

XRAY RX8

INSTRUCTION MANUAL SUPPLEMENTARY SHEET

Use this RX8 2013 Supplementary Instruction Sheet along with the standard RX8 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.

RX8 2013 SPECS



#332561
SERVO SAVER SPRING C=14



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



#338084
XRAY 3S SPRING-SET C=5.0 (2)



#338089
XRAY 3S SPRING-SET C=7.5 (2)



#338594
CLUTCH PRELOAD ADJ. NUT - HUDY SPRING STEEL™ - V2



#338732
EXHAUST MOUNTING WIRE - EXTRA-LONG



#341201
COMPOSITE BUMPER - DOWNFORCE



#341211
COMPOSITE HOLDER FOR FRONT BODY POSTS - REINFORCED



#341331
COMPOSITE REAR BODY HOLDER - HIGHER



#342022
COMPOSITE LOWER BULKHEAD FRONT LEFT FOR MUFFLER MOUNT



#342081
GRAPHITE SHOCK TOWER FRONT - LOWER



#342500
SERVO SAVER COMPLETE SET - V2



#343012
COMPOSITE LOWER BULKHEAD REAR RIGHT FOR LARGE 2-SPEED BEARING



#343071
BELT TENSIONER SET - STEEL



#343081
GRAPHITE SHOCK TOWER REAR - LOWER



#343190
GRAPHITE EXTENSION FOR SUSPENSION ARM - REAR LOWER - V2 (2)



#344041
BRAKE CAM POST - STEEL



#344141
BRAKE DISK ADAPTER - LIGHTWEIGHT - SWISS 7075 T6



#345711
FRONT MIDDLE SHAFT - LIGHTWEIGHT HUDY SPRING STEEL™



#346111
GRAPHITE RADIO PLATE - FLEX - V2



#348511
XCA UNIVERSAL CLUTCHBELL - REINFORCED HUDY STEEL - V2



#348541
CLUTCH SPRING - ULTRA-STABILE



#348601
FUEL TANK 125CCM - SET - V2



#940817
HIGH-SPEED BALL-BEARING 8x16x5 RUBBER SEALED (2)

RX8 UPGRADED PARTS INCLUDED IN THE KIT



#341101
CHASSIS 5MM - FLEX - CNC MACHINED - SWISS 7075 T6



#342111
COMPOSITE SUSPENSION ARM FOR GRAPHITE EXTENSION - FRONT LOWER



#342131
COMPOSITE SUSPENSION ARM FRONT UPPER - SHORT



#342190
GRAPHITE EXTENSIONS FOR SUSPENSION ARMS - FRONT LOWER (L+R)



#342213
COMPOSITE STEERING BLOCK FOR GRAPHITE EXTENSION - RIGHT

#342223
COMPOSITE STEERING BLOCK FOR GRAPHITE EXTENSION - LEFT



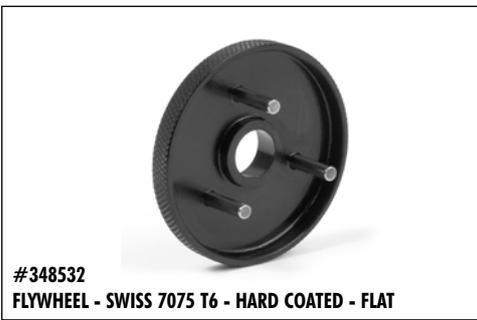
#342290
GRAPHITE EXTENSIONS FOR STEERING BLOCK (2)



#343111
COMPOSITE SUSPENSION ARM FOR GRAPHITE EXTENSION - REAR LOWER



#345510
2-SPEED SHAFT 8MM - SUPER LIGHTWEIGHT - HUDY SPRING STEEL - REINFORCED



2. REAR SUSPENSION PAGE 6 / STEP 2

2x

901410
SB M4x10

902308
SH M3x8

LEFT

RIGHT

TOP

BOTTOM

INITIAL POSITION

3.0mm

3.0mm

L=R

ASSEMBLED VIEW

2. REAR SUSPENSION PAGE 9 / STEP 3

901405
SB M4x5

940815
BB 8x14x4

940817
BB 8x16x5

THREADLOCK

8x16x5

BEARING OIL

BEARING OIL

8x14x4

NOTE ORIENTATION

Tighten setscrew onto flat spot

DETAIL

ASSEMBLED VIEW

The brake disc must freely move between the brake pads. If not, loosen the two screws holding the brake pads.

