

# ISHIMA

RACING

# RAVE

M1.0S

M1.0R

M1.0RR



INSTRUCTION MANUAL

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## I. SAFETY PRECAUTIONS

This radio controlled model is NOT a toy. It is recommended that children under the age of 16 are under adult supervision when operating an RC model.

It is important that you read and respect the instructions of this handbook. You alone are responsible for this model's safe operation, therefore you should take enough safety precautions prior to operating this model.

Check all the screws before using, use Nut-Lock if necessary. Check the screws and motor position every tank refill. Only use special nitro fuel for RC car models.

Never drive the car without the airfilter or with a dirty or defective airfilter.

## II. RAVE MODEL DIMENSIONS

Length	485mm
Width	305mm
Height	160mm
Weight	3400g

## III. SYMBOLS USED IN THE MANUAL



Cut off excess with a wire cutter



Apply grease



Apply NutLock to the indicated screw or nut



Apply cyano glue (instant glue).



Apply silicon oil (look closely at the bottom of the page which type of oil is needed!)



Apply special air-filter oil



Assemble left and right sides the same way



Assemble as many times as specified

### METRIC SIZE



Nylstop nut



E-clip



Set Screw



R/H Screw (Round Head screw)



F/H Screw (Flat Head screw)

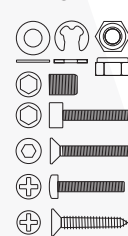
NBR O-Ring set  
RVB-S189



E-Clip bag: RVB-S141



Screwbag  
RVB-S141



## BAGS

Bags are only delivered with RAVE R & RAVE RR kit version

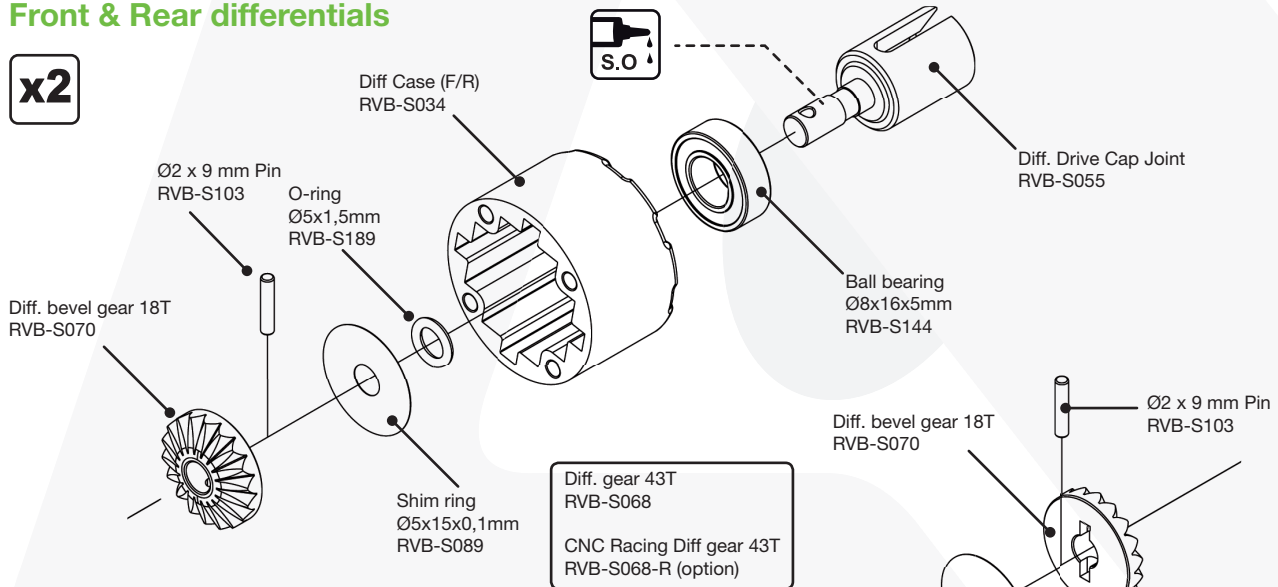
# IV. ASSEMBLY OF YOUR MODEL

## FRONT & REAR DIFFERENTIALS

**BAG A**

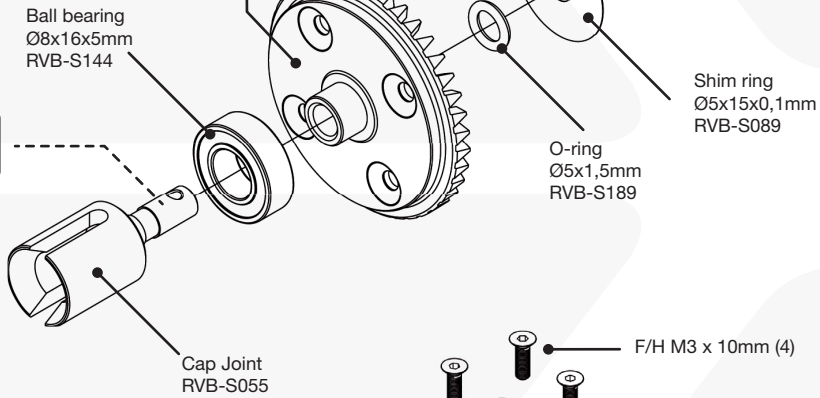
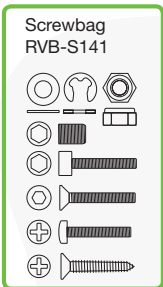
### Front & Rear differentials

**x2**



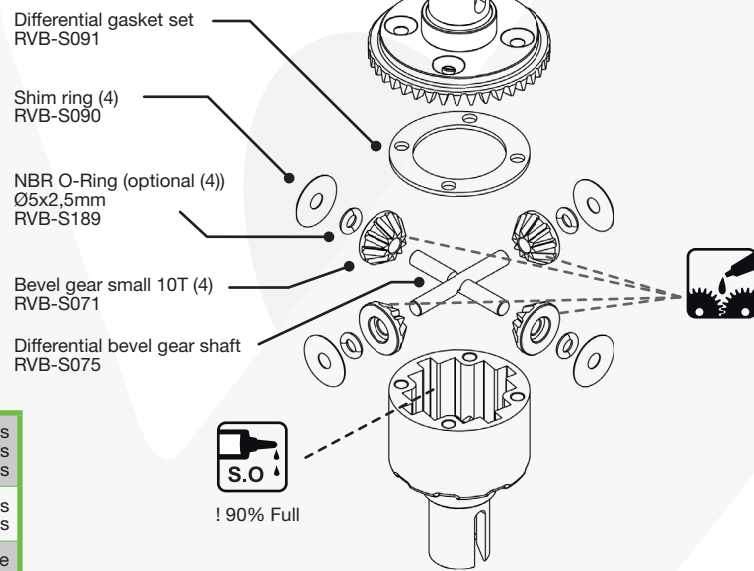
### Gear differential

**x2**



### Front & Rear diff. assembly

**x2**



Only use special RC silicone oil

FRONT DIFF.	More steering	use 2500cps
	Standard	use 5000cps
	Less steering	use 10000cps
CENTER DIFF.	Standard	use 5000cps
	Quick acceleration	use 10000cps
REAR DIFF.	Standard	use 1000cps or grease
REAR DIFF	Competition	use 5000cps use 10000cps

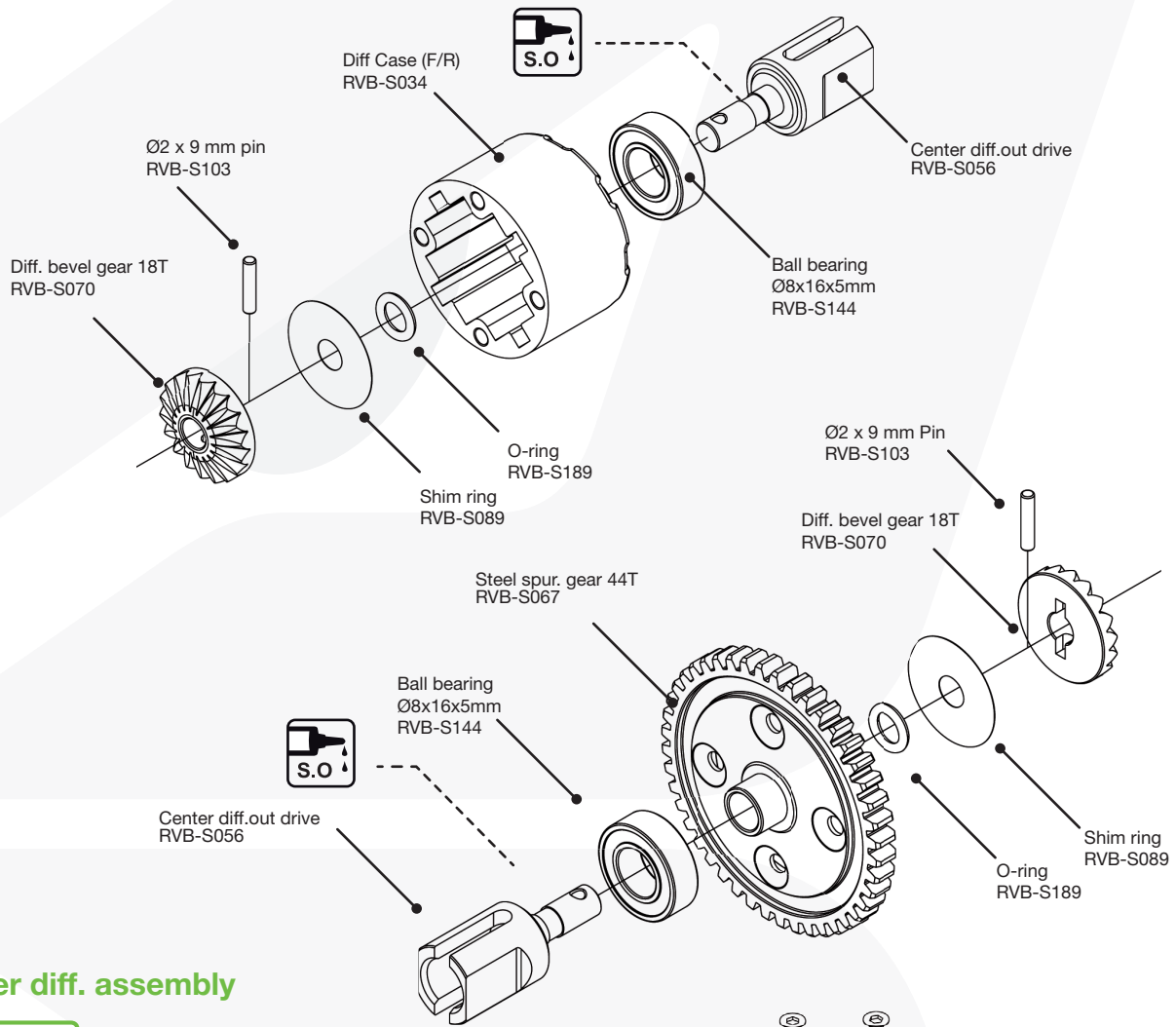


! 90% Full

# CENTER DIFFERENTIAL

# BAG B

## Center diff.



## Center diff. assembly

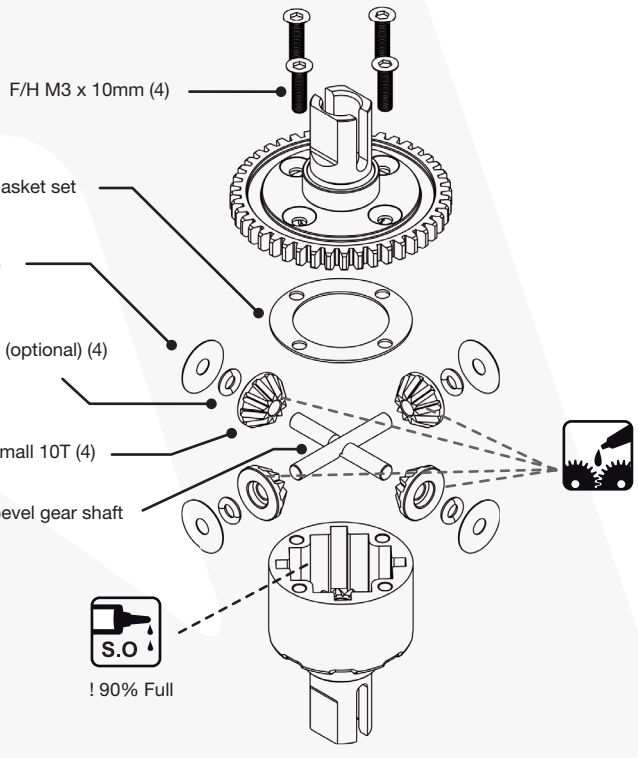
**Screwbag RVB-S141**

**NBR O-Ring set RVB-S189**



Only use special RC silicone oil

FRONT DIFF.	More steering	use 2500cps
	Standard	use 5000cps
	Less steering	use 10000cps
CENTER DIFF.	Standard	use 5000cps
	Quick acceleration	use 10000cps
REAR DIFF.	Standard	use 1000cps or grease
REAR DIFF	Competition	use 5000cps
		use 10000cps



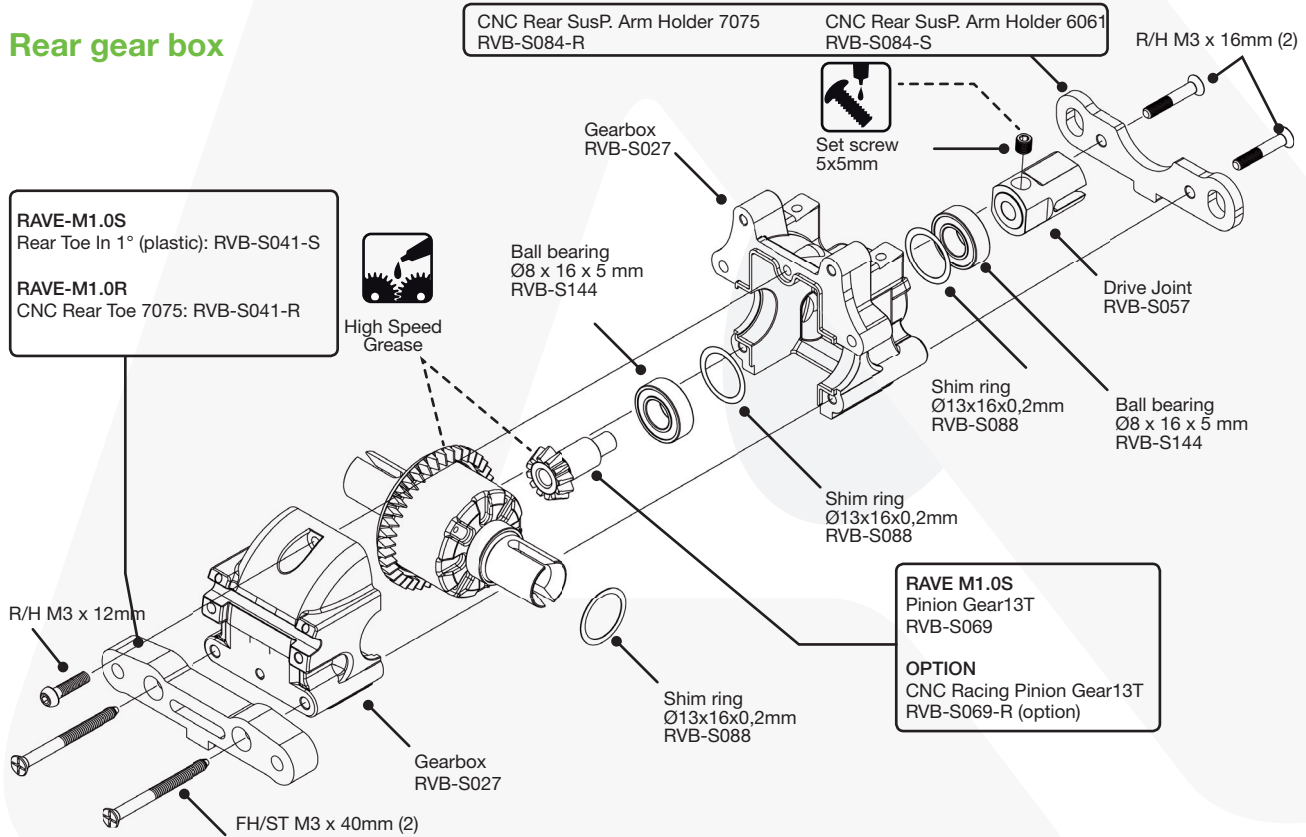
! 90% Full



## ASSEMBLY OF REAR GEARBOX

**BAG C**

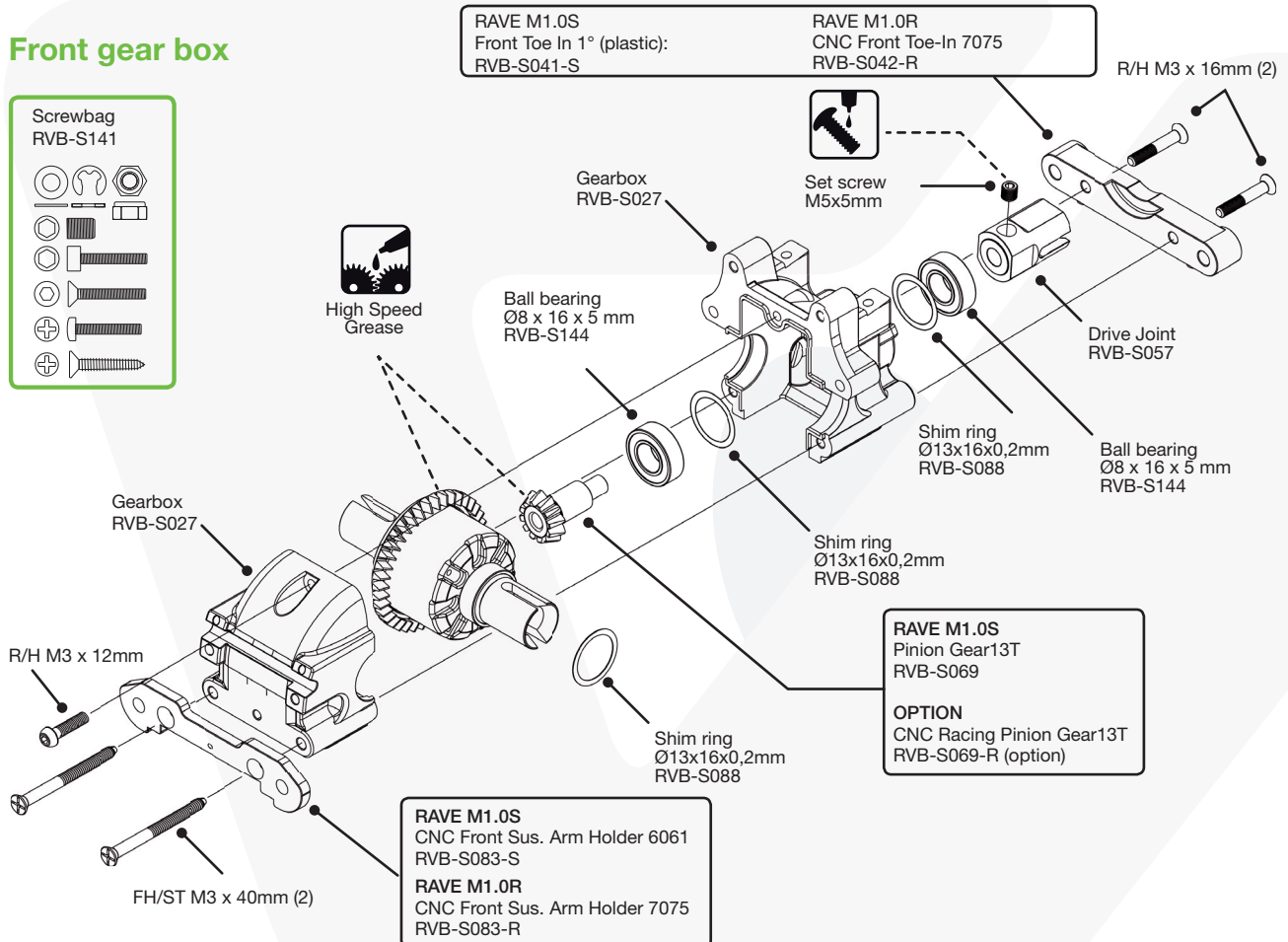
### Rear gear box



## ASSEMBLY OF FRONT GEARBOX

**BAG D**

### Front gear box



# ASSEMBLY OF FRONT SHOCK TOWER

**BAG E**

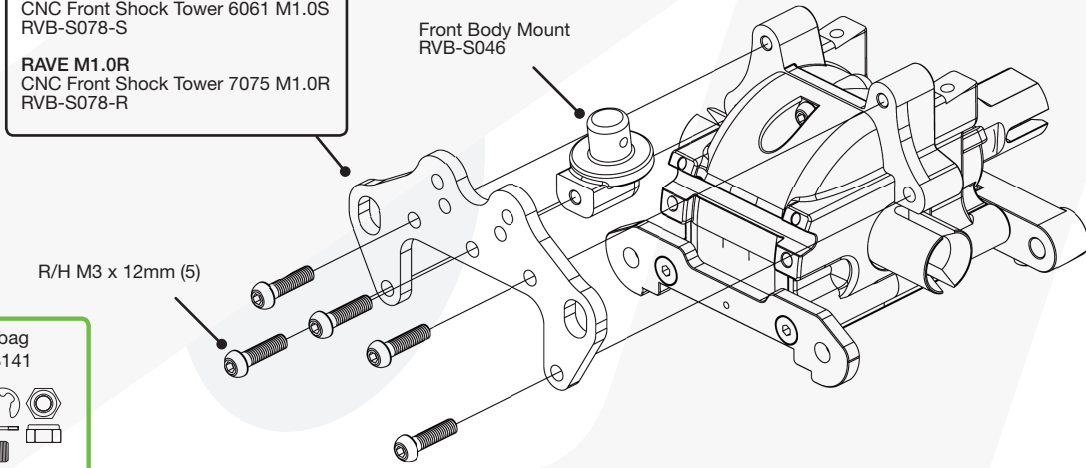
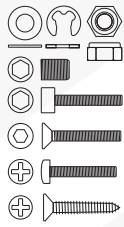
**RAVE M1.0S**  
CNC Front Shock Tower 6061 M1.0S  
RVB-S078-S

