SIDEVINDER

1/8TH SCALE 2WD READY-TO-RUN ELECTRIC DUNE BUGGY BRUSHED OR BRUSHLESS POWERED



COMPONENT AND UPGRADE PARTS LISTING







Sidewinder 1/8th RTR Electric Dune Buggy

Congratulations on your purchase of the FTX 'Sidewinder' electric Dune buggy.

This 1/8th scale model has been factory assembled and all electrics installed and set up to make it the easiest possible introduction to the sport of driving RC cars.





WARNING: Read the ENTIRE instruction manual to become familiar with the features of the product before operating. Failure to operate the product correctly can result in damage to the product, personal property and cause serious injury.

This is NOT a toy and must be operated with caution and common sense. Failure to operate this product in a safe and responsible manner could result in damage, injury or damage to other property.

This product is not intended for use by children without direct adult supervision.

It is essential to read and follow all the instructions and warnings in the manual, prior to assembly, set-up or use, in order to operate correctly and avoid damage or serious injury.

Safety Precautions and Warnings

- You are responsible for operating this model such that it does not endanger yourself and others, or result in damage to the product or the property of others.
- This model is controlled by a radio which is possibly subject to interference which can cause momentary loss of control so it is advisable to always keep a safe distance to avoid collisions or injury.
- Age Recommendation: 14 years or over. This is not a toy. This product is not intended for use by children without direct adult supervision.

Carefully follow these directions and warnings, plus those of any additional equipment associated with the use of this model, chargers, ESC and motors, radio etc.

- Never operate your model with low transmitter batteries.
- Always operate your model in an open area away from cars, traffic or people.
- Never operate the model in the street or in populated areas.
- Always keep the vehicle in direct line of sight, you cannot control what you cannot see!
- Keep all chemicals, small parts and anything electrical out of the reach of children.
- Avoid water exposure, moisture causes damage to electronics and may result in the loss of control or permanent damage.
- Avoid injury from high speed rotating parts, gears and axles etc.
- Novices should seek advice from more experienced people to operate the model correctly and meet its performance potential.
- Exercise caution when using tools and sharp instruments.
- Do not put fingers or any objects inside rotating and moving parts.
- Take care when carrying out repairs or maintenance as some parts may be sharp.
- Do NOT touch equipment such as the motor, electronic speed control and battery, immediately after using your model because they can generate high temperatures.
- Always turn on your transmitter before you turn on the receiver in the car. Always turn off the receiver before turning your transmitter off.
- Keep the wheels of the model off the ground, and keep your hands away from the wheels when checking the operation of the radio equipment.
- Prolong motor life by preventing overheat conditions. Undue motor wear can result from frequent turns, rapid change of direction forwards/backwards, continuous stop/starts, pushing/pulling objects, driving in deep sand and tall grass, or driving continuously up hill.

Contents:

Sidewinder 1/8th RTR Electric Dune Buggy

Transmitter: 2.4ghz steerwheel

Charger: Input Mains 240v AC, Output 1.0A DC

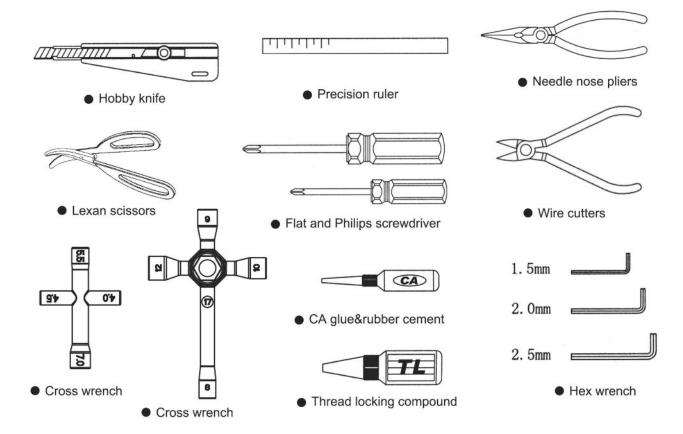
Battery: 11.1V 2200mAh LiPO (unless Ready Set version)

Aerial Tube



Required equipment for operation

1. Tools required for building and maintenance:



WARNING!

