F100/70 Generic SB

SBF100-25-128

Revision -

PASSENGER COMPARTMENT - PASSENGER AND ATTENDANT UTILITIES

A One-time Inspection of the PSU Panels and the PSU Panel/Aircraft Interface Connectors

Prepared visser-mv02446	Function / Note	Date Jul 15/16
Colleague Check hamers-jh01989		May 11/16
Manager Final Approval benthem-eb01865		Jul 21/16
Office of Airworthiness Approval visser-hv01800		Jul 21/16

Status: Released	Revision: -	Released date: (Mmm dd/yy) Jul 21/16
Security class: RESTRICTED	F100/70 Generic SB no.: SBF100-25-128	

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EASA approved procedure for electronic sign-off

1. General Information

A. General

(1) Not applicable.

PASSENGER COMPARTMENT - PASSENGER AND ATTENDANT UTILITIES

A One-time Inspection of the PSU Panels and the PSU Panel/Aircraft Interface Connectors.

Table of Contents

- Section 1: General Information
- Section 2: Planning Information
- Section 3: Material Information
- Section 4: Accomplishment Instructions
- Service Bulletin Quality Reporting Form

and attachments (if applicable):

- List of drawings/parts lists
- Parts List Local source (PLL)
- Parts List Supply (PLS)
- Required drawings

B. Service Bulletin Revision History

Revision	Date (Mmm dd/yy)	Reason for Revision
-	Refer to footer	First Release

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2. Planning Information

A. Effectivity

(1) F28 Mark 0100 aircraft serial number(s):
11244 through 11520, 11522 through 11527 (except as identified in the NOTES below).

NOTE 1: If your aircraft is post SBF100-25-070 (The Introduction of Jet Line Interior), this Service Bulletin is not applicable.

NOTE 2: If your aircraft is post SBF100-25-109 (The Introduction of Future Interior), this Service Bulletin is not applicable.

NOTE 3: If your aircraft with serial number 11359, 11361, 11367, 11396, 11397, 11404, 11446, 11456, 11468, 11483, 11490, 11499, 11502, 11515 or 11520 is post report FS-N545 or FS-N571, this Service Bulletin is not applicable.

B. Concurrent Requirements

(1) Not Applicable.

C. Reason

(1) Operators have, in the past, reported smoke in the passenger compartment during flight due to overheat of a Passenger Service Unit (PSU) panel. The overheat was caused by moisture ingress into the PSU/aircraft interface connector J1. Such moisture inside the connector causes corrosion on the contacts and as a result of that, the temperature inside the connector rises and subsequently the connector can melt and the PSU panel can be damaged. Such moisture could result from water condensation on air-conditioning ducting or exposed/not-insulated structure, and be ‘guided’ onto the PSU panels and/or into the J1 interface connector via the PSU panel wire loom.

(2) In 2003 Fokker Services issued Service Bulletin SBF100-25-097 (Refer to Airworthiness Directive NL-2004-022). This SB introduced a modification of the PSU panels and PSU/aircraft interface connector J1. Sealant was applied to the connector and the PSU panel was modified (by application of sealant) according the vendor (Honeywell) Service Bulletin SB 10-1178-33-0040 and/or 10-1571-33-0041.

(3) In 2006 Fokker Services issued Service Bulletin SBF100-25-108 (Refer to Airworthiness Directive NL-2006-008). This SB introduced a one-time inspection of the PSU panel interface connectors. New gaskets where introduced inside PSU connectors J1 and J2.

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(4) Recently one new case has been reported of burning smell and smoke in the passenger compartment during disembarking of the passengers. This case was also attributed to moisture ingress into the J1 interface connector of an unsealed/unmodified PSU panel. During investigation of several aircraft at multiple customers, discrepancies where discovered.

(5) The instructions in this new Service Bulletin provide a one-time inspection of the correct accomplishment of the modifications of the PSU panels and PSU J1 and J2 connectors.

