



## Hardware & Springs

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# IBS, INCORPORATED Tarp Cord U01

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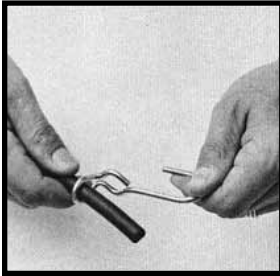
## Tarp Cord & Hooks

The 7/16" tarp cord with attachable hooks is ideal for use with canvas, tarpaulins, covers and lids on RV's, boats, cars trucks, trailers and motorcycles. It comes in a 125 ft. roll that can be cut to length for any use. The hooks can be attached easily and quickly. It's perfect for holding extra gear on trucks and trailers, or for holding down tarps and canvas covers. It's made of the highest quality Neoprene so it won't rot, peel or crack under normal usage — even in demanding outdoor conditions.

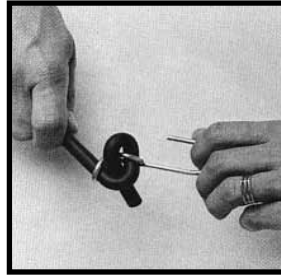
### TARP CORD & HOOKS

IBS No.	Description	Qty
32071601	7/16 dia. Neoprene Cord 125'	1
320#710	Galvanized Double Eye Hooks	25

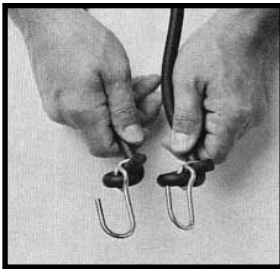
## To Apply Fastener Hooks To Tarp Cord



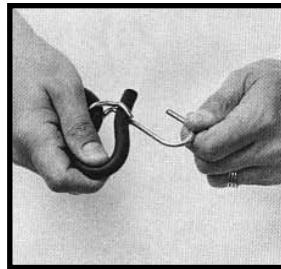
1. Insert cord through eye of hook.



2. Return through second position of eye, to form a loop.



3. Pull end through loop, forming a knot.



4. Same procedure at other end provides a tie-down strap that has many uses.

### Tarp Cord Stretchability

Cut Length .....	Stretches To
12" .....	18"
24" .....	40"
36" .....	60"

## Snappi-Hookers

### MOLDED TIE-DOWN STRAPS Heavy-Duty Rubber Hold-Down Straps With "S" Hooks



Snappi-Hookers feature reusability and long life. They have a symmetrical design that allows either side to be used against a surface and extra stretchability over most other tie-downs. They maintain their elasticity at temperatures up to 200°F and are resistant to sunlight, smog, diesel fumes and salt water. They have a rated tensile strength of 1600 psi.

### SNAPPI-HOOKERS

IBS No.	Length	Box	Pkg
SH9	9"	50	ea.
SH15	15"	50	ea.
SH20	20"	50	ea.
SH30	30"	50	ea.



### Machinery Hoist Eyes

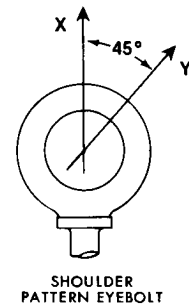
#### SHOULDER PATTERN EYEBOLTS

**Made from drop forged steel. Heat treated after forging.**

Maximum load rating for eyebolts are based on a straight vertical lift in a gradually increasing manner. Angular lifts will significantly lower loads and should be avoided whenever possible. If an angular lift is required, a properly seated Machinery Hoist Eye should be used and the lifting angle must not be more than a 45° pull. Refer to the chart below for the maximum load ratings for straight and 45° pulls.

