

XRAY NT1

INSTRUCTION MANUAL SUPPLEMENTARY SHEET

Use this NT1 2013 Supplementary Instruction Sheet along with the standard NT1 Instruction Manual included in the kit.

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 to 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 2013 SPEC



331104
ALU CHASSIS 3MM - NARROW - SWISS 7075 T6



331222
FOAM BUMPER FOR ANTI-ROLL BAR



332011
COMPOSITE LOWER & UPPER BULKHEAD FRONT RIGHT FOR WIRE ANTI-ROLL BAR



332021
COMPOSITE LOWER & UPPER BULKHEAD FRONT LEFT FOR WIRE ANTI-ROLL BAR



332082
GRAPHITE SHOCK TOWER FRONT 2.5MM - LOW



332112
COMPOSITE SUSPENSION ARM FRONT LOWER - FOR WIRE ANTI-ROLL BAR



332411
COMPOSITE FRONT ANTI-ROLL BAR HOLDER & ECCENTRIC W/O UPSTOP (2+2)



332476
ANTI-ROLL BAR FRONT 2.6 MM



333011
COMPOSITE LOWER & UPPER BULKHEAD REAR RIGHT - EXTRA ROLL CENTER



333021
COMPOSITE LOWER & UPPER BULKHEAD REAR LEFT - EXTRA ROLL CENTER



333071
BELT TENSIONER SET - V2



333081
GRAPHITE SHOCK TOWER REAR 3MM - LOWER



333452
ANTI-ROLL BAR PIVOT BALL 4.9 MM (2)



303454
BALL JOINT 4.9MM - OPEN (4)



335072
LIGHTWEIGHT DIFF OUTDRIVE ADAPTER-HUDY SPRING STEEL™ (2)



335073
LIGHTWEIGHT DIFF OUTDRIVE ADAPTER - LONG - HUDY SPRING STEEL™ (2)



335250
ALU WHEEL HUB 12MM - BLACK (2)



335711
FRONT MIDDLE SHAFT - HUDY SPRING STEEL™ - LIGHTWEIGHT



336111
GRAPHITE RADIO PLATE - MULTI-FLEX™



336181
STEEL RADIO PLATE MULTI-FLEX™ BUSHING - FLEX (2)



336182
ALU RADIO PLATE MULTI-FLEX™ BUSHING - FIXED (2)



336191
COMPOSITE ROLL-OVER BAR WITH EYELET



338000-0
ALU SHOCK ABSORBER-SET - LOW PROFILE - ORANGE (2)



338081
XRAY 3S SPRING-SET C=3.5 (2)



338082
XRAY 3S SPRING-SET C=4.0 (2)



338502
XCA (XRAY CENTRIFUGAL-AXIAL) CLUTCH SET - REVERSE



338581
CLUTCH SPRING - MEDIUM



338732
EXHAUST MOUNTING WIRE - EXTRA-LONG



338741
ALU EXHAUST WIRE MOUNT - ORANGE

NT1 upgraded parts included in the kit



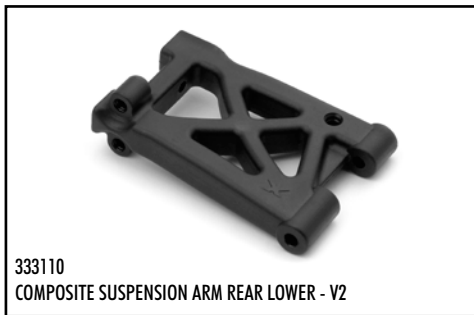
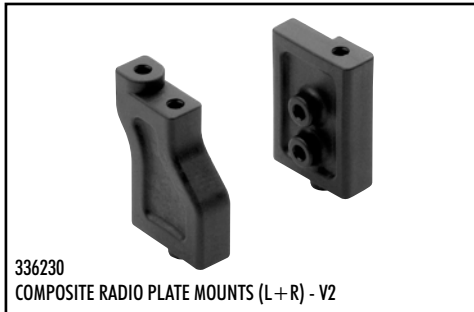
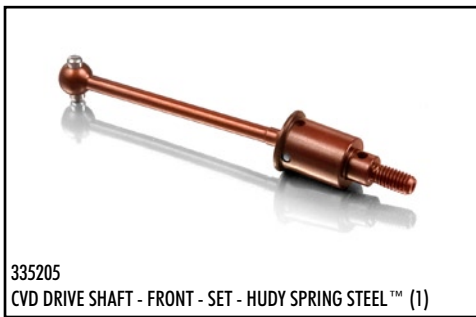
337253
COMPOSITE ADJUSTING NUT M10x1 WITH BALL CUP (4)



338601
FUEL TANK 75CC - SET - V2



335581
SPRING C=7.8 FOR GEAR BOX - MEDIUM - SILVER (2)



This Supplementary Sheet highlights and explains correct building information and you should refer to them while building your NT1 kit.

2. REAR SUSPENSION

PAGE 13 / STEP 3

2x L-R

ASSEMBLY VIEW

NOTE ORIENTATION

TIP Tighten composite hex nuts using HUDY tool #107581

2. REAR SUSPENSION

PAGE 14 / STEP 1

2x L-R

901303
SB M3x3

981210
P 2x10

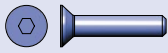
1

2

3



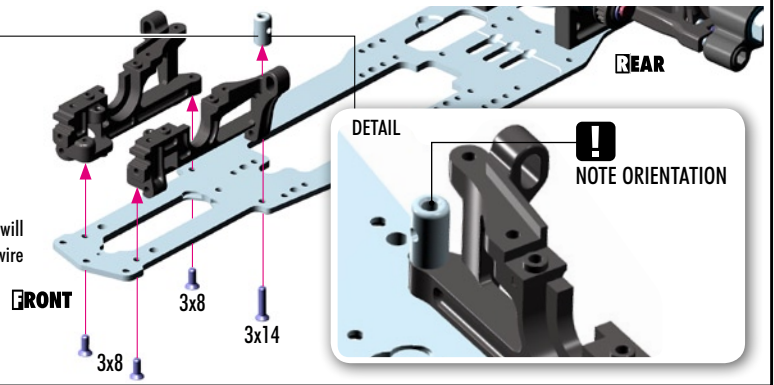
903308
SFH M3x8



903314
SFH M3x14

NOTE ORIENTATION

NOTE
Do not tight the screw fully. The screw will be tightened fully after the manifold wire is inserted.



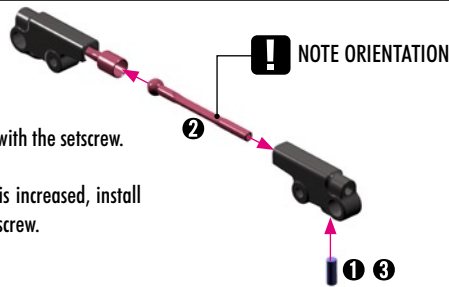
First, choose which anti-roll bar to use. If blade anti-roll bar (ALTERNATIVE 1) is used, follow this Supplementary Sheet. If wire anti-roll bar is used (ALTERNATIVE 2), continue assembling the car (DO NOT ASSEMBLE BLADE BAR AND SKIP THIS STEP); the wire anti-roll bar will be mounted later in this section.

Whether you race on small, technical tracks or large, fast tracks, you have a choice of front anti-roll bars; both wire and blade style anti-roll bars are included.

