

# Braun Industries, Inc.

One (1) == Total Life Care 2019 Type I MOD 191" - 19.300 08/01/19 ==

Y\_\_N\_\_

One (1)  
00-01-0001 GENERAL CONDITIONS

Y\_\_N\_\_

**PURCHASER:** The "Purchaser" who is hereinafter described as an individual, or a group of individuals who represent the interest of a City, Borough, County, Parish, State, or Private enterprise AND has been charged with the responsibility of purchasing one or more emergency medical ambulance(s).

**BIDDER:** The "Bidder" is hereinafter defined as the ambulance manufacturer and/or it's authorized Representative/Dealer.

## **BIDDER'S INSTRUCTIONS**

Bidders shall thoroughly examine all drawings, specifications, schedules, instructions and any other documents supplied as part of this invitation to bid and shall make all investigations necessary to thoroughly inform themselves regarding the content of the written specifications, drawings, and instructions supplied herein. No plea of ignorance by the bidder pertaining to the content of the specifications, drawings, schedule, or instructions will be considered by the purchaser on the deadline, if bid submission has occurred. Failure or omission on the part of the bidder to make the necessary examinations and investigations into the content of the specifications AND make all clarifications or explanations of exceptions and conditions that exist or that may exist hereafter shall NOT be accepted as a basis for making variations to the requirements of the purchaser or compensation to the bidder.

**CLARIFICATIONS:** Clarifications shall be written correspondence between the bidder and the purchaser. A clarification shall include the page number, paragraph number, the text with unclear content (as written in the specification) and the definition of the clarification provided.

The Purchaser's clarifications shall be documented in writing and distributed to all qualified bidders at least two business days prior to the deadline for bid submission.

**EXPLANATION OF EXCEPTIONS:** Bidders may take exceptions to any part of the bid contained herein with a written itemized schedule. The schedule shall include the page number, paragraph number(s), the text that the bidder feels he cannot comply with and an explanation why the bidder feels that the requirement is not in the best interest of the purchaser AND/OR an alternate bidder solution. Alternate bidder solutions may be considered by the purchaser, if the bidder can show the purchaser that the alternate solution is, in quality and quantity, equal to OR better than the specified item. Explanations of exceptions taken must be documented and submitted with the bid proposal on or before the bid submission deadline.

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## **PURCHASER'S INTENT**

The intent of the specifications supplied herein is to purchase an ambulance with the highest level of quality and engineering excellence. The intent of this vehicle is centered on the patient's need for pre-hospital care, in conjunction with a safe working environment for the Emergency Medical Personnel.

## **NO ALTERNATE BIDS TAKING TOTAL EXCEPTION**

**BID PACKAGES SHALL NOT TAKE TOTAL EXCEPTIONS:** Bidders are required under this bid invitation to give, for the consideration of the purchaser, a proposal that will comply with the written specifications, drawings, and schedules supplied herein. The specifications supplied represent a compilation of input from all disciplines of users, patients, maintenance and management personnel who are directly affected by the vehicle performance. All the personnel who have direct working contact with the vehicle specified herein base careful consideration pertaining to safety, configuration, construction, and workmanship on working experiences. The intent of this ambulance was created as a result of resolving issues and improvement suggestions that have originated from the personnel most QUALIFIED to make such input.

The purchaser makes no claim that potential issues or improvements are included in the specifications supplied herein. The purchaser will consider any valid concern by any bidder and will consider only minor specification exceptions or alternates of equal or better performance, provided that the exceptions are steered toward meeting the intent AND the exceptions are submitted with the final bid proposal on or before the bid deadline.

**CAUTION:** A bidder who submits a bid that takes "Total Exception" and makes an offering of some "Standard" or "Stock" unit will be viewed by the purchaser as a bidder who did not make, and is not prepared to make, a valid bid, and is not qualified to manufacture the ambulance as specified herein. Alternate bids shall NOT be considered.

## **INTER-AGENCY AGREEMENTS (PIGGY-BACK)**

It is the intent of this bid document to make available to other government entities, by mutual agreement with the successful Bidder, the right to purchase the same or like equipment and or products, at the prices quoted for the period of the contract. Each Bidder shall indicate in the bid proposal, if the Bidder will honor other political subdivision's orders, in accordance with contract terms and conditions. This procedure is sometimes identified as a "Piggy-Back" Bid.

## **VENDOR QUALIFICATIONS**

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Regardless of chassis purchased, all bidders shall be members in good standing of the Ford Motor Company Qualified Vehicle Modifier Program (Q.V.M.). Certification verification shall be provided with the bid response. If for any reason the Q.V.M. Certification was withdrawn or suspended by Ford Motor Company within the past five years, the bidder shall supply a full written explanation of the Q.V.M. withdrawal or suspension and any corrective actions taken to regain Q.V.M. Certification.

## **PRODUCT LIABILITY INSURANCE**

A Certificate of current liability insurance, with a Twenty-one Million Dollar minimum shall be supplied with the bid submission. The certificate of insurance shall bear the insurance carrier's name, address, and phone number. The Certificate shall also bear the name and address of the insured. This document shall contain the coverage schedule, explaining the type of insurance, the policy number, the effective date of coverage, the policy expiration date, and the individual limits of liability.

## **DRUG FREE WORKPLACE**

The bidder shall conduct business as a Drug Free Workplace. The bidder/manufacturer shall provide notice to their employees as required under the Drug Free Workplace Act of 1988. A copy of the bidder's Drug Free Workplace policy shall be furnished to the purchaser upon request.

## **CHASSIS POOL**

The bidder shall be a member of the Ford Motor Company's and/or the General Motor Company's Chassis Bailment Pool, regardless of the chassis specified within this specification. The bidder shall provide a current Ford Motor Company and/or General Motor Company's Pool account number to the purchaser upon request.

## **AMBULANCE SPECIFICATION**

All ambulance modules in this specification must be built in the United States of America.

## **PRODUCT TESTING**

**AMBULANCE MANUFACTURER'S DIVISION:** The Bidder shall be a member in good standing with the National Truck Equipment Association (N.T.E.A.) and the Ambulance Manufacturer's Division (A.M.D.) of N.T.E.A. The bidder shall supply a letter with the bid response to verify current membership in both the N.T.E.A. and the A.M.D.

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## **SAE J3057: AMBULANCE MODULAR BODY EVALUATION-QUASI-STATIC LOADING FOR TYPE I AND TYPE III MODULAR AMBULANCE BODIES**

SAE J3057 – The ambulance described herein shall be tested and pass all requirements of SAE J3057: Ambulance Modular Body Evaluation-Quasi-Static Loading for Type I and Type III Modular Ambulance Bodies. The test results shall be certified by an independent engineering firm not directly associated with the Ambulance Manufacturer. These certified test results shall be supplied to the purchaser upon request.

### **ROLLOVER CRASH TEST**

The manufacturer shall perform a dynamic rollover crash test with video documentation to be provided to the Purchaser upon request. Crash tests shall be performed within a controlled and repeatable environment. All testing shall be performed by an ISO/IEC 17025 accredited laboratory by an accreditation body that is recognized by the National Cooperation for Laboratory Accreditation (NACLA) or is a signatory to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA). Refer to the following publications for specifications:

- SAE J211-1 Instrumentation for Impact Test – Part 1: Electronic Instrumentation
- SAE J211-2 Instrumentation for Impact Test – Part 2: Photographic Instrumentation
- SAE J21733 Sign Convention for Vehicle Crash Testing
- SAE 3027 Ambulance Litter Integrity, Retention, and Patient Restraint

### **SIDE IMPACT CRASH TEST**

The manufacturer shall perform a dynamic side impact crash test with video documentation to be provided to the Purchaser upon request. Crash tests shall be performed within a controlled and repeatable environment. All testing shall be performed by an ISO/IEC 17025 accredited laboratory by an accreditation body that is recognized by the National Cooperation for Laboratory Accreditation (NACLA) or is a signatory to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA). Refer to the following publications for specifications:

- SAE J211-1 Instrumentation for Impact Test – Part 1: Electronic Instrumentation
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## **KKK-A-1822F TESTING CERTIFICATION**

The bidder shall provide documentation within this bid proposal, which verifies that all KKK-A-1822F testing is current and certified by an independent engineering firm.

## **QUALITY ASSURANCE - SPECIFICATION COMPLIANCE**

The manufacturer shall inspect and test all systems and electrical loads per Federal specification KKK-A-1822F Section 4. Testing results shall be documented and displayed in the oxygen compartment and supplied with the vehicle delivery handbook.

NOTE: The purchaser will have zero tolerance towards bidder/vendors who state compliance to specification, but delivers an incomplete product and/or substandard materials and workmanship.

## **NON-COLLUSIVE BID CERTIFICATION**

By submission of this bid response, the Bidder and/or Bidder's authorized representative(s), certify under penalty of perjury, to the best of their knowledge and belief the following:

A. The prices in this bid response have been arrived at independently without collusion, consultation, communication, or agreement for the purpose of restricting competition, as to any matter relating to such prices with any other Bidder or with any competitor, and;

B. Unless otherwise required by law, the prices which have been quoted in the bid response have not knowingly been disclosed by the Bidder and will not knowingly be disclosed by the Bidder, prior to the public bid opening, either directly or indirectly to any competitor, and;

C. No attempt has been made or will be made by the Bidder, for the purpose of restricting competition, to induce any person, partnership, or corporation not to submit a bid response.

## **DEBARMENT STATUS**

By submission of this bid response, the Bidder and/or its authorized representatives, certify under penalty or perjury, that to the best of their knowledge and belief they are not currently debarred from submitting bids or bidding on contracts from any agency within the home state of the purchaser, nor are they an agent of any person or entity that is currently debarred from submitting bids on contracts by any agency within the home state of the purchaser.

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## **DELIVERY STATEMENT**

The bidder shall state the number of calendar days required for delivery of the completed ambulance, after receipt of an order and receipt of chassis by the manufacturer.

Delivery shall be within \_\_\_\_\_ calendar days after receipt of order and receipt of chassis. (State number of calendar days)

## **REQUIRED DELIVERY ITEMS**

REQUIRED DELIVERY ITEMS: Upon a successful bid award, the vendor shall provide the following to the purchaser, upon ambulance delivery:

1. Manufacturer's Quality Assurance Vehicle Testing and acceptance documents.
2. One (1) copy of conversion parts, service, and operational manuals.
3. OEM Chassis Owner's Guide materials as provided by the chassis manufacturer.
4. Two (2) copies of "as built" customized electrical schematics for the ambulance conversion.

## **PURCHASER'S RIGHTS**

ACCEPTANCE OR REJECTION: The Purchaser reserves the right to accept or reject any and all bids as deemed to be in the best interest of the purchaser and is not bound to accept the lowest bid.

BID PROPOSAL TIME LIMITS: All bids submitted to the purchaser shall remain in effect for a minimum period of (60) sixty calendar days.

BID WITHDRAWAL: Only written bid withdrawal requests will be accepted by the purchaser. Bid withdrawals received less than (3) three working days prior to the advertised bid opening will not be accepted.

## **FORCE MAJEURE**

The manufacturer shall not be liable or responsible to Purchaser, nor be deemed to have defaulted or breached these Terms and Conditions, for any failure or delay in fulfilling or performing any of these Terms and Conditions when and to the extent such failure or delay is caused by or results from acts or

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circumstances beyond the reasonable control of the manufacturer including, without limitation, acts of God, flood, fire, earthquake, explosion, governmental actions, war, invasion or hostilities, terrorist threats or acts, riot or other civil unrest, national emergency, revolution, insurrection, epidemic, lockouts, strikes or other labor disputes (whether or not relating to either party's workforce), restraints or delays affecting carriers, inability or delay in obtaining supplies of adequate or suitable materials, or telecommunication breakdown, or power outage.

Any delays of subcontractors occasioned by any of the causes specified in the immediate preceding clause.

One (1)  
00-01-0006

DYNAMIC SIDE IMPACT & ROLLOVER TESTS

Y\_\_N\_\_

Bidder shall perform Dynamic Side Impact & Rollover Tests with same module that was involved in side impact crash test. This module must be the same brand, make, and model for both tests. Video documentation to be provided to the Purchaser upon request. Crash test shall be performed within a controlled and repeatable environment, validated by a third party testing facility.

One (1)  
00-01-0010

KKK CHANGE NOTICE 8 REQUIRED

Y\_\_N\_\_

End User / State is required by law to be KKK-A-1822F Change Notice 8 compliant to meet SAE J3026 - Ambulance Patient Compartment Seating Integrity and Occupant Restraint Standards, and SAE J3027 - Ambulance Litter Integrity, Retention, and Patient Restraint Standards.

One (1)  
00-01-0015

To be Grandfathered and not require CN8 compliance, please provide a copy of your pre-existing contract for this customer when you submit your order.

BIDDER KKK-A-1822F CHANGE NOTICE 8 COMPLIANT

Y\_\_N\_\_

Bidder shall be KKK-A-1822F Change Notice 8 compliant to meet SAE J3026 - Ambulance Patient Compartment Seating Integrity and Occupant Restraint Standards, and SAE J3027 - Ambulance Litter Integrity, Retention, and Patient Restraint Standards.

One (1)  
00-01-0016

BIDDER KKK-A-1822F CHANGE NOTICE 9 COMPLIANT

Y\_\_N\_\_

Bidder shall be KKK-A-1822F Change Notice 9 compliant to meet SAE J3043 - Ambulance Equipment Mounts; Interior Stowage Accommodations; Equipment Mounting Devices: Installed Oxygen cylinder, cardiac monitor, and fire extinguisher mounting devices shall meet the performance requirements of SAE J3043.

One (1)  
00-01-0017

BIDDER KKK-A-1822F CHANGE NOTICE 10 COMPLIANT

Y\_\_N\_\_

Bidder shall be: KKK-A\_1822F Change Notice 10 compliant to meet: SAE J3058 - Ambulance Interior Storage Compartment Integrity; SAE J3057- Ambulance Modular Body Evaluation-Quasi-Static Loading for Type I and Type III Modular Ambulance Bodies; SAE J3102- Ambulance Patient Compartment Structural Integrity Test to Support SAE J3027 Compliant Litter Systems; SAE J3043 - Ambulance Equipment Mounts, Interior Stowage Accommodations, Equipment Mounting Devices; Installed suction mounting; to conform to all applicable requirements.

One (1)  
00-01-0018

BIDDER KKK-A-1822F CHANGE NOTICE 11 COMPLIANT

Y\_\_N\_\_

10002-0001

05/06/20

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Bidder cab console to meet SAE J3043; Ambulance Equipment Mount Device or Systems, to be KKK-A-1822F Change Notice 11 compliant and shall be labeled with its weight capacity.

One (1) BIDDER KKK-A-1822F CHANGE NOTICE 12 COMPLIANT Y\_\_N\_\_  
00-01-0019

Revision to the existing standards include Temperature Conditions; Engine High-Idle Speed Control; Ambulance Emergency Lighting; Photometric, Chromaticity, and Physical Requirements; Tests, Warning Light System; Flood and Loading Light (Exterior); Bumpers and Steps; Doors; Equipment Mounting Devices; Oxygen Main Supply and Installation; Ventilation Criteria; Siren – Public Address System; and Test Criteria

One (1) WEIGHT RATINGS SPECIFIED, INTERIOR, LABELS, CN10 COMPLIANT Y\_\_N\_\_  
00-01-0021

All interior storage compartments and drawers shall have an affixed label that identifies weight rating specifications for each respective compartment / drawer. Specifications must be adhered to in order to comply with all applicable requirements of KKK-A 1822F Change Notice 10, J3058 storage compartment retention requirements.

One (1) NO PERFORMANCE BOND REQUIRED Y\_\_N\_\_  
00-01-0031

No performance bond required on this order.

One (1) NO BID BOND REQUIRED Y\_\_N\_\_  
00-01-0041

No Bid Bond Required

One (1) NO REQUIRED DELIVERY DATE Y\_\_N\_\_  
00-01-0051

No specific required by delivery date.

One (1) PRECONSTRUCTION MEETING NOT REQUIRED / REQUESTED Y\_\_N\_\_  
00-01-0053

The purchaser and / or end user does not wish to request a Pre-Construction meeting with the manufacturer.

One (1) LEAD TIME DEFINED Y\_\_N\_\_  
00-01-0062

PLEASE NOTE: Vehicle lead time is established upon date of accepted order and receipt of chassis.

One (1) TYPE I - AMBULANCE - TOTAL LIFE CARE CRITICAL CARE TRANSPORT Y\_\_N\_\_  
00-01-0289

SPECIFICATION INTENT: Type I Medium duty 191-inch module, constructed with not less than 73.5-inch interior module height, an overall length of 360.25-inches, an overall width of 98-inches and an overall exterior height not to exceed 113-inches.

One (1) \*\* IMPORTANT \*\* CHASSIS NOTIFICATION Y\_\_N\_\_  
09-10-0001

Manufacturer is not responsible nor can control the OEM chassis production build out dates and change of model years. Published model years and pricing are subject to change between data sets and may need to be updated during the quote and / or order process.