D. Description

(1) This Service Bulletin tells you how to:
- Inspect the installed sealant on the PSU panels and if necessary apply new sealant according to Vendor Service Bulletin Honeywell SB 10-1178-33-0040 and/or 10-1571-33-0041.
- Inspect the PSU panels to verify if the J1/P1 and J2/P2 Interface connectors can be properly locked and gaskets are present.
- Inspect the installed sealant on the PSU J1 and J2 connectors and if necessary apply new sealant.

E. Compliance

(1) Recommended

Fokker Services recommends the accomplishment of the Service Bulletin:
Within 36 months after the date of issue of this Service Bulletin, but not later than within the compliance time defined in the AD (if applicable, see note below), which takes precedence over the recommendation by Fokker Services

NOTE: It is expected that EASA will issue an Airworthiness Directive (AD) with respect to this subject with the same compliance terms. Refer to the EASA website for the publication of a (Proposed) Airworthiness Directive for comments.

F. Approval

(1) The technical content of this document is approved under the authority of DOA ref. EASA.21J.059.

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G. Manpower

(1) Approximately 13 man-hours are necessary to do this Service Bulletin on one aircraft.

This table of manpower will help you to schedule and do this Service Bulletin:

Instructions	Men	Man-hours	Elapsed time (hours)
Removal	2	2,0	1,0
Modification Inspection	2	5,0	2,5
Installation	2	6,0	3,0
Testing	-	-	-
Total		13,0	6,5

NOTE: This estimate does not include the time necessary for the paint to dry and/or the sealant to cure.

(2) The estimated hours are for direct labor done by experienced personnel. They are calculated based on the conditions given in SBF100-00-001 (Service Bulletin Introduction, section 2.C., “Manpower”).

H. Weight and Balance

(1) Weight change: None.
Index change: None.

I. Electrical Load Data

(1) Direct Current (DC) Loads:

(a) Not changed.

(2) Alternating Current (AC) Loads:

(a) Not changed.

J. Software Accomplishment Summary

(1) Not applicable.

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K. References

(1) Fokker 70/100 Aircraft Maintenance Manual (AMM)
Fokker 70/100 Illustrated Parts Catalog (IPC)
Fokker 70/100 Consumable Material List (CML)
Fokker 70/100 Standard Process Manual (SPM)
Fokker 70/100 Service Bulletin:
- SBF100-25-070
- SBF100-25-097
- SBF100-25-108
- SBF100-25-109.

Fokker 70/100 Reports:
- FS-N545
- FS-N571.

Fokker 70/100 Service Experience Digest (SED), subject 25-22/001
Fokker internal reference:
- ECR 95973.

Honeywell Vendor Service Bulletin:
- 10-1178-33-0040 and
- 10-1571-33-0041.

L. Publications Affected

(1) This Service Bulletin Appendix affects the publications listed below:

(a) Maintenance Documentation

Not affected.

(b) Maintenance Programs

Not affected.

(c) Special Instructions for Continued Airworthiness (ICA)

The effect of this Service Bulletin on the special ICA is as follows:

	YES	NO
- Electrical Wiring Interconnection System (EWIS)	-	X
- Fokker 50/60 Airworthiness Limitations Section (ALS):		
• Fuel Tank Safety (FTS)	-	X
• Damage Tolerance of Fatigue Critical Structure (FCS)	-	X
• Certification Maintenance Requirements (CMR)	-	X

NOTE: If “YES”, when not already incorporated, the changed ICA will be incorporated in the MRB, the Airworthiness Limitations Section (ALS) and/or the AMM document(s) within one calendar year from the date of issue of this Service Bulletin. Until then, no actions are required.

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(d) Operational Documentation

Not affected.

(2) Report to Fokker Services that this Service Bulletin has been carried out on the applicable aircraft.

