

# FASTENERS - HEX HEAD CAP SCREWS AND HEX NUTS

## Grade 8 Plus Hex Head Cap Screws



- Grade 8 Plus Plating
- UNC (USS) or UNF (SAE)
- Exceeds SAE J429 Grade 8 and ASTM A354-BD tensile strength requirements
- Special high-strength medium carbon alloy steel
- Through-hardened
- 180,000-200,000 psi tensile strength (190,000 psi average)

GRADE 8 PLUS HEX HEAD CAP SCREWS										
UNC (USS) Part No. TPI-20	UNF (SAE) Part No. TPI-28	Dia. (In.)	Length (In.)	Packaged Quantity		UNC (USS) Part No. TPI-16	UNF (SAE) Part No. TPI-24	Dia. (In.)	Length (In.)	Packaged Quantity
36000	36300	1/4	1/2	100		36056	36356	3/8	1 1/2	100
36001	36301	1/4	5/8	100		36057	36357	3/8	1 3/4	100
36002	36302	1/4	3/4	100		36058	36358	3/8	2	50
36003	*	1/4	7/8	100		36059	36359	3/8	2 1/4	50
36004	36304	1/4	1	100		36060	36360	3/8	2 1/2	50
36005	36305	1/4	1 1/4	100		36061	36361	3/8	2 3/4	50
36006	36306	1/4	1 1/2	100		36062	36362	3/8	3	50
36007	36307	1/4	1 3/4	100		36063	36363	3/8	3 1/4	50
36008	36308	1/4	2	100		36064	36364	3/8	3 1/2	50
36009	36309	1/4	2 1/4	100		36065	*	3/8	3 3/4	50
36010	36310	1/4	2 1/2	100		36066	36366	3/8	4	25
36011	36311	1/4	2 3/4	100		36067	36367	3/8	4 1/2	25
36012	36312	1/4	3	50		36068	36368	3/8	5	25
36012-1	*	1/4	3 1/4	50		36069	36369	3/8	5 1/2	25
36013	36313	1/4	3 1/2	50		36070	36370	3/8	6	25
36014	36314	1/4	4	50		36071	*	3/8	6 1/2	25
						36072	*	3/8	7	25
UNC (USS) Part No. TPI-18	UNF (SAE) Part No. TPI-24	Dia. (In.)	Length (In.)	Packaged Quantity		UNC (USS) Part No. TPI-14	UNF (SAE) Part No. TPI-20	Dia. (In.)	Length (In.)	Packaged Quantity
36025	36325	5/16	1/2	100		36077	36377	7/16	3/4	50
36026	*	5/16	5/8	100		36079	36379	7/16	1	50
36027	36327	5/16	3/4	100		36080	36380	7/16	1 1/4	50
36028	*	5/16	7/8	100		36081	36381	7/16	1 1/2	50
36029	36329	5/16	1	100		36082	36382	7/16	1 3/4	50
36030	36330	5/16	1 1/4	100		36083	36383	7/16	2	50
36031	36331	5/16	1 1/2	100		36084	36384	7/16	2 1/4	50
36032	36332	5/16	1 3/4	100		36085	36385	7/16	2 1/2	50
36033	36333	5/16	2	100		36086	36386	7/16	2 3/4	25
36034	36334	5/16	2 1/4	100		36087	36387	7/16	3	25
36035	36335	5/16	2 1/2	100		36088	*	7/16	3 1/4	25
36036	36336	5/16	2 3/4	100		36089	36389	7/16	3 1/2	25
36037	36337	5/16	3	50		36091	36391	7/16	4	25
36038	*	5/16	3 1/4	50		36092	36392	7/16	4 1/2	25
36039	36339	5/16	3 1/2	50		36093	36393	7/16	5	25
36040	36340	5/16	4	50		36094	*	7/16	5 1/2	25
36040-1	36340-1	5/16	4 1/2	50		36095	36395	7/16	6	25
36042	36342	5/16	5	50		36097	*	7/16	6 1/2	25
						36098	*	7/16	7	10
UNC (USS) Part No. TPI-16	UNF (SAE) Part No. TPI-24	Dia. (In.)	Length (In.)	Packaged Quantity		UNC (USS) Part No. TPI-13	UNF (SAE) Part No. TPI-20	Dia. (In.)	Length (In.)	Packaged Quantity
36050	36350	3/8	1/2	100		36102	36402	1/2	3/4	50
36051	*	3/8	5/8	100		36104	36404	1/2	1	50
36052	36352	3/8	3/4	100		36105	36405	1/2	1 1/4	50
36053	36353	3/8	7/8	100		36106	36406	1/2	1 1/2	50
36054	36354	3/8	1	100						
36055	36355	3/8	1 1/4	100						



FASTENERS



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**SPEC**

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\* Part not available.

