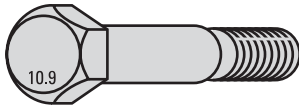
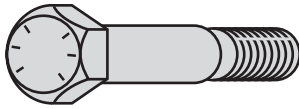
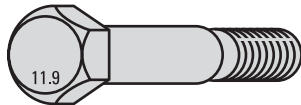
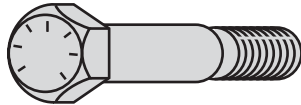


## Hex Head Bolts



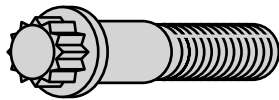
- Designed with smooth rolled threads for better clamp load, shear resistance and resistance to stripping.
- Made of fine grain steel for a more uniform micro-structure, resulting in improved toughness and fracture resistance.
- Inch Bolts
  - Meet or exceed SAE Grade 8 specifications for tensile strength 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 1040 mPa (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 plating provides better long term corrosion resistance.

## High Strength Hex Head Bolts



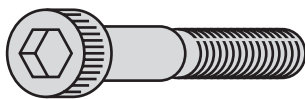
- Thread design and steel — similar to HEX Head Bolts
- Inch Bolts
  - Have 20% higher head height than SAE specifications for longer wear life, easier gripping and less slippage
  - Exceed SAE Grade 8 specifications for tensile strength and proof load, minimum tensile strength of 170,000 psi
  - Marked 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 1170 mPa (170,000 psi)
  - Marked with 11.9 on the bolt head
- Coatings — similar to HEX Head 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 1170 mPa (170,000 psi)
- For use in restricted clearance applications.

## Hex Socket Head Screw Bolts

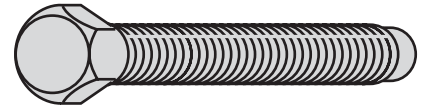


- Designed with smooth rolled threads for better clamp load, shear resistance, and resistance to stripping.
- Made of fine grain steel for a more uniform micro-structure, resulting in improved toughness and fracture resistance.
- Exceeds SAE Grade 8 specifications for tensile strength and proof load, minimum tensile strength of 1170 mPa (170,000 psi)
- For use in restricted clearance applications.



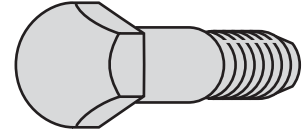
### Hex Head Forcing Bolts

- 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.



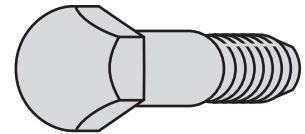
### Track Bolts and Split Master Link Bolts

- 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.



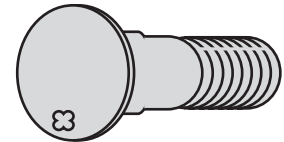
### High Strength Track Bolts

- 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.



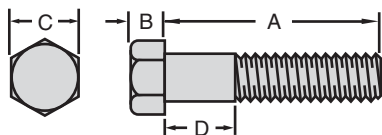
### Cutting Edge Bolts

- 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.



# Bolts

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



Hardware

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
1/4-20	3/8 in	0.19 in	0.44 in	0.06 in	OS-1613
	1/2 in	0.19 in	0.44 in	0.06 in	OS-1614
	5/8 in	0.19 in	0.44 in	0.13 in	2A-0762
	3/4 in	0.19 in	0.44 in	0.13 in	OS-1615
	7/8 in	0.19 in	0.44 in	0.13 in	4F-7957
	1 in	0.19 in	0.44 in	0.13 in	OS-1616
	1 1/8 in	0.19 in	0.44 in	0.37 in	9F-6580
	1 1/4 in	0.19 in	0.44 in	0.13 in	7B-2742
	1 3/8 in	0.19 in	0.44 in	0.63 in	2A-5546
	1 1/2 in	0.19 in	0.44 in	0.25 in	9F-7022
	1 5/8 in	0.19 in	0.44 in	0.87 in	7B-8167
	1 3/4 in	0.19 in	0.44 in	1.00 in	1B-2713
	2 in	0.19 in	0.44 in	1.13 in	8B-2377
	2 1/4 in	0.19 in	0.44 in	1.37 in	1D-4533
	2 1/2 in	0.19 in	0.44 in	1.75 in	1B-2714
	2 3/4 in	0.19 in	0.44 in	2.00 in	2A-4781
	3 in	0.19 in	0.44 in	2.00 in	4B-9365
	3 1/4 in	0.19 in	0.44 in	2.50 in	8F-8178
	3 1/2 in	0.19 in	0.44 in	2.75 in	3B-8695
	3 3/4 in	0.19 in	0.44 in	3.00 in	8F-6302
	4 in	0.19 in	0.44 in	3.25 in	8S-4710
	4 1/2 in	0.19 in	0.44 in	3.75 in	8S-4711
	4 3/4 in	0.19 in	0.44 in	4.00 in	4L-3776
	5 in	0.19 in	0.44 in	4.25 in	1B-2716
	5 1/2 in	0.19 in	0.44 in	4.50 in	1B-2717
	6 in	0.19 in	0.44 in	5.25 in	1B-2718
	6 1/2 in	0.19 in	0.44 in	5.50 in	4N-1761
	Nut				9S-8750
	Washer				5P-0537
5/16-18	1/2 in	0.24 in	0.50 in	0.06 in	1C-0569
	5/8 in	0.24 in	0.50 in	0.13 in	2H-3755
	3/4 in	0.24 in	0.50 in	0.13 in	OS-1617
	7/8 in	0.24 in	0.50 in	0.13 in	2B-2695
	1 in	0.24 in	0.50 in	0.13 in	OS-1618
	1 1/8 in	0.24 in	0.50 in	0.25 in	4B-3388
	1 1/4 in	0.24 in	0.50 in	0.37 in	1B-7182
	1 3/8 in	0.24 in	0.50 in	0.50 in	1B-2790
	1 1/2 in	0.24 in	0.50 in	0.09 in	1A-9579
	1 5/8 in	0.24 in	0.50 in	0.75 in	1H-5514
	1 3/4 in	0.24 in	0.50 in	0.87 in	1B-9575
	2 in	0.24 in	0.50 in	1.13 in	2B-2694
	2 1/4 in	0.24 in	0.50 in	1.37 in	1D-4538
	2 1/2 in	0.24 in	0.50 in	1.63 in	1D-4539
	2 3/4 in	0.24 in	0.50 in	1.87 in	1D-4540
	3 in	0.24 in	0.50 in	2.13 in	1D-4541
	3 1/4 in	0.24 in	0.50 in	2.25 in	1F-5842
	3 1/2 in	0.24 in	0.50 in	2.63 in	1F-4111

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
5/16-18	3 3/4 in	0.24 in	0.50 in	2.75 in	4B-0831
	4 in	0.24 in	0.50 in	3.00 in	4B-3903
	4 1/4 in	0.24 in	0.50 in	3.37 in	8H-8769
	4 1/2 in	0.24 in	0.50 in	3.63 in	3H-5932
	4 3/4 in	0.24 in	0.50 in	3.87 in	3H-3243
	5 in	0.24 in	0.50 in	4.13 in	1F-6296
	5 1/2 in	0.24 in	0.50 in	4.63 in	5L-1761
	5 3/4 in	0.24 in	0.50 in	4.87 in	8M-1865
	6 in	0.24 in	0.50 in	5.13 in	5P-0059
	6 1/2 in	0.24 in	0.50 in	5.37 in	4F-3508
	Nut				5S-0003
	Washer				9M-1974
3/8-16	1/2 in	0.29 in	0.56 in	0.09 in	4F-4879
	5/8 in	0.29 in	0.56 in	0.09 in	OT-0102
	3/4 in	0.29 in	0.56 in	0.13 in	OS-0509
	7/8 in	0.29 in	0.56 in	0.13 in	OL-1351
	1 in	0.29 in	0.56 in	0.13 in	OS-1594
	1 1/8 in	0.29 in	0.56 in	0.31 in	1A-2029
	1 1/4 in	0.29 in	0.56 in	0.25 in	OS-1588
	1 3/8 in	0.29 in	0.56 in	0.37 in	3B-1915
	1 1/2 in	0.29 in	0.56 in	0.37 in	OS-1591
	1 5/8 in	0.29 in	0.56 in	0.87 in	2A-4639
	1 3/4 in	0.29 in	0.56 in	0.75 in	OS-1571
	1 7/8 in	0.29 in	0.56 in	1.06 in	1C-2251
	2 in	0.29 in	0.56 in	1.00 in	OS-1590
	2 1/4 in	0.29 in	0.56 in	1.25 in	OL-2070
	2 1/2 in	0.29 in	0.56 in	1.50 in	OL-1143
	2 3/4 in	0.29 in	0.56 in	1.75 in	OT-0573
	3 in	0.29 in	0.56 in	2.00 in	OS-1619
	3 1/4 in	0.29 in	0.56 in	2.25 in	OL-1352
	3 1/2 in	0.29 in	0.56 in	2.50 in	OT-0065
	3 3/4 in	0.29 in	0.56 in	2.50 in	OS-1608
	4 in	0.29 in	0.56 in	3.00 in	8S-9191
	4 1/4 in	0.29 in	0.56 in	3.25 in	OT-0055
	4 1/2 in	0.29 in	0.56 in	3.25 in	1A-5964
	4 3/4 in	0.29 in	0.56 in	3.75 in	1A-5183
	5 in	0.29 in	0.56 in	4.00 in	5B-9603
	5 1/4 in	0.29 in	0.56 in	4.25 in	5B-2638
	5 1/2 in	0.29 in	0.56 in	4.50 in	5F-4899
	5 3/4 in	0.29 in	0.56 in	4.75 in	7F-3425
	6 in	0.29 in	0.56 in	4.87 in	1D-4706
	6 1/4 in	0.29 in	0.56 in	4.75 in	8F-8544
	6 1/2 in	0.29 in	0.56 in	5.25 in	4F-0411
	7 in	0.29 in	0.56 in	5.75 in	9F-8999
	7 1/2 in	0.29 in	0.56 in	6.25 in	6B-1557
	8 in	0.29 in	0.56 in	6.75 in	8F-6350
	8 1/2 in	0.29 in	0.56 in	7.25 in	9F-2773

\* High strength bolt.

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

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
3/16-16	9 in	0.29 in	0.56 in	7.75 in	5F-6044
	9 1/2 in	0.29 in	0.56 in	8.25 in	4H-3283
	11 in	0.29 in	0.56 in	9.75 in	5P-1415
	12 in	0.29 in	0.56 in	11.00 in	7M-1202
	Nut				9S-8752
	Washer				5M-2894
7/16-14	3/4 in	0.34 in	0.69 in	0.19 in	5P-0060
	7/8 in	0.34 in	0.69 in	0.13 in	3L-0526
	1 in	0.34 in	0.69 in	0.13 in	0T-0318
	1 1/8 in	0.34 in	0.69 in	0.13 in	4F-8965
	1 1/4 in	0.34 in	0.69 in	0.13 in	0T-0320
	1 3/8 in	0.34 in	0.69 in	0.25 in	3H-5368
	1 1/2 in	0.34 in	0.69 in	0.37 in	0T-0772
	1 3/4 in	0.34 in	0.69 in	0.63 in	0T-0768
	2 in	0.34 in	0.69 in	0.87 in	0T-0319
	2 1/4 in	0.34 in	0.69 in	1.13 in	1D-4707
	2 1/2 in	0.34 in	0.69 in	1.37 in	1D-4703
	2 3/4 in	0.34 in	0.69 in	1.63 in	1D-4556
	3 in	0.34 in	0.69 in	1.87 in	4F-5192
	3 1/4 in	0.34 in	0.69 in	2.13 in	3B-8428
	3 1/2 in	0.34 in	0.69 in	2.37 in	7F-8698
	3 3/4 in	0.34 in	0.69 in	2.63 in	9F-2491
	4 in	0.34 in	0.69 in	2.87 in	4F-7226
	4 1/4 in	0.34 in	0.69 in	3.13 in	2J-5907
	4 1/2 in	0.34 in	0.69 in	3.25 in	4B-7220
	4 3/4 in	0.34 in	0.69 in	3.63 in	7H-3472
	5 in	0.34 in	0.69 in	3.75 in	5B-5059
	5 1/2 in	0.34 in	0.69 in	4.37 in	8F-4197
	6 in	0.34 in	0.69 in	4.87 in	8F-6419
	6 1/2 in	0.34 in	0.69 in	5.13 in	3L-0742
	7 in	0.34 in	0.69 in	5.63 in	7H-7209
	7 1/2 in	0.34 in	0.69 in	6.13 in	2L-7442
	8 in	0.34 in	0.69 in	6.62 in	4L-7925
	9 in	0.34 in	0.69 in	7.63 in	4L-7926
	11 in	0.34 in	0.69 in	9.63 in	3L-4317
	Nut				3S-1546
	Washer				5P-8244
1/2-13	1/2 in	0.39 in	0.75 in	0.06 in	1K-6705
	3/4 in	0.39 in	0.75 in	0.13 in	0S-1620
	7/8 in	0.39 in	0.75 in	0.28 in	2H-3855
	1 in	0.39 in	0.75 in	0.13 in	0S-1621
	1 1/8 in	0.39 in	0.75 in	0.13 in	6H-1717
	1 1/4 in	0.39 in	0.75 in	0.31 in	0S-1595
	1 3/8 in	0.39 in	0.75 in	0.44 in	7B-3235
	1 1/2 in	0.39 in	0.75 in	0.25 in	0S-1585
	1 3/4 in	0.39 in	0.75 in	0.44 in	0S-1587
	2 in	0.39 in	0.75 in	0.75 in	1A-1460
	2 1/4 in	0.39 in	0.75 in	1.00 in	9X-8873
	2 1/2 in	0.39 in	0.75 in	1.00 in	2B-0947*
	2 3/4 in	0.39 in	0.75 in	1.25 in	9S-1366
	3 in	0.39 in	0.75 in	1.50 in	1A-5822
	3 1/2 in	0.39 in	0.75 in	1.75 in	9X-8874
5/8-12	3 in	0.39 in	0.75 in	1.75 in	0L-1329*
	3 1/4 in	0.39 in	0.75 in	2.00 in	0V-0375
	3 1/2 in	0.39 in	0.75 in	2.25 in	9X-8875
	3 3/4 in	0.39 in	0.75 in	2.25 in	1D-4566*
	4 in	0.39 in	0.75 in	2.50 in	1B-2886
	4 1/4 in	0.39 in	0.75 in	2.75 in	0S-1573
	4 1/2 in	0.39 in	0.75 in	3.00 in	1D-4569
	4 3/4 in	0.39 in	0.75 in	3.25 in	8S-9089
	5 in	0.39 in	0.75 in	3.50 in	9X-8876
	5 1/4 in	0.39 in	0.75 in	3.50 in	2B-2006*
	5 1/2 in	0.39 in	0.75 in	3.75 in	9X-8877
	5 3/4 in	0.39 in	0.75 in	3.75 in	2H-6488*
	6 in	0.39 in	0.75 in	4.00 in	9X-8878
	6 1/4 in	0.39 in	0.75 in	4.00 in	6F-5282*
	6 1/2 in	0.39 in	0.75 in	4.25 in	9X-8879
	6 3/4 in	0.39 in	0.75 in	4.25 in	1D-4572*
	7 in	0.39 in	0.75 in	4.50 in	8F-8804
	7 1/4 in	0.39 in	0.75 in	4.75 in	1D-4574
	7 1/2 in	0.39 in	0.75 in	4.75 in	9H-8260
	7 3/4 in	0.39 in	0.75 in	5.00 in	2A-1531
	8 in	0.39 in	0.75 in	5.50 in	1A-7669
	8 1/4 in	0.39 in	0.75 in	6.00 in	1A-0168
	8 1/2 in	0.39 in	0.75 in	6.50 in	9S-1374
	8 3/4 in	0.39 in	0.75 in	7.00 in	1B-3573
	9 in	0.39 in	0.75 in	7.50 in	6M-9613
	10 in	0.39 in	0.75 in	8.50 in	6F-5281
	10 1/2 in	0.39 in	0.75 in	9.00 in	8M-0139*
	11 in	0.39 in	0.75 in	9.50 in	8S-3887
	11 1/2 in	0.39 in	0.75 in	10.00 in	5P-5421*
	13 in	0.39 in	0.75 in	11.50 in	8S-6212*
	14 in	0.39 in	0.75 in	12.50 in	5M-7900*
	Nut				1F-7958
	Washer				5P-8245
3/4-10	1 in	0.43 in	0.87 in	0.12 in	3K-3379
	1 1/4 in	0.43 in	0.87 in	0.16 in	8S-4732
	1 3/8 in	0.43 in	0.87 in	0.17 in	4B-8519
	1 1/2 in	0.43 in	0.87 in	0.16 in	8S-4733
	2 1/2 in	0.43 in	0.87 in	1.13 in	8S-4735
	3 in	0.43 in	0.87 in	1.63 in	8S-4736
	3 1/2 in	0.43 in	0.87 in	2.13 in	8S-4737
	4 in	0.43 in	0.87 in	2.63 in	8S-4738
	4 1/2 in	0.43 in	0.87 in	3.13 in	8S-4739
	5 in	0.43 in	0.87 in	3.63 in	8S-4740
	5 1/2 in	0.43 in	0.87 in	4.13 in	8S-4741
	6 in	0.43 in	0.87 in	4.63 in	8S-4742
	8 in	0.43 in	0.87 in	6.38 in	9H-9129
	Nut				5P-0539
	Washer				5P-8246
1 1/2-8	3/4 in	0.48 in	0.94 in	0.06 in	1H-9456
	1 in	0.48 in	0.94 in	0.19 in	0S-1624
	1 1/8 in	0.48 in	0.94 in	0.28 in	7S-9372
	1 1/4 in	0.48 in	0.94 in	0.19 in	0S-1592

\* High strength bolt.

# Bolts

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

Hardware

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
½-11	1 ¾ in	0.48 in	0.94 in	0.19 in	4B-4043
	1 ½ in	0.48 in	0.94 in	0.19 in	OS-1566
	1 ¾ in	0.48 in	0.94 in	0.25 in	OS-1589
	2 in	0.48 in	0.94 in	0.50 in	9X-8880
	2 in	0.48 in	0.94 in	0.50 in	1A-1135*
	2 ¼ in	0.48 in	0.94 in	0.75 in	9X-8881
	2 ¼ in	0.48 in	0.94 in	0.75 in	8S-9092*
	2 ½ in	0.48 in	0.94 in	0.63 in	9X-8882
	2 ½ in	0.48 in	0.94 in	0.63 in	OS-1625*
	2 ¾ in	0.48 in	0.94 in	1.25 in	9X-8883
	2 ¾ in	0.48 in	0.94 in	1.25 in	1A-8537*
	3 in	0.48 in	0.94 in	1.50 in	1B-4367
	3 ¼ in	0.48 in	0.94 in	1.75 in	1D-4585
	3 ½ in	0.48 in	0.94 in	2.00 in	1D-4586
	3 ¾ in	0.48 in	0.94 in	2.25 in	OL-1169
	4 in	0.48 in	0.94 in	2.50 in	OS-1569
	4 ¼ in	0.48 in	0.94 in	2.75 in	1D-4588
	4 ½ in	0.48 in	0.94 in	3.00 in	1A-8651
	4 ¾ in	0.48 in	0.94 in	3.25 in	1D-4590
	5 in	0.48 in	0.94 in	3.50 in	1A-5405
	5 ¼ in	0.48 in	0.94 in	3.75 in	9X-8884
	5 ¼ in	0.48 in	0.94 in	3.75 in	7S-3224*
	5 ½ in	0.48 in	0.94 in	4.00 in	1D-4593
	6 in	0.48 in	0.94 in	4.50 in	1D-4595
	6 ¼ in	0.48 in	0.94 in	4.50 in	5D-9514
	6 ½ in	0.48 in	0.94 in	4.75 in	1D-4597
	7 in	0.48 in	0.94 in	5.25 in	1D-4599
	7 ½ in	0.48 in	0.94 in	5.75 in	1D-4600
	8 in	0.48 in	0.94 in	6.25 in	1B-7709
	8 ½ in	0.48 in	0.94 in	6.75 in	1D-4601
	9 in	0.48 in	0.94 in	7.25 in	2H-3756
	9 ½ in	0.48 in	0.94 in	7.75 in	1D-4602
	11 ½ in	0.48 in	0.94 in	9.75 in	5P-4624
	Nut				4K-0367
	Washer				5P-8247
¾-10	1 in	0.58 in	1.13 in	0.31 in	7H-2069
	1 ¼ in	0.58 in	1.13 in	0.31 in	OS-1583
	1 ½ in	0.58 in	1.13 in	0.31 in	OS-1626
	1 ¾ in	0.58 in	1.13 in	0.31 in	1A-0458
	2 in	0.58 in	1.13 in	0.31 in	OL-1178
	2 ¼ in	0.58 in	1.13 in	0.50 in	9X-8885
	2 ¼ in	0.58 in	1.13 in	0.50 in	2A-1538*
	2 ½ in	0.58 in	1.13 in	0.75 in	1A-8063
	2 ¾ in	0.58 in	1.13 in	1.00 in	9X-8886
	2 ¾ in	0.58 in	1.13 in	1.00 in	1D-4608*
	3 in	0.58 in	1.13 in	1.25 in	9X-8887
	3 in	0.58 in	1.13 in	1.25 in	1D-4609*
	3 ¼ in	0.58 in	1.13 in	1.50 in	9X-8888
	3 ¼ in	0.58 in	1.13 in	1.50 in	1D-4610*
	3 ½ in	0.58 in	1.13 in	1.75 in	9X-8889
	3 ½ in	0.58 in	1.13 in	1.75 in	3B-2968*
	3 ¾ in	0.58 in	1.13 in	2.00 in	7F-5227

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
¾-10	4 in	0.58 in	1.13 in	2.25 in	1D-4612
	4 ¼ in	0.58 in	1.13 in	2.50 in	OS-1756
	4 ½ in	0.58 in	1.13 in	2.75 in	OS-1627
	4 ¾ in	0.58 in	1.13 in	3.00 in	3B-6753
	5 in	0.58 in	1.13 in	3.25 in	1D-4614
	5 ¼ in	0.58 in	1.13 in	3.50 in	6V-8199
	5 ½ in	0.58 in	1.13 in	3.75 in	1D-4615
	5 ¾ in	0.58 in	1.13 in	4.00 in	6K-1330
	6 in	0.58 in	1.13 in	4.25 in	1D-4616
	6 ¼ in	0.58 in	1.13 in	4.25 in	1D-4617
	6 ½ in	0.58 in	1.13 in	4.50 in	2B-1015
	7 in	0.58 in	1.13 in	5.00 in	1D-4620
	7 ½ in	0.58 in	1.13 in	5.50 in	1D-4621
	8 in	0.58 in	1.13 in	6.00 in	1D-4622
	8 ½ in	0.58 in	1.13 in	6.50 in	1D-4623
	9 in	0.58 in	1.13 in	7.00 in	1D-4624
	9 ½ in	0.58 in	1.13 in	7.50 in	5J-1702
	10 in	0.58 in	1.13 in	8.00 in	8F-4225
	11 ½ in	0.58 in	1.13 in	9.50 in	4J-7945
	13 in	0.58 in	1.13 in	11.00 in	031-9099
	Nut				2J-3506
	Washer				5P-8248
¾-9	1 ½ in	0.67 in	1.31 in	0.25 in	OT-0690
	1 ¾ in	0.67 in	1.31 in	0.37 in	2H-3757
	2 in	0.67 in	1.31 in	0.37 in	9X-8890
	2 in	0.67 in	1.31 in	0.37 in	OS-1973*
	2 ¼ in	0.67 in	1.31 in	0.37 in	9F-9522
	2 ½ in	0.67 in	1.31 in	0.50 in	1D-4625
	2 ¾ in	0.67 in	1.31 in	0.75 in	9X-8891
	2 ¾ in	0.67 in	1.31 in	0.75 in	1D-4626*
	3 in	0.67 in	1.31 in	1.00 in	1D-4627
	3 ¼ in	0.67 in	1.31 in	1.25 in	9X-8892
	3 ¼ in	0.67 in	1.31 in	1.25 in	1D-4628*
	3 ½ in	0.67 in	1.31 in	1.50 in	9X-8893
	3 ½ in	0.67 in	1.31 in	1.50 in	1D-4629*
	3 ¾ in	0.67 in	1.31 in	1.75 in	9X-8894
	3 ¾ in	0.67 in	1.31 in	1.75 in	2H-3856*
	4 in	0.67 in	1.31 in	2.00 in	9X-8895
	4 in	0.67 in	1.31 in	2.00 in	1D-4630*
	4 ¼ in	0.67 in	1.31 in	2.25 in	1D-4631
	4 ½ in	0.67 in	1.31 in	2.50 in	1A-5576
	4 ¾ in	0.67 in	1.31 in	2.75 in	4J-8622
	5 in	0.67 in	1.31 in	3.00 in	9S-1351
	5 ½ in	0.67 in	1.31 in	3.50 in	1D-4634
	6 in	0.67 in	1.31 in	3.75 in	9S-1322
	6 ½ in	0.67 in	1.31 in	4.25 in	6J-1536
	7 in	0.67 in	1.31 in	4.75 in	1D-5976
	7 ½ in	0.67 in	1.31 in	5.25 in	1K-9422
	8 in	0.67 in	1.31 in	5.75 in	1D-6259
	8 ½ in	0.67 in	1.31 in	6.25 in	3K-7127
	9 in	0.67 in	1.31 in	6.75 in	6K-8739
	9 ½ in	0.67 in	1.31 in	7.25 in	1D-6260

\* High strength bolt.



