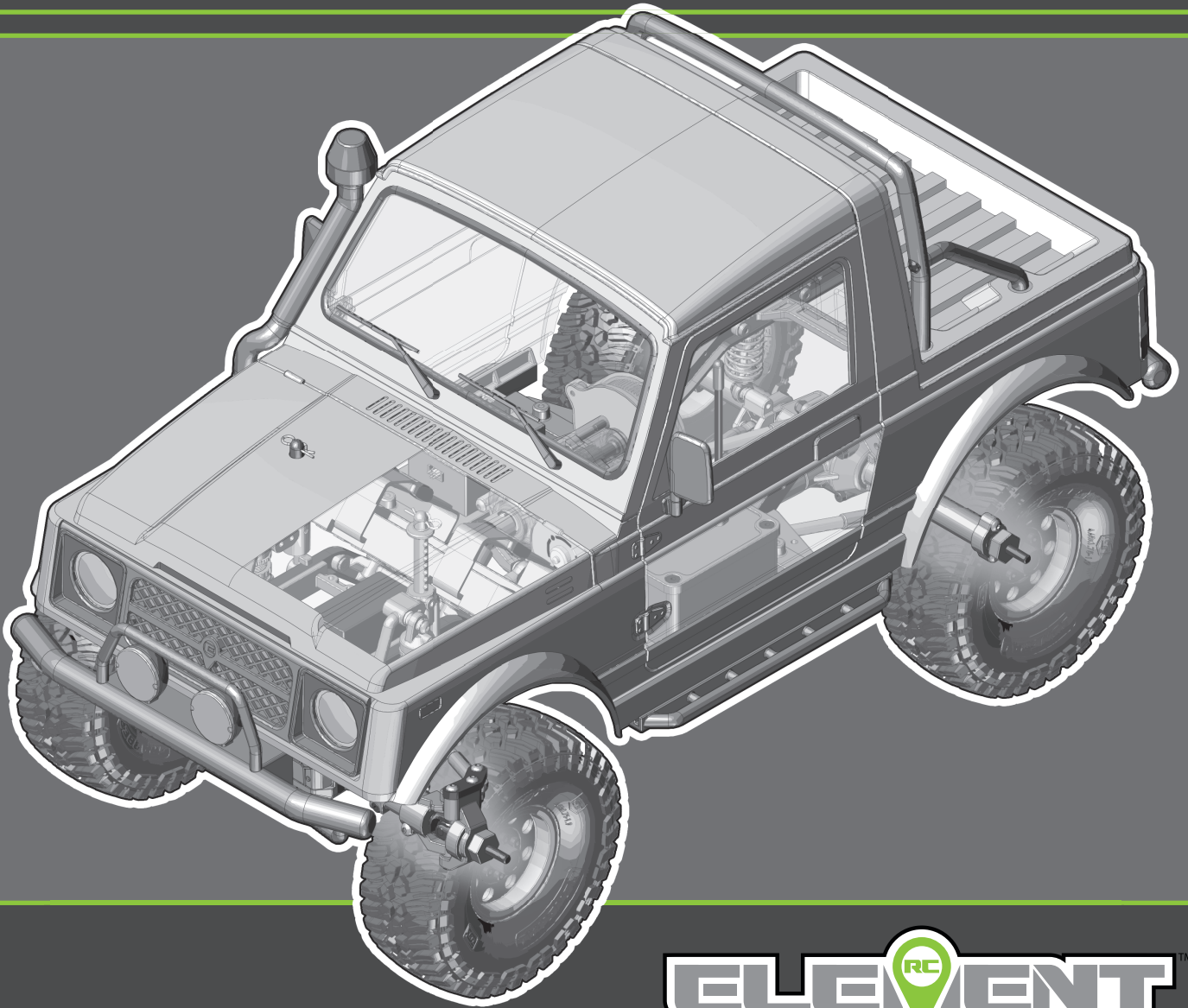


ENDURO

BUSHIDO
OFF-ROAD 4X4



OWNERS BUILD MANUAL





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Your journey begins here.



INTRODUCTION

Thank you for purchasing this Element RC product. This assembly manual contains instructions and tips for building and maintaining your new Enduro chassis. Please take a moment to read through this manual to help familiarize yourself with these steps. We are continually changing and improving our designs; therefore, actual parts may appear slightly different than in the illustrations. New parts will be noted on supplementary sheets located in the appropriate parts bags.

ENDURO TRAIL TRUCK

All in the details. Modeled after the small 1980s 4x4 kei car designs out of Japan, the Bushido features awesome looks on a capable chassis.

The single-piece polycarbonate body comes pre-painted with clear windows and includes a highly-detailed decal sheet along with extra decals for making the Bushido your own. With injection-molded mirrors, grill, wipers, snorkle, bumpers, and rear bed cage for added scale realism, this rig is sure to look great on the trail.

Out of the box, the Bushido Off-Road 4X4 is ready to tackle the elements – your journey begins here!

OFFICIALLY LICENSED TIRES: Gripping the trail is a set of officially licensed General Grabber™ X3 tires molded in a high-performance, soft compound rubber. The General Grabber™ X3 tires are mounted on a set of Element RC Ocho beadlock wheels. No more worrying if your RTR tires will come unglued.

The Enduro Trail Truck comes ready for adventure right out of the box, with performance-driven Reedy Power electronics. The all-new, ultra-smooth and powerful, 16-turn 5-slot brushed crawler motor and Reedy Power SC480X electronic speed controller with T-plug connector, supply ample power to this tough rig. Controlling the beast on the trail is our 3-channel XPI30 2.4GHz radio and Reedy Power high-torque 1320MG metal gear servo.

With all this packed in one box, we know the Enduro Trail Truck is ready for the trail...Are you?

ITEMS NEEDED

The following items are required to build or maintain your Enduro Trail Truck.

- 1.5mm Allen Wrench (#1500)
- 2mm Allen Wrench (#1501)
- 2.5mm Allen Wrench (#1503)
- Pliers
- Long Nose Pliers
- 5.5mm Nut Driver (#1507)
- 7mm Nut Driver (#1508)

OTHER HELPFUL ITEMS

The following items aren't required, but will aid in the building and maintaining of your Enduro Trail Truck.

- Threadlock (#1596)
- Green Slime (#1105)

FEATURES

- Stealth X Gearbox with adjustable overdrive gears
- BTA steering [Behind the Axle]
- CMS [Chassis Mounted Servo]
- Integrated servo winch mount
- Adjustable front track bar
- Universal front drive axles
- Stamped steel C-Channel frame rails
- Enclosed receiver box
- 12mm wheel hexes
- Adjustable front and rear bumper mounts
- Adjustable width rock sliders
- Two battery boxes (Shorty and regular size!)
- Threaded aluminum shock bodies
- Aluminum steering plates
- Aluminum motor plate
- Adjustable body posts
- Optimized rod ends for more fluid axle articulation
- Adjustable rear shock mount positions
- Telescopic driveshaft's front and rear
- Extruded aluminum driveshaft splines
- One-piece rear axle design
- Splined front axle with adjustable caster
- Machined input pinion gear
- Metal ring gear
- Machined steel top shaft
- Metal idler gears
- Heavy duty 5mm diameter steel links
- Precision metal ball bearings included
- Steel servo horn
- Licensed 1.9"x4.65" General Grabber X3 tires
- 11.8" (299mm) wheelbase

ELECTRONICS:




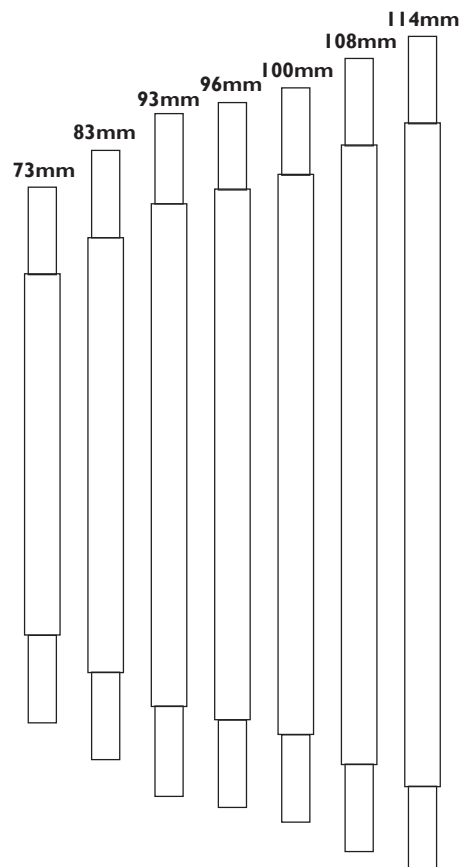
- Water resistant 2S-3S LiPo compatible Reedy SC480X brushed electronic speed control with adjustable drag brake and T-plug battery connector
- Smooth and powerful Reedy Crawler 16T 5-slot brushed motor
- XPI30 2.4GHz radio system (3 Channel)
- Reedy high-torque 1320MG metal gear servo (13kg/180 oz.)

