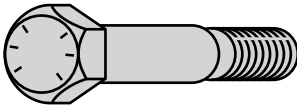


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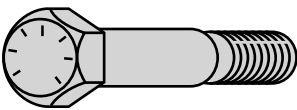
HARDWARE

Bolts



Hex Head Bolts

- Designed with smooth rolled threads for better clamp load, shear resistance and resistance to stripping.
- Made of fine grain steel for a more uniform micro-structure, resulting in improved toughness and fracture resistance.
- Inch Bolts
 - Meet or exceed SAE Grade 8 specifications for tensile strength and proof load, minimum tensile strength of 150,000 psi.
 - Have 20% higher head height than SAE specifications for longer wear life, easier gripping and less slippage.
 - Marked with 6 radial dashes on the bolt head.
- Metric Bolts
 - Meet or exceed ISO Class 10.9 specifications for tensile strength and proof load, minimum tensile strength of 150,000 psi.
 - Marked with 10.9 on the bolt head.
- Bolt Coatings
 - Phosphate and Oil coating provides better clamp loads and torque retention.
 - Zinc Dichromate plating provides better long term corrosion resistance.



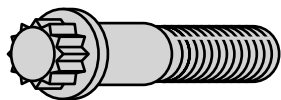
High Strength Hex Head Bolts

- Thread design and steel - similar to HEX Head Bolts
- Inch Bolts
 - Have 20% higher head height than SAE specifications for longer wear life, easier gripping and less slippage
 - Exceed SAE Grade 8 specifications for tensile strength and proof load, minimum tensile strength of 170,000 psi
 - Marked with seven radial dashes on the bolt head
- Metric Bolts
 - Exceed ISO 10.9 specifications for tensile strength and proof load, minimum tensile strength of 170,000 psi
 - Marked with 11.9 on the bolt head
- Coatings - similar to HEX Head Bolts.



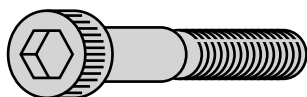
Bolts

12 Point Head Bolts



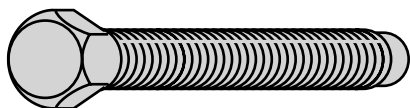
- Designed with smooth rolled threads for better clamp load, shear resistance, and resistance to stripping.
- Made of fine grain steel for a more uniform micro-structure, resulting in improved toughness and fracture resistance.
- Exceeds SAE Grade 8 specifications for tensile strength and proof load, minimum tensile strength of 170,000 psi.
- For use in restricted clearance applications.

Hex Socket Head Screw Bolts



- Designed with smooth rolled threads for better clamp load, shear resistance, and resistance to stripping.
- Made of fine grain steel for a more uniform micro-structure, resulting in improved toughness and fracture resistance.
- Exceeds SAE Grade 8 specifications for tensile strength and proof load, minimum tensile strength of 170,000 psi.
- For use in restricted clearance applications.

Hex Head Forcing Bolts

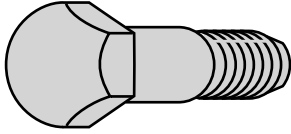


- Designed with smooth rolled threads for better clamp load, shear resistance, and strip resistance.
- Made of fine grain steel for a more uniform micro-structure, resulting in improved toughness and fracture resistance.



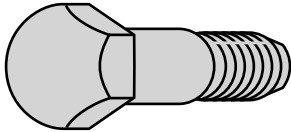
Hardware

Bolts



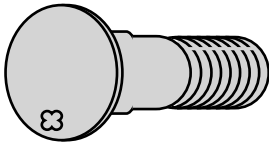
Track Bolts and Split Master Link Bolts

- High dome Hex head for longer wear life and reusability.
- Exceeds SAE Grade 8 specifications for tensile strength and proof load, minimum tensile strength 170,000 psi.
- Special induction heat treat process provides Rockwell C37–42 hardness.



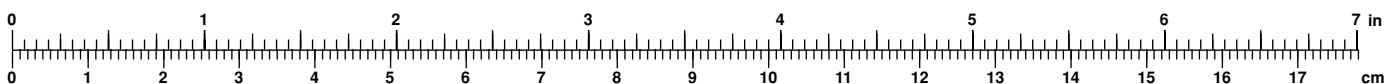
High Strength Track Bolts

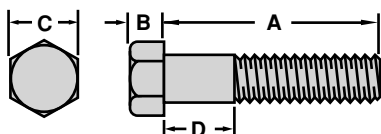
- Similar high dome Hex head as standard Track Bolts.
- Exceeds SAE Grade 8 specifications for tensile strength and proof load, minimum tensile strength 180,000 psi.
- Special induction heat treat process provides Rockwell C39–43 hardness.



Cutting Edge Bolts

- Dome shaped head for added strength and wear resistance.
- Exceeds SAE Grade 8 specifications for tensile strength and proof load, minimum tensile strength of 150,000 psi.
- Special induction heat treat process provides Rockwell C33–39 minimum.





Hex Head Bolts / Inch / Coarse Thread UNC / Phosphate & Oil Coated

THREAD SIZE (in - TPI)	A BOLT LENGTH (in)	B HEAD HEIGHT (in)	C HEAD WIDTH (in)	D GRIP LENGTH (in)	PART NUMBER
1/4-20	3/8	0.19	0.44	0.06	0S-1613
	1/2	0.19	0.44	0.06	0S-1614
	5/8	0.19	0.44	0.13	2A-0762
	3/4	0.19	0.44	0.13	0S-1615
	7/8	0.19	0.44	0.13	4F-7957
	1	0.19	0.44	0.13	0S-1616
	1 1/8	0.19	0.44	0.37	9F-6580
	1 1/4	0.19	0.44	0.13	7B-2742
	1 3/8	0.19	0.44	0.63	2A-5546
	1 1/2	0.19	0.44	0.25	9F-7022
	1 5/8	0.19	0.44	0.87	7B-8167
	1 3/4	0.19	0.44	1.00	1B-2713
	2	0.19	0.44	1.13	8B-2377
	2 1/4	0.19	0.44	1.37	1D-4533
	2 1/2	0.19	0.44	1.75	1B-2714
	2 3/4	0.19	0.44	2.00	2A-4781
	3	0.19	0.44	2.00	4B-9365
	3 1/4	0.19	0.44	2.50	8F-8178
	3 1/2	0.19	0.44	2.75	3B-8695
	3 3/4	0.19	0.44	3.00	8F-6302
	4	0.19	0.44	3.25	8S-4710
	4 1/2	0.19	0.44	3.75	8S-4711
	4 3/4	0.19	0.44	4.00	4L-3776
	5	0.19	0.44	4.25	1B-2716
	5 1/2	0.19	0.44	4.50	1B-2717
	6	0.19	0.44	5.25	1B-2718
	6 1/2	0.19	0.44	5.50	4N-1761
	Nut				9S-8750
	Washer				5P-0537
5/16-18	1/2	0.24	0.50	0.06	1C-0569
	5/8	0.24	0.50	0.13	2H-3755
	3/4	0.24	0.50	0.13	0S-1617
	7/8	0.24	0.50	0.13	2B-2695
	1	0.24	0.50	0.13	0S-1618
	1 1/8	0.24	0.50	0.25	4B-3388
	1 1/4	0.24	0.50	0.37	1B-7182
	1 3/8	0.24	0.50	0.50	1B-2790
	1 1/2	0.24	0.50	0.09	1A-9579

THREAD SIZE (in - TPI)	A BOLT LENGTH (in)	B HEAD HEIGHT (in)	C HEAD WIDTH (in)	D GRIP LENGTH (in)	PART NUMBER
5/16-18	1 5/8	0.24	0.50	0.75	1H-5514
	1 3/4	0.24	0.50	0.87	1B-9575
	2	0.24	0.50	1.13	2B-2694
	2 1/4	0.24	0.50	1.37	1D-4538
	2 1/2	0.24	0.50	1.63	1D-4539
	2 3/4	0.24	0.50	1.87	1D-4540
	3	0.24	0.50	2.13	1D-4541
	3 1/4	0.24	0.50	2.25	1F-5842
	3 1/2	0.24	0.50	2.63	1F-4111
	3 3/4	0.24	0.50	2.75	4B-0831
	4	0.24	0.50	3.00	4B-3903
	4 1/4	0.24	0.50	3.37	8H-8769
	4 1/2	0.24	0.50	3.63	3H-5932
	4 3/4	0.24	0.50	3.87	3H-3243
	5	0.24	0.50	4.13	1F-6296
	5 1/2	0.24	0.50	4.63	5L-1761
	5 3/4	0.24	0.50	4.87	8M-1865
	6	0.24	0.50	5.13	5P-0059
	6 1/2	0.24	0.50	5.37	4F-3508
	Nut				5S-0003
	Washer				9M-1974
3/8-16	1/2	0.29	0.56	0.09	4F-4879
	5/8	0.29	0.56	0.09	0T-0102
	3/4	0.29	0.56	0.13	0S-0509
	7/8	0.29	0.56	0.13	0L-1351
	1	0.29	0.56	0.13	0S-1594
	1 1/8	0.29	0.56	0.31	1A-2029
	1 1/4	0.29	0.56	0.25	0S-1588
	1 3/8	0.29	0.56	0.37	3B-1915
	1 1/2	0.29	0.56	0.37	0S-1591
	1 5/8	0.29	0.56	0.87	2A-4639
	1 3/4	0.29	0.56	0.75	0S-1571
	1 7/8	0.29	0.56	1.06	1C-2251
	2	0.29	0.56	1.00	0S-1590
	2 1/4	0.29	0.56	1.25	0L-2070
	2 1/2	0.29	0.56	1.50	0L-1143
	2 3/4	0.29	0.56	1.75	0T-0573
	3	0.29	0.56	2.00	0S-1619

* High strength bolt.

Hardware

Hex Head Bolts / Inch / Coarse Thread UNC / Phosphate & Oil Coated

THREAD SIZE (in - TPI)	A BOLT LENGTH (in)	B HEAD HEIGHT (in)	C HEAD WIDTH (in)	D GRIP LENGTH (in)	PART NUMBER
3/8-16	3 1/4	0.29	0.56	2.25	0L-1352
	3 1/2	0.29	0.56	2.50	0T-0065
	3 3/4	0.29	0.56	2.50	0S-1608
	4	0.29	0.56	3.00	8S-9191
	4 1/4	0.29	0.56	3.25	0T-0055
	4 1/2	0.29	0.56	3.25	1A-5964
	4 3/4	0.29	0.56	3.75	1A-5183
	5	0.29	0.56	4.00	5B-9603
	5 1/4	0.29	0.56	4.25	5B-2638
	5 1/2	0.29	0.56	4.50	5F-4899
	5 3/4	0.29	0.56	4.75	7F-3425
	6	0.29	0.56	4.87	1D-4706
	6 1/4	0.29	0.56	4.75	8F-8544
	6 1/2	0.29	0.56	5.25	4F-0411
	7	0.29	0.56	5.75	9F-8999
	7 1/2	0.29	0.56	6.25	6B-1557
	8	0.29	0.56	6.75	8F-6350
	8 1/2	0.29	0.56	7.25	9F-2773
	9	0.29	0.56	7.75	5F-6044
	9 1/2	0.29	0.56	8.25	4H-3283
	11	0.29	0.56	9.75	5P-1415
	12	0.29	0.56	11.00	7M-1202
	Nut				9S-8752
	Washer				5M-2894
7/16-14	3/4	0.34	0.69	0.19	5P-0060
	7/8	0.34	0.69	0.13	3L-0526
	1	0.34	0.69	0.13	0T-0318
	1 1/8	0.34	0.69	0.13	4F-8965
	1 1/4	0.34	0.69	0.13	0T-0320
	1 3/8	0.34	0.69	0.25	3H-5368
	1 1/2	0.34	0.69	0.37	0T-0772
	1 3/4	0.34	0.69	0.63	0T-0768
	2	0.34	0.69	0.87	0T-0319
	2 1/4	0.34	0.69	1.13	1D-4707
	2 1/2	0.34	0.69	1.37	1D-4703
	2 3/4	0.34	0.69	1.63	1D-4556
	3	0.34	0.69	1.87	4F-5192
	3 1/4	0.34	0.69	2.13	3B-8428
	3 1/2	0.34	0.69	2.37	7F-8698
	3 3/4	0.34	0.69	2.63	9F-2491
	4	0.34	0.69	2.87	4F-7226

THREAD SIZE (in - TPI)	A BOLT LENGTH (in)	B HEAD HEIGHT (in)	C HEAD WIDTH (in)	D GRIP LENGTH (in)	PART NUMBER
7/16-14	4 1/4	0.34	0.69	3.13	2J-5907
	4 1/2	0.34	0.69	3.25	4B-7220
	4 3/4	0.34	0.69	3.63	7H-3472
	5	0.34	0.69	3.75	5B-5059
	5 1/2	0.34	0.69	4.37	8F-4197
	6	0.34	0.69	4.87	8F-6419
	6 1/2	0.34	0.69	5.13	3L-0742
	7	0.34	0.69	5.63	7H-7209
	7 1/2	0.34	0.69	6.13	2L-7442
	8	0.34	0.69	6.62	4L-7925
	9	0.34	0.69	7.63	4L-7926
	11	0.34	0.69	9.63	3L-4317
	Nut				3S-1546
	Washer				5P-8244
1/2-13	1/2	0.39	0.75	0.06	1K-6705
	3/4	0.39	0.75	0.13	0S-1620
	7/8	0.39	0.75	0.28	2H-3855
	1	0.39	0.75	0.13	0S-1621
	1 1/8	0.39	0.75	0.13	6H-1717
	1 1/4	0.39	0.75	0.31	0S-1595
	1 3/8	0.39	0.75	0.44	7B-3235
	1 1/2	0.39	0.75	0.25	0S-1585
	1 3/4	0.39	0.75	0.44	0S-1587
	2	0.39	0.75	0.75	1A-1460
	2 1/4	0.39	0.75	1.00	9X-8873
	2 1/4	0.39	0.75	1.00	2B-0947*
	2 1/2	0.39	0.75	1.25	9S-1366
	2 3/4	0.39	0.75	1.50	1A-5822
	3	0.39	0.75	1.75	9X-8874
	3	0.39	0.75	1.75	0L-1329*
	3 1/4	0.39	0.75	2.00	0V-0375
	3 1/2	0.39	0.75	2.25	9X-8875
	3 1/2	0.39	0.75	2.25	1D-4566*
	3 3/4	0.39	0.75	2.50	1B-2886
	4	0.39	0.75	2.75	0S-1573
	4 1/4	0.39	0.75	3.00	1D-4569
	4 1/2	0.39	0.75	3.25	8S-9089
	4 3/4	0.39	0.75	3.50	9X-8876
	4 3/4	0.39	0.75	3.50	2B-2006*
	5	0.39	0.75	3.75	9X-8877
	5	0.39	0.75	3.75	2H-6488*

* High strength bolt.

Hex Head Bolts / Inch / Coarse Thread UNC / Phosphate & Oil Coated

THREAD SIZE (in - TPI)	A BOLT LENGTH (in)	B HEAD HEIGHT (in)	C HEAD WIDTH (in)	D GRIP LENGTH (in)	PART NUMBER
1/2-13	5 1/4	0.39	0.75	4.00	9X-8878
	5 1/4	0.39	0.75	4.00	6F-5282*
	5 1/2	0.39	0.75	4.25	9X-8879
	5 1/2	0.39	0.75	4.25	1D-4572*
	5 3/4	0.39	0.75	4.50	8F-8804
	6	0.39	0.75	4.75	1D-4574
	6 1/4	0.39	0.75	4.75	9H-8260
	6 1/2	0.39	0.75	5.00	2A-1531
	7	0.39	0.75	5.50	1A-7669
	7 1/2	0.39	0.75	6.00	1A-0168
	8	0.39	0.75	6.50	9S-1374
	8 1/2	0.39	0.75	7.00	1B-3573
	9	0.39	0.75	7.50	6M-9613
	10	0.39	0.75	8.50	6F-5281
	10 1/2	0.39	0.75	9.00	8M-0139*
	11	0.39	0.75	9.50	8S-3887
	11 1/2	0.39	0.75	10.00	5P-5421*
	13	0.39	0.75	11.50	8S-6212*
	14	0.39	0.75	12.50	5M-7900*
	Nut				1F-7958
	Washer				5P-8245
9/16-12	1	0.43	0.87	0.12	3K-3379
	1 1/4	0.43	0.87	0.16	8S-4732
	1 3/8	0.43	0.87	0.17	4B-8519
	1 1/2	0.43	0.87	0.16	8S-4733
	2 1/2	0.43	0.87	1.13	8S-4735
	3	0.43	0.87	1.63	8S-4736
	3 1/2	0.43	0.87	2.13	8S-4737
	4	0.43	0.87	2.63	8S-4738
	4 1/2	0.43	0.87	3.13	8S-4739
	5	0.43	0.87	3.63	8S-4740
	5 1/2	0.43	0.87	4.13	8S-4741
	6	0.43	0.87	4.63	8S-4742
	8	0.43	0.87	6.38	9H-9129
	Nut				5P-0539
	Washer				5P-8246
5/8-11	3/4	0.48	0.94	0.06	1H-9456
	1	0.48	0.94	0.19	0S-1624
	1 1/8	0.48	0.94	0.28	7S-9372
	1 1/4	0.48	0.94	0.19	0S-1592
	1 3/8	0.48	0.94	0.19	4B-4043

THREAD SIZE (in - TPI)	A BOLT LENGTH (in)	B HEAD HEIGHT (in)	C HEAD WIDTH (in)	D GRIP LENGTH (in)	PART NUMBER
5/8-11	1 1/2	0.48	0.94	0.19	0S-1566
	1 3/4	0.48	0.94	0.25	0S-1589
	2	0.48	0.94	0.50	9X-8880
	2	0.48	0.94	0.50	1A-1135*
	2 1/4	0.48	0.94	0.75	9X-8881
	2 1/4	0.48	0.94	0.75	8S-9092*
	2 1/2	0.48	0.94	0.63	9X-8882
	2 1/2	0.48	0.94	0.63	0S-1625*
	2 3/4	0.48	0.94	1.25	9X-8883
	2 3/4	0.48	0.94	1.25	1A-8537*
	3	0.48	0.94	1.50	1B-4367
	3 1/4	0.48	0.94	1.75	1D-4585
	3 1/2	0.48	0.94	2.00	1D-4586
	3 3/4	0.48	0.94	2.25	0L-1169
	4	0.48	0.94	2.50	0S-1569
	4 1/4	0.48	0.94	2.75	1D-4588
	4 1/2	0.48	0.94	3.00	1A-8651
	4 3/4	0.48	0.94	3.25	1D-4590
	5	0.48	0.94	3.50	1A-5405
	5 1/4	0.48	0.94	3.75	9X-8884
	5 1/4	0.48	0.94	3.75	7S-3224*
	5 1/2	0.48	0.94	4.00	1D-4593
	6	0.48	0.94	4.50	1D-4595
	6 1/4	0.48	0.94	4.50	5D-9514
	6 1/2	0.48	0.94	4.75	1D-4597
	7	0.48	0.94	5.25	1D-4599
	7 1/2	0.48	0.94	5.75	1D-4600
	8	0.48	0.94	6.25	1B-7709
	8 1/2	0.48	0.94	6.75	1D-4601
	9	0.48	0.94	7.25	2H-3756
	9 1/2	0.48	0.94	7.75	1D-4602
	11 1/2	0.48	0.94	9.75	5P-4624
	Nut				4K-0367
	Washer				5P-8247
3/4-10	1	0.58	1.13	0.31	7H-2069
	1 1/4	0.58	1.13	0.31	0S-1583
	1 1/2	0.58	1.13	0.31	0S-1626
	1 3/4	0.58	1.13	0.31	1A-0458
	2	0.58	1.13	0.31	0L-1178
	2 1/4	0.58	1.13	0.50	9X-8885
	2 1/4	0.58	1.13	0.50	2A-1538*

* High strength bolt.

Hardware

Hex Head Bolts / Inch / Coarse Thread UNC / Phosphate & Oil Coated

THREAD SIZE (in - TPI)	A BOLT LENGTH (in)	B HEAD HEIGHT (in)	C HEAD WIDTH (in)	D GRIP LENGTH (in)	PART NUMBER
3/4-10	2 1/2	0.58	1.13	0.75	1A-8063
	2 3/4	0.58	1.13	1.00	9X-8886
	2 3/4	0.58	1.13	1.00	1D-4608*
	3	0.58	1.13	1.25	9X-8887
	3	0.58	1.13	1.25	1D-4609*
	3 1/4	0.58	1.13	1.50	9X-8888
	3 1/4	0.58	1.13	1.50	1D-4610*
	3 1/2	0.58	1.13	1.75	9X-8889
	3 1/2	0.58	1.13	1.75	3B-2968*
	3 3/4	0.58	1.13	2.00	7F-5227
	4	0.58	1.13	2.25	1D-4612
	4 1/4	0.58	1.13	2.50	0S-1756
	4 1/2	0.58	1.13	2.75	0S-1627
	4 3/4	0.58	1.13	3.00	3B-6753
	5	0.58	1.13	3.25	1D-4614
	5 1/4	0.58	1.13	3.50	6V-8199
	5 1/2	0.58	1.13	3.75	1D-4615
	5 3/4	0.58	1.13	4.00	6K-1330
	6	0.58	1.13	4.25	1D-4616
	6 1/4	0.58	1.13	4.25	1D-4617
	6 1/2	0.58	1.13	4.50	2B-1015
	7	0.58	1.13	5.00	1D-4620
	7 1/2	0.58	1.13	5.50	1D-4621
	8	0.58	1.13	6.00	1D-4622
	8 1/2	0.58	1.13	6.50	1D-4623
	9	0.58	1.13	7.00	1D-4624
	9 1/2	0.58	1.13	7.50	5J-1702
	10	0.58	1.13	8.00	8F-4225
	11 1/2	0.58	1.13	9.50	4J-7945
	13	0.58	1.13	11.00	031-9099
	Nut				2J-3506
	Washer				5P-8248
7/8-9	1 1/2	0.67	1.31	0.25	0T-0690
	1 3/4	0.67	1.31	0.37	2H-3757
	2	0.67	1.31	0.37	9X-8890
	2	0.67	1.31	0.37	0S-1973*
	2 1/4	0.67	1.31	0.37	9F-9522
	2 1/2	0.67	1.31	0.50	1D-4625
	2 3/4	0.67	1.31	0.75	9X-8891
	2 3/4	0.67	1.31	0.75	1D-4626*
	3	0.67	1.31	1.00	1D-4627
	3 1/4	0.67	1.31	1.25	9X-8892

THREAD SIZE (in - TPI)	A BOLT LENGTH (in)	B HEAD HEIGHT (in)	C HEAD WIDTH (in)	D GRIP LENGTH (in)	PART NUMBER
7/8-9	3 1/4	0.67	1.31	1.25	1D-4628*
	3 1/2	0.67	1.31	1.50	9X-8893
	3 1/2	0.67	1.31	1.50	1D-4629*
	3 3/4	0.67	1.31	1.75	9X-8894
	3 3/4	0.67	1.31	1.75	2H-3856*
	4	0.67	1.31	2.00	9X-8895
	4	0.67	1.31	2.00	1D-4630*
	4 1/4	0.67	1.31	2.25	1D-4631
	4 1/2	0.67	1.31	2.50	1A-5576
	4 3/4	0.67	1.31	2.75	4J-8622
	5	0.67	1.31	3.00	9S-1351
	5 1/2	0.67	1.31	3.50	1D-4634
	6	0.67	1.31	3.75	9S-1322
	6 1/2	0.67	1.31	4.25	6J-1536
	7	0.67	1.31	4.75	1D-5976
	7 1/2	0.67	1.31	5.25	1K-9422
	8	0.67	1.31	5.75	1D-6259
	8 1/2	0.67	1.31	6.25	3K-7127
	9	0.67	1.31	6.75	6K-8739
	9 1/2	0.67	1.31	7.25	1D-6260
	10	0.67	1.31	7.75	2B-2391
	11	0.67	1.31	8.75	3K-3112
	12 1/2	0.67	1.31	10.25	4D-8317
	14	0.67	1.31	11.75	3K-0581
	15	0.67	1.31	12.75	3K-3183
	16	0.67	1.31	13.75	3K-6552
	Nut				2J-3505
	Washer				5P-8249
1-8	1 1/4	0.71	1.50	0.31	8S-4767
	1 1/2	0.71	1.50	0.31	0V-0450
	1 3/4	0.71	1.50	0.37	1J-7370
	2	0.71	1.50	0.75	1J-5257
	2 1/4	0.71	1.50	0.25	8S-9093
	2 1/2	0.71	1.50	0.50	1D-4635
	2 3/4	0.71	1.50	0.50	9S-1363
	3	0.71	1.50	0.75	1D-4709
	3 1/4	0.71	1.50	1.00	1D-4637
	3 1/2	0.71	1.50	1.25	1D-4638
	3 3/4	0.71	1.50	1.50	8H-5772
	4	0.71	1.50	1.75	9X-8896
	4	0.71	1.50	1.75	1D-4639*
	4 1/4	0.71	1.50	2.00	9X-8897

* High strength bolt.

