

NO COMPROMISE!
1/8 SCALE ELECTRIC 4WD RACING KIT



SPIRIT^{EF}

S T R 8

FEEL THE SPIRIT!



INSTRUCTION MANUAL



WWW.HOBBYTECH-RC.COM

CAUTION

To avoid serious personal injury and property damage, operate all remotely controlled models in a responsive manner as out-lined below.

R/C car models can exceed speeds of 40km/h (25mph), and cannot be stopped quickly.

- 1- Never run R/C models on the street or highways, as it could cause or contribute to serious traffic accidents.
- 2- Never run an R/C model near people or animals, nor use people or animals as obstacles when operation R/C vehicles.
- 3- To avoid injury to persons or animals, and damage to property, never run a R/C model in a confined or crowded area.
- 4- Running R/C models into furniture or other inanimate objects will cause damage to the objects and the R/C models.

CAUTION DURING OPERATIONS / PRECAUTIONS A OBSERVER PENDANT L'UTILISATION

When the R/C model is in operation, dot not touch any of its moving parts, such as drive shafts, wheels, as the rotating parts can cause serious injury.

- 1- The vehicle motor gets very hot during running and could cause burns if touched.
 - 2- Make sure that no one else is using the same frequency as yours in your running area. Using the same frequency at the same time, whether is driving, flying or sailing, can cause loss of control of the R/C models, resulting in serious accidents.
 - 3- Properly connect plugs. To prevent electrical shock and/or damage to the product resulting from a short-circuit; insulate connections with heat shrink tubing or electrical tape. Before running vehicle, check that battery wiring and plugs are not so loose as to drag on the ground. Properly secure cables using electrical tape or nylon tie-wraps.
 - 4- Stiff rotation of gears, shafts, joints and wheels can burn out the motor. It's recommended to check proper joint and shaft rotation by using one 1,5V dry cell during assembly of the model.
- A worn motor will overheat and result in a short running time. Replace a worn out motor as soon as possible.
- 5- R/C models will run out of control when either the receiver or transmitter battery voltage drops off. Stop the vehicle immediately when the car starts to show down to prevent it from running out of control.

SAFETY PRECAUTIONS/ CONSIGNES DE SECURITE

Follow the outlined rules for safe radio control operation

Avoid running the car in crowed area and near small children.

Make sure that no one else is using the same frequency in your running area. Using the same frequency at the same time can cause serious accidents, whether it's driving, flying or sailing.

Avoid running in standing water and rain. If R/C unit, motor, or battery get wet, clean and dry throughly in a dry shaded area.

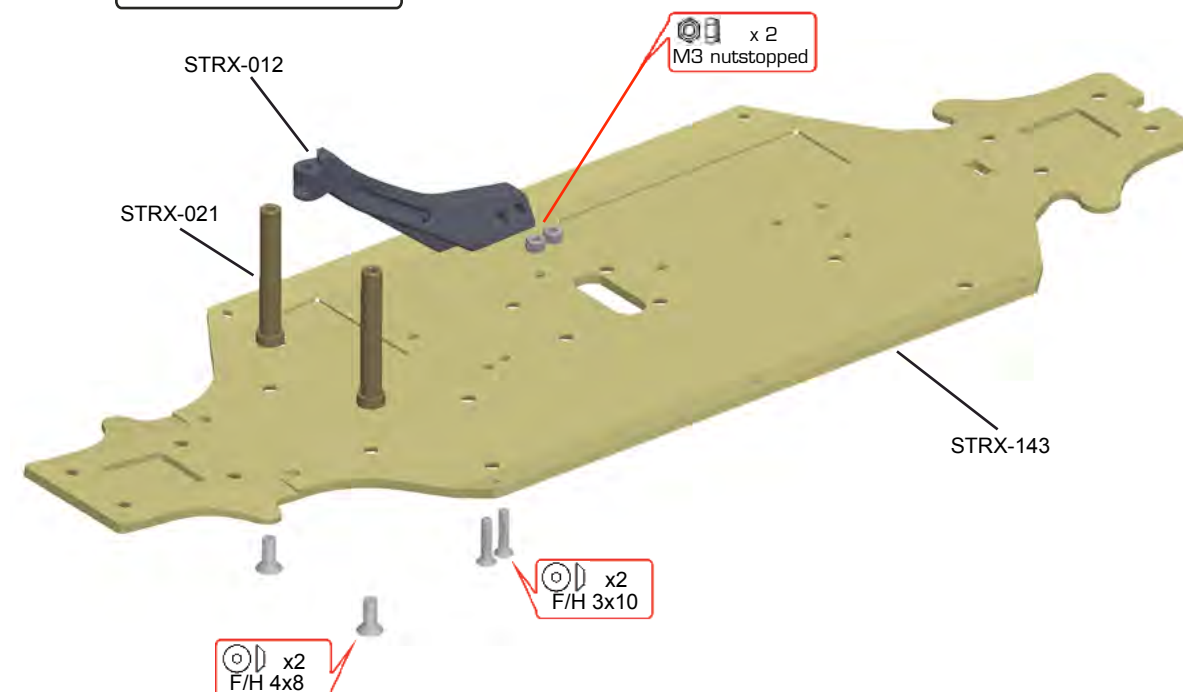
R/C operating procedures

- 1- Make sure the transmitter controls and trims are in neutral. Switch on transmitter.
- 2- Switch on receiver.
- 3- Inspect operation using transmitter before running.
- 4- Adjust steering servo and trim so that the model runs straight with transmitter in neutral.
- 5- Reverse sequence to shut down after running.
- 6- Make sure to disconnect/remove all batteries.
- 7- Completely remove sand, mud, dirt etc
- 8- Store the car and batteries separately when not use
- 9- Gear ratio

Proper gear ratio should be determined by the available output power of the motor; type of battery; track condition and layout It should be also noted that running the car on a good grip surface suggests use of pinion gear 1 teeth smaller, in order to effectively use all of the available battery power.

