

Glenwood Springs Fire Dept

LADDER
Spec.

TURNING PERFORMANCE ANALYSIS

OF

A PIERCE ARROW CHASSIS

FRONT AXLE	FRONT BRAKES	FRONT TIRES	CRAMP ANGLE	BUMPER TO AXLE DIM.
FL-941 W/ASSIST	CAM	315/65R22.5	40 DEG.	70.38 IN.
WHEELBASE	WHEEL OFFSET	FRONT AXLE TRACK		
240 INCHES	3.12	85.86 INCHES		

INSIDE TURNING RADIUS MEASURED TO THE CENTERLINE OF THE
INSIDE TIRE : 370.25 INCHES OR 30.85 FEET.

OUTSIDE TURNING RADIUS MEASURED TO THE CENTERLINE OF THE
OUTSIDE TIRE : 434.92 INCHES OR 36.24 FEET.

CURB TO CURB TURNING RADIUS CALCULATED FOR A 9.00 INCH CURB
HEIGHT : 443.14 INCHES OR 36.93 FEET.

WALL TO WALL TURNING RADIUS MEASURED USING AN AXLE TO BUMPER
DIMENSION OF 70.38 INCHES : 483.11 INCHES OR 40.26 FEET.

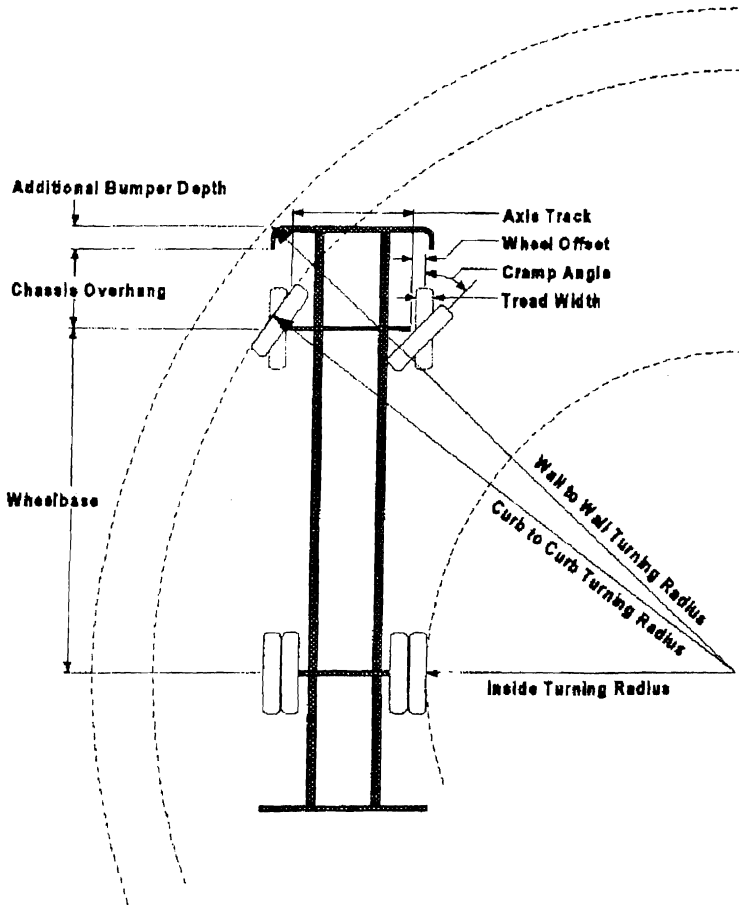
ACTUAL WHEEL CRAMP ANGLE MAY BE LESS DUE TO OPTIONS

Total width including Mirrors 10'
17' clear width needed to deploy outriggers
Length Bumper to Bumper 41.5'



Turning Performance Analysis

Pierce IHC 7400 Tenders



Parameters:

Inside Cramp Angle:	35.00 °
Axle Track:	85.66 in.
Wheel Offset:	6.18 in.
Tread Width:	12.50 in.
Chassis Overhang:	0.00 in.
Additional Bumper Depth:	19.00 in.
Wheelbase:	230.00 in.

Calculated Turning Radii:

Inside Turn:	26 ft. 4 in.
Curb to Curb:	40 ft. 6 in.
Wall to Wall:	41 ft. 2 in.

