TITLE

NAVIGATION - 978 MHZ UAT ADS-B OUT INSTALLATION

EFFECTIVITY

MODEL	SERIAL NUMBERS
162	16200002 thru 16200237

REASON

To provide 978 MHz UAT ADS-B out Installation.

DESCRIPTION

This service document provides parts and instructions to install a GPS antenna, L-Band transponder antenna, and a GDL 82 with associated wiring and cables to enable 978 MHz UAT ADS-B out.

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 approval has been obtained on technical data in this publication that affects airplane compliance to ASTM standards.

TYPE OF MAINTENANCE

Heavy Maintenance

Textron Aviation Customer Service, P.O. Box 7706, Wichita, KS 67277, U.S.A. 1-316-517-5800

CERTIFICATION

Airframe and Powerplant Mechanic (A&P) or Repair Station

NOTE: The coaxial cables require the installation of crimp connectors and there are specific set up and operational check for the GDL 82, it is encouraged that a maintenance facility with an avionics shop complete this installation.

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
Aluminum Sheet	2024 T3 Alclad 0.032 Thickness	Commercially available	To fabricate doublers for GPS and transponder antenna.
Paint, Epoxy (Top Coat)	Matterhorn White No. 54–19232 (or color match airplane if custom painted)	Commercially available	Touch up rivet heads.
Paint, Epoxy	Flat Black	Commercially available	Top coat for GPS antenna doubler.
Corrosion Resistant Primer	K000574	Textron Aviation Parts Distribution 7121 Southwest Boulevard Wichita, KS 67215	Final finish for aluminum.
Adhesive	U074031S, Type I, Class A (RTV-732 White)	Textron Aviation Parts & Distribution	To seal plug button and antenna screws.
Color Chemical Film	U074093	Textron Aviation Parts Distribution	To prepare aluminum surface for intermediate primer.
Sealant	U554426	Textron Aviation Parts Distribution	To fillet seal around the antenna.

TOOLING

NAME	NUMBER	MANUFACTURER	USE
Laptop computer, IBM-compatible PC running Windows 7 SP1 or later operating system and an available USB port		Commercially available	To run the GDL 8X install tool for configuring the GDL 82.
USB-A to USB-B cable		Commercially Available	To connect laptop to GDL 82.
Coaxial DSVB Tools		Commercially Available	To install Coaxial cables.

WEIGHT AND BALANCE INFORMATION

MODEL	162
WEIGHT CHANGE	+ 3.50 pounds
RESULTANT MOMENT	+ 478 inch-pounds
MOMENT/100	+ 4.78 inch-pounds

REFERENCES

Cessna Model 162 Maintenance Manual

Cessna Model 162 Illustrated Parts Manual

GDL 82 TSO Installation Manual Revision 5 or later

NOTE: The GDL 82 TSO Installation Manual can be downloaded from www.flygarmin.com or www.support.cessna.com, go to Model 162, under Avionics select Garmin, scroll down to Optional Equipment and Database Guides.

PUBLICATIONS AFFECTED

Cessna Model 162 Maintenance Manual

Cessna Model 162 Illustrated Parts Catalog

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 external electrical power.
      (2) Disconnect the airplane battery.
   D. Attach maintenance warning tags to the battery and external power receptacle that have **"DO NOT CONNECT ELECTRICAL POWER - MAINTENANCE IN PROGRESS"** written on them.
   E. Place a tail stand below the tail tie down.
2. Remove the center counsel cup holder and aft pedestal closeout. (Refer to the Model 162 Illustrated Parts Catalog, Chapter 25, Pedestal Cover Installations, Figure 05 for installation figure.)
3. Remove the switch panel. (Refer to the Model 162 Maintenance Manual, Chapter 31, Instrument Panel - Maintenance Practices.)
4. (Refer to Figure 1, Sheet 3 and Figure 2, Sheet 3.) Use 2024 T3 Alclad of 0.032 inch or thicker to fabricate the doublers for the 013-00235-00 GPS and L10-611-14 Transponder antennas.
   A. Deburr all drilled holes and edges.
   B. Apply color chemical film treatment and corrosion resistant primer to the bare metal.
   C. Epoxy top-coat the doubler for the GPS Antenna a flat black color to match fuselage interior ceiling.
      NOTE: The doubler for the transponder antenna will be installed under the center counsel, it is not necessary to top-coat the doubler for the transponder antenna.

5. (Refer to Figure 1, Sheet 1 and Sheet 2.) Install the 013-00235-00 GPS Antenna as follows:

   A. Identify the position for the 013-00235-00 GPS antenna and fabricated doubler as follows:

      NOTE: The doubler will be mounted inside the fuselage. The doubler is not symmetrical, the end of the doubler with the shortest distance between the large center hole and the end goes forward. The aft end of the GPS antenna tapers to a more pointed shape and has a longer distance from the coaxial connector.

      (1) (Refer to Figure 1, Sheet 1.) Position the fabricated doubler for the GPS Antenna against the inside of fuselage skin, above the co-pilot seat, against the outboard edge of the first stringer located approximately 6 inches inboard of the fuel sight gauge.

      (2) Slide the doubler forward until it touches the angle gusset and the inboard stringer.

      (3) Slide the doubler aft and slightly outboard until there is an equal 1/8 inch space between doubler, the angle gusset, and the inboard stringer.

         NOTE: Maintain an equal space between the doubler and the inboard stringer to keep the doubler parallel with the stringer.

   B. (Refer to Figure 1, Sheet 3.) Identify with a mark the 5/8 (0.625 Inch Diameter) center hole location.

   C. Remove the doubler.

   D. (Refer to Figure 1, Sheet 3.) Drill the 5/8 (0.625 Inch Diameter) center hole.

   E. Deburr the drilled hole.

   F. Position the doubler with the center holes lined up and hold in position

   G. (Refer to Figure 1, Sheet 3.) Match-drill 18 number 30 (0.128 Inch Diameter) rivet holes.

   H. (Refer to Figure 1, Sheet 3.) Match-drill four number 16 (0.177 Inch Diameter) screw holes.

   I. Remove the doubler

   J. Deburr the drilled holes.

   K. Apply color chemical film treatment to the bare metal.

   L. (Refer to Figure 1, Sheet 3.) Install the doubler with 18 MS20470AD4-4 Rivets.

      NOTE: The manufactured head (button head) of the rivet will be on the outside (top) of the fuselage.

   M. (Refer to Figure 1, Sheet 2.) Install the 013-00235-00 GPS Antenna, O-Ring, with four MS24694-S51 Screws, NAS1149F0332P Washers, and MS21044N3 Nuts.

      NOTE: The antenna is installed with an O-ring only, there is not a gasket or sealant requirement.

      (1) Torque the nuts to 15 Inch-Pounds.

   N. Do a electrical bond check between the 013-00235-00 GPS Antenna and fuselage and make sure the bond is 0.0025 ohms or less.

