N5182A-13A

Information Only Service Note

Supersedes:
N5182A-13

N5182A MXG Vector Signal Generator

Serial Numbers: ALL

The Problem – The N5180-60024 LCD Assembly is No Longer Available

Parts Required:

P/N	Description	Qty.
N5180-69465	Refurbished Display LCD 6.2-in STN 640X240-Pixels	1

ADMINISTRATIVE INFORMATION

[[]] Calibration Required	PRODUCT LINE: 15
X Calibration NOT Required	AUTHOR: MM

ADDITIONAL INFORMATION:

KEYSIGHT TECHNOLOGIES

Situation:
New front panel LCDs for this instrument are no longer available due to the manufacturer discontinuing production of them, and the lifetime buys that were made have been depleted.

Solution/Action:
Since the main reason that these displays have failed in these instruments is the CCFL backlight wearing out over time, the displays are being refurbished by having the CCFL backlights replaced with LED backlights. In order to accomplish this an LED driver board will also need to be added in place of the CCFL driver board. So, a replacement parts kit has been setup to provide all the necessary parts to accomplish this.

Table 1 shows all the lower level parts that were included in the discontinued N5180-60024 LCD Assembly Replacement kit, along with the current part numbers that can be used to order these parts.

Table 1 – Discontinued LCD Assembly Replacement Kit Contents – N5180-60024

Part Number	Qty	Description	Order As
1000-1515	1	Filter EMI Display 159.70X67.30X1.90-mm	N5180-60413[1]
1460-2022	1	Spring, Compression .18-in-OD .5-in-LG	N5180-60413[1]
2090-0908	1	Display LCD, 6.2-in 640X240-Pixels	N5180-69465
8121-1380	1	Cable-Assembly, Ribbon, LCD Control	8121-1380
W1312-40011	1	Display Boot	N5180-60266
W1312-40012	1	Display Hold Down	N5180-60266

[1] The N5180-60413 kit includes the parts listed along with others that were not designed for this instrument. Use the parts needed and discard the rest.

As can be seen in Table 1, a new LCD assembly replacement kit has been created to provide the parts needed to replace the CCFL backlit LCD with a refurbished LED backlit LCD. This kit contains the parts listed in Table 2. If any other parts that were in the discontinued kit are needed, they will need to be ordered separately, using the “Order As” part numbers shown in Table 1.

Table 2 – Refurbished LCD Assembly Replacement Parts Kit Contents – N5180-69465

Qty	Description
1	Refurbished Display LCD, 6.2-in 640x240 Pixels
1	LED Backlight Driver Board

Once the defective CCFL LCD display has been replaced, be sure to send it back to the Keysight support

parts organization so that it can be refurbished with an LED backlight and reused in another instrument.

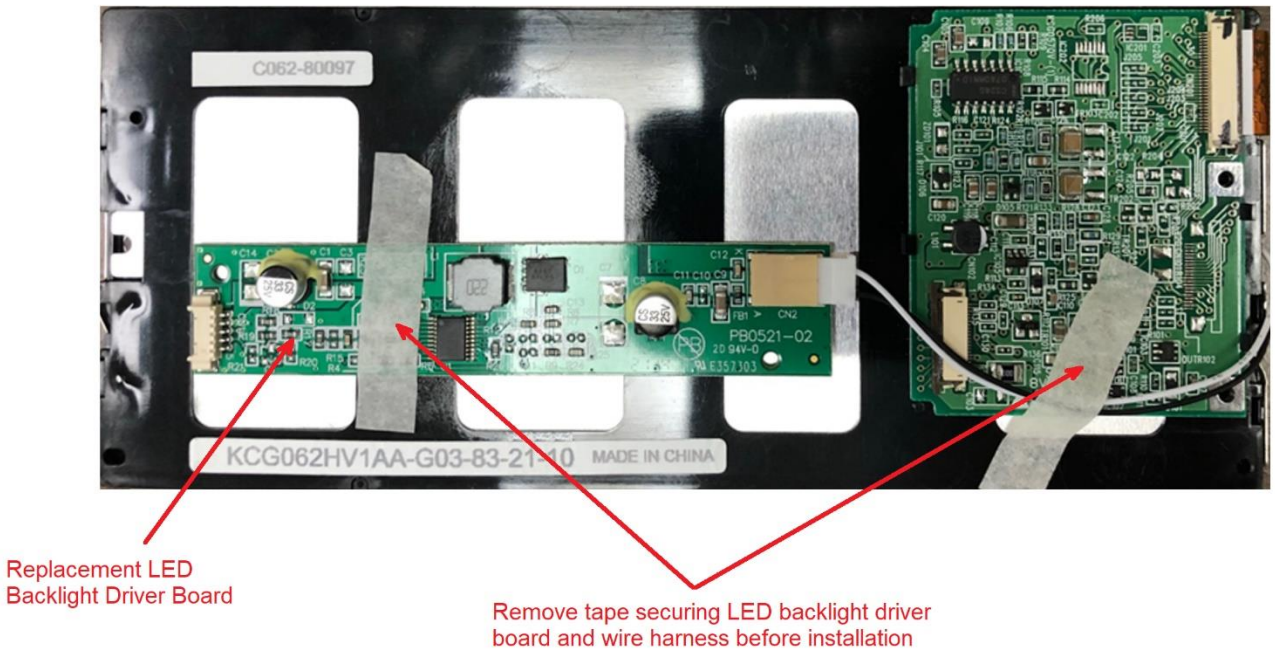
N5180-69465 Replacement LCD Installation Instructions

The N5180-69465 replacement LCD assembly will also come with a new backlight driver board. While this will install in the same position as the previous backlight driver board, it is completely different and needs to be used with the rebuilt LCD assembly.

