



[WWW.FTX-RC.COM](http://WWW.FTX-RC.COM)

# OUTRAGE

1/8 SCALE 4WD IC RACING BUGGY

Part No: FTX5520



**SPECIFICATIONS:**

WIDTH:	305MM
HEIGHT:	165MM
LENGTH:	458MM
WHEELBASE:	335MM
TYRE SIZE:	110 X 43MM
ENGINE:	21 SIZE 3.5CC

**FEATURES:**

- READY-TO-RUN
- 2-CHANNEL RADIO INSTALLED
- 4WD DRIVE SYSTEM
- 21 SIZE 3.5CC PULL START ENGINE
- WATERPROOF DUSTPROOF SEALED GEARBOX
- FAST ACCESS RECEIVER AND BATTERY COMPARTMENTS
- 3 DIFFERENTIALS WITH FOUR BEVEL GEARS
- BLUE ANODISED ALUMINIUM CHASSIS
- ADJUSTABLE THREADED LONG OIL-FILLED SHOCK ABSORBERS
- ROLL BAR/CARRY HANDLE
- FRONT AND REAR CVA DRIVESHAFTS
- SEALED PRECISION BALL BEARING
- PLYABLE DURABLE SUSPENSION MOULDINGS
- PRE-PAINTED BODYSHELL

**SAFETY PRECAUTIONS**

- This radio controlled racing car is not a toy!
- This high-performance R/C model is recommended for ages 14 and older.
- First-time builders should seek the advice of experienced modellers before commencing assembly.
- Take enough safety precautions prior to operating this model. You are responsible for this model's assembly and safe operation!

**INSTRUCTION MANUAL**

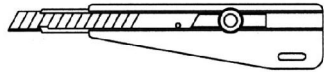


[WWW.CMLDISTRIBUTION.CO.UK](http://WWW.CMLDISTRIBUTION.CO.UK)

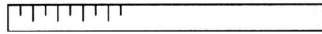


## Required equipment for operation

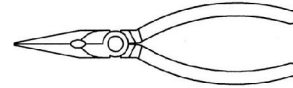
### 1. Tools required for building and maintenance: (not included).



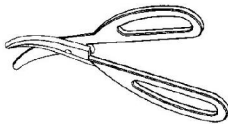
● Hobby knife



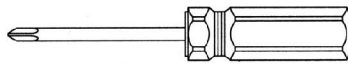
● Precision ruler or caliper



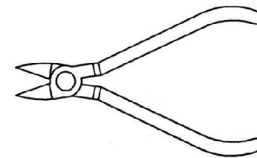
● Needle nose pliers



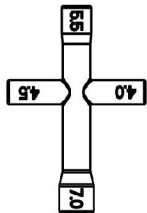
● Hobby scissors



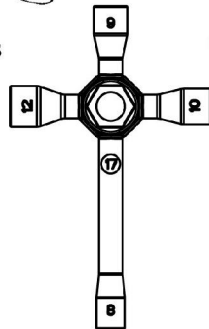
● Flat and Philips screwdriver



● Wire cutters



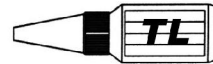
● Cross wrench



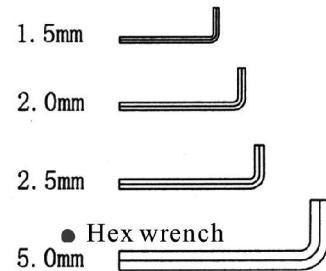
● Cross wrench



● CA glue & rubber cement



● Thread locking compound



● Hex wrench

### 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.

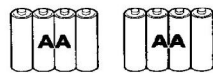
### 2. Additional items needed for operation:



**FTX5985**  
Transmitter



**FTX5986**  
Receiver



8pcs AA alkaline  
batteries for  
transmitter



**FAST50**  
Glow igniter & its charger



**FTX5987**  
3Kg Servo



**VZ002**  
6.0V Ni-MH 2/3A1200mAh & its charger



**FAST810**



**FAST22R**  
550cc Fuel Bottle

### IMPORTANT!

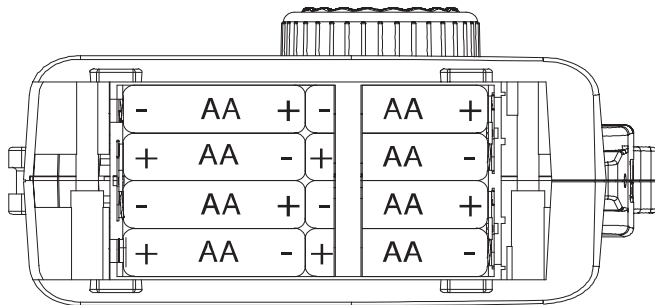
Check all screws are tight before using the vehicle.  
Use thread-lock on all screws that may work loose.



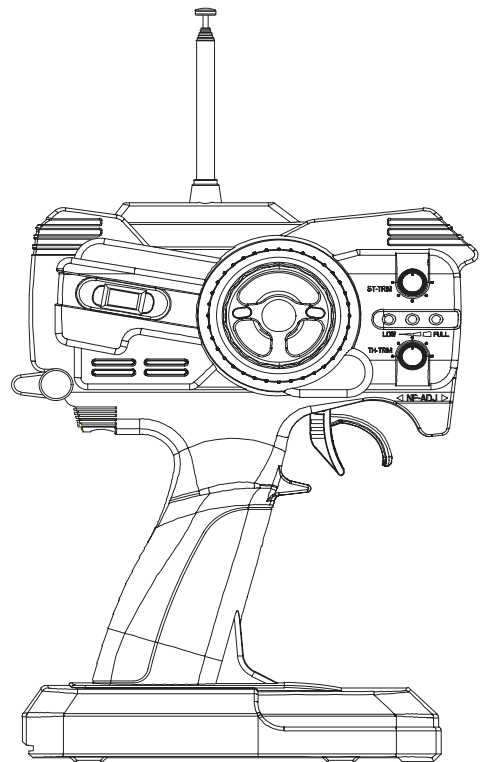
Please read the instructions carefully before starting the assembly.

