

29.07.2010

**SERVICE BULLETIN SB FSG2T-1.06**

**MANUFACTURER** DITTEL Messtechnik GmbH (former Walter Dittel GmbH),  
86899 LANDSBERG, Erpftinger Strasse 36, Germany

**TYPE DESIGNATION** FSG 2T VHF/AM Airband Transceiver – Part number F10350

**AUTHORIZATIONS** EASA.21O.1304 (former JTSA LBA.O.10.911/103)  
FAA TSO C37d and TSO C38d

**APPLICABILITY** This Service Bulletin applies to all FSG 2T VHF/AM transceivers having serial number 35X-05100 up to serial number 35X-06462, except SN 35X-05189, SN 35X-05557, SN 35X-05696 and SN 35X-05828, or marked with Mod-Index **SB 1.06**.

**REASON** Possible degradation of operational availability could create disruption of VHF communication due to internal capacitor misplacement. The capacitor could be destroyed and could be separated with possible generation of smoke.

**DESCRIPTION** Replace the misplaced capacitor by a new capacitor placed as shown in the attachment. To have access to the capacitor it is necessary to open the unit and to separate the TX/RX Module from the Chassis. Remove the adhesive fixing and replace the SMD capacitor.

**EFFECTIVE DATE** 29.07.2010

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**REQUIRED ACTIONS**

1. By means of the serial number verify whether the transceiver FSG 2T is affected by this Service Bulletin or not.
2. Replace the capacitor in affected units (except SN 35X-05189, SN 35X-05557, SN 35X-05696 and SN 35X-05828, or marked with Mod-Index **SB 1.06**)
  - from serial number 35X-05100 to and including serial number 35X-05550 within 6 month,
  - from serial number 35X-05551 to and including serial number 35X-06000 within 12 month,
  - from serial number 35X-06001 to and including serial number 35X-06462 within 18 month.

It is strongly recommended to execute the modification by DITTEL Messtechnik GmbH. Modifications executed at other locations require qualified, trained and authorized personal to avoid damaging the transceiver's PC board when introducing the modification. In case of introduction of the modification by others than the manufacturer itself, the manufacturer will not take over any responsibility for the correctly executed modification, verified functioning or any damage of the transceiver unit.

For modification of transceiver units please contact our sales/service department prior to shipping under:

Dittel Messtechnik GmbH

Erpftinger Strasse 36

D-86899 Landsberg

Germany

Tel.: +49-(0) 8191 3351-0

Fax: +49-(0) 8191 3351-49

Email: [Service-funk@dittel.com](mailto:Service-funk@dittel.com)

Transceiver units to be modified according Service Bulletin SB FSG2T-1.06 shall be sent **CPT (Cost Paid To) Landsberg** and will be sent back **DDU (Delivery Duty Unpaid)** as per Incoterms 2000.

The execution of the modification according to this Service Bulletin at manufacturer Dittel facilities is free of charge.

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**GENERAL INSTRUCTIONS**

- Obey standard established shop practices during the modification of the transceiver unit
- Use all CAUTIONS and WARNINGS
- Obey the precautions

**WORKING INSTRUCTIONS**

A description of disassembling the FSG 2T Transceiver is given in our FSG 2T Maintenance & Overhaul Manual, Article number D10057, issued April 2010. Refer to § 8.3 or § 8.3a. All components on the TX/RX Module should be accessible.

Locate the misplaced capacitor C2038 (680µ) on the TX/RX Module.

