SCOPE: This specification establishes the requirement to display a 2D bar code on all service part Unit containers, and Masterpack containers as applicable. This bar code format encodes many data elements that are required to support FCSD's Global Distribution network. 2D bar codes are now a requirement for all service parts as detailed in the FCSD Packaging & Shipping Guide and therefore it will not be included on individual service part packaging specifications.

BAR CODE SYMBOL: 2D bar code type is in Datamatrix format. Bar code size is 5/8" (15.875mm) square as shown here:

(5/8" × 5/8" Datamatrix bar code image shown)

BAR CODE FORMAT: The table below provides 2D bar code encoding instructions. The 13 data elements to be captured in the 2D bar code are shown, as well as the field numbers for each data element. ***It is imperative that data always starts in the first position of each data element field, and that any unused field positions are filled in with spaces, i.e. every data element field position must have a character or space entered.*** Failure to do this will result in a bar code that will display faulty data. Also, please note that a complete packaging specification must be input into the FCSD Packaging Specification System, and the part must be properly sourced by FCSD Purchasing in the FCSD MMP Materials Management System, before a 2D bar code can be generated.

> **IMPORTANT**
> **2D bar code data must match FCSD packaging specification on file in GSPPS**

> **'P' for Unit Container**
> **'M' for Masterpack**

> **IMPORTANT**
> If you manually enter data, it is imperative that data always starts in the first available position of each data element field, and that any unused field positions are filled in with spaces, i.e. every data element field position must have a character or space entered.

Service Part Number (23)		Engineering Finis Number (8)	Engineering Part Number (23)	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23		24 25 26 27 28 29 30 31	32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54	
P	Service Part Number with Hypens	F — Engineering Finis Number	E	Engineering Part Number with Hyphens

Sales Part Number (17)	Manufacturing Supplier GSDB Code (5)	Packaging Supplier GSDB Code (5)	Packager Work Order Number (9)	Packaging Date Code (9)	Unit of Issue (3)
55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71	72 73 74 75 76	77 78 79 80 81	82 83 84 85 86 87 88 89 90	91 92 93 94 95 96 97 98 99	100 101 102
S — Sales Part Number with Hyphens	5-Digit Manufacturing Supplier GSDB Code	5-Digit Packaging Supplier GSDB Code	Packager Work Order Number	Packaging Date Code (ie. 12JUL2016)	Unit of Issue

COO (2)	Use By Date (9)	UPC Code (12)	Packager of Record Open Field (15)
103 104	105 106 107 108 109 110 111 112 113	114 115 116 117 118 119 120 121 122 123 124 125	126 127 128 129 130 131 132 133 134 135 136 137 138 139 140
Country Code	Use By Date (ie. 31DEC2019)	Universal Product Code	Packager Data - Open Data for Packager Use

Revisons:
11-11-19 - Added IMPORTANT note to page 1; removed secondary 2d app, page 7.
9-16-19 - Updated Scan to Web and 2D Bar Code Creator web address.
6-14-19 - Updated Scan to Web app instructions per update from app developer.
2-1-19 - Added additional barcode app on page 7.
9-14-18 - Added P/M Masterpack identifier. Updated FCSD address.
6-26-18 - Updated bar code links for 2D barcode generator and 2D bar code validation tool. GPL
1-17-17 - Revised 2D bar code encoding table from Supplier GSDB Code to Packaging Supplier GSDB code. GPL
10-26-16 - Revised Bar Code Scan test directions. GPL

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Designed	GPL	T. A. Kasper	*(signature)*	Date 10-20-16	Revised 11-11-19

AUTOMATIC FORMATTING: To facilitate the 2D bar code generation process and ensure quality control, FCSD Global Packaging Engineering has created a tool that will enable suppliers to simply enter the service part number and the tool will automatically fill out most of the data element fields for the 2D bar code. The other option is for the suppliers to manually enter all the required data. So suppliers are strongly encouraged to use this tool. This tool is available via the Supplier Portal at http://web.pkginfo.ford.com.

Step 1 - Go to link
https://fcsd2dbarcodecreator.cdis3.com/
Step 2 - Select Unit Pack or Masterpack
Step 3 - Enter service part number

FCSD 2D Bar Code Creator

To start the 2D Bar Code Creator process, enter a Service Part Number or FINIS Number in the text box below, select Unit/Sell Pack or Masterpack, then click on the Submit button. If you do not have a Service Part Number, then just click on the Submit button.

