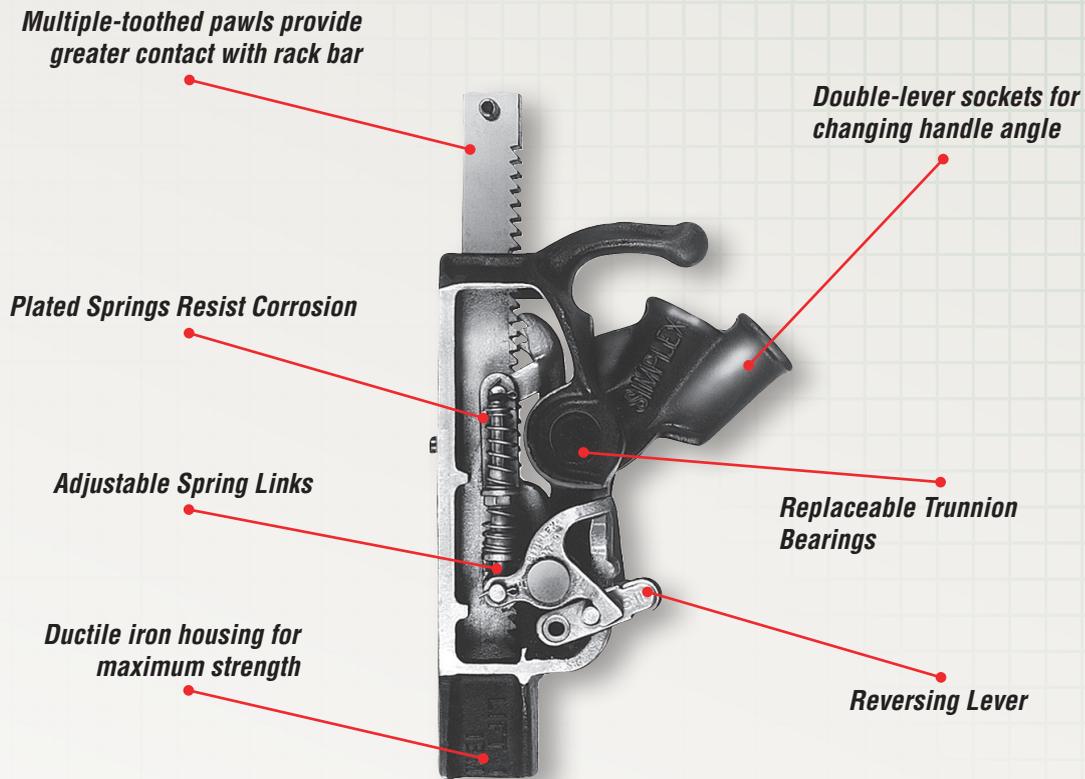


mechanical

MECHANICAL JACKS





Ratchet Model Jack Shown

SIMPLEX MECHANICAL JACKS PRODUCT LINE OVERVIEW

► The Industry Standard

With over a century of experience in designing and manufacturing mechanical jacks, Simplex is the undisputed market leader that has set the standard for high quality and reliability in the mechanical jack industry.

► The Widest Selection

Only Simplex can offer a full range of Ratchet Jacks, Screw Jacks, Superjacks, Push/Pull Jacks and Mine Roof Supports to fit a broad range of applications and use.

► Unsurpassed Quality

Simplex Jacks have proven to withstand the toughest application and use in today's market. Each Jack component is carefully inspected and assembled by highly skilled assemblers and tested to meet or exceed ANSI B30.1 Safety Standards.

► Value and Service

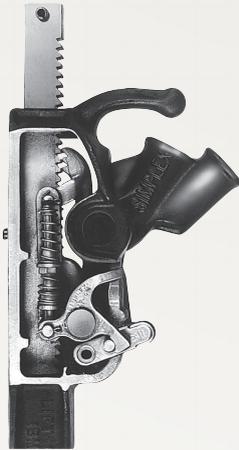
Simplex stands behind every mechanical jack we sell with a NO SMALL PRINT WARRANTY supported by our global network of Industrial Distributors and Authorized Service Centers.

MECHANICAL JACKS

Proper Size & Selection



Methods Of Mechanical Force



Ratchet Jacks

◀ Ratcheting mechanism used to create leverage for movement.



Screw Jacks

◀ Mechanical advantage is gained by using a specialized Acme threaded screw.

Points To Review When Selecting A Mechanical Jack

mechanical

Determine the Proper Jack for your Application

Ratchet jacks are designed for lifting and positioning up to 15 tons. For higher tonnage applications, you should consider using our Superjacks for lifting and sustaining up to 50 tons. For all sustaining load applications, consider the screw jack as a suitable solution up to 24 tons.

Handle Effort

Reference each table within this section to determine the amount of handle effort required for an application. Each model number specifies the amount of force required per ton. Also consult your local codes, safety standards or contracts that may specify maximum allowable handle effort per user. Proper jack sizing is required to maintain reasonable handle effort.

Lift and Height of Jack

The available clearance under the load often determines which jack should be used. For the greatest versatility, select a jack that has the longest available stroke, but still fits under the load. The ratchet jack toe can be used in very low clearance situations where other products are not suited.

Travel Speed

Ratchet jacks provide greatest travel per stroke, but accommodate lighter loads. Superjacks provide greater lifting capacity with less movement per stroke.

Portability

If ease of portability is a factor, consider lightweight Ratchet Jack models: RJA1022, RJA1538, or Superjack models: JJA1510C, JJA2510C, JJA2515C, JJA3510D, JJA5010B.

Ratchet Jacks are ideal for mills and factory maintenance, oil fields, shipyards, farms, machinery riggers, construction contactors, mining operators, bridge and rail car repair and heavy-duty industrial maintenance. These are the most versatile, general-purpose jacks available. Rugged construction permits safe, efficient lifting, lowering, skidding, moving, sustaining and leveling with the important SIMPLEX feature that provides full lift capacity on the toe or on the cap.



Super Jacks are used for inspecting and renewing journal brasses, bridge, tank and structural steel erectors, presses, shipbuilding and all industries where powerful, all-position jacks are required. These jacks will hold the load indefinitely and offer heat treated, alloy steel forgings, bronze nuts, ball bearings, positive shoulder stops and high gear ratios. The ratchet mechanisms are fully enclosed to protect them from the elements.



Screw Jacks are suitable for house movers, leveling, supporting, shop and factory maintenance, riggers, locomotive repairs, drillers and farm applications. Malleable housings are lighter and unbreakable. A hardened, large chrome-moly ball floating cap centers the load automatically and reduces friction by 88%. The steel cap is constructed of corrugated, drop-forged steel with a self-leveling 9 degree float.