4. FRONT SUSPENSION PAGE 16 / STEP 1

2x

902308
SH M3x8

ASSEMBLED VIEW

L=R

4. FRONT SUSPENSION PAGE 16 / STEP 2

2x

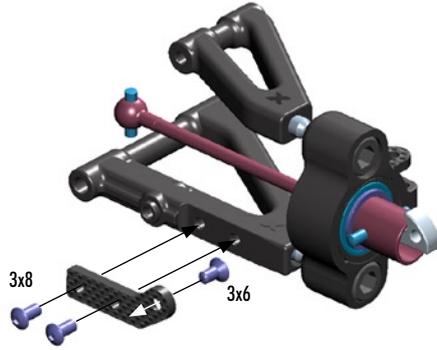
L=R

6.5mm

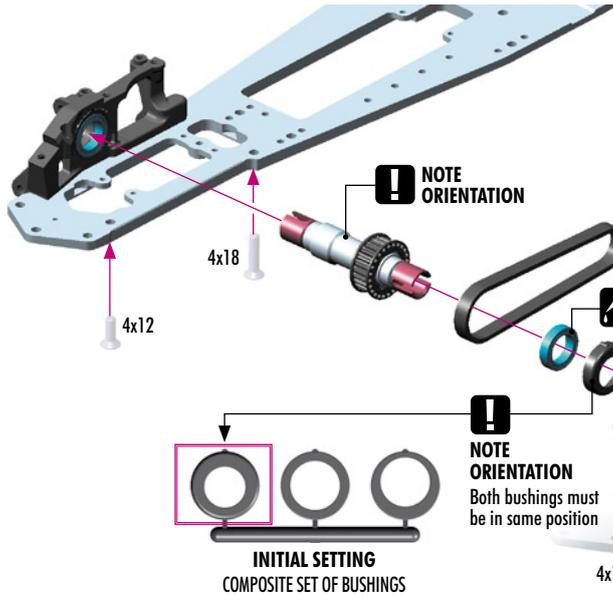
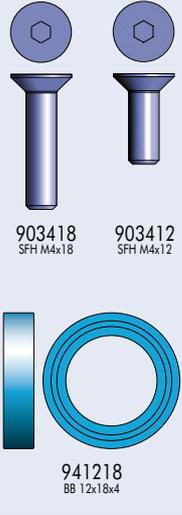
3.0mm



2x L=R



ASSEMBLED VIEW



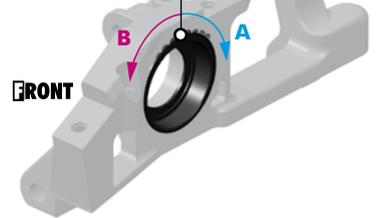
DETAIL

FRONT BELT TENSION ADJUSTMENT

INITIAL POSITION
Place tab in this notch

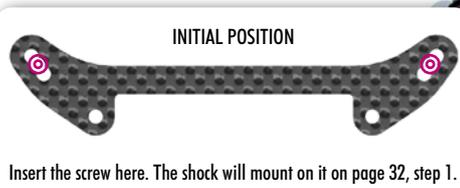
FRONT

REAR



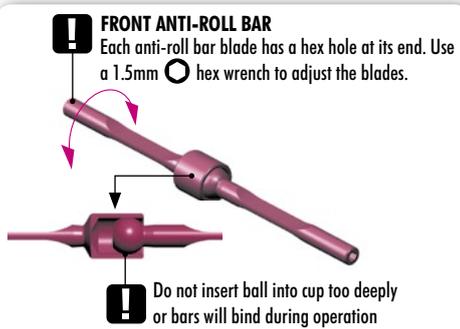
TO LOOSEN FRONT BELT
Rotate BOTH front composite bushings in arrow direction (B)

TO TIGHTEN FRONT BELT
Rotate BOTH front composite bushings in arrow direction (A)



