

# **THS<sup>TM</sup> NEONATAL CART** OPERATING GUIDE









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For any issues with your Technimount product, its components, or for any technical questions during the installation, operation, or maintenance, please contact Technical Support at techsupport@technimount.com.

## **Contact Information**

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# 1. Safety Guidelines



#### WARNING – Hand Crush/Pinch Point

Keep fingers away from the extremity of the fold-up hitch, it's clip and quick release mechanism during coupling operations. The mobile parts can represent a risk of pinching.



# WARNING – Risk of Injury

Always ensure that the coupling between the fold-up hitch of the transport cart and the THS<sup>™</sup> coupling device under the incubator is properly secured before use, to avoid all risks of disconnection between the patient and the life support medical equipment and disconnection of the transport cart. If the red part on the stem of the quick release button is visible, it indicates that the system's locking mechanism is not properly secured.



## WARNING – General Warning

- Do not perform safety checks on Technimount products, before receiving proper training.
- Perform the safety checks, as described in this operating guide. Failing to follow the recommended guidelines could cause premature damage to the product.
- Improper use of the Technimount product may damage the device or cause injury to the patients or clinical staff.
- If any serious incident occurs with the transport cart, immediately stop using the product, report this incident to Technical Support at technicalsupport@technimount.com and the applicable regulatory agency.



## CAUTION – Safe Practice

- Always ensure that the quick release mechanism of the fold-up hitch is properly engaged and functional before use.
- Always ensure that the locking mechanisms of the support brackets of all the medical equipment installed onto the rail system and on the transport cart's surfaces are engaged and functional before use.
- Always pay close attention to the condition of the four (4) brakes and the quick release mechanism of the fold-up hitch, to prevent undue risk to the transport cart, patients, and clinical staff. Follow the recommended maintenance plan and its guidelines, as described in this user manual and operation guide.
- Practice safely operating the transport cart until the manipulations have been perfected, before use with patients. Improper use of a Technimount product may damage it or cause injury to the patients or clinical staff.





## CAUTION – Safe Handling and Operation

- Do not fasten or unfasten a gas cylinder on the transport cart during transfers to avoid risks of damage, equipment falling or injuries to the patients or clinical staff. Always wait until the transport cart is immobilized before manipulating the straps. This mounting system was designed to transport type D-M15 and type E-M24 gas cylinders during intrahospital transfers.
- **Do not** use extension cables. If needed, use the provided power cords to power the medical equipment on the transport cart.
- **Do not** use the fold-up hitch as a foot rest. Always ensure the fold-up hitch is attached in it's clip when the transport cart is detached from the incubator or when stored. When down, the hitch could cause tripping or tipping hazards.
- Always slow the descent of the fold-up hitch when lowering to align with the THS<sup>™</sup> coupling device. Lowering the hitch too fast or past the alignment point could cause risks of misalignment between the parts or damage the product.
- Always ensure that the power cable of the Uninterruptible Power Supply unit (herein after referred to as "UPS") is disconnected and rolled onto the cable management hook, once the unit has been fully charged and/or before moving the transport cart.
- Always ensure that the braking system is applied to all four (4) dual wheel swivel casters when the THS Neonatal Cart is immobilized or not being used, to avoid tipping incidents.
- One (1) person is required to safely move the transport cart and two (2) people, to safely move the transport cart and incubator when they are connected. For transfers with a patient, always refer to and follow the hospital's transfer protocols.



#### CAUTION – Working Load/Load Balance

- **Do not** overload the transport cart to avoid tipping incidents or risks of collapsing. The total Safe Working Load (SWL) is 136.1 kg (300 lb).
- **Do not** overload the transport cart components. The maximum weight capacities are:
  - Top shelf and UPS protector/shelf: 27.22 kg (60 lb), per shelf
  - UPS shelf: 68.04 kg (150 lb)
  - Horizontal rails: 18.14 kg (40 lb), per rail
  - IV poles:
    - Top part of the IV pole is 4.5 L (160 oz liq.), per pole
    - Bottom part of the IV pole is 9.07 kg (20 lb), per pole



## CAUTION – Follow the Instruction for Use

- Always read and abide by all the safety guidelines identified, as well as follow instructions provided within Technimount user documentation.
- Refer Dräger Babyleo<sup>®</sup> TN500 user documentation for safety precautions and user instructions for the safe use of the incubator.
- Refer to the Dräger Babyroo<sup>®</sup> TN300 user documentation for safety precautions and user instructions for the safe use of the incubator.
- This transport cart may contain optional medical equipment and/or accessories. Refer their specific user documentation for the safety guidelines, user instructions and safe use with the THS Neonatal Cart.