**MACHINERY HOIST EYES**

IBS No.	Shank		Eye		Max Load (lbs.)		Pkg Qty
	Size	Length	ID	OD	Strt Pull	45° Pull	
20000	1/4-20	1	3/4	1-1/4	500	125	5
20001	5/16-18	1-1/8	7/8	1-1/2	900	225	5
20002	3/8-16	1-1/4	1	1-21/32	1400	350	5
20003	7/16-14	1-3/8	1-3/32	1-27/32	2000	500	3
20004	1/2-13	1-1/2	1-3/16	2-1/8	2600	650	2
20005	9/16-12	1-5/8	1-9/32	2-9/32	3000	750	2
20006	5/8-11	1-3/4	1-3/8	2-1/2	4000	1000	2
20007	3/4-10	2	1-1/2	2-13/16	6000	1500	2
20008	7/8-9	2-1/4	1-11/16	3-1/4	7000	1750	2
20009	1-8	2-1/2	1-13/16	3-9/16	9000	2250	2

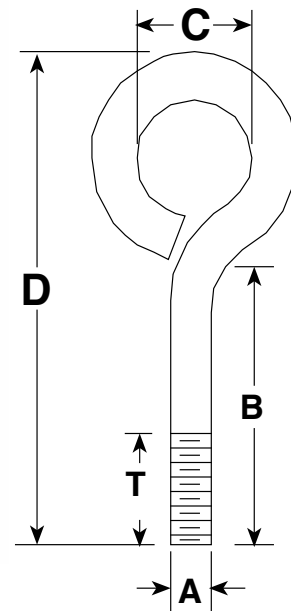


### Turned Eye Bolts

Turned Eyebolts are manufactured from low carbon cold drawn steel wire, threaded and supplied with a nut.

**TURNED EYEBOLTS**

IBS No.	Dimensions in inches					MAX Load (Lbs)	Pkg Qty
	A	B	C	D	T		
22024	10-24	2	3/8	2-11/16	1	38	20
02539	10-24	3	3/8	3-11/16	1-1/2	38	20
22025	1/4-20	2	1/2	3	1-1/4	74	20
22027	1/4-20	3	1/2	4	1-1/2	74	20
22028	1/4-20	5	1/2	6	3	74	20
22029	5/16-18	3	5/8	4-1/8	1-1/2	96	20
22030	5/16-18	4	5/8	5-1/8	2-1/2	96	20
02549	5/16-18	5	5/8	6-1/8	3	96	20
02550	5/16-18	6	5/8	7-1/8	4	96	20
02552	3/8-16	3	3/4	4-1/2	1-1/2	144	20
02553	3/8-16	4	3/4	5-1/2	2-1/2	144	20
02554	3/8-16	5	3/4	6-1/2	3	144	20
22032	3/8-16	6	3/4	7-1/2	4	144	20



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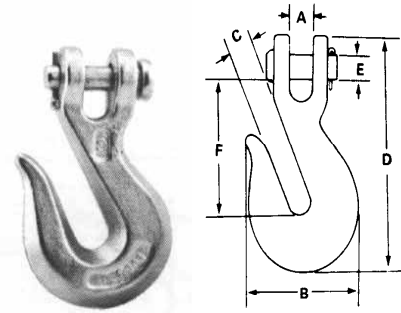
# IBS, INCORPORATED

## Eyebolts, Chain & Wire Hardware U02

HARDWARE & SPRINGS

### Clevis Grab Hooks

- Made for use on Hi-Test Chain. All hooks are heat treated. They can also be used on BBB & proof coil.
- High test (H.T.) stamped on every hook.
- Zinc plated for corrosion resistance.



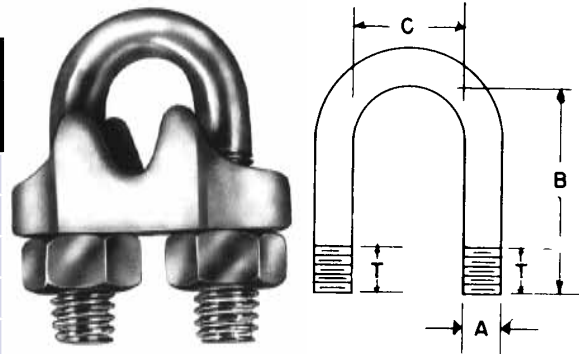
CLEVIS GRAB HOOKS

IBS No	Chain Size	A & E	B	C	D	F	Work Load (Lbs)	Pkg Qty
22010	1/4	5/16	1-5/16	3/8	3-3/8	2	2600	2
22021	5/16	3/8	2-1/4	7/16	3-15/16	2-3/8	4000	2
22022	3/8	7/16	2-11/16	1/2	4-1/2	2-11/16	5400	2

