

**AMBULANCE SPECIFICATIONS**

**TYPE III FORD**

**150" BOX**

**E-350**

**2009**

## OFFICIAL BID PROPOSAL

PLEASE SIGN IN INK, IN THE SPACE PROVIDED. FAILURE TO DO SO WILL RESULT IN A NON-RESPONSIVE BID.

IT IS AGREED BY THE UNDERSIGNED BIDDER THAT THE SIGNING AND DELIVERY OF THIS BID REPRESENTS THE BIDDER'S ACCEPTANCE OF THE TERMS AND CONDITIONS OF THESE SPECIFICATIONS AND, IF AWARDED, THIS BID WILL REPRESENT THE AGREEMENT BETWEEN THE PARTIES.

NAME OF FIRM: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_

TELEPHONE: (\_\_\_\_) \_\_\_\_\_

TITLE: \_\_\_\_\_ PRINT NAME: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

FINAL VEHICLE MANUFACTURER: \_\_\_\_\_

TYPE: \_\_\_\_\_

CHASSIS: YEAR: \_\_\_\_\_ MAKE: \_\_\_\_\_ MODEL: \_\_\_\_\_

DELIVERY: \_\_\_\_\_

PURCHASE PRICE: \_\_\_\_\_

TERMS: \_\_\_\_\_

EXCEPTIONS TO SPECIFICATIONS: NO (\_\_\_) YES (\_\_\_)

## SPECIFICATIONS

The following chassis must comply with current KKK-A-1822 and it is up to the responding bidder to confirm that the vehicle being bid meets those requirements. Should the delivered vehicle not comply with the specifications, it will not be accepted.

### 1. CHASSIS

2009 Ford E350 cutaway with ambulance builders prep package #47A

10,700-pound GVWR

138" wheelbase

6.0L Power Stroke<sup>®</sup> turbo diesel V8 engine

5 speed TorqShift<sup>™</sup>. automatic transmission

Power Steering, tilt wheel, and cruise control.

Power brakes with 4 wheel ABS disc with Hydro Boost

Parking brake, cable actuated variable ratio

Heavy-duty factory air conditioning

Extra engine cooling package

Tinted glass

Seat belts, both lap and shoulder for driver and passenger

Factory OEM vinyl captain's chairs with inboard armrests

Chrome front bumper

Exterior mirrors manual swing out telescopic mirrors built in convex mirror

Alternator, dual OEM 130 amp

Dual heavy-duty batteries 750 CCA mounted in an exterior compartment under the als

Gauges required: ammeter – 300-amp shunt type, temperature, oil pressure, and fuel.

Single factory installed fuel tank with 37-gallon capacity.

Front axle – 4600-pound capacity

Rear axle – 7800-pound capacity

Rear axle ratio – 4.10:1 limited slip

Heavy-duty front springs with stabilizer bar

Heavy-duty rear leaf springs with stabilizer bar

Heavy-duty shock, front and rear

Air bags – driver and passenger

A-Pillar interior grab handle – driver and passenger

AM/FM radio with digital clock and single cd

OEM idle control

Intermittent windshield wipers

LT225/75RX16E BSW all season tires

Factory electric horns

Exterior sound package

Inside hood release

12-volt power point

Spare tire, wheel, and tire changing tools

Remote keyless entry

### CHASSIS OPTIONS:

Diamond plate running boards

Stainless steel wheel simulators

Aluminum wheels (4)

2. DRIVER COMPARTMENT:

- A. OEM entry door panels.
- B. Padded head knockers over module entry door.
- C. Lockable partition door with see thru window

3. ROOF CONSTRUCTION:

- A. Roof frame structure of 2" x 2" x .125" and 1" x 2" x .125" aluminum tubing forming a grid structure which allows for the routing of the wire harnesses without cutting frame members.
- B. 13" centers .
- C. Upper roof extrusions to incorporate a permanent drip molding.
- D. Single piece .125" aluminum roof skin fully welded to the entire circumference of the roof structure
- E. All frame members alloy of 6063-T6.
- F. Certified to static school bus load test standard #001.
- G. 68" interior headroom.
- H. Head liner constructed of white gel coated fiberglass with padded cover over center wire race.
- I. .188 roof extrusion designed to interlock with roof skin and side panels. Extrusion alloy to be 6063-T6.

