



Manual # 99904612

17/117SL Technical Specifications

Revision Date 20120503



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Revisions

DATE	LOCATION	DESCRIPTION
20090813		Added swing clearance drawing.
20100118	Geometric Configuration	Added stabilizer height, extension distance, stabilizer drawings.
20111214	Specs, stabilizer drawings.	ECN 11628 - Updated stabilizer wording.
20120502	Specifications	Updated crane weight to include mounting kit and tank.



CHAPTER 1

Technical Data and Charts

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17/117SL Technical Specifications

17/117SL	1-HYDRAULIC	2-HYDRAULIC	3-HYDRAULIC	4-HYDRAULIC	5-HYDRAULIC	6-HYDRAULIC
Crane Rating*	116,450 ft lb (16.1 tm)	112,835 ft lb (15.6 tm)	109,940 ft lb (15.2 tm)	107,050 ft lb (14.8 tm)	104,155 ft lb (14.4 tm)	101,985 ft lb (14.1 tm)
Maximum Horizontal Reach	20' 4" (6.2 m)	27' 3" (8.3 m)	34' 1" (10.4 m)	41' 8" (12.7 m)	48' 11" (14.9 m)	56' 5" (17.2 m)
Maximum Vertical Reach	28' 6" (8.7 m)	35' 5" (10.8 m)	42' 6" (12.9 m)	49' 11" (15.2 m)	57' 1" (17.4 m)	64' 7" (19.7 m)
Maximum Capacity	12,785 lb (5,800 kg)	12,565 lb (5,700 kg)	12,125 lb (5,500 kg)	11,465 lb (5,200 kg)	11,245 lb (5,100 kg)	11,245 lb (5,100 kg)
Max Cap @ Max Reach	5,710 lb (2,590 kg)	4,080 lb (1,850 kg)	3,000 lb (1,360 kg)	2,225 lb (1,010 kg)	1,675 lb (760 kg)	1,280 lb (580 kg)
Crane Weight **	3,240 lb (1,470 kg)	3,550 lb (1,610 kg)	3,860 lb (1,750 kg)	4,155 lb (1,885 kg)	4,420 lb (2,005 kg)	4,630 lb (2,100 kg)
Hook Approach						
Vertical	9' 1" (2.76 m)	8' 11" (2.71 m)	8' 7" (2.62 m)	8' 4" (2.53 m)	8' 0" (2.44 m)	7' 9" (2.35 m)
Horizontal	2' 5" (0.74 m)	2' 7" (0.79 m)	2' 9" (0.84 m)	2' 11" (0.89 m)	3' 1" (0.94 m)	3' 3" (1.0 m)
Center of Gravity - Stored						
Vertical	2' 5" (730 mm)	2' 6" (755 mm)	2' 7" (780 mm)	2' 8" (805 mm)	2' 8" (825 mm)	2' 9" (840 mm)
Horizontal (C/L RotTo Bridge)	14.0" (355 mm)	13.8" (350 mm)	13.2" (335 mm)	12.6" (320 mm)	12.0" (305 mm)	11.4" (290 mm)

* Crane rating (ft-lb) is the rated load (lb) multiplied by the respective distance (ft) from centerline of rotation with all extensions retracted and the inner and outer booms in a horizontal position, per ANSI B30.22. ** Crane weight is for standard crane with tank & 4-bolt mounting kit. Does not include stabilizers, oil.



17/117SL SPECIFICATIONS	
Stabilizer Pad Diameter	6" (160 mm)
Crane Storage Height	7' 4" (2,245 mm)
Mounting Space ***	2' 8" (820 mm)
Rotational Torque	14,465 ft lb (2.0 tm)
Rotation	400°
Optimum Pump Performance	13.2 gpm (50 L/min)
System Pressure	4,785 psi (330 bar)
Oil Reservoir Capacity	23.8 gal (90 L)
Stabilizer Extension Span	
Standard (manual out / hydraulic down)	15' 2" (4,615 mm)
Weight	440 lb (200 kg)
Opt. 1 (manual out / hydraulic down)	18' 4" (5,590 mm)
Weight	560 lb (254 kg)
Opt. 2 (hydraulic out / hydraulic down)	21' 3" (6,470 mm)
Weight	640 lb (290 kg)
*** Maximum swing clearance radius required is 25" (620 mm) at 7'-10" (2390 mm) from top of chassis frame.	

MINIMUM CHASSIS SPECIFICATIONS	
Front Axle Rating (GAWR)	12,000 lb (5,445 kg)
Rear Axle Rating (GAWR)	21,000 lb (9,525 kg)
Resistance To Bending Moment	1,850,000 in-lb (213,145 kg-m)



17/117SL Pressure Settings

WORKING PRESSURE ON MAIN-RELIEF VALVES & PORT RELIEF VALVES

Function	Direction	Port	Pressure Setting
Main-relief valve			4785 psi (330 bar)
Rotation system	Right	A	P
	Left	B	P
Boom cylinder	Down	A	1450 psi (100 bar)
	Up	B	4930 psi (340 bar)
Jib cylinder	Up	A	4930 psi (340 bar)
	Down	B	2900 psi (200 bar)
Extension cylinders	Extend	A	P
	Retract	B	P
Rotator	Right	A	2900 psi (200 bar)
	Left	B	2900 psi (200 bar)
Grab	Open	A	2900 psi (200 bar)
	Close	B	2900 psi (200 bar)
Separate stabilizer valve		All	2175 psi (150 bar)

WORKING PRESSURE ON LOAD-HOLDING VALVES

Function	Direction	Port	Opening Pressure
Boom cylinder			5075 psi (350 bar)
Jib cylinder			5075 psi (350 bar)
Rotation system			2685 psi (185 bar)
Extension cylinders	Extend	A	3045 psi (210 bar)
	Retract	B	6235 psi (430 bar)

PRESSURE SETTING FOR LOAD-MOMENT LIMITATION (LMB)

Load moment limitation (LMB)	4640 psi (320 bar)
HDL	4205 psi (290 bar)

MAXIMUM PUMP PERFORMANCE

Pump performance	13.2 gal/min (50 l/min)
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17/117SL Pressure Settings with Remote Control

