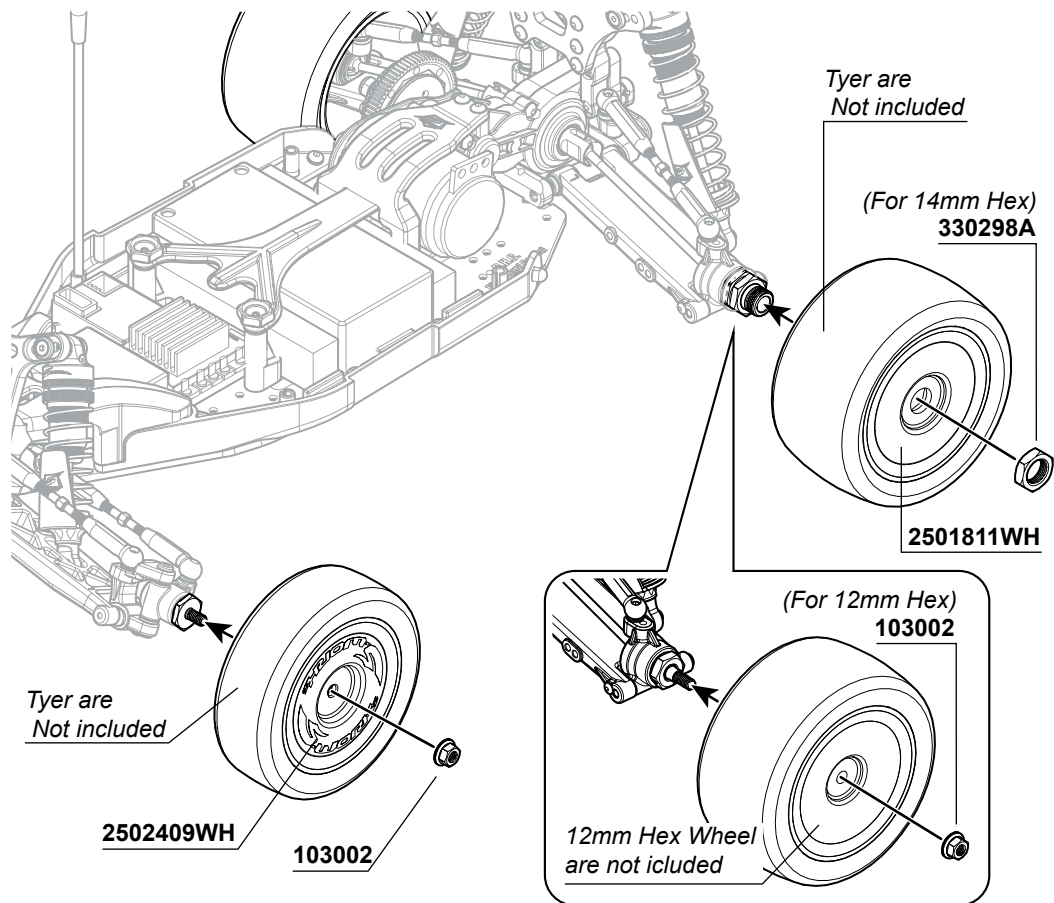
x2 For Rear



103002
Flange M4 Nut Lock x2



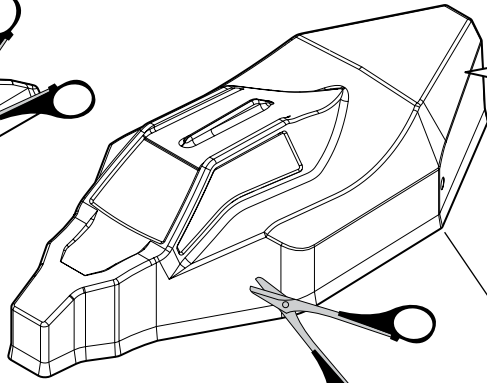
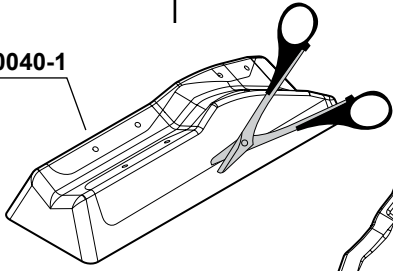
330298A
Wheel Nut 14mm x2



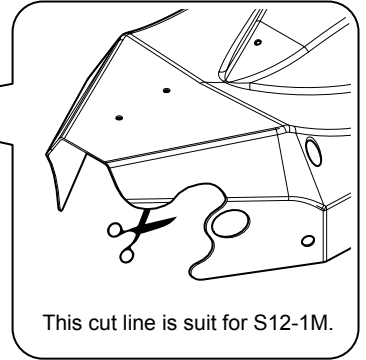
36

Body shell painting preparation

250040-1

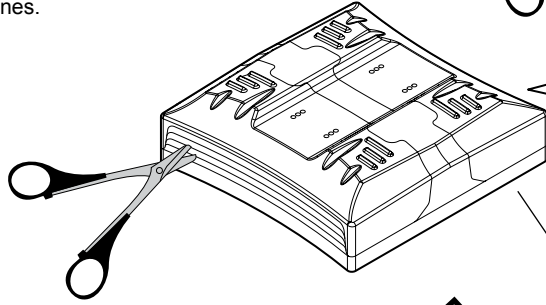


250040

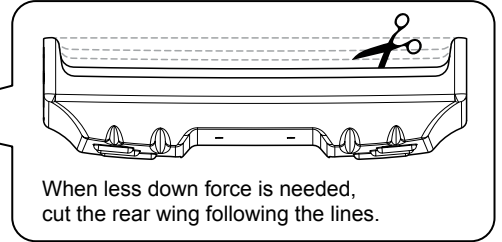


This cut line is suit for S12-1M.

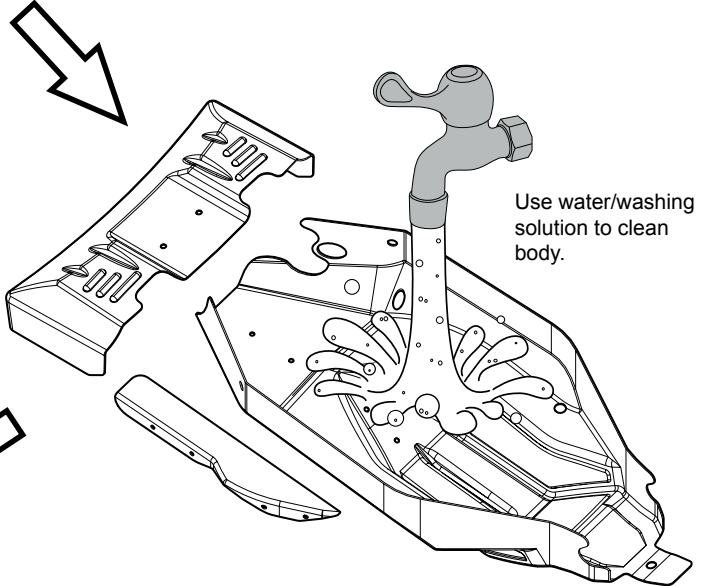
Use body scissors to cut along the body lines.



