

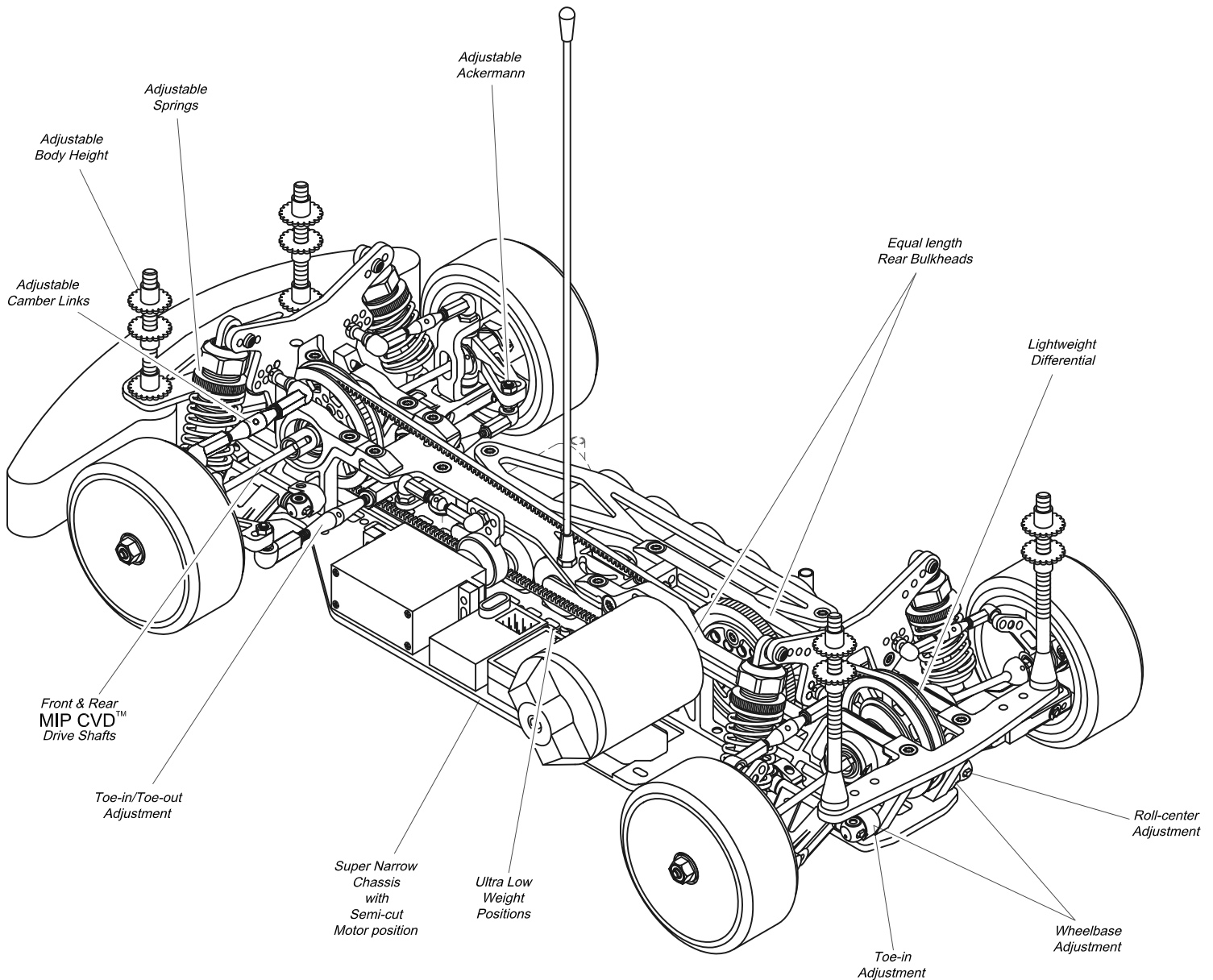


At Corally we use high-tech, quality engineering to provide you, the racers, with superior racing equipment. State of the art production methods and extensive R&D ensure that every Corally product sets the pace of development in the R/C competition world. We are not followers of fashion but leaders in innovation and development. RDX stands for Research and Development Xtreme. The RDX Phi is the highest specification electric touring car on the market today.

Corally RDX Phi Instruction Manual

#01618 and #01619

This manual will guide you through all steps to get your car running. For best result it is advised to read the manual completely before building the car.



Please note:

During assembly of the RDX Phi you might find some extra small parts. These extra parts have been included for your convenience. They do not necessarily need to be used during assembly.

RDX Phi Parts & Options

OPTION	1015	Diff balls 2.5mm - CHROME STEEL (10 pcs)
	1016	Diff balls 2.5mm - CERAMIC (10 pcs)
	10421	Antenna tube and holder
	10425	Antenna holder
	1121	Ball Bearings 'Metal Shielded' 5 x 9 mm (1 pair)
	1122	Ball Bearings 'Metal Shielded' 1/4 x 3/8" (1 pair)
	1124	Ball Bearings 'Metal Shielded' 4 x 7 mm (1 pair)
	1125	Ball Bearings 'Metal Shielded' 4 x 11 mm Flanged - For 08 Differential (1 pair)
	1131	Ball Bearings 'Metal Shielded' 10 x 15 mm (1 pair)
	1132	Ball Bearings 'Metal Shielded' 5 x 8 mm (1 pair)
OPTION	1133	Ball Bearings 'Metal Shielded' 3 x 6 mm (1 pair)
OPTION	1151	Ball Bearings - CERAMIC 'Metal Shielded' 5 x 9 mm (1 pair)
OPTION	1161	Ball Bearings - CERAMIC 'Metal Shielded' 10 x 15 mm (1 pair)
OPTION	1162	Ball Bearings - CERAMIC 'Metal Shielded' 5 x 8 mm (1 pair)
	11960	Steel screws M2.5 x 5 mm - 1.5mm Hex PH
	11961	Steel screws M2.5 x 6 mm - 2mm Hex FH
	11962	Steel screws M2.5 x 4 mm - 1.5mm Hex BH
OPTION	11963	Steel screws M2.5 x 6 mm - 1.5mm Hex FH
	1238	Cone Washers 10 x 4.2 x 0.5 mm - 10 pcs (For 08 RDX Phi Diffs)
	1244	Steel Screws M3 x 12 mm - Torx 10 Flat Head - 10 pcs
	1244	Steel Screws M3 x 6 mm - Torx 10 Flat Head - 10 pcs
	1245	Steel Screws M3 x 8 mm - Torx 10 Flat Head - 10 pcs
	1246	Steel Screws M3 x 6 mm - Torx 10 Round Head - 10 pcs
	1247	Steel Screws M3 x 12 mm - Torx 10 Round Head - 10 pcs
	1248	Steel Screws M3 x 8 mm - Torx 10 Round Head - 10 pcs
	1249	Steel Screws M3 x 10 mm - Torx 10 Flat Head - 10 pcs
	1253	Steel Nuts, M3 - 10 pcs
OPTION	1256	Aluminium Locknuts, M3 Black - 10 pcs
	1257	Aluminium Locknuts, M4 Black - Flanged - 4 pcs
	1260	O-Rings, 2.0x1.0 (10 pcs.)
	1280	Steel washers 3x6 (10 pcs.)
	16081	Screw-driver - Torx 10
	2210	Setscrews M3 x 3 (5 pcs.)
	2215	Setscrews M3 x 12 (5 pcs.)
	2378	Spur Gear 48P - 78 Teeth
	75710	Body post nuts
OPTION	77165	Diff Shims
OPTION	79040	CF6 Wishbone, Front - Medium 5 - Improved design (1 pc.)
OPTION	790404	CF6 Wishbone, Front - Medium 5 - Improved design (4 pcs)
OPTION	79050	CF6 Wishbone, Rear - Medium 5 - Improved design (1 pc.)
OPTION	790504	CF6 Wishbone, Rear - Medium 5 - Improved design (4 pcs)
	79060	CF6 Wishbone, Front - Hard 35 - Improved design (1 pc.)
	790604	CF6 Wishbone, Front - Hard 35 - Improved design (4 pcs)
	79070	CF6 Wishbone, Rear - Hard 35 - Improved design (1 pc.)
	790704	CF6 Wishbone, Rear - Hard 35 - Improved design (4 pcs)
OPTION	79080	CF6 Wishbone, Front - X Hard 80 - Improved design (1 pc.)
OPTION	790804	CF6 Wishbone, Front - X Hard 80 - Improved design (4 pcs)
OPTION	79090	CF6 Wishbone, Rear - X Hard 80 - Improved design (1 pc.)
OPTION	790904	CF6 Wishbone, Rear - X Hard 80 - Improved design (4 pcs)
OPTION	79109	Wishbone - Molded 75 - X Hard (1 pc.)
OPTION	791094	Wishbone - Molded 75 - X Hard (4 pcs.)
	79110	Inner Hinge pins (1 pair)
	79112	Outer Hinge pins (1 pair)
	79113	Inner Hinge pin Shims - White Nylon - 1.4 mm (10 pcs)
OPTION	79114	Inner Hinge pin Shims - White Nylon - 0.5 mm (30 pcs)
	79116	Outer Hinge pin E-Clips (10 pcs.)
OPTION	79117	Outer Hinge pin Shims 0.2 mm (10 pcs.)
OPTION	79118	Outer Hinge pin Shims 0.1 mm (10 pcs.)
	79120	Hinge pin Coupler - Duraluminium (1 pc.)
OPTION	79121	Hinge pin Coupler - Low - Duraluminium (1 pc.)
	79123	Insert for Hinge pin Adjustment Blocks - Delrin (1 pc.)
OPTION	79125	Toe-in Spacers, 0.5 Degree (8 pcs.)
OPTION	79126	Toe-in Spacers, 1.0 Degree (8 pcs.)
	79132	Belt Guide, incl. 2 ball bearings & post
	79134	Front Belt S3M (210)
OPTION	79135	Rear Belt S3M (510)
OPTION	77136A	Front Belt S3M (480)
OPTION	79137A	Rear Belt S3M (186)
	79136	Rear Belt S3M (213)
	79138	Front Belt S3M (507)
	79140	Wheel Hex Adapter (1 Pair) - Duraluminium
	79141	Narrow Wheel Hex Adapter (1 Pair) - Duraluminium
OPTION	79156	Front Spool with 42 teeth pulley - Delrin (1 pc.)
OPTION	79157	Front Spool with 36 teeth pulley - Delrin (1 pc.)
OPTION	79159	Lightweight Front 1-way Outdrives - Duraluminium (1 pair)
	79162	Diff Washers (1 Pair)
	79169	Front 1-way Outdrives - Steel (1 pair)
	79180	MIP CVD TM Driveshafts - Lightweight (1 pair)
OPTION	79180ST	MIP CVD TM Driveshafts - Steel (1 pair)
	79182	MIP CVD TM Bones - Lightweight (1 pair)
OPTION	79182A	MIP CVD TM Bones +2mm - Lightweight (1 pair)
OPTION	79182ST	MIP CVD TM Bones - Steel (1 Pair)
	79184	MIP CVD TM Wheel Axles (1 Pair)
OPTION	79184A	MIP CVD TM Wheel Axles - Short - 2mm (1 Pair)
	79185	MIP CVD TM Couplings & Pins (1 Pair)
	79186	MIP CVD TM Lube
	79187	MIP CVD TM Thread Lock
	79189	Replacement Caps for Driveshafts (1 Pair)
	791898	Replacement Caps for Driveshafts (4 Pairs)
	79220	Shock Absorbers, Silver Hardcoated Alum. (1 Pr)
	79221	Shock Body incl. Shockcap & adjustment Nut (1 Pr)
OPTION	79221A	Short Shock Body (1 Pr)
	79222	Shock Piston/shaft incl. E-Clips (1 Pr)
	79224A	Shock Piston, Rounded - 2 x 1.3mm holes (1 pair)
OPTION	79224B	Shock Piston, Rounded - 2 x 1.1mm holes (1 pair)
OPTION	79224C	Shock Piston, Rounded - 2 x 0.9 mm holes (1 pair)
OPTION	79225	Shock Spring Collar - Ultra Low (1 pair)
	79226	Shock Spring Adjustment Nut O-Ring 13x1 (1 Pr)
	79227	Shock Diaphragm (1 Pr)
	79228	Shock Silicone O-rings with Spacers & Clip (1 Pr)
	79229	Shock Collar with Ballends & Balls (1 Pr)
OPTION	79230	Black Spring Set - Standard (6 Pair)
OPTION	79231	Silver Spring Set - Hard (6 pairs)
	79233	Black Springs 17 lbs (1 pair)
	79252	Steering Lever Posts (1 pair)
OPTION	79256A	Steering Lever Set - Duraluminium (1 pair)
	79256B	Steering Lever 'L-Type' - With M3 threaded holes - Duraluminium (1 pc)
	79259	Ball cups 5.8 mm - Nylon (2 pairs)
	79260	Ball cups 4.3 mm (7 pairs)
	79261	Pivot Balls 4.3 mm, M3 x 2.5 mm - Duraluminium (4 pcs.)
	79262	Pivot Balls 4.3mm, for inside front link - Hardened steel (1 pair)

