



# ST-1

**1/8th Nitro Powered 4WD Stadium Racing Truck**



**No.6233-F**



**Please read all instructions thoroughly before operation.**

The contents are subject to change without prior notice due to product improvements and specification changes.

## **INSTRUCTION MANUAL**

### **WARRANTY**

Thunder Tiger Corporation guarantees this model kit to be free from defects in both material and workmanship. The total monetary value under warranty will in no case exceed the cost of the original kit purchased. This warranty does not cover any components damaged by use or modification. Part or parts missing from this kit must be reported within 60 days of purchase. No part or parts will be sent under warranty without proof of purchase. To receive part or parts under warranty, the service center must receive a proof of purchase and/or the defective part or parts. Should you find a defective or missing part, contact the authorized Thunder Tiger Service/Distributor nearest you. Under no circumstances can a dealer or distributor accept return of a kit if assembly has started.



## INTRODUCTION

Experience a whole new rush that racers have never thought of, pushing the big scale truck to pure competition level.

The Thunder Tiger ST-1 is intended for racing and has been designed to be a pure competition truck with ultra-wide suspension arms, low center of gravity, and super sturdy chassis for excellent handling characteristics. The ST-1 comes with a race proven extra-long anodized aluminum chassis for added durability, super strong composite arms, and adjustable pivot balls. Both front and rear sway bars are also standard. An oversized 150cc fuel tank will squeeze the fuel to the last drop to maximize your run time while the brand-new Thunder Tiger Pro.28 engine is installed in the truck to guarantee you victory at the race track. Thunder Tiger guarantees you should have many hours of trouble free use from this R/C product. We race and test our products around the world to bring you state-of-the-art R/C products.

## CAUTION

Thank you for purchasing a Thunder Tiger Product.

**Please read all instructions and familiarize yourself with the products and controls before operation.**

1. This product is not a toy. It is a high performance model product. It is important to familiarize yourself with the model, its manual, and its construction before assembly or operation. A child operating under the supervision of the adults is necessary.
2. Always keep this instruction manual ready at your hand for your assembling and operating reference, even after completing the assembly.
3. Make sure all the screws are properly tightened and all the parts are checked after running the car for a long period of time.
4. For the best performance, it is important to make sure all the moveable parts work free without binding.
5. Do not operate model products in rain, on public roads, near crowds, near airport, or near areas with restricted radio operation.
6. Always keep fuel away from heat and open flame. Only operate in open, well-ventilated area. Store fuel in cool, dry area. Keep the fuel bottle cap tightly closed. Clean up any leak or excess fuel before starting the engine.
7. This product, its parts, and its construction tools can be harmful to your health. Always exercise extreme caution when assembling and/or operating this product. Do not touch any part of the model that rotates.
8. Check your radio frequency with the proper operating frequency of the area or country. Always check to see if there are any modelers operating on the same frequency as yours. Also, check your radio for proper operation before operating a model.

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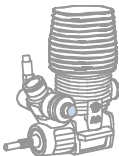
## IMPORTANT NOTES & WARNING

### FUEL SELECTION



1. Choose a fuel from a reputable, brand name company that is approved for car/truck use. Do not use airplane or boat fuels in your car/truck. Choose methanol based model engine glow fuel that has a nitro content in the range 10%-30% and 5% to 18% castor/synthetic oil content for lubrication. Lower nitro percentages will generally result in a cooler engine running temperature and therefore last longer before needing a rebuild; cooler-running engines also generally produce less power. 20% nitro is the most widely used fuel.
2. Fuel color is for identification purpose only and is not important to performance or durability of your engine.
3. Be careful. If the tank overflows it might get on your radio gear or on your brakes and it may create an unsafe driving situation. Always keep your fuel bottle closed when not in use.
4. Do not dispose of fuel or empty fuel containers in a fire. It may possibly cause fire or explosion.

### ENGINE



1. For proper engine break-in procedure, please refer to the manual of your engine.
2. Never run your vehicle without the air filter. If the vehicle will be operated in an area with fine dust, use filter oil or castor oil on the air filter element. It is important that the foam is only moist to trap dirt and allow air passage. With the foam too wet, limited air can pass through; therefore, limiting engine performance.
3. The parts around engine could be dangerously hot after operation. Do not touch it without any protection!

### RADIO OPERATION



1. When turning radio on, first turn on the transmitter and extend the transmitter antenna.
2. Then, turn on the receiver. When turning off, first turn the receiver off, then the transmitter off.

### FIRST AID



1. If you drink nitro fuel by accident, immediately drink large quantities of water and try to induce vomiting. Consult with physician right after then.
2. If the nitro fuel gets into your eyes, rinse them well with water. Consult with physician right after then.
3. If the fuel gets onto your skin, wash it well with soap and water.

### WARNING



1. Improper operations may cause personal and/or property damage. Thunder Tiger and its distributor have no control over damage resulting from shipping, improper construction, or improper usage.
2. Thunder Tiger assumes and accepts no responsibility for personal and/or property damages resulting from the use of improper building materials, equipment and operations. By the act of assembling or operating this product, the user accepts all resulting liability. If the buyer is not prepared to accept this liability, then he/she should return this kit in new, unassembled, and unused condition to the place of purchase.

## ITEMS REQUIRED FOR OPERATION



Screw Drivers, Lexan Body Reamer, Hobby Knife, Lexan Scissors.



Glow Fuel, Methanol  
10% to 30% Nitro  
5% to 18% Caster / Synthetic Oil



CA Glue / Instant Glue



RX Battery pack and battery charger



Hex Wrench Set, 1.5mm / 2.0mm / 2.5mm / 5.0mm



4-Way, 5-Way Wrench



Glow Starter w/ Charger



Fuel Bottle

# 1 UNWRAPPING CONTENTS FROM BOX



- a.** Contents of the box are secured with reusable zip-ties. To unlock zip-tie, press on the small lever.
- b.** Pull on the zip-tie while keeping the small lever pressed. Pull the zip-tie out completely.

# 2 CHARGING THE GLOW PLUG IGNITER



- a.** Plug the charger into an AC outlet, and then pull on the igniter lever to accept the charging adapter.
- b.** At this point, the small red LED indicator on the charger should light up indicating the charging sequence is in progress.
- c.** When the charging complete, pull on the glow plug igniter lever to unplug the glow igniter.  
Charge the new glow plug igniter for 16 to 24 hours on the first charge. For subsequent charges, charge it about 12 hours before next use.

## NOTE:

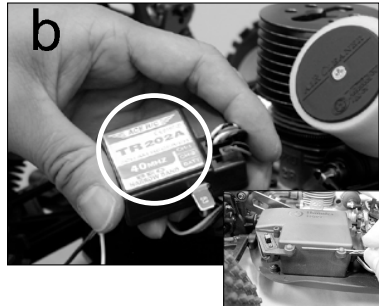
If the igniter gets warm or hot during the charge, unplug the igniter from charger immediately. A warm / hot igniter means the igniter is overcharged. Overcharging can damage the internal battery in the igniter; thus, shortening its life.

