



STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
TECHNICAL SPECIFICATIONS FOR

TRUCK, CAB & CHASSIS, 35,000# GVWR, FLATBED

SERIES NO. 170-000

REV. 3/20/2024

EQUIPMENT SPECIFICATION 170-000P

GENERAL

This specification sets forth the minimum requirements for a truck, cab & chassis, 35,000# GVWR with a flatbed.

Equipment shall be new, a production model of current manufacture, and must meet all state and Federal safety and emission standards in effect at time of order.

REPRESENTATIVE SPECIFICATIONS

An International MV607 chassis intended to be used for herbicide spray applications with appropriate options and standard features, was used to develop these specifications and establish equivalency evaluation criteria.

Equipment of similar style, type, character, quality, features, and purpose conforming to the following detailed requirements/specifications will be considered. For evaluation purposes, bidders proposing an exception/equivalent option/feature to those specified herein, may be required to provide manufacturer/product information (catalogue sheets, detailed specifications, pictures, etc.). This information will be evaluated against the minimum requirements of this specification. Proposed submittals that are determined not to be equivalent to the established criteria will be rejected.

LOUISIANA AUTHORIZED DEALER(S)

Proposed item(s) must be from a manufacturer who has at least one (1) authorized dealer **within the State of Louisiana** where parts and service can be obtained. Authorized dealer(s) must have properly trained technicians plus all other resources necessary to perform warranty and repair services in complete accordance with the manufacturer's requirements. A letter certifying the ability to meet this requirement, inclusive of the company name(s) and address(es) of the Louisiana authorized dealer(s), should be supplied with the bid submittal and may be required prior to award.

DELIVERY & ACCEPTANCE

Vendor shall perform a test run of each unit to verify that all features and capabilities are operating properly at time of delivery. Documentation of testing may be required prior to acceptance by the Department.

Unit(s) must be delivered completely assembled (including all components, accessories, etc.) and ready for operation without any additional preparation including, but not limited to, ensuring all fluid levels are at their full mark, fuel tank(s) is full, all necessary lubrication has been performed, etc. A Louisiana safety inspection shall be performed on each vehicle prior to delivery and a Louisiana safety inspection sticker properly affixed.

Any unit delivered under this specification is subject to rejection if there is evidence of poor workmanship, by either the vendor or the original manufacturer. Noted defects and/or nonconformance findings may



be corrected by the vendor. Corrections must be completed and approved by the Equipment Engineer or his representative prior to final acceptance.

Unit(s) shall be delivered "**on the ground**;" DOTD will not unload nor provide any unloading equipment to the vendor/delivery driver in order to offload the unit(s).

NOTE: The Department will have space available for equipment to be unloaded.

EACH UNIT MUST BE SUPPLIED WITH THE FOLLOWING DOCUMENTATION AT TIME OF DELIVERY:

1. Notarized Bill of Sale
2. Original Certificate of Origin (MSO), (no photocopy)
3. Dealer's Service Policy
4. Owner's/Operator's Manual(s)
 - a. One (1) Hardcopy
 - b. One (1) Digital Copy
 - i. Acceptable Formats: PDF delivered via USB "Flash Drive", or E-mail
5. Service Manual(s)
 - a. One (1) Hardcopy
 - b. One (1) Digital Copy
 - i. Acceptable Formats: PDF delivered via USB "Flash Drive", or E-mail
6. Build Sheet(s) – as applicable
 - a. One (1) Hardcopy
 - b. Build sheets should be written in plain language (not company specific codes) and include, at a minimum, all standard & optional features of the delivered unit.

NOTE: Invoices will not be processed for payment until the unit(s) have been inspected by the Equipment Engineer or their representative and deemed in compliance with the specifications.

BID SUBMITTALS

Any additions, deletions, or variations from the specifications should be noted in the "Bidder's Exceptions" page of this specification. Exceptions that are noted to be less than a minimum requirement will not be accepted.