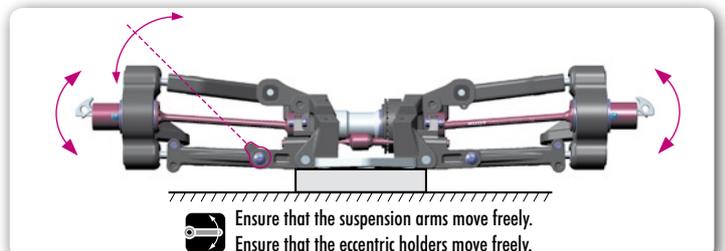
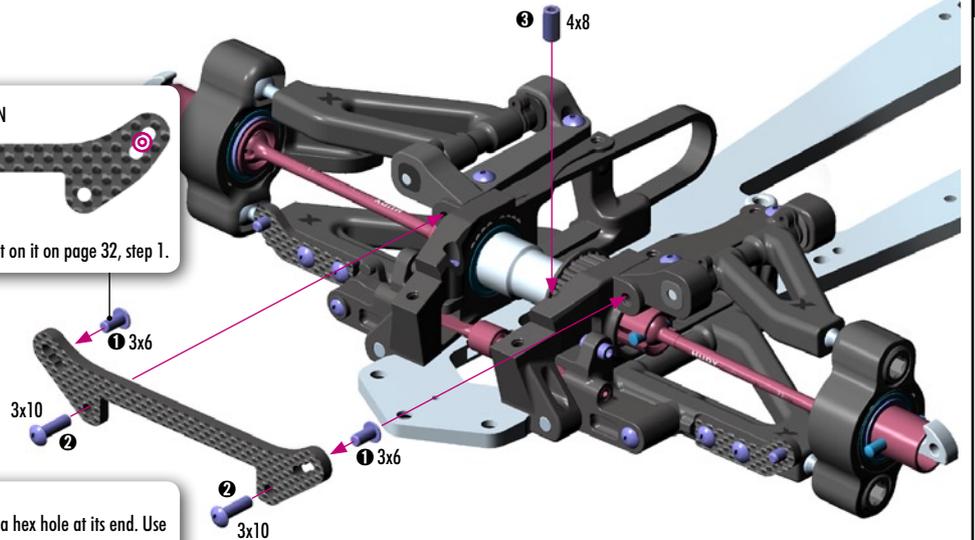
INITIAL POSITION

Insert the screw here. The shock will mount on it on page 32, step 1.