Comments:

Components	PRIDE #	Description
Front Axle	0000300	Axle, Front, Meritor RF-16-145 (FWD)
Front Wheels	0001653	Wheels, Frt, Steel 22.50" x 8.25" (12R22.50)
Front Tires	0001625	Tires, Goodyear, 12R22.50 16 ply high tread
Front Bumper	0003174	Bumper Extension, 19", No Tray Commercial Chassis

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.

Reduce turning radius by 33% if vehicle is equipped with all-wheel steer.

Front Bumper overhang
from front of front tire
3 feet

Vehicle Height - 10 Ft. 2 In.

Vehicle Length - 29 Ft. 3 In.

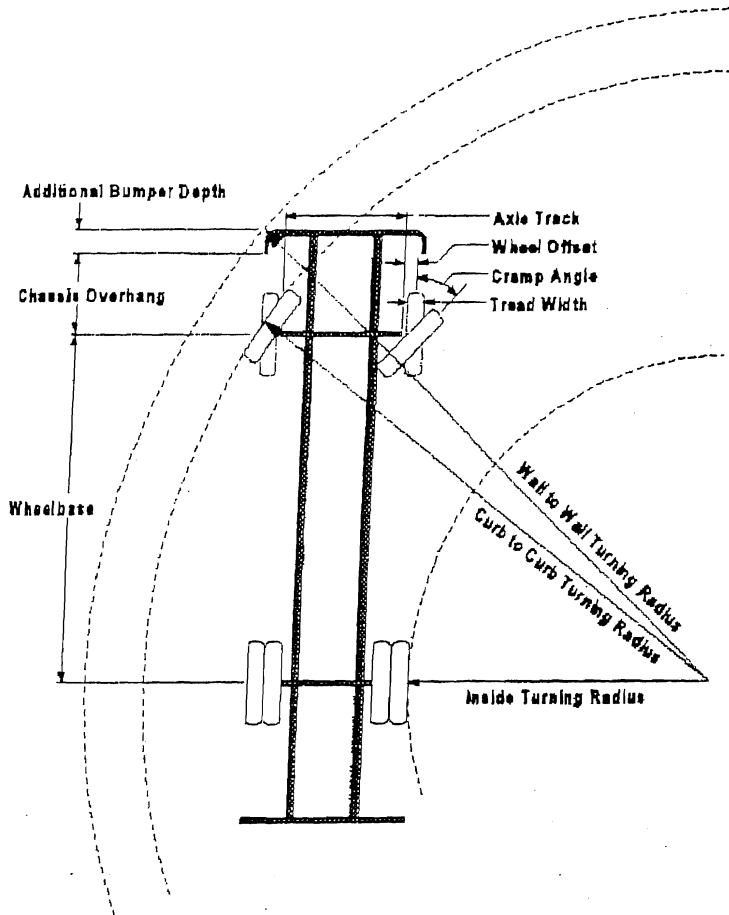
Vehicle Width - 98 In.



Glenwood Springs Fire Dept.

Turning Performance Analysis

Pierce Dash Pumpers



Parameters:

Inside Cramp Angle:	45.00 °
Axle Track:	84.42 in.
Wheel Offset:	4.68 in.
Tread Width:	15.90 in.
Chassis Overhang:	65.99 in.
Additional Bumper Depth:	16.00 in.
Wheelbase:	195.00 in.

Calculated Turning Radii:

Inside Turn:	15 ft. 2 in.
Curb to Curb:	29 ft. 5 in.
Wall to Wall:	33 ft. 7 in.

Comments:

Components	PRIDE #	Description
Front Axle	0000272	Axle, Front, Meritor FL-943, 18,740#, w/assist, Qtrn
Front Wheels	0019611	Wheels, Frt, Alum, Alcoa, 22.50" x 12.25" (425/ & 385/)
Front Tires	0001619	Tires, Michelin, 385/65R22.50 18 ply XTE2, Hiway Rib
Chassis	0050220	Dash-2000 Chassis
Front Bumper	0012244	Bumper, 16' extended - all chassis'

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.
- Reduce turning radius by 33% if vehicle is equipped with all-wheel steer.

Vehicle Height - 10 Ft. 3 In.

Vehicle Length - 31 Ft. 1 In.

Vehicle Width - 96 In.