



SERVICE LETTER 00055

Date Released: February 20th, 2022

Date Effective: February 20th, 2022

Subject: Garmin GSA 28 Autopilot Servo Replacement

Affected Models: RV-12 and RV-12iS aircraft equipped with Garmin G3X Touch avionics kits shipped by Van's before January 2022

SLSA RV-12 and RV-12iS aircraft with serial numbers 12001-12107, 12109 equipped with Garmin G3X Touch

Required Action: RV-12: At the AV-50000A, cut wire C915 (pin 15) at connector labelled "AUTOPILOT"

RV-12iS: At the AV-60000, cut wire C7042 (pin 23) at connector labelled "PWR MOD"

Time of Compliance: Upon replacement of GSA28 Autopilot Servo with a new unit with part number 011-02927-20

Supersedes Notice: N/A

Labor Required / SLSA Warranty Allowance: N/A

Level of Certification: SLSA: LSA Repairman Maintenance or A&P
ELSA: Owner (certification not required)
Check the rules of the local controlling authority/agency and the operating limitations for your aircraft.

Synopsis:

A change to the latest Garmin GSA 28 Autopilot Servo renders the unit more sensitive to the AP disconnect input signal from the AV-50000A (RV-12) or AV-60000 (RV-12iS). Van's has discovered that after replacement of a Garmin GSA 28 Autopilot Servo with the latest GSA 28 part number 011-02927-20, the autopilot system will remain permanently disengaged.

NOTE: This Service Letter is only applicable when replacing part number 011-02927-00/-10/-11 with part number 011-02927-20.

Materials Required:

None

Method of Compliance:

For RV-12iS Systems:

Step 1: At the AV-60000 Power Module, disconnect the main 50-pin D-sub connector labeled "PWR MOD" - Reference KAI 42MiS/U Page 42.

Step 2: Carefully remove the backshell and cut away heat shrink.

Step 3: Cut wire number C7042, which terminates to pin 23, as close as possible to the D-sub connector. For Garmin VFR systems, reference WH-00134 schematic. For Garmin NAV/COM systems, reference WH-00136 schematic.

Step 4: Apply a 1" piece of heat shrink to the wire, ensuring the end is completely covered. See Figure 1.

Step 5: Wrap wire bundle tightly with electrical tape and reinstall the backshell. Connect the "PWR MOD" D-sub to the AV-60000 Power Module. Move onto Step 6 below.

For RV-12 Systems:

Step 1: At the AV-50000A Control Module, disconnect the D-sub connector labeled "AUTOPILOT". Reference KAI 42N Page 16.

Step 2: Carefully remove the backshell and cut away heat shrink.

Step 3: Cut wire number C915, which terminates to pin 15, as close as possible to the D-sub connector. Reference RV-12 G3X TOUCH ELECTRICAL SYSTEM schematic.

Step 4: Apply a 1" piece of heat shrink to the wire, ensuring the end is completely covered. See Figure 1.

Step 5: Wrap wire bundle tightly with electrical tape and reinstall the backshell. Connect the "AUTOPILOT" D-sub to the AV-50000A Control Module.

Cut wire and
apply heat shrink

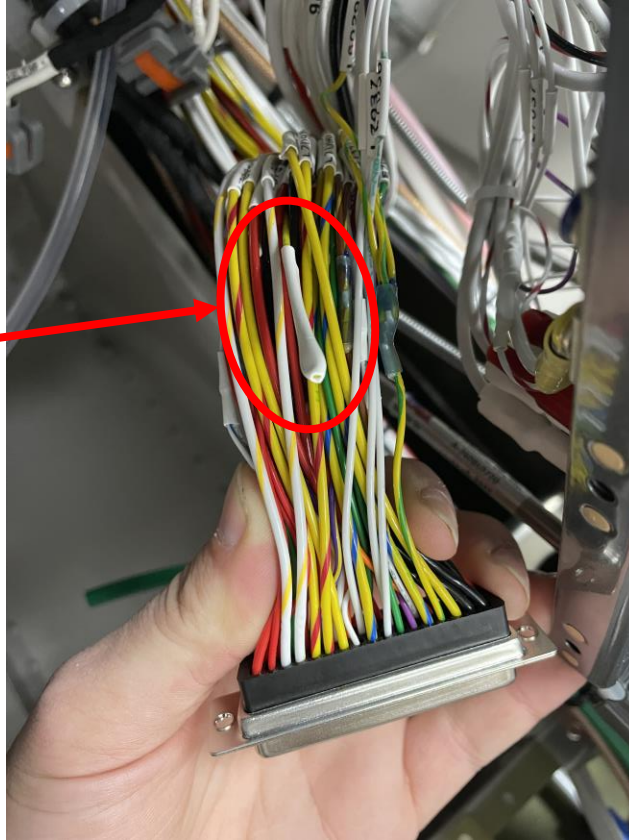


FIGURE 1: EXAMPLE OF CUT WIRE

Step 6: Make a logbook entry indicating compliance with service document per the requirements of the controlling authority/agency.

Place a copy of this notification in the back of the maintenance manual for your aircraft. Add the name and date of the service information to the Addendum Documents List at the front of the Maintenance Manual.

If you are no longer in possession of this aircraft, please forward this information to the present owner/operator and immediately notify Van's Aircraft, Inc. via email at registrations@vansaircraft.com.

Information regarding establishing/transferring aircraft ownership, registration and licensing is available at: <https://www.vansaircraft.com/qr/transfer-of-ownership/>