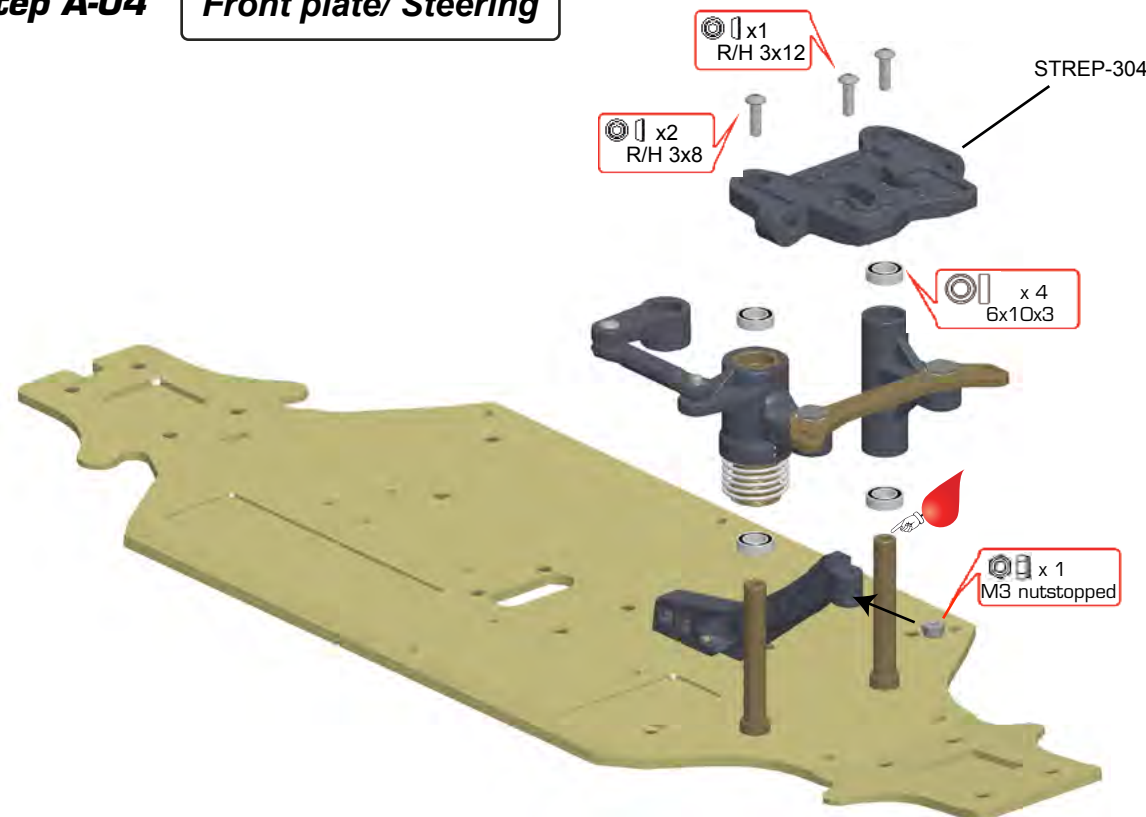
Step A-03

Chassis brace



Step A-04

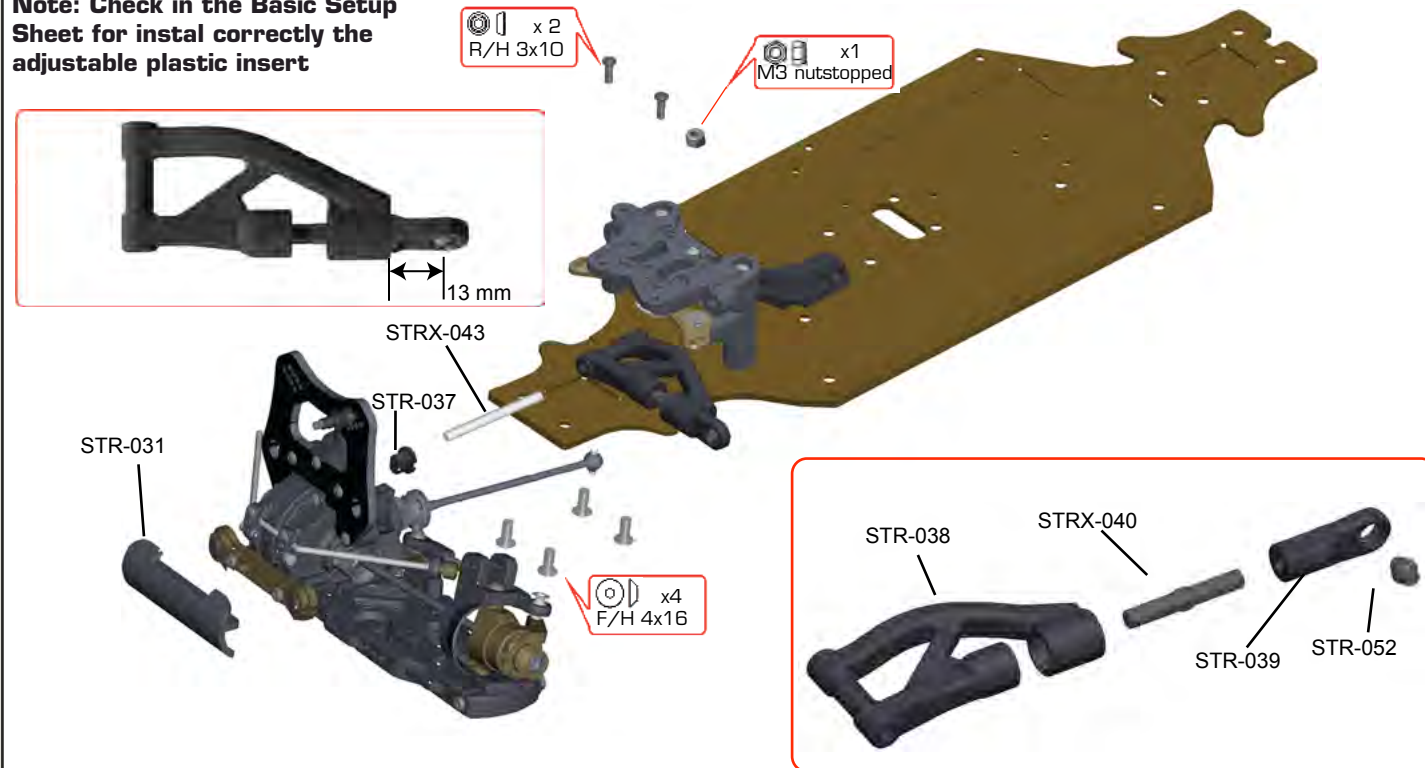
Front plate/ Steering



BAG-B

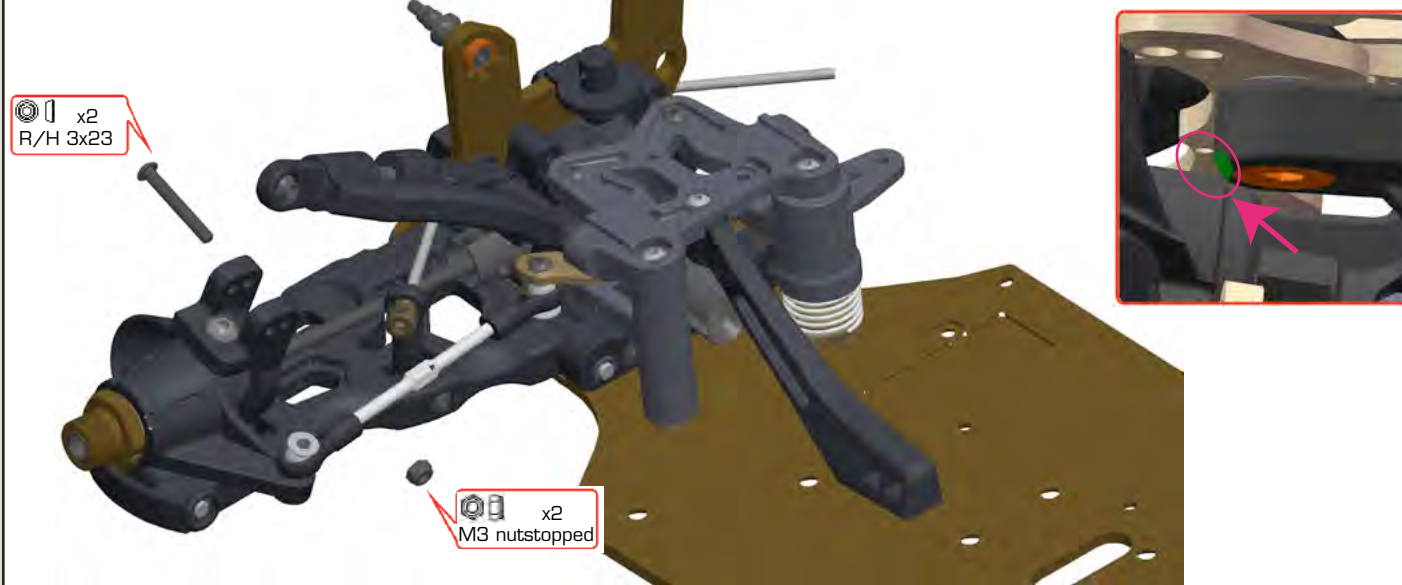
Step B-12 Front drive assembly

Note: Check in the Basic Setup Sheet for instal correctly the adjustable plastic insert



