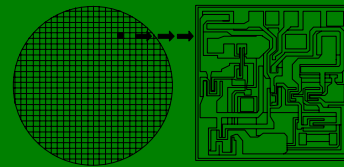
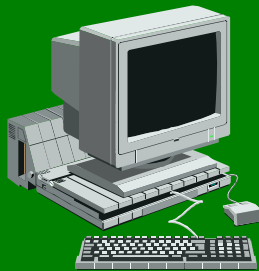


SERVICE MANUAL TECHNICAL INFORMATION

REV. 1.0



GAS ANALYSER

AGS 200

From bench Iren to bench
Sensors



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2 INTRODUCTION





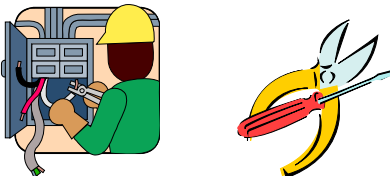

2.1 CONTENTS OF THE MANUAL

In this manual are present the information for a SERVICE TECHNICIAN to repair or for the maintenance of the device. In this case the information allow the replacement of the bench IREN with a bench SENSORS, using the kit 141250900003XX.

3 SAFETY GENERAL INFORMATION

3.1 IMPORTANT INFORMATION FOR SAFETY





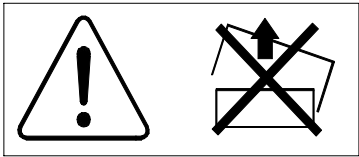
During installation and operative procedure, it needs to respect some important rule for individual safety

	<p>All operations in this manual must be done by train people</p>
	<p>In order to move heavy load or use tools it is compulsory to use protection gloves</p>
	<p>In order to use tools (drill, saw) it is compulsory to use protection glasses</p>
	<p>-It is forbidden to raise load more than 22 kg for person without lifter</p>
	<p>-Before to handle inside instruments, remove main power and use tools with isolate handle</p>
	<p>-Respect carefully all indications in this manual or in other manuals to link it</p>

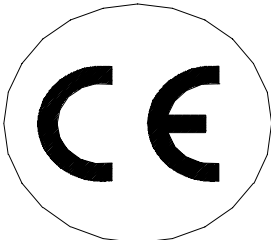
3.2 SYMBOL

Questo paragrafo descrive la simbologia relativa alla sicurezza riportata sugli strumenti

3.2.1 SAFETY

	ALTERNATE CURRENT
	GROUND
	READ MANUAL INSTRUCTION
	ATTENTION ! ELECTRICAL SHAKE
	ATTENTION! DON'T TRY TO REMOVE THE COVER (operation allowed to qualified technicians)

3.2.2 MARK

	CE MARK
---	---------

4 BENCH SUBSTITUTION

4.1 NECESSARY TOOLS

- Cross-head screwdriver of about 5x80mm ;
- Flat-head screwdriver of about 4x100mm ;
- 2 monkey wrenches of 13mm ;
- 1 monkey wrench of 10mm ;
- Clamp and pipe-cutter for plastic pipes;
- Rapid glue (LOCTITE ATTAK) ;
- Cleaning material: cloth or duster, or paper; ethyl alcohol or synthetic turpentine.

4.2 OPERATIONS TO PERFORM

Here the operations that must be performed for the production of SL Gas Analyzer not personalized 125080002YY for AGS-200 devices with AMB2 Sensors bench and for the production of SL Gas Analyzer not personalized 1250800018YY for AGS-200 devices with Infrasense Seltec bench.

4.2.1 Realization of necessary pipes from the one inserted in the kit

The pneumatic section is composed by two kind of pipes:

1. PIPE W8P0503 (PVC transparent pipe internal diameter (di)=3mm, external diameter (de)=5mm) ;
2. PIPE T4S0804 (silicon transparent pipe di=4mm , de=8mm) .

