

Cap Screw Hex Head, Grade 5, Plain, Coarse Threads

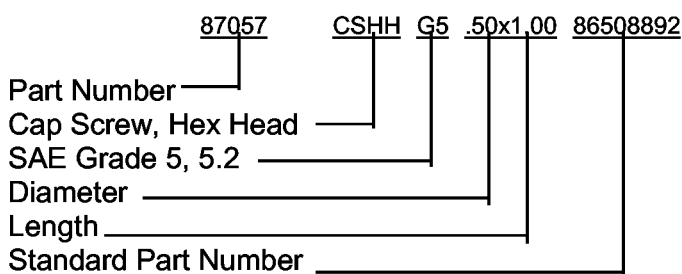
1. SCOPE

1.1. The fasteners defined by this specification are plain Grade 5 Hex Head Cap Screw coarse threads.

1.2. The Cap Screw Hex Head Grade 5 Plain fastener is to be used only in welding applications.

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 2 lists the Non-Preferred part numbers which should not 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

86505922(FNHA-3-A-005.00) - Assignment of Standard Part Numbers
 ANSI/ASME B1.1 - Unified Inch Screw Threads
 ANSI/ASME B18.2.1 - Square and Hex Bolts and Screws
 SAE J429 - Mechanical and Material Requirements for Externally Threaded Fasteners
 SAE J1061 - Surface Discontinuities on General Application Bolts, Screws, and Studs

3.2 This standard replaces the following company standards.

New Holland Standard	NA2.02.3
Versatile Standard (Partial)	1-A-002

4. REQUIREMENTS

4.1 MATERIAL

4.1.1 Grade 5 according to SAE J429 - Medium carbon steel quenched and tempered steel with .28 to .55% Carbon, max. of .048% Phosphorus, and max. of .058% Sulfur.

4.1.2 Grade 5.2 according to SAE J429 - Low carbon martensite steel fully killed fine grain quenched and tempered with .15 to .25% Carbon, min. of .74% Magnesium, max. of .048% Phosphorus, max. of .058% Sulfur, and min. of .0005% Boron.

4.1.3 The head markings shall be according to SAE J429 (See Table 1).

ALL	G	BJF	115468	19JAN01	NAME	STD CSHH G5 UNC	
ALL	F	BJF	114621	4/00			
ALL	E	BJF	111422	2/98	 NEW HOLLAND	ENGINEERING SPECIFICATION	
ALL	D	BJF	110964	11/97			
ALL	C	BJF	110118	6/97			
3	B	BJF	108139	7/96			
ALL	A	RE	104739	2/94	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.	FRAME 1	OF 4
FRAME NO.	REV	BY	ECN NO.	DATE		PART NUMBER	
APP.	DRAWN		BJFJR	10/93		86508892	
KHH 11/93	CHECKED						
						Documents Document Sharing	

4.2 PLATING

These parts are not plated.

4.3 MECHANICAL REQUIREMENTS

Grade	Nominal Diameter	Proof Load	Min. Tensile Strength	Min. Yield Strength	Max. Surface Hardness	Core Hardness Rockwell *	
	Inches	psi	psi	psi	Rockwell 30N	min	max
5	1/4 to 1	85000	120000	92000	54	C25	C34
	over 1 to 1 1/2	74000	105000	81000	50	C19	C30
5.2	1/4 to 1	85000	120000	92000	56	C26	C36

* 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)

4.4 MECHANICAL DIMENSIONS

The screw thread geometry shall conform to UNC-2A per ANSI/ASME B1.1. 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 Standardization Engineering activity of the proposed changes and obtain the written acknowledgement of the Standardization Engineering activity. Test data, test samples and a new identification code are to be submitted with the request.

	NAME				PART NUMBER	
	STD CSHH G5 UNC				86508892	
ENGINEERING SPECIFICATION			REV. G	FRAME 2	OF 4	