Introduction

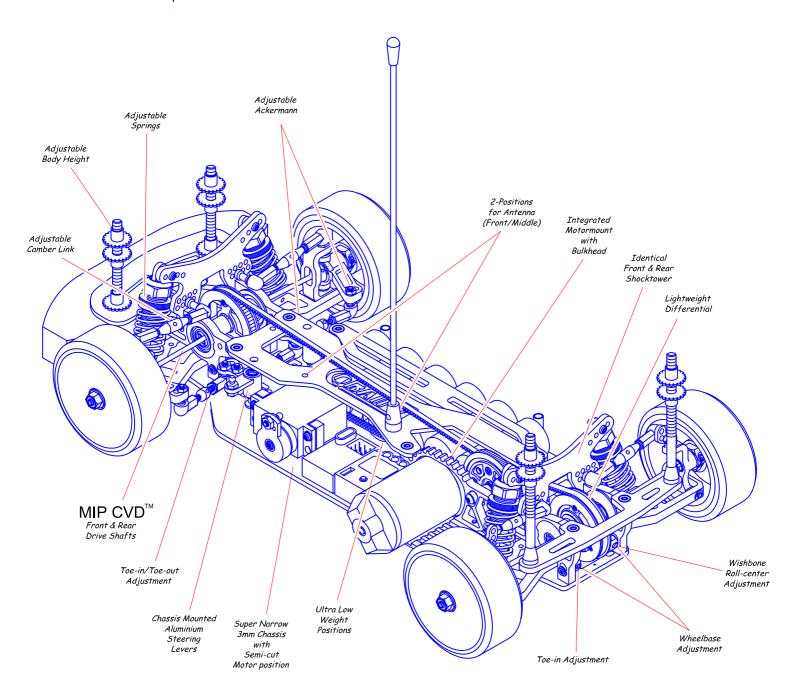
Congratulations!



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 Corally RDX will improve your driving skills more than ever before. The RDX is the highest specification electric touring car on the market today. And this

Corally RDX Instruction Manual #00166 and #00167

will guide you through all the steps to get your car running. For best results it is advised to read this manual completely before you start to build the car.





RDX Parts & Options

	1009	Diff balls 3,5 mm (10 pcs)
Optional	1010	Diff balls 3,5 mm 'CERAMIC' (10 pcs.)
Optional	10421	Aerial 1-10
	1121	Ball Bearings 'Metal Shielded' 5x9 (2 pcs.)
	1122	Ball Bearings 'Metal Shielded' 4x7 (2 pcs.)
	1131	Ball Bearings 'Metal Shielded' 10x15 (2 pcs.)
	1132	Ball Bearings 'Metal Shielded' 5x8 (2 pcs.)
Optional	1133	Ball Bearings 'Metal Shielded' 3x6 (2 pcs.)
	1134	Ball Bearings 'Metal Shielded' 12x18 (2 pcs.)
Optional	1151	Ball Bearings - CERAMIC 'Metal Shielded' 5x9 (2 pcs.)
Optional	1161	Ball Bearings - CERAMIC 'Metal Shielded' 10x15 (2 pcs.)
Optional	1164	Ball Bearings - CERAMIC 'Metal Shielded' 12x18 (2 pcs.)
	1220	Screws M2x4FH (10 pcs.)
	1222 1232	Screws M2x8FH (10 pcs.)
	1232	Torx Screws M4x10RH (10 pcs.) Cone Washers 4x8x0.5 (10 pcs.)
	1236	Cone Washers 2,5x6x0.5 (10 pcs.)
	1244	Torx Screws M3x6FH (10 pcs.)
	1245	Torx Screws M3x8FH (10 pcs.)
	1246	Torx Screws M3x6RH (10 pcs.)
	1247	Torx Screws M3x12RH (10 pcs.)
	1248	Torx screws M3x8RH (10 pcs.)
	1249	Torx Screws M3x12FH (10 pcs.)
	1250	Nuts, M3 (10 pcs.)
	1253	Nuts, M2 (10 pcs.)
	1260	O-Rings 2,0x1,0 (10 pcs.)
	1261	O-Rings 3,0x1,0 (10 pcs.)
	1280	Steel washers 3x6 (10 pcs.)
	1281	Aluminium washers 3.2x7 (10 pcs.)
	16030	Screw-driver - Torx 10
	2210	Setscrews M3x3 (5 pcs.)
	2215	Setscrews M3x12 (5 pcs.)
	2378	Spur Gear 48P - 78 Teeth
	75710	Body post nuts
	76101	Transponder holder
	77162	Diff Screws (2)
Optional	77165	Diff Shims
Optional	79101	Wishbone, Molded - Medium (1 Pc)
Optional	791014	Wishbone, Molded - Medium (4 Pcs)
Optional	79102	Wishbone, Molded - Hard (1 Pc)
Optional	791024 79103	Wishbone, Molded - Hard (4 Pcs) Wishbone, Duraluminium (1 Pc)
Optional Optional	79103	Wishbone, Duraluminium (4 Pcs)
Optional	791034	Wishbone, Graphite, X-Hard (1 Pc)
Optional	791044	Wishbone, Graphite X-Hard (4 Pcs)
Optional	79106	Short Wishbone, Molded - Medium (1 Pc)
Optional	791064	Short Wishbone, Molded - Medium (4 Pcs)
	79107	Short Wishbone, Molded - Hard (1 Pc)
	791074	Short Wishbone, Molded - Hard (4 Pcs)
Optional	79108	Short Wishbone, Duraluminium (1 Pc)
Optional	791084	Short Wishbone, Duraluminium (4 Pcs)
Optional	79109	Short Wishbone, Graphite, X-Hard (1 Pc)
Optional	791094	Short Wishbone, Graphite X-Hard (4 Pcs)
	79110	Inner Hingepins (1 Pair)
	79112	Outer Hingepins (1 Pair)
	79115	Inner Hingepin Clips + Shims (8 + 4 Pcs)
	79116	Outer Hingepin E-Clips (10 Pcs)
	79120	Hingepin Adjustment Block (1 Pc) - Duraluminium
Optional	79121	Hingepin Adjustment Block, Low (1 Pc) - Duraluminium
	79123	Insert for Hingepin Adj. Blocks (1 Pc) - Delrin
	79125	Toe-in Spacers, 0.5 Degree (8 Pcs)
	79126	Toe-in Spacers, 1.0 Degree (8 Pcs)
	79132	Belt Guide, incl. 2 Ball Bearings & Post
	79136	Rear Belt S3M (213)
	79138 79140	Front Belt S3M (507) Wheel Hex Adapter (1 Pair) - Duraluminium
Optional	79140	Front Spool (1 Pc)
Optional	79155	Front One-way Outdrives (1 Pair) - Lightweight
	79161	Diff Rebuild Kit incl. M2.5x20 diff. screw (1 Pc)
	79162	Diff Washers (1 Pair)
	79163	Thrust Bearing (1 Pc)
Ontini	79164	Thrust Bearing (TTC) Thrust Bearing 'CERAMIC' (1 Pc)
เบอบเดาละโ	79167	Front One-way Unit - Duraluminium
Optional	. 5 . 5 /	Front One-way Unit - Lightweight
Optional	79168	
	79168 79169	
Optional	79168 79169 79171	Front One-way Outdrives Hardened Steel (1 Pair)
	79169	
	79169 79171	Front One-way Outdrives Hardened Steel (1 Pair) Pulley 42T for diff / front one-way (1 Pc)
	79169 79171 79172	Front One-way Outdrives Hardened Steel (1 Pair) Pulley 42T for diff / front one-way (1 Pc) LW Diff Pulley-Ring (1 Pc)

