

HARDWARE



**NEBRASKA-IOWA
INDUSTRIAL
FASTENERS CORP.**

www.neiafasteners.com

E-Mail: orders@neiafasteners.com

1-800-782-6342

8530 "K" Street
Omaha, NE 68127
Phone: (402) 592-4988
Fax: (402) 592-9271

8116 U.S. Highway 166
Arkansas City, KS 67005
Phone: (620) 442-7526
Fax: (620) 442-7583



www.nfc-usa.com

E-Mail: orders@nfc-usa.com

1-800-786-4658

1817 Jasper Street
Kansas City, MO 64116
Phone: (816) 221-8885
Fax: (816) 472-5555

2335 B-104 E. Chestnut Expwy.
Springfield, MO 65802
Phone: (417) 865-6246
Fax: (417) 865-0596

NOTES

Hardware Section I

Bolts

Carriage, Grade 2	17
Carriage, Grade 5	18
Elevator	19
Flange	20
Plow, Grade 5	20
Shoulder	19
Spring Center	19
Step	18
Whiz Bolts, Grade 5	20

Brass

Cotter Pins	56
Cap Screws	55
Machine Screws	57
Nuts, Hex	55
Nuts, Jam	56
Nuts, Manifold, High	56
Washers, Flat	55
Washers, Lock	56

Cap Screws

316 Stainless Steel	41
Brass	55
Button Head Socket	21
Chrome	58
Flat Head Socket	22
Grade 5	6, 7, 8, 9
Grade 8	10, 11, 12, 13
Grade L-9	14, 15, 16
Socket Head	24, 25
Stainless Steel	42

Chrome

Cap Screws, Hex Head	58
Nuts, Hex	59
Washers, Flat	59
Washers, Lock	59

Copper

Washers, Flat	56
---------------	----

Drill Rod

Drill Rod	27
-----------	----

Nuts

Cap	36
Castle	35
Coupling	27, 36
Crown Lock, Gr. 8	34b
Finished Hex	30
Flange	20
Grade 5	31
Grade 5, High, SAE	31
Grade 5, Jam	34
Grade 8	32
Grade 8, High, SAE	32
Heavy Finished	30
Jam, Grade 5	34a
"K" Lock	35
Left Hand	35
Lock, 2 Way	34a
Lock, Nylon	33, 34b
Lock, Nylon, High	33
Lock, Nylon, Thin	33
Slotted	35
Spin Lock	33
Square	36
Tee	36
Un-Plated, Heavy	30
Wing (Cold Forged)	36

Set Screws

Square Head	23
Socket	28, 29
Stainless	45

Hardware Section I

Stainless Steel (18-8)

Cap Screws,	
Button Head, Socket	44
Flat Head, Socket	44
Hex Head	42
Socket Head	43
Carriage Bolts	42b
Nuts	
Acorn (Cap)	46
Hex	46
Keys Nuts	46
Lock, Nylon	46
Wing	46
Washers	
AN Flat	47
Belleville	47b
Fender	47b
Flat	46
Lock	46
Cotter Pins	48
Roll Pins	48
Set Screws	
Hex Socket	45
Screws	
Machine	50, 51, 52
Sheet Metal	49, 50
Deck Wood	49
Sidewalk Bolts	48
Wedge Anchors	48

Metric (Stainless)

Cap Screws, Hex Head	53
Cap Screws, Socket Head	53
Nuts, Hex	54
Nuts, Wing	54
Washers, Flat	54
Washers, Lock	54

Stainless Steel (316)

Cap Screws, Hex Head	41
Nuts, Hex	41
Washers, Flat	41
Washers, Lock	41

Threaded Rod

B7 Alloy	26
Coupling Nuts	27
Grade 2	26
Left Hand Thread	26
Metric	27
Stainless Steel	27

Washers

Chrome	59
Flat, Extra Thick	40
Flat, SAE	37
Flat, USS	37
Flat, Grade 8, SAE	38
Flat, Grade 8, USS	38
Lock	39
Lock, Grade 8	39
Lock, High Collar Gr. 8	39
Oversize (Fender)	39
Stainless	47a
Star, External Tooth	40
Star, Internal Tooth	40

FASTENER FACTS

Recommended Tightening Torques

USS (UNC) Coarse Threads

Bolt Diameter	System Pre-Load (Lb.)	Torque Bolt Hd. (Ft. Lb.)	Torque by Nut (Ft. Lb.)
1/4-20	3,450	10	11
5/16-18	5,700	19	21
3/8-16	8,450	30	33
7/16-14	11,550	55	60
1/2-13	15,450	85	95
9/16-12	19,800	120	140
5/8-11	24,550	170	185
3/4-10	36,350	265	290
7/8-9	50,300	475	505
1-8	65,900	550	775
1-1/8-7	83,000	1,025	1,150
1-1/4-7	105,400	1,400	1,600
1-1/2-6	152,800	2,900	3,250

NOTE:

- Values are based on using the complete X fastening combination: Cap Screw, Nut and Flat Washer.

SAE (UNF) Fine Threads

Bolt Diameter	System Pre-Load (Lb.)	Torque Bolt Hd. (Ft. Lb.)	Torque by Nut (Ft. Lb.)
1/4-28	3,950	12	13
5/16-24	6,300	20	23
3/8-24	9,550	35	38
7/16-20	12,900	60	65
1/2-20	17,400	95	105
9/16-18	22,100	135	150
5/8-18	27,800	190	205
3/4-16	40,600	330	355
7/8-14	55,400	520	585
1-14 (UNRS)	73,800	700	900
1-1/8-12	93,100	1,150	1,325
1-1/4-12	116,700	1,600	1,750
1-1/2-12	171,900	3,300	3,650


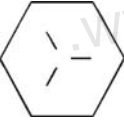




FASTENER FACTS

Head Markings and Physical Properties for ASTM* and SAE* Grade Steel Cap Screws & Bolts

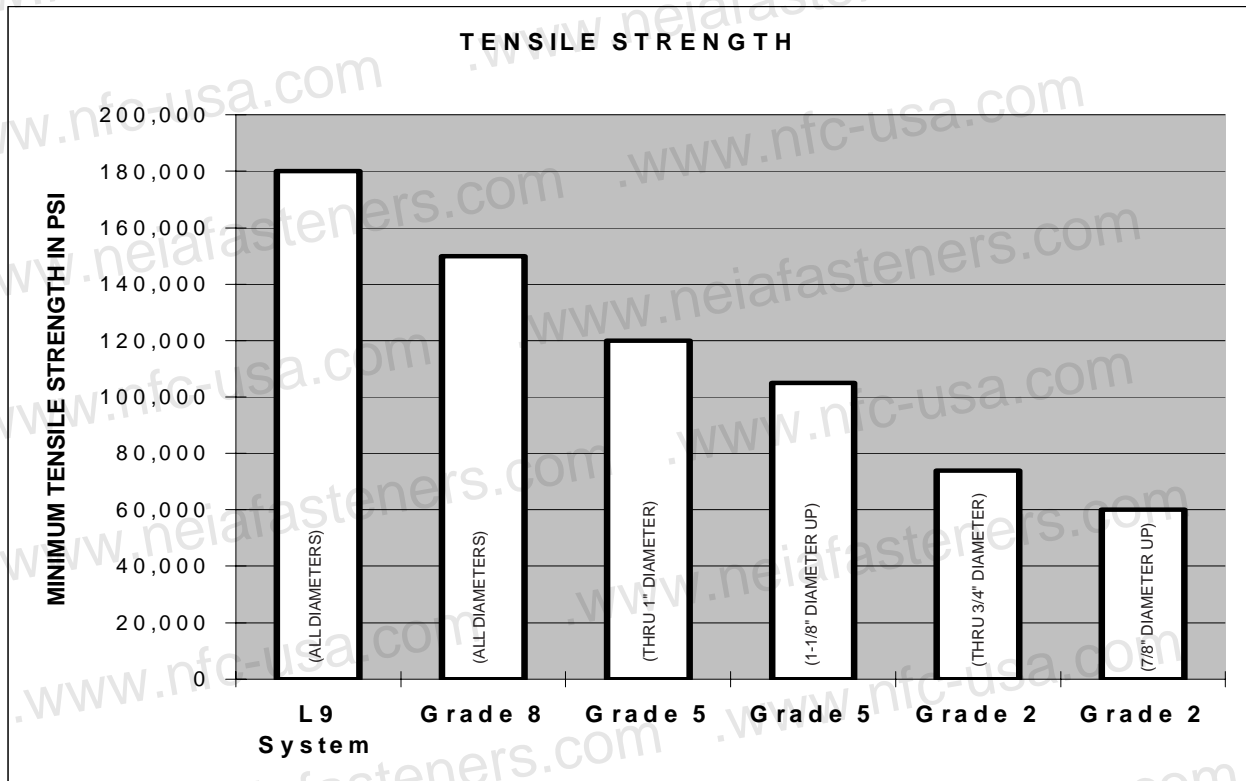
*ASTM American Society of Testing Materials

*SAE Society of Automotive Engineers

Head Markings Tell the True Story

Hex Head Marking	Marking Specification and Grade	Typical SAE & ASTM Analyses for Reference	Material	Physical Properties		
				For Fastener Diameters	Proof Load PSI	Tensile Strength (Min.) PSI
	No Marking SAE Grade 1	C-1010 C-1020	Low Carbon Steel	1/4 thru 1-1/2	33,000	60,000
	No Marking SAE - Grade 2	C-1018 C-1020	Low Carbon Steel	1/4 thru 1-1/2	55,000	74,000
	3 Radial Lines SAE Grade 5	C-1038	Medium Carbon Steel, Quenched & Tempered	1/4 thru 1"	85,000	120,000
				Over 1" to 1-1/2"	74,000	105,000
				Over 1-1/2" thru 3"	55,000	90,000
	5 Radial Lines SAE Grade 7	1335	Medium Carbon Steel Quenched & Tempered, Roll Threaded after Heat Treatment	Up to 1-1/2"	105,000	133,000
		1335				
	6 Radial Lines SAE Grade 8	8735	Medium Carbon Alloy Steel, Quenched & Tempered	Up to 1-1/2"	120,000	150,000
		8740				
	9 Radial Lines and L-9™ Logo L-9 System	8735	Medium Carbon Alloy Steel, Quenched & Tempered	Up to 1-1/2"	145,000	180,000
		8740				
	3 Radial Lines and A-325 Logo A-325	ASTM: A-325	Medium Carbon Steel	1/2" to 1" Incl.	85,000	120,000
		ASTM: A-325		1-1/8" to 1-1/2" Inclusive	74,000	105,000

FASTENER FACTS



Use following formula to determine thread length of cap screw:

- Bolts below 6" length: $2 \times \text{Dia.} + 1/4" = \text{Thread Length}$
- Bolts 6" or longer: $2 \times \text{Dia.} + 1/2" = \text{Thread Length}$

Bolt Length: Below 6"		Bolt Length: 6" and Above	
Diameter	Thread Length	Diameter	Thread Length
1/4"	3/4"	1/4"	1"
5/16"	7/8"	5/16"	1 1/8"
3/8"	1"	3/8"	1 1/4"
7/16"	1 1/8"	7/16"	1 3/8"
1/2"	1 1/4"	1/2"	1 1/2"
9/16"	1 3/8"	9/16"	1 5/8"
5/8"	1 1/2"	5/8"	1 3/4"
3/4"	1 3/4"	3/4"	2"
7/8"	2"	7/8"	2 1/4"
1"	2 1/4"	1"	2 1/2"
1 1/8"	2 1/2"	1 1/8"	2 3/4"
1 1/4"	2 3/4"	1 1/4"	3"

USS		SAE	
Bolt Diameter	Threads Per In.	Bolt Diameter	Threads Per In.
#2	56	#2	64
#3	48		56
#4	40	#4	48
#5	40		44
#6	32	#6	40
#8	32	#8	36
#10	24	#10	32
#12	24	#12	28
1/4"	20	1/4"	28
5/16"	18	5/16"	24
3/8"	16	3/8"	24
7/16"	14	7/16"	20
1/2"	13	1/2"	20
9/16"	12	9/16"	18
5/8"	11	5/8"	18
3/4"	10	3/4"	16
7/8"	9	7/8"	14
1"	8	1"	14
1-1/8"	7	1-1/8"	12
1-1/4"	7	1-1/4"	12
1-1/2"	6	1-1/2"	12

FASTENER FACTS

Weights of Hex Head Cap Screws

Length	Diameter													
	1/4		5/16		3/8		7/16		1/2		9/16		5/8	
	Wgt. per 100 pcs.	Pcs. per lb.	Wgt. per 100 pcs.	Pcs. per lb.	Wgt. per 100 pcs.	Pcs. per lb.	Wgt. per 100 pcs.	Pcs. per lb.	Wgt. per 100 pcs.	Pcs. per lb.	Wgt. per 100 pcs.	Pcs. per lb.	Wgt. per 100 pcs.	Pcs. per lb.
3/8	1.05	95.24												
1/2	1.18	84.75	1.99	50.25	2.93	34.13								
5/8	1.31	76.34	2.2	45.45	3.24	30.86								
3/4	1.44	69.44	2.41	41.49	3.55	28.17	5.08	19.69	8.1	12.35				
7/8	1.57	63.69	2.62	38.17	3.86	25.91	5.5	18.18	8.66	11.55				
1	1.74	57.47	2.83	35.34	4.17	23.98	5.92	16.89	9.22	10.85	11.3	8.87	15.2	6.60
1 1/4	2.08	48.08	3.37	29.67	4.86	20.58	6.76	14.79	10.3	9.67	12.7	7.87	16.9	5.91
1 1/2	2.43	41.15	3.91	25.58	5.64	17.73	7.82	12.79	11.6	8.63	14.1	7.07	18.7	5.35
1 3/4	2.77	36.10	4.45	22.47	6.42	15.58	8.88	11.26	13	7.71	15.9	6.29	20.7	4.84
2	3.12	32.05	4.99	20.04	7.19	13.91	9.94	10.06	14.4	6.97	17.6	5.67	22.8	4.38
2 1/4	3.46	28.90	5.52	18.12	7.97	12.55	11	9.09	15.7	6.36	19.4	5.16	25	4.00
2 1/2	3.81	26.25	6.06	16.50	8.74	11.44	12.1	8.29	17.1	5.84	21.1	4.73	27.1	3.69
2 3/4	4.15	24.10	6.6	15.15	9.52	10.50	13.1	7.62	18.5	5.41	22.9	4.37	29.3	3.42
3	4.5	22.22	7.14	14.01	10.3	9.71	14.2	7.05	19.9	5.03	24.7	4.06	31.4	3.18
3 1/4	4.84	20.66	7.68	13.02	11.1	9.03	15.2	6.56	21.3	4.71	26.4	3.79	33.6	2.98
3 1/2	5.19	19.27	8.21	12.18	11.9	8.44	16.3	6.13	22.6	4.42	28.2	3.55	35.8	2.80
3 3/4	5.53	18.08	8.75	11.43	12.6	7.92	17.4	5.76	24	4.16	29.9	3.34	37.9	2.64
4	5.88	17.01	9.29	10.76	13.4	7.46	18.4	5.43	25.4	3.94	31.7	3.16	40.1	2.50
4 1/2	6.57	15.22	10.4	9.64	15	6.69	20.5	4.87	28.2	3.55	35.2	2.84	44.4	2.25
5	7.26	13.77	11.4	8.74	16.5	6.06	22.7	4.42	30.9	3.24	38.7	2.59	48.7	2.05
5 1/2	7.95	12.58	12.5	7.99	18.1	5.54	24.8	4.04	33.7	2.97	42.2	2.37	53	1.89
6	8.64	11.57	13.6	7.35	19.6	5.10	26.9	3.72	36.4	2.75	45.7	2.19	57.3	1.75
6 1/2	9.22	10.85	14.5	6.90	20.9	4.78	28.3	3.53	38.6	2.59			61.6	1.62
7	9.89	10.11	15.5	6.45	22.5	4.44	30.4	3.29	40.9	2.44			65.8	1.52
7 1/2	10.6	9.43	16.6	6.02	24	4.17	32.5	3.08	43.5	2.30			70	1.43
8	11.2	8.93	17.7	5.65	25.5	3.92	34.5	2.90	46.1	2.17			74.1	1.35
8 1/2	11.9	8.40	18.7	5.35	27	3.70	36.6	2.73	48.8	2.05			78.3	1.28
9	12.6	7.94	19.8	5.05	28.5	3.51	38.6	2.59	51.5	1.94			82.4	1.21
9 1/2	13.3	7.52	20.8	4.81	30.1	3.32	40.7	2.46	54.2	1.85			86.6	1.15
10	13.9	7.19	21.9	4.57	31.6	3.16	42.8	2.34	57	1.75			90.8	1.10
10 1/2	14.6	6.85	22.9	4.37	33.1	3.02	44.8	2.23	59.6	1.68			94.9	1.05
11	15.3	6.54	24	4.17	34.6	2.89	46.9	2.13	62.3	1.61			99.1	1.01
11 1/2	15.9	6.29	25	4.00	36.1	2.77	48.9	2.04	65	1.54			103	0.97
12	16.6	6.02	26.1	3.83	37.6	2.66	51	1.96	67.6	1.48			107	0.93

