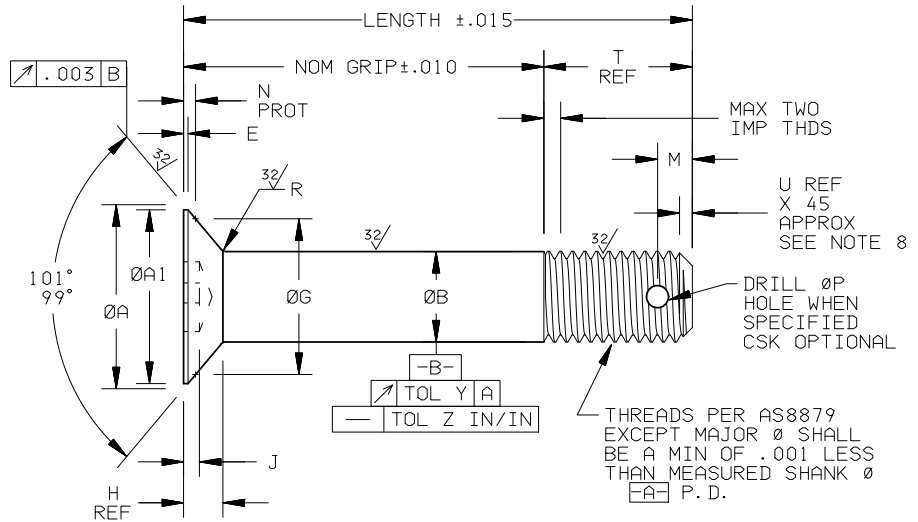
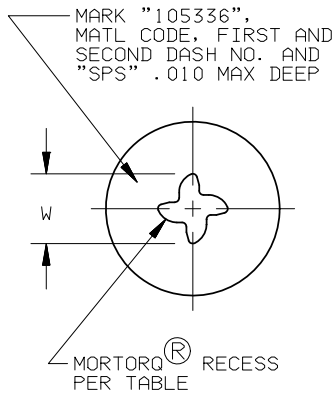




**PROPRIETARY INFORMATION**  
 INFORMATION ON THIS DOCUMENT IS A TRADE SECRET, PROPRIETARY, AND SHALL NOT BE USED OR REPRODUCED IN WHOLE OR IN PART WITHOUT WRITTEN AUTHORIZATION OF SPS TECHNOLOGIES

DRAWING NUMBER: **SPS-B-105336**  
 ISSUE DATE: 1/12/04  
 REVISION: **1** 3/18/09



FIRST DASH NO	THREADS UNJF-3A	RECESS SIZE	ØA MAX 1/	ØA1 MIN 2/	ØB		E MAX	ØG GAGE	H REF	J	M	N PROT	ØP	R	T REF	U REF	W REF	X	Y	Z	TENSILE STRENGTH LBS MIN
					PLATED	UN PLATED															
3	.1900-32	1	.3813	.339	.1895	.1895	.015	.3147	.083	.027	.126	.0285	.080	.035	.363	.050	.240	.005	.0045	.0040	3,180
					.1885	.1890		.3145													
4	.2500-28	1	.5066	.464	.2495	.2495	.015	.4245	.111	.039	.126	.0351	.086	.035	.403	.050	.240	.006	.0045	.0030	5,790
					.2485	.2490		.4243													
5	.3125-24	1	.6335	.578	.3120	.3120	.015	.5389	.140	.050	.130	.0409	.086	.045	.501	.060	.240	.007	.0045	.0030	9,260
					.3110	.3115		.5387													
6	.3750-24	2	.7604	.717	.3745	.3745	.015	.6532	.167	.062	.130	.0459	.116	.045	.594	.060	.308	.008	.0060	.0025	14,000
					.3735	.3740		.6530													
7	.4375-20	3	.8884	.826	.4370	.4370	.022	.7784	.195	.067	.134	.0470	.116	.055	.675	.080	.354	.009	.0060	.0025	19,000
					.4360	.4365		.7782													
8	.5000-20	4	1.0139	.951	.4995	.4995	.022	.8902	.222	.072	.134	.0529	.116	.055	.768	.080	.428	.010	.0060	.0020	25,600
					.4985	.4990		.8900													
9	.5625-18	5	1.1408	1.071	.5615	.5615	.025	1.0028	.250	.082	.134	.0590	.151	.055	.881	.090	.506	.010	.0060	.0020	32,400
					.5605	.5610		1.0026													
10	.6250-18	5	1.2723	1.201	.6240	.6240	.025	1.1124	.280	.092	.134	.0683	.151	.055	.981	.090	.506	.010	.0060	.0020	40,900
					.6230	.6235		1.1122													

