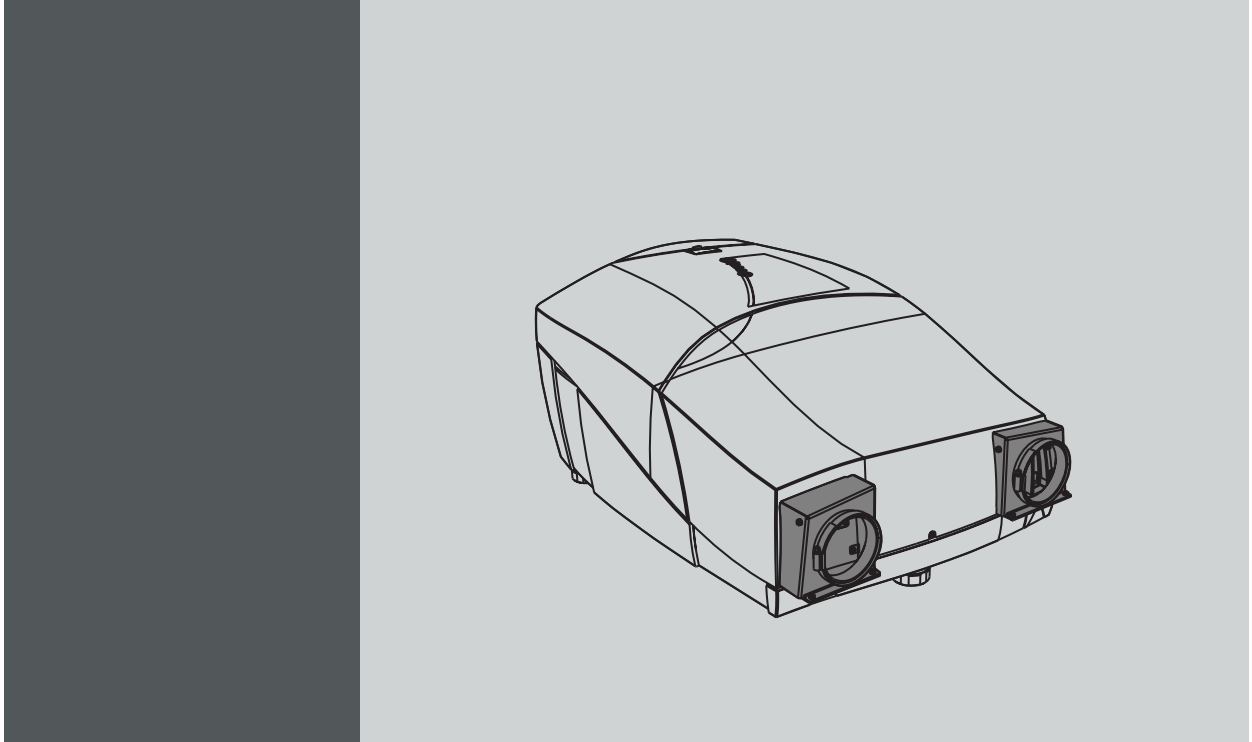


# Heat Exhaust kit



## Installation manual NH-12 series and NW-xx series

R9843115

R59770445/01  
05/04/2012

**BARCO**

visibly yours

**Barco nv Control Rooms & Simulation Division**

Noordlaan 5, B-8520 Kuurne

Phone: +32 56.36.82.11

Fax: +32 56.36.84.86

Support: [www.barco.com/esupport](http://www.barco.com/esupport)

Visit us at the web: [www.barco.com](http://www.barco.com)

Printed in Belgium

## Changes

Barco provides this manual 'as is' without warranty of any kind, either expressed or implied, including but not limited to the implied warranties or merchantability and fitness for a particular purpose. Barco may make improvements and/or changes to the product(s) and/or the program(s) described in this publication at any time without notice.

This publication could contain technical inaccuracies or typographical errors. Changes are periodically made to the information in this publication; these changes are incorporated in new editions of this publication.

The latest edition of Barco manuals can be downloaded from the Barco web site [www.barco.com](http://www.barco.com) or from the secured Barco web site <https://my.barco.com>.

## Copyright ©

All rights reserved. No part of this document may be copied, reproduced or translated. It shall not otherwise be recorded, transmitted or stored in a retrieval system without the prior written consent of Barco.

## Disposal Information

Waste Electrical and Electronic Equipment



■ This symbol on the product indicates that, under the European Directive 2002/96/EC governing waste from electrical and electronic equipment, this product must not be disposed of with other municipal waste. Please dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources.

For more information about recycling of this product, please contact your local city office or your municipal waste disposal service. For details, please visit the Barco website at: <http://www.barco.com/en/AboutBarco/weee>

## Guarantee and Compensation

Barco provides a guarantee relating to perfect manufacturing as part of the legally stipulated terms of guarantee. On receipt, the purchaser must immediately inspect all delivered goods for damage incurred during transport, as well as for material and manufacturing faults Barco must be informed immediately in writing of any complaints.