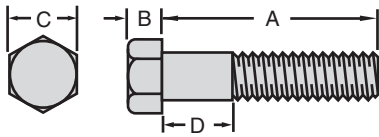
## Hex Head Bolts/Inch/Coarse Thread UNC/Phosphate &amp; Oil Coated

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number	Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
½-9	10 in	0.67 in	1.31 in	7.75 in	2B-2391	1 ½-7	4 in	0.72 in	1.69 in	0.63 in	3N-1614
	11 in	0.67 in	1.31 in	8.75 in	3K-3112		4 ¼ in	0.72 in	1.69 in	1.75 in	5J-1572
	12 ½ in	0.67 in	1.31 in	10.25 in	4D-8317		4 ½ in	0.72 in	1.69 in	2.00 in	5M-0544
	14 in	0.67 in	1.31 in	11.75 in	3K-0581		5 ¼ in	0.72 in	1.69 in	3.00 in	6J-1551
	15 in	0.67 in	1.31 in	12.75 in	3K-3183		6 in	0.72 in	1.69 in	3.50 in	8H-5727
	16 in	0.67 in	1.31 in	13.75 in	3K-6552		6 ½ in	0.72 in	1.69 in	3.75 in	8F-4486
	Nut				2J-3505		Nut				4J-5977
	Washer				5P-8249		Washer				3S-1349
1-8	1 ¼ in	0.71 in	1.50 in	0.31 in	8S-4767	1 ¼-7	2 ½ in	0.81 in	1.87 in	0.44 in	3F-6353
	1 ½ in	0.71 in	1.50 in	0.31 in	0V-0450		3 in	0.81 in	1.87 in	0.44 in	3R-2299
	1 ¾ in	0.71 in	1.50 in	0.37 in	1J-7370		3 ¼ in	0.81 in	1.87 in	0.50 in	1J-5484
	2 in	0.71 in	1.50 in	0.75 in	1J-5257		3 ½ in	0.81 in	1.87 in	0.75 in	2B-1955
	2¼ in	0.71 in	1.50 in	0.25 in	8S-9093		4 in	0.81 in	1.87 in	1.25 in	2H-3758
	2 ½ in	0.71 in	1.50 in	0.50 in	1D-4635		4 ¼ in	0.81 in	1.87 in	1.50 in	1S-6560
	2 ¾ in	0.71 in	1.50 in	0.50 in	9S-1363		4 ½ in	0.81 in	1.87 in	1.75 in	3R-2300
	3 in	0.71 in	1.50 in	0.75 in	1D-4709		4 ¾ in	0.81 in	1.87 in	2.00 in	8F-1156
	3 ¼ in	0.71 in	1.50 in	1.00 in	1D-4637		5 in	0.81 in	1.87 in	2.25 in	2H-1618
	3 ½ in	0.71 in	1.50 in	1.25 in	1D-4638		5 ½ in	0.81 in	1.87 in	2.75 in	1B-2721
	3 ¾ in	0.71 in	1.50 in	1.50 in	8H-5772		6 in	0.81 in	1.87 in	3.25 in	2H-1537
	4 in	0.71 in	1.50 in	1.75 in	9X-8896		6 ½ in	0.81 in	1.87 in	3.50 in	6H-1628
	4 in	0.71 in	1.50 in	1.75 in	1D-4639*		7 in	0.81 in	1.87 in	4.00 in	6V-2624
	4 ¼ in	0.71 in	1.50 in	2.00 in	9X-8897		8 in	0.81 in	1.87 in	5.00 in	3F-9025
	4 ½ in	0.71 in	1.50 in	2.00 in	1D-4640*		8 ½ in	0.81 in	1.87 in	5.50 in	1J-6775
	4 ¾ in	0.71 in	1.50 in	2.25 in	1D-4641		9 in	0.81 in	1.87 in	6.00 in	1K-9418
	4 ¾ in	0.71 in	1.50 in	2.50 in	2A-1420		9 ½ in	0.81 in	1.87 in	6.50 in	1K-9420
	5 in	0.71 in	1.50 in	2.75 in	9X-8898		10 in	0.81 in	1.87 in	7.00 in	1D-4649
	5 in	0.71 in	1.50 in	2.75 in	1D-4642*		10 ½ in	0.81 in	1.87 in	7.50 in	6B-0388
	5 ½ in	0.71 in	1.50 in	3.25 in	1D-4643		11 in	0.81 in	1.87 in	8.25 in	1K-9415
	6 in	0.71 in	1.50 in	3.75 in	9F-6936		13 in	0.81 in	1.87 in	10.50 in	1K-4378
	6 ½ in	0.71 in	1.50 in	4.00 in	5B-5473		14 in	0.81 in	1.87 in	11.00 in	6V-1734
	7 in	0.71 in	1.50 in	4.50 in	5F-9338		15 in	0.81 in	1.87 in	12.00 in	031-0213
	7 ½ in	0.71 in	1.50 in	5.00 in	2B-7218		Nut				3K-9770
	8 in	0.71 in	1.50 in	5.50 in	1D-4644		Washer				4K-0684
	8 ½ in	0.71 in	1.50 in	6.00 in	1D-4645	1 ½-6	3 ½ in	0.97 in	2.25 in	0.40 in	3J-1805
	9 in	0.71 in	1.50 in	6.50 in	1D-4646		4 in	0.97 in	2.25 in	0.50 in	6V-8970
	9 ½ in	0.71 in	1.50 in	7.00 in	1D-4647		4 ½ in	0.97 in	2.25 in	1.00 in	6V-8536
	10 in	0.71 in	1.50 in	7.50 in	2J-8348		4 ¾ in	0.97 in	2.25 in	1.25 in	138-8455
	10 ½ in	0.71 in	1.50 in	8.00 in	8F-6453		5 in	0.97 in	2.25 in	1.75 in	1K-9414
	11 in	0.71 in	1.50 in	8.50 in	8K-5130		6 in	0.97 in	2.25 in	2.50 in	131-2627
	11 ½ in	0.71 in	1.50 in	9.00 in	7K-4363		7 in	0.97 in	2.25 in	2.50 in	4R-9112
	12 in	0.71 in	1.50 in	10.50 in	2H-4010		9 in	0.97 in	2.25 in	5.50 in	6V-7977
	13 in	0.71 in	1.50 in	10.50 in	6J-4081		11 ½ in	0.97 in	2.25 in	7.50 in	6V-0659
	14 in	0.71 in	1.50 in	10.50 in	6M-2001		12 ½ in	0.97 in	2.25 in	9.00 in	127-4840
	15 in	0.71 in	1.50 in	13.50 in	2H-4011		Nut				9S-8216
	16 in	0.71 in	1.50 in	14.00 in	6M-1029		Washer				3S-6162
	Nut				2J-3507						
	Washer				5P-8250						
1 ½-7	2 in	0.72 in	1.69 in	0.25 in	3J-8281						
	2 ½ in	0.72 in	1.69 in	1.00 in	7J-7222						
	2 ¾ in	0.72 in	1.69 in	0.44 in	2K-2037						
	3 in	0.72 in	1.69 in	0.50 in	1J-2814						
	3 ½ in	0.72 in	1.69 in	1.00 in	1J-2175						

\* High strength bolt.

# Bolts

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



Hardware

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
¼-28	½ in	0.19 in	0.44 in	0.09 in	6F-7027
	⅝ in	0.19 in	0.44 in	0.08 in	0S-1570
	¾ in	0.19 in	0.44 in	0.08 in	0T-0284
	⅞ in	0.19 in	0.44 in	0.08 in	0L-1340
	1 in	0.19 in	0.44 in	0.25 in	0S-1597
	1 ⅛ in	0.19 in	0.44 in	0.37 in	0L-1590
	1 ¼ in	0.19 in	0.44 in	0.13 in	4B-2152
	1 ½ in	0.19 in	0.44 in	0.75 in	5F-4475
	1 ¾ in	0.19 in	0.44 in	1.00 in	2D-7563
	2 in	0.19 in	0.44 in	1.25 in	4B-8701
	2 ¼ in	0.19 in	0.44 in	1.50 in	2B-8593
	2 ½ in	0.19 in	0.44 in	1.50 in	1A-9919
	3 in	0.19 in	0.44 in	2.25 in	8S-4712
	3 ½ in	0.19 in	0.44 in	2.75 in	8S-4713
	4 in	0.19 in	0.44 in	3.25 in	8S-4714
	4 ½ in	0.19 in	0.44 in	3.75 in	8S-4715
	5 in	0.19 in	0.44 in	4.25 in	8S-4716
	Nut				9S-8748
	Washer				5P-0537
⅝-24	½ in	0.24 in	0.50 in	0.09 in	2F-2093
	⅝ in	0.24 in	0.50 in	0.13 in	2H-3737
	¾ in	0.24 in	0.50 in	0.13 in	1A-2343
	⅞ in	0.24 in	0.50 in	0.09 in	4B-9883
	1 in	0.24 in	0.50 in	0.13 in	2H-3738
	1 ⅛ in	0.24 in	0.50 in	0.66 in	6H-0187
	1 ¼ in	0.24 in	0.50 in	0.37 in	1B-1293
	1 ⅝ in	0.24 in	0.50 in	0.50 in	2A-1371
	1 ¾ in	0.24 in	0.50 in	0.63 in	1B-0581
	1 ½ in	0.24 in	0.50 in	0.87 in	2H-3708
	2 in	0.24 in	0.50 in	1.13 in	1H-5403
	2 ¼ in	0.24 in	0.50 in	1.37 in	2H-3739
	2 ½ in	0.24 in	0.50 in	1.63 in	8S-4717
	2 ¾ in	0.24 in	0.50 in	1.87 in	4B-1028
	3 in	0.24 in	0.50 in	2.13 in	8S-4718
	3 ¼ in	0.24 in	0.50 in	2.37 in	7F-0938
	3 ½ in	0.24 in	0.50 in	2.63 in	8S-4719
	4 in	0.24 in	0.50 in	3.13 in	8S-4720
	4 ½ in	0.24 in	0.50 in	3.63 in	8S-4721
	5 in	0.24 in	0.50 in	4.13 in	8S-4722
	Nut				9S-8751
	Washer				9M-1974
¾-24	½ in	0.29 in	0.56 in	0.09 in	0L-1138
	⅝ in	0.29 in	0.56 in	0.09 in	0T-0642
	¾ in	0.29 in	0.56 in	0.13 in	0L-0472
	⅞ in	0.29 in	0.56 in	0.09 in	0T-0703
	1 in	0.29 in	0.56 in	0.19 in	6F-7030
	1 ⅛ in	0.29 in	0.56 in	0.13 in	5B-2208

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
¾-24	1 ¼ in	0.29 in	0.56 in	0.25 in	1A-2209
	1 ⅝ in	0.29 in	0.56 in	0.37 in	2A-4996
	1 ½ in	0.29 in	0.56 in	0.50 in	0T-0924
	1 ¾ in	0.29 in	0.56 in	0.75 in	0L-0478
	2 in	0.29 in	0.56 in	1.00 in	0S-1748
	2 ¼ in	0.29 in	0.56 in	1.25 in	0L-0639
	2 ½ in	0.29 in	0.56 in	1.50 in	0L-1648
	2 ¾ in	0.29 in	0.56 in	1.75 in	0L-0139
	3 in	0.29 in	0.56 in	2.00 in	6F-7031
	3 ¼ in	0.29 in	0.56 in	2.25 in	0S-1605
	3 ½ in	0.29 in	0.56 in	2.50 in	1B-3680
	4 in	0.29 in	0.56 in	3.00 in	0T-0513
	4 ¼ in	0.29 in	0.56 in	3.25 in	1B-5082
	4 ½ in	0.29 in	0.56 in	3.50 in	6F-8425
	5 in	0.29 in	0.56 in	4.00 in	1A-2116
	5 ½ in	0.29 in	0.56 in	4.50 in	5B-6579
	6 in	0.29 in	0.56 in	5.00 in	6F-4736
	6 ½ in	0.29 in	0.56 in	5.25 in	03S-2353
	8 in	0.29 in	0.56 in	6.75 in	4H-5883
	Nut				3S-2713
	Washer				5M-2894
7/16-20	1 in	0.34 in	0.69 in	0.13 in	0T-0840
	1 ¼ in	0.34 in	0.69 in	0.13 in	0T-0244
	1 ½ in	0.34 in	0.69 in	0.37 in	8S-4723
	1 ¾ in	0.34 in	0.69 in	0.63 in	1A-4350
	2 in	0.34 in	0.69 in	0.87 in	0T-0489
	2 ¼ in	0.34 in	0.69 in	1.13 in	8S-4724
	2 ½ in	0.34 in	0.69 in	1.37 in	1B-0572
	2 ¾ in	0.34 in	0.69 in	1.63 in	8S-4725
	3 in	0.34 in	0.69 in	1.87 in	8S-4726
	3 ¼ in	0.34 in	0.63 in	1.75 in	5D-4085
	3 ½ in	0.34 in	0.69 in	2.37 in	1J-6298
	3 ¾ in	0.34 in	0.69 in	2.63 in	8S-4727
	4 in	0.34 in	0.69 in	2.87 in	8S-4728
	4 ½ in	0.34 in	0.69 in	3.37 in	8S-4729
	5 in	0.34 in	0.69 in	3.87 in	8S-4730
	6 in	0.34 in	0.69 in	4.87 in	8S-4731
	9 in	0.34 in	0.69 in	7.63 in	2L-4523
	Nut				9S-8905
	Washer				5P-8244
½-20	¾ in	0.39 in	0.75 in	0.13 in	6F-7032
	⅞ in	0.39 in	0.75 in	0.13 in	0T-0598
	1 in	0.39 in	0.75 in	0.13 in	0S-1629
	1 ¼ in	0.39 in	0.75 in	0.13 in	0S-1593
	1 ⅝ in	0.39 in	0.75 in	0.13 in	4K-7502
	1 ½ in	0.39 in	0.75 in	0.25 in	0S-1603
	1 ¾ in	0.39 in	0.75 in	0.50 in	0S-1584

\* High strength bolt.



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

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number	Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
½-20	2 in	0.39 in	0.75 in	0.75 in	OS-1579	¾-18	3 ¾ in	0.48 in	0.94 in	2.25 in	OS-2353
	2 ¼ in	0.39 in	0.75 in	1.00 in	OS-0484		4 in	0.48 in	0.94 in	2.50 in	OV-0459
	2 ½ in	0.39 in	0.75 in	1.25 in	OS-1604		4 ¼ in	0.48 in	0.94 in	2.75 in	OV-0523
	2 ¾ in	0.39 in	0.75 in	1.50 in	OS-1599		4 ½ in	0.48 in	0.94 in	3.00 in	OT-0857
	3 in	0.39 in	0.75 in	1.75 in	OL-1732		4 ¾ in	0.48 in	0.94 in	3.25 in	1A-3203
	3 ¼ in	0.39 in	0.75 in	2.00 in	OL-1558		5 in	0.48 in	0.94 in	3.50 in	6F-7024
	3 ½ in	0.39 in	0.75 in	2.25 in	OL-2315		5 ½ in	0.48 in	0.94 in	4.00 in	2A-2814
	3 ¾ in	0.39 in	0.75 in	2.50 in	1A-1952		5 ¾ in	0.48 in	0.94 in	4.25 in	1B-7538
	4 in	0.39 in	0.75 in	2.75 in	OL-1559		6 in	0.48 in	0.94 in	4.50 in	2B-6030
	4 ¼ in	0.39 in	0.75 in	3.00 in	6F-7033		7 in	0.48 in	0.94 in	5.25 in	1B-3623
	4 ½ in	0.39 in	0.75 in	3.25 in	1A-3046		7 ½ in	0.48 in	0.94 in	5.75 in	7H-5569
	4 ¾ in	0.39 in	0.75 in	3.50 in	OL-0557		8 in	0.48 in	0.94 in	6.25 in	8S-4753
	5 in	0.39 in	0.75 in	3.75 in	1B-1422		8 ½ in	0.48 in	0.94 in	6.75 in	6V-1873
	5 ½ in	0.39 in	0.75 in	4.25 in	3H-1097		11 in	0.48 in	0.94 in	9.25 in	5K-7144
	5 ¾ in	0.39 in	0.75 in	4.50 in	5M-9979		12 in	0.48 in	0.94 in	10.25 in	6K-0953
	6 in	0.39 in	0.75 in	4.75 in	9F-1595		Nut				6B-6683
	6 ½ in	0.39 in	0.75 in	5.00 in	2H-3747		Washer				5P-8247
	7 in	0.39 in	0.75 in	3.37 in	3H-1930	¾-16	1 ¼ in	0.58 in	1.13 in	0.19 in	2H-3740
	7 ½ in	0.39 in	0.75 in	6.00 in	2H-3748		1 ½ in	0.58 in	1.13 in	0.19 in	2H-3725
	8 in	0.39 in	0.75 in	6.50 in	1A-3967		1 ¾ in	0.58 in	1.13 in	0.19 in	1A-0075
	Nut				6B-6684		2 in	0.58 in	1.13 in	0.25 in	9S-1362
	Washer				5P-8245		2 ¼ in	0.58 in	1.13 in	0.50 in	OS-1897
⅝-18	1 ¼ in	0.43 in	0.87 in	0.13 in	8S-4743		2 ½ in	0.58 in	1.13 in	0.75 in	OT-0856
	1 ⅝ in	0.43 in	0.87 in	0.13 in	8S-4761		2 ¾ in	0.58 in	1.13 in	1.00 in	8F-3152
	1 ½ in	0.43 in	0.87 in	0.13 in	8S-4744		3 in	0.58 in	1.13 in	1.25 in	OS-1575
	1 ¾ in	0.43 in	0.87 in	0.38 in	8S-4762		3 ¼ in	0.58 in	1.13 in	1.50 in	6B-5310
	2 in	0.43 in	0.87 in	0.63 in	8S-4745		3 ½ in	0.58 in	1.13 in	1.75 in	9S-1364
	2 ¼ in	0.43 in	0.87 in	0.88 in	8S-4763		3 ¾ in	0.58 in	1.13 in	2.00 in	1A-3103
	2 ½ in	0.43 in	0.87 in	1.13 in	8S-4746		4 in	0.58 in	1.13 in	2.25 in	OL-1328
	2 ¾ in	0.43 in	0.87 in	1.38 in	8S-4764		4 ¼ in	0.58 in	1.13 in	2.50 in	1D-3419
	3 in	0.43 in	0.87 in	1.38 in	6S-0753		4 ¾ in	0.58 in	1.13 in	3.00 in	7B-5163
	3 ½ in	0.43 in	0.87 in	2.13 in	8S-4747		5 in	0.58 in	1.13 in	3.25 in	OS-1607
	3 ¾ in	0.43 in	0.87 in	2.38 in	2S-1216		5 ½ in	0.58 in	1.13 in	3.75 in	8F-6123
	4 in	0.43 in	0.87 in	2.63 in	8S-4748		6 in	0.58 in	1.13 in	4.25 in	7B-4436
	4 ½ in	0.43 in	0.87 in	3.13 in	8S-4749		6 ½ in	0.58 in	1.13 in	4.50 in	6F-7901
	5 in	0.43 in	0.87 in	3.63 in	8S-4750		7 in	0.58 in	1.13 in	5.00 in	2H-3749
	5 ½ in	0.43 in	0.87 in	4.13 in	8S-4751		7 ½ in	0.58 in	1.13 in	5.50 in	2H-3750
	6 in	0.43 in	0.87 in	4.63 in	8S-4752		8 in	0.58 in	1.13 in	6.00 in	4F-0925
	Nut				5P-0540		8 ½ in	0.58 in	1.13 in	6.50 in	8S-4766
	Washer				5P-8246		9 in	0.58 in	1.13 in	7.00 in	7F-1926
¾-18	1 in	0.48 in	0.94 in	0.19 in	6F-7316		9 ½ in	0.58 in	1.13 in	7.50 in	8B-7943
	1 ¼ in	0.48 in	0.94 in	0.19 in	1A-4273		10 in	0.58 in	1.13 in	8.00 in	2K-2813
	1 ⅝ in	0.48 in	0.94 in	0.19 in	4H-4033		11 in	0.58 in	1.13 in	9.00 in	5P-8288
	1 ½ in	0.48 in	0.94 in	0.19 in	2L-1701		11 ½ in	0.58 in	1.13 in	9.50 in	2P-9845
	1 ¾ in	0.48 in	0.94 in	0.25 in	5B-0841		Nut				6B-6682
	2 in	0.48 in	0.94 in	0.50 in	OS-1576		Washer				5P-8248
	2 ¼ in	0.48 in	0.94 in	0.75 in	OS-1577	¾-14	1 ½ in	0.67 in	1.31 in	0.25 in	8S-4754
	2 ½ in	0.48 in	0.94 in	1.00 in	OS-1600		1 ¾ in	0.67 in	1.31 in	0.25 in	8F-7496
	2 ¾ in	0.48 in	0.94 in	1.25 in	OS-1601		2 in	0.67 in	1.31 in	0.25 in	2H-3854
	3 in	0.48 in	0.94 in	1.50 in	8B-5144		2 ¼ in	0.67 in	1.31 in	0.25 in	6F-7035
	3 ¼ in	0.48 in	0.94 in	1.75 in	OS-2318		2 ½ in	0.67 in	1.31 in	0.50 in	1D-5873
	3 ½ in	0.48 in	0.94 in	2.00 in	OS-1602		2 ¾ in	0.67 in	1.31 in	0.75 in	OS-1596

\* High strength bolt.

# Bolts

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

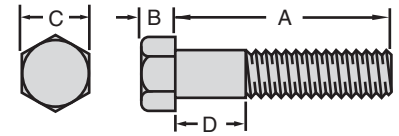
Hardware

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
7/8-14	3 in	0.67 in	1.31 in	1.00 in	6F-7036
	3 1/4 in	0.67 in	1.31 in	1.25 in	2H-3741
	3 1/2 in	0.67 in	1.31 in	1.50 in	1A-0224
	3 3/4 in	0.67 in	1.31 in	1.75 in	0L-2090*
	4 in	0.67 in	1.31 in	2.00 in	0T-0603
	4 1/4 in	0.67 in	1.31 in	2.25 in	1D-3848
	4 1/2 in	0.67 in	1.31 in	2.50 in	4H-8340
	5 in	0.67 in	1.31 in	3.00 in	1D-6089
	5 1/2 in	0.67 in	1.31 in	3.50 in	0S-1606
	6 in	0.67 in	1.31 in	4.00 in	7F-6100
	6 1/2 in	0.67 in	1.31 in	4.25 in	6F-4991
	7 in	0.67 in	1.31 in	4.75 in	4F-6426
	7 1/2 in	0.67 in	1.31 in	5.25 in	2K-1747
	8 in	0.67 in	1.31 in	5.75 in	7F-0479
	9 in	0.67 in	1.31 in	6.75 in	2L-1091
	11 in	0.67 in	1.31 in	8.75 in	3B-4978
	11 1/2 in	0.67 in	1.31 in	9.25 in	4B-7572
	Nut				1A-5666
	Washer				5P-8249
1-14	1 1/2 in	0.71 in	1.50 in	0.13 in	8S-4755
	1 3/4 in	0.71 in	1.50 in	0.13 in	8S-4756
	2 in	0.71 in	1.50 in	0.25 in	2H-3743
	2 1/4 in	0.71 in	1.50 in	0.25 in	2H-3744
	2 1/2 in	0.71 in	1.50 in	0.25 in	5B-9385
	2 3/4 in	0.71 in	1.50 in	0.50 in	2H-3745
	3 in	0.71 in	1.50 in	0.75 in	6B-9194
	3 1/4 in	0.71 in	1.50 in	1.00 in	6F-7037
	3 1/2 in	0.71 in	1.50 in	1.25 in	9S-1368
	3 3/4 in	0.71 in	1.50 in	1.50 in	9S-1367
	4 in	0.71 in	1.50 in	1.75 in	1F-7464*
	4 1/2 in	0.71 in	1.50 in	2.25 in	0V-0269
	4 3/4 in	0.71 in	1.50 in	2.50 in	7B-7181
	5 in	0.71 in	1.50 in	2.75 in	2H-3746
	5 1/2 in	0.71 in	1.50 in	3.25 in	8F-6124
	6 in	0.71 in	1.50 in	3.75 in	3F-6645
	6 1/2 in	0.71 in	1.50 in	4.00 in	7F-4283
	7 in	0.71 in	1.50 in	4.50 in	5F-6932
	7 1/2 in	0.71 in	1.50 in	5.00 in	2H-0637
	8 in	0.71 in	1.50 in	5.50 in	8S-4757
	8 1/2 in	0.71 in	1.50 in	6.00 in	3J-5981
	9 in	0.71 in	1.50 in	6.50 in	9F-8122
	9 1/2 in	1.50 in	0.39 in	7.00 in	5F-7136
	10 in	0.71 in	1.50 in	7.50 in	1L-8586
	Nut				1A-1935
	Washer				5P-8250
1 1/8-12	2 1/4 in	0.72 in	1.69 in	0.31 in	1A-2208
	2 1/2 in	0.72 in	1.69 in	0.50 in	2H-3751
	3 1/4 in	0.72 in	1.69 in	2.00 in	8B-0477
	4 in	0.72 in	1.69 in	1.50 in	8F-3895
	4 1/2 in	0.72 in	1.69 in	2.00 in	8H-4040
	5 in	0.72 in	1.69 in	2.50 in	7B-9215
	5 1/2 in	0.72 in	1.69 in	3.00 in	4B-5219
	6 in	0.72 in	1.69 in	3.50 in	2D-3424

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
1 1/8-12	6 1/2 in	0.72 in	1.69 in	3.75 in	3B-5752
	7 in	0.72 in	1.69 in	4.25 in	2D-8930
	7 1/2 in	0.72 in	1.69 in	4.75 in	9M-3742
	8 in	0.72 in	1.69 in	5.25 in	1S-3647
	9 in	0.72 in	1.69 in	6.25 in	2M-3530
	Nut				3S-1356
	Washer				3S-1349
	2 1/4 in	0.81 in	1.87 in	0.25 in	7B-2289
	3 in	0.81 in	1.87 in	0.25 in	7F-6112
	3 1/2 in	0.81 in	1.87 in	0.75 in	2K-0439
1 1/4-12	4 in	0.81 in	1.87 in	1.25 in	5P-2663
	4 1/4 in	0.81 in	1.87 in	2.00 in	7B-8791
	5 1/2 in	0.81 in	1.87 in	2.75 in	2J-2555
	6 in	0.81 in	1.87 in	3.25 in	5H-1649
	6 1/2 in	0.81 in	1.87 in	3.50 in	4H-6511
	7 1/2 in	0.81 in	1.87 in	4.50 in	7F-9464
	8 in	0.81 in	1.87 in	5.00 in	4J-0924
	8 1/2 in	0.81 in	1.87 in	5.50 in	5F-9339
	9 1/2 in	0.81 in	1.87 in	6.50 in	3S-7079
	10 in	0.81 in	1.87 in	7.00 in	4H-8009
	11 1/2 in	0.81 in	1.87 in	8.38 in	6F-4438
	12 in	0.81 in	1.87 in	9.00 in	7H-3579
	13 in	0.81 in	1.87 in	10.88 in	4H-2400
	Nut				7H-7539
	Washer				4K-0684
1 1/2-12	3 in	0.97 in	2.25 in	0.25 in	7X-3305
	3 3/4 in	0.97 in	2.25 in	0.50 in	1J-2921
	4 in	0.97 in	2.25 in	0.75 in	8F-5535
	4 1/2 in	0.97 in	2.25 in	1.25 in	1F-6762
	5 in	0.97 in	2.25 in	1.75 in	5P-9402
	6 in	0.97 in	2.25 in	2.75 in	5F-9891
	7 in	0.97 in	2.25 in	3.50 in	8F-1692
	8 in	0.97 in	2.25 in	4.50 in	2D-7687
	9 in	0.97 in	2.25 in	5.50 in	5F-3492
	10 in	0.97 in	2.25 in	7.48 in	5P-9384
	Nut				8H-3390
	Washer				3S-6162
	8 in	0.97 in	3.00 in	1.75 in	5R-8907

\* High strength bolt.

