



INSTRUCTION MANUAL

OFF ROAD NITRO BUGGY 1/8 HIGH PERFORMANCE



PERFORMANCE FEATURES

- NEW DIFFERENTIAL HOUSING DESIGN ALLOWS FOR QUICK DIFFERENTIAL SWAPS / QUICK-ACCESS FRONT AND REAR DIFF DESIGN
- SPECIAL HIGH-PERFORMANCE BRAKE PAD MATERIAL
- NEWLY DESIGNED LOW-DRAG POLYCARBONATE (PC) BODYSHELL
- ANGLED BEVEL GEAR DESIGN IN FRONT AND REAR GEARBOXES FOR IMPROVED CENTER DOGBONE ALIGNMENT AND QUICKER ACCELERATION
- QUICK-RELEASE CENTER DIFF MOUNT FOR FAST DIFFERENTIAL ADJUSTMENT
- EQUIPPED WITH 17MM ANTI-LOOSENING HEX WHEEL NUTS
- ONE-PIECE WING MOUNT REDUCES DEFORMATION
- HIGH-STIFFNESS SHOCK SPRINGS
- NEW RECEIVER BOX DESIGN ALLOWS TRANSPONDER TO BE CONCEALED
- FRONT CASTER ANGLE ADJUSTABLE BLOCK FOR QUICK CASTER ANGLE ADJUSTMENT
- LIGHT WEIGHT FRONT, REAR AND CENTER DIFFERENTIALS
- COMPLETE SET OF LIGHT WEIGHT OUT DRIVES
- 7075 CNC 5MM ALUMINIUM FRONT AND REAR SHOCK TOWERS
- 7075 CNC ARM HOLDER AND TOE PLATE
- 7075 3MM LIGHTENED CHASSIS WITH COUNTERSUNK SCREWS
- COMPOSITE RADIO TRAY, ENCLOSED BATTERY AND RECEIVER BOX
- COMPLETE HIGH PERFORMANCE BEARING SET
- SIDE LOADED CALIPER WITH RETURN SPRINGS
- FRONT / REAR CHASSIS RESERVATION SPACE FOR COUNTER WEIGHT AT FRONT / REAR CHASSIS
- CNC MACHINED HARDENED 13 TOOTH BEVEL PINION GEAR
- CNC MACHINED HARDENED 45 TOOTH BEVEL GEAR
- 4 SHOE CLUTCH SET
- 2.5MM CARBON FIBER CENTER UPPER PLATE



ADDITIONAL PARTS NEEDED

- ENGINE/MOTOR.
- 2 CHANEL RADIO.
- GLOW PLUG.
- GLOW PLUG IGNITOR.
- STARTER BOX OR STARTER.
- BATTERIES.
- PAINT.
- RC CAR FUEL (20%)

- KIT IN INSTRUCTION MANUAL MAY BE DIFFER FROM PICTURE SHOWN.
- ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

HONGNOR
QUALITY RC MODEL PRODUCTS

THIS IS NOT TOY !

- DO NOT USE WITH CHILDREN UNDER 16 YEARS OF AGE OR WITHOUT ADULT SUPERVISION.

CONTENTS

• REQUIRED FOR OPERATION	01
• INSTALLATION INSTRUCTION	02
• TIRES SETTING GUIDE	33
• SETUP SHEET	34
• SPARE PARTS LIST	35

WARNINGS

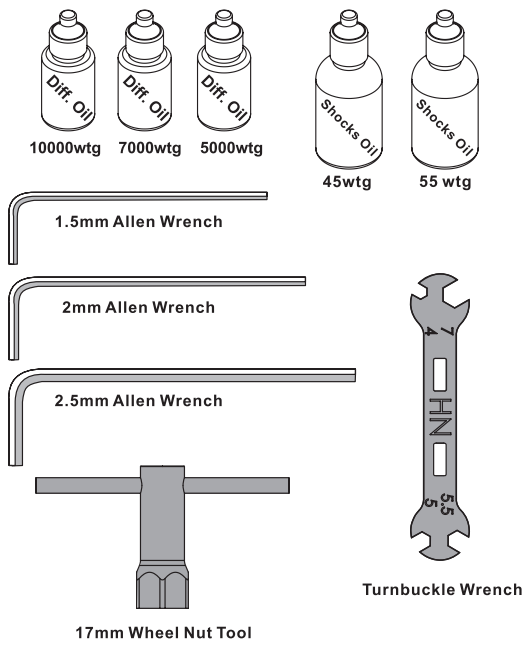
- This product is not intended for those under 14 years of age without proper adult supervision. The product is not a toy. It is a precision machine requiring proper assembly and setup to avoid accidents and it is the responsibility of the owner to operate this product in a safe manner as it can cause serious personal injury and damage to property due to carelessness or misuse.
- Operate this product within your ability. Do not operate under tired condition.
- Choose an appropriate operating site consisting of flat, smooth ground, and clear open field. Do not operate near buildings, high voltage cable lines, or trees to ensure safety operation. Operate in safe area only, away from other people. RC models are prone to accidents, failures, and crashes due to a variety of reasons including, lack of maintenance, user error, and radio interference. Users are responsible for their actions and damage or injury occurring during the operation.
- You should complete a successful pre-run check of your radio equipment and model prior to each run.

WARNING NOTES

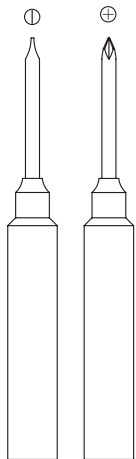
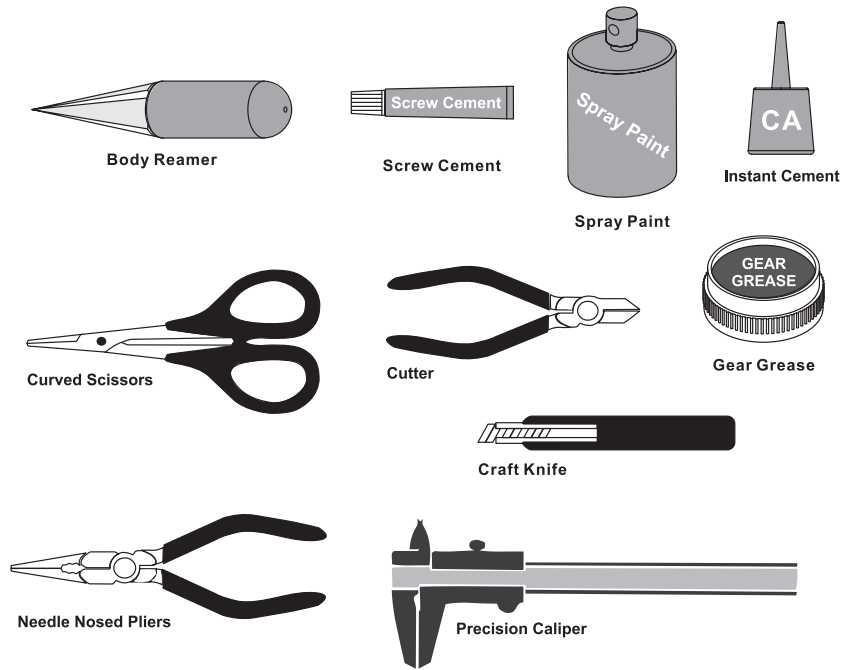
- Don't drive your model car when it raining or thundering to keep safety.
- Keep your model car in dry normal temperature condition, and keep away from water.
- Please do not use other optional parts to install our model car if you can not make sure it can match your car or not. And please do don't over load or or use it to do breaking local law.
- Please keep car away from fire as it was mostly made by plastic and electric material.
- If you are in doubt of your ability to operate the model, we strongly recommend that you seek assistance from experienced RC users or join your local modeling club to gain the required knowledge and skill. As the manufacture and distribution, we assume no liability for the use of this product.

REQUIRED FOR OPERATION

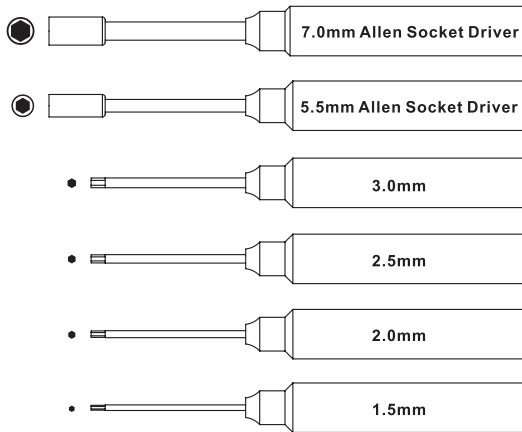
INCLUDED ITEMS



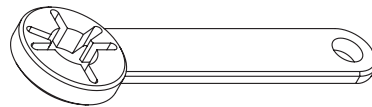
TOOLS NOT INCLUDED IN THE KIT



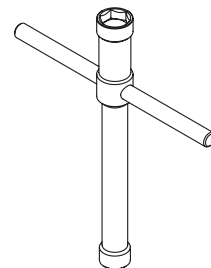
Screw Drivers



Allen Drivers

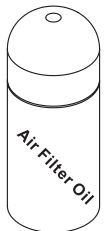


Flywheel Tool



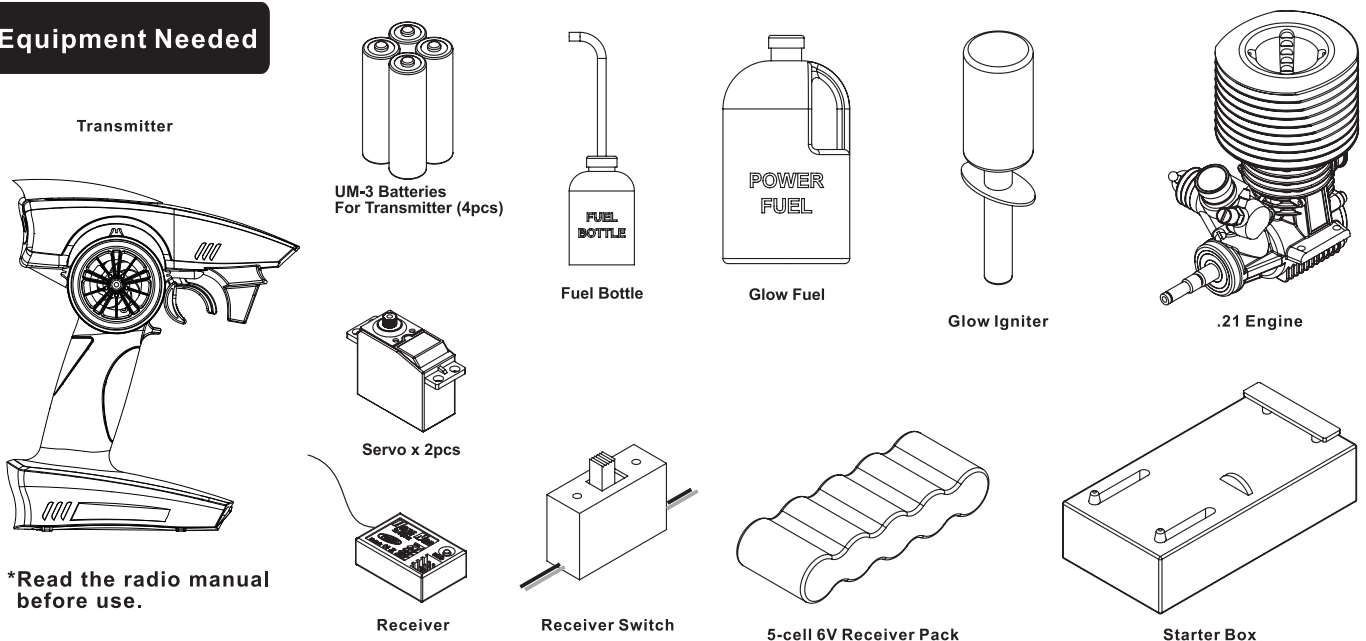
Cross Wrench

HONG NOR
#339



Air Filter Oil

Equipment Needed



*Read the radio manual before use.

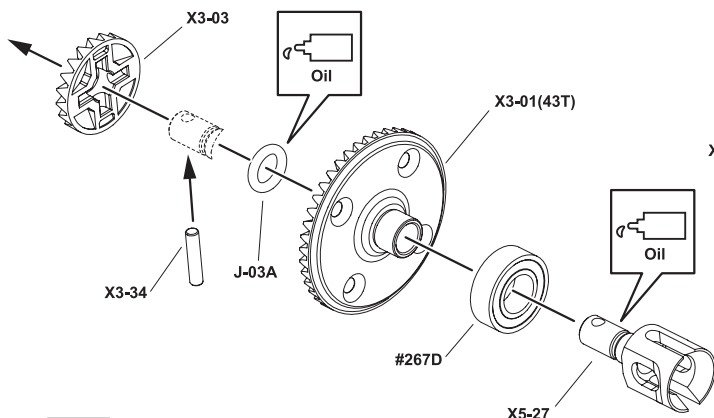
1 ASSEMBLY OF THE FRONT AND REAR DIFF.



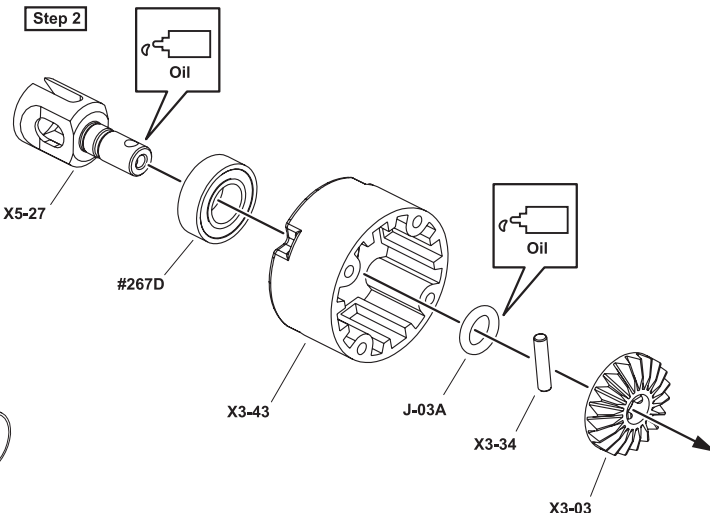
NO.1

Build two differentials for front and rear.

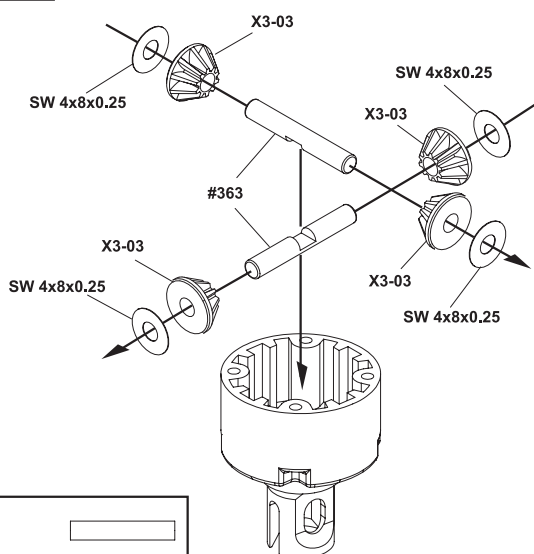
Step 1



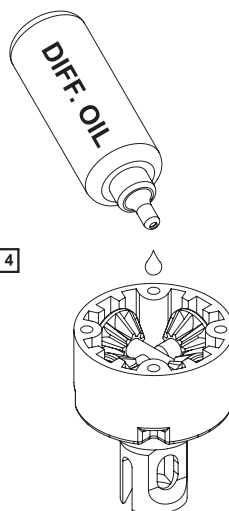
Step 2



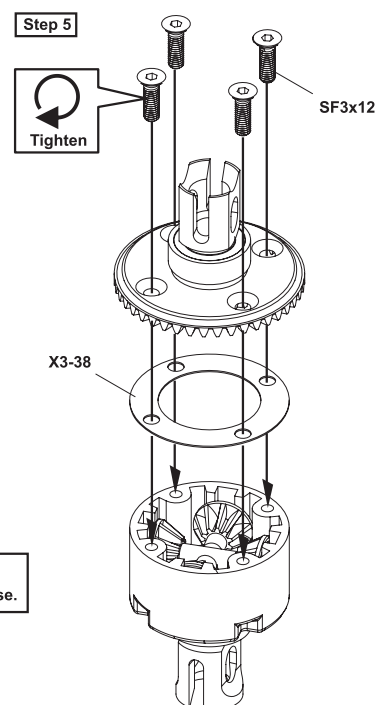
Step 3



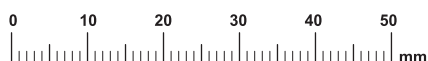
Step 4



Step 5



- Use the Diff. Oil #7000 for front and #5000 for rear.
- Use White Oil pen mark front diff. case and rear diff. case.



X3-34
2.5x11.8mm Pinx4

J-03A
P6 O-Ringx4

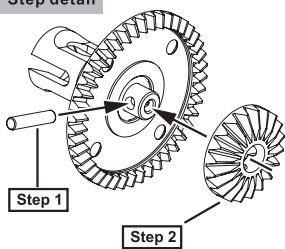
#267D
8x16x5mm
Ball Bearingx4

SW 4x8x0.25
4x8x0.25mm
Washerx8

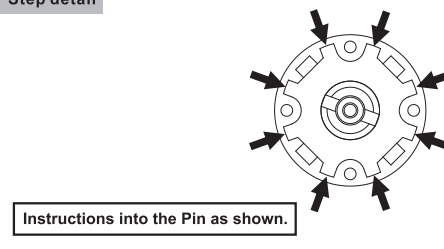
#363
4mm Alum. Cross Pinx4

SF3x12mm
Flat Head Hex Screwx8

Step detail

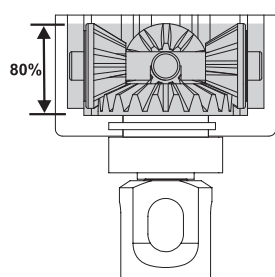


Step detail



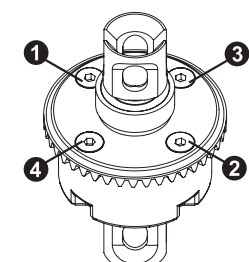
Step detail

Fill the diff oil just level with the top of the satellite gears.

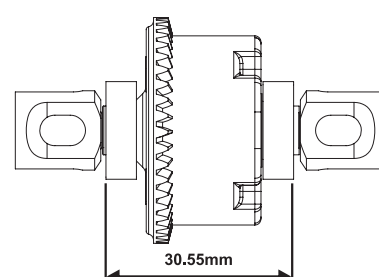


Step detail

Repeat tightening in this order



After assembly the differential should be 30,55 mm measured from the ends of the installed ball-bearings. If differential is longer, hold the bevel gear and retighten the 4 screws.

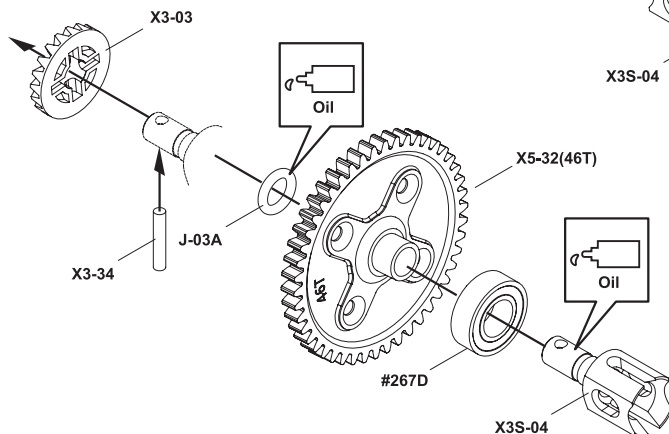


2 ASSEMBLY OF THE CENTER DIFF.

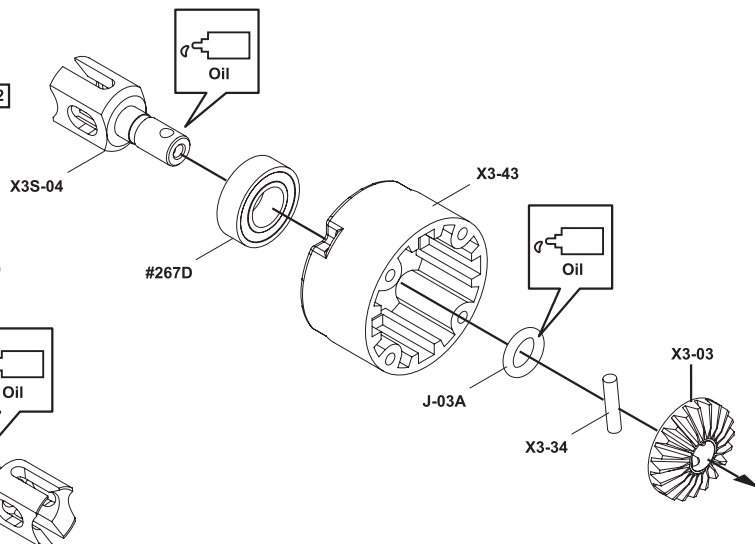


NO.1

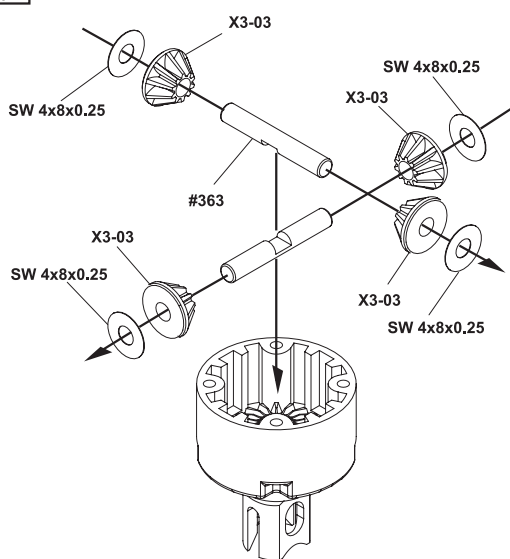
Step 1



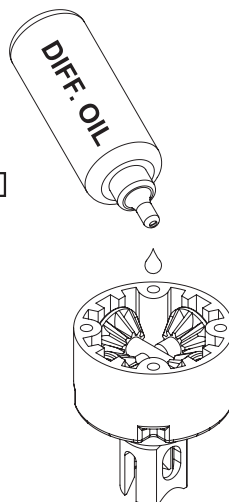
Step 2



Step 3

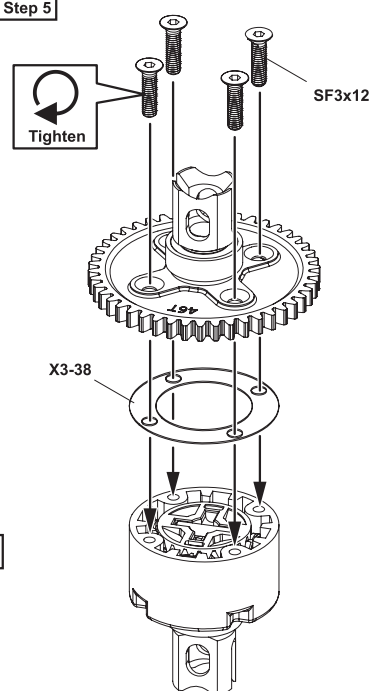


Step 4

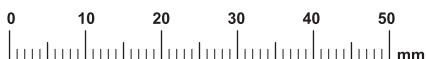


Use the Diff. Oil #10000 for the center diff.

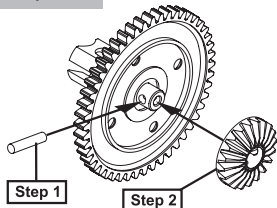
Step 5



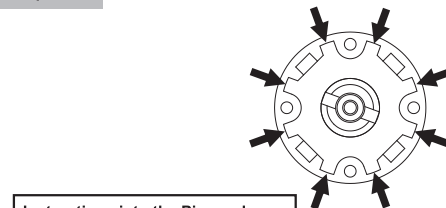
- X3-34
2.5x11.8mm Pinx2
- J-03A
P6 O-Ringx2
- #267D
8x16x5mm
Ball Bearingx2
- SW 4x8x0.25
4x8x0.25mm
Washerx4
- #363
4mm Alum. Cross Pinx2
- SF3x12mm
Flat Head Hex Screwx4



Step detail

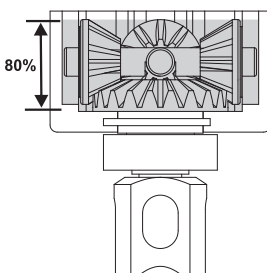


Step detail



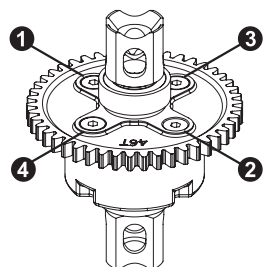
Step detail

Fill the diff oil just level with the top of the satellite gears.

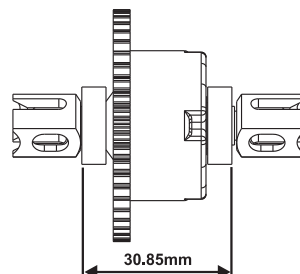


Step detail

Repeat tightening in this order



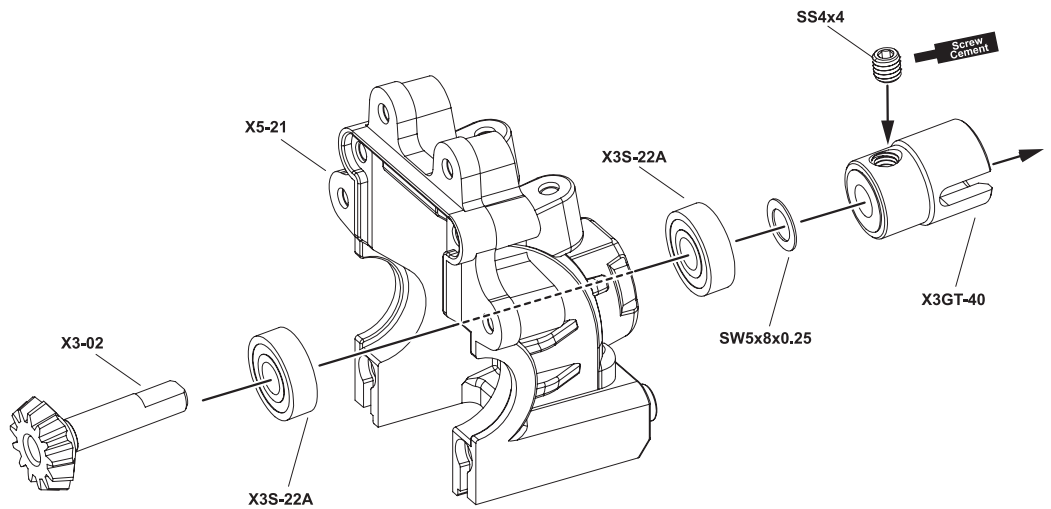
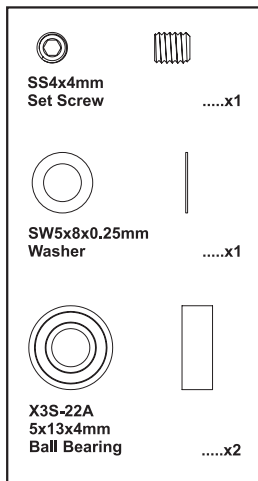
After assembly the differential should be 30.85mm measured from the ends of the installed ball-bearings. If differential is longer, hold the bevel gear and retighten the 4 screws.