	79263	Pivot Balls 4.3 mm, for inside rear link - Hardened steel (1 pair)
	79265	Pivot Balls 4.3 mm, M3 x 7.5 mm - Hardened steel (4 pcs)
	79267	Pivot Balls 5.8 mm, M3 x 6.5 mm - Short - Duraluminium (2 pcs)
	79268	Pivot Balls 5.8 mm, M3 x 6.5 mm - Long - Duraluminium (2 pcs)
	79269	Pivot Balls 5.8 mm, M3 (Inside thread) - Duraluminium (4 pcs)
	79270	Turnbuckles 21 mm - Duraluminium (1 pair)
OPTION	79270A	Turnbuckles 21 mm - Duraluminium - New design with adj. square (1 pair)
	79271	Turnbuckles 28 mm - Duraluminium (1 pair)
OPTION	79271A	Turnbuckles 28 mm - Duraluminium - New design with adj. square (1 pair)
	79272	Turnbuckles 33 mm - Duraluminium (1 pair)
OPTION	79272A	Turnbuckles 33 mm - Duraluminium - New design with adj. square (1 pair)
	79274	Turnbuckles 42 mm - Duraluminium - New design with adj. square (1 pair)
OPTION	79277	Adjustment tool for new design turnbuckles with adj. square
OPTION	79278	Steering Blocks incl. bushings 3x6mm - Duraluminium (1 pr.)
OPTION	79278A	Narrow Steering Blocks incl. bushings 3x6mm - Duraluminium (1 pr.)
OPTION	79279	Steering Blocks incl. ball bearings 3x6mm - Duraluminium (1 pr.)
OPTION	79279A	Narrow Steering Blocks incl. ball bearings 3x6mm - Duraluminium (1 pr.)
	79280	Steering Blocks - Nylon (1 pair)
OPTION	79281	Front C-Hub with 0° caster, Left or right - Duraluminium (1 pc.)
	79282	Front C-Hub with 2° caster, Left - Duraluminium (1 pc.)
	79283	Front C-Hub with 2° caster, Right - Duraluminium (1 pc.)
OPTION	79288	Front C-Hub with 3° caster, Left - Duraluminium (1 pc.)
OPTION	79289	Front C-Hub with 3° caster, Right - Duraluminium (1 pc.)
OPTION	79284	Front C-Hub with 4° caster, Left - Duraluminium (1 pc.)
OPTION	79285	Front C-Hub with 4° caster, Right - Duraluminium (1 pc.)
OPTION	79286	Front C-Hub with 6° caster, Left - Duraluminium (1 pc.)
OPTION	79287	Front C-Hub with 6° caster, Right - Duraluminium (1 pc.)
	79290	Front C-Hub M5 Screw + Ball screw (1 pair)
OPTION	79296	Rear Uprights with 2° toe-in, Left - Duraluminium (1 pc.)
OPTION	79297	Rear Uprights with 2° toe-in, Right - Duraluminium (1 pc.)
	79330A	Lower Bumper - Reinforced Nylon
	79336	Large Foam Bumper - X-hard
	79365	Battery strap posts (1 pair)
OPTION	79380	Ultra low balancing weight - 5 gram (1 pc.)
OPTION	79381	Ultra low balancing weight - 8 gram (1 pc.)
	79395A	Servo posts, Lightweight - Duraluminium (1 pair)
	79400	Bodyposts for horizontal mounting (1 pair)
	79430	Anti-roll bar clamps (1 pair)
	79432	Anti-roll bar balls 5.8 mm - Hard Anodised Duraluminium
OPTION	79500	Motor Cooling Fan 30mm (5 - 6 V) with universal receiver plug
OPTION	79510	Motor Guard / Fan Support - Alu 7075T6
OPTION	79515	Motor Cooling Kit (Motor Guard and Cooling Fan)
OPTION	79655	Front Spool (excluding pulley) - Duraluminium
	79667	One-way (excl. pulley) - Incl. Hardened Steel Outdrives - Dural.
OPTION	79670	Pulley 36 teeth for LW differential
OPTION	79671	Pulley 36 teeth for duraluminium spool / front 1-way
	79672	Pulley 42 teeth for LW differential
	79673	Pulley 42 teeth for duraluminium spool / front 1-way
	79680	08 Differential Front/Rear (excluding pulley) - Duraluminium
	79681	08 Diff Outdrive, Short - Duraluminium
	79682	08 Diff Outdrive, Long - Duraluminium
	79683	08 Diff Rebuild Kit incl. thrust bearing & diff nut (1 pc.)
	79684	08 Diff Washers (1 pair)
	79685	08 Diff nut wrench - 7 mm hex - Graphite (1 pc.)
	79697	Bearing Holder Clips (4 pcs)
	79698A	Bearing Holder, Front - Left for diff & spool / Right for 1-way
	79699A	Bearing Holder, Front - Right for diff & spool / Left for 1-way
	79700A	Bearing Holder, Rear - Left (256 / 264 mm) - Duraluminium
	79701A	Bearing Holder, Rear - Right (256 / 264 mm) - Duraluminium
OPTION	79702A	Bearing Holder, Rear - Left (260 mm) - Duraluminium
OPTION	79703A	Bearing Holder, Rear - Right (260 mm) - Duraluminium
	79704A	Bulkhead, Front - Duraluminium
	79705A	Bulkhead, Rear - Left - Duraluminium
	79706A	Bulkhead, Rear - Right - Duraluminium
	79707A	Rear Bulkhead center brace - Duraluminium
	79708A	Coupler Clamp Standard - Duraluminium
OPTION	79709A	Coupler Clamp -0.6 mm anti-dive (left) - Duraluminium
OPTION	79710A	Coupler Clamp -0.6 mm anti-dive (right) - Duraluminium
	79711A	Coupler Clamp 2.0 mm toe-in - Rear (left) - Duraluminium
	79712A	Coupler Clamp 2.0 mm toe-in - Rear (right) - Duraluminium
OPTION	79715	Coupler Clamp Spacers - 0.5 mm (2 pcs)
OPTION	79716	Coupler Clamp Spacers - 1.0 mm (2 pcs)
OPTION	79738	Shock Tower Front - Low - 2.9 mm Graphite
	79739	Shock Tower Front - 2.9 mm Graphite
OPTION	79740	Shock Tower Rear - Low - 2.9 mm Graphite
	79741	Shock Tower Rear - 2.9 mm Graphite
	79801	Layshaft with spacer - Duraluminium
OPTION	79807	Center pulley for front or rear belt - 21 Teeth - Duraluminium
	79808	Spur Gear & Pulley Adapter - Duraluminium
	79809	Spur Gear Guide Ring - Duraluminium
OPTION	79810	Front Pulley Guide Ring - Duraluminium
OPTION	79817	Center pulley for front or rear belt - 17 Teeth - Delrin
OPTION	79818	Center pulley for front or rear belt - 18 Teeth - Delrin
OPTION	79821	Center pulley for front or rear belt - 21 Teeth - Delrin
OPTION	79828	6-cell Chassis Stiffener - 2.4 mm Graphite
	79831	Upper bumperplate - 2.4 mm Graphite
OPTION	79836A	6-cell Chassis - 2 mm Graphite - Cells +3mm
	79837	6-cell Chassis - 2.4 mm Graphite
	79838	6-cell Chassis - 2.9 mm Graphite
OPTION	79839	6-cell Chassis - 3.4 mm Graphite
	79856	Topdeck - 2.4 mm Graphite
OPTION	79858	Topdeck - 2.9 mm Graphite
	79863	Battery strap - Graphite
OPTION	79907	Rear bodypost plate - 2.4 mm Graphite
OPTION	79910	Anti-roll bar set 1.0 mm, Black - Rear
OPTION	79912	Anti-roll bar set 1.3 mm, Silver - Rear
OPTION	79913	Anti-roll bar set 1.3 mm, Silver - Front
OPTION	79914	Anti-roll bar set 1.6 mm, Brass - Rear
OPTION	79915	Anti-roll bar set 1.6 mm, Brass - Front
OPTION	79916	Anti-roll bar set 1.9 mm, Black - Rear
OPTION	79917	Anti-roll bar set 1.9 mm, Black - Front
OPTION	79920	Anti-roll bar wire 1.0 mm, Black - Rear
OPTION	79922	Anti-roll bar wire 1.3 mm, Silver - Rear
OPTION	79923	Anti-roll bar wire 1.3 mm, Silver - Front
OPTION	79924	Anti-roll bar wire 1.6 mm, Brass - Rear
OPTION	79925	Anti-roll bar wire 1.6 mm, Brass - Front
OPTION	79926	Anti-roll bar wire 1.9 mm, Black - Rear
OPTION	79927	Anti-roll bar wire 1.9 mm, Black - Front
	80010	Diff Lube, White - For the large diff balls
	80120	High Grade Shock Oil - 100% PURE SILICONE 1 Oz. - 20 Wt
	90086	Sticker Sheet - RDX PHI LOGOS (2 pcs.)

Tools required (included)

- Screw driver Torx T10 **Corally part #16081**
- Silicone Shock Oil 20WT oil **Corally part #80120**
- Differential Grease **Corally part #80010**
- Thread Lock **Corally part #79187** (included with MIP CVD™)

Tools required (not included)

Corally Tool Set (#16070) containing:

- Screw driver Torx T10 **Corally part #16081**
- Screw driver for set screws - 1.5mm **Corally part #16082**
- Small Philips screw driver **Corally part #16085**
- 5.5 mm nut driver **Corally part #16087**
- 6 mm nut driver **Corally part #16088**
- 7 mm nut driver **Corally part #16089**
- 7 mm Diff nut wrench **Corally part #79685**
- 5 mm nut driver **Corally part #16086**
- Cutting Plier
- Long nose Plier
- Vernier calipers or precision ruler
- Hobby Knife
Be careful with the sharp blade!
- Hobby Scissors
- Double-sided Tape

Items required to complete your car (not included)

- R/C two channel surface frequency radio system
- 7.2V Battery Pack (6 cell sub-C size) / 6V Battery Pack (5 cell sub-C size)
- Battery Charger (with peak or temperature detection)
- Servo with Servo saver
- Electronic Speed Control
- Electric Motor
- Pinion gear (short boss), size to be determined by type and wind of motor being used.
- 1:10 Scale Lexan Body 190 mm
- Tires and wheels

Bag 1 Differential (2 included in #1619)

Step 1

LW Output Shaft, Long:

- Place one 1/4 x 3/8" ball bearing on the output shaft.
- Place a diff washer.
- Put some grease on the diff washer, but not too much.
- Now place the pulley on the 1/4 x 3/8" ball bearing
- Place the 2.5mm balls in the pulley.

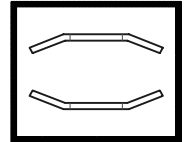
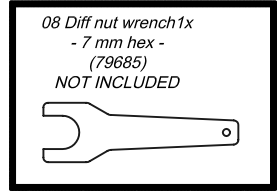
Step 2

LW Output Shaft, Short:

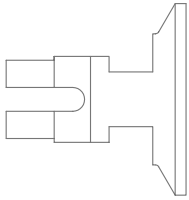
- Place a diff washer.
- Put some grease on the diff washer, but not too much.
- Place a 4x11F ball bearing in the output shaft.
- Place the M4 locknut on top of the 4x11F ball bearing.
- Slide 2 cone washers 10 x 4.2 x 0.5 between the M4 locknut and the 4x11F ball bearing.

Now mount both output shafts together while holding the M4 locknut with the available 7mm diff wrench.

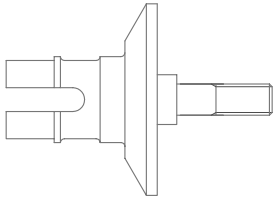
The diff will be damaged if overtightened!
See next page for adjusting the diff.



18x 2.5mm Ball



1x LW Diff Output Shaft, Short



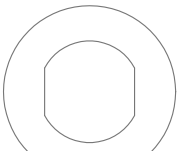
1x LW Diff Output Shaft, Long



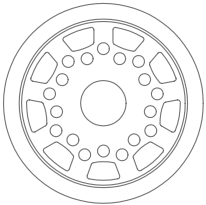
1x Ball Bearing 1/4 x 3/8"



1x Ball Bearing 4x11F



2x Diff Washer



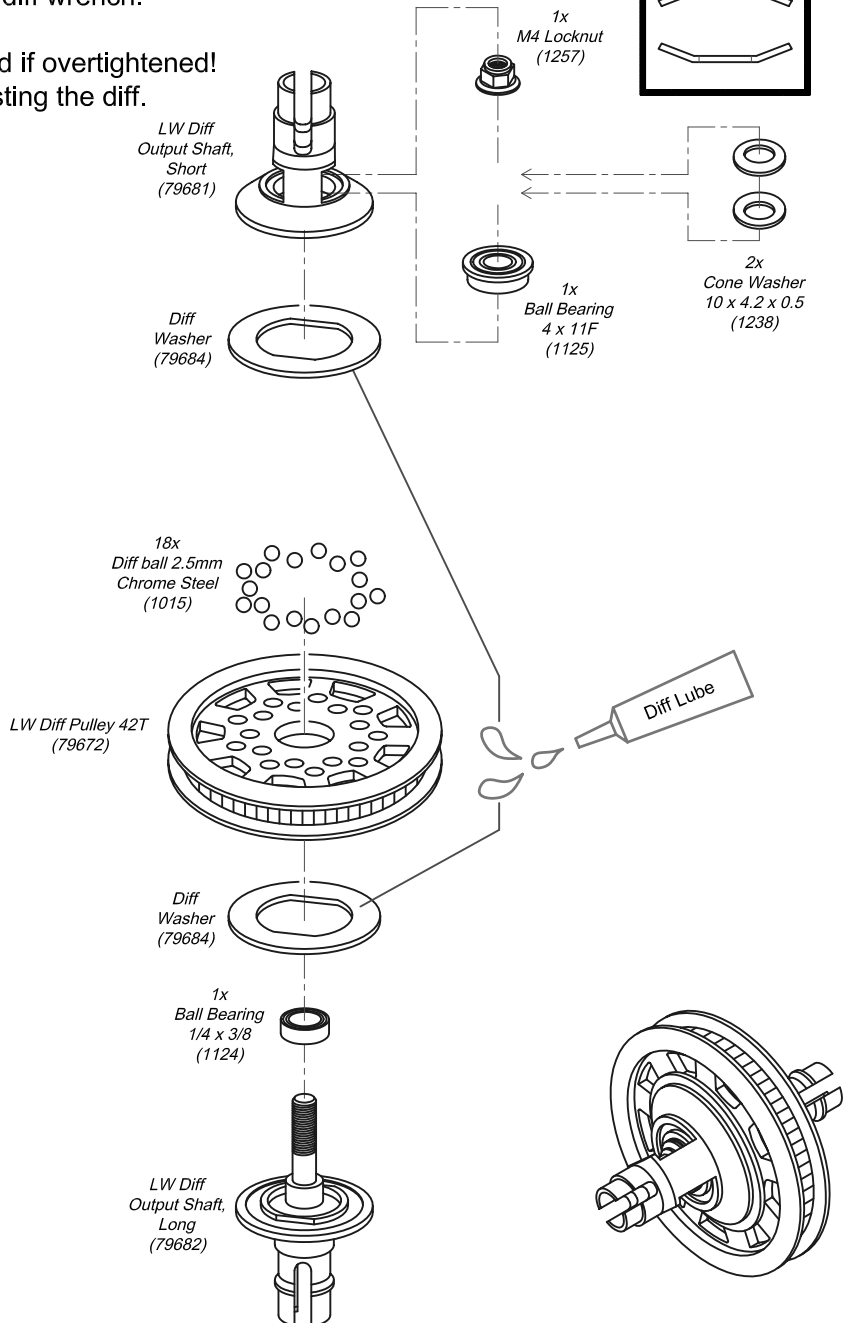
1x LW Diff Pulley 42T



2x Cone Washer 10x4.2x0.5



1x M4 Locknut



Step 2

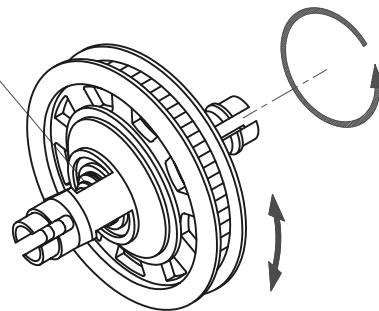
Differential Adjustment

The differential is an important component of your car. So build and adjust it very carefully.

The RDX Phi (#01618) has a rear differential and front one-way.

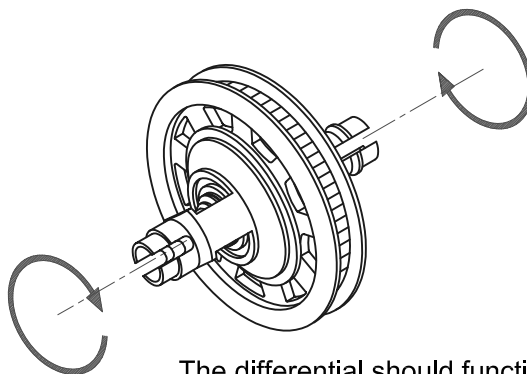
The RDX Phi US Carpet Spec (#01619) comes with two differentials.

Hold the M4 nut in the output shaft with a 7 mm wrench. (**part #79685**)



Differential adjustment.

The differential should be carefully adjusted by holding the M4 nut using a 7 mm wrench (**Corally part #79685**). Overtightening the M4 nut might damage the bearings, balls and washers in the differential! To test for the correct adjustment, hold both output shafts and try to spin the pulley. If the pulley slips without using extreme force, it means the diff is too loose and needs to be tightened some more by turning the M4 nut.



The differential should function smoothly.

Bag 2 Front One-way (not included in (#01619))

Step 1

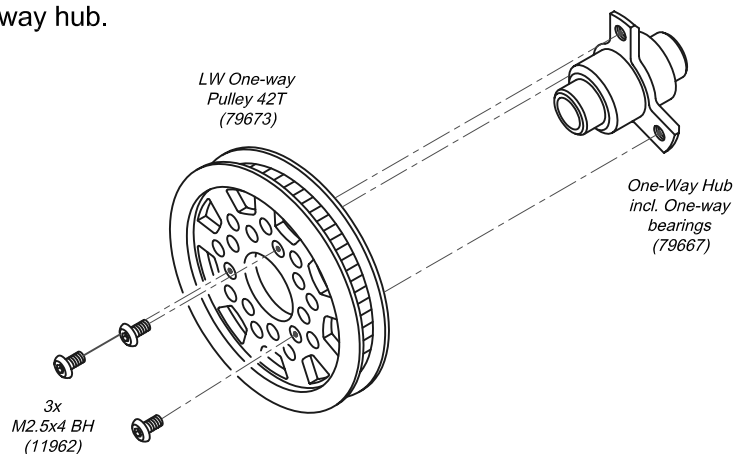
Mount the pulley on the one-way hub.