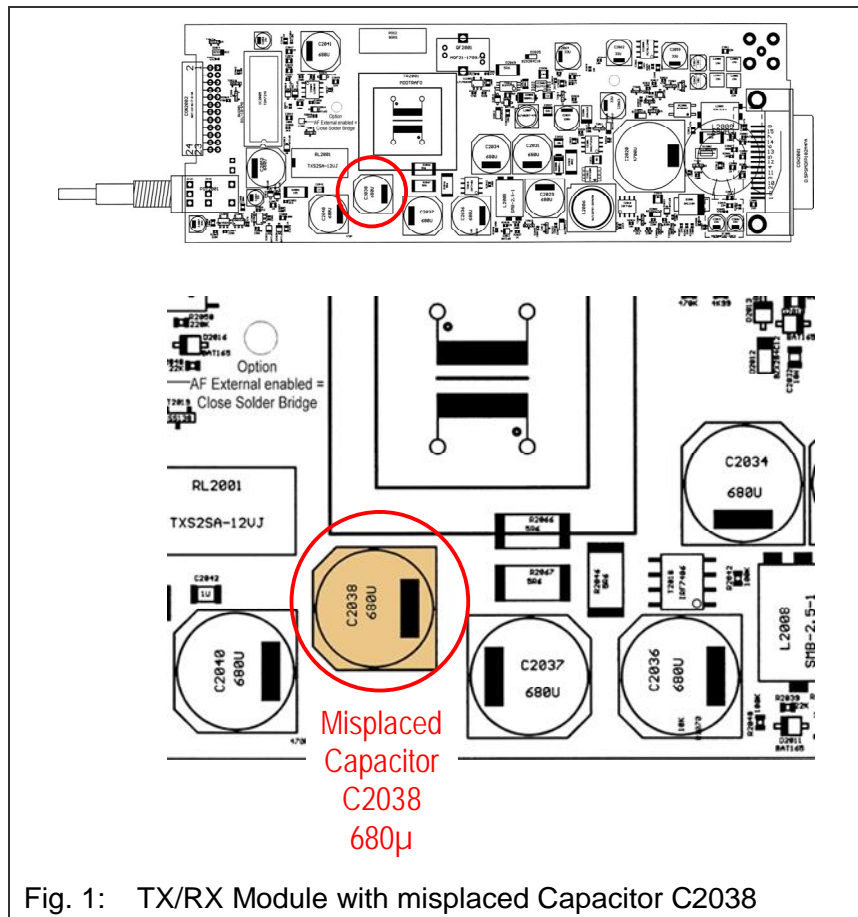
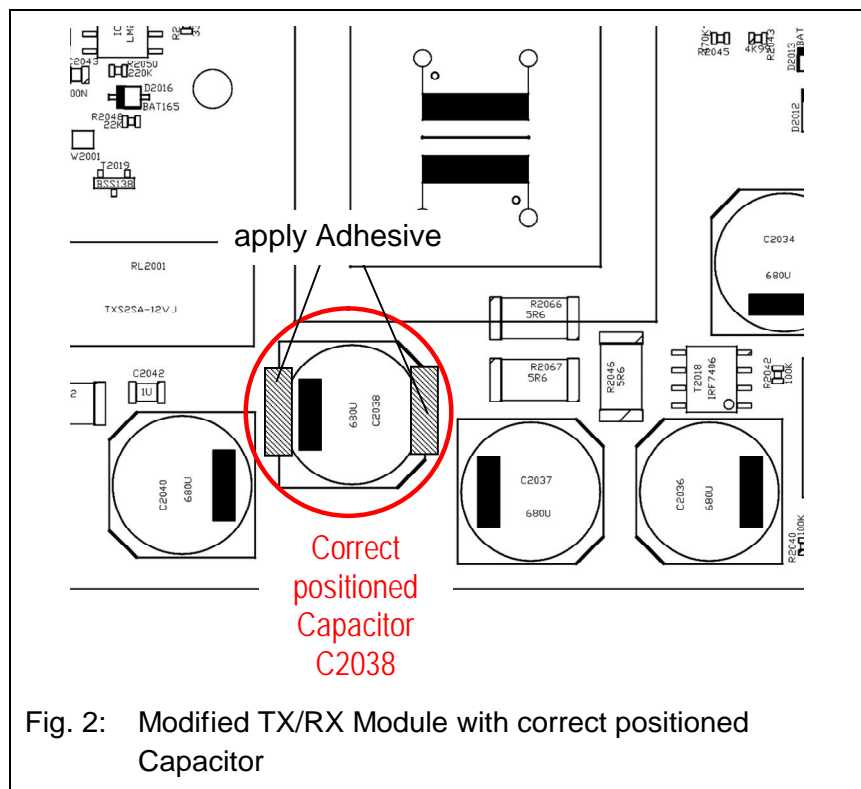


Fig. 1: TX/RX Module with misplaced Capacitor C2038

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- Repair:
- An adhesive fixes the capacitor C2038. Use a regulated heat gun (ca. 300°C / 570°F) with a small nozzle to warm up the adhesive.
  - Scratch off the adhesive.
  - Use an adequate solder tip to unsolder the misplaced capacitor.
  - Clean the soldering pads.
  - Take the supplied NEW capacitor C2038, 680µ and position it (watch polarity/marker!).
  - Solder.



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Stick a company-owned seal each across both sides of the gap Chassis – Top Cover.

**IMPORTANT!** After the FSG 2T was opened once and any assemblies or components were replaced, perform the “General Performance Test after Repair”.

Refer to Section 9 of FSG 2T, Maintenance & Overhaul Manual, April 2010.