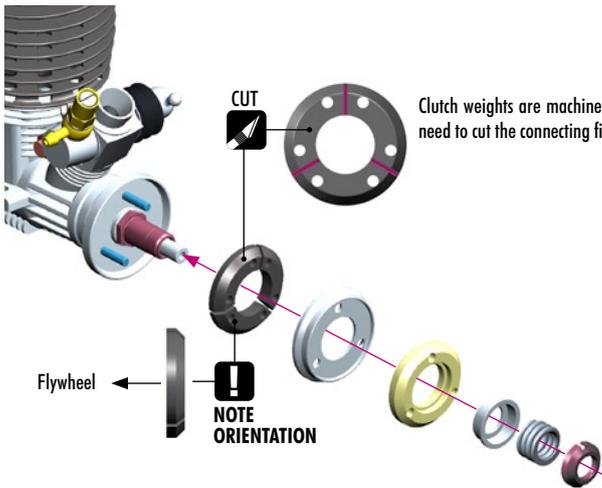
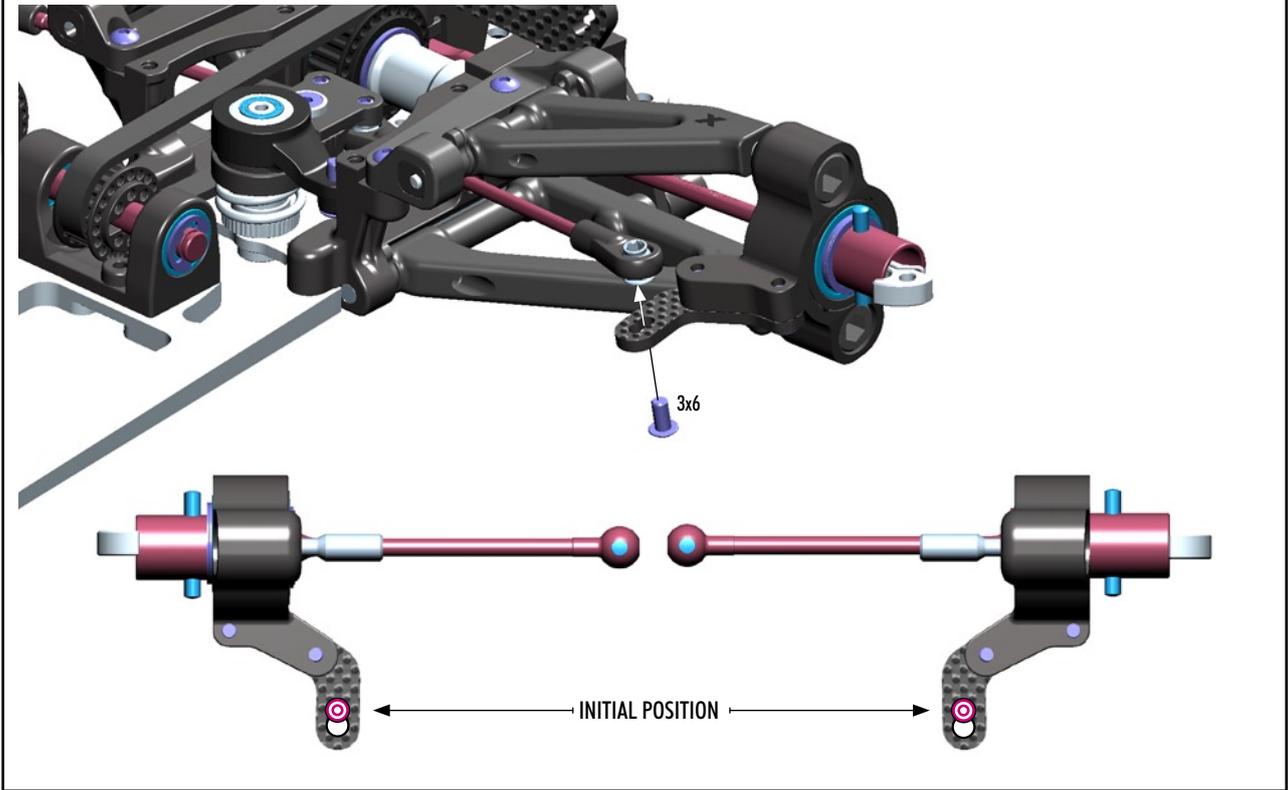


FRONT ANTI-ROLL BAR
Each anti-roll bar blade has a hex hole at its end. Use a 1.5mm hex wrench to adjust the blades.

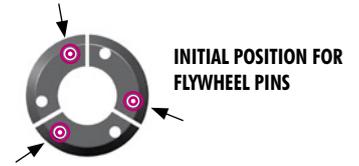
! Do not insert ball into cup too deeply or bars will bind during operation



! Ensure that the suspension arms move freely.
Ensure that the eccentric holders move freely.



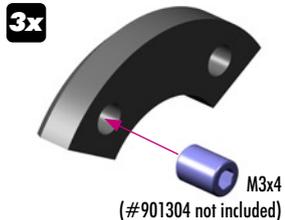
Clutch weights are machined as 1 piece, with thin film connecting the pieces together. You need to cut the connecting film to separate the 3 shoes.



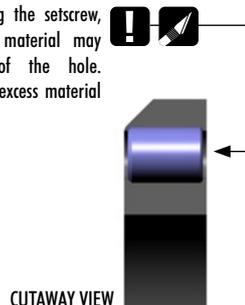
TECH TIP FOR EXTRA BOTTOM-END POWER

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.



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



TECH TIP FOR RX8 CLUTCH SHOE

To ensure that the RX8 clutch shoe works properly and for a long time, it is very important to run in the clutch shoe.

