

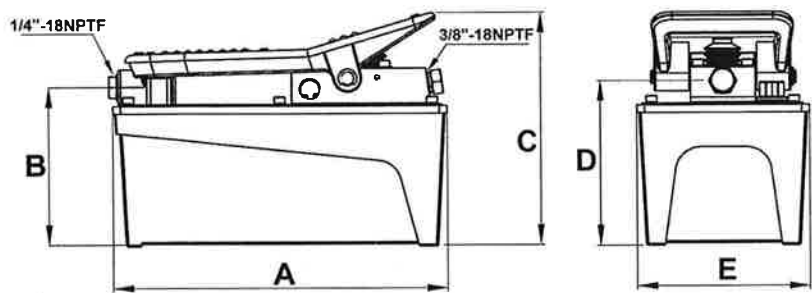
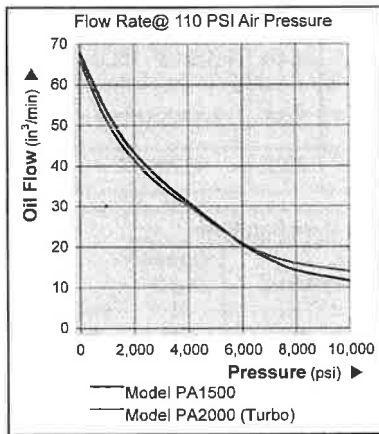
## BVA METAL AIR PUMPS



- High strength reinforced alloy reservoir is lightweight and corrosion resistant
- Pressure relief valve for overload protection
- Suggested air pressure range: 110-175 psi. / 7.5-12 bar
- Dust cover protection for the release control valve
- PA2000 offers a turbo function that features high flow at high pressure condition
- Maximum working pressure: 10,000 psi / 700 bar



Air pumps can be used in a variety of industrial settings



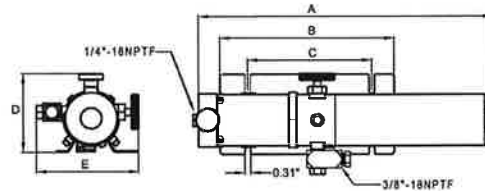
Used with Cylinder	Usable Oil Capacity (in <sup>3</sup> )	Model Number	Pressure Rating (psi)	Oil Output Flow Rate (in <sup>3</sup> /min)		Input Air Pressure Range (psi)	Dimensions (in)					Weight (lbs)
				No load	Load		A	B	C	D	E	
Single Acting	91.5	PA1500	10,000	66	11	110-175	10.35	5.00	7.28	5.16	5.35	18.1
	122.1	PA2000		65	12		11.57	6.02	7.91	6.18	5.98	20.1
	231.9	PA3801		65	11		12.64	5.08	7.36	5.24	7.36	27.1
	460.0	PA7550		65	11		12.64	5.398	8.31	6.14	8.43	36.0

## BVA AIR PUMPS

### All Position Air Pumps



- Pump can work in any position
- Mounting plate allows for the pump to be securely fastened
- Hydraulic port swivels for easy connection

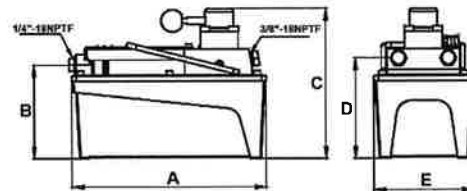


Used with Cylinder	Usable Oil Capacity (in <sup>3</sup> )	Model Number	Pressure Rating (psi)	Oil Output Flow Rate (in <sup>3</sup> /min)		Input Air Pressure Range (psi)	Dimensions (in)					Weight (lbs)
				No Load	Load		A	B	C	D	E	
Single Acting	36.6	PA600	10,000	61	9	110-175	16.77	9.84	7.01	6.18	5.59	14.1
		PA600H								4.49	5.75	12.5

### Double Acting Air Pumps



- PA1500M offers a 4-way control valve for operation of double acting cylinders

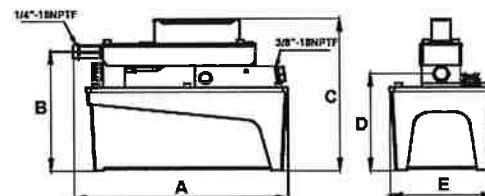


Used with Cylinder	Usable Oil Capacity (in <sup>3</sup> )	Model Number	Pressure Rating (psi)	Oil Output Flow Rate (in <sup>3</sup> /min)		Input Air Pressure Range (psi)	Dimensions (in)					Weight (lbs)
				No Load	Load		A	B	C	D	E	
Single Acting	91.5	PA1500M	10,000	66	11	110-175	10.51	5.00	7.99	5.35	5.35	19.1

### Remote Control Air Pumps



- 10 foot hand held remote allows user to operate the air pump from a safe distance
- Air pump comes with convenient carry handle



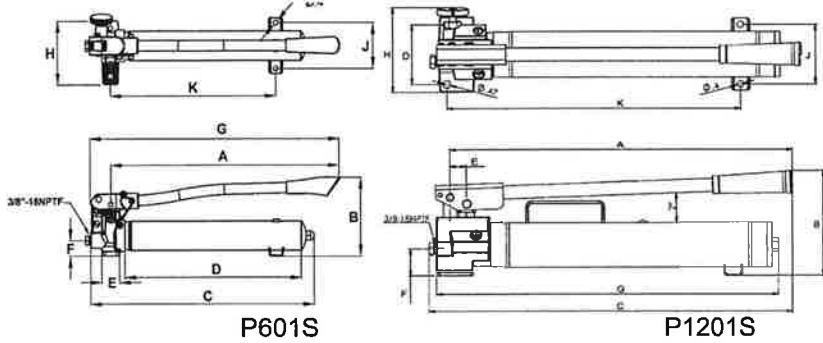
Used with Cylinder	Usable Oil Capacity (in <sup>3</sup> )	Model Number	Pressure Rating (psi)	Oil Output Flow Rate (in <sup>3</sup> /min)		Input Air Pressure Range (psi)	Dimensions (in)					Weight (lbs)
				No Load	Load		A	B	C	D	E	
Single Acting	91.5	PA1500L	10,000	61	10	110-175	10.98	6.30	8.03	5.12	5.35	19.4
	231.9	PA3801L		61	10		12.64	6.42	8.15	5.20	7.36	30.4

## BVA HAND PUMPS

### Single Speed Hand Pumps



- All metal reservoirs resist cracks and leaks
- Internal pressure relief valve for overload protection



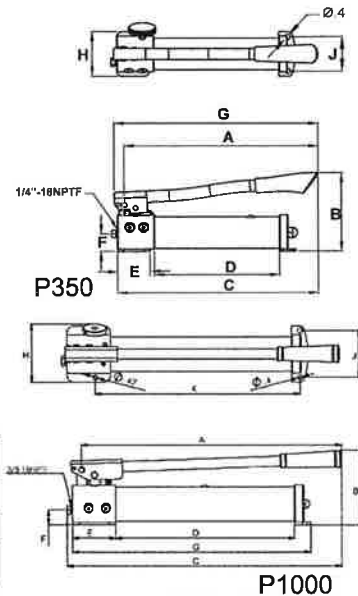
Model Number	Dimensions (in)									
	A	B	C	D	E	F	G	H	J	K
P601S	18.94	6.46	19.53	15.35	1.57	1.26	20.79	5.20	3.74	14.45
P1201S	19.75	6.64	21.95	16.63	2.36	1.73	20.71	4.72	3.74	18.27

Used with Cylinder	Pump Type	Usable Oil Capacity (in <sup>3</sup> )	Model Number	Pressure Rating (psi)	Oil Displacement per Stroke	Max. Operating Force (lbs)	Piston Stroke (in)	Oil Outlet Port	Weight (lbs)
Single	Single	36.5	P601S	10,000	0.15	109	0.79	3/8"-18NPTF	13.0
Acting	Speed	67.0	P1201S		0.13	132	0.82		20.0

### Two Speed Aluminum Hand Pumps



- Lightweight aluminum alloy for easy handling
- Two speed operation increases productivity and reduces user fatigue
- Internal pressure relief valve for overload protection



Model Number	Dimensions (in)									
	A	B	C	D	E	F	G	H	J	K
P350	13.43	5.91	13.89	9.09	2.36	1.34	14.13	3.35	2.56	—
P1000	19.69	6.38	19.88	14.96	3.62	1.26	20.63	4.72	3.94	16.93

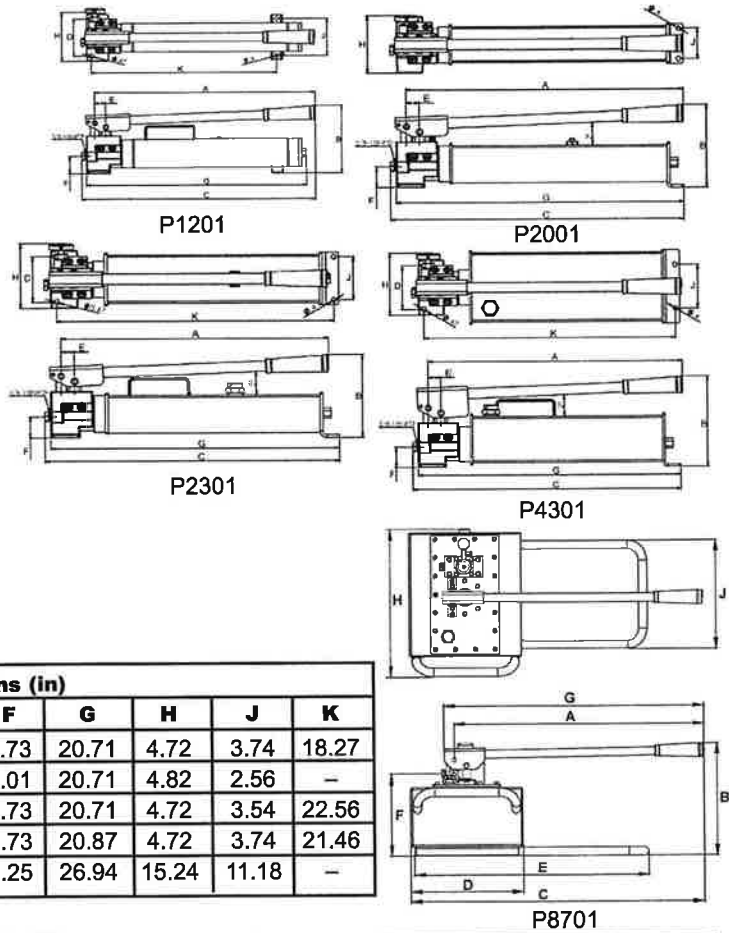
Used with Cylinder	Pump Type	Usable Oil Capacity (in <sup>3</sup> )	Model Number	Pressure Rating		Oil Displacement per Stroke		Max. Operating Force (lbs)	Piston Stroke (in)	Oil Outlet Port	Weight (lbs)
				1st Stage (psi)	2nd Stage (psi)	1st Stage (in <sup>3</sup> )	2nd Stage (in <sup>3</sup> )				
Single	Two	21.4	P350	200	10,000	0.18	0.05	88	0.38	1/4"-18NPTF	6.6
Acting	Speed	6.10	P1000			0.81	0.14				

## BVA HAND PUMPS

### Two Speed Hand Pumps



- All metal reservoirs resist cracks and leaks
- Two speed operation increases productivity and reduces user fatigue
- Internal pressure relief valve for over load protection
- Load release valve for single acting cylinder usage
- Large oil capacity to power a wide range of cylinders and tools



Model Number	Dimensions (in)									
	A	B	C	D	E	F	G	H	J	K
P1201	19.75	6.64	21.95	16.63	2.36	1.73	20.71	4.72	3.74	18.27
P2001	19.75	6.54	23.86	18.54	2.36	2.01	20.71	4.82	2.56	—
P2301	19.75	6.64	23.69	18.37	2.36	1.73	20.71	4.72	3.54	22.56
P4301	19.91	7.56	22.62	17.30	2.36	1.73	20.87	4.72	3.74	21.46
P8701	25.79	11.61	30.35	11.54	24.17	8.25	26.94	15.24	11.18	—

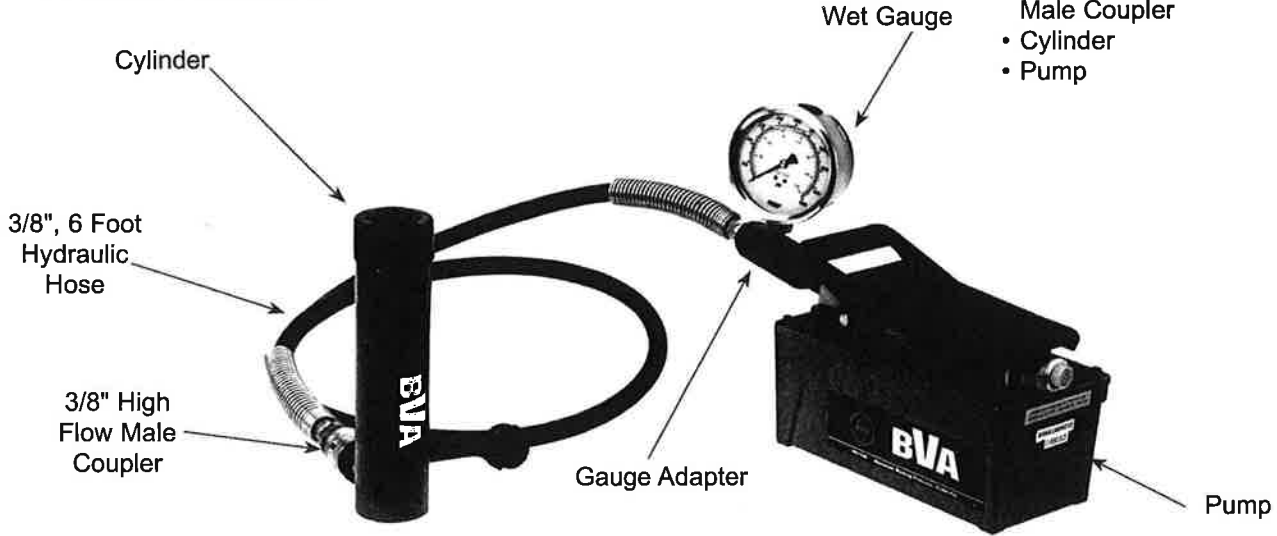
Used with Cylinder	Pump Type	Usable Oil Capacity (in <sup>3</sup> )	Model Number	Pressure Rating		Oil Displacement per Stroke		Max. Operating Force (lbs)	Piston Stroke (in)	Oil Outlet Port	Weight (lbs)
				1st Stage (psi)	2nd Stage (psi)	1st Stage (in <sup>3</sup> )	2nd Stage (in <sup>3</sup> )				
Single Acting	Two Speed	67.0	P1201	200	10,000	0.81	0.14	132	0.82	3/8"-18NPTF	20.3
		122.0	P2001								20.9
		128.0	P2301								27.5
		250.0	P4301								32.2
		476.0	P8701	290	7.71	0.29	143	1.69	90.8		

## BVA PUMP / CYLINDER COMBO

- Matched sets provide a combination of components for single acting cylinder applications
- Ordering is as easy as 1, 2, 3
  1. Select the cylinder you want
  2. Select the pump you want
  3. Choose the set number

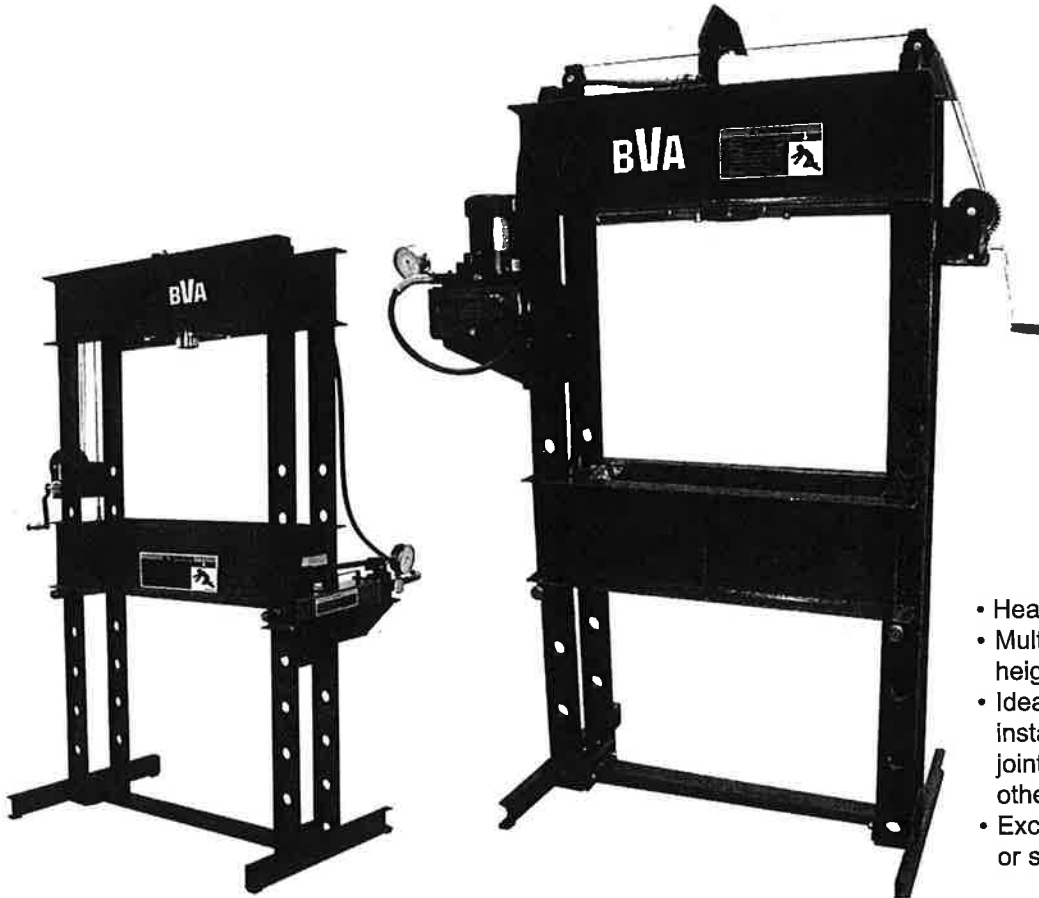
**Each Set Includes:**

- 3/8", 6 Foot Hydraulic Hose
- Gauge Adapter
- 4" Wet Gauge
- 3/8" High Flow Male Coupler
- Cylinder
- Pump



