

Traction Battery Health Report

HIGH-VOLTAGE DIAGNOSTIC REPORT

REPORT ID: SOH-2016-90D-4366

VEHICLE & PACK IDENTIFICATION

Vehicle Model	Tesla Model S P90D
Model Year	2016
Vehicle Identification Number (VIN)	5YJSA7E45GF124366
Battery Pack Architecture	90 kWh Nominal Li-Ion Pack (85.5 kWh Usable Baseline)

CALCULATED STATE OF HEALTH (SOH)
Based on controlled energy input analysis

92.7%
Excellent Condition

Degradation: 7.3%

Factory Usable Baseline: 85.5 kWh

DIAGNOSTIC CHARGE SESSION

Initial State of Charge	11.0%
Final State of Charge	93.0%
State of Charge Delta	82.0% (Δ 82%)
Total Energy Delivered	65.0 kWh

CALCULATED CAPACITY METRICS

Extrapolated Full Capacity	79.27 kWh
Original Usable Capacity	85.50 kWh
Charging Efficiency Factor	98.2% (Est.)
Diagnostic Status	Passed

TECHNICIAN & ENGINEERING NOTES

The high-voltage battery management system (BMS) logs and active session charge data for VIN 5YJSA7E45GF124366 have been evaluated against Tesla's certified original usable baseline capacity of 85.5 kWh for the 2016 90D/P90D pack architecture. The energy delta of 65.0 kWh transferred between 11% and 93% SOC extrapolates to an effective total usable capacity of approximately 79.27 kWh, yielding a refined State of Health (SOH) of **92.7%**.



Date: October 20, 2026
Validation Stamp & Record