**RAVE M1.0R**  
CNC Front Shock Tower 7075 M1.0R  
RVB-S078-R

Front Body Mount  
RVB-S046

R/H M3 x 12mm (5)

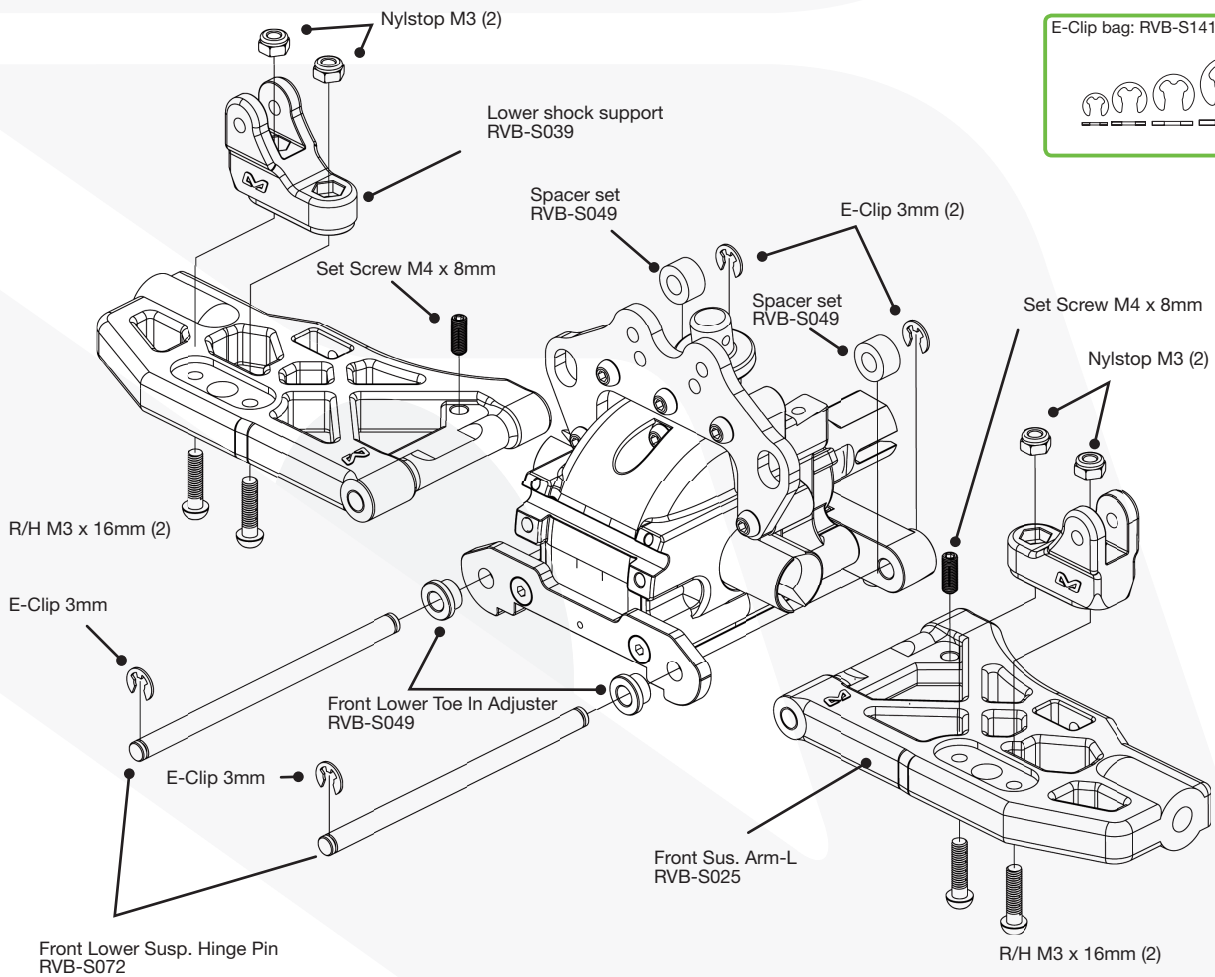
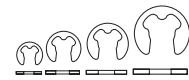
Screwbag  
RVB-S141



# ASSEMBLY OF FRONT SUSPENSION ARMS

**BAG E**

E-Clip bag: RVB-S141

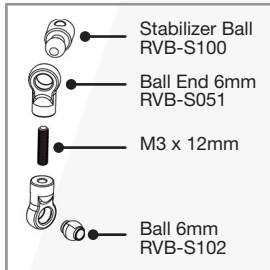


## ASSEMBLY OF THE FRONT STABILIZER

**BAG F**

### Front Sway Bar

**x2**



Front Sway Bar Ø2,4mm RVB-S107

Set screw (2)  
M3 x 5mm

F/H M3 x 8mm (2)

Set screw  
M3 x 3mm

Front Sway Bar (option)  
2.2mm : RVB-S105  
2.3mm : RVB-S106  
2.4mm : RVB-S107

Make sure that the sway bar moves freely!

R/H M3 x 16mm

Set screw  
M3 x 3mm

R/H M3 x 16mm

Sway Bar Plate (\*)  
RVB-S104

## ASSEMBLY OF THE FRONT SUSPENSION PLATE

**BAG F**

R/H M3 x 8mm (4)

Front Upper Susp. Plate  
RVB-S080

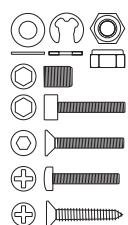
R/H M3 x 12mm (2)

RAVE M1.0S  
Front Upper Susp. Hinge Pin  
Holder Plastic: RVB-S043-S

OPTION  
CNC Front Upper Susp. Hinge  
Pin Holder 7075: RVB-S043-R

Nylstop M3 (4)

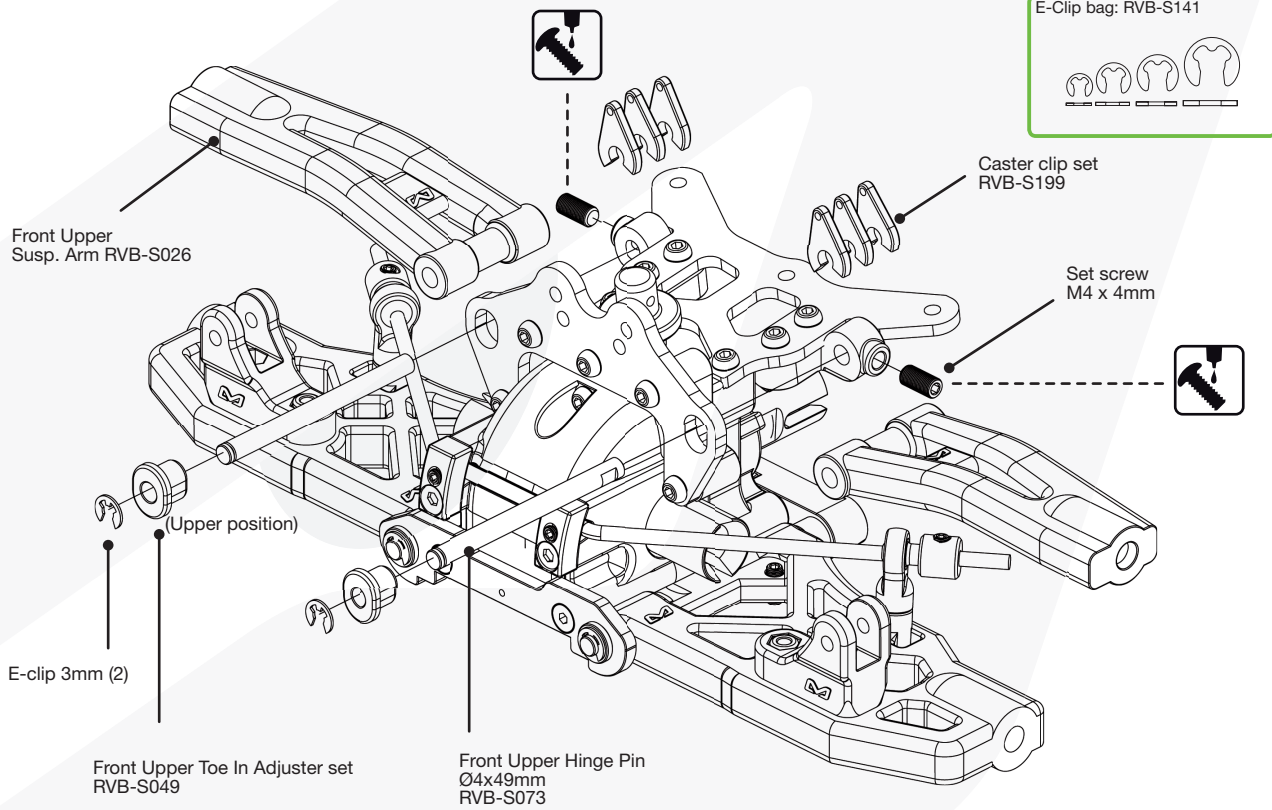
Screwbag  
RVB-S141





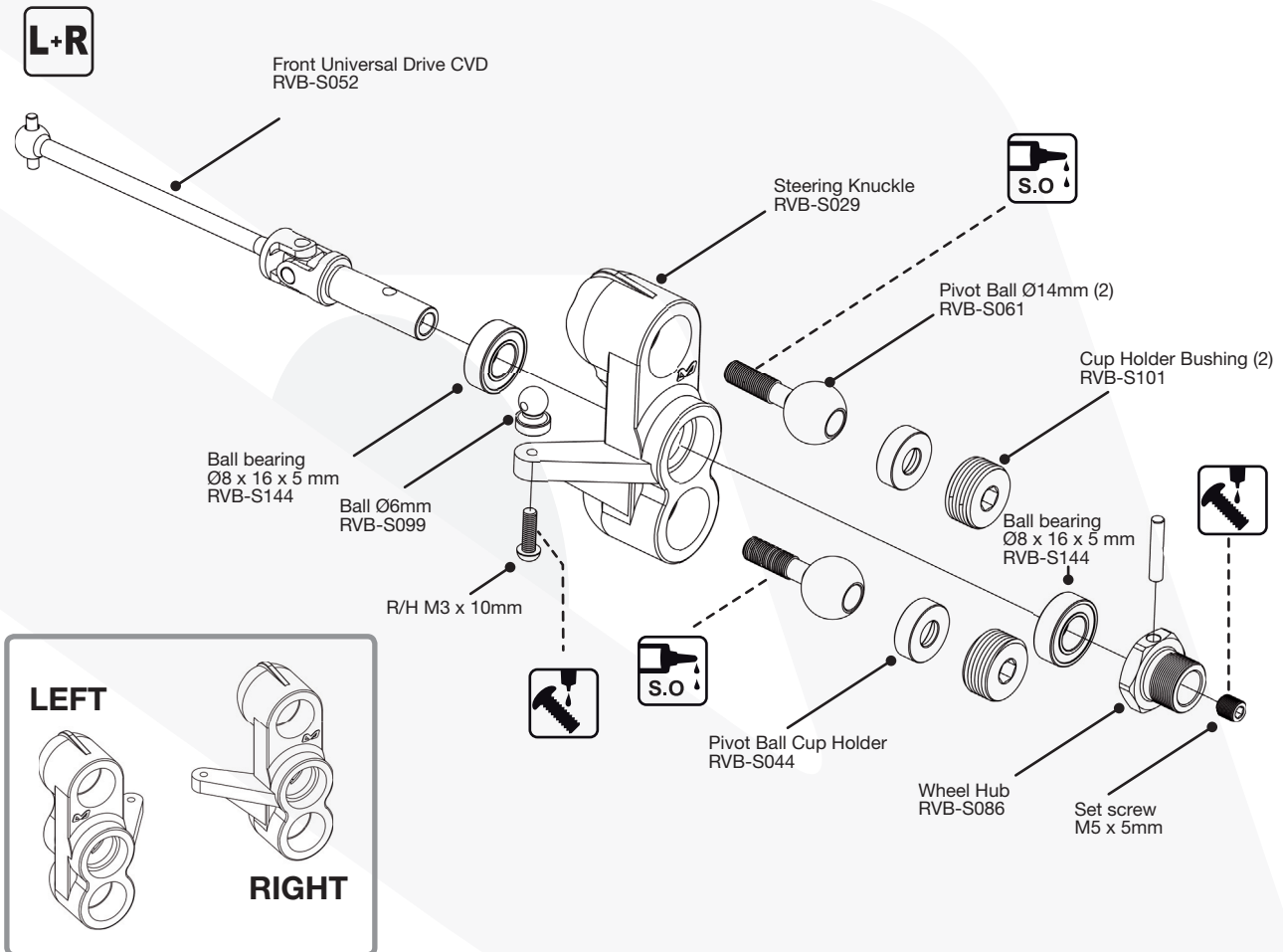
# ASSEMBLY OF THE FRONT SUSPENSION ARMS

# BAG G

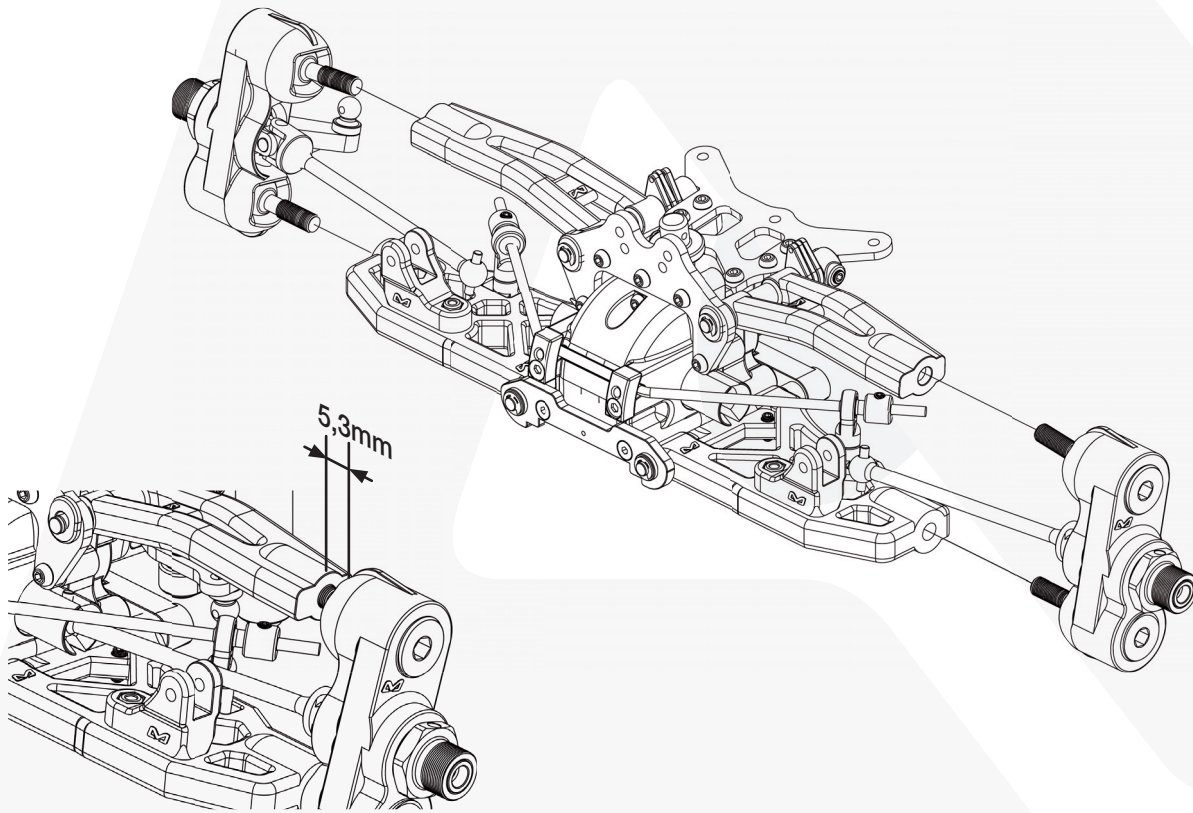


# ASSEMBLY OF THE STEERING KNUCKLES

# BAG H



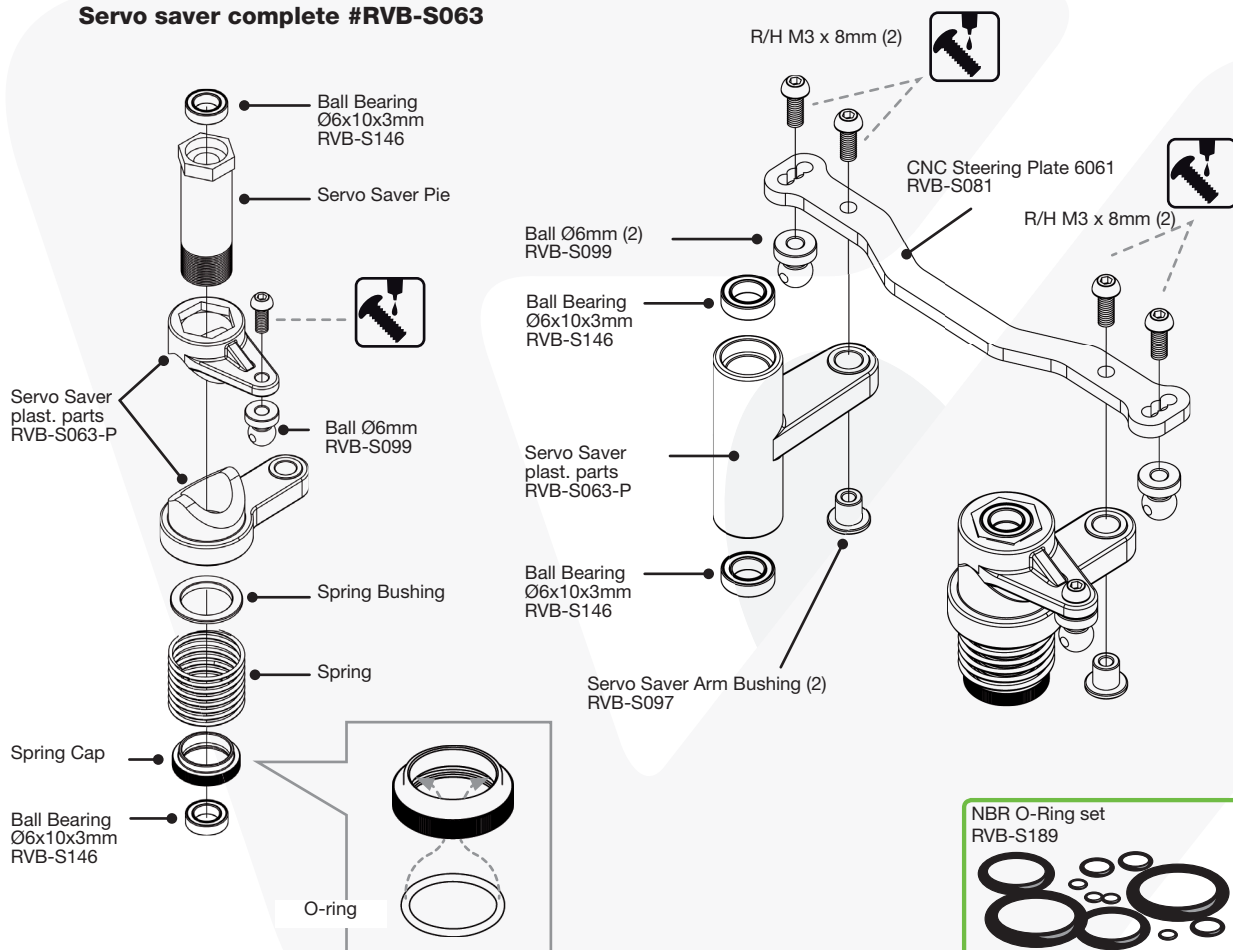
## ASSEMBLY OF THE FRONT STEERING SYSTEM