Type	Combo Capacity (ton)	Cylinder			Combo Model Number						
		Model	Stroke (in)	Collapsed Height (in)	with Hand Pump			with Air Pump			
					Model P350	Model P1000	Model P2001	Model PA1500	Model PA1500L	Model PA3801	
Single Acting Cylinders	5	H0505	5.08	8.70	SP3-0505						
	10	H1002	2.01	4.84		SP10-1002		SA15-1002			
		H1006	5.94	2.24		SP10-1006		SA15-1006	SAL15-1006		
		H1010	9.96	13.86		SP10-1010		SA15-1010	SAL15-1010		
		HT1006	5.95	11.46		SP10-1006T		SA15-1006T	SAL15-1006T		
		HT1010	9.96	15.47		SP10-1010T		SA15-1010T	SAL15-1010T		
	15	H1504	3.86	8.66		SP10-1504		SA15-1504			
		H1506	5.87	10.67		SP10-1506		SA15-1506			
	25	H2502	2.01	6.82		SP10-2502		SA15-2502			
		H2504	3.94	8.78		SP10-2504		SA15-2504			
		H2506	5.94	10.79		SP10-2506		SA15-2506			
H2508		7.95	12.80			SP20-2508	SA15-2508				
55	H5506	6.25	11.13			SP20-5506	SA15-5506				
100	H10006	6.63	13.25							SA38-10006	
Single Acting Aluminum Cylinders	30	HU3002	2.00	6.50		SP10-3002U		SA15-3002U			
		HU3006	6.00	10.50		SP10-3006U		SA15-3006U			
	50	HU5006	6.00	10.50		SP10-5006U		SA15-5006U			
	100	HU10006	6.00	10.50							SA38-10006U
Single Acting Low Profile Cylinders	10	HL1001	1.50	3.48	SP3-1001L			SA15-1001L			
	20	HL2002	1.75	3.90	SP3-2002L			SA15-2002L			
	30	HL3002	2.44	4.61		SP10-3002L		SA15-3002L			

## BVA 25 / 55 / 100 TON SHOP PRESSES



- Heavy steel welded construction
- Multi-position bed for work height adjustment
- Ideal for the removal or installation of gears, universal joints, pulleys, wrist pins, and other press jobs
- Excellent for bending, bonding or straightening applications

Capacity (tons)	Model Number	Pump Type	Pump Model	Cylinder Model	Bed Position	Cylinder Stroke (in)	Product (HXLXW)	Working Space (A Min./A Max.) (in)	Dimensions (in)											Weight (lbs)	Model No.	
									A (Min.)	A (Max.)	B	C	D	E	F	G	H	I	J			K
25	IMP2506	Manual	P1000	H2506	8	6	71" x 48" x 28"	4-1/2"-47-1/4"	4.5	47.25	71	48	28	30	3	6.5	6	11.5	560	IMP2506		
	IAP2506	Air	PA1500	H2506																IAP2506		
55	IAP5506	Air	PA1500	H5506	9	6	79" x 56" x 30"	14"-55-1/2"	14.0	55.5	79	56	30	35.4	4	9	10	14.8	760	IAP5506		
	IEP5506	Electric	PEW0501T																	H5506	IEP5506	
	IMP5506	Manual	P2301	H5513	13	6	79" x 56" x 30"	14"-55-1/2"	14.0	55.5	79	56	30	35.4	4	9	10	14.8	760	IMP5506		
	IAP5513	Air	PA3801																	H5513	IAP5513	
IEP5513	Electric	PEW0501T	H5513	IEP5513																		
100	IEP10010	Electric	PEW1002T	H10010	8	10	89" x 63" x 30"	11-1/4"-51"	11.3	51.0	89	63	30	35.5	8	N/A	10	N/A	12	16.0	1550	IEP10010

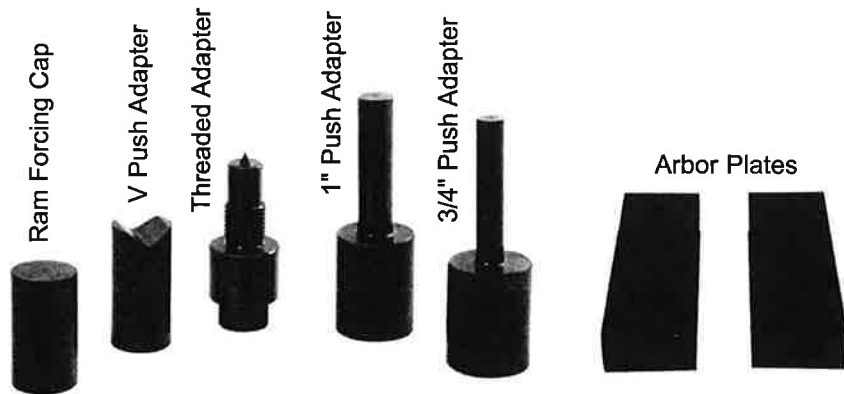


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## SHOP PRESS ACCESSORIES

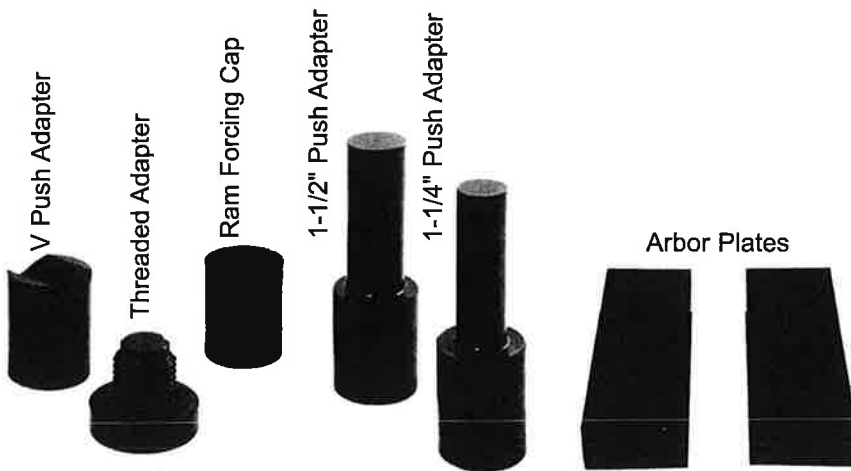
### Model CS25 25 Ton Shop Press Accessory Kit

- 300-002-229 • Ram forcing cap
- 300-002-807 • V push adapter
- 300-002-953 • Threaded adapter
- 300-002-510 • 3/4" push adapter
- 300-002-511 • 1" push adapter
- AP25 • Arbor plates (in pairs)



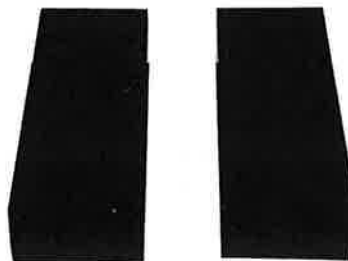
### Model CS55 55 Ton Shop Press Accessory Kit

- 400-002-230 • Ram forcing cap
- 400-002-368 • Threaded adapter
- 400-002-757 • 1-1/2" push adapter
- 400-002-756 • 1-1/4" push adapter
- 400-002-808 • V push adapter
- AP55 • Arbor plates (in pairs)



### 100 Ton Shop Press Accessory

- AP100 • Arbor plates (in pairs)



## BVA BOTTLE JACKS

### Manual Bottle Jacks



- Hydraulic system is protected from internal damage by a patented by-pass mechanism
- Machined and polished cylinders with die-cut threads provide non-abrasive leak-free, durable performance
- Fabricated from hard-cast steel with heat-treated critical stress areas
- Unique cross-type forged release valve assures positive load control
- A wide, rugged base provides stability and strength

Capacity (ton)	Model Number	Minimum Height (in)	Maximum Height (in)	Hydraulic Lifting (in)	Extension Screw (in)	Base Size Length (in)	Base Size Width (in)	Weight (lbs)
12	J10125	9-1/2	18-5/8	6	3-1/8	5-1/4	5-1/8	17.5
	J10129	6	10-5/8	3	1-5/8			14.9
20	J10205	9-1/2	18-5/8	6	3-1/8	6-1/4	5-7/8	27.5
	J10209	6-1/2	11-1/4	3-1/8	1-5/8			21.8
30	J10300	11	18	7	N/A	8-1/8	6-7/8	53.5
50	J10500	12	19	7	N/A	10-7/8	7-3/8	96.4

### Air / Manual Bottle Jacks



- Effortless air operation will greatly reduce operator fatigue and speed up the efficiency of industrial work
- A compact yet powerful air turbo motor U.S. Patent No. 5,341,723 is equipped to raise the load to the desired height efficiently, effortlessly, and safely
- Versatile "Quick Connector" design provides for easy removal of air hose from air motor allowing compact storage or remote operation
- All air bottle jacks have chrome plated rams

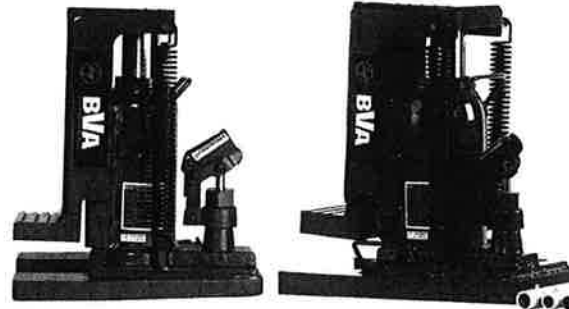
Capacity (ton)	Model Number	Minimum Height (in)	Maximum Height (in)	Hydraulic Lifting (in)	Extension Screw (in)	Base Size Length (in)	Base Size Width (in)	Input Air Pressure Range (psi)	Weight (lbs)
12	J18122	9-1/2	18-1/2	5-1/2	3-1/2	7-5/8	6-1/2	110-175	28.6
20	J18202	9-3/4	18-3/4	5-1/8	3-7/8	8-1/4	7-1/4		37.4
30	J18302	11	18	7	N/A	10-1/4	8-1/4		60.5
50	J18502	12	19	7		10-7/8	7-3/8		128.5
100	J18992		18-1/8	6-1/8		12-5/8	9-3/8		205.9



## BVA JACKS

### Toe Jacks

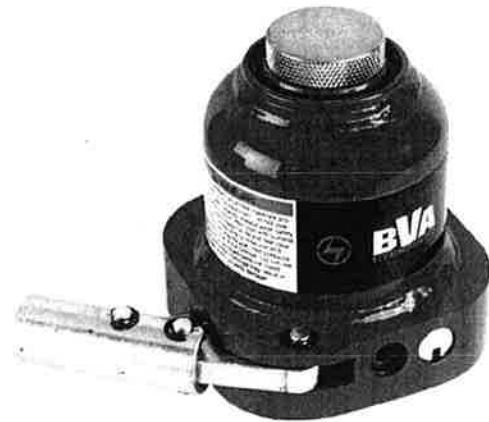
- Heat treated and chrome plated medium-carbon steel cylinder
- Chrome plated ram promotes longer seal life and optimum performance
- U.S. Patented by-pass device protects hydraulic system from over traveling damage



Capacity (tons)	Model Number	Toe Saddle		Head Saddle		Hydraulic Lifting (in)	Base Size (L x W) (in)	Weight (lbs)
		Min. Height (in)	Max. Height (in)	Min. Height (in)	Max. Height (in)			
3	J13060	0.62	5.75	9.0	14.12	5.12	6.00 x 4.37	36.1
6	J13120	0.88	6.00	10.50	15.63	5.13	11.00 x 7.50	55.0
10	J13200	1.13	6.25	11.00	16.13		11.63 x 9.00	84.0

### Mini Jacks

- Low profile mini jack
- Pocket size and lightweight
- Convenient for storage



Interchangeable saddle



Capacity (tons)	Model Number	Min. Height (in)	Max. Height (in)	Hydraulic Lifting (in)	Base Size (L x W) (in)	Weight (lbs)
5	J11050	2.37	3.13	0.76	4.13 x 4.00	4.6
5	J11055	3.37	4.88	1.51		5.3
10	J11100	4.75	6.25	1.63	4.88 x 4.38	12.5
20	J11200	5.13	6.75	1.63	5.38 x 4.75	16.7

## BVA MAINTENANCE KITS



- Sets are portable for easy use in the plant or on the job site
- Custom fitted, rugged blow molded storage case
- 10 ton set has wheel for easy movement
- Designed for applications of pushing, spreading, pressing, and more

Capacity (tons)	Pump Capacity (psi)	Model Number	Ram			Number of attachments	Weight (lbs)
			Collapsed Height (in2)	Extended Height (in3)	Effective Area (in2)		
4	8,000	J50040	11.00	15.75	0.998	14	46.0
10	10,000	J50100	13.63	19.75	2.411	13	81.0
20	10,000	J50200	11.77	16.93	5.14	16	206.0

\*When extension tubes and / or offset attachments are used, the capacity is reduced.

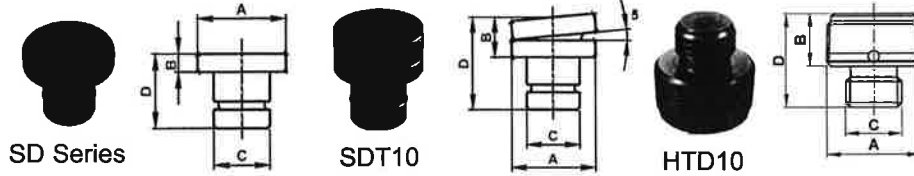
Contents of Kit	Part Number					
	Model J50040		Model J50100		Model J50200	
Hand Pump	J0401		J1001		J65421	
Ram	J0402		J1002		J65740	
Hose	J0402		J1003		J65593	
Case	J0404		J1004		J65073	
Hydraulic Spreader (1000 lbs. capacity)	J0405		J1005		N/A	
Combination Head (90 degrees)	J0406		J1006		N/A	
Rubber Head	J0407		J1007		N/A	
Ram Toe (offset)	J0408		J1008		J65774	
Plunger Toe (offset)	J0409		J1009		N/A	
Flat Base	J0410		J1010		J65778	
Serrated Saddle	J0411		J1011		J65771 (2)	
Wedge Head (offset)	J0412		J1012		J65773	
Male Connector	J0413		J1013		J65770	
Hose Coupler	CRZ14M		CRZ14M		CH38M	
Ram Coupler	CRZ14F		CRZ14F		CH38F	
Chain Pull Plate	N/A		N/A		J65775	
V Head					J65772	
Threaded Coupling					J65776 (3)	
8" Chain w/hook					J97518	
Ram Base					J65778	
Extension Tube	3"	J0414	4"	J1014	3"	J65760
	6-1/8"	J0415	10"	J1015	5"	J65762
	8-1/2"	J0416	18"	J1016	10"	J65764
	16-1/2"	J0417	27"	J1017	18"	J65766
	19-1/2"	J0418			24"	J65768



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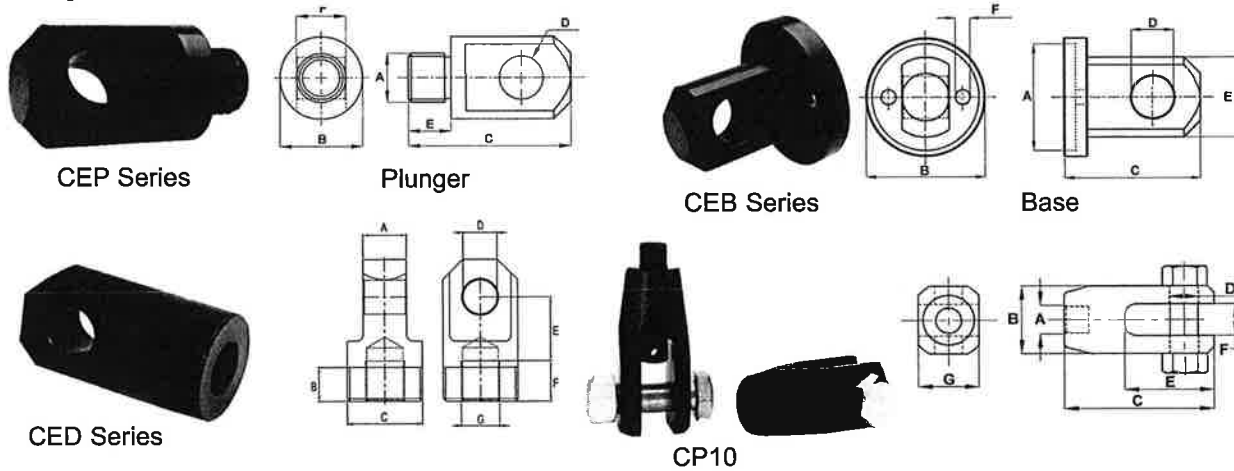
## SADDLES AND CLEVIS EYES

### Saddles



Saddle Type	Model Number	For use with Cylinder Capacity (ton)	Dimensions (in)			
			A	B	C	D
Grooved	SD05	5	0.98	0.24	0.67	0.81
	SD10	10	1.38		0.87	1.06
	SD15	15	1.50	0.28	0.87	1.18
	SD25	25	1.97		1.42	1.14
Tilt	SDT10	10	1.38	0.63	0.87	1.50
Threaded	HTD10	10	1-1/4"-11.5NPTF	0.95	1"-8UNC	1.77