Do not use a power screw driver to install screws into nylon or plastic materials. The fast locking may heat up the screws being installed that may break the molded parts or strip the threads during installation.

2.Additional items needed for operation:



3 pcs AA Alkaline batteries for transmitter

IMPORTANT!

Check that all screws and nuts are tight before each use.



FAMILIARIZING YOURSELF WITH YOUR 2.4GHz RADIO SYSTEM

Your car is equipped with the new 2.4GHz radio system. Please read and understand all instructions below before operating.



A: Steering Wheel 1: Steering Trim 4: Power Switch 7: Throttle Reverse
B: Trigger 2: Steering Reverse 5: Steering Dual Rate 8: Green Indicator
C: Battery Case 3: Red Indicator 6: Throttle Trim 9: Bind(Pair) button

Steering Wheel: Proportionally operates the models right and left steering control.

Battery Case: Requires 3pcs of AA size batteries.

Power Switch: Used to turn the radio controller ON/OFF

Steering Dual Rate Dial: Allows you to change the amount of steering servo travel compared to the amount of physical movement of the steering wheel.

Throttle / Steering Trims: Used to adjust the center trim of the throttle/steering channel.

Steering Reverse: Allows you to electronically switch the direction of steering servo travel. For example, if you move the steering wheel to the right and the steering servo moves to the left, flip the Steering Reverse Switch to make the steering servo move to the left.

Throttle Reverse: Allows you to electronically switch the direction that the motor operates in relation to the throttle trigger. For example, if you pull the throttle trigger to accelerate forward, but the model goes in reverse,

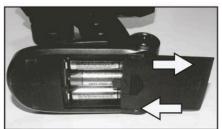
flip the Throttle Reverse Switch to make the model accelerate forward.

Trigger: Controls the speed and braking ability of your car. Pull it to accelerate, release it to decelerate, and push it to brake. Pushing it a second time activates the reverse feature.

Indicators: Shows battery power level. Green indicator flashing means battery power is low. If both red and green indicators are flashing then the radio controller battery is too low to control the model and you must replace with fresh batteries immediately.

Bind (Pair) button: It is used to bind your 2.4GHz radio system.

BATTERY INSTALLATION



- 1) Slide the battery cover as shown and install 3pcs of AA size batteries, positioning the polarity as indicated.
- 2) Replace the battery cover after batteries are installed.

NOTES:

- -Use batteries of same type.
- -Remove batteries from the case if not in use.
- -Always check the battery power.
- -Dispose of exhausted batteries properly.

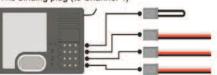


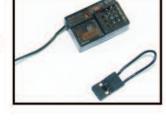
TO BIND THE RECEIVER TO THE RADIO CONTROLLER

Before running, make sure that the radio controller is bound with the receiver. This has been done at the factory, but if the model is not responding to the controller, it is possible that the controller and receiver are not bound, and you must perform the binding procedure following the instructions below.

1. The bind plug is secured around your receiver wires. Insert the bind plug into channel 4 as indicated in the illustration.





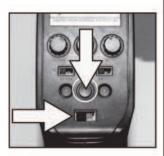




2. Switch on the car and the receiver LED will begin flashing.



3. Press and hold the PAIR (Bind) button on the transmitter and turn the power switch on. You must do this within 5 seconds of turning on the car.



4. The LED on the receiver will remain flashing indicating that binding is being performed automatically. The green light on the transmitter will also flash.



5. Once both red and green lights on the transmitter are lit solid and the LED is solid on the receiver, then your receiver is bound to the controller and the binding process is complete.



- 6. Then centre the throttle trim and throttle trigger to set the failsafe.
- 7. Unplug the bind plug from the receiver.

RUNNING YOUR CAR









NOTES:

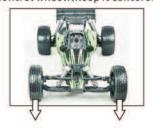
- --Before using your car, make sure the radio controller has sufficient battery power. If the battery power is too low it can lead to the loss of control of your car.
- -- Always turn on the remote controller FIRST, and then the receiver.

3 CHECK STEERING PERFORMANCE

Ensure good steering performance.



