

Standard In-Stock Studs



Cox Industries

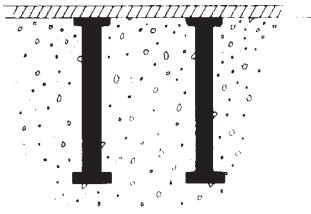
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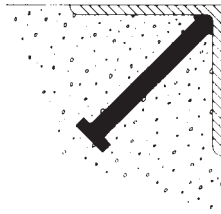


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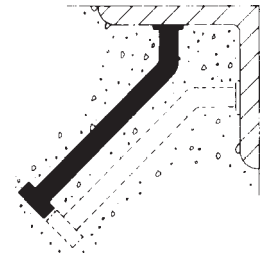
APPLICATIONS



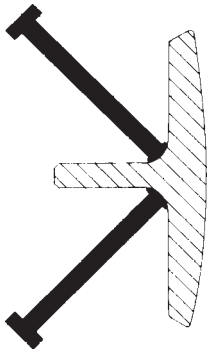
Typical embed plate.



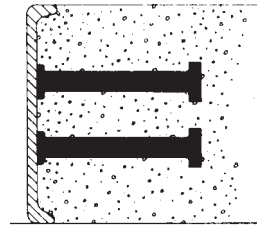
Typical loading dock embed plate.



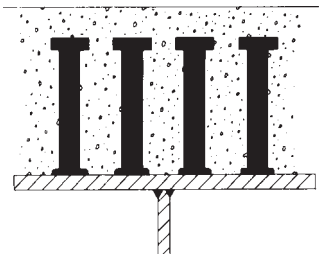
Typical expansion joint on bridge



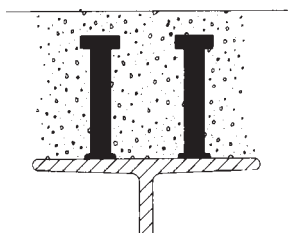
Typical waterway lock embed plate.



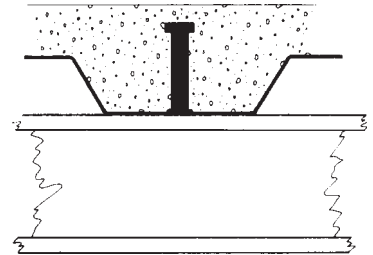
Typical curb facing.



Typical composite bridge beam.



Typical composite building beam

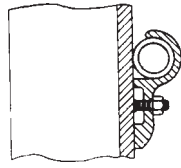


Typical metal deck with composite construction.

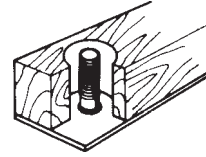


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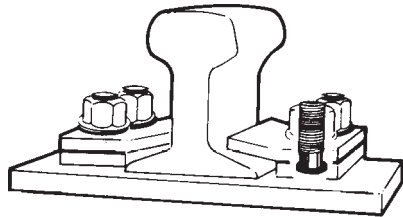
APPLICATIONS



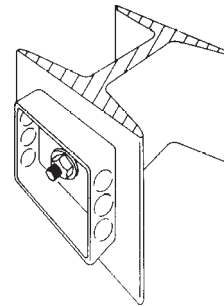
Threaded stud for securing clamps.



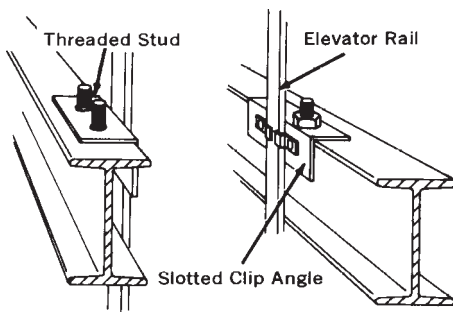
Threaded stud for securing nailers.



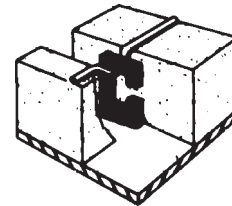
Threaded studs for securing crane rails.



Threaded stud for securing electrical boxes.



Threaded studs for securing elevator rails.

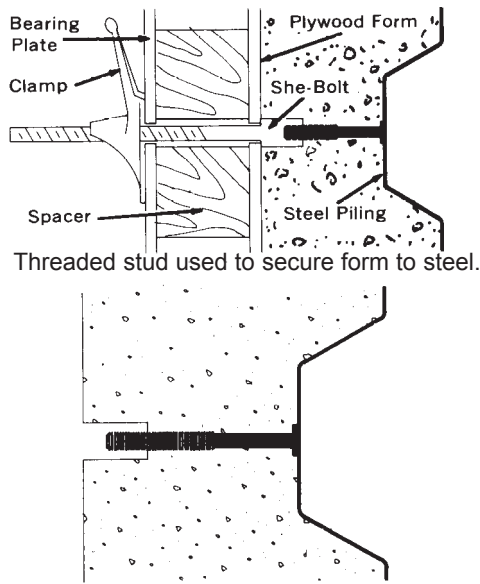


Rectangular stud to secure blocks in place.



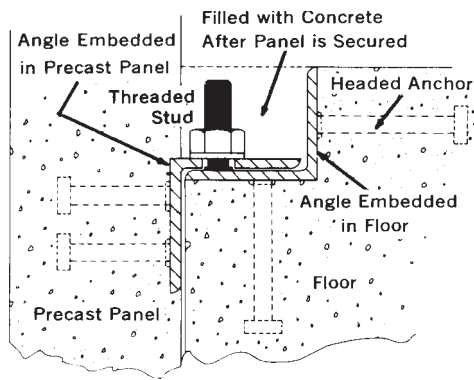
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APPLICATIONS

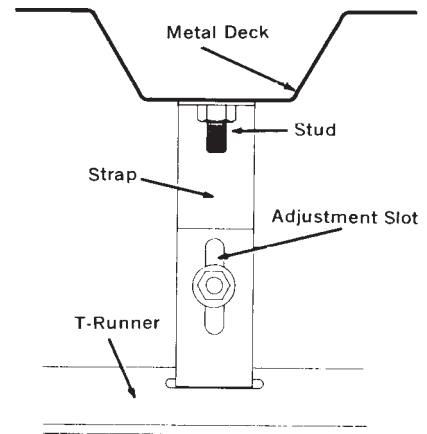


Threaded stud used to secure form to steel.

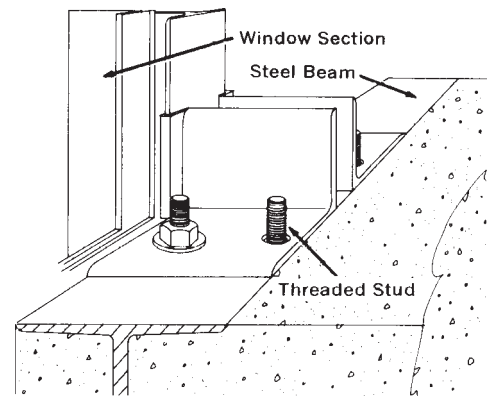
Finished detail after stripping form. Hole is grouted.



A typical detail for a precast concrete panel.



Threaded stud used with prefabricated hanger.



A typical detail for a window frame mounting.

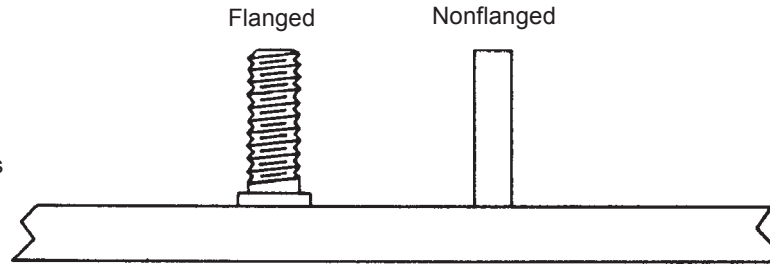


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DATA

Why CD Studs are better.

- No drilling and tapping.
- No cleanup.
- No broken tools.
- Won't vibrate loose.
- No fillet.
- Very fast, 5-6 milliseconds



Fastens to most any thickness parent metal from .025" up.

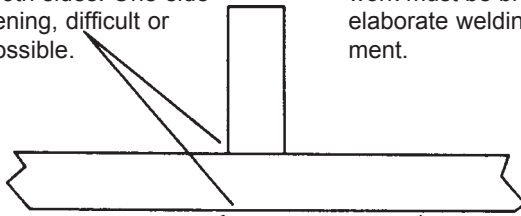
Reverse side can be painted, polished, vinyl-clad or otherwise finished before welding.

Reverse side can be painted, polished, vinyl-clad or otherwise finished before welding.

... than resistance welding

Contact usually required on both sides. One-side fastening, difficult or impossible.

Requires extensive setup, work must be brought to elaborate welding equipment.



Leaves dimple or burnmarks, requires grinding or polishing.

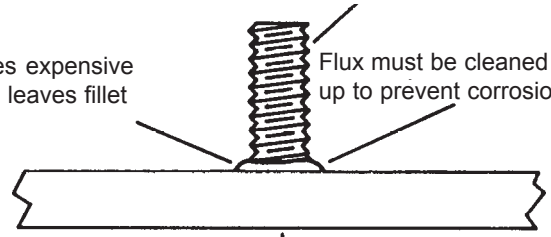
Base metal cannot be coated or painted prior to welding.

...than silver soldering or brazing

Work must be clamped in place.

Requires expensive solder, leaves fillet

Flux must be cleaned up to prevent corrosion.



High heat can ruin sensitive components and mar finish.

Needs expensive equipment.

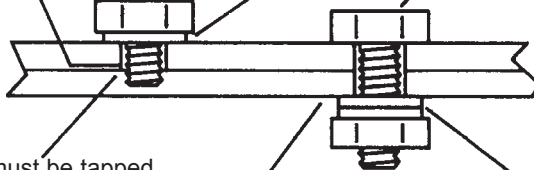
Slow operation.

...than nuts and bolts

Hole must be drilled, can weaken workpiece.

Usually needs lockwasher.

Installation can be a 2-man operation



Hole must be tapped, messy cleanup.

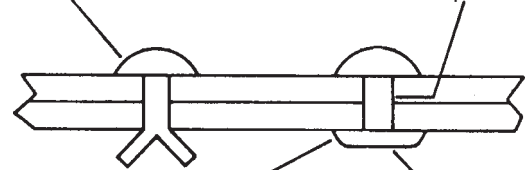
Needs nut. May need lockwasher or gasket. Can vibrate loose. Permits leaks.

Pierces work, mars reverse-side finish.

...than rivets

Heads mar reverse-side finish.

Hole must be drilled, can weaken workpiece



Must be peened over. Can vibrate loose, permit leaks.