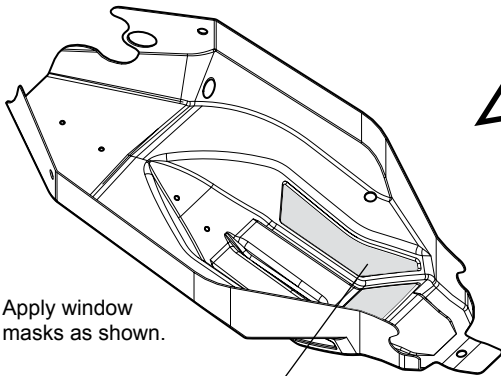
250042



When less down force is needed, cut the rear wing following the lines.

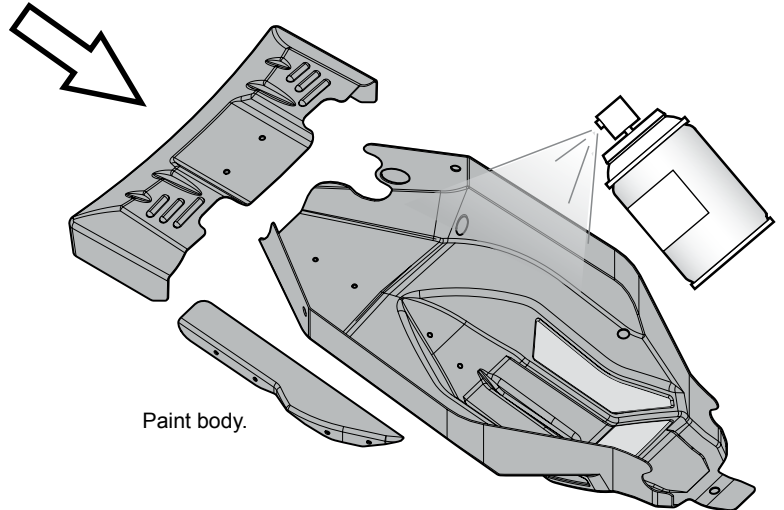


Use water/washing solution to clean body.



Apply window masks as shown.

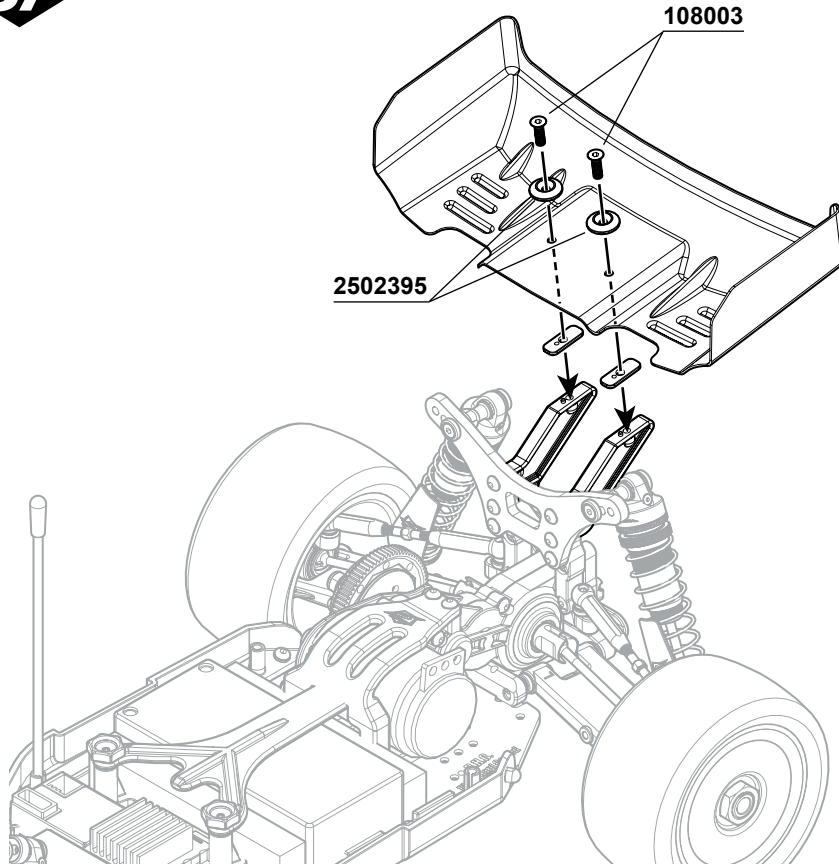
510060



Paint body.



