



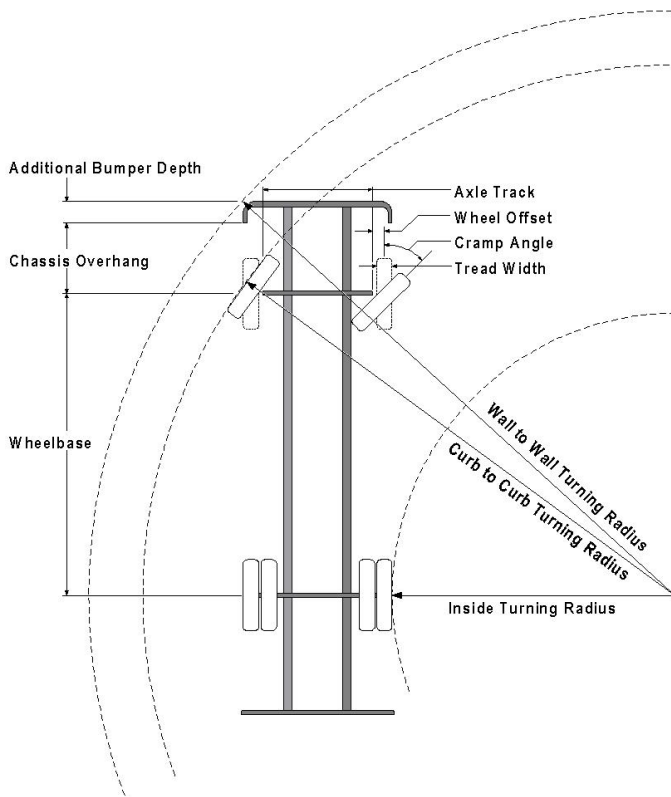
Turning Performance Analysis

02/16/2022

Canby Fire District

Chassis: Velocity Chassis, Aerials/Tankers Tandem (Big Block), 2010

Body: Aerial, HD Ladder 105', Alum Body



Parameters:

*Inside Cramp Angle:	45°
Axle Track:	82.92 in.
Wheel Offset:	4.68 in.
Tread Width:	17.7 in.
Chassis Overhang:	78 in.
Additional Bumper Depth:	19 in.
Front Overhang:	97 in.
Wheelbase:	248.5 in.

Calculated Turning Radii:

Inside Turn:	19 ft. 7 in.
Curb to curb:	35 ft. 8 in.
Wall to wall:	40 ft. 8 in.

Category	Option	Description
Tires, Front	0521238	Tires, Front, Michelin, XFE (wb), 425/65R22.50, 20 ply
Wheels, Front	0019611	Wheels, Front, Alcoa, 22.50" x 12.25", Aluminum, Hub Pilot
Bumpers	0549296	Bumper, 19" Extended Steel Painted
Axle, Front, Custom	0508849	Axle, Front, Oshkosh TAK-4, Non Drive, 22,800 lb, Imp/Vel
Aerial Devices	0673136	Aerial, 105' Heavy Duty Ladder, (750 dry/500 water)

Notes:

*Actual Inside cramp angle may be less than shown.

Curb to Curb turning radius calculated for 9.00 inch curb.

Definitions:

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.