

12NPR 04-03-14-1 Reason For Revision

- 1) RV-12 SkyView Touch Avionics Kit
- 2) RV-12 SkyView AP-Knob Panels Kit (58)
- 3) Add instructions for installation of F-00062.
- 4) Allow use of lighter springs on RV-12 throttle
- 5) Improve functionality of canopy latch. Add switch to detect open canopy before takeoff. Re-Write ditching instructions in POH.
- 6) Placarding changes to match KAI and POH to the actual placarding on the aircraft.
- 7) Make a new optional section for installation of a rudder trim tab.

KAI Page 42G-01 REV 1: "F-00044-1" was "F-00044" Panel has changed to accommodate new style throttle.

KAI Page 42G-02 REV 1: Add note **"NOTE: For a Garmin G3X Touch installation make the following substitutions: AV GARMIN G3X GTR200 for AV GARMIN GTR200 and WH-00104 for WH-00100"**

Also add **"NOTE: Older finish kits were shipped with a SL-40 specific COM antenna cable connector. Connectors as shown in Figure 1 will need to be cut off and replaced with "AV BNC 1039-ND" available from Vans Aircraft. This requires a BNC RG 58 crimping tool for a wire cross section of .213". We recommend a Proskit CP-371 using CP-336DI."**

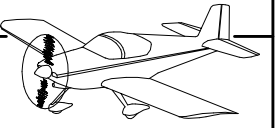
In Step 1,4, 7 and Figure 5 "F-00044-1" was "F-00044"

KAI Page 42G-03 REV 1: Add note at beginning of page **"NOTE: If installing a G3X Touch EFIS system (See Section 42N) or SkyView ADS-B (See Section 53) brackets will share the tray attach screws.**

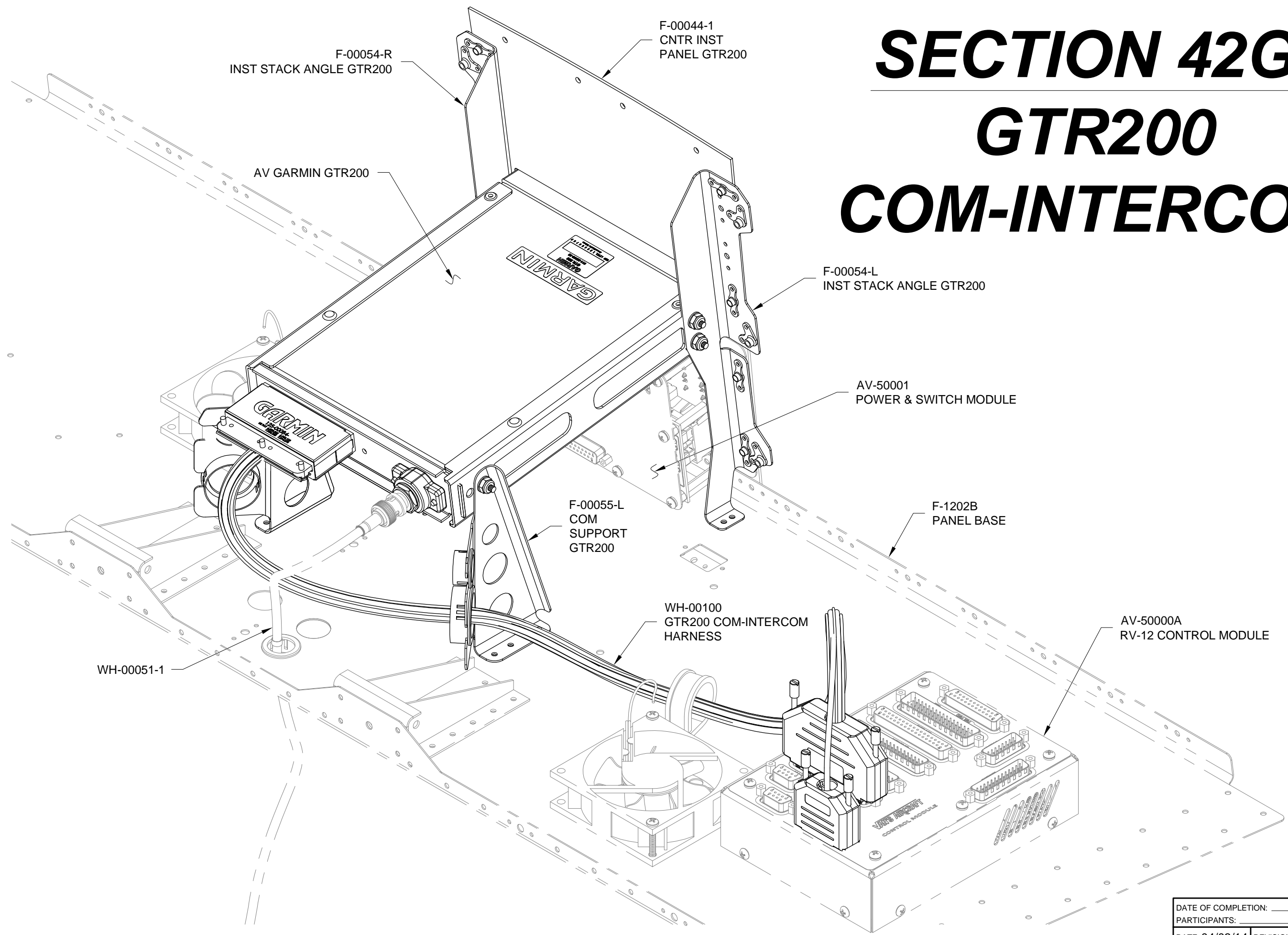
In Figure 1 "F-00044-1" was "F-00044"