	79184	MIP CVD TM Wheel Axles (1 Pair)
	79185	MIP CVD TM Couplings & Pins (1 Pair)
	79186	MIP CVD TM Lube
	79187	MIP CVD TM Thread Lock
	79189 79191	Replacement Caps for Driveshafts (1 Pair) LW Diff Output Shaft, Short (1 Pc) - Duraluminium
	79196	LW Diff Output Shaft, Long (1 Pc) - Duraluminium
	79198	Front One-way Bearing Holders - 12x18 (2 Pcs)
	79199	Diff Bearing Holders - 10x15 (4 Pcs)
	79204	Bulkhead, Front (1 Pc) - Duraluminium
	79205	Bulkhead, Rear / Right (1 Pc) - Duraluminium
	79206 79207	Bulkhead with Motormount, Rear / Left (1 Pc) - Duraluminium Bulkhead Bridge, Shocktower mount (1 Pc) - Duraluminium
	79220	Shock Absorbers, Silver Hardcoated Alum. (1 Pr)
	79221	Shock Body incl. Shockcap & adj. Nut (1 Pr)
	79222	Shock Pistonshaft incl. E-Clips (1 Pr)
	79223	Shock Piston - 2 x 0,9mm holes (1 Pr)
Optional	79224	Shock Piston - 2 x 1,3mm holes (1 Pr)
	79226	Shock Spring Adj. Nut O-Ring 13x1 (1 Pr)
	79227 79228	Shock Diaphragm (1 Pr) Shock Silicone O-rings with Spacers & Clip (1 Pr)
	79229	Shock Collar with Ballends & Balls (1 Pr)
Optional	79230	Black Spring Set - Standard (6 Pair)
Optional	79231	Silver Spring Set - Hard (6 Pair)
	79233	Black Springs 17 lbs (1 Pair)
	79239	Front / Rear Shock Tower - 2,9 Graphite
	79248 79251	Rear Shock Extension - Duraluminium Steering Lever Posts (1 Pair)
	79256	Steering Lever Posts (1 Pair) Steering Lever Set (1 Pair) - Duraluminium
	79260	Ball cups 4.3mm (7 Pair)
	79262	Joint balls 4.3mm, inside front link (1 Pair)
	79263	Joint balls 4.3mm, inside rear link (1 Pair)
	79264	Joint balls 4.3mm, M3x5.5 (4 Pcs)
	79265 79270	Joint balls 4.3mm, M3x7.5 (4 Pcs)
	79271	Turnbuckles 21MM (1 Pair) - Duraluminium Turnbuckles 28MM (1 Pair) - Duraluminium
	79272	Turnbuckles 33MM (1 Pair) - Duraluminium
	79273	Turnbuckles 38MM (1 Pair) - Duraluminium
Optional	79279	Steering Blocks incl. Ball Bear. (1 Pair) - Duraluminium
	79280	Steering Blocks (1 Pair)
Optional	79281	Front C-Hub, O-Deg Left/Right (1 Pc) - Duraluminium
	79282 79283	Front C-Hub, 2-Deg Left (1 Pc) - Duraluminium Front C-Hub, 2-Deg Right (1 Pc) - Duraluminium
Optional	79284	Front C-Hub, 4-Deg Left (1 Pc) - Duraluminium
Optional	79285	Front C-Hub, 4-Deg Right (1 Pc) - Duraluminium
Optional	79286	Front C-Hub, 6-Deg Left (1 Pc) - Duraluminium
Optional	79287	Front C-Hub, 6-Deg Right (1 Pc) - Duraluminium
	79290 79295	Front C-Hub M5 Screw + Ballscrew (1 Pair) Rear Uprights (1 Pc) - Duraluminium
Optional	79295	Rear Uprights - 2 Deg, left(1 Pc) - Duraluminium
Optional	79297	Rear Uprights - 2 Deg, right(1 Pc) - Duraluminium
·	79301	Layshaft & spacer
	79305	Spur gear flange & screws
	79306	Aluminium pulley / spur gear adapter set
	79307	Aluminium pulley 21T (rear belt)
	79330 79331	Bumper Bumperplate - Graphite
	79335	Foam Bumper
	79339	Chassis - 2,9 Graphite
	79356	Topdeck - 2,9 Graphite
	79363	Battery strap - 6 cell - Graphite
Optional	79365 79380	Battery strap posts (1 Pair) Ultra low Weight, 5 Gramm (1 Pc)
Optional	79381	Ultra low Weight, 8 Gramm (1 Pc)
-	79390	Bulkhead Center Post (1 Pc) - Aluminium
	79395	Servo posts (1 Pair) - Aluminium
	79400	Bodypost set (1 Pair)
0=#=	79407	Rear bodypost plate - Graphite
Optional Optional	79412 79413	Anti-roll bar set 1.3mm Silver, Rr / Fr Anti-roll bar set 1.3mm Silver, Fr / Rr
Opuonai	79416	Anti-roll bar set 1.5mm Sliver, Fr / Rr
	79417	Anti-roll bar set 1.9mm Black, Fr / Rr
Optional	79422	Anti-roll bar wire 1.3mm Silver, Rr / Fr
Optional	79423	Anti-roll bar wire 1.3mm Silver, Fr / Rr
	79426	Anti-roll bar wire 1.9mm Black, Rr / Fr
	79427 79430	Anti-roll bar wire 1.9mm Black, Fr / Rr Anti-roll bar clamps (1 Pair)
	80010	Ball Differential Lubricant
	80120	Shock Absorber Oil - 20W
	90083	CORALLY RDX Sticker Sheets (2 X)



Tools needed (included)

- Screwdriver Torx T10 Corally part #16030
- Silicone Shock Oil 20WT oil Corally part #80120
- Differential Grease Corally part #80010
- Thread Lock (included with MIP CVD[™]) Corally part #79180

Tools needed (not included)

Corally Tool Set (#16070) containing:

- Screwdriver Torx T10 Corally part #16081 (same size as #16030)
- Screwdriver for setscrews 1.5mm Corally part #16082
- Small Philips screwdriver 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
- 5 mm nut driver
- Cutting Plier
- Longnose Plier
- Vernier calipers or precision ruler
- Hobby Knife

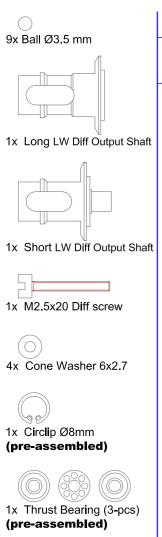
Be carefull with the sharp blade!

- Hobby Scissors
- Double-sided Tape

Items needed to complete your car (not included)

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







Bag 1 Lightweight Differential (2 included in #00167) Step 1 (pre-assembled) (79191) Short LW Diff Output Shaft (79191) Diff Output Shaft Assembly Ball Bearing 5x8x2.5 Thrust Bearing (1132) (Pre-assembled) (79163) Long LW Diff Output Shaft (79196) Circlip Ø8mm (79161) DiffLube Cone Washer Ø 6x2.7 (79161) 0900 Diff Lubricant Short LW Diff (80010) Output Shaft M2.5x20 Assembly Diff.screw (79161) LW Diff Pulley-ring (79172) Diff Lube Diff Lubricant Diff (80010) Washer (79162) Long LW Diff 9x Output Shaft 3.5mm Diff Ball Assembly (1009) Diff Washer (79162)Step 2 Pulley 42T (79171) M2x4 FH (1220)

Diff. Assembly (see next page for adjustment)



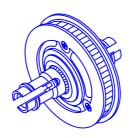
Step 3

Differential Adjustment

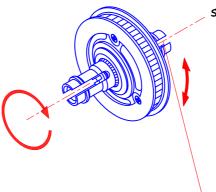
The Differential is one of the most important things of your car. So build and adjust it very carefully.

The RDX (#00166) contains a rear differential and front one-way. The same differential can also be used in the front.

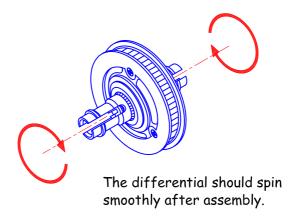
The RDX US Carpet Spec (#00167) contains two differentials instead of an one-way.



Hold the output shaft on this side with a screwdriver.



Stick a 1.5mm screwdriver in it so it slots in the head of the diff screw. As you tighten the diff, you will notice the cone washers are being compressed. The cone washers should be tightened until the pulley can not be rotated when both of the output shafts are being held.





1x One-way Hub

2x LW One-way Outdrive

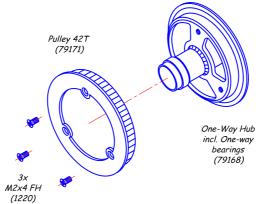
1x Pulley 42T

3x M2x4 FH

Bag 2 Front One-way (not included in #00167)

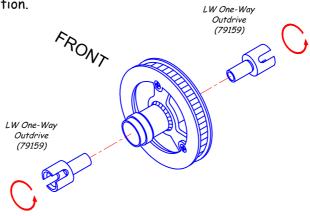
Step 1

Mount the plastic pulley on the one-way hub.