3 ASSEMBLY OF THE FRONT GEAR CASE



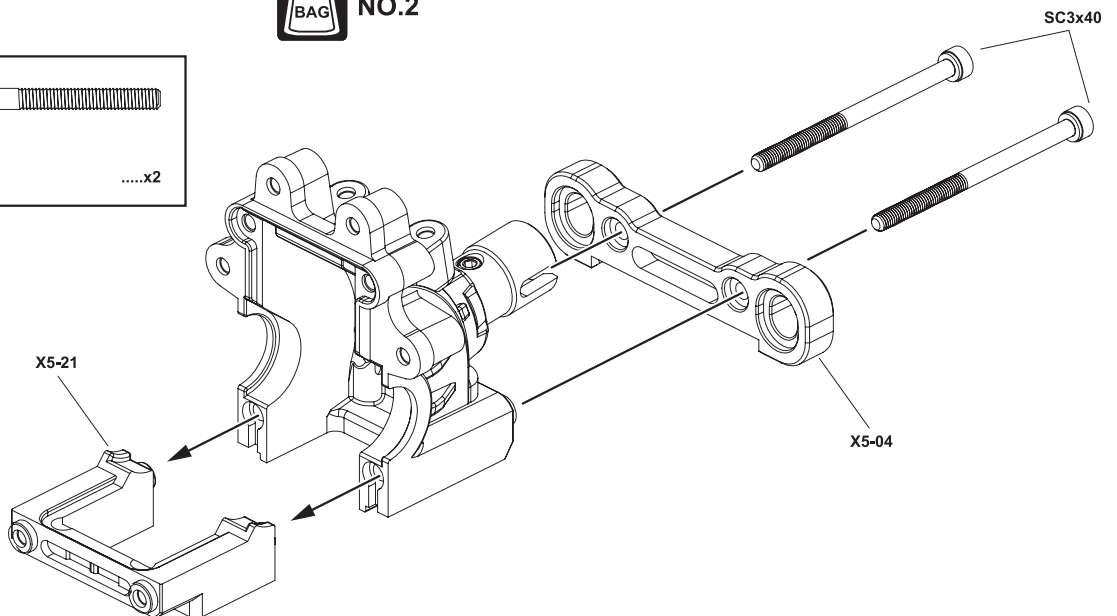
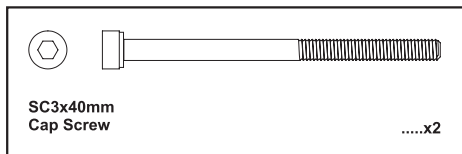
NO.2



4 ASSEMBLY OF THE FRONT GEAR CASE



NO.2

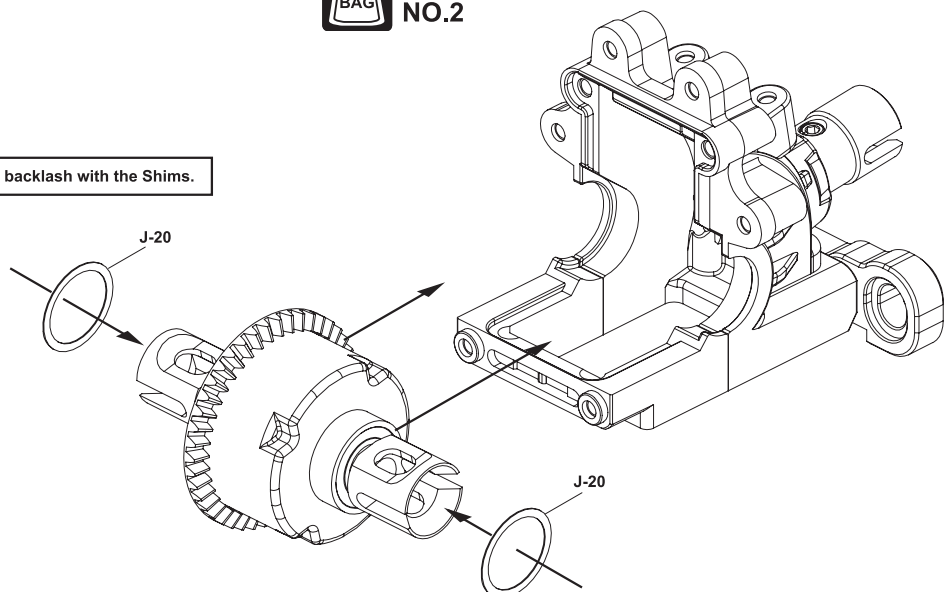
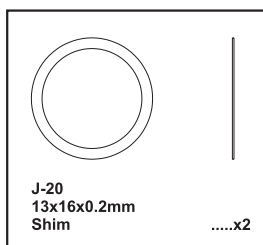


5 ASSEMBLY OF THE FRONT DIFFERENTIAL INTO GEAR CASE



NO.1
NO.2

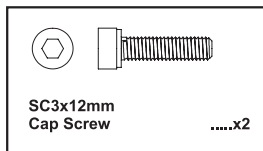
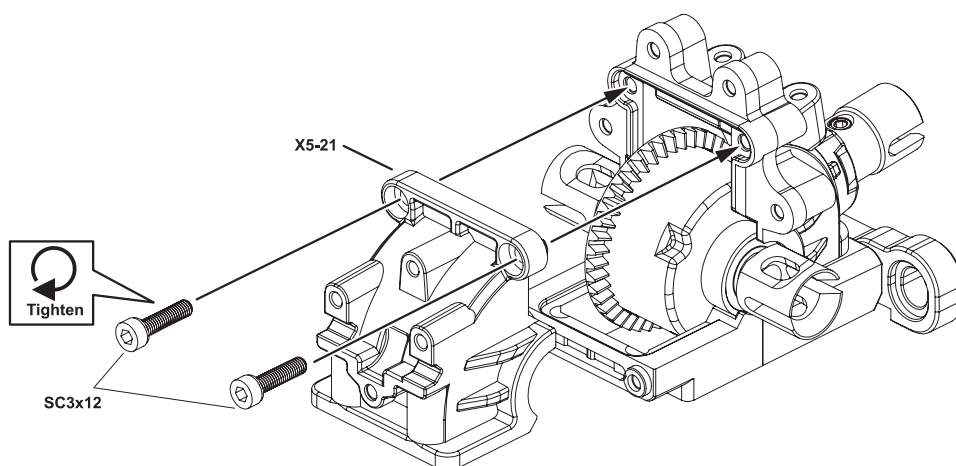
Adjust the backlash with the Shims.



6 ASSEMBLY OF THE FRONT GEAR CASE COVER



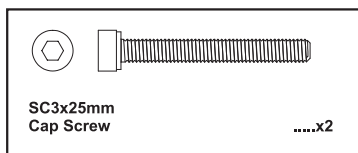
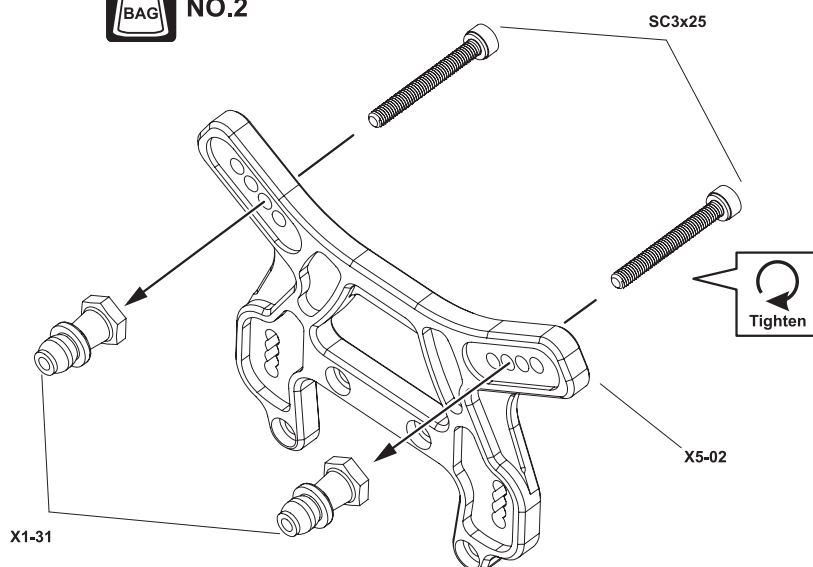
NO.2



7 ASSEMBLY OF THE FRONT SHOCK STAY



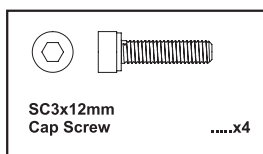
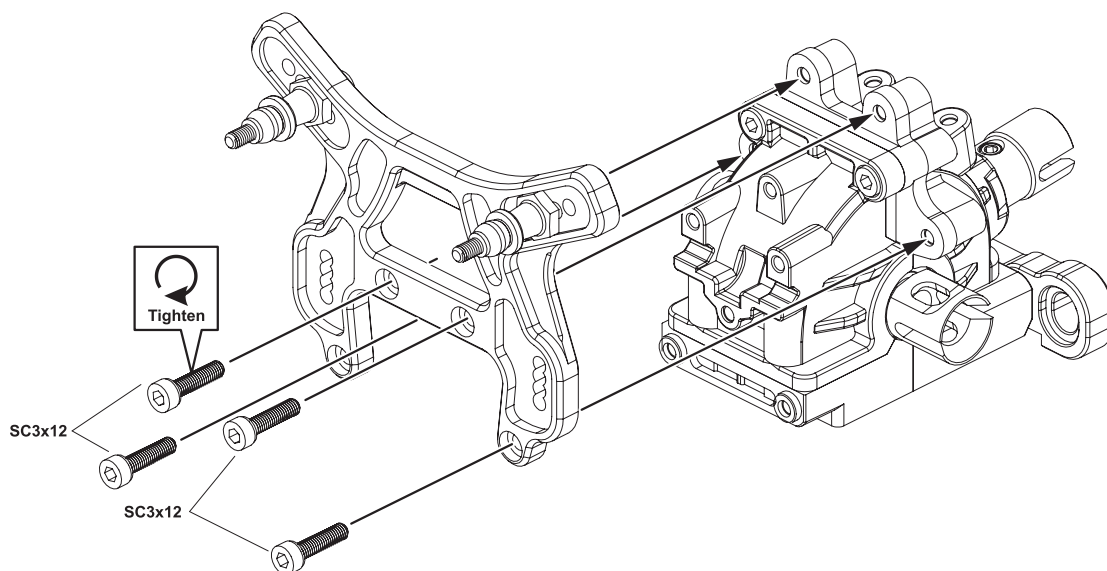
NO.2



8 ASSEMBLY OF THE FRONT SHOCK STAY ONTO GEAR CASE



NO.2



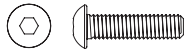
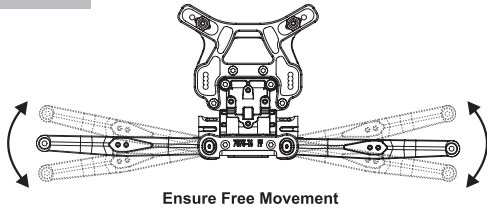
9 ASSEMBLY OF THE FRONT LOWER ARMS



NO.2

Assemble both right and left sides.

Step detail



SB3x12mm
Hex Screwx2



X3-40
4x10mm
Round Head Set Screwx2



SB3x12

X5-05

X3-46

Initial setting

X3.6-07

X5-22



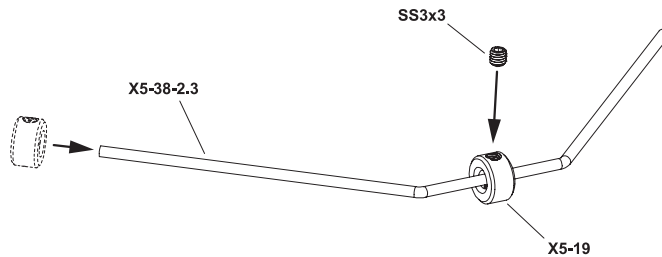
X3-46

10 ASSEMBLY OF THE FRONT STABILIZER ROD

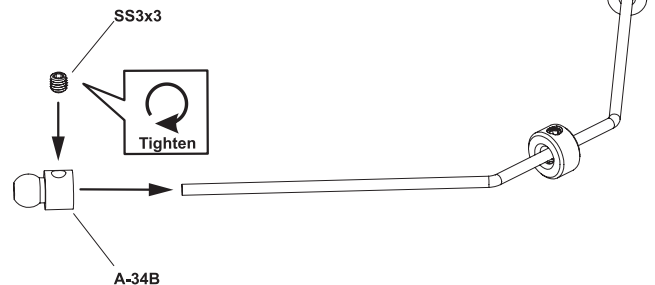


NO.2

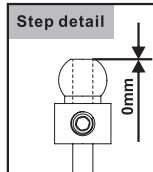
Step 1



Step 2



SS3x3mm
Set Screwx3



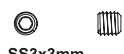
11 ASSEMBLY OF THE FRONT STABILIZER ROD



NO.2



SB3x8mm
Hex Screwx3



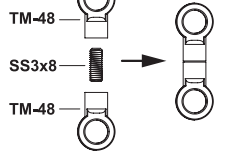
SS3x3mm
Set Screwx2



SS3x5mm
Set Screwx2



SS3x8mm
Set Screwx2



X5-10

A-41A

SS3x3

X5-21

SB3x8

SS3x5



12 ADJUSTABLE CASTER SET

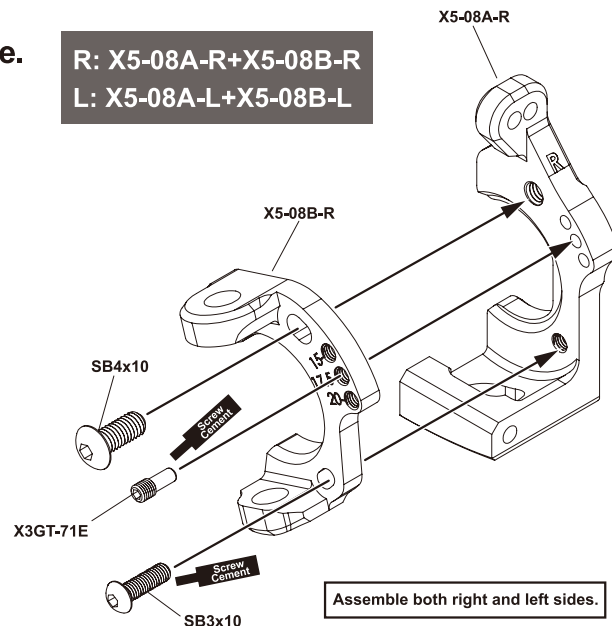
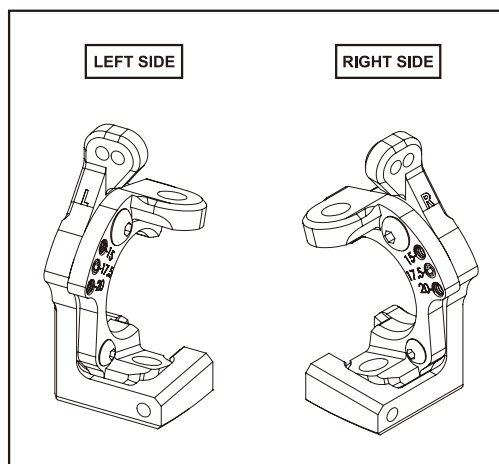
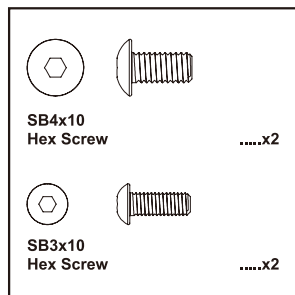


NO.2

Adjustable Caster Set installation, as shown in the figure.
(Take 17.5-degree caster angle on the right side as an example)

R: X5-08A-R+X5-08B-R

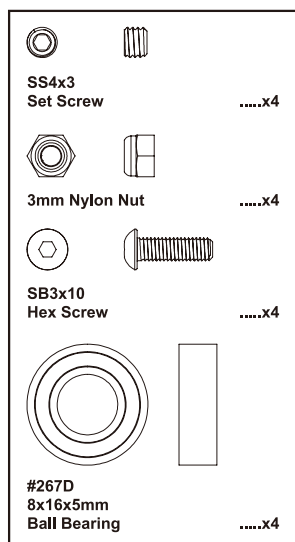
L: X5-08A-L+X5-08B-L



13 ASSEMBLY OF THE FRONT KNUCKLE ARMS

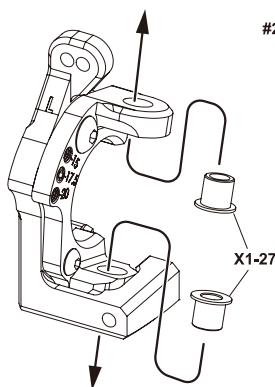


NO.2



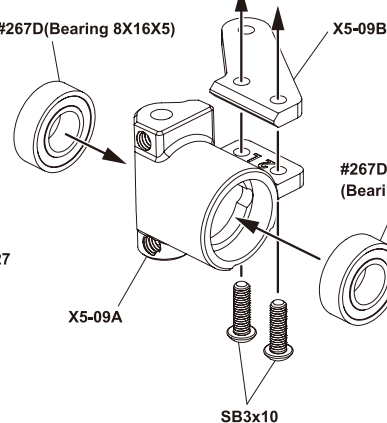
LEFT SIDE

Step 1

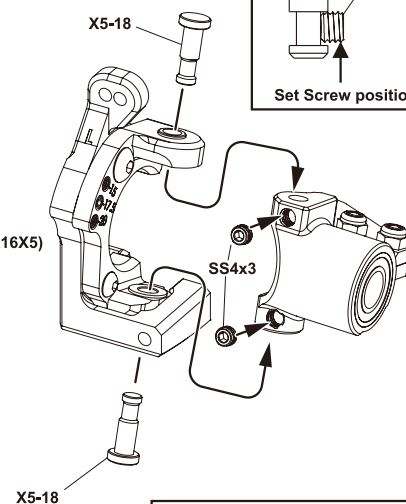


Step 2

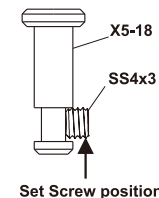
#267D(Bearing 8X16X5)



Step 3



Step detail

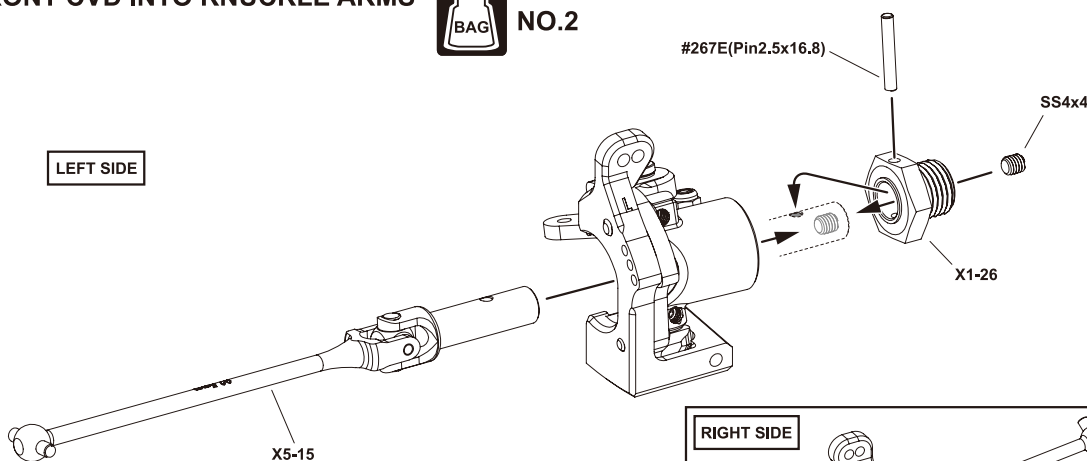


14 ASSEMBLY OF THE FRONT CVD INTO KNUCKLE ARMS

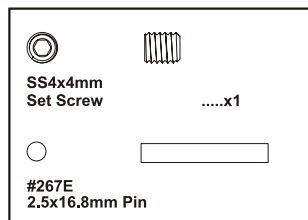


NO.2

LEFT SIDE



RIGHT SIDE



15 ASSEMBLY OF THE KNUCKLE ARMS ONTO FRONT LOWER ARMS



NO.2

R Right side

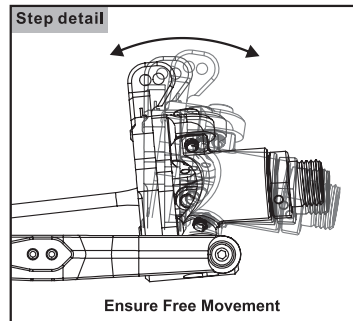
Assemble both right and left sides.



.....x2



L LEFT SIDE



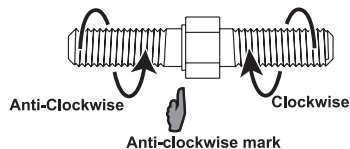
16 ASSEMBLY OF THE FRONT UPPER ARMS



NO.2

Step detail

Note the locking direction!



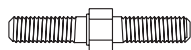
X3-32
7x12mm Ball

.....x2



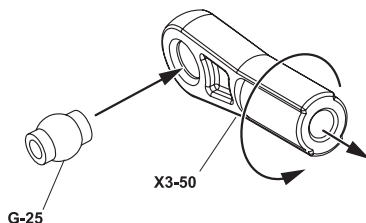
G-25
7mm Ball

.....x2

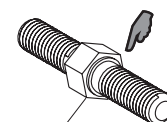


G-26
5x35mm Turnbuckle

.....x2



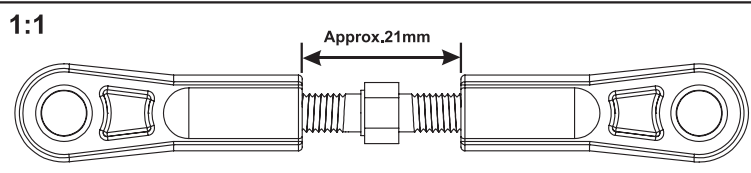
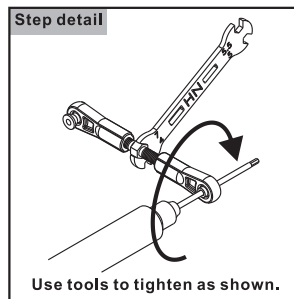
Anti-clockwise mark



G-26

x2

Step detail



17 ASSEMBLY OF THE FRONT UPPER ARMS

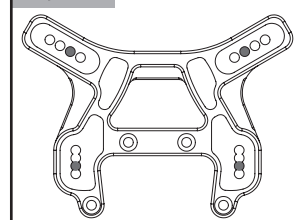


NO.2

R Right side

Assemble both right and left sides.

Step detail



SNN3mm
Nylon Nut

.....x4



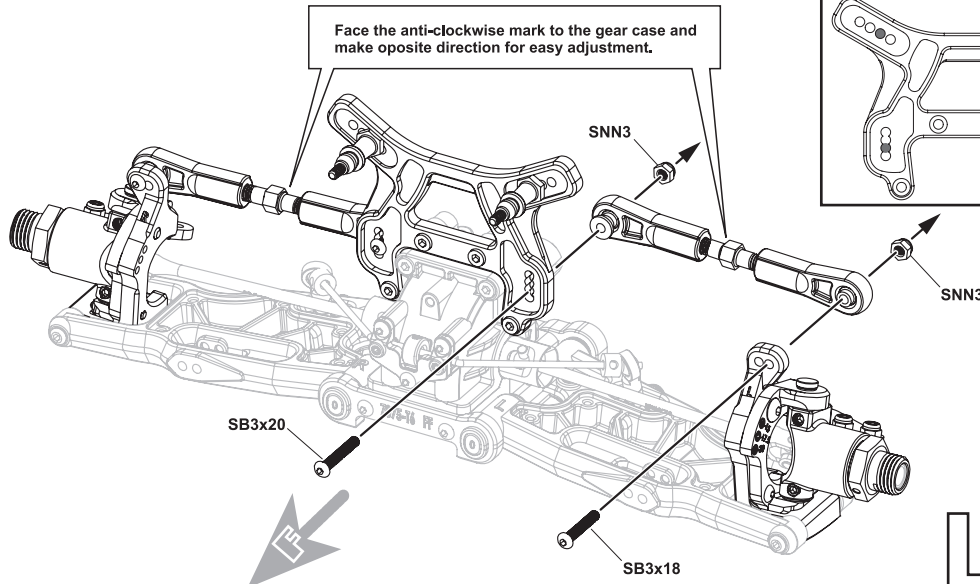
SB3x18mm
Hex Screw

.....x2



SB3x20mm
Hex Screw

.....x2

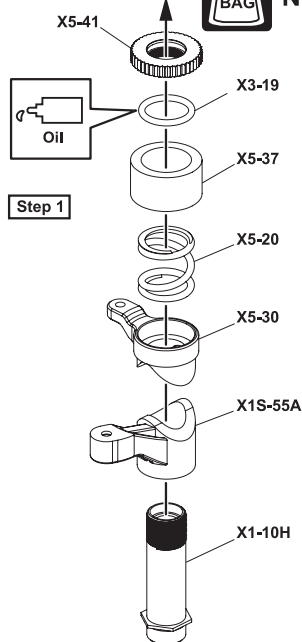
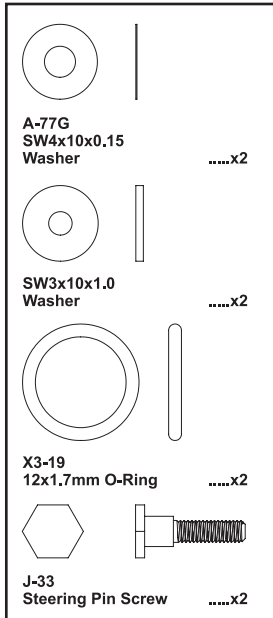


L LEFT SIDE

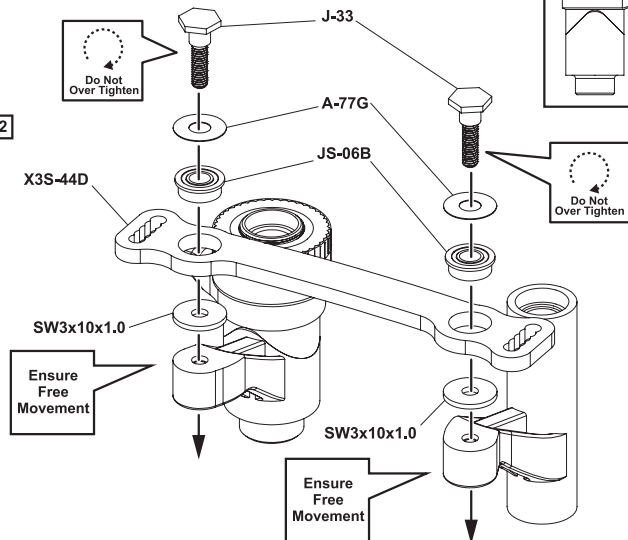
18 ASSEMBLY OF THE SERVO SAVER



NO.3



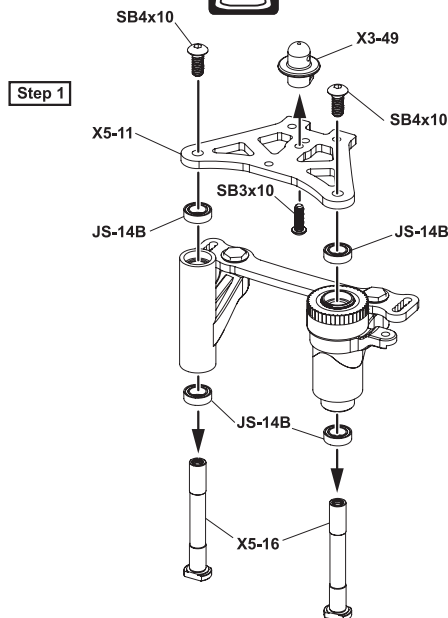
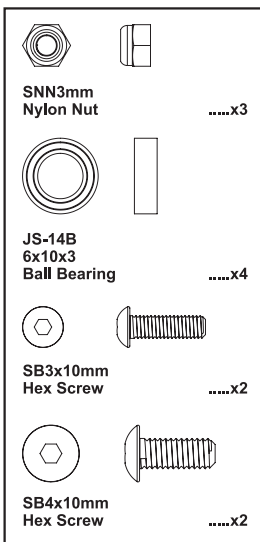
Step 2



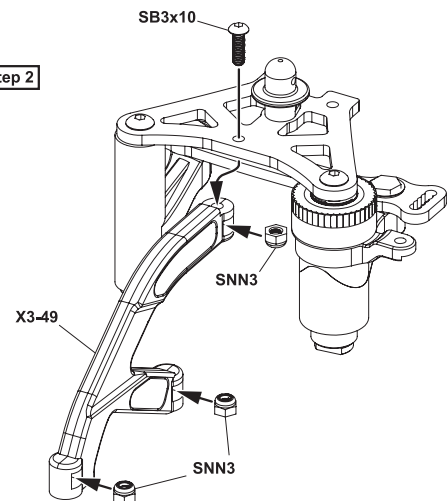
19 ASSEMBLY OF THE SERVO SAVER



NO.3



Step 2



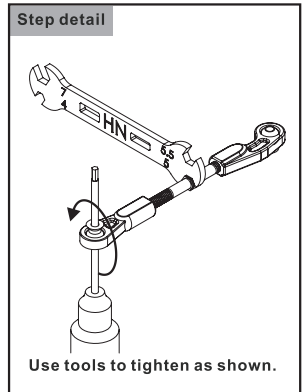
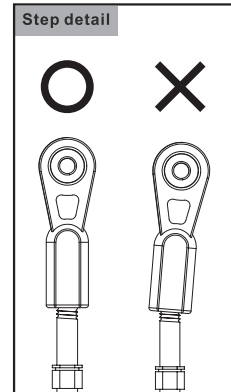
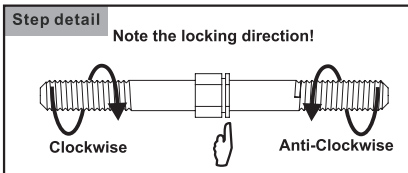
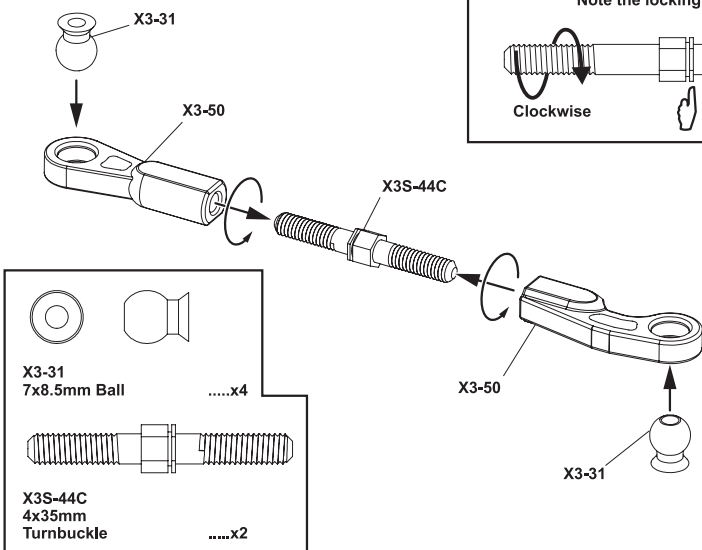
20 ASSEMBLY OF THE STEERING TIE-ROD



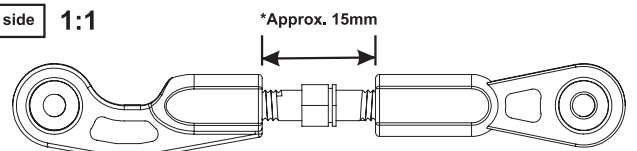
NO.3

Make two steering rods for left and right hand sides.