One (1) CHASSIS - FREIGHTLINER M2 234" WB 4X2 Y\_\_N\_\_  
10-06-0012

10002-0001

05/06/20



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**M2 106            2020 FREIGHTLINER M2 CONVENTIONAL CHASSIS CREW  
CAB, 234" WB 4X2 (121.5"CA)**

Data Code	Description
PRL-19M	M2 PRL-19M (EFF:01/15/19)

## **Data Version**

DRL-003	SPECPRO21 DATA RELEASE VER 003
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## **Interior Convenience/Driver Retention Package**

055-002	INTERIOR CONVENIENCE PACKAGE
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## **Vehicle Configuration**

001-172	M2 106 CONVENTIONAL CHASSIS
004-220	2020 MODEL YEAR SPECIFIED
002-004	SET BACK AXLE - TRUCK
019-002	STRAIGHT TRUCK PROVISION
003-001	LH PRIMARY STEERING LOCATION

## **General Service**

AA1-002	TRUCK CONFIGURATION
AA6-001	DOMICILED, USA 50 STATES (INCLUDING CALIFORNIA AND CARB OPT-IN STATES)
A85-006	RESCUE AND EMERGENCY SERVICE
A84-1EV	EMERGENCY VEHICLES BUSINESS SEGMENT
AA4-011	FIXED LOAD COMMODITY
AA5-002	TERRAIN/DUTY: 100% (ALL) OF THE TIME, IN TRANSIT, IS SPENT ON PAVED ROADS
AB1-008	MAXIMUM 8% EXPECTED GRADE
AB5-001	SMOOTH CONCRETE OR ASPHALT PAVEMENT - MOST SEVERE IN-TRANSIT (BETWEEN SITES) ROAD SURFACE
995-091	MEDIUM TRUCK WARRANTY

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A66-99D EXPECTED FRONT AXLE(S) LOAD: 10000.0 lbs

A68-99D EXPECTED REAR DRIVE AXLE(S) LOAD: 15000.0 lbs

A63-99D EXPECTED GROSS VEHICLE WEIGHT CAPACITY: 25000.0  
lbs

## Truck Service

AA3-024 AMBULANCE BODY

A88-99D EXPECTED TRUCK BODY LENGTH:

AF3-2G7 BRAUN INDUSTRIES

AF7-99D EXPECTED BODY/PAYLOAD CG HEIGHT ABOVE FRAME  
"XX" INCHES : 32.0 in

## Engine

101-22C CUM B6.7 300EV HP @ 2600 RPM, 2600 GOV, 660 LB/FT @  
1600 RPM, R/F/E

## Electronic Parameters

79A-075 75 MPH ROAD SPEED LIMIT

79B-000 CRUISE CONTROL SPEED LIMIT SAME AS ROAD SPEED  
LIMIT

79K-007 PTO MODE ENGINE RPM LIMIT - 1100 RPM

79P-002 PTO RPM WITH CRUISE SET SWITCH - 700 RPM

79Q-003 PTO RPM WITH CRUISE RESUME SWITCH - 800 RPM

79S-001 PTO MODE CANCEL VEHICLE SPEED - 5 MPH

79U-007 PTO GOVERNOR RAMP RATE - 250 RPM PER SECOND

80G-002 PTO MINIMUM RPM - 700

80J-002 REGEN INHIBIT SPEED THRESHOLD - 5 MPH

## Engine Equipment

99C-017 2016 ONBOARD DIAGNOSTICS/2010 EPA/CARB/FINAL  
GHG17 CONFIGURATION

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99D-012      2008 CARB EMISSION CERTIFICATION - EXEMPTED  
VEHICLE; NO CLEAN IDLE LABEL REQUIRED

13E-001      STANDARD OIL PAN

105-001      ENGINE MOUNTED OIL CHECK AND FILL

133-004      ONE PIECE VALVE COVER

014-099      SIDE OF HOOD AIR INTAKE WITH FIREWALL MOUNTED  
DONALDSON AIR CLEANER

124-1G1      DR 12V 300 AMP 40-SI BRUSHLESS PAD MOUNT  
ALTERNATOR WITH REMOTE BATTERY VOLTAGE  
SENSE

292-203      (3) DTNA GENUINE, FLOODED STARTING, MIN 2250CCA,  
510RC, THREADED STUD BATTERIES

290-017      BATTERY BOX FRAME MOUNTED

281-001      STANDARD BATTERY JUMPERS

282-003      SINGLE BATTERY BOX FRAME MOUNTED LH SIDE BACK OF  
CAB

291-017      WIRE GROUND RETURN FOR BATTERY CABLES WITH  
ADDITIONAL FRAME GROUND RETURN

289-001      NON-POLISHED BATTERY BOX COVER

87P-998      NO CAB AUXILIARY POWER WIRING

293-058      POSITIVE LOAD DISCONNECT WITH CAB MOUNTED  
CONTROL SWITCH MOUNTED OUTBOARD

DRIVER SEAT

107-032      CUMMINS TURBOCHARGED 18.7 CFM AIR COMPRESSOR  
WITH INTERNAL SAFETY VALVE

108-002      STANDARD MECHANICAL AIR COMPRESSOR GOVERNOR

131-013      AIR COMPRESSOR DISCHARGE LINE

152-039      GVG, FIRE AND EMERGENCY SERVICE VEHICLES ENGINE  
WARNING

128-1AR      CUMMINS EXHAUST BRAKE INTEGRAL WITH VARIABLE  
GEOMETRY TURBO WITH ON/OFF DASH  
SWITCH, ACTIVATES STOP LAMPS

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016-1DD RH OUTBOARD UNDER STEP MOUNTED HORIZONTAL  
AFTERTREATMENT SYSTEM ASSEMBLY  
WITH LH HORIZONTAL TAILPIPE EXITING FORWARD OF  
REAR TIRES

28F-007 ENGINE AFTERTREATMENT DEVICE, AUTOMATIC OVER  
THE ROAD ACTIVE REGENERATION AND  
DASH MOUNTED SINGLE REGENERATION REQUEST/INHIBIT SWITCH

239-001 STANDARD EXHAUST SYSTEM LENGTH

235-078 RH OUTBOARD UNDER STEP MOUNTED HORIZONTAL DPF  
ATD OR AFTERTREATMENT SYSTEM

237-027 LH HORIZONTAL TAILPIPE, EXIT FORWARD OF REAR  
TIRES

23U-001 6 GALLON DIESEL EXHAUST FLUID TANK

30N-003 100 PERCENT DIESEL EXHAUST FLUID FILL

43X-999 BRAUN DEF CONFIGURATION

43Y-001 STANDARD DIESEL EXHAUST FLUID TANK CAP

273-058 AIR POWERED ON/OFF ENGINE FAN CLUTCH

276-001 AUTOMATIC FAN CONTROL WITHOUT DASH SWITCH, NON  
ENGINE MOUNTED

110-003 CUMMINS SPIN ON FUEL FILTER

118-001 FULL FLOW OIL FILTER

266-100 700 SQUARE INCH ALUMINUM RADIATOR

103-039 ANTIFREEZE TO -34F, OAT (NITRITE AND SILICATE FREE)  
EXTENDED LIFE COOLANT

171-007 GATES BLUE STRIPE COOLANT HOSES OR EQUIVALENT

172-001 CONSTANT TENSION HOSE CLAMPS FOR COOLANT  
HOSES

270-016 RADIATOR DRAIN VALVE

168-002 LOWER RADIATOR GUARD

134-001 ALUMINUM FLYWHEEL HOUSING

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132-004 ELECTRIC GRID AIR INTAKE WARMER

155-058 DELCO 12V 38MT HD STARTER WITH INTEGRATED  
MAGNETIC SWITCH

## **Transmission**

342-1KD ALLISON 3000 EVS AUTOMATIC TRANSMISSION WITH PTO  
PROVISION

## **Transmission Equipment**

343-330 ALLISON VOCATIONAL PACKAGE 197 - AVAILABLE ON  
3000/4000 PRODUCT FAMILIES WITH  
VOCATIONAL MODEL EVS

84B-003 ALLISON VOCATIONAL RATING FOR FIRE  
TRUCK/EMERGENCY VEHICLE APPLICATIONS AVAILABLE  
WITH ALL PRODUCT FAMILIES

84C-022 PRIMARY MODE GEARS, LOWEST GEAR 1, START GEAR 1,  
HIGHEST GEAR 5, AVAILABLE FOR  
3000/4000 PRODUCT FAMILIES ONLY

84D-022 SECONDARY MODE GEARS, LOWEST GEAR 1, START  
GEAR 1, HIGHEST GEAR 5, AVAILABLE FOR  
3000/4000 PRODUCT FAMILIES ONLY

84E-000 PRIMARY SHIFT SCHEDULE RECOMMENDED BY DTNA AND  
ALLISON, THIS DEFINED BY ENGINE  
AND VOCATIONAL USAGE

84F-000 SECONDARY SHIFT SCHEDULE RECOMMENDED BY DTNA  
AND ALLISON, THIS DEFINED BY  
ENGINE AND VOCATIONAL USAGE

84G-000 PRIMARY SHIFT SPEED RECOMMENDED BY DTNA AND  
ALLISON, THIS DEFINED BY ENGINE AND  
VOCATIONAL USAGE

84H-000 SECONDARY SHIFT SPEED RECOMMENDED BY DTNA AND  
ALLISON, THIS DEFINED BY ENGINE  
AND VOCATIONAL USAGE

84J-000 ENGINE BRAKE RANGE PRESELECT  
RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED BY

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ENGINE

AND VOCATIONAL USAGE

84K-000 ENGINE BRAKE RANGE ALTERNATE PRESELECT  
RECOMMENDED BY DTNA AND ALLISON, THIS

DEFINED BY ENGINE AND VOCATIONAL USAGE

84L-000 LOAD BASED SHIFT SCHEDULE AND VEHICLE  
ACCELERATION CONTROL RECOMMENDED BY

DTNA AND ALLISON, THIS DEFINED VOCATIONAL USAGE

84N-000 NEUTRAL AT STOP - DISABLED, FUELSENSE - DISABLED

84U-000 DRIVER SWITCH INPUT - DEFAULT - NO SWITCHES

353-066 VEHICLE INTERFACE WIRING CONNECTOR WITH BLUNT  
CUTS, AT END OF FRAME

34C-001 ELECTRONIC TRANSMISSION CUSTOMER ACCESS  
CONNECTOR FIREWALL MOUNTED

341-018 MAGNETIC PLUGS, ENGINE DRAIN, TRANSMISSION DRAIN,  
AXLE(S) FILL AND DRAIN

345-003 PUSH BUTTON ELECTRONIC SHIFT CONTROL, DASH  
MOUNTED

97G-004 TRANSMISSION PROGNOSTICS - ENABLED 2013

370-015 WATER TO OIL TRANSMISSION COOLER, IN RADIATOR  
END TANK

346-003 TRANSMISSION OIL CHECK AND FILL WITH ELECTRONIC  
OIL LEVEL CHECK

35T-001 SYNTHETIC TRANSMISSION FLUID (TES-295 COMPLIANT)

## **Front Axle and Equipment**

400-1A5 DETROIT DA-F-10.0-3 10,000# FF1 71.5 KPI/3.74 DROP  
SINGLE FRONT AXLE

402-021 MERITOR 15X5 Q+ CAST SPIDER CAM FRONT BRAKES,  
DOUBLE ANCHOR, FABRICATED SHOES

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403-026 FRONT LINING	FIRE AND EMERGENCY SEVERE SERVICE, NON-ASBESTOS
419-023	CONMET CAST IRON FRONT BRAKE DRUMS
409-006	FRONT OIL SEALS
408-001 SIDE PLUGS - OIL	VENTED FRONT HUB CAPS WITH WINDOW, CENTER AND
416-022	STANDARD SPINDLE NUTS FOR ALL AXLES
405-002	MERITOR AUTOMATIC FRONT SLACK ADJUSTERS
536-050	TRW THP-60 POWER STEERING
539-003	POWER STEERING PUMP
534-015	2 QUART SEE THROUGH POWER STEERING RESERVOIR
40T-001	ORGANIC SAE 80/90 FRONT AXLE LUBE

## **Front Suspension**

620-062	10,000# TAPERLEAF FRONT SUSPENSION
619-005 SUSPENSION	MAINTENANCE FREE RUBBER BUSHINGS - FRONT
629-004	FRONT SWAYBAR
410-001	FRONT SHOCK ABSORBERS

## **Rear Axle and Equipment**

420-1M3 AXLE	MS-17-14X 17,500# R-SERIES QUIET RIDE SINGLE REAR
421-433	4.33 REAR AXLE RATIO
424-001 HOUSING	IRON REAR AXLE CARRIER WITH STANDARD AXLE
386-074	MXL 176T MERITOR EXTENDED LUBE MAIN DRIVELINE WITH HALF ROUND YOKES
452-007 REAR AXLE	TRAC-TECH FULL TIME NO-SPIN DIFFERENTIAL SINGLE
423-028	MERITOR 15X8.62 Q+ CAST SPIDER CAM REAR BRAKES, DOUBLE ANCHOR, FABRICATED SHOES

# Braun Industries, Inc.

433-025 FIRE AND EMERGENCY SEVERE SERVICE NON-ASBESTOS  
REAR BRAKE LINING

434-005 BRAKE CAMS AND CHAMBERS ON FORWARD SIDE OF  
DRIVE AXLE(S) WITH AUXILIARY SUPPORT

BRACKETS

451-023 CONMET CAST IRON REAR BRAKE DRUMS

440-006 REAR OIL SEALS

426-100 WABCO TRISTOP D LONGSTROKE 1-DRIVE AXLE SPRING  
PARKING CHAMBERS

428-003 HALDEX AUTOMATIC REAR SLACK ADJUSTERS

41T-001 ORGANIC SAE 80/90 REAR AXLE LUBE

## Rear Suspension

LIQUID SPRING PREP PACKAGE

## Brake System

018-002 AIR BRAKE PACKAGE

490-100 WABCO 4S/4M ABS

871-001 REINFORCED NYLON, FABRIC BRAID AND WIRE BRAID  
CHASSIS AIR LINES

904-001 FIBER BRAID PARKING BRAKE HOSE

412-001 STANDARD BRAKE SYSTEM VALVES

46D-001 STANDARD AIR SYSTEM PRESSURE PROTECTION AND 85  
PSI PRESSURE PROTECTION FOR AIR

HORN(S)

413-002 STD U.S. FRONT BRAKE VALVE

432-003 RELAY VALVE WITH 5-8 PSI CRACK PRESSURE, NO REAR  
PROPORTIONING VALVE

480-086 BW AD-9SI BRAKE LINE AIR DRYER WITH HEATER

479-012 AIR DRYER MOUNTED UNDER HOOD

460-008 STEEL AIR BRAKE RESERVOIRS MOUNTED INSIDE RAIL



# Braun Industries, Inc.

46A-023 (1) 1730 CUBIC INCH AIR HORN TANK, 85 PSI PRESSURE  
PROTECTED INLET WITH CHECK VALVE

AND QUICK DISCONNECT FITTING

607-001 CLEAR FRAME RAILS FROM BACK OF CAB TO FRONT  
REAR SUSPENSION BRACKET, BOTH RAILS

OUTBOARD

477-006 BW DV-2 AUTO DRAIN VALVE WITHOUT HEATER ON ALL  
TANK(S)

## Trailer Connections

335-004 UPGRADED CHASSIS MULTIPLEXING UNIT

32A-002 UPGRADED BULKHEAD MULTIPLEXING UNIT

## Wheelbase & Frame

545-595 5950MM (234 INCH) WHEELBASE

546-101 11/32X3-1/2X10-15/16 INCH STEEL FRAME  
(8.73MMX277.8MM/0.344X10.94 INCH) 120KSI

552-037 1775MM (70 INCH) REAR FRAME OVERHANG

55W-006 FRAME OVERHANG RANGE: 61 INCH TO 70 INCH

AC8-99D CALC'D BACK OF CAB TO REAR SUSP C/L (CA) : 121.5 in

AE8-99D CALCULATED EFFECTIVE BACK OF CAB TO REAR  
SUSPENSION C/L (CA) : 118.5 in

AE4-99D CALC'D FRAME LENGTH - OVERALL : 343.18

AM6-99D CALC'D SPACE AVAILABLE FOR DECKPLATE : 121.2 in

FSS-0LH CALCULATED FRAME SPACE LH SIDE : 121.96 in

FSS-0RH CALCULATED FRAME SPACE RH SIDE : 101.81 in

553-001 SQUARE END OF FRAME

550-001 FRONT CLOSING CROSSMEMBER

559-001 STANDARD WEIGHT ENGINE CROSSMEMBER

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561-001 STANDARD CROSSMEMBER BACK OF TRANSMISSION  
562-001 STANDARD MIDSHIP #1 CROSSMEMBER(S)  
572-001 STANDARD REARMOST CROSSMEMBER  
565-001 STANDARD SUSPENSION CROSSMEMBER

## **Chassis Equipment**

556-1AR THREE-PIECE 14 INCH CHROMED STEEL BUMPER WITH  
COLLAPSIBLE ENDS  
558-001 FRONT TOW HOOKS - FRAME MOUNTED  
642-012 PDI INSTALLED LIGHTED SIGHT RODS WITH FACTORY  
INSTALLED PRE-WIRE  
586-024 FENDER AND FRONT OF HOOD MOUNTED FRONT  
MUDFLAPS  
551-017 GRADE 8 THREADED HEX HEADED FRAME FASTENERS  
INSTALLED WITH BOLT HEADS ON  
OUTSIDE OF FRAME

## **Fuel Tanks**

206-190 40 GALLON/151 LITER RECTANGULAR ALUMINUM FUEL  
TANK - RH  
204-190 40 GALLON/151 LITER RECTANGULAR ALUMINUM FUEL  
TANK - LH  
218-005 RECTANGULAR FUEL TANK(S)  
215-005 PLAIN ALUMINUM/PAINTED STEEL FUEL/HYDRAULIC  
TANK(S) WITH PAINTED BANDS  
212-014 LH FUEL TANK MOUNTED FORWARD, RH FUEL TANK  
MOUNTED AFT -  
664-001 PLAIN STEP FINISH  
205-001 FUEL TANK CAP(S)  
122-1J1 DETROIT FUEL/WATER SEPARATOR WITH WATER  
IN FUEL SENSOR, HAND PRIMER AND 12 VOLT  
PREHEATER"  
216-001 SINGLE SUCTION AND RETURN FUEL LINES