FASTENER FACTS

Weights of Hex Head Cap Screws

Length	Diameter													
	3/4		7/8		1		1-1/8		1-1/4		1-3/8		1-1/2	
	Wgt. per 100 pcs.	Pcs. per lb.	Wgt. per 100 pcs.	Pcs. per lb.	Wgt. per 100 pcs.	Pcs. per lb.	Wgt. per 100 pcs.	Pcs. per lb.	Wgt. per 100 pcs.	Pcs. per lb.	Wgt. per 100 pcs.	Pcs. per lb.	Wgt. per 100 pcs.	Pcs. per lb.
1	24.5	4.09	36.8	2.7	51.4	1.9	70.4	1.4	94.3	1.1	122	0.8	157	0.6
1 1/4	27.1	3.70	40.4	2.5	56.1	1.8	76.3	1.3	101.7	1	131	0.8	168	0.6
1 1/2	29.7	3.37	43.9	2.3	60.8	1.6	82.2	1.2	109.1	0.9	140	0.7	178	0.6
1 3/4	32.3	3.10	47.5	2.1	65.5	1.5	88.1	1.1	116.6	0.9	149	0.7	189	0.5
2	35.1	2.85	51.1	2	70.1	1.4	94	1.1	124	0.8	158	0.6	200	0.5
2 1/4	38.2	2.62	55	1.8	74.8	1.3	99.9	1	131.5	0.8	166	0.6	211	0.5
2 1/2	41.3	2.42	59.2	1.7	79.9	1.3	106	0.9	138.9	0.7	175	0.6	221	0.5
2 3/4	44.5	2.25	63.4	1.6	85.4	1.2	112	0.9	146.3	0.7	184	0.5	232	0.4
3	47.6	2.10	67.7	1.5	91	1.1	119	0.8	154.4	0.6	193	0.5	243	0.4
3 1/4	50.7	1.97	71.9	1.4	96.5	1	126	0.8	163	0.6	203	0.5	254	0.4
3 1/2	53.8	1.86	76.1	1.3	102	1	133	0.8	171.7	0.6	213	0.5	265	0.4
3 3/4	56.9	1.76	80.3	1.2	108	0.9	140	0.7	180.3	0.6	224	0.4	278	0.4
4	60	1.67	84.6	1.2	113	0.9	147	0.7	188.9	0.5	234	0.4	290	0.3
4 1/2	66.2	1.51	93	1.1	124	0.8	161	0.6	206.2	0.5	255	0.4	315	0.3
5	72.4	1.38	101	1	135	0.7	175	0.6	223.5	0.4	276	0.4	340	0.3
5 1/2	78.7	1.27	110	0.9	146	0.7	189	0.5	240.8	0.4	297	0.3	365	0.3
6	84.9	1.18	118	0.8	157	0.6	203	0.5	258	0.4	318	0.3	390	0.3
6 1/2	90.9	1.10	127	0.8	170	0.6	218	0.5	278	0.4	341	0.3	417	0.2
7	96.9	1.03	135	0.7	180	0.6	232	0.4	295	0.3	362	0.3	442	0.2
7 1/2	103	0.97	143	0.7	191	0.5	245	0.4	311	0.3	383	0.3	467	0.2
8	109	0.92	151	0.7	202	0.5	259	0.4	328	0.3	404	0.2	492	0.2
8 1/2	115	0.87	159	0.6	213	0.5	272	0.4	345	0.3	424	0.2	517	0.2
9	121	0.83	168	0.6	223	0.4	286	0.3	362	0.3	446	0.2	542	0.2
9 1/2	127	0.79	176	0.6	234	0.4	300	0.3	379	0.3	466	0.2	567	0.2
10	133	0.75	184	0.5	245	0.4	313	0.3	395	0.3	488	0.2	592	0.2
10 1/2	139	0.72	192	0.5	255	0.4	327	0.3	412	0.2	508	0.2	617	0.2
11	145	0.69	201	0.5	266	0.4	340	0.3	429	0.2	530	0.2	642	0.2
11 1/2	151	0.66	209	0.5	277	0.4	354	0.3	446	0.2	550	0.2	667	0.1
12	158	0.63	217	0.5	288	0.3	368	0.3	462	0.2	572	0.2	692	0.1

CAP SCREWS

- Zinc Plated
- Medium Carbon Steel
- Quenched and Tempered

Grade 5 Cap Screws



Length (In.)	Thread	Diameter (In.)				
		1/4"	5/16"	3/8"	7/16"	1/2"
1/2"	USS/UNC	90000*	90060*	90120*		
	SAE/UNF	90001*	90061*	90121*		
5/8"	USS/UNC	90002*	90062*	90122*		
	SAE/UNF		90063*	90123*		
3/4"	USS/UNC	90004*	90064*	90124*	90184*	90244*
	SAE/UNF	90005*	90065*	90125*	90185*	90245*
7/8"	USS/UNC	90006*	90066*	90126*		90246*
	SAE/UNF		90067*	90127*		
1"	USS/UNC	90008*	90068*	90128*	90188*	90248*
	SAE/UNF	90009*	90069*	90129*	90189*	90249*
1-1/4"	USS/UNC	90010	90070	90130*	90190*	90250*
	SAE/UNF	90011	90071	90131*	90191*	90251*
1-1/2"	USS/UNC	90012	90072	90132	90192	90252*
	SAE/UNF	90013	90073	90133	90193	90253*
1-3/4"	USS/UNC	90014	90074	90134	90194	90254
	SAE/UNF	90015	90075	90135	90195	90255
2"	USS/UNC	90016	90076	90136	90196	90266
	SAE/UNF	90017	90077	90137	90197	90267
2-1/4"	USS/UNC	90018	90078	90138	90198	90268
	SAE/UNF	90019	90079	90139	90199	90269
2-1/2"	USS/UNC	90020	90080	90140	90200	90270
	SAE/UNF	90021	90081	90141	90201	90271
2-3/4"	USS/UNC	90022	90082	90142	90202	90272
	SAE/UNF	90023	90083	90143	90203	90273
3"	USS/UNC	90024	90084	90144	90204	90274
	SAE/UNF	90025	90085	90145	90205	90275
3-1/4"	USS/UNC	90026	90086	90146	90206	90276
	SAE/UNF	90027	90087	90147	90207	90277
3-1/2"	USS/UNC	90028	90088	90148	90208	90278
	SAE/UNF	90029	90089	90149	90209	90279
3-3/4"	USS/UNC	90030	90090	90150	90210	90280
	SAE/UNF	90031	90091	90151	90211	90281
4"	USS/UNC	90032	90092	90152	90212	90282
	SAE/UNF	90033	90093	90153	90213	90283
4-1/2"	USS/UNC	90036	90096	90156	90216	90286
	SAE/UNF	90037	90097	90157	90217	90287
5"	USS/UNC	90040	90100	90160	90220	90290
	SAE/UNF	90041	90101	90161	90221	90291
5-1/2"	USS/UNC	90044	90104	90164	90224	90294
	SAE/UNF	90045	90105	90165	90225	90295
6"	USS/UNC	90048	90108	90168	90228	90298
	SAE/UNF	90049	90109	90169	90229	90299

* Asterisk indicates fully threaded bolt

CAP SCREWS

- Zinc Plated
- Medium Carbon Steel
- Quenched and Tempered

Grade 5 Cap Screws



Length (In.)	Thread	Diameter (In.)				
		1/4"	5/16"	3/8"	7/16"	1/2"
6-1/2"	USS/UNC SAE/UNF			90170		90300 90301
7"	USS/UNC SAE/UNF		90112	90172		90302 90303
7-1/2"	USS/UNC SAE/UNF	90056		90174		90304 90305
8"	USS/UNC SAE/UNF		90116	90176		90306 90307
8-1/2"	USS/UNC SAE/UNF		90118			90308
9"	USS/UNC SAE/UNF	90062		90180		90310
9-1/2"	USS/UNC SAE/UNF	90064		90182		90312
10"	USS/UNC SAE/UNF			90183		90314
10-1/2"	USS/UNC SAE/UNF					
11"	USS/UNC SAE/UNF					90315
11-1/2"	USS/UNC SAE/UNF					
12"	USS/UNC SAE/UNF					90316

CAP SCREWS

- Zinc Plated
- Medium Carbon Steel
- Quenched and Tempered

Grade 5 Cap Screws



Length (In.)	Thread	Diameter (In.)				
		9/16"	5/8"	3/4"	7/8"	1"
1"	USS/UNC	90320*	90384*	90444*		
	SAE/UNF	90321*	90385*	90445*		
1-1/4"	USS/UNC	90322*	90386*	90446*		
	SAE/UNF	90323*	90387*	90447*		
1-1/2"	USS/UNC	90324*	90388*	90448*	90510*	90570*
	SAE/UNF	90325*	90389*	90449*	90511*	90571*
1-3/4"	USS/UNC	90326	90390*	90450*	90512*	90572*
	SAE/UNF	90327	90391*	90451*	90513*	90573*
2"	USS/UNC	90328	90392	90452*	90514*	90574*
	SAE/UNF	90329	90393	90453*	90515*	90575*
2-1/4"	USS/UNC	90330	90394	90454	90516*	90576*
	SAE/UNF	90331	90395	90455	90517*	90577*
2-1/2"	USS/UNC	90332	90396	90456	90518	90578*
	SAE/UNF	90333	90397	90457	90519	90579*
2-3/4"	USS/UNC	90334	90398	90458	90520	90580
	SAE/UNF	90335	90399	90459	90521	90581
3"	USS/UNC	90336	90400	90460	90522	90582
	SAE/UNF	90337	90401	90461	90523	90583
3-1/4"	USS/UNC	90338	90402	90462	90524	90584
	SAE/UNF	90339	90403	90463	90525	90585
3-1/2"	USS/UNC	90340	90404	90464	90526	90586
	SAE/UNF	90341	90405	90465	90527	90587
3-3/4"	USS/UNC	90342	90406	90466	90528	90588
	SAE/UNF	90343	90407	90467	90529	90589
4"	USS/UNC	90344	90408	90468	90530	90590
	SAE/UNF	90345	90409	90469	90531	90591
4-1/2"	USS/UNC	90348	90412	90472	90534	90594
	SAE/UNF	90349	90413	90473	90535	90595
5"	USS/UNC	90352	90416	90476	90538	90598
	SAE/UNF	90353	90417	90477	90539	90599
5-1/2"	USS/UNC	90356	90420	90480	90542	90602
	SAE/UNF	90357	90421	90481	90543	90603
6"	USS/UNC	90360	90424	90484	90546	90606
	SAE/UNF	90361	90425	90485	90547	90607

* Asterisk indicates fully threaded bolt

CAP SCREWS

- Zinc Plated
- Medium Carbon Steel
- Quenched and Tempered

Grade 5 Cap Screws



Length (In.)	Thread	Diameter (In.)				
		9/16"	5/8"	3/4"	7/8"	1"
6-1/2"	USS/UNC SAE/UNF		90426 90427	90486 90487	90548 90549	90608
7"	USS/UNC SAE/UNF		90428 90429	90488 90489	90550 90551	90610 90611
7-1/2"	USS/UNC SAE/UNF		90430 90431	90490	90552	90612
8"	USS/UNC SAE/UNF		90432 90433	90492 90493	90554 90555	90614 90615
8-1/2"	USS/UNC SAE/UNF		90434	90494	90556	90616
9"	USS/UNC SAE/UNF		90436	90496	90558	90618
9-1/2"	USS/UNC SAE/UNF		90438	90498	90560	90620
10"	USS/UNC SAE/UNF		90440	90500	90562 90563	90622
10-1/2"	USS/UNC SAE/UNF					
11"	USS/UNC SAE/UNF		90441			
12"	USS/UNC SAE/UNF			90506		

SAE Grade 5 Cap Screw Black Finish

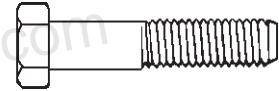


Part No.	Diameter	Thread	Length	Finish
90601	1"	SAE/UNF	5"	Black

CAP SCREWS

- Zinc and Yellow Dichromate Plated
- Medium Carbon Alloy Steel, Quenched & Tempered
- 120,000 psi Proof Load (Minimum)
- 150,000 psi Tensile Strength (Minimum)

Grade 8 Cap Screws



Length (In.)	Thread	Diameter (In.)				
		1/4"	5/16"	3/8"	7/16"	1/2"
1/2"	USS/UNC	92000*	92060*	92120*		
	SAE/UNF	92001*	92061*	92121*		
3/4"	USS/UNC	92004*	92064*	92124*	92184*	92244*
	SAE/UNF	92005*	92065*	92125*	92185*	92245*
1"	USS/UNC	92008*	92068*	92128*	92188*	92248*
	SAE/UNF	92009*	92069*	92129*	92189*	92249*
1-1/4"	USS/UNC	92010	92070	92130*	92190*	92250*
	SAE/UNF	92011	92071	92131*	92191*	92251*
1-1/2"	USS/UNC	92012	92072	92132	92192	92252*
	SAE/UNF	92013	92073	92133	92193	92253*
1-3/4"	USS/UNC	92014	92074	92134	92194	92254
	SAE/UNF	92015	92075	92135	92195	92255
2"	USS/UNC	92016	92076	92136	92196	92266
	SAE/UNF	92017	92077	92137	92197	92267
2-1/4"	USS/UNC	92018	92078	92138	92198	92268
	SAE/UNF	92019	92079	92139	92199	92269
2-1/2"	USS/UNC	92020	92080	92140	92200	92270
	SAE/UNF	92021	92081	92141	92201	92271
2-3/4"	USS/UNC	92022	92082	92142	92202	92272
	SAE/UNF	92023	92083	92143	92203	92273
3"	USS/UNC	92024	92084	92144	92204	92274
	SAE/UNF	92025	92085	92145	92205	92275
3-1/4"	USS/UNC	92026	92086	92146	92206	92276
	SAE/UNF	92027	92087	92147	92207	92277
3-1/2"	USS/UNC	92028	92088	92148	92208	92278
	SAE/UNF	92029	92089	92149	92209	92279
3-3/4"	USS/UNC	92030	92090	92150	92210	92280
	SAE/UNF	92031	92091	92151	92211	92281
4"	USS/UNC	92032	92092	92152	92212	92282
	SAE/UNF	92033	92093	92153	92213	92283
4-1/2"	USS/UNC	92036	92096	92156	92216	92286
	SAE/UNF	92037	92097	92157	92217	92287
5"	USS/UNC	92040	92100	92160	92220	92290
	SAE/UNF	92041	92101	92161	92221	92291
5-1/2"	USS/UNC	92044	92104	92164	92224	92294
	SAE/UNF	92045	92105	92165	92225	92295
6"	USS/UNC	92048	92108	92168	92228	92298
	SAE/UNF	92049	92109	92169	92229	92299

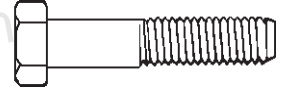
- Manufactured to SAE J-429 and ANSI B18.2.1 1981 ASTM-354-BD
- Rockwell Hardness C33-C39 UNRC-UNRF Class 2A
- Zinc Yellow Di-Chromate

* Asterisk indicates fully threaded bolt

CAP SCREWS

- Zinc and Yellow Dichromate Plated
- Medium Carbon Alloy Steel, Quenched & Tempered
- 120,000 psi Proof Load (Minimum)
- 150,000 psi Tensile Strength (Minimum)

Grade 8 Cap Screws



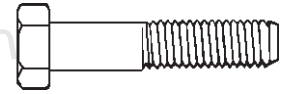
- Manufactured to SAE J-429 and ANSI B18.2.1 1981 ASTM-354-BD
- Rockwell Hardness C33-C39 UNRC-UNRF Class 2A
- Zinc Yellow Di-Chromate

Length (In.)	Thread	Diameter (In.)		
		3/8"	7/16"	1/2"
6-1/2"	USS/UNC	92170	92230	92300
	SAE/UNF	92171	92231	92301
7"	USS/UNC	92172	92232	92302
	SAE/UNF	92173	92233	92303
7-1/2"	USS/UNC	92174		92304
	SAE/UNF			92305
8"	USS/UNC	92176	92236	92306
	SAE/UNF			92307
8-1/2"	USS/UNC			92308
	SAE/UNF			92309
9"	USS/UNC			92310
	SAE/UNF			92311
9-1/2"	USS/UNC			92312
	SAE/UNF			92313
10"	USS/UNC			92314
	SAE/UNF			92315
10-1/2"	USS/UNC			92316
	SAE/UNF			92317
11"	USS/UNC			92318
	SAE/UNF			92319
11-1/2"	USS/UNC			92320
	SAE/UNF			92321
12"	USS/UNC			92322
	SAE/UNF			92323

