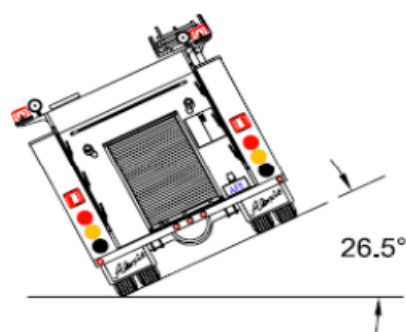
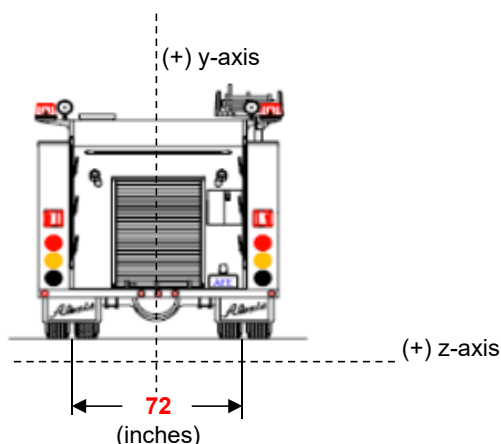
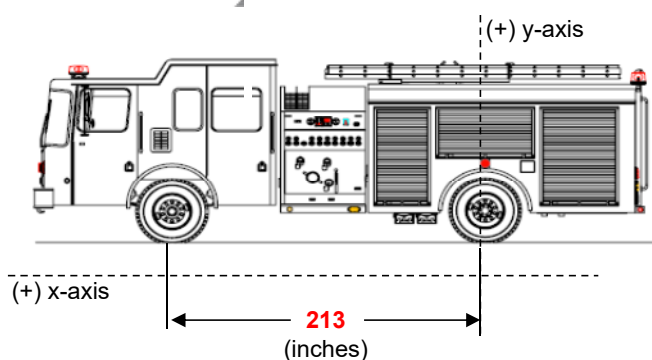


VERTICAL CENTER OF GRAVITY / WEIGHT DISTRIBUTION

1/11/2017



Contract No: **2314**
 Proposal Name: **AFE DEMO**
 Calculated By: **Melissa Tinkham**
 Approved By:
 Revision:
 Type of Chassis: **HME 1871-W-MFDxL 12RR**
 Type of Pump: **Darley PSM 1500gpm**
 Cab to Axle: **153**
 Tank Capacity: **750**

Item	Weight (lbs)	Coordinates Local C.G. (in)			% Rear	Weight (lbs)	
		z	x	y		Front	Rear
Chassis	18020	0	162	42	24%	13700	4320
Poly Tank (w/water)	6937.5	1.5	20.75	71	90%	676	6262
Officer & Driver	500	0	239	63	-12%	561	-61
Men & Equip. (cab)	1000	0	169	63	21%	793	207
Pump Module	1800	0	112.5	63	47%	951	849
Pump	1400	0	89	48	58%	585	815
Body Module (SS)	4750	0	-6.5	66	103%	-145	4895
Hose Bed	1000	0	-36.5	95	117%	-171	1171
Add. Equip. front	1000	0	48	56	77%	225	775
Add. Equip. Rear	1500	0	-54.5	56	126%	-384	1884
Preconnects	400	0	121	61	43%	227	173
	0	0	0	0	0%	0	0
Ladder Rack	350	47	-6.5	101	103%	-11	361
Suction Hose	100	-44.5	-6.5	116.5	103%	-3	103
Bumper Extension	250	0	295.5	30	-39%	347	-97
	0	0	0	0	0%	0	0
	0	0	0	0	0%	0	0
	0	0	0	0	0%	0	0
	0	0	0	0	0%	0	0
	0	0	0	0	0%	0	0
	0	0	0	0	0%	0	0
Total	39007.5	Global Center of Gravity				17352	21656
GAWR	45740	x	y	z		18740	27000
Load as % of Total	100%	0.6	94.7	55.2		44%	56%
						OK	OK

Truck Tipping Angle: **33** degrees (Full Water Tank) **OK**
 Maximum vertical center of gravity "z" = **57.60** **OK**
 (Maximum "z" is 80% of the rear axle track width)

HOSE CAPACITIES

1/11/2017

Customer AFE DEMO
Calculated By Melissa Tinkham

Drawing No. P-V78 Rev. 2314
Contract No.

HOSE BED

Length	100	
Width	71	
Height	31	
Cu. Ft.	127.37	0.00
Total	127.37	

Hose Size				
Amount				
DF	0	0	0	0
Cu. Ft.	0.00	0.00	0.00	0.00
Total	0.00			

MATTYDALES

Length		
Width		
Height		
Cu. Ft.	0.00	0.00
Total	0.00	

Hose Size		
Amount		
DF	0	0
Cu. Ft.	0.00	0.00
Total	0.00	

CARTRIDGE LAYS

Length	73	73
Width	10	10
Height	8	12
Cu. Ft.	3.38	5.07
Total	8.45	

Hose Size	1 3/4	2 1/2
Amount	200	150
DF	26	41
Cu. Ft.	3.01	3.56
Total	6.57	

HOSE TRAYS

Length		
Width		
Height		
Cu. Ft.	0.00	0.00
Total	0.00	

Hose Size		
Amount		
DF	0	0
Cu. Ft.	0.00	0.00
Total	0.00	

HOSE WELLS

Length	12	
Width	26.5	
Height	12	
Cu. Ft.	2.21	0.00
Total	2.21	

Hose Size	1 3/4	
Amount	150	
DF	26	0
Cu. Ft.	2.26	0.00
Total	2.26	

Standard Hose Dimensions per NFPA (2003 Edition)

1 3/4" lays 3 1/4" wide	DF=	26
2" lays 3 3/4" wide	DF=	24 (ANGUS)
2 1/2" lays 4 1/2" wide	DF=	41
3" lays 5 1/4" wide	DF=	50
4" lays 6 1/2" wide	DF=	58
5" lays 8" wide - Angus	DF=	96
5" lays 8-1/2" wide - Cotton	DF=	102

COMPARTMENT SPACE

Department Name:	AFE DEMO	Calc. By:	Melissa Tinkham
Drawing Number:	P-V78	Rev. Number:	
Contract Number:	2314	1/11/2017	

[illegible]