

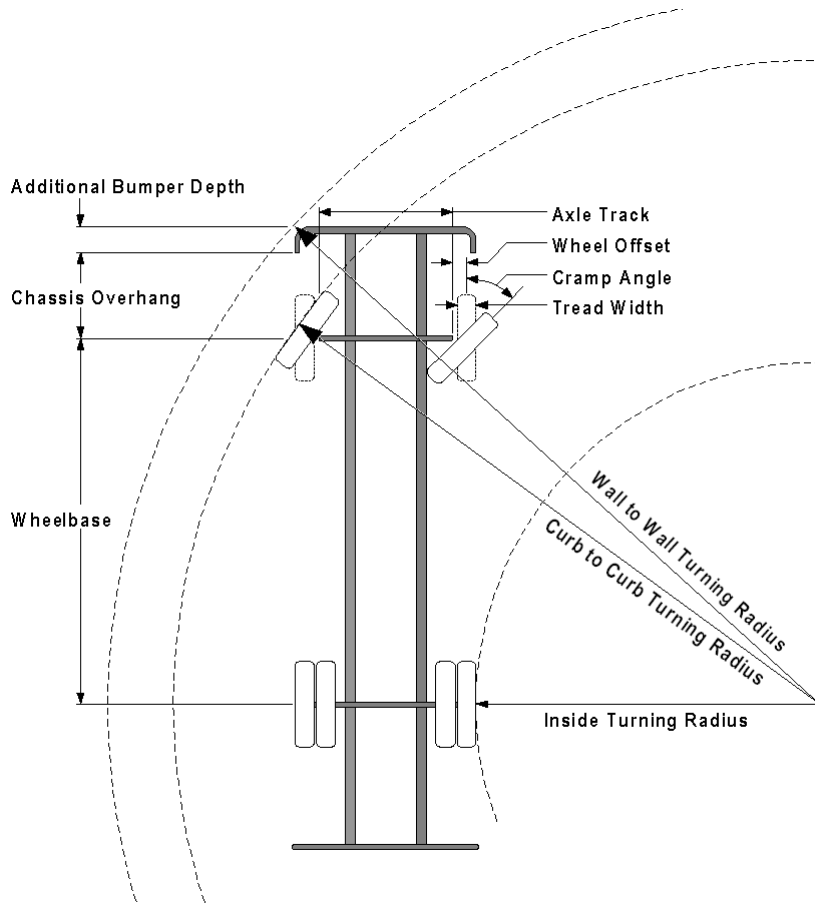


# Turning Performance Analysis

2/17/2011  
06:08:14PM

**Configuration:** 19889 100' HAL Quint Arrow XT Chassis  
**Number:** 19889 **Ver:** 105

**Representative:** Kimber, Linda  
**Organization:** Clarey Safety Equipment, Inc  
**Department:** Rapid City, City of



**Parameters:**

Inside Cramp Angle:	45°
Axle Track:	85.34"
Wheel Offset:	4.68"
Loaded Tire Width:	17.70"
Chassis Overhang:	68.99"
Additional Bumper Depth:	19.00"
Front Overhang:	87.99"
Wheelbase:	245.50"

**Calculated Turning Radii:**

Inside Turn:	231.97"
Curb to Curb:	425.51"
Wall to Wall:	479.38"

**Comments:**

Aerial Application

Components	Option #	Description
Front Axle	0018453	Axle, Suspension, Front, Oshkosh TAK-4, Non-Drive, 22,800 lb
Front Wheels	0111380	Aluminum, Alcoa, 22.50 x 12.25
Front Tires	0111370	Michelin, 425/65R22.50, 20 Ply, XTE2
Chassis	0104769	Arrow-XT® Chassis
Front Bumper	0107610	Tray, Bumper, Passenger Side, Standard, 19" W x 14.5" L x 13" D
Aerial Device	0117822	Aerial, 100' HAL, 750lb Tip Load

**Notes:**

Actual Inside Cramp Angle may be less due to highly specialized options.

Curb to Curb turning radius calculated for a 9.00 inch curb.

**Definitions:**

Inside Cramp Angle	Maximum turning angle of the front inside tire.
Axle Track	King-pin to king-pin distance of the 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 from the center-line of the front axle to the front edge of the cab. This does not include the bumper depth.
Additional Bumper Depth	Depth that the bumper assembly adds to the front overhang.
Wheelbase	Distance between the center lines of the vehicle's 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 inside of which the vehicle's tires can turn. This measurement assumes a curb height of 9 inches.
Wall to Wall Turning Radius	Radius of the smallest circle inside of which the entire vehicle can turn. This measurement takes into account any front overhang due to the chassis, bumper extensions and/or aerial devices.