BUSHIDO BODY FEATURES:

- Bushido 1-piece body thermoformed in high-strength polycarbonate
- Clear windows
- Injection-molded snorkel, wipers, and pivoting side mirrors
- Injection-molded rear bed cage
- Molded grill
- Adjustable front / rear bumpers

HARDWARE 1:1 SCALE VIEW

HARDWARE USED WITH OPTIONAL REPLACEMENT PART NUMBERS

FLAT HEAD SCREWS (FHCS) 2.5x10mm (31350) 2.5x14mm (41077) 3x8mm (25201) 3x10mm (25202) 3x12mm (25203) 3x14mm (89208)**BUTTON HEAD SCREWS (BHCS)** 2.6x10mm (41088)
Self Tapping Thread 3x5mm (31530) 3x6mm (31531) 3x8mm (31532)
Aluminum (8552) 3x10mm (25211)
Aluminum (8554) 3x12mm (89202) 3x14mm (25187) 3x16mm (89203) 3x18mm (2308) 3x20mm (25188) 3x28mm (41078)**SOCKET HEAD SCREWS (SHCS)** 2x5mm (31511)
Aluminum (8566) 2x8mm (7187) 2.5x6mm (41079) 2.5x10 (41087) 2.5x14 (71032) 2.5x16 (41086)**SET SCREWS** 3x3mm (25225) 3x16mm (4689)**PIVOT BALLS** Pivot Ball, Short (42041) Pivot Ball, Long, Upper Shock (42041)**LOCK NUTS** M3 Locknuts (25215)
Aluminum (31550) M4 Locknut W/Flange (25391)**BEARINGS** 5x10x4mm (91560) 7x14x3.5mm (91474) 10x15x4mm (91563)**SHIMS AND WASHERS** .250x.125x.015 (7337) Servo Horn Spacer (42041) Drive Gear Shim (42027)**MISC. SCREWS** Shoulder Screw 3x4x10mm (42070) Screw Pin (42022) Pin 2x11mm (42019)**LINKS**

73mm
83mm
93mm
96mm
100mm
108mm
114mm

TABLE OF CONTENTS

4/18/2023

01	COVER	12	DRIVESHAFTS BUILD (BAG 8)
02	INTRODUCTION	13	SHOCKS BUILD (BAG 9)
03	1:1 HARDWARE "FOLD OUT"	14	BUMPERS BUILD (BAG 10)
04	TABLE OF CONTENTS	14	WHEELS/TIRES BUILD
05	CHASSIS BUILD (BAG 1, 2)	15	BODY BUILD (BAG 11)
06	ELECTRONIC MOUNTS BUILD (BAG 3)	16	OPTIONAL GEARBOX BUILD
07	GEARBOX BUILD (BAG 4)	17	TRAIL TIPS
08	FRONT AXLES BUILD (BAG 5)	18	BACK COVER
09	REAR AXLES BUILD (BAG 6)		
09	LINKS BUILD (BAG 7)		

USING THIS MANUAL



This symbol indicates a special note or instruction in the manual.

x2

This symbol indicates the number of the same part that is required.



This symbol indicates the order within a step to assemble parts.



This symbol indicates a Trail Tip.



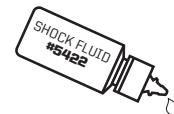
This symbol indicates where Black Grease should be applied.



This symbol indicates where Green Slime can be applied. *not included



This symbol indicates where Thread Lock Adhesive should be applied. *not included



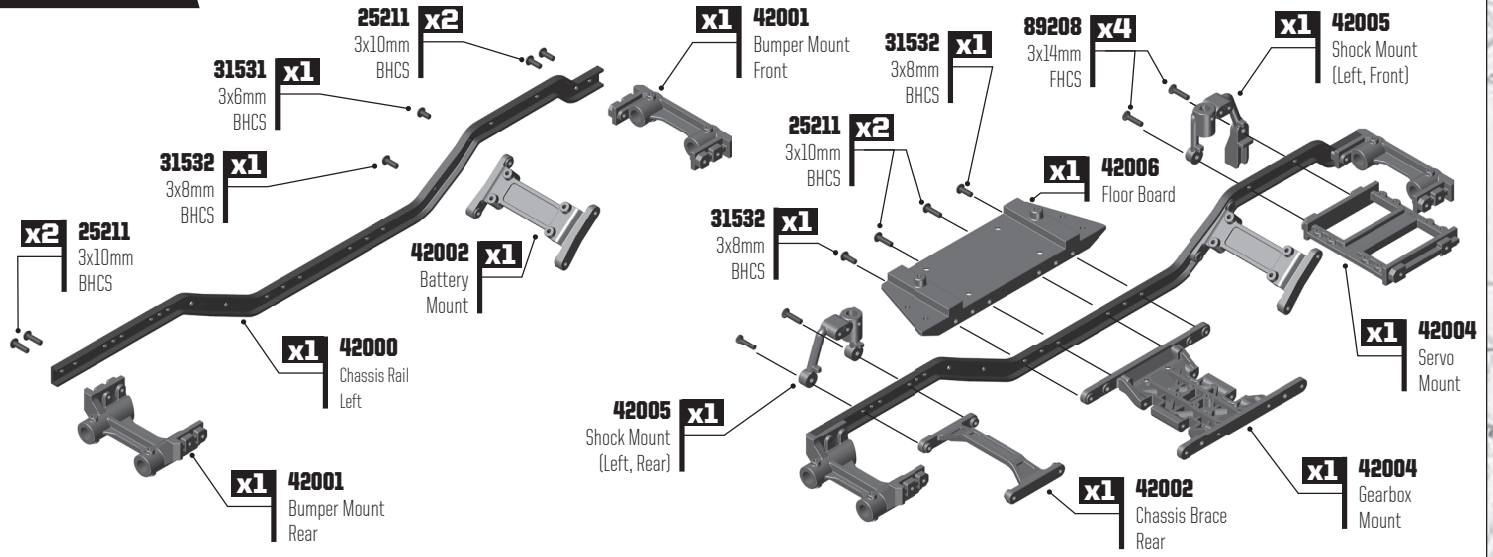
This symbol indicates where Shock Fluid should be applied.



There is a 1:1 hardware foldout page in the front of the manual. To check the size of a part, line up your hardware with the correct drawing until you find the exact size. Each part in the foldout has a number assigned to it for ordering replacement parts.