Service Part:

Are you creating a 2D Bar Code for a Unit/Sell Pack or Masterpack Label (Required)

● Unit/Sell Pack ● Masterpack

Submit

FCSD 2D Bar Code Creator

Complete the form below, then click on the 'Create 2D Bar Code' button. Hold your cursor over the field names below to view a brief description of each.

Service Part Number (maximum 22 characters)
CC3Z-9D653-F

Engineering Finis Number (maximum 7 characters)
5402046

Engineering Part Number (maximum 22 characters)
CC34-9E857-DD

Sales Part Number (maximum 16 characters)
CX2538

Part Manufacturing Source GSDB Code (exactly 5 characters)
EE01A

Packaging Supplier GSDB Code (exactly 5 characters)
P025A

Packager Work Order Number (maximum 9 characters)
123456789

Packaging Date Code
Day 08 Month SEP Year 2016

Unit of Issue (maximum 3 characters)
1

Country of Origin (exactly 2 characters)
US

Use By Date
Day 01 Month OCT Year 2016

UPC Code (exactly 12 characters)
0315086911353

Packager of Record Open Field (maximun 15 characters)

Enter Data in These Fields Manually

Enter Data in These Fields If Applicable

Step 2 - Click (Create 2D Bar Code) —— Create 2D Bar Code

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Tool for Validating Bar Code

Step 3 - Select all to copy the 2D bar code text string ────────▶

> **Your 2D Bar Code has been created. Right click in the text box below and choose Select All to copy the entire text string.**
>
> PCC3Z-9D653-F   F5402046ECC34-9E857-DD   SCX2538
> EE01AP025A1   1 US   031508691353
>
> **Return to Part Entry Screen**

BAR CODE PLACEMENT: Please refer to the Material Specification PRINT for exact positioning of the 2D bar code on FCSD's various packaging materials including graphic and plain labels, small branded poly bags, and branded folding cartons.

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Tool for Validating Bar Code

Step 4 - To validate your 2D bar code string,go to link https://fcsd2dbarcodevalidator.cdis3.com/
            and paste 2D bar code string into text field as shown below. Click submit button.

Note: This does not guarantee that your bar code is readable.
            Download Scan to Web app and follow the steps on page 6 to assure your 2D bar code is readable.

FCSD 2D Bar Code Validator

Scan your barcode into the text field below, then click on the Submit Button.

857-DD   SCX-2538   EE01AP025A12345678901JAN20161 US01JAN2016031508691353

Submit

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See Pages 6 for FCSD approved app to test 2D bar codes and view results as shown below:

Correct 2D bar code

FCSD 2D Bar Code Validator

Scan your barcode into the text field below, then click on the Submit Button.

PCC3Z-9D653-F   F5402046ECC34-9E857-DD   SCX-2538   EE01AP025A12345678901JAN20161 US01JAN

Submit

Service Part Number (including the leading 'P' character):
PCC3Z-9D653-F

Engineering FINIS Number (including the leading 'F' character):
F5402046

Engineering Part Number (including the leading 'E' character):
ECC34-9E857-DD

Sales Part Number (including the leading 'S' character):
SCX-2538

Primary GSDB:
EE01A

Packager GSDB:
P025A

Packager Work Order Number:
123456789

Packaging Date Code:
01JAN2016

Unit of Issue:
1

Country of Origin:
US

Use By Date:
01JAN2016

UPC Code:
031508691353

Packager of Record Open Field:

Incorrect 2D bar code
Note: Errors are indicated below in red text.

FCSD 2D Bar Code Validator

Scan your barcode into the text field below, then click on the Submit Button.