Installation can be a 2-man operation

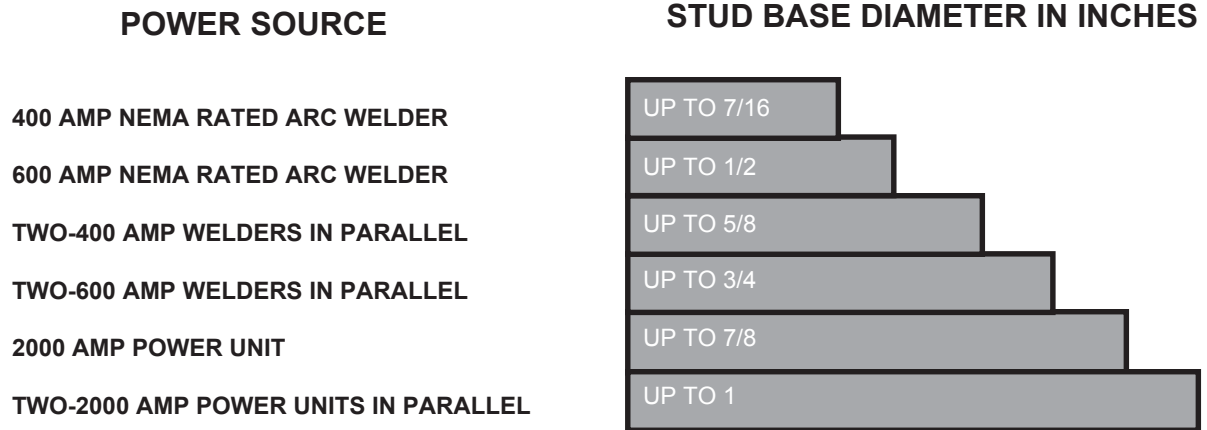
Must pass through work, limited to thin metals.



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POWER SOURCE CAPACITIES FOR ARC STUD WELDING



RECOMMENDED MINIMUM PLATE THICKNESS OF STEEL AND ALUMINUM FOR ARC STUD WELDING

STUD BASE DIAMETER		STEEL WITHOUT BACKUP			ALUMINUM			
					WITHOUT BACKUP	WITH BACKUP		
in.	mm.	in.	mm.	gage	in.	mm.	in.	mm.
3/16	4.8	.036	.91	20	.125	3.2	.125	3.2
1/4	6.4	.048	1.21	18	.125	3.2	.125	3.2
5/16	7.9	.060	1.52	16	.187	4.7	.187	4.7
3/8	9.5	.075	1.90	14	.187	4.7	.187	4.7
7/16	11.1	.090	2.28	13	.250	6.4	.250	6.4
1/2	12.7	.120	3.04	11	.250	6.4	.250	6.4
5/8	15.9	.145	3.80					
3/4	19.1	.185	4.70					
7/8	22.2	.250	6.40					
1	25.4	.375	9.50					



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TYPICAL COMBINATIONS OF BASE AND STUD METALS FOR STUD WELDING

BASE METAL	STUD METAL
ARC STUD WELDING	
Low carbon steel, AISI 1006 to 1022	Low carbon steel, AISI 1006 to 1022; stainless steel, 300 series
Stainless steel, 300 series ¹ , 405, 410 and 430	Low carbon steel, AISI 1006 to 1022; stainless steel, 300 series
Aluminum alloys, 5000 series	Aluminum alloy 5000 series
CAPACITOR DISCHARGE STUD WELDING	
Low carbon steel, AISI 1006 to 1022	Low carbon steel, AISI 1006 to 1022; stainless steel, 300 series; copper alloys 260 and 268
Stainless steel, 300 series and 400	Low carbon steel, AISI 1006 to 1022; stainless steel, 300 series
Aluminum alloys, 1100, 3000, 5000 series, 6061 and 6063	Aluminum alloys 1100 and 5000 series and 6061
ETP copper, lead free brass, and rolled copper	Low carbon steel, AISI 1006 to 1022; stainless steel, 300 series; copper alloys C26000, C268000, and 464
Zinc alloys (die cast)	Aluminum alloys 1100 and 5000 series

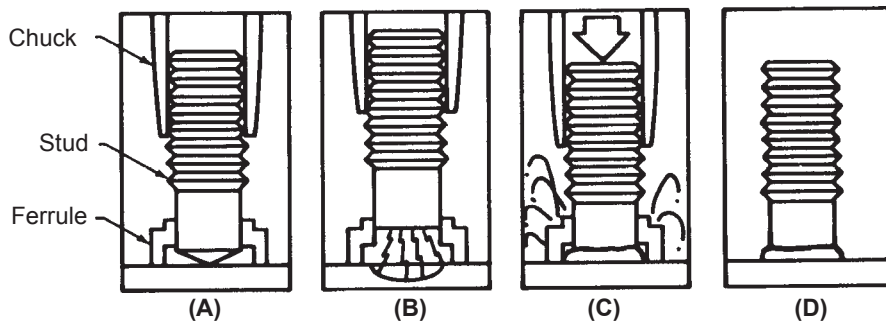
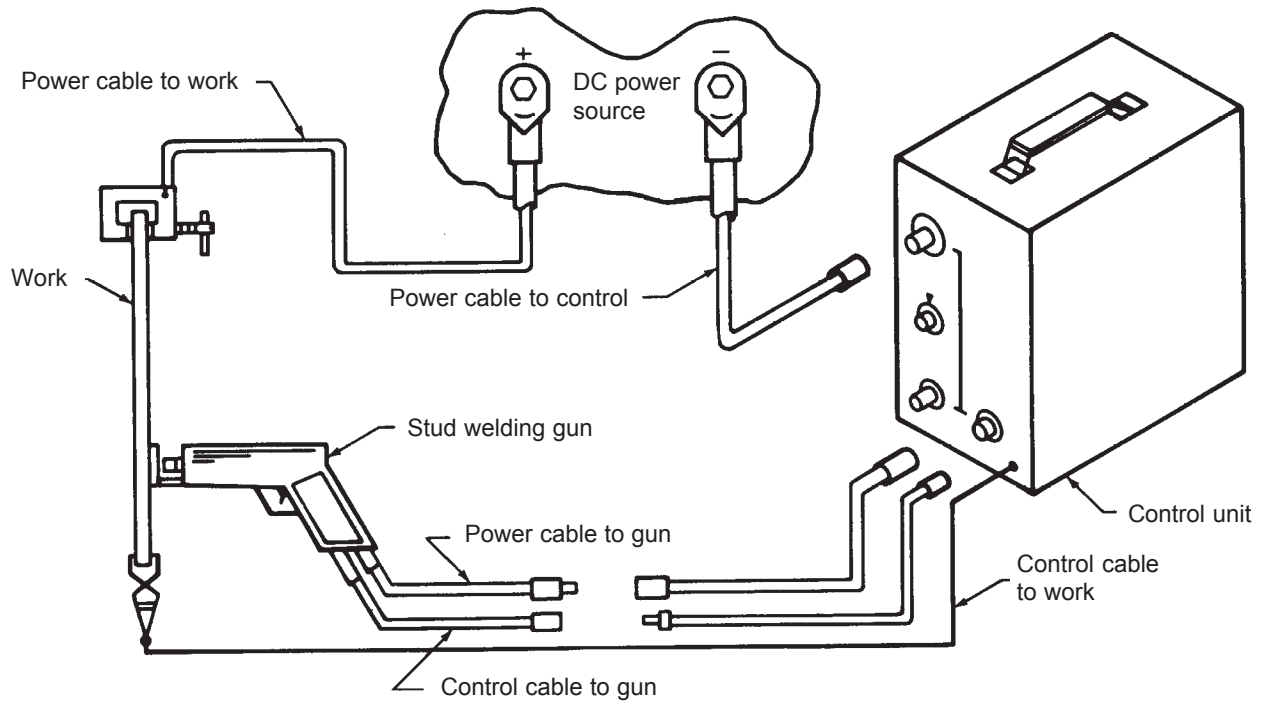
1. Except for the free-machining Type 303 stainless steel.



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TYPICAL SETUP AND PROCESS FOR ARC STUD WELDING



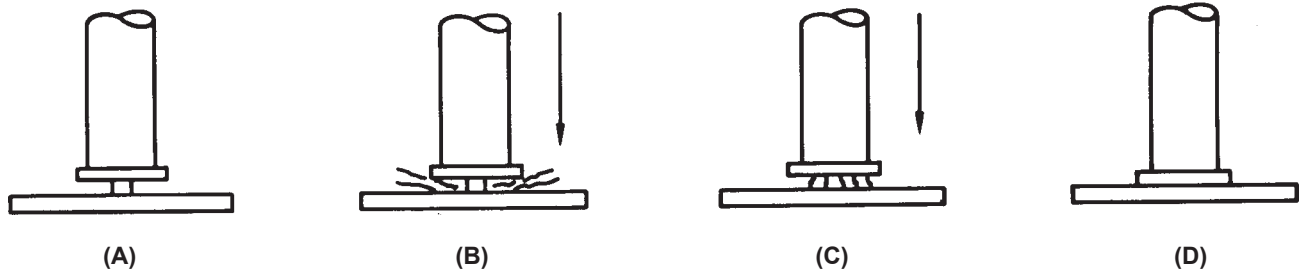
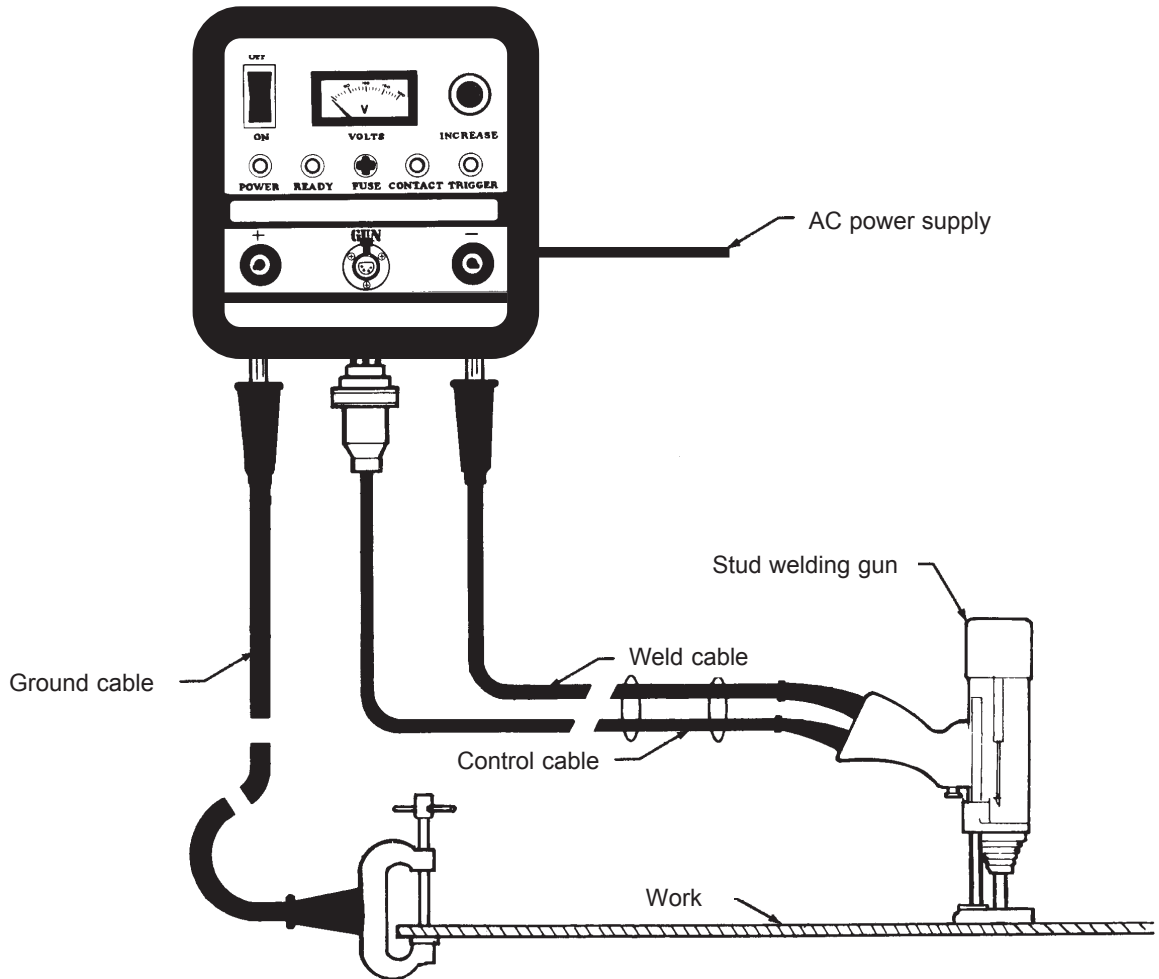
A) Stud and ceramic ferrule is positioned against work piece B) stud lifts and an arc is drawn C) control times out and stud plunges into molten metal D) metal solidifies and weld is complete in a split second



