Instructions for use

Transport Supply Unit

WARNING
To properly use accessories, read and comply with all relevant instructions for use.
Trademarks

<table>
<thead>
<tr>
<th>Trademark</th>
<th>Trademark owner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evita®</td>
<td>Dräger</td>
</tr>
<tr>
<td>Infinity®</td>
<td>Dräger</td>
</tr>
<tr>
<td>Savina®</td>
<td>Dräger</td>
</tr>
<tr>
<td>Incidur®</td>
<td>Ecolab</td>
</tr>
<tr>
<td>Dismozon®</td>
<td>Bode Chemie</td>
</tr>
</tbody>
</table>

Safety information definitions

**WARNING**

A WARNING statement provides important information about a potentially hazardous situation which, if not avoided, could result in death or serious injury.

**CAUTION**

A CAUTION statement provides important information about a potentially hazardous situation which, if not avoided, may result in minor or moderate injury to the user or patient or in damage to the medical device or other property.

**NOTE**

A NOTE provides additional information intended to avoid inconvenience during operation of the medical device.

Definition of target groups

For this product, users, service personnel, and experts are defined as target groups.

These target groups must have received instruction in the use of the product and must have the necessary training and knowledge to use, install, reprocess, maintain, or repair the product.

The product must be used, installed, reprocessed, maintained, or repaired exclusively by defined target groups.

**Users**

Users are persons who use the product in accordance with its intended use.
**Service personnel**

Service personnel are persons who are responsible for the maintenance of the product.

Service personnel must be trained in the maintenance of medical devices and install, reprocess, and maintain the product.

**Experts**

Experts are persons who perform repair or complex maintenance work on the product.

Experts must have the necessary knowledge and experience with complex maintenance work on the product.
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For your safety and that of your patients

General Safety Information

The following WARNING and CAUTION statements apply to general operation of the product.

WARNING and CAUTION statements specific to subsystems or particular features of the product appear in the respective sections of these instructions for use or in the instructions for use of another product being used with this product.

Strictly follow these instructions for use

**WARNING**
Risk of incorrect operation and of incorrect use
Any use of the product requires full understanding and strict observation of all sections of these instructions for use. The product must only be used for the purpose specified in “Intended use” on page 7.

Strictly observe all WARNING and CAUTION statements throughout these instructions for use and all statements on the product labels. Failure to observe these safety information statements constitutes a use of the product that is inconsistent with its intended use.

Maintenance

**WARNING**
Risk of malfunction of the product and of patient injury
The product must be inspected and serviced regularly by service personnel. Repair and complex maintenance carried out on the product must be performed by experts.

If the above is not complied with, failure of the product and patient injury may occur. See chapter "Maintenance".

Dräger recommends that a service contract is obtained with DrägerService and that all repairs are performed by DrägerService. For maintenance Dräger recommends the use of authentic Dräger repair parts.

Accessories

**WARNING**
Risk due to incompatible accessories
Dräger has tested only the compatibility of accessories listed in the current list of accessories. If other, incompatible accessories are used, there is a risk of patient injury due to product malfunction.

Dräger recommends that the product is only used together with accessories listed in the current list of accessories.
For your safety and that of your patients

Product-specific safety information

**WARNING**
Risk of damage to the device or personal damage
Failure to observe the maximum loads permitted can cause the transport supply unit to tip over. Observe maximum loads, see "Technical data" on page 25.

**CAUTION**
Risk of damage to the device or personal damage
In the non-coupled state, the transport supply unit has limited tipping stability. Move the transport supply unit carefully when not coupled.
**Intended use**

The transport supply unit supplies a ventilator with gas (oxygen or medical compressed air) from one or two compressed gas cylinders.

The transport supply unit may only be used with Dräger ventilators as indicated in the respective list of accessories.

