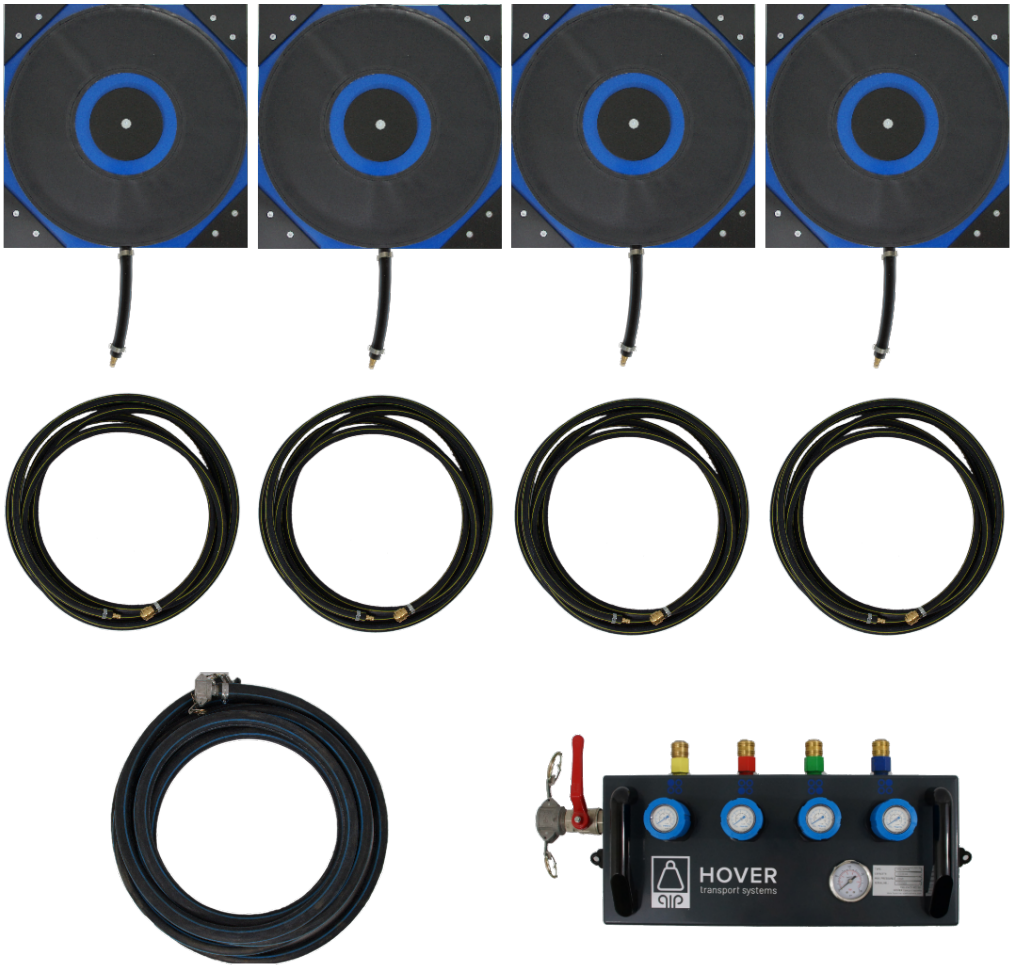
HOVER TRANSPORT SYSTEMS

ORIGINAL OPERATING & MAINTENANCE MANUAL

MODULAR AIR CASTER SYSTEM

Version 2.2, May 2020



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1. INTRODUCTION

Congratulations with the purchase of your modular air caster system at Hover Transport Systems!

Before operating this equipment, please thoroughly read this manual to ensure safe and successful movement of your load utilizing the modular air caster system.

Operators should not operate the system prior to training, using this "Operating & maintenance manual". Make sure they understand the risks of moving heavy loads and follow the safety recommendations, instructions and warnings in this manual.

Before operating the modular air caster system, operators must be trained per the instructions, requirements and safety notices that are enclosed in this manual. For approval:

OPERATOR TRAINED	**DATE OF TRAINING**

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1.1 SYMBOLS

Dangerous, make sure to follow these safety instructions!

Useful tip

1.2 OPERATING ENVIRONMENT

The modular air caster system is designed to be used in a certain environment.

1.2.1 AIR SUPPLY REQUIREMENTS

The air supply system needs to produce enough flow (air volume) against sufficient pressure in order to run the system properly. We recommend a minimum inlet air pressure of 6 bar (87 psi) and a maximum of 10 bar (145 psi).

Air consumption numbers can be found in the specification sheets of the product pages in the appendixes and on our website. Total capacity of the air system is a result of compressor and air buffer tank(s).

The air from the compressor must be sufficiently dried and filtered. The air caster system is an open system so liquids and debris will eventually come out. When the air supply system doesn't meet these requirements, it will result in higher wear or malfunction.

1.2.2 SURFACE REQUIREMENTS

MATERIALS	
Epoxy coated concrete:	✓
Plastic & steel sheet material:	✓
Machine troweled concrete:	✓
Manual troweled concrete:	×
Asphalt:	×

Air casters need to build up pressure between the air chamber and the floor. Therefore, the surface needs to be non-porous and have a smooth finish. Most facilities have a machine trowelled concrete floor, that will work perfectly. The table on the left shows you roughly what surfaces will and will not work. A rougher, more porous surface will result in more air consumption.