After removing the defective LCD assembly and the backlight driver board as outlined in the instrument service guide:

1. Remove the tape securing the new backlight driver board and wire harness to the LCD assembly, as seen in Figure 1.

Figure 1 - Replacement LCD and Backlight Driver Board



2. Install the replacement LCD into the front frame assembly
3. Install the replacement LED Backlight Driver board using the same location and screws for the original backlight driver board, as shown in Figure 2 and Figure 3

Figure 2 - LED Backlight Driver Board Connection

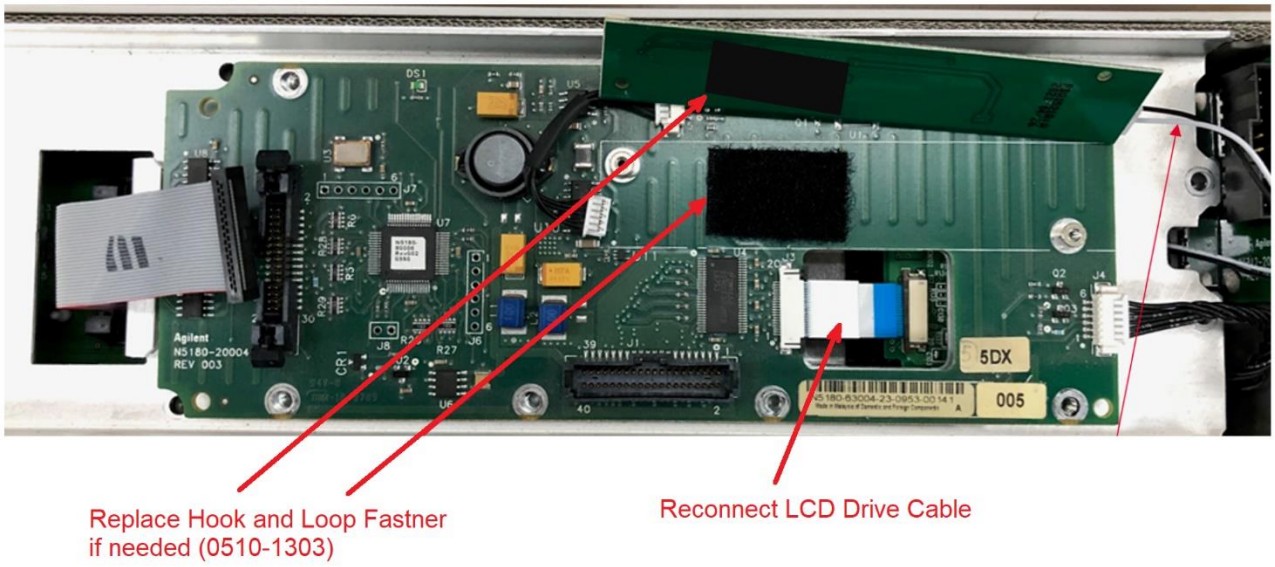
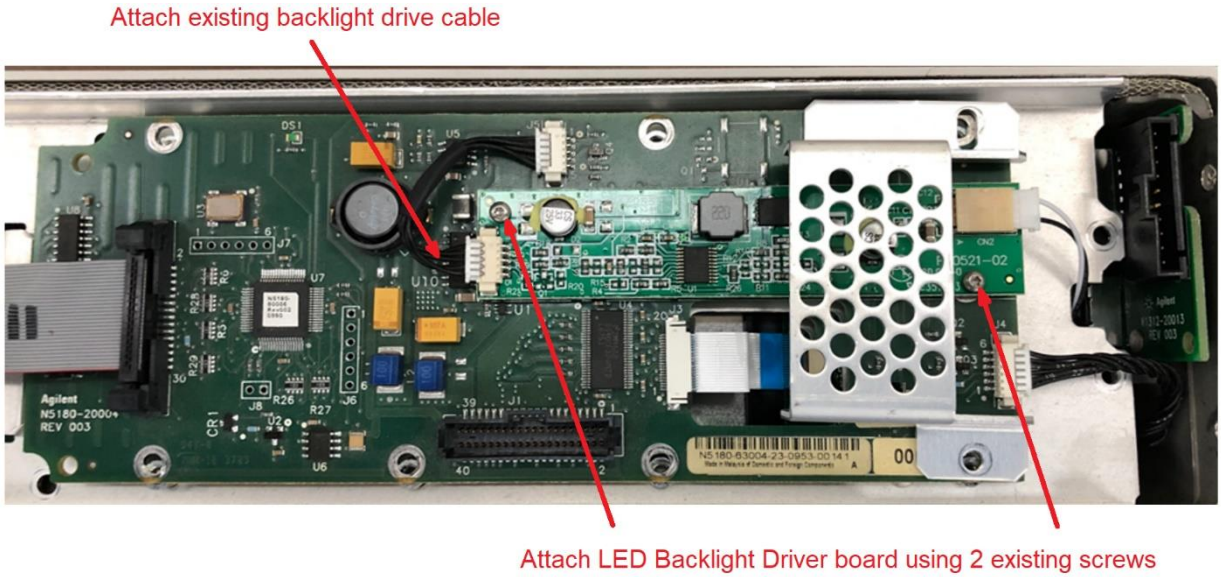


Figure 3 - LED Backlight Driver Board Attachment



4. Attach the existing backlight drive cable to the new LED backlight driver board, as shown in Figure 3
5. Once the assembly is completed, turn the instrument on and verify operation.
6. If the display needs to be adjusted press **Utility**, **Display** and adjust the **Contrast**, as shown in

Figure 4

Figure 4 - Contrast Adjustment

Revision History:

Date	Service Note Revision	Author	Reason for Change
29 July 2020	01	Mike Medley	As Published
10 June 2021	02	Mike Medley	Add info for LED backlight driver