# 2. THS Neonatal Cart Orientation Diagrams

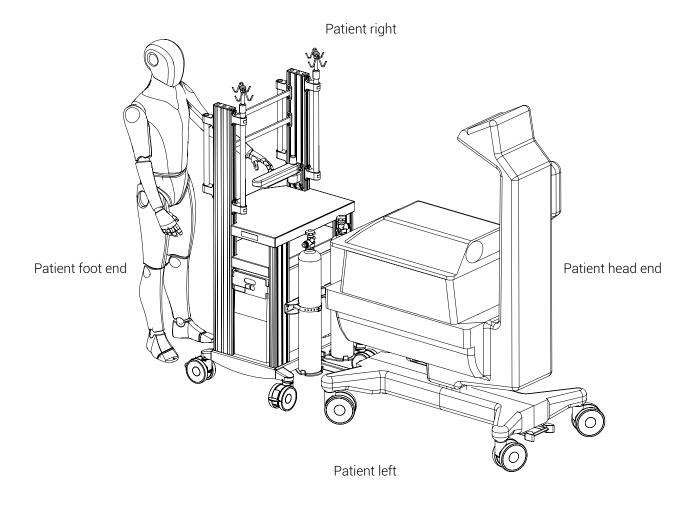


Figure 1 : THS Neonatal Cart orientation diagram, illustrated with the Babyleo TN500 incubator



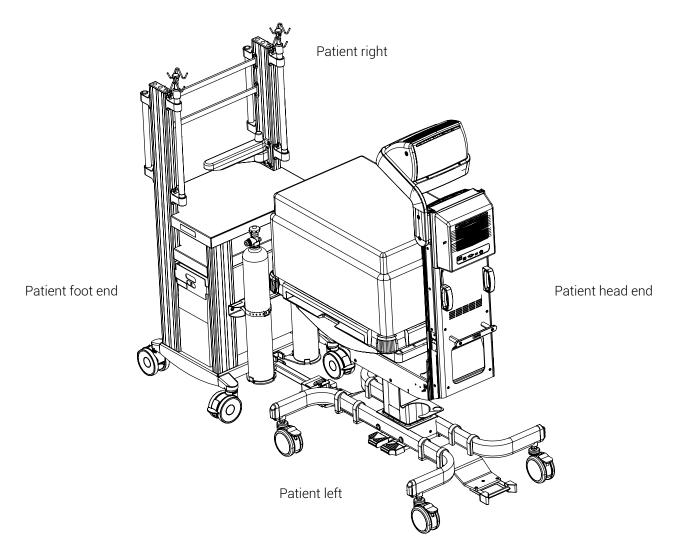


Figure 2 : THS Neonatal Cart orientation diagram, illustrated with the Babyroo TN300 incubator