CAP SCREWS

- Zinc and Yellow Dichromate Plated
- Medium Carbon Alloy Steel, Quenched & Tempered
- 120,000 psi Proof Load (Minimum)
- 150,000 psi Tensile Strength (Minimum)

Grade 8 Cap Screws



Length (In.)	Thread	Diameter (In.)							
		9/16"	5/8"	3/4"	7/8"	1"	1-1/8"	1-1/4"	1-1/2"
1"	USS/UNC	92330*	92400*	92476*					
	SAE/UNF	92331*	92401*	92477*					
1-1/4"	USS/UNC	92332*	92402*	92478*					
	SAE/UNF	92333*	92403*	92479*					
1-1/2"	USS/UNC	92334*	92404*	92480*	92550*	92610*			
	SAE/UNF	92335*	92405*	92481*	92551*	92611*			
1-3/4"	USS/UNC	92336	92406*	92482*	92552*	92612*			
	SAE/UNF	92337	92407*	92483*	92553*	92613*			
2"	USS/UNC	92338	92408	92484*	92554*	92614*			
	SAE/UNF	92339	92409	92485*	92555*	92615*			
2-1/4"	USS/UNC	92340	92410	92486	92556*	92616*			
	SAE/UNF	92341	92411	92487	92557*	92617*			
2-1/2"	USS/UNC	92342	92412	92488	92558	92618*	92697*		
	SAE/UNF	92343	92413	92489	92559	92619*			
2-3/4"	USS/UNC	92344	92414	92490	92560	92620			
	SAE/UNF	92345	92415	92491	92561	92621			
3"	USS/UNC	92346	92416	92492	92562	92622	92700	92750*	
	SAE/UNF	92347	92417	92493	92563	92623	92701	92751*	
3-1/4"	USS/UNC	92348	92418	92494	92564	92624			
	SAE/UNF	92349	92419	92495	92565	92625			
3-1/2"	USS/UNC	92350	92420	92496	92566	92626	92704	92754	
	SAE/UNF	92351	92421	92497	92567	92627	92705	92755	
3-3/4"	USS/UNC	92352	92422	92498	92568	92628			
	SAE/UNF	92353	92423	92499	92569	92629			
4"	USS/UNC	92354	92424	92500	92570	92630	92708	92758	
	SAE/UNF	92355	92425	92501	92571	92631	92709	92759	
4-1/2"	USS/UNC	92358	92428	92504	92572	92632	92712	92762	
	SAE/UNF	92359	92429	92505	92573	92633	92713	92763	
5"	USS/UNC	92362	92432	92508	92574	92634	92716	92766	92818
	SAE/UNF	92363	92433	92509	92575	92635	92717	92767	
5-1/2"	USS/UNC	92366	92436	92512	92576	92636	92720	92770	92822
	SAE/UNF	92367	92437	92513	92577	92637	92721	92771	
6"	USS/UNC	92370	92440	92516	92578	92638	92724	92774	92824
	SAE/UNF	92371	92441	92517	92579	92639	92725	92775	

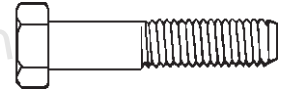
- Manufactured to SAE J-429 and ANSI B18.2.1 1981 ASTM-354-BD
- Rockwell Hardness C33-C39 UNRC-UNRF Class 2A
- Zinc Yellow Di-Chromate

* Asterisk indicates fully threaded bolt

CAP SCREWS

- Zinc and Yellow Dichromate Plated
- Medium Carbon Alloy Steel, Quenched & Tempered
- 120,000 psi Proof Load (Minimum)
- 150,000 psi Tensile Strength (Minimum)

Grade 8 Cap Screws



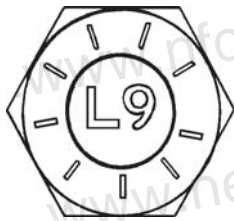
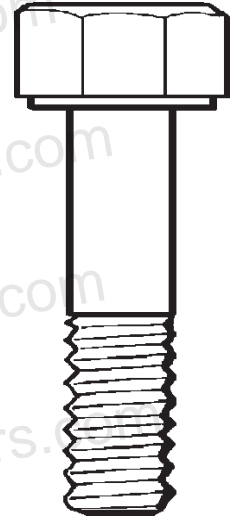
Length (In.)	Thread	Diameter (In.)						
		5/8"	3/4"	7/8"	1"	1-1/8"	1-1/4"	1-1/2"
6-1/2"	USS/UNC	92442	92518	92580	92640	92726	92776	92826
	SAE/UNF	92443	92519	92581	92641	92727	92777	
7"	USS/UNC	92444	92520	92582	92642	92728	92778	92828
	SAE/UNF	92445	92521	92583	92643	92729	92779	
7-1/2"	USS/UNC	92446	92522	92584	92644	92730	92780	92830
	SAE/UNF	92447	92523	92585	92645	92731	92781	
8"	USS/UNC	92448	92524	92586	92646	92732	92782	92832
	SAE/UNF	92449	92525	92587	92647	92733	92783	
8-1/2"	USS/UNC	92450	92526	92588	92648	92734	92784	92834
	SAE/UNF	92451	92527	92589	92649	92735	92785	
9"	USS/UNC	92452	92528	92590	92650	92736	92786	92836
	SAE/UNF	92453	92529	92591	92651	92737	92787	
9-1/2"	USS/UNC	92454	92530	92592	92652	92738	92788	92838
	SAE/UNF	92455	92531	92593	92653	92739	92789	
10"	USS/UNC	92456	92532	92594	92654	92740	92790	92840
	SAE/UNF	92457	92533	92595	92655	92741	92791	
10-1/2"	USS/UNC	92458	92534	92596	92656	92742	92792	92842
	SAE/UNF				92657			
11"	USS/UNC	92460	92536	92598	92658	92744	92794	92844
	SAE/UNF				92659			
11-1/2"	USS/UNC	92462	92538	92600	92660	92746	92796	92846
	SAE/UNF				92661			
12"	USS/UNC	92464	92540	92602	92662	92748	92798	92848
	SAE/UNF				92663			

- Manufactured to SAE J-429 and ANSI B18.2.1 1981 ASTM-354-BD
- Rockwell Hardness C33-C39 UNRC-UNRF Class 2A
- Zinc Yellow Di-Chromate

CAP SCREWS

L-9[®] High Strength Cap Screws

- 180,000 Minimum Tensile Strength
- 25% Stronger than SAE Grade 8
- Special Alloy Steels and Heat Treatments are used to achieve the 180,000 psi Minimum Tensile Strength
- Ductility Equals or Exceeds Grade 8 Fasteners which are rated at 150,000 psi Tensile Strength
- Heads are Thicker than standard, to give more Non-Slip Surface for High Torqueability
- Cold Rolled Threads & L-9 Heat Treated Alloy Provide More Resistance to Shearing
- Washer Faced Bearing Surface Helps Distribute Clamp Load Evenly
- Possibility of Failure Reduced by a Generous Radius Under Head
- Meets 96 hour Salt Spray test as Specified by ASTM B-117



Bolt marked with L-9[®] logo and nine radial head markings to assure positive identification

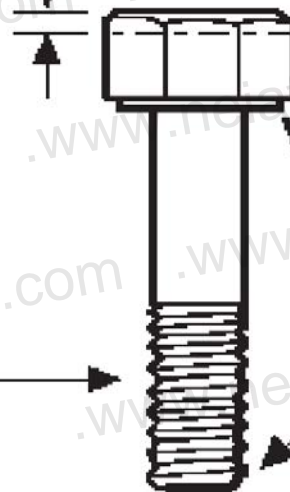
20% higher gives more wrenching:



Washer face under head eliminates corner drag when hand wrenching

Notch effect of the reduced by radius root thread

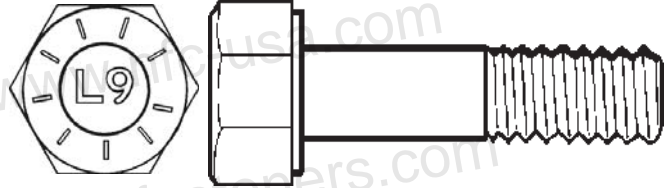
Chamfered tip for easier starting



CAP SCREWS

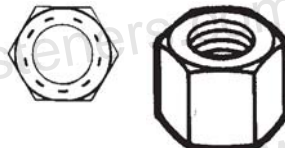
L-9® Cap Screws

- Zinc Dichromate Plated
- Medium Carbon Alloy Steel
Quenched & Tempered
- 145,000 psi Proof Load (Minimum)
- 180,000 psi Tensile Strength (Minimum)



Length (In.)	Thread	Diameter (In.)				
		1/4"	5/16"	3/8"	7/16"	1/2"
1/2"	USS	09000*	09060*			
3/4"	USS	09004*	09064*	09124*		
1"	USS	09008*	09068*	09128*	09188*	09248*
1-1/4"	USS	09010	09070	09130*	09190*	09250*
1-1/2"	USS	09012	09072	09132	09192	09252*
1-3/4"	USS	09014	09074	09134	09194	09254*
2"	USS	09016	09076	09136	09196	09256
2-1/4"	USS			09138		09258
2-1/2"	USS	09020	09080	09140	09200	09260
2-3/4"	USS					
3"	USS	09024	09084	09144	09204	09264
3-1/4"	USS					
3-1/2"	USS		09088	09148	09208	09268
4"	USS	09032	09092	09152	09212	09272
4-1/2"	USS			09156		09276
5"	USS			09158	09218	09278
5-1/2"	USS					
6"	USS			09162	09222	09282
7"	USS					09286
8"	USS					09290

L-9® Hex Nuts

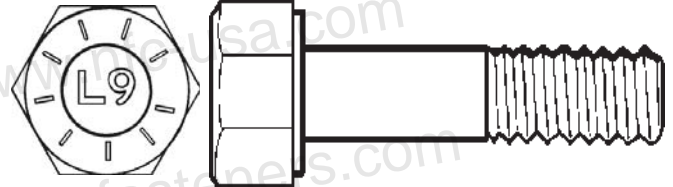


Bolt Size	1/4-20	5/16-18	3/8-16	7/16-14	1/2-13	5/8-11	3/4-10	7/8-9	1-8
Part No.	09700	09702	09704	09706	09708	09712	09714	09716	09718

CAP SCREWS

L-9[®] Cap Screws

- Zinc Dichromate Plated
- Medium Carbon Alloy Steel
- Quenched & Tempered
- 145,000 psi Proof Load (Minimum)
- 180,000 psi Tensile Strength (Minimum)



Length (In.)	Thread	Diameter (In.)				
		9/16"	5/8"	3/4"	7/8"	1"
1-1/4"	USS		09390*			
1-1/2"	USS	09322*	09392*	09462*		
1-3/4"	USS		09394*	09464*		
2"	USS	09326	09396	09466*	09536*	09606
2-1/4"	USS		09398	09468		
2-1/2"	USS	09330	09400	09470	09540	09610*
2-3/4"	USS		09402	09472		
3"	USS	09334	09404	09474	09544	09614
3-1/4"	USS					
3-1/2"	USS	09338	09408	09478	09548	09618
4"	USS	09342	09412	09482	09552	09622
4-1/2"	USS		09416	09486	09556	09626
5"	USS	09348	09418	09488	09558	09628
5-1/2"	USS		09420	09490	09560	09630
6"	USS		09422	09492	09562	09632
7"	USS		09426	09496	09566	09636
8"	USS		09430	09500	09570	09640
9"	USS		09434	09504	09574	09644
10"	USS		09438	09508	09578	09648
12"	USS		09446	09516	09586	09656

Ask your sales representative about our custom made assortments. Stock only the sizes you use.

BOLTS

- Zinc Plated
- Round Head
- Square Neck

Grade 2 Carriage Bolts



Length (In.)	Diameter (In.)							
	3/16"	1/4"	5/16"	3/8"	7/16"	1/2"	5/8"	3/4"
1/2"		93000						
5/8"		93003						
3/4"	92980	93001	93030	93061				
1"	92982	93002	93032	93062		93132		
1-1/4"	92984	93004	93034	93064	93092	93134		
1-1/2"	92986	93006	93036	93066	93096	93136		
1-3/4"	92988	93007	93037	93067		93137		
2"		93008	93038	93068	93098	93138	93168	93190
2-1/4"		93009	93039	93069				
2-1/2"	92991	93010	93040	93070	93100	93140	93170	93191
3"		93012	93042	93072	93102	93142	93172	93192
3-1/2"		93014	93044	93074	93104	93144	93174	93193
4"		93016	93046	93076	93106	93146	93176	93194
4-1/2"		93018	93048	93078	93108	93148	93178	93195
5"		93020	93050	93080	93120	93150	93180	93196
5-1/2"		93022	93052	93082	93122	93152	93182	93197
6"		93024	93054	93084	93124	93154	93184	93198
6 - 1/2"			93055	93085		93155		
7"				93086		93156	93186	
7 1 1/2"				93087				
8"		93028	93058	93088		93158	93188	
8 - 1/2"				93089		93159		
9"			93060	93090		93160		
10"				93091		93162		
11"						93164		
12"				92900		93166		

- Zinc Plated
- Round Head
- Ribbed Neck

Ribbed Neck Carriage Bolts

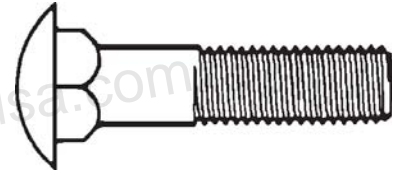


Length (In.)	Diameter/Thread
	3/8-16
1-1/4"	93288
1-1/2"	93289
1-3/4"	93290

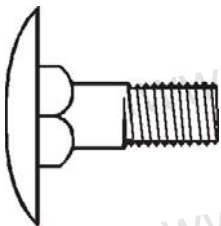
BOLTS

- Zinc Plated
- Round Head
- Square Neck

Grade 5 Carriage Bolts



Length (In.)	Diameter/Threads						
	1/4-20	5/16-18	3/8-16	7/16-14	1/2-13	5/8-11	3/4-10
1/2"							
5/8"							
3/4"	98004	98054	98104				
1"	98008	98058	98108	98158	98208		
1-1/4"	98010	98060	98110	98160	98210		
1-1/2"	98012	98062	98112	98162	98212	98262	
1-3/4"	98014	98064	98114	98164	98214		
2"	98016	98066	98116	98166	98216	98266	
2-1/4"	98018	98068	98118	98168	98218		
2-1/2"	98020	98070	98120	98170	98220	98270	98320
3"	98021	98074	98124	98174	98224	98274	98324
3-1/4"					98226		
3-1/2"	98023	98076	98128	98178	98228	98278	98328
3-3/4"					98230		
4"	98022	98078	98132	98182	98232	98282	98332
4-1/2"	98024	98080	98134		98236	98286	98336
5"	98026	98082	98136		98238	98288	98338
5-1/2"	98028	98084	98138		98240	98290	98340
6"	98030	98086	98140		98242	98292	98342



Step Bolts

- Zinc Plated
- Flush or near flush heads

Length (In.)	Diameter (In.)		
	1/4"	5/16"	3/8"
3/4"	92859		
1"	92860	92866	
1-1/4"	92861	92867	92872
1-1/2"	92862	92868	92873
2"	92863	92869	92874
2-1/2"	92864	92870	92875
3"	92865	92871	92876

Ask your sales representative about our custom made assortments. Stock only the sizes you use.