# Braun Industries, Inc.

11F-998 NO NATURAL GAS VEHICLE FUEL TANK VENT LINE/STACK

20E-001 AUXILIARY FUEL SUPPLY AND RETURN PORTS

202-016 HIGH TEMPERATURE REINFORCED NYLON FUEL LINE

## **Tires**

093-1TK MICHELIN X MULTI Z 265/70R19.5 14 PLY RADIAL FRONT  
TIRES

094-0E5 MICHELIN XZE 245/70R19.5 16 PLY RADIAL REAR TIRES

## **Hubs**

418-014 WEBB IRON FRONT HUBS

450-045 CONMET PRESET IRON REAR HUBS

## **Wheels**

502-1EB ACCURIDE 50180 19.5X6.75 8-HUB PILOT 5.12 INSET  
4-HAND STEEL DISC FRONT WHEELS

505-1EB ACCURIDE 50180 19.5X6.75 8-HUB PILOT 4-HAND STEEL  
DISC REAR WHEELS

52M-004 FORCEMATCH TIRE/WHEEL RUNOUT CHECK/MARK AND  
STATIC BALANCING - ALL TIRES/WHEELS

496-011 FRONT WHEEL MOUNTING NUTS

497-011 REAR WHEEL MOUNTING NUTS

## **Cab Exterior**

829-079 154 INCH BBC HIGH-ROOF ALUMINUM CONVENTIONAL  
CREW CAB

682-050 WALK THROUGH OPENING IN BACK OF CAB WITHOUT  
BOOT

650-009 RUBBER CAB MOUNTS

678-018 LH AND RH EXTERIOR GRAB HANDLES WITH SINGLE  
RUBBER INSERT

646-023 HOOD MOUNTED CHROMED PLASTIC GRILLE

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65X-003	CHROME HOOD MOUNTED AIR INTAKE GRILLE
644-004	FIBERGLASS HOOD
690-007 INSULATION	HOOD LINER INSULATION WITH SINGLE FIREWALL
727-036 HORN, PIPING CAPPED AT FIREWALL	VALVE AND PLUMBING FOR CUSTOMER FURNISHED AIR
726-002	DUAL ELECTRIC HORNS
657-001	DOOR LOCKS AND IGNITION SWITCH KEYED THE SAME
575-001	REAR LICENSE PLATE MOUNT END OF FRAME
312-038 BEZEL	INTEGRAL HEADLIGHT/MARKER ASSEMBLY WITH CHROME
302-001	(5) AMBER MARKER LIGHTS
311-019 LIGHTS	HEADLIGHTS ON WITH WIPERS, WITH DAYTIME RUNNING
294-046	OMIT STOP/TAIL/BACKUP LIGHTS AND PROVIDE WIRING WITH SEPARATE STOP/TURN WIRES TO
	4 FEET BEYOND END OF FRAME
300-015	STANDARD FRONT TURN SIGNAL LAMPS
744-1BC	DUAL WEST COAST BRIGHT FINISH HEATED MIRRORS WITH LH AND RH REMOTE
797-001	DOOR MOUNTED MIRRORS
796-001	102 INCH EQUIPMENT WIDTH
743-204	LH AND RH 8 INCH BRIGHT FINISH CONVEX MIRRORS MOUNTED UNDER PRIMARY MIRRORS
729-001	STANDARD SIDE/REAR REFLECTORS
677-016	DUAL LEVEL CAB ENTRY STEPS ON BOTH SIDES
275-061	ELECTRIC HORN WARNING SYSTEM FOR PARK BRAKE NOT SET WITH DOOR OPEN AND ALL
<b>IGNITION KEY POSITIONS</b>	
768-998	NO REAR WINDOW

# Braun Industries, Inc.

661-003 TINTED DOOR GLASS LH AND RH WITH TINTED  
NON-OPERATING WING WINDOWS

654-027 RH AND LH ELECTRIC POWERED WINDOWS, PASSENGER  
SWITCHES ON DOOR(S)

663-013 TINTED WINDSHIELD

659-019 2 GALLON WINDSHIELD WASHER RESERVOIR WITHOUT  
FLUID LEVEL INDICATOR, FRAME  
MOUNTED

## **Cab Interior**

707-1AK OPAL GRAY VINYL INTERIOR

706-026 MOLDED PLASTIC DOOR PANEL WITHOUT VINYL INSERT  
WITH ALUMINUM KICKPLATE LOWER  
DOOR

708-026 MOLDED PLASTIC DOOR PANEL WITHOUT VINYL INSERT  
WITH ALUMINUM KICKPLATE LOWER  
DOOR

772-006 BLACK MATS WITH SINGLE INSULATION

691-014 FORWARD ROOF MOUNTED CONSOLE WITH UPPER  
STORAGE COMPARTMENTS AND  
ADDITIONAL CENTER COMPARTMENT WITHOUT NETTING

694-010 IN DASH STORAGE BIN

742-007 (2) CUP HOLDERS LH AND RH DASH

680-006 GRAY/CHARCOAL FLAT DASH

860-004 SMART SWITCH EXPANSION MODULE

700-002 HEATER, DEFROSTER AND AIR CONDITIONER

701-001 STANDARD HVAC DUCTING

703-005 MAIN HVAC CONTROLS WITH RECIRCULATION SWITCH

170-015 STANDARD HEATER PLUMBING

130-036 (1) DENSO HEAVY DUTY AND (1) SANDEN COMPACT  
REFRIGERANT COMPRESSORS

702-002 BINARY CONTROL, R-134A

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739-034	PREMIUM INSULATION
285-013	SOLID-STATE CIRCUIT PROTECTION AND FUSES
280-007	12V NEGATIVE GROUND ELECTRICAL SYSTEM
324-047	DOOR ACTIVATED DOME/RED MAP LIGHTS, FORWARD LH AND RH AND REAR LH, RH AND CENTER
655-005	LH AND RH ELECTRIC DOOR LOCKS
284-023	(1) 12 VOLT POWER SUPPLY IN DASH
756-1J3	BASIC HIGH BACK AIR SUSPENSION DRIVER SEAT WITH MECHANICAL LUMBAR AND INTEGRATED CUSHION EXTENSION
760-1J3	BASIC HIGH BACK AIR SUSPENSION PASSENGER SEAT WITH MECHANICAL LUMBAR AND INTEGRATED CUSHION EXTENSION
762-310	BASIC HIGH BACK NON SUSPENSION LH & RH REAR PASSENGER SEATS
759-020	DUAL DRIVER, FRONT PASSENGER AND LH AND RH REAR PASSENGER SEAT ARMRESTS
711-004	LH AND RH INTEGRAL DOOR PANEL ARMRESTS
758-017	GRAY CORDURA PLUS CLOTH DRIVER SEAT COVER
761-017	GRAY CORDURA PLUS CLOTH PASSENGER SEAT COVER
755-017	GRAY CORDURA PLUS CLOTH REAR PASSENGER SEAT COVER
763-104	HIGH VISIBILITY ORANGE SEAT BELTS WITH DRIVER INDICATOR LIGHT AND AUDIBLE ALARM
532-002	ADJUSTABLE TILT AND TELESCOPING STEERING COLUMN
540-015	4-SPOKE 18 INCH (450MM) STEERING WHEEL

# Braun Industries, Inc.

765-002 DRIVER AND PASSENGER INTERIOR SUN VISORS

## Instruments & Controls

732-003 WOODGRAIN DRIVER INSTRUMENT PANEL

734-003 WOODGRAIN CENTER INSTRUMENT PANEL

87L-001 ENGINE REMOTE INTERFACE WITH PARK BRAKE  
INTERLOCK

870-001 BLACK GAUGE BEZELS

486-001 LOW AIR PRESSURE INDICATOR LIGHT AND AUDIBLE  
ALARM

840-002 2 INCH PRIMARY AND SECONDARY AIR PRESSURE  
GAUGES

198-006 ENGINE COMPARTMENT MOUNTED AIR RESTRICTION  
INDICATOR WITH GRADUATIONS, WITH  
WARNING LIGHT IN DASH

149-013 ELECTRONIC CRUISE CONTROL WITH SWITCHES IN LH  
SWITCH PANEL

156-007 KEY OPERATED IGNITION SWITCH AND INTEGRAL START  
POSITION; 4 POSITION  
OFF/RUN/START/ACCESSORY

811-042 ICU3S, 132X48 DISPLAY WITH DIAGNOSTICS, 28 LED  
WARNING LAMPS AND DATA LINKED

160-038 HEAVY DUTY ONBOARD DIAGNOSTICS INTERFACE  
CONNECTOR LOCATED BELOW LH DASH

844-001 2 INCH ELECTRIC FUEL GAUGE

148-070 ENGINE REMOTE INTERFACE WITH PRESET FAST IDLE

163-001 ENGINE REMOTE INTERFACE CONNECTOR AT BACK OF  
CAB

856-001 ELECTRICAL ENGINE COOLANT TEMPERATURE GAUGE

864-001 2 INCH TRANSMISSION OIL TEMPERATURE GAUGE

830-017 ENGINE AND TRIP HOUR METERS INTEGRAL WITHIN  
DRIVER DISPLAY

# Braun Industries, Inc.

852-002	ELECTRIC ENGINE OIL PRESSURE GAUGE
679-998	NO OVERHEAD INSTRUMENT PANEL
746-1B4	AM/FM/WB WORLD TUNER RADIO WITH CD PLAYER, BLUETOOTH, IPOD INTERFACE, USB AND AUXILIARY INPUTS, J1939
747-001	DASH MOUNTED RADIO
750-002	(2) RADIO SPEAKERS IN CAB
753-001	AM/FM ANTENNA MOUNTED ON FORWARD LH ROOF
810-027	ELECTRONIC MPH SPEEDOMETER WITH SECONDARY KPH SCALE, WITHOUT ODOMETER
817-001	STANDARD VEHICLE SPEED SENSOR
812-001	ELECTRONIC 3000 RPM TACHOMETER
162-002	IGNITION SWITCH CONTROLLED ENGINE STOP
264-014 DRIVER AIR HORN	(2) FOOT SWITCHES: (1) OFFICER AIR HORN AND (1)
836-015 DISPLAY	DIGITAL VOLTAGE DISPLAY INTEGRAL WITH DRIVER
660-008 DELAY	SINGLE ELECTRIC WINDSHIELD WIPER MOTOR WITH
304-001 SWITCH	MARKER LIGHT SWITCH INTEGRAL WITH HEADLIGHT
27D-004	ALTERNATING FLASHING HEADLAMP SYSTEM WITH BODY BUILDER CONTROLLED ENGAGEMENT
882-009 INDICATOR	ONE VALVE PARKING BRAKE SYSTEM WITH WARNING
299-013	SELF CANCELING TURN SIGNAL SWITCH WITH DIMMER, WASHER/WIPER AND HAZARD IN HANDLE
298-039	INTEGRAL ELECTRONIC TURN SIGNAL FLASHER WITH HAZARD LAMPS OVERRIDING STOP LAMPS
<b>Design</b>	
065-000	PAINT: ONE SOLID COLOR



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## Color

980-5F6	CAB COLOR A: L0006EB WHITE ELITE BC
986-020	BLACK, HIGH SOLIDS POLYURETHANE CHASSIS PAINT
962-972 (PKWHT21, TKWHT21, W, TW)	POWDER WHITE (N0006EA) FRONT WHEELS/RIMS
966-972 (PKWHT21, TKWHT21, W, TW)	POWDER WHITE (N0006EA) REAR WHEELS/RIMS
963-003	STANDARD E COAT/UNDERCOATING

## Certification / Compliance

996-001	U.S. FMVSS CERTIFICATION, EXCEPT SALES CABS AND GLIDER KITS
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## Secondary Factory Options

998-033	CORPORATE PDI CENTER IN-SERVICE AND OPTION INSTALLATION/MODIFICATION
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## Raw Performance Data

AE4-99D	CALC'D FRAME LENGTH - OVERALL : 343.18
AE8-99D	CALCULATED EFFECTIVE BACK OF CAB TO REAR SUSPENSION C/L (CA) : 118.5 in
AM6-99D	CALC'D SPACE AVAILABLE FOR DECKPLATE : 121.2 in

## Extended Warranty

WAG-010	TOWING: 1 YEAR/UNLIMITED MILES/KM EXTENDED TOWING COVERAGE \$550 CAP FEX APPLIES
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One (1)  
15-00-0092

FRONT BUMPER GUIDE POLES, AMBER LED LIGHT TIP

Y\_\_N\_\_

Two (2) stainless steel bumper guide poles with amber LED light tips shall be installed on sides of front bumper, one (1) each side. Each bumper guide pole shall be attached using stainless steel clamps.

One (1)  
20-10-0099

FUEL TANK - FULL UPON FACTORY RELEASE

Y\_\_N\_\_

The chassis fuel tank of the completed unit shall be full at time of release from the ambulance manufacturer's facility.

One (1)  
20-10-0106

SUSPENSION - LIQUID SPRING

Y\_\_N\_\_

A **CLASS®**, or **Compressible Liquid Adaptive Suspension System**, shall be provided and installed by bidder. Utilizing a strut, with a compressible fluid as the spring/damping

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medium, and its sophisticated on-board microprocessor, **CLASS®** adapts the entire vehicle's response to road variations and the driver. Unlike current steel and air sprung suspension systems, **CLASS®** can automatically and instantaneously change the spring stiffness and damping at each wheel over a very broad range with minimal power consumption while the vehicle is being driven and without driver intervention. The system shall include an automatic lowering feature, which is activated by opening the rear patient compartment doors. There shall be a switch near the rear doors which will defeat the lowering feature.

One (1) 20-10-0214	BATTERY - THREE SYSTEM - TOTAL LIFE CARE M2 CHASSIS	Y__N__
	The chassis shall have three (3) Alliance Model 1031, Group 31, 12 volt maintenance free 2280 CCA threaded stud batteries.	
One (1) 20-10-0404	SECONDARY COMPRESSOR	Y__N__
	The chassis shall be equipped with a separate engine mounted compressor to provide air conditioning to the patient compartment.	
One (1) 20-10-0604	ENGINE BLOCK HEATER - OEM PLUG	Y__N__
	An engine block heater shall be included in the chassis with the 125 VAC power cord, located at driver's side step.	
One (1) 20-20-0135	FLOOR CONSOLE - ANGLED FRONT - REMOVABLE PLATES - ALUMINUM	Y__N__
	A center floor console manufactured out of aluminum and covered in a black onyx scratch resistant, multi-use polychromatic coating with a clear epoxy finish shall be installed in the cab. The console shall include a raised area to accommodate the Weldon Vista display. The lower portion of the console shall consist of a flat area that shall contain two (2) drink holders, with the siren installed between them, then to the rear center a recessed storage area for maps and reports. The console face plates shall be removable for accessibility and serviceability. The console face plates shall be removable for accessibility and serviceability. The Console System is to be SAE J3043 Ambulance Equipment Mount Device or Systems compliant and shall be labeled with its weighted capacity.	
One (1) 20-20-0251	HEAT SHIELDS	Y__N__
	Protective heat shields shall be installed above the exhaust system as recommended by the chassis manufacturer.	
One (1) 20-30-0212	MIRRORS, EXTERIOR WEST COAST HEATED/REMOTE	Y__N__
	The chassis shall have OEM exterior mirrors. The mirrors shall be West coast bright finish heated mirrors with LH and RH remote. Also included are 8" bright finish convex mirrors mounted under the primary mirrors.	
One (1) 20-30-0813	EXTERIOR CAB STEPS - STAR PUNCHED DIAMOND PLATE	Y__N__
	Exterior cab step covers shall be constructed of diamond plate material. The lower step to include a star punched non-skid surface. There shall be access to fuel and the DEF tank from the driver side step cover and access to second fuel tank from passenger side step cover.	
One (1) 20-40-0205	VALVE STEM EXTENSIONS	Y__N__
	Valve stem extensions for chassis aluminum wheels shall be installed on the outer and inner rear wheels.	
One (1)	ELECTRICAL SYSTEM - WELDON V-MUX, MICRO PROCESSOR BASED	Y__N__

# Braun Industries, Inc.

30-06-0007

A Weldon V-MUX 100% solid state microprocessor based multiplex system shall be installed to control the electrical functions. The system shall include load management, load shedding, power modulation, load sequencing capabilities and provide on-board diagnostics with real-time status reporting. The system shall consist of one (1) color control console (Vista) in the cab, two (2) color control console (Vistas) in the patient compartment, a total of three (3) control nodes: two (2) High Content nodes and one (1) 8 X 16 node, and a module warning display with video input and monitoring capabilities.

The system must be a Weldon V-MUX. **No exception.**

Bidders who propose any other proprietary electrical system shall be considered as non-compliant.

### **Documentation required with bid submission**

Bidder must supply with his/her bid proposal, a listing of not less than 500 ambulances produced with the Weldon V-MUX system within the past 5 years. The documentation shall include a production order number, the purchaser's agency name, and the date the ambulance was delivered.

Bids submitted without this documentation shall not be considered.

One (1)  
30-06-0010

VISTA IV MCC - PUSH BUTTON

Y\_\_N\_\_

A Weldon V-MUX Vista IV interface module / display screen shall be provided and installed in the cab. The Vista module shall be operated through the use of push buttons.

One (1)  
30-06-0015

VISTA IV ACP - PUSH BUTTON

Y\_\_N\_\_

A Weldon V-MUX Vista IV interface module / display screen shall be provided and mounted on an angled flip - down panel with chrome lever latches, in the patient compartment ACP area. The Vista module shall be operated through the use of push buttons. A temperature sensor shall be mounted to the bottom of the ACP panel.

One (1)  
30-06-0026

WARNING DISPLAY - MULTIPLEX ELECTRICAL SYSTEM

Y\_\_N\_\_

A digital warning display shall be integrated into the cab display console and programmed through the multiplex system to provide visual and audible indications for:

Parking brake set condition

Parking brake release condition

Patient status alarm (four color with reset capability)

Individual outside storage compartment "door open" warnings in vehicle outline form.