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TYPICAL SETUP AND PROCESS FOR CD STUD WELDING



A) Stud is positioned against work piece B) stored energy discharged through special timing tip and starts downward C) stud is forced into molten metal D) metal solidifies and weld is complete in a split second



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WEIGHT CHART

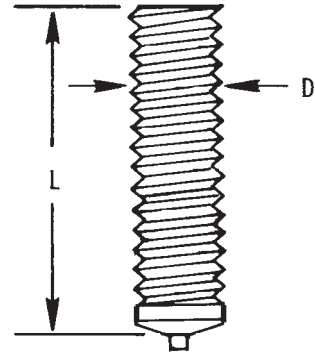
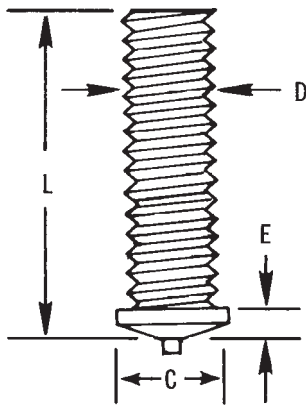
ESTIMATED WEIGHTS OF NON-THREADED STUDS IN POUNDS PER 1000 PIECES									
LENGTH	3/16 DIA	1/4 DIA	5/16 DIA	3/8 DIA	7/16 DIA	1/2 DIA	5/8 DIA	3/4 DIA	7/8 DIA
3/4	6.0	10.5	16.4	23.5	31.9	41.7			
1	8.0	14.0	21.8	31.3	42.5	55.6	86.6		
1-1/4	10.0	17.5	27.3	39.1	53.1	69.5	108.3	156.0	
1-1/2	12.0	21.0	32.7	47.0	63.8	83.4	129.9	187.2	255.0
1-3/4	14.0	24.5	38.2	54.8	74.4	97.3	151.6	218.4	297.5
2	16.0	28.0	43.6	62.6	85.0	111.2	173.2	249.6	340.0
2-1/4	18.0	31.5	49.1	70.4	95.6	125.1	194.9	280.8	382.5
2-1/2	20.0	35.0	54.5	78.3	106.3	139.0	216.5	312.0	425.0
2-3/4	22.0	38.5	60.0	86.1	116.9	152.9	238.2	343.2	467.5
3	24.0	42.0	65.4	93.9	127.5	166.8	259.8	374.4	510.0
3-1/4	26.0	45.5	70.9	101.1	138.1	180.7	281.5	405.6	552.5
3-1/2	28.0	49.0	76.3	109.6	148.8	194.6	303.1	436.8	595.0
3-3/4	30.0	52.5	81.8	117.4	159.4	208.5	324.8	468.0	637.5
4	32.0	56.0	87.2	125.2	170.0	222.4	346.4	499.2	680.0
4-1/4	34.0	59.5	92.7	133.0	180.6	236.3	368.1	530.4	722.5
4-1/2	36.0	63.0	98.1	140.9	191.3	250.2	389.7	561.6	765.0
4-3/4	38.0	66.5	103.6	148.7	201.9	264.1	411.4	592.8	807.5
5	40.0	70.0	109.0	156.5	212.5	278.0	433.0	624.0	850.0
EACH ADD'L INCH	8.0	14.0	21.8	31.3	42.5	55.6	86.6	124.8	170.0

ESTIMATED WEIGHTS OF THREADED STUDS IN POUNDS PER 1000 PIECES									
LENGTH	3/16 DIA	1/4 DIA	5/16 DIA	3/8 DIA	7/16 DIA	1/2 DIA	5/8 DIA	3/4 DIA	7/8 DIA
3/4	4.2	8.3	12.8	18.8	25.5	34.5			
1	5.6	11.0	17.0	25.0	34.0	46.0	70.0		
1-1/4	7.0	13.8	21.3	31.3	42.5	57.5	87.5	133.8	
1-1/2	8.4	16.5	25.5	37.5	51.0	69.0	105.0	160.5	243.8
1-3/4	9.8	19.3	29.8	43.8	59.5	80.5	122.5	187.3	284.4
2	11.2	22.0	34.0	50.0	68.0	92.0	140.0	214.0	325.0
2-1/4	12.6	24.8	38.3	56.3	76.5	103.5	157.5	240.8	365.6
2-1/2	14.0	27.5	42.5	62.5	85.0	115.0	175.0	267.5	406.3
2-3/4	15.4	30.3	46.8	68.8	93.5	126.5	192.5	294.3	446.9
3	16.8	33.0	51.0	75.0	102.0	138.0	210.0	321.0	487.5
3-1/4	18.2	35.8	55.3	81.3	110.5	149.5	227.5	347.5	528.1
3-1/2	19.6	38.5	59.5	87.5	119.0	161.0	245.0	374.5	568.8
3-3/4	21.0	41.3	63.8	93.8	127.5	172.5	262.5	401.3	609.4
4	22.4	44.0	68.0	100.0	136.0	184.0	280.0	428.0	560.0
4-1/4	23.8	46.8	72.3	106.3	144.5	195.5	297.5	454.8	690.6
4-1/2	25.2	49.5	76.5	112.5	153.0	207.0	315.0	481.5	731.3
4-3/4	26.6	52.3	80.8	118.8	161.5	218.5	332.5	508.3	771.9
5	28.0	55.0	85.0	125.0	170.0	230.0	350.0	535.0	812.5
EACH ADD'L INCH	5.6	11.0	17.0	25.0	34.0	46.0	70.0	107.0	162.5



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CD CAPACITOR DISCHARGE STUD



FLANGED		
D	C	E
4-40	3/16	1/32
6-32	7/32	1/32
8-32	1/4	1/32
10-24	1/4	1/32
10-32	1/4	1/32
1/4-20	5/16	1/32
5/16-18	3/8	1/32
3/8-16	1/2	1/32

NON FLANGED
D
4-40
6-32
8-32
10-24
10-32
1/4-20
5/16-18
3/8-16

LENGTH: Available in lengths as required.

THREAD: Standard thread is UNC2A. 10-32 is UNF2A.

MATERIAL: Cold drawn low carbon steel with copper flash plating.

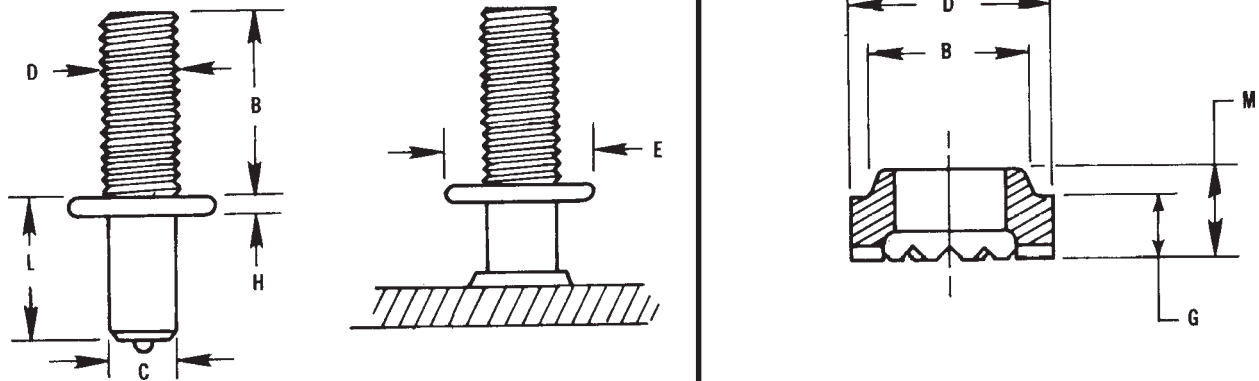
STAINLESS STEEL: Studs are available in weldable stainless steel.

ALUMINUM: Studs are available in weldable aluminum alloys.



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CS COLLAR STUDS



STUD SPECIFICATIONS						FERRULE SPECIFICATIONS				
D	Std. B	Min. L	C	E	H	No.	D	B	G	M
1/4-20	5/8	3/8	.215	1/2	3/32	14CFER	.875	.785	.125	.250
5/16-18	5/8	3/8	.275	5/8	3/32	51CFER	.875	.785	.125	.250
3/8-16	5/8	3/8	.330	5/8	3/32	38CFER	.875	.785	.125	.250
1/2-13	3/4	1/2	.448	3/4	3/32	12CFER	1.030	.921	.125	.281

COX INDUSTRIES CS COLLAR STUDS are threaded studs with a collar separating the weld base and the thread. They are available in diameters 1/4" through 1/2". All orders for studs include required ferrules.

LENGTH: Available in required lengths above recommended standard minimums. Length is before weld. Studs will be approximately 1/8" shorter after welding.

THREAD: Standard thread is UNC2A.

MATERIAL: Low carbon steel.

