

# XRAY NT1 WORLD EDITION

## INSTRUCTION MANUAL SUPPLEMENTARY SHEET

Use this NT1 Supplementary Instruction Sheet along with the standard NT1 Instruction Manual included in the kit. Note that there is a separate instruction manual for building the aluminum shock absorbers.

### New and Improved Parts

All of these parts are new or updated from the previous versions. Each part features its corresponding part number which can be used for re-ordering. You can also refer to the complete exploded views.

Please note that this kit does not include a turnbuckle tool. We recommend that you purchase the #181030 HUDY Turnbuckle Tool 3mm.

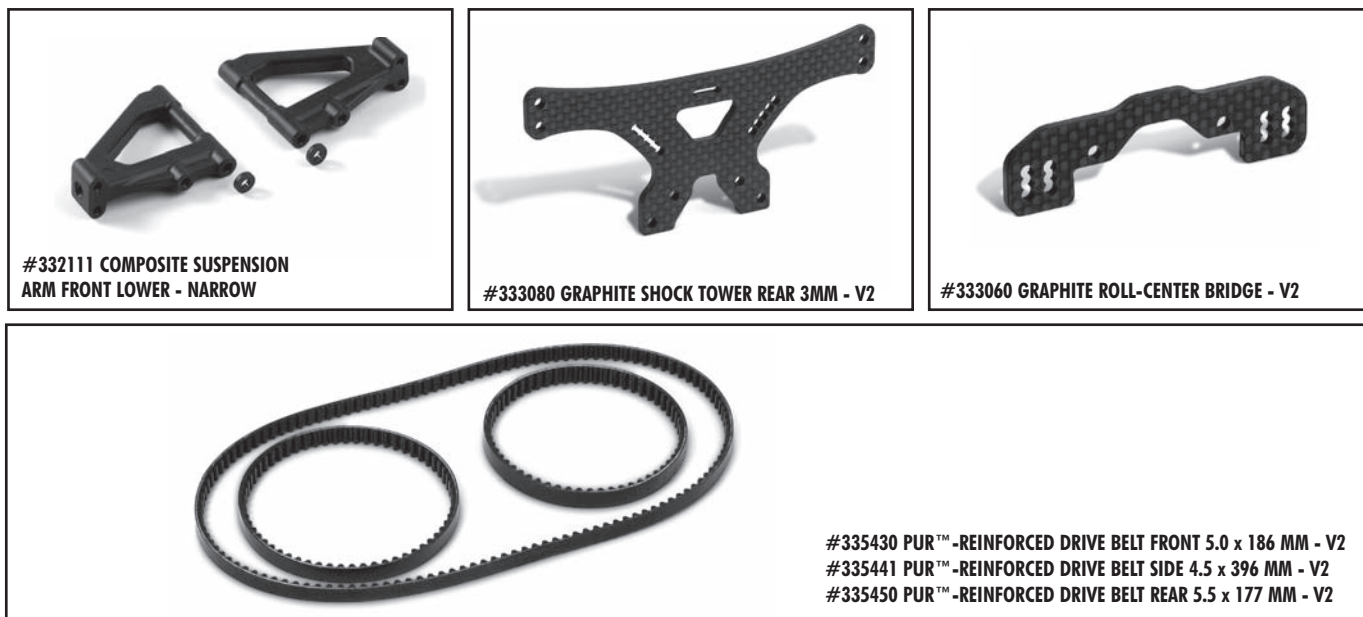
## NT1 2010 WORLD EDITION

			
#301324 FRONT BODY MOUNT SET + 2MM HEIGHT	#301334 REAR BODY MOUNT SET + 2MM HEIGHT	#331215 GRAPHITE UPPER HOLDER FOR BUMPER	#332401 DOWNSTOP INDEPENDENT ALU FRONT ANTI-ROLL BAR
			