Low voltage alarm

Low oxygen pressure alarm

One (1)  
30-06-0050

DAYTIME RUNNING LAMPS - MULTIPLEX ELECTRICAL SYSTEM

Y\_\_N\_\_

Headlights shall be activated at 30% intensity, for day time operation, when transmission is placed in drive, as a feature of the multiplex system. (if not standard on the chassis)

10002-0001

05/06/20

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One (1) 30-06-0076	<p>MASTER CONTROL CONSOLE (MCC) - MULTIPLEX ELECTRICAL SYSTEM</p> <p>A floor mounted Master Control Console (MCC) shall be located in the cab. The console shall house the siren and the color microprocessor display screen, which will control all the Emergency Warning functions as well as also being able to control the Patient Compartment lighting and module heat/ac functions.</p>	Y__N__
One (1) 30-06-0101	<p>ATTENDANT CONTROL PANEL (ACP) - MULTIPLEX ELECTRICAL SYSTEM</p> <p>The Attendant Control Panel (ACP) shall contain a color micro processor screen, which will control all equipment installed in the patient compartment.</p>	Y__N__
One (1) 30-06-0127	<p>ELECTRICAL COMPARTMENT (PDQ) - MULTIPLEX ELECTRICAL SYSTEM</p> <p>The Power Distribution Quarters (PDQ) shall hold electrical components, (i.e. power distribution nodes, circuit breakers, etc). The electrical compartment shall be enclosed with a lockable, hinged door with chrome locking lever latches. The PDQ shall be located at the top left on the partition wall.</p>	Y__N__
One (1) 30-06-0150	<p>SPARE CIRCUIT - MULTIPLEX ELECTRICAL SYSTEM</p> <p>One (1) spare 15 amp circuit shall be provided.</p>	Y__N__
One (1) 30-06-0175	<p>WIRING HARNESS CONNECTORS - MULTIPLEX ELECTRICAL SYSTEM</p> <p>All wiring harnesses shall be connected via quick connect circular plug connectors.</p>	Y__N__
One (1) 30-06-0201	<p>RADIO TIE-IN POINT - (1) 12V/40 AMP - CAB CONSOLE AREA</p> <p>One (1) set of 12 volt/40 amp radio tie-in points shall be installed in the cab console area of the unit. The set shall include one (1) "Battery Hot", one (1) "Ignition Hot", and one (1) "Grounded" 250 amp junction stud.</p>	Y__N__
One (1) 30-06-0202	<p>RADIO TIE-IN POINT - (1) 12V/40 AMP - PATIENT COMPARTMENT</p> <p>One (1) set of 12 volt/40 amp radio tie-in points shall be installed in the patient compartment attendant control panel area of the unit. The set shall include one (1) "Battery Hot", one (1) "Ignition Hot", and one (1) "Grounded" 250 amp junction stud.</p>	Y__N__
One (1) 30-06-0203	<p>RADIO TIE-IN POINT - (1) 12V/40 AMP - PDQ</p> <p>One (1) set of 12 volt/40 amp radio tie-in points shall be installed and mounted in the PDQ of the unit. The set shall include one (1) "Battery Hot", one (1) "Ignition Hot", and one (1) "Grounded" 250 amp junction stud.</p>	Y__N__
One (1) 30-06-0225	<p>EMERGENCY MASTER SWITCH - MULTIPLEX ELECTRICAL SYSTEM</p> <p>A single emergency master switch shall be supplied for activating all the emergency warning lights and shall be provided on the master control console screen. The emergency master switch will activate the module power automatically. There shall also be an Emergency Master Menu button which shall allow access to individual warning light functions.</p>	Y__N__
One (1) 30-06-0250	<p>CONTROL PANEL SWITCHES - MULTIPLEX ELECTRICAL SYSTEM</p> <p>The switches on the master control console and attendant control panel screens shall have dimmable perimeter backlighting for easy identification.</p>	Y__N__
One (1) 30-06-0275	<p>MODULE POWER SWITCH - MULTIPLEX ELECTRICAL SYSTEM</p> <p>A module power switch for the electrical system shall be provided on both the master control console and the Attendant Control Panel screens.</p>	Y__N__

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One (1) 30-06-0285	<p>MODULE DISCONNECT - MULTIPLEX ELECTRICAL SYSTEM</p> <p>An In-Power 15 minute, nonadjustable disconnect shall be installed to keep the module power switch engaged, after the ignition is switched to the "off" position. This disconnect can also be activated from the side and rear doorways to turn on the check-out lights.</p>	Y__N__
One (1) 30-06-0300	<p>VOLTMETER - MULTIPLEX ELECTRICAL SYSTEM</p> <p>One (1) digital voltmeter shall be provided on the master control console screen.</p>	Y__N__
One (1) 30-06-0325	<p>FLASHER - MULTIPLEX ELECTRICAL SYSTEM</p> <p>The flasher shall be provided within and programmed by the multiplex electrical system.</p>	Y__N__
One (1) 30-06-0350	<p>FLASHING HEADLIGHTS - MULTIPLEX ELECTRICAL SYSTEM</p> <p>The headlights (high beams) shall be programmed through the multiplex system to alternate flash (wig-wag), activated by a switch on the master control console screen labeled "Flashing Headlights", with the ignition on and module power and emergency master switches enabled. The flashing headlights are to be disabled when the low or high beams are activated. They are also disabled when the transmission is placed in the neutral/park position. The flashing headlights shall have the capability to be reactivated with the "park override" switch in the "on" position if the low and high beams are off.</p>	Y__N__
One (1) 30-06-0375	<p>PARK OVERRIDE - MULTIPLEX ELECTRICAL SYSTEM</p> <p>A park override switch, located on the master control console screen, shall reactivate all lights disabled when the transmission is placed in the neutral/park position.</p>	Y__N__
One (1) 30-06-0400	<p>LOAD MANAGER-SEQUENTIAL SWITCHING SYSTEM - MULTIPLEX ELECTRIC SYSTEM</p> <p>The load manager-sequential switching system shall be controlled by the microprocessor based electrical system. The emergency master button shall control the sequential switching of the emergency lights and/or other warning devices. The load manager shall automatically shed not-critical electrical loads during low voltage conditions to help prevent electrical system overload when the vehicle is stationary and the transmission is in the park position.</p>	Y__N__
One (1) 30-06-0410	<p>WARNING LIGHTS FLASH PATTERN SIGNAL ALERT 75 - MULTIPLEX ELECTRICAL SYSTEM</p> <p>The default flash pattern for the warning lights shall be Signal Alert 75. These warning lights will be operated from a single button labeled "flashers" via the Multiplex System on the master control console.</p>	Y__N__
One (1) 30-06-0450	<p>FRONT CLEAR DISABLE SWITCH - MULTIPLEX ELECTRICAL SYSTEM</p> <p>Activation of the switch on the master control console screen shall disable all forward facing clear warning lights.</p>	Y__N__
One (1) 30-06-0475	<p>CURBSIDE SCENE LIGHTS "ON" WITH CURBSIDE DOOR - MULTIPLEX ELECTRICAL SYSTEM</p> <p>The curbside scene lights shall be programmed to activate when the curbside door is in the open position.</p>	Y__N__
One (1) 30-06-0500	<p>REAR SCENE LIGHTS "ON" WITH REAR DOORS OPEN - MULTIPLEX ELECTRICAL SYSTEM</p>	Y__N__

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One (1) 30-06-0525	<p>The rear scene lights shall be programmed to activate when the rear doors are in the open position.</p> <p>DISABLE SWITCH FOR REAR SCENE LIGHTS - MULTIPLEX ELECTRICAL SYSTEM</p>	Y__N__
One (1) 30-06-0550	<p>A disable switch shall be installed at the rear door area to disable the rear scene lights.</p> <p>DISABLE SWITCH FOR SIDE SCENE LIGHTS - MULTIPLEX ELECTRICAL SYSTEM</p>	Y__N__
One (1) 30-06-0575	<p>A disable switch shall be installed at the curbside door area to disable the curbside scene lights.</p> <p>REVERSE (TRANSMISSION) FUNCTIONS - MULTIPLEX ELECTRICAL SYSTEM</p>	Y__N__
One (1) 30-10-0030	<p>The system shall be programmed to provide activation for the rear outboard warning lights, the rear side warning lights, the rear scene lights, and the rear side scene lights, when the transmission selector lever is placed into "reverse" position.</p> <p>BACKUP ALARM</p>	Y__N__
One (1) 30-10-0071	<p>An (OSHA approved) back up alarm shall be installed with a disable control for silent backing. The disable control shall be located on the MCC (master control console). The back up alarm system shall automatically reset to the "on" mode when the transmission is taken out of reverse.</p> <p>CAMERA REAR VIEW - SINGLE SYSTEM - VISTA SCREEN</p>	Y__N__
One (1) 30-10-0074	<p>A color camera system connected to the cab Vista display screen shall be installed, providing rear view monitoring to the rear exterior of the module. The camera shall be connected to the video input provided in the cab's Vista screen. This camera image shall automatically be displayed on the MCC Vista when the vehicle is placed in reverse. The Vista shall resume normal operation when the vehicle is taken out of reverse.</p> <p>CAMERA PATIENT AREA SINGLE SYSTEM - VISTA SCREEN</p>	Y__N__
One (1) 30-10-0083	<p>A color camera system connected to the cab Vista display screen shall be installed, providing rear view monitoring to the patient area of the module. The camera shall be connected to the video input provided in the cab's Vista screen. The patient area camera is activated as needed by a switch on the master control console screen, labeled "Module Camera".</p> <p>DVD SYSTEM-FLIP DOWN LCD SCREEN w/DVD PLAYER/RECEIVER/RADIO</p>	Y__N__
One (1) 30-10-0110	<p>A 12 volt DVD Player System shall be installed: the system shall include one (1) in-dash DVD player/receiver/radio/Blue tooth combination control unit, one (1) DVD monitor installed in the ceiling near the rear entry doors, and a pair of dedicated DVD player speakers installed in the rear head pad. One (1) AM/FM antenna shall also be installed.</p> <p>ELECTRICAL CIRCUITS</p> <p>All electrical circuits shall have wiring and circuit protection suitable to the demand and must meet the national electric code (NEC) wiring requirements.</p> <p>All added on wiring (18 GA through 10 GA) shall be color coded and stamped with code numbers and functions every 4" for easy identification (all other wiring shall be color coded). SLX high temperature thermoplastic cross link wire shall be used.</p>	Y__N__

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SGX insulated cable shall be used for all under hood / underbody battery and charging system cable. High temperature (375° f) thermoplastic loom shall be used on all harnesses.

One (1)  
30-10-0190 GROUND FAULT CIRCUIT INTERRUPTER (GFCI) Y\_\_N\_\_

A 125 VAC, 20 AMP circuit breaker with ground fault circuit interrupter (GFCI) electronic ground leakage detection shall be installed in the load center for the shoreline circuit.

One (1)  
30-10-0233 INTERCOM SYSTEM - FIRE RESEARCH (ICA 100-A00-PTT1) (W/2-REMOTE STATIONS) Y\_\_N\_\_

A Fire Research Intercom (model ICA100-A00-PTT1) two-way system shall be provided and installed. The intercom kit shall include a master station, and two (2) remote stations and interconnecting cable. The master station shall be mounted in the cab and have a volume control knob and a push-to-talk button. One (1) remote station shall be recessed in the streetside wall near the attendant's control panel and one (1) remote station shall be recessed in the curbside wall to the left of the seating area. The remote stations each shall have a push-to-talk button. The intercom shall be designed for interior use. Each station shall have a plastic housing and be surface mounted. The power requirements for the intercom shall be 12 VDC and not exceed 3 amps. The output power shall be 8 watts.

One (1)  
30-10-0269 INVERTER, 1800 WATT Y\_\_N\_\_

An 1800 watt inverter with remote switch, shall be provided and installed in streetside OSS #1 per dwg #3.

One (1)  
30-10-0274 GENERATOR STADCO DIESEL CP7E 6.0 KW LIQUID COOLED Y\_\_N\_\_

A Stadco CP7E 6.0 KW continuous liquid-cooled diesel generator with electronic governor on the engine shall be installed in OSS #3 and supply electricity to power the module. The generator will be the primary source of power for the 125VAC in the module to include the HVAC and 125VAC outlets.

## Generator Unit Output Rating:

- Single-Phase, 120/240VAC, 60 Hz
- 7.25 kW Intermittent @ 1.0 PF. Recommended maximum duty cycle of 25%, limited to 15min./hr.
- 6.5 kW Lt. Continuous @ 1.0 PF. Recommended maximum duty cycle of 50%, limited to 30min./hr.
- 6.0 kW Continuous @ 1.0 PF. 100% Duty cycle

## Engine:

- Mitsubishi, 1800 RPM, 3-Cylinder Diesel Engine
- Liquid Cooled, 0.95 L (58 CID)
- Electronic Governing

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- Electronic Regulated, 4-Pole, Brushless AC Alternator, 1800 RPM, 60 Hz.
- Class "F" Insulation

One (1) 30-10-0291 20	LIGHT, ATTENDANT CONTROL PANEL AREA - LED - WARM WHITE  A Tecniq Silho-X 2.75" round warm white LED light with SS trim ring, shall be mounted above the left wall forward action area counter. The light shall be operated through the a button on the ACP Vista screen labeled "Attendant Light"	Y__N__
One (1) 30-10-0310	LIGHT, LED ELECTRICAL COMPARTMENT (PDQ)  A 12 VDC light shall be located in the electrical compartment. The light shall be wired "battery-hot" to activate when the power distribution quarter's door is in the open position. The light shall be off when the door is in the closed position.	Y__N__
One (1) 30-10-0406	LIGHTS, OSS COMPARTMENTS - INCANDESCENT  The outside storage compartments shall be equipped with Truck-Lite brand incandescent lights, activated by magnetic switches. (compartments #1, #2, and #3, each contain one (1) clear 4" round light, and compartment #4 shall contain two (2) clear 4" round lights).	Y__N__
One (1) 30-10-0540	OUTLETS, 125VAC - FOUR (4) INTERIOR DUPLEX  Four (4) 2-wire +plus ground 125 VAC hospital-grade duplex outlets shall be installed in the patient compartment with wiring connected to the shoreline. Three (3) outlets shall be installed on the street side: one (1) in primary action area above countertop, one (1) in secondary action area rearward of cabinet #4, and one (1) outlet shall be installed to right of IV poles. One (1) outlet shall be installed on the curbside above cabinet #3. An indicator lamp shall be located within each 125 VAC outlet as a line monitor to indicate a live circuit. The outlets shall be labeled, "125 VAC".	Y__N__
One (1) 30-10-0553	OUTLETS, 12VDC - TWO (2) INTERIOR POWERPOINT  Two (2) 12VDC power point outlets shall be installed in the patient compartment, one (1) above the counter in the curbside seating area, and one (1) in the attendant control panel area in the street side primary action area. The outlets shall be labeled, "12 VDC". A Schottky diode medical isolator shall be provided to protect the 12 VDC outlets.	Y__N__
One (1) 30-10-0574	USB - DUAL PORT OUTLETS, TWO (2)  Two (2) dual USB port outlets, 5 volt / 2.1 amp, shall be installed in the vehicle. One (1) outlet shall be located on the streetside main action area in the patient compartment. One (1) shall be located on the Master Control Console in the cab. The outlets shall have power and ground for charging equipment, such as cell phones, iPad, etc.	Y__N__
One (1) 30-10-0657	RADIO ANTENNA BASES - TWO (2)  Two (2) antenna bases with attached coax cables shall be installed on the module roof. The coax cables shall terminate in the PDQ. Access to the antenna bases shall be through adjacent module interior dome lights.	Y__N__
One (1) 30-10-0732	RECEPTACLE SHORELINE INLET - TWO (2) SUPER AUTO EJECT, (1) 20 AMP (1) 30 AMP	Y__N__



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Two (2) Kussmaul super auto eject shoreline inlet receptacles with yellow covers shall be installed on the module exterior (forward street side) near the driver's door. One (1) upper 20 AMP inlet shall be for outlets, charger, etc, and one (1) lower 30 AMP 125 VAC inlet shall be for the 110/12V heat A/C system. Each receptacle shall be equipped with an integral dynamic disconnect.

The 125 VAC, heavy duty 30-amp circuit breaker shall have GFCI protection and shall be connected to the lighted 125 VAC patient compartment outlet(s). Two(2) mating connectors shall be shipped loose with the completed ambulance.

One (1) OTE CLIMATE CONTROLLED CABINET- TEMPERATURE CONTROL MODULE - RIGHT WALL Y\_\_N\_\_  
30-10-0745

A 12-volt OTE # 19503C climate controlled compartment with flanged mount and vented right side, shall be provided and installed on the upper right rearward wall. The unit shall be equipped with a temperature control module with LED read out. Unit shall have a locking bottom hinged door.

One (1) SIREN, WHELEN 295-HFSA7-REMOTE WITH MICROPHONE Y\_\_N\_\_  
30-10-0753

A Whelen 295-HFSA7 remote dual siren amplifier shall be flush-mounted in the master control console located in the cab. The siren shall be capable of hands-free operation and shall be equipped with a noise canceling microphone. Some features of this siren include:

### **DUAL 200 WATT, FLUSH MOUNT SIREN with REMOTE SIREN AMPLIFIER**

- Six function siren plus radio repeat and public address.
- Operates two 100-watt speakers.
- Operates in dual (outputs 2 independent siren tones creating rich harmonic dual tone sound) or mono sound modes.
  - External dip switch programmable siren tones.
  - PTT (push to talk) switch on microphone overrides all siren functions.
- Removable unidirectional microphone with adjustable microphone volume & adjustable preset radio repeat volume.
  - SI TEST®, silent diagnostic test.
  - Quick disconnect plug for ease of service or replacement.

### **12 Siren Tones**

- Air horn • Wail • Yelp • Piercer • Manual Coast to Stop
- Manual • Mechanical Coast to Stop • Hi/Low • Yelp 249
- Warble • Whoop • Mechanical Tone

One (1) SIREN SPEAKERS, CAST PRODUCTS - IN FRONT BUMPER Y\_\_N\_\_  
30-10-0811

Two (2) Cast Products 100-watt siren speakers shall be installed in the front bumper. SYSTEM ACTIVE AND CHECK OUT LIGHTS - 15 MINUTES

One (1) Y\_\_N\_\_  
30-10-0901

A switch shall be located at the curb and rear entry doors that will allow activation of the V-MUX electrical system. There shall also be a check out light switch located at the curb and rear doors that will allow activation of the left LED angled lights prior to entering the module. The system shall be programmed to shut down automatically after 15 minutes unless the ignition is on. This shutdown delay shall be user adjustable.