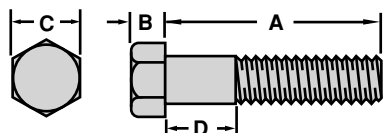
Hex Head Bolts / Inch / Coarse Thread UNC / Phosphate & Oil Coated

THREAD SIZE (in - TPI)	A BOLT LENGTH (in)	B HEAD HEIGHT (in)	C HEAD WIDTH (in)	D GRIP LENGTH (in)	PART NUMBER
1-8	4 1/4	0.71	1.50	2.00	1D-4640*
	4 1/2	0.71	1.50	2.25	1D-4641
	4 3/4	0.71	1.50	2.50	2A-1420
	5	0.71	1.50	2.75	9X-8898
	5	0.71	1.50	2.75	1D-4642*
	5 1/2	0.71	1.50	3.25	1D-4643
	6	0.71	1.50	3.75	9F-6936
	6 1/2	0.71	1.50	4.00	5B-5473
	7	0.71	1.50	4.50	5F-9338
	7 1/2	0.71	1.50	5.00	2B-7218
	8	0.71	1.50	5.50	1D-4644
	8 1/2	0.71	1.50	6.00	1D-4645
	9	0.71	1.50	6.50	1D-4646
	9 1/2	0.71	1.50	7.00	1D-4647
	10	0.71	1.50	7.50	2J-8348
	10 1/2	0.71	1.50	8.00	8F-6453
	11	0.71	1.50	8.50	8K-5130
	11 1/2	0.71	1.50	9.00	7K-4363
	12	0.71	1.50	10.50	2H-4010
	13	0.71	1.50	10.50	6J-4081
	14	0.71	1.50	10.50	6M-2001
	15	0.71	1.50	13.50	2H-4011
	16	0.71	1.50	14.00	6M-1029
	Nut				2J-3507
	Washer				5P-8250
1 1/8-7	2	0.72	1.69	0.25	3J-8281
	2 1/2	0.72	1.69	1.00	7J-7222
	2 3/4	0.72	1.69	0.44	2K-2037
	3	0.72	1.69	0.50	1J-2814
	3 1/2	0.72	1.69	1.00	1J-2175
	4	0.72	1.69	0.63	3N-1614
	4 1/4	0.72	1.69	1.75	5J-1572
	4 1/2	0.72	1.69	2.00	5M-0544
	5 1/4	0.72	1.69	3.00	6J-1551
	6	0.72	1.69	3.50	8H-5727
	6 1/2	0.72	1.69	3.75	8F-4486
	Nut				4J-5977
	Washer				3S-1349
1 1/4-7	2 1/2	0.81	1.87	0.44	3F-6353
	3	0.81	1.87	0.44	3R-2299
	3 1/4	0.81	1.87	0.50	1J-5484

THREAD SIZE (in - TPI)	A BOLT LENGTH (in)	B HEAD HEIGHT (in)	C HEAD WIDTH (in)	D GRIP LENGTH (in)	PART NUMBER
1 1/4-7	3 1/2	0.81	1.87	0.75	2B-1955
	4	0.81	1.87	1.25	2H-3758
	4 1/4	0.81	1.87	1.50	1S-6560
	4 1/2	0.81	1.87	1.75	3R-2300
	4 3/4	0.81	1.87	2.00	8F-1156
	5	0.81	1.87	2.25	2H-1618
	5 1/2	0.81	1.87	2.75	1B-2721
	6	0.81	1.87	3.25	2H-1537
	6 1/2	0.81	1.87	3.50	6H-1628
	7	0.81	1.87	4.00	6V-2624
	8	0.81	1.87	5.00	3F-9025
	8 1/2	0.81	1.87	5.50	1J-6775
	9	0.81	1.87	6.00	1K-9418
	9 1/2	0.81	1.87	6.50	1K-9420
	10	0.81	1.87	7.00	1D-4649
	10 1/2	0.81	1.87	7.50	6B-0388
	11	0.81	1.87	8.25	1K-9415
	13	0.81	1.87	10.50	1K-4378
	14	0.81	1.87	11.00	6V-1734
	15	0.81	1.87	12.00	031-0213
	Nut				3K-9770
	Washer				4K-0684
1 1/2-6	3 1/2	0.97	2.25	0.40	3J-1805
	4	0.97	2.25	0.50	6V-8970
	4 1/2	0.97	2.25	1.00	6V-8536
	4 1/2	0.97	2.25	1.25	138-8455
	5	0.97	2.25	1.75	1K-9414
	6	0.97	2.25	2.50	131-2627
	7	0.97	2.25	2.50	4R-9112
	9	0.97	2.25	5.50	6V-7977
	11 1/2	0.97	2.25	7.50	6V-0659
	12 1/2	0.97	2.25	9.00	127-4840
	Nut				9S-8216
	Washer				3S-6162

* High strength bolt.

Hardware



Hex Head Bolts / Inch / Fine Thread UNF / Phosphate & Oil Coated

THREAD SIZE (in - TPI)	A BOLT LENGTH (in)	B HEAD HEIGHT (in)	C HEAD WIDTH (in)	D GRIP LENGTH (in)	PART NUMBER
1/4-28	1/2	0.19	0.44	0.09	6F-7027
	5/8	0.19	0.44	0.08	0S-1570
	3/4	0.19	0.44	0.08	0T-0284
	7/8	0.19	0.44	0.08	0L-1340
	1	0.19	0.44	0.25	0S-1597
	1 1/8	0.19	0.44	0.37	0L-1590
	1 1/4	0.19	0.44	0.13	4B-2152
	1 1/2	0.19	0.44	0.75	5F-4475
	1 3/4	0.19	0.44	1.00	2D-7563
	2	0.19	0.44	1.25	4B-8701
	2 1/4	0.19	0.44	1.50	2B-8593
	2 1/2	0.19	0.44	1.50	1A-9919
	3	0.19	0.44	2.25	8S-4712
	3 1/2	0.19	0.44	2.75	8S-4713
	4	0.19	0.44	3.25	8S-4714
	4 1/2	0.19	0.44	3.75	8S-4715
	5	0.19	0.44	4.25	8S-4716
	Nut				9S-8748
	Washer				5P-0537
5/16-24	1/2	0.24	0.50	0.09	2F-2093
	5/8	0.24	0.50	0.13	2H-3737
	3/4	0.24	0.50	0.13	1A-2343
	7/8	0.24	0.50	0.09	4B-9883
	1	0.24	0.50	0.13	2H-3738
	1 1/8	0.24	0.50	0.66	6H-0187
	1 1/4	0.24	0.50	0.37	1B-1293
	1 3/8	0.24	0.50	0.50	2A-1371
	1 1/2	0.24	0.50	0.63	1B-0581
	1 3/4	0.24	0.50	0.87	2H-3708
	2	0.24	0.50	1.13	1H-5403
	2 1/4	0.24	0.50	1.37	2H-3739
	2 1/2	0.24	0.50	1.63	8S-4717
	2 3/4	0.24	0.50	1.87	4B-1028
	3	0.24	0.50	2.13	8S-4718
	3 1/4	0.24	0.50	2.37	7F-0938
	3 1/2	0.24	0.50	2.63	8S-4719
	4	0.24	0.50	3.13	8S-4720
	4 1/2	0.24	0.50	3.63	8S-4721

THREAD SIZE (in - TPI)	A BOLT LENGTH (in)	B HEAD HEIGHT (in)	C HEAD WIDTH (in)	D GRIP LENGTH (in)	PART NUMBER
5/16-24	5	0.24	0.50	4.13	8S-4722
	Nut				9S-8751
	Washer				9M-1974
3/8-24	1/2	0.29	0.56	0.09	0L-1138
	5/8	0.29	0.56	0.09	0T-0642
	3/4	0.29	0.56	0.13	0L-0472
	7/8	0.29	0.56	0.09	0T-0703
	1	0.29	0.56	0.19	6F-7030
	1 1/8	0.29	0.56	0.13	5B-2208
	1 1/4	0.29	0.56	0.25	1A-2209
	1 3/8	0.29	0.56	0.37	2A-4996
	1 1/2	0.29	0.56	0.50	0T-0924
	1 3/4	0.29	0.56	0.75	0L-0478
	2	0.29	0.56	1.00	0S-1748
	2 1/4	0.29	0.56	1.25	0L-0639
	2 1/2	0.29	0.56	1.50	0L-1648
	2 3/4	0.29	0.56	1.75	0L-0139
	3	0.29	0.56	2.00	6F-7031
	3 1/4	0.29	0.56	2.25	0S-1605
	3 3/4	0.29	0.56	2.50	1B-3680
	4	0.29	0.56	3.00	0T-0513
	4 1/4	0.29	0.56	3.25	1B-5082
	4 1/2	0.29	0.56	3.50	6F-8425
	5	0.29	0.56	4.00	1A-2116
	5 1/2	0.29	0.56	4.50	5B-6579
	6	0.29	0.56	5.00	6F-4736
	6 1/2	0.29	0.56	5.25	035-2353
	8	0.29	0.56	6.75	4H-5883
	Nut				3S-2713
	Washer				5M-2894
7/16-20	1	0.34	0.69	0.13	0T-0840
	1 1/4	0.34	0.69	0.13	0T-0244
	1 1/2	0.34	0.69	0.37	8S-4723
	1 3/4	0.34	0.69	0.63	1A-4350
	2	0.34	0.69	0.87	0T-0489
	2 1/4	0.34	0.69	1.13	8S-4724
	2 1/2	0.34	0.69	1.37	1B-0572
	2 3/4	0.34	0.69	1.63	8S-4725

* High strength bolt.

Hex Head Bolts / Inch / Fine Thread UNF / Phosphate & Oil Coated

THREAD SIZE (in - TPI)	A BOLT LENGTH (in)	B HEAD HEIGHT (in)	C HEAD WIDTH (in)	D GRIP LENGTH (in)	PART NUMBER
7/16-20	3	0.34	0.69	1.87	8S-4726
	3 1/4	0.34	0.63	1.75	5D-4085
	3 1/2	0.34	0.69	2.37	1J-6298
	3 3/4	0.34	0.69	2.63	8S-4727
	4	0.34	0.69	2.87	8S-4728
	4 1/2	0.34	0.69	3.37	8S-4729
	5	0.34	0.69	3.87	8S-4730
	6	0.34	0.69	4.87	8S-4731
	9	0.34	0.69	7.63	2L-4523
	Nut				9S-8905
	Washer				5P-8244
1/2-20	3/4	0.39	0.75	0.13	6F-7032
	7/8	0.39	0.75	0.13	0T-0598
	1	0.39	0.75	0.13	0S-1629
	1 1/4	0.39	0.75	0.13	0S-1593
	1 3/8	0.39	0.75	0.13	4K-7502
	1 1/2	0.39	0.75	0.25	0S-1603
	1 3/4	0.39	0.75	0.50	0S-1584
	2	0.39	0.75	0.75	0S-1579
	2 1/4	0.39	0.75	1.00	0S-0484
	2 1/2	0.39	0.75	1.25	0S-1604
	2 3/4	0.39	0.75	1.50	0S-1599
	3	0.39	0.75	1.75	0L-1732
	3 1/4	0.39	0.75	2.00	0L-1558
	3 1/2	0.39	0.75	2.25	0L-2315
	3 3/4	0.39	0.75	2.50	1A-1952
	4	0.39	0.75	2.75	0L-1559
	4 1/4	0.39	0.75	3.00	6F-7033
	4 1/2	0.39	0.75	3.25	1A-3046
	4 3/4	0.39	0.75	3.50	0L-0557
	5	0.39	0.75	3.75	1B-1422
	5 1/2	0.39	0.75	4.25	3H-1097
	5 3/4	0.39	0.75	4.50	5M-9979
	6	0.39	0.75	4.75	9F-1595
	6 1/2	0.39	0.75	5.00	2H-3747
	7	0.39	0.75	3.37	3H-1930
	7 1/2	0.39	0.75	6.00	2H-3748
	8	0.39	0.75	6.50	1A-3967
	Nut				6B-6684
	Washer				5P-8245

THREAD SIZE (in - TPI)	A BOLT LENGTH (in)	B HEAD HEIGHT (in)	C HEAD WIDTH (in)	D GRIP LENGTH (in)	PART NUMBER
9/16-18	1 1/4	0.43	0.87	0.13	8S-4743
	1 3/8	0.43	0.87	0.13	8S-4761
	1 1/2	0.43	0.87	0.13	8S-4744
	1 3/4	0.43	0.87	0.38	8S-4762
	2	0.43	0.87	0.63	8S-4745
	2 1/4	0.43	0.87	0.88	8S-4763
	2 1/2	0.43	0.87	1.13	8S-4746
	2 3/4	0.43	0.87	1.38	8S-4764
	3	0.43	0.87	1.38	6S-0753
	3 1/2	0.43	0.87	2.13	8S-4747
	3 3/4	0.43	0.87	2.38	2S-1216
	4	0.43	0.87	2.63	8S-4748
	4 1/2	0.43	0.87	3.13	8S-4749
	5	0.43	0.87	3.63	8S-4750
	5 1/2	0.43	0.87	4.13	8S-4751
	6	0.43	0.87	4.63	8S-4752
	Nut				5P-0540
	Washer				5P-8246
5/8-18	1	0.48	0.94	0.19	6F-7316
	1 1/4	0.48	0.94	0.19	1A-4273
	1 3/8	0.48	0.94	0.19	4H-4033
	1 1/2	0.48	0.94	0.19	2L-1701
	1 3/4	0.48	0.94	0.25	5B-0841
	2	0.48	0.94	0.50	0S-1576
	2 1/4	0.48	0.94	0.75	0S-1577
	2 1/2	0.48	0.94	1.00	0S-1600
	2 3/4	0.48	0.94	1.25	0S-1601
	3	0.48	0.94	1.50	8B-5144
	3 1/4	0.48	0.94	1.75	0S-2318
	3 1/2	0.48	0.94	2.00	0S-1602
	3 3/4	0.48	0.94	2.25	0S-2353
	4	0.48	0.94	2.50	0V-0459
	4 1/4	0.48	0.94	2.75	0V-0523
	4 1/2	0.48	0.94	3.00	0T-0857
	4 3/4	0.48	0.94	3.25	1A-3203
	5	0.48	0.94	3.50	6F-7024
	5 1/2	0.48	0.94	4.00	2A-2814
	5 3/4	0.48	0.94	4.25	1B-7538
	6	0.48	0.94	4.50	2B-6030
	7	0.48	0.94	5.25	1B-3623

* High strength bolt.

Hardware

Hex Head Bolts / Inch / Fine Thread UNF / Phosphate & Oil Coated

THREAD SIZE (in - TPI)	A BOLT LENGTH (in)	B HEAD HEIGHT (in)	C HEAD WIDTH (in)	D GRIP LENGTH (in)	PART NUMBER
5/8-18	7 1/2	0.48	0.94	5.75	7H-5569
	8	0.48	0.94	6.25	8S-4753
	8 1/2	0.48	0.94	6.75	6V-1873
	11	0.48	0.94	9.25	5K-7144
	12	0.48	0.94	10.25	6K-0953
	Nut				6B-6683
	Washer				5P-8247
3/4-16	1 1/4	0.58	1.13	0.19	2H-3740
	1 1/2	0.58	1.13	0.19	2H-3725
	1 3/4	0.58	1.13	0.19	1A-0075
	2	0.58	1.13	0.25	9S-1362
	2 1/4	0.58	1.13	0.50	0S-1897
	2 1/2	0.58	1.13	0.75	0T-0856
	2 3/4	0.58	1.13	1.00	8F-3152
	3	0.58	1.13	1.25	0S-1575
	3 1/4	0.58	1.13	1.50	6B-5310
	3 1/2	0.58	1.13	1.75	9S-1364
	3 3/4	0.58	1.13	2.00	1A-3103
	4	0.58	1.13	2.25	0L-1328
	4 1/4	0.58	1.13	2.50	1D-3419
	4 3/4	0.58	1.13	3.00	7B-5163
	5	0.58	1.13	3.25	0S-1607
	5 1/2	0.58	1.13	3.75	8F-6123
	6	0.58	1.13	4.25	7B-4436
	6 1/2	0.58	1.13	4.50	6F-7901
	7	0.58	1.13	5.00	2H-3749
	7 1/2	0.58	1.13	5.50	2H-3750
	8	0.58	1.13	6.00	4F-0925
	8 1/2	0.58	1.13	6.50	8S-4766
	9	0.58	1.13	7.00	7F-1926
	9 1/2	0.58	1.13	7.50	8B-7943
	10	0.58	1.13	8.00	2K-2813
	11	0.58	1.13	9.00	5P-8288
	11 1/2	0.58	1.13	9.50	2P-9845
	Nut				6B-6682
	Washer				5P-8248
7/8-14	1 1/2	0.67	1.31	0.25	8S-4754
	1 3/4	0.67	1.31	0.25	8F-7496
	2	0.67	1.31	0.25	2H-3854
	2 1/4	0.67	1.31	0.25	6F-7035
	2 1/2	0.67	1.31	0.50	1D-5873
	2 3/4	0.67	1.31	0.75	0S-1596

THREAD SIZE (in - TPI)	A BOLT LENGTH (in)	B HEAD HEIGHT (in)	C HEAD WIDTH (in)	D GRIP LENGTH (in)	PART NUMBER
7/8-14	3	0.67	1.31	1.00	6F-7036
	3 1/4	0.67	1.31	1.25	2H-3741
	3 1/2	0.67	1.31	1.50	1A-0224
	3 3/4	0.67	1.31	1.75	0L-2090*
	4	0.67	1.31	2.00	0T-0603
	4 1/4	0.67	1.31	2.25	1D-3848
	4 1/2	0.67	1.31	2.50	4H-8340
	5	0.67	1.31	3.00	1D-6089
	5 1/2	0.67	1.31	3.50	0S-1606
	6	0.67	1.31	4.00	7F-6100
	6 1/2	0.67	1.31	4.25	6F-4991
	7	0.67	1.31	4.75	4F-6426
	7 1/2	0.67	1.31	5.25	2K-1747
	8	0.67	1.31	5.75	7F-0479
	9	0.67	1.31	6.75	2L-1091
	11	0.67	1.31	8.75	3B-4978
	11 1/2	0.67	1.31	9.25	4B-7572
	Nut				1A-5666
	Washer				5P-8249
1-14	1 1/2	0.71	1.50	0.13	8S-4755
	1 3/4	0.71	1.50	0.13	8S-4756
	2	0.71	1.50	0.25	2H-3743
	2 1/4	0.71	1.50	0.25	2H-3744
	2 1/2	0.71	1.50	0.25	5B-9385
	2 3/4	0.71	1.50	0.50	2H-3745
	3	0.71	1.50	0.75	6B-9194
	3 1/4	0.71	1.50	1.00	6F-7037
	3 1/2	0.71	1.50	1.25	9S-1368
	3 3/4	0.71	1.50	1.50	9S-1367
	4	0.71	1.50	1.75	1F-7464*
	4 1/2	0.71	1.50	2.25	0V-0269
	4 3/4	0.71	1.50	2.50	7B-7181
	5	0.71	1.50	2.75	2H-3746
	5 1/2	0.71	1.50	3.25	8F-6124
	6	0.71	1.50	3.75	3F-6645
	6 1/2	0.71	1.50	4.00	7F-4283
	7	0.71	1.50	4.50	5F-6932
	7 1/2	0.71	1.50	5.00	2H-0637
	8	0.71	1.50	5.50	8S-4757
	8 1/2	0.71	1.50	6.00	3J-5981
	9	0.71	1.50	6.50	9F-8122
	9 1/2	1.50	0.39	7.00	5F-7136

* High strength bolt.

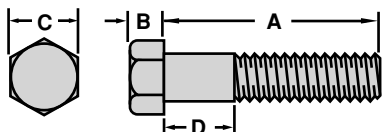
Hex Head Bolts / Inch / Fine Thread UNF / Phosphate & Oil Coated

THREAD SIZE (in - TPI)	A BOLT LENGTH (in)	B HEAD HEIGHT (in)	C HEAD WIDTH (in)	D GRIP LENGTH (in)	PART NUMBER
1-14	10	0.71	1.50	7.50	1L-8586
	Nut				1A-1935
	Washer				5P-8250
1 1/8-12	2 1/4	0.72	1.69	0.31	1A-2208
	2 1/2	0.72	1.69	0.50	2H-3751
	3 1/4	0.72	1.69	2.00	8B-0477
	4	0.72	1.69	1.50	8F-3895
	4 1/2	0.72	1.69	2.00	8H-4040
	5	0.72	1.69	2.50	7B-9215
	5 1/2	0.72	1.69	3.00	4B-5219
	6	0.72	1.69	3.50	2D-3424
	6 1/2	0.72	1.69	3.75	3B-5752
	7	0.72	1.69	4.25	2D-8930
	7 1/2	0.72	1.69	4.75	9M-3742
	8	0.72	1.69	5.25	1S-3647
	9	0.72	1.69	6.25	2M-3530
	Nut				3S-1356
	Washer				3S-1349
1 1/4-12	2 1/4	0.81	1.87	0.25	7B-2289
	3	0.81	1.87	0.25	7F-6112
	3 1/2	0.81	1.87	0.75	2K-0439
	4	0.81	1.87	1.25	5P-2663
	4 3/4	0.81	1.87	2.00	7B-8791
	5 1/2	0.81	1.87	2.75	2J-2555
	6	0.81	1.87	3.25	5H-1649
	6 1/2	0.81	1.87	3.50	4H-6511
	7 1/2	0.81	1.87	4.50	7F-9464
	8	0.81	1.87	5.00	4J-0924
	8 1/2	0.81	1.87	5.50	5F-9339
	9 1/2	0.81	1.87	6.50	3S-7079
	10	0.81	1.87	7.00	4H-8009
	11 1/2	0.81	1.87	8.38	6F-4438
	12	0.81	1.87	9.00	7H-3579
	13	0.81	1.87	10.88	4H-2400
	Nut				7H-7539
	Washer				4K-0684
1 1/2-12	3	0.97	2.25	0.25	7X-3305
	3 3/4	0.97	2.25	0.50	1J-2921
	4	0.97	2.25	0.75	8F-5535
	4 1/2	0.97	2.25	1.25	1F-6762
	5	0.97	2.25	1.75	5P-9402

THREAD SIZE (in - TPI)	A BOLT LENGTH (in)	B HEAD HEIGHT (in)	C HEAD WIDTH (in)	D GRIP LENGTH (in)	PART NUMBER
1 1/2-12	6	0.97	2.25	2.75	5F-9891
	7	0.97	2.25	3.50	8F-1692
	8	0.97	2.25	4.50	2D-7687
	9	0.97	2.25	5.50	5F-3492
	10	0.97	2.25	7.48	5P-9384
	Nut				8H-3390
	Washer				3S-6162
2-12	8	0.97	3.00	1.75	5R-8907

* High strength bolt.

