



# Cinderella

Installasjons veildning

Installation manual



## Cinderella Motion





## Description

Since there is a variety of mobile homes and campers on the market with many different solutions for the bathroom area, this guide will not provide detailed instructions, but instead provide a useful overview of the work required and the various points you must observe in order to achieve satisfactory service from your toilet.

Temperatures indicated in the instruction are the max temperature measured with proper installation. If the installation is not correct, this can lead to higher temperatures than specified.

## Warranty

The warranty is void if the installation violates guidelines set out in this guide. This includes provisions on:

- Not getting approval for installation
- Use of components other than those provided with the toilet box and installation package without a separate agreement.

## Installation verification and documentation

Before the installation commences, a sketch of the planned installation for the intake air and exhaust is required to be sent to an authorized representative for review and approval. We require documentation of several steps of the installation process, where you will need to take pictures and write a description of the project. Should there be any queries related to the installation, or the product become faulty some time in future, the distributor or manufacturer may ask for this documentation.

## Planning the installation

Before you begin, you should prepare a plan to cover a number of important elements. These elements include:

- Where to locate the toilet
- Feeding and mounting the exhaust hose through the roof
- Feeding and mounting the inlet air hose through the floor
- Access to connections
- A power supply source and mounting the power cable
- A gas source and mounting the gas pipe
- Locating the control panel

It is therefore beneficial to read this guide from start to finish revealing all the details for installing Cinderella Motion before you begin with the actual documentation and installation.

# Installation



## Before you start

Take pictures, write a description and make a sketch of the intended installation.

Forward the description and installation sketches to [installation@cinderellamotion.com](mailto:installation@cinderellamotion.com) for review and approval. Unapproved installations may lead to loss of warranty.

Contact the Cinderella Motion representative if you have any questions regarding installation.

## What is included in the toilet box

- 1 ea. Cinderella Motion
- 1 ea. Roof feed-through
- 1 ea. Chimney top
- 1 ea. Winter extension
- 1 ea. Control panel
- 6 ea. Acid resistant screws
- 1 pkg. bowl liners 500 ea.

## What is included in the installation package

- 1 ea. Inlet funnel
- 1 ea. Inlet flange
- 1 ea. Inlet hose
- 1 ea. Exhaust hose
- 1 ea. Insulation exhaust hose
- 1 ea. Power cable connector
- 2 ea. Hose clamps for inlet air
- 2 ea. Hose clamps for exhaust hose

## Sketch of an installation





## Placing the toilet



The toilet requires a flat surface to be mounted on. The rear part of the toilet must be covered since the connection of the exhaust tube, the inlet air hose, gas, and electricity occurs here.

If the floor is moulded in a hard plastic material, preventing you from placing the toilet where you would prefer it, the material may need to be removed, and a new floor installed, unless it is possible to modify parts of the floor. You should take into account that the ash container occasionally must be emptied, a process that will require at least 40 cm space in front of the toilet. There must be at least 5 cm clearance on each side of the toilet, but keep user comfort in mind and provide extra room if at all possible.

Some units have a double wall, or a wall that borders against cargo hold or the like, where you can fix the toilet into the wall. In this way, the installation requires less space in the room and can reduce the work needed afterwards for covering. If this is not possible, you can create a false wall or a box around the back. You must take into account that the ash pan must be emptied and this requires a minimum of 40 cm in front of the toilet in full width. The toilet must have a minimum of 5 cm clearance at the sides, but have user comfort in mind and give them extra space if possible.

Technical specifications:

- Width: 410 mm
- Depth toilet: 490 mm + 100 mm backpack
- Height: 540 mm
- Max temperature backpack: 74 ° C at 45 ° C inlet temperature

## Exhaust air

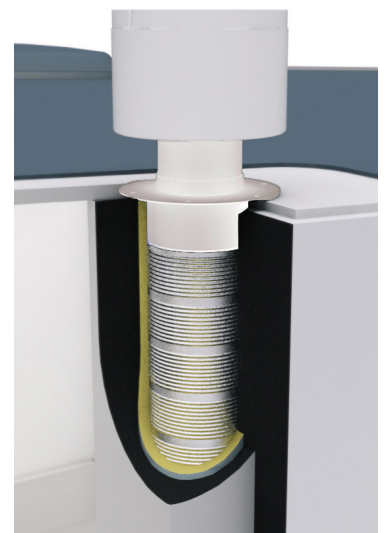
The exhaust gases are passed through the roof, using a special flange that comes with the installation package. The flange must be located in a place where one has a flat surface so that you can ensure a good seal. Find a suitable place where the flange makes good contact with the roof and make a hole in the roof with 83 mm hole saw. Be sure to use plenty of sealant between the flange and ceiling to ensure that no water ingress. Fasten flange with appropriate acid resistant screws.

Exhaust hose with insulation is fed from roof flange to the toilet and secured at each end with a powerful hose clamp. Avoid horizontal stretches (max 60 cm) and turns as far as possible as this creates counter pressure and will cause increased stress on the toilet over time and the possibility of overheating. Bends should be as gentle as possible. Under no circumstances should negatively fall or sharp 90° bends occur as this will cause overheating of the product. The insulation must not be squeezed as this affects the insulating.