### Clevis Eyes



Clevis Type	Fore use with Cylinder Capacity (tons)	Model Number	Dimensions (in)						
			A	B	C	D	E	F	G
Plunger	5	CEP05	3/4"-16UNF	1.13	2.25	0.63	0.62	0.56	—
	10	CEP10	1"-8UNC	1.69	3.31	0.88	0.75	1.00	—
	15	CEP15							
	25	CEP25	1-1/2"-16	2.25	3.81	1.25	0.87	1.50	—
Base	5	CEB05	1.52	1.75	2.13	0.63	0.26	1.13	—
	10	CEB10	2.28	2.50	2.87	0.88	1.69	0.32	—
	15	CEB15	2.77	3.00	2.87	0.88	1.69	0.38	—
	25	CEB25	3.40	3.75	3.37	1.25	2.25	0.56	—
Plunger & Base	9	CED09	1	1	1-11/16"-18	0.75	1.31	0.94	3/4"-16
	16	CED16	1.25	1	2-3/16"-16	1	1.88	1.19	1-1/8"-12
	HP1006 only	CP10*	M30x2	2.95	6.30	1.18	3.74	1.38	2.56

\* 2-pc set with an adapter



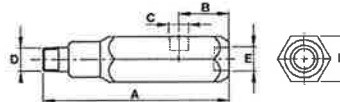
## GAUGES/BASES/CYLINDERS/HOSES/OIL

### Hydraulic Pressure Gauges



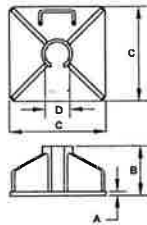
Gauge Type	Model Number	Face Diameter (in)	Thread (in)	Pressure Range		Graduation			
				(psi)	(bar)	Major Graduation	Minor Graduation	Major Graduation	Minor Graduation
						(psi)	(psi)	(bar)	(bar)
Dry	GD2514	2.50	1/4"-18NPTF	0-10,000	0-700	1,000	100	100	10
	GD4014	4.00				2,000	200		
Wet	GW2514	2.50				1,000	100		
	GW4014	4.00				2,000	200		

### Gauge Adapter



Model Number	Dimensions (in)					
	A	B	C	D	E	F
CF3814	5.12	1.38	1/4"-18NPTF	3/8"-18NPTF	3/8"-18NPTF	1.25

### Bases



For use with Cylinder Capacity (tons)	Model Number	Dimensions (in)			
		A	B	C	D
5	CB05	0.32	4.65	7.87	1.54
10	CB10	0.39	4.72	9.06	2.28
15	CB15	0.47	4.80	10.00	2.76
25	CB25	0.63	4.96	11.02	3.41

### Plates for Aluminum Cylinders



For use with Cylinder Capacity (tons)	Model Number	Dimensions (in)		
		Length	Width	Thickness
30	Z030	6.00	6.00	0.50
50	Z050	7.50	7.50	0.50

### Hydraulic Hoses



Hose I.D. (in)	Model Number	Hose End Fittings	Operating Pressure (psi)	Hose Length (ft)	Weight (lbs)
1/4"	CS1414	1/4"-18NPTF	10,000	6	2.5
	CS3814	3/8"-18NPTF		6	3.0
	CS3814A			2	2.0
	CS3814B			3	2.2
	CS3814C			10	5.0
	CS3814D			20	10.5
3/8"	CS1438			1/4"-18NPTF	6
	CS3838	3/8"-18NPTF		6	3.5
	CS3838C			10	6.5
	CS3838D			20	13.5

### Hydraulic Oil



Volume (gal)	Model Number	Viscosity Index (min)	Viscosity@ 100°F (S.U.S.)	Viscosity@ 210°F (S.U.S.)	ASTM Point Grade	Flash Point (°F)	Pour Point (°F)	API Gravity
1	F01	144	234	53	215	403	-33	30.8



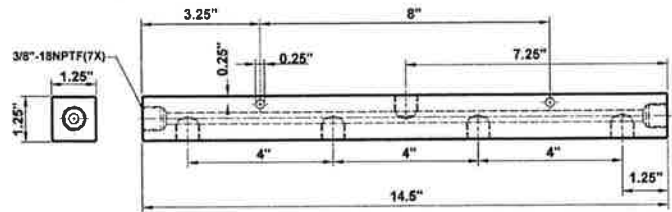
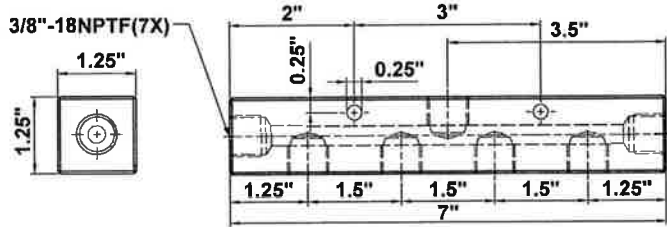
## BVA MANIFOLDS



CM7



CM14



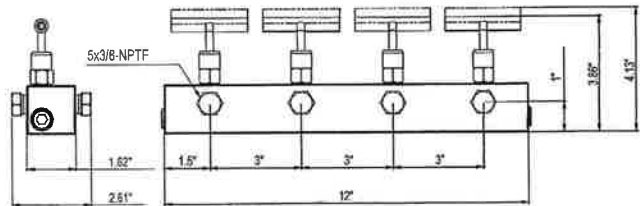
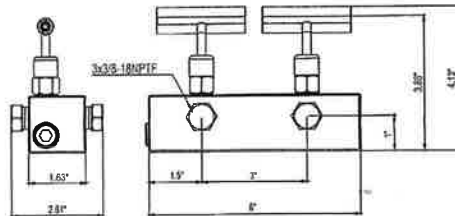
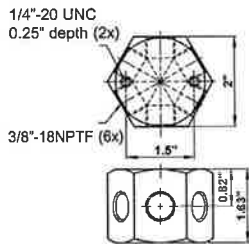
CMH6



MFC2



MFC4

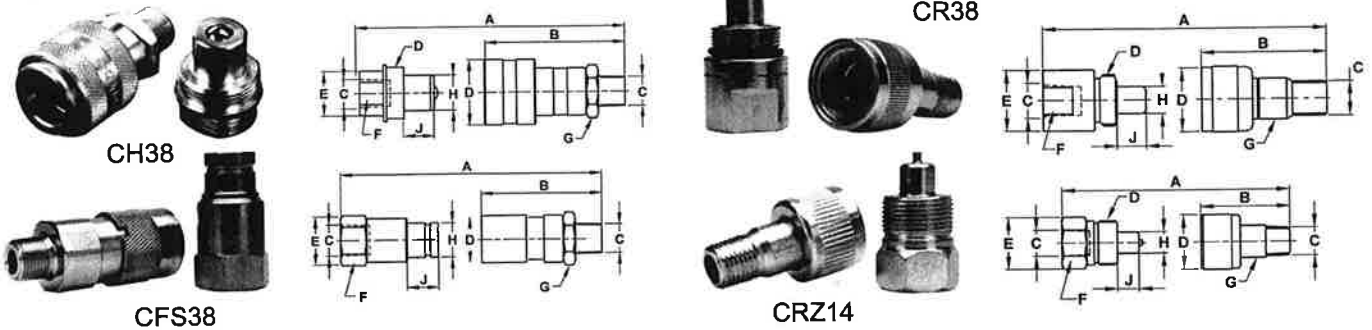


Manifold Type	Model Number	Number of Parts	Port Size	Mounting Hole
6-Port Hexagon Manifold	CMH6	6	3/8"-18NPTF	1/4"-20UNC
7" Long Manifold	CM7	7		
14" Long Manifold	CM14	7		
Manifold with Two Needle Valves	MFC2	3		4.4
Manifold with Four Needle Valves	MFC4	5		10.1



## COUPLERS/SPREADERS

### Hydraulic Couplers

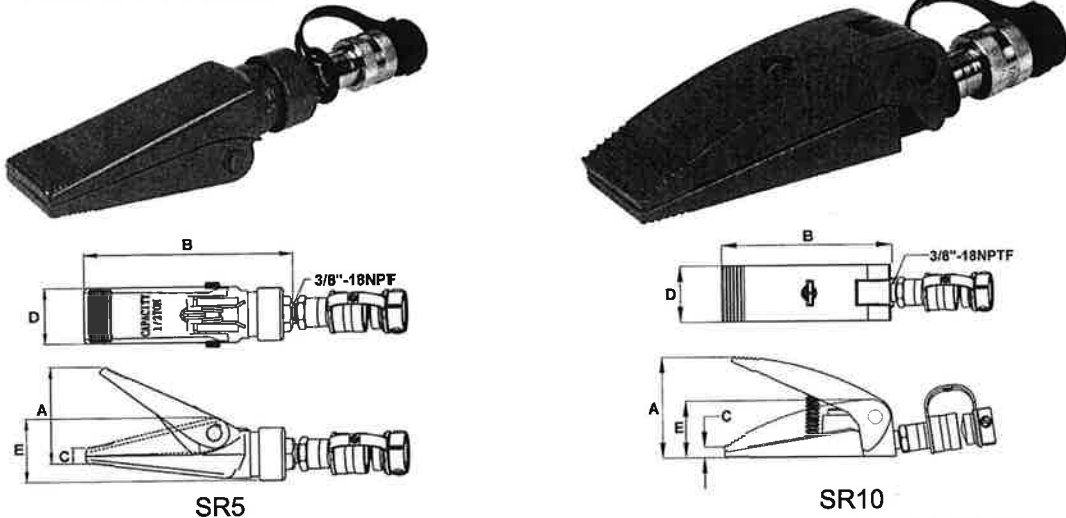


Coupler Type	Model Number			Dimensions (in)								
	Complete Set	Male Half	Female Half	A*	B	C	D	E	F	G	H	J
High-Flow Coupler	CH38	CH38M	CH38F	3.35	2.84	3/8"-18NPTF	1-3/16"-16	1.10	0.94	1.00	0.75	0.63
Flush-Face Coupler	CFS38	CFS38M	CFS38F	4.36	2.85	3/8"-18NPTF	1.19	1.21	1.06	1.12	0.79	0.63
Regular-Flow Coupler	CR38	CR38M	CR38F	3.15	2.20	3/8"-18NPTF	15/16"-20	1.04	0.94	0.73	0.50	0.53
Zinc Coupler	CRZ14	CRZ14M	CRZ14F	2.42	1.67	1/4"-18NPTF	13/16"-20	0.95	0.83	0.58	0.39	0.35

\* Value "A" is total length when male and female couplers are connected.

### Spreaders

- Designed to work in confined working space



Cylinder Capacity (tons)	Model Number	Cylinder Effective Area (in <sup>2</sup> )	Oil Capacity (in <sup>3</sup> )	Dimensions (in)					Weight (lbs)
				A	B	C	D	E	
0.5	SR05	1.22	0.58	3.54	7.57	0.51	2.05	2.36	4.8
1	SR10	1.09	0.86	3.90	6.57	0.47	2.17	2.20	4.8



## Drop Forged Shackles Screw Pin Shackles

Shackles meet Federal Spec:  
RR-C-271D Type IVA



Size	Screw Pin Shackles	
	Galvanized	Self-Colored
3/16"	075-201056	075-200059
1/4"	075-201100	075-200103
5/16"	075-201155	075-200158
3/8"	075-201209	075-200202
7/16"	075-201254	075-200257
1/2"	075-201308	075-200301
5/8"	075-201353	075-200356
3/4"	075-201407	075-200400
7/8"	075-201452	075-200455
1"	075-201506	075-200509
1-1/8"	075-201551	075-200554
1-1/4"	075-201605	075-200608
1-3/8"	075-201650	075-200653
1-1/2"	075-201704	075-200707

## Safety Shackles

Shackles meet Federal Spec:  
RR-C-271D Type IVA



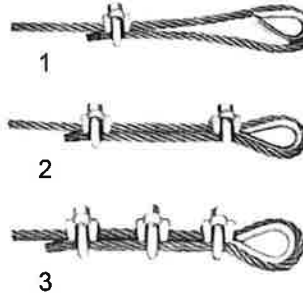
Size	Safety Shackles	
	Galvanized	Self-Colored
1/4"	075-206105	075-205108
5/16"	075-206150	075-205153
3/8"	075-206204	075-205207
7/16"	075-206259	075-205252
1/2"	075-206303	075-205306
5/8"	075-206358	075-205351
3/4"	075-206402	075-205405
7/8"	075-206457	075-205450
1"	075-206501	075-205504
1-1/8"	075-206556	075-205559
1-1/4"	075-206600	075-205603
1-1/2"	075-206709	075-205702

## Drop Forged Wire Rope Clips

Meets Federal Specification FF-C-450, Type 1, Class 1



### Recommended Application



Rope Size	Galvanized	
	Part No.	
1/8"	075-234603	
3/16"	075-234658	
1/4"	075-234702	
5/16"	075-234757	
3/8"	075-234801	
7/16"	075-234856	
1/2"	075-234900	
9/16"	075-234955	
5/8"	075-235006	
3/4"	075-235051	
7/8"	075-235105	
1"	075-235150	
1-1/8"	075-235204	
1-1/4"	075-235259	
1-1/2"	075-235358	

1. The correct way to attach wire rope clips is illustrated above. Apply the first clip one base width from the dead end of the wire rope. The base or saddle should bear on the line end of the rope U-bolt on the short end. Tighten nuts firmly.
2. Attach second clip as close to loop as possible. Tighten nuts but not firmly.
3. Attach balance of clips spaced equally between first two clips. Tighten all nuts completely. Apply initial load - inspect nuts and retighten. Inspect all clips periodically.

## Clevis Grab Hooks Drop Forged High-Test

- Made for use on high-test chain. Also can be used on BBB and proof coil
- All hooks are heat treated
- High test stamped on every hook
- Available self-colored and zinc plates



Chain Size	Self-Colored	Zinc Plated
	Part No.	Part No.
1/4"	075-237055	075-238052
5/16"	075-237109	075-238106
3/8"	075-237154	075-238151
7/16"	075-237208	075-238205
1/2"	075-237253	075-238250
5/8"	075-237307	075-238304
3/4"	075-237352	075-238359

## Wire Rope Thimbles



Standard

Heavy Duty



Closed

Closed

Rope Diameter	Standard	Heavy Duty
	Part No.	Part No.
3/16"	075-22510-6	-
1/4"	075-22515-1	075-22105-4
5/16"	075-22520-5	075-22110-8
3/8"	075-22525-0	075-22115-3
7/16"	075-22530-4	075-22120-7
1/2"	075-22535-9	075-22125-2
5/8"	075-22540-3	075-22130-6
3/4"	075-22545-8	075-22135-1
7/8"	075-22550-2	075-22140-5
1"	075-22555-7	075-22145-0





# Oilfield Supplies



## Drop Forged Turnbuckles

Turnbuckles meet performance requirements of ASTM specification F1145-92 Type 1 Grade 1 (Supercedes FF-T-791B)



(Class D)



(Class D)



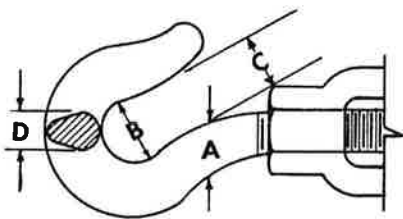
(Class E)



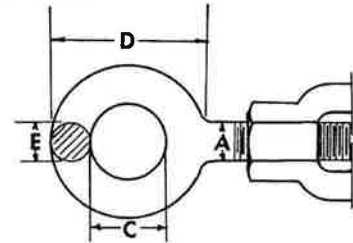
(Class E)

Diameter & Take-up	Eye and Eye		Hook and Hook		Weight per 100 In Lbs.
	Part No. Galv.	Closed Length	Part No. Galv.	Closed Length	
1/4" x 4"	075-01255 3	8"	075-02155 5	8-1/2"	35
5/16" x 4-1/2"	075-01260 7	9"	075-02160 9	9-1/2"	47.5
3/8" x 6"	075-01265 2	11-1/2"	075-02165 4	12"	90.6
1/2" x 2"	075-01270 6	8-1/2"	075-02170 8	10"	111
1/2" x 6"	075-01273 7	13"	075-02173 9	14-1/4"	170
1/2" x 9"	075-01276 8	16"	075-02176 0	17-1/4"	202
1/2" x 12"	075-01279 9	19"	075-02179 1	20-1/4"	232.5
5/8" x 6"	075-01284 3	13-1/2"	075-02184 5	14-3/4"	260
5/8" x 9"	075-01287 4	17"	075-02187 6	17-3/4"	320
5/8" x 12"	075-01290 4	20-1/2"	075-02190 6	20-3/4"	392.5
5/8" x 18"	075-01293 5	26-1/2"	075-02193 7	26-3/4"	557
3/4" x 6"	075-01298 0	14-3/4"	075-02198 2	16-3/4"	397.5
3/4" x 9"	075-01301 7	18"	075-02201 9	19-3/4"	512.2
3/4" x 12"	075-01304 8	21-3/4"	075-02204 0	22-3/4"	581
3/4" x 18"	075-01307 9	27-3/4"	075-02207 1	28-3/4"	666
7/8" x 6"	075-01312 3	18"	075-02212 5	19"	650
7/8" x 12"	075-01315 4	22-1/2"	075-02215 6	23-3/4"	787.5
7/8" x 18"	075-01318 5	28-1/2"	075-02218 7	29-3/4"	1212
1" x 6"	075-01323 9	17"	075-02223 1	20"	805
1" x 12"	075-01326 0	25"	075-02226 2	25-1/2"	1077.5
1" x 18"	075-01329 1	31"	075-02229 3	31-1/2"	1386

To ascertain extended length add amount of take-up to length in closed position. Eye, Jaw and Hook fittings are heat treated.



Hook



Eye

Dimensions - Inches				Working Load Limit in lbs. †
A	B	C	D	
1/4"	5/16"	9/32"	7/32"	400
5/16"	1/2"	1/2"	5/16"	700
3/8"	1/2"	1/2"	3/8"	1,000
1/2"	7/8"	13/16"	17/32"	1,500
5/8"	29/32"	27/32"	5/8"	2,250
3/4"	1-1/8"	29/32"	11/16"	3,000
7/8"	1-3/16"	1-1/16"	13/16"	3,200
1"	1-3/8"	1-1/4"	7/8"	5,000

Dimensions - Inches				Working Load Limit in lbs. †
A	B	C	D	
1/4"	1/2"	1"	7/32"	500
5/16"	5/8"	1-1/4"	9/32"	800
3/8"	3/4"	1-1/2"	11/32"	1,200
1/2"	1"	2"	7/16"	2,200
5/8"	1-1/4"	2-5/16"	17/32"	3,500
3/4"	1-1/2"	2-3/4"	5/8"	5,200
7/8"	1-3/4"	3-1/2"	7/8"	7,200
1"	2"	3-3/4"	7/8"	10,000

† Loads are based on a safety factor of 5 to 1. Maximum load ratings are based on a straight vertical lift in a gradually increasing manner. Any deviations as angular lifts, shock loads, modification of the basic part, etc., will result in drastically reduced maximum loads.