1x One-way Hub with pre-assembled 1-way bearings

2x LW One-way Outdrive

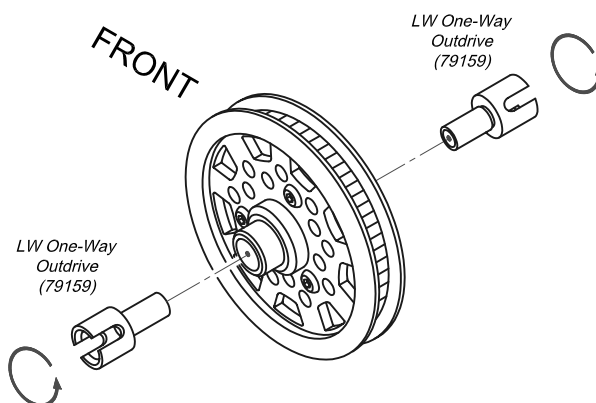
1x LW One-way Pulley 42T

3x M2.5x4 BH



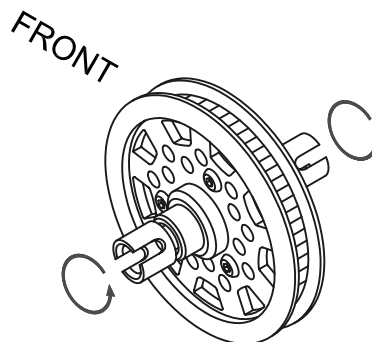
Step 2

Now slide the outrives in the one-way bearings. Make sure that they rotate in the right direction.



Step 3

The outrives have to spin freely by rolling them forwards.



Bag 3 Drivetrain Subassembly

The wishbones can be secured with the additional supplied mounting parts.

Do not tighten the screws too tight. They are only for extra securement

2x Coupler Clamp Standard



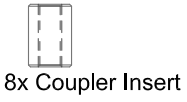
1x Coupler Clamp 2° toe L



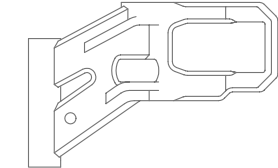
1x Coupler Clamp 2° toe R



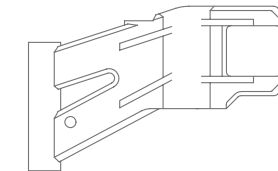
8x Hingepin Coupler



8x Coupler Insert

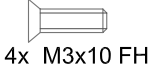


2x Front Wishbone



2x Rear Wishbone

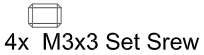
4x Inner Hingepin



4x M3x10 FH



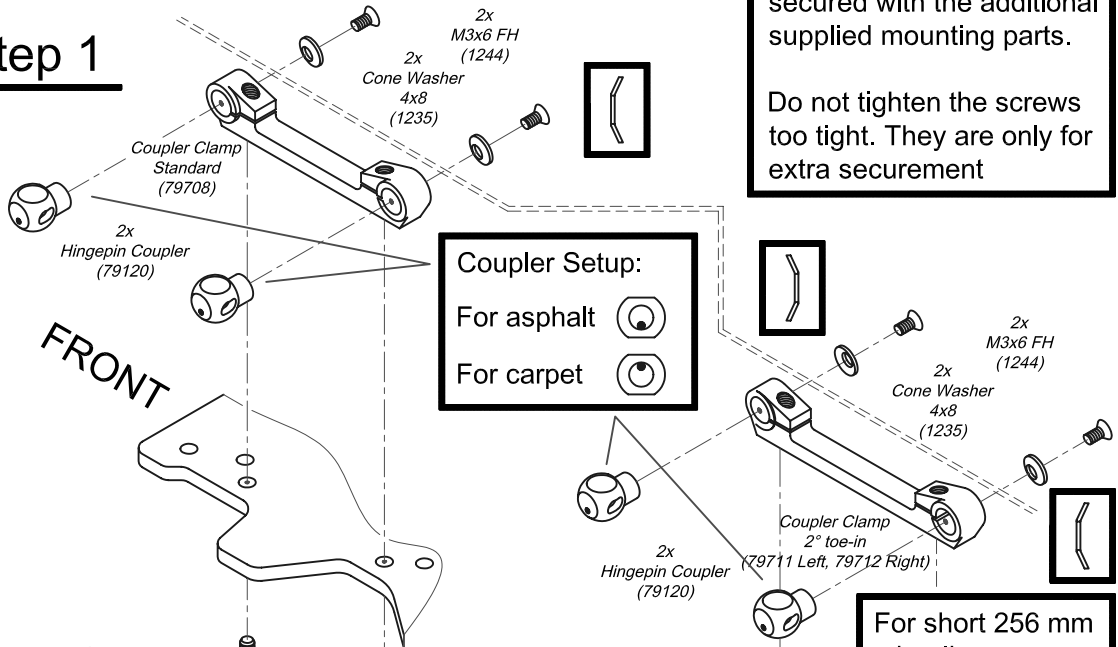
4x M3x12 Set Screw



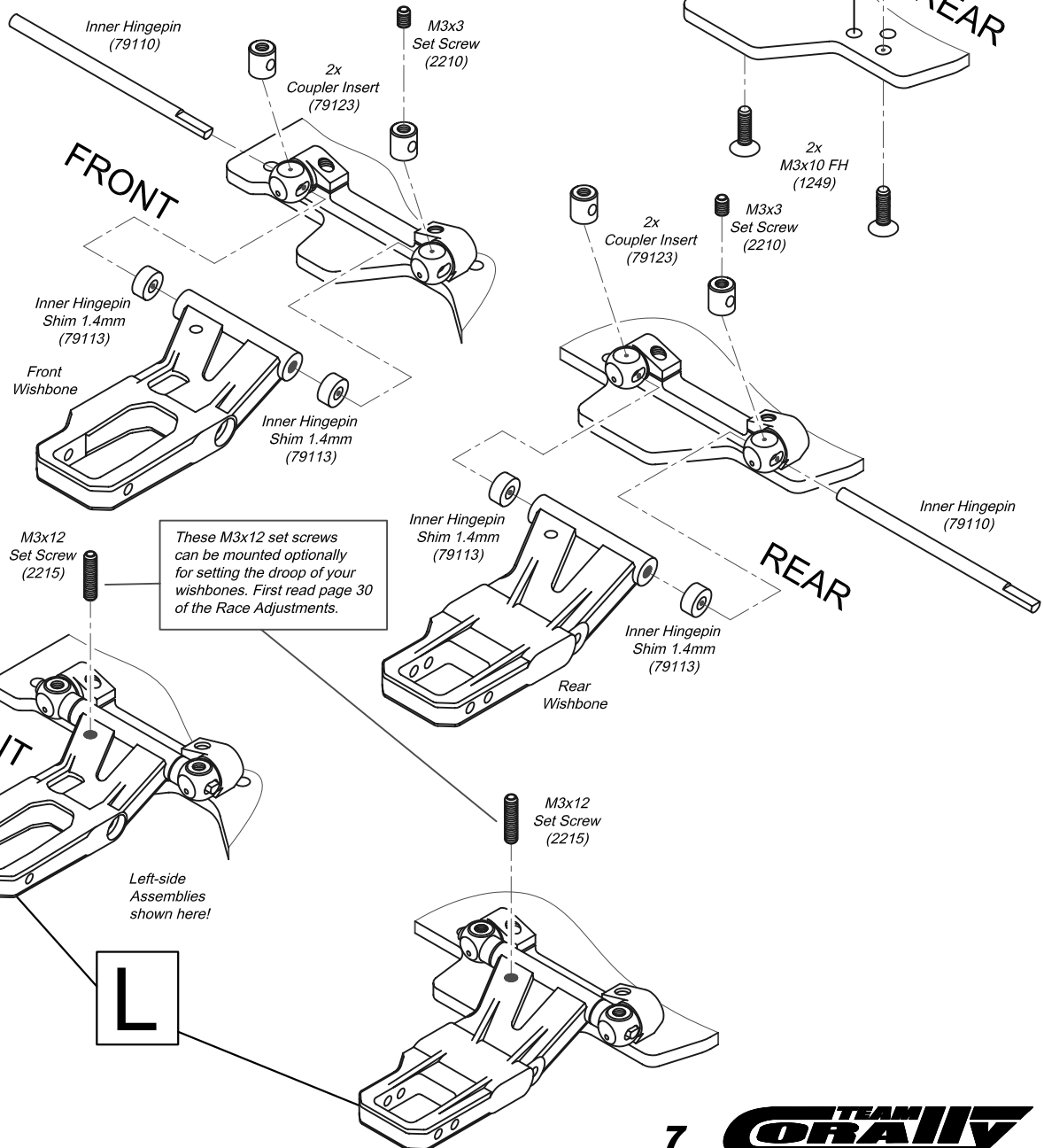
4x M3x3 Set Screw

4x Inner Hingepin Shim 1.4 mm (White Nylon)

Step 1



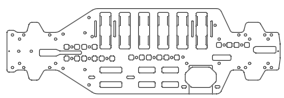
Step 2



Additional parts

4x M3x6 FH

4x 4x8 Cone Washer



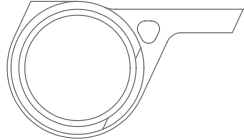
1x 6-cell Chassis



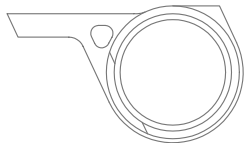
1x Front Belt 507 mm



2x Front Bulkhead



1x Bearing Holder, Front
Left f. diff&spool/Right f. 1-way



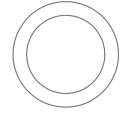
1x Bearing Holder, Front
Right f. diff&spool/Left f. 1-way



2x Ball Bearing 10x15



2x Bearing Holder Clip



2x Shim 10x0.4



6x M3x6 FH

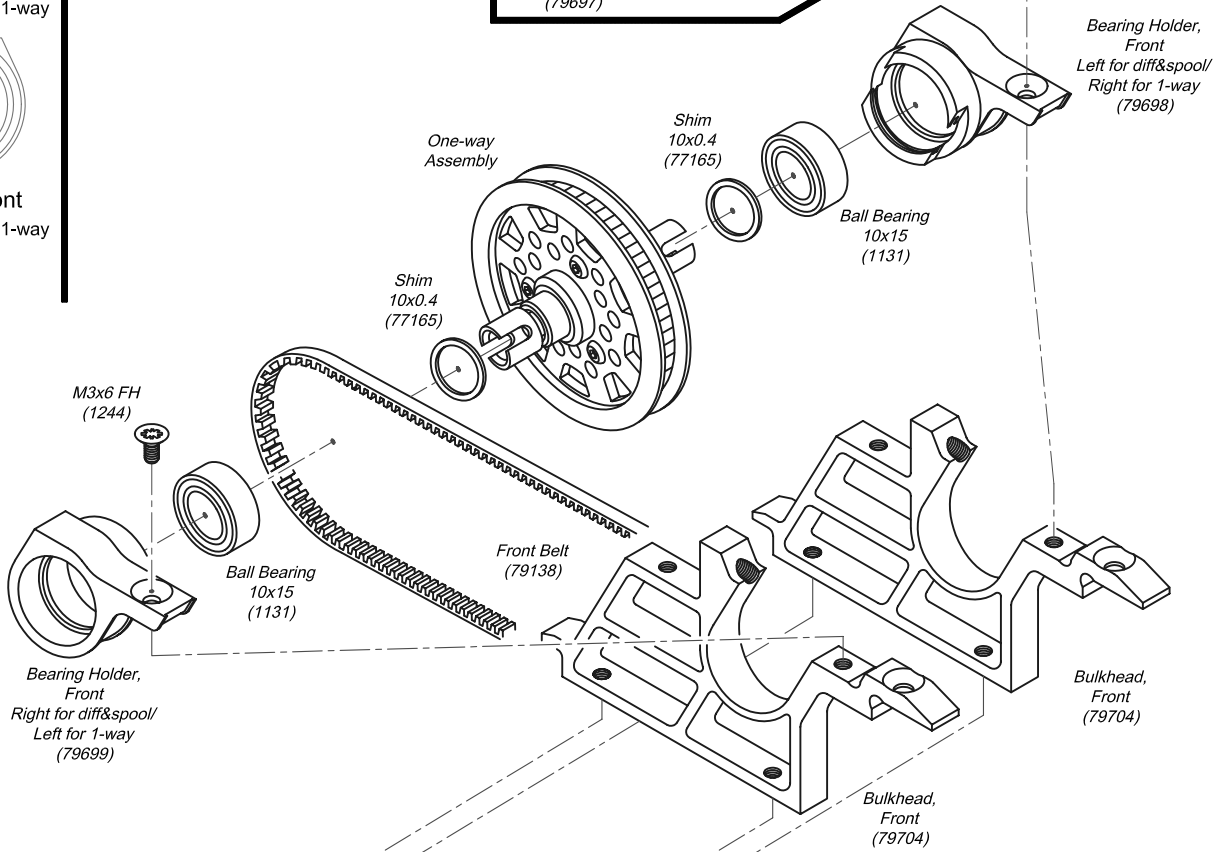
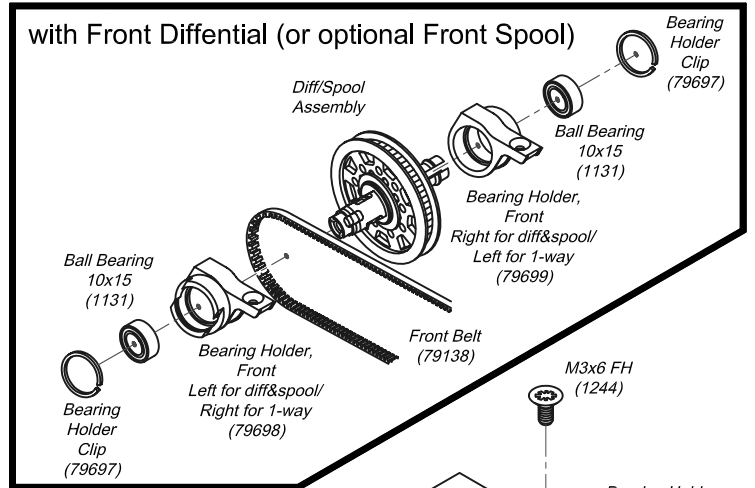
Bag 4 Drivetrain (Front)

Step 1

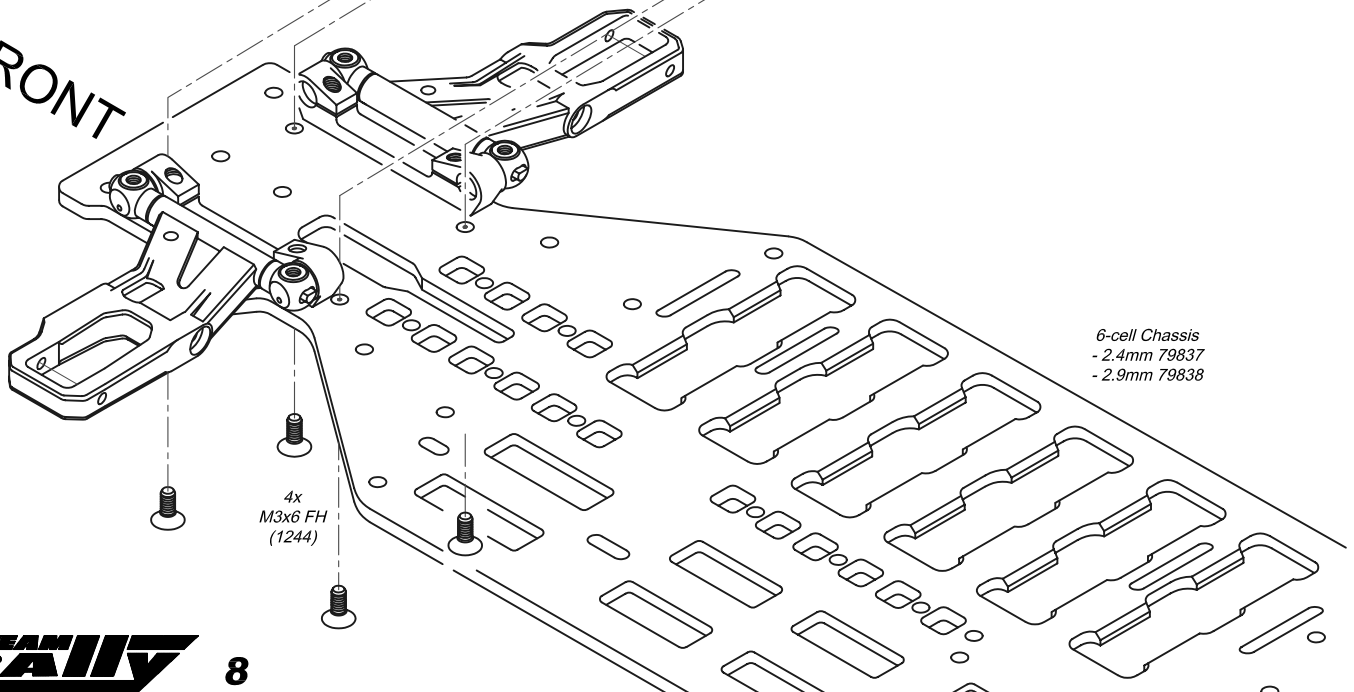
Mount the front bulkheads to the chassis.

