

ELECTRONIC LUNG VENTILATOR



SPENCER 170

cod. EV01170A

SPENCER ITALIA S.r.I. – LIFE SUPPORT Strada Cavi,7 – 43044 Collecchio (PR) ITALIA Tel. 0039 0521 541111 – Fax 0039 0521 541222

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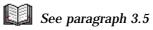
1 – GENERAL INFORMATION

1.1 MANUFACTURER

Spencer Italia S.r.l. is known all over the world for the production of lung ventilators. Our experience, customer satisfaction and technology level guarantee the quality of the supplied devices.

1.2 CUSTOMER SERVICE CENTRE

For any need regarding use, maintenance and spare parts request, the Customer is requested to contact the manufacturer or authorised Service Centre specifying the data shown on the label.



1.3 CERTIFICATION

Spencer electronic ventilators are realised according to relevant Council Directives.

1.4 GUARANTEE



Fill and send the specific form to activate the guarantee. See paragraph 8.2

1.5 STRUCTURE OF USER MANUAL

The Customer is advised to read this Manual carefully, as the correct use of the device represents the basis of the Customer-Manufacturer relationship.

1.5.1 **Object**

This Manual is intended to give the Customer all necessary information to allow correct use and maintenance of the device. It includes information concerning technical aspects, operating conditions, maintenance, safety and replacement parts.

Operators must read this Manual carefully before any action is undertaken.

Should questions arise regarding the use or care of this product that are not covered clearly in this manual, contact customer service representatives.

1.5.2 Preservation

This User Manual must be stored near the product, protected from anything, which could compromise its integrity and legibility.

1.5.3 Used symbols

SYMBOL	MEANING	NOTES
<u>.</u>	DANGER	Indicates a danger (also with risk of death) for users.
L.F	WARNING	Indicates a warning note about key function or useful information. Pay maximum attention to text blocks marked by this symbol.
	OBSERVATION	The user is requested to measure a value, to control a signal,
•	QUESTION	User is requested to verify the proper position of an element before operating a function.
	CONSULTATION	User is requested to look up the Manual before operating a function.
P	REGULATION	In case of particular operating conditions or faults, a mechanical or electric calibration could be required.

2 – DEVICE DESCRIPTION

2.1 OPERATING PRINCIPLE

Spencer 170 is a breathing control/assistance device, which comprehends some of the emerging trends in the field of automatic respirators.

It is an electronically controlled device and works as a flow intermittent pneumatic unit, time-cicled, able to supply medical gas at two different concentrations with the same gas energy source.

The device is portable with a 2-hour self-powered electric feeding system: after two hours external power feeding is necessary, this will automatically recharge the internal system.

The user interface is in the front control panel realised in abrasive and common medical substances resistant material. The front panel has clear and intuitive graphics and the case sleeve protects the control buttons. On the right hand side there is a flange with connections for the pressurised oxygen and the supply of medical mix for the patient.

The wide range of volumes and respiratory frequencies of the SPENCER 170 and the monitoring system for patient safety allows for its use with both adult and paediatric patients.

2.2 MAIN COMPONENTS

The device is composed of the following main components:

Frontal panel control

All the control devices to operate the ventilator are lodged in this panel.

Electronic control board

Effects the integrated control of all respiratory functions and of the main parameters of respiration.

Pneumatic block of gas mixing

The pressurised gas in entry is sent to the mixing block of the device thanks to a flow cutting valve controlled by the electronic check. When turned off any flowing pressurised gas cannot be supplied into the device, as it is blocked by the closed off electro-valve.