4. WALL CONSTRUCTION

- A. Entire module structure to be .125" or heavier aluminum.
- B. Single piece .125" aluminum sheets shall be attached to wall frames utilizing a 3M brand acrylic bonding system rated at 50,000 psi.
- C. Each wall shall be a fully framed structure as regards compartments, doorways, and the ends of each wall.
- D. All structural frame components to be 2" x 2" or 2" x 3" .125" tube aluminum.
- E. .188" corner extrusions of 6063-T6 aluminum shall interlock each wall unit the entire height of said wall unit, holding the wall skin and the 2 x 2 or 2 x 3 frame in a recess channel. The extrusion and wall shall be skip welded every 4" with a 4" weld the entire height of the wall
- F. 12" centers.
- G. Exterior compartment drip rails over all exterior doors.
- H. 15 year structural warranty included with bid, renewable at each remount.
- I. Interior metal .125" aluminum tubes welded to frame for support and attaching of interior cabinets.
- J. 5/8" x 3" metal tapping plates welded to frame for support of installed seat belts and any special applications.
- K. All hardware and fasteners to be stainless steel.

## 5. FLOOR CONSTRUCTION

- A. One piece, seven ply exterior grade,  $\frac{3}{4}$ " plywood floor
- B. Flooring extends full length and width of patient compartment.
- C. Commercial Lonseal brand gray Loncoin floor covering.
- D. Framing of 2" x 2" .250" aluminum tubing and 2" x 4" .250" aluminum channel.
- E. Frame welded to side wall frames and exterior compartments for strength and durability.
- F. .050" moisture shield between frame and plywood floor.
- G. Flooring to extend up side wall 3".

## 6. DOORS

- A. Single side door on curbside with opening of 30" wide by 67" high.
- B. Curbside and rear doors provide unobstructed access to and from patient compartment.
- C. Double rear doors with opening of 46" wide by 56" high.
- D. Upper half of patient compartment doors are covered with a single sheet of "Kydex".
- E. There shall be a removable panel to allow easy access to interior latches on patient compartment doors.
- F. All latches, hinges, and hardware shall comply with FMVSS 206.
- G. All doors to be constructed of a single sheet of .125" aluminum outer panel.
- H. Door frame shall be an aluminum extrusion, slotted to hold the outer sheet and welded to the door frame. The extrusion wall shall be constructed in such a way as to utilize two adhesive backed seals (1 inside door extrusion and 1 inside door frame).
- I. All doors shall be 2.5" thick.
- J. Doors to have full length,  $\frac{1}{4}$ " pin stainless steel slotted piano hinge attached with stainless steel screws. There shall be a moisture barrier applied between dissimilar metals (ECK or equal)
- K. All doors fitted with Cleveland type, cam operated closures with all-thread rod assembly.
- L. All doors fitted with stainless steel, flush fit "paddle" latches with lock.
- M. Entry doors lockable from inside module.
- N. All doors to be fully insulated.
- O. Compartment door panels to be .125" polished diamond tread.
- P. All locking devices to be Eberhard series 400 rotary locks with nader type pins in door frames.
- Q. All entry doors to have single window in upper portion with fixed panes or movable pane with stationary screen.
- R. Curbside entry door step well to be automatically lighted when opened.
- S. Interior, V-shaped handicap type entry door grab handles

## 7. BODY MOUNTING

- A. Dual 5/8" x 3" flat bar bolted through OEM donuts in original factory locations.
- B. Minimum ten (10)  $\frac{1}{2}$ " grade 8 bolts.
- C. No oak sills or any mounting system allowed that might void chassis warranty.
- D. All undercarriage voids to be sealed with approved rubber and silicone sealants.
- E. Undermodule undercoating per current Federal KKK-1822 specifications.
- F. Heat Shield

8. EXTERIOR DIMENSIONS:

- A. 150" module length.
- B. 95" module width.
- C. 87" module height.
- D. 68" minimum interior head room.

9. FENDERS:

- A. Fender extensions attached to side panels at wheel wells.
- B. Polished cast aluminum construction bolted on for ease of replacement.