Please follow these run-in steps to help ensure proper clutch operation:



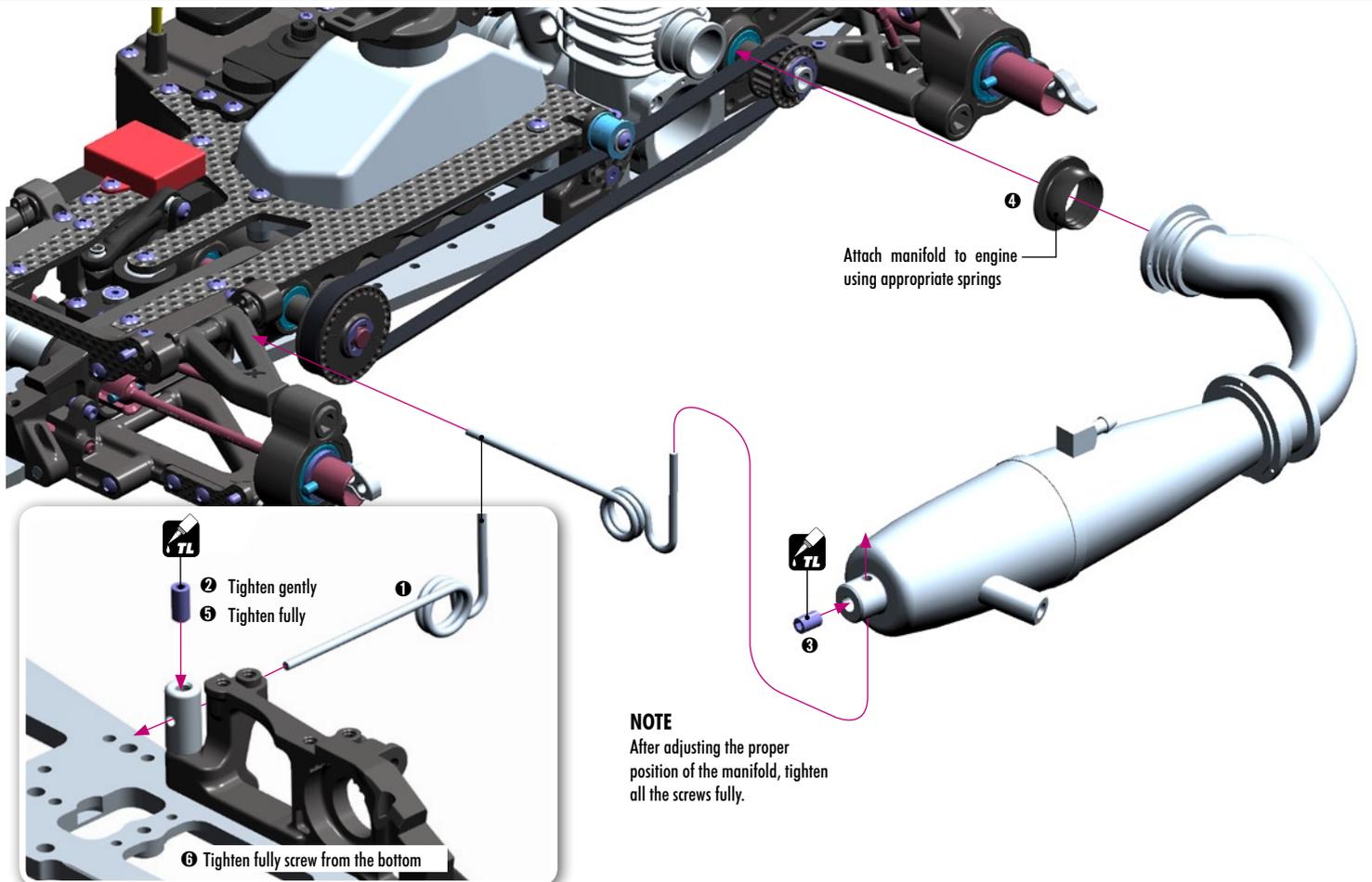
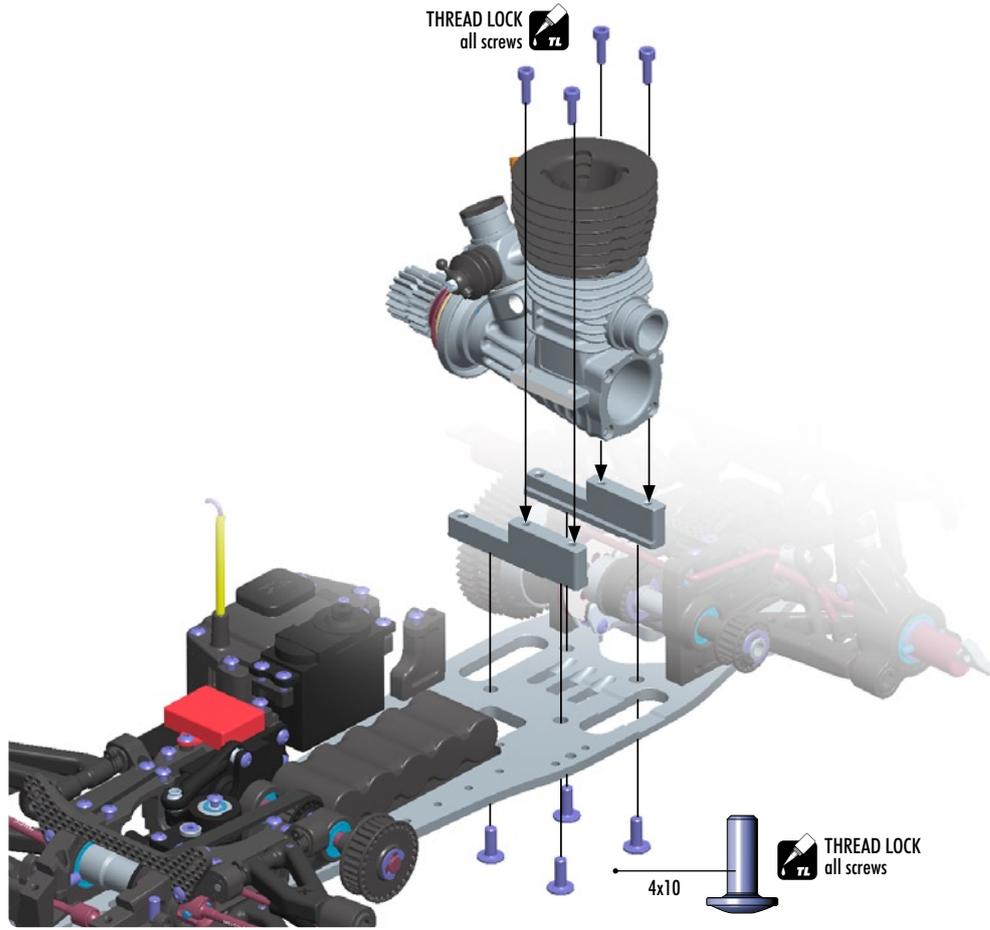
- 1 Install clutch according to manual.
- 2 Check that the spring preload is not too much; for run-in process use less preload.
- 3 When you start the engine, the clutch should start engage under low RPM. If the clutch engages only under high RPM, stop the engine and loosen the spring preload collar. Repeat until the clutch engages under low RPM.
- 4 Run in the clutch shoe on the track, or on the starter box if you have only limited time. (We recommend running it in on the track.)
- 5 Run in the clutch shoe for 1 tank of fuel using a soft preload setting, and then after that slightly tighten the spring preload. DO NOT run in the clutch shoe under high RPM.
- 6 Continue this process until the clutch shoe is properly run in; this will be indicated by a dark and glossy surface colour on the top of the clutch shoe.