## ASSEMBLY OF THE SERVO SAVER

**BAG I**

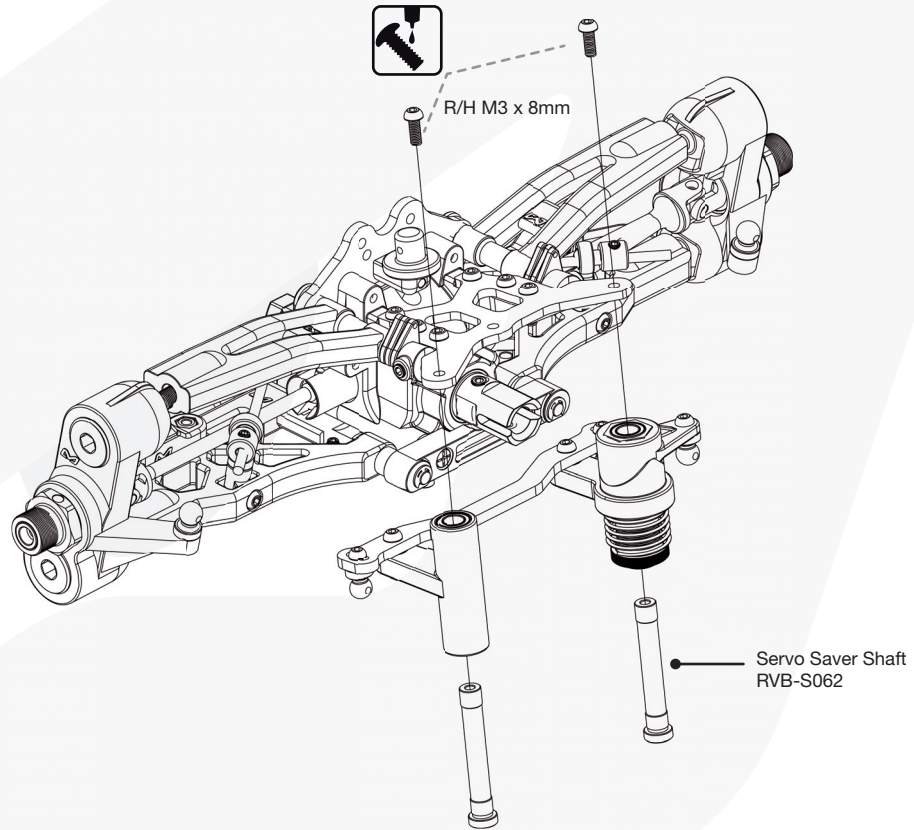
### Servo saver complete #RVB-S063



# INSTALLING THE SERVO SAVER

# BAG I

- Screwbag  
RVB-S141
- 

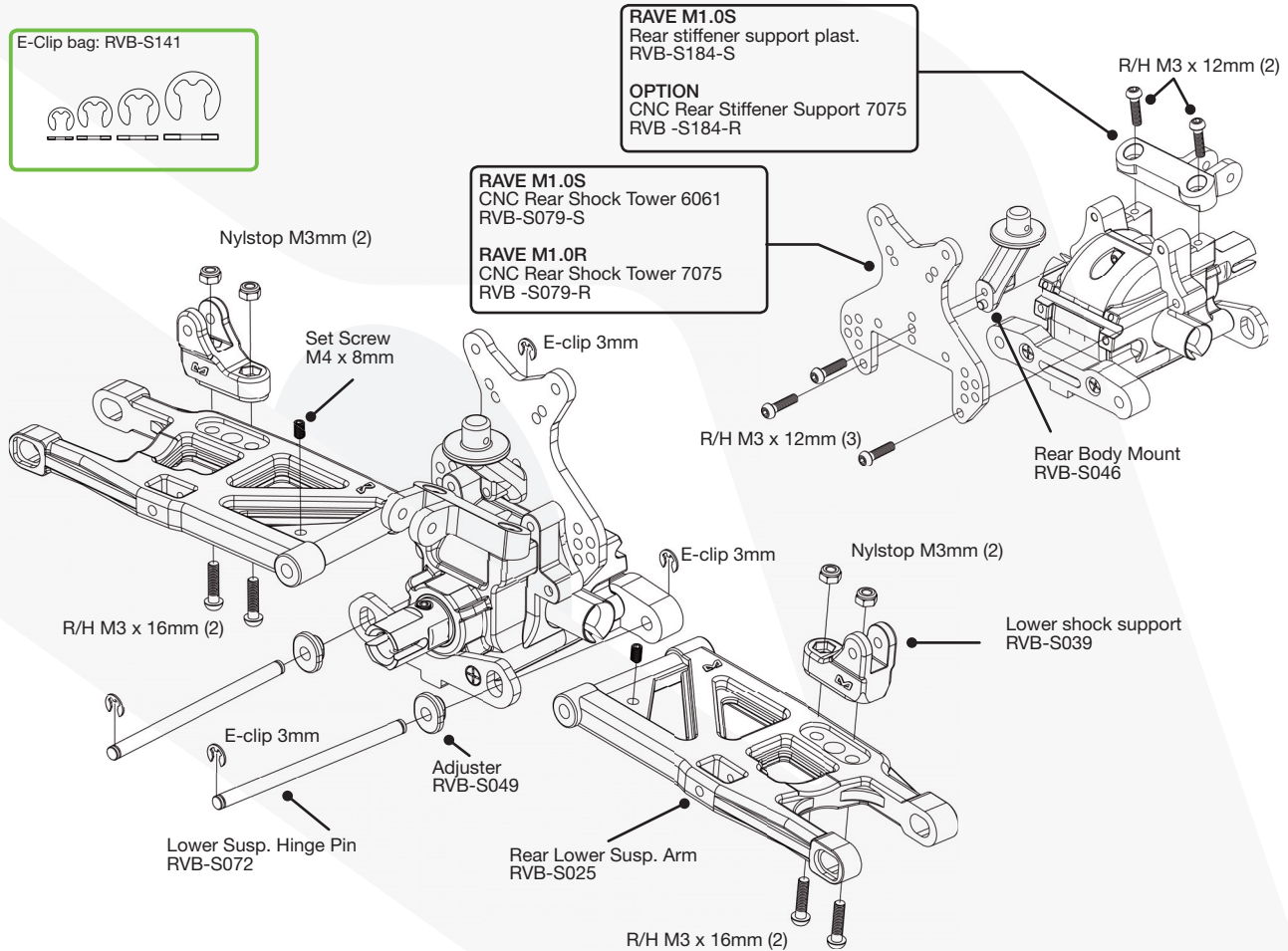


# ASSEMBLY OF THE REAR SUSPENSION

# BAG J

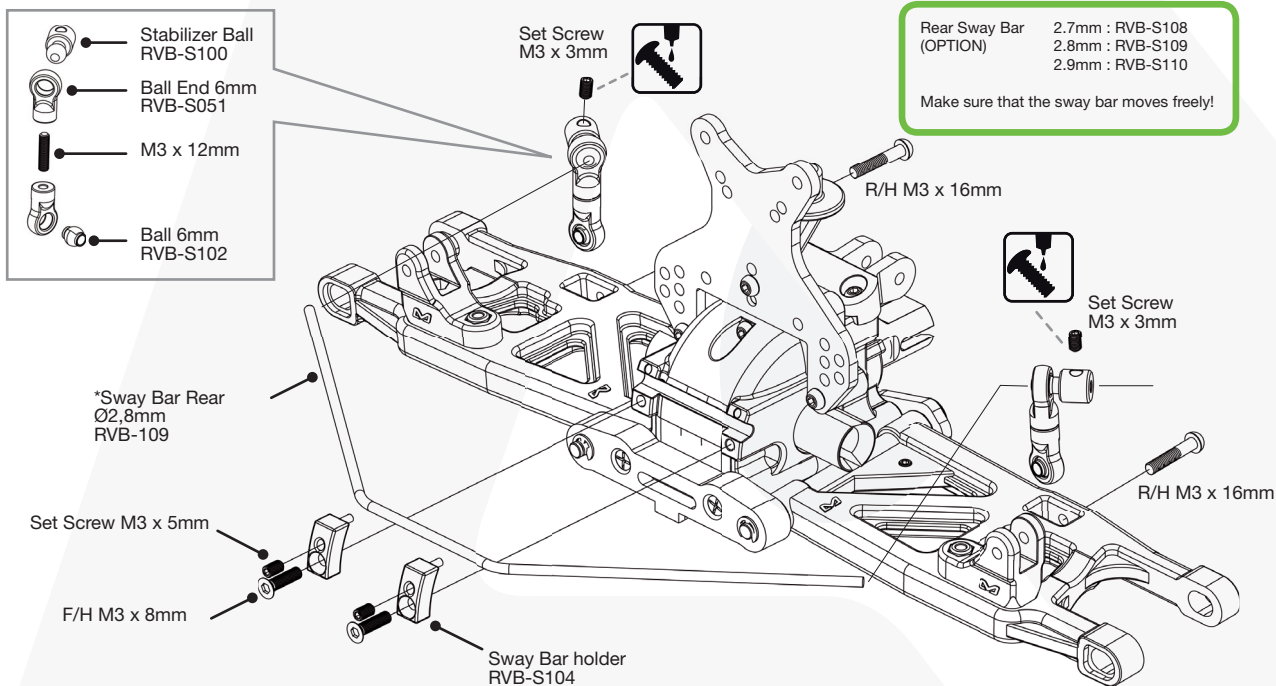
- E-Clip bag: RVB-S141
- 

- RAVE M1.0S  
Rear stiffener support plast.  
RVB-S184-S
- OPTION  
CNC Rear Stiffener Support 7075  
RVB-S184-R