6. (Refer to Figure 2, Sheet 1.) Remove the existing transponder antenna as follows:

   A. Disconnect the transponder coaxial connector (PC801) from the existing transponder antenna (YC801).

   B. Remove and discard the existing transponder antenna and hardware.

   C. Put a small bead of U074031S RTV Sealant around the exterior of hole where the antenna was removed.

   D. Install a D4037 BUTTON Plug Button and bend a minimum four tabs against the inside fuselage skin.

   E. Wipe away any excess squeeze out of the RTV sealant.

7. (Refer to Figure 2, Sheet 2 and Sheet 3.) Install the L10-611-14 Transponder Antenna as follows:
   A. Identify the position for the L10-611-14 Transponder Antenna and fabricated doubler as follows:

      NOTE: The doubler will be mounted inside the fuselage.

      (1) (Refer to Figure 2, Sheet 2.) Identify with a mark the location 4 Inches aft from the center of the installed button (where the removed transponder antenna was located).

      (2) Position the fabricated doubler for the L10-611-14 Transponder Antenna against the bottom side of the skin, with the two forward screw holes aligned with the mark from previous step.

      (3) Adjust the doubler so it is positioned in the center between the two row of rivets to the left and right of its position.

   B. (Refer to Figure 2, Sheet 3.) Identify with a mark the 5/8 (0.625 Inch Diameter) center hole location.

   C. Remove the doubler.

   D. (Refer to Figure 2, Sheet 3.) Drill the 5/8 (0.625 Inch Diameter) center hole.

   E. Deburr the drilled hole.

   F. Position the doubler with the center holes lined up and hold in position

   G. (Refer to Figure 2, Sheet 3.) Match-drill 16 number 30 (0.128 Inch Diameter) rivet holes.

   H. (Refer to Figure 2, Sheet 3.) Match-drill four number 7 (0.201 Inch Diameter) screw holes.

   I. Remove the doubler

   J. Deburr the drilled holes and remove metal shavings.

   K. Apply color chemical film treatment to the bare metal.

   L. (Refer to Figure 2, Sheet 2, and Sheet 3.) Install the doubler with 18 MS20470AD4-4 Rivets.

      NOTE: The manufactured head (button head) of the rivet will be on the outside (bottom) of the fuselage.

   M. (Refer to Figure 2, Sheet 2.) Install the L10-611-14 Transponder Antenna with four MS24694-S6 Screws, NAS1149FN832P Washers, and MS21044N08 Nuts.

      (1) Torque the nuts to 15 Inch-Pounds.

   N. Do a electrical bond check between the L10-611-14 Transponder Antenna and fuselage and make sure the bond is 0.0025 ohms or less.

8. (Refer to Figure 3, Sheet 1 and Sheet 2.) Mount the GDL 82 as follows:
   A. Put the GDL 82 into position, under the flap handle at approximately CL 0 and FS 140.5 with the XPDR connection facing forward.

      NOTE: Keep consideration of the coaxial cables, connectors, and bend radius when positioning the GDL 82.

   B. Identify with a mark the four mounting hole locations.

   C. (Refer to Figure 3, Sheet 1.) Drill four Number 25 (0.149 Inch Diameter) holes through the airplane skin at the identified locations.

   D. Deburr the drilled holes.

   E. Apply color chemical film treatment and corrosion resistant primer to the bare metal.

   F. Increase four mounting holes in the GDL 82 to a Number 16 (0.177 Inch Diameter) holes.

      NOTE: The mounting holes in the GDL 82 are increased to fit the S1477-06 Clip Nuts.

   G. Deburr the drilled holes.

H. Apply color chemical film treatment to the bare metal.

I. Install four S1477-06 Clip-Nuts on the GDL 82 mounting flage, centered in the larger mounting holes.

J. Install the GDL 82 with four MS35206-229 Screws and NAS1149FN632P Washers.

(1) Torque the screws to 12 Inch-Pounds.

9. Touch-up exposed rivets on exterior of airplane with appropriate polyurethane topcoat mixed and applied as directed by the paint manufacturer or supplier.

10. Buildup the J821 Connector as follows:

A. Install supplied pins on the 4 USB adapter wires.

B. Insert the pins into the J821 Connector as follows:
- White - Location 1
- Green - Location 6
- Black - Location 7
- Red - Location 11

NOTE: Two of the pins included with the J821 Connector will be used for the GDL 82 power and ground wires in the steps that follow.

11. (Refer to Figure 4, Sheet 1.) Install the power wire as follows:

A. Access Pin 6 from the PC001 Connector.

NOTE: Pin 6 is the transponder wire.

B. Cut the transponder wire about 6 inches from the PC001 Connector.

C. Connect electrical wire marked 6PC001-15GDL82 to the cut wires for Pin 6 from PC001 with one M81824/1-2 Splice.

D. Follow the routing of other wire bundles to the GDL 82.

E. Cut the wire to the correct length.

F. Install a pin from the J821 Connector kit on the power wire and insert into location 15 of the J821 Connector.

12. (Refer to Figure 4, Sheet 1.) Install the ground wire as follows:

A. Access the GIDB01 Connector from the ground block under the instrument panel.

B. Crimp a FC120N2 Pin on the electrical wire marked NGIDB01-14GDL82.

C. Install FC120N2 Pin into Pin N on GIDB01 Ground Lug.

D. Follow the routing of other wire bundles to the GDL 82.

E. Cut the wire to the correct length.

F. Install a pin from the J821 Connector kit on the ground wire and insert into location 14 of the J821 Connector.

13. (Refer to Figure 3, Sheet 2.) Install the S2034-1 Tie Mount as follows:

A. Locate the S2034-1 Tie Mount on the forward side of the bulkhead located just in front of the GDL 82, (FS 134) so the tie mount will support the coaxial cables as the cables pass through the left lightening hole.

B. Identify the location for the mount screw.

C. Drill a 1/8 (0.125 Inch Diameter) hole at the identified location.

D. Deburr the drilled hole.

E. Apply color chemical film treatment and corrosion resistant primer to the bare metal.

F. Install the S2034-1 Tie Mount with one AN530-8R8 Screw.

NOTE: Position the tie mount with the cable support to the aft so it is located within the lightening hole.

14. Install RG142 Coaxial Cable from the 013-00235-00 GPS Antenna to the GDL 82 as follows:

A. Install the RG142 Coaxial Cable from the 013-00235-00 GPS Antenna, route outboard of the fuel sight gage, aft along the top of the right door, down the aft door post and to the aft side of the GDL 82.

NOTE: Follow the routing of the existing wire bundles and antenna cables in this area as a guide.

B. Cut the RG142 Coaxial Cable to the correct length.

C. Put one TMS-SCE1/4-2.0-9 ID Sleeve marked GPSANT-GDL82 three inches from each end of the RG142 Coaxial Cable.

D. Install a 225554-6 RF Connector (TNC right angle male) on the end of the RG142 Coaxial Cable for the 013-00235-00 GPS Antenna.

(1) Connect the 225554-6 RF Connector to the 013-00235-00 GPS Antenna.

E. Install a 225554-6 RF Connector (TNC right angle male) on the end of RG142 Coaxial Cable for the GDL 82.

(1) (Refer to Figure 3, Sheet 2.) Connect to the 225554-6 RF Connector to the GPS connection on the GDL 82.

F. Cover the visible parts of RG142 Coaxial Cable with black P610079 Corrugated Loom Tubing.

G. Use S2209-1 Tie Straps and S1781-1 D-Rings to attach the RG142 Coaxial Cable to exiting wire bundles and antenna cables along the routing.