BOLTS

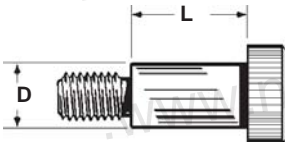
Spring Center Bolts



Length (Inch.)	Diameter/Thread (Inch.)			
	5/16-24	3/8-24	7/16-20	1/2-20
6"	93400	93402	93404	
8"			93405	93407
10"		93403		
12"				93408
12" With Extra Length Threads and Tall Head				93409

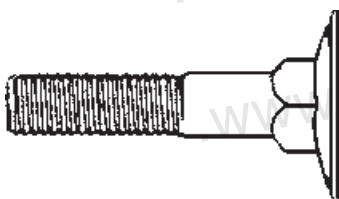
- Fillister Head
- SAE Threads
- Oil Finish

Shoulder Bolts



Shoulder Length (L)	Shoulder Diameter (D)					
	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"
	Thread Size					
	10 - 24	1/4 - 20	5/16 - 18	3/8 - 16	1/2 - 13	5/8 - 11
3/8"	93600	93618	93637			
1/2"	93601	93619	93638	93656		
5/8"	93602	93620	93639	93657		
3/4"	93603	93621	93640	93658	93676	
1"	93604	93622	93641	93659	93679	
1-1/4"	93605	93623	93642	93660	93680	93578
1-1/2"	93606	93624	93643	93661	93681	93587
1-3/4"		93625	93644	93662	93682	
2"		93626	93645	93663	93683	93588
2-1/4"			93646	93664	93685	93589
2-1/2"			93647	93665	93684	93590
2-3/4"			93648	93666	93686	93591
3"			93649	93667	93688	93592
3-1/4"			93650	93668		93593
3-1/2"			93651	93669	93689	93594
3-3/4"				93670		93595
4"				93671	93690	93596
4-1/2"				93673	93692	93597
4-3/4"						93598
5"						93599

Elevator Bolts



Length (Inch)	Diameter (Inch)		
	1/4 - 20	5/16 - 18	3/8 - 16
1"	93424		
1-1/4"	93426	93438	93444
1-1/2"	93428	93436	93446
1-3/4"			93447
2"	93432	93440	93448
2-1/2"	93434	93442	93449
3"	93435		93451

BOLTS

Grade 5 Plow Bolts



- Grade 5 Tensile Strength
- Phosphate & Oil Finish

Length (In.)	Diameter/Thread			
	3/8-16	7/16-14	1/2-13	5/8-11
1"	93450	93480	93510	
1-1/4"	93452	93482	93512	
1-1/2"	93454	93484	93514	93544
1-3/4"	93456	93486	93516	93546
2"	93458	93488	93518	93548
2-1/4"	93460	93490	93520	93550
2-1/2"	93462	93492	93522	93552
2-3/4"		93494		
3"	93468	93496	93526	93556
3-1/2"		93498	93528	93558
4"		93500	93530	93560

Grade 5 Whiz Bolts



- Zinc Plated
- Heat Treated
- Case Hardened
- 120,000 PSI

Length (In.)	Diameter/Thread			
	1/4-20	5/16-18	3/8-16	1/2-13
3/8"	93395			
1/2"	93398	93396		
3/4"	93399	93415	93419	
7/8"	93410			
1"	93412	93416	93420	
1-1/4"		93417	93421	93441
1-1/2"		93418	93422	
1-3/4"	93414			
2"		93397		

Grade 8 Flange Bolts & Nuts



- Designed for use with Grade 8 Bolt
- Medium Carbon Heat Treated Steel
- Phosphate & Oil Finish

Length (In.)	Diameter (In.)				
	3/8-16	1/2-13	5/8-11	3/4-10	
1"	93300	93312			
1-1/4"	93302	93314			
1-1/2"	93304	93316	93338		
1-3/4"	93306	93318	93340	93380	
2"		93320	93342	93382	
2-1/4"		93322	93344	93384	
2-1/2"		93324	93346	93386	
2-3/4"		93326	93348	93388	
3"		93328	93350	93390	
3-1/4"		93330	93352		
3-1/2"		93332	93354	93394	
4"			93356		
Nuts		93360	93364	93368	93370

Grade 8 Plow Bolts



- Grade 8 Tensile Strength
- Phosphate & Oil Finish

Length (In.)	Diameter (In.)		
	5/8"	3/4"	7/8"
1-1/2"			
1-3/4"			
2"	96316	96332	
2-1/4"	96317		
2-1/2"	96318	96334	96350
2-3/4"			
3"	96320	96336	
3-1/2"			
4"	96324		96356
4-1/2"			
5"			96358

SOCKET HEAD CAP SCREWS

Button Head Socket Cap Screws

- Black Oxide Finish
- Alloy Steel
- Chamfered End
- Class Fit 3A
- Hardness RC 36-43



Length (In.)	Thread	Diameter/Thread										
		2-56	3-48	4-40	6-32	8-32 8-36	10-24 10-32	1/4-20 1/4-28	5/16-18 5/16-24	3/8-16	1/2-13	5/8-11
3/16"	USS SAE	93700	93712									
1/4"	USS SAE	93702	93714	93726	93738	93750	93760 93761					
3/8"	USS SAE	93704	93716	93728	93740	93752	93762 93763	93782 93783	93800			
1/2"	USS SAE	93706	93718	93730	93742	93754	93764 93765	93784 93785	93802	93826		
5/8"	USS SAE				93744	93756	93766 93767	93786	93806 93818	93828		
3/4"	USS SAE				93746	93758	93768 93769	93788 93789	93808	93830		
7/8"	USS SAE						93770 93771	93790	93810	93832		
1"	USS SAE				93748	93759	93772 93773	93792 93793	93812 93820	93834	93854	
1-1/4"	USS SAE						93774 93775	93794 93795	93814	93836	93856	
1-1/2"	USS SAE						93777		93796	93816	93838	93858
2"	USS SAE						93779			93842	93860	93862

12-Point Flange Screws

- Plain Finish



Length (In.)	Thread	Diameter
		3/8-16
1-1/4"	USS	91960

SOCKET HEAD CAP SCREWS

- Black Oxide Finish
- Alloy Steel
- Chamfered End
- Class Fit 3A
- Hardness RC 36-43

Flat Head Socket Cap Screws



Length (In.)	Thread	Diameter/Thread										
		4-40	6-32	8-32	10-24 10-32	1/4-20 1/4-28	5/16-18 5/16-24	3/8-16 3/8-24	7/16-14 7/16-20	1/2-13 1/2-20	5/8-11 5/8-18	3/4-10 3/4-16
1/4"	USS/UNC <i>SAE/UNF</i>	91650	91670									
3/8"	USS/UNC <i>SAE/UNF</i>	91652	91672	91698	91724 <i>91725</i>	91774 <i>91775</i>						
1/2"	USS/UNC <i>SAE/UNF</i>	91654	91674	91700	91726 <i>91727</i>	91776 <i>91777</i>	91800 <i>91801</i>	91828				
5/8"	USS/UNC <i>SAE/UNF</i>	91656	91676	91704	91728 <i>91729</i>	91778 <i>91779</i>	91802 <i>91803</i>	91832 <i>91833</i>				
3/4"	USS/UNC <i>SAE/UNF</i>	91658	91678	91706	91730 <i>91731</i>	91780 <i>91781</i>	91804 <i>91805</i>	91830 <i>91831</i>	91854	91880 <i>91881</i>		
1"	USS/UNC <i>SAE/UNF</i>		91682	91708	91734 <i>91735</i>	91784 <i>91785</i>	91808 <i>91809</i>	91834 <i>91835</i>	91856	91884 <i>91885</i>		
1-1/4"	USS/UNC <i>SAE/UNF</i>				91736 <i>91737</i>	91786 <i>91787</i>	91810 <i>91811</i>	91836 <i>91837</i>	91858	91886 <i>91887</i>	91910	
1-1/2"	USS/UNC <i>SAE/UNF</i>				91738 <i>91739</i>	91788 <i>91789</i>	91812 <i>91813</i>	91838 <i>91839</i>	91860	91888 <i>91889</i>	91912	
1-3/4"	USS/UNC <i>SAE/UNF</i>						91790	91814	91840	91862 <i>91891</i>	91914	
2"	USS/UNC <i>SAE/UNF</i>						91792	91816	91842	91864 <i>91893</i>	91916	
2-1/4"	USS/UNC <i>SAE/UNF</i>							91818	91844		91898	91917
2-1/2"	USS/UNC <i>SAE/UNF</i>						<i>91795</i>	91820	91846		91894	91918
3"	USS/UNC <i>SAE/UNF</i>								91848		91896	91920 91950

USS/UNC part numbers shown in bold, straight type.
SAE/UNF part numbers shown in normal italic type

SET SCREWS

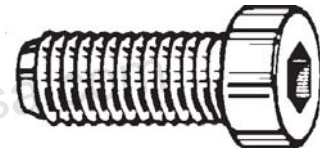
- Cup Point
- Black Oxide Finish
- Case Hardened
- UNRC Class Fit 2A
- ANSI B18.6.2

Square Head Set Screws (Fully Threaded)



Length (In.)	Thread	Diameter/Thread								
		1/4-20	5/16-18	3/8-16	7/16-14	1/2-13	5/8-11 5/8-18	3/4-10	7/8-9	1-8
1/2"	USS/UNC	97001	97021	97041						
5/8"	USS/UNC	97002								
3/4"	USS/UNC	97003	97023	97043		97083				
1"	USS/UNC	97005	97025	97045	97065	97085	97105	97135		
1-1/4"	USS/UNC	97007	97027	97047						
1-1/2"	USS/UNC	97009	97029	97049	97069	97089	97109	97139		
1-3/4"	USS/UNC							97140		
2"	USS/UNC	97011	97031	97051		97091	97111	97141	97171	97201
	SAE/UNF						97112			
2-1/4"	USS/UNC	97013				97093				
2-1/2"	USS/UNC	97015	97035	97055		97095	97115	97145	97175	97205
3"	USS/UNC	97017	97037	97057		97097	97117	97147	97177	97207
3-1/2"	USS/UNC						97119		97179	97209
4"	USS/UNC					97099	97121	97151	97181	97211
4-1/2"	USS/UNC							97153	97183	97213
5"	USS/UNC						97123	97155	97185	97215
6"	USS/UNC								97187	97217

SOCKET HEAD CAP SCREWS



USS/UNC part numbers shown in bold, straight type.
SAE/UNF part numbers shown in normal italic type

Socket Head Cap Screws

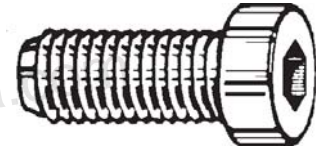
- Black Oxide Finish
- Alloy Steel

Length (In.)	Thread	Diameter/Thread								
		2-56	4-40	5-40	6-32	8-32	10-24 10-32	1/4-20 1/4-28	5/16-18 5/16-24	3/8-16 3/8-24
1/4"	USS/UNC <i>SAE/UNF</i>	91018	90950		91000	91050	<i>91101</i>			
3/8"	USS/UNC <i>SAE/UNF</i>	91020	90952	91026	91002	91052	91102 <i>91103</i>	91202 <i>91203</i>	91252	
1/2"	USS/UNC <i>SAE/UNF</i>	91022	90954	91028	91004	91054	91104 <i>91105</i>	91204 <i>91205</i>	91254 <i>91255</i>	91304 <i>91305</i>
5/8"	USS/UNC <i>SAE/UNF</i>		90956	91030	91006	91056	91106 <i>91107</i>	91206 <i>91207</i>	91256 <i>91257</i>	91306 <i>91307</i>
3/4"	USS/UNC <i>SAE/UNF</i>		90958	91032	91008	91058	91108 <i>91109</i>	91208 <i>91209</i>	91258 <i>91259</i>	91308 <i>91309</i>
7/8"	USS/UNC <i>SAE/UNF</i>				91010	91060	91110 <i>91111</i>	91210 <i>91211</i>	91260 <i>91261</i>	91310 <i>91311</i>
1"	USS/UNC <i>SAE/UNF</i>		90960	91034	91012	91062	91112 <i>91113</i>	91212 <i>91213</i>	91262 <i>91263</i>	91312 <i>91313</i>
1-1/4"	USS/UNC <i>SAE/UNF</i>					91064	91114 <i>91115</i>	91214 <i>91215</i>	91264 <i>91265</i>	91314 <i>91315</i>
1-1/2"	USS/UNC <i>SAE/UNF</i>				91016	91066	91116 <i>91117</i>	91216 <i>91217</i>	91266 <i>91267</i>	91316 <i>91317</i>
1-3/4"	USS/UNC <i>SAE/UNF</i>					91068	91118 <i>91119</i>	91218 <i>91219</i>	91268 <i>91269</i>	91318 <i>91319</i>
2"	USS/UNC <i>SAE/UNF</i>						91120 <i>91121</i>	91220 <i>91221</i>	91270 <i>91271</i>	91320 <i>91321</i>
2-1/4"	USS/UNC <i>SAE/UNF</i>							91222 <i>91223</i>	91272 <i>91273</i>	91322 <i>91323</i>
2-1/2"	USS/UNC <i>SAE/UNF</i>						91122	91224 <i>91225</i>	91274 <i>91275</i>	91324 <i>91325</i>
2-3/4"	USS/UNC <i>SAE/UNF</i>						91124 <i>91125</i>	91226	91276	91326
3"	USS/UNC <i>SAE/UNF</i>						<i>91127</i>	91228 <i>91229</i>	91278 <i>91279</i>	91328 <i>91329</i>
3-1/4"	USS/UNC								91280	91330
3-1/2"	USS/UNC							91232	91282	91332
4"	USS/UNC							91234		91334
4-1/2"	USS/UNC							91236		91336
5"	USS/UNC							91238		91338

SOCKET HEAD CAP SCREWS

USS/UNC part numbers shown in bold, straight type.
SAE/UNF part numbers shown in normal italic type

Socket Head Cap Screws



- Black Oxide Finish
- Alloy Steel

Length (In.)	Thread	Diameter/Thread						
		7/16-14 <i>7/16-20</i>	1/2-13 <i>1/2-20</i>	5/8-11 <i>5/8-18</i>	3/4-10 <i>3/4-16</i>	7/8-9 <i>7/8-14</i>	1-8 <i>1-14</i>	1-1/4"-7 <i>1-1/4"-12</i>
1/2"	USS/UNC <i>SAE/UNF</i>	91354						
5/8"	USS/UNC <i>SAE/UNF</i>	91356	91406					
3/4"	USS/UNC <i>SAE/UNF</i>	91358	91408					
7/8"	USS/UNC <i>SAE/UNF</i>	91360	91410					
1"	USS/UNC <i>SAE/UNF</i>	91362 <i>91363</i>	91412 <i>91413</i>	91462 <i>91463</i>				
1-1/4"	USS/UNC <i>SAE/UNF</i>	91364 <i>91365</i>	91414 <i>91415</i>	91464 <i>91465</i>	91514			
1-1/2"	USS/UNC <i>SAE/UNF</i>	91366 <i>91367</i>	91416 <i>91417</i>	91466 <i>91467</i>	91516			
1-3/4"	USS/UNC <i>SAE/UNF</i>	91368	91418 <i>91419</i>	91468 <i>91469</i>	91518			
2"	USS/UNC <i>SAE/UNF</i>	91370 <i>91371</i>	91420 <i>91421</i>	91470 <i>91471</i>	91520	91570	91594	
2-1/4"	USS/UNC <i>SAE/UNF</i>	91372	91422 <i>91423</i>	91472	91522	91572	91610	
2-1/2"	USS/UNC <i>SAE/UNF</i>	91374	91424 <i>91425</i>	91474 <i>91475</i>	91524	91574	91595	
2-3/4"	USS/UNC <i>SAE/UNF</i>	91376	91426	91476	91526	91576	91612	
3"	USS/UNC <i>SAE/UNF</i>	91378	91428 <i>91429</i>	91478	91528	91578	91596	
3-1/4"	USS/UNC	91380	91431					
3-1/2"	USS/UNC	91382	91430	91480	91530	91580	91597	
4"	USS/UNC	91384	91432	91482	91532	91582	91598	91620
4-1/4"	USS/UNC		91433					
4-1/2"	USS/UNC		91434	91484	91534	91584	91599	
5"	USS/UNC		91436	91486	91536	91586	91600	
5-1/2"	USS/UNC		91438	91488	91538	91588	91602	
6"	USS/UNC		91440	91490	91540	91590	91604	91622
6-1/2"	USS/UNC		91442	91492	91542	91592	91606	
7"	USS/UNC		91444	91494	91544	91593	91608	91624
7-1/2"	USS/UNC		91446	91496				
8"	USS/UNC		91448	91498				

THREADED ROD



Diameter Thread	Zinc Plated			B7 - Unplated		Left Hand Plated	Stainless Steel 18-8
	3ft. Length Part No.	6ft. Length Part No.	12ft. Length Part No.	3ft. Length Part No.	6ft. Length Part No.	3ft. Length Part No.	6ft. Length Part No.
4-40	93869						
5-40	93870						
6-32	93871						
8-32	93872						
10-24	93900						93970
10-32	93901						
12-24	93873						
1/4-20	93902	93882		93931-3	93931	93951	93971
1/4-28	93903			98503-3			
5/16-18	93904	93884		93932-3	93932	93952	93972
5/16-24	93905			98505-3	98505		
3/8-16	93906	93886	93984	93933-3	93933	93953	93973
3/8-24	93907			98507-3	98507		
7/16-14	93908	93888		93934-3	93934	93954	93974
7/16-20	93909			98509-3			
1/2-13	93910	93890	93985	93935-3	93935	93955	93975
1/2-20	93911			98511-3			
9/16-12	93912			93936-3			
9/16-18	93913						
5/8-11	93914	93892	93986	93937-3	93937	93957	93977
5/8-18	93915			98515-3			
3/4-10	93916	93894	93987	93938-3	93938	93958	93978
3/4-16	93917			98517-3			
7/8-9	93918	93896		93939-3	93939	93959	93979
7/8-14	93919			98519-3			
1-8	93920	93898		93940-3	93940	93960	93980
1-14	93921			98521-3			
1-1/8 - 7	93922			93941-3	93941		
1-1/8 - 12	93923						
1-1/4 - 7	93924			93942-3	93942		
1-1/4 - 12	93925			98525-3			
1-3/8 - 6				93943-3			
1-3/8 - 12				98527-3			
1-1/2 - 6	93928	93899		93944-3	93944		
1-1/2 - 12				98529-3			

THREADED ROD & DRILL ROD

Metric Threaded Rod Zinc Plated



Diameter Thread	Meter Length Part No.
4 x .70	93874
5 x .80	93989
6 x 1.00	93990
8 x 1.25	93991
10 x 1.50	93992
12 x 1.75	93875
16 x 2.00	93877

Precision Ground Drill Rod



AISI/SAE 0-1 Oil Hardening Drill Rod

0-1 is an oil hardening type of steel, most popular for general all round tool room use. 0-1 has good non-deforming characteristics used in tools and dies requiring moderate resistance to abrasion. Machinability: 90

Part No.	Diameter	Length
93993	#10 (3/16")	3 ft.
93994	1/4"	3 ft.
93995	5/16"	3 ft.
93996	3/8"	3 ft.
93997	7/16"	3 ft.
93998	1/2"	3 ft.
93999	5/8"	3 ft.
93965	3/4"	3 ft.
93966	7/8"	3 ft.
93967	1"	3 ft.