1. Please assemble and install this product without children. As the product includes small and sharp parts.
2. Do not run the truck in public street or highways. As it might cause serious accidents, personal injuries and property damage etc.
3. During the middle of racing and after operation, the engine and exhaust will become HOT. Therefore please do not touch them before cooling down.
4. Please make sure everyone is using different frequencies while racing the truck in the same area.

## TRANSMITTER PREPARATION

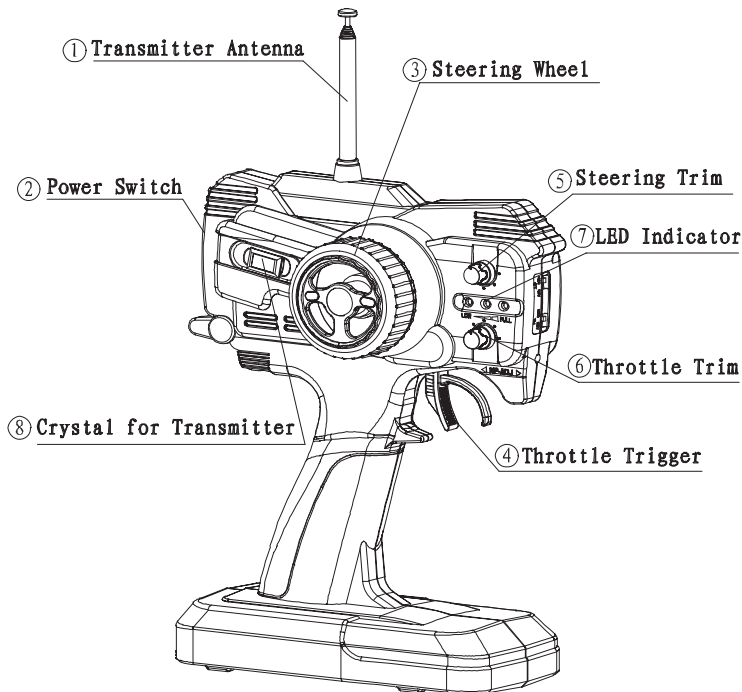


- Install eight "AA" batteries into transmitter, making sure the polarity is correct.
- Insert the antenna into the top of the transmitter and tighten.
- Turn the transmitter on and check the battery light.
- If all LED's light up, the batteries are acceptable. If only the red LED lights up, immediately replace the batteries.





## GLOSSARY OF TRANSMITTER



- ① The transmitter antenna is for transmit the radio waves.
- ② The power switch is for switching the power on/off.
- ③ The steering wheel is for controlling the direction of right/left.
- ④ The throttle trigger is for controlling the throttle and brake.
- ⑤ The steering trim is for adjusting the position of neutral.(right/left)
- ⑥ The throttle trim is for adjusting the carb in idle position.
- ⑦ The LED indicator is for showing the remaining amount of the battery.when turn on the power switch.
- ⑧ Crystal for transmitter is for changing the radio frequency by replacing the crystal.

## BEFORE OPERATING

- Install the receiver antenna.
- Install the transmitter antenna.
- Loading the battery on the transmitter.
- Install the charged battery on the truck.

**Please Note:**  
**We recommend that you install a Failsafe Unit.**

## RC OPERATING PROCEDURES

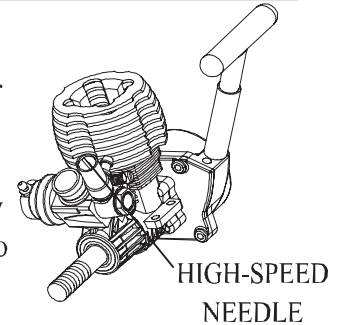
1. Please pull out the transmitter antenna and then turn on the power switch first, before turning on the receiver.
2. Please raise the vehicle off the ground and check that the controls are responding correctly.
3. When the responses of the vehicle start to slow down please change or recharge the battery pack
4. When you finish the racing,please turn the receiver switch off first,and then the transmitter.
5. Please make sure the battery is disconnected and remove the battery after finishing racing.



## ENGINE TUNING GUIDE

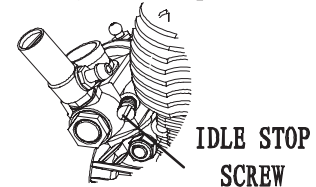
### HIGH-SPEED NEEDLE

The "high-speed" needle is sticking up from the carburetor. This controls the fuel to air mixture of the carburetor. The needle is pre-set for break-in from the factory at 2-1/2 turns out from fully closed. Once the engine is broken-in, the high-speed needle would typically run from 2 to 2-1/2 turns out from closed, depending on the weather, humidity and altitude above sea level. To richen the mixture turn the needle counterclockwise. To lean it, turn the needle clockwise.



The Low-Speed Needle (For 18# engine)

The "low-speed" needle is the screw in the carb body opposite the throttle arm. It controls the fuel to air mixture at low throttle settings. There is a simple way of adjusting the low-speed needle correctly called the "pinch test." With the engine at idle, pinch the fuel line and listen to how the engine speeds up or slows down. If the engine increases its speed for about 2 or 3 seconds and then loses speed, the needle is set correctly. If the engine loses RPM quickly, it is set too lean and the low-speed needle needs to be opened (counterclockwise) to richen the mixture. Pinch again to check the mixture. If the engine takes longer than 4 seconds to slow down, lean (clockwise) the low-speed needle and then pinch again to check the mixture.



### IDLE STOP SCREW

The "idle stop" screw is located on the backside of the carburetor. This increases or decreases the idle speed without changing the fuel mixture. The barrel should be approximately 1mm from fully closed.

**IMPORTANT! To ensure long life and good performance from your engine, you MUST break-in the engine. The break-in period is critical for long life of the internal parts of the engine. This should be done over the first 5 tanks of fuel.**

## RUNNING THE ENGINE

### STARTING THE ENGINE

**IMPORTANT!** Your radio system must ALWAYS be turned on and the transmitter antenna fully extended when running the engine!