Any additions, deletions or variations from the manufacturer's standard published specifications should be noted on the "Bidder's Exceptions" page of this specification. Unless otherwise noted, any items appearing in the manufacturer's standard published specifications furnished by the Bidder are assumed to be included in the Bidder's submittal.

Bidder should note on their submittal any installation(s) to the equipment that will be performed by the vendor instead of the manufacturer.

Failure to note any specification exceptions, manufacturer specification alterations, and/or vendor installations prior to award may result in rejection of the equipment at the time of delivery.

THE NUMBER OF DELIVERY DAYS AFTER RECEIPT OF ORDER (ARO) MAY BE USED AS A FACTOR IN THE AWARD.

EQUIPMENT SPECIFICATIONS

NOTICE TO BIDDERS

Bidder should review the detailed "Equipment Specification" completely and respond to the compliance question at the end of each section by marking "X", in the space provided, for "Yes" or "No". Mark "Yes" to indicate that the equipment bid meets the section exactly as specified. Mark "No" if there are exceptions to any part of that section. Exceptions/deviations to any part of the specification are to be detailed on the "Bidder's Exceptions" page of this specification.

IN ORDER TO BE CONSIDERED FOR AWARD, BIDDER SHOULD RETURN THIS SPECIFICATION, COMPLETED IN FULL, WITH THEIR BID SUBMITTAL.

Note: All values listed below are minimums unless noted otherwise.

1. Cab & Chassis

1.1. GVWR: 35,000 lbs.

Comply: ___ Yes ___ No

1.2. Frame: 2,000,000 RBM (Resisting Bending Moment) - Bidder should list section modulus and yield strength below

Section Modulus: _____ Yield Strength: _____

Comply: ___ Yes ___ No

1.3. Cab & Axle Positions

1.3.1. Front axle: For the purposes of this solicitation, set-forward-axle (SFA) is considered equal to set-back-axle (SBA); however, SBA is the preferred option

1.3.2. Wheelbase: 204"

1.3.3. Cab to Axle (CA):138" clear*

1.3.4. Values given here are minimums. Truck vendor and Herbicide Sprayer manufacturer shall coordinate in selecting a wheelbase and cab to axle dimension that is compatible with the required body length and ensures proper load distribution to the axles in accordance with manufacturer and industry practice.

Comply: ___ Yes ___ No

1.4. Front Bumper

1.4.1. Full width all-steel front bumper

1.4.2. Two (2) frame mounted tow hooks

Comply: ___ Yes ___ No

1.5. Cab

1.5.1. Conventional day cab

1.5.2. Tinted safety glass

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- 1.5.3. Full width exterior cab mounted sun shade with integral clearance lights
- 1.5.4. Cab entry handles, driver & passenger side
- 1.5.5. Outside mirrors, driver & passenger side
 - 1.5.5.1. Power adjustable
 - 1.5.5.2. 90 sq. in. minimum
 - 1.5.5.3. Heated with integrated turn signals
 - 1.5.5.4. Two (2) adjustable spot mirrors, one (1) per outside mirror
- 1.5.6. Two (2) roof mounted air horns & one (1) standard electric horn
- 1.5.7. Air ride: driver and passenger seat, cab suspension
- 1.5.8. Driver and Passenger seat to be high back with lumbar support
- 1.5.9. Manufacturer's highest level sound insulation package
- 1.5.10. Wing dash, if available
- 1.5.11. Gauge package including the following gauges:
 - 1.5.11.1. Air cleaner restriction
 - 1.5.11.2. Coolant temperature
 - 1.5.11.3. DEF only DEF is required to meet emission standards
 - 1.5.11.4. Fuel
 - 1.5.11.5. Oil pressure
 - 1.5.11.6. Primary and secondary air pressure
 - 1.5.11.7. Speedometer
 - 1.5.11.8. Tachometer
 - 1.5.11.9. Voltmeter
 - 1.5.11.10. Gear indicator
 - 1.5.11.11. Odometer
 - 1.5.11.12. Total engine hours
 - 1.5.11.13. Trip hours
 - 1.5.11.14. Trip odometer
 - 1.5.11.15. Rear axle oil temperature
 - 1.5.11.16. Auto transmission oil temperature
 - 1.5.11.17. Engine oil temperature
- 1.5.12. Dual sun visors
- 1.5.13. Two (2) cup holders, integral to dash
- 1.5.14. 3-point seat belt for each seat. All seat belt webbing must be manufacturer's high visibility color (Orange, Red, Green, or Yellow).
- 1.5.15. Climate control, including air conditioning, heater, & defroster
- 1.5.16. Power windows & power door locks
- 1.5.17. Tilting and telescoping steering wheel