Mechanical Properties (as cold drawn)

Tensile: 55,000 psi

Reduction in Area: 50% min.

STAINLESS STEELS: Studs are also available in weldable stainless steel. Type 304 is the most commonly used. Other grades of stainless steel (except Type 303) available when required.

PLATING: If plated studs are required, cadmium, zinc, and nickel are used to ASTM specifications A165 Type TS, A164 Type RS, and B-456. Welding end of stud is not plated to prevent weld contamination. Information on other plating materials available upon request.

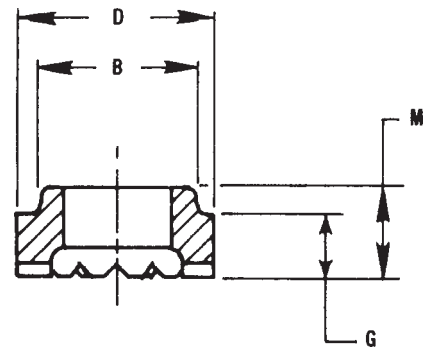
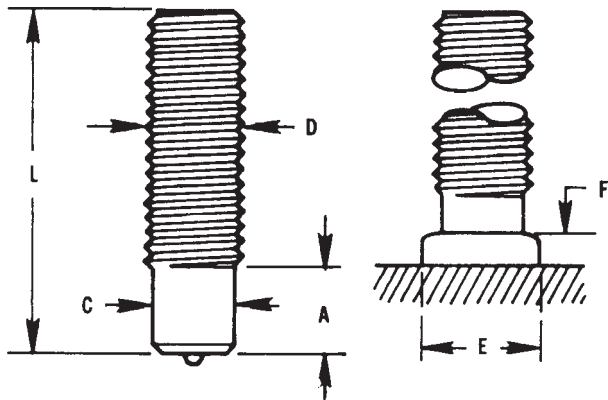
ANNEALING: Stud ductility can be increased by annealing to 75 Rockwell B for low carbon steel and 90 Rockwell B for stainless steel.

FLUX: Standard collar studs are solid fluxed.



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TP PITCH DIAMETER BASE STUD



STUD SPECIFICATIONS						FERRULE SPECIFICATIONS				
D	Min L.	C	A	FILLET DIMENSION		No.	D	B	G	M
				E	F					
1/4-20	5/8	.215	3/8	5/16	3/32	14PFER	.455	.385	.125	.250
5/16-18	43/64	.275	3/8	13/32	7/64	51PFER	.535	.445	.125	.250
3/8-16	27/32	.330	3/8	15/32	7/64	38PFER	.590	.505	.139	.264
7/16-14	15/16	.387	7/16	17/32	1/8	71PFER	.675	.585	.173	.329
1/2-13	1 1/32	.448	1/2	19/32	5/32	12PFER	.740	.650	.206	.362
5/8-11	1 13/64	.562	5/8	3/4	3/16	58PFER	.910	.785	.277	.433
3/4-10	1 7/16	.680	51/64	59/64	1/4	34PFER	1.150	1.030	.339	.526
7/8-9	1 39/64	.798	55/64	1 3/64	5/16	78PFER	1.330	1.210	.406	.593
1-8	1 51/64	.915	59/64	1 3/16	11/32	1PFER	1.526	1.406	.474	.661

COX INDUSTRIES TP STUDS have a pitch diameter weld base (C). They are available in diameters 1/4" through 1". All orders for studs include required ferrules.

LENGTH: Available in required lengths above recommended standard minimums (L). Length is before weld. Stud diameters 1/2" and below will be approximately 1/8" shorter after welding. 5/8" and above will be approximately 3/16" shorter after welding.

THREAD: Standard thread is UNC2A. Maximum standard thread length is 3 7/8".

MATERIAL: Low carbon steel.

Mechanical Properties (as cold drawn)
 Tensile55,000 psi min.
 Reduction in Area50% min.

STAINLESS STEELS: COX INDUSTRIES studs are also available in weldable stainless steel. Type 304 is the most commonly used. Other grades of stainless steel (except Type 303) available when required.

PLATING: If plated studs are required, cadmium, zinc, and nickel are used to ASTM specifications A165 Type TS, A164 Type RS, and B-456. Welding end of stud is not plated to prevent weld contamination. Information on other plating materials available upon request.

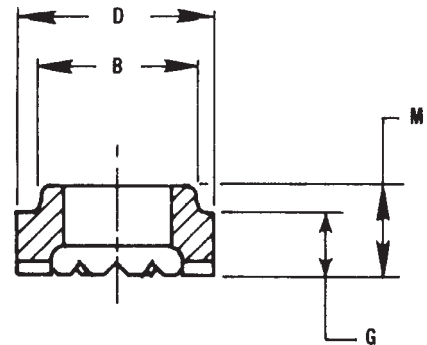
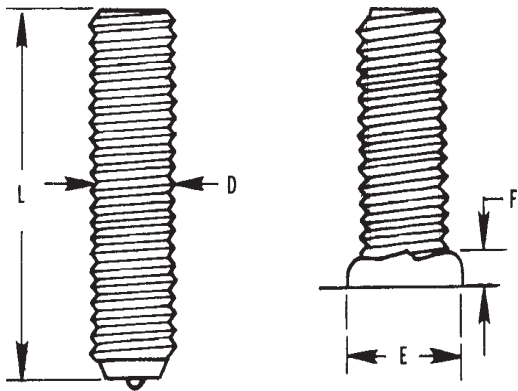
ANNEALING: Stud ductility can be increased by annealing to 75 Rockwell B for low carbon steel and 90 Rockwell B for stainless steel.

FLUX: COX INDUSTRIES studs 1/4" and over are solid fluxed.



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TF FULL THREADED STUD



STUD SPECIFICATIONS				FERRULE SPECIFICATIONS				
D	Min L.	FILLET DIMENSION		No.	D	B	G	M
		E	F					
10-24	5/8	9/32	3/32	10FER	.390	.305	.234	.390
1/4-20	43/64	23/64	7/64	14FER	.454	.380	.234	.390
5/16-18	27/32	7/16	7/64	51FER	.578	.445	.281	.437
3/8-16	15/16	1/2	1/8	38FER	.637	.505	.281	.437
7/16-14	1 1/32	19/32	5/32	71FER	.703	.585	.234	.422
1/2-13	1 13/64	11/16	3/16	12FER	.795	.650	.281	.469
5/8-11	1 7/16	7/8	1/4	58FER	1.030	.785	.328	.516
3/4-10	1 39/64	1 1/16	5/16	34FER	1.215	1.030	.469	.656
7/8-9	1 51/64	1 1/8	11/32	78FER	1.408	1.210	.545	.732
1-8	1 17/32	1 3/8	3/8	1FER	1.615	1.406	.633	.820

COX INDUSTRIES TF STUDS are available in diameters 3/16" through 1". All orders for studs include required ferrules.

LENGTH: Available in required lengths above recommended standard minimums (L). Length is before weld. Stud diameters 1/2" and below will be approximately 1/8" shorter after welding. 5/8" and above will be approximately 3/16" shorter after welding.

THREAD: Standard thread is UNC2A. Maximum standard thread length is 3 7/8".

MATERIAL: Low carbon steel.

Mechanical Properties (as cold drawn)
 Tensile55,000 psi min.
 Reduction in Area50% min.

STAINLESS STEELS: COX INDUSTRIES studs are also available in weldable stainless steel. Type 304 is the most commonly used. Other grades of stainless steel (except Type 303) available when required.

PLATING: If plated studs are required, cadmium, zinc, and nickel are used to ASTM specifications A165 Type TS, A164 Type RS, and B-456. Welding end of stud is not plated to prevent weld contamination. Information on other plating materials available upon request.

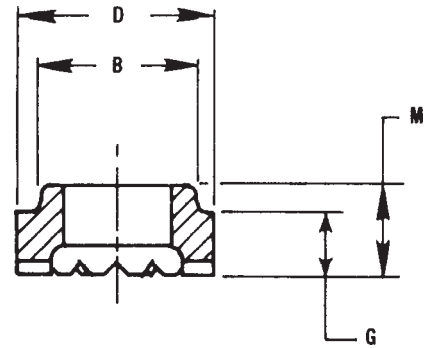
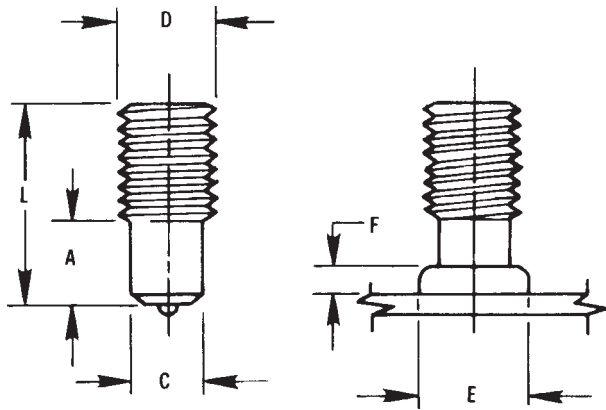
ANNEALING: Stud ductility can be increased by annealing to 75 Rockwell B for low carbon steel and 90 Rockwell B for stainless steel.

FLUX: COX INDUSTRIES studs 1/4" and over are solid fluxed.



Cox Industries

RB REDUCED BASE STUD



STUD SPECIFICATIONS						FERRULE SPECIFICATIONS				
D	Min L.	C	A	FILLET DIMENSION		No.	D	B	G	M
				E	F					
1/4-20	3/4	.187	3/16	5/16	3/32	31FER	.455	.385	.125	.250
5/16-18	3/4	.250	1/4	13/32	7/64	14FER	.535	.445	.125	.250
3/8-16	3/4	.312	3/8	15/32	7/64	51FER	.590	.505	.139	.264
1/2-13	1	.375	7/16	17/32	1/8	38FER	.675	.585	.173	.329
5/8-11	1 1/4	.500	1/2	19/32	5/32	12FER	.740	.650	.206	.362
3/4-10	1 1/2	.625	5/8	3/4	3/16	58FER	.910	.785	.277	.433
7/8-9	1 1/2	.750	3/4	59/64	1/4	34FER	1.150	1.030	.339	.526
1-8	1 3/4	.875	7/8	1 3/64	5/16	78FER	1.330	1.210	.406	.593

COX INDUSTRIES RB STUDS have a reduced weld base (C). They are available in diameters 1/4" through 1". All orders for studs include required ferrules.

LENGTH: Available in required lengths above recommended standard minimums (L). Length is before weld. Stud diameters 1/2" and below will be approximately 1/8" shorter after welding. 5/8" and above will be approximately 3/16" shorter after welding.

THREAD: Standard thread is UNC2A. Maximum standard thread length is 3 7/8".

MATERIAL: Low carbon steel.

Mechanical Properties (as cold drawn)
 Tensile55,000 psi min.
 Reduction in Area50% min.