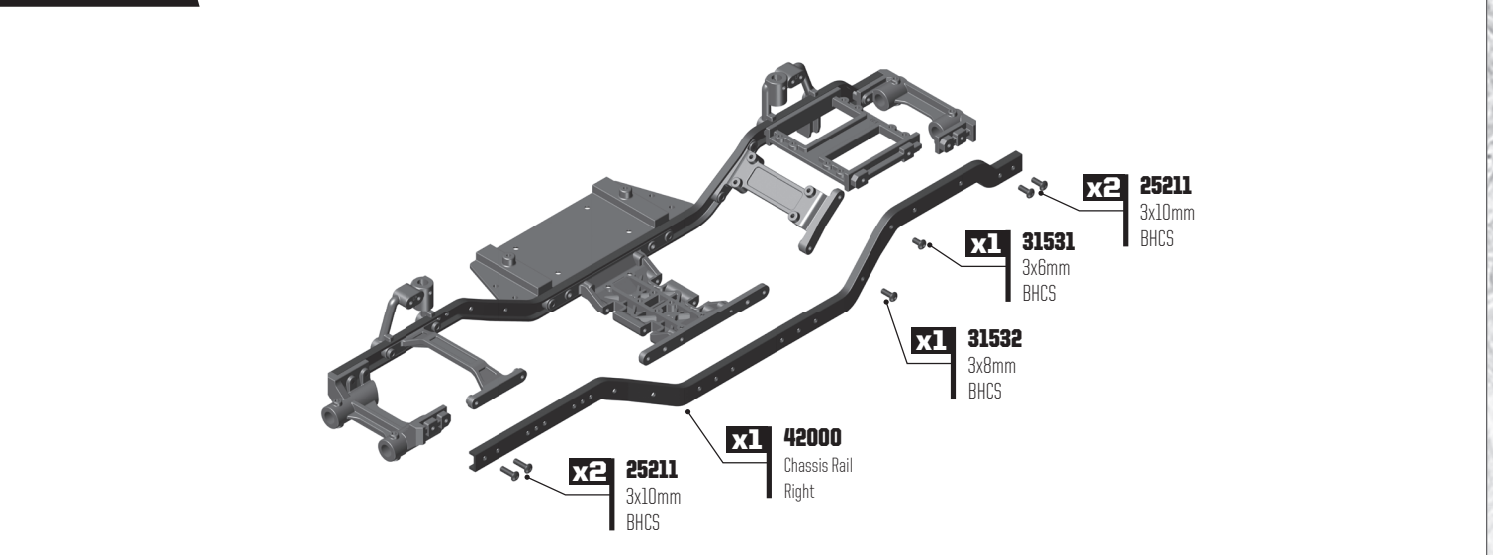
GATE 01

CHASSIS BUILD: BAG 1, 2



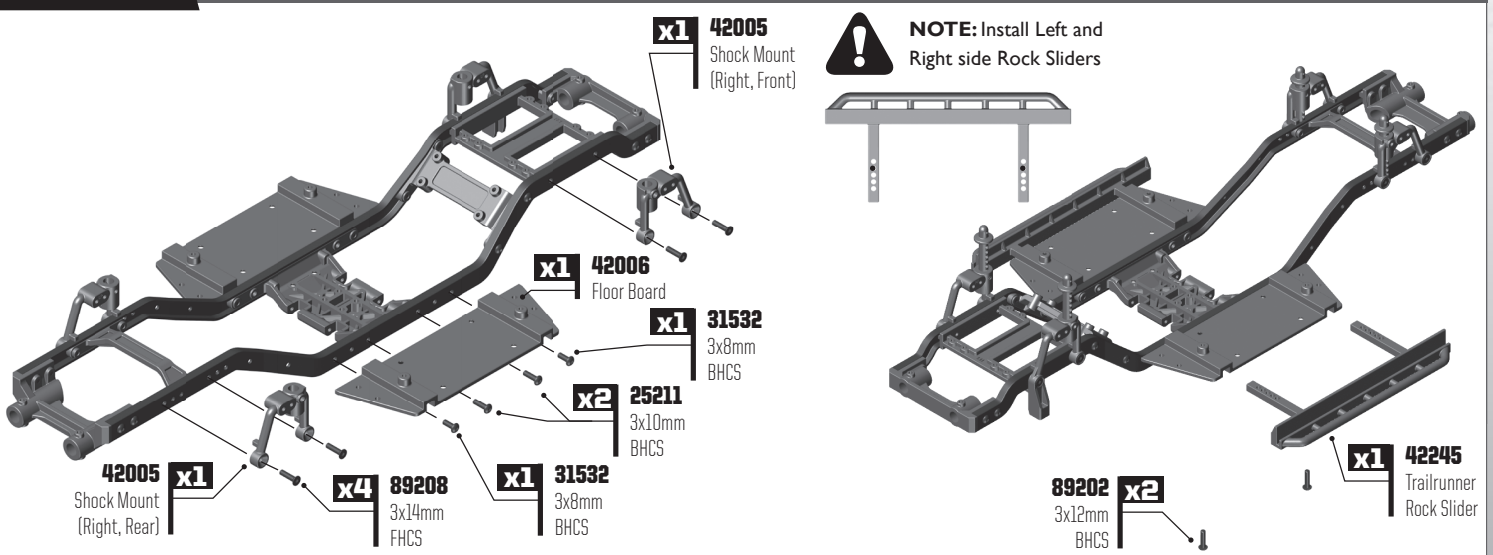
GATE 02

CHASSIS BUILD: BAG 1, 2

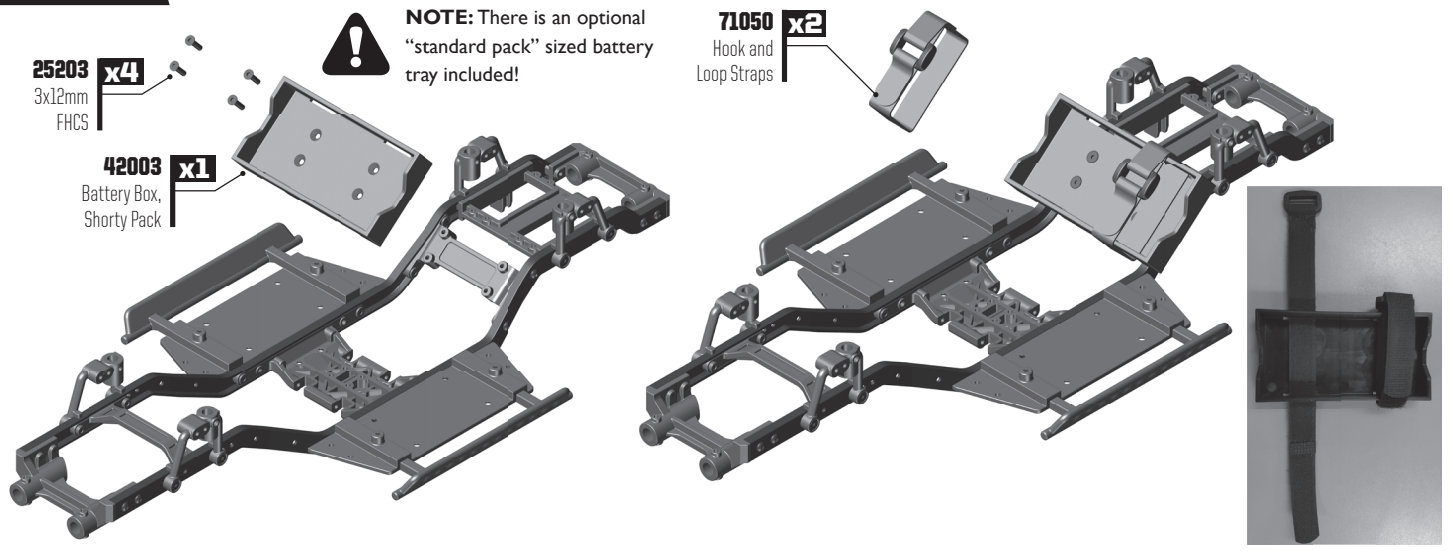


GATE 03

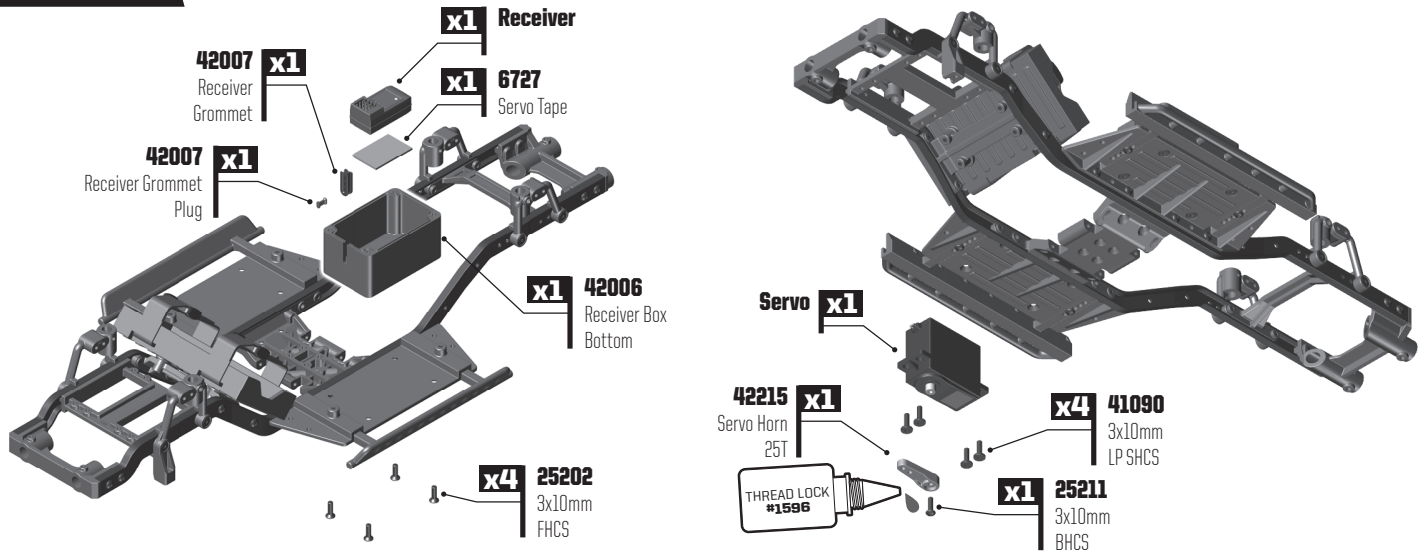
CHASSIS BUILD: BAG 1, 2



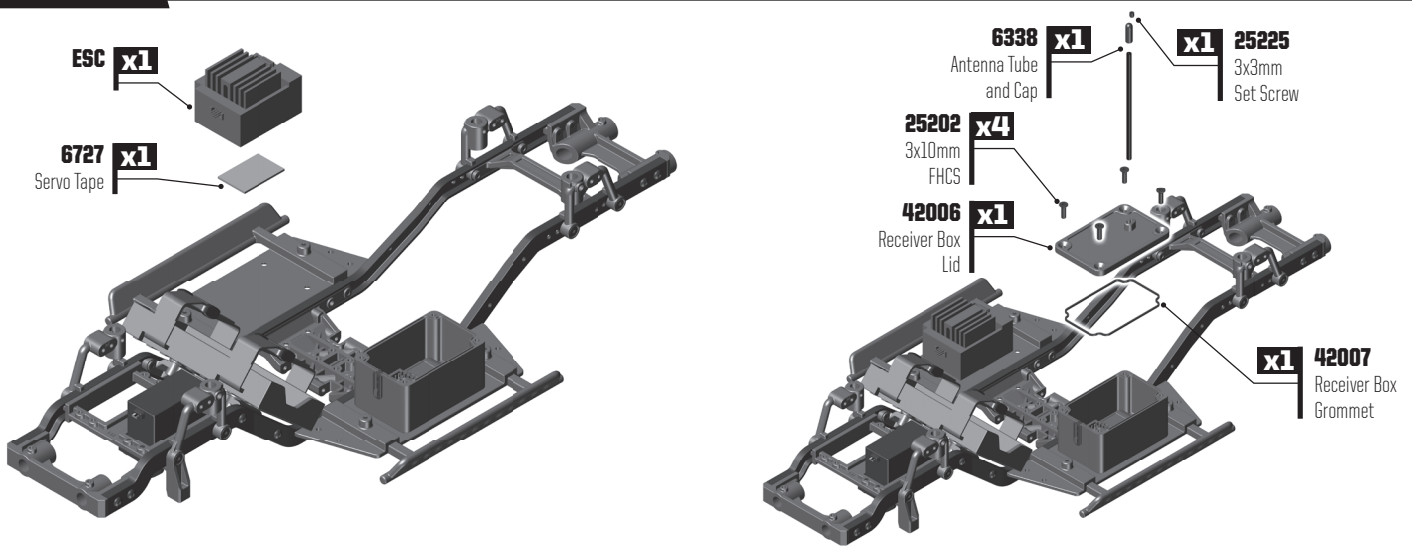
GATE 01 ELECTRONIC MOUNTS BUILD: BAG 3



GATE 02 ELECTRONIC MOUNTS BUILD: BAG 3



GATE 03 ELECTRONIC MOUNTS BUILD: BAG 3



GATE 01 GEARBOX BUILD: BAG 4

BLACK GREASE #6588

- x1 42028** Stealth X Gearbox Drive Gear, 53T
- x1 42027** Stealth X Gearbox Outdrive, Long
- x4 31350** 2.5x10mm FHCS
- x2 91563** 10x15x4mm Bearing
- x1 42027** Stealth X Gearbox Drive Gear Shim
- x1 42027** Stealth X Gearbox Outdrive, Short
- x4 41077** 2.5x14mm FHCS
- x1 42028** Stealth X Gearbox Drive Gear, 52T

NOTE: Make sure the 10x15x4mm bearing is completely seated in the short outdrive

GATE 02 GEARBOX BUILD: BAG 4

- x2 42025** Idler Shaft Pin 2x9mm
- x1 42025** Stealth X Gearbox Idler Shaft
- x1 42026** Stealth X Gearbox Idler Gear, 27T
- x1 42026** Stealth X Gearbox Idler Gear, 28T
- x4 91560** 5x10x4mm Bearing
- x1 42030** Stealth X Gearbox Top Shaft, Rear
- x5 41078** 3x28mm BHCS
- x2 91563** 10x15x4mm Bearing
- x1 42023** Stealth X Gearbox Case
- x1 42023** Stealth X Gearbox Case

