

**Macon-Bibb County
Specifications For Bucket Truck
Attachment B**

**(38) FOOT INSULATED HYDRAULIC
TELESCOPIC AERIAL DEVICE**

This specification is to set forth the specific requirements for a minimum (40) foot to the bottom of platform, hydraulic operated, telescopic aerial device equipped with single platform and with a steel line service body mounted on an appropriate chassis/cab. These insulating aerial device requirements shall also include an insulating lower arm insert, insulating telescopic upper boom and a dielectrically tested insulating control handle, with upper control isolation system at the boom tip, offering an additional layer of secondary dielectric protection for the operator.

This aerial device shall be to the manufacturer's standard. It shall be equipped with the manufacturer's equipment and accessories which are included as standard in the advertised and published literature for the unit. No such item of equipment or accessories shall be removed or omitted because it was not specified in the bid.

If it is necessary to bid alternate equipment or to take exceptions to the specifications as set forth, this must be so stated in your bid. For each item, please place an X in the appropriate space (Yes___No___) to signify whether or not you are in complete compliance with the specification. Failure to follow the format or answer the specification may cause your bid to be disqualified. If you need extra space to describe your product, please attach extra sheets. When doing this, be sure your description references the appropriate question number.

COMPLY

GENERAL SPECIFICATIONS:

YES

NO

Minimum 38 Foot telescopic articulating aerial device with an insulating lower arm, insulating telescopic upper boom and a dielectrically tested insulating control handle, with upper control isolation system at the boom tip, for installation behind chassis cab, built in accordance with these standard specifications and include the following features:

A. Ground to Bottom of Platform Height: 40.6 feet

B. Working Height---- Minimum 45.6 feet

C. Pedestal: Post type pedestal design with large service openings.

Pedestal consists of fixture welded steel tubing 10.75 inch (273 mm) diameter. The 1.0 inch (25.4mm) top plate of the pedestal is machined after welding to provide a rigid, flat mounting surface for the rotation bearing. This extends the life of the bearing and reduces life cycle cost. The pedestal is bolted to a quick mount interface frame which is attached to the chassis frame utilizing a bolt-on technique.

D. Turntable: Steel fixture-welded structure with a 1.0-inch (25.4 mm) steel bottom plate. The bottom plate of the turntable is machined after welding, to ensure a flat mounting surface for the rotation bearing. A steel ring is welded to the bottom plate to stiffen the plate and to protect the rotation bearing. For easy maintenance, hydraulic valving is located on the side of the turntable and protected by a meal guard.

E. Articulating Arm: Tubular steel structure with insulating fiberglass insert. The articulating arm is designed so that the articulating arm and telescopic boom is compensating. By raising the articulating arm only, the arm and telescopic booms maintain the same relative angle with the ground. By raising the articulating arm in conjunction with the telescopic boom the operator is able to position himself more quickly and easily into the work area.

F. Lift Cylinders: The rod eye is welded to the rod while the blind end of the cylinder is of cast steel, one piece design, which utilizes cartridge-type, bi-directional counterbalance holding valves. Non-lubricated type bushings are used at each end of the cylinder.

