

SigmasTek STX7A-BS

SigmasTek STX7A-BS ATV Battery Instruction Manual

Model: STX7A-BS (Replacement for Kasea 150CC Skyhawk 150 Adventure Buggy)

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1. INTRODUCTION

This manual provides essential information for the safe and effective use of your SigmasTek STX7A-BS ATV Battery. This battery is designed as a replacement for Kasea 150CC Skyhawk 150 Adventure Buggy models and utilizes Absorbent Glass Mat (AGM) technology for reliable performance. Please read this manual thoroughly before installation and operation to ensure proper handling and longevity of your battery.



Image 1.1: SigmasTek STX7A-BS ATV Battery, a 12V 7Ah AGM battery.

2. SAFETY INFORMATION

Always observe the following safety precautions when handling and installing batteries:

- **Wear Protective Gear:** Always wear eye protection (safety glasses) and gloves when working with batteries.
- **Avoid Sparks and Flames:** Batteries produce flammable gases. Keep sparks, open flames, and

smoking materials away from the battery.

- **Prevent Short Circuits:** Do not place tools or metallic objects on top of the battery. Avoid contact between the positive and negative terminals.
- **Keep Out of Reach of Children:** Batteries contain hazardous materials and should be stored securely.
- **Proper Ventilation:** Ensure adequate ventilation when charging batteries to disperse any gases.
- **Emergency Procedures:** In case of contact with battery acid, flush immediately with water and seek medical attention.
- **Disposal:** Dispose of old batteries responsibly at an authorized recycling center. Do not discard with household waste.

3. PRODUCT FEATURES

The SigmasTek STX7A-BS ATV Battery offers the following key features:

- **Voltage and Capacity:** 12V, 7Ah (Ampere-hour) with 105 CCA (Cold Cranking Amps).
- **AGM Technology:** Utilizes Absorbent Glass Mat (AGM) technology for superior performance, spill-proof design, and maintenance-free operation.
- **Robust Construction:** Engineered for extreme freeze, heat, and vibration resistance, ensuring durability in various conditions.
- **Starting Power:** Provides superior starting power for reliable engine ignition.
- **Ready for Use:** SigmasTek Powersport batteries come fully charged from the factory, ready for immediate installation and use.

4. SETUP AND INSTALLATION

Follow these steps for proper installation of your SigmasTek STX7A-BS battery:

1. **Preparation:** Ensure the ATV's ignition is off and remove the key. Locate the existing battery compartment.
2. **Remove Old Battery:** Disconnect the negative (-) terminal first, followed by the positive (+) terminal. Carefully remove the old battery.
3. **Inspect Battery Compartment:** Clean any corrosion or debris from the battery tray and terminals.
4. **Position New Battery:** Place the SigmasTek STX7A-BS battery into the compartment, ensuring it fits securely. Refer to the dimensions below for proper fitment.
5. **Connect New Battery:** Connect the positive (+) terminal first, then the negative (-) terminal. Ensure connections are tight but do not overtighten.
6. **Secure Battery:** Use any existing straps or clamps to secure the battery firmly in place to prevent movement during operation.



Image 4.1: Dimensions of the SigmasTek STX7A-BS battery (5.94" L x 3.46" W x 3.70" H).

5. OPERATING INSTRUCTIONS

Your SigmasTek STX7A-BS battery is factory-charged and ready for immediate use. For optimal performance and longevity, consider the following:

- **Initial Start-up:** After installation, the ATV should start normally. If not, recheck connections.
- **Charging:** While the battery comes pre-charged, if the ATV is stored for extended periods or experiences slow cranking, a maintenance charger designed for AGM batteries can be used. Follow the charger manufacturer's instructions.
- **Avoid Deep Discharge:** Repeated deep discharge can shorten battery life. Ensure the ATV's charging system is functioning correctly to maintain battery charge during operation.