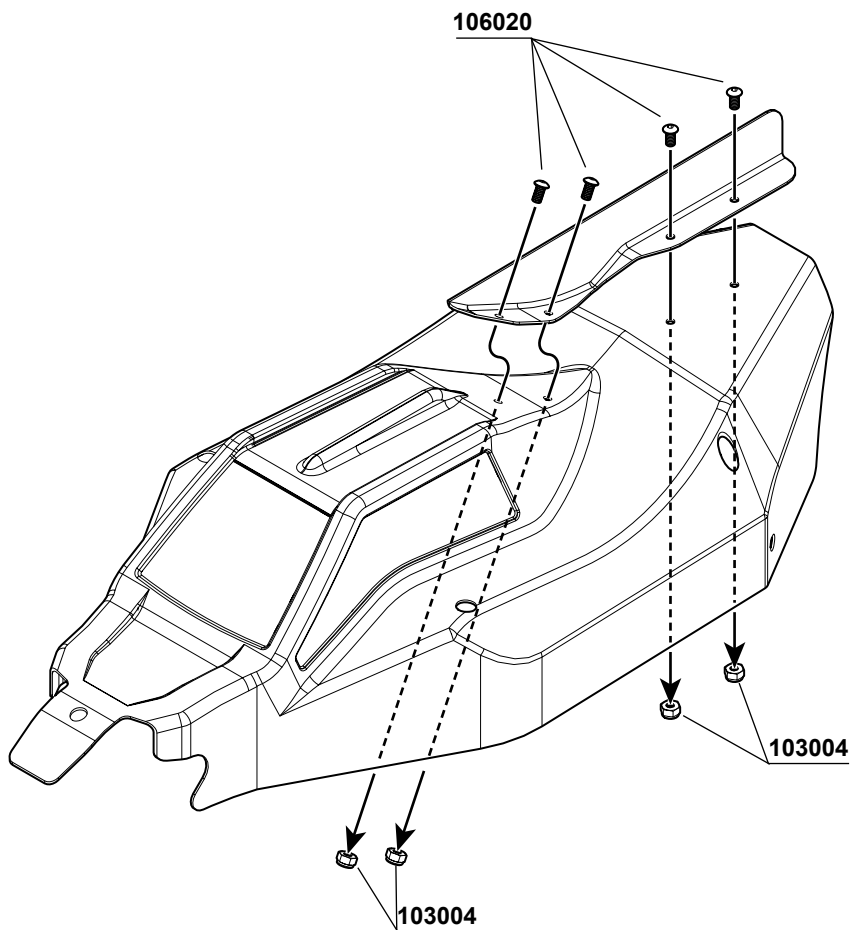
108003
M3x10mm FH/ST HEX Screw x2

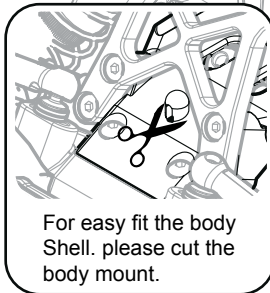
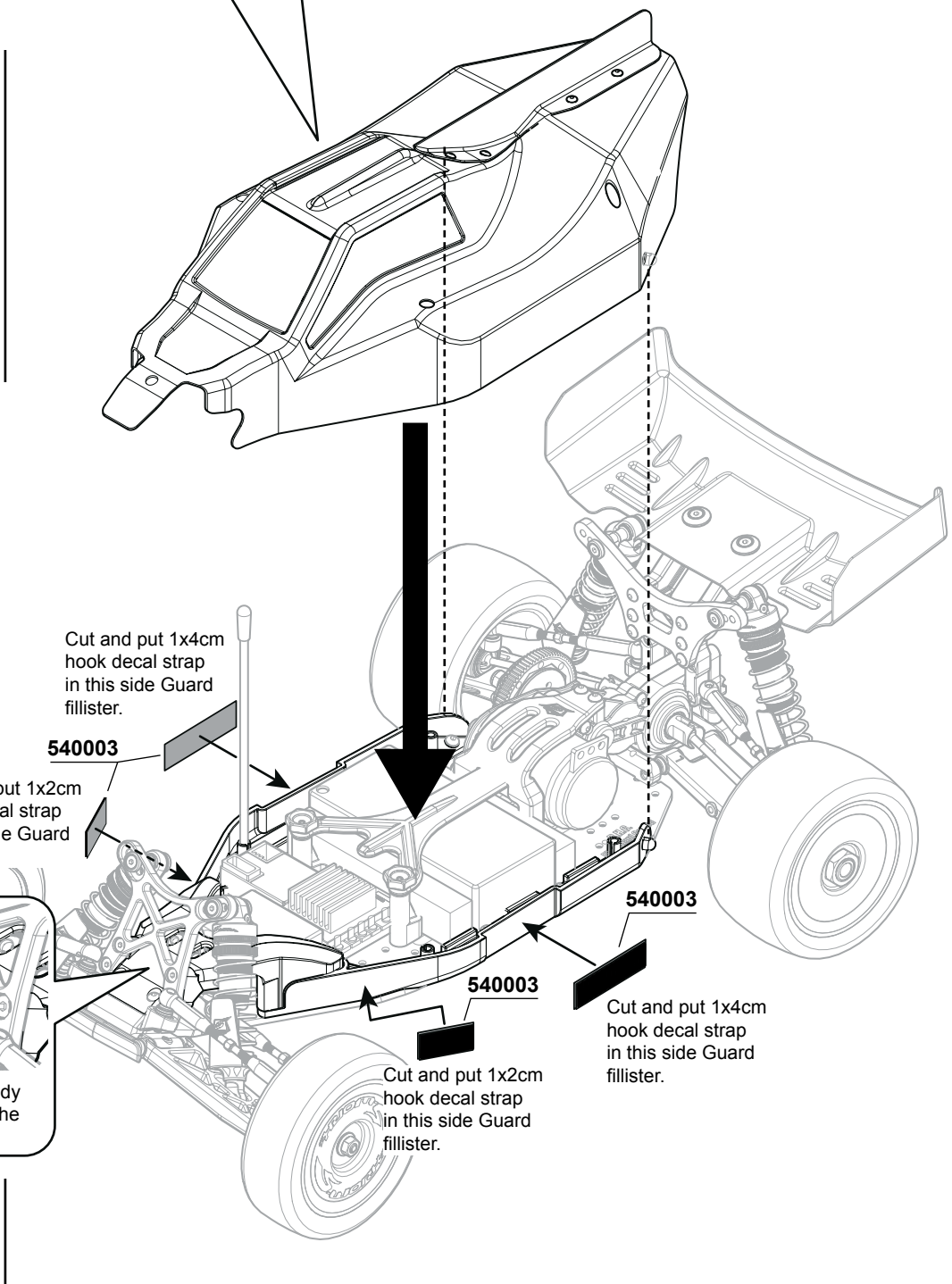
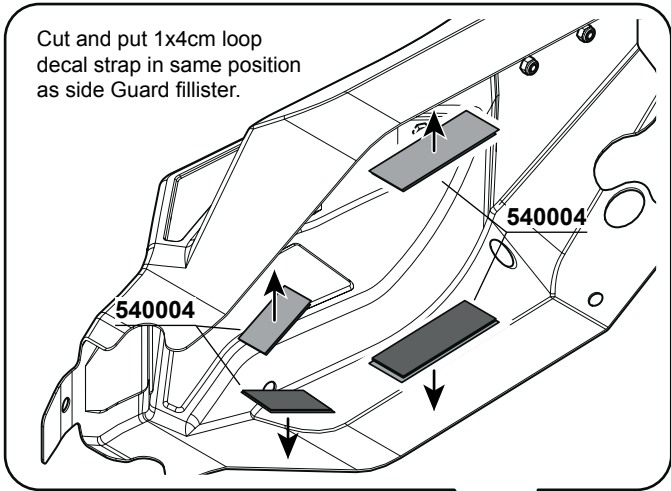


