

**TITLE**

COMMUNICATIONS - GARMIN GDR 66 VHF DATA LINK RADIO INSTALLATION

**EFFECTIVITY**

MODEL	SERIAL NUMBERS
525 (Citation M2)	-0800 and On

**NOTE:** Airplanes -0800 thru -1047 must perform SB525-34-97, Navigation - Garmin Software Update To Version 4.8.11 prior to or in conjunction with this service bulletin.

**NOTE:** Airplanes -1048 and On are equipped with next generation hardware from the factory and will be eligible to install this service bulletin

**NOTE:** Textron Aviation-owned or Textron Aviation-authorized Service Centers are the only facilities that can complete this service document.

**REASON**

To install the Garmin GDR 66 Data Link Radio system.

**DESCRIPTION**

This service document provides parts and instructions to install the Garmin GDR 66 Data Link Radio system.

**COMPLIANCE**

OPTIONAL. This service document can be accomplished at the discretion of the owner.

A service document published by Textron Aviation may be recorded as *completed* in an aircraft log only when the following requirements are satisfied:

- 1) The mechanic must complete all of the instructions in the service document, including the intent therein.
- 2) The mechanic must correctly use and install all applicable parts supplied with the service document kit. Only with written authorization from Textron Aviation can substitute parts or rebuilt parts be used to replace new parts.
- 3) The mechanic or airplane owner must use the technical data in the service document only as approved and published.
- 4) The mechanic or airplane owner must apply the information in the service document only to aircraft serial numbers identified in the *Effectivity* section of the document.
- 5) The mechanic or airplane owner must use maintenance practices that are identified as acceptable standard practices in the aviation industry and governmental regulations.

No individual or corporate organization other than Textron Aviation is authorized to make or apply any changes to a Textron Aviation-issued service document or flight manual supplement without prior written consent from Textron Aviation.

Textron Aviation is not responsible for the quality of maintenance performed to comply with this document, unless the maintenance is accomplished at a Textron Aviation-owned Service Center.

**APPROVAL**

Textron Aviation received FAA approval for the technical data in this publication that changes the airplane type design.

**FLIGHT CREW OPERATIONS**

No Changes

**CONSUMABLE MATERIAL**

You must use the consumable materials that follow, or their equivalent, to complete this service document.

NAME	NUMBER	MANUFACTURER	USE
Sealant	U470642 (PR-1440 (Type I, Class A)	PRC-Desoto 24811 Avenue Rockefeller Valencia, CA 91355-3468	To fay seal parts.
Sealant	U470637 Type I, Class B-1/2, (2ounce Simkit)	Textron Aviation Parts Distribution 7121 Southwest Boulevard Wichita, KS 67215	For sealing applications.
Color Chemical Film Treatment	U074093 (Alodine 1132 Touch n Prep)	Textron Aviation Parts Distribution 7121 Southwest Boulevard Wichita, KS 67215	To prepare bare aluminum surface for intermediate primer.
Corrosion-Resistant Primer	513 x 419	PRC - Desoto International 5430 San Fernando Road Glendale, CA 91209	To protect against corrosion and prepare surface for final finish.

**TOOLING**

No specialized tooling is required to complete this service document.

**WEIGHT AND BALANCE INFORMATION**

<b>MODEL</b>	525
<b>WEIGHT CHANGE</b>	+5.69 pounds
<b>RESULTANT MOMENT</b>	+1908.35 inch-pounds
<b>MOMENT/100</b>	+19.08 inch-pounds

**REFERENCES**

Cessna Model 525 (0685 and 0800 and On) Maintenance Manual

Citation Standard Practices Manual

**PUBLICATIONS AFFECTED**

Cessna Model 525 (0685 and 0800 and On) Maintenance Manual

**ACCOMPLISHMENT INSTRUCTIONS**

1. Prepare the airplane for maintenance.
  - A. Make sure that the airplane is electrically grounded.
  - B. Make sure that all switches are in the OFF/NORM position.
  - C. Disconnect electrical power from the airplane.
    - (1) Disconnect the airplane batteries.
    - (2) Disconnect external electrical power.