3. THS Neonatal Cart Illustrated Parts

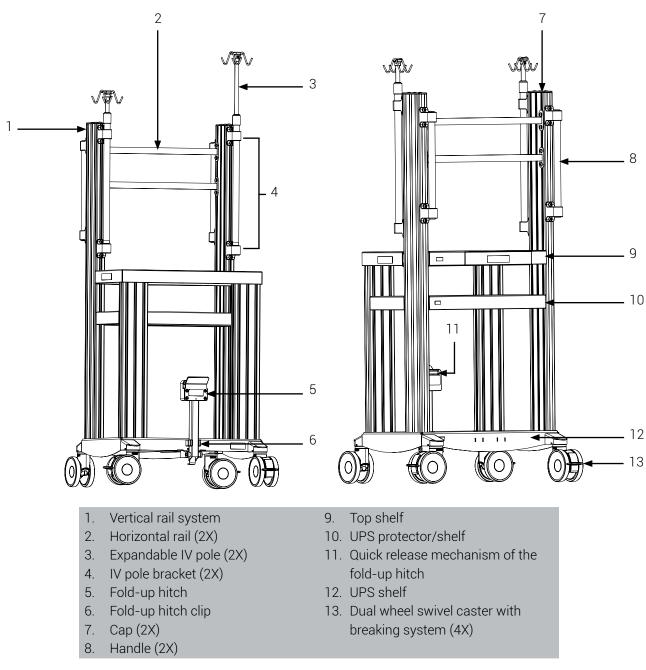


Figure 3 : THS Neonatal Cart components



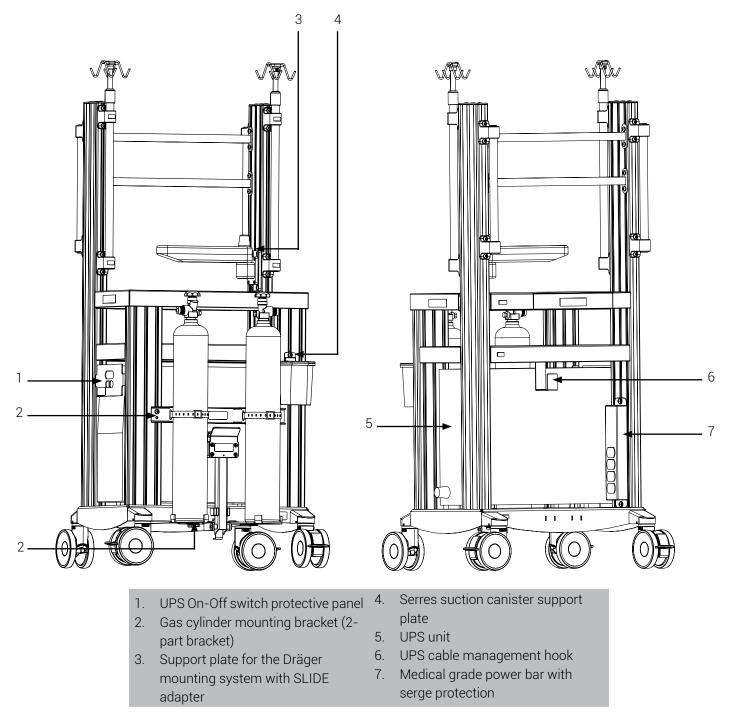


Figure 4 : THS Neonatal Cart optional accessories



# 4. Operate the THS Neonatal Cart

The contents herein are intended for clinical staff who are proficient, have received the required training and are sufficiently knowledgeable to safely operate the product and perform the daily safety checks. Follow the operating instructions to help you safely and effectively use the THS Neonatal Cart and move the neonatal incubators and multiple medical devices that are essential to neonates during intrahospital transfers. For detailed product information that is not user related or mentioned herein, refer to your administrator/manager/supervisor or the user manual.

- **NOTE:** Always perform the Safety checks **before** using the THS Neonatal Cart. Refer to the « Daily Safety Checks » on page 20 before each use.
- **NOTE:** Technimount continually seeks advancements in product design and quality. While this Operating Guide contains the most updated product information available at the time of printing, it may contain minor differences from the current version. For more information, please contact Customer Service at customerservice@technimount.com.

#### 4.1. Couple the THS Neonatal Cart with the Incubator

#### 4.1.1. Couple the THS Neonatal Cart with the Babyleo TN500 Incubator

1. If required, unplug the UPS power cable from the outlet, wind the cord and hang it on the cable management hook (Figure 5), located on the THS Neonatal Cart UPS protector/shelf.

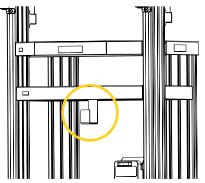


Figure 5 : Location of the cable management hook

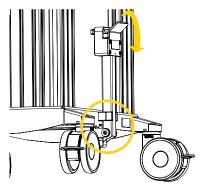
- 2. If required, disengage the braking system on all four (4) dual wheel swivel casters of the THS Neonatal Cart.
- 3. If required, disengage the four (4) locking brakes of the incubator, then engage the directional castor to facilitate straight movements.



4. Lower the THS Neonatal Cart fold-up hitch using your foot to free it from its clip (Figure 6 A), then pivot the arm downwards until it has reached its final position (Figure 6 B).

(B)





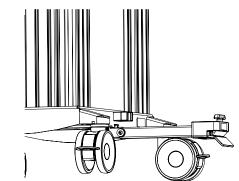


Figure 6 : Pivoting the fold-up hitch

- 5. Move to the side of the transport cart, then align the fold-up hitch with the THS coupling device located under the incubator (Figure 7 A).
- 6. Pull the transport cart towards the incubator until the THS coupling device is inserted and fully secured in the fold-up hitch locking mechanism (Figure 7 B).

