



Hamilton Sundstrand

A United Technologies Company

Part Identification Approval Process & Reference Guide

The latest revision of material included here is available on the [HS supplier portal](#) / Part Identification Aid page.

Rev. E
8-16-2018

PART MARKING APPROVAL PROCESS

1. Upon receiving a purchase order from Hamilton Sundstrand, the supplier's quality/engineering dept. will review the print and the purchase order.
2. Using the part marking "toolbox" found on the [HS supplier portal](#), part marking work instructions are created.
3. Work instructions are sent via email to gphspartmarking@hs.utc.com for review and response.
 - a. Part marking is approved and a response is sent from the HS part marking team within 3-4 business of receiving supplier request for review.

OR

- b. Part marking is rejected. A corrected part marking is sent to supplier within 3-4 days for review to be resubmitted by the supplier with corrections for final approval.
4. Supplier keeps the part marking team response with the part number's paper work . The E-mail approval is the supplier's "get out of Jail" free card should any issues about part marking arise.
5. Questions? Call 860-480-3103 or 860-654-2853 supplier response center.

NOTE: The above approval process is mandated only when indicated on a purchase order (PPAP) or FAI. However, it's in the supplier's best interest to follow the above steps to ensure proper marking of parts shipped to Hamilton Sundstrand.

Using the Part Identification Aid web page

1. **Open** [HS SUPPLIER PORTAL](#) Web Page
2. **Log in** Using the Hamilton Sundstrand assigned supplier code
3. **Select** The QUICK LINKS TAB, or look under the list of QUICK LINKS
4. **Select** PART IDENTIFICATION GENERATOR

INTERACTIVE TUTORIAL Part Marking 101

- Allows you to see exactly where each component of a marking comes from.
- Explores the most common reasons for part marking rejects.
- Outlines the different places where part marking criteria can be flowed down, and how to determine order of precedence.
- Teaches how and where to find information about source controlled drawings.

PART IDENTIFICATION GENERATOR (PIG)

- Using the UTAS drawing, answer the questions found in the automated Par Identification Generator (PIG) to create a replica that displays the marking content and format for a specific part number.

•THE PIG TOOL SHOULD ONLY BE USED WHEN A DRAWING HAS SPEC. DRIVEN MARKING REQUIRMENTS.

CHECKLISTS for HS333 , PN17.50 , ESR 1386 , MIL-STD-130

- Reference sheets that contain a replica of required content and format for part marking as well as the section in a marking specification where the requirements can be found.
- PART MARKING APPROVAL PROCESS AND REFERENCE GUIDE

E-MAIL/ Phone CONTACT

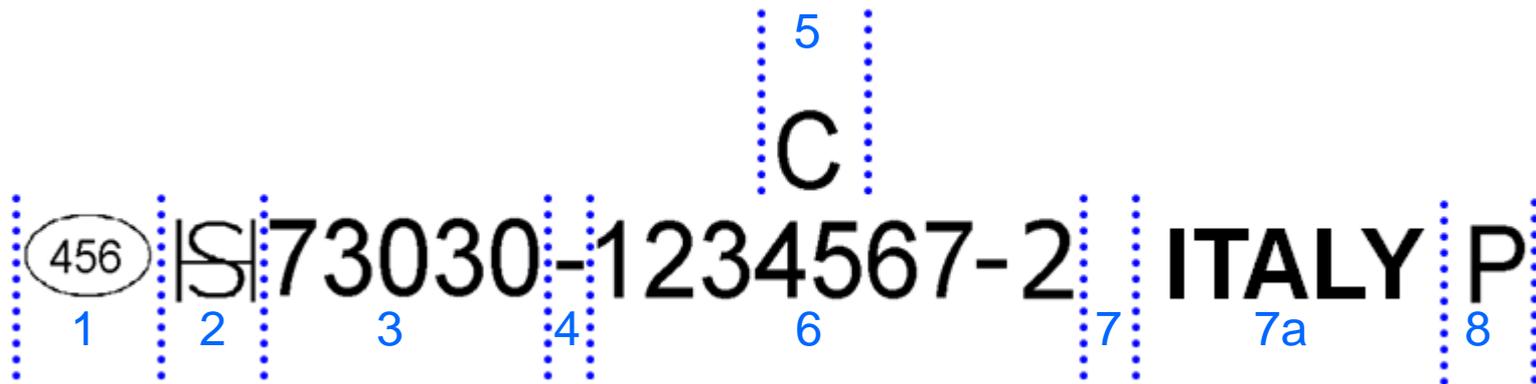
- Contact the part marking team with questions about your part marking or to submit a replica for approval : gphspartmarking@hs.utc.com Supplier's who follow the part marking approval process will not be held responsible for part marking rejections that occur due to an improper approval by the part marking team.