LEFT SIDE



Right side 1:1



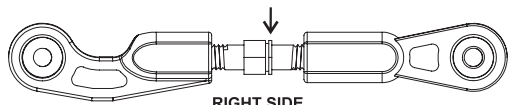
21 ASSEMBLY OF THE STEERING TIE-ROD



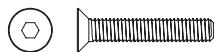
NO.3

Step detail

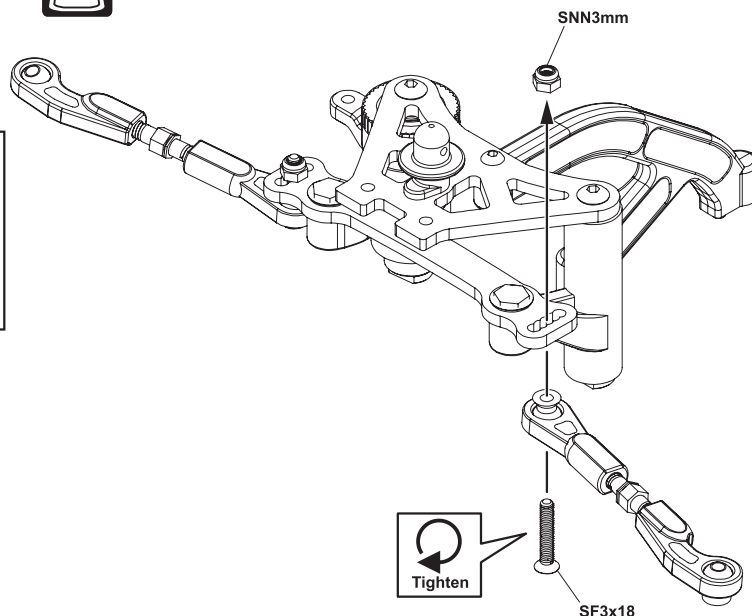
Face the anti-clockwise mark to the gear case and make opposite direction for easy adjustment.



SNN3mm
Nylon Nutx2



SF3x18mm
Flat Head Hex Screwx2



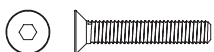
22 ASSEMBLY OF THE SERVO SAVER ONTO THE FRONT GEAR BOX



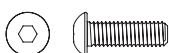
NO.3



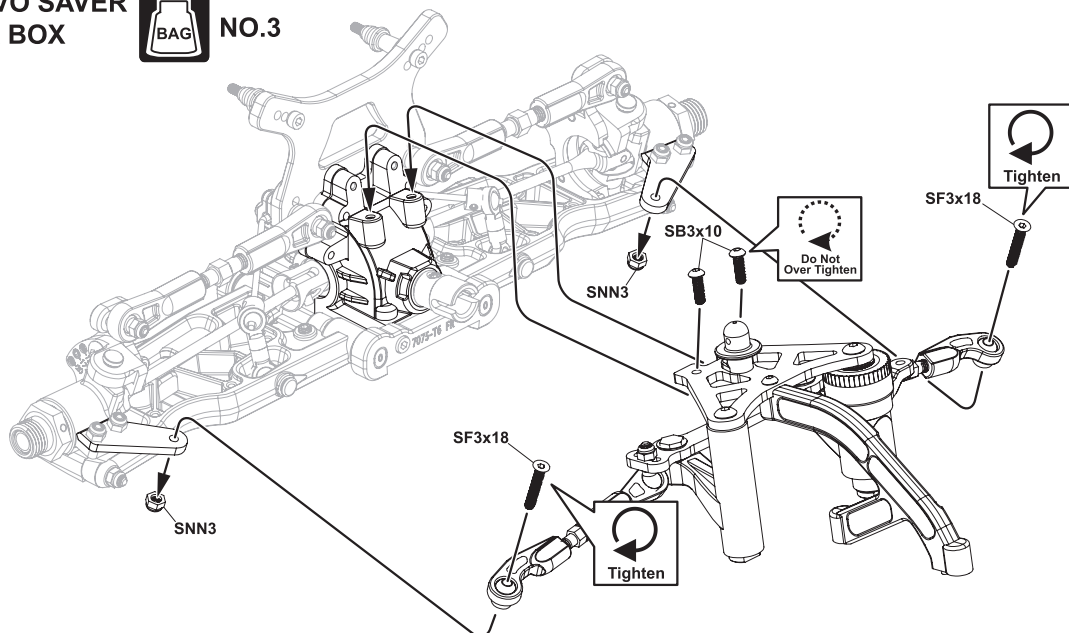
SNN3mm
Nylon Nutx2



SF3x18mm
Flat Head Hex Screwx2



SB3x10mm
Hex Screwx2



23 ASSEMBLY OF THE REAR PINION GEAR AND CVD SHAFT



NO.4



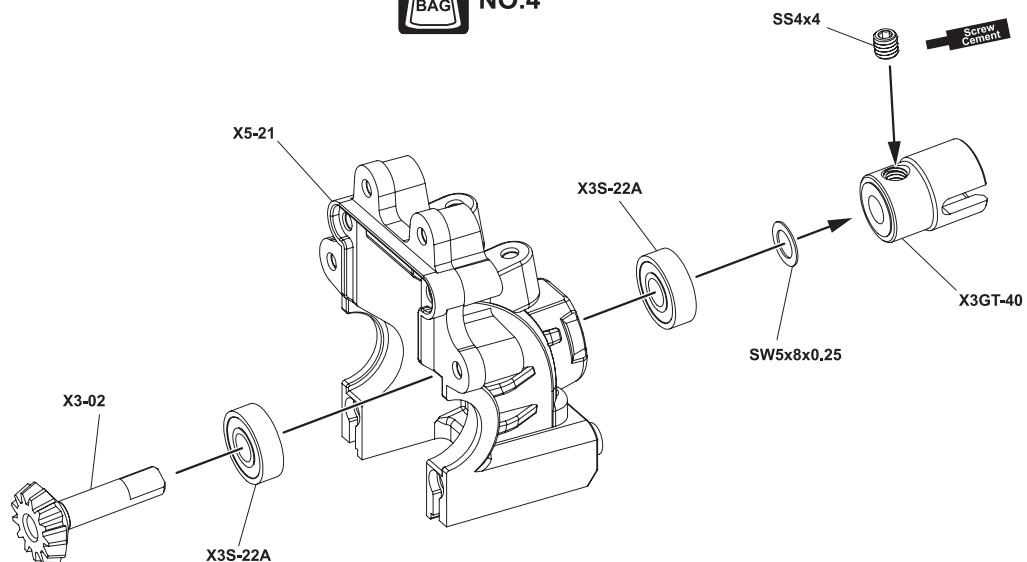
SS4x4mm
Set Screwx1



SW5x8x0.25mm
Washerx1



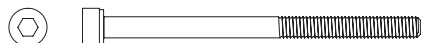
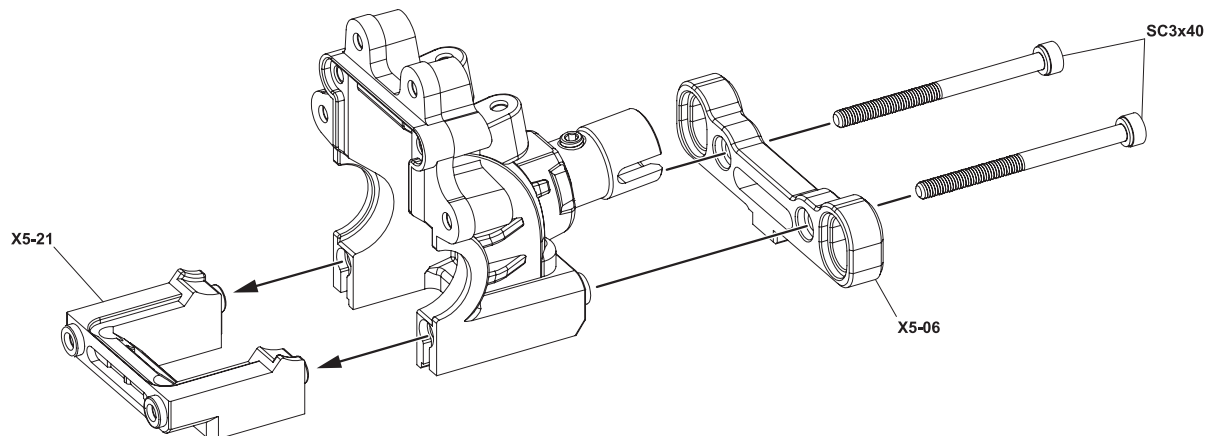
X3S-22A
5x13x4mm
Ball Bearingx2



24 ASSEMBLY OF THE REAR GEAR CASE



NO.4



SC3x40mm
Cap Screw

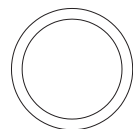
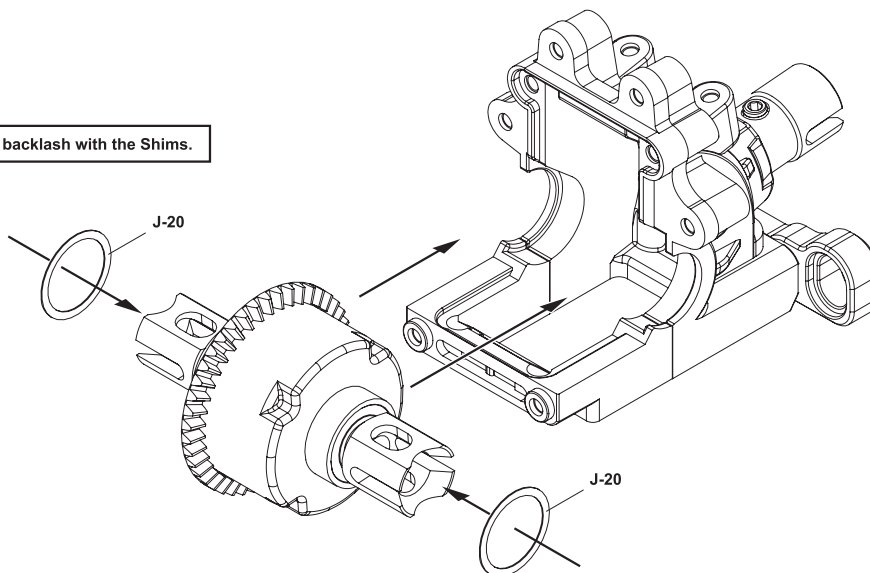
.....x2

25 ASSEMBLY OF THE REAR DIFFERENTIAL ONTO GEAR CASE



NO.4
NO.1

Adjust the backlash with the Shims.



J-20
13x16x0.2mm
Shim

.....x2

26 ASSEMBLY OF THE REAR GEAR CASE COVER



NO.4



SC3x12



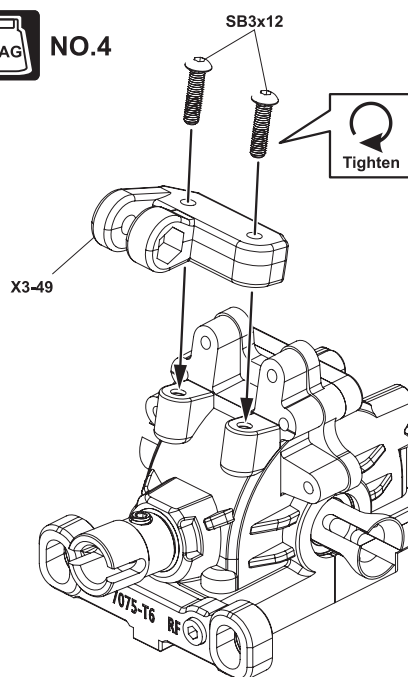
SC3x12mm
Cap Screw

.....x2

27 ASSEMBLY OF THE REAR BRACE MOUNT



NO.4

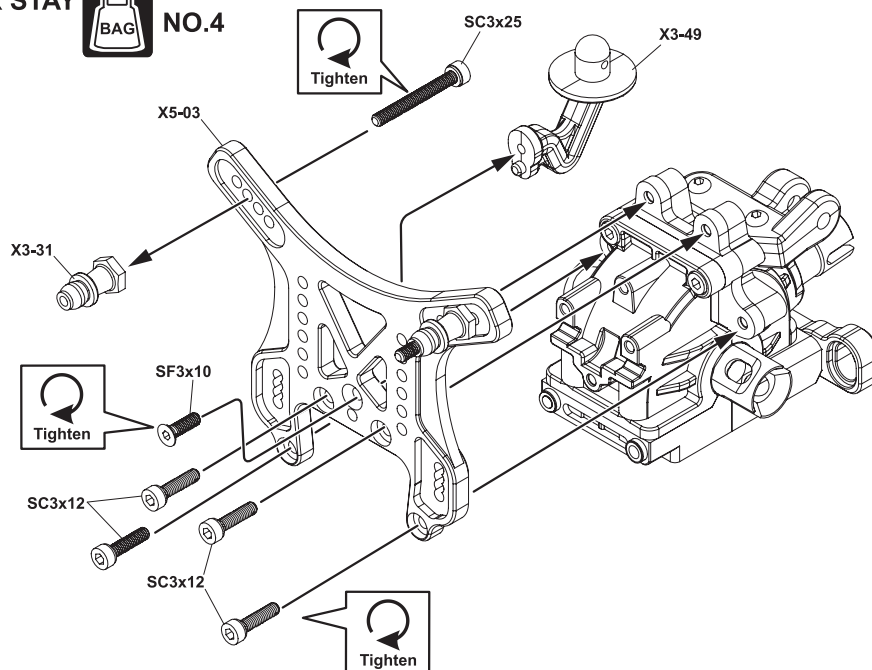


SB3x12mm
Hex Screwx2

28 ASSEMBLY OF THE REAR SHOCK STAY ONTO REAR GEAR CASE



NO.4



SF3x10mm
Flat Head Hex Screwx1



SC3x12mm
Cap Screwx4

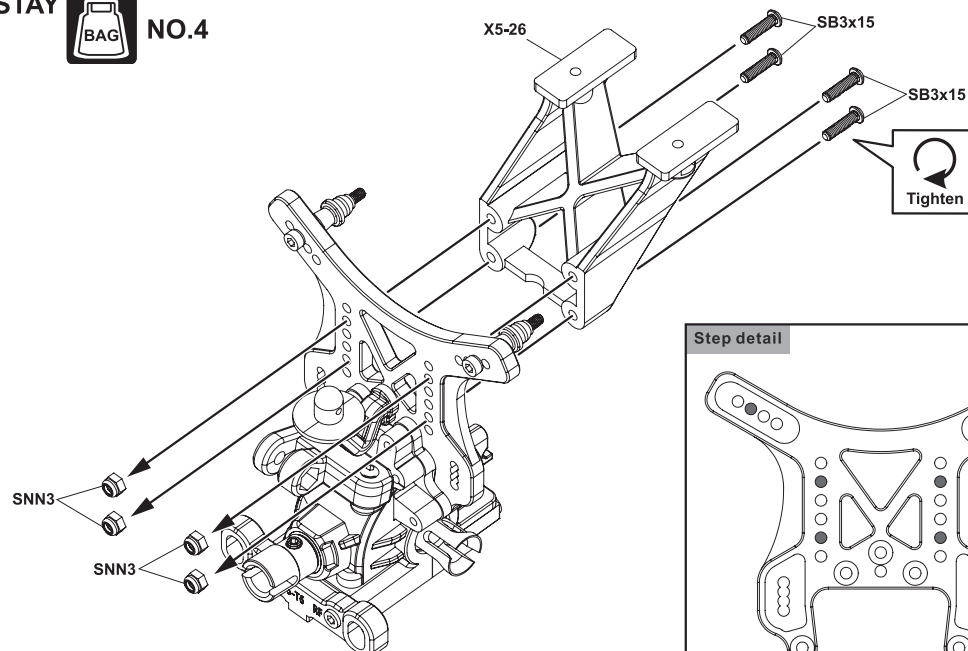


SC3x25mm
Cap Screwx2

29 ASSEMBLY OF THE WING STAY



NO.4

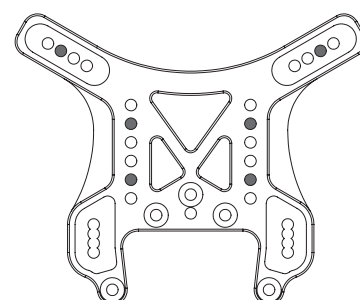


SNN3mm
Nylon Nutx4



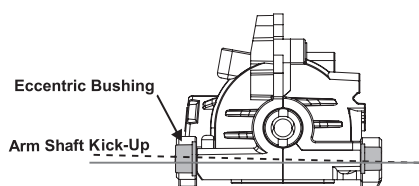
SB3x15mm
Hex Screwx4

Step detail



30 REAR KICK-UP (RF) & REAR TOE-IN (RR) SETTING

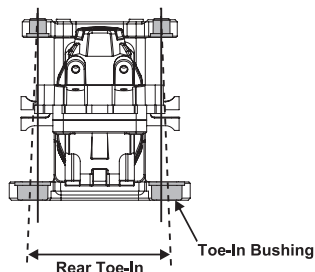
REAR KICK-UP SETTING



Rear Kick-Up	Characteristics
Less Rear Kick-Up	● Absorb road shock less. ● Applicable flat surface.
More Rear Kick-Up	● Absorb road shock more. ● Applicable uneven surface.

RF	Rear Kick-Up
3.3	2.8°
3	2.5°
2.5	2°
2	1.5°
2 (Reverse)	1°
2 (Reverse)	0.5°
2 (Reverse)	0°

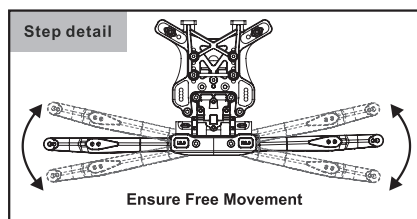
REAR TOE-IN SETTING



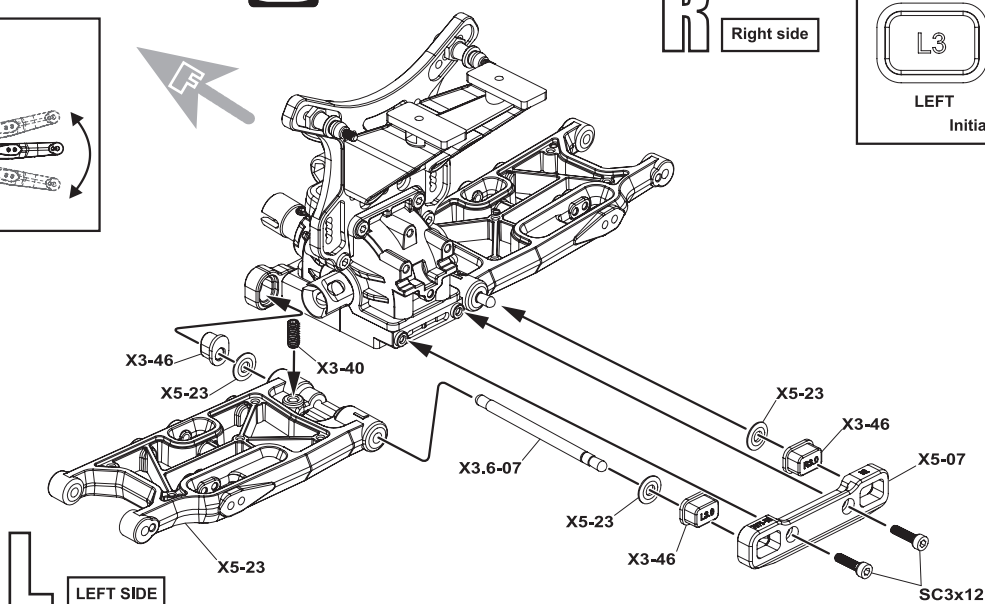
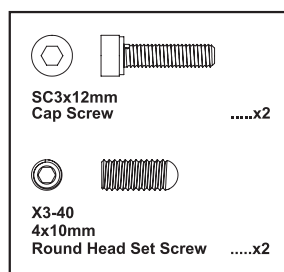
Rear Toe-In	Characteristics
Less Rear Toe-In	● Reduced Grip. ● Oversteer tendency. ● Linear acceleration over the instability.
More Rear Toe-In	● Increased grip. ● Understeer tendencies. ● Linear acceleration than the stability.

RR	Rear Toe-In
L3.5 R3.5	3.5°
L3.3 R3.3	3.3°
L3 R3	3°
L2.5 R2.5	2.5°
L2 R2	2°

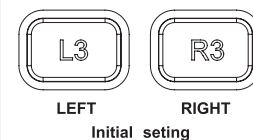
31 ASSEMBLY OF THE REAR LOWER ARMS



Assemble both right and left side.



Step detail



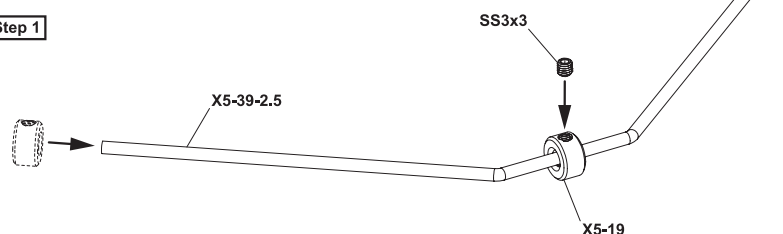
Step detail



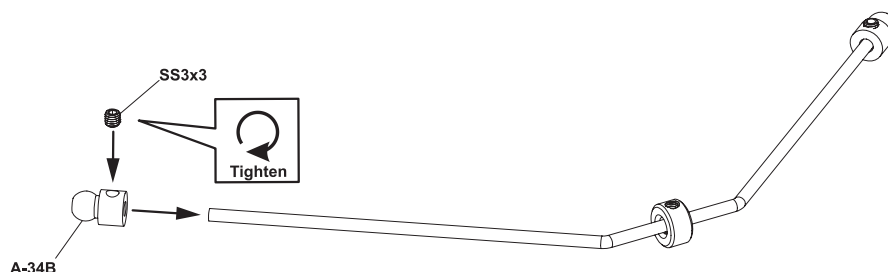
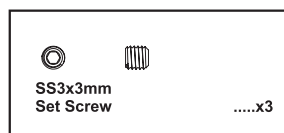
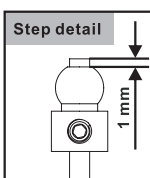
32 ASSEMBLY OF THE REAR STABILIZER ROD



Step 1



Step 2

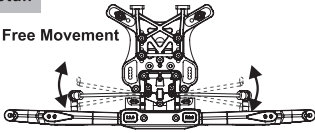


33 ASSEMBLY OF THE REAR STABILIZER

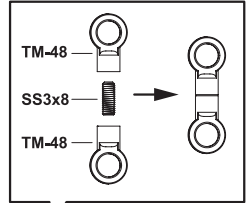
BAG NO.4

Step detail

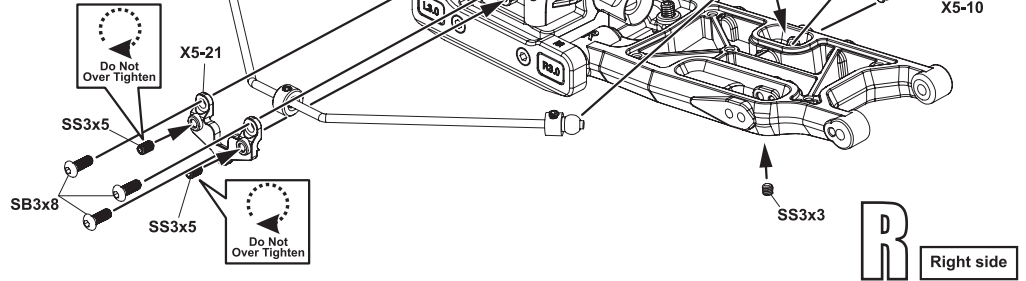
Ensure Free Movement



L LEFT SIDE



- SB3x8mm Hex ScrewX3
- SS3x3mm Set ScrewX2
- SS3x5mm Set ScrewX2
- SS3x8mm Set ScrewX2

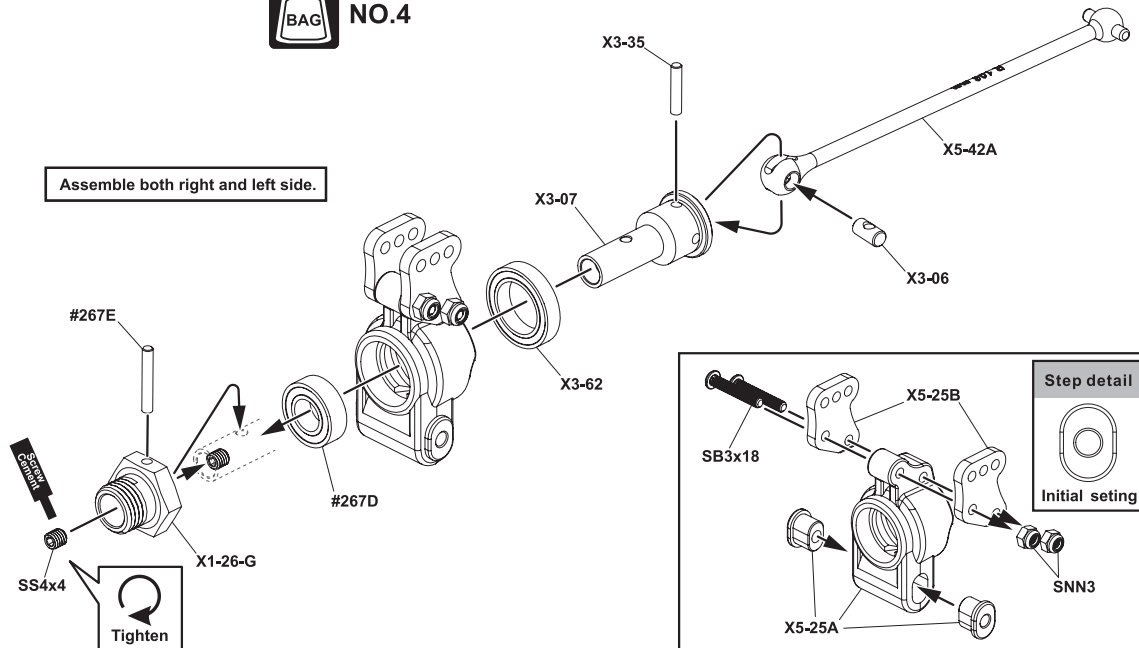


34 ASSEMBLY OF THE REAR WHEEL HUBS

BAG NO.4

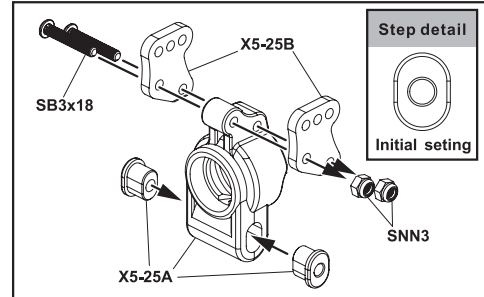
- SNN3mm Nylon NutX4
- SB3x18mm Hex ScrewX4
- X3-35 2.5x12.8mm Pin 滾針X2
- #267E 2.5x16.8mm Pin 滾針X2
- 4x4mm Set Screw 止付螺絲X2

Assemble both right and left side.