- D. Attach maintenance warning tags to the batteries and external power receptacle that have "**DO NOT CONNECT ELECTRICAL POWER - MAINTENANCE IN PROGRESS**" written on them.
2. Install the VHF10-829 COMM Antenna if necessary.
- A. Remove aft baggage compartment panel 321DC to the doubler at FS 359.40. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 6, Access Plates and Panels Identification - Description and Operation.)
- B. (Refer to View A-A.) Drill one 0.76 inch-diameter hole in the fairing panel to match the hole in the doubler.
- C. (Refer to View A-A.) Install four MS21075-3N Nutplates on the doubler.
- (1) Put the VHF10-829 Antenna on the fairing panel and install it in the 0.76 inch-diameter hole that was drilled.
  - (2) Make sure the antenna is aligned with RBL 2.72.
  - (3) Drill four 0.193 inch-diameter holes through the fairing panel and doubler to match the holes in the antenna.
  - (4) Remove the antenna from the fairing panel.
  - (5) Put each nutplate over the 0.193 inch-diameter holes that were drilled.
  - (6) Drill two Number 40 (0.098 inch-diameter) holes through the fairing panel and doubler to match the holes in the nutplates.
  - (7) Countersink the Number 40 holes 100 degrees x 0.180 inch-diameter.
  - (8) Remove the nutplates from the doubler.
  - (9) Deburr the holes that were drilled.
  - (10) Apply U074093 (Alodine 1132) color chemical film treatment to the holes that were drilled. (Refer to the Model 525 Structural Repair Manual, Chapter 51, Protective Treatment Of Metal.)
  - (11) Apply corrosion resistant primer to all of the holes that were drilled. (Refer to the Model 525 Structural Repair Manual, Chapter 51, Protective Treatment Of Metal.)
  - (12) Install the four MS21075-3N Nutplates on the doubler with eight CM3827AD3-2 Rivets.
- D. (Refer to Figure 1, View B-B.) Install the new VHF10-829 COMM Antenna.
- (1) Put the VHF10-829 COMM Antenna on the fairing.
  - (2) Attach the antenna to the fairing with four MS27039-1-08 Screws.
  - (3) Connect the PT1059 coaxial cable to the antenna.  
**NOTE:** The PT1059 coaxial cable has already been installed in the airplane.
  - (4) Make sure there is a Type V electrical bond between the antenna and the fairing panel. (Refer to the Citation Standard Practices Manual, Chapter 20, Electrical Bonding and Grounding - Maintenance Practices.)  
**NOTE:** Electrical bonding of the antenna is accomplished through the MS27039C1-17 Screws. Do not remove the finish on the exterior of the fairing.
  - (5) Fillet seal around the entire base of the antenna, adapter and coaxial connectors with U470637 (Type I, Class B-1/2) . (Refer to the Citation Standard Practices Manual, Chapter 20, Fuel, Weather, Pressure and High Temperature Sealing - Maintenance Practices.)
  - (6) Brush coat seal the nutplates using U470642 Sealant (Refer to the Citation Standard Practices Maintenance Manual, Chapter 20, Fuel Weather Pressure and High Temperature Sealing - Maintenance Manual.).

3. (Refer to Figure 2, Detail A.) Install the GDR 66 VHF Data Link Radio.
  - A. Remove aft baggage compartment panel 322A to get access to the shelf assembly. (Refer to Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 6, Access Plates and Panels Identification - Description and Operation.)
  - B. Put the 011-02477-00 GDR 66 Install Mount on the shelf assembly.
  - C. Attach the 011-02477-00 GDR 66 Install Mount to the shelf assembly with four MS27039-1-08 Screws.
  - D. Make sure there is a Type I Electrical Bond between the 011-02477-00 GDR 66 Install Mount and the shelf assembly. (Refer to the Citation Standard Practices Manual, Chapter 20, Electrical Bonding and Grounding - Maintenance Practices.)
  - E. Install the 011-02303-00 GDR 66 Data Link Radio in the 011-02477-00 GDR 66 Install Mount. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 23, Garmin GDR 66 VHF Data Link Radio - Removal/Installation.)
  - F. Connect the electrical connectors and coaxial cables to the 011-02303-00 GDR 66 Data Link Radio.