106020
M2.5x5mm Hex Socket OH/TP Screw x4



103004
M2.5 Nut Lock x4





S12-TM

Track Conditions

- Size: Open Med. Tight
Traction: High Med. Low
Surface: Smooth Med. Bumpy

Name: _____
Date: _____
Track: _____

Diff. Oil

Rear: _____

Diff. Type

- Gear Ditt
 Ball Ditt

Electric System

ESC Type: _____

Motor Type: _____

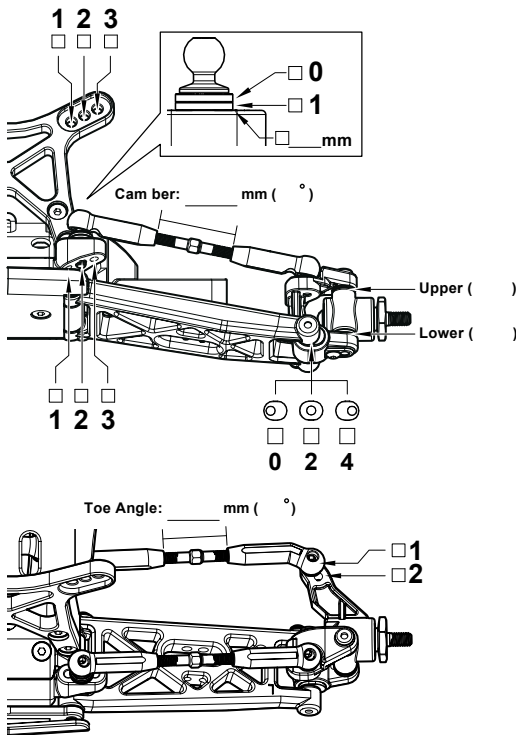
Motor Gear/Spur Gear: _____

Battery Type A: Saddle Pack _____
B: Shorty Pack _____

Tire

Front Type: _____ Rear Type: _____
Foam: _____ Foam: _____

Front Suspension



Front Shocks

Oil: _____
Pistons: _____
Spring: _____
Spacer: _____ mm

Front Lower Arm Holder Adjustment

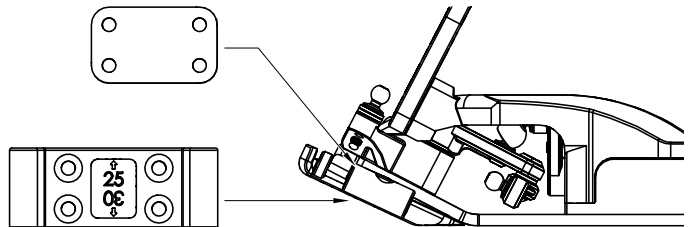
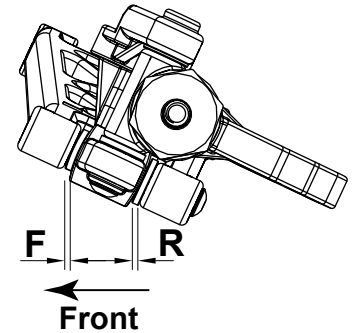
0.5mm 1mm

Front Lower Arm Holder

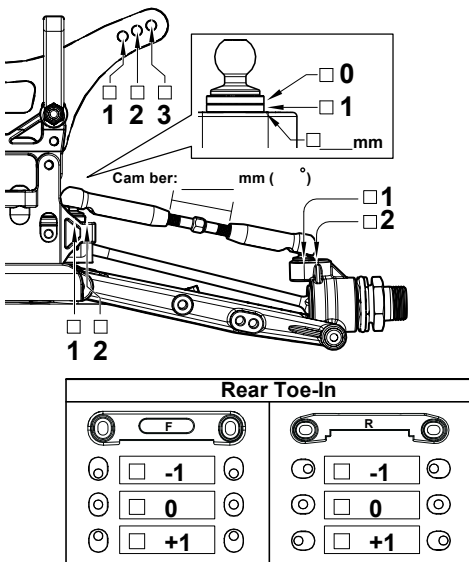
25° 30°

Ride High: _____ mm

Body: _____
Wing: _____



Rear Suspension



Rear Shocks

Oil: _____
Pistons: _____
Spring: _____
Spacer: _____ mm

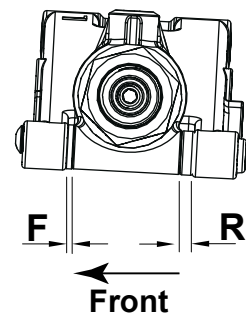
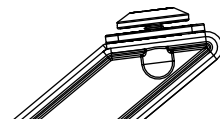
Wheelbase F _____ mm
adjustment R _____ mm

