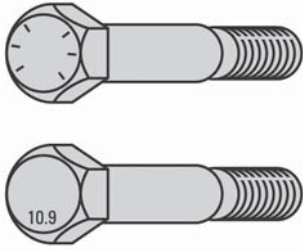




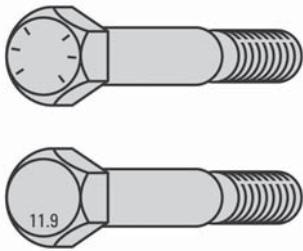
HARDWARE

Hex Head Bolts



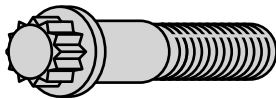
- Designed with smooth rolled threads for better clamp load, shear resistance and resistance to stripping.
- Made of fine grain steel for a more uniform micro-structure, resulting in improved toughness and fracture resistance.
- Inch Bolts:
 - Meet or exceed SAE Grade 8 specifications for tensile strength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



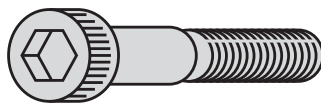
- Thread design and steel — similar to HEX Head Bolts
- Inch Bolts:
 - Have 20% higher head height than SAE specifications for longer wear life, easier gripping and less slippage.
 - Exceed SAE Grade 8 specifications for tensile strength and proof load, minimum tensile strength of 170,000 psi.
 - Marked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

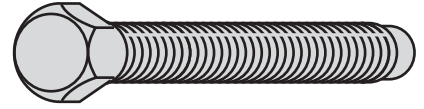
Hex Socket Head Screw Bolts



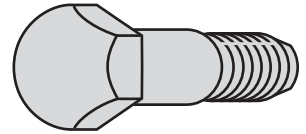
- Designed with smooth rolled threads for better clamp load, shear resistance, and resistance to stripping.
- Made of fine grain steel for a more uniform micro-structure, resulting in improved toughness and fracture resistance.
- Exceeds SAE Grade 8 specifications for tensile strength and proof load,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

Hex Head Forcing Bolts

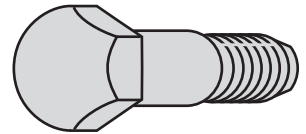
- Designed with smooth rolled threads for better clamp load, shear resistance, and strip resistance.
- Made of fine grain steel for a more uniform micro-structure, resulting in improved toughness and fracture resistance.

**Track Bolt and Split Master Link Bolts**

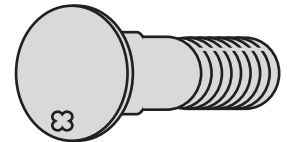
- High dome Hex head for longer wear life and reusability.
- Exceeds SAE Grade 8 specification for tensile strength and proof load, minimum tensile strength 170,000 psi.
- Special induction heat treat process provides Rockwell C37-42 hardness.

**High Strength Track Bolts**

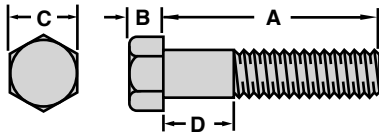
- Similar high dome Hex head as standard Track Bolts.
- Exceeds SAE Grade 8 specifications for tensile strength and proof load, minimum tensile strength 180,000 psi.
- Special induction heat treat process provides Rockwell C39-43 hardness.

**Cutting Edge Bolts**

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



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



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

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
Thread Size (in - TPI) 5/16 - 18 (Continued)					
5/16 - 18	1 5/8 in	0.24 in	0.50 in	0.75 in	1H-5514
5/16 - 18	1 3/4 in	0.24 in	0.50 in	0.87 in	1B-9575
5/16 - 18	2 in	0.24 in	0.50 in	1.13 in	2B-2694
5/16 - 18	2 1/4 in	0.24 in	0.50 in	1.37 in	1D-4538
5/16 - 18	2 1/2 in	0.24 in	0.50 in	1.63 in	1D-4539
5/16 - 18	2 3/4 in	0.24 in	0.50 in	1.87 in	1D-4540
5/16 - 18	3 in	0.24 in	0.50 in	2.13 in	1D-4541
5/16 - 18	3 1/4 in	0.24 in	0.50 in	2.25 in	1F-5842
5/16 - 18	3 1/2 in	0.24 in	0.50 in	2.63 in	1F-4111
5/16 - 18	3 3/4 in	0.24 in	0.50 in	2.75 in	4B-0831
5/16 - 18	4 in	0.24 in	0.50 in	3.00 in	4B-3903
5/16 - 18	4 1/4 in	0.24 in	0.50 in	3.37 in	8H-8769
5/16 - 18	4 1/2 in	0.24 in	0.50 in	3.63 in	3H-5932
5/16 - 18	4 3/4 in	0.24 in	0.50 in	3.87 in	3H-3243
5/16 - 18	5 in	0.24 in	0.50 in	4.13 in	1F-6296
5/16 - 18	5 1/2 in	0.24 in	0.50 in	4.63 in	5L-1761
5/16 - 18	5 3/4 in	0.24 in	0.50 in	4.87 in	8M-1865
5/16 - 18	6 in	0.24 in	0.50 in	5.13 in	5P-0059
5/16 - 18	6 1/2 in	0.24 in	0.50 in	5.37 in	4F-3508
1 - 8	8 1/2 in	0.71 in	1.50 in	6.00 in	1D-4645
5/16 - 18	Nut	--	--	--	5S-0003
5/16 - 18	Washer	--	--	--	9M-1974
Thread Size (in - TPI) 3/8 - 16					
3/8 - 16	5/8 in	0.29 in	0.56 in	0.09 in	OT-0102
3/8 - 16	1/2 in	0.29 in	0.56 in	0.09 in	4F-4879
3/8 - 16	3/4 in	0.29 in	0.56 in	0.13 in	OS-0509
3/8 - 16	7/8 in	0.29 in	0.56 in	0.13 in	OL-1351
3/8 - 16	1 in	0.29 in	0.56 in	0.13 in	OS-1594
3/8 - 16	1 1/4 in	0.29 in	0.56 in	0.25 in	OS-1588
3/8 - 16	1 1/8 in	0.29 in	0.56 in	0.31 in	1A-2029
3/8 - 16	1 3/8 in	0.29 in	0.56 in	0.37 in	3B-1915
3/8 - 16	1 1/2 in	0.29 in	0.56 in	0.37 in	OS-1591
3/8 - 16	1 3/4 in	0.29 in	0.56 in	0.75 in	OS-1571
3/8 - 16	1 5/8 in	0.29 in	0.56 in	0.87 in	2A-4639
3/8 - 16	2 in	0.29 in	0.56 in	1.00 in	OS-1590
3/8 - 16	1 7/8 in	0.29 in	0.56 in	1.06 in	1C-2251
3/8 - 16	2 1/4 in	0.29 in	0.56 in	1.25 in	OL-2070
3/8 - 16	2 1/2 in	0.29 in	0.56 in	1.50 in	OL-1143
3/8 - 16	2 3/4 in	0.29 in	0.56 in	1.75 in	OT-0573

(Continued)

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

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
Thread Size (in - TPI) $\frac{3}{8}$ - 16 (Continued)					
$\frac{3}{8}$ - 16	12 in	0.29 in	0.56 in	11.00 in	7M-1202
$\frac{3}{8}$ - 16	3 in	0.29 in	0.56 in	2.00 in	OS-1619
$\frac{3}{8}$ - 16	3 $\frac{1}{4}$ in	0.29 in	0.56 in	2.25 in	OL-1352
$\frac{3}{8}$ - 16	3 $\frac{3}{4}$ in	0.29 in	0.56 in	2.50 in	OS-1608
$\frac{3}{8}$ - 16	3 $\frac{1}{2}$ in	0.29 in	0.56 in	2.50 in	OT-0065
$\frac{3}{8}$ - 16	4 in	0.29 in	0.56 in	3.00 in	8S-9191
$\frac{3}{8}$ - 16	4 $\frac{1}{4}$ in	0.29 in	0.56 in	3.25 in	OT-0055
$\frac{3}{8}$ - 16	4 $\frac{1}{2}$ in	0.29 in	0.56 in	3.25 in	1A-5964
$\frac{3}{8}$ - 16	4 $\frac{3}{4}$ in	0.29 in	0.56 in	3.75 in	1A-5183
$\frac{3}{8}$ - 16	5 in	0.29 in	0.56 in	4.00 in	5B-9603
$\frac{3}{8}$ - 16	5 $\frac{1}{4}$ in	0.29 in	0.56 in	4.25 in	5B-2638
$\frac{3}{8}$ - 16	5 $\frac{1}{2}$ in	0.29 in	0.56 in	4.50 in	5F-4899
$\frac{3}{8}$ - 16	5 $\frac{3}{4}$ in	0.29 in	0.56 in	4.75 in	7F-3425
$\frac{3}{8}$ - 16	6 $\frac{1}{4}$ in	0.29 in	0.56 in	4.75 in	8F-8544
$\frac{3}{8}$ - 16	6 in	0.29 in	0.56 in	4.87 in	1D-4706
$\frac{3}{8}$ - 16	6 $\frac{1}{2}$ in	0.29 in	0.56 in	5.25 in	4F-0411
$\frac{3}{8}$ - 16	7 in	0.29 in	0.56 in	5.75 in	9F-8999
$\frac{3}{8}$ - 16	7 $\frac{1}{2}$ in	0.29 in	0.56 in	6.25 in	6B-1557
$\frac{3}{8}$ - 16	8 in	0.29 in	0.56 in	6.75 in	8F-6350
$\frac{3}{8}$ - 16	8 $\frac{1}{2}$ in	0.29 in	0.56 in	7.25 in	9F-2773
$\frac{3}{8}$ - 16	9 in	0.29 in	0.56 in	7.75 in	5F-6044
$\frac{3}{8}$ - 16	9 $\frac{1}{2}$ in	0.29 in	0.56 in	8.25 in	4H-3283
$\frac{3}{8}$ - 16	11 in	0.29 in	0.56 in	9.75 in	5P-1415
$\frac{3}{8}$ - 16	Nut	--	--	--	9S-8752
$\frac{3}{8}$ - 16	Washer	--	--	--	5M-2894
Thread Size (in - TPI) $\frac{7}{16}$ - 14					
$\frac{7}{16}$ - 14	1 in	0.34 in	0.69 in	0.13 in	OT-0318
$\frac{7}{16}$ - 14	1 $\frac{1}{8}$ in	0.34 in	0.69 in	0.13 in	4F-8965
$\frac{7}{16}$ - 14	1 $\frac{1}{4}$ in	0.34 in	0.69 in	0.13 in	OT-0320
$\frac{7}{16}$ - 14	$\frac{7}{8}$ in	0.34 in	0.69 in	0.13 in	3L-0526
$\frac{7}{16}$ - 14	$\frac{3}{4}$ in	0.34 in	0.69 in	0.19 in	5P-0060
$\frac{7}{16}$ - 14	1 $\frac{3}{8}$ in	0.34 in	0.69 in	0.25 in	3H-5368
$\frac{7}{16}$ - 14	1 $\frac{1}{2}$ in	0.34 in	0.69 in	0.37 in	OT-0772
$\frac{7}{16}$ - 14	1 $\frac{3}{4}$ in	0.34 in	0.69 in	0.63 in	OT-0768
$\frac{7}{16}$ - 14	2 in	0.34 in	0.69 in	0.87 in	OT-0319
$\frac{7}{16}$ - 14	2 $\frac{1}{4}$ in	0.34 in	0.69 in	1.13 in	1D-4707
$\frac{7}{16}$ - 14	2 $\frac{1}{2}$ in	0.34 in	0.69 in	1.37 in	1D-4703
$\frac{7}{16}$ - 14	2 $\frac{3}{4}$ in	0.34 in	0.69 in	1.63 in	1D-4556
$\frac{7}{16}$ - 14	3 in	0.34 in	0.69 in	1.87 in	4F-5192
$\frac{7}{16}$ - 14	3 $\frac{1}{4}$ in	0.34 in	0.69 in	2.13 in	3B-8428
$\frac{7}{16}$ - 14	3 $\frac{1}{2}$ in	0.34 in	0.69 in	2.37 in	7F-8698
$\frac{7}{16}$ - 14	3 $\frac{3}{4}$ in	0.34 in	0.69 in	2.63 in	9F-2491
$\frac{7}{16}$ - 14	4 in	0.34 in	0.69 in	2.87 in	4F-7226
$\frac{7}{16}$ - 14	4 $\frac{1}{4}$ in	0.34 in	0.69 in	3.13 in	2J-5907
$\frac{7}{16}$ - 14	4 $\frac{1}{2}$ in	0.34 in	0.69 in	3.25 in	4B-7220

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
Thread Size (in - TPI) $\frac{7}{16}$ - 14 (Continued)					
$\frac{7}{16}$ - 14	4 $\frac{3}{4}$ in	0.34 in	0.69 in	3.63 in	7H-3472
$\frac{7}{16}$ - 14	5 in	0.34 in	0.69 in	3.75 in	5B-5059
$\frac{7}{16}$ - 14	5 $\frac{1}{2}$ in	0.34 in	0.69 in	4.37 in	8F-4197
$\frac{7}{16}$ - 14	6 in	0.34 in	0.69 in	4.87 in	8F-6419
$\frac{7}{16}$ - 14	6 $\frac{1}{2}$ in	0.34 in	0.69 in	5.13 in	3L-0742
$\frac{7}{16}$ - 14	7 in	0.34 in	0.69 in	5.63 in	7H-7209
$\frac{7}{16}$ - 14	7 $\frac{1}{2}$ in	0.34 in	0.69 in	6.13 in	2L-7442
$\frac{7}{16}$ - 14	8 in	0.34 in	0.69 in	6.62 in	4L-7925
$\frac{7}{16}$ - 14	9 in	0.34 in	0.69 in	7.63 in	4L-7926
$\frac{7}{16}$ - 14	11 in	0.34 in	0.69 in	9.63 in	3L-4317
$\frac{7}{16}$ - 14	Washer	--	--	--	5P-8244
$\frac{7}{16}$ - 14	Nut	--	--	--	3S-1546
Thread Size (in - TPI) $\frac{1}{2}$ - 13					
$\frac{1}{2}$ - 13	$\frac{1}{2}$ in	0.39 in	0.75 in	0.06 in	1K-6705
$\frac{1}{2}$ - 13	$\frac{3}{4}$ in	0.39 in	0.75 in	0.13 in	OS-1620
$\frac{1}{2}$ - 13	1 $\frac{1}{8}$ in	0.39 in	0.75 in	0.13 in	6H-1717
$\frac{1}{2}$ - 13	1 in	0.39 in	0.75 in	0.13 in	OS-1621
$\frac{1}{2}$ - 13	1 $\frac{1}{2}$ in	0.39 in	0.75 in	0.25 in	OS-1585
$\frac{1}{2}$ - 13	$\frac{7}{8}$ in	0.39 in	0.75 in	0.28 in	2H-3855
$\frac{1}{2}$ - 13	1 $\frac{1}{4}$ in	0.39 in	0.75 in	0.31 in	OS-1595
$\frac{1}{2}$ - 13	1 $\frac{3}{4}$ in	0.39 in	0.75 in	0.44 in	OS-1587
$\frac{1}{2}$ - 13	1 $\frac{5}{8}$ in	0.39 in	0.75 in	0.44 in	7B-3235
$\frac{1}{2}$ - 13	2 in	0.39 in	0.75 in	0.75 in	1A-1460
$\frac{1}{2}$ - 13	2 $\frac{1}{4}$ in ¹	0.39 in	0.75 in	1.00 in	2B-0947
$\frac{1}{2}$ - 13	2 $\frac{1}{4}$ in	0.39 in	0.75 in	1.00 in	9X-8873
$\frac{1}{2}$ - 13	2 $\frac{1}{2}$ in	0.39 in	0.75 in	1.25 in	9S-1366
$\frac{1}{2}$ - 13	2 $\frac{3}{4}$ in	0.39 in	0.75 in	1.50 in	1A-5822
$\frac{1}{2}$ - 13	3 in ¹	0.39 in	0.75 in	1.75 in	OL-1329
$\frac{1}{2}$ - 13	3 in	0.39 in	0.75 in	1.75 in	9X-8874
$\frac{1}{2}$ - 13	11 $\frac{1}{2}$ in ¹	0.39 in	0.75 in	10.00 in	5P-5421
$\frac{1}{2}$ - 13	13 in ¹	0.39 in	0.75 in	11.50 in	8S-6212
$\frac{1}{2}$ - 13	14 in ¹	0.39 in	0.75 in	12.50 in	5M-7900
$\frac{1}{2}$ - 13	3 $\frac{1}{4}$ in	0.39 in	0.75 in	2.00 in	OV-0375
$\frac{1}{2}$ - 13	3 $\frac{1}{2}$ in ¹	0.39 in	0.75 in	2.25 in	1D-4566
$\frac{1}{2}$ - 13	3 $\frac{1}{2}$ in	0.39 in	0.75 in	2.25 in	9X-8875
$\frac{1}{2}$ - 13	3 $\frac{3}{4}$ in	0.39 in	0.75 in	2.50 in	1B-2886
$\frac{1}{2}$ - 13	4 in	0.39 in	0.75 in	2.75 in	OS-1573
$\frac{1}{2}$ - 13	4 $\frac{1}{4}$ in	0.39 in	0.75 in	3.00 in	1D-4569
$\frac{1}{2}$ - 13	4 $\frac{1}{2}$ in	0.39 in	0.75 in	3.25 in	8S-9089
$\frac{1}{2}$ - 13	4 $\frac{3}{4}$ in ¹	0.39 in	0.75 in	3.50 in	2B-2006
$\frac{1}{2}$ - 13	4 $\frac{3}{4}$ in	0.39 in	0.75 in	3.50 in	9X-8876
$\frac{1}{2}$ - 13	5 in ¹	0.39 in	0.75 in	3.75 in	2H-6488
$\frac{1}{2}$ - 13	5 in	0.39 in	0.75 in	3.75 in	9X-8877
$\frac{1}{2}$ - 13	5 $\frac{1}{4}$ in	0.39 in	0.75 in	4.00 in	9X-8878
$\frac{1}{2}$ - 13	5 $\frac{1}{4}$ in ¹	0.39 in	0.75 in	4.00 in	6F-5282

(Continued)

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

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
Thread Size (in - TPI) 1/2 - 13 (Continued)					
1/2 - 13	5 1/2 in	0.39 in	0.75 in	4.25 in	9X-8879
1/2 - 13	5 1/2 in	0.39 in	0.75 in	4.25 in	1D-4572
1/2 - 13	5 3/4 in	0.39 in	0.75 in	4.50 in	8F-8804
1/2 - 13	6 in	0.39 in	0.75 in	4.75 in	1D-4574
1/2 - 13	6 1/4 in	0.39 in	0.75 in	4.75 in	9H-8260
1/2 - 13	6 1/2 in	0.39 in	0.75 in	5.00 in	2A-1531
1/2 - 13	7 in	0.39 in	0.75 in	5.50 in	1A-7669
1/2 - 13	7 1/2 in	0.39 in	0.75 in	6.00 in	1A-0168
1/2 - 13	8 in	0.39 in	0.75 in	6.50 in	9S-1374
1/2 - 13	8 1/2 in	0.39 in	0.75 in	7.00 in	1B-3573
1/2 - 13	9 in	0.39 in	0.75 in	7.50 in	6M-9613
1/2 - 13	10 in	0.39 in	0.75 in	8.50 in	6F-5281
1/2 - 13	10 1/2 in ¹	0.39 in	0.75 in	9.00 in	8M-0139
1/2 - 13	11 in	0.39 in	0.75 in	9.50 in	8S-3887
1/2 - 13	Nut	—	—	—	1F-7958
1/2 - 13	Washer	--	--	--	5P-8245
Thread Size (in - TPI) 9/16 - 12					
9/16 - 12	1 in	0.43 in	0.87 in	0.12 in	3K-3379
9/16 - 12	1 1/2 in	0.43 in	0.87 in	0.16 in	8S-4733
9/16 - 12	1 1/4 in	0.43 in	0.87 in	0.16 in	8S-4732
9/16 - 12	1 3/8 in	0.43 in	0.87 in	0.17 in	4B-8519
9/16 - 12	2 1/2 in	0.43 in	0.87 in	1.13 in	8S-4735
9/16 - 12	3 in	0.43 in	0.87 in	1.63 in	8S-4736
9/16 - 12	3 1/2 in	0.43 in	0.87 in	2.13 in	8S-4737
9/16 - 12	4 in	0.43 in	0.87 in	2.63 in	8S-4738
9/16 - 12	4 1/2 in	0.43 in	0.87 in	3.13 in	8S-4739
9/16 - 12	5 in	0.43 in	0.87 in	3.63 in	8S-4740
9/16 - 12	5 1/2 in	0.43 in	0.87 in	4.13 in	8S-4741
9/16 - 12	6 in	0.43 in	0.87 in	4.63 in	8S-4742
9/16 - 12	8 in	0.43 in	0.87 in	6.38 in	9H-9129
9/16 - 12	Nut	--	--	--	5P-0539
9/16 - 12	Washer	--	--	--	5P-8246
Thread Size (in - TPI) 5/8 - 11					
5/8 - 11	3/4 in	0.48 in	0.94 in	0.06 in	1H-9456
5/8 - 11	1 1/2 in	0.48 in	0.94 in	0.19 in	0S-1566
5/8 - 11	1 1/4 in	0.48 in	0.94 in	0.19 in	0S-1592
5/8 - 11	1 in	0.48 in	0.94 in	0.19 in	0S-1624
5/8 - 11	1 3/8 in	0.48 in	0.94 in	0.19 in	4B-4043
5/8 - 11	1 3/4 in	0.48 in	0.94 in	0.25 in	0S-1589
5/8 - 11	1 1/8 in	0.48 in	0.94 in	0.28 in	7S-9372
5/8 - 11	2 in ¹	0.48 in	0.94 in	0.50 in	1A-1135
5/8 - 11	2 in	0.48 in	0.94 in	0.50 in	9X-8880
5/8 - 11	2 1/2 in	0.48 in	0.94 in	0.63 in	9X-8882
5/8 - 11	2 1/2 in ¹	0.48 in	0.94 in	0.63 in	0S-1625
5/8 - 11	2 1/4 in	0.48 in	0.94 in	0.75 in	9X-8881

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
Thread Size (in - TPI) 5/8 - 11 (Continued)					
5/8 - 11	2 1/4 in ¹	0.48 in	0.94 in	0.75 in	8S-9092
5/8 - 11	2 3/4 in ¹	0.48 in	0.94 in	1.25 in	1A-8537
5/8 - 11	2 3/4 in	0.48 in	0.94 in	1.25 in	9X-8883
5/8 - 11	3 in	0.48 in	0.94 in	1.50 in	1B-4367
5/8 - 11	3 1/4 in	0.48 in	0.94 in	1.75 in	1D-4585
5/8 - 11	3 1/2 in	0.48 in	0.94 in	2.00 in	1D-4586
5/8 - 11	3 3/4 in	0.48 in	0.94 in	2.25 in	0L-1169
5/8 - 11	4 in	0.48 in	0.94 in	2.50 in	0S-1569
5/8 - 11	4 1/4 in	0.48 in	0.94 in	2.75 in	1D-4588
5/8 - 11	4 1/2 in	0.48 in	0.94 in	3.00 in	1A-8651
5/8 - 11	4 3/4 in	0.48 in	0.94 in	3.25 in	1D-4590
5/8 - 11	5 in	0.48 in	0.94 in	3.50 in	1A-5405
5/8 - 11	5 1/4 in ¹	0.48 in	0.94 in	3.75 in	7S-3224
5/8 - 11	5 1/4 in	0.48 in	0.94 in	3.75 in	9X-8884
5/8 - 11	5 1/2 in	0.48 in	0.94 in	4.00 in	1D-4593
5/8 - 11	6 1/4 in	0.48 in	0.94 in	4.50 in	5D-9514
5/8 - 11	6 in	0.48 in	0.94 in	4.50 in	1D-4595
5/8 - 11	6 1/2 in	0.48 in	0.94 in	4.75 in	1D-4597
5/8 - 11	7 in	0.48 in	0.94 in	5.25 in	1D-4599
5/8 - 11	7 1/2 in	0.48 in	0.94 in	5.75 in	1D-4600
5/8 - 11	8 in	0.48 in	0.94 in	6.25 in	1B-7709
5/8 - 11	8 1/2 in	0.48 in	0.94 in	6.75 in	1D-4601
5/8 - 11	9 in	0.48 in	0.94 in	7.25 in	2H-3756
5/8 - 11	9 1/2 in	0.48 in	0.94 in	7.75 in	1D-4602
5/8 - 11	11 1/2 in	0.48 in	0.94 in	9.75 in	5P-4624
5/8 - 11	Nut	--	--	--	4K-0367
5/8 - 11	Washer	--	--	--	5P-8247
Thread Size (in - TPI) 3/4 - 10					
3/4 - 10	1 1/2 in	0.58 in	1.13 in	0.31 in	0S-1626
3/4 - 10	1 1/4 in	0.58 in	1.13 in	0.31 in	0S-1583
3/4 - 10	1 3/4 in	0.58 in	1.13 in	0.31 in	1A-0458
3/4 - 10	1 in	0.58 in	1.13 in	0.31 in	7H-2069
3/4 - 10	2 in	0.58 in	1.13 in	0.31 in	0L-1178 ²
3/4 - 10	2 1/4 in	0.58 in	1.13 in	0.50 in	9X-8885
3/4 - 10	2 1/4 in ¹	0.58 in	1.13 in	0.50 in	2A-1538
3/4 - 10	2 1/2 in	0.58 in	1.13 in	0.75 in	1A-8063
3/4 - 10	2 3/4 in	0.58 in	1.13 in	1.00 in	9X-8886
3/4 - 10	2 3/4 in ¹	0.58 in	1.13 in	1.00 in	1D-4608
3/4 - 10	3 in ¹	0.58 in	1.13 in	1.25 in	1D-4609
3/4 - 10	3 in	0.58 in	1.13 in	1.25 in	9X-8887
3/4 - 10	3 1/4 in	0.58 in	1.13 in	1.50 in	9X-8888
3/4 - 10	3 1/4 in ¹	0.58 in	1.13 in	1.50 in	1D-4610
3/4 - 10	3 1/2 in ¹	0.58 in	1.13 in	1.75 in	3B-2968
3/4 - 10	3 1/2 in	0.58 in	1.13 in	1.75 in	9X-8889
3/4 - 10	13 in	0.58 in	1.13 in	11.00 in	031-9099

(Continued)

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

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
Thread Size (in - TPI) 3/4 - 10 (Continued)					
3/4 - 10	3 3/4 in	0.58 in	1.13 in	2.00 in	7F-5227
3/4 - 10	4 in	0.58 in	1.13 in	2.25 in	1D-4612
3/4 - 10	4 1/4 in	0.58 in	1.13 in	2.50 in	OS-1756
3/4 - 10	4 1/2 in	0.58 in	1.13 in	2.75 in	OS-1627
3/4 - 10	4 3/4 in	0.58 in	1.13 in	3.00 in	3B-6753
3/4 - 10	5 in	0.58 in	1.13 in	3.25 in	1D-4614
3/4 - 10	5 1/4 in	0.58 in	1.13 in	3.50 in	6V-8199
3/4 - 10	5 1/2 in	0.58 in	1.13 in	3.75 in	1D-4615
3/4 - 10	5 3/4 in	0.58 in	1.13 in	4.00 in	6K-1330
3/4 - 10	6 1/4 in	0.58 in	1.13 in	4.25 in	1D-4617
3/4 - 10	6 in	0.58 in	1.13 in	4.25 in	1D-4616
3/4 - 10	6 1/2 in	0.58 in	1.13 in	4.50 in	2B-1015
3/4 - 10	7 in	0.58 in	1.13 in	5.00 in	1D-4620
3/4 - 10	7 1/2 in	0.58 in	1.13 in	5.50 in	1D-4621
3/4 - 10	8 in	0.58 in	1.13 in	6.00 in	1D-4622
3/4 - 10	8 1/2 in	0.58 in	1.13 in	6.50 in	1D-4623
3/4 - 10	9 in	0.58 in	1.13 in	7.00 in	1D-4624
3/4 - 10	9 1/2 in	0.58 in	1.13 in	7.50 in	5J-1702
3/4 - 10	10 in	0.58 in	1.13 in	8.00 in	8F-4225
3/4 - 10	11 1/2 in	0.58 in	1.13 in	9.50 in	4J-7945
3/4 - 10	Washer	--	--	--	5P-8248
3/4 - 10	Nut	--	--	--	2J-3506
Thread Size (in - TPI) 7/8 - 9					
7/8 - 9	1 1/2 in	0.67 in	1.31 in	0.25 in	OT-0690
7/8 - 9	1 3/4 in	0.67 in	1.31 in	0.37 in	2H-3757
7/8 - 9	2 in	0.67 in	1.31 in	0.37 in	9X-8890
7/8 - 9	2 1/4 in	0.67 in	1.31 in	0.37 in	9F-9522
7/8 - 9	2 in ¹	0.67 in	1.31 in	0.37 in	OS-1973
7/8 - 9	2 1/2 in	0.67 in	1.31 in	0.50 in	1D-4625
7/8 - 9	2 3/4 in ¹	0.67 in	1.31 in	0.75 in	1D-4626
7/8 - 9	2 3/4 in	0.67 in	1.31 in	0.75 in	9X-8891
7/8 - 9	3 in	0.67 in	1.31 in	1.00 in	1D-4627
7/8 - 9	3 1/4 in ¹	0.67 in	1.31 in	1.25 in	1D-4628
7/8 - 9	3 1/4 in	0.67 in	1.31 in	1.25 in	9X-8892
7/8 - 9	3 1/2 in	0.67 in	1.31 in	1.50 in	9X-8893
7/8 - 9	3 1/2 in ¹	0.67 in	1.31 in	1.50 in	1D-4629
7/8 - 9	3 3/4 in ¹	0.67 in	1.31 in	1.75 in	2H-3856
7/8 - 9	3 3/4 in	0.67 in	1.31 in	1.75 in	9X-8894
7/8 - 9	12 1/2 in	0.67 in	1.31 in	10.25 in	4D-8317
7/8 - 9	14 in	0.67 in	1.31 in	11.75 in	3K-0581
7/8 - 9	15 in	0.67 in	1.31 in	12.75 in	3K-3183
7/8 - 9	16 in	0.67 in	1.31 in	13.75 in	3K-6552
7/8 - 9	4 in ¹	0.67 in	1.31 in	2.00 in	1D-4630
7/8 - 9	4 in	0.67 in	1.31 in	2.00 in	9X-8895
7/8 - 9	4 1/4 in	0.67 in	1.31 in	2.25 in	1D-4631

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
Thread Size (in - TPI) 7/8 - 9 (Continued)					
7/8 - 9	4 1/2 in	0.67 in	1.31 in	2.50 in	1A-5576
7/8 - 9	4 3/4 in	0.67 in	1.31 in	2.75 in	4J-8622
7/8 - 9	5 in	0.67 in	1.31 in	3.00 in	9S-1351
7/8 - 9	5 1/2 in	0.67 in	1.31 in	3.50 in	1D-4634
7/8 - 9	6 in	0.67 in	1.31 in	3.75 in	9S-1322
7/8 - 9	6 1/2 in	0.67 in	1.31 in	4.25 in	6J-1536
7/8 - 9	7 in	0.67 in	1.31 in	4.75 in	1D-5976
7/8 - 9	7 1/2 in	0.67 in	1.31 in	5.25 in	1K-9422
7/8 - 9	8 in	0.67 in	1.31 in	5.75 in	1D-6259
7/8 - 9	8 1/2 in	0.67 in	1.31 in	6.25 in	3K-7127
7/8 - 9	9 in	0.67 in	1.31 in	6.75 in	6K-8739
7/8 - 9	9 1/2 in	0.67 in	1.31 in	7.25 in	1D-6260
7/8 - 9	10 in	0.67 in	1.31 in	7.75 in	2B-2391
7/8 - 9	11 in	0.67 in	1.31 in	8.75 in	3K-3112
7/8 - 9	Nut	--	--	--	2J-3505
7/8 - 9	Washer	--	--	--	5P-8249
Thread Size (in - TPI) 1 - 8					
1 - 8	2 1/4 in	0.71 in	1.50 in	0.25 in	8S-9093
1 - 8	1 1/4 in	0.71 in	1.50 in	0.31 in	8S-4767
1 - 8	1 1/2 in	0.71 in	1.50 in	0.31 in	OV-0450
1 - 8	1 3/4 in	0.71 in	1.50 in	0.37 in	1J-7370
1 - 8	2 1/2 in	0.71 in	1.50 in	0.50 in	1D-4635
1 - 8	2 3/4 in	0.71 in	1.50 in	0.50 in	9S-1363
1 - 8	3 in	0.71 in	1.50 in	0.75 in	1D-4709
1 - 8	2 in	0.71 in	1.50 in	0.75 in	1J-5257
1 - 8	3 1/4 in	0.71 in	1.50 in	1.00 in	1D-4637
1 - 8	3 1/2 in	0.71 in	1.50 in	1.25 in	1D-4638
1 - 8	3 3/4 in	0.71 in	1.50 in	1.50 in	8H-5772
1 - 8	4 in	0.71 in	1.50 in	1.75 in	9X-8896
1 - 8	4 in ¹	0.71 in	1.50 in	1.75 in	1D-4639
1 - 8	14 in	0.71 in	1.50 in	10.50 in	6M-2001
1 - 8	13 in	0.71 in	1.50 in	10.50 in	6J-4081
1 - 8	12 in	0.71 in	1.50 in	10.50 in	2H-4010
1 - 8	15 in	0.71 in	1.50 in	13.50 in	2H-4011
1 - 8	16 in	0.71 in	1.50 in	14.00 in	6M-1029
1 - 8	4 1/4 in	0.71 in	1.50 in	2.00 in	9X-8897
1 - 8	4 1/4 in ¹	0.71 in	1.50 in	2.00 in	1D-4640
1 - 8	4 1/2 in	0.71 in	1.50 in	2.25 in	1D-4641
1 - 8	4 3/4 in	0.71 in	1.50 in	2.50 in	2A-1420
1 - 8	5 in	0.71 in	1.50 in	2.75 in	9X-8898
1 - 8	5 in ¹	0.71 in	1.50 in	2.75 in	1D-4642
1 - 8	5 1/2 in	0.71 in	1.50 in	3.25 in	1D-4643
1 - 8	6 in	0.71 in	1.50 in	3.75 in	9F-6936
1 - 8	6 1/2 in	0.71 in	1.50 in	4 in	5B-5473
1 - 8	7 in	0.71 in	1.50 in	4.50 in	5F-9338

(Continued)

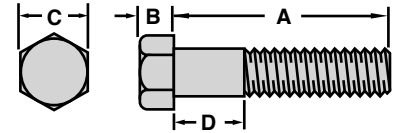
Hex Head Bolts/Inch/Coarse Thread UNC/Phosphate & Oil Coated (Continued)

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
Thread Size (in - TPI) 1 - 8 (Continued)					
1 - 8	7 ½ in	0.71 in	1.50 in	5.00 in	2B-7218
1 - 8	8 in	0.71 in	1.50 in	5.50 in	1D-4644
1 - 8	8 ½ in	0.71 in	1.50 in	6.00 in	1D-4645
1 - 8	9 in	0.71 in	1.50 in	6.50 in	1D-4646
1 - 8	9 ½ in	0.71 in	1.50 in	7.00 in	1D-4647
1 - 8	10 in	0.71 in	1.50 in	7.50 in	2J-8348
1 - 8	10 ½ in	0.71 in	1.50 in	8.00 in	8F-6453
1 - 8	11 in	0.71 in	1.50 in	8.50 in	8K-5130
1 - 8	11 ½ in	0.71 in	1.50 in	9.00 in	7K-4363
1 - 8	Nut	--	--	--	2J-3507
1 - 8	Washer	--	--	--	5P-8250
Thread Size (in - TPI) 1 ⅛ - 7					
1 ⅛ - 7	2 in	0.81 in	1.87 in	0.25 in	3J-8281
1 ⅛ - 7	2 ¾ in	0.72 in	1.69 in	0.44 in	2K-2037
1 ⅛ - 7	3 in	0.72 in	1.69 in	0.50 in	1J-2814
1 ⅛ - 7	4 in	0.72 in	1.69 in	0.63 in	3N-1614
1 ⅛ - 7	2 ½ in	0.72 in	1.69 in	1.00 in	7J-7222
1 ⅛ - 7	3 ½ in	0.72 in	1.69 in	1.00 in	1J-2175
1 ⅛ - 7	4 ¼ in	0.72 in	1.69 in	1.75 in	5J-1572
1 ⅛ - 7	4 ½ in	0.72 in	1.69 in	2.00 in	5M-0544
1 ⅛ - 7	5 ¼ in	0.72 in	1.69 in	3.00 in	6J-1551
1 ⅛ - 7	6 in	0.72 in	1.69 in	3.50 in	8H-5727
1 ⅛ - 7	6 ½ in	0.72 in	1.69 in	3.75 in	8F-4486
1 ⅛ - 7	Nut	--	--	--	4J-5977
1 ⅛ - 7	Washer	--	--	--	3S-1349
Thread Size (in - TPI) 1 ¼ - 7					
1 ¼ - 7	3 in	0.81 in	1.87 in	0.44 in	3R-2299
1 ¼ - 7	2 ½ in	0.81 in	1.87 in	0.44 in	3F-6353
1 ¼ - 7	3 ¼ in	0.81 in	1.87 in	0.50 in	1J-5484
1 ¼ - 7	3 ½ in	0.81 in	1.87 in	0.75 in	2B-1955
1 ¼ - 7	4 in	0.81 in	1.87 in	1.25 in	2H-3758
1 ¼ - 7	4 ¼ in	0.81 in	1.87 in	1.50 in	1S-6560