The transport supply unit can be used:
- in intensive care units
- during transport in the hospital

The transport supply unit can be used, e.g., with the following Dräger ventilators:
- Evita Infinity V500
- Evita V300
- Savina 300
Overview

Overall view

A Product label
B Column
C Upper gas cylinder holder
D Lower gas cylinder holder
E Guide pin
F Double castors (2 pcs.)
G Double castors with locking brake (2 pcs.)
H Pedestal
I Hose holder
J Product label indicating the maximum load permitted on the hose holder
K Handle
Overview

Upper gas cylinder holder

A Finishing trim
B Cover
C Coupling element of the transport supply unit
D Hook-and-loop strap
E Column clamp
F Clamping screw
G Fixing lug
H Product label for positioning the compressed gas cylinders

Lower gas cylinder holder

I Cover
J Finishing trim
K Hook-and-loop strap
L Product label indicating the maximum load permitted per gas cylinder holder
M Column clamp
N Clamping screw
O Fixing lug

Locking elements

P Locking button
Q Product label: Warning! Strictly follow these instructions for use
R Locking lever
S Rating plate

Instructions for use Transport Supply Unit
Overview

Product labels

<table>
<thead>
<tr>
<th>Max. Weight</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 kg (6.6 lbs)</td>
<td>Maximum load permitted on the hose holder</td>
</tr>
<tr>
<td>10 kg (22 lbs)</td>
<td>Maximum load permitted per gas cylinder holder</td>
</tr>
</tbody>
</table>

Positioning of the compressed gas cylinders on the transport supply unit

Warning! Strictly follow these instructions for use

Tipping stability

Fixing plate and coupling element of the trolley

The fixing plate and the coupling element of the trolley must be mounted to the trolley of the ventilator.

A Fixing plate
B Coupling element of the trolley
Preparation

Installation on the trolley of the ventilator

The installation must be performed by technical personnel.

The following parts must be fitted to the trolley of the ventilator before using the transport supply unit for the first time:
- Fixing plate
- Coupling element of the trolley

Fitting the fixing plate

The fixing plate is fitted to the bottom of the trolley.

1. Lock all locking brakes on the trolley.
2. Tilt the trolley back.
3. Use an Allen key to remove the screws (A) on the bottom of the pedestal.
4. Remove the flat washers and the spring washers from the screws.
5. Screw on the fixing plate (B) with the screws (A) and spring washers (C). The flat washers are no longer needed.
6. Use a torque spanner to tighten the screws (A) to a tightening torque of 24 ±0.5 Nm.
Preparation

**Fitting the coupling element of the trolley**

1. Push the coupling element of the trolley (A) onto the coupling element of the transport supply unit (B) until it engages audibly.

2. Push the transport supply unit under the trolley. The guide pin must be pushed into the fixing plate.

3. Use a marker pen to mark the height of the coupling element of the trolley (A) on the trolley column.

4. Pull out the transport supply unit from under the trolley.

5. Remove the coupling element of the trolley (A) from the coupling element of the transport supply unit (B). To do this, move the locking lever (E) to the left while pressing the locking button (F).

6. Fit the coupling element of the trolley (A) at the mark. To do this, loosen the screws (G) on the left and right side and position the claws in the lateral grooves on the trolley. Align the coupling element of the trolley horizontally.

7. Move the transport supply unit under the trolley.

8. Connect the coupling element of the transport supply unit to the coupling element of the trolley. If the coupling element of the transport supply unit does not engage or gets stuck, adjust the position of the coupling element of the trolley.

9. Use a torque wrench to tighten the lateral screws (G) to a tightening torque of 12 ±0.5 Nm.
Replacing the hook-and-loop strap

The hook-and-loop straps must be replaced by technical personnel.

**WARNING**
Risk of damage to the device or personal damage

The length of the hook-and-loop straps must match the circumference of the compressed gas cylinders. Otherwise, the compressed gas cylinders cannot be secured correctly. Replace with the respective hook-and-loop strap as required.

<table>
<thead>
<tr>
<th>Diameter of the compressed gas cylinder</th>
<th>Length of the hook-and-loop strap</th>
</tr>
</thead>
<tbody>
<tr>
<td>80 to 130 mm</td>
<td>450 mm</td>
</tr>
<tr>
<td>130 to 160 mm</td>
<td>570 mm</td>
</tr>
</tbody>
</table>

**NOTE**
The loop side must be facing outwards when inserting the hook-and-loop strap. Otherwise, the hook-and-loop strap cannot be closed.