(3) You have the possibility to send your SB feedback to Fokker Services per “Service Bulletin Reporting Quality Form”. This form is located on the last Service Bulletin page.

(4) For incorporation of this Service Bulletin in your documentation refer to SBF100-00-001 (Service Bulletin Introduction, section 4 “Incorporation of Service Bulletins in Documentation of Fokker Services”).

M. Interchangeability or Intermixability of Parts

(1) Not applicable.

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3. Material Information

A. Material – Price and Availability

(1) The materials are local source items.

B. Material Required

(1) These parts, which are necessary to complete this Service Bulletin on 1 aircraft, are not part of the mod kit.

New Part Number	Qty	Keyword	Info	Old Part Number	Instructions/ Disposition
-	AR*1	Isopropyl alcohol	Fk11-013*2	-	Local source
PR1930-2	AR*1	Sealant	Fk09-025*2	-	Local source
JFP7010	AR*1	Promotor	Fk09-004A*2 (TH5.939/10).	-	Local source
10-1624-1	AR*1	Kit, Gasket J1 & J2*3	-	-	
F0N9-9504-1*4	AR*1	Placard (white)	-	-	Local source

NOTES:
*1 Use as much as necessary
*2 Refer to the CML for material numbers.
*3 Both gaskets can be ordered separately as pn 60-4940-1 (J2) and pn 60-4940-3 (J1).
*4 Or use an equivalent part number placard.

C. Tooling – Price and Availability

(1) Not applicable.

D. Tooling Required

(1) Not applicable.

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4. Accomplishment Instructions

General:
- In general, use (A)MM chapter 20, standard practices-airframe, as guide line for the aircraft modification.
- Loosen the cable clamps where necessary.
- Remove and discard the cable ties where necessary.
- Remove and discard the lacing tape where necessary.
- Use cable ties and lacing tape where necessary.
- For CML material number references refer to “MyFokkerFleet.com > Documentation and select CML” and/or AMM chapter 20-30-00.
- For Standards and Process Manual (SPM) references refer to “MyFokkerFleet.com > Documentation and select SPM”.
- For the application of sealing compound refer to AMM chapter 20-32-00 and chapter 51-23-00.

WARNING: BE CAREFUL WHEN YOU USE THE CONSUMABLE MATERIALS. OBEY THE INSTRUCTIONS AND MANUFACTURER'S HEALTH AND SAFETY INSTRUCTIONS.

A. Determine if the aircraft cabin is in a pre or post mod SBF100-25-070 or SBF100-25-109 configuration.

(1) If the aircraft cabin is in a post mod SBF100-25-070 or SBF100-25-109 configuration, no further action is necessary.

(2) If the aircraft cabin is in a pre mod SBF100-25-070 and SBF100-25-109 configuration, continue with step B.

NOTE: If it is not sure in which configuration the cabin is, continue with step B.

B. Open all Passenger Service Unit (PSU) panels in the cabin. (Refer to the AMM, chapter 25-22-01).

C. Determine each PSU partnumber. If the part number of all the PSU panels is pn 676520X-XXX or pn A546011-XXX (vendor C & D Interiors), the cabin is in a post mod SBF100-25-070 or SBF100-25-109 configuration. Close all PSU panels. No further action is necessary.

D. Inspection for the correct application of sealant on the PSU panels.

WARNING: BE CAREFUL NOT TO BEND CONTACTS WHEN CLEANING THE RECEPTACLE.

Refer to figures 1A and 1B and 2.

(1) On the PSU panels, disconnect plug P1 and P2.

(2) On the PSU panel, loosen the four screws and remove the Circuit Card Assembly (CCA) cover.

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(3) Check the sealant on the PSU panel CCA is correctly applied refer to Vendor Honeywell SB 10-1178-33-040 or SB 10-1571-33-041 (see figure 1A and 1B for an example of the applied sealant around the connectors and the transformers). If correctly applied, continue with step (6). If not correctly applied (for example, see figure 2) continue with step (4).