The flatness of the floor has an impact on how the air casters perform. The maximum height deviation is set out against a

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LENTG (M)	ΔHEIGHT (MM)
0,1	1
1	3
5	9
10	12
15	15

certain horizontal length. When the maximum height is exceeded (see the table left), the air casters will not work properly.

The levelness doesn't affect the performance, but is a safety matter. When the floor is too steep, objects may start to move on their own, because the air casters make the object hover above the floor.

Small, superficial cracks in the floor are no problem. Cracks need to be filled when they are so deep that air can pass through. This is also the case with expansion joints. The gaps need to be filled first and then sealed with polyurethane sealing material.

Metal, linoleum (without texture) or plastic sheets can be placed over the floor when it doesn't meet the above-mentioned requirements. This is a temporary solution to make it fit for air caster transport. Note that the thickness of this material shouldn't be more than 1 mm (0,4″). When thicker material is used, a small ramp must be constructed by sanding the sides of the material or fixing them to the floor with a thin tape.

1.2.3 TEMPERATURE REQUIREMENTS

The system is designed to work within a temperature range between -10°C and 60°C (14°F – 140°F). Outside this range the system will wear faster or fail to operate.

We can use different materials to withstand a higher maximum temperature. Please contact Hover Transport Systems if you have a need for this.

1.2.4 FLUIDS AND DEBRIS

Make sure that the transportation path is free of production debris and abrasive chemicals such as cutting oil and hydraulic fluid.

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1.3 THE EQUIPMENT

1.3.1 UNBOXING

Immediately on arrival, inspect if the packaging is damaged during transportation. If the package is damaged and the products inside as well, contact Hover Transport Systems and make pictures of how the goods have arrived at your facility.

Open the packaging carefully to not damage the system and especially the air caster bladders. Don't use a knife or other sharp objects to open the packaging.

When a case is ordered together with the modular system, check if this case is damaged during transportation.

1.3.2 THE CONTENTS

Once the packaging is opened, inspect the contents to verify the proper quantity, size and model numbers.

If there are any shortcomings or damaged components, please contact Hover Transport Systems immediately.

A standard modular air caster system should include the following:

- 4 or 6 air caster assemblies with each:
  - 1 Air caster* (according to type ordered)
  - 1 Power plates with integrated air hose
  - 4 Corners and 1 middle landing pads (corners only from air caster sizes 40cm (15") and up)

- 4 or 6 interconnect air hoses in two different lengths** (length according to type ordered)

- 1 air supply hose** (length according to type ordered)

- 1 air control unit assembly with either 4 or 6 air outlets with:
  - 4/6 Air caster couplings
  - 4/6 Air regulators with integrated manometers
  - 1 Air inlet manometer
  - 4 Ball wheels
  - 2 Handle bars

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- 1 Air inlet safety camlock coupling with a ball valve

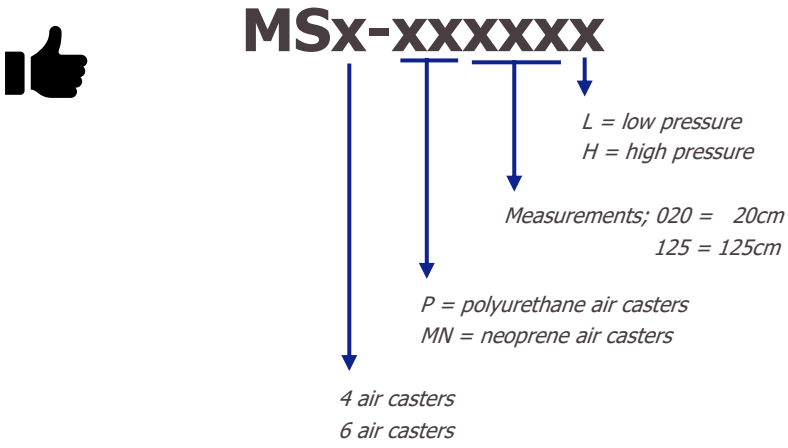
- 1 Operating manual

- Optionally you can order a transport case, the biggest sizes (up to 50 cm/ 21” diameter) look like this. Paragraph 2.2 in the installation section shows how to assemble the wheels.

*The air caster dimensions can be found in the specification sheets in Appendix I
**Lengths can be derived from the type number. Type number breakdown is explained in paragraph 1.3.3

1.3.3 HTS TYPE NUMBER BREAKDOWN

We use two methods for identifying our complete product portfolio.
The first one is the **HTS type number**. This is the method that describes the functional product with its measurements, performance and other specifications.
The second one is the S(tock) K(eeping) U(nits) code. These **SKU codes** are unique and contain all product information such as materials used, air hose lengths and other specific options.
First, we will describe the HTS type number for our modular air caster system:



Example modular air caster system: MS4-NM90H

- *Modular system*
- *4 air casters*
- *Neoprene air casters*
- *90 cm*
- *High pressure*