1. Fold up and remove the cover (A).
2. Remove the finishing trim (B).
3. Pull the pin (C) out of the lug of the hook-and-loop strap.
4. Pull out the hook-and-loop strap (D).
5. Insert the new hook-and-loop strap (E), with the lug and the loop side facing outwards, fully into the lateral opening.
6. Insert the pin (C) fully into the lug.
7. Put back the cover (A).
8. Insert the finishing trim (B).
9. Press the cover (A) down until it engages.
Adjusting the lower gas cylinder holder

The lower gas cylinder holder must be adjusted by technical personnel.

**WARNING**
Risk of damage to the device or personal damage

Adjust the height of the lower gas cylinder holder to the compressed gas cylinders being used. Adjust the height so that the upper gas cylinder holder holds the compressed gas cylinders around the top half of the cylinder. Otherwise, the compressed gas cylinders can fall off.

1. Remove the finishing trim (A).
2. Loosen the clamping screw (B) until the column clamps (C) can be moved.
3. Slide the gas cylinder holder upwards according to the height of the compressed gas cylinder.
4. Insert the finishing trim (A).
5. Tighten the clamping screw (B) to a tightening torque of 5.5 ±0.5 Nm.
Securing the compressed gas cylinders

The following requirements must be met before the compressed gas cylinders can be secured to the transport supply unit:

– Coupling element and fixing plate are fitted to the trolley.
– The height of the lower gas cylinder holder is adjusted according to the compressed gas cylinders being used.
– The lengths of the hook-and-loop straps correspond to the compressed gas cylinders being used.

1. Place the compressed gas cylinders (A) in the lower gas cylinder holder (B).
2. Turn the compressed gas cylinders so that the pressure reducers (C) face the front.
3. Tighten the hook-and-loop straps of the upper gas cylinder holder (D) and the lower gas cylinder holder (B) and press together firmly.

When coupling, turn the cylinders with the pressure reducers slightly to the side to prevent a collision with the ventilator.

CAUTION
Risk of damage to the compressed gas cylinders
The pedestal of the transport supply unit serves as a collision protector. Take particular care when the compressed gas cylinders are larger than the collision protector.

WARNING
Risk of damage to the device or personal damage
Failure to observe the maximum loads permitted can cause the transport supply unit to tip over. Observe maximum loads.

CAUTION
Risk of damage to the pressure reducers
Position the compressed gas cylinders so that the pressure reducers face the front. Observe the labels on the device. Otherwise, there is a risk of damage during transport.

CAUTION
Risk of damage to the transport supply unit and the coupling element on the trolley
The gas cylinder holder and the coupling elements may be damaged if the maximum load of 2 x 10 kg is exceeded. Do not exceed the maximum load of 2 x 10 kg.

WARNING
Risk of damage to the device or personal damage
Failure to observe the maximum loads permitted can cause the transport supply unit to tip over. Observe maximum loads.
Operation

**CAUTION**
Check the transport supply unit for visible damage (e.g., dents, cracks). In the event of visible damage, do not use the transport supply unit. Contact DrägerService.

Moving the transport supply unit

**WARNING**
Risk of damage to the device
Do not move the transport supply unit faster than at a walking pace. There is an increased danger of the unit tipping over at thresholds, uneven surfaces, and ramps. Slow the walking pace down even further.

**CAUTION**
Risk of damage to the device
Cables and hoses lying about can get dragged along or cause the transport supply unit to stop suddenly. When moving the transport supply unit, pay attention to cables and hoses lying about.

**CAUTION**
Risk of damage to the device
If the compressed gas cylinders protrude beyond the pedestal, damage may occur during transport. Particular care is required when moving the transport supply unit.

**CAUTION**
Risk of damage to the device
If the transport supply unit is to be moved a long way, remove the pressure reducers and if required, close off the compressed gas cylinders with the appropriate caps.