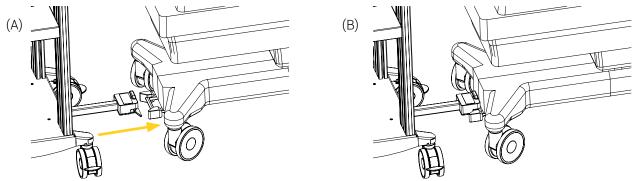


Figure 7 : Installation of the transport cart on the Babyleo TN500 incubator

7. Ensure that coupling between the fold-up hitch of the transport cart and the THS coupling device under the Babyleo TN500 incubator is properly secured (Figure 8).

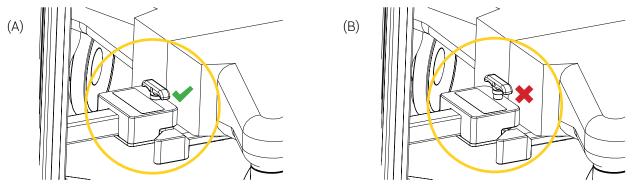


Figure 8 : THS Neonatal Cart attached on the Babyleo TN500 incubator



8. If the transport cart is not immediately used for transport, apply the brakes on all four (4) dual wheel swivel casters.

The coupling of the THS Neonatal Cart with the Babyleo TN500 incubator is completed.

#### 4.1.2. Couple the THS Neonatal Cart with the Babyroo TN300 Incubator

1. If required, unplug the UPS power cable from the outlet, wind the cord and hang it on the cable management hook (Figure 9), located on the THS Neonatal Cart UPS protector/shelf.

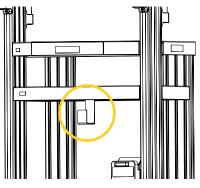
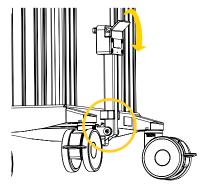


Figure 9 : Location of the cable management hook

- 2. If required, disengage the braking system on all four (4) dual wheel swivel casters of the THS Neonatal Cart.
- 3. If required, disengage the four (4) locking brakes of the incubator, then engage the directional castor to facilitate straight movements.
- 4. Lower the THS Neonatal Cart fold-up hitch using your foot to free it from its clip (Figure 10 A), then pivot the arm downwards until it has reached its final position (Figure 10 B).

(B)





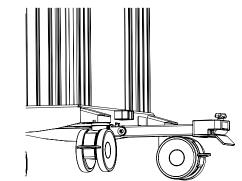


Figure 10 : Pivoting the fold-up hitch



- 5. Move to the side of the transport cart, then align the fold-up hitch with the THS coupling device located under the incubator (Figure 11 A).
- 6. Pull the transport cart towards the incubator until the THS coupling device is inserted and fully secured in the fold-up hitch locking mechanism (Figure 11 B).

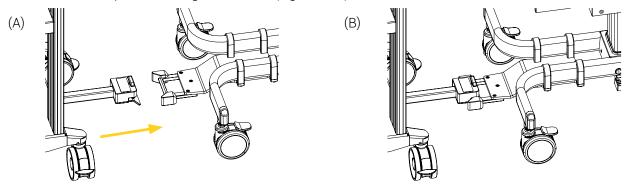


Figure 11 : Installation of the transport cart on the Babyroo TN300 incubator

7. Ensure that coupling between the fold-up hitch of the transport cart and the THS coupling device under the Babyroo TN300 incubator is properly secured (Figure 12).

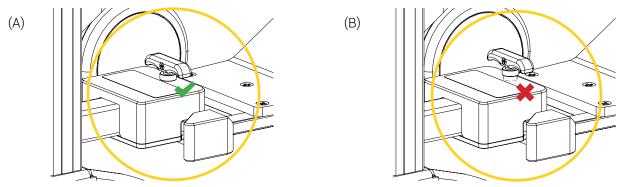


Figure 12 : THS Neonatal Cart attached on the Babyroo TN300 incubator

8. If the transport cart is not immediately used for transport, apply the brakes on all four (4) dual wheel swivel casters.

The coupling of the THS Neonatal Cart with the Babyroo TN300 incubator is completed.