Sway bar Use _____ mm
 None

Ride High: _____ mm

Notes: _____

Wing spacer _____ mm



S12-1M

Track Conditions

Size: Open Med. Tight
Traction: High Med. Low
Surface: Smooth Med. Bumpy

Name: SWORKz
Date: 2015.10.05
Track: Yatabe Arena

Diff. Oil

Rear: _____
#5000

Diff. Type

Gear Ditt
 Ball Ditt

Electric System

ESC Type: Hobby Wing V3.1

Motor Type: Hobby Wing V10 6.5T

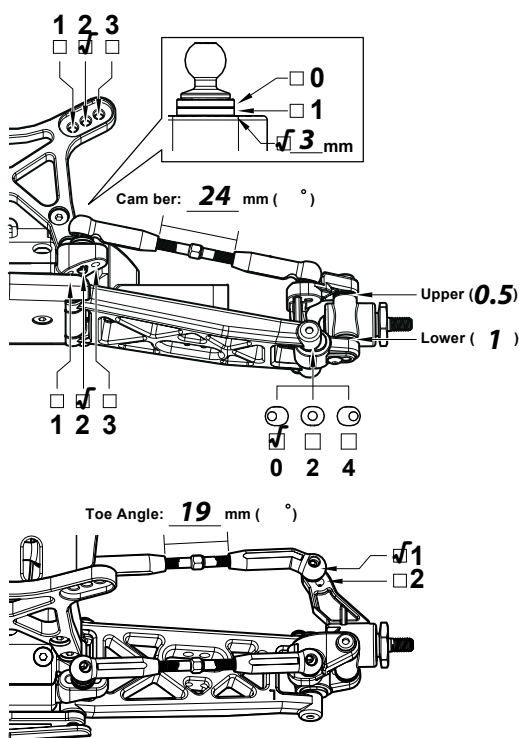
Motor Gear/Spur Gear: 22/82T

Battery Type A: Saddle Pack _____
B: Shorty Pack ORCA

Tire

Front Rear
Type: Schumacher Type: Schumacher
Foam: No Use Foam: Standard

Front Suspension



Front Shocks

Oil: #650
Pistons: 1.5x2
Spring: Yatabe Red
Spacer: 5 mm

Body: SWORKz

Wing: SWORKz

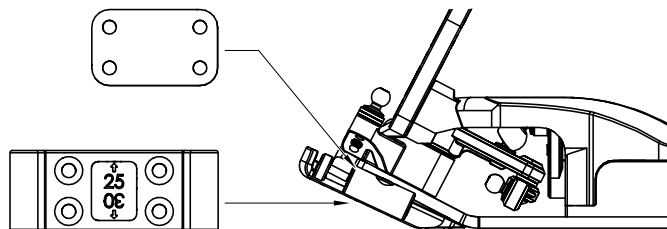
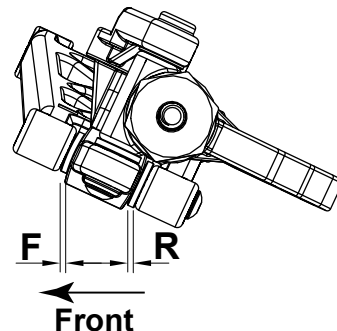
Front Lower Arm Holder Adjustment

0.5mm 1mm

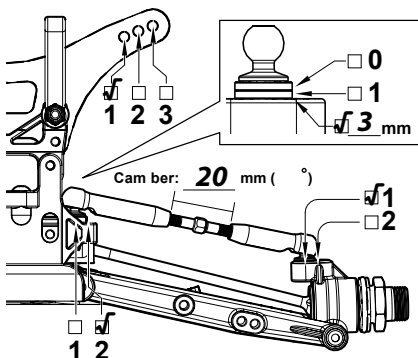
Front Lower Arm Holder

25° 30°

Ride High: 16 mm



Rear Suspension



Rear Shocks

Oil: #550
Pistons: 1.5x2
Spring: Yatabe OR
Spacer: 3 mm

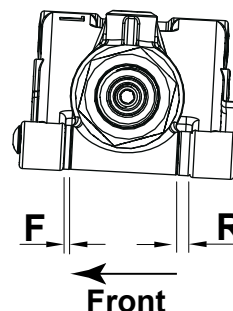
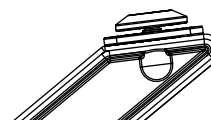
Wing spacer 2 mm

Wheelbase F 3 mm
adjustment R 0 mm

Sway bar Use _____ mm
 None

Ride High: 16 mm

Notes:



Rear Toe-In	
F	R
<input checked="" type="checkbox"/> -1	<input type="checkbox"/> -1
<input type="checkbox"/> 0	<input checked="" type="checkbox"/> 0
<input type="checkbox"/> +1	<input type="checkbox"/> +1

Parts No. List			
Part No.	Part Name	Q'ty in Use	Item No.
2501811	S104 Rear Wheel (WH)	2	SW-2501811
2502409	S12-1 Front Wheel (WH)	2	SW-2502409WH
2502394	S12-1 Front Steering Knuckle (L)	1	SW-2502394
	S12-1 Front Steering Knuckle(R)	1	
	S12-1 Insert (3X7X0.5mm)	4	
	S12-1 Insert (3X7X1mm)	6	
	S12-1 Front Steering Knuckle Insert(L0)	1	
	S12-1 Front Steering Knuckle Insert(R0)	1	
	S12-1 Front Steering Knuckle Insert(L+2)	1	
	S12-1 Front Steering Knuckle Insert(R+2)	1	
	S12-1 Front Steering Knuckle Insert(L+4)	1	
	S12-1 Front Steering Knuckle Insert(R+4)	1	
2502395	S12-1 Wing Mount (Rear Motor)	2	SW-2502395
	S12-1 Rear Wing Mount (For Middle Motor)	2	
	S12-1 Wing Space	2	
	S12-1 Wing Adjust Insert (0 degree)	2	
2502396	S12-1 Wing Adjust Insert (+3~-3 degree)	2	SW-2502396
	S102 Front Lower Arm Holder	1	
	S12-1 Front Lower Arm Holder Adjust Inster (1mm)	1	
	S12-1 Front Lower Arm Holder Adjust Inster (0.5mm)	1	
	S12-1 Servo Savor Arm	1	
	S12-1 Rear Lower Arm Plate (Middle Motor)	1	
	S12-1 Rear Lower Arm Plate	1	
	S12-1 Rear Arm Holder	1	
2502397	S12-1 Servo Savor Steering Plate	1	SW-2502397
	S12-1 Front Lower Arm (L)	1	
	S12-1 Front Lower Arm (R)	1	
2502398	S12-1 Insert (3X7X1mm)	2	2502398
	S12-1 Rear Lower Arm (L)	1	
	S12-1 Rear Lower Arm (R)	1	
2502399	S12-1 Insert 3X7X2mm	2	SW-2502399
	S12-1 Gear Cover (Center)	1	
	S12-1 Rear Bumper	1	
	S12-1 Front Bumper	1	
	S12-1 Receiver/ESC Holder	1	
	S12-1 Servo Holder	2	
	S12-1 Servo Adjust Insert (1mm)	2	
2502400	S12-1 Servo Adjust Insert (2mm)	2	2502400
	S12-1 Front Upper Arm Holder	1	
	S12-1 Front Shock Tower Holder	1	
	S12-1 Plastic Front Shock Tower	1	
2502401	S12-1 Plastic Rear Shock Tower	1	SW-2502401
	S12-1 Ball End Cap M(5mm)	6	
	S12-1 Ball End Cup (S)(5mm)	4	
	S12-1 Ball End Cup(L)(5mm)	2	
	S12-1 Curve Ball End Cup(L)(5mm)	2	
	S12-1 Ball End Cup(L)(5mm)	6	
	S12-1 Rear Arm Holder Insert (0 degree)	6	
	S12-1 Arm Hinge Pin Insert	6	
	S12-1 Savor Servo Arm (25T)	1	
	S12-1 Savor Servo Arm(23T)	1	
2502402-01	S12-1 Savor Servo Arm(24T)	1	SW-2502402
	S12-1 Diff Case	1	
2502402-02	S12-1 Diff Case Cover	1	
2502403-03	S12-1 Spur Gear 76T	1	SW-2502403-03
2502403-04	S12-1 Spur Gear (81T)	1	SW-2502403-04
2502403-05	S12-1 Slipper Clutch Spring Plastic Insert	1	SW-2502403-06
2502403-06	S12-1 Slipper Clutch Case	1	SW-2502403-06
2502406	S12-1 Side Guard (L)	1	SW-2502406
	S12-1 Side Guard (R)	1	
	S12-1 Batter Holder (Side)	0	