(1) Make sure the RG142 Coaxial Cable is sufficiently clear and do not interfere or touch flight control cables when the flight controls are moved through the full travel.

15. (Refer to Figure 2, Sheet 2 and Figure 3, Sheet 2.) Install RG142 Coaxial Cable from the L10-611-14 Transponder Antenna to the GDL 82 as follows:

A. Install the RG142 Coaxial Cable from the L10-611-14 Transponder Antenna, through the left lighting hole and to the aft side of the GDL 82.

NOTE: Follow the routing of the existing wire bundles and antenna cables in this area as a guide.

B. Cut the RG142 Coaxial Cable to the correct length.

C. Put one TMS-SCE1/4-2.0-9 ID Sleeve marked XPDRANT-GDL82 three inches from each end of the RG142 Coaxial Cable.

D. Install 225554-6 RF Connector (TNC right angle male) on the end of the RG142 Coaxial Cable for the L10-611-14 Transponder Antenna.

(1) Connect the 225554-6 RF Connector to the L10-611-14 Transponder Antenna.

E. Install 225973-4 RF (BNC right angle male) Connector on the end of RG142 Coaxial Cable for the GDL 82.

(1) Connect the 225973-4 RF Connector to the ANT connection on the GDL 82.

F. Use S2209-1 Tie Straps and S1781-1 D-Rings to attach the RG142 Coaxial Cable to exiting wire bundles and antenna cables along the routing.

(1) Make sure the RG142 Coaxial Cable is sufficiently clear and do not interfere or touch flight control cables when the flight controls are moved through the full travel.

16. (Refer to Figure 2, Sheet 2 and Figure 3, Sheet 2.) Install the RG142 Coaxial Cable extension as follows:

    A. Install the RG142 Coaxial Cable from the transponder coaxial cable end to the fwd side of the GDL 82.

    NOTE: This RG142 Coaxial Cable extension will connect to the RG142 Coaxial Cable removed from the original transponder antenna and extend to the GDL 82.

    B. Cut the RG142 Coaxial Cable to the correct length.

    C. Put one TMS-SCE1/4-2.0-9 ID Sleeve marked XPDR-GDL82 three inches from each end of the RG142 Coaxial Cable.

    D. Install a 225396-1 RF (Straight female socket) Connector on the end of RG142 Coaxial Cable that will connect to the existing transponder RG142 Coaxial Cable.

    (1) Connect the 225396-1 RF Connector the existing transponder RG142 Coaxial Cable.

    E. Install a 225395-6 RF (BNC straight male) Connector on the end for the GDL 82.

    (1) Connect the 225395-6 RF Connector to the XPDR connection on the GDL 82.

    F. Use S2209-1 Tie Straps and S1781-1 D-Rings to attach the RG142 Coaxial Cable to exiting wire bundles and antenna cables along the routing.

    (1) Make sure the RG142 Coaxial Cable is sufficiently clear and do not interfere or touch flight control cables when the flight controls are moved through the full travel.

17. Install the switch panel. (Refer to the Model 162 Maintenance Manual, Chapter 31, Instrument Panel - Maintenance Practices.)

18. (Refer to Figure 4, Sheet 2.) Locally fabricate a placard with XPDR UAT on it.

19. (Refer to Figure 4, Sheet 2.) Reidentify the XPDR circuit breaker as XPDR UAT with the fabricated placard.

20. Connect the airplane battery.

21. Download and install the GDL 8X Install Tool. (Refer to the GDL 82 TSO Installation Manual, Section 7.1, GDL 8X Install Tool Instructions.)

    NOTE: The GDL 8X Install Tool requires an IBM-compatible PC running Windows 7 SP1 or later operating system and an available USB port.

    NOTE: Before downloading the GDL 8X Install Tool, review the system requirements identified in the GDL 82 TSO Installation Manual, Section 7.1 - GDL 8X Install Tool.

    NOTE: The GDL 82 TSO Installation Manual can be downloaded from www.flygarmin.com or www.support.cessna.com, go to Model 162, under Avionics select Garmin, scroll down to Optional Equipment and Database Guides.

22. Configure the installation parameters. (Refer to the GDL 82 TSO Installation Manual, Section 7.3, Configuration.)

    NOTE: Some additional information to help with completing the System Page inputs for aircraft, transponder, GPS, and ADS-B Selections:
    - Stall Speed: 37 (Model 162, POH, Section 2, Operating Limitations - Airspeed Limitations, VsO KIAS.)
    - Squat Switch: Not Installed
    - GPS Source: Internal
    - Longitudinal Antenna Offset: 6
    - Anonymous Mode Switch: Not Installed
    - 1090 ES Receive Capable: Not Capable
    - UAT Receive Capable: Not Capable

23. Do a system checkout. (Refer to the GDL 82 TSO Installation Manual, Section 8 System Checkout.)
    A. Complete the Internal GPS Source check. (Refer to the GDL 82 TSO Installation Manual, Section 8 System Checkout.)Section 8.1.1 GPS.)
    B. Complete the External GPS Source check. (Refer to the GDL 82 TSO Installation Manual, Section 8 System Checkout.)Section 8.1.1 GPS.)
    C. Complete the Transponder check. (Refer to the GDL 82 TSO Installation Manual, Section 8.1.2 Interface Checks.)

       NOTE: The Discrete Inputs and Discrete Outputs in Section 8.1.2 are not applicable for this installation.
24. Install the center counsel cup holder and aft pedestal closeout. (Refer to the Model 162 Illustrated Parts Catalog, Chapter 25, Pedestal Cover Installations, Figure 05 for installation figure.)
25. Update the airplanes weight and balance sheet with the information from the Weight and Balance Information section of this service document.
26. Update the Garmin G300 Weight and Balance Calculator. (Refer to the Garmin G300 Installation Manual.)
    A. Start the Garmin G300 again in normal mode and make sure that the weight and balance information has been updated correctly.
27. Remove the maintenance warning tags.
28. Make an entry in the airplane logbook that states compliance and method of compliance with this service document.