Push-Pull Jacks are essential for any maintenance repair or production work in all types of shops and field applications. Loadbinder Jacks are used on the construction of bridges and concrete and steel engineering projects. Gravity type pawl is used on boats and barges.



Trench Braces & Roof Supports are designed for putting up cross timbers and steel beams, aligning steel mine cars, a temporary prop in connection with loading equipment, pulling up and removing slack in power cables and pulling and pushing conveyor lines and controlling the tail piece.



MECHANICAL JACKS

RJ Series - Ratchet Jacks



Models: RJ84A, RJ85A, RJ1017 & RJ86A



THINK SAFETY

Please refer to pages 4&5 for a complete list of safety tips and recommendations.



CE COMPLIANT

Our Jack design specifications meet or exceed ANSI /ASME B30.1 Safety Standards.



CARRYING HANDLE

Carrying handles make the positioning and transporting of the 10, 15 and 20 ton ratchet jacks simple.

mechanical

- Capacity Range** ► **5 - 20 Tons**
- Stroke Range** ► **7 - 21.25 In.**
- Maximum Toe Height Range** ► **1.62 - 2.25 In.**

- Multiple-tooth pawls for strength & safety.
- Large base ensures a firm foundation.
- Drop-forged, alloy steel, heat-treated components.
- Plated springs to resist corrosion.
- Double-lever sockets for jacking in close quarters.
- The RJA1538 pole jack is designed for pole pulling applications. Chain and I-Beam are ordered separately.



RJA1022

RJ22B

RJ24A

RJ2029

RJA1538 Pole Jack

IB1538 I-Beam Base

CHA1538 Alloy Chain

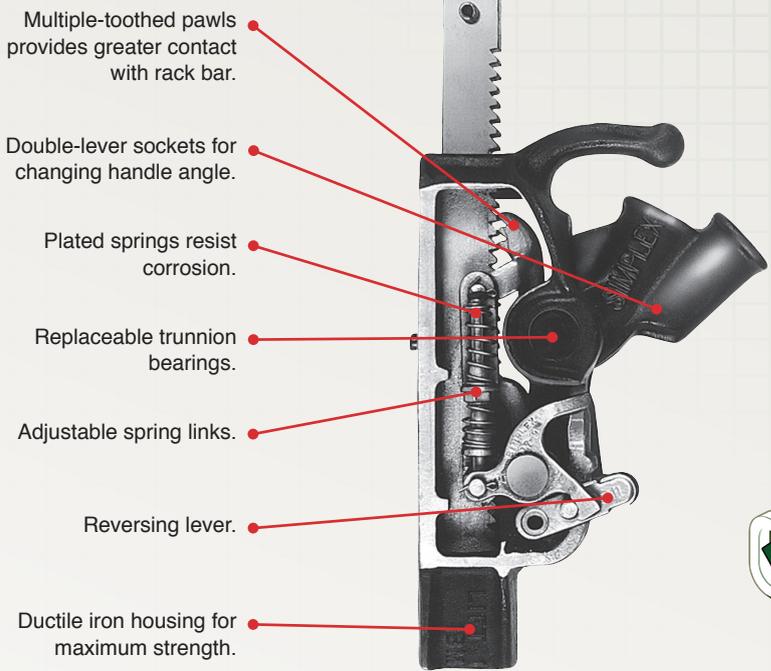
Its large lifting and holding capacity and heavy-duty housing, makes the RJ Series Jacks universal tools on any jobsite. ▼



Model	Jack Housing Material	Support Capacity (tons)	Lifting Capacity (tons)	Handle Effort per Ton (lbs)
RJ84A	Steel	5	5	32
RJ85A				32
RJ86A				32
RJ1017		10	10	30
RJ22B				30
RJ24A		20	15	32
RJ2029				32
RJA1022	Aluminum	10	10	30
RJA1538		15	8	32

MECHANICAL JACKS

RJ Series - Ratchet Jacks



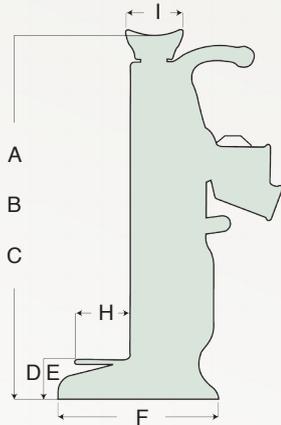
- Multiple-toothed pawls provides greater contact with rack bar.
- Double-lever sockets for changing handle angle.
- Plated springs resist corrosion.
- Replaceable trunnion bearings.
- Adjustable spring links.
- Reversing lever.
- Ductile iron housing for maximum strength.



RECOMMENDED LEVER BARS

Please refer to page 146 for additional details.

Ratchet Jack Model	Lever Bar Model
<i>RJ84A</i>	SLB36
<i>RJ85A</i>	SLB36
<i>RJ86A</i>	SLB36
<i>RJ1017</i>	SLB60
<i>RJ22B</i>	SLB60
<i>RJ24A</i>	SLB70
<i>RJ2029</i>	SLB70
<i>RJA1022</i>	SLB60
<i>RJA1538</i>	SLB70



mechanical

Dimensions (in)										Weight (lbs)	Model
A	B	C	D	E	F	G	H	I	J		
Minimum Height	Maximum Height	Stroke	Toe Minimum Height	Toe Maximum Height	Base Length	Base Width	Toe Length	Cap Length	Cap Width		
14	21	7	1.75	8.75	7.38	5	2.5	2.62	2.31	28	<i>RJ84A</i>
17	27	10	1.75	11.75	7.38	5	2.5	2.62	2.31	30	<i>RJ85A</i>
20	33	13	1.75	14.75	7.38	5	2.5	2.62	2.31	35	<i>RJ86A</i>
17.25	26.75	9.5	1.62	11.13	8.75	6	2.4	2.87	2.62	40	<i>RJ1017</i>
21.62	33.62	12	2	14	10.25	6.5	2.4	3	2.5	70	<i>RJ22B</i>
23.25	36	12.75	2.25	15	10.25	8	2.62	3.5	2.87	93	<i>RJ24A</i>
28	46	18	2.25	20.25	11	8	2.62	3.5	2.87	104	<i>RJ2029</i>
21.62	33.62	12	2	14	10.25	6.5	2.4	3	2.5	42	<i>RJA1022</i>
37.62	59.13	21.25	---	---	8.13	8.25	---	---	---	62	<i>RJA1538</i>

MECHANICAL JACKS

CR Series - Reel Jacks



CR321B Reel Jacks

Capacity Range ► **5 - 20 Tons**
Stroke Range ► **9.5 - 11.5 In.**
Minimum Height Range ► **21 - 34.5 In.**

mechanical

- Double-lever sockets for jacking in close quarters.
- Multiple-tooth pawls for strength & safety.
- Drop-forged, alloy steel, heat-treated components.
- Adjustable spring links for added serviceability.
- Plated springs to resist corrosion.
- Precision machining throughout.
- Steel lever bars sold separately.