10. REAR BUMPER STEP/TRIM:

- A. Full width construction.
- B. Center section to be aluminum open grate with flip-up.
- C. 2" x 2" x .125" steel tubing and diamond tread construction.
- D. Stainless steel piano hinge with 1/4" pin.
- E. Full length riser kick panel below rear doors and above bumper constructed of diamond tread.
- F. Diamond tread rub rails along lower edge of module skirt.
- G. End cap covers of .125" aluminum diamond tread.

11. AMBULANCE LETTERING AND PAINT:

- A. Federal DOT Ambulance decal package, blue reflective, die-cut and place to specifications.
- B. All exterior surfaces shall be prepared and painted in accordance with current Federal KKK specifications.
- C. 10" Belt line stripe.
- D. Color standards and tolerances to conform with current Federal KKK specifications.

12. SCENE LIGHTS:

- A. Four scene lights, two per side.
- B. Two load lights over rear doors.
- C. One hand held 200,000 candle power spotlight hardwired into system.
- D. Load lights to automatically activate when rear or side entry doors are opened.
- E. Entire system to conform to current Federal KKK specifications.

13. EXTERIOR WARNING LIGHTS:

- A. Eight (8) red halogen lights-two front, two rear, and two each side of module.
- B. One forward facing clear lens halogen light on front of module.
- C. One amber lens halogen light on rear of module centered above rear doors.
- D. Two red halogen grill warning lights.
- E. Two red halogen fender mounted intersection warning lights.
- F. All warning lights to be Whelen or equal.
- G. Primary/secondary function.
- H. Entire emergency lighting system to conform to current Federal KKK specifications.

14. AUDIBLE WARNING EQUIPMENT (SIREN):

- A. 200 watt electronic siren, Southern VP SS-700 or equal with full function, including PA, airhorn, manual, wail, yelp, phaser, and horn override.
- B. Two cpi 100 watt speaker / grill light combo's mounted on the top of each side of the bumper.
- C. Horn/siren switch on control panel for siren control through horn ring.
- D. Entire system to conform to current Federal KKK specifications.

15. ELECTRICAL POWER SYSTEM:

- A. Batteries mounted in exterior compartment.
- B. Dual Ford factory alternators.
- C. Wiring looms to be high temperature Packard electric split type.
- D. GXL wiring with function code printed every 6".
- E. All wiring harnesses utilizing machine crimped amp style connectors.
- F. Power Control Panel (PCP) located in exterior lockable compartment (no exceptions).
- G. Power Control Panel to be easily accessible for service.
- H. All load bearing wiring minimum 12 awg.
- I. Wiring installation to be automotive harness design (minimum 3).
- J. Entire system to conform to current Federal KKK specifications.
- K. Automatic reset circuit breakers.
- L. Inverter pre-wiring with switch, cables, and transfer switch.

16. PATIENT COMPARTMENT ELECTRICAL:

- A. Eight (8) dual intensity recessed halogen lights, four over primary patient and four over squad bench.
- B. Two 110 volt A.C. duplex wall outlets – GFI protected with “energized” indicator light and wired to exterior shoreline. One to be located in the action area and one in ALS compartment.
- C. Full length, padded wiring harness access panel.
- D. Pre-wired with two medical radio antenna coax cable.
- E. Two 12 volt D.C. outlets on action wall.

17. DRIVER'S CONSOLE

- A. Choice of dash mount, engine cover mount, or floor console.
- B. All switches back lighted and permanently labeled.
- C. Lighted paddle type master switch.
- D. Warning light and scene light control switches.
- E. Horn/siren switch.
- F. Door ajar indicator.
- G. Compartment ajar indicator.
- H. OEM electronic auto throttle set to automatic.
- I. Back-up alarm disable with momentary type switch that resets when reverse is disengaged.
- J. Silent three light intercom, with buzzer.
- K. Patient compartment dome lights.

18. ACTION WALL

- A. Technician switch panel on hinged access door.
- B. Dome light intensity control switches.
- C. Electric suction motor switch.
- D. Power exhaust vent switch.
- E. Silent intercom.
- F. Dual recessed oxygen outlets.
- G. Single recessed suction outlet.
- H. Open work area with suction collection jar.
- I. EMT light with switch.