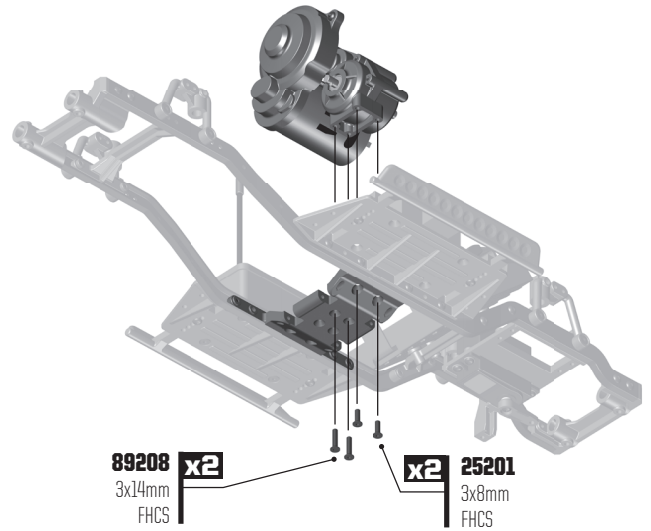
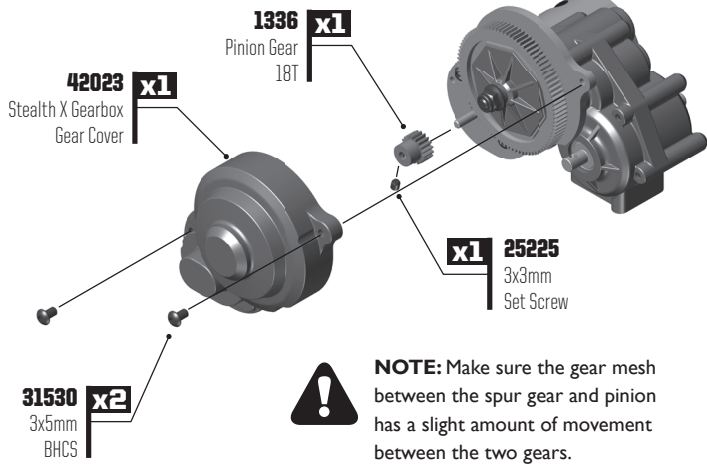
NOTE: There are optional gearbox builds on page 24

Over Drive Option I (Stock)

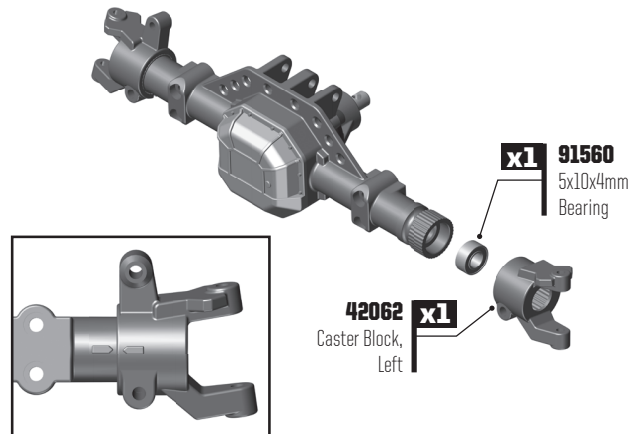
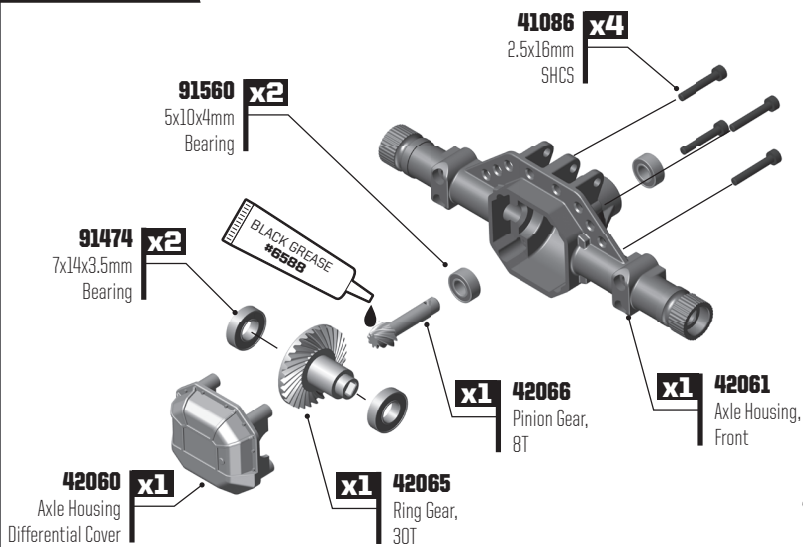
GATE 03 GEARBOX BUILD: BAG 4

- x1 42029** Stealth X Gearbox Motor Plate
- x3 25201** 3x8mm FHCS
- x2 42023** Stealth X Gearbox Spur Gear Hub
- x1 25391** FT M4 Locknut
- x2 41090** 3x10mm LP SHCS
- x1 9654** Spur Gear 48P, 87T
- x1 Motor**

GATE 04 GEARBOX BUILD: BAG 4

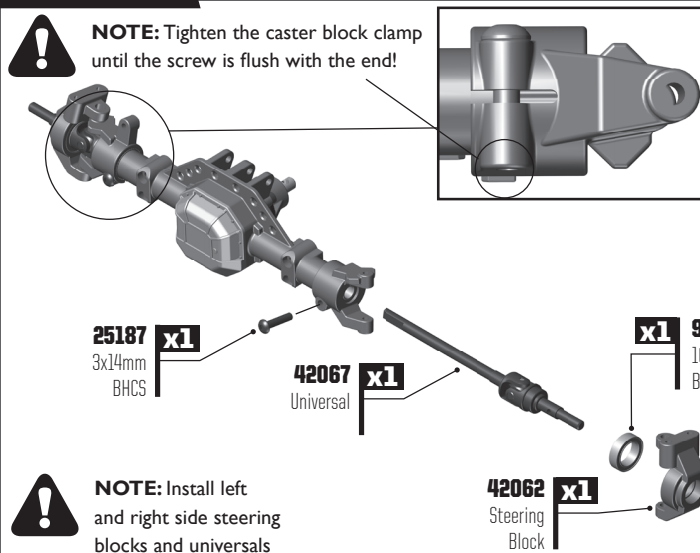


GATE 01 FRONT AXLE BUILD: BAG 5

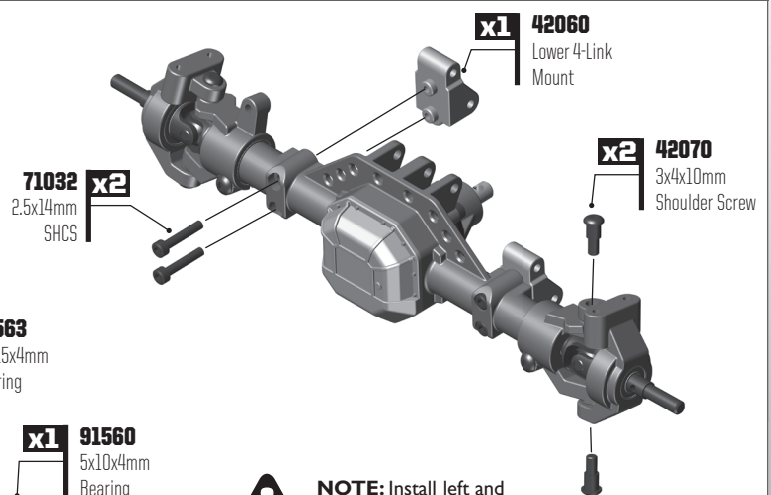


NOTE: Install Left and right side caster blocks and bearings

GATE 02 FRONT AXLE BUILD: BAG 5

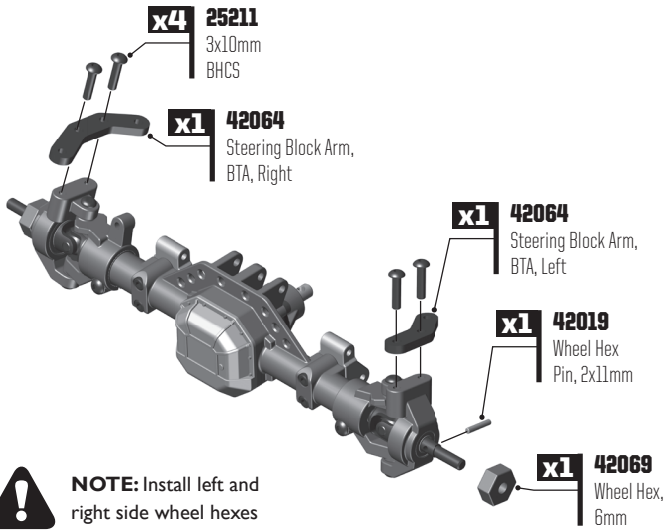


NOTE: Install left and right side steering blocks and universals



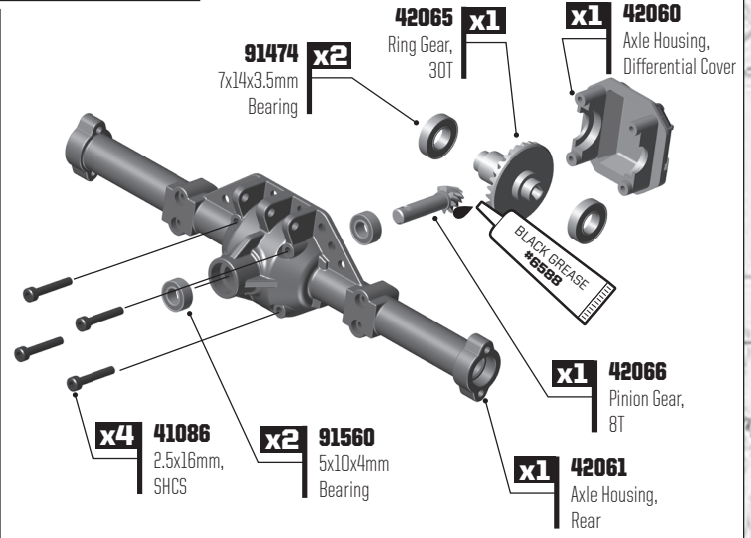
NOTE: Install left and right side axle mounts and shoulder screws

