

Yuasa YTX20HL-BS

Yuasa YTX20HL-BS High Performance VRLA Battery Instruction Manual

1. INTRODUCTION

This manual provides essential instructions for the safe and effective use, installation, and maintenance of your Yuasa YTX20HL-BS High Performance VRLA (Valve Regulated Lead Acid) Battery. Please read this manual thoroughly before proceeding with any battery activation, installation, or charging procedures. Proper adherence to these instructions will ensure optimal performance and longevity of your battery.

2. SAFETY INFORMATION

WARNING: Batteries contain sulfuric acid and produce explosive gases. Improper handling can cause severe injury or death. Always wear appropriate personal protective equipment, including eye protection and gloves, when handling batteries.

- Keep batteries out of reach of children.
- Do not short-circuit battery terminals.
- Do not expose batteries to open flames, sparks, or smoking materials.
- Ensure adequate ventilation when charging batteries.
- In case of contact with acid, flush immediately with water and seek medical attention.
- This battery contains lead (Pb). Do not dispose of in household waste. Recycle responsibly.



Image 1: Yuasa YTX20HL-BS High Performance VRLA Battery. The battery is black with white text, showing the Yuasa logo, 'HIGH PERFORMANCE', 'MADE IN USA', 'YUASA BATTERY, INC.', 'READING, PA 19605', 'ISO 9000', and 'www.yuasabatteries.com'. Key specifications like '12V 18Ah (10HR)', 'VRLA', 'YTX20HL-BS (M620BH)', '18.9 Ah (20HR) / 310A (CCA)' are visible. Charging instructions 'CHARGING METHOD: 1.8 Amps x 5~10 hrs' are also present. Symbols for recycling (three arrows forming a triangle), lead content (Pb), and a crossed-out wheeled bin indicating improper disposal are clearly marked.

3. PACKAGE CONTENTS

Upon opening the package, verify that all components are present and undamaged:

- Yuasa YTX20HL-BS Battery
- Terminal Screws

4. SETUP AND ACTIVATION

The Yuasa YTX20HL-BS is a factory-fresh battery that requires activation by adding the electrolyte pack (typically included separately) and an initial charge before first use. This process ensures maximum battery life and performance.

4.1. Electrolyte Filling Procedure

1. Place the battery on a level surface.
2. Remove the sealing strip from the battery.

3. Take the electrolyte pack and remove its cap. Do not peel off the foil seal.
4. Align the electrolyte pack with the battery's fill holes and push down firmly to break the foil seals.
5. Allow the electrolyte to drain completely into the battery cells. This may take up to 20 minutes. Do not tilt or remove the pack prematurely.
6. Once all electrolyte has drained, carefully remove the empty pack.
7. Firmly press the sealing strip back onto the battery to seal the cells. Do not remove this strip once installed.

4.2. Initial Charging

After filling with electrolyte, the battery requires an initial charge to reach full capacity.

- Connect the battery to an AGM-compatible battery charger.
- Set the charging current to **1.8 Amps**.
- Charge the battery for **5 to 10 hours**.
- The battery is fully charged when the voltage stabilizes at 12.8V or higher (for a 12V battery) and the charging current drops to a very low level.
- Disconnect the charger once charging is complete.

5. INSTALLATION

This battery is designed for vehicle-specific applications. Always consult your vehicle's service manual for detailed battery installation instructions.

1. Ensure the vehicle's ignition is off and remove the key.
2. Locate the battery compartment.
3. If replacing an old battery, disconnect the negative (-) terminal first, then the positive (+) terminal. Remove the old battery.
4. Carefully place the new Yuasa YTX20HL-BS battery into the battery compartment. Ensure it is securely seated and will not move during operation.
5. Connect the positive (+) terminal first, then the negative (-) terminal. Use the provided terminal screws and ensure connections are tight.
6. Apply a thin layer of dielectric grease to the terminals to prevent corrosion.
7. Secure any battery hold-downs or covers.

6. OPERATING

The Yuasa YTX20HL-BS battery is a maintenance-free VRLA type, meaning it does not require water additions. Once properly activated and installed, it is ready for use in your vehicle. Ensure your vehicle's charging system is functioning correctly to prevent overcharging or undercharging, which can shorten battery life.

7. MAINTENANCE

While VRLA batteries are considered maintenance-free, periodic checks and proper charging practices are crucial for extending their lifespan.

- **Terminal Inspection:** Periodically check battery terminals for corrosion and ensure they are clean and tight. Clean any corrosion with a wire brush and baking soda solution, then rinse with water and

dry thoroughly.

- **Voltage Check:** Regularly check the battery voltage, especially during periods of non-use. A fully charged 12V battery should read approximately 12.8V or higher.
- **Charging During Storage:** If the vehicle will be stored for an extended period (e.g., off-season), connect the battery to an automatic, temperature-compensated, AGM-compatible battery tender or smart charger. This will prevent self-discharge and sulfation. Avoid using trickle chargers not specifically designed for AGM batteries.
- **Cleaning:** Keep the battery case clean and dry.

8. TROUBLESHOOTING

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

- **Weak Cranking/No Start:**
 - Check battery voltage. If below 12.4V, recharge the battery.
 - Inspect terminal connections for looseness or corrosion. Clean and tighten as necessary.
 - Have the vehicle's charging system (alternator/stator, regulator) checked by a qualified technician.
- **Battery Not Holding Charge:**
 - Ensure the battery is being properly charged by the vehicle's system or an external charger.
 - Check for parasitic drains on the vehicle's electrical system.
 - If the battery is old and has been deeply discharged multiple times, its capacity may be permanently reduced.
- **Swollen Battery Case:** This indicates severe overcharging or internal damage. Discontinue use immediately and replace the battery.

If troubleshooting steps do not resolve the issue, contact Yuasa customer support or a certified battery specialist.

9. SPECIFICATIONS

Specification	Value
Brand	Yuasa
Model Number	YTX20HL-BS (M620BH)
Battery Type	VRLA (Valve Regulated Lead Acid) / AGM
Voltage	12V
Capacity (10HR)	18 Ah
Capacity (20HR)	18.9 Ah
Cold Cranking Amps (CCA)	310A
Recommended Charging Method	1.8 Amps x 5-10 hours
Product Dimensions (L x W x H)	5.67 x 7.87 x 10.71 inches (14.4 x 20 x 27.2 cm)

Item Weight	1.6 pounds
Country of Origin	United States
Manufacturer	Yuasa Battery, Inc.
Certifications	ISO 9000

10. WARRANTY AND SUPPORT

For warranty information, technical support, or further assistance, please contact Yuasa Battery, Inc. directly. Keep your purchase receipt as proof of purchase.

- **Manufacturer:** Yuasa Battery, Inc., Reading, PA 19605, USA
- **Website:** www.yuasabatteries.com