### Wire Rope Clips

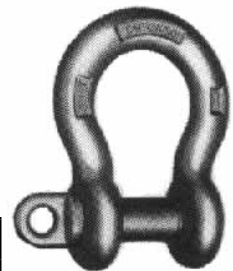
WIRE ROPE CLIPS

IBS No.	Rope Size	Dimensions in inches				Pkg Qty
		A	B	C	T	
22014	3/16	1/4-20	3/4	5/16	5/8	5
22015	1/4	5/16-18	15/16	3/8	3/4	5
02702	5/16	3/8-16	1-5/32	1/2	1	5
02703	3/8	7/16-14	1-1/2	9/16	7/8	5
22016	1/2	1/2-13	1-7/8	5/8	1-1/4	5



### Screw Pin Shackles

Loads are based on a safety factor of 5 to 1. When tested all shackles are pulled at a uniform rate of speed in a direct tension. Any deviations as angular lifts, shock loads, modification of the basic forging, etc., will result in drastically reduced maximum loads.



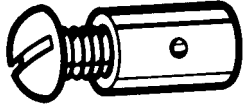
ANCHOR SCREW PIN SHACKLES

IBS No.	Max Load tons	Dimensions - Inches							O.D. Eyes	Pin or Bolt Dia	Pkg Qty
		Inside					Length	Tol. ±			
		Size Dia.	Width @ eyes	Tol. ±	Width @ bow						
22017	1/8	3/16	3/8	1/16	9/16	7/8	1/16	5/8	1/4	2	
22018	1/2	1/4	15/32	1/16	3/4	1-1/8	1/16	3/4	5/16	2	
22019	3/4	5/16	17/32	1/16	15/16	1-1/4	1/16	7/8	3/8	2	
22020	1	3/8	21/32	1/16	1-1/8	1-7/16	1/16	1	7/16	2	



## Wire Stops

- Heavy duty wire stop.
- Used on control, push/pull cables.
- Also used on throttle cables for power equipment repair.
- Position wire stop against arm or lever, then tighten bolt.



### WIRE STOPS

IBS No.	Description	Qty
D-100-013	1/4", .062" Max Wire Dia.	25
D-100-014	5/16", .062" Max Wire Dia.	25
D-100-015	3/8", .125" Max Wire Dia.	25

## Cold Shuts

Repair links for chain

- An economical way to join chain links and attach fittings.
- To close, drive the end through the eye and flatten the end to prevent opening (can also be welded shut).



### COLD SHUTS

IBS No.	Description	Qty
22036	1/4" Cold Shut	5
03602	5/16" Cold Shut	5
22038	3/8" Cold Shut	5



# IBS, INCORPORATED

## Eyebolts, Chain & Wire Hardware U02

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### Chain Parts

#### SLIP FIT CONNECTING LINKS



Slip-Fit Connecting Links or Rivet-Type Connecting Links are furnished with a pin link plate and a spring clip. Once the connecting link is inserted between the chain links, slide the pin link plate over ring and assemble with spring clip grooves on pins.

#### SLIP FIT CONNECTING LINKS

IBS No.	Chain No.	Description	Qty
20135	#35	.375 Pitch	10
20140	#40	.500 Pitch	10
20141	#41	.500 Pitch	10
20150	#50	.625 Pitch	10
20160	#60	.750 Pitch	10
20180	#80	1.00 Pitch	5

#### OFFSET LINKS



This is in reality a roll link at one end, and a pin link at the other end. An offset link is used whenever an odd number of pitches is required. The pin is removed to assemble the link into a chain.

