Turning Performance Analysis

Bid Number: 464
Department: Tukwila Fire Department

Chassis: Velocity Chassis, PAP, PUC (Big Block), 2010
Body: Aerial, Platform 100’, PUC, Alum Body

Parameters:
- Inside Cramp Angle: 40°
- Axle Track: 82.92 in.
- Wheel Offset: 5.3 in.
- Tread Width: 17.5 in.
- Chassis Overhang: 78 in.
- Additional Bumper Depth: 0.00 in.
- Front Overhang: 138.1 in.
- Wheelbase: 265.5 in.

Calculated Turning Radii:
- Inside Turn: 25 ft. 1 in.
- Curb to curb: 40 ft. 11 in.
- Wall to wall: 47 ft. 0 in.

Comments:
32593 as of 11/2/18

Category | Option  | Description
----------|---------|--------------------------------------------------
Axle, Front, Custom | 0508846 | Axle, Front, Oshkosh TAK-4, Non Drive, 24,000 lb, Velocity
Wheels, Front | 0019618 | Wheels, Front, Alcoa, 22.50” x 13.00”, Aluminum, Hub Pilot
Tires, Front | 0582746 | Tires, Front, Goodyear, G296 MSA, 445/65R22.50, 20 ply
Bumpers | 0524744 | Bumper, 22” Extended, Steel, Painted, Imp/Vel
Aerial Devices | 0784643 | Aerial, 100’ Pierce Platform, 35 MPH Wind Rating, 400lb Tip Load Allowance

Notes:
- Actual Inside cramp angle may be less than shown.

Curb to Curb turning radius calculated for 9.00 inch curb.
<table>
<thead>
<tr>
<th>Definitions:</th>
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<tbody>
<tr>
<td>Inside Cramp Angle</td>
<td>Maximum turning angle of the front inside fire.</td>
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<tr>
<td>Axle Track</td>
<td>King-pin to King-pin distance of front axle.</td>
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<tr>
<td>Wheel Offset</td>
<td>Offset from the center line of the wheel to the King-pin.</td>
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<tr>
<td>Tread Width</td>
<td>Width of the tire tread.</td>
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<tr>
<td>Chassis Overhang</td>
<td>Distance of the center line of the front axle to the front edge of the cab. This does not include the bumper depth.</td>
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<tr>
<td>Additional Bumper Wheel</td>
<td>Depth that the bumper assembly adds to the front overhang.</td>
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<tr>
<td>Wheelbase</td>
<td>Distance between the center lines of the vehicles front and rear axles.</td>
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<tr>
<td>Inside Turning Radius</td>
<td>Radius of the smallest circle around which the vehicle can turn.</td>
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<tr>
<td>Curb to Curb Turning Radius</td>
<td>Radius of the smallest circle around which the vehicle's tires can turn. This measures assumes a curb height of 9 inches.</td>
</tr>
<tr>
<td>Wall to Wall Turning Radius</td>
<td>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.</td>
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