

Technical Documentation IPM
Isolette® C2000



Warning

All servicing and/or test procedures
on the device require detailed
knowledge of this documentation.
Use of the device requires detailed
knowledge and observance of the
relevant Instructions for Use.

Infant Incubator

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1

General

This chapter contains general notes and definitions that are important for the use of this documentation.

1.1 General notes

1.1.1 Notes on use

Read through the following notes thoroughly before applying this documentation.

The warnings set out here apply to all parts of this documentation.

Dräger reserves the right to make changes to the device and/or to this documentation without prior notice. This documentation is intended solely as an information resource for maintenance personnel or technical specialists.

1.1.2 Copyright and other protected rights

The content of this documentation, in particular its design, text, software, technical drawings, configurations, graphics, images, data and their selection and its composition and any amendments to it (content) are protected by copyright. The content must not (in whole or in part) be modified, copied, distributed, reproduced, republished, displayed, transmitted or sold without the prior written consent of Dräger.

1.1.3 Definitions

WARNING

An important advisory indicating a potentially hazardous situation which may result in death or serious injury if not prevented.

CAUTION

An important advisory indicating a potentially hazardous situation which may result in minor or moderate injury to the user or patient or in damage to the medical product or other assets if not prevented.

NOTE

A NOTE provides additional information intended to avoid inconvenience during operation and/or servicing.

Term	Definition
Maintenance	Maintaining the operative condition of a medical product by suitable means
Inspection	Assessment of the actual condition of a medical product
Servicing	Maintaining the operative condition of a medical product by recurrent, specified measures
Repair	Restoring the operative condition of a medical product after failure of a device function

1.1.4

General safety precautions

Read through each section thoroughly before beginning servicing.

CAUTION

Incorrect use of tools

The device's function may be impaired, or the device may be damaged.

Always use the correct tools and the specified test equipment.

WARNING

The device must be regularly inspected and serviced by maintenance personnel. Repairs and complex maintenance work on the medical product must be carried out by qualified specialists.

If you require a service contract, or for any necessary repair work, Dräger recommends DrägerService. Dräger recommends using original Dräger parts for servicing.

If the aforementioned instructions and recommendations are ignored, the correct functioning of the medical product may be put at risk. Pay attention to the "Servicing" section of the Instructions for Use.

WARNING

Non-conforming test values

If test values do not conform to specifications, the safety of the patient may be put at risk.

- Do not put the device into operation if test values do not conform to specifications.
- Contact your local service organization.

WARNING

Impermissible modifications to the device

If impermissible modifications are made to the device, the safety of the patient may be put at risk.

Do not modify the device without Dräger's permission.

WARNING

Risk of infection

The unit may transmit pathogens following use on the patient.

- Before carrying out any servicing, ensure that the device and its components have been handed over by the user cleaned and disinfected.
- Service only cleaned and disinfected units and unit components.

WARNING

Risk to patient.

Ensure that no patient is connected to the device before starting maintenance or repair work.

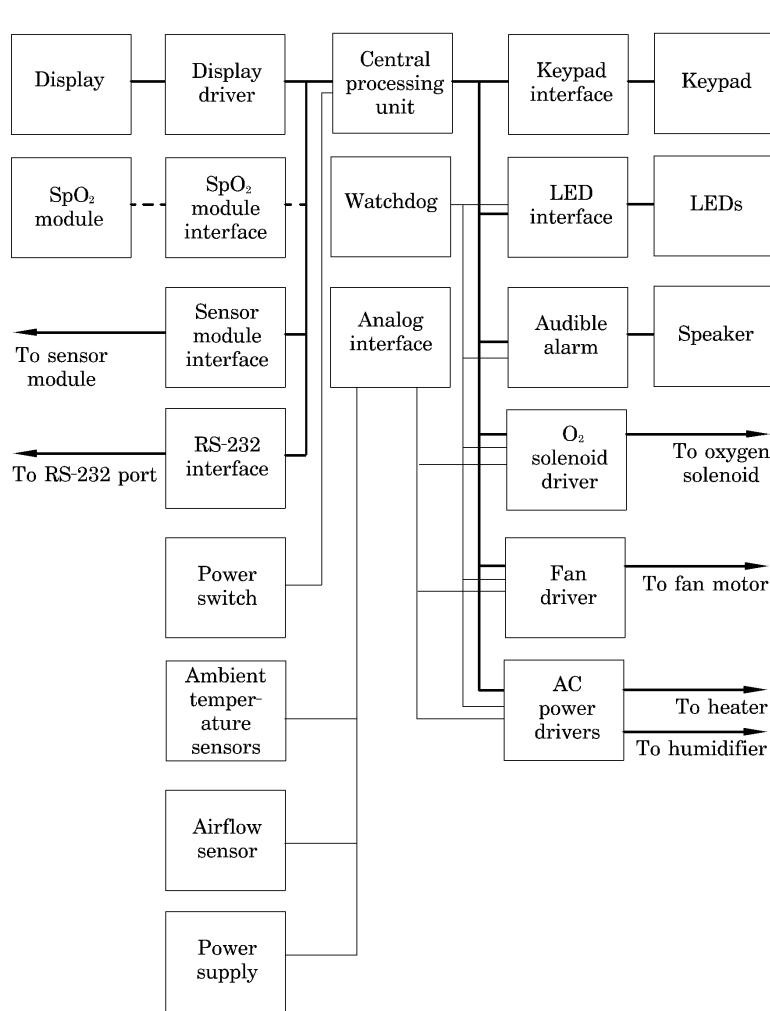
NOTE

Where reference is made to legislation, regulations and standards, in respect of devices used and serviced in Germany they are based on the laws of Germany. Users and technicians in other countries must comply with their national laws and/or international standards.

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2**Function descriptions**

This chapter contains descriptions of the device's technical functions.

2.1 Function description**2.1.1 Controller Assembly**

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Fig. 1 Controller Assembly Block Diagram

2.1.2

Variable Height Adjustable Pedestal/Stand Assembly

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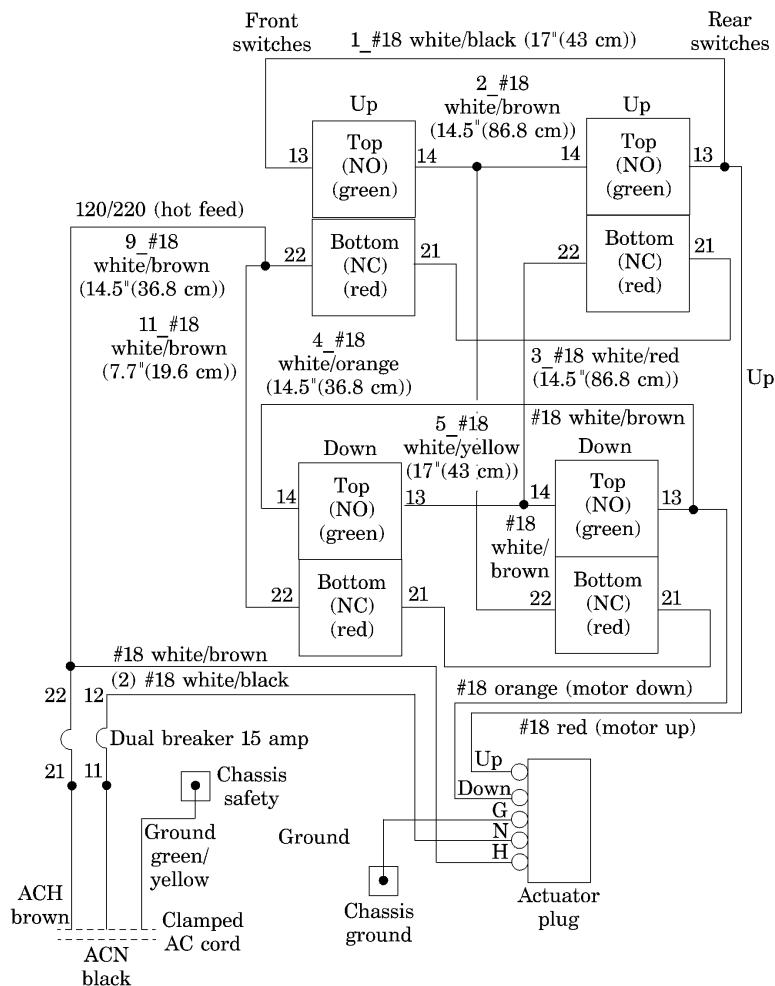


Fig. 2 Variable Height Adjustable Pedestal/Stand Assembly Wiring Diagram

2.1.3 Electrical System

2.1.3.1 Sensor Module

The sensor module P.C. board provides the interface for the patient and incubator requirements that the infant incubator must support. The sensor module assembly reads and processes the following parameters:

- Temperature
- Oxygen
- Humidity
- Weight information, collected from external sensors and cables

This information is periodically updated and transmitted to the main controller upon request.

The sensor module P.C. board does **not** require manual calibration. To provide safe monitoring and control, both the temperature information and oxygen information have redundant circuitry to prevent single-fault failures.

All signals are transmitted through serial data communication.

The sensor module connects to a sensor P.C. board that has the following parameters required for the system:

- Air temperature
- Oxygen
- Humidity
- Fan operation

Power Supply

The power to the sensor module P.C. board is provided through connector J4, providing ± 12 V DC for the system. U21, U19, and U15 regulate the voltages by providing +5 V, digital +5 V and analog -5 V, respectively. U20 provides a precision +5 V source for analog signal conversions.

Sensor Position Detection

Hall effect sensors sense the magnets in the slide mechanism. The sensors, U9 and U2, determine the calibration position. The sensors, U16 and U22, determine the hood's position during normal operation. The output is normally **high**. These devices provide a **low** output if a significant south pole magnetic field is applied to their surface.

Remote Light Alarm Indicator

DS1 provides an alarm indication with a high field of view. A positive signal, RMLITE, at the gate of transistor Q3 illuminates DS1.

Scale Interface

The connector J3 provides the interface and power for the scale module. The scale module supports serial data communication. The signal SCCLK is used for scale communication only and is normally high when the scale is disconnected. The signal CDATA is bi-directional and is normally in the low state when the scale is not connected.

Fan Control/Feedback Circuit

To drive the DC fan on the sensor board, the signal FANON pulses Q1 on its gate at a 50% duty cycle at approximately 48 Hz to maintain proper speed and to increase fan life. Every 4 seconds, the microcontroller asserts FANON for 42 milliseconds, and the fan pulse detection begins.

U1A handles the pulse detection and, through the resistors R3 and R7, samples the current spikes from the fan produced across R1. The amplifier operates as a differentiator, providing high gain for the current spikes. D1 and C16 then rectify and filter this signal and then feed it to the Analog/Digital (A/D) converter as signal FANPUL. This provides a semi-DC level as a function of the fan rotation.

Temperature Measurement

The temperature data acquisition circuit starts with the analog multiplexers, U6 and U5, each allowing an 8-to-1 signal switching. The microcontroller selects the multiplexer channel by the signals MSEL0, MSEL1, and MSEL2. Each multiplexer output can be inhibited by either signal TM1SEL or TM2SEL, depending on the multiplexer; only one multiplexer is active at a time. With each multiplexer output into the amplification under control, this data acquisition is viewed as a 16-to-1 analog temperature selector. The microcontroller selects a new temperature channel every 21 milliseconds.

The resistor R14 provides the constant voltage drive required for each thermistor as it is selected from the appropriate multiplexer. This voltage is amplified by a factor of 2.1083, and is sent to the A/D converter as signal TCOM.

To provide automatic calibration of the circuit and eliminate temperature and aging drifts, R44 and R45 introduce precise calibration values into each multiplexer. These values are read through the multiplexers and are used in software processing to eliminate the gain and offset errors of each multiplexer/amplifier combination. These values equate to 120.87 °F (49.37 °C) and 72.72 °F (22.62 °C), which allow for precise circuit calibration.

Resistor R43 is an additional check to the circuit, which provides a resistance simulating 98.57 °F (36.98 °C).

The sensor module supports the following three air temperature sensors on the sensor board:

- AIRTE
- AIRTC
- AIRTM

These signals interface through J2-6 to J2-8. The thermistors then route to temperature multiplexers U5 and U6, which provide analog signal processing into the A/D converter.

The skin temperature probes contain dual thermistors. The sensor module supports two probes that plug into connectors J6 and J7. The two thermistors connect to SKNT1M and SKNT1C or SKNT2M and SKNT2C, with a common connector at AGND. Both probes have high frequency filtering by inductor networks LN1 and LN2. In addition, each skin probe has a resistor that is input to the multiplexers. The microcontroller uses these signals, SKNT1D and SKNT2D, to determine if the probes are installed.

Humidity Measurement

Humidity measurement originates with the humidity sensor on the sensor P.C. board, connected to J2-5 and J2-14 (AGND and HS2, respectively). The sensor is a capacitive-type that changes capacitance as a function of humidity; the net range of capacitances is from approximately 160 pF to 200 pF. The sensor connects to the amplifier U7A/U8A, which is set up as a multi-vibrator. The sensor capacitance charges up through R20 and R21 to a threshold voltage established by R30 and R26.

When the capacitor voltage reaches the threshold, the capacitor U7A/U8A goes high to 2.5 V as controlled by R19 and R28, and turns on Q2. This discharges the humidity sensor through R20 until it reaches the lower threshold established by R24, R26, and R30. The capacitor voltage goes from approximately 0.2 V to 0.7 V. At this point, the comparators output goes low, releasing the drive to Q2 and allowing the humidity to start charging again. This produces a frequency output as a function of capacitance, such as humidity.

The output signal, which is only 2.5 V peak, is then input into U7B/U8B to condition the 5 V signal. Hysteresis is provided through the use of R23, R29, and R32 to ensure stable frequency switching. The output signal, JUMPUL, is then sent to the microcontroller for processing. A typical frequency would be around 37 KHz.

Microcontroller

The microcontroller is a Priority-Interrupt Controller (PIC) 16C73, used for signal-processing and for control of all signals on the sensor module. The device has three external ports, configurable as inputs and outputs. The microcontroller operates from a precise time-base of crystal Y1, operating at 4 MHz. The instruction cycle time of the PIC is $\frac{1}{4}$ of that, namely at 1 MHz or 1 microsecond.

To ensure a clean power-up, U10 provides a fixed power-up reset to the microcontroller. This integrated circuit also generates a rest in the event of a brownout condition when the D+5 falls below a predetermined threshold.

If the main controller determines that the sensor module requires reset intervention, the reset line of the microcontroller, SMRES, is available to the main controller.

The PIC device operates with an internal watchdog timer device that asserts SMRES if the program execution operates outside normal conditions.

Expansion Devices

The digital multiplexer, U3, allows additional digital signals for processor control. It is a dual, 4-to-1 multiplexer that allows the microcontroller to use two ports for 8-bits of information. The signals, DVSEL0 and DVSEL1, control U18.

The buffered line-drivers, U13A/B and U14A, are used for signals that are going off-board, namely SMDATA, SCDATA, and SCCLK. The SMDATA line is used as a bi-directional line that can change from input or output “on-the-fly” for data communication to the main controller. The SCDATA is similar, with connection to the scale at connector J3. SCCLK is the buffered clock line used for scale communications.

Buffer U14B provides an inversion for TM1SEL, producing TM2SEL to alternately enable and disable the temperature multiplexers.

Analog/Digital (A/D) Conversions

The A/D converter, U11, is an eight-channel, 12-bit, serial, interface device. Control for the channels is software-configurable by the serial communication line SSPCLK, ADCDIN, and COMOUT. The signal, ACENI, enables the A/D converter for signal processing and is asserted twice every 21 milliseconds; the A/D converter is read twice. In addition, the ADCIN and COMOUT are driven at 21 millisecond intervals. The SSPCLK is shared with the EEPROM on the sensor board and scale clock; therefore, the timing is not periodic.

All temperature information appears as a multiplexed signal on Channel 0, and oxygen information appears as a multiplexed signal on Channel 2. Channel 4 enables the A/D converter to read its maximum input, and Channel 5 enables the A/D converter to read its minimum input to determine proper A/D functioning.

The analog representation of fan pulses apply to Channel 6.

2.1.3.2 Controller

The controller accepts input voltages between the range of 90 V AC and 264 V AC through a universal input switching power supply. Voltages above the safe operating range are clamped using a transorb diode.

The controller accepts input frequencies between the range of 48 Hz to 62 Hz through a universal input switching power supply.

The stand supplies the input power and protective ground to the controller and incorporates circuit protection and electromagnetic interference (EMI) filtering components.

The controller provides AC power to the heater and the humidifier. These outputs are fused in the controller to protect the controller in the event of a short circuit or electrical overload.

- Maximum heater voltage—264 V AC
- Maximum heater current—4.8 A
- Maximum humidifier voltage—264 V AC
- Maximum heater current—1.2 A
- Heater/humidifier fuse rating—6.3 A

The controller provides DC power to the following:

- The fan
- The sensor module
- The scale
- The SPO₂ module, if available
- The airflow sensors
- The door switches

These outputs are current-limited in the controller to protect the controller and the powered device if a circuit shorts or electrically overloads. These outputs are regulated to ensure the output voltage is within the voltage specification for the powered device. The microprocessor feeds and monitors the outputs 1 and 2 into the A/D converter.

2.1.3.3

Impeller Movement Detector (IMD) P.C. Board

The Impeller Movement Detector (IMD) P.C. board is positioned so that magnets pressed into the bottom of the impeller pass directly over a Hall effect sensor mounted to the IMD P.C. board. The IMD circuit monitors the Hall effect sensor's pulse train, produced by the magnets when the impeller rotates. The speed of the impeller is measured and compared with the pre-determined maximum and minimum acceptance limits. If the impeller's rotational speed is too fast or too slow, an impeller error signal generates. The IMD circuit also detects if one, two, or all three magnets are missing or if an old impeller without magnets is used. These errors produce the same error signal to the controller as for low or high impeller speeds.

The controller's +12 V supplies the power for the IMD circuit through a $301\ \Omega$ resistor. This resistor and the load of the IMD circuit form a voltage divider that sets the LONG signal voltage that remains constant. U1, a voltage regulator, supplies +5 V DC to the Hall effect sensor (U3) and the microcontroller (U2). As the magnets pass above the Hall effect sensor, its open-drain output, U3-2, goes low, detecting the magnets' field. When the magnets' field is removed, the oscillator is used as a reference. When an error condition is detected, U2-2, the microcontroller's output, drives low, which accomplishes the following:

- Turns off Q1.
- Releases a portion of the load on the short signal, allowing it to rise above the LONG signal voltage.

R2, the switch portion of the SHORT signal load, and R4, the unswitch position of the SHORT signal load, adjust to provide an approximate 1V swing between the error and non-error outputs. The capacitors, C1 and C2, filter the system's supply.

The IMD P.C. board supports in-circuit programming (ICP) of the microcontroller. Programming is done after the unprogrammed microcontroller is populated with all the other components by connecting a programmer to the pads labeled VPP, +5 V, CLK, DTA, and GND.

2.1.3.4

Fan Motor

The controller sets the fan motor speed if the watchdog is not tripped. The microprocessor supplies a pulse-width modulation (PWM) signal to an optocoupler for isolation. The output connects to an integrator circuit that converts the PWM signal to an analog signal for the motor controller. The motor incorporates the Hall effect sensors for monitoring and control. One of the Hall effect sensor outputs is fed to the microprocessor for measuring the motor speed. If the watchdog timer trips, the fan motor speed is maintained at 1500 rpm +/- 450 rpm.

The controller provides an alarm to indicate a failure of the fan to rotate. When this occurs, the heater and humidifier disable, and an audible alarm with a visual indication activates.

2.1.3.5

Heater Power

The controller monitors the heater power. A current transformer is in series with the power to the heater and the humidifier. The output of the current transformer connects to the A/D converter.

The system enables control of the incubator's heater. The microprocessor controls a solid state relay that controls the power to the heater. The microprocessor and the watchdog circuit control the safety relay, K3. The release of the safety relay removes power from the heater regardless of the functionality of the heater triac.

2.1.3.6

Humidity Heater Power

The controller monitors the humidity heater power. A current transformer is in series with the power to the heater and humidifier. The output of the current transformer connects to the A/D converter.

The system enables control of the humidity heater. The microprocessor controls a solid state relay that controls the power to the humidity heater. The microprocessor and the watchdog circuit control the safety relay, K3. The release of the safety relay removes power from the humidifier heater regardless of the functionality of the humidity heater triac.

Oxygen Control

The system enables control of the oxygen pneumatics. The microprocessor provides a PWM signal to the solenoid's metal oxide semiconductor field-effect transistor (MOSFET).

The voltage to the oxygen solenoid is monitored and fed into the A/D converter. This circuit monitors the 12 V power supply and thermal fuse.

Light-Emitting Diodes (LEDs)

The microprocessor drives each light-emitting diode (LED). The hardware watchdog timer circuit drives the alarm/system fail indicator. The power fail detection circuitry drives the **Power Fail** indicator.

Audio Alarms

The audible alarm circuit incorporates an oscillator circuit to generate the three alarm frequencies used:

- 600 Hz
- 1500 Hz
- 2500 Hz

The microprocessor, the watchdog circuit, and the power failure detection circuitry drive the audible alarm circuit.

The audio volume is capable of three discrete sound levels. An analog switch, incorporated in the audible alarm amplifier circuit, selects a 57 dB, 62 dB, or 65 dB output, as measured by International Electrotechnical Commission (IEC) 60601-2-19:2019.6.2.1.102. The microprocessor, the watchdog circuit, and the power failure detection circuit control the analog switch.

Power Fail

The controller provides an audio output for power fail conditions. The alarm oscillator is set for 600 Hz at 65 dB output, as measured by IEC 60601-2-19:2019.6.2.1.102. A timer circuit generates the cadence tone during power failures.

When a **Power Failure** alarm is activated, the following occurs:

- The **Power Fail** indicator on the front panel illuminates.
- An alarm sounds.

A high energy storage capacitor powers the power failure detection circuitry and supplies power to the audible alarm and indicator for a minimum of 10 minutes. This capacitor charges while the unit is operating. When power is lost to the controller and the **Power** switch remains in the **On** position, the storage capacitor supplies power to the power failure circuitry. The power failure circuitry incorporates a timer circuit that periodically enables the audible alarm and **Power Fail** indicator at a cadence of 520 milliseconds off and 98 milliseconds on until one of the following occurs:

- The **Power** switch is turned off.
- The power is restored.
- The storage capacitor is depleted.

The **Power Failure** alarm silence is hardware-controlled. Pressing the **Alarm Silence** key during power failure silences the alarm for the duration of the power failure. The **Power Fail** indicator flashes until one of the following occurs:

- The storage capacitor is depleted.
- The **Power** switch is turned off.
- The power is restored.

The **System Failure** alarm is unaffected by the **Alarm Silence** key.

Interfacing

An interface port enables an RS-232 serial communication link. The serial port is fully isolated from the remaining controller circuitry. The power to the serial port interface circuitry derives from an isolated winding on the power supply transformer. The RS-232 interface connector is a female DB-9, mounted on the rear of the controller. An RS-232 transceiver converts the RS-232 to logic voltage levels and vice versa. Optocouplers provide the isolation barrier and interface the RS-232 transceiver to the PC16550 UART. The UART interfaces the serial port to the microprocessor bus. All lines connected to the RS-232 connector are filtered to block EMI. The RS-232 transceiver incorporates electrostatic discharge (ESD) protection.

An interface enables communication between the controller module and the sensor module. The sensor module interface connector is a female DB-9, mounted on the rear of the controller and comprised of a bi-directional data line, a clock output line, and a reset output line. The data lines are fully isolated and optocoupled to the microprocessor. The controller provides isolated power to the sensor module.

Door Switches

The controller connects to the two door switches that are wired in parallel. The controller performs the following:

- Provides no more than 5 milliamperes (mA) of current to the switches
- Provides less than 6 V of power to the switches
- Monitors the return current to determine if either door is open

The switches are open when the door is closed. The input is protected with transorb diodes and is filtered to block EMI and prevent ESD damage to the controller.

Cooling Fan

The cooling fan provides a continuous flow of air through the controller to remove heat generated by the various components inside the controller enclosure. The cooling fan operates whenever power is applied to the controller. The cooling fan is equipped with a tachometer output signal that is supplied to the microprocessor.

Ambient Temperature Sensors

The temperature sensors, located in the airflow of the cooling fan, are NTC thermistors. The output signals of the redundant sensors feed into the A/D converter.

Watchdogs

The first watchdog timer is internal to the microprocessor. If the software does not update the watchdog timer within the required time frame, the internal watchdog resets the microprocessor and all peripherals connected to the external reset line.

The second watchdog timer circuit attaches to the microprocessor bus. The microprocessor continuously writes the following data to the watchdog timer:

- Data 55 hex (01010101 binary) to watchdog register #1.
- Data AA hex (10101010 binary) to watchdog register #2.

The watchdog timer trips in 1 second ± 0.4 second unless the above sequence is completed. Once the watchdog timer trips, the following occurs:

- The safety relay turns off, removing power from the heater and the humidifier.
- The fan control reverts to closed loop control, maintaining a constant fan speed regardless of the door's position.
- The oxygen solenoid control from the microprocessor is overridden, and the oxygen solenoid turns off so that no oxygen enters the hood.
- A constant alarm sounds for a minimum of 500 milliseconds.
- The system failure indicator illuminates.

The microprocessor resets the watchdog timer after a watchdog trip by sending the above data sequence.

Factory Defaults

Factory defaults are stored in program memory, flash EEPROM. System parameters are configured and stored in the real time clock (RTC) module or serial EEPROM. The RTC memory and random access memory (RAM) are protected against corruption during power failures and are battery-backed for a period of time.

The program is stored in reprogrammable memory and may be reprogrammed through a cable connected to the serial port of a computer. The program memory is stored in a flash EEPROM. The RS-232 serial port operates at speeds of 115,200 baud to expedite the speed of the program download.

Power Supply

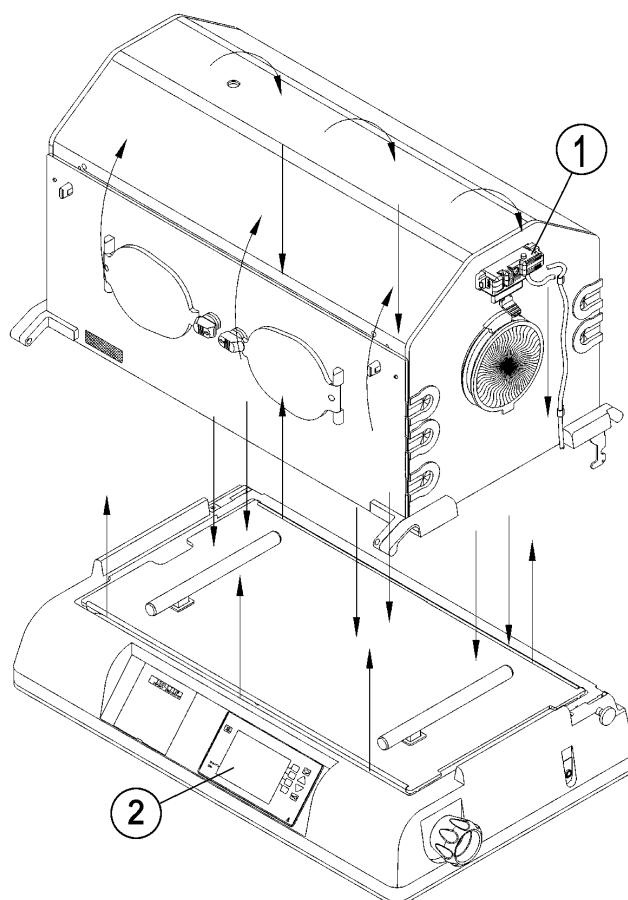
The power supply is so designed that 1 second after disconnection of the plug, the voltage between the supply pins of the plug and between either supply pin and the enclosure does not exceed 60 V by using a bleeder resistor across the mains filter capacitor, if necessary.

2.1.4**Air System****2.1.4.1****Overall Functional Description**

The controller (Fig. 3/2) displays the air temperature and the skin temperature on a display. Optional displays of the humidity and oxygen concentration levels within the hood environment and the infant's weight are available. In addition, Trend displays of 2, 4, 8, 12, and 24 hours of all parameters (except weight, which is presented in days) are user-selectable.

To indicate which mode of operation, Air Mode or Skin Mode, is in control, the set temperature of the controlling parameter remains on adjacent to the actual displayed temperature. In addition, the rotating wheel in the **Air** or **Skin** softkey designator rotates.

The forced air circulation system controls the temperature, humidity, and oxygen concentration (see Fig. 3). The motor-driven impeller in the shell draws a controlled amount of approximately 7 liters per minute (lpm) of room air through the air intake filter.



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Fig. 3 Air/Oxygen Circulation System

The impeller also provides the internal circulation at a much greater flow than that of the fresh gas inflow. The total flow of fresh and circulated air is directed past the airflow sensor and around the heater. The air enters the infant compartment up through the slots at the front and rear of the main deck and then passes between the front and rear inner walls. The air circulates past the sensor module (Fig. 3/1), which contains the temperature sensing probe that encapsulates the air temperature control thermistor and a high air temperature alarm thermistor. After circulating within the infant compartment, the air then re-circulates down through a slot in the right end of the main deck, and back to the impeller. When the access panel of the hood is open, the air continues to flow upward past the opening. Impeller ramps up to 2200 RPM to creating a warm air curtain to minimize the drop in air temperature in the incubator. The temperature is regulated using either the incubator's air or the infant's skin temperature as the controlling parameter; the desired mode is selected by the front panel keys.

In either mode of operation, the heater output is proportional to the amount of heat required to maintain the desired temperature.

2.1.4.2

Air Mode

In Air Mode, the air temperature is maintained from 68 °F to 99 °F (20 °C to 37 °C) (99 °F to 102 °F (37 °C to 39 °C) in Temperature Override Mode), as selected by the **Air Set Temperature** Up and Down arrow keys on the front panel. A probe located in the sensor module monitors the incubator's air temperature and compares it with the air's set temperature setting. The probe supplies this information to the heater control circuitry, which regulates the heater output to maintain the air temperature setting. The actual air temperature appears on the **Air Temperature** display. A second sensor within the air temperature probe serves as a backup to limit the maximum incubator temperature. If the high temperature limit activates, the heater shuts off.

In Air Mode, the infant's temperature is a function of the air temperature and the infant's ability to establish and maintain its own temperature. A small infant, or one with underdeveloped homeostatic control, may not be able to maintain a stable temperature at the desired level.

In Air Mode, there is a 15-minute setpoint retention. When you first power the unit on, the air setpoint temperature is 95 °F (35 °C); for example, if you change the air setpoint temperature to 95.9 °F (35.5 °C), and a power failure occurs, the air set temperature comes up to 95.9 °F (35.5 °C) if the unit turns on again before 15 minutes elapse.

2.1.4.3

Skin Mode

In Skin Mode, the infant's temperature is selected from 93 °F to 99 °F (34°C to 37 °C) (99 °F to 100 °F (37 °C to 38 °C) in Temperature Override Mode) by the **Skin Set Temperature** Up and Down arrow keys on the front panel. A temperature sensing probe attaches directly to the infant's skin. The probe supplies information to the heater control circuitry, which proportions the heater output to maintain the skin set temperature.

The air temperature still appears in Skin Mode, but as information only. If Air Mode is selected while the skin probe remains connected, the **Skin Temperature** display continues to display actual skin temperature, but it does not control.

The sensor module accepts two skin probes. However, when the second skin probe connects to the sensor module in Skin Mode, an alarm sounds, and the message **Remove Skin 2 Probe** appears. To connect the second skin probe, first select Air Mode. The controller then displays the two temperatures.

If Skin Probe 1 disconnects from its receptacle during Skin Mode, the **Skin Temperature** display goes blank, an alarm sounds, and the heater turns off.

2.1.4.4

Oxygen Control

An oxygen sensor assembly mounted inside the sensor module adjusts the flow of oxygen into the hood and controls the oxygen concentration level within the incubator's hood environment.

A valve regulates the flow into the incubator and periodically interrupts the flow of oxygen into the incubator.

The sensor module houses two independent oxygen fuel cells that monitor and control the oxygen concentration levels inside the incubator.

If the sensor module is outside of the hood environment during Oxygen Mode, audible and visual alarms are enabled, and the flow of oxygen is interrupted.

In Oxygen Mode, the user sets the oxygen level control point from 21% to 65%. The high and low alarm limits automatically set to $\pm 3\%$ from the control point. If the oxygen concentration level rises above or falls below the selected setpoint limits, an audible and visual alarm occurs.

2.1.4.5

Humidity Control Valve

The built-in humidifier provides humidification of the incubator from 30% to 95% RH in 1% increments. The humidifier reservoir permits visual inspection of the water level.

If the water level in the chamber is depleted, an audible and visual **Low Humidity** alarm occurs, indicating a need to replenish the water supply.

2.1.5 Hardware

2.1.5.1 Weighing Mode

Two load cells in a platform under the mattress perform the actual weighing function. These cells provide a voltage that is proportional to the load on it. The controller processes the voltage and displays it in either kilograms or pounds/ounces on the **Weight** display.

The weighing routine is initiated by placing the infant on the mattress. If the infant is already on the mattress, lift the infant off the mattress; when the system zeros, return the infant to the mattress to obtain the weight.

The **Weigh** key enables repeated weighing of the infant after the weighing routine is initiated as described above.

2.1.5.2 Trend Displays

Four standard parameters are presented on Trend displays:

- Air temperature
- Skin temperature #1
- Skin temperature #2
- Heater power

Additional Trend displays are available when the unit is equipped with any of the following options:

- Oxygen
- Weight
- Humidity

The Trend time is user-selectable in intervals of 2, 4, 8, 12, and 24 hours for all parameters, except for weight, which provides a trend of 7 days.

2.1.5.3 Interface Connections

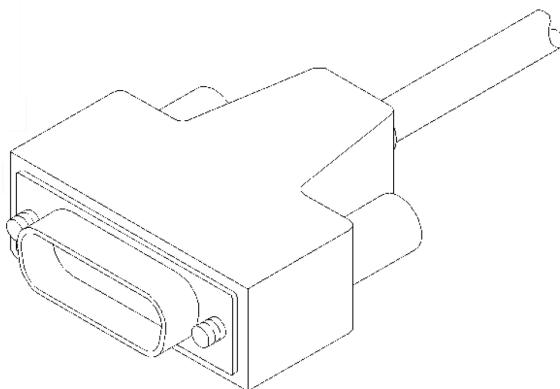
A serial interface port is provided as a data terminal device and an RS-232 output.

The following parameters are available:

- Air and skin setpoint temperatures
- Current air and skin temperatures
- Oxygen setpoint
- Oxygen level
- Humidity setpoint
- Humidity level
- Infant weight

2.1.5.4**RS-232 Serial Port Protocol**

The RS-232 serial port connector is next to the AC power connector on the front of the incubator. The serial port is configured for 2400 baud, 8 data, 1 stop, no parity, and is output only (see Fig. 4).



11314

Fig. 4 RS-232 Connector Pin Outs

Legend to Fig. 4

Pin	Designation
1	NC
2	RXD
3	TXD
4	NC
5	GND
6	NC
7	NC
8	NC
9	NC

During normal operation, a data packet transmits every 5 seconds. Each data packet is entirely in American Standard Code Information Interchange (ASCII) and is readable when displayed on any standard RS-232 terminal device. A data packet consists of one 82-character line of text that is composed of a prefix, a data portion, a suffix, a checksum, and a carriage return/line feed (CR/LF) pair.

The prefix identifies the data line. It consists of an opening bracket and an ID character that are unique to the data line. The format of the data portion depends on the specific data line. Any character positions within the data portion that are undefined transmit as spaces to enhance the readability of the output. The suffix property limits the data portion and consists of a closing bracket.

The checksum is two ASCII hexadecimal digits and represents an 8-bit acclamation of the ASCII characters from the prefix to the suffix, inclusive.

All monitored parameters, including temperature, oxygen, humidity, and weight, transmit at the 5-second interval. Asynchronous events, such as alarms or mode changes, transmit as they occur.

Example of the data string:

```
0000000001111111112222222223333333444444444555555555666
12345678901234567890123456789012345678901234567890123
[ ISOLETTE 000000000000 361A 385 387 360 220 050 76 75 21 21 1245 ]8D
```

RS-232 Serial Port Proto

Columns	Description
1 and 2	Prefix: 2 characters, '[' followed by the ID character (see "ID Characte")
4 through 11	Product ID: 8 characters
13 and 14	Mode bit flags: 2 hexadecimal digits (see "Mode Bit Flags")
15 through 24	Alarm bit flags: 10 hexadecimal digits (see "Alarm Bit Flags")
26 through 28	Setpoint temperature: 3 digits, 1 decimal, Celsius
29	Air/Skin Mode: 1 character "A or B"
31 through 33	Skin temperature 1: 3 digits, 1 decimal, Celsius
35 through 37	Skin temperature 2: 3 digits, 1 decimal, Celsius
39 through 41	Air temperature: 3 digits, 1 decimal, Celsius
43 through 45	Ambient temperature: 3 digits, 1 decimal, Celsius
47 through 49	Heater power: 3 digits, range 0 to 250
51 and 52	Humidity: 2 digits, 0 decimal
54 and 55	Setpoint humidity: 2 digits
57 and 58	Oxygen: 2 digits, 0 decimal
60 and 61	Setpoint oxygen: 2 digits
63 through 66	Weight: 4 digits, 3 decimals, kilograms
78	Suffix: 1 character, '['
79 and 80	Checksum: 2 hexadecimal digits
81 and 81	CR/LF: 2 control characters

ID Characte

Character	Description
<space>	Normal mode
1	Special/Test Mode is in effect (data may be invalid)

Mode Bit Flags

Bit	Description
01	Humidity on
02	Oxygen on
04	Baby Mode configuration
08	0.5 °C baby alarm limit
10	Reserved
20	Reserved
40	Reserved
80	Reserved

For example: If "Humidity on" and "Baby Mode configuration" are selected, the character is **05**.

Alarm Bit Flags

Bit	Description
0000000001	Low control temperature
0000000002	High control temperature
0000000004	Low oxygen
0000000008	High oxygen
0000000010	High temperature cut-out
0000000020	Skin 1—probe failure
0000000040	Skin probe—disconnect
0000000080	Oxygen calibration required
0000000100	Sensor out of position
0000000200	Water level low
0000000400	Procedural Silence
0000000800	Motor failed
0000001000	Low air flow
0000002000	Heater failed
0000004000	EEPROM failed
0000008000	Sensor module failure
0000010000	Controller failure 1
0000020000	Controller failure 2
0000040000	Controller failure 3
0000080000	Controller failure 4
0000100000	Air probe failed
0000200000	Oxygen cell different
0000400000	Scale disconnect
0000800000	Too much weight
0001000000	Scale failed

For example: If the air temperature and oxygen are low and Procedural Silence is initiated, such as when an access door is open, the 10 character value equals **000000405**.

Certain fields, such as air temperature, have an implied decimal point. The decimal point does not physically appear in the data stream.

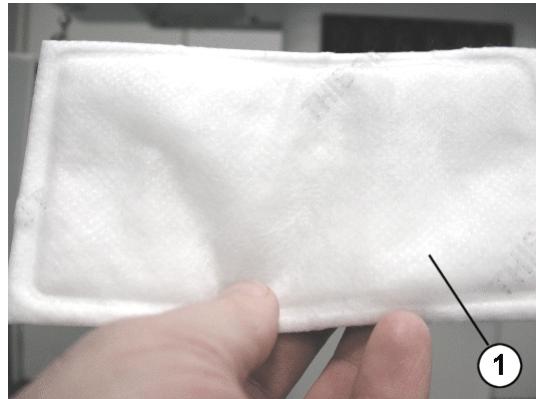
3

Maintenance instructions

This chapter describes the measures required to maintain the specified condition of the device.

3.1

Air filter



12528

Fig. 5 Air filter with imprint

3.1.1

Safety precautions

CAUTION

If the air filter (Fig. 5/1) is dirty, do not clean it, but replace it with a new one.

CAUTION

A dirty air filter (Fig. 5/1) may impair the performance of the machine or lead to the accumulation of carbon dioxide (CO₂). The air filter must be replaced on a regular basis, in accordance with local regulations. It may be necessary to change the filter frequently, especially if the machine is used in an environment subject to unusually high dust levels. Failure to comply with this instruction may result in injury to the infant or damage to the machine!

NOTE

If the imprint on the air filter (Fig. 5/1) is no longer legible, or the air filter is dirty or damaged, replace the air filter.

3.1.2

Replacing the air filter

- 1 Check that there is no patient inside the Isolette.
- 2 If there is no patient inside the Isolette C2000/C2000e, switch it off.

- 3 Loosen the screws (Fig. 6/1) on the underside (rear) of the Isolette as far as possible.

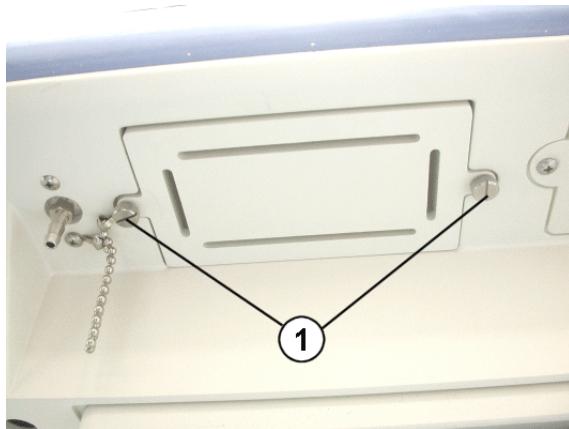


Fig. 6 Underside (rear) of Isolette; screws

NOTE

Used air filters can be disposed of as normal waste.

- 4 Take the used air filter (Fig. 7/1) out of the mounting frame and dispose of it in the normal waste.



Fig. 7 Mounting frame with air filter

- 5 Insert the **new** air filter in the mounting frame so that the imprint reading "This side out" points downwards; see Fig. 7. Note: When the air filter is fitted in the correct position the imprint is not legible!
- 6 Fix the mounting to the Isolette by the screws (Fig. 6/1).

3.2 Option Oxygen sensors

3.2.1 Notes/Safety instructions

CAUTION

If preventive maintenance is carried out by untrained personnel it may result in personal injury or damage to property.

Preventive maintenance or repairs to the Isolette® infant incubator may only be carried out by properly, trained personnel.

- i** The oxygen sensor is a sealed unit which uses potassium hydroxide as an electrolyte. If a leak occurs in the sensor it must be disposed of immediately. If electrolyte comes into contact with skin or clothing, the affected area must be rinsed with copious amounts of water. If electrolyte gets into the eyes, rinse them immediately for at least 15 minutes, keeping the eyes open as you do so. Immediately consult a doctor. Failure to comply with this instruction may result in personal injury or damage to the machine.
- i** Only oxygen cells recommended by Dräger have been tested with the device and therefore we recommend only these cells be used otherwise the correct functioning of the device may be compromised.
- i** Check the gas/oxygen service components at regular intervals for signs of corrosion or damage. Failure to comply with this instruction may result in personal injury or damage to the machine.
- i** Check the oxygen cells regularly for loss of quality or leaks, and replace them as necessary. Failure to comply with this instruction may result in personal injury or damage to the machine.
- i** Always replace both oxygen sensor cell, as a pair, at the same time, with new ones.

3.2.2 Replacing the oxygen sensors

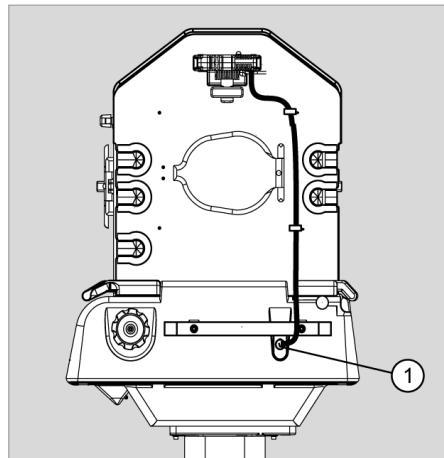
3.2.2.1 Service equipment required

- Crosshead screwdriver

3.2.2.2 Procedure

- 1 Check that there is no patient inside the machine.
- 2 If there is no patient inside the Isolette®, switch it off.

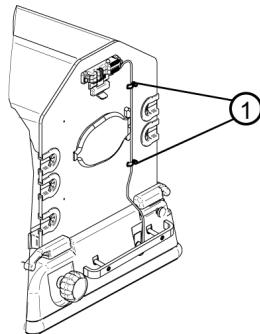
- 3 Unplug the connector (Fig. 8/1) of the sensor module from the jack.



2875

Fig. 8 Side view of Isolette®: sensor module connector

- 4 Remove the sensor module cable from the cable guides (Fig. 9/1).



2876

Fig. 9 Side view of Isolette®: cable guides

- 5 Turn the pawl latches (Fig. 10/1) to the "OPEN" position.

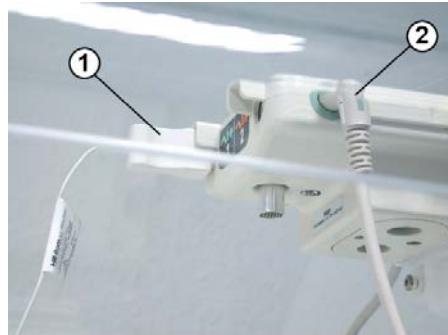


2870

Fig. 10 Isolette®: pawl latches

- 6 Open the front access panel and lower it.

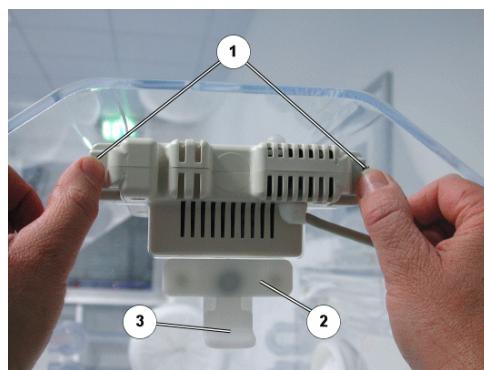
- 7 Unplug the connector(s) (Fig. 11/1) of any skin temperature probes (option) from the sensor module
- 8 Unplug the connector (Fig. 11/2) of the weighing scale (if present) from the sensor module



2878

Fig. 11 Sensor module: Connectors for skin temperature sensor (1) and scale (2)

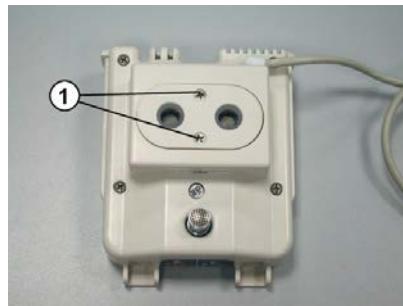
- 9 Lower the Sensor Module Locking Tab (Fig. 12/3).
- 10 Withdraw the sensor module partially out of the hood, until it stops.