One (1) VISTA DISPLAY SCREEN-PUSH BUTTON - CURBSIDE - FIXED ANGLED Y\_\_N\_\_  
30-10-0917

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One (1) 30-11-0103	One (1) Vista screen shall be provided in the patient compartment, located on the curbside wall on a fixed angled mount with removable plate over the head end of the squad bench. LIGHTS, DOME LED (10) SUPER, WHELEN	Y__N__
One (1) 30-11-0157	Ten (10) Super LED dome lights, Whelen #80C0EHCR, shall be provided in the patient compartment. The dome lights shall be controlled by separate switches for the left bank and right bank of lights. The dome lights shall be activated by switches on both the attendant control panel and the master control console. The dome lights shall be illuminated at 50% power whenever the patient compartment side or rear doors are opened. LIGHTS, LED PANEL (4) STREETSIDE - ANGLED	Y__N__
One (1) 30-11-0158	Four (4) LED lights shall be mounted on the angled panel above the streetside interior cabinets. These lights shall be three way switched from the attendant control panel and the master control console. LIGHTS, TECNIQ SILHO - X LED (2) FRONT WALL BELOW CABINETS	Y__N__
One (1) 30-11-0176	Two (2) Tecniq Silho - X LED lights shall be mounted below the interior cabinets on the front wall per dwg #7. These lights shall operate in conjunction with the ceiling dome lights. LIGHTS, LED PANEL (2) CURBSIDE - ANGLED	Y__N__
One (1) 30-25-0123	Two (2) LED lights shall be mounted on an angled panel located above the curbside seating area. These lights shall be three way switched from the attendant control panel and the master control console. LIGHTS, ICC / LED CLEARANCE - ON MODULE REAR - TECNIQ	Y__N__
One (1) 30-25-0125	The vehicle shall have five (5) red TECNIQ LED (S330) clearance / ICC lights on the rear of the module near the roof line. LIGHTS, ICC / LED CLEARANCE - ON MODULE FRONT - TECNIQ	Y__N__
One (1) 30-25-3111	The vehicle shall have two (2) amber Tecniq LED (S330) clearance / ICC lights on the front of the module near the roof line. LIGHTS, FRONT GRILLE - (2) WHELEN 700 SUPER LED - RED W/CLEAR LENS	Y__N__
One (1) 30-25-4216	Two (2) Whelen 700 series red super LED warning lights, with clear lenses and waterproof connectors shall be installed the grille area of the chassis. The lights shall operate from a switch on the master control console labeled "Flashers". LIGHTS, FRONT MODULE (3) WHELEN - RED LED (1) 700 SERIES CLR (2) 900 SERIES	Y__N__
One (1) 30-26-3012	A total of three (3) Whelen red super LED warning lights with chrome flanges shall be installed on the module front. One (1) Whelen 700 series clear super LED light shall be mounted on front of condenser located in the center of module, and two (2) Whelen 900 series red super LED lights, one (1) each side of condenser shall be located on front of module. All lights shall have clear lens. The lights shall operate from a switch on the master control console, labeled "Flashers". LIGHTS, REAR TAIL - WHELEN 600 LED STOP, TURN, & MINIMUM INTENSITY BACK-UP	Y__N__

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One (1) 30-26-5101	One (1) pair each of Whelen 600 series LED stop/tail lights, turn lights, and minimum intensity back-up lights with chrome bezels shall be installed on the rear of the module. LIGHTS, REAR WINDOW-LEVEL - WHELEN (2)900 LED - RED W/CLR LENS	Y__N__
One (1) 30-26-6155 30	Two (2) Whelen 900 series red super LED warning lights with clear lenses and chrome flanges shall be installed on the rear of the module at window level, one (1) on each side. These lights shall operate from a switch on the master control console, labeled "Flashers". LIGHTS LED, REAR MODULE -WHELEN (5)900: (2)RED, (1)AMB , (2)SCN CLR LENS	Y__N__
One (1) 30-26-7002	Two (2) Whelen 900 series red super LED warning lights with clear lens, two (2) Whelen 900 series 24 diode LED scene/load lights, and one (1) Whelen 900 series amber super LED warning light with clear lens shall be installed on the rear of the module. The lights shall be installed with chrome flanges and shall be operated from switches on the master control console labeled "Flashers" and "Rear Scene Lights". LIGHT, LICENSE PLATE LED	Y__N__
One (1) 30-27-1103	One (1) Whelen OACOEDCR LED license plate light with 45 deg angled chrome-plated bezel shall be installed on the rear of the module, lower left side. LIGHTS, ICC / LED CLEARANCE - ON MODULE SIDE - TECNIQ	Y__N__
One (1) 30-27-1116	The vehicle shall have four (4) Tecniq clearance / ICC lights: one (1) amber on each side module front and one (1) red each side module rear per DWG 3 & 4. The lights that are located on the module sides at the rear of the vehicle which will also function with the turn signals. LIGHTS, INTERSECTION FRONT - WHELEN 700 SUPER LED - RED W/CLR LENS	Y__N__
One (1) 30-27-2004	Two (2) Whelen 700 series red super LED warning lights, with clear lens, chrome flanges and water-proof connectors, shall be mounted on the front chassis fenders, one (1) on each side. The lights shall operate from a switch on the master control console labeled "Flashers". NOTE: When vehicle is placed in park, the override switch must be on for intersection light(s) to remain on. LIGHTS, SIDE MODULE SCENE - WHELEN 900 24 DIODE LED - CLEAR	Y__N__
One (1) 30-27-3014	Four (4) Whelen 900 series 24 Diode LED scene lights with chrome flanges shall be installed, two (2) each module side, inboard of the warning lights. These lights shall operate from switches on the master control console labeled "Left Scene Light" and "Right Scene Light". LIGHTS, SIDE MODULE WARNING - WHELEN 900 SUPER LED - RED W/CLR LENS	Y__N__
10002-0001	Six (6) Whelen 900 series red super LED warning lights with clear lenses and chrome flanges shall be installed, three (3) each module side. Streetside shall have one (1) warning light outboard of the side module rear scene light, one (1) warning light outboard of the module front scene light, and one warning light top center side of module. Curbside shall have one (1) warning light outboard of the side module rear scene light, one (1) warning light outboard of the module front scene light, and and one warning light top center side of module. These lights shall operate from a switch on the master control console labeled "Flashers".	

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One (1) 30-27-4115	LIGHTS, INTERSECTION REAR - WHELEN 700 SUPER LED - RED W/CLR LENS	Y__N__
	Two (2) Whelen 700 series red super LED warning lights with clear lenses, chrome flanges and water-proof connectors, shall be installed above the rear wheel wells, one (1) on each side. These lights shall operate from the master control console, labeled "Flashers", via the MasterTech Electrical System. NOTE: When vehicle is placed in park, the override control must be on for intersection light(s) to remain on.	
One (1) 39-00-0001	MODULE BODY CONSTRUCTION - SEAMLESS	Y__N__
	The module shall be fabricated entirely of parts cut and formed from .125" (minimum) thickness 5052-H32 flat aluminum sheet stock, using CNC machines capable of .0004" repeatability. This is the only alloy that may be used for body parts that are welded together.	
	The roll-cage type interior super-structure, aluminum partition and module shall all be welded together into a single unit to give optimum strength for patient and attendant protection. The module roof shall be designed with a minimum 1.5" crown to facilitate water run off.	
	The floor, roof, sides, and all exterior doors shall be fabricated from .125" (minimum) thick flat aluminum sheet stock. The exterior joints between the roof and side components shall be continuous full seam welded the entire length of the module. All exterior body panel joints shall be continuous full seam welded.	
	No VHB bonding tape or other adhesives shall be used in the construction of the ambulance module.	
One (1) 39-00-0002	SOLE SOURCE MODULE BODY CONSTRUCTION	Y__N__
	It is required that the manufacturer of this vehicle have the ability to manufacture a completed ambulance, with the exception of the chassis, within their own manufacturing facility. The modular body must be built in the manufacturer's facility and shall not be the product of a subcontractor or any company other than the manufacturer.	
One (1) 39-00-0005	AWS ALUMINUM CERTIFIED WELDERS	Y__N__
	AWS Aluminum Certified Welders shall construct the module.	
	AWS certificates shall be required to be part of the completed bid packet. Bids without AWS certificates shall be considered non-compliant (no Exception).	
One (1) 39-10-0006	CONNECTIONS, MODULE	Y__N__
	The module shall be bolted to the chassis frame rail with (14) 5/8" -11 grade 8 bolts through OEM rubber insulating spacers installed on outriggers at fourteen (14) separate locations (seven each frame rail), providing noise insulation and easy removal for chassis replacement. The frame mounting bolts shall be properly torqued and secured with locktite. The system used for fastening the module to the frame shall be that approved by the chassis manufacturer.	
One (1) 40-00-0009	ALUMINUM PARTS - MODULE EXTERIOR	Y__N__
	All unpainted exterior aluminum parts shall be bright dip anodized after fabrication to retain the finish and increase corrosion resistance.	
One (1)	CORROSION MINIMIZATION - MODULE	Y__N__

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40-00-0010

All module contact with dissimilar metals shall be minimized with the use of nylon screw-hole inserts to prevent fastener contact with the module body, nylon hinge strips, ceramic coated stainless steel hinge bolts, and ECK brand corrosion inhibitor spray.

One (1)

CONDENSER, AC - PROAIR 206-50 001 720 DUAL COIL /DUAL PORT FRONT MOUNT

Y\_\_N\_\_

40-00-0012

A ProAir 206-50 001 720 dual coil / dual port AC condenser shall be installed on the top front center of the module. Condenser shall be installed with aluminum mounting brackets. Condenser and brackets are to be painted to match the module. Condenser to be located per DWG #1.

NOTE: Condenser mounted on the front of the module may affect front module lighting choices.

One (1)

DOOR SKINS, OUTSIDE STORAGE COMPARTMENTS - DIAMOND PLATE INTERIOR SKINS

Y\_\_N\_\_

40-00-0019

The interior door skins for all outside storage compartments shall be constructed of .063" thick aluminum diamond plate.

One (1)

DOOR CONSTRUCTION - GASKET PLACEMENT

Y\_\_N\_\_

40-00-0020

All exterior hinged module doors shall be constructed in an inverted pan-formed design. The pan shall be constructed from .125" thick 5052-H32 flat sheet aluminum. The exterior door skin shall be constructed of .190" thick aluminum and welded to the pan.

Door gaskets shall be attached to the interior side of the door skin. Gaskets attached to interior door frames are not satisfactory and shall not be accepted.

One (1)

EXTERIOR COMPARTMENTS DESIGN

Y\_\_N\_\_

40-00-0030

All exterior compartments shall include these features:

- Sound absorbing slip resistant polyurethane material shall be sprayed on the inside of all compartments and compartment shelving, slide out trays and closeouts.
- Baffled seep holes shall be provided to prevent water from splashing or seeping into the exterior compartments.
- Full-length, two-way adjustable, stainless steel hinges on all exterior compartment doors with 3/16" stainless steel hinge pins.
- Compartment doors shall be installed, flush with the module body.
- When double doors are provided, each door shall have an exterior handle, but only the forward door shall be lockable. (rearward door is secured when forward door is locked). All exterior compartments and passage doors shall be keyed alike.
- Lockable, Eberhard "free-floating" type chrome plated handles with rotary locks. A gasket shall be installed under each handle to protect the paint.
- Drip rails shall be installed above all exterior compartment doors.

10002-0001

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One (1) 40-00-0050	EXTERIOR COMPARTMENTS, VENTING	Y__N__
	A minimum of nine (9) square inches of venting shall be provided inside the #1, #2, #3, & #4 exterior storage compartments to provide for easier closure of the compartment doors.	
One (1) 40-00-0055	EXTERIOR COMPARTMENTS, VENTING - OXYGEN STORAGE	Y__N__
	A minimum of nine (9) square inches of venting shall be provided in the exterior oxygen storage compartment, to dissipate any leaking oxygen gas.	
One (1) 40-00-0060	EXTERIOR COMPARTMENTS - SWEEP-OUT	Y__N__
	Exterior module compartments shall be of a sweep-out design to aid in facilitation of the purchaser's routine care and cleaning of the vehicle.	
	All exterior compartment floors, with the exception of the front ALS compartment shall be constructed to be flush with the bottom door frame.	
One (1) 40-00-0070	HANDLES, EBERHARD - CHROME FREE FLOATING TYPE	Y__N__
	Eberhard #EMC-1-2110 chrome "free-floating" handles shall be installed on each exterior module door. The handles shall be large enough to accommodate a gloved hand.	
One (1) 40-00-0080	INSULATION - POLYURETHANE SPRAY FOAM	Y__N__
	The walls, ceiling, passage doors, outside storage doors, the entire underside of the module floor (except for mounting pads), the underside of the outside storage compartments, the wheel wells, and the underside of the curbside step area shall be completely foam - in - place insulated with nominal 3/4" thick sprayed on Class I, urethane foam for thermal and acoustical insulation. The insulation shall comply with FMVSS #302 flame spread requirements. The underside of the body shall be properly prepared to ensure adhesion before the spray insulation is applied.	
One (1) 40-00-0091	THRESHOLD, STAINLESS STEEL - ALL OSS STORAGE COMPARTMENTS	Y__N__
	Each exterior storage compartment with a hinged door shall have a stainless steel lower threshold at the door opening to protect the paint as equipment is installed and removed from the compartment.	
One (1) 40-10-0051	REFLECTOR, INTERMEDIATE AMBER	Y__N__
	Two (2) amber colored reflectors shall be installed, one (1) each side of module. The reflectors shall be located on bottom front side of module, rearward of the step cover.	
One (1) 40-10-0066	DOOR SLIDING, E-Z GLIDE - MODULE CURBSIDE PASSAGE	Y__N__
	The module body shall include an E-Z Glide sliding side entry door to access the curbside of the patient compartment. The door shall slide out and towards the rear of the module body. The door design must meet FMVSS 206 for sliding doors and shall have been cycle tested in excess of 100,000 cycles. The door shall not extend out more than 5 1/4" from the module when in the open position and shall be flush in the closed position. The door shall operate on a total of nine (9) casters and three (3) tracks for ease of operation. The door shall be held closed with two (2) rotary latches and two (2) locking tabs. The door must have a system to prevent the door from self closing, when unit is parked on an incline. A measured force of ten (10) pounds maximum shall be required to release the door from the open to closed position. A chrome locking handle shall be installed on the exterior of the door. The door shall be lockable from the inside and outside and shall shut on molded air-core, automotive type door seals to prevent any water from leaking into the vehicle interior. A drip rail shall be installed above the door.	

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**Documentation required:**

The bidder must submit with this bid proposal a listing of not less than 200 ambulances produced with curbside sliding doors in the past four years. The listing is to include a production order number, the purchaser's agency name, and date the ambulance equipped with the curbside sliding door was delivered.

- One (1)  
40-10-0073 Failure to provide the required documentation shall be considered as non-responsive.  
LOWERED MODULE CURB SIDE Y\_\_N\_\_
- Module curb side to be as low as possible and still comply with KKK-1822-F ramp break over angle. Lowered side will allow easier entry into the module as well as increased compartment storage.
- One (1)  
40-10-0088 DOORS - REAR PASSAGE Y\_\_N\_\_
- There shall be a 47.50" wide x 59" high rear door opening in the patient compartment. The doors shall be flush without a protruding flange or lip. The right rear passage door shall have a lockable, chrome exterior handle. The left rear door shall have a non-locking, chrome exterior handle. All handles shall be installed with a gasket to protect the paint. The hinge shall be full length stainless steel with a 3/16" stainless steel hinge pin and shall be two-way adjustable. Each rear door shall have a two point slam action automotive type rotary latching system to the body.
- The right rear door shall lock to the body at the top and bottom, not to the left rear door. The doors shall have .213" steel door latch activator rods with clevis adjusters. The doors shall be lockable from the inside and outside. All doors shall shut on molded, air-core, automotive type door seals to prevent any water from leaking into the vehicle interior.
- One (1)  
40-10-0103 FENDERETTES - POLISHED ALUMINUM Y\_\_N\_\_
- Polished aluminum fenderettes shall be installed around the rear wheel well openings.
- One (1)  
40-10-0120 10 HOLD-OPEN - REAR DOORS - GRABBERS Y\_\_N\_\_
- Door grabbers (1 pair) with hard rubber inserts shall be installed on the rear doors, permitting a door hold open position of 180 degrees.
- One (1)  
40-10-0130 EMERGENCY RELEASE LEVER, REAR PATIENT PASSAGE DOORS Y\_\_N\_\_
- An emergency release lever shall be attached to each rear passage door latch and be free-floating from the interior door linkages. The levers shall provide a means of actuating the latches from the patient compartment without the use of the interior door handles.
- One (1)  
40-10-0151 SWITCH UNLOCK, WATERPROOF - HIDDEN IN FRONT GRILLE AREA Y\_\_N\_\_
- An exterior waterproof hidden door unlock switch shall also be included.
- One (1)  
40-10-0192 LOCKS POWER - PASSAGE, COMPARTMENTS, KEY FOBS Y\_\_N\_\_
- Power door locks shall be included on module passage doors and five (5) outside storage compartments. The locks shall be activated from the interior of the rear door and the curbside doorway, as well as the OEM chassis cab door switches. A keyless entry system shall be installed. The system shall include two (2) remote key fob transmitters to lock/unlock all chassis and module doors.
- One (1)  
40-10-0204 MUD FLAPS, REAR - BLACK RUBBER FIBERGLASS REINFORCED - THREE COLOR Y\_\_N\_\_

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Black rubber, fiberglass reinforced mud flaps with a minimum 1/4" thickness shall be bolted to the underside of the module behind the rear wheels. The width and length of the flaps shall provide adequate coverage of the rear dual wheels of the chassis. The mud flaps shall be three color with the bidder's logo.

One (1) REAR STEP/BUMPER -FLIP-UP CENTER SECTION - STAR PUNCHED AND ANODIZED Y\_\_N\_\_

40-10-0266

The rear bumper shall be affixed to the chassis frame. The bumper shall be constructed with a hinged center section. Two (2) steel braces shall secure the step to the chassis frame. The outer 17" on each end of the bumper shall be constructed from heavy gauge stamped polished stainless steel bumper parts and shall provide smooth rounded corners. The step shall be constructed of star punched .125" thick aluminum diamond plate. Two (2) rear LED step illumination lights shall be provided. All diamond plate surfaces shall be bright dip anodized. Rear step installation shall comply with AMD standard 018. A strip of black PVC shall be installed on the face of the step to protect the patient cots during loading.

One (1) RUB RAILS, ANODIZED ALUMINUM Y\_\_N\_\_

40-10-0280

Bright dip anodized polished aluminum rub rails shall be installed on the lower sides of the body below the outside compartment sill areas. The rub rails shall be offset 3/16" from the body to facilitate wash down of road debris.

