



X10r

Build Manual

mglRC X10r

The serious choice for the serious 1:10 Vintage class racer

mglRC

V1.0

This kit represents our love for the legendary Tenth Technology Predator.

A car that captured my attention since it was first unveiled in the 90's.

A car that innovated ahead of its time.

A car that deserves its place in modern vintage events.

A car that left the racing world far, far too early.

A car that has been meticulously recreated and respected by our X10r.

A car that you can now experience with our production mglRC X10r.

This car could not exist without the interest and support that mglRC has gained since going public and of course needs the support of people like you who want to own one of these legendary recreations. While it has been a difficult and challenging journey to get to this point, it has been absolutely worth it and I would do it again in a heartbeat. The satisfaction of bringing this car back to the racetrack and seeing it perform at the highest level is indescribable and I will be forever grateful for this experience and to those that have supported the project along the way.

I truly hope you enjoy the build and, more importantly, I hope you are delighted by the finished car. I am very much looking forward to seeing customer cars on track.

Matt

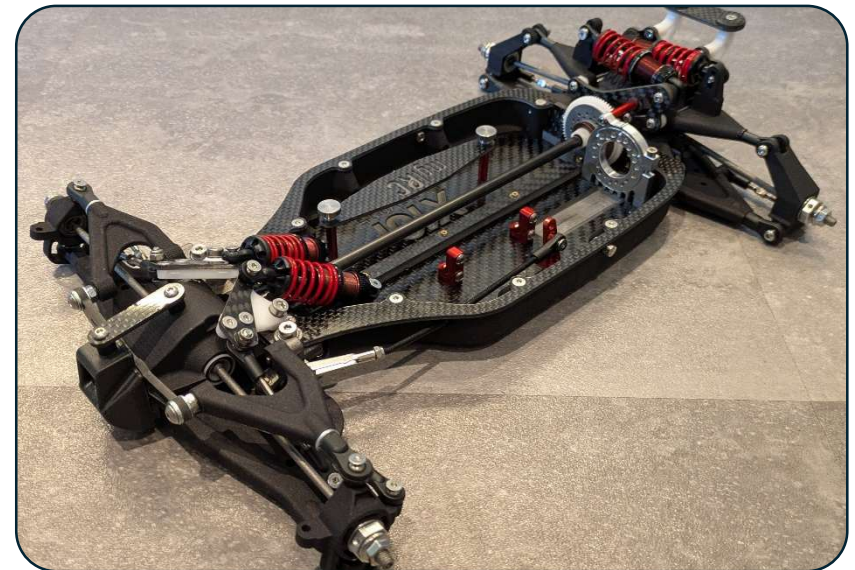
Matt Litton, Founder, mglRC.

At mglRC, we want our products, including the X10r, to be the best they can be. We regularly re-evaluate our design choices and we review sales of spare parts.

Occasionally this process will lead to a revised part specification without compromising compatibility with the X10r platform.

This means that exact part specification is subject to change as we continuously improve our products and parts.

Please be assured that all parts from mglRC are the best they can be and that changes are in the pursuit of improving performance and/or reliability.





!! Important Safety Information !!

- This kit is not suitable for people under the age of 14. Ensure the build is undertaken or supervised by a responsible adult.
- This kit contains small parts – KEEP AWAY from small children.
- Exercise care when using hand tools to prevent injury.
- Please read and follow this build manual carefully.
- The finished kit has exposed moving parts – DO NOT put fingers near any of these parts without first DISSCONNECTING and REMOVING the battery.
- ENSURE electrical parts are installed neatly, wiring is protected from moving parts and that all insulation is intact to prevent risk of fire.
- The speed controller and motor can become very hot in use – DO NOT touch them until they have cooled down.
- ALWAYS follow all safety and operating instructions of the electrical items to be used in conjunction with this kit.
- The finished car can cause injuries in a collision – DO NOT operate in places where it could be involved in a collision with people, animals or vehicles.



Additional Items Required

- | | |
|---|---|
| • Radio System (Transmitter and receiver) | • Wheels*, Tyres and Inserts |
| • Electronic Speed Controller | • Silicone Grease for Differentials |
| • Motor and 48dp Pinion Gear | • Molybdenum Grease |
| • Steering Servo | • Blue Threadlock (e.g. Loctite 242/243) |
| • 2S Lipo Battery | • CA Glue (e.g. Loctite 406) |
| • Battery Charger | • Silicone Oil for Shock Absorbers (400 and 500cst default) |
| • Polycarbonate Paint | • Tools (See list on next page) |

* Most 12mm hex fitment wheels will fit the car.

mgIRC recommends the use of Schumacher wheels to ensure hub clearances and car widths are correct.



Tools Required

- | | | |
|--------------------|-------------------------|-------------------------------|
| • 1.5mm Hex Driver | • 5.5mm M3 Nut Driver | • Side Cutters |
| • 2mm Hex Driver | • 7mm 8mm M5 Nut Driver | • Body Reamer |
| • 2.5mm Hex Driver | • Needle Nose Pliers | • Curved Scissors |
| • 3mm Hex Driver | • M4 Nut Driver | • Soldering Iron (and Solder) |



Build Manual Conventions



Follow the green arrow on each page of this build manual

×2

Repeat this part of the build manual twice.

!! Apply Threadlock !!

Apply blue thread lock to this part of the build.

FL

This part of the build is for the **Front Left** part of the car.

!! Apply Black Grease !!

Apply molybdenum grease to this part of the build.

FR

This part of the build is for the **Front Right** part of the car.

!! Apply Silicone Grease !!

Apply silicone grease to this part of the build

RL

This part of the build is for the **Rear Left** part of the car.

!! Note !!

Red text is used to indicate a note that is important to the build.

RR

This part of the build is for the **Rear Right** part of the car.

The blue column on the left of each page lists the parts and quantities needed to complete that page of the build manual.

- The upper part lists fasteners and bearings with a 1:1 scale image to help identify the correct part.
- The lower part lists the mglRC parts required.



M2x8HTCS

×5

XCH001

×1

XCH002

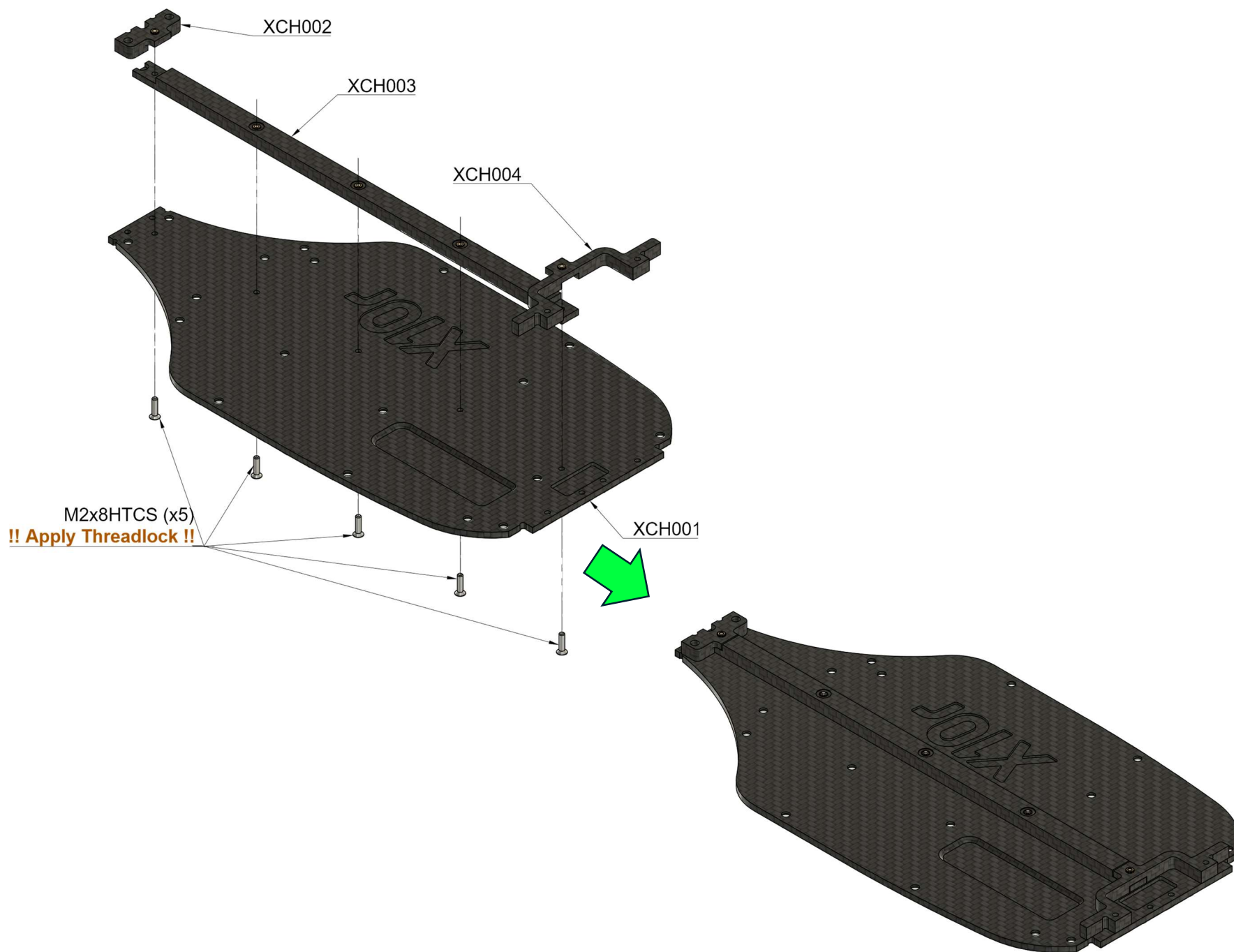
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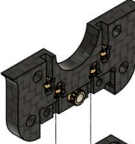
XCH003

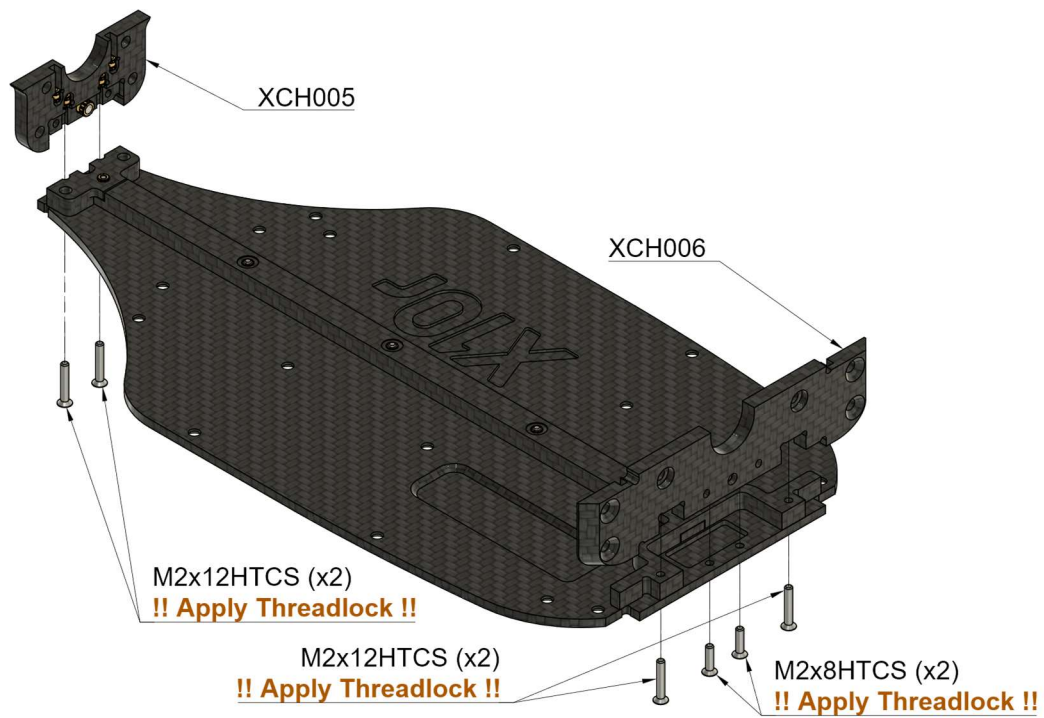
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XCH004

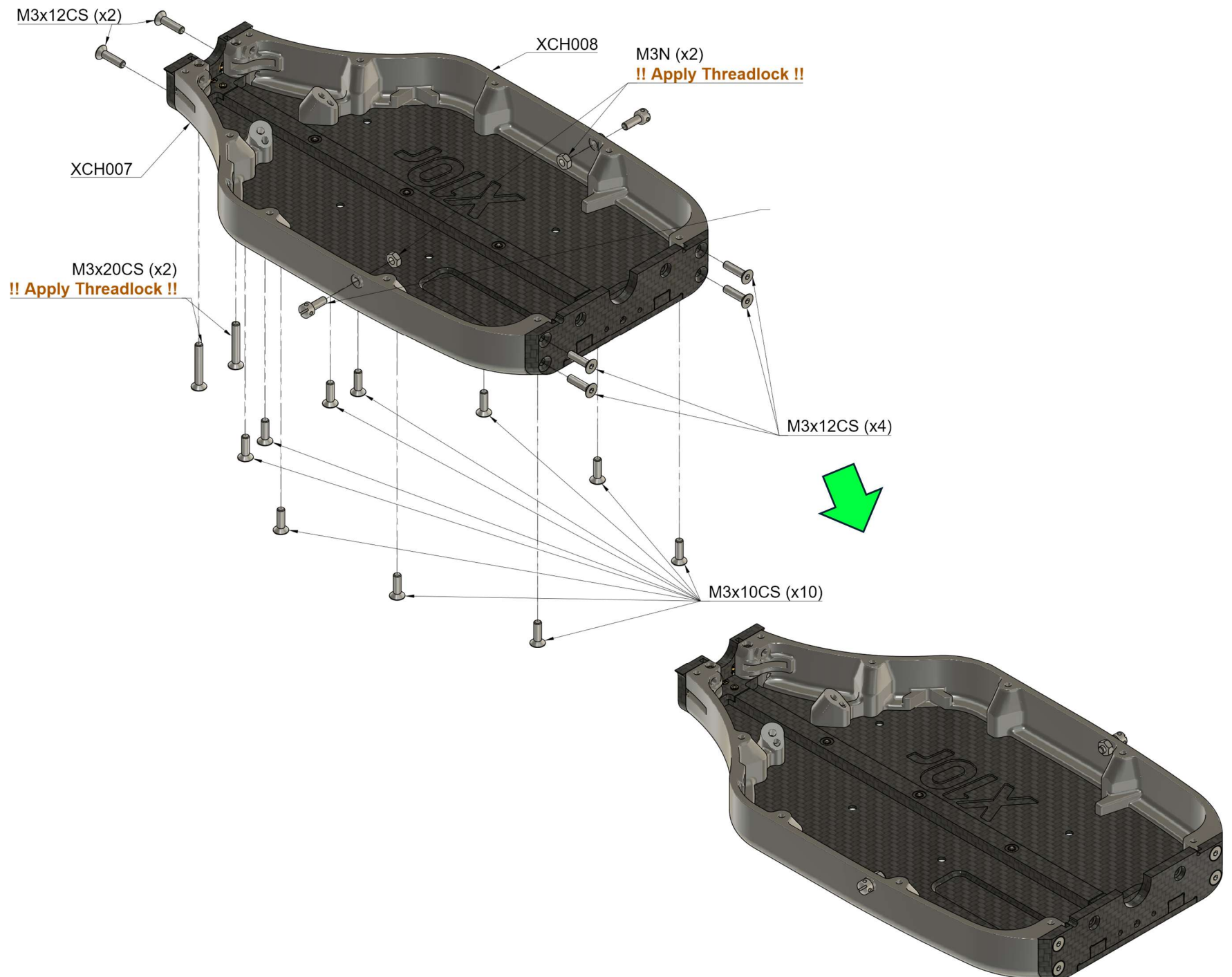
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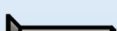


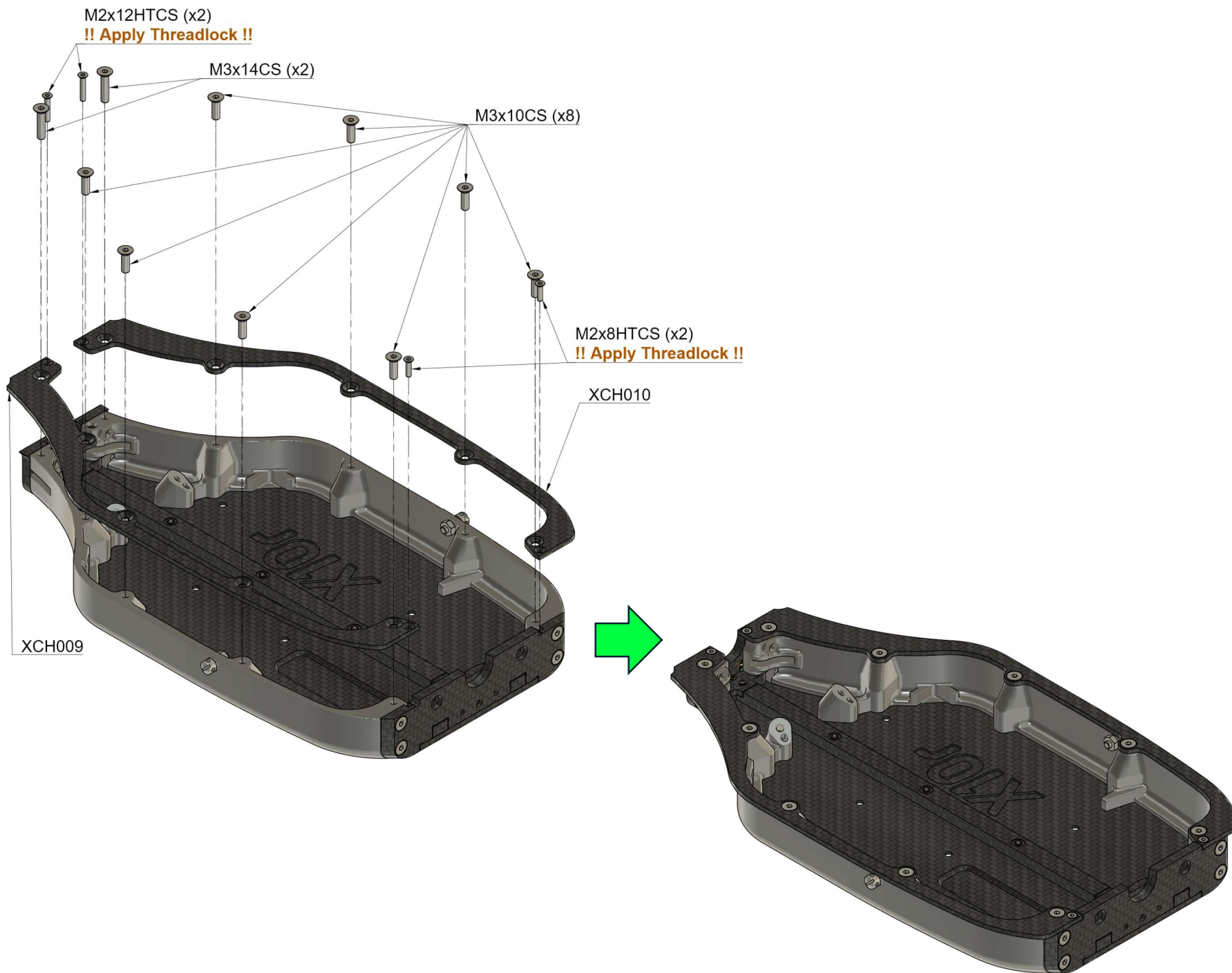
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	M2x12HTCS	×4
	XCH005	×1
	XCH006	×1