Steel Coupling Nuts for Threaded Rod

- Zinc Plated

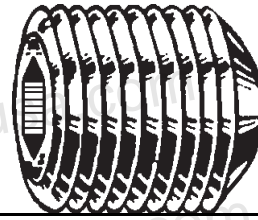


Part No.	Diameter Threads	Height	Width Across Flats
94948	10-24	3/4	5/16
94950	1/4-20	7/8	3/8
94951	1/4-20	1-3/4	7/16
94952	5/16-18	7/8	1/2
94953	5/16-18	1-3/4	1/2
94954	3/8-16	1-1/8	1/2
94955	3/8-16	1-3/4	9/16
94956	7/16-14	1-1/4	9/16
94957	7/16-14	1-3/4	5/8
94959	1/2-13	1-1/4	5/8
94958	1/2-13	1-3/4	11/16
94960	5/8-11	2-1/8	13/16
94962	3/4-10	2-1/4	1
94964	7/8-9	2-1/2	1-1/4
94966	1-8	2-3/4	1-3/8

SOCKET SET SCREWS

- Alloy Steel
- Black Oil Finish
- Class Fit: 3A
- Hardness: RC 38-43
- Cup Point

Socket Set Screws



Length (In.)	Thread	Diameter/Thread								
		6-32 <i>6-40</i>	8-32 <i>8-36</i>	10-24 <i>10-32</i>	1/4-20 <i>1/4-28</i>	5/16-18 <i>5/16-24</i>	3/8-16 <i>3/8-24</i>	7/16-14 <i>7/16-20</i>	1/2-13 <i>1/2-20</i>	5/8-11 <i>5/8-18</i>
1/8"	USS/UNC <i>SAE/UNF</i>	97500 <i>97501</i>	97522 <i>97523</i>							
3/16"	USS/UNC <i>SAE/UNF</i>	97502 <i>97503</i>	97524 <i>97525</i>	97544 <i>97545</i>	97566 <i>97567</i>					
1/4"	USS/UNC <i>SAE/UNF</i>	97504 <i>97505</i>	97526 <i>97527</i>	97546 <i>97547</i>	97568 <i>97569</i>	97588 <i>97589</i>	97608			
5/16"	USS/UNC <i>SAE/UNF</i>	97506 <i>97507</i>	97528 <i>97529</i>	97548 <i>97549</i>	97570 <i>97571</i>	97590 <i>97591</i>	97610			
3/8"	USS/UNC <i>SAE/UNF</i>	97508 <i>97509</i>	97530 <i>97531</i>	97550 <i>97551</i>	97572 <i>97573</i>	97592 <i>97593</i>	97612 <i>97613</i>	97630 <i>97631</i>		
7/16"	USS/UNC <i>SAE/UNF</i>	97510	97532	97552 <i>97553</i>	97574 <i>97575</i>	97594 <i>97595</i>	97614 <i>97615</i>	97632 <i>97633</i>		
1/2"	USS/UNC <i>SAE/UNF</i>	97512	97534 <i>97535</i>	97554 <i>97555</i>	97576 <i>97577</i>	97596 <i>97597</i>	97616 <i>97617</i>	97634 <i>97635</i>	97650 <i>97651</i>	97672
5/8"	USS/UNC <i>SAE/UNF</i>	97514	97536	97556 <i>97557</i>	97578 <i>97579</i>	97598 <i>97599</i>	97618 <i>97619</i>	97636 <i>97637</i>	97652 <i>97653</i>	97674
3/4"	USS/UNC <i>SAE/UNF</i>	97516	97538	97558 <i>97559</i>	97580 <i>97581</i>	97600 <i>97601</i>	97620 <i>97621</i>	97640 <i>97639</i>	97654 <i>97655</i>	97676
7/8"	USS/UNC <i>SAE/UNF</i>	97518	97540	97560	97582	97602	97622	97640	97656	97678
1"	USS/UNC <i>SAE/UNF</i>	97520	97542	97562 <i>97563</i>	97584 <i>97585</i>	97604 <i>97605</i>	97624 <i>97625</i>	97642	97658 <i>97659</i>	97680
1-1/4"	USS/UNC <i>SAE/UNF</i>			97564 <i>97565</i>	97586 <i>97587</i>	97606 <i>97607</i>	97626 <i>97627</i>	97644	97660	97682
1-1/2"	USS/UNC <i>SAE/UNF</i>						97628 <i>97629</i>	97646	97662 <i>97663</i>	97684
1-3/4"	USS/UNC <i>SAE/UNF</i>								97664	97686
2"	USS/UNC <i>SAE/UNF</i>							97648	97666	97688
2-1/2"	USS/UNC <i>SAE/UNF</i>								97668	97690
3"	USS/UNC <i>SAE/UNF</i>								97670	97692

USS/UNC part numbers shown in bold, straight type.
SAE/UNF part numbers shown in normal italic type

SOCKET SET SCREWS

Socket Set Screws

Length (In.)	Thread	Diameter/Thread		
		3/4-10 3/4-16	7/8-9 7/8-14	1-8 1-14
5/8"	USS/UNC <i>SAE/UNF</i>	97694		
3/4"	USS/UNC <i>SAE/UNF</i>	97696		
7/8"	USS/UNC <i>SAE/UNF</i>		97712	
1"	USS/UNC <i>SAE/UNF</i>	97698	97714	97728
1-1/4"	USS/UNC <i>SAE/UNF</i>	97700	97716	
1-1/2"	USS/UNC <i>SAE/UNF</i>	97702	97718	97730
1-3/4"	USS/UNC <i>SAE/UNF</i>	97704		
2"	USS/UNC <i>SAE/UNF</i>	97706	97722	97734
2-1/2"	USS/UNC <i>SAE/UNF</i>	97708	97724	97736
3"	USS/UNC <i>SAE/UNF</i>	97710	97726	97738

- Alloy Steel
- Black Oil Finish
- Class Fit: 3A
- Hardness: RC 38-43



USS/UNC part numbers shown in bold, straight type.
SAE/UNF part numbers shown in normal italic type

- Alloy Steel
- Black Oil Finish
- Class Fit: 3A
- Hardness: RC 38-43

Knurled Point Socket Set Screws



Length (In.)	Thread	Diameter/Thread						
		6-32 6-40	8-32 8-36	10-24 10-32	1/4-20 1/4-28	5/16-18 5/16-24	3/8-16 3/8-24	1/2-13 1/2-20
1/4"	USS/UNC <i>SAE/UNF</i>	97230	97244	97258	97272			
5/16"	USS/UNC <i>SAE/UNF</i>				97274	97288		
3/8"	USS/UNC <i>SAE/UNF</i>				97276	97290	97304	
1/2"	USS/UNC <i>SAE/UNF</i>			97264	97278	97292	97306	97324
5/8"	USS/UNC <i>SAE/UNF</i>				97280	97294	97308	97326
3/4"	USS/UNC <i>SAE/UNF</i>		97254	97268	97282	97296	97310	97328
1"	USS/UNC <i>SAE/UNF</i>				97284	97298		97330

HEX NUTS

Finished Hex Nuts

- Zinc Plated Steel



Bolt Diameter	USS Part No.	SAE Part No.	Width Across Flats	Thickness
1/4"	94000	94001	7/16"	7/32"
5/16"	94002	94003	1/2"	17/64"
3/8"	94004	94005	9/16"	21/64"
7/16"	94006	94007	11/16"	3/8"
1/2"	94008	94009	3/4"	7/16"
9/16"	94010	94011	7/8"	31/64"
5/8"	94012	94013	15/16"	35/64"
3/4"	94014	94015	1-1/8"	41/64"
7/8"	94016	94017	1-5/16"	3/4"
1"	94018	94019	1-1/2"	55/64"
1-1/8"	94020	94021	1-11/16"	31/32"
1-1/4"	94022	94023	1-7/8"	1-1/16"
1-3/8"	94024		2-1/16"	1-11/64"
1-1/2"	94026	94027	2-1/4"	1-9/32"
1-5/8"	94028		2-7/16"	1-25/64"
1-3/4"	94030	94031	2-5/8"	1-1/2"
2"	94032	94033	3"	1-23/32"

USS Finished Heavy Hex Nuts

- Zinc Plated Steel



Part No.	Size	Width Across Flats	Thickness
94072	5/16-18	9/16"	19/64"
94074	3/8-16	11/16"	23/64"
94078	1/2-13	7/8"	31/64"
94080	5/8-11	1-1/16"	39/64"
94082	3/4-10	1-1/4"	47/64"
94084	7/8-9	1-7/16"	55/64"
94086	1-8	1-5/8"	63/64"
94088	1-1/4-7	2"	1-7/32"
94090	1-1/2-6	2-3/8"	1-15/32"

USS Un-Plated Heavy Hex Nuts



Part No.	Size	Width Across Flats	Thickness
94228	1/4-20"	1/2"	15/64"
94230	5/16-18"	9/16"	19/64"
94232	3/8-16"	11/16"	23/64"
94234	1/2-13"	7/8"	31/64"
94236	5/8-11"	1-1/16"	39/64"
94238	3/4-10"	1-1/4"	47/64"
94240	7/8-9"	1-7/16"	55/64"
94242	1-8"	1-5/8"	63/64"
94244	1-1/8-7"	1-3/4"	1-7/64"
94246	1-1/4-7"	2"	1-7/32"

GRADE 5 HEX NUTS

Grade 5 Hex Nuts



- Zinc Plated
- SAE J995
- ANSI/ASME B18.2.2 1986

Bolt Diameter	USS Part No.	SAE Part No.	Width Across Flats	Thickness
1/4"	94140	94141	7/16"	7/32"
5/16"	94142	94143	1/2"	17/64"
3/8"	94144	94145	9/16"	21/64"
7/16"	94146	94147	11/16"	3/8"
1/2"	94148	94149	3/4"	7/16"
9/16"	94150	94151	7/8"	31/64"
5/8"	94152	94153	15/16"	35/64"
3/4"	94154	94155	1-1/8"	41/64"
7/8"	94156	94157	1-5/16"	3/4"
1"	94158	94159	1-1/2"	55/64"
1-1/8"	94160*		1-11/16"	31/32"
1-1/4"	94162*		1-7/8"	1-1/6"

Grade 5 SAE High Hex Nuts



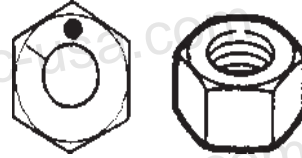
- 3 Radial Marks for Positive Gr. 5 Identification
- SAE J995
- ANSI/ASME B18.2.2 1986

Part No.	Size	Width Across Flats	Thickness
94051	3/8-24	9/16"	17/32"
94053	7/16-20	5/8"	39/64"
94055	1/2-20	3/4"	11/16"
94057	9/16-18	7/8"	49/64"

GRADE 8 HEX NUTS

Grade 8 Hex Nuts

- Zinc and Yellow Dichromate Plated
- SAE J995
- ANSI/ASME B18.2.2 1986



Bolt Diameter	USS Part No.	SAE Part No.	Width Across Flats	Thickness
1/4"	94100	94101	7/16"	7/32"
5/16"	94102	94103	1/2"	17/64"
3/8"	94104	94105	9/16"	21/64"
7/16"	94106	94107	11/16"	3/8"
1/2"	94108	94109	3/4"	7/16"
9/16"	94110	94111	7/8"	31/64"
5/8"	94112	94113	15/16"	35/64"
3/4"	94114	94115	1-1/8"	41/64"
7/8"	94116	94117	1-5/16"	3/4"
1"	94118	94119	1-1/2"	55/64"
1-1/8"	94120	94121	1-11/16"	31/32"
1-1/4"	94122	94123	1-7/8"	1-1/16"
1-1/2"	94126	94127	2-1/4"	1-9/32"

SAE Grade 8 High Hex Nuts

- 6 Radial Marks for Positive Gr. 8 Identification
- SAE J995
- ANSI/ASME B18.2.2 1986



Part No.	Size	Width Across Flats	Thickness
94175	5/8-18	15/16"	27/32"
94177	3/4-16	1-1/16"	1"
94179	7/8-14	1-1/4"	1-5/32"
94180	1-14	1-7/16"	1-5/16"

LOCK NUTS

Nylon Insert Lock Nuts

- Zinc Plated Steel
- Reusable
- Will not harm threads



Bolt Diameter	Height	USS Part No	SAE Part No	Quantity
4-40		94298		100
6-32		94300		100
8-32		94302		100
10-24	15/64"	94304		100
10-32	15/64"		94305	100
1/4"	5/16"	94306	94307	100
5/16"	11/32"	94308	94309	100
3/8"	29/64"	94310	94311	100
7/16"	29/64"	94312	94313	50
1/2"	19/32"	94314	94315	50
9/16"	41/64"	94316	94317	25
5/8"	3/4"	94318	94319	25
3/4"	7/8"	94320	94321	25
7/8"	64/64"	94322	94323	25
1"	1-3/64"	94324	94325	25
1-1/8"	1-11/64"	94326	94327	10
1-1/4"	1-25/64"	94328	94329	10
1-3/8"		94330	94331	10
1-1/2"	1-39/64"	94332	94333	10
2"		94340	94341	5

THIN Nylon Insert Lock Nuts

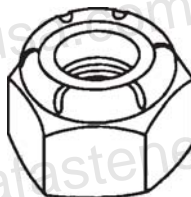
- Zinc Plated Steel
- Reusable
- Will not harm threads



Bolt Diameter	Height	USS Part No	SAE Part No	Quantity
1/4"	13/64"	94550		50
5/16"	1/4"	94552	94553	50
3/8"	17/64"	94554	94555	50
7/16"		94556		50
1/2"	5/16"	94558	94559	25
5/8"	25/64"	94562	94563	25
3/4"	13/32"	94564	94565	10
7/8"		94566	94567	10
1"		94568	94569	5
1-1/8"		94570	94571	5

SAE HIGH Nylon Insert Lock Nuts

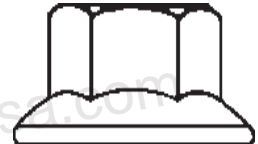
- Zinc Plated Steel
- Reusable
- Will not harm threads



Bolt Diameter	SAE Part No	Quantity
7/16-20	94389	20
1/2-20	94391	20
5/8-18	94393	20
3/4-16	94395	20
7/8-14	94397	20

Spin Lock Nuts

- Zinc Plated Steel
- Serrated under flange



Bolt Diameter	USS Part No	SAE Part No	Quantity
8-32	94774		100
10-24	94776		100
1/4"	94778		100
5/16"	94780	94781	100
3/8"	94782	94783	100
7/16"	94784		50
1/2"	94786		50

- Plain
- Serrated under flange

Bolt Diameter	USS Part No	SAE Part No	Quantity
1/4-20	94248*		100
5/16-18	94249*		100
3/8-16	94250*		100
1/2-13	94251		100

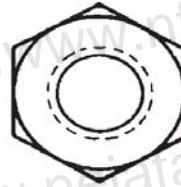
* Large Flange

HEX NUTS

Hex Jam Nuts

- Zinc Plated Steel

Bolt Diameter	USS Part No.	SAE Part No.
1/4"	94500	94501
5/16"	94502	94503
3/8"	94504	94505
7/16"	94506	94507
1/2"	94508	94509
9/16"	94510	94511
5/8"	94512	94513
3/4"	94514	94515
7/8"	94516	94517
1"	94518	94519
1-1/8"	94520	94521
1-1/4"	94522	94523
1-1/2"	94526	94527



Standard Nut

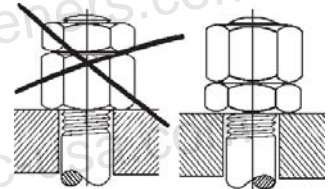


Jam Nut

Helpful Hint:

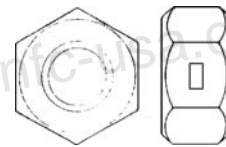
Which comes first in using jam nuts for position locking? The thick nut? Or thin? THIN is correct. The use of two nuts together is a good way to form a superior and economical device resistant to loosening. When used with a standard nut, the Jam Nut should be placed between the Hex Nut and the joint surface. Reason: It's important that the Hex Nut, rather than the Jam Nut, take the full bolt load.

See illustration below.