STAINLESS STEELS: COX INDUSTRIES studs are also available in weldable stainless steel. Type 304 is the most commonly used. Other grades of stainless steel (except Type 303) available when required.

PLATING: If plated studs are required, cadmium, zinc, and nickel are used to ASTM specifications A165 Type TS, A164 Type RS, and B-456. Welding end of stud is not plated to prevent weld contamination. Information on other plating materials available upon request.

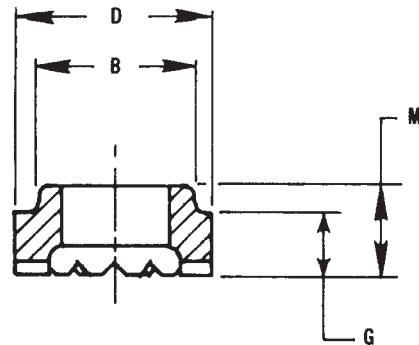
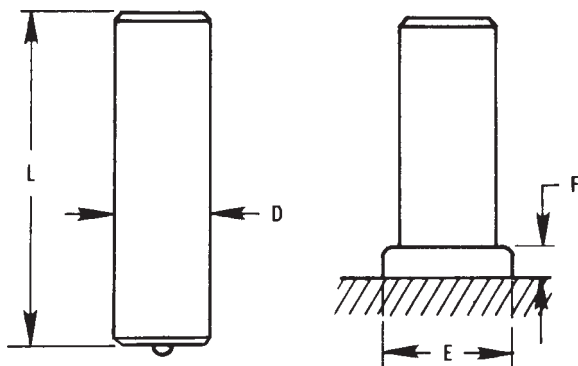
ANNEALING: Stud ductility can be increased by annealing to 75 Rockwell B for low carbon steel and 90 Rockwell B for stainless steel.

FLUX: COX INDUSTRIES studs 1/4" and over are solid fluxed.



Cox Industries

NT NON-THREADED STUD



STUD SPECIFICATIONS				FERRULE SPECIFICATIONS				
D	Min L.	FILLET DIMENSION		No.	D	B	G	M
		E	F					
3/16	25/32	9/32	3/32	10FER	.390	.305	.234	.390
1/4	25/32	23/64	7/64	14FER	.454	.380	.234	.390
5/16	25/32	7/16	7/64	51FER	.578	.445	.281	.437
3/8	25/32	1/2	1/8	38FER	.637	.505	.281	.437
7/16	25/32	19/32	5/32	71FER	.703	.585	.234	.422
1/2	13/16	11/16	3/16	12FER	.795	.650	.281	.469
5/8	31/32	7/8	1/4	58FER	1.030	.785	.328	.516
3/4	1-15/64	1 1/16	5/16	34FER	1.215	1.030	.469	.656
7/8	1-1/2	1 1/8	11/32	78FER	1.408	1.210	.545	.732
1	1-41/64	1 3/8	3/8	1FER	1.615	1.406	.633	.820

COX INDUSTRIES NT STUDS are available in diameters from 3/16" through 1". All orders for studs include required ferrules.

LENGTH: Available in required lengths above recommended standard minimums (L). Length is before weld. Stud diameters 1/2" and below will be approximately 1/8" shorter after welding. 5/8" and above will be approximately 3/16" shorter after welding.

MATERIAL: Low carbon steel.

Mechanical Properties (as cold drawn)
 Tensile 55,000 psi min.
 Reduction in Area 50% min.

STAINLESS STEELS: COX INDUSTRIES studs are also available in weldable stainless steel. Type 304 is the most commonly used. Other grades of stainless steel (except Type 303) available when required.

PLATING: If plated studs are required, cadmium, zinc, and nickel are used to ASTM specifications A165 Type TS, A164 Type RS, and B-456. Welding end of stud is not plated to prevent weld contamination. Information on other plating materials available upon request.

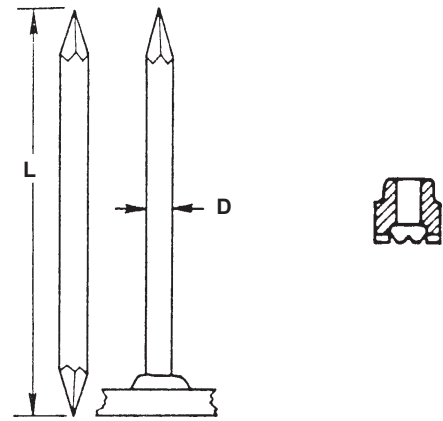
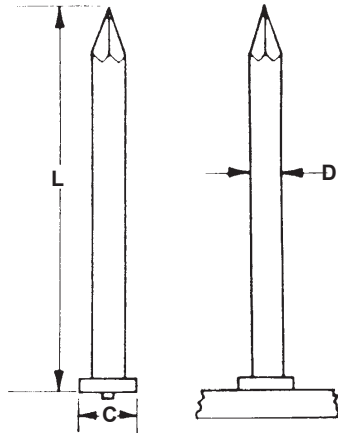
ANNEALING: Stud ductility can be increased by annealing to 75 Rockwell B for low carbon steel and 90 Rockwell B for stainless steel.

FLUX: COX INDUSTRIES studs 1/4" and over are solid fluxed.



Cox Industries

IN INSULATION STUDS



CD STYLE		
D	C	L
12 ga.	.170	as required
10 ga.	.187	as required

ARC STYLE DOUBLE POINT		
D	Min L	FERRULE
10 ga.	3/4	10GFER
3/16	3/4	31FER

COX INDUSTRIES IN STUDS are available in CD and ARC style. All orders for ARC studs include required ferrules.

MATERIAL: Low carbon steel.

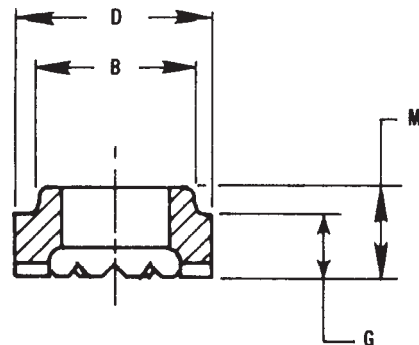
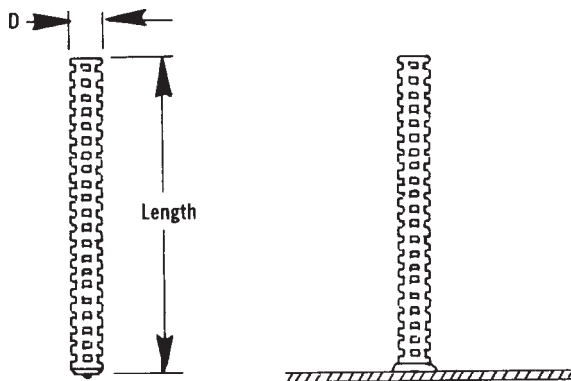
ALUMINUM: Studs are available in weldable aluminum alloys.

STAINLESS STEELS: COX INDUSTRIES studs are also available in weldable stainless steel. Type 304 is the most commonly used. Other grades of stainless steel (except Type 303) available when required.



Cox Industries

DB DEFORMED BAR ANCHOR



STUD SPECIFICATIONS			FERRULE SPECIFICATIONS				
D x LENGTH	PART NO.	LBS/M *	PART NO.	B	D	G	M
3/8 X 6-1/8	DB386	180	38FER	.505	.637	.281	.437
3/8 X 10-1/8	DB3810	300					
3/8 X 12-1/8	DB3812	360					
3/8 X 18-1/8	DB3818	520					
3/8 X 24-1/8	DB3824	720					
3/8 X 36-1/8	DB3836	1035					
1/2 X 5-1/8	DB125	269	12FER	.650	.795	.281	.469
1/2 X 10-1/8	DB1210	537					
1/2 X 12-1/8	DB1212	640					
1/2 X 18-1/8	DB1218	960					
1/2 X 24-1/8	DB1224	1280					
1/2 X 30-1/8	DB1230	1650					
1/2 X 36-1/8	DB1236	1920	58FER	.785	1.030	.328	.516
5/8 X 12-3/16	DB5812	1000					
5/8 X 18-3/16	DB5818	1500					
5/8 X 24-3/16	DB5824	2000					
5/8 X 30-3/16	DB5830	2500					
5/8 X 36-3/16	DB5836	3000	34FER	1.030	1.215	.469	.656
3/4 X 12-3/16	DB3412	1485					
3/4 X 18-3/16	DB3418	2210					
3/4 X 24-3/16	DB3424	2880					
3/4 X 30-3/16	DB3430	3625					
3/4 X 36-3/16	DB3436	4400					

MATERIAL: Low Carbon Steel ASTM: A-496.

LENGTH: Length is before weld. Stud diameters (D) 1/2" and below will be approximately 1/8" shorter after welding. 5/8" and 3/4" will be approximately 3/16" shorter after welding.

STAINLESS STEEL: COX INDUSTRIES Deformed Bar Anchors are available in 300 series (except 303) stainless steel.

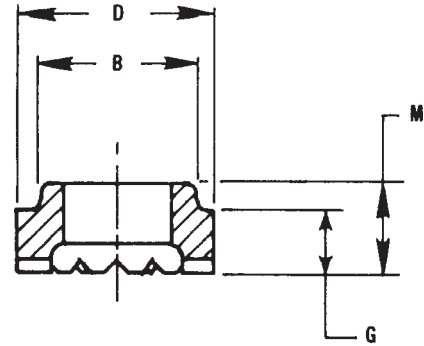
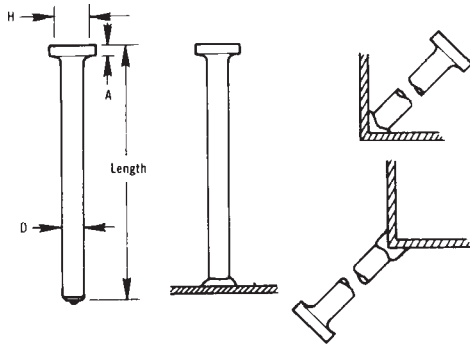
SPECIALS: Any length of deformed anchors is available upon request.

* Weights are approximate and will vary with different heats of steel.