# 3 INSTALLING TIRES / WHEELS



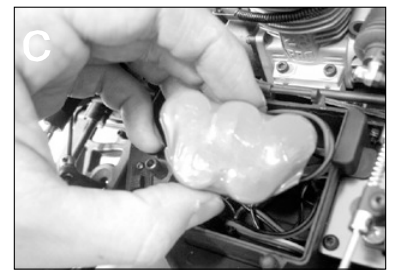
- a.** Use the supplied wrench to install all 4 tires/wheels.
- b.** Apply the supplied wheel nuts onto the hex adapter.
- c.** Turn the wrench to tighten the wheel nuts

## 4 PREPARING THE RADIO



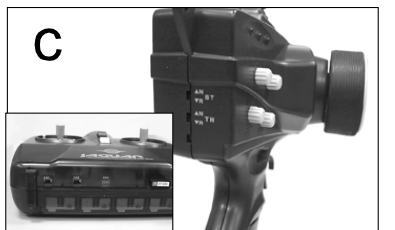
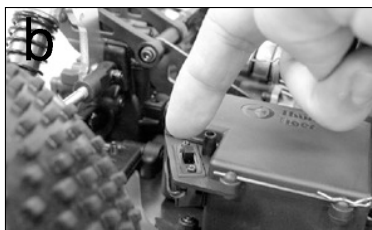
- a. Check the frequency printed on the transmitter crystal.
- b. Remove the radio receiver from box with a screw driver. Check the frequency printed on the receiver crystal, and make sure it matches with the transmitter crystal. Make sure no one will operate on the same frequency when you are. When there is a radio glitch, it will most likely be caused by improper crystal, damaged crystal, or people operating on the same frequency. After checking, place the receiver back in the box and secure the receiver box top.
- c. Install the antenna into transmitter.

## 5 RADIO BATTERY INSTALLATION



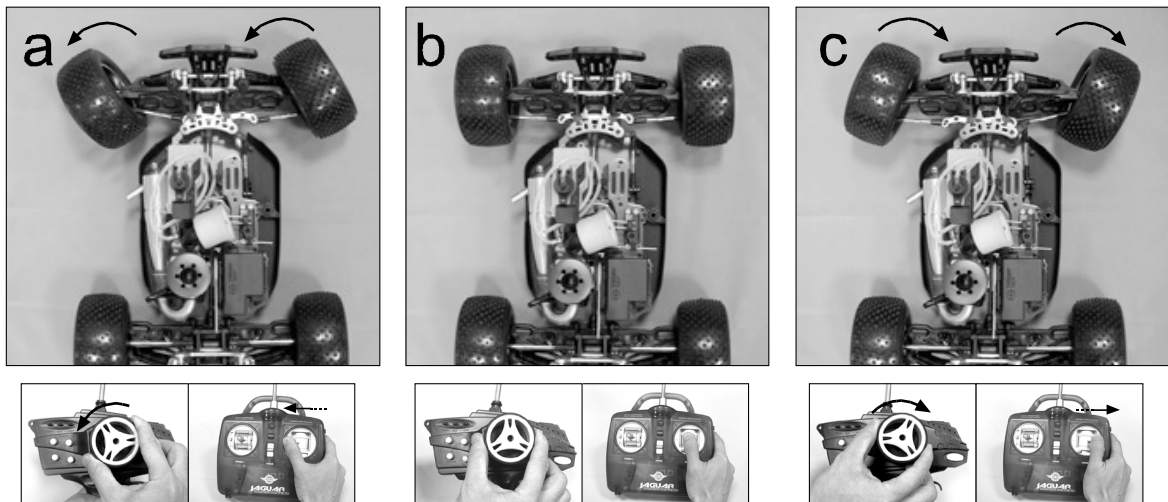
- a. Install 8 AA-size alkaline batteries into transmitter.
- b. Connect the battery connectors from the switch with battery pack.
- c. Install the battery into the receiver box. secure the box with a long body clip.

## 6 RADIO OPERATION



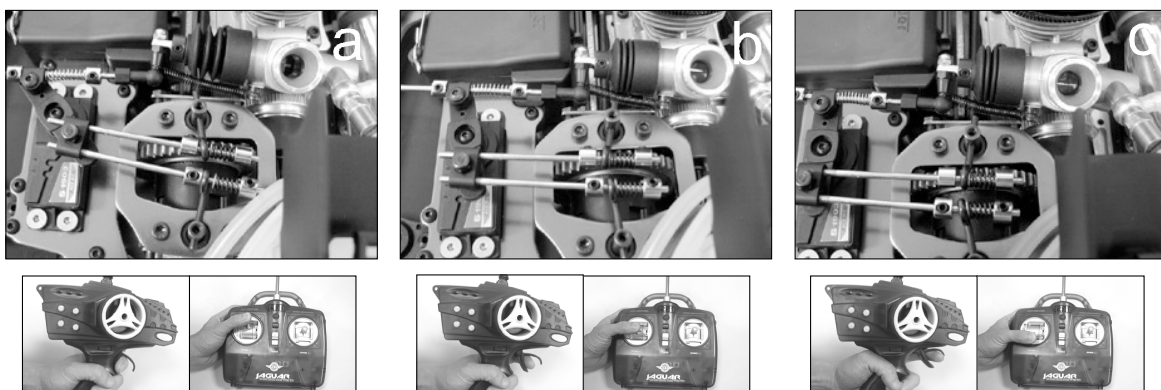
- a. When turning radio on, first turn on the transmitter.
- b. Then, turn on the receiver. When turning off, first turn the receiver off, then the transmitter off.
- c. To reverse the functions of servos, use the small, white servo reverse switches located on side of the pistol transmitter (or the inset servo reverse switches located at the bottom of the stick transmitter). To trim the servos on pistol transmitter, use the trim switches on side of the steering wheel (the ST. trims steering, and the TH trims throttle/brake). On a stick transmitter, the trim levers are located accordingly around the sticks.
- d. For more details, please check the transmitter instruction manual.

# 7 OPERATING RADIO STEERING FUNCTION



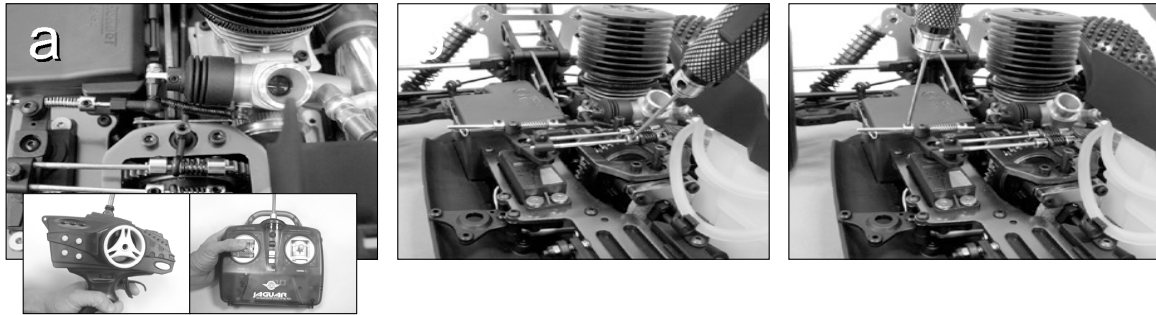
- a.** Check the radio steering functions. With the radio transmitter and receiver on, turn the steering wheel / stick to the left. The front tires/wheels should turn left accordingly. If not, flip the steering servo reverse switch.
- b.** Return the steering wheel / stick to neutral. The front tires/wheels should point straight forward. If not, use the steering trim lever to correct it.
- c.** Turn the steering wheel / stick to the right. The front tires/wheels should turn right accordingly.