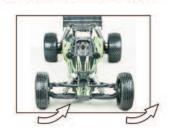
1) To keep the car running in a straight line, do not move the control wheel. (Keep it centered)



TURN LEFT



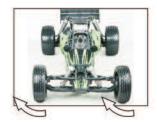
2) Turn the control wheel left to allow your vehicle to turn left.



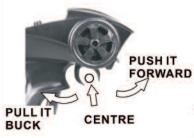
TURN RIGHT

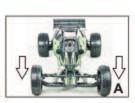


3) Turn the control wheel right to allow your vehicle to turn right.



4 CHECK TRIGGER RESPONSE



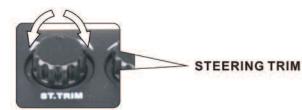






- A. Pull the trigger back to accelerate, release it to decelerate and push it forward to brake.
- B. To stop accelerating your car, release the trigger to Neutral.
- C. Pushing the trigger forward a second time activates the reverse feature.

5) TO TUNE THE STEERING TRIM

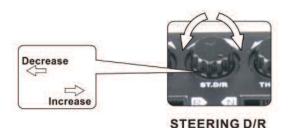


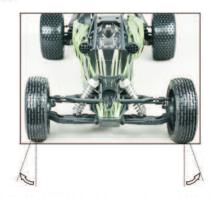


Gently pull the trigger to allow your car to accelerate slowly. Meantime, tune the steering trim to align the front wheels.



(6) TO TUNE THE STEERING DUAL RATE CONTROL DIAL





This dial adjusts the overall travel of the steering servo. Push the dial forward for maximum steering. Pull the dial back to reduce the steering level.

- Set the Steering Dual Rate Control Dial to Minimum first. To set the desired steering level increase it again whilst decelerating your vehicle.

BATTERY INSTALLATION









Follow the illustrations above to install the Li-po battery pack in your car. The battery cover is located on the bottom of the chassis.

- 1) Pinch the battery cover blocks as shown to open the battery cover. (See Figure 1)
- 2) Lift the battery cover. (See Figure 2)
- 3) Connect the battery to the ESC as shown. Note: The car uses dean-T plugs -make sure to connect black to black and red to red.. (See figure 3)
- 4) Install the battery foam and replace the battery cover. (See Figure 4)

Note: Some versions may not be supplied with battery & charger. Check box ends for spec.

CHARGING THE BATTERY PACK

Note: The Li-Po pocket battery charger is not provided unless separately purchased.

Input Voltage: 110-240 V AC

Output Current: 1.0 A Indicator: 3 LED

Max. Charging Current: 1.0 A Size: 100 mm * 60mm * 35 mm

Weight: Approx. 180g

Slot A for 2S li-po

Charging Indicators

(7.4V)

Slot A for 3S li-po

Power Supply Slot (11.1V)



 Connect the pocket balance charger to power supply by using the power supply cord provided in the package.
 The indicator lights will turn green meaning that the charger is ready.



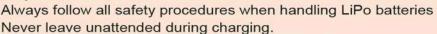
2) Connect the battery to the corresponding slot. (If it is 3S(11.1V) battery, please connect it to 3S slot...)
When the battery is initially connected, the indicator lights will turn Red meaning that charging has begin.
Once the battery is fully charged, the indicator lights will turn green again.



Note: The batteries use Deans T plugs -make sure to connect black to black and red to red.

WARNING

Ensure that you connect your charger as outlined in this manual. Only connect 2s or 3s LiPo batteries.



Charge away from flamable objects and materials

We recommend charging battery in a closed tin or Lipo sack

Do not handle charger with wet hands and keep dry at all times.

Must be used with adult supervision.



STOPPING YOUR CAR

1 TURN OFF THE RECEIVER ON YOUR CAR









• Always switch off the receiver, and then the radio controller.

3 REMOVE BATTERIES

• Do not forgot to remove batteries from your car and radio controller when not in use.

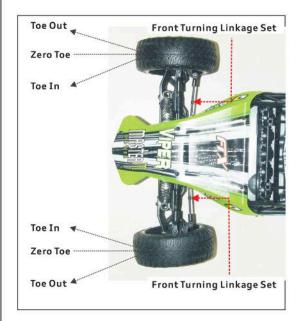


CHASSIS TUNING GUIDE

Your model can be customized to enhance speed and performance. Simple adjustment and easily maintained setting will assure optimum operation and performance. When making adjustments, do so only in small increments and always check for other parts of the vehicle that are affected. Many after market options are available to make your R/C vehicle faster and stronger. Please read the section carefully and it always make sure you write down your base settings in case you need to refer to them at a later date.