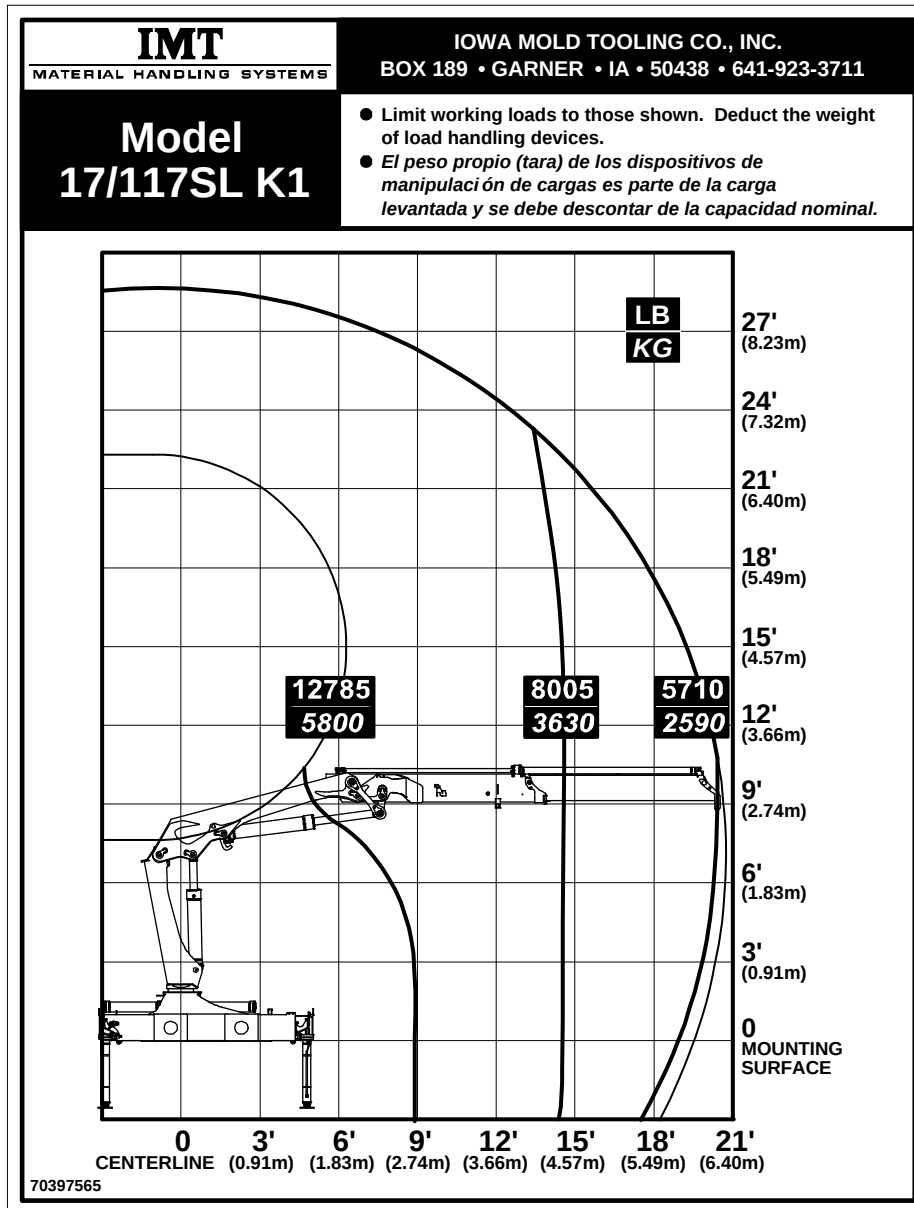
WORKING PRESSURE ON MAIN-RELIEF VALVES & PORT RELIEF VALVES				
Function	Direction	Port	Port-Relief Valve Pressure Setting	Load-Sense Pressure Adjustment
Main-relief valve			4785 psi (330 bar)	4785 psi (330 bar)
Rotation system	Right	A	P	2610 psi (180 bar)
	Left	B	P	2610 psi (180 bar)
Boom cylinder	Down	A	1815 psi (125 bar)	1450 psi (100 bar)
	Up	B	5075 psi (350 bar)	5075 psi (350 bar)
Jib cylinder	Up	A	5075 psi (350 bar)	5075 psi (350 bar)
	Down	B	2755 psi (190 bar)	2320 psi (160 bar)
Extension cylinders	Extend	A	P	-
	Retract	B	P	-
Rotator	Right	A	P	725 - 4350 psi (50-300 bar)
	Left	B	P	725 - 4350 psi (50-300 bar)
Grab	Open	A	P	725 - 4350 psi (50-300 bar)
	Close	B	P	725 - 4350 psi (50-300 bar)
Winch (1.5 metric T)	Lift	A	P	2320 psi (160 bar)
	Lower	B	P	2320 psi (160 bar)
Winch (2.5 metric T)	Lift	A	P	2685 psi (185 bar)
	Lower	B	P	2685 psi (185 bar)
Separate stabilizer valve		All		2175 psi (150 bar)

WORKING PRESSURE ON LOAD-HOLDING VALVES		
Function	Direction	Opening Pressure
Rotation System	Right	2685 psi (185 bar)
	Left	2685 psi (185 bar)
Boom cylinder	Up	5075 psi (350 bar)
	Down	-
Jib cylinder	Up	5075 psi (350 bar)
	Down	3045 psi (210 bar)
Extension cylinders	Extend	3045 psi (210 bar)
	Retract	6235 psi (430 bar)

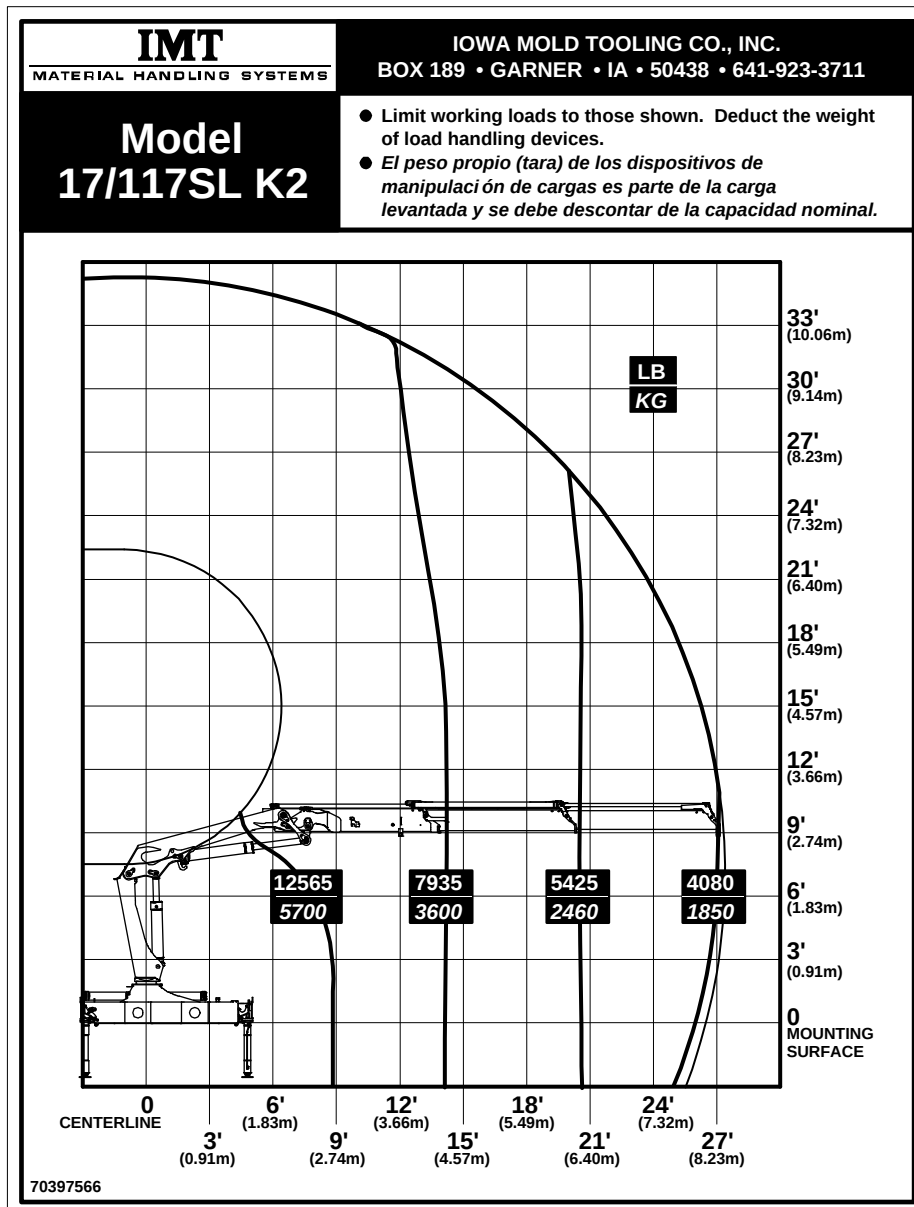
PRESSURE SETTING FOR LOAD-MOMENT LIMITATION (LMB)	
Load moment limitation (LMB)	4570 psi (315 bar)
HDL	4135 psi (285 bar)

