

23.08.2010

**SERVICE BULLETIN SB FSG2T-1.05**

**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 may be introduced to all FSG 2T VHF/AM transceivers having serial number 35X-05100 up to serial number 35X-06492, if not marked with Mod-Index **SB 1.05**.

**REASON** In the direct vicinity of strong external RF transmitters, which exceed the limits of transmitted signal levels specified as maximum, could disturb communication by suppression of the active channel.

**DESCRIPTION** Verify reliable communication in the vicinity of external RF transmitters, which could disturb active communication channels. Improvement against external RF signal, exceeding the maximum limits, can be achieved by modifying the resistor R1099 and to introduce the capacitor C1207 on the TX/RX module.

The introduction of this improvement is recommended in conjunction with execution of SB FSG2T-1.06.

**EFFECTIVE DATE** 23.08.2010

23.08.2010

**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 resistor and introduce the capacitor in affected units from serial number 35X-05100 to and including serial number 35X-06492.

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-1.05 shall be sent **CPT (Cost Paid To) Landsberg** and will be sent back **ex works Landsberg** as per Incoterms 2000.

The execution of the modification according to this Service Bulletin at manufacturer Dittel facilities is free of charge, when introduced in conjunction with SB FSG2T-1.06.

23.08.2010

**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 resistor R1099 (820R) and the tunable inductivity L1026 on the TX/RX Module.