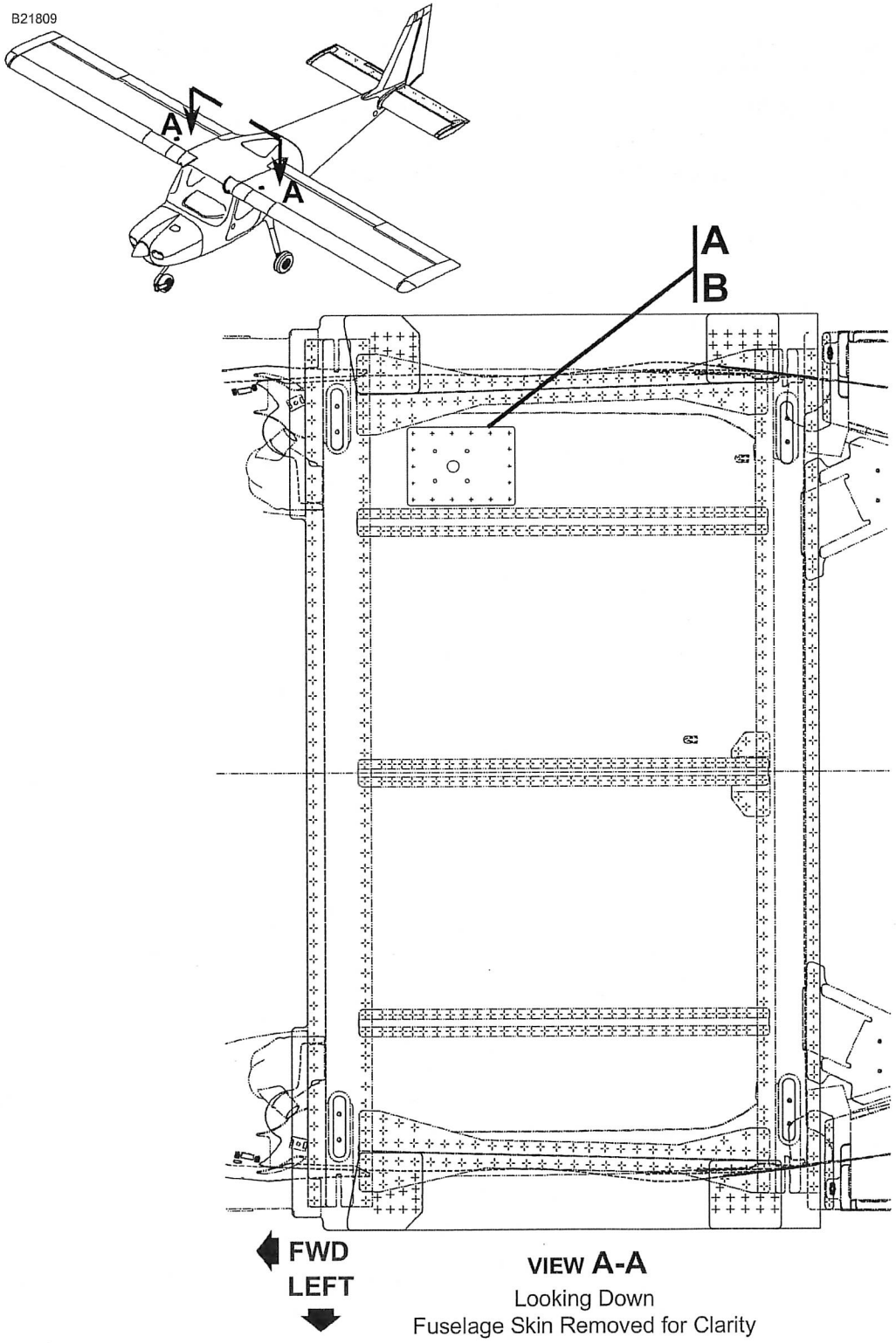
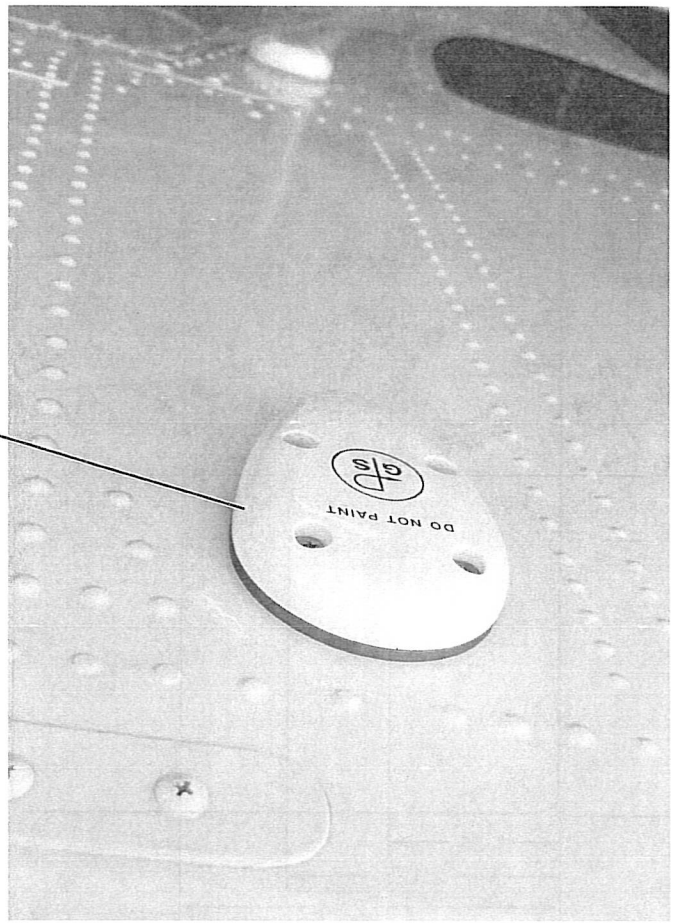


Figure 1. GPS Antenna and Doubler Installation (Sheet 1)

B21810

013-00235-00
GPS Antenna
(1 Required)
MS24696-S51
Screw
NAS1149F0332P
Washer
MS21044N3
Nut
(4 Each Required)