Install the one-way/diff/spool parts with the ball bearings in the bearing holders.

Mount the assembly with the front belt into the front bulkheads.



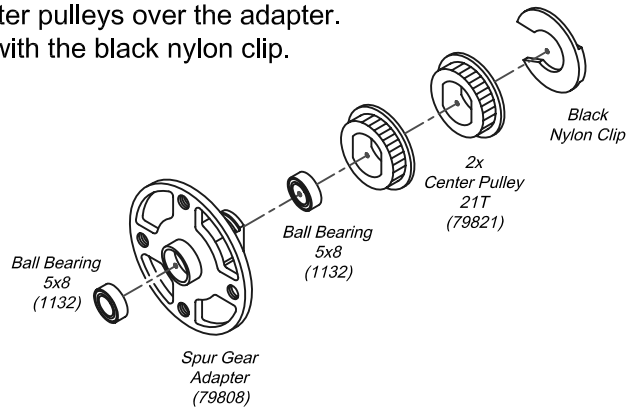
FRONT



Bag 4 Spur Gear / Center Pulley Assembly

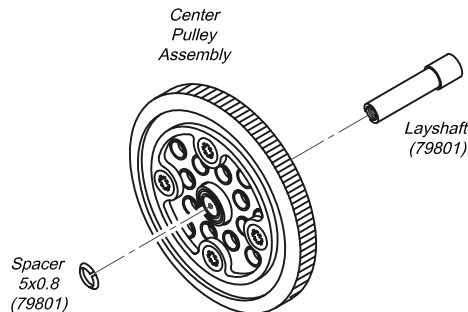
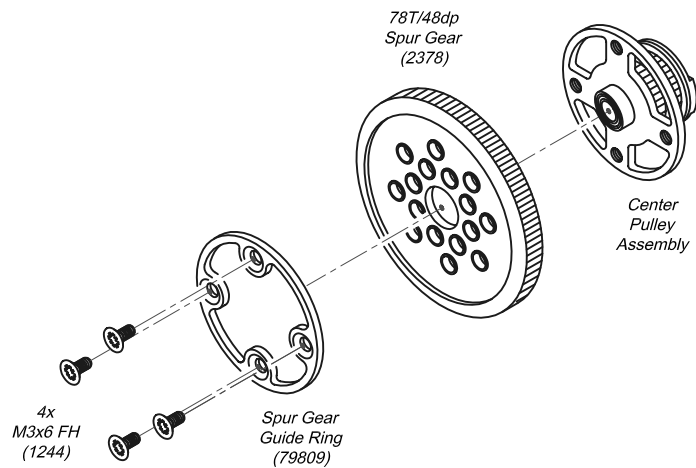
Step 2

Install a ball bearing on each side of the spur gear adapter.
Slide the two center pulleys over the adapter.
Lock the pulleys with the black nylon clip.

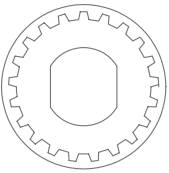


Step 3

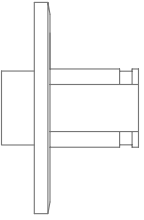
Attach the spur gear by using the spur gear lock ring.



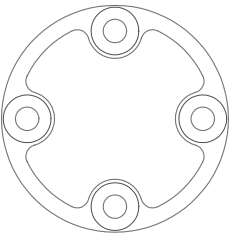
1x Layshaft



2x Center Pulley



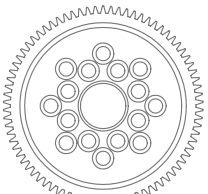
1x Spur Gear Adapter



1x Spur Gear Guide Ring



1x Black Nylon Clip



1x 78T / 48dp Spur Gear



1x Spacer 5x0.8



2x Ball Bearing 5x8x2.5



4x M3x6 FH

Bag 4 Drivetrain (Rear)

Step 5

Mount the rear bulkheads on the chassis.

Install the rear differential with rear belt between the rear bearing holders.

This is locked by mounting the rear body post plate.

Install the layshaft assembly

1x Rear Bodypost Plate

1x Rear Belt 213 mm

1x Bulkhead, Rear Left

1x Bulkhead, Rear Right

1x Left Bearing Holder, Rear

1x Right Bearing Holder, Rear

1x Rear Bulkhead Center Brace

2x Ball Bearing 10x15

2x Bearing Holder Clip

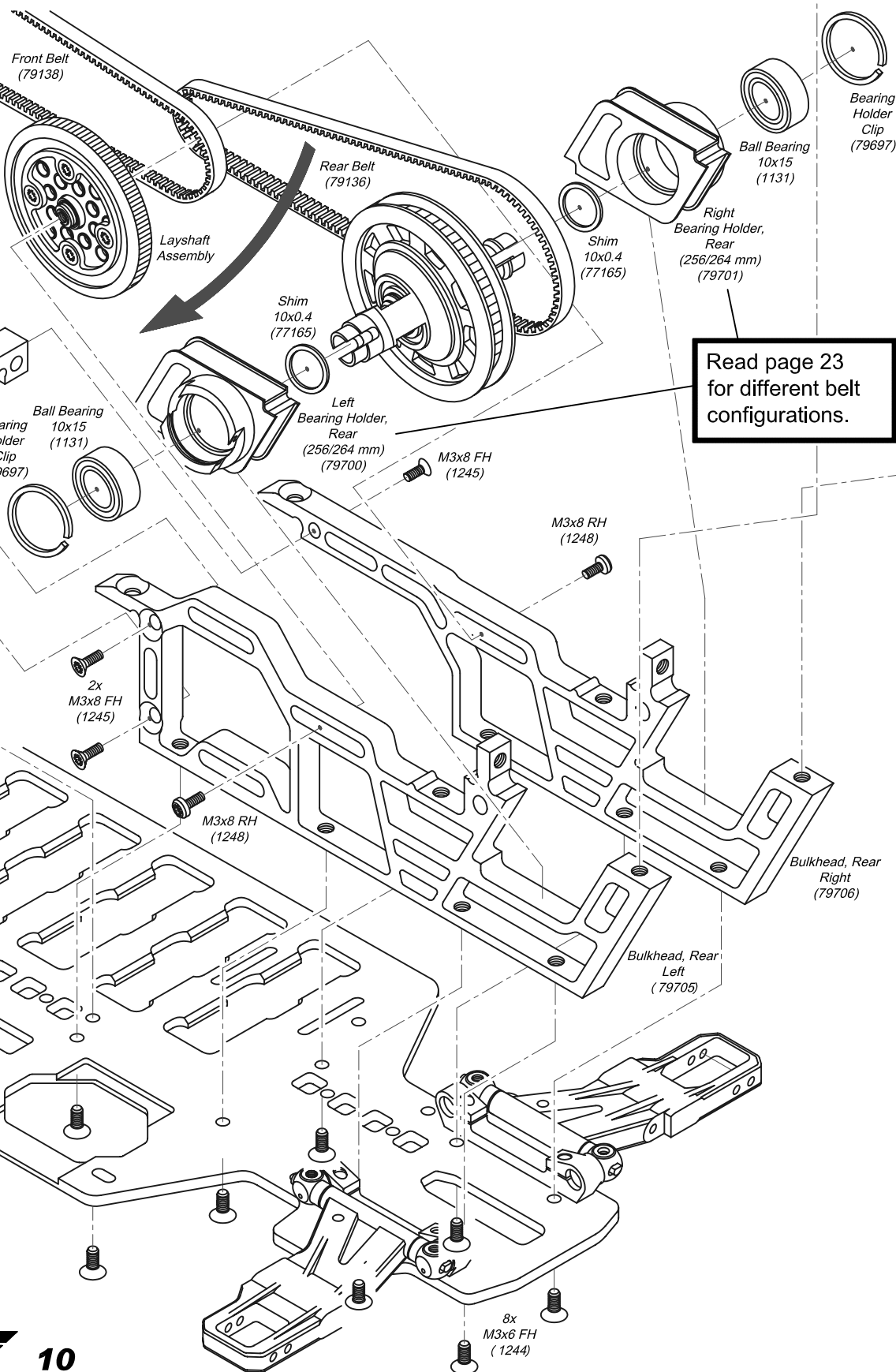
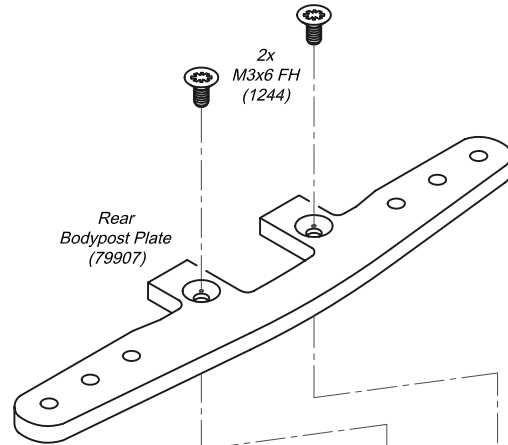
2x Shim 10x0.4

2x M3x8 RH

3x M3x8 FH

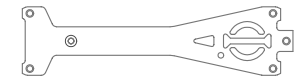
10x M3x6 FH

See page 23 for other internal gear ratios. When using other belts or other pulleys, the bearing holders can be rotated 180°. Or use the optional #79702 and #79703 bearing holders.



Read page 23 for different belt configurations.

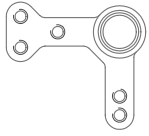
Bag 5 Chassis



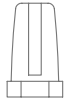
1x Topdeck



1x Steering Lever Post



1x Steering Lever



1x Antenna Holder



4x Pivot Ball 4.3 mm
M3x2.5 mm



2x Ball Bearing 5x8



2x Turnbuckle 42 mm



1x Turnbuckle 21 mm



6x Ballcup



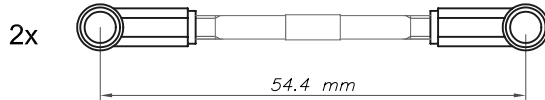
7x M3x6 FH

Screw the pivot balls on the steering lever.

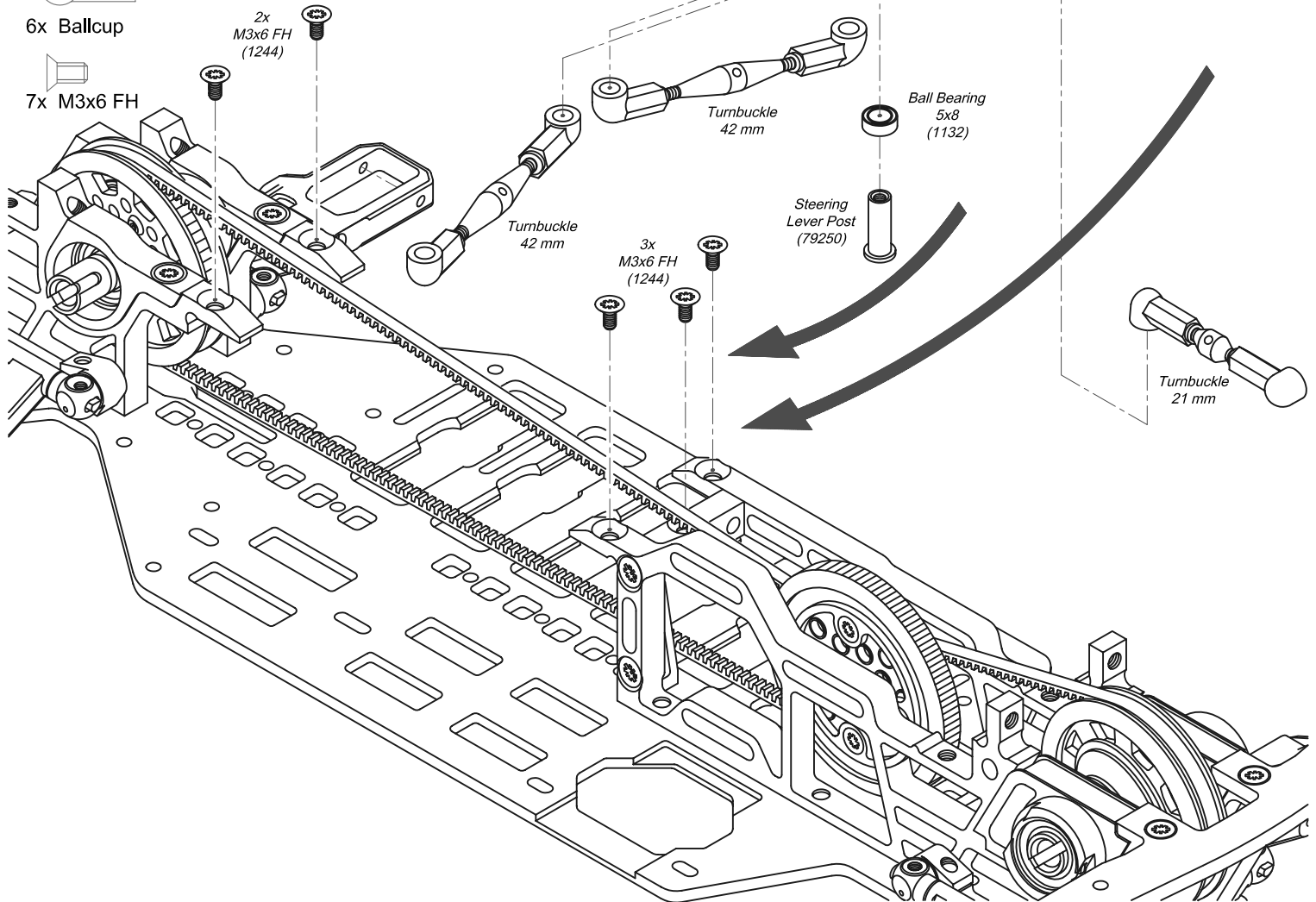
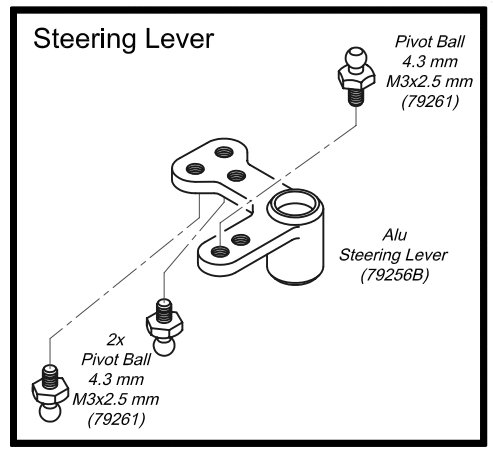
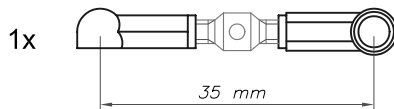
Build 3 turnbuckles as shown. Snap them on the pivot balls.