MAXIMUM PUMP PERFORMANCE	
Pump performance	18.5 gal/min (70 l/min)

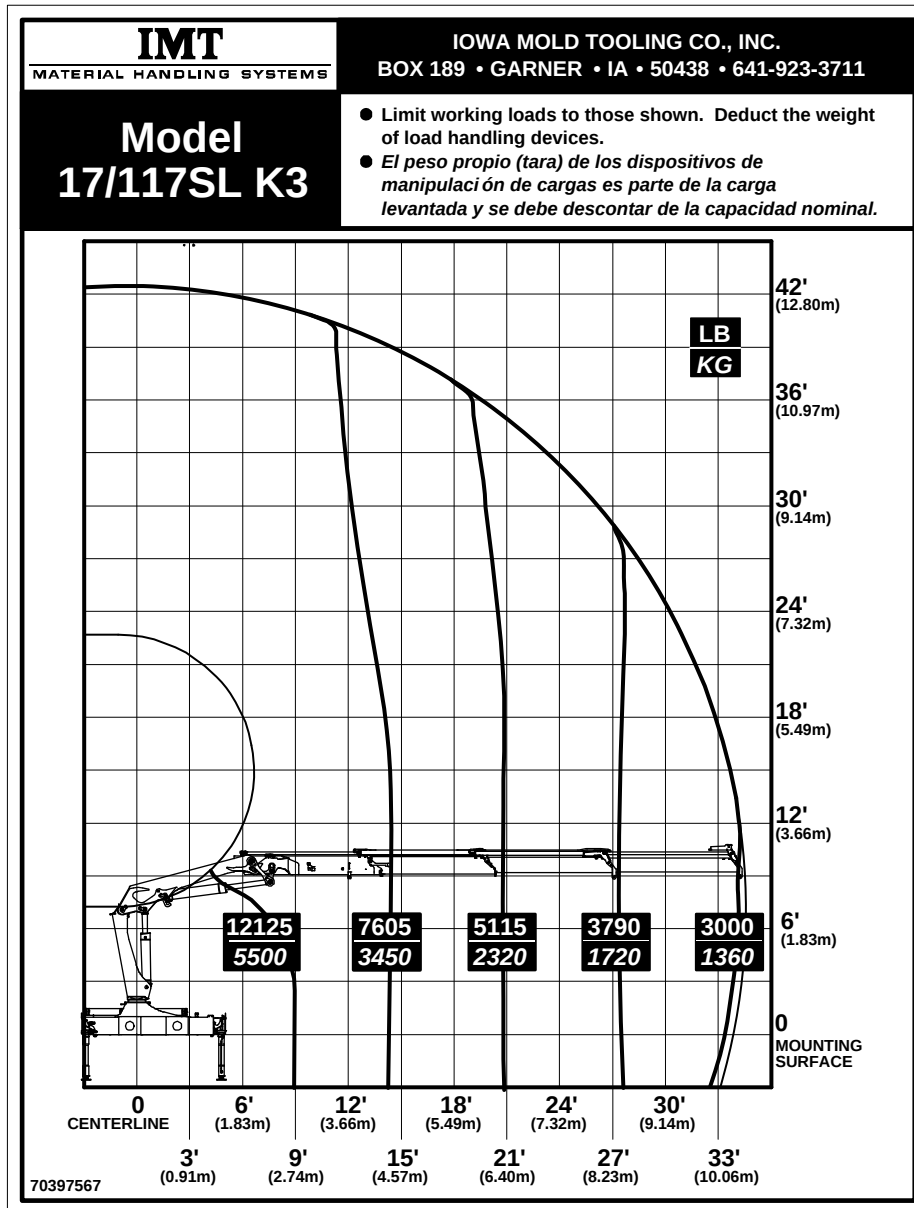
17/117SL K1 Capacity Chart



17/117SL K2 Capacity Chart