HS333

If you can't see the entire image (including #8)
Go to VIEW and zoom out
OR File/Print
To make a paper copy
For a great reference!

- A. Verify drawing geometry matches part to be marked
- B. Determine Cage Code from title block of drawing.
- C. Pull applicable marking Spec. for reference: **HS333**
- D. Check that you are using the latest revision. **HS333 REV AK** is referenced below.
- E. Validate correct marking method and location

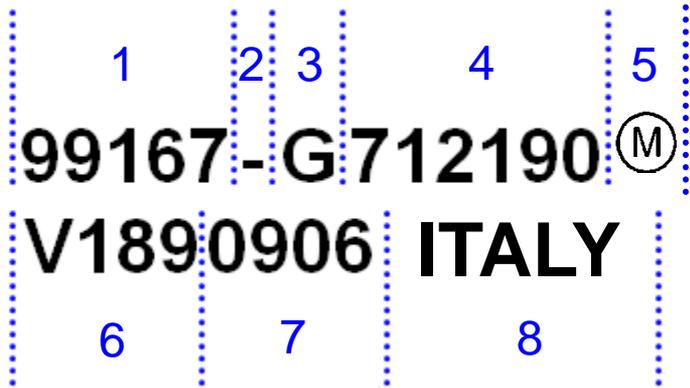
Rev. c
4-12-2012



- 1) Validate Inspection Symbol – Last 3 digits of Vendor code enclosed in Oval (3.6.1). this requirement is driven from **HSM17** found on the PO
- 2) Validate HS Trademark Symbol (3.5.5)
- 3) Validate Cage Code on replica/photo Matches Drawing title block (3.5.4)
- 4) “-” -or- “ASSY” precedes part number (3.5.1)
- 5) Validate **PART** Rev Letter on replica, drawing and PO match .
NOTE: DRAWING Rev & PART Rev are not always the same on 73030 prints.
preferred placement of Part Rev is centered above P/N (3.5.2) .
- 6) Validate Part number on drawing matches replica/photo
- 7) Separate NDT stamp and part number with 2 or more spaces
- 7a) Validate Country Code (3.7.1) United States can be abbreviated US, and is only required IF specifically required on the print. Other country markings shall be spelled out completely, no abbreviations.
- 8) Validate NDT stamp represents 100% insp. and that the letter matches the process (i.e. P= Penetrant Inspection) (3.6.2). See NDT stamp checklist

PN17.50

If you can't see the entire image (including #8) Go to VIEW and zoom out OR select File/Print To make a paper copy for a great reference!



- A. Verify drawing geometry matches part to be marked
- B. Determine Cage Code from title block of drawing.
- C. Pull applicable marking Spec. for reference: **PN17.50**
- D. Check that you are using the latest Spec. revision .
PN17.50 REV DK used in references below
- E. Validate correct marking method and location

- 1) Validate Cage Code on replica matches drawing ([Ref. 3.4.2](#))
- 2) “-” -or- “ASSY precedes Rev letter ([3.9](#)), no spaces.
- 3) Rev Letter matches drawing, directly precedes P/N and drawing type symbol ([3.6](#))
If part is a basic /no Rev Letter, then to put in the asterisk symbol (*) in place of rev.letter. Also note that the Part Revision **is** the same as the Drawing Revision.
- 4) Check that the P/N on drawing matches marking replica.
- 5) Validate NDT requirements (100% testing or sample testing) . Also, confirm that the NDT stamp letter matches the actual test requirement.
See NDT checklist .
- 6) Manufacturing Source Identification Marking ([3.14.2](#))
- 7) Validate date code exists in MMY format and is current ([3.14.2](#))
- 8) Validate Country Code ([3.15.1](#)) United States , though not required, can be added and abbreviated using the letters US . Other country markings shall be spelled out completely , no abbreviations.