Blade anti-roll bar (Alternative 1) recommended for long, fast tracks when maximum cornering speed is needed. With the blade anti-roll bar, the car will not dive in the corners and will maintain maximum speed.

Wire anti-roll bar (Alternative 2) recommended for smaller, technical tracks when fast direction changes and side weight changes are needed.

ALTERNATIVE 1 (BLADE ANTI-ROLL BAR)



1 Pre-thread mount with the setscrew.

3 After anti-roll bar is increased, install and tighten the setscrew.

ALTERNATIVE A

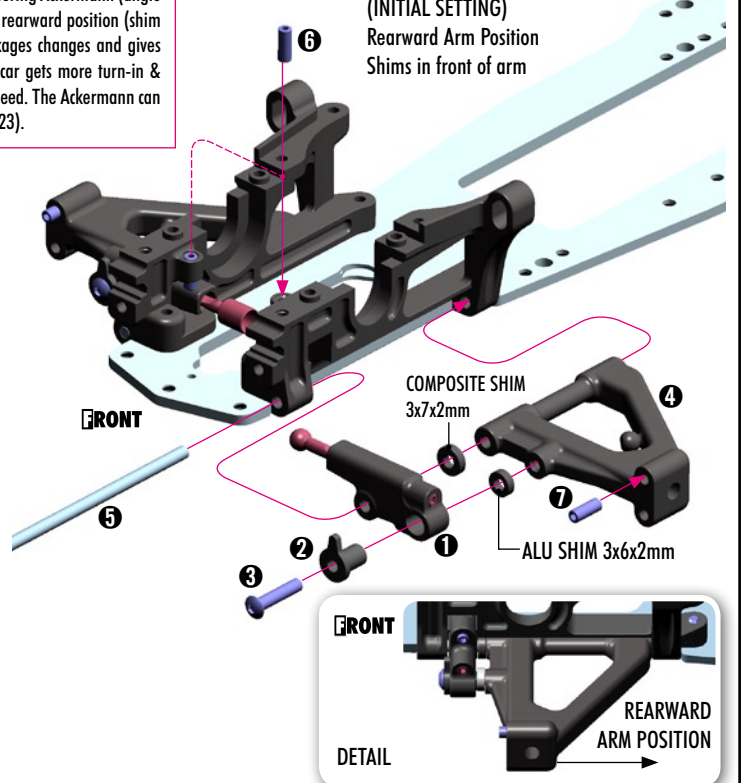
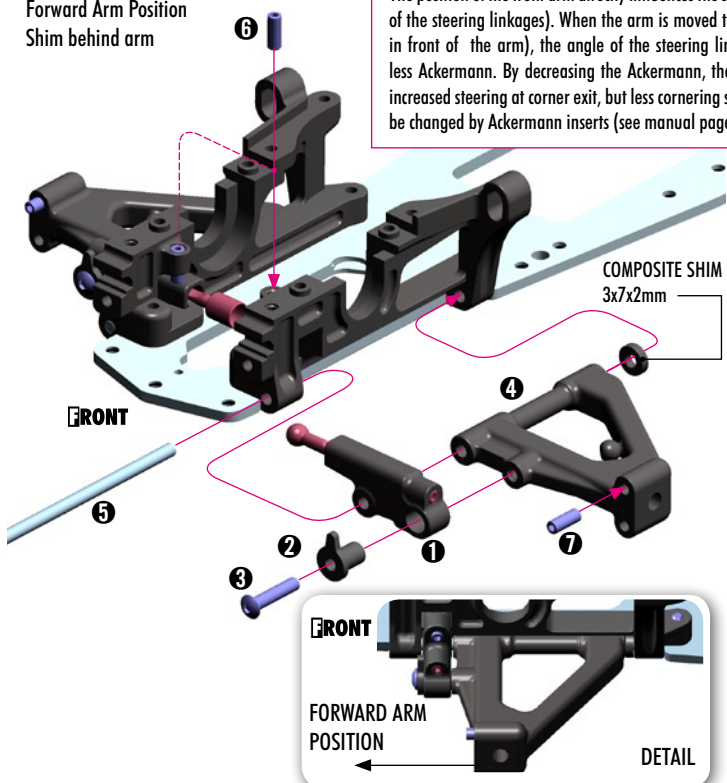
Forward Arm Position
Shim behind arm

IMPORTANT!

The position of the front arm directly influences the steering Ackermann (angle of the steering linkages). When the arm is moved to rearward position (shim in front of the arm), the angle of the steering linkages changes and gives 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 page 23).

ALTERNATIVE B

(INITIAL SETTING)
Rearward Arm Position
Shims in front of arm

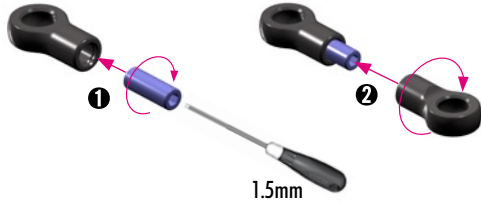


ALTERNATIVE 2 (WIRE ANTI-ROLL BAR)