**NOTE:** The electrical connectors and coaxial cables are already installed in the airplane.

4. Remove the maintenance warning tags and connect the airplane battery.
5. Do the Airplane Options Installation procedures. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual), Chapter 34, Garmin G3000 Integrated Avionics System - Adjustment/Test (Airplanes with Software Version 4.8 or later).
  - A. From the GTC Home page, do the steps that follow:
    - (1) Select Utilities>Setup>Avionics Status.
    - (2) Scroll down until the GTS status is shown.
    - (3) Make sure the GTS Software is version 3.14.1.
6. Do an operational check of the GDR 66 VHF Data Link system. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 23, Garmin GDR 66 VHF Data Link Radio System - Adjustment/Test.)
7. Install aft baggage compartment panels 322A and 321DC. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 6, Access Plates and Panels Identification - Description and Operation.)
8. Make an entry in the airplane logbook that states compliance and method of compliance with this service document.

**NOTE:** Textron Aviation recommends that compliance with all service documents is reported to a maintenance tracking system provider.

- Complete a record of compliance. (Maintenance Transaction Report, Log Book Entry, or other record of compliance.)
- Put a copy of the completed record of compliance in the airplane logbook.
- Send a copy of the completed record of compliance to the maintenance tracking system provider used.

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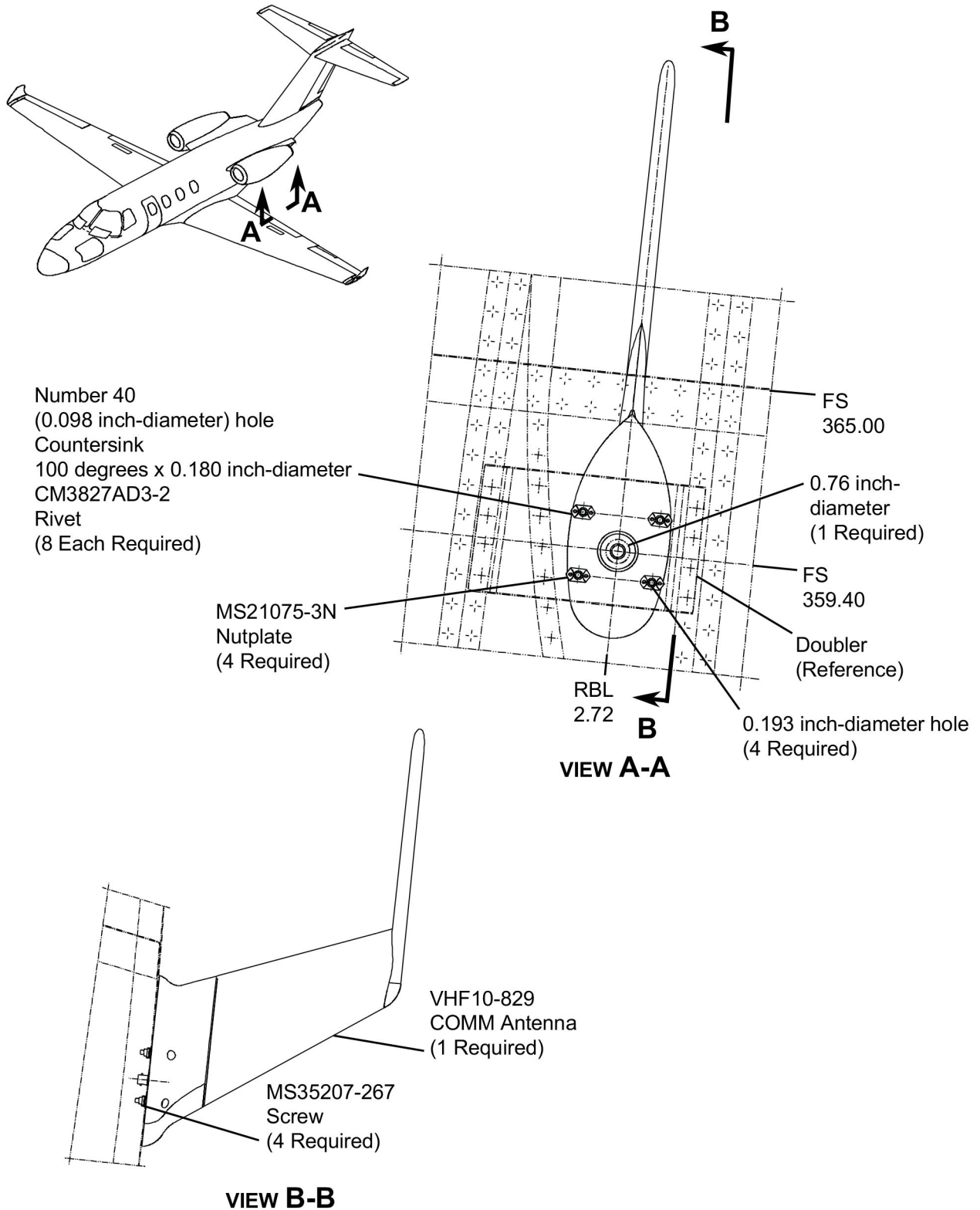