Front Steering Toe Angles

The front steering toe angle has a dramatic on how your car performs and how your tires wear. You can have toe-in, zero toe or toe-out. This can be adjusted by turning the front turning linkage set with an adjustable wrench.



Toe-in will be less reactive and cause the vehicle to under steer(the front wheels push straight on while turning).

This can be advantageous for operators struggling to get to grips with the driving of the vehicle.

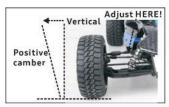
Toe-out will be more aggressive on the steering response especially on small steering inputs. This will make the car want to over steer(rear wheels slide on small steering inputs). This is useful as a race tuning aid to gain extra steering.

Zero toe will make the front wheels run straight and make the car very neutral. Tire wear will also be reduced and the vehicle will feel easier to drive.

Camber Adjustment

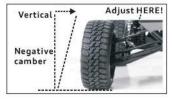
Camber can be adjusted on all 4 wheels of the car. You can have negative camber or positive camber which will affect the contact patch of the tire both statically and while cornering.

Camber is mainly used to control the wear of the tire. Normally a car would be set to have a small amount of negative camber. Camber is adjusted by the upper link turnbuckle linking the wheel to the chassis front and rear.



This is an example of positive camber.

This is when the bottom of the wheel is closer to the centre of the car compared to the top of the wheel. Positive camber will give less contact area in the corner and less grip. Excessive amounts will cause less grip and uneven wear.



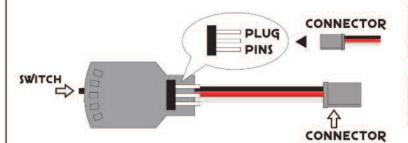
This is an example of negative camber.

This is when the top of the wheel is closer to the centre of the car compared to the bottom of the wheel. Negative camber will give more contact area in the corner and more grip. Excessive amounts will cause less grip and uneven wear.

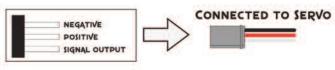


GYRO

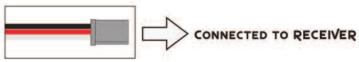
Gyro, which is an optional part, can be installed under the driver patch to your car with the help of a piece of adhesive tape. (See the pictures below.)

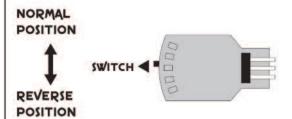




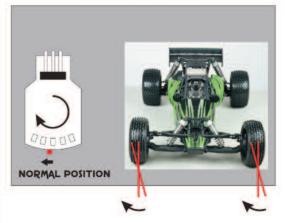


Negative pole to BLACK wire Positive pole to RED wire Signal output to WHITE wire

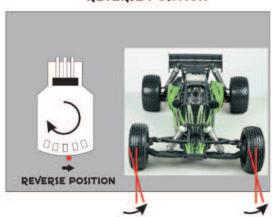




NORMAL POSITION



REVERSE POSITION



The gyro is a device that can help you drive your dune buggy easier on low traction surfaces, reducing possible spin outs. It adjusts the servo direction to avoid a full 360° spin happening keeping your vehicle on track.



MAINTAINING YOUR CAR

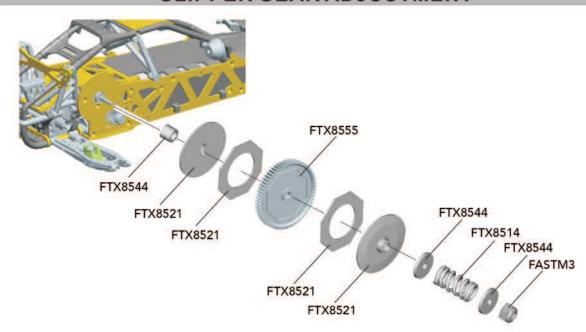
After running your car, perform the following procedures regularly to maintain your car's performance.