- Check that the compressed gas cylinders are fitted securely.

1. Release both locking brakes (A).
2. Hold the transport supply unit by the handle (B) and push it no faster than at a walking pace.
Parking the transport supply unit

- Lock both locking brakes (A).

Coupling the transport supply unit

1. Lock all four brakes (A) on the trolley of the ventilator.
2. Push the transport supply unit under the trolley. The guide pin must be pushed into the retaining plate.
3. Turn the cylinders with pressure reducers sufficiently far to the side that the pressure reducers do not collide with the trolley or other parts of the ventilator during coupling.
4. Tip up the transport supply unit until the coupling element of the transport supply unit (B) audibly clicks into the coupling element of the trolley (C).
5. Pull on the transport supply unit to check correct coupling. The locking button can no longer be operated when locked correctly.

**CAUTION**

Risk of damage to the device
If the transport supply unit is not fully engaged, it can unexpectedly release from the trolley. Check for proper coupling.
Moving the transport supply unit and trolley

WARNING
Risk of damage to the device
Do not move the transport supply unit faster than at a walking pace. There is an increased danger of the unit tipping over at thresholds, uneven surfaces, and ramps. Slow the walking pace down even further.

CAUTION
Risk of damage to the device
Cables and hoses lying about can get dragged along or cause the transport supply unit to stop suddenly. When moving the transport supply unit, pay attention to cables and hoses lying about.

CAUTION
Risk of damage to the device
If the compressed gas cylinders protrude beyond the pedestal, damage may occur during transport. Particular care is required when moving the transport supply unit.

1 Release all the brakes (A) on the trolley of the ventilator.
2 Use the trolley handle (B) to move the trolley with the coupled transport supply unit.
Tipping stability

Transport supply unit

WARNING
Risk of damage to the device or personal damage
There is a risk of the transport supply unit tipping over when it is used on inclines >5°.
On inclined surfaces, the transport supply unit must be oriented so that the handle is always at the upper end.

Combination with a ventilator

WARNING
Risk of damage to the device or personal damage
If the transport supply unit is combined with a ventilator on a trolley and is used on inclines >5°, there is a risk that it may tip over.
On inclined surfaces, the combination must be arranged so that the transport supply unit is always at the upper end.

Illustration: Combination with Savina 300 ventilator
**Uncoupling the transport supply unit**

1. Lock all the brakes on the trolley of the ventilator.

2. Hold the transport supply unit by the handle (C) and move the locking lever (A) to the left while pressing the locking button (B).

3. Pull out the transport supply unit from under the trolley and park it.
Cleaning and disinfection

Testing of procedures and agents

The cleaning and disinfection process has been tested with the following procedures and agents. At the time of testing, the following procedures and agents showed good material compatibility and effectiveness:

Manual disinfection and simultaneous cleaning:
– Incidur from Ecolab, Germany
– Dismozon pur from Bode Chemie Hamburg, Germany

Manual disinfection and simultaneous cleaning

Perform manual disinfection preferably with disinfectants based on aldehydes or quaternary ammonium compounds.

For choosing the appropriate disinfectant, observe country-specific lists of disinfectants. The list of the German Association for Applied Hygiene (Verbund für Angewandte Hygiene VAH) applies in German-speaking countries.

Strictly observe the manufacturer's instructions for using disinfectants. The composition of disinfectants may change.

Procedure:
1. Remove dirt immediately with a wipe soaked in disinfectant.
2. Perform surface disinfection (scrub-and-wipe disinfection).
3. After the contact time has elapsed, remove disinfectant residues.
Maintenance

Overview

This chapter describes the maintenance measures required to maintain the proper functioning of the product. Maintenance measures must be performed by the personnel responsible.

**WARNING**

**Risk of infection**

Users and service personnel can become infected with pathogenic germs.

Disinfect and clean device or device parts before any maintenance measures and also before returning the medical device for repair.