THINK SAFETY

Please refer to pages 4&5 for a complete list of safety tips and recommendations.



CE COMPLIANT

Our Jack design specifications meet or exceed ANSI /ASME B30.1 Safety Standards.



CARRYING HANDLES

Convenient center mounted carrying handle makes this jack easy to position and move.



LAMINATED BASE

Treated laminated hardwood base provides solid support along with durability.

The large wooden bases and low handle efforts on these Reel Jacks enhance safety and reduce operator fatigue. ▼



CR320B



CRA1029R

Model	Capacity / Pair		Handle Effort per Tons (lbs)	Stroke (in)	Dimensions (in)					
	Side Hooks (tons)	Top Hooks (tons)			A	B	C	C ¹	C ²	C ³
					Minimum Height	Maximum Height	Minimum Height			
CR320B	5	10	72	9.5	20.75	30.25	15.25	---	---	---
CR321B	10	20	48	14	34.50	48.50	9.25	15.63	22.00	28.38
CRA1029R			40	11.63	31.13	42.75	24.87	---	---	---
CRA1029L			40	11.63	31.13	42.75	24.87	---	---	---

MECHANICAL JACKS

CR Series - Reel Jacks



◀ Two CR321B Reel Jacks are used to support this cable spool for line feeding.

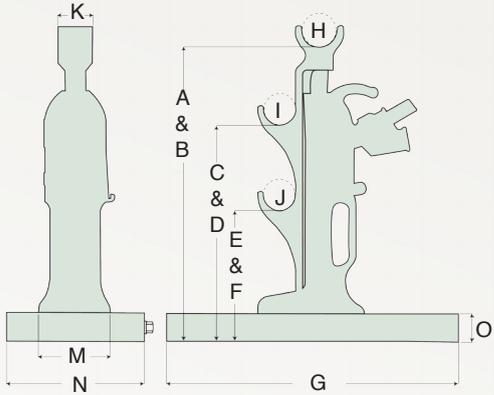


RECOMMENDED LEVER BARS

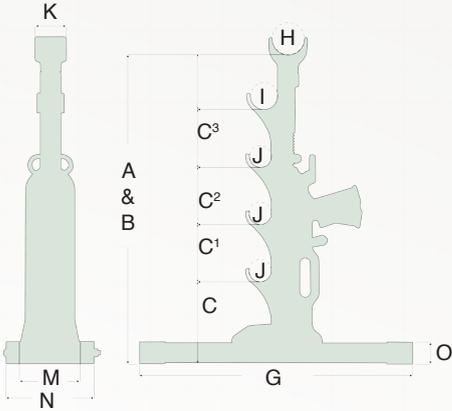
Please refer to page 146 for additional details.

Reel Jack Model	Lever Bar Model
CR320B	SLB36
CR321B	SLB60
CRA1029R	SLB60
CRA1029L	SLB60

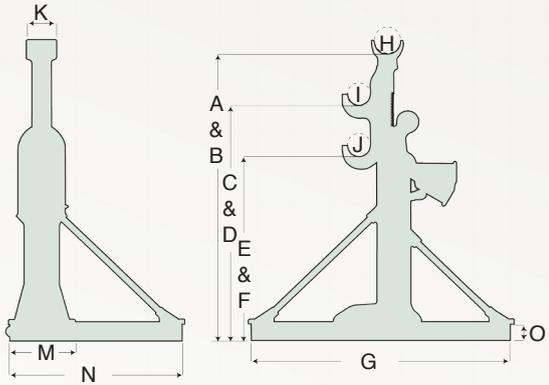
CR320B



CR321B



CRA1029R & CRA1029L



mechanical

Dimensions (in)											Weight (lbs)	Model
D	E	F	G	H	I	J	K	M	N	O		
Maximum	Minimum	Maximum	Length	Diameter	Diameter	Diameter	Width	Length	Width	Height		
24.75	9.25	18.75	20.38	2.62	2.25	2.25	2.38	5.00	9.38	2.00	51	CR320B
---	---	---	30.37	3.63	3.00	2.38	3.50	6.50	9.75	2.50	125	CR321B
36.50	18.87	30.50	30.00	3.12	2.62	2.62	3.50	6.62	7.50	2.25	86	CRA1029R
36.50	18.87	30.50	30.00	3.12	2.62	2.62	3.50	6.62	7.50	2.25	86	CRA1029L

MECHANICAL JACKS

PP Series - Push / Pull Jacks



Model: PP610



Model: PP61015



THINK SAFETY

Please refer to pages 4&5 for a complete list of safety tips and recommendations.



CE COMPLIANT

Our Jack design specifications meet or exceed ANSI /ASME B30.1 Safety Standards.



RECOMMENDED LEVER BARS

Please refer to page 146 for additional details.

Push/Pull Jack Model	Lever Bar Model
PP610	SLB24
PP61015	SLB24

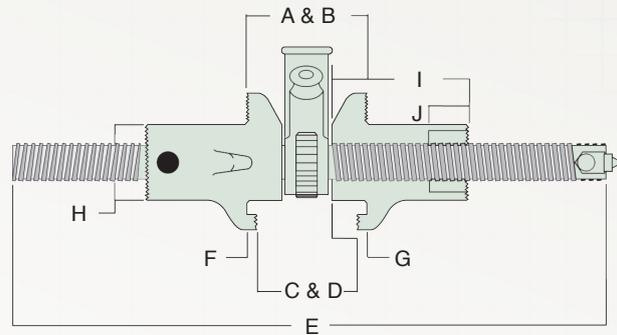
A Simplex PP610 is used to separate these I-Beams for proper bridge repair operation and maintenance. ▼



- Centered Capacity▶ **10 Tons**
- Weight▶ **5 - 13 Lbs.**
- Screw Diameter▶ **1.25 In.**

- ▶ Used for pushing, pulling, holding and more.
- ▶ Ideal for weld shops.
- ▶ End nuts are designed to permit the use of chains with eye hooks.
- ▶ Suitable for adjusting forms, dampers, fixtures and flues.
- ▶ Incorporates 1.25-6 ACME 2G Class, right and left hand.

mechanical



Model	Dimensions (in)									
	A	B	C	D	E	F	G	H	I	J
	Minimum	Maximum	Minimum	Maximum	Length	Length	Length	Length	Length	Length
PP610	3.38	8.13	2.87	7.62	10	.31	.31	2.38	3.19	1.25
PP61015	----	----	----	----	10	----	----	----	----	----

Model	Centered Capacity (tons)	Hook/Toe Offset Load Capacity (tons)	Travel (in)	Handle Effort per ton (lbs)	Screw Diameter (in)	Weight (lbs)
PP610	10	2	4.5	15	1.25	13
PP61015	10	2	----	15	1.25	5



MECHANICAL JACKS

JJ Series - Super Jacks



Models: JJA2515C, JJ2510C

Capacity Range ► **15 - 50 Tons**
Stroke Range ► **4 - 9 In.**
Minimum Height ► **10.25 - 15 In.**

- Ratcheting screw jack design.
- Holds the load indefinitely, and will not creep down.
- Positive shoulder stop for safety.
- Available with aluminum or ductile iron housing.
- Ball bearings for smooth operation and low handle effort.