Rev.C

4-12-2012

ESR1386

Parts that contain the cage code 55820 or 0LYZ0 are no longer being reviewed by UTAS part marking team. Please contact your buyer for instructions about part marking review requirements.

If you can't see the entire image (including #9)
Go to VIEW and zoom out
OR File/Print
To make a paper copy
For a great reference!

55820- PN 4567890 REV A ITALY P

1 2 3 4 5 6 7 8 8a 9

- 1) Validate Cage Code on photo/replica Matches Drawing ([3.4.1](#) / [3.4.2](#))
- 2) Drawing type directly follows Cage Code, no spaces between Cage Code and drawing type ([3.4.3](#))
- 3) 2 or more spaces or 1 or more lines after drawing type and before PN ([3.5.1](#))
- 4) Validate part number on drawing matches photo/replica and contains "PN" prefix ([3.5.1](#)) .
Separate the "PN" from part number with (1) space
- 5) 2 or more spaces or 1 or more lines ([3.5.2](#))
- 6) Validate Rev Letter on photo/replica & drawing match and contains "REV" prefix ([3.5.2](#)) . Separate REV from revision letter with 1 space. i.e. REV A . Use the asterisk * symbol for a basic/no revision part.
- 7) 2 or more spaces –or- 1 or more lines ([3.6.3](#))
- 8) 19 C.F.R. PART 134—COUNTRY OF ORIGIN MARKING Title 19 - Customs Duties. Do not use ESR1386 REV. B requirements. Do NOT use abbreviations.
- 8a) 2 or more spaces between country of origin and NDT stamp
- 9) Validate NDT stamp represents Correct inspection requirement and letter matches process (i.e. P =Penetrant inspection) . See NDT stamp checklist for more info.

Rev. C

4-12-2012

MIL-STD-130 (Source control item) * Note that HS333 will follow the MIL-STD-130 format for SOURCE CONTROLLED ITEMS

1 2 3 4 5 6
914 73030 SOCN 7010145H01 REV A

The following Reference Numbers refer to MIL-STD-130N:

- 1) Validate Inspection Symbol—Last 3 digits of Vendor code enclosed in oval. This requirement is driven from HSM17 found on Purchase Order.
- 2) Validate Cage Code on replica/photo matches Drawing Title Block ([Ref. 5.3.1](#))
- 3) “SOCN” precedes Part Number; no spaces. Source Control Item designation is found on the drawing print ([Ref. 5.3.6](#))
- 4) Validate Part Number on Drawing matches replica/photo ([Ref. 5.3.1](#))
- 5) Separate Part Number and Rev Letter with 2 or more spaces
- 6) Validate Rev Letter on photo/replica & drawing match and contains “REV” prefix. Separate REV from rev letter with 1 space (i.e. REV A). Including the Rev Letter is NOT required. Including a revision letter shall NOT be a cause for rejection.

Additional information can be required on a part and should only be marked if required on the drawing or the PO. Additional information can include, but is not limited to the following items:

Manufacturer's Identification
Hamilton Sundstrand Name or Logo
Supplier's Cage Code
Country of Origin
Manufacturer's Serial Number
Date of Manufacture (YYYYMM)

NON - DESTRUCTIVE TEST STAMP QUICK REFERENCE

- A. Look for NDT requirements in the notes area or in the tab box on the drawing.
- B. TIP: Specs. listed below are often the only indication of NDT requirements.
- C. Refer to specs. for more clarity, or use the interactive tutorial found on the supplier web page
- D. TIP: HS 333 always calls out 100% testing.

	<u>Fluorescent Penetrant</u>	<u>Magnetic Particle</u>	<u>Ultrasonic</u>	<u>Radiographic</u>	<u>Temper Etch</u>
100% Testing 	P		U		N or NE
Sample Testing 		M	U	 See ASTM E1742 for details on this	N or NE
<u>HS 333</u>	HS447	HS31	HS7250	HS4845	HS 972
<u>PN 17.50</u>	PN16.03	PN 16.04	PN16.06	PN16.01	PN16.05
<u>ESR 1386</u>	PN16.03	PN 16.04	PN16.06	PN16.01	PN16.05
Standard Practice Documents	ASTM E1417	ASTM E1444	Mil-std – 2154	ASTM E1742	Mil-std-867

REV
C
4-12-
12