# 8 OPERATING RADIO THROTTLE / BRAKE FUNCTION



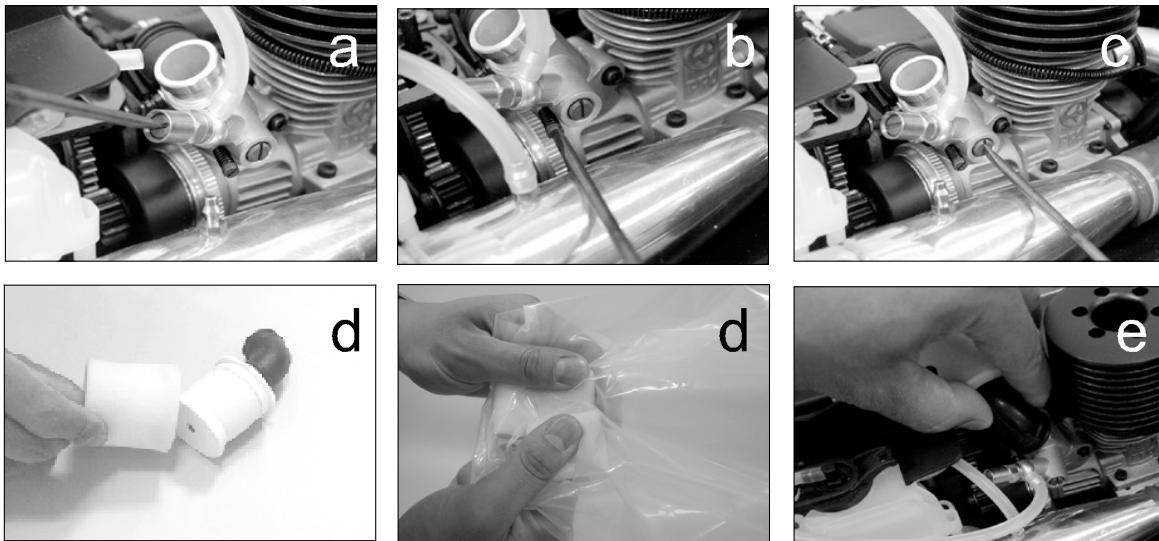
- a.** Check the radio throttle/brake functions. With the radio transmitter and receiver on, pull the trigger / push the stick forward. The carburetor should be fully opened and the brake disengaged. To reverse this function, flip the throttle/brake servo reverse switch.
- b.** Return the trigger / stick to neutral. The carburetor should be closed to a point where the idle has been set (see step 9 & 10 for settings), and the brake still disengaged. If not, use the throttle/brake trim lever to correct it.
- c.** Push the trigger / pull the stick backward. The carburetor opening should still be the same at neutral, throttle spring compressed slightly, and the brake engaged.

## 9 ADJUSTING THROTTLE / BRAKE LINKAGE



- a.** To set the throttle/ brake linkage, first the radio should be on and neutral; thus, the servo is at neutral position.
- b.** With the servo at neutral, loosen the brake linkage collar and move it to a point where the brake levers still have 2mm of space before brakes are engaged.
- c.** With the servo at neutral, use a 1.5mm hex wrench to set the outer collar next to the plastic lever (servo horn).

## 10 ADJUSTING CARBURETOR

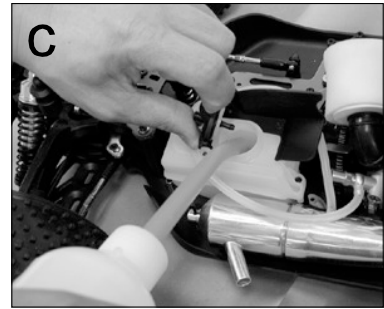


- a.** To set the high speed needle (large needle sticking out from the carburetor body), turn the screw as pictured. Initial high speed needle setting should be 2.5 turns (close the needle completely, then back out 2.5 turns). Clockwise turn will provide leaner setting (lower fuel to air mixture), and counterclockwise turn will provide richer setting (higher fuel to air mixture).
- b.** To set the carburetor idle (small needle sticking out from the carburetor body), turn the screw as pictured. Initial idle setting should leave 1mm carburetor gap. Clockwise turn will provide higher idle (larger carburetor opening), and counterclockwise turn will provide lower idle (smaller carburetor opening). For more details about the engine setting, please refer to ENGINE BREAK-IN/SETTING procedures to properly set the engine.
- c.** To set the low speed needle (The low-speed mixture screw is located in the end of the carburetor), turn the screw as pictured. This screw controls how much fuel enters the engine at idle and low throttle. This adjustment will smooth the idle and improve the acceleration to mid speed. Make this adjustment with the throttle closed, after setting the idle. Turn the screw clockwise gently until it bottoms out. DO NOT over tighten. Now turn the low-speed mixture screw counter-clock 6 1/2 turns.
- d.** Remove the outer foam from filter and make it moist evenly with a few drops of fuel. Put the filter in a plastic bag and knead it until the foam is saturated, but not soaked.
- e.** Finally, make sure the air cleaner boot is securely fastened with a zip-tie.

Never run your vehicle without the air filter. If the vehicle will be operated in an area with fine dust, use filter oil or castor oil instead of fuel. It is important that the foam is only moist to trap dirt and allow air passage. With the foam too wet, limited air can pass through; therefore, limiting engine performance.

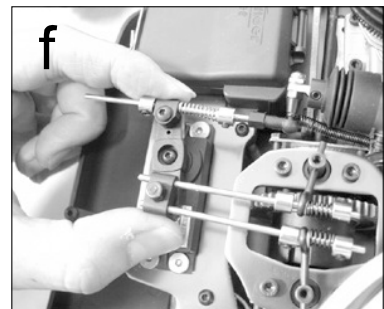
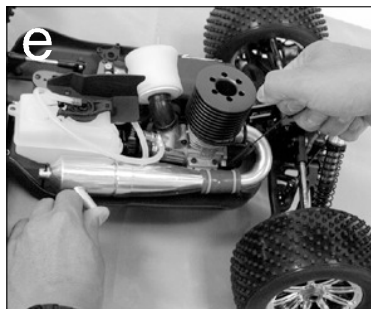
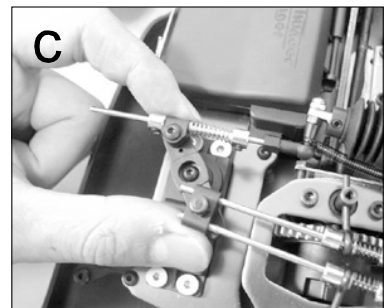
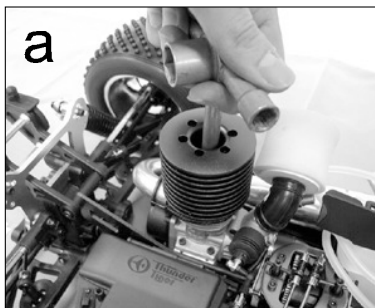


# 11 FUELLING



- a.** Remove the cap from fuel bottle nozzle.
- b.** Squeeze the fuel bottle, insert into fuel, and draw fuel into the fuel bottle. The fuel used should be methanol based model engine glow fuel (available at hobby shops) with 10% to 30% nitro content and 5% to 18% castor/synthetic oil content for lubrication.
- c.** Fill car's fuel tank with glow fuel.