GATE 03 FRONT AXLE BUILD: BAG 5

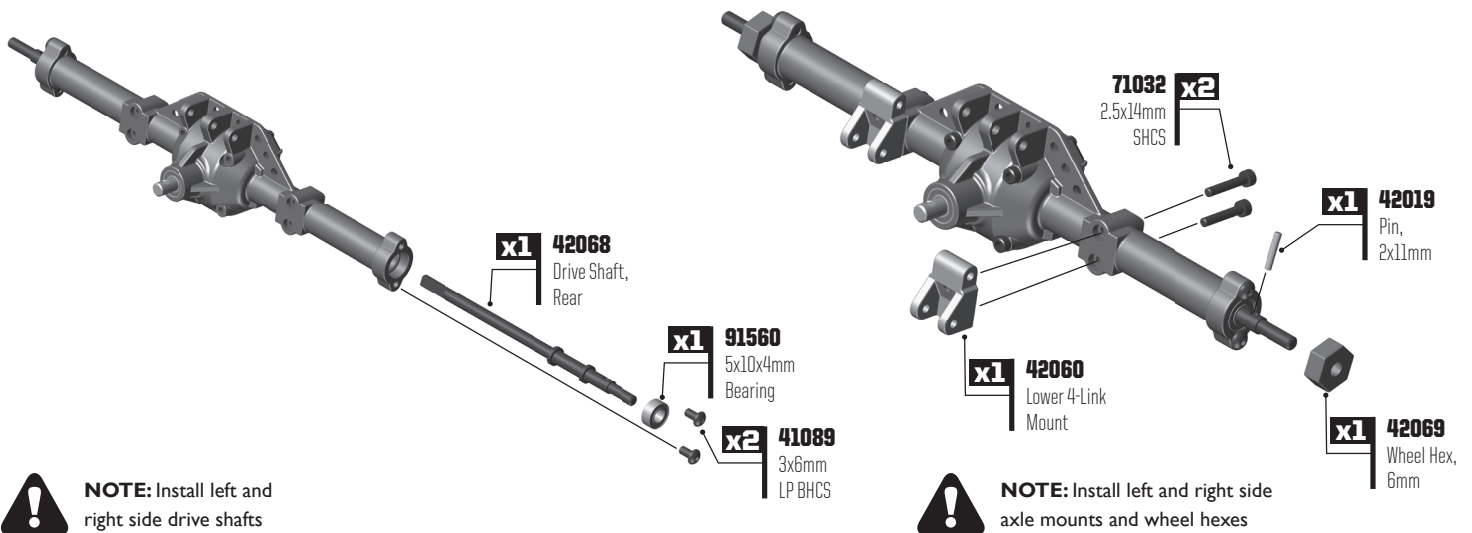


NOTE: Install left and right side wheel hexes

GATE 01 REAR AXLE BUILD: BAG 6



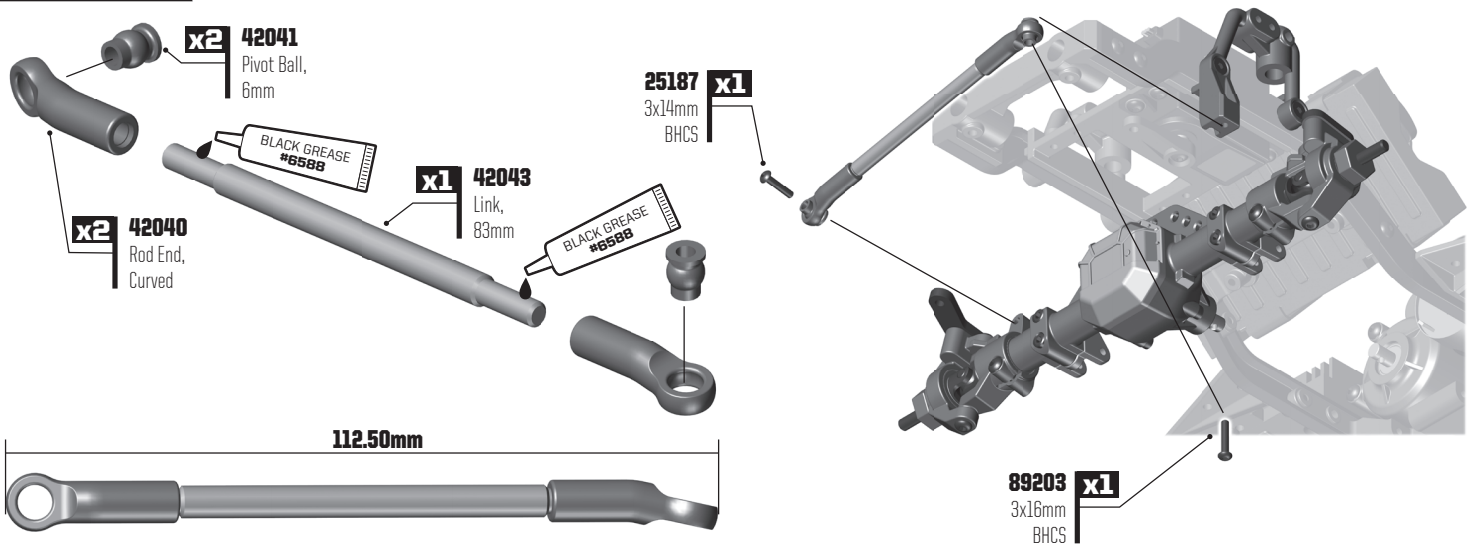
GATE 02 REAR AXLE BUILD: BAG 6



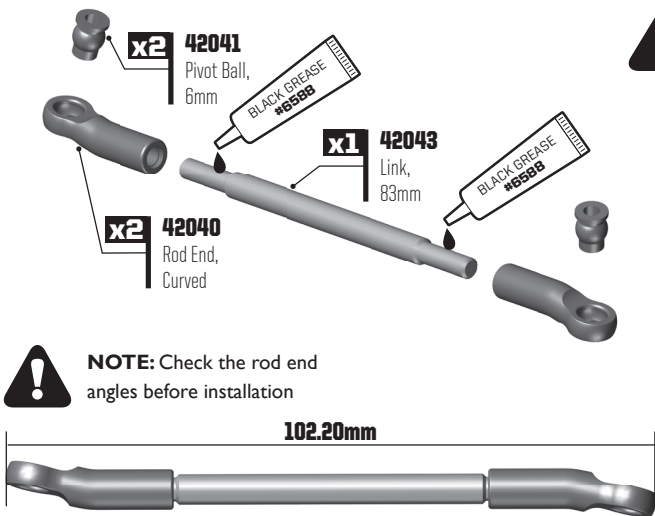
NOTE: Install left and right side drive shafts

NOTE: Install left and right side axle mounts and wheel hexes

GATE 01 LINKS BUILD: BAG 7



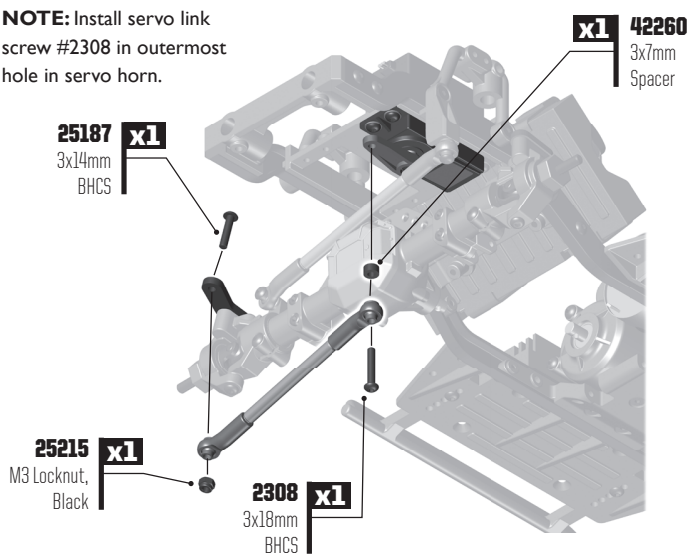
GATE 02 LINKS BUILD: BAG 7



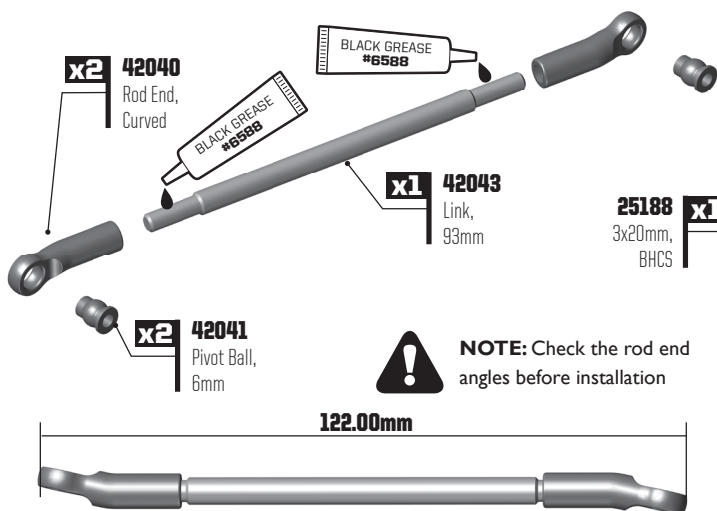
NOTE: Check the rod end angles before installation



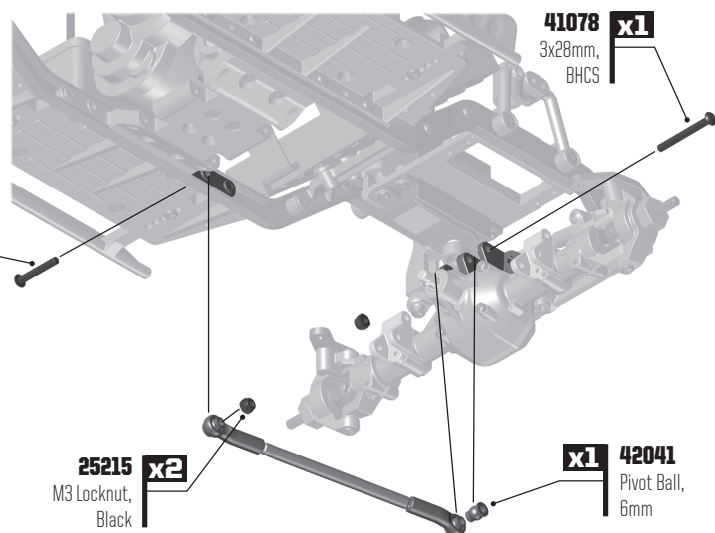
NOTE: Install servo link screw #2308 in outermost hole in servo horn.