**GRADE 8 PLUS HEX HEAD CAP SCREWS**

UNC (USS) Part No. TPI-13	UNF (SAE) Part No. TPI-20	Dia. (In.)	Length (In.)	Packaged Quantity	UNC (USS) Part No. TPI-10	UNF (SAE) Part No. TPI-16	Dia. (In.)	Length (In.)	Packaged Quantity
36107	36407	½	1¾	50	36170	36470	¾	1½	25
36108	36408	½	2	50	36171	36471	¾	1¾	25
36109	36409	½	2¼	25	36172	36472	¾	2	25
36110	36410	½	2½	25	36173	36473	¾	2¼	25
36111	36411	½	2¾	25	36174	36474	¾	2½	25
36112	36412	½	3	25	36175	36475	¾	2¾	25
36113	36413	½	3¼	25	36176	36476	¾	3	25
36114	36414	½	3½	25	36177	36477	¾	3¼	25
36115	*	½	3¾	25	36178	36478	¾	3½	25
36116	36416	½	4	25	36179	36479	¾	3¾	25
36117	36417	½	4½	25	36180	36480	¾	4	10
36118	36418	½	5	25	36181	36481	¾	4½	10
36119	36419	½	5½	25	36182	36482	¾	5	10
36120	36420	½	6	25	36183	36483	¾	5½	10
36121	36421	½	6½	10	36184	36484	¾	6	10
36122	36422	½	7	10	36185	36485	¾	6½	10
36123	*	½	7½	10	36186	36486	¾	7	5
36124	*	½	8	10	36187	36487	¾	7½	5
					36188	36488	¾	8	5
					36189	*	¾	8½	5
					36190	36490	¾	9	2
					36191	36491	¾	10	2
					36192	*	¾	10½	2
UNC (USS) Part No. TPI-12	UNF (SAE) Part No. TPI-18	Dia. (In.)	Length (In.)	Packaged Quantity	UNC (USS) Part No. TPI-9	UNF (SAE) Part No. TPI-14	Dia. (In.)	Length (In.)	Packaged Quantity
36129	36429	⅜	1	25	36193	*	⅞	1½	10
36130	36430	⅜	1¼	25	36194	36494	⅞	2	10
36131	36431	⅜	1½	25	36195	*	⅞	2¼	10
36132	36432	⅜	1¾	25	36196	36496	⅞	2½	10
36133	36433	⅜	2	25	36197	*	⅞	2¾	10
36134	36434	⅜	2¼	25	36198	36498	⅞	3	10
36135	36435	⅜	2½	10	36200	36500	⅞	3½	10
36137	36437	⅜	3	10	36201	36501	⅞	4	10
36139	36439	⅜	3½	10	36202	36502	⅞	4½	10
36141	36441	⅜	4	10	36203	36503	⅞	5	10
36142	36442	⅜	4½	10	36204	36504	⅞	5½	10
36143	36443	⅜	5	10	36205	36505	⅞	6	10
36143-1	*	⅜	5½	10	36206	*	⅞	6½	5
36144	*	⅜	6	10	36207	36507	⅞	7	2
					36208	*	⅞	7½	2
					36209	36509	⅞	8	2
					36211	36511	⅞	9	2
					36212	36512	⅞	10	2
UNC (USS) Part No. TPI-11	UNF (SAE) Part No. TPI-18	Dia. (In.)	Length (In.)	Packaged Quantity	UNC (USS) Part No. TPI-8	UNF (SAE) Part No. TPI-14	Dia. (In.)	Length (In.)	Packaged Quantity
36145	36445	⅝	1	25	36214	36514	1	2	10
36146	36446	⅝	1¼	25	36215	36515	1	2½	10
36147	36447	⅝	1½	25	36217	36517	1	3	10
36148	36448	⅝	1¾	25	36219	36519	1	3½	10
36149	36449	⅝	2	25	36221	36521	1	4	10
36150	36450	⅝	2¼	25	36222	36522	1	4½	10
36151	36451	⅝	2½	25	36223	36523	1	5	10
36152	36452	⅝	2¾	25	36224	36524	1	5½	10
36153	36453	⅝	3	25	36225	36525	1	6	10
36154	36454	⅝	3¼	25	36226	*	1	6½	2
36155	36455	⅝	3½	25	36227	36527	1	7	2
36156	36456	⅝	3¾	25	36228	36528	1	7½	2
36157	36457	⅝	4	25	36229	36529	1	8	2
36158	36458	⅝	4½	25	36231	36531	1	9	2
36159	36459	⅝	5	25					
36160	36460	⅝	5½	25					
36161	36461	⅝	6	25					
36162	36462	⅝	6½	10					
36163	36463	⅝	7	10					
*	36464	⅝	7½	10					
36165	36465	⅝	8	5					
36166	*	⅝	8½	5					
36167	*	⅝	9	5					



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\* Part not available.



