



TRUCK, HIAB CRANE & ACCESSORIES WEIGHT DISTRIBUTION, NO PAYLOAD, LIFT AXLE UP.	
TOTAL WEIGHT ON FRONT AXLE	= 13,900 LBS.
TOTAL WEIGHT ON REAR AXLE	= 23,230 LBS.
FRONT AXLE WT. PERCENTAGE	= 37 %
REAR AXLE WT. PERCENTAGE	= 63 %
GROSS VEHICLE WEIGHT	= 37,130 LBS.

TRUCK, HIAB CRANE & ACCESSORIES WEIGHT DISTRIBUTION, WITH PAYLOAD, LIFT AXLE DOWN.	
TOTAL WEIGHT ON FRONT AXLE	= 18,680 LBS.
TOTAL WEIGHT ON REAR AXLE	= 32,490 LBS.
TOTAL WEIGHT ON LIFT AXLE	= 11,000 LBS.
FRONT AXLE WT. PERCENTAGE	= 30 %
REAR AXLE WT. PERCENTAGE	= 52 %
LIFT AXLE WT. PERCENTAGE	= 18 %
GROSS VEHICLE WEIGHT	= 62,170 LBS.
WATER LEVEL PAYLOAD	= 25,040 LBS.

TRUCK SPECIFICATIONS	
TRUCK MODEL	= VOLVO VHDF
WHEELBASE	= 291"
CAB TO TANDEM	= 206 1/2"
AXLE-TO-FRAME	= 144" AF
FRONT AXLE CURB WEIGHT	= 9,918 LBS.
REAR AXLE CURB WEIGHT	= 8,768 LBS.
FRONT G.A.W.R.	= 20,800 LBS.
REAR G.A.W.R.	= 40,000 LBS.
YIELD STRENGTH OF EACH CHASSIS FRAME	MINIMUM SECTION MODULUS REQUIRED
110,000 P.S.I. YIELD	= 31.52 in. <sup>3</sup>
120,000 P.S.I. YIELD	= 28.89 in. <sup>3</sup>
MINIMUM RBM/RAIL OF 3,466,800 IN-LBS	

**NOTES:**  
 DOUBLE FRAME CHASSIS REQUIRED.  
 FULL LENGTH SUB-FRAME REQUIRED:  
 6"x4"x3/8" RECT. TUBING (ON TOP OF CHASSIS FRAME)  
 5"x3"x3/8" RECT. TUBING (CROSSMEMBERS EVERY 3 FT.)  
 CURB WEIGHTS WERE PROVIDED WITH LIFT AXLE INSTALLED.  
 BODY WEIGHT WAS ESTIMATED.

TRUCK RUNS IN US (RULES FOR MOST STATES).  
 20,000 LBS. ALLOWED ON FRONT AXLE.  
 34,000 LBS. ALLOWED ON TANDEM.  
 43,500 LBS. ALLOWED ON TRIDEM. (10')  
 63,500 LBS. ALLOWED GROSS WEIGHT. (32')  
 ALLOWABLE LEGAL OVERALL LENGTH IS 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.

**Hiab, Inc.**  
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Tolerances - unless otherwise noted.  
 Tolerances are in inches  
 2-PLACE ±.000..... .05  
 3-PLACE ±.000..... .015  
 ANGULAR ± ..... 1/16"  
 FRACTIONAL ± ..... 1/16"  
 Break all sharp corners unless otherwise specified.

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Next Assy.  
**285 / SALES**  
 Dwg/Cad file no.

**Drawing Title:** 285K-2 HIPRO

**Project Name:** SALES LAYOUT

**Drawn by:** CSV **Date:** 11-16-18 **Size:** **Part No.:**

**Approval:** **Date Approved:** **Scale:** unit wt. **Eng. Job no.:**