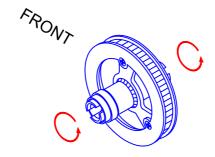
Step 2

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

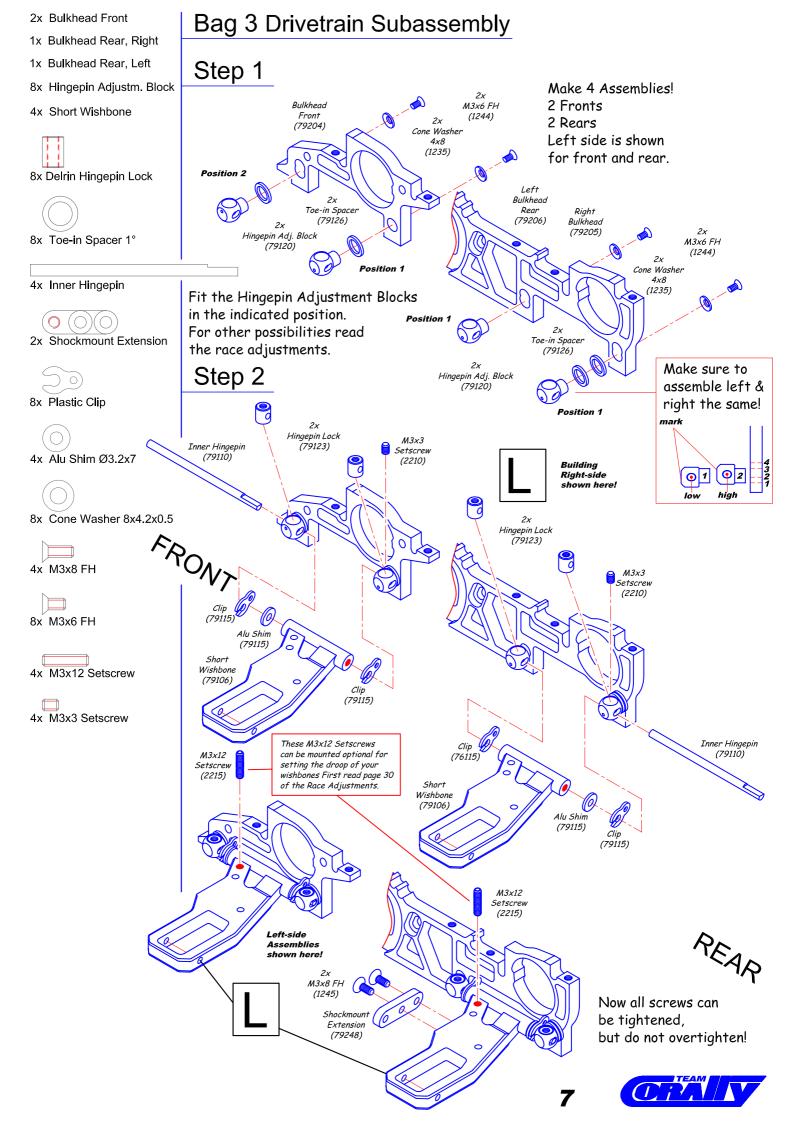


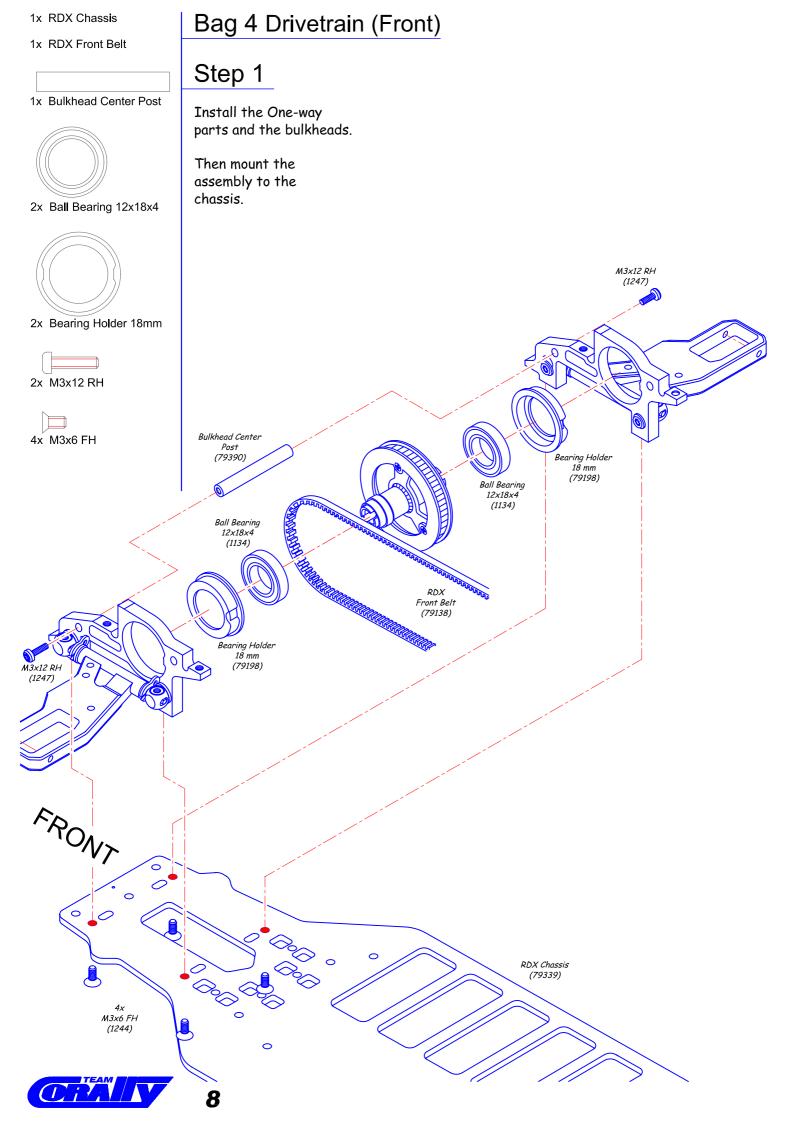
Step 3

The outdrives have to turn freely by rolling them forwards.









- 1x RDX Layshaft
- 1x RDX Alu 21T Pulley
- 1x Spur Gear Adapter
- 1x Spur Gear Lockring
- 1x 78T / 48dp Spur Gear
- 1x Pulley Flange



2x Ball Bearing 5x8x2.5



4x M3x6 FH





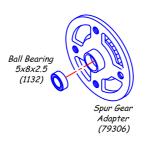


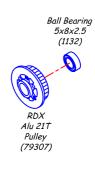
1x O-ring Ø3x1

Bag 4 Spur Gear / Center Pulley Assembly

Step 2

Install the Bearings in the Spur Gear Adapter and the RDX 21T Pulley.

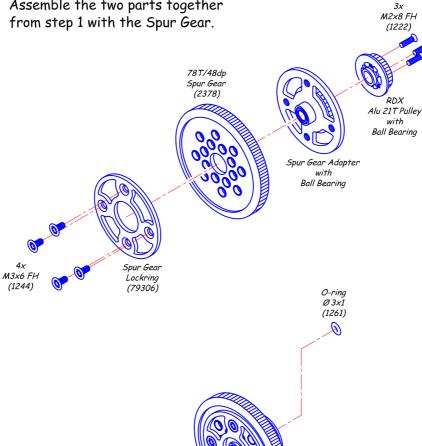




Step 3

Assemble the two parts together from step 1 with the Spur Gear.

> RDX Layshaft (79301)



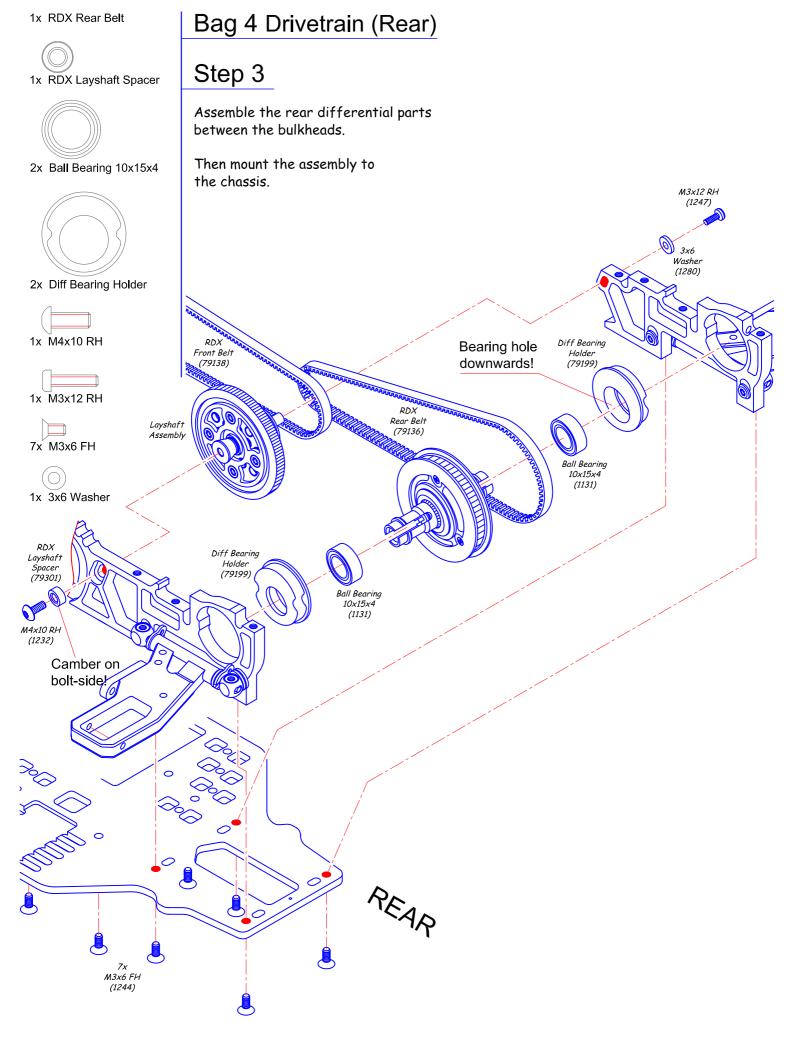
Spur Gear/Center-pulley Assembly

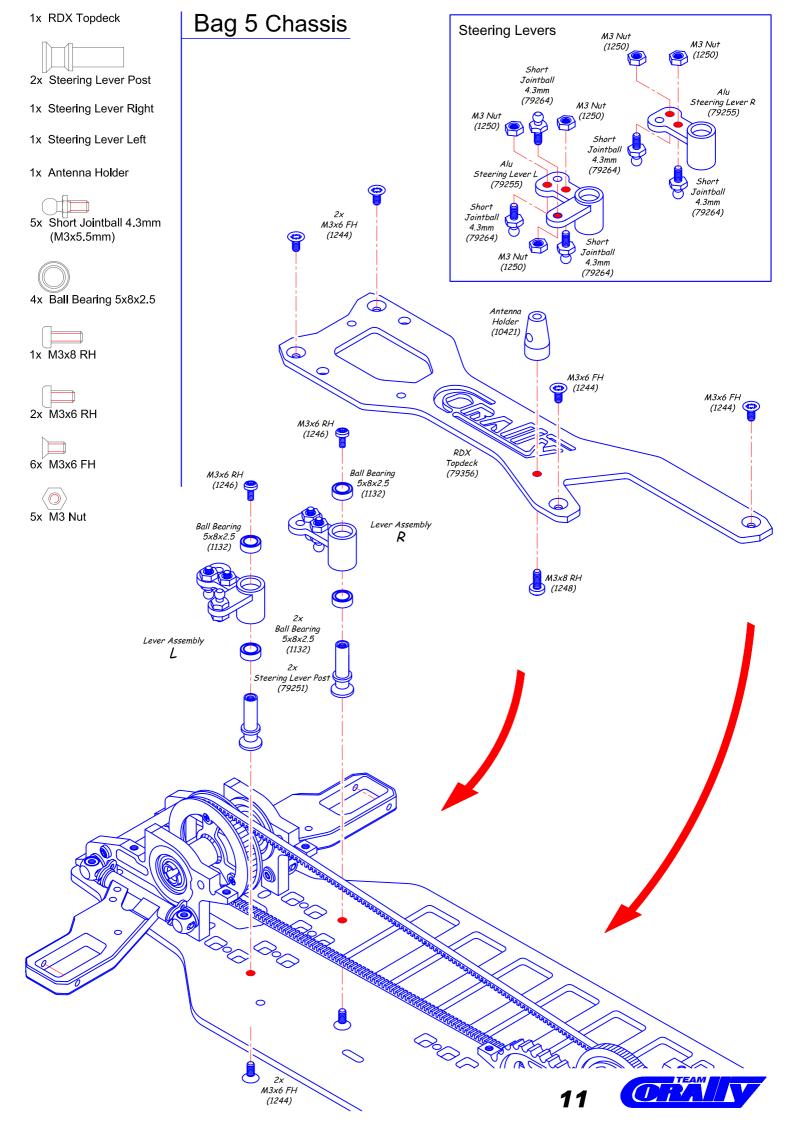


3x M2x4 FH

(1220)