KAI Page 42G-04 REV 1: Label existing steps (SkyView) that pertain to just the SkyView EFIS system. Add a note emphasizing this to the builder at the beginning of the page.

Re-Write Step 1 using the SL-40 menu options. Dynon never added GTR200 menu options but instead SL-40 works for both.



SECTION 42G: GTR200 COM-INTERCOM



F-00054-R
INST STACK ANGLE GTR200

F-00044-1
CNTR INST
PANEL GTR200

AV GARMIN GTR200

F-00054-L
INST STACK ANGLE GTR200

AV-50001
POWER & SWITCH MODULE

F-00055-L
COM
SUPPORT
GTR200

F-1202B
PANEL BASE

WH-00100
GTR200 COM-INTERCOM
HARNESS

AV-50000A
RV-12 CONTROL MODULE

WH-00051-1



**NOTE: For a Garmin G3X Touch Installation make the following substitutions:
AV GARMIN G3XT GTR200 for AV GARMIN GTR200 and WH-00104 for WH-00100.**

NOTE: Older finish kits were shipped with a SL-40 specific COM antenna cable connector. Connectors as shown in Figure 1 will need to be cut off and replaced with "AV BNC 1039-ND" available from Vans Aircraft. This requires a BNC RG 58 crimping tool for a wire cross section of .213". We recommend a Proskit CP-371 using CP-336DI.

