

Yuasa YBX7005

Yuasa YBX7005 EFB Start-Stop Automotive Battery User Manual

1. INTRODUCTION

This manual provides comprehensive instructions for the Yuasa YBX7005 12V 65Ah 620A EFB Start-Stop automotive battery. The Yuasa YBX7005 features advanced EFB (Enhanced Flooded Battery) technology, specifically engineered for vehicles equipped with Start-Stop systems. This battery delivers superior cycling performance, high charge acceptance for rapid recharging during engine stop modes, and provides additional power for onboard electrical systems when the engine is off. It is designed to contribute to fuel economy and reduced emissions in compatible vehicles.

Please read this manual thoroughly before installation and operation to ensure safe and optimal performance of your battery.

2. SAFETY INFORMATION

Automotive batteries contain sulfuric acid and produce explosive gases. Improper handling can lead to serious injury. Always observe the following safety precautions:

- **Wear Protective Gear:** Always wear eye protection (safety glasses or goggles) and acid-resistant gloves when handling batteries.
- **Avoid Sparks and Flames:** Keep batteries away from sparks, open flames, and smoking materials. Batteries produce hydrogen gas, which is highly flammable.
- **Ventilation:** Ensure adequate ventilation when working with batteries to disperse any gases.
- **Acid Contact:** Battery acid is corrosive. In case of skin or eye contact, flush immediately with plenty of water and seek medical attention.
- **Children and Pets:** Keep batteries out of reach of children and pets.
- **Lifting:** The Yuasa YBX7005 battery weighs approximately 16 kg. Lift with care, using proper lifting techniques or assistance to prevent injury.
- **Disposal:** Do not dispose of batteries in household waste. Batteries contain lead (Pb) and must be recycled at an authorized facility.



Image: Rear view of the Yuasa YBX7005 battery, displaying recycling symbols and lead (Pb) warning, indicating proper disposal is required.

3. SETUP AND INSTALLATION

Proper installation is crucial for battery performance and safety. If you are unsure about any step, consult a qualified mechanic.

Tools Required:

- Wrench set (appropriate size for battery terminals)
- Battery terminal cleaner (wire brush)
- Battery terminal grease (optional)
- Safety glasses and gloves

Installation Steps:

1. **Preparation:** Ensure the vehicle's ignition is off and all accessories are disconnected. Locate the existing battery.
2. **Disconnect Negative Terminal:** Using a wrench, loosen the nut on the negative (-) terminal (usually marked with a minus sign and black cable). Remove the cable and ensure it cannot accidentally touch the battery terminal.
3. **Disconnect Positive Terminal:** Loosen the nut on the positive (+) terminal (usually marked with a plus sign and red cable). Remove the cable.
4. **Remove Old Battery:** Unfasten any battery hold-down clamps. Carefully lift and remove the old battery. Remember the weight (16 kg) and lift safely.
5. **Clean Battery Tray and Cables:** Clean the battery tray and the inside of the battery cable clamps with a wire brush to remove corrosion.
6. **Place New Battery:** Carefully place the Yuasa YBX7005 battery into the battery tray. Ensure it is seated securely.

7. **Secure Battery:** Fasten the battery hold-down clamps to prevent movement.
8. **Connect Positive Terminal:** Connect the positive (+) cable to the positive (+) terminal of the new battery. Tighten the nut securely.
9. **Connect Negative Terminal:** Connect the negative (-) cable to the negative (-) terminal of the new battery. Tighten the nut securely.
10. **Apply Grease (Optional):** Apply a thin layer of battery terminal grease to the terminals to help prevent corrosion.
11. **Verify:** Double-check all connections are tight and secure.



Image: A mechanic installing a Yuasa battery into a vehicle's engine bay, demonstrating proper handling during installation.

4. OPERATING INSTRUCTIONS

The Yuasa YBX7005 battery is designed for vehicles with Start-Stop technology. Its EFB design ensures reliable performance in demanding applications.

- **Start-Stop System Compatibility:** This battery is optimized to handle the frequent engine starts and stops characteristic of modern Start-Stop vehicles. It provides the necessary power for rapid engine restarts and supports vehicle electronics during engine-off periods.
- **Engine Starting:** Turn the ignition key or press the start button as per your vehicle's manufacturer instructions. The battery will provide the necessary cranking power.
- **Charging:** The vehicle's charging system will recharge the battery during operation. The EFB technology, including a lithium carbon additive, enhances charge acceptance for quicker recharging.