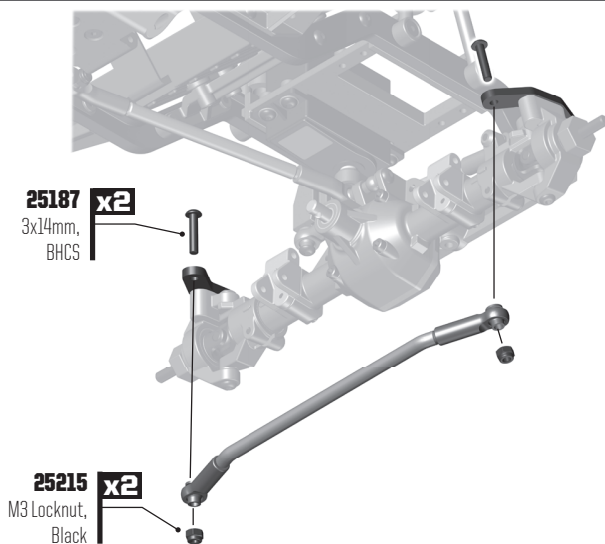
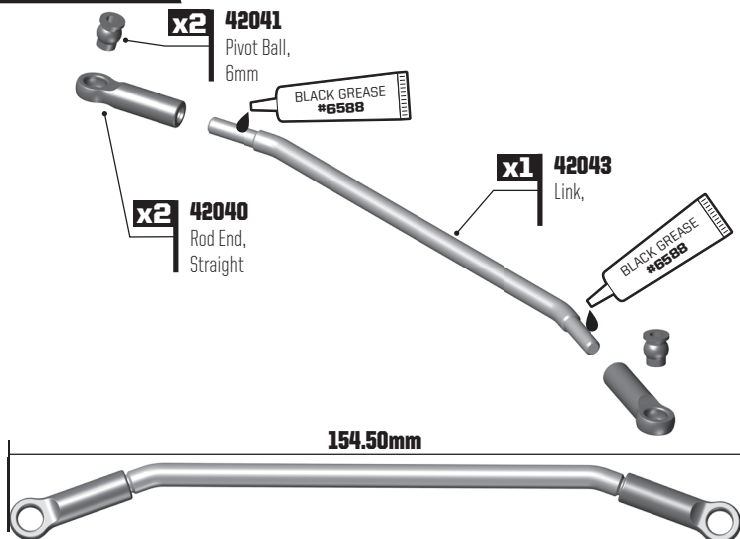
GATE 03 LINKS BUILD: BAG 7



NOTE: Check the rod end angles before installation



GATE 04 LINKS BUILD: BAG 7



GATE 05 LINKS BUILD: BAG 7

NOTE: Build and install two rear upper links

x2 42041 Pivot Ball, 6mm

BLACK GREASE #6588

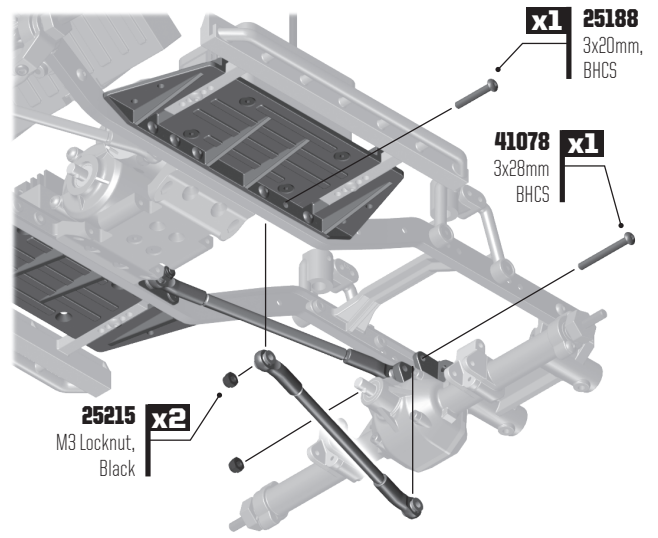
x1 42043 Link, 93mm

BLACK GREASE #6588

x2 42040 Rod End, Curved

NOTE: Check the rod end angles before installation

122.00mm



GATE 06 LINKS BUILD: BAG 7

NOTE: Build and install two front lower links

x2 42041 Pivot Ball, 6mm

BLACK GREASE #6588

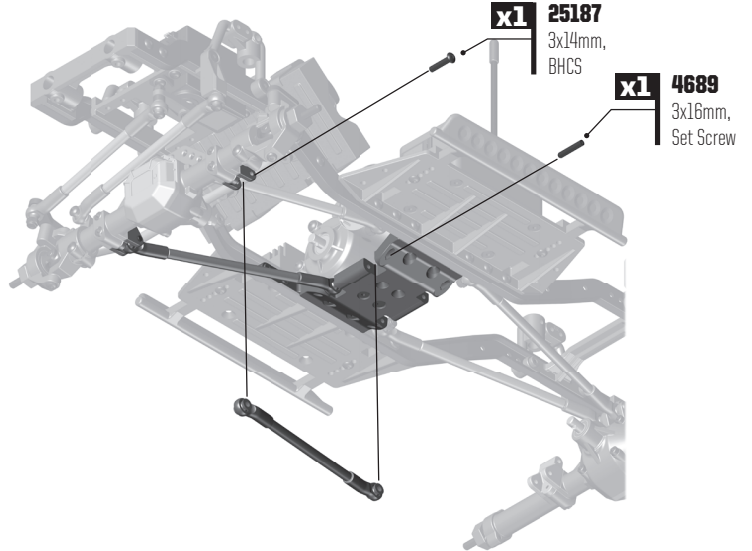
x1 42043 Link, 100mm

BLACK GREASE #6588

x2 42040 Rod End, Curved

NOTE: Check the rod end angles before installation

129.50mm



GATE 07 LINKS BUILD: BAG 7

NOTE: Build and install two front lower links

x2 42041 Pivot Ball, 6mm

BLACK GREASE #6588

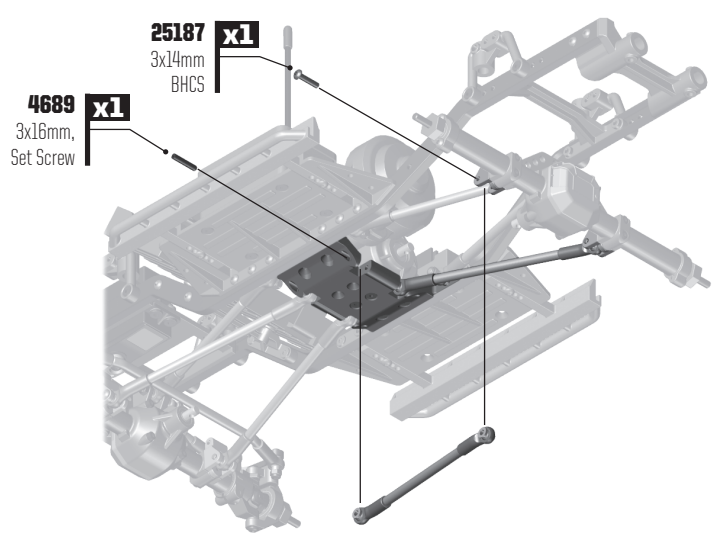
x1 42043 Link, 100mm

BLACK GREASE #6588

x2 42040 Rod End, Curved

NOTE: Check the rod end angles before installation

129.50mm



GATE 01 DRIVE SHAFT BUILD: BAG 8

Drive Shaft Lengths

	Front (mm)	Rear (mm)
Female 1	33	33
Female 2	33	42
Male	48	48

NOTE: Build a front and rear drive shaft

GATE 02 DRIVESHAFT BUILD: BAG 8

NOTE: Install the front drive shaft

NOTE: Install the rear drive shaft

GATE 03 DRIVESHAFT BUILD: BAG 8

NOTE: Make sure the screw pins are aligned with each female CVA during assembly

NOTE: Make sure the phasing of the drive shafts is correct when installing them to the axles and gearbox.

Correct Phasing

Incorrect Phasing

FRONT 33 48 33

REAR 42 48 33

42022 x4 Screw Pin

THREAD LOCK #1596

GATE 01 SHOCK BUILD: BAG 9

SHOCK CAP O-RING

SHOCK COLLAR O-RING

SHOCK CAP

SHOCK BODY, 10x32mm

O-Ring, Small, Shock Cap

O-Ring, Red

SHOCK O-RING SPACER

SHOCK SHAFT, 3x30mm

SHOCK BOTTOM CAP

ENDURO ROD ENDS

Pro Tip: Use #1105 Green Slime on O-Rings

NOTE: Build 4 complete shocks

GATE 02 SHOCK BUILD: BAG 9

Shock Bleeding Steps:

1. Pull shock shaft down.
2. Fill shock body 3/4 full with silicone fluid.
3. Slowly move the shock shaft up and down to remove air from under piston.
4. Wait for bubbles to come to surface.
5. Fill shock body to top with silicone fluid.
6. Place a drop of oil in the cap and on cap threads.
7. Install cap and tighten completely.
8. Slowly compress shaft all the way to the top. If there is pressure at the top of the stroke, there is too much oil or air. You must bleed it out.
9. Slowly pull shaft out.
10. Unscrew the cap 3/4 turn and tilt the shock at a slight angle.
11. Slowly compress the shaft to push out excess oil and air. You should see bubbles coming out from under the cap.
12. With the shaft compressed, tighten the cap and re-check for pressure at the top of the stroke. If there is still pressure, repeat steps 9 thru 11.