Parts No. List			
Part No.	Part Name	Q'ty in Use	Item No.
2502407	S12-1 Rear Bumper (For Rear Motor)	0	SW-2502407
	S12-1 Batter Case (R)	0	
	S12-1 Batter Holder	0	
	S12-1 Batter Holder Nut	2	
	S12-1 Batter Case (F)	1	
	S12-1 Plastic Saddle Pack Battery Holder (R)	0	
	S12-1 Plastic Saddle Pack Battery Holder (L)	0	
2502408	S12-1 Battery Holder Post	1	SW-2502408
	S12-1 Rear Shock Tower Bottom Holder (for Rear Motor)	0	
	S12-1 Rear Shock Tower Upper Holder (for Rear Motor)	0	
	S12-1 Rear Shock Tower Bottom Holder (for Middle Motor)	1	
	S12-1 Rear Sway Bar Holder (Middle Motor)	0	
2502417	S12-1 Rear Shock Tower Upper Holder (for Middle Motor)	1	SW-2502417
	SWORKz 5.5mm Nut and Battery Nut Cross Wrench	1	
	S12-1 Steering Hub (L&R)	2	
	S12-1 Rear Wheel Hub (L&R)	2	
2501807	S12-1 Insert 3X7X2mm	2	SW-2501807
	S12-1 Insert (3X7X1mm)	2	
	S12-1 Front Wheel Axle Adjust Insert(5X7)(1mm)	2	
	S104 Plastic Shock Washer 3.3x6.5x1mm	0	
	S104 Plastic Shock Washer 3.3x6.5x2.5mm	0	
	S104 Plastic Shock Piston 1.3mmx5 holes	0	
	S104 Plastic Shock Piston 1.2mmx5 holes	0	
	S104 Shock Cap Insert	4	
	S104 Shock Spring Holder L	2	
	S104 Shock Spring Holder S	2	
2503133	S104 Plastic Shock Cap Stud	0	SW-2503133
	S104 Shock Ball End	4	
	S12-1M Edition Middle Front Motor Gear Box (1 Idler Gear)(L)	1	
	S12-1M Edition Middle Front Motor Gear Box (1 Idler Gear)(R)	1	
2503134-04	S12-1M Edition Middle Front Gear Box Motor Cover	1	SW-2503134-04
2502212	S12-1 M Edition Idler Gear 34T	1	SW-2503134-04
330516	14mm Plastic Wheel Hex Tool Hand Bar	1	SW-2502212
330671	S12-1Idler Gear Shaft 5X15L	1	SW-330516
330672	S12-1 Slipper Clutch Inside Holder	1	SW-330671
330672	S12-1 Slipper Clutch Outside Holder	1	SW-330672
330524	S12-1 Pro Chassis (7075 Aluminum)	1	SW-330524
330525	S12-1 Rear Lower Arm Hinge Pin (3X44mm)	2	SW-330525
330526	S12-1 Rear CVD Drive Shaft (73.5mm)	2	SW-330526
330528	S12-1 Wheel Hub 14mm(L8)	2	SW-330528
330529	S12-1EVO/102 Shock Body (L)	2	SW-330529
330530	S12-1EVO/102 Shock Body (S)	2	SW-330530
330531	S12-1EVO/102 Shock Shaft(L)	2	SW-330531
330532	S12-1EVO/102 Shock Shaft(S)	2	SW-330532
330533	S12-1 Servo Savor Bushing 3x4mm	2	SW-330533
330534	S12-1Steering Hub Hinge Pin (L&R)	2	SW-330534
330536	S12-1 Pin (3X26mm)	4	SW-330536
330537	S12-1 Arm Hinge Pin (3X34mm)	4	SW-330537
330538	S12-1 Aluminum Front Lower Arm Holder	1	SW-330538
330540	S12-1 Servo Savor Post	2	SW-330540
330541	S12-1 Gear Diff Outdrive	2	SW-330541
330543	S12-1 Slipper Clutch Plate	1	SW-330543
330544	S12-1 Shoick Seal Cover (SP)	4	SW-330544
330545	S12-1 Shock Seal Washer(3.3X6.5X2.0(SP))	8	SW-210065
330546	S12-1 Shock Cap (SP)	4	SW-330546
330547	S104EVO/S12-1 Shock Piston(1.5mmX2 Holes)	4	SW-330547
330581	S12-1 Rear CVD Axle for 12mm Wheel Hex	2	SW-330581
330582	S12-1 Rear Wheel Hub for 12mm wheels	2	SW-330582
330583	Pin for M2.0x12mm	2	SW-330583
330627	S12-1 Aluminum Idler Gear 20T	1	SW-330627
330654	S12-1 Option Aluminum Rear Lower Arm Holder (RF)	1	SW-330654
330655	S12-1 Option Aluminum Rear Lower Arm Toe-In Plate for Middle Motor (RR)	1	SW-330655
330664	S12-1 5mm Ball Stud (L10mm)	4	SW-330664
330666	S12-1 Middle Front Aluminum Motor Plate (1 Idler Gear)	1	SW-330666