2879

Fig. 12 Rear view of sensor module: locking tabs and sensor module lock plate

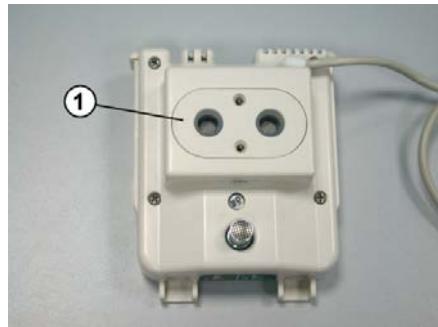
- 11 Hold the two locking tabs (Fig. 12/1) of the sensor module apart and at the same time withdraw the sensor module all the way out of the hood.
- 12 Remove and retain the screws (Fig. 13/1).



2880

Fig. 13 Sensor module: screws

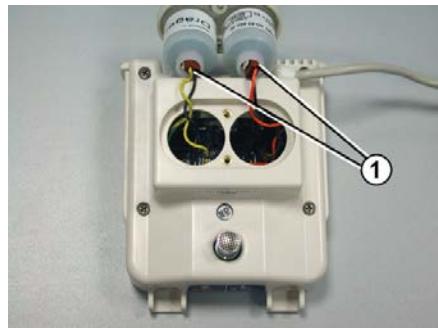
- 13** Carefully detach the backing plate (Fig. 14/1) (Note: There are wires connecting the backing plate to the sensor module!).



2881

Fig. 14 Sensor module: backing plate

- 14** Unplug the jacks (Fig. 15/1) from the connectors of the oxygen sensors.



2882

Fig. 15 Sensor module: jacks

- 15** Unscrew the oxygen sensors (Fig. 16/1) anti-clockwise out of the backing plate (Fig. 16/2).



2883

Fig. 16 Backing plate with oxygen sensors

■ Used oxygen sensors are special waste. Used oxygen sensors must be disposed of in accordance with local waste disposal regulations.

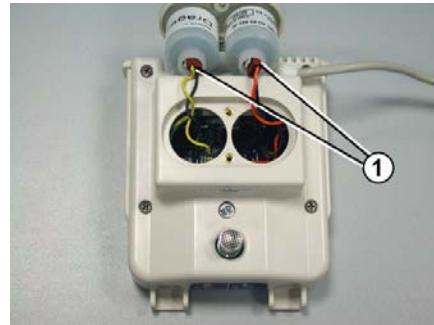
- 16** Dispose of used oxygen sensors in accordance with local waste disposal regulations.

■ Always replace both oxygen sensor cell, as a pair, at the same time, with new ones.

17 Screw new oxygen sensors (Fig. 16/1) clockwise into the backing plate (Fig. 16/2) until a resistance is noticeable. (Note: The sealing rings of the oxygen sensors press against the backing plate!)

! The jacks on the ends of the oxygen sensor cables are not coded, and can be attached to either of the oxygen sensors when reconnecting!

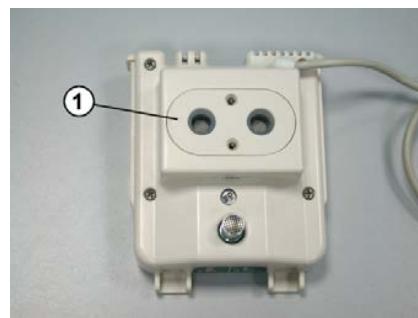
18 Fit the jacks (Fig. 17/1) firmly onto the connectors of the new oxygen sensors.



2882

Fig. 17 Sensor module: jacks

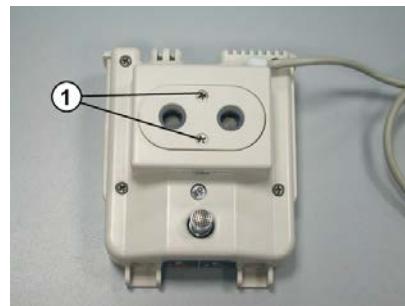
19 Insert the backing plate (Fig. 18/1) with the oxygen sensors into the sensor module.



2881

Fig. 18 Sensor module: backing plate

20 Fix the backing plate to the sensor module by the screws (Fig. 19/1).

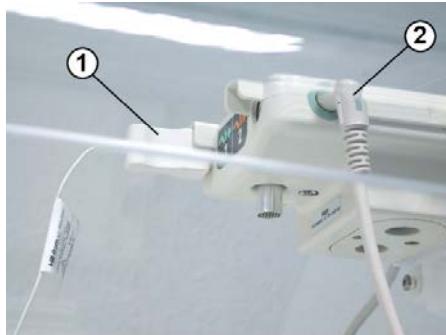


2880

Fig. 19 Sensor module: screws

21 Insert the sensor module fully into the hood, ensuring correct positioning.

- 22** Plug the connector(s) (Fig. 20/1) of any skin temperature probes (option) into the sensor module jack.
- 23** Plug the connector (Fig. 20/2) of the weighing scale (if present) into the sensor module jack.



2878

Fig. 20 Sensor module: Connectors for skin temperature sensor (1) and scale (2)

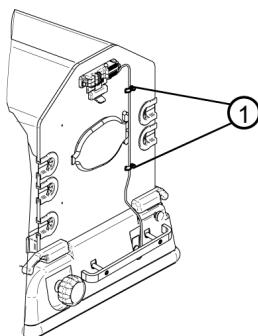
- 24** Close the front access panel and turn the pawl latches (Fig. 21/1) to the "CLOSED" position.



2870

Fig. 21 Isolette®: pawl latches

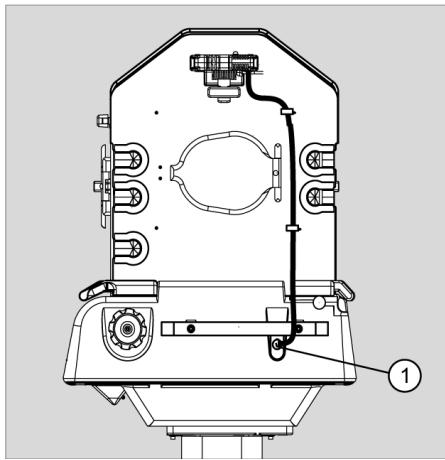
- 25** Insert the sensor module cable into the cable guides (Fig. 22/1). All extra length of the cable should be between the lowest cable guide and the shell connection, see Fig. 23.



2876

Fig. 22 Side view of Isolette®: cable guides

26 Plug the connector (Fig. 23/1) of the sensor module into the jack.



2875

Fig. 23 Side view of Isolette®: sensor module connector

27 Calibrate the oxygen sensors; see 3.2.3 Calibrating the oxygen sensors.

3.2.3

Calibrating the oxygen sensors

3.2.3.1

Safety instructions for calibrating the oxygen sensors

CAUTION

Improper oxygen calibration can result in the display of false oxygen measurements. Death or serious injury could occur.

If the "100% oxygen calibration fixture" is installed (Fig. 25/1), the Isolette® controller must be configured for "100% oxygen calibration", and the "100% oxygen calibration fixture" must be connected to a minimum 3 L/min of 100% oxygen during calibration. If the "100% oxygen calibration fixture" is **not** installed (Fig. 12/2), the Isolette® controller must be configured for "21% oxygen calibration", and no oxygen source shall be used. The "21% calibration" is made in ambient air.

3.2.3.2

General

After replacing oxygen sensors, be sure to calibrate the oxygen sensors at least once a week.

To calibrate the oxygen sensors, those sensors must be in an environment of known oxygen concentration. Such an environment can be achieved by withdrawing the sensor module such that the oxygen sensors are exposed to ambient air (at 21% oxygen), or, if the (optional) 100% calibration fixture is used, to a microenvironment flooded to 100% oxygen.

In order to calibrate the oxygen sensors, the calibration setting for oxygen and for any accessories connected to the Isolette® must be checked as follows:

3.2.3.3

Checking the calibration setting and accessories

- 1 Connect the Isolette® to the mains power supply.
- 2 Press and hold down the "alarm suppression" key and at the same time switch on the Isolette®.

The Isolette® starts up in configuration mode.

- 3 Check the oxygen calibration setting. Note: In Fig. 24/1 the calibration setting is "21%".

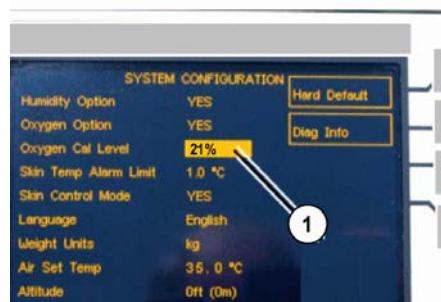


Fig. 24 Close-up view of control panel: oxygen calibration point

If the oxygen calibration setting is "21%", the 100% oxygen calibration fitting (Fig. 25/1) must not be attached to the sensor module! For calibration with 21% O₂, see 3.2.3.4 21% O₂ calibration.

If the oxygen calibration setting is "100%", the 100% oxygen calibration fitting (Fig. 25/1) must be attached to the sensor module! For calibration with 100% O₂, see Fig. 25 "100% O₂ calibration".

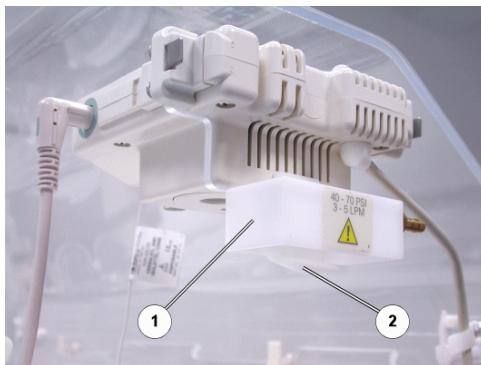


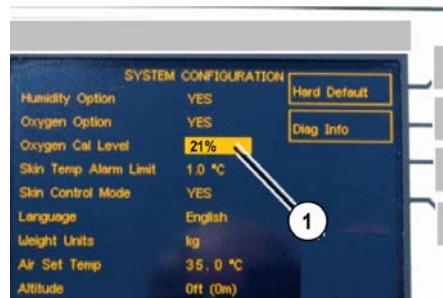
Fig. 25 Sensor module with 100% oxygen calibration fitting

3.2.3.4 21% O₂ calibration

- 1 Connect the Isolette® to the mains power supply.
- 2 Press and hold down the "alarm suppression" key and at the same time switch on the Isolette®.

The Isolette® starts up in configuration mode.

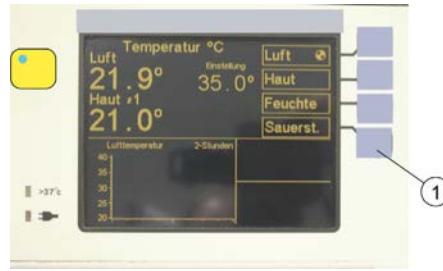
- 3** Check that the oxygen calibration point is "21%" (Fig. 26/1) and that the 100% oxygen calibration fitting (Fig. 25/1) is not attached to the sensor module.



31639

Fig. 26 Close-up view of control panel: oxygen calibration point

- 4** Switch off the Isolette® and wait 1 minute.
5 Switch on the Isolette®.
6 On the control panel touch the "Oxygen" softkey (Fig. 27/1).



10060

Fig. 27 Close-up view of control panel: "oxygen" softkey.

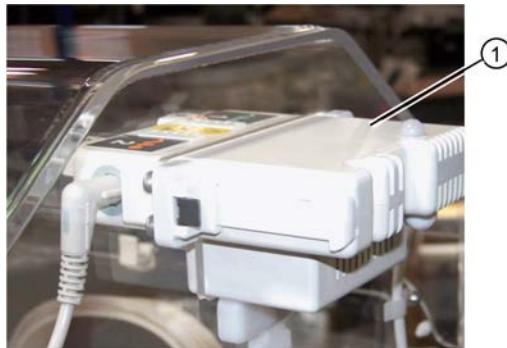
- 7** On the control panel touch the "CALIBRATION" softkey (Fig. 28/1).



10061

Fig. 28 Close-up view of control panel: "CALIBRATION" softkey

- 8** When the display prompts you the message slide out sensor module, slide the sensor module (Fig. 29/1) partially out of the hood, until it stops.



10862

Fig. 29 View of sensor module, partially slid out

The display shows a timer visually indicating the progress of the calibration, together with the message "21% calibration".

After calibration the display shows the message that the calibration was successful.

- 9** Go to "Reinserting the sensor module".

3.2.3.5

100% O₂ calibration

- 1** Connect the Isolette® to the mains power supply.
 - 2** Press and hold down the "alarm suppression" key and at the same time switch on the Isolette®.
- The Isolette® starts up in configuration mode.
- 3** Check that the oxygen calibration point is "100%" (Fig. 30/1) and that the 100% oxygen calibration fitting (Fig. 25/1) is attached to the sensor module.

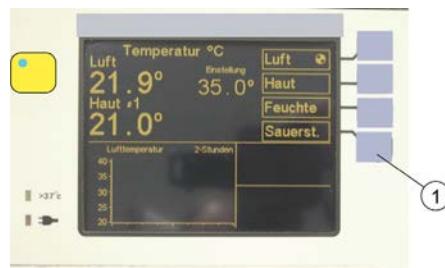


31640

Fig. 30 Close-up view of control panel: oxygen calibration point "100%"

- 4** Switch off the Isolette®.
- 5** Switch on the Isolette®.
- 6** Connect 100% oxygen to the 100% calibration fixture, using 1/4" or 6 mm tube / hose.
- 7** Set a flow rate of 3 L/min to 5 L/min on the oxygen cylinder.
- 8** Open the oxygen feed on the oxygen cylinder.

- 9** On the control panel touch the "Oxygen" softkey (Fig. 31/1).



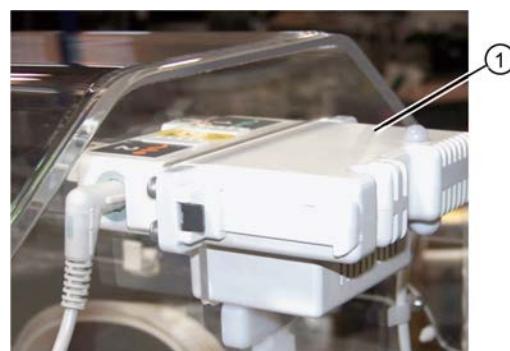
10960

- 10** On the control panel touch the "CALIBRATION" softkey (Fig. 32/1).



10961

- 11** When the display prompts you to slide out the sensor module, slide out the sensor module (Fig. 33/1) partially out of the hood, until it stops.



10962

Fig. 33 View of sensor module, partially slid out

The display shows a timer visually indicating the progress of the calibration, together with the message 100% calibration.

- 12** After calibration turn off and disconnect the oxygen source.

3.2.3.6

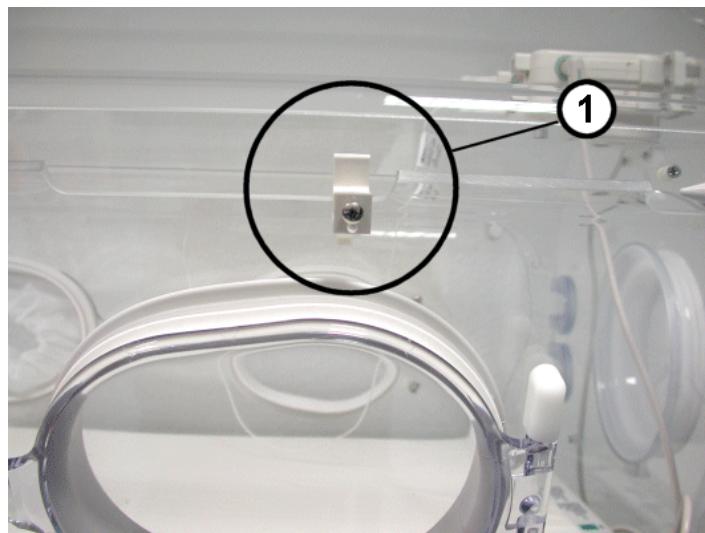
Reinserting the sensor module

- 1** Return the sensor module to its operational position, fully inside the hood.
- 2** If the O₂ sensors were replaced, perform tests according to the Test Instructions. If the existing O₂ sensors were used for the calibration, perform the operational checkout procedure from the Instructions for Use.

3.3 Heat Shield Locks

3.3.1 General

The Isolette C2000/C2000e has four heat shield locks. Two heat shield locks are mounted on the front door and two on the rear. Note: Fig. 34/1 shows only one heat shield lock!



12524

Fig. 34 Close-up view of Isolette C2000/C2000e; heat shield lock

3.3.2 Safety precautions

NOTE

Snapped-off heat shield locks will no longer hold the intermediate wall (heat shield) to the door, and in the worst-case scenario will fall inside the incubator. Immediately replace snapped-off heat shield locks with new ones.

3.3.3 Replacing heat shield locks

3.3.3.1 Service equipment required

- Crosshead screwdriver

3.3.3.2 Procedure

The following procedure details how to replace a heat shield lock on the front door. The procedure is applicable in the same way to all heat shield locks (2x on the front door, 2x on the rear).

- 1 Check that there is no patient inside the Isolette C2000/C2000e.
- 2 If there is no patient inside the Isolette C2000/C2000e, switch it off.

- 3 Turn the pawl latches (Fig. 35/1) to the "OPEN" position and carefully lower the front door.

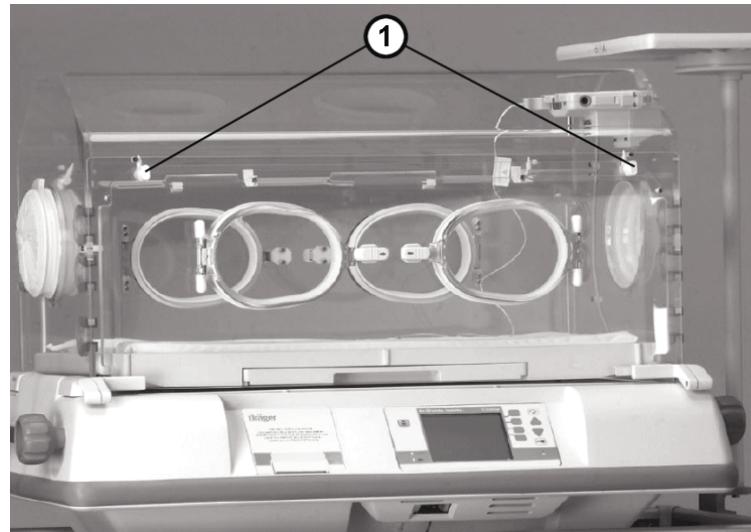


Fig. 35 View of Isolette C2000/C2000e; pawl latches

- 4 Lift the front door slightly and while doing so remove the screw (Fig. 36/1).

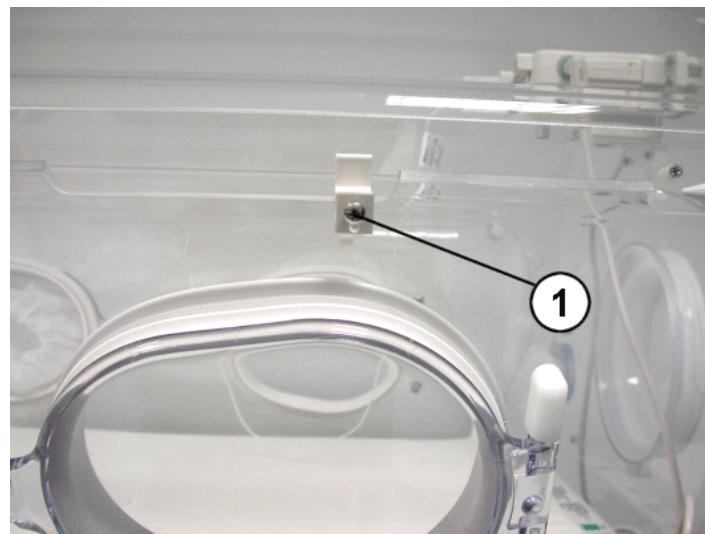


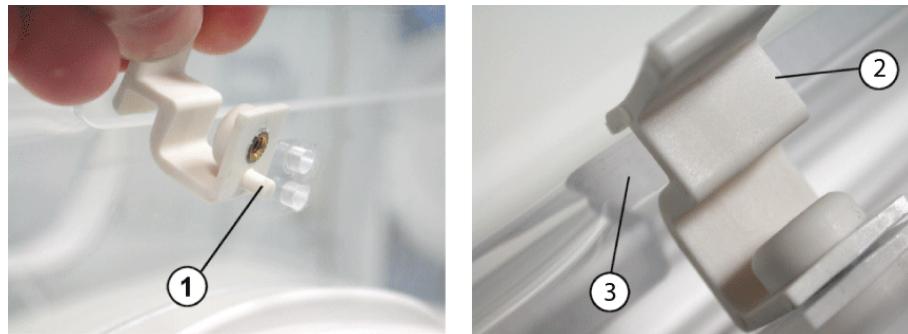
Fig. 36 Close-up view of front door; screw

NOTE

Faulty heat shield locks are special waste. Faulty heat shield locks must be disposed of in accordance with local waste disposal regulations.

- 5 Take out the faulty heat shield lock and dispose of it in accordance with local waste disposal regulations.

- 6** Insert the **new** heat shield lock into the front door so that the pin (Fig. 37/1) of the heat shield lock goes into the bottom hole in the front door and at the same time the heat shield lock locator (Fig. 37/2) is positioned over the intermediate wall (heat shield) (Fig. 37/3).



12527

Fig. 37 Heat shield lock; fitting

- 7** Fix the heat shield lock to the front door by the screw (Fig. 36/1).
8 Lift the front door and turn the pawl latches (Fig. 35/1) to the "CLOSED" position.

3.4 Motor (for main fan) and Vibration Isolators

3.4.1 Notes/Safety instructions

CAUTION

Electrostatic discharge!

Electrostatic discharge may damage electrostatic sensitive devices.

When handling electrostatic sensitive devices, use an anti-static mat and wrist strap.

3.4.2 Replacement

3.4.2.1 Tools required

- Pliers
- Small flat head screwdriver
- Cross head screwdriver

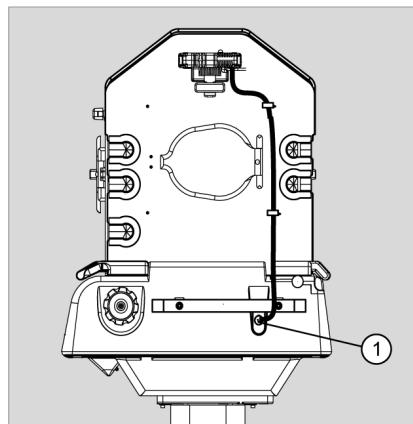
3.4.2.2 Procedure

- 1 Unplug the unit from its power source.
- 2 Disconnect any oxygen sources and remove any equipment from shelves or IV poles.
- 3 If necessary, disconnect the scale cable assembly from the sensor module assembly (Fig. 38/2).



Fig. 38 Sensor module: Connectors for skin temperature sensor and scale

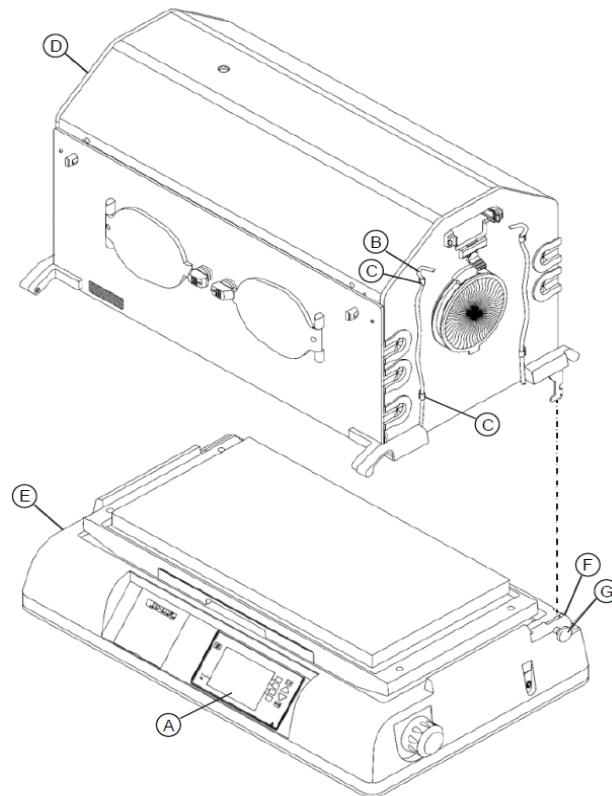
- 4 Disconnect the sensor module cable (Fig. 39/1) from the upper shell assembly.



2875

Fig. 39 Side view of Isolette®: sensor module connector

- 5 Unplug the power cord from the back of the controller assembly (Fig. 40/A).
- 6 If installed, remove the scale connector cable (Fig. 40/B) from the cable clamps (Fig. 40/C) on the end of the hood assembly (Fig. 40/D).



22440

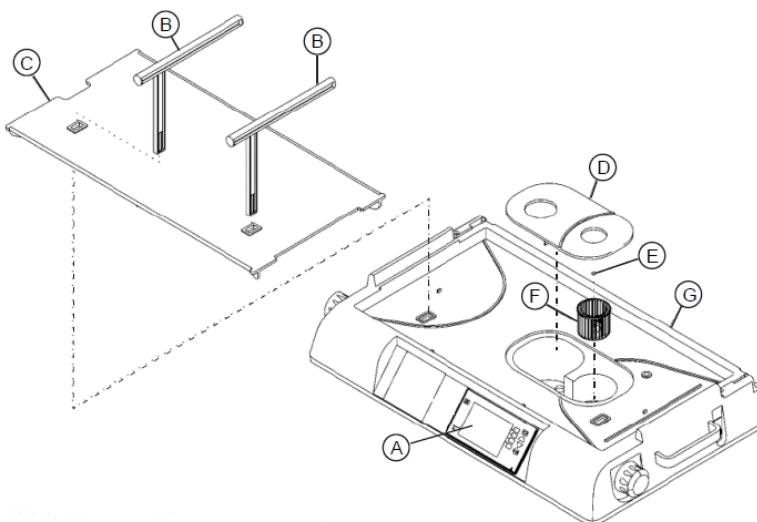
Fig. 40 Hood Assembly

- 7 Tilt the hood assembly (Fig. 40/D) back until it is fully open.

CAUTION

Two people are required to lift the hood assembly. Failure to use at least two people could result in personal injury or equipment damage.

- 8** Stand one person behind the incubator at each end of the hood assembly (Fig. 40/D), and have each person lift their end of the hood assembly (Fig. 40/D) straight up from the upper shell assembly (Fig. 40/E). The person at the sensor module end of the hood assembly (Fig. 40/D) **must** release the knob (Fig. 40/G) while lifting.
- 9** Carefully remove the hood assembly (Fig. 40/D) from the unit.
- 10** Remove the mattress, mattress tray, X-ray tray, and scale (if present) by lifting the mattress tray straight up.
- 11** Pull the two mattress tilt bars (Fig. 41/B) up through the main deck (Fig. 41/C), and remove them from the unit.

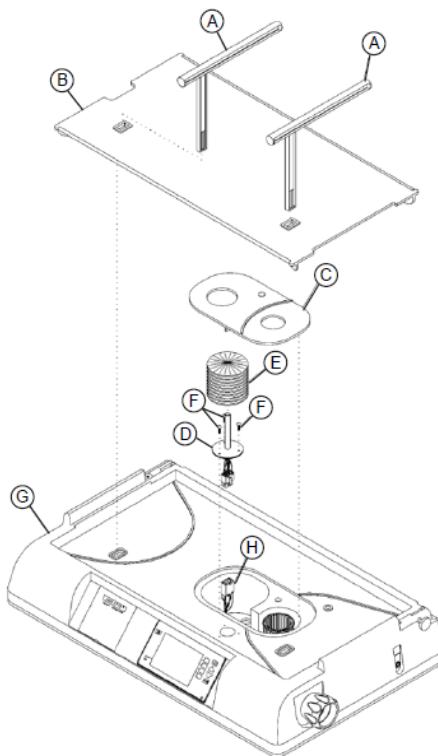


22443

Fig. 41 Impeller Assembly

- 12** Remove the main deck (Fig. 41/C) from the unit.
- 13** Remove the heater/impeller cover (Fig. 41/D) from the unit.
- 14** Using pliers, remove the wire hose clamp (Fig. 41/E) (if present) that secures the impeller assembly (Fig. 41/F) to the upper shell assembly (Fig. 41/G).
- 15** Remove the impeller assembly (Fig. 41/F) from the upper shell assembly (Fig. 41/G).

16 Allow 45 minutes for the heater assembly (Fig. 42/D) to cool.



22477

Fig. 42 Heater assembly

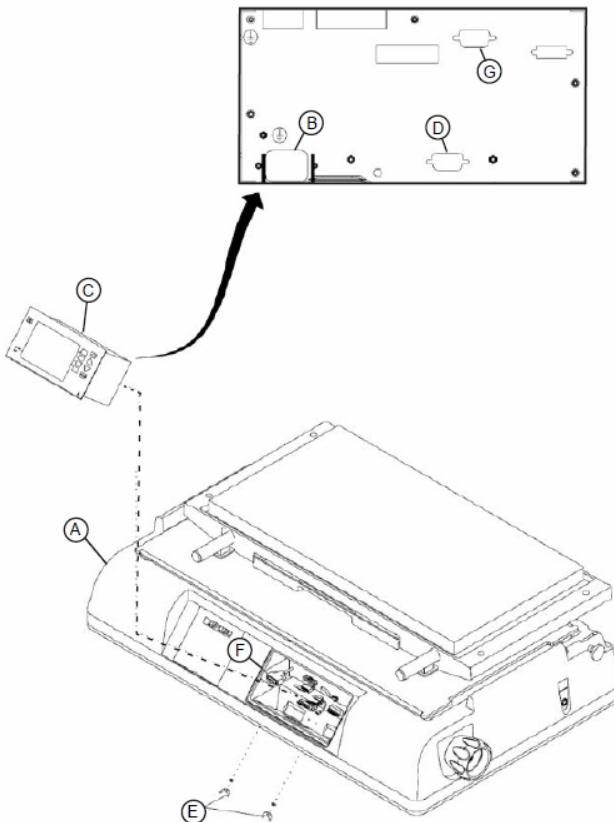
17 Remove the heater radiator (Fig. 42/E) from the heater assembly (Fig. 42/D).

CAUTION

Unplug the unit from its power source. Failure to do so could result in personal injury or equipment damage.

18 From under the upper shell assembly (Fig. 43/A), perform the following:

- Disconnect the AC power cord from its connector (Fig. 43/B) on the back of the controller assembly (Fig. 43/C).
- If necessary, disconnect the cable attached to the RS-232 port (Fig. 43/D).
- Remove and retain the two wing nuts and flat washers (Fig. 43/E) located next to the AC power connector (Fig. 43/B) and the RS-232 port (Fig. 43/D).



31657

Fig. 43 Controller

- 19** Slide the controller assembly (Fig. 43/C) out from the upper shell assembly (Fig. 43/A) until its cable connectors are visible.
- 20** Disconnect the cables from the controller assembly (Fig. 43/C).
- 21** Remove the controller assembly (Fig. 43/C) from the upper shell assembly (Fig. 43/A).
- 22** If the unit is equipped with a humidity system, remove the reservoir.

23 Remove and retain the four Nylok® screws (Fig. 44/B) that secure the shell bottom (Fig. 44/C) to the upper shell assembly (Fig. 44/D).

 When reinstalling, apply fresh Loctite 242 to the screws.

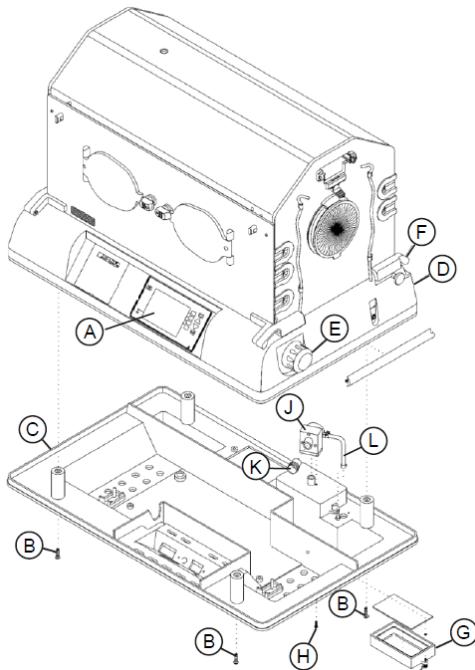


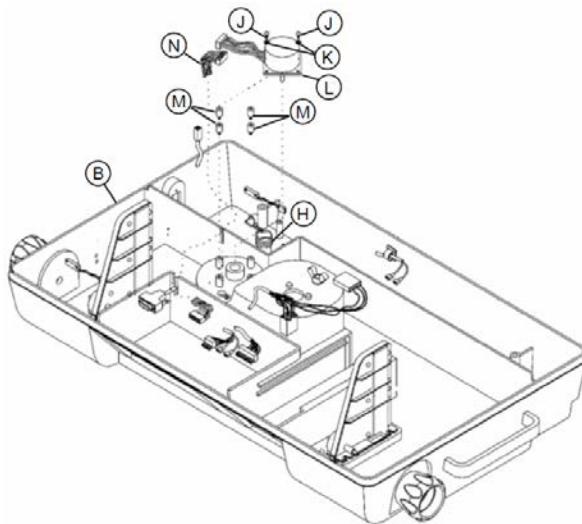
Fig. 44 Upper Shell Assembly

24 If present, remove the blue bumper gasket that separates the upper and lower shells.

25 Stand at the same end of the upper shell assembly (Fig. 44/D) as the controller (Fig. 44/A) and perform the following:

- Using the mattress tilt knob (Fig. 44/E) and the rear hood hinge (Fig. 44/F), lift the upper shell assembly (Fig. 44/D) enough to access the corrugated hose (Fig. 44/K) at the fresh air valve (Fig. 44/J).
- Using pliers, disconnect the corrugated hose (Fig. 44/K) from upper shell assembly.
- Carefully remove the upper shell assembly (Fig. 44/D) from the shell bottom (Fig. 44/C) and place it upside down on a flat, padded surface.

-
- 26** Disconnect the motor assembly (Fig. 45/L) from the incubator motor-to-controller cable (Fig. 45/N).



22444

- Fig. 45 Motor Assembly**
- 27** Remove and retain the four screws (Fig. 45/J) and the four lockwashers (Fig. 45/K) that secure the motor assembly (Fig. 45/L) to the four Vibration Isolators (Fig. 45/M).
- 28** Remove and discard the motor assembly (Fig. 45/L).
- 29** Remove and discard the four Vibration Isolators (Fig. 45/M).
- 30** Reassemble by reversing the order of disassembly.
- 31** To ensure proper operation of the Isolette® Infant Incubator, perform the "Electrical safety tests" and the "Function Checks" according to the Test Instructions.

3.5 Fan (Sensor Module)

3.5.1 Notes/Safety instructions

CAUTION

Electrostatic discharge!

Electrostatic discharge may damage electrostatic sensitive devices.

When handling electrostatic sensitive devices, use an anti-static mat and wrist strap.

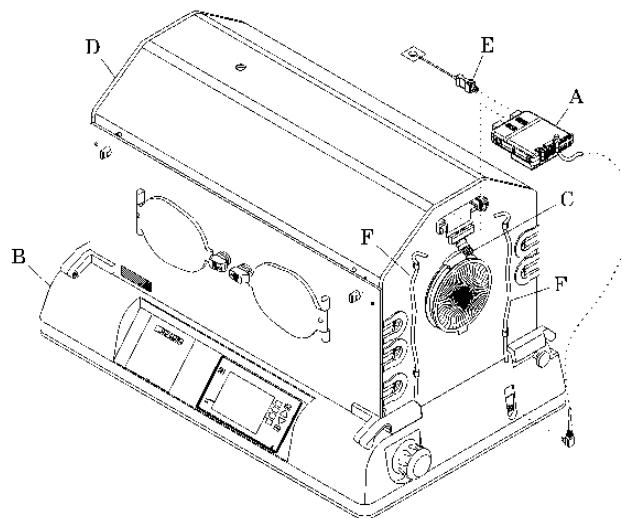
3.5.2 Replacement

3.5.2.1 Tools required

- Small crosshead screwdriver

3.5.2.2 Procedure

- 1 If necessary, disconnect the scale cable assembly from the sensor module assembly (Fig. 46/A).
- 2 If necessary, disconnect any skin temperature probes from the sensor module assembly (Fig. 46/A).
- 3 Disconnect the sensor module cable from the upper shell assembly (Fig. 46/B).
- 4 Remove the sensor module cable from under the 2 clips on the hood.

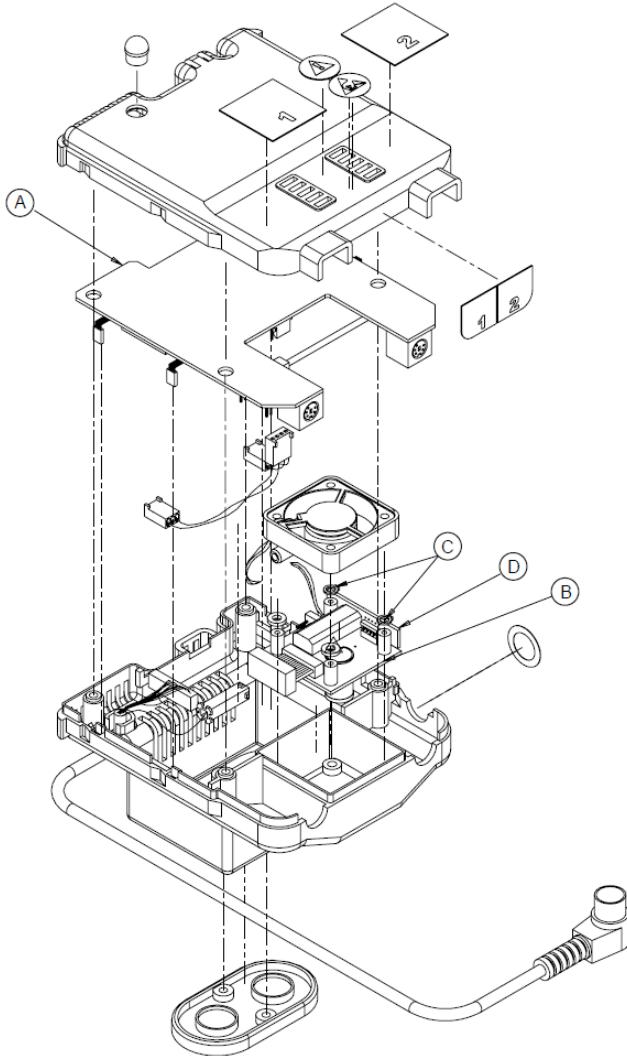


22438

Fig. 46 Sensor Module

- 5 Lower the sensor module lock (Fig. 46/C). This may be secured by a sensor module lock plate (as in (Fig. 46), or by a 100% oxygen calibration fixture (not pictured)).
- 6 Withdraw the sensor module assembly (Fig. 46/A) from the hood assembly (Fig. 46/D) until it stops.
- 7 Pull out the clip on the left side of the sensor module assembly (Fig. 46/A), and slide the sensor module assembly (Fig. 46/A) out of the hood assembly (Fig. 46/D).
- 8 Cut all labels that cross the seam of the Sensor Module along that seam.

- 9 Open the Sensor Module.
- 10 Partially remove the main PCB, and disconnect the ribbon cable.
- 11 Remove the Connector PCB (including fan) (Fig. 47/B) from the Sensor Module.
Note the position and orientation of 2 tabbed washers (Fig. 47/C).



31791

Fig. 47 Sensor Module

- 12 If the fan has a connector, disconnect it, install the replacement fan, and skip to reassembly.
- 13 If the fan is soldered in, remove and retain the Humidity PCB (if present) (Fig. 47/D) from the Connector PCB (Fig. 47/B).
- 14 Discard the Connector PCB (including fan) (Fig. 47/B).
- 15 Install the Humidity PCB (if present) (Fig. 47/D) into the new Connector PCB (including fan) (Fig. 47/B).
- 16 Install the new Connector PCB (Fig. 47/B) into the Sensor Module.
- 17 Reassemble by reversing the order of disassembly.

18 To ensure proper operation of the Isolette® Infant Incubator, perform the "Electrical safety tests" and the "Function Checks" according to the Test Instructions.

3.6 Controller Fan

3.6.1 Notes/Safety instructions

CAUTION

Electrostatic discharge!

Electrostatic discharge may damage electrostatic sensitive devices.

When handling electrostatic sensitive devices, use an anti-static mat and wrist strap.

3.6.2 Replacement

3.6.2.1 Tools required

- Cross head screwdriver
- Small flat screwdriver
- 7/32 inch socket or flat wrench

3.6.2.2 Procedure

1 CAUTION

Unplug the unit from its power source. Failure to do so could result in personal injury or equipment damage.

Unplug the unit from its power source.

- 2 From under the upper shell assembly (Fig. 48/A), perform the following:
 - Disconnect the AC power cord from its connector (Fig. 48/B) on the back of the controller assembly (Fig. 48/C).
 - If necessary, disconnect the cable attached to the RS-232 port (Fig. 48/D).
 - Remove and retain the two wing nuts (Fig. 48/E) and flat washers located next to the AC power connector (Fig. 48/B) and the RS-232 port (Fig. 48/D).

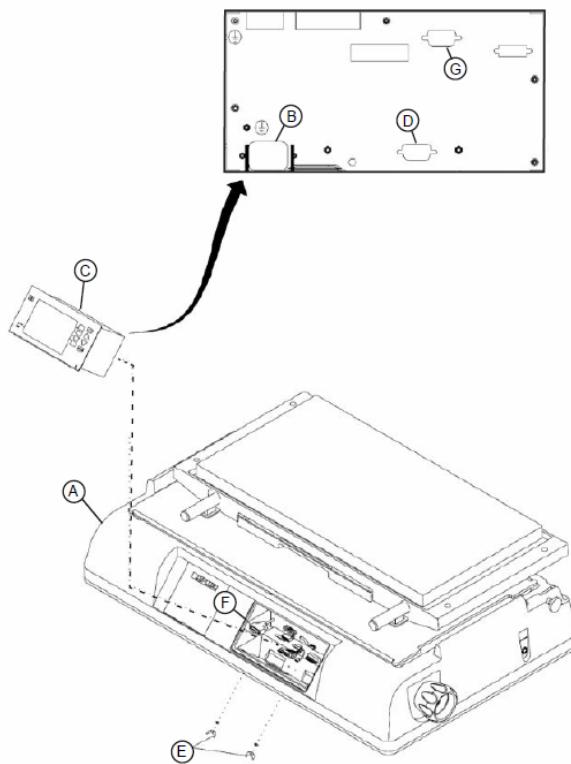


Fig. 48 Controller

- 3 Slide the controller assembly (Fig. 48/C) out from the upper shell assembly (Fig. 48/A) until its cable connectors are visible.
- 4 Disconnect the cables from the controller assembly (Fig. 48/C).
- 5 Remove the controller assembly (Fig. 48/C) from the upper shell assembly (Fig. 48/A).
- 6 Remove the four screws (Fig. 49/A) that secure the LC display front panel assembly (Fig. 49/B) to the controller assembly (Fig. 49/C).

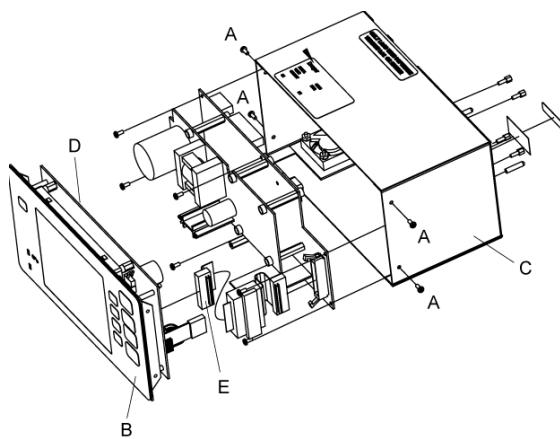
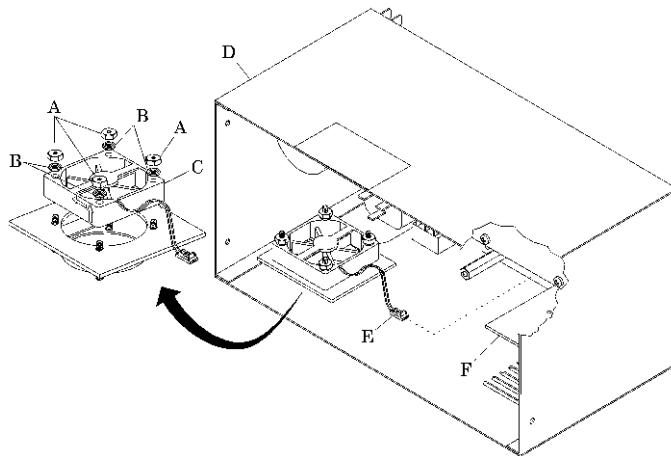


Fig. 49 LC Display Front Panel

- 7 Slide the LC display front panel assembly (Fig. 49/B) out of the controller assembly (Fig. 49/C), and disconnect ribbon cable assembly (Fig. 49/E) from the interface PCB.
- 8 Remove the LC display front panel assembly (Fig. 49/B) from the controller assembly (Fig. 49/C).
- 9 Using a 7/32" socket wrench, remove the four hex nuts (Fig. 50/A) and the four O-rings (Fig. 50/B) that secure the fan assembly (Fig. 50/C) to the controller assembly (Fig. 50/D).



22473

Fig. 50 Controller Fan Assembly

- 10 Disconnect the fan assembly cable (Fig. 50/E) from the interface/power supply module (Fig. 50/F).
- 11 Remove and discard the fan assembly (Fig. 50/C) from the controller assembly (Fig. 50/D).

CAUTION

When reconnecting the rear panel connectors, connect the sensor module-to-connector cable assembly to the sensor module connector **only**. Do **not** connect the sensor module cable to the RS-232 connector. Equipment damage could occur.

- 12 Reassemble by reversing the order of disassembly.
- 13 To ensure proper operation of the Isolette® Infant Incubator, perform the "Electrical safety tests" and the "Function Checks" according to the Test Instructions.

3.7 O₂ Membrane and Filters

3.7.1 Notes/Safety instructions

CAUTION

Electrostatic discharge!

Electrostatic discharge may damage electrostatic sensitive devices.

When handling electrostatic sensitive devices, use an anti-static mat and wrist strap.

- i** Older Isolette® (pre-2007) have a "Check Valve", for fresh air, with 2 O₂ inlet hoses, and a metal body. Newer Isolette® (2007 thru 2016) have a "Fresh Air Valve", with 1 O₂ inlet hose and a metal body. Isolette® after 2016 have a "Fresh Air Valve", with 1 O₂ inlet hose and a molded body. All these versions are referred to here as "Fresh Air Valve". The figures are generic to all 3 versions.