2-Way Lock Nuts (Reversible)

- Zinc Plated Steel

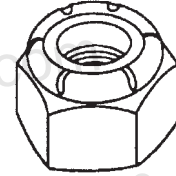


Part No.	Size	Flats	Thickness
94350	1/4-20	7/16"	7/32"
94352	5/16-18	1/2"	17/64"
94354	3/8-16	9/16"	21/64"
94356	7/16-14	11/16"	3/8"
94358	1/2-13	3/4"	7/16"
94360	5/8-11	15/16"	35/64"
94362	3/4-10	1-1/8"	41/64"
94364	7/8-9	1-1/2"	55/64"
94366	1-8	1-1/2"	63/64"

LOCK NUTS

- Zinc Plated Steel

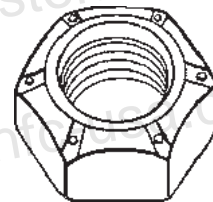
Grade 8 Nylon Lock Nuts



Bolt Diameter	USS Part No.	SAE Part No.
1/4"	94572	94573
5/16"	94574	94575
3/8"	94576	94577
7/16"	94578	94579
1/2"	94580	94581
9/16"	94582	94583
5/8"	94584	94585
3/4"	94586	94587
7/8"	94588	94589
1"	94590	94591

Grade 8 Crown Lock Nuts

- Cadmium Plated
- Wax Finish



Bolt Diameter	USS Part No.	SAE Part No.
1/4"	94400	94401
5/16"	94402	94403
3/8"	94404	94405
7/16"	94406	94407
1/2"	94408	94409
9/16"	94410	94411
5/8"	94412	94413
3/4"	94414	94415
7/8"	94416	94417
1"	94418	94419
1-1/8"	94422	94423
1-1/4"	94420	94421
1-1/2"	94424	94425

NOTES

HEX NUTS

Hex Castle Nuts

- Zinc Plated



Bolt Diameter	SAE Part No	Quantity
1/4"	94651	100
5/16"	94653	100
3/8"	94655	100
7/16"	94657	100
1/2"	94659	50
9/16"	94661	50
5/8"	94663	50
3/4"	94665	25
7/8"	94667	25
1"	94669	25
1-1/8"	94671	10
1-1/4"	94673	10

Slotted Hex Nuts

- Zinc Plated



Bolt Diameter	USS Part No	SAE Part No	Quantity
1/4"	94600	94601	50
5/16"	94602	94603	50
3/8"	94604	94605	50
7/16"	94606	94607	25
1/2"	94608	94609	25
9/16"	94610	94611	25
5/8"	94612	94613	25
3/4"	94614	94615	15
7/8"	94616	94617	15
1"	94618	94619	15
1-1/8"	94620	94621	10
1-1/4"	94624	94625	10

Left Hand Thread Finished Hex Nuts



Bolt Diameter	USS Part No	SAE Part No	Quantity
1/4"	94700	94701	50
5/16"	94702	94703	50
3/8"	94704	94705	50
7/16"	94706	94707	25
1/2"	94708	94709	25
9/16"	94710	94711	25
5/8"	94712	94713	25
3/4"	94714	94715	15
7/8"	94716	94717	15
1"	94718	94719	15

Left Hand Jam Nuts



- Unplated

Part No.	Size
94729	1/2-20
94731	5/8-18
94734	3/4-16

"K" Lock Nuts

- Zinc Plated
- Hex Nut with External Tooth Lockwasher Attached



Bolt Diameter	USS Part No	SAE Part No	Quantity
6-32	94750		100
8-32	94752		100
10-24	94754		100
10-32		94755	100
1/4	94756	94757	50
5/16	94758	94759	50
3/8	94760	94761	50

HEX NUTS

Tee Nuts

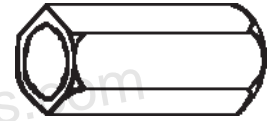
- Zinc Plated Steel
- Use to fasten wood
- Tangs bite into wood for firm grip



Bolt Diameter	USS Part No.	SAE Part No.
10-32		94801
1/4"	94804	
5/16"	94806	
3/8"	94808	

Steel Coupling Nuts for Threaded Rod

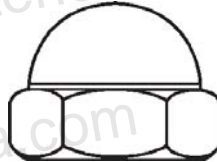
- Zinc Plated



Part No.	Diameter Threads	Height	Width Across Flats
94948	10-24	3/4	5/16
94950	1/4-20	7/8	3/8
94951	1/4-20	1-3/4	7/16
94952	5/16-18	7/8	1/2
94953	5/16-18	1-3/4	5/8
94954	3/8-16	1-1/8	1/2
94955	3/8-16	1-3/4	5/8
94956	7/16-14	1-1/4	9/16
94957	7/16-14	1-3/4	5/8
94959	1/2-13	1-1/4	5/8
94958	1/2-13	1-3/4	11/16
94960	5/8-11	2-1/8	13/16
94962	3/4-10	2-1/4	1
94964	7/8-9	2-1/2	1-1/4
94966	1-8	2-3/4	1-3/8

Cap Nuts (Acorn)

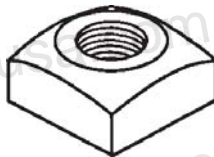
- Zinc Plated



Bolt Diameter	USS Part No.	SAE Part No.
6-32	94900	
8-32	94902	
10-24	94904	
10-32		94905
1/4"	94906	
5/16"	94908	94909
3/8"	94910	94911
1/2"	94912	

Square Nuts

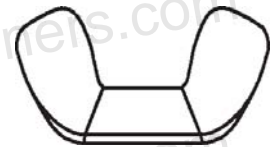
- Zinc Plated



Part No.	Size
94200	1/4-20
94202	5/16-18
94204	3/8-16
94206	7/16-14
94208	1/2-13
94212	5/8-11
94214	3/4-10

Wing Nuts

- Zinc Plated
- Cold Forged



Bolt Diameter	USS Part No.	SAE Part No.
6-32	94850	
8-32	94852	
10-24	94854	
10-32		94855
1/4"	94856	94857
5/16"	94858	
3/8"	94860	
7/16"	94862	
1/2"	94864	

FLAT WASHERS

USS Flat Washers

- Zinc Plated Steel



Bolt Size	Part No.	O. D.	I. D.	Thickness	Approx. Pcs. Per
3/16"	95004	9/16"	1/4"	.036/.065	400
1/4"	95008	3/4"	5/16"	.051/.080	149
5/16"	95010	7/8"	3/8"	.064/.104	90
3/8"	95012	1"	7/16"	.064/.104	75
7/16"	95014	1-1/4"	1/2"	.064/.104	41
1/2"	95016	1-3/8"	9/16"	.086/.132	26
9/16"	95018	1-1/2"	5/8"	.086/.132	13
5/8"	95020	1-3/4"	21/32"	.108/.160	13
3/4"	95022	2"	13/16"	.122/.177	10
7/8"	95024	2-1/4"	15/16"	.136/.192	7
1"	95026	2-1/2"	1-1/16"	.136/.192	5
1-1/8"	95028	2-3/4"	1-1/4"	.136/.192	4
1-1/4"	95030	3"	1-3/8"	.136/.192	3
1-3/8"	95032	3-1/4"	1-1/2"	.153/.213	3
1-1/2"	95034	3-1/2"	1-5/8"	.153/.213	2
1-3/4"	95036	4"	1-7/8"	.153/.213	2
2"	95038	4-1/2"	2-1/8"	.153/.213	1

SAE Flat Washers

- Zinc Plated Steel



Bolt Size	Part No.	O. D.	I. D.	Thickness	Approx. Pcs. Per
#2	94999	7/32"	3/32"	.036/.065	2100
#4	95000	5/16"	1/8"	.036/.065	1650
#6	95001	3/8"	5/32"	.036/.065	790
#8	95003	7/16"	3/16"	.036/.065	600
#10	95005	1/2"	7/32"	.036/.065	435
#12	95007	9/16"	1/4"	.051/.080	362
1/4"	95009	5/8"	9/32"	.051/.080	222
5/16"	95011	11/16"	11/32"	.051/.080	192
3/8"	95013	13/16"	13/32"	.051/.080	140
7/16"	95015	59/64"	15/32"	.051/.080	105
1/2"	95017	1-1/16"	17/32"	.074/.121	55
9/16"	95019	1-3/16"	19/32"	.074/.121	43
5/8"	95021	1-5/16"	21/32"	.074/.121	36
3/4"	95023	1-15/32"	13/16"	.108/.160	21
7/8"	95025	1-3/4"	15/16"	.108/.160	16
1"	95027	2"	1-1/16"	.108/.160	12
1-1/8"	95029	2-1/4"	1-1/4"	.108/.160	9
1-1/4"	95031	2-1/2"	1-3/8"	.136/.192	6
1-3/8"	95033	2-3/4"	1-1/2"	.136/.192	5
1-1/2"	95035	3"	1-5/8"	.153/.213	4

GRADE 8 FLAT WASHERS

- High Strength
- Zinc Yellow Dichromate Plating
- RC# C38-45 ASTM F436

USS Grade 8 Flat Washers



Bolt Size	Part No.	O. D.	I. D.	Thickness	Approx. Pcs. Per
1/4"	95108	3/4"	5/16"	.051/.080	75
5/16"	95110	7/8"	3/8"	.064/.104	50
3/8"	95112	1"	7/16"	.064/.104	40
7/16"	95114	1-1/4"	1/2"	.064/.104	25
1/2"	95116	1-3/8"	9/16"	.086/.132	15
9/16"	95118	1-1/2"	5/8"	.086/.132	11
5/8"	95120	1-3/4"	21/32"	.108/.160	7
3/4"	95122	2"	13/16"	.122/.177	5
7/8"	95124	2-1/4"	15/16"	.136/.192	4
1"	95126	2-1/2"	1-1/16"	.136/.192	3
1-1/8"	95128	2-3/4"	1-1/4"	.136/.192	2
1-1/4"	95130	3"	1-3/8"	.136/.192	2
1-3/8"	95132	3-1/4"	1-1/2"	.136/.192	2
1-1/2"	95134	3-1/2"	1-5/8"	.153/.213	1

- High Strength
- Zinc Yellow Dichromate Plating
- RC# C38-45 ASTM F436

SAE Grade 8 Flat Washers



Bolt Size	Part No.	O. D.	I. D.	Thickness	Approx. Pcs. Per
1/4"	95109	5/8"	9/32"	.051/.080	112
5/16"	95111	11/16"	11/32"	.051/.080	100
3/8"	95113	13/16"	13/32"	.051/.080	75
7/16"	95115	59/64"	15/32"	.051/.080	50
1/2"	95117	1-1/16"	17/32"	.097/.177	25
9/16"	95119	1-3/16"	19/32"	.097/.177	20
5/8"	95121	1-5/16"	21/32"	.122/.177	12
3/4"	95123	1-15/32"	13/16"	.122/.177	10
7/8"	95125	1-3/4"	15/16"	.136/.177	6
1"	95127	2"	1-1/16"	.122/.177	4
1-1/8"	95129	2-1/4"	1-1/4"	.122/.177	3
1-1/4"	95131	2-1/2"	1-3/8"	.122/.177	3
1-1/2"	95135	3"	1-5/8"	.122/.177	2

WASHERS

Lock Washers

- Zinc Plated



Part No.	Bolt Size	Quantity
95300	#4	100
95301	#6	100
95302	#8	100
95303	#10 (3/16")	100
95304	#12	100
95305	1/4"	100
95306	5/16"	100
95307	3/8"	100
95308	7/16"	100
95309	1/2"	100
95310	9/16"	50
95311	5/8"	50
95312	3/4"	50
95313	7/8"	25
95314	1"	25
95315	1-1/8"	25
95316	1-1/4"	25
95317	1-3/8"	25
95318	1-1/2"	25

Grade 8 Heavy Lock Washers

- Zinc Yellow Dichromate Plated
- Heat Treated Steel
- AISI 1060 Steel
- Manufactured to ANSI B18.21 1983 RC 38-46



Part No.	Bolt Size
95350	1/4"
95351	5/16"
95352	3/8"
95353	7/16"
95354	1/2"
95355	9/16"
95356	5/8"
95357	3/4"
95358	7/8"
95359	1"
95360	1-1/8"
95361	1-1/4"

High Collar Lock Washers (Grade 8)



Part No.	Bolt Size	Quantity
95375	#10	100
95377	1/4"	100
95378	5/16"	100
95379	3/8"	100
95380	7/16"	100
95381	1/2"	100
95382	5/8"	50
95383	3/4"	50
95384	7/8"	25
95385	1"	25

Oversize (Fender) Washers

- Zinc Plated



Part No.	Bolt Size	Inside Dimension	Outside Dimension
95194	1/8"	5/32"	9/16"
95195	1/8"	9/64"	5/8"
95199	3/16"	7/32"	3/4"
95200	3/16"	3/16"	1"
95202	3/16"	3/16"	1-1/4"
95204	1/4"	1/4"	1"
95206	1/4"	1/4"	1-1/4"
95208	1/4"	1/4"	1-1/2"
95210	5/16"	5/16"	1-1/4"
95212	5/16"	5/16"	1-1/2"
95213	3/8"	3/8"	1-1/4"
95214	3/8"	3/8"	1-1/2"
95216	3/8"	3/8"	1-3/4"
95218	1/2"	1/2"	2"

WASHERS

Tooth Lock Washers

- Zinc Plated



External



Internal



Internal
-External

Bolt Size	Internal	External	Internal-External
#4	95450	95400	
#6	95451	95401	95551
#8	95452	95402	95552
#10	95453	95403	95553
#12	95454	95404	
#14 or 1/4"	95455	95405	95555
5/16"	95456	95406	95556
3/8"	95457	95407	95557
7/16"	95458	95408	95558
1/2"	95459	95409	95559
5/8"	95460	95410	95560
3/4"	95461	95411	
7/8"	95462	95412	

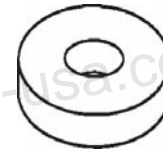
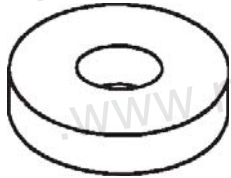
Extra Thick Fender Washers

- Zinc Plated
- 1/8" Thickness
- *95220 has 3/16" thickness.



Part No.	Bolt Size	Inside Dimension	Outside Dimension
95224	1/4"	1/4"	1"
95226	1/4"	1/4"	1-1/2"
95228	5/16"	5/16"	1-1/4"
95230	5/16"	5/16"	1-3/4"
95232	3/8"	3/8"	1-1/4"
95234	3/8"	3/8"	1-3/4"
95219	1/2"	1/2"	1-3/4"
95236	1/2"	1/2"	2"
95220*	1/2"	9/16"	2-1/2"

USS & SAE Thick Flat Washers



- Special High Strength Alloy Steel.
- Zinc Plated Yellow Dichromate Finish.
- Multiple Heat Treated & Baked.
- Exceeds all ASTM A-325 and A-490 Specifications.
- Eliminates bolt failure caused by ordinary flat washers "Dishing Out" and allowing assembly to vibrate loose.
- Can be used with Grade 5, 8 or L9 capscrews.

