

Pressure Sensitive Markings (Decals)

1. SCOPE

1.1 This specification defines the requirements associated with Pressure Sensitive Markings. In the remainder of this standard, pressure sensitive markings will be referred to as markings. In many instances, pressure sensitive markings are referred to as decals and may be used interchangeably.

1.2 This specification may involve hazardous materials, procedures, and apparatus. This specification does not address the health and safety problems associated with its application or use. It is the specification user's responsibility to follow appropriate health or safety practices and determine the application or regulatory limitation before use.

2. DESIGNATION

2.1 Each Engineering drawing must specify the following information. See Figure 1(a)-1(e).

2.1.1 Proper identity of color(s) per standard 86505483 (FNHA-2-J-005.00) - follow procedure in standard 86511126 (FNHA-3-B-100.00) on how to call out the color(s)

2.1.2 Marking dimensions

2.1.3 Gloss level—located in the materials block

2.1.4 Material—located in the materials block

2.1.5 Performance Level—follow procedure in standard 86511126 (FNHA-3-B-100.00) on how to call out the performance requirements

2.1.6 Designation of this standard: follow procedure in standard 86511126 (FNHA-3-B-100.00) on how to call out the decal reference standard.

2.1.7 Substrates requiring special adhesive

(a) If the marking is to be applied to plastic substrate such as polyethylene, substrate material must be identified on the drawing.

(b) Supplier must use a suitable adhesive for the substrate, as identified on the drawing.

NOTE: Markings are usually supplied with the approved adhesives, backing paper, premask, etc. If any exception from the norm is required, it must be noted on the print.

NOTE: It is the responsibility of the Supplier to clarify this information prior to making the marking by notifying Purchasing or Materials Engineering of any discrepancies or omissions. New Holland is then responsible for correcting the Engineering drawing.

2.2 When a drawing for a marking is created using a foreign language, the part number of the English version and "English" to indicate language shall be listed on the drawing. Similarly, the drawing for the English version of the marking shall list the part number and language of the foreign language version. See Figure 1(a) for example.

					NAME	STD PRESSURE MRKINGS		
ALL	E	TH	120847	03-03	 NEW HOLLAND	ENGINEERING SPECIFICATION		
ALL	D	TH	118279	05-02				
ALL	C	TH	117318	08JAN02				
ALL	B	TH	116158	14MAY01				
ALL	A	RE	115096	29SEP00				
FRAME NO.	REV	BY	ECN NO.	DATE	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 15	PART NUMBER
APP.	DRAWN	BJFJR	3/00					
GES 9/00	CHECKED							

3. RELATED SPECIFICATIONS

3.1 REFERENCE STANDARDS

86505483 (FNHA-2-J-005.00)—Color Designation
 86523144 (FNHA-2-M-095.01)—Performance Requirements for Pressure Sensitive Markings
 86511126 (FNHA-3-B-100.00)—Referencing Standards on Drawings
 86509254 (FNHA-3-A-075.00)—Safety Markings
 86509255 (FNHA-3-A-080.00)—Operating Markings
 86521430 (FNHA-1-F-020.00)—Requirements for the Marking—"NEW HOLLAND"
 ENW.DS.008—Decal—Development, Design, and Sourcing

3.2 This specification replaces sections 2A and 2B of the New Holland Finishing Manual and Versatile standard 2A015. Also this specification replaces DM specification.

4. TYPES OF MARKINGS

The markings used by New Holland are identified in the following list.

4.1 PATCH TYPE

These markings are the caution, danger, warning, and instructional type. They consist mostly of printed matter used with the appropriate ANSI safety color or black and white printed instructional items. All of these items must be made using the silk, polyester, or metal screen process using 100% opaque PVC film. See standards 86509254 (FNHA-3-A-075.00) on Safety Markings and 86509255 (FNHA-3-A-080.00) on Operating Markings.

4.2 PRE-SPACED DIE CUT

These markings are used primarily for identification and consist of New Holland logos, model numbers, names, etc. In some cases, background or decorative stripes use the same material. It is strongly recommended that these items be made from color impregnated vinyl film. If color impregnated vinyl film is not available, color may be screen printed on approved white vinyl film. See

standard 86521430 (FNHA-1-F-020.00) for "NEW HOLLAND" markings. For model number and model name markings, the style of lettering in Eurostyle.

4.3 RETRO-REFLECTIVE PATCHES

These markings are for night identification by headlights and are usually red or amber in color.