Hardware



Hex Head Bolts / Inch / Coarse Thread UNC / Zinc Dichromate Plated

THREAD SIZE (in - TPI)	A BOLT LENGTH (in)	B HEAD HEIGHT (in)	C HEAD WIDTH (in)	D GRIP LENGTH (in)	PART NUMBER
1/4-20	1/2	0.19	0.44	0.06	5S-7349
	5/8	0.19	0.44	0.13	8T-9364
	3/4	0.19	0.44	0.13	4M-5281
	7/8	0.19	0.44	0.13	1H-3337
	1	0.19	0.44	0.13	8T-8908
	1 1/8	0.19	0.44	0.37	6D-2928
	1 1/4	0.19	0.44	0.13	7X-2501
	1 1/2	0.19	0.44	0.25	4M-5282
	1 3/4	0.19	0.44	1.00	5P-2675
	2	0.19	0.44	1.13	8T-9367
	2 1/4	0.19	0.44	1.37	8T-9368
	2 1/2	0.19	0.44	1.75	7X-0264
	2 3/4	0.19	0.44	2.00	7X-0265
	3	0.19	0.44	2.00	7X-0266
	3 1/4	0.19	0.44	2.50	7X-0267
	3 1/2	0.19	0.44	2.75	7X-0268
	3 3/4	0.19	0.44	3.00	8C-3793
	4	0.19	0.44	3.25	7X-0269
	5	0.19	0.44	4.25	8T-8909
	5 1/2	0.19	0.44	4.50	7X-0271
	Nut				6V-8185
	Washer				8T-4205
5/16-18	1/2	0.24	0.50	0.06	8T-5391
	5/8	0.24	0.50	0.13	5K-0906
	3/4	0.24	0.50	0.13	4M-0061
	7/8	0.24	0.50	0.13	8T-9043
	1	0.24	0.50	0.13	4M-6425
	1 1/8	0.24	0.50	0.25	6V-5782
	1 1/4	0.24	0.50	0.37	6V-8918
	1 1/2	0.24	0.50	0.09	8C-3121
	1 3/4	0.24	0.50	0.87	7X-0440
	2	0.24	0.50	1.13	8T-8911
	2 1/4	0.24	0.50	1.37	8T-8912
	2 1/2	0.24	0.50	1.63	5P-2955
	2 3/4	0.24	0.50	1.87	7X-0274
	3	0.24	0.50	2.13	4M-6424
	3 1/4	0.24	0.50	2.25	7X-0275
	3 1/2	0.24	0.50	2.63	7X-0276
	3 3/4	0.24	0.50	2.75	7X-0277

THREAD SIZE (in - TPI)	A BOLT LENGTH (in)	B HEAD HEIGHT (in)	C HEAD WIDTH (in)	D GRIP LENGTH (in)	PART NUMBER
5/16-18	4	0.24	0.50	3.00	7X-0278
	4 3/4	0.24	0.50	3.87	7X-0279
	5	0.24	0.50	4.13	7X-0280
	5 1/2	0.24	0.50	4.63	7X-0281
	6 1/2	0.24	0.50	5.37	7X-0282
	Nut				6V-8189
	Washer				8T-4224
3/8-16	1/2	0.29	0.56	0.09	8T-9371
	5/8	0.29	0.56	0.09	5P-8167
	3/4	0.29	0.56	0.13	5M-3062
	7/8	0.29	0.56	0.13	5S-7379
	1	0.29	0.56	0.13	4L-6454
	1 1/8	0.29	0.56	0.31	8T-2502
	1 1/4	0.29	0.56	0.25	9B-7237
	1 1/2	0.29	0.56	0.37	4L-9337
	1 3/4	0.29	0.56	0.75	5S-7383
	2	0.29	0.56	1.00	8T-2501
	2 1/4	0.29	0.56	1.25	8T-9377
	2 1/2	0.29	0.56	1.50	4L-6459
	2 3/4	0.29	0.56	1.75	8T-9101
	3	0.29	0.56	2.00	8T-7008
	3 1/4	0.29	0.56	2.25	8T-8915
	3 1/2	0.29	0.56	2.50	7X-0290
	3 3/4	0.29	0.56	2.50	7X-0291
	4	0.29	0.56	3.00	8T-9378
	4 1/4	0.29	0.56	3.25	8T-9379
	4 1/2	0.29	0.56	3.25	7X-0292
	4 3/4	0.29	0.56	3.75	7X-0293
	5	0.29	0.56	4.00	7X-0294
	5 1/4	0.29	0.56	4.25	7X-0295
	5 1/2	0.29	0.56	4.50	7X-0296
	5 3/4	0.29	0.56	4.75	7X-0297
	6	0.29	0.56	4.87	8C-7323
	6 1/2	0.29	0.56	5.25	7X-0300
	7	0.29	0.56	5.75	7X-0301
	7 1/2	0.29	0.56	6.25	7X-0302
	8	0.29	0.56	6.75	7X-0303
	8 1/2	0.29	0.56	7.25	7X-0304
	9	0.29	0.56	7.75	7X-0305

Hex Head Bolts / Inch / Coarse Thread UNC / Zinc Dichromate Plated

THREAD SIZE (in - TPI)	A BOLT LENGTH (in)	B HEAD HEIGHT (in)	C HEAD WIDTH (in)	D GRIP LENGTH (in)	PART NUMBER
3/8-16	9 1/2	0.29	0.56	8.25	4H-3283
	Nut				6V-8801
	Washer				8T-4896
7/16-14	3/4	0.34	0.69	0.19	7X-0307
	7/8	0.34	0.69	0.13	7X-0272
	1	0.34	0.69	0.13	8T-9380
	1 1/8	0.34	0.69	0.13	8T-6973
	1 1/4	0.34	0.69	0.13	8T-9382
	1 1/2	0.34	0.69	0.37	8T-8916
	1 3/4	0.34	0.69	0.63	8C-6877
	2	0.34	0.69	0.87	7X-0310
	2 1/4	0.34	0.69	1.13	7X-0311
	2 1/2	0.34	0.69	1.37	7X-0312
	2 3/4	0.34	0.69	1.63	7X-0313
	3	0.34	0.69	1.87	7X-0314
	3 1/4	0.34	0.69	2.13	7X-0315
	3 1/2	0.34	0.69	2.37	7X-0316
	3 3/4	0.34	0.69	2.63	7X-0317
	4	0.34	0.69	2.87	7X-0318
	4 1/4	0.34	0.69	3.13	7X-0319
	4 3/4	0.34	0.69	3.63	7H-3472
	5	0.34	0.69	3.75	7X-0320
	5 1/2	0.34	0.69	4.37	7X-0321
	6	0.34	0.69	4.87	7X-0322
	Nut				7X-0447
	Washer				8T-5360
1/2-13	3/4	0.39	0.75	0.13	8T-9383
	7/8	0.39	0.75	0.28	8T-9384
	1	0.39	0.75	0.13	5P-2228
	1 1/8	0.39	0.75	0.13	5C-6565
	1 1/4	0.39	0.75	0.31	8T-8917
	1 1/2	0.39	0.75	0.25	5P-2566
	1 3/4	0.39	0.75	0.44	8T-8919
	2	0.39	0.75	0.75	8T-4835
	2 1/4	0.39	0.75	1.00	5P-2424
	2 1/2	0.39	0.75	1.25	7X-0325
	2 3/4	0.39	0.75	1.50	8T-9389
	3	0.39	0.75	1.75	7X-0326
	3 1/4	0.39	0.75	2.00	8T-8920
	3 1/2	0.39	0.75	2.25	7X-0328
	3 3/4	0.39	0.75	2.50	8T-9391
	4	0.39	0.75	2.75	6V-4432

THREAD SIZE (in - TPI)	A BOLT LENGTH (in)	B HEAD HEIGHT (in)	C HEAD WIDTH (in)	D GRIP LENGTH (in)	PART NUMBER
1/2-13	4 1/4	0.39	0.75	3.00	7X-0331
	4 1/2	0.39	0.75	3.25	7X-0332
	4 3/4	0.39	0.75	3.50	7X-0333
	5	0.39	0.75	3.75	7X-0334
	5 1/4	0.39	0.75	4.00	7X-0335
	5 1/2	0.39	0.75	4.25	7X-0336
	5 3/4	0.39	0.75	4.50	7X-0337
	6	0.39	0.75	4.75	7X-0338
	6 1/2	0.39	0.75	5.00	7X-0340
	7	0.39	0.75	5.50	7X-0341
	7 1/2	0.39	0.75	6.00	8T-9392
	8 1/2	0.39	0.75	7.00	7X-0471
	Nut				6V-8188
	Washer				8T-4223
	2	0.43	0.87	0.63	8S-4734
5/8-11	1	0.48	0.94	0.19	5C-6266
	1 1/4	0.48	0.94	0.19	7X-0343
	1 1/2	0.48	0.94	0.19	8T-9393
	1 3/4	0.48	0.94	0.25	7X-0345
	2 1/4	0.48	0.94	0.75	7X-0347
	2 1/2	0.48	0.94	0.63	8T-6871
	2 3/4	0.48	0.94	1.25	8C-6362
	3	0.48	0.94	1.50	7X-0349
	3 1/4	0.48	0.94	1.75	8T-9396
	3 1/2	0.48	0.94	2.00	7X-0350
	3 3/4	0.48	0.94	2.25	7X-0351
	4	0.48	0.94	2.50	7X-0352
	4 1/4	0.48	0.94	2.75	7X-0353
	4 1/2	0.48	0.94	3.00	7X-0354
	4 3/4	0.48	0.94	3.25	7X-0355
	5	0.48	0.94	3.50	7X-0356
	5 1/4	0.48	0.94	3.75	7X-0357
	5 1/2	0.48	0.94	4.00	7X-0358
	6	0.48	0.94	4.50	7X-0359
	6 1/2	0.48	0.94	4.75	7X-0361
	7	0.48	0.94	5.25	7X-0362
	8	0.48	0.94	6.25	7X-0363
	8 1/2	0.48	0.94	6.75	7X-0364
	9 1/2	0.48	0.94	7.75	7X-7890
	Nut				7X-0448
	Washer				8T-4122
3/4-10	1 1/4	0.58	1.13	0.31	8T-9397

Hardware

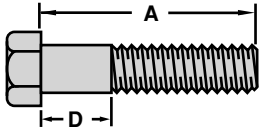
Hex Head Bolts / Inch / Coarse Thread UNC / Zinc Dichromate Plated

THREAD SIZE (in - TPI)	A BOLT LENGTH (in)	B HEAD HEIGHT (in)	C HEAD WIDTH (in)	D GRIP LENGTH (in)	PART NUMBER
3/4-10	1 1/2	0.58	1.13	0.31	7X-0365
	1 3/4	0.58	1.13	0.31	8T-9398
	2	0.58	1.13	0.31	7X-0366
	2 1/4	0.58	1.13	0.50	8T-9399
	2 1/2	0.58	1.13	0.75	8T-8924
	2 3/4	0.57	1.13	1.00	8C-6857
	3	0.58	1.13	1.25	7X-0368
	3 1/4	0.58	1.13	1.50	7X-0369
	3 1/2	0.58	1.13	1.75	7X-0370
	3 3/4	0.58	1.13	2.00	7X-0371
	4	0.58	1.13	2.25	8C-8842
	4 1/4	0.58	1.13	2.50	7X-0372
	4 1/2	0.58	1.13	2.75	8T-9311
	4 3/4	0.58	1.13	3.00	8T-8925
	5	0.58	1.13	3.25	7X-0375
	5 1/2	0.58	1.13	3.75	7X-0373
	5 3/4	0.58	1.13	4.00	7X-0374
	6	0.58	1.13	4.25	8T-9312
	6 1/2	0.58	1.13	4.50	7X-0377
	7	0.58	1.13	5.00	8T-9313
	7 1/2	0.58	1.13	5.50	1J-8930
	8	0.58	1.13	6.00	5P-4135
	8 1/2	0.58	1.13	6.50	7X-0378
	9	0.58	1.13	7.00	7X-3179
	10	0.58	1.13	8.00	8F-4225
	Nut				6V-8182
	Washer				8T-4994
7/8-9	1 1/2	0.67	1.31	0.25	7X-0379
	1 3/4	0.67	1.31	0.37	7X-0380
	2	0.67	1.31	0.37	7X-0381
	2 1/4	0.67	1.31	0.37	7X-0382
	2 1/2	0.67	1.31	0.50	8T-9400
	2 3/4	0.67	1.31	0.75	7X-0383
	3	0.67	1.31	1.00	7X-0384
	3 1/4	0.67	1.31	1.25	7X-0385
	3 1/2	0.67	1.31	1.50	7X-0386
	3 3/4	0.67	1.31	1.75	7X-0453
	4	0.67	1.31	2.00	7X-0387
	4 1/4	0.67	1.31	2.25	7X-0455
	4 1/2	0.67	1.31	2.50	7X-0388
	4 3/4	0.67	1.31	2.75	7X-0389
	5	0.67	1.31	3.00	7X-0390

THREAD SIZE (in - TPI)	A BOLT LENGTH (in)	B HEAD HEIGHT (in)	C HEAD WIDTH (in)	D GRIP LENGTH (in)	PART NUMBER
7/8-9	5 1/2	0.67	1.31	3.50	7X-0391
	6	0.67	1.31	3.75	7X-0392
	6 1/2	0.67	1.31	4.25	7X-0393
	7	0.67	1.31	4.75	7X-0394
	8	0.67	1.31	5.75	7X-0395
	8 1/2	0.67	1.31	6.25	7X-0396
	9	0.67	1.31	6.75	7X-0397
	10	0.67	1.31	7.75	7X-0398
	Nut				7X-0449
	Washer				8C-6913
1-8	1 1/4	0.71	1.50	0.31	7X-0399
	1 1/2	0.71	1.50	0.31	7X-0400
	1 3/4	0.71	1.50	0.37	7X-0401
	2	0.71	1.50	0.75	7X-0402
	2 1/4	0.71	1.50	0.25	7X-0403
	2 1/2	0.71	1.50	0.50	7X-0404
	2 3/4	0.71	1.50	0.50	7X-0405
	3	0.71	1.50	0.75	7X-0406
	3 1/4	0.71	1.50	1.00	7X-0407
	3 1/2	0.71	1.50	1.25	7X-0408
	3 3/4	0.71	1.50	1.50	8T-8927
	4	0.71	1.50	1.75	7X-0410
	4 1/4	0.71	1.50	2.00	7X-0411
	4 1/2	0.71	1.50	2.25	8C-8843
	4 3/4	0.71	1.50	2.50	7X-0412
	5	0.71	1.50	2.75	8C-8844
	5 1/2	0.71	1.50	3.25	7X-0443
	6	0.71	1.50	3.75	1J-5929
	6 1/2	0.71	1.50	4.00	7X-0444
	7	0.71	1.50	4.50	7X-0413
	7 1/2	0.71	1.50	5.00	7X-0414
	8	0.71	1.50	5.50	7X-0415
	8 1/2	0.71	1.50	6.00	7X-0416
	9	0.71	1.50	6.50	7X-0417
	9 1/2	0.71	1.50	7.00	7X-0418
	10	0.71	1.50	7.50	7X-0419
	Nut				6V-8190
	Washer				8T-5361
1 1/8-7	2	0.72	1.69	0.25	7X-0420
	3	0.72	1.69	0.50	7X-0421
	3 1/2	0.72	1.69	1.00	7X-0422
	4 1/2	0.72	1.69	2.00	7X-0423

Hex Head Bolts / Inch / Coarse Thread UNC / Zinc Dichromate Plated

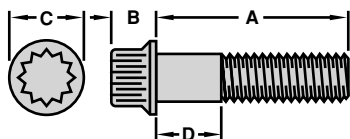
THREAD SIZE (in - TPI)	A BOLT LENGTH (in)	B HEAD HEIGHT (in)	C HEAD WIDTH (in)	D GRIP LENGTH (in)	PART NUMBER
1 1/8-7	5 1/4	0.72	1.69	3.00	7X-0424
	6	0.72	1.69	3.50	7X-0425
	6 1/2	0.72	1.69	3.75	7X-0426
	Nut				7X-0450
	Washer				7X-0531
1 1/4-7	3 1/2	0.81	1.87	0.75	7X-0427
	4	0.81	1.87	1.25	7X-0428
	4 1/2	0.81	1.87	1.75	7X-0429
	5	0.81	1.87	2.25	7X-0445
	5 1/2	0.81	1.87	2.75	7X-0430
	6	0.81	1.87	3.25	7X-0431
	6 1/2	0.81	1.87	3.50	7X-0432
	7	0.81	1.87	4.00	7X-0433
	8	0.81	1.87	5.00	7X-0434
	8 1/2	0.81	1.87	5.50	7X-0435
	9	0.81	1.87	6.00	7X-0436
	9 1/2	0.81	1.87	6.50	7X-0437
	Nut				7X-0451
	Washer				7X-0533
1 1/2-6	3 1/2	0.97	2.25	0.40	7X-0438
	4 1/2	0.97	2.25	1.25	138-8455
	5	0.97	2.25	1.75	7X-0439
	6	0.97	2.25	2.50	131-2627
	Nut				7X-0452



Self-Locking Bolts / Inch / Coarse Thread UNC

THREAD SIZE (in - TPI)	A BOLT LENGTH (in)	D GRIP LENGTH (in)	PART NUMBER
1/4-20	3/8	0.06	032-5691
	1/2	0.06	031-0214
	5/8	0.13	031-0215
	3/4	0.13	031-0216
	7/8	0.10	031-0217
	1	0.13	031-5085
	1 1/8	0.37	6V-7634
	1 1/4	0.13	6V-6845
	4	3.25	3J-8919
5/16-18	1/2	0.06	032-5473
	5/8	0.13	030-2135
	3/4	0.13	031-4630
	1	0.13	034-4160
	1 1/4	0.37	031-2701
	1 1/2	0.09	6V-4414
	1 5/8	0.87	1N-7543
	2	1.13	6V-9665
	2 1/4	1.37	6V-2664
	2 1/2	1.63	6V-0825
	3	2.13	6V-3314
3/8-16	1/2	0.09	031-0218
	5/8	0.13	6K-4936
	3/4	0.13	5K-9107
	7/8	0.13	030-8535
	1	0.13	5D-0353
	1 1/8	0.31	034-3557
	1 1/4	0.25	2J-3118
	1 1/2	0.50	030-8537
	1 3/4	0.75	031-0219
	2	1.00	5D-9844
	2 1/4	1.25	5P-8048
	2 1/2	1.50	031-0220
	3	2.00	5K-5552
	3 1/2	2.50	6V-8819
	3/4	0.13	7K-0734
	1	0.13	034-0106
	1 1/4	0.13	031-2523
	1 1/2	0.37	5P-8282
	2	0.87	5P-8864

THREAD SIZE (in - TPI)	A BOLT LENGTH (in)	D GRIP LENGTH (in)	PART NUMBER
1/2-13	3/4	0.13	031-0221
	7/8	0.13	6K-5718
	1	0.13	6K-7917
	1 1/8	0.13	5K-8454
	1 1/4	0.31	030-8538
	1 1/2	0.25	5K-7143
	1 3/4	0.44	031-0223
	2	0.75	6V-0314
	2 1/4	1.00	030-9620
	2 3/4	1.50	034-0172
	3 1/4	2.00	5P-8091
5/8-11	1	0.19	5K-7138
	1 1/4	0.13	6K-0138
	1 1/2	0.19	030-7335
	1 3/4	0.25	7K-4370
	2	0.50	6K-0137
	2 1/4	0.75	5P-7034
	2 1/2	0.63	5P-9118
	2 3/4	1.25	6V-1997
	3	1.50	032-0676
	3 3/4	2.25	5P-7782
3/4-10	1 1/4	0.31	031-2712
	1 1/2	0.31	031-9253
	1 3/4	0.31	031-0224
	2	0.31	031-0225
	2 1/4	0.50	5P-3882
	2 1/2	0.75	6K-1304
	3	1.25	5P-6712
	3 1/2	1.75	6V-1684
	4 1/2	2.75	5P-1910
	2 1/2	0.50	5P-7688
7/8-9	2 3/4	0.50	5P-7783
	3 1/2	1.25	7K-9272
	5 1/2	3.25	032-0679
1 1/8-7	3 1/2	1.00	7J-9897

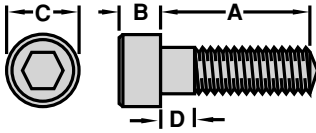


12 Point Head Bolts / Inch / Coarse & Fine Thread

THREAD SIZE (in - TPI)	A BOLT LENGTH (in)	B HEAD HEIGHT (in)	C HEAD WIDTH (in)	D GRIP LENGTH (in)	PART NUMBER
COARSE THREAD					
1/4-20	1/16	0.27	0.38	0.11	9S-5033
5/16-18	3/4	0.31	0.47	0.11	1T-0416
	1	0.31	0.47	0.11	1T-0414
	1 1/4	0.31	0.47	0.11	6L-4783
	1 1/2	0.31	0.47	0.11	8M-8162
	1 1/2	0.31	0.47	0.63	2N-7517
	1 3/4	0.31	0.47	0.63	6L-4784
	2 1/2	0.31	0.47	1.13	3S-4346
	3	0.31	0.47	1.63	2S-5818
	3 1/2	0.31	0.47	2.25	2S-0629
	4 1/2	0.31	0.47	3.25	9M-4288
	5	0.31	0.47	3.63	9M-4289
	5 1/2	0.31	0.47	4.25	1S-9810
	6	0.31	0.47	4.63	1S-9811
	6 1/2	0.31	0.47	5.25	4S-5845
3/8-16	3/4	0.38	0.56	0.25	1T-0822
	1	0.38	0.56	0.25	1T-0765
	1 1/16	0.38	0.56	0.50	4D-5239
	1 1/4	0.38	0.56	0.25	1T-0720
	2	0.38	0.56	0.50	3S-1307
	2 1/4	0.38	0.56	1.00	3S-0127
	2 3/4	0.38	0.56	1.50	2S-3567
	3	0.38	0.56	1.50	4S-9002
	3 3/4	0.38	0.56	2.50	8M-2518
7/16-14	1 1/2	0.44	0.66	0.14	6K-3771
	2 1/4	0.44	0.66	0.63	6K-3772
1/2-13	1	0.50	0.75	0.16	9M-6590
	1 1/4	0.50	0.75	0.16	8M-2530
	1 1/2	0.50	0.75	0.16	4K-5175
	2	0.50	0.75	0.16	5J-5793
	2 1/4	0.50	0.75	0.75	6J-2515
	2 1/2	0.50	0.75	1.00	7K-6058
	2 3/4	0.50	0.75	0.75	9S-9739
	3 1/2	0.50	0.75	1.50	5J-5794
	4 1/2	0.50	0.75	3.00	8D-0648

THREAD SIZE (in - TPI)	A BOLT LENGTH (in)	B HEAD HEIGHT (in)	C HEAD WIDTH (in)	D GRIP LENGTH (in)	PART NUMBER
5/8-11	7/8	0.62	0.94	0.19	1S-9808
	1	0.62	0.94	0.19	9S-8889
	1 3/4	0.62	0.94	0.19	8S-2332
	2	0.62	0.94	0.19	8S-2331
	2 1/4	0.62	0.94	0.50	6M-9149
	2 1/2	0.62	0.94	0.75	031-1382
	3	0.62	0.94	1.25	031-3185
	3 1/4	0.62	0.94	1.50	6J-3913
	3 1/2	0.62	0.94	1.50	7K-3116
	3 1/2	0.75	1.13	0.25	6J-3991
3/4-10	1 3/4	0.75	1.13	0.19	6M-8796
FINE THREAD					
5/16-24	3/4	0.31	0.47	0.08	5D-8269
3/8-24	5/8	0.38	0.56	0.08	1T-0510
	1	0.38	0.56	0.08	1T-0417
	1 1/4	0.38	0.56	0.08	1T-0448
	1 3/4	0.38	0.56	0.50	1T-0954
7/16-20	2 1/2	0.38	0.56	1.00	5K-4451
	2 3/4	0.44	0.66	1.25	5J-7820
	3	0.50	0.75	1.50	8S-0509
	3	0.62	0.94	0.19	9S-8890
5/8-18	2 1/2	0.62	0.94	0.75	9S-8891
	3	0.62	0.94	0.75	2P-1956
3/4-16	3 1/4	0.75	1.13	1.00	9S-8892
7/8-14	2 1/2	0.88	1.31	0.16	2N-5014
1-14	2 1/2	1.00	1.50	0.75	2N-5006
	4	1.00	1.50	1.00	9S-8893

Hardware



Hex Socket Head Screw Bolts / Inch / Coarse & Fine Thread

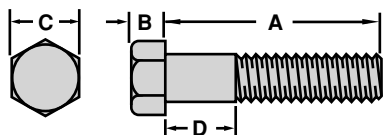
THREAD SIZE (in - TPI)	A BOLT LENGTH (in)	B HEAD HEIGHT (in)	C HEAD WIDTH (in)	D GRIP LENGTH (in)	PART NUMBER
COARSE THREAD					
No. 4-40	3/8	0.11	0.19	0.05	2S-9255
No. 8-32	1/2	0.16	0.27	0.06	6D-3897
	3/4	0.16	0.27	0.06	7D-5473
	1	0.16	0.27	0.06	9M-4704
No. 10-24	1/2	0.19	0.31	0.08	5S-2671
	5/8	0.19	0.31	0.08	2H-0191
	3/4	0.19	0.31	0.08	3L-2540
	7/8	0.19	0.31	0.08	9F-1707
	1 1/4	0.19	0.31	0.38	7L-0688
	1 1/2	0.19	0.31	0.38	5J-1714
1/4-20	1 3/4	0.19	0.31	0.88	2N-0402
	3/8	0.25	0.38	0.11	7J-0637
	1/2	0.25	0.38	0.11	8H-0708
	5/8	0.25	0.38	0.11	8H-3128
	3/4	0.25	0.38	0.11	8H-3127
	7/8	0.25	0.38	0.11	6L-5897
	1	0.25	0.38	0.11	8H-0707
	1 1/4	0.25	0.38	0.09	4L-7124
	1 1/2	0.25	0.38	0.50	2H-3764
	1 3/4	0.25	0.38	0.50	5L-9018
	2	0.25	0.38	1.00	6L-1596
	2 1/4	0.25	0.38	1.00	6L-5551
	2 1/2	0.25	0.38	1.50	6H-3958
	2 3/4	0.25	0.38	1.50	6J-2819
5/16-18	3/4	0.31	0.47	0.11	9F-5975
	1	0.31	0.47	0.11	1T-0284
	1 1/4	0.31	0.47	0.11	9F-6641
	1 1/2	0.31	0.47	0.11	5J-5314
	1 3/4	0.31	0.47	0.63	7S-6701
	2	0.31	0.47	0.63	9S-7381
	2 3/4	0.31	0.47	1.63	2L-1352
	3 1/2	0.31	0.47	2.25	9S-7382
3/8-16	3/4	0.38	0.56	0.25	1L-0509
	7/8	0.38	0.56	0.25	4S-5565
	1	0.38	0.56	0.25	2D-4534
	1 1/4	0.38	0.56	0.25	2J-5245
	1 1/2	0.38	0.56	0.25	4D-3120
	1 3/4	0.38	0.56	0.50	5S-2586