- Inspect your car for any obvious damage.
- Check the gears for wear, debris or broken/slipping teeth.
- Check the wheels and tighten the wheel screws properly.
- Check for loose screws in the chassis.
- Check the wiring for frayed or damaged wires or connectors.
- Always disconnect and remove the battery when not in use.
- Check all batteries.
- Keep the chassis clean and free of sand, dust, moisture and any other debris.
 Remove and clean the motor if necessary. (Never attempt to re-assemble the motor, you will damage it and void the warranty).
- Clean the car body with a soft lint-free cloth.
- Remove all batteries from the car when not in use.

	TROUBLESHOOTING		
	1. Check to see if radio controller and car are on.		
A. The vehicle does	2. Check to see if radio controller and receiver are properly bound		
not work at all.	3. Adjust throttle trim on the radio controller		
	4. Replace batteries.		
	1. Replace or charge the battery pack and/or the radio batteries.		
B. The vehicle runs	2. Make sure the vehicle is geared properly and the pinion and spur gear are over tightened.		
slow.	3. Clean all bushings or ball bearings.		
	4. Check for stripped or dirty gears.		
C. The throttle works,	1. Check if the servo feels jammed, try centering carefully it by hand.		
but not the steering.	2. Check all the steering linkage for any damage.		
D. It steers, but no throttle control.	1. Adjust the throttle trim.		
	2. Replace or charge the battery pack and/or the radio batteries.		
	1. Check gear mesh between spur gear and pinion.		
E. The vehicle runs	2. Check for stripped and/or dirty gears.		
noisily.	3. Clean and oil bushings or ball bearings.		



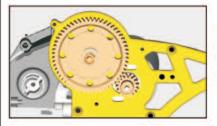
SLIPPER GEAR ADJUSTMENT



Install the spur gear and slipper clutch as shown. Tighten the lock nut with a cross wrench once installed. You will need to test the car to make sure the slipper clutch is set correctly.

A) If you find that the slipper clutch slips too much (Buggy goes slowly but the electric motor is running fast.), you will need to tighten the lock nut. For high traction surfaces and coming of jumps, you should have the slipper clutch slip a little.

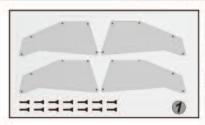
B) Never over tighten the lock nut to make the slipper clutch not to slip. If too tight you can damage the gear box. The amount of slippage can affect the performance of your buggy.



Make sure the gear mesh is set properly.

Double-check the motor pinion screw and the spur gear nut are tightened firmly.

INSTALLING THE SIDE WINDSHIELDS







- 1) Find in the pack inside the box where it contains two pieces of side windshields and 12pcs of Round Head Self Tapping Screws 2.6*8mm (FTX6783). See Figure 1
- 2) Install the side windshields to your cars with the screws as shown in Figure 2 and 3.











FTX8533



Gear Case+Shock Tower Brace+Shock Retainers

FTX8538



Braces

FTX8543



Off Road Wing +Wing Mount

FTX8544



Steering Assembly+ Servo Arm + Mount-Plastic Part

FTX8549



Rear Stays+Mount+Light Mounts Set

FTX8554



Rear Brace Mounts

FTX8545



Suspension Arms(Upper) +Braces+Side Body Posts

FTX8550



Bead Lock Rings (Front 4P& Rear 4P)

FTX8555



Spur Gear+ Diff. Gear Assembly

FTX8546



Gear Cover Seals

FTX8551



Wheels-Front

FTX8556



Wheels-Rear

FTX8547



Tires (Front)+ Sponge Insert

FTX8552



Tires (Rear)+ Sponge Insert

FTX8557



Wheels Complete-Front

FTX8548



Wheels Complete-Rear

FTX8553



Sand Tires Optional Part (Front)+Sponge Insert

FTX8558



Sand Tires Optional Part (Rear)+Sponge Insert

FTX8559



Sand Wheels Optional Part Complete-Front

FTX8562

Sand Wheels Optional Part
Complete-Rear







FTX8636



FTX8637





Gyro

Brushed Motor

Brushless Motor (3650 TYPE , KV 2750)

81

Shock Inner Oil Bladder

FTX8560



VZ0340



LiPo Battery 11.1V, 25C 2200mAH (w/T Plug)