	M3x10CS	×10
	M3x12CS	×6
	M3x20CS	×2
	BPST	×2
	M3N	×2
	XCH007	×1
	XCH008	×1



-  M2x8HTCS ×2
-  M2x12HTCS ×2
-  M3x10CS ×8
-  M3x14CS ×2
- 
- XCH009 ×1
- XCH010 ×1

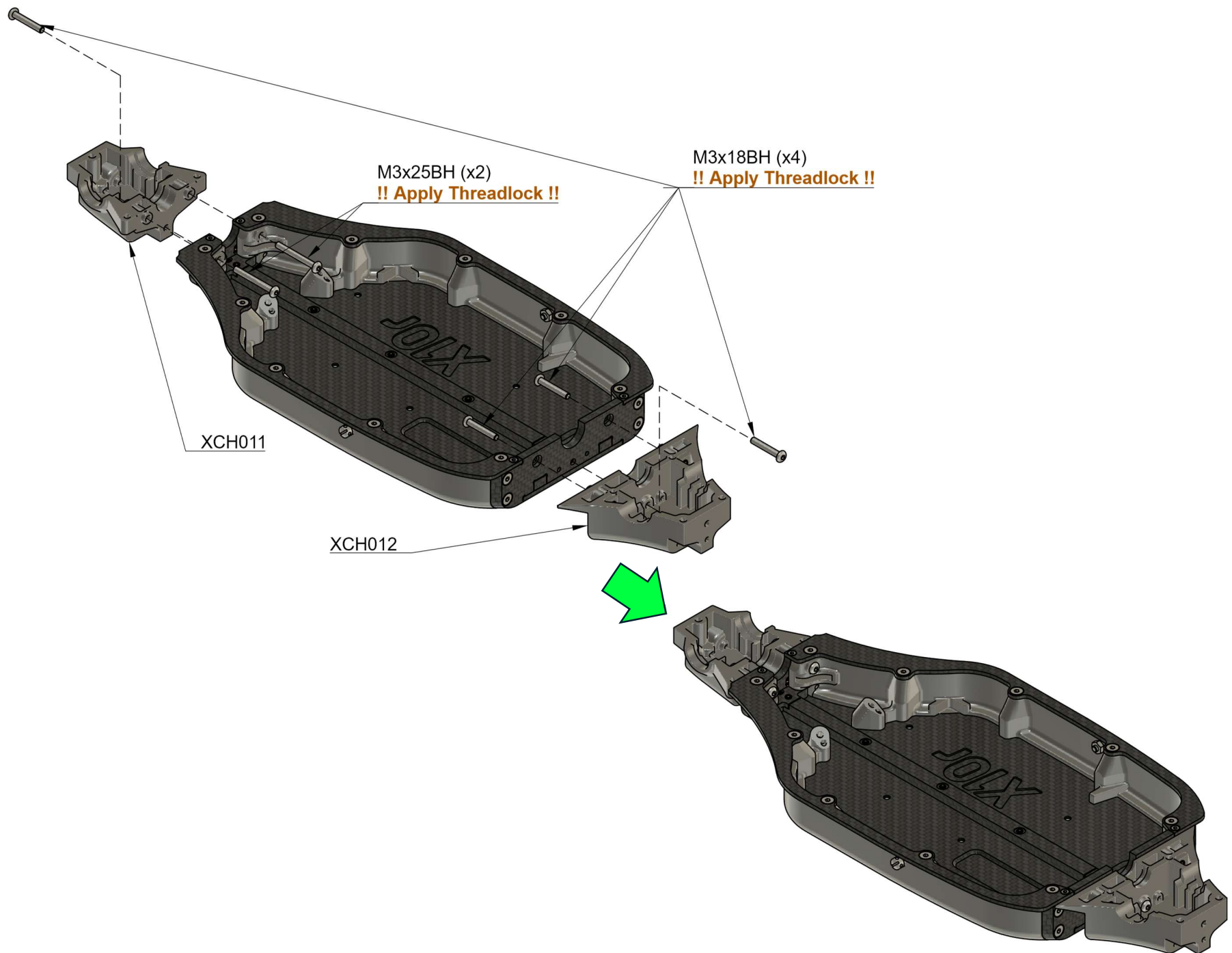


M3x18BH ×4

M3x25BH ×2

XCH011 ×1

XCH012 ×1





M8CW

×4



XTR005

×1



5x2OR

×12

XTR001

×1

XTR002

×2

XTR003

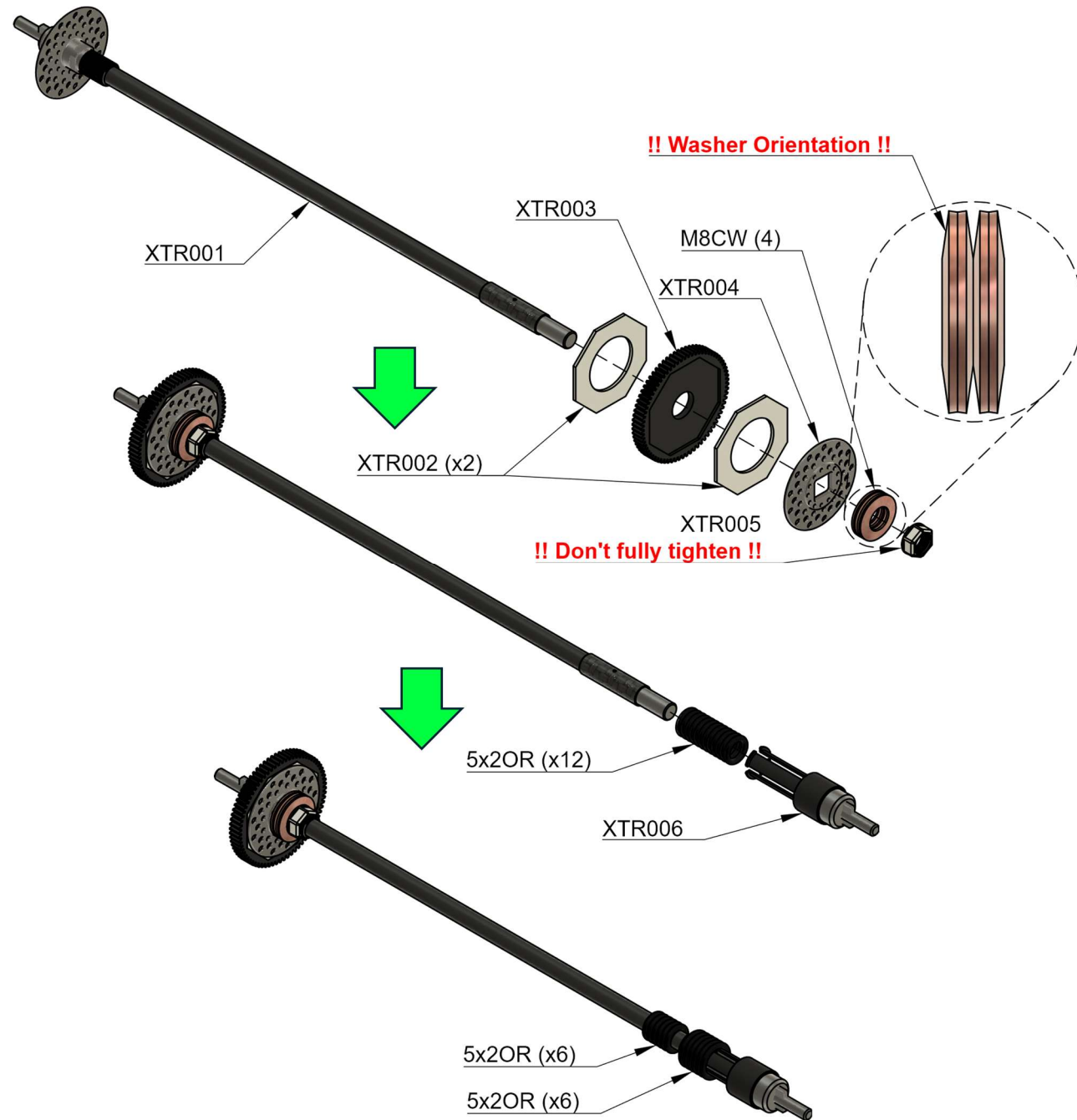
×1

XTR004

×1

XTR006

×1





8x12x3.5FB

×2

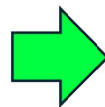
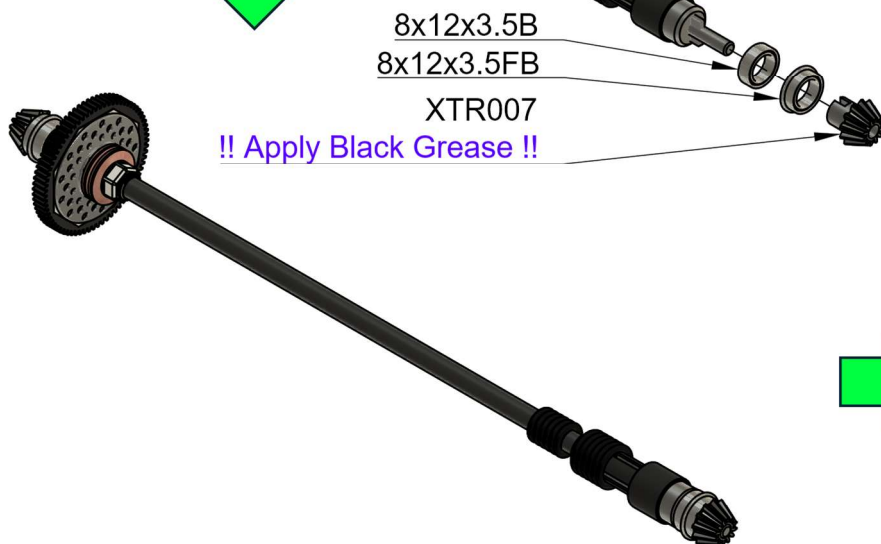


8x12x3.5B

×2

XTR007

×2





M2.5x20CH

×2



M2.5CW

×20



2.5x6TB

×2



3.175SB

×20



5x8x2B

×4

XTR008

×2

XTR009

×4

XTR010

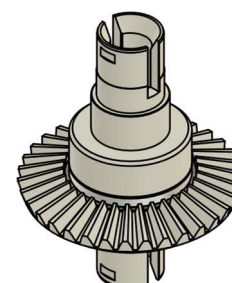
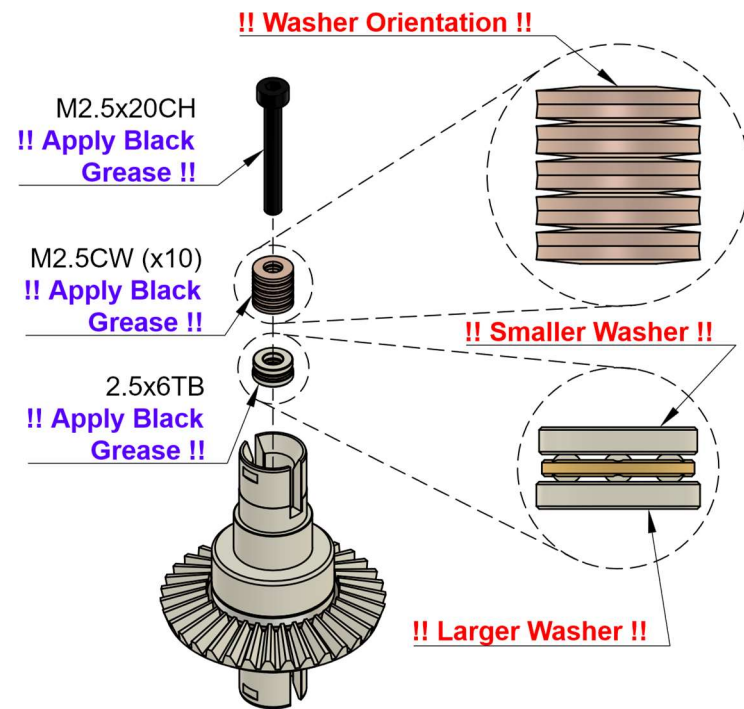
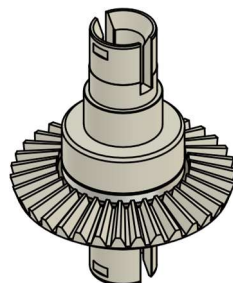
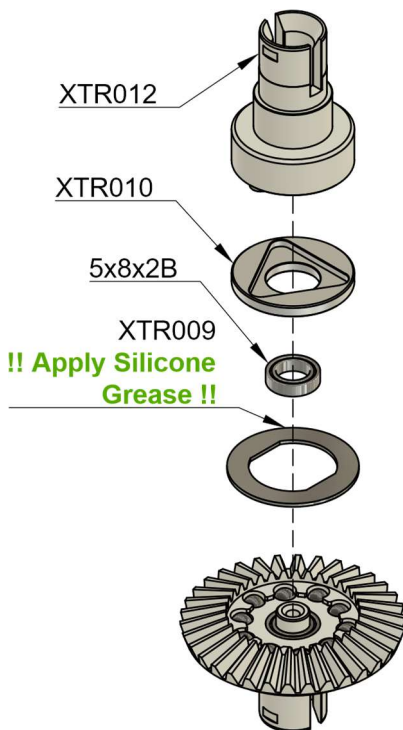
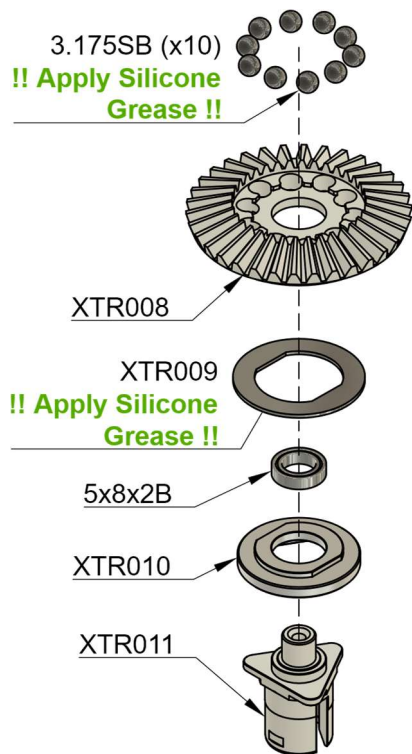
×4

XTR011

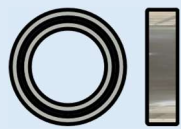
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XTR012

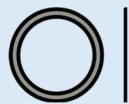
×2



×2



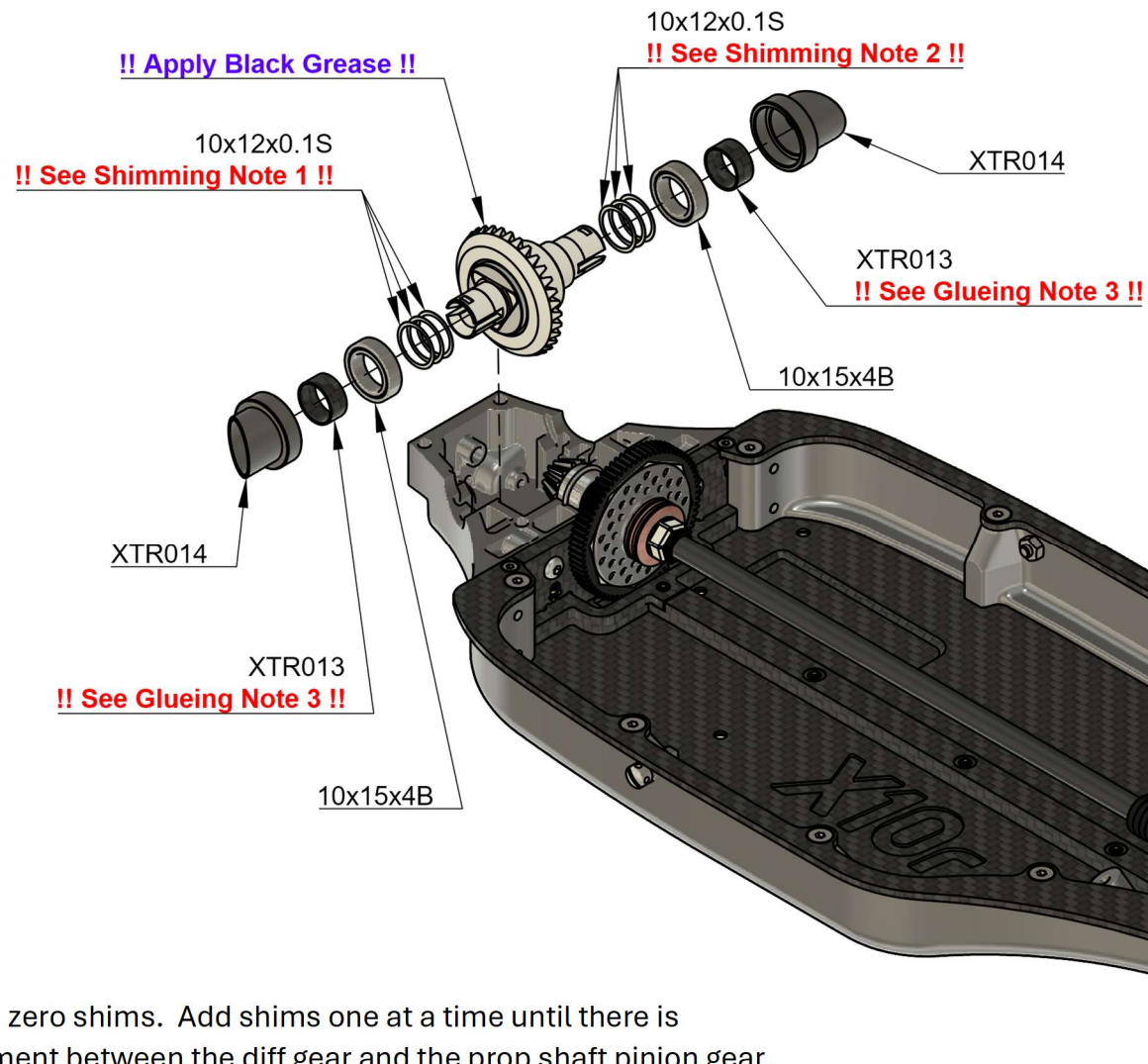
10x15x4B ×2



10x12x0.1S

XTR013 ×2

XTR014 ×2



Shimming Note 1:

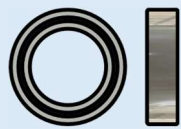
Start with zero shims. Add shims one at a time until there is no movement between the diff gear and the prop shaft pinion gear. Do this before Shimming Note 2.