THREAD SIZE (in - TPI)	A BOLT LENGTH (in)	B HEAD HEIGHT (in)	C HEAD WIDTH (in)	D GRIP LENGTH (in)	PART NUMBER
3/8-16	2	0.38	0.56	0.50	1L-8793
	2 1/4	0.38	0.56	1.00	2L-3793
	2 1/2	0.38	0.56	1.00	1Y-7574
	2 3/4	0.38	0.56	1.50	2K-6073
	3 1/4	0.38	0.56	2.00	4B-3835
	4	0.38	0.56	2.50	3B-7614
	5	0.38	0.56	3.50	8L-3837
	6	0.38	0.56	4.50	2D-8992
7/16-14	7/8	0.44	0.66	0.14	4J-1096
	1 1/4	0.44	0.66	0.14	7B-7525
	2	0.44	0.66	0.63	2N-0412
	2 1/2	0.44	0.66	1.13	3J-4567
1/2-13	1/2	0.50	0.75	0.16	021-7916
	3/4	0.50	0.75	0.16	013-8289
	1	0.50	0.75	0.16	5H-4893
	1 1/4	0.50	0.75	0.16	5F-8807
	1 1/2	0.50	0.75	0.16	3F-7147
	1 3/4	0.50	0.75	0.16	5S-2256
	2	0.50	0.75	0.19	8B-7997
	2 1/4	0.50	0.75	0.75	2L-0041
	2 1/2	0.50	0.75	0.75	8B-7979
	2 3/4	0.50	0.75	0.75	5S-2389
	3	0.50	0.75	1.50	4L-8515
	3 1/4	0.50	0.75	1.50	6D-0119
	3 1/2	0.50	0.75	1.50	8B-7998
	5	0.50	0.75	3.00	5S-2388
	6	0.50	0.75	4.50	8L-4612
	7	0.50	0.75	5.25	7L-0654
5/8-11	1 1/4	0.62	0.94	0.19	5S-2201
	2	0.62	0.94	0.19	5S-2457
	3	0.62	0.94	0.75	4D-0242
	4	0.62	0.94	2.25	8L-4743
	4 1/2	0.62	0.94	2.25	6H-3959
	5 1/2	0.62	0.94	3.75	7L-8304
3/4-10	1 1/2	0.75	1.12	0.20	7L-9787
	1 3/4	0.75	1.12	0.20	5F-5321
	2 1/2	0.75	1.12	0.20	2N-6170
	3 1/4	0.75	1.12	1.00	2N-1746
	3 1/2	0.75	1.12	1.00	9S-4920

Hex Socket Head Screw Bolts / Inch / Coarse & Fine Thread

THREAD SIZE (in - TPI)	A BOLT LENGTH (in)	B HEAD HEIGHT (in)	C HEAD WIDTH (in)	D GRIP LENGTH (in)	PART NUMBER
7/8-9	2 1/2	0.88	1.31	0.22	8L-4638
	4	0.88	1.31	1.00	8L-9299
	4 1/2	0.88	1.31	3.00	8L-4717
1-8	2 1/2	1.00	1.50	0.25	8L-6059
	3	1.00	1.50	0.25	7L-9198
	5	1.00	1.50	2.00	8L-3745
FINE THREAD					
No. 10-32	5/8	0.19	0.31	0.06	3K-6168
	7/8	0.19	0.31	0.06	8H-4959
1/4-28	1/2	0.25	0.38	0.08	2K-8407
	5/8	0.25	0.38	0.08	021-7941
	3/4	0.25	0.38	0.08	3H-1392
	7/8	0.25	0.38	0.08	8S-1571
5/16-24	3/4	0.31	0.47	0.08	3F-8156
3/8-24	3/4	0.38	0.56	0.08	013-8253
	7/8	0.38	0.56	0.08	4L-1507
	1	0.38	0.56	0.08	5L-4183
	1 1/4	0.38	0.56	0.08	1T-0131
	1 1/2	0.38	0.56	0.19	5L-8894
	1 3/4	0.38	0.56	0.50	013-8257
	2	0.38	0.56	0.50	013-8258
	2 1/4	0.38	0.56	1.00	013-8259
7/16-20	5 3/4	0.38	0.56	4.75	8J-1582
	1/2	0.44	0.66	0.11	8S-2696
1/2-20	1 3/4	0.44	0.66	0.11	8F-1948
	1/2	0.50	0.75	0.11	021-7956
	3/4	0.50	0.75	0.11	013-8306
	1	0.50	0.75	0.11	013-8307
	1 1/4	0.50	0.75	0.11	1F-1375
	1 1/2	0.50	0.75	0.11	8F-0069
	1 3/4	0.50	0.75	0.11	013-8310
	2	0.50	0.75	0.11	2H-3763
	2 1/4	0.50	0.75	0.75	013-8312
5/8-18	3	0.50	0.75	1.50	013-8315
	2 1/4	0.62	0.94	0.11	9S-9078
3/4-16	2	0.75	1.12	0.13	061-8718

Hardware



Hex Head Bolts / Metric / Coarse Thread UNC / Phosphate & Oil Coated

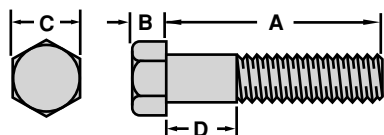
THREAD SIZE (dia x pitch)	A BOLT LENGTH (mm)	B HEAD HEIGHT (mm)	C HEAD WIDTH (mm)	D GRIP LENGTH (mm)	PART NUMBER
M6 x 1.00	12	4	10	2	8T-0639
	16	4	10	3	6V-8837
	20	4	10	3	6V-8214
	25	4	10	3	6V-8490
	30	4	10	12	8T-0640
	35	4	10	17	6V-2315
	40	4	10	22	2W-9499
	45	4	10	6	6V-7728
	50	4	10	33	8T-0275
	60	4	10	42	8T-5066
	70	4	10	52	6V-8359
	80	4	10	62	6V-9798
	Nut				6V-8225
	Washer				9X-8267
M8 x 1.25	12	6	13	3	6V-2316
	16	6	13	3	6V-5215
	20	6	13	3	6V-5217
	25	6	13	3	6V-3940
	30	6	13	8	6V-2317
	35	6	13	13	6V-5218
	40	6	13	18	6V-5219
	45	6	13	23	8T-0276
	50	6	13	28	6V-3918
	60	6	13	38	8T-0100
	70	6	13	48	5P-8347
	80	6	13	58	6V-5221
	90	6	13	68	8T-0292
	100	6	13	78	6V-5223
	110	6	13	88	6V-3821
	120	6	13	98	6V-9607
	130	6	13	108	7X-0457
	140	6	13	112	7X-0870
	150	6	13	122	8C-4984
	Nut				5P-7970
	Washer				9M-1974
M10 x 1.50	12	7	16	5	6V-8084
	16	7	16	3	6V-8212
	20	7	16	5	6V-6317
	25	7	16	5	6V-4248

THREAD SIZE (dia x pitch)	A BOLT LENGTH (mm)	B HEAD HEIGHT (mm)	C HEAD WIDTH (mm)	D GRIP LENGTH (mm)	PART NUMBER
M10 x 1.50	30	7	16	5	6V-1820
	35	7	16	5	6V-3822
	40	7	16	14	6V-5842
	45	7	16	19	6V-5843
	50	7	16	24	6V-4249
	60	7	16	34	6V-5230
	70	7	16	44	6V-7981
	80	7	16	54	8T-0643
	90	7	16	64	8T-0644
	100	7	16	74	6V-1819
	110	7	16	78	8T-0355
	120	7	16	94	8T-5030
	140	7	16	108	8C-2926
	150	7	16	118	8T-9085
	160	7	16	128	8T-0356
	180	7	16	148	8T-7950
	200	7	16	168	8T-6854
	Nut				2Y-5829
	Washer				6V-5839
M12 x 1.75	16	8	18	5	6V-8177
	20	8	18	5	8T-0293
	25	8	18	5	6A-5591
	30	8	18	5	6V-3668
	35	8	18	5	6V-8675
	40	8	18	5	6V-8197
	45	8	18	15	6V-5684
	50	8	18	20	6V-7673
	60	8	18	30	6V-3823
	70	8	18	40	6V-8336
	80	8	18	50	6V-5696
	90	8	18	60	8T-0372
	100	8	18	70	8T-0106
	110	8	18	80	8T-0646
	120	8	18	90	6V-8004
	140	8	18	104	7X-0909
	150	8	18	114	8T-5044
	160	8	18	124	8T-0162
	180	8	18	144	8T-6991
	200	8	18	147	8C-3226

Hex Head Bolts / Metric / Coarse Thread UNC / Phosphate & Oil Coated

THREAD SIZE (dia x pitch)	A BOLT LENGTH (mm)	B HEAD HEIGHT (mm)	C HEAD WIDTH (mm)	D GRIP LENGTH (mm)	PART NUMBER	THREAD SIZE (dia x pitch)	A BOLT LENGTH (mm)	B HEAD HEIGHT (mm)	C HEAD WIDTH (mm)	D GRIP LENGTH (mm)	PART NUMBER
M12 x 1.75	Nut				6V-8149	M20 x 2.50	100	13	30	54	6V-9667
	Washer				5P-8245		110	13	30	64	8T-0362
M14 x 2.00	20	9	21	6	8T-0373		120	13	30	74	8T-0070
	25	9	21	6	8T-0296		130	13	30	78	8T-0655
	30	9	21	6	8T-0297		140	13	30	88	6V-9167
	35	9	21	6	6V-8550		150	13	30	98	8T-0656
	45	9	21	6	8T-0226		160	13	30	108	8T-0657
	50	9	21	16	6V-5685		180	13	30	128	8T-0658
	60	9	21	26	8T-3666		200	13	30	148	6V-8569
	80	9	21	46	8T-3653		Nut				6V-7742
	90	9	21	56	8C-0537		Washer				8T-3282
	100	9	21	66	8T-0298	M24 x 3.00	35	15	36	8	8T-0662
	Nut				139-6366		40	15	36	8	8T-0661
M16 x 2.00	25	10	24	4	6V-5224		45	15	36	8	8T-0663
	30	10	24	3	8T-0299		50	15	36	8	6V-9199
	35	10	24	4	6V-5844		70	15	36	8	8T-0664
	40	10	24	5	6V-4429		80	15	36	26	6V-8133
	45	10	24	5	8T-0375		90	15	36	36	8T-0666
	50	10	24	12	6V-5686		100	15	36	46	8T-0667
	60	10	24	22	6V-3303		110	15	36	56	8T-0668
	70	10	24	32	8T-0357		120	15	36	66	6V-8132
	80	10	24	42	8T-0281		130	15	36	70	8T-0669
	90	10	24	52	8T-0358		140	15	36	80	8T-0670
	100	10	24	62	8T-0207		150	15	36	90	8T-0671
	110	10	24	72	8T-0649		160	15	36	100	8T-0672
	120	10	24	82	8T-0282		180	15	36	120	8T-0674
	130	10	24	86	8T-0359		200	15	36	140	6V-8198
	140	10	24	96	6V-7675		Nut				7X-0851
	150	10	24	106	6V-8154		Washer				6V-8237
	160	10	24	116	8T-0650	M30 x 3.50	80	19	46	14	8C-3222
	180	10	24	136	8T-5002		90	19	46	24	8C-3411
	Nut				8T-1757		100	19	46	34	8T-0368
	Washer				9X-8268		110	19	46	44	8T-0283
M20 x 2.50	30	13	30	4	8T-0651		120	19	46	54	8T-0369
	35	13	30	4	8T-0300		140	19	46	68	8T-0370
	40	13	30	5	6V-7729		160	19	46	88	8C-3236
	45	13	30	6	8T-0652		180	19	46	108	8T-6624
	50	13	30	4	6V-3531		Nut				8T-1583
	60	13	30	14	6V-3532		Washer				9X-8399
	70	13	30	24	6V-5845						
	80	13	30	34	6V-3669						
	90	13	30	44	8T-0360						

Hardware



Hex Head Bolts / Metric / Coarse Thread UNC / Zinc Dichromate Plated

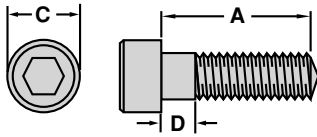
THREAD SIZE (dia x pitch)	A BOLT LENGTH (mm)	B HEAD HEIGHT (mm)	C HEAD WIDTH (mm)	D GRIP LENGTH (mm)	PART NUMBER
M6 x 1.00	12	4	10	2	8T-4171
	16	4	10	3	5C-9553
	20	4	10	3	8T-4138
	25	4	10	2	6V-7357
	30	4	10	12	8T-4971
	35	4	10	17	7X-2533
	40	4	10	22	8C-8451
	45	4	10	6	8T-2947
	50	4	10	32	7X-2534
	60	4	10	42	7X-2535
	70	4	10	52	8T-3844
	80	4	10	62	8T-6974
	Nut				5C-2890
	Washer				9X-8256
M8 x 1.25	12	6	13	3	8T-4199
	16	6	13	3	8T-4200
	20	6	13	3	8T-4189
	25	6	13	3	8T-4908
	30	6	13	8	8T-7547
	35	6	13	13	7X-2537
	40	6	13	3	8T-4197
	45	6	13	23	7X-0818
	50	6	13	28	8T-6912
	60	6	13	38	8T-6869
	70	6	13	48	8T-6870
	80	6	13	58	8T-3647
	90	6	13	68	8T-4177
	100	6	13	78	7X-2538
	110	6	13	88	7X-2539
	120	6	13	98	7X-2540
	130	6	13	108	108-2989
	140	6	13	112	7X-2541
	150	6	13	122	7X-2542
	160	6	13	128	8T-7352
	Nut				5C-7261
	Washer				8T-4224
M10 x 1.50	12	7	16	5	7X-2621
	16	7	16	5	8T-4191
	20	7	16	5	8T-4137

THREAD SIZE (dia x pitch)	A BOLT LENGTH (mm)	B HEAD HEIGHT (mm)	C HEAD WIDTH (mm)	D GRIP LENGTH (mm)	PART NUMBER
M10 x 1.50	25	7	16	5	8T-4136
	30	7	16	5	8T-4195
	35	7	16	5	8T-4196
	40	7	16	14	8T-4186
	45	7	16	19	8T-4182
	50	7	16	24	8T-4185
	60	7	16	34	8T-6466
	70	7	16	44	8T-5005
	80	7	16	54	8T-4172
	90	7	16	64	8T-4178
	100	7	16	74	8T-4198
	110	7	16	84	8T-6685
	120	7	16	94	7X-2543
	130	7	16	98	8T-5436
	140	7	16	108	7X-2544
	150	7	16	118	7X-2545
	160	7	16	128	8T-6408
	180	7	16	148	7X-2546
	200	7	16	168	7X-2547
	Nut				8T-4133
	Washer				8T-4121
M12 x 1.75	16	8	18	5	7X-2548
	20	8	18	5	8T-4179
	25	8	18	5	8T-4192
	30	8	18	5	8T-4139
	35	8	18	5	8T-4956
	40	8	18	5	8T-4183
	45	8	18	15	8T-4184
	50	8	18	20	8T-4194
	60	8	18	30	8T-4910
	70	8	18	40	8T-4648
	80	8	18	50	8T-6868
	90	8	18	60	8T-4176
	100	8	18	70	7X-2549
	110	8	18	80	7X-2550
	120	8	18	90	8T-5041
	130	8	18	94	8T-5001
	140	8	18	104	8T-5412
	150	8	18	114	8T-5092

Hex Head Bolts / Metric / Coarse Thread UNC / Zinc Dichromate Plated

THREAD SIZE (dia x pitch)	A BOLT LENGTH (mm)	B HEAD HEIGHT (mm)	C HEAD WIDTH (mm)	D GRIP LENGTH (mm)	PART NUMBER	THREAD SIZE (dia x pitch)	A BOLT LENGTH (mm)	B HEAD HEIGHT (mm)	C HEAD WIDTH (mm)	D GRIP LENGTH (mm)	PART NUMBER
M12 x 1.75	160	8	18	124	8T-7930	M20 x 2.50	180	13	30	128	7X-2568
	180	8	18	144	8T-7929		200	13	30	148	7X-2569
	200	8	18	147	7X-2551		Nut				8T-4131
	Nut				8T-4244		Washer				8T-4123
	Washer				8T-4223	M24 x 3.00	35	15	36	8	7X-2572
M16 x 2.00	25	10	24	4	8T-4190		40	15	36	8	7X-2573
	30	10	24	3	7X-2552		45	15	36	8	7X-2574
	35	10	24	4	8T-4779		50	15	36	8	8T-5379
	40	10	24	5	7X-2553		60	15	36	8	7X-2575
	45	10	24	5	8T-7338		70	15	36	8	7X-2576
	50	10	24	12	8T-4193		80	15	36	26	8T-5878
	60	10	24	22	8T-4140		90	15	36	36	7X-2577
	70	10	24	32	7X-2554		100	15	36	46	7X-2489
	80	10	24	42	7X-2555		110	15	36	56	7X-2454
	90	10	24	52	8T-4175		120	15	36	66	8T-0363
	100	10	24	56	7X-2556		130	15	36	70	8T-6380
	110	10	24	72	8T-4173		140	15	36	80	8T-4649
	120	10	24	82	8T-4174		150	15	36	90	8C-3290
	130	10	24	86	7X-2475		160	15	36	100	7X-2567
	140	10	24	96	7X-2557		180	15	36	120	7X-2465
	150	10	24	106	7X-2558		200	15	36	140	7X-2578
	160	10	24	116	7X-2559		Nut				8T-4001
	180	10	24	136	8T-6385		Washer				8T-4167
	200	10	24	156	8T-6383	M30 x 3.50	50	19	46	9	9X-2199
M20 x 2.50	Nut				8T-4132		80	19	46	14	8C-8723
	Washer				8T-4122		90	19	46	24	7X-2580
	30	13	30	4	8T-4780		100	19	46	34	7X-2581
	35	13	30	4	7X-2561		110	19	46	44	7X-2582
	40	13	30	5	8T-5460		120	19	46	54	7X-2583
	45	13	30	6	7X-2562		140	19	46	68	7X-2584
	50	13	30	4	8T-6430		160	19	46	88	7X-2585
	60	13	30	14	7X-2563		180	19	46	108	7X-2586
	70	13	30	24	8T-4141		Nut				8C-8722
	80	13	30	34	8T-4187		Washer				9X-8258
	90	13	30	44	7X-2564						
	100	30	30	54	7X-2565						
	110	13	30	64	7X-2566						
	120	13	30	74	8T-6381						
	130	13	30	78	7X-2532						
	140	13	30	88	8C-8478						
	150	13	30	98	8T-4170						
	160	13	30	108	7X-2488						

Hardware



Hex Socket Head Screw Bolts / Metric / Coarse Thread UNC

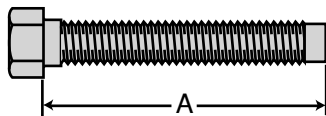
THREAD SIZE (dia x pitch)	A BOLT LENGTH (mm)	C HEAD WIDTH (mm)	D GRIP LENGTH (mm)	PART NUMBER
M3 x 0.50	6	6	2	8C-6365
	20	6	2	8T-9006
M4 x 0.70	6	7	2	095-0640
	10	7	2	095-0641
	16	7	1	8T-9405
	20	7	1	8C-4982
	45	7	25	101-4306
	65	7	51	107-3198
M5 x 0.80	8	9	2	096-5968
	10	9	2	099-0822
	12	9	2	099-2374
	14	9	2	8C-6364
	16	9	2	8C-8580
	20	9	2	096-4833
	25	9	2	096-5969
	35	9	13	8T-6699
	40	9	18	8T-0266
	45	9	23	8T-3283
	50	9	28	095-0642
	70	9	48	9X-2536
M6 x 1.00	10	10	5	9X-6153
	12	10	3	8T-0267
	16	10	3	6V-5683
	20	10	3	8T-0269
	25	10	3	3T-0849
	30	10	3	8T-8442
	35	10	11	1R-5396
	40	10	16	6V-8653
	45	10	21	8C-6965
	50	10	32	8T-9534
	55	10	37	095-0645
	60	10	36	8T-2396
	65	10	41	8T-2922
	70	10	46	9X-2537
	80	10	56	102-7364
	90	10	66	8T-2397
M8 x 1.25	16	13	4	6V-8202
	20	13	4	8T-1158
	25	13	4	5A-3604

THREAD SIZE (dia x pitch)	A BOLT LENGTH (mm)	C HEAD WIDTH (mm)	D GRIP LENGTH (mm)	PART NUMBER
M8 x 1.25	30	13	4	6V-5192
	35	13	4	6V-8337
	45	13	17	8T-0338
	50	13	22	3E-8025
	55	13	33	9X-6154
	60	13	38	8T-9535
	65	13	37	096-0187
	70	13	42	6V-8213
	80	13	58	6V-5196
	90	13	62	8T-2394
	100	13	72	102-7365
	110	13	82	8T-0339
	130	13	102	3E-8006
	200	13	172	9X-8269
M10 x 1.50	16	16	5	096-4835
	20	16	5	6V-3938
	25	16	5	8T-1159
	30	16	3	9X-6032
	35	16	5	8T-0271
	40	16	8	8T-9515
	45	16	13	8T-2223
	50	16	18	8T-1160
	55	16	29	095-0655
	60	16	28	8T-0341
	65	16	33	8T-2392
	70	16	38	095-0658
	80	16	48	8T-0342
	90	16	58	9X-2158
	100	16	68	8T-7586
	110	16	78	8T-0272
	120	16	88	096-1331
	130	16	98	086-2369
	150	16	118	3E-8028
	220	16	194	095-0665
M12 x 1.75	20	18	5	8T-9080
	25	18	5	8T-8441
	30	18	5	8T-3957
	35	18	5	6V-8200
	40	18	5	8T-0273

Hex Socket Head Screw Bolts / Metric / Coarse Thread UNC

THREAD SIZE (dia x pitch)	A BOLT LENGTH (mm)	C HEAD WIDTH (mm)	D GRIP LENGTH (mm)	PART NUMBER
M12 x 1.75	45	18	5	095-0670
	50	18	5	8T-7811
	55	18	19	8T-0343
	60	18	24	095-0673
	65	18	35	095-0674
	70	18	34	3E-6910
	80	18	44	8C-8729
	90	18	54	3E-8007
	100	18	64	7X-2436
	110	18	74	095-9804
	120	18	84	8C-3413
	130	18	94	7X-2607
	140	18	104	8T-7058
	180	18	144	3E-6911
	220	18	184	8C-4980
M16 x 2.00	25	24	6	3E-6923
	30	24	6	8T-0439
	35	24	6	8T-6594
	40	24	6	8T-4944
	45	24	6	6V-8201
	50	24	6	8T-0348
	55	24	17	095-0700
	60	24	6	8T-2393
	65	24	21	8T-0349
	70	24	26	8T-1447
	80	24	36	095-9806
	90	24	46	3E-8008
	100	24	56	095-0705
	110	24	66	095-0706
	120	24	76	095-0707
	140	24	96	096-0008
	160	24	116	8C-7587
	180	24	136	102-2562
	200	24	156	7Y-5243
	260	24	216	7Y-5244
M20 x 2.50	45	30	8	7Y-5221
	50	30	8	8T-5042
	55	30	8	8T-6593
	60	30	8	7Y-5241
	70	30	8	7Y-5217