NOTE: Build 4 complete shocks

SHOCK CAP, Enduro

2x4mm BHCS

ENDURO ROD ENDS

Step 1-3

Step 3-4

Step 5-6

Step 7

Step 8-12

GATE 03 SHOCK BUILD: BAG 9

NOTE: Seat O-Ring into the groove on the inside of the shock collar

SHOCK COLLAR O-RING

SHOCK COLLAR, Black, Aluminum

SHOCK SPRING, Gray, 1.49 lb/in, 63mm

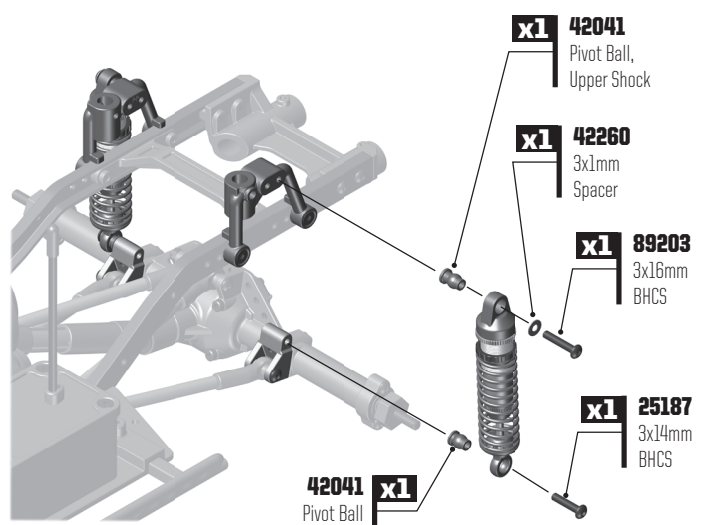
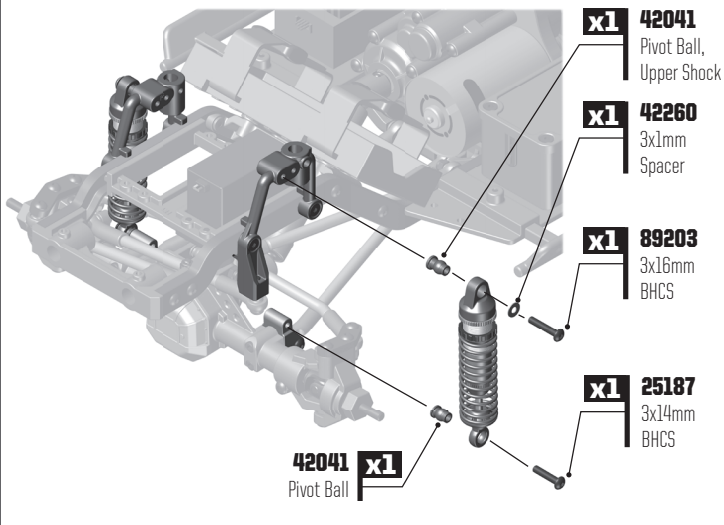
SHOCK SPRING CUP

SHOCK CAP

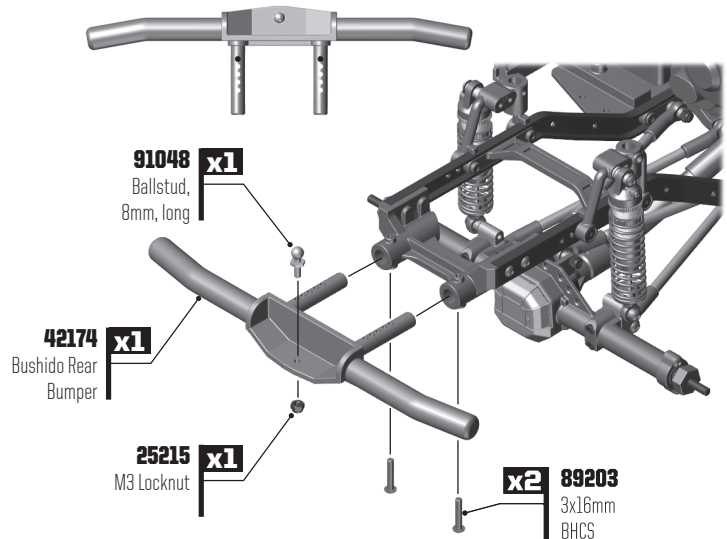
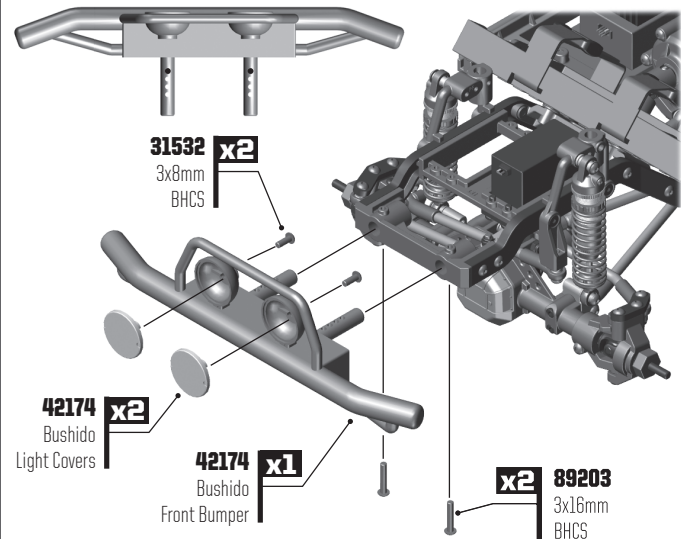
NOTE: Build 4 complete shocks

3mm

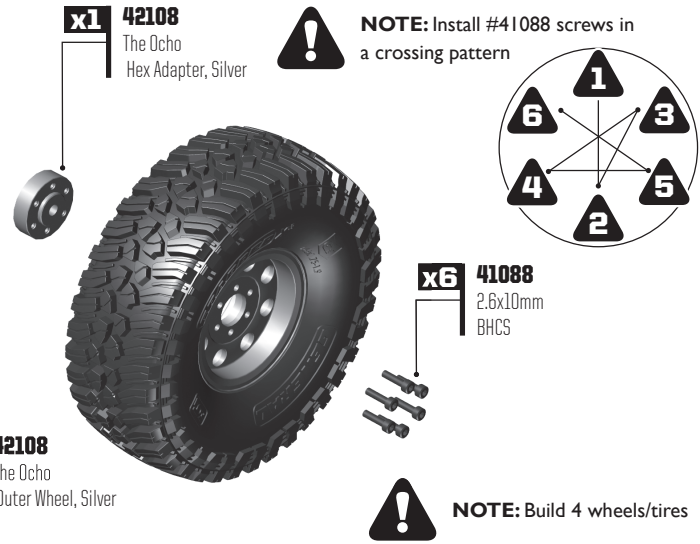
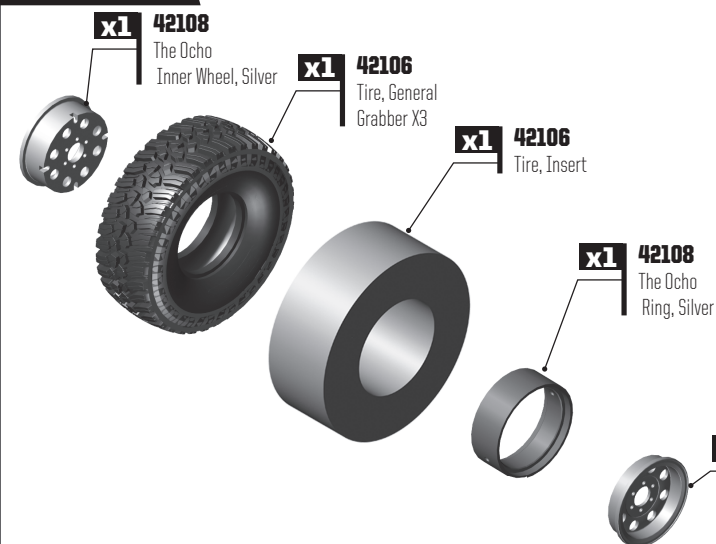
GATE 04 SHOCK BUILD: BAG 9



GATE 01 BUMPER BUILD: BAG 10



GATE 01 WHEEL/TIRE BUILD



GATE 02 WHEEL/TIRE BUILD

NOTE: Install 4 body mounts

- x2** 25391 FT M4 Locknut, Blue
- x2** 42109 The Ocho Nut Cap, Black
- x2** 42009 Body Mount, Short Pin
- x2** 42022 Screw Pin

Front Post Rear Post

NOTE: Install 4 wheels/tires

GATE 01 BODY BUILD: BAG 11

Bodies

- 42171 RTR - Painted (White)
- 42172 Clear
- 42195 RTR - Painted (Green)

- x2** 89203 3x16mm BHCS
- x1** 42173 Bushido Roll Bar
- x1** 42172 Bushido Body, Clear
- x1** 42171 Bushido Body, Painted
- x4** 42260 1mm Spacer
- x2** 31532 3x8mm BHCS
- x2** 25187 3x14mm BHCS
- x10** 31532 3x8mm BHCS
- x2** 42173 Bushido LED Mount
- x2** 42173 Bushido Headlight Bucket
- x1** 42173 Bushido Grill, Black

NOTE: Install light buckets and hardware inside the body

GATE 02 BODY BUILD: BAG 11

- x2** 41086 2.5x16mm SHCS
- x1** 42173 Bushido Snorkel
- x2** 42173 Bushido Windshield Wiper Blade
- x2** 42173 Snorkel Mount
- x2** 31520 2.5x6mm BHCS
- x4** 31392 3x5mm Washer
- x4** 89215 2.5mm Locknut
- x2** 42173 Side Mirror, Black
- x2** 42173 Side Mirror Mount, Black
- x2** 41086 2.5x16mm SHCS
- x2** 42173 Side Mirror Mount, Backing
- x4** 6332 Body Clips
- x2** 42145 Nut
- x2** 21173 Body Clip, Small
- x2** 5407 O-Ring

NOTE: Install body clip and o-ring inside the body

GATE 01**STEALTH X: BUILD CONFIGURATION: MOTOR MOUNT FACING REAR (STOCK)****OVERDRIVE:**

Overdrive is a scenario where the front and rear wheels do not rotate at the same speed. The Stealth X gearbox is designed to allow the front wheels to spin faster than the rear wheels. Overdrive is advantageous when climbing up rock faces because the front tires will want to pull the vehicle up the rock. On deserts, the rear tires rotating slower than the front tires will help keep the chassis more stable and keep the rear tires planted on the ground.

Stealth X:

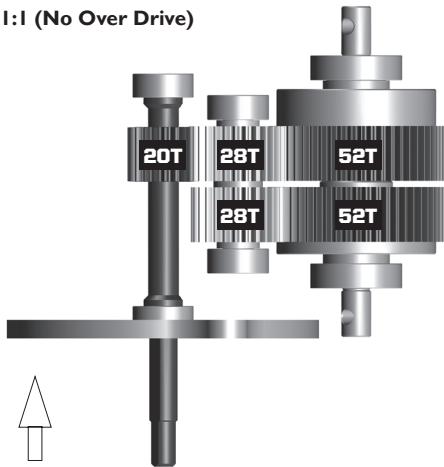
The Stealth X gearbox allows the driver to change the front to rear drive ratios with 3 separate ratio adjustments to the rear drive shaft. The driver has the option to flip the gearbox direction (motor mount facing the front) the optional inverse top shaft (#42024) is required.