4.4 SLOW MOVING VEHICLE EMBLEMS (SMV)

They are triangular in shape and consist of a center triangle of fluorescent red-orange with three borders of red retro-reflective material.

4.5 FLUORESCENT PATCHES

These markings are for daylight and twilight identification and are usually red-orange in color.

4.6 DASHBOARD, CAB INTERIOR OPERATIONAL PANELS, TOUCH PADS, ETC.

The markings used in this application are primarily constructed of "LEXAN" (polycarbonate) film and are very low in gloss (gloss level 3).

4.7 SPECIALTY ITEMS

The remaining markings are grouped in this category and consist of products such as anti-skid patches used on stepping areas. Included in this category is Kreider Dryer markings, which require Underwriters' Laboratories approval.

5. REQUIREMENTS

5.1 MATERIAL

5.1.1 Vinyl (PVC)

5.1.2 Mylar (brushed chrome polyester)

5.1.3 Aluminum foil (brushed aluminum)

5.1.4 Lexan (polycarbonate)

5.1.5 Any specialty item such as anti-skid material for steps must be specified.

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5.1.6 For use on powder coated, polyester powder coated, and plastic parts, the following material and adhesive combinations are approved:

- Avery XL-1000 film/ S-780 adhesive, 2 mil cast vinyl film.
- Avery C-101 film/ S-780 adhesive, 4 mil calendered vinyl film.
- Avery MX-3200 film/ S-780 adhesive, 4 mil calendered film.

5.2 GLOSS LEVEL

5.2.1 Gloss level 1 is 70 or above at 60° and is used on all pre-spaced, die-cut model numbers, logos, decorative stripes, etc.

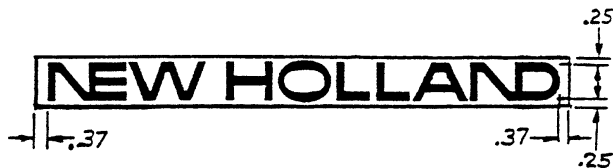
5.2.2 Gloss level 2 is 50 ± 10 at 60° and is used on all patch type markings such as warning, danger, caution, instructional, etc.

5.2.3 Gloss level 3 is 0-10 at 60° and is used on all cab interior markings such as "Lexan" dashboard or console markings and all other operational instructional items in the cab.

5.3 PERFORMANCE

The markings shall meet the performance requirements in standard 86523144 (FNHA-2-M-095.01).

5.4 For Pre-Spaced Die Cut Markings, dimensions controlling the limits of the transparent open background and backing paper must be .37 in. (9.4 mm) wide on the sides and .25 in. (6.35 mm) wide on the top and bottom of the marking. See the following example:



NOTE: The .37 in. (9.4 mm) and .25 in. (6.35 mm) dimensions will not appear on the drawing.

5.5 NEW MARKINGS

For development, design and sourcing of new markings, follow work instruction ENW.DS.008.

5.6 PACKAGING

5.6.1 All markings shall be individually cut except stripping which may be supplied in roll form provided the material will meet the gloss specification and all durability requirements. Markings shall be securely, but not tightly, packed in such a manner that they shall easily separate without blocking. All bundles will be bound with a suitable stiffener to prevent curling or warping. The markings must withstand 30 lbs. per square inch for 24 hours at room temperature ($72^\circ \pm 5^\circ\text{F}$) without blocking or transferring print. Each bundle shall contain 50 to 250 pieces in multiples of 50 and the contents written on the outside of each package. Depending on annual usage, it may be practical to bundle in lesser quantities.

5.6.2 Packaging of pre-spaced die-cut marking should be done in bundles. Each bundle should contain 50 to 250 pieces in multiples of 50 and the contents written on the outside of each bundle. Each multiple of 50 pieces should contain an information sheet, which states the following:

- (1) New Holland part number and print revision letter
- (2) Supplier's name,
- (3) Date of manufacture

5.6.3 Service Parts Markings

Each individual marking should be packaged and state the following on the package:

- (1) New Holland part number and print revision letter
- (2) Supplier's name
- (3) Date of manufacture

The package should also contain an information sheet, which details the application instructions for the marking.

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5.6.4 Service Part Marking Kits

Each service part kit will contain an information sheet (within the kit) which will list the following:

- (1) New Holland part number and a description of the part which that number represents
- (2) Supplier's name
- (3) Date of manufacture

Each kit should also contain an information sheet, which details the application instructions of the markings within the kit.