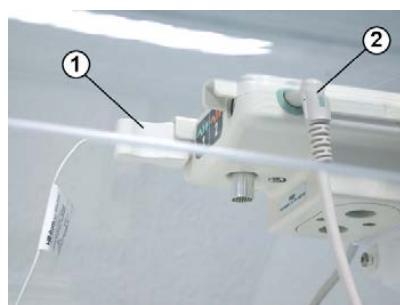
3.7.2 Replacement

3.7.2.1 Tools required

- Pliers
- Small flat head screwdriver
- Cross head screwdriver
- Retaining ring pliers

3.7.2.2 Procedure

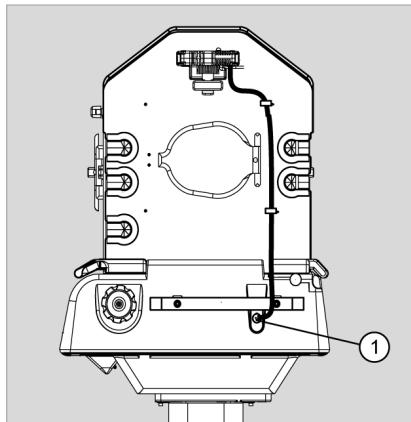
- 1 Unplug the unit from its power source.
- 2 Disconnect any oxygen sources and remove any equipment from shelves or IV poles.
- 3 If necessary, disconnect the scale cable assembly from the sensor module assembly (Fig. 51/2).



2878

Fig. 51 Sensor module: Connectors for skin temperature sensor and scale

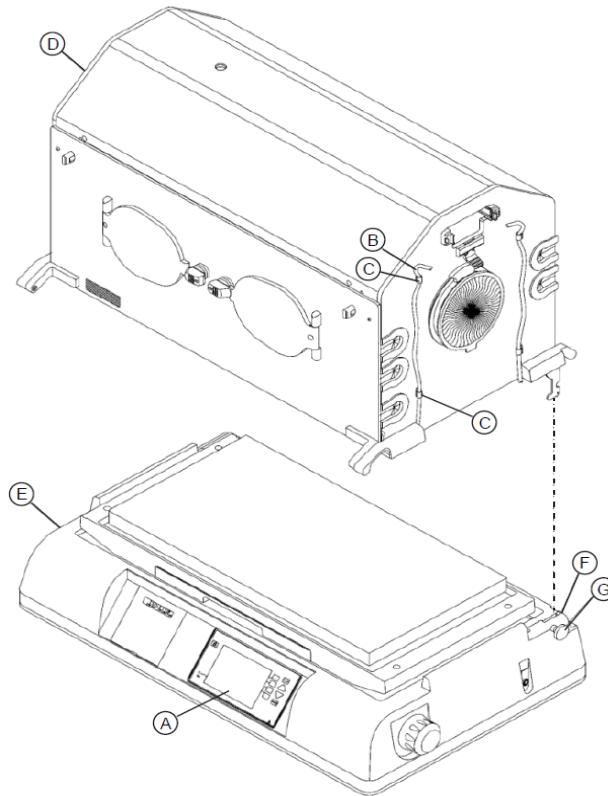
- 4 Disconnect the sensor module cable (Fig. 52/1) from the upper shell assembly.



2875

Fig. 52 Side view of Isolette®: sensor module connector

- 5 Unplug the power cord from the back of the controller assembly (Fig. 53/A).
- 6 If installed, remove the scale connector cable (Fig. 53/B) from the cable clamps (Fig. 53/C) on the end of the hood assembly (Fig. 53/D).



22440

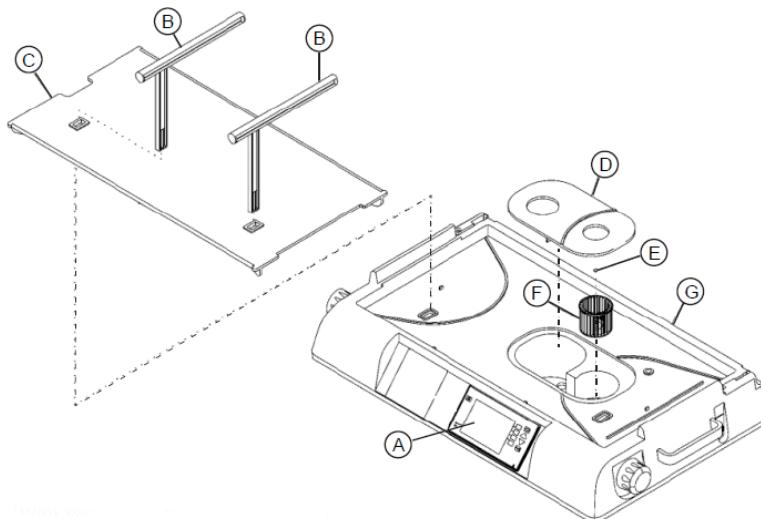
Fig. 53 Hood Assembly

- 7 Tilt the hood assembly (Fig. 53/D) back until it is fully open.

CAUTION

Two people are required to lift the hood assembly. Failure to use at least two people could result in personal injury or equipment damage.

- 8** Stand one person behind the incubator at each end of the hood assembly (Fig. 53/D), and have each person lift their end of the hood assembly (Fig. 53/D) straight up from the upper shell assembly (Fig. 53/E). The person at the sensor module end of the hood assembly (Fig. 53/D) **must** release the knob (Fig. 53/G) while lifting.
- 9** Carefully remove the hood assembly (Fig. 53/D) from the unit.
- 10** Remove the mattress, mattress tray, X-ray tray, and scale (if present) by lifting the mattress tray straight up.
- 11** Pull the two mattress tilt bars (Fig. 54/B) up through the main deck (Fig. 54/C), and remove them from the unit.

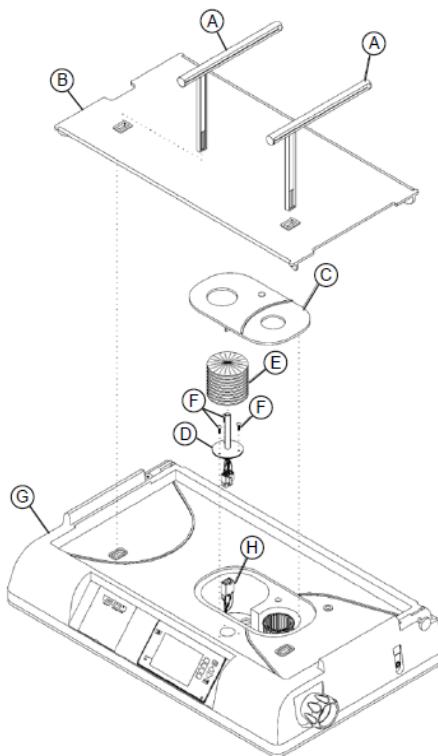


22443

Fig. 54 Impeller Assembly

- 12** Remove the main deck (Fig. 54/C) from the unit.
- 13** Remove the heater/impeller cover (Fig. 54/D) from the unit.
- 14** Using pliers, remove the wire hose clamp (Fig. 54/E) (if present) that secures the impeller assembly (Fig. 54/F) to the upper shell assembly (Fig. 54/G).
- 15** Remove the impeller assembly (Fig. 54/F) from the upper shell assembly (Fig. 54/G).

16 Allow 45 minutes for the heater assembly (Fig. 55/D) to cool.



22477

Fig. 55 Heater assembly

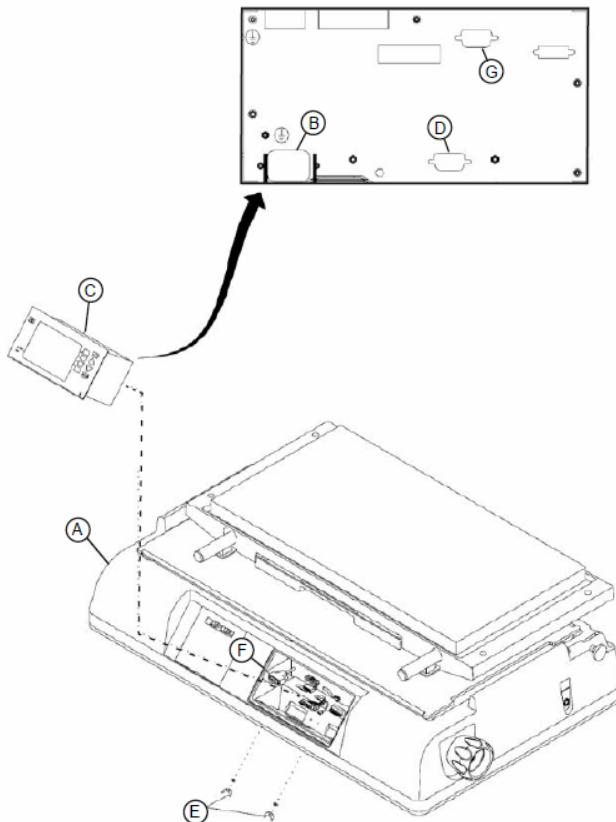
17 Remove the heater radiator (Fig. 55/E) from the heater assembly (Fig. 55/D).

CAUTION

Unplug the unit from its power source. Failure to do so could result in personal injury or equipment damage.

18 From under the upper shell assembly (Fig. 56/A), perform the following:

- Disconnect the AC power cord from its connector (Fig. 56/B) on the back of the controller assembly (Fig. 56/C).
- If necessary, disconnect the cable attached to the RS-232 port (Fig. 56/D).
- Remove and retain the two wing nuts and flat washers (Fig. 56/E) located next to the AC power connector (Fig. 56/B) and the RS-232 port (Fig. 56/D).



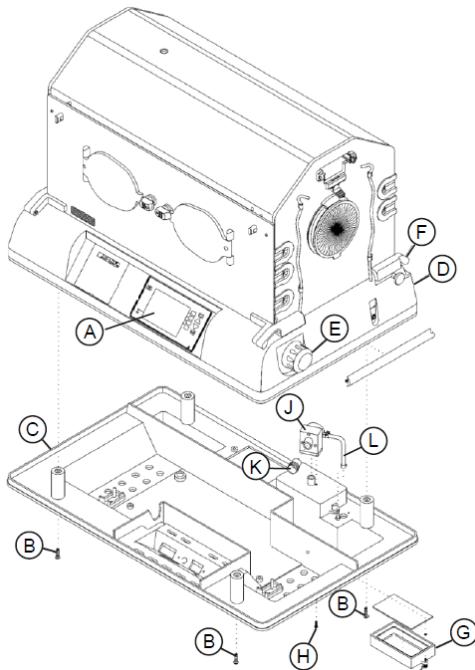
31657

Fig. 56 Controller

- 19** Slide the controller assembly (Fig. 56/C) out from the upper shell assembly (Fig. 56/A) until its cable connectors are visible.
- 20** Disconnect the cables from the controller assembly (Fig. 56/C).
- 21** Remove the controller assembly (Fig. 56/C) from the upper shell assembly (Fig. 56/A).
- 22** If the unit is equipped with a humidity system, remove the reservoir.

23 Remove and retain the four Nylok® screws (Fig. 57/B) that secure the shell bottom (Fig. 57/C) to the upper shell assembly (Fig. 57/D).

 When reinstalling, apply fresh Loctite 242 to the screws.



22441

Fig. 57 Upper Shell Assembly

24 If present, remove the blue bumper gasket that separates the upper and lower shells.

25 Stand at the same end of the upper shell assembly (Fig. 57/D) as the controller (Fig. 57/A) and perform the following:

- Using the mattress tilt knob (Fig. 57/E) and the rear hood hinge (Fig. 57/F), lift the upper shell assembly (Fig. 57/D) enough to access the corrugated hose (Fig. 57/K) at the fresh air valve (Fig. 57/J).
- Using pliers, disconnect the corrugated hose (Fig. 57/K) from upper shell assembly.
- Carefully remove the upper shell assembly (Fig. 57/D) from the shell bottom (Fig. 57/C) and place it upside down on a flat, padded surface.

- 26 Using pliers, disconnect the braided hose (Fig. 58/L) from the servo oxygen assembly (if present) or the oxygen inlet fitting (if present).
- 27 Remove the air intake microfilter cover (Fig. 58/G) and the air filter.

22441

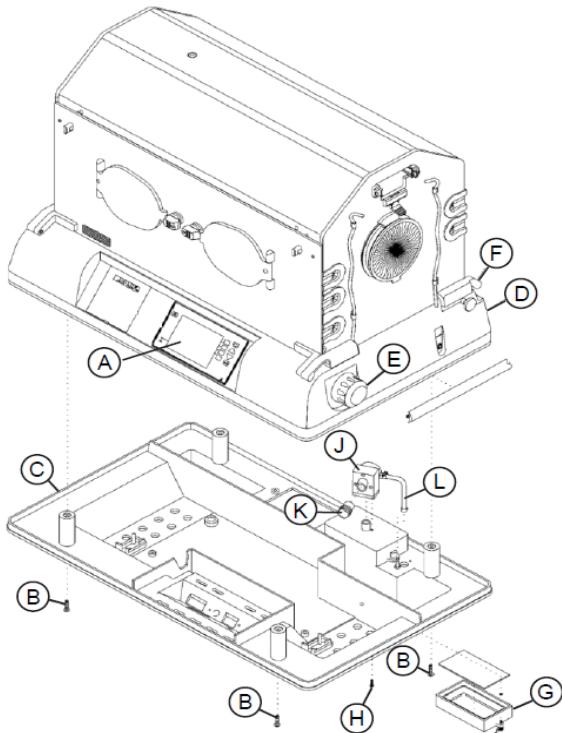


Fig. 58 Fresh Air Valve Assembly

- 28 Remove the screw (Fig. 58/H) that secures the fresh air valve assembly (Fig. 58/J) to the shell bottom (Fig. 58/C). **The screw (Fig. 58/H) should be reused, but with a new application of Loctite 242.**
- 29 Remove the fresh air valve assembly (Fig. 58/J) from the shell bottom (Fig. 58/C).
- 30 Remove and retain 3 screws holding the chamber to the valve body.
- 31 Remove and retain the chamber.
- 32 Note the position and folding of the diaphragm, and remove the diaphragm assembly.
- 33 Using retaining ring pliers, remove and retain the "C" type retaining ring. Remove and discard the 3 filter disks.
- 34 Remove and retain the internal tooth retaining ring and the nylon washer.
- 35 Remove and discard the old diaphragm.
- 36 Reassemble by reversing the order of disassembly, installing 3 new filter disks and the new diaphragm. Ensure the smooth motion of the diaphragm assembly within the valve body before reassembly.
- 37 To ensure proper operation of the Isolette® Infant Incubator, perform the "Electrical safety tests" and the "Function Checks" according to the Test Instructions.

4

Parts catalog

Parts catalog

This chapter contains a list of the device's orderable parts.

4.1

Isolette® C2000



Parts catalog

Isolette C2000

Revision: 14
6016.036

Parts catalog
Isolette C2000

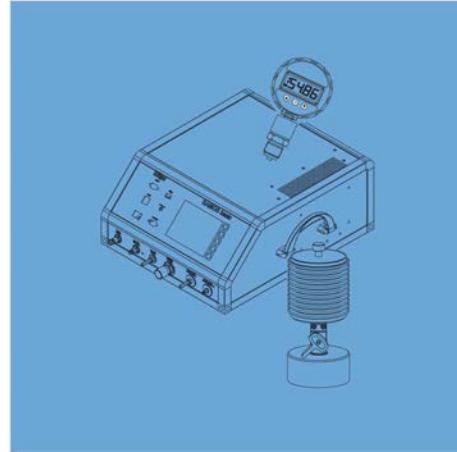
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	MX46532	<input type="checkbox"/>	Tools		St	
	MX46482	<input type="checkbox"/>	Products concerned		St	
	MX46486	<input type="checkbox"/>	Basic Unit		St	
	MX46484	<input type="checkbox"/>	Modification kits/Options		St	
	MX46483	<input type="checkbox"/>	Maintenance parts/Service kits		St	
	MX46485	<input type="checkbox"/>	Accessories/Consumables		St	
	MX46533	<input type="checkbox"/>	Manuals/Techn. Documentation		St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Tools



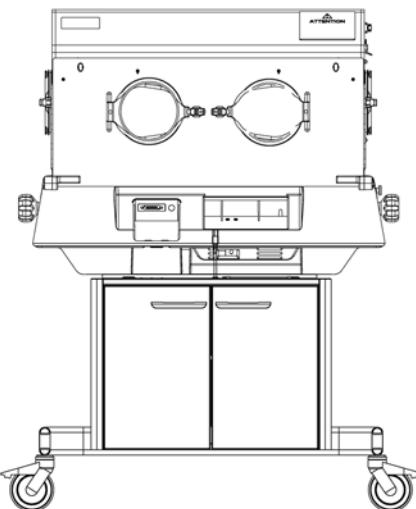
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	MU01732	<input checked="" type="checkbox"/>	Test weight	1.000	St	
	7910594	<input checked="" type="checkbox"/>	VDE tester GMC Secutest 0751	1.000	St	
	7910980	<input checked="" type="checkbox"/>	Temperature-humidity meter set	1.000	St	
	MU13549	<input checked="" type="checkbox"/>	Cable assembly, programming	1.000	St	
	7911955	<input checked="" type="checkbox"/>	MX 300-i Oxygen Monitor	1.000	St	
	7901161	<input checked="" type="checkbox"/>	Flowm., bl. , 0.02 - 14 L/min.	1.000	St	
	7911370	<input checked="" type="checkbox"/>	Spring balance with press. kit	1.000	St	
	MU14789	<input checked="" type="checkbox"/>	WRENCH,L,3/8 HEX,BALL END STUB	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

3/115

Parts catalog
Products concerned



Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

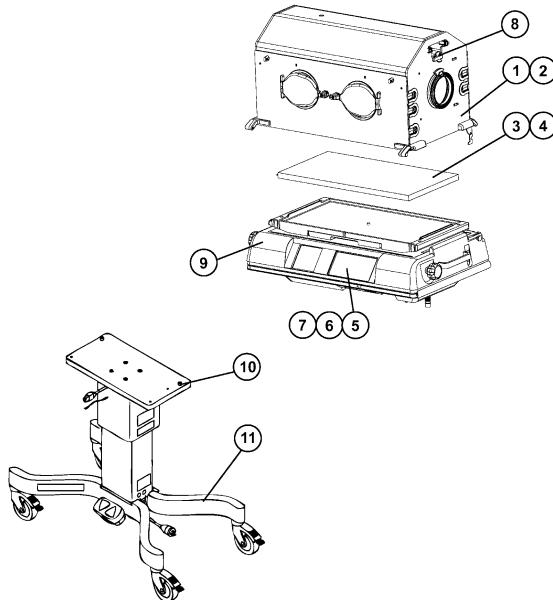
Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
MU20500		<input checked="" type="checkbox"/>	C2000 Isolette	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

4/115

Parts catalog
Basic Unit



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Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

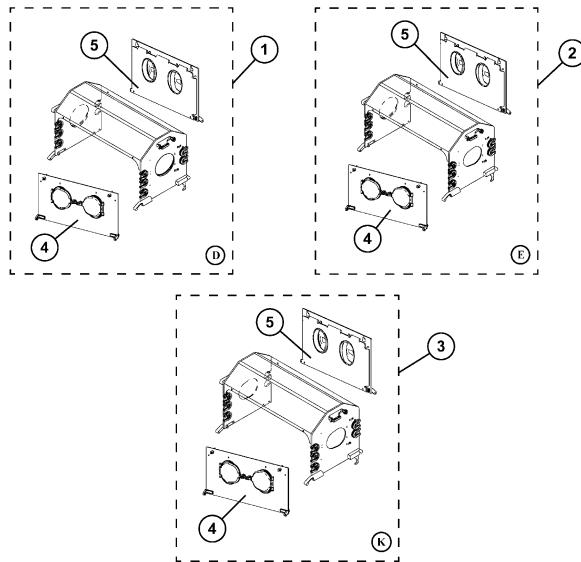
Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
1	MQ50484	<input type="checkbox"/>	Hoods with 2 Access Panels	1.000	St	not for order, available parts see assembly
2	MQ50486	<input type="checkbox"/>	Hood with 1 Access Panel	1.000	St	not for order, available parts see assembly
3	MQ50232	<input type="checkbox"/>	Mattress Tray	1.000	St	not for order, available parts see assembly
4	MQ50233	<input type="checkbox"/>	Mattress Tray	1.000	St	not for order, available parts see assembly
5	MQ50469	<input type="checkbox"/>	Controller C2000 LCD,not ROHS	1.000	St	not for order, available parts see assembly
6	MQ50555	<input type="checkbox"/>	Controller C2000 LCD-ROHS	1.000	St	not for order, available parts see assembly
7	MQ50473	<input type="checkbox"/>	Controller C2000 EL	1.000	St	not for order, available parts see assembly
8	MQ50565	<input type="checkbox"/>	Sensor modules C2000	1.000	St	not for order, available parts see assembly
9	MX46503	<input type="checkbox"/>	Shell Assemblies	1.000	St	not for order, available parts see assembly
10	MX46518	<input type="checkbox"/>	Attachment Shell/Pedest.Stand	1.000	St	not for order, available parts see assembly
11	MQ50343	<input type="checkbox"/>	C2000 stands	1.000	St	not for order, available parts see assembly

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

5/115

Parts catalog
Hoods with 2 Access Panels



Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

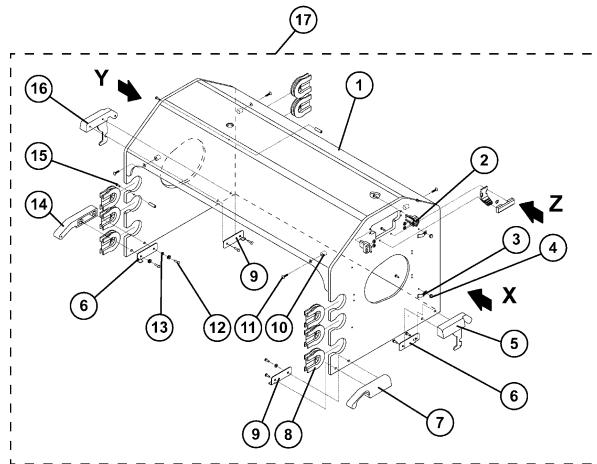
Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
1	MX46489	<input type="checkbox"/>	Hood Assy,HI,Dual Acs,ip l+r	1.000	St	not for order, available parts see assembly
2	MX46491	<input type="checkbox"/>	Hood Assy,HI,Dual Acs,ip l,d r	1.000	St	not for order, available parts see assembly
3	MQ50485	<input type="checkbox"/>	Hood,HI,dual-ACS,AD L&R	1.000	St	not for order, available parts see assembly
4	MQ50588	<input type="checkbox"/>	Front Access Panel C2	1.000	St	not for order, available parts see assembly
5	MQ50589	<input type="checkbox"/>	Rear Access Panel C2	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

6/115

Parts catalog
Hood Assy,HI,Dual Acs,ip l+r



Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

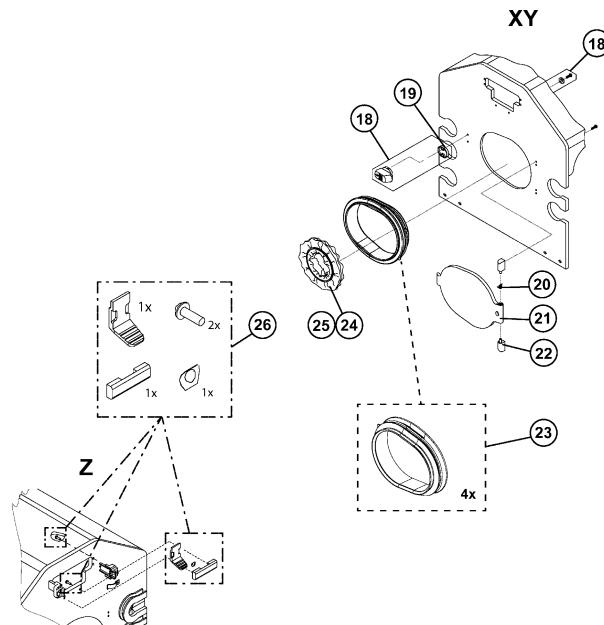
Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
0	MU13413	<input checked="" type="checkbox"/>	X-ray tray label/non slip	1.000	St	
0	MU15147	<input checked="" type="checkbox"/>	Scr,6-32X5/8 PN PH SS Nylok	4.000	St	
0	MU05562	<input checked="" type="checkbox"/>	Cover,screw,LT Gray,1/4-20 PN	1.000	St	
1	MU12632	<input checked="" type="checkbox"/>	Hood,HI,dual access,IP L&R	1.000	St	
2	MU12626	<input checked="" type="checkbox"/>	Slide assy,sensor module	2.000	St	
3	MU11061	<input checked="" type="checkbox"/>	Clamp,Cable,Spr Ty,Ny .38ID	2.000	St	
4	MU15421	<input checked="" type="checkbox"/>	Nut,acorn,6-32 AL	2.000	St	
5	MU12603	<input checked="" type="checkbox"/>	Hinge,hood/acs PNL,right rear	1.000	St	
6	MU12607	<input checked="" type="checkbox"/>	Plate,backup hinge, LF RR	2.000	St	
7	MU12600	<input checked="" type="checkbox"/>	Hinge,hood/access PNL,right FR	1.000	St	
8	MU12609	<input checked="" type="checkbox"/>	Grommet_access	10.000	St	
9	MU12608	<input checked="" type="checkbox"/>	Plate,backup hinge, LR RF	2.000	St	
10	MU12716	<input checked="" type="checkbox"/>	Spacer,6-32ID .31OD .38L ACTL	4.000	St	
11	MU15129	<input checked="" type="checkbox"/>	Scr,6-32x7/16,FL PH SS	4.000	St	
12	MU15559	<input checked="" type="checkbox"/>	Wshr,FL,	1.000	St	
13	MU05563	<input checked="" type="checkbox"/>	Base,screw,1/4-20 PN	2.000	St	
14	MU12601	<input checked="" type="checkbox"/>	Hinge,hood/access PNL,left FR	1.000	St	
15	MU15141	<input checked="" type="checkbox"/>	Scr,6-32x9/16 TR PH SS	2.000	St	
16	MU12602	<input checked="" type="checkbox"/>	Hinge,hood/acs PNL,left rear	1.000	St	
17	MU12660	<input checked="" type="checkbox"/>	Hood assy,HI,dual ACS,IPL&R	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Hood Assy,HI,Dual Acs,ip l+r



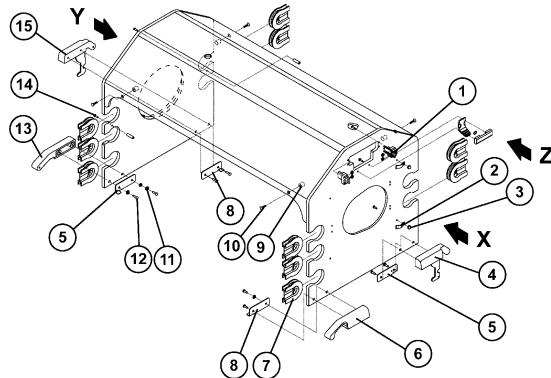
Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
18	MU06573	<input checked="" type="checkbox"/>	Ring assy,Iris port,lg flange	2.000	St	
19	MU06545	<input checked="" type="checkbox"/>	Ring,retaining, Iris port, clear	2.000	St	
20	MU06571	<input type="checkbox"/>	Iris port cuffs,disp,soft,100	2.000	St	wahlweise/optional;
21	MU13461	<input checked="" type="checkbox"/>	Sensor module look kit, Isolette	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000

Revision: 14

Parts catalog
Hood Assy,Hi,Dual Acs,ip l,d r



Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

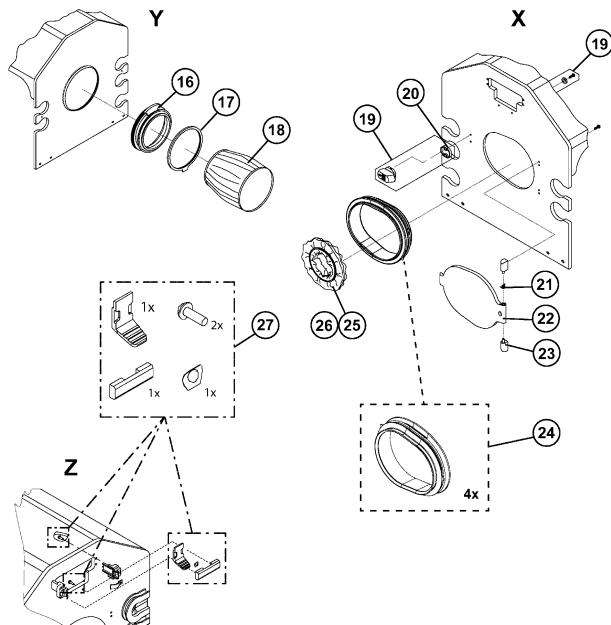
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
0	MU15147	<input checked="" type="checkbox"/>	Scr,6-32X5/8 PN PH SS Nylok	4.000	St	
1	MU12626	<input checked="" type="checkbox"/>	Slide assy,sensor module	2.000	St	
2	MU11061	<input checked="" type="checkbox"/>	Clamp,Cable,Spr Ty,Ny .38ID	2.000	St	
3	MU15421	<input checked="" type="checkbox"/>	Nut,acorn,6-32 AL	2.000	St	
4	MU12603	<input checked="" type="checkbox"/>	Hinge,hood/acs PNL,right rear	1.000	St	
5	MU12607	<input checked="" type="checkbox"/>	Plate,backup hinge, LF RR	2.000	St	
6	MU12600	<input checked="" type="checkbox"/>	Hinge,hood/access PNL,right FR	1.000	St	
7	MU12609	<input checked="" type="checkbox"/>	Grommet_access	10.000	St	
8	MU12608	<input checked="" type="checkbox"/>	Plate,backup hinge, LR RF	2.000	St	
9	MU12716	<input checked="" type="checkbox"/>	Spacer,6-32ID .31OD .38L ACTL	4.000	St	
10	MU15129	<input checked="" type="checkbox"/>	Scr,6-32x7/16,FL PH SS	4.000	St	
11	MU15559	<input checked="" type="checkbox"/>	Wshr,FL,	1.000	St	
12	MU05563	<input checked="" type="checkbox"/>	Base,screw,1/4-20 PN	2.000	St	
13	MU12601	<input checked="" type="checkbox"/>	Hinge,hood/access PNL,left FR	1.000	St	
14	MU15141	<input checked="" type="checkbox"/>	Scr,6-32x9/16 TR PH SS	2.000	St	
15	MU12602	<input checked="" type="checkbox"/>	Hinge,hood/acs PNL,left rear	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Hood Assy,Hi,Dual Acs,ip l,d r



Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
16	MU06573	<input checked="" type="checkbox"/>	Ring assy,Iris port,lg flange	1.000	St	
17	MU06545	<input checked="" type="checkbox"/>	Ring,retaining, Iris port, clear	1.000	St	
18	MU06571	<input type="checkbox"/>	Iris port cuffs,disp,soft,100	1.000	St	wahlweise/optional;
19	MU13393	<input checked="" type="checkbox"/>	Repl kit,access door latch	1.000	St	
20	MU12687	<input checked="" type="checkbox"/>	Latch mounting,access door	1.000	St	
21	MU08164	<input checked="" type="checkbox"/>	Spring,Trsn.,270OD,.030W,.365L	1.000	St	
22	MU12677	<input checked="" type="checkbox"/>	Door_access_Isolette	1.000	St	
23	MU08163	<input checked="" type="checkbox"/>	Pivot hinge	2.000	St	
24	MU22201	<input checked="" type="checkbox"/>	Kit Gasket Port Door Non Drip	1.000	St	
25	MU06570	<input checked="" type="checkbox"/>	Acs port cuffs,0V,repl,box/100	1.000	St	
26	MU12702	<input checked="" type="checkbox"/>	Cuff,ACS door,reuse,ISO,Box/10	1.000	St	wahlweise/optional;
27	MU13461	<input checked="" type="checkbox"/>	Sensor module look kit, Isolette	1.000	St	

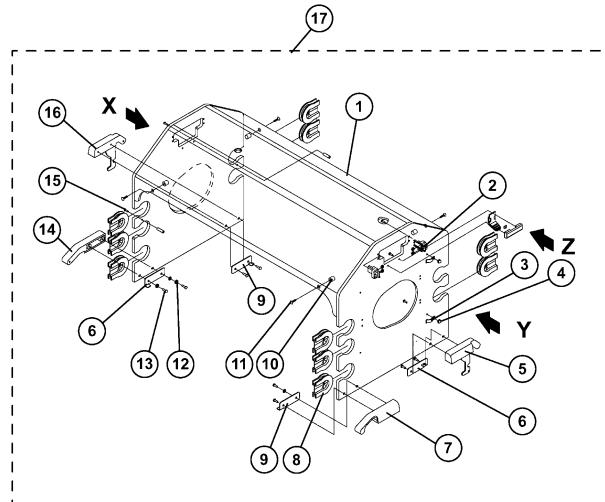
Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000

Revision: 14

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Parts catalog
Hood,HI,dual-ACS,AD L&R



Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

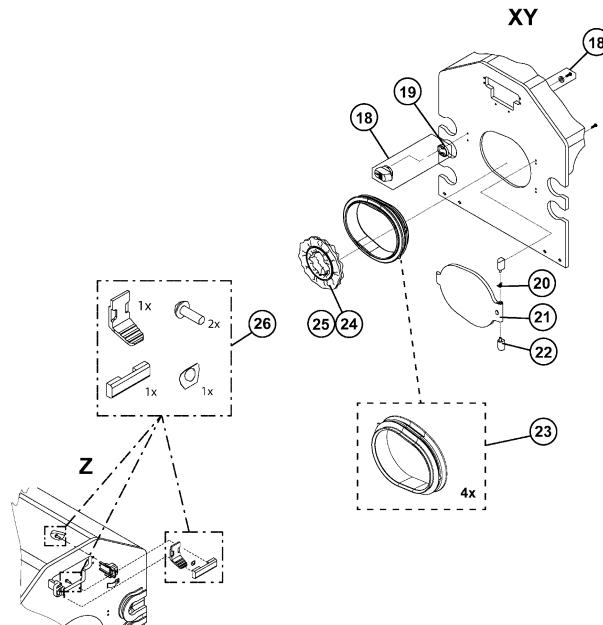
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
0	MU05562	<input checked="" type="checkbox"/>	Cover,screw,LT Gray, 1/4-20 PN	1.000	St	
0	MU15147	<input checked="" type="checkbox"/>	Scr,6-32X5/8 PN PH SS Nylok	1.000	St	
0	MU13413	<input checked="" type="checkbox"/>	X-ray tray label/non slip	1.000	St	
1	MU12644	<input checked="" type="checkbox"/>	Hood,HI,dual access,AD L&R	1.000	St	
2	MU12626	<input checked="" type="checkbox"/>	Slide assy,sensor module	1.000	St	
3	MU11061	<input checked="" type="checkbox"/>	Clamp,Cable,Spr Ty,Ny .38ID	1.000	St	
4	MU15421	<input checked="" type="checkbox"/>	Nut,acorn,6-32 AL	1.000	St	
5	MU12603	<input checked="" type="checkbox"/>	Hinge,hood/acs PNL,right rear	1.000	St	
6	MU12607	<input checked="" type="checkbox"/>	Plate,backup hinge, LF RR	1.000	St	
7	MU12600	<input checked="" type="checkbox"/>	Hinge,hood/access PNL,right FR	1.000	St	
8	MU12609	<input checked="" type="checkbox"/>	Grommet_access	1.000	St	
9	MU12608	<input checked="" type="checkbox"/>	Plate,backup hinge, LR RF	1.000	St	
10	MU12716	<input checked="" type="checkbox"/>	Spacer,6-32ID .31OD .38L ACTL	1.000	St	
11	MU15129	<input checked="" type="checkbox"/>	Scr,6-32x7/16,FL PH SS	1.000	St	
12	MU15559	<input checked="" type="checkbox"/>	Wshr,FL,	1.000	St	
13	MU05563	<input checked="" type="checkbox"/>	Base,screw,1/4-20 PN	1.000	St	
14	MU12601	<input checked="" type="checkbox"/>	Hinge,hood/access PNL,left FR	1.000	St	
15	MU15141	<input checked="" type="checkbox"/>	Scr,6-32x9/16 TR PH SS	1.000	St	
16	MU12602	<input checked="" type="checkbox"/>	Hinge,hood/acs PNL,left rear	1.000	St	
17	MU12664	<input checked="" type="checkbox"/>	Hood assy HI dual ACS ADL&R	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

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Parts catalog
Hood,HI,dual-ACS,AD L&R



Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
18	MU13393	<input checked="" type="checkbox"/>	Repl kit,access door latch	1.000	St	
19	MU12687	<input checked="" type="checkbox"/>	Latch mounting,access door	1.000	St	
20	MU08164	<input checked="" type="checkbox"/>	Spring,Trsn.,.270OD,.030W,.365L	1.000	St	
21	MU12677	<input checked="" type="checkbox"/>	Door_access_Isolette	1.000	St	
22	MU08163	<input checked="" type="checkbox"/>	Pivot hinge	1.000	St	
23	MU22201	<input checked="" type="checkbox"/>	Kit Gasket Port Door Non Drip	1.000	St	
24	MU06570	<input checked="" type="checkbox"/>	Acs port cuffs,0V,repl,box/10	1.000	St	
25	MU12702	<input checked="" type="checkbox"/>	Cuff,ACS door,reuse,ISO,Box/10	1.000	St	
26	MU13461	<input checked="" type="checkbox"/>	Sensor module look kit, Isolette	1.000	St	

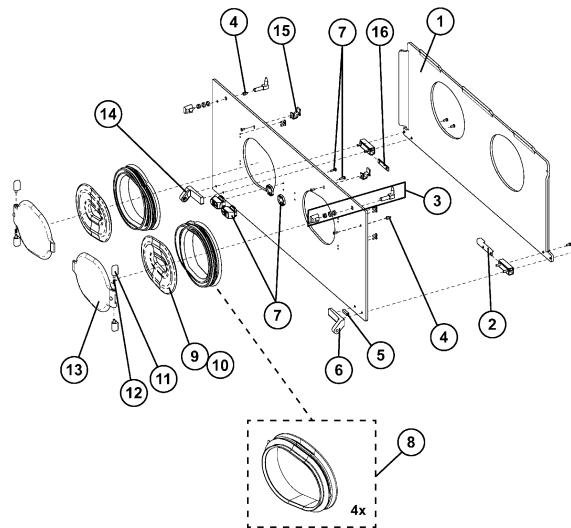
Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000

Revision: 14

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Parts catalog
Front Access Panel C2



Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

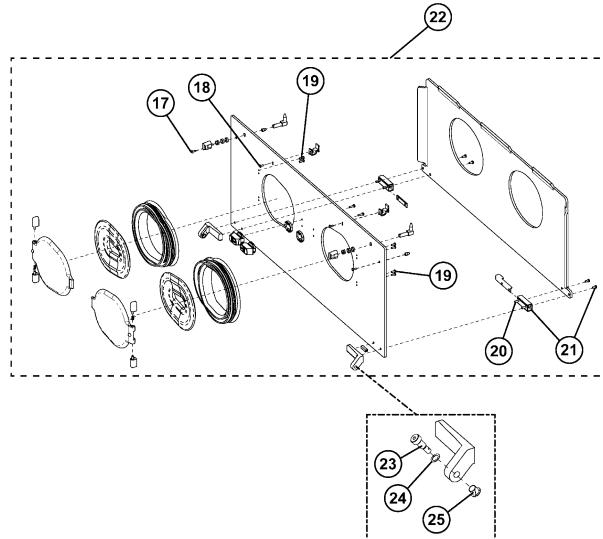
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
1	MU12258	<input checked="" type="checkbox"/>	Repl heat shield,ACS PNL,PAWL	1.000	St	
2	MU12684	<input checked="" type="checkbox"/>	Bracket,heat shield,front	1.000	St	
3	MU08534	<input checked="" type="checkbox"/>	Knob & latch repl kit, ACS PNL	2.000	St	
4	MU12717	<input checked="" type="checkbox"/>	Spacer,6-32,.31OD,.50LG	2.000	St	
5	MU12697	<input checked="" type="checkbox"/>	Magnet,.25SQ X 1.00lg ALNICO	1.000	St	
6	MU12694	<input checked="" type="checkbox"/>	HINGE,ACCESS PANEL,RIGHT FRONT	1.000	St	
7	MU13393	<input checked="" type="checkbox"/>	Repl kit,access door latch	2.000	St	
8	MU22201	<input checked="" type="checkbox"/>	Kit Gasket Port Door Non Drip	1.000	St	
9	MU12702	<input checked="" type="checkbox"/>	Cuff,ACS door,reuse,ISO,Box/10	1.000	St	wahlweise/optional;
10	MU06570	<input checked="" type="checkbox"/>	Acs port cuffs,0V,repl,box/100	1.000	St	
11	MU08163	<input checked="" type="checkbox"/>	Pivot hinge	4.000	St	
12	MU08164	<input checked="" type="checkbox"/>	Spring,Trsn.,270OD,.030W,.365L	2.000	St	
13	MU12677	<input checked="" type="checkbox"/>	Door_access_Isolette	2.000	St	
14	MU12695	<input checked="" type="checkbox"/>	HINGE,ACCESS PANEL,LEFT FRONT	1.000	St	
15	MU12681	<input checked="" type="checkbox"/>	Latch,heatshield	2.000	St	
16	MU12676	<input checked="" type="checkbox"/>	Plate,backup,hinge,heat shield	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

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Revision: 14

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Parts catalog
Front Access Panel C2



Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
17	MU15130	<input checked="" type="checkbox"/>	Scr,6-32X7/16 TR PH SS	2.000	St	
18	MU15127	<input checked="" type="checkbox"/>	Scr,6-32X3/8, TR PH SS Nylok	2.000	St	
19	MU15131	<input checked="" type="checkbox"/>	Scr,6-32X7/16,TR PH SS Nylok	8.000	St	
20	MU15248	<input checked="" type="checkbox"/>	Scr 10-32X5 8 TR PH SS Nylok	4.000	St	
21	MU13400	<input checked="" type="checkbox"/>	Kit,heat shield hinge Isolette	1.000	St	
22	MU12732	<input checked="" type="checkbox"/>	Repl access panel assy,Hl,frnt	1.000	St	
23	MU12267	<input checked="" type="checkbox"/>	Bearing,.25ID .29OD .41Flg NY	1.000	St	
24	MU15580	<input checked="" type="checkbox"/>	Wshr,Fl,.25ID .38OD .02T Ny	1.000	St	
25	MU15729	<input checked="" type="checkbox"/>	Scr,Shldr,.25D.35L 10-24SS Nlk	1.000	St	

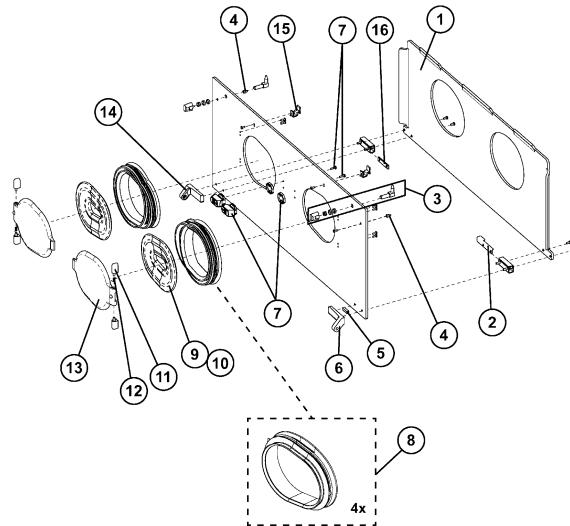
Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000

Revision: 14

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Parts catalog
Rear Access Panel C2



Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

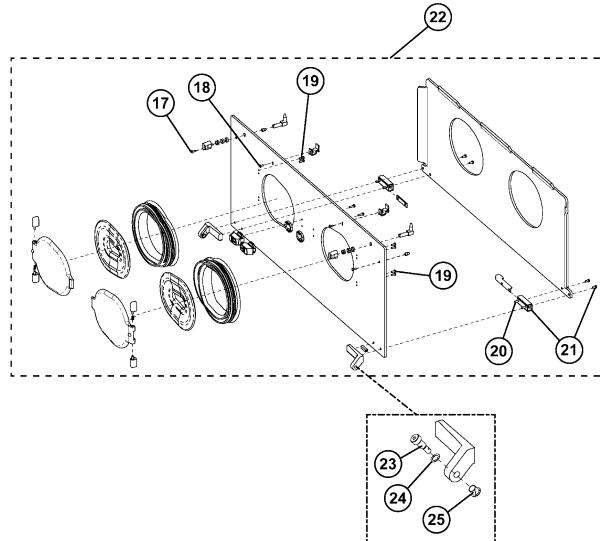
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
1	MU12258	<input checked="" type="checkbox"/>	Repl heat shield,ACS PNL,PAWL	1.000	St	
2	MU12676	<input checked="" type="checkbox"/>	Plate,backup,hinge,heat shield	1.000	St	
3	MU08534	<input checked="" type="checkbox"/>	Knob & latch repl kit, ACS PNL	1.000	St	
4	MU12717	<input checked="" type="checkbox"/>	Spacer,6-32,.31OD,.50LG	1.000	St	
5	MU12697	<input checked="" type="checkbox"/>	Magnet,.25SQ X 1.00lg ALNICO	1.000	St	
6	MU12698	<input checked="" type="checkbox"/>	HINGE, ACCESS PANEL, LEFT REAR	1.000	St	
7	MU13393	<input checked="" type="checkbox"/>	Repl kit,access door latch	1.000	St	
8	MU22201	<input checked="" type="checkbox"/>	Kit Gasket Port Door Non Drip	1.000	St	
9	MU12702	<input checked="" type="checkbox"/>	Cuff,ACS door,reuse,ISO,Box/10	1.000	St	
10	MU06570	<input checked="" type="checkbox"/>	Acs port cuffs,0V,repl,box/100	1.000	St	
11	MU08163	<input checked="" type="checkbox"/>	Pivot hinge	1.000	St	
12	MU08164	<input checked="" type="checkbox"/>	Spring,Trsn.,270OD,.030W,.365L	1.000	St	
13	MU12677	<input checked="" type="checkbox"/>	Door_access_Isolette	1.000	St	
14	MU12699	<input checked="" type="checkbox"/>	HINGE, ACCESS PANEL,RIGHT REAR	1.000	St	
15	MU12681	<input checked="" type="checkbox"/>	Latch,heatshield	1.000	St	
16	MU12685	<input checked="" type="checkbox"/>	Bracket,heat shield,rear	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Rear Access Panel C2



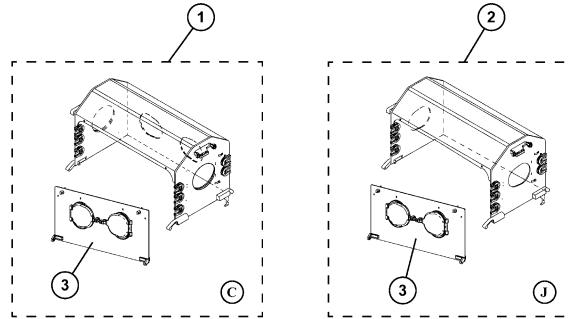
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
17	MU15130	<input checked="" type="checkbox"/>	Scr,6-32X7/16 TR PH SS	1.000	St	
18	MU15127	<input checked="" type="checkbox"/>	Scr,6-32X3/8, TR PH SS Nylok	1.000	St	
19	MU15131	<input checked="" type="checkbox"/>	Scr,6-32X7/16,TR PH SS Nylok	1.000	St	
20	MU15248	<input checked="" type="checkbox"/>	Scr 10-32X5 8 TR PH SS Nylok	1.000	St	
21	MU13400	<input checked="" type="checkbox"/>	Kit,heat shield hinge Isolette	1.000	St	
22	MU12734	<input checked="" type="checkbox"/>	Repl access panel assy,Hl,rear	1.000	St	
23	MU12267	<input checked="" type="checkbox"/>	Bearing,.25ID .29OD .41Flg NY	1.000	St	
24	MU15580	<input checked="" type="checkbox"/>	Wshr,Fl,.25ID .38OD .02T Ny	1.000	St	
25	MU15729	<input checked="" type="checkbox"/>	Scr,Shldr,.25D.35L 10-24SS Nlk	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Hood with 1 Access Panel



Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
1	MX46496	<input type="checkbox"/>	Hood Assy,HI,FrontAcs,2d,ipl+r	1.000	St	not for order,available parts,see assembly
2	MX46498	<input type="checkbox"/>	Hood Assy,HI,FrontAcs,door l+r	1.000	St	not for order,available parts,see assembly
3	MQ50588	<input type="checkbox"/>	Front Access Panel C2	1.000	St	not for order,available parts,see assembly

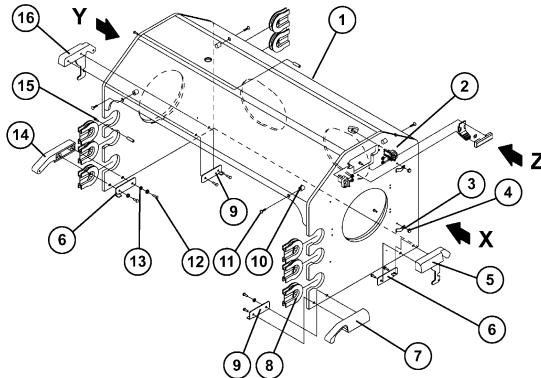
Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

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Revision: 14

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Parts catalog
Hood Assy,HI,FrontAcs,2d,ipl+r



Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

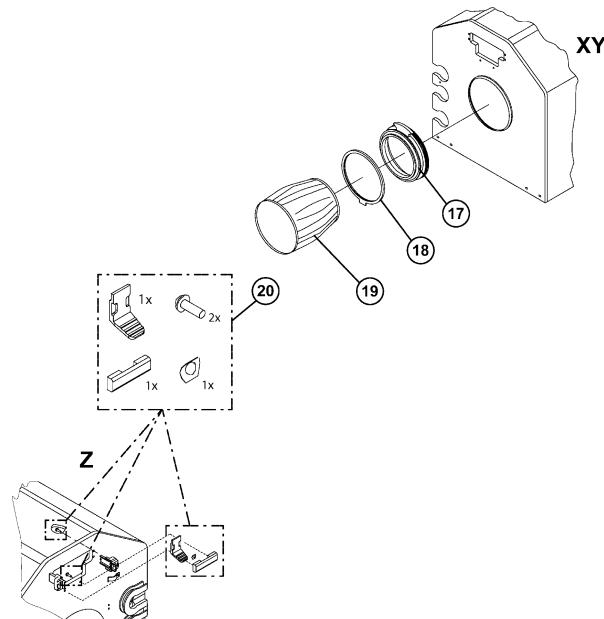
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
0	MU12258	<input checked="" type="checkbox"/>	Repl heat shield,ACS PNL,PAWL	1.000	St	
0	MU15147	<input checked="" type="checkbox"/>	Scr,6-32X5/8 PN PH SS Nylok	4.000	St	
1	MU12647	<input checked="" type="checkbox"/>	Hood HI fr ACS 2AD RR IP L&R	1.000	St	
2	MU12626	<input checked="" type="checkbox"/>	Slide assy,sensor module	2.000	St	
3	MU11061	<input checked="" type="checkbox"/>	Clamp,Cable,Spr Ty,Ny .38ID	2.000	St	
4	MU15421	<input checked="" type="checkbox"/>	Nut,acorn,6-32 AL	2.000	St	
5	MU12603	<input checked="" type="checkbox"/>	Hinge,hood/acs PNL,right rear	1.000	St	
6	MU12607	<input checked="" type="checkbox"/>	Plate,backup hinge, LF RR	2.000	St	
7	MU12600	<input checked="" type="checkbox"/>	Hinge,hood/access PNL,right FR	1.000	St	
8	MU12609	<input checked="" type="checkbox"/>	Grommet_access	6.000	St	
9	MU12608	<input checked="" type="checkbox"/>	Plate,backup hinge, LR RF	2.000	St	
10	MU12716	<input checked="" type="checkbox"/>	Spacer,6-32ID .31OD .38L ACTL	2.000	St	
11	MU15129	<input checked="" type="checkbox"/>	Scr,6-32x7/16,FL PH SS	2.000	St	
12	MU05563	<input checked="" type="checkbox"/>	Base,screw,1/4-20 PN	2.000	St	
13	MU15559	<input checked="" type="checkbox"/>	Wshr,FL,	1.000	St	
14	MU12601	<input checked="" type="checkbox"/>	Hinge,hood/access PNL,left FR	1.000	St	
15	MU15141	<input checked="" type="checkbox"/>	Scr,6-32x9/16 TR PH SS	1.000	St	
16	MU12602	<input checked="" type="checkbox"/>	Hinge,hood/acs PNL,left rear	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Hood Assy,HI,FrontAcs,2d,ipl+r



Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
17	MU06573	<input checked="" type="checkbox"/>	Ring assy,Iris port,lg flange	2.000	St	
18	MU06545	<input checked="" type="checkbox"/>	Ring,retaining, Iris port, clear	2.000	St	
19	MU06571	<input type="checkbox"/>	Iris port cuffs,disp,soft,100	1.000	St	wahlweise/optional;
20	MU13461	<input checked="" type="checkbox"/>	Sensor module look kit, Isolette	1.000	St	

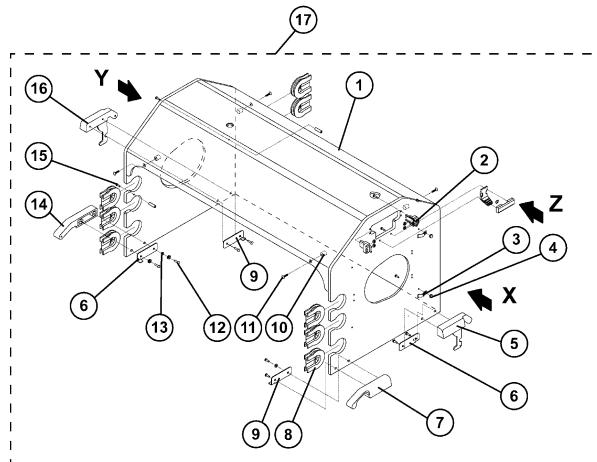
Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000

Revision: 14

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Parts catalog
Hood Assy,HI,FrontAcs,door l+r



Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
0	MU12258	<input checked="" type="checkbox"/>	Repl heat shield,ACS PNL,PAWL	1.000	St	
0	MU15147	<input checked="" type="checkbox"/>	Scr,6-32X5/8 PN PH SS Nylok	1.000	St	
0	MU13413	<input checked="" type="checkbox"/>	X-ray tray label/non slip	1.000	St	
0	MU05562	<input checked="" type="checkbox"/>	Cover,screw,LT Gray,1/4-20 PN	1.000	St	
1	MU12637	<input checked="" type="checkbox"/>	Hood,HI,fr ACS,2AD RR,AD L&R	1.000	St	
2	MU12626	<input checked="" type="checkbox"/>	Slide assy,sensor module	1.000	St	
3	MU11061	<input checked="" type="checkbox"/>	Clamp,Cable,Spr Ty,Ny .38ID	1.000	St	
4	MU15421	<input checked="" type="checkbox"/>	Nut,acorn,6-32 AL	1.000	St	
5	MU12603	<input checked="" type="checkbox"/>	Hinge,hood/acs PNL,right rear	1.000	St	
6	MU12607	<input checked="" type="checkbox"/>	Plate,backup hinge, LF RR	1.000	St	
7	MU12600	<input checked="" type="checkbox"/>	Hinge,hood/access PNL,right FR	1.000	St	
8	MU12609	<input checked="" type="checkbox"/>	Grommet_access	1.000	St	
9	MU12608	<input checked="" type="checkbox"/>	Plate,backup hinge, LR RF	1.000	St	
10	MU12716	<input checked="" type="checkbox"/>	Spacer,6-32ID .31OD .38L ACTL	1.000	St	
11	MU15129	<input checked="" type="checkbox"/>	Scr,6-32x7/16,FL PH SS	1.000	St	
12	MU05563	<input checked="" type="checkbox"/>	Base,screw,1/4-20 PN	1.000	St	
13	MU15559	<input checked="" type="checkbox"/>	Wshr,FL,	1.000	St	
14	MU12601	<input checked="" type="checkbox"/>	Hinge,hood/access PNL,left FR	1.000	St	
15	MU15141	<input checked="" type="checkbox"/>	Scr,6-32x9/16 TR PH SS	1.000	St	
16	MU12602	<input checked="" type="checkbox"/>	Hinge,hood/acs PNL,left rear	1.000	St	
17	MU12666	<input checked="" type="checkbox"/>	Hood assy,HI,fr acs,2AD ADL&R	1.000	St	

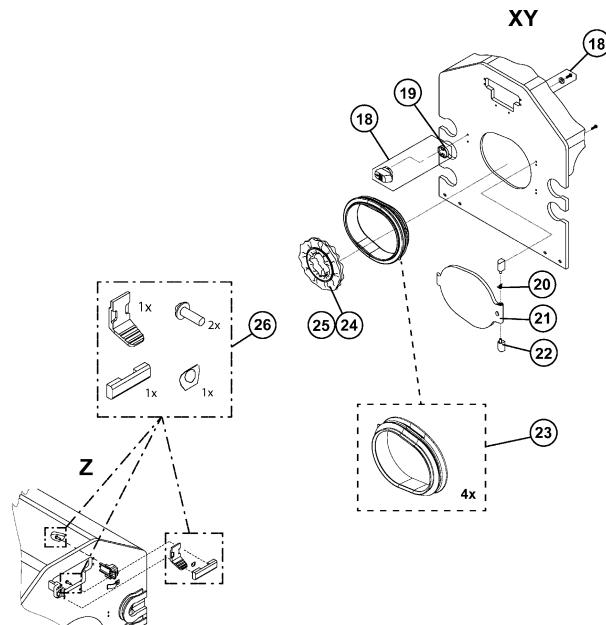
Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000

Revision: 14

20/115

Parts catalog
Hood Assy,HI,FrontAcs,door l+r



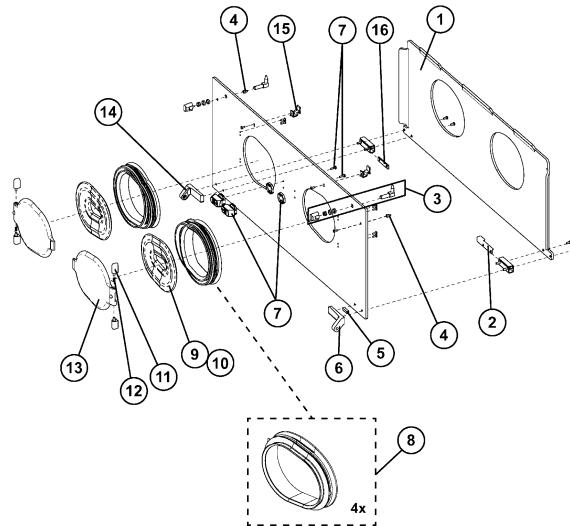
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
18	MU13393	<input checked="" type="checkbox"/>	Repl kit,access door latch	1.000	St	
19	MU12687	<input checked="" type="checkbox"/>	Latch mounting,access door	1.000	St	
20	MU08164	<input checked="" type="checkbox"/>	Spring,Trsn.,270OD,.030W.,365L	1.000	St	
21	MU12677	<input checked="" type="checkbox"/>	Door_access_Isolette	1.000	St	
22	MU08163	<input checked="" type="checkbox"/>	Pivot hinge	1.000	St	
23	MU22201	<input checked="" type="checkbox"/>	Kit Gasket Port Door Non Drip	1.000	St	
24	MU06570	<input checked="" type="checkbox"/>	Acs port cuffs,0V,repl,box/100	1.000	St	
25	MU12702	<input checked="" type="checkbox"/>	Cuff,ACS door,reuse,ISO,Box/10	1.000	St	
26	MU13461	<input checked="" type="checkbox"/>	Sensor module look kit, Isolette	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Front Access Panel C2



Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

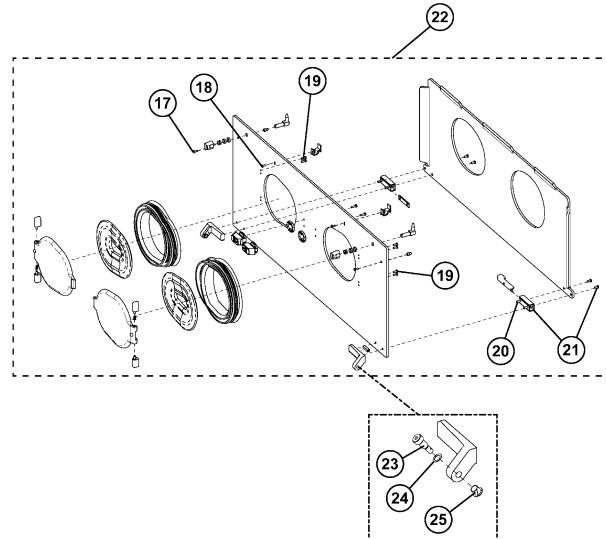
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
1	MU12258	<input checked="" type="checkbox"/>	Repl heat shield,ACS PNL,PAWL	1.000	St	
2	MU12684	<input checked="" type="checkbox"/>	Bracket,heat shield,front	1.000	St	
3	MU08534	<input checked="" type="checkbox"/>	Knob & latch repl kit, ACS PNL	2.000	St	
4	MU12717	<input checked="" type="checkbox"/>	Spacer,6-32,.31OD,.50LG	2.000	St	
5	MU12697	<input checked="" type="checkbox"/>	Magnet,.25SQ X 1.00lg ALNICO	1.000	St	
6	MU12694	<input checked="" type="checkbox"/>	HINGE,ACCESS PANEL,RIGHT FRONT	1.000	St	
7	MU13393	<input checked="" type="checkbox"/>	Repl kit,access door latch	2.000	St	
8	MU22201	<input checked="" type="checkbox"/>	Kit Gasket Port Door Non Drip	1.000	St	
9	MU12702	<input checked="" type="checkbox"/>	Cuff,ACS door,reuse,ISO,Box/10	1.000	St	wahlweise/optional;
10	MU06570	<input checked="" type="checkbox"/>	Acs port cuffs,0V,repl,box/100	1.000	St	
11	MU08163	<input checked="" type="checkbox"/>	Pivot hinge	4.000	St	
12	MU08164	<input checked="" type="checkbox"/>	Spring,Trsn.,270OD,.030W,.365L	2.000	St	
13	MU12677	<input checked="" type="checkbox"/>	Door_access_Isolette	2.000	St	
14	MU12695	<input checked="" type="checkbox"/>	HINGE,ACCESS PANEL,LEFT FRONT	1.000	St	
15	MU12681	<input checked="" type="checkbox"/>	Latch,heatshield	2.000	St	
16	MU12676	<input checked="" type="checkbox"/>	Plate,backup,hinge,heat shield	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Front Access Panel C2



Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
17	MU15130	<input checked="" type="checkbox"/>	Scr,6-32X7/16 TR PH SS	2.000	St	
18	MU15127	<input checked="" type="checkbox"/>	Scr,6-32X3/8, TR PH SS Nylok	2.000	St	
19	MU15131	<input checked="" type="checkbox"/>	Scr,6-32X7/16,TR PH SS Nylok	8.000	St	
20	MU15248	<input checked="" type="checkbox"/>	Scr 10-32X5 8 TR PH SS Nylok	4.000	St	
21	MU13400	<input checked="" type="checkbox"/>	Kit,heat shield hinge Isolette	1.000	St	
22	MU12732	<input checked="" type="checkbox"/>	Repl access panel assy,Hl,frnt	1.000	St	
23	MU12267	<input checked="" type="checkbox"/>	Bearing,.25ID .29OD .41Flg NY	1.000	St	
24	MU15580	<input checked="" type="checkbox"/>	Wshr,Fl,.25ID .38OD .02T Ny	1.000	St	
25	MU15729	<input checked="" type="checkbox"/>	Scr,Shldr,.25D.35L 10-24SS Nlk	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000

Revision: 14

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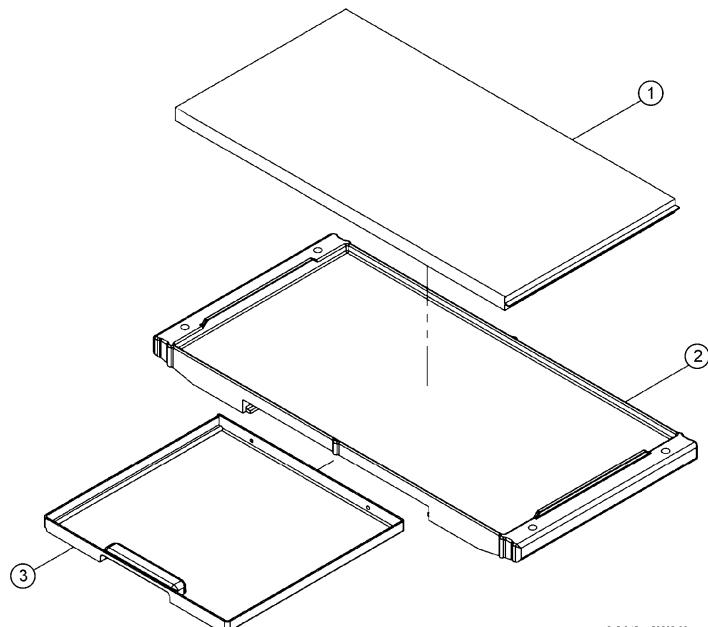
Parts catalog
Mattress Tray

fig5-045mq50232-00

Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
1	MU12249	<input checked="" type="checkbox"/>	MATTRESS, FOAM, C2000	1.000	St	
2	MU12250	<input checked="" type="checkbox"/>	Tray_mattress	1.000	St	
3	MU12252	<input checked="" type="checkbox"/>	Tray,X-ray	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Mattress Tray

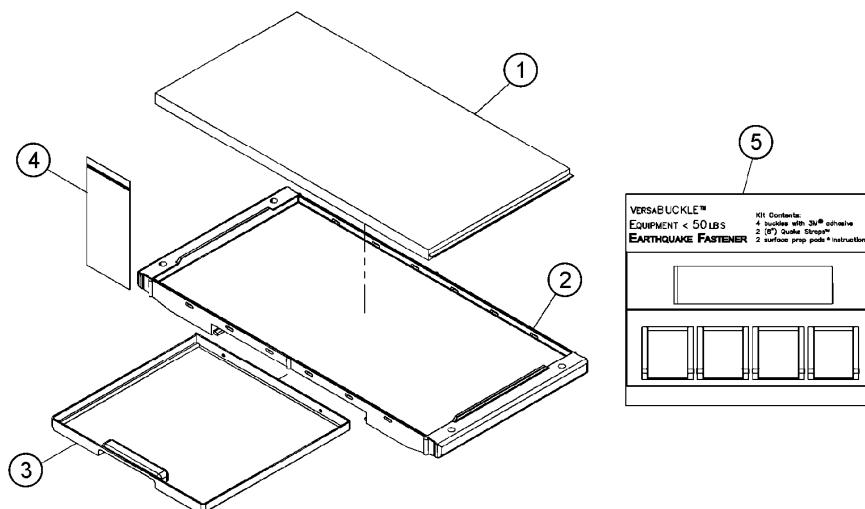


fig5-046mq50233-00

Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
1	MU12249	<input checked="" type="checkbox"/>	MATTRESS, FOAM, C2000	1.000	St	
2	MU12253	<input checked="" type="checkbox"/>	Tray_mattress,for restraints	1.000	St	
3	MU12252	<input checked="" type="checkbox"/>	Tray,X-ray	1.000	St	

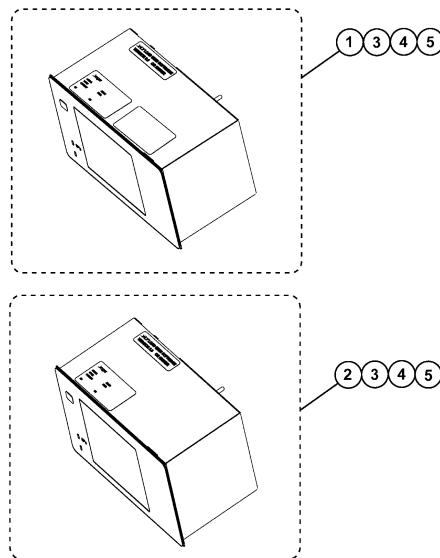
Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000

Revision: 14

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Parts catalog
Controller C2000 LCD,not ROHS



Pos. 0 ohne Abbildung/ Item 0 without illustration/ Pos. 0 sin ilustración/ Pos. 0 sans illustration

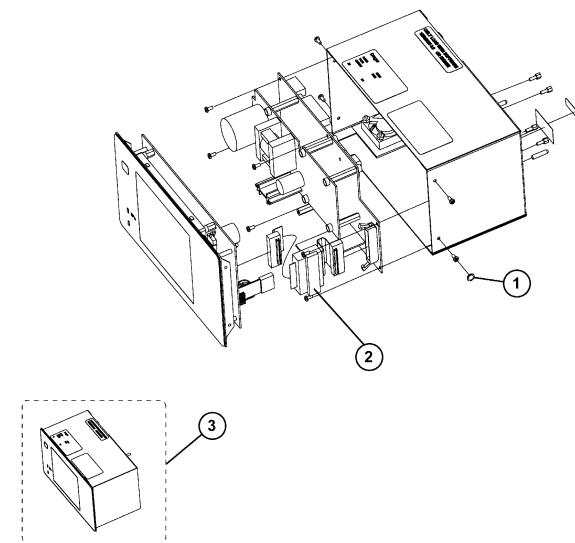
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
0	MU13479	<input checked="" type="checkbox"/>	Kit, software dist. assy C2000	1.000	St	not for order,available parts see assembly
1	MQ50470	<input type="checkbox"/>	Control unit C2 LCD OIML	1.000	St	not for order,available parts see assembly
2	MQ50478	<input type="checkbox"/>	Control unit C2 LCD non-OIML	1.000	St	not for order,available parts see assembly
3	MQ50403	<input type="checkbox"/>	Interface power supply LCD	1.000	St	not for order,available parts see assembly
4	MQ50404	<input type="checkbox"/>	Enclosure C2 LCD	1.000	St	not for order,available parts see assembly
5	MQ50477	<input type="checkbox"/>	Front Panel C2 LCD OIML	1.000	St	not for order,available parts see assembly

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Control unit C2 LCD OIML



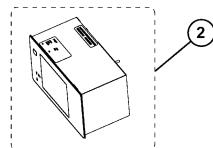
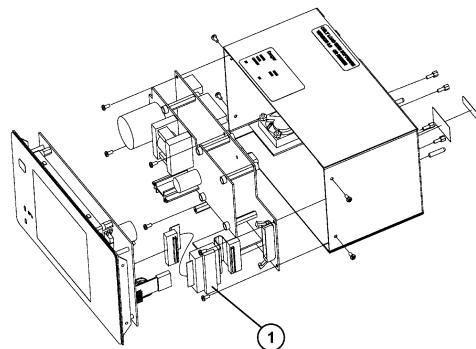
Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
1	MU13098	<input checked="" type="checkbox"/>	Label,tamper proof	1.000	St	
2	MU18111	<input checked="" type="checkbox"/>	Cable Assembly Interface/CPU	1.000	St	
3	MU25448	<input checked="" type="checkbox"/>	Ctrl Assy,C2000,OIML Spare	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

27/115

Parts catalog
Control unit C2 LCD non-OIML



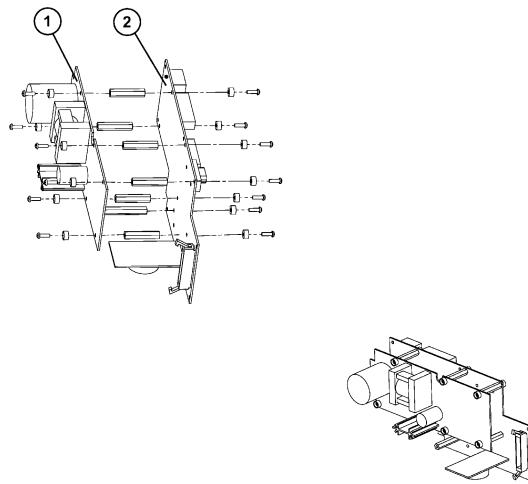
Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
1	MU18111	<input checked="" type="checkbox"/>	Cable Assembly Interface/CPU	1.000	St	
2	MU25449	<input checked="" type="checkbox"/>	Ctrl Assy,C2000,Non-OIML Spare	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Interface power supply LCD



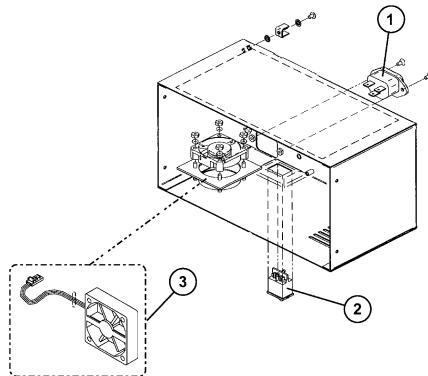
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Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
1	MU12389	<input checked="" type="checkbox"/>	PCB assy,power supply,Isolette	1.000	St	
2	MU17992	<input checked="" type="checkbox"/>	PCB asm,interface board	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

29/115

Parts catalog
Enclosure C2 LCD

Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
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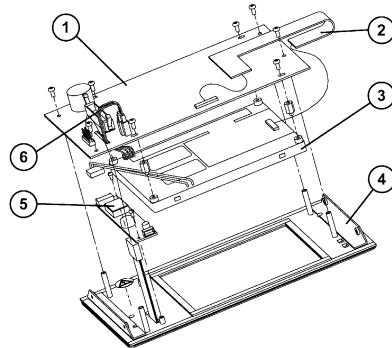
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
1	MU12410	<input checked="" type="checkbox"/>	Cable assy,IEC conn,AS contro	1.000	St	
2	MU12411	<input checked="" type="checkbox"/>	Cable assy,power switch	1.000	St	
3	MU12409	<input checked="" type="checkbox"/>	Fan assy,AS controller	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Front Panel C2 LCD OIML



Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

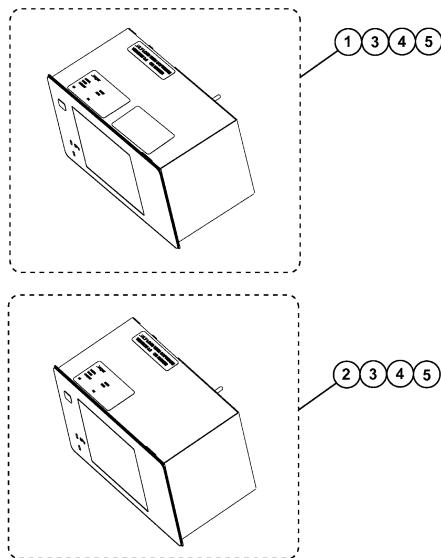
Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
0	MU21616	<input checked="" type="checkbox"/>	PCB Assy, Real-Time Clk Repl	1.000	St	
1	MU17988	<input checked="" type="checkbox"/>	PCB assy,LCD-EL CPU,C2000-E	1.000	St	
2	MU18059	<input checked="" type="checkbox"/>	Cable-Ribbon, Display/CPU C2000	1.000	St	
3	MU18057	<input checked="" type="checkbox"/>	Display,320 X 240,KYOCERA	1.000	St	
4	MU18296	<input checked="" type="checkbox"/>	Front Panel Subassembly, LCD C2000	1.000	St	
5	MU18058	<input checked="" type="checkbox"/>	PCB Inverter TDK	1.000	St	
6	MU18060	<input checked="" type="checkbox"/>	Cable-Inverter/CPU,C2000	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Controller C2000 LCD-ROHS



Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
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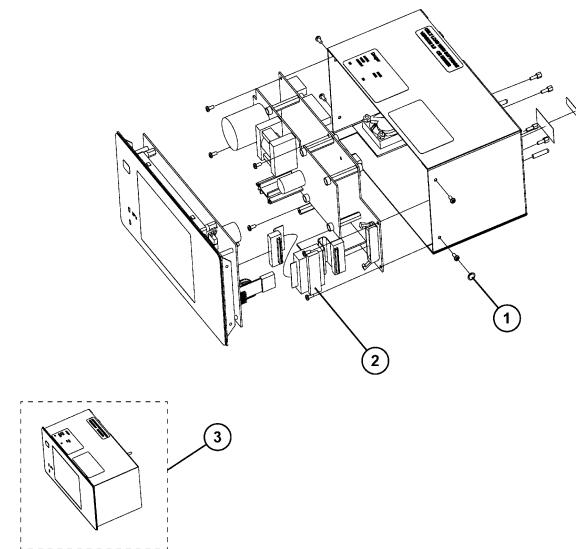
Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
0	MU13479	<input checked="" type="checkbox"/>	Kit, software dist. assy C2000	1.000	St	
1	MQ50556	<input type="checkbox"/>	Controller C2 LCD OIML ROHS	1.000	St	not for order, available parts see assembly
2	MQ50560	<input type="checkbox"/>	Controller C2LCD non-OIML,ROHS	1.000	St	not for order, available parts see assembly
3	MQ50557	<input type="checkbox"/>	Interface power sup. LCD ROHS	1.000	St	not for order, available parts see assembly
4	MQ50404	<input type="checkbox"/>	Enclosure C2 LCD	1.000	St	not for order, available parts see assembly
5	MQ50558	<input type="checkbox"/>	Front panel LCD non-OIML,ROHS	1.000	St	not for order, available parts see assembly

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

32/115

Parts catalog
Controller C2 LCD OIML ROHS



Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
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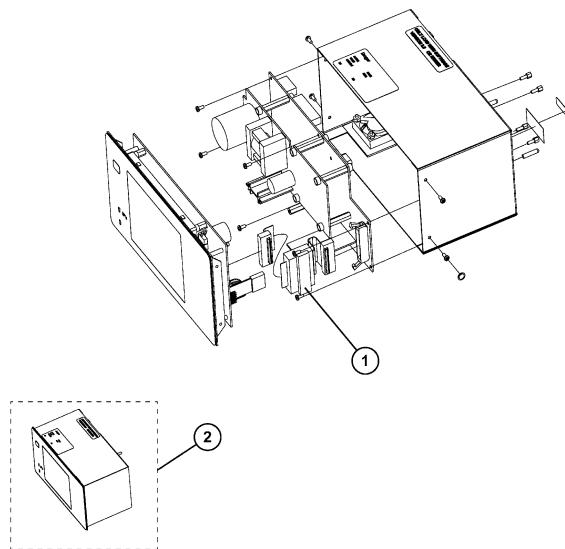
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
1	MU13098	<input checked="" type="checkbox"/>	Label,tamper proof	1.000	St	
2	MU23393	<input checked="" type="checkbox"/>	Cable assy,interface/CPU	1.000	St	
3	MU25448	<input checked="" type="checkbox"/>	Ctrl Assy,C2000,OIML Spare	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Controller C2LCD non-OIML,ROHS



Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
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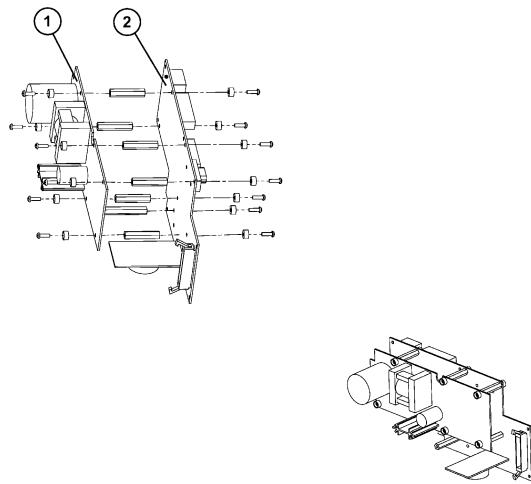
Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
1	MU23393	<input checked="" type="checkbox"/>	Cable assy,interface/CPU	1.000	St	
2	MU25449	<input checked="" type="checkbox"/>	Ctrl Assy,C2000,Non-OIML Spare	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Interface power sup. LCD ROHS



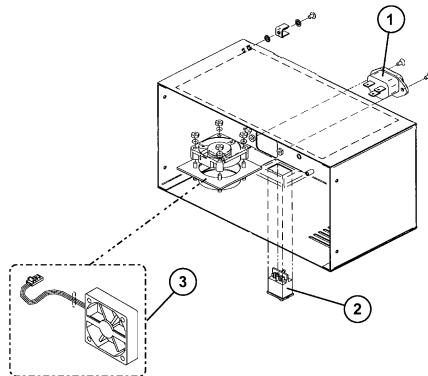
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Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
1	MU23383	<input checked="" type="checkbox"/>	PCB assy, power supply, C2K/I8K	1.000	St	
2	MU23379	<input checked="" type="checkbox"/>	PCB assy, interface, C2K/I8K	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Enclosure C2 LCD

Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

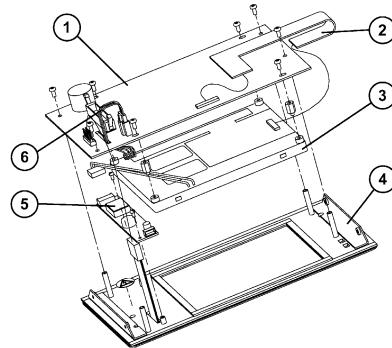
Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
1	MU12410	<input checked="" type="checkbox"/>	Cable assy,IEC conn,AS contro	1.000	St	
2	MU12411	<input checked="" type="checkbox"/>	Cable assy,power switch	1.000	St	
3	MU12409	<input checked="" type="checkbox"/>	Fan assy,AS controller	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Front panel LCD non-OIML,ROHS



Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

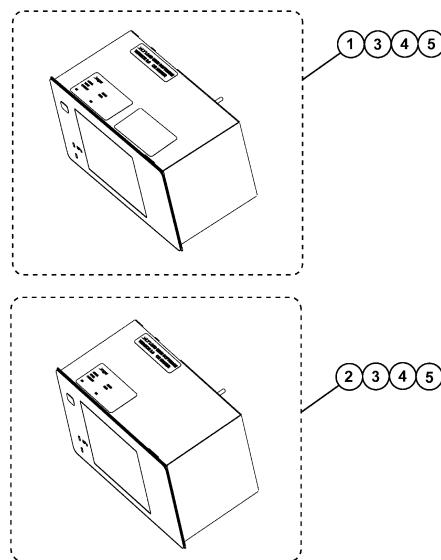
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
0	MU21616	<input checked="" type="checkbox"/>	PCB Assy, Real-Time Clk Repl	1.000	St	
1	MU25439	<input checked="" type="checkbox"/>	PCB assy, CPU, C2000	1.000	St	
2	MU18059	<input checked="" type="checkbox"/>	Cable-Ribbon, Display/CPU C2000	1.000	St	
3	MU23385	<input checked="" type="checkbox"/>	PCB, LCD with LED backlight	1.000	St	
4	MU18296	<input checked="" type="checkbox"/>	Front Panel Subassembly, LCD C2000	1.000	St	
5	MU23386	<input checked="" type="checkbox"/>	PCB, LED driver circuit	1.000	St	
6	MU25443	<input checked="" type="checkbox"/>	Cable-inverter/CPU,C2K/I8K	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

37/115

Parts catalog
Controller C2000 EL



Pos. 0 ohne Abbildung/ Item 0 without illustration/ Pos. 0 sin ilustración/ Pos. 0 sans illustration

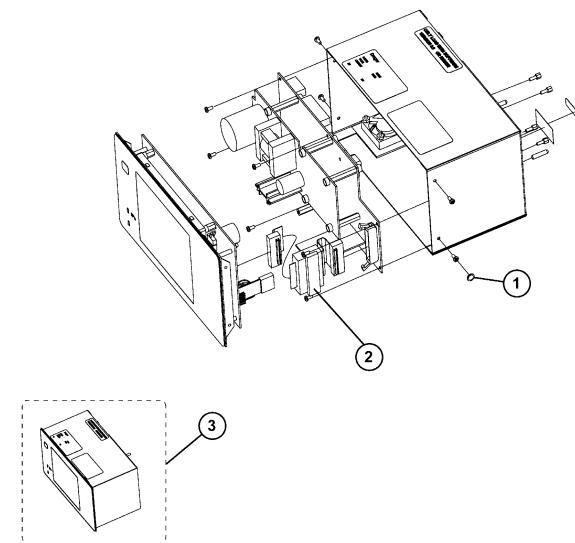
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
0	MU13479	<input checked="" type="checkbox"/>	Kit, software dist. assy C2000	1.000	St	
1	MQ50474	<input type="checkbox"/>	Controller C2000 EL NAWI/OIML	1.000	St	
2	MQ50481	<input type="checkbox"/>	Controller C2000 EL non-N/O	1.000	St	
3	MX46512	<input type="checkbox"/>	Interface/Power Supply Module	1.000	St	
4	MQ50404	<input type="checkbox"/>	Enclosure C2 LCD	1.000	St	
5	MX46511	<input type="checkbox"/>	Luminescent Disp. Front Panel	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Controller C2000 EL NAWI/OIML



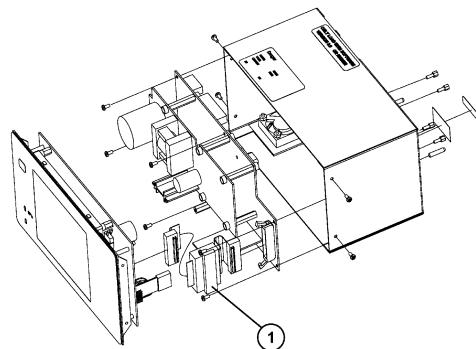
Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
1	MU13098	<input checked="" type="checkbox"/>	Label,tamper proof	1.000	St	
2	MU12413	<input checked="" type="checkbox"/>	Cable_assy,ribbon,interfac,CPU	1.000	St	
3	MU19232	<input checked="" type="checkbox"/>	Controller Assy, C2 OIML	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Controller C2000 EL non-N/O



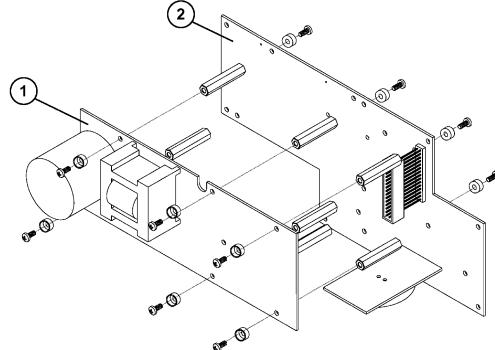
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
1	MU12413	<input checked="" type="checkbox"/>	Cable_assy,ribbon,interfac,CPU	1.000	St	
2	MU19231	<input type="checkbox"/>	Controller Assy, C2 Non-OIML	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Interface/Power Supply Module



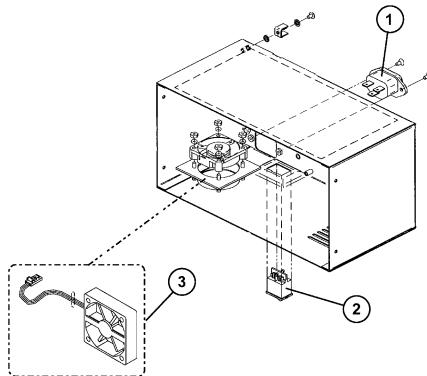
Pos. 0 ohne Abbildung/ Item 0 without illustration/ Pos. 0 sin ilustración/ Pos. 0 sans illustration

Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
1	MU12389	<input checked="" type="checkbox"/>	PCB assy,power supply,Isolette	1.000	St	
2	MU12385	<input checked="" type="checkbox"/>	PCB assy, interface, Isolette	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Enclosure C2 LCD

Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

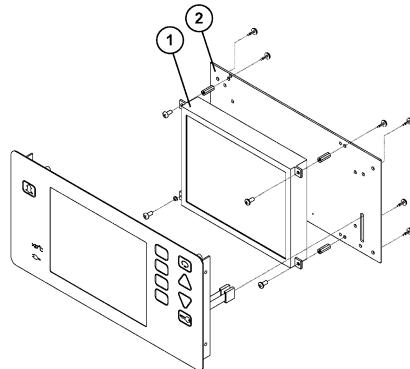
Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
1	MU12410	<input checked="" type="checkbox"/>	Cable assy,IEC conn,AS contro	1.000	St	
2	MU12411	<input checked="" type="checkbox"/>	Cable assy,power switch	1.000	St	
3	MU12409	<input checked="" type="checkbox"/>	Fan assy,AS controller	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Luminescent Disp. Front Panel



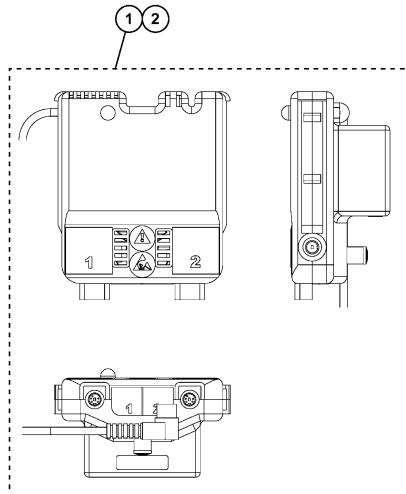
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Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
1	MU12370	<input type="checkbox"/>	Display,EL 320W X 240H	1.000	St	
2	MU12380	<input checked="" type="checkbox"/>	PCB assy,EL CPU,Isolette	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

43/115

Parts catalog
Sensor modules C2000

Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

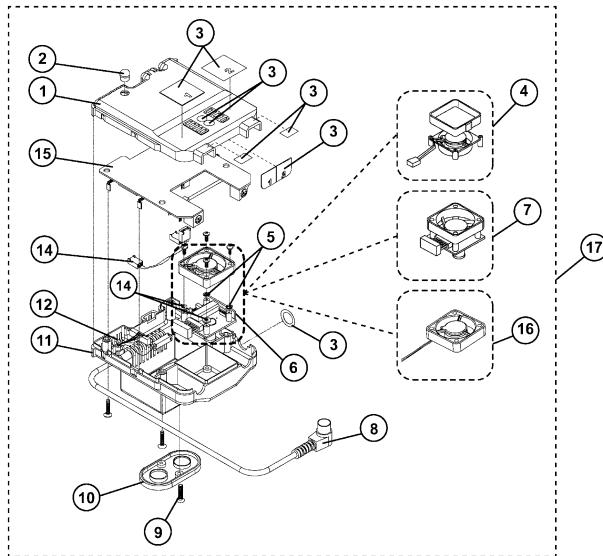
Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
1	MX46513	<input type="checkbox"/>	Sensor module Ass.not ROHS	1.000	St	
2	MQ50566	<input checked="" type="checkbox"/>	Sensor module ROHS	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

44/115

Parts catalog
Sensor module Ass.not ROHS



Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

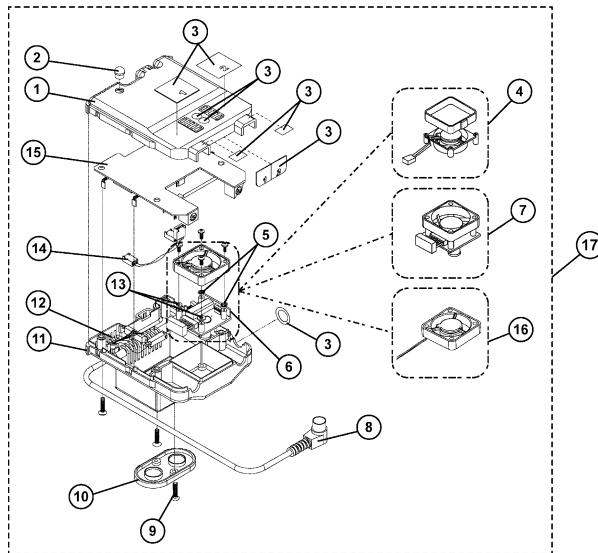
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
0	MU22074	<input checked="" type="checkbox"/>	Retrokit Firmware Sensormod I8	1.000	St	
1	MU12303	<input checked="" type="checkbox"/>	Top cover, sensor module	1.000	St	
2	MU12288	<input checked="" type="checkbox"/>	Lens,LED,white,sensor module	1.000	St	
3	MU21512	<input checked="" type="checkbox"/>	Kit,label,sensor module	1.000	St	
4	MU12299	<input checked="" type="checkbox"/>	Fan assy,40mm X 40mm X 10mm	1.000	St	
5	MU15503	<input type="checkbox"/>	Wshr_TAB_	2.000	St	
6	MU12274	<input checked="" type="checkbox"/>	PCB1_Assy, humidity board	1.000	St	
7	MU25441	<input checked="" type="checkbox"/>	PCB assy, connector board, C2K	1.000	St	
8	MU12287	<input checked="" type="checkbox"/>	Cable assy,sensor module	1.000	St	
9	MU15137	<input checked="" type="checkbox"/>	Scr,6-32X1/2, FL PH SS	2.000	St	
10	MU12305	<input checked="" type="checkbox"/>	Plate,w/o O2,sensor module	1.000	St	
11	MU12304	<input checked="" type="checkbox"/>	Bottom cover,sensor module	1.000	St	
12	MU03629	<input checked="" type="checkbox"/>	Strain RLF,rtang.,250.-290 DIA	1.000	St	
13	MU15510	<input type="checkbox"/>	WASHER,FL,	2.000	St	
14	MU12289	<input checked="" type="checkbox"/>	Cable assy,O2 cell	1.000	St	
15	MU12315	<input checked="" type="checkbox"/>	PCB1 assy,sensor module	1.000	St	
16	MU25464	<input checked="" type="checkbox"/>	FAN ASSY,40MM X 40MM X 10MM	1.000	St	
17	MU12301	<input checked="" type="checkbox"/>	Sensor module assembly	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000