Comply: ___ Yes ___ No

- 1.6. Engine
 - 1.6.1. 8.9 L, electronic diesel, turbocharged, liquid cooled, 6-cylinder inline configuration
 - 1.6.2. 330 HP, 1000 FT-LBS
 - 1.6.3. Engine must include Compression/Turbo Exhaust brake

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- 1.6.4. Emission system must comply with emission standards in effect as of date manufactured
- 1.6.5. DEF tank to be located on driver's side next to fuel tank
- 1.6.6. DEF tank must have a minimum capacity of 7 gallons
- 1.6.7. DEF tank protected with stainless steel or similar cover to prevent corrosion
- 1.6.8. Engine must be biodiesel compatible
- 1.6.9. Horizontal exhaust after-treatment (DPF) with vertical tail pipe with tailpipe guard

Comply: Yes No

1.7. Fuel System

- 1.7.1. Fuel tank shall be metal with drain and a 50-gallon minimum capacity; tank should be located on driver's side; tank straps stainless steel to prevent corrosion
- 1.7.2. Davco fuel processor or equal - mounted to outside of frame
- 1.7.3. Visual element change indication that is integral to and non-removable from unit (to be located on driver's side near fuel tank)
- 1.7.4. Water-in-fuel sensor with indicator in cab
- 1.7.5. Entire fuel system must be biodiesel compatible

Comply: Yes No

1.8. Transmission

- 1.8.1. Automatic, Allison 3500 RDS or equal
- 1.8.2. Must include PTO aperture
- 1.8.3. To be filled with manufacturer approved synthetic lubricants

Comply: Yes No

1.9. Gearing, Speed Governing & Performance

- 1.9.1. Top gear road speed shall be electronically governed at 75 mph maximum
- 1.9.2. Cruise control speed shall be governed at 72 mph maximum
- 1.9.3. Transmission and axle ratio shall be selected for performance to be optimized at 65 while permitting truck to operate up to 75 MPH on highway without excessive engine speed.

Comply: Yes No

1.10. PTO

- 1.10.1. PTO must have pump which meets the requirements of the spray unit that will be mounted to truck
- 1.10.2. PTO must be activated by dash mounted factory upfitter switch
- 1.10.3. Indication of PTO engagement should be accomplished by lighted switch or dash mounted light

Comply: Yes No

1.11. Front Axle

- 1.11.1. 12,000 lbs. GAWR @ ground capacity (6,000 lbs. capacity per spring @ ground)
- 1.11.2. Shock absorbers

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- 1.11.3. Integral power steering
- 1.11.4. Wet-type, visible cap axle seals, Stemco or equal
- 1.11.5. Axle should be filled with manufacturer approved synthetic lubricants

Comply: ___Yes ___No

- 1.12. Rear Axle
 - 1.12.1. Single speed, 23,000 lbs. GAWR @ ground capacity
 - 1.12.2. Air-ride suspension
 - 1.12.3. Shock absorbers
 - 1.12.4. Axle should be filled with manufacturer approved synthetic lubricants