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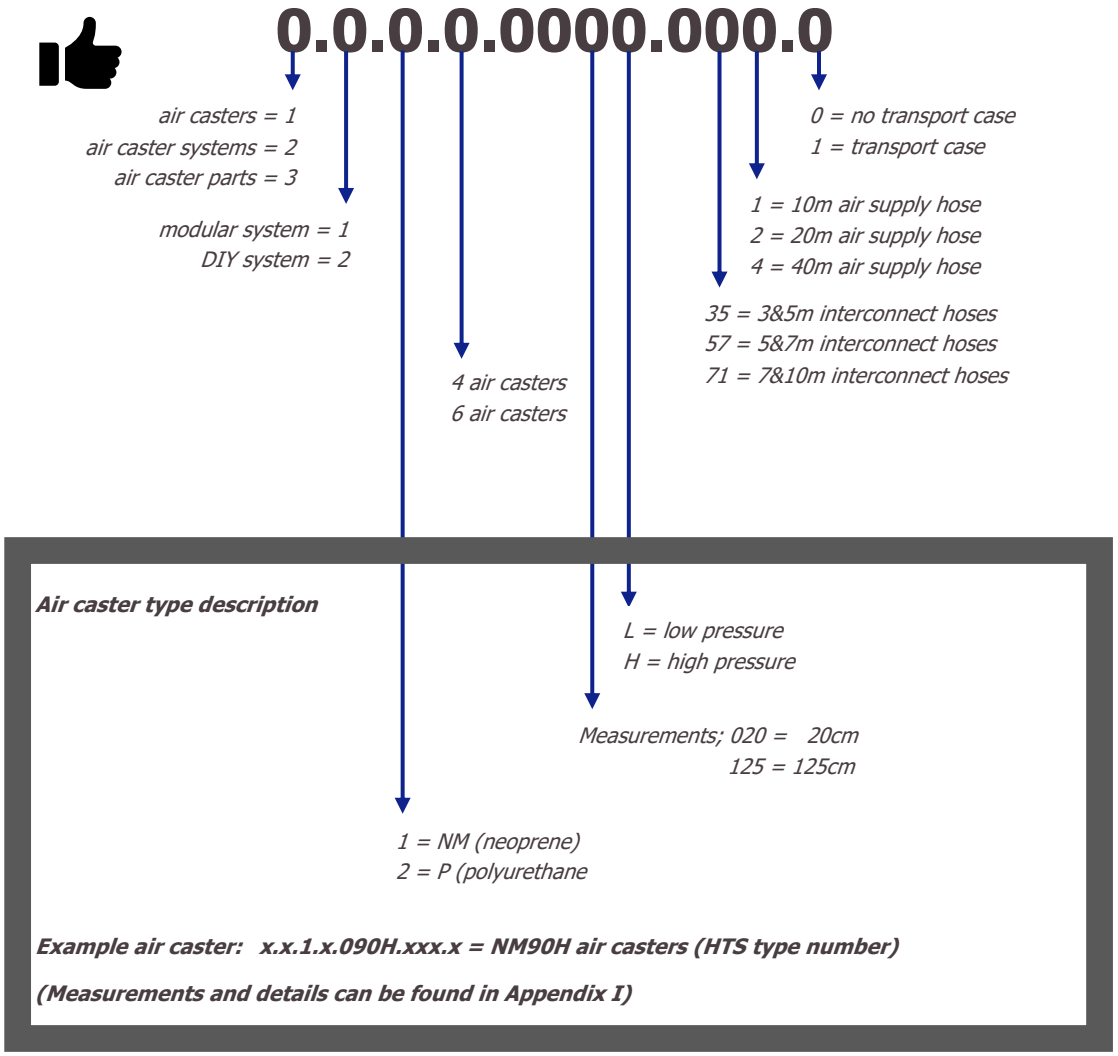
1.3.4 BREAKDOWN SKU CODE

When you want to re-order a specific product, it is best to use the SKU code because this code contains all necessary information regarding the product. You will get the exact product that you ordered before with the right materials and options.
Below you can find the breakdown for the SKU codes of our modular air caster systems:



Example modular air caster system: 2.1.1.4.090H.572.1

- *Air caster system*
- *Modular System*
- *NM90H air casters (neoprene 90cm, high pressure)*
- *4 pieces of air casters*
- *5 & 7 meter interconnect hoses*
- *20 meter air supply hose*
- *With or without a transport case*

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2. PREPARATION & INSTALLATION

2.1 SAFETY INSTRUCTIONS BEFORE INSTALLATION

Inspect each component before every move and check on missing parts or damage. Also check the state of the air bearing bladders. If they are worn so far that the threads are visible through the rubber or if there are holes in material at certain places, replace the bladder with a new one.

Also check if all the bolts on the air casters are still tight. If not, please tighten them with a force of 3Nm.

Always use the following personal protective equipment: safety glasses, helmet, safety shoes and ear plugs when necessary. And properly secure your load so it won't shift during transportation.

Compressed air

Be cautious with the use of compressed air. All air connections (hoses, couplings and other connections) need to be fastened properly and the safety connectors need to be installed in the right way to prevent them from loosening and causing injuries. Never exceed the maximum pressure that is mentioned on the identification plate. And never disconnect a pressurized air hose! The noise can be harmful to your hearing when it is not used properly. When air hoses or connections are loose or the air casters aren't placed under the load properly, the noise level could go up.