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
Thread Size (in - TPI) 1 ¼ - 7 (Continued)					
1 ¼ - 7	4 ½ in	0.81 in	1.87 in	1.75 in	3R-2300
1 ¼ - 7	13 in	0.81 in	1.87 in	10.50 in	1K-4378
1 ¼ - 7	14 in	0.81 in	1.87 in	11.00 in	6V-1734
1 ¼ - 7	15 in	0.81 in	1.87 in	12.00 in	031-0213
1 ¼ - 7	4 ¾ in	0.81 in	1.87 in	2.00 in	8F-1156
1 ¼ - 7	5 in	0.81 in	1.87 in	2.25 in	2H-1618
1 ¼ - 7	5 ½ in	0.81 in	1.87 in	2.75 in	1B-2721
1 ¼ - 7	6 in	0.81 in	1.87 in	3.25 in	2H-1537
1 ¼ - 7	6 ½ in	0.81 in	1.87 in	3.50 in	6H-1628
1 ¼ - 7	7 in	0.81 in	1.87 in	4.00 in	6V-2624
1 ¼ - 7	8 in	0.81 in	1.87 in	5.00 in	3F-9025
1 ¼ - 7	8 ½ in	0.81 in	1.87 in	5.50 in	1J-6775
1 ¼ - 7	9 in	0.81 in	1.87 in	6.00 in	1K-9418
1 ¼ - 7	9 ½ in	0.81 in	1.87 in	6.50 in	1K-9420
1 ¼ - 7	10 in	0.81 in	1.87 in	7.00 in	1D-4649
1 ¼ - 7	10 ½ in	0.81 in	1.87 in	7.50 in	6B-0388
1 ¼ - 7	11 in	0.81 in	1.87 in	8.25 in	1K-9415
1 ¼ - 7	Washer	--	--	--	4K-0684
1 ¼ - 7	Nut	--	--	--	3K-9770
Thread Size (in - TPI) 1 ½ - 6					
1 ½ - 6	3 ½ in	0.97 in	2.25 in	0.40 in	3J-1805
1 ½ - 6	4 in	0.97 in	2.25 in	0.50 in	6V-8970
1 ½ - 6	4 ½ in	0.97 in	2.25 in	1.00 in	6V-8536
1 ½ - 6	4 ¾ in	0.97 in	2.25 in	1.25 in	138-8455
1 ½ - 6	5 in	0.97 in	2.25 in	1.75 in	1K-9414
1 ½ - 6	6 in	0.97 in	2.25 in	2.50 in	131-2627
1 ½ - 6	7 in	0.97 in	2.25 in	2.50 in	4R-9112
1 ½ - 6	9 in	0.97 in	2.25 in	5.50 in	6V-7977
1 ½ - 6	11 ½ in	0.97 in	2.25 in	7.50 in	6V-0659
1 ½ - 6	12 ½ in	0.97 in	2.25 in	9.00 in	127-4840
1 ½ - 6	Washer	--	--	--	3S-6162
1 ½ - 6	Nut	--	--	--	9S-8216

¹ High strength bolt.² Discontinued, part of the 8F-2550 Engine Tilting Group

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



Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
Thread Size (in - TPI) 1/4 - 28					
1/4 - 20	Washer	--	--	--	5P-0537
1/4 - 28	5/8 in	0.19 in	0.44 in	0.08 in	0S-1570
1/4 - 28	1 1/4 in	0.19 in	0.44 in	0.13 in	4B-2152
1/4 - 28	3/4 in	0.19 in	0.44 in	0.08 in	0T-0284
1/4 - 28	1 in	0.19 in	0.44 in	0.25 in	0S-1597
1/4 - 28	7/8 in	0.19 in	0.44 in	0.08 in	0L-1340
1/4 - 28	1 1/8 in	0.19 in	0.44 in	0.37 in	0L-1590
1/4 - 28	1 1/2 in	0.19 in	0.44 in	0.75 in	5F-4475
1/4 - 28	1 3/4 in	0.19 in	0.44 in	1.00 in	2D-7563
1/4 - 28	2 in	0.19 in	0.44 in	1.25 in	4B-8701
1/4 - 28	2 1/2 in	0.19 in	0.44 in	1.50 in	1A-9919
1/4 - 28	2 1/4 in	0.19 in	0.44 in	1.50 in	2B-8593
1/4 - 28	3 in	0.19 in	0.44 in	2.25 in	8S-4712
1/4 - 28	3 1/2 in	0.19 in	0.44 in	2.75 in	8S-4713
1/4 - 28	4 in	0.19 in	0.44 in	3.25 in	8S-4714
1/4 - 28	4 1/2 in	0.19 in	0.44 in	3.75 in	8S-4715
1/4 - 28	Nut	--	--	--	9S-8748
1/4 - 28	1/2 in	0.19 in	0.44 in	0.09 in	6F-7027
1/4 - 28	5 in	0.19 in	0.44 in	4.25 in	8S-4716
Thread Size (in - TPI) 5/16 - 24					
5/16 - 18	Washer	--	--	--	9M-1974
5/16 - 24	1/2 in	0.24 in	0.50 in	0.09 in	2F-2093
5/16 - 24	7/8 in	0.24 in	0.50 in	0.09 in	4B-9883
5/16 - 24	3/4 in	0.24 in	0.50 in	0.13 in	1A-2343
5/16 - 24	5/8 in	0.24 in	0.50 in	0.13 in	2H-3737
5/16 - 24	1 1/4 in	0.24 in	0.50 in	0.37 in	1B-1293
5/16 - 24	1 3/8 in	0.24 in	0.50 in	0.50 in	2A-1371
5/16 - 24	1 1/2 in	0.24 in	0.50 in	0.63 in	1B-0581
5/16 - 24	1 1/8 in	0.24 in	0.50 in	0.66 in	6H-0187
5/16 - 24	1 3/4 in	0.24 in	0.50 in	0.87 in	2H-3708
5/16 - 24	2 in	0.24 in	0.50 in	1.13 in	1H-5403
5/16 - 24	2 1/4 in	0.24 in	0.50 in	1.37 in	2H-3739
5/16 - 24	2 1/2 in	0.24 in	0.50 in	1.63 in	8S-4717
5/16 - 24	2 3/4 in	0.24 in	0.50 in	1.87 in	4B-1028
5/16 - 24	3 in	0.24 in	0.50 in	2.13 in	8S-4718
5/16 - 24	3 1/4 in	0.24 in	0.50 in	2.37 in	7F-0938
5/16 - 24	4 in	0.24 in	0.50 in	3.13 in	8S-4720
5/16 - 24	4 1/2 in	0.24 in	0.50 in	3.63 in	8S-4721
5/16 - 24	5 in	0.24 in	0.50 in	4.13 in	8S-4722
5/16 - 24	Nut	--	--	--	9S-8751

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
Thread Size (in - TPI) 5/16 - 24 (Continued)					
5/16 - 24	1 in	0.24 in	0.50 in	0.13 in	2H-3738
5/16 - 24	3 1/2 in	0.24 in	0.50 in	2.63 in	8S-4719
Thread Size (in - TPI) 3/8 - 24					
3/8 - 16	Washer	--	--	--	5M-2894
3/8 - 24	Nut	--	--	--	3S-2713
3/8 - 24	7/8 in	0.29 in	0.56 in	0.09 in	0T-0703
3/8 - 24	1 1/8 in	0.29 in	0.56 in	0.13 in	5B-2208
3/8 - 24	3/4 in	0.29 in	0.56 in	0.13 in	0L-0472
3/8 - 24	1 in	0.29 in	0.56 in	0.19 in	6F-7030
3/8 - 24	1 1/4 in	0.29 in	0.56 in	0.25 in	1A-2209
3/8 - 24	1 3/8 in	0.29 in	0.56 in	0.37 in	2A-4996
3/8 - 24	1 1/2 in	0.29 in	0.56 in	0.50 in	0T-0924
3/8 - 24	2 in	0.29 in	0.56 in	1.00 in	0S-1748
3/8 - 24	2 1/4 in	0.29 in	0.56 in	1.25 in	0L-0639
3/8 - 24	2 1/2 in	0.29 in	0.56 in	1.50 in	0L-1648
3/8 - 24	2 3/4 in	0.29 in	0.56 in	1.75 in	0L-0139
3/8 - 24	3 3/4 in	0.29 in	0.56 in	2.50 in	1B-3680
3/8 - 24	4 in	0.29 in	0.56 in	3.00 in	0T-0513
3/8 - 24	4 1/4 in	0.29 in	0.56 in	3.25 in	1B-5082
3/8 - 24	4 1/2 in	0.29 in	0.56 in	3.50 in	6F-8425
3/8 - 24	5 in	0.29 in	0.56 in	4.00 in	1A-2116
3/8 - 24	5 1/2 in	0.29 in	0.56 in	4.50 in	5B-6579
3/8 - 24	6 in	0.29 in	0.56 in	5.00 in	6F-4736
3/8 - 24	6 1/2 in	0.29 in	0.56 in	5.25 in	035-2353
3/8 - 24	8 in	0.29 in	0.56 in	6.75 in	4H-5883
3/8 - 24	1 3/4 in	0.29 in	0.56 in	0.75 in	0L-0478
3/8 - 24	3 in	0.29 in	0.56 in	2.00 in	6F-7031
3/8 - 24	3 1/4 in	0.29 in	0.56 in	2.25 in	0S-1605
3/8 - 24	1/2 in	0.29 in	0.56 in	0.09 in	0L-1138
3/8 - 24	5/8 in	0.29 in	0.56 in	0.09 in	0T-0642
Thread Size (in - TPI) 7/8 - 20					
7/8 - 14	Washer	--	--	--	5P-8244
7/8 - 20	1 1/4 in	0.34 in	0.69 in	0.13 in	0T-0244
7/8 - 20	1 1/2 in	0.34 in	0.69 in	0.37 in	8S-4723
7/8 - 20	1 3/4 in	0.34 in	0.69 in	0.63 in	1A-4350
7/8 - 20	2 in	0.34 in	0.69 in	0.87 in	0T-0489
7/8 - 20	2 1/4 in	0.34 in	0.69 in	1.13 in	8S-4724
7/8 - 20	3 1/4 in	0.34 in	0.69 in	1.75 in	5D-4085
7/8 - 20	3 in	0.34 in	0.69 in	1.87 in	8S-4726
7/8 - 20	2 3/4 in	0.34 in	0.69 in	1.63 in	8S-4725

(Continued)

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

Thread Size (in - TPI)	A	B	C	D	Part Number
	Bolt Length	Head Height	Head Width	Grip Length	
Thread Size (in - TPI) ⁷ / ₁₆ - 20 (Continued)					
⁷ / ₁₆ - 20	3 ³ / ₄ in	0.34 in	0.69 in	2.63 in	8S-4727
⁷ / ₁₆ - 20	4 in	0.34 in	0.69 in	2.87 in	8S-4728
⁷ / ₁₆ - 20	4 ¹ / ₂ in	0.34 in	0.69 in	3.37 in	8S-4729
⁷ / ₁₆ - 20	5 in	0.34 in	0.69 in	3.87 in	8S-4730
⁷ / ₁₆ - 20	6 in	0.34 in	0.69 in	4.87 in	8S-4731
⁷ / ₁₆ - 20	9 in	0.34 in	0.69 in	7.63 in	2L-4523
⁷ / ₁₆ - 20	1 in	0.34 in	0.69 in	0.13 in	0T-0840
⁷ / ₁₆ - 20	2 ¹ / ₂ in	0.34 in	0.69 in	1.37 in	1B-0572
⁷ / ₁₆ - 20	Nut	--	--	--	9S-8905
⁷ / ₁₆ - 20	3 ¹ / ₂ in	0.34 in	0.69 in	2.37 in	1J-6298
Thread Size (in - TPI) ¹ / ₂ - 20					
¹ / ₂ - 13	Washer	--	--	--	5P-8245
¹ / ₂ - 20	1 in	0.39 in	0.75 in	0.13 in	0S-1629
¹ / ₂ - 20	³ / ₄ in	0.39 in	0.75 in	0.13 in	6F-7032
¹ / ₂ - 20	⁷ / ₈ in	0.39 in	0.75 in	0.13 in	0T-0598
¹ / ₂ - 20	1 ¹ / ₂ in	0.39 in	0.75 in	0.25 in	0S-1603
¹ / ₂ - 20	1 ³ / ₄ in	0.39 in	0.75 in	0.50 in	0S-1584
¹ / ₂ - 20	2 in	0.39 in	0.75 in	0.75 in	0S-1579
¹ / ₂ - 20	2 ¹ / ₄ in	0.39 in	0.75 in	1.00 in	0S-0484
¹ / ₂ - 20	2 ¹ / ₂ in	0.39 in	0.75 in	1.25 in	0S-1604
¹ / ₂ - 20	2 ³ / ₄ in	0.39 in	0.75 in	1.50 in	0S-1599
¹ / ₂ - 20	3 in	0.39 in	0.75 in	1.75 in	0L-1732
¹ / ₂ - 20	3 ¹ / ₄ in	0.39 in	0.75 in	2.00 in	0L-1558
¹ / ₂ - 20	3 ¹ / ₂ in	0.39 in	0.75 in	2.25 in	0L-2315
¹ / ₂ - 20	3 ³ / ₄ in	0.39 in	0.75 in	2.50 in	1A-1952
¹ / ₂ - 20	4 in	0.39 in	0.75 in	2.75 in	0L-1559
¹ / ₂ - 20	4 ¹ / ₄ in	0.39 in	0.75 in	3.00 in	6F-7033
¹ / ₂ - 20	4 ¹ / ₂ in	0.39 in	0.75 in	3.25 in	1A-3046
¹ / ₂ - 20	7 in	0.39 in	0.75 in	3.37 in	3H-1930
¹ / ₂ - 20	4 ³ / ₄ in	0.39 in	0.75 in	3.50 in	0L-0557
¹ / ₂ - 20	5 in	0.39 in	0.75 in	3.75 in	1B-1422
¹ / ₂ - 20	5 ¹ / ₂ in	0.39 in	0.75 in	4.25 in	3H-1097
¹ / ₂ - 20	5 ³ / ₄ in	0.39 in	0.75 in	4.50 in	5M-9979
¹ / ₂ - 20	6 in	0.39 in	0.75 in	4.75 in	9F-1595
¹ / ₂ - 20	6 ¹ / ₂ in	0.39 in	0.75 in	5.00 in	2H-3747
¹ / ₂ - 20	7 ¹ / ₂ in	0.39 in	0.75 in	6.00 in	2H-3748
¹ / ₂ - 20	8 in	0.39 in	0.75 in	6.50 in	1A-3967
¹ / ₂ - 20	Nut	--	--	--	6B-6684
¹ / ₂ - 20	1 ¹ / ₄ in	0.39 in	0.75 in	0.13 in	0S-1593
¹ / ₂ - 20	1 ³ / ₈ in	0.39 in	0.75 in	0.13 in	4K-7502
Thread Size (in - TPI) ⁹ / ₁₆ - 18					
⁹ / ₁₆ - 12	Washer	--	--	--	5P-8246
⁹ / ₁₆ - 18	1 ³ / ₈ in	0.43 in	0.87 in	0.13 in	8S-4761
⁹ / ₁₆ - 18	1 ³ / ₄ in	0.43 in	0.87 in	0.38 in	8S-4762
⁹ / ₁₆ - 18	2 in	0.43 in	0.87 in	0.63 in	8S-4745

Thread Size (in - TPI)	A	B	C	D	Part Number
	Bolt Length	Head Height	Head Width	Grip Length	
Thread Size (in - TPI) ⁹ / ₁₆ - 18 (Continued)					
⁹ / ₁₆ - 18	2 ¹ / ₄ in	0.43 in	0.87 in	0.88 in	8S-4763
⁹ / ₁₆ - 18	2 ¹ / ₂ in	0.43 in	0.87 in	1.13 in	8S-4746
⁹ / ₁₆ - 18	2 ³ / ₄ in	0.43 in	0.87 in	1.38 in	8S-4764
⁹ / ₁₆ - 18	3 in	0.43 in	0.87 in	1.38 in	6S-0753
⁹ / ₁₆ - 18	3 ¹ / ₂ in	0.43 in	0.87 in	2.13 in	8S-4747
⁹ / ₁₆ - 18	3 ³ / ₄ in	0.43 in	0.87 in	2.38 in	2S-1216
⁹ / ₁₆ - 18	4 in	0.43 in	0.87 in	2.63 in	8S-4748
⁹ / ₁₆ - 18	4 ¹ / ₂ in	0.43 in	0.87 in	3.13 in	8S-4749
⁹ / ₁₆ - 18	5 in	0.43 in	0.87 in	3.63 in	8S-4750
⁹ / ₁₆ - 18	5 ¹ / ₂ in	0.43 in	0.87 in	4.13 in	8S-4751
⁹ / ₁₆ - 18	6 in	0.43 in	0.87 in	4.63 in	8S-4752
⁹ / ₁₆ - 18	Nut	--	--	--	5P-0540
⁹ / ₁₆ - 18	1 ¹ / ₂ in	0.43 in	0.87 in	0.13 in	8S-4744
⁹ / ₁₆ - 18	1 ¹ / ₄ in	0.43 in	0.87 in	0.13 in	8S-4743
Thread Size (in - TPI) ⁵ / ₈ - 18					
⁵ / ₈ - 11	Washer	--	--	--	5P-8247
⁵ / ₈ - 18	1 ³ / ₈ in	0.48 in	0.94 in	0.19 in	4H-4033
⁵ / ₈ - 18	1 in	0.48 in	0.94 in	0.19 in	6F-7316
⁵ / ₈ - 18	1 ³ / ₄ in	0.48 in	0.94 in	0.25 in	5B-0841
⁵ / ₈ - 18	2 in	0.48 in	0.94 in	0.50 in	0S-1576
⁵ / ₈ - 18	2 ¹ / ₄ in	0.48 in	0.94 in	0.75 in	0S-1577
⁵ / ₈ - 18	2 ¹ / ₂ in	0.48 in	0.94 in	1.00 in	0S-1600
⁵ / ₈ - 18	2 ³ / ₄ in	0.48 in	0.94 in	1.25 in	0S-1601
⁵ / ₈ - 18	3 in	0.48 in	0.94 in	1.50 in	8B-5144
⁵ / ₈ - 18	3 ¹ / ₄ in	0.48 in	0.94 in	1.75 in	0S-2318
⁵ / ₈ - 18	12 in	0.48 in	0.94 in	10.25 in	6K-0953
⁵ / ₈ - 18	3 ¹ / ₂ in	0.48 in	0.94 in	2.00 in	0S-1602
⁵ / ₈ - 18	3 ³ / ₄ in	0.48 in	0.94 in	2.25 in	0S-2353
⁵ / ₈ - 18	4 in	0.48 in	0.94 in	2.50 in	0V-0459
⁵ / ₈ - 18	4 ¹ / ₄ in	0.48 in	0.94 in	2.75 in	0V-0523
⁵ / ₈ - 18	4 ¹ / ₂ in	0.48 in	0.94 in	3.00 in	0T-0857
⁵ / ₈ - 18	4 ³ / ₄ in	0.48 in	0.94 in	3.25 in	1A-3203
⁵ / ₈ - 18	5 in	0.48 in	0.94 in	3.50 in	6F-7024
⁵ / ₈ - 18	5 ¹ / ₂ in	0.48 in	0.94 in	4.00 in	2A-2814
⁵ / ₈ - 18	5 ³ / ₄ in	0.48 in	0.94 in	4.25 in	1B-7538
⁵ / ₈ - 18	6 in	0.48 in	0.94 in	4.50 in	2B-6030
⁵ / ₈ - 18	7 in	0.48 in	0.94 in	5.25 in	1B-3623
⁵ / ₈ - 18	7 ¹ / ₂ in	0.48 in	0.94 in	5.75 in	7H-5569
⁵ / ₈ - 18	8 in	0.48 in	0.94 in	6.25 in	8S-4753
⁵ / ₈ - 18	8 ¹ / ₂ in	0.48 in	0.94 in	6.75 in	6V-1873
⁵ / ₈ - 18	11 in	0.48 in	0.94 in	9.25 in	5K-7144
⁵ / ₈ - 18	Nut	--	--	--	6B-6683
⁵ / ₈ - 18	1 ¹ / ₂ in	0.48 in	0.94 in	0.19 in	2L-1701
⁵ / ₈ - 18	1 ¹ / ₄ in	0.48 in	0.94 in	0.19 in	1A-4273

(Continued)

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

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
Thread Size (in - TPI) $\frac{3}{4}$ - 16					
$\frac{3}{4}$ - 10	Washer	--	--	--	5P-8248
$\frac{3}{4}$ - 16	3 in	0.58 in	1.13 in	1.25 in	0S-1575
$\frac{3}{4}$ - 16	3 $\frac{1}{4}$ in	0.58 in	1.13 in	1.50 in	6B-5310
$\frac{3}{4}$ - 16	3 $\frac{1}{2}$ in	0.58 in	1.13 in	1.75 in	9S-1364
$\frac{3}{4}$ - 16	3 $\frac{3}{4}$ in	0.58 in	1.13 in	2.00 in	1A-3103
$\frac{3}{4}$ - 16	4 in	0.58 in	1.13 in	2.25 in	0L-1328
$\frac{3}{4}$ - 16	4 $\frac{1}{4}$ in	0.58 in	1.13 in	2.50 in	1D-3419
$\frac{3}{4}$ - 16	4 $\frac{3}{4}$ in	0.58 in	1.13 in	3.00 in	7B-5163
$\frac{3}{4}$ - 16	5 in	0.58 in	1.13 in	3.25 in	0S-1607
$\frac{3}{4}$ - 16	5 $\frac{1}{2}$ in	0.58 in	1.13 in	3.75 in	8F-6123
$\frac{3}{4}$ - 16	6 in	0.58 in	1.13 in	4.25 in	7B-4436
$\frac{3}{4}$ - 16	6 $\frac{1}{2}$ in	0.58 in	1.13 in	4.50 in	6F-7901
$\frac{3}{4}$ - 16	7 in	0.58 in	1.13 in	5.00 in	2H-3749
$\frac{3}{4}$ - 16	8 in	0.58 in	1.13 in	6.00 in	4F-0925
$\frac{3}{4}$ - 16	8 $\frac{1}{2}$ in	0.58 in	1.13 in	6.50 in	8S-4766
$\frac{3}{4}$ - 16	9 in	0.58 in	1.13 in	7.00 in	7F-1926
$\frac{3}{4}$ - 16	9 $\frac{1}{2}$ in	0.58 in	1.13 in	7.50 in	8B-7943
$\frac{3}{4}$ - 16	10 in	0.58 in	1.13 in	8.00 in	2K-2813
$\frac{3}{4}$ - 16	11 in	0.58 in	1.13 in	9.00 in	5P-8288
$\frac{3}{4}$ - 16	11 $\frac{1}{2}$ in	0.58 in	1.13 in	9.50 in	2P-9845
$\frac{3}{4}$ - 16	1 $\frac{1}{2}$ in	0.58 in	1.13 in	0.19 in	2H-3725
$\frac{3}{4}$ - 16	1 $\frac{3}{4}$ in	0.58 in	1.13 in	0.19 in	2H-3740
$\frac{3}{4}$ - 16	1 $\frac{3}{4}$ in	0.58 in	1.13 in	0.19 in	1A-0075
$\frac{3}{4}$ - 16	2 in	0.58 in	1.13 in	0.25 in	9S-1362
$\frac{3}{4}$ - 16	2 $\frac{1}{4}$ in	0.58 in	1.13 in	0.50 in	0S-1897
$\frac{3}{4}$ - 16	2 $\frac{1}{2}$ in	0.58 in	1.13 in	0.75 in	2H-3750
$\frac{3}{4}$ - 16	2 $\frac{3}{4}$ in	0.58 in	1.13 in	1.00 in	6B-6682
$\frac{3}{4}$ - 16	2 $\frac{1}{2}$ in	0.58 in	1.13 in	0.75 in	0T-0856
$\frac{3}{4}$ - 16	2 $\frac{3}{4}$ in	0.58 in	1.13 in	1.00 in	8F-3152
Thread Size (in - TPI) $\frac{7}{8}$ - 14					
$\frac{7}{8}$ - 14	2 $\frac{1}{4}$ in	0.67 in	1.31 in	0.25 in	6F-7035
$\frac{7}{8}$ - 14	Nut	--	--	--	1A-5666
$\frac{7}{8}$ - 14	2 $\frac{1}{2}$ in	0.67 in	1.31 in	0.50 in	1D-5873
$\frac{7}{8}$ - 14	2 $\frac{3}{4}$ in	0.67 in	1.31 in	0.75 in	0S-1596
$\frac{7}{8}$ - 14	3 in	0.67 in	1.31 in	1.00 in	6F-7036
$\frac{7}{8}$ - 14	3 $\frac{1}{4}$ in	0.67 in	1.31 in	1.25 in	2H-3741
$\frac{7}{8}$ - 14	3 $\frac{1}{2}$ in	0.67 in	1.31 in	1.50 in	1A-0224
$\frac{7}{8}$ - 14	3 $\frac{3}{4}$ in ¹	0.67 in	1.31 in	1.75 in	0L-2090
$\frac{7}{8}$ - 14	4 $\frac{1}{4}$ in	0.67 in	1.31 in	2.25 in	1D-3848
$\frac{7}{8}$ - 14	5 in	0.67 in	1.31 in	3.00 in	1D-6089
$\frac{7}{8}$ - 14	5 $\frac{1}{2}$ in	0.67 in	1.31 in	3.50 in	0S-1606
$\frac{7}{8}$ - 14	1 $\frac{1}{2}$ in	0.67 in	1.31 in	0.25 in	8S-4754
$\frac{7}{8}$ - 14	1 $\frac{3}{4}$ in	0.67 in	1.31 in	0.25 in	8F-7496
$\frac{7}{8}$ - 14	6 in	0.67 in	1.31 in	4.00 in	7F-6100
$\frac{7}{8}$ - 14	6 $\frac{1}{2}$ in	0.67 in	1.31 in	4.25 in	6F-4991

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
Thread Size (in - TPI) $\frac{7}{8}$ - 14 (Continued)					
$\frac{7}{8}$ - 14	7 in	0.67 in	1.31 in	4.75 in	4F-6426
$\frac{7}{8}$ - 14	7 $\frac{1}{2}$ in	0.67 in	1.31 in	5.25 in	2K-1747
$\frac{7}{8}$ - 14	9 in	0.67 in	1.31 in	6.75 in	2L-1091
$\frac{7}{8}$ - 14	11 in	0.67 in	1.31 in	8.75 in	3B-4978
$\frac{7}{8}$ - 14	11 $\frac{1}{2}$ in	0.67 in	1.31 in	9.25 in	4B-7572
$\frac{7}{8}$ - 14	2 in	0.67 in	1.31 in	0.25 in	2H-3854
$\frac{7}{8}$ - 14	4 in	0.67 in	1.31 in	2.00 in	0T-0603
$\frac{7}{8}$ - 14	4 $\frac{1}{2}$ in	0.67 in	1.31 in	2.50 in	4H-8340
$\frac{7}{8}$ - 14	8 in	0.67 in	1.31 in	5.75 in	7F-0479
$\frac{7}{8}$ - 9	Washer	--	--	--	5P-8249
Thread Size (in - TPI) 1 - 14					
1 - 14	2 $\frac{1}{2}$ in	0.71 in	1.50 in	0.25 in	5B-9385
1 - 14	4 in ¹	0.71 in	1.50 in	1.75 in	1F-7464
1 - 14	2 in	0.71 in	1.50 in	0.25 in	2H-3743
1 - 14	2 $\frac{3}{4}$ in	0.71 in	1.50 in	0.50 in	2H-3745
1 - 14	3 in	0.71 in	1.50 in	0.75 in	6B-9194
1 - 14	3 $\frac{1}{4}$ in	0.71 in	1.50 in	1.00 in	6F-7037
1 - 14	1 $\frac{1}{2}$ in	0.71 in	1.50 in	0.13 in	8S-4755
1 - 14	1 $\frac{3}{4}$ in	0.71 in	1.50 in	0.13 in	8S-4756
1 - 14	3 $\frac{1}{2}$ in	0.71 in	1.50 in	1.25 in	9S-1368
1 - 14	3 $\frac{3}{4}$ in	0.71 in	1.50 in	1.50 in	9S-1367
1 - 14	4 $\frac{1}{2}$ in	0.71 in	1.50 in	2.25 in	0V-0269
1 - 14	4 $\frac{3}{4}$ in	0.71 in	1.50 in	2.50 in	7B-7181
1 - 14	5 in	0.71 in	1.50 in	2.75 in	2H-3746
1 - 14	5 $\frac{1}{2}$ in	0.71 in	1.50 in	3.25 in	8F-6124
1 - 14	6 in	0.71 in	1.50 in	3.75 in	3F-6645
1 - 14	6 $\frac{1}{2}$ in	0.71 in	1.50 in	4.00 in	7F-4283
1 - 14	7 in	0.71 in	1.50 in	4.50 in	5F-6932
1 - 14	7 $\frac{1}{2}$ in	0.71 in	1.50 in	5.00 in	2H-0637
1 - 14	8 in	0.71 in	1.50 in	5.50 in	8S-4757
1 - 14	8 $\frac{1}{2}$ in	0.71 in	1.50 in	6.00 in	3J-5981
1 - 14	9 in	0.71 in	1.50 in	6.50 in	9F-8122
1 - 14	9 $\frac{1}{2}$ in	1.50 in	0.39 in	7.00 in	5F-7136
1 - 14	10 in	0.71 in	1.50 in	7.50 in	1L-8586
1 - 14	Nut	--	--	--	1A-1935
1 - 14	2 $\frac{1}{4}$ in	0.71 in	1.50 in	0.25 in	2H-3744
1 - 8	Washer	--	--	--	5P-8250
Thread Size (in - TPI) 1 $\frac{1}{8}$ - 12					
1 $\frac{1}{8}$ - 12	2 $\frac{1}{4}$ in	0.72 in	1.69 in	0.31 in	1A-2208
1 $\frac{1}{8}$ - 12	6 $\frac{1}{2}$ in	0.72 in	1.69 in	3.75 in	3B-5752
1 $\frac{1}{8}$ - 12	4 in	0.72 in	1.69 in	1.50 in	8F-3895
1 $\frac{1}{8}$ - 12	3 $\frac{1}{4}$ in	0.72 in	1.69 in	2.00 in	8B-0477
1 $\frac{1}{8}$ - 12	4 $\frac{1}{2}$ in	0.72 in	1.69 in	2.00 in	8H-4040
1 $\frac{1}{8}$ - 12	5 in	0.72 in	1.69 in	2.50 in	7B-9215
1 $\frac{1}{8}$ - 12	5 $\frac{1}{2}$ in	0.72 in	1.69 in	3.00 in	4B-5219

(Continued)

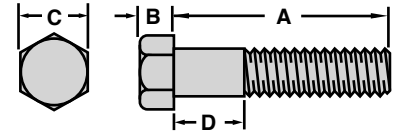
Hex Head Bolts/Inch/Fine Thread UNF/Phosphate & Oil Coated (Continued)

Thread Size (in - TPI)	A	B	C	D	Part Number
	Bolt Length	Head Height	Head Width	Grip Length	
Thread Size (in - TPI) 1 1/8 - 12 (Continued)					
1 1/8 - 12	6 in	0.72 in	1.69 in	3.50 in	2D-3424
1 1/8 - 12	7 in	0.72 in	1.69 in	4.25 in	2D-8930
1 1/8 - 12	7 1/2 in	0.72 in	1.69 in	4.75 in	9M-3742
1 1/8 - 12	8 in	0.72 in	1.69 in	5.25 in	1S-3647
1 1/8 - 12	9 in	0.72 in	1.69 in	6.25 in	2M-3530
1 1/8 - 12	Nut	--	--	--	3S-1356
1 1/8 - 12	2 1/2 in	0.72 in	1.69 in	0.50 in	2H-3751
1 1/8 - 7	Washer	--	--	--	3S-1349
Thread Size (in - TPI) 1 1/4 - 12					
1 1/4 - 12	2 1/4 in	0.81 in	1.87 in	0.25 in	7B-2289
1 1/4 - 12	3 in	0.81 in	1.87 in	0.25 in	7F-6112
1 1/4 - 12	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
1 1/4 - 12	13 in	0.81 in	1.87 in	10.88 in	4H-2400
1 1/4 - 12	4 3/4 in	0.81 in	1.87 in	2.00 in	7B-8791
1 1/4 - 12	5 1/2 in	0.81 in	1.87 in	2.75 in	2J-2555
1 1/4 - 12	6 in	0.81 in	1.87 in	3.25 in	5H-1649
1 1/4 - 12	6 1/2 in	0.81 in	1.87 in	3.50 in	4H-6511
1 1/4 - 12	7 1/2 in	0.81 in	1.87 in	4.50 in	7F-9464
1 1/4 - 12	8 in	0.81 in	1.87 in	5.00 in	4J-0924
1 1/4 - 12	8 1/2 in	0.81 in	1.87 in	5.50 in	5F-9339

Thread Size (in - TPI)	A	B	C	D	Part Number
	Bolt Length	Head Height	Head Width	Grip Length	
Thread Size (in - TPI) 1 ¼ - 12 (Continued)					
1 ¼ - 12	9 ½ in	0.81 in	1.87 in	6.50 in	3S-7079
1 ¼ - 12	10 in	0.81 in	1.87 in	7.00 in	4H-8009
1 ¼ - 12	11 ½ in	0.81 in	1.87 in	8.38 in	6F-4438
1 ¼ - 12	12 in	0.81 in	1.87 in	9.00 in	7H-3579
1 ¼ - 12	Nut	--	--	--	7H-7539
1 ¼ - 7	Washer	--	--	--	4K-0684
Thread Size (in - TPI) 1 ½ - 12					
1 ½ - 12	3 in	0.97 in	2.25 in	0.25 in	7X-3305
1 ½ - 12	3 ¾ in	0.97 in	2.25 in	0.50 in	1J-2921
1 ½ - 12	4 in	0.97 in	2.25 in	0.75 in	8F-5535
1 ½ - 12	4 ½ in	0.97 in	2.25 in	1.25 in	1F-6762
1 ½ - 12	5 in	0.97 in	2.25 in	1.75 in	5P-9402
1 ½ - 12	6 in	0.97 in	2.25 in	2.75 in	5F-9891
1 ½ - 12	7 in	0.97 in	2.25 in	3.50 in	8F-1692
1 ½ - 12	8 in	0.97 in	2.25 in	4.50 in	2D-7687
1 ½ - 12	9 in	0.97 in	2.25 in	5.50 in	5F-3492
1 ½ - 12	10 in	0.97 in	2.25 in	7.48 in	5P-9384
1 ½ - 12	Nut	--	--	--	8H-3390
1 ½ - 6	Washer	--	--	--	3S-6162
Thread Size (in - TPI) 2 - 12					
2 - 12	8 in	0.97 in	3.00 in	1.75 in	5R-8907

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

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
Thread Size (in - TPI) 5/16 - 18 (Continued)					
5/16 - 18	1 1/2 in	0.24 in	0.50 in	0.09 in	8C-3121
5/16 - 18	Washer	--	--	--	8T-4224
5/16 - 18	1/2 in	0.24 in	0.50 in	0.06 in	8T-5391
5/16 - 18	2 in	0.24 in	0.50 in	1.13 in	8T-8911
5/16 - 18	3/4 in	0.24 in	0.50 in	0.13 in	4M-0061
5/16 - 18	2 1/4 in	0.24 in	0.50 in	1.37 in	8T-8912
5/16 - 18	7/8 in	0.24 in	0.50 in	0.13	8T-9043
Thread Size (in - TPI) 3/8 - 16					
3/8 - 16	5 3/4 in	0.29 in	0.56 in	4.75 in	7X-0297
3/8 - 16	9 1/2 in	0.29 in	0.56 in	8.25 in	4H-3283
3/8 - 16	1 in	0.29 in	0.56 in	0.13 in	4L-6454
3/8 - 16	2 1/2 in	0.29 in	0.56 in	1.50 in	4L-6459
3/8 - 16	1 1/2 in	0.29 in	0.56 in	0.37 in	4L-9337
3/8 - 16	3/4 in	0.29 in	0.56 in	0.13 in	5M-3062
3/8 - 16	5/8 in	0.29 in	0.56 in	0.09 in	5P-8167
3/8 - 16	3 1/2 in	0.29 in	0.56 in	2.50 in	7X-0290
3/8 - 16	7/8 in	0.29 in	0.56 in	0.13 in	5S-7379
3/8 - 16	1 3/4 in	0.29 in	0.56 in	0.75 in	5S-7383
3/8 - 16	Nut	--	--	--	6V-8801
3/8 - 16	3 3/4 in	0.29 in	0.56 in	2.50 in	7X-0291
3/8 - 16	4 1/2 in	0.29 in	0.56 in	3.25 in	7X-0292
3/8 - 16	4 3/4 in	0.29 in	0.56 in	3.75 in	7X-0293
3/8 - 16	5 in	0.29 in	0.56 in	4.00 in	7X-0294
3/8 - 16	5 1/4 in	0.29 in	0.56 in	4.25 in	7X-0295
3/8 - 16	5 1/2 in	0.29 in	0.56 in	4.50 in	7X-0296
3/8 - 16	6 1/2 in	0.29 in	0.56 in	5.25 in	7X-0300
3/8 - 16	7 in	0.29 in	0.56 in	5.75 in	7X-0301
3/8 - 16	7 1/2 in	0.29 in	0.56 in	6.25 in	7X-0302
3/8 - 16	8 in	0.29 in	0.56 in	6.75 in	7X-0303
3/8 - 16	8 1/2 in	0.29 in	0.56 in	7.25 in	7X-0304
3/8 - 16	1 1/8 in	0.29 in	0.56 in	0.31 in	8T-2502
3/8 - 16	9 in	0.29 in	0.56 in	7.75 in	7X-0305
3/8 - 16	6 in	0.29 in	0.56 in	4.87 in	8C-7323
3/8 - 16	2 in	0.29 in	0.56 in	1.00 in	8T-2501
3/8 - 16	Washer	--	--	--	8T-4896
3/8 - 16	3 in	0.29 in	0.56 in	2.00 in	8T-7008
3/8 - 16	3 1/4 in	0.29 in	0.56 in	2.25 in	8T-8915
3/8 - 16	2 3/4 in	0.29 in	0.56 in	1.75 in	8T-9101
3/8 - 16	1/2 in	0.29 in	0.56 in	0.09 in	8T-9371
3/8 - 16	2 1/4 in	0.29 in	0.56 in	1.25 in	8T-9377

(Continued)

Hex Head Bolts/Inch/Coarse Thread UNC/Zinc Plated (Continued)