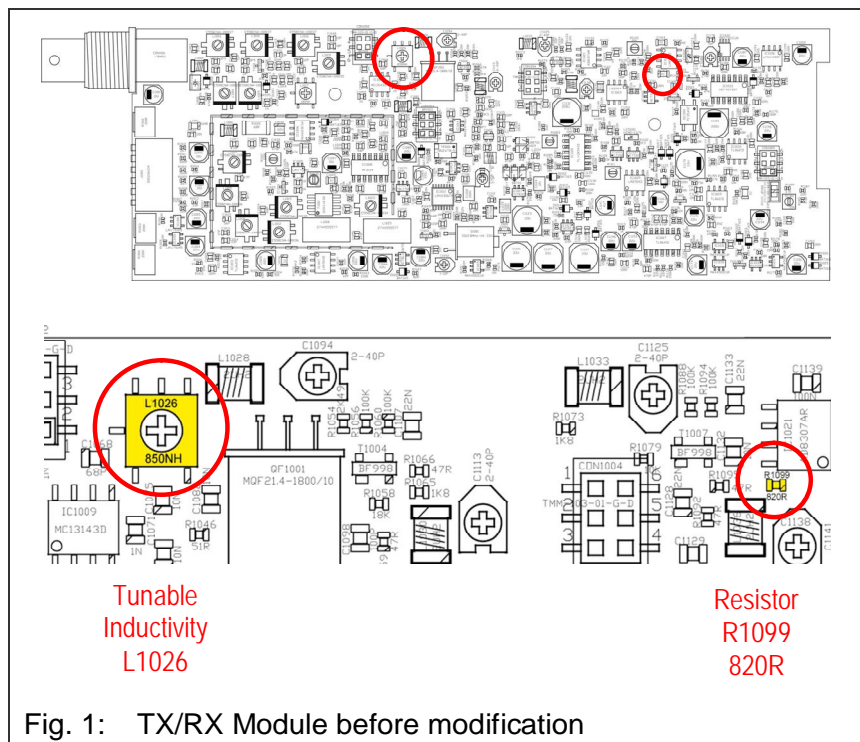


Fig. 1: TX/RX Module before modification

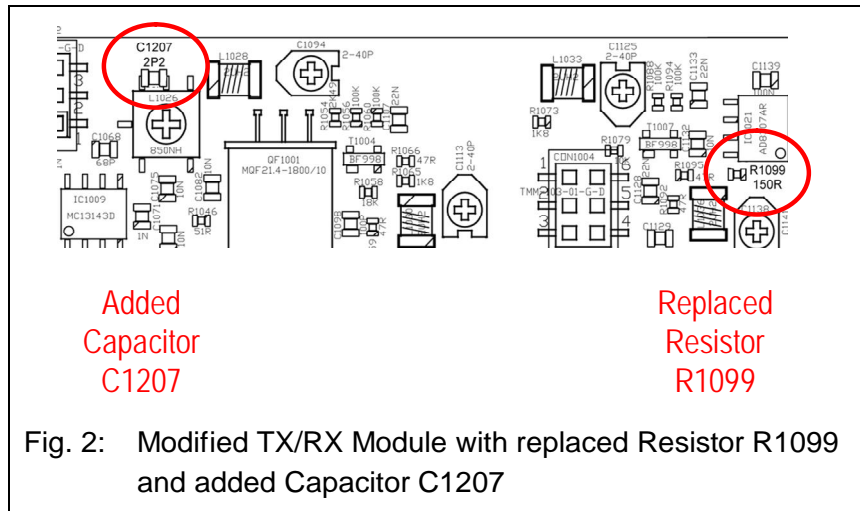
Repair: Replacing the Resistor R1099/820R by a Resistor R1099/150R:

- Use an adequate solder tip to unsolder the 820R Resistor.
- Clean the soldering pads.
- Take the supplied NEW Resistor R1099, 150R, and position it.
- Use an adequate solder tip and solder.

23.08.2010

Adding a Capacitor C1207:

- Take the supplied NEW Capacitor C1207, 2P2, and position it across the two upper left soldering pads of the inductivity L1026.
- Use an adequate solder tip and solder.



**Assembling:** Depending on type of chassis (Mod. 0A or Mod. 0B and 0C), assemble the Transceiver unit by following the steps in reverse order as described in § 8.3 or § 8.3a, FSG 2T Maintenance & Overhaul Manual.

**Additional hints for assembling:** Slightly press the wire mesh into the groove of the Chassis. The mesh must be flush with the edges of the Chassis. Take care not to drop any wire particles into the Chassis.

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 1.05**

23.08.2010

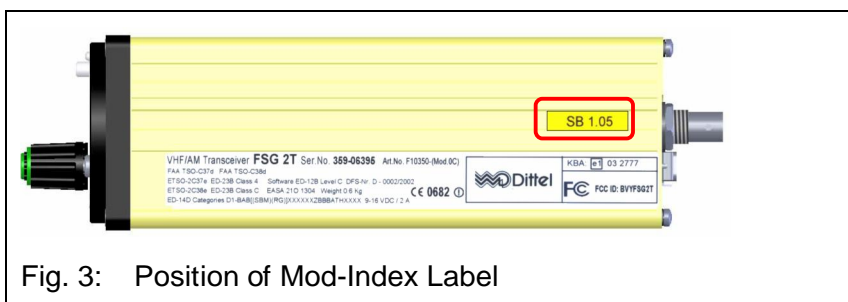


Fig. 3: Position of Mod-Index Label

**MATERIAL INFORMATION**

Modification set, Article number PX1151, containing:  
1 Capacitor 2P2 ± 0.25P / 50V / C0805 (A/N E05874);  
1 Resistor 150R ± 1%, R0603 (A/N E59485);  
1 Mod-Index label SB 1.05 (Art. E62339)

**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), 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. The transceiver units shall be sent CPT (Cost Paid To) Landsberg and will be sent back ex works Landsberg as per Incoterms 2000. The introduction of this modification is free of charge if performed before 31.12.2011 and in conjunction with execution of SB FSG2T-1.06.

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.

**RECOMMENDATION**

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, in conjunction with execution of SB FSG2T-1.06.

23.08.2010

**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 transceiver unit. Incorrectly fabricated special tooling or test equipment can result in damage to the transceiver 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.

23.08.2010

**SERVICE BULLETIN SB FSG2T-1.05**  
**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