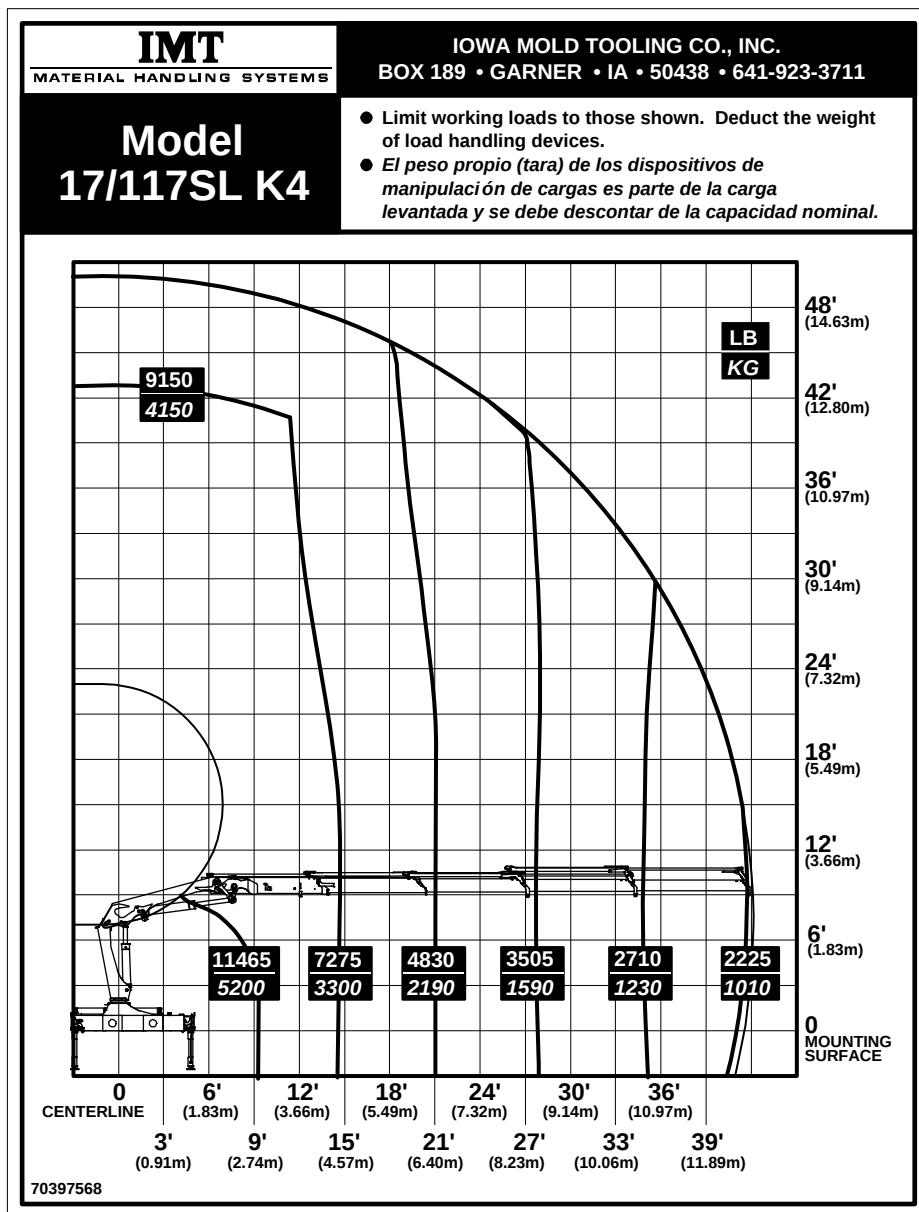


17/117SL K3 Capacity Chart

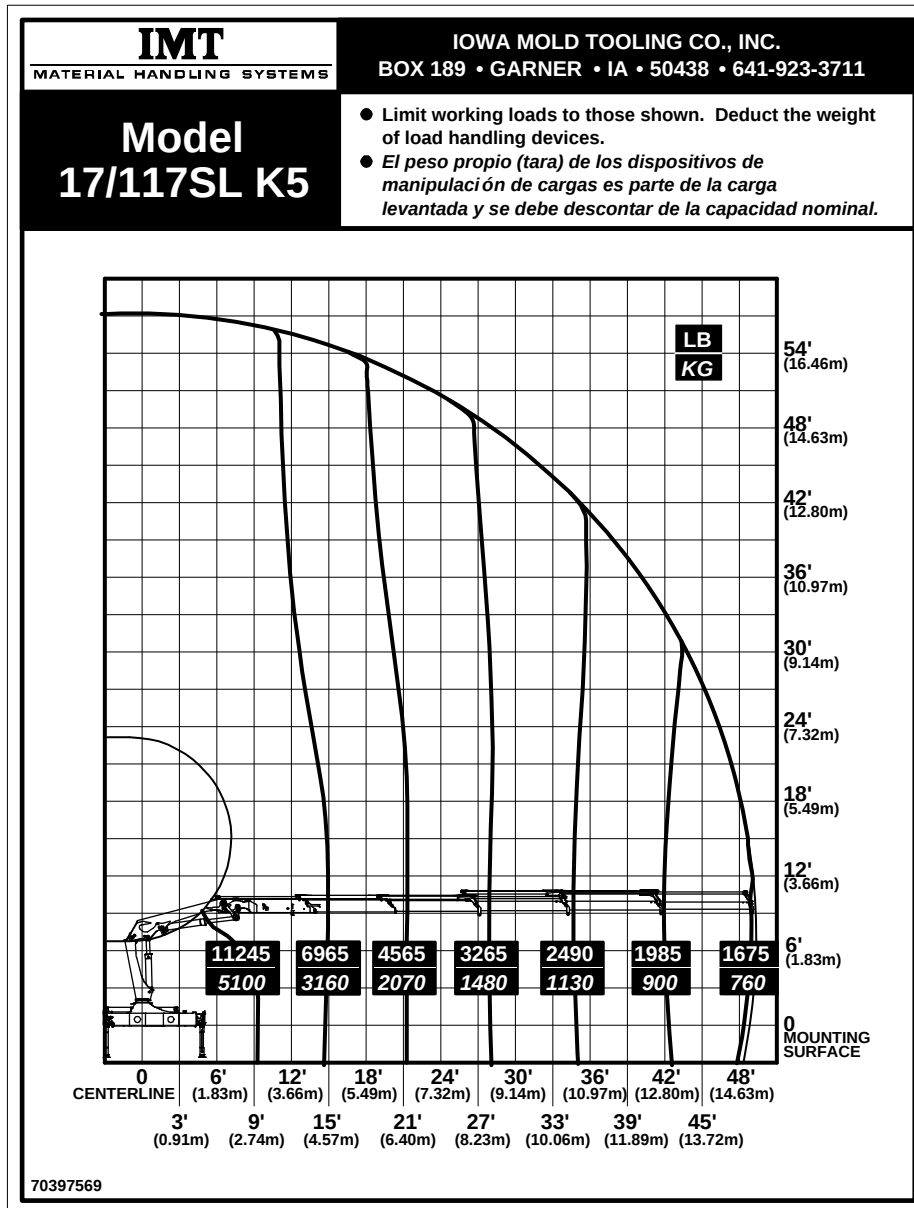




17/117SL K4 Capacity Chart

