

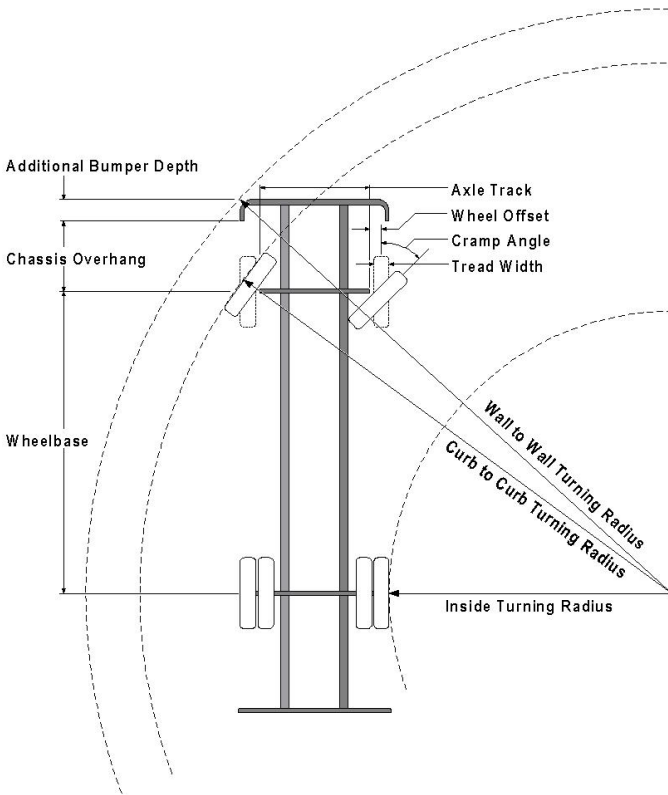


# Turning Performance Analysis

11/17/2017

**Bid Number:** 632  
**Department:** Johns Creek Fire Department

**Chassis:** Enforcer Chassis, Tractor (Tiller)  
**Body:** Aerial, Tiller, Alum Body



**Parameters:**

Inside Cramp Angle:	50°
Axle Track:	85.86 in.
Wheel Offset:	3.12 in.
Tread Width:	13.5 in.
Chassis Overhang:	65.95 in.
Additional Bumper Depth:	10 in.
Front Overhang:	75.95 in.
Wheelbase:	163 in.

**Calculated Turning Radii:**

Inside Turn:	10 ft. 7 in.
Curb to curb:	23 ft. 10 in.
Wall to wall:	27 ft. 9 in.

**Comments:**

Tiller

Category	Option	Description
Axle, Front, Custom	0637708	Axle, Front, Meritor FL-941, 18,000 lb, Saber FR/Enforcer
Wheels, Front	0019575	Wheels, Front, Alcoa, 22.50" x 9.00", Aluminum, Hub Pilot
Tires, Front	0581599	Tires, Front, Goodyear, G291, 315/80R22.50, 20 ply, Fire Service Speed Rating
Bumpers	0606607	Bumper, 10" Extended, Painted/Reinforced, 12" High, Saber FR/Enforcer
Aerial Devices	0670312	Aerial, 100' Heavy Duty Ladder, Tiller 2002 (500 dry/500 water)

**Notes:**

Actual Inside cramp angle may be less due to highly specialized options.

Curb to Curb turning radius calculated for 9.00 inch curb.

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**Definitions:**

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Inside CrampAngle	Maximum turning angle of the front inside fire.
Axle Track	King-pin to King-pin distance of front axle.
Wheel Offset	Offset from the center line of the wheel to the King-pin.
Tread Width	Width of the tire tread.
Chassis Overhang	Distance of the center line of the front axle to the front edge of the cab. This does not include the bumper depth.
Additional Bumper Wheel	Depth that the bumper assembly adds to the front overhang.
Wheelbase	Distance between the center lines of the vehicles front and rear axles.
Inside Turning Radius	Radius of the smallest circle around which the vehicle can turn.
Curb to Curb Turning Radius	Radius of the smallest circle around which the vehicle's tires can turn. This measures assumes a curb height of 9 inches.
Wall to Wall Turning Radius	Radius of the smallest circle around which the vehicle's tires can turn. This measures takes into account any front overhang due to chassis , bumper extensions and or aerial devices.