Shimming Note 2:

Start with zero shims. Add shims one at a time until the diff has no sideways movement within the gearbox. Do this before Glueing Note 3.

Glueing Note 3:

Apply 2 small spots of CA glue into the recesses on the outside of the diff outdrives then slide XTR013 over the outdrive until flush with the outer edge of the outdrive. If re-shimming is required, XTR013 can be prised from the outdrive before re-glueing.



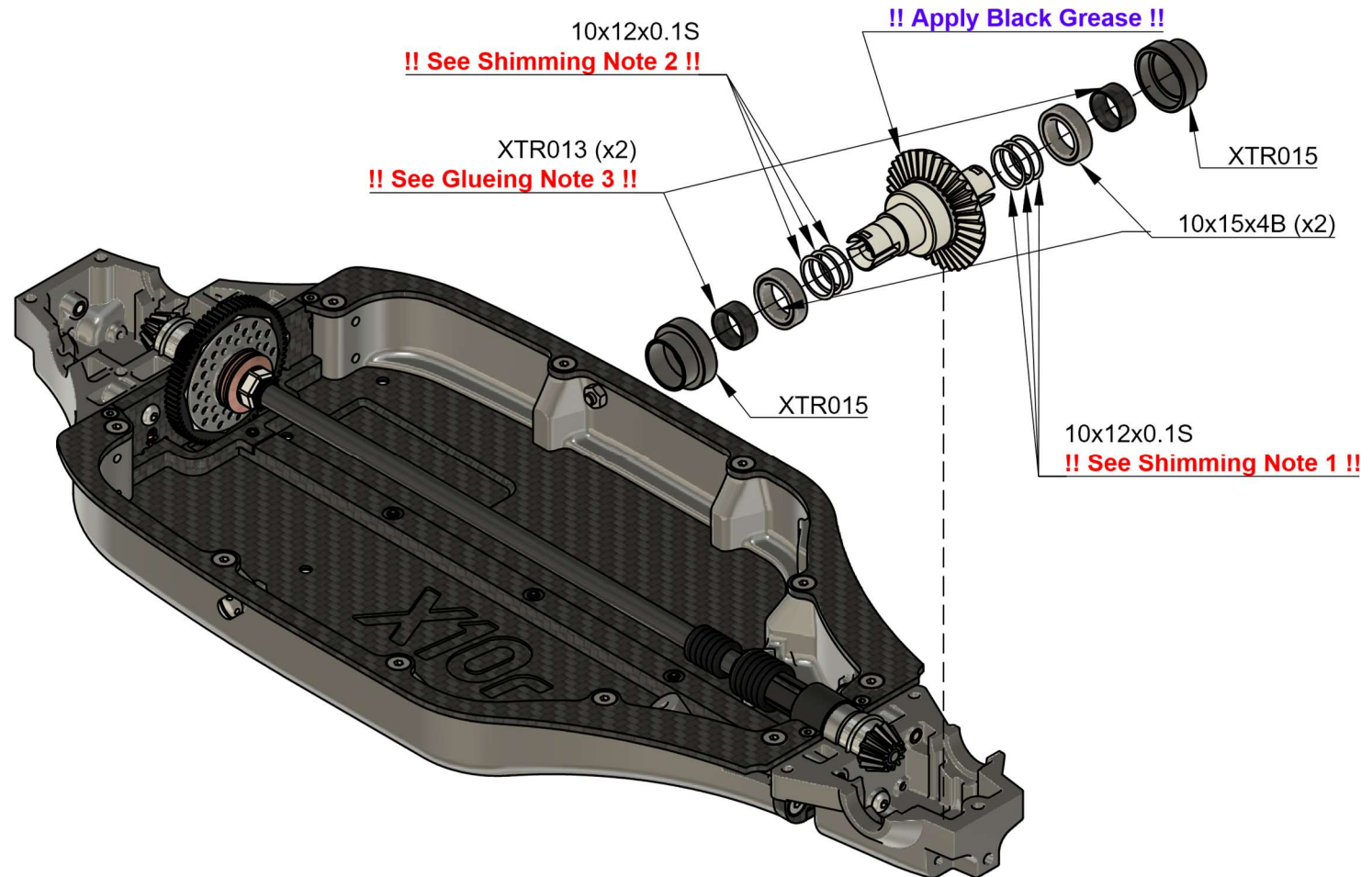
10x15x4B ×2



10x12x0.1S

XTR013 ×2

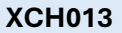
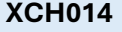
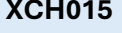
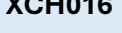
XTR015 ×2

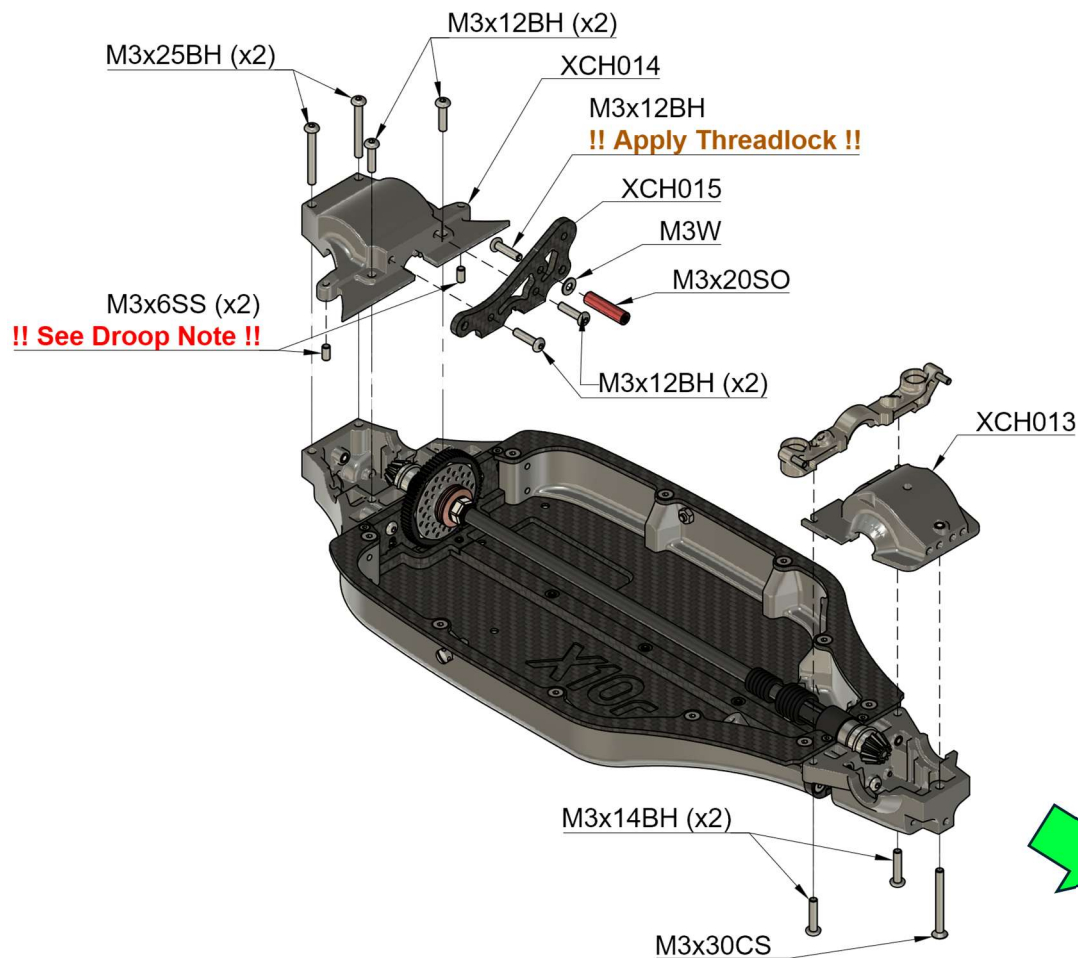


Shimming Note 1: Start with zero shims. Add shims one at a time until there is no movement between the diff gear and the prop shaft pinion gear. Do this before Shimming Note 2.

Shimming Note 2: Start with zero shims. Add shims one at a time until the diff has no sideways movement within the gearbox. Do this before Glueing Note 3.

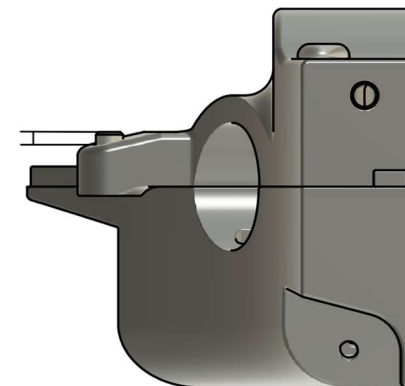
Glueing Note 3: Apply 2 small spots of CA glue into the recesses on the outside of the diff outdrives then slide XTR013 over the outdrive until flush with the outer edge of the outdrive. If re-shimming is required, XTR013 can be prised from the outdrive before re-glueing.

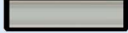
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	M3x12BH	×5
	M3x6SS	×2
	M3W	×1
	M3x30CS	×1
	M3x14BH	×2
	M3x20SO	×1
	XCH013	×1
	XCH014	×1
	XCH015	×1
	XCH016	×1

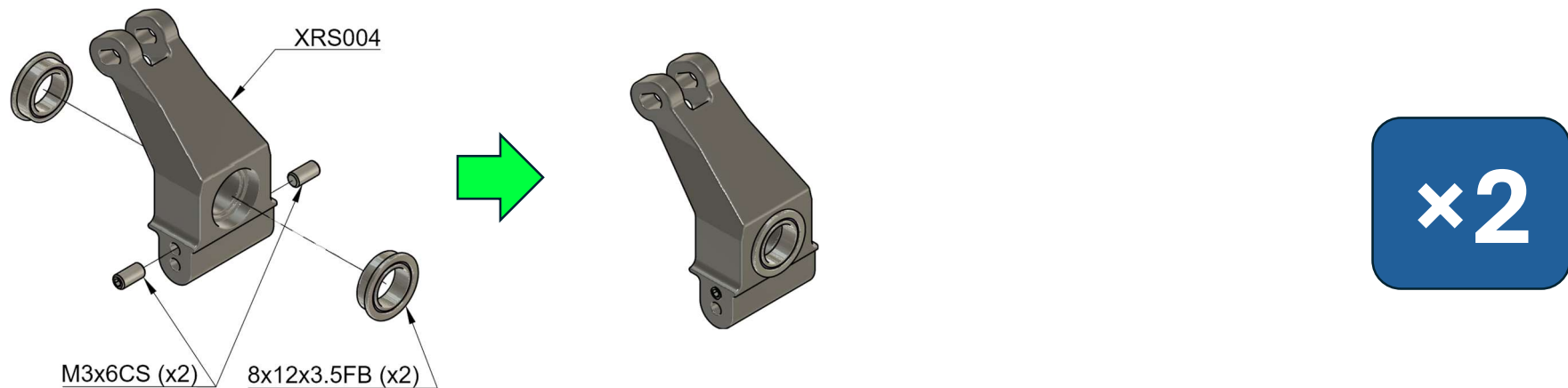
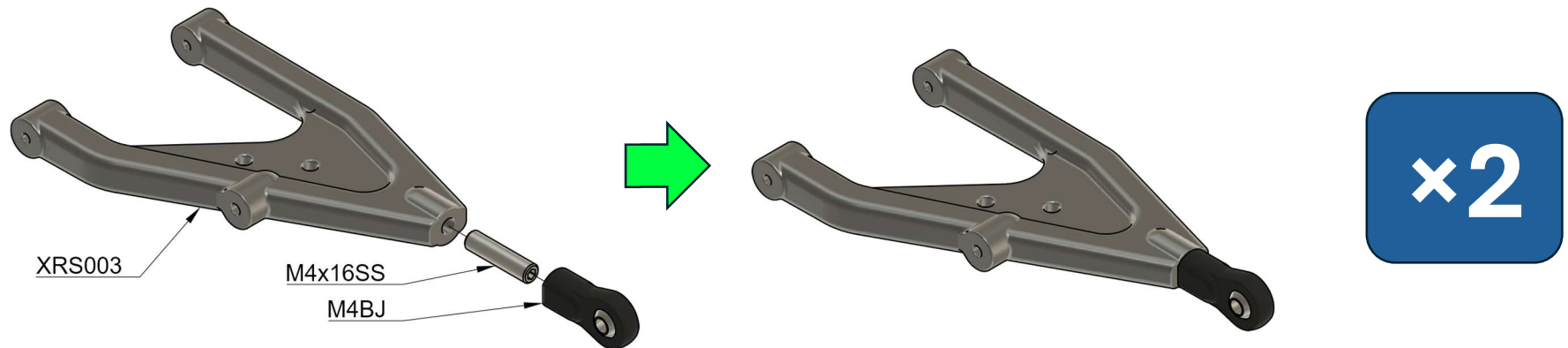
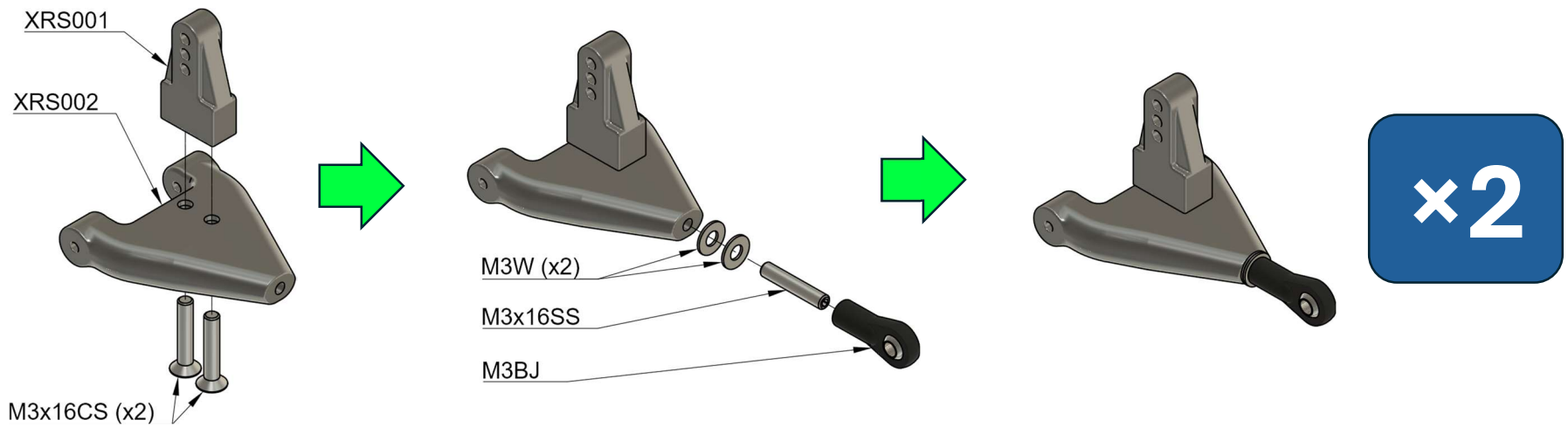


Droop Note:

These set screws can be used to limit suspension droop to adjust the handling of the car. Initial setting is 1.0mm



- | | | |
|---|------------|----|
|  | M3x16CS | ×4 |
|  | M3x16SS | ×2 |
|  | M3x6SS | ×4 |
|  | M3W | ×4 |
|  | M4x16SS | ×2 |
|  | 8x12x3.5FB | ×4 |
|  | M3BJ | ×2 |
|  | M4BJ | ×2 |
| <hr/> | | |
| XRS001 | ×2 | |
| XRS002 | ×2 | |
| XRS003 | ×2 | |
| XRS004 | ×2 | |