# 12 PREPARING THE ENGINE FOR STARTING

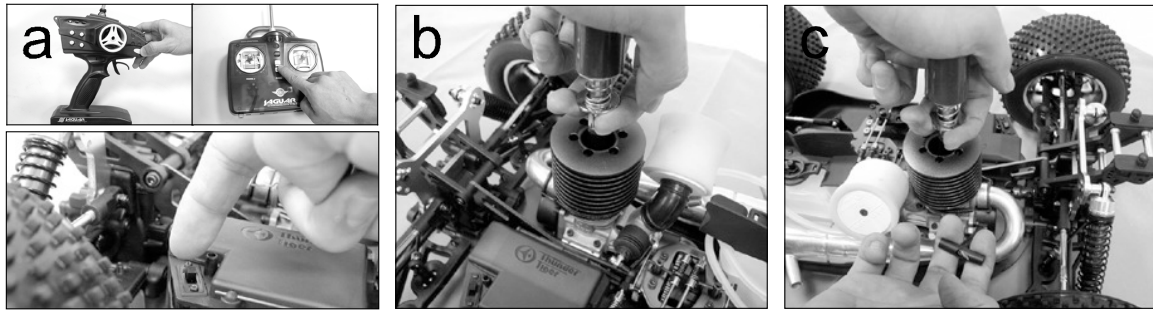


- a.** To start an engine, first remove the glow plug with the included wrench.
- b.** Check the glow plug by plugging it into the glow plug igniter. The glow plug element should light up brightly. If it lights up dimly, then the glow plug igniter is low (and it needs recharging). If it doesn't light up, or the plug element looks distorted, then the glow plug is bad (replace with new one). After checking, reinstall the glow plug.

The glow plug used for this engine can be: Thunder Tiger 9281, McCoy #9 / #59, Novarossi C4S / C5S / C6S, OS #8 / #A3 / #A5, and Picco P6S / P7S.

- c.** With the radio off, manually turn the servo to open the carburetor (open throttle).
- d.** Plug the tuned pipe exhaust tip.
- e.** Keeping the exhaust tip plugged, pull on the engine's starter. Keep doing it until fuel reaches engine's carburetor, then pull it 3 more times to prime the engine.
- f.** Manually return the servo back to neutral.

## 13 STARTING THE ENGINE



- a.** Turn on the radio (transmitter first, then receiver)
- b.** Clip the glow plug igniter onto engine's glow plug.
- c.** Pull on the engine starter, release, repeat until the engine starts. Throttle maybe required to be opened momentarily, step 9a (release back to neutral immediately after it starts).

Remove the glow plug igniter from engine after engine has started and warmed up. If the engine stops right after the igniter is removed, the carburetor setting is too rich. Please refer to engine setting section.

If engine starter becomes hard to pull, the engine maybe flooded. To unflood an engine, remove the glow plug from engine, flip the car upside down, and pull on the starter to release excess fuel. Then, reinstall the glow plug and repeat the engine starting procedure.

## 14 ENGINE BREAK-IN

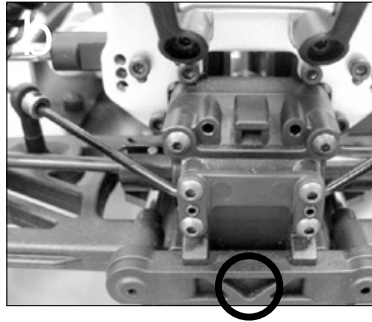
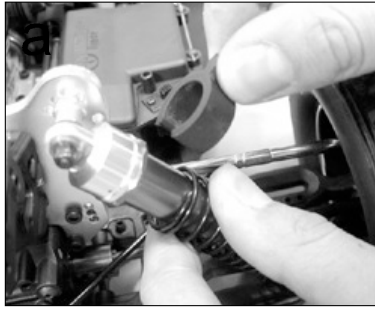
For a new engine (break-in setting), the high speed needle needs to be set as rich as possible. Turn the high speed needle 1/4 turn counterclockwise from initial setting (2.5 turns from fully closed). Repeat step 15b. Keep doing this until the engine stalls at full throttle, then turn the high speed needle 1/4 turn clockwise. Run the car in an open parking lot with this rich engine setting for at least 5 tanks of fuel to complete the break-in process. It is normal for new engines to stall many times during this time due to the rich setting. When it does, just restart the engine. After break-in, follow the engine setting procedure to set the carburetor for normal operations.

### ENGINE SETTING

Due to different fuel formula, operating elevation, humidity . . . etc. The engine may / may not operate properly at initial setting. Please follow the following procedure to achieve proper carburetor setting. Do not perform this procedure until the engine has been properly broken in.

- a. Start the engine.
- b. With a running engine, run the car back and forth in a straight line (full throttle achieved during each passage) in an open parking lot. Repeat, and note the sound of the exhaust. Do not hold the throttle open with car off the ground or the engine connect rod may break.
- c. If the exhaust does not reach a high pitch note, turn the high speed needle (long needle, extending from carburetor, pointing up) 1/4 turn clockwise, and repeat step 15b.  
If the exhaust reaches a high pitch note immediately, turn the high speed needle 1/4 turn counterclockwise, and repeat step 15b.
- d. Repeat step 15c until the engine reaches optimum setting (turning in the high speed needle will no longer have an effect at full throttle and turning out the needle will cause the engine's full throttle rpm to drop a little).  
For normal operations, turn the high speed needle 1/4 turn counterclockwise from the optimum high speed needle setting.
- e. To set the idle, turn the idle screw in (higher rpm) or out (lower rpm).  
Basically, the idle needs to be set at the lowest possible point before the engine stalls.
- f. To set the low speed needle (larger needle on the side of carburetor body), the engine needs to be broken-in and high speed needle needs to be set first.
- g. Repeating step 15b every 10 seconds (1 second of full throttle and 10 seconds of idle). If the engine rpm at idle drops after a few seconds and stalls, then turn in the low speed needle (clockwise) 1/4 turn. If the engine rpm stays the same or goes up at idle, then turn out the low speed needle (counterclockwise) 1/4 turn.
- h. Keep repeating step 15g until the engine rpm drops (goes to idle rpm, then drops a few more rpm after a few seconds) but does not stall at idle.