2.3 DIMENSIONS AND WEIGHT

Width	mm 295
Height	mm 155
Depth	mm 145
Weight (accessories included)	kg 4.300

2.4 ENVIRONMENTAL CONDITIONS

	During handling and storage	During operation
Temperature	from -20° to $+60^{\circ}$	from -10° to $+40^{\circ}$
Humidity rel.	from 10 % to 100 %	from 15 % to 95 %
Atmospheric Pressure	from 50 kPa to 106 kPa	from 70 kPa to 110 kPa

2.5 TECHNICAL DATA

ChargingTension Absorption of current at 12V continuous current FUSES External Feeding 12V INTERNAL BATTERY Functioning time Recharging time Functioning time after signalling of discharged battery Internal Volume of the Patient Circuit tubes MEDICAL GAS (Oxygen) (centralised plant or tank with pressure regulator) Entry pressure Minimum Capacity PRESSURES P line max P line	Connection to external tension stabilised at 12V DC max 14 V max 244 mA 2,93 W 1A 1A average 120 minutes 8 hours 5 min
MEDICAL GAS (Oxygen) (centralised plant or tank with pressure regulator) Entry pressure Minimum Capacity PRESSURES P lim max P wmax (maximum ensured through pressure limiter) P wmax (maximum ensured through pressure limiter) P wmin VENTILATION Minute Volume Volume released (measurable) Frequency Oxygen concentration I:E Pressure (sub-atmospheric) negative in the exhaling phase MANOVACCUUMETER Tolerance	max 14 V max 244 mA 2,93 W 1A average 120 minutes 8 hours 5 min
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at 12V continuous current FUSES External Feeding 12V INTERNAL BATTERY Functioning time Recharging time Functioning time after signalling of discharged battery Internal Volume of the Patient Circuit tubes MEDICAL GAS (Oxygen) (centralised plant or tank with pressure regulator) Entry pressure Minimum Capacity PRESSURES P Im max P Im min P w main VENTILATION Minute Volume Volume Volume Volume Volume Volume Prequency Oxygen concentration I:E Pressure (sub-atmospheric) negative in the exhaling phase MANOVACCUUMETER Tolerance	1A average 120 minutes 8 hours 5 min
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P w min Image: Constraint of the state of the stat	+ 20 mbar
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Minute Volume Volume released (measurable) Frequency Oxygen concentration I:E Pressure (sub-atmospheric) negative in the exhaling phase MANOVACCUUMETER Tolerance	3 Bar
Volume released (measurable) Frequency Oxygen concentration I:E Pressure (sub-atmospheric) negative in the exhaling phase MANOVACCUUMETER Tolerance	
Frequency Image: Constant of the second	from 2 to 20 lt/min
Oxygen concentration I:E I:E Pressure (sub-atmospheric) negative in the exhaling phase MANOVACCUUMETER Image: Constraint of the exhaling phase Tolerance Image: Constraint of the exhaling phase	(volume/minutes):frequency
I:E Pressure (sub-atmospheric) negative in the exhaling phase MANOVACCUUMETER Tolerance	from 5 to 30 bpm
Pressure (sub-atmospheric) negative in the exhaling phase MANOVACCUUMETER Tolerance	60% - 100%
MANOVACCUUMETER Tolerance	1:2
Tolerance	not available
	-20 +70 mbar
Range from -20 to +10 mbar	2 mbar
Range from +10 to 70 mbar	5 mbar
MAXIMUM DEVIATION OF SET VALUES	
Medical gas flow	
Frequency	± 1 litre ± 1 bpm

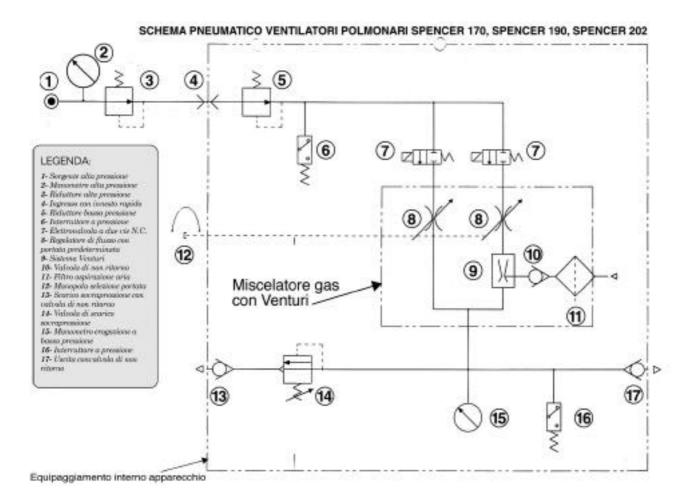
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User Manual

