Pierce Manufacturing Inc., An Oshkosh Corporation Company
P.O. Box 2017, Appleton WI 54912-2017 USA

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The most reliable, configurable, usable electrical systems.

COMMAND ZONE™

CZ CONTROL
- VIRTUAL SWITCHING
- CUSTOM PROGRAMMING

CZ DIAGNOSTICS
- DEBUG MODE
- ON-TRUCK MANUALS
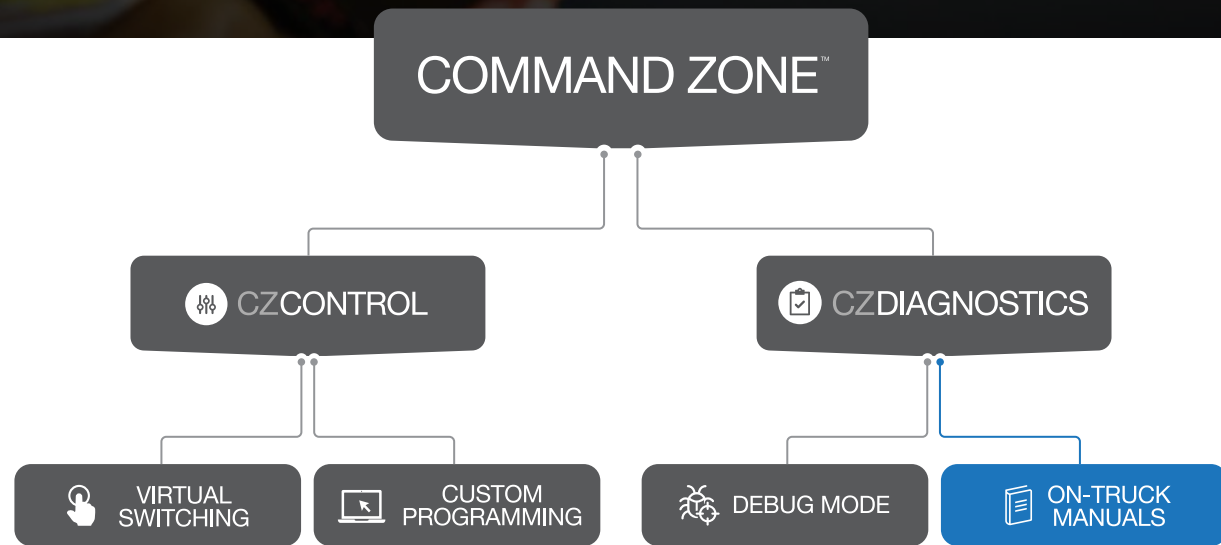
It's time to change the conversation. Every modern firefighting apparatus contains elements of multiplexed and hardwired electrical systems. Only Pierce engineers systems that are purpose-built to serve the fire industry with features poised to seamlessly evolve with technology.

No clunky retrofits or complicated third-party software. No troubleshooting your troubleshooting. Utilizing proven military-grade hardware and wire harnesses, Pierce® electrical systems give you technology built from the ground up for your department. If you have questions, you speak directly to the people who engineered your system, who just so happen to have lunch with the people who welded your frame rails.

One source. One intuitive, singular system. Available in feature packages that provide your desired level of interface, diagnostics, prognostics, maintenance, navigation, and more.

FEATURE PACKAGE	FOUNDATION	CZ WIFI	CZ TOUCHSCREEN	FULL COMMAND ZONE
Saber®	S	O	O	
Enforcer™	S	O	O	O
Arrow XT™	S	O*	O*	O
Impel®	S	S	O	S
Velocity®	S	S	S	S
Quantum®	S	S	S	S

*Features only available with Full Command Zone package
S = Standard   O = Optional