Step detail

Initial setting

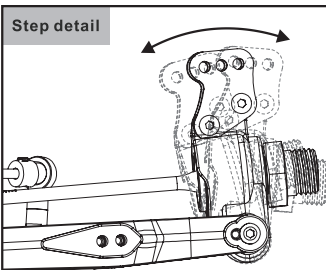


35 ASSEMBLY OF THE REAR SUSPENSION ARMS

BAG NO.4

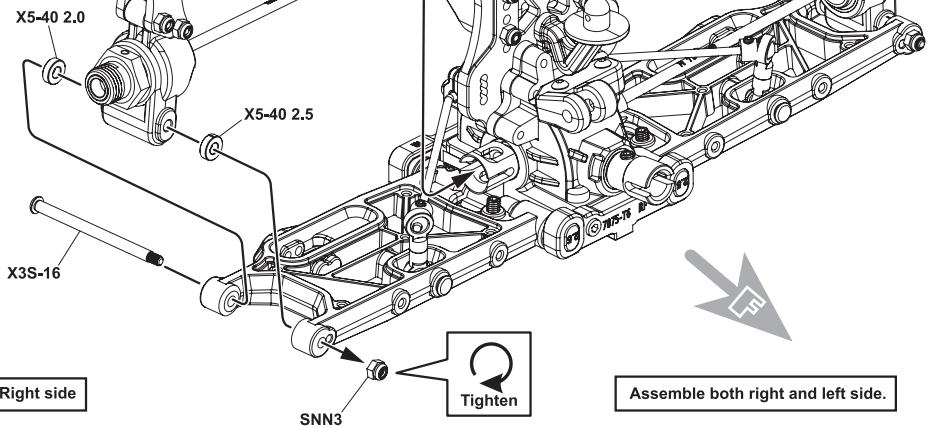
Step detail

Ensure Free Movement



L LEFT SIDE

Check screw direction.



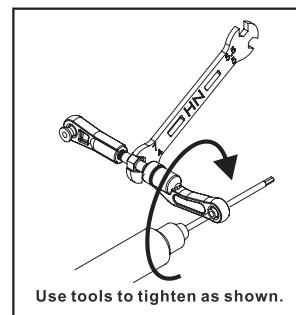
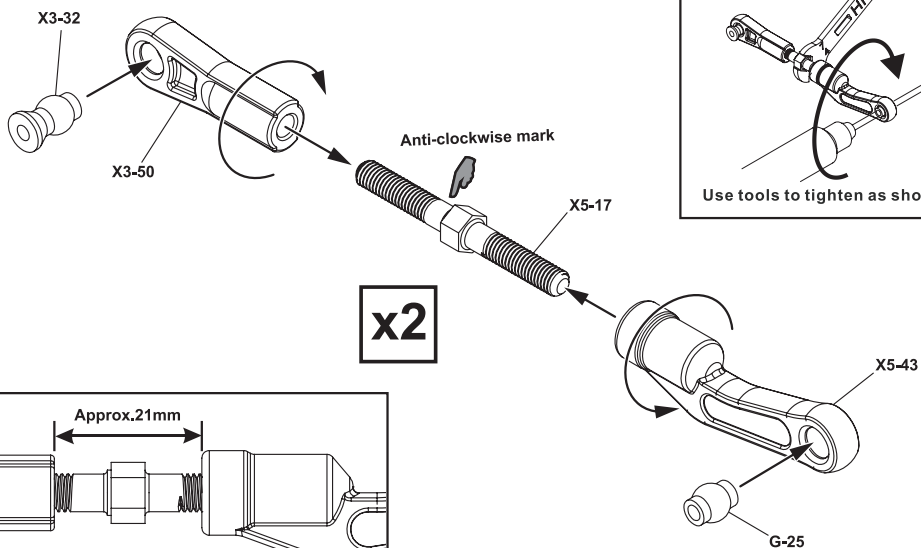
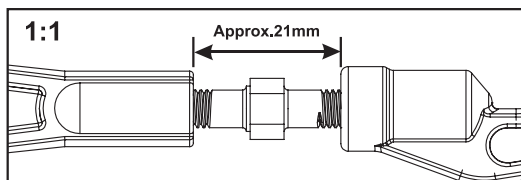
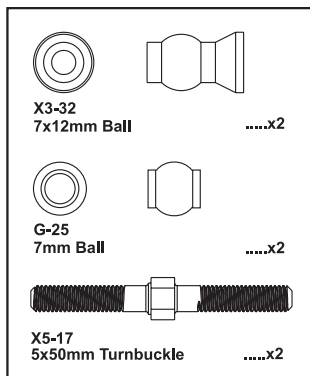
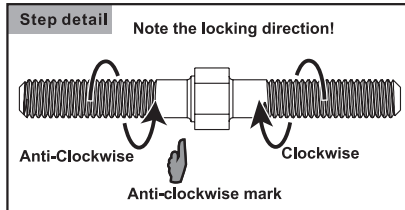
- SNN3mm Nylon NutX2

Assemble both right and left side.

36 ASSEMBLY OF THE REAR UPPER ARMS



NO.4



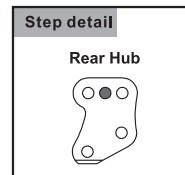
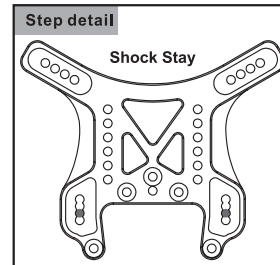
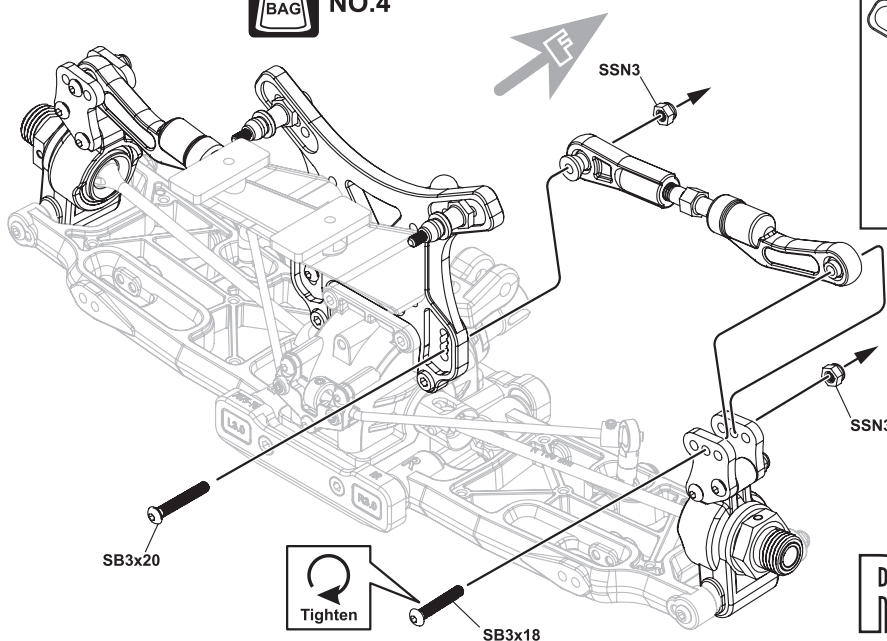
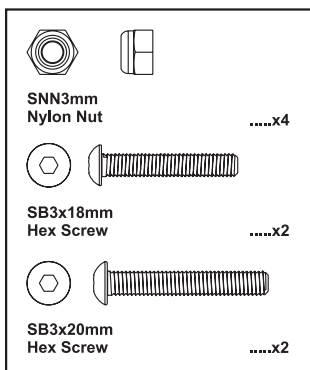
37 ASSEMBLY OF THE REAR UPPER ARMS



NO.4

L LEFT SIDE

Assemble both right and left side.



R Right side

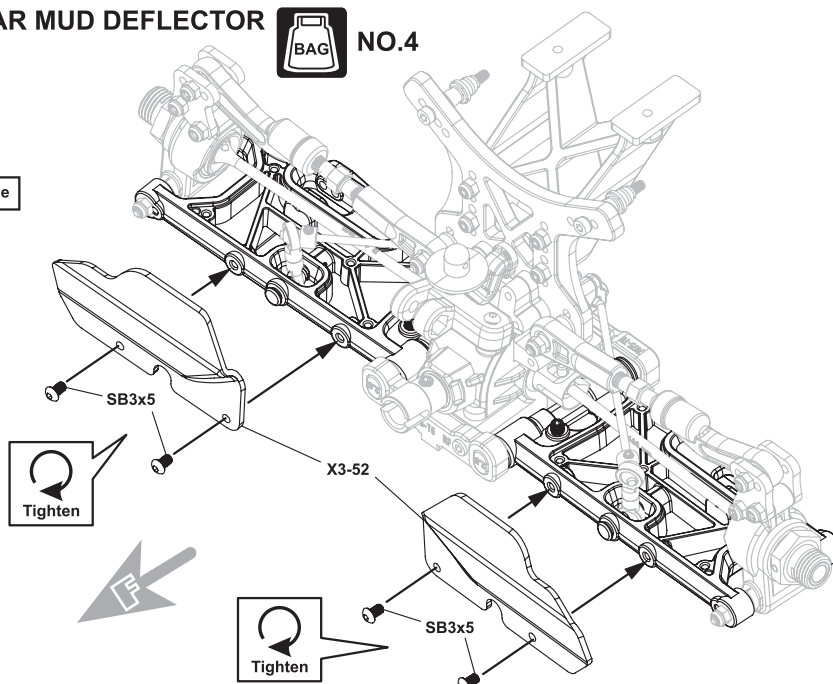
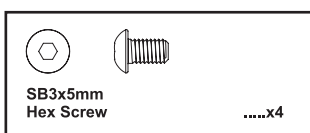
38 ASSEMBLY OF THE REAR MUD DEFLECTOR



NO.4

R Right side

Assemble both right and left side.



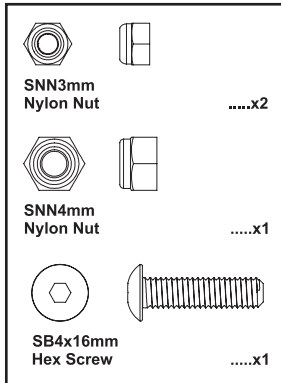
L LEFT SIDE

39 ASSEMBLY OF THE REAR CENTER BRACE

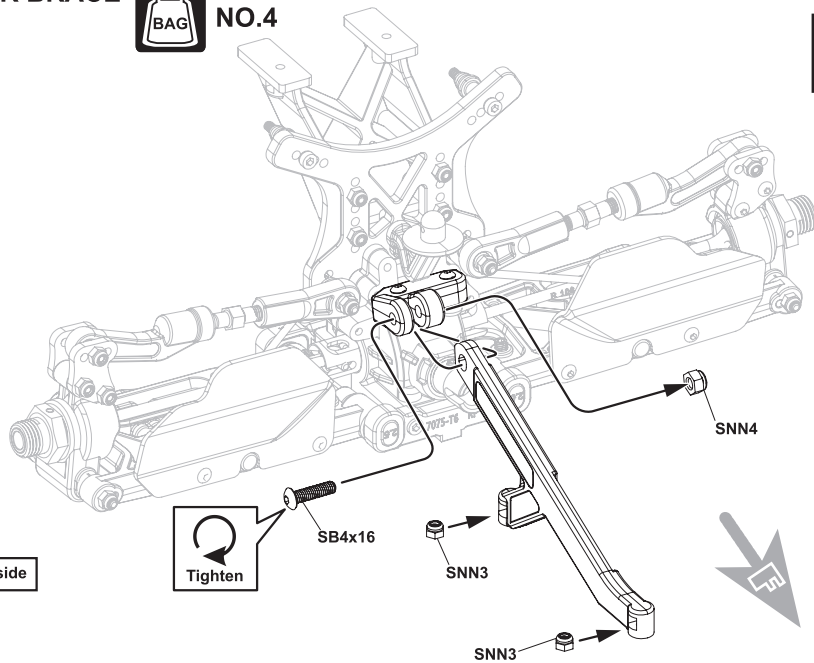


NO.4

LEFT SIDE



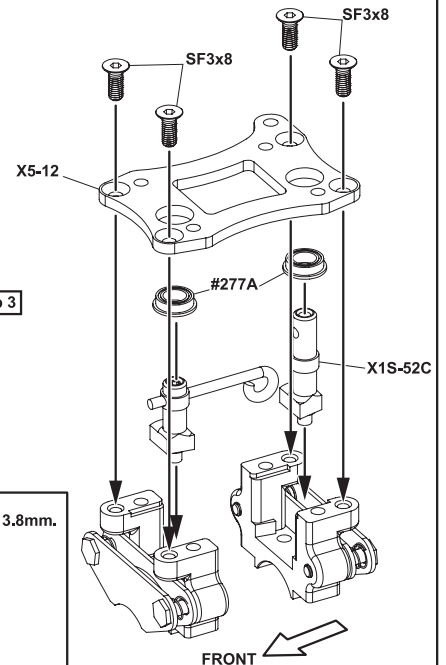
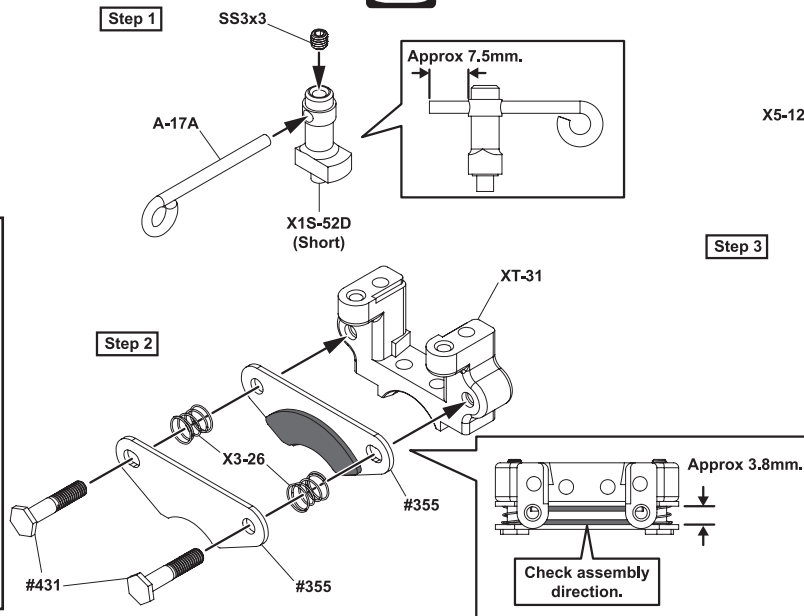
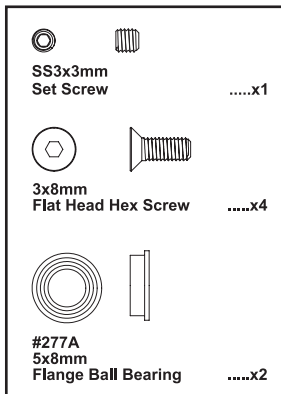
R Right side



40 ASSEMBLY OF THE TOP CENTER DIFF MOUNT



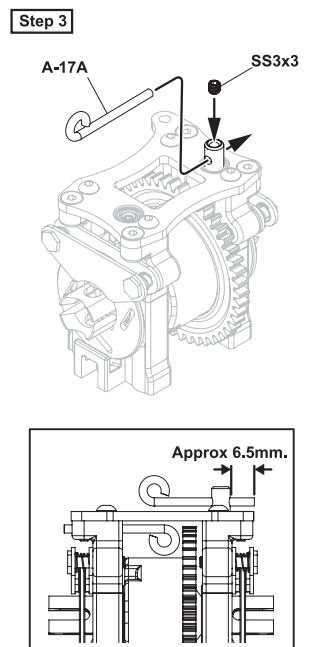
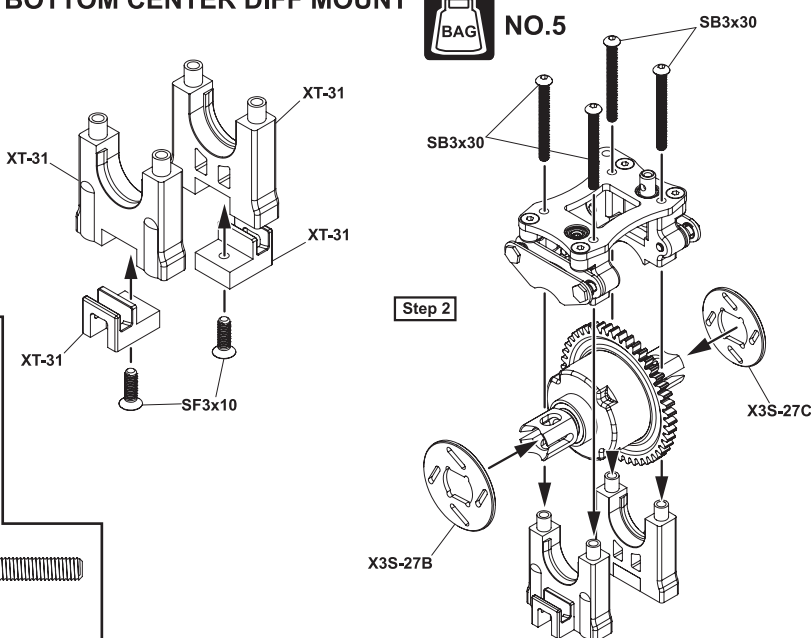
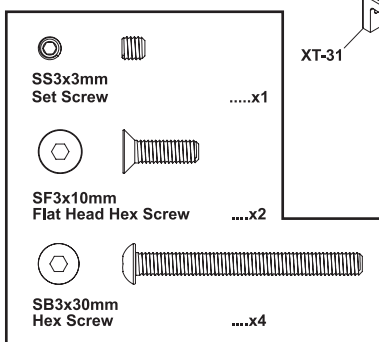
NO.5



41 ASSEMBLY OF THE BOTTOM CENTER DIFF MOUNT



NO.5

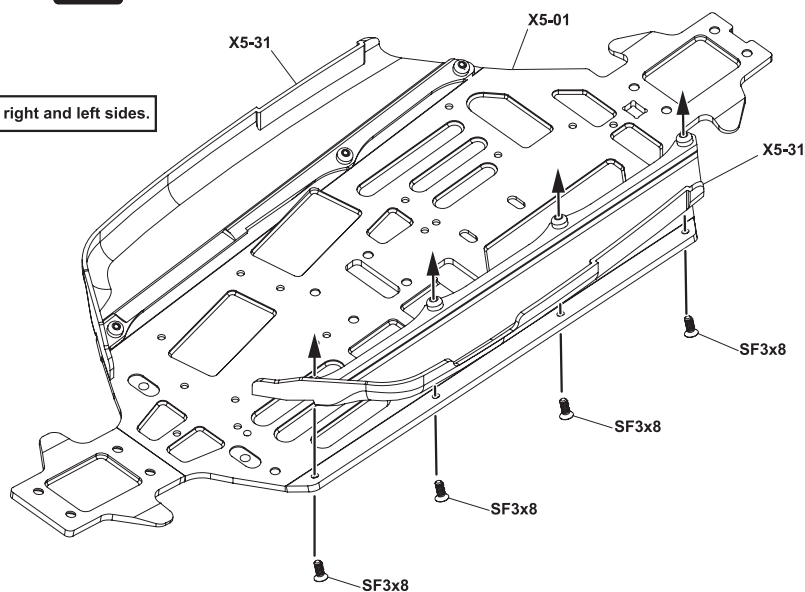


42 ASSEMBLY OF THE SIDE GUARD



NO.6
NO.12

Assemble both right and left sides.



SF3x8mm
Flat Head Hex Screwx7

43 ASSEMBLY OF THE FRONT GEAR CASE ONTO CHASSIS



NO.2
NO.12



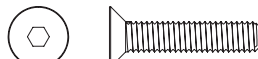
SF3x10mm
Flat Head Hex Screwx2



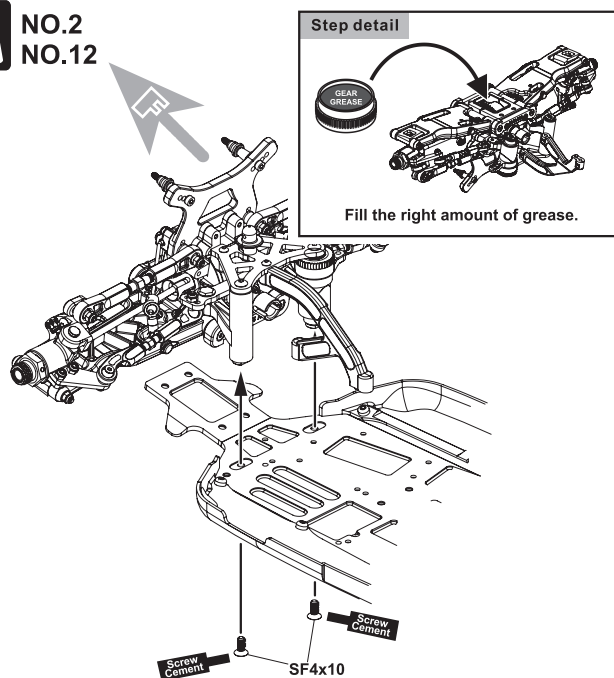
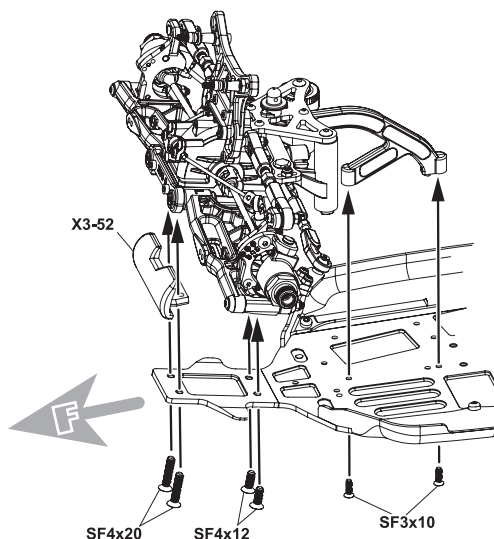
SF4x10mm
Flat Head Hex Screwx2



SF4x12mm
Flat Head Hex Screwx2



SF4x20mm
Flat Head Hex Screwx2



44 ASSEMBLY OF THE REAR GEAR CASE ONTO CHASSIS



NO.4
NO.12



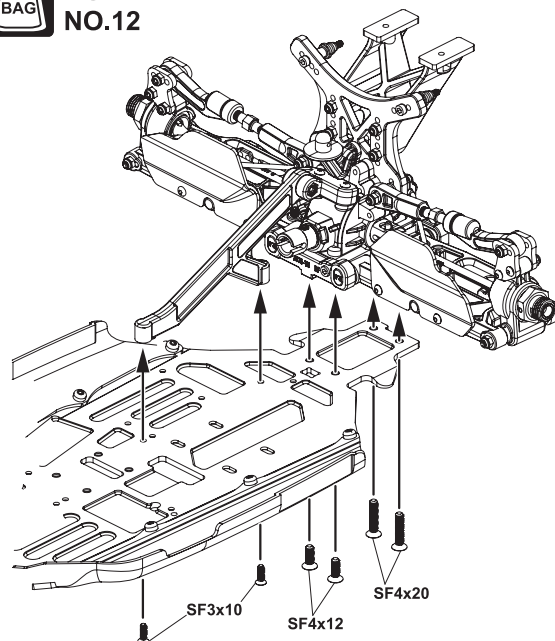
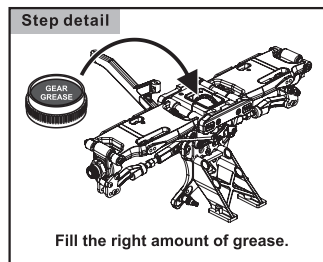
SF3x10mm
Flat Head Hex Screwx2