FTX8635



Splash Resistant Brushed ESC (w/T plug)

FTX8622

FTX8564



Brushed Motor Pinion 17T + Grub screw

Shock O-Rings

FTX8563G



Body Assembly (Green)

FTX8563B



Body Assembly (Blue)

FTX8571



Strongly recommended for SAND WHEELS Optional Part

Alum. Wheel Hex

FTX8638



Splash Resistant Brushless ESC w/T plug

ET0017



Servo (6Kgs)

FTX8528



Metal Gearbox gears (brushless)

VZ0341



Li-po Battery 11.1V,30c, 3000mAH (w/T plug)

ET1071



2.4ghz Transmitter

ET0223E



Li-po Battery Charger+ European Standard Plug

ET0223



Li-po Battery Charger+ UK Standard Plug

ET1091

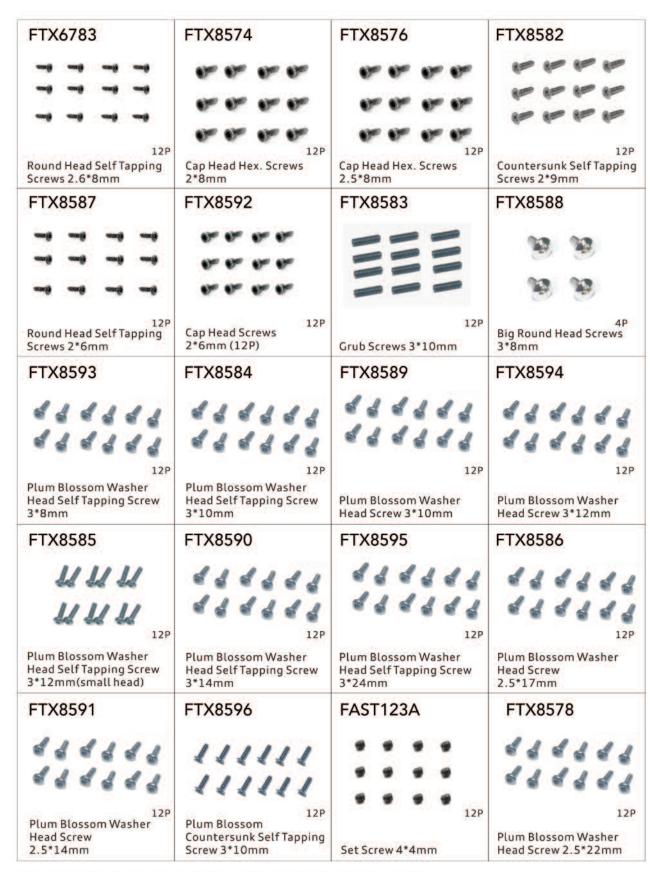


Receiver 2.4Ghz









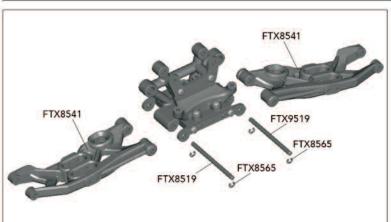


FTX8580	FTX8577	FTX8579	FTX8581
44444	44444	44444	44444
999999	999999	999999	49999
Plum Blossom Washer Head Screw 3*18mm	Plum Blossom Washer Head Screw 3*4mm	Countersunk Blossom Self Tapping Screw 3*8mm	Countersunk Blossom Self Tapping Screw 3*17mm