2.5.1 STANDARDS APPLIED

- EN 60601-1 (1990) + A1 (1993 + A2 (1995) + A12 (1993) + A13 (1996) + correction specs (July 1994)
- IEC 601-1-2 (EN 60601-1-2)
- EN 794-3 (1998)
- 89/336/EC
- 92/31/EC

2.6 PNEUMATIC DRAWING



2.7 ACCESSORIES

Device includes the following accessories:

- PATIENT CIRCUIT
 - (Composed of: atoxic hose Ø22mm, non-rebreathing valve and a quick connection inlet)
- 12 V FEEDING CABLE

2.8 ELECTROMAGNETIC ENVIRONMENT

The device is realised to operate correctly in an electromagnetic environment. It has successfully passed all the electromagnetic tests required by Harmonised Standards by the Notifying Body (see Declaration of Conformity).

3 - SAFETY

3.1 GENERAL WARNINGS

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Operators have to read this Manual carefully, paying special attention to safety precautions and operating instructions.

r 🔁 🧘	Use the device only as prescribed in this Manual. Never alter or modify it: modification can cause unpredictable consequences and in this case Spencer declines all responsibilities.
r 🔁 🚹	If at any time the device does not operate properly, take it out of service immediately and contact the Customer Service Centre. Ensure to have a manual resuscitator available to guarantee continuous ventilation.
r 🚹	Ensure to execute periodically all preparation and maintenance operations described in this Manual.
r 🗘	Do not operate without proper training.
r 🔁 🔁	The utilisation of the ventilator in power feeding and environmental conditions different from the indicated ones compromises the safety of operating; find as follows some of these conditions:

CONDITIONS	Verifiable problem	
Excessive power feeding current	The fuse cuts out	
Low power feeding current	The battery is not recharged	
	Problems with the holding membranes	
Excessive environmental temperature	Gas leaks	
	Excursions of the set flow	
	Possible presence of condense (at the moment when	
Low environmental temperature	the ventilator is brought to higher temperatures	
	again)	

3.2 INTENDED USE

The device substitutes the breathing functions in those patients who are not able to breathe spontaneously *(controlled ventilation)*.

The following list shows the optimal ventilation parameters:

PATIENT	RESP. FREQUENCY	CORRENT VOLUME	MINUTE VOLUME
Adult	10-20 atti min.	10-12 ml/Kg	TVxFR
Child (until 5Kg)*	35-40 atti min.	10-15 ml/Kg	TVxFR
Child (over 5Kg)	30-35 atti min.	10-15 ml/Kg	TVxFR

* For childrens weighing below 5 kg. you ought to carry out pressure ventilation, observing thorax excursion and avoiding to overcome a pressure of 30-35 mbar.

The device was designed for use on emergency rescue vehicles (i.e. ambulances, helicopters).

3.3 CONTRA-INDICATIONS AND UNDESIRABLE EFFECTS



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DO NOT USE the ventilator in neonatal clinics and in patients with pneumothorax.

DO NOT USE ventilator in presence of inflammable substances and anaesthetics.

DO NOT USE the device if it is connected to an SPS charger or other transformer 220V/12V.

To avoid hypercapnia effects DO NOT USE 100% oxygen for protracted ventilation (the device is provided with a special mixer switch to change mixed oxygen/air at 60% or 100%).

3.4 SAFETY SYSTEMS

The device is provided with the following safety systems:

Mechanical overpressure valve

Maximum limits of device pressure 60mbar.

Overpressure valve on the patient valve (non rebreathing)

The valve, when positioned on "INFANT", limits maximum pressure to 25mbar.