Revision: 14

Parts catalog
Sensor module ROHS



Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

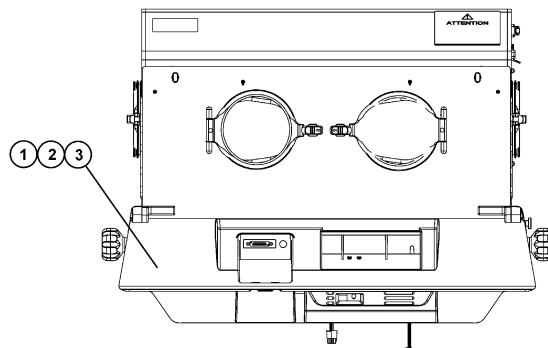
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
0	MU22074	<input checked="" type="checkbox"/>	Retrokit Firmware Sensormod I8	1.000	St	
1	MU12303	<input checked="" type="checkbox"/>	Top cover, sensor module	1.000	St	
2	MU12288	<input checked="" type="checkbox"/>	Lens,LED,white,sensor module	1.000	St	
3	MU21512	<input checked="" type="checkbox"/>	Kit,label,sensor module	1.000	St	
4	MU12299	<input checked="" type="checkbox"/>	Fan assy,40mm X 40mm X 10mm	1.000	St	
5	MU15503	<input type="checkbox"/>	Wshr_TAB_	2.000	St	
6	MU25442	<input checked="" type="checkbox"/>	PCB assy, humidity board, C2K	1.000	St	
7	MU25441	<input checked="" type="checkbox"/>	PCB assy, connector board, C2K	1.000	St	
8	MU25469	<input checked="" type="checkbox"/>	Cable assy, sensor module	1.000	St	
9	MU15137	<input checked="" type="checkbox"/>	Scr,6-32X1/2, FL PH SS	2.000	St	
10	MU12305	<input checked="" type="checkbox"/>	Plate,w/o O2,sensor module	1.000	St	
11	MU12304	<input checked="" type="checkbox"/>	Bottom cover,sensor module	1.000	St	
12	MU03629	<input checked="" type="checkbox"/>	Strain RLF,rtang.,250.-290 DIA	1.000	St	
13	MU15510	<input type="checkbox"/>	WASHER,FL,	2.000	St	
14	MU12289	<input checked="" type="checkbox"/>	Cable assy,O2 cell	1.000	St	
15	MU25440	<input checked="" type="checkbox"/>	PCB assy, sensor module, C2K	1.000	St	
16	MU25464	<input checked="" type="checkbox"/>	FAN ASSY,40MM X 40MM X 10MM	1.000	St	
17	MU23391	<input checked="" type="checkbox"/>	Sensor module assy, C2000	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000

Revision: 14

Parts catalog
Shell Assemblies



Pos. 0 ohne Abbildung/ Item 0 without illustration/ Pos. 0 sin ilustración/ Pos. 0 sans illustration

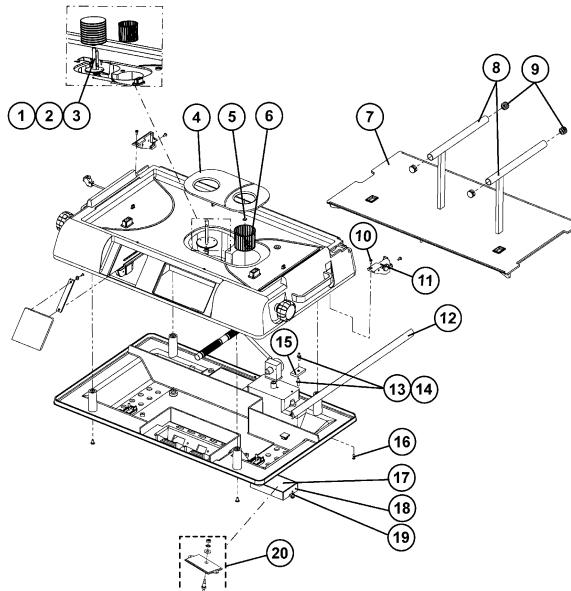
Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
1	MX46504	<input type="checkbox"/>	Shell	1.000	St	not for order,available parts,see assembly
2	MX46506	<input type="checkbox"/>	Top shell/Barn door	1.000	St	not for order,available parts,see assembly
3	MX46507	<input type="checkbox"/>	Top Shell-AP	1.000	St	not for order,available parts,see assembly

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Shell



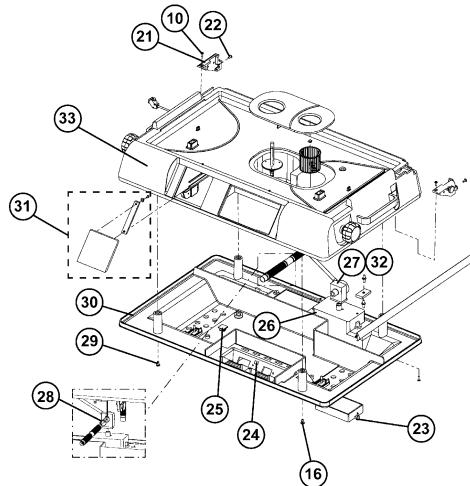
Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
1	MU12514	<input checked="" type="checkbox"/>	Heater assembly, 240V	1.000	St	
2	MU12517	<input checked="" type="checkbox"/>	Heater assembly, 100V	1.000	St	
3	MU12510	<input checked="" type="checkbox"/>	Heater assembly,120V	1.000	St	
4	MU13396	<input checked="" type="checkbox"/>	Repl kit,scroll cover,Isolette	1.000	St	
5	MU03732	<input checked="" type="checkbox"/>	Clamp,hose (for 3/8 OD)	1.000	St	
6	MU12543	<input checked="" type="checkbox"/>	Impeller assy	1.000	St	
7	MU12443	<input checked="" type="checkbox"/>	Deck,Isolette	1.000	St	
8	MU13395	<input checked="" type="checkbox"/>	Lift bar kit,Isolette	2.000	St	
9	MU12564	<input checked="" type="checkbox"/>	Cap,tubing,1.00 OD,white ABS	4.000	St	
10	MU15241	<input checked="" type="checkbox"/>	Scr,10-32X1/2 PN PH SS Nylok	2.000	St	
11	MU12539	<input checked="" type="checkbox"/>	Bracket,pivot/hood lock assy	1.000	St	
12	MU12459	<input checked="" type="checkbox"/>	Bumper extrusion	1.000	St	
13	MU01647	<input checked="" type="checkbox"/>	Conn,barb,1/4hose X 1/8NPT(M)	2.000	St	
14	MU15740	<input checked="" type="checkbox"/>	Tape,pipe jnt seal,teflon,.50"	1.000	St	Menge nach Bedarf/Quantity as required;
15	MU12463	<input checked="" type="checkbox"/>	Manifold,oxygen	1.000	St	
16	MU15197	<input checked="" type="checkbox"/>	Scr,8-32X5/8, TR PH SS Nylok	6.000	St	
17	MU12504	<input checked="" type="checkbox"/>	Filter,repl,Isolette,BOX/ 4	1.000	St	
18	MU22531	<input checked="" type="checkbox"/>	Repl.Filter Door Access Assy	1.000	St	
19	MU12493	<input checked="" type="checkbox"/>	Bead chain assy	1.000	St	
20	MU17552	<input checked="" type="checkbox"/>	Pneumatic access door assy	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

Parts catalog
Shell



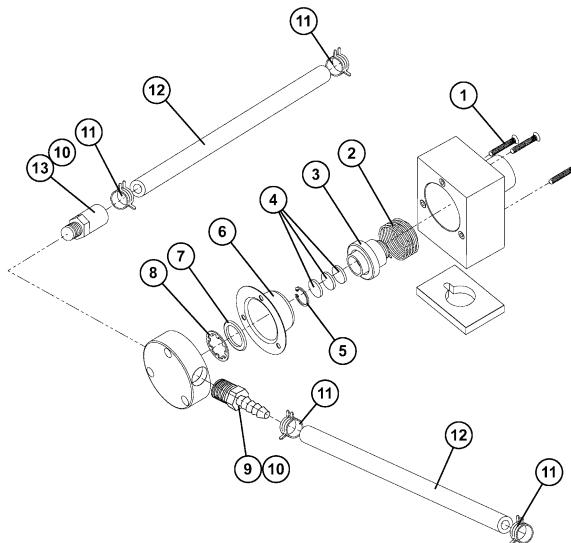
Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
10	MU15241	<input checked="" type="checkbox"/>	Scr,10-32X1/2 PN PH SS Nylok	2.000	St	
16	MU15197	<input checked="" type="checkbox"/>	Scr,8-32X5/8, TR PH SS Nylok	6.000	St	
21	MU12454	<input checked="" type="checkbox"/>	BRACKET,PIVOT,LEFT,PAINTED	1.000	St	
22	MU15238	<input checked="" type="checkbox"/>	Scr,10-32X1/2 TR PH SS Nylok	2.000	St	
23	MU12485	<input checked="" type="checkbox"/>	Screw,PNL,8-32 X .875 LG SS	2.000	St	
24	MU19885	<input checked="" type="checkbox"/>	Kit,HW,leg/base/column,C2000	1.000	St	
25	MU03409	<input checked="" type="checkbox"/>	Clip,cord retaining	1.000	St	
26	MU12460	<input checked="" type="checkbox"/>	Hose corrugated_22mm_ID_x_12_00lg	1.000	St	
27	MX46520	<input type="checkbox"/>	Repl Kit, Ccek Valve Assembly	1.000	St	not for order,available parts,see assembly
28	MU19730	<input checked="" type="checkbox"/>	CLAMP, HOSE .860 - 1.03 ID	1.000	St	
29	MU15296	<input checked="" type="checkbox"/>	Scr,1/4-20X1/2 TR PH S ZI Nylk	4.000	St	
30	MU12442	<input checked="" type="checkbox"/>	SHELL,BOTTOM,C2000	1.000	St	
31	MU13411	<input checked="" type="checkbox"/>	REPL_KIT,HUMIDITY_DOOR	1.000	St	
32	MQ50408	<input type="checkbox"/>	Fresh Air Valve	1.000	St	not for order,available parts,see assembly
33	MU23359	<input checked="" type="checkbox"/>	Kit,repl,shell top,AP,C2/C2E	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Repl Kit, Ccek Valve Assembly



Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

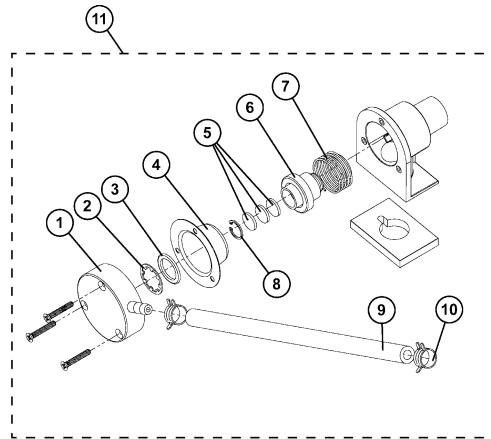
Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
1	MU15165	<input checked="" type="checkbox"/>	Scr,6-32X1.75 FL PH SS	3.000	St	
2	MU12583	<input checked="" type="checkbox"/>	Spring,cprs,1.04OD .040W 1.00L	1.000	St	
3	MU12584	<input checked="" type="checkbox"/>	Piston,check valve	1.000	St	
4	MU01958	<input checked="" type="checkbox"/>	Filter disc	3.000	St	
5	MU15719	<input checked="" type="checkbox"/>	Ring,rtng,int,0.500 DIA SS	1.000	St	
6	MU06679	<input checked="" type="checkbox"/>	Diaphragm	1.000	St	
7	MU06675	<input checked="" type="checkbox"/>	Wshr,fl,.628ID .88OD .06T actl	1.000	St	
8	MU15720	<input checked="" type="checkbox"/>	Ring,retaining,wal 5105-6255	1.000	St	
9	MU01647	<input checked="" type="checkbox"/>	Conn,barb,1/4hose X 1/8NPT(M)	1.000	St	
10	MU15740	<input checked="" type="checkbox"/>	Tape,pipe jnt seal,teflon,,50"	0.000	St	Menge nach Bedarf/Quantity as required;
11	MU13252	<input checked="" type="checkbox"/>	Clamp,hose,,460 -.545 I.D.	4.000	St	
12	MU13257	<input checked="" type="checkbox"/>	Hose,braided,PVC,CLR,1/4 ID	1.000	m	
13	MU10486	<input checked="" type="checkbox"/>	Check valve,1/4NPT F IN,M out	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Fresh Air Valve



Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

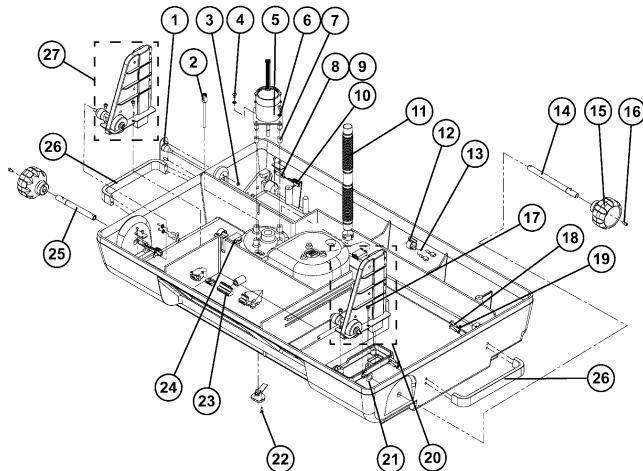
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
1	MU06680	<input checked="" type="checkbox"/>	CAP,OXY,W/HOSE NIPPLE	1.000	St	
2	MU15720	<input checked="" type="checkbox"/>	Ring,retaining,wal 5105-6255	1.000	St	
3	MU06675	<input checked="" type="checkbox"/>	Wsh,rfl.,.628ID .88OD .06T actl	1.000	St	
4	MU06679	<input checked="" type="checkbox"/>	Diaphragm	1.000	St	
5	MU01958	<input checked="" type="checkbox"/>	Filter disc	1.000	St	
6	MU12584	<input checked="" type="checkbox"/>	Piston,check valve	1.000	St	
7	MU12583	<input checked="" type="checkbox"/>	Spring,cprs,1.04OD .040W 1.00L	1.000	St	
8	MU15719	<input checked="" type="checkbox"/>	Ring,rtng,int,0.500 DIA SS	1.000	St	
9	MU13257	<input checked="" type="checkbox"/>	Hose,braided,PVC,CLR,1/4 ID	1.000	m	
10	MU13252	<input checked="" type="checkbox"/>	Clamp,hose,.460 - .545 I.D.	1.000	St	
11	MU21522	<input checked="" type="checkbox"/>	Spare,fresh AIR valve,C2000	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Top shell/Barn door



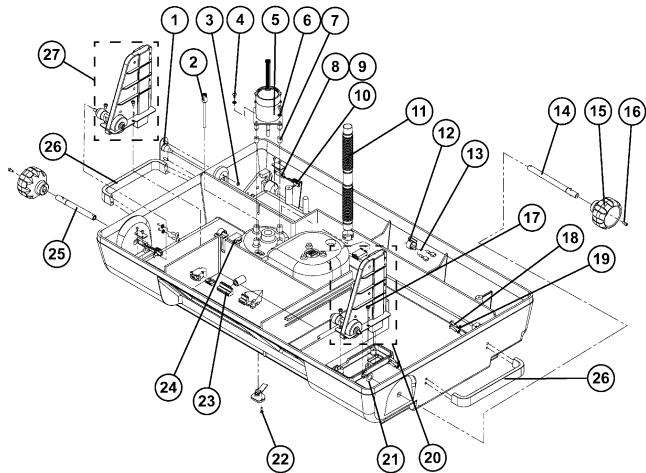
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Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
0	MU21564	<input checked="" type="checkbox"/>	Banc,kit,shell top,brn,C2/C2E	1.000	St	
1	MU12483	<input type="checkbox"/>	Cable assy,sensor mdl to contr	1.000	St	
2	MU12541	<input checked="" type="checkbox"/>	Probe,impeller movement detect	1.000	St	
3	MU15422	<input checked="" type="checkbox"/>	Nut,hex,6-32 KEPS S ZI	2.000	St	
4	MU15174	<input checked="" type="checkbox"/>	Scr,8-32X5/16_TR_PH_SS	4.000	St	
5	MU13477	<input checked="" type="checkbox"/>	Kit,repl motor,C2000	1.000	St	
6	MU15553	<input checked="" type="checkbox"/>	Wshr_LK_INT_	4.000	St	
7	MU07138	<input checked="" type="checkbox"/>	Isolator,VIB,.44OD .44LG 4LB	4.000	St	
8	MU15086	<input checked="" type="checkbox"/>	Scr,4-40X7/16,TR PH SS	4.000	St	
9	MU15411	<input checked="" type="checkbox"/>	Nut,hex,4-40 KEPS S ZI	4.000	St	
10	MU03319	<input checked="" type="checkbox"/>	Switch,SPST,NC,magnetic reed	2.000	St	
11	MU12460	<input checked="" type="checkbox"/>	Hose_corrugated_22mm_ID_x_12_00lg	1.000	St	
12	MU03409	<input checked="" type="checkbox"/>	Clip,cord retaining	1.000	St	
13	MU15715	<input checked="" type="checkbox"/>	Ring,rtnq,ext"E",SS	2.000	St	
13	MU12488	<input checked="" type="checkbox"/>	Wire harness, AC	1.000	St	
14	MU12569	<input checked="" type="checkbox"/>	Shaft,knob	2.000	St	
15	MU12568	<input checked="" type="checkbox"/>	Knob,mattress, tilt	2.000	St	
16	MU15186	<input checked="" type="checkbox"/>	Scr,8-32X3/8 CP SK SS Nylok	1.000	St	
17	MU15222	<input checked="" type="checkbox"/>	Scr,10-32X5/16 PN PH S ZI Nylok	6.000	St	
18	MU15250	<input checked="" type="checkbox"/>	Scr,10-32X3/4 TR PH SS	8.000	St	
19	MU15567	<input checked="" type="checkbox"/>	Wshr,LK,EXT,	8.000	St	
20	MU21490	<input checked="" type="checkbox"/>	Replac,tilt mech assy,LH,C2000	1.000	St	
21	MU15635	<input checked="" type="checkbox"/>	Wshr,FL.,.516ID .88OD .010T nyl	2.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

Parts catalog
Top shell/Barn door



Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

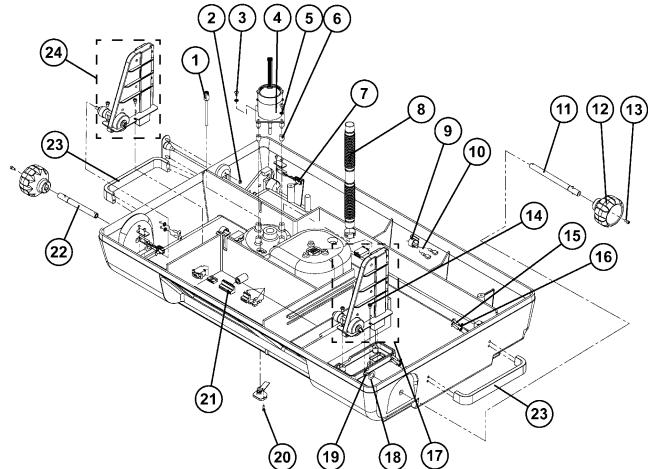
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
22	MU15142	<input checked="" type="checkbox"/>	Scr,6-32X9/16,TR PH SS Nylok	1.000	St	
23	MU12482	<input checked="" type="checkbox"/>	Cable assy,AC harness to contr	1.000	St	
24	MU03069	<input checked="" type="checkbox"/>	Ferrite suppressor,.280 ID	1.000	St	
25	MU12571	<input checked="" type="checkbox"/>	Shaft,knob,rh	1.000	St	
26	MU13416	<input checked="" type="checkbox"/>	HANDLE ASSY,LEFT/RIGHT	1.000	St	
27	MU21491	<input checked="" type="checkbox"/>	Replac,tilt mech assy,RH,C2000	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

53/115

Parts catalog
Top Shell-AP



Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

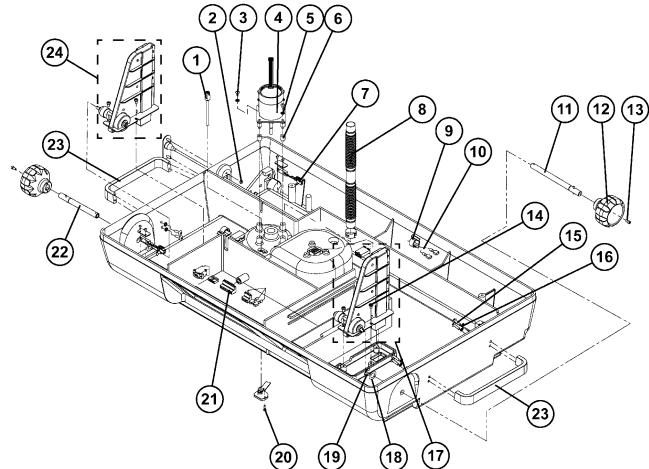
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
1	MU12541	<input checked="" type="checkbox"/>	Probe,impeller movement detect	1.000	St	
2	MU15422	<input checked="" type="checkbox"/>	Nut,hex,6-32 KEPS S ZI	2.000	St	
3	MU15174	<input checked="" type="checkbox"/>	Scr,8-32X5/16_TR_PH_SS	4.000	St	
4	MU13477	<input checked="" type="checkbox"/>	Kit,repl motor,C2000	1.000	St	
5	MU15553	<input checked="" type="checkbox"/>	Wshr_LK_INT_	4.000	St	
6	MU07138	<input checked="" type="checkbox"/>	Isolator,VIB,.44OD .44LG 4LB	4.000	St	
7	MU03319	<input checked="" type="checkbox"/>	Switch,SPST,NC,magnetic reed	2.000	St	
8	MU12460	<input checked="" type="checkbox"/>	Hose_corrugated_22mm_ID_x_12_00lg	1.000	St	
9	MU03409	<input checked="" type="checkbox"/>	Clip,cord retaining	1.000	St	
10	MU12488	<input checked="" type="checkbox"/>	Wire harness, AC	1.000	St	
11	MU12569	<input checked="" type="checkbox"/>	Shaft,knob	2.000	St	
12	MU12568	<input checked="" type="checkbox"/>	Knob,mattress, tilt	2.000	St	
13	MU15186	<input checked="" type="checkbox"/>	Scr,8-32X3/8 CP SK SS Nylok	2.000	St	
14	MU15222	<input checked="" type="checkbox"/>	Scr,10-32X5/16 PN PH S ZI Nylok	6.000	St	
15	MU15250	<input checked="" type="checkbox"/>	Scr,10-32X3/4 TR PH SS	1.000	St	
16	MU15567	<input checked="" type="checkbox"/>	Wshr,LK,EXT,	1.000	St	
17	MU21490	<input checked="" type="checkbox"/>	Replac,tilt mech assy,LH,C2000	1.000	St	
18	MU15635	<input checked="" type="checkbox"/>	Wshr,FL,.516ID .88OD .010T nyl	2.000	St	
19	MU15715	<input checked="" type="checkbox"/>	Ring,rting,ext"E",SS	2.000	St	
20	MU15137	<input checked="" type="checkbox"/>	Scr,6-32X1/2, FL PH SS	1.000	St	
21	MU12482	<input checked="" type="checkbox"/>	Cable assy,AC harness to contr	1.000	St	
22	MU12571	<input checked="" type="checkbox"/>	Shaft,knob,rh	1.000	St	
23	MU13416	<input checked="" type="checkbox"/>	HANDLE ASSY,LEFT/RIGHT	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Top Shell-AP



Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

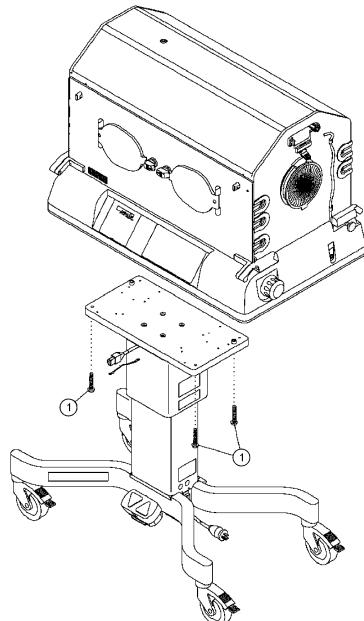
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
24	MU21491	<input checked="" type="checkbox"/>	Replac,tilt mech assy,RH,C2000	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Attachment Shell/Pedest.Stand



fp5030nxv651b-01

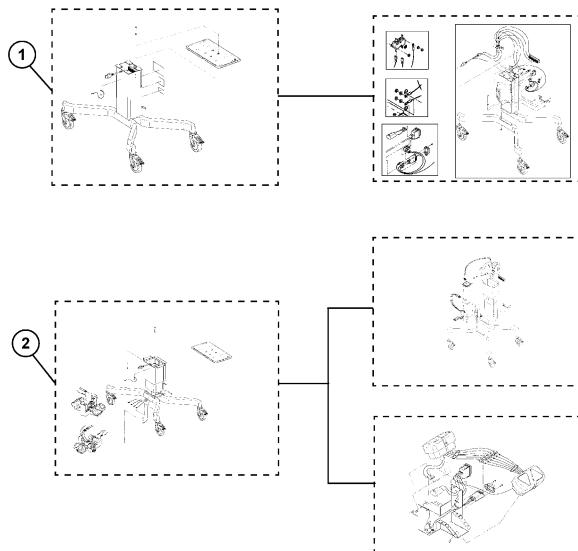
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
1	MU15330	<input checked="" type="checkbox"/>	Scr,1/4-20X1.50 CP HX SS Nylok	4.000	St	C2000

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
C2000 stands



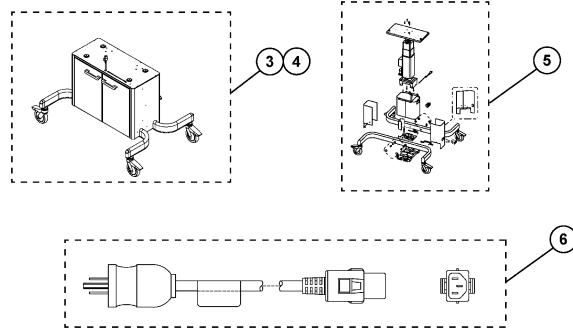
Pos. 0 ohne Abbildung/ Item 0 without illustration/ Pos. 0 sin ilustración/ Pos. 0 sans illustration

Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
1	MQ50296	<input type="checkbox"/>	Stand Fixed Height	1.000	St	
2	MQ50299	<input type="checkbox"/>	Stand VHA w/o UPS	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

57/115

Parts catalog
C2000 stands

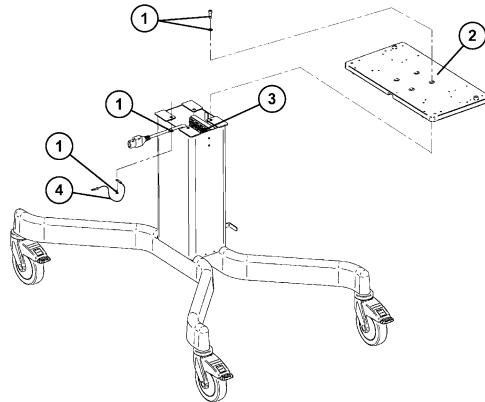
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
3	MQ50411	<input type="checkbox"/>	Cabinet Stand Assembly	1.000	St	
4	MQ50468	<input type="checkbox"/>	Cab Stand Assy before Jul 2009	1.000	St	before July 2009
5	MQ50389	<input type="checkbox"/>	Trolley Performance	1.000	St	
6	MQ50462	<input type="checkbox"/>	Permanent Mains Cables	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

58/115

Parts catalog
Stand Fixed Height



Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

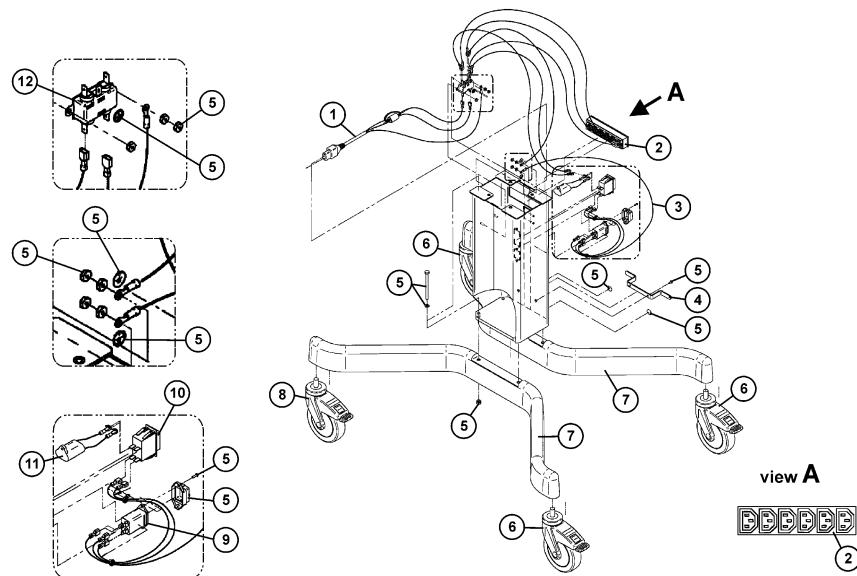
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
0	MU12955	<input checked="" type="checkbox"/>	I.V.pole assy,Isolette	1.000	St	
0	MU12937	<input checked="" type="checkbox"/>	Monitor shelf assy,Hi,Isolette	1.000	St	
0	MU12948	<input checked="" type="checkbox"/>	Monitor_shelf_assy,LO,Isolette	1.000	St	
1	MU19884	<input checked="" type="checkbox"/>	Kit,HW,stand level assy,C2000	1.000	St	
2	MU12805	<input checked="" type="checkbox"/>	Ate,upper transition,mach	1.000	St	
3	MQ50304	<input type="checkbox"/>	LegBase+ColumnFixedHeightNoUPS	1.000	St	
4	MU12783	<input checked="" type="checkbox"/>	Cable assy,Ground,6.25 grn	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
LegBase+ColumnFixedHeightNoUPS



Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
1	MU02505	<input checked="" type="checkbox"/>	Cable Assy,CONT PWR,VDE,fixed	1.000	St	
2	MU12864	<input checked="" type="checkbox"/>	Cable assy,AC top,fixed	1.000	St	wahlweise/optional;
3	MU12744	<input checked="" type="checkbox"/>	Cable assy,power conn, VHA	1.000	St	
4	MU12758	<input checked="" type="checkbox"/>	Cleat,power cord	1.000	St	
5	MU19885	<input checked="" type="checkbox"/>	Kit,HW,leg/base/column,C2000	1.000	St	
6	MU12762	<input checked="" type="checkbox"/>	Caster, Swivel, 4.92DIA, Total Lk	3.000	St	
7	MU14711	<input checked="" type="checkbox"/>	Leg,base,extended,machining	1.000	St	
8	MU12761	<input checked="" type="checkbox"/>	Caster, Swivel, 4.92DIA, Dir Lk	1.000	St	
9	MU14735	<input checked="" type="checkbox"/>	Conn.assy,AC PWR,MALE,LKG,15 A	1.000	St	
10	MU02609	<input checked="" type="checkbox"/>	Ckt brkr,DPST,15.0A 250V/28V	1.000	St	
11	MU12785	<input checked="" type="checkbox"/>	Cap assy,Isolette stands	1.000	St	
12	MU03057	<input checked="" type="checkbox"/>	Filter,line,115-250VAC	1.000	St	

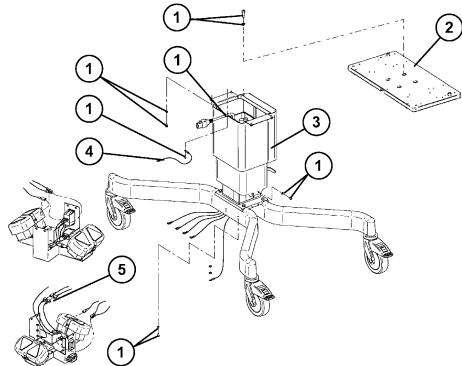
Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000

Revision: 14

60/115

Parts catalog
Stand VHA w/o UPS



Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

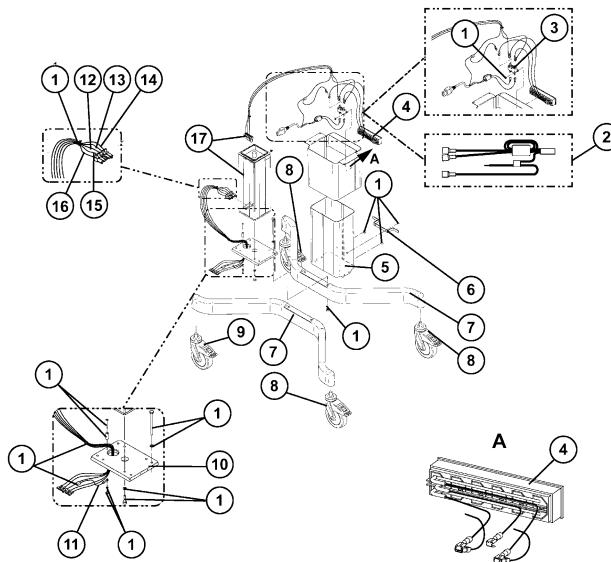
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
0	MU12948	<input checked="" type="checkbox"/>	Monitor_shelf_assy,LO,Isolette	1.000	St	
0	MU12955	<input checked="" type="checkbox"/>	I.V.pole assy,Isolette	1.000	St	
0	MU12937	<input checked="" type="checkbox"/>	Monitor shelf assy,HI,Isolette	1.000	St	
1	MU19884	<input checked="" type="checkbox"/>	Kit,HW,stand level assy,C2000	1.000	St	
2	MU12805	<input checked="" type="checkbox"/>	Ate,upper transition,mach	1.000	St	
3	MQ50302	<input type="checkbox"/>	Leg,Base+Column VHA	1.000	St	
4	MU12783	<input checked="" type="checkbox"/>	Cable assy,Ground,6.25 grn	1.000	St	
5	MQ50305	<input type="checkbox"/>	Connector Housing	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Leg,Base+Column VHA



Pos. 0 ohne Abbildung/ Item 0 without illustration/ Pos. 0 sin ilustración/ Pos. 0 sans illustration

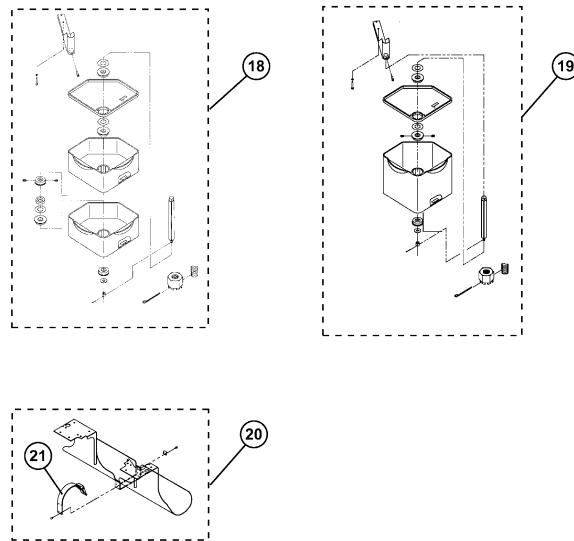
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
1	MU19885	<input checked="" type="checkbox"/>	Kit,HW,leg/base/column,C2000	1.000	St	
2	MU02503	<input checked="" type="checkbox"/>	Cable Assy,CONT PWR,VDE,VHA	1.000	St	
3	MU03057	<input checked="" type="checkbox"/>	Filter,line,115-250VAC	1.000	St	
4	MU12757	<input checked="" type="checkbox"/>	Cable assy,AC top,VHA	2.000	St	
5	MU12748	<input checked="" type="checkbox"/>	Column,lower,VHA	1.000	St	
6	MU12758	<input checked="" type="checkbox"/>	Cleat,power cord	1.000	St	
7	MU14711	<input checked="" type="checkbox"/>	Leg,base,extended,machining	2.000	St	
8	MU12762	<input checked="" type="checkbox"/>	Caster, Swivel, 4.92DIA, Total Lk	3.000	St	
9	MU14735	<input checked="" type="checkbox"/>	Conn.assy,AC PWR,MALE,LKG,15 A	1.000	St	
10	MU12756	<input checked="" type="checkbox"/>	Plate,transition,bottom	1.000	St	
11	MU12784	<input checked="" type="checkbox"/>	Wire assy,ground,	1.000	St	
12	MU12782	<input checked="" type="checkbox"/>	Cable assy,GND,14" grn/yel	1.000	St	
13	MU12790	<input checked="" type="checkbox"/>	Cable assy,mtr to FS,17",orn	1.000	St	
14	MU12789	<input checked="" type="checkbox"/>	Cable assy,mtr to FS,17",red	1.000	St	
15	MU12770	<input checked="" type="checkbox"/>	Cable assy,BRKR,17" wht/blu	1.000	St	
16	MU12769	<input checked="" type="checkbox"/>	Cable assy,BRKR,17" wht/brn	1.000	St	
17	MU12808	<input checked="" type="checkbox"/>	Actuator,120V,hight thrust	1.000	St	
17	MU12809	<input checked="" type="checkbox"/>	Actuator,230V,high thrust	1.000	St	
17	MU12807	<input checked="" type="checkbox"/>	Actuator,120V,low speed	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000

Revision: 14

Parts catalog
Leg,Base+Column VHA



Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
18	MU17880	<input checked="" type="checkbox"/>	Swivel drawer assy,small	1.000	St	
19	MU17879	<input checked="" type="checkbox"/>	Swivel drawer assy,large	1.000	St	
20	MU12952	<input checked="" type="checkbox"/>	Oxygen Tank Brkt Assy,Isolette	1.000	St	
21	MU12954	<input checked="" type="checkbox"/>	Clamp assy, tank	1.000	St	

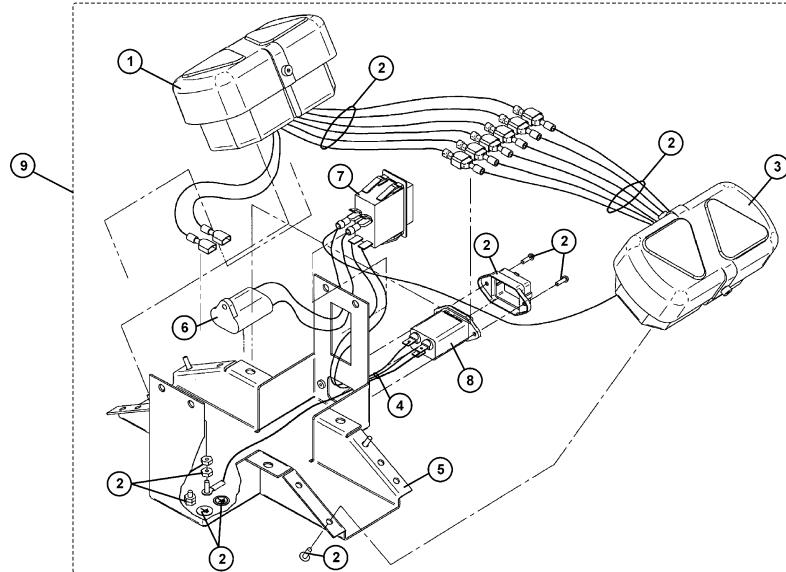
Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000

Revision: 14

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Parts catalog
Connector Housing



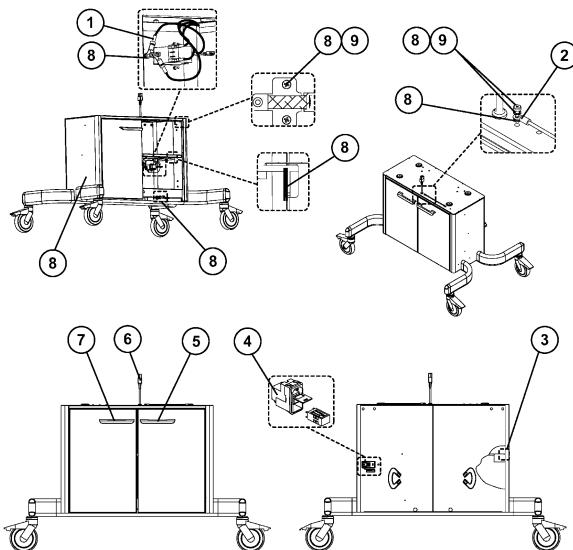
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
1	MU12815	<input checked="" type="checkbox"/>	Foot switch assy rear	1.000	St	
2	MU19886	<input checked="" type="checkbox"/>	Kit,HW,connector housing,C2000	1.000	St	
3	MU12813	<input checked="" type="checkbox"/>	Foot switch assy front	1.000	St	
4	MU12744	<input checked="" type="checkbox"/>	Cable assy,power conn, VHA	1.000	St	
5	MU12754	<input checked="" type="checkbox"/>	Housing,AC/CKT BRKR,VHA	1.000	St	
6	MU12785	<input checked="" type="checkbox"/>	Cap assy,Isolette stands	1.000	St	
7	MU02609	<input checked="" type="checkbox"/>	Ckt brkr,DPST,15.0A 250V/28V	1.000	St	
8	MU14735	<input checked="" type="checkbox"/>	Conn.assy,AC PWR,MALE,LKG,15 A	1.000	St	
9	MU19874	<input checked="" type="checkbox"/>	Repl,connector hsg assy,VHAC2K	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Cabinet Stand Assembly



Pos. 0 ohne Abbildung/ Item 0 without illustration/ Pos. 0 sin ilustración/ Pos. 0 sans illustration

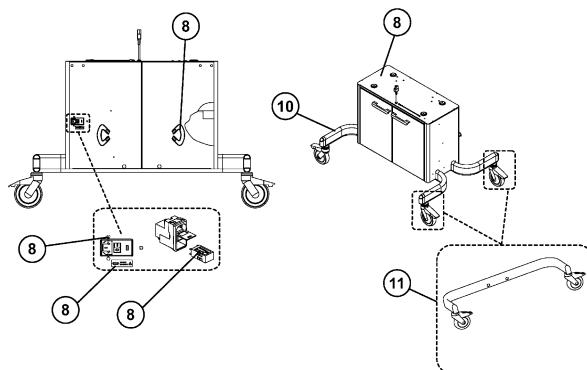
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
1	MU19570	<input checked="" type="checkbox"/>	Cable_assy_ground	1.000	St	
2	MU12783	<input checked="" type="checkbox"/>	Cable assy,Ground,6.25 grn	1.000	St	
3	MU19323	<input checked="" type="checkbox"/>	Cover Power Module	1.000	St	
4	MU19193	<input checked="" type="checkbox"/>	Pwr Entry Module & Switch	1.000	St	
5	MU19357	<input checked="" type="checkbox"/>	Door assy_rh_cabinet stand	1.000	St	
6	MU19559	<input checked="" type="checkbox"/>	Controller_pwr_cord	1.000	St	
7	MU19358	<input checked="" type="checkbox"/>	Door_assy_lh_cabinet_stand	1.000	St	
8	MU19729	<input checked="" type="checkbox"/>	Kit,C2000 cabinet service part	1.000	St	
9	MU21023	<input checked="" type="checkbox"/>	Kit,Hardware,Dr_assy,C2000,VLSTD	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Cabinet Stand Assembly



Pos. 0 ohne Abbildung/ Item 0 without illustration/ Pos. 0 sin ilustración/ Pos. 0 sans illustration

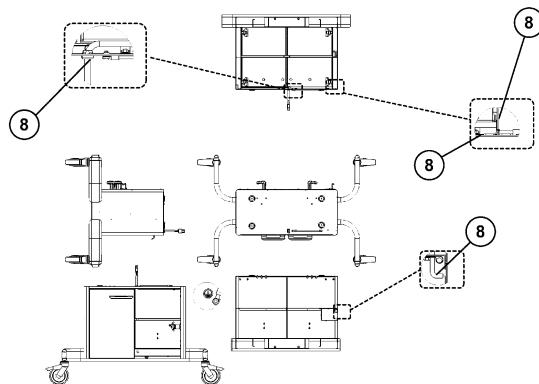
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
8	MU19729	<input checked="" type="checkbox"/>	Kit,C2000 cabinet service part	1.000	St	
10	MU21239	<input checked="" type="checkbox"/>	Leg,Stand,C2000/ I8000	1.000	St	
11	MU21302	<input checked="" type="checkbox"/>	Kit,C2000VHA CSTRS/CAP SYM LEG	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Cabinet Stand Assembly



Pos. 0 ohne Abbildung/ Item 0 without illustration/ Pos. 0 sin ilustración/ Pos. 0 sans illustration

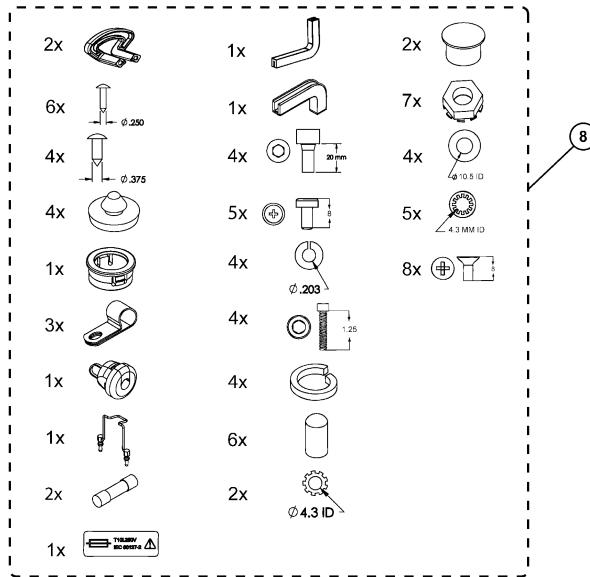
Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
8	MU19729	<input checked="" type="checkbox"/>	Kit,C2000 cabinet service part	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Cabinet Stand Assembly



Pos. 0 ohne Abbildung/ Item 0 without illustration/ Pos. 0 sin ilustración/ Pos. 0 sans illustration

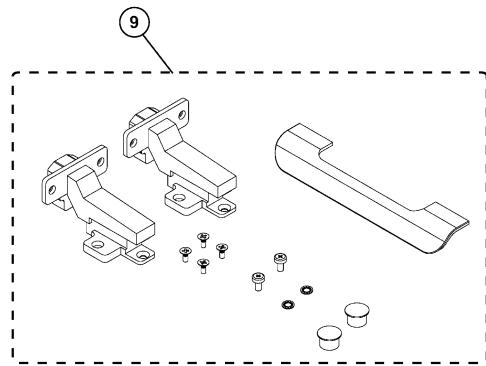
Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
8	MU19729	<input checked="" type="checkbox"/>	Kit,C2000 cabinet service part	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Cabinet Stand Assembly



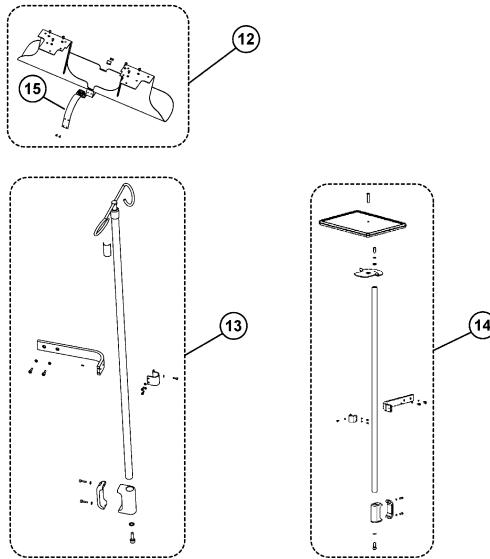
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Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
9	MU21023	<input checked="" type="checkbox"/>	Kit,Hardware,Dr_assy,C2000,VLSTD	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