Static electricity

The movement of the air casters can cause static electricity. Whenever this is a concern due to sensitive equipment, please install a grounding strap or wire to discharge.

Alterations to system

This Installation Manual applies to the original delivery from Hover Transport Systems. Any alterations that will be made to the original equipment will ensure that this installation manual and its certificates are no longer valid.

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2.2 INSTALLATION

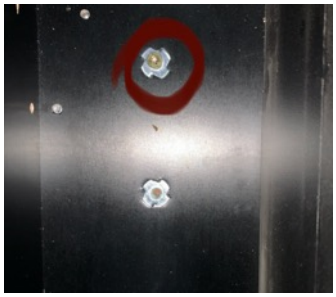
Inspect each component before every move and check on missing parts or damage. Also check the state of the air bearing bladders. If they are worn so far that the threads are visible through the rubber or there are holes in the material at certain places, replace the bladder with a new one.

Follow these installation instructions closely and execute them in the order as described below.

I. Assemble transport case (when purchased)

Empty the transport case, loosen the transport screws and mount the wooden support plates and wheels as shown in the picture below with the bolts that are included in the case.





II. Install and position

Use at least a 3 air casters configuration to create a stable support situation. 4 pieces are recommended for a more stable and safer situation!

Make sure that the maximum capacity in weight and pressure of each individual air caster is never exceeded! Look at the individual load points and what their weight is. The total capacity can be less or equal to the total weight of the object, but when the load is not distributed evenly, the maximum weight of one air caster can still be exceeded! Adjust the capacity of each individual air caster by turning (+ or -) the control valves on the control unit. Place the air casters as far apart as possible to have a stable set-up.

The system is delivered with the air caster and landing pads already mounted to the power plate and landing pad corners and discs, see picture below. So they are ready to use. Just check if

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the bolts are still all tight and the air caster is in the right position above the air inlet (please see paragraph 5.3 for the instructions). Take all air caster assemblies out of storage or your transport case and lay them as close as possible to the position where they need to be placed. Place them with the air caster facing up, this prevents unnecessary damage to the bladders.

Then place the air caster assemblies underneath the object that you are going to move. Now with the air caster facing down. Make sure that the centre of the air caster is placed right underneath the centre of the contact surface of your object.

Next fill out the gap out (if there is one) with wooden or plastic beams or plates. Fill the gaps out until there is ideally less than 0,5cm (0,2”) of open space between the air caster assembly (with the air casters deflated, so with the black landing pads on the floor) and the object.

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Place the air control unit in the most logical position to perform the movement. Mostly the unit is placed in front of the object in the direction of the movement. Or on one of the sides if that is more practical.

Take the air interconnect hoses out of storage or the transport case and lay them (with the correct colour) next to the air caster assemblies.

Connect the air interconnect hoses to the air caster assemblies and make sure that the colour code is matching.

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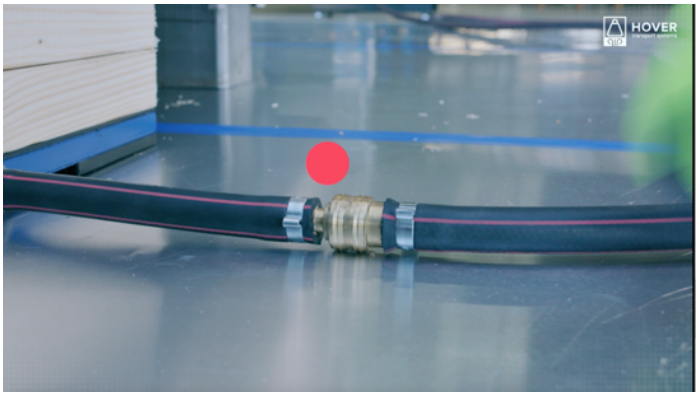
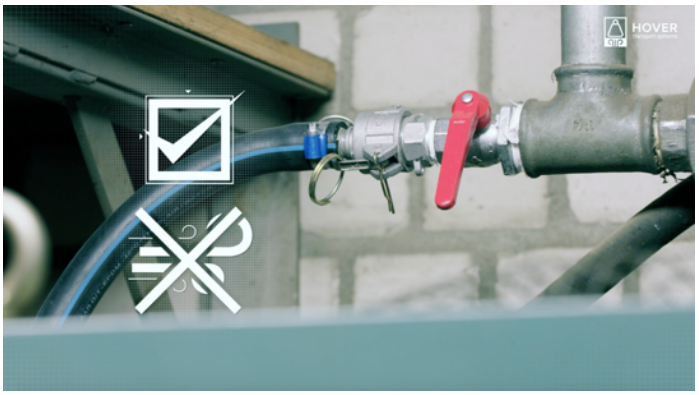


Connect the air interconnect hoses to the air control unit and make sure that the colour code is matching.

Before you connect the air supply hose to your air supply system, make sure that the air flow is completely closed!
Next connect the camlock female to your air supply system and make sure that the safety pins are installed correctly!