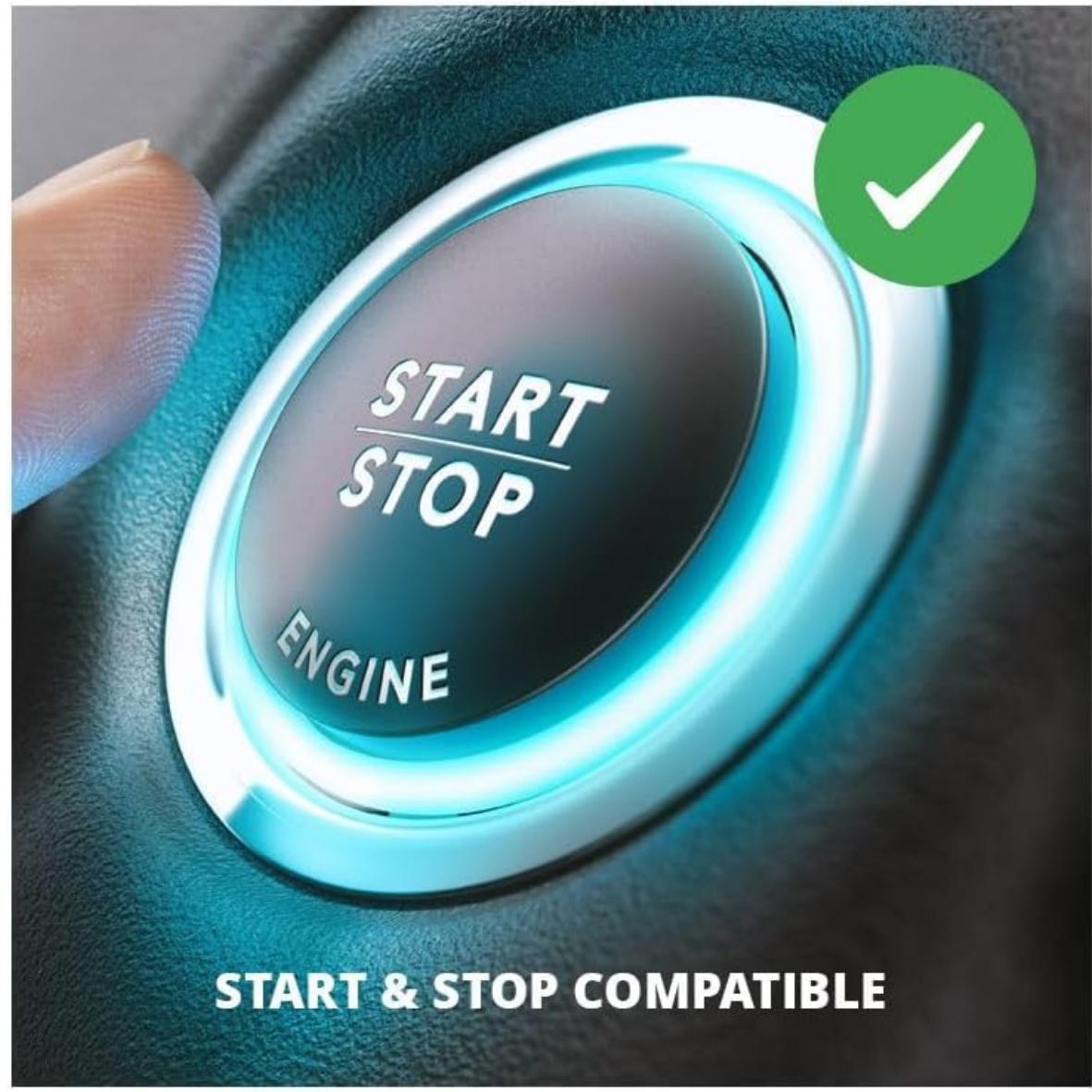


Image: A vehicle's 'Start Stop Engine' button, highlighting the battery's compatibility with Start-Stop systems.