THINK SAFETY

Please refer to pages 4&5 for a complete list of safety tips and recommendations.



CE COMPLIANT

Our Jack design specifications meet or exceed ANSI /ASME B30.1 Safety Standards.



REVERSAL RATCHET

Raise or lower the load precisely with the reversal ratchet socket with quick spin handle.

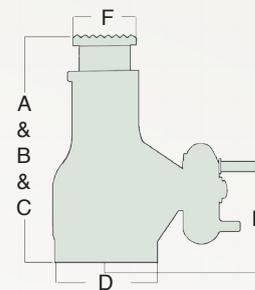


RECOMMENDED LEVER BARS

Please refer to page 146 for additional details.

Super Jack Model	Lever Bar Model
JJ2510C	SLB36
JJ3510D	SLB36
JJ5010B	SLB56
JJA1510C	SLB36
JJA2510C	SLB36
JJA2515C	SLB36
JJA3510D	SLB36
JJA5010B	SLB56

mechanical



Model	Jack Housing Material	Capacity (tons)	Dimensions (in)						Handle Effort Per Ton (lbs)	Weight (lbs)
			A	B	C	D	E	F		
			Minimum Height	Maximum Height	Stroke	Base Diameter	Socket	Cap Diameter		
JJ2510C	Steel	25	10.25	15.25	5	5.5	7.5	3.13	6	43
JJ3510D		35	10.25	15.25	5	5.5	7.5	3.13	6	44
JJ5010B		50	10.31	14.31	4	7.25	8.81	3.93	4	80
JJA1510C	Aluminum	15	10.25	15.25	5	5.5	7.5	2.38	6	38
JJA2510C		25	10.25	15.25	5	5.5	7.5	3.13	6	34
JJA2515C		25	14.87	23.87	9	5.5	7.5	3.13	6	43
JJA3510D		35	10.25	15.25	5	5.5	7.5	3.13	5	34
JJA5010B		50	10.31	14.31	4	7.25	8.81	3.93	4	61

MECHANICAL JACKS

SJ Series - Screw Jacks



Mechanical Screw Jack Family Shown

Capacity Range▶ **12 - 24 Tons**
Stroke Range▶ **3.75 - 14.25 In.**
Minimum Height▶ **9.62 - 23 In.**

mechanical

- ▶ Ductile and malleable bodies for added strength.
- ▶ Positive welded stop for safety.
- ▶ Supports loads indefinitely, and will not creep down.
- ▶ Carry handle for ease of transport.
- ▶ Four holes for easy positioning of lever bar.
- ▶ 9° tilt saddle assists in centering load point.



THINK SAFETY

Please refer to pages 4&5 for a complete list of safety tips and recommendations.



CE COMPLIANT

Our Jack design specifications meet or exceed ANSI /ASME B30.1 Safety Standards.

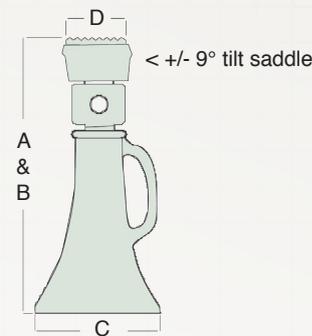


RECOMMENDED LEVER BARS

Please refer to page 146 for additional details.

* Lever Bars Sold Separately

Screw Jack Model	Lever Bar Model
<i>SJ156</i>	SLB24
<i>SJ158</i>	SLB24
<i>SJ1512</i>	SLB24
<i>SJ208</i>	SLB35
<i>SJ2010</i>	SLB35
<i>SJ2012</i>	SLB35
<i>SJ258</i>	SLB42
<i>SJ2512</i>	SLB42
<i>SJ2518</i>	SLB42



Model	Sustaining Capacity (tons)	Dimensions (in)				Handle Effort Per Ton (lbs)	Weight (lbs)
		A Closed Height	B Stroke	C Base Diameter	D Cap Diameter		
<i>SJ156</i>	12	9.63	3.75	4.75	2.88	15	10
<i>SJ158</i>		11.63	5.75	5.5	2.88	15	12
<i>SJ1512</i>		15.75	9.75	6.25	2.88	15	16
<i>SJ208</i>	20	11.88	5	6	3.13	15	17
<i>SJ2010</i>		13.75	7	6.5	3.13	15	20
<i>SJ2012</i>		15.75	9	6.75	3.13	15	24
<i>SJ258</i>	24	13	4.25	6.5	3.25	15	28
<i>SJ2512</i>		17	8.25	7.25	3.25	15	37
<i>SJ2518</i>		23	14.25	8.5	3.25	15	52



MECHANICAL JACKS

SC Series - Screw & Cap Assemblies



▲ The shoulder nut is placed into piping, fixtures or other fixed forms supplied by the user.

SCN15 & SC156 Shown



THINK SAFETY

Please refer to pages 4&5 for a complete list of safety tips and recommendations.



RECOMMENDED LEVER BARS

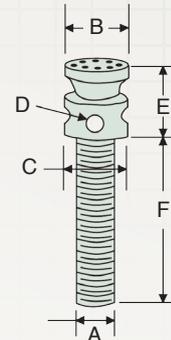
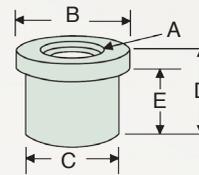
Please refer to page 146 for additional details.