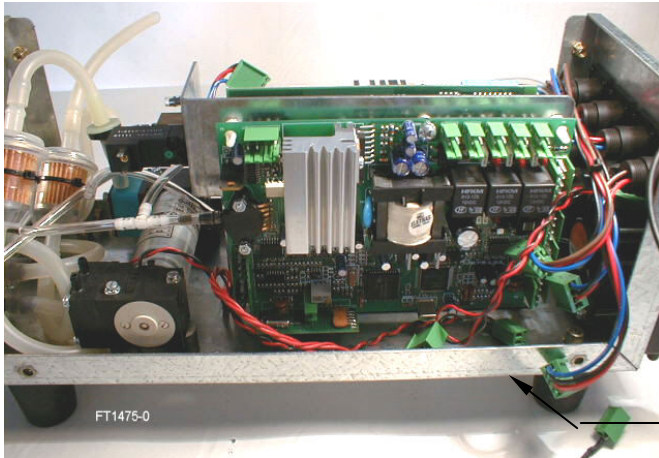
Each pipe cutted with the right tool, following the list, have a code and a number to make easier indentify it in the procedure.

In this application it is necessary to prepare a pipe as showed in the list below, using the pipe supplied with the kit (1 meter).

PIPE W8P0503 (PVC transparent pipe di=3mm , de=5mm)

- element 5 ; 1250600031YY ; SPEZ.TUBO-W8P050305 L.450MM ; from gas pump output (black head) to bench Sensors.

4.2.2 Dismantle the Gas Analyzer

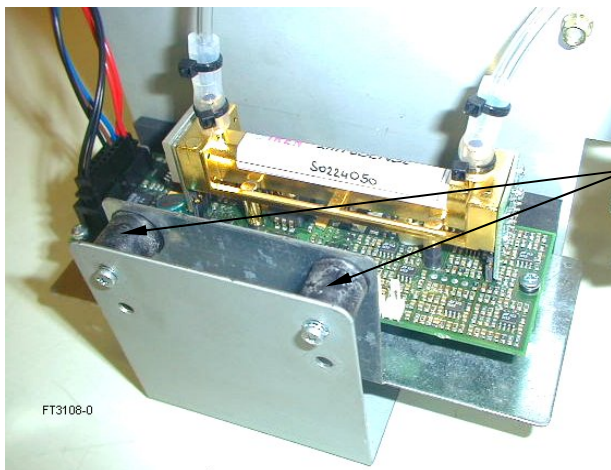


Remove the cover of the analyzer and unplug all the connectors on the elaboration board (see figure).

Un-screw the four screws TC+M4x10 with the four washer \varnothing 4mm on the bottom.

Detach the pipes form the electronic boards and remove the stirrup with the electronic boards.

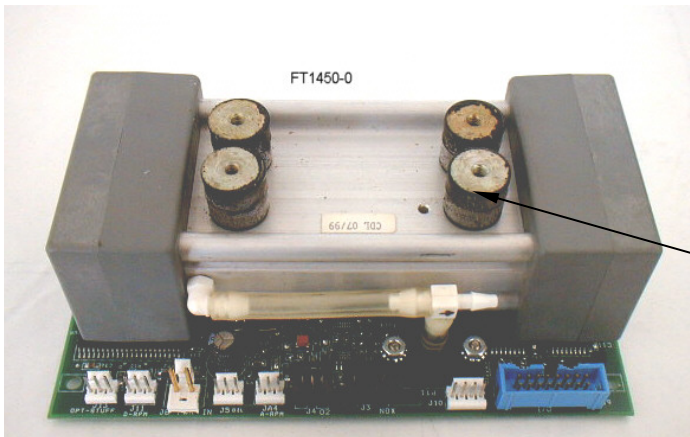
Dismantle of Infrasense Seltec bench



Un-screw the stirrup of the bench from the other stirrup, keeping the two screws TC+ M3x5 ZNT and all the washers M3.

Unplug the cables of the bench on the elaboration board.

