INSTALLATION INSTRUCTIONS

HU20 VERTICAL BEDHEAD SERVICE SYSTEM

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SECTION 1: SAFETY

Before unpacking and installing the equipment, please carefully read these instructions.

Installation / commissioning, operation and servicing / maintenance of this equipment are to be carried out by suitably competent personnel only.

Do not use oil or grease on any of the gas terminal units or pipe-work for any reason as this could lead to a fire or an explosion. Use only approved oxygen compatible lubricants. If in any doubt, contact Hutz Medical Service Department.

Before carrying out any maintenance on the equipment, and before opening the access panels ensure that the electrical circuits have been de-energised and isolated, to avoid an electrical shock.

The following symbols apply to this product and are used in these instructions and on the product in question. The meaning of these symbols is as specified below:

CAUTION!
*Failure to comply with this warning could result in serious or fatal injury*

CONSULT INSTRUCTIONS FOR USE!
*Failure to comply with this notification could result in injury or damage to product*

Type B Applied Part

LOT Number

Manufacturer

Authorised Representative in the European Community

European Conformity

Maximum Payload
SECTION 2: DESCRIPTION

The HU20 vertical bed-head service system comprises of an extruded aluminium section which provides up to 240 volt electrical power as well as gas, vacuum and scavenger services if specified by the customer, from an external source through another device to the patient.

Certain other services can be provided for the direct use of the user or patient, such as internal lighting, nurse call, communication services and data services.

Access panels are provided for installation / maintenance / servicing purposes.

Where specified by the customer, a medical rail can be fitted, on which various attachments can be mounted.
SECTION 3: PRODUCT IDENTIFICATION

PRODUCT: HU20
SUPPLY SERVICE: Ceiling Entry

HU20 2-BED UNIT

- Termination Box
- Ceiling Cowling
- Reading Light
- Medical Gas
- Equipment Poles
- Medical Gas
- Communication Points
- Euro Socket
- Switch / Sockets
- Switches
- Nurse Call
- Night Light
SECTION 3: PRODUCT IDENTIFICATION

PRODUCT: HU20
SUPPLY SERVICE: Ceiling Entry

For more information, refer to the product catalogue – obtainable from Hutz Medical Sales Department.
SECTION 4: CLEANING AND MAINTENANCE

The equipment should always be kept clean. An alkaline cleaning agent with a pH range of 12 and 13 is recommended.

As the unit is not fully protected from ingress of liquid, only a slightly damp cleaning cloth should be used to avoid an electrical shock.

No special maintenance of the equipment required, other than to replace consumables.

A separate Service / Maintenance Manual issued on hand-over of the project. Contact Hutz Medical Service Department if there are any queries relating to maintenance of the equipment. (Refer to Cover Page for Contact Details)

SECTION 5: PROTECTION AGAINST FLAMMABLE MIXTURES

⚠️ Not protected – not suitable for use with flammable gases

SECTION 6: MODE OF OPERATION

Continuous, i.e. equipment may be left on indefinitely
SECTION 7: POWER SOURCE

Mains operated 110V / 130V, 220V / 240 V, 50 / 60 Hz alternating current.

⚠️ Electrical connections are only to be carried out by competent persons.

Protection against Shock

Class 1, Type B equipment (mains supplied equipment using a protected earth)

Wiring

The Wiring Legend is fixed to the inside of the unit.

Electromagnetic Interferences

In the event that data cables are required in the equipment, ensure that the data cables are fed through a flexible self-extinguishing conduit to shield the data cables from possible errors of electromagnetic interferences.

SECTION 8: DISPOSAL

Used lamps are to be disposed of according to the applicable regulations of the region or country involved.

Any other materials should be disposed of in such a way that they can be re-cycled.

The equipment does not contain any hazardous substances.