USS Flat Washers

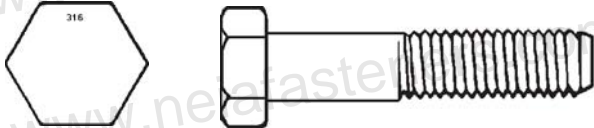
Part No.	Bolt Size	I.D.	O.D.	Thick-ness
95150	1/4"	5/16"	3/4"	.072-.090
95152	5/16"	3/8"	7/8"	.072-.090
95154	3/8"	7/16"	1"	.097-.115
95156	7/16"	1/2"	1-1/4"	.097-.115
95160	1/2"	9/16"	1-3/8"	.122-.138
95167	5/8"	21/32"	1-3/4"	.136-.160
95168	3/4"	13/16"	2"	.0177-.0200
95170	7/8"	15/16"	2-1/4"	.0177-.0200
95171	1"	1-1/16"	2-1/2"	.0177-.0200

SAE Flat Washers

Part No.	Bolt Size	I.D.	O.D.	Thick-ness
95151	1/4"	9/32"	5/8"	.072-.090
95153	5/16"	11/32"	11/16"	.072-.090
95155	3/8"	13/32"	13/16"	.097-.115
95157	7/16"	15/32"	15/16"	.097-.115
95159	1/2"	17/32"	1-1/16"	.122-.138
95163	5/8"	21/32"	1-5/16"	.136-.160
95164	3/4"	13/16"	1-1/2"	.0177-.0200
95165	7/8"	15/16"	1-3/4"	.0177-.0200
95166	1"	1-1/16"	2"	.0177-.0200

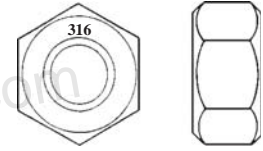
STAINLESS STEEL, TYPE 316

Type 316 Stainless Steel Hex Head Cap Screw



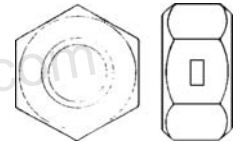
Part No.	Diameter	Length	Quan.
101002	1/4 - 20	3/4"	50
101004	1/4 - 20	1"	50
101008	1/4 - 20	1-1/2"	50
101014	1/4 - 20	2"	50
101018	1/4 - 20	2-1/2"	50
101052	5/16 - 18	3/4"	50
101054	5/16 - 18	1"	50
101056	5/16 - 18	1-1/4"	50
101058	5/16 - 18	1-1/2"	50
101062	5/16 - 18	2"	50
101066	5/16 - 18	2-1/2"	50
101100	3/8 - 16	3/4"	50
101102	3/8 - 16	1"	50
101104	3/8 - 16	1-1/4"	50
101106	3/8 - 16	1-1/2"	50
101110	3/8 - 16	2"	50
101114	3/8 - 16	2-1/2"	50
101150	7/16 - 14	1"	50
101152	7/16 - 14	1-1/4"	50
101154	7/16 - 14	1-1/2"	50
101158	7/16 - 14	2"	50
101162	7/16 - 14	2-1/2"	50
101196	1/2 - 13	1"	50
101198	1/2 - 13	1 - 1/4"	50
101200	1/2 - 13	1 - 1/2"	50
101204	1/2 - 13	2"	50
101208	1/2 - 13	2-1/2"	50
101250	5/8 - 11	1-1/4"	50
101252	5/8 - 11	1-1/2"	50
101256	5/8 - 11	2"	50
101260	5/8 - 11	2-1/2"	50
101264	5/8 - 11	3"	50
101276	5/8 - 11	3 - 1/2"	50
101278	5/8 - 11	4"	50
101324	3/4 - 10	4"	50

Type 316 Stainless Steel USS Hex Nuts



Part No.	Size	Flats	Height	Quan.
101534	1/4 - 20	7/16"	7/32"	50
101536	5/16 - 18	1/2"	17/64"	50
101538	3/8 - 16	9/16"	21/64"	50
101540	7/16 - 14	11/16"	3/8"	50
101542	1/2 - 13	3/4"	7/16"	50
101544	5/8 - 11	15/16"	35/64"	50
101546	3/4 - 10	1-1/8"	41/64"	50
101550	1 - 8	1-1/2"	63/64"	50

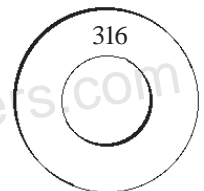
Type 316 Stainless Steel 2 Way Lock Nuts



Part No.	Size	Quan.
101620	1/4-20	25

Type 316 Stainless Steel Flat Washers

Part No.	Bolt Size	Quan.
101680	1/4"	50
101682	5/16"	50
101684	3/8"	50
101686	7/16"	50
101688	1/2"	50
101690	5/8"	50
101692	3/4"	50



Type 316 Stainless Steel Lock Washers



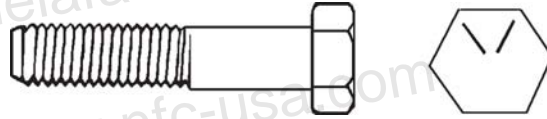
Part No.	Bolt Size	Quan.
101722	1/4"	50
101723	5/16"	50
101724	3/8"	50
101734	7/16"	50
101736	1/2"	50
101737	5/8"	50
101738	3/4"	50

STAINLESS HEX CAP SCREWS

Type 18-8

Stainless Steel

Hex Head Cap Screws

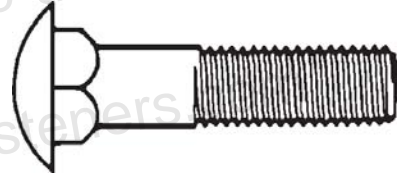


	Thread	Diameter (in)								
		1/4"	5/16"	3/8"	7/16"	1/2"	5/8"	3/4"	7/8"	1"
1/2"	USS/UNC SAE/UNF	100000	100050	100098						
3/4"	USS/UNC SAE/UNF	100002	100052	100100	100148	100194				
1"	USS/UNC SAE/UNF	100004	100054 100055	100102 100103	100150	100196	100248	100300		
1-1/4"	USS/UNC SAE/UNF	100006	100056	100104 100105	100152	100198	100250	100302		
1-1/2"	USS/UNC SAE/UNF	100008	100058	100106	100154	100200 100201	100252	100304	100352	
1-3/4"	USS/UNC SAE/UNF	100012	100060	100108		100202	100254			
2"	USS/UNC SAE/UNF	100014	100062	100110	100158	100204	100256	100308	100356	100400
2-1/4"	USS/UNC SAE/UNF			100112		100206				
2-1/2"	USS/UNC SAE/UNF	100018	100066	100114	100162	100208	100260	100312	100360	100404
2-3/4"	USS/UNC SAE/UNF					100210				
3"	USS/UNC SAE/UNF	100022	100070	100118	100166	100212	100264	100316	100364	100408
3-1/4"	USS/UNC SAE/UNF									
3-1/2"	USS/UNC SAE/UNF	100026	100074	100122	100170	100216	100268	100320	100368	100412
3-3/4"	USS/UNC SAE/UNF									
4"	USS/UNC SAE/UNF	100030	100078	100126	100174	100220	100272	100324	100372	100416
4-1/2"	USS/UNC SAE/UNF	100032	100080	100128	100176	100222	100274	100326	100374	100418
5"	USS/UNC SAE/UNF	100034	100082	100130	100178	100224	100276	100328	100376	100420
5-1/2"	USS/UNC SAE/UNF	100036	100084		100180	100226	100278	100330	100378	100422
6"	USS/UNC SAE/UNF	100038	100086	100134	100182	100228	100280	100332	100380	100424
6-1/2"	USS/UNC SAE/UNF									
7"	USS/UNC SAE/UNF									
7-1/2"	USS/UNC SAE/UNF									
8"	USS/UNC SAE/UNF									
8-1/2"	USS/UNC SAE/UNF						100290			
9"	USS/UNC SAE/UNF						100292			

STAINLESS STEEL

Type 18-8 Stainless Steel Carriage Bolts

- Stainless Steel
- Round Head
- Square Neck

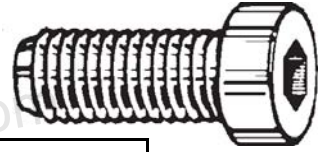


Length	Diameter (in)		
	1/4-20	5/16-18	3/8-16
1"	100803	100832	100862
1-1/4"	100804		
1-1/2"	100806	100836	100866
1-3/4"			100867
2"	100808	100838	100868
2-1/4"			100869
2-1/2"	100810	100840	100870
2-3/4"		100841	
3"	100812	100842	100872
3-1/2"			100874
4"	100816	100846	100876

NOTES

STAINLESS SOCKET CAP SCREWS

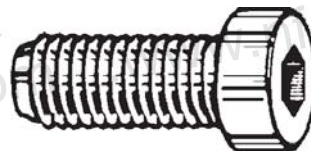
Stainless Steel Socket Head Cap Screws



Length (In.)	Thread	Diameter/Thread							
		4-40	6-32	8-32	10-24 10-32	1/4-20 1/4-28	5/16-18 5/16-24	3/8-16 3/8-24	1/2-13 1/2-20
1/4"	USS/UNC SAE/UNF	101820							
5/16"	USS/UNC SAE/UNF				101865				
3/8"	USS/UNC SAE/UNF	101822	101834	101850	101866 101867	101886			
1/2"	USS/UNC SAE/UNF	101824	101836	101852	101868 101869	101888 101889	101922	101952	
5/8"	USS/UNC SAE/UNF	101826	101838	101854	101870 101871	101890			
3/4"	USS/UNC SAE/UNF		101840	101856	101872 101873	101892 101893	101924	101956	
7/8"	USS/UNC SAE/UNF				101874	101894	101926		
1"	USS/UNC SAE/UNF		101844	101858	101876 101877	101896 101897	101928	101958 101959	102022
1-1/4"	USS/UNC SAE/UNF		101845	101860	101878 101879	101898	101930	101960 101961	102024
1-1/2"	USS/UNC SAE/UNF		101846	101862	101880 101881	101900	101932	101962 101963	102026
1-3/4"	USS/UNC SAE/UNF					101902	101935		
2"	USS/UNC SAE/UNF			101864	101884 101885	101904	101936	101966	102030
2-1/4"	USS/UNC SAE/UNF							101968	
2-1/2"	USS/UNC SAE/UNF					101908	101940	101970	102034 102035
3"	USS/UNC SAE/UNF					101912	101944	101974	102038
3-1/2"	USS/UNC SAE/UNF						101948	101978	
4"	USS/UNC SAE/UNF					101920		101982	102046
4-1/2"	USS/UNC SAE/UNF							101984	102048

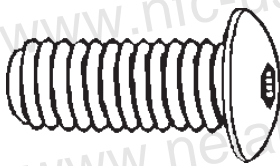
Socket Head Cap Screws (Con't.)

Length (In.)	Thread	Diameter/Thread	
		5/8-11 5/8-18	3/4-10 3/4-16
1-1/2"	USS/UNC SAE/UNF	102068	
3"	USS/UNC SAE/UNF		102118



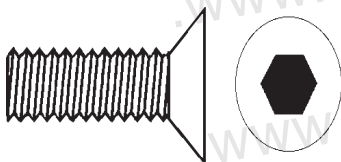
STAINLESS SOCKET CAP SCREWS

Button Head Socket Cap Screws



Length (In.)	Thread	Diameter/Thread						
		4-40	8-32	10-24 10-32	1/4-20 1/4-28	5/16-18 5/16-24	3/8-16 3/8-24	1/2-13 1/2-20
1/4"	USS SAE	102161		102198				
3/8"	USS SAE		102182	102200 102201				
1/2"	USS SAE			102202 102203	102214	102258	102230	
5/8"	USS SAE			102204 102205				
3/4"	USS SAE		102186	102206 102207	102218	102260	102234	
1"	USS SAE			102210 102211	102222	102262	102238	102246
1-1/4"	USS SAE				102224	102264	102240	
1-1/2"	USS SAE				102226	102266	102242	102250
2"	USS SAE						102244	

Flat Head Socket Cap Screws



Length (In.)	Thread	Diameter/Thread						
		6-32	8-32	10-24 10-32	1/4-20 1/4-28	5/16-18 5/16-24	3/8-16 3/8-24	1/2-13 1/2-20
1/4"	USS/UNC SAE/UNF	102284	102306					
5/16"	USS/UNC SAE/UNF	102285						
3/8"	USS/UNC SAE/UNF	102286	102308	102316 102317				
1/2"	USS/UNC SAE/UNF	102288	102310	102318 102319	102334 102335		102370	
3/4"	USS/UNC SAE/UNF	102290	102312	102320 102321	102336	102352	102372	102402
1"	USS/UNC SAE/UNF	102292	102314	102322 102323	102338	102354	102374	102404
1-1/4"	USS/UNC SAE/UNF	102294	102315	102324 102325	102340	102356	102376	102406
1-1/2"	USS/UNC SAE/UNF	102296	102303	102326 102327	102342	102358	102378	102408
2"	USS/UNC SAE/UNF				102346	102362		
2-1/2"	USS/UNC SAE/UNF						102386	

STAINLESS SET SCREWS

Stainless Steel Hex Socket Set Screws



Length (In.)	Thread	Diameter/Thread						
		6-32 6-40	8-32 8-36	10-24 10-32	1/4-20 1/4-28	5/16-18 5/16-24	3/8-16 3/8-24	1/2-13 1/2-20
1/8"	USS/UNC SAE/UNF	102470		102513				
3/16"	USS/UNC SAE/UNF	102472 102473	102494 102495		102536			
1/4"	USS/UNC SAE/UNF	102474 102475	102496 102497	102516 102517	102538 102539	102558	102580	
5/16"	USS/UNC SAE/UNF				102540	102560 102561	102582	
3/8"	USS/UNC SAE/UNF	102478 102479	102500 102501	102520 102521	102542 102543	102562 102563	102584	
7/16"	USS/UNC SAE/UNF							
1/2"	USS/UNC SAE/UNF	102482	102504	102524 102525	102546	102566 102567	102588 102589	102629
5/8"	USS/UNC SAE/UNF						102590	
3/4"	USS/UNC SAE/UNF			102529		102570	102594	
7/8"	USS/UNC SAE/UNF							
1"	USS/UNC SAE/UNF				102554	102574	102598	102636
1-1/4"	USS/UNC SAE/UNF				102556			
1-1/2"	USS/UNC SAE/UNF							102640

Ask your sales representative about our custom made assortments. Stock only the sizes you use.

STAINLESS STEEL NUTS

Stainless Steel Hex Nuts



USS		SAE	
Size	Part No.	Size	Part No.
3-48	100523		
4-40	100524		
6-32	100526		
8-32	100528		
10-24	100530	10-32	100531
12-24	100532		
1/4-20	100534	1/4-28	100535
5/16-18	100536	5/16-24	100537
3/8-16	100538	3/8-24	100539
7/16-14	100540	7/16-20	
1/2-13	100542	1/2-20	100543
9/16/12	100544	9/16-18	
5/8-11	100546	5/8-18	
3/4-10	100548	3/4-16	
7/8-9	100550	7/8-14	
1-8	100552	1-14	
1 1/8-7	100554	1 1/8-12	
1 1/4-7	100556	1 1/4-12	
1 1/2-6	100558	1 1/2-12	

Stainless Steel Nylon Lock Nuts



USS		SAE	
Size	Part No.	Size	SAE
6-32	100614		
8-32	100616		
10-24	100618	10-32	100619
1/4-20	100620	1/4-28	100621
5/16-18	100622	5/16-24	100623
3/8-16	100624	3/8-24	100625
7/16-14	100626	7/16-20	
1/2-13	100628	1/2-20	100629
5/8-11	100630	5/8-18	
3/4-10	100632	3/4-16	
1-8	100636	1-14	

Stainless Steel Wing Nuts



USS		SAE	
Size	Part No.	Size	SAE
10-24	100650	10-32	100651
1/4-20	100652	1/4-28	
5/16-18	100654	5/16-24	
3/8-16	100656	3/8-24	

Stainless Steel Acorn Nuts



Part No.	Size
103941	10-32
103942	1/4-20
103944	5/16-18
103946	3/8-16
103950	5/8-11

Stainless Steel Keps Nuts

Part No.	Size
100572	4-40
100574	6-32
100576	8-32
100578	10-24
100579	10-32
100581	1/4-20



STAINLESS STEEL WASHERS

Stainless Steel Flat Washers

Bolt Size	Part No.	O.D.	I.D.	Thickness
#3	100672	1/4	.109	.019
#4	100675	5/16	.125	.0312
#5	100676	5/16	.156	.035
#6	100674	3/8	.149	.031
#8	100677	3/8	.174	.031
3/16" (#10)	100678	7/16	.203	.0625
#12	100679	9/16	.250	.045
1/4"	100680	5/8	.281	.045
5/16"	100682	3/4	.343	.045
3/8"	100684	7/8	.406	.045
7/16"	100686	1 1/8	.500	.062
1/2"	100688	1 1/4	.531	.062
5/8"	100690	1 1/2	.687	.078
3/4"	100692	1 3/4	.812	.109
7/8"	100694	2	.937	.109
1"	100696	2	1.062	.125

Note: Washer thickness may vary $\pm .007$
depending on production run.

Stainless Steel AN Washers

Bolt Size	Part No.	O.D.	I.D.	Thickness
1/4"	103960	1/2"	.265	.0625
5/16"	103961	9/16"	.328	.0625
3/8"	103962	5/8"	.390	.0625
7/16"	103963	3/4"	.453	.0625
1/2"	103964	7/8"	.516	.0625
5/8"	103966	1-3/4"	0.655	.0625

Note: Washer thickness may vary $\pm .007$
depending on production run.

NOTES

STAINLESS STEEL WASHERS

Stainless Steel Lock Washers



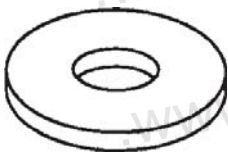
Bolt Size	Part No.
#3	100715
#4	100716
#6	100718
#8	100719
3/16" (#10)	100720
#12	100721
1/4"	100722
5/16"	100724
3/8"	100726
7/16"	100728
1/2"	100730
5/8"	100732
3/4"	100734
7/8"	100736
1"	100738
1-1/4"	100740

Stainless Steel Belleville Washers



Part No.	Screw Size	I.D.	O.D.
100705	3/8"	3/8"	3/4"
100707	1/2"	1/2"	1"
100708	1/2"	1/2"	1-3/16"

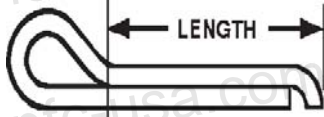
Stainless Steel Fender Washers



Bolt Size	Part No.	O.D.	I.D.	Thickness
#8	100757	3/4"	.174	.040
#10	100758	1 1/16"	.203	.045
#10	100759	1"	.203	.045
1/4"	100760	1"	.281	.045
1/4"	100761	1 1/4"	.281	.045
1/4"	100762	1 1/2"	.281	.062
5/16"	100764	1 1/4"	.343	.045
5/16"	100765	1 1/2"	.343	.062
3/8"	100768	1"	.406	.045
3/8"	100769	1 1/4"	.406	0.125
3/8"	100770	1 1/2"	.406	.062
1/2"	100774	1 1/2"	.531	.062
1/2"	100775	2"	.531	.062

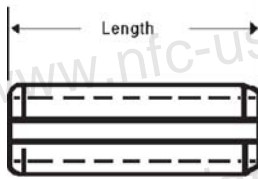
Note: Washer thickness may vary + - .007 depending on production run.