4.2.3 Assembly of the bench AMB2 Sensors

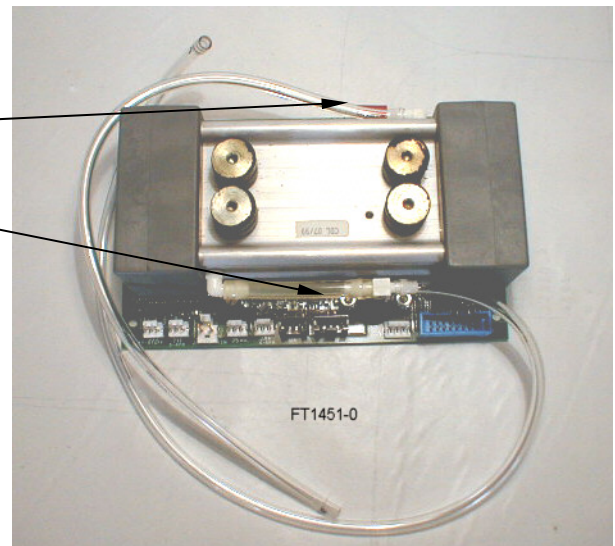


Screw down the four silent-block on the four holes of the bench 36556000011YY. Tighten as possible only with hands.

silent-block 7/16" 4055200001YY
bench

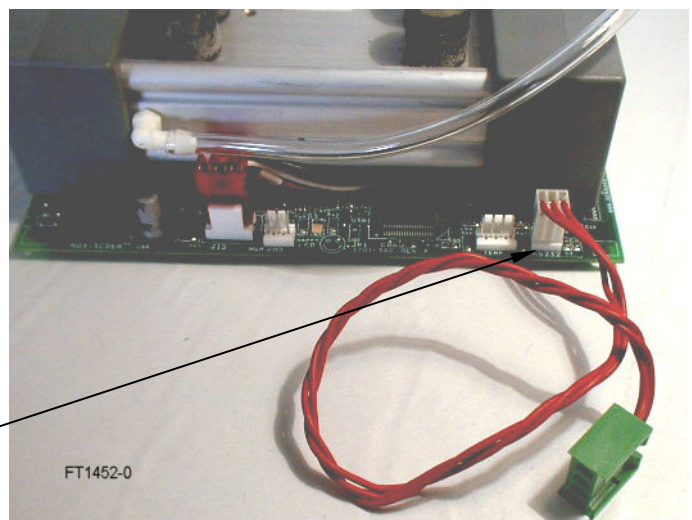
Plug the pipes 4 and 5 respectively on the input and the output of the bench.

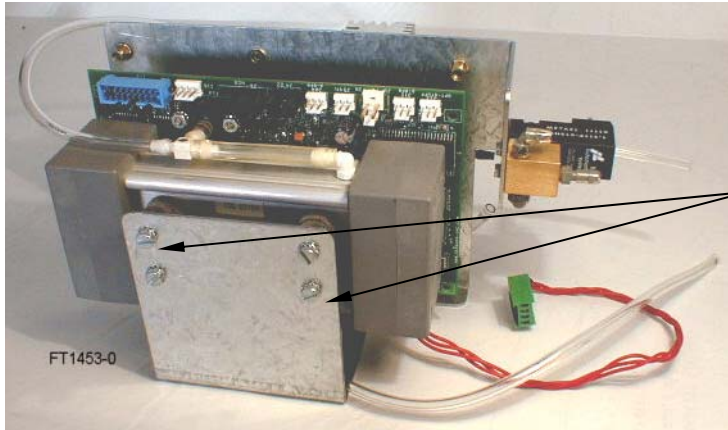
Output gas – pipe n° 5 (the same of the Bench IREN)
Input gas – pipe n° 4



Plug the communication cable AGS-090 for RS232 in the right connector (J7 on the electronic board of the bench) .