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
Thread Size (in - TPI) $\frac{3}{8}$ - 16 (Continued)					
$\frac{3}{8}$ - 16	4 in	0.29 in	0.56 in	3.00 in	8T-9378
$\frac{3}{8}$ - 16	4 $\frac{1}{4}$ in	0.29 in	0.56 in	3.25 in	8T-9379
$\frac{3}{8}$ - 16	1 $\frac{1}{4}$ in	0.29 in	0.56 in	0.25 in	9B-7237
Thread Size (in - TPI) $\frac{7}{16}$ - 14					
$\frac{7}{16}$ - 14	2 $\frac{1}{2}$ in	0.34 in	0.69 in	1.37 in	7X-0312
$\frac{7}{16}$ - 14	2 $\frac{3}{4}$ in	0.34 in	0.69 in	1.63 in	7X-0313
$\frac{7}{16}$ - 14	3 in	0.34 in	0.69 in	1.87 in	7X-0314
$\frac{7}{16}$ - 14	3 $\frac{1}{4}$ in	0.34 in	0.69 in	2.13 in	7X-0315
$\frac{7}{16}$ - 14	3 $\frac{1}{2}$ in	0.34 in	0.69 in	2.37 in	7X-0316
$\frac{7}{16}$ - 14	3 $\frac{3}{4}$ in	0.34 in	0.69 in	2.63 in	7X-0317
$\frac{7}{16}$ - 14	4 in	0.34 in	0.69 in	2.87 in	7X-0318
$\frac{7}{16}$ - 14	4 $\frac{1}{4}$ in	0.34 in	0.69 in	3.13 in	7X-0319
$\frac{7}{16}$ - 14	5 in	0.34 in	0.69 in	3.75 in	7X-0320
$\frac{7}{16}$ - 14	5 $\frac{1}{2}$ in	0.34 in	0.69 in	4.37 in	7X-0321
$\frac{7}{16}$ - 14	6 in	0.34 in	0.69 in	4.87 in	7X-0322
$\frac{7}{16}$ - 14	Nut	--	--	--	7X-0447
$\frac{7}{16}$ - 14	1 $\frac{3}{4}$ in	0.34 in	0.69 in	0.63 in	8C-6877
$\frac{7}{16}$ - 14	Washer	--	--	--	8T-5360
$\frac{7}{16}$ - 14	1 in	0.34 in	0.69 in	0.13 in	8T-9380
$\frac{7}{16}$ - 14	1 $\frac{1}{8}$ in	0.34 in	0.69 in	0.13 in	8T-6973
$\frac{7}{16}$ - 14	1 $\frac{1}{2}$ in	0.34 in	0.69 in	0.37 in	8T-8916
$\frac{7}{16}$ - 14	1 $\frac{1}{4}$ in	0.34 in	0.69 in	0.13 in	8T-9382
$\frac{7}{16}$ - 14	4 $\frac{3}{4}$ in	0.34 in	0.69 in	3.63 in	7H-3472
$\frac{7}{16}$ - 14	$\frac{7}{8}$ in	0.34 in	0.69 in	0.13 in	7X-0272
$\frac{7}{16}$ - 14	$\frac{3}{4}$ in	0.34 in	0.69 in	0.19 in	7X-0307
$\frac{7}{16}$ - 14	2 in	0.34 in	0.69 in	0.87 in	7X-0310
$\frac{7}{16}$ - 14	2 $\frac{1}{4}$ in	0.34 in	0.69 in	1.13 in	7X-0311
Thread Size (in - TPI) $\frac{1}{2}$ - 13					
$\frac{1}{2}$ - 13	1 $\frac{1}{8}$ in	0.39 in	0.75 in	0.13 in	5C-6565
$\frac{1}{2}$ - 13	1 in	0.39 in	0.75 in	0.13 in	5P-2228
$\frac{1}{2}$ - 13	2 $\frac{1}{4}$ in	0.39 in	0.75 in	1.00 in	5P-2424
$\frac{1}{2}$ - 13	1 $\frac{1}{2}$ in	0.39 in	0.75 in	0.25 in	5P-2566
$\frac{1}{2}$ - 13	4 in	0.39 in	0.75 in	2.75 in	6V-4432
$\frac{1}{2}$ - 13	3 in	0.39 in	0.75 in	1.75 in	7X-0326
$\frac{1}{2}$ - 13	Nut	--	--	--	6V-8188
$\frac{1}{2}$ - 13	2 $\frac{1}{2}$ in	0.39 in	0.75 in	1.25 in	7X-0325
$\frac{1}{2}$ - 13	3 $\frac{1}{2}$ in	0.39 in	0.75 in	2.25 in	7X-0328
$\frac{1}{2}$ - 13	4 $\frac{1}{4}$ in	0.39 in	0.75 in	3.00 in	7X-0331
$\frac{1}{2}$ - 13	4 $\frac{1}{2}$ in	0.39 in	0.75 in	3.25 in	7X-0332
$\frac{1}{2}$ - 13	4 $\frac{3}{4}$ in	0.39 in	0.75 in	3.50 in	7X-0333
$\frac{1}{2}$ - 13	5 in	0.39 in	0.75 in	3.75 in	7X-0334
$\frac{1}{2}$ - 13	5 $\frac{1}{4}$ in	0.39 in	0.75 in	4.00 in	7X-0335
$\frac{1}{2}$ - 13	5 $\frac{1}{2}$ in	0.39 in	0.75 in	4.25 in	7X-0336
$\frac{1}{2}$ - 13	5 $\frac{3}{4}$ in	0.39 in	0.75 in	4.50 in	7X-0337
$\frac{1}{2}$ - 13	6 in	0.39 in	0.75 in	4.75 in	7X-0338

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
Thread Size (in - TPI) $\frac{1}{2}$ - 13 (Continued)					
$\frac{1}{2}$ - 13	6 $\frac{1}{2}$ in	0.39 in	0.75 in	5.00 in	7X-0340
$\frac{1}{2}$ - 13	8 $\frac{1}{2}$ in	0.39 in	0.75 in	7.00 in	7X-0471
$\frac{1}{2}$ - 13	Washer	--	--	--	8T-4223
$\frac{1}{2}$ - 13	2 in	0.39 in	0.75 in	0.75 in	8T-4835
$\frac{1}{2}$ - 13	1 $\frac{1}{4}$ in	0.39 in	0.75 in	0.31 in	8T-8917
$\frac{1}{2}$ - 13	1 $\frac{3}{4}$ in	0.39 in	0.75 in	0.44 in	8T-8919
$\frac{1}{2}$ - 13	3 $\frac{1}{4}$ in	0.39 in	0.75 in	2.00 in	8T-8920
$\frac{1}{2}$ - 13	$\frac{3}{4}$ in	0.39 in	0.75 in	0.13 in	8T-9383
$\frac{1}{2}$ - 13	$\frac{7}{8}$ in	0.39 in	0.75 in	0.28 in	8T-9384
$\frac{1}{2}$ - 13	2 $\frac{3}{4}$ in	0.39 in	0.75 in	1.50 in	8T-9389
$\frac{1}{2}$ - 13	3 $\frac{3}{4}$ in	0.39 in	0.75 in	2.50 in	8T-9391
$\frac{1}{2}$ - 13	7 $\frac{1}{2}$ in	0.39 in	0.75 in	6.00 in	8T-9392
Thread Size (in - TPI) $\frac{9}{16}$ - 12					
$\frac{9}{16}$ - 12	2 in	0.43 in	0.87 in	0.63 in	8S-4734
Thread Size (in - TPI) $\frac{5}{8}$ - 11					
$\frac{5}{8}$ - 11	2 $\frac{1}{4}$ in	0.48 in	0.94 in	0.75 in	7X-0347
$\frac{5}{8}$ - 11	1 in	0.48 in	0.94 in	0.19 in	5C-6266
$\frac{5}{8}$ - 11	1 $\frac{1}{4}$ in	0.48 in	0.94 in	0.19 in	7X-0343
$\frac{5}{8}$ - 11	1 $\frac{3}{4}$ in	0.48 in	0.94 in	0.25 in	7X-0345
$\frac{5}{8}$ - 11	3 in	0.48 in	0.94 in	1.50 in	7X-0349
$\frac{5}{8}$ - 11	3 $\frac{1}{2}$ in	0.48 in	0.94 in	2.00 in	7X-0350
$\frac{5}{8}$ - 11	4 in	0.48 in	0.94 in	2.50 in	7X-0352
$\frac{5}{8}$ - 11	4 $\frac{1}{4}$ in	0.48 in	0.94 in	2.75 in	7X-0353
$\frac{5}{8}$ - 11	4 $\frac{1}{2}$ in	0.48 in	0.94 in	3.00 in	7X-0354
$\frac{5}{8}$ - 11	4 $\frac{3}{4}$ in	0.48 in	0.94 in	3.25 in	7X-0355
$\frac{5}{8}$ - 11	5 in	0.48 in	0.94 in	3.50 in	7X-0356
$\frac{5}{8}$ - 11	5 $\frac{1}{4}$ in	0.48 in	0.94 in	3.75 in	7X-0357
$\frac{5}{8}$ - 11	5 $\frac{1}{2}$ in	0.48 in	0.94 in	4.00 in	7X-0358
$\frac{5}{8}$ - 11	6 in	0.48 in	0.94 in	4.50 in	7X-0359
$\frac{5}{8}$ - 11	6 $\frac{1}{2}$ in	0.48 in	0.94 in	4.75 in	7X-0361
$\frac{5}{8}$ - 11	7 in	0.48 in	0.94 in	5.25 in	7X-0362
$\frac{5}{8}$ - 11	8 in	0.48 in	0.94 in	6.25 in	7X-0363
$\frac{5}{8}$ - 11	8 $\frac{1}{2}$ in	0.48 in	0.94 in	6.75 in	7X-0364
$\frac{5}{8}$ - 11	Nut	--	--	--	7X-0448
$\frac{5}{8}$ - 11	9 $\frac{1}{2}$ in	0.48 in	0.94 in	7.75 in	7X-7890
$\frac{5}{8}$ - 11	2 $\frac{3}{4}$ in	0.48 in	0.94 in	1.25 in	8C-6362
$\frac{5}{8}$ - 11	Washer	--	--	--	8T-4122
$\frac{5}{8}$ - 11	2 $\frac{1}{2}$ in	0.48 in	0.94 in	0.63 in	8T-6871
$\frac{5}{8}$ - 11	1 $\frac{1}{2}$ in	0.48 in	0.94 in	0.19 in	8T-9393
$\frac{5}{8}$ - 11	3 $\frac{1}{4}$ in	0.48 in	0.94 in	1.75 in	8T-9396
$\frac{5}{8}$ - 11	3 $\frac{3}{4}$ in	0.48 in	0.94 in	2.25 in	7X-0351
Thread Size (in - TPI) $\frac{3}{4}$ - 10					
$\frac{3}{4}$ - 10	9 in	0.58 in	1.13 in	7.00 in	7X-3179
$\frac{3}{4}$ - 10	7 $\frac{1}{2}$ in	0.58 in	1.13 in	5.50 in	1J-8930
$\frac{3}{4}$ - 10	8 in	0.58 in	1.13 in	6.00 in	5P-4135

(Continued)

Hex Head Bolts/Inch/Coarse Thread UNC/Zinc Plated (Continued)

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
Thread Size (in - TPI) $\frac{3}{4}$ - 10 (Continued)					
$\frac{3}{4}$ - 10	1 $\frac{1}{2}$ in	0.58 in	1.13 in	0.31 in	7X-0365
$\frac{3}{4}$ - 10	2 in	0.58 in	1.13 in	0.31 in	7X-0366
$\frac{3}{4}$ - 10	3 in	0.58 in	1.13 in	1.25 in	7X-0368
$\frac{3}{4}$ - 10	3 $\frac{1}{4}$ in	0.58 in	1.13 in	1.50 in	7X-0369
$\frac{3}{4}$ - 10	3 $\frac{1}{2}$ in	0.58 in	1.13 in	1.75 in	7X-0370
$\frac{3}{4}$ - 10	3 $\frac{3}{4}$ in	0.58 in	1.13 in	2.00 in	7X-0371
$\frac{3}{4}$ - 10	4 $\frac{1}{4}$ in	0.58 in	1.13 in	2.50 in	7X-0372
$\frac{3}{4}$ - 10	5 $\frac{1}{2}$ in	0.58 in	1.13 in	3.75 in	7X-0373
$\frac{3}{4}$ - 10	5 $\frac{3}{4}$ in	0.58 in	1.13 in	4.00 in	7X-0374
$\frac{3}{4}$ - 10	5 in	0.58 in	1.13 in	3.25 in	7X-0375
$\frac{3}{4}$ - 10	6 $\frac{1}{2}$ in	0.58 in	1.13 in	4.50 in	7X-0377
$\frac{3}{4}$ - 10	8 $\frac{1}{2}$ in	0.58 in	1.13 in	6.50 in	7X-0378
$\frac{3}{4}$ - 10	2 $\frac{3}{4}$ in	0.58 in	1.13 in	1.00 in	8C-6857
$\frac{3}{4}$ - 10	4 in	0.58 in	1.13 in	2.25 in	8C-8842
$\frac{3}{4}$ - 10	10 in	0.58 in	1.13 in	8.00 in	8F-4225
$\frac{3}{4}$ - 10	Washer	--	--	--	8T-4994
$\frac{3}{4}$ - 10	2 $\frac{1}{2}$ in	0.58 in	1.13 in	0.75 in	8T-8924
$\frac{3}{4}$ - 10	4 $\frac{3}{4}$ in	0.58 in	1.13 in	3.00 in	8T-8925
$\frac{3}{4}$ - 10	4 $\frac{1}{2}$ in	0.58 in	1.13 in	2.75 in	8T-9311
$\frac{3}{4}$ - 10	6 in	0.58 in	1.13 in	4.25 in	8T-9312
$\frac{3}{4}$ - 10	7 in	0.58 in	1.13 in	5.00 in	8T-9313
$\frac{3}{4}$ - 10	1 $\frac{1}{4}$ in	0.58 in	1.13 in	0.31 in	8T-9397
$\frac{3}{4}$ - 10	1 $\frac{3}{4}$ in	0.58 in	1.13 in	0.31 in	8T-9398
$\frac{3}{4}$ - 10	2 $\frac{1}{4}$ in	0.58 in	1.13 in	0.50 in	8T-9399
$\frac{3}{4}$ - 10	Nut	--	--	--	6V-8182
Thread Size (in - TPI) $\frac{7}{8}$ - 9					
$\frac{7}{8}$ - 9	1 $\frac{1}{2}$ in	0.67 in	1.31 in	0.25 in	7X-0379
$\frac{7}{8}$ - 9	1 $\frac{3}{4}$ in	0.67 in	1.31 in	0.37 in	7X-0380
$\frac{7}{8}$ - 9	2 in	0.67 in	1.31 in	0.37 in	7X-0381
$\frac{7}{8}$ - 9	2 $\frac{1}{4}$ in	0.67 in	1.31 in	0.37 in	7X-0382
$\frac{7}{8}$ - 9	2 $\frac{3}{4}$ in	0.67 in	1.31 in	0.75 in	7X-0383
$\frac{7}{8}$ - 9	3 in	0.67 in	1.31 in	1.00 in	7X-0384
$\frac{7}{8}$ - 9	3 $\frac{1}{4}$ in	0.67 in	1.31 in	1.25 in	7X-0385
$\frac{7}{8}$ - 9	3 $\frac{1}{2}$ in	0.67 in	1.31 in	1.50 in	7X-0386
$\frac{7}{8}$ - 9	4 in	0.67 in	1.31 in	2.00 in	7X-0387
$\frac{7}{8}$ - 9	4 $\frac{1}{2}$ in	0.67 in	1.31 in	2.50 in	7X-0388
$\frac{7}{8}$ - 9	4 $\frac{3}{4}$ in	0.67 in	1.31 in	2.75 in	7X-0389
$\frac{7}{8}$ - 9	5 in	0.67 in	1.31 in	3.00 in	7X-0390
$\frac{7}{8}$ - 9	5 $\frac{1}{2}$ in	0.67 in	1.31 in	3.50 in	7X-0391
$\frac{7}{8}$ - 9	6 in	0.67 in	1.31 in	3.75 in	7X-0392
$\frac{7}{8}$ - 9	6 $\frac{1}{2}$ in	0.67 in	1.31 in	4.25 in	7X-0393
$\frac{7}{8}$ - 9	7 in	0.67 in	1.31 in	4.75 in	7X-0394
$\frac{7}{8}$ - 9	8 in	0.67 in	1.31 in	5.75 in	7X-0395
$\frac{7}{8}$ - 9	8 $\frac{1}{2}$ in	0.67 in	1.31 in	6.25 in	7X-0396
$\frac{7}{8}$ - 9	9 in	0.67 in	1.31 in	6.75 in	7X-0397

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
Thread Size (in - TPI) $\frac{7}{8}$ - 9 (Continued)					
$\frac{7}{8}$ - 9	10 in	0.67 in	1.31 in	7.75 in	7X-0398
$\frac{7}{8}$ - 9	Nut	--	--	--	7X-0449
$\frac{7}{8}$ - 9	3 $\frac{3}{4}$ in	0.67 in	1.31 in	1.75 in	7X-0453
$\frac{7}{8}$ - 9	4 $\frac{1}{4}$ in	0.67 in	1.31 in	2.25 in	7X-0455
$\frac{7}{8}$ - 9	Washer	--	--	--	8C-6913
$\frac{7}{8}$ - 9	2 $\frac{1}{2}$ in	0.67 in	1.31 in	0.50 in	8T-9400
Thread Size (in - TPI) 1 - 8					
1 - 8	5 $\frac{1}{2}$ in	0.71 in	1.50 in	3.25 in	7X-0443
1 - 8	6 $\frac{1}{2}$ in	0.71 in	1.50 in	4.00 in	7X-0444
1 - 8	6 in	0.71 in	1.50 in	3.75 in	1J-5929
1 - 8	Nut	--	--	--	6V-8190
1 - 8	1 $\frac{1}{4}$ in	0.71 in	1.50 in	0.31 in	7X-0399
1 - 8	1 $\frac{1}{2}$ in	0.71 in	1.50 in	0.31 in	7X-0400
1 - 8	1 $\frac{3}{4}$ in	0.71 in	1.50 in	0.37 in	7X-0401
1 - 8	2 in	0.71 in	1.50 in	0.75 in	7X-0402
1 - 8	2 $\frac{1}{4}$ in	0.71 in	1.50 in	0.25 in	7X-0403
1 - 8	2 $\frac{3}{4}$ in	0.71 in	1.50 in	0.50 in	7X-0405
1 - 8	3 in	0.71 in	1.50 in	0.75 in	7X-0406
1 - 8	3 $\frac{1}{4}$ in	0.71 in	1.50 in	1.00 in	7X-0407
1 - 8	3 $\frac{1}{2}$ in	0.71 in	1.50 in	1.25 in	7X-0408
1 - 8	4 in	0.71 in	1.50 in	1.75 in	7X-0410
1 - 8	4 $\frac{1}{4}$ in	0.71 in	1.50 in	2.00 in	7X-0411
1 - 8	4 $\frac{3}{4}$ in	0.71 in	1.50 in	2.50 in	7X-0412
1 - 8	7 in	0.71 in	1.50 in	4.50 in	7X-0413
1 - 8	7 $\frac{1}{2}$ in	0.71 in	1.50 in	5.00 in	7X-0414
1 - 8	8 in	0.71 in	1.50 in	5.50 in	7X-0415
1 - 8	8 $\frac{1}{2}$ in	0.71 in	1.50 in	6.00 in	7X-0416
1 - 8	9 in	0.71 in	1.50 in	6.50 in	7X-0417
1 - 8	9 $\frac{1}{2}$ in	0.71 in	1.50 in	7.00 in	7X-0418
1 - 8	10 in	0.71 in	1.50 in	7.50 in	7X-0419
1 - 8	4 $\frac{1}{2}$ in	0.71 in	1.50 in	2.25 in	8C-8843
1 - 8	5 in	0.71 in	1.50 in	2.75 in	8C-8844
1 - 8	Washer	--	--	--	8T-5361
1 - 8	3 $\frac{3}{4}$ in	0.71 in	1.50 in	1.50 in	8T-8927
Thread Size (in - TPI) 1 $\frac{1}{8}$ - 7					
1 $\frac{1}{8}$ - 7	Washer	--	--	--	7X-0531
1 $\frac{1}{8}$ - 7	Nut	--	--	--	7X-0450
1 $\frac{1}{8}$ - 7	2 in	0.72 in	1.69 in	0.25 in	7X-0420
1 $\frac{1}{8}$ - 7	3 in	0.72 in	1.69 in	0.50 in	7X-0421
1 $\frac{1}{8}$ - 7	3 $\frac{1}{2}$ in	0.72 in	1.69 in	1.00 in	7X-0422
1 $\frac{1}{8}$ - 7	4 $\frac{1}{2}$ in	0.72 in	1.69 in	2.00 in	7X-0423
1 $\frac{1}{8}$ - 7	5 $\frac{1}{4}$ in	0.72 in	1.69 in	3.00 in	7X-0424
1 $\frac{1}{8}$ - 7	6 in	0.72 in	1.69 in	3.50 in	7X-0425
1 $\frac{1}{8}$ - 7	6 $\frac{1}{2}$ in	0.72 in	1.69 in	3.75 in	7X-0426

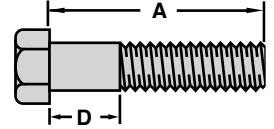
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Hex Head Bolts/Inch/Coarse Thread UNC/Zinc Plated (Continued)

Thread Size (in - TPI)	A	B	C	D	Part Number
	Bolt Length	Head Height	Head Width	Grip Length	
Thread Size (in - TPI) 1 ¼ - 7					
1 ¼ - 7	3 ½ in	0.81 in	1.87 in	0.75 in	7X-0427
1 ¼ - 7	4 in	0.81 in	1.87 in	1.25 in	7X-0428
1 ¼ - 7	4 ½ in	0.81 in	1.87 in	1.75 in	7X-0429
1 ¼ - 7	5 ½ in	0.81 in	1.87 in	2.75 in	7X-0430
1 ¼ - 7	6 in	0.81 in	1.87 in	3.25 in	7X-0431
1 ¼ - 7	6 ½ in	0.81 in	1.87 in	3.50 in	7X-0432
1 ¼ - 7	7 in	0.81 in	1.87 in	4.00 in	7X-0433
1 ¼ - 7	8 in	0.81 in	1.87 in	5.00 in	7X-0434
1 ¼ - 7	8 ½ in	0.81 in	1.87 in	5.50 in	7X-0435
1 ¼ - 7	9 in	0.81 in	1.87 in	6.00 in	7X-0436

Thread Size (in - TPI)	A	B	C	D	Part Number
	Bolt Length	Head Height	Head Width	Grip Length	
Thread Size (in - TPI) 1 ¼ - 7 (Continued)					
1 ¼ - 7	9 ½ in	0.81 in	1.87 in	6.50 in	7X-0437
1 ¼ - 7	5 in	0.81 in	1.87 in	2.25 in	7X-0445
1 ¼ - 7	Nut	--	--	--	7X-0451
1 ¼ - 7	Washer	--	--	--	7X-0533
Thread Size (in - TPI) 1 ½ - 6					
1 ½ - 6	6 in	0.97 in	2.25 in	2.50 in	131-2627
1 ½ - 6	4 ½ in	0.97 in	2.25 in	1.25 in	138-8455
1 ½ - 6	3 ½ in	0.97 in	2.25 in	0.40 in	7X-0438
1 ½ - 6	5 in	0.97 in	2.25 in	1.75 in	7X-0439
1 ½ - 6	Nut	--	--	--	7X-0452

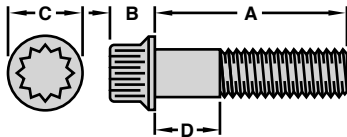
Self-Locking Bolts/Inch/Coarse Thread UNC



Thread Size (in - TPI)	A Bolt Length	D Grip Length	Part Number
Thread Size (in - TPI) ¼ - 20			
¼ - 20	½ in	0.06 in	031-0214
¼ - 20	⅝ in	0.13 in	031-0215
¼ - 20	¾ in	0.13 in	031-0216
¼ - 20	⅞ in	0.10 in	031-0217
¼ - 20	1 in	0.13 in	031-5085
¼ - 20	⅜ in	0.06 in	032-5691
¼ - 20	4 in	3.25 in	3J-8919
¼ - 20	1 ¼ in	0.13 in	6V-6845
¼ - 20	1 ⅝ in	0.37 in	6V-7634
Thread Size (in - TPI) ⅝ - 18			
⅝ - 18	2 ¼ in	1.37 in	6V-2664
⅝ - 18	⅝ in	0.13 in	030-2135
⅝ - 18	1 ¼ in	0.37 in	031-2701
⅝ - 18	¾ in	0.13 in	031-4630
⅝ - 18	½ in	0.06 in	032-5473
⅝ - 18	1 in	0.13 in	034-4160
⅝ - 18	1 ⅝ in	0.87 in	1N-7543
⅝ - 18	2 ½ in	1.63 in	6V-0825
⅝ - 18	3 in	2.13 in	6V-3314
⅝ - 18	1 ½ in	0.09 in	6V-4414
⅝ - 18	2 in	1.13 in	6V-9665
Thread Size (in - TPI) ¾ - 16			
¾ - 16	⅞ in	0.13 in	030-8535
¾ - 16	1 ½ in	0.50 in	030-8537
¾ - 16	½ in	0.09 in	031-0218
¾ - 16	1 ¾ in	0.75 in	031-0219
¾ - 16	2 ½ in	1.50 in	031-0220
¾ - 16	1 ⅝ in	0.31 in	034-3557
¾ - 16	1 ¼ in	0.25 in	2J-3118
¾ - 16	1 in	0.13 in	5D-0353
¾ - 16	2 in	1.00 in	5D-9844
¾ - 16	3 in	2.00 in	5K-5552
¾ - 16	¾ in	0.13 in	5K-9107
¾ - 16	2 ¼ in	1.25 in	5P-8048
¾ - 16	⅝ in	0.13 in	6K-4936
¾ - 16	3 ½ in	2.50 in	6V-8819
Thread Size (in - TPI) ⅞ - 14			
⅞ - 14	1 in	0.13 in	034-0106
⅞ - 14	1 ½ in	0.37 in	5P-8282
⅞ - 14	2 in	0.87 in	5P-8864
⅞ - 14	¾ in	0.13 in	7K-0734
⅞ - 14	1 ¼ in	0.13 in	031-2523

Thread Size (in - TPI)	A Bolt Length	D Grip Length	Part Number
Thread Size (in - TPI) ½ - 13			
½ - 13	1 ¼ in	0.31 in	030-8538
½ - 13	2 ¼ in	1.00 in	030-9620
½ - 13	¾ in	0.13 in	031-0221
½ - 13	1 ¾ in	0.44 in	031-0223
½ - 13	2 ¾ in	1.50 in	034-0172
½ - 13	1 ½ in	0.25 in	5K-7143
½ - 13	1 ⅝ in	0.13 in	5K-8454
½ - 13	3 ¼ in	2.00 in	5P-8091
½ - 13	⅞ in	0.13 in	6K-5718
½ - 13	1 in	0.13 in	6K-7917
½ - 13	2 in	0.75 in	6V-0314
Thread Size (in - TPI) ⅝ - 11			
⅝ - 11	1 ½ in	0.19 in	030-7335
⅝ - 11	3 in	1.50 in	032-0676
⅝ - 11	1 in	0.19 in	5K-7138
⅝ - 11	2 ¼ in	0.75 in	5P-7034
⅝ - 11	3 ¾ in	2.25 in	5P-7782
⅝ - 11	2 ½ in	0.63 in	5P-9118
⅝ - 11	2 in	0.50 in	6K-0137
⅝ - 11	1 ¼ in	0.13 in	6K-0138
⅝ - 11	2 ¾ in	1.25 in	6V-1997
⅝ - 11	1 ¾ in	0.25 in	7K-4370
Thread Size (in - TPI) ¾ - 10			
¾ - 10	1 ¾ in	0.31 in	031-0224
¾ - 10	2 in	0.31 in	031-0225
¾ - 10	1 ¼ in	0.31 in	031-2712
¾ - 10	1 ½ in	0.31 in	031-9253
¾ - 10	4 ½ in	2.75 in	5P-1910
¾ - 10	2 ¼ in	0.50 in	5P-3882
¾ - 10	3 in	1.25 in	5P-6712
¾ - 10	2 ½ in	0.75 in	6K-1304
¾ - 10	3 ½ in	1.75 in	6V-1684
Thread Size (in - TPI) ⅞ - 9			
⅞ - 9	2 ½ in	0.50 in	5P-7688
Thread Size (in - TPI) 1 - 8			
1 - 8	5 ½ in	3.25 in	032-0679
1 - 8	2 ¾ in	0.50 in	5P-7783
1 - 8	3 ½ in	1.25 in	7K-9272
Thread Size (in - TPI) 1 ⅝ - 7			
1 ⅝ - 7	3 ½ in	1.00 in	7J-9897

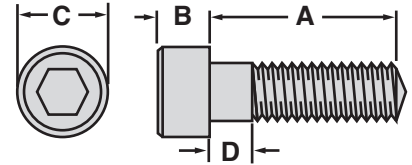
12 Point Head Bolt/Inch/Coarse & Fine Thread



Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
Coarse Thread					
1/2 - 13	3 1/2 in	0.50 in	0.75 in	1.50 in	5J-5794
1/2 - 13	2 1/4 in	0.50 in	0.75 in	0.75 in	6J-2515
1/2 - 13	4 1/2 in	0.50 in	0.75 in	3.00 in	8D-0648
1/2 - 13	1 in	0.50 in	0.75 in	0.16 in	9M-6590
1/2 - 13	2 3/4 in	0.50 in	0.75 in	0.75 in	9S-9739
1/2 - 13	2 in	0.50 in	0.75 in	0.16 in	5J-5793
1/2 - 13	2 1/2 in	0.50 in	0.75 in	1.00 in	7K-6058
1/2 - 13	1 1/4 in	0.50 in	0.75 in	0.16 in	8M-2530
1/2 - 13	1 1/2 in	0.50 in	0.75 in	0.16 in	4K-5175
1/4 - 20	1/16 in	0.27 in	0.38 in	0.11 in	9S-5033
3/4 - 10	1 1/2 in	0.75 in	1.13 in	0.25 in	6J-3991
3/4 - 10	1 3/4 in	0.75 in	1.13 in	0.19 in	6M-8796
3/8 - 16	3 3/4 in	0.38 in	0.56 in	2.50 in	8M-2518
3/8 - 16	2 in	0.38 in	0.56 in	0.50 in	3S-1307
3/8 - 16	2 1/4 in	0.38 in	0.56 in	1.00 in	3S-0127
3/8 - 16	1 1/4 in	0.38 in	0.56 in	0.25 in	1T-0720
3/8 - 16	1 1/16 in	0.38 in	0.56 in	0.50 in	4D-5239
3/8 - 16	3 in	0.38 in	0.56 in	1.50 in	4S-9002
3/8 - 16	2 3/4 in	0.38 in	0.56 in	1.50 in	2S-3567
3/8 - 16	3/4 in	0.38 in	0.56 in	0.25 in	1T-0822
3/8 - 16	1 in	0.38 in	0.56 in	0.25 in	1T-0765
5/16 - 18	4 1/2 in	0.31 in	0.47 in	3.25 in	9M-4288
5/16 - 18	6 in	0.31 in	0.47 in	4.63 in	1S-9811
5/16 - 18	5 in	0.31 in	0.47 in	3.63 in	9M-4289
5/16 - 18	5 1/2 in	0.31 in	0.47 in	4.25 in	1S-9810
5/16 - 18	1 1/2 in	0.31 in	0.47 in	0.11 in	8M-8162
5/16 - 18	3 1/2 in	0.31 in	0.47 in	2.25 in	2S-0629
5/16 - 18	1 1/2 in	0.31 in	0.47 in	0.63 in	2N-7517
5/16 - 18	3/4 in	0.31 in	0.47 in	0.11 in	1T-0416
5/16 - 18	1 in	0.31 in	0.47 in	0.11 in	1T-0414
5/16 - 18	6 1/2 in	0.31 in	0.47 in	5.25 in	4S-5845

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
Coarse Thread (Continued)					
5/16 - 18	2 1/2 in	0.31 in	0.47 in	1.13 in	3S-4346
5/16 - 18	1 1/4 in	0.31 in	0.47 in	0.11 in	6L-4783
5/16 - 18	1 3/4 in	0.31 in	0.47 in	0.63 in	6L-4784
5/16 - 18	3 in	0.31 in	0.47 in	1.63 in	2S-5818
5/8 - 11	2 1/2 in	0.62 in	0.94 in	0.75 in	031-1382
5/8 - 11	1 3/4 in	0.62 in	0.94 in	0.19 in	8S-2332
5/8 - 11	2 in	0.62 in	0.94 in	0.19 in	8S-2331
5/8 - 11	3 1/2 in	0.62 in	0.94 in	1.50 in	7K-3116
5/8 - 11	2 1/4 in	0.62 in	0.94 in	0.50 in	6M-9149
5/8 - 11	1 in	0.62 in	0.94 in	0.19 in	9S-8889
5/8 - 11	7/8 in	0.62 in	0.94 in	0.19 in	1S-9808
5/8 - 11	3 1/4 in	0.62 in	0.94 in	1.50 in	6J-3913
5/8 - 11	3 in	0.62 in	0.94 in	1.25 in	031-3185
7/16 - 14	2 1/4 in	0.44 in	0.66 in	0.63 in	6K-3772
7/16 - 14	1 1/2 in	0.44 in	0.66 in	0.14 in	6K-3771
Fine Thread					
1 - 14	2 1/2 in	1.00 in	1.50 in	0.75 in	2N-5006
1 - 14	4 in	1.00 in	1.50 in	1.00 in	9S-8893
1/2 - 20	3 in	0.50 in	0.75 in	1.50 in	8S-0509
3/4 - 16	3 1/4 in	0.75 in	1.13 in	1.00 in	9S-8892
3/8 - 24	5/8 in	0.38 in	0.56 in	0.08 in	1T-0510
3/8 - 24	1 1/4 in	0.38 in	0.56 in	0.50 in	1T-0448
3/8 - 24	1 3/4 in	0.38 in	0.56 in	0.50 in	1T-0954
3/8 - 24	2 1/2 in	0.38 in	0.56 in	1.00 in	5K-4451
3/8 - 24	1 in	0.38 in	0.56 in	0.08 in	1T-0417
5/16 - 24	3/4 in	0.31 in	0.47 in	0.08 in	5D-8269
5/8 - 18	1 in	0.62 in	0.94 in	0.19 in	9S-8890
5/8 - 18	3 in	0.62 in	0.94 in	0.75 in	2P-1956
5/8 - 18	2 1/2 in	0.62 in	0.94 in	0.75 in	9S-8891
7/16 - 20	2 3/4 in	0.44 in	0.66 in	1.25 in	5J-7820
7/8 - 14	2 1/2 in	0.88 in	1.31 in	0.16 in	2N-5014

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



Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
Coarse Thread					
1 - 8	3 in	1.00 in	1.50 in	0.25 in	7L-9198
1 - 8	5 in	1.00 in	1.50 in	2.00 in	8L-3745
1 - 8	2 ½ in	1.00 in	1.50 in	0.25 in	8L-6059
½ - 13	1 ¾ in	0.50 in	0.75 in	0.16 in	5S-2256
½ - 13	5 in	0.50 in	0.75 in	3.00 in	5S-2388
½ - 13	2 ¾ in	0.50 in	0.75 in	0.75 in	5S-2389
½ - 13	3 ¼ in	0.50 in	0.75 in	1.50 in	6D-0119
½ - 13	1 in	0.50 in	0.75 in	0.16 in	5H-4893
½ - 13	1 ¼ in	0.50 in	0.75 in	0.16 in	5F-8807
½ - 13	1 ½ in	0.50 in	0.75 in	0.16 in	3F-7147
½ - 13	3 in	0.50 in	0.75 in	1.50 in	4L-8515
½ - 13	2 ¼ in	0.50 in	0.75 in	0.75 in	2L-0041
½ - 13	¾ in	0.50 in	0.75 in	0.16 in	013-8289
½ - 13	½ in	0.50 in	0.75 in	0.16 in	021-7916
½ - 13	6 in	0.50 in	0.75 in	4.50 in	8L-4612
½ - 13	3 ½ in	0.50 in	0.75 in	1.50 in	8B-7998
½ - 13	2 in	0.50 in	0.75 in	0.19 in	8B-7997
½ - 13	2 ½ in	0.50 in	0.75 in	0.75 in	8B-7979
½ - 13	7 in	0.50 in	0.75 in	5.25 in	7L-0654
¼ - 20	1 ¼ in	0.25 in	0.38 in	0.09 in	4L-7124
¼ - 20	1 in	0.25 in	0.38 in	0.11 in	8H-0707
¼ - 20	½ in	0.25 in	0.38 in	0.11 in	8H-0708
¼ - 20	¾ in	0.25 in	0.38 in	0.11 in	8H-3127
¼ - 20	1 ½ in	0.25 in	0.38 in	0.50 in	2H-3764
¼ - 20	1 ¾ in	0.25 in	0.38 in	0.50 in	5L-9018
¼ - 20	2 ¾ in	0.25 in	0.25 in	1.50 in	6J-2819
¼ - 20	⅝ in	0.25 in	0.38 in	0.11 in	8H-3128
¼ - 20	⅜ in	0.25 in	0.38 in	0.11 in	7J-0637
¼ - 20	⅞ in	0.25 in	0.38 in	0.11 in	6L-5897
¼ - 20	2 ¼ in	0.25 in	0.38 in	1.00 in	6L-5551
¼ - 20	2 in	0.25 in	0.38 in	1.00 in	6L-1596
¼ - 20	2 ½ in	0.25 in	0.38 in	1.50 in	6H-3958
¾ - 10	2 ½ in	0.75 in	1.12 in	0.20 in	2N-6170
¾ - 10	3 ¼ in	0.75 in	1.12 in	1.00 in	2N-1746
¾ - 10	1 ¾ in	0.75 in	1.12 in	0.20 in	5F-5321
¾ - 10	1 ½ in	0.75 in	1.12 in	0.20 in	7L-9787
¾ - 10	3 ½ in	0.75 in	1.12 in	1.00 in	9S-4920
⅜ - 16	¾ in	0.38 in	0.56 in	0.25 in	1L-0509
⅜ - 16	2 in	0.38 in	0.56 in	0.50 in	1L-8793

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
Coarse Thread (Continued)					
⅜ - 16	2 ½ in	0.38 in	0.56 in	1.00 in	1Y-7574
⅜ - 16	1 in	0.38 in	0.56 in	0.25 in	2D-4534
⅜ - 16	6 in	0.38 in	0.56 in	4.50 in	2D-8992
⅜ - 16	1 ¼ in	0.38 in	0.56 in	0.25 in	2J-5245
⅜ - 16	2 ¾ in	0.38 in	0.56 in	1.50 in	2K-6073
⅜ - 16	2 ¼ in	0.38 in	0.56 in	1.00 in	2L-3793
⅜ - 16	5 in	0.38 in	0.56 in	3.50 in	8L-3837
⅜ - 16	1 ¾ in	0.38 in	0.56 in	0.50 in	5S-2586
⅜ - 16	⅞ in	0.38 in	0.56 in	0.25 in	4S-5565
⅜ - 16	4 in	0.38 in	0.56 in	2.50 in	3B-7614
⅜ - 16	3 ¼ in	0.38 in	0.56 in	2.00 in	4B-3835
⅜ - 16	1 ½ in	0.38 in	0.56 in	0.25 in	4D-3120
⅝ - 18	1 ¾ in	0.31 in	0.47 in	0.63 in	7S-6701
⅝ - 18	1 in	0.31 in	0.47 in	0.11 in	1T-0284
⅝ - 18	3 ½ in	0.31 in	0.47 in	2.25 in	9S-7382
⅝ - 18	2 in	0.31 in	0.47 in	0.63 in	9S-7381
⅝ - 18	1 ¼ in	0.31 in	0.47 in	0.11 in	9F-6641
⅝ - 18	¾ in	0.31 in	0.47 in	0.11 in	9F-5975
⅝ - 18	1 ½ in	0.31 in	0.47 in	0.11 in	5J-5314
⅝ - 18	2 ¾ in	0.31 in	0.47 in	1.63 in	2L-1352
⅝ - 11	5 ½ in	0.62 in	0.94 in	3.75 in	7L-8304
⅝ - 11	4 ½ in	0.62 in	0.94 in	2.25 in	6H-3959
⅝ - 11	2 in	0.62 in	0.94 in	0.19 in	5S-2457
⅝ - 11	1 ¼ in	0.62 in	0.94 in	0.19 in	5S-2201
⅝ - 11	4 in	0.62 in	0.94 in	2.25 in	8L-4743
⅝ - 11	3 in	0.62 in	0.94 in	0.75 in	4D-0242
⅞ - 14	⅞ in	0.44 in	0.66 in	0.14 in	4J-1096
⅞ - 14	1 ¼ in	0.44 in	0.66 in	0.14 in	7B-7525
⅞ - 14	2 in	0.44 in	0.66 in	0.63 in	2N-0412
⅞ - 14	2 ½ in	0.44 in	0.66 in	1.13 in	3J-4567
⅞ - 9	2 ½ in	0.88 in	1.31 in	0.22 in	8L-4638
⅞ - 9	4 in	0.88 in	1.31 in	1.00 in	8L-9299
⅞ - 9	4 ½ in	0.88 in	1.31 in	3.00 in	8L-4717
No. 10 - 24	1 ¾ in	0.19 in	0.31 in	0.88 in	2N-0402
No. 10 - 24	1 ½ in	0.19 in	0.31 in	0.38 in	5J-1714
No. 10 - 24	½ in	0.19 in	0.31 in	0.08 in	5S-2671
No. 10 - 24	⅞ in	0.19 in	0.31 in	0.08 in	9F-1707
No. 10 - 24	1 ¼ in	0.19 in	0.31 in	0.38 in	7L-0688
No. 10 - 24	⅝ in	0.19 in	0.31 in	0.08 in	2H-0191