5. MAINTENANCE

Regular maintenance helps prolong the life and ensure the reliability of your Yuasa YBX7005 battery.

- **Keep Terminals Clean:** Periodically inspect battery terminals for corrosion. Clean any corrosion with a wire brush and a solution of baking soda and water. Rinse with clean water and dry thoroughly.
- **Check Connections:** Ensure battery cables are securely fastened to the terminals. Loose connections can lead to poor performance and potential damage.
- **Fluid Levels (if applicable):** While EFB batteries are often low-maintenance, some designs allow for checking electrolyte levels. If visible, ensure the electrolyte is between the 'UPPER LEVEL' and 'LOWER LEVEL' marks. If topping up is required, use only distilled water. **Do not overfill.**
- **Battery Charge:** If the vehicle is not used for extended periods, the battery may discharge. Consider using a suitable automotive battery charger to maintain a full charge, especially in cold weather.
- **Battery Case Inspection:** Check the battery case for any signs of damage, cracks, or leaks. Replace the battery if any damage is observed.



Image: Front-top view of the Yuasa YBX7005 battery, showing terminal posts and markings for upper and lower fluid levels.

6. TROUBLESHOOTING

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

Problem	Possible Cause	Solution
Engine cranks slowly or not at all	Low battery charge, corroded terminals, loose connections, faulty starter motor.	Charge the battery. Clean and tighten terminals. Have the starter motor checked by a professional.
Battery not holding charge	Faulty charging system (alternator), parasitic drain, aged battery.	Have the vehicle's charging system inspected. Check for electrical components drawing power when the vehicle is off. If the battery is old, consider replacement.
Start-Stop system not functioning	Battery charge too low, ambient temperature too cold/hot, other vehicle systems requiring power.	Ensure the battery is fully charged. The Start-Stop system may temporarily disable itself under certain conditions (e.g., extreme temperatures, high electrical load). Consult your vehicle's manual.

Problem	Possible Cause	Solution
Corrosion on terminals	Normal chemical reaction, loose connections, overcharging.	Clean terminals thoroughly. Ensure connections are tight. Have the charging system checked if corrosion is excessive and recurring.

For persistent issues or complex problems, it is recommended to consult a qualified automotive technician.

7. SPECIFICATIONS

Key technical specifications for the Yuasa YBX7005 EFB Start-Stop Battery:

Feature	Detail
Model Number	YBX7005
Brand	Yuasa
Voltage	12 Volts
Capacity (Ah)	65 Ah
Cold Cranking Amps (CCA EN)	620 A
Battery Technology	EFB (Enhanced Flooded Battery)
Dimensions (L x W x H)	23.2 x 22.5 x 17.3 cm
Weight	16 Kilograms
Terminal Type	T1 Terminal
Key Features	Up to 270,000 engine starts, Lithium Carbon Additive for improved charge acceptance, reduced fuel consumption and emissions.

Choosing the right battery for you and your vehicle



Voltage: most vehicles have a 12V electrical system so a 12V battery is most likely to be what you need. However, it's important to check any replacement meets the vehicle's original specification.



Ah or Ampere Hour capacity: the number of amps the battery can deliver over 20 hours at 25°C to a cut off voltage of 10.5V. The higher the Ah capacity, the longer your battery can provide power.



CCA or A (EN): the maximum current the battery can deliver, measured at -18°C. The higher the CCA, the easier it will be to start the vehicle, especially important in cold weather or climates.

Your battery will be a specific case size, for example, '027' or '096'. A replacement battery must match the vehicle's original.

Vehicles with advanced technology such as Start - Stop will need an EFB or AGM battery. These batteries must be replaced like for like.

If you regularly use your vehicle for short or infrequent journeys, then you will need to choose a battery with higher specifications than that originally fitted to your vehicle.

Image: Infographic detailing key battery specifications like Voltage, Ampere-Hour (Ah) capacity, and Cold Cranking Amps (CCA).

8. WARRANTY AND SUPPORT

For information regarding the warranty period and terms for your Yuasa YBX7005 battery, please refer to the

documentation provided at the time of purchase or contact your retailer. Warranty conditions may vary by region and point of sale.

If you require technical support or have questions not covered in this manual, please contact your authorized Yuasa dealer or visit the official Yuasa website for customer service contact information.