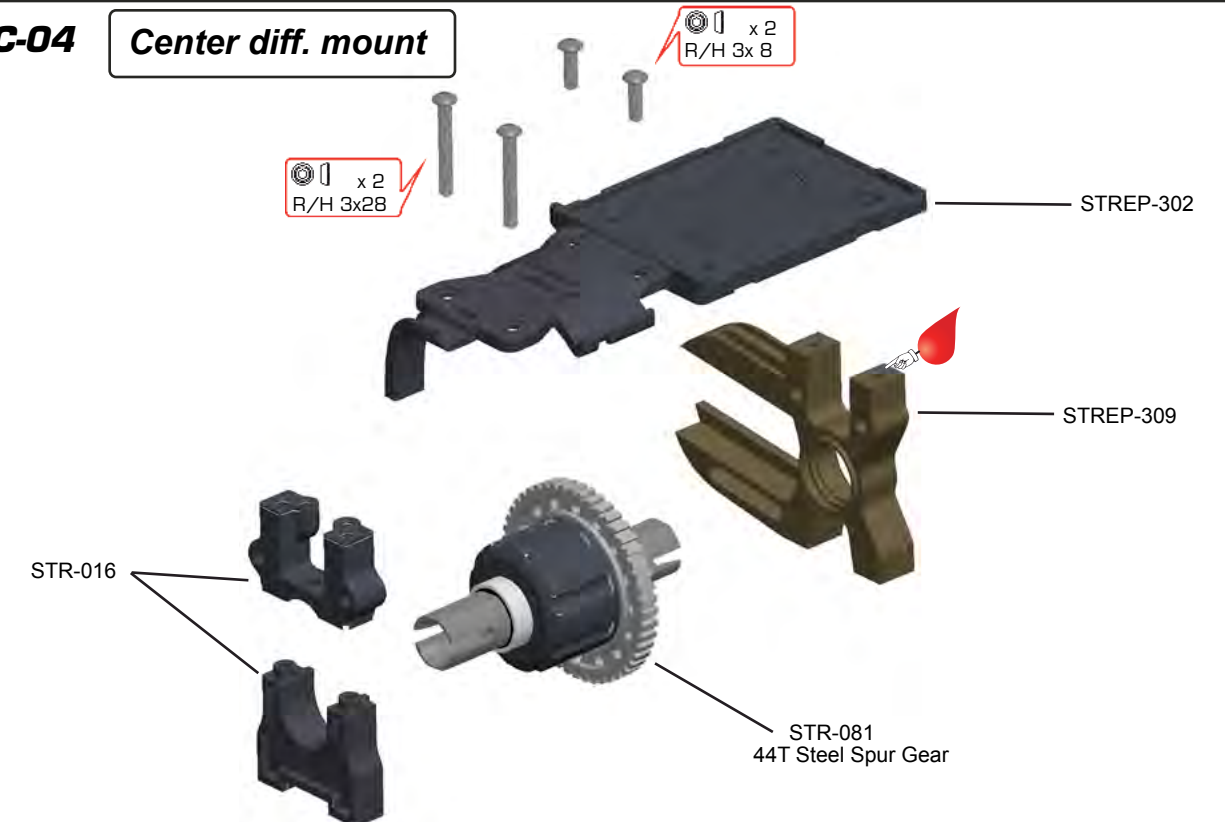
Step B-13 Completed front assembly

Note: When you have assembly the front drive, it is possible that the plastic steering arm (STRX-022) is rubbing against the gear case. You will need to cut off part of the plastic steering arm for obtain steering correctly works