1. Fill the fuel tank.
2. Prime the engine-while the engine is cool, place your finger over the tuned pipe's exhaust hole and pull the recoil gently several times. Do not over-prime! Stop when you see fuel in the fuel line at the carb. You may need to loosen the glow plug a little to help with this.
3. Install a "C" alkaline into the glow starter and attach the starter to the glow plug.
4. With the throttle at idle, start the engine by pulling the recoil using short, quick pulls. Do NOT pull the recoil starter's string to the end. You only need 10 to 12 inches of pull to start the engine with the throttle at idle.

Sometimes it is helpful to start the engine at around half throttle. When the engine starts, immediately return the throttle to idle. If this is not done the engine can over-rev and cause engine damage.



## STOPPING THE ENGINE

Pinch the fuel line that runs to the carburetor. Pinching this line will restrict fuel flow and the engine will quit within a few seconds. Never place your finger over the exhaust to stop the engine. This could result in serious burns on your finger. It also causes fuel to back up in the engine, making it harder to start the next time you run your vehicle.

## IMPORTANT! FIXING A FLOODED ENGINE

If the engine is difficult to turn over with the recoil starter, especially if it is brand new, loosen the glow plug a half turn before starting the engine. This allows some compression to escape, but the engine will still start. Make sure you tighten the glow plug after the engine starts. If the recoil starter is still difficult to pull, the engine is flooded—there is too much fuel inside the engine. Remove the glow plug, then turn the the buggy upside down and pull the recoil 5 or 6 times. This will clear the engine of fuel, and you will notice the recoil pulls easier. Replace the glow plug and repeat the starting procedure.

## BREAK IN PROCEDURE

### SOME THINGS TO REMEMBER DURING BREAK-IN

1. Run with the body off. This will keep the engine cooler.
2. Keep the air filter on at ALL time. Failure to do so will result in dirt entering the engine and instant damage.
3. Run on a smooth, hard surface. An empty parking lot is Perfect.
4. Use the same fuel that you will use for normal running.
5. Resist the urge to accelerate and decelerate quickly.
6. Break-in puts stress on the glow plug so it is advisable to have at least one spare to hand.
7. DO NOT overheat the engine. You can check the head temperature by using a temperature gauge.

### TANK 1

Your first tank of fuel should be running the vehicle at a very rich needle valve setting. This allows the fuel to carry as much oil as possible into the engine to properly lubricate the internal parts during the break-in.

1. Open the high speed needle valve 4-1/2 turns from fully closed (counterclockwise).  
When closing the high-speed needle, close until you feel some resistance.  
DO NOT overtighten or you will damage the engine.
2. Fill the fuel tank and start the engine.
3. Run the buggy on a smooth surface with the body off.
4. Run back and forth at medium speeds, slowly accelerating and decelerating the buggy.
5. Run the buggy until the tank is almost out of fuel. Do not allow the tank to run out of fuel during break-in. This leans out the engine and can cause overheating.
6. Stop the engine and allow it to cool. This normally takes around 10-15 minutes.

**NOTE: if your engine does not stay running consistently, increase the idle speed by turning the idle stop screw clockwise.**

### TANK 2

Lean the high-speed needle 1/12 turn from "tank 1" setting. Run the buggy for the complete tank and then let cool.



### TANK 3

Lean the high-speed needle another 1/12 turn from "tank 2" setting. Run the buggy for the complete tank and then let cool.

### TANK 4

Lean the high-speed needle another 1/12 turn from "tank 3" setting. Run the buggy for the complete tank and then let cool. You should notice the engine running much better at this point.

### TANK 5

Lean the high-speed needle another 1/12 turn from "tank 4" setting. Run the buggy for the complete tank and then let cool. The engine is now ready to be performance tuned. Important! At this point, the engine will likely be running at a faster idle than needed (This is typical after break-in). Adjust the idle stop screw to lower the idle speed so that the wheels do not, or just barely, rotate when you lift the buggy off the ground.

### TUNING TIPS

After break-in, run the vehicle where you plan to do most of your driving (grass, street, track, etc). Tune the high speed needle so the engine makes good power without overheating. Using a temperature gauge, tune the engine so that it will consistently stay under 270 F (132 C). Keep in mind. RC engines usually take a minute or two to warm up. It is common not to reach full power right away. Never tune a cold engine!

### ENGINE CARE

Never store your car with fuel in the tank. We recommend that after the final run of the day, you empty the fuel tank and then run the engine at idle until all the fuel is out of the fuel lines and engine. Remove of air filter and glow plug. Then place two drops of the After Run Engine Oil in the carburetor and two into the cylinder to help prevent corrosion. Pull the re-coil a few times to circulate the oil.

