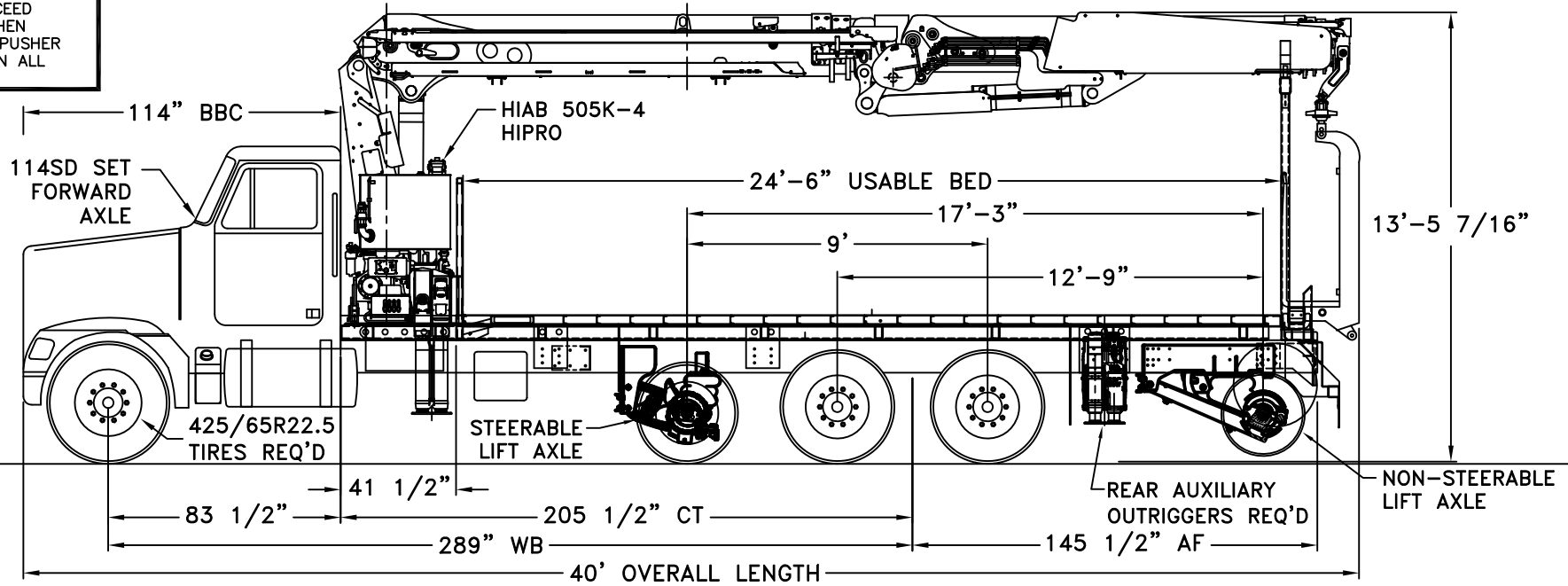


**\* WARNING \***

TANDEM AXLE MAY EXCEED 34,000 LBS. RATING WHEN PUSHER AXLE IS UP. PUSHER AXLE MUST BE DOWN IN ALL FORWARD GEARS.



**TRUCK, HIAB CRANE & ACCESSORIES WEIGHT DISTRIBUTION, NO PAYLOAD, PUSHER AXLE DOWN.**

TOTAL WEIGHT ON FRONT AXLE	= 13,080 LBS.
TOTAL WEIGHT ON PUSHER AXLE	= 10,000 LBS.
TOTAL WEIGHT ON TANDEM AXLE	= 28,750 LBS.
FRONT AXLE WT. PERCENTAGE	= 25 %
PUSHER AXLE WT. PERCENTAGE	= 19 %
TANDEM AXLE WT. PERCENTAGE	= 56 %
GROSS VEHICLE WEIGHT	= 51,830 LBS.

**TRUCK, HIAB CRANE & ACCESSORIES WEIGHT DISTRIBUTION, WITH PAYLOAD, LIFT AXLES DOWN.**

TOTAL WEIGHT ON FRONT AXLE	= 18,320 LBS.
TOTAL WEIGHT ON PUSHER AXLE	= 10,000 LBS.
TOTAL WEIGHT ON TANDEM AXLE	= 31,680 LBS.
TOTAL WEIGHT ON TAG AXLE	= 10,000 LBS.
FRONT AXLE WT. PERCENTAGE	= 26 %
PUSHER AXLE WT. PERCENTAGE	= 14 %
TANDEM AXLE WT. PERCENTAGE	= 46 %
TAG AXLE WT. PERCENTAGE	= 14 %
GROSS VEHICLE WEIGHT	= 70,000 LBS.
WATER LEVEL PAYLOAD	= 18,170 LBS.