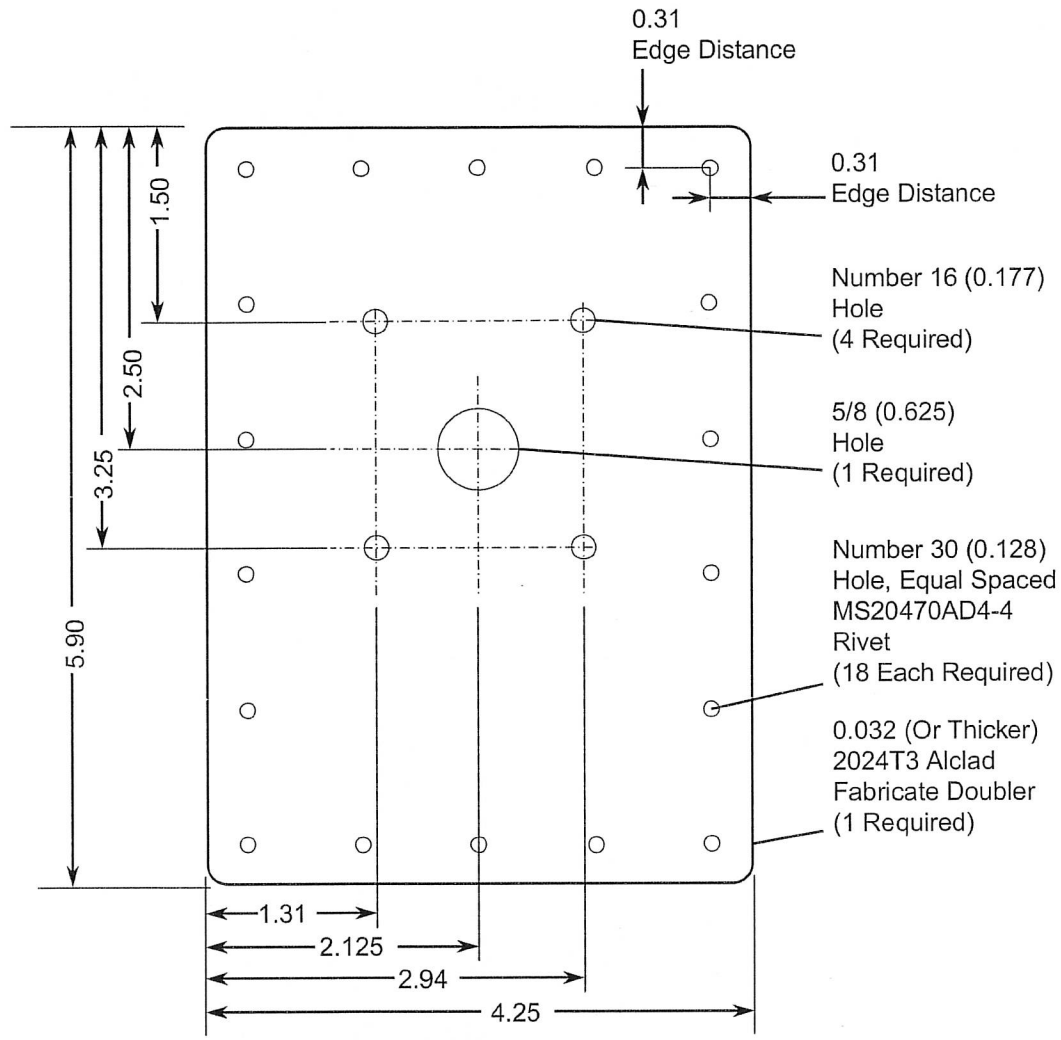


DETAIL A
GPS Antenna
View Looking Aft From Leading
Edge of Right Wing/Fuselage

NOTE: Location of GPS Antenna will be farther aft of example in picture.

Figure 1. GPS Antenna and Doubler Installation (Sheet 2)

B21827



DETAIL B
GPS Antenna Doubler
Fabricate Locally

Figure 1. GPS Antenna and Doubler Installation (Sheet 3)

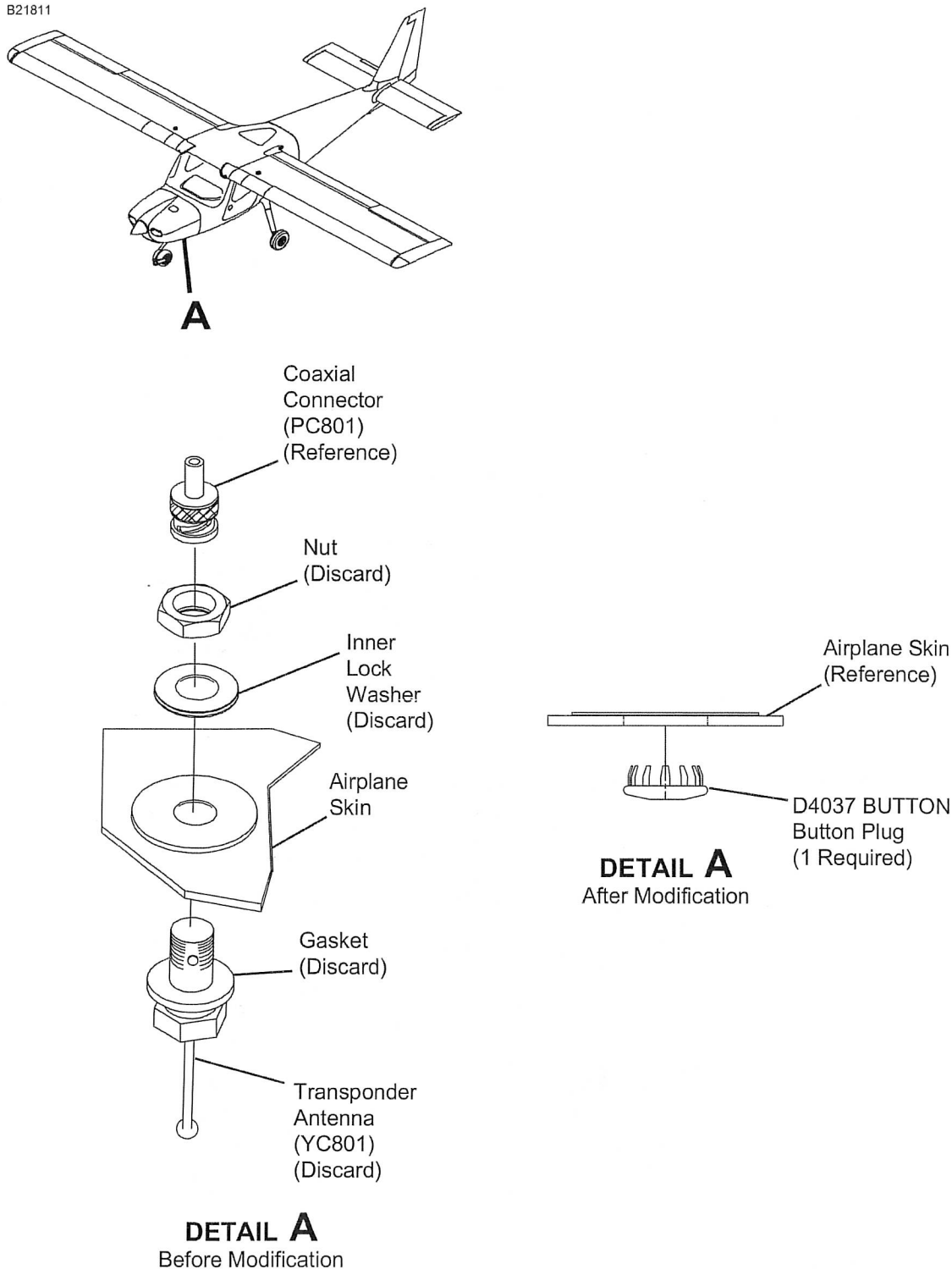
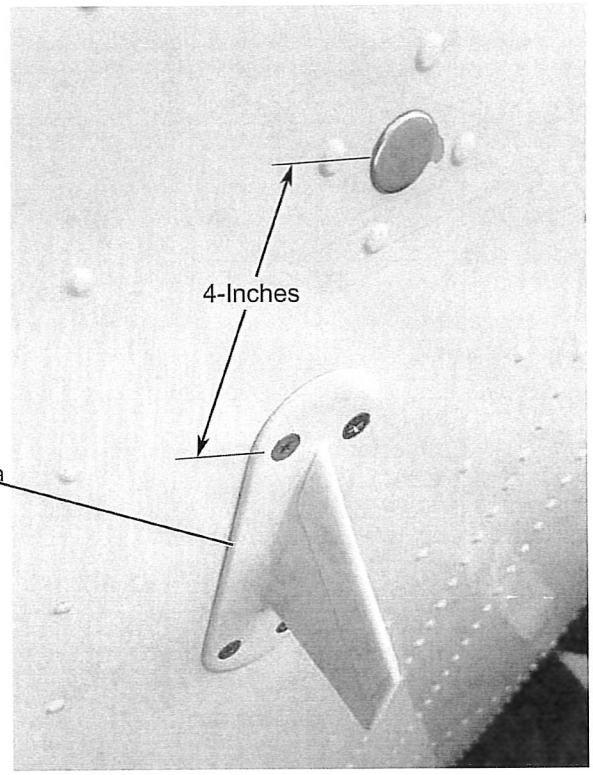