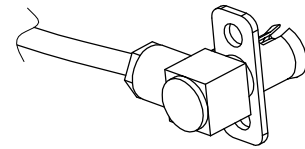
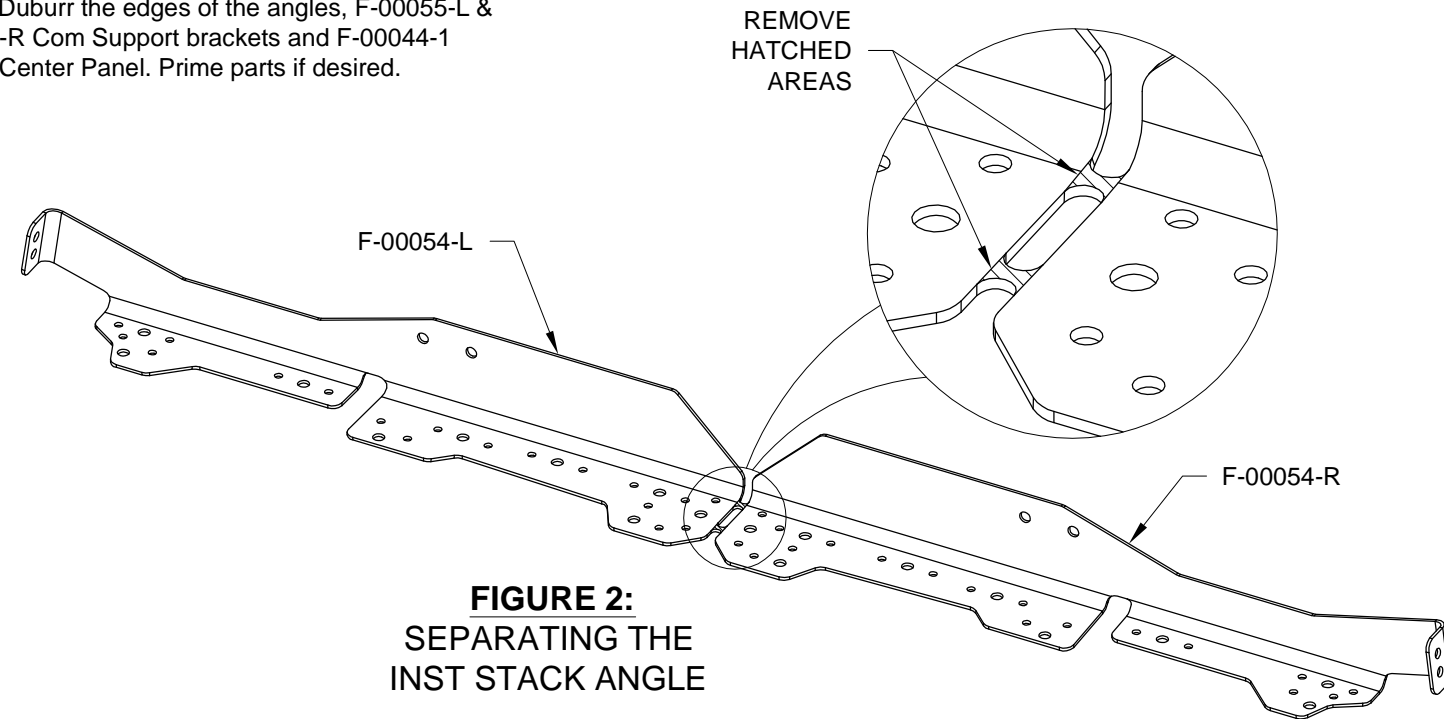


FIGURE 1: SL-40 BNC

Step 1: Separate the F-00054 Inst Stack Angle GTR200 into F-00054-L & -R Inst Stack Angles as shown in Figure 2.