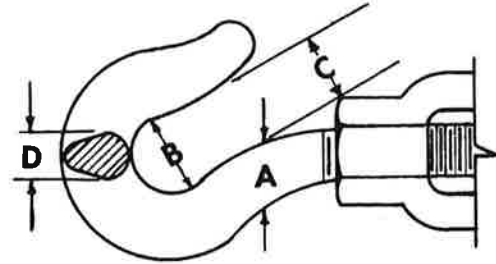
## Drop Forged Turnbuckles (Cont.)

Turnbuckles meet performance requirements of ASTM specification F1145-92 Type 1 Grade 1 (Supercedes FF-T-791B)



(Class F)

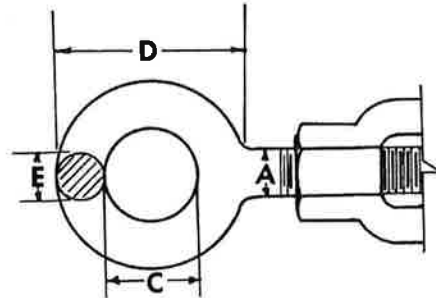
Eye, Jaw and Hook fittings are heat treated.



### Hook Dimensions - Strength

Dimensions - Inches				Working Load Limit in Lbs.†
A	B	C	D	
1/4"	5/16"	9/32"	7/32"	400
5/16"	1/2"	1/2"	5/16"	700
3/8"	1/2"	1/2"	3/8"	1,000
1/2"	7/8"	13/16"	17/32"	1,500
5/8"	29/32"	27/32"	5/8"	2,250
3/4"	1-1/8"	29/32"	11/16"	3,000
7/8"	1-3/16"	1-1/16"	13/16"	3,200
1"	1-3/8"	1-1/4"	7/8"	5,000

† Loads are based on a safety factor of 5 to 1.



### Eye Dimensions - Strength

Dimensions - Inches				Working Load Limit in Lbs.†
A	B	D	E	
1/4"	1/2"	1"	7/32"	500
5/16"	5/8"	1-1/4"	9/32"	800
3/8"	3/4"	1-1/2"	11/32"	1,200
1/2"	1"	2"	7/16"	2,200
5/8"	1-1/4"	2-5/16"	17/32"	3,500
3/4"	1-1/2"	2-3/4"	5/8"	5,200
7/8"	1-3/4"	3-1/2"	7/8"	7,200
1"	2"	3-3/4"	7/8"	10,000

† Loads are based on a safety factor of 5 to 1.

Diameter & Take-up	Hook and Eye		Weight per 100 in Lbs.
	Part No.	Closed Length	
1/4" x 4"	075-01705 3	8-1/4"	35
5/16" x 4-1/2"	075-01710 7	9-1/4"	47.5
3/8" x 6"	075-01715 2	11-3/4"	90.6
1/2" x 2"	075-01720 6	9-1/4"	109
1/2" x 6"	075-01723 7	13-5/8"	170
1/2" x 9"	075-01726 8	16-3/8"	202
1/2" x 12"	075-01729 9	19-5/8"	232.5
5/8" x 6"	075-01734 3	14-1/8"	260
5/8" x 9"	075-01737 4	17-3/8"	320
5/8" x 12"	075-01740 4	20-5/8"	392.5
5/8" x 18"	075-01743 5	26-5/8"	557
3/4" x 6"	075-01748 0	15-3/4"	397.5
3/4" x 9"	075-01751 0	18-7/8"	512.5
3/4" x 12"	075-01754 1	22-1/8"	581
3/4" x 18"	075-01757 2	28-1/8"	666
7/8" x 6"	075-01762 6	18-1/2"	650
7/8" x 12"	075-01765 7	23-1/8"	787.5
7/8" x 18"	075-01768 8	29-1/8"	1212
1" x 6"	075-01773 2	19-1/2"	805
1" x 12"	075-01776 3	25-1/4"	1077.5
1" x 18"	075-01779 4	31-1/4"	1386

To ascertain extended length add amount of take-up length in closed position.



Maximum load ratings are based on a straight vertical lift in a gradually increasing manner. Any deviations as angular lifts, shock loads, modification of the basic part, etc., will result in drastically reduced maximum loads.

# Oilfield Supplies



## Drop Forged Turnbuckles (Cont.)

Turnbuckles meet performance requirements of ASTM specification F1145-92 Type 1 Grade 1 (Supercedes FF-T-791B)

Eye, Jaw and Hook fittings are heat treated.

Diameter & Take-up	Jaw and Eye Hot Galvanized			Jaw and Jaw Hot Galvanized		
	Part No.	Closed Length	Weight per 100	Part No.	Closed Length	Weight per 100
1/4" x 4"	075-02605 5	8-1/4"	37.5	03055 7	8-1/2"	40
5/16" x 4-1/2"	075-02610 9	9-1/8"	52.5	03060 1	9-1/4"	52.5
3/8" x 6"	075-02615 4	11-1/2"	96.5	03065 6	11-1/2"	97.5
1/2" x 2"	075-02620 8	8-3/4"	109	03070 0	8-7/8"	119
1/2" x 6"	075-02623 9	13-1/4"	160	03073 1	13-1/2"	170
1/2" x 9"	075-02626 0	16-1/4"	198.5	03076 2	16-1/2"	202.5
1/2" x 12"	075-02629 1	19-1/4"	225	03079 3	19-1/2"	227.5
5/8" x 6"	075-02634 5	14-5/8"	257.5	03084 7	15-3/4"	260.5
5/8" x 9"	075-02637 6	17-7/8"	330	03087 8	18-3/4"	330
5/8" x 12"	075-02640 6	21-1/8"	402	03090 8	21-3/4"	407
5/8" x 18"	075-02643 7	27-1/8"	581	03093 9	27-3/4"	607
3/4" x 6"	075-02648 2	15-5/8"	402.5	03098 4	16-1/2"	417.5
3/4" x 9"	075-02651 2	18-3/4"	522.5	03101 1	19-1/2"	545
3/4" x 12"	075-02654 3	22"	602.5	03104 2	22-1/2"	619.5
3/4" x 18"	075-02657 4	28"	702	03107 3	28-1/2"	753
7/8" x 6"	075-02662 8	19"	655	03112 7	19-1/2"	668
7/8" x 12"	075-02665 9	23-1/2"	842.5	03115 8	24-1/2"	862.5
7/8" x 18"	075-02668 0	29-1/2"	1252	03118 9	30-1/2"	1281
1" x 6"	075-02673 4	19-1/8"	872	03123 3	21-3/16"	911
1" x 12"	075-02676 5	25-1/4"	1137.5	03126 4	25-1/2"	1165
1" x 18"	075-02679 6	31-1/4"	1463	03129 5	31-1/2"	1518



(Class H)



(Class G)

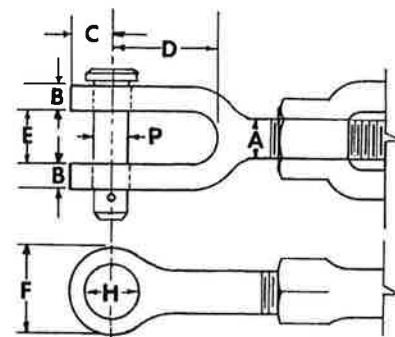
Jaw types supplied with round pins and cotter keys unless nuts and bolts and specified. Locking nuts are also available.



Diameter & Take-up	Rod End Eye & Eye Self-Colored		
	Part No.	Closed Length	Weight per 100
1/2" x 6"	075-03373 2	13"	131
5/8" x 6"	075-03384 8	13-1/4"	205
3/4" x 6"	075-03398 5	13-1/2"	293
7/8" x 6"	075-03412 8	14"	456
1" x 6"	075-03423 4	14-1/8"	589

### Jaw Dimensions - Strength

Dimensions - Inches								Working Load Limit in Lbs.†
A	B	C	D	*E	F	**H	P	
1/4"	7/32"	5/16"	25/32"	3/8"	5/8"	9/32"	1/4"	500
5/16"	1/4"	5/16"	7/8"	15/32"	5/8"	9/32"	1/4"	800
3/8"	9/32"	13/32"	1"	1/2"	13/16"	11/32"	5/16"	1,200
1/2"	5/16"	1/2"	1-9/32"	5/8"	1"	15/32"	7/16"	2,200
5/8"	3/8"	21/32"	1-21/32"	7/8"	1-5/16"	35/64"	1/2"	3,500
3/4"	1/2"	13/16"	1-27/32"	15/16"	1-5/8"	43/64"	5/8"	5,200
7/8"	9/16"	29/32"	1-31/32"	1-5/32"	1-7/8"	25/32"	3/4"	7,200
1"	11/16"	1-1/16"	2-13/32"	1-3/16"	2"	15/16"	7/8"	10,000



\* At parting line: includes 7° draft. \*\*Hole size.  
 † Loads are based on a safety factor of 5 to 1.

## Machinery Eye Bolts

Drop forged steel. Heat treated after forging. Self-colored.  
Plain or shoulder type, threaded.



### Standard Shank Lengths Plain Pattern

Plain Pattern No.	Bolt Diameter N.C.	Standard Shank Length	Threaded	
			Part No.	Weight Per 100
1	1/4"	1"	075-11605 3	5
2	5/16"	1-1/8"	075-11625 1	10.5
3	3/8"	1-1/4"	075-11645 9	15.5
4	7/16"	1-3/8"	075-11665 7	20.5
5	1/2"	1-1/2"	075-11685 5	33
6	9/16"	1-5/8"	075-11705 0	44.5
7	5/8"	1-3/4"	075-11725 8	64
8	3/4"	2"	075-11748 7	90.5
9	7/8"	2-1/4"	075-11768 5	135
10	1"	2-1/2"	075-11788 3	190.5
11	1-1/8"	2-3/4"	075-11808 8	299.5
12	1-1/4"	3"	075-11831 6	399
14	1-1/2"	3-1/2"	075-11851 4	662.5



### Standard Shank Lengths Shoulder Pattern

Plain Pattern No.	Bolt Diameter N.C.	Standard Shank Length	Threaded	
			Part No.	Weight Per 100
21	1/4"	1"	075-12805 6	6
22	5/16"	1-1/8"	075-12825 4	10
23	3/8"	1-1/4"	075-12845 2	16
24	7/16"	1-3/8"	075-12865 0	26.5
25	1/2"	1-1/2"	075-12885 8	38
26	9/16"	1-5/8"	075-12905 3	49
27	5/8"	1-3/4"	075-12925 1	73.5
28	3/4"	2"	075-12948 0	99.5
29	7/8"	2-1/4"	075-12968 8	172.5
30	1"	2-1/2"	075-12988 6	235
31	1-1/8"	2-3/4"	075-13008 0	342.5
32	1-1/4"	3"	075-13031 8	462.5
34	1-1/2"	3-1/2"	075-13051 6	752.5

# Oilfield Supplies



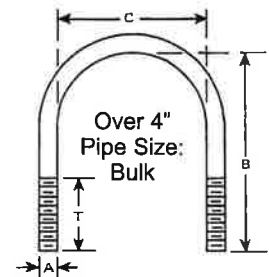
## ROUND BEND U-BOLTS

Round Bend U-Bolts for steel or wrought iron pipe sizes 1/4"-18" inclusive, as listed on this and next pages, are produced from low carbon steel and supplied with NC rolled threads and two (2) hex nuts. In addition, U-Bolt plate is available if required.

Some sizes also available in stainless steel.



Standard Pack:  
10 pieces



Over 4"  
Pipe Size:  
Bulk

### Zinc Plated

U-Bolt Dimensions - Inches				For Pipe Size	U-Bolts & 2 Nuts			U-Bolts, Plates & 2 Nuts		
Diameter & Thread (A)	I.D. (C)	Inside Length (B)	Thread Length (T)		Stock No.	Part No.	Weight Per 100	Stock No.	Part No.	Weight Per 100
1/4"-20	9/16"	1-1/4"	3/4"	1/4"	01	075-50005 0	5	1	075-50205 4	7
1/4"-20	3/4"	1-1/4"	5/8"	3/8"	02	075-50008 1	5	2	075-50208 5	7
1/4"-20	3/4"	2-1/4"	1-1/2"	3/8"	03	075-50011 1	7	3	075-50211 5	9
1/4"-20	1"	1-3/4"	1"	1/2"	04	075-50014 2	7	4	075-50214 6	9
1/4"-20	1"	2-3/4"	1-1/4"	1/2"	04L	075-50017 2	8	4L	075-50217 7	11
1/4"-20	1-1/8"	2"	1"	3/4"	05	075-50020 3	7	5	075-50220 7	9
1/4"-20	1-1/8"	3-1/8"	1-1/2"	3/4"	05L	075-50023 4	9	5L	075-50223 8	12
1/4"-20	1-1/4"	2-1/4"	1-1/4"	3/4"	06	075-50026 5	7.5	6	075-50226 9	10
1/4"-20	1-1/2"	2-3/4"	1-3/8"	1"	07	075-50029 6	9	7	075-50229 0	12
1/4"-20	1-3/4"	3"	1-3/8"	1-1/4"	08	075-50032 6	9	8	075-50232 0	12
1/4"-20	2"	3-1/4"	1-3/8"	1-1/2"	09	075-50035 7	9.5	9	075-50235 1	14
5/16"-18	1"	2-3/16"	1-3/8"	1/2"	010	075-50038 8	11	10	075-50238 2	14
5/16"-18	1-1/8"	2-3/16"	1"	3/4"	0101	075-50041 8	12	101	075-50241 2	14.5
5/16"-18	1-3/8"	2-3/16"	1"	1"	011	075-50044 9	12	11	075-50244 3	15
5/16"-18	1-3/8"	3-5/8"	2"	1"	011L	075-50047 0	16	11L	075-50247 4	20
5/16"-18	1-1/2"	2-3/16"	1"	1"	012	075-50050 0	12	12	075-50250 4	15
5/16"-18	1-3/4"	2-11/16"	1-1/8"	1-1/4"	013	075-50053 1	13	13	075-50253 5	17.5
5/16"-18	1-3/4"	4-1/2"	2"	1-1/4"	013L	075-50056 2	19	13L	075-50256 6	24
5/16"-18	2"	2-11/16"	1"	1-1/2"	014	075-50059 3	14	14	075-50259 7	19
5/16"-18	2"	4-3/4"	3"	1-1/2"	014L	075-50062 3	20	14L	075-50262 7	25
5/16"-18	2-1/2"	3-3/16"	1"	2"	015	075-50065 4	16	15	075-50265 8	21
5/16"-18	2-1/2"	5-5/8"	3"	2"	015L	075-50068 5	23	15L	075-50268 9	29
5/16"-18	3"	3-11/16"	1"	2-1/2"	016	075-50071 5	18	16	075-50271 9	24
3/8"-16	1"	2-1/4"	1-1/4"	1/2"	017	075-50074 6	17.5	17	075-50274 0	22.5
3/8"-16	1-1/4"	2-1/4"	1-1/4"	3/4"	018	075-50077 7	18	18	075-50277 1	24
3/8"-16	1-1/2"	2-1/2"	1-1/4"	1"	019	075-50080 7	18.5	19	075-50280 1	26
3/8"-16	1-3/4"	2-3/4"	1-1/8"	1-1/4"	020	075-50083 8	20	20	075-50283 2	27.5
3/8"-16	2"	2-5/8"	1-1/4"	1-1/2"	021	075-50086 9	20	21	075-50286 3	29
3/8"-16	2-1/2"	3-1/8"	1-1/4"	2"	022	075-50089 0	24.5	22	075-50289 4	33
3/8"-16	3"	3-5/8"	1-1/4"	2-1/2"	023	075-50092 0	26	23	075-50292 4	38
3/8"-16	3"	6-5/8"	3"	2-1/2"	023L	075-50095 1	41	23L	075-50295 5	52.5
3/8"-16	3-1/2"	4-1/8"	1-1/4"	3"	024	075-50098 2	30	24	075-50298 6	42.5
1/2"-13	3"	4-1/2"	1-5/8"	2-1/2"	025	075-50101 9	59	25	075-50301 3	71
1/2"-13	3-1/2"	5"	1-1/2"	3"	026	075-50104 0	64	26	075-50304 4	78
1/2"-13	3-1/2"	8-1/2"	3"	3"	026L	075-50107 1	95	26L	075-50307 5	110
1/2"-13	4"	5-1/2"	1-1/2"	3-1/2"	027	075-50110 1	70	27	075-50310 5	87
1/2"-13	4-1/2"	6"	1-1/2"	4"	028	075-50113 2	75	28	075-50313 6	92.5
1/2"-13	5-5/8"	7-1/4"	2"	5"	029	075-50116 3	90	N.A.	N.A.	N.A.
1/2"-13	6-3/4"	8-3/8"	2"	6"	030	075-50119 4	101	N.A.	N.A.	N.A.
1/2"-13	8-3/4"	10-3/8"	2"	8"	031	075-50122 4	120	N.A.	N.A.	N.A.
3/4"-10	10-7/8"	13-13/16"	4"	10"	032	075-50125 5	440	N.A.	N.A.	N.A.
7/8"-9	12-7/8"	16-1/16"	4-1/4"	12"	033	075-50128 6	710	N.A.	N.A.	N.A.
7/8"-9	14-1/8"	17-5/16"	4-1/4"	14"	034	075-50131 6	755	N.A.	N.A.	N.A.
7/8"-9	16-1/8"	19-5/16"	4-1/4"	16"	035	075-50134 7	850	N.A.	N.A.	N.A.
1"-8	18-1/8"	21-11/16"	4-3/4"	18"	036	075-50137 8	1245	N.A.	N.A.	N.A.