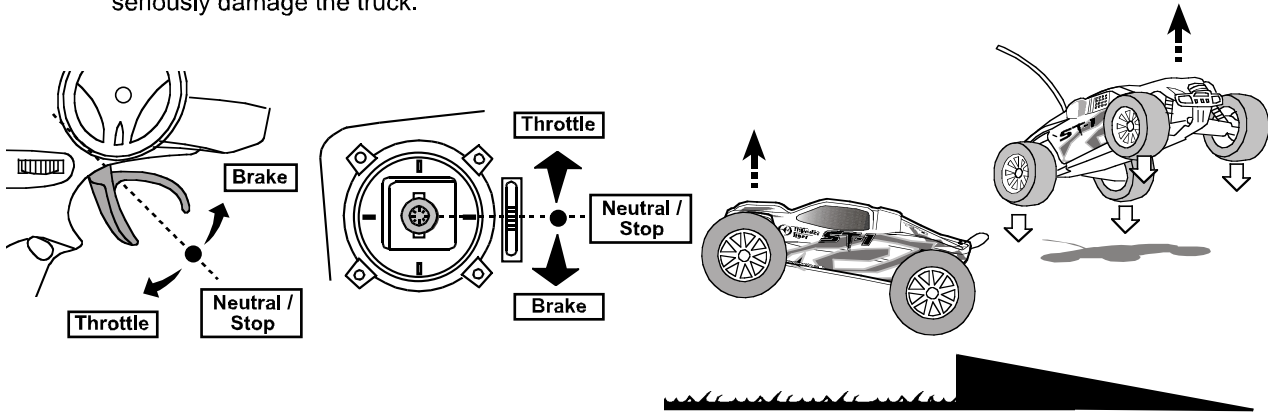
# 15 SHOCK AND REAR TOE-IN ADJUSTMENT



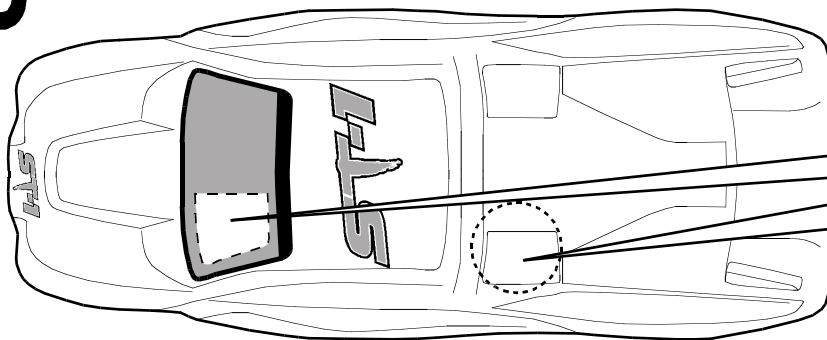
- a. Use the included shock clips to adjust for spring pre-load. Pressing the entire car down, release, and the car should return to ride height (indicated on set-up page). More pre-load clips will produce higher ride height, and less clips will produce lower ride height. Amount of clips used for front and rear shocks can be different, but clips should be the same for left and right.
- b. Use the included plastic toe-in plates to adjust for rear toe-in. The toe-in angles are indicated on each plates.

# 17 DRIVING TIPS

When control your truck in flight, apply some throttle to bring truck nose up and land level on all 4 wheels. Please do not over-drive the engine or land AT FULL THROTTLE. An extreme jumping may seriously damage the truck.



# 18 BODY CUTTING



It is recommended to cut the windows out to let cool air in for good circulation.

# ST-1 TROUBLESHOOTING

If you have trouble starting or keeping your ST-1 running, here's a quick checklist of what to look for first.

Description	Problem	Solution
Engine will not start	Out of fuel .....	Fill fuel tank
	Contaminated fuel .....	Replace fuel
	Glow plug igniter not charged .....	Charge glow igniter
	Glow plug bad .....	Replace glow plug, see "Glow Plug Problems" section below.
	Fuel not getting to carburetor .....	Open and close fuel tank lid twice.
	Engine flooded .....	See "Flooding" section below.
	Engine overheating.....	Allow engine to cool, richen fuel mixture, see "Fuel Mixture" section below.
	Carburetor incorrectly adjusted.....	Re-adjust carburetor, see "Fuel Mixture" or "Factory Carburetor Settings" section below.
	Exhaust blocked .....	Check exhaust, remove blockage.
	Air cleaner blocked .....	Check air cleaner, remove blockage.
Engine starts, then stalls	Idle speed set to low.....	Adjust idle speed screw, see "Fuel Mixture" section below.
	Air bubbles in fuel line.....	Check for leaks in fuel line
	Glow plug is fouled.....	Replace glow plug, see "Glow Plug Problems" Section below.
Starter rope will not pull	Engine is flooded.....	See "Flooding" section below.
	Engine is seized.....	Examine engine for damage

### Glow Plug Problems.

The glow plug in your engine must be replaced periodically to maintain peak performance and easy starting. Most starting problems or erratic performance can be traced back to the glow plug. The easiest way to check for a faulty glow plug is to simply install a new one and see if the problem is corrected. However, to test the glow plug, remove the glow plug from the cylinder head with a 5/16" nut driver (make sure there is no dirt on top of the head which could fall into the engine. Do not lose the copper gasket which seals the glow plug.) Connect the glow plug to the glow igniter. All of the coils should glow bright white. Sometimes, the first few coils will not glow, while the rest are bright orange. This indicates a bad glow plug or low igniter battery. Try recharging the igniter, or replacing the glow plug.



### Flooding

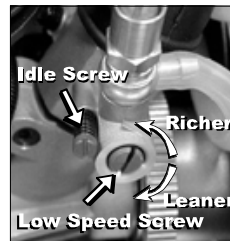
Symptoms of a flooded engine include difficulty in starting, muffled sounds coming from the exhaust, pull starter won't operate, and excess fuel draining from the exhaust outlet. Remove the glow plug with a 5/16" nut driver and also remove the air cleaner. Turn the car upside down and pull the starter a couple of times to drain the excess fuel out of the engine and carburetor. Re-install the glow plug and try starting again.

### Fuel Mixture

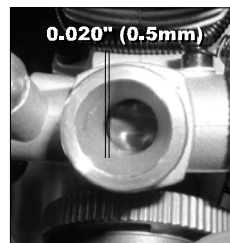
The fuel mixture is controlled by three different adjustments on the carburetor, and should come preset from the factory (see photos below). Your engine should

start and run slightly rich with these settings (rich is good for break-in). Tuning Tip: Always make sure you can see some exhaust smoke coming out of the exhaust outlet during operation. This is a good sign that enough fuel is getting to the engine.

### Factory Carburetor Settings.



Low speed mixture  
6<sup>1</sup>/<sub>2</sub> turns out  
Clockwise=Leaner  
Counterclockwise=Richer



Idle speed:  
.020" (.5mm)  
Adjust Idle Screw until  
.5mm is obtained.



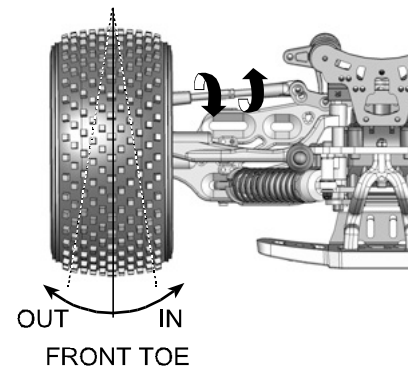
High speed mixture:  
2<sup>3</sup>/<sub>4</sub> turns out  
Clockwise = Leaner  
Counterclockwise=Richer

# SET UP

## Toe Adjustment (Front)

1. Toe Adjustment (Front) Adjust the front toe angle by tuning the length of the left and right steering rod.

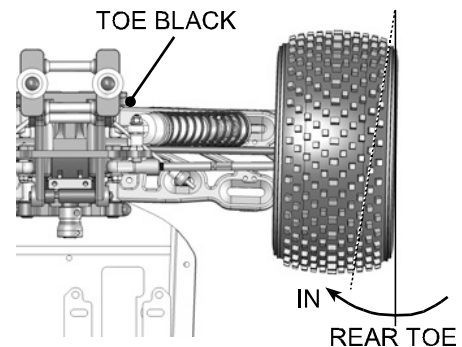
Rod length	Steering Characteristics
Tuning longer More front toe-in	<ul style="list-style-type: none"> <li>• Increases straight-line stability</li> <li>• Makes the steering response milder</li> </ul>
Tuning shorter More front toe-out	<ul style="list-style-type: none"> <li>• Decreases straight-line stability</li> <li>• Makes the steering response quicker</li> </ul>








**Note:** Ensure you adjust either the length of right and left tie rod the same.

## Toe Adjustment (Rear)

2. Toe Adjustment (Rear) Adjust the rear toe angle by changing the various toe blocks behind the rear bulkhead. Take out the embedded plastic balls inside of the block length and re-insert to the new toe block. Replace the toe block. There are 4 different blocks that can be chosen for adjustments. Please refer to the table below.