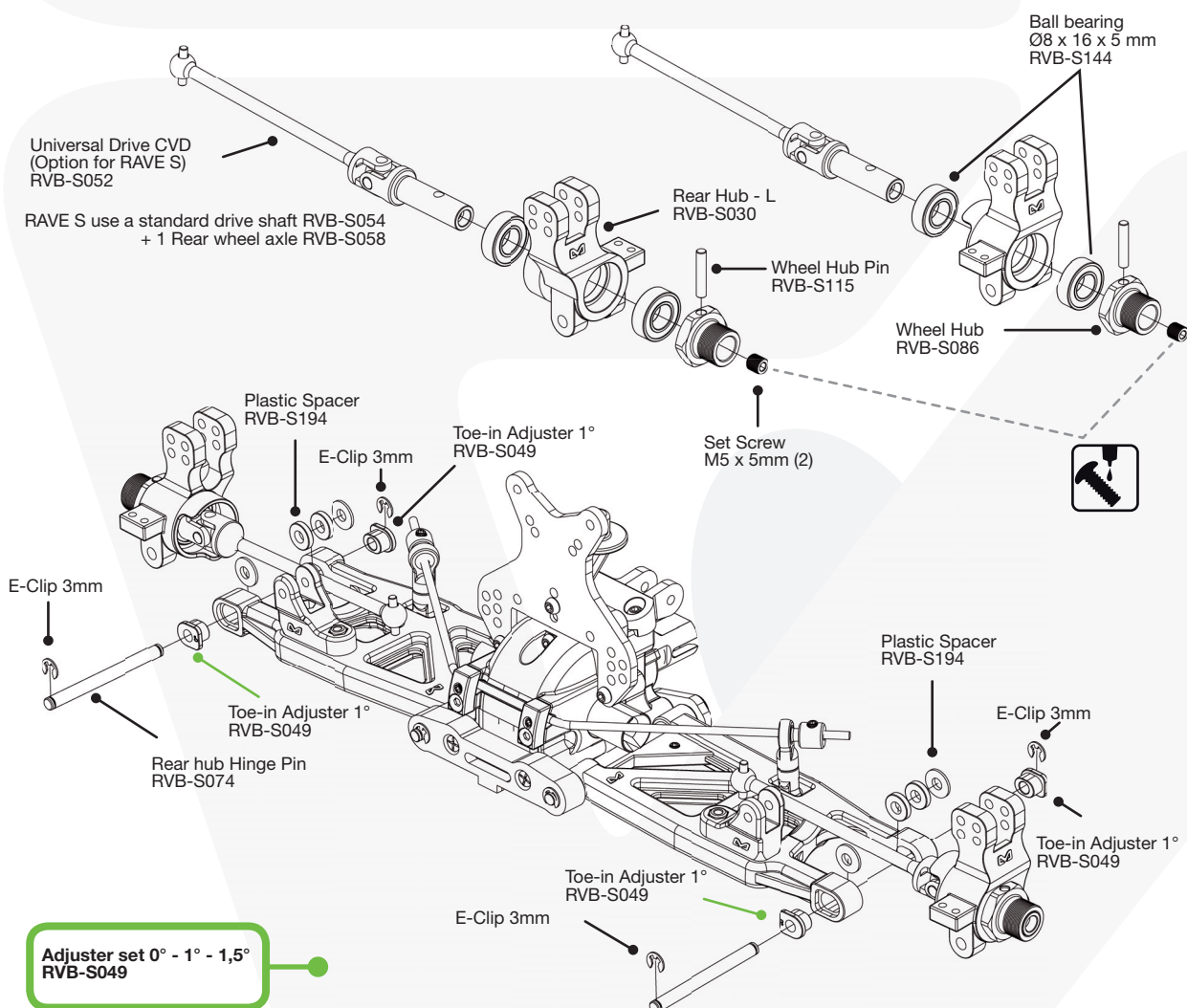
## REAR STABILIZER

## BAG K



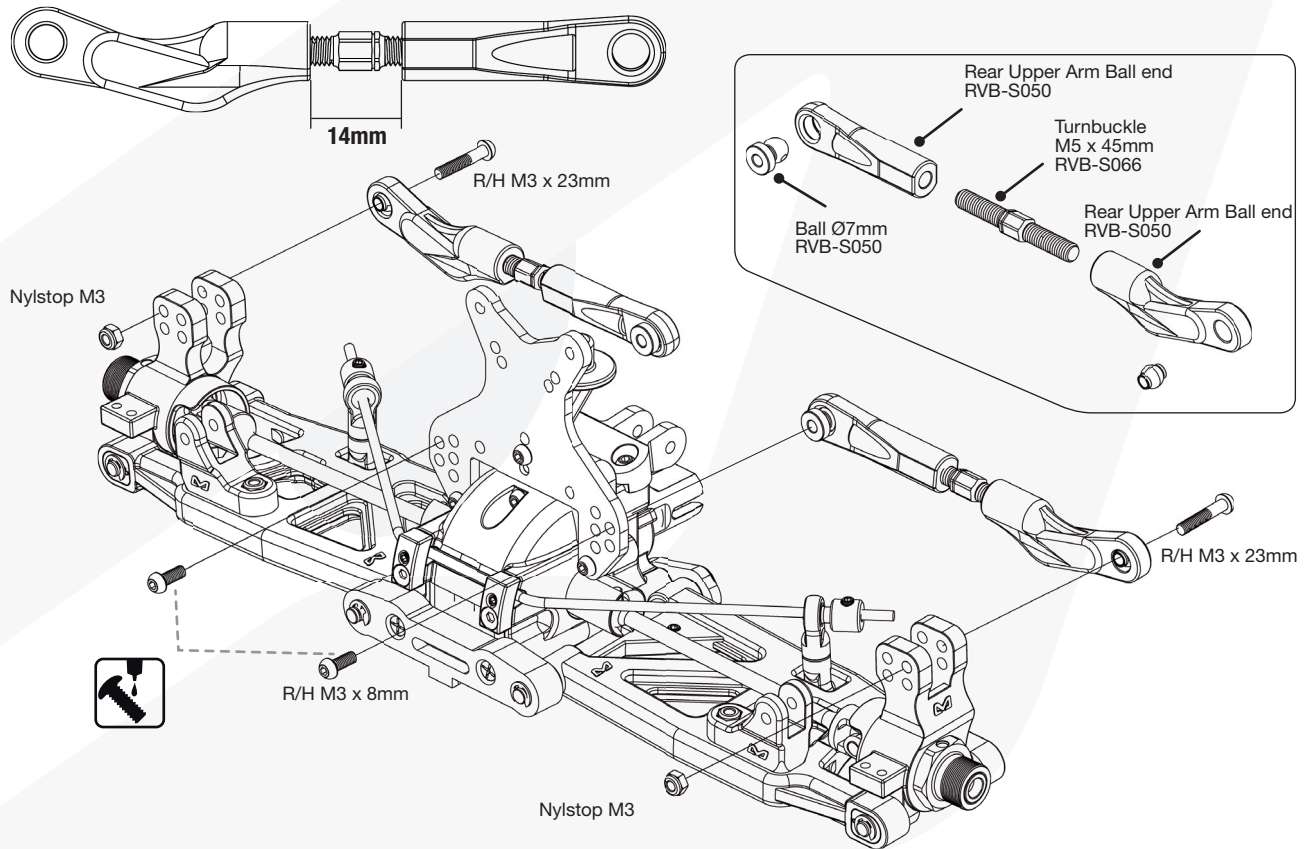
## REAR SUSPENSION

## BAG L



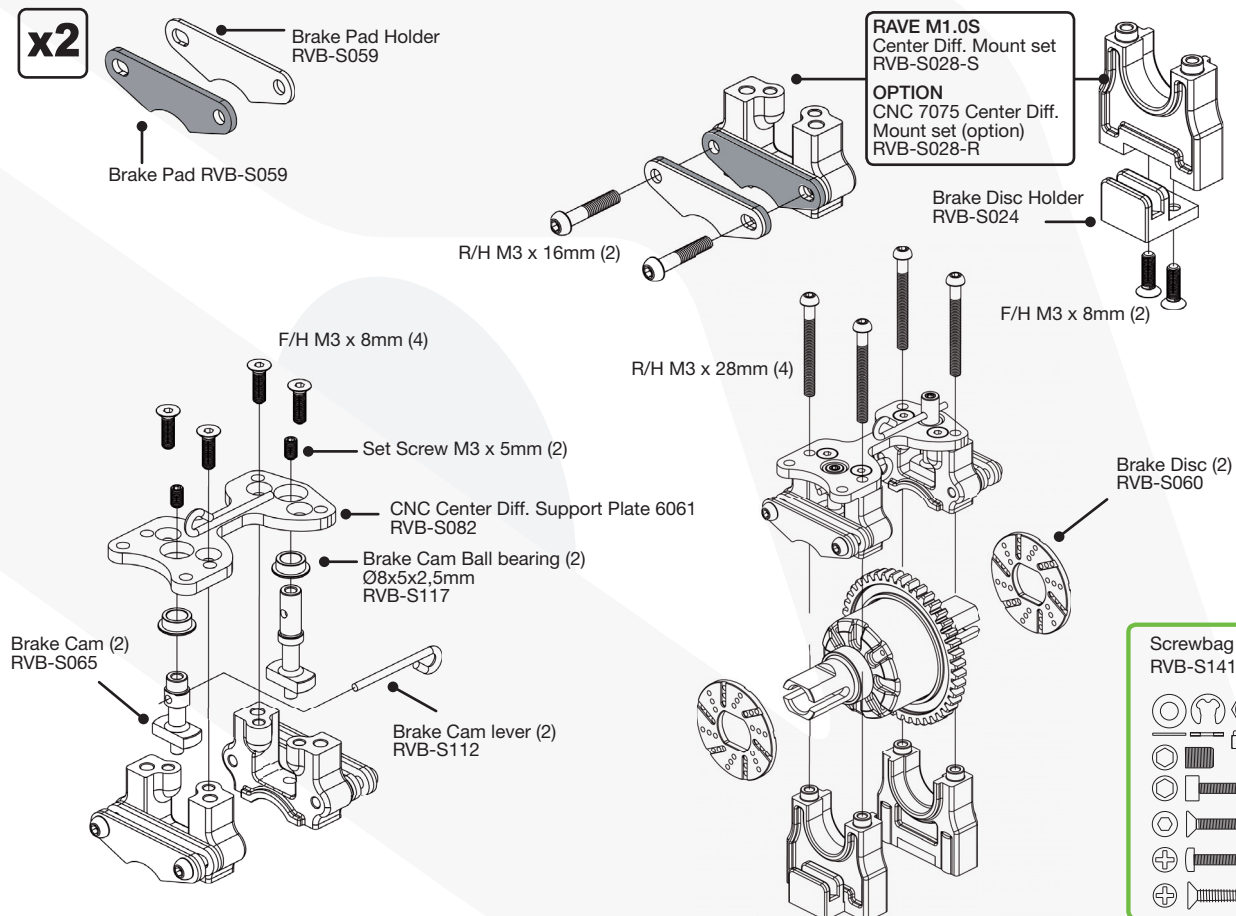
## REAR SUSPENSION

## BAG M



## CENTER DIFFERENTIAL

## BAG N

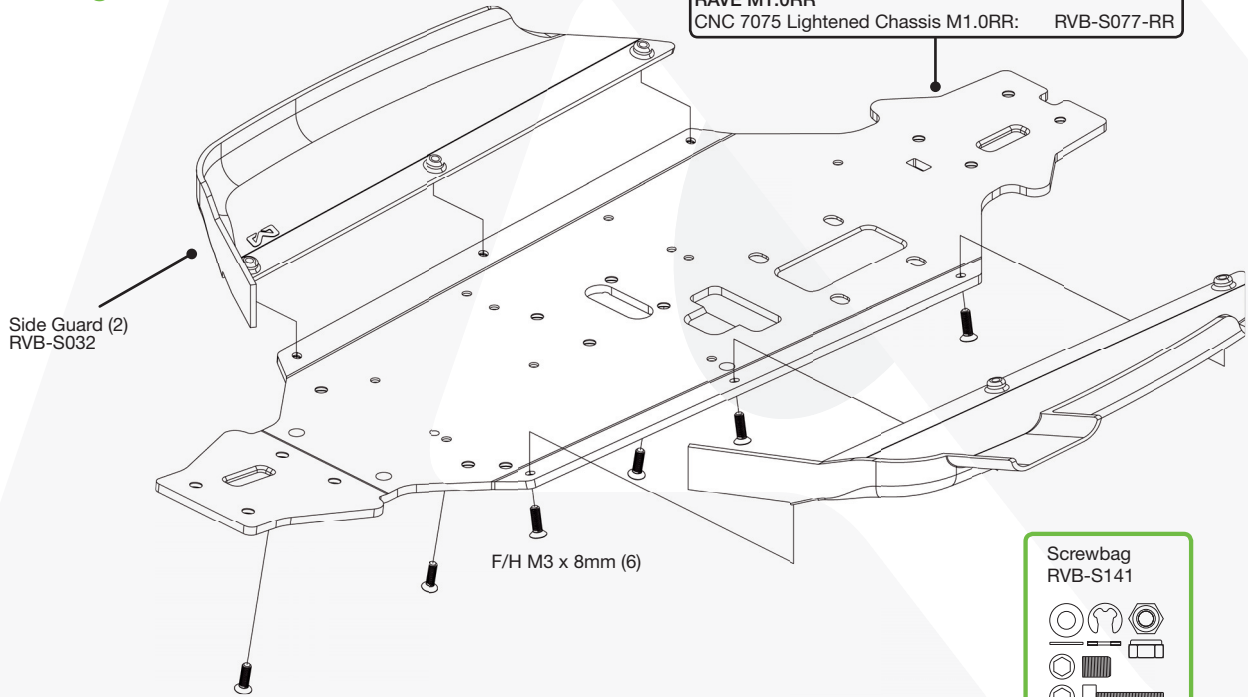


# ASSEMBLY OF THE DRIVE TRAINS ON THE CHASSIS

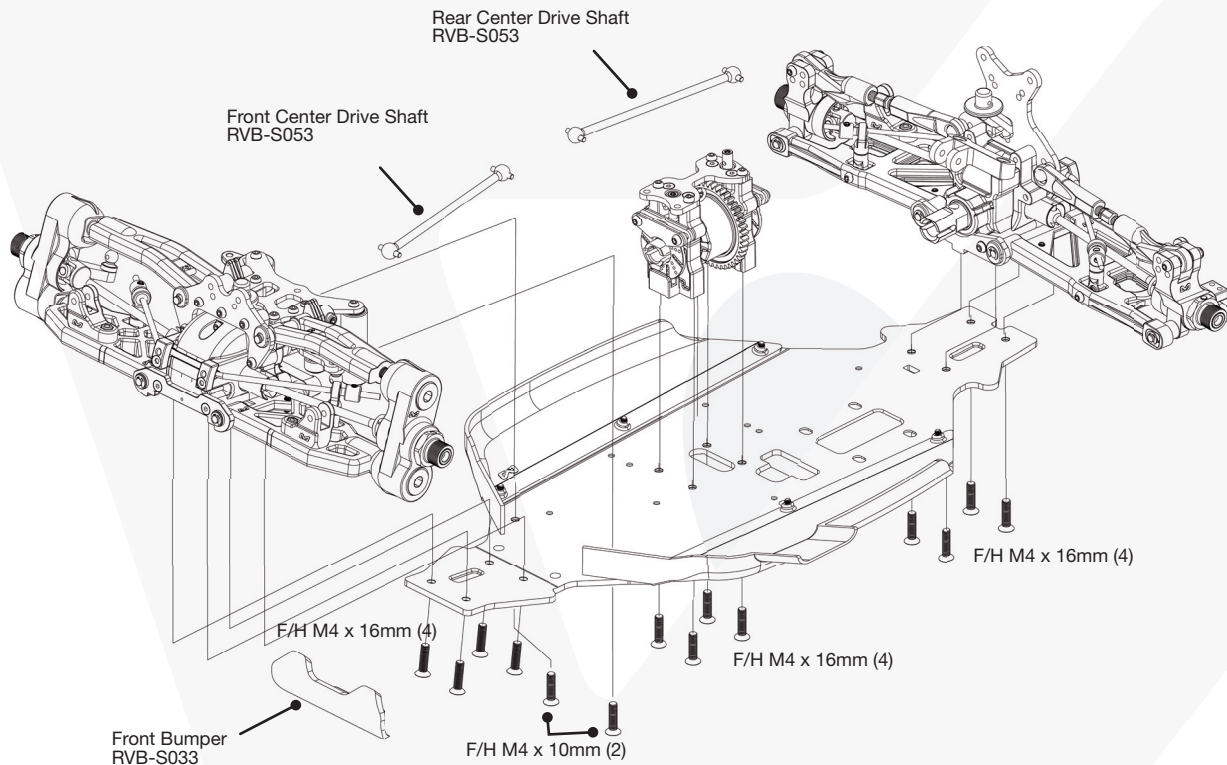
# BAG 0

## Left & Right Side Guard

RAVE M1.0S	
CNC Chassis M1.0S:	RVB-S077-S
RAVE M1.0R	
CNC 7075 Chassis M1.0R:	RVB-S077-R
RAVE M1.0RR	
CNC 7075 Lightened Chassis M1.0RR:	RVB-S077-RR



## Front drive train + Center differential + Rear drive train



# ASSEMBLY OF THE CHASSIS STIFFENERS

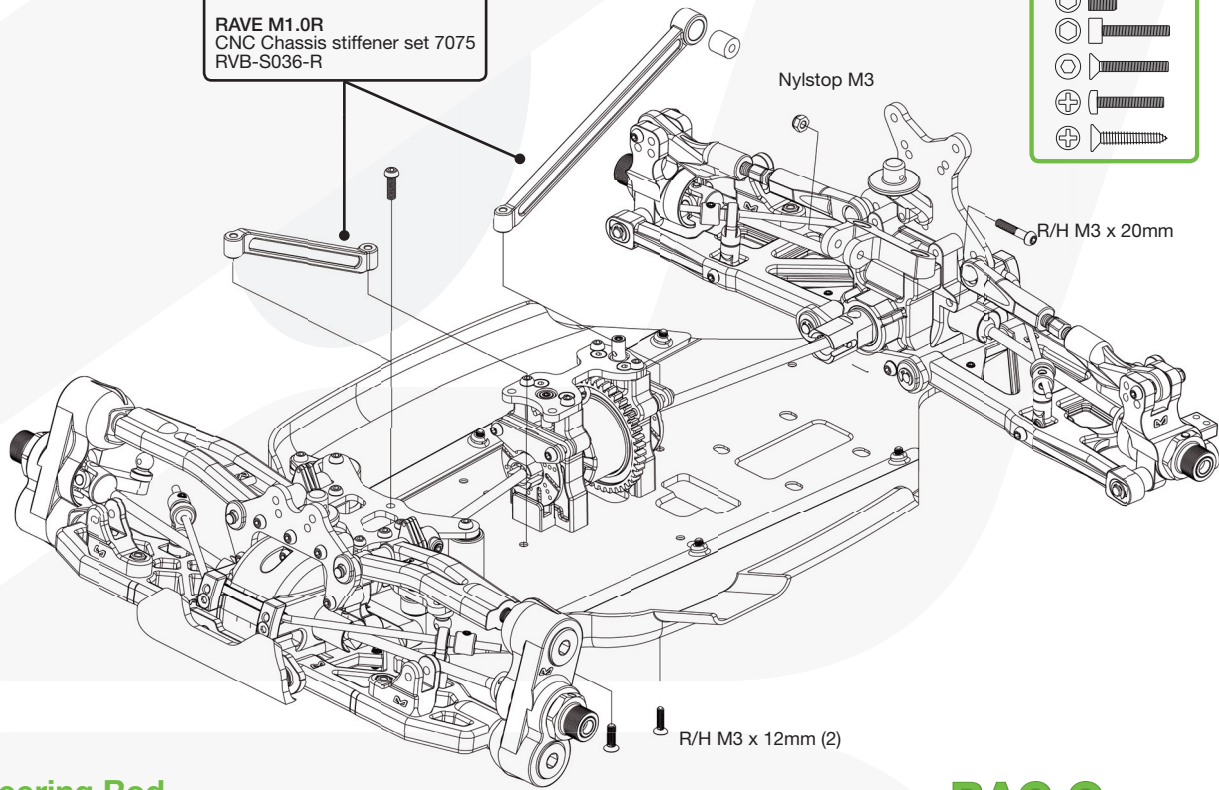
# BAG P

## FR & RE Chassis stiffeners

RAVE M1.0S  
Chassis stiffener set (plastic)  
RVB-S036-S

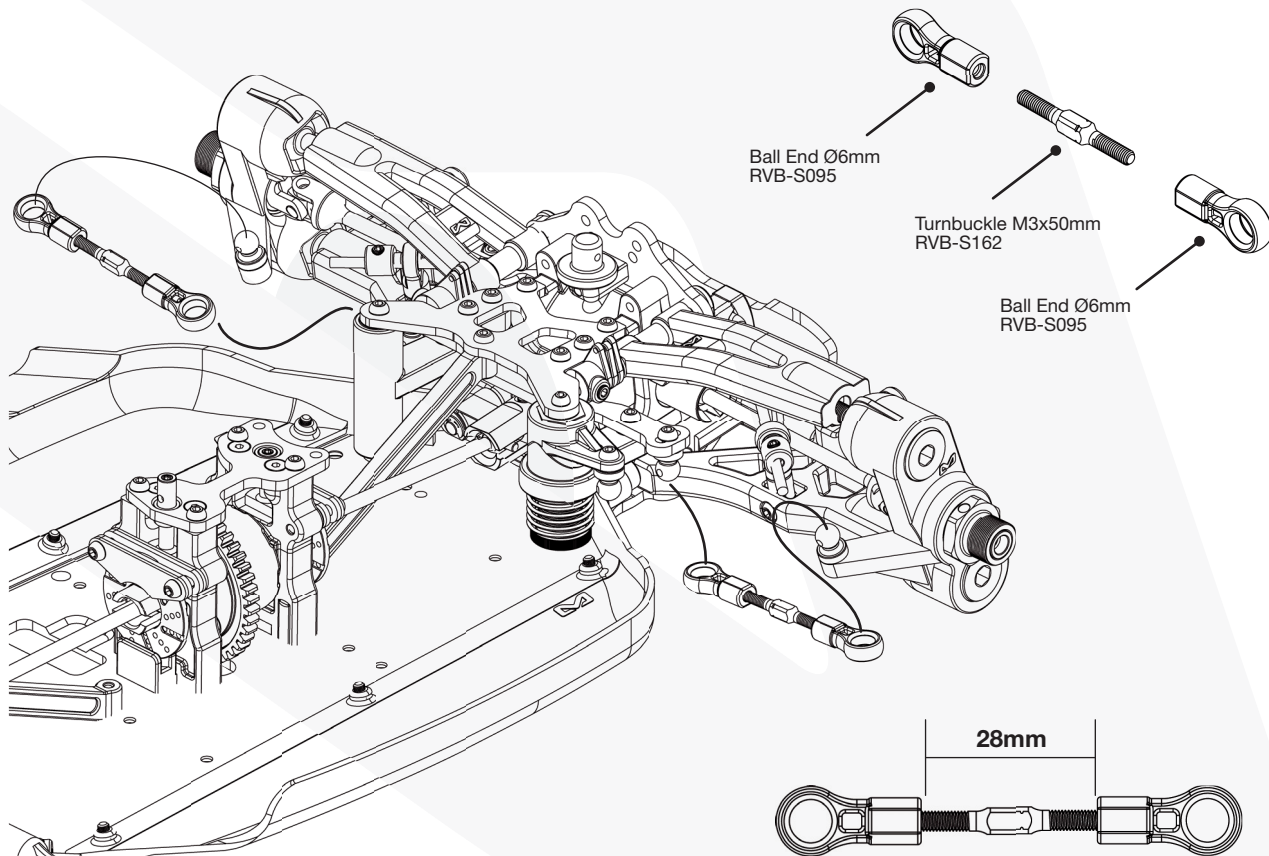
RAVE M1.0R  
CNC Chassis stiffener set 7075  
RVB-S036-R

Screwbag  
RVB-S141



## Steering Rod

# BAG Q

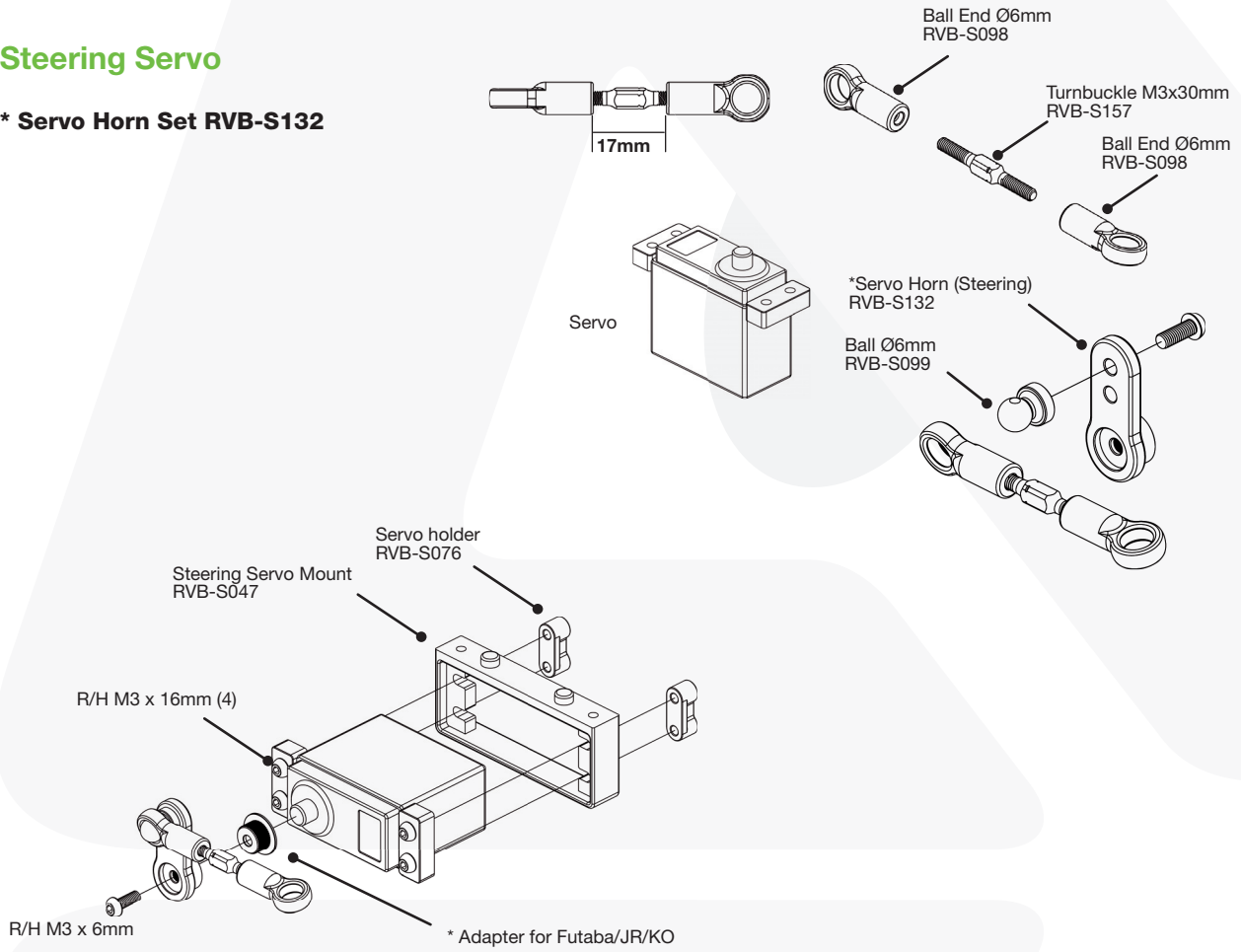


# ASSEMBLY OF THE RADIO PLATE

# BAG R

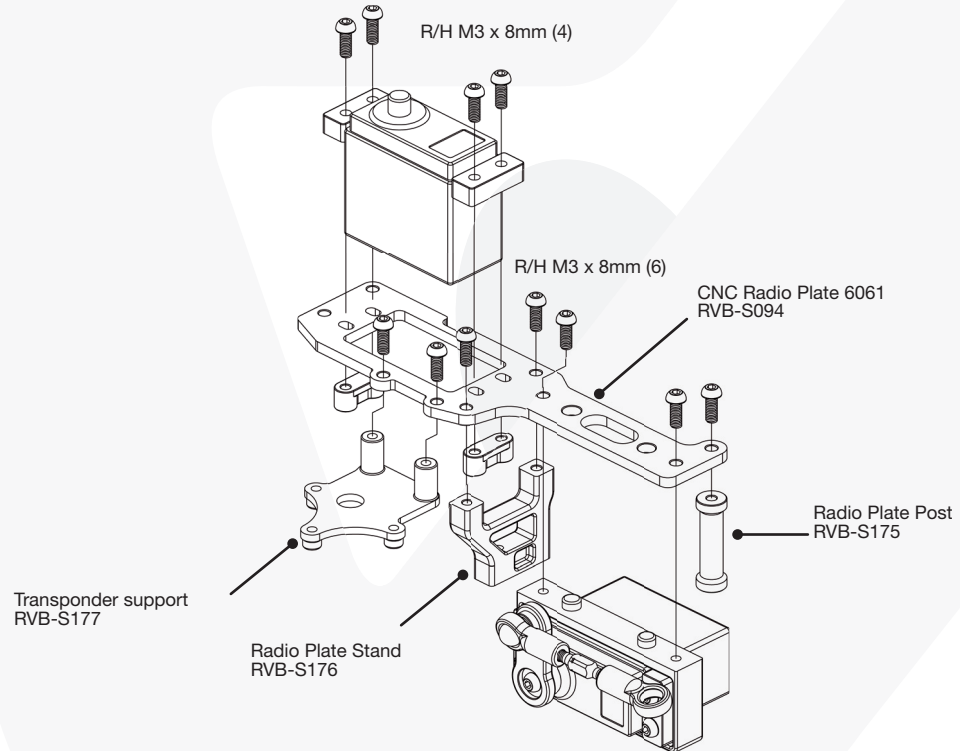
## Steering Servo

\* Servo Horn Set RVB-S132



## Assembly of the radio Plate

Screwbag  
RVB-S141

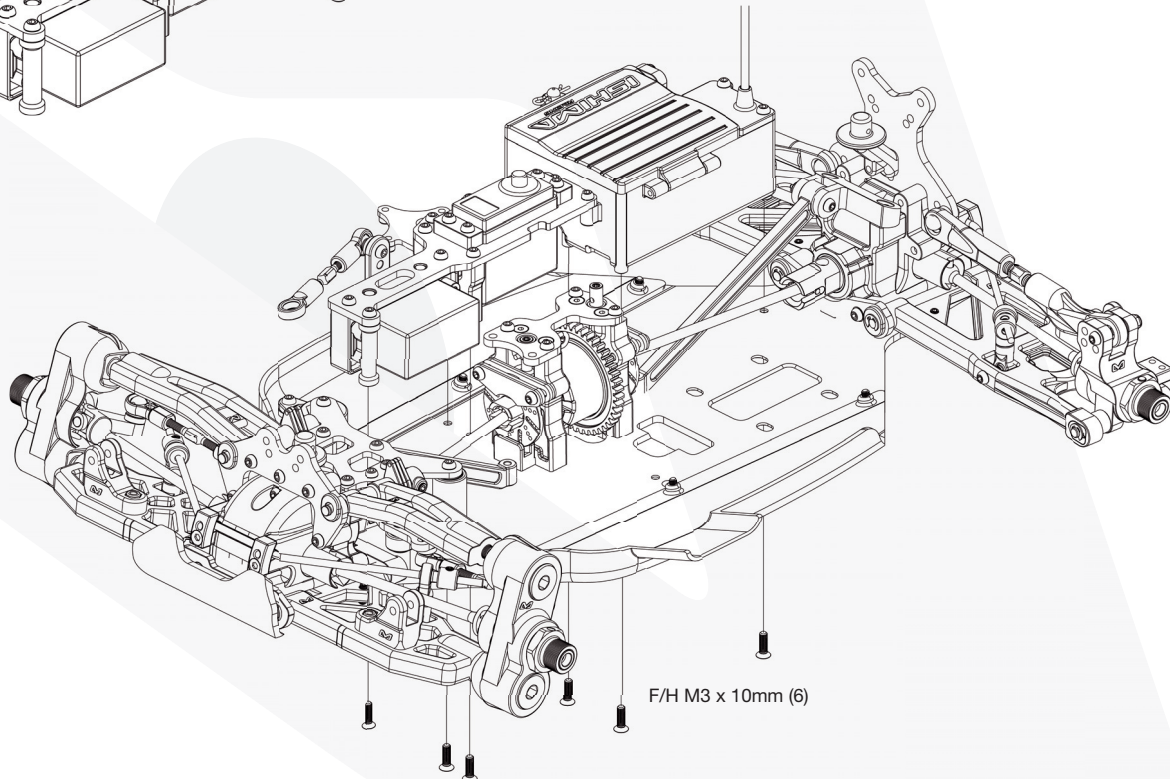
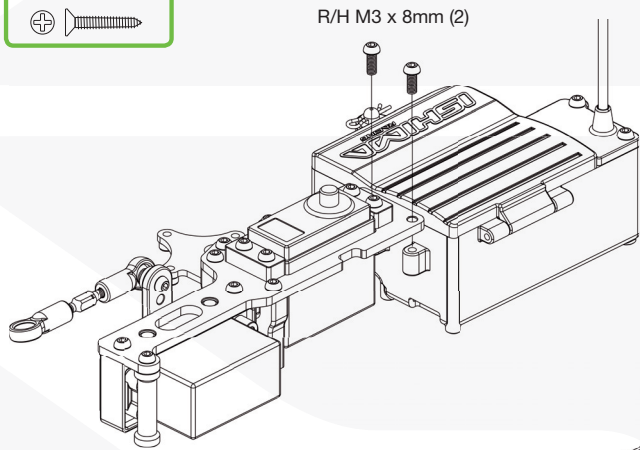
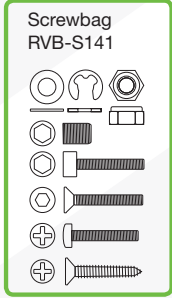
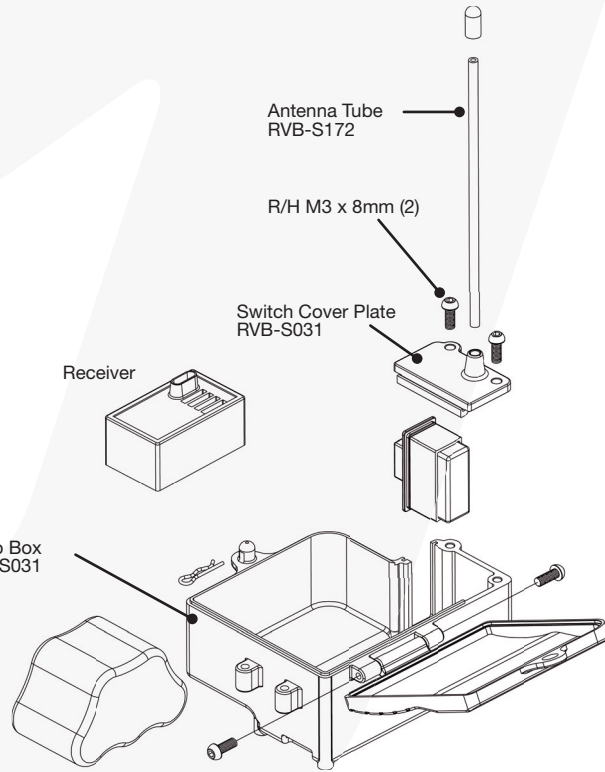
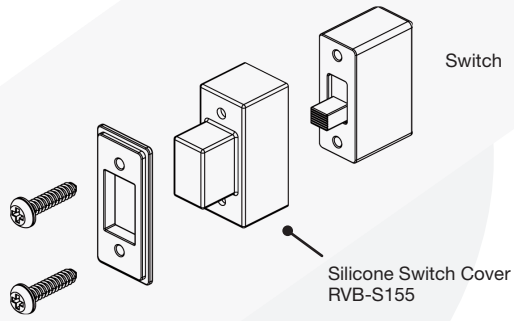