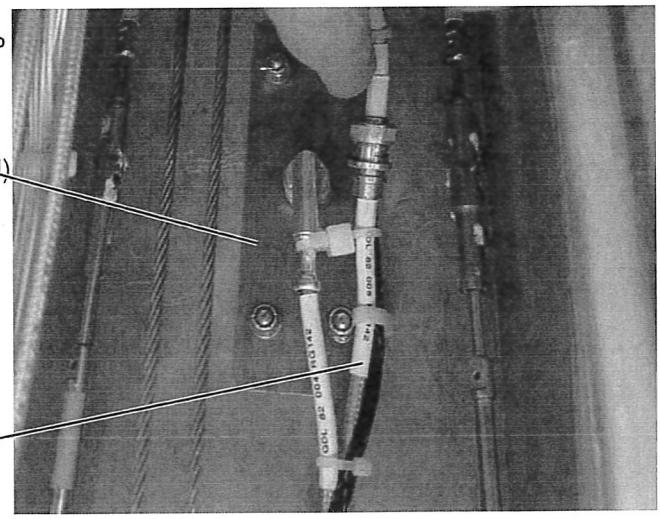
Figure 2. Transponder Antenna and Doubler Installation (Sheet 1)

B21812



Transponder Antenna and Plug Button

Fabricate Doubler
(1 Required)
MS24694-S6
Screw
NAS1149FN832P
Washer
MS21044N08
Nut
(4 Each Required)



NOTE: Actual doubler will be bigger than example doubler in picture.

Transponder Antenna

Figure 2. Transponder Antenna and Doubler Installation (Sheet 2)

B21828

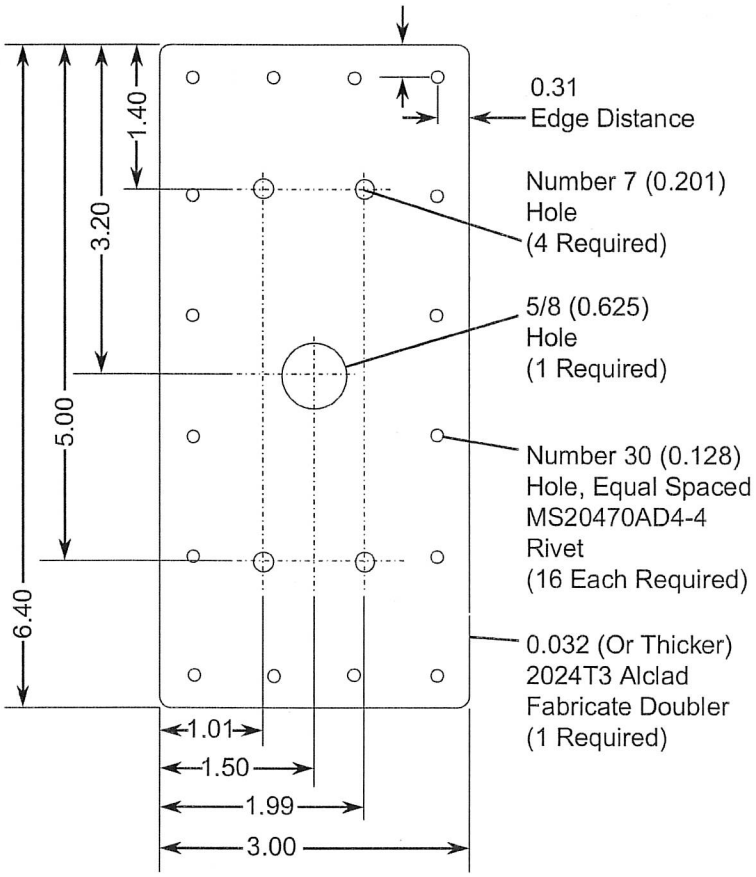


Figure 2. Transponder Antenna and Doubler Installation (Sheet 3)

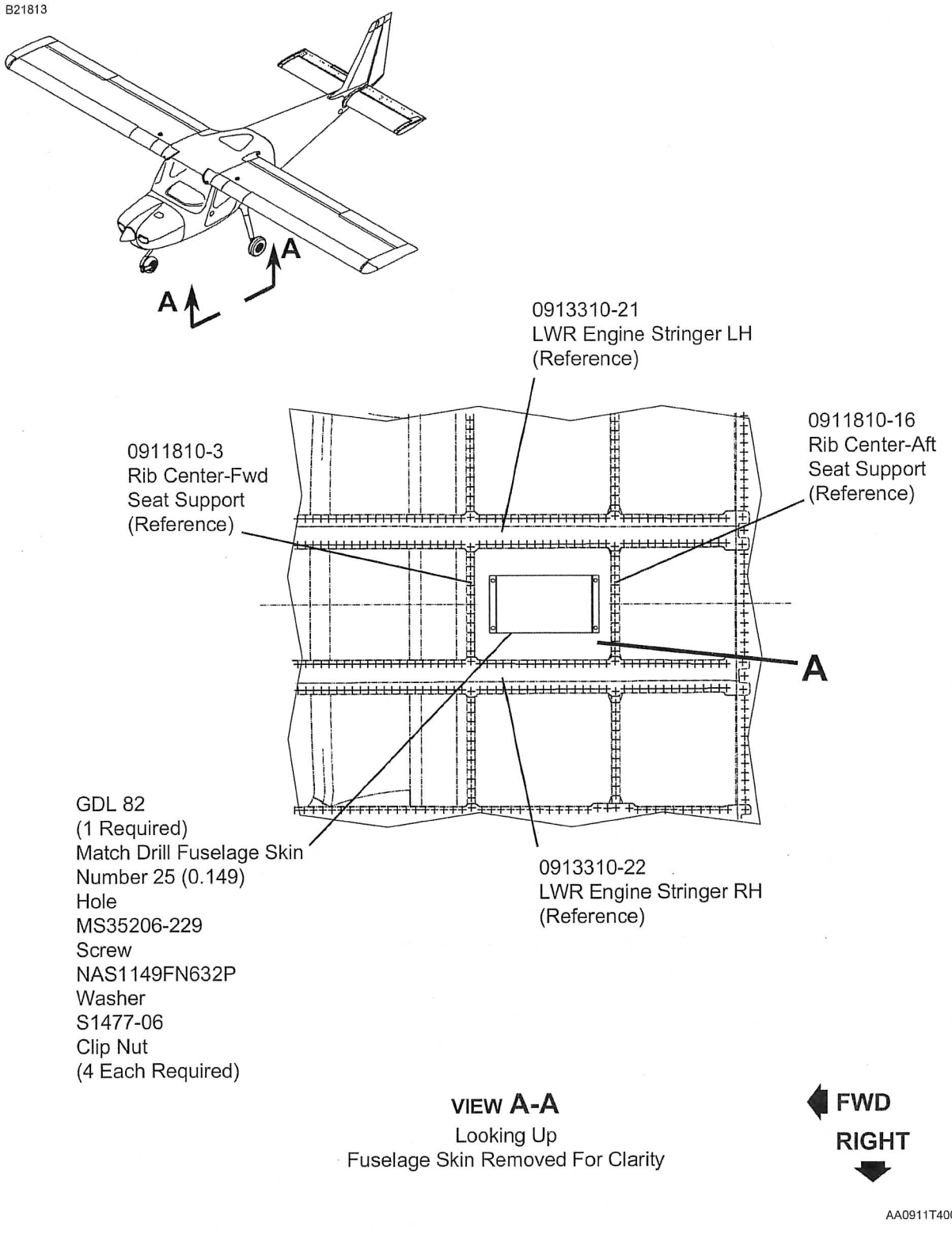


Figure 3. GDL 82 Installation (Sheet 1)