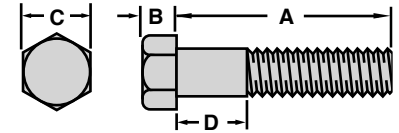
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Hex Socket Head Screw Bolts/Inch/Coarse & Fine Thread (Continued)

Thread Size (in - TPI)	A	B	C	D	Part Number
	Bolt Length	Head Height	Head Width	Grip Length	
Coarse Thread (Continued)					
No. 10 - 24	¾ in	0.19 in	0.31 in	0.08 in	3L-2540
No. 4 - 40	¾ in	0.11 in	0.19 in	0.05 in	2S-9255
No. 8 - 32	1 in	0.16 in	0.27 in	0.06 in	9M-4704
No. 8 - 32	¾ in	0.16 in	0.27 in	0.06 in	7D-5473
No. 8 - 32	½ in	0.16 in	0.27 in	0.06 in	6D-3897
Fine Thread					
½ - 20	3 in	0.50 in	0.75 in	1.50 in	013-8315
½ - 20	1 ¼ in	0.50 in	0.75 in	0.11 in	1F-1375
½ - 20	1 ¾ in	0.50 in	0.75 in	0.11 in	013-8310
½ - 20	2 ¼ in	0.50 in	0.75 in	0.75 in	013-8312
½ - 20	½ in	0.50 in	0.75 in	0.11 in	021-7956
½ - 20	1 in	0.50 in	0.75 in	0.11 in	013-8307
½ - 20	¾ in	0.50 in	0.75 in	0.11 in	013-8306
½ - 20	2 in	0.50 in	0.75 in	0.11 in	2H-3763
½ - 20	1 ½ in	0.50 in	0.75 in	0.11 in	8F-0069
¼ - 28	⅞ in	0.25 in	0.38 in	0.08 in	8S-1571
¼ - 28	¾ in	0.25 in	0.38 in	0.08 in	3H-1392
¼ - 28	⅝ in	0.25 in	0.38 in	0.08 in	021-7941

Thread Size (in - TPI)	A	B	C	D	Part Number
	Bolt Length	Head Height	Head Width	Grip Length	
Fine Thread (Continued)					
¼ - 28	½ in	0.25 in	0.38 in	0.08 in	2K-8407
¾ - 16	2 in	0.75 in	1.12 in	0.13 in	061-8718
⅜ - 24	⅞ in	0.38 in	0.56 in	0.08 in	4L-1507
⅜ - 24	2 ¼ in	0.38 in	0.56 in	1.00 in	013-8259
⅜ - 24	5 ¾ in	0.38 in	0.56 in	4.75 in	8J-1582
⅜ - 24	1 ¼ in	0.38 in	0.56 in	0.08 in	1T-0131
⅜ - 24	¾ in	0.38 in	0.56 in	0.08 in	013-8253
⅜ - 24	1 in	0.38 in	0.56 in	0.08 in	5L-4183
⅜ - 24	1 ½ in	0.38 in	0.56 in	0.19 in	5L-8894
⅜ - 24	2 in	0.38 in	0.56 in	0.50 in	013-8258
⅜ - 24	1 ¾ in	0.38 in	0.56 in	0.50 in	013-8257
⅝ ₁₆ - 24	¾ in	0.31 in	0.31 in	0.08 in	3F-8156
⅝ - 18	2 ¼ in	0.62 in	0.94 in	0.11 in	9S-9078
⅞ ₁₆ - 20	½ in	0.44 in	0.66 in	0.11 in	8S-2696
⅞ ₁₆ - 20	1 ¾ in	0.44 in	0.66 in	0.11 in	8F-1948
No. 10 - 32	⅝ in	0.19 in	0.31 in	0.06 in	3K-6168
No. 10 - 32	⅞ in	0.19 in	0.31 in	0.06 in	8H-4959

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



Thread Size (dia × pitch)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
Thread Size (dia × pitch) M6 × 1.00					
M6 × 1.00	40 mm	4 mm	10 mm	22 mm	2W-9499
M6 × 1.00	35 mm	4 mm	10 mm	17 mm	6V-2315
M6 × 1.00	45 mm	4 mm	10 mm	6 mm	6V-7728
M6 × 1.00	20 mm	4 mm	10 mm	3 mm	6V-8214
M6 × 1.00	Nut	--	--	--	6V-8225
M6 × 1.00	70 mm	4 mm	10 mm	52 mm	6V-8359
M6 × 1.00	25 mm	4 mm	10 mm	3 mm	6V-8490
M6 × 1.00	16 mm	4 mm	10 mm	3 mm	6V-8837
M6 × 1.00	80 mm	4 mm	10 mm	62 mm	6V-9798
M6 × 1.00	50 mm	4 mm	10 mm	33 mm	8T-0275
M6 × 1.00	12 mm	4 mm	10 mm	2 mm	8T-0639
M6 × 1.00	30 mm	4 mm	10 mm	12 mm	8T-0640
M6 × 1.00	60 mm	4 mm	10 mm	42 mm	8T-5066
M6 × 1.00	Washer	--	--	--	9X-8267
Thread Size (dia × pitch) M8 × 1.25					
M8 × 1.25	Nut	--	--	--	5P-7970
M8 × 1.25	70 mm	6 mm	13 mm	48 mm	5P-8347
M8 × 1.25	12 mm	6 mm	13 mm	3 mm	6V-2316
M8 × 1.25	30 mm	6 mm	13 mm	8 mm	6V-2317
M8 × 1.25	110 mm	6 mm	13 mm	88 mm	6V-3821
M8 × 1.25	50 mm	6 mm	13 mm	28 mm	6V-3918
M8 × 1.25	25 mm	6 mm	13 mm	3 mm	6V-3940
M8 × 1.25	16 mm	6 mm	13 mm	3 mm	6V-5215
M8 × 1.25	20 mm	6 mm	13 mm	3 mm	6V-5217
M8 × 1.25	35 mm	6 mm	13 mm	13 mm	6V-5218
M8 × 1.25	40 mm	6 mm	13 mm	18 mm	6V-5219
M8 × 1.25	80 mm	6 mm	13 mm	58 mm	6V-5221
M8 × 1.25	100 mm	6 mm	13 mm	78 mm	6V-5223
M8 × 1.25	120 mm	6 mm	13 mm	98 mm	6V-9607
M8 × 1.25	130 mm	6 mm	13 mm	108 mm	7X-0457
M8 × 1.25	140 mm	6 mm	13 mm	112 mm	7X-0870
M8 × 1.25	150 mm	6 mm	13 mm	122 mm	8C-4984
M8 × 1.25	60 mm	6 mm	13 mm	38 mm	8T-0100
M8 × 1.25	45 mm	6 mm	13 mm	23 mm	8T-0276
M8 × 1.25	90 mm	6 mm	13 mm	68 mm	8T-0292
M8 × 1.25	Washer	--	--	--	9M-1974
Thread Size (dia × pitch) M10 × 1.50					
M10 × 1.50	Nut	--	--	--	2Y-5829
M10 × 1.50	100 mm	7 mm	16 mm	74 mm	6V-1819
M10 × 1.50	30 mm	7 mm	16 mm	5 mm	6V-1820

Thread Size (dia × pitch)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
Thread Size (dia × pitch) M10 × 1.50 (Continued)					
M10 × 1.50	35 mm	7 mm	16 mm	5 mm	6V-3822
M10 × 1.50	25 mm	7 mm	16 mm	5 mm	6V-4248
M10 × 1.50	50 mm	7 mm	16 mm	24 mm	6V-4249
M10 × 1.50	60 mm	7 mm	16 mm	34 mm	6V-5230
M10 × 1.50	Washer	--	--	--	6V-5839
M10 × 1.50	40 mm	7 mm	16 mm	14 mm	6V-5842
M10 × 1.50	45 mm	7 mm	16 mm	19 mm	6V-5843
M10 × 1.50	20 mm	7 mm	16 mm	5 mm	6V-6317
M10 × 1.50	70 mm	7 mm	16 mm	44 mm	6V-7981
M10 × 1.50	12 mm	7 mm	16 mm	5 mm	6V-8084
M10 × 1.50	16 mm	7 mm	16 mm	3 mm	6V-8212
M10 × 1.50	140 mm	7 mm	16 mm	108 mm	8C-2926
M10 × 1.50	110 mm	7 mm	16 mm	78 mm	8T-0355
M10 × 1.50	160 mm	7 mm	16 mm	128 mm	8T-0356
M10 × 1.50	80 mm	7 mm	16 mm	54 mm	8T-0643
M10 × 1.50	90 mm	7 mm	16 mm	64 mm	8T-0644
M10 × 1.50	120 mm	7 mm	16 mm	94 mm	8T-5030
M10 × 1.50	200 mm	7 mm	16 mm	168 mm	8T-6854
M10 × 1.50	180 mm	7 mm	16 mm	148 mm	8T-7950
M10 × 1.50	150 mm	7 mm	16 mm	118 mm	8T-9085
Thread Size (dia × pitch) M12 × 1.75					
M12 × 1.75	Washer	--	--	--	5P-8245
M12 × 1.75	25 mm	8 mm	18 mm	5 mm	6A-5591
M12 × 1.75	30 mm	8 mm	18 mm	5 mm	6V-3668
M12 × 1.75	60 mm	8 mm	18 mm	30 mm	6V-3823
M12 × 1.75	45 mm	8 mm	18 mm	15 mm	6V-5684
M12 × 1.75	80 mm	8 mm	18 mm	50 mm	6V-5696
M12 × 1.75	50 mm	8 mm	18 mm	20 mm	6V-7673
M12 × 1.75	120 mm	8 mm	18 mm	90 mm	6V-8004
M12 × 1.75	Nut	--	--	--	6V-8149
M12 × 1.75	16 mm	8 mm	18 mm	5 mm	6V-8177
M12 × 1.75	40 mm	8 mm	18 mm	5 mm	6V-8197
M12 × 1.75	70 mm	8 mm	18 mm	40 mm	6V-8336
M12 × 1.75	35 mm	8 mm	18 mm	5 mm	6V-8675
M12 × 1.75	140 mm	8 mm	18 mm	104 mm	7X-0909
M12 × 1.75	200 mm	8 mm	18 mm	147 mm	8C-3226
M12 × 1.75	100 mm	8 mm	18 mm	70 mm	8T-0106
M12 × 1.75	160 mm	8 mm	18 mm	124 mm	8T-0162
M12 × 1.75	20 mm	8 mm	18 mm	5 mm	8T-0293
M12 × 1.75	90 mm	8 mm	18 mm	60 mm	8T-0372

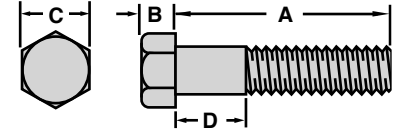
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Hex Head Bolts/Metric/Coarse Thread UNC/Phosphate & Oil Coated (Continued)

Thread Size (dia × pitch)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
Thread Size (dia × pitch) M12 × 1.75 (Continued)					
M12 × 1.75	110 mm	8 mm	18 mm	80 mm	8T-0646
M12 × 1.75	150 mm	8 mm	18 mm	114 mm	8T-5044
M12 × 1.75	180 mm	8 mm	18 mm	144 mm	8T-6991
Thread Size (dia × pitch) M14 × 2.00					
M14 × 2.00	Nut	--	--	--	139-6366
M14 × 2.00	50 mm	9 mm	21 mm	16 mm	6V-5685
M14 × 2.00	35 mm	9 mm	21 mm	6 mm	6V-8550
M14 × 2.00	90 mm	9 mm	21 mm	56 mm	8C-0537
M14 × 2.00	45 mm	9 mm	21 mm	6 mm	8T-0226
M14 × 2.00	25 mm	9 mm	21 mm	6 mm	8T-0296
M14 × 2.00	30 mm	9 mm	21 mm	6 mm	8T-0297
M14 × 2.00	100 mm	9 mm	21 mm	66 mm	8T-0298
M14 × 2.00	20 mm	9 mm	21 mm	6 mm	8T-0373
M14 × 2.00	80 mm	9 mm	21 mm	46 mm	8T-3653
M14 × 2.00	60 mm	9 mm	21 mm	26 mm	8T-3666
Thread Size (dia × pitch) M16 × 2.00					
M16 × 2.00	60 mm	10 mm	24 mm	22 mm	6V-3303
M16 × 2.00	40 mm	10 mm	24 mm	5 mm	6V-4429
M16 × 2.00	25 mm	10 mm	24 mm	4 mm	6V-5224
M16 × 2.00	50 mm	10 mm	24 mm	12 mm	6V-5686
M16 × 2.00	35 mm	10 mm	24 mm	4 mm	6V-5844
M16 × 2.00	140 mm	10 mm	24 mm	96 mm	6V-7675
M16 × 2.00	150 mm	10 mm	24 mm	106 mm	6V-8154
M16 × 2.00	100 mm	10 mm	24 mm	62 mm	8T-0207
M16 × 2.00	80 mm	10 mm	24 mm	42 mm	8T-0281
M16 × 2.00	120 mm	10 mm	24 mm	82 mm	8T-0282
M16 × 2.00	30 mm	10 mm	24 mm	3 mm	8T-0299
M16 × 2.00	70 mm	10 mm	24 mm	32 mm	8T-0357
M16 × 2.00	90 mm	10 mm	24 mm	52 mm	8T-0358
M16 × 2.00	130 mm	10 mm	24 mm	86 mm	8T-0359
M16 × 2.00	45 mm	10 mm	24 mm	5 mm	8T-0375
M16 × 2.00	110 mm	10 mm	24 mm	72 mm	8T-0649
M16 × 2.00	160 mm	10 mm	24 mm	116 mm	8T-0650
M16 × 2.00	Nut	--	--	--	8T-1757
M16 × 2.00	180 mm	10 mm	24 mm	136 mm	8T-5002
M16 × 2.00	Washer	--	--	--	9X-8268
Thread Size (dia × pitch) M20 × 2.50					
M20 × 2.50	50 mm	13 mm	30 mm	4 mm	6V-3531
M20 × 2.50	60 mm	13 mm	30 mm	14 mm	6V-3532
M20 × 2.50	80 mm	13 mm	30 mm	34 mm	6V-3669
M20 × 2.50	70 mm	13 mm	30 mm	24 mm	6V-5845
M20 × 2.50	40 mm	13 mm	30 mm	5 mm	6V-7729
M20 × 2.50	Nut	--	--	--	6V-7742
M20 × 2.50	200 mm	13 mm	30 mm	148 mm	6V-8569

Thread Size (dia × pitch)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
Thread Size (dia × pitch) M20 × 2.50 (Continued)					
M20 × 2.50	140 mm	13 mm	30 mm	88 mm	6V-9167
M20 × 2.50	100 mm	13 mm	30 mm	54 mm	6V-9667
M20 × 2.50	120 mm	13 mm	30 mm	74 mm	8T-0070
M20 × 2.50	35 mm	13 mm	30 mm	4 mm	8T-0300
M20 × 2.50	90 mm	13 mm	30 mm	44 mm	8T-0360
M20 × 2.50	110 mm	13 mm	30 mm	64 mm	8T-0362
M20 × 2.50	30 mm	13 mm	30 mm	4 mm	8T-0651
M20 × 2.50	45 mm	13 mm	30 mm	6 mm	8T-0652
M20 × 2.50	130 mm	13 mm	30 mm	78 mm	8T-0655
M20 × 2.50	150 mm	13 mm	30 mm	98 mm	8T-0656
M20 × 2.50	160 mm	13 mm	30 mm	108 mm	8T-0657
M20 × 2.50	180 mm	13 mm	30 mm	128 mm	8T-0658
M20 × 2.50	Washer	--	--	--	8T-3282
Thread Size (dia × pitch) M24 × 3.00					
M24 × 3.00	120 mm	15 mm	36 mm	66 mm	6V-8132
M24 × 3.00	80 mm	15 mm	36 mm	26 mm	6V-8133
M24 × 3.00	200 mm	15 mm	36 mm	140 mm	6V-8198
M24 × 3.00	Washer	--	--	--	6V-8237
M24 × 3.00	50 mm	15 mm	36 mm	8 mm	6V-9199
M24 × 3.00	Nut	--	--	--	7X-0851
M24 × 3.00	40 mm	15 mm	36 mm	8 mm	8T-0661
M24 × 3.00	35 mm	15 mm	36 mm	8 mm	8T-0662
M24 × 3.00	45 mm	15 mm	36 mm	8 mm	8T-0663
M24 × 3.00	70 mm	15 mm	36 mm	8 mm	8T-0664
M24 × 3.00	90 mm	15 mm	36 mm	36 mm	8T-0666
M24 × 3.00	100 mm	15 mm	36 mm	46 mm	8T-0667
M24 × 3.00	110 mm	15 mm	36 mm	56 mm	8T-0668
M24 × 3.00	130 mm	15 mm	36 mm	70 mm	8T-0669
M24 × 3.00	140 mm	15 mm	36 mm	80 mm	8T-0670
M24 × 3.00	150 mm	15 mm	36 mm	90 mm	8T-0671
M24 × 3.00	160 mm	15 mm	36 mm	100 mm	8T-0672
M24 × 3.00	180 mm	15 mm	36 mm	120 mm	8T-0674
Thread Size (dia × pitch) M30 × 3.50					
M30 × 3.50	Washer	--	--	--	9X-8399
M30 × 3.50	80 mm	19 mm	46 mm	14 mm	8C-3222
M30 × 3.50	160 mm	19 mm	46 mm	88 mm	8C-3236
M30 × 3.50	90 mm	19 mm	46 mm	24 mm	8C-3411
M30 × 3.50	110 mm	19 mm	46 mm	44 mm	8T-0283
M30 × 3.50	100 mm	19 mm	46 mm	34 mm	8T-0368
M30 × 3.50	120 mm	19 mm	46 mm	54 mm	8T-0369
M30 × 3.50	140 mm	19 mm	46 mm	68 mm	8T-0370
M30 × 3.50	Nut	--	--	--	8T-1583
M30 × 3.50	180 mm	19 mm	46 mm	108 mm	8T-6624

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
Thread Size (dia × pitch) M6 × 1.00					
M6 × 1.00	Washer	--	--	--	9X-8256
M6 × 1.00	Nut	--	--	--	5C-2890
M6 × 1.00	16 mm	4 mm	10 mm	3 mm	5C-9553
M6 × 1.00	25 mm	4 mm	10 mm	2 mm	6V-7357
M6 × 1.00	35 mm	4 mm	10 mm	17 mm	7X-2533
M6 × 1.00	50 mm	4 mm	10 mm	32 mm	7X-2534
M6 × 1.00	60 mm	4 mm	10 mm	42 mm	7X-2535
M6 × 1.00	40 mm	4 mm	10 mm	22 mm	8C-8451
M6 × 1.00	45 mm	4 mm	10 mm	6 mm	8T-2947
M6 × 1.00	70 mm	4 mm	10 mm	52 mm	8T-3844
M6 × 1.00	20 mm	4 mm	10 mm	3 mm	8T-4138
M6 × 1.00	12 mm	4 mm	10 mm	2 mm	8T-4171
M6 × 1.00	30 mm	4 mm	10 mm	12 mm	8T-4971
M6 × 1.00	80 mm	4 mm	10 mm	62 mm	8T-6974
Thread Size (dia × pitch) M8 × 1.25					
M30 × 3.50	160 mm	19 mm	46 mm	88 mm	7X-2585
M8 × 1.25	16 mm	6 mm	13 mm	3 mm	8T-4200
M8 × 1.25	25 mm	6 mm	13 mm	3 mm	8T-4908
M8 × 1.25	30 mm	6 mm	13 mm	8 mm	8T-7547
M8 × 1.25	40 mm	6 mm	13 mm	3 mm	8T-4197
M8 × 1.25	35 mm	6 mm	13 mm	13 mm	7X-2537
M8 × 1.25	45 mm	6 mm	13 mm	23 mm	7X-0818
M8 × 1.25	50 mm	6 mm	13 mm	28 mm	8T-6912
M8 × 1.25	60 mm	6 mm	13 mm	38 mm	8T-6869
M8 × 1.25	90 mm	6 mm	13 mm	68 mm	8T-4177
M8 × 1.25	70 mm	6 mm	13 mm	48 mm	8T-6870
M8 × 1.25	20 mm	6 mm	13 mm	3 mm	8T-4189
M8 × 1.25	Nut	--	--	--	5C-7261
M8 × 1.25	80 mm	6 mm	13 mm	58 mm	8T-3647
M8 × 1.25	100 mm	6 mm	13 mm	78 mm	7X-2538
M8 × 1.25	110 mm	6 mm	13 mm	88 mm	7X-2539
M8 × 1.25	120 mm	6 mm	13 mm	98 mm	7X-2540
M8 × 1.25	140 mm	6 mm	13 mm	112 mm	7X-2541
M8 × 1.25	150 mm	6 mm	13 mm	122 mm	7X-2542
M8 × 1.25	130 mm	6 mm	13 mm	108 mm	108-2989
M8 × 1.25	160 mm	6 mm	13 mm	128 mm	8T-7352
M8 × 1.25	Washer	--	--	--	8T-4224
M8 × 1.25	12 mm	6 mm	13 mm	3 mm	8T-4199
Thread Size (dia × pitch) M10 × 1.50					
M10 × 1.50	25 mm	7 mm	16 mm	5 mm	8T-4136

Thread Size (dia × pitch)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
Thread Size (dia × pitch) M10 × 1.50 (Continued)					
M10 × 1.50	160 mm	7 mm	16 mm	128 mm	8T-6408
M10 × 1.50	120 mm	7 mm	16 mm	94 mm	7X-2543
M10 × 1.50	140 mm	7 mm	16 mm	108 mm	7X-2544
M10 × 1.50	150 mm	7 mm	16 mm	118 mm	7X-2545
M10 × 1.50	180 mm	7 mm	16 mm	148 mm	7X-2546
M10 × 1.50	200 mm	7 mm	16 mm	168 mm	7X-2547
M10 × 1.50	Nut	--	--	--	8T-4133
M10 × 1.50	Washer	--	--	--	8T-4121
M10 × 1.50	16 mm	7 mm	16 mm	5 mm	8T-4191
M10 × 1.50	20 mm	7 mm	16 mm	5 mm	8T-4137
M10 × 1.50	30 mm	7 mm	16 mm	5 mm	8T-4195
M10 × 1.50	35 mm	7 mm	16 mm	5 mm	8T-4196
M10 × 1.50	40 mm	7 mm	16 mm	14 mm	8T-4186
M10 × 1.50	45 mm	7 mm	16 mm	19 mm	8T-4182
M10 × 1.50	50 mm	7 mm	16 mm	24 mm	8T-4185
M10 × 1.50	60 mm	7 mm	16 mm	34 mm	8T-6466
M10 × 1.50	70 mm	7 mm	16 mm	44 mm	8T-5005
M10 × 1.50	80 mm	7 mm	16 mm	54 mm	8T-4172
M10 × 1.50	90 mm	7 mm	16 mm	64 mm	8T-4178
M10 × 1.50	100 mm	7 mm	16 mm	74 mm	8T-4198
M10 × 1.50	110 mm	7 mm	16 mm	84 mm	8T-6685
M10 × 1.50	130 mm	7 mm	16 mm	98 mm	8T-5436
M10 × 1.50	12 mm	7 mm	16 mm	5 mm	7X-2621
Thread Size (dia × pitch) M12 × 1.75					
M12 × 1.75	25 mm	8 mm	18 mm	5 mm	8T-4192
M12 × 1.75	16 mm	8 mm	18 mm	5 mm	7X-2548
M12 × 1.75	180 mm	8 mm	18 mm	144 mm	8T-7929
M12 × 1.75	110 mm	8 mm	18 mm	80 mm	7X-2550
M12 × 1.75	200 mm	8 mm	18 mm	147 mm	7X-2551
M12 × 1.75	Washer	--	--	--	8T-4223
M12 × 1.75	30 mm	8 mm	18 mm	5 mm	8T-4139
M12 × 1.75	35 mm	8 mm	18 mm	5 mm	8T-4956
M12 × 1.75	40 mm	8 mm	18 mm	5 mm	8T-4183
M12 × 1.75	45 mm	8 mm	18 mm	15 mm	8T-4184
M12 × 1.75	50 mm	8 mm	18 mm	20 mm	8T-4194
M12 × 1.75	60 mm	8 mm	18 mm	30 mm	8T-4910
M12 × 1.75	70 mm	8 mm	18 mm	40 mm	8T-4648
M12 × 1.75	80 mm	8 mm	18 mm	50 mm	8T-6868
M12 × 1.75	90 mm	8 mm	18 mm	60 mm	8T-4176
M12 × 1.75	Nut	--	--	--	8T-4244

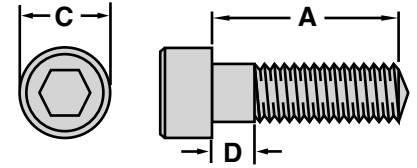
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Hex Head Bolts/Metric/Coarse Thread UNC/Zinc Plated (Continued)

Thread Size (dia × pitch)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
Thread Size (dia × pitch) M12 × 1.75 (Continued)					
M12 × 1.75	20 mm	8 mm	18 mm	5 mm	8T-4179
M12 × 1.75	120 mm	8 mm	18 mm	90 mm	8T-5041
M12 × 1.75	130 mm	8 mm	18 mm	94 mm	8T-5001
M12 × 1.75	140 mm	8 mm	18 mm	104 mm	8T-5412
M12 × 1.75	150 mm	8 mm	18 mm	114 mm	8T-5092
M12 × 1.75	160 mm	8 mm	18 mm	124 mm	8T-7930
M12 × 1.75	100 mm	8 mm	18 mm	70 mm	7X-2549
Thread Size (dia × pitch) M16 × 2.00					
M16 × 2.00	45 mm	10 mm	24 mm	5 mm	8T-7338
M16 × 2.00	120 mm	10 mm	24 mm	82 mm	8T-4174
M16 × 2.00	50 mm	10 mm	24 mm	12 mm	8T-4193
M16 × 2.00	60 mm	10 mm	24 mm	22 mm	8T-4140
M16 × 2.00	90 mm	10 mm	24 mm	52 mm	8T-4175
M16 × 2.00	130 mm	10 mm	24 mm	86 mm	7X-2475
M16 × 2.00	140 mm	10 mm	24 mm	96 mm	7X-2557
M16 × 2.00	150 mm	10 mm	24 mm	106 mm	7X-2558
M16 × 2.00	160 mm	10 mm	24 mm	116 mm	7X-2559
M16 × 2.00	180 mm	10 mm	24 mm	136 mm	8T-6385
M16 × 2.00	200 mm	10 mm	24 mm	156 mm	8T-6383
M16 × 2.00	Nut	--	--	--	8T-4132
M16 × 2.00	Washer	--	--	--	8T-4122
M16 × 2.00	30 mm	10 mm	24 mm	3 mm	7X-2552
M16 × 2.00	40 mm	10 mm	24 mm	5 mm	7X-2553
M16 × 2.00	70 mm	10 mm	24 mm	32 mm	7X-2554
M16 × 2.00	80 mm	10 mm	24 mm	42 mm	7X-2555
M16 × 2.00	100 mm	10 mm	24 mm	56 mm	7X-2556
M16 × 2.00	25 mm	10 mm	24 mm	4 mm	8T-4190
M16 × 2.00	35 mm	10 mm	24 mm	4 mm	8T-4779
M16 × 2.00	110 mm	10 mm	24 mm	72 mm	8T-4173
Thread Size (dia × pitch) M20 × 2.50					
M20 × 2.50	35 mm	13 mm	30 mm	4 mm	7X-2561
M20 × 2.50	140 mm	13 mm	30 mm	88 mm	8C-8478
M20 × 2.50	60 mm	13 mm	30 mm	14 mm	7X-2563
M20 × 2.50	90 mm	13 mm	30 mm	44 mm	7X-2564
M20 × 2.50	100 mm	13 mm	30 mm	54 mm	7X-2565
M20 × 2.50	110 mm	13 mm	30 mm	64 mm	7X-2566
M20 × 2.50	130 mm	13 mm	30 mm	78 mm	7X-2532
M20 × 2.50	160 mm	13 mm	30 mm	108 mm	7X-2488
M20 × 2.50	180 mm	13 mm	30 mm	128 mm	7X-2568
M20 × 2.50	200 mm	13 mm	30 mm	148 mm	7X-2569
M20 × 2.50	Nut	--	--	--	8T-4131

Thread Size (dia × pitch)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
Thread Size (dia × pitch) M20 × 2.50 (Continued)					
M20 × 2.50	Washer	--	--	--	8T-4123
M20 × 2.50	30 mm	13 mm	30 mm	4 mm	8T-4780
M20 × 2.50	40 mm	13 mm	30 mm	5 mm	8T-5460
M20 × 2.50	50 mm	13 mm	30 mm	4 mm	8T-6430
M20 × 2.50	70 mm	13 mm	30 mm	24 mm	8T-4141
M20 × 2.50	80 mm	13 mm	30 mm	34 mm	8T-4187
M20 × 2.50	120 mm	13 mm	30 mm	74 mm	8T-6381
M20 × 2.50	150 mm	13 mm	30 mm	98 mm	8T-4170
M20 × 2.50	45 mm	13 mm	30 mm	6 mm	7X-2562
Thread Size (dia × pitch) M24 × 3.00					
M24 × 3.00	100 mm	15 mm	36 mm	46 mm	7X-2489
M24 × 3.00	70 mm	15 mm	36 mm	8 mm	7X-2576
M24 × 3.00	90 mm	15 mm	36 mm	36 mm	7X-2577
M24 × 3.00	110 mm	15 mm	36 mm	56 mm	7X-2454
M24 × 3.00	160 mm	15 mm	36 mm	100 mm	7X-2567
M24 × 3.00	180 mm	15 mm	36 mm	120 mm	7X-2465
M24 × 3.00	200 mm	15 mm	36 mm	140 mm	7X-2578
M24 × 3.00	Nut	--	--	--	8T-4001
M24 × 3.00	50 mm	15 mm	36 mm	8 mm	8T-5379
M24 × 3.00	120 mm	15 mm	36 mm	66 mm	8T-0363
M24 × 3.00	130 mm	15 mm	36 mm	70 mm	8T-6380
M24 × 3.00	140 mm	15 mm	36 mm	80 mm	8T-4649
M24 × 3.00	40 mm	15 mm	36 mm	8 mm	7X-2573
M24 × 3.00	Washer	--	--	--	8T-4167
M24 × 3.00	35 mm	15 mm	36 mm	8 mm	7X-2572
M24 × 3.00	150 mm	15 mm	36 mm	90 mm	8C-3290
M24 × 3.00	45 mm	15 mm	36 mm	8 mm	7X-2574
M24 × 3.00	60 mm	15 mm	36 mm	8 mm	7X-2575
M24 × 3.00	80 mm	15 mm	36 mm	26 mm	8T-5878
Thread Size (dia × pitch) M30 × 3.50					
M30 × 3.50	50 mm	19 mm	46 mm	9 mm	9X-2199
M30 × 3.50	Nut	--	--	--	8C-8722
M30 × 3.50	Washer	--	--	--	9X-8258
M30 × 3.50	90 mm	19 mm	46 mm	24 mm	7X-2580
M30 × 3.50	180 mm	19 mm	46 mm	108 mm	7X-2586
M30 × 3.50	120 mm	19 mm	46 mm	54 mm	7X-2583
M30 × 3.50	140 mm	19 mm	46 mm	68 mm	7X-2584
M30 × 3.50	160 mm	19 mm	46 mm	88 mm	7X-2585
M30 × 3.50	100 mm	19 mm	46 mm	34 mm	7X-2581
M30 × 3.50	80 mm	19 mm	46 mm	14 mm	8C-8723
M30 × 3.50	110 mm	19 mm	46 mm	44 mm	7X-2582

Hex Socket Head Bolts/Metric/Coarse Thread UNC



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

Thread Size (dia × pitch)	A Bolt Length	C Head Width	D Grip Length	Part Number
Thread Size (dia × pitch) M8 × 1.25				
M8 × 1.25	65 mm	13 mm	37 mm	096-0187
M8 × 1.25	100 mm	13 mm	72 mm	102-7365
M8 × 1.25	130 mm	13 mm	102 mm	3E-8006
M8 × 1.25	50 mm	13 mm	22 mm	3E-8025
M8 × 1.25	25 mm	13 mm	4 mm	5A-3604
M8 × 1.25	30 mm	13 mm	4 mm	6V-5192
M8 × 1.25	80 mm	13 mm	58 mm	6V-5196
M8 × 1.25	16 mm	13 mm	4 mm	6V-8202
M8 × 1.25	70 mm	13 mm	42 mm	6V-8213
M8 × 1.25	35 mm	13 mm	4 mm	6V-8337
M8 × 1.25	45 mm	13 mm	17 mm	8T-0338
M8 × 1.25	110 mm	13 mm	82 mm	8T-0339
M8 × 1.25	20 mm	13 mm	4 mm	8T-1158
M8 × 1.25	90 mm	13 mm	62 mm	8T-2394
M8 × 1.25	60 mm	13 mm	38 mm	8T-9535
M8 × 1.25	55 mm	13 mm	33 mm	9X-6154
M8 × 1.25	200 mm	13 mm	172 mm	9X-8269
Thread Size (dia × pitch) M10 × 1.50				
M10 × 1.50	130 mm	16 mm	98 mm	086-2369
M10 × 1.50	55 mm	16 mm	29 mm	095-0655
M10 × 1.50	70 mm	16 mm	38 mm	095-0658
M10 × 1.50	220 mm	16 mm	194 mm	095-0665
M10 × 1.50	120 mm	16 mm	88 mm	096-1331
M10 × 1.50	16 mm	16 mm	5 mm	096-4835
M10 × 1.50	150 mm	16 mm	118 mm	3E-8028
M10 × 1.50	20 mm	16 mm	5 mm	6V-3938
M10 × 1.50	35 mm	16 mm	5 mm	8T-0271
M10 × 1.50	110 mm	16 mm	78 mm	8T-0272
M10 × 1.50	60 mm	16 mm	28 mm	8T-0341
M10 × 1.50	80 mm	16 mm	48 mm	8T-0342
M10 × 1.50	25 mm	16 mm	5 mm	8T-1159
M10 × 1.50	50 mm	16 mm	18 mm	8T-1160
M10 × 1.50	45 mm	16 mm	13 mm	8T-2223
M10 × 1.50	65 mm	16 mm	33 mm	8T-2392
M10 × 1.50	100 mm	16 mm	68 mm	8T-7586
M10 × 1.50	40 mm	16 mm	8 mm	8T-9515
M10 × 1.50	90 mm	16 mm	58 mm	9X-2158
M10 × 1.50	30 mm	16 mm	3 mm	9X-6032

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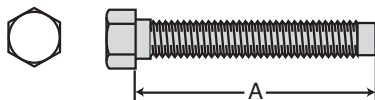
Bolts

Hex Socket Head Bolts/Metric/Coarse Thread UNC (Continued)

Thread Size (dia × pitch)	A	C	D	Part Number
	Bolt Length	Head Width	Grip Length	
Thread Size (dia × pitch) M12 × 1.75				
M12 × 1.75	60 mm	18 mm	24 mm	095-0673
M12 × 1.75	45 mm	18 mm	5 mm	095-0670
M12 × 1.75	65 mm	18 mm	35 mm	095-0674
M12 × 1.75	110 mm	18 mm	74 mm	095-9804
M12 × 1.75	70 mm	18 mm	34 mm	3E-6910
M12 × 1.75	180 mm	18 mm	144 mm	3E-6911
M12 × 1.75	90 mm	18 mm	54 mm	3E-8007
M12 × 1.75	35 mm	18 mm	5 mm	6V-8200
M12 × 1.75	100 mm	18 mm	64 mm	7X-2436
M12 × 1.75	130 mm	18 mm	94 mm	7X-2607
M12 × 1.75	120 mm	18 mm	84 mm	8C-3413
M12 × 1.75	220 mm	18 mm	184 mm	8C-4980
M12 × 1.75	80 mm	18 mm	44 mm	8C-8729
M12 × 1.75	40 mm	18 mm	5 mm	8T-0273
M12 × 1.75	55 mm	18 mm	19 mm	8T-0343
M12 × 1.75	30 mm	18 mm	5 mm	8T-3957
M12 × 1.75	140 mm	18 mm	104 mm	8T-7058
M12 × 1.75	50 mm	18 mm	5 mm	8T-7811
M12 × 1.75	25 mm	18 mm	5 mm	8T-8441
M12 × 1.75	20 mm	18 mm	5 mm	8T-9080
Thread Size (dia × pitch) M16 × 2.00				
M16 × 2.00	55 mm	24 mm	17 mm	095-0700
M16 × 2.00	100 mm	24 mm	56 mm	095-0705
M16 × 2.00	110 mm	24 mm	66 mm	095-0706
M16 × 2.00	120 mm	24 mm	76 mm	095-0707
M16 × 2.00	80 mm	24 mm	36 mm	095-9806
M16 × 2.00	140 mm	24 mm	96 mm	096-0008
M16 × 2.00	180 mm	24 mm	136 mm	102-2562
M16 × 2.00	25 mm	24 mm	6 mm	3E-6923

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

Forcing Bolts/Inch/Fine Thread UNF

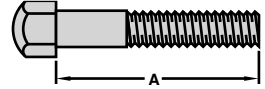


Thread Size (in - TPI)	A	Grip Length	Part Number
	Length		
1 - 14	6 ¹⁵ / ₁₆ in	0.97 in	5P-8715
1 ½ - 12	4 ³ / ₄ in	0.33 in	5P-5264
1 ½ - 12	2 ⁷ / ₈ in	0.33 in	6V-0187
¾ - 14	5 ³ / ₈ in	0.33 in	5P-5265

Forcing Bolts/Metric/Coarse Thread UNC

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

Track Bolts/Inch



Model	Thread Size (in - TPI)	A	Part Number
		Bolt Length	
307, E70, E70B	½ - 20	35 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	⅝ - 18	41.4 mm (1.63 in)	4K-7038
AP650B, BG225C, AP1050B, BG245C	⅝ - 18	50.8 mm (2 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 ¹	⅝ - 18	51 mm (2.01 in)	7H-3597
D6, D7, 572, 955, 963, 977, 215SA, 219, 225, 225SA, 229, 231, 235, FB227	¾ - 16	54.8 mm (2.16 in)	1S-1859
D5N, D5M, D5C, D5H, D4H, 953, 939, 939C	⅝ - 18	55.1 mm (2.17 in)	9G-3110

Model	Thread Size (in - TPI)	A	Part Number
		Bolt Length	
D6N, D7N, D6R, D6H, D6M, D5H, 517, 257, FB227, D6HD	¾ - 16	60.9 mm (2.40 in)	6V-1792
D7, D8, 571, 572, 973, 977, 235, 583	¾ - 16	61.2 mm (2.41 in)	7H-3598
D7R, D7H, D8, 973, 983, 235	⅞ - 14	67.5 mm (2.66 in)	7H-3599
235	⅞ - 14	71.1 mm (2.80 in)	5P-4028
D9, 594, 245 ²	1 - 14	74.6 mm (2.94 in)	2M-5657
245	1 - 14	78.9 mm (3.11 in)	3T-6308
D8T/R/N, D8L, 583R, 578	⅞ - 14	87.1 mm (3.43 in)	6V-1723
D9T/R/N	1 - 14	89.9 mm (3.54 in)	6T-2638
D10T/R/N	1 ⅛ - 12	96 mm (3.78 in)	7T-1000
D9L, 589	1 - 14	96.7 mm (3.81 in)	6V-1726
D10	1 ⅛ - 12	106.9 mm (4.21 in)	5P-3868
D11RN, 5130	1 ⅜ - 12	109.2 mm (4.30 in)	6T-8853
5130	1 ⅜ - 12	120.1 mm (4.73 in)	6I-8648

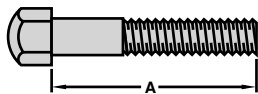
¹ Use model D5C with 9K links² Use model 245 with 8K links

Bolts

Track Bolts/Inch/Self Cleaning Shoes

Model	Thread Size (in - TPI)	A	Part Number
		Bolt Length	
D6N, D6M, D5H	$\frac{3}{4}$ - 16	91.9 mm (3.62 in)	107-0718
D7R/H	$\frac{7}{8}$ - 14	109.9 mm (4.33 in)	116-8145
D6	$\frac{3}{4}$ - 16	54.8 mm (2.16 in)	1S-1859
D5H, D5N, D5M, D4H	$\frac{5}{8}$ - 18	89.9 mm (3.54 in)	3T-3884
D3G, D4G, D3C, D4	$\frac{9}{16}$ - 18	41.4 mm (1.63 in)	4K-7038
D3G, D4G, D3C, D4	$\frac{9}{16}$ - 18	76.2 mm (3 in)	5A-3187
D4, D5	$\frac{5}{8}$ - 18	84 mm (3.31 in)	5A-4104
D6	$\frac{3}{4}$ - 16	99 mm (3.90 in)	5A-7524
D7	$\frac{3}{4}$ - 16	104.1 mm (4.10 in)	5P-1028
D7H, D6R, D6H	$\frac{3}{4}$ - 16	104.9 mm (4.13 in)	6T-2162
D7H, D6R, D6H, D6N, D6M, D5H	$\frac{3}{4}$ - 16	60.9 mm (2.40 in)	6V-1792
D4, D5	$\frac{5}{8}$ - 18	51 mm (2.01 in)	7H-3597
D7	$\frac{3}{4}$ - 16	61.2 mm (2.41 in)	7H-3598
D7R/H	$\frac{7}{8}$ - 14	67.5 mm (2.66 in)	7H-3599
D5H, D5N, D5M, D4H	$\frac{5}{8}$ - 18	55.1 mm (2.17 in)	9G-3110

Track Bolts/Metric



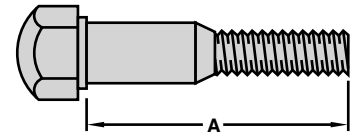
Model	Thread Size (dia × pitch)	A	Part Number
		Bolt Length	
E180	M18 × 1.50	58 mm	093-0262
E300B, EL300	M20 × 1.50	70 mm	093-0265
E240, E300	M20 × 1.50	63 mm	093-0266
E450	M22 × 1.50	78 mm	093-0268
E650	M24 × 1.50	81 mm	093-0271
E140	M16 × 1.50	55 mm	096-1043
308, 307B	M14 × 1.50	35 mm	136-2401
350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

Track Bolts/Metric/Self Cleaning Shoes

Model	Thread Size (dia × pitch)	A	Part Number
		Bolt Length	
311, 312, 313, 314, E110, E110B, E120, E120B, E140	M16 × 1.50	68 mm	093-0259
311, 312, 313, 314, E110, E110B, E120, E120B, E140	M16 × 1.50	108 mm	093-0261
E180 ¹	M18 × 1.50	90 mm	093-0264
E240 ¹	M20 × 1.50	108 mm	096-0551
325	M20 × 1.50	63 mm	6Y-0846
325	M20 × 1.50	110 mm	6Y-5686
315, 317, 318, 319, 320, 321, 322, E200B, E240B, E240C	M20 × 1.50	80 mm	8E-9349
315, 317, 318, 319, 320, 321, 322, E200B, E240B, E240C	M20 × 1.50	55 mm	9W-3619
330	M22 × 1.50	110 mm	5Q-3253
330	M22 × 1.50	67 mm	6Y-0924

¹ Only one bolt length used.