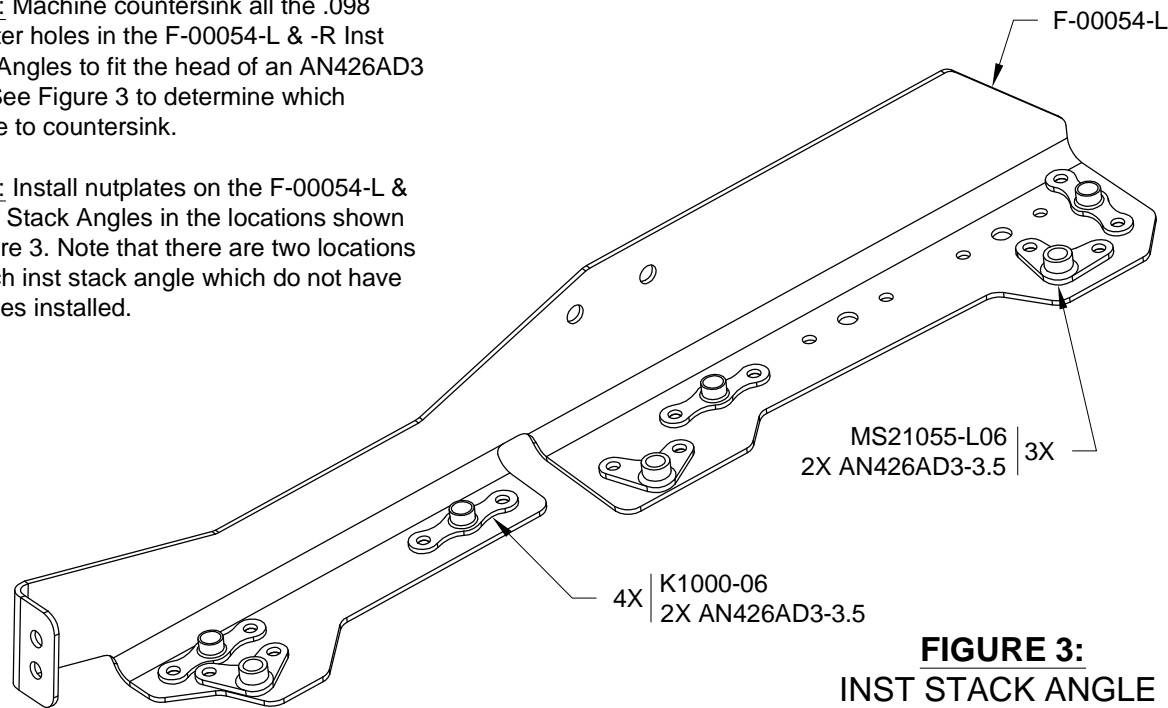
Duburr the edges of the angles, F-00055-L & -R Com Support brackets and F-00044-1 Center Panel. Prime parts if desired.



**FIGURE 2:
SEPARATING THE
INST STACK ANGLE**

Step 2: Machine countersink all the .098 diameter holes in the F-00054-L & -R Inst Stack Angles to fit the head of an AN426AD3 rivet. See Figure 3 to determine which surface to countersink.

Step 3: Install nutplates on the F-00054-L & -R Inst Stack Angles in the locations shown in Figure 3. Note that there are two locations on each inst stack angle which do not have nutplates installed.



**FIGURE 3:
INST STACK ANGLE
NUTPLATE INSTALLATION**

Step 4: Carefully remove parts that may be installed in the location of the F-00054-L & -R Inst Stack Angles and F-00055-L & -R Com Support brackets.