#334061 ALU BRAKE POST ARM - ALU 7075 T6	#334111 VENTILATED BRAKE DISC - CNC MACHINED - LIGHTWEIGHT	#334141 LIGHTWEIGHT BRAKE DISK ADAPTER - ALU 7075 T6	#335072 LIGHTWEIGHT DIFF OUTDRIVE ADAPTER - HUDY SPRING STEEL™ (2)
			
#335073 LIGHTWEIGHT DIFF OUTDRIVE ADAPTER - LONG - HUDY SPRING STEEL™ (2)	#335081 ALU DIFF PIN - HARDCOATED (2)	#335250 ALU WHEEL HUB (2)	#335511 2-SPEED SHAFT - LIGHTWEIGHT
			
#335521 LIGHTWEIGHT CARRIER FOR 2-SPEED GEAR (2nd) - ALU 7075 T6	#335531 LIGHTWEIGHT DRIVE FLANGE WITH 1-WAY BEARING - ALU 7075 T6	#335711 FRONT MIDDLE SHAFT - HUDY SPRING STEEL™ - LIGHTWEIGHT	#336110 GRAPHITE RADIO PLATE - V4
			
#336155 GRAPHITE BATTERY PLATE	#336231 ALU RADIO PLATE MOUNTS (L + R) - ALU 7075 T6	#338513 XCA CLUTHBELL - HIGH DYNAMIC - HUDY STEEL	#338532 LIGHTWEIGHT FLYWHEEL - HIGH DYNAMIC - ALU 7075 T6
			
#338561 CLUTCH FLYWEIGHT SET - HIGH DYNAMIC	#338571 ALU CLUTCH DISK - HIGH DYNAMIC - ALU 7075 T6	#338578 CLUTCH SHOE - HIGH DYNAMIC - RED	#338581 CLUTCH SPRING - MEDIUM
			
#338690 FUEL LEVEL INDICATOR STICKER (4)	#338716 BRASS 1-PIECE ENGINE MOUNT		



## INSTRUCTION MANUAL SUPPLEMENTARY SHEET

### NT1 2010 SPEC

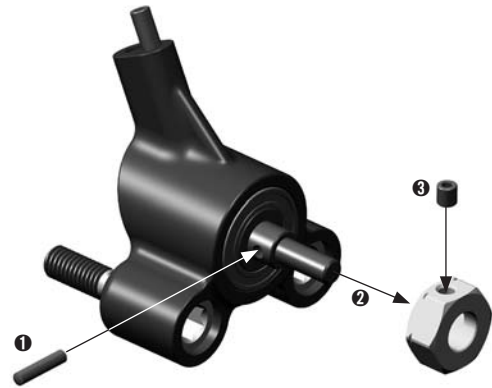
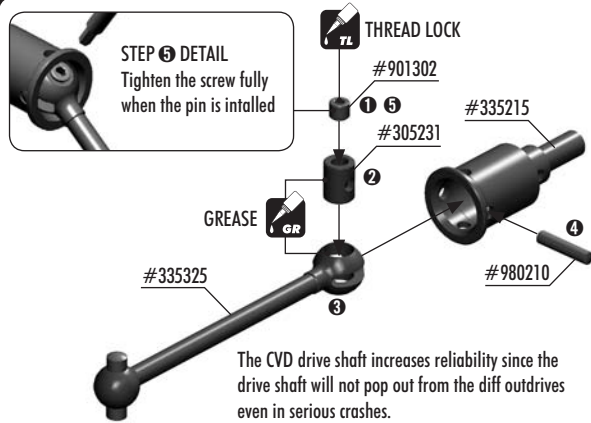