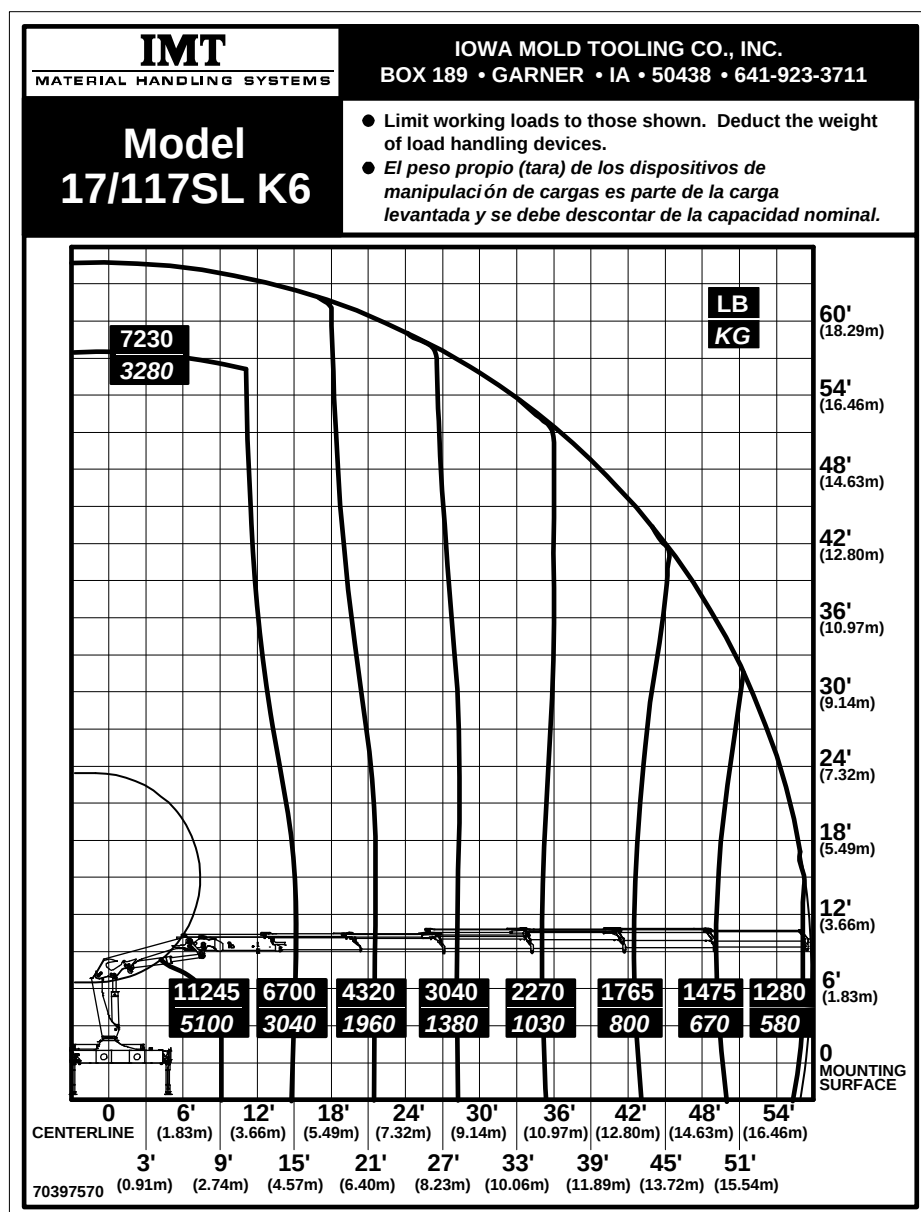


17/117SL K5 Capacity Chart



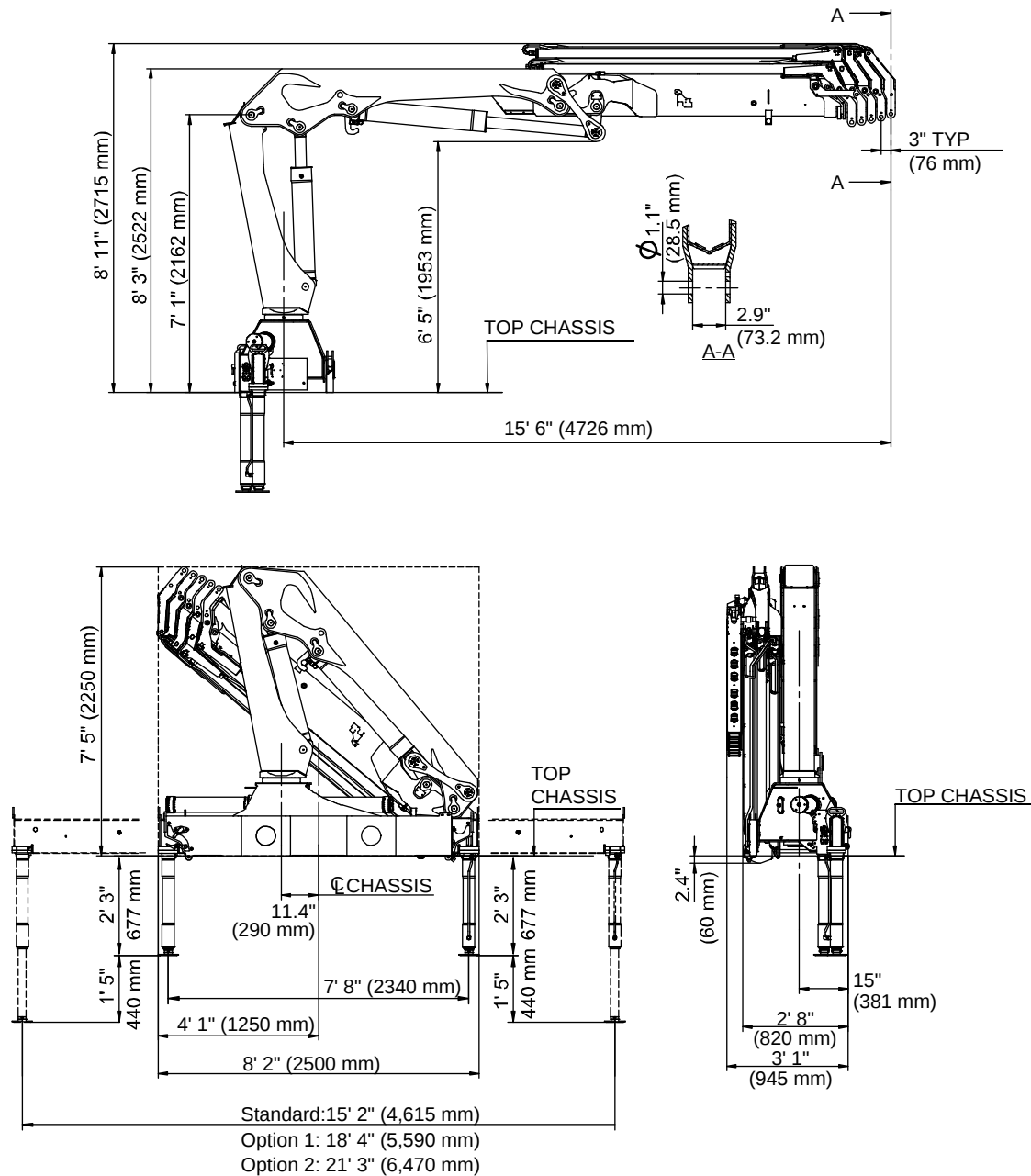


17/117SL K6 Capacity Chart



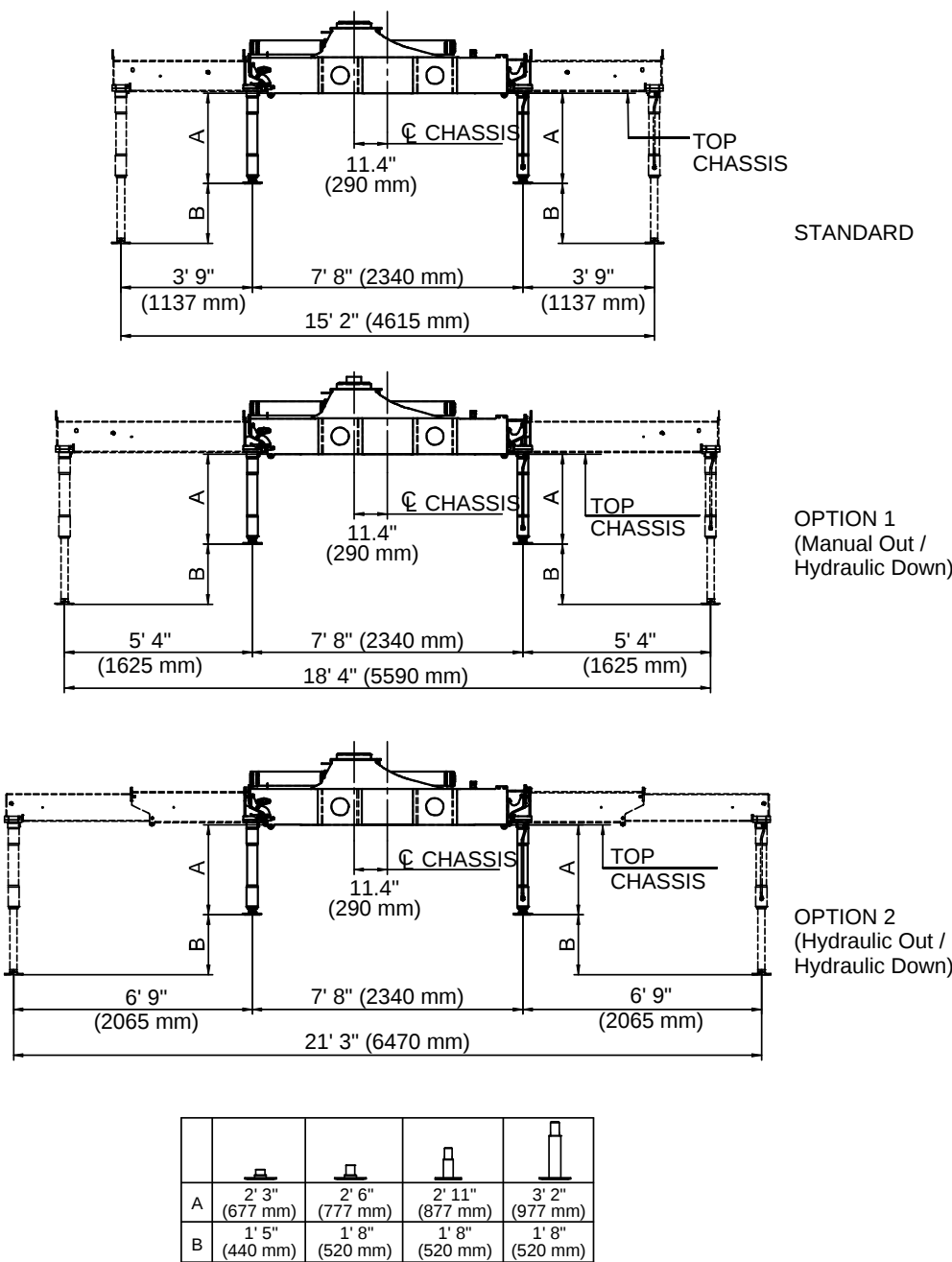