#### 4.2. Uncouple the THS Neonatal Cart from the Incubator

#### 4.2.1. Uncouple the THS Neonatal Cart from the Babyleo TN500 Incubator

- 1. If required, disengage the braking system on all four (4) dual wheel swivel casters of the THS Neonatal Cart.
- 2. Pull and maintain the knob of the fold-up hitch quick release mechanism to release the THS coupling device (Figure 13).

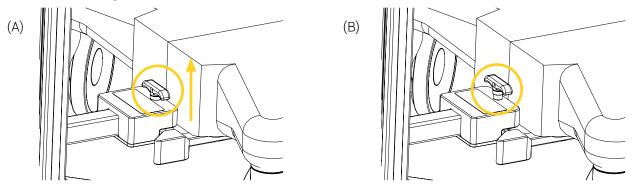


Figure 13 : Quick release mechanism

3. Push the transport cart away from the Babyleo TN500 incubator to detach the fold-up hitch from the THS coupling device, while simultaneously retaining the knob of the quick release mechanism of the fold-up hitch lifted (Figure 14).

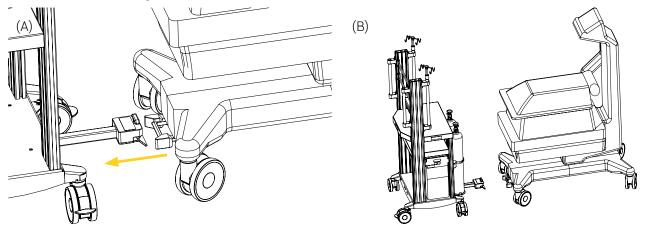


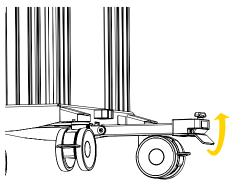
Figure 14 : Removal of the transport cart from the Babyleo TN500 incubator



4. Pivot the fold-up arm upwards until it has reached its final position, then press on the arm to insert and secure the arm in its clip using your foot (Figure 15).

(B)





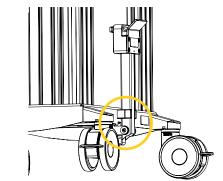


Figure 15 : Pivoting the fold-up hitch

5. Apply the brakes on all four (4) dual wheel swivel casters of the transport cart.

The uncoupling of the THS Neonatal Cart from the Babyleo TN500 incubator is completed.

# 4.2.2. Uncouple the THS Neonatal Cart from the Babyroo TN300 Incubator

- 1. If required, disengage the braking system on all four (4) dual wheel swivel casters of the THS Neonatal Cart.
- 2. Pull and maintain the knob of the fold-up hitch quick release mechanism to release the THS coupling device (Figure 16).

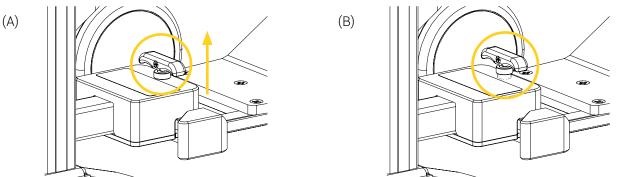


Figure 16 : Quick release mechanism



3. Push the transport cart away from the Babyroo TN300 incubator until the THS coupling device is fully detached from the fold-up hitch locking mechanism, while simultaneously retaining the knob of the quick release mechanism of the fold-up hitch lifted (Figure 17).

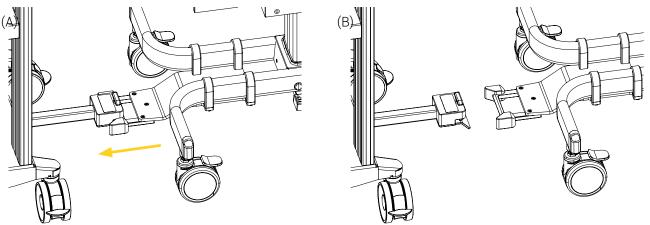


Figure 17 : Uncoupling the transport cart from the Babyroo TN300 incubator

4. Pivot the fold-up arm upwards until it has reached its final position, then press on the arm to insert and secure the arm in its clip using your foot (Figure 18).