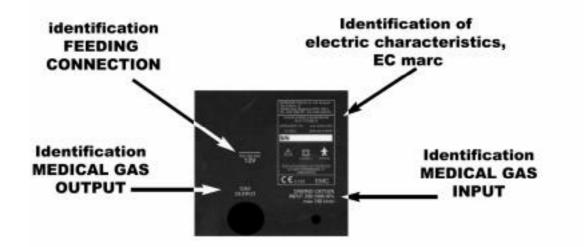
Spontaneous breathing

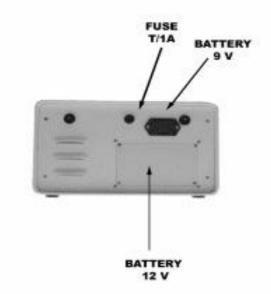
When the ventilator is off or gas supplying is interrupted, the patient can breathe spontaneously.

The device is provided with an independent power supply alarm (9V battery). This acoustic and visible alarm signals intermittently the condition of discharged battery. The said alarm functions even if the switch of the device is turned OFF.

3.5 LABELLING







[]] par. 2.4

4 - INSTALLATION

4.1 HANDLING AND STORAGE

Before effecting transportation of the device ensure that: the indications of the table below have been followed, packaging is adequate and risks of bumping or falling during transportation are minimised.



Preserve the original packaging for possible future handling.

Damages to the device caused by handling are NOT covered by guarantee. Repairs or replacement of damaged components are at Customer's expense.

In case of prolonged periods of inactivity and/or before transportation			
Switch in OFF position			
Take out the power lead			
Check the internal battery and, if necessary, re-charge it			

In case of long inactivity, besides the above-mentioned recommendations, the device must be stored with the precautions relevant to the place and time of stocking:

- Store the device in a closed place
- Keep it from stress and impacts
- Protect device from humidity as well as excessive thermal excursions
- Avoid contact with corrosive substances.

4.2 PREPARATION

Put the device on a flat surface (i.e. shelf, trolley)

If put on an ambulance, the ventilator must be fixed correctly, using the apposite threaded holes, with threaded screws diam. 6.



The operations of preparation below listed must be carried out and checked before every use

	To check	Result required
RESPIRATORY SYSTEM	-Corrugated Tube -Non-rebreathing valve -PEEP valve -Mask -OverpressureTest -VentilationTest	-Must be whole and connected correctly -See section 5.2 -The respirator ventilates
	-Press ON, functioning mode:	- The respirator ventilates
ELECTRIC POWER SUPPLY	CONTROLLED	



Ensure the availability of a mechanical/manual ventilation system (i.e. autoexpansible insufflator)

4.3 ELECTRIC FEEDING

Connection with the electric net

In order to connect the device with the electric net:

tension value indicated on the tension selector must correspond to the net tension

Connect the feeder SPS with the lung ventilator through the specific connector and then insert the SPS plug in an electric outlet with a grounding perfectly installed (installed following norms VDE 0100 or equivalent national rules), the device indicates the connection with the net through the "EXTERNAL FEEDING" led.

CONTROL OF INTERNAL BATTERY RECHARGE

The emergency battery, embedded, recharges automatically during normal functioning of the device connected with feeding 12V CC or with tension 220V.

Before turning the ventilator on, it is necessary to test the battery, and if requested, to recharge it.

With a charged battery or in good conditions, the ventilator may function two hours. With discharged battery or in bad conditions it may function for a shorter time.

External feeding 12V DC

The external feeding may be used in emergency situations or during the use of the ventilator on ambulances and/or helicopters.

In order to use the external feeding 12V DC please do the following:

- Use only cable EV20010A
- The free end must be perfectly connected with the ground outlet

Brown wire	on +
Blue wire	on -

• Insert the connector dedicated on the ventilator side.

The device indicates the connection with the net through the "EXTERNAL FEEDING" led.

Emergency electrical feeding through a supplementary battery



Do not put the additional battery on the device. It must be placed as far as possible from the air entering filter of the ventilator.