Split Master Link Bolts/Inch



Model	Thread Size (in - TPI)	A	Part Number
		Bolt Length	
D6R/H, D6, D7	¾ - 16	105 mm (4.13 in)	9S-1838
D7R/H	7/8 - 14	116 mm (4.57 in)	9W-9058
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
D3G, D4G, D3C, D4C	9/16 - 18	76.2 mm (3 in)	5A-3187
D5N, D5M, D4H	5/8 - 18	83 mm (3.27 in)	9G-8592
D6N, D6M, D5H, 517	¾ - 16	74 mm (2.91 in)	106-1642
D6N, D6M, D5H	¾ - 16	99 mm (3.90 in)	107-0719
D7, 571, 572, 973, 977	¾ - 16	113 mm (4.45 in)	2P-9670
D7H	¾ - 16	80 mm (3.15 in)	6V-1793
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

Model	Thread Size (in - TPI)	A	Part Number
		Bolt Length	
D11R/N	1 3/8 - 12	153 mm (6.02 in)	6T-8521
D7R/H	7/8 - 14	87.1 mm (3.43 in)	6V-1723
D8T/R/N, D8L, 583R, 578	7/8 - 14	96 mm (3.78 in)	6V-1724
D7R/H	7/8 - 14	129 mm (5.08 in)	6V-1725
D10T/R/N	1 1/8 - 12	164 mm (6.46 in)	7T-0998
D9T/R/N, D9L, 589	1 - 14	123 mm (4.84 in)	7T-2283
D8, 983, 583	7/8 - 14	123 mm (4.84 in)	8S-0395
D9, 594	1 - 14	87 mm (3.43 in)	8S-1723
D9T/R/N, D9L, 589	1 - 14	148 mm (5.83 in)	6V-1728
D10T/R/N	1 1/8 - 12	134 mm (5.28 in)	7T-0999
D5C, D4, D5, D6, 561, 941, 943, 951, 953, 955, 977 ¹	5/8 - 18	88.9 mm (3.50 in)	3P-2274
D5H	5/8 - 18	91 mm (3.58 in)	3T-8580

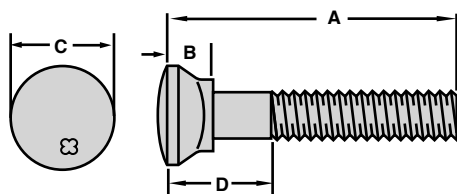
¹ Use model D5C with 9K links

Bolts

Split Master Link Bolts/Inch/Self Cleaning Shoes

Model	Thread Size (in - TPI)	A	Part Number
		Bolt Length	
D4,D5	$\frac{5}{8}$ - 18	88.9 mm (3.50 in)	3P-2274
D6N, D6M, D5H	$\frac{3}{4}$ - 16	109 mm (4.29 in)	107-0717
D6N, D6M, D5H	$\frac{3}{4}$ - 16	99 mm (3.90 in)	107-0719
D5N, D5M, D4H, D5H	$\frac{5}{8}$ - 18	102 mm (4.02 in)	3T-3889
D5H	$\frac{5}{8}$ - 18	91 mm (3.58 in)	3T-8580
D3G, D4G, D3C, D4C	$\frac{9}{16}$ - 18	76.2 mm (3 in)	5A-3187
D4, D5	$\frac{5}{8}$ - 18	117.5 mm (4.63 in)	5P-0569
D3G, D4G, D3C, D4C	$\frac{9}{16}$ - 18	109 mm (4.29 in)	5P-4683
D5N, D5M, D4H	$\frac{5}{8}$ - 18	83 mm (3.27 in)	9G-8592
D7H	$\frac{3}{4}$ - 16	125 mm (4.92 in)	6T-1441
D6R/H, D6, D7	$\frac{3}{4}$ - 16	139 mm (5.47 in)	3P-1111
D7R/H	$\frac{7}{8}$ - 14	129 mm (5.08 in)	6V-1725
D6R/H, D6, D7	$\frac{3}{4}$ - 16	105 mm (4.13 in)	9S-1838
D7R/H	$\frac{7}{8}$ - 14	116 mm (4.57 in)	9W-9058
D7H, D7	$\frac{3}{4}$ - 16	113 mm (4.45 in)	2P-9670

Cutting Edge Bolts/Inch/Coarse Thread



Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
Thread Size (in - TPI) $\frac{3}{8}$ - 16					
$\frac{3}{8}$ - 16	Nut	--	--	--	9S-8752
$\frac{3}{8}$ - 16	2 in	0.31 in	0.67 in	1.00 in	4F-4048
Thread Size (in - TPI) $\frac{1}{2}$ - 13					
$\frac{1}{2}$ - 13	Nut	—	—	—	1F-7958
$\frac{1}{2}$ - 13	1 $\frac{1}{2}$ in	0.44 in	0.89 in	0.63 in	4F-3646
$\frac{1}{2}$ - 13	1 $\frac{1}{4}$ in	0.44 in	0.89 in	0.50 in	4F-3647
$\frac{1}{2}$ - 13	1 $\frac{3}{4}$ in	0.44 in	0.89 in	0.63 in	4F-3648
$\frac{1}{2}$ - 13	2 in	0.44 in	0.89 in	0.75 in	4F-3649
$\frac{1}{2}$ - 13	2 $\frac{1}{4}$ in	0.44 in	0.89 in	1.00 in	4F-3650
$\frac{1}{2}$ - 13	2 $\frac{1}{2}$ in	0.44 in	0.89 in	1.25 in	4F-3651
$\frac{1}{2}$ - 13	2 $\frac{3}{4}$ in	0.44 in	0.89 in	1.50 in	4F-3652
$\frac{1}{2}$ - 13	3 in	0.44 in	0.89 in	1.75 in	4F-3662
$\frac{1}{2}$ - 13	3 $\frac{1}{2}$ in	0.45 in	0.89 in	2.25 in	4F-3663
$\frac{1}{2}$ - 13	5 in	0.44 in	0.89 in	3.75 in	4F-4043
Thread Size (in - TPI) $\frac{5}{8}$ - 11					
$\frac{5}{8}$ - 11	2 $\frac{1}{4}$ in	0.54 in	1.04 in	1.25 in	3F-5108
$\frac{5}{8}$ - 11	3 in	0.54 in	1.04 in	1.50 in	4F-3658
$\frac{5}{8}$ - 11	1 $\frac{1}{2}$ in	0.54 in	1.04 in	0.63 in	4F-3664

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
Thread Size (in - TPI) $\frac{5}{8}$ - 11 (Continued)					
$\frac{5}{8}$ - 11	3 $\frac{1}{2}$ in	0.54 in	1.04 in	2.00 in	4F-3665
$\frac{5}{8}$ - 11	4 in	0.54 in	1.04 in	2.50 in	4F-3671
$\frac{5}{8}$ - 11	3 $\frac{3}{4}$ in	0.54 in	1.04 in	2.25 in	4F-0391
$\frac{5}{8}$ - 11	1 $\frac{3}{4}$ in	0.54 in	1.04 in	0.63 in	4F-3653
$\frac{5}{8}$ - 11	2 in	0.54 in	1.04 in	0.75 in	4F-3654
$\frac{5}{8}$ - 11	2 $\frac{1}{2}$ in	0.54 in	1.04 in	1.00 in	4F-3656
$\frac{5}{8}$ - 11	2 $\frac{3}{4}$ in	0.54 in	1.04 in	1.25 in	4F-3657
$\frac{5}{8}$ - 11	Nut	--	--	--	4K-0367
Thread Size (in - TPI) $\frac{3}{4}$ - 10					
$\frac{3}{4}$ - 10	4 $\frac{1}{4}$ in	0.63 in	1.20 in	2.50 in	1J-0962
$\frac{3}{4}$ - 10	4 $\frac{5}{8}$ in	0.63 in	1.20 in	2.88 in	1J-6761
$\frac{3}{4}$ - 10	3 $\frac{1}{8}$ in	0.63 in	1.20 in	1.38 in	1J-6762
$\frac{3}{4}$ - 10	2 in	0.63 in	1.20 in	0.75 in	4F-3672
$\frac{3}{4}$ - 10	Nut	--	--	--	2J-3506
$\frac{3}{4}$ - 10	2 $\frac{1}{4}$ in	0.63 in	1.20 in	1.00 in	4F-7827
$\frac{3}{4}$ - 10	3 $\frac{3}{4}$ in	0.63 in	1.20 in	2.00 in	5F-8933
$\frac{3}{4}$ - 10	2 $\frac{3}{4}$ in	—	—	1.50 in	5J-4771
$\frac{3}{4}$ - 10	2 $\frac{1}{2}$ in	0.63 in	1.20 in	1.19 in	5J-4773

(Continued)

Cutting Edge Bolts/Inch/Coarse Thread (Continued)

Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
Thread Size (in - TPI) 7/8 - 9					
7/8 - 9	4 5/8 in	0.74 in	1.41 in	2.63 in	1J-0849
7/8 - 9	3 1/2 in	0.74 in	1.41 in	1.75 in	2J-2548
7/8 - 9	4 1/4 in	0.74 in	1.41 in	2.50 in	2J-5458
7/8 - 9	3 in	0.74 in	1.41 in	1.25 in	5J-2409
7/8 - 9	2 1/2 in	0.74 in	1.41 in	1.36 in	5J-4772
7/8 - 9	2 3/4 in	0.74 in	1.41 in	1.50 in	6F-0196
7/8 - 9	3 1/4 in	0.74 in	1.41 in	2.44 in	8J-2935
7/8 - 9	Nut	--	--	--	2J-3505
Thread Size (in - TPI) 1 - 8					
1 - 8	4 1/2 in	0.81 in	1.60 in	2.25 in	1J-3527
1 - 8	5 1/4 in	0.81 in	1.60 in	3.00 in	1J-4947
1 - 8	3 3/4 in	0.81 in	1.60 in	1.50 in	1J-4948
1 - 8	4 in	0.81 in	1.60 in	2.95 in	5P-8136
1 - 8	Nut	--	--	--	2J-3507

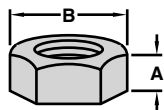
Thread Size (in - TPI)	A Bolt Length	B Head Height	C Head Width	D Grip Length	Part Number
Thread Size (in - TPI) 1 - 8 (Continued)					
1 - 8	2 3/4 in	0.81 in	1.60 in	1.50 in	1J-5607
1 - 8	2 1/2 in	0.81 in	1.60 in	1.31 in	3J-2801
1 - 8	3 in	0.81 in	1.60 in	1.75 in	4F-4042
1 - 8	3 1/4 in	0.81 in	1.60 in	1.91 in	4J-9058
1 - 8	3 1/2 in	0.81 in	1.60 in	2.19 in	4J-9208
1 - 8	3 3/4 in	0.81 in	1.60 in	2.69 in	8J-2928
Thread Size (in - TPI) 1 1/4 - 7					
1 1/4 - 7	4 15/16 in	1.06 in	2.03 in	2.28 in	5P-8361
1 1/4 - 7	4 1/8 in	1.02 in	2.01 in	2.28 in	5P-8823
1 1/4 - 7	Nut	--	--	--	3K-9770
1 1/4 - 7	3 3/4 in	1.06 in	2.03 in	2.28 in	6V-6535
1 1/4 - 7	4 1/2 in	1.06 in	2.03 in	2.28 in	6V-8360
1 1/4 - 7	3 3/8 in	1.06 in	2.03 in	1.65 in	8T-9079

Maintenance Tips For Cutting Edge Hardware

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

Thread Size (in - TPI)	(ft lb)	Torque (N-m)	Size
5/8	200 ± 30	270 ± 40	16 mm
3/4	350 ± 45	475 ± 60	19 mm
7/8	550 ± 65	750 ± 90	22 mm
1	825 ± 110	1125 ± 150	25 mm
1 1/4	1350 ± 220	1850 ± 300	31 mm

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	B	Part Number
	Nut Height	Nut Width	
1/4 - 20	0.22 in	7/16 in	9S-8750
5/16 - 18	0.27 in	1/2 in	5S-0003
3/8 - 16	0.33 in	9/16 in	9S-8752
7/16 - 14	0.38 in	11/16 in	3S-1546
1/2 - 13	0.44 in	3/4 in	1F-7958
9/16 - 12	0.48 in	7/8 in	5P-0539
5/8 - 11	0.55 in	15/16 in	4K-0367

Thread Size (in - TPI)	A	B	Part Number
	Nut Height	Nut Width	
3/4 - 10	0.64 in	1 1/8 in	2J-3506
7/8 - 9	0.75 in	1 5/16 in	2J-3505
1 - 8	0.86 in	1 1/2 in	2J-3507
1 1/8 - 7	0.97 in	1 11/16 in	4J-5977
1 1/4 - 7	1.06 in	1 7/8 in	3K-9770
1 3/8 - 6	1.17 in	2 1/16 in	9M-3770
1 1/2 - 6	1.28 in	2 1/4 in	9S-8216

Coarse Thread UNC/Zinc Plated/Hardened

Thread Size (in - TPI)	A	B	Part Number
	Nut Height	Nut Width	
1/4 - 20	0.22 in	7/16 in	6V-8185
5/16 - 18	0.27 in	1/2 in	6V-8189
3/8 - 16	0.33 in	9/16 in	6V-8801
7/16 - 14	0.37 in	11/16 in	7X-0447
1/2 - 13	0.44 in	3/4 in	6V-8188
5/8 - 11	0.55 in	15/16 in	7X-0448

Thread Size (in - TPI)	A	B	Part Number
	Nut Height	Nut Width	
1 1/8 - 7	0.61	1 11/16	2H-3787
3/4 - 10	0.64 in	1 1/8 in	6V-8182
7/8 - 9	0.75 in	1 5/16 in	7X-0449
1 - 8	0.86 in	1 1/2 in	6V-8190
1 1/4 - 7	1.06 in	1 7/8 in	7X-0451
1 1/2 - 6	1.28 in	2 1/4 in	7X-0452

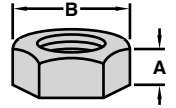
Fine Thread UNF/Phosphate & Oil Coated/Hardened

Thread Size (in - TPI)	A	B	Part Number
	Nut Height	Nut Width	
1/4 - 28	0.22 in	7/16 in	9S-8748
5/16 - 24	0.27 in	1/2 in	9S-8751
3/8 - 24	0.33 in	9/16 in	3S-2713
7/16 - 20	0.38 in	11/16 in	9S-8905
1/2 - 20	0.44 in	3/4 in	6B-6684
9/16 - 18	0.48 in	7/8 in	5P-0540
5/8 - 18	0.55 in	15/16 in	6B-6683

Thread Size (in - TPI)	A	B	Part Number
	Nut Height	Nut Width	
3/4 - 16	0.64 in	1 1/8 in	6B-6682
7/8 - 14	0.75 in	1 5/16 in	1A-5666
1 - 14	0.86 in	1 1/2 in	1A-1935
1 1/8 - 12	0.97 in	1 11/16 in	3S-1356
1 1/4 - 12	1.06 in	1 7/8 in	7H-7539
1 3/8 - 12	1.17 in	2 in	2M-0400
1 1/2 - 12	1.28 in	2 1/4 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	B	Part Number
	Nut Height	Nut Width	
1/4 - 20	0.23 in	7/16 in	2D-6235
5/16 - 18	0.27 in	1/2 in	031-4155
3/8 - 16	0.33 in	9/16 in	2K-4973
7/16 - 14	0.38 in	1 1/16 in	6V-5729
1/2 - 13	0.44 in	3/4 in	1K-6872
9/16 - 12	0.50 in	7/8 in	034-9954

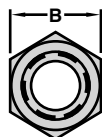
Thread Size (in - TPI)	A	B	Part Number
	Nut Height	Nut Width	
5/8 - 11	0.55 in	1 5/16 in	3K-2889
3/4 - 10	0.64 in	1 1/8 in	1K-6870
7/8 - 9	0.75 in	1 5/16 in	6K-0545
1 - 8	0.86 in	1 1/2 in	6K-3632
1 1/8 - 7	0.97 in	1 11/16 in	8D-9513
1 1/4 - 7	1.06 in	1 7/8 in	2J-5997

Fine Thread UNF/Hardened

Thread Size (in - TPI)	A	B	Part Number
	Nut Height	Nut Width	
1/4 - 28	0.23 in	7/16 in	2L-9038
5/16 - 24	0.27 in	1/2 in	3D-8752
1/2 - 20	0.44 in	3/4 in	2K-0564
9/16 - 18	0.50 in	7/8 in	054-5448
5/8 - 18	0.55 in	1 5/16 in	2K-4821

Thread Size (in - TPI)	A	B	Part Number
	Nut Height	Nut Width	
3/4 - 16	0.64 in	1 1/8 in	2K-0337
7/8 - 14	0.75 in	1 5/16 in	5D-1986
1 - 14	0.86 in	1 1/2 in	2K-7471
1 1/8 - 12	0.97 in	1 11/16 in	3D-4904
1 1/4 - 12	1.06 in	1 7/8 in	2K-7468
1 1/2 - 12	1.28 in	2 1/4 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	B	Part Number
	Nut Height	Nut Width	
$\frac{5}{16}$ - 18	0.34 in	$\frac{1}{2}$ in	3E-9860
$\frac{5}{8}$ - 11	0.75 in	$1\frac{15}{16}$ in	3E-9861
$\frac{3}{4}$ - 10	0.88 in	$1\frac{1}{16}$ in	3E-9862

Thread Size (in - TPI)	A	B	Part Number
	Nut Height	Nut Width	
$\frac{1}{4}$ - 20	0.31 in	$\frac{7}{16}$ in	3E-9865
$\frac{3}{8}$ - 16	0.45 in	$\frac{9}{16}$ in	3K-6060
$\frac{1}{2}$ - 13	0.59 in	$\frac{3}{4}$ in	9X-0941
$\frac{7}{8}$ - 9	0.98 in	$1\frac{1}{4}$ in	3E-9863

Coarse Thread/UNC/Zinc Plated/Non Hardened

Thread Size (in - TPI)	A	B	Part Number
	Nut Height	Nut Width	
No. 6-32	0.18 in	$\frac{5}{16}$ in	7D-6922
No. 8-32	0.23 in	$1\frac{11}{32}$ in	6D-5801
No. 10-24	0.25 in	$\frac{3}{8}$ in	031-0249
$\frac{1}{4}$ - 20	0.31 in	$\frac{7}{16}$ in	7H-8909

Thread Size (in - TPI)	A	B	Part Number
	Nut Height	Nut Width	
$\frac{5}{16}$ - 18	0.34 in	$\frac{1}{2}$ in	2R-0504
$\frac{3}{8}$ - 16	0.37 in	$1\frac{11}{16}$ in	9T-2730
$\frac{1}{2}$ - 13	0.59 in	$\frac{3}{4}$ in	2H-3788
$\frac{5}{8}$ - 11	0.75 in	$1\frac{15}{16}$ in	2H-3789
$\frac{3}{4}$ - 10	0.88 in	$1\frac{1}{16}$ in	2H-3790

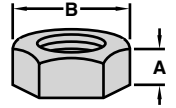
Fine Thread/UNF/Zinc Plated/Non Hardened

Thread Size (in - TPI)	A	B	Part Number
	Nut Height	Nut Width	
$\frac{3}{8}$ - 24	0.18 in	$\frac{9}{16}$ in	2F-8616
No. 10-32	0.25 in	$\frac{3}{8}$ in	4L-1250
$\frac{1}{4}$ - 28	0.31 in	$\frac{7}{16}$ in	3F-7674

Thread Size (in - TPI)	A	B	Part Number
	Nut Height	Nut Width	
$\frac{5}{16}$ - 24	0.34 in	$\frac{1}{2}$ in	3F-2617
$\frac{7}{16}$ - 20	0.45 in	$1\frac{11}{16}$ in	139-4187
$\frac{1}{2}$ - 20	0.59 in	$\frac{3}{4}$ 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	B	Part Number
	Nut Height	Nut Width	
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	1 1/16 in	1L-9048
9/16 - 12	0.31 in	7/8 in	8S-5151

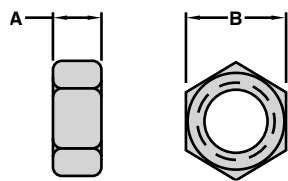
Thread Size (in - TPI)	A	B	Part Number
	Nut Height	Nut Width	
1/2 - 13	0.31 in	3/4 in	3H-3680
5/8 - 11	0.38 in	15/16 in	1D-5118
3/4 - 10	0.42 in	1 1/8 in	1D-5119
7/8 - 9	0.48 in	1 5/16 in	5P-0541
1 - 8	0.55 in	1 1/2 in	1D-6306

Fine Thread UNF/Non Hardened

Thread Size (in - TPI)	A	B	Part Number
	Nut Height	Nut Width	
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

Thread Size (in - TPI)	A	B	Part Number
	Nut Height	Nut Width	
7/16 - 20	0.25 in	1 1/16 in	5B-3254
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/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	B	Part Number
	Nut Height	Nut Width	
M6 × 1.00	5.20 mm	10 mm	6V-8225
M8 × 1.25	6.80 mm	13 mm	5P-7970
M10 × 1.50	8.40 mm	16 mm	2Y-5829
M12 × 1.75	10.80 mm	18 mm	6V-8149

Thread Size (dia × pitch)	A	B	Part Number
	Nut Height	Nut Width	
M16 × 2.00	14.80 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	25.60 mm	46 mm	8T-1583
M36 × 4.00	31.00 mm	55 mm	8C-4032

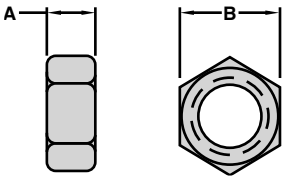
Coarse Thread UNC/Zinc Plated/Hardened

Thread Size (dia × pitch)	A	B	Part Number
	Nut Height	Nut Width	
M6 × 1.00	5.20 mm	10 mm	5C-2890
M8 × 1.25	6.80 mm	13 mm	5C-7261
M10 × 1.50	8.40 mm	16 mm	8T-4133
M12 × 1.75	10.80 mm	18 mm	8T-4244
M16 × 2.00	14.80 mm	24 mm	8T-4132

Thread Size (dia × pitch)	A	B	Part Number
	Nut Height	Nut Width	
M20 × 2.50	18.00 mm	30 mm	8T-4131
M24 × 3.00	21.50 mm	36 mm	8T-4001
M30 × 3.50	25.60 mm	46 mm	8C-8722
M3 × 0.50	2.40 mm	5.5 mm	3C-6969
M36 × 4.00	31.00 mm	55 mm	8T-4955

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	B	Part Number
	Nut Height	Nut Width	
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

Thread Size (dia × pitch)	A	B	Part Number
	Nut Height	Nut Width	
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

Track Nuts

Inch

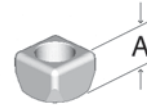


Model	Thread Size (in - TPI)	A	Part Number
		Nut Height	
307, E70, E70B	$\frac{1}{2}$ - 20	12.9 mm (0.51 in)	102-8073
307, PM465	$\frac{1}{2}$ - 20	16 mm (0.63 in)	117-8885
D5N, D5M, D5G, D5C, D4, D5, D6, 561, 939, 941, 943, 951, 953, 955, 977, 205, 211, 213, 215, 215SA, 219, 225, 215SA, 219, 225, PR750, 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
D9, 594, 245	1 - 14	25.4 mm (1 in)	1S-6421
D7R/H D8, 983, 583	$\frac{7}{8}$ - 14	23.6 mm (0.93 in)	2S-2140
245 ¹	1 - 14	25.4 mm (1 in)	2V-0250
D3, 931	$\frac{1}{2}$ - 20	15.2 mm (0.60 in)	6S-3419
D4, 941	$\frac{9}{16}$ - 18	15.4 mm (0.61 in)	7H-3606
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
973, 235	$\frac{7}{8}$ - 14	23.8 mm (0.94 in)	7T-9825
D4	$\frac{1}{2}$ - 20	14.2 mm (0.56 in)	8H-5724

¹ Use with 8K links

(Continued)

Metric



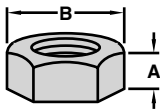
Model	Thread Size (dia × pitch)	A	Part Number
		Nut Height	
308, 307B	M14 × 1.50	14 mm	136-2404
E140	M16 × 1.50	22 mm	093-0319
E180, EL180	M18 × 1.50	22 mm	093-0320
E240, EL240, E300B, E300, EL300, EL300B	M20 × 1.50	27 mm	093-0321
E650	M24 × 1.50	29 mm	093-0323
E450	M22 × 1.50	29 mm	096-0586
365B	M27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

Inch



Model	Thread Size (in - TPI)	A	Part Number
		Nut Height	
D8T/R/N, D8L, 583R, 578	$\frac{7}{8}$ - 14	35 mm (1.38 in)	7G-6442
D9T/R/N	1 - 14	39.8 mm (1.57 in)	7G-0434
D10, D10T/R/N, 5110B	1 $\frac{3}{8}$ - 12	43.6 mm (1.72 in)	5P-8221
D11R/N, 5130	1 $\frac{3}{8}$ - 12	45.9 mm (1.81 in)	3T-6292

Cutting Edge Nuts

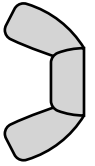


Thread Size (in - TPI)	A	B	Part Number
	Height	Width	
1/2 - 20	0.44 in	3/4 in	6B-6684
5/8 - 11	0.55 in	15/16 in	1D-4720
5/8 - 11	0.55 in	15/16 in	4K-0367
3/4 - 10	0.64 in	1 1/8 in	2J-3506
3/4 - 16	0.64 in	1 1/8 in	6B-6682
7/8 - 9	0.75 in	1 5/16 in	2J-3505
1 - 8	0.86 in	1 1/2 in	2J-3507
1 1/4 - 7	1.06 in	1 7/8 in	3K-9770

Wing Nuts/Inch/Coarse Thread UNC/Zinc Plated

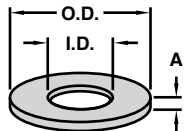
- Install and remove by hand.

Thread Size (in - TPI)	Part Number
10 - 32	033-3658
1/4 - 20	1F-1739
3/8 - 16	2B-9498
5/16 - 18	3B-0723
10 - 24	6F-6898
3/8 - 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	Part Number
			Thickness	
¼ in	0.28 in	0.56 in	0.08 in	5P-0537
⅝ in	0.34 in	0.62 in	0.08 in	9M-1974
¾ in	0.39 in	0.72 in	0.09 in	5M-2894
7/16 in	0.50 in	0.88 in	0.09 in	5P-8244
½ in	0.53 in	1.00 in	0.12 in	5P-8245
⅝ in	0.62 in	1.14 in	0.12 in	5P-8246

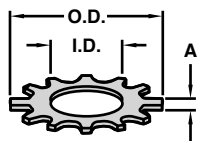
Bolt Diameter	Inside Diameter	Outside Diameter	A	Part Number
			Thickness	
⅝ in	0.67 in	1.26 in	0.14 in	5P-8247
¾ in	0.79 in	1.44 in	0.14 in	5P-8248
7/8 in	0.94 in	1.62 in	0.16 in	5P-8249
1 in	1.09 in	1.94 in	0.20 in	5P-8250
1 ⅛ in	1.19 in	2.06 in	0.25 in	3S-1349
1 ¼ in	1.31 in	2.12 in	0.25 in	4K-0684
1 ½ in	1.59 in	2.62 in	0.25 in	3S-6162

Zinc Plated/Hardened

Bolt Diameter	Inside Diameter	Outside Diameter	A	Part Number
			Thickness	
¼ in	0.28 in	0.56 in	0.08 in	8T-4205
⅝ in	0.34 in	0.62 in	0.08 in	8T-4224
¾ in	0.41 in	0.72 in	0.09 in	8T-4896
7/16 in	0.47 in	0.88 in	0.09 in	8T-5360
½ in	0.53 in	1.00 in	0.12 in	8T-4223
⅝ in	0.66 in	1.25 in	0.14 in	8T-4122

Bolt Diameter	Inside Diameter	Outside Diameter	A	Part Number
			Thickness	
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 ⅛ in	1.22 in	2.06 in	0.25 in	7X-0531
1 ¼ 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.

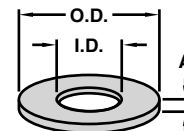
Zinc Plated/Non-Hardened

Bolt Diameter	Inside Diameter	Outside Diameter	A	Part Number
			Thickness	
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	Part Number
			Thickness	
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/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	Part Number
			Thickness	
M12	13.50 mm	25.50 mm	3.00 mm	5P-8245
M14	15.50 mm	29.00 mm	3.00 mm	5P-8246
M10	11.00 mm	21.00 mm	2.50 mm	6V-5839
M24	26.00 mm	44.00 mm	4.00 mm	6V-8237

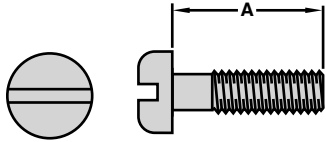
Bolt Diameter (mm)	Inside Diameter	Outside Diameter	A	Part Number
			Thickness	
M20	22.00 mm	35.00 mm	3.50 mm	8T-3282
M8	8.80 mm	16.00 mm	2.00 mm	9M-1974
M6	6.60 mm	12.00 mm	2.00 mm	9X-8267
M16	17.50 mm	30.00 mm	3.50 mm	9X-8268
M30	33.00 mm	56.00 mm	6.00 mm	9X-8399

Zinc Plated/Hardened

Bolt Diameter (mm)	Inside Diameter	Outside Diameter	A	Part Number
			Thickness	
M10	11.00 mm	21.00 mm	2.50 mm	8T-4121
M20	22.00 mm	35.00 mm	3.50 mm	8T-4123
M24	26.00 mm	44.00 mm	4.00 mm	8T-4167
M12	13.50 mm	25.50 mm	3.00 mm	8T-4223

Bolt Diameter (mm)	Inside Diameter	Outside Diameter	A	Part Number
			Thickness	
M8	8.80 mm	16.00 mm	2.00 mm	8T-4224
M6	6.60 mm	12.00 mm	2.00 mm	9X-8256
M16	17.50 mm	30.00 mm	3.50 mm	9X-8257
M30	33.00 mm	56.00 mm	6.00 mm	9X-8258

Pan Head/Machine Screws/Inch

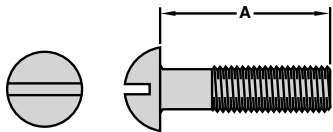


- Made of steel and finished with a zinc plating.
- Conforms to ANSI B18.6.3 standard.

Thread Size (in - TPI)	A	Part Number
	Screw Length	
¼ - 20	⅝ in	3K-6881
¼ - 20	¾ in	2Y-1020
¼ - 20	⅞ in	030-9614
¼ - 20	1 in	7H-1246
No. 10 - 24	¾ in	2N-3480
No. 10 - 24	1 ½ in	2N-7456
No. 10 - 24	½ in	2N-3479
No. 10 - 24	⅞ in	2N-3478
No. 10 - 24	1 ¼ in	2N-3162

Thread Size (in - TPI)	A	Part Number
	Screw Length	
No. 6 - 32	1 ¼ in	2N-3477
No. 6 - 32	½ in	2N-3475
No. 6 - 32	⅜ in	2N-3474
No. 6 - 32	1 in	030-8838
No. 6 - 32	¾ in	2N-3476
No. 6 - 32	1 ½ in	033-4815
No. 8 - 32	¾ in	7S-4338
No. 8 - 32	1 ¼ in	6V-7697
No. 8 - 32	2 in	5S-9105
No. 8 - 32	1 ½ in	7S-1198

Round Head/Machine Screws/Inch

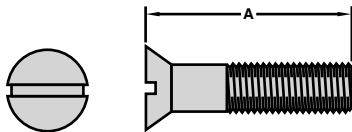


- Made of steel and finished with a zinc plating.
- Conforms to ANSI B18.6.3 standard.