Pulley Flange (79305)





1x RDX Shocktower

1x Front Bumper



2x Long Jointball 4.3mm (Front Link)



3x M3x8 FH



2x M3x6 FH



3x M3 Nut

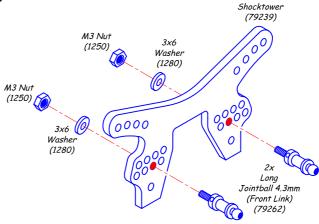


2x 3x6 Washer

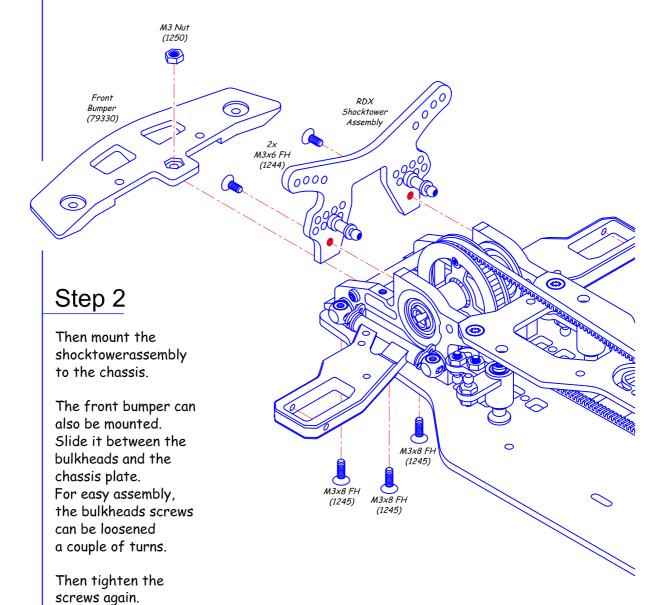
Bag 5 Chassis (Front)

Step 1

Mount the balljoints for the turnbuckles to the shocktower.



RDX





1x RDX Shocktower Mount

1x RDX Shocktower



2x Short Jointball 4.3mm (Rear Link)



2x M3x8 FH



2x M3x6 FH



2x M3 Nut



2x 3x6 Washer

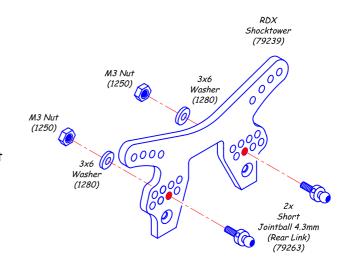
Bag 5 Chassis (Rear)

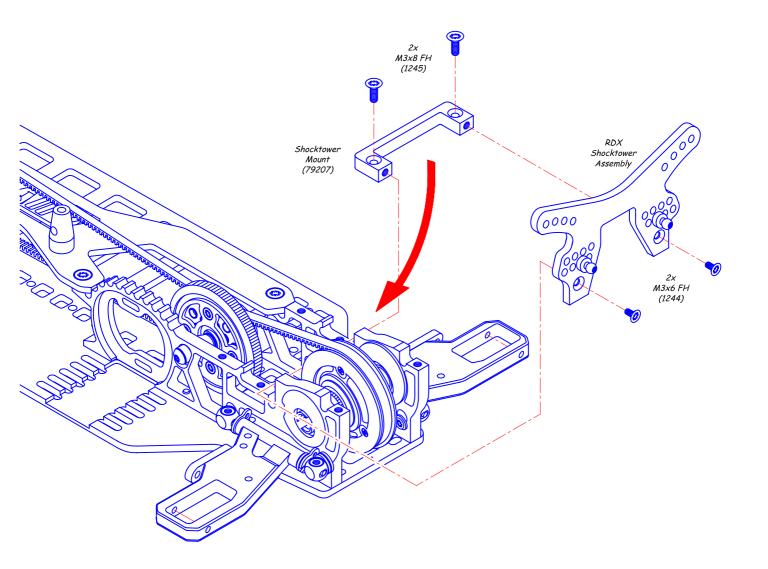
Step 1

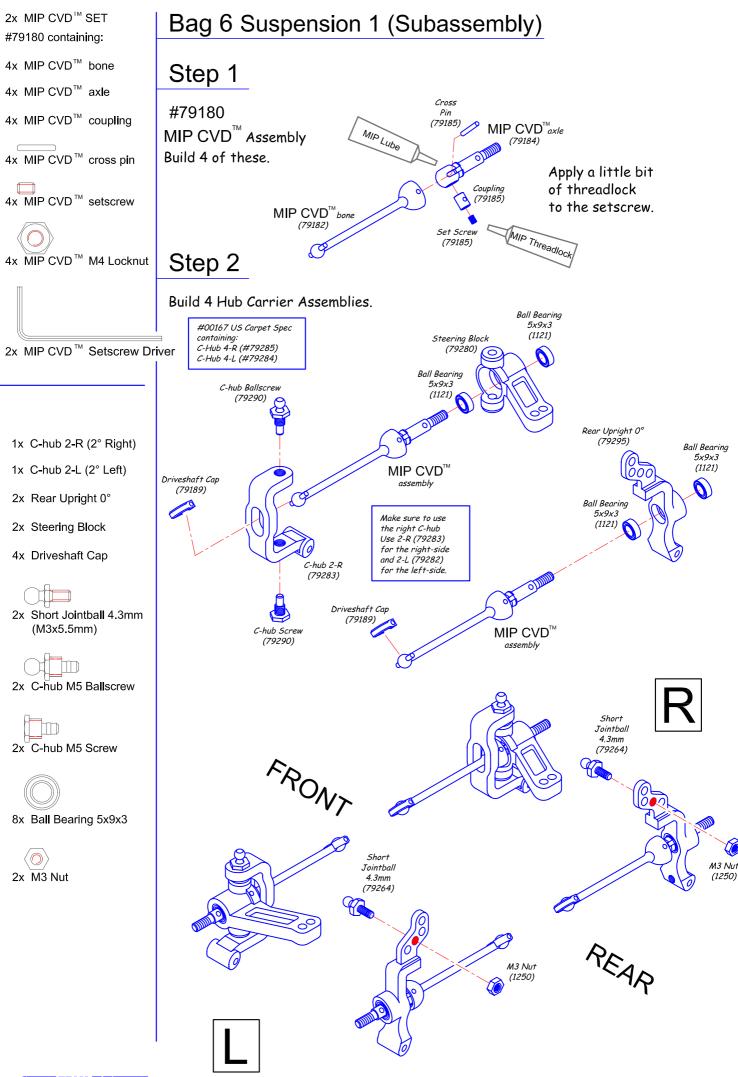
Mount the balljoints for the turnbuckles to the shocktower.

Step 2

Slide the Shocktower Mount through the short belt. Mount the Shocktower to the Shocktower Mount. Now mount the Assembly to the Rear Bulkheads.









2x Outer Hingepin



2x M3x3 Setscrew



2x M3 Nut



2x 3x6 Washer



4x Small E-clip

E-Clip (79116)

Left Front Hub Carrier Assembly

M3x3

Setscrew

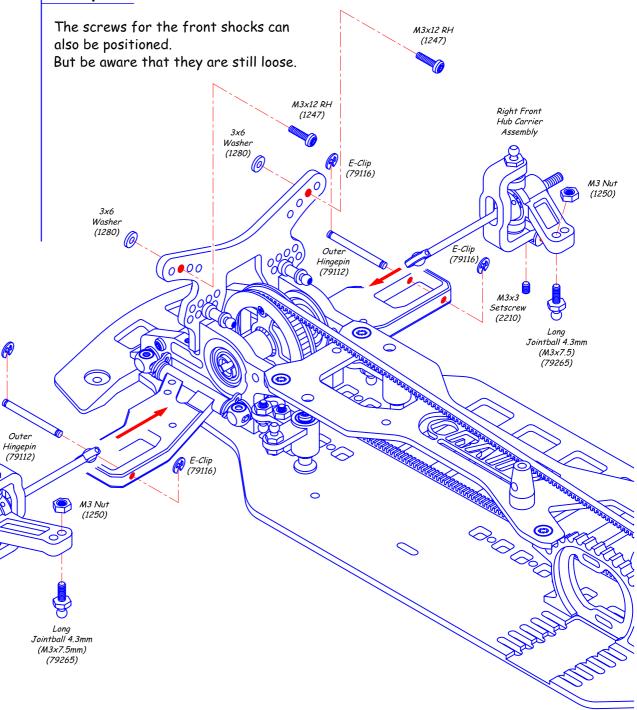
(2210)

Bag 6 Suspension 1 (Front)

Step 1

Mount the front hub carrier assemblies to the wishbones. Fit the assembly between the wishbone and slide a hingepin in the hole. Set the hingepin with a setscrew. Now the E-clips can also be mounted.

