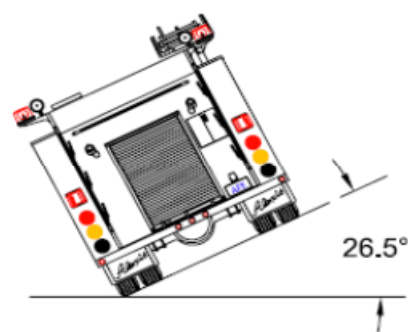
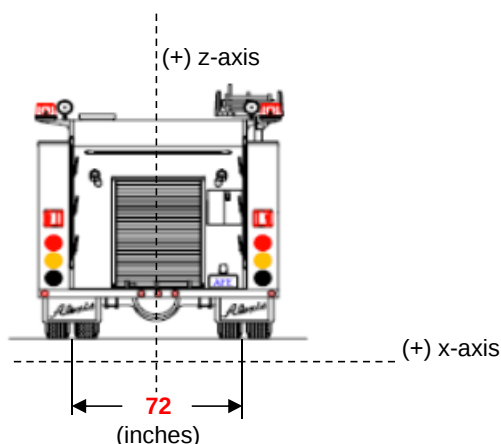
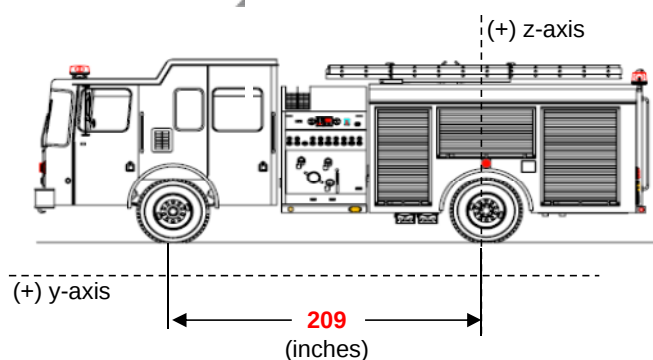


VERTICAL CENTER OF GRAVITY / WEIGHT DISTRIBUTION

9/24/2015



Contract No: **2277**
 Proposal Name: **AFE DEMO**
 Calculated By: **Melissa Tinkham**
 Approved By:
 Revision:
 Type of Chassis: **Spartan Metro Star MFD 10RR**
 Type of Pump: **Darley PSM 1500gpm**
 Cab to Axle: **155**
 Tank Capacity: **1000**

Item	Weight (lbs)	Coordinates Local C.G. (in)			% Rear	Weight (lbs)	
		x	y	z		Front	Rear
Chassis	17886	0	160	43	23%	13716	4170
Poly Tank (w/water)	9250	-3.25	11.75	72.75	94%	520	8730
Officer & Driver	1000	0	237	63	-13%	1134	-134
Men & Equip. (cab)	500	0	170.5	63	18%	408	92
Pump Module	1000	0	95.5	59.5	54%	457	543
Pump	1600	0	89.5	49	57%	685	915
Body Module	3750	-3	-6.5	68	103%	-117	3867
Hose Bed	1000	0	-15.5	92.5	107%	-74	1074
Add. Equip. front	1000	-2	48	58	77%	230	770
Add. Equip. Rear	1500	-2	-54.5	58	126%	-391	1891
Preconnect Module	800	0	124	55	41%	475	325
Suction Hose	125	28	-12.5	68.5	106%	-7	132
Ladders	300	45.5	0	97	100%	0	300
	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
	0	0	0	0	0%	0	0
	0	0	0	0	0%	0	0
Total	39711	Global Center of Gravity				17035	22676
GAWR	42000	x	y	z		18000	24000
Load as % of Total	100%	-0.7	89.7	56.6		43%	57%
						OK	OK

Truck Tipping Angle: **32** degrees (Full Water Tank) **OK**
 Maximum vertical center of gravity "z" = **57.60** **OK**
 (Maximum "z" is 80% of the rear axle track width)