# ASSEMBLY OF THE RADIO PLATE

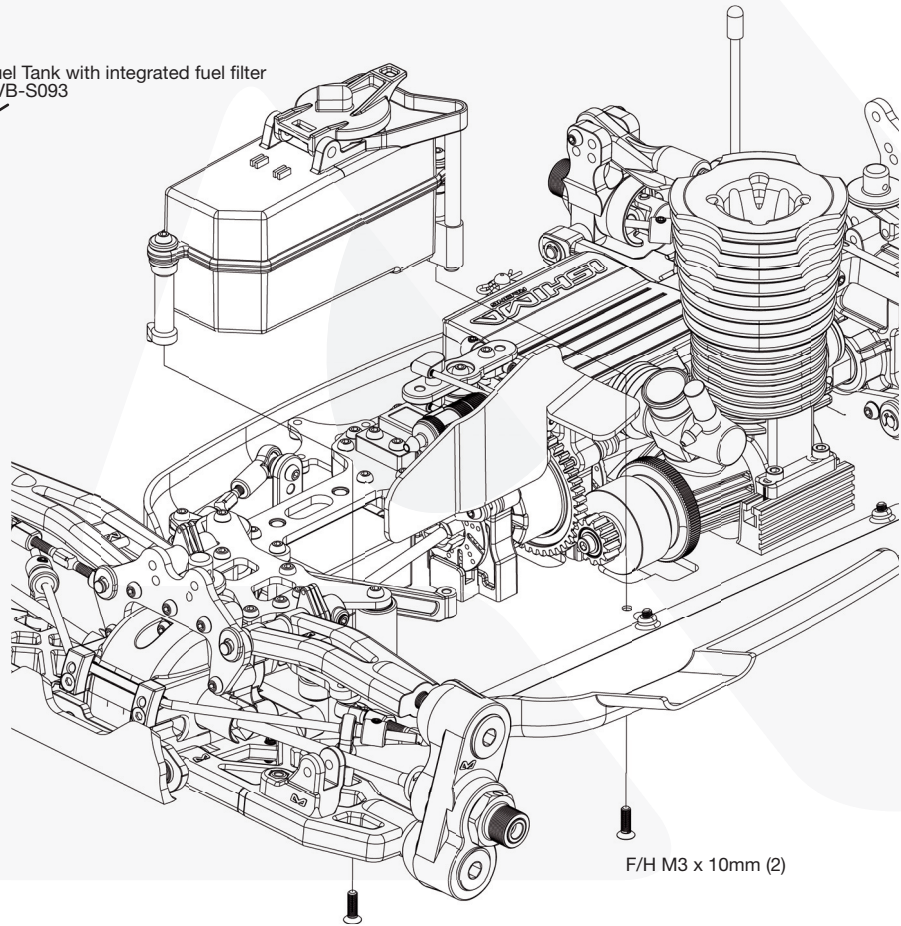
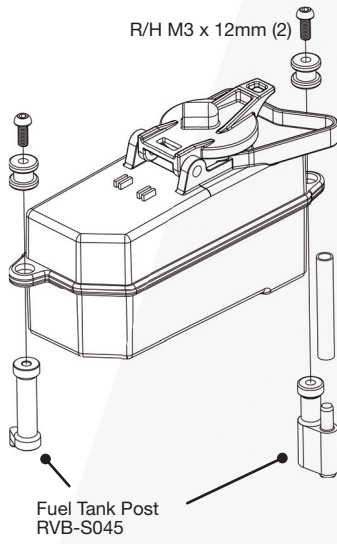
# BAG S

## Receiver Box Set



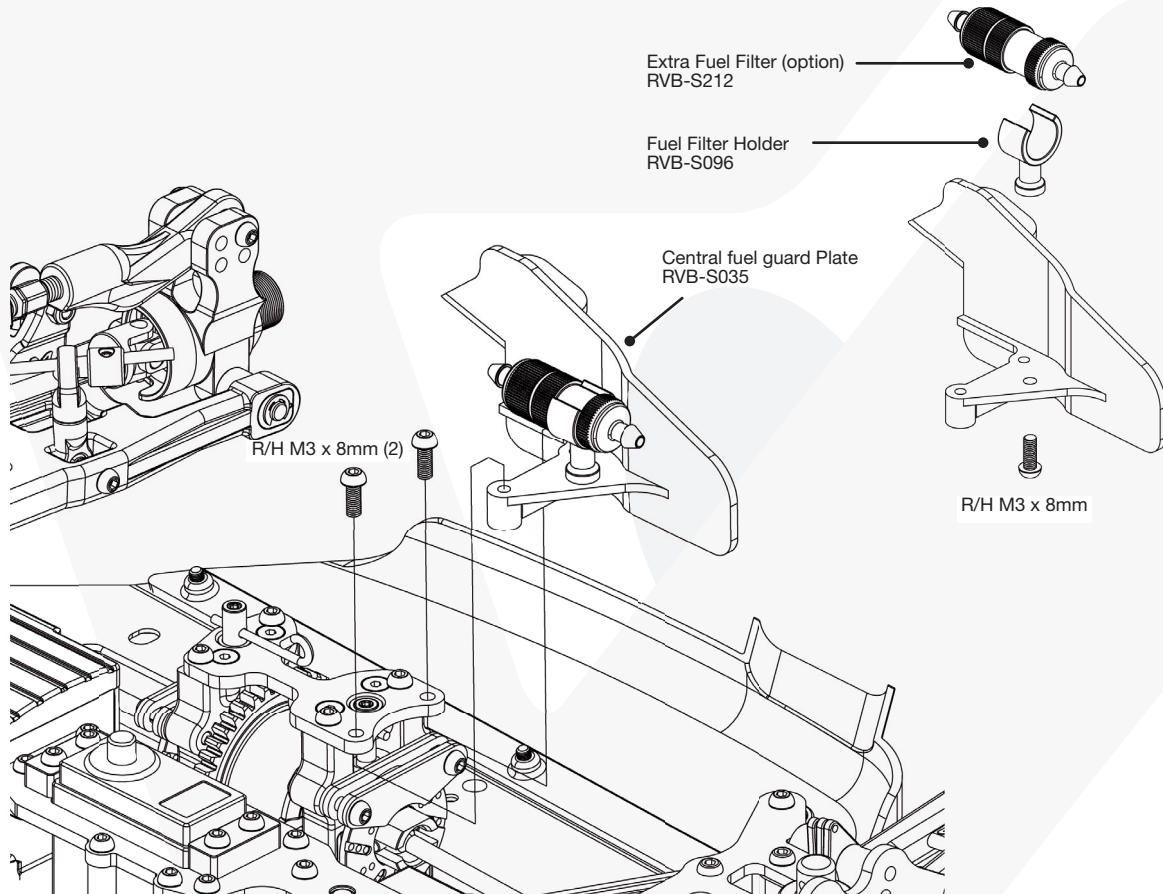
# THE FUEL TANK

# BAG T



Screwbag  
RVB-S141

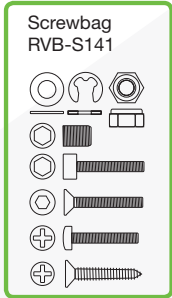
## Fuel Guard



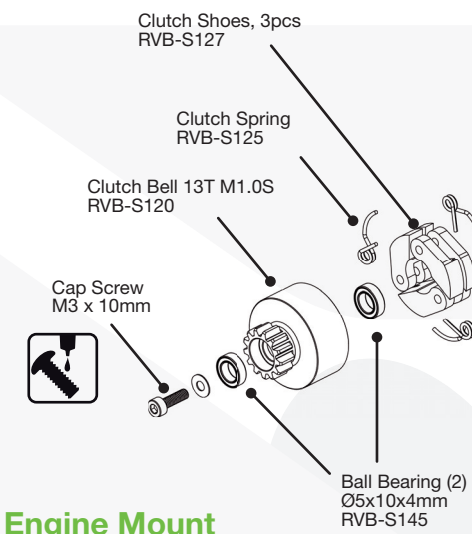
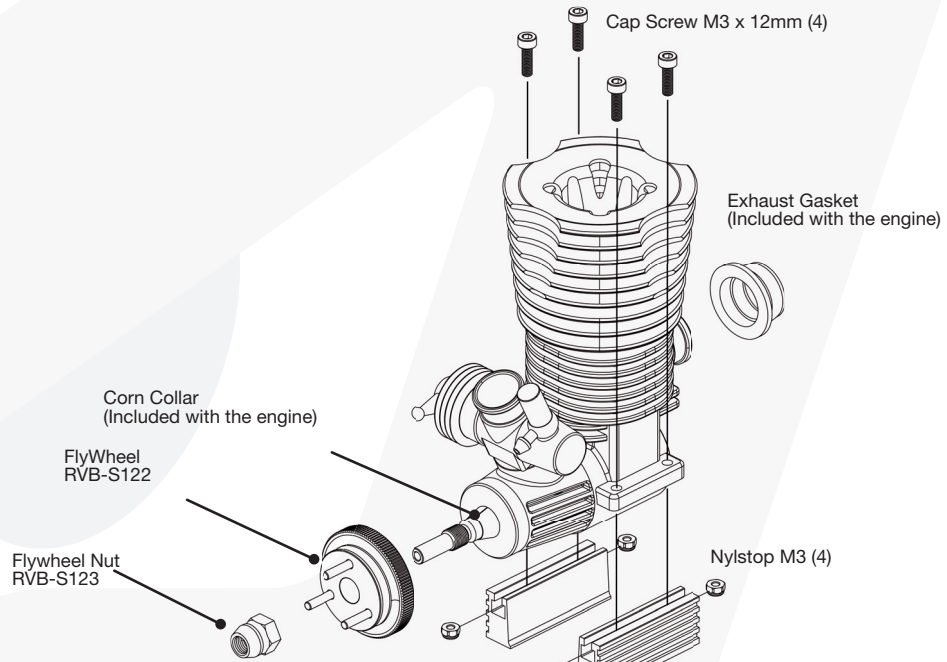
# ASSEMBLY OF THE CLUTCH SYSTEM

# BAG U

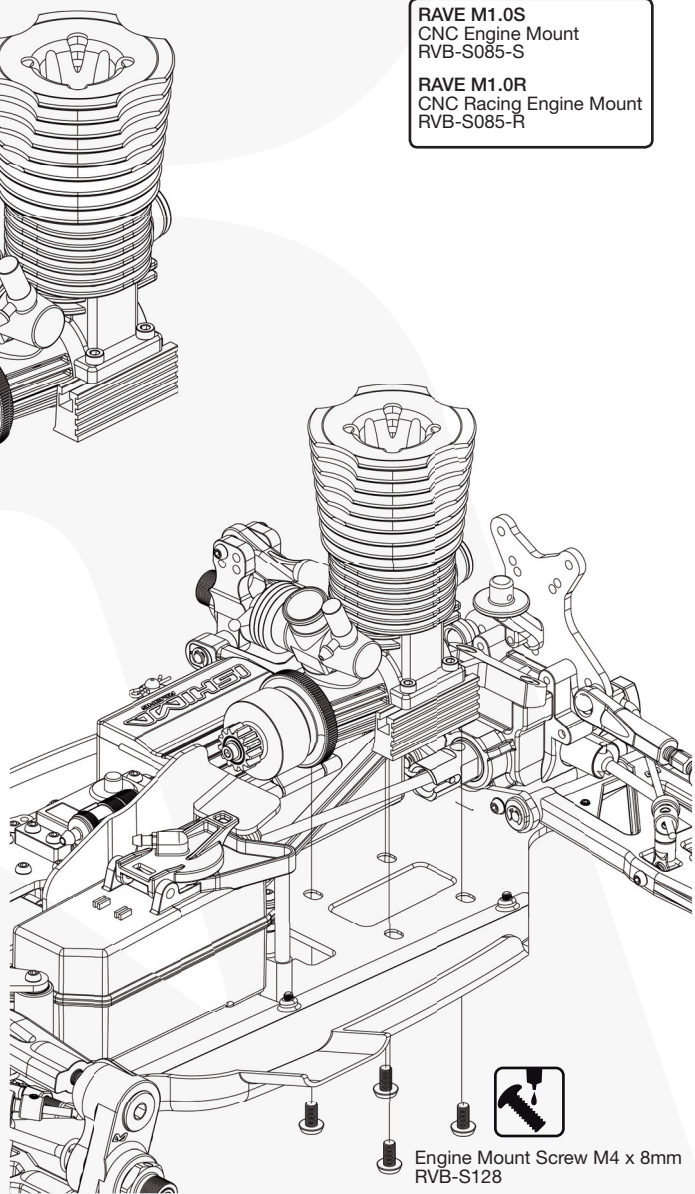
## Clutch Set Up



- OPTION**
- |                            |          |
|----------------------------|----------|
| CNC Racing Clutch Bell 13T | RVB-S213 |
| CNC Racing Clutch Bell 14T | RVB-S214 |
| CNC Racing Clutch Bell 15T | RVB-S215 |
| Clutch Spring 0.9mm        | RVB-S124 |
| Clutch Spring 1.1mm        | RVB-S126 |



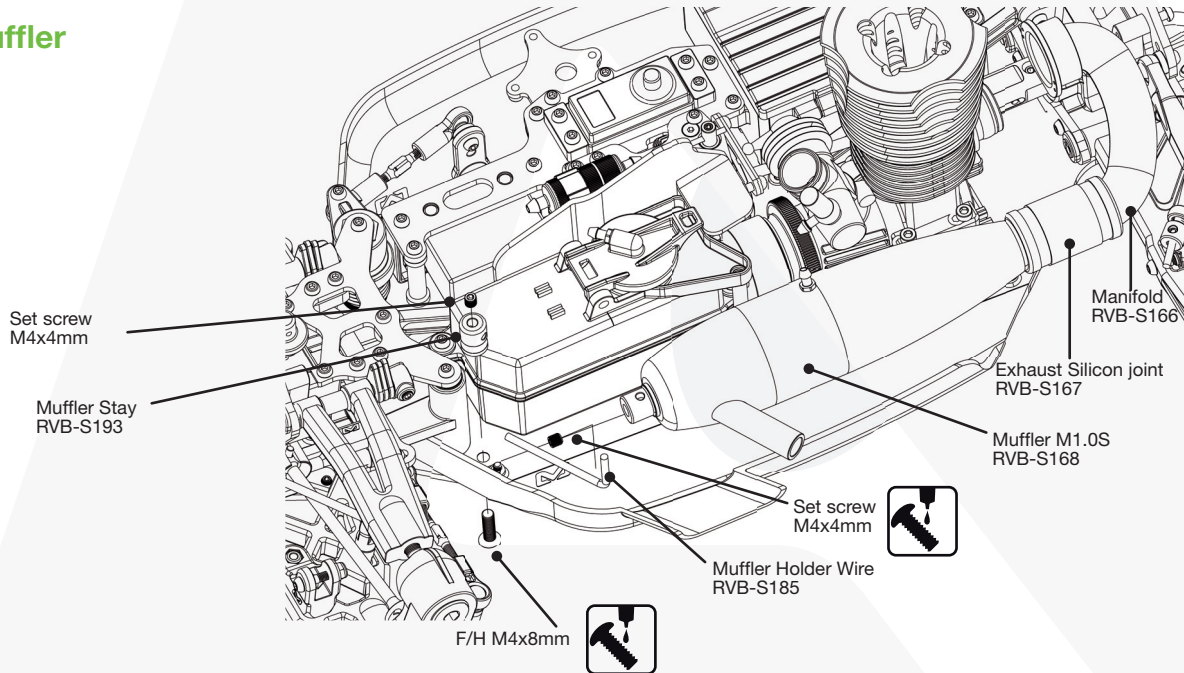
## Engine Mount



# THE THROTTLE CONTROL LINKAGE

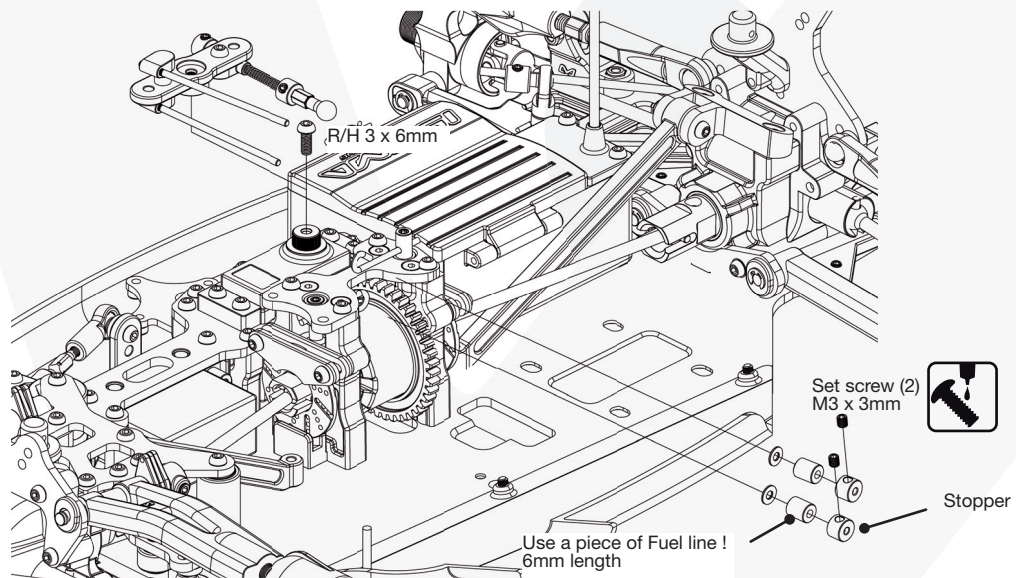
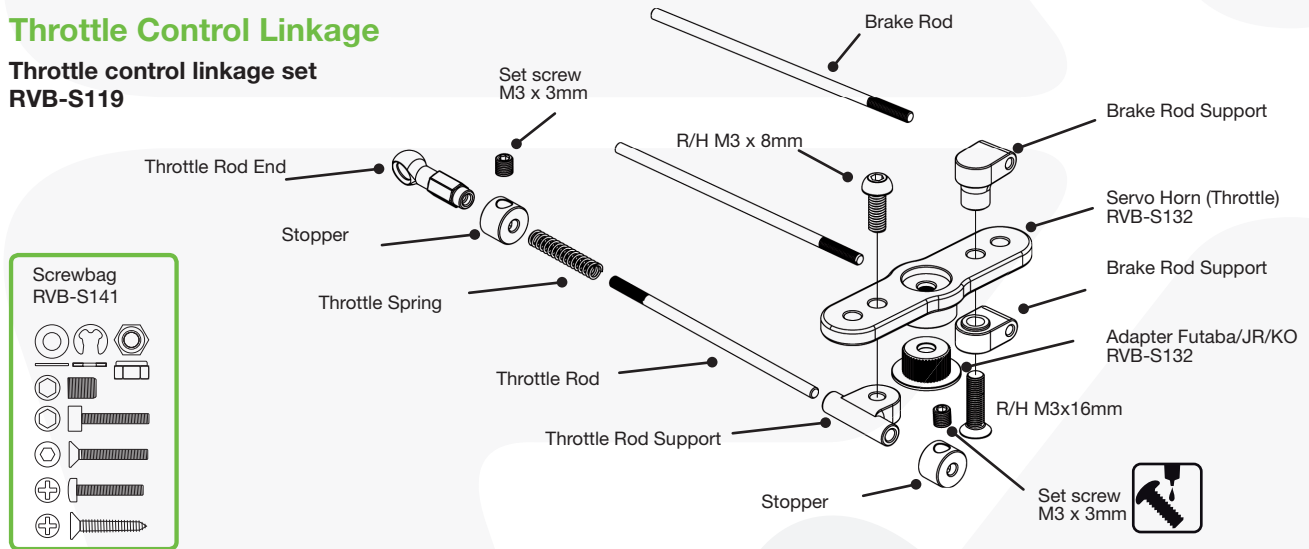
# BAG V