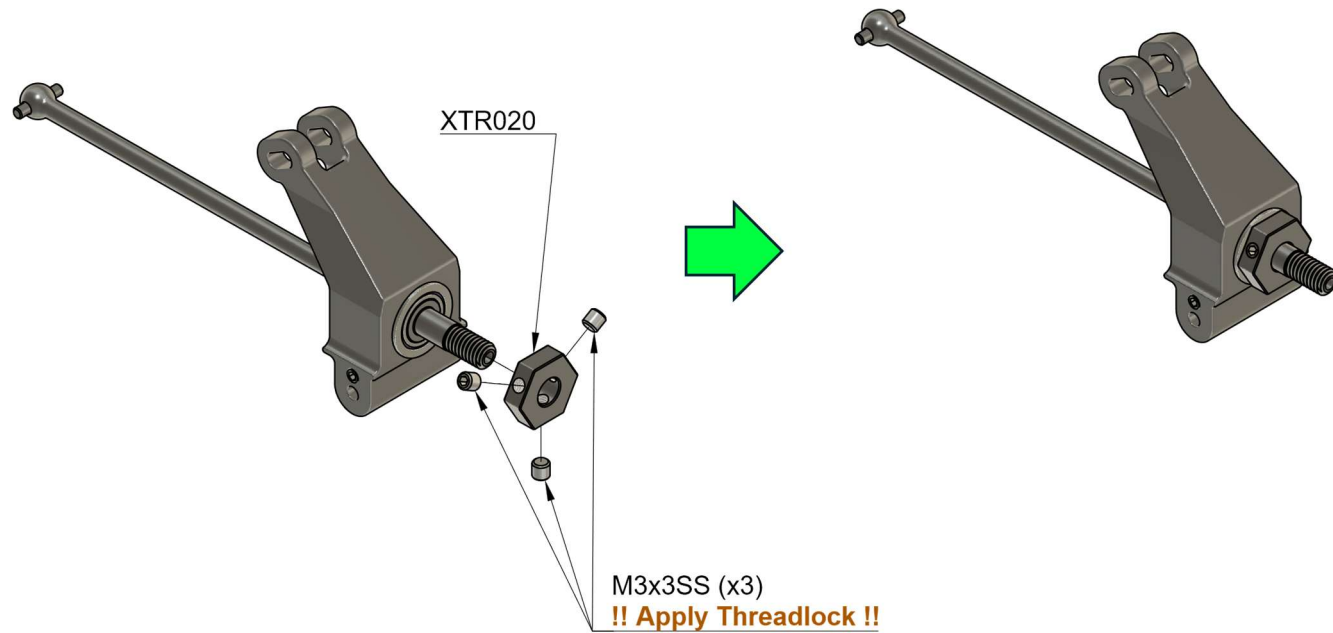
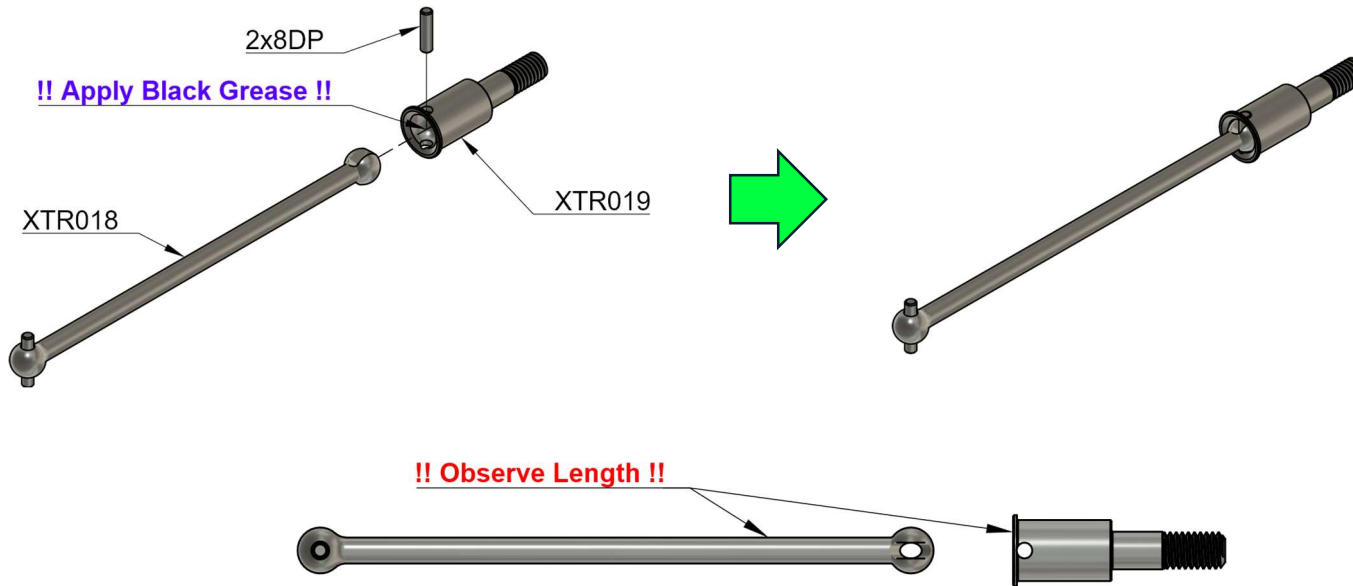
 2x8DP ×2

 M3x3SS ×6

XTR018 ×2

XTR019 ×2

XTR020 ×2





M3x18BH

×2



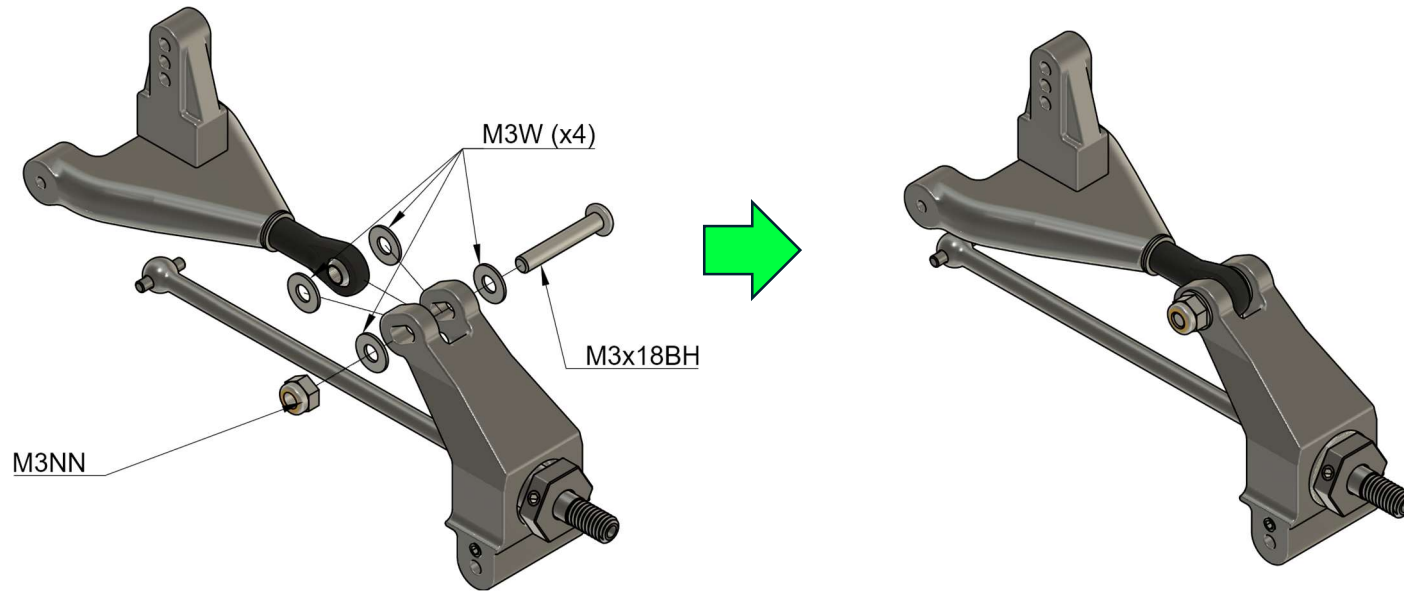
M3W

×8

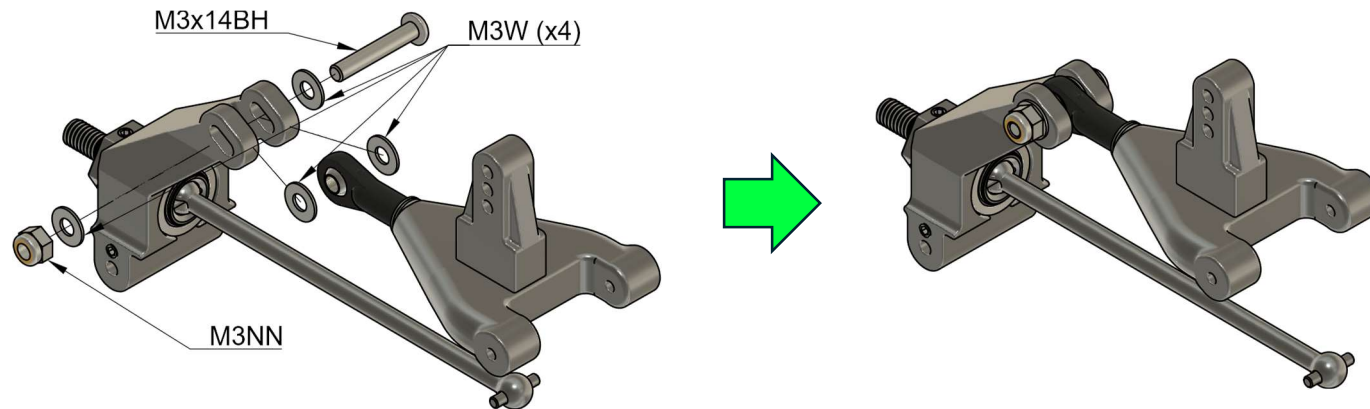


M3NN

×2



RR



RL



M3x14BH

×2



M3W

×2



M3x14CS

×4



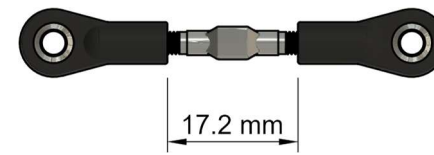
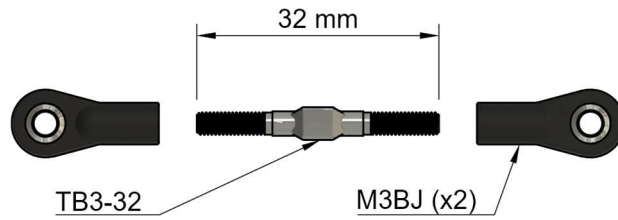
M3BJ

×4

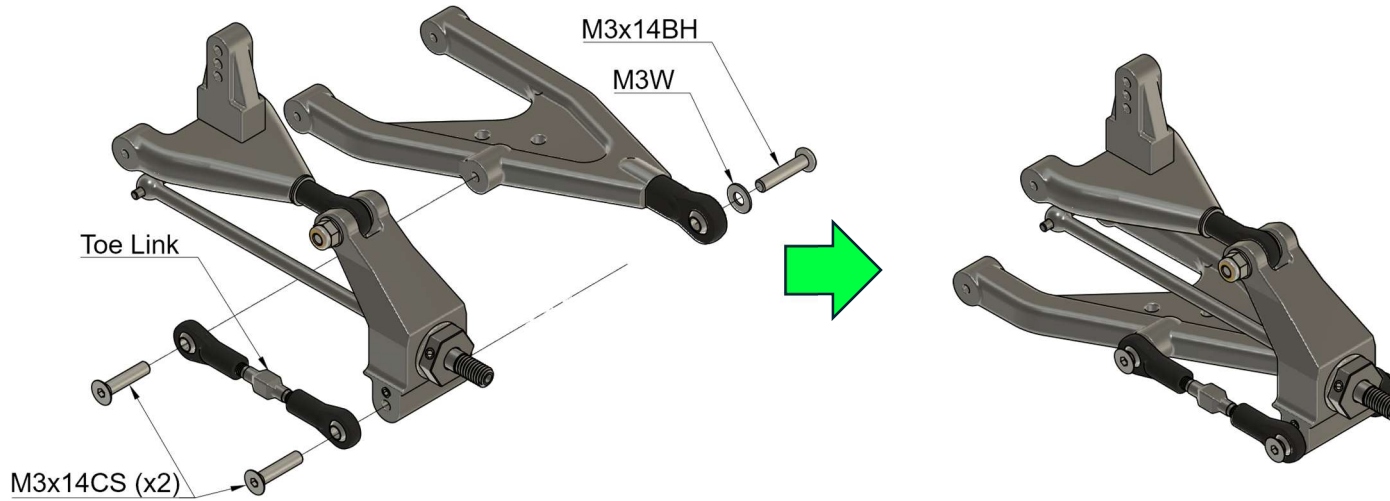


TB3-32

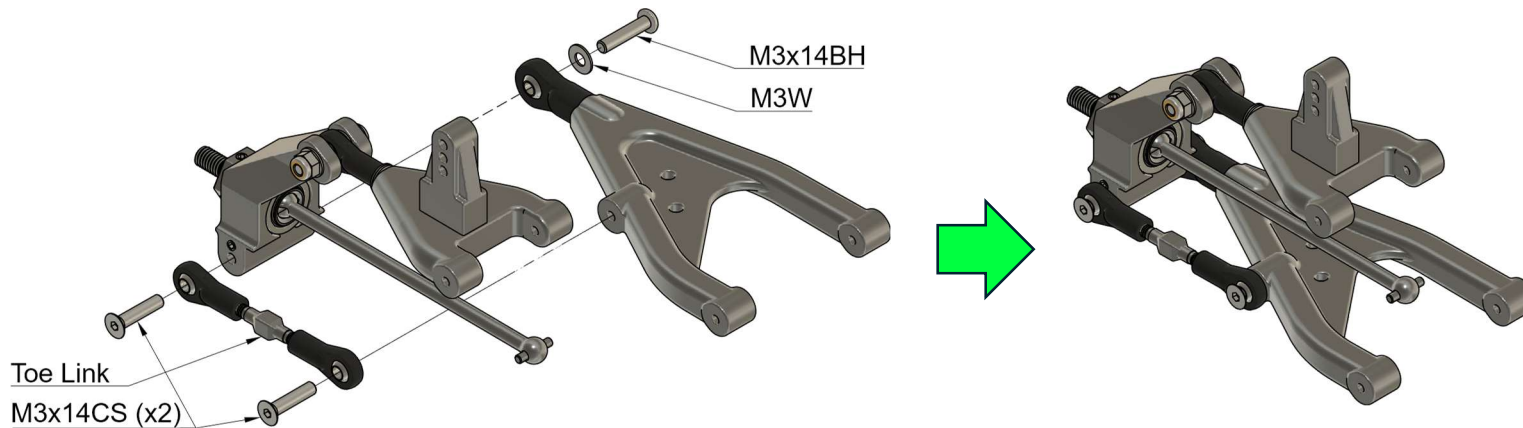
×2



×2



RR



RL

 M3x5BH ×2

 M3x10CS ×6

 M3W ×2

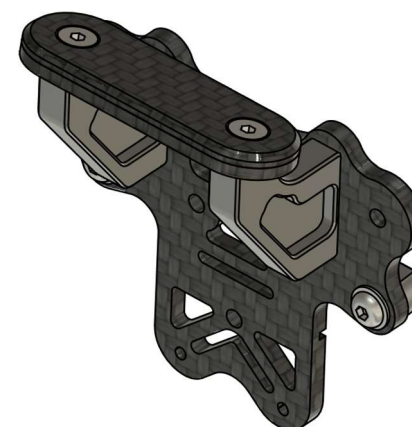
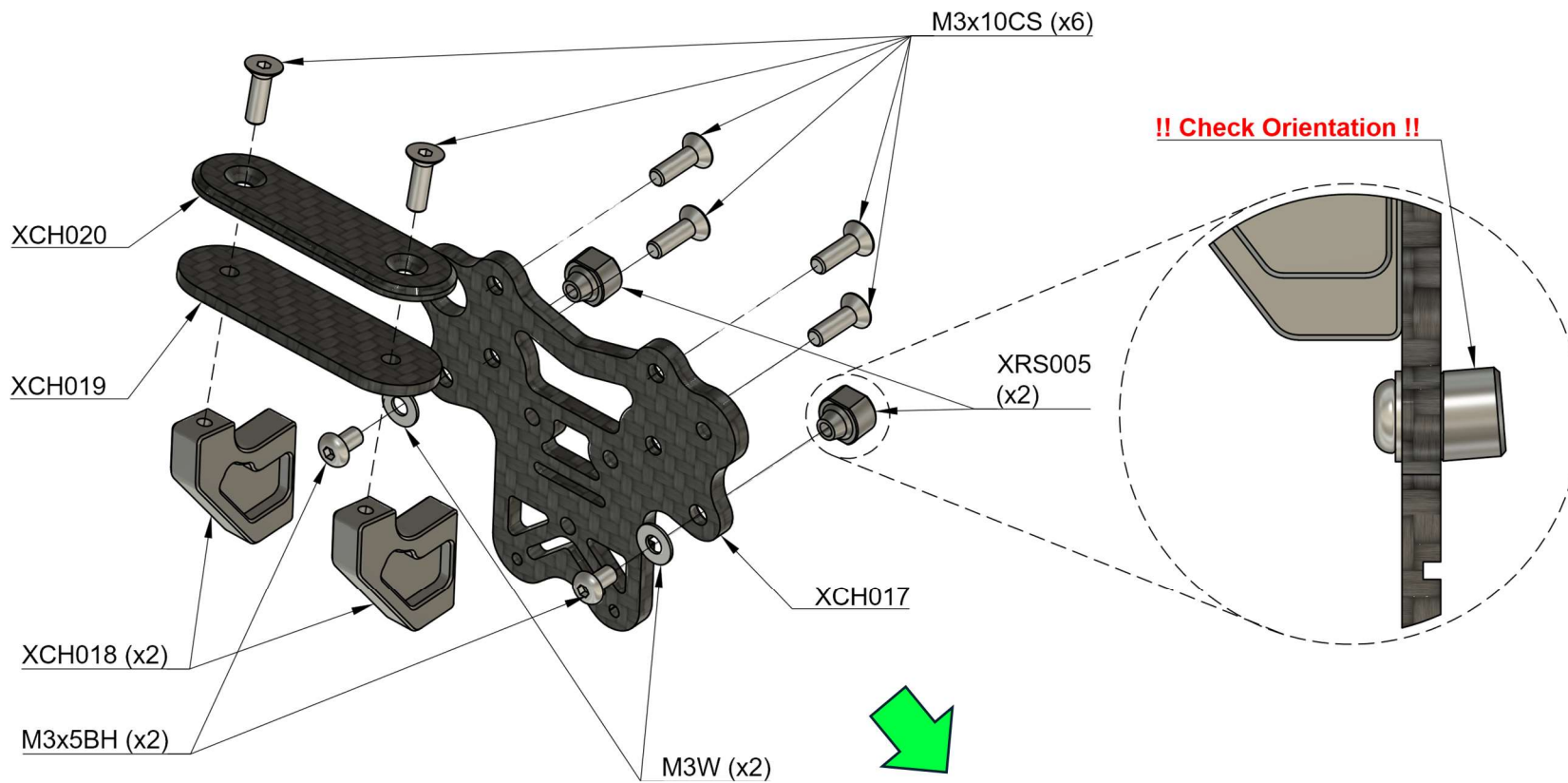
XCH017 ×1