### NT1 2009 SPEC



## 2. REAR SUSPENSION

PAGE 14 / STEP 1



## 2. REAR SUSPENSION

PAGE 14 / STEP 4



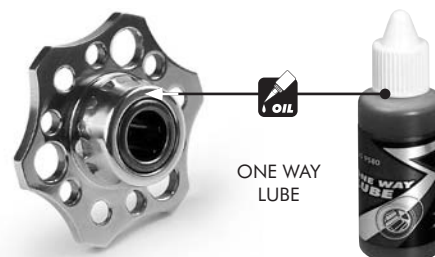
## 3. REAR TRANSMISSION

PAGE 21 / STEP 3

The ball-bearing is factory-preassembled and pressed into the alu carrier. The bearing must be regularly serviced and cleaned. Use the tip of a sharp hobby knife to remove the blue rubber seal. Clean the inside of the bearing to remove any debris and then use a light ball-bearing oil to lubricate the bearing. Re-install the rubber seal back onto the bearing. Regular servicing and cleaning will help to ensure a long lifetime of the bearing. Note that after some time the bearing will wear out, but please note that the ball-bearing is NOT replaceable, meaning that you cannot replace it yourself. Therefore, when the bearing has worn out you will need to replace the entire carrier.



The one-way bearing is factory-preassembled and pressed into the drive flange. The bearing must be regularly serviced and cleaned by cleaning all debris from the bearing and lubricating it. For lubrication we suggest using XRAY's One-way Lube #309580. Regular servicing and cleaning will help to ensure a long lifetime of the bearing. Note that after some time the bearing will wear out, but please note that the bearing is NOT replaceable, meaning that you cannot replace it yourself. Therefore, when the bearing has worn out you will need to replace the entire drive flange.

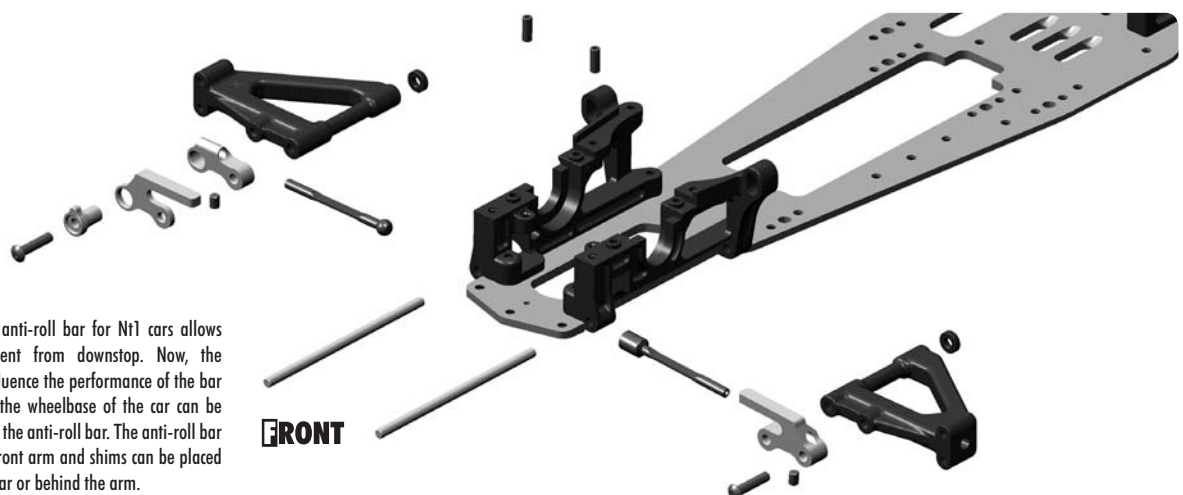


## 4. FRONT SUSPENSION

PAGE 18 / STEP 1

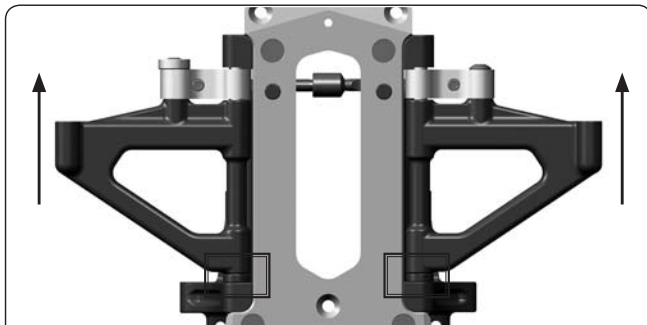
### IMPORTANT!