## Muffler



## Throttle Control Linkage

### Throttle control linkage set RVB-S119

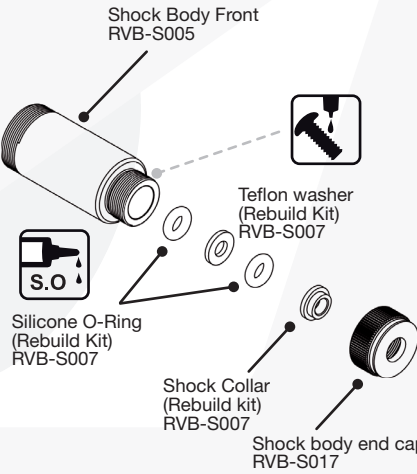
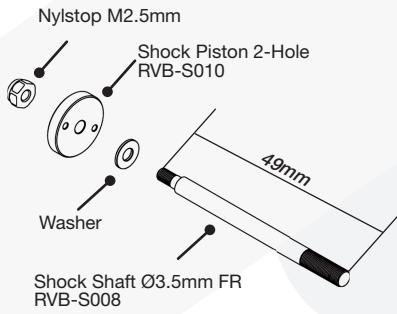


# THE FR & RE SHOCK ABSORBERS

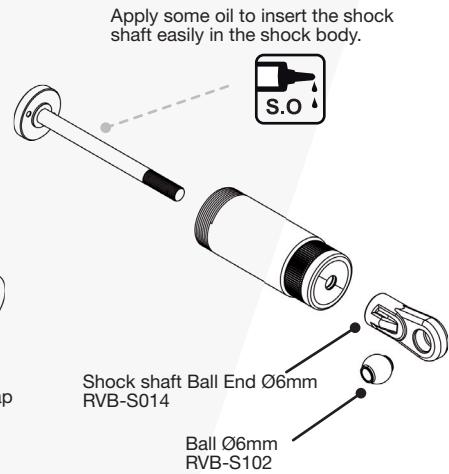
# BAG W

## Front Shock

**x2** \* Complete Front Shock Set  
RVB-S003

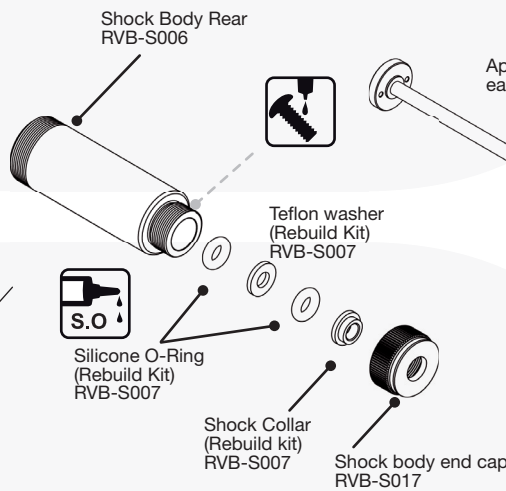
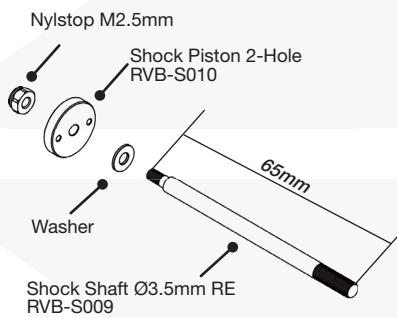


\* Shock rebuild kit  
RVB-S007

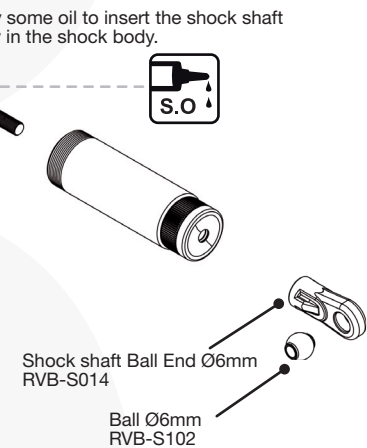


## Rear Shock

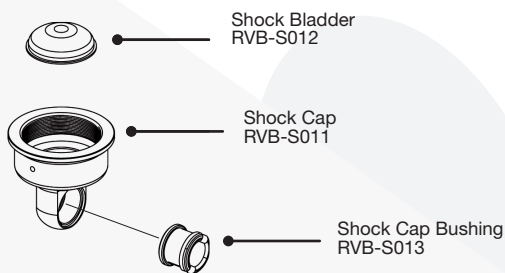
**x2** \* Complete Rear Shock Set  
RVB-S004



Apply some oil to insert the shock shaft easily in the shock body.



## Shock Oil Set Up



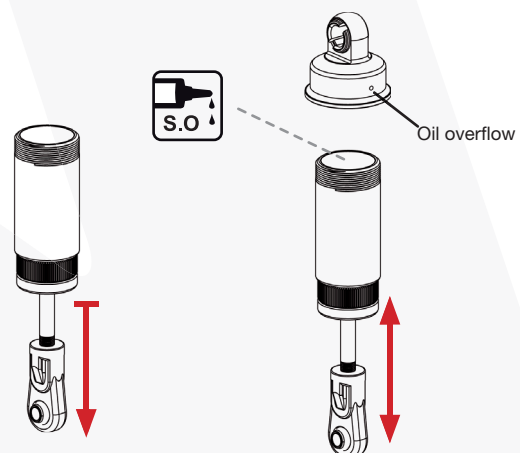
**x2** for FRONT

**x2** for REAR

Front 500cps Silicon Oil  
Rear 450cps Silicon Oil

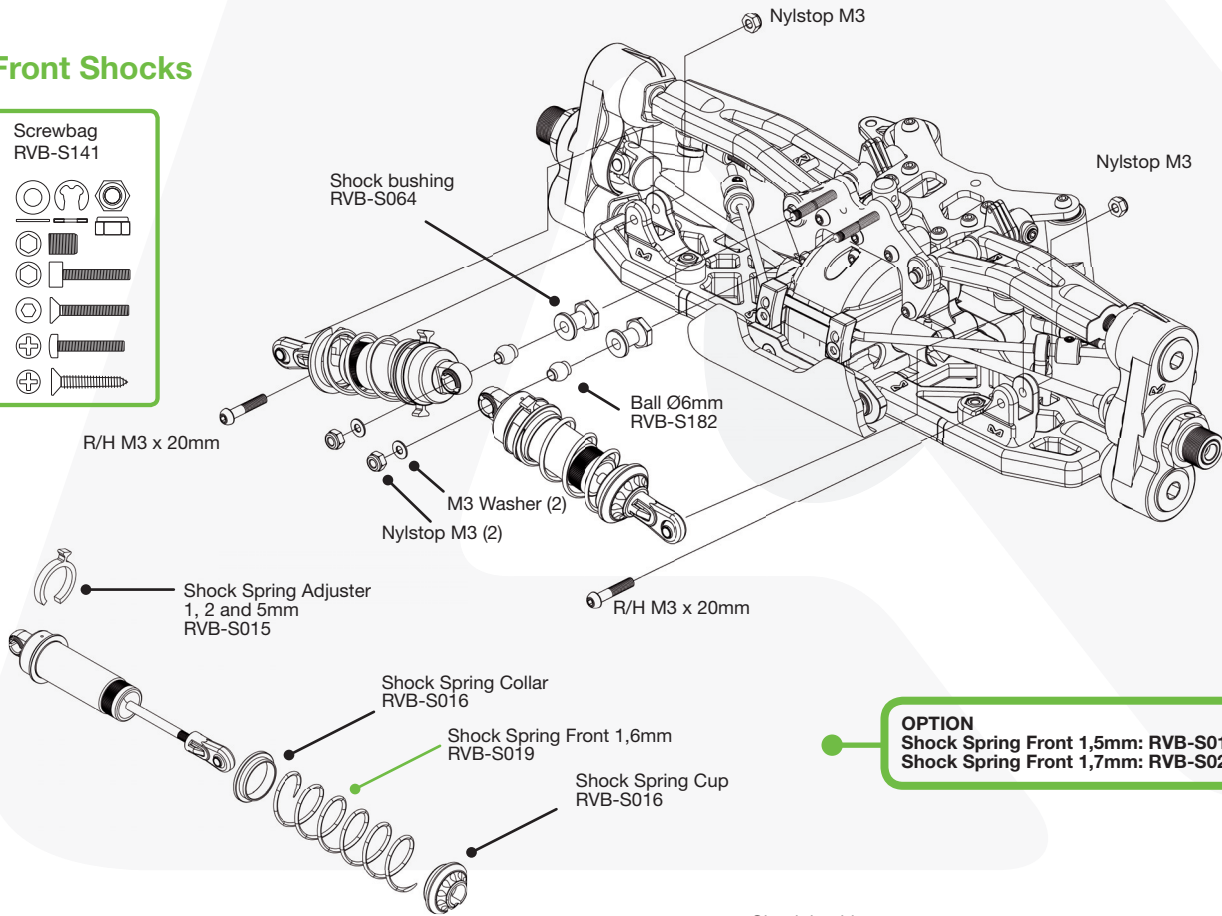
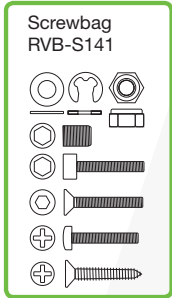
Setting up the piston:

- First pull down the piston.
- Fill until the shock oil nearly overflows
- Then slowly move the piston up and down to remove excess air.
- Leave the filled shock for 10 mins so air bubbles can go out.
- Screw the shock cap slowly, excess oil will evacuate.



# ASSEMBLY OF THE FRONT AND REAR SHOCK ABSORBERS BAG W

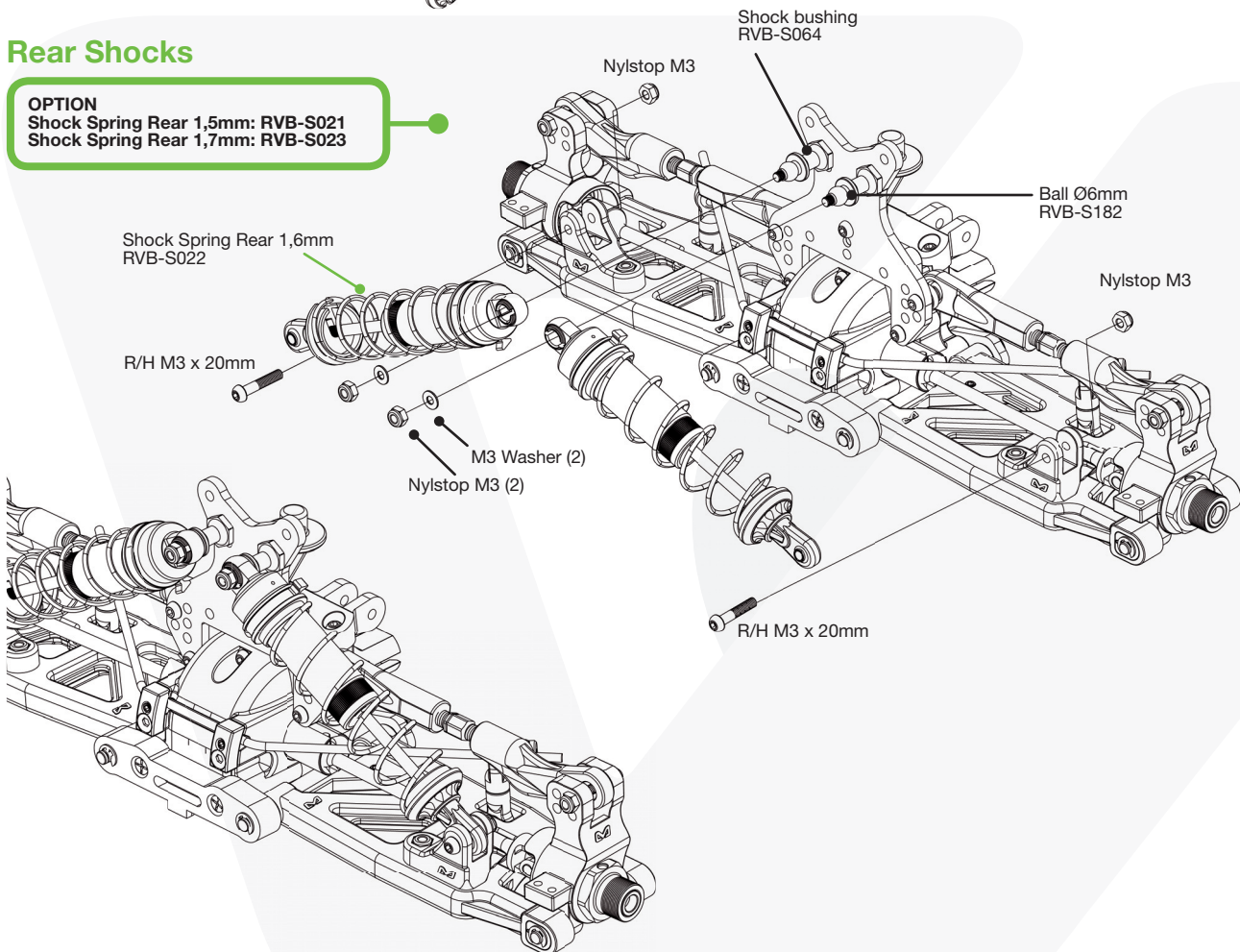
## Front Shocks



**OPTION**  
Shock Spring Front 1,5mm: RVB-S018  
Shock Spring Front 1,7mm: RVB-S020

## Rear Shocks

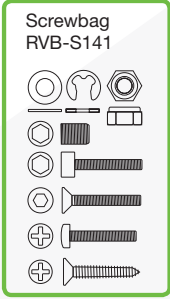
**OPTION**  
Shock Spring Rear 1,5mm: RVB-S021  
Shock Spring Rear 1,7mm: RVB-S023



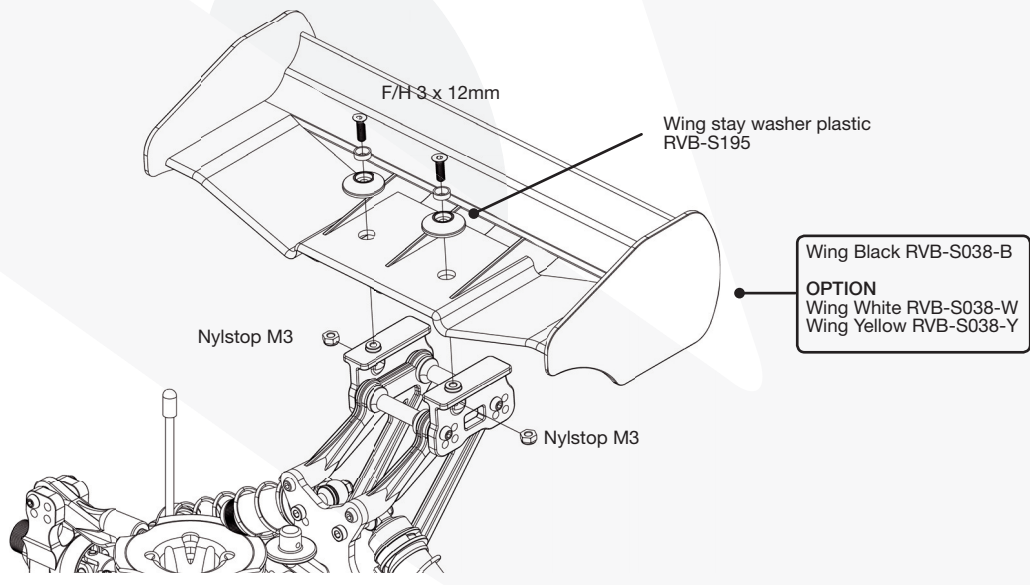
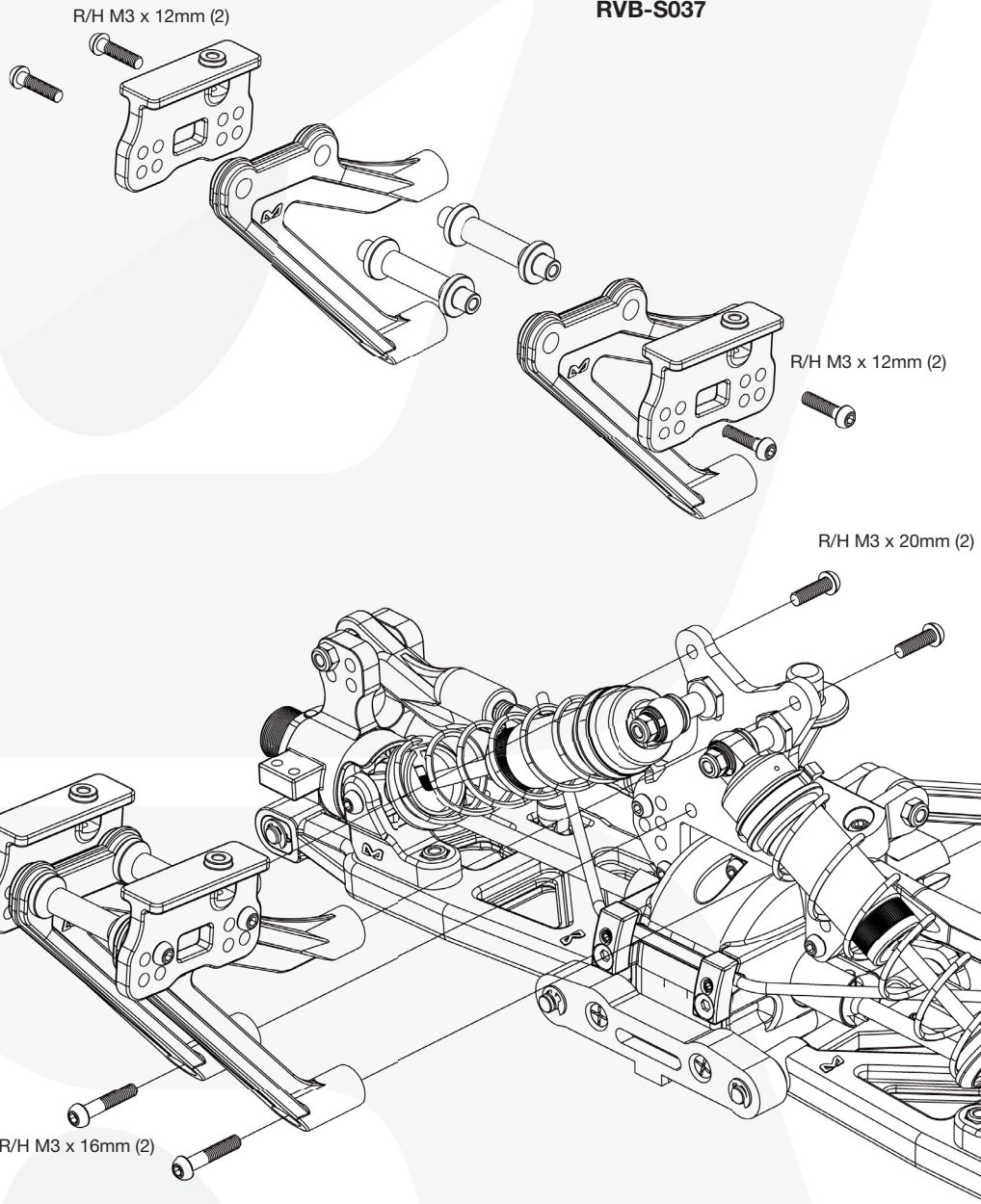
# ASSEMBLY OF THE REAR WING