Comply: ___Yes ___No

- 1.13. Brakes
 - 1.13.1. Full air disc brake system, ABS brake system with traction control
 - 1.13.2. 18 CFM air compressor
 - 1.13.3. Bendix AD-9SI air dryer or equal
 - 1.13.4. Advanced driver assistance system, Bendix Wingman® or approved equal with the following:
 - 1.13.4.1. Collision mitigation system
 - 1.13.4.2. Stationary vehicle braking system
 - 1.13.4.3. Lane departure warning system

Comply: ___Yes ___No

- 1.14. Wheels & Tires
 - 1.14.1. Hub piloted steel disc, size - 8.25 X 22.5
 - 1.14.2. First line, first quality tires, size – 11R22.5
 - 1.14.3. Front tires - single highway tread
 - 1.14.4. Rear tires - dual on/off road tread
 - 1.14.5. Load ratings to be compatible with GVWR
 - 1.14.6. Spare tire, jack, & lug wrench are NOT required

Comply: ___Yes ___No

- 1.15. Electrical System & Lights
 - 1.15.1. 12-volt system
 - 1.15.2. 180-amp brushless alternator
 - 1.15.3. Batteries with 2200 CCA combined, Maintenance free, Top Threaded Stud
 - 1.15.4. Aluminum battery box with plastic cover
 - 1.15.5. Remote jump start studs, with tethered protective caps, located outside of the battery box
 - 1.15.6. Battery disconnect switch, located inside cab, near driver's seat, similar to the below picture.

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1.15.7.

1.15.8. Battery Discharge protection

1.15.9. Four (4) dash mounted, rocker-style, factory installed, body circuit switches (upfitter switches) for simple on/off functions for accessories (PTO, warning lights, etc.; one (1) assigned to activate the PTO; one (1) assigned to operate the flashing warning lights; two (2) blank to be assigned by DOTD personnel.

1.15.10. All exterior lighting should be LED

1.15.11. Headlights:

1.15.11.1. Automatic daytime running lights

1.15.11.2. Automatic on if windshield wipers are turned on

1.15.11.3. Automatic on with low ambient light levels

1.15.11.4. Warning buzzer/alarm when headlight switch is on and ignition switch is in off position

1.15.12. Cruise control

1.15.13. Intermittent windshield wipers with washers

1.15.14. Self-cancelling directional signals

1.15.15. Backup alarm, 97 dba

1.15.16. AM/FM/WB radio with auxiliary front input, Bluetooth/hands free function and steering wheel controls

1.15.17. Two (2) 12V accessory power outlets with covers, mounted in dash (for cell phone chargers, GPS devices, etc.)

Comply: ___ Yes ___ No

1.16. Paint

1.16.1. Cab: Manufacturer's standard white

1.16.2. Chassis: Manufacturer's standard black

Comply: ___ Yes ___ No

1.17. FMCSA/DOT Mandated Safety Items

1.17.1. One (1) UL listed, 5 B:C rated, or higher, fire extinguisher securely mounted in cab

1.17.2. One (1) set of three (3) bidirectional reflective triangles conforming to FMVSS No. 125

1.17.3. At least one (1) spare fuse for each type/size used in the truck

Comply: ___ Yes ___ No

Note: The truck vendor and attached equipment manufacturer/vendor must mutually resolve any unexpected truck/attached equipment component conflict with a sound and functional solution as a requirement of this specification.

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2. Truck Bed

2.1. Truck Bed & Tank Support

- 2.1.1. 1" X 3/16" welded steel grating. Minimum load capacity 1,029 lbs. per square foot when placed over a 2' span. Floor joists on approximately 18" centers, steel stake pockets. A 2.0' X 5.0' X 10 gauge galvanized plate is to be used in each wheel well area, to be installed under the grating with the leading edge 2.0' forward of centerline of axle. Mud flap brackets are to be a permanent part of the body. Entire body to be hot dipped galvanized after fabrication. Sprayed on type coatings are not acceptable.
- 2.1.2. The bed shall be a minimum of 8' X 18' dimensions
- 2.1.3. The bed shall have a headache rack and contain safety lighting as per the attached safety lighting requirements section
- 2.1.4. The bed shall have all LED stop and running lights and reflectors installed per Federal highway specifications
- 2.1.5. The bed shall have mud flaps
- 2.1.6. Minor surfaces of the bed that cannot be galvanized shall have two (2) coats of primer, two (2) coats of industrial black paint