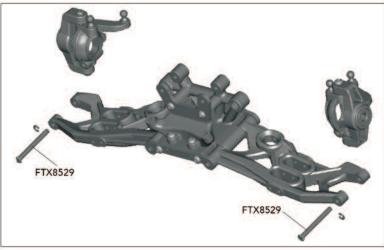


FRONT SUSPENSION ASSEMBLY

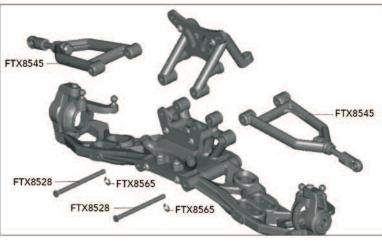








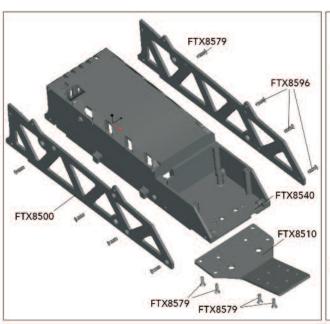


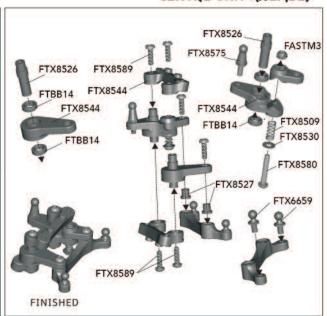




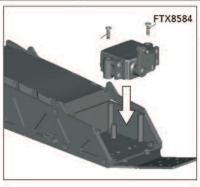


CENTRE UNIT ASSEMBLY

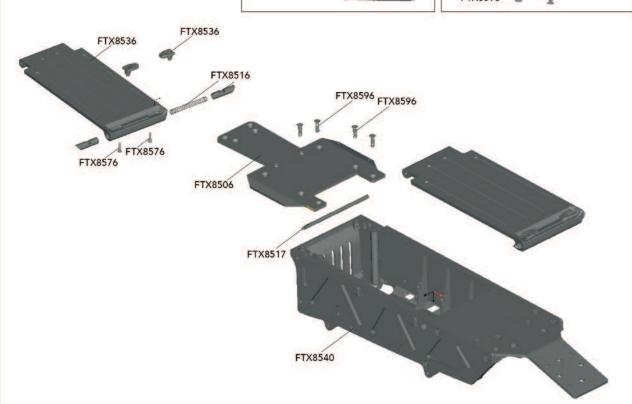












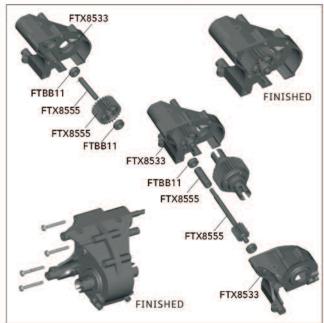


DIFF./GEAR BOX/REAR SUSPENSION ASSEMBLY

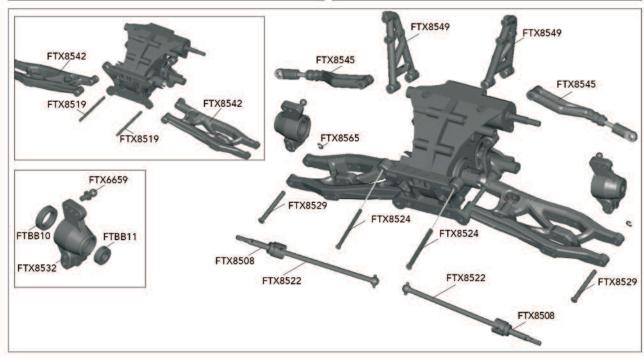






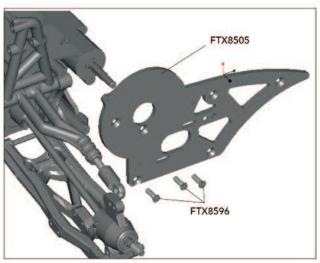


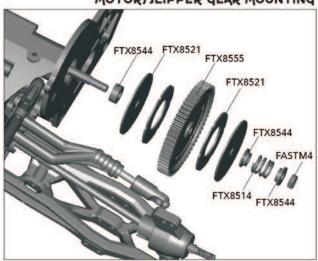


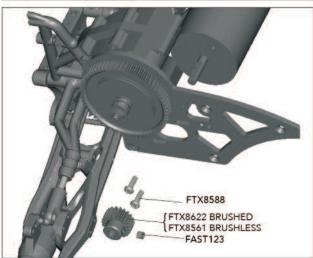


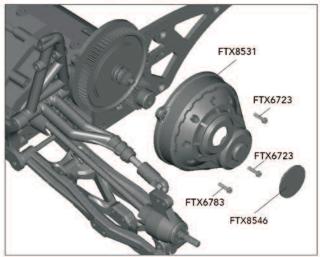


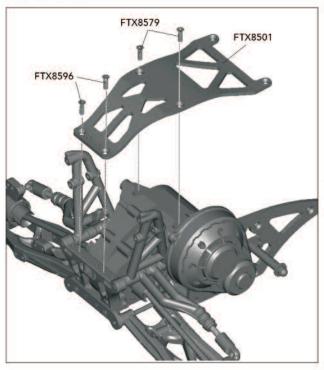
MOTOR/SLIPPER GEAR MOUNTING

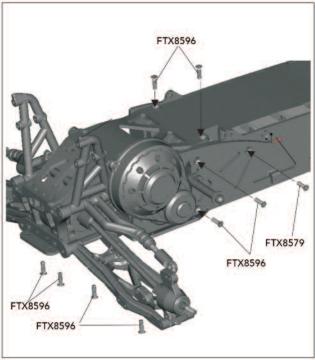