SF4x12mm
Flat Head Hex Screwx2



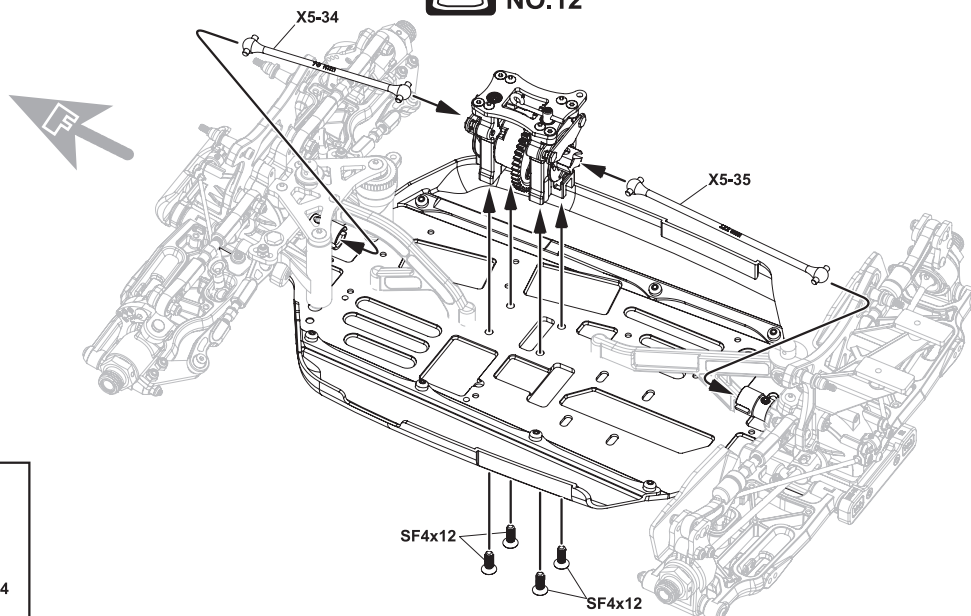
SF4x20mm
Flat Head Hex Screwx2



45 ASSEMBLY OF THE CENTER DIFF. ONTO CHASSIS



NO.5
NO.12

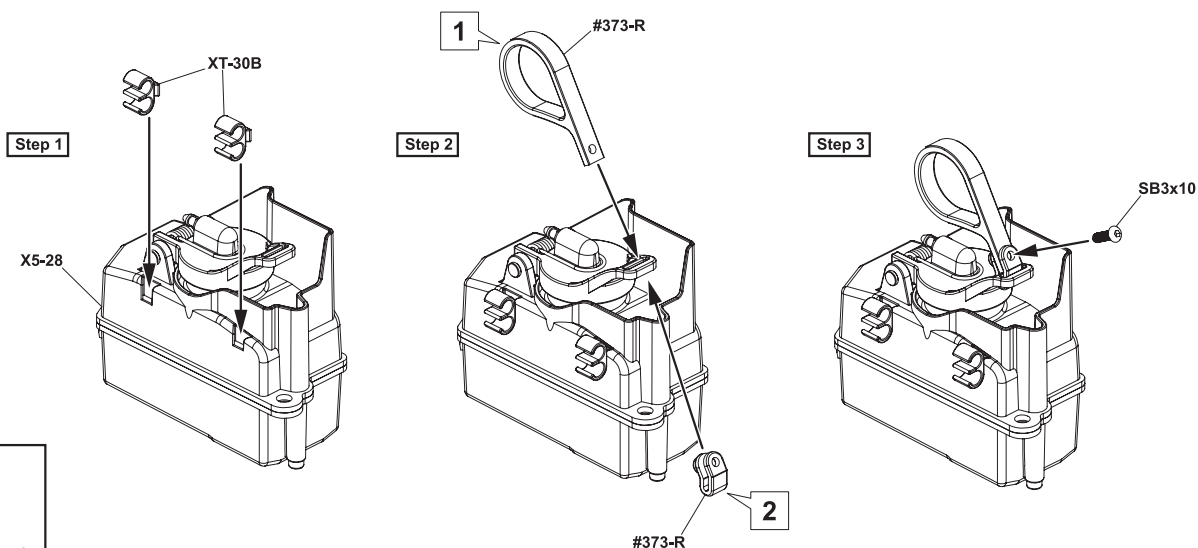


SF4x12mm
Flat Head Hex Screwx4

46 ASSEMBLY OF THE FUEL TANK



NO.10

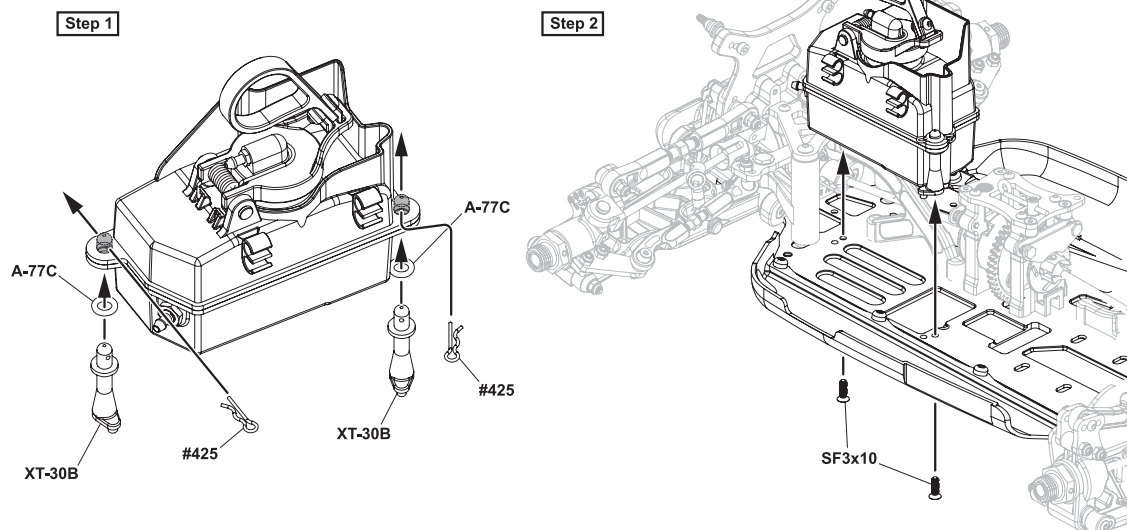


SB3x10mm
Hex Screwx1

47 ASSEMBLY OF THE FUEL TANK ONTO CHASSIS



NO.10



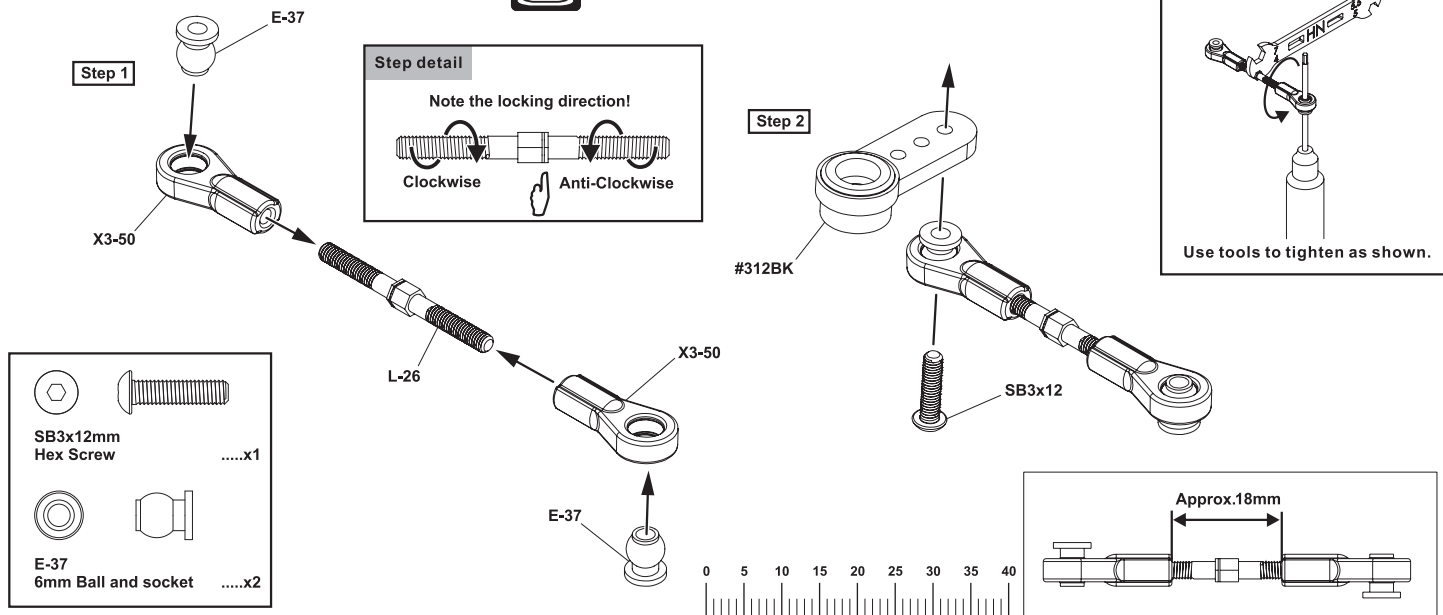
A-77C
P5 O-Ringx2



SB3x10mm
Flat Head Hex Screwx2

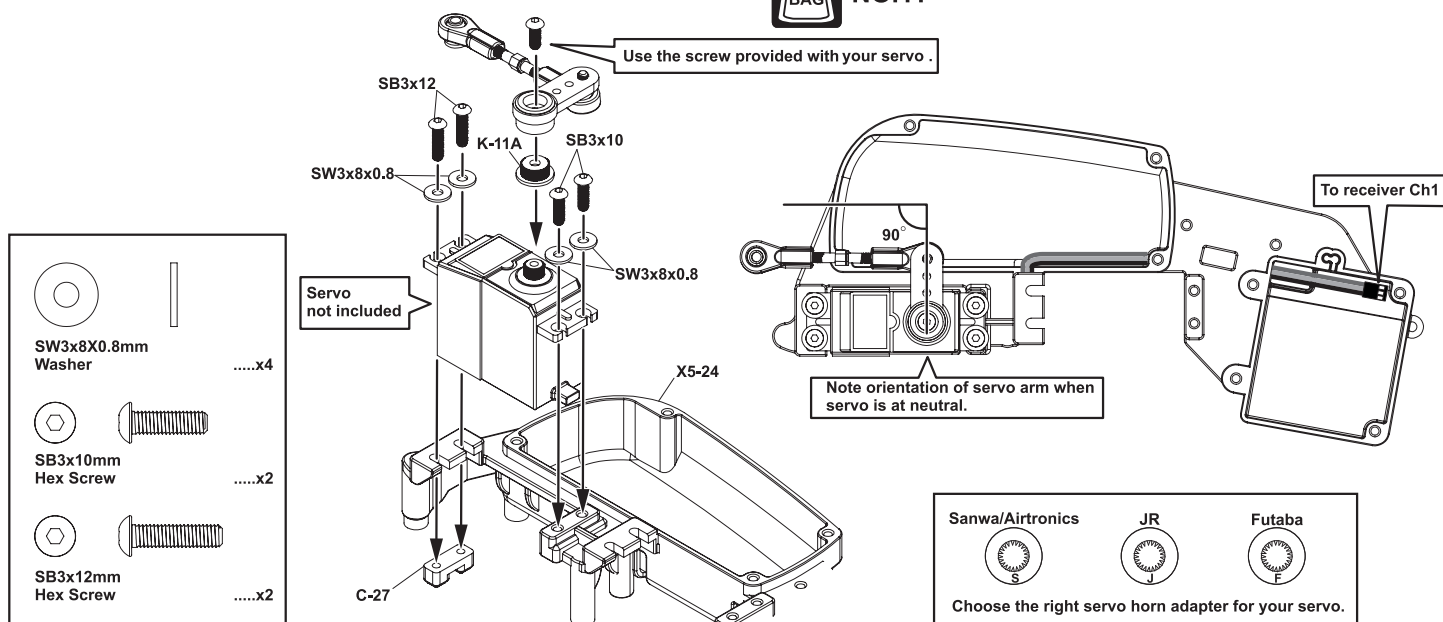
48 ASSEMBLY OF THE STEERING ROD

BAG NO.11



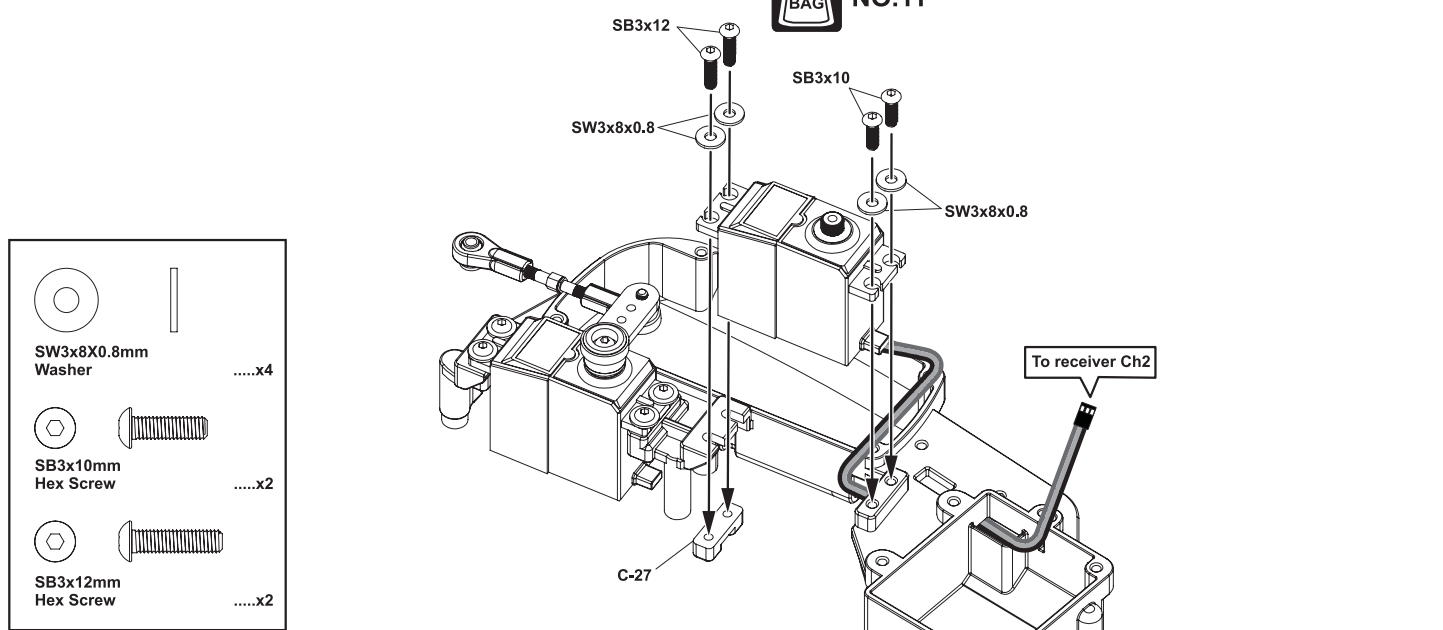
49 ASSEMBLY OF THE STEERING SERVO AND RADIO TRAY

BAG NO.11



50 ASSEMBLY OF THE THROTTLE SERVO AND RADIO TRAY

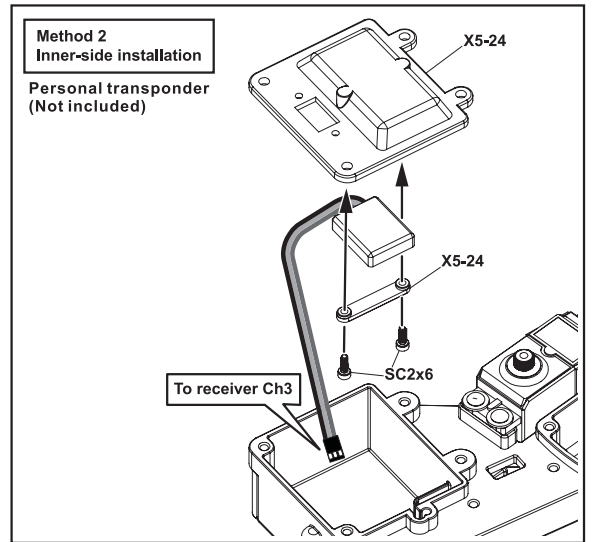
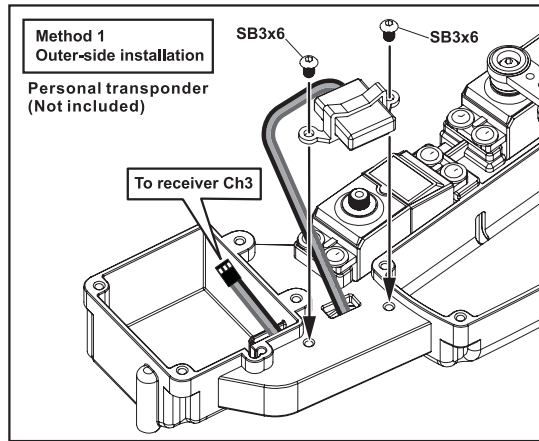
BAG NO.11



51 ASSEMBLY OF THE PERSONAL TRANSPONDER

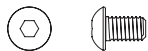


NO.11



SC2x6mm
Cap Screw

.....x2



SB3x6mm
Hex Screw

.....x2

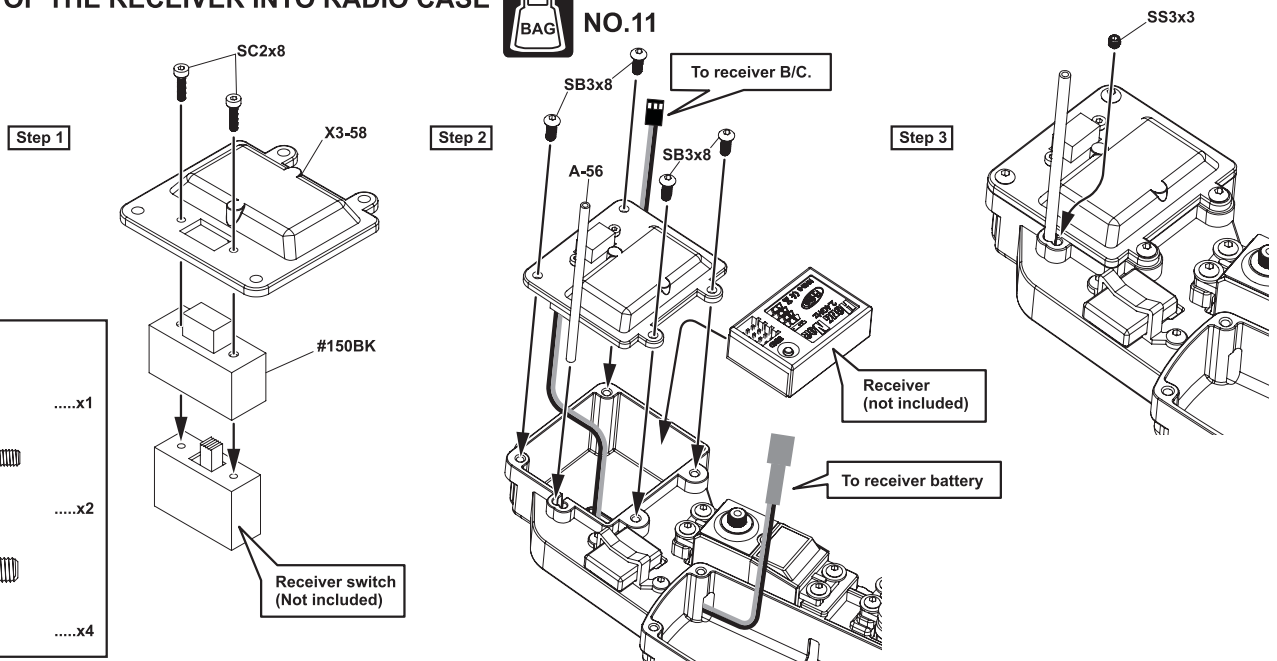


If participating in a competition, bring your own transponder.

52 ASSEMBLY OF THE RECEIVER INTO RADIO CASE



NO.11



SS3x3mm
Set Screw

.....x1



SC2x8mm
Cap Screw

.....x2



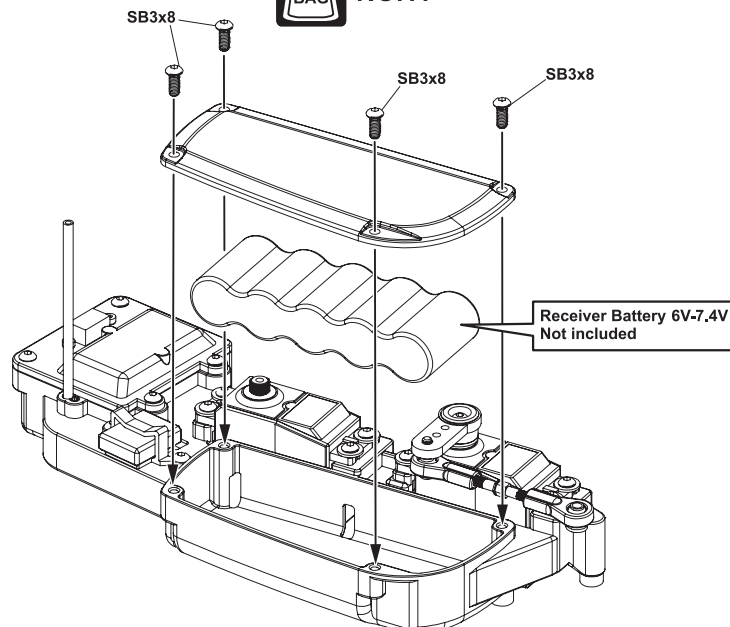
SB3x8mm
Hex Screw

.....x4

53 ASSEMBLY OF THE BATTERY BOX AND RADIO TRAY



NO.11



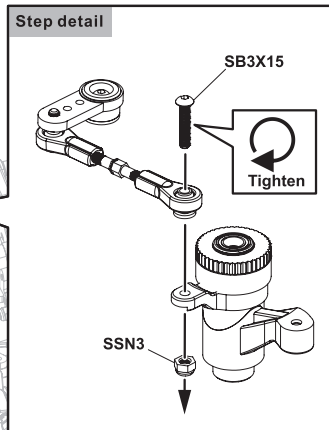
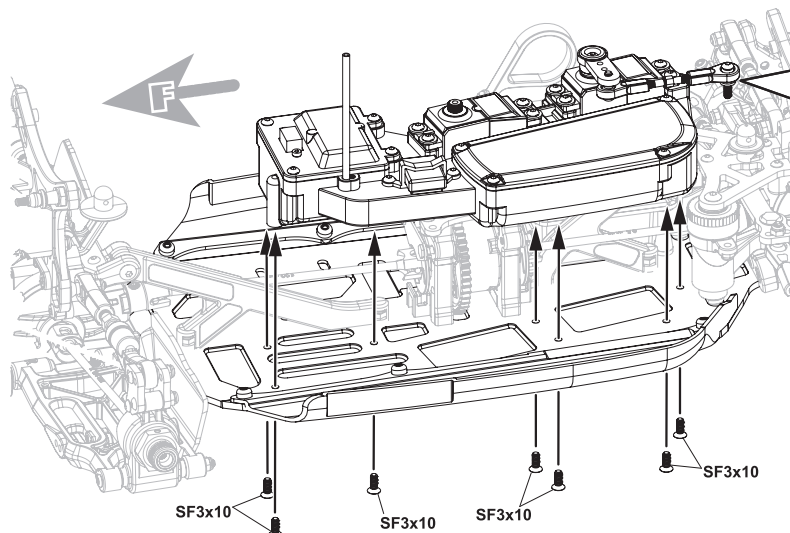
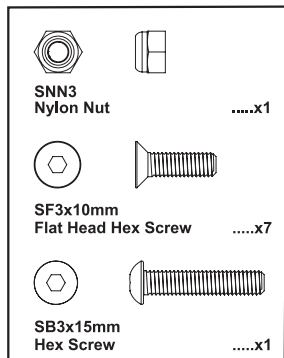
SB3x8mm
Hex Screw

.....x4

54 ASSEMBLY OF THE RADIO TRAY ONTO CHASSIS



NO.11

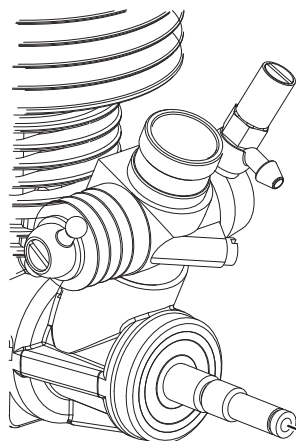


55 ASSEMBLY OF THE CLUTCH



NO.7

Step 1

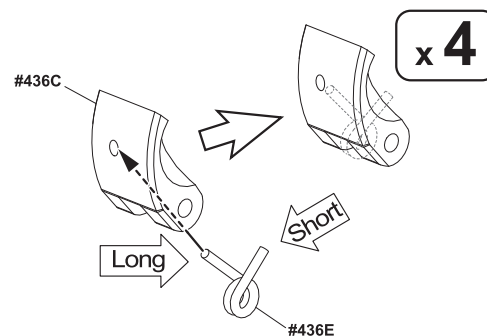


#264B

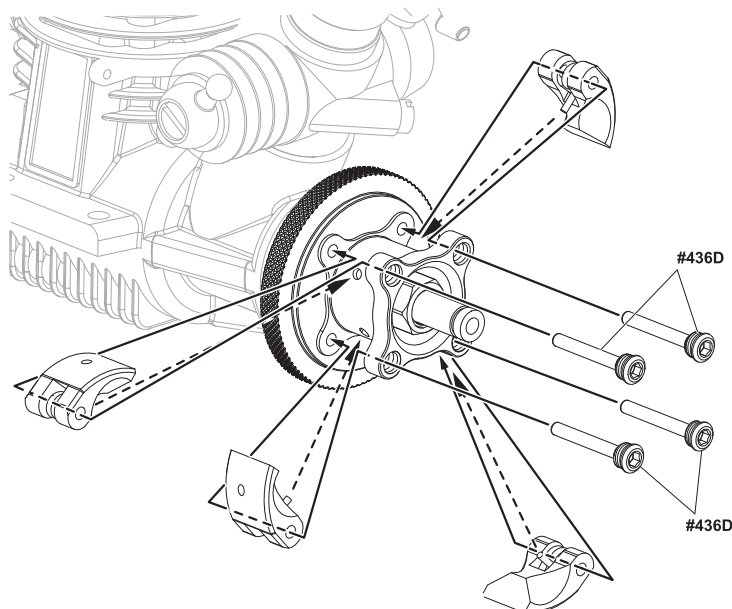
#436A

#436B

Step 2



Step 3



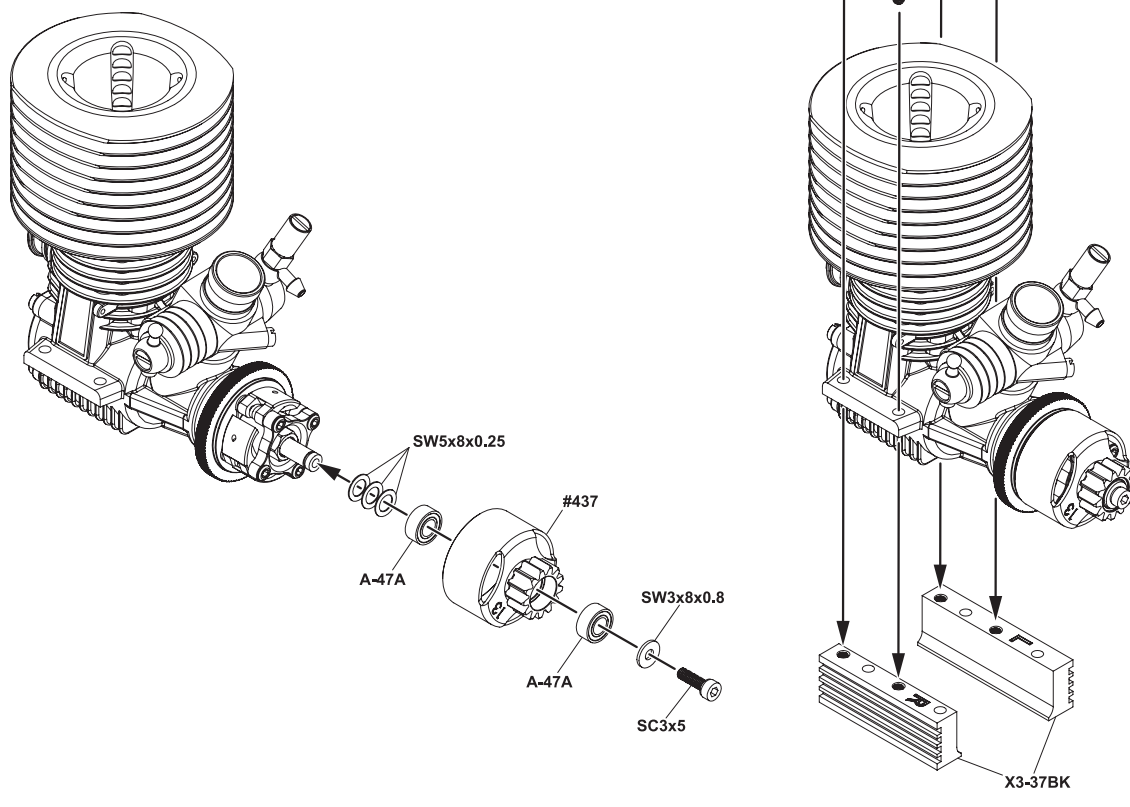
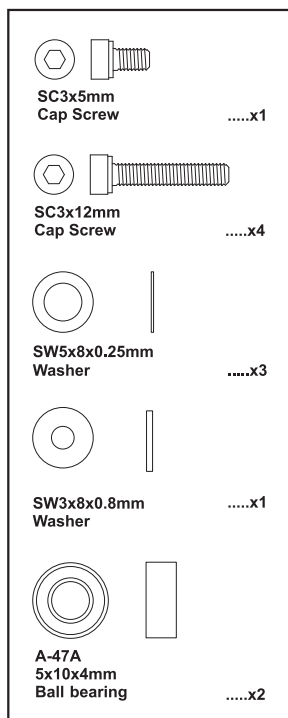
56 ASSEMBLY OF THE CLUTCH BELL AND ENGINE MOUNT



NO.7

Step 1

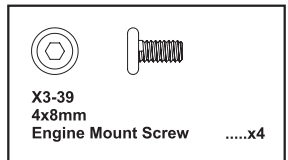
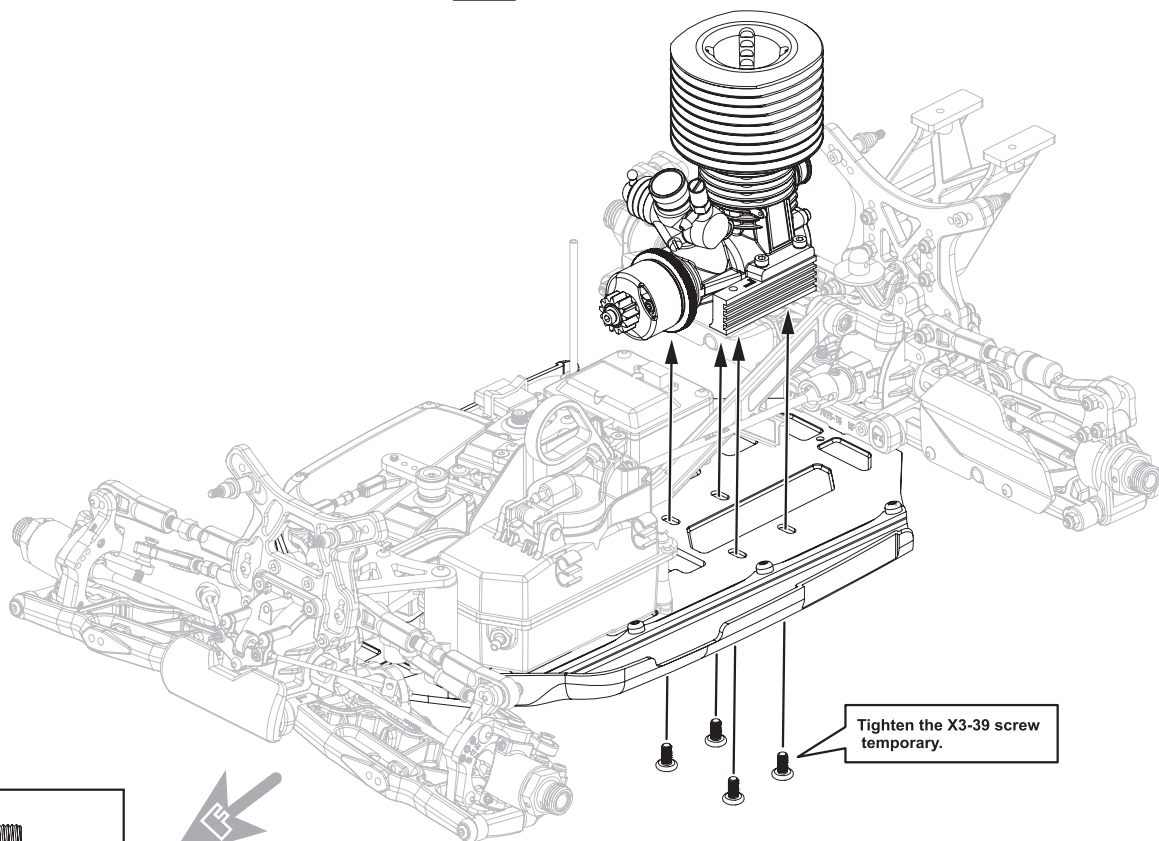
Step 2