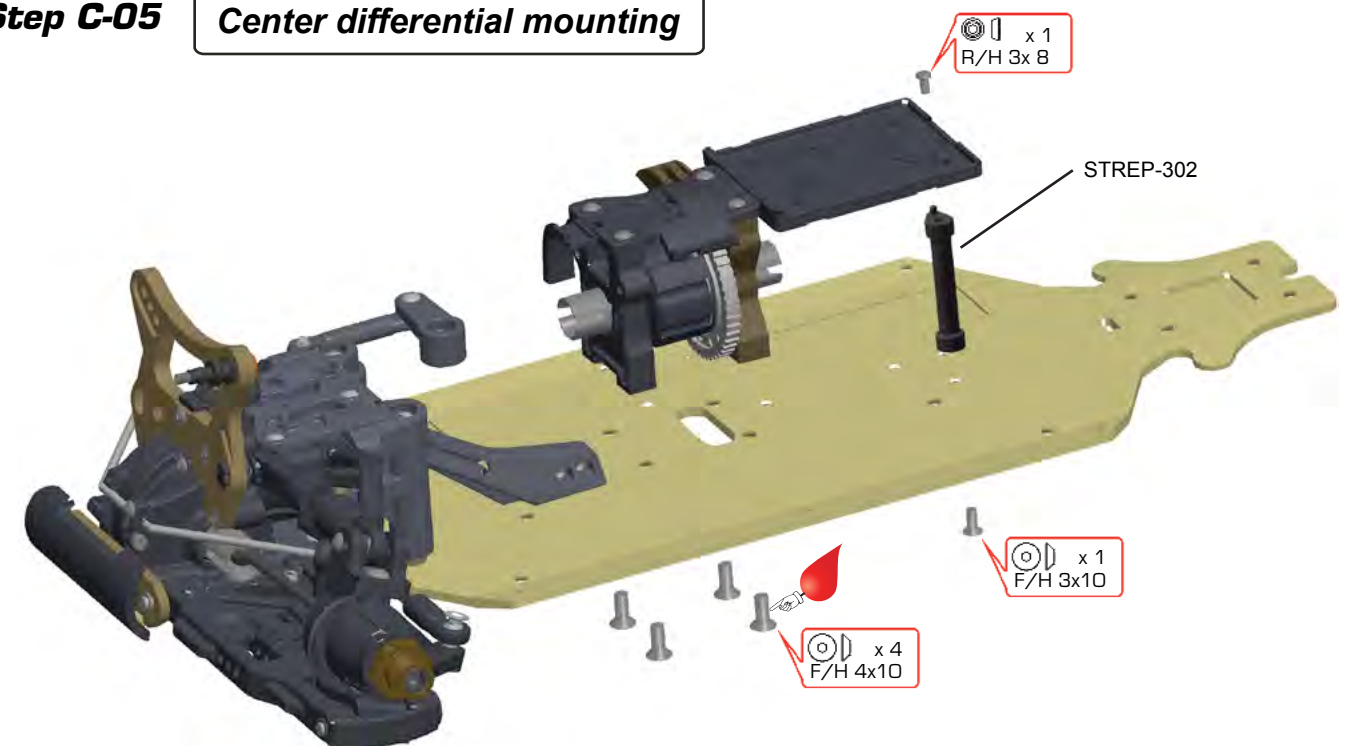


BAG-C

Step C-04 Center diff. mount



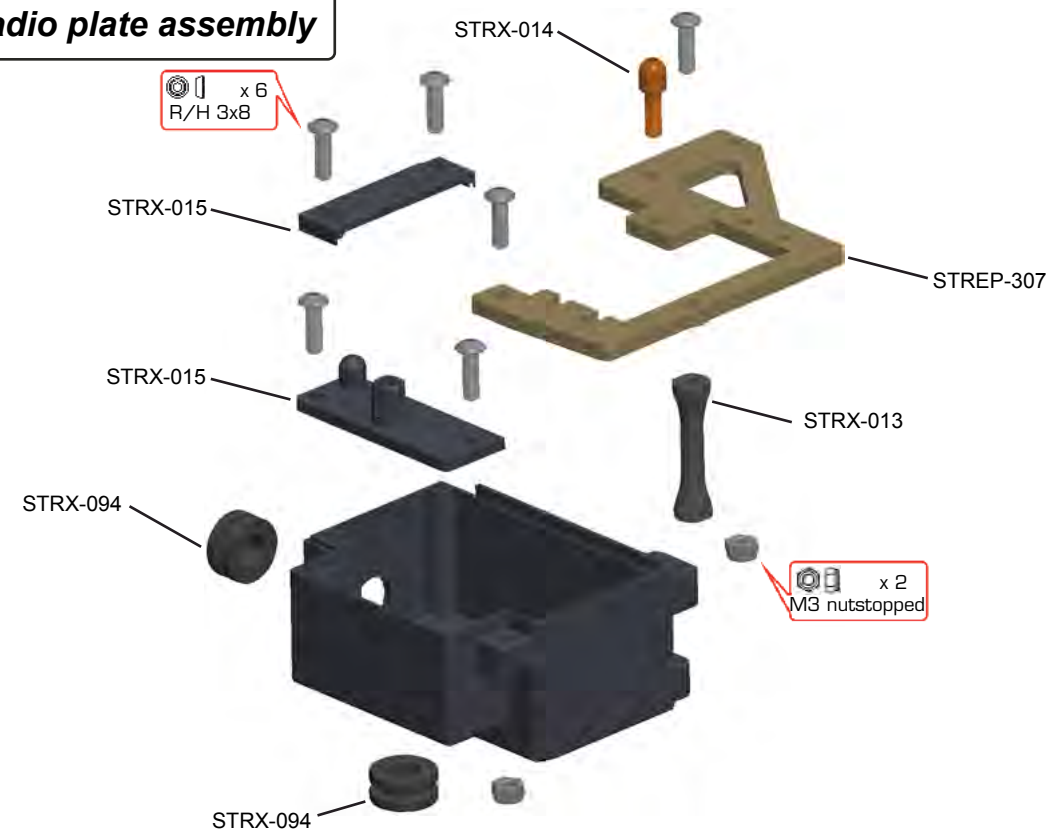
Step C-05 Center differential mounting



BAG-F

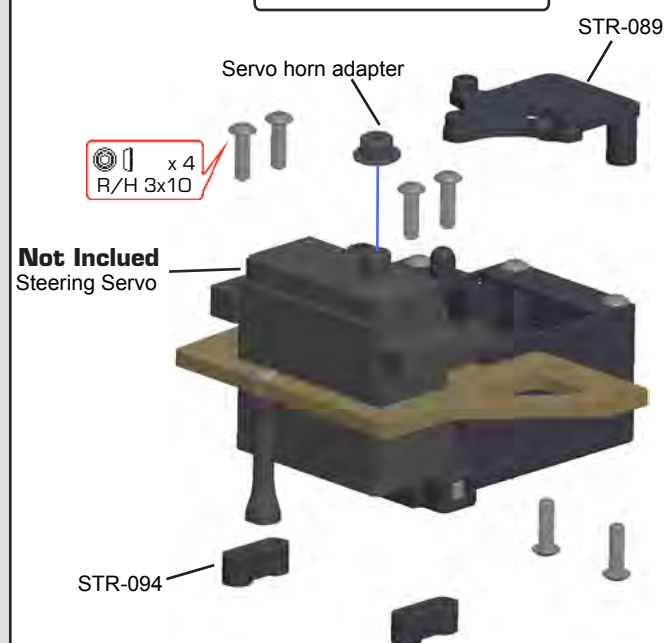
Step F-03

Radio plate assembly



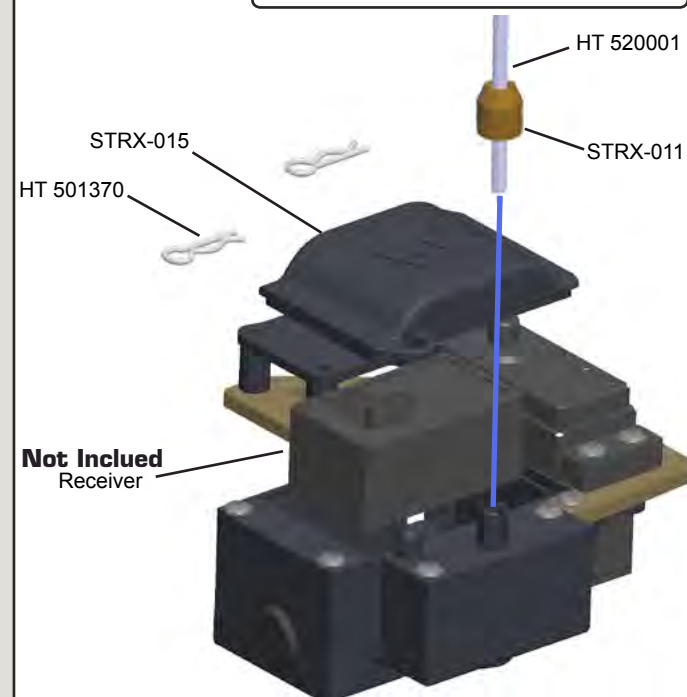
Step F-04

Steering servo



Step F-05

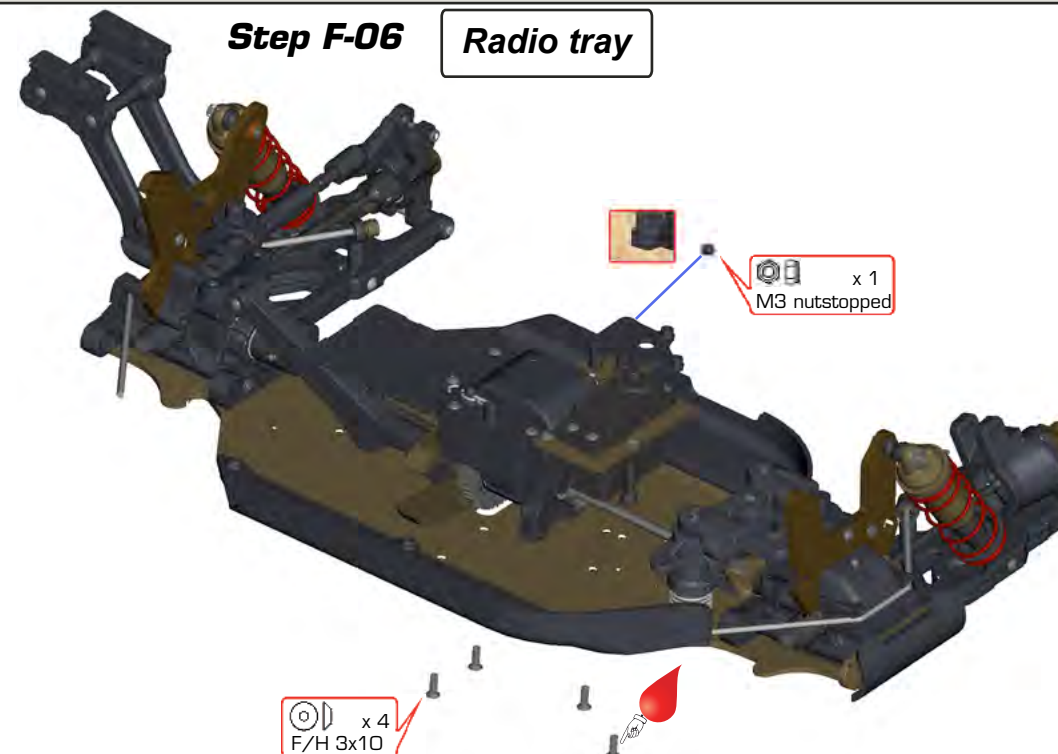