SECTION 9: TRANSPORT, STORAGE AND OPERATING CONDITIONS

Ambient temperature: 0 - 40°C
Relative humidity (non-condensing): 10 – 95%
Atmospheric pressure: 70 – 110 kPa
SECTION 10: TOOLS REQUIRED

The following tools should be recommended for the HU10 unit installation:

- High Impact Drill
- Hammer
- Rubber Mallet
- Chalk Line
- Spirit Level
- Tape Measure
- Ø6.0 Masonry Drill (for concrete wall mount)
- Ø4.0 HS Drill (for dry-wall mounting; using a Coach Screw)
- Ø16.0 HS Drill (for dry-wall mounting; using a Butterfly Screw)
- Ø8.0 HS Drill (for drilling holes into ceiling)
- Star Screwdriver / Cordless Drill with Star End Bit
- 1.5mm Hex Key (where units are joined)
- 10mm Open End / Ring Spanner (where units are joined)
- 3mm Hex Key (where a riser is fitted)
- 4mm Hex Key (where Medial Rails are fitted)
- Torque Wrench 9Nm with 4mm Hex Key End Bit
SECTION 11: PRE-INSTALLATION INSTRUCTIONS

11.1 Remove the HU20 from all the packing and place the unit on a flat surface or table. The packaging is to be discarded for recycling purposes according to respective National Environmental Regulations.

11.2 Check that the following components have been included with the HU20 Unit:

11.2.1 2.5mm Hexagon Alan Key
11.2.2 M6 x 60 Impact Anchors – 6-off
11.2.3 Ceiling Cowling
11.2.4 No.: 4 x 45 Pozi-drive Screws – 3-off
11.2.5 Flexi Anchors
11.2.6 White Plastic Screw Head Covers
11.2.7 Equipment Pole Ø25mm
11.2.8 Mounting Spacer
11.2.9 Mounting spacer Tightening Plate
11.2.10 Equipment Pole Tightening Plate
11.2.11 Equipment Pole Hole Cap
11.2.12 Equipment Poles End Cap
11.2.13 M8 x 30 Socket Head Screws – 1-off / Mounting Spacer
11.2.14 M4 x 10 Socket Head Screws – 2-off / Mounting Spacer
11.2.15 M6 x 55 Socket Head Screws – 2-off / Mounting Spacer
11.2.16 M4 x 12 Socket Head Screws – 1-off / Mounting Spacer
11.2.17 Hinge Tool
11.2.18 M6 x 60 Impact Anchor (suitable for solid brick or concrete walls only) *
11.2.19 M6 x 80 Butterfly Screw (suitable for Dry Walls only) *
11.2.20 M6 Oversize Washer (used with the M6 x 80 Butterfly Screw)
11.2.21 Ø6 x 50 Coach Screw (suitable for Wood Beams only)*
11.2.22 Hanging Rail
If any of the above mentioned items have not been packed with the unit or any items have been damaged, contact HUTZ Medical immediately. (Refer to cover page for contact details)

Additional Components maybe included on customer request.
11.3 For Installation purposes it would be recommended to remove the centre panel for installation of the HU20 Unit. To remove the centre panel the spring hinges have to be released to remove the centre panel. Hold a hinge tool in each hand, stand in front of the unit, in the centre and insert them into the hinge groove as illustrated below; equidistant from the centre.

11.4 By placing your index fingers on the hinge tool in position “A” and your thumb in position “B”, pull the hinge tool downwards towards the floor to open the spring hinge to release the centre panel, as illustrated below. Do likewise, but visa versa to open the top hinge.
11.5 Ensure that the side hinges are slid in behind the top and bottom lid and remove the centre panel by lifting the Centre Panel out of the slot in the End Plate. This will give you access, so that the M4 countersunk socket head screws are visible.

11.6 Use the Allen Key provided (Refer to Section 10.2.1) to loosen the side lid screws and rotate the lids outwards, as illustrated below to free the centre panel. Place the centre panel in a safe place to prevent any damage while installing the unit on the wall.
SECTION 12: MARKING OFF

12.1 Mark out the required height on wall, from the Finished Floor Level (F.F.L.) as specified on the HUTZ Medical drawings issued upon delivery. To determine the Bed Centre position of the unit in the Ward refer to Hospital Floor Plan.