**TRUCK SPECIFICATIONS**

TRUCK MODEL	= FREIGHTLINER 114 SFA
WHEELBASE	= 289"
CAB TO TANDEM	= 205 1/2"
AXLE-TO-FRAME	= 145 1/2"
FRONT AXLE CURB WEIGHT	= 10,200 LBS.
REAR AXLE CURB WEIGHT	= 9,600 LBS.
FRONT G.A.W.R.	= 20,000 LBS.
REAR G.A.W.R.	= 46,000 LBS.
YIELD STRENGTH OF EACH CHASSIS FRAME	MINIMUM SECTION MODULUS REQUIRED
120,000 P.S.I. YIELD	= 46.55 in. <sup>3</sup>
MINIMUM RBM/RAIL OF 5,585,679 IN-LBS	

**NOTES:**  
 CHASSIS FRAME RAIL MIN. OF 31.0 SECTION MODULUS REQ'D.  
 FULL LENGTH SUB-FRAME REQUIRED:  
 5"x3"x3/8" RECT. TUBING (ON TOP OF CHASSIS FRAME)  
 5"x3"x3/8" RECT. TUBING (CROSSMEMBERS EVERY 3 FT.)  
 1/2" TOP & 3/8" BOTTOM PLATES REQUIRED.  
 FLATBED AND LIFT AXLE WEIGHTS ARE ESTIMATED.  
 CURB WEIGHTS WERE ESTIMATED.

TRUCK RUNS IN US (RULES FOR MOST STATES).  
 20,000 LBS. ALLOWED ON FRONT AXLE.  
 34,000 LBS. ALLOWED ON TANDEM.  
 42,500 LBS. ALLOWED ON TRIDEM (9').  
 45,500 LBS. ALLOWED ON TRIDEM (13').  
 53,500 LBS. ALLOWED ON QUAD (17').  
 70,000 LBS. ALLOWED GROSS WEIGHT (35').  
 MAXIMUM LENGTH CANNOT EXCEED 40'.

**NOTICE:**

THE DRAWING PURPOSE IS TO INTRODUCE A GENERAL CONCEPT OF A PROPOSED IDEA.

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**NOTICE:**

THIS WEIGHT DISTRIBUTION IS BASED ON ESTIMATED WEIGHTS AND IS ONLY AS ACCURATE AS THOSE ESTIMATES. ACTUAL WEIGHTS MAY CHANGE THE RESULTS OF THIS WEIGHT DISTRIBUTION.

<p><b>Cargotec USA</b>                  12233 Williams Road                  Perrysburg, Ohio 43551                  Tel (419) 482-6000                  Fax (419) 482-6001</p> <p><small>Tolerances - unless otherwise noted.                  Tolerances are in inches</small></p> <p>2-PLACE ±.000... .03                  3-PLACE ±.000... .015                  ANGULAR ±.000... .1°                  FRACTIONAL ±.000... 1/16"</p> <p><small>Break all sharp corners unless otherwise specified.</small></p>	<p>THIS PROPERTY AND ALL INFORMATION THEREIN IS THE PROPERTY OF CARGOTEC USA, 12233 WILLIAMS RD, PERRYSBURG, OHIO 43551 AND IS CONFIDENTIAL. IT MUST NOT BE MADE PUBLIC OR COPIED. THIS DRAWING IS LOANED TO RETURN UPON DEMAND AND SHALL NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO OUR INTERESTS. OUR PRIOR SPECIFIC APPROVAL IS REQUIRED FOR EXPOSURE OF THIS DRAWING TO OTHERS FOR ANY PURPOSE.</p>	<p><b>Drawing Title:</b> 505K HI-PRO</p> <p><b>Project Name:</b> SALES LAYOUT</p>
	<p><b>Next Assy:</b> 505K / SALES</p> <p>Dwg/Cad file no.</p>	<p><b>Drawn by/Date:</b> SMG 8-20-19</p> <p><b>Approval/Date Approved:</b></p>