69/115

Parts catalog
Cabinet Stand Assembly

Pos. 0 ohne Abbildung/ Item 0 without illustration/ Pos. 0 sin ilustración/ Pos. 0 sans illustration

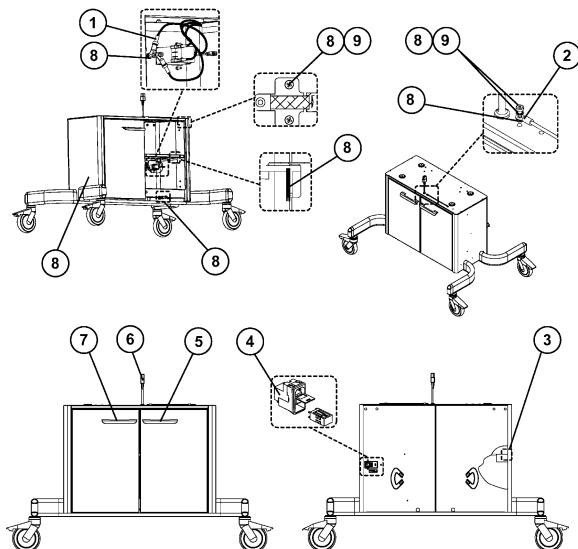
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
12	MU19505	<input checked="" type="checkbox"/>	Oxygen tank brkt assy_Isolette	1.000	St	
13	MU19403	<input checked="" type="checkbox"/>	IV_pole_assy_cabinet	1.000	St	
14	MU19325	<input checked="" type="checkbox"/>	Utility_shelf_assy_cabinet	1.000	St	
15	MU12954	<input checked="" type="checkbox"/>	Clamp assy, tank	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000

Revision: 14

Parts catalog
Cab Stand Assy before Jul 2009



Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

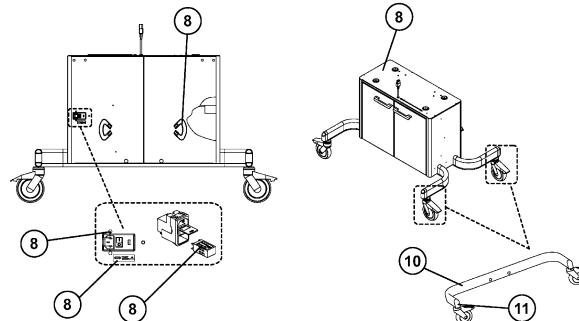
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
1	MU19570	<input checked="" type="checkbox"/>	Cable_assy_ground	1.000	St	
2	MU12783	<input checked="" type="checkbox"/>	Cable assy,Ground,6.25 grn	1.000	St	
3	MU19323	<input checked="" type="checkbox"/>	Cover Power Module	1.000	St	
4	MU19193	<input checked="" type="checkbox"/>	Pwr Entry Module & Switch	1.000	St	
5	MU19357	<input checked="" type="checkbox"/>	Door assy_rh_cabinet stand	1.000	St	
6	MU19559	<input checked="" type="checkbox"/>	Controller_pwr_cord	1.000	St	
7	MU19358	<input checked="" type="checkbox"/>	Door_assy_lh_cabinet_stand	1.000	St	
8	MU19729	<input checked="" type="checkbox"/>	Kit,C2000 cabinet service part	1.000	St	
9	MU21023	<input checked="" type="checkbox"/>	Kit,Hardware,Dr_assy,C2000,VLSTD	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Cab Stand Assy before Jul 2009



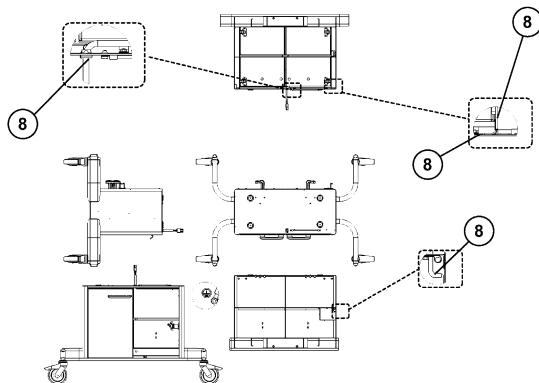
Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
8	MU19729	<input checked="" type="checkbox"/>	Kit,C2000 cabinet service part	1.000	St	
10	MU21239	<input checked="" type="checkbox"/>	Leg,Stand,C2000/ I8000	1.000	St	
11	2M21223	<input checked="" type="checkbox"/>	Cap	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Cab Stand Assy before Jul 2009



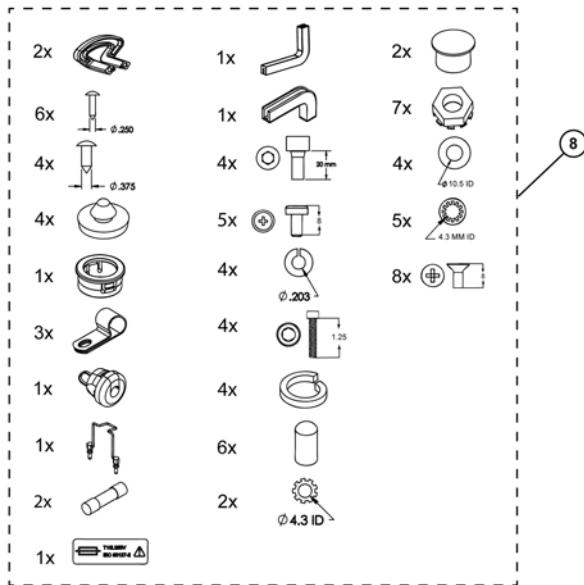
Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
8	MU19729	<input checked="" type="checkbox"/>	Kit,C2000 cabinet service part	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Cab Stand Assy before Jul 2009



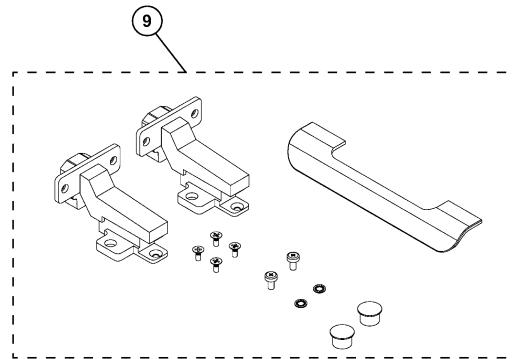
Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
8	MU19729	<input checked="" type="checkbox"/>	Kit,C2000 cabinet service part	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Cab Stand Assy before Jul 2009



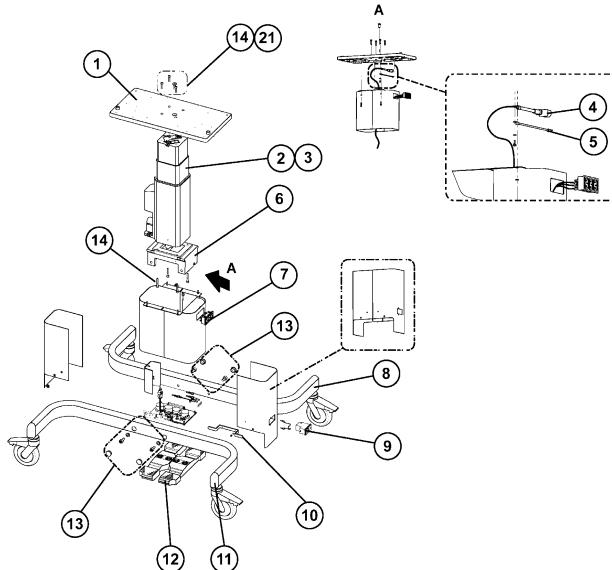
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
9	MU21023	<input checked="" type="checkbox"/>	Kit,Hardware,Dr_assy,C2000,VLSTD	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

75/115

Parts catalog
Trolley Performance



Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

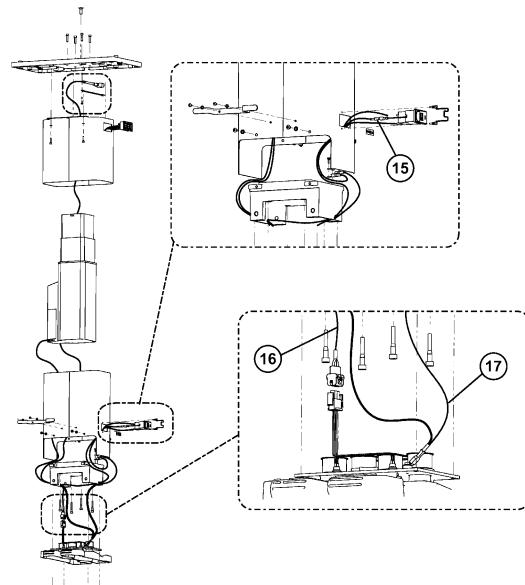
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
0	MU19319	<input checked="" type="checkbox"/>	Fuse 5mmx20mm 10 Amp Slow Blow	1.000	St	
1	MU19128	<input checked="" type="checkbox"/>	Plate-Top Transition-Machined	1.000	St	
2	MU19344	<input checked="" type="checkbox"/>	Actuator_120V_Telescopic	1.000	St	
3	MU19354	<input checked="" type="checkbox"/>	Actuator_230V_Telescopic	1.000	St	
4	MU19406	<input checked="" type="checkbox"/>	Cable assy,cont PWR,VHA C2000	1.000	St	
5	MU12783	<input checked="" type="checkbox"/>	Cable assy,Ground,6.25 grn	1.000	St	
6	MU19184	<input checked="" type="checkbox"/>	Mount_VHA_Stand_Machined	1.000	St	
7	MU19182	<input checked="" type="checkbox"/>	Outlet-3 position	1.000	St	
8	MU21239	<input checked="" type="checkbox"/>	Leg,Stand,C2000/ I8000	1.000	St	
9	MU21056	<input checked="" type="checkbox"/>	Pwr entry mod. assy., VHA C2000	1.000	St	
10	MU12758	<input checked="" type="checkbox"/>	Cleat,power cord	1.000	St	
11	MU21302	<input checked="" type="checkbox"/>	Kit,C2000VHA CSTRS/CAP SYM LEG	1.000	St	
12	2M20290	<input checked="" type="checkbox"/>	Pedal, cpl.	1.000	St	
13	MQ50407	<input type="checkbox"/>	Kit Trolley Perform.leg	1.000	St	
14	MQ50405	<input type="checkbox"/>	Kit Trolley Perform.hardware	1.000	St	
21	MU15896	<input checked="" type="checkbox"/>	SCR,M6X1.0X25LG,CP SK SS	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000

Revision: 14

Parts catalog
Trolley Performance

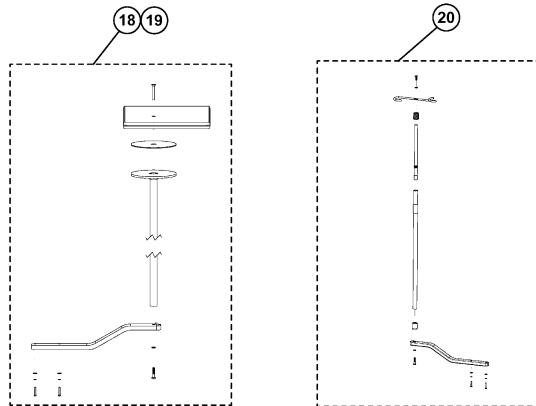


Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
15	MU19402	<input checked="" type="checkbox"/>	Cable Assy Pwr Input VHA C2000	1.000	St	
16	MU19400	<input checked="" type="checkbox"/>	Cable Assy SKF Actuator C2000	1.000	St	
17	MU19405	<input checked="" type="checkbox"/>	Wire Assy Grnd VHA Stand C2000	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Trolley Performance

Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
18	MU12937	<input checked="" type="checkbox"/>	Monitor shelf assy,HI,Isolette	1.000	St	
19	MU12948	<input checked="" type="checkbox"/>	Monitor_shelf_assy,LO,Isolette	1.000	St	
20	MU12955	<input checked="" type="checkbox"/>	I.V.pole assy,Isolette	1.000	St	

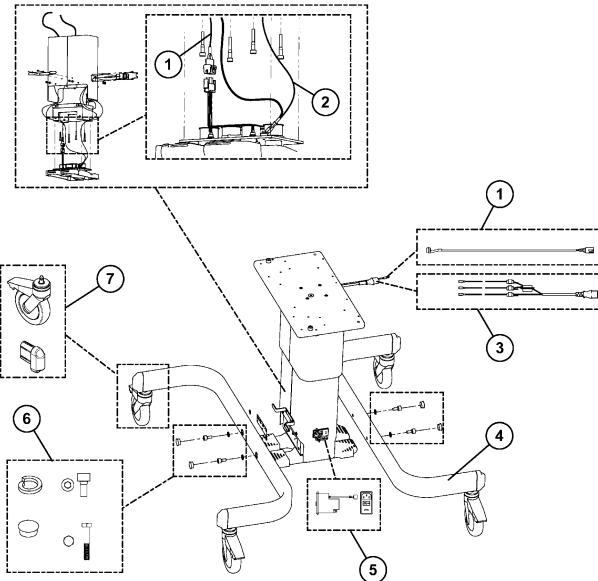
Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000

Revision: 14

78/115

Parts catalog
Kit Trolley Perform.leg



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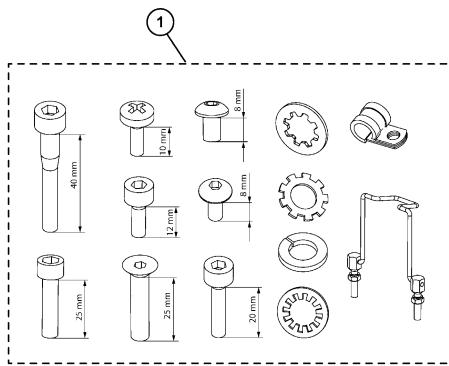
Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
1	MU19400	<input checked="" type="checkbox"/>	Cable Assy SKF Actuator C2000	1.000	St	
2	MU19405	<input checked="" type="checkbox"/>	Wire Assy Grnd VHA Stand C2000	1.000	St	
3	MU19406	<input checked="" type="checkbox"/>	Cable assy,cont PWR,VHA C2000	1.000	St	
4	MU21239	<input checked="" type="checkbox"/>	Leg,Stand,C2000/ I8000	1.000	St	
5	MU21056	<input checked="" type="checkbox"/>	Pwr entry mod. assy., VHA C2000	1.000	St	
6	MU19898	<input checked="" type="checkbox"/>	Kit,C2000VHA Leg Mntg Hardware	1.000	St	
7	MU21302	<input checked="" type="checkbox"/>	Kit,C2000VHA CSTRS/CAP SYM LEG	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

79/115

Parts catalog
Kit Trolley Perform.hardware



Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

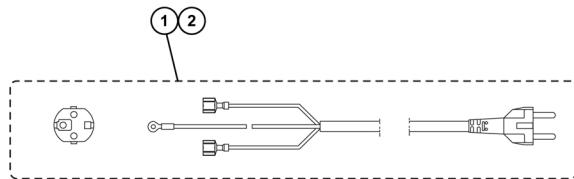
Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
1	MU19897	<input checked="" type="checkbox"/>	Kit,C2000 VHA Stand Hardware	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

80/115

Parts catalog
Permanent Mains Cables



Pos. 0 ohne Abbildung/ Item 0 without illustration/ Pos. 0 sin ilustración/ Pos. 0 sans illustration

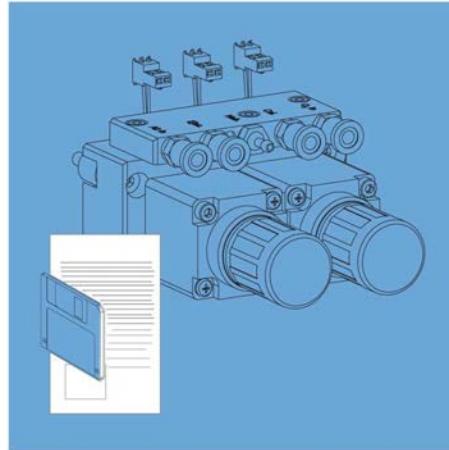
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
1	MU02504	<input checked="" type="checkbox"/>	Cable Assy,AC PWR,VDE,gra,15A	1.000	St	
2	MU02502	<input checked="" type="checkbox"/>	Cable Assy,AC PWR CORD,gra,15A	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

81/115

Parts catalog
Modification kits/Options



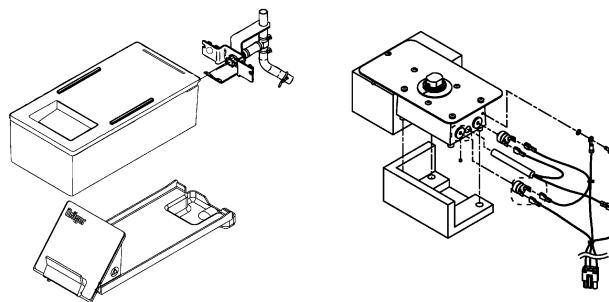
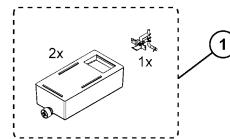
Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
	MX46525	<input type="checkbox"/>	Humidity System Assemblies	1.000	St	not for order, available parts see assembly
	MQ50567	<input type="checkbox"/>	C2000 Oxygen systems	1.000	St	not for order, available parts see assembly

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

82/115

Parts catalog
Humidity System Assemblies



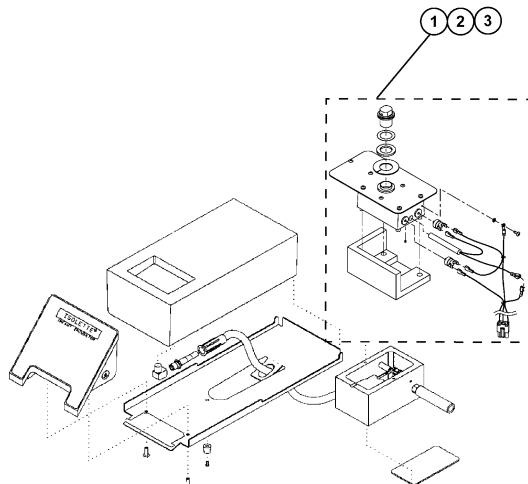
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
	MX46526	<input type="checkbox"/>	Humidity System Assembly "610"	1.000	St	not for order, available parts see assembly
	MX46527	<input type="checkbox"/>	Humidity System Assembly "613"	1.000	St	not for order, available parts see assembly
	MX46548	<input type="checkbox"/>	Humidity System Assy CPC "615"	1.000	St	not for order, available parts see assembly
	MQ50572	<input type="checkbox"/>	Humidity system aftermarket	1.000	St	not for order, available parts see assembly
1	MU13482	<input checked="" type="checkbox"/>	Retro,hum sys,E/S/F/G/I,C2,CPC	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

83/115

Parts catalog
Humidity System Assembly "610"



Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

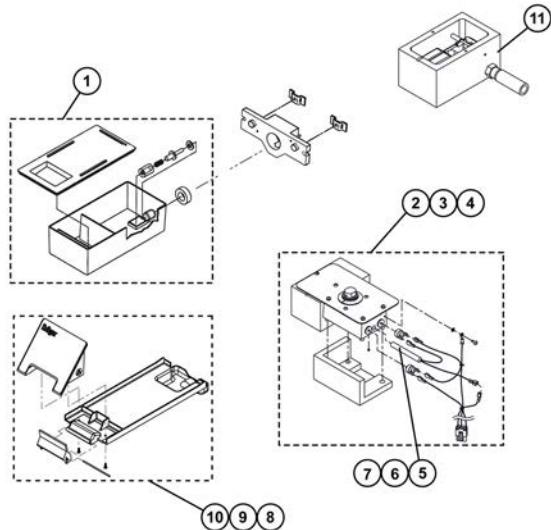
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
1	MU13194	<input checked="" type="checkbox"/>	Repl kit,Evap reservoir,120V	1.000	St	
2	MU13195	<input checked="" type="checkbox"/>	Repl kit,Evap reservoir,230V	1.000	St	
3	MU13196	<input checked="" type="checkbox"/>	Repl Kit,Evap Res Assy,100V	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

84/115

Parts catalog
Humidity System Assembly "613"



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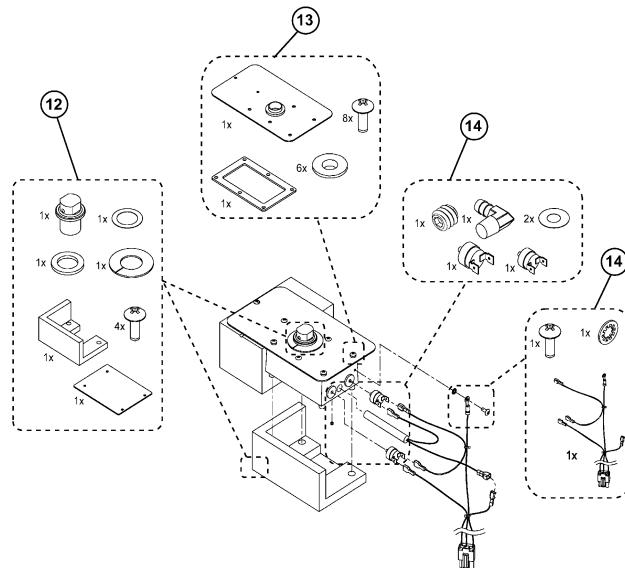
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
1	MU13202	<input checked="" type="checkbox"/>	Reservoir assy,humidity	1.000	St	
2	MU13194	<input checked="" type="checkbox"/>	Repl kit,Evap reservoir,120V	1.000	St	
3	MU13195	<input checked="" type="checkbox"/>	Repl kit,Evap reservoir,230V	1.000	St	
4	MU13196	<input checked="" type="checkbox"/>	Repl Kit,Evap Res Assy,100V	1.000	St	
5	MU13142	<input checked="" type="checkbox"/>	HEATER_CARTRIDGE_120V_100W	1.000	St	
6	MU13140	<input checked="" type="checkbox"/>	HEATER,CARTRIDGE,240V 100W	1.000	St	
7	MU13139	<input checked="" type="checkbox"/>	HEATER_CARTRIDGE_100V_100W	1.000	St	
8	MU13204	<input checked="" type="checkbox"/>	Tray assy,humidity E/S/F/G/I	1.000	St	
9	MU13206	<input checked="" type="checkbox"/>	Tray assy,humidity SWE-GRE	1.000	St	
10	MU21085	<input checked="" type="checkbox"/>	Repl,tray assy,HMD,C2,JA-ZH	1.000	St	
11	MU13128	<input checked="" type="checkbox"/>	Repl housing/float assy	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

85/115

Parts catalog
Humidity System Assembly "613"



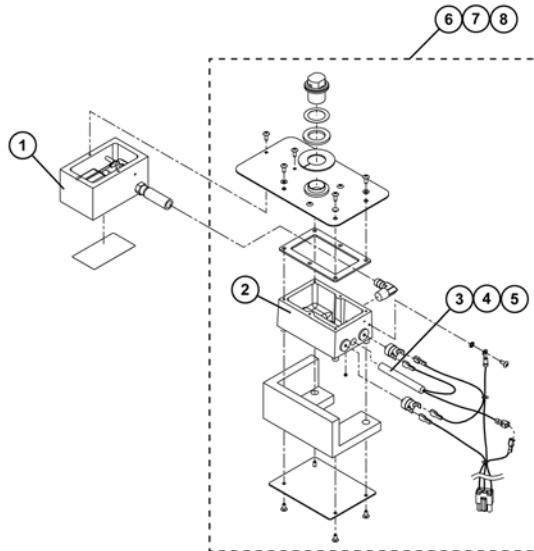
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
12	MU21357	<input checked="" type="checkbox"/>	Kit,cap&insulaton,hmidty,C2000	1.000	St	
13	MU21356	<input checked="" type="checkbox"/>	Kit,top plate,humidity,C2000	1.000	St	
14	MU21355	<input checked="" type="checkbox"/>	Kit,elect&elbw,hmidty,C2000	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

86/115

Parts catalog
Humidity System Assy CPC "615"



Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

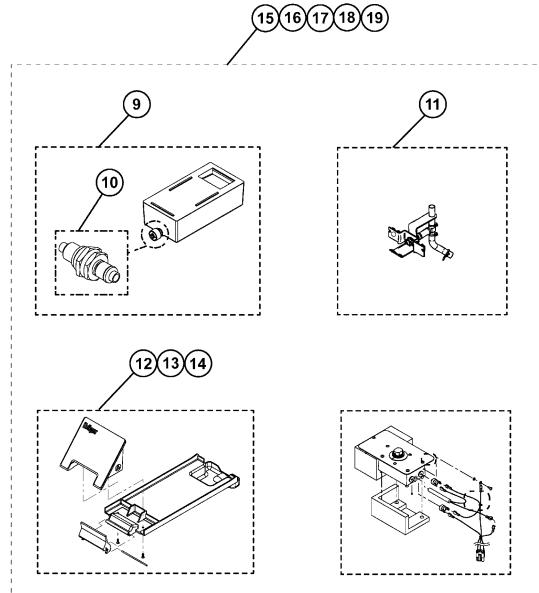
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
1	MU13128	<input checked="" type="checkbox"/>	Repl housing/float assy	1.000	St	
2	MU13178	<input checked="" type="checkbox"/>	Reservoir_Evaporator	1.000	St	
3	MU13142	<input checked="" type="checkbox"/>	HEATER_CARTRIDGE_120V_100W	1.000	St	
4	MU13140	<input checked="" type="checkbox"/>	HEATER,CARTRIDGE,240V 100W	1.000	St	
5	MU13139	<input checked="" type="checkbox"/>	HEATER_CARTRIDGE_100V_100W	1.000	St	
6	MU13194	<input checked="" type="checkbox"/>	Repl kit,Evap reservoir,120V	1.000	St	
7	MU13195	<input checked="" type="checkbox"/>	Repl kit,Evap reservoir,230V	1.000	St	
8	MU13196	<input checked="" type="checkbox"/>	Repl Kit,Evap Res Assy,100V	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

87/115

Parts catalog
Humidity System Assy CPC "615"



Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
9	MU17191	<input checked="" type="checkbox"/>	Reservoir assy,hum, CPC fitting	1.000	St	
10	MU18801	<input checked="" type="checkbox"/>	COUPLING INSERT	1.000	St	
11	MU18655	<input checked="" type="checkbox"/>	Manifold Assy, Humidity, CPC FIT	1.000	St	
12	MU21085	<input checked="" type="checkbox"/>	Repl,tray assy,HMD,C2,JA-ZH	1.000	St	
13	MU13206	<input checked="" type="checkbox"/>	Tray assy,humidity SWE-GRE	1.000	St	
14	MU13204	<input checked="" type="checkbox"/>	Tray assy,humidity E/S/F/G/I	1.000	St	
15	MU17605	<input checked="" type="checkbox"/>	Humidity Sys Assy,120V	1.000	St	
16	MU17606	<input checked="" type="checkbox"/>	Humidity Sys Assy,230V	1.000	St	
17	MU17607	<input checked="" type="checkbox"/>	Humidity Sys,230V,SWE-GR,C2,CPC	1.000	St	
18	MU19717	<input checked="" type="checkbox"/>	Humidity sys,230V,CPC,H/T/R/S/C/J/C,C2	1.000	St	
19	MU17608	<input checked="" type="checkbox"/>	Humidity Sys,100V,C2,CPF1	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

88/115

Parts catalog
Humidity System Assy CPC "615"

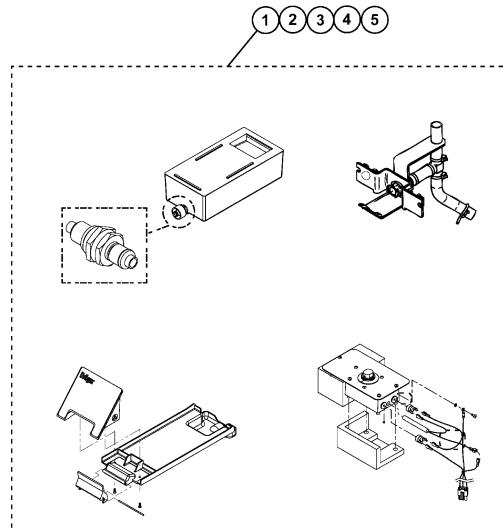
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
20	MU21357	<input checked="" type="checkbox"/>	Kit,cap&insulaton,hmidty,C2000	1.000	St	
21	MU21356	<input checked="" type="checkbox"/>	Kit,top plate,humidity,C2000	1.000	St	
22	MU21355	<input checked="" type="checkbox"/>	Kit,elect&elbw,hmidty,C2000	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

89/115

Parts catalog
Humidity system aftermarket



Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

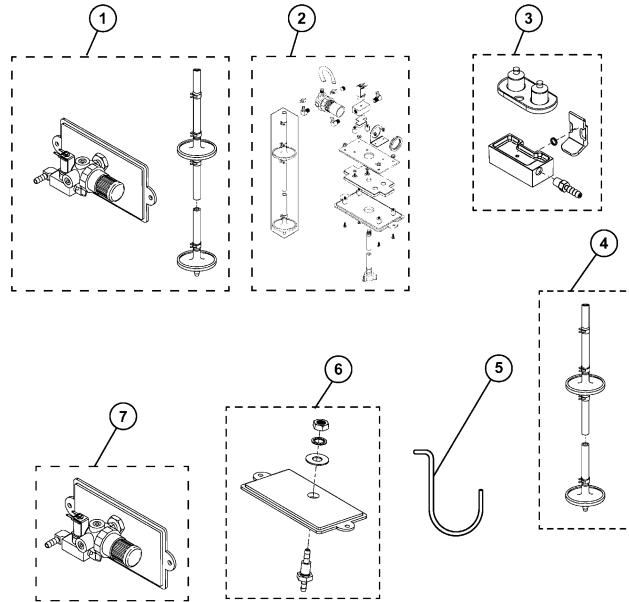
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
1	MU17605	<input checked="" type="checkbox"/>	Humidity Sys Assy,120V	1.000	St	
2	MU17606	<input checked="" type="checkbox"/>	Humidity Sys Assy,230V	1.000	St	
3	MU17607	<input checked="" type="checkbox"/>	Humidity Sys,230,SWE-GR,C2,CPC	1.000	St	
4	MU17608	<input checked="" type="checkbox"/>	Humidity Sys,100V,C2,CPFI	1.000	St	
5	MU19717	<input checked="" type="checkbox"/>	Humidity sys,230V,CPC,H/T/R/S/C/J/C,C2	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

90/115

Parts catalog
C2000 Oxygen systems



Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
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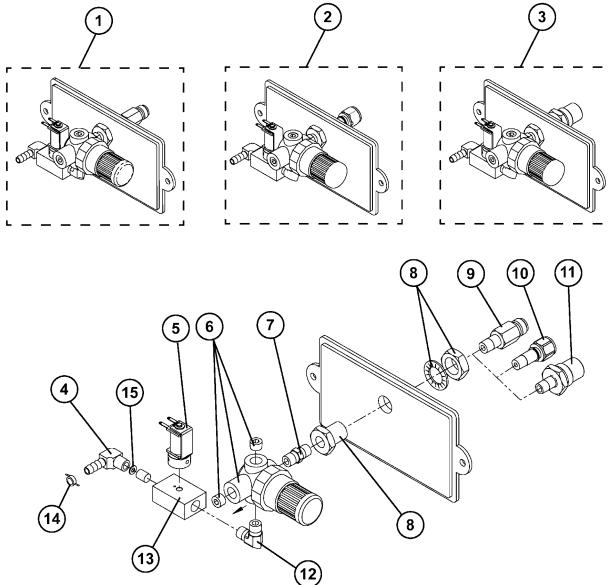
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
1	MQ50517	<input type="checkbox"/>	C2 O2-Valve Assembly post 2008	1.000	St	not for order, available parts see assembly
2	MX46529	<input type="checkbox"/>	C2 O2-Valve Assembly pre-2008	1.000	St	not for order, available parts see assembly
3	MQ50564	<input type="checkbox"/>	Kit,O2-calibration device	1.000	St	not for order, available parts see assembly
4	MQ50563	<input type="checkbox"/>	O2-Sound filter	1.000	St	not for order, available parts see assembly
5	MU13243	<input checked="" type="checkbox"/>	Hook,oxygen hose	1.000	St	
6	MU17552	<input checked="" type="checkbox"/>	Pneumatic access door assy	1.000	St	
7	MQ50571	<input type="checkbox"/>	Oxygen system aftermarket	1.000	St	not for order, available parts see assembly

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

91/115

Parts catalog
C2 O2-Valve Assembly post 2008



Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

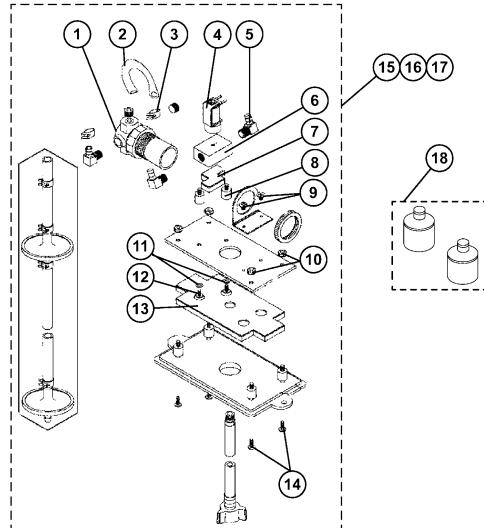
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
1	MU16672	<input checked="" type="checkbox"/>	Oxy cntl valve assy,diss male	1.000	St	
2	MU16673	<input checked="" type="checkbox"/>	Oxy cntl vlv assy,diss female	1.000	St	
3	MU16720	<input checked="" type="checkbox"/>	Oxy cntl valve assy,nist male	1.000	St	
4	MU03746	<input checked="" type="checkbox"/>	Elbow,90DEG,1/4hose-1/8NPT(M)	1.000	St	
5	MU03664	<input checked="" type="checkbox"/>	Valve,solenoid,12VDC,50PSI,O2	1.000	St	
6	MU13249	<input checked="" type="checkbox"/>	Regulator,pressure,40 psi	1.000	St	
7	MU05925	<input checked="" type="checkbox"/>	Nipple,.12NPTM,1.0L.G,brass	1.000	St	
8	MU19017	<input checked="" type="checkbox"/>	Anchor coupling,.12NPTF,.96L	1.000	St	
9	MU16670	<input checked="" type="checkbox"/>	Adapter,diss O2 M,1/8 NPT M	1.000	St	
10	MU16671	<input checked="" type="checkbox"/>	Adapter,diss O2 F,1/8 NPT M	1.000	St	
11	MU04892	<input checked="" type="checkbox"/>	Adapter,1/8NPT M-O2 NIST F,SS	1.000	St	
12	MU19022	<input checked="" type="checkbox"/>	Elbow .12NPTM	1.000	St	
13	MU13255	<input checked="" type="checkbox"/>	Block,solenoid mount	1.000	St	
14	MU13252	<input checked="" type="checkbox"/>	Clamp,hose,.460 -.545 I.D.	1.000	St	
15	MU15524	<input checked="" type="checkbox"/>	Wshir,FL,	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

92/115

Parts catalog
C2 O2-Valve Assembly pre-2008



Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

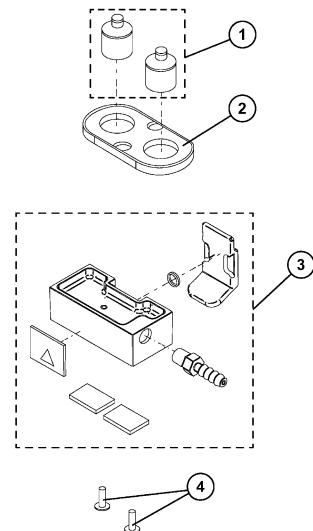
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
1	MU13249	<input checked="" type="checkbox"/>	Regulator,pressure,40 psi	1.000	St	
2	MU13257	<input checked="" type="checkbox"/>	Hose,braided,PVC,CLR,1/4 ID	0.150	m	
3	MU13252	<input checked="" type="checkbox"/>	Clamp,hose.,.460 -.545 I.D.	6.000	St	
4	MU03664	<input checked="" type="checkbox"/>	Valve,solenoid,12VDC,50PSI,O2	1.000	St	
5	MU03746	<input checked="" type="checkbox"/>	Elbow,90DEG,1/4hose-1/8NPT(M)	1.000	St	
6	MU13255	<input checked="" type="checkbox"/>	Block,solenoid mount	1.000	St	
7	MU13254	<input checked="" type="checkbox"/>	Sound coat,solenoid mtg block	1.000	St	
8	MU07138	<input checked="" type="checkbox"/>	Isolator,VIB,.44OD .44LG 4LB	1.000	St	
9	MU15171	<input checked="" type="checkbox"/>	Scr,8-32X1/4 TR PH SS Nylok	1.000	St	
10	MU15433	<input checked="" type="checkbox"/>	Nut,hex,8-32 KEPS S ZI	1.000	St	
11	MU15553	<input checked="" type="checkbox"/>	Wshr_LK_INT_	1.000	St	
12	MU15174	<input checked="" type="checkbox"/>	Scr,8-32X5/16_TR_PH_SS	1.000	St	
13	MU13256	<input checked="" type="checkbox"/>	Sound coat,mounting plate	1.000	St	
14	MU15185	<input checked="" type="checkbox"/>	Scr,8-32X3/8 TR PH SS Nylok	1.000	St	
15	MU16672	<input checked="" type="checkbox"/>	Oxy cntl valve assy,diss male	1.000	St	
16	MU16673	<input checked="" type="checkbox"/>	Oxy cntl vlv assy,diss female	1.000	St	
17	MU16720	<input checked="" type="checkbox"/>	Oxy cntl valve assy,nist male	1.000	St	
18	MU24903	<input checked="" type="checkbox"/>	Oxygen sensor kit	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

93/115

Parts catalog
Kit,O2-calibration device



Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

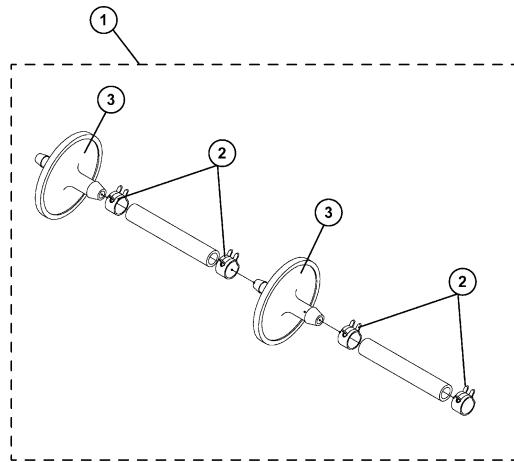
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
1	MU24903	<input checked="" type="checkbox"/>	Oxygen sensor kit	1.000	St	
2	MU13232	<input checked="" type="checkbox"/>	Plate,oxygen cell mounting	1.000	St	
3	MU13260	<input checked="" type="checkbox"/>	Oxygen calib. fix asy.locking	1.000	St	
4	MU15193	<input checked="" type="checkbox"/>	Scr,8-32X1/2, TR PH SS Nylok	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

94/115

Parts catalog
O2-Sound filter



Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

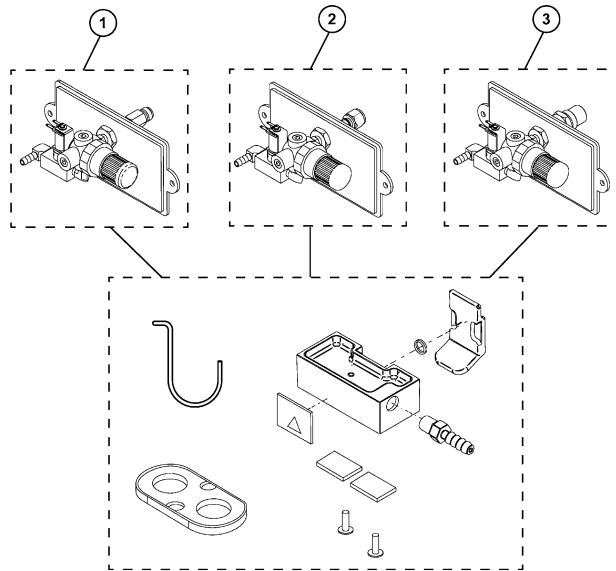
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
1	MU13404	<input checked="" type="checkbox"/>	Retro kit,dual fltr,oxy cont v	1.000	St	
2	MU13252	<input checked="" type="checkbox"/>	Clamp,hose,.460 -.545 I.D.	1.000	St	
3	MU13244	<input checked="" type="checkbox"/>	Filter,suction,dispos,rect	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

95/115

Parts catalog
Oxygen system aftermarket



Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
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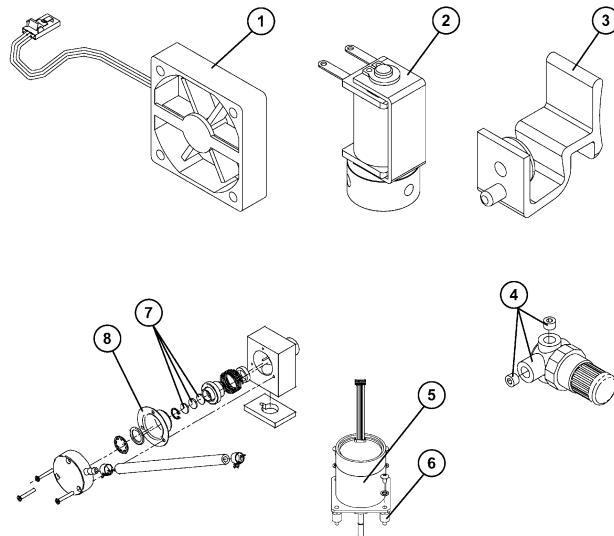
Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
1	MU16945	<input checked="" type="checkbox"/>	Oxygen assy, diss male, C2000	1.000	St	
2	MU16946	<input checked="" type="checkbox"/>	Oxygen assy, diss fmale,C2000	1.000	St	
3	MU16947	<input checked="" type="checkbox"/>	Oxygen assy,nist male,C2000	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

96/115

Parts catalog
Maintenance parts/Service kits



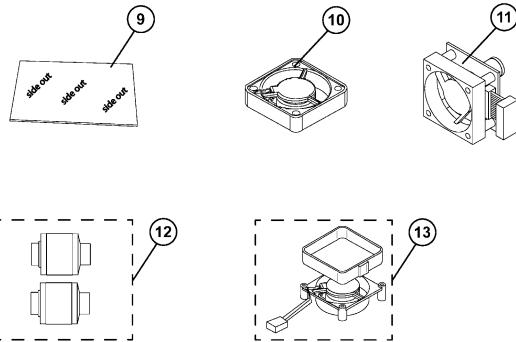
Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
1	MU12409	<input checked="" type="checkbox"/>	Fan assy,AS controller	1.000	St	
2	MU03664	<input checked="" type="checkbox"/>	Valve,solenoid,12VDC,50PSI,O2	1.000	St	
3	MU12681	<input checked="" type="checkbox"/>	Latch,heatshield	2.000	St	
4	MU13249	<input checked="" type="checkbox"/>	Regulator,pressure,40 psi	1.000	St	
5	MU13477	<input checked="" type="checkbox"/>	Kit,repl motor,C2000	1.000	St	
6	MU07138	<input checked="" type="checkbox"/>	Isolator,VIB,.44OD .44LG 4LB	4.000	St	
7	MU01958	<input checked="" type="checkbox"/>	Filter disc	3.000	St	
8	MU06679	<input checked="" type="checkbox"/>	Diaphragm	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Maintenance parts/Service kits

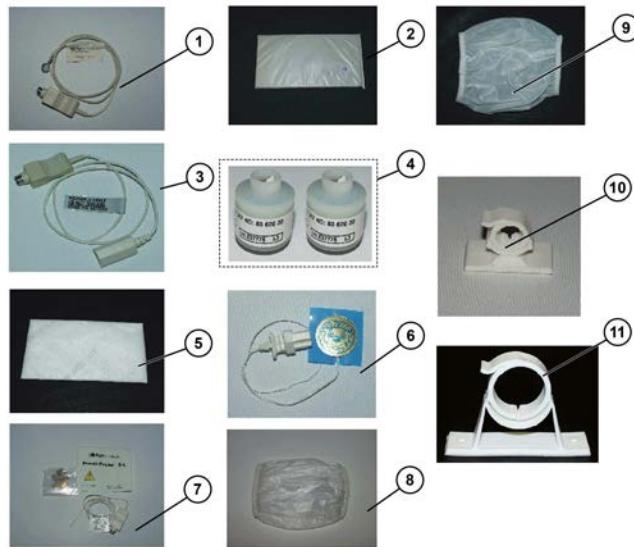
Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
9	MU12504	<input checked="" type="checkbox"/>	Filter,repl,Isolette,BOX/ 4	1.000	St	
10	MU25464	<input checked="" type="checkbox"/>	FAN ASSY,40MM X 40MM X 10MM	1.000	St	
11	MU25441	<input checked="" type="checkbox"/>	PCB assy, connector board, C2K	1.000	St	
12	MU24903	<input checked="" type="checkbox"/>	Oxygen sensor kit	1.000	St	
13	MU12299	<input checked="" type="checkbox"/>	Fan assy,40mm X 40mm X 10mm	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Accessories/Consumables



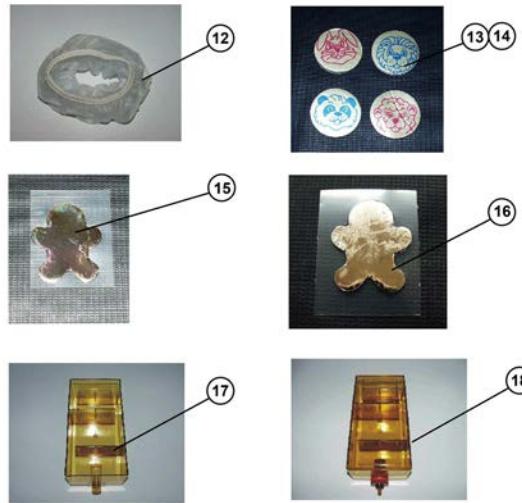
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Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
0	MQ50569	<input type="checkbox"/>	Accessories for cabinet stand	1.000	St	not for order, available parts see assembly
0	MQ50570	<input type="checkbox"/>	Accessories for column stand	1.000	St	not for order, available parts see assembly
0	MU13413	<input checked="" type="checkbox"/>	X-ray tray label/non slip	1.000	St	
0	MQ50466	<input type="checkbox"/>	Cables/Hoses/Adapter	1.000	St	not for order, available parts see assembly
0	MX46521	<input type="checkbox"/>	Scale Assembly (US)	1.000	St	not for order, available parts see assembly
0	MQ50568	<input type="checkbox"/>	Scale(EU)verifiable,RoHs	1.000	St	not for order, available parts see assembly
1	MU12533	<input checked="" type="checkbox"/>	Probe 5,skin temp,reusable	1.000	St	
2	MU12249	<input checked="" type="checkbox"/>	MATTRESS, FOAM, C2000	1.000	St	
3	MU12520	<input checked="" type="checkbox"/>	Adptr,probe 4,skin temp,reuse	1.000	St	
4	MU24903	<input checked="" type="checkbox"/>	Oxygen sensor kit	1.000	St	
5	MU12504	<input checked="" type="checkbox"/>	Filter,repl,Isolette,BOX/ 4	1.000	St	
6	MU12525	<input checked="" type="checkbox"/>	Probe 4,skntmp,dsp,ISO,BX/10	1.000	St	
7	MU12551	<input checked="" type="checkbox"/>	Probe 5,lg,skin tmp,YSI,box/10	1.000	St	
8	MU03876	<input checked="" type="checkbox"/>	Iris port sleeve,box/100	1.000	St	
9	MU12702	<input checked="" type="checkbox"/>	Cuff,ACS door,reuse,ISO,Box/10	1.000	St	
10	MU06558	<input checked="" type="checkbox"/>	Neat-clips, 0.38" dia, box/10	1.000	St	
11	MU06560	<input checked="" type="checkbox"/>	Neat-clips,1.00" dia, box/10	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