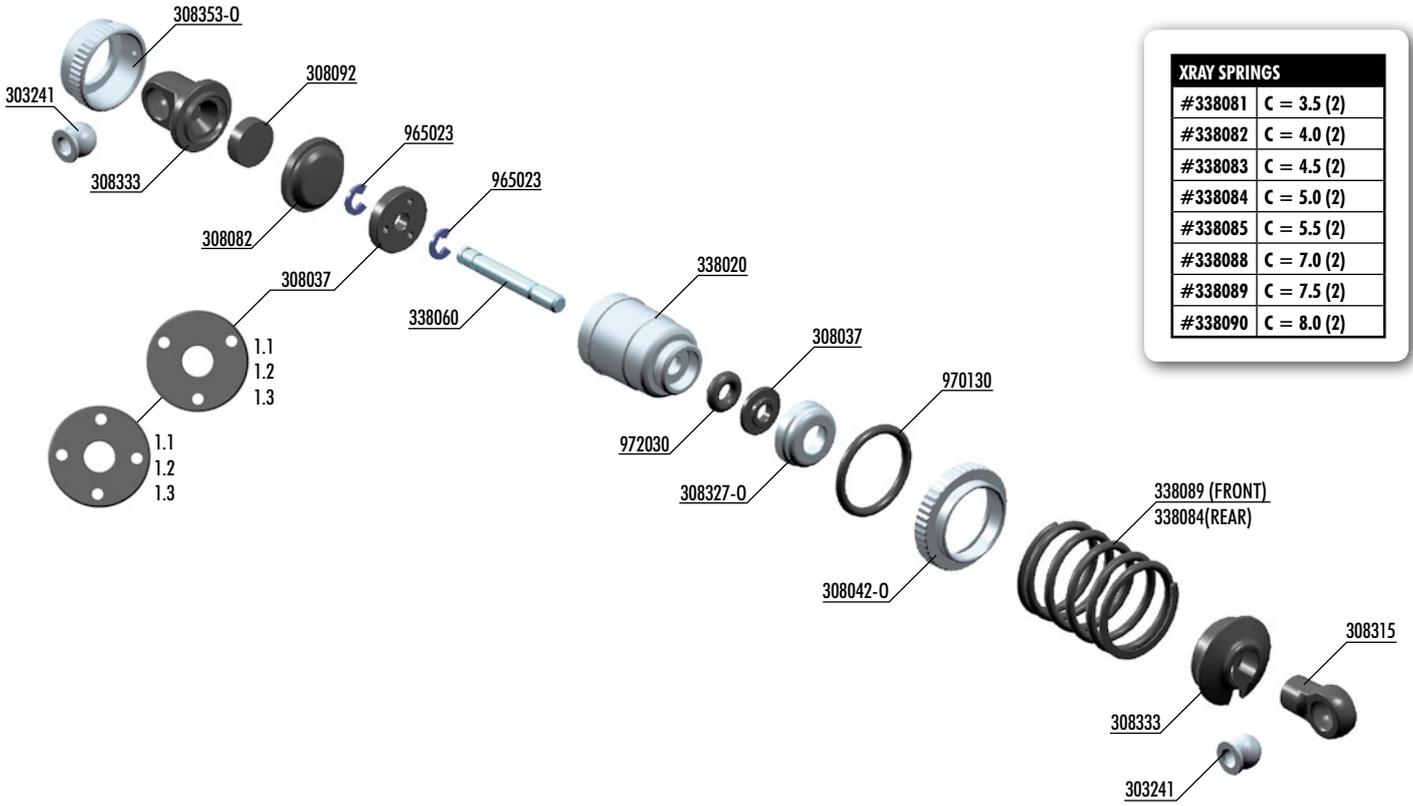


911410
SH M4x10



908312
SCH M3x12





| 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) |
| #338088 | C = 7.0 (2) |
| #338089 | C = 7.5 (2) |
| #338090 | C = 8.0 (2) |

| | | | | | |
|-----------|--|-----------|--|---------|------------------------------|
| 33 8000-0 | ALU SHOCK ABSORBER-SET - LOW PROFILE - ORANGE (2) | 30 8315 | SHOCK BALL JOINT - LONG (4) | 33 8084 | XRAY 3S SPRING-SET C=5.0 (2) |
| 30 3241 | BALL UNIVERSAL 5.8 MM HEX (4) | 33 8020 | ALU SHOCK BODY - LOW PROFILE (2) | 33 8089 | XRAY 3S SPRING-SET C=7.5 (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) | 33 8060 | HARDENED SHOCK SHAFT - LOW PROFILE (2) | | |

965023
C 2.3

4x

INITIAL SETTING
4 holes Ø1.1mm

972030
O 3x2

4x

SHOCK OIL

SHOCK OIL

NOTE ORIENTATION

970130
O 13x1.5

4x

SHOCK OIL

SHOCK OIL

CUTAWAY VIEW

Be careful not to cross-thread the collar on the shock body.

4x

INCORRECT ✗

CORRECT ✓

DETAIL

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 OIL

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

FOAM INSERT

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

REBOUND ADJUSTMENT

1 Release the shock cap by 2-3 turns.

2 Push the shock shaft fully up. The first time you do this, extra oil will release through the hole in the alu cap-nut.

3 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.

TIGHTEN FULLY

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

REBOUND CHECK

0%
25%
50%
75%
100%

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.

4x

TIP

SEE TECH TIP (PAGE 31)