Parts No. List

Part No.	Part Name	Q'ty in Use	Item No.
330673	S12-1 Aluminum Pro Front Shock Tower	1	SW-330673
330527	S12-1 Pro Rear Carbon Fiber Shock Tower	1	SW-330527
330134	Shock Ball Stud	4	SW-330134
330277	S104 Diff. Bevel Gear 18T	2	SW-330278
330278	S104 Diff. Bevel Gear 10T	4	SW-330278
330279	S104 Bevel Gear Shaft	2	SW-330279
330283	S104 Pin M2.0x10mm	4	SW-330283
330285	S104 Pin M2.0x14mm	2	SW-330285
330294	S104 CVD Axle	2	SW-330294
330295	S104 CVD Join	2	SW-330295
330298A	S104 Wheel Nut 14mm	2	SW-330298A
330300	S104 Rear Upper Sus. Arm Turnbuckles	6	SW-330300
330304A	S104 Aluminum Shock Spring Adjust Nut (GM)	4	SW-330304A
330305	S104 Shock Washer 3.3x6.5x1mm	4	SW-210065
330312A	S104 Aluminum Shock Cap Stud	2	SW-330312A
330331	S104 Steering Linkage Ball Stud 4.1mm	10	SW-330331
330410	S104 Motor Gear 21T	1	SW-330410
330597	S104 EVO Rear Longer Aluminum Shock Cap Stud	2	SW-330597
400002	O-ring S5 4.8X1.5	2	SW-400002
400018A	S104 Shock Seal O-ring 3x6.6mm	8	SW-400018
400014	S104 Aluminum Shock Spring Adjust Nut O-Ring 1.5x13.5mm	6	SW-400014
610013	S104 Center Slipper Clutch Pad	3	SW-610013
410047	S102 Shock Cap O-Ring (SP)	4	SW-410047
610017	S12-1 Diff. Gasket (16X24X0.3t)	1	SW-610017
410049	1/10 Shock Seal Cap O-ring (8*10*1)	4	SW-410049
250040	S12-1 Eaglet Style Body Shell with Top Wing	1	SW-250040
250040-1	S12-1 Eaglet Style Body Shell Wing	1	SW-250040
250042	SWORKz 1/10 sonic wing 6.5"	1	SW-250042
510060	S12-1 Eaglet Style Body Window Mask	1	SW-250040
510061	S12-1 Body Decal Sheet	1	SW-250040
115135	S12-1 Slipper Clutch Spring	1	SW-115135
115090	S104EVO/S12-1 Front Shock Spring(1.3P5.5)	2	SW-115090
115091	S104EVO/S12-1 Rear Shock Spring(1.2Px6.0)	2	SW-115091
610014	S12-1 Shorty Foam Battery Block	2	SW-610014
116013	Ball Bearing 10x15x4mm	4	SW-116013
116010	Ball Bearing 5x10x4mm	8	SW-116010
116015	Ball Bearing 5x8x2.5mm	4	SW-116015
116017	Ball Bearing 6x12x4mm	2	SW-116017
101020A	3mm Countersunk Washers	8	SW-101020A
101026	S102 Aluminum Washer 3X6X1.5mm	2	SW-101026
103004	M2.5mm Nut Lock	4	SW-103004
104012	M3x12mm Set Screw	5	SW-104012
104004	M3x3mm Set Screw	3	SW-104004
104005	Set Screw M3x4	2	SW-104005
103003	Flange M3 Nut Lock	2	SW-103003
103001	M3 Nut Lock	2	SW-103001
104008	M4x4mm Set Screw	2	SW-104008
103005	M4mm Nut Lock (BK)	1	SW-103005
103002	Flange M4 Nut Lock	4	SW-103002
106020	M2.5x5mm 1.5mmHex Soket OH/ST Screw	14	SW-106020
106014	M2x6mm Hex Soket OH/TP Screw	8	SW-106014
106002	M3x10mm Hex Soket OH/TP Screw	16	SW-106002
106008	M3x12mm Hex Soket OH/TP Screw	8	SW-106008
106005	M3x15mm Hex Soket OH/TP Screw	4	SW-106005
106010	M3x6mm Hex Soket OH/TP Screw	12	SW-106010
106001	M3x8mm Hex Soket OH/TP Screw	7	SW-106001
108020	M2.0x4mm FH/ST HEX Screw	4	SW-108020
108003	M3x10mm FH/ST HEX Screw	6	SW-108003
108001	M3x12mm FH/ST HEX Screw	8	SW-108001
108005	M3x14mm FH/ST HEX Screw	4	SW-108005
108015	M3x16mm FH/ST HEX Screw	2	SW-108015
108006	M3x8mm FH/ST HEX Screw	23	SW-108006
101011	M2.6x6xT0.5mm	4	SW-101011
101012	M3x6xT0.5mm	4	SW-101012

Parts No. List

Part No.	Part Name	Q'ty in Use	Item No.
106020	M2.5x5mm 1.5mmHex Soket OH/ST Screw	14	SW-106020
101004	Washer 3.5X10X0.2mm	4	SW-101004
200193	Antenna Tube	1	SW-200193
420010	Antenna Cup	1	SW-200193
540003	Hook decal strap 2x10cm	1	SW-540004
540004	Loop decal strap 2x10cm	1	SW-540004

Spare Part List

Item No.	Part Name
SW-2501811	S104 Rear Wheel (WH)
SW-2502409WH	S12-1 Front Wheel (WH)
SW-2502394	S12-1 Front Steering Knuckle and Inserts Set
SW-2502395	S12-1 Rear Wing Mount Sets
SW-2502396	S12-1 Front Lower Arm Suspension Holder and Adjust Inster Set
SW-2502397	S12-1 Front Lower Arm Set
SW-2502398	S12-1 Rear Lower Arm Set
SW-2502399	S12-1 Bumper and Plastic Parts Set
SW-2502400	S12-1 Front/Rear Shock Towers and Holders
SW-2502401	S12-1 Ball End Caps and Hinge Pin Inserts
SW-2502402	S12-1 Diff Case Set
SW-2502403-03	S12-1 Spur Gear 76T
SW-2502403-04	S12-1Spur Gear 81T
SW-2502403-06	S12-1 Slipper Clutch Case (Spring Plastic Insert)
SW-2502406	S12-1 Side Guard
SW-2502407	S12-1Batter Holder Parts Set
SW-2502408	S12-1 Rear Shock Tower Upper Holder Set
SW-2502417	S12-1 Front Steering and Rear Hubs
SW-2501807	S104 Plastic Shock Washer 3.3x6.5x1mm
SW-2503133	S12-1 Middle Front Motor Gear Box
SW-2503134-04	S12-1 MFR Gear Box Idler Gear 34T
SW-2502212	14mm Plastic Wheel Hex Tool Hand Bar
SW-330516	S12-1 Idler Gear Shaft 5X15L
SW-330671	S12-1 Slipper Clutch Inside Holder
SW-330672	S12-1 Slipper Clutch Outside Holder
SW-330524	S12-1 Pro Chassis (7075 Aluminum)
SW-330525	S12-1 Rear Lower Arm Hinge Pin
SW-330526	S12-1 Rear CVD Drive Shaft (72.5mm)
SW-330528	S12-1 Wheel Hub 14mm(L8)
SW-330529	S104EVO/S12 Shock Body (L)
SW-330530	S104EVO/S12 Shock Body (S)
SW-330531	S104EVO/S12 Shock Shaft(L)
SW-330532	S104EVO/S12 Shock Shaft(S)
SW-330533	S12-1 Servo Savor Bushing 3x4mm
SW-330534	S12-1 Steering Hub Hinge Pin (L&R)
SW-330536	S12-1 Pin (3X26mm)
SW-330537	S12-1Front Lower Arm Hinge Pin (3X34mm)
SW-330538	S12-1 Aluminum Front Lower Arm Holder
SW-330540	S12-1 Servo Savor Post
SW-330541	S12-1 Gear Diff Outdrive
SW-330543	S12-1 Slipper Clutch Plate (Steel)
SW-330544	S104EVO/S12 Shoick Seal Cover (GM)
SW-210065	S104 EVO/S12 series Pro Shock Seal Kit
SW-330546	S104 EVO/S12 Shock Cap (GM)
SW-330547	S104EVO/S12 Shock Piston(1.5mmX2 Holes)
SW-330581	S12-1 Rear CVD Axle for 12mm Wheel Hex
SW-330582	S12-1 Rear Wheel Hub for 12mm wheels
SW-330583	Pin for M2.0x12mm
SW-330627	S12-1 Aluminum Idler Gear 20T
SW-330654	S12-1 Option Aluminum Rear Lower Arm Holder (RF)
SW-330655	S12-1 Option Aluminum Rear Lower Arm Toe-In Plate for Middle Motor (RR)
SW-330664	S12-1 5mm Ball Stud (L10mm)
SW-330666	S12-1 Middle Front Aluminum Motor Plate (1 Idler Gear)
SW-330673	S12-1 Aluminum Pro Front Shock Tower
SW-330527	S12-1 Pro-composite Carbon Rear Shock Tower
SW-330134	Shock Ball Stud
SW-330278	S104 Diff. Bevel Gear 18T
SW-330278	S104 Diff. Bevel Gear 10T
SW-330279	S104 Bevel Gear Shaft
SW-330283	S104 Pin M2.0x10mm
SW-330285	S104 Pin M2.0x14mm
SW-330294	S104 CVD Axle
SW-330295	S104 CVD Join
SW-330298A	S104 Wheel Nut 14mm