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



Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
1/4-20	1/2 in	0.19 in	0.44 in	0.06 in	5S-7349
	5/8 in	0.19 in	0.44 in	0.13 in	8T-9364
	3/4 in	0.19 in	0.44 in	0.13 in	4M-5281
	7/8 in	0.19 in	0.44 in	0.13 in	1H-3337
	1 in	0.19 in	0.44 in	0.13 in	8T-8908
	1 1/8 in	0.19 in	0.44 in	0.37 in	6D-2928
	1 1/4 in	0.19 in	0.44 in	0.13 in	7X-2501
	1 1/2 in	0.19 in	0.44 in	0.25 in	4M-5282
	1 3/4 in	0.19 in	0.44 in	1.00 in	5P-2675
	2 in	0.19 in	0.44 in	1.13 in	8T-9367
	2 1/4 in	0.19 in	0.44 in	1.37 in	8T-9368
	2 1/2 in	0.19 in	0.44 in	1.75 in	7X-0264
	2 3/4 in	0.19 in	0.44 in	2.00 in	7X-0265
	3 in	0.19 in	0.44 in	2.00 in	7X-0266
	3 1/4 in	0.19 in	0.44 in	2.50 in	7X-0267
	3 1/2 in	0.19 in	0.44 in	2.75 in	7X-0268
	3 3/4 in	0.19 in	0.44 in	3.00 in	8C-3793
	4 in	0.19 in	0.44 in	3.25 in	7X-0269
	5 in	0.19 in	0.44 in	4.25 in	8T-8909
	5 1/2 in	0.19 in	0.44 in	4.50 in	7X-0271
	Nut				6V-8185
	Washer				8T-4205
5/16-18	1/2 in	0.24 in	0.50 in	0.06 in	8T-5391
	5/8 in	0.24 in	0.50 in	0.13 in	5K-0906
	3/4 in	0.24 in	0.50 in	0.13 in	4M-0061
	7/8 in	0.24 in	0.50 in	0.13 in	8T-9043
	1 in	0.24 in	0.50 in	0.13 in	4M-6425
	1 1/8 in	0.24 in	0.50 in	0.25 in	6V-5782
	1 1/4 in	0.24 in	0.50 in	0.37 in	6V-8918
	1 1/2 in	0.24 in	0.50 in	0.09 in	8C-3121
	1 3/4 in	0.24 in	0.50 in	0.87 in	7X-0440
	2 in	0.24 in	0.50 in	1.13 in	8T-8911
	2 1/4 in	0.24 in	0.50 in	1.37 in	8T-8912
	2 1/2 in	0.24 in	0.50 in	1.63 in	5P-2955
	2 3/4 in	0.24 in	0.50 in	1.87 in	7X-0274
	3 in	0.24 in	0.50 in	2.13 in	4M-6424
	3 1/4 in	0.24 in	0.50 in	2.25 in	7X-0275
	3 1/2 in	0.24 in	0.50 in	2.63 in	7X-0276
	3 3/4 in	0.24 in	0.50 in	2.75 in	7X-0277
	4 in	0.24 in	0.50 in	3.00 in	7X-0278
	4 3/4 in	0.24 in	0.50 in	3.87 in	7X-0279
	5 in	0.24 in	0.50 in	4.13 in	7X-0280
	5 1/2 in	0.24 in	0.50 in	4.63 in	7X-0281
	6 1/2 in	0.24 in	0.50 in	5.37 in	7X-0282
	Nut				6V-8189
	Washer				8T-4224
3/16-16	1/2 in	0.29 in	0.56 in	0.09 in	8T-9371

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
3/8-16	5/8 in	0.29 in	0.56 in	0.09 in	5P-8167
	3/4 in	0.29 in	0.56 in	0.13 in	5M-3062
	7/8 in	0.29 in	0.56 in	0.13 in	5S-7379
	1 in	0.29 in	0.56 in	0.13 in	4L-6454
	1 1/8 in	0.29 in	0.56 in	0.31 in	8T-2502
	1 1/4 in	0.29 in	0.56 in	0.25 in	9B-7237
	1 1/2 in	0.29 in	0.56 in	0.37 in	4L-9337
	1 3/4 in	0.29 in	0.56 in	0.75 in	5S-7383
	2 in	0.29 in	0.56 in	1.00 in	8T-2501
	2 1/4 in	0.29 in	0.56 in	1.25 in	8T-9377
	2 1/2 in	0.29 in	0.56 in	1.50 in	4L-6459
	2 3/4 in	0.29 in	0.56 in	1.75 in	8T-9101
	3 in	0.29 in	0.56 in	2.00 in	8T-7008
	3 1/4 in	0.29 in	0.56 in	2.25 in	8T-8915
	3 1/2 in	0.29 in	0.56 in	2.50 in	7X-0290
	3 3/4 in	0.29 in	0.56 in	2.50 in	7X-0291
	4 in	0.29 in	0.56 in	3.00 in	8T-9378
	4 1/4 in	0.29 in	0.56 in	3.25 in	8T-9379
	4 1/2 in	0.29 in	0.56 in	3.25 in	7X-0292
	4 3/4 in	0.29 in	0.56 in	3.75 in	7X-0293
	5 in	0.29 in	0.56 in	4.00 in	7X-0294
	5 1/4 in	0.29 in	0.56 in	4.25 in	7X-0295
	5 1/2 in	0.29 in	0.56 in	4.50 in	7X-0296
	5 3/4 in	0.29 in	0.56 in	4.75 in	7X-0297
	6 in	0.29 in	0.56 in	4.87 in	8C-7323
	6 1/2 in	0.29 in	0.56 in	5.25 in	7X-0300
	7 in	0.29 in	0.56 in	5.75 in	7X-0301
	7 1/2 in	0.29 in	0.56 in	6.25 in	7X-0302
	8 in	0.29 in	0.56 in	6.75 in	7X-0303
	8 1/2 in	0.29 in	0.56 in	7.25 in	7X-0304
	9 in	0.29 in	0.56 in	7.75 in	7X-0305
	9 1/2 in	0.29 in	0.56 in	8.25 in	4H-3283
	Nut				6V-8801
	Washer				8T-4896
7/16-14	3/4 in	0.34 in	0.69 in	0.19 in	7X-0307
	7/8 in	0.34 in	0.69 in	0.13 in	7X-0272
	1 in	0.34 in	0.69 in	0.13 in	8T-9380
	1 1/8 in	0.34 in	0.69 in	0.13 in	8T-6973
	1 1/4 in	0.34 in	0.69 in	0.13 in	8T-9382
	1 1/2 in	0.34 in	0.69 in	0.37 in	8T-8916
	1 3/4 in	0.34 in	0.69 in	0.63 in	8C-6877
	2 in	0.34 in	0.69 in	0.87 in	7X-0310
	2 1/4 in	0.34 in	0.69 in	1.13 in	7X-0311
	2 1/2 in	0.34 in	0.69 in	1.37 in	7X-0312
	2 3/4 in	0.34 in	0.69 in	1.63 in	7X-0313
	3 in	0.34 in	0.69 in	1.87 in	7X-0314
	3 1/4 in	0.34 in	0.69 in	2.13 in	7X-0315

# Bolts

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

Hardware

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
⅜-14	3 ½ in	0.34 in	0.69 in	2.37 in	7X-0316
	3 ¾ in	0.34 in	0.69 in	2.63 in	7X-0317
	4 in	0.34 in	0.69 in	2.87 in	7X-0318
	4 ¼ in	0.34 in	0.69 in	3.13 in	7X-0319
	4 ¾ in	0.34 in	0.69 in	3.63 in	7H-3472
	5 in	0.34 in	0.69 in	3.75 in	7X-0320
	5 ½ in	0.34 in	0.69 in	4.37 in	7X-0321
	6 in	0.34 in	0.69 in	4.87 in	7X-0322
	Nut				7X-0447
	Washer				8T-5360
½-13	¾ in	0.39 in	0.75 in	0.13 in	8T-9383
	⅞ in	0.39 in	0.75 in	0.28 in	8T-9384
	1 in	0.39 in	0.75 in	0.13 in	5P-2228
	1 ⅛ in	0.39 in	0.75 in	0.13 in	5C-6565
	1 ¼ in	0.39 in	0.75 in	0.31 in	8T-8917
	1 ½ in	0.39 in	0.75 in	0.25 in	5P-2566
	1 ¾ in	0.39 in	0.75 in	0.44 in	8T-8919
	2 in	0.39 in	0.75 in	0.75 in	8T-4835
	2 ¼ in	0.39 in	0.75 in	1.00 in	5P-2424
	2 ½ in	0.39 in	0.75 in	1.25 in	7X-0325
	2 ¾ in	0.39 in	0.75 in	1.50 in	8T-9389
	3 in	0.39 in	0.75 in	1.75 in	7X-0326
	3 ¼ in	0.39 in	0.75 in	2.00 in	8T-8920
	3 ½ in	0.39 in	0.75 in	2.25 in	7X-0328
	3 ¾ in	0.39 in	0.75 in	2.50 in	8T-9391
	4 in	0.39 in	0.75 in	2.75 in	6V-4432
	4 ¼ in	0.39 in	0.75 in	3.00 in	7X-0331
	4 ½ in	0.39 in	0.75 in	3.25 in	7X-0332
	4 ¾ in	0.39 in	0.75 in	3.50 in	7X-0333
	5 in	0.39 in	0.75 in	3.75 in	7X-0334
	5 ¼ in	0.39 in	0.75 in	4.00 in	7X-0335
	5 ½ in	0.39 in	0.75 in	4.25 in	7X-0336
	5 ¾ in	0.39 in	0.75 in	4.50 in	7X-0337
	6 in	0.39 in	0.75 in	4.75 in	7X-0338
	6 ½ in	0.39 in	0.75 in	5.00 in	7X-0340
	7 in	0.39 in	0.75 in	5.50 in	7X-0341
	7 ½ in	0.39 in	0.75 in	6.00 in	8T-9392
	8 ½ in	0.39 in	0.75 in	7.00 in	7X-0471
	Nut				6V-8188
	Washer				8T-4223
⅝-12	2 in	0.43 in	0.87 in	0.63 in	8S-4734
⅞-11	1 in	0.48 in	0.94 in	0.19 in	5C-6266
	1 ¼ in	0.48 in	0.94 in	0.19 in	7X-0343
	1 ½ in	0.48 in	0.94 in	0.19 in	8T-9393
	1 ¾ in	0.48 in	0.94 in	0.25 in	7X-0345
	2 ¼ in	0.48 in	0.94 in	0.75 in	7X-0347
	2 ½ in	0.48 in	0.94 in	0.63 in	8T-6871
	2 ¾ in	0.48 in	0.94 in	1.25 in	8C-6362
	3 in	0.48 in	0.94 in	1.50 in	7X-0349
	3 ¼ in	0.48 in	0.94 in	1.75 in	8T-9396
	3 ½ in	0.48 in	0.94 in	2.00 in	7X-0350
	3 ¾ in	0.48 in	0.94 in	2.25 in	7X-0351

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
⅞-11	4 in	0.48 in	0.94 in	2.50 in	7X-0352
	4 ¼ in	0.48 in	0.94 in	2.75 in	7X-0353
	4 ½ in	0.48 in	0.94 in	3.00 in	7X-0354
	4 ¾ in	0.48 in	0.94 in	3.25 in	7X-0355
	5 in	0.48 in	0.94 in	3.50 in	7X-0356
	5 ¼ in	0.48 in	0.94 in	3.75 in	7X-0357
	5 ½ in	0.48 in	0.94 in	4.00 in	7X-0358
	6 in	0.48 in	0.94 in	4.50 in	7X-0359
	6 ½ in	0.48 in	0.94 in	4.75 in	7X-0361
	7 in	0.48 in	0.94 in	5.25 in	7X-0362
	8 in	0.48 in	0.94 in	6.25 in	7X-0363
	8 ½ in	0.48 in	0.94 in	6.75 in	7X-0364
	9 ½ in	0.48 in	0.94 in	7.75 in	7X-7890
	Nut				7X-0448
	Washer				8T-4122
¾-10	1 ¼ in	0.58 in	1.13 in	0.31 in	8T-9397
	1 ½ in	0.58 in	1.13 in	0.31 in	7X-0365
	1 ¾ in	0.58 in	1.13 in	0.31 in	8T-9398
	2 in	0.58 in	1.13 in	0.31 in	7X-0366
	2 ¼ in	0.58 in	1.13 in	0.50 in	8T-9399
	2 ½ in	0.58 in	1.13 in	0.75 in	8T-8924
	2 ¾ in	0.57 in	1.13 in	1.00 in	8C-6857
	3 in	0.58 in	1.13 in	1.25 in	7X-0368
	3 ¼ in	0.58 in	1.13 in	1.50 in	7X-0369
	3 ½ in	0.58 in	1.13 in	1.75 in	7X-0370
	3 ¾ in	0.58 in	1.13 in	2.00 in	7X-0371
	4 in	0.58 in	1.13 in	2.25 in	8C-8842
	4 ¼ in	0.58 in	1.13 in	2.50 in	7X-0372
	4 ½ in	0.58 in	1.13 in	2.75 in	8T-9311
	4 ¾ in	0.58 in	1.13 in	3.00 in	8T-8925
	5 in	0.58 in	1.13 in	3.25 in	7X-0375
	5 ½ in	0.58 in	1.13 in	3.75 in	7X-0373
	5 ¾ in	0.58 in	1.13 in	4.00 in	7X-0374
	6 in	0.58 in	1.13 in	4.25 in	8T-9312
	6 ½ in	0.58 in	1.13 in	4.50 in	7X-0377
	7 in	0.58 in	1.13 in	5.00 in	8T-9313
	7 ½ in	0.58 in	1.13 in	5.50 in	1J-8930
	8 in	0.58 in	1.13 in	6.00 in	5P-4135
	8 ½ in	0.58 in	1.13 in	6.50 in	7X-0378
	9 in	0.58 in	1.13 in	7.00 in	7X-3179
	10 in	0.58 in	1.13 in	8.00 in	8F-4225
	Nut				6V-8182
	Washer				8T-4994
⅝-9	1 ½ in	0.67 in	1.31 in	0.25 in	7X-0379
	1 ¾ in	0.67 in	1.31 in	0.37 in	7X-0380
	2 in	0.67 in	1.31 in	0.37 in	7X-0381
	2 ¼ in	0.67 in	1.31 in	0.37 in	7X-0382
	2 ½ in	0.67 in	1.31 in	0.50 in	8T-9400
	2 ¾ in	0.67 in	1.31 in	0.75 in	7X-0383
	3 in	0.67 in	1.31 in	1.00 in	7X-0384
	3 ¼ in	0.67 in	1.31 in	1.25 in	7X-0385
	3 ½ in	0.67 in	1.31 in	1.50 in	7X-0386

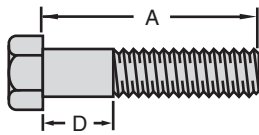
## Hex Head Bolts/Inch/Coarse Thread UNC/Zinc Plated

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
¾-9	3 ¾ in	0.67 in	1.31 in	1.75 in	7X-0453
	4 in	0.67 in	1.31 in	2.00 in	7X-0387
	4 ¼ in	0.67 in	1.31 in	2.25 in	7X-0455
	4 ½ in	0.67 in	1.31 in	2.50 in	7X-0388
	4 ¾ in	0.67 in	1.31 in	2.75 in	7X-0389
	5 in	0.67 in	1.31 in	3.00 in	7X-0390
	5 ½ in	0.67 in	1.31 in	3.50 in	7X-0391
	6 in	0.67 in	1.31 in	3.75 in	7X-0392
	6 ½ in	0.67 in	1.31 in	4.25 in	7X-0393
	7 in	0.67 in	1.31 in	4.75 in	7X-0394
	8 in	0.67 in	1.31 in	5.75 in	7X-0395
	8 ½ in	0.67 in	1.31 in	6.25 in	7X-0396
	9 in	0.67 in	1.31 in	6.75 in	7X-0397
	10 in	0.67 in	1.31 in	7.75 in	7X-0398
	Nut				7X-0449
	Washer				8C-6913
1-8	1 ¼ in	0.71 in	1.50 in	0.31 in	7X-0399
	1 ½ in	0.71 in	1.50 in	0.31 in	7X-0400
	1 ¾ in	0.71 in	1.50 in	0.37 in	7X-0401
	2 in	0.71 in	1.50 in	0.75 in	7X-0402
	2 ¼ in	0.71 in	1.50 in	0.25 in	7X-0403
	2 ½ in	0.71 in	1.50 in	0.50 in	7X-0404
	2 ¾ in	0.71 in	1.50 in	0.50 in	7X-0405
	3 in	0.71 in	1.50 in	0.75 in	7X-0406
	3 ¼ in	0.71 in	1.50 in	1.00 in	7X-0407
	3 ½ in	0.71 in	1.50 in	1.25 in	7X-0408
	3 ¾ in	0.71 in	1.50 in	1.50 in	8T-8927
	4 in	0.71 in	1.50 in	1.75 in	7X-0410
	4 ¼ in	0.71 in	1.50 in	2.00 in	7X-0411
	4 ½ in	0.71 in	1.50 in	2.25 in	8C-8843
	4 ¾ in	0.71 in	1.50 in	2.50 in	7X-0412
	5 in	0.71 in	1.50 in	2.75 in	8C-8844
	5 ½ in	0.71 in	1.50 in	3.25 in	7X-0443
	6 in	0.71 in	1.50 in	3.75 in	1J-5929
	6 ½ in	0.71 in	1.50 in	4.00 in	7X-0444
	7 in	0.71 in	1.50 in	4.50 in	7X-0413
	7 ½ in	0.71 in	1.50 in	5.00 in	7X-0414
	8 in	0.71 in	1.50 in	5.50 in	7X-0415
	8 ½ in	0.71 in	1.50 in	6.00 in	7X-0416
	9 in	0.71 in	1.50 in	6.50 in	7X-0417
	9 ½ in	0.71 in	1.50 in	7.00 in	7X-0418
	10 in	0.71 in	1.50 in	7.50 in	7X-0419
	Nut				6V-8190
	Washer				8T-5361
1 ½-7	2 in	0.72 in	1.69 in	0.25 in	7X-0420
	3 in	0.72 in	1.69 in	0.50 in	7X-0421
	3 ½ in	0.72 in	1.69 in	1.00 in	7X-0422
	4 ½ in	0.72 in	1.69 in	2.00 in	7X-0423
	5 ¼ in	0.72 in	1.69 in	3.00 in	7X-0424
	6 in	0.72 in	1.69 in	3.50 in	7X-0425
	6 ½ in	0.72 in	1.69 in	3.75 in	7X-0426
	Nut				7X-0450

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
1 ⅝-7	Washer				7X-0531
1 ¼-7	3 ½ in	0.81 in	1.87 in	0.75 in	7X-0427
	4 in	0.81 in	1.87 in	1.25 in	7X-0428
	4 ½ in	0.81 in	1.87 in	1.75 in	7X-0429
	5 in	0.81 in	1.87 in	2.25 in	7X-0445
	5 ½ in	0.81 in	1.87 in	2.75 in	7X-0430
	6 in	0.81 in	1.87 in	3.25 in	7X-0431
	6 ½ in	0.81 in	1.87 in	3.50 in	7X-0432
	7 in	0.81 in	1.87 in	4.00 in	7X-0433
	8 in	0.81 in	1.87 in	5.00 in	7X-0434
	8 ½ in	0.81 in	1.87 in	5.50 in	7X-0435
	9 in	0.81 in	1.87 in	6.00 in	7X-0436
	9 ½ in	0.81 in	1.87 in	6.50 in	7X-0437
	Nut				7X-0451
	Washer				7X-0533
1 ½-6	3 ½ in	0.97 in	2.25 in	0.40 in	7X-0438
	4 ½ in	0.97 in	2.25 in	1.25 in	138-8455
	5 in	0.97 in	2.25 in	1.75 in	7X-0439
	6 in	0.97 in	2.25 in	2.50 in	131-2627
	Nut				7X-0452

# Bolts

## Self-Locking Bolts/Inch/Coarse Thread UNC



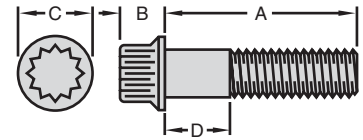
Hardware

Thread Size (in - TPI)	A Bolt Length	D Grip Length	Part Number
¼-20	¾ in	0.06 in	032-5691
	½ in	0.06 in	031-0214
	¾ in	0.13 in	031-0215
	¾ in	0.13 in	031-0216
	7⁄8 in	0.10 in	031-0217
	1 in	0.13 in	031-5085
	1 ⅛ in	0.37 in	6V-7634
	1 ¼ in	0.13 in	6V-6845
	4 in	3.25 in	3J-8919
⅜-18	½ in	0.06 in	032-5473
	¾ in	0.13 in	030-2135
	¾ in	0.13 in	031-4630
	1 in	0.13 in	034-4160
	1 ¼ in	0.37 in	031-2701
	1 ½ in	0.09 in	6V-4414
	1 ⅝ in	0.87 in	1N-7543
	2 in	1.13 in	6V-9665
	2 ¼ in	1.37 in	6V-2664
	2 ½ in	1.63 in	6V-0825
	3 in	2.13 in	6V-3314
¾-16	½ in	0.09 in	031-0218
	¾ in	0.13 in	6K-4936
	¾ in	0.13 in	5K-9107
	7⁄8 in	0.13 in	030-8535
	1 in	0.13 in	5D-0353
	1 ⅛ in	0.31 in	034-3557
	1 ¼ in	0.25 in	2J-3118
	1 ½ in	0.50 in	030-8537
	1 ¾ in	0.75 in	031-0219
	2 in	1.00 in	5D-9844
	2 ¼ in	1.25 in	5P-8048
	2 ½ in	1.50 in	031-0220
	3 in	2.00 in	5K-5552
	3 ½ in	2.50 in	6V-8819
7⁄16-14	¾ in	0.13 in	7K-0734
	1 in	0.13 in	034-0106
	1 ¼ in	0.13 in	031-2523
	1 ½ in	0.37 in	5P-8282
	2 in	0.87 in	5P-8864
½-13	¾ in	0.13 in	031-0221
	7⁄8 in	0.13 in	6K-5718
	1 in	0.13 in	6K-7917
	1 ⅛ in	0.13 in	5K-8454
	1 ¼ in	0.31 in	030-8538
	1 ½ in	0.25 in	5K-7143
	1 ¾ in	0.44 in	031-0223
	2 in	0.75 in	6V-0314
	2 ¼ in	1.00 in	030-9620

Thread Size (in - TPI)	A Bolt Length	D Grip Length	Part Number
½-13	2 ¾ in	1.50 in	034-0172
	3 ¼ in	2.00 in	5P-8091
¾-11	1 in	0.19 in	5K-7138
	1 ¼ in	0.13 in	6K-0138
	1 ½ in	0.19 in	030-7335
	1 ¾ in	0.25 in	7K-4370
	2 in	0.50 in	6K-0137
	2 ¼ in	0.75 in	5P-7034
	2 ½ in	0.63 in	5P-9118
	2 ¾ in	1.25 in	6V-1997
	3 in	1.50 in	032-0676
	3 ¾ in	2.25 in	5P-7782
¾-10	1 ¼ in	0.31 in	031-2712
	1 ½ in	0.31 in	031-9253
	1 ¾ in	0.31 in	031-0224
	2 in	0.31 in	031-0225
	2 ¼ in	0.50 in	5P-3882
	2 ½ in	0.75 in	6K-1304
	3 in	1.25 in	5P-6712
	3 ½ in	1.75 in	6V-1684
	4 ½ in	2.75 in	5P-1910
¾-9	2 ½ in	0.50 in	5P-7688
1-8	2 ¾ in	0.50 in	5P-7783
	3 ½ in	1.25 in	7K-9272
	5 ½ in	3.25 in	032-0679
1 ⅝-7	3 ½ in	1.00 in	7J-9897



## 12 Point Head Bolts/Inch/Coarse &amp; Fine Thread

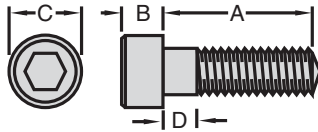


Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
Coarse Thread					
¼-20	⅛ in	0.27 in	0.38 in	0.11 in	9S-5033
⅝-18	¾ in	0.31 in	0.47 in	0.11 in	1T-0416
	1 in	0.31 in	0.47 in	0.11 in	1T-0414
	1 ¼ in	0.31 in	0.47 in	0.11 in	6L-4783
	1 ½ in	0.31 in	0.47 in	0.11 in	8M-8162
	1 ½ in	0.31 in	0.47 in	0.63 in	2N-7517
	1 ¾ in	0.31 in	0.47 in	0.63 in	6L-4784
	2 ½ in	0.31 in	0.47 in	1.13 in	3S-4346
	3 in	0.31 in	0.47 in	1.63 in	2S-5818
	3 ½ in	0.31 in	0.47 in	2.25 in	2S-0629
	4 ½ in	0.31 in	0.47 in	3.25 in	9M-4288
	5 in	0.31 in	0.47 in	3.63 in	9M-4289
	5 ½ in	0.31 in	0.47 in	4.25 in	1S-9810
	6 in	0.31 in	0.47 in	4.63 in	1S-9811
	6 ½ in	0.31 in	0.47 in	5.25 in	4S-5845
¾-16	¾ in	0.38 in	0.56 in	0.25 in	1T-0822
	1 in	0.38 in	0.56 in	0.25 in	1T-0765
	1 ⅛ in	0.38 in	0.56 in	0.50 in	4D-5239
	1 ¼ in	0.38 in	0.56 in	0.25 in	1T-0720
	2 in	0.38 in	0.56 in	0.50 in	3S-1307
	2 ¼ in	0.38 in	0.56 in	1.00 in	3S-0127
	2 ¾ in	0.38 in	0.56 in	1.50 in	2S-3567
	3 in	0.38 in	0.56 in	1.50 in	4S-9002
	3 ¾ in	0.38 in	0.56 in	2.50 in	8M-2518
⅞-14	1 ½ in	0.44 in	0.66 in	0.14 in	6K-3771
	2 ¼ in	0.44 in	0.66 in	0.63 in	6K-3772
½-13	1 in	0.50 in	0.75 in	0.16 in	9M-6590
	1 ¼ in	0.50 in	0.75 in	0.16 in	8M-2530
	1 ½ in	0.50 in	0.75 in	0.16 in	4K-5175
	2 in	0.50 in	0.75 in	0.16 in	5J-5793
	2 ¼ in	0.50 in	0.75 in	0.75 in	6J-2515
	2 ½ in	0.50 in	0.75 in	1.00 in	7K-6058
	2 ¾ in	0.50 in	0.75 in	0.75 in	9S-9739
	3 ½ in	0.50 in	0.75 in	1.50 in	5J-5794
	4 ½ in	0.50 in	0.75 in	3.00 in	8D-0648
⅝-11	⅞ in	0.62 in	0.94 in	0.19 in	1S-9808
	1 in	0.62 in	0.94 in	0.19 in	9S-8889
	1 ¼ in	0.62 in	0.94 in	0.19 in	8S-2332
	2 in	0.62 in	0.94 in	0.19 in	8S-2331
	2 ¼ in	0.62 in	0.94 in	0.50 in	6M-9149
	2 ½ in	0.62 in	0.94 in	0.75 in	031-1382
	3 in	0.62 in	0.94 in	1.25 in	031-3185
	3 ¾ in	0.62 in	0.94 in	1.50 in	6J-3913
	3 ½ in	0.62 in	0.94 in	1.50 in	7K-3116
¾-10	1 ½ in	0.75 in	1.13 in	0.25 in	6J-3991
	1 ¾ in	0.75 in	1.13 in	0.19 in	6M-8796