Completely close all air control valves on the air control unit. To do so, gently pull up the knob and turn it counter clockwise until it stops.

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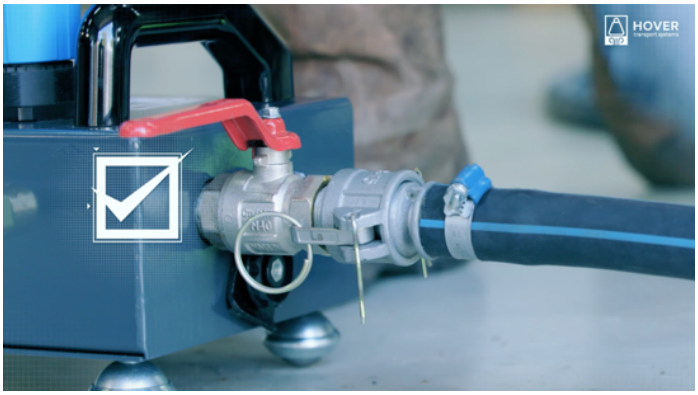
Turn the air inlet ball valve (red lever) in the closed position and connect the air supply hose camlock female to the air control unit and make sure that the safety pins are installed correctly!



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3. OPERATION

3.1 SAFETY INSTRUCTIONS BEFORE OPERATION

At Hover Transport Systems we have made the greatest effort to inform you as fully and correctly as possible about the dangers that might occur during the use of our products/ systems. We have done so by enclosing this Operation & Maintenance Manual in the delivery of our products/ systems. You are ultimately responsible for complying with these regulations and instructions yourself. The purchaser/ user is obliged that these regulations and instructions are familiar and will be followed by all personnel using and servicing this product / system.
Our modular air caster system has the function to lift the load and make it hover. We are never responsible for the actual movement itself. We provide the instructions to make the system hover in a safe and easy manner.

Read this manual thoroughly before you use the product/ system and precisely follow all instructions and be aware of all safety measurements.

Before inflating the air casters, make sure that you have your load properly secured and in control by applying a brake on your motorized device or have sufficient trained personnel available on all sides of the load. When the air casters are hovering, they will start to drift towards to lowest point on the floor.

Make sure that no body parts are near the air casters when they are being inflated, deflated or during transport. They can get stuck and cause serious injuries!
Inspect each component before every move and check on missing parts or damage. Also check the state of the air bearing bladders. If they are worn so far that the threads are visible through the rubber or if there are holes in material at certain places, replace the bladder with a new one.

Also check if all the bolts on the air casters are still tight. If not, please tighten them with a force of 3Nm.

Always use the following personal protective equipment: safety glasses, helmet, safety shoes and ear plugs when necessary.
And properly secure your load so it won't shift during transportation.

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Compressed air

Be cautious with the use of compressed air. All air connections (hoses, couplings and other connections) need to be fastened properly and the safety connectors need to be installed in the right way to prevent them from loosening and causing injuries. Never exceed the maximum pressure that is mentioned on the identification plate. And never disconnect a pressurized air hose! The noise can be harmful to your hearing when it is not used properly. When air hoses or connections are loose or the air casters aren't placed under the load properly, the noise level could go up.

Static electricity

The movement of the air casters can cause static electricity. Whenever this is a concern due to sensitive equipment, please install a grounding strap or wire to discharge.

Alterations to system

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I. Inflate, lift and hover

Slowly turn on the main air supply until it is fully open.

Slowly turn on the air supply to the control unit by turning the red lever.

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Before inflating the air casters, make sure that you have your load properly secured and in control by applying a brake on your motorized device or have sufficient trained personnel available on all sides of the load. When the air casters are hovering, they will start to drift towards to lowest point on the floor.

Make sure that no body parts are near the air casters when they are being inflated, deflated or during transport. They can get stuck and cause serious injuries!

Turn the knobs clockwise to increase the flow and pressure to the individual air casters. Do this 2 by 2, so the front 2 two air casters simultaneously and also the back two. If you have 6 air casters do the middle set also simultaneously. Do so until all air casters have lifted the load from the landing pads.

When all air casters have lifted the load from the landing pads, finetune the flow for each air caster individually until they all hover above the floor.

To achieve this, keep turning the knob slowly clockwise until you hear the air escaping between the air caster and the floor. You can also feel the air flowing out of the air casters. Make sure that

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you don't put your body parts underneath the air caster assembly!
Keep increasing the flow/pressure until you see that the air caster is hovering. This is the case when the object starts to slowly drift away or you can move this section of the object by applying some force. The air casters are properly hovering when you do not hear a scraping noise. Air casters will wear out more if they are not hovering properly.
Keep in mind that you also do not inflate them too much. This will result in a squeaking and squealing noise. This increases the air consumption, but can also be harmful for your ears when too loud.

When all air casters are hovering properly, the system is ready for the move.
Mount all hoses and eventually also the control unit in position to reduce tripping hazards during the move.

II. Move!

Make sure that there are no body parts or hoses underneath the air caster assembly or underneath your object! And never leave a system unattended while inflated or floating.

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Never disconnect air hoses when they are pressurized.
Have sufficient trained personnel or equipment available to perform a safe move.

