



(Glow starter is not included.)

No.2409

PRO Starter box

INTRODUCTION

Thank you for the purchase of this Thunder Tiger product. You should enjoy many hours of trouble free use from this advanced R/C product. Thunder Tiger strives to bring you the highest level of quality and service we can provide. We race and test our products around the world to bring you state-of-the-art items.

We offer on-line help 24-7 on our www.acehobby.com forum and our product specialists are ready to take your call if you have any technical questions. Please read all instructions and familiarize yourself with the systems and controls of this product before operating. Have fun and enjoy the exciting world of R/C.

DESCRIPTION

The Thunder Tiger PRO Starter Box is a compact, high torque starter box that can be used to start most types of engine powered R/C vehicles. Made of stainless steel and durable nylon composite parts, the PRO Starter Box comes completely assembled and ready for use. Its rustproof, industrial grade stainless steel case maintains the same shape and color no matter how many times it has been used. Its ergonomically designed, over-size handle provides painless, fatigue-free transport every time. In addition, the starting flywheel / mechanism can be reconfigured so that it can start engines placed along the chassis or perpendicular to the chassis. The starting mechanism utilizes a large, heavy duty, 775 size motor with pulley / belt reduction system to produce the torque required for new 21-sized engines. Furthermore, the alignment posts are adjustable from top with a single tool for easy set-up. The Pro Starter Box requires two 7.2V battery packs or a 12V DC source for power, and it includes all the necessary hardware.

FEATURES:

- Compact / light weight design
- Brushed, stainless steel case
- Over-size, ergonomic handle
- Tough, nylon composite parts
- Convenient holders for glow starter and hand tool.
- Top / single tool adjustable posts
- Durable rubber flywheel
- Selectable flywheel orientation (1/8, 1/10, off or on-road)
- Adjustable flywheel engagement point
- Efficient belt-drive system
- Single, large, heavy-duty 775 size motor
- High torque pulley / belt reduction system
- Accepts twin 7.2V packs or 12V DC power
- Factory assembled, ready to use

SPECIFICATIONS:

Power source (not included):

14.4V DC (two 7.2V stick battery packs) or
12V DC (gel cell, car battery, power supply . . . etc.)

Motor:

775-size, 10V ~ 14V DC electric

Pulley ratio:

4.307:1 (13T pinion pulley / 56T spur pulley)

Length:

340mm

Width:

120mm

Weight:

1800g w/o batteries (2500g with two 7.2V batteries)

Height:

80mm

Post height:

20mm, front

6mm, rear

STARTER BOX SET-UP

1. Identify the car engine's crankshaft orientation, and move the starting box flywheel unit accordingly (by removing and reinstalling the top and bottom screws).

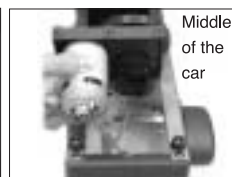


For engine crankshaft perpendicular to chassis, move starting box flywheel unit so that the face of the flywheel is toward the starting box side.

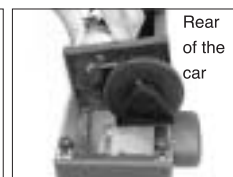
For engine crankshaft parallel to chassis, move starting box flywheel unit so that it is sitting crossways in the box.



For engine crankshaft parallel to chassis



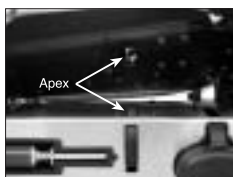
Middle of the car



Rear of the car

For engine crankshaft parallel to chassis, there are two positions available depending on the engine flywheel (middle of the car or rear of the car like the AE NTC3). To switch between these two positions, the motor and the pulley/flywheel unit must be removed and remounted on the opposite side of the starter bulkhead.

2. Line up the chassis / engine flywheel with the starter box's flywheel. The chassis needs to line up where the apex of the engine flywheel meets the apex of the starter box flywheel in an up and down motion.