Step 2



2x Outer Hingepin



2x M3x3 Setscrew



2x M3 Nut

Ox 2v6 Wool

2x 3x6 Washer

3

4x Small E-clip

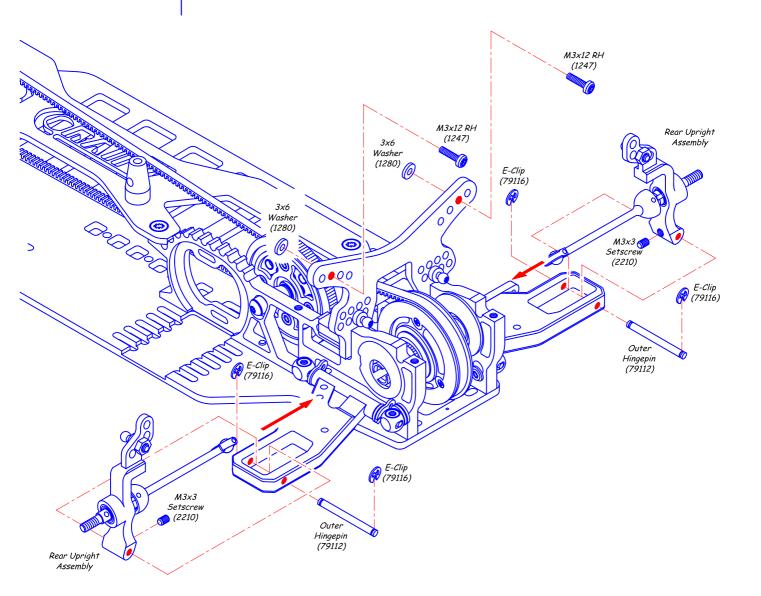
Bag 6 Suspension 1 (Rear)

Step 1

Mount the rear upright assemblies to the wishbones. Fit the assembly between the wishbone and slide a hingepin in the hole. Set the hingepin with a setscrew. Now the E-clips can also be mounted.

Step 2

The screws for the rear shocks can also be positioned. But be aware that they are still loose.



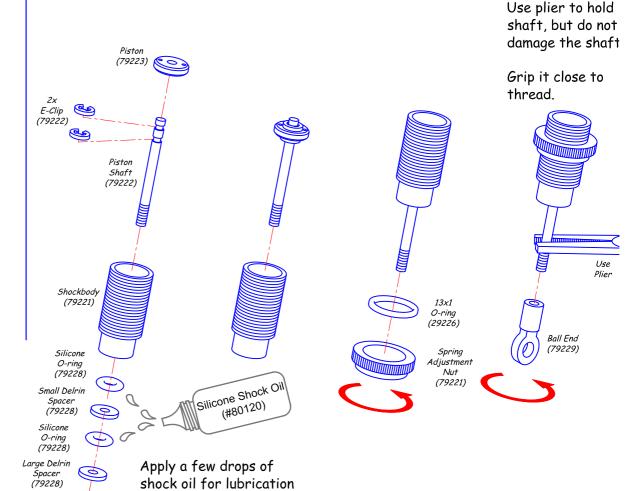
- 4x Shockbody
- 4x Spring Adjustment Nut
- 4x 13x1mm O-ring
- 8x Silicone O-ring
- 4x Shock Cap
- 4x Piston Shaft
- 4x Shock Top
- 4x Piston
- 4x Spring Collar
- 4x Ball End
- 4x Shock Diaphragm
- 4x Spring Clip
- 8x E-clip
- 4x Spring 17.0 lbs
- 4x Small Delrin Spacer
- 4x Large Delrin Spacer

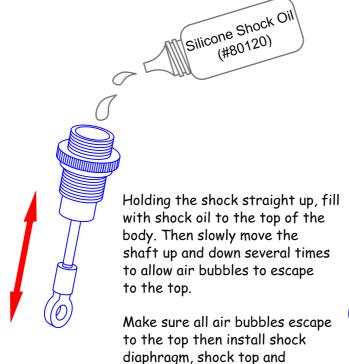
Spring

Clip (79228)

Bag 7 Suspension 2 (Shocks) - PRE-ASSEMBLED

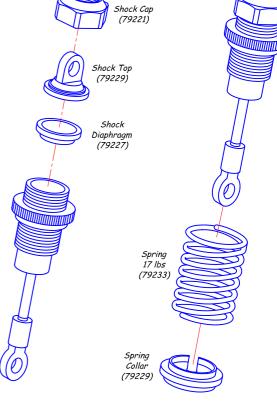
Build 4 identical Shock Absorbers (#79220). Build them very carefully.



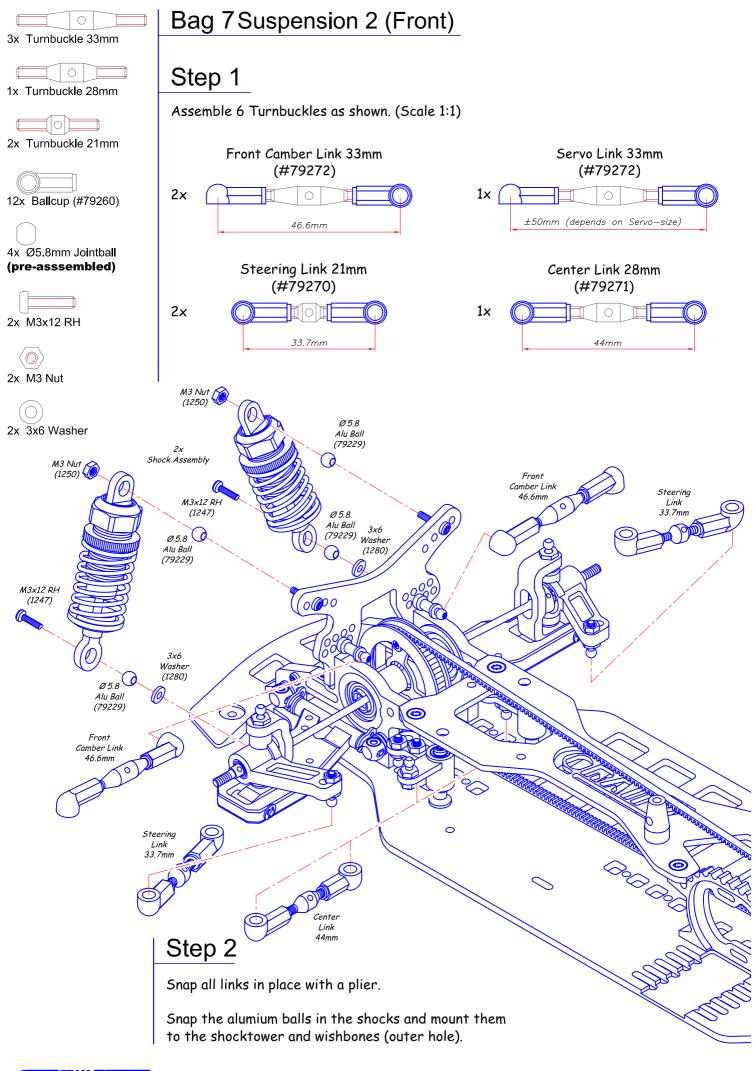


aluminium shock cap.

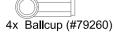
on the O-rings.











4x Ø5.8mm Jointball (pre-assembled)

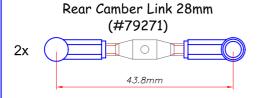


2x M3 Nut

Bag 7 Suspension 2 (Rear)

Step 1

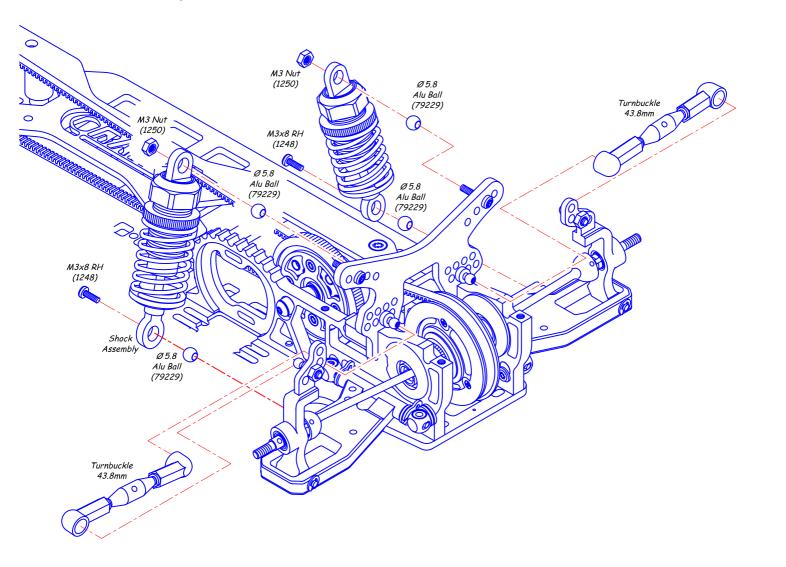
Assemble 2 Turnbuckles as shown. (Scale 1:1)