For safety reasons you need at least 2 people to operate; 1 for the air control and to keep the safety ball valve at hand to shut down in case of emergency. The other one needs to apply the force needed to move the object. A rule of thumb is that you need approximately one operon per 2.500 kg (5.500 lbs) to move.

Plan your transport carefully and prevent that personnel gets between the object and a wall or other possible crushing hazard!

Make sure that the transport path is free of production debris and other sharp objects. Abrasive chemicals such as cutting oil and hydraulic fluid also needs to be removed from the transport path in order to protect the air caster's bladders.

Move the load safely to its destination and frequently check the state of the air caster assemblies and the load itself.

III. Stop, deflate and disconnect

When the object arrives at it's final position, make sure that the system comes to a complete stop. Keep the object fixed in this final position then deflate all air casters by completely closing the

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air supply with the red lever on the control unit. The air will now bleed from the air interconnect hoses for several seconds. When the gauges on the control unit indicate 0 bar, the lines are completely depressurized.

The air supply hose is still pressurized now, do not disconnect! Close the main air supply and bleed the air supply hose when you have a self-relieving ball valve. When this is not the case, remove the air casters from underneath the object, place them next to the object and turn them around with the air caster facing up. Now slowly open the air supply with the red lever on the control unit and let it run until the interconnect hoses are completely discharged and all gauges/ also the air inlet gauge indicates 0 bar.
Now you can disconnect all air hoses and couplings.

IV. Store

Store all components in a dark, cool place. Direct sunlight and higher temperatures than 20ºC (68ºF) will affect the lifespan of the air casters and hoses. Make sure that that the air casters are not stacked onto each other or have a heavy object on top of them. They can deform.
When you have a transport case, put the components back in their position, close the case and store.

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4. TROUBLESHOOTING

4.1 SAFETY INSTRUCTIONS BEFORE TROUBLESHOOTING

Before troubleshooting the system, make sure that all air connect hoses are discharged and disconnected from the air supply system!

PROBLEM	CAUSE	REMEDY
Air caster does not inflate or hover properly	• Load too heavy • Surface is too rough or not sufficiently airtight • Dirt build up in bladders • Inadequate air supply on air inlet gauge • Torn or damaged air caster • Air caster inlet in wrong position • Air caster is not level to surface	• Check if air casters have sufficient capacity • Test application on metal or plastic sheet • Clean bladders • Check air inlet hose, coupling, ball valve and air supply system • Check the bladder on wear and if the bolts are properly fixed, otherwise replace with new part • Make sure that the air caster air inlet is aligned with the power plates air outlet • Make sure that the air caster is placed in the centre of the overlapping contact surface
Load hops or there is excessive noise	• Too much air flow	• Decrease airflow
Air caster scrapes over floor	• Too little air flow	• Increase airflow
Sound of escaping air	• Air caster inlet in wrong position • Air hose or coupling is leaking • Bolts are loose • Rubber seals leak	• Make sure that the air caster air inlet is aligned with the power plates air outlet • Place new air couplings or replace leaking air hoses • Check and fasten all bolts; in air caster assembly and in air casters themselves • Replace seals between air caster and powerplate
Other	?	• Contact Hover Transport Systems

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5. MAINTENANCE & REPAIR

5.1 SAFETY INSTRUCTIONS BEFORE MAINTENANCE AND REPAIR ACTIVITIES

Before repairing the system or performing maintenance, make sure that all air connect hoses are discharged and disconnected from the air supply system!

5.2 PREVENTIVE MAINTENANCE

The air caster modular system needs very little maintenance, but you can extend the life time by doing these simple preventive actions. For continuous use we recommend to do it once every week. Otherwise after each 5 movements:

- Blow out air hoses and clean them of dirt, moisture and obstructions.
- Clean the rubber or plastic bladders of the air casters with a cloth and some regular soap. Do not use any solvents.
- Check the rubber or plastic bladders on wear. Replace when the threads are visible through the rubber or if there are holes in material at certain places. Replace the bladder with a new one. Replacement bladders can be purchased in our webshop by looking up your current air casters type. The webshop shows the correct bladder in the "Spare Parts" section. Fix the bladder by tightening the bolts again after replacement.
- Blow out dirt and moisture by applying compressed air to the air inlet and outlet of the air casters.
- Regularly check if the bolts of the air caster assembly and in the air casters themselves are still tight. If not, tighten them. Be careful to not fix them too tight. Apply maximum 3n Nm.

5.3 REPLACING AIR CASTERS

When an air caster is worn-out you can replace either only the bladder (when the metal parts are still OK) or chose to replace the complete air caster.

Replacement of the bladder only

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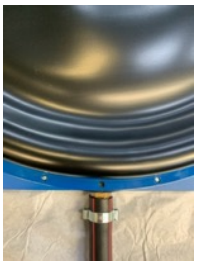
- Unbolt all screws on the bottom of the mounting ring
- Place the new bladder and align the holes with the bolt holes.
- Insert the screws and tighten with a maximum of 3Nm.

Replacement of the air caster in the assembly

- Unbolt the middle and corner landing pads and remove them
- Replace the air caster with a replacement part of the same type.
- Align the air inlet of the air caster with the air outlet of the power plate. The neoprene air caster air inlet is aligned by the bolt holes of the landing pads. The PU air inlet position is marked with the black painted bolt. This bolt needs to be aligned with the air inlet hose, see picture below.