#### OFFSET (HALF) LINKS

IBS No.	Chain No.	Description	Qty
20235	#35	.375 Pitch (Half)	10
20240	#40	.500 Pitch (Half)	10
20241	#41	.500 Pitch (Half)	10
20250	#50	.625 Pitch (Half)	10
20260	#60	.750 Pitch (Half)	10
20280	#80	1.00 Pitch (Half)	5

### Chain Repair Tools



#### #1 Chain Breaker

**IBS No. 20300**

A quality tool with forged jaws. The "push-out" pins are of tempered alloy steel. Simplifies the disassembly of the roller chain.

Overall Length	6 inches
Overall width	3 inches
Weight	11 oz.

For disassembly of:

- Single pitch chains Nos. 25 thru 60 (1/4-, 3/8-, 1/2-, 5/8- and 3/4-inch pitch)
- Double pitch chains, 1- and 1-1/4 inch pitch

### Roller Chain & Offset Chain Links

**IBS No. 208P • 15 Items • 69 Pcs**

IBS  
INCORPORATED

**Roller Chain Links  
Offset Chain Links**  
Assortment No. 208P

#35 .375 Pitch Conn Link 20135	#40 .500 Pitch Conn Link 20140	#41 .500 Pitch Conn Link 20141	#50 .625 Pitch Conn Link 20150	#60 .750 Pitch Conn Link 20160	 #1 Chain Breaker 20300
#80 1.00 Pitch Conn Link 20180					
#35 .375 Pitch Offset (Half) 20235	#40 .500 Pitch Offset (Half) 20240	#41 .500 Pitch Offset (Half) 20241	#50 .625 Pitch Offset (Half) 20250	#60 .750 Pitch Offset (Half) 20260	
#80 1.00 Pitch Offset (Half) 20280					

IBS, INCORPORATED 1-800-678-1906



## General Information

### Compression & Extension Springs



Compression springs generally have closed ends and the number of active coils (N) are two less than the total number of coils.

Extension springs - All coils are active and the body length is the number of coils + 1 times the wire diameter. For extension type springs the rate per inch is effective only after enough load is applied to separate the close wound coils and accept the initial tension load first.

#### Additional Notes:

1. Compression springs should be used between 20% and 80% of travel for optimum performance.
2. Compression springs that are over-stressed will take a set prior to full travel.
3. Rates of compression springs with less than two active coils will be subject to a plus or minus 20% load tolerance.
4. Initial tension of extension springs as shown in catalog is for reference only. This factor can vary with tensile of metal.

**SPRING WIRE GAUGE**  
American Steel & Wire Co.

Gauge	Decimal	Gauge	Decimal
4/0	.3938	16	.0625
3/0	.3625	17	.0540
2/0	.3310	18	.0475
1/0	.3065	19	.0410
1	.2830	20	.0348
2	.2625	21	.0317
3	.2437	22	.0286
4	.2253	23	.0258
5	.2070	24	.0230
6	.1920	25	.0204
7	.1770	26	.0180
8	.1620	27	.0173
9	.1483	28	.0162
10	.1350	29	.0150
11	.1205	30	.0140
12	.1055	31	.0132
13	.0915	32	.0128
14	.0800	33	.0118
15	.0720	34	.0104

#### Basic Formula For Round Wire Compression & Extension Springs

$$R = \frac{Gd^4}{8ND^3}$$

$$S = \frac{8DP}{\pi d^3}$$

- R = Rate in Pounds per Inch of Deflection
- P = Load in Pounds
- D = Mean Diameter—Inches
- d = Wire Diameter—Inches
- G = Modulus of Elasticity—Steel = 11.5x10<sup>6</sup> psi
- N = Number of Active Coils
- S = Torsional Stress—p.s.i.