Example:

Bottom of Unit

850mm OR AS
PER DRAWING
RECEIVED
SECTION 13: FITMENT OF HU20 UNIT

Refer to the drawing below for the following instructions; which are only applicable to solid brick or concrete walls: Contact HUTZ Medical Service Department where HU20 units are to be secured to other types of walls.

13.1 Hold the HU20 unit in a vertical position against the wall, on the 850mm marked off distance from the floor (or the required height from the floor). Slide the loose Hanging Bracket as supplied under the fixed Hanging Bracket and mark-out the position of the 2-off pre-drilled holes in the Loose Hanging Bracket. Drill Ø6mm holes for the Impact Anchor supplied. (Refer to # 10.2.2.)

13.2 Screw the loose Hanging Bracket to the wall, using the Impact Anchor supplied. (Refer to # 10.2.2.)

13.3 Hang the HU20 unit on the Loose Hanging Bracket and check the vertical position of the HU20 unit by using a spirit level.

13.4 Complete the securing of the HU20 unit to the wall by repeating the same drilling and securing process for the remaining 4-off pre-drilled holes in the lid cavity area.

850mm or as per HUTZ drawing supply
13.5 Ensure that the inside of the unit and the side lid channels are dust free before closing the lids and fastening the screws with the Hex Key provided (Refer to # 11.2.1)

13.6 Replace the centre panel by inserting the Centre Panel into the slot of the End Plate and allow the services to protrude correctly. Use the hinge tools (Refer to # 11.2.11) to push the spring loaded hinge up against the centre panel.
SECTION 14: INSTALLATION OF SERVICES

All electrical installations shall be performed by competent persons.

14.1 Electrical

14.1.1 Electrical terminations are made directly to the WDU Connectors; situated in the centre panel area as illustrated below.

14.1.2 Refer to the Wiring Legend as per specimen below, which is fixed to the rear side of the centre panel, to indicate the circuit/s allocated to the respective WDU Connectors.

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14.1.3 Ensure that the inside of the unit; the left- and right hand lid channels and centre panel area is dust free against the wall and cleaned out before replacing the centre facia.
14.2. **Gas Installation**

- Gas connection and testing to be carried out only by certified gas installer. Cross-connection of medical gas pipelines could prove fatal.

14.2.1. Where specified the equipment is fitted with medical grade copper pipe conforming to BS EN 1412.

14.2.2. Recommended copper to copper onsite jointing process: Silver / copper / phosphorus brazing alloy type CP1 or CP04 to BS 1845 (or equivalent) using a clean, dry, oil and oxygen free nitrogen inert gas shield with no flux.

14.2.3. Ensure that the gas pipeline system is bonded to the earth system.

14.2.4. The gas terminal units and pipeline system in the unit have been fully factory leak tested. After connection to the mains supply, the entire gas pipeline system is to be tested to BS EN ISO 7396-1 before being commissioned for use. Refer any queries in this regard to Hutz Medical Service Department (Refer to cover page for contact details).
SECTION 15: COWLING INSTALLATION

15.1 Ensure the HU20 unit is secured on the wall.
15.2 Fit the cowling around the unit and press-up against the ceiling. (Refer to # 10.2.3)
15.3 Mark the fixing hole positions on the ceiling board through the 3x pre-drilled holes in the cowling by using a Ø4.5mm drill.
15.4 Drill a Ø10mm hole through the marked off holes.
15.5 Before inserting the Flexi Anchors as provided (Refer to # 10.2.5) into the Ø10mm holes, pinch the wings flat in the direction of the arrows as illustrated below and insert them sufficiently deep enough to allow the wings to be released.

![Diagram showing cowling installation]

15.6 To check that the Flexi Anchor wings are released turn a Dry-Wall Screw (Refer to # 10.2.5) by hand into the Flexi Anchor and try and pull on it.
15.7 Fit the cowling around the unit, press-up against the ceiling and secure by using the Dry-wall Screws provided (Refer to # 10.2.4) into the Flexi Anchors.
15.8 Insert and press the White Screw Head Covers provided over the Dry-wall Screws. (Refer to # 10.2.6)