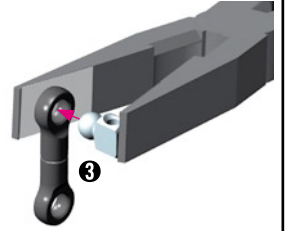
4. FRONT SUSPENSION

PAGE 19 / ADD STEP 5

901308
SB M3x8

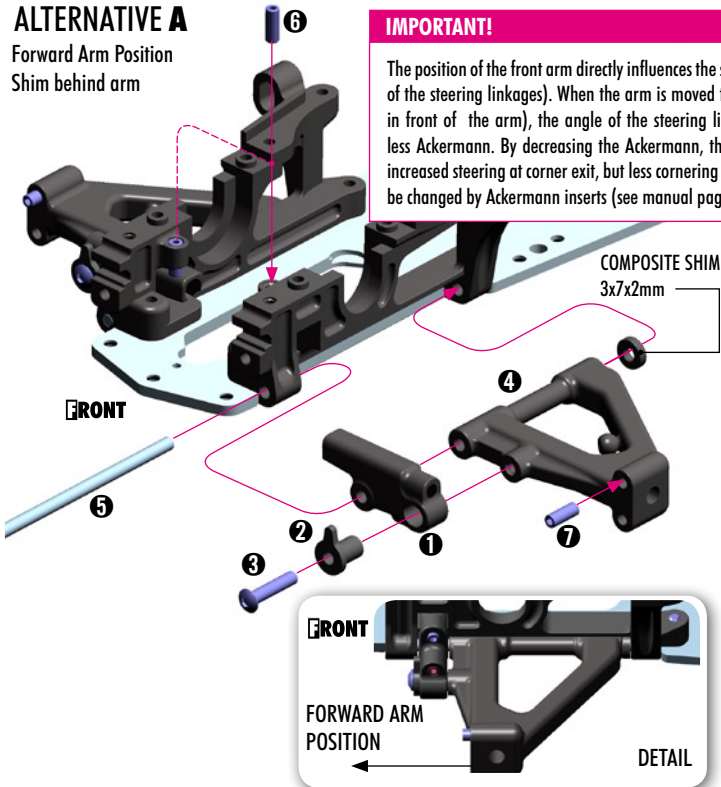


1:1 2x



ALTERNATIVE A

Forward Arm Position
Shim behind arm

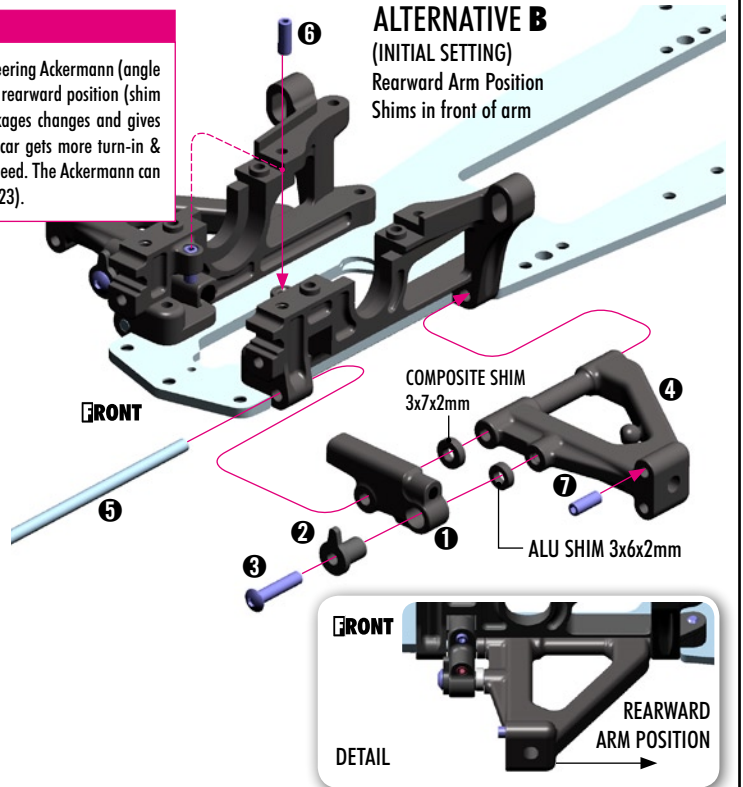


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ALTERNATIVE B

(INITIAL SETTING)
Rearward Arm Position
Shims in front of arm



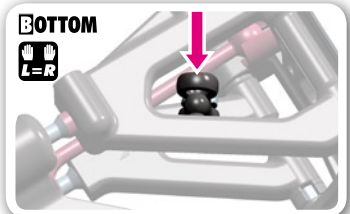
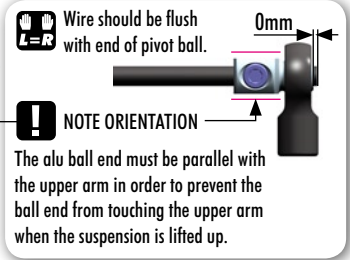
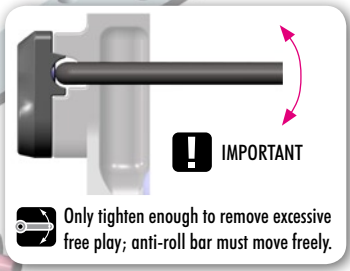
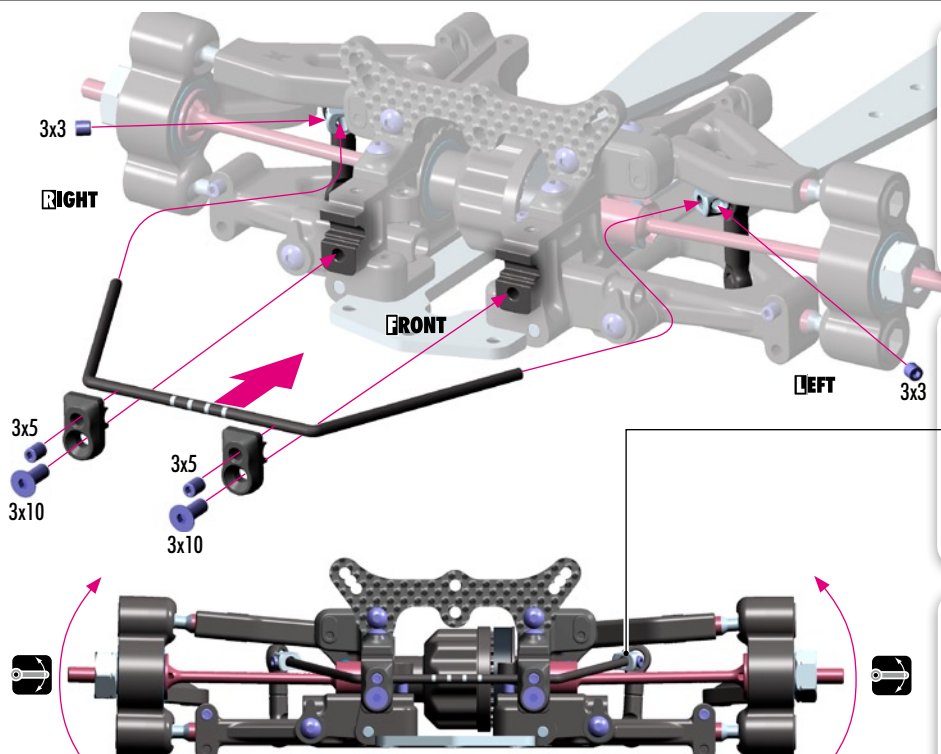
4. FRONT SUSPENSION

PAGE 19 / ADD STEP 6

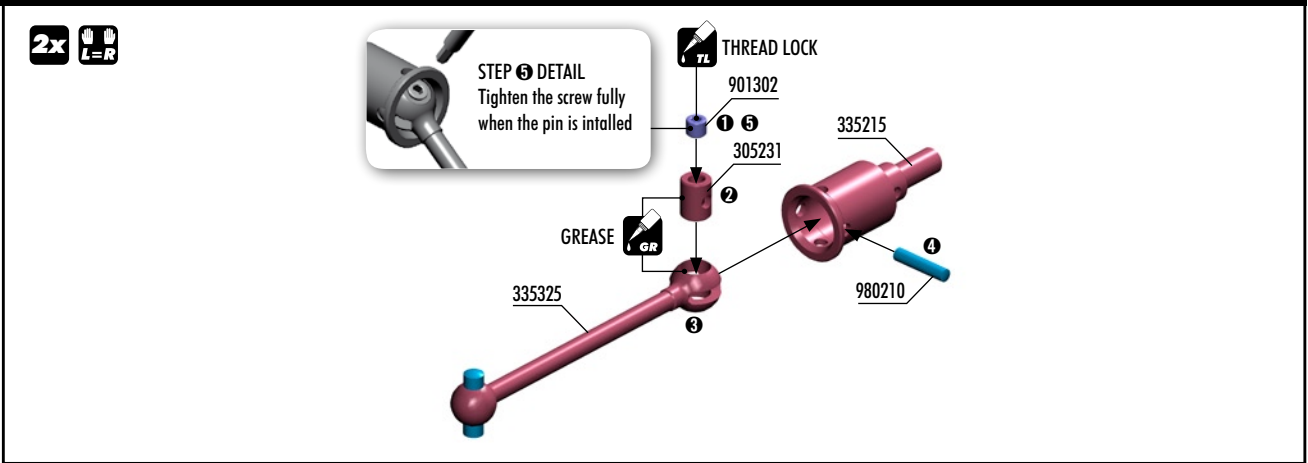
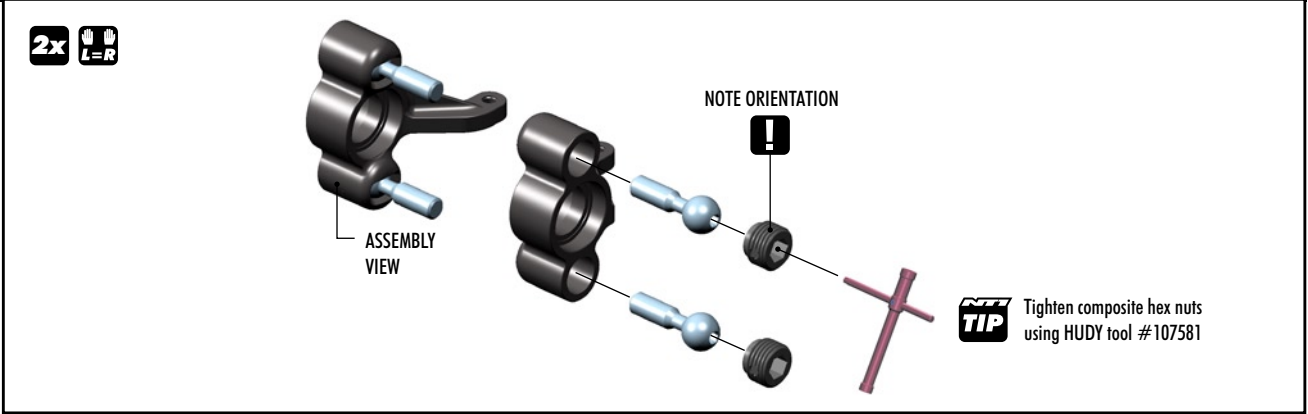
901303
SB M3x3