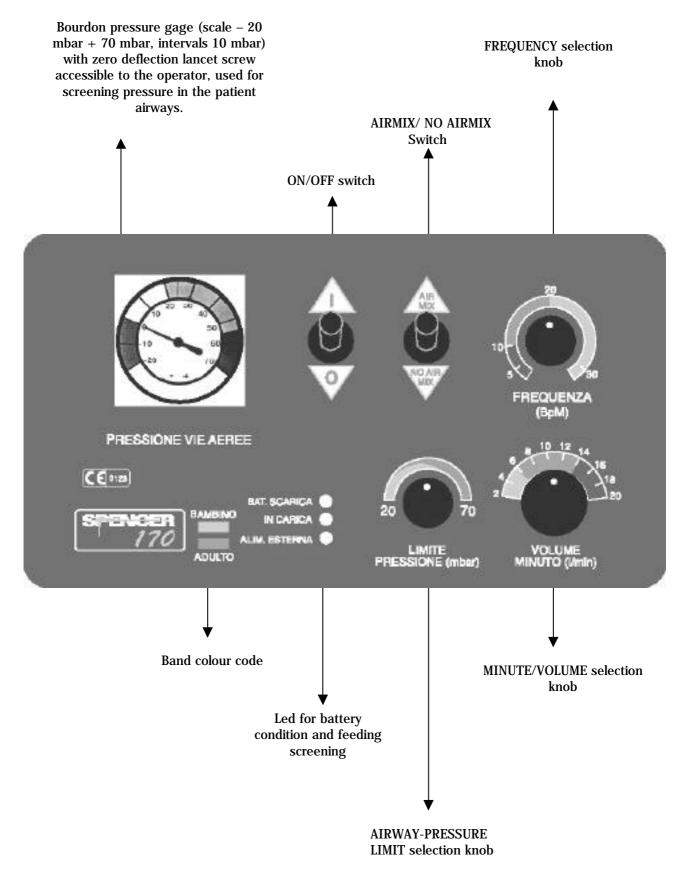
4.4 FEEDING GAS COMPRESSED



Use oxygen (central system or oxygen tank with pressure regulator) or compressed air with an entrance pressure from 3 up to 4,5 bar and a minimum capacity of 60 lt./min.

5 - OPERATION

5.1 FRONT CONTROL PANEL



5.2 OPERATING INSTRUCTION

To use correctly and safely the product, follow the instructions below mentioned after connecting it with the electric net (See par.4.3):

- Connect ventilator to gas supply by automatic outlet.
- Connect patient circuit and non-rebreathing valve.
- Switch ON the device («I" position on the switch).
- Select frequency.
- Select minute/volume: the ventilator can supply an air/oxygen mixture from 2 to 20 l/min in multiples of 2 litres.
- Check that pressure gage pointer is on "0".

In every moment the attendant can visualise the patient airway real pressure, monitored by the pressuregage on the front panel.

When device is on, it automatically operates in CONTROLLED VENTILATION MODE: the gas supply starts. Medical gas is supplied to the patient at intervals, depending on the frequency value set by the control knob.

Current gas volume supplied at every respiratory act depends on the minute volume set on the front panel by the control knob; it can be estimated dividing set volume by frequency.



To make selection easier and suggest values, on the minute volume and frequency control knobs, bands of different colours are used:

BLUE band (child)	frequency 20- 30	litres/minute 2-6
GREEN band (adult)	frequency 10- 20+	litres/minute 6-14

"AIR MIX-NO AIR MIX" selection depends on patient's needs. (S

AIR MIX (low oxygen concentration)

Is suggested for a medium/long use and when there is a small oxygen bottle.

NO AIR-MIX (high oxygen concentration) Is absolutely necessary in case of air pollution.



It is absolutely necessary to regulate first the ventilator volume and then pressure because a late volume regulation (l/min) would bring to an immediate change of the pressure limit. After choosing volume ventilation, keep closed with the palm of the hand the exit outlet of the patient valve (where is normally inserted the mask) and regulate then the pressure limit with the apposite knob.