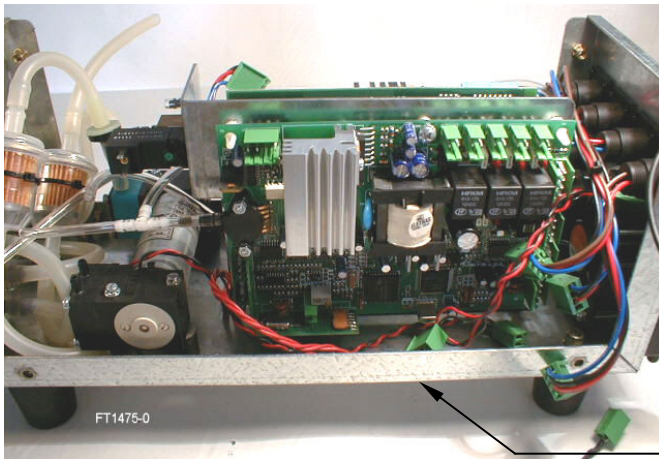
cavo AGS-090





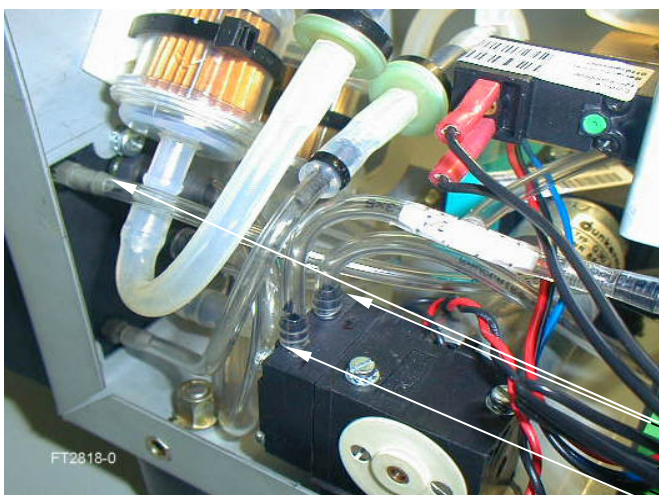
Fix the bench at the internal frame (stirrup) using four screws TE UNC 1/8x6 OTT. 4060550018YY and four washer bite \varnothing 4mm 4045100002YY.
 It is possible to use commercial screws with different finish (zinc, chrome, ...) or brass screws.
 Apply the serial number on the bench as described in the relative paragraph.

4.2.4 Assembly the electronic boards on the gas analyzer



Take the stirrup with the two electronic boards and place into the frame of the gas analyzer as showed in figure.
 Fix the stirrup with four screws and four washer bite \varnothing 4mm under the frame.

avvitare il telaio interno con le viti inserite da sotto il telaio esterno (sotto rispetto alla foto)



Plug the pipe n° 4 coming from the input of the bench to the output of the gas pump (black head).
 Plug the pipe n°5 coming from the output of the bench to the external filter.
 Plug the pipe n°3 coming from "T" connection to the input of the gas pump (black head).
 Insert completely the pipes over the connections.

elemento 4
 elemento 5
 elemento 3

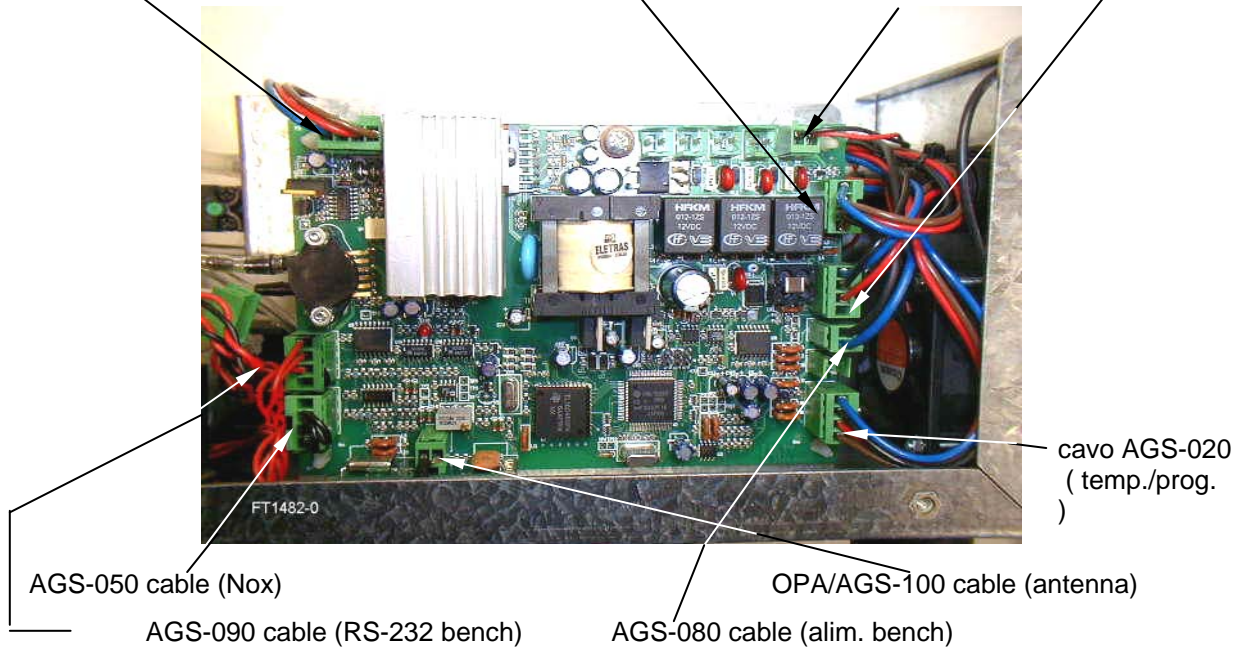
After the pneumatic connections verify:

- All the pipes are completely inserted over the right connections;
- There are not pipes too short (too stretched);
- There are not folds or narrowing.

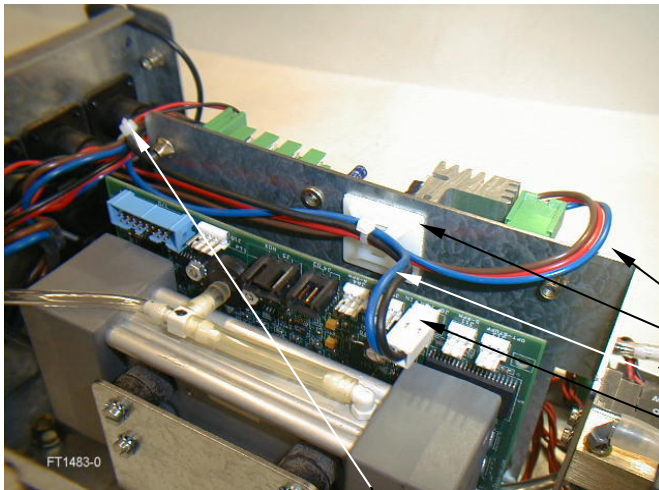
Condition as those must be removed, changing the pipes or modifying the path of them.

Link the internal cables to the elaboration board as showed:

AGS-030 cable (RPM form induction clamp) - AGS-010 cable (omniBUS) - fan cable - AGS-040 cable (RS-232)



Plug the AGS-080 cable (the white MOLEX connector of it) on the connector over the bench (J8).
Clean the surface of internal frame and place the adhesive carry-tie.



Lock the cables AGS-030 and AGS-080 with a black tie 2.5x100mm.

- AGS-030 cable
- Adhesive carry-tie
- AGS-080 cable (MOLEX connector)
- J8 connector on electronic board of the bench

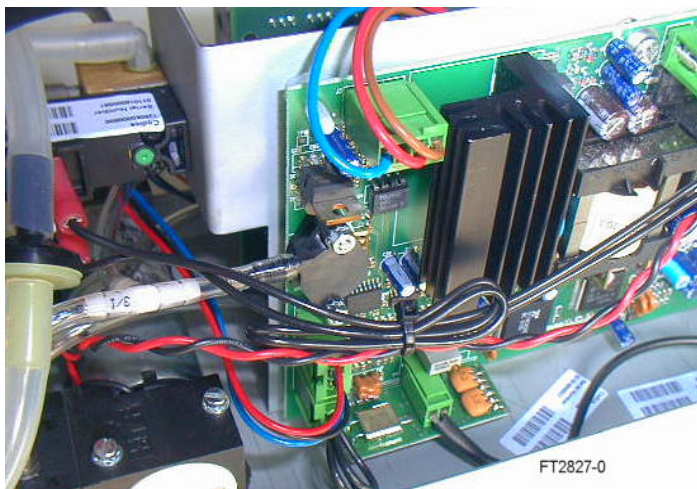
Palce a black tie 2.5x100mm around alla the internal cables.



- J7 of elaboration board
- J9 of elaboration board

Link the AGS-110 cable (the connector AMP-MODU1 to the connector J7 of elaboration board.
Link the power sully cable for the pump to the connector J9 of the board.