Please Note:

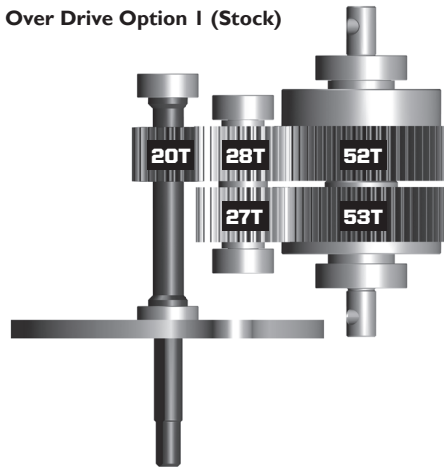
The 20T top shaft, 28T idler gear, and 52T drive gear will always be meshed together in all 6 gearbox configurations.

GATE 02**STEALTH X: BUILD CONFIGURATION: MOTOR MOUNT FACING REAR (STOCK)**

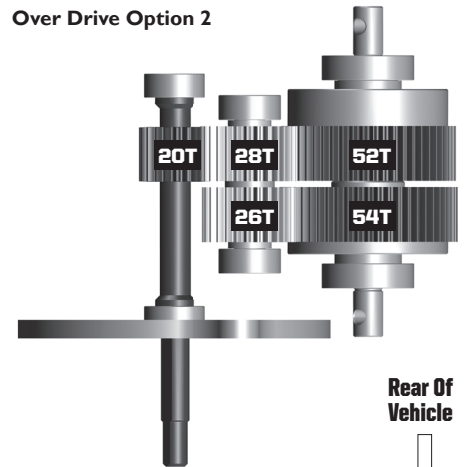
I:1 (No Over Drive)



Over Drive Option 1 (Stock)



Over Drive Option 2

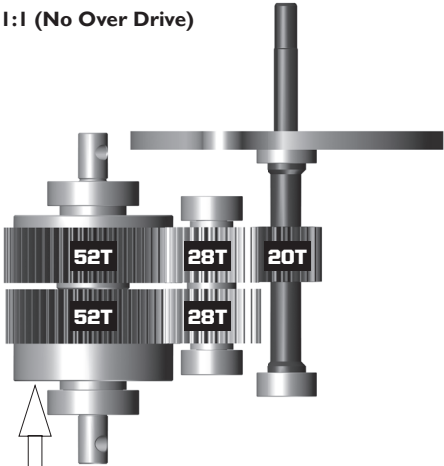


Front Of Vehicle

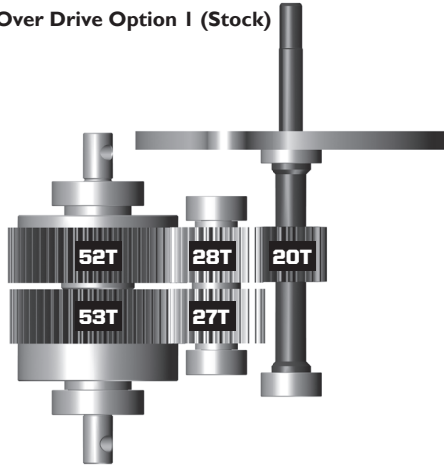
Rear Of Vehicle

GATE 03**STEALTH X: BUILD CONFIGURATION: MOTOR MOUNT FACING FRONT (OPTIONAL - REQUIRES #42024 - TOP SHAFT)**

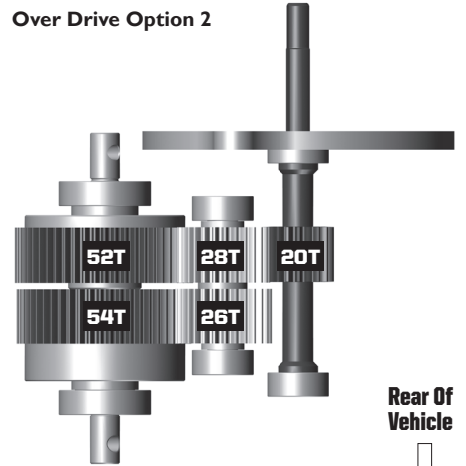
I:1 (No Over Drive)



Over Drive Option 1 (Stock)



Over Drive Option 2



Front Of Vehicle

Rear Of Vehicle

TRAIL TIPS AND CHECKLIST

PREPARING TO HIT THE TRAIL:

When preparing to hit the trail, it's a good idea to have a checklist to make sure you have everything and don't end up having to head back early. We've compiled a checklist of the things we think you'll need on the trail. We've also left some space for you to add your specific items to the list. Keep in mind these are suggestions and every person will require different items. Weather and altitude will also dictate how much food and water a person will require. Do a little research first before heading out for a full day on the trail.

- Truck with Charged Battery
- 1-2 spare Charged Batteries for your rig
- Radio with Charged Batteries
- Spare radio batteries
- Check all nuts and screws and tighten them. Including Wheel nuts!
- Spare parts (Nuts, Screws, Body Clips, and anything that may wear or break)
- Backpack
- Water (2 liters per person minimum)
- Snacks (protein bars, trailmix, etc.)
- Sturdy shoes (Hiking boots preferably or something with grip and ankle support)
- Element Hat or Beanie
- Element Hoodie or Jacket
- Sunscreen
- Bug Spray
- Lip Balm
- Nut Drivers (Factory Team Nut Drivers #1507, 1508)
- Allen wrenches (Factory Team Hex Driver set #1655)
- Cell phone and charger
- Headlight or flashlight with spare batteries
- Compact action camera
- Camera
- Tripod
- _____
- _____
- _____
- _____
- _____
- _____

TREAD LIGHTLY:

Remember, when driving your rig out on the trails, it's important to tread lightly. We all know that the best place to enjoy our hobby is out in nature, and that means we need to preserve it for future hobbyist so we all have a place to enjoy. Here are a few tips to remember when out on the trail.

- **Pack In/Pack Out:**

Don't leave anything behind. Whether it's trash, parts, or food. If you brought it, take it with you.

- **National and Public Parks:**

If visiting a national park, leave the RC cars at home. It is illegal to drive any radio control vehicle within national park boundaries. Public parks are slightly different, some may allow radio control cars and others may not. Check with your local officials before driving in a public park.

- **Be Considerate:**

Where ever you drive your radio control car, always be considerate of others. Hikers, bicyclists, and animals should always be given the right of way.

- **Keep It Quiet:**

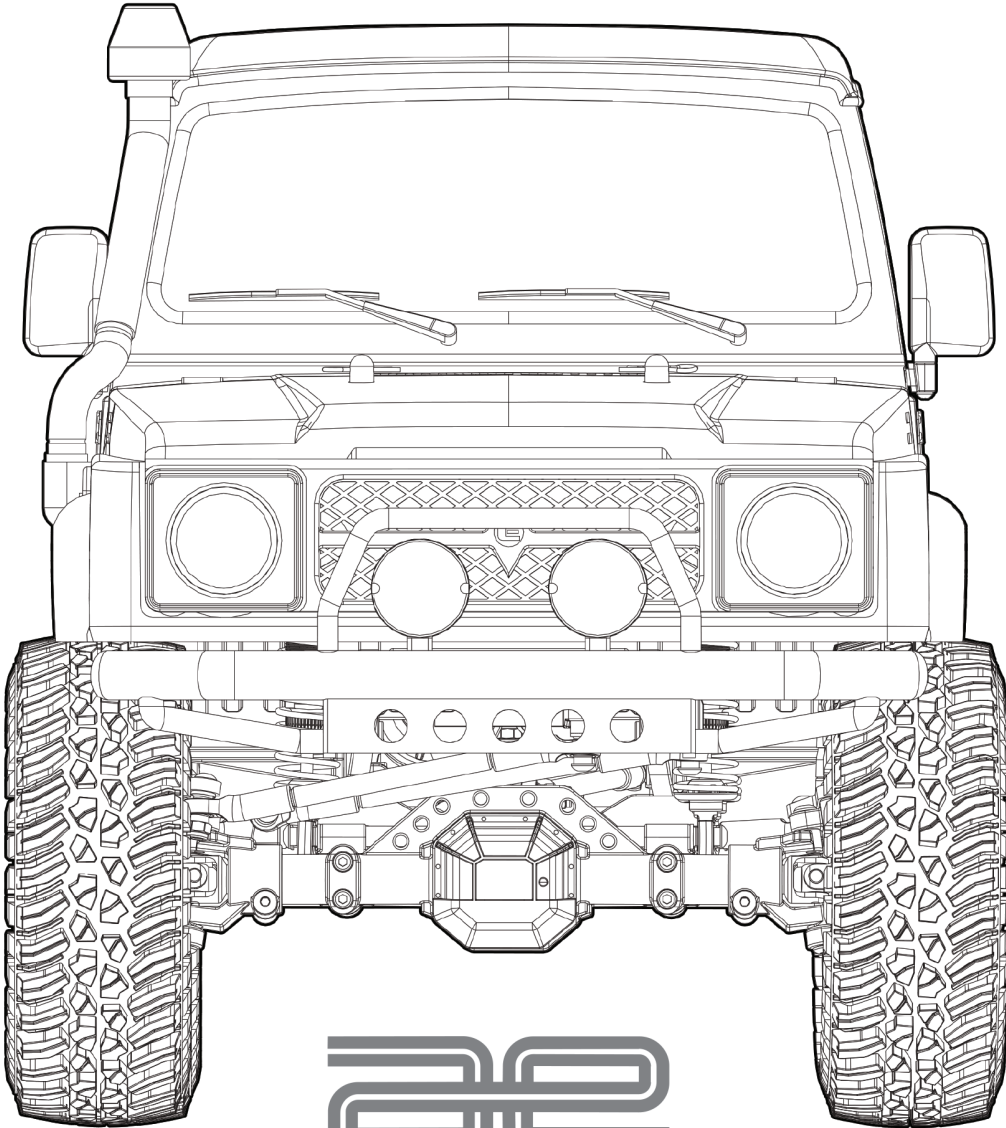
If you're sharing an area with other people, try to keep the noise to a minimum. If you come across animals or anglers, please be considerate and give them space.

- **Give A Hoot, Don't Pollute:**

When enjoying the outdoors take your trash with you. Not only is it bad for the environment, it's unsightly. If you see trash, pick it up, even if it isn't yours. If we all do our part we can work together to keep our planet beautiful for future generations.

- **Only You Can Prevent Wild Fires:**

Some of us like to mix camping with RC cars. This is great! Just remember to follow all safety precautions and put out any camp fires before calling it a night. Also, be sure to unplug and **store all LiPo batteries in LiPo sacks and a fire resistant storage device.**



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