**Definition of maintenance concepts**

<table>
<thead>
<tr>
<th>Concept</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance</td>
<td>All measures (inspection, preventive maintenance, repair) intended to maintain and restore the functional condition of a product</td>
</tr>
<tr>
<td>Inspection</td>
<td>Measures intended to determine and assess the actual state of a product</td>
</tr>
<tr>
<td>Preventive maintenance</td>
<td>Recurrent specified measures intended to maintain the functional condition of a product</td>
</tr>
<tr>
<td>Repair</td>
<td>Measures intended to restore the functional condition of a product after a device malfunction</td>
</tr>
</tbody>
</table>
Inspection

Perform inspections at regular intervals and observe the following specifications.

<table>
<thead>
<tr>
<th>Checks</th>
<th>Interval</th>
<th>Personnel responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inspection</td>
<td>Every 2 years</td>
<td>Experts</td>
</tr>
</tbody>
</table>

Preventive maintenance

**WARNING**

Risk of faulty components

Device failure is possible due to wear or material fatigue of the components.

To maintain the proper operation of all components, this device must undergo inspection and preventive maintenance at specified intervals.

The following table shows the preventive maintenance intervals:

<table>
<thead>
<tr>
<th>Component</th>
<th>Interval</th>
<th>Measure</th>
<th>Personnel responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Double castors</td>
<td>Every 2 years</td>
<td>Check for secure fitting</td>
<td>Experts</td>
</tr>
<tr>
<td>Fixing lug on the gas cylinder holders for the</td>
<td>Every 2 years</td>
<td>Check integrity and replace if necessary</td>
<td>Experts</td>
</tr>
<tr>
<td>hook-and-loop straps</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Repair

Dräger recommends that all repairs are carried out by DrägerService and that only authentic Dräger repair parts are used.
Disposal

At the end of its service life:

- Consult the relevant waste disposal companies for appropriate disposal.
- Observe the applicable laws and regulations.
**Technical data**

**Ambient conditions**

During operation
- Temperature: 5 °C to 40 °C (41 °F to 104 °F)
- Relative humidity: 5 % to 95 %

During storage
- Temperature: –20 °C to 60 °C (-4 °F to 140 °F)
- Relative humidity: 5 % to 95 %

**Transport supply unit**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
<td>950 mm (37.4 in)</td>
</tr>
<tr>
<td>Width</td>
<td>425 mm (16.7 in)</td>
</tr>
<tr>
<td>Depth</td>
<td>585 mm (23 in)</td>
</tr>
<tr>
<td>Weight</td>
<td>18.5 kg (40.8 lbs)</td>
</tr>
<tr>
<td>Maximum load</td>
<td>23 kg (50.7 lbs)</td>
</tr>
</tbody>
</table>

**Gas cylinder holder**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>5.1 kg (11.2 lbs)</td>
</tr>
<tr>
<td>Maximum height of the compressed gas cylinders</td>
<td>790 mm (31.1 in)</td>
</tr>
<tr>
<td>Minimum diameter of the compressed gas cylinders</td>
<td>80 mm (6.3 in)</td>
</tr>
<tr>
<td>Maximum diameter of the compressed gas cylinders</td>
<td>160 mm (6.3 in) without bed coupling</td>
</tr>
<tr>
<td>Maximum diameter of the compressed gas cylinders</td>
<td>140 mm (5.5 in) with bed coupling</td>
</tr>
<tr>
<td>Maximum load</td>
<td>2 x 10 kg (2 x 22.05 lbs)</td>
</tr>
</tbody>
</table>

**Hose holder**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>200 g (0.44 lbs)</td>
</tr>
<tr>
<td>Maximum load</td>
<td>3 kg (6.6 lbs)</td>
</tr>
</tbody>
</table>

**Materials used**

- Column: Aluminum and stainless steel
- Handle: Aluminum
- Hose holder: Polyamide
- Gas cylinder holder: Aluminum, acrylic styrene acrylic ester, polyoxymethylene
- Pedestal: Steel
- Double castors: Polyamide
## Accessories

<table>
<thead>
<tr>
<th>Designation</th>
<th>Part no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport coupling</td>
<td>G93137</td>
</tr>
</tbody>
</table>