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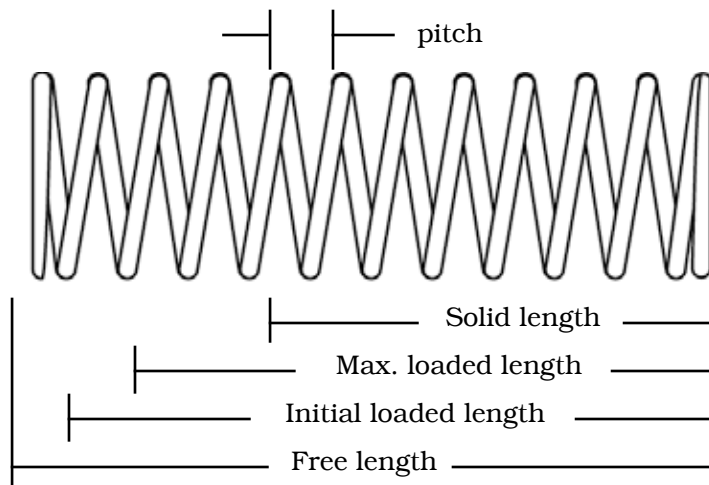
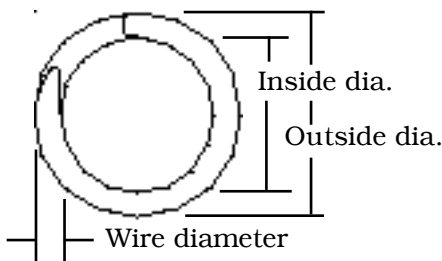


# IBS, INCORPORATED Springs U03

## Compression Springs

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IBS No.	O.D. (in.)	Free Length (in.)	Wire Dia. (in.)	Mat'l	Total Coils	Solid Hgt (in.)	Calc. Rate (#in.)	Ends	Finish
47006	3/16	1	.014	A	10-1/2	.161	1.25	Closed	Zinc
47005	5/16	1-19/32	.024	B	15-1/2	.360	1.36	Cl/Grd	None
47000	5/16	10	.047	C	76-1/2	3.643	5.06	Closed	Cad.
47007	3/8	3/4	.041	D	6-3/4	.318	22.95	Closed	Zinc
47001	3/8	12	.062	D	119	7.440	5.92	Closed	Zinc
47013	7/16	2-7/8	.076	D	24	1.824	45.95	Cl/Grd	Cad.
47004	1/2	1	.072	D	8	.576	82.12	Cl/Grd	Ziinc
47012	1/2	2-1/2	.062	D	18	1.178	15.80	Closed	Zinc
47010	19/32	2-1/2	.072	D	12	.864	27.32	Cl/Grd	Zinc
47011	5/8	2-3/4	.072	C	15	1.080	17.57	Cl/Grd	Zinc
47002	5/8	12	.062	D	60	3.782	2.05	Closed	Zinc
47009	11/16	4	.105	D	23-1/4	2.441	41.71	Cl/Grd	Zinc
47015	7/8	2-1/32	.122	C	11-7/8	1.449	75.53	Cl/Grd	Gold/lr
47016	7/8	3	.091	D	12-1/2	1.138	19.48	Cl/Grd	Zinc
47003	7/8	12	.080	D	42-2/3	3.493	2.88	Closed	Zinc
47014	15/16	2-1/4	.100	C	10	1.00	30.53	Cl/Grd	Zinc
47006	1-1/64	3-1/8	.058	C	8	.522	3.09	Closed	Zinc
47017	1-1/16	3-5/8	.107	C	12	1.284	21.63	Cl/Grd	Zinc



