NAVISTAR, INC.

Material, Parts, and Process Specifications (MPAPS)		NUMBER: MPAPS S-S-2.101-GS/PL
		Former Designation: ESP-S-2.101-GS
TITLE: Rectangular Section Seal Rings - English Series (Noun Code – 7175)		CURRENT REV No.: 1506 / DATE: June 2015
WRITTEN/EDITED BY: Materials Engineering	APPROVED BY: Materials Engineering	SUPERSEDES: ESP-S-2.101-GS - September 2000

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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.

Change Notice: **Changed to New MPAPS format; Combined GS, PP.**

1.0 GENERAL: The following specifications cover **Rectangular Section Seal** rings generally used as low cost substitutes for O-rings in low pressure, static applications.
Rings in this standard are restricted to those sizes in SAE J120a. Other sizes are considered design parts and must be specified on Product Engineering Department drawings. The prefix letter "R" in the size number designates a rectangular section ring.

2.0 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.

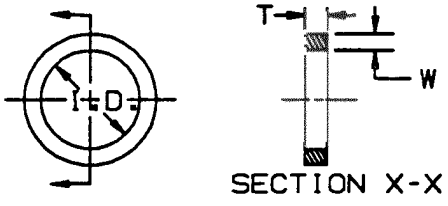
3.0 DIMENSIONS: Actual dimensions are shown in this document. Dimensions shown on part number pages are nominal only. All dimensions are in inches.

4.0 POLICY FOR SELECTING PARTS FOR NEW DESIGN: Approved parts are so designated to reduce variety of parts and assure maximum availability, interchangeability, and cost savings in volume buying.

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

5.0 MATERIAL:
Class 5 as described in MPAPS K-15, Part II. Material other than Class 5 is not normally considered for application involving rectangular section rings.

For classification of compounds, see page MPAPS S-S-1.101-GS/PL. For qualification requirements, color codes, and all other requirements not covered in this standard, see MPAPS K-15, Part II.



ACTUAL DIMENSIONS
Dimensions in inches:

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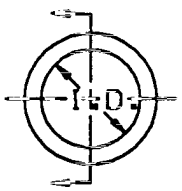

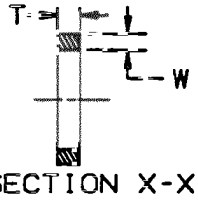

SECTION X-X

ACTUAL DIMENSIONS

Dimensions in inches:

Dimensions in inches:

Size No.	Actual Size W = .066 ± .004 T = .066 ± .003	
	ID	OD(Ref)
Toler-ance	±.005	-
R006	.114	.246
R007	.145	.277
R008	.176	.308
R009	.208	.340
R010	.239	.371
R011	.301	.433
R012	.364	.496
R013	.426	.558
R014	.489	.621
R015	.551	.683
R016	.614	.746
R017	.676	.808
R018	.739	.871
Toler-ance	± .006	-
R019	.801	.933
R020	.864	.996
R021	.926	1.058
R022	.989	1.121
R023	1.051	1.183
R024	1.114	1.246
R025	1.176	1.308
R026	1.239	1.371
R027	1.301	1.433
R028	1.364	1.496
Toler-ance	±.010	-
R029	1.489	1.621
R030	1.614	1.746
R031	1.739	1.871
R032	1.864	1.996
R033	1.989	2.121
R034	2.114	2.246
R035	2.239	2.371
R036	2.364	2.496
R037	2.489	2.621
R038	2.614	2.746

Toler-	±.015	-
R039	2.739	2.871
R040	2.864	2.996
R041	2.989	3.121
R042	3.239	3.371
R043	3.489	3.621
R044	3.739	3.871
R045	3.989	4.121

Size No.	Actual Size W = .099 ± .004 T = .099 ± .003	
	ID	OD(Ref)
Toler-ance	± .005	-
R110	.362	.560
R111	.424	.622
R112	.487	.685
R113	.549	.747
R114	.612	.810
R115	.674	.872
R116	.737	.935
Toler-ance	±.006	-
R117	.799	.997
R118	.862	1.060
R119	.924	1.122
R120	.987	1.185
R121	1.049	1.247
R122	1.112	1.310
R123	1.174	1.372
R124	1.237	1.435
R125	1.299	1.497
R126	1.362	1.560
R127	1.424	1.622
R128	1.487	1.685
Toler-ance	±.010	-
R129	1.549	1.747
R130	1.612	1.820
R131	1.674	1.872

Size No.	Actual Size W = .099 ± .004 T = .099 ± .003	
	ID	OD (Ref)
Toler-ance	±.010	-
R132	1.737	1.935
R133	1.799	1.997
R134	1.862	2.060
R135	1.925	2.123
R136	1.987	2.185
R137	2.050	2.248
R138	2.112	2.310
R139	2.175	2.373
R140	2.237	2.435
R141	2.300	2.498
R142	2.362	2.560
R143	2.425	2.623
R144	2.487	2.685
R145	2.550	2.748
R146	2.612	2.810
Toler-ance	±.015	-
R147	2.675	2.873
R148	2.737	2.935
R149	2.800	2.998
R150	2.862	3.060
R151	2.987	3.185
R152	3.237	3.435
R153	3.487	3.685
R154	3.737	3.935
R155	3.987	4.185
R156	4.237	4.435
R157	4.487	4.685
R158	4.737	4.935
R159	4.987	5.185
Toler-ance	±.023	-
R160	5.237	5.435
R161	5.487	5.685
R162	5.737	5.935
R163	5.987	6.185

Size No.	Actual Size W = .134 ± .004 T = .134 ± .004	
	ID	OD(Ref)
Toler-ance	±.006	-
R210	.734	1.002
R211	.796	1.064
R212	.859	1.127
R213	.921	1.189
R214	.984	1.252
R215	1.046	1.314
R216	1.109	1.377
R217	1.171	1.439
R218	1.234	1.502
R219	1.296	1.564
R220	1.359	1.627
R221	1.421	1.689
R222	1.484	1.752
Toler-ence	±.010	-
R223	1.609	1.877
R224	1.734	2.002
R225	1.859	2.127
R226	1.984	2.252
R227	2.109	2.377
R228	2.234	2.502
R229	2.359	2.627
R230	2.484	2.752
R231	2.609	2.877
Toler-ance	±.015	-
R232	2.734	3.002
R233	2.859	3.127
R234	2.984	3.252
R235	3.109	3.337
R236	3.234	3.502
R237	3.359	3.627
R238	3.484	3.752
R239	3.609	3.877
R240	3.734	4.002
R241	3.859	4.127
R242	3.984	4.252
R243	4.109	4.377

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