

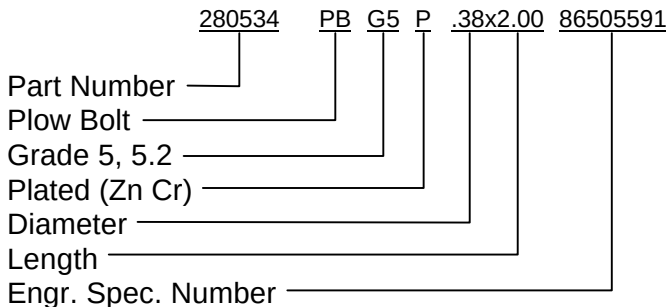
Plow Bolt—No. 3 Head, Square Neck, Zn Cr Plated, Coarse Threads**1. SCOPE**

1.1 The fasteners defined by this specification are Grade 5 gold Zinc Chromate (Zn Cr) plated Plow Bolts with No. 3 Round Head, Countersunk, Square Neck, and Coarse Threads.

1.2 The Plow Bolt No. 3 Head Zn Cr plated is to be used only when you want material to flow over the bolt without damaging the head of the bolt.

2. DESIGNATION

2.1 Typical call-out on a drawing shall be:



NOTE: The above typical description is required for use in all company-wide computer generated documents. The description on hand drawn assembly drawings should follow the same practice.

2.2 Table 3 contains the list part numbers to be used in future designs.

2.3 When requesting a new part number, refer to the instructions in standard 86505922 (FNHA-3-A-005.00).

3. RELATED SPECIFICATIONS**3.1. REFERENCE STANDARDS**

86508305 (FNHA-2-H-500.00)—Zinc Electroplating on Ferrous Surfaces
86505922 (FNHA-3-A-005.00)—Assignment of Standard Part Numbers
ANSI/ASME B1.1—Unified Inch Screw Threads
ANSI/ASME B18.9—Plow Bolts
ASTM A449—Quenched and Tempered Steel Bolts and Studs
SAE J1061—Surface Discontinuities on General Application Bolts, Screws, and Studs

3.2 This standard replaces the following company standards:

New Holland	NA2.02.9
Versatile	1-A-013

4. REQUIREMENTS**4.1 MATERIAL**

4.1.1 Type 1 according to ASTM A449—Medium carbon steel, quenched and tempered, with the following chemical composition: .25 to .58% Carbon, min. .57% Manganese, max. .048% Phosphorus, and max. .058% of Sulfur. (Equivalent to Grade 5.)

					NAME	STD PB UNC ZNCR		
					 NEW HOLLAND		ENGINEERING SPECIFICATION	
ALL	J	BJF	119263	29AUG02			FRAME 1	OF 4
ALL	H	BJF	117881	19MAR02	THE INFORMATION HEREON IS THE CONFIDENTIAL AND PROPRIETARY PROPERTY OF NEW HOLLAND N.V. AND/OR ITS SUBSIDIARIES. ANY USE, EXCEPT THAT FOR WHICH IT MAY BE LOANED, IS PROHIBITED.		PART NUMBER	
FRAME NO.	REV	BY	ECN NO.	DATE				
APP.	DRAWN		BJFJR	10/93				
KHH 11/93	CHECKED							

4.1.2 Type 2 according to ASTM A449—Low carbon or medium carbon martensite steel, that is fully killed fine-grain quenched and tempered, with the following chemical composition: .13 to .41% Carbon, min. .67% Manganese, max. .048% Phosphorus, max. .058% Sulfur, and min. .0005% Boron. (Equivalent to Grade 5.2.)

4.1.3 Head Markings

4.1.3.1 Type 1—Shall be marked with 3 radial lines 120° apart.

4.1.3.2 Type 2—Shall be marked with 3 radial lines 60° apart.

4.2 PLATING

The plating shall be gold Zinc Chromate (Zn Cr) Electroplate per 86508316 (FNHA-2-H-500.25). Baking is not required for hydrogen embrittlement relief.

4.3 MECHANICAL REQUIREMENTS

See Chart A below for mechanical requirements.

4.4 MECHANICAL DIMENSIONS

The screw thread geometry shall conform to UNC-2A per ANSI/ASME B1.1 before plating. The general dimensions shall meet the requirements in Table 1.

4.5 SURFACE DISCONTINUITIES

All products under this specification shall meet the Surface Discontinuities on General Application Bolts, Screws, and Studs per SAE J1061 requirements.

5. SUPPLIER RESPONSIBILITY

5.1 Suppliers shall perform the necessary test for sample approval for initial lots. After this approval, suppliers are not required to perform the specific tests, but ascertain that their product will conform to the specification limits. These specified requirements will be used to reconcile any disputed values.

5.2 All materials supplied to this specification shall be equivalent in all characteristics to the material upon which approval was originally granted. Prior to making of any changes in the properties, composition, construction, color, dimensions, processing or labeling of the material originally approved under this specification, the supplier shall notify Purchasing and the affected Materials Engineering activity of the proposed changes and obtain the written acknowledgment of the Materials Engineering activity. Test data, test samples and a new identification code are to be submitted with the request.

Chart A: Mechanical Requirements

Nominal Diameter	Proof Load	Min. Tensile Strength	Min. Yield Strength	Hardness * Rockwell	
Inches	psi	psi	psi	min.	max.
1/4 to 1 1/4	85000	120000	92000	25	34

* Take measurement at 1/2 radius of threaded transverse section at a distance of one diameter from the end of the product (average of four readings).

 NEW HOLLAND	NAME			PART NUMBER	
	STD PB UNC ZNCR			86505591	
ENGINEERING SPECIFICATION			REV. J	FRAME 2	OF 4