NEW RELEASE

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BEV : GAC Toyota Motor (GAC Toyota) bZ3X Unit Teardown Report (Part 1)

鉑智3X (bZ3X)

eAxle

ADAS ECU

Back ground

The bZ3X (Bozhi 3X), a sport utility vehicle jointly developed by Toyota Motor Corporation, Guangzhou Automobile Group, GAC Toyota, and the Toyota Intelligent & Electrified Vehicle R&D Center (China), was announced in March 2025.
By adopting components from Chinese manufacturers, the vehicle is priced from RMB110,000, keeping costs low.
Given Toyota's strong focus on reliability, LTEC has release several reports analyzing what types of components have been adopted.
This first report provides connection diagrams, as well as teardown and key component identification of the installed units.

Released reports

1. **High-Voltage Electrical Components Teardown Report (15pages) 25R-0217-1**
Connection diagrams of high-voltage electrical components (eAxle & battery), installation locations of related units, teardown, and major component analysis report.
2. **Low-Voltage Electrical Components Teardown Report (15pages) 25R-0217-2**
Connection diagrams of low-voltage electrical components (steering, HMI, ADAS, etc.), installation locations of related units, teardown, and major component analysis report.
3. **Thermal Management Teardown Report (21pages) 25R-0217-5**
Thermal paths for thermal management systems (cooling, heater, etc.), installation locations of related units, teardown, and major component analysis report.
4. **ADAS related units Teardown Report 25R-0217-6**
Connection diagrams of ADAS ECU (cooling, heater, etc.), teardown, and major component analysis report.
5. **7 in 1 eAxel Teardown report 25R-0217-3**
Teardown, Component list including passive components, each 7 units connections, and connection of each PCBs inside of units

Delivered one week after order placement. Please contact us for report pricing.

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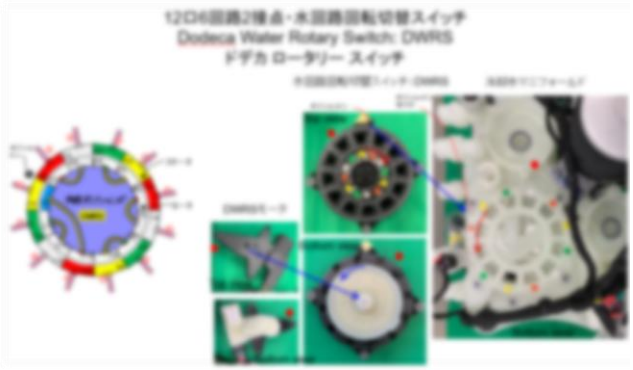
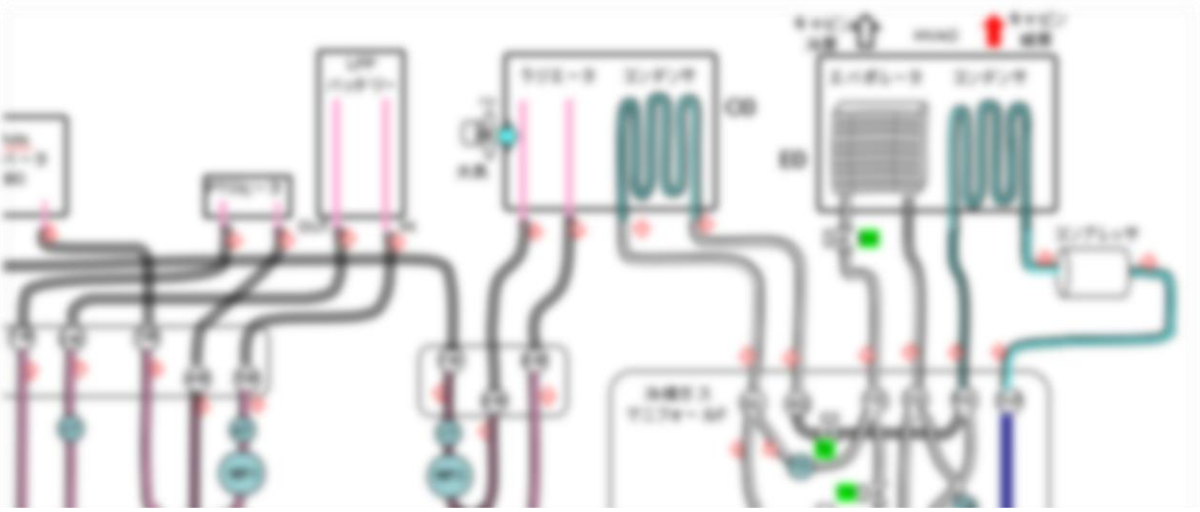
(3) Thermal Management Teardown Report

In the electric vehicle bZ3X, the Thermal Management System (TMS) integrates multiple high-power, high-density subsystems—including the traction battery, motor/inverter, power electronics, and cabin HVAC unit. To manage thermal flow across these components, the vehicle employs a Water Rotary Switch (WRS) architecture. This system features twelve coolant inlet/outlet ports, dynamically configured into eleven distinct flow patterns to regulate heat distribution. Through this mechanism, the vehicle maintains optimal performance, reliability, and cabin comfort.
This report is intended to support the understanding of thermal control design in electric vehicle development, provide comparative insights across models, and serve as a reference for future design optimization.