### 10 WAYS TO ENSURE LONG LIFE FROM YOUR ENGINE

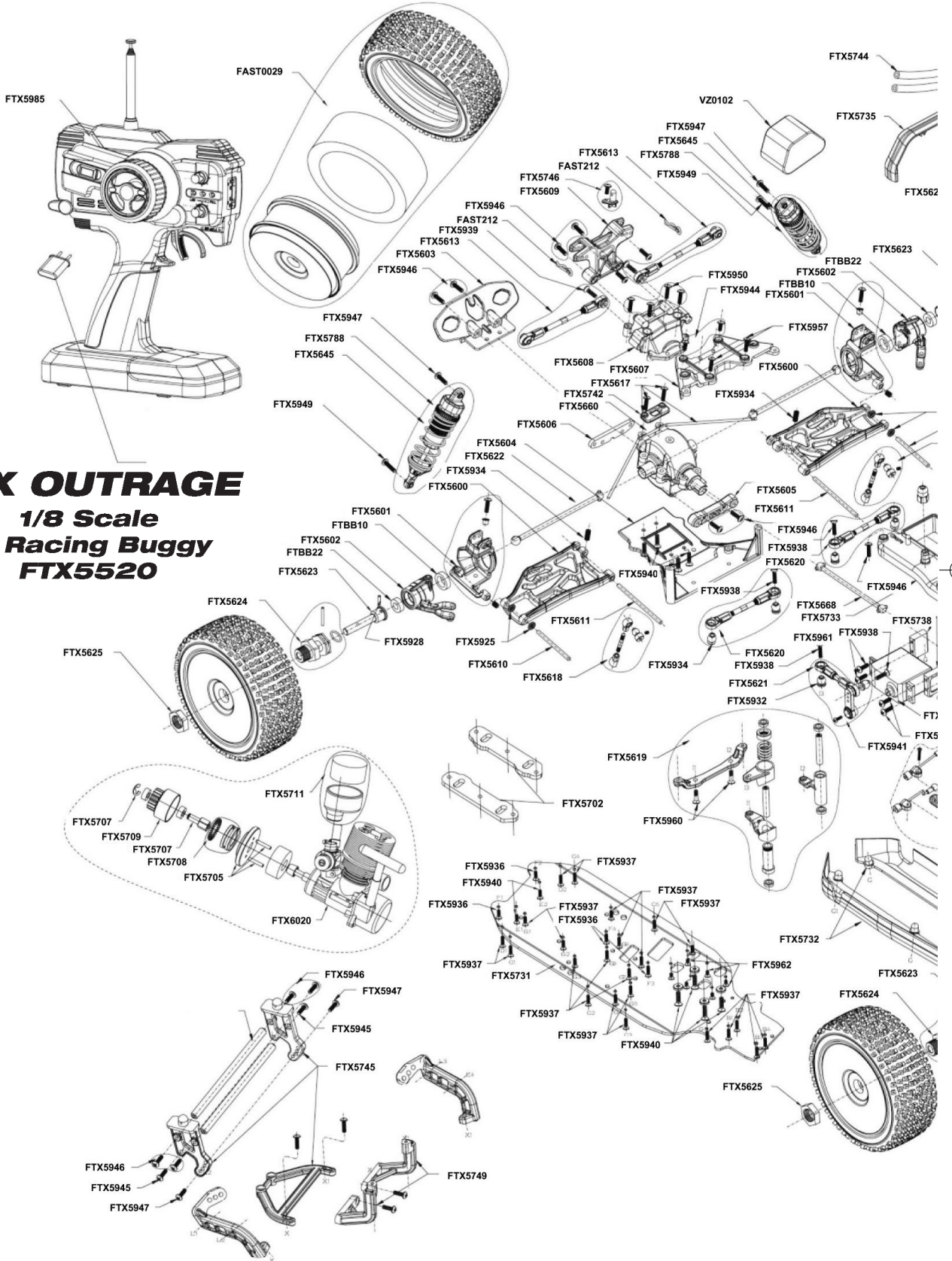
1. Keep your engine and air filter clean. Dirt will act as insulation on an engine. it will not be able to shed heat as easily. Clean and re-oil the element often.
2. Do not over-lean your engine.
3. Do not run your engine with little or no load. Don't throttle up the engine to full throttle when the wheels are not in contact with the ground.
4. Do not overheat the engine.
5. Do not use a fuel with a low oil content. Make sure you use a model car fuel from a reputable manufacturer, such as Byron Fuel.
6. Avoid using old fuels in the engine.
7. Do not use a fuel with a nitromethane (often called nitro) content over 20%.
8. Do not scratch the piston or cylinder sleeve. Avoid jamming something into the exhaust port when removing or re-installing the clutch or flywheel. Use a special tool called a Flywheel Wrench to keep the crankshaft from moving.
9. Do not use silicone sealer on the engine joints. Silicone sealer contains acetic acid, which is corrosive if it gets inside your engine.
10. Do not allow any water to get inside the engine. This sounds easy, but temperature changes can cause condensation inside the engine. This is a good reason to use an after-run oil. Store your engine inside the house, not in a garage or shed where there will be temperature extremes.



