

NAVISTAR, INC.		
Material, Parts, and Process Specifications (MPAPS)	NUMBER: MPAPS S-J-5.101-GS/PL	
	Former Designation: ESP-J-5.101-GS	
TITLE: Groove Drive Studs – English Series (Noun Code 6200)	CURRENT REV No.: 1506	DATE: June 2015
WRITTEN/EDITED BY: Materials Engineering	APPROVED BY: Materials Engineering	SUPERSEDES: ESP-J-5.101-GS - August 2006
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<i>This specification may involve hazardous materials, equipment, and procedures. This specification does not purport to address all of the safety issues associated with its use. The user is responsible to consult appropriate safety and health practices and to determine the applicability of regulatory limits prior to use.</i>		
Change Notice: Changed to New MPAPS format.		

1.0 MATERIAL: Cold heading steel (STL) wire which is standard with the manufacturer.

2.0 FINISHES: As designated by part number. studs will be furnished plain or plated in accordance with MPAPS and class listed below:

Brass (BRS) flash deposit on steel - Standard with manufacturer for sizes up to 6.

Zinc Trivalent (ZN6A) on steel – MPAPS G-20, Class 6A.

Chromium (CRB) on steel - Standard with manufacturer.

3.0 RESTRICTED CHEMICAL SUBSTANCES: Effective January 1, 2007, all product supplied to the requirements of this specification must comply with the requirements of the MPAPS B-50 specification.

4.0 POLICY FOR SELECTING PARTS FOR NEW DESIGN:

For new design, parts shall be selected from "Approved" part list only.

Material and Finish: Steel (STL), Zinc Trivalent (ZN6A).

Sizes and Lengths: Stock sizes and lengths listed in dimensional table.

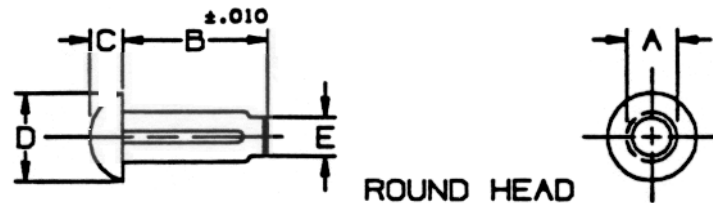
5.0 DEFECTS: Studs must be free from burrs and all other defects which might affect their serviceability.

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6.0 APPROVED PART LIST:



Dimensions in inches:

Nominal Size	0	2	4	6	7	8	10	12	14	16
E Diameter, Maximum	.067	.086	.104	.120	.136	.144	.161	.196	.221	.250
Diameter, Minimum	.065	.084	.102	.118	.134	.142	.159	.194	.219	.248
D Head Diameter, Max	.130	.162	.221	.260	.309	.309	.359	.408	.457	.472
Head Diameter, Min	.120	.146	.193	.240	.287	.287	.334	.382	.429	.443
C Head Height, Max	.050	.070	.086	.103	.119	.119	.136	.152	.169	.174
Head Height, Min	.040	.059	.075	.091	.107	.107	.124	.140	.156	.161
Recm Hole Size, Min	.0670	.0860	.1040	.1200	.1360	.1440	.1610	.1960	.2210	.2500
Recm Hole Size, Max	.0696	.0877	.1059	.1220	.1382	.1463	.1636	.1990	.2240	.2534
"B" Length "A" Diameter Max and Min Limits (Measured with Ring Gages)										
1/8	.076 .072	.098 .094								
3/16	.076 .072	.098 .094	.117 .113							
1/4	.076 .072	.097 .093	.115 .111	.134 .130						
5/16			.115 .111	.132 .128	.149 .145					
3/8				.132 .128	.149 .145	.157 .153	.175 .171			
1/2					.146 .142	.155 .151	.173 .169	.208 .204	.236 .232	.269 .265
5/8						.155 .151	.173 .169	.206 .202	.234 .230	
3/4								.206 .202	.234 .230	
"B" Length	PART NUMBERS – STEEL (STL) , ZINC TRIVALENT (ZN6A)									
1/8										
3/16		443083								
3/8				443090						

Size	Length	Finish	Part Number
0	1/4	Chromium-Bright	116365

7.0 TECHNICAL INFORMATION:

For further information related to the technical content of this specification, contact:	Suppliers may purchase controlled copies of this specification by contacting:
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