The position of the front arm directly influences the steering Ackermann (angle of the steering linkages). When the arm is moved to the rearward position (shim in front of the arm), the angle of the steering linkages changes and provide less Ackermann. By decreasing the Ackermann, the car gets more turn in & increased steering at corner exit, but less cornering speed. The Ackermann can be changed by Ackermann inserts (see manual p.23).



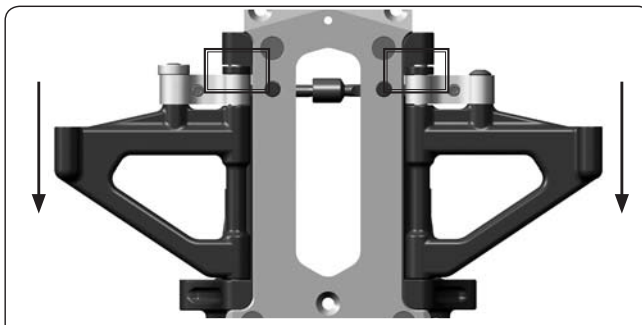
New aluminum front anti-roll bar for N1 cars allows independent adjustment from downstop. Now, the downstop does not influence the performance of the bar and vice versa. Plus, the wheelbase of the car can be adjusted together with the anti-roll bar. The anti-roll bar moves together with front arm and shims can be placed either in front of the bar or behind the arm.

FORWARD ARM POSITION

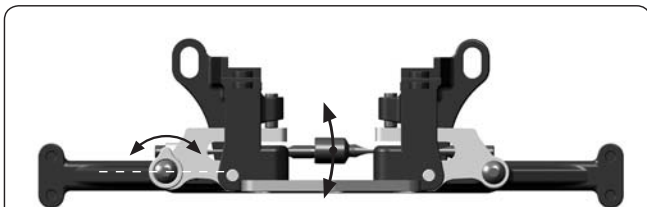


To **LENGTHEN** the wheelbase: Add shims behind the rear lower arms.

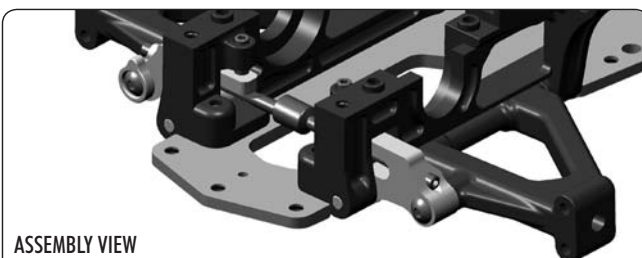
REARWARD ARM POSITION



To **SHORTEN** the wheelbase: Add shims ahead of the alu front anti-roll bar mounts.

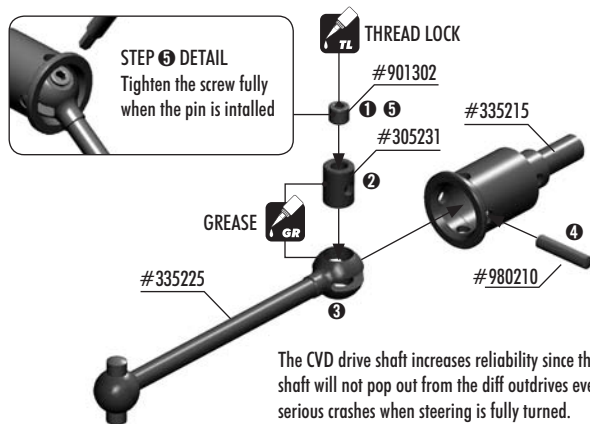


Adjust the front anti-roll bar using the right-side eccentric, so that the bar is even and both front arms raise equally. Tighten the eccentric screw when complete.