XCH018 ×2

XCH019 ×1

XCH020 ×1

XRS005 ×2





M3x5BH

x2



M3x12BH

x2



M3W

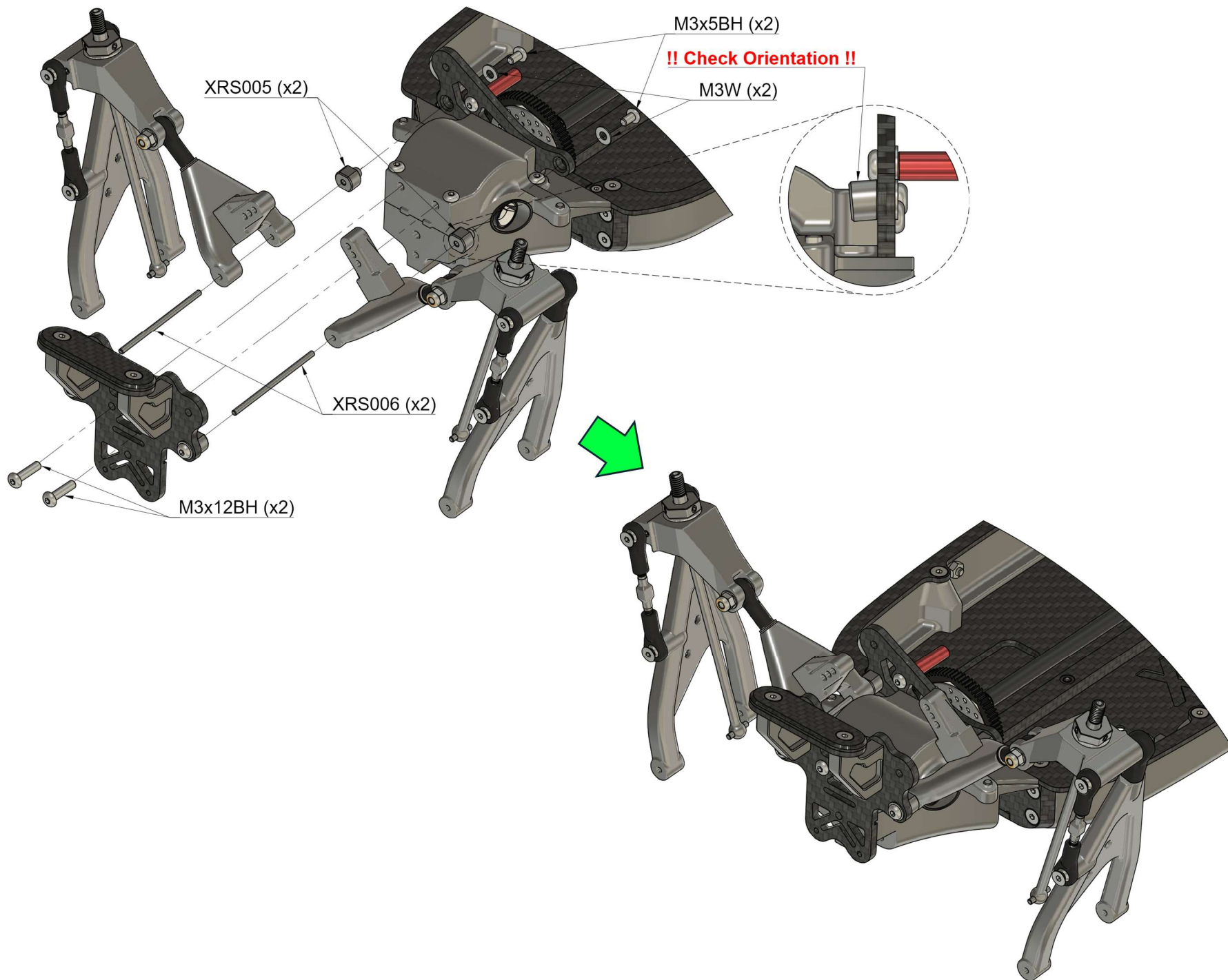
x2

XRS005

x2

XRS006

x2





M3x14CS

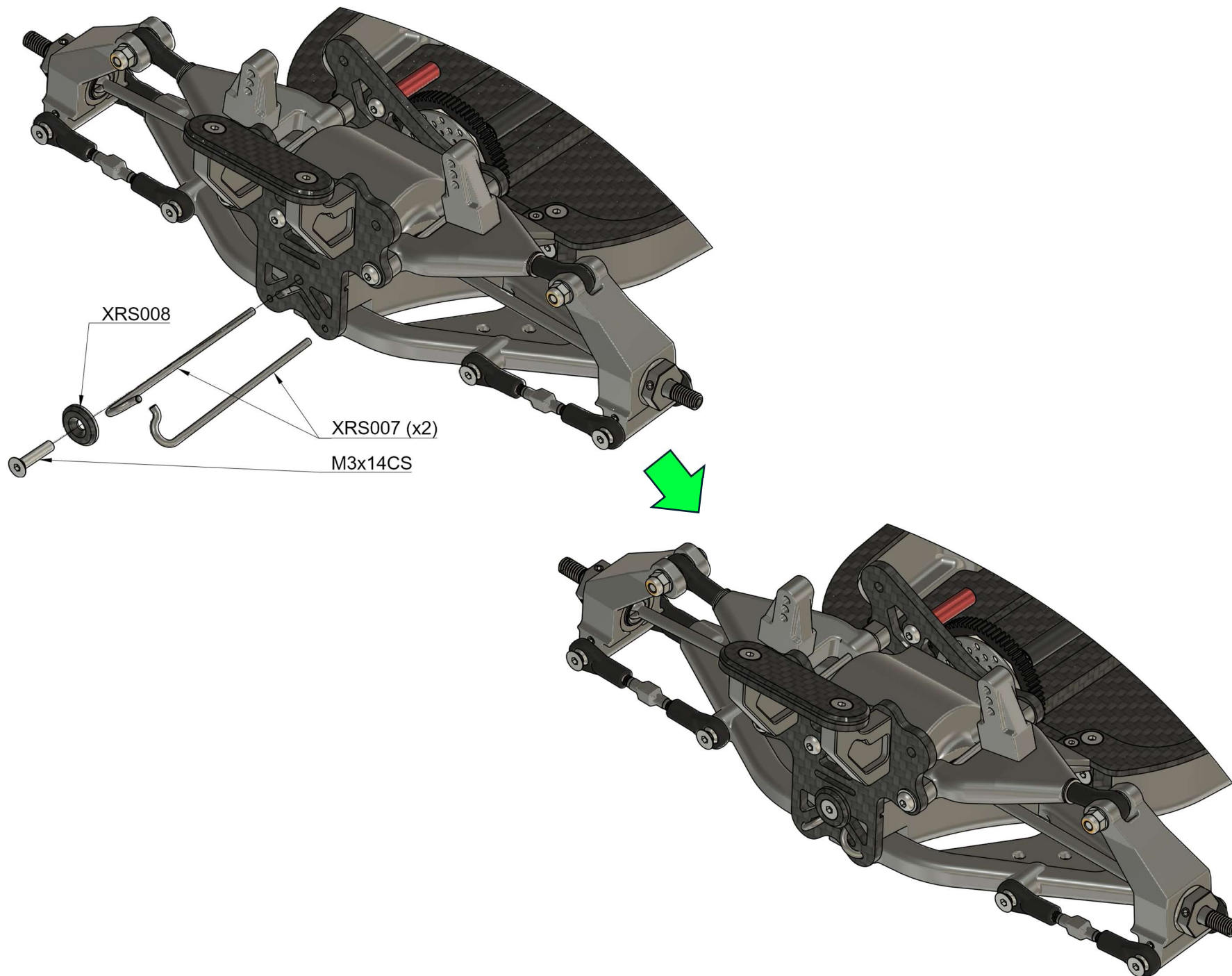
×1

XRS007

×2

XRS008

×1





M4W

×4



M4x16SS

×4



M4BJ

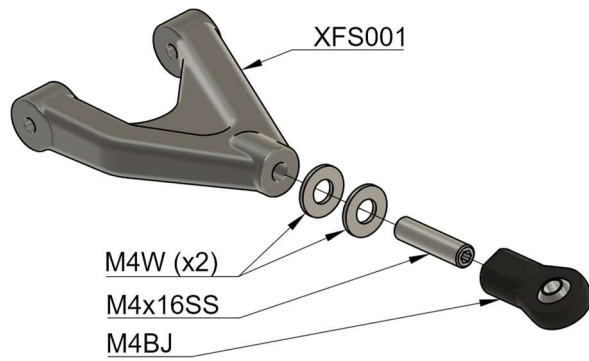
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XFS001

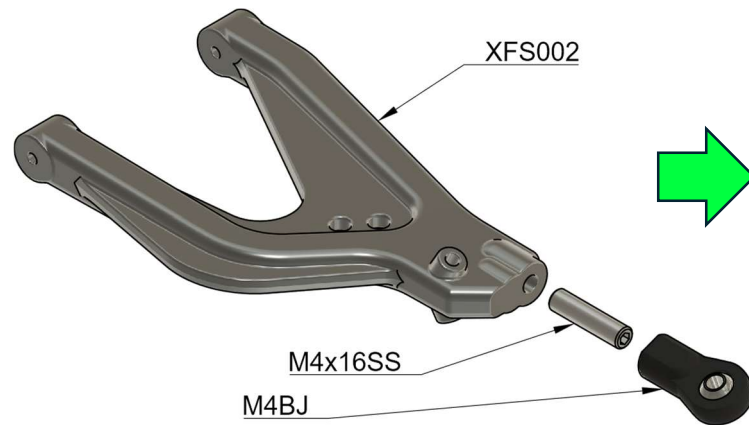
×2

XFS002

×2



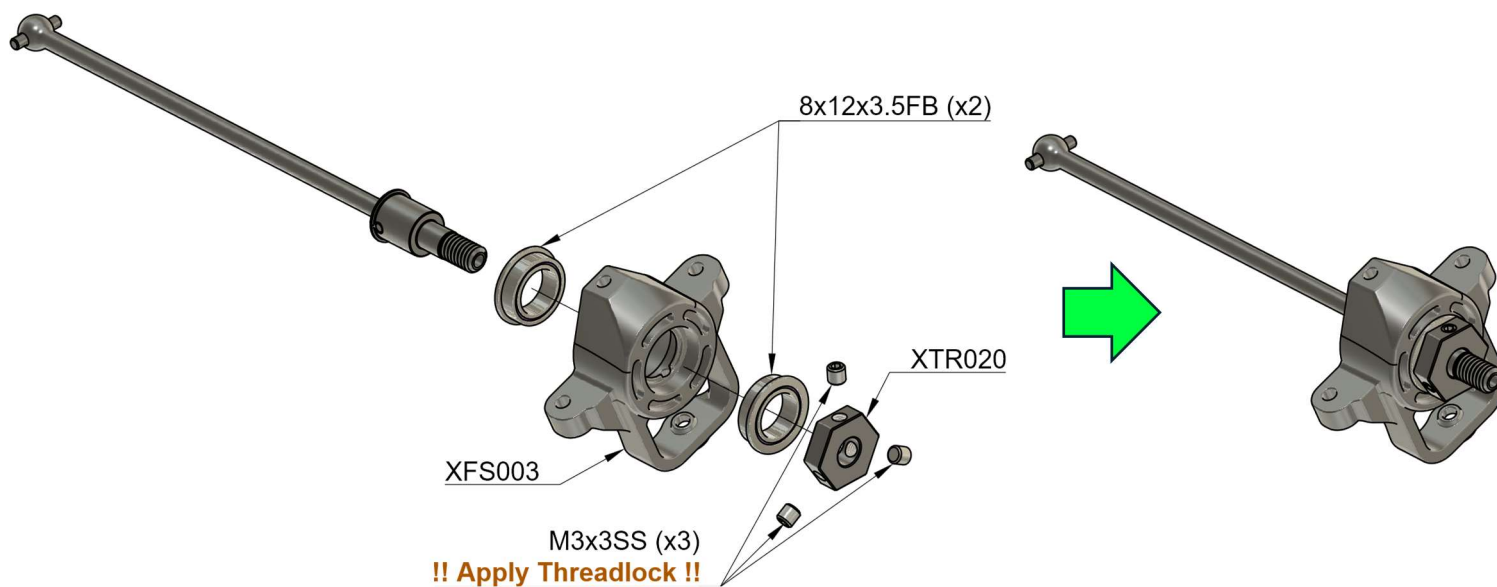
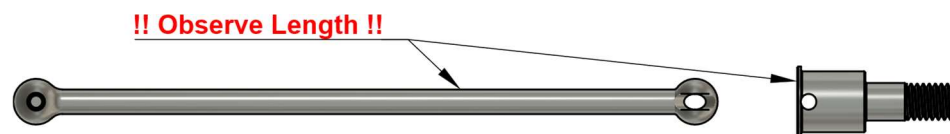
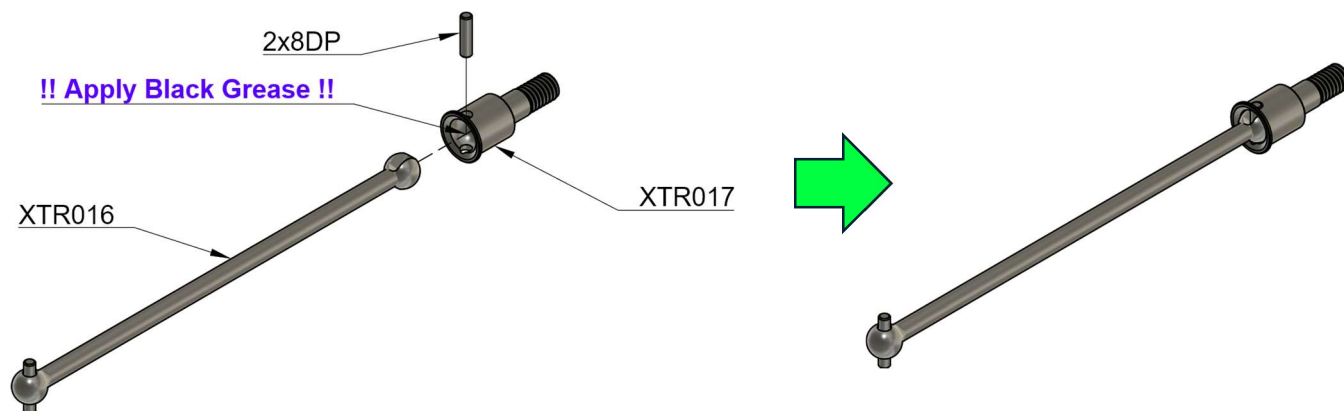
×2



×2

	M3x3SS	×6
	2x8DP	×2
	8x12x3.5FB	×4

XTR016	×2
XTR017	×2
XTR020	×2
XFS003	×2





M3x14CS

×2



M3x16CS

×1



3x5x2S

×1



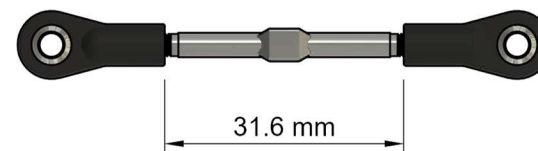
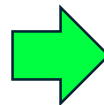
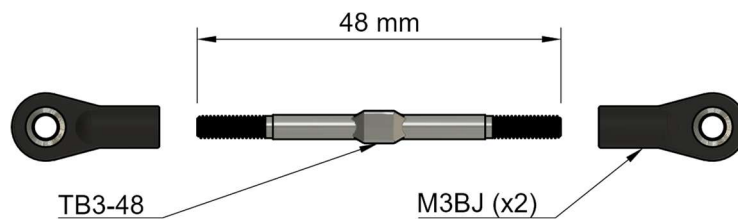
M3BJ

×4

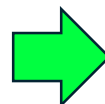
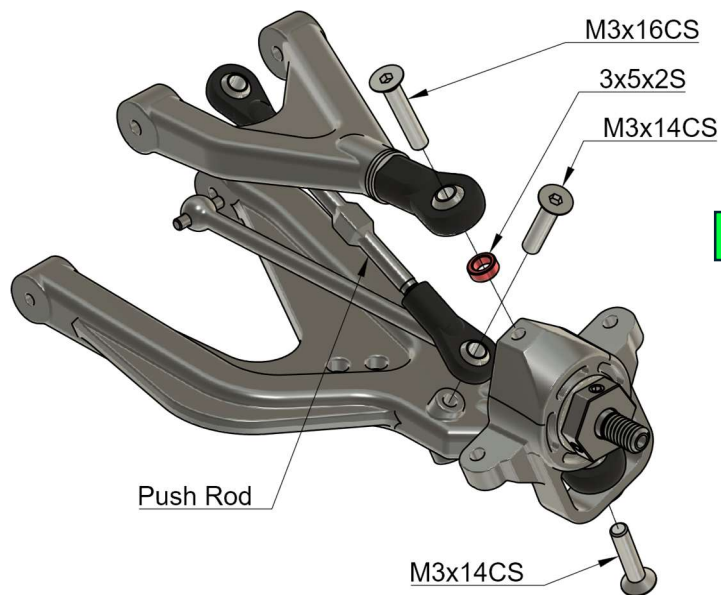


