



MINIMUM BOLT-LENGTH CHART

MODEL			MS		MZ		HS			K	
	S	J	M/ML/RL	Regular	Short Bolt	Regular	Short Bolt	H	Regular		Short Bolt
Bolt Size	5,000#	30,000#	110,000#	90,000#	90,000#	125,000#	125,000#	170,000#	170,000#	170,000#	220,000#
#6	1/2										
#8	5/8										
#10	7/8	7/8									
1/4"	7/8	1									
5/16"	1	1-1/4	1-1/2								
3/8"		1-1/2	1-3/4								
7/16"		1-3/4	2								
1/2"		2	2-1/4	1-3/4	1-1/2	2	1-1/4				
5/8"			2-1/2	2	1-1/2	2-1/4	1-1/2				
3/4"			2-3/4	2	1-3/4	2-1/2	1-3/4				
7/8"			2-3/4	2-1/4	2	2-3/4	2				
1"			3	2-1/2	2-1/4	3	2-1/4	3-1/4	3	2-1/4	
1-1/8"			4-3/4	3-1/4	2-1/2	3-1/4	2-1/2	5-1/4	3-1/4	2-1/2	
1-1/4"			5	3-3/8	2-3/4	3-1/2	2-3/4	5-1/2	3-1/2	2-3/4	5-1/2
1-3/8"								5-1/2	3-3/4	3-1/4	6
1-1/2"								5-3/4	4	3-3/4	6-1/2
1-3/4"											8
2"											8
2-1/4"											9
2-1/4"											9-1/4

**Spacer kits are available to increase grip on longer bolts

**NO LIMIT SERVICE FOR A
NO LIMIT INDUSTRY**