



STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
TECHNICAL SPECIFICATIONS FOR

TELESCOPING TREE TRIMMER, SELF-PROPELLED, 4 WHEEL DRIVE

SERIES NO. 268-250

REV. 12/6/2024

EQUIPMENT SPECIFICATION 268-250F

GENERAL

This specification sets forth the minimum requirements for a 4-wheel drive, rubber tires, self-propelled, telescoping boom tree trimmer.

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

A Jarraff 4-wheel drive tree trimming machine, 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.

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. Dealer's Service Policy
2. Owner's/Operator's Manual(s)
 - a. One (1) Hardcopy
 - b. One (1) Digital Copy
 - i. Acceptable Formats: CD, DVD, Flash Drive, or E-mail
3. Service Manual(s)
 - a. One (1) Hardcopy
 - b. One (1) Digital Copy
 - i. Acceptable Formats: CD, DVD, Flash Drive, or E-mail
4. Build Sheet(s) – as applicable
 - a. One (1) Hardcopy
 - b. Build sheets should be writing 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.

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. General

A four-wheel drive, rubber tire, telescoping boom tree trimmer.

2. Chassis/Cab

2.1. Dimensions/Weight

- 2.1.1. Length: 27 ft. (not including boom)
- 2.1.2. Height: 11 ft.
- 2.1.3. Shipping Width: 8 ft.
- 2.1.4. Operating width 10 ft.
- 2.1.5. Total length including boom w/blade: 41' 6 " (Boom in travel position)
- 2.1.6. Operating Weight: 24,500 lbs.

Comply: ___ Yes ___ No

2.2. Undercarriage

- 2.2.1. Articulating Undercarriage
- 2.2.2. Axles to be hydrostatic
- 2.2.3. Axles to be capable of full lock operation by switch in cab

Comply: ___ Yes ___ No

2.3. Cab

- 2.3.1. Fully enclosed and insulated
- 2.3.2. ROPS and FOPS certified
- 2.3.3. FOGS (Falling Object Guard Structure) bolted to cab
- 2.3.4. Heavy duty swing bearing with worm gear drive
- 2.3.5. Articulating cab providing 35 degrees of tilt left and right of center
- 2.3.6. Cab and boom assembly to be capable of 360 degrees rotation on turntable
- 2.3.7. Door latch sensor
- 2.3.8. Operator present switch
- 2.3.9. Hydraulic joystick interlock control

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- 2.3.10. Safeguard Control System mounted in cab within reach of Operator to provide control of multiple functions with built in safety features, to be touch screen
- 2.3.11. In cab inclinometer in view of the Operator to indicate angle when operating on grades or slopes
- 2.3.12. Ergonomic hydraulic piloted joysticks(2) for boom function control and cab movement control
- 2.3.13. Foot pedal and hand controls for travel and service brake
- 2.3.14. Joystick mounted buttons to control push blade
- 2.3.15. Rear Pop out window for emergency escape exit
- 2.3.16. Air conditioner, heater and defroster
- 2.3.17. Step and Handrail to provide safe access to cab and boom
- 2.3.18. Side view and rear view cameras with in cab monitor
- 2.3.19. Windshield wiper with washer
- 2.3.20. Gauges; free standing and/or included in system control center
 - 2.3.20.1. Engine Oil Pressure
 - 2.3.20.2. Engine Oil temperature
 - 2.3.20.3. Engine coolant temperature
 - 2.3.20.4. Voltage/Charging system
 - 2.3.20.5. Hydraulic oil temperature
 - 2.3.20.6. Fuel level
 - 2.3.20.7. DEF level
 - 2.3.20.8. DPF/SCR regeneration status
 - 2.3.20.9. Error codes
 - 2.3.20.10. Low coolant
- 2.3.21. Backup alarm, 97 dba
- 2.3.22. Electric horn
- 2.3.23. Tinted windows
- 2.3.24. Lexguard (or equivalent) tinted cab roof
- 2.3.25. Two (2) on board ABC rated fire extinguishers with secure and easy access
- 2.3.26. Adjustable upholstered seat with seat belt
- 2.3.27. 12 VDC auxiliary socket

Comply: ___Yes ___No

3. Drive Train

3.1. Engine

- 3.1.1. Diesel, inline 4 cylinder
- 3.1.2. Liquid Cooled
- 3.1.3. 130 HP @ 2200 RPM
- 3.1.4. Engine and DOC/SCR system to meet all emission standards in effect at time of delivery
- 3.1.5. If system requires Diesel Exhaust Fluid (DEF), tank to hold a minimum of 5 gallons of DEF
- 3.1.6. Fuel Tank: 46 gallon capacity tank
- 3.1.7. Reversing engine cooling fan