Parts catalog
Accessories/Consumables



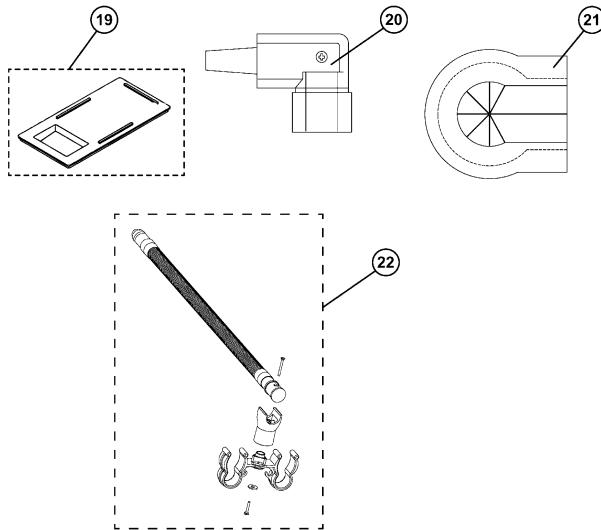
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12	MU06570	<input checked="" type="checkbox"/>	Acs port cuffs,0V,repl,box/100	1.000	St	
13	MU06941	<input checked="" type="checkbox"/>	Critter covers, box/600	1.000	St	
14	MU06942	<input checked="" type="checkbox"/>	CRITTER COVERS,BOX/100	1.000	St	
15	MU06943	<input checked="" type="checkbox"/>	Cover,probe,cfm,lge,box/100	1.000	St	
16	MU06944	<input checked="" type="checkbox"/>	Cover,probe,cfm,std,box/100	1.000	St	
17	MU13202	<input checked="" type="checkbox"/>	Reservoir assy,humidity	1.000	St	
18	MU13162	<input checked="" type="checkbox"/>	Reservoir, humidity	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
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Parts catalog
Accessories/Consumables



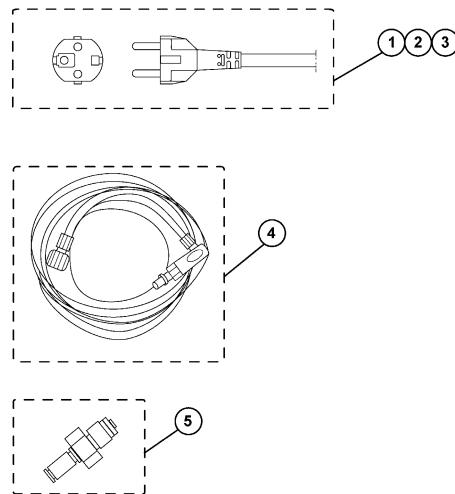
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
19	MU13161	<input checked="" type="checkbox"/>	Cover,humidity reservoir	1.000	St	
20	MU04774	<input checked="" type="checkbox"/>	Conn,plug,male,rtang,AC,10A250	1.000	St	
21	MU12609	<input checked="" type="checkbox"/>	Grommet_access	1.000	St	
22	MU18660	<input checked="" type="checkbox"/>	Kit,vent tube supt,Isolette	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Cables/Hoses/Adapter



Pos. 0 ohne Abbildung/ Item 0 without illustration/ Pos. 0 sin ilustración/ Pos. 0 sans illustration

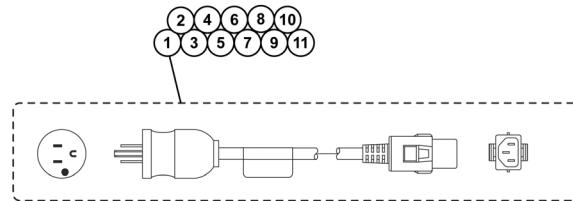
Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
1	MQ50351	<input type="checkbox"/>	Locking Mains Cables	1.000	St	
2	MQ50461	<input type="checkbox"/>	Non-Locking Mains Cables	1.000	St	
3	MQ50462	<input type="checkbox"/>	Permanent Mains Cables	1.000	St	
4	MQ50463	<input type="checkbox"/>	O2-Hoses,wall to device	1.000	St	
5	MQ50467	<input type="checkbox"/>	Oxygen Hose Adapter Assy.US	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Locking Mains Cables



Pos. 0 ohne Abbildung/ Item 0 without illustration/ Pos. 0 sin ilustración/ Pos. 0 sans illustration

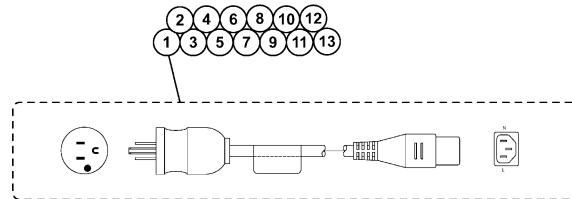
Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
1	MU02496	<input checked="" type="checkbox"/>	Cable Assy, AC PWR LK, DOM 10F	1.000	St	
2	MU19404	<input checked="" type="checkbox"/>	Cable Assy, AC PWR LK, INT, 10	1.000	St	
3	MU02500	<input checked="" type="checkbox"/>	Cable Assy,AC PWR/LK,EURO,10FT	1.000	St	
4	MU02521	<input checked="" type="checkbox"/>	Cable Assy,AC PWR,Switzerland	1.000	St	
5	MU02522	<input checked="" type="checkbox"/>	Cable Assy,AC PWR,China	1.000	St	
6	MU02524	<input checked="" type="checkbox"/>	Cable Assy,AC PWR,Denmark	1.000	St	
7	MU02526	<input checked="" type="checkbox"/>	Cable Assy,AC PWR,UK/Ireland	1.000	St	
8	MU02520	<input checked="" type="checkbox"/>	Cable Assy,AC PWR,Australia	1.000	St	
9	MU02525	<input checked="" type="checkbox"/>	Cable Assy,AC PWR,Israël	1.000	St	
10	MU02523	<input checked="" type="checkbox"/>	Cable Assy,AC PWR,Italy	1.000	St	
11	MU02527	<input checked="" type="checkbox"/>	Cable Assy,AC PWR,Ind/S.Africa	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Non-Locking Mains Cables



Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

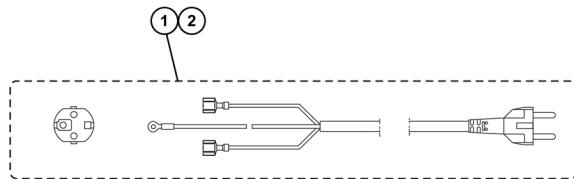
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
1	1841793	<input checked="" type="checkbox"/>	PWR Cord 10A,3m,gr,USA/J RoHS	1.000	St	
2	1868160	<input checked="" type="checkbox"/>	Power cable 10A 3m C13 bk RoHS	1.000	St	
3	1851683	<input checked="" type="checkbox"/>	Supply main, 3m, 10A	1.000	St	
4	1851691	<input checked="" type="checkbox"/>	Mains cable Swiss ,3m,10A	1.000	St	
5	1859714	<input checked="" type="checkbox"/>	Power cable 10A,3m,black,China	1.000	St	
6	1868950	<input checked="" type="checkbox"/>	PWR Cord DK,3m,10A,C13,HG RoHS	1.000	St	
7	1851713	<input checked="" type="checkbox"/>	Cable Great Britain,3m,10A	1.000	St	
8	1851705	<input checked="" type="checkbox"/>	Cable Australia,3m,10A,C13	1.000	St	
9	MU16872	<input checked="" type="checkbox"/>	Cable assy,AC PWR/NL,Israel	1.000	St	
10	MU16874	<input checked="" type="checkbox"/>	Cable assy,AC PWR/NL,Ind/S.Afr	1.000	St	
11	MU16870	<input checked="" type="checkbox"/>	Cable assy,AC PWR/NL,Italy	1.000	St	
12	1869833	<input checked="" type="checkbox"/>	Pwr Cord IL,3m,10A,C13 RoHS	1.000	St	
13	1875523	<input checked="" type="checkbox"/>	Mains cable BR,3m,C13,BK RoHS	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Permanent Mains Cables



Pos. 0 ohne Abbildung/ Item 0 without illustration/ Pos. 0 sin ilustración/ Pos. 0 sans illustration

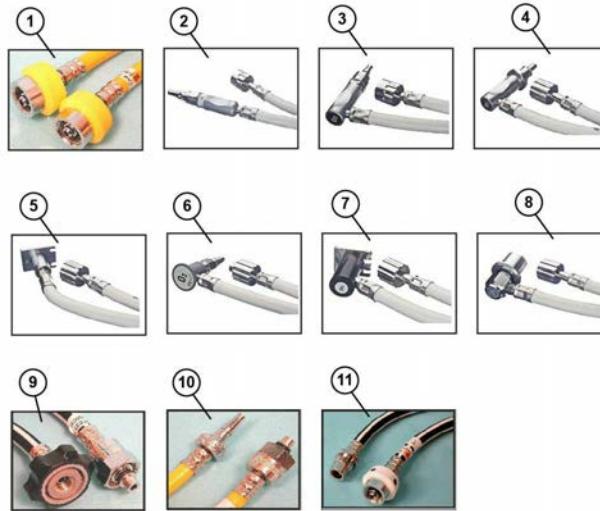
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
1	MU02504	<input checked="" type="checkbox"/>	Cable Assy,AC PWR,VDE,gra,15A	1.000	St	
2	MU02502	<input checked="" type="checkbox"/>	Cable Assy,AC PWR CORD,gra,15A	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
O2-Hoses,wall to device



Pos. 0 ohne Abbildung/ Item 0 without illustration/ Pos. 0 sin ilustración/ Pos. 0 sans illustration

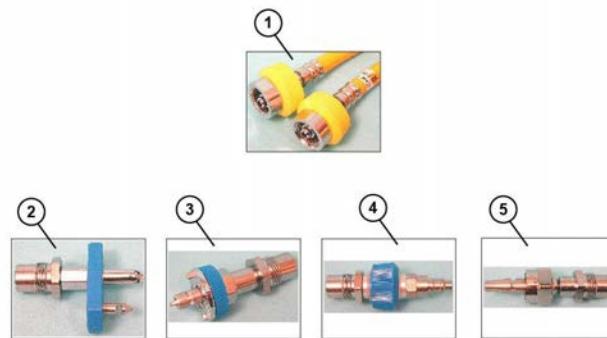
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
1	4199592	<input checked="" type="checkbox"/>	Hose ASM-02 DISS hand 10L	1.000	St	
2	M35376	<input checked="" type="checkbox"/>	O2 CS-hose 3.0m NIST EN SS	1.000	St	
3	M35390	<input checked="" type="checkbox"/>	O2 CS-hose 3.0m NIST EN BS	1.000	St	
4	M35408	<input checked="" type="checkbox"/>	O2 CS-hose 3.0m NIST EN UNI	1.000	St	
5	M35459	<input checked="" type="checkbox"/>	O2 CS-hose 3.0m NIST EN Parco	1.000	St	
6	M35472	<input checked="" type="checkbox"/>	O2 CS-hose 3.0m NIST EN Carba	1.000	St	
7	M35481	<input checked="" type="checkbox"/>	O2 CS-hose 3.0m NIST EN Medec	1.000	St	
8	M36020	<input checked="" type="checkbox"/>	O2 CS-hose 3m NIST EN Carburos	1.000	St	
9	M36152	<input checked="" type="checkbox"/>	O2 ZV-Hose 3m NIST EN AS	1.000	St	
11	M36291	<input checked="" type="checkbox"/>	O2 ZV-Hose 3m DISSB EN HAND	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Oxygen Hose Adapter Assy.US



Pos. 0 ohne Abbildung/ Item 0 without illustration/ Pos. 0 sin ilustración/ Pos. 0 sans illustration

Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
1	4199592	<input checked="" type="checkbox"/>	Hose ASM-02 DISS hand 10L	1.000	St	
2	4119068	<input checked="" type="checkbox"/>	Adapter-DISS M/QC-O2-Chemetron	1.000	St	
3	4119073	<input checked="" type="checkbox"/>	Adapter-DISS M/QC-O2-Ohmeda	1.000	St	
4	4119078	<input checked="" type="checkbox"/>	Adapter-DISS M/QC-O2-Pur Ben	1.000	St	
5	4119083	<input checked="" type="checkbox"/>	Adapter-DISS M/QC-O2-Schrader	1.000	St	

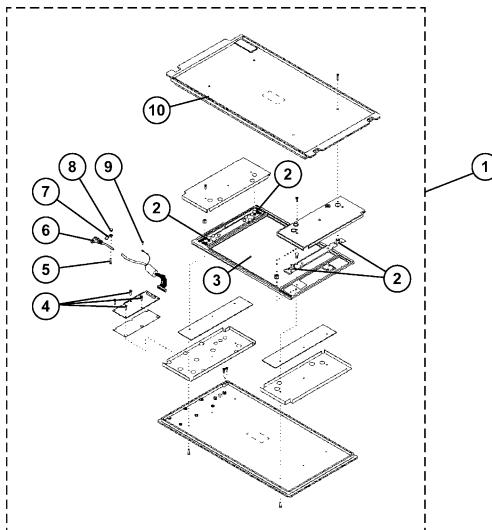
Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000

Revision: 14

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Parts catalog
Scale Assembly (US)



Pos. 0 (wenn vorhanden) ohne Abbildung/ Item 0 (if available) without illustration/
Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

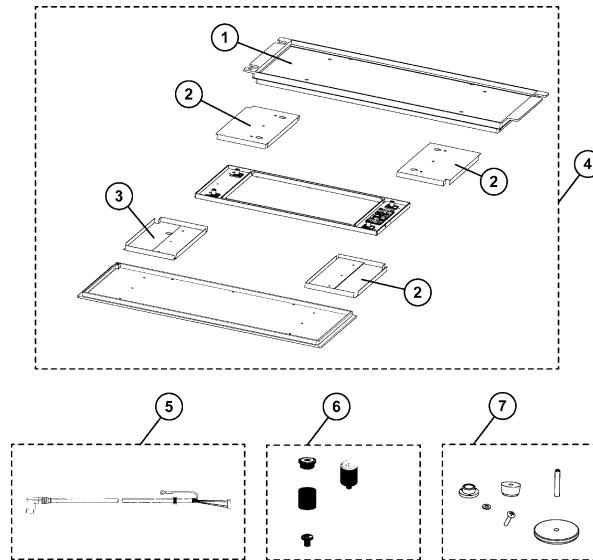
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
1	MU25476	<input checked="" type="checkbox"/>	Scale assy,serial,Isolette	1.000	St	
2	MU13070	<input checked="" type="checkbox"/>	Bushing,flin tab	4.000	St	
3	MU02917	<input checked="" type="checkbox"/>	Tape,conductive, cop,1.00 wide	1.000	m	
4	MU15170	<input checked="" type="checkbox"/>	Scr,8-32X1/4 TR PH SS	8.000	St	
5	MU15142	<input checked="" type="checkbox"/>	Scr,6-32X9/16,TR PH SS Nylok	2.000	St	
6	MU13058	<input checked="" type="checkbox"/>	Cable assembly, scale	1.000	St	
7	MU11061	<input checked="" type="checkbox"/>	Clamp,Cable,Spr Ty,Ny .38ID	2.000	St	
8	MU15421	<input checked="" type="checkbox"/>	Nut,acorn,6-32 AL	2.000	St	
9	MU15105	<input checked="" type="checkbox"/>	Scr, 06-32 X 1/4 PH PAN SEMS EXT S	1.000	St	
10	MU25401	<input checked="" type="checkbox"/>	Tray,top, scale,Isolette	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Scale(EU)verifiable,RoHS



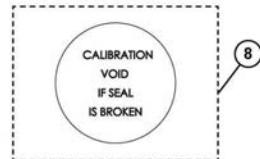
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Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
0	MU25554	<input checked="" type="checkbox"/>	Field HW kit,scale,Isolette	1.000	St	
1	MU25401	<input checked="" type="checkbox"/>	Tray,top,scale,Isolette	1.000	St	
2	MU25548	<input checked="" type="checkbox"/>	2 hole shield,scale,Isolette	1.000	St	
3	MU25549	<input checked="" type="checkbox"/>	1 hole shield,scale,Isolette	1.000	St	
4	MU25530	<input checked="" type="checkbox"/>	Scale Assy, serial OIML, Isolette	1.000	St	verifiable
5	MU25551	<input checked="" type="checkbox"/>	Cable assembly,scale,Isolette	1.000	St	
6	MU25582	<input checked="" type="checkbox"/>	Load mount,scale,Isolette	1.000	St	
7	MU25546	<input checked="" type="checkbox"/>	Kit,HW,OIML adjust,Isolette	1.000	St	

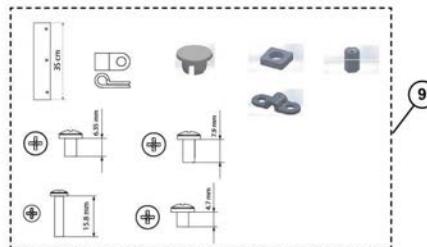
Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
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Parts catalog
Scale(EU)verifiable,RoHs

8



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Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
8	MU13098	<input checked="" type="checkbox"/>	Label,tamper proof	1.000	St	
9	MU25552	<input checked="" type="checkbox"/>	Kit,hardware,scale,Isolette	1.000	St	

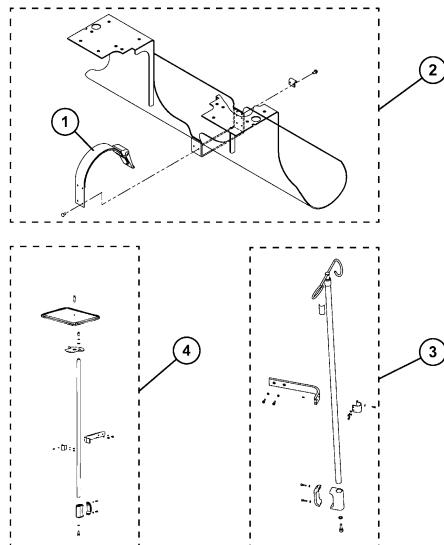
Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000

Revision: 14

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Parts catalog
Accessories for cabinet stand



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Pos. 0 (si existe) sin ilustración/ Pos. 0 (si existant) sans illustration

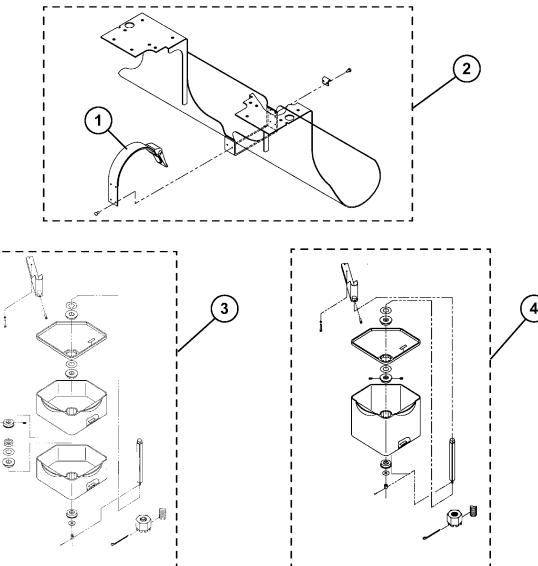
Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
1	MU12954	<input checked="" type="checkbox"/>	Clamp assy, tank	1.000	St	
2	MU12952	<input checked="" type="checkbox"/>	Oxygen Tank Brkt Assy,Isolette	1.000	St	
3	MU19403	<input checked="" type="checkbox"/>	IV_pole_assy_cabinet	1.000	St	
4	MU19325	<input checked="" type="checkbox"/>	Utility_shelf_assy_cabinet	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Accessories for column stand



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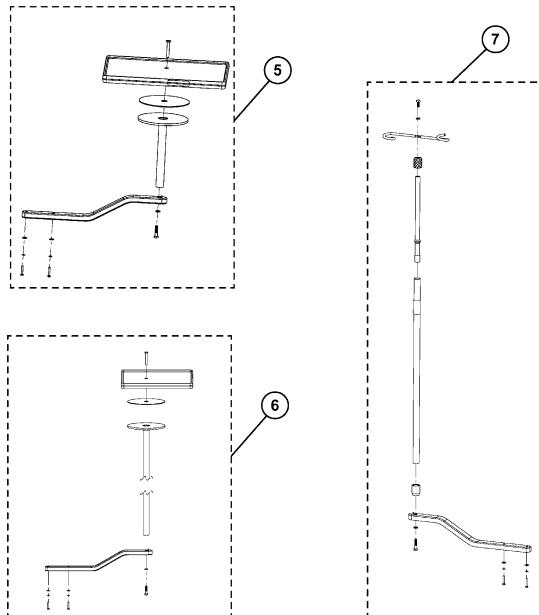
Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
1	MU12954	<input checked="" type="checkbox"/>	Clamp assy, tank	1.000	St	
2	MU12952	<input checked="" type="checkbox"/>	Oxygen Tank Brkt Assy,Isolette	1.000	St	
3	MU17880	<input checked="" type="checkbox"/>	Swivel drawer assy,small	1.000	St	
4	MU17879	<input checked="" type="checkbox"/>	Swivel drawer assy,large	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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Parts catalog
Accessories for column stand



Item No.	Order No.	Orderable	Description	Qty.	Qty.unit	Remark
5	MU12948	<input checked="" type="checkbox"/>	Monitor_shelf_assy,LO,Isolette	1.000	St	
6	MU12937	<input checked="" type="checkbox"/>	Monitor shelf assy,HI,Isolette	1.000	St	
7	MU12955	<input checked="" type="checkbox"/>	I.V.pole assy,Isolette	1.000	St	

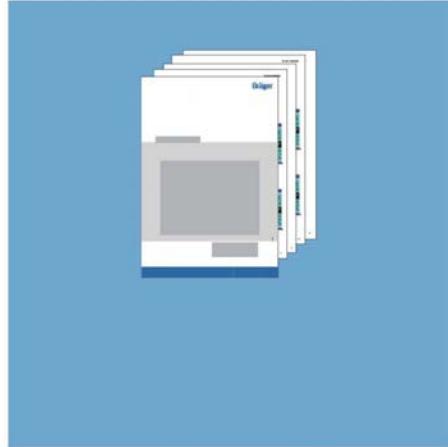
Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000

Revision: 14

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Parts catalog
Manuals/Techn. Documentation



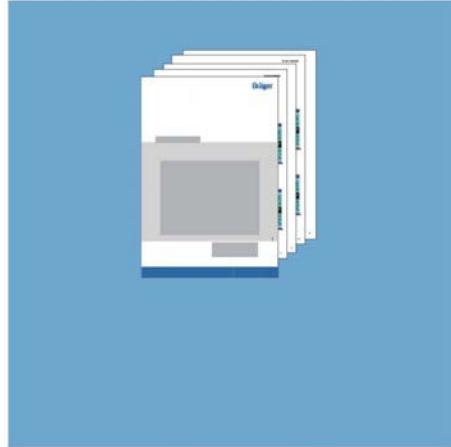
Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
	MU00939	<input checked="" type="checkbox"/>	TSM Isolette C2000 en	1.000	St	
	MU19409	<input checked="" type="checkbox"/>	IFU, C2000 Value, en	1.000	St	
	MU19694	<input checked="" type="checkbox"/>	IFU, C2000 Value, bg	1.000	St	
	MU19410	<input checked="" type="checkbox"/>	IFU, C2000 Value, cs	1.000	St	
	MU19411	<input checked="" type="checkbox"/>	IFU, C2000 Value, da	1.000	St	
	MU19412	<input checked="" type="checkbox"/>	IFU, C2000 Value, de	1.000	St	
	MU19413	<input checked="" type="checkbox"/>	IFU, C2000 Value, el	1.000	St	
	MU19414	<input checked="" type="checkbox"/>	IFU, C2000 Value, es	1.000	St	
	MU19415	<input checked="" type="checkbox"/>	IFU, C2000 Value, fi	1.000	St	
	MU19416	<input checked="" type="checkbox"/>	IFU, C2000 Value, fr	1.000	St	
	MU22000	<input checked="" type="checkbox"/>	IFU, C2000 Value, hr	1.000	St	
	MU19417	<input checked="" type="checkbox"/>	IFU, C2000 Value, hu	1.000	St	
	MU19418	<input checked="" type="checkbox"/>	IFU, C2000 Value, it	1.000	St	
	MU19419	<input checked="" type="checkbox"/>	IFU, C2000 Value, ja	1.000	St	
	MU19695	<input checked="" type="checkbox"/>	IFU, C2000 Value, ko	1.000	St	
	MU19420	<input checked="" type="checkbox"/>	IFU, C2000 Value, nl	1.000	St	
	MU19421	<input checked="" type="checkbox"/>	IFU, C2000 Value, no	1.000	St	
	MU19422	<input checked="" type="checkbox"/>	IFU, C2000 Value, pl	1.000	St	
	MU19425	<input checked="" type="checkbox"/>	IFU, C2000 Value, pt	1.000	St	
	MU19693	<input checked="" type="checkbox"/>	IFU, C2000 Value, ro	1.000	St	
	MU19427	<input checked="" type="checkbox"/>	IFU, C2000 Value, sk	1.000	St	
	MU22769	<input checked="" type="checkbox"/>	IFU, C2000 Value, sr	1.000	St	
	MU19428	<input checked="" type="checkbox"/>	IFU, C2000 Value, sv	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000

Revision: 14

Parts catalog
Manuals/Techn. Documentation



Item No.	Order No.	Oderable	Description	Qty.	Qty.unit	Remark
MU19429		<input checked="" type="checkbox"/>	IFU, C2000 Value, tr	1.000	St	
MU19430		<input checked="" type="checkbox"/>	IFU, C2000 Value, zh	1.000	St	
MU14982		<input checked="" type="checkbox"/>	IFU, C2000/C2000e, en	1.000	St	
MU19536		<input checked="" type="checkbox"/>	IFU, C2000/C2000e, bg	1.000	St	
MU14986		<input checked="" type="checkbox"/>	IFU, C2000/C2000e, es	1.000	St	
MU17242		<input checked="" type="checkbox"/>	IFU, C2000/C2000e, pt	1.000	St	
MU19535		<input checked="" type="checkbox"/>	IFU, C2000/C2000e, ro	1.000	St	
MU16779		<input checked="" type="checkbox"/>	IFU, C2000/C2000e, ru	1.000	St	
MU16778		<input checked="" type="checkbox"/>	IFU, C2000/C2000e, zh	1.000	St	

Items that are shown in the illustration but are not listed below the illustration are not available as spare parts

Isolette C2000
Revision: 14

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5

Test instructions

Test Instructions

This chapter contains the measures required to determine the actual condition of the device.

5.1

Test Instructions / Service Card IPM

Dräger

Test Instructions / Service Card IPM

Isolette® C2000



20046

Warning

All servicing and/or test procedures on the device require detailed knowledge of this documentation. Use of the device requires detailed knowledge and observance of the relevant Instructions for Use.

Revision 4.0

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Important notes

NOTE

Prior to using these test instructions, check that they are the latest revision (compare revision with current service documentation).

All results and inputs must be documented in the "Result Sheet".

NOTE

Do not use these test instructions for testing after a repair procedure.

These test instructions apply to software versions greater than or equal to 2.19 and less than or equal to 3.11, except 3.02.



1 Device configuration

This chapter is used to record the device configuration.

1.1 Device Configuration

1.1.1 Serial numbers

- | | | |
|--------|--|------------|
| Action | • Enter the following serial numbers: | |
| Result | Isolette® C2000 (The serial number is located on the rating plate on the rear of the basic housing.) | [_____txt] |
| Result | Controller (The serial number is located on the rating plate underneath the controller.) | [_____txt] |
| Result | Sensor module (The serial number is located on the rating plate on the bottom of the basic housing.) | [_____txt] |
| Result | Option, Scale (The serial number is located on the rating plate underneath the scale.) | [_____txt] |
| Result | Option, VHA (Variable Height Adjustment) (The serial number is located on the rating plate. Older devices have the rating plate on the side of the VHA, newer devices have the rating plate in the rear of the unit.) | [_____txt] |
| Result | Option, Servo O₂ (The serial number is located on the rating plate. The rating plate is on the outside of the Servo O₂ module, at the rear of the shell.) | [_____txt] |

NOTE

Enter the serial number only during or after an installation or repair of the humidifier; perform the following procedure.

- | | | |
|--------|--|------------|
| Result | Option, Humidity (only during installation or repair) (The serial number is located on the rating plate underneath the humidity.) | [_____txt] |
|--------|--|------------|

CAUTION

- | |
|---|
| ► The cartridge, the heating element, and the humidifier are very hot after operation. After removing the heating element, allow the heating cartridge to cool down before touching it! |
|---|

**Isolette® C2000
Device configuration**

- Action • Unplug power plug of unit from mains socket outlet.
 • Remove the humidifier container from the unit.
 • Remove the mattress tray or the scale (option) from the unit.
 • Open and latch the hood.
 • Remove the mattress tray tilt rods (2x) from the unit.
 • Remove the main deck from the unit.
 • Remove the heater/impeller cover plate from the basic housing.
 • Remove the heating element from the heating cartridge and place it aside.
 • Check the vaporizer cap.
- Testing after an installation or repair
- Action • Check the following parts only if a new humidifier has been installed or if the humidifier has been repaired:
 – Vaporizer container
 – connections
- Test The vaporizer cap is neither contaminated nor damaged. A stainless steel washer and a silicone gasket are mounted on the container connector of the humidifier. The stainless steel washer and the silicone gasket are neither contaminated nor damaged.
- Action • Visually check the humidifier container, the container gasket, and the non-return valve.
- Test The humidifier container, the container gasket, and the non-return valve are neither contaminated nor damaged.
- Action • Slide the humidifier container into the unit until it engages.
 • Refit the heating element onto the heating cartridge.
- Result **Testing after an installation or repair**

 [] OK]

1.1.2 Software version

- Prerequisites The unit is connected to the AC power supply.
- Action • Switch the device on.
- The unit completes its self-test. The software version is displayed during the self-test.
- Action • Read and record the software version.
- Result **Enter the Software version.**

 [] txt]

1.1.3 Operating hours, Sensor module firmware and Heater Thermocouple
NOTE

In incubators Isolette C2000 built after 2011, or which have Controller CPU PCBs replaced after 2011, the operating hours parameter is not based on a Real Time Clock, but is emulated in software. Reloading the controller software will reset the operating hours parameter to 0.

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- Prerequisites The unit is connected to the AC power supply.

Isolette® C2000
Device configuration

- Action • Press and hold the "alarm silence" button and, at the same time, switch the unit on and keep the "alarm silence" button pressed until the "System Configuration" menu appears on the display.
• Press the "Diag Info" softkey.

The "DIAG INFO" menu is displayed.

- Action • Read the operating hours from the "Total Unit Run Time" line and record them into the "Test result" sheet.

Result **Operating hours**

[_____ h]

- Action • Read the sensor module firmware version from the "Sensor Module Firmware" line and record it into the "Test result" sheet.

Result **Sensor module firmware**

[_____ txt]

- Action • Press the "Data summary" softkey.
• Press the "Display selection" button.

Heater thermocouple

Test Within 5 minutes, the "heater thermocouple" value increases from approx. zero (cold heater) to approx. 5 mV to 25 mV.

Result **Heater thermocouple**

[_____ OK]

- Action • Switch off the device.

Isolette® C2000
Maintenance parts

2 Maintenance parts

This chapter contains interval-related maintenance parts, measures, and tests that can only be performed on an open device.

2.1 Replacement parts, as required or at the latest every three months

2.1.1 Air Filter

Quan- tivity	Designation	Number	Location/Remark
1	Air filter	MU12504	4-pack / Medical and technical personnel

Result **Air Filter**

Next replacement: [_____dat]

2.2 Maintenance parts, yearly

2.2.1 Option, Oxygen sensors

Quan- tivity	Designation	Number	Location/Remark
1	Oxygen sensor	MU24903	/ Technical personnel

Result **Option Oxygen sensors**

Next replacement: [_____dat]

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Isolette® C2000
Maintenance parts

2.3 Maintenance parts, 2-yearly

2.3.1 Heat shield latch

Quan- tity	Designation	Number	Location/Remark
4	Heat shield latch	MU12681	2 per access panel / Technical personnel

Result **Heat shield latch**

Next replacement: [_____ dat]

2.3.2 Option, O₂ solenoid valve

Quan- tity	Designation	Number	Location/Remark
1	O ₂ solenoid valve	MU03664	/ Technical personnel

Result **Option, O₂ solenoid valve**

Next replacement: [_____ dat]

Isolette® C2000
Maintenance parts

2.4 Maintenance parts, 3-yearly

2.4.1 Impeller motor spare parts kit

Quan- tity	Designation	Number	Location/Remark
1	Impeller motor spare parts kit	MU13477	/ Technical personnel

Result **Impeller motor spare parts kit**

Next replacement: [_____ dat]

2.4.2 Vibration dampening rubbers for impeller motor

Quan- tity	Designation	Number	Location/Remark
4	Vibration dampening rubbers	MU07138	/ Technical personnel

Result **Vibration dampening rubbers for impeller motor**

Next replacement: [_____ dat]

2.4.3 Fan motor (Sensor module)

NOTE

The fan motor must be the correct version for the sensor module. For Sensor Modules prior to January 2003, use Fan MU12299, with a connector. For Sensor modules after January 2003, use either fan MU25464 (soldered in) or Connector PCB MU23129 (with fan already soldered).

Fan motor with connector (prior to January 2003)

Quan- tity	Designation	Number	Location/Remark
1	Fan motor	MU12299	Sensor module / Technical per- sonnel

Result **Fan motor with connector (prior to January 2003)**

Next replacement: [_____ dat]

Fan motor, soldered in (January 2003 until present)

Quan- tity	Designation	Number	Location/Remark
1	Fan motor	MU25464	Sensor module / Technical Personnel

Result **Fan motor, soldered in (January 2003 until present)**

Next replacement: [_____ dat]

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Isolette® C2000
Maintenance parts

Fan motor including Connector PCB (January 2003 to present)

Quan- tity	Designation	Number	Location/Remark
1	Fan motor	MU23129	Sensor module / Technical Personnel

Result **Fan motor including Connector PCB (January 2003 to present)**

Next replacement: [_____ dat]

2.4.4 Fan motor (Controller) and visual inspection J15

Quan- tity	Designation	Number	Location/Remark
1	Fan motor	MU12409	Controller / Technical personnel

Result **Fan motor**

Next replacement: [_____ dat]

NOTE

During replacement of the controller fan, inspect male and female of the high-current connector J 15 on the Interface P.C. Board for discoloration, or signs of damage. Replace the P.C. Board and/or mating cables if damaged

Action • Inspect the male and female connector of J 15.

Result **Visual inspection of male and female connector J 15 (Interface P.C. Board)**

[_____ dat]

2.4.5 Oxygen diaphragm

Quan- tivity	Designation	Number	Location/Remark
1	Oxygen diaphragm	MU06679	/ Technical personnel

Result **Oxygen diaphragm**

Next replacement: [_____ dat]

2.4.6 Filter disk

Quan- tivity	Designation	Number	Location/Remark
3	Filter disk	MU01958	/ Technical personnel

Result **Filter disk**

Next replacement: [_____ dat]

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Maintenance parts

2.5 Maintenance parts, 6-yearly

2.5.1 Option, Pressure regulator O₂

Quan- tity	Designation	Number	Location/Remark
1	Pressure regulator	MU13249	/ Technical personnel

Result **Pressure regulator**

Next replacement: [_____ dat]

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3 Electrical safety

This chapter contains tests that need to be performed in order to verify that the medical electrical system is operational.

3.1 Electrical safety according to IEC 62353

NOTE

The device conforms to the conditions of protection class 1, type BF.

Introduction The following subsections provide descriptions of device checks, recurrent testing and testing after servicing of medical electrical (ME) devices.

NOTE

The tester, e.g. SECUTEST, must be correctly configured for all measurements. If implausible measurement results are obtained, such as a leakage current of 0.0 µA, check the tester configuration in addition to the test setup!

NOTE

In testing to IEC 62353, the medical electrical device (ME device) or the medical electrical system (ME system) must be tested.

ME systems must be treated like ME devices.

An ME system is a combination of several devices, as specified by the manufacturer, of which at least one must be an ME device, which are interconnected by a functional connection or by means of a multiple socket outlet.

NOTE

With devices that are connected to other devices by means of a data cable, this connection must be disconnected prior to performing the electrical safety check, in order to avoid incorrect measurements.

3.1.1 Visual check

Prerequisites The tester and the device under test are switched off.

- Action • Disconnect the power plug from the mains socket.

WARNING

Hazardous voltage.

Touching live components can lead to serious injury or death.

- Disconnect the power cord from the AC outlet before checking the power fuse-links.

Test – The power fuse-links, if present, of the device under test match the specifications on the rating plate.

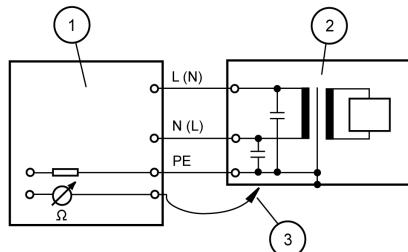
- The power cable and plug are not dirty or damaged.

Result **Condition checked**

[] OK]

3.1.2 Protective earth resistance

Test set-up



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Fig. 1 Protective earth resistance

Item	Designation
1	Tester (test device)
2	Device under test
3	Tester probe cable
L	Conductor
N	Neutral conductor
PE	Protective earth conductor

- Action
- Prepare the test setup.
 - Switch the tester on.
 - Configure the tester appropriately and follow the instructions on the tester.
 - Using the tip of the probe cable, scan each of the points on the device under test listed under “**Protective earth resistance measurement points**” one after the other, moving the power supply cord along the entire length during the measurement. The resistance must not change when you do so.

Test The protective earth resistance of devices with detachable but connected mains power cables must not exceed **0.3 Ohm** in each case.

Result **Maximum measured value of device with power supply cord.** [_____ Ω]

Test If other optional power cables are fitted, the respective protective earth resistance must not exceed **0.1 Ohms**. Move the power supply cord along the entire length during the measurement. The resistance must not change when you do so.

Result **Maximum measured value of optional power supply cord.** [_____ Ω]

3.1.3 Protective earth resistance measurement points

- Action
- Scan the following measurement points for protective earth resistance measurement one after the other using the tip of the probe cable:
 - Wing nut on the controller
 - Option: Device with fixed height stand:
 - Screws located near the main power switch
 - All protective earth conductor contacts on all power sockets of the multiple-socket outlet
 - Option: Device with variable height stand:
 - Screws located near the main power switch
 - All protective earth conductor contacts on all power sockets of the multiple socket-outlet.
 - Option: Screws on the fixed height column (Note: The screws are located near the main power switch).
 - Option: Screws on the variable height adjustable column (Note: The screws are located near the main power switch).
 - Option: Wire-holder screws on the cabinet stand (Note: The screws are located near the main power switch).

Result **Measurement points scanned.**

OK

3.1.4 Equipment leakage current

NOTE

The equipment leakage current can be tested by the differential measurement method or the direct measurement method.

In direct measurement, set up the equipment under test with insulation and scan all accessible conductive components using the probe (the protective earth is internally interrupted in the tester).

Prerequisites The tester is switched on.

Test set-up

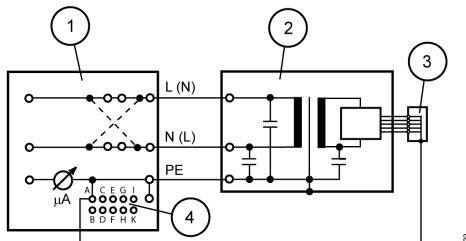


Fig. 2 Equipment leakage current

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Electrical safety

Item	Designation
1	Tester
2	Equipment under test
3	(Applied part) Device-specific test adapter for tester
4	(Applied part) Configurable ports for applied part
L	Conductor
N	Neutral conductor
PE	Protective earth

- Action
- Prepare the test setup.
 - (Applied part) Connect the device-specific test adapter on one end to the device under test and on the other end to the tester's configurable port "A" for applied parts (paying attention to the configuration!).
 - Follow the instructions on the tester.

NOTE

For symmetrical mains plugs that have no preferential position in the socket-outlet, perform the test twice! Perform the second test with the plug rotated 180° in the socket. In many test devices the mains plug rotation is simulated by means of a built-in selector switch. Document the higher measured value.

NOTE

Always enter the reference value (initial value measured) in the "Test Report" or "Result Sheet" document.

NOTE

If the measured values are between 90% and 100% of the permissible limit value, the reference value and the previously measured values of the recurrent test should be applied to assess electrical safety!

Test The initial value must not exceed **500** µA.

Result **Initial value** [_____ µA]

Test The recurrent value must not exceed **500** µA.

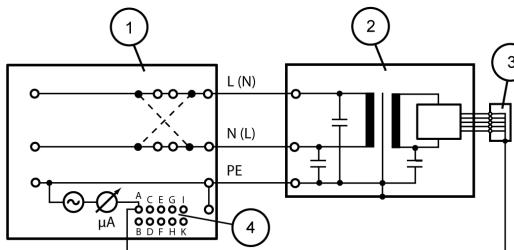
Result **Recurrent value** [_____ µA]

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3.1.5 Applied part leakage current, mains on applied part, type BF

Prerequisites The tester is switched on.

Test set-up



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Fig. 3 Applied part leakage current

Item	Designation
1	Tester (test device)
2	Device under test
3	Application component, device-specific test adapters for tester
4	Configurable connection sockets for applied parts (A - K)
L	Conductor
N	Neutral conductor
PE	Protective earth conductor

- Action**
- Prepare the test setup.
 - (Applied part) Connect the device-specific test adapter on one end to the device under test and on the other end to the tester's configurable socket "A" for applied parts (paying attention to the configuration!).
 - Follow the instructions on the tester.

NOTE

The test must be performed twice! The second test is performed with the plug rotated 180° in the socket. In many test devices the mains plug rotation is simulated by means of a built-in selector switch. The higher measured value must be documented.

NOTE

The reference value (initial measured value) must always be transmitted!

NOTE

If the measured values are between 90% and 100% of the permissible limit value, the reference value and the previously measured values of the recurrent test should be applied to assess electrical safety!

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Electrical safety

Test The reference value must not exceed **5000** µA.

Result **Reference value**

[_____] µA]

Test The recurrent test value must not exceed **5000** µA.

Result **Recurrent test**

[_____] µA]

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3.2 Electrical safety according to IEC 60601-1

NOTE

The medical product to be tested conforms to the requirements of protection class 1, type BF.

NOTE

An optional multiple socket-outlet, if any, must be included in the individual tests (medical electrical system).

NOTE

In the case of equipment connected to other equipment by a data cable, this connection must be disconnected prior to performing the electrical safety check, in order to avoid incorrect measurements.

3.2.1 Visual check

Prerequisites The tester and the device under test are switched off.

- Action • Disconnect the power plug from the mains socket.

WARNING

Hazardous voltage.

Touching live components can lead to serious injury or death.

- Disconnect the power cord from the AC outlet before checking the power fuse-links.

Test – The power fuse-links, if present, of the device under test match the specifications on the rating plate.

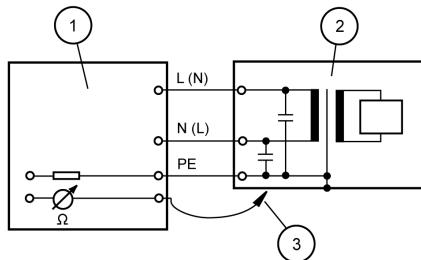
- The power cable and plug are not dirty or damaged.

Result **Condition checked**

OK]

3.2.2 Protective earth resistance**NOTE**

The protective earth resistance is measured with the power supply cord connected.

Test set-up

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Fig. 4 Protective earth resistance

Pos.	Designation
1	Tester
2	Device under test
3	Test probe with tip
L	Conductor
N	Neutral conductor
PE	(Protective earth) conductor

- Action
- Prepare the test set-up.
 - Switch on the tester and the device under test.
 - Configure the tester appropriately, and follow the instructions on the tester.
 - Using the tip of the test probe, scan each of the following points on the device under test one after the other:
 - Wing nut on the controller
 - Option: Device with fixed height stand:
 - Screws located near the main power switch
 - All protective earth conductor contacts on all power sockets of the multiple-socket outlet
 - Option: Device with variable height stand:
 - Screws located near the main power switch
 - All protective earth conductor contacts on all power sockets of the multiple-socket outlet
 - Option: Screws on the fixed height column (Note: The screws are located near the main power switch).
 - Option: Screws on the variable height adjustable column (Note: The screws are located near the main power switch).
 - Option: Wire-holder screws on the cabinet stand (Note: The screws are located near the main power switch).

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Test The protective earth resistance must not exceed **0.2 ohms** (including power supply cord) in each case.

Result **Record the highest protective earth resistance**

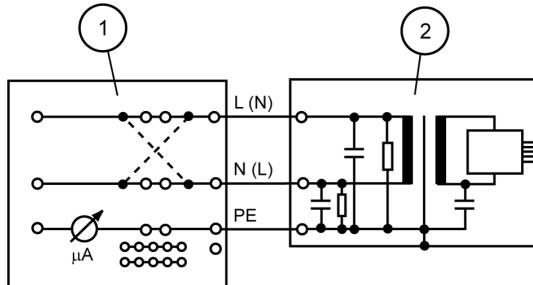
[] Ω

3.2.3 Earth leakage current

NOTE

In order to avoid incorrect measurement, set up the device under test so that it is insulated.

Test set-up



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Fig. 5 Test set-up for earth leakage current

Pos.	Designation
1	Tester
2	Device under test
L	Conductor
N	Neutral conductor
PE	(Protective earth) conductor

- Action**
- Prepare the test set-up.
 - Follow the instructions on the tester.

NOTE

For symmetrical mains plugs that have no preferential position in the socket-outlet, the device leakage current test must be performed twice! The second test shall be performed with the plug reversed 180° in the socket. In many test devices the mains plug rotation is simulated by means of a built-in selector switch. The higher measured value shall be documented.

Test Normal condition (N.C.): The value must not exceed **5000 μA**.

Result **Normal condition (N.C.)**

[] μA

Test The value must not exceed **10000 μA**.

Result **Single fault condition (S.F.C.) (The power conductor is interrupted.)**

[] μA

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Electrical safety

Action • In the following steps the test is repeated, but with the power plug turned over. This condition can be established internally on some testers.