## Continuous Threaded Rod

Manufactured from Low Carbon Domestic Steel. 36" lengths, color coded, bundled and packed in standard cartons. NC and NF rolled threads.



### Zinc Plated Steel 36" Lengths

Thread Diameter	Color Code	Part No.	36" Rods			
			Bundle		Carton	
			Quantity	Weight (lbs)	Quantity	Weight (lbs)
6"-32	Blue	075-35011 2	5	0.6	*	*
8"-32	Red	075-35031 0	5	0.8	*	*
10"-24	Green	075-35051 8	5	0.9	*	*
12"-24	Red	075-35071 6	5	1.3	*	*
1/4"-20	Blue	075-35091 4	5	1.9	200	72
5/16"-18	Red	075-35111 9	5	3	125	75
3/8"-16	Yellow	075-35131 7	5	4.3	100	86
7/16"-14	Green	075-35151 5	5	6	70	84
1/2"-13	Blue	075-35171 3	5	7.9	50	79
9/16"-12	Yellow	075-35191 1	3	6	33	66
5/8"-11	Red	075-35211 6	3	7.5	33	83
3/4"-10	Yellow	075-35231 4	3	11.1	24	88
7/8"-9	Green	075-35251 2	3	15.2	15	76
1"-8	Red	075-35271 0	3	20.1	12	81
1-1/8"-7	Yellow	075-35291 8	N.A.	N.A.	10	84
1-1/4"-7	Green	075-35311 3	N.A.	N.A.	10	105
1-3/8"-6	Blue	075-35331 1	N.A.	N.A.	10	126
1-1/2"-6	Red	075-35351 9	N.A.	N.A.	5	76

## Zinc Plated Steel "Shapes"

### Square Key Stock

Size	Part No.	12" Length	
		Bundle	
		Quantity	Weight (lbs)
1/8"	075-31005 5	6	.32
5/32"	075-31010 9	6	.50
3/16"	075-31015 4	6	.72
1/4"	075-31020 8	6	1.32
5/16"	075-31025 3	6	1.98
3/8"	075-31030 7	6	2.88
7/16"	075-31035 2	3	1.95
1/2"	075-31040 6	3	2.55
9/16"	075-31045 1	3	3.24
5/8"	075-31050 5	3	3.99
11/16"	075-31055 0	3	4.80
3/4"	075-31060 4	3	5.70
13/16"	075-31065 9	3	6.75
7/8"	075-31070 3	3	7.80
1"	075-31075 8	3	10.2



### Chicago Square Keystock Display Part No. 60150 4

Contains the following  
Zinc Plated Sizes

#### 12" Lengths Square Keystock:

**12 Each:** 1/8", 5/32", 3/16", 1/4", 5/16", 3/8"

**6 Each:** 7/16", 1/2"

Shipping weight 36 lbs.



## Steel Hand Stamps

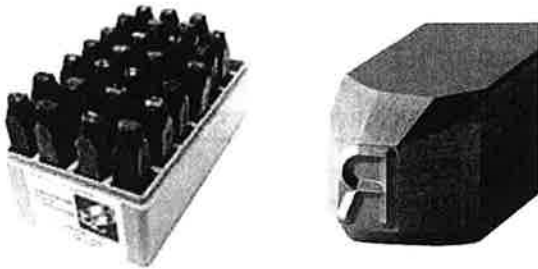
### Standard

High quality for general purpose uses at low cost

- Recommended for medium to light duty marking
- Marked with slash on the thumb side

### Letter Sets

- Letter sets contain 27 pieces A-Z plus ampersand
- For hand-held, hammer-struck applications
- Crowned striking surface insures full force to the center of the stamp & textured shank provides firm easy grip
- Packed in durable plastic storage containers



Part No.	Character Size	Shank Size	Std. Pkg.
134-20200	1/8"	1/4" x 2-3/8"	1
134-20300	1/4"	3/8" x 2-5/8"	1
134-20350	3/8"	1/2" x 2-3/4"	1
134-20400	1/2"	5/8" x 3"	1

### Number Sets

- Number sets contain 9 pieces 0-9 (the 6 is used as a 9)
- For hand-held, hammer-struck applications
- Crowned striking surface insures full force to the center & textured shank provides firm easy grip
- Packed in durable plastic storage containers



Part No.	Character Size	Shank Size	Std. Pkg.
134-20541	1/8"	1/4" x 2-3/8"	1
134-20581	1/4"	3/8" x 2-5/8"	1
134-20601	3/8"	1/2" x 2-3/4"	1
134-20621	1/2"	5/8" x 3"	1

## Letter & Number Sets

- The letter and number sets contain 27 pieces A-Z, plus 9 pieces 0-9 (the 6 is used as a 9)
- Packed in sturdy, steel index box
- Fits flat in tool boxes



Part No.	Character Size	Shank Size	Std. Pkg.
134-20624	1/8"	1/4" x 2-3/8"	1
134-20626	1/4"	3/8" x 2-5/8"	1
134-20627	3/8"	1/2" x 2-3/4"	1

## Heavy Duty Stamps

Tempered shanks for extra durability

### Combination Letter & Number Set

Part No.	Character Size	Shank Size	Std. Pkg.
134-21629	5/16"	9/16" x 3-1/8", 36 Pieces	1

### Letter Set

Part No.	Character Size	Shank Size	Std. Pkg.
134-21201	1/2"	3/4" x 3-3/4", 27 Pieces	1

### Number Set

Part No.	Character Size	Shank Size	Std. Pkg.
134-21500	1/2"	3/4" x 3-3/4", 9 Pieces	1

## Premier-Letter, Number, & Combo Sets

- Large shanks are tempered designed to hold up under continuous hard hammering
- Marked with character designation and size on the thumb side
- All steel stamps sets with 1" character height

### Letter Sets

- Letter sets contain 27 pieces A-Z



Part No.	Character Size	Shank Size	Std. Pkg.
134-22150	1/8"	3/8" x 2-3/4"	1
134-22250	3/16"	7/16" x 2-3/4"	1
134-22350	1/4"	1/2" x 3"	1
134-22400	5/16"	9/16" x 3"	1



## Premier Tempered Number Sets

- Number sets contain 9 pieces 0-9 (the 6 is used as a 9)



Part No.	Character Size	Shank Size	Std. Pkg.
134-22861	1/8"	3/8" x 2-3/4"	1
134-22881	5/32"	7/16" x 2-3/4"	1
134-22901	3/16"	7/16" x 2-3/4"	1
134-22941	1/4"	1/2" x 3"	1
134-22981	3/8"	5/8" x 3-1/8"	1

## Premier Tempered Letter & Number Sets

- The letter and number sets contain 36 pieces A-Z, plus 9 pieces 0-9 (the 6 is used as a 9)
- Packed in sturdy, steel index box



Part No.	Character Size	Shank Size	Std. Pkg.
134-24005	1/8"	3/8" x 2-3/4"	1
134-24007	3/16"	7/16" x 2-3/4"	1
134-24008	1/4"	1/2" x 3"	1



## Round Face Low Stress Stamp Sets

- Round characters produce minimum stress on the marked surface

Part No.	Character Size	Description	Std. Pkg.
134-25900	1/4"	1/2" x 3" letter set, 27 Pieces	1
134-26141	1/4"	1/2" x 3" number set, 9 Pieces	1

## Brass Stencils

- Durable brass for long-lasting services
- Clean up easily with paint solvent
- Quick, legible signs on all surfaces
- Stencils slide together and come apart easily
- Use brush, spray ink, pain or markers
- Reusable - long lasting
- Made in the USA



## 15 Piece Single Number Set

- **Contains:** 12345678900, 1-beginner, 1-plain ender, 1-dash and 1-period

Part No.	Character Size	Description	Std. Pkg.
134-10009	1-1/2"	15 pc. number set	1
134-10011	2"	15 pc. number set	1
134-10013	3"	15 pc. number set	1
134-10014	4"	15 pc. number set	1
134-10016	6"	15 pc. number set	1



## 33 Piece Single Letter Set

- **Contains:** All letters (26 pc. A-Z), 1-beginner, 1-period ender, 1-comma, 1-dash, 1-period, 1-apostrophe and 1-&

Part No.	Character Size	Description	Std. Pkg.
134-10029	1-1/2"	33 pc. letter set	1
134-10031	2"	33 pc. letter set	1
134-10033	3"	33 pc. letter set	1
134-10034	4"	33 pc. letter set	1
134-10036	6"	33 pc. letter set	1





## Brass Sencils (Cont.)



## 45 Piece Number & Letter Set

- **Contains:** All letters (26 pc. A-Z), 1234567890, 1-beginner, 1-plain ender, 1-period ender, 1-comma, 1-dash, 1-period, 2 spacers

Part No.	Character Size	Description	Std. Pkg.
134-10071	2"	45 pc. Number & Letter Set	1
134-10073	3"	45 pc. Number & Letter Set	1
134-10074	4"	45 pc. Number & Letter Set	1



## 92 Piece Number & Letter Set

- **Contains:** All letters, AAA, BB, CC, DD, EEEE, GG, HH, III, JJ, KK, LL, MM, NNN, OOO, PP, Q, RR, SSS, TT, UU, VV, WW, XX, YY, ZZ, 111, 22, 33, 44, 55, 66, 77, 88, 99, 000, 1-begginer, 1-plain ender, 3-spacers, 1-period ender, 1-comma, 1-dash, 1-&

Part No.	Character Size	Description	Std. Pkg.
134-10148	1"	92 pc. Number & Letter Set	1
134-10153	3"	92 pc. Number & Letter Set	1
134-10154	4"	92 pc. Number & Letter Set	1

## Masonry Line Reels



- High visibility lines for temporary area marking
- Free standing, stakeable handle
- Reloadable string fits 1" cores 4"-6" long
- #18 nylon construction line

Part No.	Description	Std. Pkg.
134-53200	500' Braided Pink Line Reel	12

## Cable Seals



## Globe Mechanical Seals

- Precision built to stay locked
- Self-locking, permanent mechanical closure
- Prenumbers
- For custom call customer service

Part No.	Description	Std. Pkg.
134-2799GN	Globe Mechanical Seals 8-1/4" x 3/8" metal	1



## Automatic Locking Pliers

- Automatically locks on any size without adjusting
- 7x faster and 100% easier than traditional locking pliers
- Grab thick, grab thin
- Easy squeeze release lever
- Non slip texture grip
- Limited lifetime warranty
- Chrome molybdenum steel construction for durability

### Curved Jaw



6" - 134-06100      10" - 134-10100

### Needle Nose



7" - 134-09300

### C-Clamp



7" - 134-06200      11" - 134-10200

### C-Clamp w/Swivel Pads



7" - 134-06201      11" - 134-10201



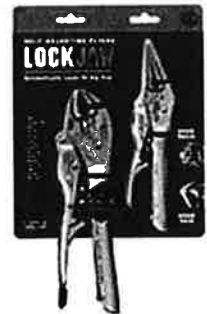
19" - 134-18200

## LockJaw™ Sets



134-80200

Includes: 1 - 10" Curved Jaw  
1 - 6" Curved Jaw



134-80300

Includes: 1 - 10" Curved Jaw  
1 - 7" Needle Nose



134-80100

Includes: 1 - 10" Curved Jaw  
1 - 6" Curved Jaw  
1 - 7" Needle Nose

Part No.	Description	Std. Pkg.
134-06100	6" Curved Jaw Locking Pliers	6
134-06200	7" C-Clamp Locking Pliers	6
134-06201	7" C-Clamp w/Swivel Pads	6
134-09300	7" Needle Nose Locking Pliers	6
134-10100	10" Curved Jaw Locking Pliers	6
134-10200	11" C-Clamp Locking Pliers	6
134-10201	11" C-Clamp w/Swivel Pads	6
134-18200	19" Long Reach C-Clamp	6
134-80100	10", 6" Curved Jaw & 7" Needle Nose	6
134-80200	10", 6" Curved Jaw Set	6
134-80300	10" Curved Jaw & 7" Needle Nose Set	6

# Oilfield Supplies



## Pneumatic Impact Wrenches



1/2" Drive



156-RP9540

3/4" Drive



156-RP9560

1" Drive



156-RP9582

Part No.	Square Drive	Air Inlet	Socket Retainer	Clutch Type	Torque Working (ft lb)	Torque Max. (ft lb)
156-RP9540	1/2"	1/4" NPTF	Friction Ring	Dyna Pact™	25-310	425
156-RP9560	3/4"	3/8" NPTF	Friction Ring	Pin	150-700	1000
156-RP9582	1"	1/2" NPTF	Hole	Rocking Dog	150-900	1400

## Needle Scaler & Chisel

1/2 Sq. In.



156-RP9538

Part No.	Air Inlet	Bore	BPM	Shank	Std. Pak
156-RP9538	1/4" NPT	1-1/8"	4600	1/2 sq. in.	1



## Generators



### Specifications:

- Fuel Tank: 6.5 gallon
- Running Hours: 10 at 50% load 389cc OHV engine
- Noise level: 74 db
- EPA certified

This Champion portable generator provides emergency power, at home or on the job. 6,000 running watts provide enough power to run your water heater or heat pump, full size refrigerator, microwave / toaster, furnace fan and box fan, color TV and CD / DVD player, and lights. Electric start, too.

Part No.	Description	Qty.
036-41311	Champion Heavy Duty Generator	1



### Specifications:

- Fuel Tank: 6.5 gallon
- Running Hours: 11 at 50% load 338cc OHV engine
- Noise level: 72 db
- EPA certified

This Champion portable generator provides emergency power for all the essential elements in your house, business or job site, at a price which is still affordable. 5,000 running watts provide enough power for a full size refrigerator, electric range or microwave / toaster, furnace fan and box fan, color TV and CD / DVD player. Or, use it to power your refrigerator, box fan, sump pump and all your power tools.

Part No.	Description	Qty.
036-41115	Champion Medium Duty Generator	1

## COOPER Hand Tools Crescent<sup>®</sup> BRAND

### Adjustable Wrenches

These wrenches are made of fine alloy steel to give extra strength and wear, and heat treated for toughness and durability. Chrome plated finish resists rust and corrosion.

#### Chrome Finish



Part No.	Description	Std. Pak
017-AC14	4" Chrome Adjustable Wrench	1
017-AC16	6" Chrome Adjustable Wrench	1
017-AC18	8" Chrome Adjustable Wrench	1
017-AC110	10" Chrome Adjustable Wrench	1
017-AC112	12" Chrome Adjustable Wrench	1
017-AC115	15" Chrome Adjustable Wrench	1
017-AC118	18" Chrome Adjustable Wrench	1
017-AC124	24" Chrome Adjustable Wrench	1

#### Black Phosphate Finish

Black phosphate finish resists corrosion



Part No.	Description	Std. Pak
017-AT14	4" Black Phosphate Adjustable Wrench	1
017-AT16	6" Black Phosphate Adjustable Wrench	1
017-AT18	8" Black Phosphate Adjustable Wrench	1
017-AT110	10" Black Phosphate Adjustable Wrench	1
017-AT112	12" Black Phosphate Adjustable Wrench	1
017-AT115	15" Black Phosphate Adjustable Wrench	1
017-AT118	18" Black Phosphate Adjustable Wrench	1

# Oilfield Supplies



## Pliers



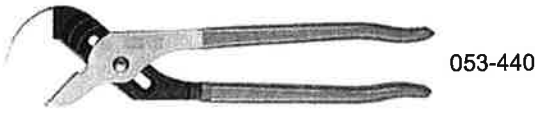
053-428



053-430



053-432



053-440



053-442



053-460

Part No.	Description	Std. Pkg.
053-428	8" Tongue and Groove	1
053-430	10" Tongue and Groove Pliers	1
053-432	10" V-Jaw Tongue and Groove Pliers	1
053-440	12" Tongue and Groove Pliers	1
053-442	12" Curve Jaw Tongue and Groove Pliers	1
053-460	16" Tongue and Groove Pliers	1

## Pliers (Cont.)



053-480



053-528



053-738



053-5410



053-GS-3



053-PC-1

Part No.	Description	Std. Pkg.
053-480	20-1/4" BigAzz Tongue and Groove Pliers	1
053-528	8" Slip Joint Plier with Wire Cutter	1
053-738	8" Needle Nose Long Reach Pliers	1
053-5410	10" Slip Joint Heavy Duty Wire Cutter Pliers	1
053-GS-3	3 Piece Tongue and Groove Plier Set	1
053-PC-1	4 Piece Pit Crew Tongue and Groove Plier Set	1

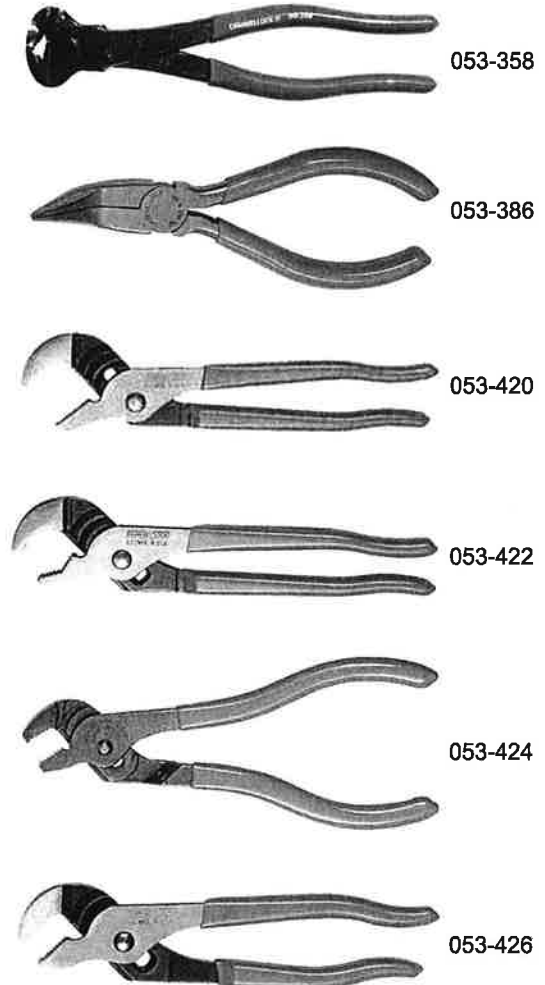


**Pliers (Cont.)**



Part No.	Description	Std. Pkg.
053-85	10-1/2" Fence Pliers	1
053-317	8" Long Nose Pliers with Side Cutter	1
053-318	8-3/8" HD Long Nose Plier with Side Cutter	1
053-326	6" Long Nose Plier with Side Cutter	1
053-337	7" Diagonal Pliers	1
053-348	8-1/2" Lineman's Round Nose Pliers	1

**Pliers (Cont.)**



Part No.	Description	Std. Pkg.
053-358	8" End Cutter Pliers	1
053-386	5-1/2" Long Nose Bent Nose Pliers	1
053-420	9-1/2" Tongue and Groove Pliers	1
053-422	9-1/2" Curve Jaw Tongue and Groove Pliers	1
053-424	4-1/2" Tongue and Groove Pliers	1
053-426	6-1/2" Tongue and Groove Pliers	1

# Oilfield Supplies

## COMMANDO KLEAN

### Cleaner/Degreaser Concentrate

Cleans everything washable at work or home.  
Makes stains disappear inside and out!