901305
SB M3x5

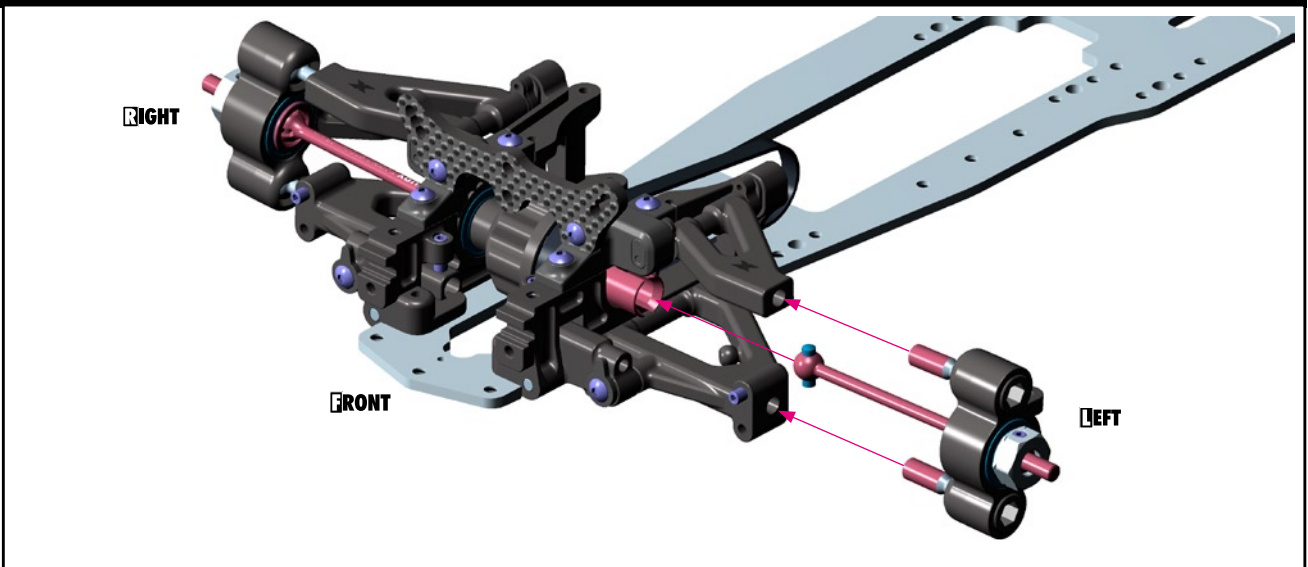
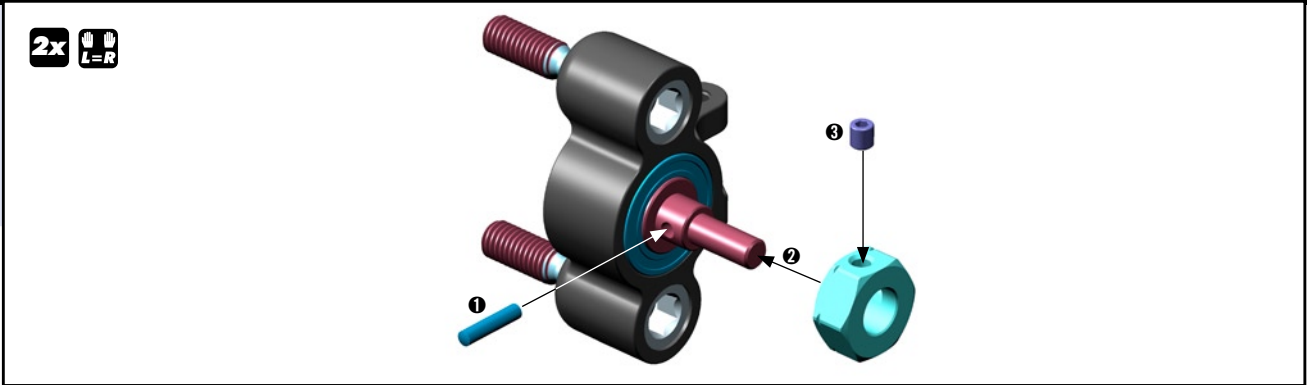
903310
SFH M3x10



When the bars are set, verify that both sides move at the same time. If they do, the bars are set up correctly. If not, make sure that both downstops are the same and that the bar wire is flat.



- 901303
SB M3x3
- 981210
P 2x10



TO ADJUST THE BELT TENSIONER:

- Loosen screw
- Move with the bushing with bearings up or down to set correct tension
- Tighten screw

