

MS90353 REV U ■ 9999912 0086934 T55 ■

Form Approved
 OMB No. 0704-0188

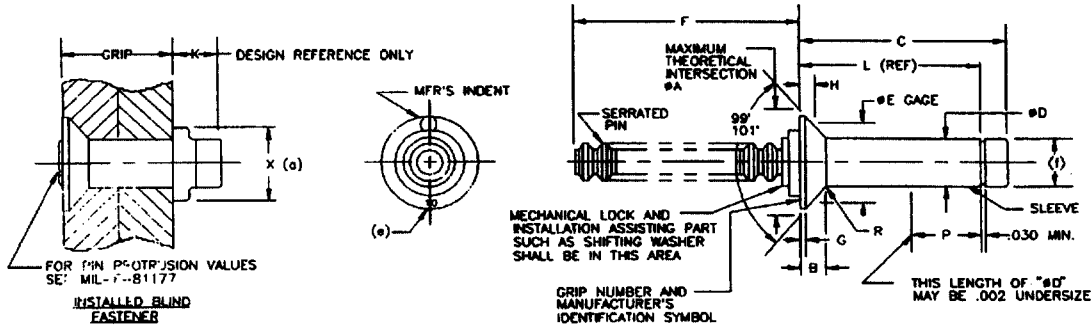


TABLE I. FASTENER DIMENSIONS AND STRENGTHS

(b) SIZE DASH NUMBER		NOM. SIZE	#A	B	#D	#E	F	G	H	K	P	R	X	INSTALLED FASTENER		HOLE LIMITS
DOUBLE ACTION (c)	SINGLE ACTION (d)													MINIMUM SINGLE SHEAR LBS.	MINIMUM TENSILE LBS.	
-05	S05 U05	5/32	.333	.072	.164 .182	.2832 .2830	.844	.011	.0206 .0171	.202	.215	.010	.195	2340	1350	.164 .187
-06	S06 U06	3/16	.386	.080	.199 .197	.3272 .3270	.875	.013	.0243 .0205	.231	.250	.015	.238	3450	2100	.199 .202
-	-08 U08	1/4	.507	.105	.280 .298	.4320 .4318	1.000	.017	.0310 .0270	.279	.305	.020	.315	5900	3650	.280 .263
-	-10 U10	5/16	.634	.137	.312 .310	.5451 .5449	1.218	.020	.0367 .0325	.319	.350	.025	.373	8500	5200	.312 .315
-	-12 U12	3/8	.762	.165	.374 .372	.6582 .6580	1.562	.023	.0428 .0380	.364	.405	.030	.448	12200	7500	.374 .377
-	-14 U14	7/16	.890	.193	.437 .435	.7784 .7782	1.562	.025	.0480 .0403	.419	.480	.032	.522	16700	10150	.437 .441
-	-16 U16	1/2	1.017	.220	.499 .496	.8902 .8900	1.562	.026	.0522 .0456	.540	.598	.035	.598	21800	13500	.500 .504

(a) MAXIMUM DIAMETER OF BLIND HEAD (X) SHALL NOT EXCEED MAXIMUM DIAMETER OF MANUFACTURED HEAD (A).

(b) SIZES "05" AND "06" WITH "-" ARE INSTALLED WITH A DOUBLE ACTION TOOL. ALL OTHER SIZES ARE INSTALLED WITH A SINGLE ACTION TOOL. SIZES "U05" AND "U06" MAY BE INSTALLED WITH A DOUBLE OR SINGLE ACTION TOOL. SEE MIL-F-81177, APPENDIX A FOR TOOL SELECTION CHART.

(c) -05, -06, ~~505, 506, 605, 606~~, -08, -10, -12, -14 AND -16 ARE INACTIVE FOR NEW DESIGN AFTER 1 JAN 91. USE U05, U06, S05 AND S06.

(d) LETTER "U" SIGNIFIES SINGLE ACTION FASTENER WITHOUT FRANGIBLE TYPE OF LOCKING COLLAR OR LOCKING COLLAR CAP. "U" AND "S" CODE FASTENERS IN SIZES "05" AND "06" ARE COLOR IDENTIFIED GREEN ON LOCKING COLLAR, SHIFTING WASHER, OR SERRATED PIN. "S" CODE FASTENERS MAY BE SUPPLIED WITH A LOCKING COLLAR CAP.

(e) SINGLE DIGIT MARKING IS PERMISSIBLE FOR GRIP DASH NUMBERS LESS THAN 10.

(f) DIAMETER OF SERRATED PIN HEAD SHALL NOT EXCEED "#D" MAX AND MAY BE .002 BELOW "#D" MIN. IN AREA "F" ONLY.