Block No.	Rear toe-in angle	Steering Characteristics
RR1 	Less rear toe-in (Less grip)	Increases steering but decreases the stability on power when exiting corners.
RR 1.5 		
RR 2 		More rear toe-in (More grip)
RR 3 		

## SET UP

### Caster Adjustment (Front)

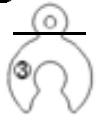
3. Caster Adjustment (Front): Adjust the caster angle by changing the plastic clips (caster shims) in the front upper hinge pin.

	Steering Characteristics
Clips behind upper arm More Caster (Note)	Sharper corner-in, slower corner-exit
Clips in the front of upper arm Less Caster	Slower corner-in, faster corner-exit

**Hint:** Using a needle nose pliers to install or reinstall the clips makes the adjustment much easier.

**Note1:** When putting the clips behind upper arms, cut the ear of the clips to avoid interfering with steering slider.

**Note2:** Ensure you make equal adjustments on both left and right sides of the car.



3mm

2mm

1mm



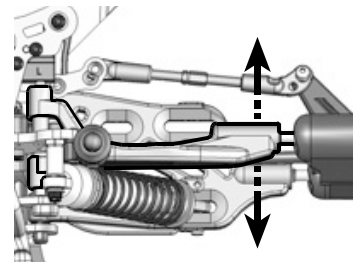
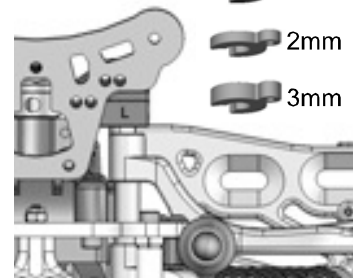
1mm shim for spare use only

Maximum Installation: 5mm

1mm

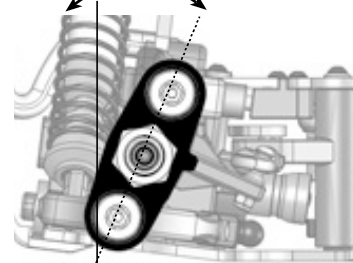
2mm

3mm






Less Caster

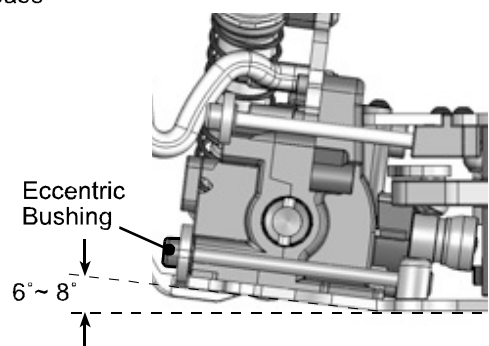
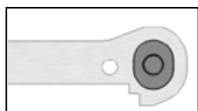
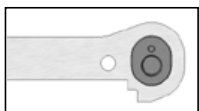
More Caster



### Front Anti-Squat Adjustment

4 Front Anti-Squat: The Front Anti-Squat angle can be adjusted using the different plastic eccentric bushings in the front suspension plate. Please refer to the table below.

Eccentric Bushing	Total	Characteristics
FF-1 	6°	Decreases steering response. Good handling on bumpy tracks.
FF0 	7°	
FF1 	8°	Increases steering response. Good handling on smooth tracks

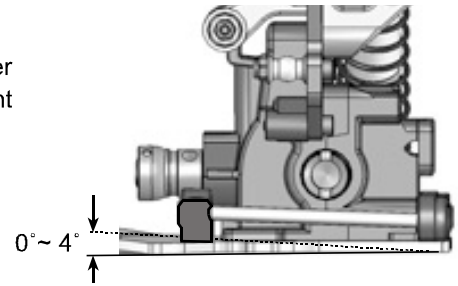


**Note:** Ensure you make equal adjustments on both left and right sides of the car.

# SET UP

## Rear Anti-Squat Adjustment

5. Rear Anti-Squat Adjustment: Adjust the rear anti-squat of the rear lower arms by replacing the different plastic arms suspension holders at the front of the rear bulkhead.

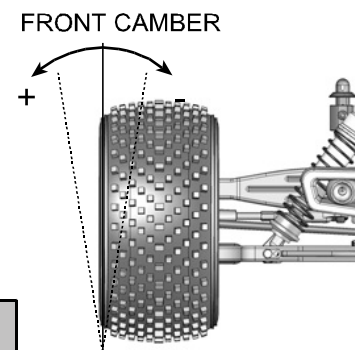


Rear susp. arm holders	Characteristics
RF 0 	Less anti-squat, flat arm Increases rear traction when cornering Decrease rear traction when accelerating. Easy handling on bumpy tracks
RF2 	
RF3 	More anti-squat, leaning backwards Decreases rear traction when cornering Increases rear traction when accelerating Easy handling on smooth or slippery tracks
RF4 	

## Camber Adjustment(Front)

6. Camber Adjustment(Front): Adjust the front camber by adjusting the lengths of threaded parts of the front pivot balls in the upper arms longer or shorter.

Length(L)	Steering Characteristics
Making longer. Positive camber.	Less steering
Making shorter. Negative camber.	More steering



**Note1:** To expanding the adjusting range of the front camber, you can also change the eccentric bushing in the upper plate at the very front of the front bulkhead and the mounting holes of hinge holders on the servo saver top plate.

Eccentric bushings	Servo saver top plate		Camber adjusting range of the front camber
Inner hole 			More camber adjustment
Outer hole 			Less camber adjustment

**Note2:** Ensure you make equal adjustments on both left and right sides of the car.

# SET UP

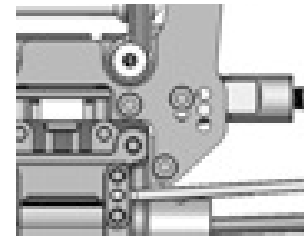
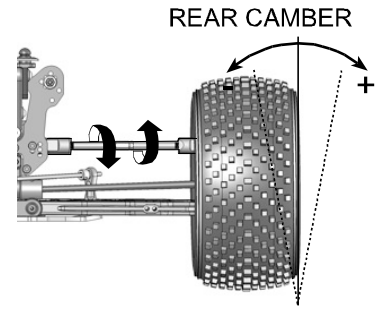
## Camber Adjustment (Rear)

7. Camber Adjustment(Rear): Adjust the rear camber by adjusting the lengths of the upper tie rods.

Length(L)	Steering Characteristics
Making longer. Positive camber.	Decreases traction when entering corners.
Making shorter. Negative camber.	Increases traction when entering corners

**Note1:** You can also adjust the rear camber by positioning the rear upper tie rods in the different holes in the shock towers and outer rear hubs. For more information, please refer to the "Set-Up Sheet" in a separate sheet.