NOTE ORIENTATION

3x8

3x12

3x10

FRONT

REAR

ASSEMBLY VIEW

3x10

3x10

3x8

3x8

ALU RADIO PLATE MULTI-FLEX™ BUSHINGS

FIXED

FLEX

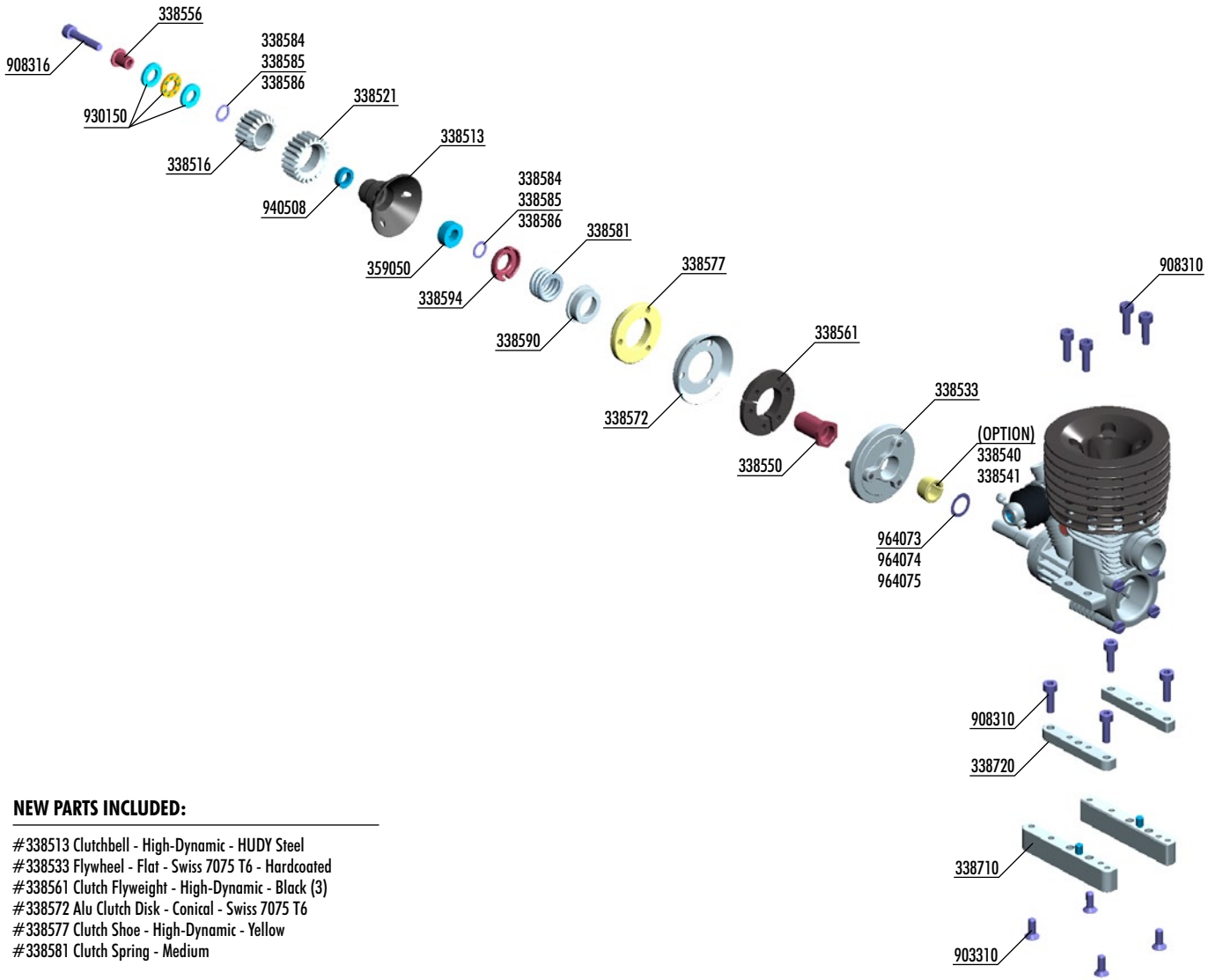
INITIAL SETTING

When using fixed bushing, tighten fully.

When using the flex bushing, tighten the screw fully and then loosen 1/8 of a turn to allow the top deck to flex.

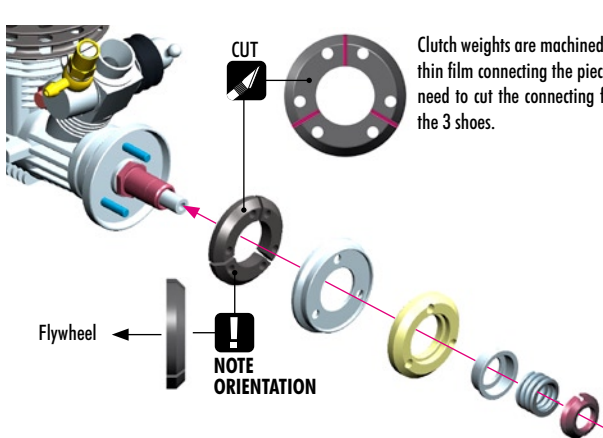
BOTTOM DETAIL

BOTTOM DETAIL

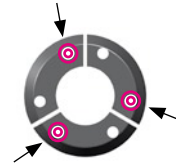


NEW PARTS INCLUDED:

- #338513 Clutchbell - High-Dynamic - HUDY Steel
- #338533 Flywheel - Flat - Swiss 7075 T6 - Hardcoated
- #338561 Clutch Flyweight - High-Dynamic - Black (3)
- #338572 Alu Clutch Disk - Conical - Swiss 7075 T6
- #338577 Clutch Shoe - High-Dynamic - Yellow
- #338581 Clutch Spring - Medium



Clutch weights are machined as 1 piece, with thin film connecting the pieces together. You need to cut the connecting film to separate the 3 shoes.



INITIAL POSITION FOR FLYWHEEL PINS

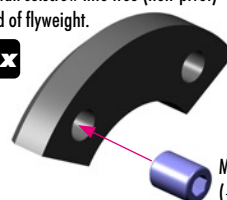
TECH TIP FOR EXTRA BOTTOM-END POWER

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 bottom-end power is required.

IMPORTANT!