Thread Size (in - TPI)	A	Part Number
	Screw Length	
No. 6 - 32	1 ½ in	010-0746
No. 6 - 32	1 ¼ in	010-0744
No. 6 - 32	¼ in	4B-1218
No. 6 - 32	½ in	4B-9762
No. 6 - 32	⅞ in	5S-7348
No. 8 - 32	1 in	3K-8106
No. 8 - 32	⅞ in	4B-1220
No. 8 - 32	½ in	4B-1221

Thread Size (in - TPI)	A	Part Number
	Screw Length	
No. 8 - 32	¾ in	5M-6668
No. 8 - 32	¼ in	9B-7242
No. 10 - 24	1 ½ in	011-0508
No. 10 - 24	2 in	032-8924
No. 10 - 24	¼ in	4B-1226
No. 10 - 24	⅜ in	4B-1227
No. 10 - 24	½ in	4B-1229
No. 10 - 24	¾ in	4B-1232
No. 10 - 24	1 ¼ in	4B-1234

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	Drive Type	Part Number
	Screw Length		
½ - 13	1 in	Int Hex	107-2783
⅝ - 18	1 ¾ in	Int Hex	034-3101
½ - 13	1 in	Int Hex	4K-1493

Thread Size (in - TPI)	A	Drive Type	Part Number
	Screw Length		
¾ - 10	2 in	Int Hex	061-6666
⅝ - 18	1 ¼ in	Slotted	1H-8293
⅝ - 18	1 ½ in	Slotted	1H-8658

Thread Size (in - TPI)	A	Drive Type	Part Number
	Screw Length		
⅝ - 18	½ in	Slotted	4B-1286
⅝ - 18	1 ¾ in	Slotted	5P-0399
¾ - 16	¾ in	Slotted	1H-8296

(Continued)

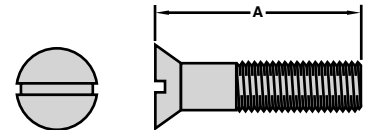
Flat Head/Machine Screws/Inch/Coarse Thread (Continued)

Thread Size (in - TPI)	A	Drive Type	Part Number
	Screw Length		
3/8 - 16	1 in	Slotted	4B-1291
3/8 - 16	1 1/2 in	Slotted	8F-6987
3/8 - 16	1 3/4 in	Slotted	8H-9579
No. 8 - 32	3/4 in	Slotted	4B-1270
1/4 - 20	1 1/2 in	Slotted	1H-8294
1/4 - 20	1 3/4 in	Slotted	1H-8298
1/4 - 20	3/8 in	Slotted	2M-5139
1/4 - 20	1 in	Slotted	4B-1284
1/4 - 20	1 1/4 in	Slotted	4B-1285
No. 10 - 24	3/8 in	Slotted	4B-1293
No. 10 - 24	1/2 in	Slotted	4B-1273
No. 10 - 24	1 in	Slotted	1H-8456
No. 10 - 24	3/4 in	Slotted	2H-6120
No. 10 - 24	5/8 in	Int Hex	4B-1274
No. 10 - 24	1 3/4 in	Slotted	5P-5582

Thread Size (in - TPI)	A	Drive Type	Part Number
	Screw Length		
No. 10 - 24	1 1/4 in	Slotted	5P-5583
No. 6 - 32	3/4 in	Slotted	2D-6327
No. 6 - 32	3/8 in	Slotted	5D-0853
No. 6 - 32	1/2 in	Phillips	7K-3435
No. 10 - 24	1/2 in	Int Hex	8T-7922
No. 6 - 32	3/8 in	Int Hex	6V-7178
1/4 - 20	1/2 in	Slotted	4M-0190
1/4 - 20	5/8 in	Slotted	4B-1281
No. 8 - 32	1/2 in	Phillips	8T-3427
1/4 - 20	5/8 in	Int Hex	9M-2750
1/4 - 20	5/8 in	Int Hex	033-0695
1/4 - 20	3/4 in	Int Hex	6D-5799
1/4 - 20	1 in	Int Hex	8M-6802
1/4 - 20	1 in	Int Hex	7D-6921
1/4 - 20	3 3/4 in	Int Hex	107-5011

Thread Size (in - TPI)	A	Drive Type	Part Number
	Screw Length		
5/16 - 18	5/8 in	Int Hex	034-3223
5/16 - 18	3/4 in	Int Hex	077-2907
5/16 - 18	7/8 in	Torx	119-0036
5/16 - 18	2 1/4 in	Slotted	6N-0768
5/16 - 18	4 in	Int Hex	107-5012
3/8 - 16	3/4 in	Int Hex	108-4311
3/8 - 16	1 in	Int Hex	030-9621
3/8 - 16	1 in	Int Hex	030-7571
3/8 - 16	2 in	Int Hex	032-0682
1/2 - 13	1 1/2 in	Int Hex	107-2784
1/2 - 13	1 3/4 in	Int Hex	2J-0996
5/8 - 18	1 1/2 in	Int Hex	8T-4110
3/4 - 10	1 3/4 in	Int Hex	105-3517
3/4 - 10	2 3/4 in	Int Hex	053-1426

Flat Head/Machine Screws/Metric/Coarse Thread

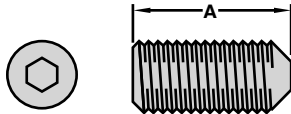


Thread Size (in - TPI)	Screw Length	Drive Type	Part Number
M10 × 1.50	20 mm	Int Hex	127-2909
M10 × 1.50	25 mm	Int Hex	6V-7726
M10 × 1.50	25 mm	Int Hex	157-0949
M10 × 1.50	30 mm	Int Hex	3E-4310
M10 × 1.50	40 mm	Int Hex	191-9739
M12 × 1.75	35 mm	Int Hex	123-0354
M12 × 1.75	40 mm	Int Hex	145-1893
M12 × 1.75	45 mm	Int Hex	160-0018
M12 × 1.75	80 mm	Int Hex	172-4014
M12 × 1.75	60 mm	Int Hex	173-8341
M16 × 2.00	60 mm	Int Hex	159-8839
M16 × 2.00	55 mm	Int Hex	246-4349
M16 × 2.00	70 mm	Int Hex	144-2531
M16 × 2.00	50 mm	Int Hex	159-2953
M16 × 2.00	80 mm	Int Hex	135-3241
M16 × 2.00	30 mm	Int Hex	8C-6789
M2.5 × 0.45	10 mm	Phillips	6V-9668
M20 × 2.50	120 mm	Int Hex	144-3087
M20 × 2.50	110 mm	Int Hex	144-2687
M20 × 2.50	100 mm	Int Hex	144-2715

Thread Size (in - TPI)	Screw Length	Drive Type	Part Number
M20 × 2.50	75 mm	Int Hex	145-4075
M20 × 2.50	70 mm	Int Hex	169-6065
M20 × 2.50	80 mm	Int Hex	170-3524
M20 × 2.50	90 mm	Int Hex	144-2698
M20 × 2.50	150 mm	Int Hex	174-6943
M20 × 2.50	160 mm	Int Hex	175-0335
M24 × 3.00	120 mm	Int Hex	144-6589
M24 × 3.00	90 mm	Int Hex	170-4740
M24 × 3.00	160 mm	Int Hex	144-5966
M24 × 3.00	140 mm	Int Hex	144-7425
M3 × 0.50	12 mm	Slotted	081-6373
M4 × 0.70	20 mm	Phillips	167-4063
M4 × 0.70	20 mm	Slotted	8T-7585
M4 × 0.70	10 mm	Int Hex	3E-4302
M4 × 0.70	10 mm	Phillips	8T-0309
M5 × 0.80	40 mm	Phillips	8C-6429
M5 × 0.80	35 mm	Slotted	8T-0386
M5 × 0.80	25 mm	Int Hex	8T-1573
M5 × 0.80	30 mm	Phillips	8C-6428
M5 × 0.80	12 mm	Int Hex	205-2941

Thread Size (in - TPI)	Screw Length	Drive Type	Part Number
M6 × 1.00	40 mm	Phillips	7X-0847
M6 × 1.00	20 mm	Int Hex	9X-6155
M6 × 1.00	16 mm	Torx	127-1960
M6 × 1.00	16 mm	Int Hex	5C-7423
M6 × 1.00	20 mm	Phillips	8C-8454
M6 × 1.00	30 mm	Int Hex	205-5149
M6 × 1.00	25 mm	Int Hex	119-5025
M6 × 1.00	25 mm	Int Hex	260-6695
M6 × 1.00	30 mm	Phillips	8C-6430
M6 × 1.00	30 mm	Int Hex	8C-6802
M8 × 1.00	40 mm	Phillips	8C-6431
M8 × 1.25	14 mm	Slotted	6V-8973
M8 × 1.25	16 mm	Int Hex	171-9455
M8 × 1.25	20 mm	Int Hex	8C-7562
M8 × 1.25	20 mm	Int Hex	8C-7505
M8 × 1.25	25 mm	Int Hex	131-6454
M8 × 1.25	30 mm	Int Hex	131-3539
M8 × 1.25	80 mm	Slotted	133-8831
M8 × 1.25	30 mm	Phillips	117-6952
M8 × 1.25	60 mm	Int Hex	114-3350

Cup Point/Set Screws/Inch/Coarse Thread UNC



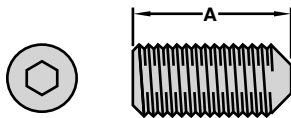
- Heat treated with a black oxide finish.

Thread Size (in - TPI)	A	
	Screw Length	Part Number
No. 10 - 24	¼ in	5B-9324
No. 10 - 24	⅜ in	8C-8430
No. 10 - 24	½ in	4B-3627
¼ - 20	⅜ in	010-2570
¼ - 20	¾ in	010-2573
¼ - 20	⅝ in	1K-6979
¼ - 20	¼ in	4B-9806
¼ - 20	½ in	4B-9808
⅝ ₁₆ - 18	¼ in	010-2580
⅝ ₁₆ - 18	¾ in	5P-2556
⅝ ₁₆ - 18	⅜ in	8B-7179

Thread Size (in - TPI)	A	
	Screw Length	Part Number
⅜ - 16	¼ in	010-2591
⅜ - 16	⅝ in	2F-5325
⅜ - 16	⅜ in	2F-5326
⅜ - 16	½ in	3B-8601
⅜ - 16	¾ in	3H-8430
⅜ - 16	1 in	010-2597
½ - 13	½ in	010-2615
½ - 13	⅝ in	010-2616
½ - 13	1 in	2H-3906
½ - 13	¾ in	4B-1771
8 - 32	¼ in	9L-9596

Thread Size (in - TPI)	A	
	Screw Length	Part Number
¼ - 20	⅝ ₁₆ in	010-2571
¼ - 20	½ in	173-5787
¼ - 20	1 in	8C-3996
⅝ ₁₆ - 18	¾ in	1T-0241
⅝ ₁₆ - 18	27/32 in	144-0691
⅝ ₁₆ - 18	1 ⅜ in	4D-5253
⅝ ₁₆ - 18	1 ½ in	5N-2882
⅝ ₁₆ - 18	1 ½ in	1N-3887
⅜ - 16	1 ⅝ in	4L-4155
½ - 13	½ in	031-8610
¼ - 20	¼ in	8T-3601
½ - 13	½ in	8J-5912

Cup Point/Set Screws/Metric/Coarse Thread UNC



- Heat treated with a black oxide finish.

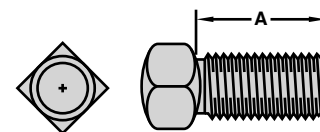
Thread Size (in - TPI)	A	
	Screw Length	Part Number
M4 × 0.70	20 mm	7X-7889
M5 × 0.80	20 mm	106-5472
M5 × 0.80	25 mm	8T-5434
M5 × 0.80	30 mm	8T-6702
M6 × 1.00	6 mm	095-1260
M6 × 1.00	8 mm	9X-6608
M5 × 0.70	12 mm	9Y-9846
M6 × 1.00	8 mm	6V-9327
M6 × 1.00	10 mm	6V-8932
M6 × 1.00	12 mm	8C-7531
M6 × 1.00	16 mm	095-1274
M6 × 1.00	16 mm	8T-0723
M6 × 1.00	30 mm	099-5742
M6 × 1.00	40 mm	087-4759
M6 × 1.00	60 mm	109-5550
M8 × 1.25	16 mm	8T-0351

Thread Size (in - TPI)	A	
	Screw Length	Part Number
M8 × 1.25	20 mm	8T-2997
M8 × 1.25	30 mm	123-0368
M8 × 1.25	31.3 mm	6E-5583
M8 × 1.25	45 mm	9X-8914
M10 × 1.50	12 mm	095-1267
M10 × 1.50	16 mm	9X-6611
M10 × 1.50	21 mm	087-4710
M10 × 1.50	30 mm	096-2966
M10 × 1.50	44.3 mm	260-7524
M10 × 1.50	120 mm	274-9987
M12 × 1.75	10 mm	8T-9533
M12 × 1.75	12 mm	096-3216
M12 × 1.75	20 mm	095-1277
M12 × 1.75	30 mm	095-1270
M12 × 1.75	50 mm	9X-2403
M12 × 1.25	50 mm	9T-6779

Thread Size (in - TPI)	A	
	Screw Length	Part Number
M12 × 1.75	70 mm	9X-8482
M12 × 1.75	80 mm	9X-8483
M12 × 1.75	90 mm	125-1379
M12 × 1.75	110 mm	195-3834
M14 × 2.00	14 mm	096-6210
M16 × 2.00	22 mm	7Y-0466
M16 × 2.00	30 mm	095-1271
M16 × 2.00	130 mm	136-8416
M20 × 2.50	25 mm	099-8112
M20 × 2.50	45 mm	225-4607
M20 × 2.50	50 mm	096-5400
M20 × 2.50	60 mm	8T-5064
M20 × 2.50	80 mm	129-2220
M20 × 2.50	100 mm	8T-8555
M24 × 3.00	25 mm	157-2235
M27 × 2.00	27 mm	7Y-8436
M6 × 1.00	25 mm	178-7877

Square Head/Set Screws/Inch/Coarse Thread UNC

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



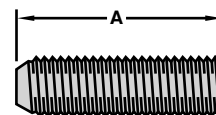
Thread Size (in - TPI)	A	
	Screw Length	Part Number
1 - 8	3 1/4 in	292-5889
3/8 - 16	1 3/4 in	2H-3881
1 - 8	2 3/4 in	2K-3229
1/4 - 20	3/8 in	4B-3565
1/4 - 20	1/2 in	4B-3566
1/4 - 20	1 in	4B-3569
5/16 - 18	1/2 in	4B-3570
5/16 - 18	5/8 in	4B-3571
3/8 - 16	1/2 in	4B-3572
3/8 - 16	5/8 in	4B-3573
3/8 - 16	3/4 in	4B-3574
3/8 - 16	1 in	4B-3575

Thread Size (in - TPI)	A	
	Screw Length	Part Number
3/8 - 16	1 1/4 in	4B-3576
3/8 - 16	1 1/2 in	4B-3577
1/2 - 13	3/4 in	4B-3580
1/2 - 13	7/8 in	4B-3581
1/2 - 13	1 1/4 in	4B-3583
1/2 - 13	1 1/2 in	4B-3584
1/2 - 13	1 3/4 in	4B-3585
1/2 - 13	2 in	4B-3586
5/8 - 11	1 1/2 in	4B-3594
5/8 - 11	1 3/4 in	4B-3595
5/8 - 11	2 in	4B-3596
5/8 - 11	3 in	4B-3599

Thread Size (in - TPI)	A	
	Screw Length	Part Number
3/4 - 10	1 1/2 in	4B-3601
3/4 - 10	1 3/4 in	4B-3602
3/4 - 10	2 in	4B-3603
3/4 - 10	2 1/2 in	4B-3604
3/4 - 10	2 27/32 in	4B-3605
5/8 - 11	2 in	4B-3619
1/2 - 13	5 in	4B-3626
3/8 - 16	7/8 in	4B-4994
1 - 8	3 1/4 in	4D-8318
1 - 14	3 7/8 in	4L-6665
1 1/2 - 12	7 1/2 in	6V-5137
3/4 - 10	4 1/2 in	8T-4162

Taper Lock/Studs/Inch/Coarse Thread UNC

- Heat treated with a direct-hardening process.
- Hardened to Rockwell C33-39
- Designed with a taper point for a plug tap.
- Meet SAE grade 8 strength requirements.



Thread Size (in - TPI)	A	
	Screw Length	Part Number
1 - 8	3 15/16 in	229-4975
1 - 8	3 15/16 in	139-4775
1 - 8	3 15/16 in	5D-3118
1 - 8	4 15/16 in	6D-0419
1 - 8	4 3/16 in	9M-5854
1 - 8	4 7/16 in	9M-3948
1 - 8	5 1/8 in	5D-0600
1 1/2 - 16	2 5/16 in	2W-8225
1 1/2 - 16	39 5/8 in	2P-4304
1/2 - 13	1 3/4 in	2D-8153
1/2 - 13	1 9/16 in	8M-8778
1/2 - 13	2 13/16 in	3D-0472
1/2 - 13	2 3/16 in	5M-1932
1/2 - 13	2 3/8 in	2D-8154
1/2 - 13	2 9/16 in	4J-6925
1/2 - 13	2 in	3D-0490
1/2 - 13	3 1/8 in	2D-8426
1/2 - 13	3 13/16 in	3D-0473

Thread Size (in - TPI)	A	
	Screw Length	Part Number
1/2 - 13	3 3/8 in	9H-1288
1/2 - 13	3 9/16 in	2D-8155
1/2 - 13	3 in	3D-6627
1/2 - 13	4 1/2 in	5P-7071
3/4 - 10	2 15/16 in	4D-6578
3/4 - 10	2 3/4 in	2D-8369
3/4 - 10	2 9/16 in	4D-6579
3/4 - 10	3 1/8 in	4D-7246
3/4 - 10	3 13/16 in	6D-1915
3/4 - 10	3 3/8 in	7D-3504
3/4 - 10	3 9/16 in	5J-6796
3/4 - 10	4 3/16 in	2P-1303
3/8 - 16	1 11/16 in	2N-9288
3/8 - 16	1 3/4 in	2M-4779
3/8 - 16	1 3/4 in	6L-8562
3/8 - 16	1 3/8 in	9M-2151
3/8 - 16	1 31/32 in	1J-8668
3/8 - 16	1 9/16 in	5P-2603

Thread Size (in - TPI)	A	
	Screw Length	Part Number
3/8 - 16	1 9/16 in	2M-1538
3/8 - 16	2 13/16 in	7S-6719
3/8 - 16	2 15/16 in	9M-3296
3/8 - 16	2 3/16 in	4M-2743
3/8 - 16	2 3/16 in	6V-1525
3/8 - 16	2 3/4 in	6V-1426
3/8 - 16	2 3/8 in	8M-1871
3/8 - 16	2 3/8 in	106-1793
3/8 - 16	2 5/32 in	313-9550
3/8 - 16	2 5/8 in	3M-0496
3/8 - 16	2 5/8 in	9L-1658
3/8 - 16	2 in	7L-0520
3/8 - 16	3 1/16 in	9L-1657
3/8 - 16	3 1/8 in	2M-8411
3/8 - 16	3 11/32 in	9X-2840
3/8 - 16	3 15/16 in	106-1792
3/8 - 16	3 3/16 in	4S-6137
3/8 - 16	3 35/64 in	6V-1427

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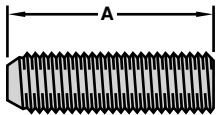
Taper Lock/Studs/Inch/Coarse Thread UNC (Continued)

Thread Size (in - TPI)	A	Part Number
	Screw Length	
$\frac{3}{8}$ - 16	3 $\frac{5}{16}$ in	2M-2488
$\frac{3}{8}$ - 16	4 $\frac{1}{2}$ in	101-8917
$\frac{3}{8}$ - 16	4 $\frac{3}{16}$ in	2P-1974
$\frac{3}{8}$ - 16	4 in	6L-4428
$\frac{5}{8}$ - 11	2 $\frac{15}{16}$ in	6L-7655
$\frac{5}{8}$ - 11	2 $\frac{3}{16}$ in	3D-4639

Thread Size (in - TPI)	A	Part Number
	Screw Length	
$\frac{5}{8}$ - 11	2 $\frac{3}{4}$ in	4D-4823
$\frac{5}{8}$ - 11	2 $\frac{5}{8}$ in	2D-8822
$\frac{5}{8}$ - 11	2 $\frac{9}{16}$ in	2D-5238
$\frac{5}{8}$ - 11	3 $\frac{3}{16}$ in	3J-8154
$\frac{5}{8}$ - 11	3 $\frac{3}{8}$ in	3D-8439
$\frac{5}{8}$ - 11	3 $\frac{9}{16}$ in	3D-5963

Thread Size (in - TPI)	A	Part Number
	Screw Length	
$\frac{5}{8}$ - 11	4 $\frac{3}{16}$ in	5D-4809
$\frac{5}{8}$ - 11	4 in	5P-3887
$\frac{7}{8}$ - 9	3 $\frac{1}{8}$ in	7D-2838
$\frac{7}{8}$ - 9	3 $\frac{3}{4}$ in	139-4774
$\frac{7}{8}$ - 9	3 $\frac{9}{16}$ in	4D-6589
$\frac{7}{8}$ - 9	4 $\frac{3}{16}$ in	4D-7259
$\frac{7}{8}$ - 9	4 $\frac{7}{16}$ in	5P-2098

Taper Lock/Studs/Metric/Coarse Thread UNC



- Heat treated with a direct-hardening process.
- Hardened to Rockwell C33-39
- Designed with a taper point for a plug tap.
- Meet SAE grade 8 strength requirements.

Thread Size (dia × pitch)	A	Part Number
	Screw Length	
M10 × 1.50	100 mm	335-2395
M10 × 1.50	100 mm	309-1905
M10 × 1.50	100 mm	274-6085
M10 × 1.50	35 mm	8T-7004
M10 × 1.50	35 mm	250-0485
M10 × 1.50	40 mm	8T-7044
M10 × 1.50	45 mm	133-7810
M10 × 1.50	45 mm	186-0870
M10 × 1.50	45 mm	351-9434
M10 × 1.50	45 mm	9X-8281
M10 × 1.50	50 mm	264-0168
M10 × 1.50	50 mm	245-9750
M10 × 1.50	50 mm	281-2592
M10 × 1.50	55 mm	309-1906
M10 × 1.50	60 mm	288-4402
M10 × 1.50	65 mm	109-3001

Thread Size (dia × pitch)	A	Part Number
	Screw Length	
M10 × 1.50	70 mm	231-0336
M10 × 1.50	75 mm	224-5445
M10 × 1.50	80 mm	259-7140
M10 × 1.50	85 mm	116-3715
M10 × 1.50	85 mm	288-4403
M10 × 1.50	95 mm	268-4779
M12 × 1.75	45 mm	141-9481
M12 × 1.75	50 mm	8T-5414
M12 × 1.75	55 mm	3E-4319
M12 × 1.75	55 mm	124-8101
M12 × 1.75	65 mm	246-5451
M12 × 1.75	70 mm	310-1945
M12 × 1.75	80 mm	272-1882
M16 × 2.0	130 mm	8C-6709
M16 × 2.00	120 mm	342-9452
M16 × 2.00	70 mm	8C-0623

Thread Size (dia × pitch)	A	Part Number
	Screw Length	
M16 × 2.00	85 mm	296-5175
M16 × 2.00	85 mm	151-6286
M16 × 2.00	90 mm	341-3770
M20 × 2.50	75 mm	116-3719
M20 × 2.50	85 mm	286-2631
M20 × 2.50	85 mm	160-0011
M24 × 3.00	105 mm	116-3720
M24 × 3.00	140 mm	292-4252
M36 × 4.00	135 mm	151-6288
M8 × 1.25	30 mm	329-8793
M8 × 1.25	40 mm	191-6301
M8 × 1.25	45 mm	232-5849
M8 × 1.25	50 mm	295-4142
M8 × 1.25	55 mm	328-0826
M8 × 1.25	65 mm	9X-8496
M8 × 1.25	95 mm	192-7207

Standard/Studs/Inch/Coarse Thread UNC

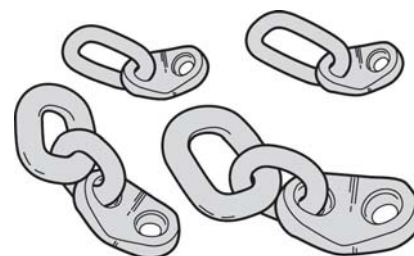
Thread Size (in - TPI)	Screw Length	Part Number
$\frac{1}{4}$ - 20	1 $\frac{3}{4}$ in	037-6874
$\frac{1}{4}$ - 28	1 $\frac{3}{8}$ in	4V-0151
$\frac{1}{4}$ - 28	1 $\frac{7}{16}$ in	8Y-2952
$\frac{1}{4}$ - 28	2 $\frac{1}{4}$ in	8L-9315
$\frac{5}{16}$ - 24	1 $\frac{3}{8}$ in	3N-7824
$\frac{5}{16}$ - 24	1 $\frac{3}{4}$ in	3N-2775
$\frac{5}{16}$ - 24	2 $\frac{3}{8}$ in	6B-0607
$\frac{5}{16}$ - 24	3 in	061-7284
$\frac{6}{16}$ - 16	1 in	133-5261
$\frac{6}{16}$ - 16	1 $\frac{3}{4}$ in	5P-9263
$\frac{6}{16}$ - 24	1 $\frac{3}{4}$ in	4K-2877
$\frac{6}{16}$ - 16	2 in	9L-4023
$\frac{6}{16}$ - 24	2 in	031-2666
$\frac{6}{16}$ - 24	2 $\frac{1}{2}$ in	4D-9589
$\frac{6}{16}$ - 24	3 $\frac{1}{4}$ in	9W-9687
$\frac{6}{16}$ - 16	3 $\frac{3}{8}$ in	5F-6849
$\frac{1}{2}$ - 20	2 $\frac{3}{8}$ in	4D-7235
$\frac{1}{2}$ - 13	4 in	193-1450
$\frac{1}{2}$ - 13	4 $\frac{1}{64}$ in	3D-0471
$\frac{1}{2}$ - 13	5 in	262-4377
$\frac{5}{8}$ - 11	3 $\frac{5}{8}$ in	7U-5270
$\frac{5}{8}$ - 18	8 $\frac{1}{2}$ in	8B-7552
$\frac{5}{8}$ - 18	8 $\frac{7}{8}$ in	6W-8509
$\frac{5}{8}$ - 18	12 in	8K-8466
No. 1 - 14	13 $\frac{1}{2}$ in	344-4705
No. 1 - 14	14 in	6V-2078
No. 1 - 14	14 $\frac{15}{16}$ in	252-9971
No. 1 - 5	17 $\frac{17}{32}$ in	266-8994
No. 1 - 14	18 in	5P-4776
1 $\frac{1}{8}$ - 12	20 in	1U-7758
1 $\frac{1}{4}$ - 12	18 in	5P-4184
1 $\frac{1}{4}$ - 5	24 in	264-5774
1 $\frac{1}{2}$ - 12	23 $\frac{5}{8}$ in	5P-7273
1 $\frac{1}{2}$ - 12	32 $\frac{3}{32}$ in	6V-2074
No. 1 - 14	16 $\frac{3}{8}$ in	252-9951
$\frac{3}{4}$ - 10	9 $\frac{5}{8}$ in	1U-9597

Standard/Studs/Metric/Coarse Thread UNC

Thread Size (dia × pitch)	Screw Length	Part Number
M5 × 0.80	40 mm	240-6577
M6 × 1.00	25 mm	8T-3982
M6 × 1.00	40 mm	6R-7651
M6 × 1.00	108 mm	320-9318
M8 × 1.25	31 mm	216-1035
M8 × 1.25	33 mm	216-1036
M8 × 1.25	35 mm	157-8861
M8 × 1.25	50 mm	166-0599
M8 × 1.25	60 mm	121-0483
M8 × 1.25	82 mm	111-9897
M8 × 1.25	225 mm	217-6670
M10 × 1.50	43 mm	172-2663
M10 × 1.50	46 mm	172-2718
M10 × 1.50	48 mm	331-4350
M10 × 1.50	55 mm	180-3998
M10 × 1.50	60 mm	357-0351
M10 × 1.50	60 mm	7Y-8710
M10 × 1.50	65 mm	9R-4764
M10 × 1.50	75 mm	164-1525
M10 × 1.50	80 mm	115-1958
M10 × 1.50	83 mm	164-1438
M10 × 1.50	105 mm	9R-2753
M10 × 1.50	110 mm	356-2419
M10 × 1.50	125 mm	288-7158
M10 × 1.25	516 mm	334-7396
M12 × 1.75	60 mm	7X-3342
M12 × 1.75	60 mm	7X-3149
M12 × 1.75	85 mm	358-3156
M12 × 1.75	200 mm	152-2489
M14 × 2.00	65 mm	285-6325
M14 × 2.00	85 mm	242-2911
M16 × 2.00	60 mm	9X-2209
M16 × 2.00	127 mm	338-3116
M16 × 2.00	150 mm	332-0035
M24 × 3.00	140 mm	212-8687
M10 × 1.50	95 mm	9R-3579
M10 × 1.50	100 mm	338-4549
M10 × 1.50	55 mm	376-3408
M16 × 2.00	165 mm	215-3965

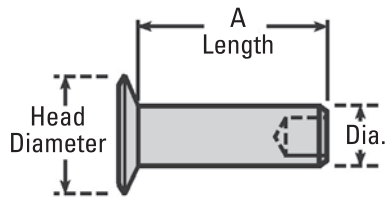
Link Brackets

- 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.



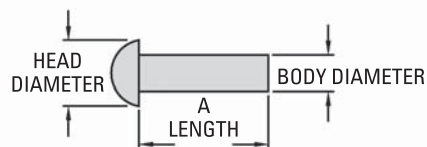
Part Number	Bolt Size	Working Load Limit	Minimum Bolt Torque
138-7573	$\frac{3}{8}$ in	1000 kg (2,205 lb)	43 N·m (32 lb ft)
138-7575	$\frac{1}{2}$ in	1800 kg (3,968 lb)	95 N·m (70 lb ft)
138-7574	$\frac{3}{4}$ in	4000 kg (8,818 lb)	360 N·m (266 lb ft)
138-7576	30 mm (1 $\frac{1}{4}$ in)	4000 kg (8,818 lb)	1300 N·m (959 lb ft)
163-6455	36 mm	5448 kg (12,011 lb)	2700 N·m (1,991 lb ft)

Rivets/Flat Head/Countersunk Shank/Inch



Body Diameter	A	Head Diameter	Part Number	Material
	Length			
$\frac{3}{16}$ in	$\frac{3}{4}$ in	$\frac{3}{8}$ in	6B-1369	Steel
$\frac{3}{16}$ in	$\frac{17}{32}$ in	$\frac{3}{8}$ in	6B-1985	Steel
$\frac{5}{32}$ in	$\frac{5}{16}$ in	$\frac{3}{8}$ in	6B-4284	Steel
$\frac{3}{16}$ in	$\frac{19}{32}$ in	$\frac{3}{8}$ in	6B-4594	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	7B-5064	Brass
$\frac{3}{16}$ in	$\frac{19}{32}$ in	$\frac{3}{8}$ in	7B-5068	Brass

Rivets/Button Head/Solid Shank/Inch



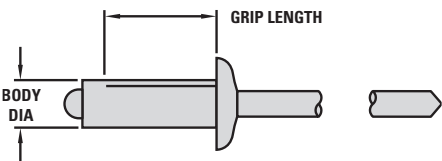
- Made of cold-formed steel.
- Meets ANSI B18.1.1 requirements.

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

Rivets/Blind/Inch

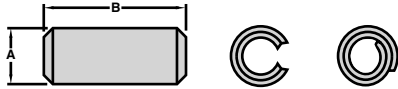
- Contains an open-end and a steel mandrel.

Body Diameter	Grip Length	Part Number
$\frac{3}{16}$ in	$\frac{3}{8}$ - $\frac{1}{2}$ in	033-9412
$\frac{5}{32}$ 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	$\frac{1}{2}$ - $\frac{5}{8}$ in	4D-6716
$\frac{1}{8}$ 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
$\frac{3}{16}$ in	$\frac{1}{4}$ - $\frac{3}{8}$ in	9M-5732
$\frac{3}{16}$ in	$\frac{1}{8}$ - $\frac{1}{4}$ in	9M-5733



Pins

Spring Pins/Roll Pin/Inch



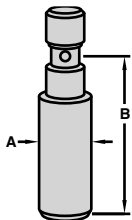
- Contains a chamfered end for easy installation.
- Made of heat-treated steel.

A	B	Part Number
Diameter	Pin Length	
1/16 in	3/4 in	2L-4911
1/16 in	3/8 in	1L-5316
1/16 in	1/4 in	8S-7499
1/16 in	1/2 in	8S-3157
1/2 in	1 in	1N-5981
1/2 in	4 in	8C-8513
1/2 in	3 in	027-3873
1/2 in	2 1/2 in	2K-8078
1/2 in	1 1/4 in	2K-9062
1/2 in	1 1/2 in	5H-4905
1/2 in	3/4 in	7K-6820
1/2 in	3 1/2 in	031-0255
1/4 in	3/4 in	7M-5130
1/4 in	1/2 in	6B-6863
1/4 in	1 1/4 in	5H-3193
1/4 in	1 in	5H-3182
1/4 in	2 in	4H-6996
1/4 in	1 3/4 in	4H-4737
1/4 in	5/8 in	3H-2617
1/4 in	1 1/2 in	2L-1699
1/4 in	2 1/2 in	1J-5353
1/4 in	7/8 in	3S-2708
1/4 in	45/64 in	095-0884

A	B	Part Number
Diameter	Pin Length	
1/8 in	1 1/4 in	2K-8467
1/8 in	1/2 in	3H-9675
1/8 in	3/4 in	3K-4897
1/8 in	5/8 in	4H-1641
1/8 in	3/8 in	8L-6565
1/8 in	7/8 in	8T-0277
13/16 in	1 37/64 in	3Q-7864
13/16 in	2 3/4 in	9X-2617
15/32 in	1 3/16 in	195-6754
21/32 in	5 1/8 in	6Y-8029
25/64 in	1 31/32 in	238-3200
3/16 in	1/2 in	5H-8985
3/16 in	1 1/4 in	138-1645
3/16 in	1 in	6H-3956
3/16 in	5/8 in	2K-5986
3/16 in	5/8 in	3S-8109
3/16 in	1 1/2 in	4H-3119
3/16 in	3/4 in	4H-8380
3/16 in	1 3/4 in	1J-5799
3/16 in	1 1/4 in	1H-1200
3/32 in	5/8 in	2K-3455
3/32 in	1/2 in	3H-1118
3/32 in	1 1/8 in	032-8870

A	B	Part Number
Diameter	Pin Length	
3/32 in	3/4 in	2L-5894
3/32 in	1 in	5M-8009
3/8 in	3/4 in	8T-5089
3/8 in	2 1/2 in	053-1720
3/8 in	1 3/4 in	5L-5711
3/8 in	1 1/4 in	5J-3941
3/8 in	1 in	2L-3650
3/8 in	1 1/2 in	2J-5850
3/8 in	5/8 in	1T-0068
3/8 in	2 in	1J-8136
3/8 in	3 in	045-7012
37/64 in	4 21/64 in	9W-9455
5/16 in	1 31/32 in	2M-3521
5/16 in	1 1/2 in	2H-9445
5/16 in	3/4 in	4H-1440
5/16 in	3 in	2K-1594
5/16 in	1 13/32 in	095-0891
5/16 in	1 3/4 in	5M-1179
5/16 in	1 1/4 in	8T-2925
5/16 in	1 in	1T-0550
5/32 in	1/2 in	1T-0099
5/32 in	1 in	5H-9839
5/32 in	1 1/2 in	6V-3259
5/32 in	3/4 in	2L-5893

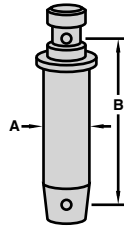
Drawbar and Clevis Pins/Type I



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

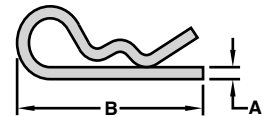
Drawbar and Clevis Pins/Type II

A	Pin Hole Diameter	B	Part Number
Diameter		Length	
1 ½ in	²⁵ / ₆₄ in	7 in	7F-9549
1 ½ in	²⁵ / ₆₄ in	8 in	7F-9544
1 ¾ in	²⁵ / ₆₄ in	12 in	5H-2209
1 ¾ in	²⁵ / ₆₄ in	8 in	7F-9547
1 ³⁵ / ₆₄ in	²⁵ / ₆₄ in	9 in	7F-9541
2 in	²⁵ / ₆₄ in	10 ½ in	2M-0093

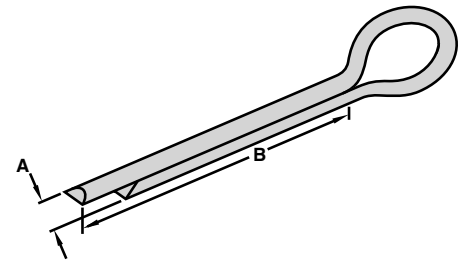


Locking Pins/Inch/Steel

A	Pin Hole Diameter	B	Part Number
Diameter		Length	
³ / ₃₂ in	½ in	2.00 in	008-3843
⁵ / ₃₂ in	⁵ / ₈ - ⁷ / ₈ in	3.00 in	5P-0370
³ / ₃₂ in	¹ / ₄ - ½ in	1.62 in	5P-0372
³ / ₁₆ in	³ / ₄ - ¹¹ / ₁₆ in	3.75 in	5P-8837
¹ / ₈ in	¹ / ₂ - ³ / ₄ in	1.75 in	6S-6646
¹ / ₈ in	⁵ / ₈ - ⁷ / ₈ in	2.50 in	8S-6377



Cotter Pins/Inch/Zinc Plated Steel



A	B	Cotter End Type	Part Number
Diameter	Pin Length		
¹ / ₁₆ in	1 ½ in	Mitered End	010-3365
¹ / ₁₆ in	1 ¼ in	Mitered End	3B-4606
¹ / ₁₆ in	³ / ₄ in	Mitered End	3B-4605
¹ / ₂ in	2 ½ in	Mitered End	3B-5324
¹ / ₂ in	2 ¾ in	Mitered End	3B-5325
¹ / ₂ in	2 in	Mitered End	3B-5323
¹ / ₂ in	3 ½ in	Mitered End	3B-5326
¹ / ₂ in	3 in	Mitered End	2H-3775

A	B	Cotter End Type	Part Number
Diameter	Pin Length		
¹ / ₂ in	4 ¼ in	Square End	1J-2919
¹ / ₂ in	4 ²³ / ₃₂ in	Mitered End	095-0872
¹ / ₂ in	5 ½ in	Square End	3J-2985
¹ / ₄ in	1 ½ in	Mitered End	3B-5313
¹ / ₄ in	1 ¼ in	Mitered End	3B-4637
¹ / ₄ in	1 ¾ in	Mitered End	3B-4639
¹ / ₄ in	1 in	Mitered End	2H-3769
¹ / ₄ in	2 ½ in	Mitered End	3B-4641

A	B	Cotter End Type	Part Number
Diameter	Pin Length		
¹ / ₄ in	2 ¼ in	Mitered End	3B-5303
¹ / ₄ in	2 in	Mitered End	3B-4640
¹ / ₄ in	3 ½ in	Mitered End	3B-4643
¹ / ₄ in	3 in	Mitered End	3B-5328
¹ / ₄ in	4 ½ in	Mitered End	4D-8002
¹ / ₈ in	1 ¼ in	Square End	3B-4618
¹ / ₈ in	1 in	Mitered End	3S-0515
¹ / ₈ in	1 in	Mitered End	3B-4617

(Continued)

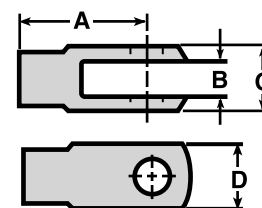
Cotter Pins/Inch/Zinc Plated Steel (Continued)

A	B	Cotter End Type	Part Number
Diameter	Pin Length		
$\frac{1}{8}$ in	$\frac{1}{2}$ in	Mitered End	3B-4613
$\frac{1}{8}$ in	$\frac{1}{2}$ in	Square End	3B-4607
$\frac{1}{8}$ in	$\frac{15}{32}$ in	Chisel End	6L-3960
$\frac{1}{8}$ in	2 $\frac{1}{2}$ in	Mitered End	8B-9264
$\frac{1}{8}$ in	2 $\frac{1}{4}$ in	Mitered End	3B-4622
$\frac{13}{32}$ in	2 $\frac{1}{2}$ in	Mitered End	095-7944
$\frac{13}{32}$ in	3 $\frac{11}{32}$ in	Mitered End	095-0868
$\frac{13}{32}$ in	5 $\frac{1}{2}$ in	Mitered End	096-1820
$\frac{3}{16}$ in	1 $\frac{1}{2}$ in	Mitered End	3B-4629
$\frac{3}{16}$ in	1 $\frac{1}{4}$ in	Square End	3B-4628
$\frac{3}{16}$ in	1 in	Mitered End	3B-4627
$\frac{3}{16}$ in	2 $\frac{1}{2}$ in	Mitered End	3B-4632
$\frac{3}{16}$ in	2 $\frac{1}{4}$ in	Mitered End	3B-5302
$\frac{3}{16}$ in	2 $\frac{3}{4}$ in	Mitered End	3B-4633
$\frac{3}{16}$ in	2 in	Square End	3B-4631
$\frac{3}{16}$ in	3 in	Mitered End	3B-4634