(4) Clean the PSU panel. Use:
- AR isopropyl alcohol FK11-013.

(5) Apply sealant on the PSU panel around the connectors and around the transformers (see figure 1A and 1B for an example and Vendor Honeywell SB 10-1178-33-040 or SB 10-1571-33-041). Use:
- AR sealant pn 3145.

(6) On the PSU panel, install the CCA cover with the four screws.

(7) Check the sealant on the PSU panel J2 connector is correctly applied refer to Vendor Honeywell CMM (see figure 5 for an example of correct application of the sealant). If correctly applied, continue with step E. If not correctly applied, refer to Vendor Honeywell PSU CMM's for corrective actions.

E. Inspect the PSU panels to verify if the J1/P1 and J2/P2 Interface connectors can be properly locked and gaskets are present.

WARNING: BE CAREFUL NOT TO BEND CONTACTS WHEN CLEANING THE RECEPTACLE.

Refer to figure 3 and figure 4.

(1) Verification of the gaskets installed.

(a) Verify that a gasket is installed in the J1 receptacle. If not, install a gasket. Use:
1 gasket (J1) pn 60-4940-3.

(b) Verify that a gasket is installed in the J2 receptacle. If not, install a gasket. Use:
1 gasket (J2) pn 60-4940-1.

(2) Verification of the proper locking of the J1/P1 PSU panel/Aircraft interface connector and J2/P2 PSU panel interface connector.

(a) Connect Aircraft connector P1 to receptacle J1 and Panel connector P2 to receptacle J2. Verify that proper locking can be made.

(b) If proper locking can be made proceed with step F.

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(c) If proper locking cannot be made, verify if the J1 and / or J2 receptacle locking tabs are not deformed. If one or more locking tabs are deformed, remove PSU panel from aircraft and send it to an approved workshop for replacement of J1 and /or J2 receptacle. Install a 'new' PSU panel and continue with step F. (Refer to the AMM 25-22-01-400-814-A).

NOTE: Perform the after installation test for all PSU panels during step I.

(d) If the locking tabs are not deformed, replace the gasket in the J1 and / or J2 receptacle. Use:

- 1 gasket (J2) pn 60-4940-1
- 1 gasket (J1) pn 60-4940-3.

(e) Verify, with the new gasket installed, if the J1/P1 PSU panel / Aircraft interface connector and J2/P2 PSU panel interface connector can be properly locked. If not, check for other problems on the plug and/or receptacle. If necessary send the PSU panel to an approved workshop.

F. Inspection for the correct application of sealant on the PSU panel/Aircraft interface connector.

WARNING: BE CAREFUL NOT TO BEND CONTACTS WHEN CLEANING THE RECEPTACLE.

Refer to figures 5 and 6.

(1) Check, if the sealant on the PSU panel/aircraft interface (J1) connector is correctly applied (see figure 5 for an example of correct application of the sealant).

(a) To identify if there is sufficient sealant applied, use a torch to shine a light back towards yourself inside the PSU panel/aircraft interface connector.

(b) If the sealant is applied correctly, i.e. no light comes through the connector, then continue with step G.

(c) If the sealant is NOT applied correctly (see figure 6 for an example of incorrect application of the sealant) continue with step (2).

(2) Clean the plug and receptacle of the PSU panel/aircraft interface connector. Use:

- AR isopropyl alcohol FK11-013.

(3) Make sure the plug and receptacle are dry and apply sealant (potting) on the backside of the plug of the PSU panel/aircraft interface connector (see figure 5 for an example of correct application of the sealant, in order to prevent moisture entering the connector). Use:

- AR promoter pn JFP7010 Fk09-004A
- AR sealant pn PR1930-2 FK09-025.

NOTE: For the application of the sealant, refer to the SPM, TH4.215.

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Refer to figure 4.