TB3-48

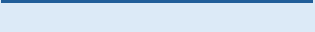
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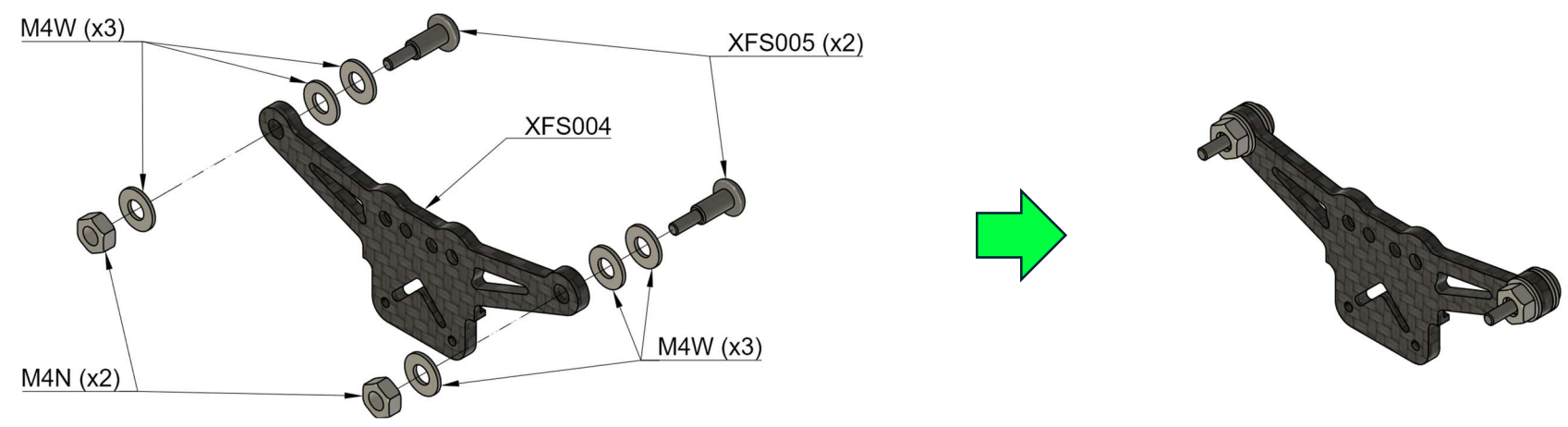
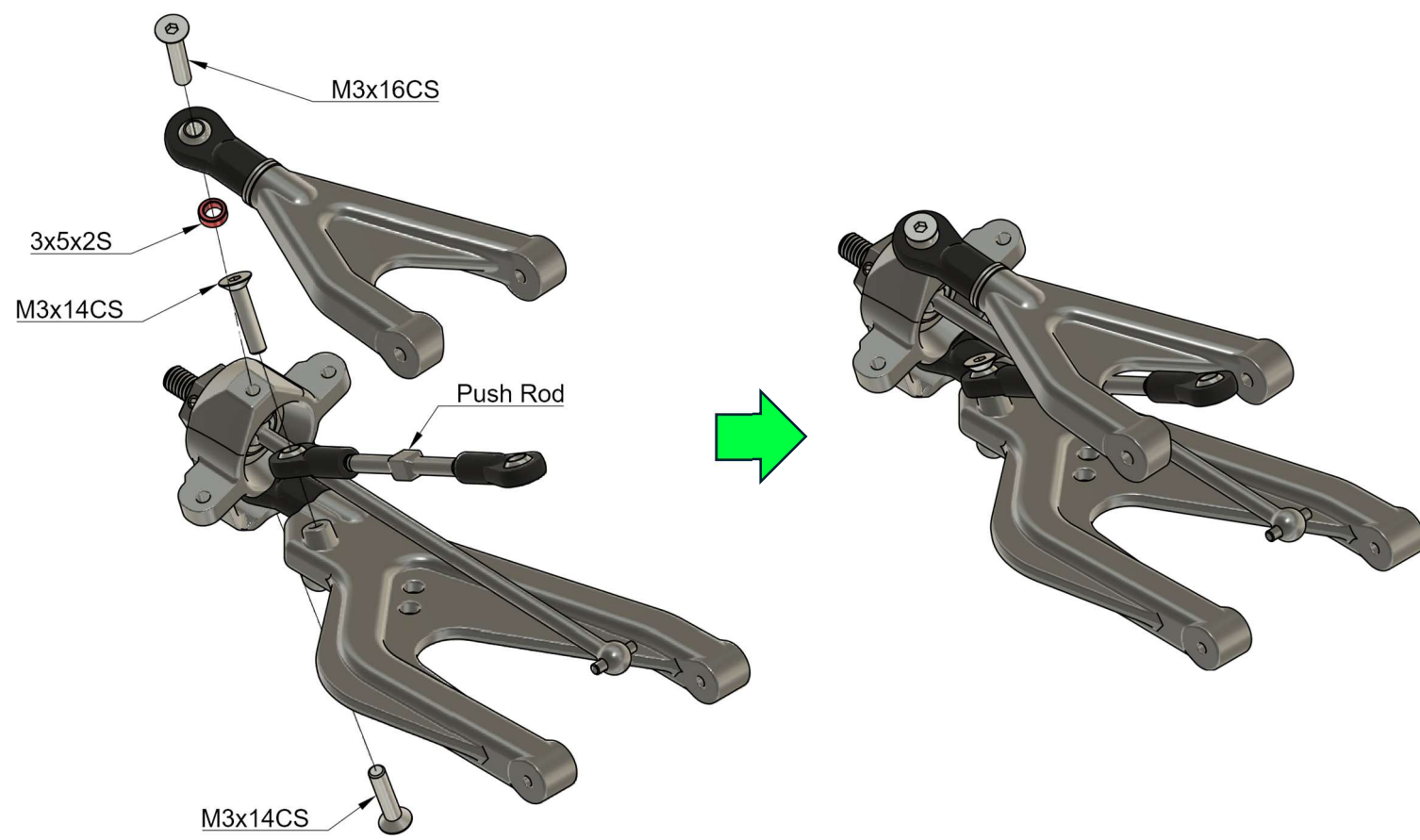


×2



FR

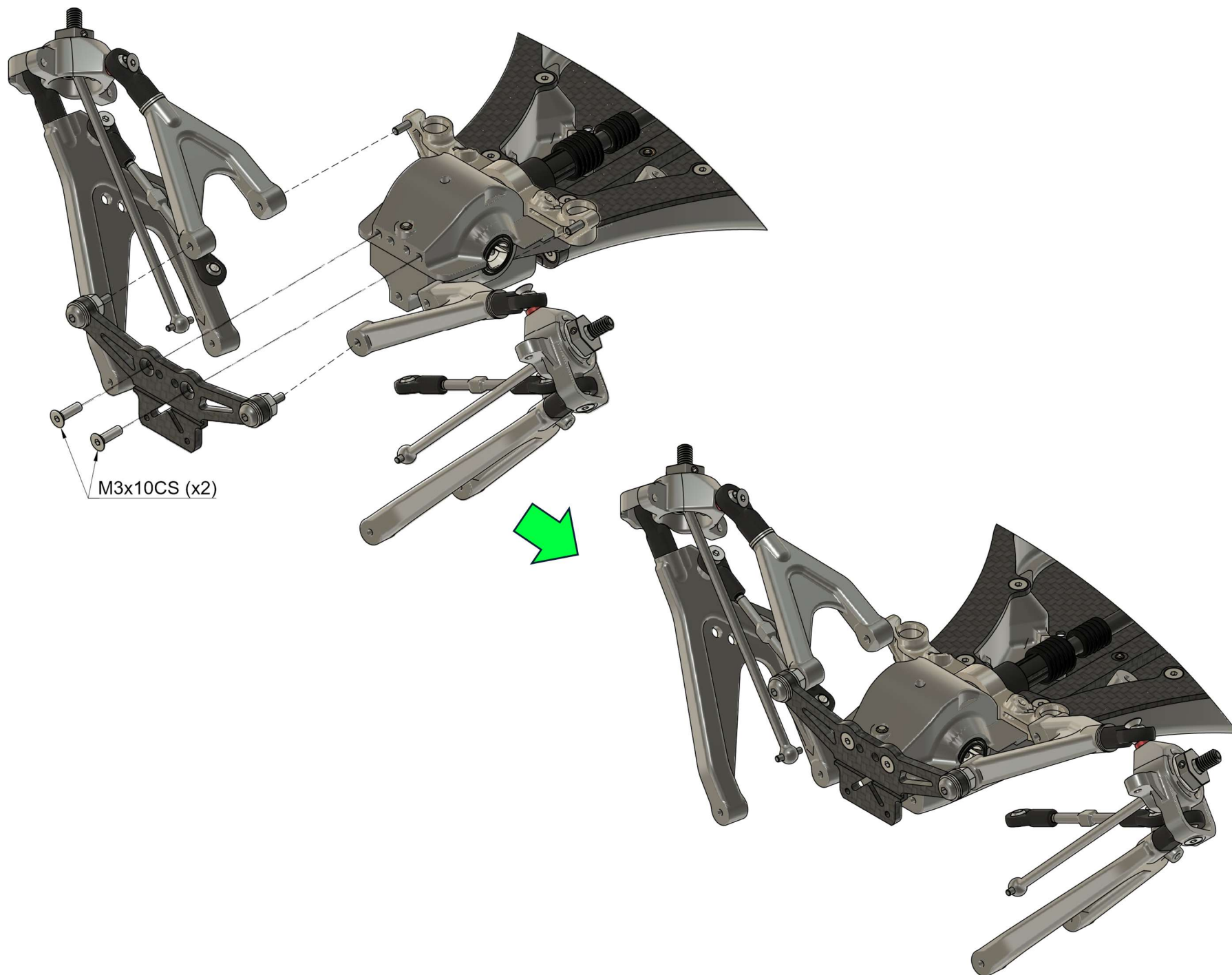
-  M3x14CS x2
-  M3x16CS x1
-  3x5x2S x1
-  M4W x6
-  M4N x2
-  XFS004 x1
-  XFS005 x2





M3x10CS

x2





M3x14BH

x2

XCH021

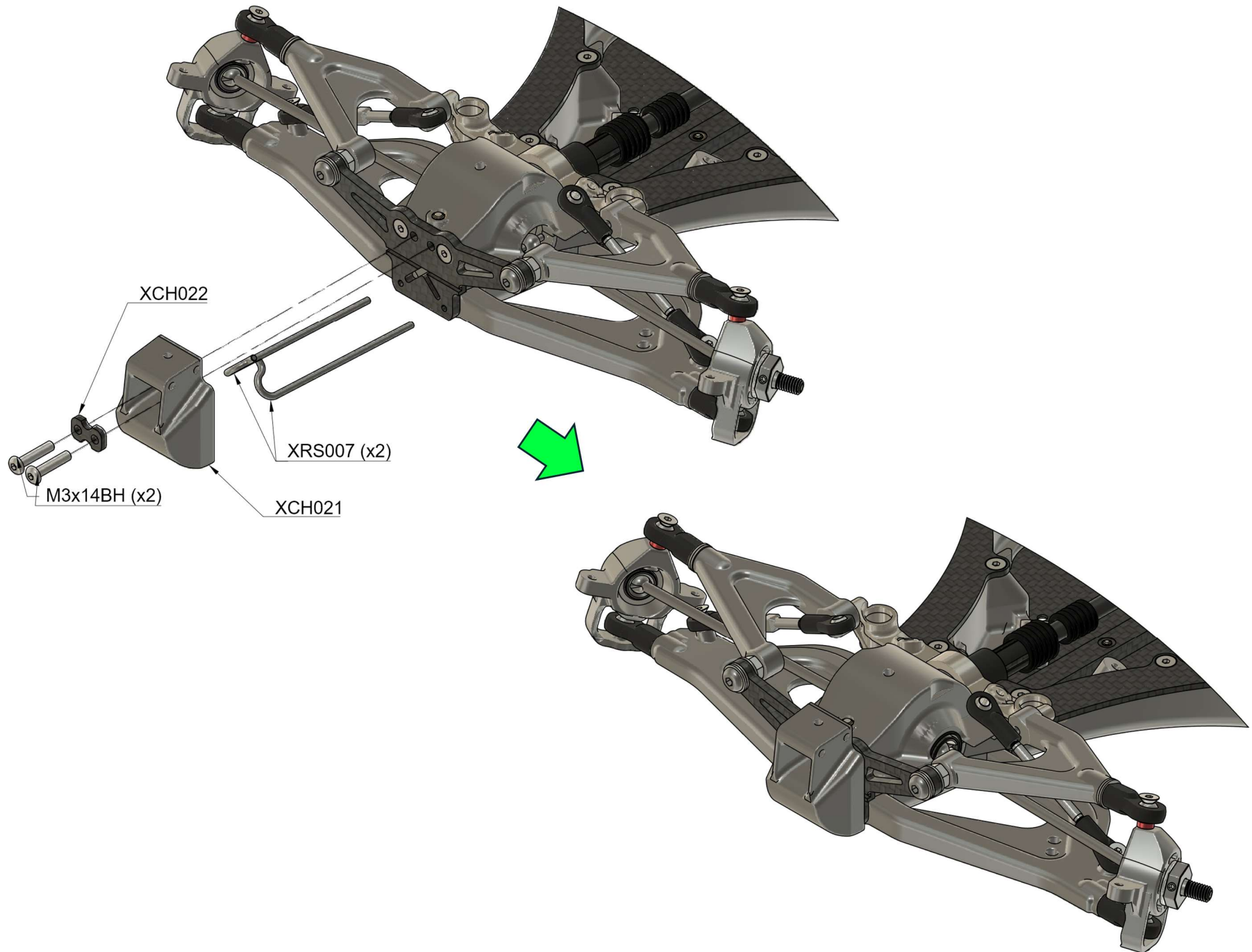
x1

XCH022

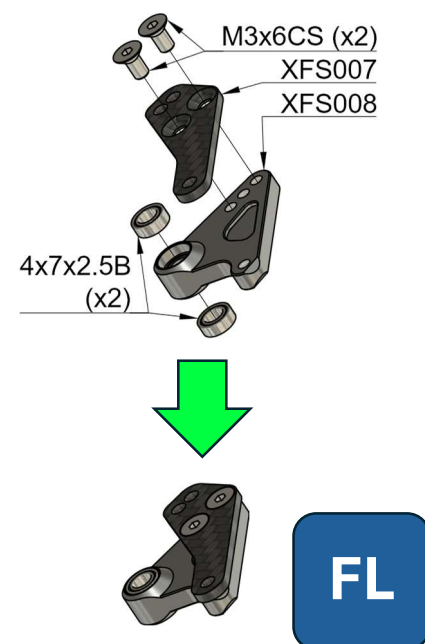
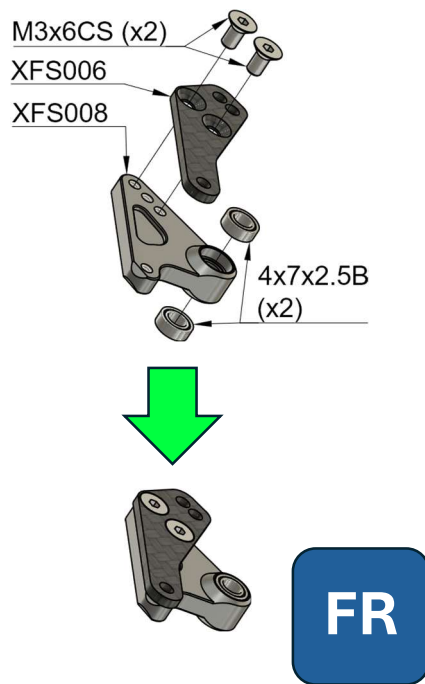
x1

XRS007

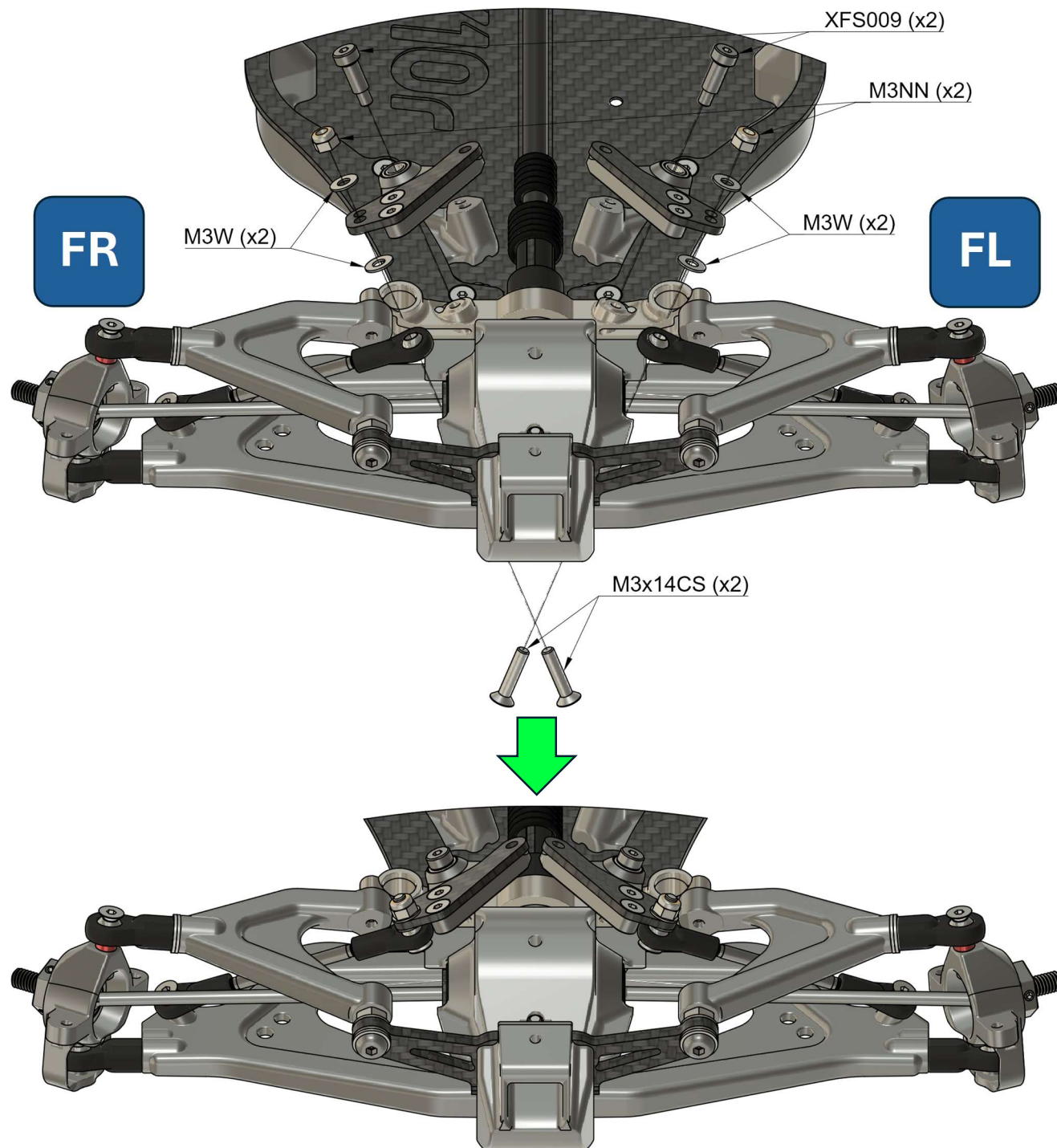
x2



-  **M3x6CS** ×4
-  **M3x14CS** ×2
-  **M3W** ×4
-  **M3NN** ×2
-  **4x7x2.5B** ×4