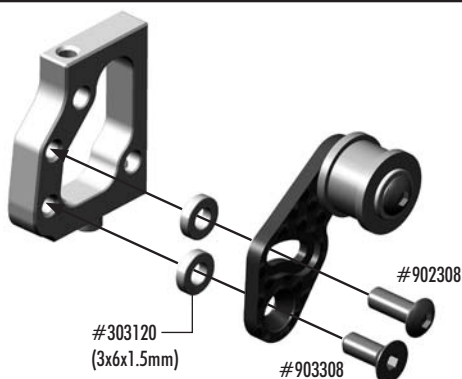
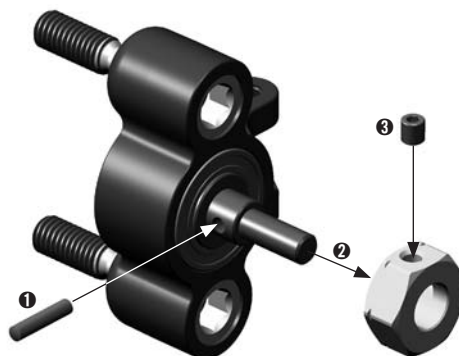


ASSEMBLY VIEW

Assemble the alu anti-roll bar as shown. Ensure all parts move freely without binding.



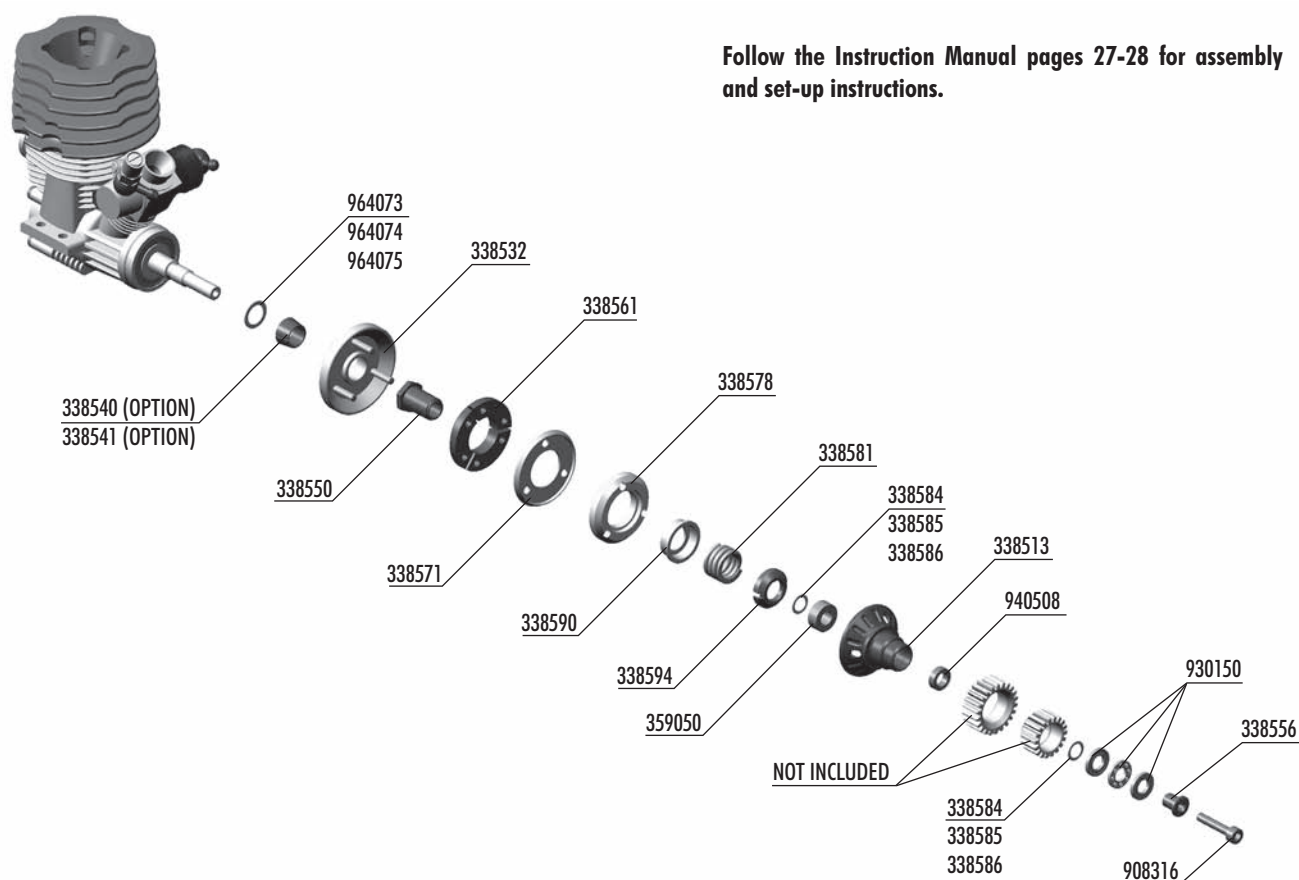
The CVD drive shaft increases reliability since the drive shaft will not pop out from the diff outdrives even in serious crashes when steering is fully turned.