Comply: ___ Yes ___ No

2.2. Bulkhead (headache rack)

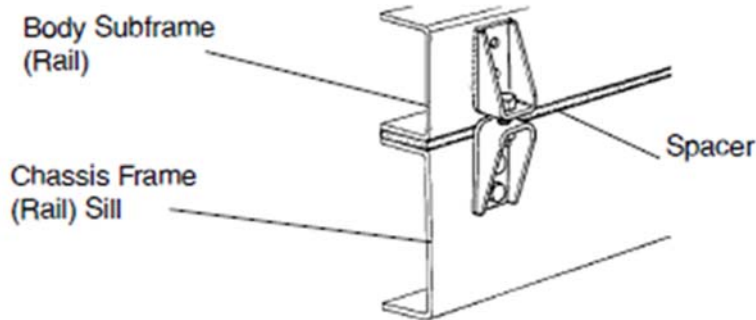
- 2.2.1. Square design bulkhead, heavy duty load supporting
- 2.2.2. Four (4) vertical posts
 - 2.2.2.1. Outer two (2) vertical posts 4" x 2" x 0.1875" structural steel tube framing. These post to extend 12" above cab
 - 2.2.2.2. Inner two (2) vertical posts 2" x 2" x 0.1875" structural steel tube framing
 - 2.2.2.3. Must have horizontal 4" x 2" x 0.1875" structural steel tube framing connecting the outer two (2) vertical post at 6" above cab
- 2.2.3. Bulkhead framing to be covered with solid ¼" steel tread plate below rear window and full width No. 3 expanded metal above for complete visibility

Comply: ___ Yes ___ No

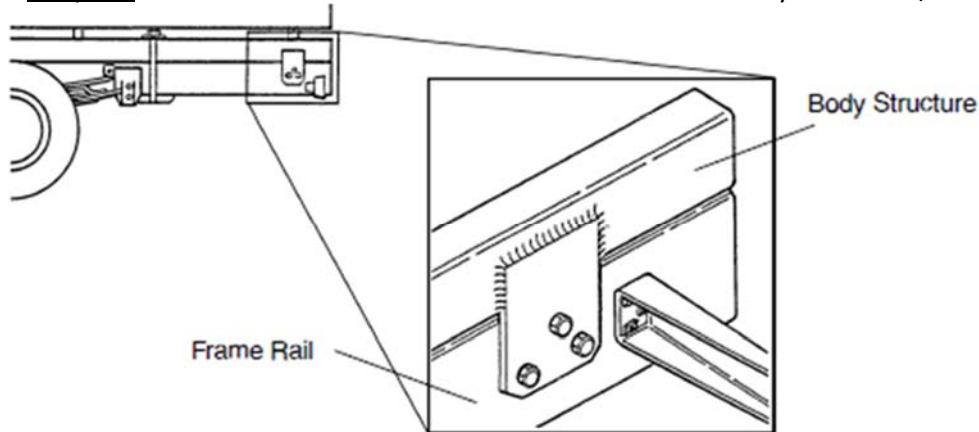
2.3. Body Installation

- 2.3.1. A sill spacer is not required; however, a rubber or plastic (nylon or Delrin) sill spacer is allowed between the frame & body sills. WOOD SPACERS ARE NOT ALLOWED!
- 2.3.2. Body shall be bolted to frame using brackets or flat bar strapping. U-BOLTS ARE NOT ALLOWED!
 - 2.3.2.1. Where possible, the upfitter should use existing holes in chassis frame web.
 - 2.3.2.2. Brackets

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2.3.3. Fishplate – to be bolted to chassis and bolted or welded to body sub-frame/sill.