- Place the middle and corner landing pads and tighten them with a maximum of 4Nm.

6. SPARE PARTS

Replacement part types can be found on our website/ webshop. Look up the type of air caster you are using and click on the "Spare Parts" button. This will lead you directly to the right spare part for your air caster system.

https://www.hovertransportsystems.com/products/

Or contact us if you need any help with spare parts!

7. WARRANTY

Hover Transport Systems warrants to client that the products will be free of defects in material and workmanship appearing within

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12 months from the date of shipment; provided the goods are used for the purpose intended and are maintained, handled, serviced and operated in accordance with the written instructions and manuals supplied by Hover Transport Systems or the manufacturer of the goods.
If a warranty defect arises, Hover Transport Systems will, at its option, repair or replace the defective goods or refund the purchase price thereof. Such repair, replacement or refund shall be the sole liability of Hover Transport Systems and the sole remedy of client with respect to the defective goods. Hover Transport Systems will not be liable to remove defective parts or material, or install replacement parts or material, or to pay for the same. In no event shall any warranty claims be made more than twelve (12) months after delivery of the purchased goods.
Hover Transport Systems shall have no responsibility to repair, replace or issue refunds for the goods damaged as a result of (a) inadequate installation, handling, operation or maintenance of the goods (including without limitation, the installation, handling, operation or maintenance of the goods contrary to written instructions and/or recommendations of Hover Transport Systems), or (b) acts of client or third parties, acts of God or Nature, modification, misapplication, abuse, or other similar events.
Unless expressly warranted in Hover Transport Systems' order confirmation, Hover Transport Systems makes no warranty that the goods comply with applicable law, regulations or specifications in any jurisdiction in which the products may be sold, marketed or used. Any governmental or other approvals necessary in connection with the resale, marketing, distribution or use of the goods shall be the sole responsibility of client.
This warranty is provided in lieu of all other express or implied warranties; and Hover Transport Systems specifically disclaims any and all implied warranties of merchantability or fitness for a particular purpose. No agent, distributor or employee of Hover Transport Systems has authority to extend the scope of this warranty or make any other representation, promise or warranty with respect to the goods.

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8. CE DECLARATION STATEMENT

Hover Transport Systems B.V. Modular Air Caster Transport System situation with regards to CE mark.

Hover Transport Systems B.V. fundamentally adheres to all applicable European Directives and Standards. All information is based on the current state of knowledge and is subject to change. We attentively follow the revisions or amendments to these directives and will design our products accordingly. This ensures that products from Hover Transport Systems B.V. are always in compliance with the currently valid requirements (e.g. Directive 2006/42/EC on Machinery) and indicated with the CE mark.

However, Hover Transport Systems B.V.'s air casters, air caster systems and parts are not subject to European Directive 2006/42/EC Lifting accessories as referred to in Article 1 (1) (d) and defined in Article 2 (d). Therefore, they cannot be identified with the CE mark.

This is based on explanations of the concepts and requirements of Directive 2006/42/EC in order to ensure uniform interpretation and application throughout the EU (see: Guide to application of the Machinery Directive 2006/42/EC, 2nd Edition – June 2010).

The Machinery Committee has drawn up a list of various categories of equipment used for lifting operations, indicating which categories are considered as lifting accessories. The list is not exhaustive but is intended to facilitate uniform interpretation and application of the Machinery Directive to Lifting accessories (see: Classification of equipment used for lifting loads with lifting machinery). Air casters are currently not on that list.

Yours sincerely,

Dennis Denissen
Managing Director
Hover Transport Systems B.V.

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Appendix

I. AIR CASTER SPECIFICATION SHEETS

SPECIFICATION SHEET POLYURETHANE AIR CASTERS

MATERIALS

Backplate:	Aluminium 5754
Bladder / Torus:	Polyurethane
Support Plate:	HPDE or SS316L

POLYURETHANE AIR CASTERS

TYPE	CAPACITY	DIMENSIONS	LIFT	WEIGHT	POS. AIR INLET (A)	MOUNTING HOLE	MAX. PRESSURE	AIR CONSUMPTION	AIR INLET
P20L	225 kg	ø200 x 24 mm	8 mm	1,0 kg	40 mm	ø10 mm	1 bar	50 l/min	1/4"
P25L	300 kg	ø250 x 24 mm	9 mm	1,2 kg	65 mm	ø10 mm	1 bar	60 l/min	1/4"
P30L	500 kg	ø300 x 24 mm	10 mm	1,7 kg	90 mm	ø10 mm	1 bar	70 l/min	1/4"
P40L	1.000 kg	ø400 x 22 mm	15 mm	2,7 kg	120 mm	ø10 mm	1 bar	100 l/min	1/4"
P50L	2.000 kg	ø500 x 22 mm	18 mm	4,3 kg	150 mm	ø10 mm	1 bar	200 l/min	1/2"
P20H	450 kg	ø200 x 24 mm	8 mm	1,0 kg	40 mm	ø10 mm	2 bar	70 l/min	1/4"
P25H	600 kg	ø250 x 24 mm	9 mm	1,2 kg	65 mm	ø10 mm	2 bar	85 l/min	1/4"
P30H	1.000 kg	ø300 x 24 mm	10 mm	1,7 kg	90 mm	ø10 mm	2 bar	100 l/min	1/4"
P40H	2.000 kg	ø400 x 22 mm	15 mm	2,7 kg	120 mm	ø10 mm	2 bar	210 l/min	1/4"
P50H	4.000 kg	ø500 x 22 mm	18 mm	4,3 kg	150 mm	ø10 mm	2 bar	360 l/min	1/2"