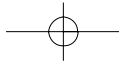
### FTX OUTRAGE EXPLC

# **FTX OUTRAGE**

1/8 Scale  
IC Racing Buggy  
**FTX5520**

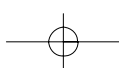
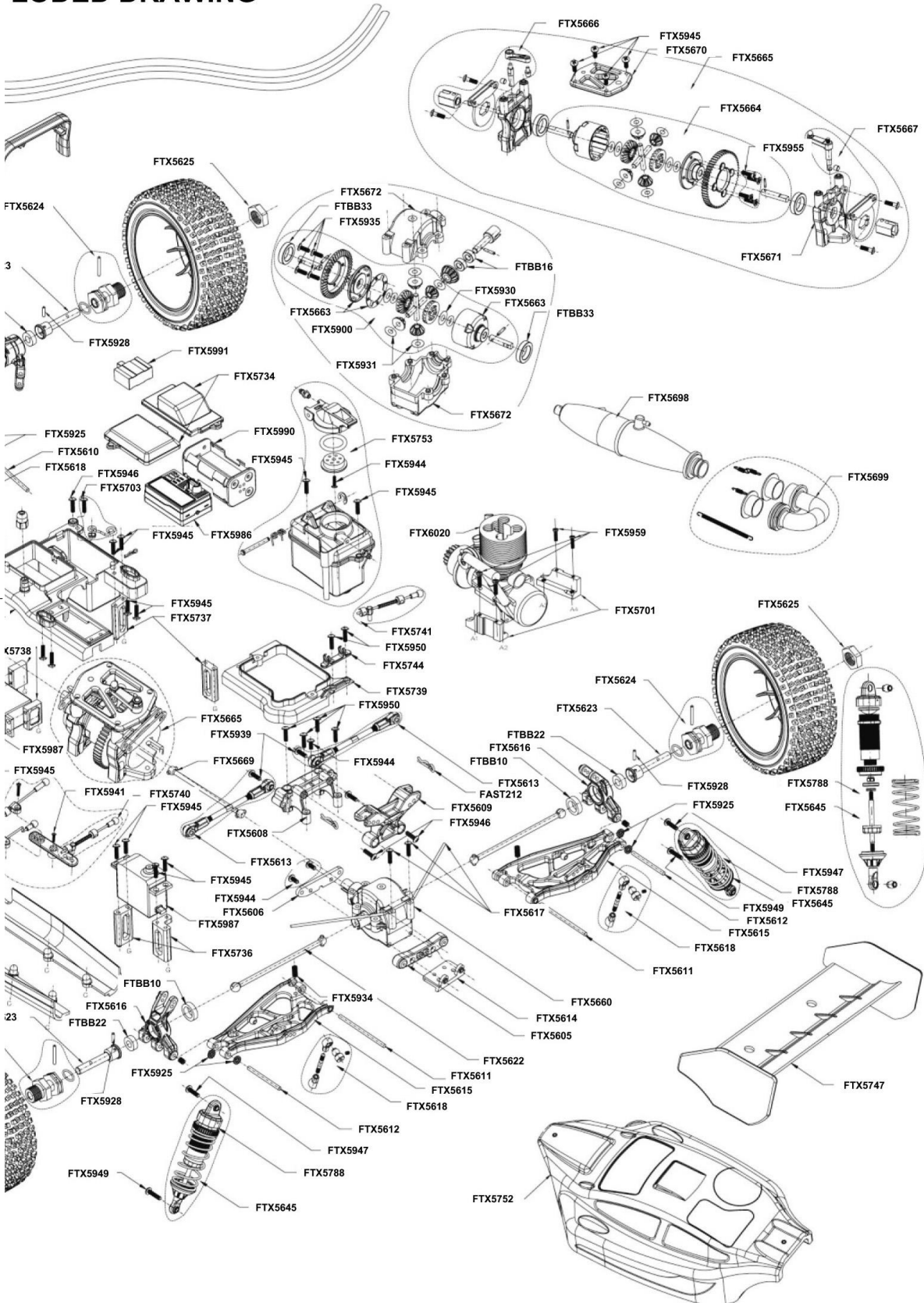


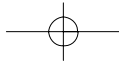




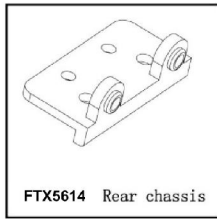
# Exploded Parts Diagram

## EXPLODED DRAWING

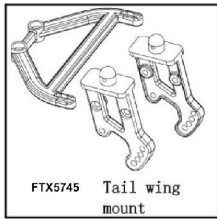




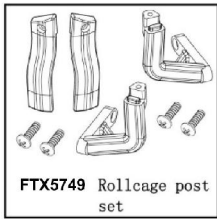
# Parts Listing



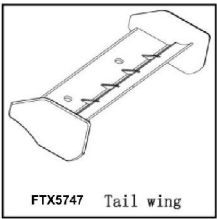
**FTX5614** Rear chassis



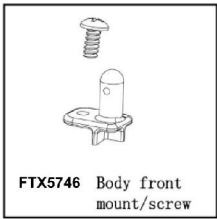
**FTX5745** Tail wing mount



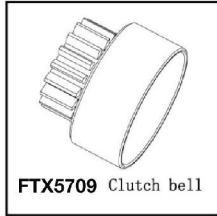
**FTX5749** Rollcage post set



**FTX5747** Tail wing



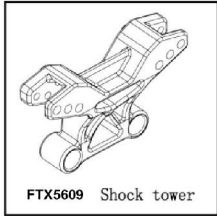
**FTX5746** Body front mount/screw



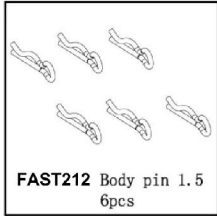
**FTX5709** Clutch bell



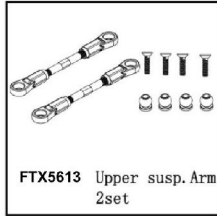
**FTX5645** Shock absorber unit(plastic) 2pcs  
**FTX5789** Shock absorber unit(alum.) 2pcs



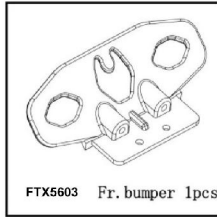
**FTX5609** Shock tower



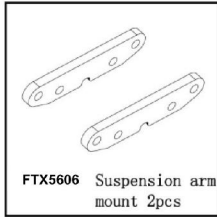
**FAST212** Body pin 1.5 6pcs



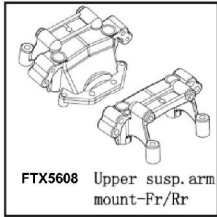
**FTX5613** Upper susp. Arm 2set



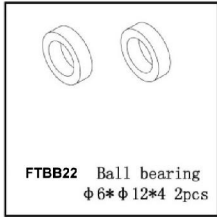
**FTX5603** Fr. bumper 1pcs



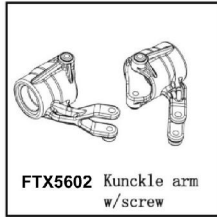
**FTX5606** Suspension arm mount 2pcs



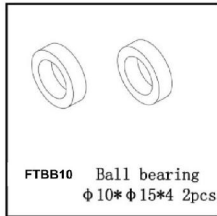
**FTX5608** Upper susp. arm mount-Fr/Rr



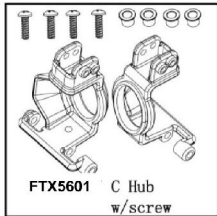
**FTBB22** Ball bearing φ6\*φ12\*4 2pcs



**FTX5602** Kunckle arm w/screw



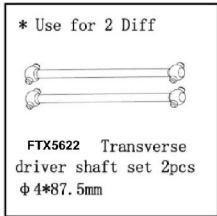
**FTBB10** Ball bearing φ10\*φ15\*4 2pcs