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
Fine Thread					
⅝-24	¾ in	0.31 in	0.47 in	0.08 in	5D-8269
¾-24	⅝ in	0.38 in	0.56 in	0.08 in	1T-0510
	1 in	0.38 in	0.56 in	0.08 in	1T-0417
	1 ¼ in	0.38 in	0.56 in	0.08 in	1T-0448
	1 ¾ in	0.38 in	0.56 in	0.50 in	1T-0954
	2 ½ in	0.38 in	0.56 in	1.00 in	5K-4451
⅞-20	2 ¾ in	0.44 in	0.66 in	1.25 in	5J-7820
½-20	3 in	0.50 in	0.75 in	1.50 in	8S-0509
⅝-18	1 in	0.62 in	0.94 in	0.19 in	9S-8890
	2 ½ in	0.62 in	0.94 in	0.75 in	9S-8891
	3 in	0.62 in	0.94 in	0.75 in	2P-1956
¾-16	3 ¼ in	0.75 in	1.13 in	1.00 in	9S-8892
⅞-14	2 ½ in	0.88 in	1.31 in	0.16 in	2N-5014
1-14	2 ½ in	1.00 in	1.50 in	0.75 in	2N-5006
	4 in	1.00 in	1.50 in	1.00 in	9S-8893

# Bolts

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



Hardware

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
Coarse Thread					
No. 4-40	⅜ in	0.11 in	0.19 in	0.05 in	2S-9255
No. 8-32	½ in	0.16 in	0.27 in	0.06 in	6D-3897
	¾ in	0.16 in	0.27 in	0.06 in	7D-5473
	1 in	0.16 in	0.27 in	0.06 in	9M-4704
No. 10-24	½ in	0.19 in	0.31 in	0.08 in	5S-2671
	⅝ in	0.19 in	0.31 in	0.08 in	2H-0191
	¾ in	0.19 in	0.31 in	0.08 in	3L-2540
	⅞ in	0.19 in	0.31 in	0.08 in	9F-1707
	1 ¼ in	0.19 in	0.31 in	0.38 in	7L-0688
	1 ½ in	0.19 in	0.31 in	0.38 in	5J-1714
	1 ¾ in	0.19 in	0.31 in	0.88 in	2N-0402
	2 in	0.25 in	0.38 in	0.11 in	7J-0637
	2 ½ in	0.25 in	0.38 in	0.11 in	8H-0708
¼-20	⅝ in	0.25 in	0.38 in	0.11 in	8H-3128
	¾ in	0.25 in	0.38 in	0.11 in	8H-3127
	⅞ in	0.25 in	0.38 in	0.11 in	6L-5897
	1 in	0.25 in	0.38 in	0.11 in	8H-0707
	1 ¼ in	0.25 in	0.38 in	0.09 in	4L-7124
	1 ½ in	0.25 in	0.38 in	0.50 in	2H-3764
	1 ¾ in	0.25 in	0.38 in	0.50 in	5L-9018
	2 in	0.25 in	0.38 in	1.00 in	6L-1596
	2 ¼ in	0.25 in	0.38 in	1.00 in	6L-5551
	2 ½ in	0.25 in	0.38 in	1.50 in	6H-3958
	2 ¾ in	0.25 in	0.38 in	1.50 in	6J-2819
	3 in	0.31 in	0.47 in	0.11 in	9F-5975
	1 in	0.31 in	0.47 in	0.11 in	1T-0284
	1 ¼ in	0.31 in	0.47 in	0.11 in	9F-6641
⅝-18	1 ½ in	0.31 in	0.47 in	0.11 in	5J-5314
	1 ¾ in	0.31 in	0.47 in	0.63 in	7S-6701
	2 in	0.31 in	0.47 in	0.63 in	9S-7381
	2 ¼ in	0.31 in	0.47 in	1.63 in	2L-1352
	3 ½ in	0.31 in	0.47 in	2.25 in	9S-7382
	¾ in	0.38 in	0.56 in	0.25 in	1L-0509
	⅞ in	0.38 in	0.56 in	0.25 in	4S-5565
	1 in	0.38 in	0.56 in	0.25 in	2D-4534
¾-16	1 ¼ in	0.38 in	0.56 in	0.25 in	2J-5245
	1 ½ in	0.38 in	0.56 in	0.25 in	4D-3120
	1 ¾ in	0.38 in	0.56 in	0.50 in	5S-2586
	2 in	0.38 in	0.56 in	0.50 in	1L-8793
	2 ¼ in	0.38 in	0.56 in	1.00 in	2L-3793
	2 ½ in	0.38 in	0.56 in	1.00 in	1Y-7574
	2 ¾ in	0.38 in	0.56 in	1.50 in	2K-6073
	3 ¼ in	0.38 in	0.56 in	2.00 in	4B-3835
	4 in	0.38 in	0.56 in	2.50 in	3B-7614
	5 in	0.38 in	0.56 in	3.50 in	8L-3837
	6 in	0.38 in	0.56 in	4.50 in	2D-8992

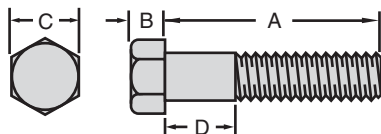
Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
⅞-14	⅞ in	0.44 in	0.66 in	0.14 in	4J-1096
	1 ¼ in	0.44 in	0.66 in	0.14 in	7B-7525
	2 in	0.44 in	0.66 in	0.63 in	2N-0412
	2 ½ in	0.44 in	0.66 in	1.13 in	3J-4567
½-13	½ in	0.50 in	0.75 in	0.16 in	021-7916
	¾ in	0.50 in	0.75 in	0.16 in	013-8289
	1 in	0.50 in	0.75 in	0.16 in	5H-4893
	1 ¼ in	0.50 in	0.75 in	0.16 in	5F-8807
	1 ½ in	0.50 in	0.75 in	0.16 in	3F-7147
	1 ¾ in	0.50 in	0.75 in	0.16 in	5S-2256
	2 in	0.50 in	0.75 in	0.19 in	8B-7997
	2 ¼ in	0.50 in	0.75 in	0.75 in	2L-0041
	2 ½ in	0.50 in	0.75 in	0.75 in	8B-7979
	2 ¾ in	0.50 in	0.75 in	0.75 in	5S-2389
	3 in	0.50 in	0.75 in	1.50 in	4L-8515
	3 ¼ in	0.50 in	0.75 in	1.50 in	6D-0119
	3 ½ in	0.50 in	0.75 in	1.50 in	8B-7998
	5 in	0.50 in	0.75 in	3.00 in	5S-2388
	6 in	0.50 in	0.75 in	4.50 in	8L-4612
	7 in	0.50 in	0.75 in	5.25 in	7L-0654
⅜-11	1 ¼ in	0.62 in	0.94 in	0.19 in	5S-2201
	2 in	0.62 in	0.94 in	0.19 in	5S-2457
	3 in	0.62 in	0.94 in	0.75 in	4D-0242
	4 in	0.62 in	0.94 in	2.25 in	8L-4743
	4 ½ in	0.62 in	0.94 in	2.25 in	6H-3959
	5 ½ in	0.62 in	0.94 in	3.75 in	7L-8304
¼-10	1 ½ in	0.75 in	1.12 in	0.20 in	7L-9787
	1 ¾ in	0.75 in	1.12 in	0.20 in	5F-5321
	2 ½ in	0.75 in	1.12 in	0.20 in	2N-6170
	3 ¼ in	0.75 in	1.12 in	1.00 in	2N-1746
	3 ½ in	0.75 in	1.12 in	1.00 in	9S-4920
⅞-9	2 ½ in	0.88 in	1.31 in	0.22 in	8L-4638
	4 in	0.88 in	1.31 in	1.00 in	8L-9299
	4 ½ in	0.88 in	1.31 in	3.00 in	8L-4717
1-8	2 ½ in	1.00 in	1.50 in	0.25 in	8L-6059
	3 in	1.00 in	1.50 in	0.25 in	7L-9198
	5 in	1.00 in	1.50 in	2.00 in	8L-3745
Fine Thread					
No. 10-32	⅝ in	0.19 in	0.31 in	0.06 in	3K-6168
	⅞ in	0.19 in	0.31 in	0.06 in	8H-4959
¼-28	½ in	0.25 in	0.38 in	0.08 in	2K-8407
	⅝ in	0.25 in	0.38 in	0.08 in	021-7941
	¾ in	0.25 in	0.38 in	0.08 in	3H-1392
	⅞ in	0.25 in	0.38 in	0.08 in	8S-1571
⅝-24	¾ in	0.31 in	0.47 in	0.08 in	3F-8156
¾-24	¾ in	0.38 in	0.56 in	0.08 in	013-8253
	⅞ in	0.38 in	0.56 in	0.08 in	4L-1507

## Hex Socket Head Screw Bolts/Inch/Coarse &amp; Fine Thread

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
¾-24	1 in	0.38 in	0.56 in	0.08 in	5L-4183
	1 ¼ in	0.38 in	0.56 in	0.08 in	1T-0131
	1 ½ in	0.38 in	0.56 in	0.19 in	5L-8894
	1 ¾ in	0.38 in	0.56 in	0.50 in	013-8257
	2 in	0.38 in	0.56 in	0.50 in	013-8258
	2 ¼ in	0.38 in	0.56 in	1.00 in	013-8259
	5 ¾ in	0.38 in	0.56 in	4.75 in	8J-1582
⅞-20	½ in	0.44 in	0.66 in	0.11 in	8S-2696
	1 ¾ in	0.44 in	0.66 in	0.11 in	8F-1948
½-20	½ in	0.50 in	0.75 in	0.11 in	021-7956
	¾ in	0.50 in	0.75 in	0.11 in	013-8306
	1 in	0.50 in	0.75 in	0.11 in	013-8307
	1 ¼ in	0.50 in	0.75 in	0.11 in	1F-1375
	1 ½ in	0.50 in	0.75 in	0.11 in	8F-0069
	1 ¾ in	0.50 in	0.75 in	0.11 in	013-8310
	2 in	0.50 in	0.75 in	0.11 in	2H-3763
	2 ¼ in	0.50 in	0.75 in	0.75 in	013-8312
	3 in	0.50 in	0.75 in	1.50 in	013-8315
⅝-18	2 ¼ in	0.62 in	0.94 in	0.11 in	9S-9078
¾-16	2 in	0.75 in	1.12 in	0.13 in	061-8718

# Bolts

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



Hardware

Thread Size (dia × pitch)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
M6 × 1.00	12 mm	4 mm	10 mm	2 mm	8T-0639
	16 mm	4 mm	10 mm	3 mm	6V-8837
	20 mm	4 mm	10 mm	3 mm	6V-8214
	25 mm	4 mm	10 mm	3 mm	6V-8490
	30 mm	4 mm	10 mm	12 mm	8T-0640
	35 mm	4 mm	10 mm	17 mm	6V-2315
	40 mm	4 mm	10 mm	22 mm	2W-9499
	45 mm	4 mm	10 mm	6 mm	6V-7728
	50 mm	4 mm	10 mm	33 mm	8T-0275
	60 mm	4 mm	10 mm	42 mm	8T-5066
	70 mm	4 mm	10 mm	52 mm	6V-8359
	80 mm	4 mm	10 mm	62 mm	6V-9798
	Nut				6V-8225
	Washer				9X-8267
M8 × 1.25	12 mm	6 mm	13 mm	3 mm	6V-2316
	16 mm	6 mm	13 mm	3 mm	6V-5215
	20 mm	6 mm	13 mm	3 mm	6V-5217
	25 mm	6 mm	13 mm	3 mm	6V-3940
	30 mm	6 mm	13 mm	8 mm	6V-2317
	35 mm	6 mm	13 mm	13 mm	6V-5218
	40 mm	6 mm	13 mm	18 mm	6V-5219
	45 mm	6 mm	13 mm	23 mm	8T-0276
	50 mm	6 mm	13 mm	28 mm	6V-3918
	60 mm	6 mm	13 mm	38 mm	8T-0100
	70 mm	6 mm	13 mm	48 mm	5P-8347
	80 mm	6 mm	13 mm	58 mm	6V-5221
	90 mm	6 mm	13 mm	68 mm	8T-0292
	100 mm	6 mm	13 mm	78 mm	6V-5223
	110 mm	6 mm	13 mm	88 mm	6V-3821
	120 mm	6 mm	13 mm	98 mm	6V-9607
	130 mm	6 mm	13 mm	108 mm	7X-0457
	140 mm	6 mm	13 mm	112 mm	7X-0870
	150 mm	6 mm	13 mm	122 mm	8C-4984
	Nut				5P-7970
	Washer				9M-1974
M10 × 1.50	12 mm	7 mm	16 mm	5 mm	6V-8084
	16 mm	7 mm	16 mm	3 mm	6V-8212
	20 mm	7 mm	16 mm	5 mm	6V-6317
	25 mm	7 mm	16 mm	5 mm	6V-4248
	30 mm	7 mm	16 mm	5 mm	6V-1820
	35 mm	7 mm	16 mm	5 mm	6V-3822
	40 mm	7 mm	16 mm	14 mm	6V-5842
	45 mm	7 mm	16 mm	19 mm	6V-5843
	50 mm	7 mm	16 mm	24 mm	6V-4249
	60 mm	7 mm	16 mm	34 mm	6V-5230
	70 mm	7 mm	16 mm	44 mm	6V-7981
	80 mm	7 mm	16 mm	54 mm	8T-0643

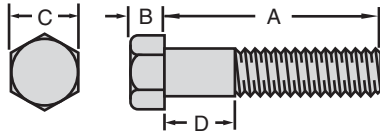
Thread Size (dia × pitch)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
M10 × 1.50	90 mm	7 mm	16 mm	64 mm	8T-0644
	100 mm	7 mm	16 mm	74 mm	6V-1819
	110 mm	7 mm	16 mm	78 mm	8T-0355
	120 mm	7 mm	16 mm	94 mm	8T-5030
	140 mm	7 mm	16 mm	108 mm	8C-2926
	150 mm	7 mm	16 mm	118 mm	8T-9085
	160 mm	7 mm	16 mm	128 mm	8T-0356
	180 mm	7 mm	16 mm	148 mm	8T-7950
	200 mm	7 mm	16 mm	168 mm	8T-6854
	Nut				2Y-5829
	Washer				6V-5839
M12 × 1.75	16 mm	8 mm	18 mm	5 mm	6V-8177
	20 mm	8 mm	18 mm	5 mm	8T-0293
	25 mm	8 mm	18 mm	5 mm	6A-5591
	30 mm	8 mm	18 mm	5 mm	6V-3668
	35 mm	8 mm	18 mm	5 mm	6V-8675
	40 mm	8 mm	18 mm	5 mm	6V-8197
	45 mm	8 mm	18 mm	15 mm	6V-5684
	50 mm	8 mm	18 mm	20 mm	6V-7673
	60 mm	8 mm	18 mm	30 mm	6V-3823
	70 mm	8 mm	18 mm	40 mm	6V-8336
	80 mm	8 mm	18 mm	50 mm	6V-5696
	90 mm	8 mm	18 mm	60 mm	8T-0372
	100 mm	8 mm	18 mm	70 mm	8T-0106
	110 mm	8 mm	18 mm	80 mm	8T-0646
	120 mm	8 mm	18 mm	90 mm	6V-8004
	140 mm	8 mm	18 mm	104 mm	7X-0909
	150 mm	8 mm	18 mm	114 mm	8T-5044
M14 × 2.00	160 mm	8 mm	18 mm	124 mm	8T-0162
	180 mm	8 mm	18 mm	144 mm	8T-6991
	200 mm	8 mm	18 mm	147 mm	8C-3226
	Nut				6V-8149
	Washer				5P-8245
	20 mm	9 mm	21 mm	6 mm	8T-0373
	25 mm	9 mm	21 mm	6 mm	8T-0296
	30 mm	9 mm	21 mm	6 mm	8T-0297
	35 mm	9 mm	21 mm	6 mm	6V-8550
	45 mm	9 mm	21 mm	6 mm	8T-0226
	50 mm	9 mm	21 mm	16 mm	6V-5685
	60 mm	9 mm	21 mm	26 mm	8T-3666
	80 mm	9 mm	21 mm	46 mm	8T-3653
	90 mm	9 mm	21 mm	56 mm	8C-0537
	100 mm	9 mm	21 mm	66 mm	8T-0298
	Nut				139-6366
M16 × 2.00	25 mm	10 mm	24 mm	4 mm	6V-5224
	30 mm	10 mm	24 mm	3 mm	8T-0299
	35 mm	10 mm	24 mm	4 mm	6V-5844

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

Thread Size (dia × pitch)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number	Thread Size (dia × pitch)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
M16 × 2.00	40 mm	10 mm	24 mm	5 mm	6V-4429	M24 × 3.00	200 mm	15 mm	36 mm	140 mm	6V-8198
	45 mm	10 mm	24 mm	5 mm	8T-0375		Nut				7X-0851
	50 mm	10 mm	24 mm	12 mm	6V-5686		Washer				6V-8237
	60 mm	10 mm	24 mm	22 mm	6V-3303	M30 × 3.50	80 mm	19 mm	46 mm	14 mm	8C-3222
	70 mm	10 mm	24 mm	32 mm	8T-0357		90 mm	19 mm	46 mm	24 mm	8C-3411
	80 mm	10 mm	24 mm	42 mm	8T-0281		100 mm	19 mm	46 mm	34 mm	8T-0368
	90 mm	10 mm	24 mm	52 mm	8T-0358		110 mm	19 mm	46 mm	44 mm	8T-0283
	100 mm	10 mm	24 mm	62 mm	8T-0207		120 mm	19 mm	46 mm	54 mm	8T-0369
	110 mm	10 mm	24 mm	72 mm	8T-0649		140 mm	19 mm	46 mm	68 mm	8T-0370
	120 mm	10 mm	24 mm	82 mm	8T-0282		160 mm	19 mm	46 mm	88 mm	8C-3236
	130 mm	10 mm	24 mm	86 mm	8T-0359		180 mm	19 mm	46 mm	108 mm	8T-6624
	140 mm	10 mm	24 mm	96 mm	6V-7675		Nut				8T-1583
	150 mm	10 mm	24 mm	106 mm	6V-8154		Washer				9X-8399
	160 mm	10 mm	24 mm	116 mm	8T-0650						
	180 mm	10 mm	24 mm	136 mm	8T-5002						
	Nut				8T-1757						
	Washer				9X-8268						
M20 × 2.50	30 mm	13 mm	30 mm	4 mm	8T-0651						
	35 mm	13 mm	30 mm	4 mm	8T-0300						
	40 mm	13 mm	30 mm	5 mm	6V-7729						
	45 mm	13 mm	30 mm	6 mm	8T-0652						
	50 mm	13 mm	30 mm	4 mm	6V-3531						
	60 mm	13 mm	30 mm	14 mm	6V-3532						
	70 mm	13 mm	30 mm	24 mm	6V-5845						
	80 mm	13 mm	30 mm	34 mm	6V-3669						
	90 mm	13 mm	30 mm	44 mm	8T-0360						
	100 mm	13 mm	30 mm	54 mm	6V-9667						
	110 mm	13 mm	30 mm	64 mm	8T-0362						
	120 mm	13 mm	30 mm	74 mm	8T-0070						
	130 mm	13 mm	30 mm	78 mm	8T-0655						
	140 mm	13 mm	30 mm	88 mm	6V-9167						
	150 mm	13 mm	30 mm	98 mm	8T-0656						
	160 mm	13 mm	30 mm	108 mm	8T-0657						
	180 mm	13 mm	30 mm	128 mm	8T-0658						
	200 mm	13 mm	30 mm	148 mm	6V-8569						
	Nut				6V-7742						
	Washer				8T-3282						
M24 × 3.00	35 mm	15 mm	36 mm	8 mm	8T-0662						
	40 mm	15 mm	36 mm	8 mm	8T-0661						
	45 mm	15 mm	36 mm	8 mm	8T-0663						
	50 mm	15 mm	36 mm	8 mm	6V-9199						
	70 mm	15 mm	36 mm	8 mm	8T-0664						
	80 mm	15 mm	36 mm	26 mm	6V-8133						
	90 mm	15 mm	36 mm	36 mm	8T-0666						
	100 mm	15 mm	36 mm	46 mm	8T-0667						
	110 mm	15 mm	36 mm	56 mm	8T-0668						
	120 mm	15 mm	36 mm	66 mm	6V-8132						
	130 mm	15 mm	36 mm	70 mm	8T-0669						
	140 mm	15 mm	36 mm	80 mm	8T-0670						
	150 mm	15 mm	36 mm	90 mm	8T-0671						
	160 mm	15 mm	36 mm	100 mm	8T-0672						
	180 mm	15 mm	36 mm	120 mm	8T-0674						

# Bolts

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



Hardware

Thread Size (dia × pitch)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
M6 × 1.00	12 mm	4 mm	10 mm	2 mm	8T-4171
	16 mm	4 mm	10 mm	3 mm	5C-9553
	20 mm	4 mm	10 mm	3 mm	8T-4138
	25 mm	4 mm	10 mm	2 mm	6V-7357
	30 mm	4 mm	10 mm	12 mm	8T-4971
	35 mm	4 mm	10 mm	17 mm	7X-2533
	40 mm	4 mm	10 mm	22 mm	8C-8451
	45 mm	4 mm	10 mm	6 mm	8T-2947
	50 mm	4 mm	10 mm	32 mm	7X-2534
	60 mm	4 mm	10 mm	42 mm	7X-2535
	70 mm	4 mm	10 mm	52 mm	8T-3844
	80 mm	4 mm	10 mm	62 mm	8T-6974
	Nut				5C-2890
	Washer				9X-8256
M8 × 1.25	12 mm	6 mm	13 mm	3 mm	8T-4199
	16 mm	6 mm	13 mm	3 mm	8T-4200
	20 mm	6 mm	13 mm	3 mm	8T-4189
	25 mm	6 mm	13 mm	3 mm	8T-4908
	30 mm	6 mm	13 mm	8 mm	8T-7547
	35 mm	6 mm	13 mm	13 mm	7X-2537
	40 mm	6 mm	13 mm	3 mm	8T-4197
	45 mm	6 mm	13 mm	23 mm	7X-0818
	50 mm	6 mm	13 mm	28 mm	8T-6912
	60 mm	6 mm	13 mm	38 mm	8T-6869
	70 mm	6 mm	13 mm	48 mm	8T-6870
	80 mm	6 mm	13 mm	58 mm	8T-3647
	90 mm	6 mm	13 mm	68 mm	8T-4177
	100 mm	6 mm	13 mm	78 mm	7X-2538
	110 mm	6 mm	13 mm	88 mm	7X-2539
	120 mm	6 mm	13 mm	98 mm	7X-2540
	130 mm	6 mm	13 mm	108 mm	108-2989
	140 mm	6 mm	13 mm	112 mm	7X-2541
	150 mm	6 mm	13 mm	122 mm	7X-2542
	160 mm	6 mm	13 mm	128 mm	8T-7352
	Nut				5C-7261
	Washer				8T-4224
M10 × 1.50	12 mm	7 mm	16 mm	5 mm	7X-2621
	16 mm	7 mm	16 mm	5 mm	8T-4191
	20 mm	7 mm	16 mm	5 mm	8T-4137
	25 mm	7 mm	16 mm	5 mm	8T-4136
	30 mm	7 mm	16 mm	5 mm	8T-4195
	35 mm	7 mm	16 mm	5 mm	8T-4196
	40 mm	7 mm	16 mm	14 mm	8T-4186
	45 mm	7 mm	16 mm	19 mm	8T-4182
	50 mm	7 mm	16 mm	24 mm	8T-4185
	60 mm	7 mm	16 mm	34 mm	8T-6466
	70 mm	7 mm	16 mm	44 mm	8T-5005

Thread Size (dia × pitch)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
M10 × 1.50	80 mm	7 mm	16 mm	54 mm	8T-4172
	90 mm	7 mm	16 mm	64 mm	8T-4178
	100 mm	7 mm	16 mm	74 mm	8T-4198
	110 mm	7 mm	16 mm	84 mm	8T-6685
	120 mm	7 mm	16 mm	94 mm	7X-2543
	130 mm	7 mm	16 mm	98 mm	8T-5436
	140 mm	7 mm	16 mm	108 mm	7X-2544
	150 mm	7 mm	16 mm	118 mm	7X-2545
	160 mm	7 mm	16 mm	128 mm	8T-6408
	180 mm	7 mm	16 mm	148 mm	7X-2546
	200 mm	7 mm	16 mm	168 mm	7X-2547
	Nut				8T-4133
	Washer				8T-4121
M12 × 1.75	16 mm	8 mm	18 mm	5 mm	7X-2548
	20 mm	8 mm	18 mm	5 mm	8T-4179
	25 mm	8 mm	18 mm	5 mm	8T-4192
	30 mm	8 mm	18 mm	5 mm	8T-4139
	35 mm	8 mm	18 mm	5 mm	8T-4956
	40 mm	8 mm	18 mm	5 mm	8T-4183
	45 mm	8 mm	18 mm	15 mm	8T-4184
	50 mm	8 mm	18 mm	20 mm	8T-4194
	60 mm	8 mm	18 mm	30 mm	8T-4910
	70 mm	8 mm	18 mm	40 mm	8T-4648
	80 mm	8 mm	18 mm	50 mm	8T-6868
	90 mm	8 mm	18 mm	60 mm	8T-4176
	100 mm	8 mm	18 mm	70 mm	7X-2549
	110 mm	8 mm	18 mm	80 mm	7X-2550
	120 mm	8 mm	18 mm	90 mm	8T-5041
	130 mm	8 mm	18 mm	94 mm	8T-5001
	140 mm	8 mm	18 mm	104 mm	8T-5412
	150 mm	8 mm	18 mm	114 mm	8T-5092
	160 mm	8 mm	18 mm	124 mm	8T-7930
	180 mm	8 mm	18 mm	144 mm	8T-7929
	200 mm	8 mm	18 mm	147 mm	7X-2551
	Nut				8T-4244
	Washer				8T-4223
M16 × 2.00	25 mm	10 mm	24 mm	4 mm	8T-4190
	30 mm	10 mm	24 mm	3 mm	7X-2552
	35 mm	10 mm	24 mm	4 mm	8T-4779
	40 mm	10 mm	24 mm	5 mm	7X-2553
	45 mm	10 mm	24 mm	5 mm	8T-7338
	50 mm	10 mm	24 mm	12 mm	8T-4193
	60 mm	10 mm	24 mm	22 mm	8T-4140
	70 mm	10 mm	24 mm	32 mm	7X-2554
	80 mm	10 mm	24 mm	42 mm	7X-2555
	90 mm	10 mm	24 mm	52 mm	8T-4175
	100 mm	10 mm	24 mm	56 mm	7X-2556