One (1) STEPWELL, CURBSIDE DOORWAY - MID STEP AREA Y\_\_N\_\_

40-10-0321

An aluminum diamond plate step well and mid-level step shall be installed in the curbside doorway threshold area.

One (1) STONE GUARDS, MODULE FRONT - ANODIZED DIAMOND PLATE Y\_\_N\_\_

40-10-0340

Bright dip anodized aluminum diamond plate stone guards shall be installed on the module front, one (1) each side.

One (1) KICKPLATE/THRESHOLD, REAR DOORWAY - ANODIZED DIAMOND PLATE Y\_\_N\_\_

40-10-0360

A bright dip anodized aluminum diamond plate kick plate shall be installed at the rear exterior doorway, providing a kick / scuff plate at the rear of the vehicle above the rear step.

One (1) TOW HOOKS, MODULE REAR Y\_\_N\_\_

40-10-0381

Two (2) tow hooks shall be provided in the rear step area and shall be securely fastened to the vehicle frame.

One (1) WINDOWS, PASSAGE DOOR - (CURB SLIDING, REAR FIXED) Y\_\_N\_\_

40-10-0505

The curbside passage door shall have a 16" x 23" openable (*sliding*) window with removable screen. Each rear passage door shall have a 19" x 18" non-openable window. The distance between the rear window glass shall not exceed 6" to assure maximum vision to the rear. The windows shall have a 69% dark tint and shall be secured with black oxide coated fasteners. No warning lights shall be blocked from view when the curbside or rear doors are open.

One (1) OUTSIDE STORAGE #1 - STREETSIDE FORWARD Y\_\_N\_\_

41-01-0703

OSS #1 (forward street side compartment) shall have an 14.75" high x 48.75" wide clear door opening with 16.25" high x 52.75" wide x 21.75" deep interior dimensions. This compartment shall be the location for dual suction pumps, an 1800 watt inverter, 125 volt heat / AC electrical components. The compartment shall have double doors held open



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One (1) 42-01-0603	with a spring loaded gas cylinders. An exterior handle shall be installed on each door. A locking handle shall be installed on the forward door. OUTSIDE STORAGE #2 - STREETSIDE CENTER	Y__N__
One (1) 43-01-0608	OSS #2 (street side center compartment) shall have a 30.00" high x 25.50" wide clear door opening with a single door and shall have 31.75" high x 29.00" wide x 21.75" deep interior dimensions. The door shall be left hinged and secured with a locking handle. OUTSIDE STORAGE #3 - STREETSIDE REAR - W/ LOUVERED DOOR	Y__N__
One (1) 44-01-0620	OSS #3 (street side rear compartment) shall have a 30.00" high x 40.50" wide clear door opening with 31.75" high x 44.00" wide x 21.75" deep interior dimensions. The compartment shall have a louvered door with a locking handle. This compartment shall house the generator for a Stadco CP6.5 6KW liquid - cooled diesel generator with remote start and stop. OUTSIDE STORAGE #4 BOARD/SCOOP, O2 CYLINDER & MEDICAL AIR - RT. REAR	Y__N__
	<b>OSS #4</b> (rear curbside compartment) shall have a 75.50" high x 34.00" wide clear door opening and shall have 38.00" wide x 21.75" deep interior dimensions; 76.50" high on left side of fixed vertical divider and 65.00" high on right side of divider due to interior drug cabinet. The fixed divider shall be 29.75" from the right wall with area on the left side of the divider for (2) backboards storage and shall contain a strap. The right side of compartment shall have a slide-out for (1) "H" medical air, and (1) "H" oxygen tank using (2) Zico QR-MV brackets towards the right wall. The area above the oxygen tank shall be will be blocked off for interior drug storage cabinet. The oxygen and medical air cylinders shall be provided by the purchaser. A cylinder changing wrench shall be provided and secured inside the compartment. The compartment door shall be held open with a spring loaded gas cylinder. A locking handle shall be installed on the exterior of the door, compartment shall have double doors.	
One (1) 45-01-0602	CURBSIDE FORWARD COT LOADING DOOR	Y__N__
	Curbside forward cot loading door for transverse compartment shall have a 51.75" high x 30.00" wide clear door opening. The compartment shall be a side entry for Stryker Performance Load or Power Load cot system. The compartment shall have a recessed floor to reach required cot load height. The compartment door shall be held open with a spring loaded gas cylinder. door shall have a hold open. NOTE: Tansverse cot position is intended for isolette use only.	
One (1) 46-01-0103	BATTERY STORAGE COMPARTMENT WITH SLIDE OUT TRAY - CURBSIDE	Y__N__
	A compartment shall be located in the front curbside corner of the module with a heavy duty slide-out storage drawer / tray for (3) three batteries. The compartment door shall be located below OSS #5 and above the front rub rail, and hinged on the forward edge. A locking handle shall be installed on the exterior of the door.	
One (1) 50-00-0202	ROUNDED INTERIOR CORNERS	Y__N__
	Interior vertical edges shall have rounded corners in the following locations: forward and aft edges of the CPR seat, the wall at the aft end of the squad bench, the partition opening cabinet edges and the upper front wall cabinet.	

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One (1) 50-01-0408	LATCHES, CABINET, CN10 COMPLIANT AS APPLICABLE  The ACP (attendant control panel) door, the PDQ (power distribution quarters) door, and the radio cabinet door shall be secured with chrome locking lever latches; all remaining interior hinged cabinet doors shall be secured with with center squeeze latches. All interior drawers shall be secured with locking flush pull latches. Cabinet(s) shall be KKK-A-1822F Change Notice 10 compliant and conform to all applicable SAE J3058 requirements.	Y__N__
One (1) 50-10-0122	CABINET - LEFT WALL, UPPER REAR #1 - FIXED FRAME  The left wall, upper rear interior cabinet (#1) shall be enclosed by one (1) set of sliding polycarbonate doors. The doors shall have full length handles with the outer most sliding door to have handles on both ends. The cabinet shall contain a center divider with one (1) adjustable shelf, each side.	Y__N__
One (1) 50-10-0224	CABINET - LEFT WALL, UPPER OVER PANEL #2 - FIXED FRAME  The left wall, interior upper cabinet (#2), above the attendant control panel shall be enclosed by one (1) set of sliding polycarbonate doors. The doors shall have full length handles with the outer most sliding door to have handles on both ends. The cabinet shall contain a center divider with one (1) adjustable shelf, each side.	Y__N__
One (1) 50-10-0231	LEFT WALL - ATTENDANT CONTROL PANEL - HINGED PANEL  A WELDON Vista Control Screen mounted on an angled flip – down panel secured with locking chrome lever latches The panel will be located to the immediate right of the attendant's seat. The forward portion of the panel will contain AM/FM radio, CD/DVD player, and FRC push-to-talk intercom.	Y__N__
One (1) 50-10-0348	CABINET - LEFT WALL, UPPER #3 - FIXED FRAME  The left wall, upper forward interior cabinet #3 shall be enclosed by one (1) set of sliding polycarbonate doors with full length handles. The outer most sliding door shall have a handle on both ends. The cabinet shall be equipped with a center divider with one (1) adjustable shelf on each side of fixed divider.	Y__N__
One (1) 50-10-0432	CABINET - LEFT WALL, REAR #4 - FIXED FRAME  An interior cabinet unit (#4) shall be installed in rear lower interior street side wall. The compartment shall be enclosed by one (1) set of sliding polycarbonate doors and equipped with one (1) adjustable shelf. The doors shall have full length handles with the outer most sliding door to have handles on both ends.	Y__N__
One (1) 50-10-0561	CABINET - LEFT WALL, REAR ACTION AREA #5  An interior cabinet unit (#5) shall be installed under rear action area on the lower interior street side wall. The compartment shall be enclosed by one (1) set of sliding polycarbonate doors and equipped with one (1) adjustable shelf. The doors shall have full length handles with the outer most sliding door to have handles on both ends.	Y__N__
One (1) 50-10-0606	PRIMARY ACTION AREA  The primary action area shall be located beside the attendant seat with work area dimensions of 41.25" wide x 21.00" high.	Y__N__
One (1) 50-10-0653	SECONDARY ACTION AREA	Y__N__

10002-0001

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One (1) 50-11-0613	<p>The secondary action area shall be located to the rear of the CPR seat with work area dimensions of 21.00" high x 20.00" wide.</p> <p>DRAWERS - LEFT WALL - PRIMARY ACTION AREA (4) DRAWER UNIT- #6, #7, #8, #9</p> <p>A four (4) drawer cabinet unit shall be installed under the primary action area on the interior left wall of the module. These drawers shall be constructed with .90" thick aluminum. The drawers shall open towards the aisle and be secured with locking stainless steel flush pull latches.</p>	Y__N__
One (1) 50-20-0507	<p>PASS THROUGH - CAB TO MODULE, WINDOW OPENING</p> <p>A window opening shall be provided in the rear of the cab to accommodate pass-through communications to the patient compartment. A bellows shall be provided to connect the cab to the module.</p>	Y__N__
One (1) 50-30-0139	<p>CABINET - RIGHT WALL, UPPER BEHIND SEATING AREA #1 &amp; #2</p> <p>The right wall cabinets #1 and #2 shall each be enclosed by a top hinged polycarbonate cabinet door with hold opens and center squeeze latch. The compartments shall each contain one (1) adjustable shelf.</p>	Y__N__
One (1) 50-31-0305	<p>CABINET - RIGHT WALL, (3) DRAWER W/ WASTE AND SHARPS CONTAINER</p> <p>A cabinet shall be installed at the forward end of the seating area. The cabinet shall contain two (2) equal size drawers. The drawers shall open towards the aisle and be secured with locking stainless steel flush pull latches. The lower portion of the cabinet shall contain one (1) waste / sharps pull-out drawer. The drawer shall open to the aisle and be secured with a stainless steel flush pull latch. There will be a solid acrylic counter top installed on the top of the cabinet. The counter top shall be the same color as other solid acrylic counter tops within the module.</p>	Y__N__
One (1) 50-41-0214	<p>HEAT/AC, PROAIR HIGH PERFORMANCE IW-5556 110/12 VOLT, BRUSHLESS BLOWER MOTOR</p> <p>A ProAir High Performance IW-5556, 110/12V air conditioner/heat unit shall be installed for shoreline-operated climate control. The unit operates as a 110 volt unit on the shoreline, providing both heating and cooling with thermostat control. When shoreline power is removed, the unit switches to 12V vehicle power. A separate 30 amp super auto-eject shoreline shall be installed for this unit. The included condenser unit shall be mounted on the front of the module.</p> <p>The heater/air conditioner shall be a 700 CFM brushless blower. The 12V system has 56,000 BTU heating and 55,000 BTU cooling capacity utilizing an ac/heat core, while the 110V system has 14,000 BTU heating and 22,000 BTU cooling capacity. The blower is controlled through the dual voltage Heat/AC system, and shall be provided for high volume air movement with minimal noise. The heater/air conditioner air return shall be filtered to minimize contamination of the heater/air conditioner cores. The cab and module environmental systems shall be simultaneously capable of heating in the front while cooling in the rear and vice-versa. A thermostatically controlled rear system shall be provided for heating and air conditioning the patient compartment.</p> <p>The temperature, whether heating or cooling, shall be controlled by a digital thermostat located in the street side cabinet. Heating and cooling may be selected automatically or manually. The Heater / Air Conditioner shall function when the ignition system is on or</p>	Y__N__

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when the shoreline is connected. The rear heater shall have EPDM/Nomex heater hoses. The rear air conditioner shall have barrier air conditioner hoses for R-134A refrigerant.

The module heat and AC system shall be installed in the upper portion of the front wall. Four (4) adjustable heat/AC vents shall be located below the heater/AC.

One (1)                   ATTN SEAT - USSC VALOR R - BACK INTEGRAL CHILD, SWIVEL SEAT, CENTER                   Y\_\_N\_\_  
50-50-0126                   W/ COT

A USSC Valor rear facing, R-back attendant seat with an integrated child seat to be centered with cot, shall be installed. The attendant seat shall be a 2-position swivel seat mounted on a pedestal base with a heavy duty seat frame for an ABTS (All Belts To Seat) application with four (4) point / four (4) retractors single click internal mount belt system. The seat shall be 20" wide with discontinuous recline and a 6" horizontal" slide for fore and aft adjustment(s). The seat shall be KKK-A-1822F Change Notice 8 compliant and conform to all applicable FMVSS and SAE J3026 requirements. Documentation from a certified independent testing facility shall be required stating the seat has passed SAE J3026 requirements and tested in accordance with SAE J2917, Occupant Restraint and Equipment Mounting Integrity – Frontal Impact System-Level Ambulance Patient Compartment and SAE J2956, Occupant Restraint and Equipment Mounting Integrity – Side Impact System-Level Ambulance Patient Compartment. The seat shall be padded and covered with sewn color matching vinyl upholstery. The attendant seat to be centered with 18" spacing from primary cot when the seat slides are in the neutral position.

One (1)                   ATTN SEAT - USSC VALOR R - BACK, TRANSVERSE AREA                   Y\_\_N\_\_  
50-50-0128

A USSC Valor aisle facing, R-back attendant seat shall be installed in the transverse area. The attendant seat shall be mounted on a pedestal base with a heavy duty seat frame for an ABTS (All Belts To Seat) application with four (4) point / four (4) retractors single click internal mount belt system. The seat shall be 20" wide with discontinuous recline and a 6" horizontal" slide for fore and aft adjustment(s). The seat shall be KKK-A-1822F Change Notice 8 compliant and conform to all applicable FMVSS and SAE J3026 requirements. Documentation from a certified independent testing facility shall be required stating the seat has passed SAE J3026 requirements and tested in accordance with SAE J2917, Occupant Restraint and Equipment Mounting Integrity – Frontal Impact System-Level Ambulance Patient Compartment and SAE J2956, Occupant Restraint and Equipment Mounting Integrity – Side Impact System-Level Ambulance Patient Compartment. The seat shall be padded and covered with sewn color matching vinyl upholstery.

One (1)                   SEATS, TWO (2) USSC VALOR R-BACK SEAT - (4) POS SWIVEL CN8 COMPLIANT                   Y\_\_N\_\_  
50-50-0229

Two (2) USSC Valor, R-back seats with integrated headrests shall be installed on right side of the patient compartment facing the cot. Each seat shall be installed on a fixed base with a heavy duty seat frame for an ABTS (All Belts To Seat) application with four (4) point / four (4) retractors internal mount belt system. Each seat shall be 20" wide and a 6" horizontal" slide adjustment, with an automotive style back recline. Seats shall be KKK-A-1822F Change Notice 8 compliant and conform to all applicable FMVSS and SAE J3026 requirements. Documentation from a certified independent testing facility shall be required stating the seat has passed SAE J3026 requirements and tested in accordance with SAE J2917, Occupant Restraint and Equipment Mounting Integrity – Frontal Impact System-Level Ambulance Patient Compartment and SAE J2956, Occupant Restraint and Equipment Mounting Integrity – Side Impact System-Level Ambulance Patient

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Compartment. The seats shall be padded and covered sewn color matching vinyl upholstery.

One (1) CPR SEAT FIXED, VALOR 4 PT HARNESS, CN8 COMPLIANT Y\_\_N\_\_  
50-50-0319

A CPR seat shall be installed on the street side of the patient compartment aft of the main action area counter. The CPR seat shall be KKK-A-1822F Change Notice 8 compliant with VALOR A-VAL shelf mount back frame and internal bolsters. The seat belt shall consist of a four (4) point / four (4) retractors single click internal mount belt system. The seat shall conform to all applicable FMVSS and SAE J3026 requirements. Documentation from a certified independent testing facility shall be required stating the seating configuration has passed SAE J3026 requirements and tested in accordance with SAE J2917, Occupant Restraint and Equipment Mounting Integrity – Frontal Impact System-Level Ambulance Patient Compartment and SAE J2956, Occupant Restraint and Equipment Mounting Integrity – Side Impact System-Level Ambulance Patient Compartment. The VALOR A-VAL shelf mount back frame and the seat shall be padded and covered with cushioned, color coordinated, cut and sewn vinyl. The seat shall have underneath storage per DWG #5.

One (1) CABINET CONSTRUCTION - INTERIOR - ALUMINUM Y\_\_N\_\_  
50-51-1001

All interior cabinets shall be constructed of a minimum of .090" thick welded aluminum. Wood products shall not be used in the construction of any interior cabinet. All cabinet exteriors, interiors, drawer fronts, drawer interiors, and aluminum doors shall be sealed with a washable sprayed-on multi-use polychromatic coating.

One (1) RECESSED ADJUSTABLE SHELF TRACK - CABINETS Y\_\_N\_\_  
50-51-1011

Unistrut 13/16" x 13/32", 19 gauge channel shall be installed in the interior cabinets that contain adjustable shelves. The track shall be welded in and recessed to reduce the number of fasteners and provide a cleaner look.

One (1) HOLD OPENS FOR INTERIOR DOORS Y\_\_N\_\_  
50-51-1013

All interior cabinets with doors less than 6" tall shall have friction hinges as hold opens for door(s).

One (1) Doors 6" and taller shall be designed using gas shocks as hold opens for the door(s).  
50-51-1014 CATCH, MAGNETIC - ADHESIVE BACK FOR INTERIOR DOOR(S) OVER 36 INCHES Y\_\_N\_\_

All interior doors that are over 36" inches tall with a latch on the top of the door shall have an adhesive back magnetic catch installed on the bottom of the door.

One (1) CABINET DOORS - CLEAR POLYCARBONATE Y\_\_N\_\_  
50-51-2002

All cabinet doors shall be clear polycarbonate material. The sliding cabinet doors shall be installed in aluminum track lined with PPL inserts to eliminate rattles and prevent the doors from opening during transit. An edge mounted aluminum handle shall be installed on each sliding cabinet door.

One (1) CABINETS/ WALLS - POLYCHROMATIC COATING - MARBLE STONE Y\_\_N\_\_  
50-51-3001

All exposed side walls, the partition wall (on the patient compartment side only), the headliner, along with the cabinet and drawer fronts, aluminum doors, cabinet and drawer interiors shall be covered with a washable #99-7371 Marble Stone sprayed-on multi-use polychromatic coating, to create a laminate-free interior.