This XRAY XCA High-Dynamic Clutch Set includes redesigned components which create a more dynamic clutch engagement suitable for most racing conditions. Included are a super-lightweight flywheel, new reinforced clutch flyweights, new smaller and super-lightweight clutchbell, smaller clutch shoe, new medium-hardness clutch spring, and new alu clutch disc. All components were designed and long-term tested by the factory racing team.

Due to the small size of the clutch, the rotating parts are lighter which provides smoother and faster acceleration as well as higher clutch efficiency.

Follow the Instruction Manual pages 27-28 for assembly and set-up instructions.



#338513 Clutchbell - High-Dynamic - HUDY Steel  
 #338532 Flywheel - Alu 7075 T6 - Hardcoated - High-Dynamic  
 #338550 Flywheel Nut - HUDY Spring Steel™  
 #338556 Clutchbell Bushing - Hudy Spring Steel™  
 #338561 Clutch Flyweight - High-Dynamic - Black (3)  
 #338571 Alu Clutch Disc - High-Dynamic - Black (3)  
 #338578 Clutch Shoe - High-Dynamic - Red  
 #338581 Clutch Spring - Medium  
 #338584 Shim 5x7x0.2 (10)  
 #338585 Shim 5x7x0.3 (10)

#338586 Shim 5x7x0.5 (10)  
 #338590 Clutch Spring Cup - Alu 7075 T6  
 #338594 Clutch Preload Adj. Nut - HUDY Spring Steel™  
 #359050 Clutchbell Ball-Bearing MR105ZZ 5x10x4 (2)  
 #908316 Hex Screw Socket Head Cap M3x16 (10)  
 #930150 Carbide Ball-Bearing Axial F5-10 5x10x4 with Groove  
 #940508 High-Speed Ball-Bearing 5x8x2.5 Rubber Sealed (2)  
 #964073 Washer S 7x10x0.2 (10)  
 #964074 Washer S 7x10x0.3 (10)  
 #964075 Washer S 7x10x0.5 (10)

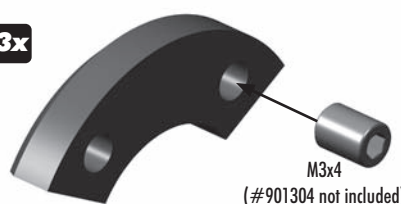
## TECH TIP FOR EXTRA BOTTOM-END POWER

For extra bottom-end power, thread a M3x4 setscrew (#901304) into each clutch flyweight as shown. The setscrew will add more weight to the end of the flyweight which will cause the flyweight to open harder, giving more bottom-end power. This is recommended for high-traction tracks where more bottom-end power is required.

Make sure the setscrew is completely within the flyweight and does not protrude.