THREAD SIZE (dia x pitch)	A BOLT LENGTH (mm)	C HEAD WIDTH (mm)	D GRIP LENGTH (mm)	PART NUMBER
M20 x 2.50	80	30	28	7Y-5216
	90	30	38	9X-2404
	150	30	98	113-7430
	240	30	196	102-2563
	300	30	256	102-2564
M24 x 3.00	90	36	30	7Y-5215
	100	36	40	7Y-5239
	110	36	50	9X-8480
	130	36	70	9X-8915



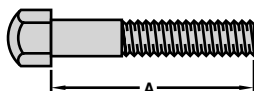
Forcing Bolts / Inch / Fine Thread UNF

THREAD SIZE (in - TPI)	A LENGTH (in)	GRIP LENGTH (in)	PART NUMBER
7/8-14	5 3/8	0.33	5P-5265
1-14	6 15/16	0.97	5P-8715
1 1/2-12	2 7/8	0.33	6V-0187
1 1/2-12	4 3/4	0.33	5P-5264

Forcing Bolts / Metric / Coarse Thread UNC

THREAD SIZE (dia x pitch)	A LENGTH (mm)	GRIP LENGTH (mm)	PART NUMBER
M24 x 3.0	190	13	136-1978

Track Bolts / Inch



MODEL	THREAD SIZE (in - TPI)	A BOLT LENGTH in (mm)	PART NUMBER
307, E70, E70B	1/2-20	1.38 (35.0)	102-8072
307, PM465	1/2-20	1.50 (38.1)	3A-9605
D3, D4, 931	1/2-20	1.50 (38.1)	8H-7504
931C, 933C, 935C, 941 D3, D4, D4B, D3C, D4C, D3G, D4G 215, TR225B, AP1050 PR450, SF350	9/16-18	1.63 (41.4)	4K-7038
AP650B, BG225C, AP1050B, BG245C	9/16-18	2.00 (50.8)	8S-4745
D5C*, 561, D4, D5, D6 941, 943, 951, 953, 955, 977, 205, 211, 213, 215, 215SA, 219, 225 PR750, PR1000, PM565 SF500, TR500	5/8-18	2.01 (51.0)	7H-3597
D5N, D5M, D5C, D5H, D4H 953, 939, 939C	5/8-18	2.17 (55.1)	9G-3110
D6, D7, 572 955, 963, 977 215SA, 219, 225, 225SA 229, 231, 235, FB227	3/4-16	2.16 (54.8)	1S-1859

* Use with "9K" links

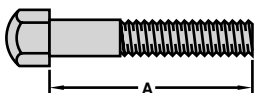
MODEL	THREAD SIZE (in - TPI)	A BOLT LENGTH in (mm)	PART NUMBER
D7, D8, 571, 572 973, 977, 235, 583	3/4-16	2.41 (61.2)	7H-3598
D6N, D7H, D6R, D6H, D6M, D5H 517, 527, FB227, D6HD	3/4-16	2.40 (60.9)	6V-1792
D7R, D7H, D8 973, 983, 235	7/8-14	2.66 (67.5)	7H-3599
D8T/R/N, D8L, 583R, 578	7/8-14	3.43 (87.1)	6V-1723
235	7/8-14	2.80 (71.1)	5P-4028
D9, 594, 245**	1-14	2.94 (74.6)	2M-5657
245	1-14	3.11 (78.9)	3T-6308
D9T/R/N	1-14	3.54 (89.9)	6T-2638
D9L, 589	1-14	3.81 (96.7)	6V-1726
D10	1 1/8-12	4.21 (106.9)	5P-3868
D10T/R/N	1 1/8-12	3.78 (96.0)	7T-1000
5130	1 3/8-12	4.73 (120.1)	6I-8648
D11RN, 5130	1 3/8-12	4.30 (109.2)	6T-8853

** Use with "8K" links

Track Bolts / Inch / Self Cleaning Shoes

MODEL	THREAD SIZE (in - TPI)	A BOLT LENGTH in (mm)	PART NUMBER
D3G, D4G, D3C, D4C, D4	9/16-18	1.62 (41.1)	4K-7038
	9/16-18	3.00 (76.2)	5A-3187
D5H, D5N, D5M, D4H	5/8-18	2.17 (55.1)	9G-3110
	5/8-18	3.54 (89.9)	3T-3884
D4, D5	5/8-18	3.31 (84.0)	5A-4104
	5/8-18	2.01 (51.0)	7H-3597
D6N, D6M, D5H	3/4-16	3.62 (91.9)	107-0718
D7H, D6R, D6H, D6N, D6M, D5H	3/4-16	2.40 (60.9)	6V-1792

MODEL	THREAD SIZE (in - TPI)	A BOLT LENGTH in (mm)	PART NUMBER
D7H, D6R, D6H	3/4-16	4.13 (104.9)	6T-2162
D6	3/4-16	2.16 (54.8)	1S-1859
	3/4-16	3.90 (99.0)	5A-7524
D7	3/4-16	4.10 (104.1)	5P-1028
	3/4-16	2.41 (61.2)	7H-3598
D7R/H	7/8-14	2.66 (67.5)	7H-3599
	7/8-14	4.33 (109.9)	116-8145



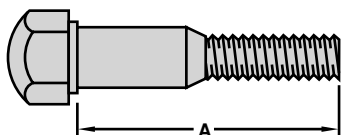
Track Bolts / Metric

MODEL	THREAD SIZE (dia x pitch)	A BOLT LENGTH (mm)	PART NUMBER
308, 307B	M14 x 1.50	35	136-2401
311, 312, 313, 314 E110, E110B, E120, E120B	M16 x 1.50	46	4I-7538
E140	M16 x 1.50	55	096-1043
E180	M18 x 1.50	58	093-0262
315, 317, 318, 319, 320, 321, 322 E200B, E240B, E240C	M20 x 1.50	55	9W-3619
317, 318, 319, 320, 321, 322, 320S, 325	M20 x 1.50	63	6Y-0846
E240, E300	M20 x 1.50	63	093-0266
E300B, EL300	M20 x 1.50	70	093-0265
330, 345, 350 D6R SystemOne™	M22 x 1.50	67	6Y-9024
350	M22 x 1.50	73	143-4891
E450	M22 x 1.50	78	093-0268
E650	M24 x 1.50	81	093-0271
345B	M24 x 1.50	67	150-4741
365B	M27 x 2.00	78	144-0805
375, 5080	M27 x 2.00	90	6Y-7432
385B, 5090	M30 x 2.00	90	174-0221

Track Bolts / Metric / Self Cleaning Shoes

MODEL	THREAD SIZE (dia x pitch)	A BOLT LENGTH (mm)	PART NUMBER
311, 312, 313, 314 E110, E110B, E120, E120B, E140	M16 x 1.50	108	093-0261
	M16 x 1.50	68	093-0259
E180*	M18 x 1.50	90	093-0264
315, 317, 318, 319, 321, 320, 322 E200B, E240B, E240C	M20 x 1.50	55	9W-3619
	M20 x 1.50	80	8E-9349
E240*	M20 x 1.50	108	096-0551
325	M20 x 1.50	63	6Y-0846
	M20 x 1.50	110	6Y-5686
330	M22 x 1.50	67	6Y-0924
	M22 x 1.50	110	5Q-3253

* Only one bolt length used.



Split Master Link Bolts / Inch

MODEL	THREAD SIZE (in - TPI)	A BOLT LENGTH in (mm)	PART NUMBER
D3, D3C, D4C, D3G, D4G 935C, 933C, 931C PM465, AP1050, PR450 SF350, TR225B	9/16-18	3.00 (76.2)	5A-3187
AP650B, BG225C AP1050B, BG245C	9/16-18	3.50 (88.9)	8S-4747
D5N, D5M, D4H, D5H D5G, D5C, 939C, 953	5/8-18	2.64 (67)	3T-8601
D5N, D5M, D4H D5G, D5C, 939C	5/8-18	3.27 (83)	9G-8592
D5H, 953	5/8-18	3.58 (91)	3T-8580
D5C*, D4, D5, D6, 561 941, 943, 951, 953, 955, 977	5/8-18	3.50 (88.9)	3P-2274
D6N, D6M, D5H, 517	3/4-16	3.90 (99)	107-0719
	3/4-16	2.91 (74)	106-1642
D7H	3/4-16	3.15 (80)	6V-1793
D7H, D6, 963, 955	3/4-16	4.13 (105)	9S-1838

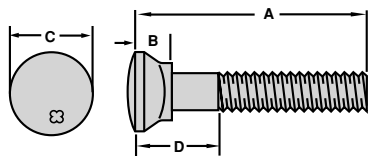
* Use with "9K" links.

MODEL	THREAD SIZE (in - TPI)	A BOLT LENGTH in (mm)	PART NUMBER
D7, 571, 572, 973, 977	3/4-16	4.45 (113)	2P-9670
D7R/H, 973	7/8-14	4.57 (116)	9W-9058
D7R/H	7/8-14	3.43 (87)	6V-1723
D8T/R/N, D8L, 583R, 578	7/8-14	3.78 (96)	6V-1724
	7/8-14	5.08 (129)	6V-1725
D8, 983, 583	7/8-14	4.84 (123.04)	8S-0395
D9T/R/N, D9L, 589	1-14	5.83 (148)	6V-1728
	1-14	4.84 (123)	7T-2283
D9, 594	1-14	5.56 (141.27)	8S-1723
D10T/R/N	1 1/8-12	6.46 (164)	7T-0998
	1 1/8-12	5.28 (134)	7T-0999
D10	1 1/8-12	6.61 (168)	5P-8222
D11R/N	1 3/8-12	7.20 (183)	6T-8520
D11R/N	1 3/8-12	6.02 (153)	6T-8521

Split Master Link Bolts / Inch / Self Cleaning Shoes

MODEL	THREAD SIZE (in - TPI)	A BOLT LENGTH in (mm)	PART NUMBER
D3G, D4G, D3C, D4C	9/16-18	4.29 (109)	5P-4683
	9/16-18	3.00 (76.2)	5A-3187
D5N, D5M, D4H	5/8-18	3.27 (83)	9G-8592
D5N, D5M, D4H, D5H	5/8-18	4.02 (102)	3T-3889
D5H	5/8-18	3.58 (91)	3T-8580
D4, D5	5/8-18	3.50 (88.9)	3P-2274
	5/8-18	4.63 (117.5)	5P-0569

MODEL	THREAD SIZE (in - TPI)	A BOLT LENGTH in (mm)	PART NUMBER
D6R/H, D6, D7	3/4-16	5.47 (139)	3P-1111
	3/4-16	4.13 (105)	9S-1838
D6N, D6M, D5H	3/4-16	3.90 (99)	107-0719
	3/4-16	4.29 (109)	107-0717
D7H, D7	3/4-16	4.29 (113)	2P-9670
D7H	3/4-16	4.92 (125)	6T-1441
D7R/H	7/8-14	4.57 (116)	9W-9058
	7/8-14	5.08 (129)	6V-1725



Cutting Edge Bolts / Inch / Coarse Thread

THREAD SIZE (in - TPI)	A BOLT LENGTH (in)	B HEAD HEIGHT (in)	C HEAD WIDTH (in)	D GRIP LENGTH (in)	PART NUMBER
3/8-16	2	0.31	0.67	1.00	4F-4048
	Nut				9S-8752
1/2-13	1 1/4	0.44	0.89	0.50	4F-3647
	1 1/2	0.44	0.89	0.63	4F-3646
	1 3/4	0.44	0.89	0.63	4F-3648
	2	0.44	0.89	0.75	4F-3649
	2 1/4	0.44	0.89	1.00	4F-3650
	2 1/2	0.44	0.89	1.25	4F-3651
	2 3/4	0.44	0.89	1.50	4F-3652
	3	0.44	0.89	1.75	4F-3662
	3 1/2	0.45	0.89	2.25	4F-3663
	5	0.44	0.89	3.75	4F-4043
	Nut				1F-7958
5/8-11	1 1/2	0.54	1.04	0.63	4F-3664
	1 3/4	0.54	1.04	0.63	4F-3653
	2	0.54	1.04	0.75	4F-3654
	2 1/4	0.54	1.04	1.25	3F-5108
	2 1/2	0.54	1.04	1.00	4F-3656
	2 3/4	0.54	1.04	1.25	4F-3657
	3	0.54	1.04	1.50	4F-3658
	3 1/2	0.54	1.04	2.00	4F-3665
	3 3/4	0.54	1.04	2.25	4F-0391
	4	0.54	1.04	2.50	4F-3671
	Nut				4K-0367
3/4-10	2	0.63	1.20	0.75	4F-3672
	2 1/4	0.63	1.20	1.00	4F-7827
	2 1/2	0.63	1.20	1.19	5J-4773
	2 3/4	—	—	1.50	5J-4771
	3 1/8	0.63	1.20	1.38	1J-6762
	3 3/4	0.63	1.20	2.00	5F-8933
	4 1/4	0.63	1.20	2.50	1J-0962
	4 5/8	0.63	1.20	2.88	1J-6761
	Nut				2J-3506
7/8-9	2 1/2	0.74	1.41	1.36	5J-4772
	2 3/4	0.74	1.41	1.50	6F-0196
	3	0.74	1.41	1.25	5J-2409
	3 1/4	0.74	1.41	2.44	8J-2935
	3 1/2	0.74	1.41	1.75	2J-2548
	4 1/4	0.74	1.41	2.50	2J-5458

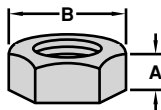
THREAD SIZE (in - TPI)	A BOLT LENGTH (in)	B HEAD HEIGHT (in)	C HEAD WIDTH (in)	D GRIP LENGTH (in)	PART NUMBER
7/8-9	4 5/8	0.74	1.41	2.63	1J-0849
	Nut				2J-3505
1-8	2 1/2	0.81	1.60	1.31	3J-2801
	2 3/4	0.81	1.60	1.50	1J-5607
	3	0.81	1.60	1.75	4F-4042
	3 1/4	0.81	1.60	1.91	4J-9058
	3 1/2	0.81	1.60	2.19	4J-9208
	3 3/4	0.81	1.60	2.69	8J-2928
	3 3/4	0.81	1.60	1.50	1J-4948
	4	0.81	1.60	2.95	5P-8136
	4 1/2	0.81	1.60	2.25	1J-3527
	5 1/4	0.81	1.60	3.00	1J-4947
	Nut				2J-3507
1 1/4-7	3 3/8	1.06	2.03	1.65	8T-9079
	3 3/4	1.06	2.03	2.28	6V-6535
	4 1/8	1.02	2.01	2.28	5P-8823
	4 1/2	1.06	2.03	2.28	6V-8360
	4 15/16	1.06	2.03	2.28	5P-8361
	Nut				3K-9770

Maintenance Tips For Cutting Edge Hardware

1. Clean all surfaces of rust, paint, nicks, and burrs.
2. Install bolts first in the center and work out toward the edge.
3. Tighten all bolts to the specified torque (see chart below for specifications).
4. Set bolt heads firmly into the edge countersink using a heavy hammer. Safety glasses **MUST** be worn when striking bolt heads.
5. Tighten all bolts again to the specified torque.

THREAD SIZE (in - TPI)	(ft lb)	TORQUE (N·M)	Size
5/8	200 ±30	270 ±40	16 mm
3/4	350 ±45	475 ±60	19 mm
7/8	550 ±65	750 ±90	22 mm
1	825 ±110	1125 ±150	25 mm
1 1/4	1350 ±220	1850 ±300	32 mm

Hardware



Nuts / Hex Head / Inch

- Made of fine grain steel.
- Designed with a washer-faced surface.
- Provides a tensile strength comparable to SAE Grade 8 bolt.
- Hardened nuts marked with 6 lines, dashes, or dots for identification.

Coarse Thread UNC / Phosphate & Oil Coated / Hardened

THREAD SIZE (in - TPI)	A NUT HEIGHT (in)	B NUT WIDTH (in)	PART NUMBER
1/4-20	0.22	7/16	9S-8750
5/16-18	0.27	1/2	5S-0003
3/8-16	0.39	9/16	9S-8752
7/16-14	0.38	11/16	3S-1546
1/2-13	0.44	3/4	1F-7958
9/16-12	0.48	7/8	5P-0539
5/8-11	0.55	15/16	4K-0367

THREAD SIZE (in - TPI)	A NUT HEIGHT (in)	B NUT WIDTH (in)	PART NUMBER
3/4-10	0.64	1 1/8	2J-3506
7/8-9	0.75	1 5/16	2J-3505
1-8	0.86	1 1/2	2J-3507
1 1/8-7	0.97	1 11/16	4J-5977
1 1/4-7	1.06	1 7/8	3K-9770
1 3/8-6	1.17	2 1/16	9M-3770
1 1/2-6	1.28	2 1/4	9S-8216

Coarse Thread UNC / Zinc Dichromate Plated / Hardened

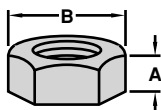
THREAD SIZE (in - TPI)	A NUT HEIGHT (in)	B NUT WIDTH (in)	PART NUMBER
1/4-20	0.22	7/16	6V-8185
5/16-18	0.27	1/2	6V-8189
3/8-16	0.33	9/16	6V-8801
7/16-14	0.37	11/16	7X-0447
1/2-13	0.44	3/4	6V-8188
5/8-11	0.55	15/16	7X-0448

THREAD SIZE (in - TPI)	A NUT HEIGHT (in)	B NUT WIDTH (in)	PART NUMBER
3/4-10	0.64	1 1/8	6V-8182
7/8-9	0.75	1 5/16	7X-0449
1-8	0.86	1 1/2	6V-8190
1 1/8-7	0.97	1 11/16	7X-0450
1 1/4-7	1.06	1 7/8	7X-0451
1 1/2-6	1.28	2 1/4	7X-0452

Fine Thread UNF / Phosphate & Oil Coated / Hardened

THREAD SIZE (in - TPI)	A NUT HEIGHT (in)	B NUT WIDTH (in)	PART NUMBER
1/4-28	0.22	7/16	9S-8748
5/16-24	0.27	1/2	9S-8751
3/8-24	0.39	9/16	3S-2713
7/16-20	0.38	11/16	9S-8905
1/2-20	0.44	3/4	6B-6684
9/16-18	0.48	7/8	5P-0540
5/8-18	0.55	15/16	6B-6683

THREAD SIZE (in - TPI)	A NUT HEIGHT (in)	B NUT WIDTH (in)	PART NUMBER
3/4-16	0.64	1 1/8	6B-6682
7/8-14	0.75	1 5/16	1A-5666
1-14	0.86	1 1/2	1A-1935
1 1/8-12	0.97	1 11/16	3S-1356
1 1/4-12	1.06	1 7/8	7H-7539
1 3/8-12	1.17	2	2M-0400
1 1/2-12	1.28	1 9/32	8H-3390



Self-Locking Nuts / Hex Head / Inch

- Made of fine grain steel.
- Resist loosening under vibration.
- Provides a tensile strength comparable with SAE Grade 8 bolts.
- Resist loosening under vibration.

Coarse Thread UNC / Hardened

THREAD SIZE (in - TPI)	A NUT HEIGHT (in)	B NUT WIDTH (in)	PART NUMBER
1/4-20	0.23	7/16	2D-6235
5/16-18	0.27	1/2	031-4155
3/8-16	0.33	9/16	2K-4973
7/16-14	0.38	11/16	6V-5729
1/2-13	0.44	3/4	1K-6872
9/16-12	0.50	7/8	034-9954

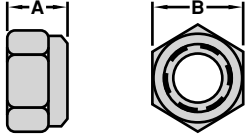
THREAD SIZE (in - TPI)	A NUT HEIGHT (in)	B NUT WIDTH (in)	PART NUMBER
5/8-11	0.55	15/16	3K-2889
3/4-10	0.64	1 1/8	1K-6870
7/8-9	0.75	1 5/16	6K-0545
1-8	0.86	1 1/2	6K-3632
1 1/8-7	0.97	1 11/16	8D-9513
1 1/4-7	1.06	1 7/8	2J-5997

Fine Thread UNF / Hardened

THREAD SIZE (in - TPI)	A NUT HEIGHT (in)	B NUT WIDTH (in)	PART NUMBER
1/4-28	0.23	7/16	2L-9038
5/16-24	0.27	1/2	3D-8752
1/2-20	0.44	3/4	2K-0564
9/16-18	0.50	7/8	054-5448
5/8-18	0.55	15/16	2K-4821

THREAD SIZE (in - TPI)	A NUT HEIGHT (in)	B NUT WIDTH (in)	PART NUMBER
3/4-16	0.64	1 1/8	2K-0337
7/8-14	0.75	1 5/16	5D-1986
1-14	0.86	1 1/2	2K-7471
1 1/8-12	0.97	1 11/16	3D-4904
1 1/4-12	1.06	1 7/8	2K-7468
1 1/2-12	1.28	2 1/4	5M-6667

Hardware



Self-Locking Nuts / Hex Head / Inch / Plastic Insert

- Resist loosening under vibration.

Coarse Thread / UNC / Zinc Dichromate Plated / Hardened

THREAD SIZE (in - TPI)	A NUT HEIGHT (in)	B NUT WIDTH (in)	PART NUMBER
1/4-20	0.31	7/16	3E-9865
5/16-18	0.34	1/2	3E-9860
3/8-16	0.45	9/16	3K-6060
1/2-13	0.59	3/4	9X-0941
5/8-11	0.75	15/16	3E-9861
3/4-10	0.88	1 1/16	3E-9862
7/8-9	0.98	1 1/4	3E-9863

Coarse Thread UNC / Zinc Dichromate Plated / Non Hardened

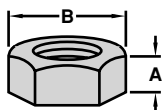
THREAD SIZE (in - TPI)	A NUT HEIGHT (in)	B NUT WIDTH (in)	PART NUMBER
No. 6-32	0.18	5/16	7D-6922
No. 8-32	0.23	11/32	6D-5801
No. 10-24	0.25	3/8	031-0249
1/4-20	0.31	7/16	7H-8909
5/16-18	0.34	1/2	2R-0504

THREAD SIZE (in - TPI)	A NUT HEIGHT (in)	B NUT WIDTH (in)	PART NUMBER
3/8-16	0.37	11/16	9T-2730
1/2-13	0.59	3/4	2H-3788
5/8-11	0.75	15/16	2H-3789
3/4-10	0.88	1 1/16	2H-3790

Fine Thread UNF / Zinc Dichromate Plated / Non Hardened

THREAD SIZE (in - TPI)	A NUT HEIGHT (in)	B NUT WIDTH (in)	PART NUMBER
No. 10-32	0.25	3/8	4L-1250
1/4-28	0.31	7/16	3F-7674
5/16-24	0.34	1/2	3F-2617
3/8-24	0.18	9/16	2F-8616

THREAD SIZE (in - TPI)	A NUT HEIGHT (in)	B NUT WIDTH (in)	PART NUMBER
7/16-20	0.45	11/16	139-4187
1/2-20	0.59	3/4	2M-2570



Hex Jam Nuts / Hex Head / Inch

- Designed with a chamfered and washer-faced surface.
- For use in locking other nuts to prevent loosening.

Coarse Thread UNC / Non Hardened

THREAD SIZE (in - TPI)	A NUT HEIGHT (in)	B NUT WIDTH (in)	PART NUMBER
1/4-20	0.16	7/16	1B-4427
5/16-18	0.19	1/2	5B-3180
3/8-16	0.22	9/16	1B-2578
7/16-14	0.25	11/16	1L-9048
1/2-13	0.31	3/4	3H-3680
9/16-12	0.31	7/8	8S-5151

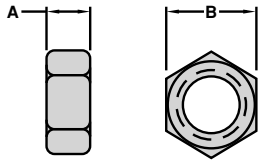
THREAD SIZE (in - TPI)	A NUT HEIGHT (in)	B NUT WIDTH (in)	PART NUMBER
5/8-11	0.38	15/16	1D-5118
3/4-10	0.42	1 1/8	1D-5119
7/8-9	0.48	1 5/16	5P-0541
1-8	0.55	1 1/2	1D-6306

Fine Thread UNF / Non Hardened

THREAD SIZE (in - TPI)	A NUT HEIGHT (in)	B NUT WIDTH (in)	PART NUMBER
1/4-28	0.16	7/16	9M-1311
5/16-24	0.19	1/2	4F-2294
3/8-24	0.22	9/16	2A-5351
7/16-20	0.25	11/16	5B-3254
3/4-16	0.42	1 1/8	1D-5120

THREAD SIZE (in - TPI)	A NUT HEIGHT (in)	B NUT WIDTH (in)	PART NUMBER
7/8-14	0.48	1 5/16	1D-5121
1-14	0.55	1 1/2	2H-3786

Hardware



Nuts / Hex Head / Metric

- Made of fine grain steel.
- Designed with a washer-faced surface.
- Provides a proof load comparable to 10.9 metric bolt.