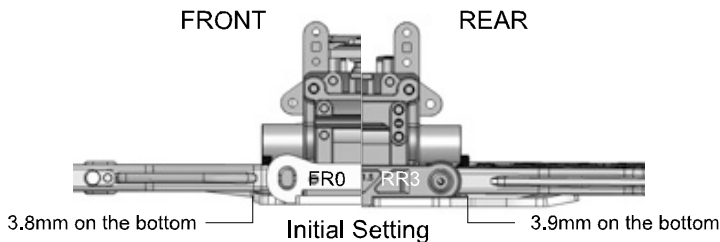
**Note2:** Ensure you make equal adjustments on both left and right sides of the car.



## Ride Height (or Droop) Adjustment

8. Ride Height (or Droop) Adjustment: The front/rear ride height can be adjusted by screwing in or unscrewing the setscrews in the lower arms.

Setscrews	Ride height	Characteristics
Screwing in	Becomes lower	Less steering, good handling on smooth tracks
Unscrewing	Becomes higher	More steering, good handling on rough tracks



## Ackerman Adjustment

9. Ackerman Adjustment: Adjust the Ackerman angle by linking the front steering rods into the different holes on the steering slider.

Steering tie-rod mounting holes	Characteristics
Forward holes	Makes the steering response sharper. Suitable for narrow, tight tracks
Rearward holes	Makes the steering response milder Suitable for high speed race way.

**Note:** Ensure you make equal adjustments on both left and right sides of the car.





# ST-1 SET UP SHEET

Name of Driver	Date	Track	Radio	Servo	Engine	Plug
Fuel	Spur/ Clutch Bell	Wheels	Tires	Inner	Muffler	
Brand:	T/ T					
Nitro: %						

## SHOCKS

(Shock Oil Brand: \_\_\_\_\_ )

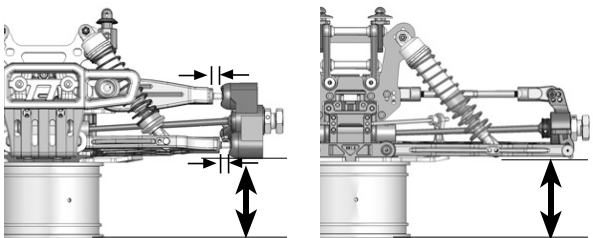
	Front	Rear
Oil #	_____	_____
Spring	<input type="checkbox"/> Blue: Softer <input type="checkbox"/> Red: Average <input type="checkbox"/> Black: Harder	<input type="checkbox"/> Blue: Softer <input type="checkbox"/> Red: Average <input type="checkbox"/> Black: Harder
Spacer	_____ mm	_____ mm

## DIFF. OIL

	Front	Center	Rear
Oil #	_____	_____	_____

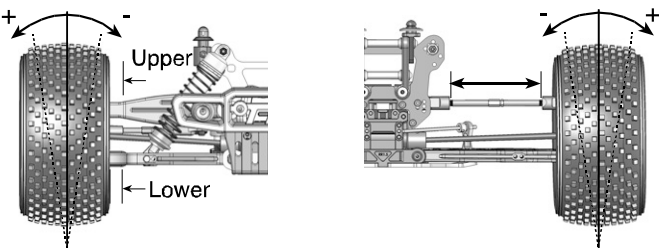
## REBOUND STOP

Front	Rear
_____ mm	_____ mm



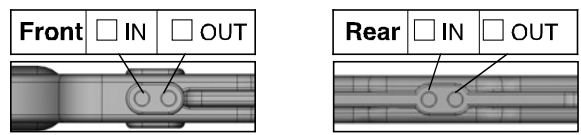
## CAMBER ANGLE

Front	Rear
_____ ° Upper _____ mm,	
_____ ° Lower _____ mm	_____ ° _____ mm

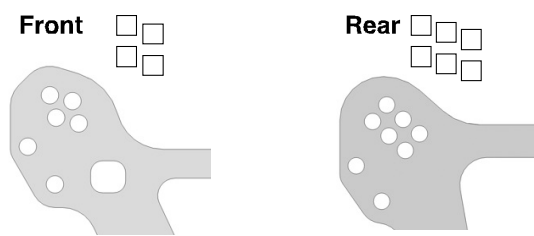


## SHOCK MOUNT POSITION

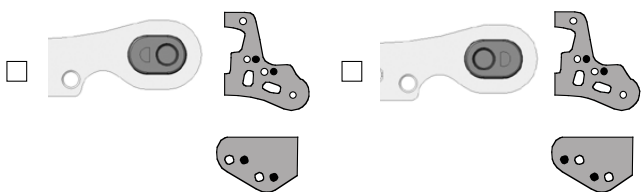
### Arm Mounting



### Tower Mounting

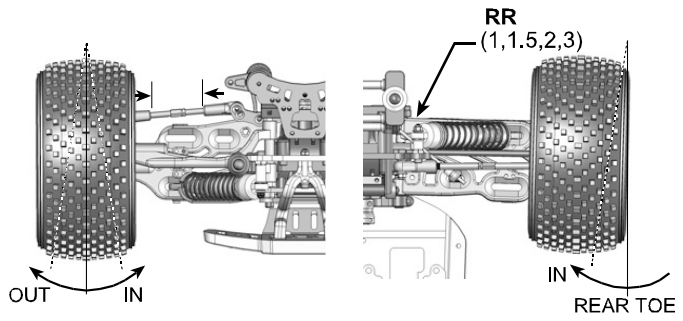


## FRONT ARM MOUNTING



## TOE ANGLE

Front	Rear
_____ ° _____ mm	<input type="checkbox"/> 1, <input type="checkbox"/> 1.5, <input type="checkbox"/> 2, <input type="checkbox"/> 3

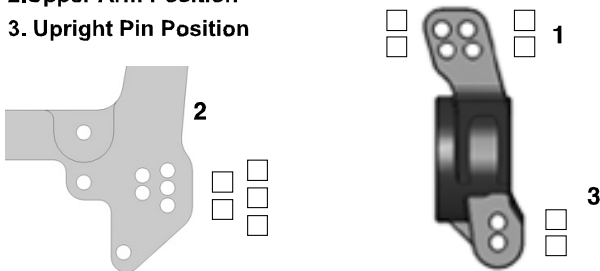


### FRONT/ REAR SUSPENSION HOLDER

Front	Rear
<input type="checkbox"/> FF-1	<input type="checkbox"/> RF0
<input type="checkbox"/> FF0	<input type="checkbox"/> RF2
<input type="checkbox"/> FF1	<input type="checkbox"/> RF3
	<input type="checkbox"/> RF4
<b>FR</b> 	<input type="checkbox"/> RR1
	<input type="checkbox"/> RR1.5
	<input type="checkbox"/> RR2
	<input type="checkbox"/> RR3

### REAR UPPER ARM POSITION

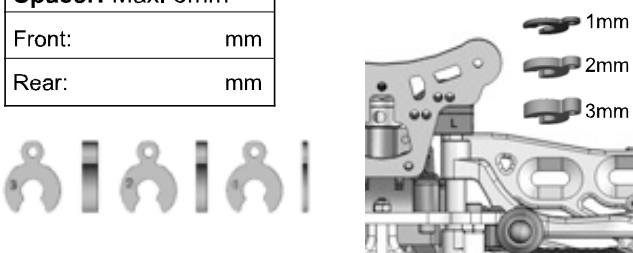
1. Rear Hub Position
2. Upper Arm Position
3. Upright Pin Position