Apex



3. With the chassis lined up like step #2, adjust the spring-loaded platform to support the rear of the chassis. To accommodate different length of the chassis, the spring-loaded platform can be flipped. If needed, disassemble, turn the platform 180 degrees, and reassemble.



4. With chassis lined up like step #2, move the front posts (loosen and tighten the posts with a screw driver from top) so that they are located behind the front lower suspension arms (by moving them to the front or rear slots).



Then, move the posts inward so that they pinch the chassis loosely (by moving the posts sideways in the slots).



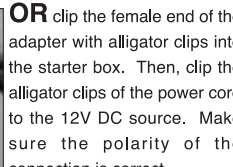
5. With chassis lined up like step #2 and front posts already set, move the rear posts (short, 6mm posts located on spring-loaded platform) so that they are pinching the rear of the chassis loosely (by moving the posts sideways in the slots).



6. Clip the female end of the three point adapter into the starter box. Then, clip the remaining two male ends of the adapter into the two 7.2V stick battery packs (not included). Then, place the battery packs in the battery holder with one end in the starter case cap/end, and push down on the battery holder clip.



OR clip the female end of the adapter with alligator clips into the starter box. Then, clip the alligator clips of the power cord to the 12V DC source. Make sure the polarity of the connection is correct.



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- The polarity of the connection is likely to be wrong. Double-check the plugs or power cord, and reverse the polarity .

- The 7.2V battery packs or the 12V DC source is bad / dead or the adapter / power cord is not making a solid connection. Check them with a voltmeter.

- The pulley / belt is too tight. Loosen the two screws which are holding the motor, adjust the pulley tension (1mm in from the outer most limit where the belt will allow the pulley to separate), and tighten the two screws again.

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- Flywheel stationary Flywheel spinning Flywheels engage



Operating Instructions

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7. Repeat if the engine does not start and consult the owner's manual for this engine.
8. After the engine has started, remove the glow igniter from the engine and the car from the charger.

- 1.** Do not engage the spring loaded switch so that the motor spins without load and/or engagement to a car's flywheel. Doing so may cause unexpected damage or shorten the life of the motor.
- 2.** If the starter box cannot start the engine immediately, do not press on the starter continuously. Doing so may also cause damage or shorten the life of the motor. Check the following points for the suspected causes.
 - 2.1** Check the glow starter. The glow starter should be fully charged before use.
 - 2.2** Check the fuel system. Fuel tank and line should be free of debris for smooth fuel flow.
 - 2.3** Check whether the engine is flooded. If the engine is flooded, remove the glow plug, and press on the starter for 5 to 10 seconds to release the excess fuel. After removing the excess fuel, replace the glow plug and start the engine again.
 - 2.4** Check the condition of the glow plug.

PD1285 FEET, POSTS, PLATFORM SET

- X4 X2 X2 X1

PD6411 HAND TOOL HOLDER

PD6414 STARTER BODY SET

PD1284 CASE ENDS / CAP

STAINLESS CASE

PD6412 GLOW STARTER HOLDER

PD1357 BATTERY HOLDER

PD1276 STARTER FLYWHEEL

PD1277 SPUR PULLEY SET

PD1278 BEARING / AXLE SET

PD1280 DRIVE BELT

PD1359 STARTER BULKHEAD

PD1355 STARTER PINION GEAR, 13T

PD1281 STARTER MOTOR

PD1284 CASE ENDS / CAP

SPRING-LOADED PLATFORM STAINLESS CASE

ELECTRICAL WIRE

PD1284 CASE ENDS / CAP

PD1360 POST, SPRING, SWITCH SET

1116 WRENCH, 5-WAY SOCKET

1132 HEX DRIVER SET

1166P PISTON LOCK TOOL

1103 HEX DRIVER SET

1261 600cc FUEL BOTTLE

1266 300cc FUEL BOTTLE

2150 1.8Ah GLOW STARTER-L, 110V 2P

2151 1.8Ah GLOW STARTER-L, 230V 2P

2152 1.8Ah GLOW STARTER-L, 230V 3P

Thunder Tiger Corp.