At-a-glance chassis/system availability of feature packages

FEATURE PACKAGES

FOUNDATION

SABER®*	ENFORCER®	ARROW XT®	IMPEL®	VELOCITY®	QUANTUM®

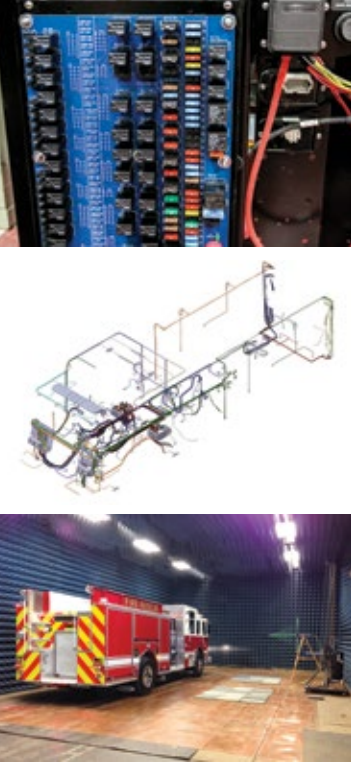**Every Pierce® custom chassis comes standard with:**

- Electrical distribution centers located strategically throughout the vehicle
- Serviceable electrical components readily accessible
- Power/signal protection & control components protected against corrosion, heat, vibration, physical damage, & water spray
- Distribution centers that contain battery power & ground studs for ease of customer supplied component installation
- Wiring run in conduit or loom where exposed; wire raceways built into cab structure
- IP67 waterproof connectors specified throughout the chassis

Component Specification

- Circuit breakers that conform to SAE J1553, J258, J554, J1284, J1888, J2077 standards
- Wire, relays, & solenoids sized to 125% of maximum current
- Wire harnesses that conform to SAE, NFPA, NEC, UL, ASTM, & WHMA standards
- Wire harnesses that include color, function, & number coding; function & circuit number stamped at 2" intervals.
- Wire insulation is high temperature crosslink

Validation

- Voluntary third party (UL) auditing for electrical compliance to NFPA 1901
- Third party EMI/RFI chamber testing to ensure emissions are suppressed at the component source
- R&D cycle testing of new components

CZ WIFI

SABER®*	ENFORCER®	ARROW XT®	IMPEL®	VELOCITY®	QUANTUM®

For those interested in using a WiFi enabled device to interface with their apparatus. This package includes the features of the Foundation package with the ability to:

- Connect up to five WiFi enabled devices within 300' of the vehicle
- Review active or historic faults with both text descriptions & SPN/FMI numbers
- View real time data transmitted on the driveline J1939 data bus
- Receive prognostics alerts for maintenance intervals
- View seat belt status

Hardware

- Telematics Control Unit (TCU)
- Control module
- Roof mounted WiFi/GPS antenna

Connectivity

- Uses the vehicle's local WiFi network & embedded web page to display vehicle information
- Auto connects to station WiFi network to upload truck data (no app or subscription required)

CZCONTROL

- Heat, defrost, & air conditioning control from touchscreen & WiFi enabled device (not available on Quantum)

CZDIAGNOSTICS

- Truck-specific electronic manuals stored on vehicle and accessed through your WiFi enabled device

Optional Integration Packages

- Bendix SmartTire tire pressure monitoring

CZ TOUCHSCREEN

SABER®*	ENFORCER®	ARROW XT®	IMPEL®	VELOCITY®	QUANTUM®

A higher level of on-board interaction, including all the features of the Foundation and CZ WiFi packages plus these touchscreen specific features:

- Active or historic faults with text descriptions & real time J1939 data bus information available at your fingertips (gloved or not)
- Prognostics alerts for maintenance intervals
- Auto day/night display backlighting mode
- Administrator setup features accessed through a configurable password security level
- Opportunity to integrate seat belt monitoring, tire pressure monitoring, pump gauges, navigation, & camera images in one touchscreen display
- Primary Screens: Transit Gauges, Scene Gauges, Notifications/Faults, Diagnostics, Prognostics, Timer/Clock/Date/Ambient Temperature, OneTouch Camera Selection