Test Normal condition (N.C.): The value must not exceed **5000 µA**.

Result **Normal condition (N.C.)**

[_____ µA]

Test The value must not exceed **10000 µA**.

Result **Single fault condition (S.F.C.) (The power conductor is interrupted.)**

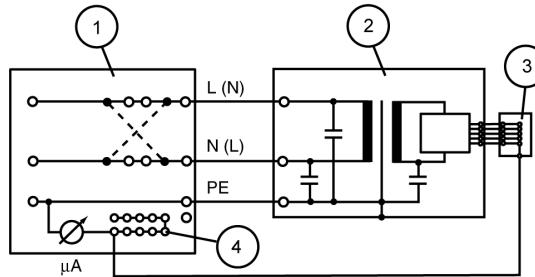
[_____ µA]

3.2.4 Patient leakage current

NOTE

Perform the test for both skin temperature probes and enter the highest value.

Test set-up



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Fig. 6 Patient leakage current

Pos.	Designation
1	Tester
2	Device under test
3	Device-specific adapter
4	Sockets for applied parts
L	Conductor
N	Neutral conductor
PE	(Protective earth) conductor

Action • Prepare the test set-up.
• Follow the instructions on the tester.

NOTE

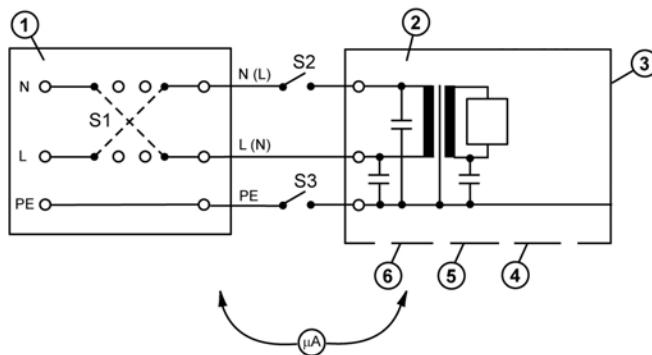
For symmetrical mains plugs that have no preferential position in the socket-outlet, the patient leakage current test must be performed twice! The second test shall be performed with the plug reversed 180° in the socket. In many test devices the mains plug rotation is simulated by means of a built-in selector switch. The higher measured value shall be documented.

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- Test Normal condition (N.C.) DC: The value must not exceed **100 µA**.
 Result **Normal condition (N.C.) DC** [_____ µA]
- Test Normal condition (N.C.) AC: The value must not exceed **100 µA**.
 Result **Normal condition (N.C.) AC** [_____ µA]
- Action • If possible perform the second test with the plug reversed 180° in the socket. (In many test devices the mains plug rotation is simulated by means of a built-in selector switch.)
- Test Single fault condition (S.F.C.) DC: The initial value must not exceed **500 µA**.
 Result **Single fault condition (S.F.C.) (The power conductor is interrupted.) DC** [_____ µA]
- Test Single fault condition (S.F.C.) AC: The value must not exceed **500 µA**.
 Result **Single fault condition (S.F.C.) (The power conductor is interrupted.) AC** [_____ µA]

3.2.5 Touch current

Test set-up



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Fig. 7 Test set-up for touch current

Pos.	Designation
1	Tester
2	Device under test
3	Enclosure, protectively earthed
4	Part of the enclosure, not protectively earthed
5	Part of the enclosure, not protectively earthed
6	Part of the enclosure, not protectively earthed
S1	Commutator Switch, DPDT, for reversing polarity
S2	Switch, SPST, opening power conductor
S3	Switch, SPST, opening Protective Earth (PE)
µA	Measuring device with 2 free leads

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Electrical safety

Pos.	Designation
L	Conductor
N	Neutral conductor
PE	Protective earth conductor

- Action
- Prepare the test set-up.
 - Switch on the tester and the device under test.
 - Configure the tester appropriately and follow the instructions on the tester.
 - Using the tips of both probe cables, scan each of the pairs of points on the device under test listed under "Touch Current Measurement Points" one after the other.

NOTE

The test must be performed twice! The second test is performed with the plug rotated 180° in the socket. In many test devices the mains plug rotation is simulated by means of a built-in selector switch. The higher measured value must be documented.

Test Normal condition (N.C.): (S2 and S3 are closed, and S1 is in Normal Polarity)
The value must not exceed **100** µA.

Result **Normal condition (N.C.)** [_____ µA]

- Action
- Adjust S2 closed, S3 open, and S1 in Normal Polarity.
 - Using the tips of both probe cables, scan each of the pairs of points on the device under test listed under "Touch Current Measurement Points" one after the other.
 - Repeat the test with S1 in Reverse Polarity.
 - Record the highest of the values.

Test Single fault condition (S.F.C.): The Protective Earth wire is interrupted. The value must not exceed **500** µA.

Result **Single fault condition (S.F.C.) The Protective Earth wire is interrupted.** [_____ µA]

- Action
- Adjust S2 open, S3 closed, and S1 in Normal Polarity.
 - Using the tips of both probe cables, scan each of the pairs of points on the device under test listed under "Touch current measurement points pairs" one after the other.
 - Record the highest of the values.

Test Single fault condition (S.F.C.): The Neutral wire is interrupted. The value must not exceed **500** µA.

Result **Single fault condition (S.F.C.) The Neutral wire is interrupted.** [_____ µA]

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3.2.6 Touch current measurement point pairs

- Action • Scan the following pairs of measurement points for touch current one after the other, using the tips of the 2 probe cables:
- wing nut on controller to left handle
 - left handle to right handle
 - right handle to hood latch pin.

Result **Measurement point pairs scanned.**

OK]

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Function and condition test

4 Function and condition test

This chapter contains tests that need to be performed in order to verify that the function and condition of the device and the accessories used meet the specifications according to the Instructions for Use.

4.1 Condition tests

4.1.1 Accompanying documents

- Action
- Check that the following documents are available (according to user/owner).
 - Instructions for Use
 - Medical Products Log (applicable in Germany only)
- Result
- The documents are available (according to user/owner)**

OK]

4.1.2 Power-on self test

Prerequisites

The unit is connected to the AC power supply.

- Action
- Switch the unit on.
- Test
- The unit completes its self-test. No error messages appear on the display after completion of the self-test.
- If the unit fails the self-test, the audible alarm sounds and one or several "system failure" messages appear on the display.

Result

Power-on self test

OK]

4.1.3 Secure attachment of trolley to basic unit

- Action
- Check mechanical attachment (basic unit/trolley).
- Test
- The basic unit is securely attached to the trolley by means of four screws.

- Action
- Check mechanical attachment (column/legs).

Test

The column is firmly attached to the legs.

Result

Secure attachment of trolley to basic unit

OK]

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4.1.4 Pre-heating the unit

NOTE

When using the temperature and humidity meter set 7910980 (meter 7910989), use the combination temperature and humidity probe 7910982, not the surface temperature probe to make air temperature measurements.

- Action
- Prepare the air temperature function as follows:
 - Place a test thermometer at the center of the mattress tray at a height of 10 cm from the surface.
 - Position the ends of both skin probes near the test thermometer.
 - Set the air temperature to "35 °C".
 - Close all access doors and, if fitted, IRIS access ports.
 - Using the "air" button, set the air temperature to "35 °C", and allow the unit to warm up.
 - Connect both skin-temperature sensors into the respective sockets "1" and "2" on the sensor module.
 - Prepare the humidity function if present as follows:
 - Remove the humidity reservoir from the unit.
 - Press the "humidity" button.
 - Press the "ON" button.
 - Set the humidity to "75%".

NOTE

The low humidity alarm will not occur until 30 minutes after water remaining in the system is evaporated. The air temperature test may take up to 60 minutes to warm.

NOTE

Keep the unit in operating mode during the following tests. If the unit is switched off in between, the humidifier must be switched on everytime!

Result **Pre-heating the unit**

[] OK]

- Action
- Proceed with the following tests.

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4.1.5 General condition

- Action • Check the following devices/parts and accessories as well as their connections and switches (etc.) are not contaminated or damaged. Device parts and accessories are complete as specified in the Instructions for Use manual.

NOTE

If applicable, clean contaminated devices/parts using the specified cleaning agents.

- Incubator Isolette® C2000
- Sensor module with cable and clamp (options: O₂ sensors)
- Skin-temperature sensor(s) complete
- Hood
- Mattress tray
- Blanking plug on the basic housing (if no humidifier is installed)
- Mattress
- external additional O₂ fitting

Options:

- Fixed height stand, multiple socket outlet, cable holders
- Variable height-adjustable stand (VHA)
- Cabinet stand
- Compressed-gas hose "O₂"
- Compressed-gas cylinder (O₂) and holder, pressure regulator, flowmeter
- Drawer(s)
- Ventilator hoses support
- Monitor shelf
- IV pole
- Oxygen module
- Scales
- Air humidity module

Result **General condition**

[] OK]

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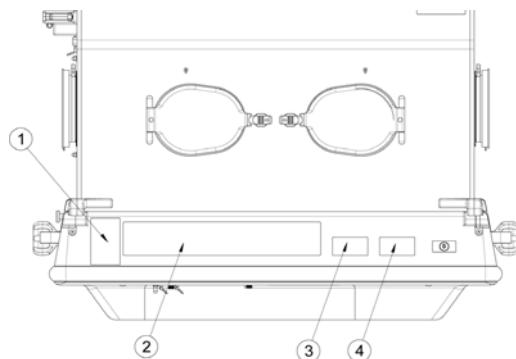
4.1.6 Impeller, fan shaft and detector seal

- Action
- Remove the heater/impeller cover.
 - Remove the impeller from the shaft of the fan motor.
 - Check the impeller.
- Test
- The impeller is not contaminated or damaged. The impeller has three magnets on its underside. There is a clamp on the opening for the fan shaft.
- Action
- Check the shaft of the fan motor.
- Test
- There is a retaining ring on the shaft of the fan motor.
- Action
- Visually check that there is a seal underneath the impeller detector cover.
- Test
- There is a seal underneath the cover of the impeller detector.
- Result
- Impeller, fan shaft and detector seal**
- OK
- Action
- Replace the impeller onto the shaft of the fan motor.
 - Replace the heater/impeller cover.

4.1.7 Labeling

Incubator

- Action
- Check the following labeling for completeness and legibility. Perform the check according to the test step below, whichever is applicable.
 - Only Isolette in Chinese language: 1x Data tag label ([Fig. 8/1](#))
 - 1x Oxygen warning label ([Fig. 8/2](#))
 - Only for Isolettes with NAWI/OIML scale: 1x NAWI/OIML scale location label ([Fig. 8/3](#))
 - 1x Data tag label ([Fig. 8/4](#))



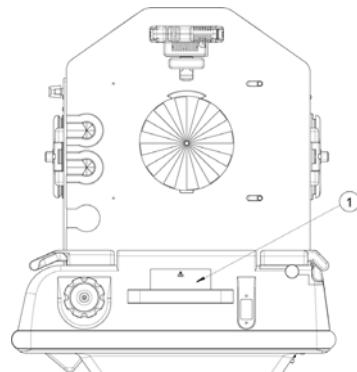
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Fig. 8 Rear view of Isolette: labels

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Function and condition test

Only for Isolette after 2004

- 2x Transport label (Fig. 9/1) - left and right side of the incubator

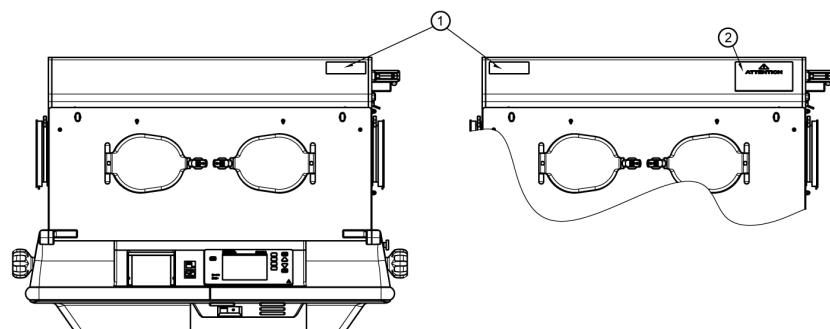


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Fig. 9 Side view of Isolette: labels

Only for Isolettes after 2008

- 2x Baby safety label (Fig. 10/1) - front and rear of the hood alternate location used on French language Isolette
- **Only for Isolettes in French language:** 1x Attention label (Fig. 10/2) - front of hood



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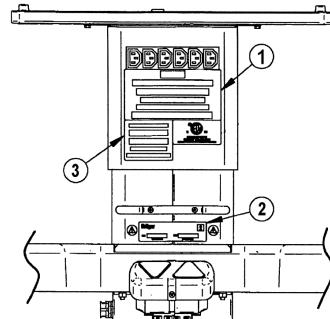
Fig. 10 Front view of Isolette: labels

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Trolley

Stand assembly, VHA, Solid leg:

- 1x Auxiliary outlet label ([Fig. 11/1](#))
- 1x Data tag label ([Fig. 11/2](#))
- 1x Ground reliability label ([Fig. 11/3](#))

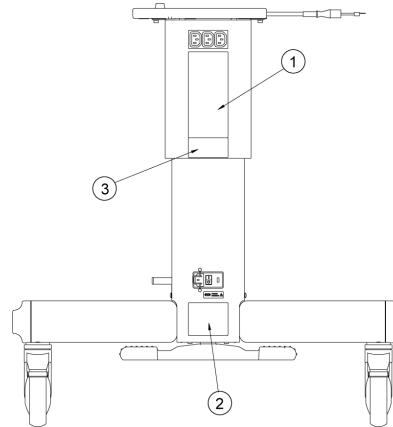


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Fig. 11 Rear view of the stand assembly (VHA, version 2): labels

Stand assembly, VHA, Hollow leg

- 1x Auxiliary outlet label ([Fig. 12/1](#))
- 1x Ground reliability label ([Fig. 12/2](#))
- 1x Data tag label ([Fig. 12/3](#))



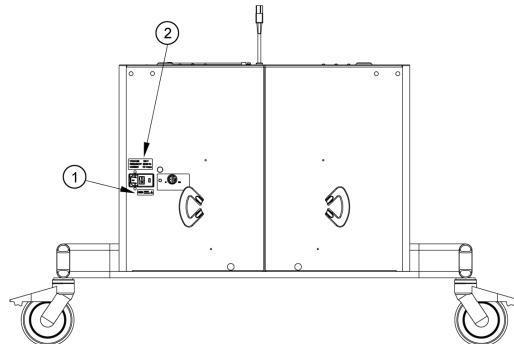
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Fig. 12 Side view of stand assembly, VHA, hollow leg: labels

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120 V Cabinet stand

- 1x 10 Amp label (Fig. 13/1)
- 1x Voltage/Ampereage label (Fig. 13/2)

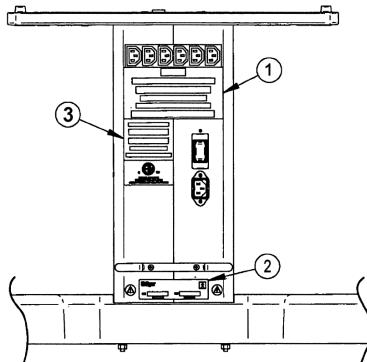


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Fig. 13 Rear view of cabinet stand: labels

Stand assembly, FIX:

- 1x Auxiliary outlet label (Fig. 14/1)
- 1x Data tag label (Fig. 14/2)
- 1x Ground reliability label (Fig. 14/3)



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Fig. 14 Rear view of the stand assembly (fix): labels

Version with OIML scales:

- OIML scale ID label - rear side of incubator

Result **Labeling**

OK]

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4.1.8 Hood and locking pivot

- Action • Check the hood and the locking pivot.
Test The hood and the locking pivot are not contaminated or damaged. The hood engages in the end position. The hood can be closed again when the hood locking pivot is pulled.

Result **Hood and locking pivot**

OK]

4.1.9 Grommets/tubing ports

- Action • Check all grommets/tubing ports.
Test All grommets/tubing ports are fitted. The grommets/tubing ports are not contaminated or damaged.

Result **Grommets/tubing ports**

OK]

4.1.10 Front and rear access panels

NOTE

The following test checks the front access panel. Repeat the test for the rear access panel using the same method if applicable.

- Action • Unlock the front access panel latch (2x) by moving them into an horizontal position.
 • Open the front access panel a bit.
Test The front access panel latch (2x) are not damaged. The heat shield, the latches and the hinges are neither contaminated nor damaged.
Action • Fold the front access panel all the way down.
Test The front access panel can be folded smoothly and is suspended vertically.
Action • Close the front access panel.
 • Lock the front access panel latch by moving them into a vertical position.
 • Repeat the tests with the rear access panel if applicable.

Result **Front and rear access panels**

OK]

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4.1.11 Access doors

- Action • Press on the latches of all access doors.
- Test The access doors spring open.
- Action • Replace the cuffs, if applicable.
- Test If cuffs are present, they are neither contaminated nor damaged.
- Action • Check the access door gaskets for damage and proper seating.
- Test The seals are not contaminated, porous or torn. The seals are seated properly; adjust position as necessary.
- Action • Close each access door, and check that is fully latched.
 • Reach inside the hood with the force gage from another door or port.
 • Using a force gage, apply an horizontal force of 2.0 kg to 2.5 kg (20 N to 25 N) for 5 seconds at the middle of each closed access door.
- Test The access doors must not open.

Result **Access doors**

OK]

4.1.12 IRIS ports cuffs

- Action • Check the IRIS ports cuffs if applicable.
- Test The cuffs of the IRIS ports on the sides of the hood are neither contaminated nor damaged; if necessary, clean or replace the cuffs.
- Action • Rotate the outer rings of the IRIS ports.
- Test The cuffs of the IRIS ports open and close during the rotation.

Result **IRIS ports cuffs**

OK]

4.1.13 Sensor module with cable and clamp

- Action • Disconnect the skin-temperature sensor(s) from the sensor module connector(s), if installed.
 • Disconnect the connector of the scale (option) from the sensor module.
 • Pull down the latch of the sensor module.
 • Pull the sensor module out of the hood as far as it will go.
 • Disconnect the sensor module connector from the basic housing.
 • Press both latches on the sides of the sensor module outwards and, at the same time, pull the sensor module including its connecting line out of the hood.
 • Check the sensor module.
- Test The sensor module can be easily pulled out of the hood. The sensor module, the connections, the cable, the connector, and the socket on the incubator housing are neither contaminated nor damaged. The Air inlet nozzle is free of dust. If the unit is equipped with the O₂ module, the two O₂ cells are inside the sensor module.
- Action • Check the cable clamps (scale) and the cable clamps of the sensor module.

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Test The clamps are undamaged.

Result **Sensor module with cable and clamp**

[] OK]

Action • Replace the sensor module to the unit.

4.1.14 Skin-temperature sensor(s)/cable(s)/connector(s)

Action • Check the skin-temperature sensors, the skin-temperature cables, and the skin-temperature connectors, if installed.

Test The skin-temperature sensors, the skin-temperature cables, and the skin-temperature connectors are not contaminated or damaged.

Result **Skin-temperature sensor(s)/cable(s)/connector(s)**

[] OK]

4.1.15 Mattress tray

Action • Check the mattress tray.

Test The mattress tray is not contaminated or damaged.

Action • Pull the mattress tray out of the unit as far as it will go.
• Carefully exert downwards pressure on the mattress tray.

Test The mattress tray can only be pulled out of the unit as far as the mechanical stop. The mattress tray is supported properly.

Result **Mattress tray**

[] OK]

Action • Push the mattress tray back into the unit.

4.1.16 X-ray tray

Action • Open the front access panel.
• Pull the X-ray tray out of the mattress tray as far as it will go.

Test The X-ray tray can only be pulled out of the mattress tray as far as the mechanical stop.

Result **X-ray tray**

[] OK]

Action • Push the X-ray tray back into the mattress tray.
• Close the access panel.

4.1.17 Mattress tray tilt mechanism

Action • Check the mattress tray tilt mechanism (mattress tray adjusting linkage and both mattress tray tilting actuators).

Test The mattress tray tilt mechanism is neither contaminated nor damaged.

Action • Turn the right-hand mattress tray tilting actuator (knob) counter-clockwise as far as it will go.
• Place a 5 kg weight on the highest point of the mattress tray.

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- Test The right-hand end of the mattress tray is tilted. Observe the right-hand mattress tray tilting actuator (knob). Accept if there is no visible motion.
- Action • Turn the right-hand mattress tray tilting actuator (knob) clockwise as far as it will go.
- Test The mattress tray is back to horizontal position.
- Action • Turn the left-hand mattress tray tilting actuator (knob) clockwise as far as it will go.
• Place a 5 kg weight on the highest point of the mattress tray.
- Test The left-hand end of the mattress tray is tilted. Observe the left-hand mattress tray tilting actuator (knob). Accept if there is no visible motion.
- Action • Turn the left-hand mattress tray tilting actuator (knob) counter-clockwise as far as it will go.
- Test The mattress tray is back to horizontal position.

Result **Mattress tray tilt mechanism**

OK]

4.1.18 Control unit and power switch

- Action • Check the control unit and the power switch.
- Test The control unit and the power switch are not contaminated or damaged.
- Action • Check the protective earth connection between the stand and the controller.
- Test The protective earth connection is mechanically attached to the stand and the controller.

Result **Control unit and power switch**

OK]

4.1.19 Power failure alarm test

- Prerequisites The unit is connected to the mains power supply and is switched on. The device must have been in operation for at least 10 minutes for the capacitor (that activates this alarm) to be charged.
- Action • Take power plug out of mains socket.
- Test The "power failure alarm" LED is flashing. An intermittent alarm sounds.
- Action • Plug the mains plug into the socket outlet.
- Test The unit completes its self-test and then switches to normal operating mode.

Result **Power failure alarm test**

OK]

4.1.20 Castors

- Action • Check that all castor holders are secured properly to the stand.
Test All castor holders are secured properly to the stand and have no play.
Action • Lock all castors if a lock is provided.
Test All castors can be locked and are not damaged. The unit cannot be moved back and forth.
Action • Release all locks if applicable.

Result **Castors**

[_____OK]

4.1.21 Pedals

- Action • Check the housings of the pedals.
Test The housings of the pedals are attached properly to the trolley.
Result **Pedals**

[_____OK]

4.1.22 Air filter on the incubator

- Action • Loosen the screws on the air filter cover. Note: The cover is installed on the back, at the bottom of the basic unit.
• Remove the air filter cover.
• Remove and check the air filter.
Test The air filter is neither contaminated nor damaged. Labeling is legible. (Recommendation: The air filter should be replaced with a new one every 3 months)
If the air filter labeling is no longer legible or if the air filter is contaminated or damaged, replace the air filter.

NOTE

Ensure that the air filter is fitted properly (orientation is correct). The labeling of the air filter points outwards.

- Action • Insert the air filter into the housing.
• Secure the cover to the unit using the screws.
Result **Air filter (air inlet) on the incubator**

[_____OK]

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4.1.23 Option, Humidifier

- Action
- Remove the water reservoir.
 - Empty any water.
 - Inspect the reservoir.

For reservoirs with a white CPC fitting

- Action
- Confirm smooth action of the valve.
 - Inspect the reservoir for cracks or signs of leaks.
 - Replace the reservoir if required with MU17191.

For reservoirs with a red silicon gasket

- Action
- Confirm smooth action of the valve.
 - Inspect the gasket for deformation, cracking, or rigidity.
 - Inspect the reservoir for cracks or signs of leaks.
 - Replace the reservoir if required with MU13202.

Result **Option, Humidifier**

OK]

4.2 Functional Tests

4.2.1 "Flow low" alarm

Prerequisites The unit is connected to the mains power supply.

WARNING

- The heater can be sufficiently hot to cause burns; avoid removing or touching the heater until the unit has been switched off for at least 45 minutes.

- Action
- Switch off the unit using the ON/OFF switch.
 - Disconnect the scale, if present, from the sensor module.
 - Tilt back the hood.
 - Remove the mattress assembly, lift bars and main deck.
 - Remove the heater/impeller cover.
 - Remove the impeller from the shaft of the fan motor and place it aside.
 - Switch on the unit using the ON/OFF switch and allow the self-test phase to complete.

Test Within 5 minutes (within 30 seconds as of software version 2.09) the unit displays the alarm "low Airflow". The audible alarm sounds.

Result **Flow low alarm**

OK]

- Action
- Switch off the unit using the ON/OFF switch.
 - Fit the impeller onto the shaft of the fan motor.
 - Fit the heater/impeller cover.
 - Fit the mattress tray, main deck, lift bars, and scale if present.

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4.2.2 Flow controlled External O₂ (if present)

- Prerequisites The unit is connected to the mains power supply and is switched on.
- Action
- Supply 9 L/min oxygen into the external oxygen connector of the unit.
 - Place a calibrated oxygen analyzer into the incubator.
 - Wait until the oxygen concentration inside the incubator has stabilized.
- Test The oxygen concentration specified in the flow table (9 L/min correspond to 45 vol.% O₂ to 75 vol.%O₂) matches the oxygen concentration displayed on the external oxygen analyzer. (Note: The flow table can be found on the label attached to the rear of the incubator.)
- Result **Flow controlled External O₂ (if present)**

[] OK]

4.2.3 Servo-controlled oxygen module (if present)

NOTE

Before the oxygen measurement is checked for proper functioning, the oxygen sensors must be calibrated to 21 vol.% O₂ (ambient air) or to 100 vol.% O₂. Which calibration is applied depends on the user's configuration of the unit.

NOTE

If the user has fitted an oxygen mount below the sensor module, then carry out a calibration to "100 vol.% O₂".

If the user has not fitted an oxygen mount below the sensor module, then carry out a calibration to "21 vol.% O₂".

Calibration (21 vol.%O₂)

- Prerequisites The unit is connected to the mains power supply and is switched on.
- Action
- Press the "oxygen" button.
 - Press the "Cal." button.
- Test The message "slide out sens" is displayed.
- Action
- Unlock the latch of the sensor module.
 - Pull the sensor module to the calibration position.
- Test Oxygen calibration starts. The message "21% cal." is displayed. The "Cal Pass" is displayed at the end of the calibration phase.
- Result **Calibration (21 vol.%O₂)**

[] OK]

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Calibration (100 vol.%O₂)

- Prerequisites The unit is connected to the mains power supply and is switched on.
- Action
- Using an oxygen cylinder and a test pressure regulator (or use any oxygen flow meter from the wall supply), adjust an oxygen flow of 3 L/min to 5 L/min and feed it into the connector of the oxygen mount (the oxygen mount is located underneath the sensor module).
 - Press the "Oxygen" button.
 - Press the "Cal." button.
- Test The message "slide out sens" is displayed.
- Action
- Unlock the latch of the sensor module and pull the sensor module out of the hood and into the calibration position.
- Test Oxygen calibration starts. The message "100% cal." is displayed. The "Cal Pass" is displayed at the end of the calibration phase.
- Result **Calibration (100 vol.%O₂)**

[] OK]

- Action
- Push the sensor module back into the hood, and latch the sensor module in the hood.
 - Interrupt the oxygen flow to the oxygen mount, if used.

Oxygen controller module

- Prerequisites The unit is connected to the mains power supply and is switched on. O₂ is available at pressure and flow compliant with the O₂ label on the rear of the incubator, has the correct hose to mate with the incubator, and is connected to the incubator and switched on.

- Action
- Place an external, calibrated oxygen analyzer inside the hood on the center of the mattress/mattress tray.
 - Set oxygen to 40 vol.%O₂.

- Test Within 5 minutes the display should indicate the set oxygen concentration with a tolerance of +/- 2 vol.% O₂.

Within 5 minutes the display of the incubator indicates the display of the external oxygen analyzer with the following tolerances:

- +/- 5 vol.% O₂ for calibration at 21 vol.% O₂
- +/- 3 vol.% O₂ for calibration at 100 vol.% O₂.

- Result **Oxygen controller module**

[] OK]

- Action
- Set the "oxygen" concentration to 21 vol.% O₂.

4.2.4 Humidifier (if present) and humidity low alarm

NOTE

Humidity and air temperature values were set above in 4.1.4 "Pre-heating the unit". The settings are repeated here for clarity. The "Humidity low" alarm is displayed approximately 30 minutes after any water in the system is evaporated.

Prerequisites	The unit is connected to the mains power supply and is switched on.
Action	<ul style="list-style-type: none">Remove the humidity reservoir from the unit.Set the humidity to "75%".Set the air temperature to "35 °C".
Test	During the following tests the message "humidity low" will be displayed. The audible alarm sounds. The lamp on the sensor module is flashing.
Result	Humidity low alarm <input type="checkbox"/> OK]

NOTE

Use keyboard unlock, next display, and display softkey to show humidity % trend. Observe this graphic display to confirm humidity trend. If there is water in the evaporator, the humidity will rise to the set point, and maintain humidity until the water is evaporated. At that time, the humidity graphic display will fall, and 30 minutes later the humidity low alarm will be activated.

NOTE

Keep the unit in operating mode during the following tests. If the unit is switched off in between, the humidifier must be switched on everytime!

NOTE

Do not perform Humidifier test (below) until "Humidity low alarm" test is complete.

Prerequisites	The unit is connected to the mains power supply and is switched on. The oxygen supply is not active.
Action	<ul style="list-style-type: none">If the "Humidity low" alarm has occurred in the meantime (refer to the "Humidity low alarm" test), refill the humidity reservoir of the humidifier with distilled water.Allow the unit to heat to "35 °C".Position the test humidity meter at the center of the mattress tray at a height of 10 cm from the surface.Press the "humidity" button.Press the "ON" button.Set the humidity to "65%".
Test	Within 30 to 60 minutes the test humidity meter indicates 59% to 71%.
Result	Humidifier <input type="checkbox"/> OK]

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4.2.5 Front and rear access panel open indicator

- Prerequisites The unit is connected to the mains power supply and is switched on.
- Action • Open the front access panel.
- Test The display shows the "access panel open" icon, see "1" following figure.



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Fig. 15 Detail view of the controller: "Front access panel open" icon

- Action • Close the front access panel.
 • If available, open the rear access panel.
- Test The display shows the "access panel open" icon.
- Result **Front and rear access panel open indicator** OK]

- Action • Close the rear access panel.

4.2.6 "Sensor module position" alarm

- Prerequisites The unit is connected to the mains power supply and is switched on.
- Action • Pull the sensor module to the calibration position.
- Test The unit generates a visual and an audible alarm. The alarm lamp mounted on the sensor module flashes.
- Result **Sensor module position alarm** OK]

- Action • Insert the sensor module into the hood.

4.2.7 Air temperature setting and air temperature low alarm

NOTE

When using the temperature and humidity meter set 7910980 (meter 7910989), use the combination temperature and humidity probe 7910982, not the surface temperature probe to make air temperature measurements.

Air temperature setting

- Prerequisites The steps in point 4.1.4 (pre-heating the unit) are done.
- Action • Use keyboard unlock, next display, trend softkey, and display softkey to show "Air temp" trend.
 • Observe this graphic display to confirm temperature stability.

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Test The warm-up time is less than 1 hour.

As soon as the air temperature has stabilized as indicated on the display (no value changes visible within 15 minutes), the display shows the set air temperature with a tolerance of +/-0.7 °C. The test thermometer is within +/- 0.8 °C of the controller air display.

Result **Air temperature setting**

OK]

"Air temperature low" alarm

Action • Set the incubator to Air mode.
• Set the air temperature to "36 °C".
• Open the front access panel and, if applicable, also the rear access panel. Allow the device to cool down to "35.9 °C".
• Close all access panels and, if fitted, the IRIS ports. Allow the device to warm up to "36 °C".
• Open the front access panel and, if applicable, also the rear access panel.

Test Within approx. 5 minutes the unit should display the "air-temperature low" message. The audible alarm sounds. The alarm lamp flashes.

Result **Air temperature low alarm**

OK]

Action • Close all access panels and, if fitted, the IRIS ports.

Test The unit returns to normal operating mode. The audible alarm is off and the error message is no longer displayed.

4.2.8 Skin-temperature monitoring

Prerequisites The unit is connected to the mains power supply and is switched on.

Action • Connect the skin-temperature sensor to connector "1" of the sensor module.
• Disconnect the second skin-temperature sensor from connector "2" of the sensor module.
• Position the skin-temperature sensor and the test thermometer 10 cm above the center of the mattress.
• Set the skin-temperature to "35 °C" using the "skin" button.

Test Once the temperature has stabilized, the display should indicate the set skin temperature with a tolerance of +/-1.0 °C.

Action • Open one access door.
• Insert skin-temperature sensor "1" through the open access door and allow it to be cooled down by the ambient air.

Test Within approx. 5 minutes the unit should display a "skin-temperature low" message. The audible alarm sounds. The remote indicator lamp flashes.

Result **Skin-temperature monitoring**

OK]

Action • Place the skin-temperature sensor back into the incubator and close the access door.

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NOTE

Alternative test method: Connect a resistor of 5877 ohms over a cable (P/N7910808) to the skin-temperature socket "1" and read on the skin-temperature display "1" a value of 35 °C +/- 0.1 °C. Repeat this test with skin-temperature socket "2".

4.2.9 Skin-temperature sensor 1 and sensor 2 alarm

- | | |
|---------------|--|
| Prerequisites | The unit is connected to the mains power supply and is switched on. Skin temperature sensor „2“ has been removed. |
| Action | <ul style="list-style-type: none"> • Select the „skin-temperature“ mode. • Disconnect the skin-temperature sensor „1“ from the connector „1“ of the sensor module. |
| Test | The audible alarm sounds. No measured value is shown on the display. The message „skin-temp probe disconn“ is displayed. The remote indicator lamp on the sensor module lights up. |
| Action | <ul style="list-style-type: none"> • Press the „alarm silence“ button. |
| Test | The audible alarm is silenced. |
| Action | <ul style="list-style-type: none"> • Plug the skin-temperature sensor „1“ into connector „1“ of the sensor module. |
| Test | The unit returns to normal operating mode. The audible alarm is off and the error message is no longer displayed. |
| Action | <ul style="list-style-type: none"> • Plug the skin-temperature sensor „2“ into connector „2“ of the sensor module. |
| Test | The audible alarm sounds. The message „Remove skin-temp probe 2“ is displayed. The remote indicator lamp flashes. |
| Action | <ul style="list-style-type: none"> • Disconnect the skin-temperature sensor „2“ from the connector „2“ of the sensor module. |
| Test | The unit returns to normal operating mode. The audible alarm is off and the error message is no longer displayed. |
| Result | Skin-temperature sensor 1 and sensor 2 alarm |

[] OK]

No.1711_0000007546

4.2.10 High-temperature limit/switch-off

NOTE

When using the temperature and humidity meter set 7910980 (meter 7910989), use the combination temperature and humidity probe 7910982, not the surface temperature probe to make air temperature measurements.

Prerequisites	The unit is connected to the mains power supply and is switched on.
Action	<ul style="list-style-type: none">• Connect skin-temperature sensor "1" to connector "1" of the sensor module.• Select the "skin-temperature monitoring" mode.• Set the skin temperature to "38 °C".• Open one access door.• Expose skin-temperature sensor "1" to room air through the open access door.• Close the access door.• Place the test thermometer about 10 cm above the center of the mattress tray.• Use keyboard unlock, next display, trend softkey, and display softkey to show "Heater power %" trend.• Observe this graphic display to confirm heater output.• Allow the device to warm up until the heater output decreases to 50%.• The "skin-temperature low" alarm will possibly be triggered.
Test	As soon as the heating capacity has decreased to approx. 50%, switch to AIR mode, and check that the maximum temperature on the test thermometer does not exceed 40 °C. Read the heating capacity off from the trend display.
Action	<ul style="list-style-type: none">• Press the "alarm silence" button if needed and switch to "air-temperature monitoring" mode.
Test	The "over temperature cutout" alarm occurs within 1 minute of the drop in heater output. The audible alarm sounds. The alarm lamp lights up.
Result	High-temperature limit/switch-off

OK]

4.2.11 Option, VHA Trolley height adjustment

Prerequisites	The unit is connected to the mains power supply and is switched on.
Action	<ul style="list-style-type: none">• Press and hold the right-hand pedal of the "Up/down" switch on the front until the incubator is in the highest position.
Test	The incubator moves evenly and smoothly to the highest position.
Action	<ul style="list-style-type: none">• Press and hold the left-hand pedal of the "Up/down" switch until the incubator is in the lowest position.
Test	The incubator moves evenly and smoothly to the lowest position.
Action	<ul style="list-style-type: none">• Repeat the tests with the pedals on the rear.
Result	Option, VHA Trolley height adjustment

OK]

Isolette® C2000
Function and condition test

4.2.12 Metrological check (Germany, Austria, and Switzerland only, every 2 years)

NOTE

Perform the "metrological check" (Germany only) every two years.

- Action • Perform the metrological check according to the test instructions "Metrological Check".

Result **Metrological check**

[] OK]

Result **Date of the next metrological check**

[dat]

4.2.13 Option, Safety check (Germany only, yearly)

NOTE

Perform the "safety check" (Germany only) every year.

- Action • Perform the safety check according to the test instructions "Safety Tests measurement tests".

Result **Safety check**

[] OK]

- Action • Entry date of the next Safety check.

Result **Date of the next "Safety check"**

[dat]

4.2.14 Final procedures

- Prerequisites – The test instructions have been performed as specified.
– All tests performed were passed successfully.

4.2.14.1 Test label and device handover

- Action • Attach a test label to the device.
• Supply the user/owner with a fully functioning device.

Result **Test label and device handover**

[] OK]

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Isolette® C2000
Test equipment

5 Test equipment

This chapter lists the service equipment required to perform the tests specified in these test instructions.

5.1 Test equipment subject and not subject to mandatory calibration

NOTE

Use the following test equipment or equivalent aids.

5.1.1 Test equipment subject to mandatory calibration

Designation	Order number	Remark
Tester for electrical safety	7910594	
Temperature/humidifier measurement	7910980	
Spring balance with pressure kit	7911370	
Flow meter	7901161	
Decade resistor	7910120	

Isolette® C2000
Test equipment

Designation	Order number	Remark
Pressure regulator O ₂	7901482	
or		
Pressure regulator, Pin index	7910342	
or		
Pressure regulator CS, Air/O ₂	7910487	
or		
Flowmeter	2M86553	

Result **Test equipment calibrated in a valid manner used.**

OK]

5.1.2 Test equipment not subject to mandatory calibration

Designation	Order number	Remark
O ₂ oxygen analyzer (MX 300-i), complete with sensor	7911955	
VDE adapter 8000	7910808	
Skin temperature sensors (pack of 10)	MU12551 or MU12525	Use skin temperature sensors if no decade resistor is available.

5.2

Result Sheet Test instructions / Service Card IPM



Result Sheet Test Instructions / Service Card IPM

Isolette® C2000

Order number:

Location:**Serial no. (basic unit):****Department:****Cust. invent. no.:****Maintenance interval:****Other / Delivery date:**

Applies to Test Instructions / Service Card IPM Revision 4.0

Key	
✓ / OK	= OK
+	= Spare part used
!	= Error / Report
/	= Accessory not available
-	= Not applicable

Test	Result
1 Device configuration	
1.1 Device Configuration	
1.1.1 Serial numbers	
□ 1.1.1.1 Isolette® C2000	txt
□ 1.1.1.2 Controller	txt
□ 1.1.1.3 Sensor module	txt
□ 1.1.1.4 Option, Scale	txt
□ 1.1.1.5 Option, VHA (Variable Height Adjustment)	txt
□ 1.1.1.6 Option, Servo O ₂	txt
□ 1.1.1.7 Option, Humidity (only during installation or repair)	txt
□ 1.1.1.8 Testing after an installation or repair	OK
□ 1.1.2 Software version	txt
1.1.3 Operating hours, Sensor module firmware and Heater Thermocouple	
□ 1.1.3.1 Operating hours	h
□ 1.1.3.2 Sensor module firmware	txt
□ 1.1.3.3 Heater thermocouple	OK
2 Maintenance parts	
2.1 Replacement parts, as required or at the latest every three months	
□ 2.1.1 Air Filter	dat
2.2 Maintenance parts, yearly	
□ 2.2.1 Option, Oxygen sensors	dat
2.3 Maintenance parts, 2-yearly	
□ 2.3.1 Heat shield latch	dat
□ 2.3.2 Option, O ₂ solenoid valve	dat
2.4 Maintenance parts, 3-yearly	
□ 2.4.1 Impeller motor spare parts kit	dat
□ 2.4.2 Vibration dampening rubbers for impeller motor	dat
2.4.3 Fan motor (Sensor module)	
□ 2.4.3.1 Fan motor with connector (prior to January 2003)	dat
□ 2.4.3.2 Fan motor, soldered in (January 2003 until present)	dat
□ 2.4.3.3 Fan motor including Connector PCB (January 2003 to present)	dat
2.4.4 Fan motor (Controller) and visual inspection J15	
□ 2.4.4.1 Fan motor	dat
□ 2.4.4.2 Visual inspection of male and female connector J 15 (Interface P.C. Board)	dat
□ 2.4.5 Oxygen diaphragm	dat
□ 2.4.6 Filter disk	dat
2.5 Maintenance parts, 6-yearly	
□ 2.5.1 Option, Pressure regulator O ₂	dat
3 Electrical safety	
3.1 Electrical safety according to IEC 62353	

Test	Result
□ 3.1.1 Visual check	OK
3.1.2 Protective earth resistance	
□ 3.1.2.1 Maximum measured value of device with power supply cord	Ω
□ 3.1.2.2 Maximum measured value of optional power supply cord	Ω
□ 3.1.3 Protective earth resistance measurement points	OK
3.1.4 Equipment leakage current	
□ 3.1.4.1 Initial value	µA
□ 3.1.4.2 Recurrent value	µA
3.1.5 Applied part leakage current, mains on applied part, type BF	
□ 3.1.5.1 Reference value	µA
□ 3.1.5.2 Recurrent test	µA
3.2 Electrical safety according to IEC 60601-1	
□ 3.2.1 Visual check	OK
□ 3.2.2 Protective earth resistance	Ω
3.2.3 Earth leakage current	
□ 3.2.3.1 Normal condition (N.C.)	µA
□ 3.2.3.2 Single fault condition (S.F.C.) (The power conductor is interrupted.)	µA
□ 3.2.3.3 Normal condition (N.C.)	µA
□ 3.2.3.4 Single fault condition (S.F.C.) (The power conductor is interrupted.)	µA
3.2.4 Patient leakage current	
□ 3.2.4.1 Normal condition (N.C.) DC	µA
□ 3.2.4.2 Normal condition (N.C.) AC	µA
□ 3.2.4.3 Single fault condition (S.F.C.) (The power conductor is interrupted.) DC	µA
□ 3.2.4.4 Single fault condition (S.F.C.) (The power conductor is interrupted.) AC	µA
3.2.5 Touch current	
□ 3.2.5.1 Normal condition (N.C.)	µA
□ 3.2.5.2 Single fault condition (S.F.C.) The Protective Earth wire is interrupted.	µA
□ 3.2.5.3 Single fault condition (S.F.C.) The Neutral wire is interrupted.	µA
□ 3.2.6 Touch current measurement point pairs	OK
4 Function and condition test	
4.1 Condition tests	
□ 4.1.1 Accompanying documents	OK
□ 4.1.2 Power-on self test	OK
□ 4.1.3 Secure attachment of trolley to basic unit	OK
□ 4.1.4 Pre-heating the unit	OK
□ 4.1.5 General condition	OK
□ 4.1.6 Impeller, fan shaft and detector seal	OK
□ 4.1.7 Labeling	OK

Test	Result
<input type="checkbox"/> 4.1.8 Hood and locking pivot	OK
<input type="checkbox"/> 4.1.9 Grommets/tubing ports	OK
<input type="checkbox"/> 4.1.10 Front and rear access panels	OK
<input type="checkbox"/> 4.1.11 Access doors	OK
<input type="checkbox"/> 4.1.12 IRIS ports cuffs	OK
<input type="checkbox"/> 4.1.13 Sensor module with cable and clamp	OK
<input type="checkbox"/> 4.1.14 Skin-temperature sensor(s)/cable(s)/connector(s)	OK
<input type="checkbox"/> 4.1.15 Mattress tray	OK
<input type="checkbox"/> 4.1.16 X-ray tray	OK
<input type="checkbox"/> 4.1.17 Mattress tray tilt mechanism	OK
<input type="checkbox"/> 4.1.18 Control unit and power switch	OK
<input type="checkbox"/> 4.1.19 Power failure alarm test	OK
<input type="checkbox"/> 4.1.20 Castors	OK
<input type="checkbox"/> 4.1.21 Pedals	OK
<input type="checkbox"/> 4.1.22 Air filter on the incubator	OK
<input type="checkbox"/> 4.1.23 Option, Humidifier	OK
4.2 Functional Tests	
<input type="checkbox"/> 4.2.1 Flow low alarm	OK
<input type="checkbox"/> 4.2.2 Flow controlled External O ₂ (if present)	OK
4.2.3 Servo-controlled oxygen module (if present)	
<input type="checkbox"/> 4.2.3.1 Calibration (21 vol.%O ₂)	OK
<input type="checkbox"/> 4.2.3.2 Calibration (100 vol.%O ₂)	OK
<input type="checkbox"/> 4.2.3.3 Oxygen controller module	OK
4.2.4 Humidifier (if present) and humidity low alarm	
<input type="checkbox"/> 4.2.4.1 Humidity low alarm	OK
<input type="checkbox"/> 4.2.4.2 Humidifier	OK
<input type="checkbox"/> 4.2.5 Front and rear access panel open indicator	OK
<input type="checkbox"/> 4.2.6 Sensor module position alarm	OK
4.2.7 Air temperature setting and air temperature low alarm	
<input type="checkbox"/> 4.2.7.1 Air temperature setting	OK
<input type="checkbox"/> 4.2.7.2 Air temperature low alarm	OK
<input type="checkbox"/> 4.2.8 Skin-temperature monitoring	OK
<input type="checkbox"/> 4.2.9 Skin-temperature sensor 1 and sensor 2 alarm	OK
<input type="checkbox"/> 4.2.10 High-temperature limit/switch-off	OK
<input type="checkbox"/> 4.2.11 Option, VHA Trolley height adjustment	OK
4.2.12 Metrological check (Germany, Austria, and Switzerland only, every 2 years)	
<input type="checkbox"/> 4.2.12.1 Metrological check	OK
<input type="checkbox"/> 4.2.12.2 Date of the next metrological check	dat
4.2.13 Option, Safety check (Germany only, yearly)	
<input type="checkbox"/> 4.2.13.1 Safety check	OK
<input type="checkbox"/> 4.2.13.2 Date of the next "Safety check"	dat
4.2.14 Final procedures	
<input type="checkbox"/> 4.2.14.1 Test label and device handover	OK
5 Test equipment	
5.1 Test equipment subject and not subject to mandatory calibration	
<input type="checkbox"/> 5.1.1 Test equipment subject to mandatory calibration	OK
5.1.2 Test equipment not subject to mandatory calibration	

Report:

Test has been performed according to the test instructions.

Name: : _____

Date/Signature: : _____

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Directive 93/42/EEC concerning medical devices

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