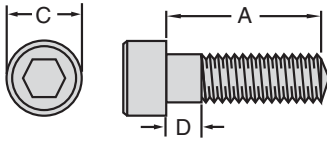
## Hex Head Bolts/Metric/Coarse Thread UNC/Zinc Plated

Thread Size (dia × pitch)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
M16 × 2.00	110 mm	10 mm	24 mm	72 mm	8T-4173
	120 mm	10 mm	24 mm	82 mm	8T-4174
	130 mm	10 mm	24 mm	86 mm	7X-2475
	140 mm	10 mm	24 mm	96 mm	7X-2557
	150 mm	10 mm	24 mm	106 mm	7X-2558
	160 mm	10 mm	24 mm	116 mm	7X-2559
	180 mm	10 mm	24 mm	136 mm	8T-6385
	200 mm	10 mm	24 mm	156 mm	8T-6383
	Nut				8T-4132
	Washer				8T-4122
M20 × 2.50	30 mm	13 mm	30 mm	4 mm	8T-4780
	35 mm	13 mm	30 mm	4 mm	7X-2561
	40 mm	13 mm	30 mm	5 mm	8T-5460
	45 mm	13 mm	30 mm	6 mm	7X-2562
	50 mm	13 mm	30 mm	4 mm	8T-6430
	60 mm	13 mm	30 mm	14 mm	7X-2563
	70 mm	13 mm	30 mm	24 mm	8T-4141
	80 mm	13 mm	30 mm	34 mm	8T-4187
	90 mm	13 mm	30 mm	44 mm	7X-2564
	100 mm	30 mm	30 mm	54 mm	7X-2565
	110 mm	13 mm	30 mm	64 mm	7X-2566
	120 mm	13 mm	30 mm	74 mm	8T-6381
	130 mm	13 mm	30 mm	78 mm	7X-2532
	140 mm	13 mm	30 mm	88 mm	8C-8478
	150 mm	13 mm	30 mm	98 mm	8T-4170
	160 mm	13 mm	30 mm	108 mm	7X-2488
	180 mm	13 mm	30 mm	128 mm	7X-2568
	200 mm	13 mm	30 mm	148 mm	7X-2569
	Nut				8T-4131
	Washer				8T-4123
M24 × 3.00	35 mm	15 mm	36 mm	8 mm	7X-2572
	40 mm	15 mm	36 mm	8 mm	7X-2573
	45 mm	15 mm	36 mm	8 mm	7X-2574
	50 mm	15 mm	36 mm	8 mm	8T-5379
	60 mm	15 mm	36 mm	8 mm	7X-2575
	70 mm	15 mm	36 mm	8 mm	7X-2576
	80 mm	15 mm	36 mm	26 mm	8T-5878
	90 mm	15 mm	36 mm	36 mm	7X-2577
	100 mm	15 mm	36 mm	46 mm	7X-2489
	110 mm	15 mm	36 mm	56 mm	7X-2454
	120 mm	15 mm	36 mm	66 mm	8T-0363
	130 mm	15 mm	36 mm	70 mm	8T-6380
	140 mm	15 mm	36 mm	80 mm	8T-4649
	150 mm	15 mm	36 mm	90 mm	8C-3290
	160 mm	15 mm	36 mm	100 mm	7X-2567
	180 mm	15 mm	36 mm	120 mm	7X-2465
	200 mm	15 mm	36 mm	140 mm	7X-2578
	Nut				8T-4001
	Washer				8T-4167
M30 × 3.50	50 mm	19 mm	46 mm	9 mm	9X-2199
	80 mm	19 mm	46 mm	14 mm	8C-8723

Thread Size (dia × pitch)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
M30 × 3.50	90 mm	19 mm	46 mm	24 mm	7X-2580
	100 mm	19 mm	46 mm	34 mm	7X-2581
	110 mm	19 mm	46 mm	44 mm	7X-2582
	120 mm	19 mm	46 mm	54 mm	7X-2583
	140 mm	19 mm	46 mm	68 mm	7X-2584
	160 mm	19 mm	46 mm	88 mm	7X-2585
	180 mm	19 mm	46 mm	108 mm	7X-2586
	Nut				8C-8722
	Washer				9X-8258

# Bolts

## Hex Socket Head Screw Bolts/Metric/Coarse Thread UNC



Hardware

Thread Size (dia × pitch)	A Bolt Length	C Head Width	D Grip Length	Part Number
M3 × 0.50	6 mm	6 mm	2 mm	8C-6365
	20 mm	6 mm	2 mm	8T-9006
M4 × 0.70	6 mm	7 mm	2 mm	095-0640
	10 mm	7 mm	2 mm	095-0641
	16 mm	7 mm	1 mm	8T-9405
	20 mm	7 mm	1 mm	8C-4982
	45 mm	7 mm	25 mm	101-4306
	65 mm	7 mm	51 mm	107-3198
M5 × 0.80	8 mm	9 mm	2 mm	096-5968
	10 mm	9 mm	2 mm	099-0822
	12 mm	9 mm	2 mm	099-2374
	14 mm	9 mm	2 mm	8C-6364
	16 mm	9 mm	2 mm	8C-8580
	20 mm	9 mm	2 mm	096-4833
	25 mm	9 mm	2 mm	096-5969
	35 mm	9 mm	13 mm	8T-6699
	40 mm	9 mm	18 mm	8T-0266
	45 mm	9 mm	23 mm	8T-3283
	50 mm	9 mm	28 mm	095-0642
	70 mm	9 mm	48 mm	9X-2536
M6 × 1.00	10 mm	10 mm	5 mm	9X-6153
	12 mm	10 mm	3 mm	8T-0267
	16 mm	10 mm	3 mm	6V-5683
	20 mm	10 mm	3 mm	8T-0269
	25 mm	10 mm	3 mm	3T-0849
	30 mm	10 mm	3 mm	8T-8442
	35 mm	10 mm	11 mm	1R-5396
	40 mm	10 mm	16 mm	6V-8653
	45 mm	10 mm	21 mm	8C-6965
	50 mm	10 mm	32 mm	8T-9534
	55 mm	10 mm	37 mm	095-0645
	60 mm	10 mm	36 mm	8T-2396
	65 mm	10 mm	41 mm	8T-2922
	70 mm	10 mm	46 mm	9X-2537
	80 mm	10 mm	56 mm	102-7364
	90 mm	10 mm	66 mm	8T-2397
M8 × 1.25	16 mm	13 mm	4 mm	6V-8202
	20 mm	13 mm	4 mm	8T-1158
	25 mm	13 mm	4 mm	5A-3604
	30 mm	13 mm	4 mm	6V-5192
	35 mm	13 mm	4 mm	6V-8337
	45 mm	13 mm	17 mm	8T-0338
	50 mm	13 mm	22 mm	3E-8025
	55 mm	13 mm	33 mm	9X-6154
	60 mm	13 mm	38 mm	8T-9535
	65 mm	13 mm	37 mm	096-0187
	70 mm	13 mm	42 mm	6V-8213

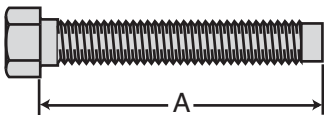
Thread Size (dia × pitch)	A Bolt Length	C Head Width	D Grip Length	Part Number
M8 × 1.25	80 mm	13 mm	58 mm	6V-5196
	90 mm	13 mm	62 mm	8T-2394
	100 mm	13 mm	72 mm	102-7365
	110 mm	13 mm	82 mm	8T-0339
	130 mm	13 mm	102 mm	3E-8006
	200 mm	13 mm	172 mm	9X-8269
M10 × 1.50	16 mm	16 mm	5 mm	096-4835
	20 mm	16 mm	5 mm	6V-3938
	25 mm	16 mm	5 mm	8T-1159
	30 mm	16 mm	3 mm	9X-6032
	35 mm	16 mm	5 mm	8T-0271
	40 mm	16 mm	8 mm	8T-9515
	45 mm	16 mm	13 mm	8T-2223
	50 mm	16 mm	18 mm	8T-1160
	55 mm	16 mm	29 mm	095-0655
	60 mm	16 mm	28 mm	8T-0341
	65 mm	16 mm	33 mm	8T-2392
	70 mm	16 mm	38 mm	095-0658
	80 mm	16 mm	48 mm	8T-0342
	90 mm	16 mm	58 mm	9X-2158
	100 mm	16 mm	68 mm	8T-7586
	110 mm	16 mm	78 mm	8T-0272
	120 mm	16 mm	88 mm	096-1331
	130 mm	16 mm	98 mm	086-2369
	150 mm	16 mm	118 mm	3E-8028
	220 mm	16 mm	194 mm	095-0665
M12 × 1.75	20 mm	18 mm	5 mm	8T-9080
	25 mm	18 mm	5 mm	8T-8441
	30 mm	18 mm	5 mm	8T-3957
	35 mm	18 mm	5 mm	6V-8200
	40 mm	18 mm	5 mm	8T-0273
	45 mm	18 mm	5 mm	095-0670
	50 mm	18 mm	5 mm	8T-7811
	55 mm	18 mm	19 mm	8T-0343
	60 mm	18 mm	24 mm	095-0673
	65 mm	18 mm	35 mm	095-0674
	70 mm	18 mm	34 mm	3E-6910
	80 mm	18 mm	44 mm	8C-8729
	90 mm	18 mm	54 mm	3E-8007
	100 mm	18 mm	64 mm	7X-2436
	110 mm	18 mm	74 mm	095-9804
	120 mm	18 mm	84 mm	8C-3413
M16 × 2.00	130 mm	18 mm	94 mm	7X-2607
	140 mm	18 mm	104 mm	8T-7058
	180 mm	18 mm	144 mm	3E-6911
	220 mm	18 mm	184 mm	8C-4980
	25 mm	24 mm	6 mm	3E-6923

## Hex Socket Head Screw Bolts/Metric/Coarse Thread UNC

Thread Size (dia × pitch)	A Bolt Length	C Head Width	D Grip Length	Part Number
M16 × 2.00	30 mm	24 mm	6 mm	8T-0439
	35 mm	24 mm	6 mm	8T-6594
	40 mm	24 mm	6 mm	8T-4944
	45 mm	24 mm	6 mm	6V-8201
	50 mm	24 mm	6 mm	8T-0348
	55 mm	24 mm	17 mm	095-0700
	60 mm	24 mm	6 mm	8T-2393
	65 mm	24 mm	21 mm	8T-0349
	70 mm	24 mm	26 mm	8T-1447
	80 mm	24 mm	36 mm	095-9806
	90 mm	24 mm	46 mm	3E-8008
	100 mm	24 mm	56 mm	095-0705
	110 mm	24 mm	66 mm	095-0706
	120 mm	24 mm	76 mm	095-0707
	140 mm	24 mm	96 mm	096-0008
	160 mm	24 mm	116 mm	8C-7587
	180 mm	24 mm	136 mm	102-2562
	200 mm	24 mm	156 mm	7Y-5243
	260 mm	24 mm	216 mm	7Y-5244
M20 × 2.50	45 mm	30 mm	8 mm	7Y-5221
	50 mm	30 mm	8 mm	8T-5042
	55 mm	30 mm	8 mm	8T-6593
	60 mm	30 mm	8 mm	7Y-5241
	70 mm	30 mm	8 mm	7Y-5217
M20 × 2.50	80 mm	30 mm	28 mm	7Y-5216
	90 mm	30 mm	38 mm	9X-2404
	150 mm	30 mm	98 mm	113-7430
	240 mm	30 mm	196 mm	102-2563
	300 mm	30 mm	256 mm	102-2564
M24 × 3.00	90 mm	36 mm	30 mm	7Y-5215
	100 mm	36 mm	40 mm	7Y-5239
	110 mm	36 mm	50 mm	9X-8480
	130 mm	36 mm	70 mm	9X-8915

Bolts

Forcing Bolts/Inch/Fine Thread UNF

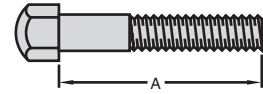


Thread Size (in - TPI)	A Length	Grip Length	Part Number
7/8-14	5 3/8 in	0.33 in	5P-5265
1-14	6 15/16 in	0.97 in	5P-8715
1 1/2-12	2 7/8 in	0.33 in	6V-0187
1 1/2-12	4 3/4 in	0.33 in	5P-5264

Forcing Bolts/Metric/Coarse Thread UNC

Thread Size (dia × pitch)	A Length	Grip Length	Part Number
M24 × 3.0	190 mm	13 mm	136-1978

## Track Bolts/Inch



Model	Thread Size (in - TPI)	A Bolt Length	Part Number
307, E70, E70B	½-20	35.0 mm (1.38 in)	102-8072
307, PM465	½-20	38.1 mm (1.50 in)	3A-9605
D3, D4, 931	½-20	38.1 mm (1.50 in)	8H-7504
931C, 933C, 935C, 941 D3, D4, D4B, D3C, D4C, D3G, D4G 215, TR225B, AP1050 PR450, SF350	¾-18	41.4 mm (1.63 in)	4K-7038
AP650B, BG225C, AP1050B, BG245C	¾-18	50.8 mm (2.00 in)	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	¾-18	51.0 mm (2.01 in)	7H-3597
D5N, D5M, D5C, D5H, D4H 953, 939, 939C	¾-18	55.1 mm (2.17 in)	9G-3110
D6, D7, 572 955, 963, 977 215SA, 219, 225, 225SA 229, 231, 235, FB227	¾-16	54.8 mm (2.16 in)	1S-1859

\* Use with "9K" links

Model	Thread Size (in - TPI)	A Bolt Length	Part Number
D7, D8, 571, 572 973, 977, 235, 583	¾-16	61.2 mm (2.41 in)	7H-3598
D6N, D7H, D6R, D6H, D6M, D5H 517, 527, FB227, D6HD	¾-16	60.9 mm (2.40 in)	6V-1792
D7R, D7H, D8 973, 983, 235	7/8-14	67.5 mm (2.66 in)	7H-3599
D8T/R/N, D8L, 583R, 578	7/8-14	87.1 mm (3.43 in)	6V-1723
235	7/8-14	71.1 mm (2.80 in)	5P-4028
D9, 594, 245**	1-14	74.6 mm (2.94 in)	2M-5657
245	1-14	78.9 mm (3.11 in)	3T-6308
D9T/R/N	1-14	89.9 mm (3.54 in)	6T-2638
D9L, 589	1-14	96.7 mm (3.81 in)	6V-1726
D10	1 1/8-12	106.9 mm (4.21 in)	5P-3868
D10T/R/N	1 1/8-12	96.0 mm (3.78 in)	7T-1000
5130	1 3/8-12	120.1 mm (4.73 in)	6I-8648
D11RN, 5130	1 3/8-12	109.2 mm (4.30 in)	6T-8853

\*\* Use with "8K" links

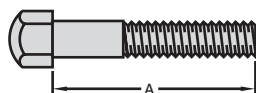
## Track Bolts/Inch/Self Cleaning Shoes

Model	Thread Size (in - TPI)	A Bolt Length	Part Number
D3G, D4G, D3C, D4C, D4	9/16-18	41.1 mm (1.62 in)	4K-7038
	9/16-18	76.2 mm (3.00 in)	5A-3187
D5H, D5N, D5M, D4H	5/8-18	55.1 mm (2.17 in)	9G-3110
	5/8-18	89.9 mm (3.54 in)	3T-3884
D4, D5	5/8-18	84.0 mm (3.31 in)	5A-4104
	5/8-18	51.0 mm (2.01 in)	7H-3597
D6N, D6M, D5H	¾-16	91.9 mm (3.62 in)	107-0718
D7H, D6R, D6H, D6N, D6M, D5H	¾-16	60.9 mm (2.40 in)	6V-1792

Model	Thread Size (in - TPI)	A Bolt Length	Part Number
D7H, D6R, D6H	¾-16	104.9 mm (4.13 in)	6T-2162
D6	¾-16	54.8 mm (2.16 in)	1S-1859
	¾-16	99.0 mm (3.90 in)	5A-7524
D7	¾-16	104.1 mm (4.10 in)	5P-1028
	¾-16	61.2 mm (2.41 in)	7H-3598
D7R/H	7/8-14	67.5 mm (2.66 in)	7H-3599
	7/8-14	109.9 mm (4.33 in)	116-8145

# Bolts

## Track Bolts/Metric



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

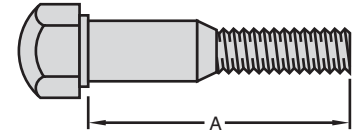
## Track Bolts/Metric/Self Cleaning Shoes

Model	Thread Size (dia × pitch)	A Bolt Length	Part Number
311, 312, 313, 314 E110, E110B, E120, E120B, E140	M16 × 1.50	108	093-0261
	M16 × 1.50	68	093-0259
E180*	M18 × 1.50	90	093-0264
315, 317, 318, 319, 321, 320, 322 E200B, E240B, E240C	M20 × 1.50	55	9W-3619
	M20 × 1.50	80	8E-9349
E240*	M20 × 1.50	108	096-0551
325	M20 × 1.50	63	6Y-0846
	M20 × 1.50	110	6Y-5686
330	M22 × 1.50	67	6Y-0924
	M22 × 1.50	110	5Q-3253

\* Only one bolt length used.



## Split Master Link Bolts/Inch



Model	Thread Size (in - TPI)	A Bolt Length	Part Number
D3, D3C, D4C, D3G, D4G 935C, 933C, 931C PM465, AP1050, PR450 SF350, TR225B	9/16-18	76.2 mm (3.00 in)	5A-3187
AP650B, BG225C AP1050B, BG245C	9/16-18	88.9 mm (3.50 in)	8S-4747
D5N, D5M, D4H, D5H D5G, D5C, 939C, 953	5/8-18	67 mm (2.64 in)	3T-8601
D5N, D5M, D4H D5G, D5C, 939C	5/8-18	83 mm (3.27 in)	9G-8592
D5H, 953	5/8-18	91 mm (3.58 in)	3T-8580
D5C*, D4, D5, D6, 561 941, 943, 951, 953, 955, 977	5/8-18	88.9 mm (3.50 in)	3P-2274
D6N, D6M, D5H, 517	3/4-16	99 mm (3.90 in)	107-0719
	3/4-16	74 mm (2.91 in)	106-1642
D7H	3/4-16	80 mm (3.15 in)	6V-1793
D7H, D6, 963, 955	3/4-16	105 mm (4.13 in)	9S-1838
D7, 571, 572, 973, 977	3/4-16	113 mm (4.45 in)	2P-9670
D7R/H, 973	7/8-14	116 mm (4.57 in)	9W-9058

\* Use with "9K" links.

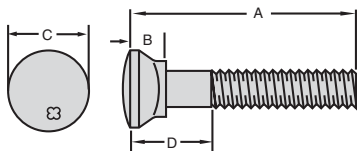
## Split Master Link Bolts/Inch/Self Cleaning Shoes

Model	Thread Size (in - TPI)	A Bolt Length	Part Number
D3G, D4G, D3C, D4C	9/16-18	109 mm (4.29 in)	5P-4683
	9/16-18	76.2 mm (3.00 in)	5A-3187
D5N, D5M, D4H	5/8-18	83 mm (3.27 in)	9G-8592
D5N, D5M, D4H, D5H	5/8-18	102 mm (4.02 in)	3T-3889
D5H	5/8-18	91 mm (3.58 in)	3T-8580
D4, D5	5/8-18	88.9 mm (3.50 in)	3P-2274
	5/8-18	117.5 mm (4.63 in)	5P-0569
D6R/H, D6, D7	3/4-16	139 mm (5.47 in)	3P-1111
	3/4-16	105 mm (4.13 in)	9S-1838

Model	Thread Size (in - TPI)	A Bolt Length	Part Number
D7R/H	7/8-14	87 mm (3.43 in)	6V-1723
D8T/R/N, D8L, 583R, 578	7/8-14	96 mm (3.78 in)	6V-1724
	7/8-14	129 mm (5.08 in)	6V-1725
D8, 983, 583	7/8-14	123.04 mm (4.84 in)	8S-0395
D9T/R/N, D9L, 589	1-14	148 mm (5.83 in)	6V-1728
	1-14	123 mm (4.84 in)	7T-2283
D9, 594	1-14	141.27 mm (5.56 in)	8S-1723
D10T/R/N	1 1/8-12	164 mm (6.46 in)	7T-0998
	1 1/8-12	134 mm (5.28 in)	7T-0999
D10	1 1/8-12	168 mm (6.61 in)	5P-8222
D11R/N	1 3/8-12	183 mm (7.20 in)	6T-8520
D11R/N	1 3/8-12	153 mm (6.02 in)	6T-8521

# Bolts

## Cutting Edge Bolts/Inch/Coarse Thread



Hardware

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
3/8-16	2 in	0.31 in	0.67 in	1.00 in	4F-4048
	Nut				9S-8752
1/2-13	1 1/4 in	0.44 in	0.89 in	0.50 in	4F-3647
	1 1/2 in	0.44 in	0.89 in	0.63 in	4F-3646
	1 3/4 in	0.44 in	0.89 in	0.63 in	4F-3648
	2 in	0.44 in	0.89 in	0.75 in	4F-3649
	2 1/4 in	0.44 in	0.89 in	1.00 in	4F-3650
	2 1/2 in	0.44 in	0.89 in	1.25 in	4F-3651
	2 3/4 in	0.44 in	0.89 in	1.50 in	4F-3652
	3 in	0.44 in	0.89 in	1.75 in	4F-3662
	3 1/2 in	0.45 in	0.89 in	2.25 in	4F-3663
	5 in	0.44 in	0.89 in	3.75 in	4F-4043
	Nut				1F-7958
5/8-11	1 1/2 in	0.54 in	1.04 in	0.63 in	4F-3664
	1 3/4 in	0.54 in	1.04 in	0.63 in	4F-3653
	2 in	0.54 in	1.04 in	0.75 in	4F-3654
	2 1/4 in	0.54 in	1.04 in	1.25 in	3F-5108
	2 1/2 in	0.54 in	1.04 in	1.00 in	4F-3656
	2 3/4 in	0.54 in	1.04 in	1.25 in	4F-3657
	3 in	0.54 in	1.04 in	1.50 in	4F-3658
	3 1/2 in	0.54 in	1.04 in	2.00 in	4F-3665
	3 3/4 in	0.54 in	1.04 in	2.25 in	4F-0391
	4 in	0.54 in	1.04 in	2.50 in	4F-3671
	Nut				4K-0367
3/4-10	2 in	0.63 in	1.20 in	0.75 in	4F-3672
	2 1/4 in	0.63 in	1.20 in	1.00 in	4F-7827
	2 1/2 in	0.63 in	1.20 in	1.19 in	5J-4773
	2 3/4 in	—	—	1.50 in	5J-4771
	3 1/8 in	0.63 in	1.20 in	1.38 in	1J-6762
	3 3/4 in	0.63 in	1.20 in	2.00 in	5F-8933
	4 1/4 in	0.63 in	1.20 in	2.50 in	1J-0962
	4 5/8 in	0.63 in	1.20 in	2.88 in	1J-6761
	Nut				2J-3506
7/8-9	2 1/2 in	0.74 in	1.41 in	1.36 in	5J-4772
	2 3/4 in	0.74 in	1.41 in	1.50 in	6F-0196
	3 in	0.74 in	1.41 in	1.25 in	5J-2409
	3 1/4 in	0.74 in	1.41 in	2.44 in	8J-2935
	3 1/2 in	0.74 in	1.41 in	1.75 in	2J-2548
	4 1/4 in	0.74 in	1.41 in	2.50 in	2J-5458
	4 5/8 in	0.74 in	1.41 in	2.63 in	1J-0849
	Nut				2J-3505
1-8	2 1/2 in	0.81 in	1.60 in	1.31 in	3J-2801
	2 3/4 in	0.81 in	1.60 in	1.50 in	1J-5607
	3 in	0.81 in	1.60 in	1.75 in	4F-4042
	3 1/4 in	0.81 in	1.60 in	1.91 in	4J-9058
	3 1/2 in	0.81 in	1.60 in	2.19 in	4J-9208
	3 3/4 in	0.81 in	1.60 in	2.69 in	8J-2928

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
1-8	3 3/4 in	0.81 in	1.60 in	1.50 in	1J-4948
	4 in	0.81 in	1.60 in	2.95 in	5P-8136
	4 1/2 in	0.81 in	1.60 in	2.25 in	1J-3527
	5 1/4 in	0.81 in	1.60 in	3.00 in	1J-4947
	Nut				2J-3507
1 1/4-7	3 3/8 in	1.06 in	2.03 in	1.65 in	8T-9079
	3 3/4 in	1.06 in	2.03 in	2.28 in	6V-6535
	4 1/8 in	1.02 in	2.01 in	2.28 in	5P-8823
	4 1/2 in	1.06 in	2.03 in	2.28 in	6V-8360
	4 15/16 in	1.06 in	2.03 in	2.28 in	5P-8361
	Nut				3K-9770

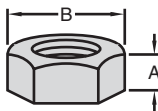
## Maintenance Tips For Cutting Edge Hardware

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
$\frac{5}{8}$	200 $\pm$ 30	270 $\pm$ 40	16 mm
$\frac{3}{4}$	350 $\pm$ 45	475 $\pm$ 60	19 mm
$\frac{7}{8}$	550 $\pm$ 65	750 $\pm$ 90	22 mm
1	825 $\pm$ 110	1125 $\pm$ 150	25 mm
1 $\frac{1}{4}$	1,350 $\pm$ 220	1850 $\pm$ 300	32 mm

# Nuts

## 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	B Nut Width	Part Number
¼-20	0.22 in	⅞ in	9S-8750
⅝-18	0.27 in	½ in	5S-0003
¾-16	0.39 in	⅝ in	9S-8752
⅞-14	0.38 in	11/16 in	3S-1546
½-13	0.44 in	¾ in	1F-7958
⅞-12	0.48 in	⅞ in	5P-0539
¾-11	0.55 in	15/16 in	4K-0367