One (1) COUNTER TOP - SOLID ACRYLIC - NIGHT STARS (BLACK) Y\_\_N\_\_

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50-51-4012	A solid acrylic counter top, Night Stars, with a 1/2" lip shall be installed to prevent equipment from sliding off. The solid acrylic counter top shall be provided on both the primary and secondary action area counters, fore and aft of the CPR seat.	
One (1) 50-51-5001	UPHOLSTERY - PATRIOT PLUS CHARCOAL #8605	Y__N__
One (1) 50-51-6003	All cushions, head pads and seats shall be covered with Spradling International Patriot Plus Charcoal #8605 expanded vinyl upholstery material. The vinyl and all foam cushion material shall comply with FMVSS #302 flame spread requirements. LONPLATE II, NON-SLIP EMBOSSED SM. GRID - GUNMETAL #424	Y__N__
One (1) 50-58-0000 80	The floor in the patient compartment shall be covered with Lonseal brand "Lonplate II" non-slip; small grid (embossed) Gunmetal #424, resilient sheet vinyl flooring material, which shall be coved 3-inches up the wall on the street side, and to the top of the squad bench base on the curbside. The flooring material shall be stripped and waxed before delivery. COT MOUNT / FASTENER FEATURES **CN8 COMPLIANT** STD	Y__N__
One (1) 50-60-0020	ASPIRATOR / SUCTION - TWO (2) SSCOR WITH ELECTRIC PUMP	Y__N__
One (1) 50-60-0036	Two (2) SSCOR suction systems shall be installed on the streetside of module. One (1) shall be located on the counter and one (1) shall be located over transverse cot. The two (2) 12 VDC SSCOR electric vacuum pumps shall be installed in OSS #1 compartment. The vacuum pump exhaust shall be shall be vented to the exterior of the vehicle (must use SSCOR pump and tubing). ASSIST HANDLES, (2) V-BARS, (4) HANDLES, STAINLESS STEEL, YELLOW ANTIMICROBIAL	Y__N__
One (1) 50-60-0179	A total of six (6) stainless steel, yellow antimicrobial assist handles shall be provided: one (1) on the streetside to left of cabinet #4, one (1) at the curbside doorway, one (1) on the top left curbside sliding door, and one (1) to left of rear passage door. Two (2) stainless steel, yellow antimicrobial V - Bars shall be located one (1) on each rear passage door. COT FASTENER - STRYKER PERFORMANCE LOAD CNTR MNT SYS REAR DOORWAY W/ CHARGER	Y__N__
One (1) 50-60-0180	A Stryker Performance - Load cot fastener system shall be installed on the module floor to accommodate a Stryker cot. It shall be center mount and load through the rear doorway. A 0.625" thick aluminum tapping plate shall be installed below the aluminum floor to secure the cot fastener system. A transfer relay and breakers shall be installed to allow system to charge only when the Shoreline is plugged in or when the system is active. COT FASTENER - STRYKER PERFORMANCE LOAD CNTR MNT SYS SIDE DOORWAY W/ CHARGER	Y__N__

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A Stryker Performance - Load cot fastener system shall be installed on the module floor to accommodate a Stryker cot. It shall be in the transverse position and load through the side doorway in a recessed floor. An (.625" thick) aluminum tapping plate shall be installed below the aluminum floor to secure the cot floor mounting plate. A transfer relay and breakers shall be installed to allow system to charge only when the Shoreline is plugged in or when the system is active.

One (1) EMBLEMS / SIGNS - REAR PATIENT COMPARTMENT Y\_\_N\_\_  
50-60-0220

Two (2) "*No Smoking / Oxygen Equipped / Fasten Seat Belts*" signs shall be provided. One (1) sign shall be installed in the cab and one (1) above the oxygen outlets in the patient compartment street side cabinet.

One (1) EXHAUST VENTILATOR, 3-SPEED - MULTIPLEX ELECTRIC SYSTEM Y\_\_N\_\_  
50-60-0256

A three-speed, 300 CFM (minimum) exhaust fan meeting KKK-A-1822F requirements shall be provided and located in the street side cabinet in the patient compartment. The exhaust fan shall be pulse width modulated from a switch on the attendant control panel vista screen. The exhaust system shall have a louvered grille inside and a chrome vent outside. The exhaust system shall vent through the side of the vehicle, not through the roof.

One (1) FLOOR CONSTRUCTION- PATIENT COMPARTMENT, NON-WOOD COMPOSITE Y\_\_N\_\_  
50-60-0300

The sub-floor in the patient compartment shall be constructed of .125" thick aluminum over .125" and .190" thick reinforcing hat sections and mounting laterals. The aluminum sub-floor shall be covered with a single piece of 3/4" **non-wood composite material**. All corner molding, edging and trim shall be anodized aluminum or stainless steel and shall be sealed to prevent fluids from seeping under the cabinets.

Wood floors are not satisfactory and shall not be accepted by the purchaser.

One (1) FLOORING - COVE Y\_\_N\_\_  
50-60-0301

The patient compartment floor radius shall be coved with pre-formed floor coving material. The coving shall be installed behind the vinyl floor covering, along both the street side and curbside walls.

One (1) GLOVE DISPENSER - (3) BOX - ABOVE ENTRY Y\_\_N\_\_  
50-60-0324

An recessed, ABS three (3) - box glove dispenser unit, with a 1/4" clear acrylic hinged access panel with three (3) cut-outs, shall be provided above the curbside entry door. The dispenser shall accommodate three (3) 5.375" wide x 10.375" long x 3.25" deep glove boxes.

One (1) GLOVE DISPENSER - (3) BOX - STREETSIDE (ALUMINUM) Y\_\_N\_\_  
50-60-0328

An aluminum three (3) - box glove dispenser unit, with a 1/4" clear acrylic hinged access panel with three (3) cut-outs, shall be provided inside the left rear door, below the street side rear interior cabinet (#4). The dispenser shall accommodate three (3) 5.375" wide x 10.125" long x 3.25" deep glove boxes.

One (1) GRAB RAIL, TWO (2) 96" STAINLESS STEEL, YELLOW ANTI MICROBIAL OVER Y\_\_N\_\_  
50-60-0341

COT AREA

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Two (2) 1-1/4" diameter stainless steel yellow anti microbial grab rails shall be installed on the ceiling for attendant/ patient balance control and shall be secured to the super structure of the module with mounting brackets. One (1) 96" grab rail shall be located above and to the right of the cot. One (1) 96" grab rail shall be located above and to the left and above cot. Grab rails shall be staggered per dwg #9. Installation of the grab rails shall comply with AMD-008 requirements.

One (1)  
50-60-0391

HEADLINER - REAR PATIENT COMPARTMENT

Y\_\_N\_\_

The headliner in the patient compartment shall be one-piece, seamless, .090 thick aluminum finished with sprayed-on multi-use polychromatic coating.

One (1)  
50-60-0438

I V HANGERS - CEILING RECESSED - CAST PRODUCTS #IV2008-1 (3)

Y\_\_N\_\_

Three (3) Cast Products #IV2008-1 recessed, dual, ceiling I.V. hangers shall be provided. Two (2) installed above the rear cot area, and one (1) above transverse cot area.

One (1)  
50-60-0451

I V POLE - 1-1/4" DIAMETER, TWO (2) IN TRANSVERSE AREA

Y\_\_N\_\_

Two (2) IV poles (yellow antimicrobial) shall be mounted on right wall in transverse area. The poles shall be 1 1/4" in diameter and capable of supporting an IV pump.

One (1)  
50-60-0626

OXYGEN/ AIR OUTLETS (8) - (4)OHIO MEDICAL, (4)MEDICAL AIR FLUSH MOUNTED

Y\_\_N\_\_

A total of eight (8) - four (4) Ohio Medical and (4) Medical Air flush mounted, quick release outlets shall be installed in the patient compartment: One (1) Ohio Medical and one (1) Medical Air shall be located street side forward cabinet (#3); one (1) Ohio Medical and one (1) Medical Air shall be located on the street side wall near second patient transport; one (1) Ohio Medical and one (1) Medical Air shall be located in curb side wall to the left of upper cabinet (#1); and one (1) Ohio Medical and one (1) Medical Air shall be located in the ceiling above the head of the cot.

One (1)  
50-60-0630

FLOW METERS, OXYGEN AND MEDICAL - THORPE STYLE

Y\_\_N\_\_

Two (2) Thorpe style flow meters , one (1) oxygen air and one (1) medical air (15LPM) shall be shipped loose with the completed vehicle.

One (1)  
50-60-0642

MEDICAL AIR SYSTEM, ELECTRIC - MULTIPLEX ELECTRIC SYSTEM

Y\_\_N\_\_

A 12 VDC controlled electric medical air system operated through the v-mux multiplex electrical system shall be provided and installed.

The medical air system shall be completely installed and include a pre-set medical air regulator with a cylinder pressure gauge and a 200 PSI safety valve with all necessary piping and connections. The medical air system shall be completely low pressure, and the regulator shall be fastened directly to the cylinder. The regulator shall be set to operate at approximately 50 PSI. The medical air cylinder shall be installed so the system may be easily turned on and off at the main cylinder valve from the patient compartment. The medical air cylinder shall be provided by the purchaser.

The medical air system monitor shall be readily available to the attendant while seated at the head of the cot as part of the microprocessor based electrical system. Flexible conductive medical air hose with a minimum 900 lbs. burst rating shall be installed between the regulator and the medical air receptacles. The system shall be tested and tagged in conformance with NFPA-56-F and KKK-A-1822F.



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One (1) 50-60-0660	The electric medical air system shall be provided with an on/off switch on the attendant control panel screen. The emergency manual bypass valve shall be located near the medical air storage compartment in the patient compartment. PADDED EDGING PROTECTION	Y__N__
One (1) 50-60-0661	Padded corner edging shall be installed where necessary on exposed corners and edges in the patient compartment for patient and attendant protection. PADS, HEAD AND BACK	Y__N__
One (1) 50-60-0713	Vinyl upholstered, foam cushioned head/back pads shall be installed as follows: the lower edge of the upper front wall cabinet (above the partition doorway or window), above the rear doors, above the side door, and on the street side wall behind and each side of the CPR seat. The pads shall be covered with a flame retardant color coordinated vinyl upholstery material. SHARPS WITH SLIDE-OUT DRAWER LEFT SIDE	Y__N__
One (1) 50-60-0730	A pull-out 5 quart waste container and a 1.5 quart sharps container shall be provided and installed within a slide-out drawer located under the primary action area. DOOR PANELS - MODULE PASSAGE DOORS - FULL LENGTH ALUMINUM - W/ACCESS PANELS	Y__N__
One (1) 50-60-0761	The inner door panels shall be manufactured from aluminum, and covered with a washable sprayed-on multi-use polychromatic coating. The panels shall run the full length of the door and will contain a removable latch access panel. STAINLESS STEEL WALL PROTECTION - INTERIOR STREETSIDE	Y__N__
One (1) 50-60-0820	A brushed stainless steel panel shall be provided on the street side wall from the bottom of the CPR seat cushion down to the flooring material to protect this area when the cot is taken in or out of the vehicle. TURTLE TILE - SKID-RESISTANT MAT, CURBSIDE STEPWELL	Y__N__
One (1) 60-01-0001	Skid resistant charcoal gray turtle tile matting shall be installed in the curbside step well. PAINT PROCEDURE	Y__N__
One (1) 60-01-0002	All non-anodized aluminum module body surfaces shall be completely chemically steam cleaned, filled with premium body filler as needed, sanded smooth and primed with an epoxy primer and then primed again with a high solid primer. The cured primer surfacer shall be DA sanded with 320 grit and cleaned. A high solid primer shall then be applied, where needed, as a sealer. PAINT MODULE - OEM WHITE	Y__N__
One (1) 60-01-0003	The module shall be painted with a low voc Axalta polyurethane paint, to match the OEM chassis color, at a dry thickness of no less than 2 to 2.5 mils. CLEAR COATING - MODULE PAINT	Y__N__
One (1) 60-01-0004	The entire module shall be clear-coated, using an Axalta Process, sprayed over the final paint coat. BUFFING, PAINT - MODULE	Y__N__
One (1)	The paint on the module sides shall be buffed to a high shine using a recommended paint buff system. STANDARDS AND SPECIFICATIONS FOR VEHICLE PAINT APPEARANCE	Y__N__

# Braun Industries, Inc.

60-01-0005

## Standards and Specifications for Vehicle Paint Appearance

1. **PURPOSE:** To provide cosmetic standards that represent a common language and set of shared expectations of the appearance quality the Bidder's vehicle. This and associated documents define the appearance acceptability and non-acceptability criteria for the Bidder's Ambulance. These standards represent a realistic balance between our Customer expectations and the derived output from our current manufacturing process. Any output required beyond these objectively based requirements requires extraordinary means and comes with associated costs and timing.
2. **SCOPE:** These standards apply to all of the Bidder's vehicles being produced beginning in calendar year 2016.
3. **DEFINITIONS:**
  - 3.1 Class A Surfaces are defined as:
    - A. Highly Visible or reflective surfaces that cause the viewer's eye to focus on that area of the vehicle.
    - B. The exterior of the vehicle from 36 inches off of the ground to 96 inches off of the ground.
    - C. Areas that passengers of the vehicle would view in a normal viewing direction of (+/- 45 degrees) and a distance of (24 Inches – 36 inches).
  - 3.2 Class B Surfaces are defined as;
    - A. Less visible area that is viewed as a general area. This would include areas beyond the normal viewing direction as specified in Class A surfaces including those higher than 96 inches off of the ground or lower than 36 inches off of the ground.
    - B. Another description would include areas seen peripherally.
    - C. Any area that must be viewed at an unusual angle.
  - 3.3 Class C Surfaces are defined as;
    - A. Any area that must be viewed by close inspection.
    - B. This would include the roof area of a cab.
    - C. Any area that would be visible less than 1% of the time such as door jams or the back of doors including those on the module
  - 3.4 Class D Surfaces are defined as;
    - A. Areas that the consumer will be unable to evaluate without removal of other component parts.
    - B. Any area that must be viewed at an abnormal or unusual angle.
    - C. Any area that can only be seen when lying on the ground, from under the vehicle, or require a ladder to see, such as the roof.

10002-0001

05/06/20

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## 4. PROCEDURE:

### 4.1 General Inspection Requirements:

- A. Cosmetic inspection by the Bidder or its suppliers shall use the TIME and DISTANCE method of inspection as described in different sections of this document.
- B. The Cosmetic standards defined in this document shall be used for training personnel, checking surface quality produced by any process and used in making "Accept/Reject" decisions.

### 4.2 Viewing Conditions:

- A. All visual inspection will be made under normal artificial lighting, unaided and viewed in a manner that duplicates the typical end use of the vehicle. During cosmetic inspection, only visual qualities (appearance) of the part surface shall be considered. Surfaces shall be viewed without the aid of magnification, at an angle approx. 45° to normal of the surface to be inspected.

### 4.3 The following are Inspection criteria:

- A. Inspection shall be conducted using the unaided eye.
- B. Viewing distance shall be 18" or 24" as specified by surface class.
- C. Viewing angle shall be at a minimum of 45° to the surface.
- D. Light source shall be fluorescent light; the light source shall provide optimal viewing and minimized glare and shadowing of the vehicle.
- E. Where subjectiveness intervenes in the assessment, form/fit/function shall take precedent.

### 4.4 The following table shall be used to determine viewing distance and duration:

<u>Codes:</u>	<u>Class A</u>	<u>Class B</u>	<u>Class C</u>	<u>Class D</u>
Viewing Distance:	18 inches	18 inches	18 inches	24 inches
24 inches				
Viewing Time:	10 seconds	5 seconds	3 seconds	3 seconds
Viewing Area:	50 Inches SQD	50 Inches SQD	50 Inches SQD	50 Inches SQD

### 4.5 Conditions and Acceptance Criteria

- A. The total number of defects per surface shall not exceed the acceptable limit.

### 4.6 Specific boundary samples are logged in the Bidder's Database and reviewed annually at a minimum for applicability.

### 4.7 These standards do not apply to an OEM chassis in which cased, OEM acceptance standards apply unless it has been quoted to meet the Bidder's Appearance Standards.

### 4.8 Any OEM chassis painted by the Bidder will conform to the original OEM acceptance standards unless it has been quoted to meet the Bidder's Appearance Standards.