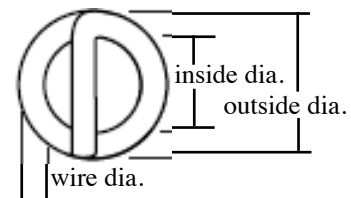
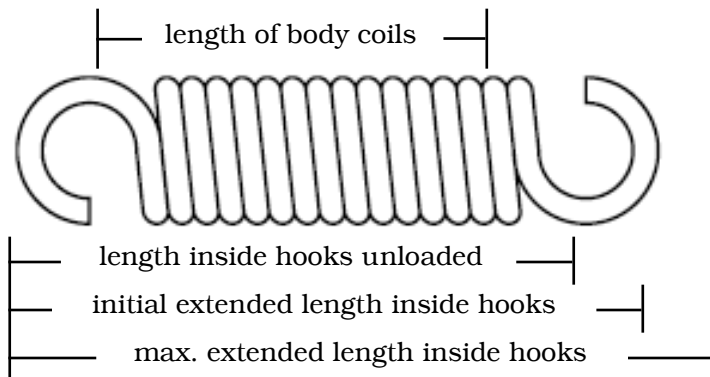
**Material Code**  
**A = Music Wire**  
**B = Stainless**  
**C = Spring Steel**  
**D = Hard Drawn**

**Sold Each**



**Extension Springs**

IBS No.	O.D. (in)	Length Inside Hooks (in.)	Wire Dia. (in.)	Mat'l	Initial Tension	Calculated Rate (#/in.)	Max. Deflect	Load	Finish
47037	15/64	1-1/32	.023	A	.25	1.63	1.45	2.62	Cad.
47038	1/4	4	.028	A	.49	0.65	5.92	4.33	Zinc
47041	1/4	5	.031	D	.76	0.84	4.75	4.76	Zinc
47035	19/64	13/16	.060	C	9.14	202.48	.10	28.66	Cad.
47042	21/64	5-7/8	.042	C	1.49	1.47	4.87	8.66	Zinc
47036	11/32	1-13/32	.050	C	2.86	18.80	.58	13.75	Zinc
47039	3/8	3	.041	C	.99	1.82	3.26	6.92	Zinc
47040	7/16	4-1/2	.041	C	.71	0.68	7.53	5.84	Zinc
47043	7/16	7	.062	D	4.13	3.87	4.05	19.82	Zinc
47034	1/2	1-5/8	.080	D	9.12	66.23	.41	36.40	Zinc
47030	1/2	9-5/8	.062	C	3.02	1.81	7.72	16.97	Zinc
47044	19/64	5	.075	C	4.63	5.69	3.52	24.64	Gld/Ir
47031	5/8	8-1/2	.072	D	3.45	2.14	8.00	20.60	Zinc
47046	23/32	3-3/16	.120	C	22.77	72.41	.79	79.83	Zinc
47047	47/64	3-7/8	.064	C	1.47	1.93	5.50	12.10	Blk/Ox
#75	3/4	4-1/2	.062	D	1.23	1.19	8.07	10.80	Zinc
47032	13/16	8-1/2	.072	D	1.93	0.92	14.69	15.39	Zinc
47033	1	8-1/2	.091	D	3.26	1.66	12.48	23.99	Zinc
47045	1-1/16	5-1/2	.120	D	9.18	9.51	4.36	50.68	Gld/Ir



**Sold Each**

**Material Code**  
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# IBS, INCORPORATED

## Assortments Z02

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### Universal Extension Spring Asst.

IBS No.115R • 18 Items - 58 Pcs

IBS INCORPORATED		Universal Extension Springs	
Assortment No. 115R			
9-5/8" 1/2" O.D. 47030		5-1/2" 1 1/2" O.D. 47045	
8-1/2" 5/8" O.D. 47031		5" lgth 3/8" O.D. 47044	
8-1/2" 3/4" O.D. 47032		7" lgth 3/4" O.D. 47043	
8-1/2" 1" O.D. 47033		5-7/8" 3/4" O.D. 47042	
4" lgth 3/4" O.D. 47038	3" lgth 3/8" O.D. 47039	4-1/2" 7/8" O.D. 47040	5" lgth 3/4" O.D. 47041
1-5/8" 1/2" O.D. 47034	13/16" 5/8" O.D. 47035	1-13/32" 1/8" O.D. 47036	1-1/32" 3/16" O.D. 47037
		3-3/16" 3/8" O.D. 47046	3-7/8" 5/8" O.D. 47047