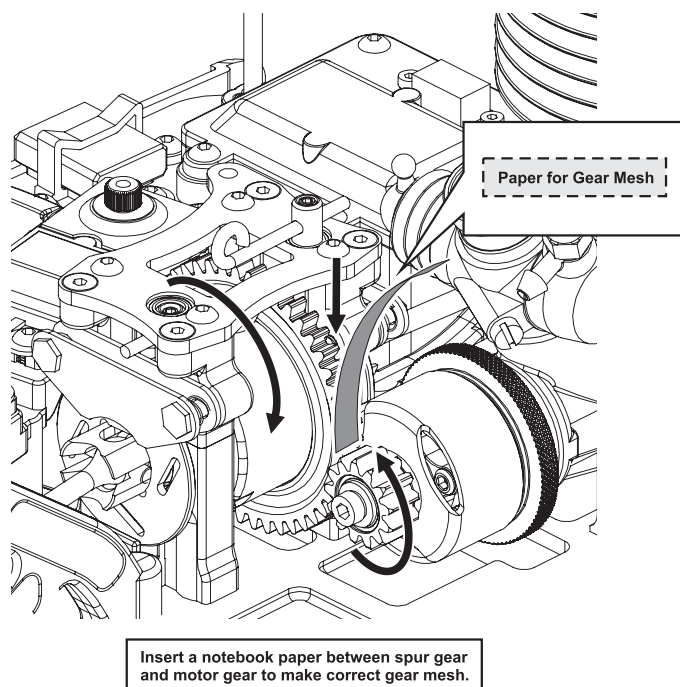
57 ASSEMBLY OF THE ENGINE ONTO CHASSIS



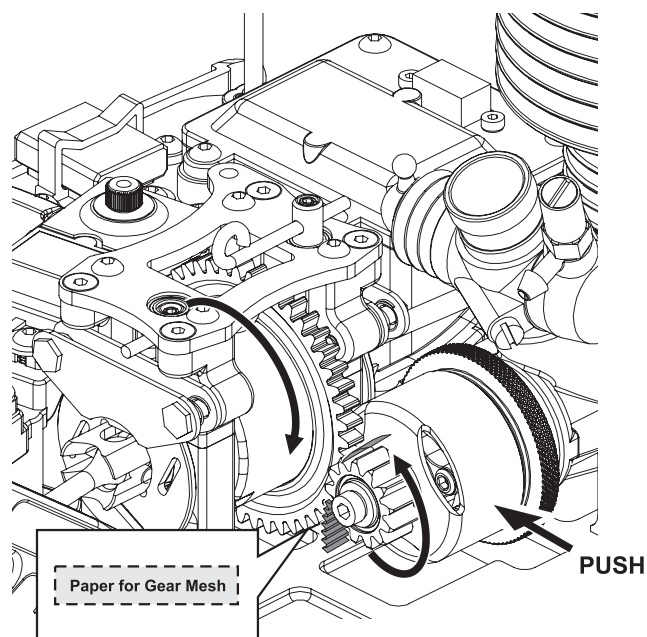
NO.7



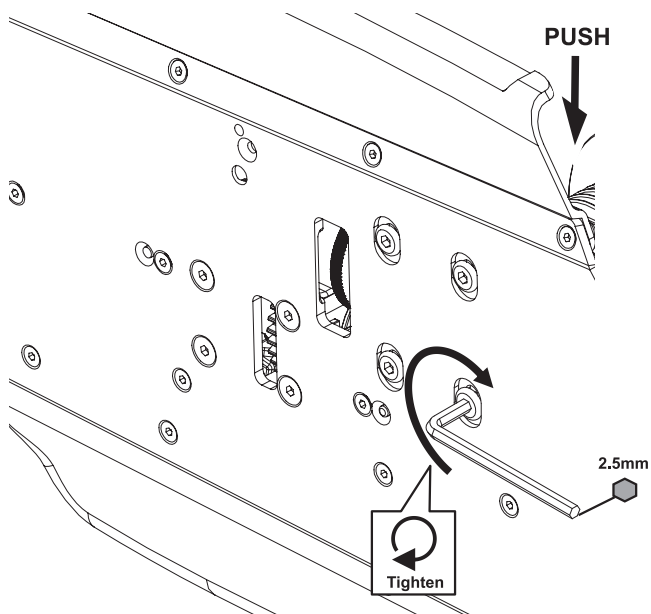
Step 1



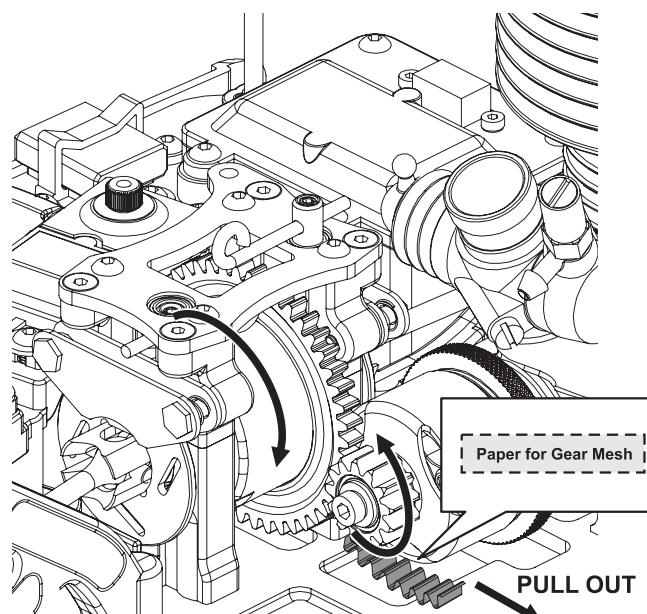
Step 2



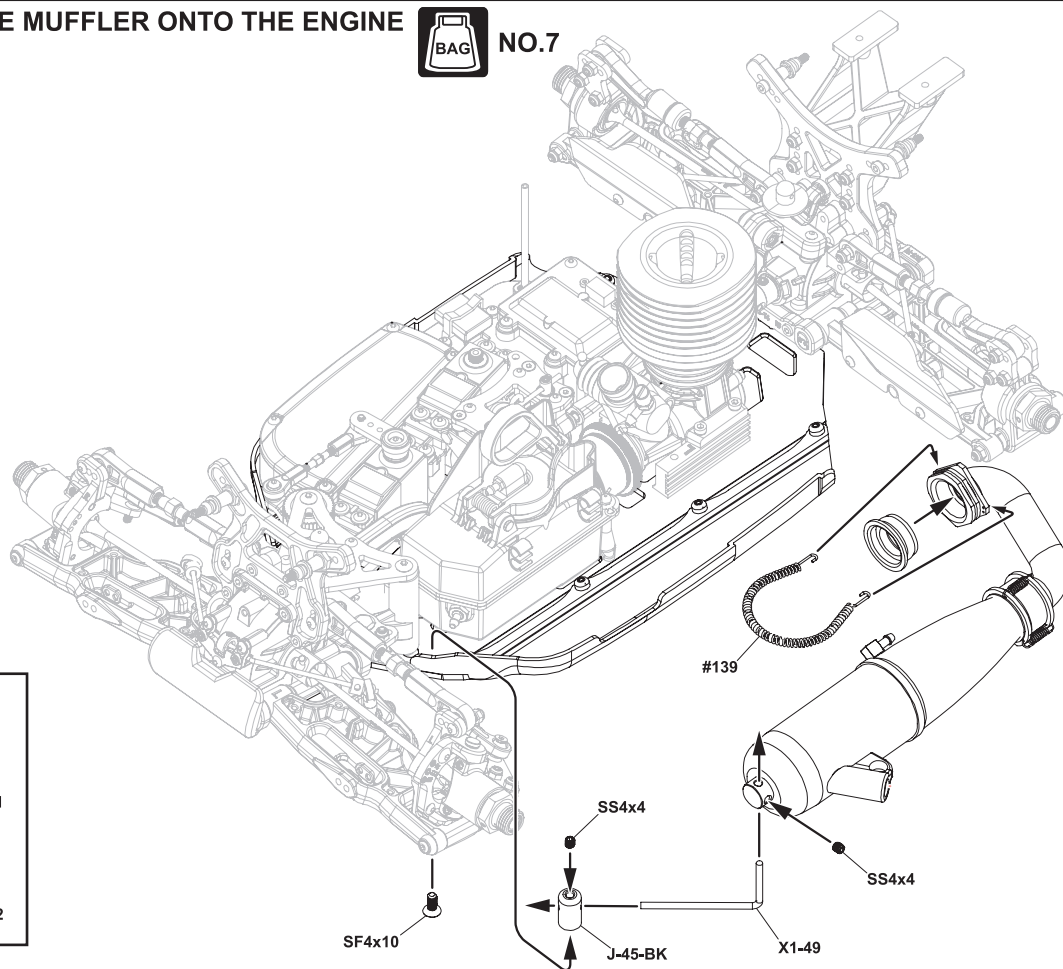
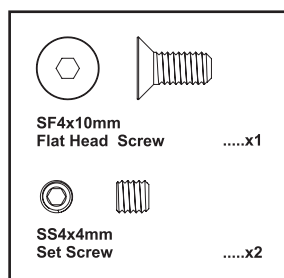
Step 3



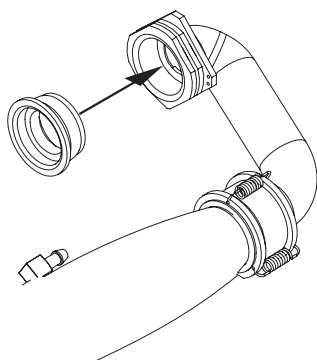
Step 4



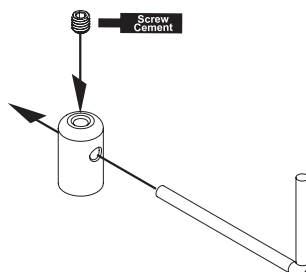
- Adjust the engine mount position to get proper gear mesh.
- To get a perfect gear mesh, place a piece of notebook paper between the gears and tighten the engine mount screws.
- If the gear mesh is not correct the spur gear will be damaged.



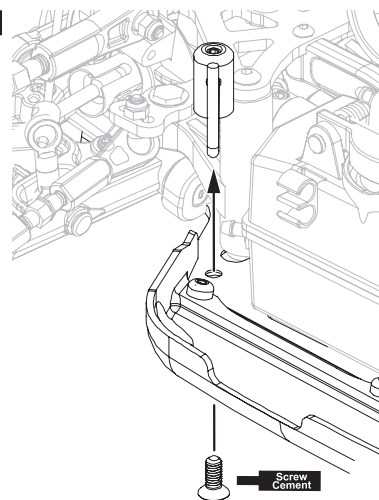
Step 1



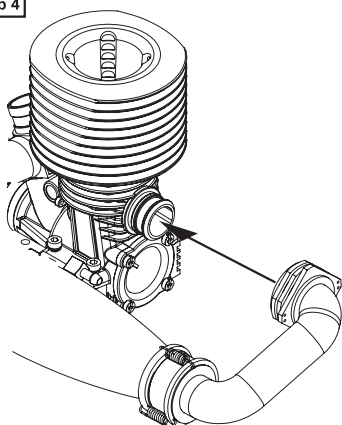
Step 2



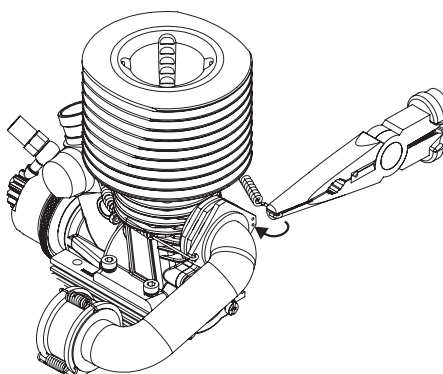
Step 3



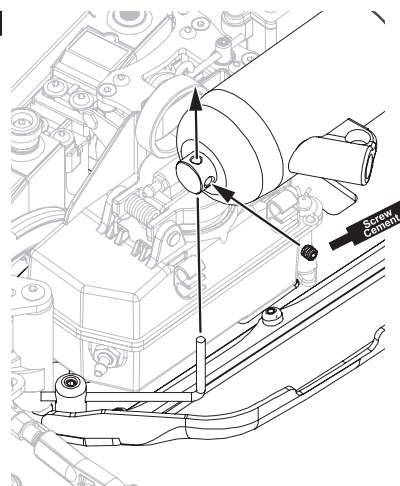
Step 4



Step 5



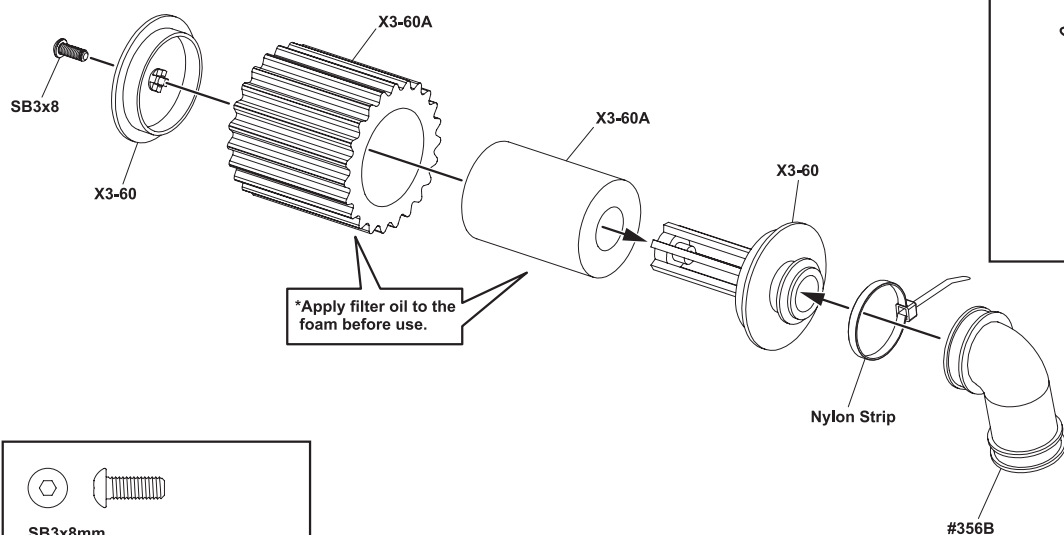
Step 6



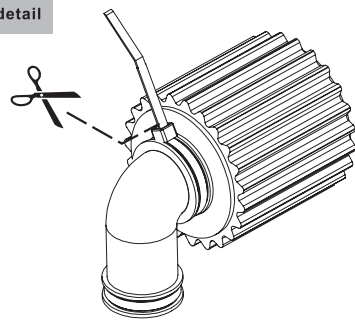
60 ASSEMBLY OF THE AIR FILTER



NO.8



Step detail



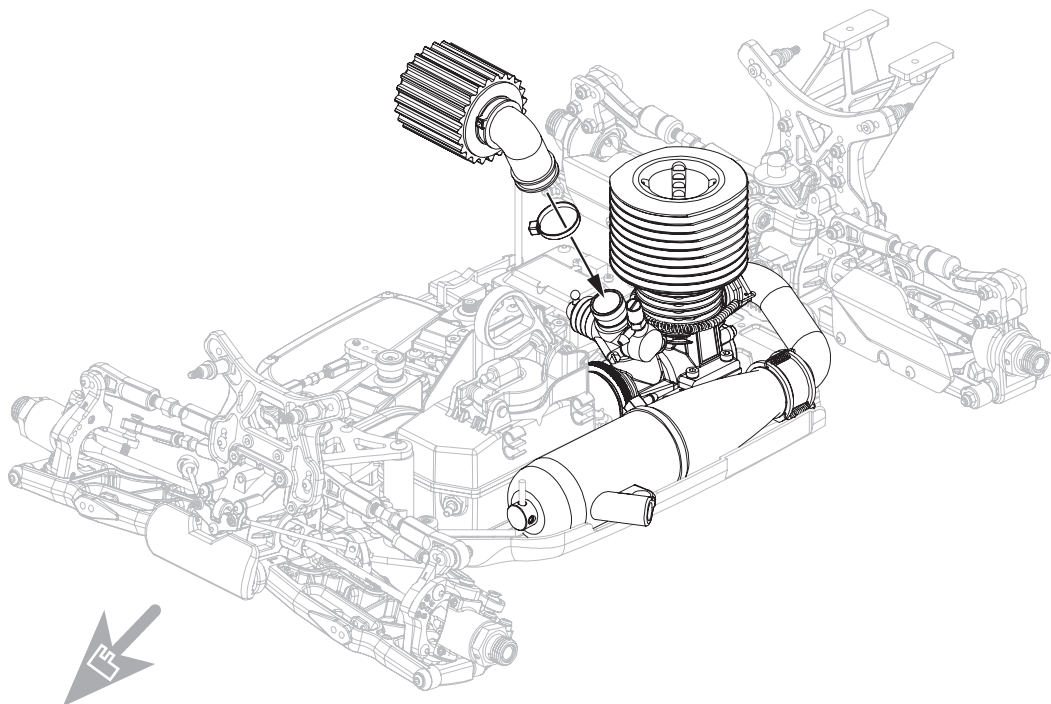
SB3x8mm
Hex Screw

.....x1

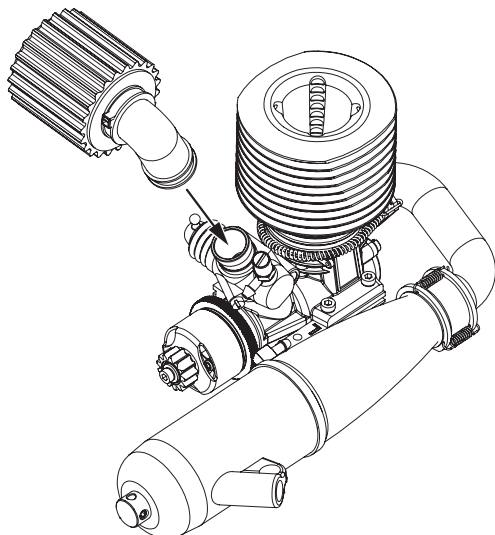
61 ASSEMBLY OF THE AIR FILTER ONTO ENGINE



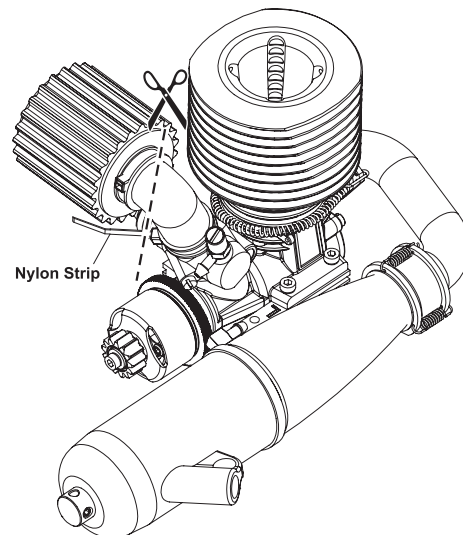
NO.8



Step 1



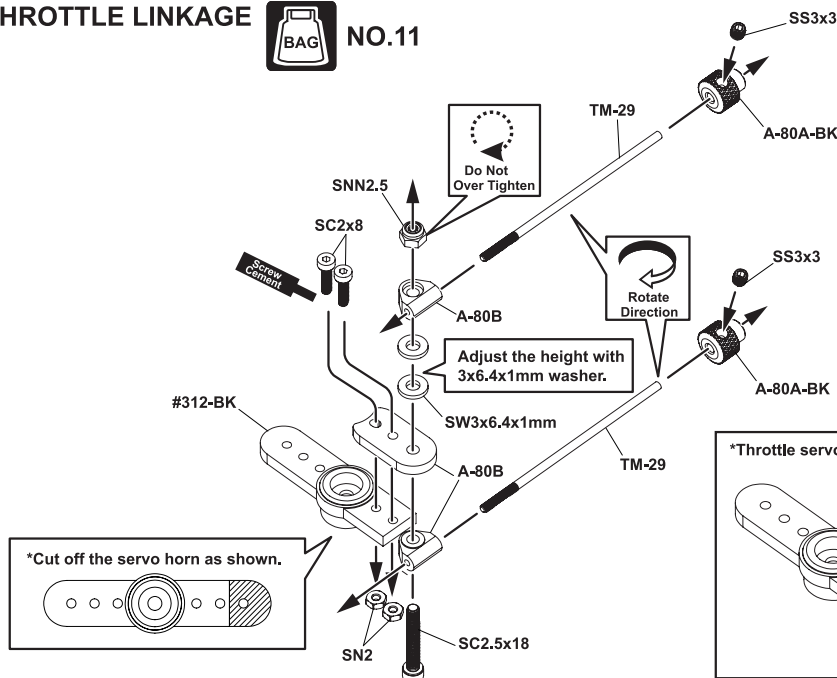
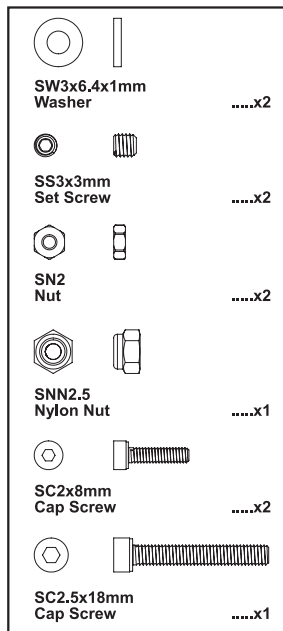
Step 2



62 ASSEMBLY OF THE THROTTLE LINKAGE



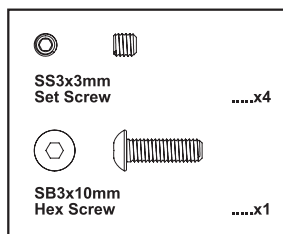
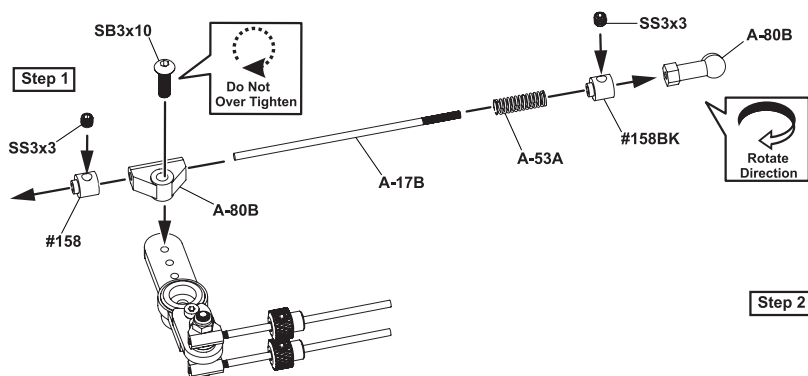
NO.11



63 ASSEMBLY OF THE THROTTLE LINKAGES INTO BREAK LEVER

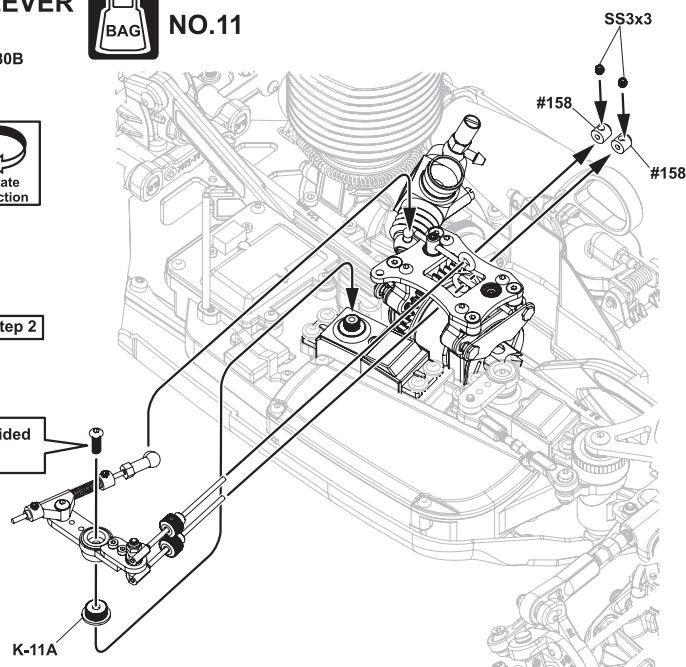


NO.11

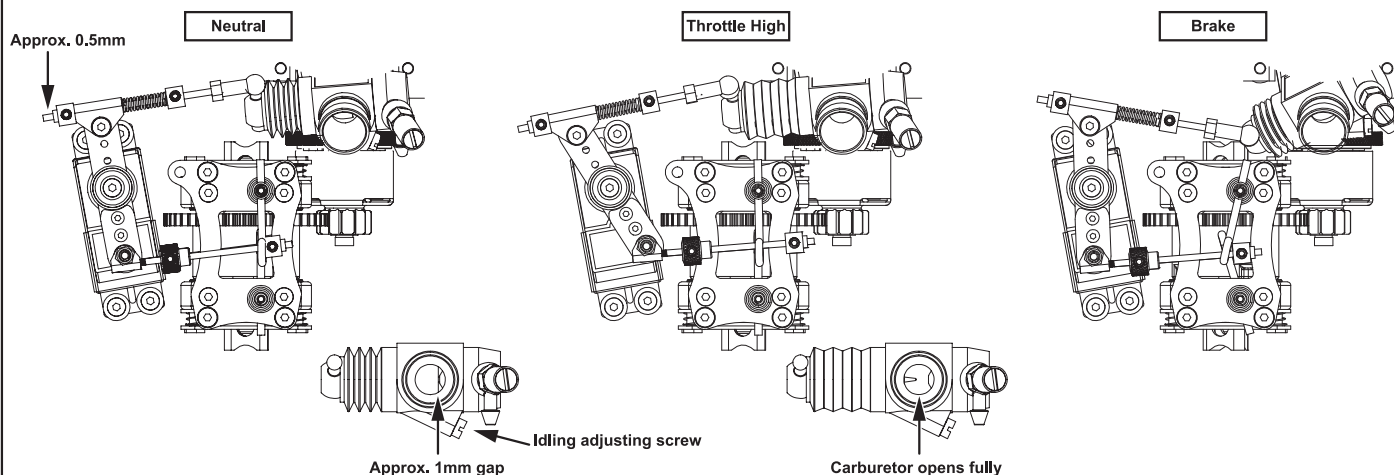


Step 2

Use the screw provided with your servo.



64 ADJUSTING THE ENGINE CONTROL LINKAGES



- * Turn on the Transmitter and Receiver, then set the Engine Control Servo Trim to neutral position.
- * Adjust the idling adjusting screw on the Carburetor to open approx 1mm gap.
- * Adjust both #158 Engine Control and Brake linkage accordingly.
- * Adjust the Engine while it is not running.

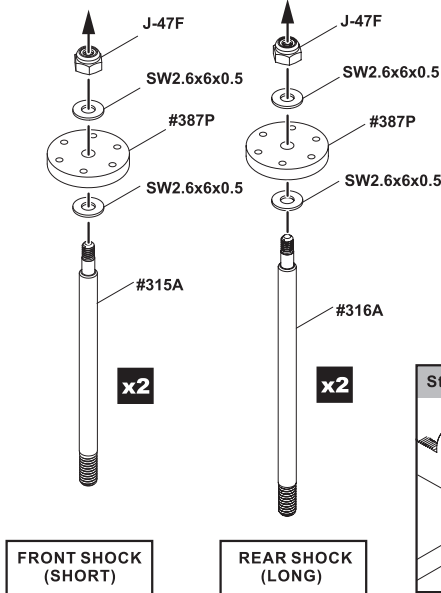
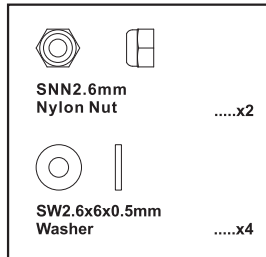
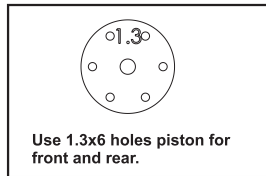
- * Adjust the Servo-Horn mounting position for the Carburetor to be fully open.
- * Change the pivot mounting position on the servo horn in case the Carburetor is not opening fully or is opening excessively. Or if available on the Transmitter, adjust the Throttle high end point.