After meeting the required minimum performance values mark the transceiver FSG 2T with the supplied Mod-Index label

**SB 1.06**

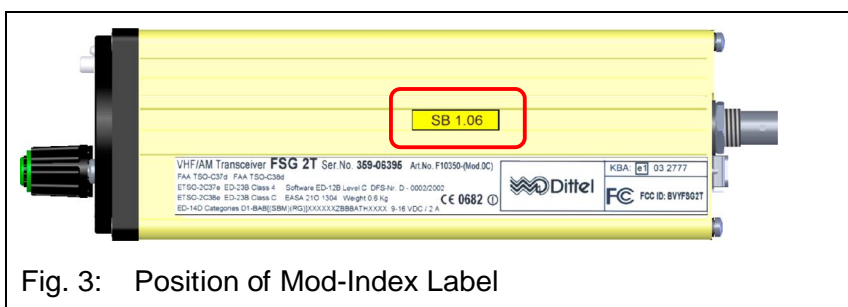


Fig. 3: Position of Mod-Index Label

#### MATERIAL INFORMATION

Modification set, Article number PX1150, containing:  
 1 Electrolytic Capacitor 680µF / 16V (A/N E59306);  
 2 pieces of wire mesh RF gasket, 162 mm each (A/N B02176);  
 1 Mod-Index label SB 1.06 (A/N E62301).

#### TOOLS REQUIRED

Suitable cross tip and slot screwdrivers, 4mm socket spanner, 6mm socket spanner, 11mm spanner, soldering station and required accessories, thread locking product (high strength), Adhesive DELO Epoxy, 2-parts, Automix 03 Rapid THIX, or equivalent, complete set of measuring instruments to perform the “Section 9, General Performance Test after Repair”.

#### REFERENCES

FSG 2T Maintenance & Overhaul Manual, A/N D10057, Issue April 2010.

#### COST

The execution of the modification according this Service Bulletin shall be done at manufacturer DITTEL facilities. If the transceiver units will be sent CPT (Cost Paid To) Landsberg and will be sent back DDU (Delivery Duty Unpaid) as per Incoterms 2000, then the introduction of this modification is free of charge if performed before 31.12.2011.

Other cost items are not reimbursable.

In case of other necessary repair of the transceiver unit the cost of repair will be given after incoming inspection at DITTEL.

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**RECOMMENDATION** In addition, it is recommended to introduce SB FSG2T-1.05 for improvement of immunity against strong RF signals which exceed the limitations defined by international standards.

**SAFETY ADVISORY** **WARNING:**  
Before the materials called out in this publication are used, know the handling, storage and disposal precautions recommended by the manufacturer or supplier. Failure to obey the manufacturers' or suppliers' recommendations can result in personal injury or disease.

This publication describes physical and chemical processes, which can make it necessary to use chemicals, solvents, paints, and other commercially available materials. The user of this publication must get the Material Safety Data Sheets from the manufacturers or suppliers of the materials to be used. The user must know the manufacturer / supplier data and obey the procedures, recommendations, warnings and cautions set forth for the safe use, handling, storage, and disposal of the materials.

**WARRANTY / LIABILITY  
ADVISORY**

The execution of the modification according this Service Bulletin does not extend the warranty status of the modified transceiver.

**WARNING:**  
Incorrectly repaired or modified transceivers can affect airworthiness or decrease the life of the transceivers unit. Incorrectly fabricated special tooling or test equipment can result in damage to the transceivers unit or give unsatisfactory results.

**WARNING:**  
DITTEL assumes no responsibility for any DITTEL equipment, which is not maintained and/or repaired in accordance with DITTEL's published instructions. Neither does DITTEL assume responsibility for special tools or test equipment fabricated by other companies

**CAUTION:**  
Do not use a material that is not equivalent to the material specified herein. A material that is not equivalent can cause damage to the equipment and can make the warranty not applicable.

**CAUTION:**  
The transceiver unit contains electrostatic discharge sensitive items. Use industry approved precautions.

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**SERVICE BULLETIN SB FSG2T-1.06**  
**Customer Support Service Report (CSSR)**

If the modification given in this service bulletin is done at a location other than manufacturer DITTEL, complete the CSSR.

FSG 2T VHF/AM Airband Transceiver	Part number F10350
Serial number	35_ - 0_____
Type of application (aircraft, ground, etc.)	
End User Company name: Company address:	
Service provider Person to contact: Company name: Company address:  Company phone number:	
Content of modification label	
Date of modification:	

**Complete the form and mail or fax it to**

Dittel Messtechnik GmbH  
Erpftinger Strasse 36  
D-86899 Landsberg  
Tel.: +49-(0) 8191 3351 -0  
Fax: +49-(0) 8191 3351 -49  
Service-funk@dittel.com