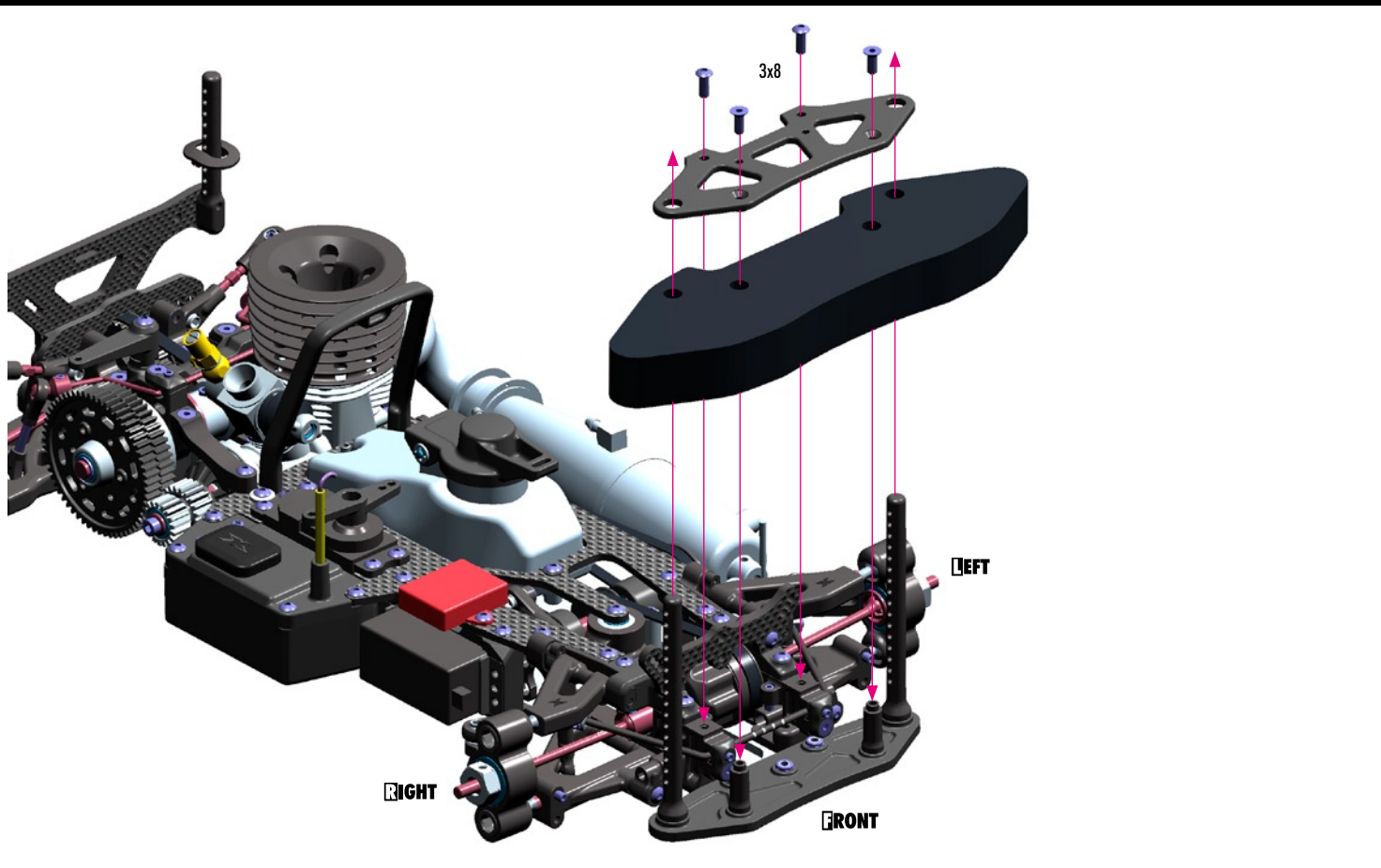
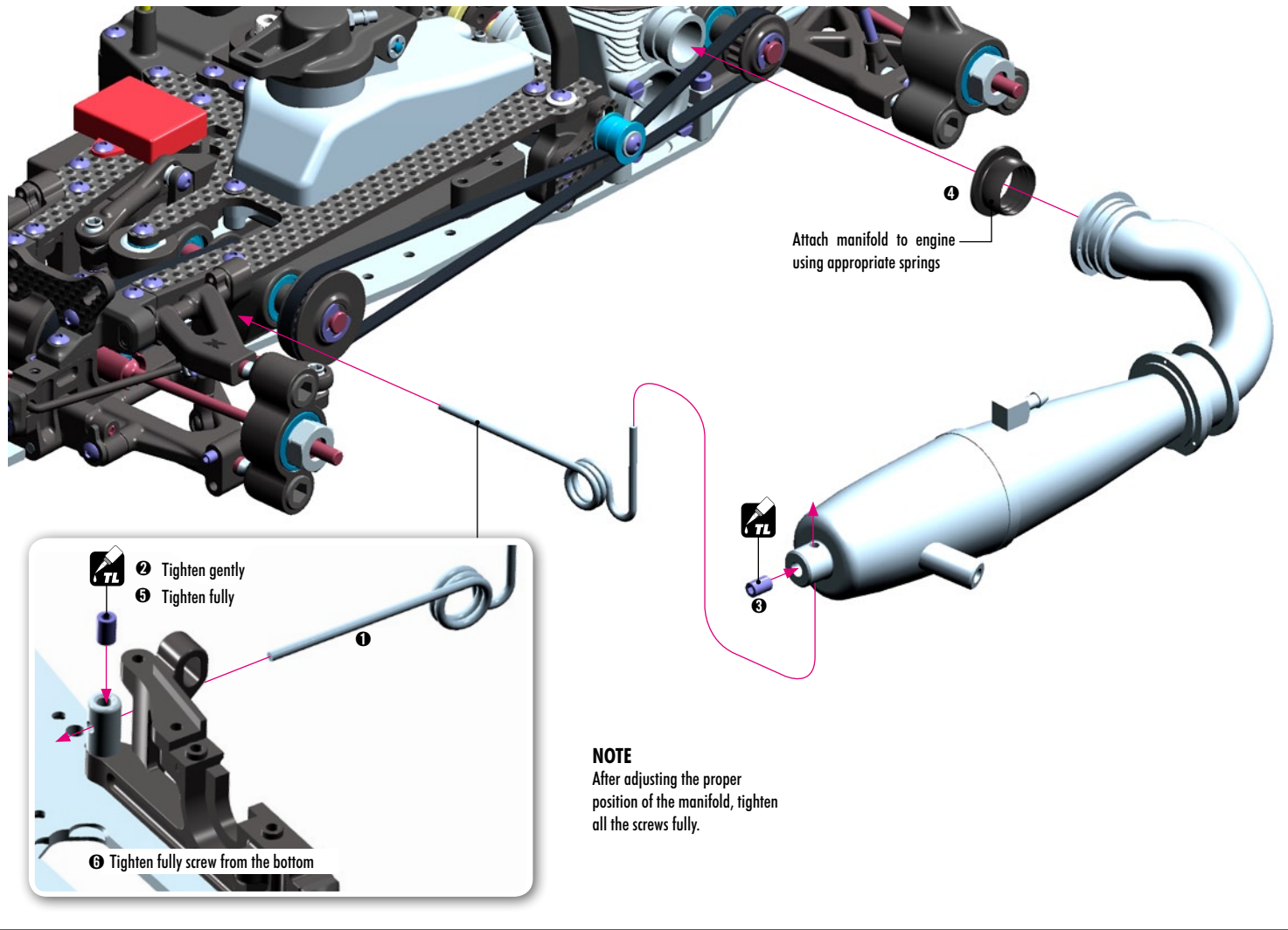
Install setscrew into free (non-pivot) end of flyweight.