* Lever Bars Sold Separately

Screw & Cap Model	Lever Bar Model
SC156	SLB24
SC158	SLB24
SC1512	SLB24
SC208	SLB35
SC2010	SLB35
SC2012	SLB35
SC258	SLB42
SC2512	SLB42
SC2518	SLB42

- Sustaining Capacity** ► **12 - 24 Tons**
- Thread Pitch Range**..... ► **1.5 - 2.5 in.**
- Weight Range**..... ► **5.5 - 29.25 Lbs.**

- Holds the load indefinitely without creep down.
- The shoulder nut is placed into piping or other fixed form, and the screw & cap assembly is threaded through it.



mechanical

Model	Sustaining Capacity (tons)	Dimensions (in)						Weight (lbs)
		A	B	C	D	E	F	
		Modified Acme Thread Diameter - Pitch A (Thread) (in)	Width		Diameter	Width		
SC156	12	1.5 - 3	2.87	2.25	.87	3.75	5.68	5.5
SC158		1.5 - 3	2.87	2.25	.87	3.75	7.68	6.25
SC1512		1.5 - 3	2.87	2.25	.87	3.75	11.68	7.75
SC208	20	2 - 2.5	3.13	2.87	.93	4	7.56	10.5
SC2010		2 - 2.5	3.13	2.87	.93	4	9.56	12
SC2012		2 - 2.5	3.13	2.87	.93	4	11.56	13.5
SC258	24	2.5 - 2.5	3.25	3.25	1.81	5	7.81	16.75
SC2512		2.5 - 2.5	3.25	3.25	1.81	5	11.86	21.75
SC2518		2.5 - 2.5	3.25	3.25	1.81	5	17.81	29.25
Shoulder Nuts								
SCN15	---	1.5 - 3	3	2.41	3	2.25	---	3.25
SCN20	---	2 - 2.5	4	3	3.25	2.25	---	5
SCN25	---	2.5 - 2.5	5	3.93	4	3	---	11

MECHANICAL JACKS

44 Series - Tank Jacks



Tank Jack Family Shown



CE COMPLIANT

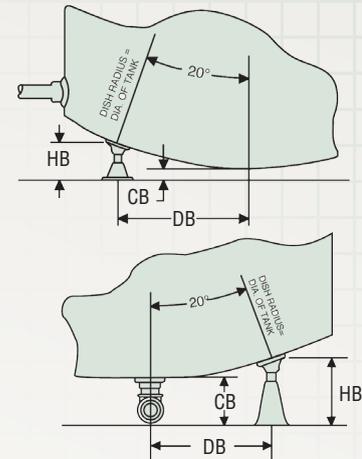
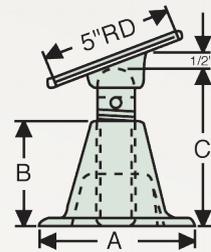
Our Jack design specifications meet or exceed ANSI /ASME B30.1 Safety Standards.

Model	Order Number	Base Dia. "A" (in)	Base Height "B" (in)	Min. Height "C" (in)	Max. Height "C" (in)	Weight (lbs)
4406	03820	5.75	4	6	8	10
4410	03840	6	8	10	12	12
4414	03860	6.5	12	14	16	17
4418	03880	8	16	18	20	26
4846	03993	-----	-----	-----	-----	2.5

- Capacity ➔ **7.5 Tons**
- Stroke ➔ **2 In.**
- Minimum Height ➔ **6 - 18 In.**

- ▶ Supports and levels verticle, bottom, or side opening filter and storage tanks.
- ▶ Rated capacity for all models is 15,000 lbs.
- ▶ Screw operation provides infinite adjustment for exact tank leveling and gravity flow.

mechanical



Use the installation data charts, with accompanying drawings, to determine the size and number of jacks your application will require.

Model	Tank Dia. (ft-in)	Pipe Dia. (in)	"DB" (in)	"HB" (in)	"CB" (in)	Quantity Required	
						Under 12 Ft.	Over 12 Ft.
For Side Pipe Connections							
4406	3-6	---	14	6.5	4	4	4
4406	4-0	---	16	6.38	3.5	4	4
4406	4-6	---	18	6.75	3.5	4	4
4406	5-0	---	20	7.13	3.5	4	4
4406	5-6	---	22	7.5	3.5	4	4
4406	6-0	---	24	6	1.5	4	4
4406	6-6	---	26	6.13	1.5	4	4
4406	7-0	---	28	6.5	1.5	4	6
4406	7-6	---	30	6.87	1.5	4	6
4406	8-0	---	32	7.25	1.5	6	8
4406	8-6	---	34	7.62	1.5	6	8
4406	9-0	---	36	8	1.5	6	8
4410	9-6	---	38	10.38	3.5	8	8
4410	10-0	---	42	10.75	3.5	8	8

Model	Tank Dia. (ft-in)	Pipe Dia. (in)	"DB" (in)	"HB" (in)	"CB" (in)	Quantity Required	
						Under 12 Ft.	Over 12 Ft.
For Bottom Pipe Connections							
4410	3-6	2	14	10.5	8	4	4
4410	4-0	2.5	16	11.87	9	4	4
4410	4-6	2.5	18	12.25	9	4	4
4414	5-0	2.5	20	14.62	11	4	4
4414	5-6	2.5	22	15	11	4	4
4414	6-0	3	24	16.38	12	4	4
4414	6-6	3	26	14.62	10	4	4
4418	7-0	4	28	18.25	13.25	4	6
4418	7-6	4	30	18.62	13.25	4	6
4418	8-0	4	32	19	13.25	6	8
4418	8-6	5	35	20	14	6	8
4418	9-0	5	37	19.5	13	6	8
4418	9-6	5	39	20	13	8	8
4418	10-0	6	41	21	14	8	8



MECHANICAL JACKS

SER Series - Loadbinder Jack



SER20 & SER30 Shown

- Capacity** ► **20 Tons**
- Travel Range** ► **14 - 38 In.**
- Barrel Range** ► **18 - 42 In.**
- Weight** ► **57 - 92 Lbs.**

- 20 ton capacity models are used for connecting river barges, pulling forms and steel plates.
- Ideal for bridge construction and steel engineering projects.
- Equipped with spring activated pawl and 26 in. integrated handle.
- Can be used in “push” or “pull” applications.



THINK SAFETY

Please refer to pages 4&5 for a complete list of safety tips and recommendations.



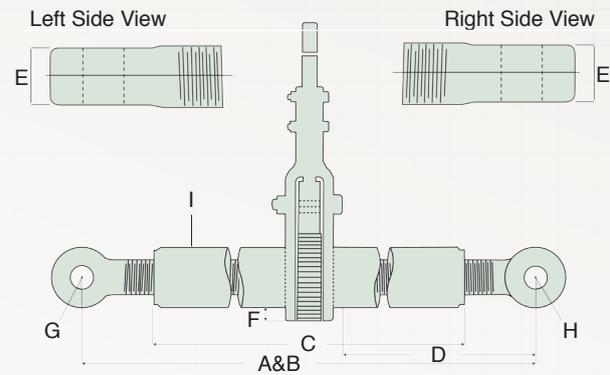
CE COMPLIANT

Our Jack design specifications meet or exceed ANSI /ASME B30.1 Safety Standards.