After assembling the parts to the topdeck, mount the topdeck under the bulkheads.

Turnbuckle long 42mm (79274)



Turnbuckle short 21mm (79270)



Bag 5 Chassis (Front)

1x Front Shock Tower



1x Front Bumper



2x Pivot Ball 4.3mm
Front Camber Link



3x M3x8 FH



2x M3x6 FH



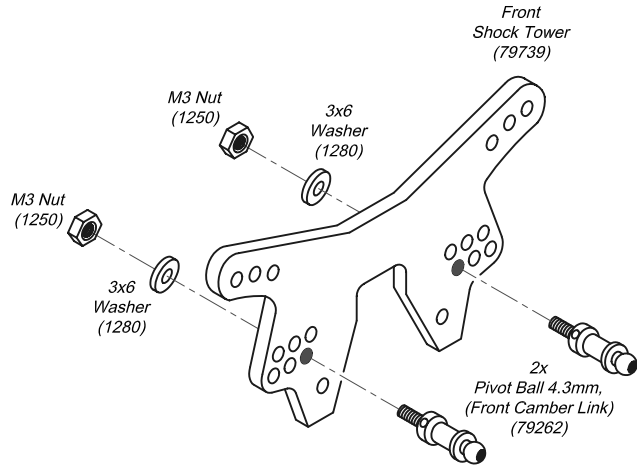
3x M3 Nut



2x 3x6 Washer

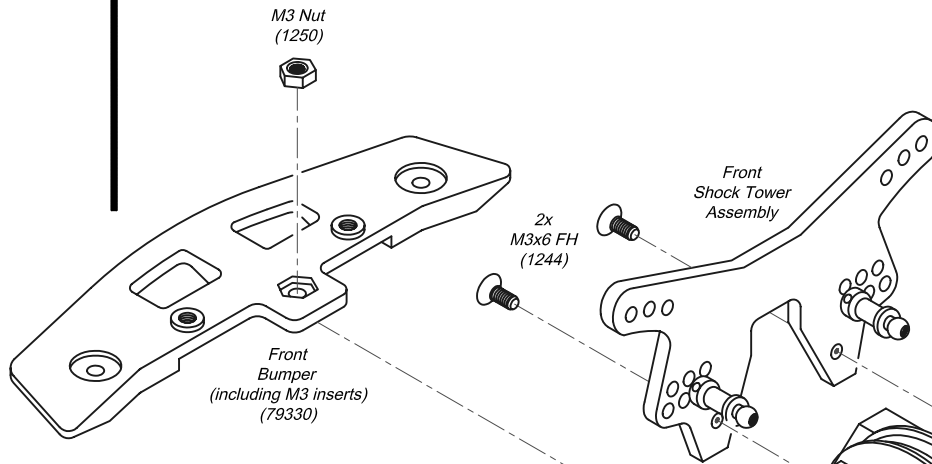
Step 1

Mount the pivot balls for the camber links to the shock tower.



Step 2

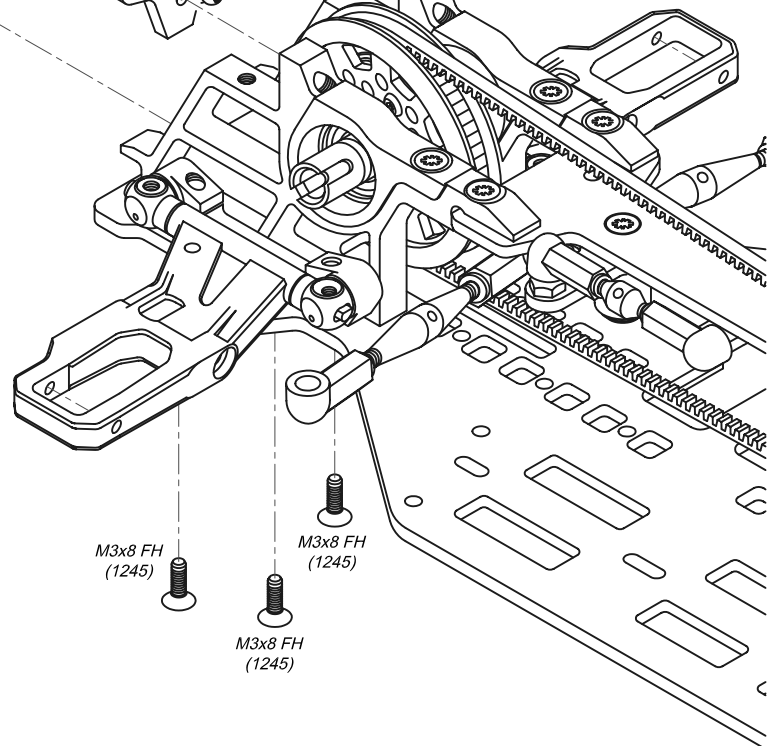
Mount the shock tower assembly to the front bulkheads.



Step 3

Mount the front bumper. Slide it between the bulkheads and the chassis plate. Loosen the bulkheads screws a couple of turns to make it easier.

Then tighten the screws again.



Bag 5 Chassis (Rear)

Step 1

Mount the pivot balls for the camber links to the shock tower.

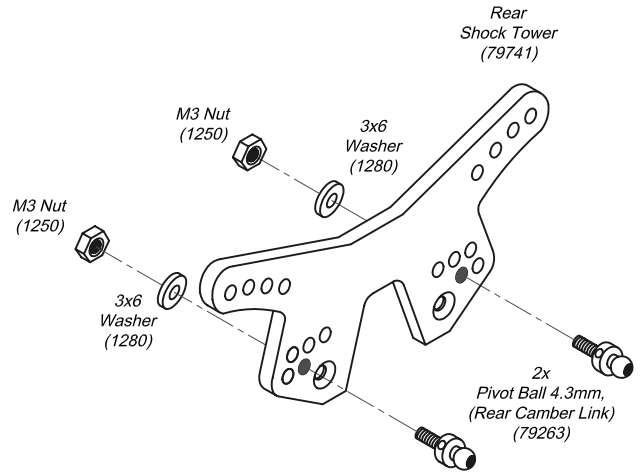
1x Rear Shock Tower

2x Pivot Ball 4.3mm Rear Camber Link

2x M3x6 FH

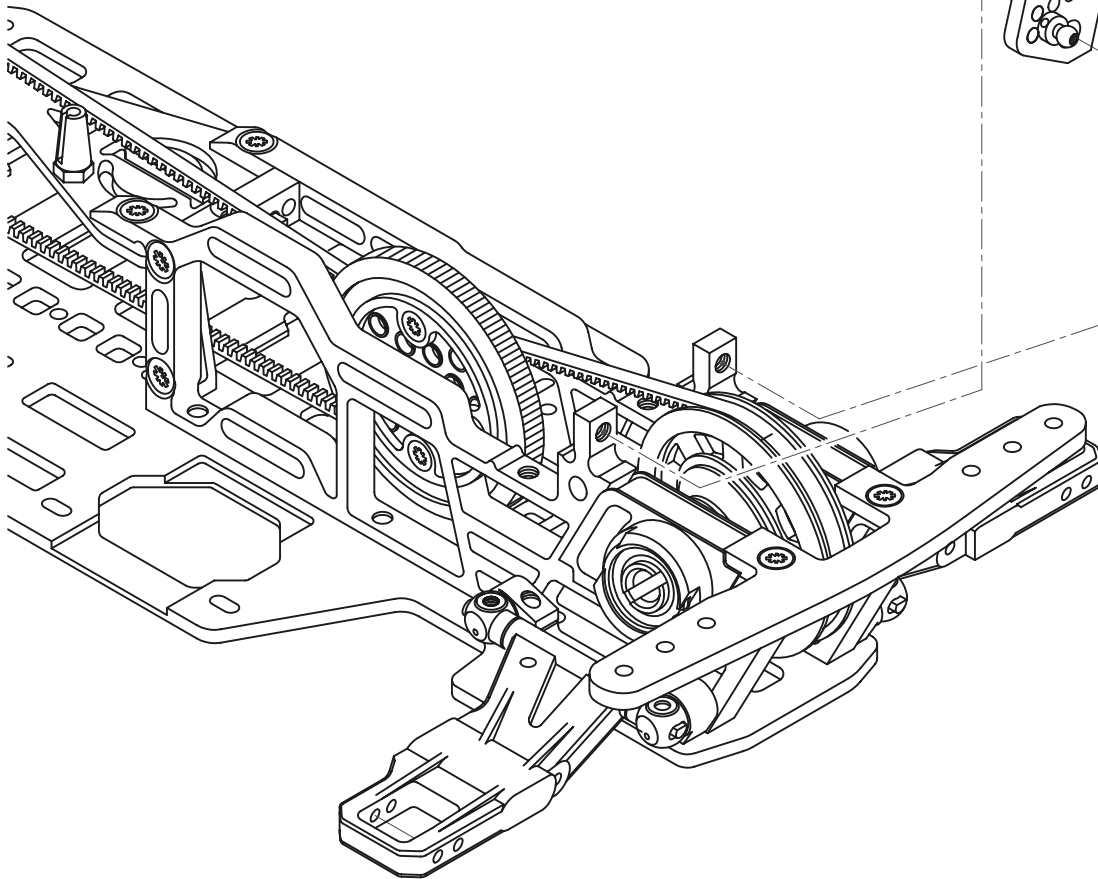
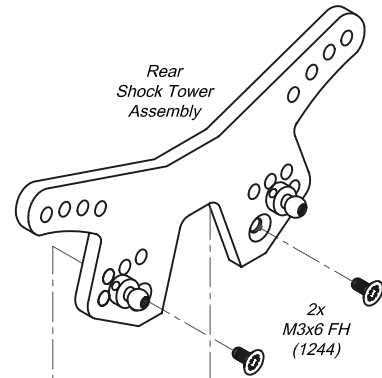
2x M3 Nut

2x 3x6 Washer



Step 2

Mount the shock tower assembly to the rear bulkheads.



2x MIP CVD™ SET

#79180 containing:



4x MIP CVD™ Bone



4x MIP CVD™ Axle



4x MIP CVD™ Coupling

4x MIP CVD™ Cross Pin

4x MIP CVD™ Set Screw

4x MIP CVD™ M4 Lock Nut

2x MIP CVD™ Set Screw Driver

1x C-hub 2-R (3° Right)

1x C-hub 2-L (3° Left)

2x Rear Upright, Narrow 0°

2x Steering Block

4x Driveshaft Cap

2x Pivot Ball 4.3 mm M3x2.5 mm

2x C-hub Ball Screw

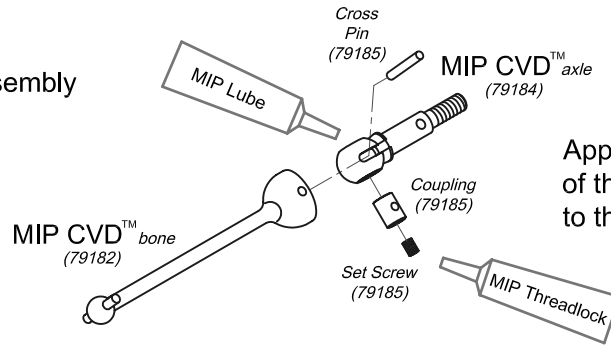
2x C-hub Screw

8x Ball Bearing 5x9

Bag 6 Suspension 1 (Subassembly)

Step 1

#79180
MIP CVD™ Assembly
(4 pieces)

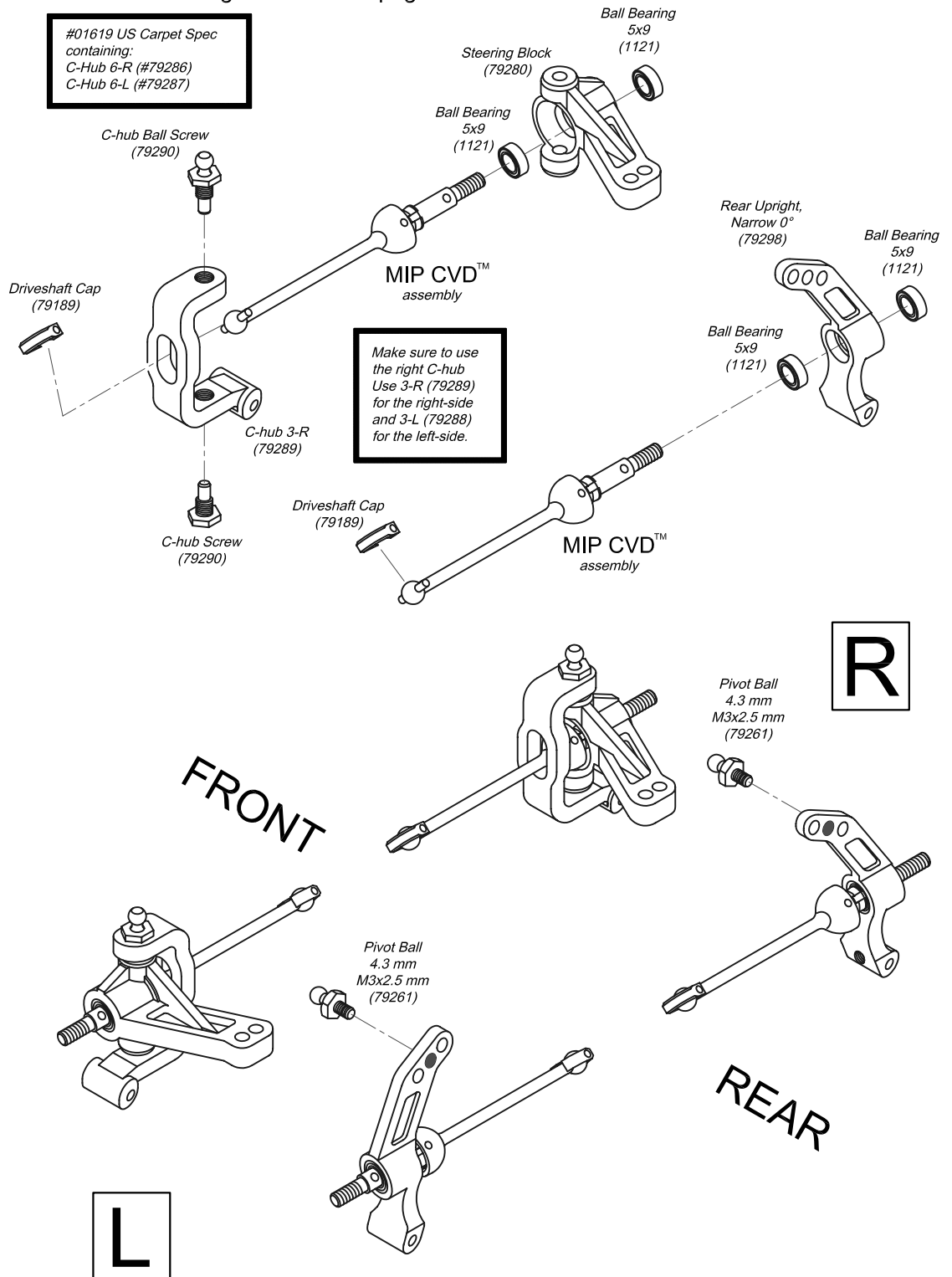


Apply a little bit of threadlock to the setscrew.

Step 2

Build 2 front steering block and 2 upright assemblies.