6. MAINTENANCE

The SigmasTek STX7A-BS is a maintenance-free AGM battery, but periodic checks can help ensure its long life:

- **Terminal Inspection:** Periodically check battery terminals for cleanliness and tightness. Clean any corrosion with a wire brush and a baking soda/water solution.
- **Battery Case:** Keep the battery case clean and dry.
- **Voltage Check:** If the ATV is stored for an extended period, check the battery voltage every few months. A fully charged 12V battery should read approximately 12.6V or higher.
- **Recharging During Storage:** If the voltage drops below 12.4V during storage, recharge the battery using a suitable AGM-compatible charger to prevent sulfation and maintain capacity.

7. TROUBLESHOOTING

If you encounter issues with your battery, consider the following common problems and solutions:

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
Engine cranks slowly or not at all	Low battery charge, loose or corroded terminals	Recharge battery, clean and tighten terminals. Check ATV charging system.
Battery not holding a charge	Faulty charging system, parasitic drain, aged battery	Inspect ATV charging system (alternator/regulator). Check for electrical components drawing power when off. If battery is old, consider replacement.
Corrosion on terminals	Normal chemical reaction, loose connections	Clean terminals with a wire brush and baking soda/water solution. Ensure connections are tight.

If problems persist after attempting these solutions, consult a qualified technician or contact SigmasTek customer support.

8. SPECIFICATIONS

Detailed technical specifications for the SigmasTek STX7A-BS battery:

Attribute	Value
Brand	SigmasTek
Model Number	STX7A-BS
Nominal Voltage	12V
Nominal Capacity (10HR)	7Ah
Cold Cranking Amps (CCA)	105
Battery Type	Absorbent Glass Mat (AGM)
Dimensions (L x W x H)	5.94" x 3.46" x 3.70" (151mm x 88mm x 94mm)
Terminal Type	NB
Operating Temp. Range (Discharge)	-20°C (-4°F) to 50°C (122°F)
Operating Temp. Range (Charge)	-20°C (-4°F) to 50°C (122°F)
Operating Temp. Range (Storage)	-20°C (-4°F) to 40°C (104°F)

Specifications		
Nominal Voltage	12V	
Nominal Capacity (10HR)	6AH	
Dimension	Length	151mm (5.94 inches)
	Width	88mm (3.46 inches)
	Height	94mm (3.70 inches)
	Total Height (with Terminal)	94mm (3.70 inches)
Approximate Weight	2.64 kg (5.81 lbs)	
CCA	105	
Polarity	+/-	
Battery Type	Valve Regulated Lead-Acid Battery, AGM Design	
Terminal Type	NB	
Acid Volume	0.39 Liter	
Charge Current	0.70 Amps	
Operating Temp. Range	Discharge:	-20°C (-4°F)~50°C (122°F)
	Charge:	-20°C (-4°F)~50°C (122°F)
	Storage:	-20°C (-4°F)~40°C (104°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Self Discharge	SigmasTek ST series batteries may be stored for up to 6 months at 25°C (77°F) and then a freshening charge is recommended. For higher temperatures the time interval will be shorter.	



Applications

- ATV
- Jet Ski
- Motorcycle
- Snowmobile
- Lawn & Garden

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Image 8.1: Detailed specifications for the SigmasTek STX7A-BS battery.