Cox Industries

CA HEADED CONCRETE ANCHORS



STUD SPECIFICATIONS			FERRULE SPECIFICATIONS				
D	A	H	PART NO.	B	D	G	M
1/4	.187	.500	14FER	.380	.454	.234	.390
3/8	.281	.750	38FER	.505	.640	.234	.390
1/2	.312	1.000	12FER	.650	.795	.250	.438
5/8	.312	1.250	58FER	.785	1.030	.328	.516

Description	Part No.	Pieces	Pounds	Pounds	Description	Part No.	Pieces	Pounds	Pounds
		Box	Box	M Pieces			Box	Box	M Pieces
1/4 x 1-1/8	CA141	3000	70	23	1/2 x 3-1/8	CA123	325	73	225
1/4 x 2-11/16	CA1421	1500	65	43	1/2 x 3-5/8	CA1235	300	74	247
1/4 x 4-1/8	CA144	1000	65	65	1/2 x 4-1/8	CA124	250	70	280
3/8 x 1-3/8	CA3813	1000	67	67	1/2 x 5-5/16	CA1255	200	68	340
3/8 x 1-5/8	CA3815	1000	73	73	1/2 x 6-1/8	CA126	150	59	393
3/8 x 2-1/8	CA382	1000	91	91	1/2 x 8-1/8	CA128	100	51	504
3/8 x 2-11/16	CA3821	700	74	106	5/8 x 2-11/16	CA5821	250	77	308
3/8 x 3-1/8	CA383	600	73	122	5/8 x 4-3/16	CA584	150	66	440
3/8 x 4-1/8	CA384	400	59	148	5/8 x 5-3/16	CA585	125	66	520
3/8 x 6-1/8	CA386	250	54	216	5/8 x 6-3/16	CA586	100	62	620
1/2 x 2-1/8	CA122	400	68	168	5/8 x 6-9/16	CA5869	100	66	660
1/2 x 2-5/8	CA1225	350	70	198	5/8 x 8-3/16	CA588	50	40	784

COX INDUSTRIES CA ANCHOR STUDS are designed for welding to flat surfaces or welding in the fillet or to the heel of angles. When ordering specify if studs are to be welded to flat surfaces or in fillet or to heel of angle. All orders for studs include required ferrules.

LENGTH: Length is before weld. Stud diameters (D) 1/2" and below will be approximately 1/8" shorter after welding. 5/8" will be approximately 3/16" shorter after welding. Maximum length available for cold headed product is 8-3/16". Prices on hot formed studs over 10-3/16" available upon request.

All COX INDUSTRIES headed anchors meet AWS specifications. Test reports available on request.

STAINLESS STEELS: COX INDUSTRIES studs are also available in weldable stainless steel. Type 304 is the most commonly used. Other grades of stainless steel (except Type 303) available when required.

FLUX: COX INDUSTRIES Headed Anchor Studs are solid fluxed.

MATERIAL: Low Carbon Steel.

MECHANICAL PROPERTIES: (as cold drawn)

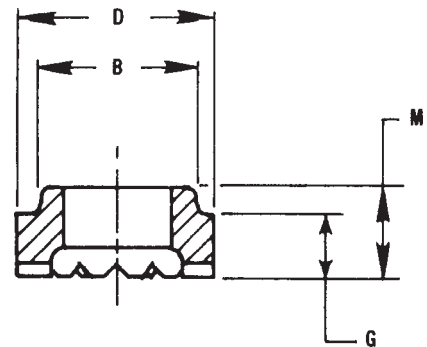
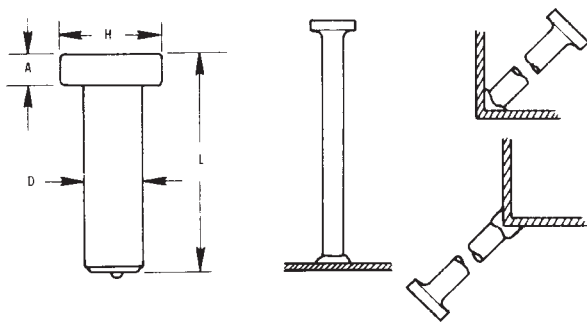
Tensile: 60,000 psi min.

Reduction in Area: 50% min.



Cox Industries

SC SHEAR CONNECTOR STUDS



STUD SPECIFICATIONS			FERRULE SPECIFICATIONS				
D	A	H	PART NO.	B	D	G	M
3/4	3/8	1-1/4	34FER	1.030	1.215	.469	.656
			34TFER	1.210	1.338	.400	.587
7/8	3/8	1-3/8	78FER	1.210	1.408	.545	.732
			78TFER				

Description	Part No.	Pieces	Pounds	Pounds	Description	Part No.	Pieces	Pounds	Pounds
		Box	Box	M Pieces			Box	Box	M Pieces
3/4 X 3-3/16	SC343	125	60	480	3/4 X 6-3/16	SC346	60	50	850
3/4 X 3-3/8	SC3433	125	62	513	3/4 X 7-3/16	SC347	60	59	1020
3/4 X 3-7/8	SC3437	100	58	568	3/4 X 8-3/16	SC348	50	56	1112
3/4 X 4-3/16	SC344	100	62	600	7/8 X 3-11/16	SC7831	100	73	726
3/4 X 4-3/8	SC3443	100	62	625	7/8 X 4-3/16	SC784	100	81	810
3/4 X 4-7/8	SC3447	75	51	707	7/8 X 5-3/16	SC785	75	75	1000
3/4 X 5-3/16	SC345	60	44	740	7/8 X 6-3/16	SC786	50	57	1140
3/4 X 5-3/8	SC3453	60	45	775	7/8 X 7-3/16	SC787	45	59	1300
3/4 X 5-7/8	SC3457	60	49	800	7/8 X 8-3/16	SC788	40	59	1510

COX INDUSTRIES TYPE SC CONNECTOR STUDS are designed to effectively tie the concrete to the steel beams and to resist shear loadings between the concrete slab and steel beam in composite construction. All orders for studs include required ferrules.

LENGTH: Length is before weld. Studs will be approximately 3/16" shorter after welding. Lengths for shear connector studs are generally set by governing specifications.

MATERIAL: Low Carbon Steel.

MECHANICAL PROPERTIES: (as cold drawn)
 Tensile: 60,000 psi min.
 Reduction in Area: 50% min.

All COX INDUSTRIES shear connector studs meet AWS specifications. Test reports available on request.

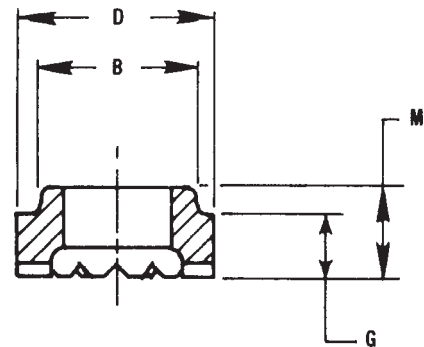
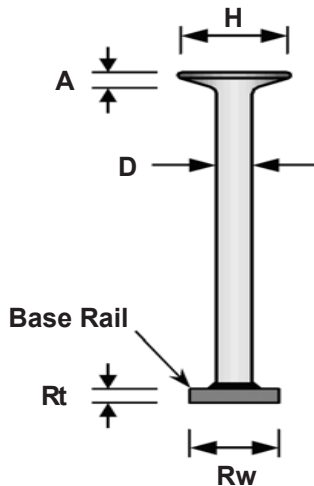
STAINLESS STEELS: COX INDUSTRIES studs are also available in weldable stainless steel. Type 304 is the most commonly used. Other grades of stainless steel (except Type 303) available when required.

FLUX: COX INDUSTRIES Shear Connector Studs are solid fluxed.



Cox Industries

PSR PUNCHING SHEAR STUDS



STUD SPECIFICATIONS						FERRULE SPECIFICATIONS				
D	A	H	HA/SA	Base Rail		PART NO.	B	D	G	M
				Rt	Rw					
3/8	.210	1.19	10.1	3/16	1	38FER	.505	.640	.234	.390
1/2	.280	1.58	10.0	1/4	1-1/4	12FER	.650	.795	.250	.438
5/8	.350	1.98	10.0	5/16	1-3/4	58FER	.785	1.030	.328	.516
3/4	.420	2.37	10.0	3/8	2	34FER	.785	1.030	.328	.516

COX INDUSTRIES PSR STUDS are designed for welding to flat strip steel to reduce punching shear stress. When ordering specify overall height of rails and diameter of stud. All orders for studs include required ferrules.

LENGTH: Length is before weld. Stud diameters (D) 1/2" and below will be approximately 1/8" shorter after welding. 5/8" will be approximately 3/16" shorter after welding. Maximum length available for cold headed product is 10-3/16". Prices on hot formed studs over 10-3/16" available upon request.

All COX INDUSTRIES PSR STUDS meet AWS specifications. Test reports available on request.

STAINLESS STEELS: COX INDUSTRIES studs are also available in weldable stainless steel. Type 304 is the most commonly used. Other grades of stainless steel (except Type 303) available when required.

FLUX: COX INDUSTRIES Headed Anchor Studs are solid fluxed.

MATERIAL: Low Carbon Steel.

MECHANICAL PROPERTIES: (as cold drawn)

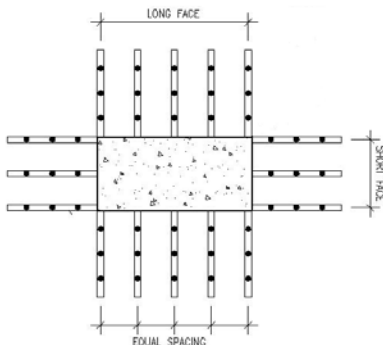
Tensile: 60,000 psi min.

Yield : 51,000 psi min.

Reduction in Area: 50% min.

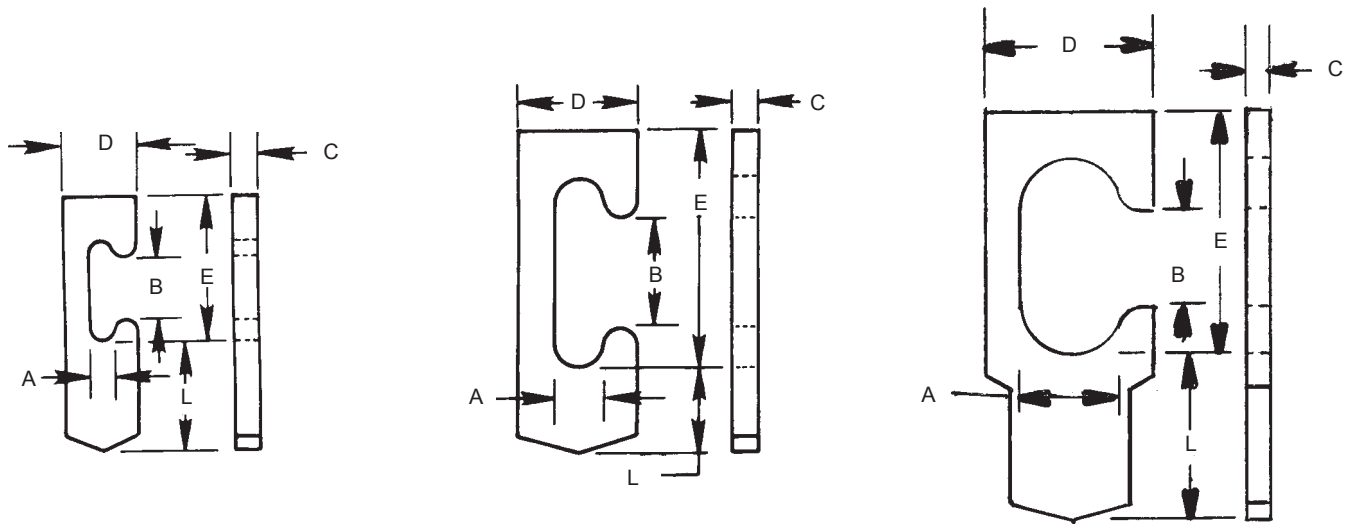
Elongation: 20% in 2 inches min.