# BAG X

## Wing & Wing Stay

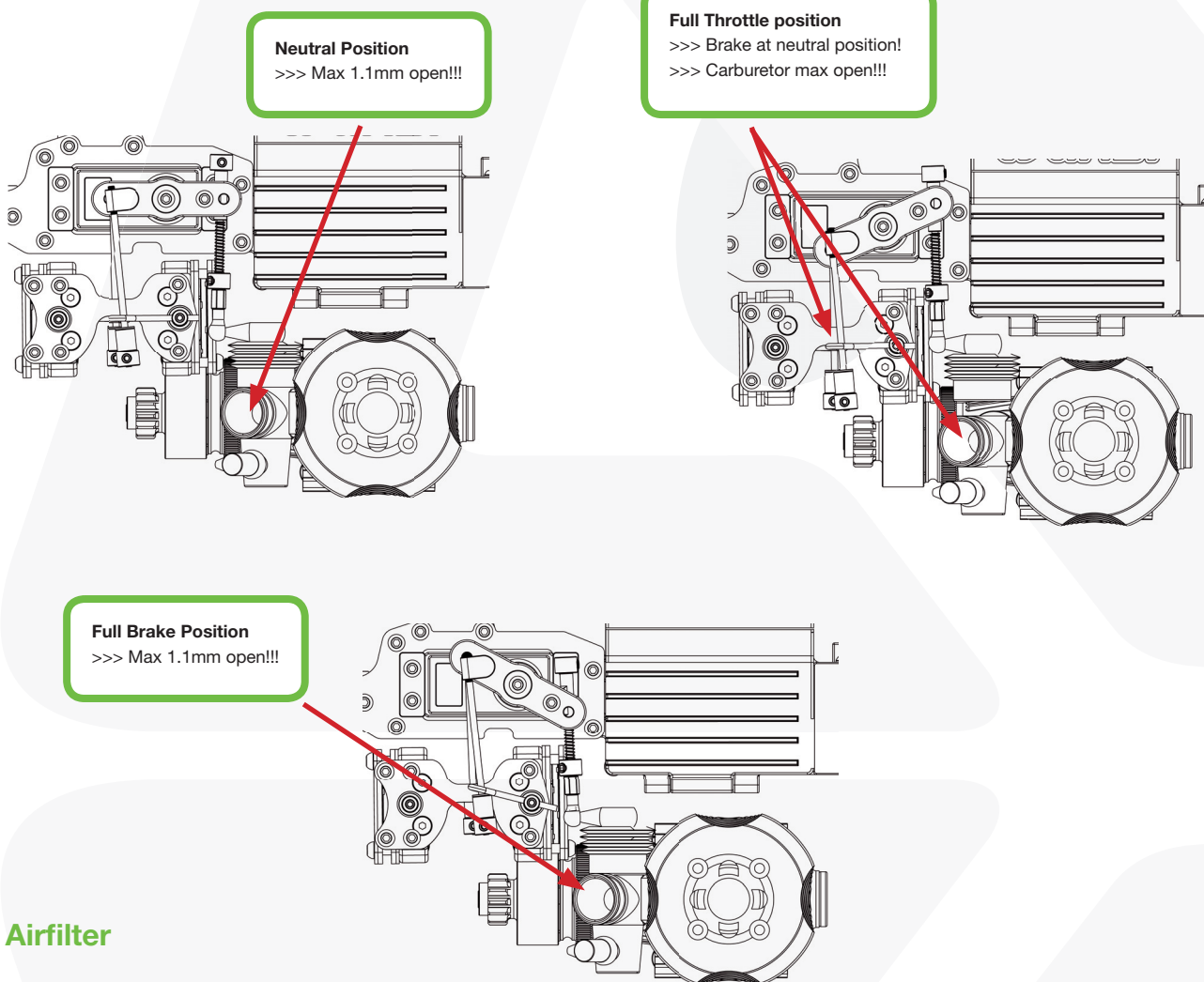


## Wing Stay set RVB-S037







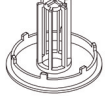


# THROTTLE LINKAGE & ASSEMBLY OF THE AIR FILTER

## Linkage Adjustment



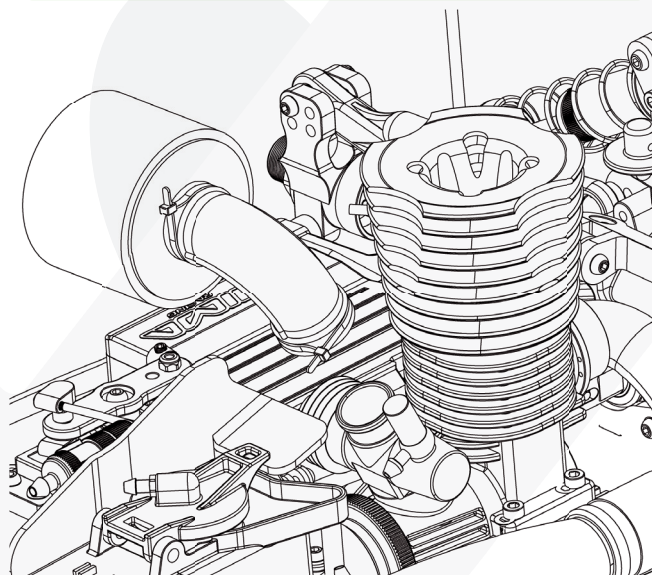
## Airfilter

Air Filter complete SET : RVB-S129

-  F/H M3 x 8mm
-  Air Filter Cap
-  Air Filter Sponge Cover RVB-S130
-  Air Filter Inner Sponge
-  Sponge Holder
-  Nylon cable tie
-  Air Filter Adapter RVB-S131



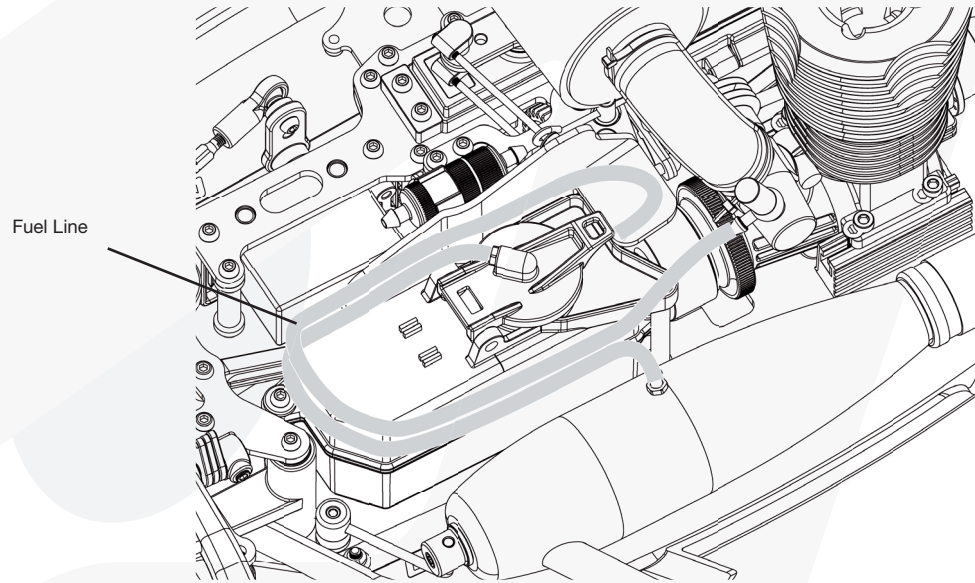
Use special air-filter oil on the inner sponge filter (not on the outer filter) to stop dust from getting into the engine.





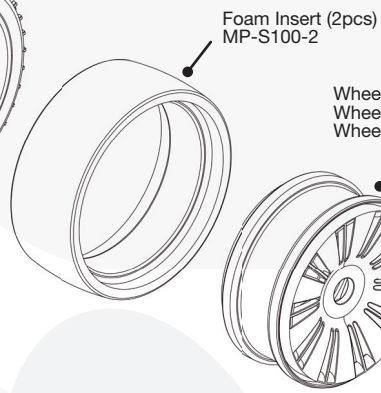
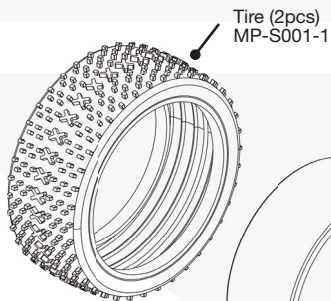
## FUEL LINE & TIRES

### Fuel Line

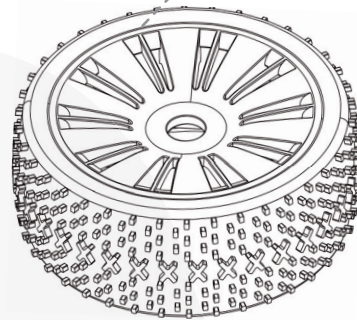


### Tires

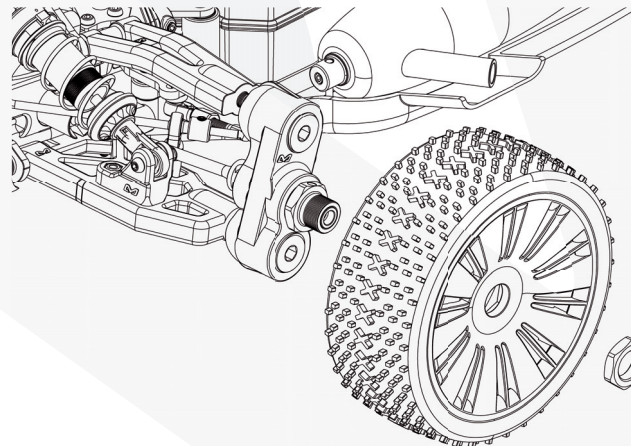
- Mount the insert and the tires on the rims
- Carefully glue the tires to the rims using Cyano Glue



Wheel Black RVB-S133-B  
Wheel White RVB-S133-W  
Wheel Yellow RVB-S133-Y



**Medial**  
**PRO**

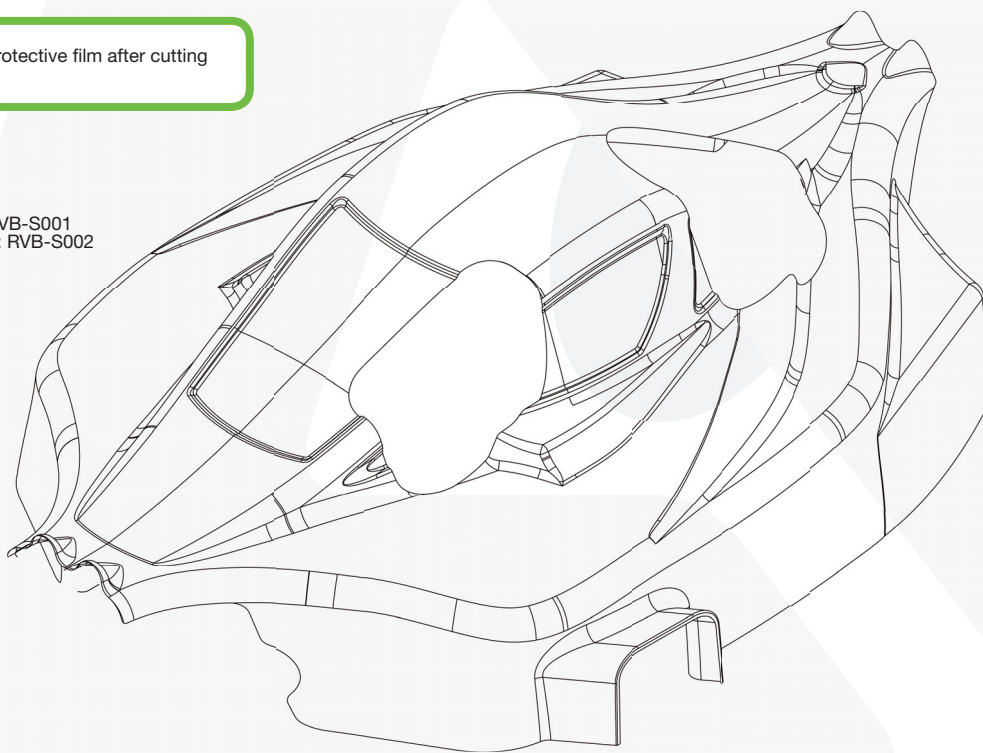


## CUT OUT OF THE BODY

### Body

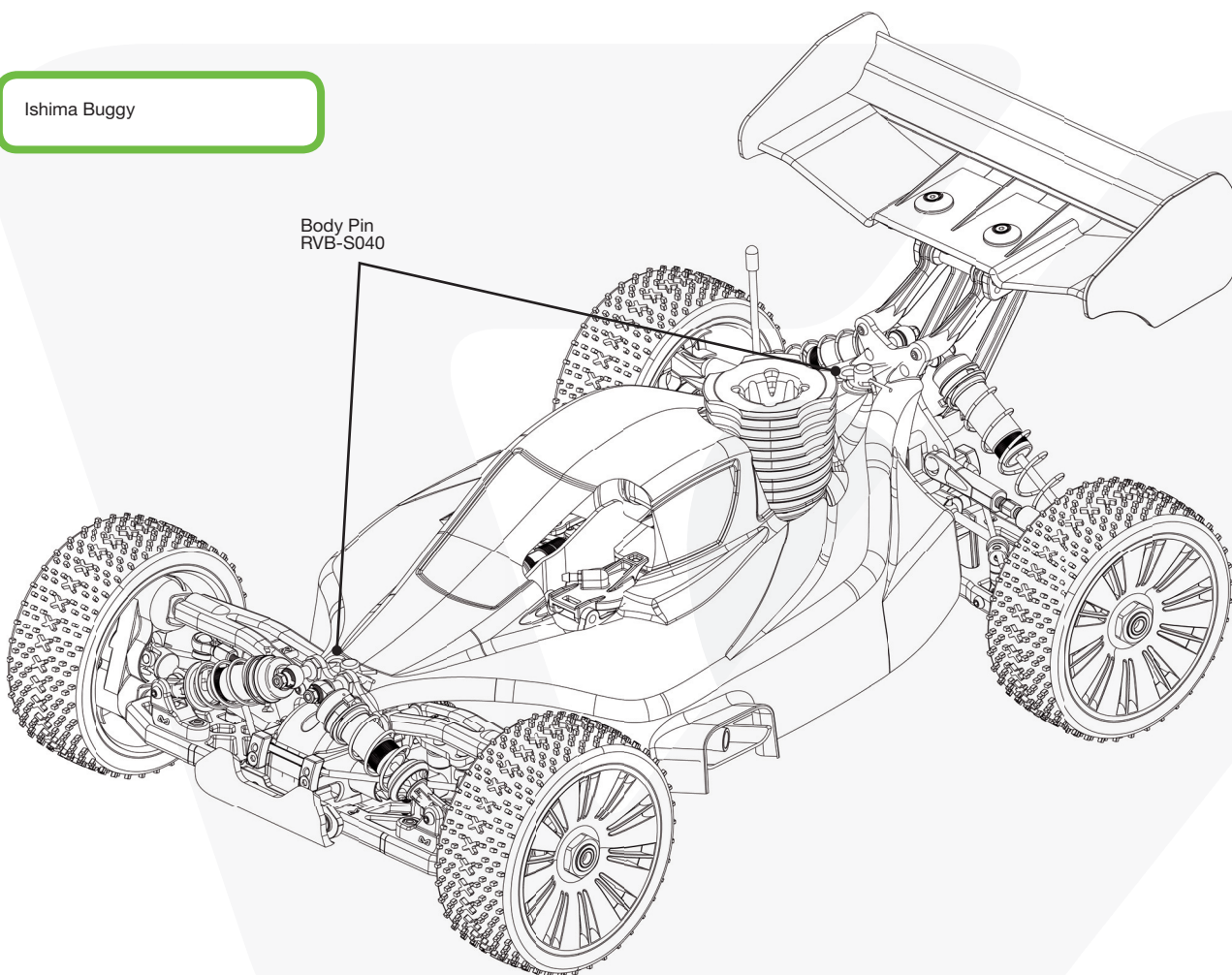
- Remove the protective film after cutting

Body clear: RVB-S001  
Body painted: RVB-S002



### Ishima Buggy

Body Pin  
RVB-S040



## INSTALL THE STICKERS



Sticker sheet RAVE-S: RVB-S092-S  
 Sticker sheet RAVE-R: RVB-S092-R  
 Sticker sheet RAVE-RR: RVB-S092-RR

- Remove the protective film on the body before installing the stickers



## V. SPARE & OPTIONAL PARTS

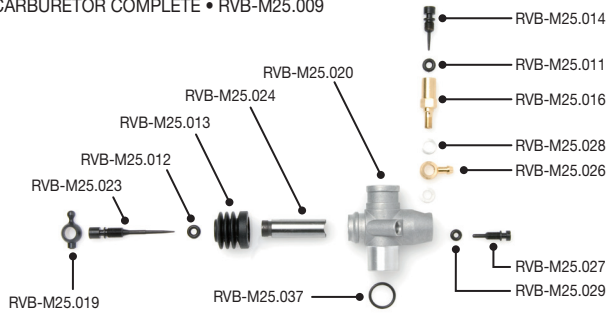
ITEM NR	RAVE-S & RAVE-R	ITEM NR	RAVE-S & RAVE-R
RVB-S001	BODY CLEAR	RVB-S049	FRONT/REAR TOE IN ADJUSTER SET
RVB-S002	BODY PAINTED	RVB-S050	REAR UPPER ARM BALL END 7MM
RVB-S003	FRONT SHOCK SET (2)	RVB-S051	SWAY BAR MOUNT BALL END 3MM
RVB-S004	REAR SHOCK SET (2)	RVB-S052	FRONT UNIVERSAL DRIVE SHAFTS (2)
RVB-S005	FRONT SHOCK BODY (2)	RVB-S053	FRONT CENTER & REAR CENTER DRIVE SHAFT
RVB-S006	REAR SHOCK BODY (2)	RVB-S054	REAR DRIVE SHAFTS (2)
RVB-S007	SHOCK REBUILD KIT	RVB-S055	DIFF DRIVE CAP JOINT
RVB-S008	FRONT SHOCK SHAFT (2)	RVB-S056	CENTER DIFF OUT DRIVE (FLAT FACE) (2)
RVB-S009	REAR SHOCK SHAFT (2)	RVB-S057	DRIVE JOINT
RVB-S010	SHOCK PISTON 2-HOLE 1,5MM (2)	RVB-S058	REAR WHEEL AXLE (2)
RVB-S011	SHOCK CAP (2)	RVB-S059	BRAKE PAD & BRAKE HOLDER
RVB-S012	SHOCK BLADDERS (2)	RVB-S060	BRAKE DISC (2)
RVB-S013	SHOCK CAP BUSHING (2)	RVB-S061	STEERING PIVOT BALLS 14MM
RVB-S014	SHOCK SHAFT BALL END (2)	RVB-S062	STEERING SERVO SAVER POST
RVB-S015	SHOCK SPRING ADJUSTER SET	RVB-S063	SERVO SAVER COMPLETE SET
RVB-S016	SHOCK SPRING CUP SET (UP & DOWN)	RVB-S063-P	SERVO SAVER PLASTIC PARTS
RVB-S017	SHOCK CAP END	RVB-S064	SHOCK BUSHING FR & RE
RVB-S019	SHOCK SPRING FRONT 1,6MM (2)	RVB-S065	FRONT & REAR BRAKE CAM
RVB-S022	SHOCK SPRING REAR 1,6MM (2)	RVB-S066	REAR UPPER SUSPENSION TURNBUCKLE
RVB-S024	BRAKE DISC HOLDER	RVB-S067	STEEL SPUR GEAR 44T
RVB-S025	FRONT & REAR LOWER SUSPENSION ARMS	RVB-S068	DIFFERENTIAL GEAR 43T
RVB-S026	FRONT UPPER SUSPENSION ARMS (2)	RVB-S068-R	CNC RACING DIFFERENTIAL GEAR 43T
RVB-S027	GEAR BOX	RVB-S069	PINION GEAR 13T
RVB-S028-S	CENTER DIFF MOUNT SET	RVB-S069-R	CNC RACING PINION GEAR 13T
RVB-S028-R	CNC CENTER DIFF MOUNT SET 7075	RVB-S070	DIFF BEVEL GEAR 18T
RVB-S029	FRONT STEERING KNUCKLE SET	RVB-S071	DIFF BEVEL GEAR 10T
RVB-S030	REAR HUB SET (2)	RVB-S072	LOWER SUSPENSION HINGE PIN SET
RVB-S031	RADIO BOX SET	RVB-S073	FRONT UPPER SUSPENSION HINGE PIN
RVB-S032	SIDE GUARDS (2)	RVB-S074	REAR HUB HINGE PIN
RVB-S033	FRONT BUMPER	RVB-S075	DIFF BEVEL GEAR SHAFT
RVB-S034	DIFFERENTIAL CASE	RVB-S076	SERVO HOLDER
RVB-S035	CENTER FUEL GUARD PLATE	RVB-S077-S	CNC CHASSIS M1.0S
RVB-S036-S	CHASSIS STIFFENER SET FR & RE PLASTIC	RVB-S077-R	CNC 7075 CHASSIS M1.0R
RVB-S036-R	CNC CHASSIS STIFFENER SET FR & RE 7075	RVB-S077-RR	CNC 7075 LIGHTENED CHASSIS M1.0RR
RVB-S037	WING STAY SET	RVB-S078-S	CNC FRONT SHOCK TOWER 6061 M1.0S
RVB-S038-B	WING BLACK	RVB-S078-R	CNC FRONT SHOCK TOWER 7075 M1.0R
RVB-S039	LOWER SHOCK SUPPORT	RVB-S079-S	CNC REAR SHOCK TOWER 6061 M1.0S
RVB-S040	BODY PIN	RVB-S079-R	CNC REAR SHOCK TOWER 7075 M1.0R
RVB-S041-S	FR&RE REAR TOE-IN SET 1°, 2°, 3°	RVB-S080	CNC FRONT SUPPORT PLATE 6061
RVB-S041-R	CNC REAR TOE-IN 7075	RVB-S081	CNC STEERING PLATE 6061
RVB-S042-R	CNC FRONT TOE-IN 7075	RVB-S082	CNC CENTER DIFF SUPPORT PLATE 6061
RVB-S043	FRONT UPPER SUSP. HINGE PIN HOLDER	RVB-S083-S	CNC FRONT SUSPENSION ARM HOLDER 6061
RVB-S043-R	CNC FR. UPPER SUSP. HINGE PIN HOLDER 7075	RVB-S083-R	CNC FRONT SUSPENSION ARM HOLDER 7075
RVB-S044	FR. STEERING PIVOT BALL CUP HOLDER BUSHING	RVB-S084-S	CNC REAR SUSPENSION ARM HOLDER 6061
RVB-S045	FUEL TANK POST SET	RVB-S084-R	CNC REAR SUSPENSION ARM HOLDER 7075
RVB-S046	FRONT & REAR BODY MOUNT	RVB-S085-S	ENGINE MOUNT M1.0S
RVB-S047	STEERING SERVO MOUNT LAY DOWN	RVB-S085-R	ENGINE MOUNT M1.0R
RVB-S048	FRONT & REAR TOE IN SET 1,2,3 DEGREE	RVB-S086	WHEEL HUB 2PCS

