



**Missouri Department of Transportation  
Specifications for 45' Light Truck Mounted,  
Non-Insulated, Articulated / Telescopic Aerial Device.**

Aerial device has a high mounted one-man bucket with a minimum ground to bottom of bucket height of 40ft., and working height of 45ft.

**Bucket**

Shall be fire resistant closed one-piece fiberglass type bucket with approximate measurements of 24" X 30" X 42" with an inside and outside step for easy access. The bucket capacity shall be a minimum of 350 lbs. and include body harness and lanyard. The anchor for lanyard must be attached to inner boom. Top of platform approximately 24" above top of boom.

**Single Stick Platform Control**

The singlestick control consists of a multi-jointed handle, which operates the control valve. A safety trigger located on the underside of the single stick handle will not allow boom movement until it is depressed. The control valve is full pressure and full flow. The operator can feather between the three control movements to provide multi-function boom action. An emergency stop is provided.

**Hydraulic Platform Rotator**

A hydraulic platform rotator, operated by a control lever, rotates the platform 180° from one side of the outer/inner boom assembly, across the end-hung position, to the other side of the outer/inner boom assembly.

**Hydraulic Bucket Leveling**

Platform leveling is controlled by a master and slave cylinder arrangement. The bucket leveling system can be activated from the upper and lower controls to adjust bucket-leveling, tilt of the bucket for cleaning, or to ease the removal of an injured operator.

**Hydraulic Tool Outlets**

Hydraulic tool outlets shall be located at the bucket and at the rear of the service body, curbside below tailshelf.

**Boom Configuration**

The major components of the aerial device shall consist of a steel outer boom, a telescopic aluminum inner boom, and steel articulating lower boom. A boom-support cradle and a ratchet type boom tie-down strap to be included.

**Rotation**

Rotation of aerial device shall be continuous and unlimited. An external hex drive is to be provided for manual rotation in case of hydraulic failure.



**Pedestal/ Reservoir**

The hydraulic reservoir to be built integral to the pedestal, the reservoir has an anti-splash baffle and easy to read fluid level gages. The oil capacity of the reservoir shall be large enough to support full operation of aerial unit and tool circuits.

**Hydraulic System**

An open or closed center hydraulic system shall be acceptable. Fluid level gages are to be furnished for checking fluid level. This system can be driven by and optional engine belt drive system or by a transmission mounted power-take-off (PTO) and pump.

**Paint**

Aerial device shall be standard manufacturer's white.

**Engine Start/Stop and Master Control**

Controls for starting and stopping the truck engine shall be located at the bucket and pedestal.

**Emergency Power**

A full function, 12-volt emergency power system, controlled from the bucket and pedestal shall be included.

**Outriggers.**

Provide pedestal mounted A-frame outriggers, for vehicle stability.

**Bucket Cover**

Provide a vinyl cover for the bucket.

The Missouri Highways and Transportation Commission reserves the right to waive technicalities and to reject any or all bids and no bid is final until formally accepted by the Commission.