GRADE 8 PLUS HEX HEAD CAP SCREWS				
UNC (USS) Part No. TPI-8	UNF (SAE) Part No. TPI-14	Dia. (In.)	Length (In.)	Packaged Quantity
36232	36532	1	10	2
36233-12	*	1	12	2
UNC (USS) Part No. TPI-7	UNF (SAE) Part No. TPI-12	Dia. (In.)	Length (In.)	Packaged Quantity
36234	*	1½	3	5
36235	*	1½	3½	5
36236	*	1½	4	5
36238	*	1½	5	5
36239	*	1½	6	5
UNC (USS) Part No. TPI-7	UNF (SAE) Part No. TPI-12	Dia. (In.)	Length (In.)	Packaged Quantity
36243	*	1¼	3	5
36245	*	1¼	4	2
36246	*	1¼	4½	2
36247	*	1¼	5	2
36248	*	1¼	6	2
36249	*	1¼	7	2
36250	*	1¼	8	2
36251	*	1¼	9	2
36252	*	1¼	10	2
UNC (USS) Part No. TPI-6	UNF (SAE) Part No. TPI-12	Dia. (In.)	Length (In.)	Packaged Quantity
36265	*	1½	5	1
36266	*	1½	6	1
36267	*	1½	7	1
36268	*	1½	8	1

\* Part not available.

## Hex Head Cap Screws & Hex Nuts Technical Data

Size (In.)	Hex Head Cap Screws	Hex Nuts & Grade 8 Plus	Hex Nuts		Grade 8 Plus Hex Lock Nuts	
	Wrench Size Width Across Flats (In.)		Thickness (In.)			
			max	min	max	min
¼	7/16	7/16	.226	.212	.226	.212
5/16	½	½	.273	.258	.273	.258
3/8	9/16	9/16	.337	.320	.337	.320
7/16	5/8	11/16	.385	.365	.385	.365
1/2	3/4	3/4	.448	.427	.448	.427
9/16	13/16	7/8	.496	.473	.496	.473
5/8	15/16	15/16	.559	.535	.559	.535
3/4	1 1/8	1 1/8	.665	.617	.734	.710
7/8	1 5/16	1 5/16	.776	.724	.859	.833
1	1 1/2	1 1/2	.887	.831	.984	.956
1 1/8	1 11/16	1 11/16	.999	.939	1.155	1.095
1 1/4	1 7/8	1 7/8	1.094	1.030	1.282	1.218
1 1/2	2 1/4	2 1/4	1.317	1.245	1.536	1.464

## Grade 8 Plus Hex Nuts



- **Medium carbon through-hardened steel** gives excellent assembly performance with our Grade 8 hex head cap screws. Eliminates "stripping-out" caused by inferior grade nuts.
- **Grade 8 Plus Plating** provides corrosion resistance that is superior to commercial zinc plating.
- **ASME Class UN-2B thread fit** assures fully formed, precision-fitting threads that provide complete and continuous clamping force.
- **Chamfered first thread** allows easy thread engagement.
- **Smooth bearing surface** distributes load evenly for consistent clamping.
- **High design** gives additional threads and more wrenching surface for positive clamping properties and slip-free installation.
- **Concentric circle grain** structure gives added strength to prevent cracking and splitting for safe, long service life.
- **Use with Grade 8 Plus cap screws.**
  - UNC (USS) or UNF (SAE)
  - Exceeds SAE J9952 Grade 8 specifications
  - Medium carbon steel
  - Through-hardened
  - 180,000 psi proof load

GRADE 8 PLUS HEX NUTS				
UNC (USS) Part No.	Size (In.)	UNF (SAE) Part No.	Size (In.)	Packaged Quantity
36601	¼-20	36611	¼-28	100
36602	5/16-18	36612	5/16-24	100
36603	3/8-16	36613	3/8-24	100
36604	7/16-14	36614	7/16-20	50
36605	1/2-13	36615	1/2-20	50
36606	9/16-12	36616	9/16-18	50
36607	5/8-11	36617	5/8-18	50
36608	3/4-10	36618	3/4-16	25
36609	7/8-9	36619	7/8-14	25
36610	1-8	36620‡	1-14	25
36610-1-1/8	1 1/8-7	36620-1-1/8	1 1/8-12	10
36610-1-1/4	1 1/4-7	36620-1-1/4	1 1/4-12	10
36610-1-1/2	1 1/2-6	36620-1-1/2	1 1/2-12	10
36610-2	2 - 4 1/2	36620-2	2-12	5

‡ 1" - 14 is UNS Thread Series

Area with horizontal lines for notes.



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