A	B	Cotter End Type	Part Number
Diameter	Pin Length		
$\frac{3}{16}$ in	4 in	Mitered End	3B-4636
$\frac{3}{32}$ in	1 $\frac{1}{4}$ in	Mitered End	3B-4612
$\frac{3}{32}$ in	1 $\frac{3}{4}$ in	Chisel End	2H-3862
$\frac{3}{32}$ in	1 in	Mitered End	3B-4611
$\frac{3}{32}$ in	2 in	Mitered End	010-3378
$\frac{3}{8}$ in	1 $\frac{1}{2}$ in	Mitered End	3B-4644
$\frac{3}{8}$ in	2 $\frac{1}{2}$ in	Mitered End	3B-4647
$\frac{3}{8}$ in	2 $\frac{3}{4}$ in	Mitered End	3B-5319
$\frac{3}{8}$ in	2 in	Mitered End	3B-4646
$\frac{3}{8}$ in	3 $\frac{1}{2}$ in	Mitered End	3B-5322
$\frac{3}{8}$ in	3 in	Mitered End	3B-5320
$\frac{3}{8}$ in	4 $\frac{1}{2}$ in	Mitered End	4J-1888
$\frac{3}{8}$ in	4 in	Mitered End	3B-5329
$\frac{5}{16}$ in	1 $\frac{1}{2}$ in	Mitered End	2H-3771
$\frac{5}{16}$ in	1 $\frac{1}{4}$ in	Mitered End	2H-3770
$\frac{5}{16}$ in	1 in	Mitered End	3B-6705

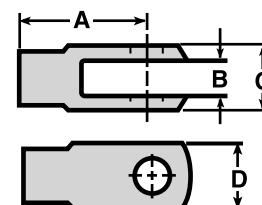
A	B	Cotter End Type	Part Number
Diameter	Pin Length		
$\frac{5}{16}$ in	2 $\frac{1}{2}$ in	Mitered End	3B-5316
$\frac{5}{16}$ in	2 $\frac{1}{4}$ in	Mitered End	3B-5315
$\frac{5}{16}$ in	2 in	Mitered End	3B-5314
$\frac{5}{16}$ in	2 in	Mitered End	095-0863
$\frac{5}{16}$ in	3 $\frac{1}{2}$ in	Mitered End	2H-3772
$\frac{5}{16}$ in	3 in	Mitered End	3B-5317
$\frac{5}{16}$ in	4 $\frac{1}{2}$ in	Mitered End	3F-8357
$\frac{5}{16}$ in	4 in	Mitered End	2H-3773
$\frac{5}{16}$ in	5 in	Mitered End	2H-3774
$\frac{5}{32}$ in	1 $\frac{1}{2}$ in	Square End	3B-5301
$\frac{5}{32}$ in	2 $\frac{1}{4}$ in	Mitered End	010-3401
$\frac{5}{32}$ in	2 $\frac{3}{4}$ in	Mitered End	3B-4625
$\frac{5}{32}$ in	2 in	Mitered End	2H-3768
$\frac{5}{8}$ in	3 in	Mitered End	3B-5327

Yoke-Type Rod End/Inch



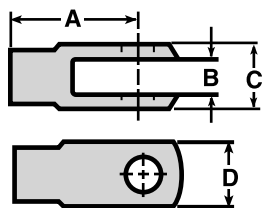
Diameter	A	B	C	D	Part Number	Nut	Pin Assy.	Clevis Pin	Retain. Clip	Retain. Pin	Cotter Pin
	Length to Pin Hole	Gap Size	Height	Width							
1/4 in	50.8 in	7.10 in	15.90 in	12.70 in	8B-3768	5L-4426	--	4B-3057	--	--	3B-4607
1/4 in	26.2 in	7.10 in	15.90 in	12.70 in	2M-4036	5L-4426	--	4B-3057	--	--	3B-4607
5/16 in	30.2 in	8.70 in	19.00 in	15.00 in	3D-9609	1B-4202	--	1A-2457	--	--	3B-4609
5/16 in	57.0 in	8.70 in	18.00 in	15.00 in	010-4037	1B-4202	--	1A-2457	--	--	3B-4609
3/8 in	34.9 in	11.10 in	22.20 in	17.50 in	1M-1341	1B-4203	8T-8932	1B-0676	--	--	3B-4615
3/8 in	63.5 in	11.10 in	22.20 in	17.50 in	1A-9252	1B-4203	--	1B-0676	--	--	3B-4617
1/2 in	46.0 in	14.30 in	28.60 in	23.90 in	2M-8340	9S-5585	--	8B-1419	--	6S-6646	3B-4617
1/2 in	76.2 in	14.30 in	28.60 in	23.90 in	6F-7010	9S-5585	--	8B-1419	--	6S-6646	3B-4617
5/8 in	57.9 in	17.50 in	34.90 in	30.20 in	4M-7930	5D-3183	--	9S-1315	--	--	3B-4617
5/8 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	A	B	C	D	Part Number	Nut	Pin Assy.	Clevis Pin	Retain. Clip	Retain. Pin	Cotter Pin
	Length to Pin Hole	Gap Size	Height	Width							
M12-LH	72.0 mm	12.0 mm	24.0 mm	24.0 mm	7X-0858	8T-4244	8T-5382	8T-6905, 7X-3161	8T-6903	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, 7X-3161	8T-6903	6S-6646	3B-4615
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	9T-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, 7X-3161	8T-6903	6S-6646	3B-4615

Yoke-Type Rod End/Jump Sizes/Metric

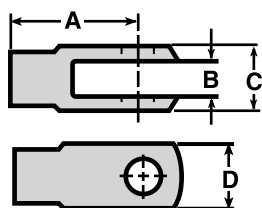


Diameter	A	B	C	D	Part Number	Nut	Pin Assy.	Clevis Pin	Retain. Clip	Retain. Pin	Cotter Pin
	Length to Pin Hole	Gap Size	Height	Width							
M10 ¹	40.0 mm	10.0 mm	20.0 mm	20.0 mm	8T-5921	8T-4133	--	--	--	--	--
M10 ²	40.0 mm	10.0 mm	20.0 mm	20.0 mm	3E-3826	8T-4133	--	1B-0676	--	6S-6646	3B-4615

¹6.0 mm bore.

²9.5 mm bore.

Yoke-Type Rod End/Forged/Metric



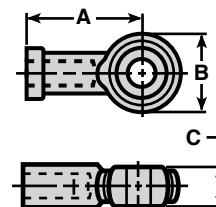
Diameter	A	B	C	D	Part Number	Nut	Pin Assy.	Clevis Pin	Retain. Clip	Retain. Pin	Cotter Pin
	Length to Pin Hole	Gap Size	Height	Width							
M6 ¹	45.0 mm	7.1 mm	15.9 mm	13.0 mm	7X-2496	5C-2890	--	7X-2618	--	--	3B-4607
M10 ²	34.9 mm	11.1 mm	22.2 mm	17.5 mm	8T-4968	8T-4133	--	1B-0676	--	6S-6646	3B-7615
M10 ²	63.5 mm	11.1 mm	22.2 mm	17.5 mm	8T-3988	8T-4133	--	1B-0676	--	6S-6646	3B-7615
M12 ³	46.4 mm	14.3 mm	28.6 mm	23.9 mm	7X-7660	8T-4244	--	8B-1419	--	--	3B-4617

¹External thread.

²9.5 mm bore.

³12.7 mm bore.

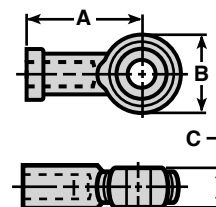
Spherical Rod End/Inch



Diameter	A	B	C	Part Number
	Length to Pin Hole	Diameter	Height	
1/4 in	1.33 in	0.89 in	0.37 in	6L-7751
5/16 in	1.40 in	1.02 in	0.44 in	5P-6672
5/16 in	1.37 in	1.02 in	0.44 in	7H-3641
5/16 in	1.90 in	1.02 in	0.44 in	7E-9748
5/16 in	1.90 in	1.02 in	0.44 in	6V-8955
5/16 in	1.90 in	1.02 in	0.44 in	6V-9163
5/16 in	1.40 in	1.02 in	0.44 in	7L-4186
5/16 in	1.90 in	1.02 in	0.44 in	6L-3353
3/8 in	1.64 in	1.13 in	0.50 in	7X-7875
3/8 in	1.64 in	1.13 in	0.50 in	7X-7874

Diameter	A	B	C	Part Number
	Length to Pin Hole	Diameter	Height	
3/8 in	1.63 in	1.00 in	0.50 in	225-3770
3/8 in	1.63 in	1.00 in	0.50 in	225-3769
3/8 in	1.64 in	1.13 in	0.50 in	4D-4064
3/8 in	1.96 in	1.13 in	0.50 in	8C-6971
3/8 in	1.64 in	1.13 in	0.50 in	8C-7321
3/8 in	1.64 in	1.13 in	0.50 in	8C-7315
1/2 in	2.14 in	1.39 in	0.63 in	4D-4065
1/2 in	2.63 in	1.50 in	0.63 in	212-6854
5/8 in	2.52 in	1.57 in	0.75 in	2K-5804
5/8 in	2.63 in	1.50 in	0.75 in	125-6857
1 1/4 in	4.13 in	2.76 in	1.37 in	8C-1457

Spherical Rod End/Metric

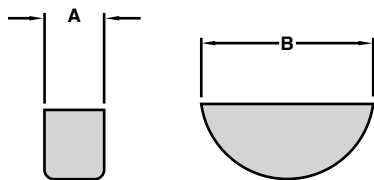


Diameter (mm)	A	B	C	Part Number
	Length to Pin Hole	Diameter	Height	
M10	42.0 mm	30.0 mm	14.0 mm	132-0994
M10	42.0 mm	30.0 mm	14.0 mm	8T-6431
M10	47.0 mm	30.0 mm	14.0 mm	8C-5057
M12	50.0 mm	31.0 mm	16.0 mm	240-9815
M12	54.0 mm	30.0 mm	16.0 mm	102-8245
M12	49.0 mm	34.0 mm	16.0 mm	240-9816
M12	54.0 mm	34.0 mm	10.0 mm	279-0963
M12	49.0 mm	34.0 mm	19.0 mm	8C-3392
M14	63.0 mm	40.0 mm	14.0 mm	309-4481
M14	63.0 mm	40.0 mm	12.0 mm	309-4480
M14	50.0 mm	30.0 mm	16.0 mm	095-6591
M16	66.7 mm	37.9 mm	21.0 mm	098-5653
M16	63.0 mm	42.0 mm	21.0 mm	9R-4760
M20	77.0 mm	53.0 mm	25.0 mm	254-3355

Diameter (mm)	A	B	C	Part Number
	Length to Pin Hole	Diameter	Height	
M20	78.0 mm	53.0 mm	16.0 mm	260-3418
M20	78.0 mm	53.0 mm	16.0 mm	260-3417
M20	133.0 mm	50.8 mm	25.4 mm	366-6668
M20	77.0 mm	54.0 mm	16.0 mm	293-6590
M24	94.0 mm	65.0 mm	20.0 mm	253-3745
M24	94.0 mm	65.0 mm	20.0 mm	253-3746
M42	300.0 mm	108.0 mm	51.0 mm	180-7336
M42	270.0 mm	108.0 mm	51.0 mm	180-6758
M6	29.0 mm	22.0 mm	9.0 mm	8C-3111
M6	29.0 mm	22.0 mm	9.0 mm	7U-2713
M6	30.0 mm	18.0 mm	9.0 mm	208-8479
M8	36.0 mm	24.0 mm	13.0 mm	381-2885
M8	36.0 mm	24.0 mm	13.0 mm	381-2911
M8	36.0 mm	22.0 mm	12.0 mm	7X-7915

Woodruff Keys

Woodruff Keys



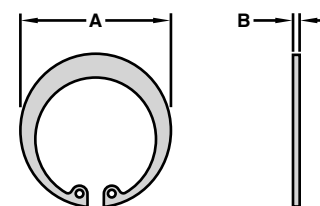
- Made of medium carbon steel and machined to a smooth finish.

A	B	MFG Number	Part Number
Thickness	Diameter		
1/16 in	5/16 in	206	4F-2291
1/16 in	3/8 in	211	3B-2098
1/2 in	2 3/4 in	V	1B-8745
1/4 in	1 in	14	3K-4723
1/4 in	1 in	15	1B-8714
1/4 in	1 1/8 in	18	1B-8716
1/4 in	1 1/4 in	21	1B-8719
1/4 in	1 3/8 in	22	1B-8720
1/4 in	1 1/2 in	24	1B-8722
1/4 in	3/4 in	91	2B-9373
1/4 in	7/8 in	A	1B-8736
1/4 in	7/8 in	--	094-4628
1/8 in	1/2 in	2	1B-8701
1/8 in	1/2 in	2	8L-4000
1/8 in	1/2 in	2	3H-1489
1/8 in	3/8 in	212	1B-8735
1/8 in	3/8 in	213	5H-2532
1/8 in	1/2 in	3	1B-8702
1/8 in	5/8 in	4	1B-8703
1/8 in	5/8 in	5	1B-8704

A	B	MFG Number	Part Number
Thickness	Diameter		
1/8 in	3/4 in	7	1B-8706
3/16 in	7/8 in	10	1B-8709
3/16 in	7/8 in	11	1B-8710
3/16 in	1 in	13	1B-8712
3/16 in	1 1/8 in	16	1B-8715
3/16 in	5/8 in	6	1B-8705
3/16 in	3/4 in	8	1B-8707
3/16 in	3/4 in	9	1B-8708
3/16 in	3/4 in	9	5H-2671
3/16 in	8/13 in	--	8M-5599
3/8 in	1 1/4 in	E	1B-8739
3/8 in	1 3/8 in	F	1B-8740
3/8 in	1 1/2 in	G	1B-8741
3/8 in	2 3/4 in	T	1B-8743
3/8 in	2 3/4 in	TX	1B-8744
5/16 in	1 3/8 in	23	1B-8721
5/16 in	1 1/2 in	25	1B-8723
5/16 in	1 in	B	1H-6627
5/16 in	1 1/8 in	C	1B-8737
5/16 in	1 1/4 in	D	1B-8738
5/16 in	2 3/4 in	SX	1B-8742

Snap Rings/Internal/Inch

- Made of tempered carbon steel.



Bore Diameter	A	B	Part Number
	Free Diameter	Thickness	
Tempered Basic			
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
1.81 in	1.95 in	0.069 in	7X-2908
1.85 in	2.05 in	0.078 in	1L-8490
2.05 in	2.28 in	0.078 in	6J-7855
--	2.35 in	0.078 in	3J-8500
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
--	2.53 in	0.079 in	250-2940
2.44 in	2.61 in	0.079 in	8T-9598
--	2.91 in	0.093 in	216-6148
2.75 in	3.05 in	0.093 in	6K-3531
2.83 in	3.12 in	0.093 in	2H-5549
--	3.32 in	0.093 in	253-1238
3.00 in	3.33 in	0.093 in	2R-1236
--	3.05 in	0.094 in	8N-7296
2.83 in	3.01 in	0.098 in	095-0942
3.15 in	3.37 in	0.098 in	2W-1145
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

Bore Diameter	A	B	Part Number
	Free Diameter	Thickness	
Tempered Basic (Continued)			
3.88 in	4.29 in	0.109 in	1S-3311
3.88 in	4.29 in	0.109 in	9M-9935
3.94 in	4.36 in	0.109 in	5J-3964
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
5.12 in	5.39 in	0.109 in	8T-9044
5.00 in	5.49 in	0.109 in	2L-0043
3.35 in	3.56 in	0.118 in	6V-5590
3.54 in	3.76 in	0.118 in	8T-0707
5.50 in	6.07 in	0.125 in	8D-2258
6.00 in	6.62 in	0.125 in	5L-4756
--	5.19 in	0.156 in	7C-1413
6.25 in	6.89 in	0.156 in	8J-8905
6.63 in	7.31 in	0.156 in	6V-4495
7.00 in	7.72 in	0.156 in	1L-7388
4.13 in	4.41 in	0.157 in	8T-7567
4.53 in	4.80 in	0.157 in	9T-2584
4.92 in	5.20 in	0.157 in	3E-4334
5.91 in	6.22 in	0.157 in	109-0119
7.25 in	7.99 in	0.187 in	1U-4022
8.00 in	8.82 in	0.187 in	8T-5380
8.25 in	9.09 in	0.187 in	9X-1802
10.24 in	10.82 in	0.197 in	3E-9401
11.02 in	11.61 in	0.197 in	192-7145
11.42 in	12.01 in	0.197 in	103-8096
8.27 in	8.74 in	0.197 in	3E-9400
9.06 in	9.53 in	0.197 in	101-2860
13.39 in	14.06 in	0.236 in	117-9750
Rectangular			
0.69 in	0.73 in	0.035 in	3P-8485
3.75 in	3.90 in	0.062 in	6V-0835
4.75 in	4.97 in	0.062 in	6V-0473
10.00 in	10.35 in	0.076 in	261-3121
16.75 in	17.09 in	0.078 in	183-6233
--	2.39 in	0.078 in	4M-8010
2.31 in	2.48 in	0.078 in	7X-2495
5.00 in	5.19 in	0.078 in	132-1183

(Continued)

Snap Rings

Snap Rings/Internal/Inch (Continued)

Bore Diameter	A	B	Part Number
	Free Diameter	Thickness	
Rectangular (Continued)			
7.50 in	7.89 in	0.086 in	185-2888
--	4.83 in	0.093 in	5T-6667
6.25 in	6.52 in	0.093 in	6V-0836
6.30 in	6.57 in	0.093 in	7X-7608
6.51 in	6.84 in	0.093 in	9W-3136
--	3.56 in	0.095 in	8F-1145
5.32 in	5.44 in	0.098 in	8T-2151
3.54 in	3.81 in	0.109 in	8C-3229
4.00 in	4.30 in	0.109 in	6V-6768
4.25 in	4.56 in	0.109 in	121-1257
4.63 in	4.94 in	0.109 in	121-1258
--	12.76 in	0.118 in	108-2736
--	2.29 in	0.120 in	4D-1186
--	6.13 in	0.120 in	3P-8218
7.87 in	8.27 in	0.120 in	313-4918
3.08 in	3.41 in	0.124 in	290-9849
--	12.13 in	0.125 in	7G-1596
--	13.78 in	0.125 in	3T-0007
--	14.87 in	0.125 in	1T-0896
2.17 in	2.38 in	0.125 in	6V-2832
--	2.50 in	0.125 in	1T-0895
--	3.75 in	0.125 in	5H-0793
3.75 in	3.93 in	0.125 in	6V-5837
4.45 in	4.66 in	0.125 in	4J-4968
4.72 in	4.94 in	0.125 in	5P-6414
4.82 in	5.08 in	0.125 in	5P-7074
--	5.37 in	0.125 in	7J-3296
6.48 in	6.83 in	0.125 in	236-2541
--	7.07 in	0.125 in	1T-1232
--	8.19 in	0.125 in	5P-6047
7.75 in	8.24 in	0.125 in	6V-1586
7.90 in	8.31 in	0.125 in	188-0751
--	3.00 in	0.126 in	234-0743
--	4.19 in	0.127 in	1H-9106
--	4.81 in	0.138 in	7Y-4672
--	5.80 in	0.138 in	087-5393
--	15.51 in	0.156 in	115-0764
5.12 in	5.36 in	0.156 in	3P-7313
5.51 in	5.75 in	0.156 in	5P-9957
6.50 in	6.83 in	0.156 in	8T-1742
6.50 in	6.83 in	0.156 in	8C-4400
6.25 in	7.25 in	0.156 in	5P-7151
--	10.63 in	0.157 in	144-4284
12.60 in	12.92 in	0.157 in	241-0163
7.64 in	7.97 in	0.172 in	6V-2833
10.00 in	10.46 in	0.187 in	5P-8194

Bore Diameter	A	B	Part Number
	Free Diameter	Thickness	
Rectangular (Continued)			
7.09 in	7.38 in	0.187 in	3E-3212
7.48 in	7.89 in	0.187 in	1Q-3332
8.00 in	8.51 in	0.187 in	8C-6799
8.50 in	9.04 in	0.187 in	3E-4371
9.06 in	9.62 in	0.187 in	117-8806
--	4.31 in	0.188 in	1P-9646
--	1.34 in	0.197 in	6Y-2875
--	1.34 in	0.197 in	6Y-2115
--	8.94 in	0.197 in	091-5224
17.72 in	20.08 in	0.210 in	7G-5831
27.68 in	31.65	0.210 in	5P-7989
35.12 in	39.37 in	0.210 in	8X-0559
40.55 in	49.21 in	0.210 in	139-7645
5.50 in	5.69 in	0.210 in	8W-3074
--	7.77 in	0.210 in	8X-0563
31.48 in	9.00 in	0.210 in	5T-4024
--	1.71 in	0.252 in	8N-6739
--	5.91 in	0.333 in	6T-0364
Spiral			
1.25 in	1.33 in	0.050 in	8H-1037
3.13 in	3.25 in	0.061 in	2J-7761
4.13 in	4.28 in	0.061 in	9M-6166
2.00 in	2.13 in	0.062 in	2D-0592
5.75 in	5.95 in	0.072 in	9H-3452
2.06 in	2.19 in	0.078 in	2K-6091
2.13 in	2.26 in	0.078 in	6H-9361
2.44 in	2.59 in	0.078 in	2D-1523
9.76 in	10.07 in	0.086 in	6P-8309
10.75 in	11.09 in	0.086 in	9M-1976
9.25 in	9.56 in	0.086 in	6V-7979
2.63 in	2.79 in	0.093 in	5S-7779
14.29 in	14.76 in	0.111 in	9W-3301
14.96 in	15.52 in	0.111 in	8E-2827
15.43 in	15.92 in	0.111 in	7T-8004
17.09 in	17.65 in	0.111 in	7X-2627
19.53 in	20.15 in	0.111 in	7X-2628
3.35 in	3.55 in	0.111 in	4M-8910
3.56 in	3.78 in	0.111 in	066-5816
3.94 in	4.18 in	0.111 in	8S-9104
4.33 in	4.59 in	0.111 in	5M-4480
4.50 in	4.77 in	0.111 in	3K-2556
4.75 in	5.03 in	0.111 in	3K-2559
5.00 in	5.30 in	0.111 in	1M-8649
5.12 in	5.44 in	0.127 in	5J-9454
5.25 in	5.56 in	0.127 in	2S-0613
6.00 in	6.31 in	0.127 in	7S-3004

(Continued)

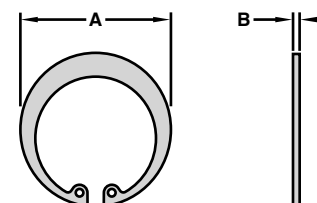
Snap Rings/Internal/Inch (Continued)

Bore Diameter	A	B	Part Number
	Free Diameter	Thickness	
Spiral (Continued)			
5.12 in	5.31 in	0.153 in	340-2367
7.00 in	7.37 in	0.156 in	340-2375
10.59 in	11.13 in	0.165 in	3W-2025
9.33 in	9.87 in	0.165 in	3W-2421
10.25 in	10.79 in	0.187 in	5P-9362
11.02 in	11.42 in	0.187 in	340-2381
--	12.76 in	0.187 in	5P-4256

Bore Diameter	A	B	Part Number
	Free Diameter	Thickness	
Spiral (Continued)			
13.52 in	14.07 in	0.187 in	5P-6651
18.61 in	19.30 in	0.187 in	5P-4041
7.37 in	7.76 in	0.187 in	340-2382
8.25 in	8.68 in	0.187 in	340-2377
9.05 in	9.47 in	0.187 in	340-2378

Snap Rings/External/Inch

- Made of tempered carbon steel.



Shaft Diameter	A	B	Part Number
	Free Diameter	Thickness	
3.27 in	2.97 in	0.142 in	6Y-5790
--	4.25 in	0.188 in	2M-4480
--	7.75 in	0.250 in	8K-2691
--	4.78 in	0.250 in	8P-4608
3.11 in	2.85 in	0.157 in	9W-5925
--	0.78 in	0.105 in	4H-8158
--	6.30 in	0.187 in	155-4881
--	0.62 in	0.038 in	4T-0933
--	0.52 in	0.035 in	7N-6825
--	7.76 in	0.156 in	6P-7983
--	3.15 in	0.187 in	4M-1708
--	2.16 in	0.207 in	6K-0468
--	2.16 in	0.125 in	5M-4443
--	2.69 in	0.187 in	6Y-1890
--	3.94 in	0.118 in	177-5241
3.74 in	3.58 in	0.126 in	315-6224
2.83 in	2.62 in	0.197 in	9W-5915
1.89 in	1.77 in	0.098 in	3E-3891
2.56 in	2.32 in	0.120 in	9W-6927
--	1.86 in	0.125 in	6S-3172
--	5.98 in	0.125 in	6P-3964
--	1.53 in	0.120 in	2B-9747
--	1.34 in	0.090 in	1A-4590
--	8.86 in	0.125 in	1W-2824
--	2.41 in	0.120 in	4B-1135
--	1.90 in	0.207 in	3K-9263
--	4.21 in	0.250 in	7P-6552

Shaft Diameter	A	B	Part Number
	Free Diameter	Thickness	
0.44 in	0.43 in	0.035 in	8C-5061
--	2.31 in	0.120 in	4H-6195
--	0.72 in	0.062 in	4F-3544
--	2.01 in	0.126 in	197-0087
3.55 in	3.35 in	0.157 in	9W-6278
--	1.88 in	0.157 in	213-4227
--	1.52 in	0.062 in	7S-4439
--	1.64 in	0.207 in	3K-9269
--	2.87 in	0.177 in	104-7336
1.50 in	1.38 in	0.098 in	145-0909
1.85 in	1.69 in	0.120 in	253-3262
--	1.81 in	0.120 in	4B-1136
--	0.91 in	0.060 in	6H-3455
--	6.04 in	0.250 in	7P-4796
--	5.32 in	0.138 in	155-9189
--	3.98 in	0.250 in	8G-1259
2.74 in	2.68 in	0.142 in	8E-2144
--	0.33 in	0.026 in	4N-2953
--	3.38 in	0.207 in	5K-7989
--	0.91 in	0.060 in	1A-6235
10.07 in	9.91 in	0.120 in	151-5729
--	5.12 in	0.179 in	4F-2198
--	1.62 in	0.120 in	4B-1127
--	2.37 in	0.120 in	1M-1655
--	6.75 in	0.177 in	3V-9541

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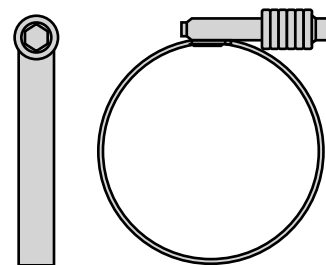
Snap Rings

Snap Rings/External/Inch (Continued)

Shaft Diameter	A	B	Part Number
	Free Diameter	Thickness	
3.02 in	2.79 in	0.126 in	147-5764
--	0.62 in	0.031 in	5I-9311
--	1.06 in	0.630 in	234-8962
--	3.88 in	0.207 in	7S-2020
--	6.00 in	0.244 in	2B-7862
--	2.26 in	0.188 in	3S-2619
--	2.28 in	0.095 in	3K-6701
--	1.56 in	0.118 in	3T-2405
--	1.37 in	0.120 in	2A-4758
--	4.86 in	0.250 in	7P-2781
--	0.67 in	0.102 in	4N-7521
--	2.31 in	0.125 in	6H-6237
--	0.61 in	0.060 in	3J-6008
--	2.64 in	0.138 in	099-6975
--	0.62 in	0.083 in	096-4032
--	1.81 in	0.120 in	9W-6904
3.35 in	3.15 in	0.157 in	9W-6277
--	2.12 in	0.120 in	9H-6425
2.56 in	2.39 in	0.102 in	7Y-4955
--	2.33 in	0.188 in	4S-6712
3.03 in	2.75 in	0.120 in	5P-9863
0.50 in	0.46 in	0.059 in	6P-1037
--	2.02 in	0.063 in	096-7380
4.02 in	3.78 in	0.207 in	6V-2835
--	4.44 in	0.188 in	2P-3421
--	0.21 in	0.020 in	7N-8821
--	0.40 in	0.059 in	2S-1387
--	1.06 in	0.236 in	243-2101
--	8.75 in	0.187 in	1J-6269
--	6.46 in	0.079 in	136-2444
--	3.09 in	0.207 in	7K-4520
--	1.61 in	0.120 in	9W-6926
0.98 in	0.89 in	0.079 in	3E-4332
--	2.14 in	0.135 in	4M-1709
1.93 in	1.76 in	0.120 in	7T-7162
--	1.75 in	0.105 in	4K-1240
--	1.65 in	0.098 in	274-8635
--	0.78 in	0.079 in	130-8150
--	6.88 in	0.177 in	9C-7368
--	2.36 in	0.126 in	195-6899
--	2.71 in	0.188 in	8S-6328
--	0.39 in	0.062 in	5B-6161
--	3.19 in	0.120 in	165-0512
--	2.25 in	0.125 in	6H-2953
--	3.12 in	0.187 in	2M-4479

Shaft Diameter	A	B	Part Number
	Free Diameter	Thickness	
2.80 in	2.50 in	0.120 in	5P-9862
--	0.16 in	0.020 in	1W-0565
--	1.44 in	0.091 in	191-2164
2.24 in	2.07 in	0.063 in	094-1399
1.00 in	0.93 in	0.042 in	001-5600
1.38 in	1.27 in	0.050 in	1J-6474
2.12 in	1.96 in	0.078 in	1K-6984
0.98 in	0.91 in	0.042 in	1L-8497
4.25 in	3.99 in	0.109 in	1N-5410
3.16 in	2.92 in	0.093 in	1N-8620
0.75 in	0.69 in	0.042 in	2J-6356
1.77 in	1.64 in	0.062 in	2J-7550
6.25 in	5.87 in	0.156 in	2L-0044
4.75 in	4.46 in	0.109 in	2L-0049
1.56 in	1.45 in	0.062 in	2L-6965
0.59 in	0.55 in	0.035 in	2L-8509
1.25 in	1.16 in	0.050 in	2M-4287
0.56 in	0.52 in	0.035 in	3D-2975
1.06 in	0.98 in	0.050 in	3K-8276
1.31 in	1.21 in	0.050 in	4D-8309
0.44 in	0.40 in	0.025 in	4H-0094
2.16 in	1.99 in	0.078 in	4K-4284
1.19 in	1.10 in	0.050 in	4M-5285
4.38 in	4.11 in	0.109 in	5H-5012
2.75 in	2.54 in	0.093 in	5J-3864
2.50 in	2.31 in	0.078 in	5K-4627
1.81 in	1.68 in	0.062 in	5K-9106
1.69 in	1.56 in	0.062 in	5L-2931
1.12 in	1.04 in	0.050 in	5L-4019
3.50 in	3.24 in	0.109 in	5L-4753
5.75 in	5.40 in	0.125 in	5L-8579
0.25 in	0.22 in	0.025 in	6H-5829
0.94 in	0.87 in	0.042 in	6H-6109
0.47 in	0.43 in	0.025 in	6L-3801
2.56 in	2.38 in	0.078 in	6S-1753
3.62 in	3.35 in	0.109 in	7J-6525
2.94 in	2.72 in	0.093 in	7J-6580
4.00 in	3.70 in	0.109 in	8F-1959
0.62 in	0.58 in	0.035 in	8F-4610
0.81 in	0.75 in	0.042 in	9F-5444
1.62 in	1.50 in	0.062 in	9L-2336
0.38 in	0.34 in	0.025 in	9M-7611
3.35 in	3.09 in	0.093 in	9S-4368
1.97 in	1.82 in	0.062 in	077-9687
2.62 in	2.43 in	0.078 in	1K-6992
1.88 in	1.74 in	0.062 in	1K-6995

Hose Clamps/Wave Seal



Working Diameter	Part Number
Belleville	
108 - 130 mm (4 1/4 - 5 1/8 in)	8T-4986
121 - 143 mm (4 3/4 - 5 5/8 in)	9X-6654
133 - 156 mm (5 1/4 - 6 1/8 in)	8T-4987
146 - 168 mm (5 3/4 - 6 5/8 in)	3E-7424
149 - 307 mm (5 7/8 - 12 1/8 in)	366-5879
159 - 181 mm (6 1/4 - 7 1/8 in)	8T-4988
17 - 32 mm (5/8 - 1 1/4 in)	159-1503
172 - 194 mm (6 3/4 - 7 3/4 in)	124-2732
184 - 206 mm (7 1/4 - 8 1/8 in)	8T-4989
21 - 27 mm (7/8 - 1 1/16 in)	9X-2488
210 - 232 mm (8 1/4 - 9 1/8 in)	8T-4990
248 - 270 mm (9 3/4 - 10 5/8 in)	116-8535
25 - 44 mm (1 - 1 3/4 in)	7X-7958
32 - 54 mm (1 1/4 - 2 1/8 in)	8T-4983
335 - 381 mm (13 1/4 - 15 in)	301-0402
45 - 67 mm (1 3/4 - 2 5/8 in)	8T-6703
57 - 79 mm (2 1/4 - 3 1/8 in)	8T-4984
83 - 105 mm (3 1/4 - 4 1/8 in)	8T-4985
95 - 118 mm (3 5/8 - 4 5/8 in)	9X-2201
T-Bolt Spring	
100 - 106.1 mm (4 - 4 1/8 in)	216-6947
103.12 - 111 mm (4 1/16 - 4 3/8 in)	307-9917
104.6 - 112.9 mm (4 1/8 - 4 7/16 in)	135-6259
104.65 - 112.78 mm (4 1/8 - 4 7/16 in)	208-7448
106.43 - 114.3 mm (4 3/16 - 4 1/2 in)	212-6932
109.5 - 115.6 mm (4 5/16 - 4 9/16 in)	209-4590
109.5 - 115.6 mm (4 5/16 - 4 9/16 in)	216-6946
112.7 - 120.6 mm (4 7/16 - 4 3/4 in)	230-3671
117.6 - 125.5 mm (4 5/8 - 5 in)	224-0807
120.65 - 128.52 mm (4 3/4 - 5 1/16 in)	250-2953
122.2 - 130 mm (4 13/16 - 5 1/8 in)	221-9208
128.5 - 136.4 mm (5 1/16 - 5 3/8 in)	222-2277
130.2 - 142.9 mm (5 1/8 - 5 5/8 in)	135-6260
130.3 - 138.2 mm (5 1/8 - 5 7/16 in)	219-0314
131.82 - 139.7 mm (5 3/16 - 5 1/2 in)	256-4448
133.35 - 141.22 mm (5 1/4 - 5 5/16 in)	247-1925
134.87 - 142.75 mm (5 5/16 - 5 5/8 in)	239-5609

Working Diameter	Part Number
T-Bolt Spring (Continued)	
135 - 147 mm (5 5/16 - 5 13/16 in)	147-1685
136.22 - 144.53 mm (5 3/8 - 5 11/16 in)	246-8026
136.65 - 144.53 mm (5 3/8 - 5 11/16 in)	226-0087
141.22 - 149.09 mm (5 9/16 - 5 7/8 in)	237-0226
143 - 150.88 mm (5 5/8 - 5 15/16 in)	220-4125
150.11 - 155.45 mm (5 29/32 - 6 1/8 in)	220-4126
152.42 - 160.32 mm (6 - 6 5/16 in)	240-2651
155.7 - 163.6 mm (6 1/8 - 6 7/16 in)	219-0313
155.7 - 168.4 mm (6 1/8 - 6 1/2 in)	135-6261
158.7 - 164.9 mm (6 1/4 - 6 1/2 in)	214-0584
158.75 - 171.45 mm (6 1/4 - 6 3/4 in)	233-8350
160.3 - 168.1 mm (6 5/16 - 6 5/8 in)	216-2212
160.3 - 168.1 mm (6 5/16 - 6 5/8 in)	216-2211
163.6 - 176.3 mm (6 7/16 - 6 15/16 in)	231-3264
165.1 - 171.2 mm (6 1/2 - 6 3/4 in)	224-0808
169.93 - 182.63 mm (6 3/4 - 7 3/16 in)	233-8351
181.1 - 188.99 mm (7 1/8 - 7 7/16 in)	230-2536
184.15 - 192.02 mm (7 1/4 - 7 9/16 in)	251-4184
185.67 - 198.37 mm (7 1/4 - 7 13/16 in)	233-8482
187.45 - 195.33 mm (7 3/8 - 7 11/16 in)	231-5210
188.98 - 201.68 mm (7 7/16 - 7 15/16 in)	233-8483
196.85 - 209.55 mm (7 3/4 - 8 1/4 in)	233-8354
206.38 - 214.25 mm (8 1/8 - 8 7/16 in)	289-4013
208 - 220.7 mm (8 3/16 - 8 11/16 in)	323-3315
211.07 - 223.77 mm (8 5/16 - 8 13/16 in)	233-8484
215.9 - 228.6 mm (8 1/2 - 9 in)	254-0816
216.78 - 224.65 mm (8 17/32 - 8 27/32 in)	230-2535
222.25 - 234.95 mm (8 3/4 - 9 1/4 in)	233-8356
254 - 266.7 mm (10 - 10 1/2 in)	230-2534
265.18 - 277.88 mm (10 7/16 - 10 15/16 in)	233-8485
268.22 - 280.92 mm (10 1/2 - 11 1/16 in)	251-0039
287.66 - 307.98 mm (11 21/64 - 12 1/8 in)	232-1779
35.05 - 39.12 mm (1 3/8 - 1 1/2 in)	250-2952
36.5 - 39.6 mm (1 7/16 - 1 9/16 in)	222-6962
42.9 - 47.4 mm (1 11/16 - 1 7/8 in)	220-3246
44.5 - 49 mm (1 3/4 - 1 15/16 in)	216-1649
46 - 52.4 mm (1 13/16 - 2 1/16 in)	232-4901

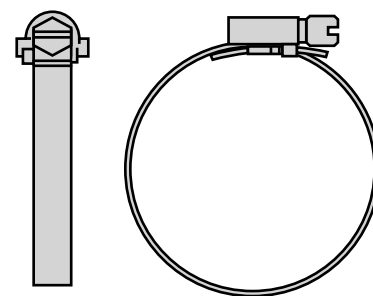
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Hose Clamps/Wave Seal (Continued)