19. ENVIRONMENTAL EQUIPMENT

- A. High capacity heavy duty three-speed combination heater/air conditioner system conforming to current Federal KKK specifications, Hoseline or equal.
- B. Two vacuum-controlled automatic shut off valves for rear heater hoses
- C. Body sides, roof, and doors to be insulate with R-13 expandable foam.
- D. Electric power exhaust vent in patient compartment with switch at action wall panel.

20. PATIENT COMPARTMENT MEDICAL:

- A. Dual medical oxygen outlets recessed into action wall.
- B. Single Ohio medical oxygen outlet recessed in wall over squad bench.
- C. Rico RS-4X suction system with 12-volt electric pump vented to exterior.
- D. Two IV hooks with restraining straps.
- E. Ferno Washington Model 175-1 cot mount.

21. SAFETY FEATURES:

- A. Padded vinyl door trim panels and head knockers.
- B. All vinyl to be heavy duty type with minimum thickness of .046".
- C. All seat cushions on squad bench and attendant seat are minimum of 3" thick.
- D. Overhead grab rail 80" of single piece construction.
- E. Interior, V-shaped handicap type entry door grab handles
- F. Seat belts bolted to frame structure.
- G. Two "No Smoking" signs.
- H. Two "Fasten Seat Belts" signs.
- I. Certified o2 cylinder retention device.

22. TECHNICIAN SEAT:

- A. Padded high back vinyl seat on pedestal.
- B. Retractable seat belt bolted to chassis structure.

23. SQUAD BENCH:

- A. Split bench lid with hold open device.
- B. Padded full length back rest.
- C. Three sets of retractable seat belts.
- D. Stretcher post and wheel cups in squad bench lids.
- E. Under bench storage.

24. PATIENT COMPARTMENT CABINETS:

- A. Streetside wall cabinets, squad bench, and front wall cabinets to conform to attached drawings.
- B. Cabinetry constructed of  $\frac{3}{4}$ " seven ply plywood covered with  $\frac{1}{16}$ " plastic laminate.
- C. Shelving to be adjustable.
- D. All plexiglass to be  $\frac{3}{16}$ " installed in extruded aluminum frames with replaceable track section.
- E. Door with window between cab and patient compartment.
- F.  $\frac{3}{4}$ " x  $\frac{1}{4}$ " groove and dadoes construction for strength and durability.
- G. All interior cabinets lined with white Formica.
- H. All exposed corners and edges broken with  $\frac{1}{2}$ " radius or chamfer or covered with Highly polished trim.

25. SPECIAL FEATURES:

- A. Undermodule undercoating per current Federal KKK-1822 specifications.
- B. Patient compartment length 146" interior.
- C. Headroom 68" interior minimum.
- D. Pass through at right front exterior compartment
- E. Markings and data plates conforming to current Federal KKK specifications.
- F. Locking drug box.
- G. Three light/buzzer intercom system.
- H. Patient compartment sound level conforming to current Federal KKK specifications.
- I. 15 year module warranty, renewable at remount.

26. EXTERIOR COMPARTMENTS:

- A. #1 – Streetside: 70" high x 15.5" wide x 16" deep, o2 storage
- B. #2 – Streetside: 36.5" high x 34.5" wide x 5" deep, Power Distribution Panel (no exceptions)
- C. #3 – Streetside: 31.5" high x 34.5" wide x 16" deep.
- D. #4 – Streetside: 31.5" high x 35" wide x 16" deep.
- E. #5 – Curbside: 80" high x 15" wide x 20" deep, backboard storage.
- F. #6 – Curbside: 29" high x 25.75" wide x 16" deep.
- G. #7 – Curbside: 70" high x 30.75" wide, side entry door.
- H. #8 – Curbside: 55" high x 18.25" wide, inside/outside storage.
- I. #9 – Curbside: 13" high x 18.25" wide, battery
- J. All compartments constructed of .125" aluminum diamond tread.
- K. Fully welded seams.
- L. All locks keyed alike.
- M. Spring loaded hold open devices on compartments 1, 2, 3, 4, 7 and 8.
- N. Compartment #8 – right front to contain two adjustable shelves.