#01619 US Carpet Spec containing:
C-Hub 6-R (#79286)
C-Hub 6-L (#79287)



FRONT

REAR

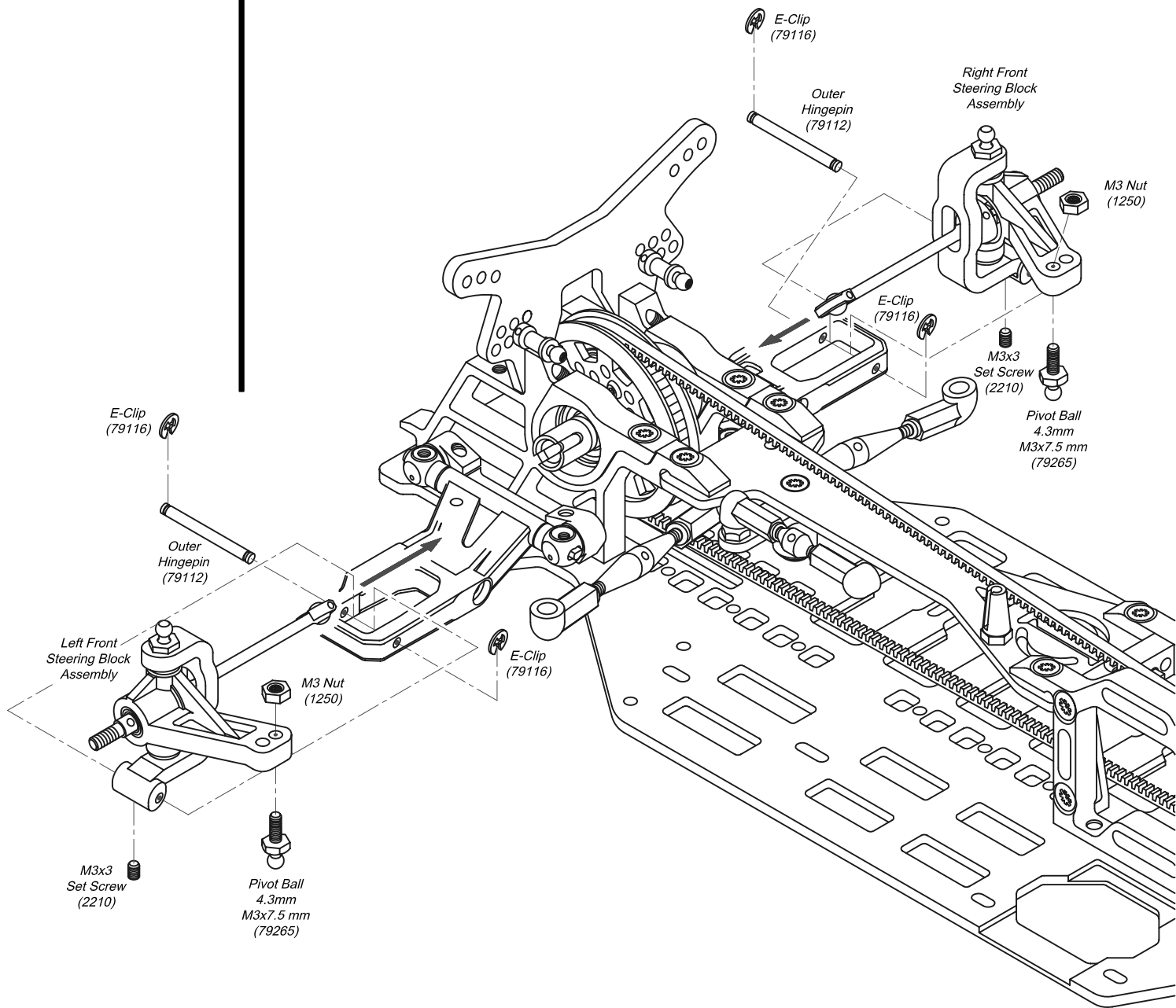
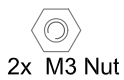
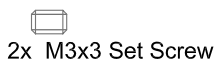
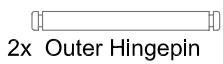
R

L

Bag 6 Suspension 1 (Front)

Step 1

Mount the front steering block assemblies to the wishbones by using the outer hinge pins. Lock the hinge pin with a set screw. The hinge pins can also be locked with the e-clips.



2x Outer Hingepin

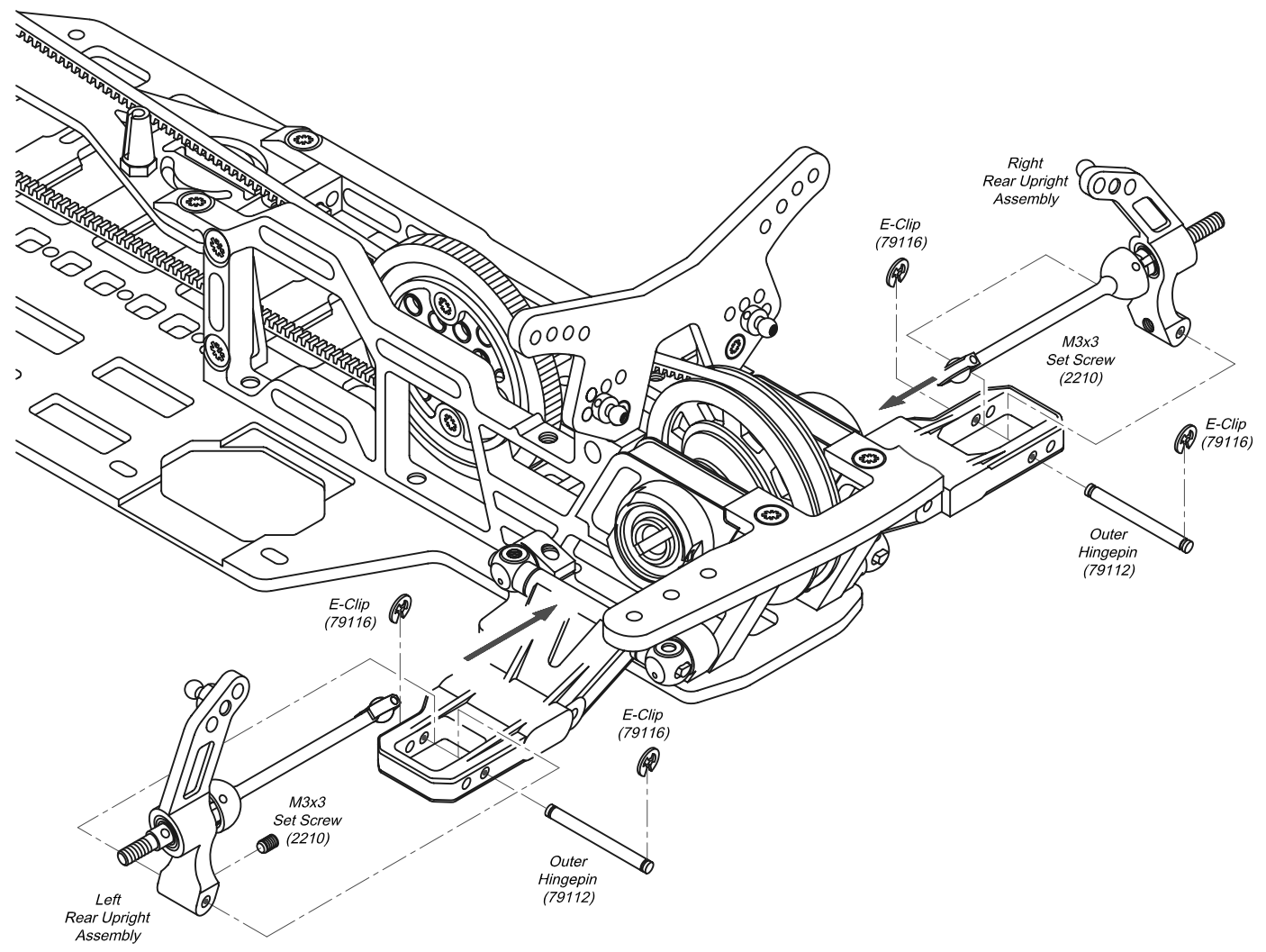
2x M3x3 Set Screw

4x E-clip

Bag 6 Suspension 1 (Rear)

Step 1

Mount the rear upright assemblies to the wishbones by using the outer hingepins. Lock the hingepin with a set screw. The hingepins can also be locked with the e-clips.



Bag 7 Suspension 2 (Shocks) - PRE-ASSEMBLED

NOTE: NO OIL in pre-assembled shocks

4x Shock Body



4x Spring Adjustment Nut



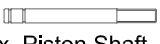
4x 13x1mm O-ring



8x Silicone O-ring



4x Shock Cap



4x Piston Shaft



4x Shock Top



4x Piston



4x Spring Collar



4x Ball End



4x Shock Diaphragm



4x Spring Clip



8x E-clip



4x Spring 17.0 lbs



4x Small Delrin Spacer

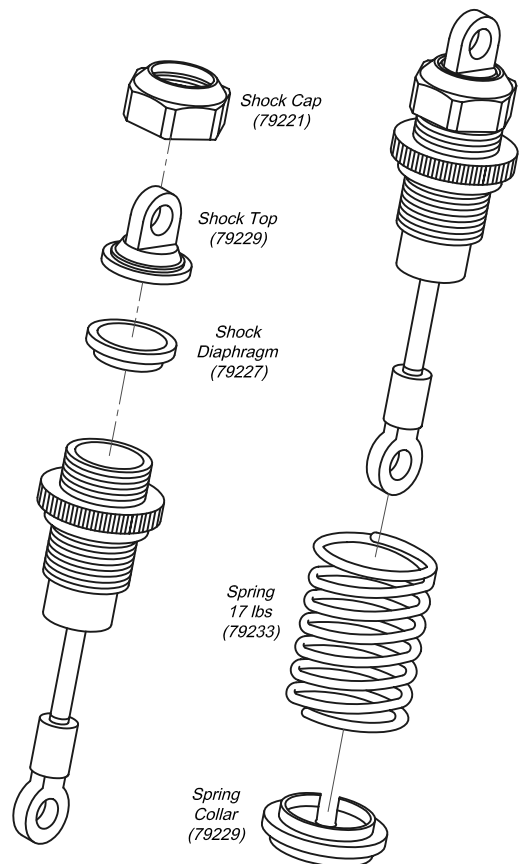
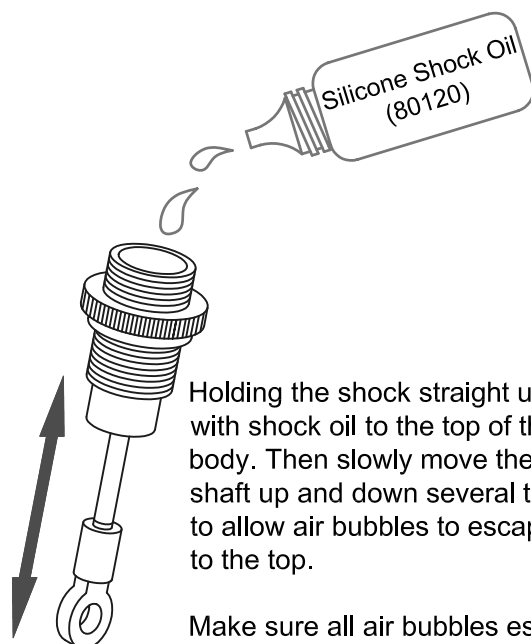
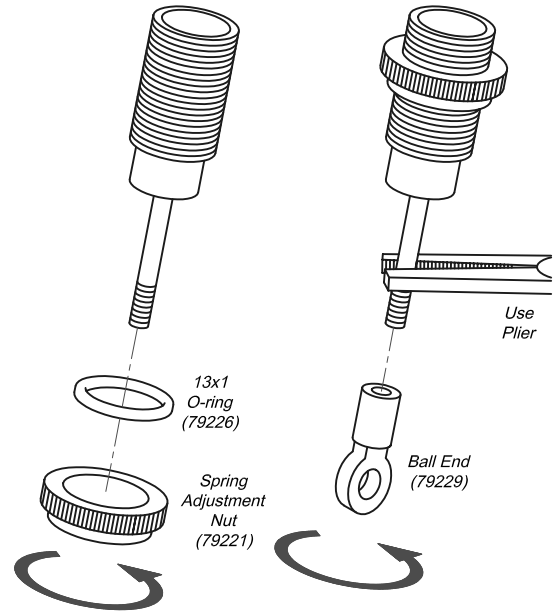
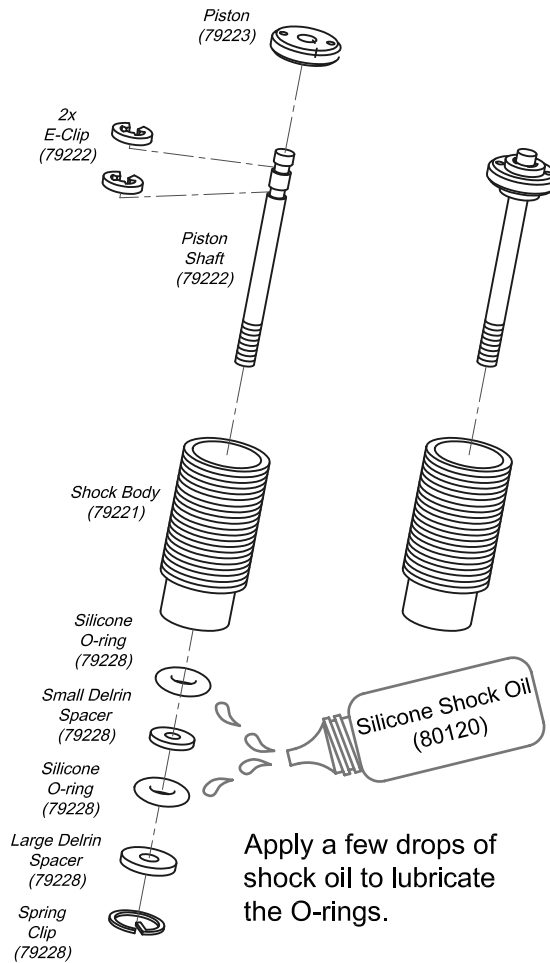


4x Large Delrin Spacer

Build 4 identical Shock Absorbers (79220).
Build them very carefully.

Use plier to hold shaft, but do not damage the shaft.

Grip it close to thread.