G. Identify the PSU panel. Clean surface and install placard. Use:
- 1 placard (white) pn F0N9-9504-1.

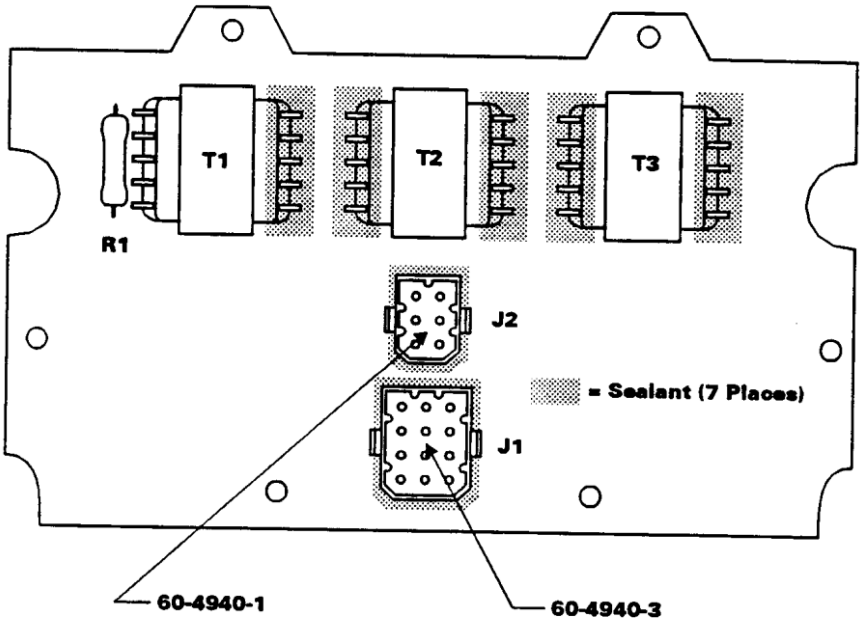
NOTE: Write down ‘POST SBF100-25-128’ on placard pn F0N9-9504-1 or equivalent.

H. Close all the PSU panels, opened in step B. (Refer to the AMM 25-22-01-400-814-A).

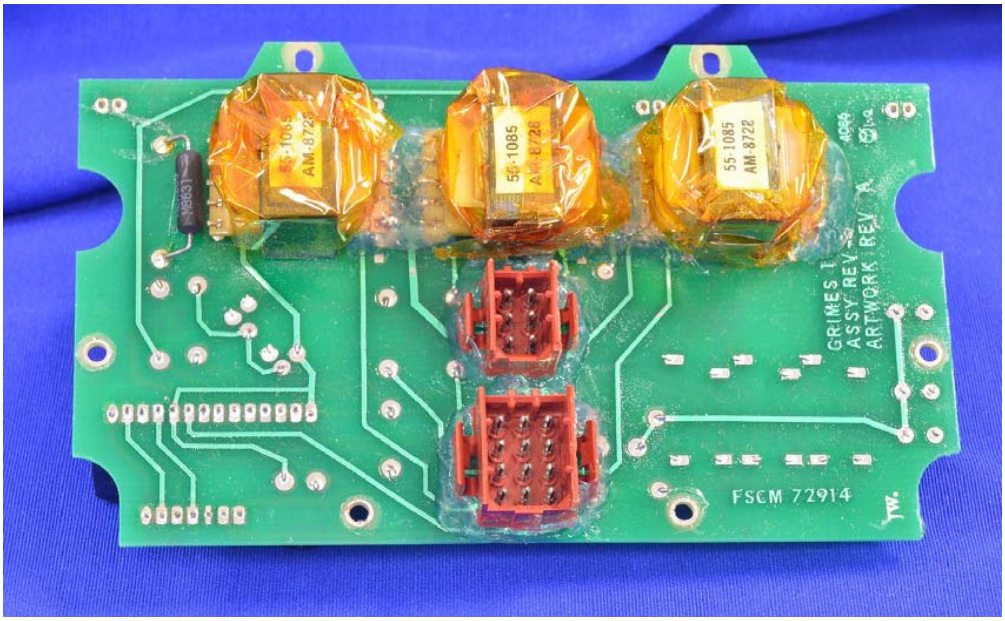
I. Perform the after installation test of all the PSU panels (Refer to the AMM 25-22-01-400-814-A).

J. Remove all tools, materials and equipment from the work area. Make sure that the area is clean.

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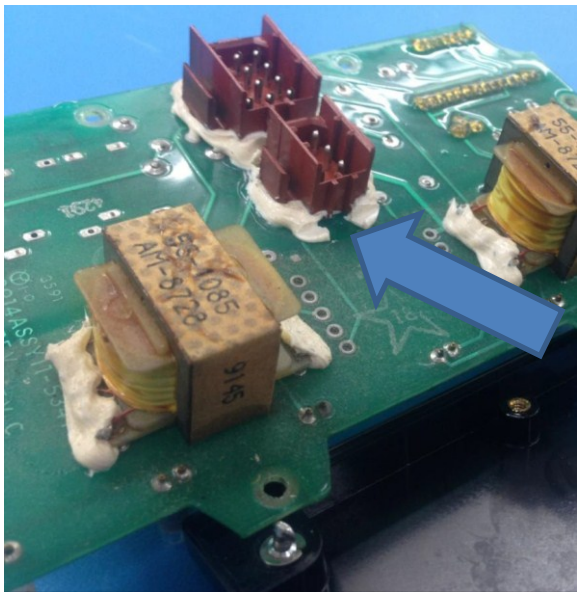
Correct Application of Sealant on PSU Panel
Figure 1A



Correct Application of Sealant on PSU Panel (Yellow plastic is normally not present)
Figure 1B

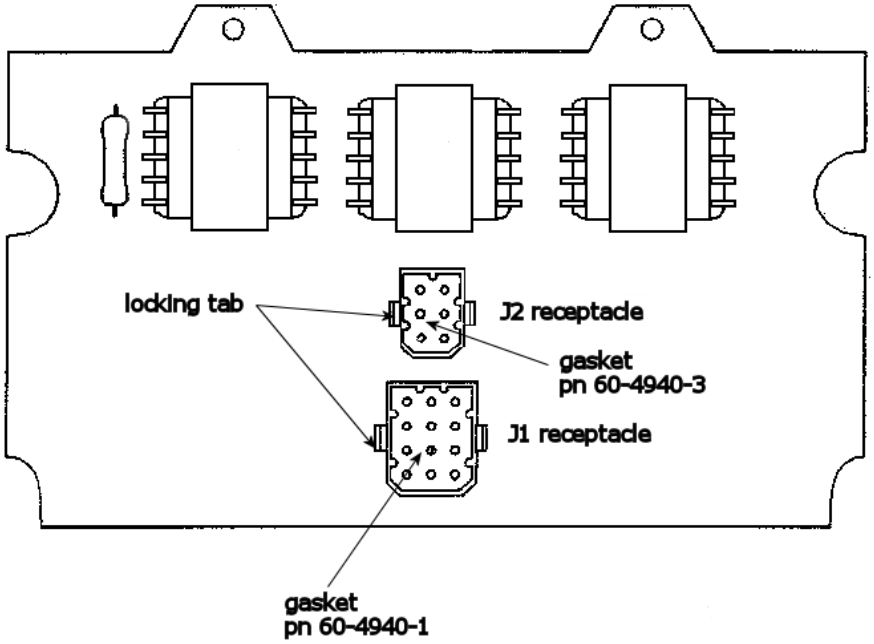
Status: Released	Revision: -	Released date: (Mmm dd/yy) Jul 21/16
Security class: RESTRICTED	F100/70 Generic SB no.: SBF100-25-128	