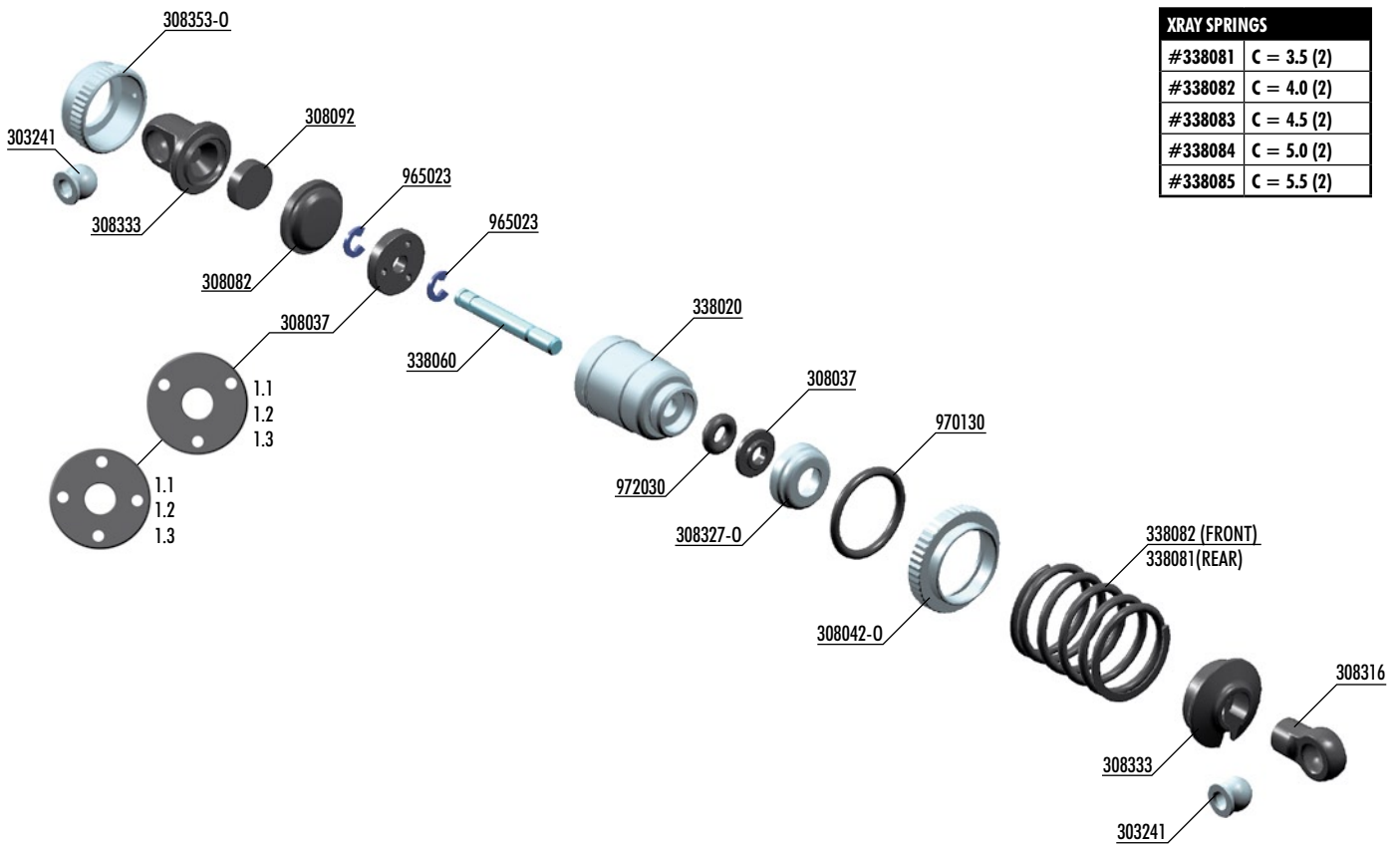
3x



After inserting the setscrew, some excess material may come out of the hole. REMOVE this excess material with a knife.

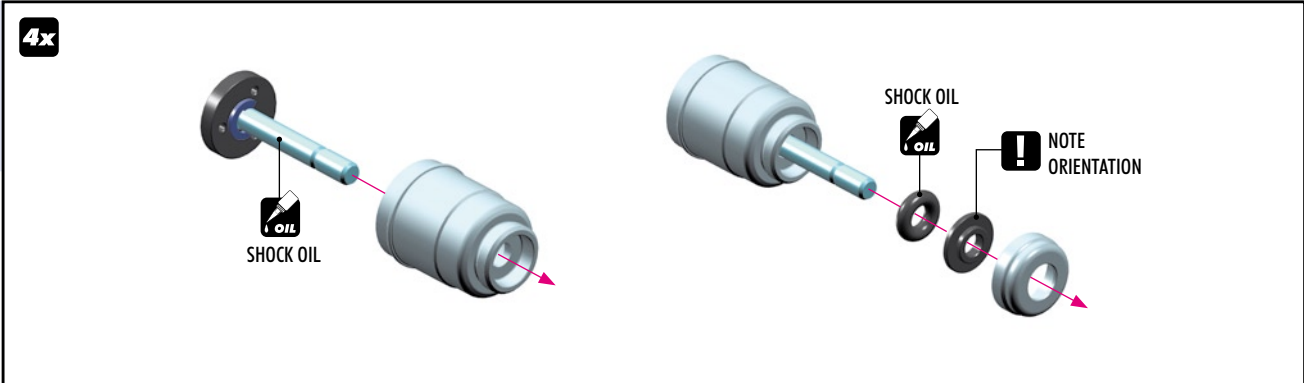
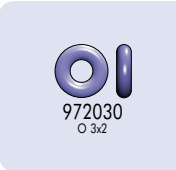
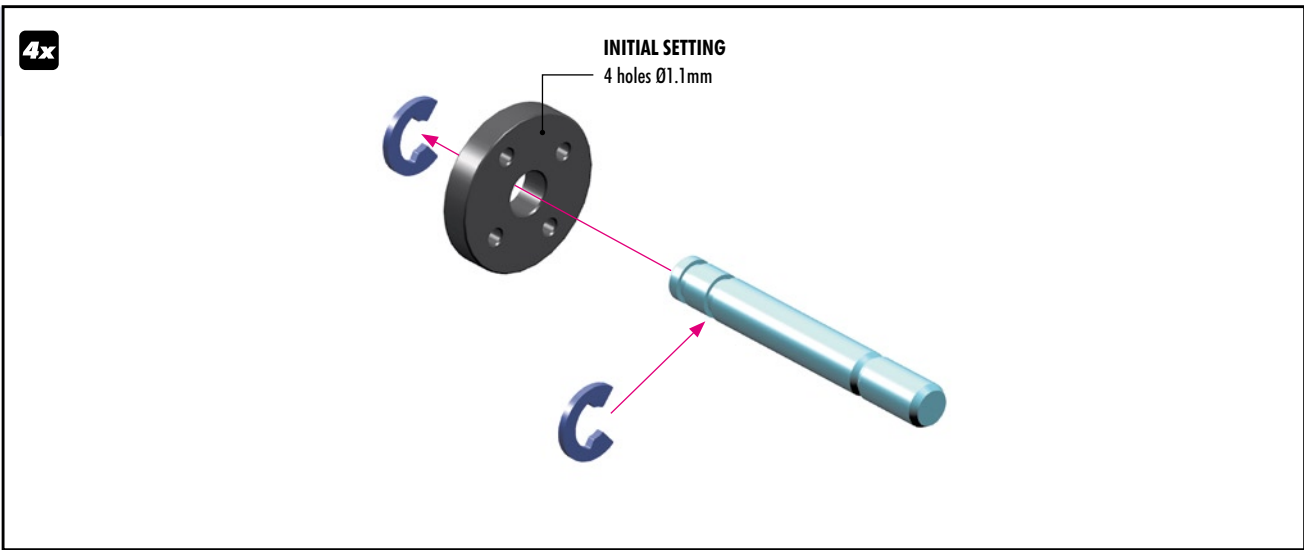
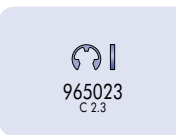






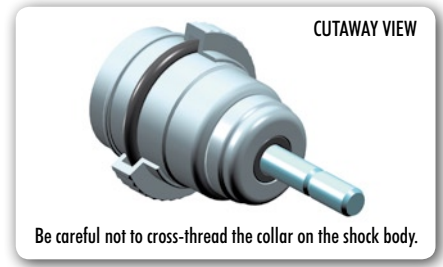
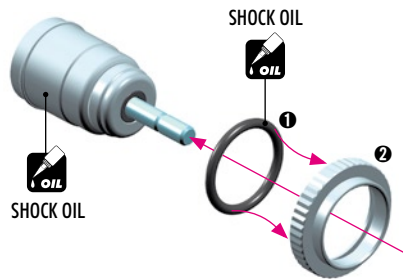
XRAY SPRINGS	
#338081	C = 3.5 (2)
#338082	C = 4.0 (2)
#338083	C = 4.5 (2)
#338084	C = 5.0 (2)
#338085	C = 5.5 (2)