- * Adjust #158 so the brakes work smoothly.
- * If the brakes apply too much or not enough, adjust A-80A accordingly. Or if available on the Transmitter, adjust the High-End Brake adjustment.
- * Adjust A-80A to change the front or rear brake.

65 ASSEMBLY OF THE SHOCK SHAFTS

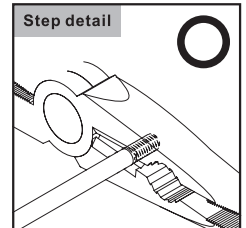
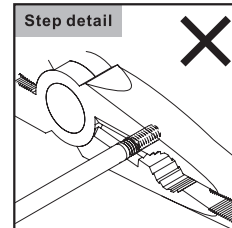
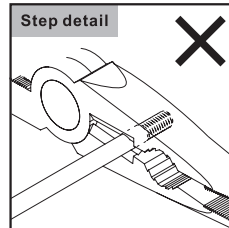
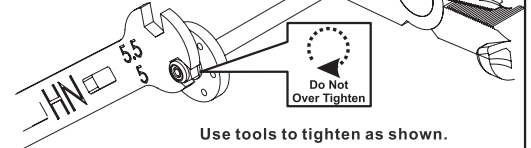
BAG NO.9

Assemble both left and right sides.



Step detail

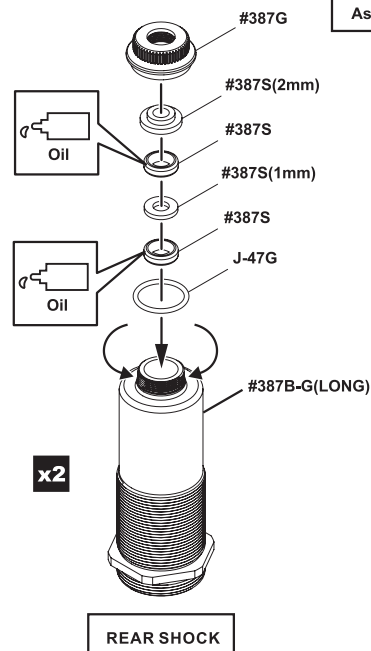
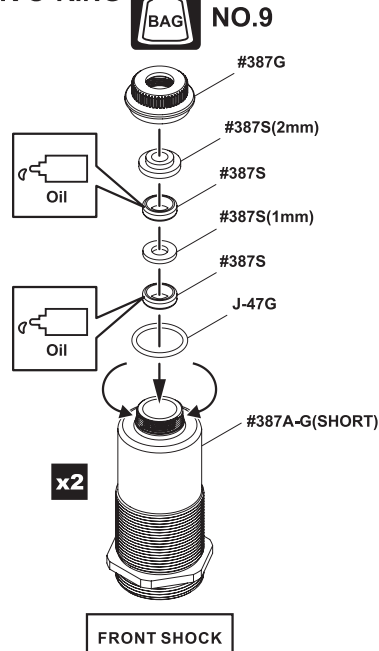
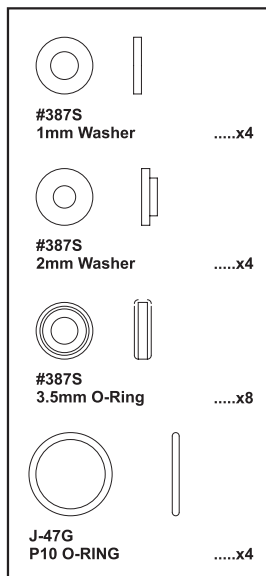
- Hold the shock rod at its thread with side needle nosed pliers.
- Be careful not to damage the shock rod.



66 ASSEMBLY OF THE SHOCK O-RING

BAG NO.9

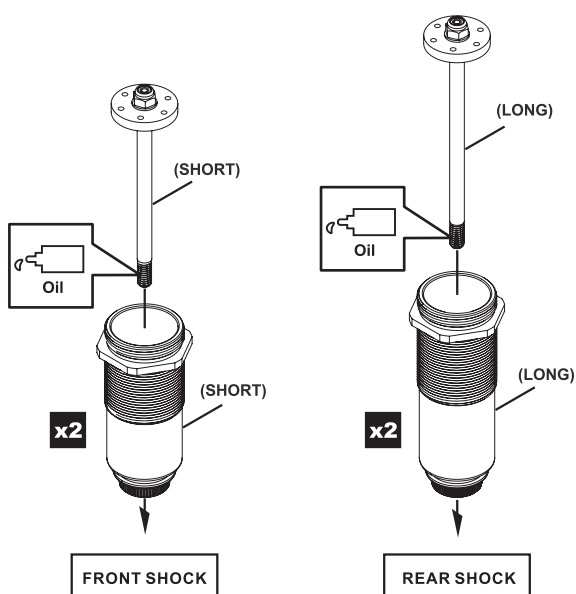
Assemble both left and right sides.



67 ASSEMBLY OF THE SHOCK SHAFTS INTO SHOCK BODIES

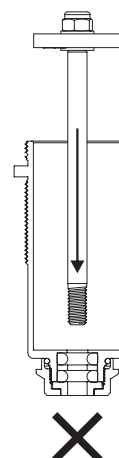
BAG NO.9

Assemble both left and right sides.

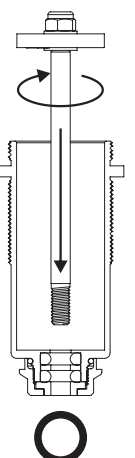


! EXTREMELY IMPORTANT

Do not push the shock shaft straight down, O-ring can be damaged.



Slowly twist the shock shaft down to the bottom.



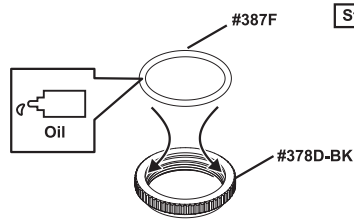
68 ASSEMBLY OF THE SHOCK ADJUST RING



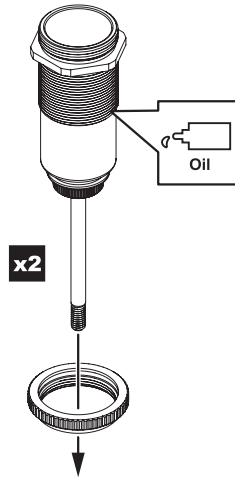
NO.9

Assemble both left and right sides.

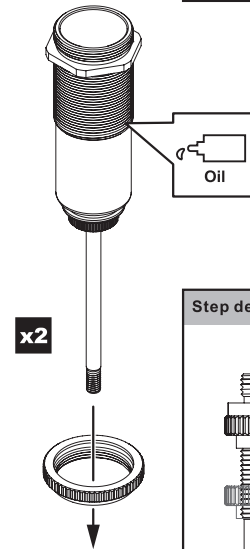
Step 1



Step 2

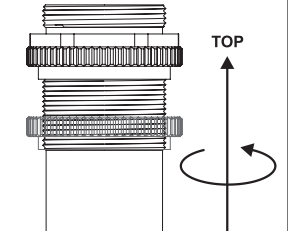


FRONT SHOCK



REAR SHOCK

Step detail



#387F
19x1.5 O-RING

.....x4

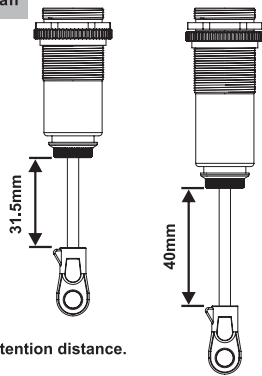
69 ASSEMBLY OF THE SHOCK BALL END



NO.9

Assemble both left and right sides.

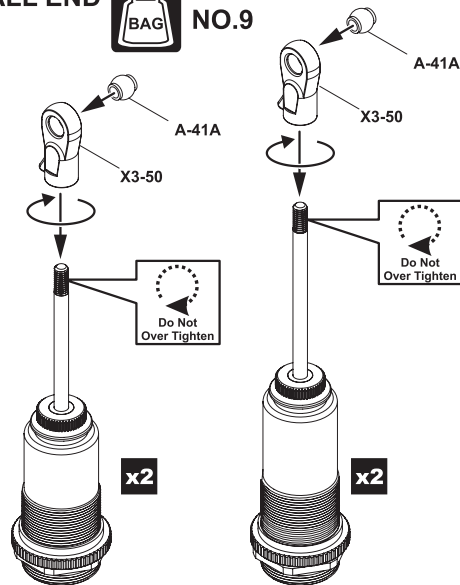
Step detail



Attention distance.

A-41A
6mm Ball

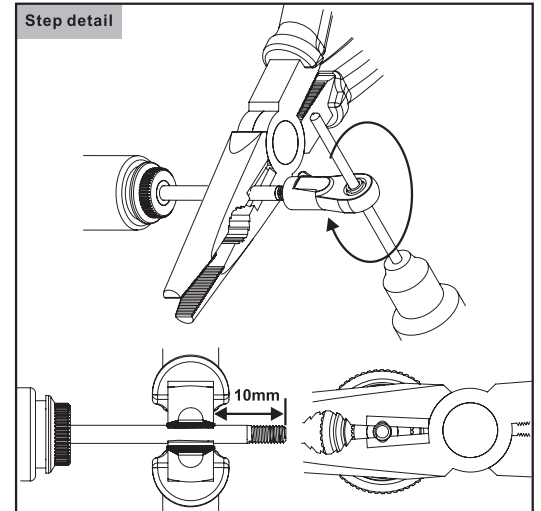
.....x4



FRONT SHOCK

REAR SHOCK

Step detail



Use tools to tighten as picture shown.

70 SETTING THE SHOCK REBOUND TO 100% (HIGH REBOUND)



NO.9

Assemble both left and right sides.

Step 1

Step 2

Step 3

Step 4

Step 5

Step 6

SHOCK OIL

FRONT (SHORT)
SHOCKS OIL #55

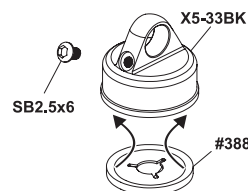
REAR (LONG)
SHOCKS OIL #40

3~5x
UP & DOWN

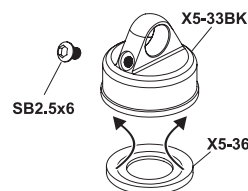


Time

1 Air-Filled Shock Absorbers



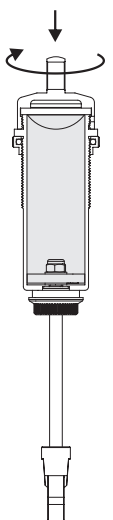
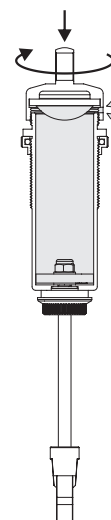
2 Airless Shock Absorbers



- Leave the filled shock vertically for several minutes with the shock shaft fully extended.
- The remaining air bubbles will release.

TIGHTENED HALF WAY 50%

TIGHTENED 100%



Step detail



Step detail



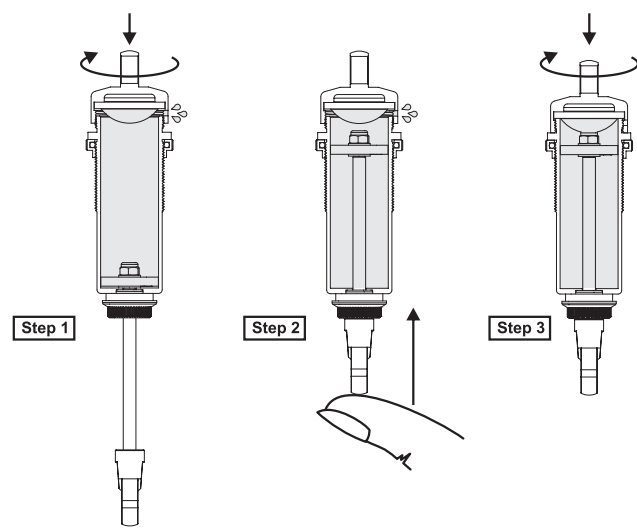
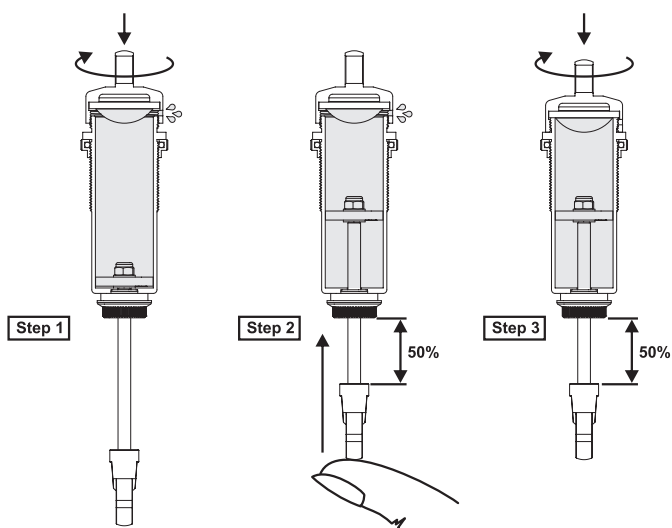
71 SETTING THE SHOCK REBOUND TO 50% & 0% (MEDIUM REBOUND & LOW REBOUND)

TIGHTENED HALF WAY 50%

TIGHTENED 100%

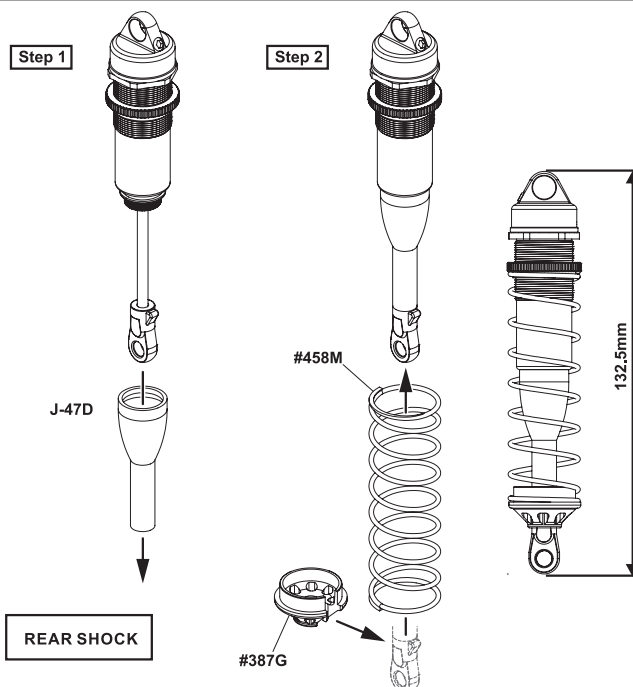
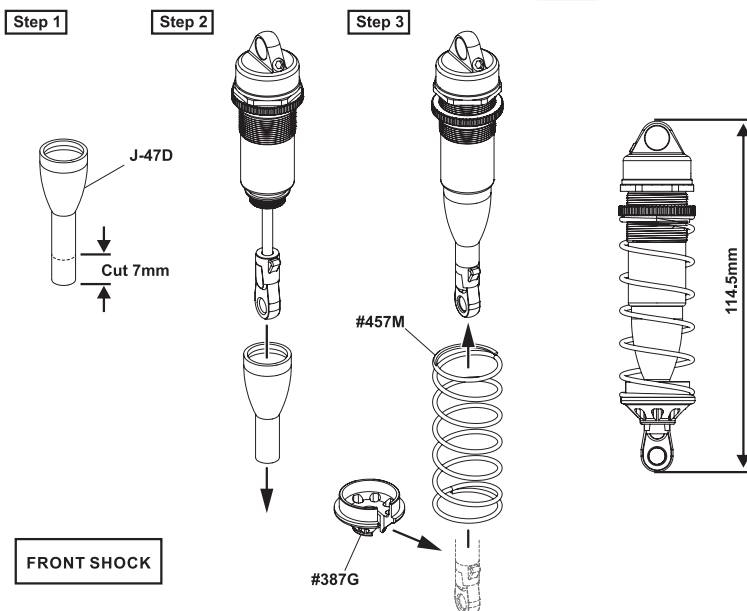
TIGHTENED HALF WAY 50%

TIGHTENED 100%



72 ASSEMBLY OF THE SHOCKS SPRING

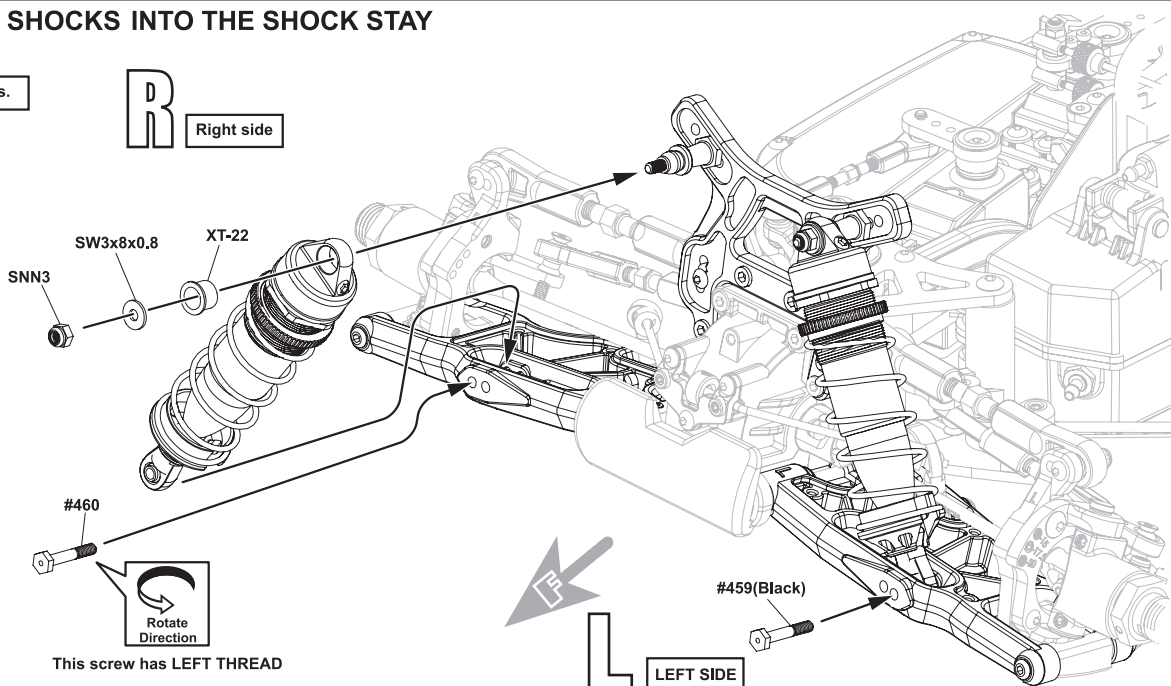
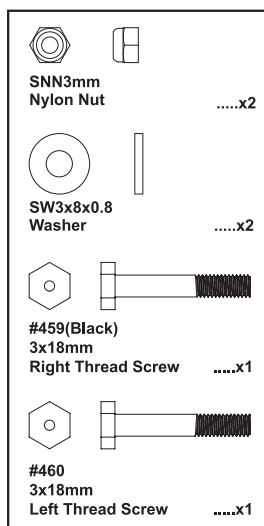
BAG NO.9



73 ASSEMBLY OF THE SHOCKS INTO THE SHOCK STAY

Assemble both left and right sides.

R Right side

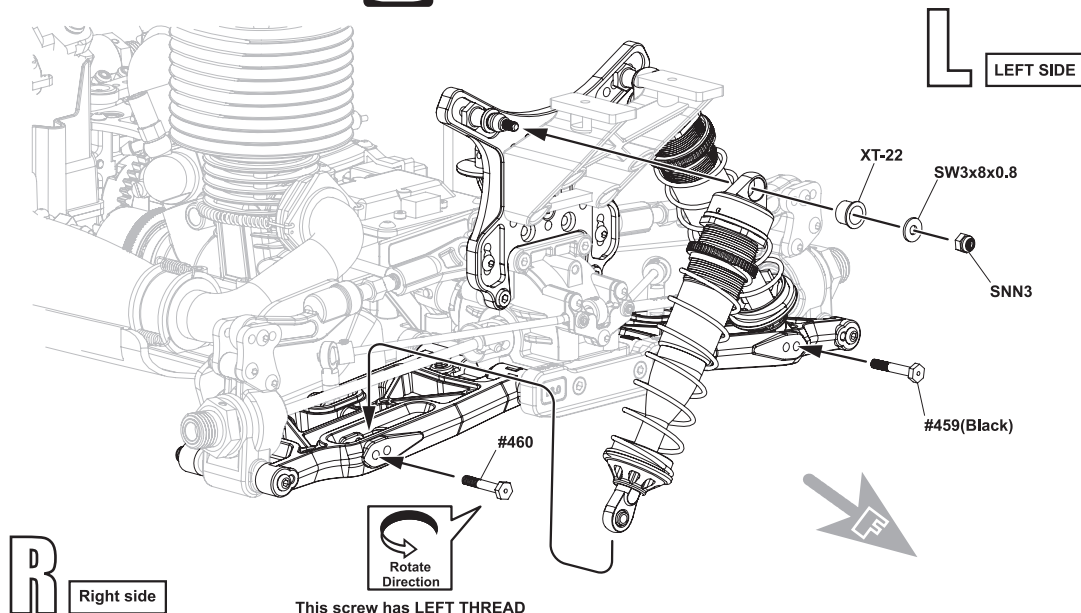
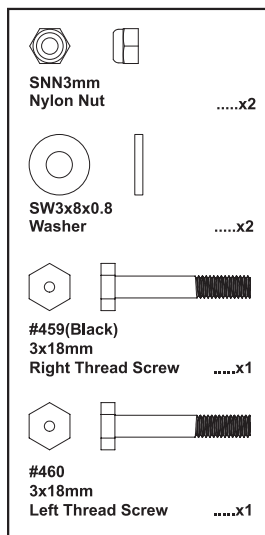


74 ASSEMBLY OF THE SHOCKS INTO THE SHOCK STAY



NO.9

Assemble both left and right sides.

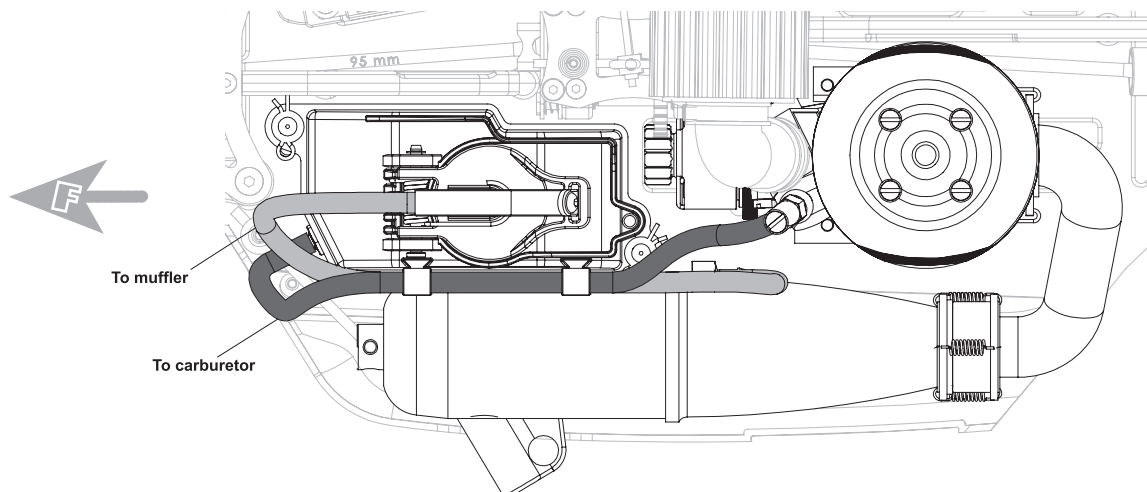
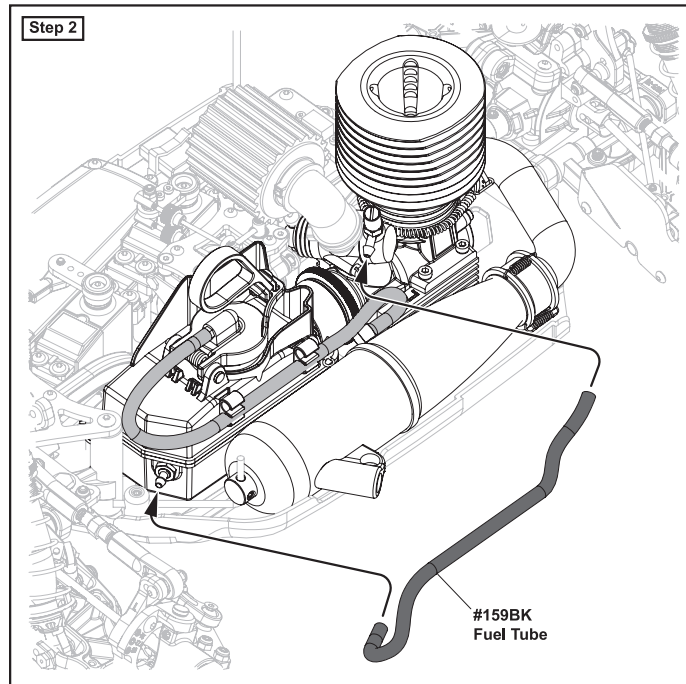
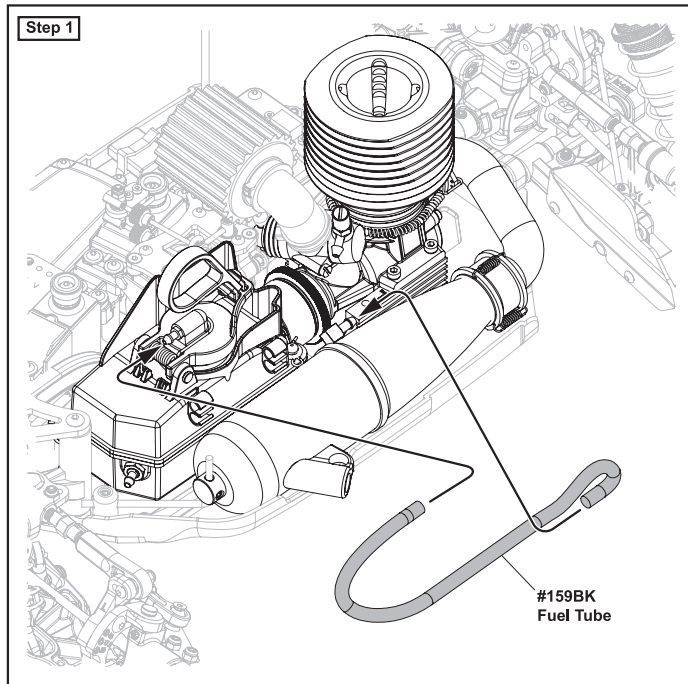


This screw has LEFT THREAD

75 ASSEMBLY OF THE FUEL TUBE



NO.10



76 ASSEMBLY OF THE TIRES ONTO THE FRONT KNUCKLE AND REAR HUB



NO.12

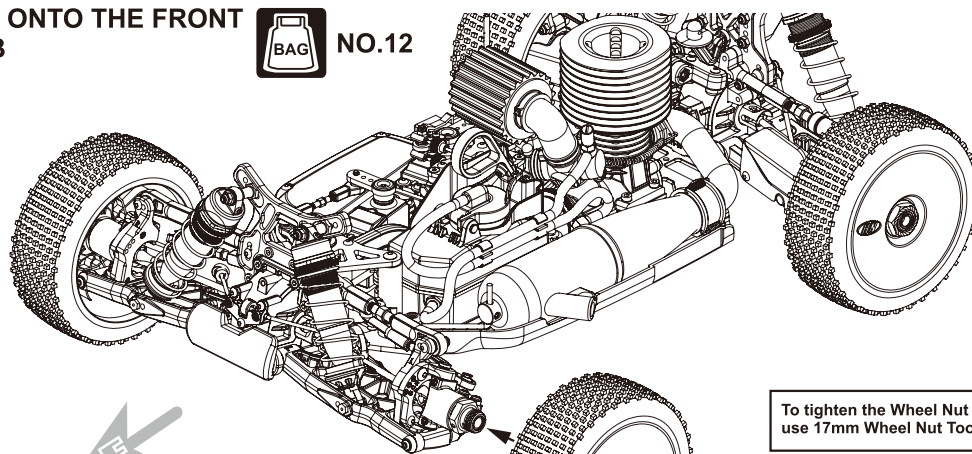
R Right side

Assemble both left and right sides.