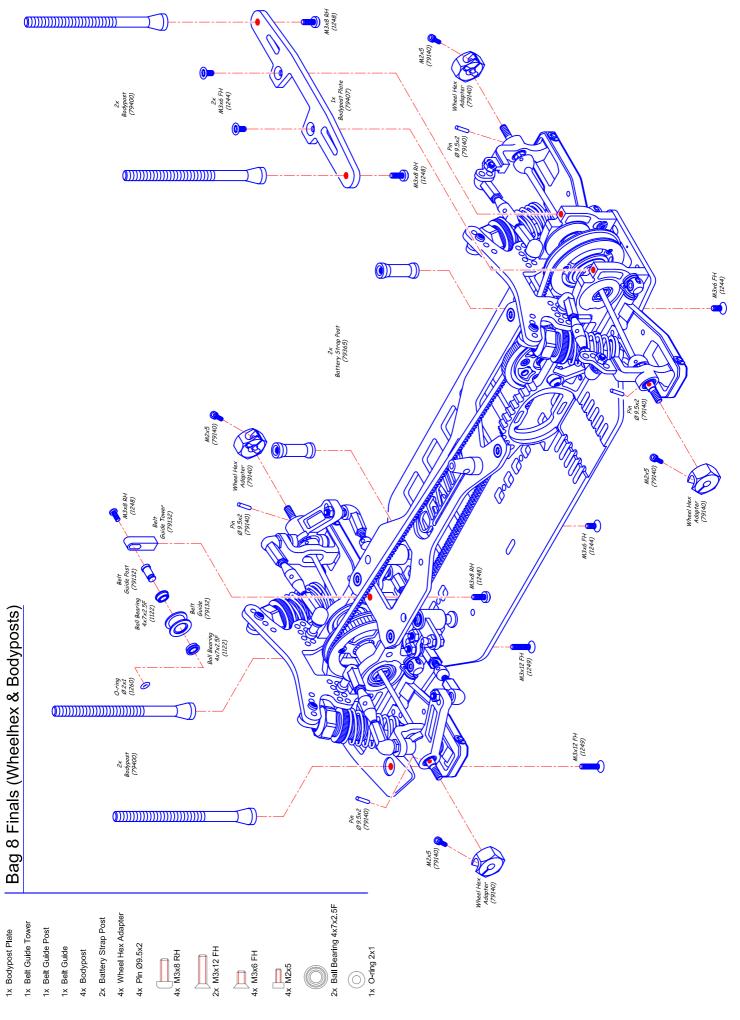


Step 2

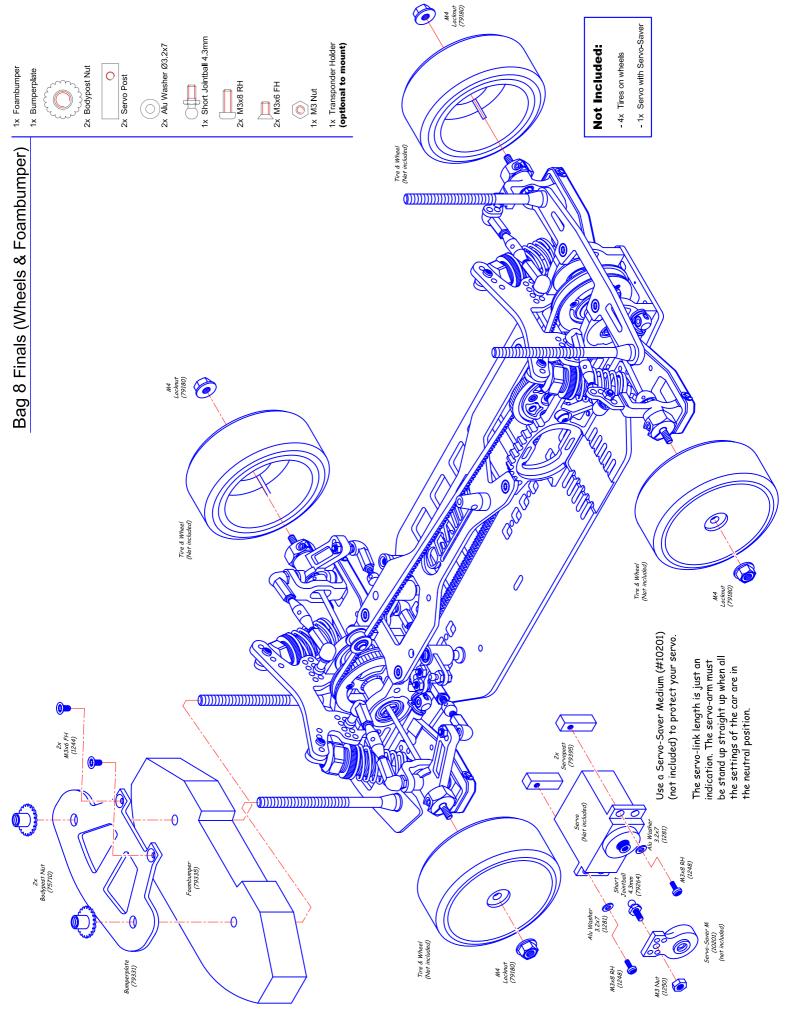
Snap the rear camber links in place with a plier.

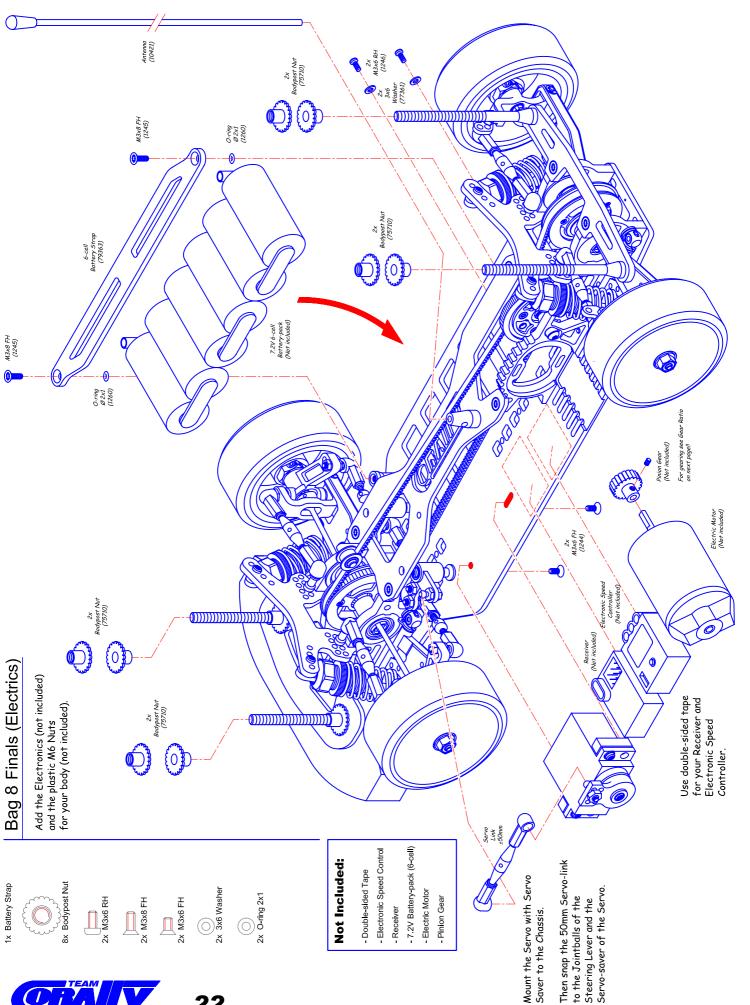
Snap the alumium balls in the shocks and mount them to the shocktower and wishbones (extended hole).











Overall Gear Ratio

It's important to gear your car the right way.

A SMALLER Gear Ratio (bigger number means smaller ratio) will give more punch, acceleration and more runtime.

But top speed will be lower.

A BIGGER Gear Ratio (smaller number means bigger ratio)

#24104 104T

9.45 9.04 8.67

will give less punch, but more top speed. Runtime will be less.

48dp	78T		64d
	#2378		
17	9.18		77
18	8.67		23
19	8.21		77
20	7.80		52
21	7.42		26
22	60.7		27
23	6.78		28
24	6.50		29
25	6.24		30
26	00.9		31
27	5.78		32
28	5.57		33
29	5.38		34
30	5.20		35
31	5.03		36
32	4.88		37
			88
		•	

787		64dp	186	100
#2378			#24098	#2410
9.18		22	8.91	60'6
8.67		23	8.52	8.70
8.21		24	8.17	8.33
7.80		25	7.84	8.00
7.42		26	7.74	7.70
7.09		27	7.26	7.41
82.9		28	7.00	7 14
6.50		29	92.9	06.9
6.24		30	6.53	6.67
00.9		31	6.32	6.45
5.78		32	6.13	6.25
5.57		33	5.94	90.9
5.38		34	92'5	2.88
5.20		35	9.60	5.71
5.03		36	5.44	5.56
4.88		37	5.30	5.40
		38	5.16	5.26
	<u> </u>	8		

6.50

6.30 6.11 5.33

5.00

5.47

5.78 5.62

5.94

7.70

7.43

7.17 6.93 6.71

8.32 8.00

> - Using the two steering turnbuckles, adjust the front Adjust the Electronic Speed Controller according to - Connect the motor. Be sure that the wheels cannot your speed control manufacturer's instructions. check your settings of the ESC and steerings. touch anything. Turn on the power switch and wheels so they are pointed straight ahead. And turn off the power switch.

Turning the steering control left must move the wheels to left and turning it right must move the wheels to right. Adjust the servo link that your servo saver is exactly

rising up.

- Make sure the wheels move in the correct direction.

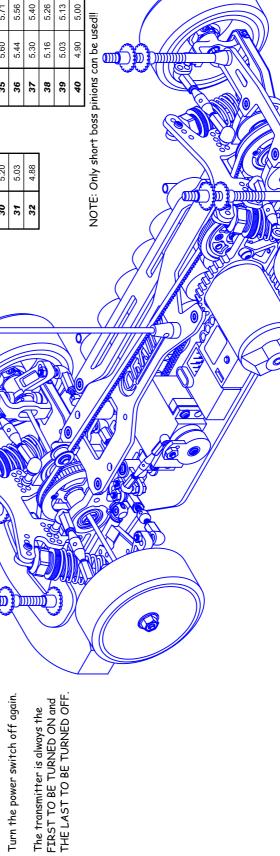
- Make sure the motor is disconnected.

- Turn the transmitter on.

 Connect your battery pack. - Turn the power switch on.

Radio adjustments

THE LAST TO BE TURNED OFF FIRST TO BE TURNED ON and The transmitter is always the



CONGRATULATIONS! YOUR CAR IS NOW READY TO RUN!

SO PUT ON THE BODY AND HIT THE TRACK !!!!