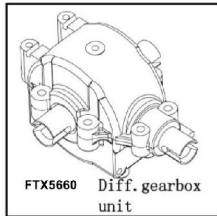
**FTX5601** C Hub w/screw



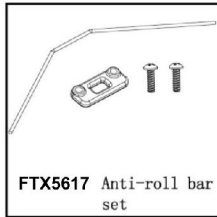
**FTX5600** Fr. lower susp. arm-Lf/Rr



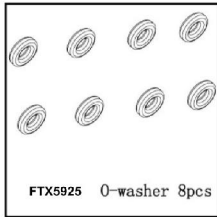
\* Use for 2 Diff  
**FTX5622** Transverse driver shaft set 2pcs φ4\*87.5mm



**FTX5660** Diff. gearbox unit



**FTX5617** Anti-roll bar set



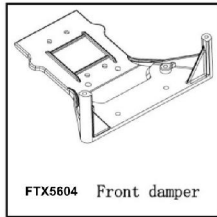
**FTX5925** O-washer 8pcs



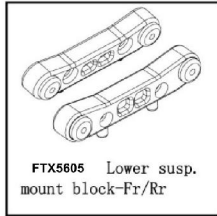
**FTX5610** Front suspension arm pin-short 4pcs φ3\*37.5mm



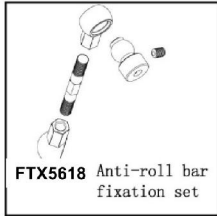
**FTX5611** Suspension arm pin-long 4pcs φ3\*56.0mm



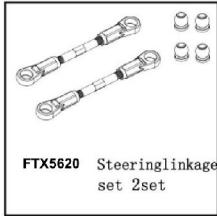
**FTX5604** Front damper



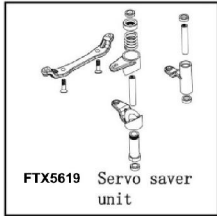
**FTX5605** Lower susp. mount block-Fr/Rr



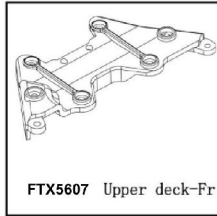
**FTX5618** Anti-roll bar fixation set



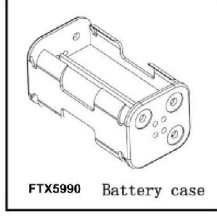
**FTX5620** Steeringlinkage set 2set



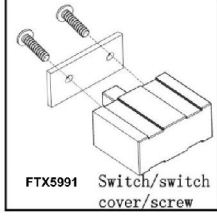
**FTX5619** Servo saver unit



**FTX5607** Upper deck-Fr



**FTX5990** Battery case



**FTX5991** Switch/switch cover/screw



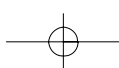
**FTX5734** Receiver case cover Battery case cover

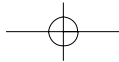


**FTX5735** Handle W/Fuel Pipe Hoop

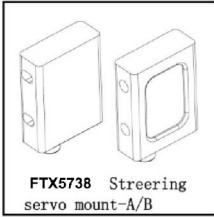


**FTX5621** Steering servo horn and linkage 1set

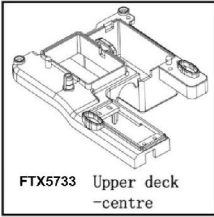




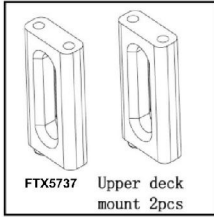
# Parts Listing



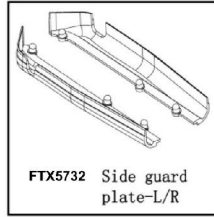
**FTX5738** Steering servo mount-A/B



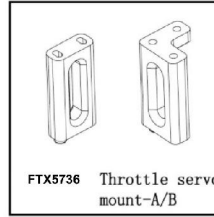
**FTX5733** Upper deck -centre



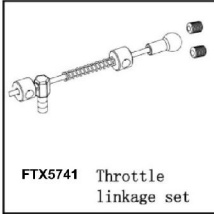
**FTX5737** Upper deck mount 2pcs



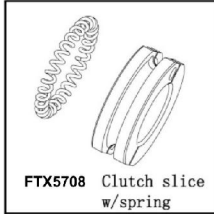
**FTX5732** Side guard plate-L/R



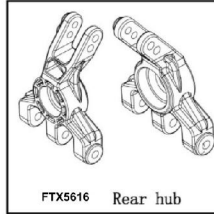
**FTX5736** Throttle servo mount-A/B



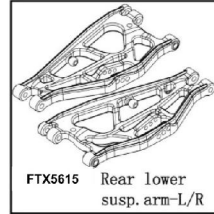
**FTX5741** Throttle linkage set



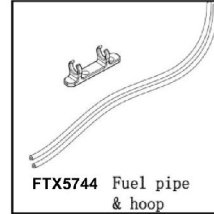
**FTX5708** Clutch slice w/spring



**FTX5616** Rear hub



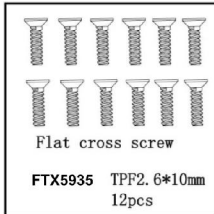
**FTX5615** Rear lower susp. arm-L/R



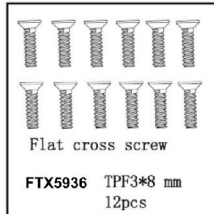
**FTX5744** Fuel pipe & hoop



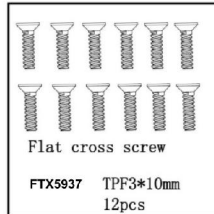
**FTX5612** Rear suspension arm pin-short 4pcs



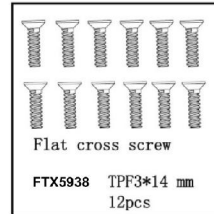
Flat cross screw  
**FTX5935** TPF2. 6\*10mm 12pcs