On top of the flange a chimney cap is mounted, this is included in the toilet box. If there are larger objects within one meter of chimney cap, or if there is snow on the roof that can prevent airflow, an extension should be mounted between the flange and chimney cap.

Technical specifications:

- Inner diameter exhaust hose: 60 mm
- Insulation thickness: 30 mm
- Max temperature exhaust gases: 118 ° C
- Max temperature insulation exterior: 55 ° C
- Dimension hole roof flange: 83 mm
- Maximum length: 250 cm
- Air flow max: 52 m<sup>3</sup>/h



Exhaust hose, insulation, roof flange and chimney cap



## Inlet air

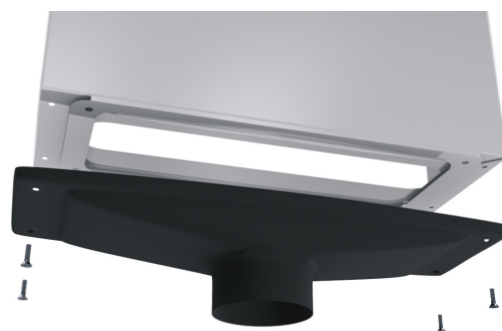
Air is supplied through a separate hose through the floor or a vent beneath the backside of the toilet through the floor or wall from the outside.

When using the hose, mount the intake air funnel at the bottom of the toilet before the toilet is put in place. Use 76 mm hole saw for implementation in flooring. If the wheel arch or other obstructions prevents the hose from going directly down, it can be bypassed, but make sure the hose is routed with gentle bends and as short stretch as possible, maximum pipe length 1.2 meters. Finish with floor nozzle under floor exterior. The tubing may be insulated if desired.

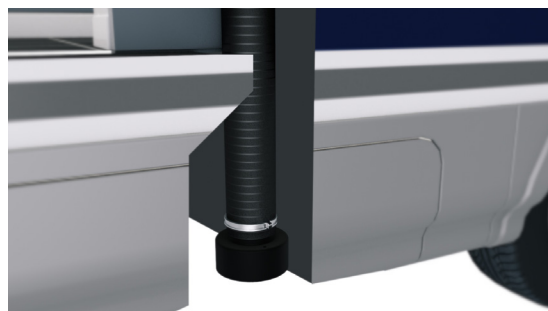
An air grate can be used in both floor and wall, but make sure you have a minimum 50cm<sup>2</sup> light opening and that you protect against water intrusion. If the toilet in large parts of the year are used in cool climates that experience extreme cold for extended periods, it may be advantageous to preheat the air in as condensation may form on the outside of the toilet. This can be done using a radiator connected to the heating system that preheats the air.

Technical specifications:

- Diameter inlet air hose: 75 mm
- Maximum length inlet air hose: 120 cm
- Minimum air grate size: 50cm<sup>2</sup> light opening



Inlet funnel



Inlet hose and floor nozzle

## Power supply

The toilet requires a 12 volt DC power supply secured by a 10A fuse. Use at least 1.5 mm<sup>2</sup> cable up to 10m cable length to avoid problems due to voltage drop, and at least 2.5 mm<sup>2</sup> cable from 10m to 17m cable length. Connect the cable directly to the battery pack with the fuse as close to the battery pack as possible.

Connector, included in the installation package, is terminated on the cable and connected to the connector on the top of the back of the toilet.

Technical specifications:

- Voltage: 11 to 14.5 V
- Max power consumption: 4 A
- Continuous withdrawal during combustion: 1.3A
- Dimensional supply under 10m: 1.5 cm<sup>2</sup>
- Dimensional supply 10 - 17m: 2.5 cm<sup>2</sup>

## Gas supply



The gas is supplied through an 8 mm pipe, with its own gas valve. It is connected directly to the toilet with compression fittings on top of the case behind the toilet. The toilet is designed to run on LPG. If you know that you frequent areas with low quality LPG a filter should be considered.

Technical specifications:

- Supply: 8mm pipes
- Gas type: Propane and LPG
- Gas pressure: 30mBar

## Inspection hatch

There must be access to the top of the toilet rear for easy access to connections. This for connection of the toilet, annual inspection and leak testing gas connection.

## Control panel

Locate the desired placement of the control panel. Create an opening here for the signal cable and route the cable out here. Connect the signal cable together with the control and fasten the control panel. The signal cable is approximately 100cm long, but extension cables can be ordered if necessary.



Back of the toilet, showing inlet air hose, exhaust hose and gas connection

## Connecting and quick test of toilet

Once everything is installed as inlet air hose, exhaust hose, power supply, gas supply and control panel, we can test the toilet. Open for gas to the toilet and test gas connections for leaks before the toilet is tested. Turn on the main switch inside the toilet. Open and close the lid once and press the button on the control panel. If combustion starts normally and no error messages is reported within a few minutes, turn off the main switch to the toilet and shut of the gas.

If you do not have the control panel in place yet, you can still test the toilet by connecting the control panel to the signal cable.

## Final cover

When the toilet is tested, it is time for the final phase with eventual covering of the back of the toilet and other installation if this is required. After the wall / cover is put in place, fasten the toilet to the wall and floor with screws. Remember the control panel if this is to be attached to the cover.

When all the covering is finished, it is time for new images and documentation.

Manufacturer reserves the right to modify parts of the installation manual without responsibility or right to a refund.





Forhandler/Dealer: