VHF NAVIGATION ANTENNA - REMOVAL/INSTALLATION

1. General

A. This section gives the removal and installation procedures for the VHF Navigation (NAV) Antenna. There is a left and right navigation antenna. For a general overview of the Garmin VHF Navigation System refer to Garmin VHF Navigation System - Description and Operation.

2. Tools and Equipment

A. Tools and Equipment

- Protective cover.

B. Special Consumables

- None.

C. Reference Material

- Chapter 6,Access Plates and Panels Identification - Description and Operation
- Chapter 20, Electrical Bonding - Maintenance Practices
- Chapter 20, Fuel, Weather, Pressure, and High-temperature Sealing - Maintenance Practices
- Garmin G1000 VHF Communications System - Description and Operation
- Garmin G1000 VHF Navigation System - Adjustment/Test.

3. Setup

A. Prepare the Airplane

CAUTION: Do not replace only one VHF NAV antenna For the correct operation of the navigation system, you must replace the VHF NAV antennas as matched pairs.

NOTE: The VHF NAV 1 (left) and the VHF NAV 2 (right) antennas are removed and installed as part of the NAV antenna kit.

(1) Disconnect external electrical power from the airplane.

(2) Disengage the circuit breakers applicable to the antenna you are replacing given in Table 401.

Table 401. Circuit Breakers

VHF Antenna	Circuit Breaker Name	Circuit Breaker Location
VHF Antenna 1	COM 1	Avionics Circuit Breaker Panel
	NAV 1	Avionics Circuit Breaker Panel
VHF Antenna 2	COM 2	Avionics Circuit Breaker Panel
	NAV 2	Avionics Circuit Breaker Panel

(3) Remove access panel 341A, on the left side of the vertical stabilizer. Refer to Chapter 6, Access Plates and Panels Identification.

4. VHF NAV Antenna Removal

A. Remove the VHF NAV Antenna (Refer to Figure 401).

NOTE: The removal of the VHF NAV1 antenna and the NAV2 antenna is typical.

(1) Disconnect the coaxial connector from each of the two VHF NAV antennas (NAV1 and NAV2).

(a) If the antenna is not going to be replaced immediately, put a protective cover on the coaxial connector.

(2) If necessary, remove any sealant covering the heads of the screws that attach the VHF NAV antenna to the forward and aft doublers.

(3) Remove the screws that attach the VHF NAV antenna to the forward and the aft doublers.

(4) Remove any sealant from around the base of the antennas and spacers.

(5) Remove the VHF NAV antenna and the spacer away from the vertical stabilizer skin.

5. VHF NAV Antenna Installation

A. Install the VHF NAV Antenna (Refer to Figure 401).

NOTE: The installation of the VHF NAV1 antenna and the NAV2 antenna is typical.

(1) Clean the mating surfaces between each of the two VHF NAV antennas (NAV1 and NAV2) and the vertical stabilizer skin. Refer to Chapter 20, Electrical Bonding - Maintenance Practices.

(2) Put the VHF NAV antenna and the spacer in their correct position on the vertical stabilizer skin.

(3) Install the screws that attach the VHF NAV antenna to the forward and the aft doublers.

(4) If necessary, remove the protective covers from the coaxial connectors.

(5) Connect the coaxial connector to the VHF NAV antenna.

6. VHF NAV Antenna Post-Maintenance Checks

A. Do the VHF NAV Antenna Post-Maintenance Checks

(1) Do an electrical bond check (Type I) between the VHF NAV antenna and the airplane structure. Refer to Chapter 20, Electrical Bonding - Maintenance Practices.

(2) Engage the circuit breakers applicable to the antenna you replaced given in Table 401.

(3) Do a functional check of the Garmin VHF Navigation System. Refer to Garmin G1000 VHF Navigation System - Adjustment/Test.

7. Closeout

A. Put the Airplane Back to its Initial Condition.

(1) Install vertical stabilizer panel 341A. Refer to Chapter 6, Access Plates and Panels Identification - Description and Operation.

(2) Fillet seal the base of each antenna with Type X , Class B sealant. Refer to Chapter 20, Fuel, Weather, Pressure, and High-temperature Sealing - Maintenance Practices.