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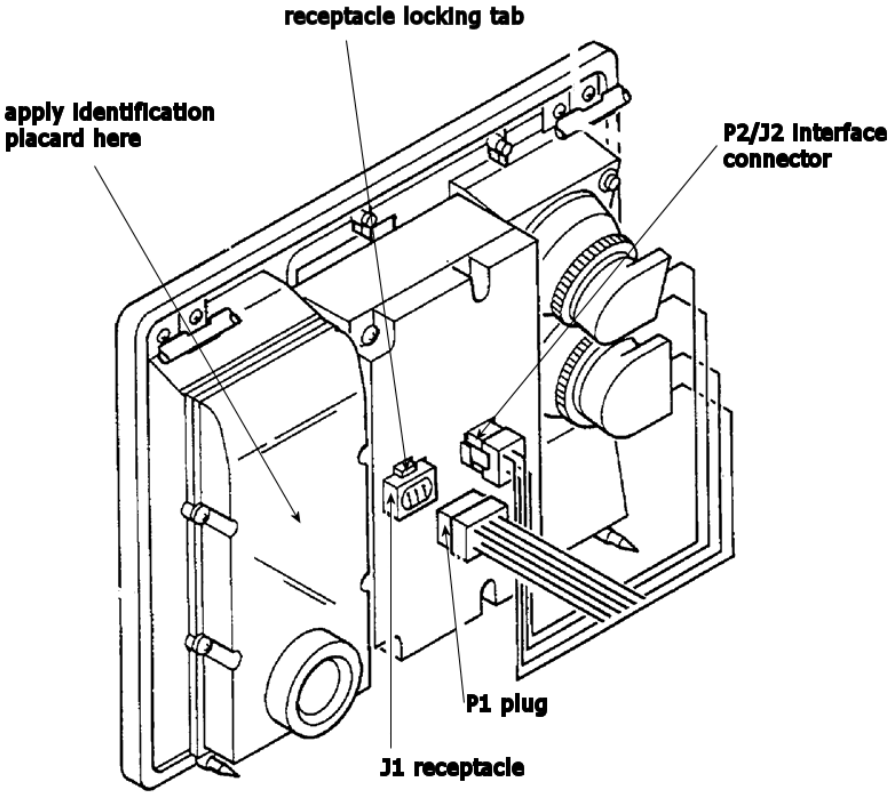


Incorrect Application of Sealant on PSU Panel
Figure 2

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PSU Panel Receptacle Layout
Figure 3



