

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 I or Type XIV, Class B-2 sealant. Refer to Chapter 20, Fuel, Weather, Pressure, and High-temperature Sealing - Maintenance Practices.

Figure 401 : Sheet 1 : VHF Navigation Antenna Installation

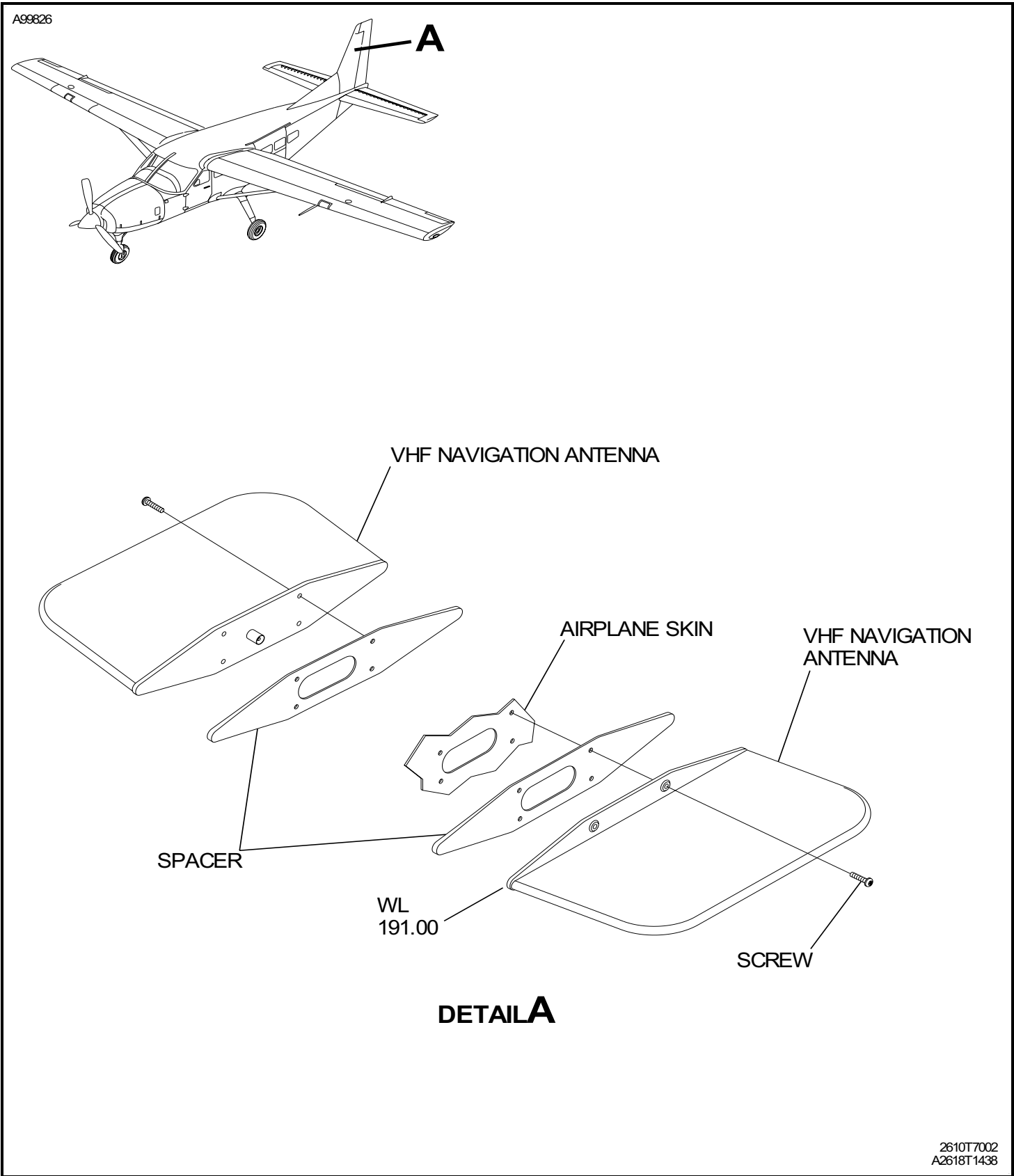
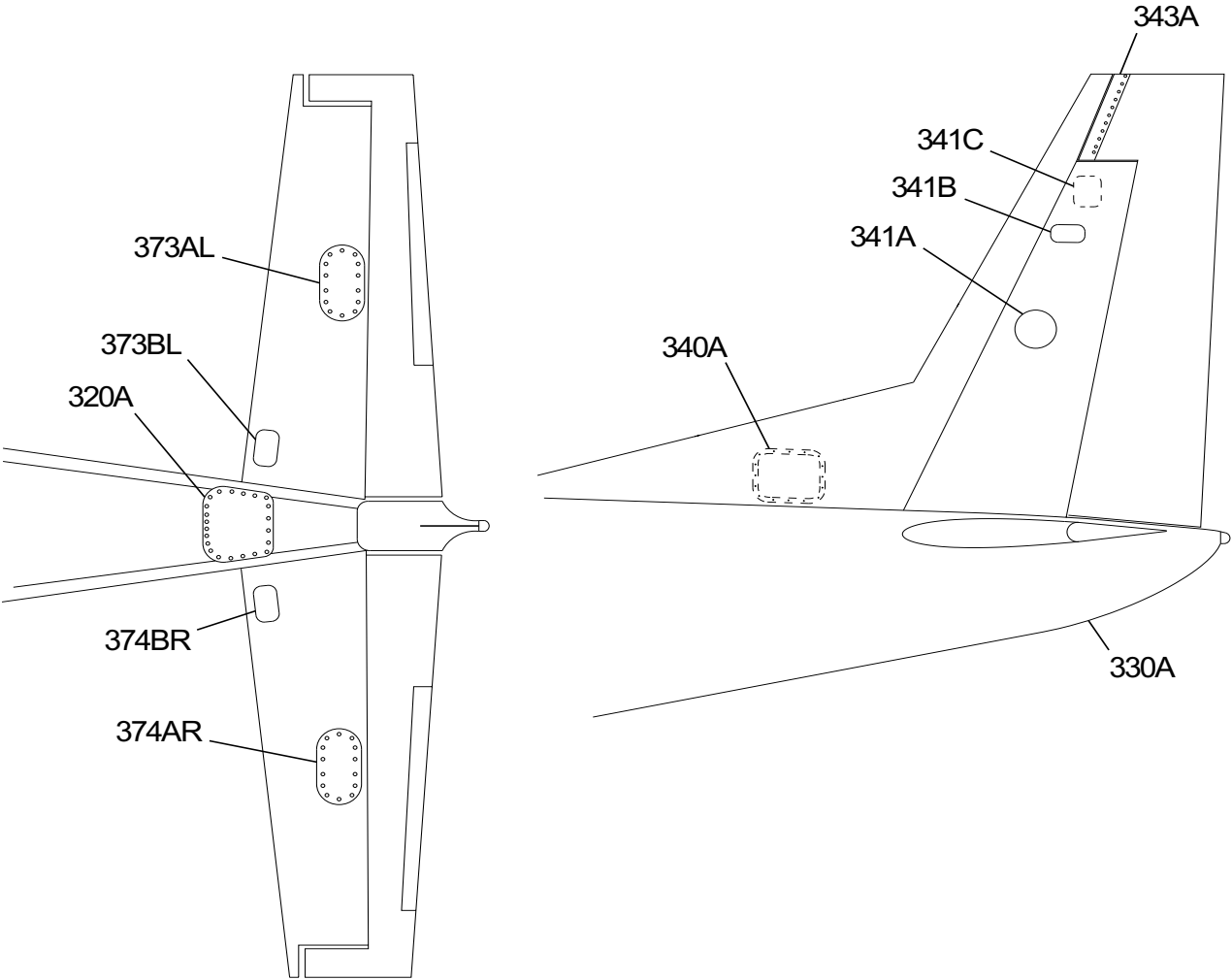


Figure 9 : Sheet 1 : Aft Fuselage, Horizontal and Vertical Stabilizer Panels

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VIEW LOOKING UP AT TAILCONE

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