1/ TO THEORETICAL SHARP CORNER      2/ ABSOLUTE MINIMUM WITH FLAT

- MATERIAL: ALLOY STEEL PER AMS 6382, 4340 PER AMS 6415 OR 8740 PER AMS 6322. TITANIUM 6AL-4V PER AMS 4928 OR AMS 4967. A286 PER AMS 5731, AMS 5732. AMS 5737 OR AMS 5853.
- HEAT TREATMENT: ALLOY STEEL - 160 KSI MINIMUM TENSILE STRENGTH PER AMS-H-6875. TITANIUM 6AL-4V - 160 KSI MINIMUM TENSILE STRENGTH PER AMS 4928 OR AMS 4967. A286 - 160 KSI MINIMUM TENSILE STRENGTH. PRECIPITATION HARDEN PER AMS 5853.
- FINISH: ALLOY STEEL - CADMIUM PLATE PER AMS-QQ-P-416 TYPE II, CLASS 2. TITANIUM 6AL-4V - PLAIN. A286 - PASSIVATE PER AMS-QQ-P-35.
- PART NUMBER: 105336( )-( )-( )-( )  
 "D" = DRILLED THREADS  
 NO LETTER = UNDRILLED  
 NOMINAL GRIP LENGTH IN SIXTEENTHS  
 NOMINAL DIAMETER IN SIXTEENTHS  
 MATERIAL CODE: A = ALLOY STEEL  
 C = A286  
 V = TITANIUM 6AL-4V  
 BASIC PART NUMBER  
 LENGTH EQUALS NOMINAL GRIP PLUS "T" REF
- PROCUREMENT SPECIFICATION: NAS4002 FOR ALLOY STEEL, NAS4003 FOR A286 AND NAS4004 FOR TITANIUM. TENSILE STRENGTH AS TABULATED HEREIN. FATIGUE TESTING FOR TITANIUM ONLY. COLD WORKING OF HEAD TO SHANK FILLET IS NOT REQUIRED ON ALLOY STEEL OR A286 BOLTS. RECESS TORQUE PER PROCUREMENT SPECIFICATIONS EXCEPT USE APPLICABLE MORTORQ® DRIVER.
- REFERENCE DIMENSIONS ARE FOR DESIGN PURPOSES ONLY AND ARE NOT INSPECTION REQUIREMENTS.
- HEAD OUT OF ROUNDNESS SHALL NOT EXCEED "X".
- CHAMFER "U" PLUS INCOMPLETE THREADS NOT TO EXCEED TWO PITCHES.
- SCREWS SHALL BE FREE FROM BURRS AND SHARP EDGES.
- DIMENSIONS ARE IN INCHES AND APPLY AFTER PLATING (WHEN REQUIRED).

® MORTORQ IS A REGISTERED TRADEMARK OF PHILLIPS SCREW COMPANY

TOLERANCES ±.010 AND ±2°	FSCM NO. 56878	<b>TITLE</b> BOLT, FLUSH, 100° HEAD MORTORQ® RECESS, 160 KSI	STANDARDS AND SPECIFICATIONS SEE NOTE 5
SURFACE ROUGHNESS 125√	CUSTODIAN: JENKINTOWN, PA.		<b>PART NUMBER:</b> 105336( )-( )-( )-( )
UNLESS OTHERWISE NOTED			
DRAFTED IN ACCORDANCE WITH ASME Y14.5M			
DRAWN BY: KATHY SCHWARTZ	DATE: 1/12/04		
APPROVED: S FOSTER	DATE: 4/6/09		
APPROVED: R HUKARI			