PCC3Z-9D653-F   F5402046ECC34-9E857-DD   SCX-2538   EE01AP025A12345678901 US01JAN2016031508691353

Submit

Service Part Number (including the leading 'P' character):
PCC3Z-9D653-F

Engineering FINIS Number (including the leading 'F' character):
F5402046

Engineering Part Number (including the leading 'E' character):
ECC34-9E857-DD

Sales Part Number (including the leading 'S' character):
SCX-2538

Primary GSDB:
EE01A

Packager GSDB:
P025A

Packager Work Order Number:
123456789

Packaging Date Code:
01 US01J
(must contain only alpha-numeric characters)

Unit of Issue:
AN2
(must contain only numeric characters)

Country of Origin:
01
(must contain only alpha characters)

Use By Date:
603150869

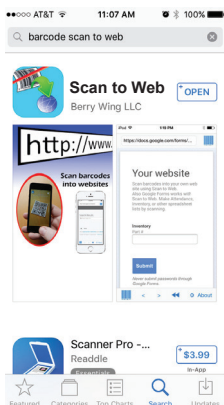*UPC Code:*
1353
(must contain only numeric characters)

Packager of Record Open Field:
1353

FORD MOTOR COMPANY, PACKAGING ENGINEERING, FORD CUSTOMER SERVICE DIVISION, 28301 SCHOOLCRAFT RD, BUILDING 300, LIVONIA, MICHIGAN 48150
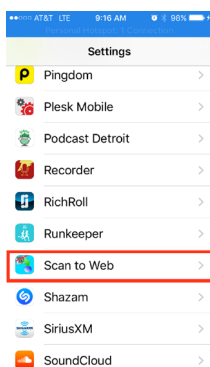
Designed			Date		Revised	
GPL	T. A. Kasper			10-20-16		11-11-19

iOS and Android App for Bar Code Scan Test (recommended)
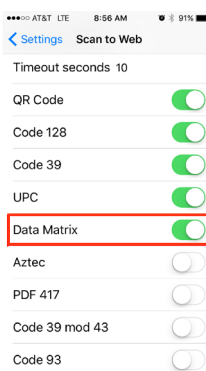## NOTE: Scan to Web is the only FCSD approved app for testing 2D bar codes.

1. Go to App Store or Google Play Store. Search for "Scan to Web" by Berry Wing LLC.
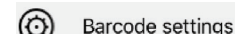
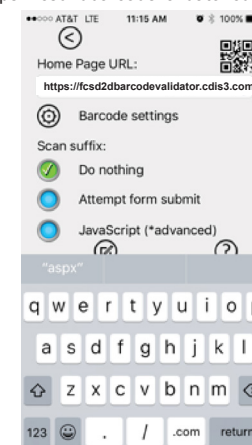2. Open your phone "Settings" menu, then select "Scan to Web" (iPhone only)
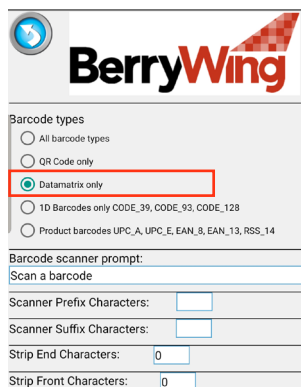
3. Turn on Data Matrix (iPhone only)

4. Open the Barcode Scan to Web app

Tap the **Barcode Settings icon**

Barcode settings

5. Enter the following URL into the Home Page URL text box:
   https://fcsd2dbarcodevalidator.cdis3.com/

6. Tap the **Barcode and App Settings** button (below 'Create Scan to Configure Barcode)
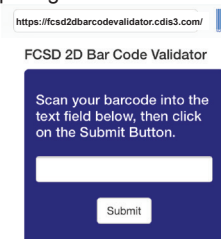
   Under Barcode Types, select **Datamatrix Only**

7. Place a checkmark in the the box for the option to **"Use v5 Scanner"**

   Tap the "back" arrow in the top, left corner until you are at the home screen.
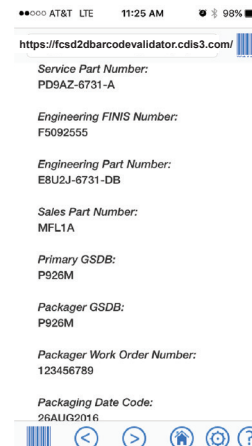
8. Close and re-open the app. The FCSD 2D Bar Code Validator will display. (If it does not, check to make sure step 5 was properly followed) Click in the text box, then click on the blue barcode icon in the upper right corner.

9. Scan the 2D barcode.

10. The app will return the results from reading the 2D bar code. Errors will be highlighted in red.

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Designed			Date	Revised
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