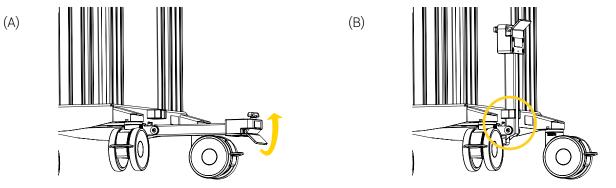


Figure 18 : Pivoting the fold-up hitch

5. Apply the brakes on all four (4) dual wheel swivel casters of the transport cart.

The uncoupling of the THS Neonatal Cart from the Babyroo TN300 incubator is completed.



#### 4.3. Install a Type D-M15 and Type E-M24 Gas Cylinder

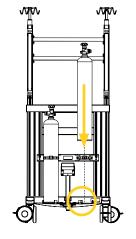
- 1. Apply the brakes on all four (4) dual wheel swivel casters of the transport cart.
- 2. If required, undo the belt of the gas cylinder mounting bracket.
- 3. Insert and position the gas cylinder on the bottom plate of the mounting bracket (Figure 19).
- 4. Tie and tighten the belt firmly around the gas cylinder using the buckle to secure it.



#### CAUTION – Safe Handling and Operation

Always ensure that the gas cylinder is secured on the transport cart before moving the system to avoid risks of damage, equipment falling or injuries to the patients or clinical staff.

(A)



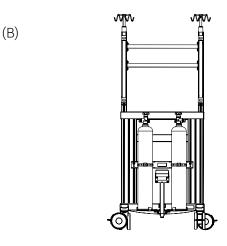


Figure 19 : Installation of the gas cylinder on the mounting bracket

5. If required, repeat steps 1 to 4 to install a second gas cylinder on the mounting bracket.

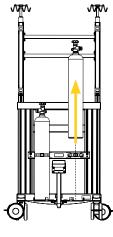
The installation of the gas cylinder on the mounting bracket is completed.



#### 4.4. Remove a Type D-M15 and Type E-M24 Gas Cylinder

- 1. Apply the brakes on all four (4) dual wheel swivel casters of the transport cart.
- 2. Undo the belt of the gas cylinder mounting bracket.
- 3. Lift and remove the gas cylinder from the mounting bracket (Figure 20 A), then set it aside.
- 4. If required, repeat steps 1 to 3 to remove a second gas cylinder from the mounting bracket (Figure 20 B).





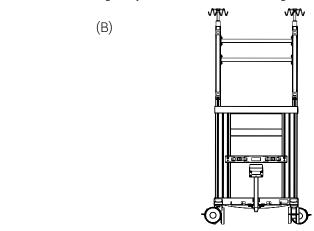
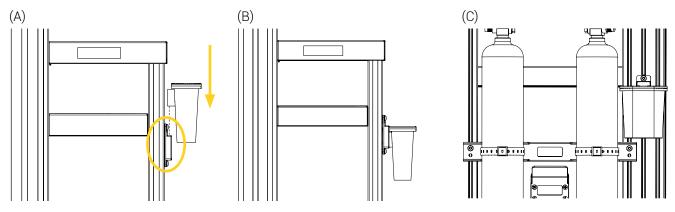


Figure 20 : Removal of the gas cylinder from the mounting bracket

Le removal of the gas cylinder from the mounting bracket is completed.

## 4.5. Install a Serres Suction Canister (Optional)

- 1. Insert the built-in bracket of the Serres suction canister in the support plate, until it has reached the bottom of the support plate (Figure 21).
- 2. Move the suction canister up and down to ensure it is correctly installed in the support plate.



**Figure 21** : Installation of the Serres suction canister (side and front of the transport cart illustrated) The installation of the Serres suction canister in the support plate is completed.



#### 4.6. Removal of a Serres Suction Canister (Optional)

Pull on the suction canister upwards to remove it from the support plate (Figure 22).

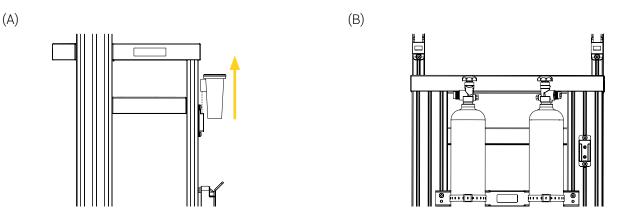


Figure 22 : Removal of the Serres suction canister

The removal of the Serres suction canister is completed.