- AGS-110 cable
- Pump's power supply cable

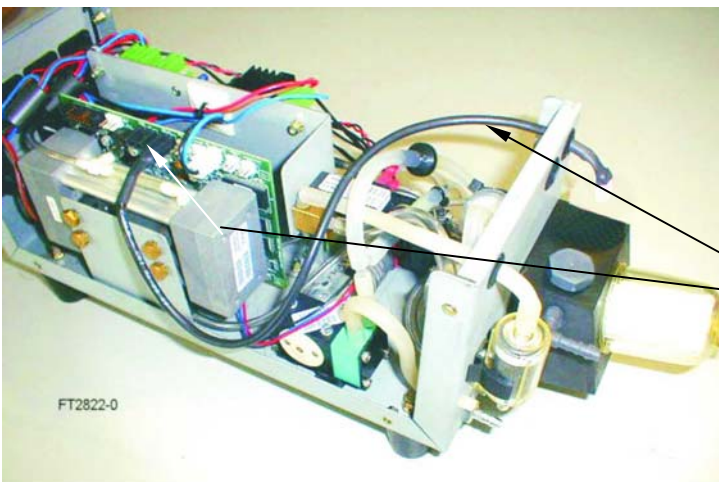


Tie up the cables AGS-110 and pump supply, using a black tie 2.5x100mm nera.



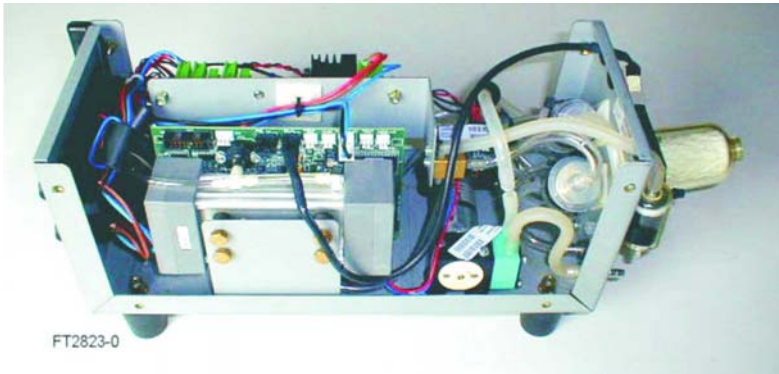
Insert the rubber elements mod. 15419-4 in the holes of the frame as showed.

Insert the cable AGS-070 (in case of Sensors Bench) or the cable AGS-076 (in case of Iren Bench) in the hole over the place for =2 sensor. Fold the cable to help it at the connection with the sensor.

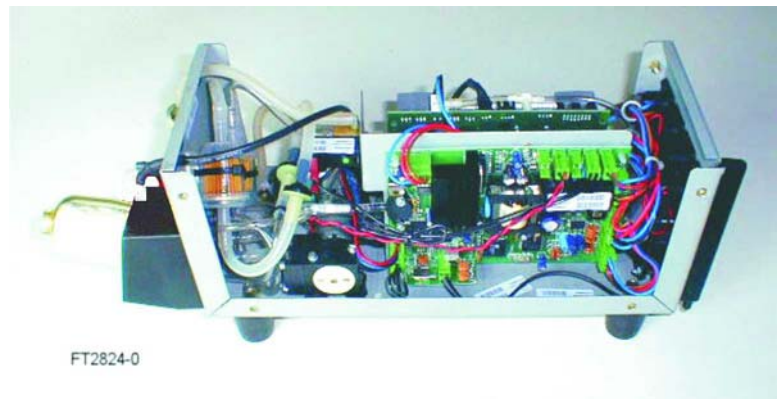


Place the cable AGS-070 1250100012YY for AGS1-2/S inside the analyzer as showed in the figure and link it to the connector J4 of the Sensors bench.

cable AGS-070
connector J4 on bench AMB2 Sensors



The pictures show how the analyzer looks like without the cover and with the bench Sensors installed.



Perform the applications of bar codes or serial number as write below.

4.2.5 Bar code application



**MICROBENCH2
AUTOMOTIVE (AMBII)
3655600001YY**

Note: With adhesive tape lock the second copy of the serial number on an external surface of the gas analyzer.