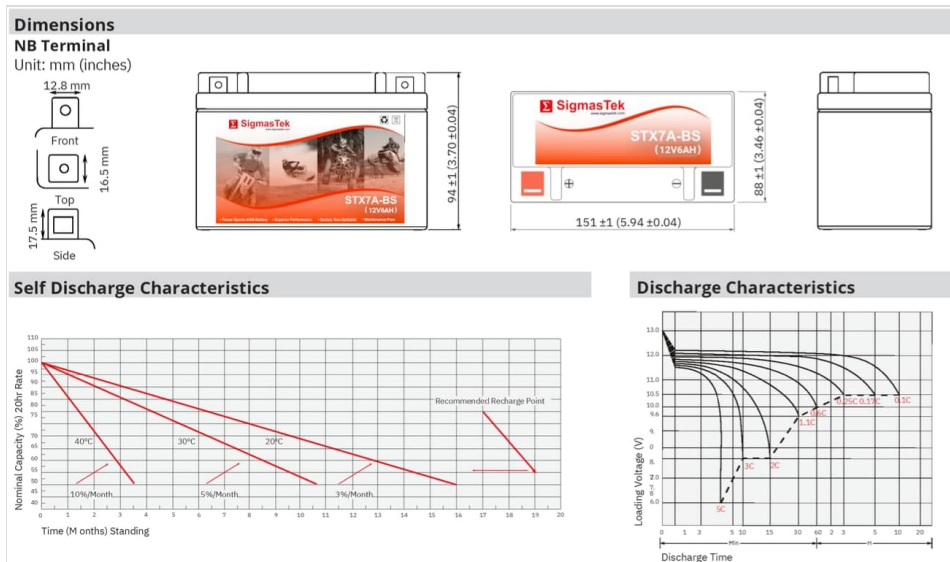
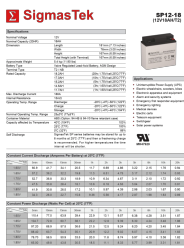
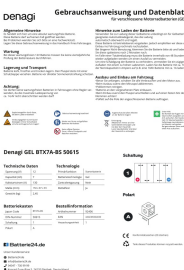
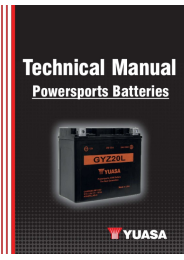
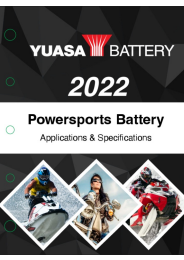
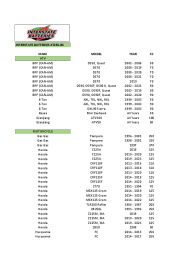


Image 8.2: Graph illustrating the discharge characteristics of the SigmasTek STX7A-BS battery.

9. WARRANTY AND SUPPORT

For information regarding warranty coverage, terms, and conditions, please refer to the official SigmasTek website or the documentation provided with your purchase. For technical support or further assistance, please contact SigmasTek customer service directly.

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	SigmasTek SP12-18 (12V18AH/T2) Rechargeable Sealed Lead-Acid Battery Datasheet Detailed specifications, performance charts, and application information for the SigmasTek SP12-18 (12V18AH/T2) rechargeable sealed lead-acid battery. Includes dimensions, capacity, discharge rates, temperature effects, and self-discharge characteristics.
	Denagi GEL BTX7A-BS 50615 Motorradbatterie Gebrauchsanweisung und Datenblatt Gebrauchsanweisung und technisches Datenblatt für die Denagi GEL BTX7A-BS 50615 verschlossene Motorradbatterie. Enthält Informationen zu Installation, Ladung, Wartung und technischen Spezifikationen.
	Yuasa Powersports Batteries Technical Manual Comprehensive technical manual from Yuasa covering powersports batteries, including battery basics, safety, types (AGM, Conventional), charging, selection, activation, installation, testing, maintenance, and troubleshooting. Features detailed explanations, diagrams, and tables for optimal battery performance and longevity.
	Yuasa Powersports Batteries: Applications & Specifications Guide Comprehensive guide to Yuasa powersports batteries, covering applications, specifications, battery types (AGM, Conventional, Yumicron), features, benefits, safety, charging, activation, installation, maintenance, and storage for motorcycles, ATVs, UTVs, PWC, and snowmobiles.
	VVCHG+ LiFePO4 PowerSports Battery User Manual User manual for the VVCHG+ LiFePO4 PowerSports battery, detailing product features, panel description, installation, applications, technical specifications, safety warnings, and warranty information.
	Interstate Batteries XTZ5S-BS Compatibility Guide A comprehensive compatibility guide for Interstate Batteries XTZ5S-BS, detailing its application across various ATV, Motorcycle, and Scooter models from brands like BRP, Honda, Kawasaki, KTM, Suzuki, and Yamaha.