TMS units



TMS Connection diagram



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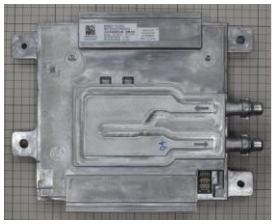
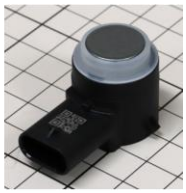
（4）ADAS related units Teardown Report

This vehicle incorporates autonomous driving technologies developed by the Chinese startup Momenta. Key features include Navigation-on-Pilot (NOA), hands-free driving, remote parking, traffic sign recognition, automated parking, and Over-the-Air (OTA) updates—collectively enabling advanced driver assistance capabilities.
This report provides a detailed overview of the installation layout, interconnections, and component-level configuration of the associated electronic control units (ECUs) and sensor modules.

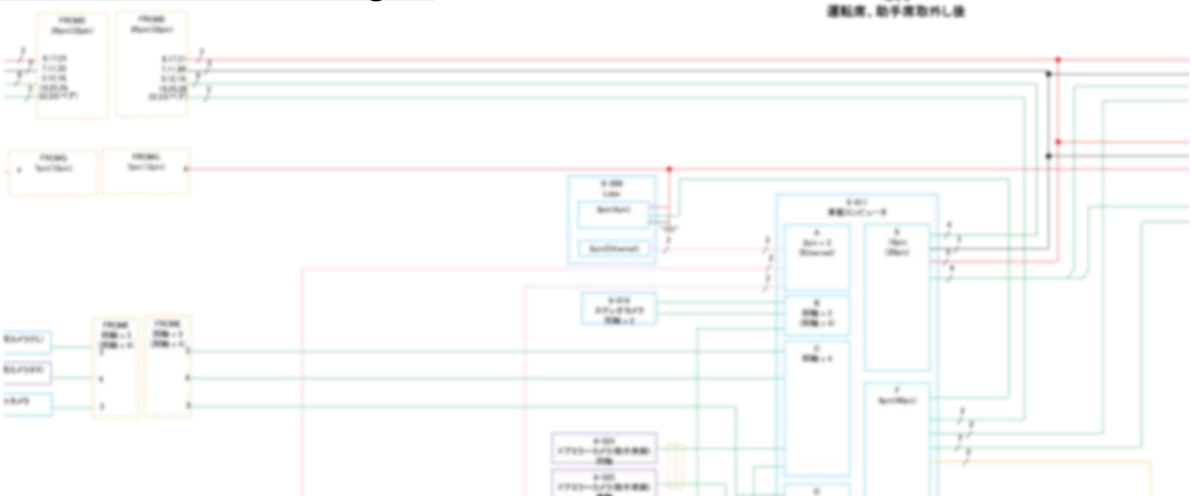






ADAS sensor position

ADAS sensors connection diagram



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（5）7 in 1 eAxel Teardown report

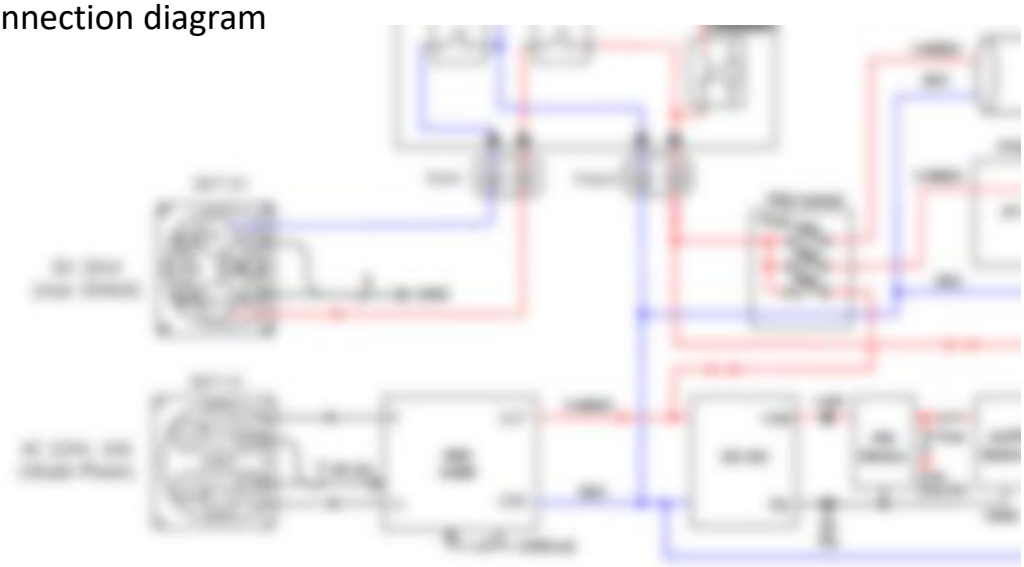
Inverter

Battery unit

Compressor

Teardown

Connection diagram



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