Hyperextend the head and seek, after inserting an oral-pharynx cannula in the patient's mouth with an apposite manoeuvre, in order to guarantee clearness of the airways. Place the ventilation mask on the mouth and on the nose of the patient checking the adhesion of the soft part of the mask on the patient's face for a good holding system. Selection method of the volume/minute knob (through trips) prevents from value changing during functioning in case of accidental touch.



In case of intubation, leave the ventilation mask of the patient valve. Insert in the free hose the endo-tracheal tube with its connector.

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Resistance of the airways due to obstructions or external cardiac massaging does not cause a variation of the respiratory volume frequency. In case of reduction of the compliance, the ventilator will react with a rise of respiratory pressure at a constant volume.

Overpressure valve test

After assembling and connecting the device to the relevant sources you can execute the following test:



Close the patient outlet with the palm of a hand and rotate the pressure limit knob to verify the lancet excursion on the manometer.

5.3 FUNCTIONING MODES

CONTROLLED Breathing (IPPV)

This functioning mode is selected automatically by the device when it is turned on. It consists in supplying to the patient packets of medical mix regularly at intervals of standard duration as per the frequency selection.

When operating in this mode, the relationship between the duration of the inhalation phase and the duration of the exhalation phase is constantly 1 to 2.

5.4 END OF USE

After using the device it is necessary to:

- Turn the switch to the OFF position
- Interrupt oxygen supply

5.5 ALARMS



Any alarm signal corresponds to an abnormal functioning condition, which demands the intervention of the operator.

As follows, are the various abnormal situations which may determine the activation of alarms and the relevant corrective actions the operator must carry out to solve the matter.

DISCHARGED INTERNAL BATTERY

Type of signal: intermittent visual and acoustic *Meaning:* the internal battery needs recharging *Correction:* connect the ventilator to an external feeding source in compliance with the specifications provided in paragraph 4.3

INSUFFICIENT FEEDING GAS OR PRESSURE

Type of signal: acoustic *Meaning:* the feeding of medical gas has insufficient pressure and/or capacity *Correction:* verify the line and source of feeding

5.6 TROUBLESHOOTING CHART

PROBLEM	CAUSE	ACTION	
Gas Supply	The ventilator is not connected to a compressed gas source (oxygen or medical gas)	Connect the ventilator to a medical gas source	
	The oxygen bottle is empty	Replace with a full cylinder and refill the empty one	
	The pressure regulator is obstructed	Clean (in regulators where it is already possible to replace the filter) the regulator or replace it	
The patient cannot exhale	Patient valve	Check the fixing of the valve or replace it	
Re-assembling of the "non rebreathing" valve	The "non rebreathing" valve is not adequately connected (after sterilisation) to the tube and/or mask compromising good holding	Adequately connect the "N.R." valve to the mask and corrugated tube	
Dead Battery	The internal battery is nearly exhausted	Use an external battery or connect to electricity power; recharge the internal battery immediately (see recharge battery)	

6 - MAINTENANCE

6.1 CLEANING



The operations below described must be executed after each use of the device.

- Switch OFF the ventilator
- Isolate the device from the feeding source/net (if connected)
- Disassemble the NON REBREATHING valve
- Disassemble the PEEP valve (where present)
- Control any presence and remove any residuals in proximity of the connection with the patient circuit
- Autoclave the non-rebreathing valve and substitute the patient circuit

(On request a re-usable patient circuit can be provided (autoclavable)

After operating the necessary operations of cleaning/sterilisation the NON REBREATHING and PEEP (where present) must be reassembled, reconnect the device to the feeding source (if necessary).

The external cleaning of the device can be effected; to ensure compatibility with the materials, with use of apposite "**disinfectants for surfaces**" as indicated in the table below:



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PRODUCTS WHICH CAN BE USED	PRODUCTS WHICH CANNOT BE USED	
Disinfecting with aldehydes	Compounds liberating halogens	
Disinfecting with alcohol	Strong organic acids	
Quaternaric ammonic compounds	Compounds liberating oxygen	

6.2 GENERAL REVISION

The ventilator must undergo general revision carried out by skilled and authorised people, every 2 years.