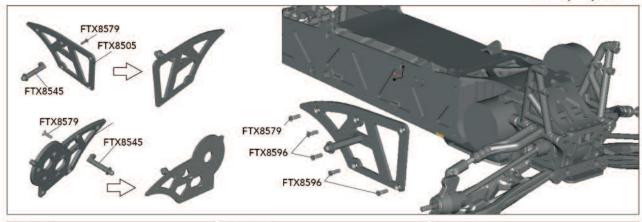




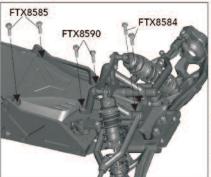


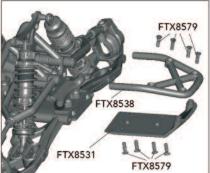


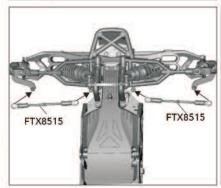
INSTALLATION-I



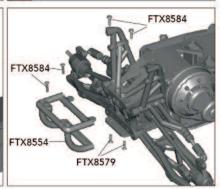


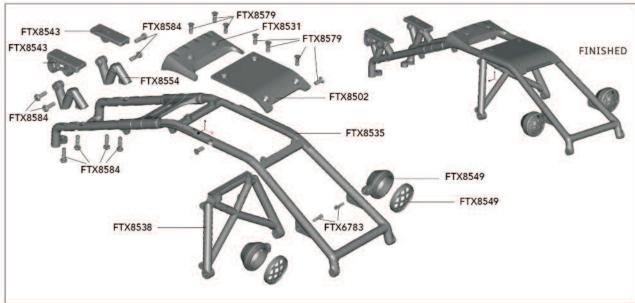






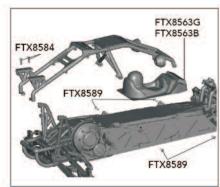


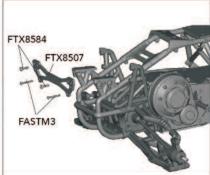


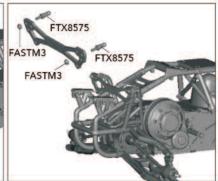


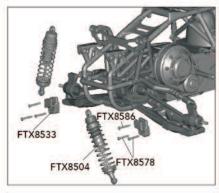


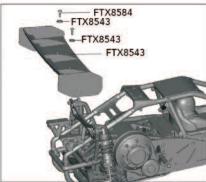
INSTALLATION-2





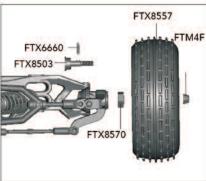


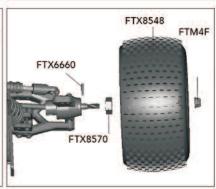


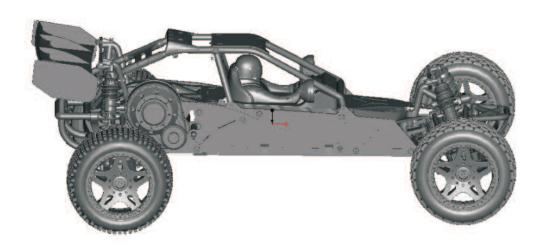














Notes:



Notes:

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