Ⓢ DENOTES CHANGE(S)

INCH-POUND

PREPARING ACTIVITY: NAVY-AS CUSTODIANS: ARMY- AV NAVY- AS AIR FORCE- 99 DLA- IS REVIEW: MI, 82 USER: PROJECT NUMBER: 5320-0815	MILITARY SPECIFICATION SHEET TITLE FASTENER, BLIND, HIGH STRENGTH, PULL TYPE, POSITIVE MECHANICAL LOCK, 100° FLUSH HEAD, ALLOY STEEL, 112 K.S.I. Fsu	SPECIFICATION SHEET NUMBER MS90353 28 FEB 94 REV U SUPERSEDING MS90353 T 13 AUG 1993 AMSC- N/A FSC 5320
DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.		Page 1 of 4

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TABLE II. GRIP DIMENSION TABULATION (CONTINUED)

Ø 3/8 (-12)				Ø 7/16 (-14)				Ø 1/2 (-16)					
GRIP DASH NO.	GRIP RANGE		L REF	GRIP DASH NO.	GRIP RANGE		C (U) MAX	L REF	GRIP DASH NO.	GRIP RANGE		C (U) MAX	L REF
	MIN	MAX			MIN	MAX				MIN	MAX		
-1204	219	282	548	-1405	281	345	964	662	-1606	344	407	1147	815
-1205	281	345	610	-1406	344	407	1026	724	-1607	406	470	1209	908
-1206	344	407	673	-1407	406	469	1089	787	-1608	469	532	1272	940
-1207	406	469	735	-1408	469	532	1151	849					
-1208	469	532	1070										
-1209	531	595	860	-1409	531	595	1214	912	-1609	531	595	1334	1003
-1210	594	657	923	-1410	594	657	1276	974	-1610	594	657	1397	1095
-1211	656	720	985	-1411	656	720	1339	1037	-1611	656	720	1459	1128
-1212	719	782	1048	-1412	719	782	1401	1099	-1612	719	782	1522	1190
-1213	781	845	1110	-1413	781	845	1464	1162	-1613	781	845	1584	1253
-1214	844	907	1173	-1414	844	907	1526	1224	-1614	844	907	1647	1315
-1215	906	970	1235	-1415	906	970	1589	1287	-1615	906	970	1709	1378
-1216	969	1032	1298	-1416	969	1032	1651	1349	-1616	969	1032	1772	1440
-1217	1031	1095	1360	-1417	1031	1095	1714	1412	-1617	1031	1095	1834	1503
-1218	1094	1157	1423	-1418	1094	1157	1776	1474	-1618	1094	1157	1897	1565
-1219	1156	1220	1485	-1419	1156	1220	1839	1537	-1619	1156	1220	1959	1628
-1220	1219	1282	1548	-1420	1219	1282	1901	1599	-1620	1219	1282	2022	1690
-1221	1281	1345	1610	-1421	1281	1345	1964	1662	-1621	1281	1345	2084	1753
-1222	1344	1407	1673	-1422	1344	1407	2026	1724	-1622	1344	1407	2147	1815
-1223	1406	1470	1735	-1423	1406	1470	2089	1787	-1623	1406	1470	2209	1878
-1224	1469	1532	1798	-1424	1469	1532	2151	1849	-1624	1469	1532	2272	1940
-1225	1531	1595	1860	-1425	1531	1595	2214	1912	-1625	1531	1595	2334	2003
-1226	1594	1657	1923	-1426	1594	1657	2276	1974	-1626	1594	1657	2397	2065
-1227	1656	1720	1985	-1427	1656	1720	2339	2037	-1627	1656	1720	2459	2128
-1228	1719	1782	2048	-1428	1719	1782	2401	2099	-1628	1719	1782	2522	2190
-1229	1781	1845	2110	-1429	1781	1845	2464	2162	-1629	1781	1845	2584	2253
-1230	1844	1907	2173	-1430	1844	1907	2526	2224	-1630	1844	1907	2647	2315
-1231	1906	1970	2235	-1431	1906	1970	2589	2287	-1631	1906	1970	2709	2378
-1232	1969	2032	2298	-1432	1969	2032	2651	2349	-1632	1969	2032	2772	2440
-1233	2031	2095	2360	-1433	2031	2095	2714	2412	-1633	2031	2095	2834	2503
-1234	2094	2157	2423	-1434	2094	2157	2776	2474	-1634	2094	2157	2897	2565
-1235	2156	2220	2485	-1435	2156	2220	2839	2537	-1635	2156	2220	2959	2628
-1236	2219	2282	2548	-1436	2219	2282	2901	2599	-1636	2219	2282	3022	2690
									-1637	2281	2345	3084	2753
									-1638	2344	2407	3147	2815
									-1639	2406	2470	3209	2878
									-1640	2469	2532	3272	2940

