

SANDEL[®]

COMPONENT MAINTENANCE MANUAL FOR SANDEL SN4500 Primary Navigation Display

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PROPRIETARY DATA

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REVISION SHEET

REV	Date	Pages	Para.	DESCRIPTION OF CHANGES
C	Jul 14, 2008	3-6	4.	A/R 1020; Added procedure for changing window
B	Mar 27, 2007	3	2.	Added software release via Service Bulletins
A	Nov 29, 2006	All	All	A/R 867; Initial Release

1. APPLICABILITY

This document is applicable to maintenance for continued airworthiness of Sandel SN4500 Primary Navigation display:

Unit part number: SN4500-xxx, Software revision 1.00 or later

2. UPLOADING SYSTEM SOFTWARE AND DATABASES

System software is released via a Service Information Letter (SIL) or via a Service Bulletin (SB) posted on the Sandel website. The SIL or SB contains links to the software and the related software installation files necessary to load the software. Database updates are available for purchase via the Sandel website. The database information site also contains up-to-date links to database download instructions.

The SIL's, SB's and Database update information can be found at: www.sandel.com under "Support".

3. OTHER MAINTENANCE

There is no additional maintenance required on the SN4500 Primary Navigation Display.

4. FIELD REPAIR

Window replacement is the only authorized in-field repair allowed on the SN4500 per the following procedure. Replacement display windows, Sandel part number 61152 may be ordered from Sandel.

Tools required

Small flat blade screwdriver

#1 Phillips head screwdriver

Important! Read through entire procedure first to familiarize yourself with the part terminology and assembly sequence. Perform replacement in a clean environment.

Step 1. Remove encoder knobs:

1. Carefully pry heading and course knob caps from encoder knobs using a small, flat blade screw driver or similar.
2. Loosen encoder knob collets using a flat blade screw driver and remove encoder knobs from encoder shafts.

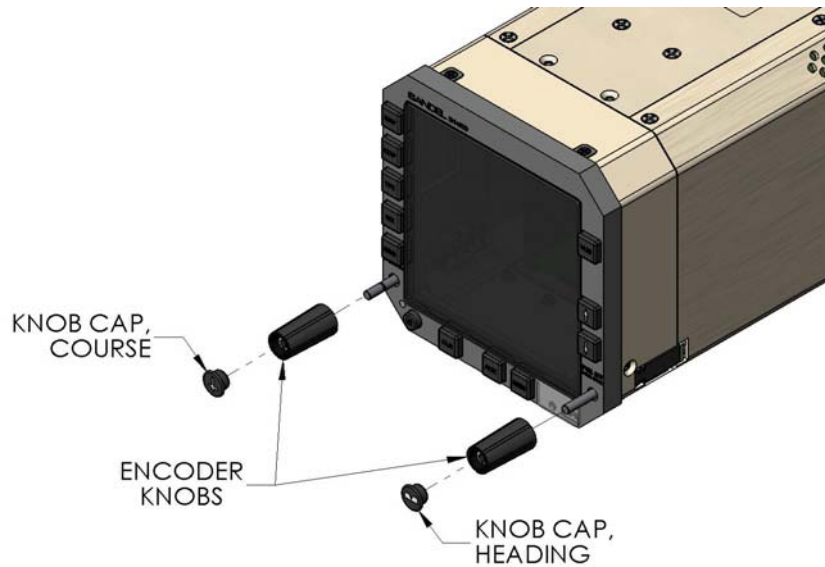


Figure 1. Encoder knob removal

Step 2. Remove bezel retaining screws

1. Place unit upright on bench.
2. Remove 4 ea flat head machine screws, 2-56 X .125 retaining bezel to actuator housing. Hold bezel in place to prevent shifting of retained components.

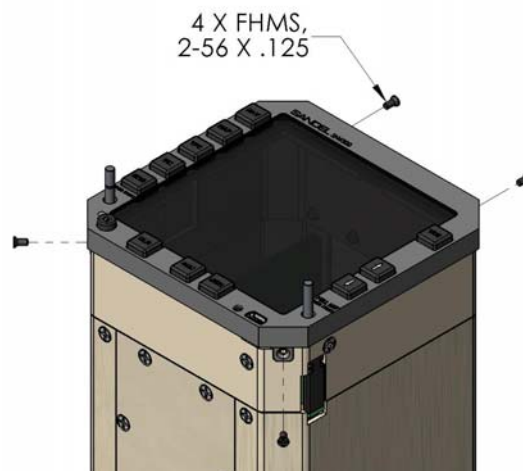


Figure 2. Remove bezel retaining screws

Step 3. Remove bezel and window:

1. Carefully lift bezel from unit while disengaging bezel buttons and rubber keypad from bezel. Do not remove or shift keypad, keypad circuit board, or Fresnel lens.
2. Remove existing window from unit.