B21814

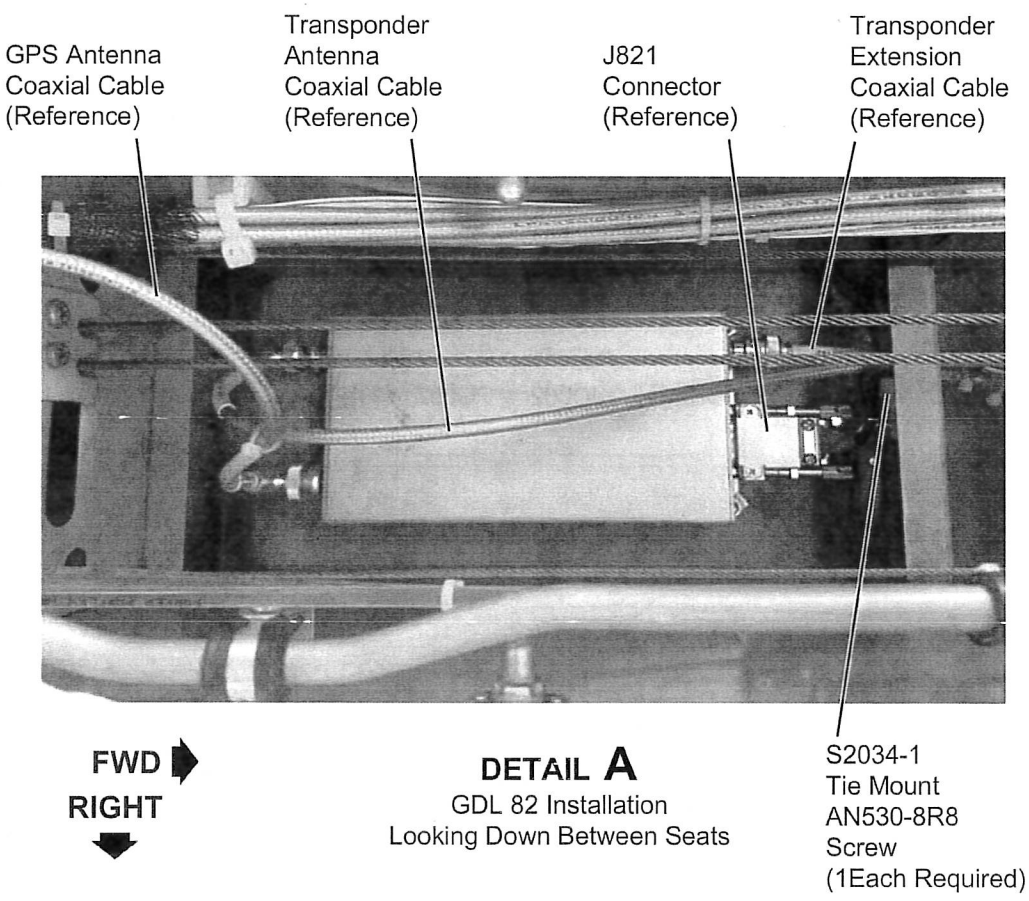
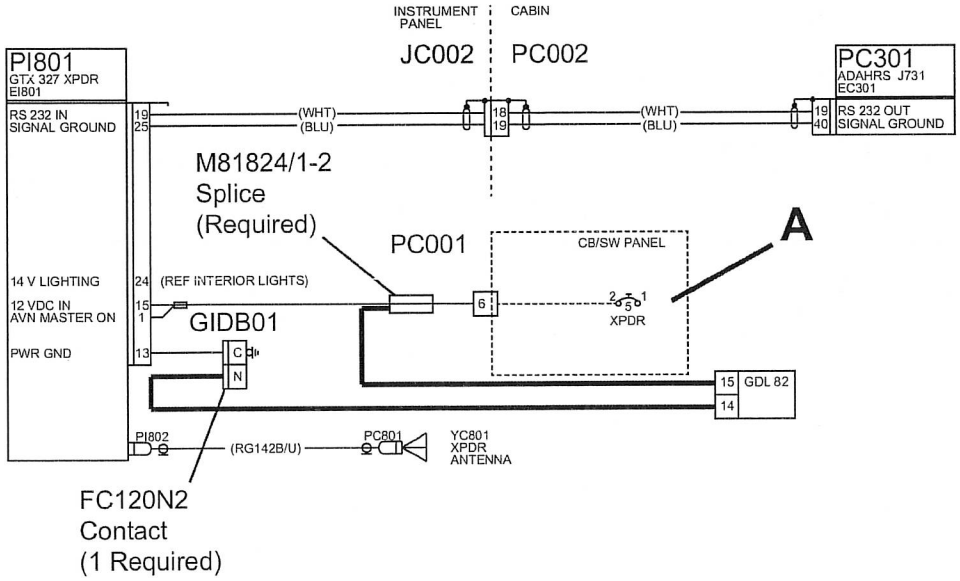


Figure 3. GDL 82 Installation (Sheet 2)

B21815



Legend	
▬▬	New Wire
——	Existing Wire

0908231B2

Figure 4. Transponder Power/Ground Wiring and Placard (Sheet 1)

B21816

DETAIL A
XPDR UAT PLACARD

Figure 4. Transponder Power/Ground Wiring and Placard (Sheet 2)

MATERIAL INFORMATION

Order the SB19-34-01-0 and SB19-34-01-1 kits below to install this modification.

NEW P/N	QUANTITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
SB19-34-01-0	1	**Kit,** consisting of the following parts:		
AN530-8R8	1	Screw	N/A	For tie mount
D4037 BUTTON	1	Plug Button	N/A	Plug antenna hole
FC120N2	1	Contact	N/A	For ground wire to ground block
010-01560-31	1	Garmin GDL-82 kit		Kit contains one GDL 82 W/GPS LRU P/N 011-03946-40, one Connector Kit P/N 011-03945-003, and one GPS Antenna P/N 013-00235-00
L10-611-14	1	"L" Band Transponder Antenna	CI101	Discard old, install new
MS20470AD4-4	34	Rivet	N/A	GPS/Transponder antenna doubler installations
MS21044N08	4	Nut	N/A	Transponder antenna installation
MS21044N3	4	Nut	N/A	GPS antenna installation
MS24694-S51	4	Screw	N/A	GPS Antenna Installation
MS24694-S6	4	Screw	N/A	Transponder antenna installation
MS35206-229	4	Screw	N/A	GDL-82 Installation
M81824/1-2	1	Wire Splice	N/A	For power wire
NAS1149FN632P	4	Washer	N/A	GDL-82 Installation
NAS1149FN832P	4	Washer	N/A	Transponder antenna installation
NAS1149F0332P	4	Washer	N/A	GPS antenna installation
P610079	4 Feet	Corrugated Split Tubing	N/A	Protect exposed coaxial cable
S1477-06	4	Clip Nut	N/A	GDL-82 Installation