Geometric Configuration



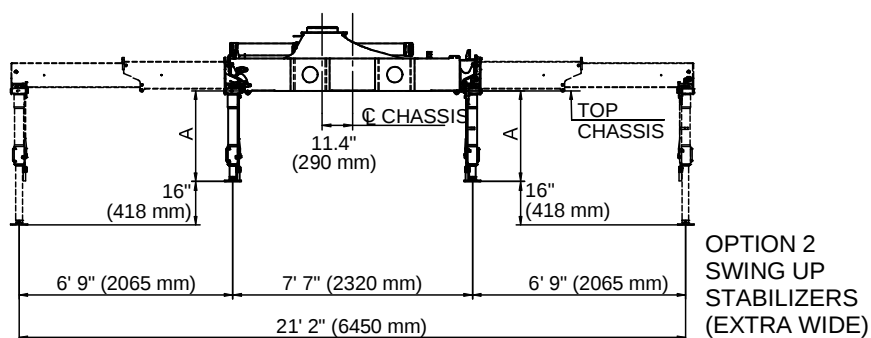
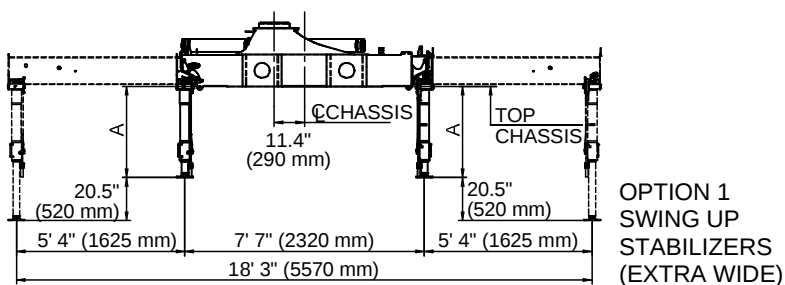
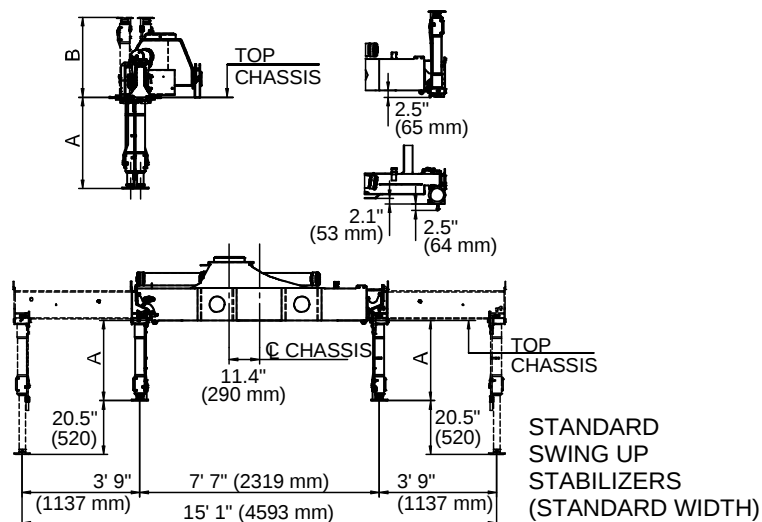