Typical Column Layout

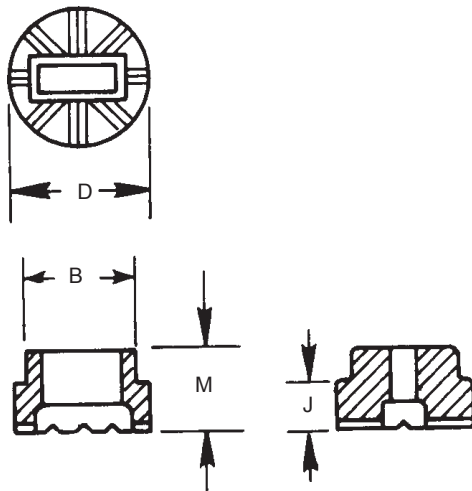


Cox Industries

REC RECTANGULAR STUDS



STUD SPECIFICATIONS					
D	Min. L	C	A	B	E
3/8	1/4	1/8	.130	.34	.74
5/8	5/16	1/8	.255	.5	1.25
7/8	7/8	1/8	.505	.5	1.25

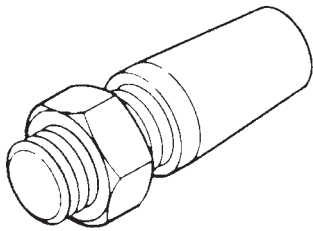


FERRULE SPECIFICATIONS				
STUD SIZE	D	B	M	J
3/8	.640	.505	.390	.234
5/8 & 7/8	1.093	.916	.436	.234

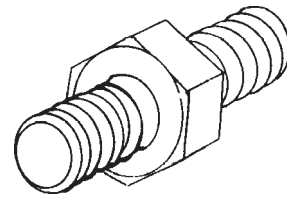


Cox Industries

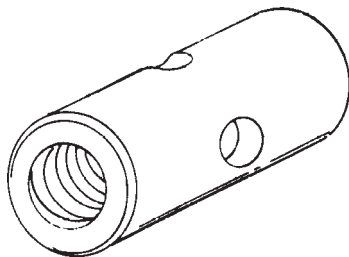
ADAPTORS



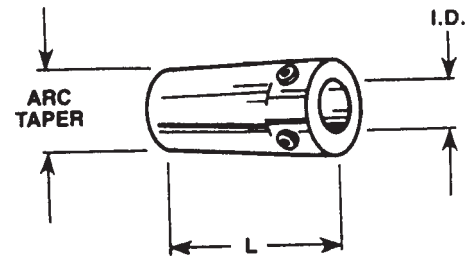
THREADED TAPER ADAPTOR	
PART NO	COST
TADAPT	\$19.50



CONNECTOR STUD	
PART NO	COST
COSTUD	\$19.50



CHUCK ADAPTOR	
PART NO	COST
CADAPT	\$19.50

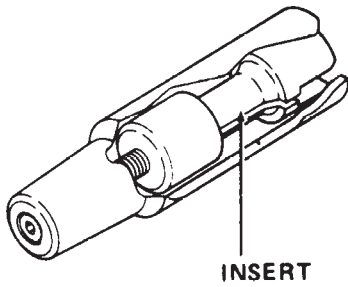


COLLET TAPER ADAPTOR	
PART NO	COST
BADAPT	\$19.50
IADAPT	\$19.50

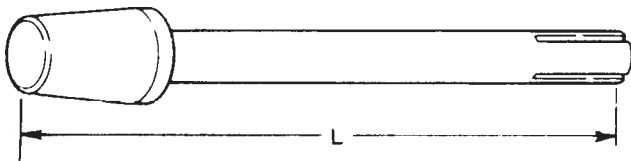


Cox Industries

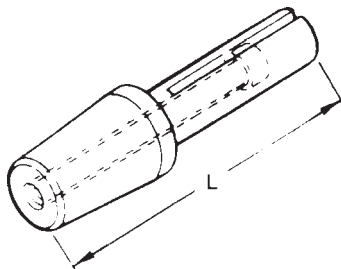
CHUCKS



RECTANGULAR CHUCKS		
STUD SIZE	PART NO.	COST
1/8 X 1/4	CREC12	\$54.00
1/8 X 3/8	CREC13	\$54.00
1/8 X 5/8	CREC15	\$54.00
1/8 X 7/8	CREC17	\$54.00
1/8 X 1	CREC11	\$66.00
3/16 X 3/4	CREC36	\$66.00
3/16 X 1	CREC31	\$66.00



LONG STRAIGHT CHUCKS			
STUD SIZE	PART NO.	L	COST
#6 or 10 ga	CDB#6L	4.750	\$31.50
#8	CDB#8L	4.750	\$31.50
#10 or 3/16	CD#10L	4.750	\$31.50
1/4	CDB14L	4.750	\$31.50
5/16	CDB51L	4.750	\$31.50
3/8	CDB38L	4.750	\$31.50
7/16	CDB71L	4.750	\$31.50
1/2	CDB12L	4.750	\$31.50
5/8	CDB58L	4.750	\$31.50
3/4	CDB34L	4.750	\$31.50

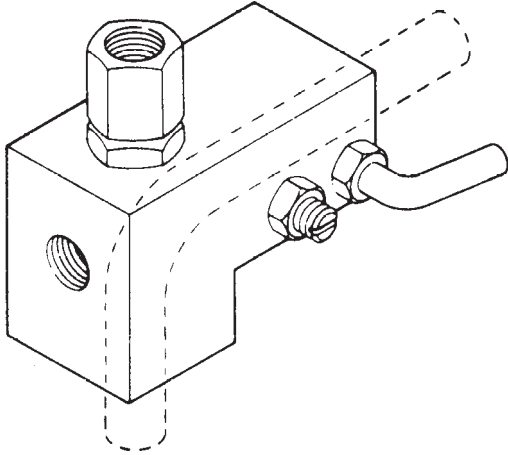


STANDARD STRAIGHT CHUCKS			
STUD SIZE	PART NO.	L	COST
#4 or 12 ga	CDBA#4	2.500	\$19.00
11 ga	CDB11G	2.500	\$19.00
#6 or 10 ga	CDBA#6	2.500	\$19.00
#8	CDBA#8	2.500	\$19.00
#10 or 3/16	CDB#10	2.500	\$19.00
1/4	CDBA14	2.500	\$19.00
5/16	CDBA51	2.500	\$19.00
3/8	CDBA38	2.500	\$19.00
7/16	CDBA71	2.500	\$19.00
1/2	CDBA12	2.500	\$19.00
5/8	CDBA58	2.500	\$28.00
3/4	CDBA34	2.500	\$28.00
7/8	CDBA78	2.500	\$28.00



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CHUCKS



BENT STUD CHUCKS				
STUD SIZE	PART NO	45° COST	PART NO	90° COST
1/4	CB1445	\$75.00	CB1490	\$72.00
3/8	CB3845	\$75.00	CB3890	\$72.00
1/2	CB1245	\$75.00	CB1290	\$72.00
5/8	CB5845	\$90.00	CB5890	\$90.00
3/4	CB3445	\$90.00	CB3490	\$90.00

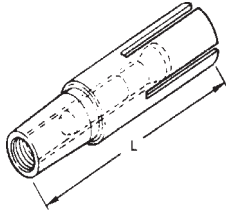


MALE STYLE CHUCKS		
TAP SIZE	PART NO	COST
10-24	CM1024	\$18.50
10-32	CM1032	\$18.50
1/4-20	CM1420	\$18.50
5/16-18	CM5116	\$18.50
3/8-16	CM3816	\$19.50
1/2-13	CM1213	\$19.50
5/8-11	CM5811	\$25.00

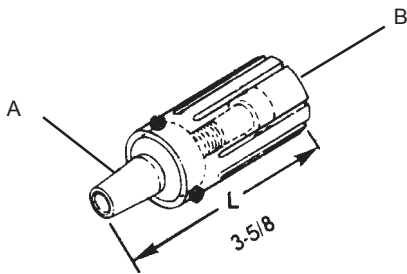


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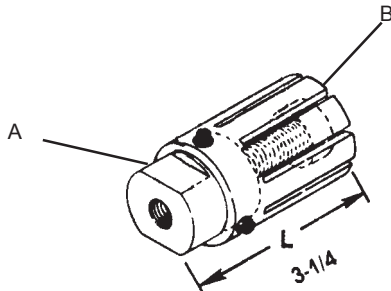
CHUCKS



CONCRETE ANCHOR CHUCKS		
STUD SIZE	CHUCK	
	PART #	COST
1/4	CDBA12	\$18.50
3/8	CDBA34	\$27.50



CONCRETE ANCHOR CHUCKS						
STUD SIZE	CHUCK		BASE "A"		TINE "B"	
	PART #	COST	PART #	COST	PART #	COST
3/8	CHA382	\$44.50	BASE38	\$24.00	CTIN38	\$20.00
1/2	CHCA12	\$44.50	BASE12	\$24.00	CTIN12	\$20.00
5/8	CHCA58	\$44.50	BASE58	\$24.00	CTIN58	\$20.00

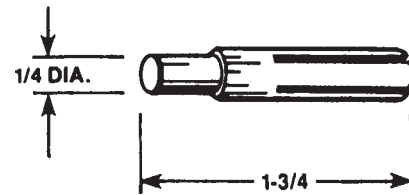
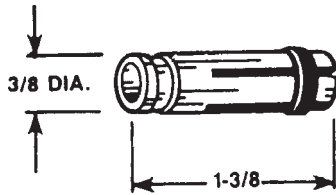


SHEAR CONNECTOR CHUCKS						
STUD SIZE	CHUCK		BASE "A"		TINE "B"	
	PART #	COST	PART #	COST	PART #	COST
3/4	CHCA34	\$44.50	BASE34	\$24.00	CTIN34	\$20.00
7/8	CHCA78	\$44.50	BASE78	\$24.00	CTIN78	\$20.00



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COLLETS



"B" COLLETS		
STUD SIZE	PART NO	COST
#2 or 14 ga	B#2COL	\$10.00
#4 or 12 ga	B#4COL	\$10.00
#5 or 1/8	B#5COL	\$10.00
#6 or 10 ga	B#6COL	\$10.00
#8	B#8COL	\$10.00
#10 or 3/16	B#10CO	\$10.00
1/4	B1/4CO	\$10.00
5/16	B5/1CO	\$10.00
3/8	B3/8CO	\$10.00