Comply: Yes No

2.4. Rear Bumper: Heavy duty ICC type 8" structural steel channel underride protection to satisfy DOT and FMVSS

Comply: Yes No

2.5. Tool Box

2.5.1. Two (2) tool boxes, 48" length X 18" height X 18" depth

2.5.2. 14 gauge steel with stainless steel hardware and lock

2.5.3. Each box shall be securely mounted under the bed of the unit, with lockable hasp and weatherproof.

Comply: Yes No

3. Safety Lighting/Striping

3.1.1. Truck must be delivered with warning lights & high visibility, reflective conspicuity tape installed in accordance with these specifications and the illustrated layout below

3.1.2. Warning lights shall be installed by an upfitter who is experienced in and regularly engages in the installation of automotive electronics & warning lights. Installer shall use vehicle & lighting manufacturers' guidance along with industry best practices and techniques to ensure that lights are installed in a safe and neat manner

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- 3.1.3. All wiring and cables should be logically routed, secured, and protected with convoluted loom where possible. Rubber grommets shall be used where wires and cables penetrate any cab panels, body panels, or chassis structure. All cab and body penetrations shall be adequately sealed to prevent water from entering.
- 3.1.4. All warning lights must be controlled by a single in-cab, dash-mounted upfitter switch. The switch must be labeled to read "Warning Lights".
- 3.1.5. Installer must contact the DOTD Equipment Section prior to programming to confirm intended flash pattern(s).
- 3.1.6. Mid-size Light Bars - Three (3) mid-size (24") light bars that satisfy the following requirements, mounted to the
 - 3.1.6.1. SoundOff Signal nRoads Mid-Size or equal (**See the image below**)
 - 3.1.6.2. Length is nominal and +/- 1" is acceptable.
 - 3.1.6.3. Dual color - 12 diodes per module (equal number of green & amber)
 - 3.1.6.4. All pods/modules must be capable of fully displaying both colors.
 - 3.1.6.5. Flash pattern must be capable of alternating between an asymmetric, low frequency, "wig-wag" pattern and a low-frequency double or quad flash.
 - 3.1.6.6. UV resistant clear polycarbonate lens
 - 3.1.6.7. 10-16 VDC
 - 3.1.6.8. Light bars shall meet all applicable federal/state laws and regulations
 - 3.1.6.9. Shall be SAE J845 360-degree Class 1 certified
- 3.1.7. Perimeter Lights: Four (4) perimeter lights, front mounted at grill level, Two (2) side facing perimeter lights along each side of the truck bed, Two (2) rear facing perimeter lights at rear (**See image below**)
 - 3.1.7.1. Brooking Industries M16 surface mount perimeter lighthouse or equal
 - 3.1.7.2. Size: Length: 4.5-5.5 in., Height: 1.0-2.0 in., Depth: 0.3-0.5 in.
 - 3.1.7.3. 12-24 VDC
 - 3.1.7.4. UV resistant clear polycarbonate lens, black bezel trim
 - 3.1.7.5. 16 diodes, dual color, equal number of green & amber (interleaved 8x8)
 - 3.1.7.6. Lighthouse must be capable of displaying each color across full length
 - 3.1.7.7. Capable of alternating between an asymmetric, low-frequency, "wig-wag" pattern and a low-frequency double or quad flash
 - 3.1.7.8. Lighthouse shall meet all applicable federal/state laws and regulations
 - 3.1.7.9. Shall be SAE J595 Class 1 certified
- 3.1.8. High Visibility Reflective Tape
 - 3.1.8.1. DOT C2 approved high visibility reflective conspicuity tape, 2" wide, with alternating 6" segments of red and white, shall be placed along the length of the bed on both sides of the truck and across the rear edge of the bed

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Note: This image represents the locations for safety lighting on the truck (Arrow board shown in the image above labeled as #3 is not required)

Comply: ___ Yes ___ No