Coarse Thread UNC / Phosphate & Oil Coated / Hardened

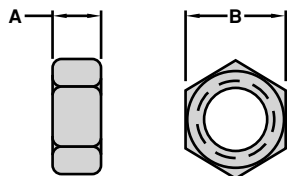
THREAD SIZE (dia x pitch)	A NUT HEIGHT (mm)	B NUT WIDTH (mm)	PART NUMBER
M6 x 1.00	5.05	10	6V-8225
M8 x 1.25	6.40	13	5P-7970
M10 x 1.50	8.22	16	2Y-5829
M12 x 1.75	10.64	18	6V-8149
M16 x 2.00	14.45	24	8T-1757
M20 x 2.50	18.00	30	6V-7742

THREAD SIZE (dia x pitch)	A NUT HEIGHT (mm)	B NUT WIDTH (mm)	PART NUMBER
M24 x 3.00	21.50	36	7X-0851
M30 x 3.50	24.95	46	8T-1583

Coarse Thread UNC / Zinc Dichromate Plated / Hardened

THREAD SIZE (dia x pitch)	A NUT HEIGHT (mm)	B NUT WIDTH (mm)	PART NUMBER
M6 x 1.00	5.05	10	5C-2890
M8 x 1.25	6.40	13	5C-7261
M10 x 1.50	8.22	16	8T-4133
M12 x 1.75	10.64	18	8T-4244
M16 x 2.00	14.45	24	8T-4132

THREAD SIZE (dia x pitch)	A NUT HEIGHT (mm)	B NUT WIDTH (mm)	PART NUMBER
M20 x 2.50	18.00	30	8T-4131
M24 x 3.00	21.50	36	8T-4001
M30 x 3.50	24.95	46	8C-8722

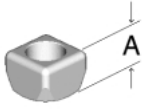


Self-Locking Nuts / Hex Head / Metric Coarse Thread UNC / Hardened

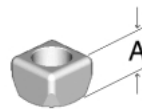
- Made of fine grain steel.
- Designed with a washer-faced surface.
- Provides a proof load comparable to 10.9 metric bolt.
- Resists loosening under vibration.

THREAD SIZE (dia x pitch)	A HEIGHT (mm)	B WIDTH (mm)	PART NUMBER
M6 x 1.00	5.90	10	6V-7743
M8 x 1.25	7.10	13	6V-9189
M10 x 1.50	9.00	16	6V-7744
M12 x 1.75	11.60	18	6V-7687
M16 x 2.00	15.20	24	8T-4778
M20 x 2.50	22.15	30	6V-7688
M24 x 3.00	26.35	36	6V-7676
M30 x 3.50	30.00	46	8T-5065

Track Nuts



Inch



Metric

MODEL	THREAD SIZE (in - TPI)	A NUT HEIGHT in (mm)	PART NUMBER
D3, 931	1/2-20	0.60 (15.2)	6S-3419
D4	1/2-20	0.56 (14.2)	8H-5724
307, PM465	1/2-20	0.63 (16.0)	117-8885
307, E70, E70B	1/2-20	0.51 (12.9)	102-8073
D3, D3B, D3C, D4C, D4B, D4 D3G, D4G, 215, 931, 933, 935, 941 PR450, PM 565, AP650B, AP1050, BG225C, BG245C SF350, TR225B	9/16-18	0.72 (18.2)	7K-2017
D4, 941	9/16-18	0.61 (15.4)	7H-3606
D5N, D5M, D5G, D5C, D4, D5, D6, 561, 939, 941, 943, 951 953, 955, 977 205, 211, 213, 215, 215SA, 219, 225 PR750, PR1000, SF500, TR500	5/8-18	0.72 (18.2)	1M-1408
D6N, D6M, D5H, D6R/H, D7H, 517, 527, D6, D7, D8, 955, 936, 973, 977 571, 572, 583 215SA, 219, 225, 225SA, FB227, 229, 231, 235	3/4-16	0.72 (18.2)	1S-1860
973, 235	7/8-14	0.94 (23.8)	7T-9825
D7R/H D8, 983, 583	7/8-14	0.93 (23.6)	2S-2140
D9, 594, 245	1-14	1.00 (25.4)	1S-6421
245 *	1-14	1.00 (25.4)	2V-0250

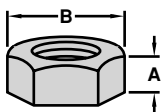
* Use with "8K" links.

MODEL	THREAD SIZE (dia x pitch)	A NUT HEIGHT (mm)	PART NUMBER
308, 307B	M14 x 1.50	14	136-2404
311, 312, 313, 314, E110, E110B, E120B, E120	M16 x 1.50	16	5I-6125
E140	M16 x 1.50	22	093-0319
E180, EL180	M18 x 1.50	22	093-0320
315, 317, 318, 319, 320, 321, 322, 325, 320S, E200B, EL200B, E240B, EL240B, E240C, EL240C	M20 x 1.50	21	9W-3361
E240, EL240, E300B, E300, EL300, EL300B	M20 x 1.50	27	093-0321
330, 345, 350 D6R SystemOne™	M22 x 1.50	22	9W-4381
E450	M22 x 1.50	29	096-0586
345B	M24 x 1.50	24	150-4742
E650	M24 x 1.50	29	093-0323
365B	M27 x 2.00	27	144-0806
375, 5080	M27 x 2.00	38.5	6Y-7433
385B, 5090B	M30 x 2.00	38.5	174-0222



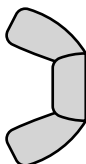
Inch

MODEL	THREAD SIZE (in - TPI)	A NUT HEIGHT in (mm)	PART NUMBER
D8T/R/N, D8L, 583R, 578	7/8-14	1.38 (35.0)	7G-6442
D9T/R/N	1-14	1.57 (39.8)	7G-0434
D10, D10T/R/N, 5110B	1 3/8-12	1.72 (43.6)	5P-8221
D11R/N, 5130	1 3/8-12	1.81 (45.9)	3T-6292



Cutting Edge Nuts

THREAD SIZE (in - TPI)	A HEIGHT (in)	B WIDTH (in)	PART NUMBER
1/2-20	0.44	3/4	6B-6684
5/8-11	0.55	15/16	1D-4720
5/8-11	0.55	15/16	4K-0367
3/4-10	0.64	1 1/8	2J-3506
3/4-16	0.64	1 1/8	6B-6682
7/8-9	0.75	1 5/16	2J-3505
1-8	0.86	1 1/2	2J-3507
1 1/4-7	1.06	1 7/8	3K-9770

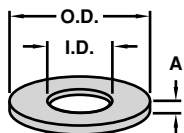


Wing Nuts / Inch / Coarse Thread UNC / Zinc Dichromate Plated

- Install and remove by hand.

THREAD SIZE (in - TPI)	PART NUMBER
10-24	6F-6898
10-32	033-3658
1/4-20	1F-1739
5/16-18	3B-0723
3/8-16	2B-9498
3/8-24	7B-8839

Hardware



Washers / Flat / Inch

- Compatible with SAE Grade 8 bolts.

Phosphate and Oil Coated / Hardened

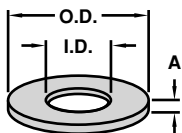
BOLT DIAMETER (in)	INSIDE DIAMETER (in)	OUTSIDE DIAMETER (in)	A THICKNESS (in)	PART NUMBER
1/4	0.28	0.56	0.08	5P-0537
5/16	0.34	0.62	0.08	9M-1974
3/8	0.39	0.72	0.09	5M-2894
7/16	0.50	0.88	0.09	5P-8244
1/2	0.53	1.00	0.12	5P-8245
9/16	0.62	1.14	0.12	5P-8246

BOLT DIAMETER (in)	INSIDE DIAMETER (in)	OUTSIDE DIAMETER (in)	A THICKNESS (in)	PART NUMBER
5/8	0.67	1.26	0.14	5P-8247
3/4	0.79	1.44	0.14	5P-8248
7/8	0.94	1.62	0.16	5P-8249
1	1.09	1.94	0.20	5P-8250
1 1/8	1.19	2.06	0.25	3S-1349
1 1/4	1.31	2.12	0.25	4K-0684
1 1/2	1.59	2.62	0.25	3S-6162

Zinc Dichromate Plated / Hardened

BOLT DIAMETER (in)	INSIDE DIAMETER (in)	OUTSIDE DIAMETER (in)	A THICKNESS (in)	PART NUMBER
1/4	0.28	0.56	0.08	8T-4205
5/16	0.34	0.62	0.08	8T-4224
3/8	0.41	0.72	0.09	8T-4896
7/16	0.47	0.88	0.09	8T-5360
1/2	0.53	1.00	0.12	8T-4223
5/8	0.66	1.25	0.14	8T-4122

BOLT DIAMETER (in)	INSIDE DIAMETER (in)	OUTSIDE DIAMETER (in)	A THICKNESS (in)	PART NUMBER
3/4	0.78	1.44	0.14	8T-4994
7/8	0.94	1.62	0.16	8C-6913
1	1.09	1.94	0.20	8T-5361
1 1/8	1.22	2.06	0.25	7X-0531
1 1/4	1.34	2.19	0.25	7X-0533
1 1/2	1.59	2.64	0.25	7X-0537



Washers / Flat / Inch

- Compatible with SAE Grade 5 bolts.

SAE

BOLT DIAMETER (in)	INSIDE DIAMETER (in)	OUTSIDE DIAMETER (in)	A THICKNESS (in)	PART NUMBER
No. 8	0.19	0.44	0.05	4B-4863
No. 10	0.22	0.50	0.06	4B-4274
1/4	0.28	0.62	0.06	4B-4276
5/16	0.34	0.69	0.06	4B-4277
3/8	0.41	0.81	0.06	4B-4278
7/16	0.47	0.94	0.06	4B-4279
1/2	0.53	1.06	0.09	4B-4280
9/16	0.59	1.19	0.09	4B-5059

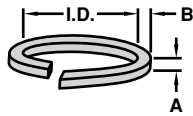
BOLT DIAMETER (in)	INSIDE DIAMETER (in)	OUTSIDE DIAMETER (in)	A THICKNESS (in)	PART NUMBER
5/8	0.66	1.31	0.09	4B-4281
3/4	0.81	1.50	0.12	4B-4283
7/8	0.94	1.75	0.12	4B-4284
1	1.06	2.00	0.12	4B-4285
1 1/8	1.19	2.25	0.12	4B-5325
1 1/4	1.31	2.50	0.16	4B-5326
1 3/8	1.44	2.75	0.16	4B-4286
1 1/2	1.56	3.00	0.16	4B-5327

USS

BOLT DIAMETER (in)	INSIDE DIAMETER (in)	OUTSIDE DIAMETER (in)	A THICKNESS (in)	PART NUMBER
1/4	0.31	0.75	0.06	4B-5269
5/16	0.38	0.88	0.08	4B-5270
3/8	0.44	1.00	0.08	4B-5271
7/16	0.50	1.25	0.08	4B-5272
1/2	0.56	1.38	0.11	4B-5273
9/16	0.62	1.50	0.11	4B-5274

BOLT DIAMETER (in)	INSIDE DIAMETER (in)	OUTSIDE DIAMETER (in)	A THICKNESS (in)	PART NUMBER
5/8	0.69	1.75	0.14	4B-5275
3/4	0.81	2.00	0.14	4B-5276
7/8	0.94	2.25	0.16	4B-5277
1	1.06	2.50	0.16	4B-5278
1 1/4	1.38	3.00	0.17	4B-5280
1 3/8	1.50	3.25	0.17	4B-5281

Hardware



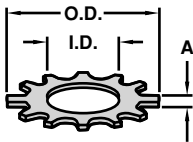
Lock Washers / Split Spring / Inch

- Made of high carbon, spring-tempered steel.
- Resists corrosion due to zinc dichromate plated finish.

Zinc Dichromate Plated / Non-Hardened

BOLT DIAMETER (in)	INSIDE DIAMETER (in)	A THICKNESS (in)	B WIDTH (in)	PART NUMBER
No. 6	0.14	0.03	0.05	9B-1117
No. 8	0.17	0.04	0.06	3B-4501
No. 10	0.20	0.05	0.06	3B-4502
1/4	0.26	0.11	0.08	3B-4504
5/16	0.32	0.13	0.10	3B-4505
3/8	0.38	0.14	0.12	3B-4506
7/16	0.45	0.13	0.16	3B-4507
1/2	0.52	0.15	0.18	3B-4508
9/16	0.57	0.19	0.17	3B-4509

BOLT DIAMETER (in)	INSIDE DIAMETER (in)	A THICKNESS (in)	B WIDTH (in)	PART NUMBER
5/8	0.63	0.21	0.19	3B-4510
3/4	0.76	0.23	0.19	3B-4512
7/8	0.88	0.27	0.22	3B-4514
1	1.01	0.30	0.25	3B-4516
1 1/8	1.14	0.33	0.28	3B-4518
1 1/4	1.26	0.36	0.31	3B-4520
1 3/8	1.39	0.39	0.34	3B-4522
1 1/2	1.51	0.42	0.38	3B-4524



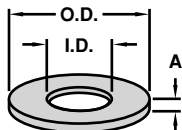
Lock Washers / External Tooth / Inch

- Provides “spring” action to keep assembly under tension.
- Resists corrosion due to zinc dichromate plated finish.

Zinc Dichromate Plated / Non-Hardened

BOLT DIAMETER (in)	INSIDE DIAMETER (in)	OUTSIDE DIAMETER (in)	A THICKNESS (in)	PART NUMBER
No. 6	0.15	0.31	0.02	5H-6555
No. 8	0.17	0.38	0.02	1H-4393
No. 10	0.20	0.40	0.02	9F-8125
1/4	0.26	0.50	0.03	1H-3338
5/16	0.33	0.59	0.03	7H-3937
3/8	0.39	0.69	0.04	4D-1326

BOLT DIAMETER (in)	INSIDE DIAMETER (in)	OUTSIDE DIAMETER (in)	A THICKNESS (in)	PART NUMBER
7/16	0.46	0.75	0.04	7F-6998
1/2	0.52	0.89	0.04	3J-4818



Washers / Flat / Metric

- Compatible with ISO property class 10.9.

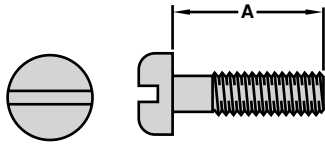
Phosphate and Oil Coated / Hardened

BOLT DIAMETER (mm)	INSIDE DIAMETER (mm)	OUTSIDE DIAMETER (mm)	A THICKNESS (mm)	PART NUMBER
M6	6.60	12.00	2.00	9X-8267
M8	8.80	16.00	2.00	9M-1974
M10	11.00	21.00	2.50	6V-5839
M12	13.50	25.50	3.00	5P-8245
M14	15.50	29.00	3.00	5P-8246
M16	17.50	30.00	3.50	9X-8268

BOLT DIAMETER (mm)	INSIDE DIAMETER (mm)	OUTSIDE DIAMETER (mm)	A THICKNESS (mm)	PART NUMBER
M20	22.00	35.00	3.50	8T-3282
M24	26.00	44.00	4.00	6V-8237
M30	33.00	56.00	6.00	9X-8399

Zinc Dichromate Plated / Hardened

BOLT DIAMETER (mm)	INSIDE DIAMETER (mm)	OUTSIDE DIAMETER (mm)	A THICKNESS (mm)	PART NUMBER
M6	6.60	12.00	2.00	9X-8256
M8	8.80	16.00	2.00	8T-4224
M10	11.00	21.00	2.50	8T4121
M12	13.50	25.50	3.00	8T-4223
M16	17.50	30.00	3.50	9X-8257
M20	22.00	35.00	3.50	8T-4123
M24	26.00	44.00	4.00	8T-4167
M30	33.00	56.00	6.00	9X-8258

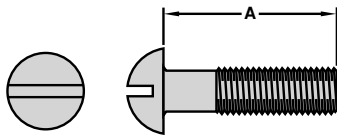


Pan Head / Machine Screws / Inch

- Made of steel and finished with a zinc plating.
- Conforms to ANSI B18.6.3 standard.

THREAD SIZE (in - TPI)	A SCREW LENGTH (in)	PART NUMBER
No. 6-32	3/8	2N-3474
	1/2	2N-3475
	3/4	2N-3476
	1	030-8838
	1 1/4	2N-3477
	1 1/2	033-4815
No. 8-32	3/4	7S-4338
	1 1/4	6V-7697
	1 1/2	7S-1198
	2	5S-9105

THREAD SIZE (in - TPI)	A SCREW LENGTH (in)	PART NUMBER
No. 10-24	3/8	2N-3478
	1/2	2N-3479
	3/4	2N-3480
	1 1/4	2N-3162
	1 1/2	2N-7456
	1 1/2	030-9614
1/4-20	3/8	030-9614
	5/8	3K-6881
	3/4	2Y-1020
	1	7H-1246

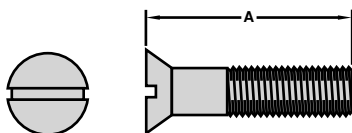


Round Head / Machine Screws / Inch

- Made of steel and finished with a zinc plating.
- Conform to ANSI B18.6.3 standard.

THREAD SIZE (in - TPI)	A SCREW LENGTH (in)	PART NUMBER
No. 6-32	1/4	4B-1218
	3/8	5S-7348
	1/2	4B-9762
	1 1/4	010-0744
	1 1/2	010-0746
No. 8-32	1/4	9B-7242
	3/8	4B-1220
	1/2	4B-1221
	3/4	5M-6668
	1	3K-8106

THREAD SIZE (in - TPI)	A SCREW LENGTH (in)	PART NUMBER
No. 10-24	1/4	4B-1226
	3/8	4B-1227
	1/2	4B-1229
	3/4	4B-1232
	1 1/4	4B-1234
	1 1/2	011-0508
	2	032-8924
	2	032-8924



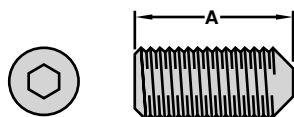
Flat Head / Machine Screws / Inch / Coarse Thread

- Made of steel and finished with a zinc plating.
- Conforms to ANSI B18.6.3 standard.

THREAD SIZE (in - TPI)	A SCREW LENGTH (in)	PART NUMBER
No. 10-24	3/8	4B-1293
	1/2	4B-1273
	5/8	4B-1274
	3/4	2H-6120
	1	1H-8456
	1 1/4	5P-5583
	1 1/2	8T-9514
	1 3/4	5P-5582
No. 6-32	3/8	5D-0853
	1/2	7K-3435

THREAD SIZE (in - TPI)	A SCREW LENGTH (in)	PART NUMBER
No. 6-32	3/4	2D-6327
No. 8-32	1/2	4B-1268
	5/8	4B-1269
	3/4	4B-1270
	1	4B-1284
1/4-20	3/8	2M-5139
	1	4B-1285
	1 1/4	1H-8294
	1 1/2	1H-8298
	1 3/4	1H-8298
5/16-18	1/2	4B-1286

THREAD SIZE (in - TPI)	A SCREW LENGTH (in)	PART NUMBER
5/16-18	1 1/4	1H-8293
	1 1/2	1H-8658
	1 3/4	5P-0399
3/8-16	3/4	1H-8296
	1	4B-1291
	1 1/4	5B-7431
	1 1/2	8F-6987
	1 3/4	8H-9579



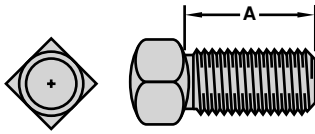
Cup Point / Set Screws / Inch / Coarse Thread UNC

- Heat treated with a black oxide finish.

THREAD SIZE (in - TPI)	A SCREW LENGTH (in)	PART NUMBER
No. 10-24	1/4	5B-9324
	3/8	8C-8430
	1/2	4B-3627
1/4-20	1/4	4B-9806
	3/8	010-2570
	1/2	4B-9808
	5/8	1K-6979
	3/4	010-2573
	1	010-3575
5/16-18	1/4	010-2580

THREAD SIZE (in - TPI)	A SCREW LENGTH (in)	PART NUMBER
5/16-18	3/8	8B-7179
	1/2	010-2582
	3/4	5P-2556
	1	2H-3907
3/8-16	1/4	010-2591
	3/8	2F-5326
	1/2	3B-8601
	5/8	2F-5325
	3/4	3H-8430
	1	010-2597

THREAD SIZE (in - TPI)	A SCREW LENGTH (in)	PART NUMBER
1/2-13	1/2	010-2615
	5/8	010-2616
	3/4	4B-1771
	1	2H-3906



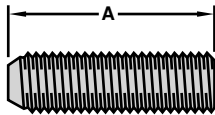
Square Head / Set Screws / Inch / Coarse Thread UNC

- Made of case-hardened steel with a full square head.

THREAD SIZE (in - TPI)	A SCREW LENGTH (in)	PART NUMBER
1/4-20	3/8	4B-3565
	1/2	4B-3566
	1	4B-3569
5/16-18	1/2	4B-3570
	5/8	4B-3571
3/8-16	1/2	4B-3572
	5/8	4B-3573
	3/4	4B-3574
	7/8	4B-4994
	1	4B-3575

THREAD SIZE (in - TPI)	A SCREW LENGTH (in)	PART NUMBER
3/8-16	1 1/4	4B-3576
	1 1/2	4B-3577
	1 3/4	2H-3881
1/2-13	3/4	4B-3580
	7/8	4B-3581
	1	4B-3582
	1 1/4	4B-3583
	1 1/2	4B-3584
	1 3/4	4B-3585
	2	4B-3586

THREAD SIZE (in - TPI)	A SCREW LENGTH (in)	PART NUMBER
5/8-11	1 1/2	4B-3594
	1 3/4	4B-3595
	2	4B-3596
	2 1/2	4B-3598
	3	4B-3599
3/4-10	1 1/2	4B-3601
	1 3/4	4B-3602
	2	4B-3603
	2 1/2	4B-3604
	3	4B-3605



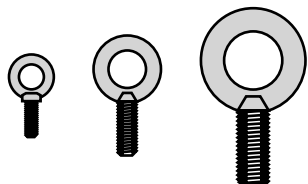
Taper Lock / Studs / Inch / Coarse Thread UNC

- Heat treated with a direct-hardening process.
- Hardened to Rockwell C 33 - 39.
- Designed with a taper point for a plug tap.
- Meet SAE grade 8 strength requirements.