1x Front Anti-roll Bar 1.9mm

1x Rear Anti-roll Bar 1.9mm

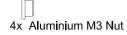


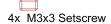
4x Double Balljoint











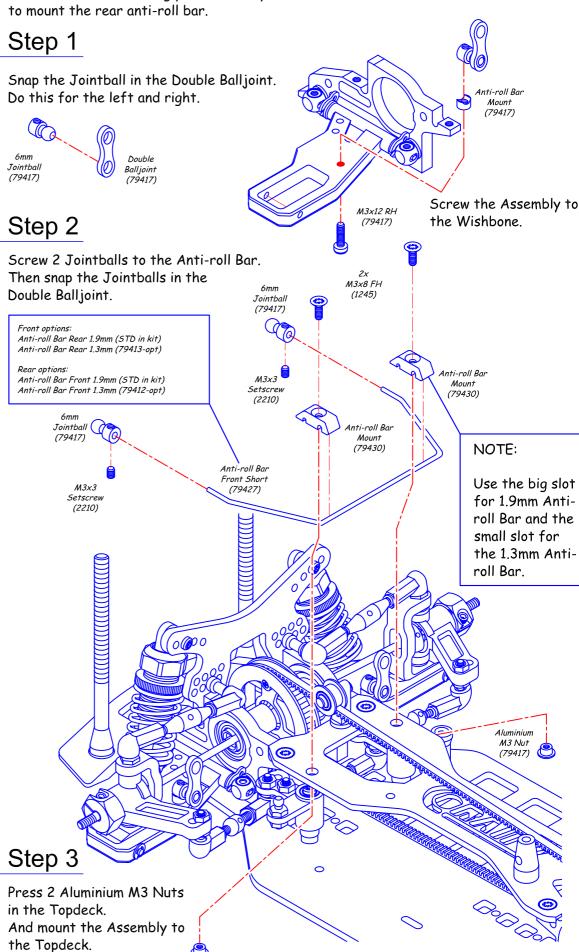




Bag 9 Optional Anti-roll Bar

You have the option to mount either the front or the rear anti-roll bar. Both anti-roll bars can also be mounted.

Follow the same mounting procedure if you choose



Aluminium M3 Nut (79417)



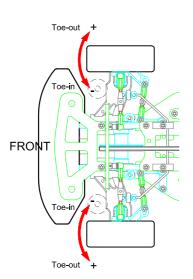


Race adjustments:

Your RDX Touring Car comes with many possible geometry adjustments, shock adjustment, camber change, etc. The standard setup in this manual is a good starting point to begin with. For optimising your car's performance, improvements can be made with the following tuning tips. But always do one step at the time, and see if there are improvements or performance is getting worse. On **www.corally.com** you can download the latest set-up sheets from Team Corally to help you find a good setup.

Front toe-in / toe-out:

Setting toe-in of the front wishbones in the center of the car will make the suspension work better on bumpy conditions. Never use toe-out.



Toe-in:

Stabilizes the car in the straights, and coming out of the corners.

It smoothes out the steering response, making the car easier to drive.

It can make the car turn in a little more in the middle and exit parts of a corner.

Toe-out:

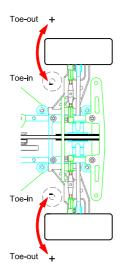
Increases turn-in steering a lot.

But can make the car very nervous on the straight parts of the track.

More than 1° of front toe-out makes the front even more nervous, so it's better not to use more than 1° toe-out.

Adjust for neutral feeling 0° toe. A slight amount of toe-out will increase the turn-in of the car but too much will make the car difficult to drive. [min. = -1 / max. = +1]

Rear toe-in:



Toe-in:

This is one of the most sensitive adjustments! One degree goes a long way. Stabilizes the car greatly. It makes the rear end "stick". The more toe-in you use, the more the rear of the car sticks. This is especially apparent going into and coming out of corners

But more toe-in makes a difference between sticking and breaking loose bigger. Large amounts of toe-in (2.5°... 3°) scrub off a little speed in the straights.

Toe-out:

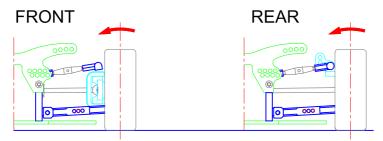
Rear toe-out is never used. It makes the rear of the car very unstable.

Toe-in can be adjusted on the hingepin adjustment blocks in the center of the the car. Use the rings of 0.4mm for 0.5° settings and 0.8mm for 1° settings. Another possibility is to use the optional 2° toe-in uprights at the rear. They will have no influence on the wheelbase of the car.

[min. 0 / max. 3.5]



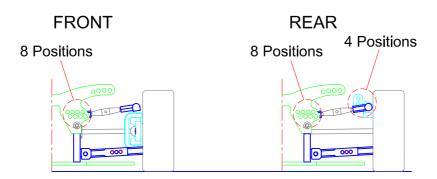
Camber:



Camber is best set when the tires' contact patch is always as big as possible. So with a stiff suspension and firm tires you'll need less camber than with soft suspension or tires with a big, flexible sidewalls. If the tire wear evenly across their contact patches, camber is about right. When using camber on the front in combination with caster blocks something must be kept in mind. Caster will cause camber at the front when steering and the front will lift up.

[min. 0 / max. 2]

Camber Link Locations:



The RDX has a couple of camber-link locations. We recommend to start off by mounting the camberlinks in 1 of the 4 lower positions on the the shocktower. This will give more camber-change while cornering thus stability. The longer or higher the link, the more traction and less stability. The shorter or lower the link, the less traction and greater stability.

Long Link: A long link gives a lot of body roll in turns. It feels as if the body is willing to keep on rolling untill it can't, the springs prevent it from rolling any further.

The car has more grip in corners, especially in the middle part. But if there already is a lot of traction, long camber links can slow down in turns.

Short Link: A short link will make the chassis doesn't roll as far, its tendency to roll drops as it rolls. It feels as if the car generates a little less grip.

More Parallel Link: A parallel link gives a little more roll than an angled one. It feels smooth, and consistant as the body rolls in turns.

Angled Link: An angled link makes the car feel as if the car a tendency to center itself (level, no roll), other than through the spring or anti-roll bar. It will give more initial grip, steering into corners. It makes it very easy to "throw" the car. The body rolls a little less than with parallel links. It's possible to use softer springs and a softer damping than with parallel links, without destabilising the car.

BUT always keep an eye on the balance of the car; large differences in roll-center front versus rear will make the car feel less consistant and no satisfaction at all.

Wishbone Inner Hingepin Locations:

It's possible to mount the wishbones on different heights to the bulkheads. These differences will effect the position of the roll-center of the car.

Low mounting: Roll-center of car will become lower, which generates more chassis-roll into the corner.

Higher mounting: Roll-center of the car will also become higher, which generates less chassis-roll. Car changes quicker from direction, but less grip will be generated. Feels very stable.



Front Caster:

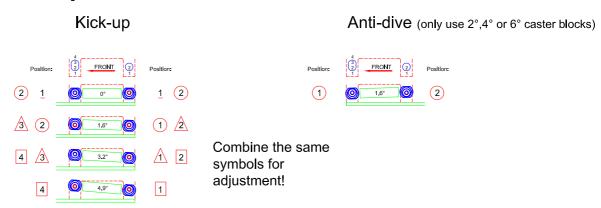
Caster can be very important to the handling of the car. Adding or removing caster can transform the steering balance of a car. The total of Caster is degrees Kick-up + degrees Caster C-hub.

More Caster: Will give stability, especially at high speeds. More Caster generally suits large

open, high-speed tracks. **Less Caster:** Will increase steering drastically. Steering feels more direct, so the car turns tighter and faster. Small amounts of caster are suitable for tight tracks.

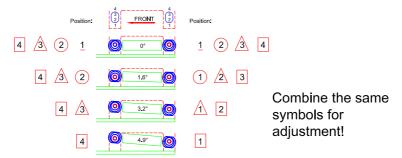
These settings can be arranged with the optional C-hubs and the inner hingepin settings. [min. 0 / 2 / 4 / max. 6]

Front Kickup and anti-dive:



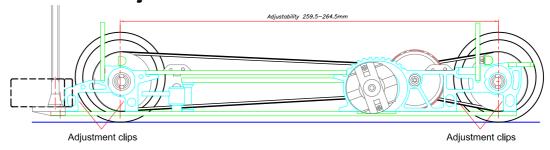
Refers to the angle in which the front suspension is mounted in relation to horizontal when looked from the side of car. **Kickup** and **anti-dive** are adjusted by changing the angle of the front wishbones, which can be done by the aluminium hingepin adjustment blocks. The setting of 0° kickup will have more aggressive steering feeling but will not absorb bumps well. The setting of 1.6° kickup will work better in most conditions, especially in bumpy conditions. For more bumpy conditions, the setting of 3.2° and 4.9° can also be arranged. The anti-dive setting of 1.6° will give a very aggressive steering feeling and will improve front braking traction entering corners. When using anti-dive a differential must be used in the front. And use at least 2° Caster C-hubs. However, anti-dive will not work in bumpy conditions.

Rear anti-squat:



Describes the angle at which the rear suspension is mounted when looked at from the side of the car. More anti-squat generally make the car more sensitive to throttle input. The car has more steering while braking (when diff is used), and also a little more powering out of the corners. Less anti-squat gives more side-bite, on-power and while braking. It feels easier to drive in low-grip situations.

Wheelbase adjustment:

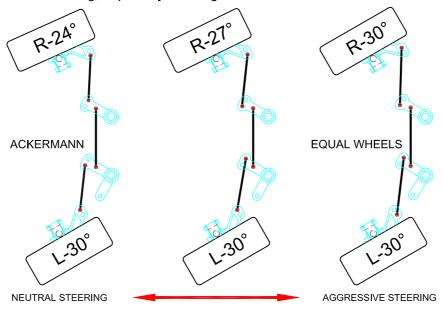




Adjust the wheelbase by moving the black plastic clips. A short wheelbase makes the car feel good in tight turns. Use a short wheelbase on very small and tight tracks. A longer wheelbase makes the car feel a lot more stable, and better in wide, high-speed turns. Use a longer wheelbase on wide-open tracks. Moving the clips to the front of the front wishbones will shorten the wheelbase and decrease rear traction and greater stability. Moving the clips to the rear of the front wishbones will lengthen wheelbase and decrease rear traction. Moving the clips to the front of the rear wishbones will lengthen the wheelbase and decrease rear traction and greater stability. Moving the clips to the rear of the rear wishbones will shorten the wheelbase and increase rear traction.