Figure 1. VHF 10-829 COMM Antenna (Sheet 1)

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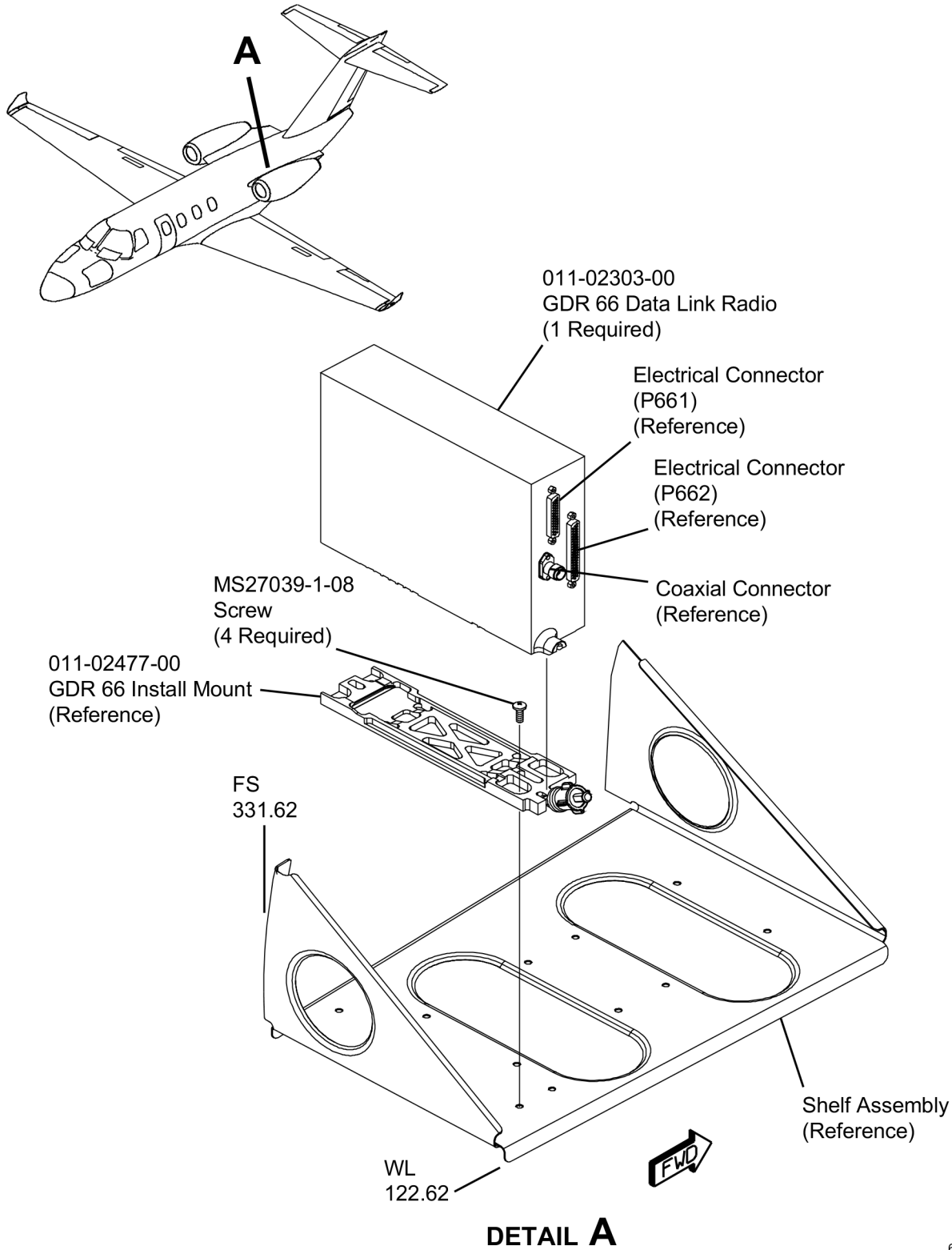


