Automotive Battery Warranty Test Reference Chart

HELPING YOU TO HELP CUSTOMERS UNDERSTAND BATTERY TEST RESULTS

When customers return with a battery believing it to be faulty it should be thoroughly inspected and tested with the YUASA MDX 617(P) battery tester. The following is guidance for returns and understanding of the YUASA MDX 617(P) battery test result which can be printed and given to the customer.

Visual Inspection

Prior to carrying out a test using the YUASA MDX 617(P) battery tester ensure that the battery is within the warranty period by checking the proof of purchase. If the battery is within the warranty period carry out a thorough visual inspection, checking for signs of abuse and damage.

Check for:

- Correct battery application (Is it the correct battery for the vehicle?)
- Terminal damage (Melted posts or signs that cable terminals have been hammered into position)
- Case damage (Pierced case/electrolyte leaks from being dropped or incorrectly installed)

MDX 617(P) Battery Tester Set Up & Result Interpretation Guide

Ensure the MDX 617(P) settings are correct prior to battery testing. Only use the **YUASA WARRANTY TEST** option for testing batteries presented for a warranty claim, ensure that the appropriate battery type is selected (Regular Flooded or AGM Flat Plate) and an accurate Cold Cranking Amperage (CCA) figure is entered from the battery label.

ONLY use the MDX 617(P) **NEW BATTERY TEST** option when testing new off the shelf batteries.

MDX 617(P) Test Result	Test Result & Action Guide
Tester screen does not illuminate, test not possible	• Check the connections between the tester and the battery, if connections are OK check the battery voltage with a voltmeter • Voltmeter reading less than 0.5 Volts **Accept Warranty Claim** and replace battery **(Do not attempt to charge this battery!)** • Voltmeter reading between 0.5 and 9.0 Volts **Reject Warranty Claim** as the battery is unserviceable due to over discharge • Customer should have the reason for deep discharge investigated as it could be a caused be a serious vehicle fault/malfunction
GOOD BATTERY (Reject Warranty Claim)	• Battery is in a serviceable condition • Voltage and state of health are good • Return battery to service
GOOD & RECHARGE (Reject Warranty Claim)	• Battery state of health is good however measured battery voltage is low and battery is at risk of premature failure, battery must be charged prior to returning to service • Lights or accessories left on or infrequent use (Battery is not being sufficiently charged on short journeys, most common during Winter with frequent accessory use) • Charging system fault or uncontrolled electrical discharge (Customer investigation required as cause could be a serious vehicle fault/malfunction)
CHARGE & RETEST (Reject Warranty Claim)	• The voltage of the battery is critically low, possibly due to a charging system fault or uncontrolled electrical discharge and as a result the tester indicates a low Cold Cranking Amperage (CCA) reading • The battery must be charged in-store in accordance with the battery charging section of the Fire Safety Document so that its serviceability can be determined by a second test • If GOOD BATTERY is the result of the second test return the battery to service • If CHARGE & RETEST is the result of the second test the battery is unlikely to recover due to sulphation caused by deep discharge
REPLACE ADVISED (Reject Warranty Claim)	• The state of health of the battery is poor and is likely to be unreliable going forward • Whilst the battery may still be capable of starting the vehicle it is likely to fail in the short term • The battery has lost performance due to external factors and can no longer deliver performance compatible with original specification • Possible causes are undercharging, overcharging, deep cycling, battery ageing and wear/tear
BAD CELL (Accept Warranty Claim)	• The battery has a faulty cell due to either a short circuit or low acid content in the electrolyte which are both manufacturing/material defects • If within the warranty period replace the battery immediately

YUASA Battery Sales (UK) Ltd
Battery Guarantee Conditions & Exemptions

Yuasa batteries sold as replacements are guaranteed against premature failure due to manufacturing or material defects only.

The battery guarantee does not cover failure resulting from:

- **Sulphation**

Sulphation impairs battery performance and lifespan as a result of a battery being allowed to remain in a discharged state (<12.40V) either on/off a vehicle for a period of time

- **Wear and tear**

Wear and tear is the process of plate deterioration caused by the natural cycling of the battery when in service resulting in a gradual loss of capacity and performance

- **Deep cycling**

Deep cycling damage is caused when a battery is rapidly charged from a deeply discharge state (>35%) resulting in greatly increased losses of plate active material and accelerated loss of battery performance

- **Overcharging**

Overcharging damage is caused by vehicle charging system faults resulting in battery overheating, electrolyte evaporation, accelerated break up of plate material and loss of battery performance

- **Physical damage**

Physical damage is caused when a battery is stored, handled or incorrectly installed on a vehicle

- **Incorrect application**

Incorrect application damage is caused by the installation of a battery to a vehicle that is not specified or recommended in the Yuasa application list