338000	ALU SHOCK ABSORBER-SET - LOW PROFILE - ORANGE (2)	30 8316	SHOCK BALL JOINT - OPEN (4)	338081	XRAY 3S SPRING-SET C=3.5 (2)
30 3241	BALL UNIVERSAL 5.8 MM HEX (4)	338020	ALU SHOCK BODY - LOW PROFILE (2)	338082	XRAY 3S SPRING-SET C=4.0 (2)
30 8037	COMPOSITE PISTONS 4-HOLE 1.0-1.2MM, 3-HOLE 1.0-1.2MM	30 8327-0	ALU CAP FOR XRAY SHOCK BODY - ORANGE	96 5023	E-CLIP 2.3 (10)
30 8042-0	ALU SHOCK ADJUSTABLE NUT - ORANGE (2)	30 8333	T4 COMPOSITE SHOCK PARTS FOR ALU SHOCKS	97 0130	O-RING 13 x 1.5 (10)
30 8082	SHOCK ABSORBER MEMBRANE (4)	30 8353-0	T4 ALU SHOCK CAP-NUT WITH VENT HOLE - ORANGE (2)	97 2030	SILICONE O-RING 3 x 2 (10)
30 8092	SHOCK FOAM INSERTS (4)	338060	HARDENED SHOCK SHAFT - LOW PROFILE (2)		

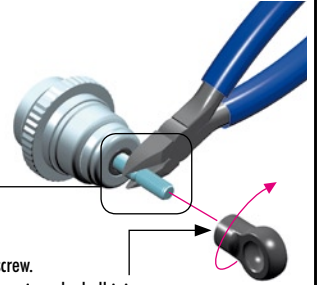
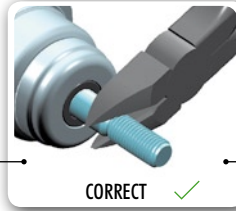
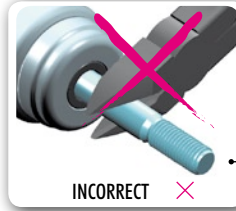
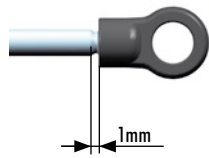




4x



4x



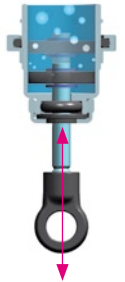
HINT: Pre-thread the ball joint using an M3 screw.
WARNING! Be careful not to pre-thread too far, since the ball joint may split or the plastic threads may strip out.

4x



SHOCK FILLING

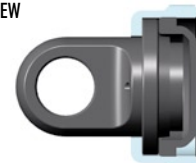
- 1 Fully extend the piston rod so the piston is at the bottom of the shock body.
- 2 Hold the shock upright and slightly overfill the shock body with shock oil.
- 3 Let the oil settle and allow air bubbles to rise to the top. Slowly move the piston up and down to allow oil into all cavities within the shock body.
- 4 Extend the piston rod most of the way out of the shock body. Let the shock rest for 5 minutes to allow the air bubbles to escape.
- 5 Add shock oil as necessary.



4x



CUTAWAY VIEW



After you insert the membrane, ensure that it is fully seated inside the alu cap.

4x



When installing the shock cap assembly on the shock body, some oil will leak out... this is normal.

Tighten the cap and clean off any excess oil.

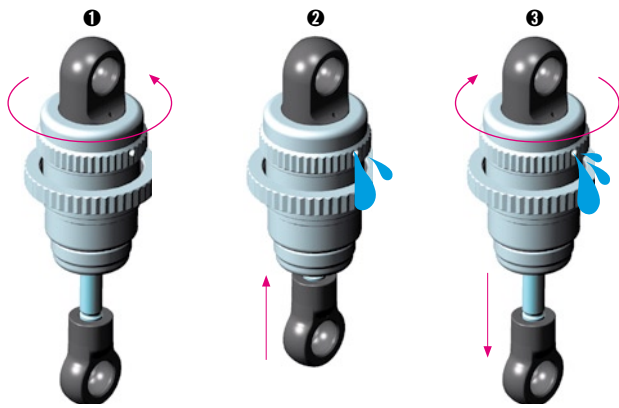
After the shock is assembled, the shock rod will push itself out of the shock body fairly quickly.

Follow the next procedure to adjust the rebound.

SHOCK OILS

#106310	100cSt	#106345	450cSt
#106315	150cSt	#106350	500cSt
#106320	200cSt	#106355	550cSt
#106325	250cSt	#106360	600cSt
#106330	300cSt	#106370	700cSt
#106335	350cSt	#106380	800cSt
#106340	400cSt	#106390	900cSt
		#106410	1000cSt
		#106420	2000cSt

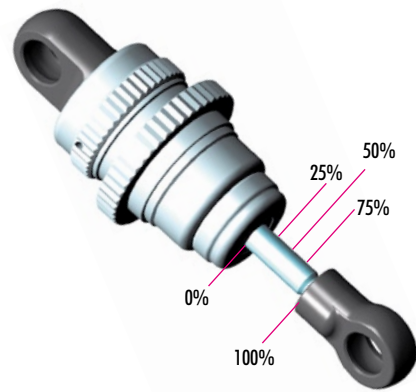
REBOUND ADJUSTMENT



After the shock is assembled you have to set the shock rebound.

- ❶ Release the shock cap by 2-3 turns.
- ❷ Push the shock shaft fully up. The first time you do this, extra oil will release through the hole in the alu cap-nut.
- ❸ Tighten the shock cap.. When tightening the shock cap, extra oil will again release through the hole in the alu cap-nut. When tightening, the shock shaft will push out from the shock body.

REBOUND CHECK



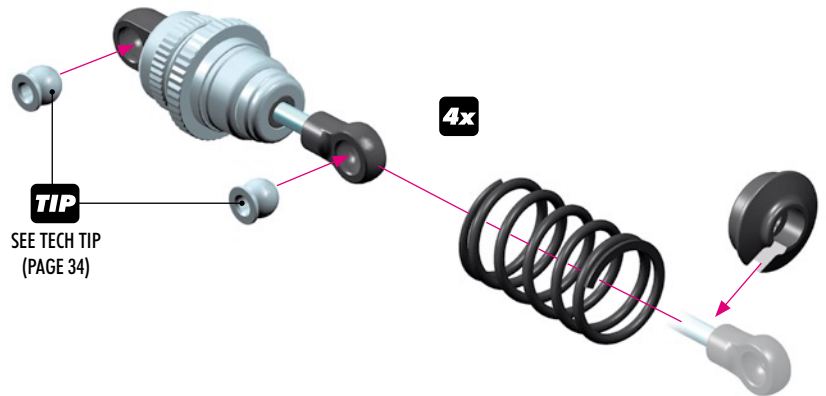
It is very important to push the shock shaft into the shock body slowly, otherwise air can come into the shock body which would create bubbles.

- 100% rebound - do not do step 2 and 3
- 75% rebound - repeat step 2 and 3 until the shock shaft will push out 75% of its length
- 50% rebound - repeat step 2 and 3 until the shock shaft will push out 50% of its length
- 25% rebound - repeat step 2 and 3 until the shock shaft will push out 25% of its length
- 0% rebound - repeat step 2 and 3 until the shock shaft will push out 0% of its length

If the shock shaft does not rebound enough, you will have to refill the shock with shock oil, and then repeat the bleeding and rebound adjustment procedures.

SHOCK LENGTH ADJUSTMENT:

It is VERY important that all shocks are equal length. Fully extend the shock absorber and measure the end-to-end length; we recommend using digital calipers to give an accurate measurement. If a shock absorber is shorter or longer than others, adjust the shock length by tightening or loosening the ball joint on the shock rod.



FINAL ASSEMBLY

PAGE 36 / STEP 1

INITIAL POSITION