#### 4.7. Operate the IV Pole

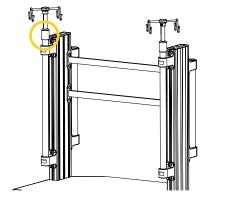
If required, the height IV poles can be adjusted to conform to the specific positioning needs of the equipment. Before adding the IV bags, refer to the safety measures and technical specifications for precision on the Safe Working Load (SWL) of each pole.

1. Loosen the collar of the IV pole by turning it a quarter of a turn counterclockwise, then raise or lower the pole according to your needs (Figure 23).

(B)

- 2. Tighten the collar.
- 3. If required, repeat steps 1 and 2 to adjust the height of the second IV pole.





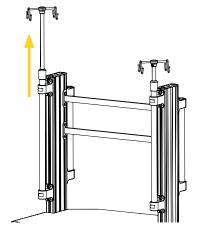


Figure 23 : Height adjustment of the IV pole



#### 5. Perform the Daily Safety Checks

Daily safety checks on Technimount products are recommended to keep them in good condition and avoid failure or injury to the patient or clinical staff. The clinical staff should perform the daily safety checks at the beginning of each work shift

**NOTE:** Always keep records of your maintenance activities and immediately remove defective or expired products from your inventory.

Please contact Technical Support at techsupport@technimount.com for replacement parts or repair related issues.

#### 5.1. Required Tools

- Clean dry cloth

#### 5.2. Daily Safety Checks

Refer to the illustrated inspection points on the transport cart (Figure 24) and under the incubators (Figure 25 and Figure 26), if needed.

**NOTE:** In case of a non-conformity, alert the maintenance supervisor of all non-compliances and immediately cease use.

DAILY SAFETY CHECKS	COMPI	LIANT
INSPECTIONS	YES	NO
THS Neonatal Cart (Figure 24)		
<ul> <li>Visually inspect all the components of the transport cart to ensure there is no damage or chemical attack, that the hardware is in good condition and there are no loose screws.</li> </ul>		
<ul> <li>Visually inspect all the components of the vertical and horizontal rails to ensure there is no damage or chemical attack, that the hardware is in good condition and there are no loose screws.</li> </ul>		
<ul> <li>Visually inspect the interior cavities of each rail and make sure there are no lodged particles.</li> <li>If so, immediately remove using a clean dry cloth.</li> </ul>		
<ul> <li>Visually inspect handles to ensure there is no damage or chemical attack, that the hardware is in good condition and there are no loose screws.</li> </ul>		
<ul> <li>Visually inspect the interior cavities of the breaking system of each dual wheel swivel caster and make sure there are no lodged particles. If so, immediately remove using a clean dry cloth.</li> </ul>		
<ul> <li>Apply/remove the brake of each dual wheel swivel caster and make sure of proper functioning. The mechanism should lock and unlock without resistance.</li> </ul>		
Fold-Up Hitch and Clip (Figure 24)		
<ul> <li>Visually inspect all the components of the fold-up hitch and clip to ensure there is no damage or chemical attack, that the hardware is in good condition and there are no loose screws.</li> </ul>		



DAILY SAFETY CHECKS	COMPL	IANT
INSPECTIONS	YES	NO
<ul> <li>Insert/remove the fold-up hitch from the clip and make sure of proper functioning. When the arm is lifted, it should easily insert and lock itself in the clip without resistance.</li> <li>Insert/remove the transport cart from the incubator and make sure of proper functioning.</li> </ul>		
The transport cart should be easily attached and locked in position after the click sound of the locking mechanism and easily removed when using the quick release mechanism.		
THS coupling devices (Figure 25 and Figure 26)		
<ul> <li>Visually inspect all the components of the THS coupling device to ensure there is no damage or chemical attack, that the hardware is in good condition and there are no loose screws.</li> </ul>		
<ul> <li>Visually inspect the guides of the THS coupling device under the incubator to ensure there is no damage or chemical attack, that the hardware is in good condition and there are no loose screws.</li> </ul>		
IV Poles (Figure 24)		
<ul> <li>Visually inspect all the components of the IV pole to ensure there is no damage or chemical attack, that the hardware is in good condition and there are no loose screws.</li> </ul>		
- Ensure the collars of each pole are tightened in their mount. The IV poles should be secured in place.		
Optional Accessories		
<ul> <li>Visually inspect all the components of the optional accessories to ensure there is no damage or chemical attack, that the hardware is in good condition and there are no loose screws. Check,</li> </ul>		
- the gas cylinder mounting bracket		
- the support plate for the Serres suction canister		
<ul> <li>the support plate for the power bar</li> <li>the support plate for the Dräger Mounting System</li> </ul>		
- the UPS cable management hook		
- the UPS On-Off switch protective panel		
- the glides under the UPS unit		
<ul> <li>Ensure to perform maintenance on all the medical equipment that may be installed on the transport cart, as per the manufacturer recommendations.</li> </ul>		



