

C-1.4 Self-Test: Hydraulic Jack Calculations Table

Small piston force	Small piston diameter	Small piston area	Small piston travel distance	Fluid pressure	Large piston diameter	Large piston area	Large piston travel distance	Force exerted by large piston	Mechanical advantage
25 lb	2.5 in.				7.5 in.		7 in.		
44 lb	3.7 in.		14 in.			73 in ²			
78 lb	5.5 in.						12 in.		14
2,375 N	8 cm		1.8 m					9,449 N	
1,850 N		40 cm ²			27.64 cm		70 mm		15
						6,120 cm ²	113 mm	10,770 N	34