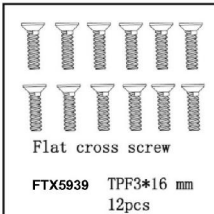
Flat cross screw  
**FTX5936** TPF3\*8 mm 12pcs



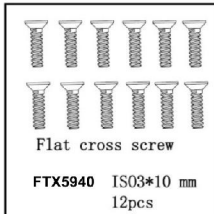
Flat cross screw  
**FTX5937** TPF3\*10mm 12pcs



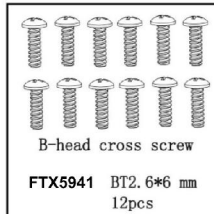
Flat cross screw  
**FTX5938** TPF3\*14 mm 12pcs



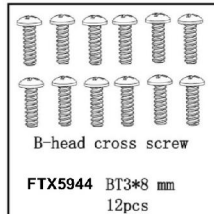
Flat cross screw  
**FTX5939** TPF3\*16 mm 12pcs



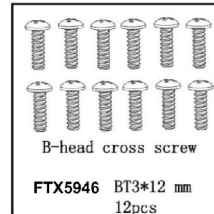
Flat cross screw  
**FTX5940** IS03\*10 mm 12pcs



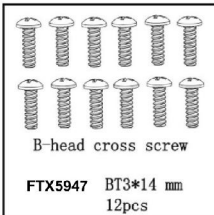
B-head cross screw  
**FTX5941** BT2. 6\*6 mm 12pcs



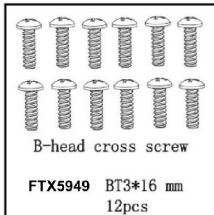
B-head cross screw  
**FTX5944** BT3\*8 mm 12pcs



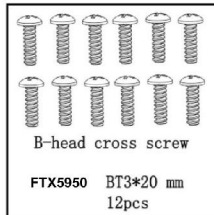
B-head cross screw  
**FTX5946** BT3\*12 mm 12pcs



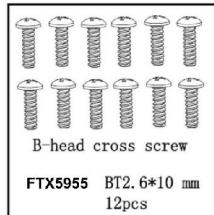
B-head cross screw  
**FTX5947** BT3\*14 mm 12pcs



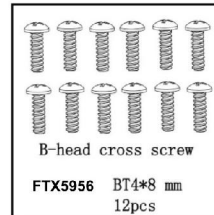
B-head cross screw  
**FTX5949** BT3\*16 mm 12pcs



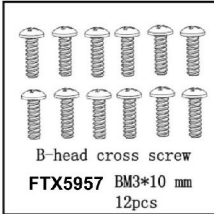
B-head cross screw  
**FTX5950** BT3\*20 mm 12pcs



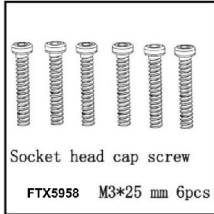
B-head cross screw  
**FTX5955** BT2. 6\*10 mm 12pcs



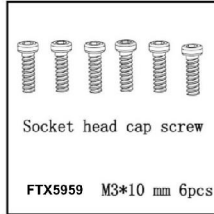
B-head cross screw  
**FTX5956** BT4\*8 mm 12pcs



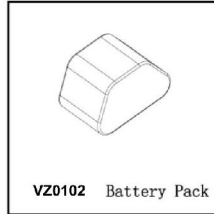
B-head cross screw  
**FTX5957** BM3\*10 mm 12pcs



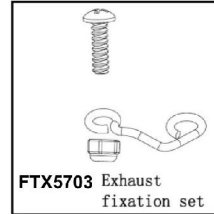
Socket head cap screw  
**FTX5958** M3\*25 mm 6pcs



Socket head cap screw  
**FTX5959** M3\*10 mm 6pcs



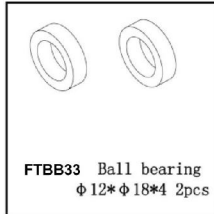
**VZ0102** Battery Pack



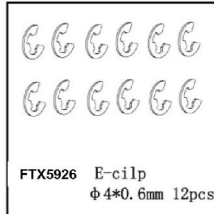
**FTX5703** Exhaust fixation set



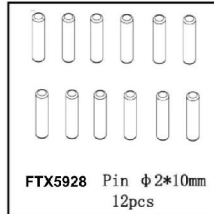
**FTBB16** Ball bearing φ 5\*φ 10\*4 2pcs



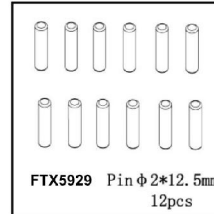
**FTBB33** Ball bearing φ 12\*φ 18\*4 2pcs



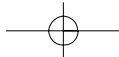
**FTX5926** E-cilp φ 4\*0. 6mm 12pcs

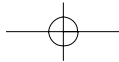


**FTX5928** Pin φ 2\*10mm 12pcs



**FTX5929** Pin φ 2\*12. 5mm 12pcs





# Parts Listing

**FTX5930** Washer  
 $\phi 5.2 * \phi 10 * 0.2$  12pcs

**FTX5931** Washer  
 $\phi 4.2 * \phi 8 * 0.2$  12pcs

**FASTM4** M4mm Nylon  
 lock-nut 6pcs

**FTX5932** Double way  
 ball end 6pcs

**FTX5933** Grub screw  
 M4\*4mm 6pcs

**FTX5934** Grub screw  
 M4\*8mm 6pcs

**FTX5663** Diff. gearbox

**FTX5672** Diff. gearbox  
 bulkhead-upper/lower

**FTX5900** Diff. unit

**FTX5662** Driving/driven  
 gear  
 Diff. gear/bevel gears

**FTX5960** M3\*9.5mm Screw  
 pin 12pcs

**FTX5742** Antenna mount  
 3pcs

\* Use for 3 Diff  
 $\phi 3.5 * 101.3$ mm  
**FTX5668** Centre drive  
 shaft-Pr