YES

NO

- G. Telescopic Boom: Fabricated, reinforced steel with a high-density fiberglass insulator. Insulator provides 12 inches (305 mm) of isolation in the lower boom section. The inner surface of the fiberglass insulator has a wax coating molded in during manufacture to provide a dry, smooth inner surface which will cause moisture to bead. The outer surface has a smooth gelcoat finish. _____
- H. Telescopic Upper Boom Section: Fiberglass, providing a minimum of 8.0 in (203mm) of isolation when retracted and 35 inches (889mm) when extended. The inner surface of the fiberglass boom has acrylic polyurethane applied to provide a dry, smooth inner surface which will cause moisture to bead. The outer surface has a smooth gelcoat finish. _____
- I. Telescopic Boom Articulation: -25 degrees to +75 degrees which allows the platform to be placed below grade when the boom is extended. This allows the operator to access the platform from the ground very close to the side of the body or access the platform from the ground even on uneven terrain such as off the side of a roadbed. _____
- J. Telescopic Boom Pivot Pin: High strength chrome plated steel with self-lubricating, replaceable, non-metallic bearings. _____
- K. Telescopic Upper Boom Extension: The upper boom section is extended and retracted by a double acting hydraulic cylinder installed within the booms. The boom extends and retracts over slide bearings located in the end of the lower boom section. _____
- L. Platform Leveling System: The platform is leveled by hydraulic leveling means, contained within the telescopic boom and designed to **maintain the dielectric integrity of the aerial device**. Controls for leveling and tilting the platform are located at the platform. The cylinders maintain a level platform throughout the full range of boom articulation. _____
- M. Platform: Totally enclosed, fiberglass. _____
- N. The dielectrically tested, insulating upper control system includes the following boom tip components that can provide an additional layer of secondary electrical contact protection. _____
1. Control Handle: A single handle controller incorporating high electrical resistance components that are dielectrically tested to 40 kV AC with no more than 400 microamperes of leakage. The control handle is green in color to differentiate it from other non-tested controllers. The handle also includes an interlock guard that reduces the potential for inadvertent boom operation. _____
 2. Auxiliary Control Covers: Non-tested blue silicon covers for auxiliary controls.
 3. Control Console: Non-tested non-metallic control console plate.
 4. Boom Tip Covers: Non-tested non-metallic boom tip covers. The covers are not

dielectrically tested, but they may provide some protection against electrical hazards.

O. Controls: The Control System for all models is a full pressure type, operating at 2,400 _____ Psi (166 bar) maximum. The upper control, located at the platform, consists of a single handle control of the tiller type. The single handle control, through an insulating linkage, actuates valves in the control head to actuate the boom. The controls provide fine metering capability and allow the operator to make simultaneous multiple boom movements. The single handle control activates Lower Boom—**Up and Down**, Upper Boom--- **Extend/Retract**, Rotating **Clockwise/Counter-clockwise**, and Articulating Arm----**Up/Down**. Unit rotation is accomplished by moving the control from side to side like a tiller. Conventional multiple lever ground controls located on the turntable include an upper control override.

P. Manual Lowering Valve: A valve located at the boom tip, easily accessible by the _____ operator without having to remove any covers allows the lower boom to be lowered in the case of engine or hydraulic system failure.

Q. Hydraulic Tool Circuit: Control easily accessible to the operator activates the _____ tool circuit which provides 5.0 gpm (18.9 lpm) at 2,000 psi (138 bar). One set of HTMA quick disconnect couplings are in a protected location inside the control cover at the platform.

R. Back-up Alarm: installed _____

S. Diagnostic Pressure Test Quick Disconnect Couplings are located at the turntable to allow _____ mobile service technician to quickly and easily attach a test gauge to verify system and tool circuit pressure. This reduces life cycle cost.

T. ANSI Category C, 46 KV and below dielectric rating _____

U. Manuals: Two (2) Operator's and two (2) Maintenance/Part manuals containing _____ instructional markings indicating hazards inherent in the operation of an aerial device.

V. Paint: Painted white with a Powder Coat Paint Process which provides a finish-painted _____ surface that is highly resistant to chipping, scratching, abrasion and corrosion. Paint is electro-statically applied to the **inside** as well as outside of fabricated parts then high temperature cured prior to assembly ensuring maximum coverage and protection

1. 40 Foot Aerial Device with insulating articulating arm and continuous rotation. _____
2. Post type pedestal design with large service openings. _____
3. Reservoir, minimum 7-gallon (26.5 L) capacity, installed on the pedestal _____
4. Single one-man end-mounted platform with rotator. Platform is _____
24 x 30 x 42 inches high (610 x 762 x 1067 mm), rated at 400 pounds capacity
and rotates hydraulically 180 about the boom tip.
5. Soft platforms cover for one man platform, 24x30inches (610x762mm) _____
6. Polyethylene platform liner for one man platform, 24x30 inches _____

(610x762mm), 50KV rating (minimum)

- | | | |
|--|-------|-------|
| 7. Engine start/stop with emergency operating system, 12 VDC electric powered. Includes pump and motor, operates from chassis battery. Control is captive air operated from the platform and toggle switch operated from the lower control. This option allows the operator to completely slow the booms and platform in a situation wherein the primary hydraulic source fails. | _____ | _____ |
| 8. Fall Protection System to include one body harness and decelerating type lanyard | _____ | _____ |
| 9. Rubber Wheel chocks, (pair). | _____ | _____ |