- XFS006** ×1
- XFS007** ×1
- XFS008** ×2
- XFS009** ×2





2x5x2.3FB

×2



4x8x3FB

×4

XST001

×1

XST002

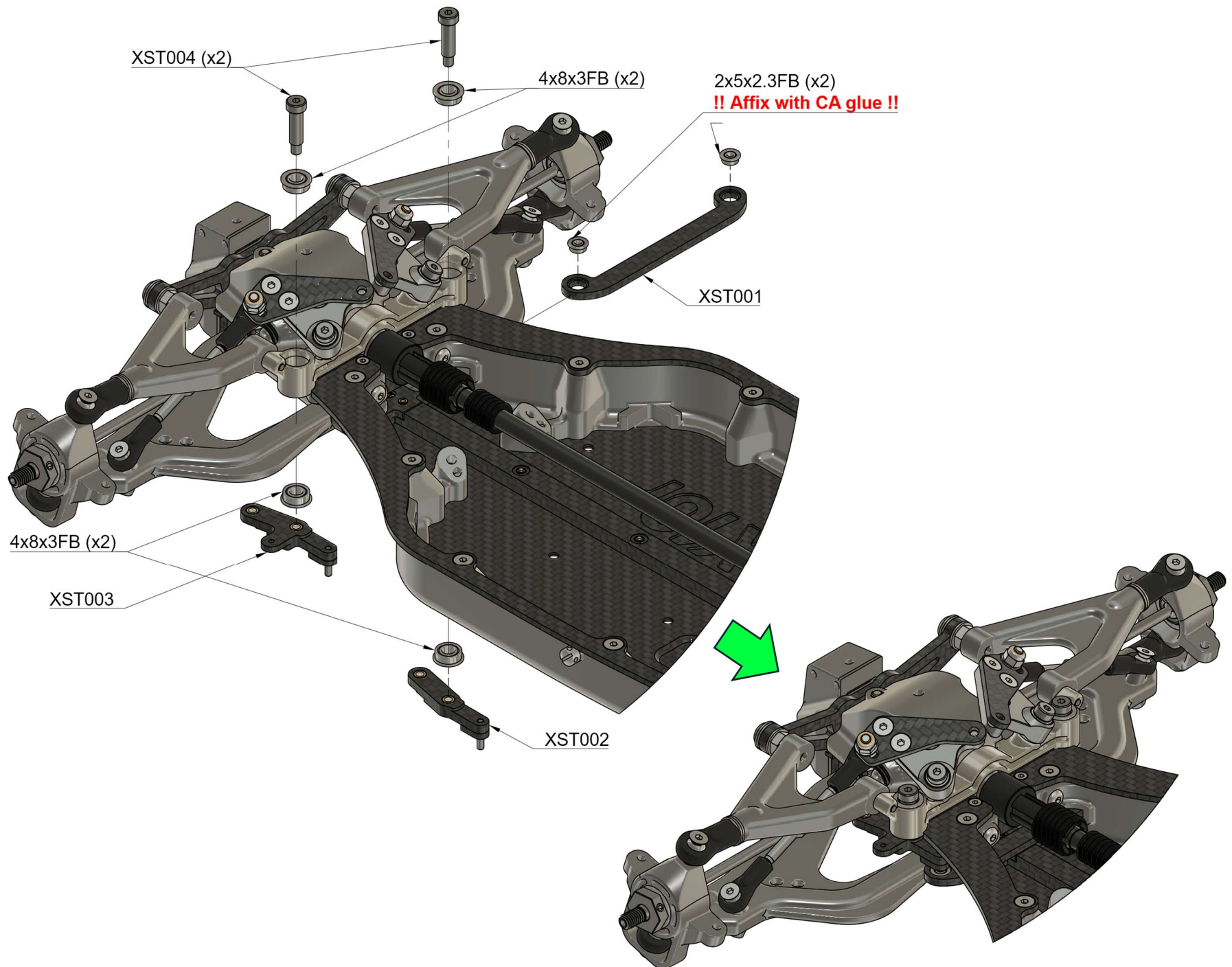
×1

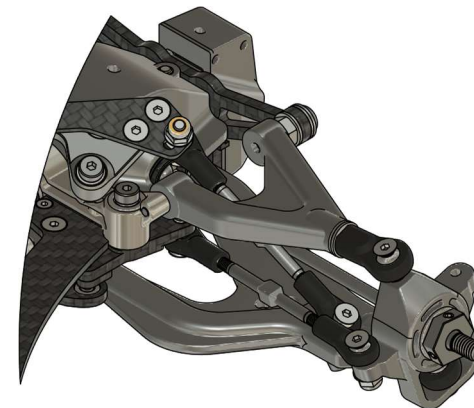
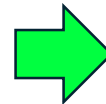
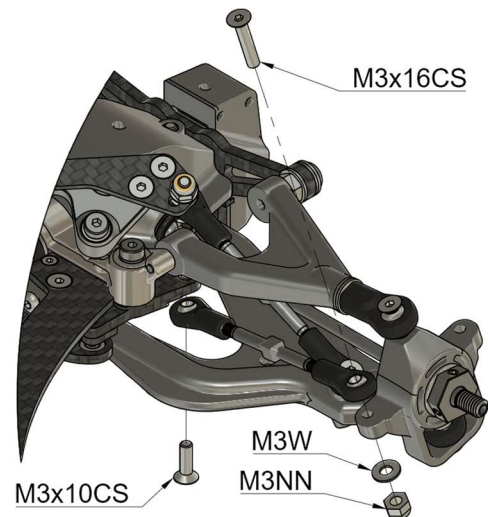
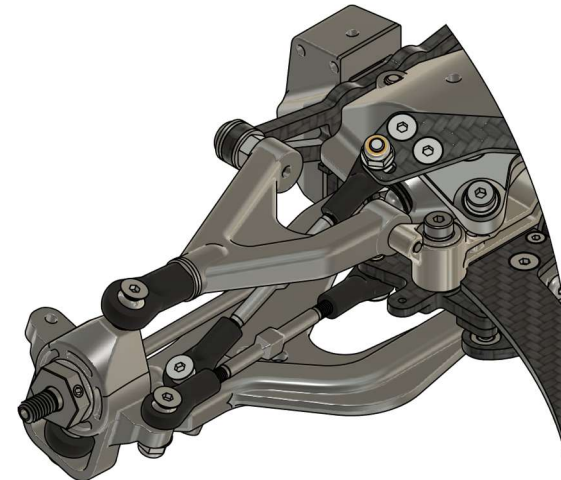
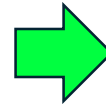
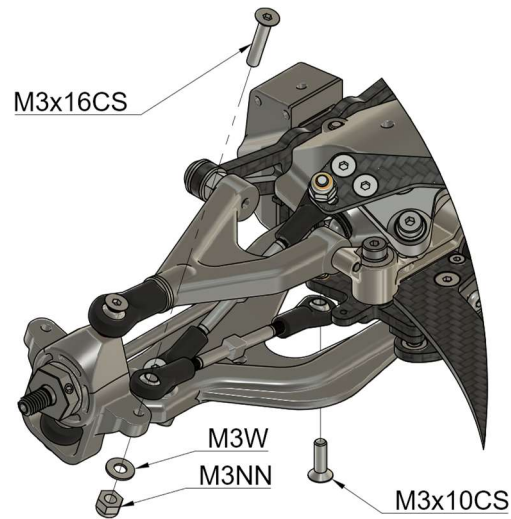
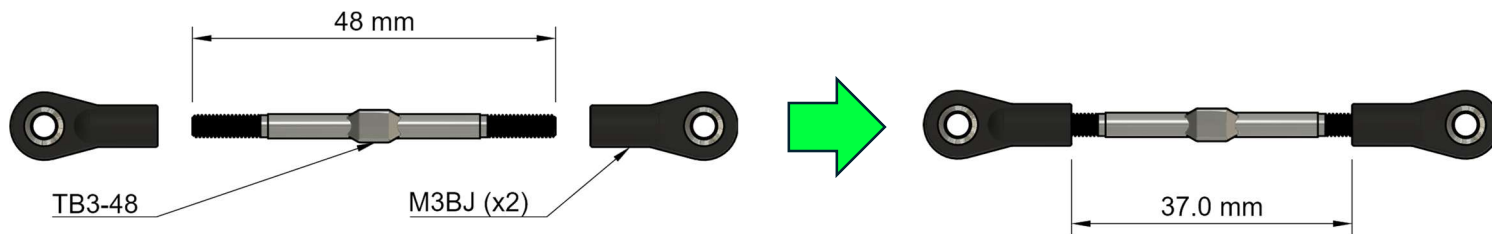
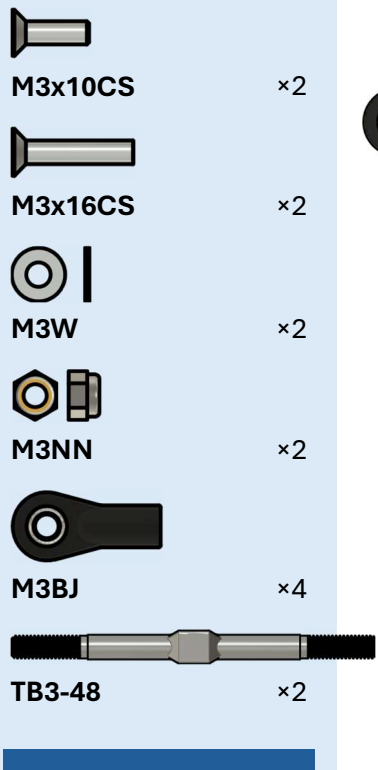
XST003

×1

XST004

×2







M3x10CS

×1



M3N

×1



M3BJ

×1

XST005

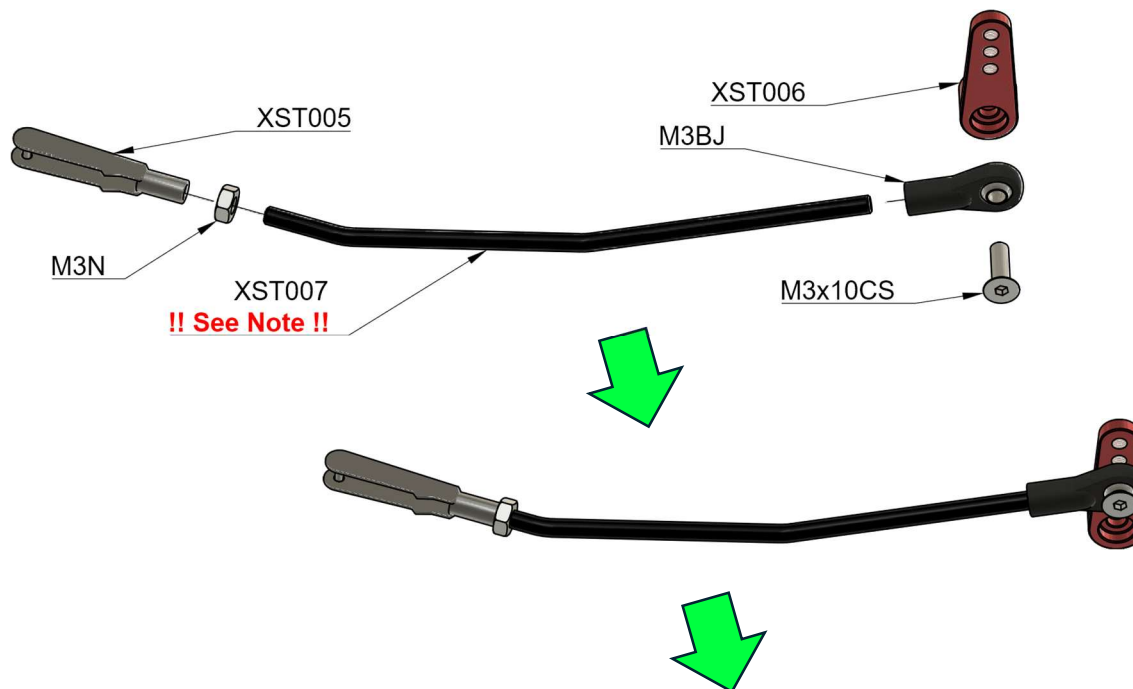
×1

XST006

×1

XST007

×1



Note:

To accommodate differences between servos and servo arm location, link rod XST007 may need additional bending to ensure it moves freely through the hole in the chassis.

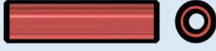


 **M3x10CS** ×6

 **M3x14BH** ×1

 **M3x18BH** ×2

 **M3x18CH** ×1

 **M3x20SO** ×2

 **3x7x6SO** ×2

XCH023 ×2

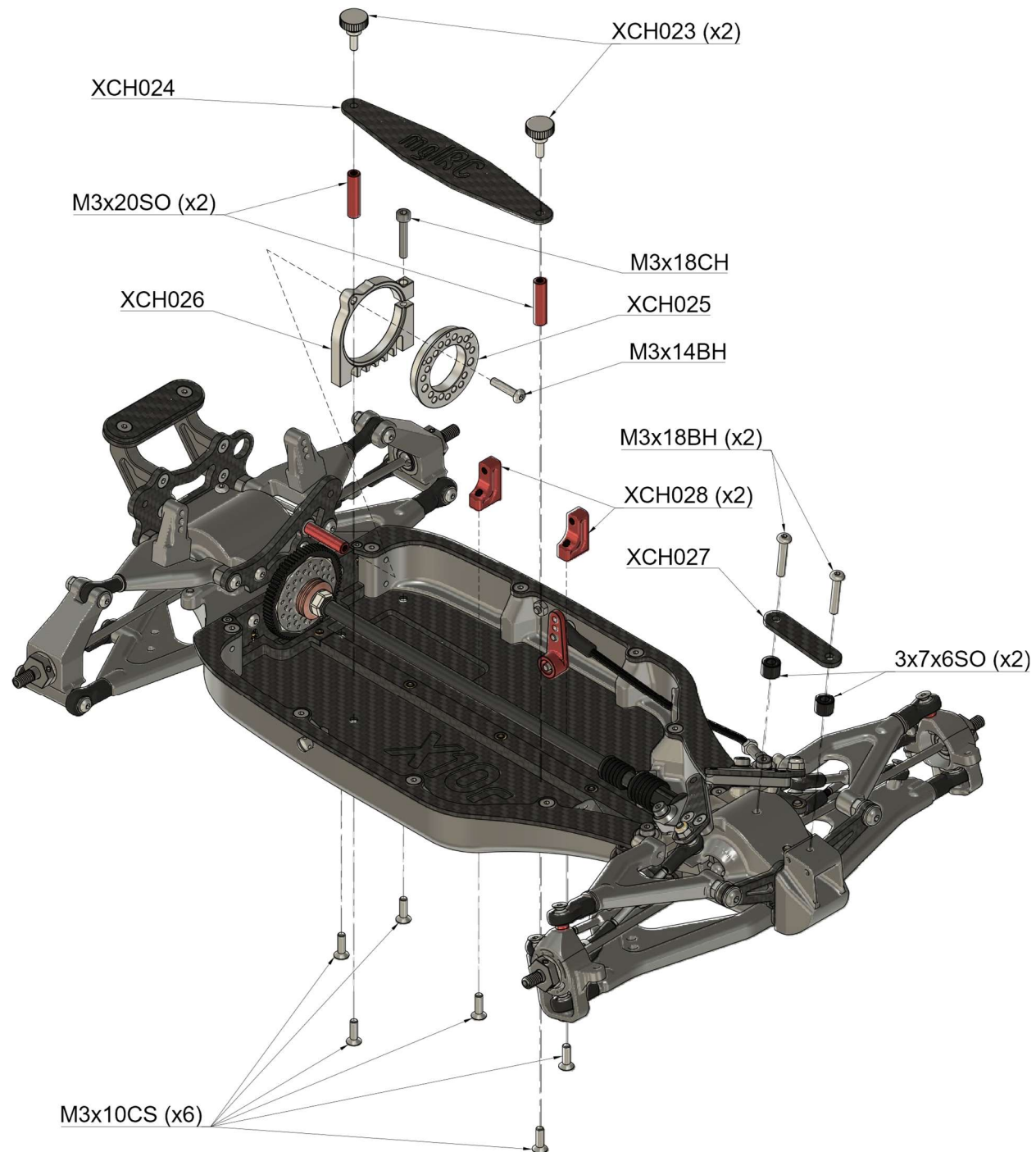
XCH024 ×1

XCH025 ×1

XCH026 ×1

XCH027 ×1

XCH028 ×2



01
1x2OR ×4



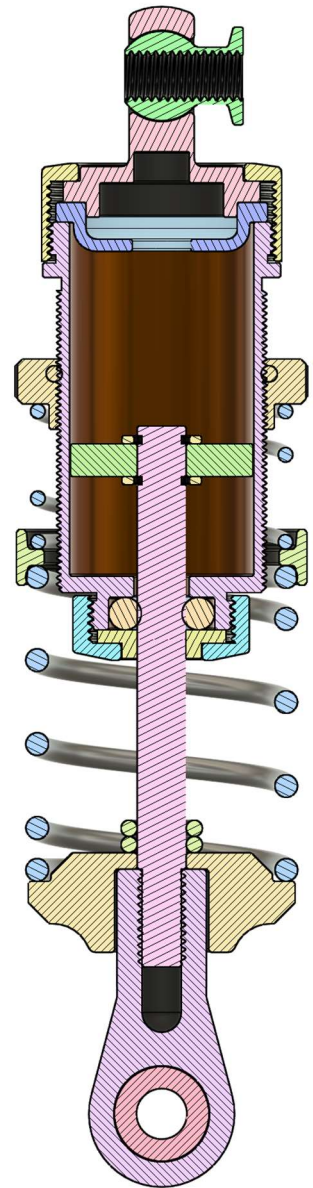
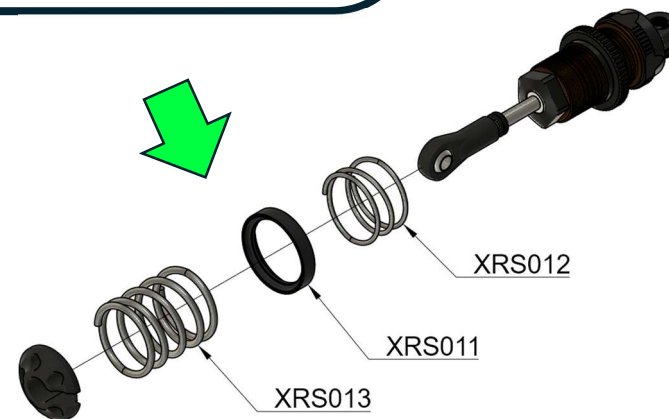
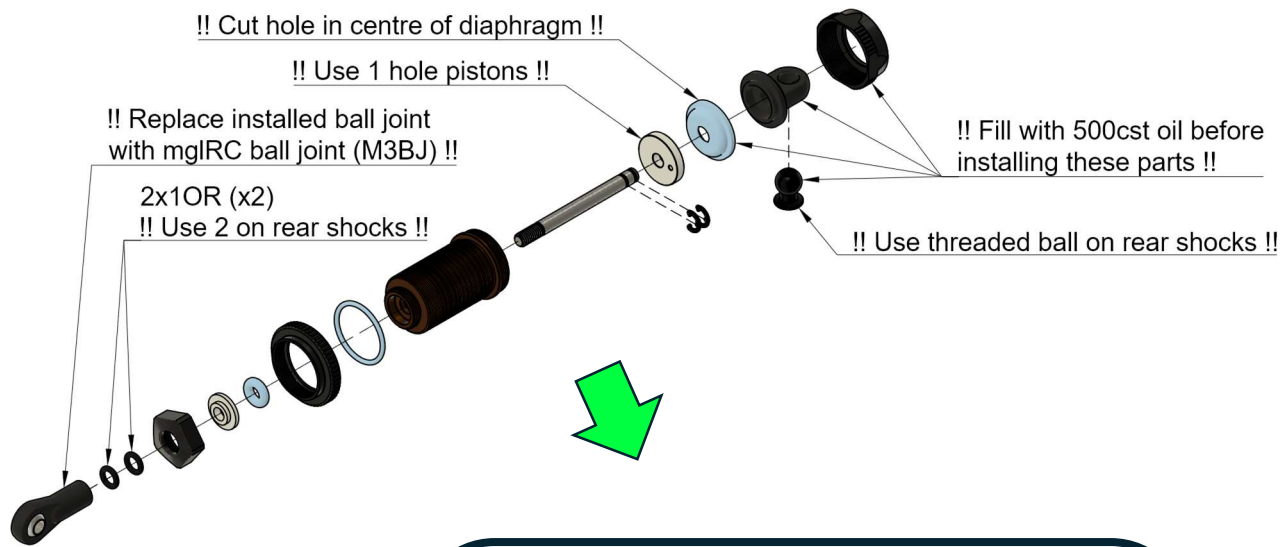
M3BJ ×2