#394BK
Wheel Nut

.....x4



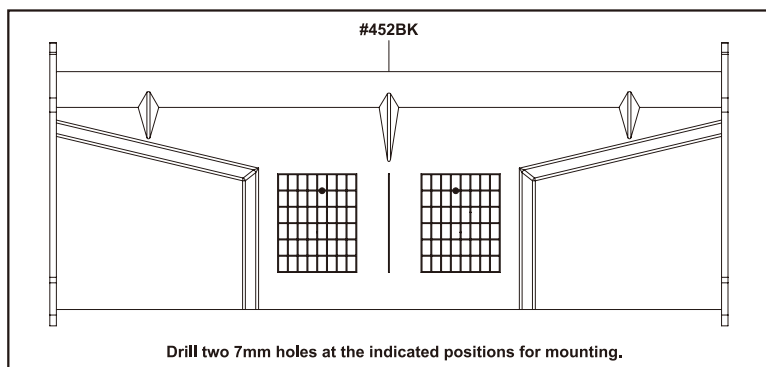
To tighten the Wheel Nut you can also use 17mm Wheel Nut Tool.(X1S-34)

#394BK

X1S-34

L LEFT SIDE

77 ASSEMBLY OF THE WING



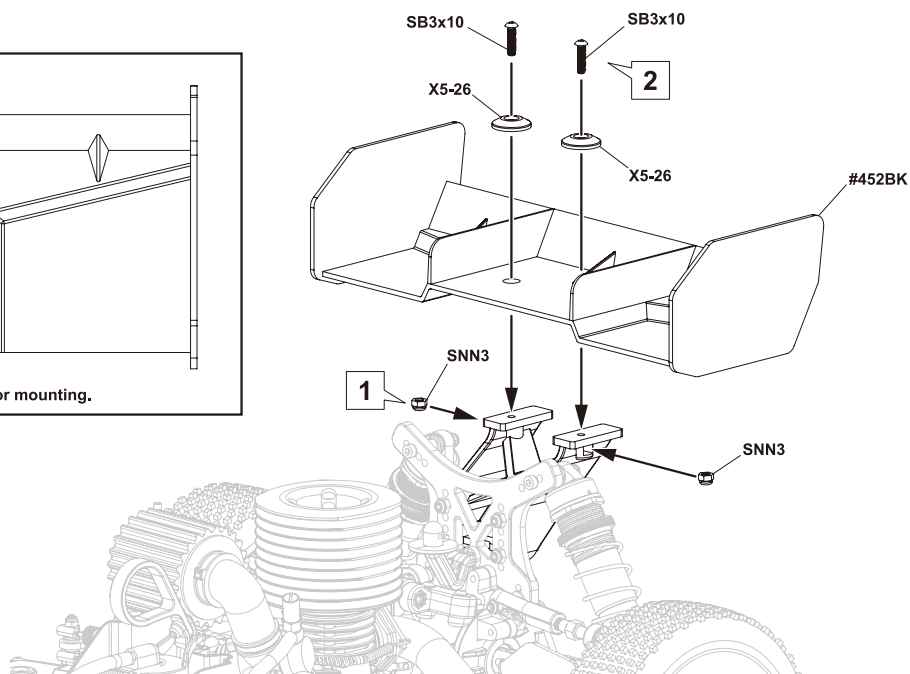
SNN3
Nylon Nut

.....x2

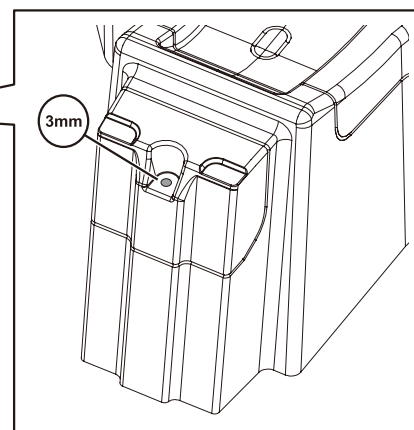
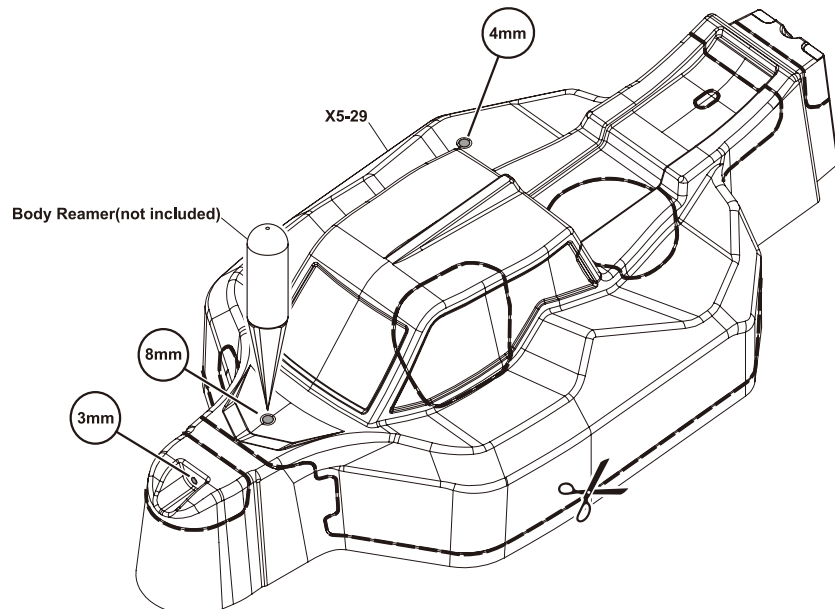


SB3x10mm
Hex Screw

.....x2

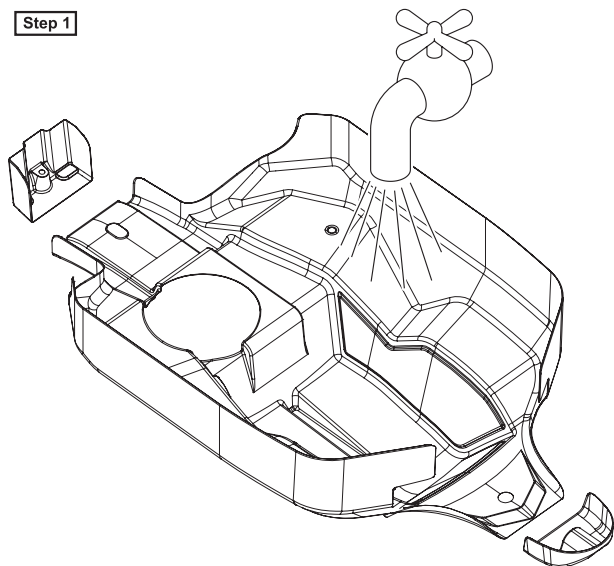


78 MAKING HOLES AND CUTTING ON THE BODY SHELL

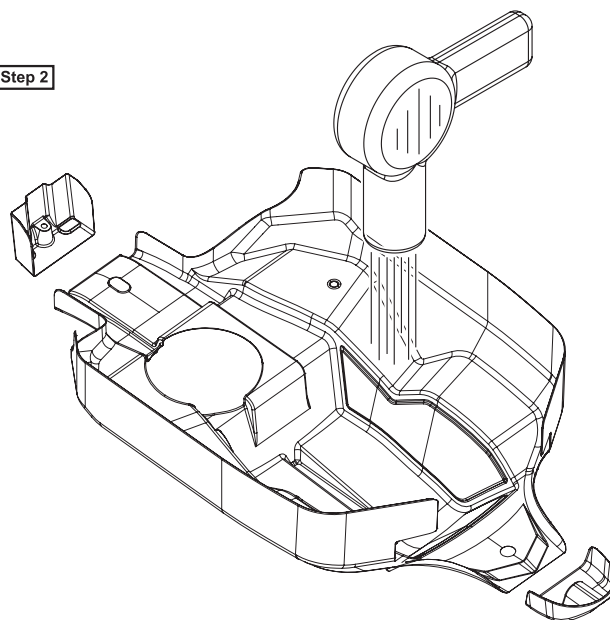


79 WASH THE INSIDE OF THE BODY SHELL

Step 1



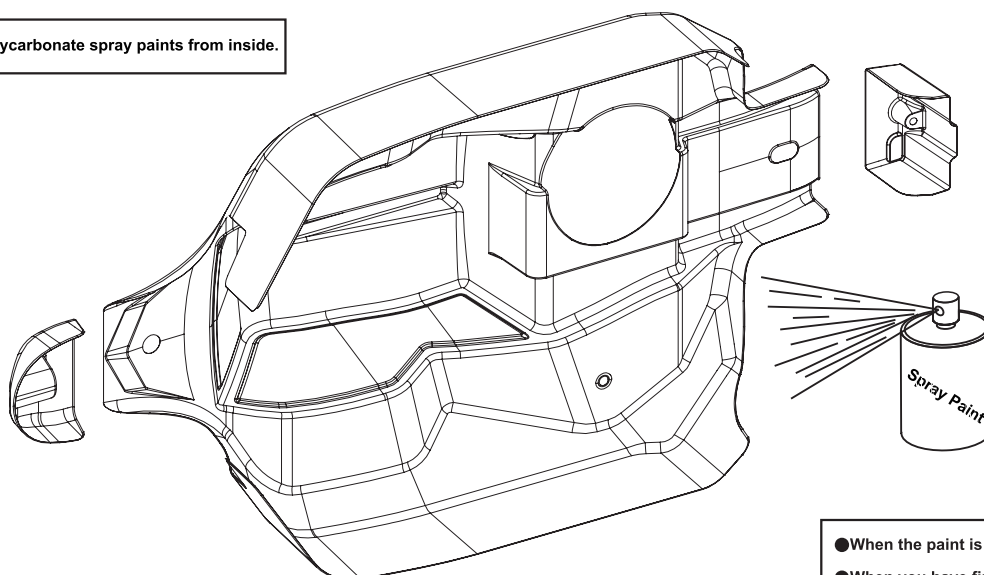
Step 2



Wash the inside of the body shell with mild detergent, and then rinse and dry thoroughly.

80 PAINTING BODY SHELL

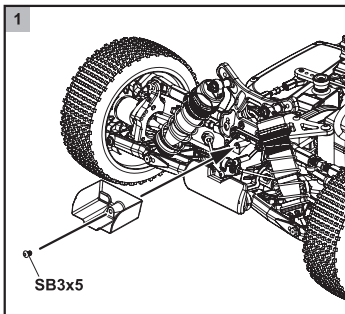
Paint the body with polycarbonate spray paints from inside.



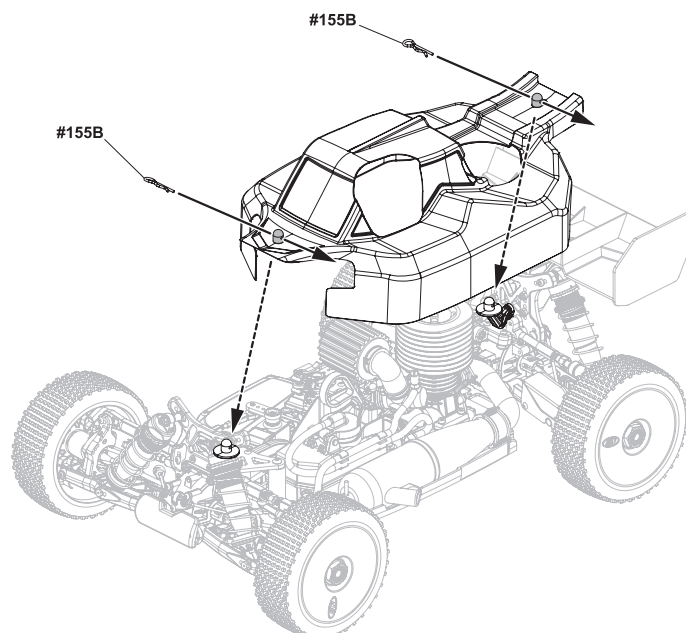
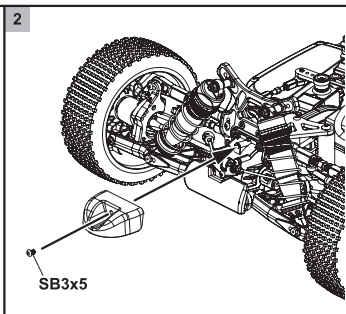
- When the paint is dry, remove the masking tape.
- When you have finished painting, peel off the external protective films.

81 MOUNTING THE BODY SHELL

1



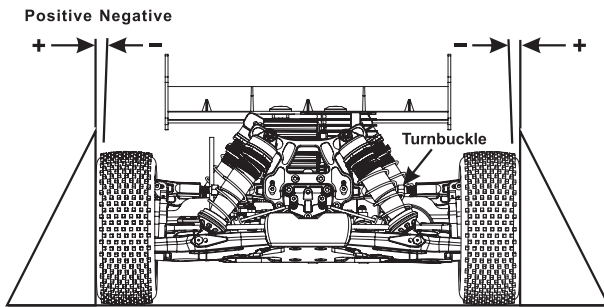
2



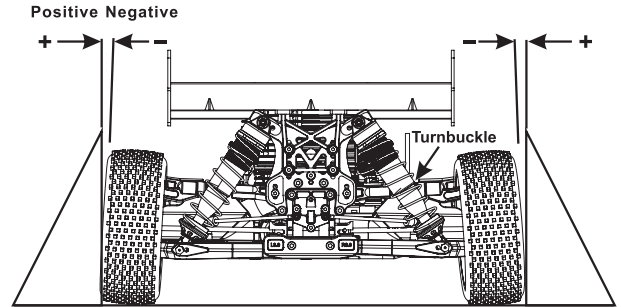
SB3x5mm
Hex Screw

.....x1

FRONT CAMBER ANGLE SETTING

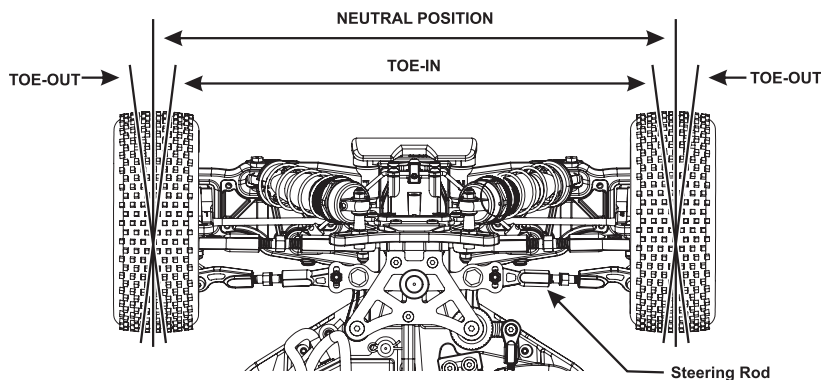


REAR CAMBER ANGLE SETTING



- Place the model car on flat surface. Raise the chassis to its clearance before the wheels leave the ground.
- Adjust the length of the front and rear upper arms so that the wheels are vertical to the ground.
- Adjust the camber angle by turning the turnbuckle rod on the upper arms clockwise or anti-clockwise.
(We suggest to use zero degree for the front and 1.5 degree negative for the rear.)

FRONT TOE-IN AND TOE-OUT SETTING

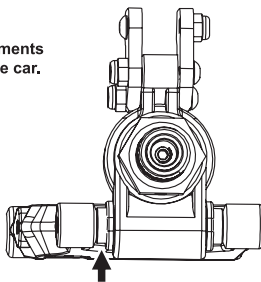
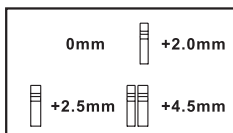


Adjust the length of front steering rod to change the toe angle.

- Making the tie rod longer will make front tires toed in.
Response will be slower and may over steer.
- Making the tie rod shorter will make front tires toed out.
Response will be quicker and may under steer.

REAR WHEELBASE

- Adjust the wheelbase by using the spacers on either side of the rear wheel hub (at the bottompin).
- **IMPORTANT!** Make equal adjustments on both left and right sides of the car.



Shorter wheelbase

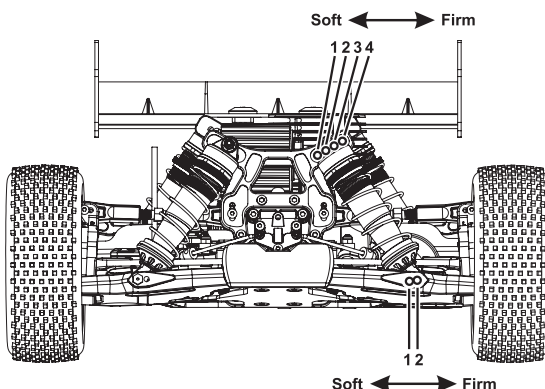
- Less spacers in front of the rear wheel hub.
- Increases rearward weight transfer during acceleration.
- Increases on-power traction.
- Quicker off-power steering into corners.
- Slight tendency to push on-power at corner exit.
- Increases steering response.
- Better on tighter, more technical tracks.

Longer wheelbase

- More spacers in front of the rear wheel hub.
- Decreases off-power steering into sharp corners.
- Increases stability.
- Slower initial steering reaction(off-power).
- Improves on-power steering at corner exit.
- Better handling over bumps and ruts.
- Better on more open tracks with high-speed corners.

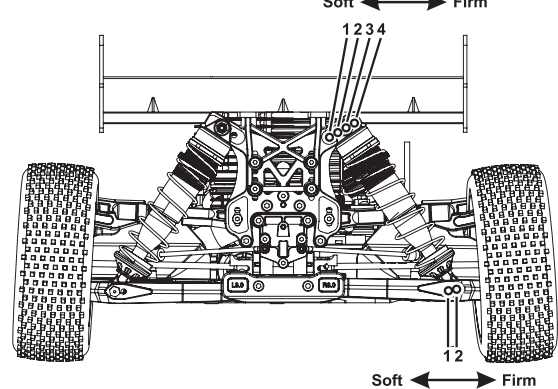
- Different shock positions will result in firmer or softer response of the suspension system.
- Install the shock in an inward angle will cause softer rebound. Softer or firmer suspension system will lead to different steering response.
- Adjust the shock angle positions according to track conditions.

FRONT SHOCK ANGLE SETTING



Firm front suspension, less steering.
Soft front suspension, more steering.

REAR SHOCK ANGLE SETTING



Firm rear suspension, over steering.
Soft rear suspension, under steering.

X5B SETUP SHEET

AIR TEMP F° °C

LAPS

BEST LAP TIME

in LAP

TRACK SIZE

☐ OPEN ☐ MEDIUM ☐ TIGHT

TRACK TRACTION

☐ HIGH ☐ MEDIUM ☐ LOW

DIFFERENTIAL OIL

FRONT CENTER REAR
STD STD STD

OIL wt.

FRONT CENTER REAR

CLUTCH

SHOE BRAND

COMPOUND ☐ ALUM

☐ CARBON

SPRING BRAND

TENSION mm

CLUTCH SHOES SHOE

GEARING

SPUR GEAR T

PINION GEAR T

TIRES

FRONT TYPE

COMPOUND

INSERT FOAM

REAR TYPE

COMPOUND

INSERT FOAM

ENGINE

TYPE

PORT

PLUG

☐ NORMAL ☐ TURBO

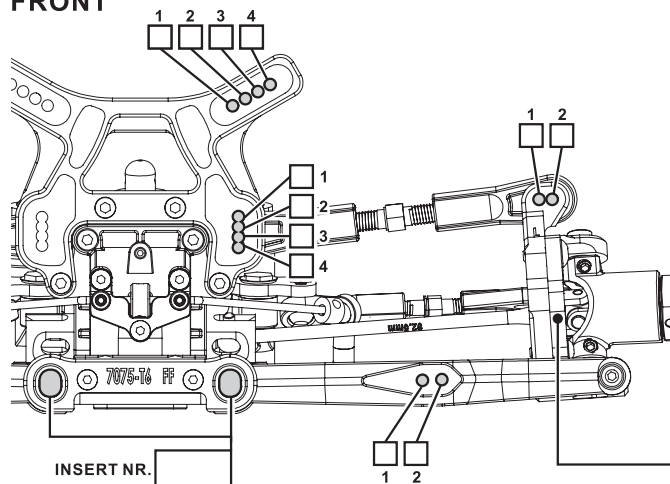
HEAD CLEARANCE

PIPE

FUEL BRAND

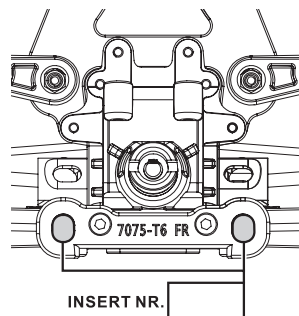
NAME RACE DATE
TRACK CITY/COUNTRY TRACK CONDITION

FRONT



INSERT NR.

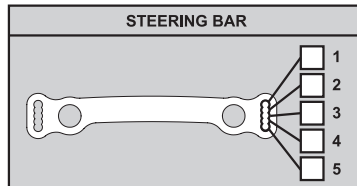
☐ ☐ ☐ ☐



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STEERING BAR



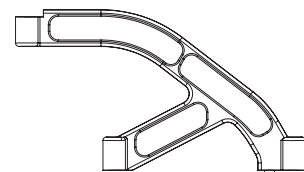
RIDE HEIGHT mm

SWAY BAR mm

CAMBER ANGLE °

TOE ANGLE °

☐ PLASTIC ☐ ALUM



FRONT SPINDLE CARRIERS CASTER

☐ 15° ☐ 17.5° ☐ 20°

SHOCK

FRONT

SHOCK LENGTH mm

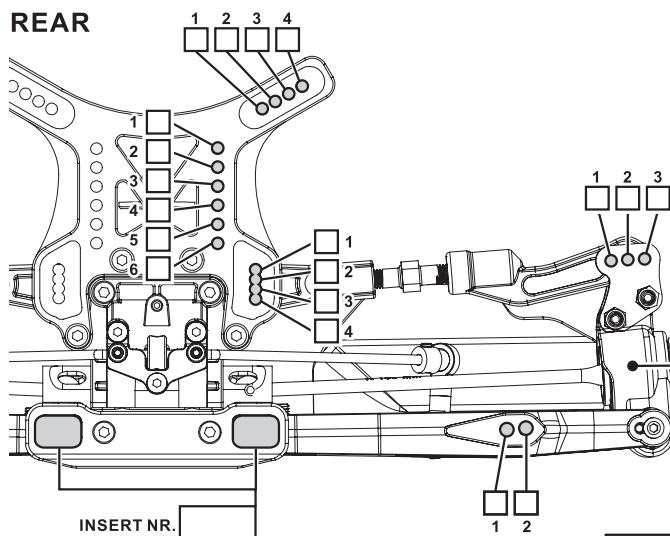
OIL wt.

PISTON

SPRING

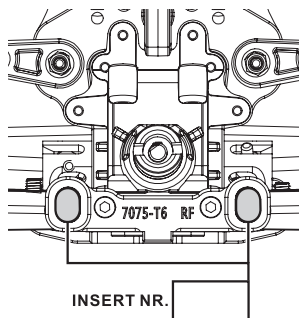


REAR



INSERT NR.

☐ ☐ ☐ ☐



INSERT NR.

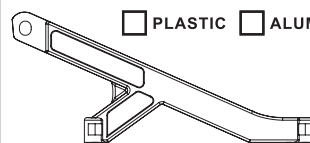
☐ ☐ ☐ ☐

RIDE HEIGHT mm

SWAY BAR mm

CAMBER ANGLE °

☐ PLASTIC ☐ ALUM

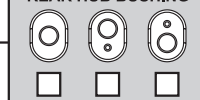


WHEEL HUB

☐ PLASTIC

☐ ALUM

REAR HUB BUSHING



SHOCK

REAR

SHOCK LENGTH mm

OIL wt.

PISTON

SPRING



WHEELBASE SHIMS

☐ 0mm ☐ 2mm

☐ 2.5mm ☐ 4.5mm

X5B PARTS LIST

Part No.	Description	Q'TY	Part No.	Description	Q'TY
A-17A	Brake Lever	2	X3-43	Diff. Case (F&R)	1
A-17B	Brake Rod	2	X3-46	Suspension Bracket Inserts	1set
A-34B	Stabilizer Ball End	2	X3-49	Body Post/Center Brace	1set
A-41A	6mm Ball	6	X3-50H	Plastic Rod End Hard	1set
A-47A	Ball Bearing 5x10x4	2	X3-52	Front Bumper / Rear MudGuard	1set
A-53A	Throttle Spring	2	X3-60A	Air Filter Foam	2
A-80A-BK	2mm Brake Adjust Nut (Black)	2	X3-60P	Air Filter Plastic Parts	1set
A-80B	Throttle Linkage Plastic	1set	X3.6-07	4x67.6mm Arm Shaft	2
C-27	Servo Fixing (Lay down)	1set	X3S-04	Diff. Cap Joint (Lightweight)	2
E-37	6mm Ball & Socket	6	X3S-16	Rear Upright 3.5mm	2
G-25	7mm Ball	6	X3S-27B	CNC Brake Disk	1
G-26	5x35 Turnbuckle	2	X3S-27C	CNC Brake Disk, Small	1
J-03A	P-6 O-Ring	2	X3S-44C	4x35mm Turnbuckle	2
J-20	Diff Bevel Gear Shim 13x16x0.2mm	4	X3S-44D	CNC Alum. Servo Saver Connecting Plate	1
J-33	Steering Plate Hex Screws	2	X3GT-40	Cup Joint For Planet Gear	2
J-45-BK	Muffler Stay Post (Black)	1	X3GT-71E	Fixing Pin	2
J-47D	Shock Shaft Dust Covers	4	X5-01	CNC 7075-3mm Lightweight Chassis	1
JS-06B	Bearing 4x8 Flange	2	X5-02	CNC 7075 Front Shock Tower	1
JS-14B	6x10 Ball Bearing	4	X5-03	CNC 7075 Rear Shock Tower	1
K-11A	Insert for Servo Saver	1set	X5-04	CNC 7075 Suspension Bracket, FR	1
L-26	3x36mm Turnbuckle	2	X5-05	CNC 7075 Suspension Bracket, FF	1
TM-29	Brake Link 2x52mm	2	X5-06	CNC 7075 Suspension Bracket, RF	1
TM-48	Stabilizer Ball End	8	X5-07	CNC 7075 Suspension Bracket, RR	1
X1-10H	Servo Saver Tube, Hard-Coated	1	X5-08	Alum.Angle Adjustable C-Hub Set	1set
X1-26-G	Alum. Wheel Hub.(Gold)	2	X5-09A	Steering Block Set	1set
X1-27	Knuckle Arm Bushing	4	X5-09B	Carbon Steering Block Arm Set	1set
X1-29	Front Stabilizer 2.0mm	1	X5-10	Alum. Swaybar Pin	2
X1-30	Rear Stabilizer 2.5mm	1	X5-11	Topdeck Carbon	1
X1-31	Shock Ball End Post/ One-Piece/ Top	4	X5-12	Carbon Center Diff Top Plate	1
X1-49	Muffler Stay	1	X5-15	Front CVD Drive Shaft 92.5mm	2
X1S-52C	CNC Brake Cam, Long	1	X5-16	Servo Saver Post	2
X1S-52D	CNC Brake Cam, Short	1	X5-17	5x50mm Turnbuckle	2
X1S-55A	Servo Saver, Plastic	1set	X5-18	Steering King Pin	4
XT-22	Plastic Shock Parts Set	1	X5-19	Anti-roll Bar Collet	2
XT-30B	Fuel Tank Post	1set	X5-20	Servo Saver Spring	1
XT-31	Plastic Center Diff. Mount	1set	X5-21	Gear Case	1set
X3-01	Spiral Bevel Gear 43t	1	X5-22	Lower Arm Front	1set
X3-02	Spiral Bevel Gear 13t	1	X5-23	Lower Arm Rear	1set
X3-03	Diff. Gear 10Tx4, 20Tx2	1set	X5-24	Receiver/ Battery Box	1set
X3-06	Drive Shaft Insert, 2.5 x12.8 Pin	4	X5-25A	Rear Hub L, R	1set
X3-07	CVD Wheel Axle	2	X5-25B	Carbon Rear Plates	2
X3-26	Brake Spring	4	X5-26	Wing Mount	1set
X3-31	7x8.5mm Ball & Socket	4	X5-27	Diff. Cap Joint (Lightweight)	2
X3-32	7x12mm Ball & Socket	4	X5-28	Fuel Tank	1
X3-34	2.5x11.8 Pins	10	X5-29	X5B Clear Body	1
X3-35	2.5 x12.8 Pins	10	X5-30	Steering Servo Saver Alum.	1
X3-37-BK	Engine Mount L.R (Black)	1set	X5-31	Side Guard L,R	1set
X3-38	Diff Gasket 31x20x0.3	3	X5-32	Steel Spur Gear 46t	1
X3-39	4x8mm Engine Mount Screws	4	X5-33	16mm Alum. Aeration Shock Cap	2
X3-40	4x10 Round Head Set Screw	4	X5-34	Center Drive Shaft. 95mm	1

[illegible]

NOTES





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