# Braun Industries, Inc.

## Specification Limits For Vehicle Appearance (Exterior)

ITEM	"A" Surface	"B" Surface	"C" Surface	"D" Surface
Bare Substrate	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>
Pin Hole/Solvent Pop	.5 mm max. size/1 per 50 inches Squared /must be a minimum of 50 inches apart - <b>MUST NOT BE DEEPER THAN THE CLEAR COAT</b>	1.0 mm max. size/1 per 50 inches Squared /must be a minimum of 50 inches apart - <b>MUST NOT BE DEEPER THAN THE CLEAR COAT</b>	1.5 mm max. size/2 per 50 inches Squared /must be a minimum of 25 inches apart - <b>MUST NOT BE DEEPER THAN THE CLEAR COAT</b>	2.0 mm max. size/3 per 25 inches Squared / must be 12 inches apart - <b>MUST NOT BE DEEPER THAN THE CLEAR COAT</b>
Chips/Damage	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>
Cracking	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>
Fish Eyes	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	Must match Boundry Sample
Dings	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>
Dirt - Must "feel" flat	.5 mm max. size/1 per 50 inches Squared /must be a minimum of 50 inches apart	1.0 mm max. size/1 per 50 inches Squared /must be a minimum of 50 inches apart	1.5 mm max. size/1 per 50 inches Squared /must be a minimum of 25 inches apart	2.0 mm max. size/ 3 per 25 inches Squared / must be 12 inches apart
Dry Spray	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	Must match Boundry Sample
Mottling - Color Specific	Must match Boundry Sample	Must match Boundry Sample	Must match Boundry Sample	Must match Boundry Sample
Off Color to Cab or other Module elements	Visually acceptable to the Master Plaque or the Delta E is not greater than 1.5	Visually acceptable to the Master Plaque or the Delta E is not greater than 1.5	Visually acceptable to the Master Plaque or the Delta E is not greater than 1.5	Visually acceptable to the Master Plaque or the Delta E is not greater than 1.5
Orange Peel	Equivalent to # 10 panel MIN.	Equivalent to # 10 panel MIN.	Equivalent to # 10 panel MIN.	Equivalent to # 7 panel MIN.
Overspray	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	Must match Boundry Sample
Paint Drops/Drips	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>
Pits/Porosity	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>
Crooked Mask Lines	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>
Burn Through	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>
Sags/Runs	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>
Scratches	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>
Polishing Swirls (Scratches)	Minimal amount of micro scratches from polishing are acceptable, must not be felt or able to be seen from 24 inches	Minimal amount of micro scratches from polishing are acceptable, must not be felt or able to be seen from 24 inches	Minimal amount of micro scratches from polishing are acceptable, must not be felt or able to be seen from 24 inches	Minimal amount of micro scratches from polishing are acceptable, must not be felt or able to be seen from 24 inches
Shrinking	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>
Thin Paint	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>
Water Spots/Rinse Blisters	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>

# Braun Industries, Inc.

Wet Mark	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>
Wrinkling	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>

## Specification Limits For Vehicle Appearance (Interior)

ITEM	"A" Surface	"B" Surface	"C" Surface	"D" Surface
Bare Substrate	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>
Pin Hole/Solvent Pop	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	N/A
Chips/Damage	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	N/A
Cracking	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	N/A
Dirt - Must "feel" flat	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	<b>1mm in diameter or 1.5mm surface area (L x W) at a minimum of 400 mm apart.</b>	N/A
Dry Spray	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	<b>ALLOWED</b>	N/A
Off Color to other Module elements	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	N/A
Overspray	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	<b>ALLOWED</b>	N/A
Paint Drops/Drips	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	<b>1mm in diameter</b>	N/A
Pits/Porosity	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	N/A
Crooked Mask Lines	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	N/A
Sags/Runs	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	<b>SAG - 2mm Wide by 2mm Long by .5mm High MAX / RUN - 3mm WIDE by 2mm Long by .5mm High MAX</b>	N/A
Scratches	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	N/A
Shrinkage	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	N/A
Thin Paint	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	N/A
Wrinkling	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	N/A

ITEM	"A" Surface	"B" Surface	"C" Surface	"D" Surface
Bare Substrate	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>
Pin Hole/Solvent Pop	.5 mm max. size/1 per 50 inches Squared /must be a minimum of 50 inches apart - <b>MUST NOT BE DEEPER THAN THE CLEAR COAT</b>	1.0 mm max. size/1 per 50 inches Squared /must be a minimum of 50 inches apart - <b>MUST NOT BE DEEPER THAN THE CLEAR COAT</b>	1.5 mm max. size/2 per 50 inches Squared /must be a minimum of 25 inches apart - <b>MUST NOT BE DEEPER THAN THE CLEAR COAT</b>	2.0 mm max. size/3 per 25 inches Squared / must be 12 inches apart - <b>MUST NOT BE DEEPER THAN THE CLEAR COAT</b>
Chips/Damage	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>

# Braun Industries, Inc.

Cracking	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>
Fish Eyes	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	Must match Boundary Sample
Dings	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>	<b>NOT ALLOWED</b>
Dirt - Must "feel" flat	.5 mm max. size/1 per 50 inches Squared /must be a minimum of 50 inches apart	1.0 mm max. size/1 per 50 inches Squared /must be a minimum of 50 inches apart	1.5 mm max. size/1 per 50 inches Squared /must be a minimum of 25 inches apart	2.0 mm max. size/ 3 per 25 inches Squared / must be 12 inches apart
Dry Spray	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	Must match Boundary Sample
Mottling - Color Specific	Must match Boundary Sample	Must match Boundary Sample	Must match Boundary Sample	Must match Boundary Sample
Off Color to Cab or other Module elements	Visually acceptable to the Master Plaque or the Delta E is not greater than 1.5	Visually acceptable to the Master Plaque or the Delta E is not greater than 1.5	Visually acceptable to the Master Plaque or the Delta E is not greater than 1.5	Visually acceptable to the Master Plaque or the Delta E is not greater than 1.5
Orange Peel	Equivalent to # 10 panel MIN.	Equivalent to # 10 panel MIN.	Equivalent to # 10 panel MIN.	Equivalent to # 7 panel MIN.
Overspray	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	Must match Boundary Sample
Paint Drops/Drips	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>
Pits/Porosity	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>
Crooked Mask Lines	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>
Burn Through	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>
Sags/Runs	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>
Scratches	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>
Polishing Swirls (Scratches)	Minimal amount of micro scratches from polishing are acceptable, must not be felt or able to be seen from 24 inches	Minimal amount of micro scratches from polishing are acceptable, must not be felt or able to be seen from 24 inches	Minimal amount of micro scratches from polishing are acceptable, must not be felt or able to be seen from 24 inches	Minimal amount of micro scratches from polishing are acceptable, must not be felt or able to be seen from 24 inches
Shrinking	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>

# Braun Industries, Inc.

Thin Paint	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>
Water Spots/Rinse Blisters	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>
Wet Mark	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>
Wrinkling	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>	<b>NONE ALLOWED</b>
Gaps in Diamond Plate at intersection of Cab Steps	<b>N/A</b>	<b>NONE ALLOWED</b>	<b>N/A</b>	<b>N/A</b>

One (1) CAB - OEM PAINT Y\_\_N\_\_  
60-10-0108

One (1) BLACK REFLECTIVE MATERIAL IN RUB RAILS Y\_\_N\_\_  
60-25-0101

One (1) Rub rails shall incorporate a 5/8" wide black reflective scotchlite safety accent stripe.  
60-30-0200 DOOR REFLECTIVITY Y\_\_N\_\_

Reflective material (25" x 2.5" red/silver chevron style) meeting FMVSS 108 requirements shall be installed on the lower interior stainless steel panel of each rear door and hinged side door.

One (1) If a sliding side door is provided, it shall have a 1.50" x 40.00" white reflective stripe installed on the rear facing edge.  
80-10-0000 KKK-A-1822F COMPLIANCE Y\_\_N\_\_

One (1) A KKK-A-1822F compliance sticker, electrical load analysis sticker, and payload sticker shall be installed in the oxygen compartment. Any deviations from KKK-A-1822F shall be listed in the vehicle delivery packet with a notation on the-compliance sticker.  
80-20-0001 VEHICLE MANUALS (1) PACKAGE SET Y\_\_N\_\_

One (1) One (1) Delivery Manual Package shall be supplied with the vehicle, and shall include the following items:  
90-10-0007 STATEMENT OF LIMITED WARRANTY NEW AMBULANCES Y\_\_N\_\_

- Ambulance manufacturer parts, service and operation manuals
- OEM chassis owner's guide
- Complete 12 VDC and 125 VAC wiring schematics for all included standard and optional systems
- Multiplex Electrical system programming - electronic media

# Braun Industries, Inc.



## BRAUN PERFORMANCE EXCELLENCE SYSTEM

### Statement of Limited Warranty New Ambulances

Document No. and Level:	BPES-P-076-100 / Level II
Effective Date:	Jan 1, 2018
Revision No.	C
Prepared By:	Kim Braun
Owner:	Kim Braun
Page:	1 of 2

#### SOLIDBODY™ MODEL WARRANTY

Subject to the provisions, limitations, and conditions set forth in this warranty, Braun Industries, Inc. (the "Manufacturer") warrants to each original purchaser that its ambulances are free of defects in material and workmanship and shall maintain such integrity under normal use and service. This warranty is valid only in the United States and Canada and all warranty periods start from the date of manufacture and expire per the disclosures listed below. The Manufacturer warrants to repair or replace at its sole discretion; components, installation, or workmanship deemed to be defective under the terms and conditions set forth in this warranty statement. Warranty repairs must be performed by the Manufacturer or by a Braun Authorized Dealer / Service Center.

#### EXCLUSIONS AND LIMITATIONS

**NOTWITHSTANDING ANY OTHER PROVISION HEREOF TO THE CONTRARY, OTHER THAN THE EXPRESS WARRANTIES SET FORTH HEREIN, THE MANUFACTURER MAKES NO OTHER WARRANTY REGARDING THE AMBULANCES, PRODUCTS AND/OR SERVICES PROVIDED BY MANUFACTURER, EXPRESS OR IMPLIED, AND MANUFACTURER EXPRESSLY DISCLAIMS ANY AND ALL OTHER WARRANTIES, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR THE WARRANTY IN SECTION 2-312 OF THE UCC THAT SUCH AMBULANCES AND/OR PRODUCTS DO NOT INFRINGE ON THE RIGHTS OF ANY OTHER PERSON.** The purchaser's right to repair or replacement of defective parts or workmanship is the exclusive remedy, and neither the Manufacturer nor any Braun Authorized Dealer / Service Center shall be liable for damages, whether ordinary, incidental, or consequential under this warranty. Any remedy of consequential damages; including but not limited to economic loss, transportation, mileage, trip charges, wages, etc., and any remedy of incidental damages or loss are hereby excluded. Any acts of God or natural disasters, such as flood, storm, lightning, etc. are excluded. Purchaser's noncompliance with any part of this specific limited warranty shall immediately render the total warranty null, void and non-enforceable.

The purchaser shall use, service and maintain the ambulance according to the written instructions furnished by the Manufacturer and failure of purchaser to properly use, service and maintain the product in accordance with such instructions shall void the warranty, including, without limitation, (i) use of modular body for any purpose other than what it was originally designed to perform, (ii) resale or remounting of modular body without written warranty-transfer approval within the required time period, (iii) overloading the ambulance beyond its applicable weight rating, (iv) overloading the electrical system beyond its applicable electrical load rating, (v) remounting the modular body by anyone other than the Manufacturer or a Braun Authorized Remounter, (vi) defects or damage as a result of misuse, abuse, negligence, damage, or failure to provide normal routine maintenance, and/or (vii) defects or damage as a result of pass-through and after-market work performed by any entity other than the Manufacturer.

This statement of limited warranty does not apply to: (i) any product or

Purchaser shall be responsible and liable for such modifications, alterations, integrations and installations performed by purchaser and purchaser hereby agrees to indemnify and hold harmless Manufacturer and its successors and assigns from all liabilities, obligations, cost, losses, demands, actions, proceedings, claims, damages, and penalties (including, without limitation, all attorney fees) incurred or suffered by Manufacturer and arising or relating to such modifications, alterations, integrations and installations performed by purchaser.

The Manufacturer reserves the right to make changes to the design and features of its products without any obligation to make corresponding changes to products previously manufactured. No other person is authorized to make any representation or warranty on behalf of the Manufacturer or any Braun Authorized Dealer / Service Center, other than as stated in the Manufacturer's warranty.

#### STRUCTURAL WARRANTY

The aluminum modular body (Braun SOLIDBODY™ ambulances) are warranted to be structurally sound and free of joint separation, weld cracks, and all other structural defects in materials and workmanship for the life of the vehicle in accordance with the provisions of this warranty. The original Braun Limited Warranty may be extended to the remounted ambulance when authorized.

Inclusions to warranty – The modular body construction, including seams, joints, door frames, roof, floor, and wall construction. All exterior doors. All aluminum cabinetry.

Exclusions from warranty – Paint finish, sealant deterioration, filler, shrinkage, hardware, moldings, windows, non-aluminum cabinets, and other accessories that are not structural components of the module. Normal wear parts such as door rollers, latches, hinges, etc. Any part or component becoming defective as a result of accident damage or other casualty.

An accident will void the structural warranty. The potential for reinstatement of the structural warranty is dependent on an inspection by the Manufacturer or a Braun Authorized Dealer / Service Center within sixty days of the occurrence. The inspection will determine the structural integrity of the module and if there is an opportunity to reinstate the warranty.

#### TRANSFER OF OWNERSHIP:

The structural warranty may be transferred to a subsequent owner(s) provided that the vehicle is inspected by the Manufacturer or a Braun Authorized Dealer / Service Center within sixty days of transfer of ownership and the warranty revalidation forms are completed and filed with the Manufacturer verifying warranty compliance. A warranty transfer fee, in addition to inspection charges, will apply. Once this warranty has become invalidated by failure to comply with this provision or for any other reason, it cannot be reinstated.

#### CONVERSION WARRANTY

The non-structural construction, assembly and installation of the module is



# Braun Industries, Inc.

component supplied by the purchaser, (ii) any product or component that is added, repaired, modified, altered, or replaced by anyone other than the Manufacturer, or (iii) any component that is not produced by the Manufacturer, and carries its own warranty.

warranted to be free of defects in materials and workmanship for a period of three years from the date of manufacture, or up to 36,000 miles, whichever occurs first. Performance of components and equipment not manufactured by the manufacturer are covered by the applicable warranty from the

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## BRAUN PERFORMANCE EXCELLENCE SYSTEM

### Statement of Limited Warranty New Ambulances

Document No. and Level:	BPES-P-076-100 / Level II
Effective Date:	Jan 1, 2018
Revision No.:	C
Prepared By:	Kim Braun
Owner:	Kim Braun
Page:	2 of 2

supplier of the specific item in question and may be more or less than the three year conversion warranty period and in some cases may not cover labor.

**Inclusion to warranty –** Non-aluminum cabinets, interior doors and acrylic or polycarbonate windows, hardware, latches and locks, trim, wall coverings, floor, kick plates, cot mount hardware, grab handles, IV hangers and other accessories. Braun manufactured seating, head pads, and other cushions and upholstery items. Air conditioning and heating system hoses, connections, and installation. Peeling or de-lamination of the topcoat and/or other layers of graphics. Cracking or checking of the graphics material and loss of gloss or color.

**Exclusion from warranty –** Effects from normal wear/use. Floor discoloration and marring. Damage to graphics caused by chemicals including but not limited to: DEF (diesel exhaust fluid), gasoline, diesel fuel, anti-freeze, power steering fluid, brake fluid, fuel additives, magnesium, calcium chloride, road salt, or other substances which are used to free roads from ice/snow. Damage caused by power washers, or other aggressive forms of washing. Damage caused by rolling, sliding or segmented doors.

#### **CHASSIS WARRANTY**

All new Braun ambulances that are mounted on a new chassis will carry the full OEM warranty, as issued by the specific chassis OEM. This warranty is administered by the chassis OEM's representing dealer and is subject to the guidelines, restrictions, and limitations that they set forth. This warranty does not apply to any portion of the truck or chassis directly included in the alteration process – including materials added to and work accomplished on the original chassis by a vehicle modifier. Should any chassis service/repairs be required due to Braun alterations, such repairs/service are covered under the Braun warranty for a term equal in duration, and in every other aspect, to the warranty provided by the OEM for the applicable chassis model year. The purchaser should complete an alignment after the unit is loaded and readied for use, as added weight and weight distribution will affect vehicle alignment. Alignments are not covered by OEM nor Braun warranty.

#### **ELECTRICAL WARRANTY - MASTERTECH**

The MasterTech microprocessor based, multiplex electrical system is warranted to be free of mechanical, electrical, and physical defects (excluding lamps, switches, and electrical display screens) for a period of seven years from the date of manufacture (up to 84,000 miles), whichever occurs first. The electrical display screens are also covered by a seven year pro-rated warranty, with a maximum allowable coverage of \$200 for parts replacement after three years. Labor is covered for the entire seven year period.

**Inclusion to warranty –** All Manufacturer installed wiring, wiring terminals,

#### **ELECTRICAL WARRANTY - TRADITIONAL**

The electrical wiring harness, electrical components, and electrical system installation and workmanship are warranted to be free of defects for a period of five years from the date of manufacture (up to 75,000 miles), whichever occurs first. Performance and function of components and equipment not manufactured by the manufacturer are covered by the applicable warranty from the supplier of the specific item in question and may be less than the five year electrical warranty period, may not cover labor and may require repair instead of replacement.

**Inclusion to warranty –** All Manufacturer installed wiring, wiring terminals, connectors, relays, rocker switches, circuit breakers, diodes, solenoids, voltmeters, ammeters, and hour meters. Installation and proper wiring of components.

**Exclusion from warranty –** Chassis electrical systems which are covered by the chassis OEM. Batteries and alternator systems which are covered by the OEM warranty. Light bulbs, batteries, and other normal wear/consumable type items.

#### **PAINT WARRANTY**

The pro-rated paint warranty covers the areas of the ambulance body finished with paint products specified by the Manufacturer for a period of seven years from the date of manufacture, or up to 84,000 miles, whichever occurs first. The first four years, or up to 48,000 miles, are covered at 100% parts and labor. The fifth year or up to 60,000 miles, is covered at 75% parts and labor. The sixth and seventh years or up to 84,000 miles, are covered at 50% parts and labor. Paint repairs must be pre-authorized by the Manufacturer and performed by the Manufacturer or an Authorized Braun Dealer / Service Center.

**Inclusion to warranty –** Peeling or de-lamination of the topcoat and/or other layers of paint. Cracking, checking or loss of gloss. Any paint failure caused by defective materials which are covered by this warranty. Corrosion caused by improper surface preparation, dissimilar metal reaction or improper paint application.

**Exclusion from warranty –** Paint deterioration caused by road salt, magnesium, calcium chloride, or other substances which are used to free roads from ice/snow. Paint deterioration caused by accidents, acid rain, chemical fallout, acts of nature, or the lack of routine maintenance such as regular washing and waxing or the failure to touch-up stone chips. Damage caused by chemicals including but not limited to: DEF (diesel exhaust fluid), gasoline, diesel fuel, anti-freeze, power steering fluid, brake fluid, fuel additives, abrasive cleaners, etc. Failures resulting from product misuse or

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connectors, nodes and electrical display screens. Initial programming and proper system functions. Installation and proper wiring of standard and specified optional components such as fans, lights, sirens, compressors, IV warmers etc.

Exclusion from warranty – Chassis electrical systems which are covered by the chassis OEM. Batteries and alternator systems which are covered by the OEM warranty. Light bulbs, batteries, and other normal wear/consumable type items.

abuse including but not limited to stone chips, scratches, gouges, other impact damage, etc. Hazing, chalking or loss of gloss caused by improper care, abrasive polishes, cleaning agents, pressure washing, or aggressive mechanical wash systems. Failure of finishes that were applied without the prior, written authorization of the Manufacturer.

NOTE: Copies of these Warranties shall be provided to the purchaser in the bid response.

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