ITEM NR	RAVE-S & RAVE-R
RVB-S088-1	BB SHIM RING 13X16X0,1MM
RVB-S088-2	BB SHIM RING 13X16X0,2MM
RVB-S089-1	DIFF SHIM RING 5X15X0,1MM
RVB-S090-1	DIFF SHIM RING 3X10X0,1MM
RVB-S090-2	DIFF SHIM RING 3X10X0,2MM
RVB-S091	DIFF GASKET
RVB-S092-S	STICKER SHEET RAVE M1.0S
RVB-S092-R	STICKER SHEET RAVE M1.0R
RVB-S092-RR	STICKER SHEET RAVE M1.0RR
RVB-S093	FUEL TANK
RVB-S094	CNC RADIO PLATE 6061
RVB-S095	STEERING BALL END
RVB-S096	FUEL FILTER HOLDER
RVB-S097	SERVO SAVER ARM BUSHING
RVB-S098	SERVO BALL END 6MM PLASTIC
RVB-S099	BALL 6MM (STEERING)
RVB-S100	STABILIZER BALL 6MM
RVB-S101	CUP HOLDER BUSHING
RVB-S102	BALL Ø6MM
RVB-S103	DIFF PIN
RVB-S104	SWAY BAR PLATE PLASTIC
RVB-S107	FRONT SWAY BAR 2,4MM
RVB-S109	REAR SWAY BAR 2,8MM
RVB-S112	BRAKE CAM LEVER
RVB-S115	WHEEL HUB PIN
RVB-S117	BRAKE CAM BALL BEARING
RVB-S119	THROTTLE LINKAGE SET
RVB-S120	CLUTCH BELL 13T M1.0S
RVB-S122	FLYWHEEL
RVB-S123	FLYWHEEL NUT (SG TYPE)
RVB-S125	CLUTCH SPRINGS 1.0MM
RVB-S127	CLUTCH SHOE 3P
RVB-S128	ENGINE MOUNT SCREW (4)
RVB-S129	AIR FILTER COMPLETE SET
RVB-S130	AIR FILTER SPONGE
RVB-S131	AIR FILTER SILICON CONNECTOR
RVB-S132	SERVO HORN SET
RVB-S133-B	WHEEL BLACK
RVB-S134	WHEEL NUT
RVB-S141	SCREW BAG SET
RVB-S142	E-CLIP BAG SET
RVB-S144	RUBBER SEALED BEARING 8*16*5MM
RVB-S145	RUBBER SEALED BEARING 5*10*4MM
RVB-S146	RUBBER SEALED BEARING 6*10*3MM
RVB-S155	SWITCH COVER
RVB-S157	TURNBUCKLE 3X30MM
RVB-S162	TURNBUCKLE 3X50MM
RVB-S166	MANIFOLD M1.0S

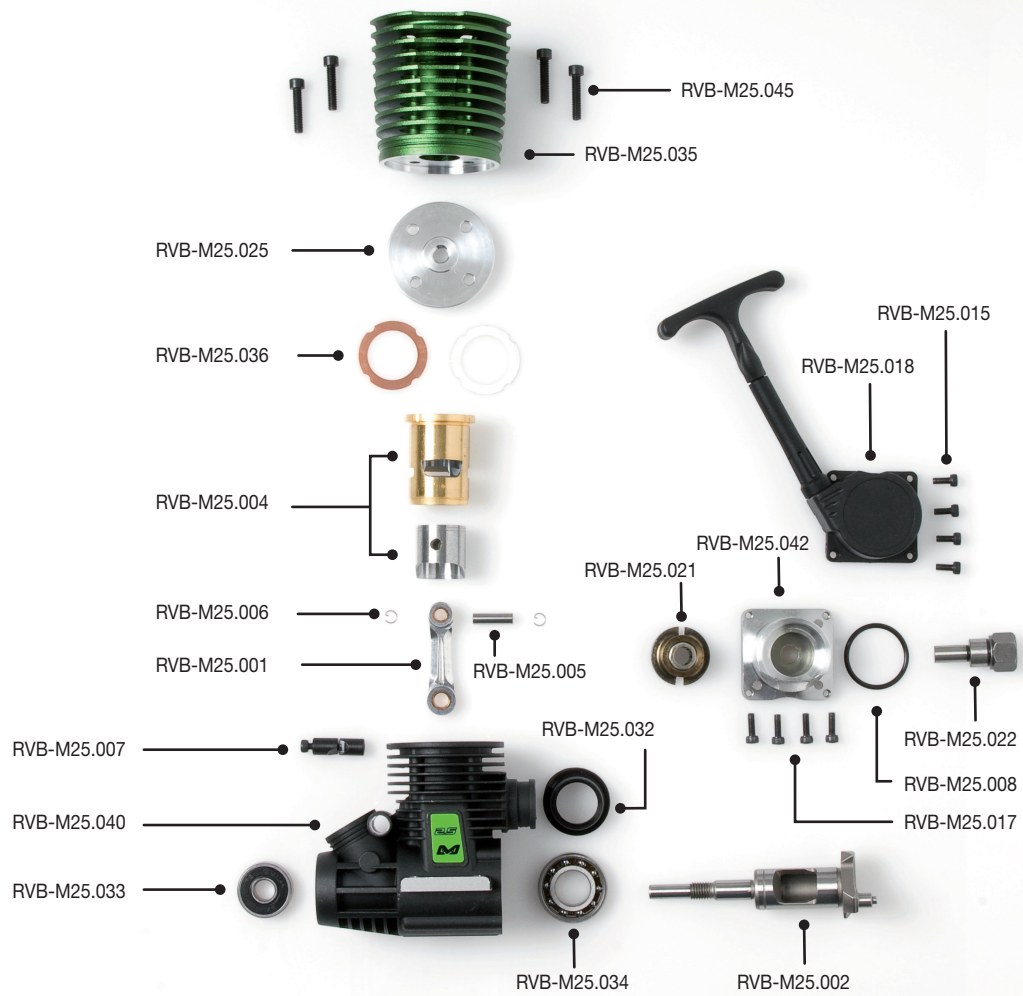
ITEM NR	RAVE-S & RAVE-R
RVB-S167	EXHAUST SILICONE JOINT
RVB-S168	MUFFLER M1.0S
RVB-S172	ANTENNA TUBE
RVB-S175	RADIO PLATE POST
RVB-S176	RADIO PLATE STAND
RVB-S177	TRANSPONDER SUPPORT
RVB-S184-S	REAR STIFFENER SUPPORT
RVB-S184-R	CNC REAR STIFFENER SUPPORT 7075
RVB-S185	MUFFLER HOLDER WIRE
RVB-S189	NBR O-RING SET
RVB-S193	MUFFLER STAY
RVB-S194	PLASTIC SPACER SET
RVB-S195	WING STAY WASHER PLASTIC
RVB-S199	CASTER CLIP SPACER SET
	<b>TIRES MEDIAL PRO</b>
MP-S001-1	MEDIAL PRO SPORTLINE TIRES
MP-S100-2	MEDIAL PRO INSERT-2
MP-S201-1	MEDIAL PRO SPORTLINE TIRES "GLUED ON WHEEL"
	<b>OPTION RAVE-S &amp; RAVE-R</b>
RVB-S018	SHOCK SPRING FRONT 1,5MM (2)
RVB-S020	SHOCK SPRING FRONT 1,7MM (2)
RVB-S021	SHOCK SPRING REAR 1,5MM (2)
RVB-S023	SHOCK SPRING REAR 1,7MM (2)
RVB-S038-Y	WING YELLOW
RVB-S038-W	WING WHITE
RVB-S105	FRONT SWAY BAR 2,2MM
RVB-S106	FRONT SWAY BAR 2,3MM
RVB-S108	REAR SWAY BAR 2,7MM
RVB-S110	REAR SWAY BAR 2,9MM
RVB-S111	SHIM RINGS FOR 13T PINION
RVB-S124	CLUTCH SPRINGS 0.9MM
RVB-S126	CLUTCH SPRINGS 1.1MM
RVB-S133-W	WHEEL WHITE
RVB-S133-Y	WHEEL YELLOW
RVB-S212	FUEL FILTER
RVB-S213	RACING CLUTCH BELL 13T
RVB-S214	RACING CLUTCH BELL 14T
RVB-S215	RACING CLUTCH BELL 15T

# VI. ENGINE

## CARBURETOR COMPLETE • RVB-M25.009

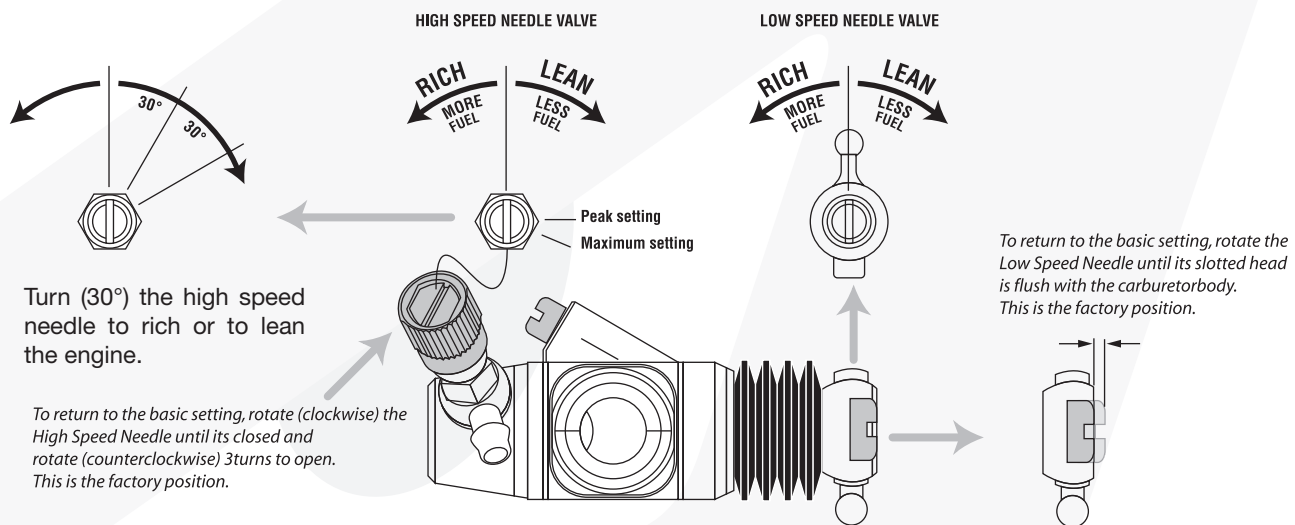


ISHIMA ENGINE .25  
#RVB-M25



REF	DESCRIPTION	REF	DESCRIPTION	REF	DESCRIPTION
RVB-M25.001	CONNECTING ROD	RVB-M25.017	CONNECTIVE SEAT BOLT	RVB-M25.034	BALL BEARING REAR
RVB-M25.002	CRANKSHAFT	RVB-M25.018	RECOIL STARTING UNIT	RVB-M25.035	CYLINDER HEAD
RVB-M25.003	DRIVE COPPER CONE	RVB-M25.019	THROTTLE SCREW CAP	RVB-M25.036	CYLINDER HEAD WASHER
RVB-M25.004	CYLINDER SLEEVE/PISTON	RVB-M25.020	CARBURETOR MAIN BODY	RVB-M25.037	CARBURETOR "O" RING
RVB-M25.005	PISTON GUDGEON PIN	RVB-M25.021	ONE WAY BALL BEARING	RVB-M25.040	CRANKCASE BLACK COLOR
RVB-M25.006	"G" PIN SNAP RING 2 PCS	RVB-M25.022	STARTING AXLE	RVB-M25.042	CONNECTIVE SEAT
RVB-M25.007	CARBURETOR SETTING PIN	RVB-M25.023	LOW END NEEDLE	RVB-M25.045	CYL. HEAD BOLT 4PCS
RVB-M25.008	REAR COVER "O" RING	RVB-M25.024	THROTTLE DRUM		
RVB-M25.009	CARBURETOR COMPLETE	RVB-M25.025	BURN ROOM		
RVB-M25.011	MAIN NEEDLE VALVE "O" RING	RVB-M25.026	FUEL SUPPLY NIPPLE		
RVB-M25.012	SUPPLY NEEDLE VALVE "O" RING	RVB-M25.027	THROT. STOP ADJUST. SCREW		
RVB-M25.013	THROTTLE COVER	RVB-M25.028	FUEL SUPPLY NIPPLE WASHER		
RVB-M25.014	MAIN NEEDLE VALVE	RVB-M25.029	O-RING		
RVB-M25.015	REAR COVER BOLT	RVB-M25.032	SILICON EXHAUST GASKET		
RVB-M25.016	MAIN NEEDLE VALVE HUB	RVB-M25.033	BALL BEARING FRONT		

## VII. CARBURETOR SETTING



### ATTENTION:

Do not set the carburetor settings too "lean". It results in higher temperatures, less lubrication and it could block the engine (overheating the engine). "Rich" setting gives less performance but improves the cooling, lubrication and therefore a longer life of the engine.

Always check the position of the high speed needle and low speed needle. If you have some problem with your settings, return to the factory settings. High speed needle valve 3 turns, low speed needle head flushed with the carburetor body.

## VIII. STARTING THE ENGINE

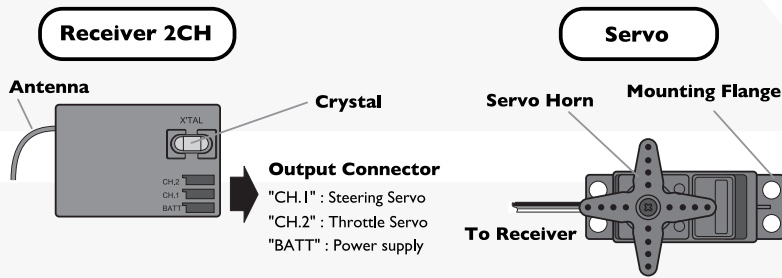
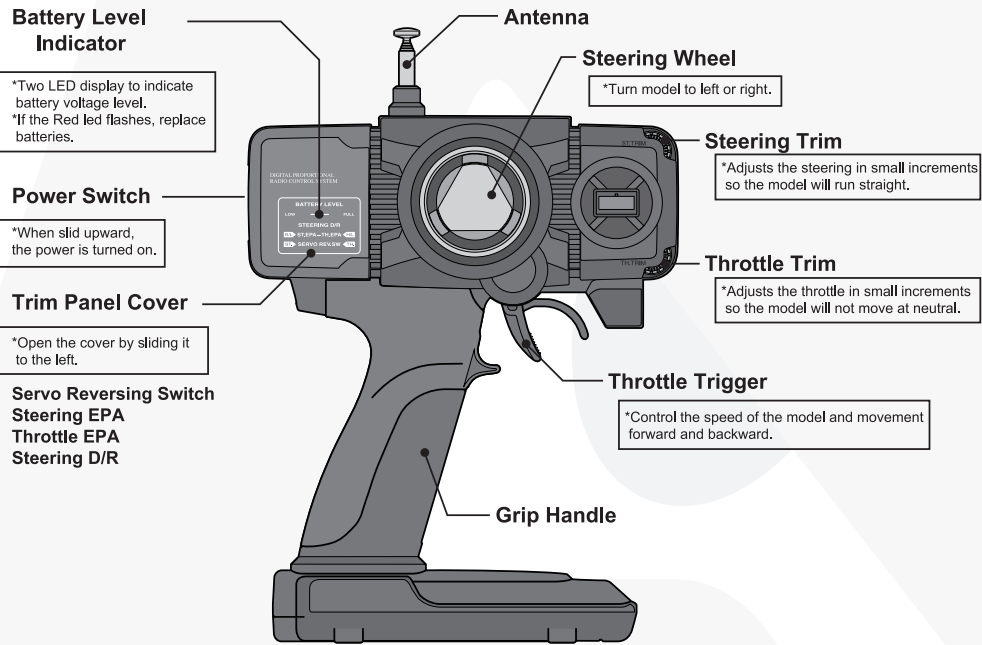
### TO START

- Fill the tank only with special glow fuel (min.16% nitro)
- Prime the carburetor by pulling the starter cord and blocking the exhaust with a rag simultaneously. Do this until the fuel reaches the carburetor. Pull 1 more time.
- Manually turn the throttle servo (receiver is OFF position) to open 1/4 the carburetor.
- Connect the glowstart to the glow plug. Pull the pull-starter in short pulls (max. 20cm). Adjust the throttle servo so that the engine runs fast enough to idle smoothly without engaging the clutch or turning the wheels. Remove the glowstart as soon as the engine is running.

### PROBLEM TO START

- If you have problem to start, Check the glow plug with a fully charged glowstart. If the element is orange or red, the glow plug is good. If the element does not glow or not totally, the glow plug is bad and should be replaced by a new one (medium-3). Be carefully, the glow plug is very hot.
- If it is difficult to draw the pull-start, it may be that the engine is "flooded". Remove the glow plug and dry it, pull the pull-start some times to evacuate the excessive fuel. Replace the glow plug and start the engine.

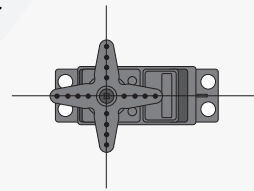
## IX. TRANSMITTER



**When making these settings adjustments, engine can not run**

### Servo horn installation instructions

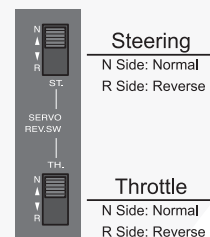
- 1 Connect the receiver, servos, and other components and then turn on the power switches to transmitter and receiver.
- 2 Be sure the Steering trim and Throttle trim on the transmitter are in neutral position . *Both servos will move to the neutral position.*
- 3 At this time install the servo horn in the manner described in the instruction manual provided with the model this system will be used in.



### Reversing the servo direction

Should the servo operate in the opposite direction required for your application, reverse the rotation with the reversing switch.

(Reversing Switches)



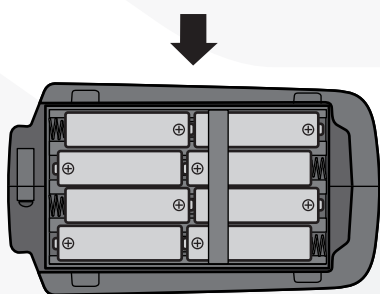
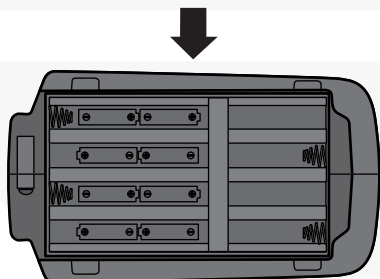
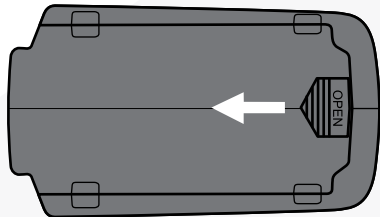


## HANDLING PROCEDURE

### Handling procedure for batteries (8 AA Size Batteries)

(Battery Replacement Method)

- 1 Remove the battery cover from the transmitter by sliding it in the direction of the arrow in the figure.
- 2 Remove the used batteries.
- 3 Load the new AA size batteries . Pay very close attention to the polarity markings and reinsert accordingly.
- 4 Slide the battery cover back onto the case.



#### (Check)

Turn the power switch on the transmitter to ON position. Check if the two LEDs light. If the LEDs fail to light, check the batteries for insufficient contact in the case or incorrect battery polarity.

### Caution

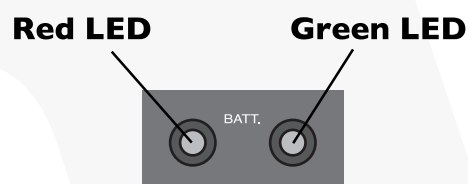
- ! Always be sure you reinsert the batteries in the correct polarity order. If the batteries are loaded incorrectly , the transmitter may be damaged.
- ! When the transmitter will not be used for any short or long period of time, always remove the batteries. If the batteries do happen to leak , clean the battery case and contacts thoroughly. Make sure the contacts are free of corrosion.

#### (Battery Disposal)

Some states require special handling when any type of battery is disposed. Contact the State Agency responsible for recycling hazardous waste for procedures in your area.

#### (Battery Alarm Display)

When the green battery level indicator (LED) goes off and the red LED flashes, change the batteries immediately

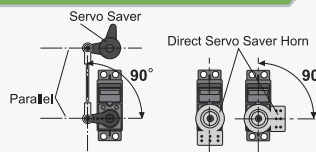


#### (Battery Level Indicator)

## TRIMS & SERVO REVERSE

### Steering Trim

Steering neutral adjustments can be made by moving the steering trim button to the left or right.



When you install a servo always check to be sure the servo is at its neutral position. Adjust the servo horn hole position and linkage so both are parallel. When a servo saver is used place it as close to center position as possible. Be sure the steering trim on the transmitter is at the neutral position.

#### Trim Operation And Maximum Travel

Changing the trim can effect the overall settings, when adjustments are made with the trims recheck your installation for maximum servo travel. (Steering EPA right side and left side).

#### When Trim usage is extreme

If it takes most of your trim movement to get a servo to the neutral position, reposition the servo horn or servo saver on the servo and inspect your linkage installation.

Steering Trim



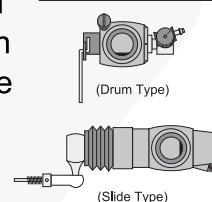
Throttle Trim

### Throttle Trim

Throttle neutral adjustments can be made moving the throttle trim to the left or right.

When using a electronic speed control set the throttle trim to neutral and make adjustments to the speed control. On a gas powered model set the trim to neutral and adjust the linkage to the point where the carburetor is fully closed in accordance with the engine instruction manual.

Carburetor Fully Closed



#### Trim Operation and Travel

Trim adjustments will effect the overall servo travel, check the brake side (backward) movement when changes are made.

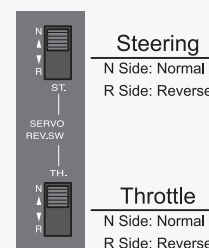
#### When trim movement is extreme

If you use most of the trim movement to get the servo to the neutral position , recenter the servo horn closer to the neutral position and inspect your throttle linkage.

### Servo Reverse

This function reverses the rotation direction of the Steering and Throttle servos.

When the trim position deviates from the center, the deviation will be on the opposite side when the servo is reversed.



(Reversing Switches)



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FAX: (852) 2721 3711  
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