UNIT AND HYDRAULIC ACCESSORIES

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|---|-------|-------|
| 10. Scuff pad for 24x30 inch (610x762 mm) platform liner to protect liner floor | _____ | _____ |
| 11. Hydraulic oil and lubricants | _____ | _____ |
| 12. Vane or gear type hydraulic pump installed in conjunction with power takeoff | _____ | _____ |
| 13. Power take-off to be installed in conjunction with transmission Hot shift PTO | _____ | _____ |
| 14. Torsion bar stabilizer installed on rear axle | _____ | _____ |
| 15. Torsion bar stabilizer installed on front axle | _____ | _____ |

BODY AND ACCESSORIES

- | | | |
|--|-------|-------|
| 16. Utility service Line Body, suitable for installing on any chassis with an approximate CA dimension of 60 inches, built in accordance with the following specification: | _____ | _____ |
| A. <u>Body</u> : Fabricated from A40 grade 100% zinc alloy coated steel with the following minimum gauge thickness: | _____ | _____ |
| 16 gauge outside panels | | |
| 16 gauge top panels | | |
| 14 gauge end panels | | |
| 20 gauge inner door panels | | |
| 18 gauge outer door panels | | |
| 18 gauge shelving, spangled steel | | |
| 14 gauge wheel panels | | |
| 12 gauge steel floor, formed checker plate | | |
| Structural channel crossmembers | | |

B. Body Dimensions:

108 inch overall body length
94 inch outside width
40 inch front of body height
18 inch compartment depth
58 inch floor width

C. Compartmentation-Curbside:

First Vertical- Six (6) adjustable locking swivel material hooks,
one adjustable shelf and inverter mounted at bottom.

Horizontal-Vacant with exception of through shelf.

Rear Vertical- Two (2) adjustable shelves with removable dividers
on 4inch centers

Through Shelf- full length with two (2) hot stick brackets and
rear access door

D. Compartmentation-Streetside

First Vertical- Two (2) adjustable shelves with removable dividers on 4
inch centers

Horizontal- One (1) removable shelf with removable dividers on 8 inch centers

Rear Vertical- Six (6) adjustable locking swivel material hooks

E. Standard Features:

Basic body fabricated from A40 grade 100% zinc alloy coated steel
All doors are full, double paneled, self-sealed with built-in drainage.
Electro-zinc plated; steel hinge rods extend full length of door. Door hinges
are zinc alloy material attached with rivets.
All doors contain zinc plated flush type, single point paddle type locks with
recessed handles, including keyed locks and adjustable two-stage strikers. Door
handles are riveted to the outer door panel. Back panel has opening for easy access.
Heavy-gauge welded steel base construction with safety tread floor.
Door header drip rail at top for maximum weather protection.
Meal formed painted
Automotive underseal applied to entire understructure.
Prime painted
Automotive type non-porous door seals mechanically fastened to the door facing

Wheel chock holder installed one (1) each side of body in fender panel.
 Drop-in 2"x 6" pressure treated wooden tailboard
 Master body security locking system
 Gas Cylinders for all vertical doors
 Rotary Paddle Latches on all doors
 Chains on Horizontal doors
 Latch cover on Horizontal door

BODY ACCESSORIES

- | | | |
|---|-------|-------|
| 17. 30" Tail shelf with wheel chock holders, one each side | _____ | _____ |
| 18. Grab handles, installed one each side at rear of tail shelf | _____ | _____ |
| 19. Cable steps installed at each rear corner of tail shelf | _____ | _____ |
| 20. Boom storage support installed at streetside rear of cargo area | _____ | _____ |
| 21. Installed as close to streetside cargo area wall as feasible to maximize access to cargo area | _____ | _____ |
| 22. Platform rest, rubber tube type. Installed directly on tail shelf, bolted and positioned under platform for support of platform during transit. | _____ | _____ |
| 23. Splash aprons (mud flaps) installed behind rear tires. One each side of body. | _____ | _____ |
| 24. Torsion bar installed in conjunction with rear axle | | |
| 25. Torsion bar installed in conjunction with front axle | | |
| 26. Five-pound fire extinguisher with mounting bracket, shipped loose | | |
| 27. Class II receiver hitch installed with two (2) safety chain eyes installed one each side of pintle hook | | |

