

NAVISTAR, INC.		
Material, Parts, and Process Specifications (MPAPS)	NUMBER: MPAPS S-B-30.101-GS/PL	
	Former Designation: ESP-B-30.101-GS	
TITLE: Weld Studs – English Series - Not Recommended (Noun Code 0810)	CURRENT REV No.: 1506	DATE: June 2015
WRITTEN/EDITED BY: Materials Engineering	APPROVED BY: Materials Engineering	SUPERSEDES: ESP-B-30.101-GS - August 2006
PRINTED COPIES OF THIS DOCUMENT MUST BE VERIFIED FOR CURRENT REVISION		
<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; Combined GS, PP.		

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2.0 HEAD: The bearing surface of the head will be at right angles to the axis of the shank within 2 degrees.

3.0 WELDING SURFACE AND PROJECTIONS: Welding surface will be flat and parallel to plane formed by the tops of embossments to provide intimate contact with welding electrode and application of equal force on all projections. The surface will have three integrally formed hemispheroidal shaped weld projections equally spaced on a locating circle concentric with the shank.

4.0 THREADS: Unified Series Class 2A limits will apply to plain finish or unplated studs and to plated studs before plating.

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5.0 THREAD LENGTH: On studs 2 inches and shorter, full formed threads will extend to within two threads of the projections (under head), or closer if practicable. Studs over 2 inches will have a full-formed thread length of 1-3/4 inches.

6.0 LENGTH TOLERANCE:

Nominal Stud Length	Tolerance on Length
Thru 1 Inch	+ .000 - .031
Over 1 Inch to 2 Inches	+ .000 - .062
Over 2 Inches	+ .000 - .094

7.0 POINTS: Weld studs are normally furnished with plain sheared ends. Header points are obtainable having standard dimensions shown in MPAPS S-C-1.101-GS/PL.

8.0 MATERIAL: Weldable grade of low carbon steel.

9.0 FINISH: Weld studs are not normally plated due to objectionable effects of certain plating on the welding process; however, where requirements dictate, studs may be zinc or copper plated.

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

Zinc Trivalent, Class 6A (ZN6A) – MPAPS G-20, Class 6A. Proper precautions in regard to toxic fumes being generated during welding should be exercised.

10.0 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.

11.0 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.

Head Style: U3 (Projection Under Head)

Threads: Coarse

Lengths:

Nominal Size	Minimum Length	Maximum Length
# 8	1/4	1-1/4
#10	1/4	1-1/2
1/4	3/8	2
5/16	1/2	2-3/4
3/8	5/8	2-3/4
1/2	1	3

Finish: Plain (PLN)

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