ECHOSENS

Bulletin Technique

ETB-009 ED. 1

Validation

Nom	Date	Signature

Mellahi 31/07/2012



Date : July 2012-ed.1

WORKS INSTRUCTION

Technical bulletin N°: ETB-009



FibroScan



WORKS INSTRUCTION

Date : July 2012-ed.1

Technical bulletin N° : ETB-009

TABLE OF CONTENTS

TABLE	E OF CONTENTS	3
1.	MISCELLANEOUS INFORMATION 1.1 Property and copyright 1.2 Reverse engineering 1.3 Registered trademarks	4 4 4
2.	SYMBOLS	5
3.	INTRODUCTION	6 6 6
4.	INSTRUCTION	7 7



WORKS INSTRUCTION

Date : July 2012-ed.1

Technical bulletin N° : ETB-009

1. MISCELLANEOUS INFORMATION

1.1 PROPERTY AND COPYRIGHT

All manuals and documents of all types are the property of Echosens SASU and are protected by intellectual property right, all rights reserved. Your right to copy this documentation is limited to legal copyright. This document cannot be distributed, translated or reproduced, in whole or in part, in any manner and in any form, without prior written authorisation from Echosens SASU. Thus, the reproduction, adaptation or translation of the present document, without prior written consent, is prohibited within the limits of copyright law.

All rights reserved. Copyright Echosens SASU– 2012.

1.2 REVERSE ENGINEERING

The software license is individual and may not, under any circumstances, be transferred in any manner to any third party. This software cannot be distributed, reproduced, translated, disassembled, decompiled, analysed, adapted, modified, integrated or combined with another software application, with the exception of cases allowed by law.

Resale of the software built into the FibroScan is prohibited.

1.3 REGISTERED TRADEMARKS

Echosens and FibroScan are registered trademarks of Echosens SASU.

Microsoft Excel and *Windows XP Embedded* are registered trademarks of *Microsoft Corporation* in the United States and in other countries

Contact and information

Echosens SASU 30 place d'Italie 75013 Paris, France Tel: +33 (0)1 44 82 78 50 Fax: +33 (0)1 44 82 78 60 Email: service@echosens.com

Echosens document N°. ETB-009 Mellahi Paris: July 2012-ed. 1



WORKS INSTRUCTION

Date : July 2012-ed.1

Technical bulletin N° : ETB-009

2. SYMBOLS



This symbol means:

Warning: check the instructions before using the FibroScan.

Instructions preceded by this symbol, if not correctly followed or performed, may cause injuries or damage to the medical device and facilities.



This symbol means:

Additional information with no impact on instrument use.



This symbol means:

Refers to instructions in the service manual, written procedures or topics of Basic or Advanced Training



This symbol means:

New implemented feature or change compared to former versions



This symbol means:

Removed option which is discontinued or not longer available.



WORKS INSTRUCTION

Date : July 2012-ed.1

Technical bulletin N° : ETB-009

3. INTRODUCTION

3.1 PURPOSE

The purpose of this instruction is to solve the problem met with the Touchpad on the Fibroscan 502 Touch.

The symptom is that it's not possible to use the touch screen and the cursor is blocked of the edge of the screen and the touch screen calibrate will generate an error message. The technical solution is described on this work instruction.

3.2 REQUIREMENTS

3.2.1 Hardware

- A FibroScan 502 Touch
- Gaskets referenced:
 - * 487212 rev 2, horizontal (290 mm), quantity 2
 - * 487214 rev 2, vertical (355 mm), quantity 2



- Flat spanner size 13 mm



- Dynamometric screwdriver (0.2N)



- Screw driver





WORKS INSTRUCTION

Date : July 2012-ed.1

Technical bulletin N° : ETB-009

4. INSTRUCTION

4.1 PROCEDURE

4.1.1 Gaskets exchange instruction:



To install Ty-Rap, follow the steps described below and the instruction on the manual E200M006: 1- Open the device

2- Remove the screen module as below.



3- Remove Touchpad driver, the mother board and the inverter board.





5- Place the new gasket directly on the touchpad as described below:





F

Do not forget to stick the gasket on the correct position: - The 487212 rev 2, horizontal (290 mm) - The 487214 rev 2, vertical (355 mm)



6- Put back the screen module.



Date : July 2012-ed.1

WORKS INSTRUCTION

Technical bulletin N° : ETB-009

7- Adjust the space between screen module and the chassis



- a- Unscrew the nuts
- b- With dynamometric screwdriver tighten till you reach the maximum for each screw
- c- With screw driver maintain the screw on the position reached with dynamometric screwdriver and with the flat spanner tighten the nuts.





- 8- Put back Touchpad driver, the mother board and the inverter board.
- 9- Perform a test
- 10- Close the Fibroscan and perform a test again.
- 11- Send report to Echosens