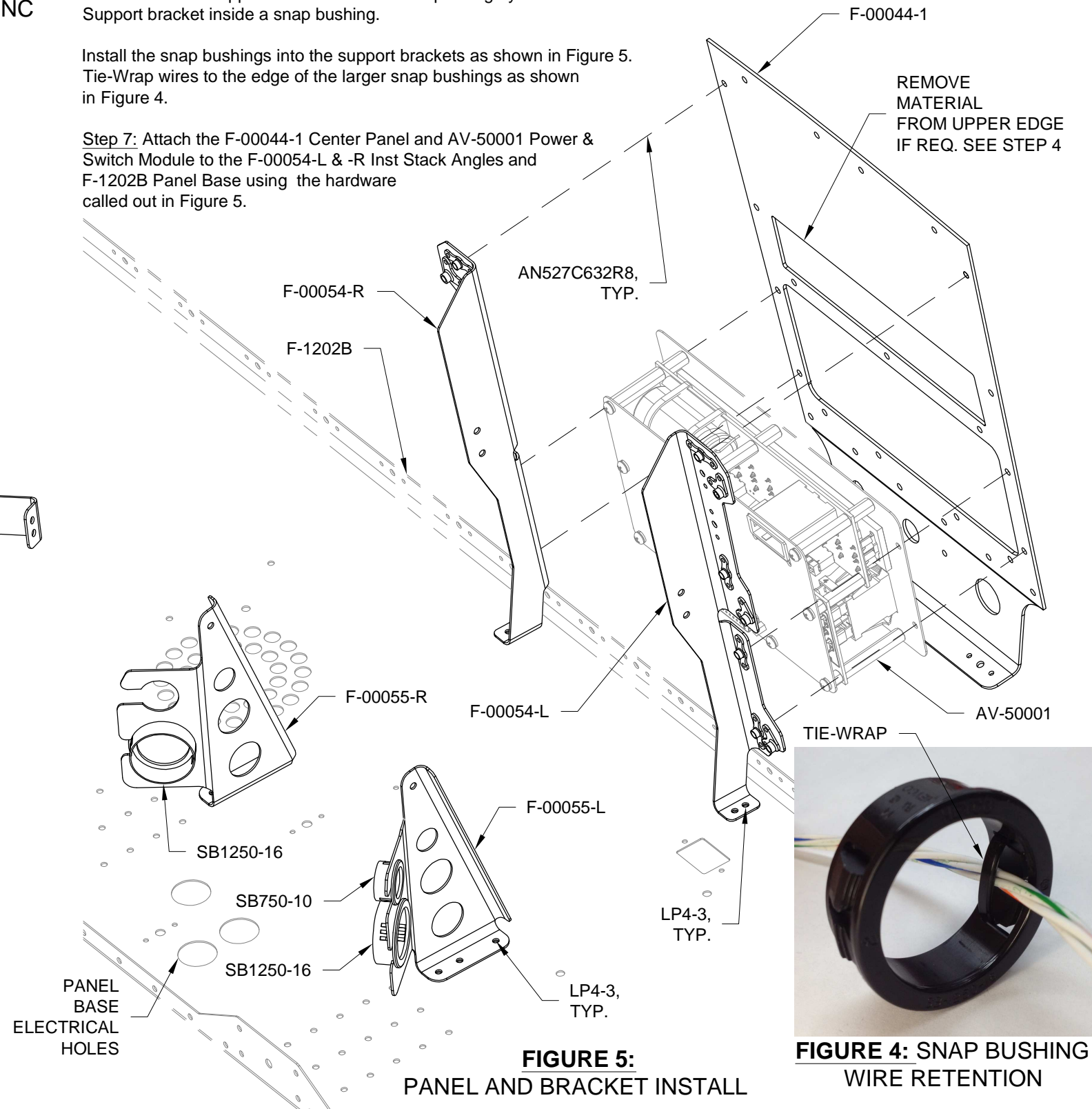
Check the fit of the bezel on the AV GARMIN GTR200 Com Radio with the cutout in the F-00044-1 Center Panel. If the bezel does not freely fit, file away the upper edge of the cutout as shown in Figure 5 to give clearance.

Step 5: Rivet the F-00054-L & -R Inst Stack Angles and F-00055-L & -R Com Support brackets to the F-1202B Panel Base using the hardware called out in Figure 5.

Step 6: Slit the snap bushings called out in Figure 5. Using the slit place all wires and the pitot tube passing by the F-00055-L Com Support bracket and all wires passing by the F-00055-R Com Support bracket inside a snap bushing.

Install the snap bushings into the support brackets as shown in Figure 5. Tie-Wrap wires to the edge of the larger snap bushings as shown in Figure 4.

Step 7: Attach the F-00044-1 Center Panel and AV-50001 Power & Switch Module to the F-00054-L & -R Inst Stack Angles and F-1202B Panel Base using the hardware called out in Figure 5.



**FIGURE 5:
PANEL AND BRACKET INSTALL**



**FIGURE 4: SNAP BUSHING
WIRE RETENTION**



NOTE: If installing a G3X Touch EFIS system (See Section 42N) or SkyView ADS-B (See Section 53) brackets will share the tray attach screws.

Step 1: Attach the AV GARMIN GTR200 Tray to the F-00054-L & -R Inst Stack Angles and F-00055-L & -R Support Brackets using the hardware called out in Figure 1.