Stabilizer Dimensions, Fixed Legs





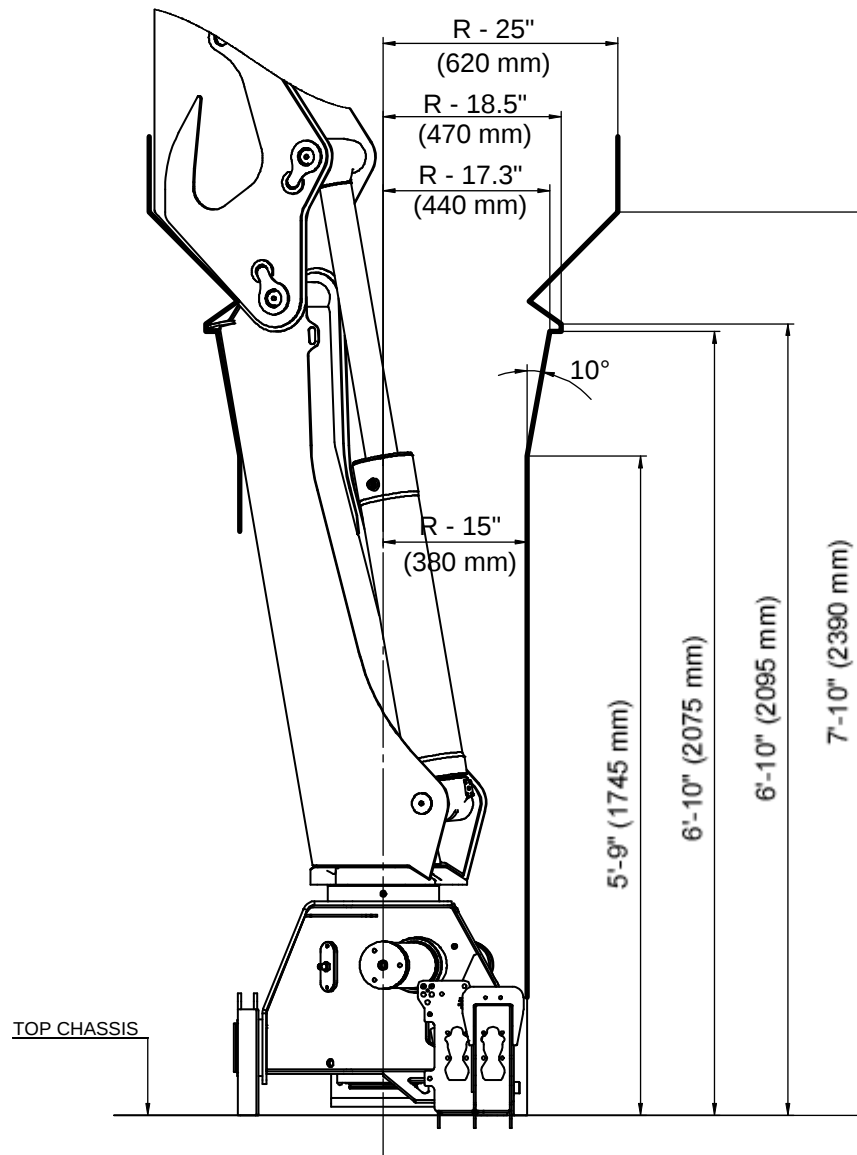
Stabilizer Dimensions, Hyd Swing-Up Legs



A	35" (881 mm)	39" (981 mm)	42.5" (1081 mm)
B	30.5" (775 mm)	34.4" (875 mm)	38.4" (975 mm)



17/117SL Swing Clearance





CHAPTER 2

Hydraulic Schematics

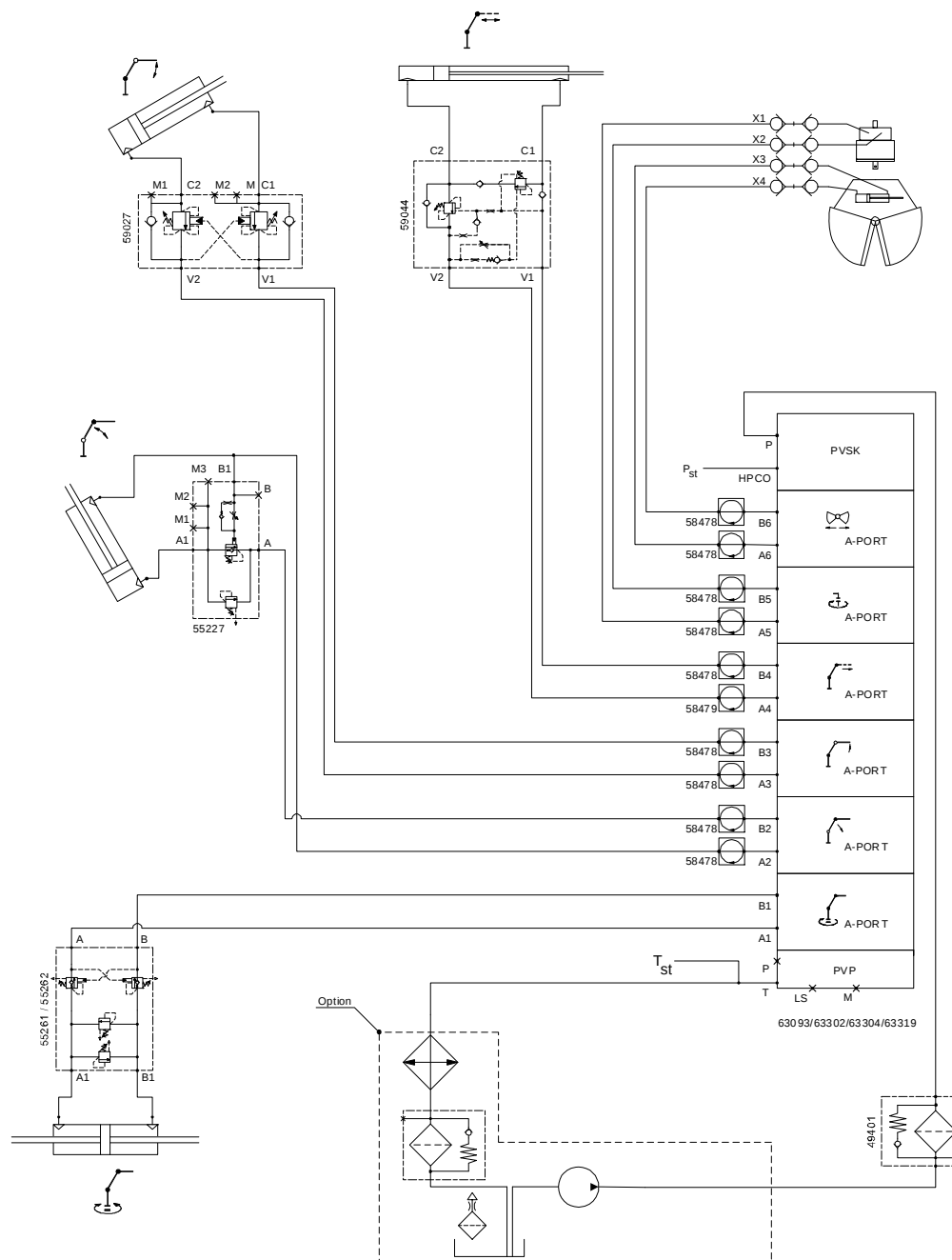
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Hydraulic Diagram - 17/117SL Danfoss 6-Function Radio