DAILY SAFETY CHECKS	COMPLIANT
INSPECTIONS	YES NO
Daily Safety Checks completed on (dd/mm/yyyy):	
Daily Safety Checks completed by:	
Comments and observations:	



#### 5.3. Illustrated Inspection Points

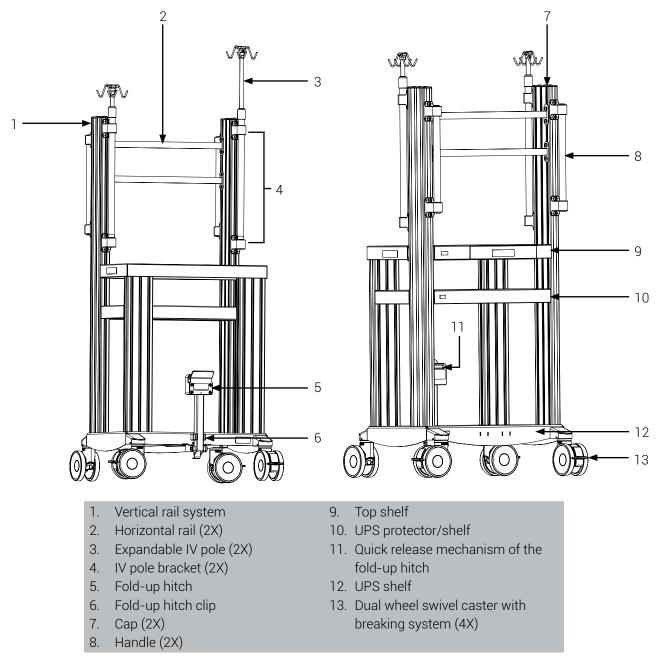


Figure 24 : Inspection points of the transport cart



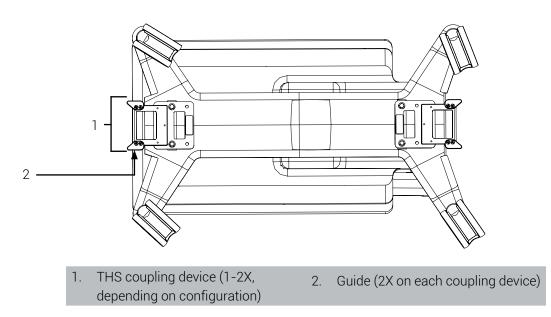


Figure 25 : Inspection points under the Babyleo TN500 incubator (two (2) THS coupling devices illustrated)

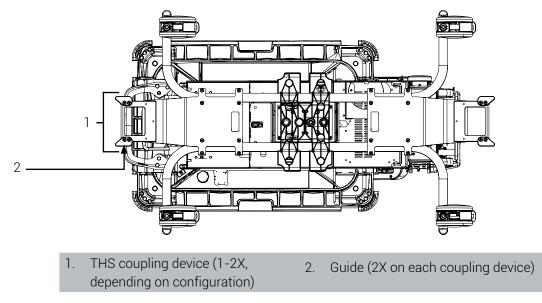


Figure 26 : Inspection points under the Babyroo TN300 incubator (two (2) THS coupling devices illustrated)



# TECHNIMOUNT MEDICAL®

At Technimount Medical Inc., we understand that healthcare professionals need equipment that make their everyday practice easier. We design and develop quality solutions which are flexible and easy to use, allowing them to focus on what matters most - patient care.

Technimount Medical, an ISO 13485 certified company, creates distinctive products that respond to the ever-evolving healthcare practices. Our Technimount Healthcare System<sup>™</sup> (THS<sup>™</sup>) and Healthcare Essentials product lines enable caregivers to move efficiently and safely all the medical devices needed to successfully treat their patients, wherever they are inside the hospital or remotely via telemedicine systems.



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