Receiver / Antenna pipe



BAG-F

Step F-06

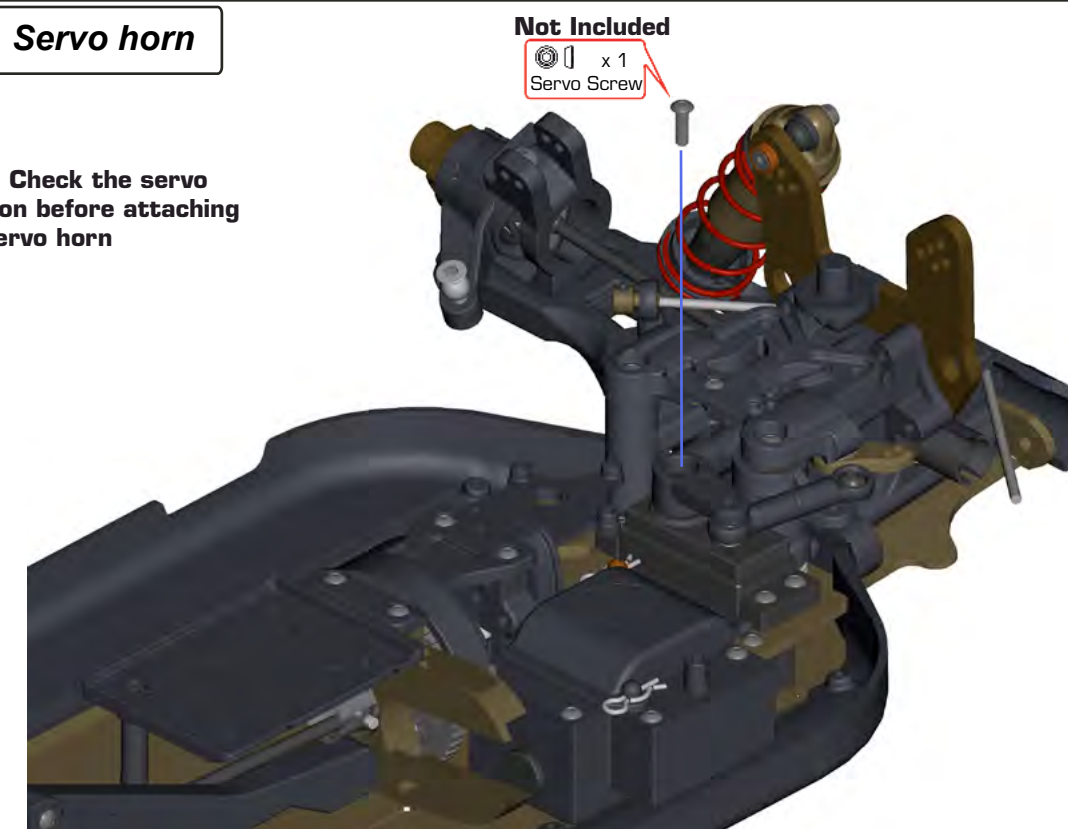
Radio tray



Step F-07

Servo horn

Note: Check the servo position before attaching the servo horn



BAG-G

Step G-01

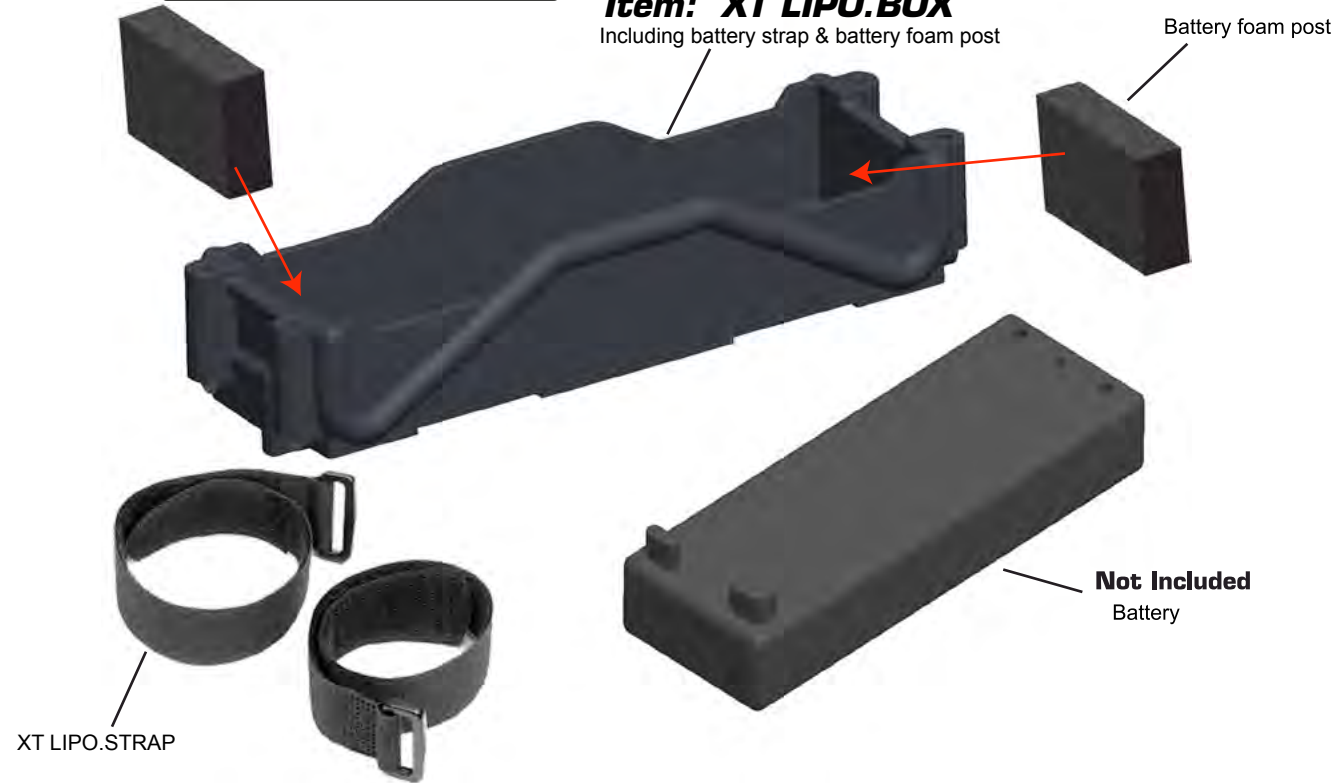
Battery box assembly

Universal battery box kit

Item: XT LIPO.BOX

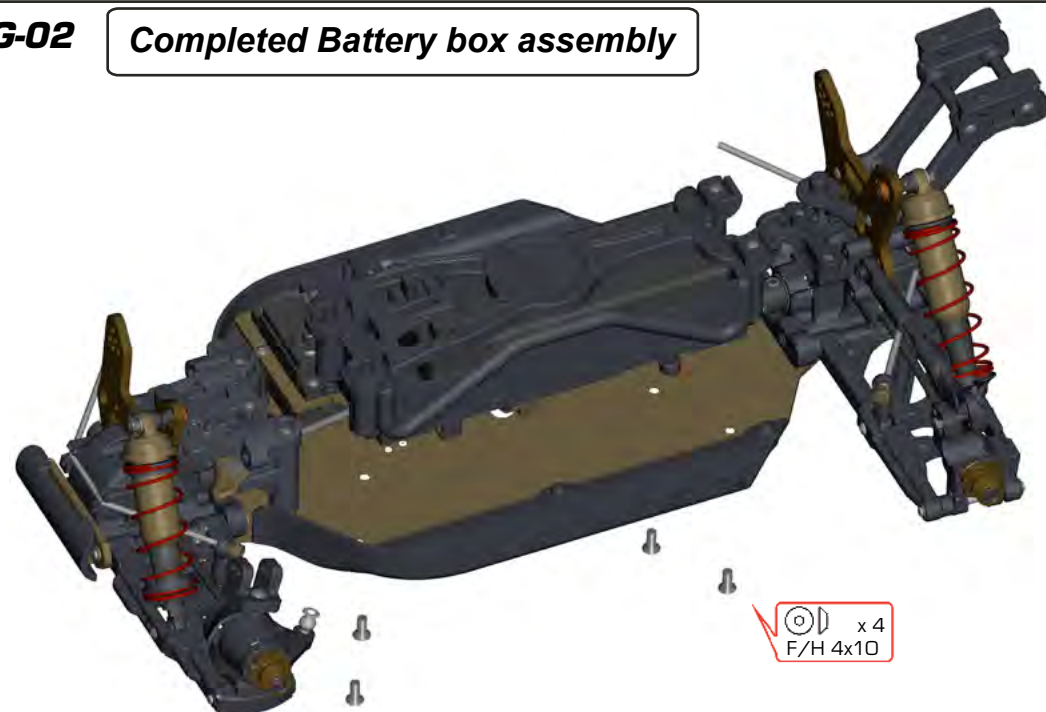