The Loadbinder Jack was used to secure a tractor for transporting. The heavy duty construction makes this jack useful for many applications. ▼



mechanical



Model	Travel Length (in)	Screw Diameter (in)	Dimensions (in)									Weight (lbs)
			Eye to Eye		Barrel Length	Left / Right Screw Length	Left / Right Screw Eye Thickness	Ratchet Socket Length	Inner Diameter Left / Right Screw Eye	Radius	Pipe Barrel Outside Diameter	
			Minimum	Maximum								
SER10	14	2	23	37	18	11	2	.75	1.31	1.75	3.5	57
SER20	20	2	29	49	24	14	2	.75	1.31	1.75	3.5	66
SER30	26	2	35	61	30	17	2	.75	1.31	1.75	3.5	74
SER40	38	2	47	85	42	23	2	.75	1.31	1.75	3.5	92

MECHANICAL JACKS

PJ Series - Planer Jacks



Models: PJ1P, PJ2P & PJ4P



THINK SAFETY

Please refer to pages 4&5 for a complete list of safety tips and recommendations.



CE COMPLIANT

Our Jack design specifications meet or exceed ANSI /ASME B30.1 Safety Standards.

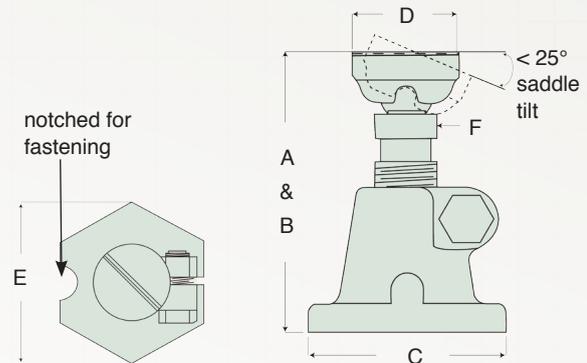
The notched base and swivel socket cap makes the versatile Planer Jack the perfect choice for repair & maintenance. ▼



mechanical

- Sustaining Capacity**▶ **2 - 8 Tons**
- Weight**▶ **1.5 - 12 Lbs.**
- Operable Rise**▶ **1-4 In.**

- ▶ Side locking screw keeps the jack extended and prevents lowering due to vibration.
- ▶ Screw operation provides countless adjustments for exact leveling.
- ▶ Ideal jack for leveling plane beds, millers and machinery.
- ▶ Ball and socket cap swivels to center load forces.
- ▶ Notched base fastens easily to machine beds.



Model	Sustaining Capacity (tons)	Operable Rise (in)	Dimensions (in)						Weight (lbs)
			A	B	C	D	E	F	
			Minimum Height	Maximum Height	Across Flats	Cap Diameter	Across Points	Hex Across Flats	
PJ1P	2	1	2.75	3.75	2.38	1.25	2.75	.75	1.5
PJ2P	4	1.5	3.75	5.25	3.13	1.68	3.62	1	3
PJ3P	6	2.25	5.25	7.5	4	2.06	4.62	1.25	6
PJ4P	8	4	7.5	11.5	5.38	2.5	6.19	1.5	12

SIMPLEX

MECHANICAL JACKS

S Series - Spreader Jack



Model: S3A



THINK SAFETY

Please refer to pages 4&5 for a complete list of safety tips and recommendations.



CE COMPLIANT

Our Jack design specifications meet or exceed ANSI /ASME B30.1 Safety Standards.



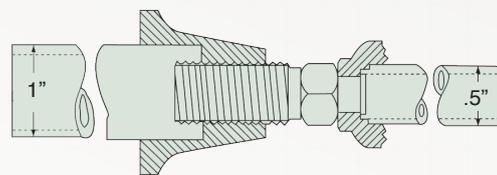
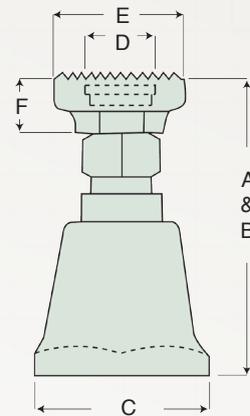
LOAD CAP

Steel serrated load cap prevents the load from possible slippage.

- Sustaining Capacity**▶ **3 Tons**
- Operable Rise**▶ **1 In.**
- Weight**▶ **3.3 Lbs.**

- ▶ Perfect for close quarters and tight spaces.
- ▶ Supports 3 tons and has a 1 in. stroke for adjustments.
- ▶ Closed height of 3 in.
- ▶ Serrated cap rotates and prevents load slippage.

The S3A, with its low profile and small footprint was the perfect solution to level the bed of this milling machine. ▼



▲ The spreader jack can easily be extended by fitting a 1 in. diameter pipe in the cap well and a .5 in. diameter pipe in the housing well.

mechanical

Model	Sustaining Capacity (tons)	Operable Rise (in)	Dimensions (in)						Weight (lbs)
			A	B	C	D	E	F	
			Minimum Height	Maximum Height	Base	Well Diameter	Cap Width	Cap Height	
S3A	3	1	3	4	2	.84	1.5	.68	3.25

MECHANICAL JACKS

RS Series - Roof Support



Models: 09618, RS139AS78114



THINK SAFETY

Please refer to pages 4&5 for a complete list of safety tips and recommendations.



CARRYING HANDLE

Integrated welded handle for ease of transport and positioning.

Stroke	▶	36 In.
Minimum Height	▶	66 - 78 In.
Maximum Height	▶	102 - 114 In.

- ▶ The 9225A family is a ratcheting style roof support rated at 4 tons sustaining capacity.
- ▶ The 139A family is a screw extension type roof support rated at 5 tons sustaining capacity.
- ▶ Aluminum alloy housing and base makes this unit lightweight and portable (A9225 Family).
- ▶ Holds the load indefinitely without creep down.

Head Styles



E Type Head

For all standard work.
Dimension between flanges: 8.13"



F Type Head

For use with electrical wiring.
Dimension between flanges: 10.25"



S Type Head

36 square inches in support area.