Spare Part List

Item No.	Part Name
SW-330300	S104 Rear Upper Sus. Arm Turnbuckles
SW-330304A	S104 Aluminum Shock Spring Adjust Nut (GM)
SW-210065	S104 Shock Washer 3.3x6.5x1mm
SW-330312A	S104 Aluminum Shock Cap Stud
SW-330331	S104 Steering Linkage Ball Stud 4.1mm
SW-330410	S104 Motor Gear 21T
SW-330597	S104 EVO Rear Longer Aluminum Shock Cap Stud
SW-400002	O-ring S5 4.8X1.5
SW-400018	S104 Shock Seal O-ring 3x6.6mm
SW-400014	S104 Aluminum Shock Spring Adjust Nut O-Ring 1.5x13.5mm
SW-610013	S104 Center Slipper Clutch Pad
SW-410047	S104 EVO/S12-1 Shock Cap O-Ring (SP)
SW-610017	S12-1 Diff. Gasket (16X24X0.3t)
SW-410049	1/10 Shock Seal Cap O-ring (8*10*1)
SW-250040	S12-1 Eaglet Style Body Shell with Top Wing
SW-250042	SWORKz 1/10 sonic wing 6.5"
SW-115135	S12-1 Slipper Clutch Spring
SW-115090	S104EVO/S12-1 Front Shock Spring(1.3P5.5)
SW-115091	S104EVO/S12-1 Rear Shock Spring(1.2Px6.0)
SW-610014	S12-1 Shorty Foam Battery Block
SW-116013	Ball Bearing 10x15x4mm
SW-116010	Ball Bearing 5x10x4mm
SW-116015	Ball Bearing 5x8x2.5mm
SW-116017	Ball Bearing 6x12x4mm
SW-101026	S102 Aluminum Washer 3X6X1.5mm
SW-103004	M2.5mm Nut Lock
SW-104012	M3x12mm Set Screw
SW-104004	M3x3mm Set Screw
SW-104005	Set Screw M3x4
SW-103003	Flange M3 Nut Lock
SW-103001	M3 Nut Lock
SW-104008	M4x4mm Set Screw
SW-103005	M4mm Nut Lock (BK)
SW-103002	Flange M4 Nut Lock
SW-106019	M2x10mm 1.5mmHex Soket OH/ST Screw
SW-106020	M2.5x5mm 1.5mmHex Soket OH/ST Screw
SW-106014	M2x6mm Hex Soket OH/TP Screw
SW-106002	M3x10mm Hex Soket OH/TP Screw
SW-106008	M3x12mm Hex Soket OH/TP Screw
SW-106005	M3x15mm Hex Soket OH/TP Screw
SW-106010	M3x6mm Hex Soket OH/TP Screw
SW-106001	M3x8mm Hex Soket OH/TP Screw
SW-108020	M2.0x4mm FH/ST HEX Screw
SW-108003	M3x10mm FH/ST HEX Screw
SW-108001	M3x12mm FH/ST HEX Screw
SW-108005	M3x14mm FH/ST HEX Screw
SW-108015	M3x16mm FH/ST HEX Screw
SW-108006	M3x8mm FH/ST HEX Screw
SW-101011	M2.6x6xT0.5mm
SW-101012	M3x6xT0.5mm
SW-106020	M2.5x5mm 1.5mmHex Soket OH/ST Screw
SW-101004	Washer 3.5X10X0.2mm
SW-200193	Antenna Tube
SW-540004	Hook & Loop decal strap Set 2x10cm

Option Part List

Item No.	Part Name
SW-330652	S102 Option Copper Front Lower Arm Blance Holder (25g)
SW-330653	S102 Option Arm Hinge Pin Insert
SW-330656	S102 Option Aluminum Rear Lower Arm Toe-In Plate for Rear Motor (RR)
SW-330657	S102 Option Aluminum Front Lower Arm Holder (10g)
SW-330658	S102 Option Aluminum Servo Savor Arm
SW-330659	S102 Option Aluminum Servo Savor Steering Plate
SW-330660	S102 Option Aluminum Front Steering Knuckle (R&L)
SW-330539	S102 Carbon Fiber Front Shock Tower
SW-210071	SWORKz S12-1R Dirt Edition Gear Box Set
SW-210072	S12-1 Series Gear Diff Set
SW-330512	S104/S12-1 Series Pro Wheel Nut (GM)
SW-210063	S104 EVO/S102 series Pro Shock Front Set
SW-210064	S104 EVO/S102 series Pro Shock Rear Set
SW-2502409FY	S12-1 Series Front Wheel (FY)

WORKZ

S12-1M

1/10 2WD EP Buggy with Middle Transmission

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