\* Use for 3 Diff  
 $\phi 3.5 * 77$ mm  
**FTX5669** Centre drive  
 shaft-Rr

**FTX5739** Upper deck-Rr

**FTX5740** Throttle  
 linkage set

**FTX5665** Centre diff.  
 unit

**FTX5664** Centre diff. box

**FTX5671** Centre diff  
 mount 2pcs

**FTX5670** Centre diff  
 cover

\* For 3 diff  
**FTX5666** Front brake  
 set

\* For 3 diff  
**FTX5667** Rear brake set

**FASTM3** M3 locknut 5pcs

**FAST103** Antenna pipe  
 w/cap 3pcs

one set  
**TX**  
**RX**

B-head cross screw  
**FTX5945** BT3\*10 mm  
 12pcs

AM  
**FTX5985** Transmitter complete

AM  
**FTX5986** Receiver 1pcs

**FTX5987** 3kg servo

**FAST0029** Tire unit 2pcs

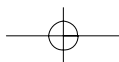
**FTX5625** Nut M12

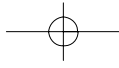
**FTX5624** Rim hub  
 pin(2\*16)/O-Ring

**FTX5623** Axle

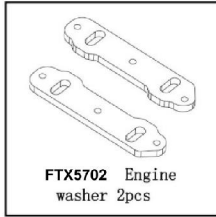
**FTX5731** Chassis 1pc

**FTX6020** Engine 21#

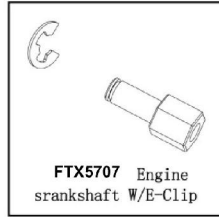




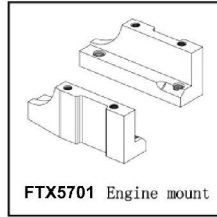
# Parts Listing



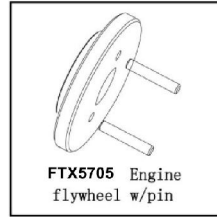
**FTX5702** Engine washer 2pcs



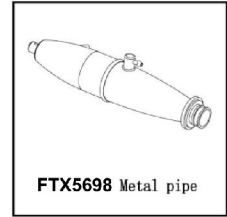
**FTX5707** Engine crankshaft W/E-Clip



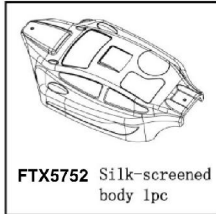
**FTX5701** Engine mount



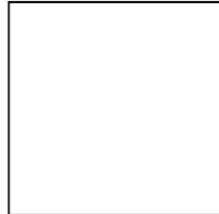
**FTX5705** Engine flywheel w/pin



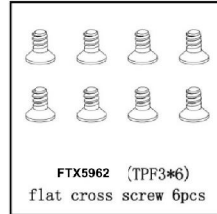
**FTX5698** Metal pipe



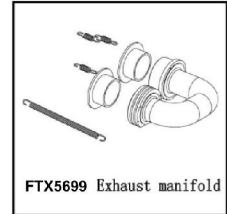
**FTX5752** Silk-screened body 1pc



**FTX5711** Air filter W/Insert

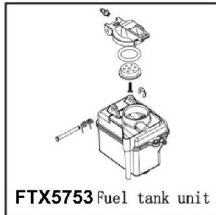


**FTX5962** (TPF3\*6) flat cross screw 6pcs



**FTX5699** Exhaust manifold

## OPTIONS PARTS



**FTX5753** Fuel tank unit



Stainless steel AL6061

**FTX5775** Wheel Hex Set



Stainless steel AL6061

**FTX5776** C HCB C HCB Pin



Stainless steel AL6061

**FTX5777** Knuckle Arm se



Stainless steel AL6061

**FTX5778** Rear Hub set



Stainless steel AL6061

**FTX5779** Shock stay mount



Stainless steel AL6061

**FTX5780** Front suspension mount



Stainless steel AL6061

**FTX5781** Rear suspension mount



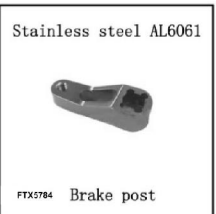
Stainless steel

**FTX5782** Steel brake disk



Stainless steel

**FTX5783** Special brake pads



Stainless steel AL6061

**FTX5784** Brake post



Stainless steel AL6061

**FTX5785** Steering Rol



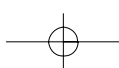
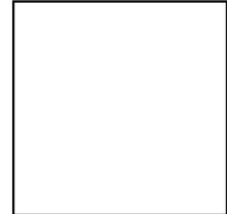
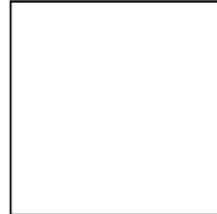
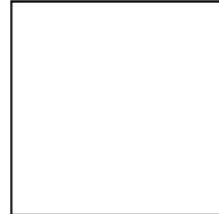
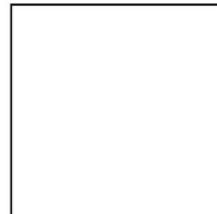
Stainless steel AL6061

**FTX5786** One pcs engine mount

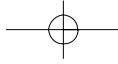


Stainless steel AL6061

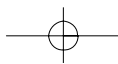
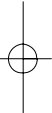
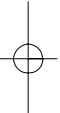
**FTX5788** Shock sbsorber uint (alum.)

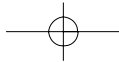






A series of horizontal lines spanning the width of the page, intended for handwritten notes or text.





***DISTRIBUTORS OF QUALITY MODEL & HOBBY PRODUCTS***

***Saxon House, Saxon Business Park, Hanbury Road, Bromsgrove, Worcestershire. B60 4AD. England***

***Tel: +44 (0) 1527 575349***

***Fax: + 44 (0) 1527 570536***

***E-mail: [info@cmldistribution.co.uk](mailto:info@cmldistribution.co.uk)***

***Web site: [www.cmldistribution.co.uk](http://www.cmldistribution.co.uk)***