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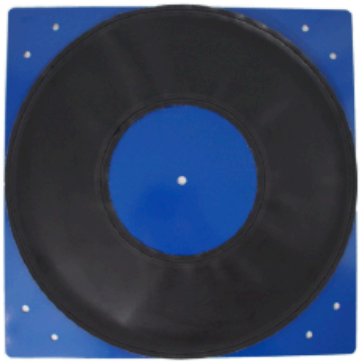
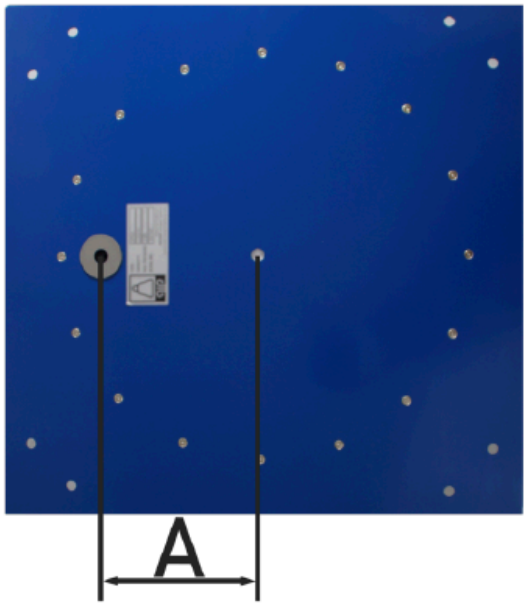
SPECIFICATION SHEET NEOPRENE AIR CASTERS





MATERIALS

Backplate:	Aluminium 5754
Bladder / Torus:	Neoprene
Support Plate:	HPDE

NEOPRENE AIR CASTERS HTS BACKPLATE

TYPE	CAPACITY	DIMENSIONS	LIFT	WEIGHT 1,5MM	WEIGHT 3MM	POS. AIR INLET (A)	MOUNTING HOLE	MAX. PRESSURE	AIR CONSUMPTION	AIR INLET
NM-20L	500 kg	200 x 200 x 11mm	12 mm	0,5 kg	0,6 kg	40 mm	ø10 mm	2 bar	90 l/min	1/4"
NM-30L	1.000 kg	300 x 300 x 11mm	17 mm	1,1 kg	1,4 kg	90 mm	ø10 mm	2 bar	200 l/min	1/4"
NM-40L	2.000 kg	400 x 400 x 11mm	26 mm	1,7 kg	2,3 kg	120 mm	ø10 mm	2 bar	300 l/min	1/4"
NM-50L	3.500 kg	500 x 500 x 11mm	32 mm	2,9 kg	3,9 kg	150 mm	ø10 mm	2 bar	350 l/min	1/2"
NM-70L	6.000 kg	700 x 700 x 11mm	42 mm	5,6 kg	7,3 kg	220 mm	ø10 mm	2 bar	430 l/min	3/4"
NM-90L	10.000 kg	900 x 900 x 11mm	52 mm	9,2 kg	12,1 kg	270 mm	ø10 mm	2 bar	550 l/min	3/4"
NM-125L	20.000 kg	1.250 x 1.250 x 11mm	75 mm	17,9 kg	23,4 kg	370 mm	ø10 mm	2 bar	700 l/min	1"
NM-20H	1.000 kg	200 x 200 x 11mm	12 mm	0,5 kg	0,6 kg	40 mm	ø10 mm	4 bar	350 l/min	1/4"
NM-30H	2.000 kg	300 x 300 x 11mm	17 mm	1,1 kg	1,4 kg	90 mm	ø10 mm	4 bar	450 l/min	1/4"
NM-40H	4.000 kg	400 x 400 x 11mm	26 mm	1,7 kg	2,3 kg	120 mm	ø10 mm	4 bar	510 l/min	1/4"
NM-50H	7.000 kg	500 x 500 x 11mm	32 mm	2,9 kg	3,9 kg	150 mm	ø10 mm	4 bar	600 l/min	1/2"
NM-70H	12.000 kg	700 x 700 x 11mm	42 mm	5,6 kg	7,3 kg	220 mm	ø10 mm	4 bar	750 l/min	3/4"
NM-90H	20.000 kg	900 x 900 x 11mm	52 mm	9,2 kg	12,2 kg	270 mm	ø10 mm	4 bar	1.000 l/min	3/4"
NM-125H	40.000 kg	1.250 x 1.250 x 11mm	75 mm	17,9 kg	23,4 kg	370 mm	ø10 mm	4 bar	1.200 l/min	1"

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