Comply: ___Yes ___No

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3.2. Transmission

- 3.2.1. Hydrostatic transmission with variable speed & reverse, capable of travel and operating speeds of 1-12 MPH

Comply: ___ Yes ___ No

3.3. Electrical System & Lighting

- 3.3.1. 12 or 24 volt DC negative ground
- 3.3.2. Battery disconnect switch in locked compartment
- 3.3.3. Engine driven alternator
- 3.3.4. Two 12 volt batteries with 1000 cold cranking amps each
- 3.3.5. Color coded wiring
- 3.3.6. HI-VIZ Led Flashing lights mounted in front and rear externally on cab

Comply: ___ Yes ___ No

3.4. Brakes

- 3.4.1. Service brakes: inboard wet disk brakes on front and rear axles
- 3.4.2. Parking brakes: wet disk spring-applied hydraulic release
- 3.4.3. Parking brake to automatically apply if engine stops or hydraulic system pump fails
- 3.4.4. Parking brake on indicator light mounted on dash

Comply: ___ Yes ___ No

3.5. Wheels & Tires

- 3.5.1. Rim Width 25 inches
- 3.5.2. Rim Diameter 26 inches
- 3.5.3. 28L-26 Forestry Tires
- 3.5.4. Tires to be minimum of 20 ply

Comply: ___ Yes ___ No

3.6. Winches

- 3.6.1. Front and Rear Mounted winches
- 3.6.2. Each winch to be capable of 20,000-lb. pull force
- 3.6.3. Each winch to be spooled with 150 feet of 5/8 inch cable
- 3.6.4. Each winch to have Chain and hook on end of cable
- 3.6.5. Winch control to be wireless remote control

Comply: ___ Yes ___ No

3.7. Push Blade

- 3.7.1. Front mounted push blade
- 3.7.2. Push Blade to be eight feet wide

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- 3.7.3. Hydraulic up/down control
- 3.7.4. Push blade controlled by in cab joy stick
- 3.7.5. Blade design and angle to maximize debris clean up

Comply: ___ Yes ___ No

4. Hydraulic Systems/Work tools

- 4.1. Hydraulic System
 - 4.1.1. Engine driven pump drive
 - 4.1.2. Hydrostatic propel system
 - 4.1.3. 13 gallon hydraulic reservoir with cleanout port and shut off valve
 - 4.1.4. Upper structure tilt system, rotate system and boom up/down equipped with lock valves
 - 4.1.5. Charge loop filtration
 - 4.1.6. Electric emergency pump
 - 4.1.7. Rotary manifold design to allow for 360 degree cab rotation

Comply: ___ Yes ___ No

5. Boom

- 5.1. Telescopic, High-Tensile, non-conductive fiberglass boom
- 5.2. Fiberglass boom to meet or exceed A.N.S.I. 92.02-2001 Category C standards to 100kv
- 5.3. Cutting height to 75' from the ground
- 5.4. The boom shall articulate with cab 35 degrees left and right of center
- 5.5. Boom belt drive to be maintenance free
- 5.6. Internally mounted hose reel to provide maximum protection of hydraulic hoses
- 5.7. Boom to have limb deflectors mounted in two locations
- 5.8. Inclinator to be mounted on boom rest in sight of the Operator

Comply: ___ Yes ___ No

6. Saw

- 6.1.1. single blade saw, 24" diameter
- 6.1.2. 72 teeth, carbide tipped
- 6.1.3. Capable of rotating 180 degrees
- 6.1.4. Saw blade to be capable of operating at a minimum of 2800 RPM

Comply: ___ Yes ___ No

7. Paint

- 7.1. Manufacturer's standard color

Comply: ___ Yes ___ No



BIDDER'S EXCEPTIONS

Instructions: Bidder should note all exceptions in space provided below. List the detail number from the aforementioned specification in the column to the left and the exception in the column to the right. Responses may be typed or hand-written. Handwritten responses must be legible. If additional space is needed, please print a duplicate copy of this sheet. "Bidder's Exceptions" page(s) should be returned with the bid submittal.

Examples:

<u>1.6</u>	<u>Engine has 325 horsepower</u>
<u>1.18.3</u>	<u>Batteries have 2000 CCA combined.</u>
<u>2.2.8</u>	<u>Crossmembers are 4" channel on 12" centers.</u>

Spec./Detail Reference	Exception
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