Step 2: Attach the WH-00051-1 Com Antenna Cable to the BNC connector to the back of the AV GARMIN GTR200 Tray.

Step 3: Route the WH-00100 GTR200 Com Harness through a snap bushing in the F-00055-L Support Bracket and through the cushioned clamp near the left ES CPU FAN.

Connect the harness backshells labeled 'NAV/COM' and 'INTERCOM' to their respective places on the AV-50000A RV-12 Control Module.

Step 4: Install the AV GARMIN GTR200 Com Radio into the tray per the instructions provided with the com radio.

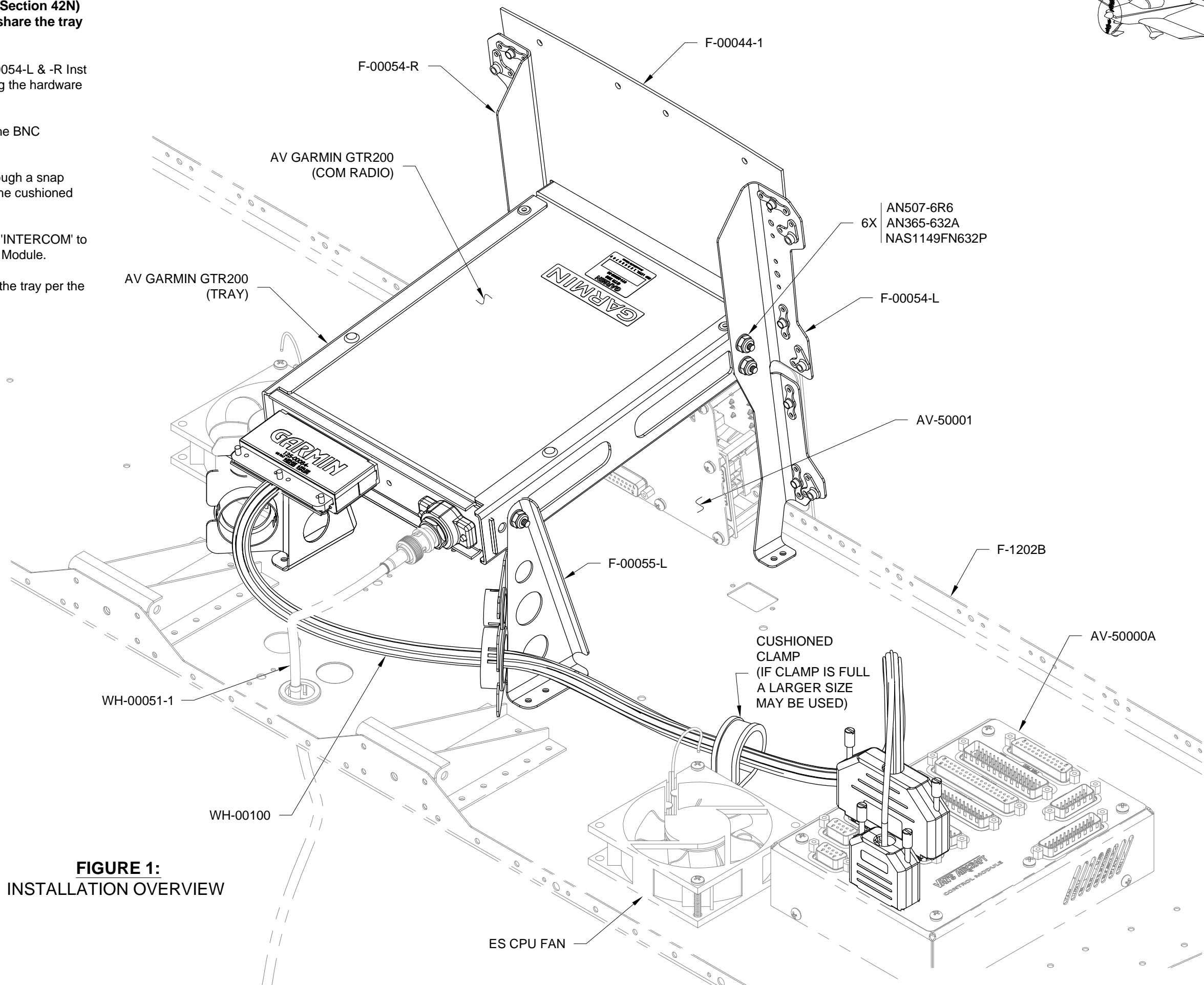
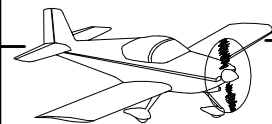