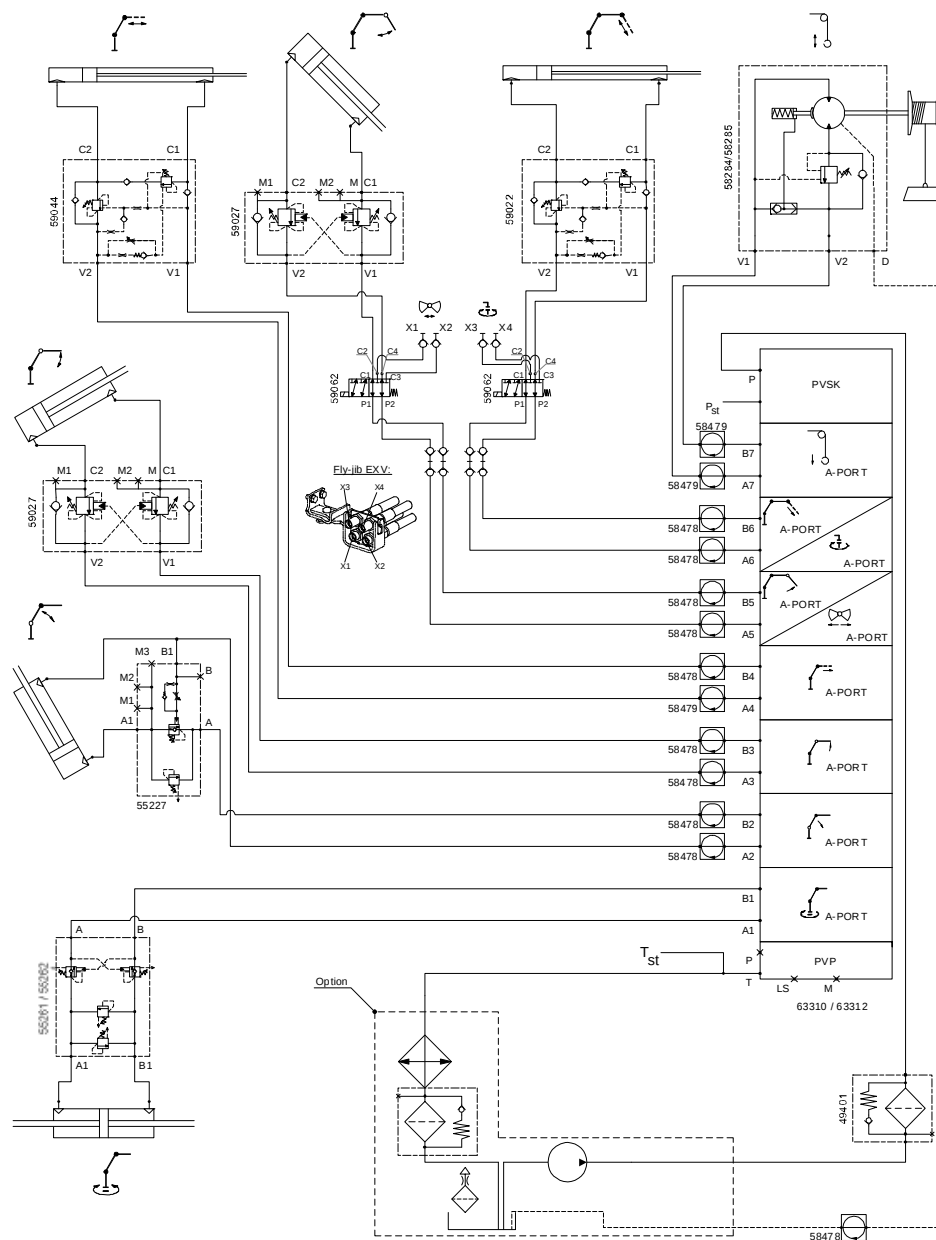
This diagram applies to a 17/117SL crane with a single-circuit fixed pump, and 6-function Danfoss radio controls.





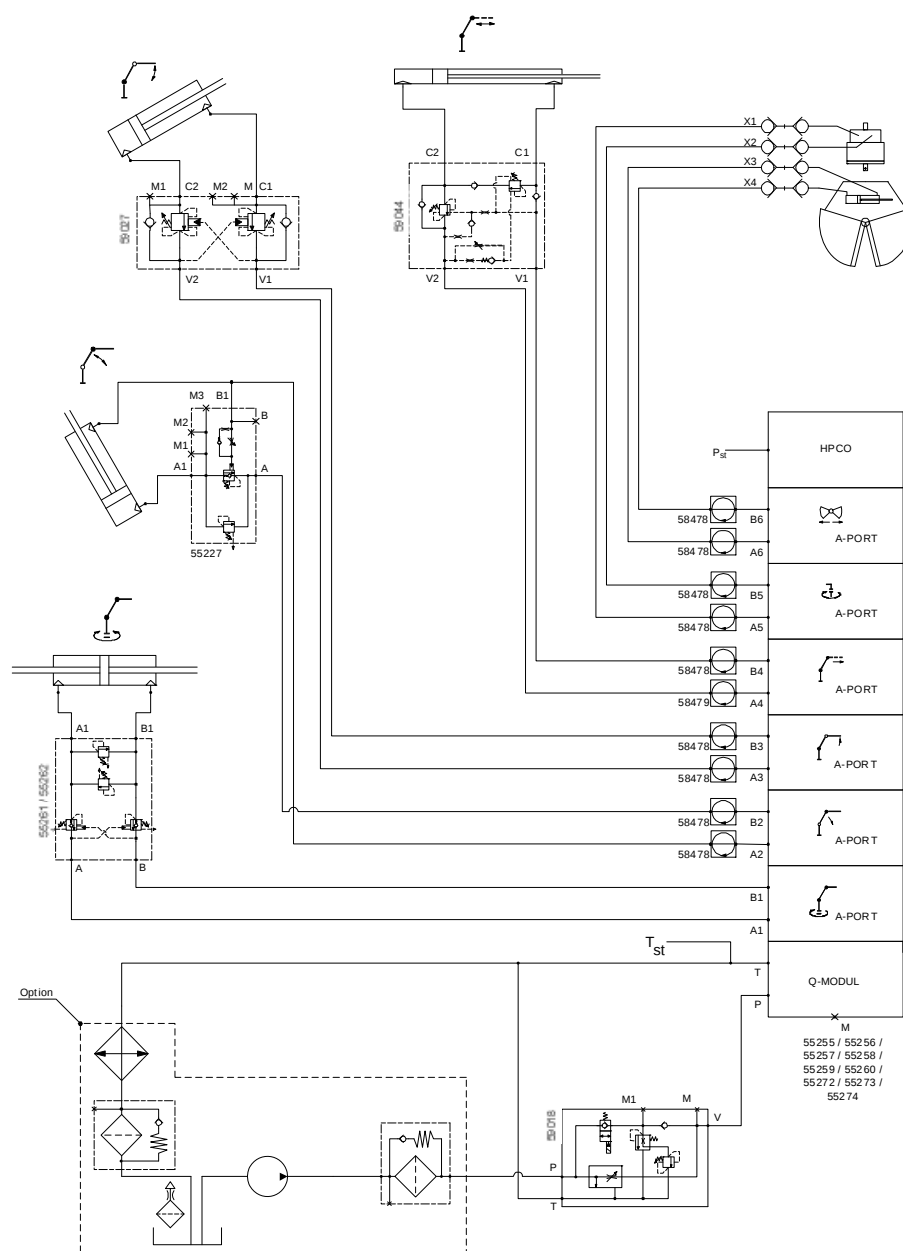
Hydraulic Diagram - 17/117SL Danfoss 7-Function Radio

This diagram applies to a 17/117SL crane with a single-circuit fixed pump, and 7-function Danfoss radio controls.



Hydraulic Diagram - 17/117SL Hydrocontrol 6-Function Manual

This diagram applies to a 17/117SL crane with a single-circuit fixed pump, and 6-function Hydrocontrol manual controls.





Hydraulic Diagram - 17/117SL Hydrocontrol 6-Function Radio

This diagram applies to a 17/117SL crane with a single-circuit fixed pump, and 6-function Hydrocontrol radio controls.