5.7 IDENTIFICATION

Identification of markings for New Holland must adhere to the following parameters:

5.7.1 Patch Type Markings [> 1 sq. in (25.4 sq. mm) in size]:

- a. New Holland Part Number and print revision letter in the lower right hand corner of the front of the marking.
- b. First initial of supplier and date code in the lower left-hand corner of the front of the marking.

Example: Supplier Smith Decals produces a marking in July of 1993. The marking will have the following in the lower left-hand corner: "S307" where "S" designates the first initial of the supplier, "3" designates the last digit of the current year, and "07" designates the month of production.

- c. No printing is required on the backing paper of the marking.
- d. Patch type model number markings (Service Parts only) should NOT be identified on the front of the decal.

5.7.2 Patch Type Markings [< 1 sq. in (25.4 sq. mm) in size]:

- a. No identification needed on front of individual marking.

- b. Markings may be produced in a strip no more than 1 1/2 in (38 mm) in width and 13 inches (330 mm) in length. The top tab on the strip should display the New Holland part number, Supplier's name, and date of manufacture. The markings on the strip should be individually kiss cut to the correct dimension of the part print for easy removal.
- c. No printing is required on the backing paper.

5.7.3 Pre-Spaced Die-Cut:

- a. Marking shall be identified with a die-cut supplier letter code, cut into the marking material. Letter code should be on the lower left side of the first numeral or letter of the die-cut marking. Size of the letter should be approximately .197 in (5 mm) in height.
- b. No identification needed on premask of the marking.

5.7.4 Service Parts (Individual Markings):

No printing is required on the backing paper or the premask of individual markings.

5.7.5 SERVICE PARTS (KITS):

- a. No identification is needed on the individual markings within the kit.
- b. Each service part kit should contain (on the outside of the kit):

- (1) Kit part number
- (2) Supplier name
- (3) Date of manufacture

6. APPROVED MATERIALS AND APPROVED SUPPLIERS

6.1 Pressure sensitive dies cut markings (model numbers, logos, names, etc.) are listed in Table 1.

6.2 Pressure sensitive patch type markings (safety, warning, caution, and instruction) are listed in Table 2.

6.3 Reflective patches are listed in Table 3 and SMV emblems are listed in Table 4.

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6.4 Dashboard, cab interior operational panels polycarbonate materials ("Lexan") is listed in Table 5.

6.5 Anti-slip materials are listed in Table 6.

6.5.1 Kreider Dryers require markings material that is approved by Underwriters' Laboratories,

produced by UL approved suppliers. In this case, UL approval will be the controlling requirement, rather than New Holland approval. Suppliers are listed in Table 7.

NOTE: For new marking development, design and sourcing, follow work instruction ENW.DS.008.

Figure 1(a)

Figure 1(a) is a technical drawing of a decal template for a warning label. The drawing includes a central warning label with the text "WARNING", "KEEP HANDS, FEET AND CLOTHING AWAY FROM MOVING PARTS.", and "SEVERE INJURY MAY RESULT FROM CONTACT WITH MOVING PARTS." The label is surrounded by a border and has dimensions of 4.38 inches in width and 2.75 inches in height. The drawing also includes a table of specifications and a list of items.

Table 1: Item Specifications

ITEM	QUANTITY	U/M	PART NUMBER	DESCRIPTION	AMER. MAT NOM SIZE
4	0		86505502	SAFETY ORANGE STD	86505483
3	0		86512107	WHITE STD	86505483
2	0		86600186	BLACK M1724P STD	86505483
1	0		86523144	STD DECAL ADH P-C	

Table 2: Decal Specifications

STD. NO.	DESCRIPTION	APPROVED MATERIAL	APPROVED EAB	DESIGN WPL	APPROVED MATERIAL	LEXICON CODE
86613511	STD PRESSURE MRKINGS		99-12-03			

Table 3: Revision History

REV.	BY	ECN NO.	DATE	DESCRIPTION
1	REL	11604	66-11-08	

Table 4: Supplier Information

SUPPLIER	136254
NEW HOLLAND	136254

Table 5: Tolerances

TOLERANCE	VALUE
90° SHEET METAL BENDS	± 2°
POSITION TOLERANCES	± 0.005
COMMERCIAL TOLERANCES	APPLY TO SECTION DIMENSIONS OF RAW MATERIAL

Table 6: Part Information

NAME	FRAME	OF	PART NUMBER
SIGN - WARNING	1	1	136254

Table 7: Class No. Decal

CLASS NO.	DECAL
2	1

Table 8: Supplier Code & Date

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