STAINLESS STEEL MISC



Stainless Steel Cotter Pins

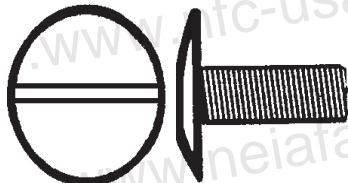
Length	Diameter						
	1/16"	5/64"	3/32"	1/8"	5/32"	3/16"	1/4"
5/16"	101740						
1/2"	101741	101749					
3/4"	101742		101750	101760	101771		
1"	101743		101751	101761	101772	101784	
1-1/4"	101744		101752	101762	101773	101785	
1-1/2"	101745		101753	101763	101774	101786	101796
1-3/4"			101754	101764		101787	
2"	101747		101755	101765	101776	101788	101798
2-1/4"						101789	
2-1/2"			101757	101767	101778	101790	101800
3"				101769	101780	101792	101802



Stainless Steel Roll Pins

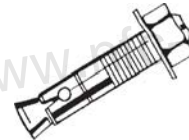
Length	Diameter					
	3/32"	1/8"	3/16"	7/32"	1/4"	5/16"
1/2"	102694		102766			
1"	102701	102721	102774		102833	102860
1-1/2"		102725			102837	102864
2"		102729	102782		102841	102868
3"				102817	102845	

Stainless Steel Sidewalk Bolts



Length	Diameter
	1/4-20
1"	102990

Stainless Steel Wedge Anchors



Length	Diameter		
	3/8"	1/2"	5/8"
2-1/4"	104006		
3"	104008		
3-3/4"	104010	104014	
4-1/4"		104015	
5"			104021
5-1/2"		104016	

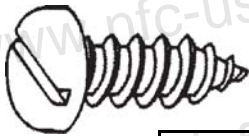
STAINLESS SHEET METAL/WOOD SCREWS

Phillips Pan Head Stainless Steel Sheet Metal Screws



Length (In.)	Diameter				
	#6	#8	#10	#12	#14
3/8"	102999	103013	103026		
1/2"	103000	103014	103027	103043	103053
5/8"	103010	103015	103028		103054
3/4"	103001	103016	103029		103055
7/8"		103017			
1"	103003	103018	103031	103045	103057
1-1/4"	103004	103019	103032		103058
1-1/2"	103005	103020	103033	103047	103059
2"		103022	103035		103061

Slotted Pan Head Stainless Steel Sheet Metal Screws



Length (In.)	Diameter				
	#6	#8	#10	#12	#14
1/2"	103200	103214	103227		
5/8"	103201	103215			
3/4"	103202	103216	103229		103256
1"	103203	103218	103231	103245	103257
1-1/4"	103204	103219	103232	103246	103258
1-1/2"	103205	103220	103233	103247	103259
1-3/4"			103234		
2"			103235	103249	103261

Phillips Flat Head Stainless Steel Deck Wood Screw



Diameter	
Length	8
1-1/4"	103330
2"	103332
2-1/2"	103333

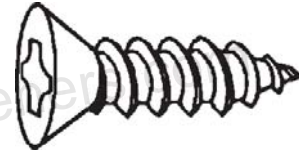
STAINLESS SHEET METAL/MACHINE SCREWS



**Phillips Oval Head
Stainless Steel
Sheet Metal Screws**

Length (In.)	Diameter				
	#6	#8	#10	#12	#14
3/8"		103082			
1/2"	103074	103084	103100	103112	
5/8"		103085			
3/4"	103076	103086	103102	103114	
7/8"		103088			
1"	103078	103090	103104	103116	
1-1/4"	103079		103105		103132
1-1/2"	103080	103094	103106	103118	103134
2-1/2"			103110		

**Phillips Flat Head
Stainless Steel
Sheet Metal Screws**



Length (In.)	Diameter #6
3/4"	103144
1"	103146

**Slotted Oval Head
Stainless Steel
Sheet Metal Screws**



Length (In.)	Diameter #10
1"	103304
1-1/4"	103305
1-1/2"	103306

**Stainless Steel
Phillips Pan Head
Self Drilling Point**



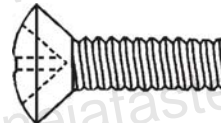
Length	8 Diameter	10 Diameter
1/2"	103312	
3/4"	103313	103321
1"		103322
1 1/4"		103323
1 1/2"		103324

**Slotted Pan Head
Stainless Steel
Machine Screws**



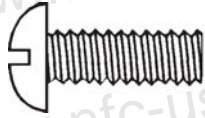
Length (In.)	Diameter		
	4-40	6-32	10-32
1/4"		103492	
1/2"	103482		
2"			103524

**Phillips Oval Head
Stainless Steel
Machine Screws**

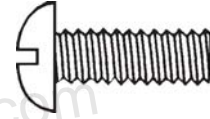


Length (In.)	Diameter			
	6-32	8-32	10-32	1/4-20
1/2"	103780			
3/4"				103826
1"				103827
1-1/4"		103802		
1-1/2"	103788		103821	

STAINLESS MACHINE SCREWS



Slotted Round Head Stainless Steel Machine Screws



Length (In.)	Thread	Diameter/Thread					
		2-56 2-64	4-40 4-48	6-32 6-40	8-32 8-36	10-24 10-32	1/4-20 1/4-28
1/8"	USS SAE	103350					
1/4"	USS SAE		103360		103385		
3/8"	USS SAE			103373	103386	103400 103403	
1/2"	USS SAE		103362	103375	103388	103402 103404	103440
5/8"	USS SAE	103354					
3/4"	USS SAE		103364	103377	103390	103408 103409	103441
7/8"	USS SAE				103391		
1"	USS SAE		103366	103379	103392	103412 103413	103442
1-1/4"	USS SAE			103380	103393	103414	103443
1-1/2"	USS SAE			103381	103394	103416 103417	103444
2"	USS SAE			103383	103396	103421	

Length (In.)	Thread	Diameter/Thread					
		6-32 6-40	8-32 8-36	10-24 10-32	1/4-20 1/4-28	5/16-18 5/16-24	3/8-16 3/8-24
3/8"	USS SAE		103584				
1/2"	USS SAE	103570	103586	103602 103603	103614		
3/4"	USS SAE	103572	103588	103604 103605	103616	103632	
1"	USS SAE		103590	103606 103607	103618	103634	103648
1-1/4"	USS SAE				103620		
1-1/2"	USS SAE			103611	103622	103638	
2"	USS SAE				103624		

Slotted Flat Head Stainless Steel Machine Screws



STAINLESS MACHINE SCREWS



**Phillips Flat Head
Stainless Steel
Machine Screws**

Length (In.)	Thread	Diameter/Thread				
		4-40	6-32 6-40	8-32 8-36	10-24 10-32	1/4-20 1/4-28
1/4	USS SAE	102902	102910	102926		
3/8"	USS SAE	102904	102912	102928	102952	
1/2"	USS SAE	102906	102914	102930	102954	
3/4"	USS SAE		102916	102932	102956	
1"	USS SAE		102918	102934		102976
1-1/4"	USS SAE					
1-1/2"	USS SAE					
1-3/4"	USS SAE			102937		



**Phillips Pan Head
Stainless Steel
Machine Screws**

Length (In.)	Thread	Diameter/Thread				
		4-40	6-32 6-40	8-32 8-36	10-24 10-32	1/4-20 1/4-28
1/4	USS SAE	103664	103671	103684	103701	
3/8"	USS SAE	103666	103673		103702	
1/2"	USS SAE	103667	103675	103688	103703 103718	103740
3/4"	USS SAE	103668	103677	103690	103704 103719	103741
1"	USS SAE	103669	103679	103692	103705 103720	103742
1-1/4"	USS SAE			103693	103706 103721	103743
1-1/2"	USS SAE			103694	103707 103722	103744
2"	USS SAE				103709	103746

METRIC STAINLESS STEEL

Stainless Steel Metric Cap Screws



Diameter	5 mm	6 mm	8 mm	10 mm	12 mm
Pitch	0.80	1.00	1.25	1.50	1.75
Wrench Sz.	8 mm	10 mm	13 mm	17 mm	19 mm
Length					
10	104126				
12		104140			
16	104130	104142	104162		
20	104132	104144	104164	104176	104212
25	104134	104145	104166	104178	
30	104136	104146	104168	104180	
35	104138	104148	104170	104182	
40	104139	104150	104172	104184	104220
75					104230

Stainless Steel Metric Socket Head Cap Screws



Diameter	4 mm	5 mm	6 mm	8 mm	10 mm	12 mm
Pitch	0.70	0.80	1.00	1.25	1.50	1.75
Wrench Sz.	7 mm	8 mm	10 mm	13 mm	17 mm	19 mm
Length						
10	104280					
12	104282	104332	104372			
16		104333	104374			
20			104376	104432	104492	
25	104288				104494	
30			104382	104436		
35						104546
40			104386	104440		
60		104342				
70				104452		
75				104454		
100				104462		
130					104526	

METRIC STAINLESS STEEL

Stainless Steel Metric Hex Nuts



Metric Hex Nuts Part No.	Diameter	Thread Pitch	Metric Nylon Lock Nut
104065	4	0.7	
104066	5	0.8	
104067	6	1	104080
104068	8	1.25	104082
104070	10	1.5	104084
104072	12	1.75	

Stainless Steel Metric Flat Washers



Part No.	Size
104048	5 mm
104049	6 mm
104051	8 mm
104053	10 mm
104055	12 mm

Stainless Steel Metric Lock Washers



Part No.	Size
104031	5 mm
104032	6 mm
104034	8 mm
104036	10 mm
104037	12 mm

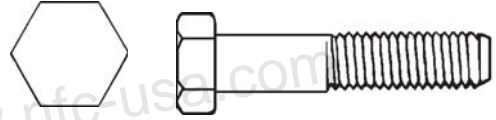
Stainless Steel Metric Wing Nuts



Part No.	Diameter	Thread Pitch
104100	6	1.00

BRASS

Brass Hex Head Cap Screws



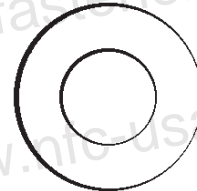
Length (In.)	Thread	Diameter (In.)			
		1/4"	5/16"	3/8"	1/2"
3/4"	USS/UNC SAE/UNF	105000	105020	105040	
1"	USS/UNC SAE/UNF	105002	105022	105042	105070
1-1/2"	USS/UNC SAE/UNF	105006	105026	105046	105074
1-3/4"	USS/UNC SAE/UNF				
2"	USS/UNC SAE/UNF		105030	105050	105078

Brass Hex Nuts



Bolt Diameter	USS Part No	SAE Part No	Quantity
6-32	105100		50
8-32	105102		50
10-24	105104		50
10-32		105105	50
1/4-20	105106		50
5/16-18	105108		50
3/8-16	105110		25
3/8-24		105111	25
7/16-14	105112		25
7/16-20		105113	25
1/2-13	105114		25
1/2-20		105115	25
5/8-11	105116		10
3/4-10	105118		10

Brass Flat Washers



Part No.	Bolt Size	Quantity
105170	#8	50
105171	#10	50
105172	1/4"	50
105173	5/16"	50
105174	3/8"	50
105176	1/2"	50
105177	5/8"	50

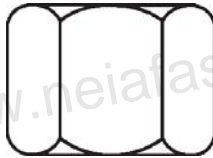
BRASS & COPPER

Brass Lock Washers



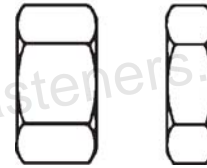
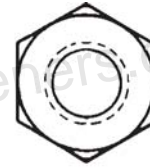
Part No.	Size
105185	1/4"
105186	5/16"
105187	3/8"
105188	1/2"

Brass (USS) High Manifold Nuts



Part No.	Size
105154	3/8-16

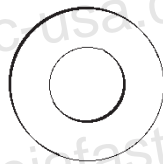
Brass (USS) Jam Nuts



Standard Nut Jam Nut

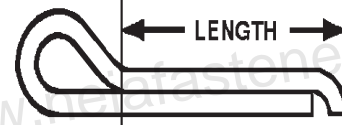
Part No.	Size
105132	1/4-20
105134	5/16-18
105136	3/8-16
105138	7/16-14
105140	1/2-13
105142	5/8-11

Copper Flat Washers



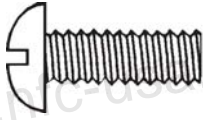
Part No.	Size
105500	1/4
105501	5/16
105502	3/8
105503	1/2

Brass Cotter Pins



Part No.	Diameter	Length
105440	1/16	1/2
105442	1/16	3/4

BRASS & ALUMINUM



Brass Slotted Round Head Machine Screws

Length	Diameter				
	6-32	8-32	10-24	10-32	1/4-20
1/2"	105250	105266	105284	105285	105300
3/4"	105252	105268	105286	105287	105302
1"	105254	105270	105288	105289	105304
1-1/2"	105256	105272	105290		105308



Brass Slotted Flat Head Machine Screws

Length	Diameter			
	6-32	8-32	10-24	1/4-20
1/2"		105360	105374	
3/4"			105376	105390
1"	105354	105364		105392
1-1/4"				105394
1-1/2"				105396

Aluminum Hex Nuts

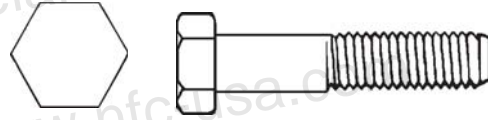


Part No.	Size
105210	3/8-16
105214	1/2-13

Ask your sales representative about our custom made assortments. Stock only the sizes you use.

CHROME PLATED CAP SCREWS

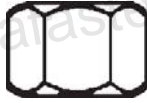
Chrome Plated
Hex Head Cap Screws



Length (In.)	Thread	Diameter (In.)			
		1/4"	5/16"	3/8"	1/2"
1/2"	USS/UNC SAE/UNF	105580 105581			
3/4"	USS/UNC SAE/UNF	105582 105583	105606 105607		
1"	USS/UNC SAE/UNF	105584 105585	105608 105609	105630 105631	105652 105653
1-1/4"	USS/UNC SAE/UNF	105586 105587	105610 105611		105654 105655
1-1/2"	USS/UNC SAE/UNF	105588 105589	105612 105613	105634 105635	105656 105657
1-3/4"	USS/UNC SAE/UNF				105658 105659
2"	USS/UNC SAE/UNF	105592 105593	105616 105617	105638 105639	105660 105661
2-1/4"	USS/UNC SAE/UNF				105662
2-1/2"	USS/UNC SAE/UNF	105596 105597	105620 105621	105642 105643	105664 105665
2-3/4"	USS/UNC SAE/UNF				
3"	USS/UNC SAE/UNF				105668 105669
3-1/2"	USS/UNC SAE/UNF				105673
3-3/4"	USS/UNC SAE/UNF				105675
4"	USS/UNC SAE/UNF				105677
4-1/2"	USS/UNC SAE/UNF				105679
5"	USS/UNC SAE/UNF				105681
5-1/2"	USS/UNC SAE/UNF				105683
6"	USS/UNC SAE/UNF				105685
7"	USS/UNC SAE/UNF				105689
8"	USS/UNC SAE/UNF				105693

CHROME PLATED

Chrome Plated Hex Nuts



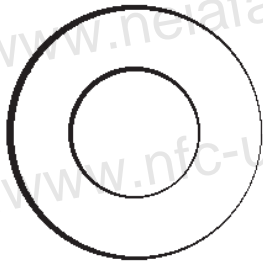
Part No.	Size	Quantity
105700	1/4-20	50
105701	1/4-28	50
105702	5/16-18	50
105703	5/16-24	50
105704	3/8-16	50
105705	3/8-24	50
105706	1/2-13	50
105707	1/2-20	50

Chrome Plated Lock Washers



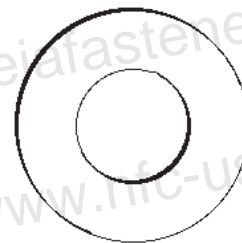
Part No.	Size	Quantity
105726	1/4	50
105727	5/16	50
105728	3/8	50
105729	1/2	50

Chrome Plated USS Flat Washers



Part No.	Size	Quantity
105710	1/4	50
105712	5/16	50
105714	3/8	50
105716	1/2	50

Chrome Plated SAE Flat Washers



Part No.	Size	Quantity
105711	1/4	50
105713	5/16	50
105715	3/8	50
105717	1/2	50