2x Turnbuckle 33mm



4x Ball Cup



2x Pivot Ball 5.8 mm Short



2x Pivot Ball 5.8 mm

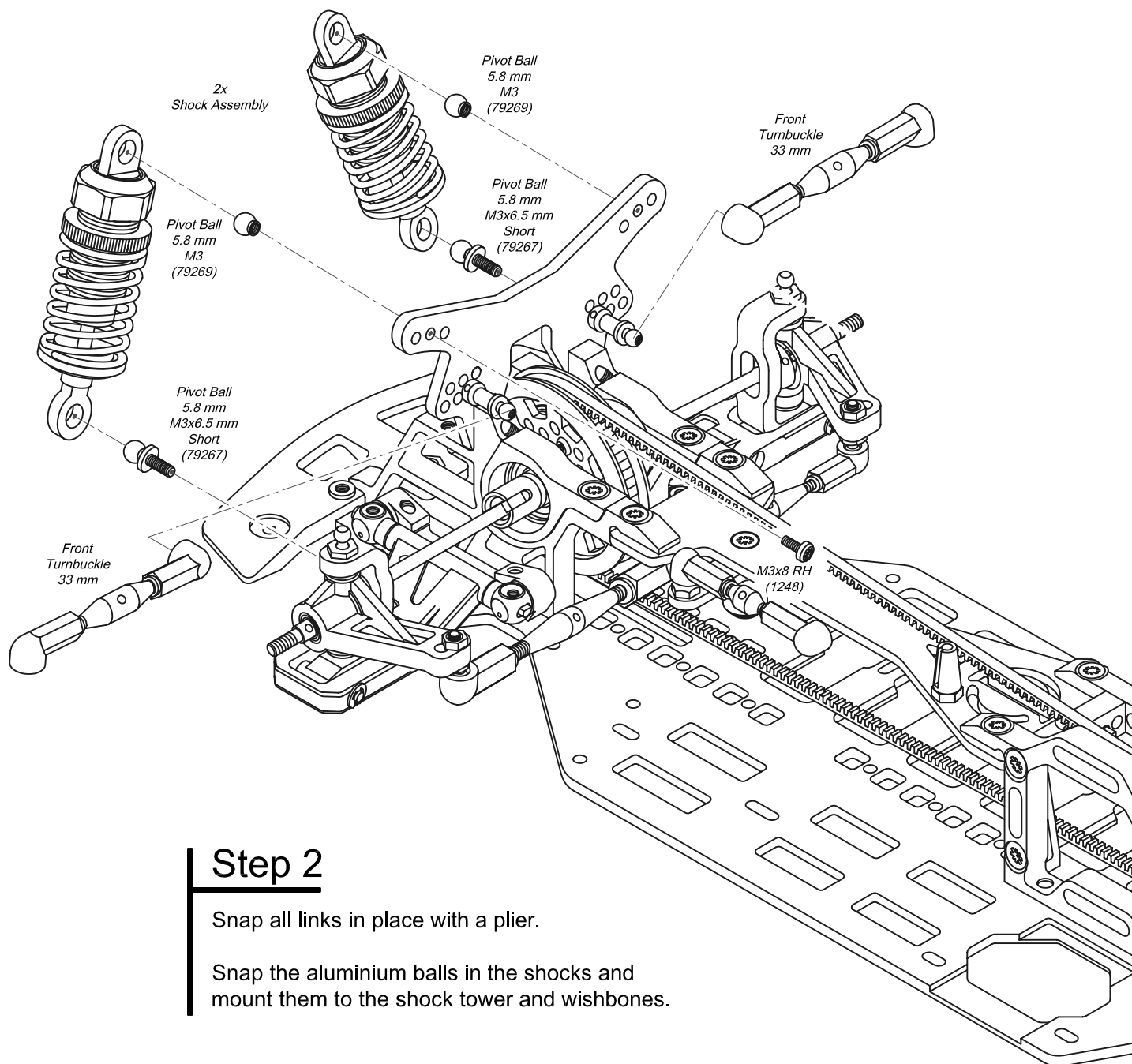
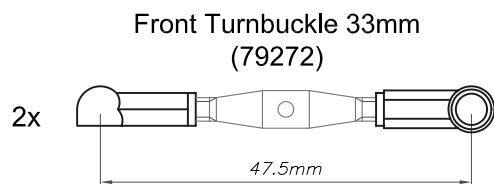


2x M3x8 RH

Bag 7 Suspension 2(Front)

Step 1

Assemble 2 Turnbuckles as shown.



Step 2

Snap all links in place with a plier.

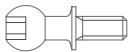
Snap the aluminium balls in the shocks and mount them to the shock tower and wishbones.



2x Turnbuckle 28mm



4x Ball Cup



2x Pivot Ball 5.8 mm Long



2x Pivot Ball 5.8 mm

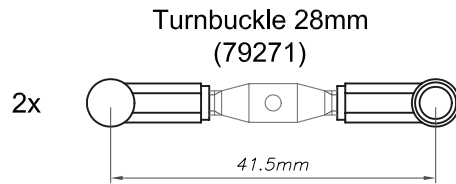


2x M3x8 RH

Bag 7 Suspension 2(Rear)

Step 1

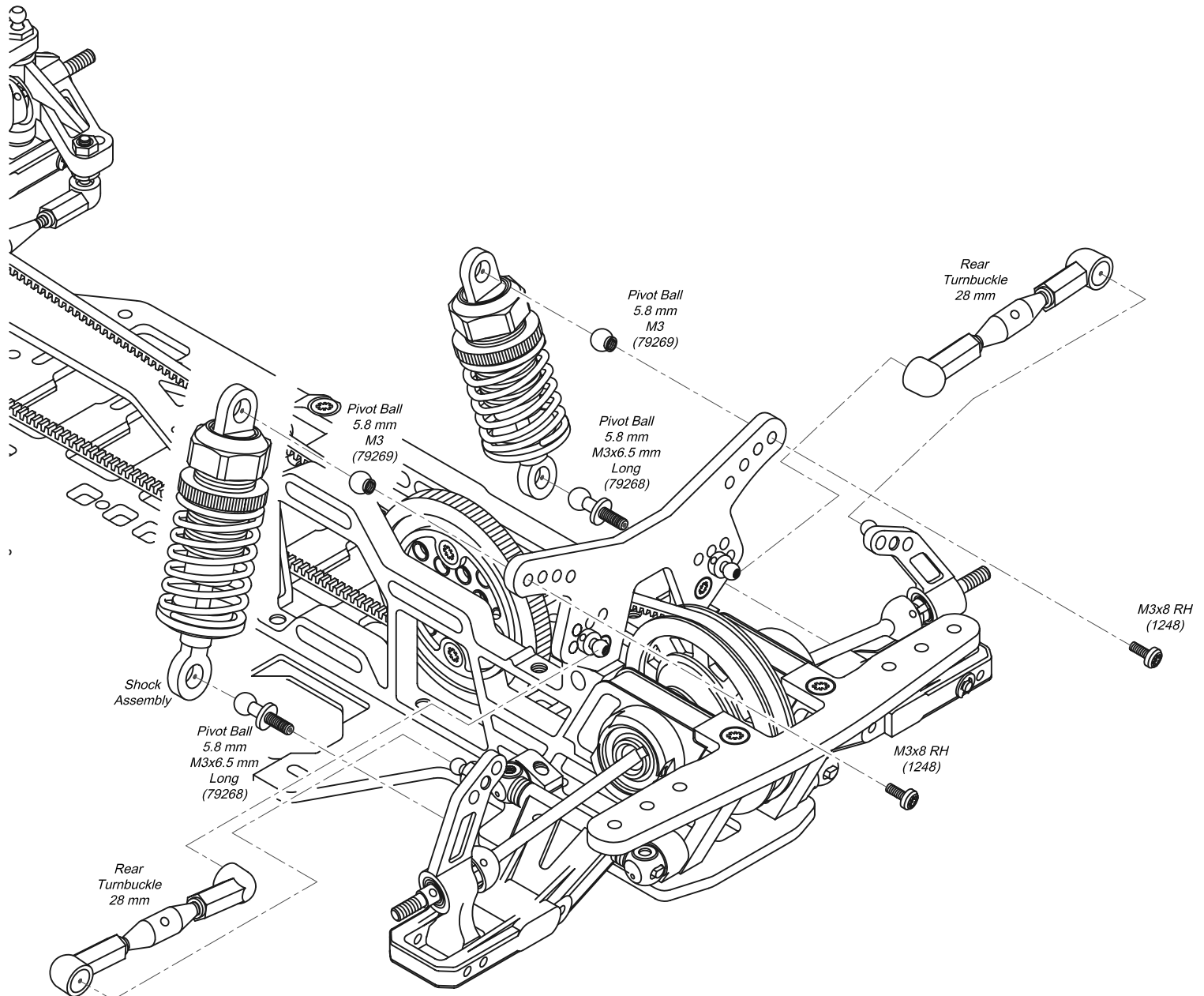
Assemble 2 Turnbuckles as shown.



Step 2

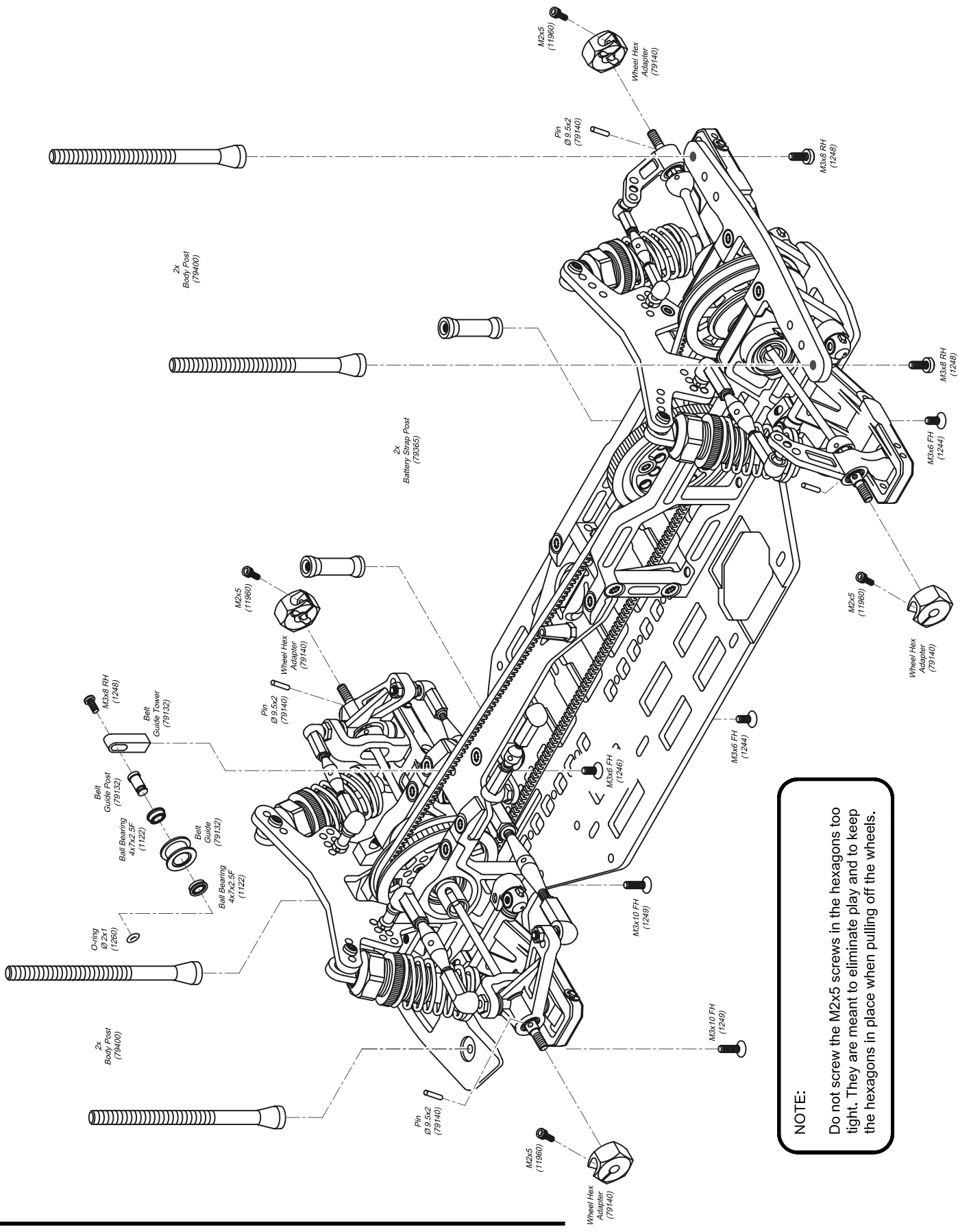
Snap the rear turnbuckles in place with a plier.

Snap the aluminium balls in the shocks and mount them to the shock tower and wishbones.



Bag 8 Finals (Wheelhex & Bodyposts)

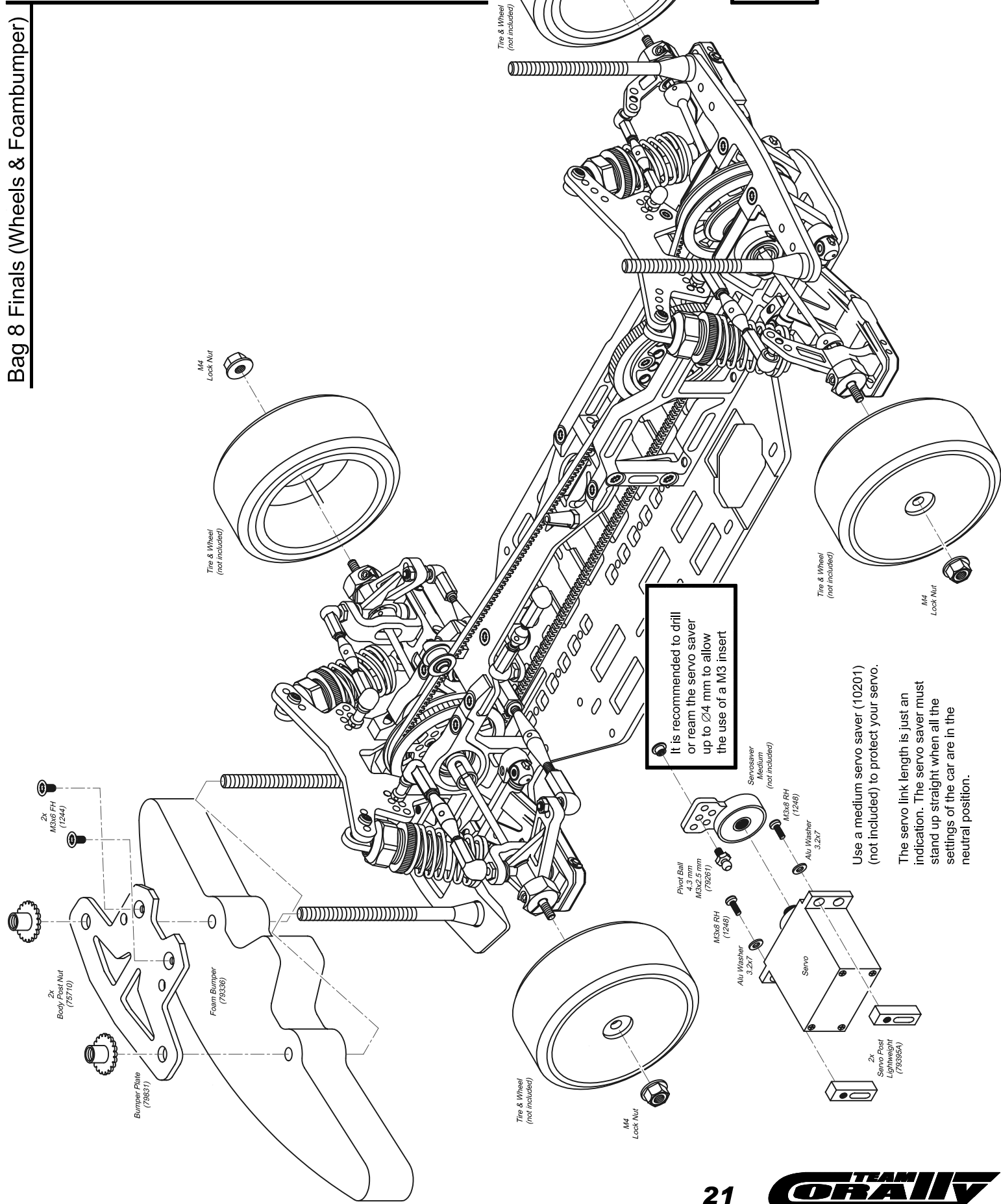
- 1x Belt Guide Tower
- 1x Belt Guide Post
- 1x Belt Guide
- 4x Body Post
- 2x Battery Strap Post
- 4x Wheel Hex Adapter
- 4x Pin Ø9.5x2
- 3x M3x8 RH
- 2x M3x10 FH
- 3x M3x6 FH
- 4x M2x5
- 2x Ball Bearing 4x7x2.5F
- 1x O-ring 2x1



NOTE:
Do not screw the M2x5 screws in the hexagons too tight. They are meant to eliminate play and to keep the hexagons in place when pulling off the wheels.

Bag 8 Finals (Wheels & Foambumper)

- 1x Foam Bumper
- 1x Bumper Plate
- 2x Body Post Nut
- 2x Servo Post
- 2x Alu Washer Ø3,2x7
- 2x M3x8 RH
- 2x M3x6 FH









Not Included:
 - 4x Tires on wheels
 - 1x Servo with Servo-Saver

It is recommended to drill or ream the servo saver up to Ø4 mm to allow the use of a M3 insert

Use a medium servo saver (10201) (not included) to protect your servo.
 The servo link length is just an indication. The servo saver must stand up straight when all the settings of the car are in the neutral position.