ELECTRICAL

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| 28. Lights and reflectors in accordance with FMVSS lighting package, installed, (All LED) | _____ | _____ |
| 29. Wire compartment lights to dash mounted switch | _____ | _____ |
| 30. Trailer Receptacle, 7-way installed at rear | _____ | _____ |
| 31. Two LED amber strobe light installed on turntable with master switch and indicator light installed in cab. Strobe light is to be visible from the front and rear of the vehicle. | _____ | _____ |
| 32. Four corner LED strobe lights installed at front and rear, clear | _____ | _____ |

33. **One (1) 2400 Watt 12 VDC Pure Sine Inverter installed front compartment** _____
Passenger side including
- Remote panel with remote On/Off Switch & Led Status mounted in cab;
 - Transfer relay if needed
 - Remote 120 VAC duplex receptacle mounted at rear of passenger compartment body.

- | | | |
|--------------------------------------|-------|-------|
| 34. Backup alarm, installed at rear. | _____ | _____ |
|--------------------------------------|-------|-------|

INSTALLATION

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|---|-------|-------|
| 35. Mounting Aerial Device | _____ | _____ |
| 36. Painting Aerial Device white with a Powder Coat Paint Process which Provides a finish-painted surface that is highly resistant to chipping, | _____ | _____ |

Scratching, abrasion and corrosion. Paint is electro-statically applied
 To the **inside** as well as outside of fabricated parts then high temperature

- Cured prior to assembly ensuring maximum coverage and protection
37. Apply black "Martex" nonskid paint to all walking surfaces, including compartment tops and front of compartments _____
38. Mounting body and accessories _____
39. Painting body and accessories white with urethane enamel _____
40. Safety and Instructional Signs, installed _____
41. Delivery of completed vehicle _____
42. DOT certification of completed vehicle _____

MISCELLANEOUS

43. Tool package to include: One (1) Stanley hydraulic drill/impact wrench with hoses and couplings. _____
44. Two (2) years parts warranty _____
45. Two (2) years labor warranty _____
46. Two Hundred Forty (240) days warranty for travel charges _____
47. Bidder is to supply a self-directed, computer-based training (CBT) program. This program will provide basic instruction in the safe operation of this aerial device. This program will also include and explain ANSI and OSHA requirements related to the proper use and operation of this unit. _____
48. Lifetime warranty on structural integrity of the following major components are to be warranted for so long as the initial purchaser owns the product: Booms, boom articulation links, hydraulic cylinder structures, outrigger weldments, pedestals, subbases and turntables. _____
49. Supply copy of manufacturer's warranty with bid _____

CHASSIS

50. 2015/2016 Model Dodge 5500 or Equivalent 4x2, Regular Cab with 5 years/60,000 mile warranty _____
- 143" Wheelbase, 60" CA
- Cummings Turbo diesel engine w/engine block heater
- Automatic transmission with PTO provision
- Minimum 36-gallon fuel tank capacity
- Air conditioning
- Bench type seat
- Minimum 200-amp Extra Heavy-Duty alternator, with dual
- 78 AH batteries
- Power 4-wheel anti-lock disc brakes
- Power steering
- Super engine cooling package
- 18000 lb. GVWR
- 7000 lb. front axle with 7000 lb. suspension
- 13500 lb. rear axle with 15000 lb. suspension
- LT225/70R19.5F SBR BSW All terrain tires with Spare

19.5x 6.0 steel wheels
4.88 rear axle ratio
AM/FM stereo
Dual interval electric windshield wipers
Trailer tow mirrors
Engine Hour Meter
PTO Hour meter installed in Cab

Completed unit is to be delivered to the following address cleaned,
with at least ½ tank of fuel and ready to be place in service.

Macon-Bibb County

Macon, GA 31201

USE OF OTHER NAMES AND REFERENCES:

Unless otherwise stated, the use of manufacturer's name and product numbers are for descriptive purposes and establishing general quality levels only. They are not intended to be restrictive. Bidders are required to state exactly what they intend to furnish, otherwise, it is fully understood that they shall furnish all items stated.

BROCHURES AND LITERATURE:

Your proposal must be accompanied by descriptive literature (marked), indicating the exact items to be furnished. The term "as specified" will not be acceptable.