### FRONT CASTER

<b>Spacer: Max. 5mm</b>	
Front:	mm
Rear:	mm

Maxsimun Installation: 5mm



### RACE NOTE

Main: \_\_\_\_\_ Place  TQ \_\_\_\_\_

Notes: \_\_\_\_\_

### STEERING PLATE

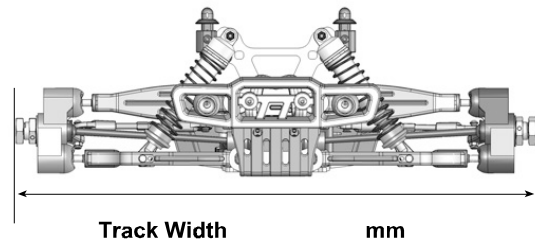
A: Front  A

B: Rear  B

### SWAY BAR

Front	Gold ø3	Black ø2.7	Silver ø2.5
Rear	Gold ø3	Black ø2.7	Silver ø2.5

### TIRES WIDTH

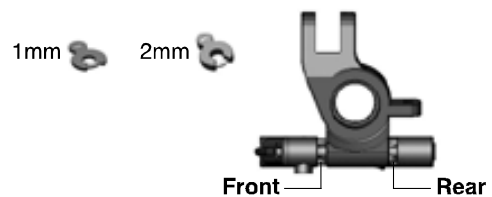


### WHEELBASE ADJUSTMENT

**Spacer:**

Front:  1mm  2mm  3mm

Rear:  1mm  2mm  3mm



### TRACK CONDITIONS

Surface:  Smooth  Bumpy

Bumps: \_\_\_\_\_

Traction:  Low  Med  High

Composition: \_\_\_\_\_

Sandy  Soft Dirt  Grass  Clay  Other

Wet  Dry  Dusty  Other



No.6230-K10

## 1/8 Nitro Powered 4WD Racing Buggy



*The new EB-4 S3 comes with new features that have never been applied to a 1/8th scale nitro buggy before, such as the super low center of gravity, radical engineering of a car construction and more than innovative, good looking and high performance suspension.*

*This is a look into the future for 1/8th scale cars and the future is here with Thunder Tiger.*

# KIT

### Specification

Length: 496mm/19.5in

Width: 305mm/12in

Height: 180mm/7.08 in

Weight: 3340g/7.4lb approx.

Wheelbase: Adjustable from 320mm to 330mm

Front track Width: Adjustable from 295mm to 305mm

Rear track Width: 300 mm

Front Caster: Adjustable from 16 to 25

Front Anti-Dive: -1 0 +1 (Front kick up: 7)

Rear Anti-Squat: 0 +2 +3 +4

Front Toe: 0 with adjustable Turnbuckle.

Rear Toe-in: 1 +1.5 +2 +3

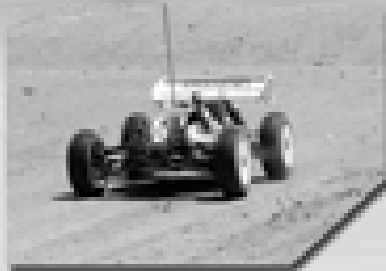
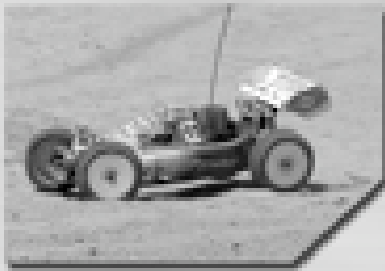
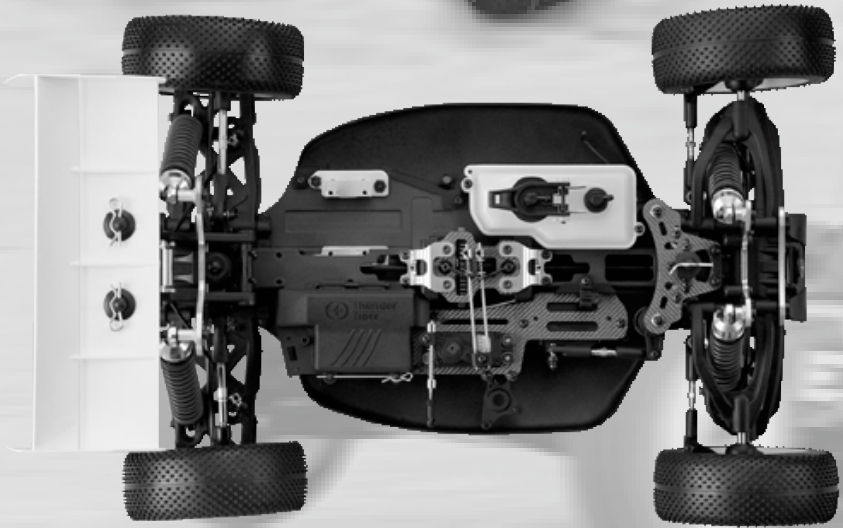
Gearing

Pinion/Spur: 13:46

Primary: 3.54:1

Internal: 3.31:1

Final: 11.72:1



**THUNDER TIGER CORP.** <http://www.thundertiger.com>



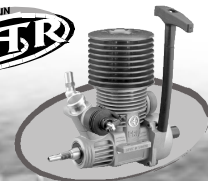
# MTA4



## 1/8 4WD NITRO MONSTER TRUCK



### INCLUDED



THUNDER TIGER PRO-28BD-R ENGINE

### Features

- High power and reliable .28 size engine that has two different starting methods (pull start and hex shaft start).
- A very rigid, extruded aluminum channel chassis was used to handle the stress of the long travel suspension and high power of the .28 size engine.
- Reliable, two-speed, adjustable automatic shifting, forward and reverse transmission.
- Long travel suspension is controlled by 8 adjustable oil damped shocks which handle jump heights in excess of 2 meter.
- One piece electronic equipment container unit.
- The large, non-stopping fuel tank features a dual fuel-pick-up system.
- Fuel line with primer pump.
- High impact absorbing front and rear bumpers protect the chassis and suspension during hard landings and tumbles.
- Realistic styled body shell, wheels and tires match the design of full size monster trucks.
- Easy & quickly body open system.



PD1759 OPTIONAL MACHINED CHASSIS

## OPTIONAL PARTS



PD1741 SHOCK CAPS, MTA



PD1766 Wheel Hex Drives, blue



AA2110-R CYLINDER HEAD, PRO 28BD-R, OP



PD0470 CLUTCH BELL 15T



PD1753 CLUTCH BELL 18T



PD1523 CLUTCH BELL 14T



PD1752 CLUTCH BELL 17T



PD1767 METAL SHOCK BODY



PD1582 SERVO SAVER, HITECH



PD1583 SERVO SAVER, JR



PD6332 SIDE EXHAUST NUFFLER MOUNT



PD0418 1/8 TUNED PIPE



PD1762 OPTIONAL STEERING KIT



PD1765 OPT STEERING HARDWARE



PD1764 SERVO SAVER HUB/SPRING



PD1763 OPT. STEERING RACK/ARM



PD1754 SPUR GEAR 49T



PD6325 SIDE MOUNT EXHAUST MANIFOLD

PD1756 TI ALLOY STEERING LINK ROD  
PD1757 TI ALLOY REAR LINK ROD

PD1761 5mm LOCK NUT, BLUE ALUM  
PD1304 4mm LOCK NUT, BLUE ALUM  
PD1301 3mm LOCK NUT, BLUE ALUM



PD1774 REVERSE ELIMINATION KIT



PD1755 SPUR GEAR 46T



PD1771 VENTILATED BRAKE DISC