**Removes:** Dirt, grease, tobacco, pencil, crayon, finger prints, blood, food, lipstick, paint and coffee

**Works on:** Walls, woodwork, moldings, floors, linoleum, tile, refrigerators, appliances, oven walls, hoods, kitchen countertops, cabinets, bathroom fixtures, canopies, fry pans, rugs, carpet, blinds, window shades, awnings, screens, sporting equipment, sneakers, washable fabrics, patio accessories, outdoor grills, porcelain, garden tools, boats, engines, outboard motors, power tools, lawn mowers, white wall tires, etc.



Part No.	Description	Std. Pkg.
203-MCI-101	1 Gallon Bottle Cleaner/Degreaser	4/Case
203-MCI-105	5 Gallon Jug Cleaner/Degreaser	1 Each
203-MCI-155	55 Gallon Drum Cleaner/Degreaser	1 Each

## CAN'T FIND IT?

*We have many products not included in this catalog...if you don't find it call us...we may have or can get just what you are looking for. New items are always being added. Send us your orders or inquiries when you want an item that is not listed...and thanks!*

## COOPER Hand Tools Crescent<sup>®</sup> BRAND

### Hand Tool Sets

These sets contain all the tools needed for most industrial applications, including 1/4", 3/8", and 1/2" quick-release ratcheting drives, with a wide selection of standard and deep sockets in the most common SAE and metric sizes.

21 Pc.



017-CTK21SAE

Part No.	Description	Set
017-CTK21SAE	21 Piece 3/4" Drive Mechanics Tool Set, SAE	1

148 Pc.



017-CTK148MP

Part No.	Description	Set
017-CTK148MP	148 Piece Tool Set	1

170 Pc.



017-CTK170MP

Part No.	Description	Set
017-CTK170MP	170 Piece Tool Set	1

### Fence Tool Pliers



**Product features:**

193610CVSMN

- 2 staple grips in nose
- Corrugated hammer head, heavy prong, easily reach, pull rusty staples
- Special opening in head allows both wire and staple to be gripped
- 2 electronically induction hardened durable wire cutters
- Made of forged alloy tool steel
- Polished head
- Red non-slip cushion handle grips

Part No.	Description	Qty
017-193610CVSMN	10-7/16" Heavy-Duty Fence Tool Solid Joint Pliers, Cushion Grip	1

### Joint Pliers



**Product features:**

19508CVN

- Designed for the requirements of linemen, cutting many gauges of wire
- Electronically induction hardened, durable and keen side cutting edges
- Made of forged alloy tool steel
- Polished head
- Red non-slip cushion handle grips

Part No.	Description	Qty
017-19508CVN	8-5/8" Heavy-Duty Side Cutting Solid Joint Pliers, Cushion Grip	1



**Product features:**

5428CVN

- Designed for heavy-duty wire cutting
- Electronically induction hardened hand-honed, long lasting cutting edges
- Made of forged alloy tool steel
- Individually tested for strength and cutting ability
- Polished head
- Red non-slip cushion handle grips

Part No.	Description	Qty
017-5428CVN	8" Heavy-Duty Diagonal Cutting Solid Joint Pliers, Cushion Grip	1



# Oilfield Supplies

## Lufkin®

### Oil Gauging Tapes

- Chrome Clad® for dark (heavy oils)
- Nubian® for light (clear oils)
- "Double Duty" w/both chrome clad & nubian
- Stainless Steel, for use in highly corrosive solutions
- Made of heavy gauge 1/2" x .012" (13mm x 0.3mm) steel
- Tapes & plumb bobs comply with API standard 2545 & ASTM standard D 1085



### Atlas Chrome Clad®/Nubian® Double Duty

Part No.	Length	Replacement Blade	Std. Pkg.
015-CN12901/2S	18'	015-OCN12901/2S	1
015-CN1290S	25'	015-OCN1290S	1
015-CN1290SME	8m	015-OCN1290SME	1
015-CN1291S	33'	015-OCN1291S	1
015-CN1293S	50'	015-OCN1293S	1
015-CN1293SME	15m	015-OCN1293SME	1
015-CN1294S	66'	015-OCN1294S	1
015-CN1294SME	20m	015-OCN1294SME	1
015-CN1295S	75'	015-OCN1295S	1
015-CN1295SME	23m	015-OCN1295SME	1
015-CN1296S	100'	015-OCN1296S	1
015-CN1296SME	30m	015-OCN1296SME	1

### Atlas Chrome Clad®

Part No.	Length	Replacement Blade	Std. Pkg.
015-C12901/2S	18'	015-OC12901/2S	1
015-C1290S	25'	015-OC1290S	1
015-C1291S	33'	015-OC1291S	1
015-C1293S	50'	015-OC1293S	1

### Atlas Nubian®

Part No.	Length	Replacement Blade	Std. Pkg.
015-1290S	25'	015-O1290S	1
015-1293S	50'	015-O1293S	1
015-1293SM	15m	015-O1293SM	1

### Atlas® Stainless Steel

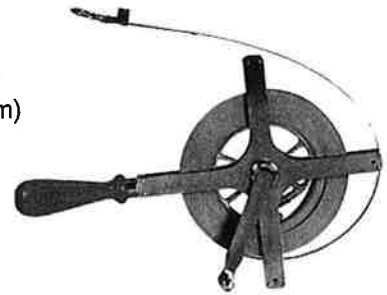
Part No.	Length	Replacement Blade	Std. Pkg.
015-S1291	33'	015-OS1291	1
015-S1293	55'	015-OS1293	1

### Replacement Handle Kit

Part No.	Description
015-Handle Kit	Handle & Strap for Gauging Tapes

### Derrick Tapes

- Chrome Clad® Blade
- Blade thickness - .019"
- Blade width - 1/4" (6mm)



Part No.	Length	Replacement Blade	Std. Pkg.
015-C2276D	100'	015-OC2276D	1
015-C2276ME	30m	015-OC2276ME	1

Part No.	Description
015-12150	Replacement Handle/Reel for C2276D

### Plumb Bobs

- 20 oz., Solid Brass
- Cylindrical Shaped
- Tapered Point Tip



015-590



015-590G



015-590GM

Part No.	Description	Std. Pkg.
015-590	Plumb Bob, 20 oz., 1" x 6-3/4"	12
015-590G	Plumb Bob, Graduated in inches	12
015-590GM	Plumb Bob, Graduated in mm & cm	12

## Lufkin®

### Series 2000 Power Return Tapes

- Lightweight, high strength chrome finished case
- Fits easily into most tape holsters
- Bright yellow blade has clear easy-to-read numerals
- Toggle lock is positioned for convenient operation
- Virtually unbreakable Quad Hook®; four rivets for extra strength (1" blade only)
- Cushioned blade return



Part No.	Description	Std. Pkg.
015-2125	1" x 25' Tape Measure, Series 2000	6
015-2133D	1" x 33' Engineer's Tape, Series 2000	6
015-2210	1/2" x 10' Tape Measure, Series 2000	6
015-2212	1/2" x 12' Tape Measure, Series 2000	6
015-2312	3/4" x 12' Tape Measure, Series 2000	6
015-2312D	3/4" x 12' Engineer's Tape, Series 2000	6
015-2316	3/4" x 16' Tape Measure, Series 2000	6
015-2325	3/4" x 25' Tape Measure, Series 2000	6
015-2325D	3/4" x 25' Engineer's Tape, Series 2000	6

### Series 1000 Power Return Tapes

- Hi-Viz® case-easy to find on the job
- Lightweight, high strength orange case
- Fits easily into most tape holsters
- Bright yellow blade has clear easy-to-read numerals
- Toggle lock is positioned for convenient operation
- Virtually unbreakable Quad Hook™
- Cushioned blade return



015-HV1425

Part No.	Description	Std. Pkg.
015-HV1312	3/4" x 12', High-Viz® Tape Measure	6
015-HV1312D	3/4" x 12', Engineer's Tape Measure	6
015-HV1316	3/4" x 16', High-Viz® Tape Measure	6
015-HV1325	3/4" x 25', High-Viz® Tape Measure	6
015-HV1425	1" x 25', High-Viz® Tape Measure	6

### L500 Series Power Return Tapes

- Lightweight, high strength, contour grip case
- High-Viz® orange case - easy to find on the job
- Unique slide lock design allows for easy control of blade
- Wide base helps keep tape standing upright
- Fits easily in most tape holsters
- Easy-to-read yellow clad blade (not replaceable)



015-L525

Part No.	Description	Std. Pkg.
015-L525	1" x 25', Hi-Viz® L 500 Series Tape Measure	6

### Mezurall® Pocket Tape

- Chrome plated case
- Yellow clad blade
- Power retraction operation
- Belt clip

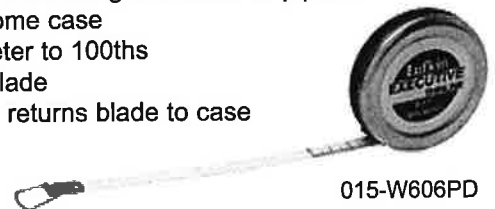


015-W9312D

Part No.	Description	Std. Pkg.
015-W9210	1/2" x 10' Mezurall® Pocket Tape	6
015-W9312D	3/4" x 12' Engineer's® Pocket Tape	6
015-W928	1/2" x 8' Mezurall® Pocket Tape	6

### Executive® Diameter

- Designed for measuring diameters of pipe, cable, etc.
- Polished chrome case
- Shows diameter to 100ths
- Yellow clad blade
- Spring action returns blade to case



015-W606PD

Part No.	Description	Std. Pkg.
015-W606PD	1/4" x 6' Executive® Diameter Pocket Tape	6
015-W9312D	3/4" x 12' Mezurall® Pocket Tape	6

## Lufkin®

### Anchor® Long Tape

- Rugged, vinyl-covered steel case
- Chrome Clad® blade
- Large easy-action winding drum and friction washers
- Nylon rollers guides the tape smoothly in and out of case



015-C213  
015-C213D  
015-C216D

Part No.	Description	Std. Pkg.
015-C213	3/8" x 50', Anchor® Tape	1
015-C213D	3/8" x 50', Anchor® 10ths Tape	1
015-C216D	3/8" x 100', Anchor® 10ths Tape	1

### Pro Series Long Steel Tape

- 3:1 gear ratio for fast blade retrieval
- Precise, easy to read black and red blade markings
- Premium steel blade resists kinks



015-PS100S

Part No.	Description	Std. Pkg.
015-PS100S	3/8" x 100', Pro Series Long Tape, 3:1	5

### Home Shop Long Tape

- Vinyl covered steel case
- Yellow clad blade
- .005" thick blade
- Large easy action winding drum with friction washers
- Fitted with a folding hook ring



015-HW100

Part No.	Description	Std. Pkg.
015-HW100	3/8" x 100', Home Shop Steel Case Tape	6

### Measuring Wheel

- Measure as fast as you can walk
- Wheel calibrated to counter - accurate for estimated measurements
- Large wheel model ideal for uneven terrain
- Also suitable for long indoor measurements
- Manufacturing plant layout, outdoor measurements on firm smooth surfaces
- Retractable handle adjusts for comfortable measurements

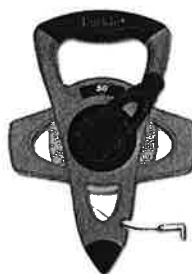


015-MW38TP

Part No.	Description	Std. Pkg.
015-MW38TP	Contractor Measuring Wheel Feet & Inches in 8ths	1

### Hi Viz® Fiberglass Tapes

- Lightweight open reel is easy to handle and rewind
- Hi-Viz® Orange Case



015-FE050  
015-FE050D



015-FE100  
015-FE100D



015-FE150  
015-FE150D



015-FE200  
015-FE200D



015-FE300  
015-FE300D

Part No.	Description	Std. Pkg.
015-FE050	1/2" x 50' Hi-Viz® Fiberglass Tape Feet & Inches	1
015-FE050D	1/2" x 50' Hi-Viz® Fiberglass Tape 10ths & 100ths	1
015-FE100	1/2" x 100' Hi-Viz® Fiberglass Tape Feet & Inches	1
015-FE100D	1/2" x 100' Hi-Viz® Fiberglass Tape 10ths & 100ths	1
015-FE150	1/2" x 150' Hi-Viz® Fiberglass Tape Feet & Inches	1
015-FE150D	1/2" x 150' Hi-Viz® Fiberglass Tape 10ths & 100ths	1
015-FE200	1/2" x 200' Hi-Viz® Fiberglass Tape Feet & Inches	1
015-FE200D	1/2" x 200' Hi-Viz® Fiberglass Tape 10ths & 100ths	1
015-FE300	1/2" x 300' Hi-Viz® Fiberglass Tape Feet & Inches	1
015-FE300D	1/2" x 300' Hi-Viz® Fiberglass Tape 10ths & 100ths	1

## Lufkin®

### Hi Viz® Fiberglass Tapes

- Durable 1/2" wide fiberglass tape is encapsulated in flexible plastic
- Non-conductive, easy-to-read black and red markings on yellow background



015-703D

Part No.	Description	Std. Pkg.
015-703D	1/2" x 50' Hi-Viz® Engineers Fiberglass Tape	1
015-706D	1/2" x 100' Hi-Viz® Engineers Fiberglass Tape	1
015-0703D	1/2" x 50' Hi-Viz® Engineers Fiberglass Tape Refill	1
015-0706D	1/2" x 100' Hi-Viz® Engineers Fiberglass Tape Refill	1

### Pro Series Ny-Clad® Steel Tape

- Durable nylon coating on blade resists wear under extreme conditions
- Super fast 3-to-1 blade retraction saves time in the field
- Steel blade will not stretch under normal use
- Engineers' Scale - 10ths & 100ths of feet



015-PS1806DN

Part No.	Description	Std. Pkg.
015-PS1806DN	1/2" x 100' Pro-Series, Ny-Clad® Yellow Steel, 3-to-1 Rewind	1

## Nicholson®

### Hacksaw Blades & Frames

#### #10 Heavy Duty Hacksaw Frame

- High impact, contoured handle
- Adjust to 10" or 12"
- 45° blade adjustment



016-80952

Part No.	Description	Std. Pkg.
016-80952	#10 Heavy Duty Hacksaw Frame	6

## Nicholson®

### Hacksaw Blades & Frames

#### Cushion Grip Hacksaw Frame

##### Professional and Industrial

- Unique cushioned rubber grip reduces slippage for better control and comfort
- Rugged, sturdy frame built for professional tool users
- High tension technology for tightening the blade to 30,000 psi
- Blade can be positioned for 45° or 90° cutting
- Patented quick change blade design



016-80965

Part No.	Description	Std. Pkg.
016-80965	Cushion Grip Hacksaw Frame	6

#### General Purpose Hacksaw Frame

- Instantly adjustable for 10" x 250 mm to 12" / 300 mm blades
- Adjusts 90° for vertical or horizontal cuts



016-80951

#### Economy Hacksaw Frame

- Instantly adjustable for 10" / 250 mm to 12" / 300 mm blades
- Cuts to 2.75" / 70 mm in depth



016-80950

Part No.	Description	Std. Pkg.
016-80950	Economy Hacksaw Frame	10
016-80951	General Purpose Hacksaw Frame	10

## Nicholson®

### Hacksaw Blades

#### Bi-Metalloy® Hacksaw Blades

- Molybdenum alloy tool steel edge
- Tough flexible high carbon steel backing
- Lasts twice as long as high-speed steel
- Lasts up to ten times longer than carbon steel
- Operates 20% to 50% faster
- High tooth hardness and shock resistance



016-62635-10"  
016-62723-12"

Part No.	Description	Std. Pkg.
016-62635	10", Bi-Metalloy® Hacksaw Blades	100
016-62723	12", Bi-Metalloy® Hacksaw Blades	100



### Air Hose Reels

#### TSH-N Series

##### Super Duty 75' Version

- Includes 75' 3/8" 300 PSI hose
- Extra Heavy Duty
- Highly Versatile
- Compact Space-Saving Size



138-TSH-N-375

##### P-LP Series

##### 50' & 25' Version

- Includes 50' or 25' 3/8" 300 PSI hose
- Extra Large Chassis
- Heavy Duty
- Triple Support Points



138-P-LP-325 & 138-P-LP-350

Part No.	Description	Std. Pkg.
138-TSH-N-375	3/8" x 75' w/300 PSI Hose	1
138-P-LP-350	3/8" x 50' w/300 PSI Hose	1
138-P-LP-325	3/8" x 25' w/300 PSI Hose	1



### Air Hose Reels (Cont.)

#### Static Discharge Cable Wheel

- 3/32" dia. 7 strand 7 wire galvanized steel cable
- Includes: Cable, stop & 50 AMP grounding clamp
- Multi-Position arm guide
- Spring driven