Thread Size (in - TPI)	A Nut Height	B Nut Width	Part Number
¾-10	0.64 in	1 ⅛ in	2J-3506
⅞-9	0.75 in	1 ⅝ in	2J-3505
1-8	0.86 in	1 ½ in	2J-3507
1 ⅛-7	0.97 in	1 11/16 in	4J-5977
1 ¼-7	1.06 in	1 ⅞ in	3K-9770
1 ⅝-6	1.17 in	2 ⅛ in	9M-3770
1 ½-6	1.28 in	2 ¼ in	9S-8216

### Coarse Thread UNC/Zinc Plated/Hardened

Thread Size (in - TPI)	A Nut Height	B Nut Width	Part Number
¼-20	0.22 in	⅞ in	6V-8185
⅝-18	0.27 in	½ in	6V-8189
¾-16	0.33 in	⅝ in	6V-8801
⅞-14	0.37 in	11/16 in	7X-0447
½-13	0.44 in	¾ in	6V-8188
¾-11	0.55 in	15/16 in	7X-0448

Thread Size (in - TPI)	A Nut Height	B Nut Width	Part Number
¾-10	0.64 in	1 ⅛ in	6V-8182
⅞-9	0.75 in	1 ⅝ in	7X-0449
1-8	0.86 in	1 ½ in	6V-8190
1 ⅛-7	0.97 in	1 11/16 in	7X-0450
1 ¼-7	1.06 in	1 ⅞ in	7X-0451
1 ½-6	1.28 in	2 ¼ in	7X-0452

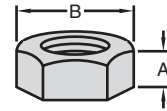
### Fine Thread UNF/Phosphate & Oil Coated/Hardened

Thread Size (in - TPI)	A Nut Height	B Nut Width	Part Number
¼-28	0.22 in	⅞ in	9S-8748
⅝-24	0.27 in	½ in	9S-8751
¾-24	0.39 in	⅝ in	3S-2713
⅞-20	0.38 in	11/16 in	9S-8905
½-20	0.44 in	¾ in	6B-6684
⅞-18	0.48 in	⅞ in	5P-0540
¾-18	0.55 in	15/16 in	6B-6683

Thread Size (in - TPI)	A Nut Height	B Nut Width	Part Number
¾-16	0.64 in	1 ⅛ in	6B-6682
⅞-14	0.75 in	1 ⅝ in	1A-5666
1-14	0.86 in	1 ½ in	1A-1935
1 ⅛-12	0.97 in	1 11/16 in	3S-1356
1 ¼-12	1.06 in	1 ⅞ in	7H-7539
1 ⅝-12	1.17 in	2 in	2M-0400
1 ½-12	1.28 in	1 9/16 in	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	B Nut Width	Part Number
¼-20	0.23 in	⅞ in	2D-6235
⅝-18	0.27 in	½ in	031-4155
¾-16	0.33 in	⅝ in	2K-4973
7⁄16-14	0.38 in	11⁄16 in	6V-5729
½-13	0.44 in	¾ in	1K-6872
⅝-12	0.50 in	⅞ in	034-9954

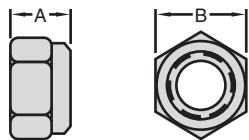
Thread Size (in - TPI)	A Nut Height	B Nut Width	Part Number
⅝-11	0.55 in	1⅝ in	3K-2889
¾-10	0.64 in	1 ⅞ in	1K-6870
⅞-9	0.75 in	1 ⅝ in	6K-0545
1-8	0.86 in	1 ½ in	6K-3632
1 ⅛-7	0.97 in	1 11⁄16 in	8D-9513
1 ¼-7	1.06 in	1 ¾ in	2J-5997

### Fine Thread UNF/Hardened

Thread Size (in - TPI)	A Nut Height	B Nut Width	Part Number
¼-28	0.23 in	⅞ in	2L-9038
⅝-24	0.27 in	½ in	3D-8752
½-20	0.44 in	¾ in	2K-0564
⅝-18	0.50 in	⅞ in	054-5448
¾-18	0.55 in	1⅝ in	2K-4821
¾-16	0.64 in	1 ⅞ in	2K-0337

Thread Size (in - TPI)	A Nut Height	B Nut Width	Part Number
7⁄16-14	0.75 in	1 ⅝ in	5D-1986
1-14	0.86 in	1 ½ in	2K-7471
1 ⅛-12	0.97 in	1 11⁄16 in	3D-4904
1 ¼-12	1.06 in	1 ¾ in	2K-7468
1 ½-12	1.28 in	2 ¼ in	5M-6667

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



- Resist loosening under vibration.

## Coarse Thread/UNC/Zinc Plated/Hardened

Thread Size (in - TPI)	A Nut Height	B Nut Width	Part Number
¼-20	0.31 in	⅞ in	3E-9865
⅝-18	0.34 in	½ in	3E-9860
¾-16	0.45 in	⅝ in	3K-6060
½-13	0.59 in	¾ in	9X-0941

Thread Size (in - TPI)	A Nut Height	B Nut Width	Part Number
⅝-11	0.75 in	⅞ in	3E-9861
¾-10	0.88 in	1 ⅛ in	3E-9862
⅞-9	0.98 in	1 ¼ in	3E-9863

## Coarse Thread/UNC/Zinc Plated/Non Hardened

Thread Size (in - TPI)	A Nut Height	B Nut Width	Part Number
No. 6-32	0.18 in	⅝ in	7D-6922
No. 8-32	0.23 in	11/32 in	6D-5801
No. 10-24	0.25 in	¾ in	031-0249
¼-20	0.31 in	⅞ in	7H-8909
⅝-18	0.34 in	½ in	2R-0504

Thread Size (in - TPI)	A Nut Height	B Nut Width	Part Number
⅝-16	0.37 in	11/16 in	9T-2730
½-13	0.59 in	¾ in	2H-3788
⅝-11	0.75 in	⅞ in	2H-3789
¾-10	0.88 in	1 ⅛ in	2H-3790

## Fine Thread UNF/Zinc Plated/Non Hardened

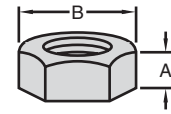
Thread Size (in - TPI)	A Nut Height	B Nut Width	Part Number
No. 10-32	0.25 in	¾ in	4L-1250
¼-28	0.31 in	⅞ in	3F-7674
⅝-24	0.34 in	½ in	3F-2617

Thread Size (in - TPI)	A Nut Height	B Nut Width	Part Number
⅝-24	0.18 in	⅝ in	2F-8616
⅞-20	0.45 in	11/16 in	139-4187
½-20	0.59 in	¾ in	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	B Nut Width	Part Number
1/4-20	0.16 in	7/16 in	1B-4427
5/16-18	0.19 in	1/2 in	5B-3180
3/8-16	0.22 in	9/16 in	1B-2578
7/16-14	0.25 in	11/16 in	1L-9048
1/2-13	0.31 in	3/4 in	3H-3680

Thread Size (in - TPI)	A Nut Height	B Nut Width	Part Number
9/16-12	0.31 in	7/8 in	8S-5151
5/8-11	0.38 in	15/16 in	1D-5118
3/4-10	0.42 in	1 1/8 in	1D-5119
7/8-9	0.48 in	1 5/16 in	5P-0541
1-8	0.55 in	1 1/2 in	1D-6306

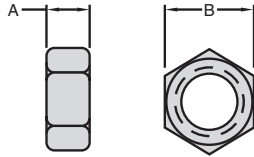
### Fine Thread UNF/Non Hardened

Thread Size (in - TPI)	A Nut Height	B Nut Width	Part Number
1/4-28	0.16 in	7/16 in	9M-1311
5/16-24	0.19 in	1/2 in	4F-2294
3/8-24	0.22 in	9/16 in	2A-5351
7/16-20	0.25 in	11/16 in	5B-3254

Thread Size (in - TPI)	A Nut Height	B Nut Width	Part Number
3/4-16	0.42 in	1 1/8 in	1D-5120
7/8-14	0.48 in	1 5/16 in	1D-5121
1-14	0.55 in	1 1/2 in	2H-3786

# Nuts

## 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 × pitch)	A Nut Height	B Nut Width	Part Number
M6 × 1.00	5.05 mm	10 mm	6V-8225
M8 × 1.25	6.40 mm	13 mm	5P-7970
M10 × 1.50	8.22 mm	16 mm	2Y-5829
M12 × 1.75	10.64 mm	18 mm	6V-8149

Thread Size (dia × pitch)	A Nut Height	B Nut Width	Part Number
M16 × 2.00	14.45 mm	24 mm	8T-1757
M20 × 2.50	18.00 mm	30 mm	6V-7742
M24 × 3.00	21.50 mm	36 mm	7X-0851
M30 × 3.50	24.95 mm	46 mm	8T-1583

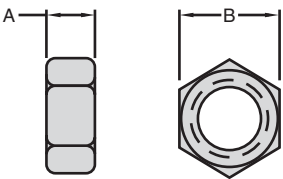
### Coarse Thread UNC/Zinc Plated/Hardened

Thread Size (dia × pitch)	A Nut Height	B Nut Width	Part Number
M6 × 1.00	5.05 mm	10 mm	5C-2890
M8 × 1.25	6.40 mm	13 mm	5C-7261
M10 × 1.50	8.22 mm	16 mm	8T-4133
M12 × 1.75	10.64 mm	18 mm	8T-4244

Thread Size (dia × pitch)	A Nut Height	B Nut Width	Part Number
M16 × 2.00	14.45 mm	24 mm	8T-4132
M20 × 2.50	18.00 mm	30 mm	8T-4131
M24 × 3.00	21.50 mm	36 mm	8T-4001
M30 × 3.50	24.95 mm	46 mm	8C-8722

Self-Locking 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.
- Resists loosening under vibration.



Coarse Thread UNC/Hardened

Thread Size (dia × pitch)	A Height	B Width	Part Number
M6 × 1.00	5.90 mm	10 mm	6V-7743
M8 × 1.25	7.10 mm	13 mm	6V-9189
M10 × 1.50	9.00 mm	16 mm	6V-7744
M12 × 1.75	11.60 mm	18 mm	6V-7687
M16 × 2.00	15.20 mm	24 mm	8T-4778
M20 × 2.50	22.15 mm	30 mm	6V-7688
M24 × 3.00	26.35 mm	36 mm	6V-7676
M30 × 3.50	30.00 mm	46 mm	8T-5065

# Nuts

## Track Nuts

### Inch



Model	Thread Size (in - TPI)	A Nut Height	Part Number
D3, 931	$\frac{1}{2}$ -20	15.2 mm (0.60 in)	6S-3419
D4	$\frac{1}{2}$ -20	14.2 mm (0.56 in)	8H-5724
307, PM465	$\frac{1}{2}$ -20	16.0 mm (0.63 in)	117-8885
307, E70, E70B	$\frac{1}{2}$ -20	12.9 mm (0.51 in)	102-8073
D3, D3B, D3C, D4C, D4B, D4 D3G, D4G, 215, 931, 933, 935, 941 PR450, PM 565, AP650B, AP1050, BG225C, BG245C SF350, TR225B	$\frac{9}{16}$ -18	18.2 mm (0.72 in)	7K-2017
D4, 941	$\frac{9}{16}$ -18	15.4 mm (0.61 in)	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	$\frac{5}{8}$ -18	18.2 mm (0.72 in)	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	$\frac{3}{4}$ -16	18.2 mm (0.72 in)	1S-1860
973, 235	$\frac{7}{8}$ -14	23.8 mm (0.94 in)	7T-9825
D7R/H D8, 983, 583	$\frac{7}{8}$ -14	23.6 mm (0.93 in)	2S-2140
D9, 594, 245	1-14	25.4 mm (1.00 in)	1S-6421
245 *	1-14	25.4 mm (1.00 in)	2V-0250

\* Use with "8K" links.

### Inch



Model	Thread Size (in - TPI)	A Nut Height	Part Number
D8T/R/N, D8L, 583R, 578	$\frac{7}{8}$ -14	35.0 mm (1.38 in)	7G-6442
D9T/R/N	1-14	39.8 mm (1.57 in)	7G-0434
D10, D10T/R/N, 5110B	$\frac{13}{16}$ -12	43.6 mm (1.72 in)	5P-8221
D11R/N, 5130	$\frac{13}{16}$ -12	45.9 mm (1.81 in)	3T-6292

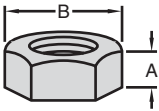
### Metric



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

Cutting Edge Nuts

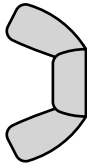
Thread Size (in - TPI)	A Height	B Width	Part Number
½-20	0.44 in	¾ in	6B-6684
⅝-11	0.55 in	15⁄16 in	1D-4720
⅝-11	0.55 in	15⁄16 in	4K-0367
¾-10	0.64 in	1 ⅙ in	2J-3506
¾-16	0.64 in	1 ⅙ in	6B-6682
7⁄8-9	0.75 in	1 ⅝ in	2J-3505
1-8	0.86 in	1 ½ in	2J-3507
1 ¼-7	1.06 in	1 ⅞ in	3K-9770



Wing Nuts/Inch/Coarse Thread UNC/Zinc Plated

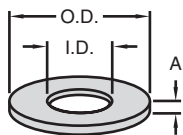
- Install and remove by hand.

Thread Size (in - TPI)	Part Number
10-24	6F-6898
10-32	033-3658
¼-20	1F-1739
⅝-18	3B-0723
⅝-16	2B-9498
⅝-24	7B-8839



# Washers

## Washers/Flat/Inch



- Compatible with SAE Grade 5/Grade 8 and above bolts.

### Phosphate and Oil Coated/Hardened

Bolt Diameter	Inside Diameter	Outside Diameter	A Thickness	Part Number
¼ in	0.28 in	0.56 in	0.08 in	5P-0537
⅜ in	0.34 in	0.62 in	0.08 in	9M-1974
½ in	0.39 in	0.72 in	0.09 in	5M-2894
⅞ in	0.50 in	0.88 in	0.09 in	5P-8244
1 in	0.53 in	1.00 in	0.12 in	5P-8245
1 ⅛ in	0.62 in	1.14 in	0.12 in	5P-8246
1 ¼ in	0.67 in	1.26 in	0.14 in	5P-8247

Bolt Diameter	Inside Diameter	Outside Diameter	A Thickness	Part Number
¾ in	0.79 in	1.44 in	0.14 in	5P-8248
7/8 in	0.94 in	1.62 in	0.16 in	5P-8249
1 in	1.09 in	1.94 in	0.20 in	5P-8250
1 ⅝ in	1.19 in	2.06 in	0.25 in	3S-1349
1 ¾ in	1.31 in	2.12 in	0.25 in	4K-0684
1 ½ in	1.59 in	2.62 in	0.25 in	3S-6162

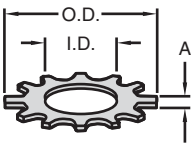
### Zinc Plated/Hardened

Bolt Diameter	Inside Diameter	Outside Diameter	A Thickness	Part Number
¼ in	0.28 in	0.56 in	0.08 in	8T-4205
⅜ in	0.34 in	0.62 in	0.08 in	8T-4224
½ in	0.41 in	0.72 in	0.09 in	8T-4896
⅞ in	0.47 in	0.88 in	0.09 in	8T-5360
1 in	0.53 in	1.00 in	0.12 in	8T-4223
1 ⅛ in	0.66 in	1.25 in	0.14 in	8T-4122

Bolt Diameter	Inside Diameter	Outside Diameter	A Thickness	Part Number
¾ in	0.78 in	1.44 in	0.14 in	8T-4994
7/8 in	0.94 in	1.62 in	0.16 in	8C-6913
1 in	1.09 in	1.94 in	0.20 in	8T-5361
1 ⅝ in	1.22 in	2.06 in	0.25 in	7X-0531
1 ¾ in	1.34 in	2.19 in	0.25 in	7X-0533
1 ½ in	1.59 in	2.64 in	0.25 in	7X-0537

Lock Washers/External Tooth/Inch

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



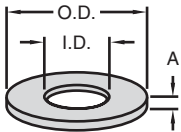
Zinc Plated/Non-Hardened

Bolt Diameter	Inside Diameter	Outside Diameter	A Thickness	Part Number
No. 6	0.15 in	0.31 in	0.02 in	5H-6555
No. 8	0.17 in	0.38 in	0.02 in	1H-4393
No. 10	0.20 in	0.40 in	0.02 in	9F-8125
¼ in	0.26 in	0.50 in	0.03 in	1H-3338

Bolt Diameter	Inside Diameter	Outside Diameter	A Thickness	Part Number
⅝ in	0.33 in	0.59 in	0.03 in	7H-3937
¾ in	0.39 in	0.69 in	0.04 in	4D-1326
7/16 in	0.46 in	0.75 in	0.04 in	7F-6998
½ in	0.52 in	0.89 in	0.04 in	3J-4818

Washers

Washers/Flat/Metric



- Compatible with ISO property class 8.8, 10.9, 11.9, 12.9.

Phosphate and Oil Coated/Hardened

Bolt Diameter (mm)	Inside Diameter	Outside Diameter	A Thickness	Part Number
M6	6.60 mm	12.00 mm	2.00 mm	9X-8267
M8	8.80 mm	16.00 mm	2.00 mm	9M-1974
M10	11.00 mm	21.00 mm	2.50 mm	6V-5839
M12	13.50 mm	25.50 mm	3.00 mm	5P-8245
M14	15.50 mm	29.00 mm	3.00 mm	5P-8246

Bolt Diameter (mm)	Inside Diameter	Outside Diameter	A Thickness	Part Number
M16	17.50 mm	30.00 mm	3.50 mm	9X-8268
M20	22.00 mm	35.00 mm	3.50 mm	8T-3282
M24	26.00 mm	44.00 mm	4.00 mm	6V-8237
M30	33.00 mm	56.00 mm	6.00 mm	9X-8399

Zinc Plated/Hardened

Bolt Diameter (mm)	Inside Diameter	Outside Diameter	A Thickness	Part Number
M6	6.60 mm	12.00 mm	2.00 mm	9X-8256
M8	8.80 mm	16.00 mm	2.00 mm	8T-4224
M10	11.00 mm	21.00 mm	2.50 mm	8T4121
M12	13.50 mm	25.50 mm	3.00 mm	8T-4223

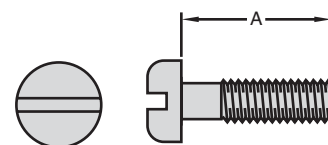
Bolt Diameter (mm)	Inside Diameter	Outside Diameter	A Thickness	Part Number
M16	17.50 mm	30.00 mm	3.50 mm	9X-8257
M20	22.00 mm	35.00 mm	3.50 mm	8T-4123
M24	26.00 mm	44.00 mm	4.00 mm	8T-4167
M30	33.00 mm	56.00 mm	6.00 mm	9X-8258

Hardware



**Pan Head/Machine Screws/Inch**

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

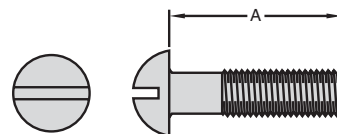


Thread Size (in - TPI)	A Screw Length	Part Number
No. 6-32	$\frac{3}{8}$ in	2N-3474
	$\frac{1}{2}$ in	2N-3475
	$\frac{3}{4}$ in	2N-3476
	1 in	030-8838
	1 $\frac{1}{4}$ in	2N-3477
	1 $\frac{1}{2}$ in	033-4815
No. 8-32	$\frac{3}{4}$ in	7S-4338
	1 $\frac{1}{4}$ in	6V-7697
	1 $\frac{1}{2}$ in	7S-1198
	2 in	5S-9105

Thread Size (in - TPI)	A Screw Length	Part Number
No. 10-24	$\frac{3}{8}$ in	2N-3478
	$\frac{1}{2}$ in	2N-3479
	$\frac{3}{4}$ in	2N-3480
	1 $\frac{1}{4}$ in	2N-3162
	1 $\frac{1}{2}$ in	2N-7456
$\frac{1}{4}$ -20	$\frac{3}{8}$ in	030-9614
	$\frac{5}{8}$ in	3K-6881
	$\frac{3}{4}$ in	2Y-1020
	1 in	7H-1246

**Round Head/Machine Screws/Inch**

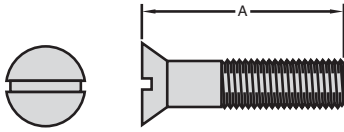
- Made of steel and finished with a zinc plating.
- Conforms to ANSI B18.6.3 standard.



Thread Size (in - TPI)	A Screw Length	Part Number
No. 6-32	$\frac{1}{4}$ in	4B-1218
	$\frac{3}{8}$ in	5S-7348
	$\frac{1}{2}$ in	4B-9762
	1 $\frac{1}{4}$ in	010-0744
	1 $\frac{1}{2}$ in	010-0746
No. 8-32	$\frac{1}{4}$ in	9B-7242
	$\frac{3}{8}$ in	4B-1220
	$\frac{1}{2}$ in	4B-1221
	$\frac{3}{4}$ in	5M-6668
	1 in	3K-8106

Thread Size (in - TPI)	A Screw Length	Part Number
No. 10-24	$\frac{1}{4}$ in	4B-1226
	$\frac{3}{8}$ in	4B-1227
	$\frac{1}{2}$ in	4B-1229
	$\frac{3}{4}$ in	4B-1232
	1 $\frac{1}{4}$ in	4B-1234
	1 $\frac{1}{2}$ in	011-0508
	2 in	032-8924

## Flat Head/Machine Screws/Inch/Coarse Thread



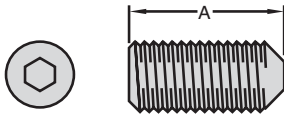
- Made of steel and finished with a zinc plating.
- Conforms to ANSI B18.6.3 standard.

Thread Size (in - TPI)	A Screw Length	Part Number
No. 10-24	3/8 in	4B-1293
	1/2 in	4B-1273
	5/8 in	4B-1274
	3/4 in	2H-6120
	1 in	1H-8456
	1 1/4 in	5P-5583
	1 1/2 in	8T-9514
	1 3/4 in	5P-5582
No. 6-32	3/8 in	5D-0853
	1/2 in	7K-3435

Thread Size (in - TPI)	A Screw Length	Part Number
No. 6-32	3/4 in	2D-6327
No. 8-32	1/2 in	4B-1268
	5/8 in	4B-1269
	3/4 in	4B-1270
	1 in	4B-1271
1/4-20	3/8 in	2M-5139
	1 in	4B-1284
	1 1/4 in	4B-1285
	1 1/2 in	1H-8294
	1 3/4 in	1H-8298
	2 in	1H-8299
5/16-18	1/2 in	4B-1286

Thread Size (in - TPI)	A Screw Length	Part Number
5/16-18	1 1/4 in	1H-8293
	1 1/2 in	1H-8658
	1 3/4 in	5P-0399
3/8-16	3/4 in	1H-8296
	1 in	4B-1291
	1 1/4 in	5B-7431
	1 1/2 in	8F-6987
	1 3/4 in	8H-9579

## Cup Point/Set Screws/Inch/Coarse Thread UNC



- Heat treated with a black oxide finish.

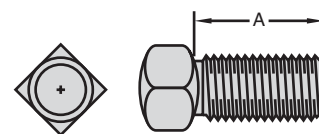
Thread Size (in - TPI)	A Screw Length	Part Number
No. 10-24	1/4 in	5B-9324
	3/8 in	8C-8430
	1/2 in	4B-3627
1/4-20	1/4 in	4B-9806
	3/8 in	010-2570
	1/2 in	4B-9808
	5/8 in	1K-6979
	3/4 in	010-2573
	1 in	010-3575
5/16-18	1/4 in	010-2580

Thread Size (in - TPI)	A Screw Length	Part Number
5/16-18	3/8 in	8B-7179
	1/2 in	010-2582
	3/4 in	5P-2556
	1 in	2H-3907
3/8-16	1/4 in	010-2591
	3/8 in	2F-5326
	1/2 in	3B-8601
	5/8 in	2F-5325
	3/4 in	3H-8430
	1 in	010-2597

Thread Size (in - TPI)	A Screw Length	Part Number
1/2-13	1/2 in	010-2615
	3/8 in	010-2616
	3/4 in	4B-1771
	1 in	2H-3906

## Square Head/Set Screws/Inch/Coarse Thread UNC

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



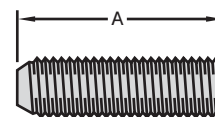
Thread Size (in - TPI)	A Screw Length	Part Number
¼-20	¾ in	4B-3565
	½ in	4B-3566
	1 in	4B-3569
⅝-18	½ in	4B-3570
	⅝ in	4B-3571
¾-16	½ in	4B-3572
	⅝ in	4B-3573
	¾ in	4B-3574
	⅞ in	4B-4994
	1 in	4B-3575

Thread Size (in - TPI)	A Screw Length	Part Number
⅝-16	1 ¼ in	4B-3576
	1 ½ in	4B-3577
	1 ¾ in	2H-3881
½-13	¾ in	4B-3580
	⅞ in	4B-3581
	1 in	4B-3582
	1 ¼ in	4B-3583
	1 ½ in	4B-3584
	1 ¾ in	4B-3585
	2 in	4B-3586

Thread Size (in - TPI)	A Screw Length	Part Number
⅝-11	1 ½ in	4B-3594
	1 ¾ in	4B-3595
	2 in	4B-3596
	2 ½ in	4B-3598
	3 in	4B-3599
¾-10	1 ½ in	4B-3601
	1 ¾ in	4B-3602
	2 in	4B-3603
	2 ½ in	4B-3604
	3 in	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.

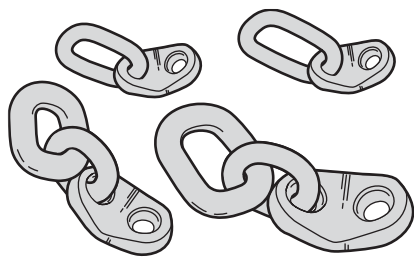


Thread Size (in - TPI)	A Screw Length	Part Number
¾-16	1 ⅞ in	2M-1538
	1 ¾ in	2M-4779
	2 in	1J-8668
	2 ⅞ in	4M-2743
	2 ¾ in	8M-1871
	2 ½ in	3M-0496
	2 ⅜ in	7S-6719
	2 ⅝ in	9M-3296
	3 ⅞ in	2M-8411
	3 ⅝ in	2M-2488
½-13	4 in	6L-4428
	1 ⅞ in	8M-8778

Thread Size (in - TPI)	A Screw Length	Part Number
½-13	1 ¾ in	2D-8153
	2 in	3D-0490
	2 ⅞ in	5M-1932
	2 ¾ in	2D-8154
	2 ½ in	4J-6925
	2 ⅜ in	3D-0472
	2 ⅝ in	3D-6627
	3 ⅞ in	2D-8426
	3 ⅝ in	2D-8155
	4 in	3D-0471
⅝-11	2 ⅞ in	3D-4639
	2 ¾ in	2D-8822

Thread Size (in - TPI)	A Screw Length	Part Number
⅝-11	2 ⅞ in	2D-5238
	2 ⅜ in	4D-4823
	2 ⅝ in	6L-7655
	3 ⅞ in	3J-8154
	3 ⅝ in	3D-5963
	4 in	5P-3887
¾-10	2 ⅞ in	4D-6579
	2 ⅜ in	2D-8369
	2 ⅝ in	4D-6578
	3 ⅞ in	4D-7246
	3 ⅝ in	5J-6796
	4 in	2P-1303

## Link Brackets

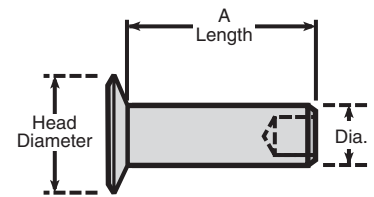


- Used to remove or install large components such as excavator swing gears (provides acceptable method of attaching hoist to component).
- 9U-6502 Link Bracket is used specifically to remove and install swing gear and bearing assembly on 5130 and 5230 Mining Excavators.
- All link brackets meet ANSI Standards for lifting devices.
- Bolts directly onto swing bearing/gear or other component (always use Grade 8 bolts to attach link bracket to component).
- Requires less clearance than standard eye bolt and makes placement/alignment of swing gear/bearing much faster and simpler.
- Used for any general purpose lifting where bracket can be attached to component.
- These link brackets are 100% proof tested at two times the working load limit. They comply with the requirements of ANSI/ASME B30.9-1984 as noted on the Certificate of Proof Test contained with each piece.