When general revision occurs, the following are checked:

- The ventilation parameters:
 - frequency
 - volume
 - manovacuumeter
- The alarms
- The system holding
- The battery and the recharging circuit for the battery

6.3 SERVICE REQUEST

Contact the manufacturer for any information concerning use, installation, maintenance, etc.

The contacted manufacturer should ask questions clearly with reference to this manual and to the instructions enumerated within.

6.4 DEMOLITION

In case of demolition of the device, it is necessary to separate the plastic pieces from the electronic components, which will be collected separately according to the laws in force.

Concerning the metallic pieces of the device, the steel pieces have to be divided from the metallic ones to execute efficient materials recycling.

7 - REPLACEMENT PARTS

7.1 ORDERING SPARES

I Only an authorised technician can perform repairing operations.

Therefore, it is recommended to call the Technical Assistance Centre of the Manufacturer, which is at disposal with skilled people, appropriate implements and tools, and original spares.



To execute the spares orders below-mentioned, please follow the instructions enumerated in the paragraph 1.2.

DESCRIPTION	CODE
Polycarbonate panel ITALIAN	EV12170A
Polycarbonate panel ENGLISH	EV13170A
Spare Battery	EV30170A
Complete microregulator	EV00109A
Manovacumeter for ventilators	EV00107A
Electrovalve in brass for ventilators	EV00110A
Pressure condition type "K4" for ventilators	EV00112A
Electronic exchange	EV00113A
Led alarms Card	EV00171A
Unipolar exchanger 250V 10A	EV00103A
Potentiometer 2,2K for vent.	EV00119A
Potentiometer 22K for vent.	EV00121A
Potentiometer 100K for vent.	EV00120A
Fuse 1 Ampere for vent.	OXO8000A
Power cable for electronic ventilator CM 40	EV20010A

7.2 LIST OF REPLACEMENT PARTS

DESCRIPTION	CODE
Power cable for electronic ventilator CM 150	EV20008A
Power cable for electronic ventilator CM 200	EV20011A
Power cable for electronic ventilator CM 250	EV20009A
Plug 12V mod. "MAGIC" for power cable	EV20012A
Overpressure valve for ventilator	EV00104B
Gas mixer for ventilator	EV00105B
Membrane for overpressure valve	EV01100A
Complete patient circuit for ventilator	EV00106A
Driving air hose 25cm	EV30010A
Driving air hose 100cm	EV30020A
Polycarbonate non-rebreathing valve	EV50014C
PVC breathing-gas hose diam.22x120cm	EV50025A
Silicon breathing-gas hose diam.22x120cm	EV50020E
"KOMPAK" bag	EV50100A
Aluminium bracket for "KOMPAK"	EV50101A

As the assistance interventions are performed only and exclusively by Spencer Italia S.r.I. or by authorised Centres, the list of the replacement parts is enumerated only to inform the buyer or the user.

8 – ATTACHMENTS

8.1 DECLARATION OF CONFORMITY

DEC	LARATION OF CONFORMITY CE0123
Manufacturer: Spencer Ital Address: Str. Cavi, 7 – 4304	
Product: ELETTRONIC	C LUNG VENTILATOR
<i>Model:</i> SPENCER 170	Code: EV01170A
We hereby decl	are that the above mentioned products meet the provisions of 93/42/EEC Council Directive (MDD)
Classification (according	to Council Directive 93/42/CEE, Annex. IX): IIb
Application from the Ann	ex II.3 (according to Council Directive 93/42/CEE)
Notified Body: TÜV PRODU	JCT SERVICE
EN	are that the above mentioned products meet the provisions of: 60601-1 Medical Electric Devices – Safety General Laws IEC 601-1-2 (EN 60601-1-2) N 794-3 Medical Electric Equipment – Lung ventilators 9/336/CEE; 93/68/CEE Magnetic Electric Compatibility
Place, date: Sala Baganza,	15/06/98
Sign and position: Pizz	zi Spadoni Luigi President

Warning

The information contained in this document may be modified without previous notice and should be considered as an engagement from Spencer Italia S.r.l.