THREAD SIZE (in - TPI)	A SCREW LENGTH (in)	PART NUMBER
3/8-16	1 9/16	2M-1538
	1 3/4	2M-4779
	2	1J-8668
	2 3/16	4M-2743
	2 3/8	8M-1871
	2 5/8	3M-0496
	2 13/16	7S-6719
	2 15/16	9M-3296
	3 1/8	2M-8411
	3 9/16	2M-2488
	4	6L-4428
1/2-13	1 9/16	8M-8778

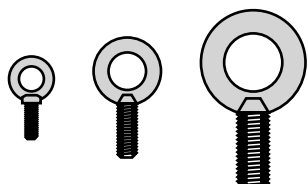
THREAD SIZE (in - TPI)	A SCREW LENGTH (in)	PART NUMBER
1/2-13	1 3/4	2D-8153
	2	3D-0490
	2 3/16	5M-1932
	2 3/8	2D-8154
	2 5/8	4J-6925
	2 13/16	3D-0472
	2 15/16	3D-6627
	3 1/8	2D-8426
	3 9/16	2D-8155
	4	3D-0471
	4 1/2	3D-0471
5/8-11	2 3/16	3D-4639
	2 3/8	2D-8822

THREAD SIZE (in - TPI)	A SCREW LENGTH (in)	PART NUMBER
5/8-11	2 5/8	2D-5238
	2 13/16	4D-4823
	2 15/16	6L-7655
	3 1/8	3J-8154
	3 9/16	3D-5963
	4	5P-3887
	4 1/2	5P-3887
3/4-10	2 5/8	4D-6579
	2 13/16	2D-8369
	2 15/16	4D-6578
	3 1/8	4D-7246
	3 9/16	5J-6796
	4	2P-1303



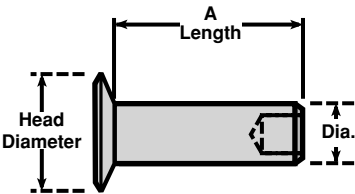
Lifting Eyebolts / Inch

THREAD SIZE (in - TPI)	MAXIMUM WORKING LOAD								PART NUMBER
	0°		30°		60°		90°		
	(lb)	(kg)	(lb)	(kg)	(lb)	(kg)	(lb)	(kg)	
1/4-20	400	180	70	32	—	—	—	—	1P-7403
5/16-18	680	308	200	91	—	—	—	—	1P-7404
3/8-16	1000	453	375	170	200	91	155	70	1P-7405
7/16-14	1380	625	500	227	300	136	235	107	1P-7406
1/2-13	1840	835	805	365	470	213	395	179	1P-7407
5/8-11	2940	1330	1340	608	805	365	670	304	2D-1201
3/4-10	4340	1960	2115	959	1180	540	1040	472	1P-7409



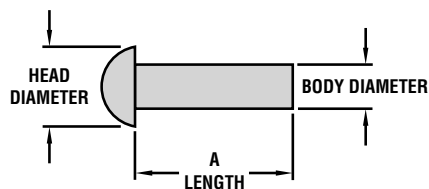
Lifting Eyebolts / Metric

THREAD SIZE (dia x pitch)	MAXIMUM WORKING LOAD				PART NUMBER
	0°		<=45°		
	(lb)	(kg)	(lb)	(kg)	
M8 x 1.25	350	160	175	80	3E-3882
M16 x 2.00	1380	630	690	315	3E-3879
M20 x 2.50	2200	1000	1100	500	3E-3880
M24 x 3.00	3520	1600	1760	800	3E-3881
M64 x 6.00	35270	16000	17635	8000	3E-3878



Rivets / Flat Head / Countersunk Shank / Inch

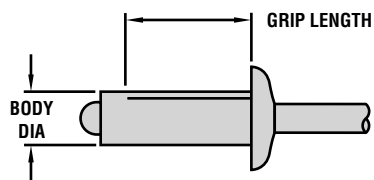
BODY DIAMETER (in)	A LENGTH (in)	HEAD DIAMETER (in)	PART NUMBER	MATERIAL
5/32	5/16	3/8	6B-4284	STEEL
3/16	9/32	3/8	7B-5048	BRASS
3/16	5/16	3/8	7B-5050	BRASS
3/16	3/8	3/8	7B-5054	BRASS
3/16	13/32	3/8	7B-5056	BRASS
3/16	15/32	3/8	7B-5060	BRASS
3/16	1/2	3/8	7B-5062	BRASS
3/16	17/32	3/8	6B-1985	STEEL
3/16	17/32	3/8	7B-5064	BRASS
3/16	19/32	3/8	6B-4594	STEEL
3/16	19/32	3/8	7B-5068	BRASS
3/16	19/32	3/8	7B-5068	BRASS
3/16	19/32	3/8	7B-5068	BRASS
3/16	3/4	3/8	6B-1369	STEEL



Rivets / Button Head / Solid Shank / Inch

- Made of cold-formed steel.
- Meets ANSI B18.1.1 requirements.

BODY DIAMETER (in)	A LENGTH (in)	HEAD DIAMETER (in)	PART NUMBER
1/8	1/4	0.23	4B-4304
1/8	3/8	0.23	4B-4306
1/8	1/2	0.23	4B-4307
3/16	3/8	0.34	4B-4310
3/16	1/2	0.34	4B-4311
3/16	5/8	0.34	4B-4312
3/16	3/4	0.34	4B-4314
3/16	7/8	0.34	1J-6280
3/16	1	0.34	4B-4315
1/4	3/8	0.45	4B-4319
1/4	1/2	0.45	4B-4320
1/4	5/8	0.45	4B-4321
1/4	3/4	0.45	4B-4322
1/4	7/8	0.56	1F-3577
1/4	1 1/8	0.45	4B-4325
5/16	5/8	0.56	4B-4334
5/16	3/4	0.56	4B-4335
5/16	7/8	0.56	4B-4336
5/16	1	0.56	4B-4337
3/8	3/4	0.67	4B-4343
3/8	7/8	0.67	4B-4344
3/8	1	0.67	4B-4345
3/8	1 1/8	0.67	4B-4346
3/8	1 1/4	0.67	4B-4347

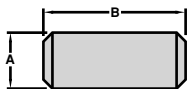


Rivets / Blind / Inch

- Contains an open-end and a steel mandrel.

BODY DIAMETER (in)	GRIP LENGTH (in)	PART NUMBER
1/8	3/8 - 1/2	6K-3273
1/8	1/8 - 3/16	7K-6536
1/8	1/16 - 1/8	8L-7905
1/8	5/16 - 3/8	9M-5731
5/32	1/4 - 3/8	034-7044
5/32	1/8 - 1/4	2N-2258
3/16	3/8 - 1/2	033-9412
3/16	1/2 - 5/8	4D-6716
3/16	1/4 - 3/8	9M-5732
3/16	1/8 - 1/4	9M-5733

Spring Pins / Roll Pin / Inch

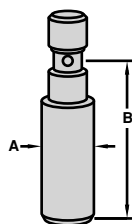


- Contains a chamfered end for easy installation.
- Made of heat-treated steel.

A DIAMETER (in)	B PIN LENGTH (in)	PART NUMBER
1/16	1/4	8S-7499
	3/8	1L-5316
	1/2	8S-3157
	3/4	2L-4911
3/32	1/2	3H-1118
	5/8	2K-3455
	3/4	2L-5894
	1	5M-8009
	1 1/4	032-8870
1/8	1/2	3H-9675
	5/8	4H-1641
	3/4	3K-4897
	1	8T-0277
	1 1/4	2K-8467
5/32	3/8	8L-6565
	1/2	1T-0099
	3/4	2L-5893
	1	5H-9839
	1 1/2	6V-3259
3/16	1/2	5H-8985
	5/8	2K-5986
	3/4	4H-8380
	1	6H-3956
	1 1/4	1H-1200
	1 1/2	4H-3119

A DIAMETER (in)	B PIN LENGTH (in)	PART NUMBER
3/16	1 3/4	1J-5799
1/4	1/2	6B-6863
	5/8	3H-2617
	3/4	7M-5130
	1	5H-3182
	1 1/4	5H-3193
	1 1/2	2L-1699
	1 3/4	4H-4737
	2	4H-6996
	2 1/2	1J-5353
5/16	3/4	4H-1440
	1	1T-0550
	1 1/2	2H-9445
	1 3/4	5M-1179
	2	2M-3521
	3	2K-1594
3/8	5/8	1T-0068
	3/4	8T-5089
	1	2L-3650
	1 1/4	5J-3941
	1 1/2	2J-5850
	1 3/4	5L-5711
	2	1J-8136
1/2	3	045-7012
	3/4	7K-6820

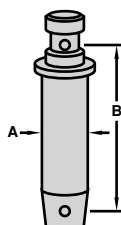
A DIAMETER (in)	B PIN LENGTH (in)	PART NUMBER
1/2	1	1N-5981
	1 1/4	2K-9062
	1 1/2	5H-4905
	2 1/2	2K-8078
	3	027-3873
	3 1/2	031-0255
	4	8C-8513



TYPE 1

Drawbar and Clevis Pins / Type I

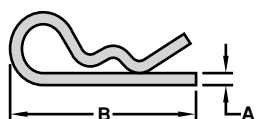
A DIAMETER (in)	PIN HOLE DIAMETER (in)	B LENGTH (in)	PART NUMBER
1 1/2	25/64	9 7/8	5H-8812
2	25/64	8 3/8	9S-8184
2	25/64	9 3/8	2R-0179
2 15/64	25/64	10 3/8	1H-4106



TYPE 2

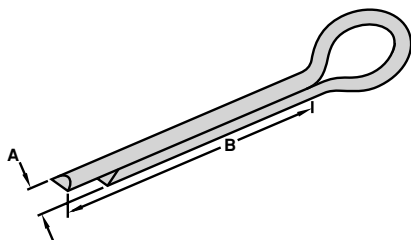
Drawbar and Clevis Pins / Type II

A DIAMETER (in)	PIN HOLE DIAMETER (in)	B LENGTH (in)	PART NUMBER
1 1/2	25/64	7	7F-9549
1 1/2	25/64	8	7F-9544
1 35/64	25/64	9	7F-9541
1 3/4	25/64	8	7F-9547
1 3/4	25/64	12	5H-2209
2	25/64	10 1/2	2M-0093



Locking Pins /Inch / Steel

A DIAMETER (in)	PIN HOLE DIAMETER (in)	B LENGTH (in)	PART NUMBER
3/32	1/4 - 1/2	1.62	5P-0372
3/32	1/2	2.00	008-3843
1/8	1/2 - 3/4	1.75	6S-6646
1/8	5/8 - 7/8	2.50	8S-6377
5/32	5/8 - 7/8	3.00	5P-0370
3/16	3/4 - 11/16	3.75	5P-8837



Cotter Pins / Inch / Zinc Plated Steel

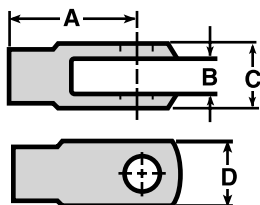
A DIAMETER (in)	B PIN LENGTH (in)	PART NUMBER
1/16	3/4	3B-4605
	1 1/4	3B-4606
	1 1/2	010-3365
3/32	1/2	3B-4607
	3/4	1S-0685*
	1	3B-4611
	1	6F-3465*
	1 1/4	3B-4612
	1 1/2	3B-5312
	1 3/4	2H-3862
	2	010-3378
1/8	1/2	3B-4613
	3/4	3B-4615
	1	3B-4617
	1 1/4	3B-4618
	1 1/4	6F-5264*
	1 1/2	5H-9456*
	1 3/4	6H-5800*
	2	3B-4621
	2	7F-2002*
	2 1/4	3B-4622
	2 1/2	8B-9264
9/64	1	1S-1083*
	1 1/4	9M-6505*
5/32	1 1/4	3B-4624
	1 1/2	3B-5301
	1 3/4	7B-1331

A DIAMETER (in)	B PIN LENGTH (in)	PART NUMBER
5/32	2	2H-3768
	2 1/4	010-3401
	2 3/4	3B-4625
3/16	1	3B-4627
	1 1/4	3B-4628
	1 1/2	3B-4629
	2	3B-4631
	2 1/4	3B-5302
	2 1/2	3B-4632
	2 3/4	3B-4633
	3	3B-4634
	4	3B-4636
1/4	1	2H-3769
	1 1/4	3B-4637
	1 1/2	3B-5313
	1 3/4	3B-4639
	2	3B-4640
	2 1/4	3B-5303
	2 1/2	3B-4641
	3	3B-5328
	3 1/2	3B-4643
	4	8T-1459
5/16	4 1/2	4D-8002
	1	3B-6705
	1 1/4	2H-3770
	1 1/2	2H-3771
	2	3B-5314

A DIAMETER (in)	B PIN LENGTH (in)	PART NUMBER
5/16	2 1/4	3B-5315
	2 1/2	3B-5316
	3	3B-5317
	3 1/2	2H-3772
	4	2H-3773
	4 1/2	3F-8357
3/8	5	2H-3774
	1 1/4	1S-0686
	1 1/2	3B-4644
	1 3/4	3B-4645
	2	3B-4646
	2 1/2	3B-4647
	2 3/4	3B-5319
	3	3B-5320
	3 1/2	3B-5322
	4	3B-5329
1/2	4 1/2	4J-1888
	2	3B-5323
	2 1/2	3B-5324
	2 3/4	3B-5325
	3	2H-3775
	3 1/2	3B-5326
	5	1J-2920
	5 1/2	3J-2985
5/8	3	3B-5327

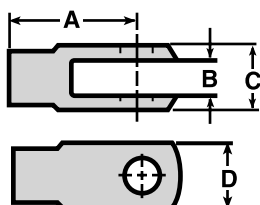
* Double head cotter pin.

Hardware



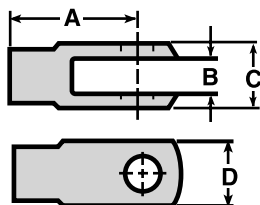
Yoke-Type Rod End / Inch

DIAMETER (in)	A LENGTH TO PIN HOLE (in)	B GAP SIZE (in)	C HEIGHT (in)	D WIDTH (in)	PART NUMBER	NUT	PIN ASSY.	CLEVIS PIN	RETAIN. CLIP	RETAIN. PIN	COTTER PIN
1/4	26.2	7.10	15.90	12.70	2M-4036	5L-4426		4B-3057			3B-4607
1/4	50.8	7.10	15.90	12.70	8B-3768	5L-4426		4B-3057			3B-4607
5/16	30.2	8.70	19.00	15.00	3D-9609	1B-4202		1A-2457			3B-4609
5/16	57.0	8.70	18.00	15.00	010-4037	1B-4202		1A-2457			3B-4609
3/8	34.9	11.10	22.20	17.50	1M-1341	1B-4203	8T-8932				
3/8	34.9	11.10	22.20	17.50	1M-1341	1B-4203		1B-0676			3B-4615
3/8	63.5	11.10	22.20	17.50	1A-9252	1B-4203		1B-0676			3B-4615
1/2	46.0	14.30	28.60	23.90	2M-8340	9S-5585		8B-1419		6S-6646	
1/2	46.0	14.30	28.60	23.90	2M-8340	9S-5585		8B-1419			3B-4617
1/2	76.2	14.30	28.60	23.90	6F-7010	9S-5585		8B-1419		6S-6646	
1/2	76.2	14.30	28.60	23.90	6F-7010	9S-5585		8B-1419			3B-4617
5/8	57.9	17.50	34.90	30.20	4M-7930	5D-3183		9S-1315			3B-4617
5/8	125.4	17.50	34.90	30.20	9S-1314	5D-3183		9S-1315			3B-4617



Yoke-Type Rod End / Metric

DIAMETER (mm)	A LENGTH TO PIN HOLE (mm)	B GAP SIZE (mm)	C HEIGHT (mm)	D WIDTH (mm)	PART NUMBER	NUT	PIN ASSY.	CLEVIS PIN	RETAIN. CLIP	RETAIN. PIN	COTTER PIN
M6	36.0	6.0	12.0	12.0	8T-4742	5C-2890	8T-4744	8T-6904	8T-6902		
M10	40.0	10.0	20.0	20.0	8T-4815	8T-4133	8T-4743	9R-2806	9R-2807		
M10-LH	60.0	10.0	20.0	20.0	8C-6955	9X-2065	8T-5381	9R-2806	9R-2807		
M10	60.0	10.0	20.0	20.0	8T-5063	8T-4133	8T-5381	9R-2806	9R-2807		
M12	48.0	12.2	24.0	24.0	8C-3393	8T-4244	8C-3394	8T-6905	8T-6903		
M12	48.0	12.2	24.0	24.0	8C-3393	8T-4244		7X-3161		6S-6646	3B-4615
M12-LH	72.0	12.0	24.0	24.0	7X-0858	8T-4244	8T-5382	8T-6905	8T-6903		
M12-LH	72.0	12.0	24.0	24.0	7X-0858	8T-4244		7X-3161		6S-6646	3B-4615
M12	72.0	12.0	24.0	24.0	8T-4650	8T-4244	8T-5382	8T-6905	8T-6903		
M12	72.0	12.0	24.0	24.0	8T-4650	8T-4244		7X-3161		6S-6646	3B-4615

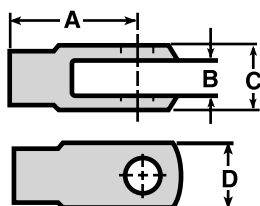


Yoke-Type Rod End / Jump Sizes / Metric

DIAMETER (mm)	A LENGTH TO PIN HOLE (mm)	B GAP SIZE (mm)	C HEIGHT (mm)	D WIDTH (mm)	PART NUMBER	NUT	PIN ASSY.	CLEVIS PIN	RETAIN. CLIP	RETAIN. PIN	COTTER PIN
M10**	40.0	10.0	20.0	20.0	3E-3826	8T-4133		1B-0676		6S-6646	3B-4615
M10*	40.0	10.0	20.0	20.0	8T-5921	8T-4133					

* 6.0 mm bore.

** 9.5 mm bore.



Yoke-Type Rod End / Forged / Metric

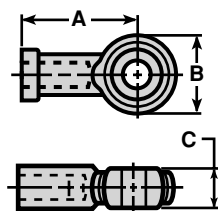
DIAMETER (mm)	A LENGTH TO PIN HOLE (mm)	B GAP SIZE (mm)	C HEIGHT (mm)	D WIDTH (mm)	PART NUMBER	NUT	PIN ASSY.	CLEVIS PIN	RETAIN. CLIP	RETAIN. PIN	COTTER PIN
M6*	45.0	7.1	15.9	13.0	7X-2496	5C-2890		7X-2618			3B-4607
M10**	34.9	11.1	22.2	17.5	8T-4968	8T-4133		1B-0676		6S-6646	3B-7615
M10**	63.5	11.1	22.2	17.5	8T-3988	8T-4133		1B-0676		6S-6646	3B-7615
M12***	46.4	14.3	28.6	23.9	7X-7660	8T-4244		8B-1419			3B-4617

* External thread.

*** 12.7 mm bore.

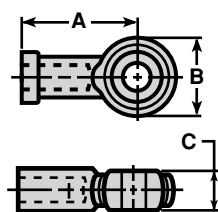
** 9.5 mm bore.

Hardware



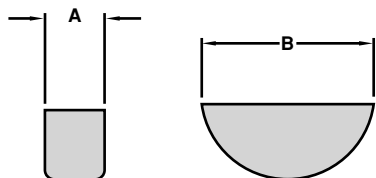
Spherical Rod End / Inch

DIAMETER (in)	A LENGTH TO PIN HOLE (in)	B DIAM. (in)	C HEIGHT (in)	PART NUMBER
1/4	1.33	0.89	0.37	6L-7751
5/16	1.37	1.02	0.44	7H-3641
3/8	1.64	1.13	0.50	4D-4064
1/2	2.12	1.39	0.63	4D-4065



Spherical Rod End / Metric

DIAMETER (mm)	A LENGTH TO PIN HOLE (mm)	B DIAM. (mm)	C HEIGHT (mm)	PART NUMBER
M6	29.0	22.0	9.0	8C-3111
M8	35.0	26.0	12.0	7X-7915
M10	42.0	30.0	14.0	8T-6431
M12	49.0	34.0	19.0	8C-3392
M16	63.0	42.0	21.0	9R-4760

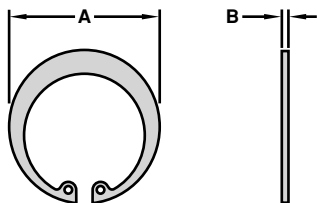


Woodruff Keys

- Made of medium carbon steel and machined to a smooth finish.

A THICKNESS (in)	B DIAMETER (in)	SAE NUMBER	PART NUMBER
1/16	5/16	206	4F-2291
1/16	3/8	211	3B-2098
1/16	1/2	1	1F-3130
3/32	5/16	207	8B-9318
3/32	3/8	212	1B-8735
3/32	1/2	2	1B-8701
3/32	5/8	4	1B-8703
1/8	3/8	213	5H-2532
1/8	1/2	3	1B-8702
1/8	5/8	5	1B-8704
1/8	3/4	7	1B-8706
5/32	5/8	6	1B-8705
5/32	3/4	8	1B-8707
5/32	7/8	10	1B-8709
3/16	3/4	9	1B-8708
3/16	7/8	11	1B-8710
3/16	1	13	1B-8712
3/16	1 1/8	16	1B-8715
7/32	1	14	3K-4723
1/4	3/4	91	2B-9373
1/4	7/8	A	1B-8736
1/4	1	15	1B-8714
1/4	1 1/8	18	1B-8716
1/4	1 1/4	21	1B-8719
1/4	1 3/8	22	1B-8720
1/4	1 1/2	24	1B-8722
5/16	1	B	1H-6627
5/16	1 1/8	C	1B-8737
5/16	1 1/4	D	1B-8738
5/16	1 3/8	23	1B-8721
5/16	1 1/2	25	1B-8723
3/8	1 1/4	E	1B-8739
3/8	1 3/8	F	1B-8740
3/8	1 1/2	G	1B-8741
3/8	2 3/4	T	1B-8743

Hardware

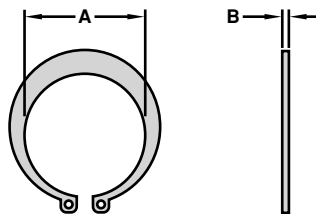


Snap Rings / Internal / Inch

- Made of tempered carbon steel.

BORE DIAMETER (in)	A FREE DIAMETER (in)	B THICKNESS (in)	PART NUMBER
0.44	0.48	0.025	3D-8358
0.50	0.55	0.035	1S-1638
0.56	0.62	0.035	2R-1256
0.69	0.76	0.035	1H-4142
0.75	0.83	0.035	2M-8191
0.81	0.90	0.042	5S-4455
0.88	0.97	0.042	2L-6726
0.90	1.00	0.042	4L-1466
1.00	1.11	0.042	4D-1322
1.12	1.25	0.050	5S-1522
1.25	1.39	0.050	2D-6398
1.38	1.53	0.050	1L-3768
1.44	1.60	0.050	2H-1142
1.50	1.66	0.062	8N-7294
1.56	1.73	0.062	3K-9879
1.65	1.83	0.062	2R-1230
1.81	2.01	0.062	2D-5826
1.85	2.05	0.078	1L-8490
2.05	2.28	0.078	6J-7855
2.31	2.54	0.078	2D-6648
2.44	2.70	0.078	6L-8797
2.50	2.77	0.078	4D-1736
2.75	3.05	0.093	6K-3531
2.83	3.12	0.093	2H-5549
3.00	3.33	0.093	2R-1236
3.16	3.52	0.109	1K-6985
3.25	3.62	0.109	8J-7636
3.50	3.89	0.109	3D-8341
3.56	3.94	0.109	1J-6472
3.88	4.29	0.109	9M-9935
4.00	4.42	0.109	7M-2275
4.33	4.76	0.109	5L-4751
4.72	5.21	0.109	067-3161

BORE DIAMETER (in)	A FREE DIAMETER (in)	B THICKNESS (in)	PART NUMBER
5.00	5.49	0.109	2L-0043
6.00	6.62	0.125	5L-4756
7.00	7.72	0.156	1L-7388
7.50	8.27	0.187	7F-6021



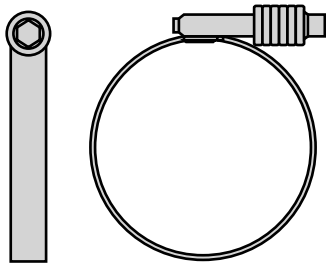
Snap Rings / External / Inch

- Made of tempered carbon steel.