Part Number	Bolt Size	Working Load Limit	Minimum Bolt Torque
163-6455	36 mm	5448 kg (12,000 lb)	2700 N·m (2,000 lb ft)
138-7576	30 mm (1 ¼ in)	4000 kg (9,000 lb)	1300 N·m (1,300 lb ft)
138-7574	¾ in	4000 kg (9,000 lb)	360 N·m (265 lb ft)
138-7575	½ in	1800 kg (4,000 lb)	95 N·m (70 lb ft)
138-7573	¾ in	1000 kg (2,250 lb)	43 N·m (32 lb ft)

## Rivets/Flat Head/Countersunk Shank/Inch

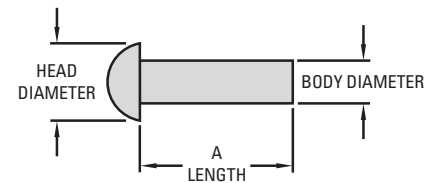
Body Diameter	A Length	Head Diameter	Part Number	Material
$\frac{5}{32}$ in	$\frac{5}{16}$ in	$\frac{3}{8}$ in	6B-4284	Steel
$\frac{3}{16}$ in	$\frac{9}{32}$ in	$\frac{3}{8}$ in	7B-5048	Brass
$\frac{3}{16}$ in	$\frac{5}{16}$ in	$\frac{3}{8}$ in	7B-5050	Brass
$\frac{3}{16}$ in	$\frac{3}{8}$ in	$\frac{3}{8}$ in	7B-5054	Brass
$\frac{3}{16}$ in	$\frac{13}{32}$ in	$\frac{3}{8}$ in	7B-5056	Brass
$\frac{3}{16}$ in	$\frac{15}{32}$ in	$\frac{3}{8}$ in	7B-5060	Brass
$\frac{3}{16}$ in	$\frac{1}{2}$ in	$\frac{3}{8}$ in	7B-5062	Brass
$\frac{3}{16}$ in	$\frac{17}{32}$ in	$\frac{3}{8}$ in	6B-1985	Steel
$\frac{3}{16}$ in	$\frac{17}{32}$ in	$\frac{3}{8}$ in	7B-5064	Brass
$\frac{3}{16}$ in	$\frac{19}{32}$ in	$\frac{3}{8}$ in	6B-4594	Steel
$\frac{3}{16}$ in	$\frac{19}{32}$ in	$\frac{3}{8}$ in	7B-5068	Brass
$\frac{3}{16}$ in	$\frac{19}{32}$ in	$\frac{3}{8}$ in	7B-5068	Brass
$\frac{3}{16}$ in	$\frac{19}{32}$ in	$\frac{3}{8}$ in	7B-5068	Brass
$\frac{3}{16}$ in	$\frac{3}{4}$ in	$\frac{3}{8}$ in	6B-1369	Steel



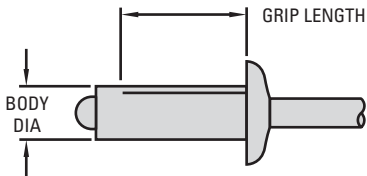
## Rivets/Button Head/Solid Shank/Inch

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

Body Diameter	A Length	Head Diameter	Part Number
$\frac{1}{8}$ in	$\frac{1}{4}$ in	0.23 in	4B-4304
$\frac{1}{8}$ in	$\frac{3}{8}$ in	0.23 in	4B-4306
$\frac{1}{8}$ in	$\frac{1}{2}$ in	0.23 in	4B-4307
$\frac{3}{16}$ in	$\frac{3}{8}$ in	0.34 in	4B-4310
$\frac{3}{16}$ in	$\frac{1}{2}$ in	0.34 in	4B-4311
$\frac{3}{16}$ in	$\frac{5}{8}$ in	0.34 in	4B-4312
$\frac{3}{16}$ in	$\frac{3}{4}$ in	0.34 in	4B-4314
$\frac{3}{16}$ in	$\frac{7}{8}$ in	0.34 in	1J-6280
$\frac{3}{16}$ in	1 in	0.34 in	4B-4315
$\frac{1}{4}$ in	$\frac{3}{8}$ in	0.45 in	4B-4319
$\frac{1}{4}$ in	$\frac{1}{2}$ in	0.45 in	4B-4320
$\frac{1}{4}$ in	$\frac{5}{8}$ in	0.45 in	4B-4321
$\frac{1}{4}$ in	$\frac{3}{4}$ in	0.45 in	4B-4322
$\frac{1}{4}$ in	$\frac{7}{8}$ in	0.56 in	1F-3577
$\frac{1}{4}$ in	1 $\frac{1}{8}$ in	0.45 in	4B-4325
$\frac{5}{16}$ in	$\frac{5}{8}$ in	0.56 in	4B-4334
$\frac{5}{16}$ in	$\frac{3}{4}$ in	0.56 in	4B-4335
$\frac{5}{16}$ in	$\frac{7}{8}$ in	0.56 in	4B-4336
$\frac{5}{16}$ in	1 in	0.56 in	4B-4337
$\frac{3}{8}$ in	$\frac{3}{4}$ in	0.67 in	4B-4343
$\frac{3}{8}$ in	$\frac{7}{8}$ in	0.67 in	4B-4344
$\frac{3}{8}$ in	1 in	0.67 in	4B-4345
$\frac{3}{8}$ in	1 $\frac{1}{8}$ in	0.67 in	4B-4346
$\frac{3}{8}$ in	1 $\frac{1}{4}$ in	0.67 in	4B-4347



Rivets/Blind/Inch

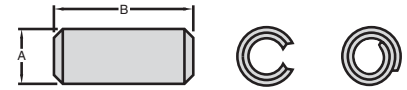


- Contains an open-end and a steel mandrel.

Body Diameter	Grip Length	Part Number
$\frac{1}{8}$ in	$\frac{3}{8}$ - $\frac{1}{2}$ in	6K-3273
$\frac{1}{8}$ in	$\frac{1}{8}$ - $\frac{3}{16}$ in	7K-6536
$\frac{1}{8}$ in	$\frac{1}{16}$ - $\frac{1}{8}$ in	8L-7905
$\frac{1}{8}$ in	$\frac{5}{16}$ - $\frac{3}{8}$ in	9M-5731
$\frac{5}{32}$ in	$\frac{1}{4}$ - $\frac{3}{8}$ in	034-7044
$\frac{5}{32}$ in	$\frac{1}{8}$ - $\frac{1}{4}$ in	2N-2258
$\frac{3}{16}$ in	$\frac{3}{8}$ - $\frac{1}{2}$ in	033-9412
$\frac{3}{16}$ in	$\frac{1}{2}$ - $\frac{5}{8}$ in	4D-6716
$\frac{3}{16}$ in	$\frac{1}{4}$ - $\frac{3}{8}$ in	9M-5732
$\frac{3}{16}$ in	$\frac{1}{8}$ - $\frac{1}{4}$ in	9M-5733

## Spring Pins/Roll Pin/Inch

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



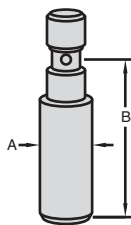
A Diameter	B Pin Length	Part Number
$\frac{1}{16}$ in	$\frac{1}{4}$ in	8S-7499
	$\frac{3}{8}$ in	1L-5316
	$\frac{1}{2}$ in	8S-3157
	$\frac{3}{4}$ in	2L-4911
$\frac{3}{32}$ in	$\frac{1}{2}$ in	3H-1118
	$\frac{5}{8}$ in	2K-3455
	$\frac{3}{4}$ in	2L-5894
	1 in	5M-8009
	1 $\frac{1}{4}$ in	032-8870
$\frac{1}{8}$ in	$\frac{1}{2}$ in	3H-9675
	$\frac{5}{8}$ in	4H-1641
	$\frac{3}{4}$ in	3K-4897
	1 in	8T-0277
$\frac{5}{32}$ in	1 $\frac{1}{4}$ in	2K-8467
	$\frac{3}{8}$ in	8L-6565
	$\frac{1}{2}$ in	1T-0099
	$\frac{3}{4}$ in	2L-5893
	1 in	5H-9839
$\frac{3}{16}$ in	1 $\frac{1}{2}$ in	6V-3259
	$\frac{1}{2}$ in	5H-8985
	$\frac{5}{8}$ in	2K-5986
	$\frac{3}{4}$ in	4H-8380
	1 in	6H-3956
	1 $\frac{1}{4}$ in	1H-1200
	1 $\frac{1}{2}$ in	4H-3119

A Diameter	B Pin Length	Part Number
$\frac{3}{16}$ in	1 $\frac{3}{4}$ in	1J-5799
$\frac{1}{4}$ in	$\frac{1}{2}$ in	6B-6863
	$\frac{5}{8}$ in	3H-2617
	$\frac{3}{4}$ in	7M-5130
	1 in	5H-3182
	1 $\frac{1}{4}$ in	5H-3193
	1 $\frac{1}{2}$ in	2L-1699
	1 $\frac{3}{4}$ in	4H-4737
	2 in	4H-6996
	2 $\frac{1}{2}$ in	1J-5353
	3 in	2K-1594
$\frac{5}{16}$ in	$\frac{3}{4}$ in	4H-1440
	1 in	1T-0550
	1 $\frac{1}{2}$ in	2H-9445
	1 $\frac{3}{4}$ in	5M-1179
	2 in	2M-3521
$\frac{3}{8}$ in	3 in	1T-0068
	$\frac{5}{8}$ in	1T-0068
	$\frac{3}{4}$ in	8T-5089
	1 in	2L-3650
	1 $\frac{1}{4}$ in	5J-3941
	1 $\frac{1}{2}$ in	2J-5850
	1 $\frac{3}{4}$ in	5L-5711
$\frac{1}{2}$ in	2 in	1J-8136
	3 in	045-7012
	$\frac{3}{4}$ in	7K-6820

A Diameter	B Pin Length	Part Number
$\frac{1}{2}$ in	1 in	1N-5981
	1 $\frac{1}{4}$ in	2K-9062
	1 $\frac{1}{2}$ in	5H-4905
	2 $\frac{1}{2}$ in	2K-8078
	3 in	027-3873
	3 $\frac{1}{2}$ in	031-0255
	4 in	8C-8513

# Pins

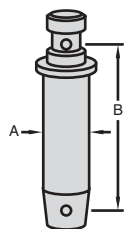
## Drawbar and Clevis Pins/Type I



TYPE 1

A Diameter	Pin Hole Diameter	B Length	Part Number
1 ½ in	$\frac{25}{64}$ in	9 $\frac{7}{8}$ in	5H-8812
2 in	$\frac{25}{64}$ in	8 $\frac{3}{8}$ in	9S-8184
2 in	$\frac{25}{64}$ in	9 $\frac{3}{8}$ in	2R-0179
2 $\frac{15}{64}$ in	$\frac{25}{64}$ in	10 $\frac{3}{8}$ in	1H-4106

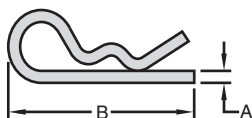
## Drawbar and Clevis Pins/Type II



TYPE 2

A Diameter	Pin Hole Diameter	B Length	Part Number
1 ½ in	$\frac{25}{64}$ in	7 in	7F-9549
1 ½ in	$\frac{25}{64}$ in	8 in	7F-9544
1 $\frac{35}{64}$ in	$\frac{25}{64}$ in	9 in	7F-9541
1 $\frac{3}{4}$ in	$\frac{25}{64}$ in	8 in	7F-9547
1 $\frac{3}{4}$ in	$\frac{25}{64}$ in	12 in	5H-2209
2 in	$\frac{25}{64}$ in	10 ½ in	2M-0093

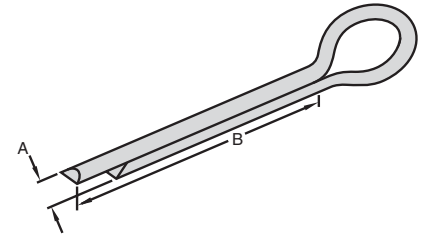
## Locking Pins/Inch/Steel



A Diameter	Pin Hole Diameter	B Length	Part Number
$\frac{3}{32}$ in	$\frac{1}{4}$ - $\frac{1}{2}$ in	1.62 in	5P-0372
$\frac{3}{32}$ in	$\frac{1}{2}$ in	2.00 in	008-3843
$\frac{1}{8}$ in	$\frac{1}{2}$ - $\frac{3}{4}$ in	1.75 in	6S-6646
$\frac{1}{8}$ in	$\frac{5}{8}$ - $\frac{7}{8}$ in	2.50 in	8S-6377
$\frac{3}{32}$ in	$\frac{5}{8}$ - $\frac{7}{8}$ in	3.00 in	5P-0370
$\frac{3}{16}$ in	$\frac{3}{4}$ - $\frac{11}{16}$ in	3.75 in	5P-8837



## Cotter Pins/Inch/Zinc Plated Steel



A Diameter	B Pin Length	Part Number
$\frac{1}{16}$ in	$\frac{3}{4}$ in	3B-4605
	1 $\frac{1}{4}$ in	3B-4606
	1 $\frac{1}{2}$ in	010-3365
$\frac{3}{32}$ in	$\frac{1}{2}$ in	3B-4607
	$\frac{3}{4}$ in	1S-0685*
	1 in	3B-4611
	1 in	6F-3465*
	1 $\frac{1}{4}$ in	3B-4612
	1 $\frac{1}{2}$ in	3B-5312
	1 $\frac{3}{4}$ in	2H-3862
	2 in	010-3378
$\frac{1}{8}$ in	$\frac{1}{2}$ in	3B-4613
	$\frac{3}{4}$ in	3B-4615
	1 in	3B-4617
	1 $\frac{1}{4}$ in	3B-4618
	1 $\frac{1}{4}$ in	6F-5264*
	1 $\frac{1}{2}$ in	5H-9456*
	1 $\frac{3}{4}$ in	6H-5800*
	2 in	3B-4621
	2 in	7F-2002*
	2 $\frac{1}{4}$ in	3B-4622
	2 $\frac{1}{2}$ in	8B-9264
$\frac{5}{64}$ in	1 in	1S-1083*
	1 $\frac{1}{4}$ in	9M-6505*
$\frac{3}{32}$ in	1 $\frac{1}{4}$ in	3B-4624
	1 $\frac{1}{2}$ in	3B-5301
	1 $\frac{3}{4}$ in	7B-1331

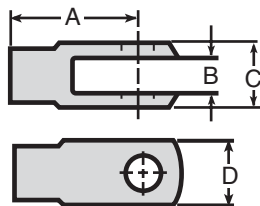
A Diameter	B Pin Length	Part Number
$\frac{5}{32}$ in	2 in	2H-3768
	2 $\frac{1}{4}$ in	010-3401
	2 $\frac{3}{4}$ in	3B-4625
$\frac{3}{16}$ in	1 in	3B-4627
	1 $\frac{1}{4}$ in	3B-4628
	1 $\frac{1}{2}$ in	3B-4629
	2 in	3B-4631
	2 $\frac{1}{4}$ in	3B-5302
	2 $\frac{1}{2}$ in	3B-4632
	2 $\frac{3}{4}$ in	3B-4633
	3 in	3B-4634
	4 in	3B-4636
	4 in	3B-4636
$\frac{1}{4}$ in	1 in	2H-3769
	1 $\frac{1}{4}$ in	3B-4637
	1 $\frac{1}{2}$ in	3B-5313
	1 $\frac{3}{4}$ in	3B-4639
	2 in	3B-4640
	2 $\frac{1}{4}$ in	3B-5303
	2 $\frac{1}{2}$ in	3B-4641
	3 in	3B-5328
	3 $\frac{1}{2}$ in	3B-4643
	4 in	8T-1459
$\frac{5}{16}$ in	4 $\frac{1}{2}$ in	4D-8002
	1 in	3B-6705
	1 $\frac{1}{4}$ in	2H-3770
	1 $\frac{1}{2}$ in	2H-3771
$\frac{3}{8}$ in	2 in	3B-5314

A Diameter	B Pin Length	Part Number
$\frac{5}{16}$ in	2 $\frac{1}{4}$ in	3B-5315
	2 $\frac{1}{2}$ in	3B-5316
	3 in	3B-5317
	3 $\frac{1}{2}$ in	2H-3772
	4 in	2H-3773
	4 $\frac{1}{2}$ in	3F-8357
$\frac{3}{8}$ in	5 in	2H-3774
	1 $\frac{1}{4}$ in	1S-0686
	1 $\frac{1}{2}$ in	3B-4644
	1 $\frac{3}{4}$ in	3B-4645
	2 in	3B-4646
	2 $\frac{1}{2}$ in	3B-4647
	2 $\frac{3}{4}$ in	3B-5319
	3 in	3B-5320
	3 $\frac{1}{2}$ in	3B-5322
	4 in	3B-5329
$\frac{1}{2}$ in	4 $\frac{1}{2}$ in	4J-1888
	2 in	3B-5323
	2 $\frac{1}{2}$ in	3B-5324
	2 $\frac{3}{4}$ in	3B-5325
	3 in	2H-3775
	3 $\frac{1}{2}$ in	3B-5326
$\frac{5}{8}$ in	5 in	1J-2920
	5 $\frac{1}{2}$ in	3J-2985
$\frac{3}{4}$ in	3 in	3B-5327

\* Double head cotter pin.

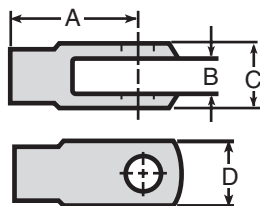
# Rod Ends

## Yoke-Type Rod End/Inch



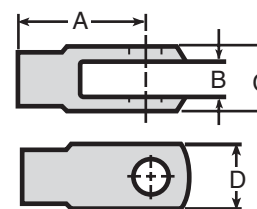
Diameter	A Length To Pin Hole	B Gap Size	C Height	D Width	Part Number	Nut	Pin Assy.	Clevis Pin	Retain. Clip	Retain. Pin	Cotter Pin
¼ in	26.2 in	7.10 in	15.90 in	12.70 in	2M-4036	5L-4426		4B-3057			3B-4607
¼ in	50.8 in	7.10 in	15.90 in	12.70 in	8B-3768	5L-4426		4B-3057			3B-4607
⅝ in	30.2 in	8.70 in	19.00 in	15.00 in	3D-9609	1B-4202		1A-2457			3B-4609
⅝ in	57.0 in	8.70 in	18.00 in	15.00 in	010-4037	1B-4202		1A-2457			3B-4609
¾ in	34.9 in	11.10 in	22.20 in	17.50 in	1M-1341	1B-4203	8T-8932				
¾ in	34.9 in	11.10 in	22.20 in	17.50 in	1M-1341	1B-4203		1B-0676			3B-4615
¾ in	63.5 in	11.10 in	22.20 in	17.50 in	1A-9252	1B-4203		1B-0676			3B-4615
½ in	46.0 in	14.30 in	28.60 in	23.90 in	2M-8340	9S-5585		8B-1419		6S-6646	
½ in	46.0 in	14.30 in	28.60 in	23.90 in	2M-8340	9S-5585		8B-1419			3B-4617
½ in	76.2 in	14.30 in	28.60 in	23.90 in	6F-7010	9S-5585		8B-1419		6S-6646	
½ in	76.2 in	14.30 in	28.60 in	23.90 in	6F-7010	9S-5585		8B-1419			3B-4617
⅝ in	57.9 in	17.50 in	34.90 in	30.20 in	4M-7930	5D-3183		9S-1315			3B-4617
⅝ in	125.4 in	17.50 in	34.90 in	30.20 in	9S-1314	5D-3183		9S-1315			3B-4617

## Yoke-Type Rod End/Metric



Diameter (mm)	A Length To Pin Hole	B Gap Size	C Height	D Width	Part Number	Nut	Pin Assy.	Clevis Pin	Retain. Clip	Retain. Pin	Cotter Pin
M6	36.0 mm	6.0 mm	12.0 mm	12.0 mm	8T-4742	5C-2890	8T-4744	8T-6904	8T-6902		
M10	40.0 mm	10.0 mm	20.0 mm	20.0 mm	8T-4815	8T-4133	8T-4743	9R-2806	9R-2807		
M10-LH	60.0 mm	10.0 mm	20.0 mm	20.0 mm	8C-6955	9X-2065	8T-5381	9R-2806	9R-2807		
M10	60.0 mm	10.0 mm	20.0 mm	20.0 mm	8T-5063	8T-4133	8T-5381	9R-2806	9R-2807		
M12	48.0 mm	12.2 mm	24.0 mm	24.0 mm	8C-3393	8T-4244	8C-3394	8T-6905	8T-6903		
M12	48.0 mm	12.2 mm	24.0 mm	24.0 mm	8C-3393	8T-4244		7X-3161		6S-6646	3B-4615
M12-LH	72.0 mm	12.0 mm	24.0 mm	24.0 mm	7X-0858	8T-4244	8T-5382	8T-6905	8T-6903		
M12-LH	72.0 mm	12.0 mm	24.0 mm	24.0 mm	7X-0858	8T-4244		7X-3161		6S-6646	3B-4615
M12	72.0 mm	12.0 mm	24.0 mm	24.0 mm	8T-4650	8T-4244	8T-5382	8T-6905	8T-6903		
M12	72.0 mm	12.0 mm	24.0 mm	24.0 mm	8T-4650	8T-4244		7X-3161		6S-6646	3B-4615

## Yoke-Type Rod End/Jump Sizes/Metric

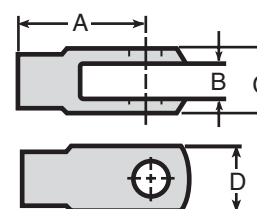


Diameter (mm)	A Length To Pin Hole	B Gap Size	C Height	D Width	Part Number	Nut	Pin Assy.	Clevis Pin	Retain. Clip	Retain. Pin	Cotter Pin
M10**	40.0 mm	10.0 mm	20.0 mm	20.0 mm	3E-3826	8T-4133		1B-0676		6S-6646	3B-4615
M10*	40.0 mm	10.0 mm	20.0 mm	20.0 mm	8T-5921	8T-4133					

\* 6.0 mm bore.

\*\* 9.5 mm bore.

## Yoke-Type Rod End/Forged/Metric



Diameter (mm)	A Length To Pin Hole	B Gap Size	C Height	D Width	Part Number	Nut	Pin Assy.	Clevis Pin	Retain. Clip	Retain. Pin	Cotter Pin
M6*	45.0 mm	7.1 mm	15.9 mm	13.0 mm	7X-2496	5C-2890		7X-2618			3B-4607
M10**	34.9 mm	11.1 mm	22.2 mm	17.5 mm	8T-4968	8T-4133		1B-0676		6S-6646	3B-7615
M10**	63.5 mm	11.1 mm	22.2 mm	17.5 mm	8T-3988	8T-4133		1B-0676		6S-6646	3B-7615
M12***	46.4 mm	14.3 mm	28.6 mm	23.9 mm	7X-7660	8T-4244		8B-1419			3B-4617

\* External thread.

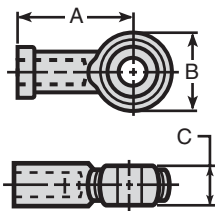
\*\* 9.5 mm bore.

\*\*\* 12.7 mm bore.

Rod Ends

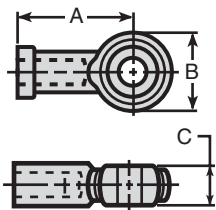
Hardware

Spherical Rod End/Inch



Diameter	A Length To Pin Hole	B Diameter	C Height	Part Number
¼ in	1.33 in	0.89 in	0.37 in	6L-7751
⅝ in	1.37 in	1.02 in	0.44 in	7H-3641
¾ in	1.64 in	1.13 in	0.50 in	4D-4064
½ in	2.12 in	1.39 in	0.63 in	4D-4065

Spherical Rod End/Metric

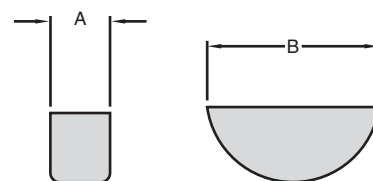


Diameter (mm)	A Length To Pin Hole	B Diameter	C Height	Part Number
M6	29.0 mm	22.0 mm	9.0 mm	8C-3111
M8	35.0 mm	26.0 mm	12.0 mm	7X-7915
M10	42.0 mm	30.0 mm	14.0 mm	8T-6431
M12	49.0 mm	34.0 mm	19.0 mm	8C-3392
M16	63.0 mm	42.0 mm	21.0 mm	9R-4760

## Woodruff Keys

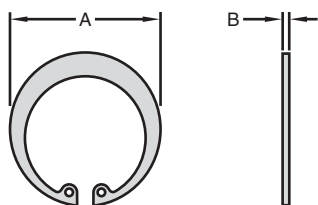
- Made of medium carbon steel and machined to a smooth finish.

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



# Snap Rings

## Snap Rings/Internal/Inch



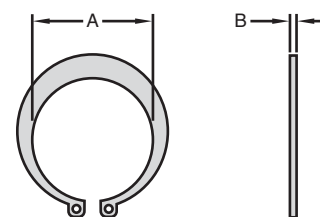
- Made of tempered carbon steel.