FIGURE 1:
INSTALLATION OVERVIEW



NOTE: Steps labeled (SkyView) are for installation using a SkyView EFIS system. Unlabeled steps are for installation of a Garmin G3X Touch or SkyView EFIS system.

Step 1 (SkyView): Enter the SkyView setup menu then LOCAL DISPLAY SETUP > SERIAL PORT SETUP > SERIAL PORT 4 SETUP then from the menu select "GARMIN / APOLLO SL-40". This will allow frequencies to be pushed to the GTR200 from the SkyView EFIS. To display the status of the GTR200 on the EFIS enter the setup menu then SYSTEM SETUP > DISPLAYED COM then select "GARMIN / APOLLO SL-40".

Step 2: The GTR200 is a stereo intercom. Check that each headset is set to stereo mode by using the headset check function available inside the GTR200. Using a mono headset will shunt the left and right channels and may distort or completely quiet the audio to one or both headsets.

Step 3: Check that the stall warn tone is louder than all other tones. Set the potentiometer for stall warning on the AV-50000A RV-12 Control Module to max volume. If this has been completed and the stall warn tone is still deficient enter the internal setup menu within the GTR200 then increase the GTR200 "Aux 1" volume.

Step 4 (SkyView): Note that GTR200 "Aux 2" volume controls the volume of the SkyView warning signals. Following the procedure in section 42C the SkyView output should be set to 100%, the AV-5000 control module potentiometer set as low as possible to eliminate noise then for a final adjustment the "Aux 2" volume may be changed within the GTR200. Note if excessive noise is coming from the SkyView "Aux 2" squelch may be adjusted within the GTR200.

Step 5: There are several internal settings within the GTR200. The factory settings "GARMIN GTR200 PRESETS" are available upon request in PDF format from Van's Aircraft. A few select settings are mentioned below.

SIDE TONE (Internal setup menu): This is the sound level of your own voice when transmitting. At the factory this setting is set at a value ("16" for example) for use with a common ANR headset. The setting may need adjustment to accommodate different headsets.

Setting the side tone to "ICS" slaves the side tone to the volume knob. It is Van's recommendation to use a fixed side tone value rather than slaving the side tone. During testing, slaving the side tone resulted in occasional feedback squeal when the com volume knob set was over 80%. The side tone would also occasionally spike to max volume.

MUSIC VOLUME (under the menu attained when pressing the soft key "MENU" button): Setting the music volume above 80% may result in background noise from the aux music wires / device. Turn the music volume setting down until all noise disappears then turn the volume up on the aux music device to attain the desired music level.

RF SQUELCH (Internal setup menu): This sets the level at which an incoming signal on the aircraft antenna will be received by the radio. Some aircraft may have a intermittent static noise from the RF Squelch set too low. This could be due to the aircraft being inside a hangar or near a source of RF (for example here at Van's an announcement over the building intercom will sometimes cause the radio to "receive"). If the RF Squelch is set too high it may be hard for the radio to receive faint distant radio transmissions (trying to tune in AWOS 50 miles out). Therefore the RF Squelch should be set as low as possible.

Step 6: Install a ES-00207 Lighted 7.5 Amp Blade Fuse into the "COM" position of the AV-50001 Power & Switch Module.

Install a second fuse of the same type into the fuse holder. Mark out the previous value on the fuse holder label if different than 7.5 amps and re-write the value to "7.5".