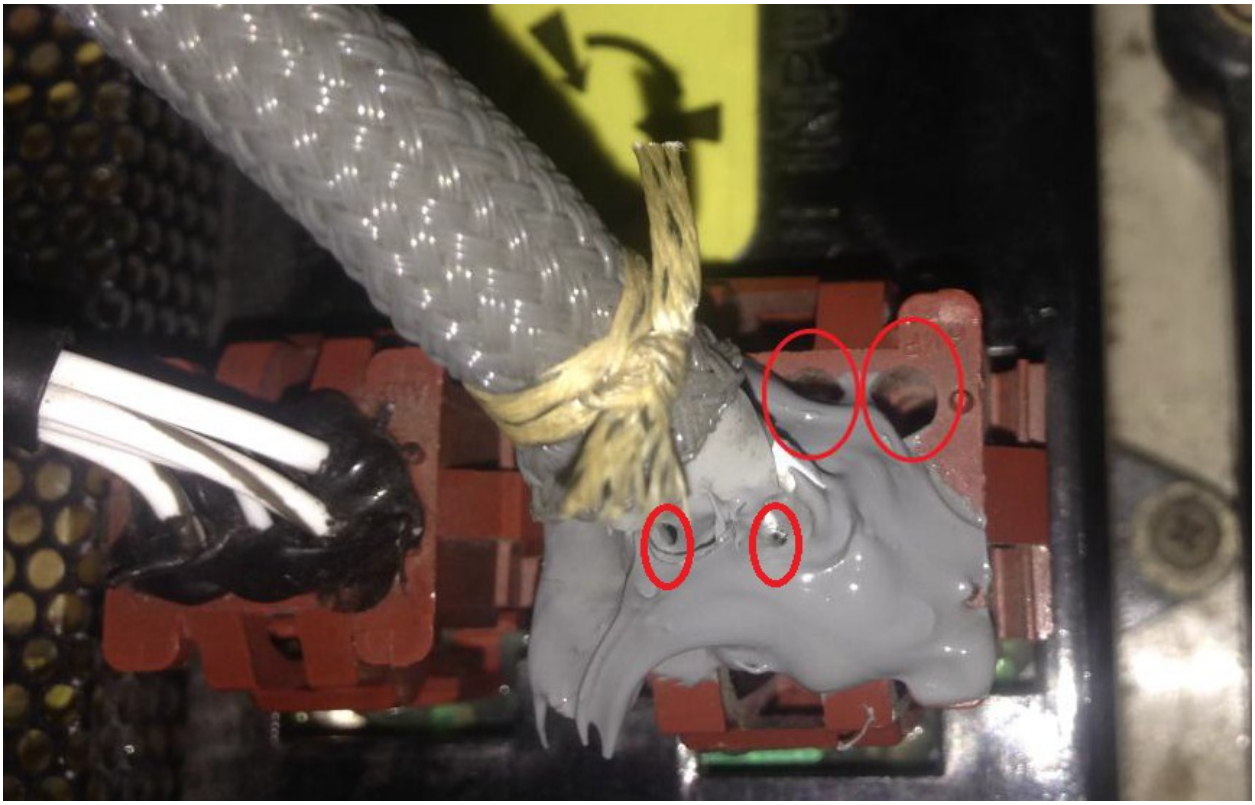
PSU Panel
Figure 4

Status: Released	Revision: -	Released date: (Mmm dd/yy) Jul 21/16
Security class: RESTRICTED	F100/70 Generic SB no.: SBF100-25-128	

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Correct Application of Sealant on J1 (LH) and J2 (RH) Interface Connector
Figure 5



Incorrect Application of Sealant on on J1 (RH) and J2 (LH) Interface Connector
Figure 6

Status: Released	Revision: -	Released date: (Mmm dd/yy) Jul 21/16
Security class: RESTRICTED	F100/70 Generic SB no.: SBF100-25-128	

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SB Title: A One-time Inspection of the PSU Panels and the PSU Panel/Aircraft Interface Connectors

Use this Service Bulletin Quality Reporting Form to tell us your perception of the quality of the Service Bulletin. The reported data that you provide to us will be used to analyze areas of difficulties and to take corrective actions to further improve the quality of our Service Bulletins. We thank you for the time you have taken in completing this form.

* Rate the scale of 1 to 4, with 1 the lowest score and 4 the highest score.

Chapters *	1	2	3	4
a) Quality rating of this SB (overall)	☐	☐	☐	☐
b) Quality rating of the Planning Information	☐	☐	☐	☐
c) Quality rating of the Material Information	☐	☐	☐	☐
d) Quality rating of the Accomplishment Instructions	☐	☐	☐	☐
e) Quality rating of the Test Instructions (if applicable)	☐	☐	☐	☐
f) Quality rating of the Illustrations or Drawings (if applicable)	☐	☐	☐	☐
g) Timely delivery of the SB	☐	☐	☐	☐

If you have had difficulties with one of the chapters of this Service Bulletin and/or one of your rating(s) is lower than 3, please give a short description of the issue.

Comments:

Operator: Date:

Name / Title:

Please return this form to: Fokker Services B.V.
Engineering, Quality Department
P.O. Box 1357
2130 EL Hoofddorp
The Netherlands

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