XRS011 ×2

XRS012 ×2

XRS013 ×2

XRS014 ×2



×2



M3x14CS

×2



M3x14BH

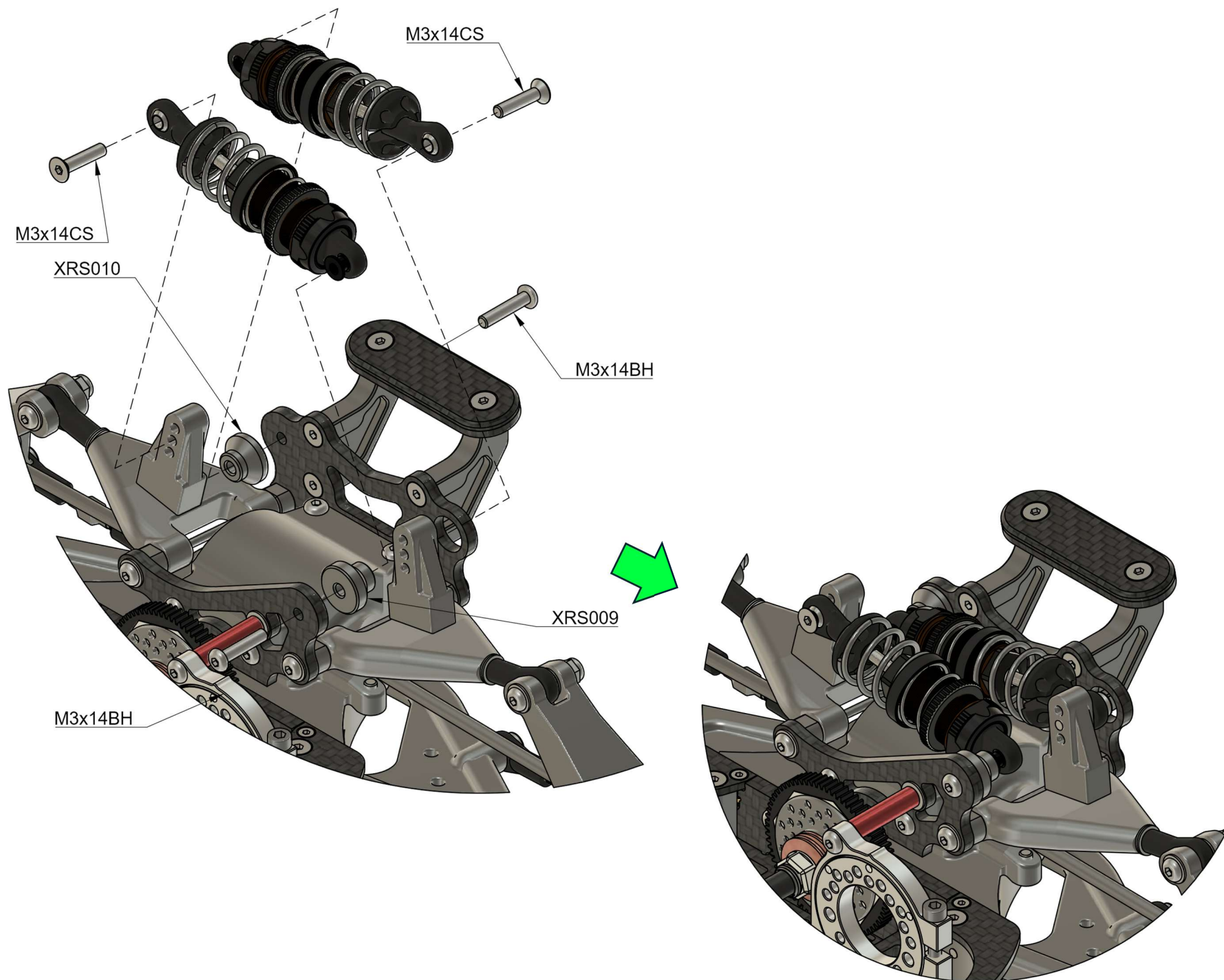
×2

XRS009

×1

XRS010

×1



01
1x2OR ×2



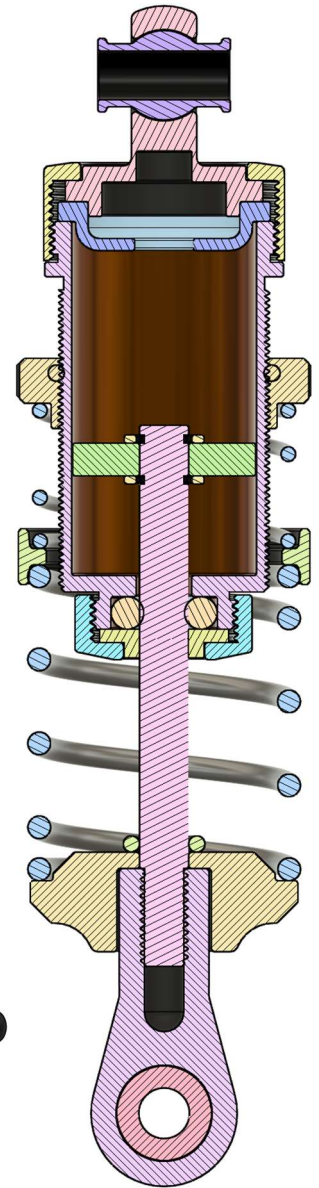
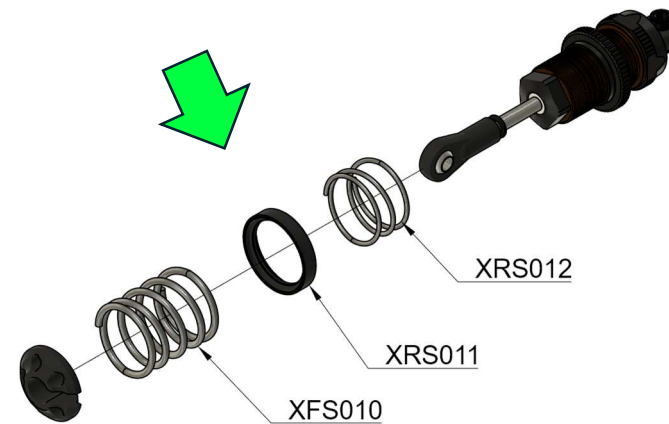
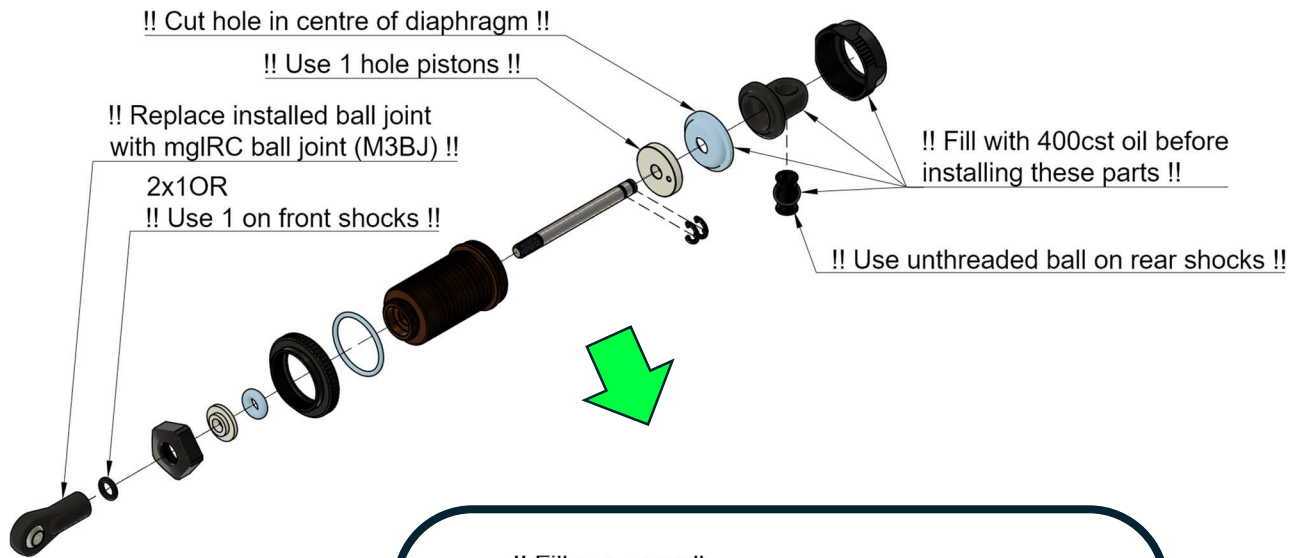
M3BJ ×2

XRS011 ×2

XRS012 ×2

XFS010 ×2

XRS014 ×2



×2



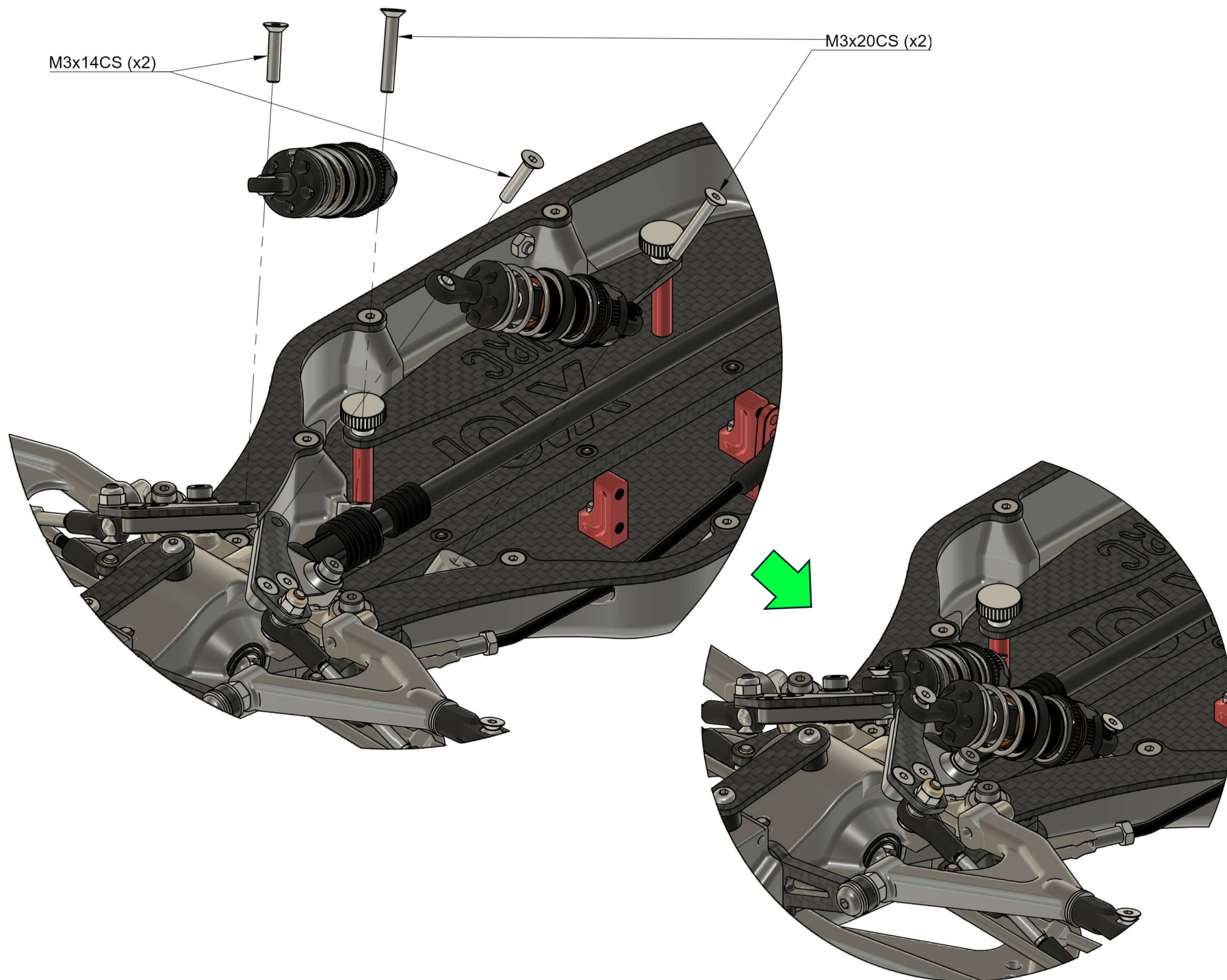
M3x14CS

×2



M3x20CS

×2



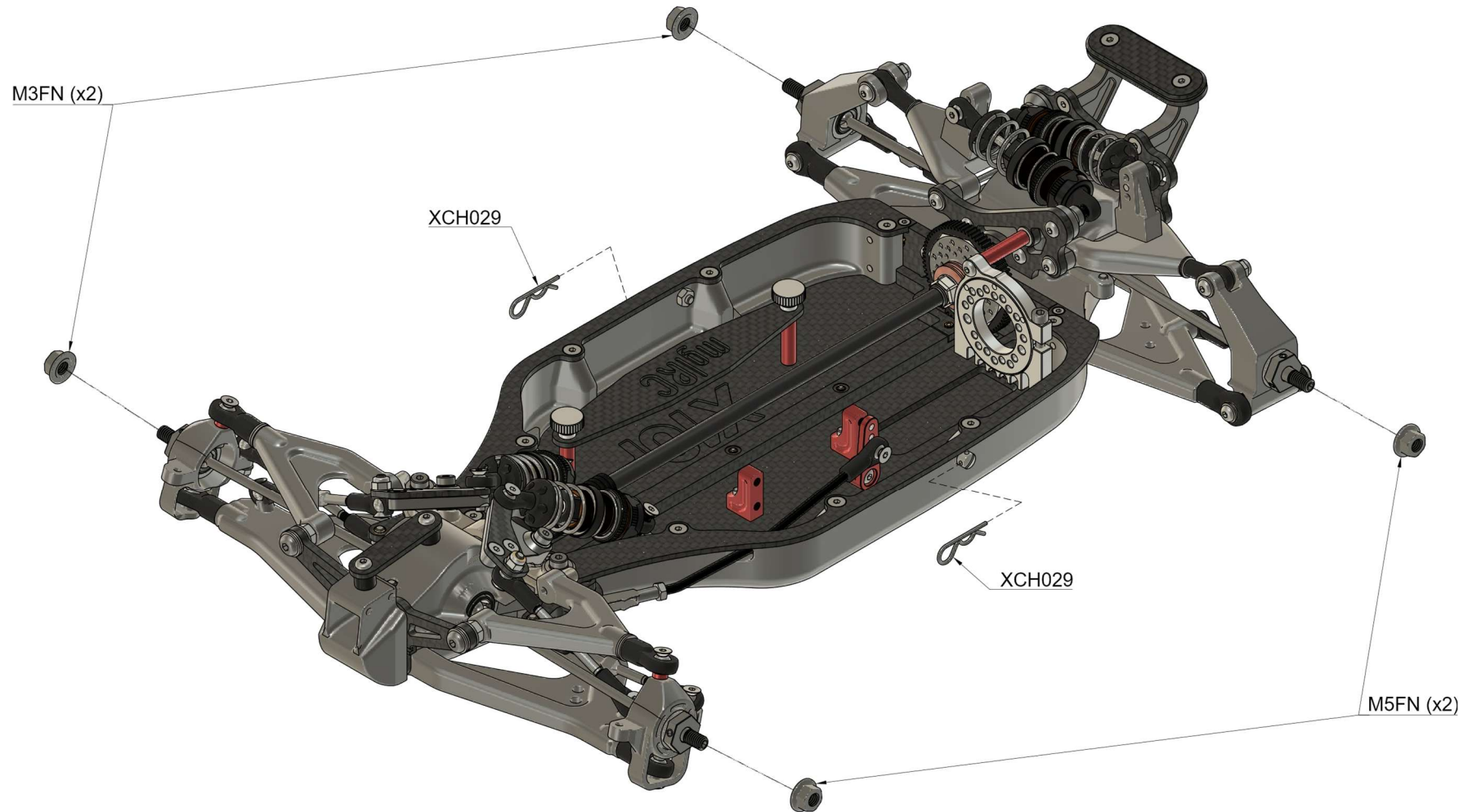


M3FN

×4

XCH029

×2



mgIRC



X10r

mgIRC