This RS Series Roof Support was used to support a horizontal I-Beam while weld work was being done on the verticle I-Beam. ▼

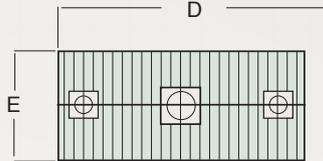


mechanical

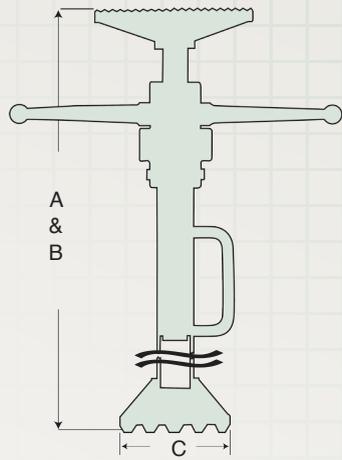
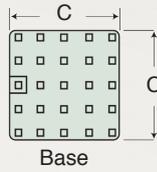
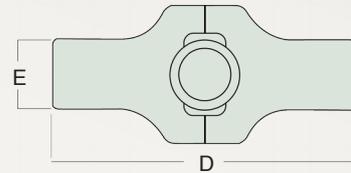
MECHANICAL JACKS

RS Series - Roof Support

S Style Head



E & F Style Head



Dimensions (in)								
Model	Order Number	Stroke (in)	A	B	C	D	E	Weight (lbs)
			Minimum Height (in)	Maximum Height (in)	Base (in)	Head Length (in)	Head Width (in)	
Complete Unit Ratchet Lever Series - A9225 Family								
E	09602	20	39	59	7.38	8.13	2	29
F	09603	20	39	59	7.38	10.25	2	29
S	09620	20	39	59	7.38	9	4	29
E	09606	26	45	71	7.38	8.13	2	33
F	09607	26	45	71	7.38	10.25	2	33
S	09621	26	45	71	7.38	9	4	33
E	09610	38	57	95	7.38	8.13	2	36
F	09611	38	57	95	7.38	10.25	2	36
S	09622	38	57	95	7.38	9	4	36
E	09614	38	69	107	7.38	8.13	2	39
F	09615	38	69	107	7.38	10.25	2	39
S	09623	38	69	107	7.38	9	4	39
E	09616	38	75	113	7.38	8.13	2	42
F	09617	38	75	113	7.38	10.25	2	42
S	09624	38	75	113	7.38	9	4	42
E	09618	38	88	126	7.38	8.13	2	48
F	09619	38	88	126	7.38	10.25	2	48
S	09625	38	88	126	7.38	9	4	48
Complete Unit Screw Extension Series - 139A Family								
E	09802	24	42	66	6	8.13	2	50
F	09803	24	42	66	6	10.25	2	50
S	09820	24	42	66	6	9	4	50
E	09806	30	48	78	6	8.13	2	52
F	09807	30	48	78	6	10.25	2	52
S	09821	30	48	78	6	9	4	52
E	09814	36	66	102	6	8.13	2	58
F	09815	36	66	102	6	10.25	2	58
S	RS139AS66102	36	66	102	6	9	4	58
E	09818	36	78	114	6	8.13	2	64
F	09819	36	78	114	6	10.25	2	64
S	RS139AS78114	36	78	114	6	9	4	64

mechanical

MECHANICAL JACKS

RS Series - Roof Support Base & Head Assembly



Head Assembly
Model 09267



Base Assembly
Model 09220

- Stroke**▶ **15 In.**
- Sustaining Capacity**▶ **8 - 16 Tons**
- Maximum Extended Height**▶ **73 - 93 In.**

Maximum pipe length recommendations are based upon the following conditions:

- ▶ Fully extended assemblies loaded to maximum rated capacity.
- ▶ Head and base securely fixed to prevent lateral movement.
- ▶ A round base (ordered separately) is available to fit the 2" pipe.
- ▶ All models incorporate a lever nut handle.
- ▶ The 8 ton models are available with either FS or S style heads.
- ▶ The 16 ton model is available with FS style head only.



THINK SAFETY

Please refer to pages 4&5 for a complete list of safety tips and recommendations.



CE COMPLIANT

Our Jack design specifications meet or exceed ANSI /ASME B30.1 Safety Standards.

Head Styles



S Type Head
36 square inches in support area.



FS Type Head
For support with wooden or rubber cap pieces.



▲ The A9225, page 141, RS Series Roof Support is perfect for added safety and support for a wide range of mining applications.

MECHANICAL JACKS

RS Series - Roof Support Base & Head Assembly

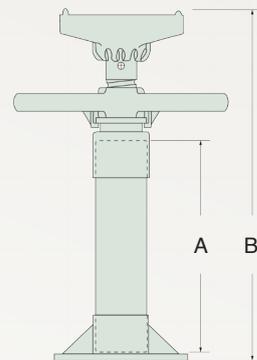
Optional Pipe Specifications

Simplex head assemblies are designed for roof support in mines and other areas where ceiling heights vary greatly. Use your own pipe to custom build a support for nearly any application.

- ▶ The 8 ton MS-9 models use 2" schedule 40 pipe with a minimum yield strength of 35,000 psi.
- ▶ The 16 ton MS-17 model requires 2" schedule 80 pipe with a minimum yield strength of 48,000 psi / 16 ton model.

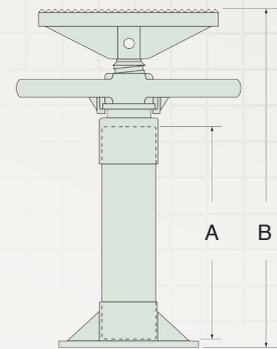


FS Type Head



09267 & 09309

S Type Head



09233

Dimensions (in)

Model	"A" Minimum Pipe Length	"B" Minimum Closed Height
MS9L-FS	20 1/2	27
MS9L-S	20 5/8	25 1/2
MS17L-FS	21 3/4	28 3/4

Model	Order Number Domestic	Head Style	Sustaining Capacity (tons)	Stroke (in)	*Maximum Pipe Length (in)	Maximum Extended Height (in)	Dimension Between Flanges (in)	Weight (lbs)
MS9L-FS	09267	FS	8	15	51.75	73	5.75	19
MS9L-S	09233	S	8	15	73.25	93	---	19
MS17L-FS	09309	FS	16	15	46.25	68	5.75	34
Base MB-17	09220	----	----	----	----	----	----	6

MECHANICAL JACKS

SE & BE Series - Trench Braces



BE25
Butt End



BE35
Butt End



SE12
Screw End

SE18
Screw End

Screw & Butt Ends Sold Separately



THINK SAFETY

Please refer to pages 4&5 for a complete list of safety tips and recommendations.



CE COMPLIANT

Our Jack design specifications meet or exceed ANSI /ASME B30.1 Safety Standards.