138-SD-50

Part No.	Description	Std. Pkg.
138-SD-50	3/32" Dia. 7 Strand x 7 Wire, 50' Galvanized Steel Cable	1

### Heavy Duty Hose Reels

#### SH-N Series

- Auto rewind easily wraps, stores & protects hose
- Heavy gauge 1/4" steel base & support post
- Factory-matched cartridge-style spring motor



138-SH-N-3100

Part No.	Description	Std. Pkg.
138-SH-N-3100	3/8" x 21/32", 100' 300 PSI Hose	1
138-SH-N-450	1/2" x 27/32", 50' 300 PSI Hose	1



## Welding Reels

### SHW Series, Spring Driven

Eliminate the bulkiness of a twin line welding hose with the SHW series reels



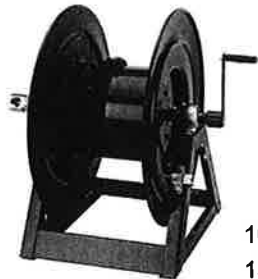
- Dual Hose System
- Includes 50' or 100' 1/4"
- Oxi/Acetylene Hose
- Spring Driven

Part No.	Description	Std. Pkg.
138-SHW-N-150	1/4" Welding Reel 50' w/Hose	1
138-SHW-N-1100	1/4" Welding Reel 100' w/Hose	1

## Hand Crank Reels



100' capacity if 1/2" hose  
138-1125-4-100



100' capacity if 1-7/16" hose  
138-117-5-100

- Easily bolts to "A" frame
- Low profile riser & open drum slot for smooth, even wraps
- Permanently lubed bearings
- Adjustable friction brake
- Powder coated
- Zinc plated swivels
- No hose included

Part No.	Description	Std. Pkg.
138-1125-4-100	Hand Crank Less Hose 1/2" x 100'	1
138-117-5-100	Hand Crank Less Hose 1-7/16" x 100'	1

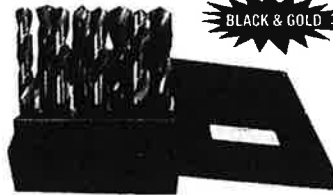
## CTD CONSOLIDATED Toledo Drill

### Silver & Deming Drill Sets

#### 130-AG



S&D-4SP



- Special Hi-Molybdenum tool steel
- 135° split point for fast penetration and accurate starting without a center punch
- Sizes larger than 1" diameter have 118° split point
- Precision ground: point, flutes, body, clearance and drill diameter for the ultimate in accuracy and performance

S&D-8SP

Part No.	Description	Qty.
130-12250	S&D-4SP, 9/16, 5/8, 3/4 & 1	1 Each
130-92400	S&D-8SP, 9/16-1 by 16ths	1 Each
130-92401	S&D-33SP, 1/2-1 by 64ths	1 Each

## Magnum Super Premium Drill Sets

- Special Hi-Molybdenum tool steel
- 135° split point for fast penetration and accurate starting without a center punch
- Body and clearance are gold surface treated for maximum lubricity
- Space age nitro-carburized steel withstands substantially higher drilling temperatures while maintaining sharpness
- Recommended for use in work hardening grades of stainless steel and other hard metal drilling applications



189-46952  
189-40642

Part No.	Description	Qty.
189-46952	29 pc. 1/2" AQF-29P Premium Drill Set	1 Each
189-40642	29 pc. 3/8" AGF-29R Reduced Shank Set	1 Each



## Cargo Chemical

Dries hard as steel in 15 minutes. Ready to drill & tap in 1 hour. Easy to use, no waste.



113-6002  
113-6004

113-1008



Part No.	Description	Std. Pkg.
113-6002	2 oz. QuikSteel Putty	12
113-6004	4 oz. QuikSteel Putty	12
113-1008	8 oz. Seal Up Liquid Glass Radiator Recap	12



**CRC** is a worldwide leader in the production of specialty chemicals for maintenance and repair professionals.

## Heavy Duty Cleaner/Degreasers

### Super Degreaser™ - Cleaner/Degreaser

- Advanced technology formula
- Non-chlorinated, non-conductive, non-corrosive & non-staining
- Evaporates rapidly and leaves no residue
- High dielectric strength of 26,800 volts
- Contains no class I or II ozone depleting chemicals
- NSF K2 Registered



068-03110

Part No.	Description	Std. Pkg.
068-03110	Super Degreaser™ - Adv. Tech. for. 20 oz.	12



## Heavy Duty Cleaner/Degreasers (Cont.)

### Heavy Duty Degreaser

- No flash or fire point
- Non-corrosive, non-staining and non-conductive
- High dielectric strength of 36,700 volts
- High cleaning strength of 129 KB
- Contains no class I or class II ozone depleting chemicals
- NSF K2 Registered for use in meat and poultry plants



068-03095

- Non-corrosive, non-staining and non-conductive
- Fast evaporation with no residue
- High dielectric strength of 36,700 volts
- High cleaning strength of 129 KB
- No class I or II ozone depleting chemicals



068-03097

Part No.	Description	Std. Pkg.
068-03095	Heavy Duty Degreaser, 20 oz. Aerosol	12
068-03097	Heavy Duty Degreaser, 5 Gallon Pail	12

### Gasket, Paint and Decal Remover

- Removes baked-on fiber gaskets, gasket adhesives and sealants
- Contains no methylene chloride
- Loosens carbon deposits
- Excellent paint, varnish and graffiti remover



068-03017

Part No.	Description	Std. Pkg.
068-03017	Gasket, Paint & Decal Remover 16 Oz.	12

### Quick Clean™ Safety Solvent and Degreaser

- Non-flammable
- Fast evaporation, leaves no residue
- Non-staining, non-corrosive and non-conductive
- High dielectric strength of 37,500 volts
- NSF K2 Registered for use in meat and poultry plants



068-03180

Part No.	Description	Std. Pkg.
068-03180	Quick Clean™, Safety Solvent and Degreaser, 20 oz. Aerosol	12



## Heavy Duty Cleaner/Degreasers (Cont.)

### Chlor-Free™ Non-Chlorinated Degreaser

- Fast drying to help minimize downtime
- Leaves no residue
- Non-conductive, non-corrosive and non-staining
- Penetrates quickly to remove oil, grease and other contaminants
- NSF K2 Registered for use in meat and poultry plants



068-03185

Part No.	Description	Std. Pkg.
068-03185	Chlor-Free™ Degreaser, 20 oz. Aerosol	12

### Carb & Choke Cleaner

- Effectively dissolves deposits such as gum, sludge and varnish
- Fast acting cleaning action
- Will not harm oxygen sensors or catalytic converters
- Meets US EPA and California VOC requirements



068-03077

Part No.	Description	Std. Pkg.
068-03077	Carb & Choke Cleaner, 16 oz. Aerosol	12

### Battery Cleaner

- Assures maximum battery current flow
- Promotes longer battery life
- Use CRC battery terminal protector (068-03175) for extended protection



068-03176

Part No.	Description	Std. Pkg.
068-03176	Battery Cleaner, 12 oz. Aerosol	12

## HydroForce® Aqueous Cleaners

### Glass Cleaner Professional Strength

- For professional strength, streak-free glass cleaning
- Biodegradable, ready to use
- Non-abrasive foaming action
- Non-flammable, non-ozone depleting
- NSF C1 registered for use in meat and poultry plants



068-14412

Part No.	Description	Std. Pkg.
068-14412	HydroForce® Glass Cleaner, 20 oz. Aerosol	12

## Multipurpose Lubricants

### Heavy Duty, Power Lube® High-Performance Lubricant

- NSF H2 registered for use in meat and poultry plants
- Contains PTFE for long-lasting protection
- Withstands extreme load carrying situations
- Displaces moisture and seals out corrosion
- Surpasses 3,150 lbs on Falex Load Test (ASTM D-3233)



068-03045

Part No.	Description	Std. Pkg.
068-03045	Heavy-Duty Power Lube®, 16 oz. Aerosol	12

### Knock'er Loose® Penetrating Solvent

- Industrial strength, low viscosity lubricant/penetrant
- Formulated to dissolve rust, varnish & corrosion
- Loosens rusted & corroded nuts, bolts, etc.
- Lubricating residue prevents corrosion
- NSF H2 registered



068-03020

Part No.	Description	Std. Pkg.
068-03020	Knock'er Loose®, 16 oz.	12





## Multipurpose Lubricants (Cont.)

### Screwloose® Super Penetrant

- Quickly penetrates through rust and corrosion
- Clear formula contains no dyes and leaves no mess
- NSF H2 registered



068-03060

Part No.	Description	Std. Pkg.
068-03060	Screwloose®, Super Penetrant, 16 oz. Aerosol	12

### Power Lube - Multi-Purpose

- Penetrates, lubricates, stops squeals, fights corrosion & loosens rusted parts
- New & improved formula is odor free



068-05006

Part No.	Description	Std. Pkg.
068-05006	Power Lube, 16 oz. Aerosol	12

### 3-36® Multi-Purpose Lubricant and Corrosion Inhibitor

- Cleans, lubricates, penetrates and loosens corrosion
- Prevents corrosion, displaces moisture and cleans
- Lubricates without leaving a sticky residue
- Convenient 360° spray valve
- NSF H2 registered



068-03005

Part No.	Description	Std. Pkg.
068-03005	3-36® Multi-Purpose Lubricant, 16 oz. Aerosol	12

### 2-26® Multi-Purpose Lubricant Precision Lube

- Multi-purpose, plastic safe
- Cleans, lubricates, penetrates and loosens corrosion
- Drives out moisture leaving and protects against corrosion
- Helps restore water damaged electrical equipment
- NSF H2 registered



068-02005

Part No.	Description	Std. Pkg.
068-02005	2-26®, Multi-Purpose, 16 oz. Aerosol	12
068-02006	2-26®, Multi-Purpose Lubricant, 1 Gallon	4

### Di-Electric Grease

- Improves electrical performance during adverse conditions such as rain, fog, salt spray and temperature extremes
- Excellent lubricant for rubber and plastic parts
- Meets FDA regulation 21 CFR 175,300 (release agent) and 21 CFR 178-3570 (lubricant, incidental food contact)
- Temperature resistant - maintains performance year round



068-02085

068-03082

Part No.	Description	Std. Pkg.
068-02085	Di-Electric Grease, 6 oz. Pressurized Tube	12
068-03082	Di-Electric Grease, 16 oz. Aerosol	12

### Electrical Grade Silicone

- Superior lubricity for metal and non-metal surfaces
- Non-hardening lubricant minimizes corrosion
- Wide effective temperature range (-40°F to 400°F)
- Convenient 360° spray valve - can be sprayed from any position
- Meets FDA regulation 21 CFR 178.3570 for incidental food contact
- NSF H1 registered for use in meat and poultry plants



068-02094

Part No.	Description	Std. Pkg.
068-02094	Electrical Grade Silicone, 16 oz. Aerosol	12



## Multipurpose Lubricants (Cont.)

### Heavy Duty Silicone Multi-Use Lubricant

- Lubricates and protects most metal and non metal surfaces
- Dry film eliminates binding and sticking
- Colorless, odorless, non staining
- VOC compliant



068-05074

Part No.	Description	Std. Pkg.
068-05074	Heavy Duty Silicone, 7.5 oz	12

### White Lithium Grease

- High-purity, high-quality, NLGI grade 2 white lithium-based aerosol grease
- Excellent heat and water resistance
- Contains rust and oxidation inhibitors
- High viscosity film
- NSF H2 registered



068-03080

Part No.	Description	Std. Pkg.
068-03080	White Lithium Grease, 16 oz. Aerosol	12

### Chain & Wire Rope Lubricant

- Blend of synthetic lubricants and an molybdenum, anti-wear additive that penetrates deep and protects
- Resists water wash-off & high temp. sling-off
- High temp stability
- NSF H2 registered



068-03050

Part No.	Description	Std. Pkg.
068-03050	Chain & Wire Rope Lubricant, 16 oz. Aerosol	12

### Dry Moly Lube

- Dry film lubricant incorporating molybdenum disulfide
- High anti-friction and anti-seizure properties
- Lubricant resists high temps., pressure, water/chemicals
- Resists dirt and dust build-up
- Non-conductive
- Harmless to most plastics, rubbers and metals



068-03084

Part No.	Description	Std. Pkg.
068-03084	Dry Moly Lube, 16 oz. Aerosol	12

### Extreme Duty Silicone Lubricant

- Premium grade-superior lubrication and temperature viscosity characteristics
- Reduces friction and galling
- High grade release and parting agent
- Clear, non-staining orderless film resists moisture
- NSF H2 registered



068-03030

Part No.	Description	Std. Pkg.
068-03030	Extreme Duty Silicone, 16 oz. Aerosol	12

## Food Grade Lubricants

### Food Grade Silicone

- Multi-purpose silicone spray for food processing and handling applications
- Excellent release agent and lubricant for all surfaces
- Harmless to most rubbers and plastics
- NSF H1 registered
- Meets FDA reg. 21 CFR 178.3570

068-03041



068-03040

Part No.	Description	Std. Pkg.
068-03040	Food Grade Silicone, 16 oz. Aerosol	12
068-03041	Food Grade Silicone, 5 Gallon Pail	1

### Food Grade Belt Dressing

- Provides a temporary food grade, synthetic treatment for worn belts
- Tacky, non-drying, resists water wash-off, maintains belt flexibility
- Meets FDA reg. 21 CFR 178.3570
- NSF P1 registered



068-03065

Part No.	Description	Std. Pkg.
068-03065	Food Grade Belt Dressing, 16 oz. Aerosol	12



## Multipurpose Lubricants (Cont.)

### Anti-Seize Compounds

#### Copper Anti-Seize & Lubricating Compound

- Prevents seizing and galling caused by high temp., heavy loads, vibration and corrosion
- Copper-based, safe for use on both ferrous and non-ferrous metals
- High temperature resistance - up to 1800°F
- Electrically conductive



068-SL35901

Part No.	Description	Std. Pkg.
068-SL35901	Copper Anti-Seize, 8 oz. Brush-Top Bottle	12

#### Nickel Anti-Seize & Lubricating Compound

- Nickel, free of copper, lead, sulfides and chlorides
- High temperature resistance - 2400°F
- Electrically conductive
- Safe for use on both ferrous and non-ferrous metals
- Chemically inert nickel is safe w/most chemicals



068-SL35911

Part No.	Description	Std. Pkg.
068-SL35911	Nickel Anti-Seize, 8 oz. Brush-Top Bottle	12

### Corrosion Inhibitors

#### Battery Terminal Protector

- Soft, flexible film completely encapsulates exposed surfaces and will not become brittle, crack or peel
- Red color provides easy visual inspection of application
- Dries quickly and protects instantly
- Prevents hard starts and battery failure



068-03175

Part No.	Description	Std. Pkg.
068-03175*	Battery Terminal Protector, 12 oz. Aerosol	12

\*This product is labeled extremely flammable. Read and observe the special warning on label. Do not apply while equipment is energized.

#### SP-350™ - Corrosion Inhibitor

068-03266

- Both superior lubrication and heavy duty corrosion protection for metal
- Displaces moisture and protects metal
- Protects inside storage up to 2 years
- Withstands 1,250 lbs. of pressure
- NSF H2 registered



068-03262

Part No.	Description	Std. Pkg.
068-03262	SP-350™, Corrosion Inhibitor, 16 oz. Aerosol	12
068-03266	SP-350™, Corrosion Inhibitor, 5 Gallon Pail	1

#### SP-400™ - Corrosion Inhibitor

068-03286

- Long-term (up to 2 years) indoor/outdoor corrosion inhibitor
- Firm, waxy film is highly resistant to humidity and salt spray
- Waxy film seals out moisture completely



068-03282

Part No.	Description	Std. Pkg.
068-03282	SP-400™, Corrosion Inhibitor, 16 oz. Aerosol	12
068-03286	SP-400™, Corrosion Inhibitor, 5 Gallon Pail	1

#### Zinc-It® Instant Cold Galvanize™

- High performance 95% pure zinc
- Fast-drying, dries in 15 minutes
- Excellent weldability



068-18412

Part No.	Description	Std. Pkg.
068-18412*	Zinc-It, Instant Cold Galvanize™, 16 oz. Aerosol	12

\*This product is labeled extremely flammable. Read and observe the special warning on label. Do not apply while equipment is energized.

### Metalworking Cutting Oil

#### Cutting Oil

068-14051

- Reduces heat and friction to ease cutting and increase cutting tool life
- Sulfur-free, low odor formula
- Excellent anti-weld properties
- Foaming aerosol formulation clings to vertical surfaces
- Compatible with all manual and motor-driven threading equipment
- NSF P1 Registered



068-14050

Part No.	Description	Std. Pkg.
068-14050	Cutting Oil, 16 oz. Aerosol	12
068-14051	Cutting Oil, 1 Gallon Bottle	4



## Sealants & Adhesives

### RTV Silicone Pressurized Tubes

CRC room temperature vulcanizing (RTV) adhesive/sealants are designed for a wide range of sealing, bonding, protecting and water-proofing application. Cures at room temperature - no special curing methods required. Pressurized tube is a convenient alternative to caulking tubes and won't dry out.