INDUSTRIAL BOLT & SUPPLY, INC. 1-800-678-1906

### Universal Compression Spring Asst.

IBS No.116R • 18 Items - 58 Pcs

IBS INCORPORATED		Universal Compression Springs	
Assortment No. 116R			
47000 O.D. 5/16" Lgth. 10"		47004 O.D. 1/2" Lgth. 1"	47005 O.D. 5/16" Lgth. 1 3/32"
47001 O.D. 3/8" Lgth. 12"		47006 O.D. 3/16" Lgth. 1"	47007 O.D. 3/8" Lgth. 3/4"
47002 O.D. 5/8" Lgth. 12"		47008 O.D. 1-1/64" Lgth. 3-1/8"	
47003 O.D. 7/8" Lgth. 12"		47009 O.D. 11/16" Lgth. 4"	
47010 O.D. 19/32" Lgth. 2-1/2"		47011 O.D. 5/8" Lgth. 2-3/4"	47012 O.D. 1/2" Lgth. 2-1/2"
47014 O.D. 15/16" Lgth. 2-1/4"		47015 O.D. 7/8" Lgth. 2-1/32"	47016 O.D. 7/8" Lgth. 3"
		47017 O.D. 1-1/16" Lgth. 3-5/8"	

INDUSTRIAL BOLT & SUPPLY, INC. 1-800-678-1906

### IBS, Inc. — Bowman Spring Interchange

#### Extension Springs

IBS No. ....	Bowman No.
47030	21694
47031	21695
47032	21695-1
47033	21696
47034	21681
47035	21684
47036	21685
47037	21667
47038	21659
47039	21660
47040	NA
47041	21657
47042	21658
47043	21655
47044	21654
47045	NA
47046	21698
47047	21699

#### Compression Springs

IBS No. ....	Bowman No.
47000	21679
47001	21651
47002	21652
47003	21653
47004	21680
47005	21688
47006	21666
47007	21664
47008	21690-1
47009	21689
47010	21682
47011	21685-1
47012	21692
47013	21693
47014	21688
47015	21690
47016	21691
47017	21663



**Miscellaneous Brushes**

**Floor Brushes**



- Black Tampico fill
- **Medium** sweeping

**FLOOR BRUSHES - MEDIUM**

IBS No.	Block	Trim	Qty
42007	18"	3"	1
42008*	24"	3"	1

- Black Tampico w / **middle wire row**
- **Coarse** sweeping

**FLOOR BRUSHES - COARSE**

IBS No.	Block	Trim	Qty
42135*	24"	3"	1

\* Braces included on all floor brushes 24" and larger



- Assembles in less than 1 minute.
- Handle/sweep connector flexes on impact, providing unbelievable shock absorbency.
- No brace needed.
- Light, easy-to-manuever and easy to manage in low surface areas.

**24" PRO-FLEX FLOOR BRUSH**

IBS No.	Description	Qty
42000	24" Pro-Flex Floor Brush	1

**Floor Squeegees**

- Black Neoprene rubber blade.
- Designed for rough, heavy use.



**FLOOR SQUEEGEES**

IBS No.	Description	Qty
45510	24" Floor Squeegee	1
45511	36" Floor Squeegee	1
<b>Use with Tapered Wood Handle IBS No. 44020</b>		

**IBS Service Broom**

- Moderate stiffness, large angled trim upright broom has a sturdy metal capped construction and fused polypropylene bristles for superior performance and long life.
- The large angle bristle flare design and comfortable handle allow for fast clean up of a wide variety of jobs.
- Private labeled with the IBS Logo and tagline "The Mark of Our Quality is in Our Service."



**Jumbo Dust Pan**

- 18" dustpan features an extra deep pan and non-skid feet for easy filling.
- Impact resistant plastic stays rigid but not brittle.
- Easily grips to a broom or brush handle.