8.2 – GUARANTEE FORM

Dear Client, thank you very much for purchasing a Spencer product, we are certain you will be satisfied with its quality.

Spencer Italia srl guarantees the product against manufacturing or materials faults for 12 (TWELVE) MONTHS starting from the date of purchase.

In case that any manufacturing or materials faults are found during the above-stated period of time, Spencer's Authorised Sellers or Spencer itself will take care of the repairing or replacement of the product and of any faulty parts within the terms and conditions below listed, without any charges for the costs of manpower and of any spare parts.

Conditions.

- 1. This warranty does not cover costs and/or damages and/or faults caused by manumission, changes or adaptations made to the product, without previous written authorisation released by Spencer Italia s.r.l., in order to be compliant with the technical and national or local safety standards that are in force in different Countries from the ones for which the product was originally designed and manufactured.
- 2. This warranty is not valid when the indication of model and serial number shown on the product have been modified, deleted, taken off or in any way made illegible.
- 3. This warranty is not valid when the product is used in a way that is non-compliant with the prescriptions indicated in the user's instructions.
- 4. The following are excluded from the warranty:

Any interventions for periodical maintenance and repairing or replacement of parts subject to normal wear and tear;

Any adaptation or change made to the product to strengthen its performance beyond the one described in the instructions of use and maintenance manual, without previous authorisation in writing from Spencer Italia s.r.l.

All the costs for technical assistance or for any transport from the Client's premises to the Servicing Centre Laboratory and vice versa, as well as any relevant risks;

Damages caused by:

- Improper use, including but not limited to: (a) the use of the product for different purposes to the ones expected or the failed observation of the Spencer Italia s.r.l. instructions of correct use and maintenance, and (b) installation or use of the product non compliant with the technical and safety standards in force in the Country in which the product is used;
- Any repairing carried out by unauthorised personnel or by the Client him/herself;
- Any accidents, lightning, floods, fires, wrong ventilation or other causes non imputable to Spencer Italia s.r.l.;
- Faults of the plants or devices the product is connected/fixed to.
- 5 This warranty does not affect the buyer's rights established in the current national laws in force, or the client's rights towards the supplier deriving from the Sales Contract.
- 6 Any expenses and risks of transport from and to the servicing centres mentioned are at the buyer's charge;
- 7 The manufacturer is not responsible for direct or indirect damages of any nature to people or things for the improper use of the product or for the impossibility of use of the product during the time needed for repair;
- 8 For any controversy deriving from the interpretation and/or interpretation of this warranty it is of exclusive competence of the judicial authority of the place of origin of the manufacturer to intervene.
- 9 The products must be repaired only at the manufacturer's premises or at an authorised laboratory. The faulty product must be accompanied by:
 - The under reported form entirely filled in at the purchase moment.
 - Enclosed form, entirely filled in, please send it to SPENCER ITALIA S.r.l. Strada Cavi, 7
 - 43044 COLLECCHIO (PR) ITALIA
 - A document or proof of purchase
- 10 Spencer Italia S.r.l. reserves the right to contest the validity of the Guarantee form if it results from unbiased checks that the product did work for a long before the purchasing date.

It is recommended to read the instructions of use carefully before contacting Spencer Italia or its authorised Sellers

PRIVACY WARRANTY: According to the Art.10 of the 675/96 law we inform You that Your details are kept in our computer archives and are used by our firm only for the sending of administrative, commercial and promotional materials relevant to our activities. We inform you moreover that in conformity with Art.13 of the law you have a right to know, update, delete, and change your details or to object their use, if treated in violation of the law.



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GUARANTEE		Article		
Code		N° Lot/ Serial		Purchasing date
Buyer		Seller		Stamp and sign
GUARANTEE		Article		
Code		N° Lot/ Serial		Purchasing date
Buyer		Seller		Stamp and sign
				<u>%</u>

Fill in and send the pre-cut part to: SPENCER ITALIA S.r.l. - STRADA CAVI, 7 - 43044 COLLECCHIO (PR) - I