Bore Diameter	A Free Diameter	B Thickness	Part Number
0.44 in	0.48 in	0.025 in	3D-8358
0.50 in	0.55 in	0.035 in	1S-1638
0.56 in	0.62 in	0.035 in	2R-1256
0.69 in	0.76 in	0.035 in	1H-4142
0.75 in	0.83 in	0.035 in	2M-8191
0.81 in	0.90 in	0.042 in	5S-4455
0.88 in	0.97 in	0.042 in	2L-6726
0.90 in	1.00 in	0.042 in	4L-1466
1.00 in	1.11 in	0.042 in	4D-1322
1.12 in	1.25 in	0.050 in	5S-1522
1.25 in	1.39 in	0.050 in	2D-6398
1.38 in	1.53 in	0.050 in	1L-3768
1.44 in	1.60 in	0.050 in	2H-1142
1.50 in	1.66 in	0.062 in	8N-7294
1.56 in	1.73 in	0.062 in	3K-9879
1.65 in	1.83 in	0.062 in	2R-1230
1.81 in	2.01 in	0.062 in	2D-5826
1.85 in	2.05 in	0.078 in	1L-8490
2.05 in	2.28 in	0.078 in	6J-7855
2.31 in	2.54 in	0.078 in	2D-6648
2.44 in	2.70 in	0.078 in	6L-8797
2.50 in	2.77 in	0.078 in	4D-1736
2.75 in	3.05 in	0.093 in	6K-3531
2.83 in	3.12 in	0.093 in	2H-5549
3.00 in	3.33 in	0.093 in	2R-1236
3.16 in	3.52 in	0.109 in	1K-6985
3.25 in	3.62 in	0.109 in	8J-7636
3.50 in	3.89 in	0.109 in	3D-8341
3.56 in	3.94 in	0.109 in	1J-6472
3.88 in	4.29 in	0.109 in	9M-9935
4.00 in	4.42 in	0.109 in	7M-2275
4.33 in	4.76 in	0.109 in	5L-4751
4.72 in	5.21 in	0.109 in	067-3161
5.00 in	5.49 in	0.109 in	2L-0043
6.00 in	6.62 in	0.125 in	5L-4756
7.00 in	7.72 in	0.156 in	1L-7388
7.50 in	8.27 in	0.187 in	7F-6021

## Snap Rings/External/Inch

- Made of tempered carbon steel.

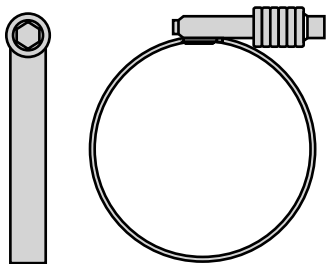
Shaft Diameter	A Free Diameter	B Thickness	Part Number
0.25 in	0.22 in	0.025 in	6H-5829
0.38 in	0.34 in	0.025 in	9M-7611
0.44 in	0.40 in	0.025 in	4H-0094
0.47 in	0.43 in	0.025 in	6L-3801
0.56 in	0.52 in	0.035 in	3D-2975
0.59 in	0.55 in	0.035 in	2L-8509
0.62 in	0.58 in	0.035 in	8F-4610
0.75 in	0.69 in	0.042 in	2J-6356
0.81 in	0.75 in	0.042 in	9F-5444
0.94 in	0.87 in	0.042 in	6H-6109
0.98 in	0.91 in	0.042 in	1L-8497
1.00 in	0.93 in	0.042 in	001-5600
1.06 in	0.98 in	0.050 in	3K-8276
1.12 in	1.04 in	0.050 in	5L-4019
1.19 in	1.10 in	0.050 in	4M-5285
1.25 in	1.16 in	0.050 in	2M-4287
1.31 in	1.21 in	0.050 in	4D-8309
1.38 in	1.27 in	0.050 in	1J-6474
1.56 in	1.45 in	0.062 in	2L-6965
1.62 in	1.50 in	0.062 in	9L-2336
1.69 in	1.56 in	0.062 in	5L-2931
1.77 in	1.64 in	0.062 in	2J-7550
1.81 in	1.68 in	0.062 in	5K-9106
1.88 in	1.74 in	0.062 in	1K-6995
1.97 in	1.82 in	0.062 in	077-9687
2.12 in	1.96 in	0.078 in	1K-6984
2.16 in	1.99 in	0.078 in	4K-4284
2.50 in	2.31 in	0.078 in	5K-4627
2.56 in	2.38 in	0.078 in	6S-1753
2.62 in	2.43 in	0.078 in	1K-6992
2.75 in	2.54 in	0.093 in	5J-3864
2.94 in	2.72 in	0.093 in	7J-6580
3.16 in	2.92 in	0.093 in	1N-8620
3.35 in	3.09 in	0.093 in	9S-4368
3.50 in	3.24 in	0.109 in	5L-4753
3.62 in	3.35 in	0.109 in	7J-6525
4.00 in	3.70 in	0.109 in	8F-1959
4.25 in	3.99 in	0.109 in	1N-5410
4.38 in	4.11 in	0.109 in	5H-5012
4.75 in	4.46 in	0.109 in	2L-0049
5.75 in	5.40 in	0.125 in	5L-8579
6.25 in	5.87 in	0.156 in	2L-0044



# Hose Clamps

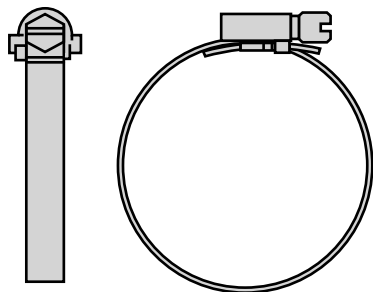
## Hose Clamps/Constant Tension

Hardware



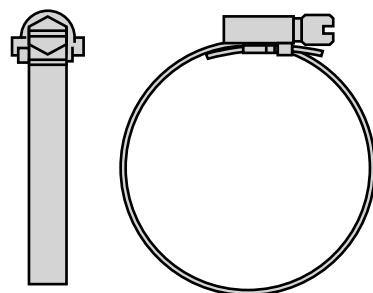
Working Diameter		Part Number
1 1/4-2 1/8 in	32-54 mm	8T-4983
1 3/4-2 5/8 in	45-67 mm	8T-6703
2 1/4-3 1/8 in	57-79 mm	8T-4984
2 3/4-3 5/8 in	70-92 mm	8T-6675
3 1/4-4 1/8 in	83-105 mm	8T-4985
4 1/4-5 1/8 in	108-130 mm	8T-4986
5 1/4-6 1/8 in	133-156 mm	8T-4987
6 1/4-7 1/8 in	159-181 mm	8T-4988
7 1/4-8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

## Hose Clamps



Working Diameter		Part Number
7/32-5/8 in	6-16 mm	1P-4278
9/16-1 1/16 in	16-27 mm	5D-1026
1 5/16-1 3/4 in	24-45 mm	9M-7958
1 3/8-2 1/2 in	40-64 mm	9M-0164
2 3/16-3 1/2 in	65-89 mm	9M-7959
3 5/16-4 1/4 in	89-108 mm	9M-6738

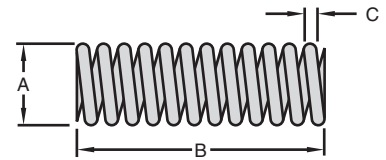
## Hose Clamps/Heavy Duty



Working Diameter		Part Number
1 1/4-2 in	32-51 mm	5P-2230
1 3/4-2 5/8 in	45-67 mm	5P-0597
2 1/8-4 1/8 in	54-105 mm	5P-0598
4-6 1/8 in	102-156 mm	5P-0599
6-9 in	156-229 mm	5P-0600



## Springs/Compression



A Outside Diameter	B Length	C Wire Diameter	Part Number
¼ in	⅝ in	0.031 in	9N-1747
	¾ in	0.031 in	9L-9522
	½ in	0.031 in	091-7106
	⅞ in	0.031 in	3G-0670
	¾ in	0.031 in	7V-3827
	1⅜ in	0.031 in	090-5957
	1 in	0.063 in	4T-7794
	1⅙ in	0.063 in	1V-8784
	1½ in	0.031 in	9N-4049
	2¼ in	0.031 in	9N-1622
	2⅜ in	0.063 in	8J-9273
⅜ in	½ in	0.031 in	6B-3364
	⅞ in	0.063 in	7M-3801
	⅝ in	0.031 in	7M-7446
	¾ in	0.031 in	3K-7217
	⅞ in	0.063 in	4K-8350
	1⅝ in	0.031 in	9S-1347
	1 in	0.031 in	1V-9969
	1⅙ in	0.031 in	9L-6422
	1¼ in	0.031 in	3N-6233
	1½ in	0.031 in	5B-1890
	1⅝ in	0.031 in	6N-8793
	1¾ in	0.031 in	2V-3457
	1⅞ in	0.063 in	6P-4993
	2⅙ in	0.063 in	7N-0426
	2¼ in	0.031 in	2L-4403
	2½ in	0.031 in	7F-7276
	2⅞ in	0.094 in	2H-5062
	3⅙ in	0.094 in	1P-9602
	3⅝ in	0.094 in	7B-9411
	3⅞ in	0.094 in	4M-5912
	4 in	0.031 in	034-3705
	⅝ in	0.031 in	6F-0967
	1 in	0.031 in	5K-3918
	1¼ in	0.031 in	5F-7464
	1½ in	0.063 in	6Y-0172
	1⅞ in	0.031 in	3C-0585
	1¾ in	0.125 in	3G-7402
	1⅞ in	0.063 in	9M-1986
	2 in	0.031 in	7M-7244
	2¼ in	0.063 in	0L-1466
	2½ in	0.063 in	6P-7701
	2⅞ in	0.031 in	3N-5738
	3¼ in	0.031 in	0L-1142
	3⅝ in	0.063 in	5B-1952
	3⅞ in	0.094 in	5J-9605
	4¼ in	0.063 in	5B-8858

A Outside Diameter	B Length	C Wire Diameter	Part Number
½ in	4 ¾ in	0.063 in	5M-6110
	4 ⅞ in	0.094 in	3T-7584
	5 ⅝ in	0.094 in	6T-1318
	5 ⅞ in	0.094 in	9S-9876
⅝ in	¾ in	0.094 in	1K-7039
	½ in	0.063 in	6T-8234
	⅝ in	0.031 in	9N-6249
	1 in	0.188 in	6B-3416
	1⅙ in	0.094 in	6S-8736
	1¼ in	0.094 in	9M-3091
	1½ in	0.063 in	5B-3754
	1⅜ in	0.063 in	3F-8845
	1⅞ in	0.094 in	4F-9503
	2 in	0.094 in	9W-1467
	2⅙ in	0.063 in	2P-5700
	2¼ in	0.063 in	5J-1787
	2½ in	0.063 in	2F-5889
	2¾ in	0.063 in	4F-6145
	3⅙ in	0.094 in	4J-4051
	3¼ in	0.063 in	1W-6077
	3⅝ in	0.125 in	3P-7566
	3½ in	0.063 in	6P-9784
	3¾ in	0.125 in	4T-4033
	4⅞ in	0.094 in	2P-4498
	4½ in	0.125 in	9T-1676
¾ in	⅞ in	0.031 in	4T-2684
	1 in	0.125 in	6F-4294
	1⅙ in	0.031 in	3N-7848
	1½ in	0.094 in	7M-3496
	1⅞ in	0.125 in	5F-2201
	2 in	0.063 in	5F-9035
	2¼ in	0.094 in	7G-5378
	2⅙ in	0.125 in	9S-8237
	2½ in	0.125 in	1K-4476
	2⅞ in	0.125 in	3D-2777
	2⅞ in	0.063 in	8F-3398
	3 in	0.156 in	1K-9105
	3⅙ in	0.094 in	6H-1649
	3⅝ in	0.094 in	5H-7473
	3⅞ in	0.094 in	1U-1067
	3⅞ in	0.063 in	2H-6117
	4 in	0.125 in	1S-5646
	4¼ in	0.094 in	9F-6092
	4½ in	0.031 in	9T-8208
	4⅞ in	0.094 in	2S-6538
⅞ in	⅞ in	0.063 in	3P-8042
	1⅝ in	0.063 in	9P-9211

# Springs

## Springs/Compression

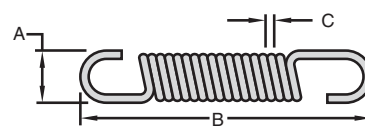
### Hardware

A Outside Diameter	B Length	C Wire Diameter	Part Number
¾ in	1 ⅜ in	0.094 in	8J-6080
	2 in	0.094 in	9S-8632
	2 ⅜ in	0.094 in	9H-4204
	2 ⅞ in	0.125 in	4M-6012
	2 7⁄8 in	0.125 in	1W-9860
	3 in	0.125 in	5N-3015
	3 ½ in	0.125 in	3P-0246
	3 ¾ in	0.125 in	1W-2208
	3 ½ in	0.125 in	9L-9243
	4 ¾ in	0.063 in	5M-6111
	4 ½ in	0.094 in	6K-4302
	4 ⅝ in	0.125 in	6B-8809
	5 ⅜ in	0.156 in	4D-7637
	5 ½ in	0.094 in	7M-1405
	5 ⅝ in	0.156 in	5D-6293
	5 ⅞ in	0.094 in	4H-1221
	6 ⅞ in	0.125 in	4D-9469
	7 ¼ in	0.125 in	7D-6198
1 in	⅝ in	0.063 in	9T-1699
	7⁄8 in	0.125 in	7W-2110
	1 in	0.094 in	7V-0444
	1 ⅛ in	0.094 in	9P-8308
	1 ¼ in	0.094 in	6T-7221
	1 ⅜ in	0.094 in	7J-0736
	1 ½ in	0.125 in	1P-0620
	1 ⅝ in	0.063 in	4N-5663
	1 ¾ in	0.125 in	1S-7592
	1 7⁄8 in	0.063 in	9F-1993
	2 in	0.094 in	2S-8398
	2 ⅛ in	0.125 in	9T-2168
	2 ¼ in	0.156 in	8H-9488
	2 ⅜ in	0.094 in	2J-0075
	2 ½ in	0.125 in	7W-7700
	2 ⅝ in	0.125 in	3V-5498
	2 ¾ in	0.094 in	8J-3819
	2 7⁄8 in	0.125 in	6L-2084
	3 in	0.094 in	4J-7066
	3 ⅛ in	0.094 in	5J-3719
	3 ¼ in	0.094 in	8J-1705
	3 ⅜ in	0.188 in	039-8820
	3 ½ in	0.156 in	9T-1848
	3 ¾ in	0.094 in	5J-3419
	4 in	0.063 in	4B-4910
	4 ⅛ in	0.063 in	1L-1098
	4 ¼ in	0.156 in	6L-4173
	4 ½ in	0.156 in	9J-5002
	4 ¾ in	0.094 in	8J-6728
	4 7⁄8 in	0.125 in	5M-5526
	5 in	0.063 in	3L-4521
	5 ¼ in	0.094 in	8J-5839
	5 ⅜ in	0.188 in	8M-1955
	5 ½ in	0.188 in	6N-1320

A Outside Diameter	B Length	C Wire Diameter	Part Number
1 in	5 ⅝ in	0.156 in	4M-0804
	6 ⅞ in	0.156 in	2S-2760
	6 ¼ in	0.094 in	4F-6446
	6 ½ in	0.125 in	6D-0314
	6 7⁄8 in	0.125 in	5M-7884

## Springs/Extension

A Outside Diameter	B Length	C Wire Diameter	Part Number
$\frac{5}{16}$ in	1 in	0.094 in	039-9138
	1 $\frac{1}{4}$ in	0.035 in	7F-7613
	1 $\frac{7}{16}$ in	0.031 in	1A-3540
	1 $\frac{11}{16}$ in	0.031 in	3C-0481
	2 $\frac{13}{32}$ in	0.031 in	038-8415
$\frac{3}{8}$ in	1 $\frac{1}{2}$ in	0.063 in	1A-1376
	1 $\frac{5}{8}$ in	0.063 in	7L-4563
	4 $\frac{9}{32}$ in	0.047 in	5H-4291
$\frac{1}{2}$ in	1 $\frac{1}{4}$ in	0.063 in	8L-8491
	1 $\frac{1}{2}$ in	0.063 in	090-3006
	2 in	0.063 in	1A-0302
$\frac{9}{16}$ in	1 $\frac{5}{8}$ in	0.063 in	5M-9708
	4 $\frac{1}{4}$ in	0.063 in	2R-0416
$\frac{5}{8}$ in	1 $\frac{3}{8}$ in	0.063 in	9F-0965
	2 $\frac{1}{8}$ in	0.063 in	001-2809
	2 $\frac{7}{8}$ in	0.031 in	001-2810
	4 in	0.063 in	001-2811
$1\frac{1}{16}$ in	4 in	0.094 in	1D-1313
	6 in	0.094 in	7D-5289
$\frac{3}{4}$ in	2 $\frac{5}{32}$ in	0.063 in	1A-8189
$\frac{7}{8}$ in	3 $\frac{3}{4}$ in	0.094 in	1F-4449
$\frac{7}{8}$ in	2 in	0.094 in	2D-9871
	2 $\frac{1}{4}$ in	0.125 in	8L-5917
	3 $\frac{1}{8}$ in	0.125 in	5G-1684
	3 $\frac{1}{4}$ in	0.094 in	8Y-4581
	3 $\frac{13}{16}$ in	0.094 in	9S-1312
	4 in	0.125 in	7G-1251
1 in	4 in	0.094 in	009-2445
	5 $\frac{1}{8}$ in	0.094 in	035-7877
	5 $\frac{3}{8}$ in	0.156 in	038-2805
1 $\frac{3}{16}$ in	5 $\frac{5}{32}$ in	0.156 in	9P-9185
	5 $\frac{3}{8}$ in	0.125 in	091-7882
	6 $\frac{1}{2}$ in	0.156 in	091-7881



## 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 - Course	Phos. & Oil	59 Part Numbers	1735	Hex
3E-9420	Inch - Course	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	Consists of:	
		Retail Pkg. Qty.	Bulk Part No.
247-0188	¼-20 × ½ in Hex Head Bolt	50	0S-1614
247-0189	¼-20 × ¾ in Hex Head Bolt	50	0S-1615
247-0190	¼-20 × 1 in Hex Head Bolt	50	0S-1616
247-0191	¼-20 × 1 ¼ in Hex Head Bolt	50	7B-2742
247-0192	¼-20 × 1 ½ in Hex Head Bolt	25	9F-7022
247-0193	¼-20 × 1 ¾ in Hex Head Bolt	25	1B-2713
247-0194	¼-20 × 2 in Hex Head Bolt	25	8B-2377
247-0195	¼-20 × 2 ¼ in Hex Head Bolt	25	1D-4533
247-0196	¼-20 × 2 ½ in Hex Head Bolt	25	1B-2714
247-0197	¼-20 × 2 ¾ in Hex Head Bolt	25	2A-4781
247-0198	¼-20 × 3 in Hex Head Bolt	25	4B-9365
247-0199	¼ in Hard Washer	25	5P-0537
247-0200	¼ in Lock Washer	100	3B-4504
247-0201	¼-20 Full Nut	50	9S-8750
247-0202	⅜-18 × ½ in Hex Head Bolt	50	1C-0569
247-0203	⅜-18 × ¾ in Hex Head Bolt	50	0S-1617
247-0204	⅜-18 × 1 in Hex Head Bolt	25	0S-1618
247-0205	⅜-18 × 1 ¼ in Hex Head Bolt	25	1B-7182
247-0206	⅜-18 × 1 ½ in Hex Head Bolt	25	1A-9579
247-0207	⅜-18 × 1 ¾ in Hex Head Bolt	25	1B-9575
247-0208	⅜-18 × 2 in Hex Head Bolt	25	2B-2694
247-0209	⅜-18 × 2 ¼ in Hex Head Bolt	25	1D-4538
247-0210	⅜-18 × 2 ½ in Hex Head Bolt	25	1D-4539
247-0211	⅜-18 × 2 ¾ in Hex Head Bolt	25	1D-4540
247-0212	⅜-18 × 3 in Hex Head Bolt	10	1D-4541
247-0213	⅜ in Hard Washer	25	9M-1974
247-0214	⅜ in Lock Washer	100	3B-4505
247-0215	⅜-18 Full Nut	50	5S-0003
247-0216	⅝-16 × ½ in Hex Head Bolt	50	4F-4879
247-0217	⅝-16 × ¾ in Hex Head Bolt	25	0S-0509
247-0218	⅝-16 × 1 in Hex Head Bolt	25	0S-1594
247-0219	⅝-16 × 1 ¼ in Hex Head Bolt	25	0S-1588
247-0220	⅝-16 × 1 ½ in Hex Head Bolt	25	0S-1591
247-0221	⅝-16 × 1 ¾ in Hex Head Bolt	25	0S-1571
247-0222	⅝-16 × 2 in Hex Head Bolt	25	0S-1590
247-0223	⅝-16 × 2 ¼ in Hex Head Bolt	10	0L-2070
247-0224	⅝-16 × 2 ½ in Hex Head Bolt	10	0L-1143
247-0225	⅝-16 × 2 ¾ in Hex Head Bolt	10	0T-0573
247-0226	⅝-16 × 3 in Hex Head Bolt	10	0S-1619
247-0227	⅝ in Hard Washer	25	5M-2894
247-0228	⅝ in Lock Washer	100	3B-4506
247-0229	⅝-16 Full Nut	50	9S-8752
247-0230	½-13 × ½ in Hex Head Bolt	25	1K-6705

Retail Package Part No.	Description	Consists of:	
		Retail Pkg. Qty.	Bulk Part No.
247-0231	½-13 × ¾ in Hex Head Bolt	25	0S-1620
247-0232	½-13 × 1 in Hex Head Bolt	25	0S-1621
247-0233	½-13 × 1 ¼ in Hex Head Bolt	10	0S-1595
247-0234	½-13 × 1 ½ in Hex Head Bolt	10	0S-1585
247-0235	½-13 × 1 ¾ in Hex Head Bolt	10	0S-1587
247-0236	½-13 × 2 in Hex Head Bolt	10	1A-1460
247-0237	½-13 × 2 ¼ in Hex Head Bolt	5	2B-0947
247-0238	½-13 × 2 ½ in Hex Head Bolt	5	9S-1366
247-0239	½-13 × 2 ¾ in Hex Head Bolt	5	1A-5822
247-0240	½-13 × 3 in Hex Head Bolt	5	0L-1329
247-0241	½ in Hard Washer	25	5P-8245
247-0242	½ in Lock Washer	50	3B-4508
247-0243	½-13 Full Nut	25	1F-7958
247-0244	⅞-11 × ¾ in Hex Head Bolt	10	1H-9456
247-0245	⅞-11 × 1 in Hex Head Bolt	10	0S-1624
247-0246	⅞-11 × 1 ¼ in Hex Head Bolt	10	0S-1592
247-0247	⅞-11 × 1 ½ in Hex Head Bolt	5	0S-1566
247-0248	⅞-11 × 1 ¾ in Hex Head Bolt	5	0S-1589
247-0249	⅞-11 × 2 in Hex Head Bolt	5	1A-1135
247-0250	⅞-11 × 2 ¼ in Hex Head Bolt	5	8S-9092
247-0251	⅞-11 × 2 ½ in Hex Head Bolt	5	0S-1625
247-0252	⅞-11 × 2 ¾ in Hex Head Bolt	5	1A-8537
247-0253	⅞-11 × 3 in Hex Head Bolt	5	1B-4367
247-0254	⅞ in Hard Washer	10	5P-8247
247-0255	⅞ in Lock Washer	25	3B-4510
247-0256	⅞-11 Full Nut	10	4K-0367
247-0583	M6 × 1, 12 mm	50	8T-0639
247-0584	M6 × 1, 16 mm	50	6V-8837
247-0585	M6 × 1, 20 mm	50	6V-8214
247-0586	M6 × 1, 25 mm	50	6V-8490
247-0587	M6 × 1, 30 mm	25	8T-0640
247-0588	M6 × 1, 35 mm	50	6V-2315
247-0589	M6 × 1, 40 mm	25	2W-9499
247-0590	M6 × 1, 45 mm	25	6V-7728
247-0591	M6 × 1, 50 mm	25	8T-0275
247-0592	M6 Washer	50	9X-8267
247-0593	M6 × 1, Hex Nut	50	6V-8225
247-0594	M8 × 1.25, 16 mm	50	6V-5215
247-0595	M8 × 1.25, 20 mm	50	6V-5217
247-0596	M8 × 1.25, 25 mm	25	6V-3940
247-0597	M8 × 1.25, 30 mm	25	6V-2317
247-0598	M8 × 1.25, 35 mm	25	6V-5218
247-0599	M8 × 1.25, 40 mm	25	6V-5219

# Convenient Hardware Packages

## Convenient Hardware Packages

Hardware

Retail Package Part No.	Description	Consists of:	
		Retail Pkg. Qty.	Bulk Part No.
247-0600	M8 × 1.25, 45 mm	25	8T-0276
247-0601	M8 × 1.25, 50 mm	25	6V-3918
247-0602	M8 × 1.25, 60 mm	10	8T-0100
247-0603	M8 × 1.25, 70 mm	10	5P-8347
247-0604	M8 Washer	25	9M-1974
247-0605	M8 × 1.25, Hex Nut	50	5P-7970
247-0606	M10 × 1.5, 20 mm	25	6V-6317
247-0607	M10 × 1.5, 25 mm	25	6V-4248
247-0608	M10 × 1.5, 30 mm	25	6V-1820
247-0609	M10 × 1.5, 35 mm	25	6V-3822
247-0610	M10 × 1.5, 40 mm	10	6V-5842
247-0611	M10 × 1.5, 45 mm	10	6V-5843
247-0612	M10 × 1.5, 50 mm	10	6V-4249
247-0613	M10 × 1.5, 60 mm	10	6V-5230
247-0614	M10 × 1.5, 65 mm	10	8T-5035
247-0615	M10 × 1.5, 70 mm	10	6V-7981
247-0616	M10 Washer	25	6V-5839
247-0617	M10 × 1.50, Hex Nut	25	2Y-5829
247-0618	M12 × 1.75, 20 mm	10	8T-0293
247-0619	M12 × 1.75, 25 mm	25	6A-5591
247-0620	M12 × 1.75, 30 mm	10	6V-3668
247-0621	M12 × 1.75, 35 mm	10	6V-8675
247-0622	M12 × 1.75, 40 mm	10	6V-8197
247-0623	M12 × 1.75, 45 mm	10	6V-5684
247-0624	M12 × 1.75, 50 mm	10	6V-7673
247-0625	M12 × 1.75, 60 mm	5	6V-3823
247-0626	M12 Washer	25	5P-8245
247-0627	M12 × 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
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 ⅛ in × 1 in Lg	50	3B-4617
247-0718	Cotter Pin ⅛ in × ¾ in Lg	50	3B-4615
247-0719	Cotter Pin ⅜ in × ½ in Lg	50	3B-4607
247-0720	Cotter Pin ⅛ in × 2 in Lg	50	3B-4621
247-0721	Cotter Pin ⅛ in × 1 ¼ 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 × H × W)	
609 mm (24 in) × 101 mm (4 in) × 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	¾-16 to #6-32
No. of bolt sizes	21
Sheet metal/wood screw sizes	5