Figure 2. GDR 66 Data Link Radio (Sheet 1)

6310T1168  
A6318T1846

**MATERIAL INFORMATION**

Order the kit/parts below to install this modification.

NEW P/N	QUAN-TITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
<b>SB525-23-25</b>	1	<b>Kit</b> , consisting of the following parts:		
CM3827AD3-2	8	Rivet	None	
MS21075-3N	4	Nutplate	None	
MS27039-1-08	4	Screw	None	
MS35207-267	4	Screw	None	
VHF10-829	1	COMM Antenna	None	
011-02477-00	1	GDR-66 Install Mount	None	
SB525-23-25	1	Instructions		

In addition to the above kit, it will be necessary to order the following part to install this modification.

NEW P/N	QUAN-TITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
011-02303-00	1	GDR 66 Data Link Radio	None	

\*Please contact your Regional Textron Aviation Parts Distribution Customer Support Team for current cost and availability of parts listed in this service document. For more information, please visit the TAPD Support & Aftermarket Account Management website at <https://ww2.txtav.com/Parts/Promos/TAPD>.

Based on availability and lead times, parts may require advanced scheduling.





**TITLE**

COMMUNICATIONS - GARMIN GDR 66 VHF DATALINK RADIO INSTALLATION

**TO:**

Cessna Citation M2 Owner

**REASON**

To install the Garmin GDR 66 Datalink Radio system.

**COMPLIANCE**

OPTIONAL. This service document can be accomplished at the discretion of the owner.

**LABOR HOURS****WORK PHASE**

Modification

**LABOR-HOURS**

As Required

**MATERIAL AVAILABILITY****PART NUMBER****AVAILABILITY****COST**

SB525-23-25

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011-02303-00

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\*Please contact your Regional Textron Aviation Parts Distribution Customer Support Team for current cost and availability of parts listed in this service document. For more information, please visit the TAPD Support & Aftermarket Account Management website at <https://ww2.txtav.com/Parts/Promos/TAPD>.

Based on availability and lead times, parts may require advanced scheduling.

**WARRANTY**

None

**NOTE:** As a convenience, service documents are now available online to all our customers through a simple, free-of-charge registration process. If you would like to sign up, please visit the Customer Access link at [www.txtavsupport.com](http://www.txtavsupport.com) to register.