**Wall Mount**

- Grips & holds various size handles without holes or hooks.
- Provides easy storage of the IBS Service Broom or similar tools.
- Holds 7/8" to 1-1/8" diameter handles.
- Soft rubber grips will not damage handles or tools.



**IBS SERVICE BROOM, DUSTPAN & HOLD-IT BROOM WALL MOUNT**

IBS No.	Description	Qty
42010	IBS Service Broom	1
42009	Dust Pan	1
149675	Wall Mount	1

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# IBS, INCORPORATED

## Maintenance Brushes P25

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### Truck Wash Brush

- Fill - Flagged white polystyrene
- Foam Block Size: 9-<sup>1</sup>/<sub>2</sub> x 2-<sup>3</sup>/<sub>4</sub>
- Trim: 2-<sup>1</sup>/<sub>2</sub>"
- Protective Bumper
- Two handle holes - tapered (44020) and threaded (44301 or 44578)



**TRUCK WASH BRUSH**

IBS No.	Description	Qty
44510	Truck Wash Brush	1

### Handles & Braces

Metal handles provide a strong and durable alternative to wooden handles. Ideal for industrial and construction applications.

- Plastic Coat Finish - for a smooth & durable scratch & crack-proof coating.
- Comfort Foam Grip - reduces user fatigue & provides a comfortable grip.
- Swivel Hang Cap - Allows a broom to be easily stored, extends broom life.
- Heavy Duty Metal Tip - stronger than standard wooden thread.



**Metal Handle with Comfort Grip**

**METAL HANDLE WITH COMFORT GRIP**

IBS No.	Description	Qty
44578	5' Metal Handle Use with Floor Brushes	1

### Handles & Braces

Metal handles provide a strong and durable alternative to wooden handles. Ideal for industrial and construction applications.



**PERMA-FLEX HANDLE**

IBS No.	Description	Qty
44301	5' Perma-Flex Handle Use with Floor Brushes	2



**TAPERED WOOD HANDLE**

IBS No.	Description	Qty
44020	5' Tapered Wood Handle Use with Floor Squeegee	2



**#2 HEAVY DUTY BRACE**

IBS No.	Description	Qty
44290	H.D. Steel Brace Use with IBS No.42135	2

### Counter Duster

**8" MEDIUM - WOOD HANDLE**

**TRIM LENGTH: 2 1/2"**

Great for general factory dusting and bench cleaning. Made with grey Tampico - a natural vegetable fiber from the Mexican Century plant. Provides a medium sweeping or brushing action.



**COUNTER DUSTER BRUSH**

IBS No.	Description	Qty
44004	Counter Duster Brush	1



### Chip and Oil Brushes

- New and improved to resist damage due to chemicals
- Multi-purpose econoline brushes
- White china bristle with wood handle



#### CHIP AND OIL BRUSHES

IBS No.	Width	Thickness	Bristle Length	Qty
40066	1"	5/16	1-5/8	6
40067	1-1/2"	5/16	1-5/8	6

### Parts Cleaning Brush

- Stiff nylon fill
- Steel ferrule Diam. : 1"
- Chisel trim Bristle: 2 3/4"



#### PARTS CLEANING BRUSH

IBS No.	Description	Qty
40035	Parts & Cleaning Brush	2

### Acid Brushes

- Pure black horsehair
- Tin ferrule



#### ACID BRUSHES

IBS No.	Width	Trim	Overall	Qty
44088	5/16	3/4	5-3/4	24
44089	3/8	3/4	5-3/4	24
44090	1/2	3/4	5-3/4	24

### 4-in-1 Tube Fitting Brush

#### ONE BRUSH REPLACES FOUR!

Steel Wire. Cleans the outside and inside diameters of 1/2" and 3/4" tubes and fittings. Use for soldering prep, deburring, drill hole cleaning and cleaning battery terminals.



#### 4-in-1 TUBE FITTING BRUSH

IBS No.	Description	Qty
44690	4-in-1 Tube Fitting Brush	1

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