Including battery strap & battery foam post

Battery foam post



Step G-02

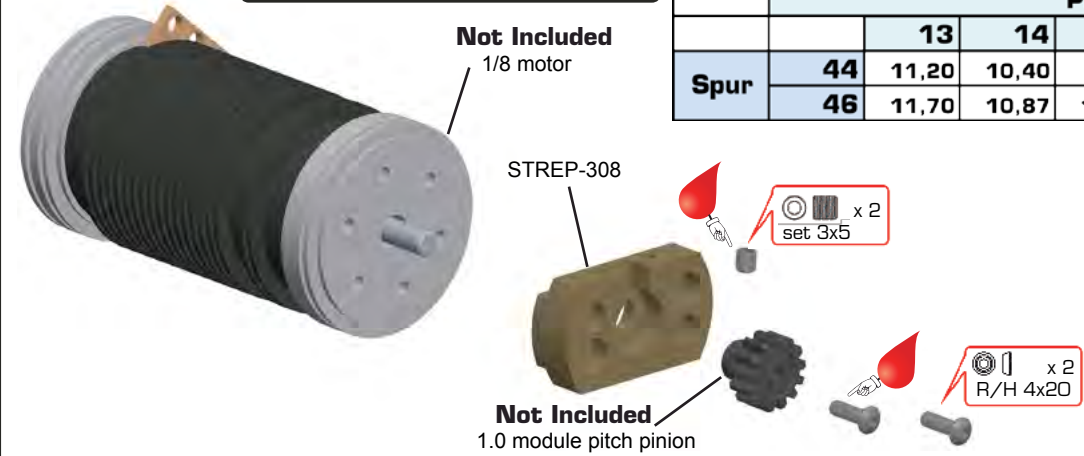
Completed Battery box assembly



BAG-H

Step H-01

Motor holder assembly



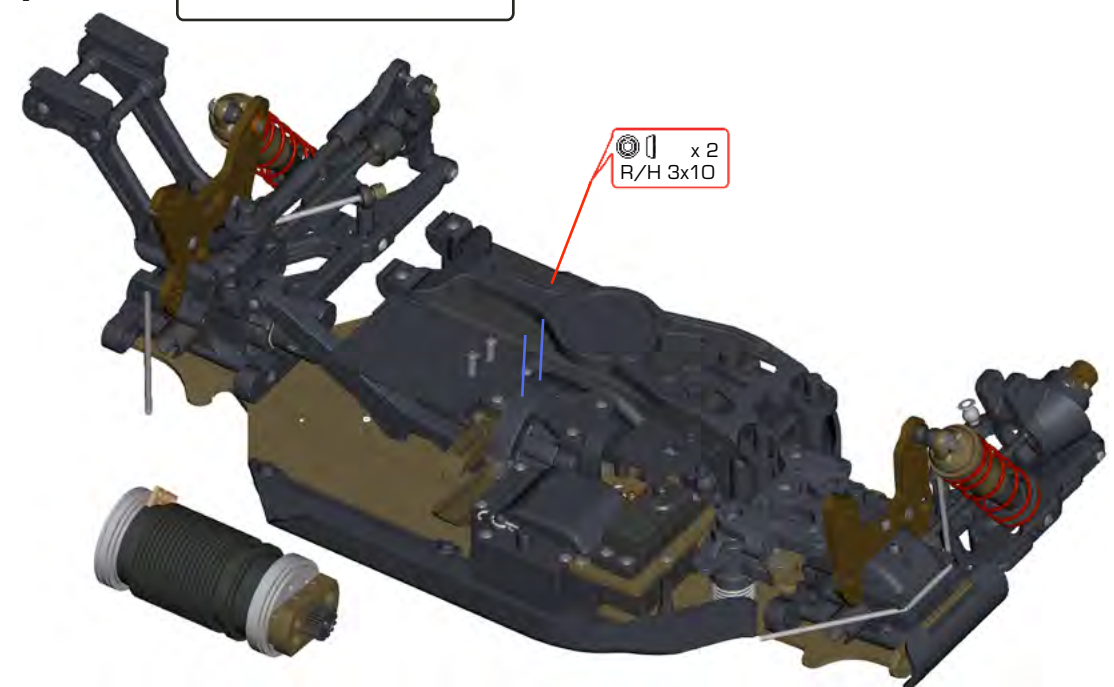
Hobbytech Spirit Gear Ratio Chart							
		Pinion					
		13	14	15	16	17	18
Spur	44	11,20	10,40	9,71	9,10	8,57	8,09
	46	11,70	10,87	10,14	9,51	8,95	8,45

Hobbytech Spirit EP (44T Spur)			
Motor [Kv]	Pinion [T]		
	LiPo 4s	LiPo 6s	
1400	20	13	Use STREP-300
1600	17	12	
1800	16	11	
2000	15	10	
2200	14	10	

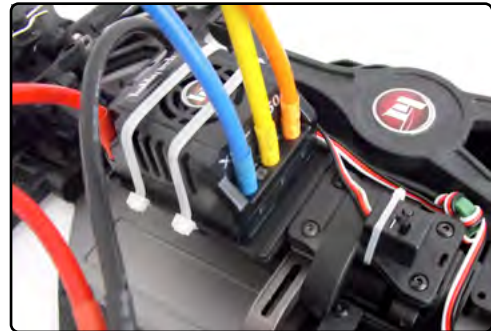
Note: Use an appropriate pinion gear for you motor. A bad compromise between the pinion and the spur gear can damage your electrical components.