NEW P/N	QUANTITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
S1781-1	4	D-Ring	N/A	For spacing cables with tie straps
S2034-1	1	Tie Mount	N/A	Support wires and coaxial cable through lighting hole
S2209-1	30	Tie Strap	N/A	Secure wires and coaxial cables
225395-6	1	Plug (BNC Straight Male Pin)	N/A	Coaxial Cable Buildup
225396-1	1	Plug (Straight Female Socket)	N/A	Coaxial Cable Buildup
225554-6	3	RF Connector (TNC Right Angle Male Pin)	N/A	Coaxial Cable Buildup
225973-4	1	Plug (BNC Right Angle Male Pin)	N/A	Coaxial Cable Buildup
SB19-34-01	1	Instructions		

NOTE: The word "BUTTON" is part of the part-number for the Plug Button.

In addition to the SB19-34-01-0 Kit, order the kit that follows to install this modification.

NEW P/N	QUANTITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
SB19-34-01-1	1	**Kit,** consisting of the following parts:		
M17/60-RG142	15 Feet	Coaxial Cable	N/A	For antenna and transponder
M81044/12-22-9	6 Feet	Electrical Wire marked - 6PC001-15GDL82	N/A	Power wire for GDL 82
M81044/12-22-9	6 Feet	Electrical Wire marked - NGIDB01-14GDL82	N/A	Ground wire For GDL-82
TMS-SCE1/4-2.0-9	2	Identification Sleeve marked - GPSANT-GDL82	N/A	GPS to GDL 82 Coaxial Cable
TMS-SCE1/4-2.0-9	2	Identification Sleeve marked - XPDR-GDL82	N/A	Transponder to GDL 82 coaxial cable
TMS-SCE1/4-2.0-9	2	Identification Sleeve marked - XPDRANT-GDL82	N/A	Transponder antenna to GDL 82 coaxial cable

* Please contact a Textron Aviation Authorized Service Facility for current cost and availability of parts listed in this service document.

TITLE

NAVIGATION - 978 MHZ UAT ADS-B OUT INSTALLATION

TO:

Cessna Model 162 Aircraft Owner

REASON

To provide 978 MHz UAT ADS-B out Installation.

COMPLIANCE

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

LABOR HOURS

For planning purposes only:

WORK PHASE	LABOR-HOURS
Modification	8.0

MATERIAL AVAILABILITY

PART NUMBER	AVAILABILITY	COST
SB19-34-01-0	*	*
SB19-34-01-1	*	*

* Please contact a Textron Aviation Authorized Service Facility for current cost and availability of parts listed in this service document.

WARRANTY

None

Textron Aviation Customer Service, P.O. Box 7706, Wichita, KS 67277, U.S.A. 1-316-517-5800


P/N M81044/12-22-9
S/N-LOT 6PC001-15GDL82
WIRE
Qty 6
Export HTS: 8544493080
Import HTS: 8544493080
FT
ECCN: EAR99
C OF O: UNITED STATES
No Shelf Life Limit
Reprinted by: c38545 Date : 06/19/2020
SB19-34-01-1
72"
2
M81044/12-22-9
P/N M81044/12-22-9
S/N-LOT NGIDB01-14GDL82
WIRE
Qty 6
Export HTS: 8544493080
Import HTS: 8544493080
FT
ECCN: EAR99
C OF O: UNITED STATES
No Shelf Life Limit
Reprinted by: c38545 Date : 06/19/2020

P/N TMS-SCE1/4-2.0-9

S/N-LOT GPSANT-GDL82

SLEEVE Qty 2
Export HTS: 3926909990
Import HTS: 3926909990 EA
ECCN: EAR99
C OF O: MEXICO
No Shelf Life Limit
Reprinted by: c38545 Date : 06/19/2020

P/N TMS-SCE1/4-2.0-9

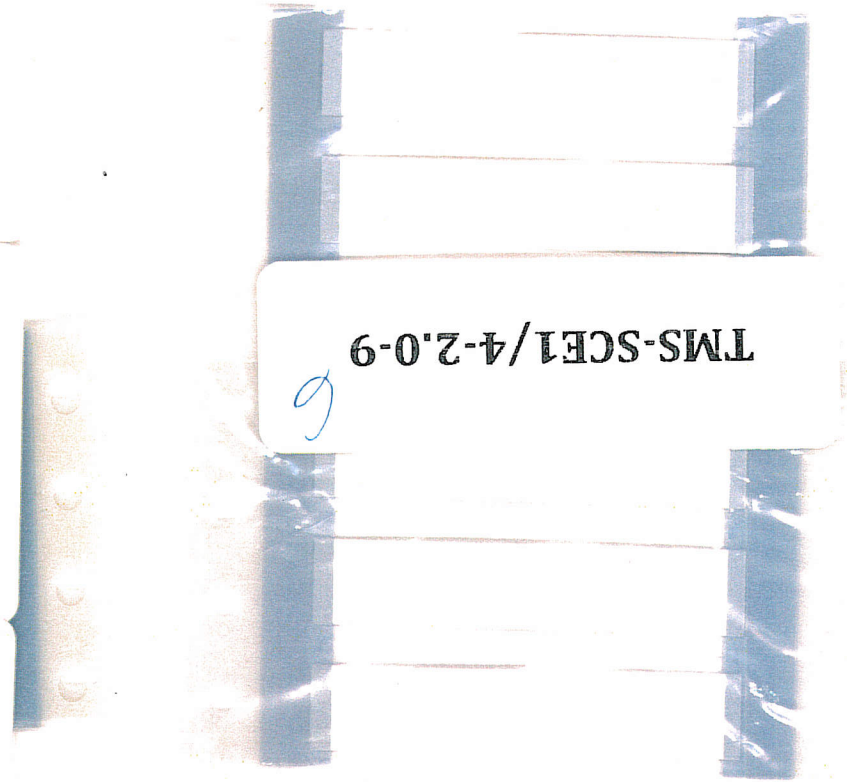
S/N-LOT XPDR-GDL82

SLEEVE Qty 2
Export HTS: 3926909990
Import HTS: 3926909990 EA
ECCN: EAR99
C OF O: MEXICO
No Shelf Life Limit
Reprinted by: c38545 Date : 06/19/2020

P/N TMS-SCE1/4-2.0-9

S/N-LOT XPDRANT-GDL82

SLEEVE Qty 2
Export HTS: 3926909990
Import HTS: 3926909990 EA
ECCN: EAR99
C OF O: MEXICO
No Shelf Life Limit
Reprinted by: c38545 Date : 06/19/2020




P/N M17/60-RG142
S/N-LOT
COAX CABLE
Qty 15
Export HTS: 8544200000
Import HTS: 8544200000
ECCN: EAR99
C OF O: UNITED STATES
No Shelf Life Limit
Reprinted by: c39545 Date: 06/19/2020
M17/60-RG142