**IMPORTANT!** Install setscrew into free (non-pivot) end of flyweight.

**3x**



CUTAWAY VIEW



The engine should be installed on the engine mount as follows:

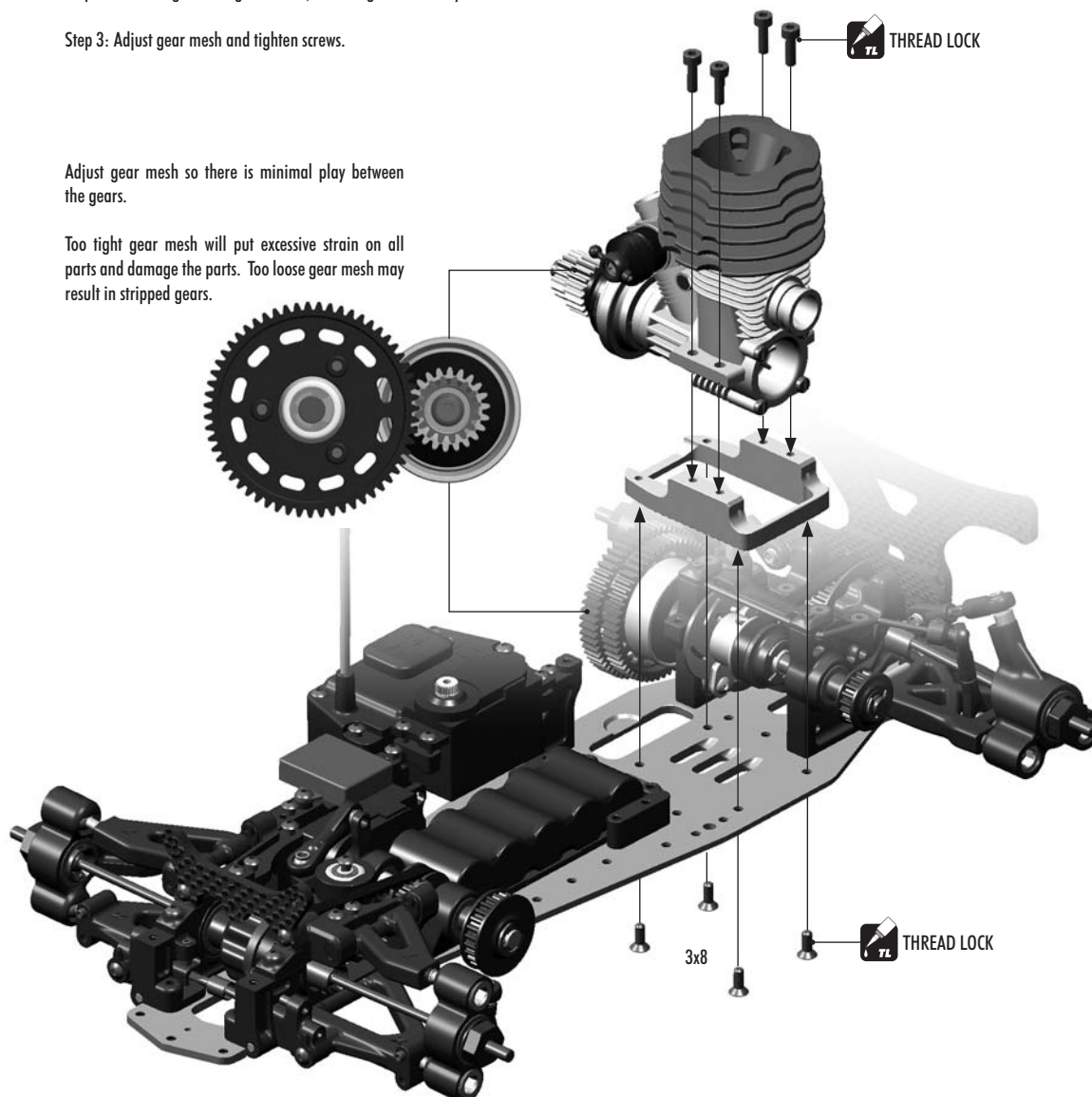
Step 1: Attach engine mount to chassis.

Step 2: Attach engine to engine mount, do not tight screws fully.

Step 3: Adjust gear mesh and tighten screws.

Adjust gear mesh so there is minimal play between the gears.

Too tight gear mesh will put excessive strain on all parts and damage the parts. Too loose gear mesh may result in stripped gears.



INITIAL POSITION