SHAFT DIAMETER (in)	A FREE DIAMETER (in)	B THICKNESS (in)	PART NUMBER
0.25	0.22	0.025	6H-5829
0.38	0.34	0.025	9M-7611
0.44	0.40	0.025	4H-0094
0.47	0.43	0.025	6L-3801
0.56	0.52	0.035	3D-2975
0.59	0.55	0.035	2L-8509
0.62	0.58	0.035	8F-4610
0.75	0.69	0.042	2J-6356
0.81	0.75	0.042	9F-5444
0.94	0.87	0.042	6H-6109
0.98	0.91	0.042	1L-8497
1.00	0.93	0.042	001-5600
1.06	0.98	0.050	3K-8276
1.12	1.04	0.050	5L-4019
1.19	1.10	0.050	4M-5285
1.25	1.16	0.050	2M-4287
1.31	1.21	0.050	4D-8309
1.38	1.27	0.050	1J-6474
1.56	1.45	0.062	2L-6965
1.62	1.50	0.062	9L-2336
1.69	1.56	0.062	5L-2931
1.77	1.64	0.062	2J-7550
1.81	1.68	0.062	5K-9106
1.88	1.74	0.062	1K-6995
1.97	1.82	0.062	077-9687
2.12	1.96	0.078	1K-6984
2.16	1.99	0.078	4K-4284
2.50	2.31	0.078	5K-4627
2.56	2.38	0.078	6S-1753
2.62	2.43	0.078	1K-6992
2.75	2.54	0.093	5J-3864
2.94	2.72	0.093	7J-6580
3.16	2.92	0.093	1N-8620

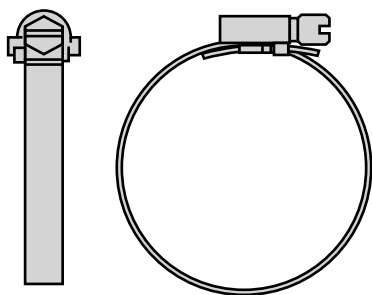
SHAFT DIAMETER (in)	A FREE DIAMETER (in)	B THICKNESS (in)	PART NUMBER
3.35	3.09	0.093	9S-4368
3.50	3.24	0.109	5L-4753
3.62	3.35	0.109	7J-6525
4.00	3.70	0.109	8F-1959
4.25	3.99	0.109	1N-5410
4.38	4.11	0.109	5H-5012
4.75	4.46	0.109	2L-0049
5.75	5.40	0.125	5L-8579
6.25	5.87	0.156	2L-0044

Hardware



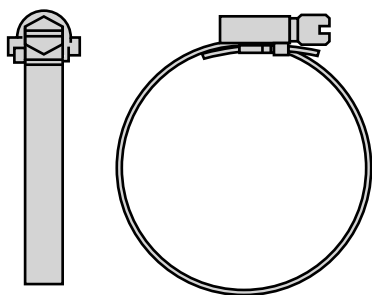
Hose Clamps / Uniform Load

WORKING DIAMETER		PART NUMBER
(in)	(mm)	
1 1/4-2 1/8	32-54	8T-4983
1 3/4-2 5/8	45-67	8T-6703
2 1/4-3 1/8	57-79	8T-4984
2 3/4-3 5/8	70-92	8T-6675
3 1/4-4 1/8	83-105	8T-4985
4 1/4-5 1/8	108-130	8T-4986
5 1/4-6 1/8	133-156	8T-4987
6 1/4-7 1/8	159-181	8T-4988
7 1/4-8 1/8	184-206	8T-4989
8 1/4-9 1/8	210-232	8T-4990



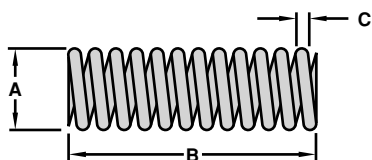
Hose Clamps

WORKING DIAMETER		PART NUMBER
(in)	(mm)	
7/32-5/8	6-16	1P-4278
9/16-11/16	16-27	5D-1026
15/16-1 3/4	24-45	9M-7958
1 9/16-2 1/2	40-64	9M-0164
2 9/16-3 1/2	65-89	9M-7959
3 5/16-4 1/4	89-108	9M-6738



Hose Clamps / Heavy Duty

WORKING DIAMETER		PART NUMBER
(in)	(mm)	
1 1/4-2	32-51	5P-2230
1 3/4-2 5/8	45-67	5P-0597
2 1/8-4 1/8	54-105	5P-0598
4-6 1/8	102-156	5P-0599
6-9	156-229	5P-0600



Springs / Compression

A OUTSIDE DIAMETER (in)	B LENGTH (in)	C WIRE DIAMETER (in)	PART NUMBER
1/4	5/16	0.031	9N-1747
	3/8	0.031	9L-9522
	1/2	0.031	091-7106
	9/16	0.031	3G-0670
	3/4	0.031	7V-3827
	13/16	0.031	090-5957
	1	0.063	4T-7794
	1 5/16	0.063	1V-8784
	1 1/2	0.031	9N-4049
	2 1/4	0.031	9N-1622
	2 13/16	0.063	8J-9273
3/8	1/2	0.031	6B-3364
	9/16	0.063	7M-3801
	5/8	0.031	7M-7446
	3/4	0.031	3K-7217
	7/8	0.063	4K-8350
	15/16	0.031	9S-1347
	1	0.031	1V-9969
	1 1/8	0.031	9L-6422
	1 1/4	0.031	3N-6233
	1 1/2	0.031	5B-1890
	1 5/8	0.031	6N-8793
	1 3/4	0.031	2V-3457
	1 7/8	0.063	6P-4993
	2 3/16	0.063	7N-0426
	2 1/4	0.031	2L-4403
	2 1/2	0.031	7F-7276
	2 5/8	0.094	2H-5062
	3 1/8	0.094	1P-9602
	3 3/8	0.094	7B-9411
	3 5/8	0.094	4M-5912
	4	0.031	034-3705
1/2	5/8	0.031	6F-0967
	1	0.031	5K-3918
	1 1/4	0.031	5F-7464
	1 1/2	0.063	6Y-0172

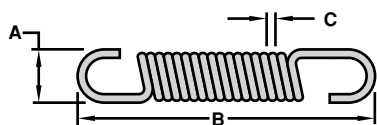
A OUTSIDE DIAMETER (in)	B LENGTH (in)	C WIRE DIAMETER (in)	PART NUMBER
1/2	1 5/8	0.031	3C-0585
	1 3/4	0.125	3G-7402
	1 7/8	0.063	9M-1986
	2	0.031	7M-7244
	2 1/4	0.063	0L-1466
	2 1/2	0.063	6P-7701
	2 5/8	0.031	3N-5738
	3 1/4	0.031	0L-1142
	3 3/4	0.063	5B-1952
	3 7/8	0.094	5J-9605
	4 1/4	0.063	5B-8858
	4 3/4	0.063	5M-6110
	4 7/8	0.094	3T-7584
	5 3/8	0.094	6T-1318
	5 7/8	0.094	9S-9876
5/8	3/8	0.094	1K-7039
	1/2	0.063	6T-8234
	5/8	0.031	9N-6249
	1	0.188	6B-3416
	1 1/8	0.094	6S-8736
	1 1/4	0.094	9M-3091
	1 1/2	0.063	5B-3754
	1 13/16	0.063	3F-8845
	1 7/8	0.094	4F-9503
	2	0.094	9W-1467
	2 1/8	0.063	2P-5700
	2 1/4	0.063	5J-1787
	2 1/2	0.063	2F-5889
	2 3/4	0.063	4F-6145
	3 1/8	0.094	4J-4051
	3 1/4	0.063	1W-6077
	3 3/8	0.125	3P-7566
	3 1/2	0.063	6P-9784
	3 3/4	0.125	4T-4033
	4 3/8	0.094	2P-4498
	4 1/2	0.125	9T-1676

Hardware

Springs / Compression

A OUTSIDE DIAMETER (in)	B LENGTH (in)	C WIRE DIAMETER (in)	PART NUMBER
3/4	7/8	0.031	4T-2684
	1	0.125	6F-4294
	1 3/8	0.031	3N-7848
	1 1/2	0.094	7M-3496
	1 5/8	0.125	5F-2201
	2	0.063	5F-9035
	2 1/4	0.094	7G-5378
	2 3/8	0.125	9S-8237
	2 1/2	0.125	1K-4476
	2 5/8	0.125	3D-2777
	2 7/8	0.063	8F-3398
	3	0.156	1K-9105
	3 1/8	0.094	6H-1649
	3 3/8	0.094	5H-7473
	3 5/8	0.094	1U-1067
	3 7/8	0.063	2H-6117
	4	0.125	1S-5646
	4 1/4	0.094	9F-6092
	4 1/2	0.031	9T-8208
	4 7/8	0.094	2S-6538
7/8	7/16	0.063	3P-8042
	15/16	0.063	9P-9211
	1 3/16	0.094	8J-6080
	2	0.094	9S-8632
	2 3/16	0.094	9H-4204
	2 7/16	0.125	4M-6012
	2 7/8	0.125	1W-9860
	3	0.125	5N-3015
	3 1/8	0.125	3P-0246
	3 3/8	0.125	1W-2208
	3 1/2	0.125	9L-9243
	4 3/8	0.063	5M-6111
	4 1/2	0.094	6K-4302
	4 5/8	0.125	6B-8809
	5 3/8	0.156	4D-7637
	5 1/2	0.094	7M-1405
	5 5/8	0.156	5D-6293
	5 15/16	0.094	4H-1221
	6 7/16	0.125	4D-9469
	7 1/4	0.125	7D-6198
1	5/8	0.063	9T-1699
	7/8	0.125	7W-2110

A OUTSIDE DIAMETER (in)	B LENGTH (in)	C WIRE DIAMETER (in)	PART NUMBER
1	1	0.094	7V-0444
	1 1/8	0.094	9P-8308
	1 1/4	0.094	6T-7221
	1 3/8	0.094	7J-0736
	1 1/2	0.125	1P-0620
	1 5/8	0.063	4N-5663
	1 3/4	0.125	1S-7592
	1 7/8	0.063	9F-1993
	2	0.094	2S-8398
	2 1/8	0.125	9T-2168
	2 1/4	0.156	8H-9488
	2 3/8	0.094	2J-0075
	2 1/2	0.125	7W-7700
	2 5/8	0.125	3V-5498
	2 3/4	0.094	8J-3819
	2 7/8	0.125	6L-2084
	3	0.094	4J-7066
	3 1/8	0.094	5J-3719
	3 1/4	0.094	8J-1705
	3 3/8	0.188	039-8820
	3 1/2	0.156	9T-1848
	3 3/4	0.094	5J-3419
	4	0.063	4B-4910
	4 1/8	0.063	1L-1098
	4 1/4	0.156	6L-4173
	4 1/2	0.156	9J-5002
	4 3/4	0.094	8J-6728
	4 7/8	0.125	5M-5526
	5	0.063	3L-4521
	5 1/4	0.094	8J-5839
	5 3/8	0.188	8M-1955
	5 1/2	0.188	6N-1320
	5 5/8	0.156	4M-0804
	6 1/8	0.156	2S-2760
	6 1/4	0.094	4F-6446
	6 1/2	0.125	6D-0314
	6 7/8	0.125	5M-7884



Springs / Extension

A OUTSIDE DIAMETER (in)	B LENGTH (in)	C WIRE DIAMETER (in)	PART NUMBER
5/16	1	0.094	039-9138
	1 1/4	0.035	7F-7613
	1 7/16	0.031	1A-3540
	1 11/16	0.031	3C-0481
	2 13/32	0.031	038-8415
3/8	1 1/2	0.063	1A-1376
	1 5/8	0.063	7L-4563
	4 9/32	0.047	5H-4291
1/2	1 1/4	0.063	8L-8491
	1 1/2	0.063	090-3006
	2	0.063	1A-0302
9/16	1 5/8	0.063	5M-9708
	4 1/4	0.063	2R-0416
5/8	1 3/8	0.063	9F-0965
	2 1/8	0.063	001-2809
	2 7/8	0.031	001-2810
	4	0.063	001-2811

A OUTSIDE DIAMETER (in)	B LENGTH (in)	C WIRE DIAMETER (in)	PART NUMBER
11/16	4	0.094	1D-1313
	6	0.094	7D-5289
3/4	2 5/32	0.063	1A-8189
25/32	3 3/4	0.094	1F-4449
7/8	2	0.094	2D-9871
	2 1/4	0.125	8L-5917
	3 1/8	0.125	5G-1684
	3 1/4	0.094	8Y-4581
	3 13/16	0.094	9S-1312
	4	0.125	7G-1251
1	4	0.094	009-2445
	5 1/8	0.094	035-7877
	5 3/8	0.156	038-2805
1 3/16	5 5/32	0.156	9P-9185
	5 3/8	0.125	091-7882
1 3/16	6 1/2	0.156	091-7881

Hardware

Hardware Bin Kits

Thirteen different Hardware Bin Kits are available for customers who want to stock hardware bins for their service departments and/or service vehicles with various quantities of popular sizes of Cat bolts, nuts and washers. Kits available:

PART NUMBER	THREAD	COATING	CONTAINS	PIECES	BOLT HEAD
3E-6640	Inch - Coarse	Phos. & Oil	59 Part Numbers	1735	Hex
3E-9420	Inch - Coarse	Phos. & Oil	38 Part Numbers	1975	Hex
3E-9421	Inch - Fine	Phos. & Oil	38 Part Numbers	1650	Hex
3E-9422	Metric - Coarse	Phos. & Oil	38 Part Numbers	1580	Hex
222-9998	Inch - Coarse	Zinc Dich.	59 Part Numbers	2175	Hex
222-9999	Inch - Coarse	Zinc Dich.	38 Part Numbers	1520	Hex
223-0000	Metric - Coarse	Phos. & Oil	56 Part Numbers	1965	Hex
223-0001	Metric - Coarse	Zinc Dich.	56 Part Numbers	1985	Hex
223-0002	Metric - Coarse	Zinc Dich.	38 Part Numbers	1510	Hex
223-0003	Inch - Coarse	Phos. & Oil	38 Part Numbers	1420	Socket
223-0004	Metric - Coarse	Phos. & Oil	38 Part Numbers	1420	Socket
222-9996	Inch - Coarse	Phos. & Oil	38 Part Numbers	1420	12-Point
222-9997	Inch - Fine	Phos. & Oil	40 Part Numbers	1570	12-Point

Hardware Shop / Field Kits

Five different Hardware Shop / Field Kits are available for small repair shops or field service vehicles. Kits contain assortments of popular sizes of Cat bolts with matching washers and nuts, in phosphate and oil coatings. The hardware is packaged in a rugged metal box with hinged metal cover and latch. Inch Hardware Kits come in two sizes, small and large, depending on the quantity of hardware in the kit. Kits available:

PART NUMBER	THREAD	COATING	SIZE	CONTAINS	PIECES
178-2207	Inch - Fine	Phos. & Oil	Large	24 Part Numbers	476
178-2208	Inch - Fine	Phos. & Oil	Small	29 Part Numbers	894
178-2209	Inch - Coarse	Phos. & Oil	Small	27 Part Numbers	502
178-2210	Inch - Coarse	Phos. & Oil	Large	34 Part Numbers	936
178-2211	Metric - Coarse	Phos. & Oil	Small	32 Part Numbers	630



Convenient Hardware Packages

- Hardware packaged in resealable plastic clamshell packages
- Product includes inch and metric bolts, nuts, washers, hose clamps, cable ties, electrical fuses, and cotter pins
- Smaller easy-to-use packages offer convenience for the service technician

RETAIL PACKAGE PART NO.	DESCRIPTION	RETAIL PKG. QTY.	CONSISTS OF: BULK PART NO.
247-0188	1/4-20 x 1/2 in Hex Head Bolt	50	0S-1614
247-0189	1/4-20 x 3/4 in Hex Head Bolt	50	0S-1615
247-0190	1/4-20 x 1 in Hex Head Bolt	50	0S-1616
247-0191	1/4-20 x 1 1/4 in Hex Head Bolt	50	7B-2742
247-0192	1/4-20 x 1 1/2 in Hex Head Bolt	25	9F-7022
247-0193	1/4-20 x 1 3/4 in Hex Head Bolt	25	1B-2713
247-0194	1/4-20 x 2 in Hex Head Bolt	25	8B-2377
247-0195	1/4-20 x 2 1/4 in Hex Head Bolt	25	1D-4533
247-0196	1/4-20 x 2 1/2 in Hex Head Bolt	25	1B-2714
247-0197	1/4-20 x 2 3/4 in Hex Head Bolt	25	2A-4781
247-0198	1/4-20 x 3 in Hex Head Bolt	25	4B-9365
247-0199	1/4 in Hard Washer	25	5P-0537
247-0200	1/4 in Lock Washer	100	3B-4504
247-0201	1/4-20 Full Nut	50	9S-8750
247-0202	5/16-18 x 1/2 in Hex Head Bolt	50	1C-0569
247-0203	5/16-18 x 3/4 in Hex Head Bolt	50	0S-1617
247-0204	5/16-18 x 1 in Hex Head Bolt	25	0S-1618
247-0205	5/16-18 x 1 1/4 in Hex Head Bolt	25	1B-7182
247-0206	5/16-18 x 1 1/2 in Hex Head Bolt	25	1A-9579
247-0207	5/16-18 x 1 3/4 in Hex Head Bolt	25	1B-9575
247-0208	5/16-18 x 2 in Hex Head Bolt	25	2B-2694
247-0209	5/16-18 x 2 1/4 in Hex Head Bolt	25	1D-4538
247-0210	5/16-18 x 2 1/2 in Hex Head Bolt	25	1D-4539
247-0211	5/16-18 x 2 3/4 in Hex Head Bolt	25	1D-4540
247-0212	5/16-18 x 3 in Hex Head Bolt	10	1D-4541
247-0213	5/16 in Hard Washer	25	9M-1974
247-0214	5/16 in Lock Washer	100	3B-4505
247-0215	5/16-18 Full Nut	50	5S-0003
247-0216	3/8-16 x 1/2 in Hex Head Bolt	50	4F-4879
247-0217	3/8-16 x 3/4 in Hex Head Bolt	25	0S-0509
247-0218	3/8-16 x 1 in Hex Head Bolt	25	0S-1594
247-0219	3/8-16 x 1 1/4 in Hex Head Bolt	25	0S-1588
247-0220	3/8-16 x 1 1/2 in Hex Head Bolt	25	0S-1591
247-0221	3/8-16 x 1 3/4 in Hex Head Bolt	25	0S-1571
247-0222	3/8-16 x 2 in Hex Head Bolt	25	0S-1590
247-0223	3/8-16 x 2 1/4 in Hex Head Bolt	10	0L-2070

RETAIL PACKAGE PART NO.	DESCRIPTION	RETAIL PKG. QTY.	CONSISTS OF: BULK PART NO.
247-0224	3/8-16 x 2 1/2 in Hex Head Bolt	10	0L-1143
247-0225	3/8-16 x 2 3/4 in Hex Head Bolt	10	0T-0573
247-0226	3/8-16 x 3 in Hex Head Bolt	10	0S-1619
247-0227	3/8 in Hard Washer	25	5M-2894
247-0228	3/8 in Lock Washer	100	3B-4506
247-0229	3/8-16 Full Nut	50	9S-8752
247-0230	1/2-13 x 1/2 in Hex Head Bolt	25	1K-6705
247-0231	1/2-13 x 3/4 in Hex Head Bolt	25	0S-1620
247-0232	1/2-13 x 1 in Hex Head Bolt	25	0S-1621
247-0233	1/2-13 x 1 1/4 in Hex Head Bolt	10	0S-1595
247-0234	1/2-13 x 1 1/2 in Hex Head Bolt	10	0S-1585
247-0235	1/2-13 x 1 3/4 in Hex Head Bolt	10	0S-1587
247-0236	1/2-13 x 2 in Hex Head Bolt	10	1A-1460
247-0237	1/2-13 x 2 1/4 in Hex Head Bolt	5	2B-0947
247-0238	1/2-13 x 2 1/2 in Hex Head Bolt	5	9S-1366
247-0239	1/2-13 x 2 3/4 in Hex Head Bolt	5	1A-5822
247-0240	1/2-13 x 3 in Hex Head Bolt	5	0L-1329
247-0241	1/2 in Hard Washer	25	5P-8245
247-0242	1/2 in Lock Washer	50	3B-4508
247-0243	1/2-13 Full Nut	25	1F-7958
247-0244	5/8-11 x 3/4 in Hex Head Bolt	10	1H-9456
247-0245	5/8-11 x 1 in Hex Head Bolt	10	0S-1624
247-0246	5/8-11 x 1 1/4 in Hex Head Bolt	10	0S-1592
247-0247	5/8-11 x 1 1/2 in Hex Head Bolt	5	0S-1566
247-0248	5/8-11 x 1 3/4 in Hex Head Bolt	5	0S-1589
247-0249	5/8-11 x 2 in Hex Head Bolt	5	1A-1135
247-0250	5/8-11 x 2 1/4 in Hex Head Bolt	5	8S-9092
247-0251	5/8-11 x 2 1/2 in Hex Head Bolt	5	0S-1625
247-0252	5/8-11 x 2 3/4 in Hex Head Bolt	5	1A-8537
247-0253	5/8-11 x 3 in Hex Head Bolt	5	1B-4367
247-0254	5/8 in Hard Washer	10	5P-8247
247-0255	5/8 in Lock Washer	25	3B-4510
247-0256	5/8-11 Full Nut	10	4K-0367
247-0583	M6 x 1, 12 mm	50	8T-0639
247-0584	M6 x 1, 16 mm	50	6V-8837
247-0585	M6 x 1, 20 mm	50	6V-8214

Hardware

RETAIL PACKAGE PART NO.	DESCRIPTION	CONSISTS OF: RETAIL PKG. QTY.	BULK PART NO.
247-0586	M6 x 1, 25 mm	50	6V-8490
247-0587	M6 x 1, 30 mm	25	8T-0640
247-0588	M6 x 1, 35 mm	50	6V-2315
247-0589	M6 x 1, 40 mm	25	2W-9499
247-0590	M6 x 1, 45 mm	25	6V-7728
247-0591	M6 x 1, 50 mm	25	8T-0275
247-0592	M6 Washer	50	9X-8267
247-0593	M6 x 1, Hex Nut	50	6V-8225
247-0594	M8 x 1.25, 16 mm	50	6V-5215
247-0595	M8 x 1.25, 20 mm	50	6V-5217
247-0596	M8 x 1.25, 25 mm	25	6V-3940
247-0597	M8 x 1.25, 30 mm	25	6V-2317
247-0598	M8 x 1.25, 35 mm	25	6V-5218
247-0599	M8 x 1.25, 40 mm	25	6V-5219
247-0600	M8 x 1.25, 45 mm	25	8T-0276
247-0601	M8 x 1.25, 50 mm	25	6V-3918
247-0602	M8 x 1.25, 60 mm	10	8T-0100
247-0603	M8 x 1.25, 70 mm	10	5P-8347
247-0604	M8 Washer	25	9M-1974
247-0605	M8 x 1.25, Hex Nut	50	5P-7970
247-0606	M10 x 1.5, 20 mm	25	6V-6317
247-0607	M10 x 1.5, 25 mm	25	6V-4248
247-0608	M10 x 1.5, 30 mm	25	6V-1820
247-0609	M10 x 1.5, 35 mm	25	6V-3822
247-0610	M10 x 1.5, 40 mm	10	6V-5842
247-0611	M10 x 1.5, 45 mm	10	6V-5843
247-0612	M10 x 1.5, 50 mm	10	6V-4249
247-0613	M10 x 1.5, 60 mm	10	6V-5230
247-0614	M10 x 1.5, 65 mm	10	8T-5035
247-0615	M10 x 1.5, 70 mm	10	6V-7981
247-0616	M10 Washer	25	6V-5839
247-0617	M10 x 1.50, Hex Nut	25	2Y-5829
247-0618	M12 x 1.75, 20 mm	10	8T-0293
247-0619	M12 x 1.75, 25 mm	25	6A-5591
247-0620	M12 x 1.75, 30 mm	10	6V-3668
247-0621	M12 x 1.75, 35 mm	10	6V-8675
247-0622	M12 x 1.75, 40 mm	10	6V-8197
247-0623	M12 x 1.75, 45 mm	10	6V-5684
247-0624	M12 x 1.75, 50 mm	10	6V-7673
247-0625	M12 x 1.75, 60 mm	5	6V-3823
247-0626	M12 Washer	25	5P-8245
247-0627	M12 x 1.75, Hex Nut	25	6V-8149
247-0698	Hose Clamp 54 mm - 105 mm	2	5P-0598
247-0699	Hose Clamp 60 mm - 82 mm	2	5P-4868
247-0700	Hose Clamp 45 mm - 67 mm	2	5P-0597

RETAIL PACKAGE PART NO.	DESCRIPTION	CONSISTS OF: RETAIL PKG. QTY.	BULK PART NO.
247-0701	Hose Clamp 16 mm - 27 mm	5	5D-1026
247-0702	Hose Clamp 6 mm - 16 mm	6	1P-4278
247-0703	Hose Clamp 108 mm - 130 mm	2	5P-1717
247-0717	Cotter Pin 1/8 in x 1 in Lg	50	3B-4617
247-0718	Cotter Pin 1/8 in x 3/4 in Lg	50	3B-4615
247-0719	Cotter Pin 3/32 in x 1/2 in Lg	50	3B-4607
247-0720	Cotter Pin 1/8 in x 2 in Lg	50	3B-4621
247-0721	Cotter Pin 1/8 in x 1 1/4 in Lg	50	3B-4618
247-0749	Fuse (10 Amp)	5	3K-8782
247-0750	Fuse (15 Amp)	5	8M-8948
247-0751	Fuse (20 Amp)	5	8M-0456
247-0752	Mini Fuse (10 Amp)	5	113-8490
247-0753	Mini Fuse (15 Amp)	5	113-8491
247-0754	Mini Fuse (20 Amp)	5	113-8492
247-0755	Mini Fuse (25 Amp)	5	113-8493
247-0762	Cable Strap 170.2 mm (6.7 in) long 4.9 mm (0.194 in) wide	20	3S-2093
247-0763	Cable Strap 355.6 mm (14 in) long 4.9 mm (0.194 in) wide	10	6K-0806
247-0764	Cable Strap 355.6 mm (14 in) long 7.9 mm (0.310 in) wide	10	7K-1181



Check-a-Thread

- Quickly identifies hardware thread diameter and pitch
- Four holes on mounting base for easy attachment to retail parts counter, service shop tool crib, or field service truck

Dimensions (L x H x W)		609 mm (24 in) x 101 mm (4 in) x 76 mm (3 in)
Metric		
Media literature number		250-6866
Range		16 mm-2.0 to 4 mm-0.7
No. of bolt sizes		15
Inch		
Media literature number		250-6865
Range		3/4-16 to #6-32
No. of bolt sizes		21
Sheet metal/wood screw sizes		5