Bag 8 Finals (Electronics)

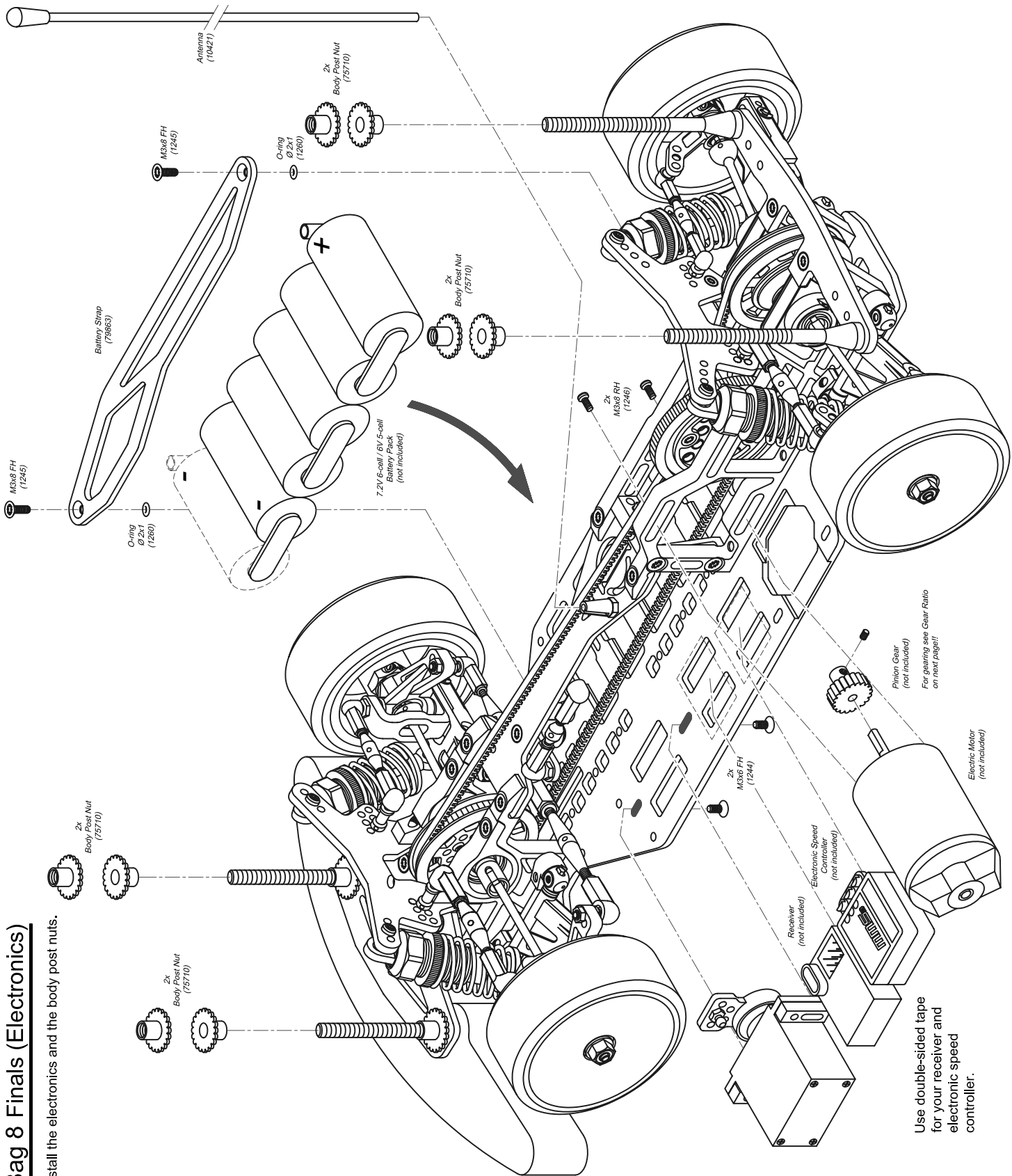
Install the electronics and the body post nuts.

-  1x Battery Strap
-  8x Body Post Nut
-  2x M3x8 RH
-  2x M3x8 FH
-  2x M3x6 FH
-  2x O-ring

Not Included:

- Double-sided Tape
- Electronic Speed Control
- Receiver
- Sub-C Battery-pack (5 or 6-cell)
- Electric Motor
- Pinion Gear

Mount the servo with servo saver to the chassis.
Then snap the turnbuckle 21mm to the pivot balls on the steering lever and the servo saver.



Use double-sided tape for your receiver and electronic speed controller.

Pinion Gear (not included)
For pairing, see Gear Ratio on next page!!

Radio adjustments

- Turn the transmitter on.
- Make sure the motor is disconnected.
- Connect your battery pack.
- Turn the power switch on.
- Make sure the wheels move in the right direction. If you turn the steering control to the left, the wheels should move to the left. If you turn the steering control to the right, the wheels should move to the right.
- Adjust the servo link so your servo saver is rising upwards.
- Using the two steering turnbuckles, adjust the front wheels so they are pointed straight up.
- Adjust the Electronic Speed Controller according to your speed control manual. Turn off the power switch.
- Connect the motor. Be sure that the wheels do not touch anything. Turn on the power switch and check the settings of the ESC and steering. Turn the power switch off again.
- The transmitter is always the FIRST TO BE TURNED ON and THE LAST TO BE TURNED OFF.

Gear Ratio Charts

The RDX Phi has several internal ratio options.

- **2,00 : 1 - Standard 507 mm / 213 mm belts with 42T / 21T pulleys**
- Optional 510 mm* / 210 mm* belts with 42T / 21T pulleys
- Optional 507 mm / 186 mm* belts with 42T / 17T pulleys (turn Bearing holders 180° for 256 mm belt configuration)
- Optional 510 mm / 186 mm* belts with 42T / 18T pulleys (turn Bearing holders 180° for 256 mm belt configuration)
- Optional 480 mm / 210 mm* belts with 36T / 17T pulleys
- Optional 507 mm / 186 mm* belts with 36T / 18T pulleys
- Optional 507 mm / 186 mm* belts with 36T / 21T pulleys (use Bearing holders #79702 and #79703 for 260 mm belt configuration)

* optional belts available from mid 2007

42T / 21T Pulleys (standard)

48dp	78T #2378	98T #24098	104T #24104
17	9.18	9.09	9.45
18	8.67	8.70	9.04
19	8.21	8.33	8.67
20	7.80	8.00	8.32
21	7.42	7.70	8.00
22	7.09	7.26	7.41
23	6.78	7.00	7.14
24	6.50	6.76	6.90
25	6.24	6.53	6.67
26	6.00	6.32	6.45
27	5.78	6.13	6.25
28	5.57	5.94	6.06
29	5.38	5.76	5.88
30	5.20	5.60	5.71
31	5.03	5.44	5.56
32	4.88	5.30	5.40
		5.16	5.26
		5.03	5.13
		4.90	5.00

42T / 18T Pulleys (optional)

48dp	78T #2378	98T #24098	104T #24104
17	10.69	10.37	10.59
18	10.09	9.93	10.13
19	9.56	9.39	9.71
20	9.09	9.14	9.32
21	8.65	8.78	8.96
22	8.26	8.46	8.63
23	7.90	8.16	8.32
24	7.57	7.87	8.03
25	7.27	7.61	7.67
26	6.99	7.36	7.52
27	6.73	7.14	7.28
28	6.40	6.92	7.06
29	6.27	6.72	6.85
30	6.06	6.52	6.66
31	5.86	6.34	6.47
32	5.68	6.17	6.30
		6.02	6.13
		5.85	5.97
		5.71	5.83

42T / 17T Pulleys (optional)

48dp	78T #2378	98T #24098	104T #24104
17	11.33	11.00	11.22
18	10.70	10.52	10.73
19	10.14	10.08	10.29
20	9.63	9.68	9.88
21	9.17	9.31	9.50
22	8.26	8.96	9.15
23	8.37	8.64	8.82
24	8.03	8.35	8.52
25	7.71	8.07	8.23
26	7.41	7.81	7.96
27	6.88	7.56	7.72
28	6.64	7.33	7.49
29	6.84	7.12	7.26
30	6.42	6.52	7.06
31	6.21	6.72	6.86
32	5.83	6.54	6.68
		6.37	6.50
		6.20	6.33
		6.05	6.18

36T / 21T Pulleys (optional)

48dp	78T #2378	98T #24098	104T #24104
17	7.84	7.62	7.77
18	7.41	7.29	7.29
19	7.02	6.98	6.98
20	6.67	6.70	6.70
21	6.35	6.44	6.45
22	6.06	6.20	6.20
23	5.80	5.99	6.11
24	5.56	5.78	5.89
25	5.33	5.59	5.70
26	5.13	5.40	5.52
27	4.94	5.24	5.34
28	4.76	5.08	5.18
29	4.50	4.93	5.34
30	4.45	4.79	4.88
31	4.30	4.66	4.75
32	4.17	4.53	4.62
		4.41	4.50
		4.29	4.38
		4.19	4.27

36T / 18T Pulleys (optional)

48dp	78T #2378	98T #24098	104T #24104
17	9.18	8.91	9.09
18	8.67	8.52	8.70
19	8.21	8.17	8.33
20	7.80	7.84	8.00
21	7.42	7.74	7.70
22	7.09	7.26	7.41
23	6.78	7.00	7.14
24	6.50	6.76	6.90
25	6.24	6.53	6.67
26	6.00	6.32	6.45
27	5.78	6.13	6.25
28	5.57	5.94	6.06
29	5.38	5.76	5.88
30	5.20	5.60	5.71
31	5.03	5.44	5.56
32	4.88	5.30	5.40
		5.16	5.26
		5.03	5.13
		4.90	5.00

36T / 17T Pulleys (optional)

48dp	78T #2378	98T #24098	104T #24104
17	9.73	9.44	9.64
18	9.19	9.03	9.22
19	8.70	8.66	8.83
20	8.27	8.31	8.48
21	7.87	7.99	8.15
22	7.52	7.69	7.81
23	7.19	7.42	7.57
24	6.89	7.16	7.31
25	6.61	6.93	7.07
26	6.36	6.70	6.84
27	6.12	6.49	6.63
28	5.90	6.32	6.42
29	5.70	6.14	6.24
30	5.51	5.94	6.06
31	5.33	5.77	5.89
32	5.17	5.62	5.73
		5.46	5.58
		5.33	5.44
		5.19	5.30

Anti-roll bar mounting instructions (option part)

1x Anti-roll Bar Front

1x Anti-roll Bar Rear

2x Pivot Ball 5.8 mm Short

2x Pivot Ball 5.8 mm

4x Pivot Ball 5.8mm

4x Anti-roll Bar Clamp

4x Ball End 5.8mm

4x M3x12 Set Screw

4x M3x3 Set Screw

2x M3x15 RH

4x M3x8 FH

Ball End
5.8 mm

M3x12
Set Screw
(2215)

Ball End
5.8 mm

Center to center 22mm

Pivot Ball
5.8 mm

M3x15 RH

Ball End
5.8 mm

M3x12
Set Screw
(2215)

5.8 mm
Ball End
5.8 mm

Center to center 22mm

Pivot Ball
5.8 mm
Short

Anti-roll bar clamps:

Use the big slot for Black 1.9mm Anti-roll Bar and the small slot for Silver 1.3mm Anti-roll Bar. When using the Brass 1.6mm Anti-roll Bar, sand 0.3mm off the bottom of the clamp so the 1.9mm slot will fit the 1.6mm Anti-roll Bar wire.

2x
M3x8 FH
(1245)

M3x3
Set Screw
(2210)

2x
Anti-roll Bar
Clamp
(79430)

Pivot Ball
5.8 mm

Anti-roll Bar
Front

2x
M3x8 FH
(1245)

2x
Anti-roll Bar
Clamp
(79430)

Pivot Ball
5.8 mm

Anti-roll Bar
Rear

Pivot Ball
5.8 mm

M3x3
Set Screw
(2210)

M3x3
Set Screw
(2210)

- 79910 Anti-roll bar set 1.0 mm, Black - Rear
- 79912 Anti-roll bar set 1.3 mm, Silver - Rear
- 79913 Anti-roll bar set 1.3 mm, Silver - Front
- 79914 Anti-roll bar set 1.6 mm, Brass - Rear
- 79915 Anti-roll bar set 1.6 mm, Brass - Front
- 79916 Anti-roll bar set 1.9 mm, Black - Rear
- 79917 Anti-roll bar set 1.9 mm, Black - Front

- 79920 Anti-roll bar wire 1.0 mm, Black - Rear
- 79922 Anti-roll bar wire 1.3 mm, Silver - Rear
- 79923 Anti-roll bar wire 1.3 mm, Silver - Front
- 79924 Anti-roll bar wire 1.6 mm, Brass - Rear
- 79925 Anti-roll bar wire 1.6 mm, Brass - Front
- 79926 Anti-roll bar wire 1.9 mm, Black - Rear
- 79927 Anti-roll bar wire 1.9 mm, Black - Front



HIGH PERFORMANCE 1:10 ELECTRIC TOURING CAR

SETUP SHEET

Driver: _____

Track / City: _____

Event: _____ Date: _____

Front

Caster _____ Downstops _____ mm Oil _____ WT

Toe-out _____ Anti-roll bar _____ Piston _____

Camber _____ Front width _____ mm Rebound _____

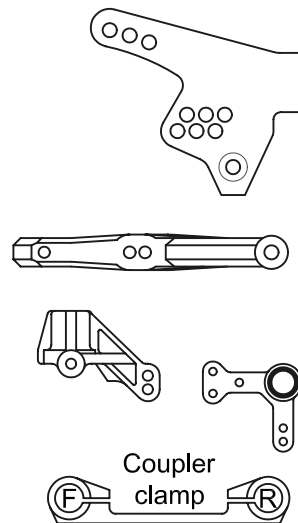
Ride Height _____ Front drive _____ Spring _____ lbs

Wishbone _____ Front pulley _____ Shock tower _____

Wheelbase _____ Steering _____ Steering block _____

F Coupler _____ F coupler shims _____ Coupler clamp _____

R Coupler _____ R coupler shims _____ Clamp shims _____



Rear

Anti-squat _____ Downstops _____ mm Oil _____ WT

Toe-in _____ Anti-roll bar _____ Piston _____

Camber _____ Rear width _____ mm Rebound _____

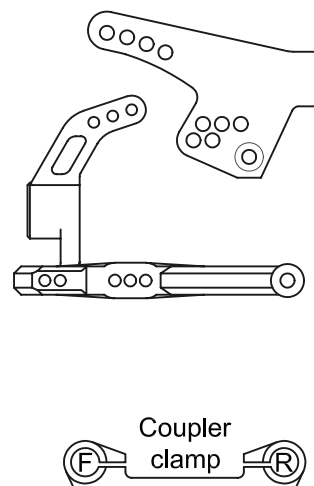
Ride Height _____ Center pulley _____ T Spring _____ lbs

Wishbone _____ Rear pulley _____ T Shock tower _____

Wheelbase _____ Upright _____ toe-in

F Coupler _____ F coupler shims _____ Coupler clamp _____

R Coupler _____ R coupler shims _____ Clamp shims _____



Others

Tires _____ Tire additive _____

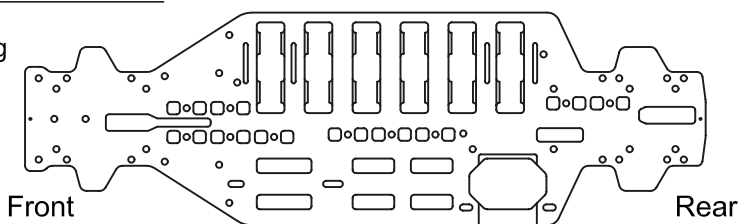
Motor _____ Motor setup _____ Spur / Pinion _____ T / _____ T

Radio _____ Servo _____ ESC _____

Body _____ Wing _____

Lead Weights _____ g

Weight balance



Track Conditions

Surface _____

Traction _____

Temp. _____

Notes _____

Race Comments

Main _____ Finish _____ Qual. Pos. _____ Time _____ Laps _____