PREPARING ACTIVITY: NAVY-AS	MILITARY SPECIFICATION SHEET	SPECIFICATION SHEET NUMBER
CUSTODIANS: ARMY- AV NAVY- AS	TITLE	MS90353 28 FEB 1994
AIR FORCE- 99 DLA- IS	FASTENER, BLIND, HIGH STRENGTH. PULL TYPE, POSITIVE MECHANICAL LOCK, 100° FLUSH HEAD, ALLOY STEEL, 112 K.S.I. Fu	REV U
REVIEW MI, 82		SUPERSEDING MS90353 T 13 AUG 1993
USER:		AMSC- N/A FSC 5320
PROJECT NUMBER: 5320-0B15		
DISTRIBUTION STATEMENT	A. Approved for public release; distribution is unlimited.	Page 3 of 4

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REQUIREMENT:

1. MATERIAL

SLEEVE AND SERRATED PIN - ALLOY STEEL PER ASTM-A-331

MECHANICAL LOCK: CARBON STEEL OR ALLOY STEEL CONFORMING TO THE CHEMICAL COMPOSITION OF 1010, 1020, 1144, 4037, OR 4130 OF FEDERAL STANDARD 66 OR A286 CRES CONFORMING TO THE CHEMICAL LIMITS OF AMS 5737, OR TYPE 316 CRES CONFORMING TO THE CHEMICAL REQUIREMENTS OF AMS 5690.

2. HARDNESS

SLEEVE: KNOOP (1000 GRAM LOAD) 326-466

SERRATED PIN: ROCKWELL "C" 48 TO 53

MECHANICAL LOCK: NOT APPLICABLE

3. PROTECTIVE TREATMENT

SLEEVE: CADMIUM PLATE PER QQ-P-416, TYPE II, CLASS 2 OR ALUMINUM COATING PER MIL-C-83488.

SERRATED PIN: CADMIUM PLATE PER QQ-P-416, TYPE I, CLASS 3 WITH HYDROGEN EMBRITTLEMENT RELIEF PER ML-F-81177 OR ALUMINUM COATING PER MIL-C-83488.

MECHANICAL LOCK: CADMIUM PLATE PER QQ-P-416, TYPE II, CLASS 2 (CARBON AND ALLOY STEEL), PASSMATE PER QQ-P-35 (A286 AND TYPE 316 CRES) OR ALUMINUM COATING PER MIL-C-83488, AT MANUFACTURER'S OPTION.

4. INSPECTION:

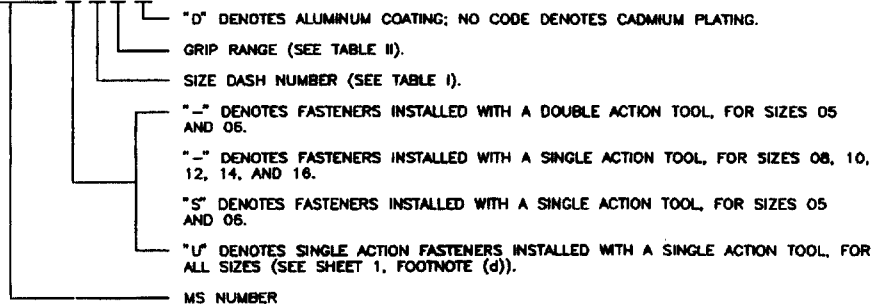
DUE TO INSTALLATION LOADS BEING HIGHER THAN PERFORMANCE LOAD REQUIREMENTS, MAGNETIC PARTICLE INSPECTION IS NOT REQUIRED.

5. LUBRICATION:

NONE, EXCEPT MANUFACTURER'S OPTION TO LUBRICATE LOCK MECHANISM WITH LOX COMPATIBLE DRY FILM LUBRICANTION.

6. EXAMPLE OF PART NUMBER:

MS 90353 - 0806 D - 1/4 DIA. NOM. SIZE, .156 MIN. GRIP, INSTALLED WITH A SINGLE ACTION TOOL.



NOTES:

- DIMENSIONS ARE IN INCHES. UNLESS OTHERWISE SPECIFIED TOLERANCES: DECIMALS: ± .010.
- IN THE EVENT OF A CONFLICT BETWEEN THE TEXT OF THIS DOCUMENT AND THE REFERENCES CITED HEREIN, THE TEXT OF THIS DOCUMENT SHALL TAKE PRECEDENCE.
- UNLESS OTHERWISE SPECIFIED, ISSUES OF REFERENCED DOCUMENTS ARE THOSE IN EFFECT AT THE TIME OF SOLICITATION.

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