* "B" COLLET STOPS ARE AVAILABLE

* METRIC SIZES ARE AVAILABLE

INSERT COLLETS			
STUD DIA.	DEPTH	PART NO	COST
12 ga or #4	1/4	CI#42	\$10.00
	3/8	CI#43	
	1/2	CI#44	
	1	CI#48	
1/8 or #5	1/4	CI#52	\$10.00
	3/8	CI#53	
	1/2	CI#54	
	1	CI#58	
10 ga or #6	1/4	CI#62	\$10.00
	3/8	CI#63	
	1/2	CI#64	
	1	CI#68	
#8	1/4	CI#82	\$10.00
	3/8	CI#83	
	1/2	CI#84	
	1	CI#88	
3/16 or #10	1/4	CI#102	\$10.00
	3/8	CI#103	
	1/2	CI#104	
	1	CI#108	
1/4	1/4	CI1/42	\$10.00
	3/8	CI1/43	
	1/2	CI1/44	
	1	CI1/48	
5/16	1/2	CI5/14	\$10.00
	3/4	CI5/16	
	1	CI5/18	
3/8	1/2	CI3/84	\$10.00
	3/4	CI3/86	
	1	CI3/88	

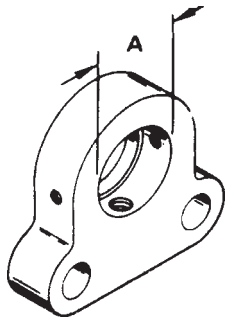
* SPECIAL DEPTHS ARE AVAILABLE

* METRIC SIZES ARE AVAILABLE

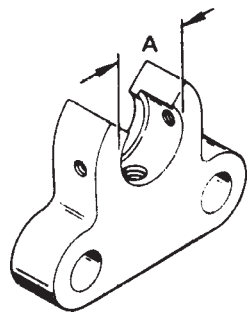


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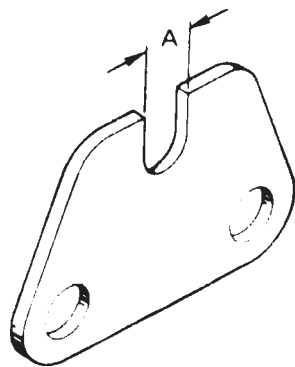
FEET



STANDARD CLOSED FEET			
PART NO	FERRULE GRIP RANGE	A	COST
SFOOTC	1/8 - 1/2	.875	\$30.00
MFOOTC	5/8 - 3/4	1.156	\$30.00
LFOOTC	7/8 - 1	1.750	\$30.00



STANDARD SPLIT FOOT			
PART NO	FERRULE GRIP RANGE	A	COST
SFOOTS	1/8 - 1/2	.875	\$30.00
MFOOTS	5/8 - 3/4	1.156	\$30.00
LFOOTS	7/8 - 1	1.750	\$30.00

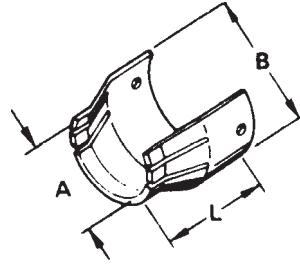
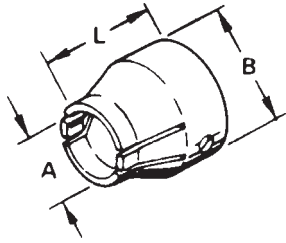


COMBINATION FOOT & GRIPS			
PART NO	STUD DIAMETER	A	COST
CFG1/4	1/4	.410	\$30.00
CFG5/16	5/16	.470	\$30.00
CFG3/8	3/8	.530	\$30.00
CFG7/16	7/16	.610	\$30.00
CFG1/2	1/2	.680	\$30.00
CFG5/8	5/8	.810	\$30.00
CFG3/4	3/4	1.060	\$30.00
CFG7/8	7/8	1.240	\$30.00



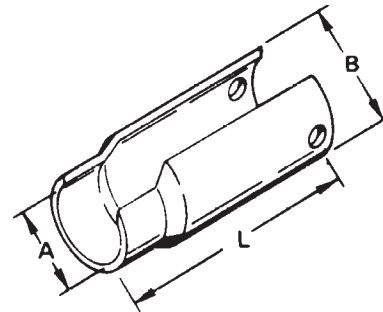
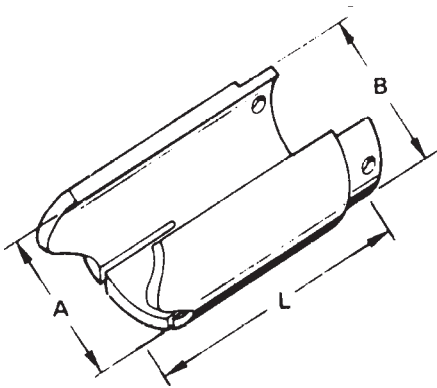
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GRIPS



STANDARD CLOSED GRIPS					
STUD SIZE	PART NO	A	B	L	COST
3/16	CFG31S	.325	.875	.875	\$8.50
1/4	CFG14S	.400	.875	.875	\$8.50
5/16	CFG51S	.465	.875	.875	\$8.50
3/8	CFG38S	.525	.875	.875	\$8.50
7/16	CFG71S	.605	.875	.875	\$8.50
1/2	CFG12S	.670	.875	.875	\$8.50
5/8	CFG58S	.805	1.156	1.000	\$11.00
3/4	CFG34S	1.050	1.156	1.000	\$11.00
7/8	CFG78S	1.230	1.750	1.000	\$11.00
1	CFG1S	1.425	1.750	1.000	\$11.00

STANDARD SPLIT GRIPS					
STUD SIZE	PART NO	A	B	L	COST
3/16	SFG31S	.325	.875	.875	\$8.50
1/4	SFG14S	.400	.875	.875	\$8.50
5/16	SFG51S	.465	.875	.875	\$8.50
3/8	SFG38S	.525	.875	.875	\$8.50
7/16	SFG71S	.605	.875	.875	\$8.50
1/2	SFG12S	.670	.875	.875	\$8.50
5/8	SFG58S	.805	1.156	1.000	\$11.00
3/4	SFG34S	1.050	1.156	1.000	\$11.00
7/8	SFG78S	1.230	1.750	1.000	\$11.00
1	SFG1S	1.425	1.750	1.000	\$11.00



45 DEGREE FERRULE SPLIT GRIPS					
STUD SIZE	PART NO	A	B	L	COST
3/8	SFG38A	.875	.875	2.500	\$42.00
1/2	SFG12A	.875	.875	2.500	\$42.00

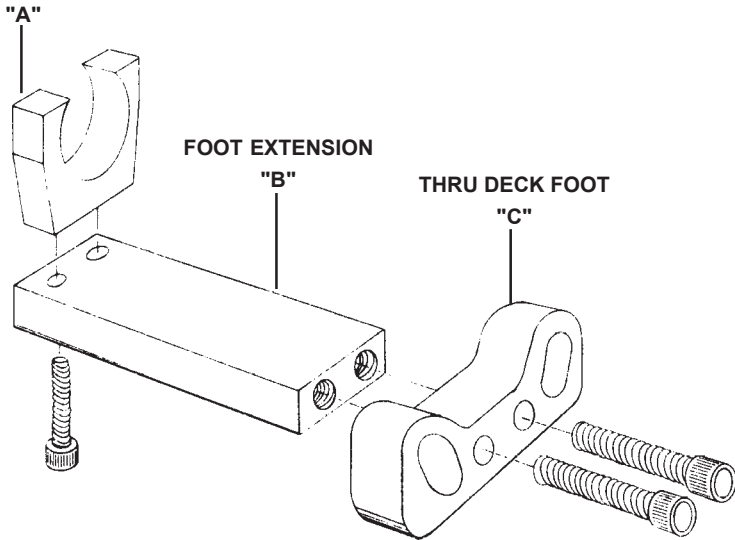
LONG SPLIT GRIPS					
STUD SIZE	PART NO	A	B	L	COST
1/4	SFG14L	.400	.875	1.500	\$11.00
3/8	SFG38L	.525	.875	2.000	\$11.00
1/2	SFG12L	.670	.875	2.000	\$11.00
5/8	SFG58L	.805	1.156	2.000	\$13.00
3/4	SFG34L	1.050	1.156	2.375	\$13.00



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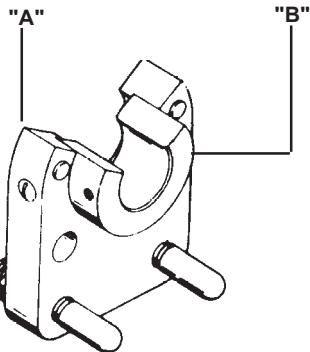
SC ACCESSORIES

FERRULE HOLDER



FOOT EXTENSION ASSEMBLY		
PART NO	COST	
FTEXAS	\$67.00	
FERRULE HOLDER "A"		
SIZE	PART NO	COST
5/8	SCFH58	\$22.50
3/4	SCFH34	\$22.50
7/8	SCFH78	\$22.50
FOOT EXTENSION "B"		
PART NO	COST	
FOOTEX	\$22.50	
THRU DECK FOOT "C"		
PART NO	COST	
TDFOOT	\$22.50	

BIPOD FOOT

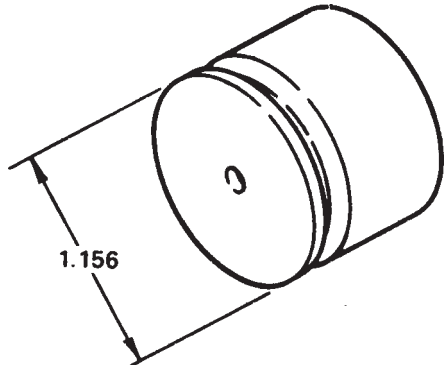


BIPOD FOOT ASSEMBLY		
PART NO	COST	
BPFTAS	\$74.00	
BIPOD FOOT "A"		
PART NO	COST	
BPFOOT	\$52.00	
FERRULE GRIP "B"		
SIZE	PART NO	COST
1/2	SCFG12	\$22.50
5/8	SCFG58	\$22.50
3/4	SCFG34	\$22.50
7/8	SCFG78	\$22.50



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MISCELLANEOUS



SPARK SHIELDS	
PART NO	COST
SPARKS	\$19.50



DIA 3/8" or 5/16" LEGS

STUD GUN LEGS		
L	PART NO	COST
7"	SLEG07	\$60.00
9"	SLEG09	\$60.00
14"	SLEG14	\$60.00
18"	SLEG18	\$60.00
23"	SLEG23	\$60.00
27"	SLEG27	\$60.00
36"	SLEG36	\$60.00
48"	SLEG48	\$60.00



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