Figure 401 : Sheet 1 : VHF Navigation Antenna Installation

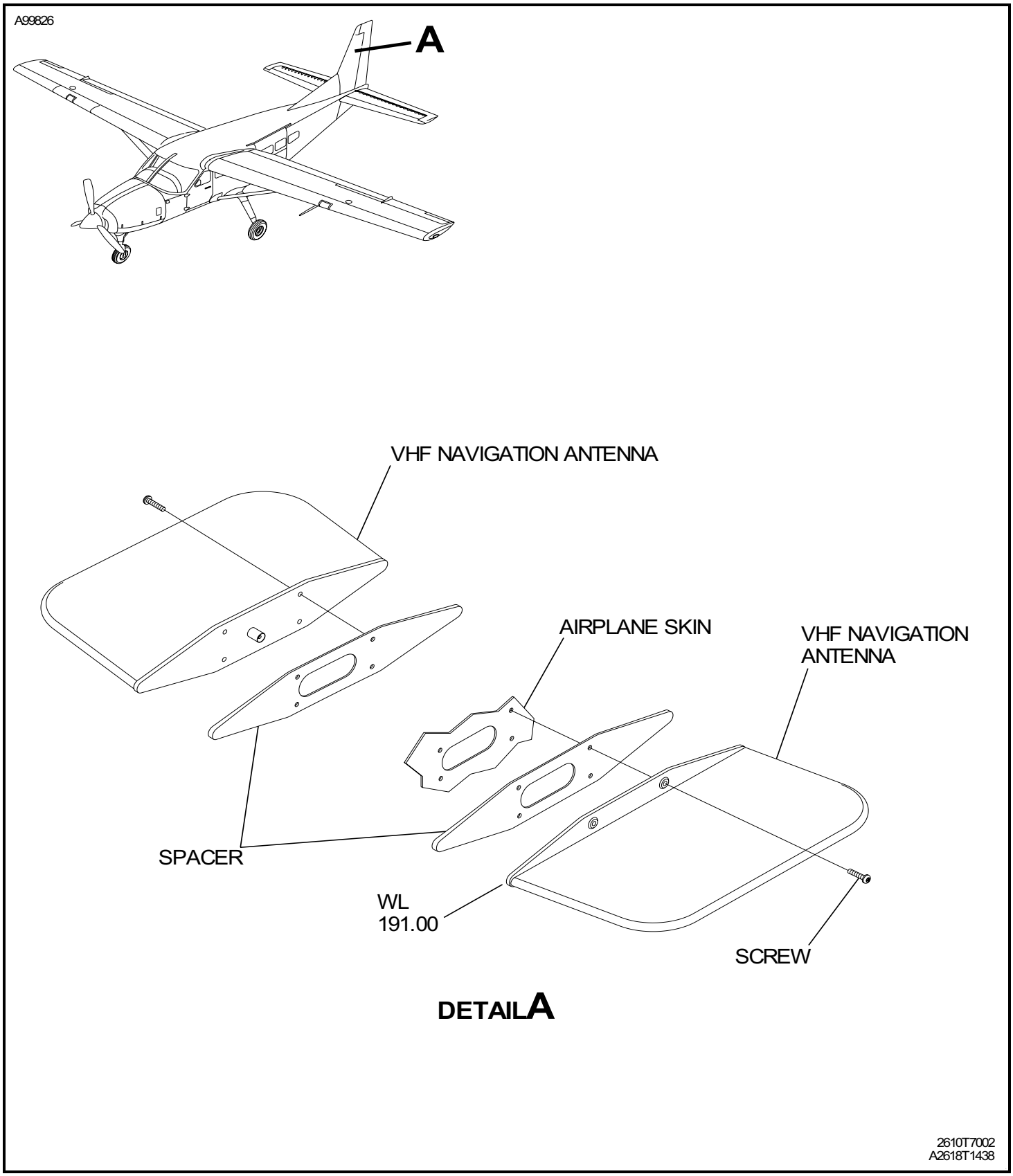

Figure 9 : Sheet 1 : Aft Fuselage, Horizontal and Vertical Stabilizer Panels