- Clear - Forms a barely visible water-tight seal
- Blue - Heavy duty industrial gasket sealant
- Red - High temperature, low odor, non-corrosive gasket sealant
- Black - High pressure, low odor, non-corrosive gasket sealant



068-14055

Part No.	Description	Std. Pkg.
068-14055	Clear, 8 oz. Pressurized Tube	12
068-14057	Blue, 8 oz. Pressurized Tube	12
068-14059	Red, 8 oz. Pressurized Tube	12
068-14072	Black, 8 oz. Pressurized Tube	12

### RTV Silicone Cartridges

- Economical
- Screw-on Nozzle
- Fast dispensing for applications that require less precision



068-14073

Part No.	Description	Std. Pkg.
068-14073	Clear, 12 Oz. Cartridge	12
068-14075	Red, 12 oz. Cartridge	12

### Minute Mend™ - Epoxy Putty

- Formulated to bond to both wet and dry surfaces and can be applied underwater
- A two-part epoxy putty packaged in one stick
- Ready-to-use
- Can be tapped, sawed, drilled, machined, stained and painted



068-14070

Part No.	Description	Std. Pkg.
068-14070	Minute Mend™ Epoxy Putty, 4 oz. Stick	24

### Spray Adhesive

- General purpose quick tack adhesive
- Bonds to many foils, plastics, papers, foams, metals, cardboards and cloth
- Compare to 3M® Super 77™ adhesive
- Good water resistance
- Versatile to create both high strength and temporary bonds



068-03018

Part No.	Description	Std. Pkg.
068-03018	Spray Adhesive, 24 oz. Aerosol	12

### Threadlockers

#### Screw Lock - Low Strength (Purple)

- For fasteners 1/4" (6mm) and smaller
- Use on set screws, adjustment screws, calibration screws, meters and gauges
- Fast cure time
- Compare to Loctite® 222



068-04500

#### Nut Lock - Medium Strength (Blue)

- For fasteners 1/4" - 3/4" (6mm - 20mm)
- Fast cure time
- Eliminates the need for lock washers and lock nuts
- Compare to Loctite® 242



068-04505

#### Bolt Lock - Shock Resistant (Red)

- High strength for permanent applications
- High viscosity
- For fasteners between 3/8" to 1" (10mm to 25mm)
- For use in harsh environments where heavy shock and vibration are common
- Compare to Loctite® 262



068-04510

#### Stud Lock - High Strength (Red)

- Excellent for heavy duty applications
- Permanently locks studs up to 1" (25mm)
- Use to replace snap rings and set screws
- Compare to Loctite® 271



068-04515

Part No.	Description	Std. Pkg.
068-04500	Screw Lock, Low Strength, Net 1.69 fl. oz., 4 oz. Bottle	10
068-04505	Nut Lock, Medium Strength, 1.69 fl. oz., 4 oz. Bottle	10
068-04510	Bolt Lock, Shock Resistant, 1.69 fl. oz., 4 oz. Bottle	10
068-04515	Stud Lock, High Strength, 1.69 fl. oz., 4 oz. Bottle	10



## Tool & Equipment Oils

### Air Tool Oil

- Lubricates and protects pneumatic equipment
- Increases torque; assures long tool life
- Reduces rust, varnish, sludge and acids



068-SL2531

Part No.	Description	Std. Pkg.
068-SL2531	Air Tool Oil, 15 oz. Bottle	12

## Greases

### Lithium Complex-Based

### Extreme Pressure Sta-Plex™ Premium Red Grease

- Extremely versatile lithium complex, NLGI #2 grease with excellent high temperature lubrication
- Protects against rust and oxidation
- Maintains 60 lb Timken OK load
- Typical drop point; 500°F



068-SL3190

Part No.	Description	Std. Pkg.
068-SL3190	Premium Red Grease, 14 oz. Cartridge	10

### New Generation™ Wheel Bearing Grease for Disc and Drum Brakes

- Premium lithium complex NLGI #2 grease for use on drum and sic brake wheel bearings, chassis, suspension and universal joints
- Excellent performance under extreme pressure and anti-wear applications
- Maintains 50 lb Timken OK load
- Typical drop point: 500°F



068-SL3110

Part No.	Description	Std. Pkg.
068-SL3110	Wheel Bearing Grease, 14 oz. Cartridge	10

## Lithium-Based

### Extreme Pressure Moly-Graph® Multi-Purpose Lithium Grease

- Lithium complex, NLGI #2 grease
- "Moly" and graphite help establish a fine micron plating on all working surfaces
- Maintains 40 lb Timken OK load
- Typical drop point: 380°F



068-SL3330

Part No.	Description	Std. Pkg.
068-SL3330	Multi-Purpose Lithium Grease, 14 oz. Cartridge	10

## Insecticides

### Wasp & Hornet Killer Plus™ Insecticide

- Fast acting high strength insecticide
- Kills wasps, hornets, yellow jackets, bees, fire ants, scorpions, spiders - It will kill'em all
- Accurate spray up to 20 feet
- High dielectric strength of over 40,000 volts



068-14010

Part No.	Description	Std. Pkg.
068-14010	Wasp & Hornet Killer Plus™, 20 oz. Aerosol w/trigger	12

### Insect Repellent Double Strength

- Convenient aerosol package
- Contains over 28% active ingredient (DEET)
- The only insect repellent in the industry with CRC's patented M.S.D. [L.]™, a current MSDS printed on the reverse side of the product label



068-14011

Part No.	Description	Std. Pkg.
068-14011	Double Strength Insect Repellent, 8 oz. Aerosol	12



## Precision Contact Cleaners

### Contact Cleaner 2000® Precision Cleaner

- General purpose precision cleaner
- Evaporates quickly, leaves no residue
- No class 1 ozone depleting chemicals
- Non-conductive, non-corrosive, and chemically stable
- Not recommended for use on Noryl® or polycarbonate type plastics
- NSF K2 registered



068-02140

### QD® Contact Cleaner Quick Dry

- For sensitive electronics and electrical equipment
- Evaporates quickly and leaves no residue
- Safe on all plastics
- No class I or II ozone depleting chemicals
- NSF K2 registered



068-02130

### CO® Contact Cleaner

- Advanced technology formula
- Will not damage sensitive modern plastics
- Non flammable
- Evaporates quickly and leaves no residue
- Non-chlorinated, non-staining and non-corrosive
- No VOCs
- No class I or II ozone depleting chemicals
- NSF K2 registered



068-02016

Part No.	Description	Std. Pkg.
068-02140	Contact Cleaner 2000®, 16 oz. Aerosol	12
068-02130*	QD® Contact Cleaner, 16 oz. Aerosol	12
068-02016	CO® Contact Cleaner, 16 oz. Aerosol	12

\*This product is labeled extremely flammable. Read and observe the special warning on label. Do not apply while equipment is energized.

## Precision Contact Cleaners (Cont.)

### Industrial Contact Cleaner

- Non-flammable
- Plastic safe
- Evaporates quickly and leaves no residue
- Non-chlorinated, non-staining and non-corrosive
- High dielectric strength of 27,600 volts
- Contains no VOCs
- Contains no class I or II ozone depleting chemicals
- NSF K2 registered



068-03070

### QD® Contact Cleaner Quick Dry

- Plastic safe
- Evaporates quickly and leaves no residue
- Contains no class I or II ozone depleting chemicals
- NSF K2 registered



068-03130\*

### Duster™ Aerosol Dust Removal System

- Non-flammable
- Plastic safe
- No residue
- Non-abrasive
- NSF K2 registered



068-14085

### Duster™ Moisture-Free Dust and Lint Remover

- Plastic safe
- No wetting or clumping
- Non-abrasive, non-corrosive
- Non-ozone depleting



068-05185

Part No.	Description	Std. Pkg.
068-03070	Contact Cleaner, 16 oz. Aerosol	12
068-03130*	QD® Contact Cleaner, 16 oz. Aerosol	12
068-14085	Duster™ Dust Removal, 12 oz. Aerosol w/Trigger	12
068-05185	Duster™ Moisture-Free Dust & Lint, 16 oz.	12

\*This product is labeled extremely flammable. Read and observe the special warning on label. Do not apply while equipment is energized.



## Precision Contact Cleaners (Cont.)

### Freeze Spray

- Non-flammable
- Safe on plastics
- Dries instantly, leaves no residue
- Non-abrasive
- Contains no class I or II ozone depleting chemicals
- Instantly freezes surfaces to -60°F, dissipating heat and cooling equipment



068-14086

Part No.	Description	Std. Pkg.
068-14086	Freeze Spray, 12 oz. Trigger Aerosol	12

## Heavy Duty Cleaners



068-02018



068-02020



068-02021

### Lectra Clean® Heavy Duty Electrical Parts Degreaser

- Quick and efficient degreasing action, fast evaporation and no residue
- High dielectric strength of 37,500 volts
- Non-corrosive, non-staining and non-conductive
- No 1, 1, 1Trichloroethane or class I or II chemicals
- NSF K2 registered

### Lectra Clean® II Non-Chlorinated

- Excellent alternative for cleaning where chlorinated solvents are not acceptable
- High dielectric strength of 29,000 volts
- Non-corrosive, non-staining and non-conductive
- No 1, 1, 1Trichloroethane or class I or II chemicals
- NSF K2 registered



068-02120

Part No.	Description	Std. Pkg.
068-02018	Lectra Clean®, 20 oz. Aerosol	12
068-02020	Lectra Clean®, 1 Gallon Bottle	4
068-02021	Lectra Clean®, 5 Gallon Pail	1
068-02120	Lectra Clean® II, 20 oz. Aerosol	12

## Electrical Parts Cleaner

- Non-flammable
- Fast evaporation, leaves no residue
- Non-staining, non-corrosive and non-conductive
- High dielectric strength of 37,500 volts
- Contains no 1, 1, 1 trichloroethane
- NSF K2 registered for use in meat and poultry plants



068-02180

Part No.	Description	Std. Pkg.
068-02180	Electrical Parts Cleaner, 20 oz. Aerosol	12

## Vehicle Maintenance Cleaners & Lubricants

### Brakleen® Brake Parts Cleaner Non-Chlorinated Formula

- Contains no chlorinated solvents
- Cleans fast, dries fast, leaves no residue
- Degreases instantly
- Works without disassembly



068-05050



068-05084\*



068-05088+

### Brakleen® Brake Parts Cleaner

- Non-flammable
- Cleans fast, dries fast, leaves no residue
- Degreases instantly
- Works without disassembly
- Helps brakes last longer and perform more efficiently



068-05089+\*

Part No.	Description	Std. Pkg.
068-05050	Brakleen® Non-Chlorinated, 20 oz. Non-chlorinated formula meets VOC regulations in all 50 states	12
068-05084*	Brakleen® Non-Chlorinated, 20 oz. Aerosol	12
068-05088+	Brakleen® Non-Chlorinated, 20 oz. Aerosol	12
068-05089+*	Brakleen® Non-Chlorinated, 20 oz. Aerosol	12

\*This product is labeled extremely flammable. Read and observe the special warning on label. Do not apply while equipment is energized.

+Not for use in California or

•New Jersey



## Vehicle Maintenance Cleaners & Lubricants (Cont.)

### Lectra Motive® Electric Parts Cleaner

- Fast, thorough cleaning for non-sensitive electrical equipment
- Dissolves grease, oil, dirt and wax
- Leaves no residue
- Non-flammable

068-05018



### Ice-Off® Windshield Spray De-Icer

- Melts ice, snow and frost on contact
- Harmless to car finish
- Thaws frozen locks
- Effective to sub-zero temperatures

068-05346



### Jump Start™ Starting Fluid w/Lubricity

- Assures fast starts in cold or humid climates
- Upper cylinder lubricant minimizes wear during cold starts
- Ether - 25%
- Effective to -65°F
- For diesel and gasoline engines

068-05671



Part No.	Description	Std. Pkg.
068-05018	Lectra Motive®, 20 oz. Aerosol	12
068-05346	Ice-Off®, De-Icer, 16 oz. Aerosol	12
068-05671	Jump Start™, 16 oz. Aerosol	12



## Machete

- A multiple use tool for weed growth, cleaning and cutting bush, vines and shrubs
- Features a 22" (56cm) long polished blade with a 5" long plastic handle
- 21 oz. weight
- Blade can take a razor sharp edge



131-21-100

- Top quality leather sheath for above, with belt loop



131-21-101

Part No.	Description	Std. Pkg.
131-21-100	22" long polished blade machete	1
131-21-101	Leather machete sheath with belt loop	1

## Self-Leveling Rotary Laser Package

- Anti-drift system signals operator when unit has moved out of position, assures accuracy and reliability throughout the day's work
- 2,800 feet working diameter, along with the LD440 detector, ensures full jobsite coverage
- Accuracy of 1/16-inch at 100-feet ensures accurate and reliable measurements every time
- Horizontal and vertical use with dual manual slope and cross axis leveling
- Cross-axis leveling allows grade matching for basic slope work, while maintaining accuracy in the cross slope
- Vertical self-leveling allows rotary laser to be positioned in laydown for vertical applications
- Limited 3-year warranty



131-57-ALHVPKG

Part No.	Description	Std. Pkg.
131-57-ALHVPKG	ALHV Horizontal / Vertical Rotary Laser Complete Package	1

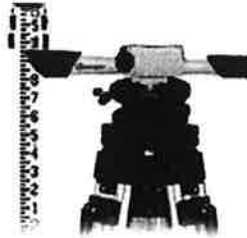


## CST/berger

### Levels & Rods

#### 20X Transit Level Kit

- Non-strip focus knob
- 4.5' short focus
- Power coated safety yellow paint
- One year warranty
- Includes aluminum tripod and 8' telescoping leveling rod



131-54-135K

#### Telescoping Aluminum Leveling Rods

Part No.	Length	No. Sections
131-06-808A	8'	3
131-06-816	16'	4

Metric also available



## C.S. OSBORNE & COMPANY

### Packing Hooks

- Shaft - Two spiral steel shafts wound together
- Handle - Made of solid zinc
- Hook - Tempered and permanently pointed



Size No.	Length	Diameter of Shaft	Diameter of Spiral	Length of Spiral
1	6-1/4"	3/16"	1/4"	3/4"
2	10-5/8"	1/4"	5/16"	1-1/8"
3	15"	3/8"	3/8"	1-1/2"

Part No.	Description	Std. Pkg.
022-1203	Packing Hook Set - #1, 2, 3 - One of Each	1
022-1204-1	#1 Packing Hook	12
022-1204-2	#2 Packing Hook	12
022-1204-3	#3 Packing Hook	12
022-1204-4	#4 Packing Hook	12

### Arch Punch Sets

- Rounded Tips
- Sizes included (inches): 1/4, 3/8, 1/2, 3/4, 7/8, 1



022-K-14

- Oblong Tips
- Sizes included (inches): 3/16, 5/16, 7/16, 9/16, 11/16, 13/16, 15/16



022-K-16

Part No.	Description	Std. Pkg.
022-K-14	Rounded Tip Punch Set	1
022-K-16	Oblong Tip Punch Set	1

### Pouring Ladles

- Double lipped bowls
- Heavy quality for long use
- Iron, lead, aluminum, bronze and beryllium
- Steel handles are black smith welded to the bowls

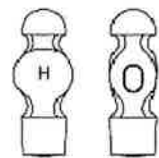


Part No.	Dia. of Bowl	Std. Pkg.
022-373-2-1/2	2-1/2"	1
022-373-3	3"	1
022-373-3-1/2	3-1/2"	1
022-373-4	4"	1
022-373-5	5"	1
022-373-6	6"	1

## UNITEC

### Aluminum Bronze (AlBr)

#### Ball Peen Hammers



Part No.	(H) lbs.	(H) kg.
040-Ex101-0450	1.00	0.45
040-Ex101-0700	1.54	0.70
040-Ex101-0900	1.98	0.90



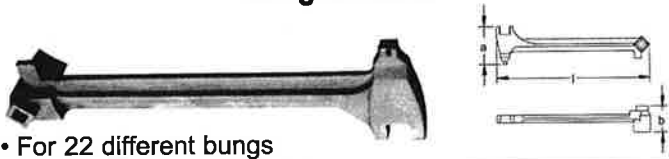
Aluminum Bronze (AlBr)

### Sledge Hammers



Part No.	(H) lbs.	(H) kg.
040-Ex104-1000	2.20	1.00
040-Ex104-1500	3.31	1.50
040-Ex104-2000	4.41	2.00
040-Ex104-3000	6.61	3.00
040-Ex104-4000	8.81	4.00
040-Ex104-6000	13.23	6.00
040-Ex104-8000	17.64	10.00

### Bung Wrench



• For 22 different bungs

Part No.	(A) inch	(B) inch	(l) inch	Wt. lbs.
040-Ex110S-385	3-13/16	2-5/8	15-3/8	4.01

Part No.	(A) mm	(B) mm	(l) mm	Wt. kg.
040-Ex110S-385	96	66	385	1.82

### Angle Scraper



Part No.	(A) inch	(l) inch	Wt. lbs.
040-Ex402-50	2	12	1.57

Part No.	(A) mm	(l) mm	Wt. kg.
040-Ex402-50	50	300	0.71

### Long Blade Scraper



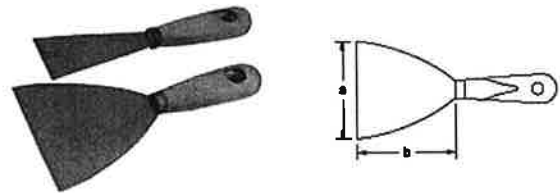
• Handle Sold Separately

Part No.	(A) inch	(l) inch	Wt. lbs.
040-Ex407-150	6	7-3/16	2.45

Part No.	(A) mm	(l) mm	Wt. kg.
040-Ex407-150	150	180	1.11

### Hand Scraper / Putty Knife



Part No.	(A) inch	(l) inch	Wt. lbs.
040-Ex408-30	1-3/16	4	0.12
040-Ex408-50	2	4	0.17
040-Ex408-100	4	4	0.28

Part No.	(A) mm	(l) mm	Wt. kg.
040-Ex408-30	30	100	0.05
040-Ex408-50	50	100	0.08
040-Ex408-100	100	100	0.13

### Adjustable End Wrenches



Part No.	(S. Max) inch	(l) inch	Wt. lbs.
040-Ex501-6	3/4	6	0.29
040-Ex501-8	15/16	8	0.62
040-Ex501-10	1-1/8	10	1.06
040-Ex501-12	1-3/8	12	1.68
040-Ex501-14	1-9/16	14	2.41
040-Ex501-15	1-3/4	15	3.13
040-Ex501-18	2-3/16	18	6.19
040-Ex501-24	2-3/8	24	10.87

Part No.	(S. Max) mm	(l) mm	Wt. kg.
040-Ex501-6	19	150	0.13
040-Ex501-8	24	200	0.28
040-Ex501-10	28	250	0.48
040-Ex501-12	34	300	0.76
040-Ex501-14	39	350	1.15
040-Ex501-15	45	375	1.42
040-Ex501-18	55	450	2.81
040-Ex501-24	60	600	4.93