Step H-02

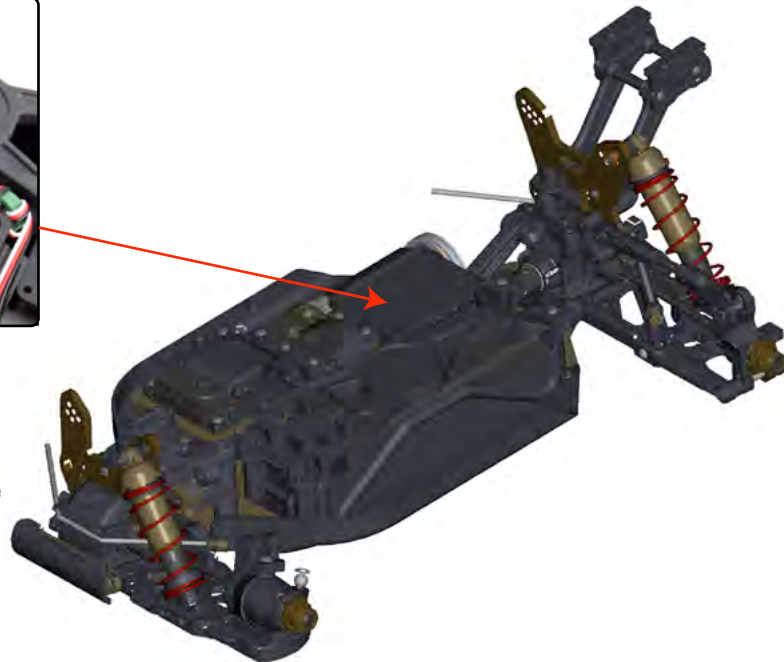
Motor installation



Step H-03 ESC installation

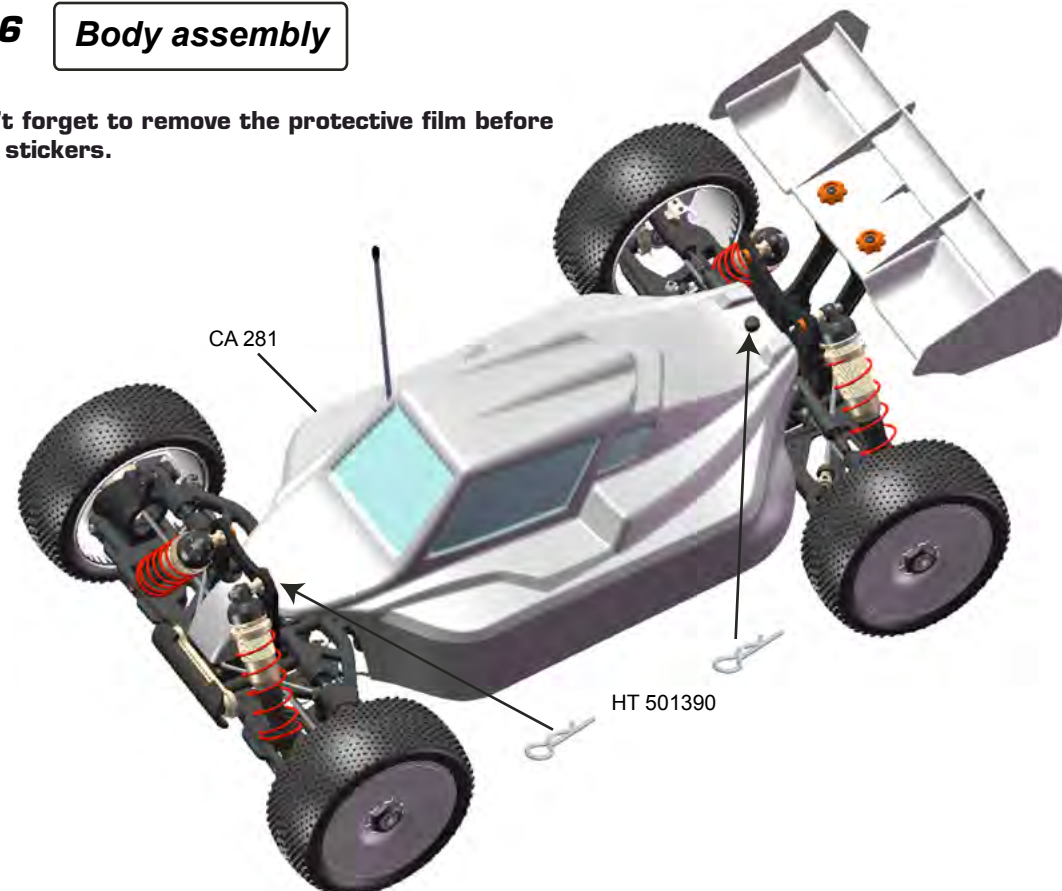


Note: Use the double tape (provided in the kit) to fix the ESC. You can also do like the picture bellow, you have to add 2 tie rap (not included) to secure the whole parts together



Step H-06 Body assembly

Note: Don't forget to remove the protective film before putting the stickers.



SPIRIT EP Parts List

CA 281	Spirit EP body
STR-016	Center Diff Mount
STR-081	44T Steel spur gear
STR-089	Transponder holder
STREP-302	Center diff plate
STREP-304	Front plastic plate
STREP-307	Alu radio plate
STREP-308	Alu motor holder
STREP-309	Alu motor/diff mount
STRX-143	Spirit EP main chassis
XT LIPO.BOX	Universal LiPo box
XT LIPO.STRAP	Battery Strap

SPIRIT EP Screw set

F/H 4x10	Flat Head Screw (qty 8)
R/H 3x8	Round Head Screw (qty 3)
R/H 3x10	Round Head Screw (qty 2)
R/H 3x12	Round Head Screw (qty 2)
R/H 3x28	Round Head Screw (qty 2)

Notes