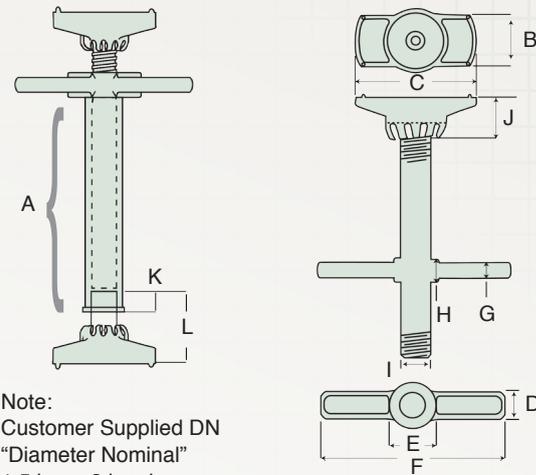
Simplex SE Series Trench Braces are used to shore up the walls of this trench for the repair work of underground water pipes. ▼



- Adjustable Range** ► **7 - 10 In.**
- Pipe Size** ► **1.5 - 2 In.**
- Lever Length** ► **9.5 - 11 in.**

mechanical

- Provides an efficient, economical protection against cave-ins and costly re-digging in construction & maintenance.
- Ball socket joints tilt for added safety on angular mounting.
- Holes on each end facilitates mounting to wood members.



Note:
Customer Supplied DN
"Diameter Nominal"
1.5 in. or 2 in. pipe.

Dimensions assume the use of both screw & butt ends together as an assembly.

Model (Screw End)	Adjust Range (in)	Pipe Size (in)	Dimensions (in)											
			A	B	C	D	E	F	G	H	I	J	K	L
			Minimum Pipe Length	Width	Length	Lever Width	Lever Diameter O.D.	Lever Length	Lever Height	Lever Nut Height	Screw Diameter O.D.	Height	I.D. Butt End Height	Collar Height
SE12	7	1.5	12	2.44	5.75	1.25	2.13	9.5	.68	1.13	1.38	2.44	----	----
SE16	10	1.5	16	2.44	5.75	1.25	2.13	9.5	.68	1.13	1.38	2.44	----	----
SE18	10	2	18	2.75	7.5	1.5	2.68	11	.81	1.38	1.87	3	----	----
Model (Butt End)	Screw Ends to be used with Butt End													
BE25	SE12 / SE16		----	2.44	----	----	----	----	----	----	----	----	1.5	3.87
BE35	SE18		----	2.75	----	----	----	----	----	----	----	----	1.93	4.87

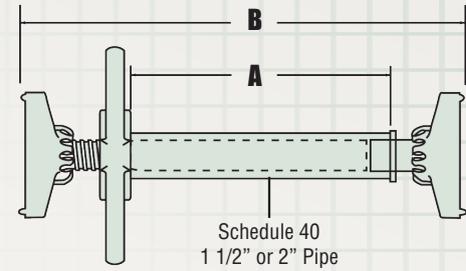
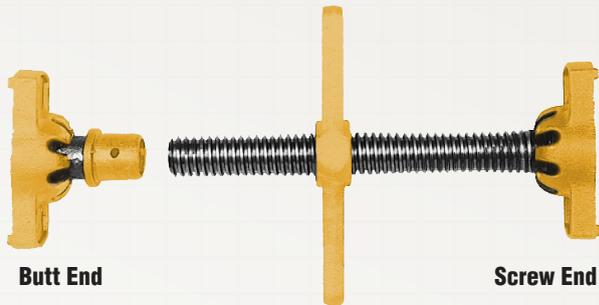


MECHANICAL JACKS

SE & BE Series - Trench Braces

Simplex Trench Braces provide efficient, economical protection against cave-ins and costly redigging in construction and utility maintenance. Braces extend by turning the lever nut handle. The ball socket joints tilt for added safety on angular mounting. Holes on each end facilitate mounting to wood members.

Simplex trench braces are designed for use with standard schedule 40 pipe. Screw end models SE-12, SE-16 and butt end model BE-25 use 1 1/2" diameter pipe. Model SE-18 and butt end BE-35 use 2" diameter pipe. Pipe should be cut to length based on the chart below and drawing in Fig. 1.



(Fig. 1) All Trench Brace Models

mechanical

Quick Reference Timber / Trench Brace Equivalency Tables*

The following charts are based on OSHA Timber/Trench Brace Charts* which do not consider transverse loading conditions.

Trench Depth (ft)	Horizontal Spacing (ft)	Cross Brace			Vertical Spacing (ft)	Wales		Uprights (in)			
		Width of Trench (ft)				Size (in)	Vertical Spacing (ft)	Max. Allowable Horizontal Spacing (ft)			
		up to 4	up to 6	up to 8				4'	5'	6'	8'
Soil Type - A $P^a = 25 \times H + 72$ psf (2ft. Surcharge)											
5 to 10	up to 6	SE12 SE16	SE12 SE16	SE18	4	---	---	---	---	2"x 6"	---
	up to 8	SE12 SE16	SE12 SE16	SE18	4			---	---	---	2"x 6"
	up to 10	SE18	SE18	SE18	4	8 x 8	4	---	2"x 6"	---	---
	up to 12	SE18	SE18	---	4	8 x 8	4	---	---	2"x 6"	---
10 to 15	up to 6	SE12 SE16	SE12 SE16	SE18	4	---	---	---	---	3"x 8"	---
	up to 8	SE18	SE18	---	4			8 x 8	4	2"x 6"	---
Soil Type - B $P^a = 45 \times H + 72$ psf (2ft. Surcharge)											
Trench Depth (ft)	Horizontal Spacing (ft)	Cross Brace		Vertical Spacing (ft)	Wales		Uprights (in)				
		Width of Trench (ft)			Size (in)	Vertical Spacing (ft)	Max. Allowable Horizontal Spacing (ft)				
		up to 4	up to 6				3'				
5 to 10	up to 6	SE-18	SE-18	5	6 x 8	5	2"x 6"				

ACCESSORIES

Lever Bars & Accessories



STEEL LEVER BARS & ACCESSORIES

Model	Description	Length (in)	Diameter (in)	Weight (lb)
SLB24	Round Lever Bar	24	.75	4
SLB35	Round Lever Bar	36	.81	6
SLB36	Round Lever Bar	36	1	8
SLB42	Round Lever Bar	42	1.13	12
SLB56	Round (Tapered) Lever Bar	56	1.14	16
SLB60*	Chisel Point Lever Bar	60	1.25	17
SLB70	Chisel Point Lever Bar	72	1.25	20
IB1538	I - Beam Base	20	---	44
CHA1538	Heavy Duty Chain	84	.62	29

* Note: The SLB60 lever bars can be interchangeable with the SLB70 model, resulting in lower handle efforts.