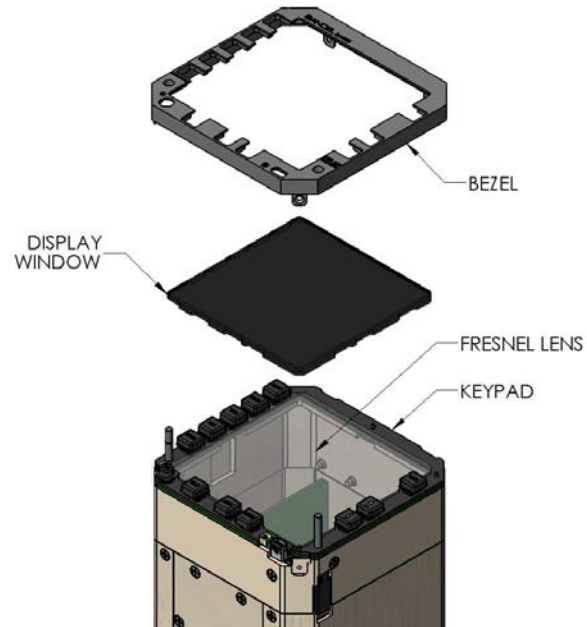


Figure 3. Window removal

Step 4. Install replacement window:

1. Align replacement window to keypad and place onto Fresnel lens of face of unit.
2. Ensure that keypad, keypad circuit board, and Fresnel lens are properly located and have not shifted during procedure.

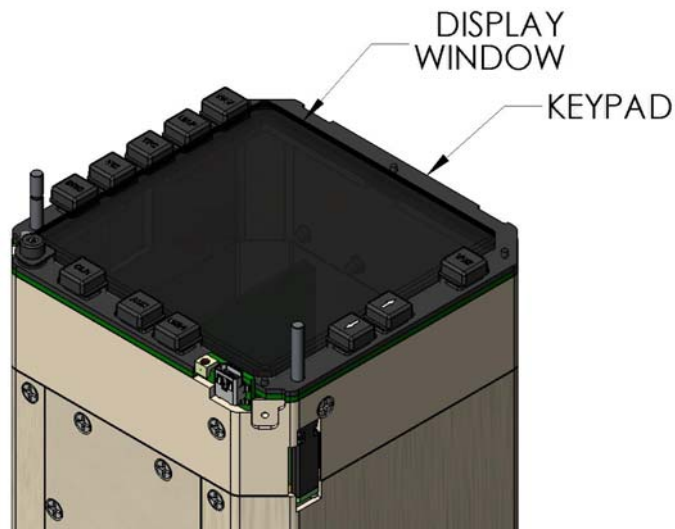


Figure 4. Reinstall window

Step 5. Reinstall bezel:

1. Carefully reinstall bezel onto unit actuator housing. Ensure that the machined lip in window engages bezel opening and that bezel fully seats.

2. Reinstall 4 ea flat head machine screws, 2-56 X .125.

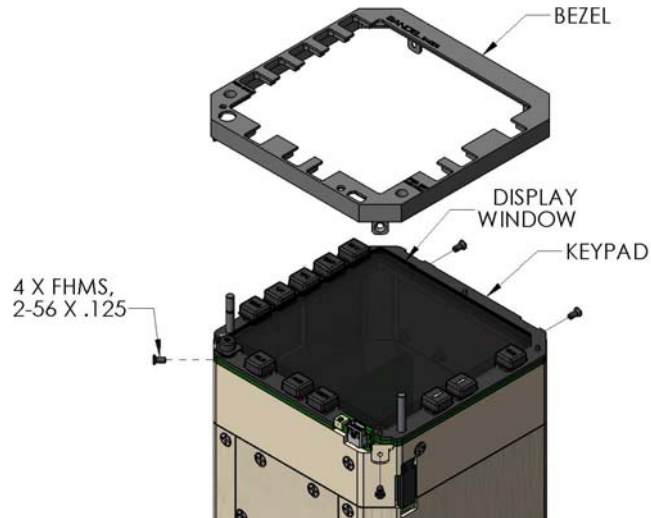


Figure 5. Reinstall Bezel

Step 6. Reinstall encoder knobs:

1. Place encoder knobs over encoder shafts.
2. Leave approximately 0.06" (1.5mm) gap between back of encoder knob and face of bezel.
3. Tighten encoder knob collets using flat blade screw driver. Verify knob operation by rotating knob and pushing in knob. Detent in knob push should be detectable and knob should not contact bezel. When depressed, verify gap dimension by slipping a piece of paper between the knob and the bezel (paper is approximately 0.005" [0.1mm]). The paper should fit easily.
4. Reinstall encoder knob caps into encoder knobs. Ensure proper location of heading and course caps.

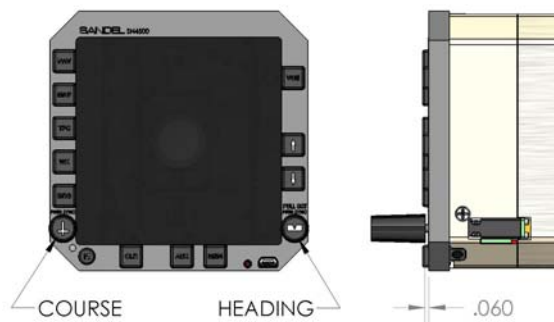


Figure 6. Reinstall Encoder Knobs

Step 7. Verify installation:

1. Ensure that all affected components are installed.
2. Ensure that bezel retaining screws are securely installed.
3. Ensure that all bezel buttons operate freely, without binding.