Working Diameter	Part Number
T-Bolt Spring (Continued)	
47.6 - 53.7 mm (1 ⁷ / ₈ - 2 ⁷ / ₆₄ in)	222-1178
49.28 - 57.15 mm (1 ¹⁵ / ₁₆ - 2 ¹ / ₄ in)	296-5807
52.4 - 58.5 mm (2 ¹ / ₁₆ - 2 ⁵ / ₁₆ in)	221-5252
54.1 - 62 mm (2 ¹ / ₈ - 2 ⁷ / ₁₆ in)	215-4012
55.6 - 63.5 mm (2 ³ / ₁₆ - 2 ¹ / ₂ in)	263-9020
55.65 - 63.45 mm (2 ³ / ₁₆ - 2 ¹ / ₂ in)	215-4011
57.2 - 65 mm (2 ¹ / ₄ - 2 ⁵ / ₁₆ in)	212-6933
57.2 - 65 mm (2 ¹ / ₄ - 2 ⁵ / ₁₆ in)	214-7457
58.6 - 66.6 mm (2 ⁵ / ₁₆ - 2 ⁵ / ₈ in)	212-6934
58.7 - 66.5 mm (2 ⁵ / ₁₆ - 2 ⁵ / ₈ in)	214-7458
60.4 - 68.4 mm (2 ³ / ₈ - 2 ³ / ₄ in)	217-6885
61.9 - 69.9 mm (2 ⁷ / ₁₆ - 2 ³ / ₄ in)	223-9985
61.9 - 69.9 mm (2 ⁷ / ₁₆ - 2 ³ / ₄ in)	216-6944
63.45 - 71.45 mm (2 ¹ / ₂ - 2 ¹³ / ₁₆ in)	221-8571
63.5 - 71.4 mm (3 - 2 ¹³ / ₁₆ in)	215-4013
635 - 647 mm (25 - 25 ¹ / ₂ in)	313-5058
65.1 - 71.2 mm (2 ⁹ / ₁₆ - 2 ¹³ / ₁₆ in)	216-6945
68.25 - 76.25 mm (2 ¹¹ / ₁₆ - 3 in)	226-0449
68.25 - 76.25 mm (2 ¹¹ / ₁₆ - 3 in)	216-4983
68.3 - 78 mm (2 ¹¹ / ₁₆ - 3 ¹ / ₁₆ in)	324-3210
69.9 - 75.9 mm (2 ³ / ₄ - 3 in)	208-6054
69.9 - 77.7 mm (2 ³ / ₄ - 3 ¹ / ₁₆ in)	320-0635
71.4 - 79.2 mm (2 ¹³ / ₁₆ - 3 ¹ / ₈ in)	295-5550
71.4 - 79.2 mm (2 ¹³ / ₁₆ - 3 ¹ / ₈ in)	209-4573
73.2 - 81 mm (2 ⁷ / ₈ - 3 ³ / ₁₆ in)	209-4574
74.6 - 82.5 mm (2 ¹⁵ / ₁₆ - 3 ¹ / ₄ in)	209-4575
77.7 - 85.6 mm (3 ¹ / ₁₆ - 3 ³ / ₈ in)	209-4577
79.5 - 87.4 mm (3 ¹ / ₈ - 3 ⁷ / ₁₆ in)	208-6055
81 - 88.9 mm (3 ³ / ₁₆ - 3 ¹ / ₂ in)	209-4578

Working Diameter	Part Number
T-Bolt Spring (Continued)	
82.55 - 90.45 mm (3 ¹ / ₄ - 3 ⁵ / ₁₆ in)	209-4579
84.1 - 91.9 mm (3 ⁵ / ₁₆ - 3 ⁵ / ₈ in)	209-4580
85.9 - 93.7 mm (3 ³ / ₈ - 3 ¹¹ / ₁₆ in)	209-4581
87.3 - 95.2 mm (3 ⁷ / ₁₆ - 3 ³ / ₄ in)	209-4582
90.5 - 98.4 mm (3 ⁹ / ₁₆ - 3 ⁷ / ₈ in)	254-5633
92.2 - 100 mm (3 ⁵ / ₈ - 3 ¹⁵ / ₁₆ in)	166-1153
93.7 - 101.6 mm (3 ¹¹ / ₁₆ - 4 in)	209-4586
96.8 - 102.9 mm (3 ¹³ / ₁₆ - 4 ³ / ₆₄ in)	209-4588
98.4 - 104.5 mm (3 ⁷ / ₈ - 4 ⁷ / ₆₄ in)	209-4589
Wave Liner	
102 - 152 mm (4 - 6 in)	346-4792
124 - 173 mm (4 ⁷ / ₈ - 6 ¹³ / ₁₆ in)	342-9511
25 - 38 mm (1 - 1 ¹ / ₂ in)	289-9139
27 - 35 mm (1 ¹ / ₁₆ - 1 ³ / ₈ in)	284-3502
33 - 48 mm (1 ¹ / ₄ - 1 ⁷ / ₈ in)	335-8254
35 - 51 mm (1 ³ / ₈ - 2 in)	280-8911
39 - 57 mm (1 ¹ / ₂ - 2 ¹ / ₄ in)	300-6036
39 - 59 mm (1 ¹ / ₂ - 2 ⁵ / ₁₆ in)	347-3148
46 - 67 mm (1 ¹³ / ₁₆ - 2 ⁵ / ₈ in)	347-4163
48 - 70 mm (1 ⁷ / ₈ - 2 ³ / ₄ in)	314-7599
51 - 76 mm (2 - 3 in)	335-9214
56 - 83 mm (2 ³ / ₁₆ - 3 ¹ / ₄ in)	343-6821
60 - 89 mm (2 ³ / ₈ - 3 ¹ / ₂ in)	347-4165
60 - 91 mm (2 ³ / ₈ - 3 ⁹ / ₁₆ in)	346-9043
69 - 102 mm (2 ¹¹ / ₁₆ - 4 in)	343-1820
73 - 108 mm (2 ⁷ / ₈ - 4 ¹ / ₄ in)	346-4789
76 - 114 mm (3 - 4 ¹ / ₂ in)	346-4790
86 - 127 mm (3 ³ / ₈ - 5 in)	346-4791
94 - 140 mm (3 ¹¹ / ₁₆ - 5 ¹ / ₂ in)	346-4788

Standard Hose Clamps



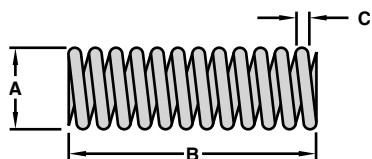
Working Diameter	Part Number
133 - 156 mm (5 1/4 - 6 1/8 in)	5P-0599
156 - 229 mm (6 1/8 - 9 in)	5P-0600
16 - 27 mm (5/8 - 1 1/16 in)	5D-1026
22 - 44 mm (7/8 - 1 3/4 in)	9M-7958
32 - 51 mm (1 1/4 - 2 in)	5P-2230

Working Diameter	Part Number
43 - 64 mm (1 11/16 - 2 1/2 in)	9M-0164
45 - 67 mm (1 3/4 - 2 5/8 in)	5P-0597
54 - 105 mm (2 1/8 - 4 1/8 in)	5P-0598
6 - 16 mm (1/4 - 5/8 in)	1P-4278
65 - 89 mm (2 9/16 - 3 1/2 in)	9M-7959
89 - 108 mm (3 1/2 - 4 1/4 in)	9M-6738

Clamp Style Recommendations

- For low pressure joints, up to 7 PSI, a standard worm drive clamp is recommended.
- For joints with higher pressure, which does not exceed 50 PSI, a constant pressure style clamp is recommended (T-Bolt, Belleville, and Wave Liner).
- For pressure lines exceeding 50 PSI, a T-Bolt style clamp or hose assembly with crimped fittings should be used.

Springs/Compression



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

A	B	C	Part Number
Outside Diameter	Length	Wire Diameter	
½ Inch (Continued)			
½ in	1 ⅝ in	0.031 in	3C-0585
½ in	1 ¾ in	0.125 in	3G-7402
½ in	1 ⅞ in	0.063 in	9M-1986
½ in	2 in	0.031 in	7M-7244
½ in	2 ¼ in	0.063 in	0L-1466
½ in	2 ½ in	0.063 in	6P-7701
½ in	2 ⅝ in	0.031 in	3N-5738
½ in	3 ¼ in	0.031 in	0L-1142
½ in	3 ¾ in	0.063 in	5B-1952
½ in	3 ⅞ in	0.094 in	5J-9605
½ in	4 ¼ in	0.063 in	5B-8858
½ in	4 ¾ in	0.063 in	5M-6110
½ in	4 ⅞ in	0.094 in	3T-7584
½ in	5 ⅜ in	0.094 in	6T-1318
½ in	5 ⅞ in	0.094 in	9S-9876
⅝ Inch			
⅝ in	¾ in	0.094 in	1K-7039
⅝ in	½ in	0.063 in	6T-8234
⅝ in	⅝ in	0.031 in	9N-6249
⅝ in	1 in	0.188 in	6B-3416
⅝ in	1 ⅛ in	0.094 in	6S-8736
⅝ in	1 ¼ in	0.094 in	9M-3091
⅝ in	1 ½ in	0.063 in	5B-3754
⅝ in	1 ⅜ in	0.063 in	3F-8845
⅝ in	1 ⅞ in	0.094 in	4F-9503
⅝ in	2 in	0.094 in	9W-1467
⅝ in	2 ⅛ in	0.063 in	2P-5700
⅝ in	2 ½ in	0.063 in	2F-5889
⅝ in	2 ¾ in	0.063 in	4F-6145
⅝ in	3 ⅛ in	0.094 in	4J-4051
⅝ in	3 ¼ in	0.063 in	1W-6077
⅝ in	3 ⅝ in	0.125 in	3P-7566
⅝ in	3 ½ in	0.063 in	6P-9784
⅝ in	3 ¾ in	0.125 in	4T-4033
⅝ in	4 ⅜ in	0.094 in	2P-4498
⅝ in	4 ½ in	0.125 in	9T-1676
⅝ in	2 ¼ in	0.063 in	5J-1787

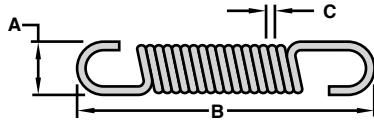
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Springs/Compression (Continued)

A	B	C	Part Number
Outside Diameter	Length	Wire Diameter	
3⁄4 Inch			
3⁄4 in	7⁄8 in	0.031 in	4T-2684
3⁄4 in	1 in	0.125 in	6F-4294
3⁄4 in	1 3⁄8 in	0.031 in	3N-7848
3⁄4 in	1 1⁄2 in	0.094 in	7M-3496
3⁄4 in	1 5⁄8 in	0.125 in	5F-2201
3⁄4 in	2 in	0.063 in	5F-9035
3⁄4 in	2 1⁄4 in	0.094 in	7G-5378
3⁄4 in	2 3⁄8 in	0.125 in	9S-8237
3⁄4 in	2 1⁄2 in	0.125 in	1K-4476
3⁄4 in	2 5⁄8 in	0.125 in	3D-2777
3⁄4 in	2 7⁄8 in	0.063 in	8F-3398
3⁄4 in	3 in	0.156 in	1K-9105
3⁄4 in	3 1⁄8 in	0.094 in	6H-1649
3⁄4 in	3 3⁄8 in	0.094 in	5H-7473
3⁄4 in	3 5⁄8 in	0.094 in	1U-1067
3⁄4 in	3 7⁄8 in	0.063 in	2H-6117
3⁄4 in	4 in	0.125 in	1S-5646
3⁄4 in	4 1⁄4 in	0.094 in	9F-6092
3⁄4 in	4 1⁄2 in	0.031 in	9T-8208
3⁄4 in	4 7⁄8 in	0.094 in	2S-6538
7⁄8 Inch			
7⁄8 in	7⁄16 in	0.063 in	3P-8042
7⁄8 in	15⁄16 in	0.063 in	9P-9211
7⁄8 in	1 3⁄16 in	0.094 in	8J-6080
7⁄8 in	2 in	0.094 in	9S-8632
7⁄8 in	2 3⁄16 in	0.094 in	9H-4204
7⁄8 in	2 7⁄16 in	0.125 in	4M-6012
7⁄8 in	2 7⁄8 in	0.125 in	1W-9860
7⁄8 in	3 in	0.125 in	5N-3015
7⁄8 in	3 1⁄8 in	0.125 in	3P-0246
7⁄8 in	3 3⁄8 in	0.125 in	1W-2208
7⁄8 in	3 1⁄2 in	0.125 in	9L-9243
7⁄8 in	4 3⁄8 in	0.063 in	5M-6111
7⁄8 in	4 1⁄2 in	0.094 in	6K-4302
7⁄8 in	4 5⁄8 in	0.125 in	6B-8809
7⁄8 in	5 3⁄8 in	0.156 in	4D-7637
7⁄8 in	5 1⁄2 in	0.094 in	7M-1405
7⁄8 in	5 5⁄8 in	0.156 in	5D-6293
7⁄8 in	5 15⁄16 in	0.094 in	4H-1221
7⁄8 in	6 7⁄16 in	0.125 in	4D-9469
7⁄8 in	7 1⁄4 in	0.125 in	7D-6198

A	B	C	Part Number
Outside Diameter	Length	Wire Diameter	
1 Inch			
1 in	⅝ in	0.063 in	9T-1699
1 in	⅞ in	0.125 in	7W-2110
1 in	1 in	0.094 in	7V-0444
1 in	1 ⅛ in	0.094 in	9P-8308
1 in	1 ¼ in	0.094 in	6T-7221
1 in	1 ⅜ in	0.094 in	7J-0736
1 in	1 ½ in	0.125 in	1P-0620
1 in	1 ⅝ in	0.063 in	4N-5663
1 in	1 ¾ in	0.125 in	1S-7592
1 in	1 ⅞ in	0.063 in	9F-1993
1 in	2 in	0.094 in	2S-8398
1 in	2 ⅛ in	0.125 in	9T-2168
1 in	2 ¼ in	0.156 in	8H-9488
1 in	2 ⅜ in	0.094 in	2J-0075
1 in	2 ½ in	0.125 in	7W-7700
1 in	2 ⅝ in	0.125 in	3V-5498
1 in	2 ¾ in	0.094 in	8J-3819
1 in	2 ⅞ in	0.125 in	6L-2084
1 in	3 in	0.094 in	4J-7066
1 in	3 ⅛ in	0.094 in	5J-3719
1 in	3 ¼ in	0.094 in	8J-1705
1 in	3 ⅝ in	0.188 in	039-8820
1 in	3 ½ in	0.156 in	9T-1848
1 in	3 ¾ in	0.094 in	5J-3419
1 in	4 in	0.063 in	4B-4910
1 in	4 ⅛ in	0.063 in	1L-1098
1 in	4 ¼ in	0.156 in	6L-4173
1 in	4 ½ in	0.156 in	9J-5002
1 in	4 ¾ in	0.094 in	8J-6728
1 in	4 ⅞ in	0.125 in	5M-5526
1 in	5 in	0.063 in	3L-4521
1 in	5 ¼ in	0.094 in	8J-5839
1 in	5 ⅝ in	0.188 in	8M-1955
1 in	5 ½ in	0.188 in	6N-1320
1 in	5 ⅝ in	0.156 in	4M-0804
1 in	6 ⅛ in	0.156 in	2S-2760
1 in	6 ¼ in	0.094 in	4F-6446
1 in	6 ½ in	0.125 in	6D-0314
1 in	6 ⅞ in	0.125 in	5M-7884

Springs/Extension



A	B	C	Part Number
Outside Diameter	Length	Wire Diameter	
$\frac{5}{16}$ Inch			
$\frac{5}{16}$ in	$2\frac{13}{32}$ in	0.031 in	038-8415
$\frac{5}{16}$ in	1 in	0.094 in	039-9138
$\frac{5}{16}$ in	$1\frac{7}{16}$ in	0.031 in	1A-3540
$\frac{5}{16}$ in	$1\frac{11}{16}$ in	0.031 in	3C-0481
$\frac{5}{16}$ in	$1\frac{1}{4}$ in	0.035 in	7F-7613
$\frac{3}{8}$ Inch			
$\frac{3}{8}$ in	$1\frac{1}{2}$ in	0.063 in	1A-1376
$\frac{3}{8}$ in	$4\frac{9}{32}$ in	0.047 in	5H-4291
$\frac{3}{8}$ in	$1\frac{5}{8}$ in	0.063 in	7L-4563
$\frac{1}{2}$ Inch			
$\frac{1}{2}$ in	$1\frac{1}{2}$ in	0.063 in	090-3006
$\frac{1}{2}$ in	2 in	0.063 in	1A-0302
$\frac{1}{2}$ in	$1\frac{1}{4}$ in	0.063 in	8L-8491
$\frac{9}{16}$ Inch			
$\frac{9}{16}$ in	$4\frac{1}{4}$ in	0.063 in	2R-0416
$\frac{9}{16}$ in	$1\frac{5}{8}$ in	0.063 in	5M-9708
$\frac{5}{8}$ Inch			
$\frac{5}{8}$ in	$2\frac{1}{8}$ in	0.063 in	001-2809
$\frac{5}{8}$ in	$2\frac{7}{8}$ in	0.031 in	001-2810
$\frac{5}{8}$ in	4 in	0.063 in	001-2811
$\frac{5}{8}$ in	$1\frac{3}{8}$ in	0.063 in	9F-0965
$1\frac{1}{16}$ Inch			
$1\frac{1}{16}$ in	4 in	0.094 in	1D-1313
$1\frac{1}{16}$ in	6 in	0.094 in	7D-5289
$\frac{3}{4}$ Inch			
$\frac{3}{4}$ in	$2\frac{5}{32}$ in	0.063 in	1A-8189
$\frac{25}{32}$ Inch			
$\frac{25}{32}$ in	$3\frac{3}{4}$ in	0.094 in	1F-4449
$\frac{7}{8}$ Inch			
$\frac{7}{8}$ in	2 in	0.094 in	2D-9871
$\frac{7}{8}$ in	$3\frac{1}{8}$ in	0.125 in	5G-1684
$\frac{7}{8}$ in	4 in	0.125 in	7G-1251
$\frac{7}{8}$ in	$2\frac{1}{4}$ in	0.125 in	8L-5917
$\frac{7}{8}$ in	$3\frac{1}{4}$ in	0.094 in	8Y-4581
$\frac{7}{8}$ in	$3\frac{13}{16}$ in	0.094 in	9S-1312
1 Inch			
1 in	4 in	0.094 in	009-2445
1 in	$5\frac{1}{8}$ in	0.094 in	035-7877
1 in	$5\frac{3}{8}$ in	0.156 in	038-2805
$1\frac{3}{16}$ Inch			
$1\frac{3}{16}$ in	$6\frac{1}{2}$ in	0.156 in	091-7881
$1\frac{3}{16}$ in	$5\frac{3}{8}$ in	0.125 in	091-7882
$1\frac{3}{16}$ in	$5\frac{5}{32}$ in	0.156 in	9P-9185

Springs Extension/Crossover Loop

Outside Diameter	Length	Wire Diameter	End Configuration	Spring End Orientation	Part Number
1 1/16 in	8 3/4 in	0.105 in	Crossover Loop	360	9H-6700
1 3/32 in	5 13/32 in	0.091 in	Crossover Loop	360	5K-5697
49/64 in	8 29/64 in	0.091 in	Crossover Loop	180	4M-4014
1 in	7 1/2 in	0.120 in	Crossover Loop	90	4B-6493
3/4 in	4 17/64 in	0.091 in	Crossover Loop	360	1M-0437
1 1/2 in	7 in	0.148 in	Crossover Loop	360	119-0952

Springs Extension/Machine Hook

Outside Diameter	Length	Wire Diameter	End Configuration	Spring End Orientation	Part Number
1 1/4 in	5 1/2 in	0.162 in	Machine Hook	180	149-2065
15/32 in	2 5/8 in	0.048 in	Machine Hook	90	4F-6123
15/32 in	2 1/16 in	0.047 in	Machine Hook	180	9D-1058
31/64 in	1 1/4 in	0.059 in	Machine Hook	180	8L-8491
1/2 in	2 61/64 in	0.072 in	Machine Hook	360	1S-6889
1/2 in	5 29/64 in	0.058 in	Machine Hook	360	9L-6626
1/2 in	2 3/4 in	0.048 in	Machine Hook	90	3W-6485
17/32 in	1 9/16 in	0.047 in	Machine Hook	90	8P-2290
9/16 in	1 5/8 in	0.072 in	Machine Hook	180	5M-9708
9/16 in	3 7/8 in	0.055 in	Machine Hook	180	203-7559
1 5/8 in	5 27/32 in	0.207 in	Machine Hook	360	4E-8340
25/32 in	3 13/64 in	0.024 in	Machine Hook	180	8Y-4581
51/64 in	3 7/64 in	0.207 in	Machine Hook	180	8W-2823
3/4 in	3 15/32 in	0.079 in	Machine Hook	180	159-9875
13/16 in	2 23/64 in	0.069 in	Machine Hook	180	176-2447
7/8 in	4 1/8 in	0.120 in	Machine Hook	180	7G-1251
7/8 in	2 61/64 in	0.135 in	Machine Hook	360	318-9461
7/8 in	5 1/4 in	0.120 in	Machine Hook	360	1H-2348
1 in	5 17/64 in	0.120 in	Machine Hook	360	9R-1587
1 in	5 1/2 in	0.115 in	Machine Hook	180	141-6343
1 3/32 in	3 in	0.091 in	Machine Hook	180	6K-1898
1 3/32 in	3 1/8 in	0.160 in	Machine Hook	360	194-7034
1 1/8 in	4 7/8 in	0.148 in	Machine Hook	360	9D-2641
1 1/8 in	11 in	0.135 in	Machine Hook	90	6K-1961
1 5/32 in	4 59/64 in	0.157 in	Machine Hook	90	090-8612
1 5/32 in	5 5/32 in	0.162 in	Machine Hook	180	9P-9185
1 3/16 in	5 11/32 in	0.138 in	Machine Hook	180	296-5446
1 1/4 in	6 5/16 in	0.162 in	Machine Hook	360	2J-2664
1 19/64 in	6 1/64 in	0.234 in	Machine Hook	360	103-4867
1 19/64 in	2 25/32 in	0.156 in	Machine Hook	360	111-3780
1 11/32 in	6 3/4 in	0.162 in	Machine Hook	360	7B-5594
1 13/32 in	12 1/2 in	0.156 in	Machine Hook	90	5H-6044
1 5/8 in	10 3/16 in	0.187 in	Machine Hook	90	4F-2943
9/16 in	2 1/8 in	0.076 in	Machine Hook	90	2G-3765
9/16 in	2 11/32 in	0.072 in	Machine Hook	360	2P-3682
37/64 in	2 9/16 in	0.098 in	Machine Hook	360	4M-8799
5/8 in	2 19/64 in	0.091 in	Machine Hook	180	2S-1381
21/32 in	3 5/16 in	0.120 in	Machine Hook	90	6W-5817

(Continued)

Springs Extension/Machine Hook (Continued)

Outside Diameter	Length	Wire Diameter	End Configuration	Spring End Orientation	Part Number
$1\frac{1}{16}$ in	$1\frac{43}{64}$ in	0.062 in	Machine Hook	180	3B-9762
$1\frac{1}{16}$ in	$3\frac{15}{16}$ in	0.091 in	Machine Hook	180	1D-1313
$1\frac{1}{16}$ in	2 in	0.076 in	Machine Hook	360	8M-1019
$1\frac{1}{16}$ in	2 in	0.078 in	Machine Hook	360	8C-3442
$1\frac{1}{16}$ in	$4\frac{3}{4}$ in	0.091 in	Machine Hook	90	8D-8456
$1\frac{1}{16}$ in	6 in	0.091 in	Machine Hook	180	7D-5289
$\frac{45}{64}$ in	$1\frac{29}{32}$ in	0.063 in	Machine Hook	90	3Y-2806
$\frac{23}{32}$ in	$2\frac{9}{32}$ in	0.080 in	Machine Hook	90	1U-1648
$\frac{3}{4}$ in	$7\frac{1}{2}$ in	0.331 in	Machine Hook	90	7G-6942
$\frac{15}{16}$ in	$3\frac{27}{32}$ in	0.438 in	Machine Hook	360	3W-4324
2 in	$11\frac{33}{64}$ in	0.263 in	Machine Hook	360	125-5071
$2\frac{1}{8}$ in	13 in	0.283 in	Machine Hook	180	344-6306
$2\frac{1}{2}$ in	$9\frac{1}{16}$ in	0.225 in	Machine Hook	180	6G-0254
3 in	$19\frac{11}{16}$ in	0.394 in	Machine Hook	90	229-0108
$\frac{9}{16}$ in	3 in	0.062 in	Machine Hook	90	9L-7372
$\frac{9}{16}$ in	$4\frac{1}{4}$ in	0.063 in	Machine Hook	180	106-0070

Springs Extension/Machine Loop

Outside Diameter	Length	Wire Diameter	End Configuration	Spring End Orientation	Part Number
$\frac{3}{4}$ in	$5\frac{1}{4}$ in	0.080 in	Machine Loop	90	7D-9722
$\frac{1}{2}$ in	$1\frac{39}{64}$ in	0.062 in	Machine Loop	90	4H-3521
$\frac{1}{2}$ in	2 in	0.062 in	Machine Loop	180	1A-0302
$\frac{5}{8}$ in	$3\frac{3}{4}$ in	0.080 in	Machine Loop	360	4M-1768
$\frac{5}{8}$ in	$4\frac{1}{16}$ in	0.080 in	Machine Loop	360	4S-8569
$\frac{21}{32}$ in	$5\frac{13}{32}$ in	0.072 in	Machine Loop	360	5N-5291
$1\frac{5}{32}$ in	$4\frac{29}{32}$ in	0.157 in	Machine Loop	90	300-0541

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
222-9996	Inch - Coarse	Phosphate and Oil	38 Part Numbers	1420	12-Point
222-9997	Inch - Fine	Phosphate and Oil	40 Part Numbers	1570	12-Point
222-9998	Inch - Coarse	Zinc Dichromate	59 Part Numbers	2175	Hex
222-9999	Inch - Coarse	Zinc Dichromate	38 Part Numbers	1520	Hex
223-0000	Metric - Coarse	Phosphate and Oil	56 Part Numbers	1965	Hex
223-0001	Metric - Coarse	Zinc Dichromate	56 Part Numbers	1985	Hex
223-0002	Metric - Coarse	Zinc Dichromate	38 Part Numbers	1510	Hex
223-0003	Inch - Coarse	Phosphate and Oil	38 Part Numbers	1420	Socket
223-0004	Metric - Coarse	Phosphate and Oil	38 Part Numbers	1420	Socket
3E-6640	Inch - Coarse	Phosphate and Oil	59 Part Numbers	1735	Hex
3E-9420	Inch - Coarse	Phosphate and Oil	38 Part Numbers	1975	Hex
3E-9421	Inch - Fine	Phosphate and Oil	38 Part Numbers	1650	Hex
3E-9422	Metric - Coarse	Phosphate and Oil	38 Part Numbers	1580	Hex

Hardware Shop and 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	Phosphate and oil	Large	24 Part Numbers	476
178-2208	Inch - Fine	Phosphate and oil	Small	29 Part Numbers	894
178-2209	Inch - Coarse	Phosphate and oil	Small	27 Part Numbers	502
178-2210	Inch - Coarse	Phosphate and oil	Large	34 Part Numbers	936
178-2211	Metric - Coarse	Phosphate and 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	⅝ -18 × ½ in Hex Head Bolt	50	1C-0569
247-0203	⅝ -18 × ¾ in Hex Head Bolt	50	0S-1617
247-0204	⅝ -18 × 1 in Hex Head Bolt	25	0S-1618
247-0205	⅝ -18 × 1 ¼ in Hex Head Bolt	25	1B-7182
247-0206	⅝ -18 × 1 ½ in Hex Head Bolt	25	1A-9579

Retail Package Part No.	Description	Consists of:	
		Retail Pkg. Qty.	Bulk Part No.
247-0207	⅝ -18 × 1 ¾ in Hex Head Bolt	25	1B-9575
247-0208	⅝ -18 × 2 in Hex Head Bolt	25	2B-2694
247-0209	⅝ -18 × 2 ¼ in Hex Head Bolt	25	1D-4538
247-0210	⅝ -18 × 2 ½ in Hex Head Bolt	25	1D-4539
247-0211 ¹	⅝ -18 × 2 ¾ in Hex Head Bolt	25	1D-4540
247-0212	⅝ -18 × 3 in Hex Head Bolt	10	1D-4541
247-0213	⅝ in Hard Washer	25	9M-1974
247-0214	⅝ in Lock Washer	100	3B-4505
247-0215	⅝ -18 Full Nut	50	5S-0003
247-0216	⅜ -16 × ½ in Hex Head Bolt	50	4F-4879
247-0217 ¹	⅜ -16 × ¾ in Hex Head Bolt	25	0S-0509
247-0218	⅜ -16 × 1 in Hex Head Bolt	25	0S-1594
247-0219 ¹	⅜ -16 × 1 ¼ in Hex Head Bolt	25	0S-1588
247-0220	⅜ -16 × 1 ½ in Hex Head Bolt	25	0S-1591
247-0221	⅜ -16 × 1 ¾ in Hex Head Bolt	25	0S-1571
247-0222	⅜ -16 × 2 in Hex Head Bolt	25	0S-1590
247-0223 ¹	⅜ -16 × 2 ¼ in Hex Head Bolt	10	0L-2070
247-0224	⅜ -16 × 2 ½ in Hex Head Bolt	10	0L-1143
247-0225	⅜ -16 × 2 ¾ in Hex Head Bolt	10	0T-0573

(Continued)

Convenient Hardware Packages (Continued)

Retail Package Part No.	Description	Consists of:	
		Retail Pkg. Qty.	Bulk Part No.
247-0226	$\frac{3}{8}$ -16 $\times$ 3 in Hex Head Bolt	10	OS-1619
247-0227	$\frac{3}{8}$ in Hard Washer	25	5M-2894
247-0228 ¹	$\frac{3}{8}$ in Lock Washer	100	3B-4506
247-0229 ¹	$\frac{3}{8}$ -16 Full Nut	50	9S-8752
247-0230	$\frac{1}{2}$ -13 $\times$ $\frac{1}{2}$ in Hex Head Bolt	25	1K-6705
247-0231	$\frac{1}{2}$ -13 $\times$ $\frac{3}{4}$ in Hex Head Bolt	25	OS-1620
247-0232	$\frac{1}{2}$ -13 $\times$ 1 in Hex Head Bolt	25	OS-1621
247-0233	$\frac{1}{2}$ -13 $\times$ 1 $\frac{1}{4}$ in Hex Head Bolt	10	OS-1595
247-0234	$\frac{1}{2}$ -13 $\times$ 1 $\frac{1}{2}$ in Hex Head Bolt	10	OS-1585
247-0235	$\frac{1}{2}$ -13 $\times$ 1 $\frac{3}{4}$ in Hex Head Bolt	10	OS-1587
247-0236	$\frac{1}{2}$ -13 $\times$ 2 in Hex Head Bolt	10	1A-1460
247-0237	$\frac{1}{2}$ -13 $\times$ 2 $\frac{1}{4}$ in Hex Head Bolt	5	2B-0947
247-0238	$\frac{1}{2}$ -13 $\times$ 2 $\frac{1}{2}$ in Hex Head Bolt	5	9S-1366
247-0239	$\frac{1}{2}$ -13 $\times$ 2 $\frac{3}{4}$ in Hex Head Bolt	5	1A-5822
247-0240	$\frac{1}{2}$ -13 $\times$ 3 in Hex Head Bolt	5	0L-1329
247-0241	$\frac{1}{2}$ in Hard Washer	25	5P-8245
247-0242	$\frac{1}{2}$ in Lock Washer	50	3B-4508
247-0243	$\frac{1}{2}$ -13 Full Nut	25	1F-7958
247-0244 ¹	$\frac{5}{8}$ -11 $\times$ $\frac{3}{4}$ in Hex Head Bolt	10	1H-9456
247-0245	$\frac{5}{8}$ -11 $\times$ 1 in Hex Head Bolt	10	OS-1624
247-0246	$\frac{5}{8}$ -11 $\times$ 1 $\frac{1}{4}$ in Hex Head Bolt	10	OS-1592
247-0247 ¹	$\frac{5}{8}$ -11 $\times$ 1 $\frac{1}{2}$ in Hex Head Bolt	5	OS-1566
247-0248	$\frac{5}{8}$ -11 $\times$ 1 $\frac{3}{4}$ in Hex Head Bolt	5	OS-1589
247-0249	$\frac{5}{8}$ -11 $\times$ 2 in Hex Head Bolt	5	1A-1135
247-0250 ¹	$\frac{5}{8}$ -11 $\times$ 2 $\frac{1}{4}$ in Hex Head Bolt	5	8S-9092
247-0251	$\frac{5}{8}$ -11 $\times$ 2 $\frac{1}{2}$ in Hex Head Bolt	5	OS-1625
247-0252 ¹	$\frac{5}{8}$ -11 $\times$ 2 $\frac{3}{4}$ in Hex Head Bolt	5	1A-8537
247-0253 ¹	$\frac{5}{8}$ -11 $\times$ 3 in Hex Head Bolt	5	1B-4367
247-0254 ¹	$\frac{5}{8}$ in Hard Washer	10	5P-8247
247-0255 ¹	$\frac{5}{8}$ in Lock Washer	25	3B-4510
247-0256 ¹	$\frac{5}{8}$ -11 Full Nut	10	4K-0367
247-0583 ¹	M6 $\times$ 1, 12 mm, Hex Head Bolt	50	8T-0639
247-0584	M6 $\times$ 1, 16 mm, Hex Head Bolt	50	6V-8837
247-0585 ¹	M6 $\times$ 1, 20 mm, Hex Head Bolt	50	6V-8214
247-0586 ¹	M6 $\times$ 1, 25 mm, Hex Head Bolt	50	6V-8490
247-0587 ¹	M6 $\times$ 1, 30 mm, Hex Head Bolt	25	8T-0640
247-0588 ¹	M6 $\times$ 1, 35 mm, Hex Head Bolt	50	6V-2315
247-0589 ¹	M6 $\times$ 1, 40 mm, Hex Head Bolt	25	2V-9499
247-0590 ¹	M6 $\times$ 1, 45 mm, Hex Head Bolt	25	6V-7728
247-0591 ¹	M6 $\times$ 1, 50 mm, Hex Head Bolt	25	8T-0275
247-0592	M6 Washer, Hex Head Bolt	50	9X-8267
247-0593 ¹	M6 $\times$ 1, Hex Nut	50	6V-8225
247-0594 ¹	M8 $\times$ 1.25, 16 mm, Hex Head Bolt	50	6V-5215
247-0595 ¹	M8 $\times$ 1.25, 20 mm, Hex Head Bolt	50	6V-5217
247-0596	M8 $\times$ 1.25, 25 mm, Hex Head Bolt	25	6V-3940
247-0597 ¹	M8 $\times$ 1.25, 30 mm, Hex Head Bolt	25	6V-2317
247-0598	M8 $\times$ 1.25, 35 mm, Hex Head Bolt	25	6V-5218
247-0599 ¹	M8 $\times$ 1.25, 40 mm, Hex Head Bolt	25	6V-5219
247-0600 ¹	M8 $\times$ 1.25, 45 mm, Hex Head Bolt	25	8T-0276
247-0601 ¹	M8 $\times$ 1.25, 50 mm, Hex Head Bolt	25	6V-3918
247-0602 ¹	M8 $\times$ 1.25, 60 mm, Hex Head Bolt	10	8T-0100

(Continued)

Convenient Hardware Packages

Convenient Hardware Packages (Continued)

Retail Package Part No.	Description	Consists of:	
		Retail Pkg. Qty.	Bulk Part No.
247-0603 ¹	M8 × 1.25, 70 mm, Hex Head Bolt	10	5P-8347
247-0604 ¹	M8 Washer	25	9M-1974
247-0605 ¹	M8 × 1.25, Hex Nut	50	5P-7970
247-0606 ¹	M10 × 1.5, 20 mm, Hex Head Bolt	25	6V-6317
247-0607 ¹	M10 × 1.5, 25 mm, Hex Head Bolt	25	6V-4248
247-0608	M10 × 1.5, 30 mm, Hex Head Bolt	25	6V-1820
247-0609 ¹	M10 × 1.5, 35 mm, Hex Head Bolt	25	6V-3822
247-0610	M10 × 1.5, 40 mm, Hex Head Bolt	10	6V-5842
247-0611	M10 × 1.5, 45 mm, Hex Head Bolt	10	6V-5843
247-0612	M10 × 1.5, 50 mm, Hex Head Bolt	10	6V-4249
247-0613 ¹	M10 × 1.5, 60 mm, Hex Head Bolt	10	6V-5230
247-0614 ¹	M10 × 1.5, 65 mm, Hex Head Bolt	10	8T-5035
247-0615 ¹	M10 × 1.5, 70 mm, Hex Head Bolt	10	6V-7981
247-0616	M10 Washer	25	6V-5839
247-0617	M10 × 1.50, Hex Nut	25	2Y-5829
247-0618 ¹	M12 × 1.75, 20 mm, Hex Head Bolt	10	8T-0293
247-0619 ¹	M12 × 1.75, 25 mm, Hex Head Bolt	25	6A-5591
247-0620 ¹	M12 × 1.75, 30 mm, Hex Head Bolt	10	6V-3668
247-0621 ¹	M12 × 1.75, 35 mm, Hex Head Bolt	10	6V-8675
247-0622	M12 × 1.75, 40 mm, Hex Head Bolt	10	6V-8197
247-0623	M12 × 1.75, 45 mm, Hex Head Bolt	10	6V-5684
247-0624	M12 × 1.75, 50 mm, Hex Head Bolt	10	6V-7673

Retail Package Part No.	Description	Consists of:	
		Retail Pkg. Qty.	Bulk Part No.
247-0625 ¹	M12 × 1.75, 60 mm, Hex Head Bolt	5	6V-3823
247-0626	M12 Washer	25	5P-8245
247-0627 ¹	M12 × 1.75, Hex Nut	25	6V-8149
247-0698 ¹	Hose Clamp 54 mm — 105 mm	2	5P-0598
247-0699 ¹	Hose Clamp 60 mm — 82 mm	2	5P-4868
247-0700 ¹	Hose Clamp 45 mm — 67 mm	2	5P-0597
247-0701 ¹	Hose Clamp 16 mm — 27 mm	5	5D-1026
247-0702	Hose Clamp 6 mm — 16 mm	6	1P-4278
247-0703 ¹	Hose Clamp 108 mm — 130 mm	2	5P-1717
247-0717	Cotter Pin ½ in × 1 in Lg	50	3B-4617
247-0718 ¹	Cotter Pin ½ in × ¾ in Lg	50	3B-4615
247-0719 ¹	Cotter Pin ⅜ in × ½ in Lg	50	3B-4607
247-0720 ¹	Cotter Pin ½ in × 2 in Lg	50	3B-4621
247-0721 ¹	Cotter Pin ⅜ in × 1 ¼ in Lg	50	3B-4618
247-0749 ¹	Fuse (10 Amp)	5	3K-8782
247-0750 ¹	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 ¹	Mini Fuse (15 Amp)	5	113-8491
247-0754	Mini Fuse (20 Amp)	5	113-8492
247-0755 ¹	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 ¹	Cable Strap 355.6 mm (14 in) long 4.9 mm (0.194 in) wide	10	6K-0806
247-0764 ¹	Cable Strap 355.6 mm (14 in) long 7.9 mm (0.310 in) wide	10	7K-1181

¹Not available for individual sale

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 m (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