Hardware

- 7" color resistive touchscreen
- Telematics Control Unit (TCU)
- Control module
- Roof mounted WiFi/GPS antenna

CZCONTROL

- Heat, defrost, & air conditioning control from touchscreen & WiFi enabled device (not available on Quantum)

CZDIAGNOSTICS

- Truck-specific electronic manuals stored on vehicle and accessed through your WiFi enabled device

Optional Integration Packages

- Bendix SmartTire tire pressure monitoring
- Camera Systems
- Ascendant® Setup Determination
- Wabco Collision Mitigation

FULL COMMAND ZONE

SABER®	ENFORCER®	ARROW XT®	IMPEL®	VELOCITY®	QUANTUM®

The highest level of Command Zone™ interface, control, diagnostic, & prognostic capability. Includes all the features of the Foundation, CZ WiFi, and CZ Touchscreen packages plus:

- Full complement of D-Series Command Zone solid state input/output modules (optional diagnostic LEDs integrated into each module)
- Strategically located modules throughout apparatus reduces wire harness bulk
- Command Zone debug diagnostics available on the touchscreen and WiFi enabled device (password protected ability to force inputs & outputs on to aid troubleshooting)
- Virtual switch panels allowing control from the touchscreen & WiFi enabled device
- Virtual switch panel configuration through administrator setup menu
- Dynamic or static Graphical Do Not Move Truck screen

Hardware

- D-Series power, input, & output modules
- 7" color resistive touchscreen
- Telematics Control Unit (TCU)
- Control module
- Roof mounted WiFi/GPS antenna

CZCONTROL

- Heat, defrost, & air conditioning control from touchscreen & WiFi enabled device (not available on Quantum)
- Virtual switch panels on display & WiFi enabled devices
- Truck-specific I/O configuration

CZDIAGNOSTICS

- Visual Do Not Move Truck indication
- Command Zone I/O debug mode
- Load manager status
- Pump & throttle interlock status
- Truck-specific electronic manuals stored on vehicle

Optional Integration Packages

- Bendix SmartTire tire pressure monitoring
- Camera Systems
- Ascendant Setup Determination
- Wabco Collision Mitigation

■ STANDARD	■ OPTIONAL	■ NOT AVAILABLE

*Excludes Saber with Ford Power Train

ASCENDANT®

SABER	ENFORCER	ARROW XT	IMPEL	VELOCITY	QUANTUM

Setup determination & aerial information on chassis touchscreen.

• Understand if the vehicle is properly placed to use the aerial prior to leaving the cab

Only available with the CZ Touchscreen or Full Command Zone packages.

TIRE PRESSURE MONITORING

SABER	ENFORCER	ARROW XT	IMPEL	VELOCITY	QUANTUM

Bendix SmartTire system monitors each tire's pressure & temperature.

3 Alert Levels
• Critical Low Pressure
• Pressure Deviation
• High Temperature

COLLISION MITIGATION

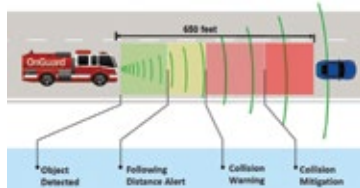| SABER	ENFORCER	ARROW XT	IMPEL	VELOCITY	QUANTUM

Detects objects up to 650' away and in adjacent lanes.

Audible & visual driver alerts for potential rear-end collisions.

Application of service brake up to 50% in event of impending collision.

Audible & visual driver alerts for potential stationary object collision.

• Meritor Wabco OnGuard™ far-range & near range, self aligning radar sensor collision mitigation system

Only available with the CZ Touchscreen or Full Command Zone packages.

AERIAL STABILIZER CAMERAS

SABER	ENFORCER	ARROW XT	IMPEL	VELOCITY	QUANTUM

Provides a top down view of where the aerial stabilizers will be planted.

• Outline of extended stabilizers overlaid on camera image

Only available with the CZ Touchscreen or Full Command Zone packages.

■ STANDARD ■ OPTIONAL ■ NOT AVAILABLE