Ackermann:

This is a term describing the effect of the inner front wheel turning tighter than the outside front wheel. The perfect angle (no slip in theory) between the two front tires is called "the Ackermann angle". The angle can be varied by adjusting the steering linkages. The Ackermann setup works well in most conditions and will provide a very smooth, predictable steering. More equal wheels will give a more aggressive steering, especially entering corners.



Shock Springs:

Try to keep your car level during accelleration, decelleration and cornering. Stiffer springs make the car feel more responsive, more direct. The car reacts faster to driver input. Stiff springs are suited for tight, high-traction tracks, which aren't too bumpy. Usually, when you stiffen the whole car, you lose a small amount of steering.

Softer springs are better for bumpy and very large and open tracks. They can also make the car feel as sluggish and slow.

Stiffer Front:

The car has less front traction, and less steering. It's harder to get the car to turn, the turn radius is bigger and the car has a lot less steering exiting corners. On very high-grip tracks, if the track itself feels tacky or sticky, very stiff springs are the way to go.

Softer Front:

The car has more steering, especially in the middle part and the exit of the corner. Front springs that are too soft can make the car hook and spin.

Stiffer Rear:

The car has more steering, in the middle and exit of the turn. This is especially apparent in long, high-speed corners. But rear traction is reduced.

Softer rear:

The car has generally more rear traction, in turns as well through bumpy sections and while accelerating.



Damping:

Thicker oil (heavier damping) makes the car more stable, and makes it handle more smoothly. If damping is too heavy, traction could be lost in bumpy sections. The car will also change direction slower. Soft damping makes the car react quicker. Damping should always be adapted to the spring ratio; the suspension should never feel to "springy" or too slow.

Heavier Front or Softer Rear: The turn radius is wider, but smoother. The car doesn't hook up suddenly. The car is easier to drive, and high-speed steering feels very nice. Easy to drive.

Softer Front or Heavier Rear: The steering reacts guicker. More and better low-speed steering.

Shock Pistons:

The assumption is made that if pistons are changed, the viscosity of oil is also adapted, to give the same static feel. (Same low-speed damping)

Smaller holes (#79223) means more "pack". Pack means the damping gets very stiff, or almost locks up, over sharp bumps. Small holes are good for smooth tracks.

Bigger holes (#79224) mean less pack. The point at which the damping gets stiff (where the shock "packs up") occurs a lot later, at higher shock shaft speeds. Big holes are very good for bumpy tracks. The car is more stable and has more traction in the bumpy sections. It won't be thrown up over sharp bumps, the suspension will soak them up a lot better.

Ride Height:

This describes the height of the chassis in relation to the surface sitting on. This adjustment must be made with the chassis ready-to-run but with no body. By turning the spring adjustment nut the chassis can be raised or lowered. Start with about 6mm clearance between the chassis and ground. Try using a slightly lower ride height for high traction conditions as carpet racing. Do not use a ride height lower than 4mm.

Higher: The car feels better in bumpy sections. It can feel tippy, or even flip over in high-grip conditions.

Lower: The car feels more direct, and it can potentially corner a bit faster. It's also harder to flip the car over. Lowering one end of the car, or putting the other end higher up, gives a little more grip at the lowest end, but try to avoid big differences in ride height between the front and the rear.

Anti-Roll Bars:

Before using Anti-roll bars first try to play with the droop settings. Anti-roll bars can be used to stabilize a car from excessive roll (which occurs when your car leans through the turns by centrifugal force). Anti-roll bars are generally used on smooth, high traction track conditions. If the conditions are very bumpy, then anti-roll bars are probably not necessary. If you are driving on a high traction surface and your car wants to oversteer, then use the optional #79412 (soft) anti-roll bar or #79416 (hard) on the front only. This will decrease the front chassis roll and decrease steering throughout the corner. This has the feeling of increasing rear traction. If your car is understeering, then try the optional #79413 (soft) anti-roll bar or #79417 (hard) anti-roll bar on the rear only. The rear anti-roll bar will decrease rear chassis roll and decrease rear traction (this has the feeling of increasing steering).

Downstops (droop-setting):

When the Wishbones have a lot of droop the chassis is free to roll in turns. The center of gravity of the car won't change much. Chassis rolls around its roll-center. But if the wishbones almost have no droop the chassis will be pulled down as it rolls. It cannot roll anymore around its roll-center, because the chassis will become one-piece with the wishbone as it rolls. Then the center of gravity will become lower.



Front:

- **Less droop** makes the car smoother in the middle of a corner and gives more steering under acceleration. Sometimes too little droop makes a car difficult to accelerate out from corners.
- More droop gives more steering response in the middle of a corner and makes the car push on throttle.

Rear:

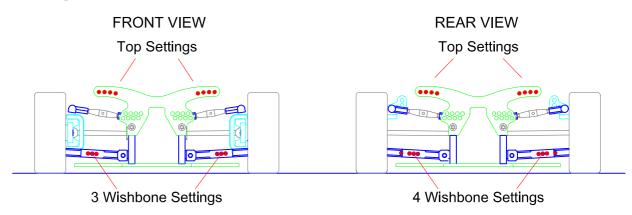
- **Less droop** makes the rear more stable to the corner and gives less grip in the middle and out of the corner.
- Less droop will heat up tires more.
- **More droop** reduces rear grip into the corner, but rear tires stay cooler and the car works more stable through your heat.

Before using Anti-roll bars, the droop-setting is a better option first to play with. The wishbones are already prepared for using downstops. See the instructions on page 7 for installing the M3x12 Setscrews which are required for adjusting the droop. The adjustment of left and right should be the same. But don't use your downstops for lowering your chassis, because this isn't the way to do so. This must be done by the spring adjustment of your dampers.

Front Drive:

- **Ball Differential (#79174)** can be adjusted for tightness (and slippage), so it makes them very versatile. By adjusting the front diff a little tighter, some more understeer will be experienced. But there will be a little more steering and traction exiting the corner. It feels more stable. When tighten the rear diff, the rear of the car will become easier to break loose. But adjusting the diffs is not really a good solution to solve the problem of under/oversteer balance.
- **One-way (#79168)** contains two one-way bearings; one for each wheel. It acts like a diff in only the forward direction. The front wheels can only turn faster than the rear wheels, but not slower. Left and right wheel can rotate independantly from each other, when power off entering a corner. This will give slightly more steering, so the corner can be taken faster. With a one-way front diff there will be no front braking, no differential action off power, high cornering speed, and excellent acceleration out of the corner. On really high-grip, open tracks with smooth, flowing high speed corners it is a one to have thing. So it comes standard in this kit.
- **Spool (#79155)** is like a fully locked diff but has no moving parts. It's super-solid with no adjustments. Because there's no differential action at all, a lot of speed is scrubbed off in corners. A spool at the front will make the car very hard to turn in. But gives stability under acceleration and deceleration. A spool at the rear will give a lot of steering.

Shock position:



The RDX allows 4 front and 4 rear top fixing positions for the shock absorbers.

More Inclined: Has a more progressive smoother feel. More lateral grip. Having all shocks inclined makes the car very easy to drive, and it feels like the car has more grip, but it's not always fast...

Less Inclined (more vertical): More direct feel. Less lateral grip. (site-bite)

Front more inclined than rear: Steering feels very smooth. A little more mid-corner steering. Mounting the rear shocks very much upright can result in the rear end feeling unpredictable. It also makes the rear end jitter in turns.

Rear more inclined than front: Feels agressive turning in, but for most of time the car has a little less steering. The car has a lot of side traction in the rear, and the turn radius isn't very tight.



Wishbones:

It's possible to use different kind of Wishbones:

Medium 20: Long (#79101) - Short (#79106) Hard 50: Long (#79102) - Short (#79107) Xtra Hard 75: Long (#79104) - Short (#79109) **Duraluminium : Long (#79103) - Short (#79108)**

Softer Wishbones can add a little more grip because they flex a bit more.

Harder Wishbones can be used if there is plenty of traction but suspension setup will be more important. Suspension setup feels better and more consistent.

Short Wishbones will make the suspension softer because less travel of the spring is used with the same wheeltravel as with Long Wishbones. Also the distance from shock-mount to the wishbone swing-centre is shorter, so it costs less energy to push the spring in.

Long Wishbones will make the suspension harder because more travel of the spring is used with the same wheeltravel as with Short Wishbones. Also the distance from shock-mount to the wishbone swing-centre is bigger, so it costs more energy to push the spring in.

Tires & Inserts:

All these possibilities cannot be fully exploited if the car does not run on quality wheels. Tires and inserts are two of the most influential changes you can make to your car. The Corally RDX kit comes without tires and wheels. There's a variety of wheels, inserts and tires available. Which one is the best for you depends on the different weather or track conditions as well as local rules when competing in championships.

Tire Additives:

For getting even more out of the tires our Tire Additives can be used. Apply it on the tires at least 15 minutes before the race. Dry the tyres a few minutes before the race.

- TC-1 (#13788) Formulated for foam tires on carpet
- **TC-2 (#13779)** Jack the Gripper (Minimum Odour)
- TC-3 (#13789) Unpleasant Smell, Maximum Traction

Setup Sheet:

There's a setup sheet included in this manual. Set up your RDX with the standard settings at right, then deviate from them in response to your track conditions and driving style, as noted below.

For best result, make only one setup change at a time, testing it before making another change. Make a copy of the setup sheet included in this manual to help keep track of your changes. Before make any changes to standard setting, make sure you can get around the track without crashing. None of your setup changes will work if you cannot stay on the track. Your goal is consistent laptimes. Inconsistent lap times may indicate poor control. When you have consistent lap times, then make changes to your car. If the change results in a faster lap, then mark the change in your setup sheet. If performance is worse, then revert to previous setup and try another change. Fill out your setup sheet thoroughly when you are satisfied with it and file it away. It can be a practical guide for future track lay-outs and conditions you encounter. Always keep in mind that your car stays in balance. Too much difference in front and rear setup can make the car feel unpredictable.

We at Team Corally wish you best luck and see you at the track!

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