The period of guarantee begins on the date of transfer of risks, in the case of special systems and software on the date of commissioning, at latest 30 days after the transfer of risks. In the event of justified notice of complaint, Barco can repair the fault or provide a replacement at its own discretion within an appropriate period. If this measure proves to be impossible or unsuccessful, the purchaser can demand a reduction in the purchase price or cancellation of the contract. All other claims, in particular those relating to compensation for direct or indirect damage, and also damage attributed to the operation of software as well as to other services provided by Barco, being a component of the system or independent service, will be deemed invalid provided the damage is not proven to be attributed to the absence of properties guaranteed in writing or due to the intent or gross negligence or part of Barco.

If the purchaser or a third party carries out modifications or repairs on goods delivered by Barco, or if the goods are handled incorrectly, in particular if the systems are commissioned operated incorrectly or if, after the transfer of risks, the goods are subject to influences not agreed upon in the contract, all guarantee claims of the purchaser will be rendered invalid. Not included in the guarantee coverage are system failures which are attributed to programs or special electronic circuitry provided by the purchaser, e.g. interfaces. Normal wear as well as normal maintenance are not subject to the guarantee provided by Barco either.

The environmental conditions as well as the servicing and maintenance regulations specified in the this manual must be complied with by the customer.

## Trademarks

Brand and product names mentioned in this manual may be trademarks, registered trademarks or copyrights of their respective holders. All brand and product names mentioned in this manual serve as comments or examples and are not to be understood as advertising for the products or their manufacturers.



---

# TABLE OF CONTENTS

<b>1. Exhaust kit description</b> .....	<b>3</b>
1.1 Domain of application .....	3
1.2 Specifications .....	3
1.3 Kit content .....	4
<b>2. Installation of the Exhaust</b> .....	<b>7</b>
2.1 Preparations .....	7
2.1.1 Removing the rear cover .....	7
2.1.2 Preparing the rear cover .....	7
2.2 Mounting the parts .....	8
<b>Index</b> .....	<b>11</b>



# 1. EXHAUST KIT DESCRIPTION

## About this manual

This manual describes the **Heat Exhaust kit** with part number R9843115 and the way to install it on a projector.

## Overview

- Domain of application
- Specifications
- Kit content

## 1.1 Domain of application

### What can be done ?

The Heat Exhaust kit allows to connect an external tube system to the projector in order to transport the exhaust hot air outside the projection area.

Each projector has 2 exhausts:

1. left exhaust;
2. right exhaust.

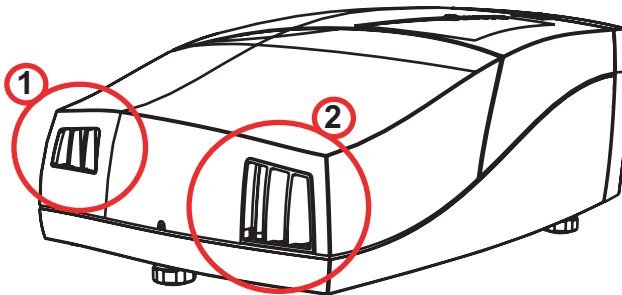


Image 1-1  
Exhaust location

One can decide to connect only one or both exhausts.

### Projector range

The Heat Exhaust kit is intended to be used on the following projector ranges:

- (Galaxy) NH-12;
- (Galaxy) NW-12;
- Galaxy NW-7.

## 1.2 Specifications

### Heat dissipation per projector

The maximum heat dissipation of the projector when it runs at full power is 2800 W or 9560 BTU/h. This value can be different, depending on the power rate of the lamp (i.e. Economy mode or Normal mode).

### Outlet temperature

The maximum temperature of the air at the outlet is 60° C when the projectors run at full power and assuming the environmental temperature to be 20° C maximum. All elements in the air extraction need to resist at least a temperature of 60° C for long duration.

### Air speed

For acoustical reasons, an air speed of 6 m/s is typically recommended in an office/auditorium environment. In a display system where the projectors and the collector are not situated inside the projection room, the air speed in the tubes between projector outlet and "collector" tube can be slightly higher.

## 1. Exhaust kit description

### Flow rate

The flow rate varies, as the speed of the internal fans changes depending on the power rate of the projector and depending on the ambient temperature. The maximum flow rate is 50 l/s per projector. The airco can be designed to extract 50 l/s per projector at all time.

The following table lists the air flow at both exhausts in different lamp power modes:

Exhaust air flow	Economy lamp mode	Normal lamp mode
1	3,3 l/s	6,4 l/s
2	20,3 l/s	31,3 l/s

### Outlet tube

The external diameter of the outlet tubes is 100 mm, which matches the common size of 100 mm for flexible extraction pipes. For a flow rate of 50 l/s, this results in an air speed of 6,4 m/s.



The extraction pipes are not included in this kit

### Extraction control

No air extraction control is required. It is no problem that air is sucked through the projectors even when they are switched off.

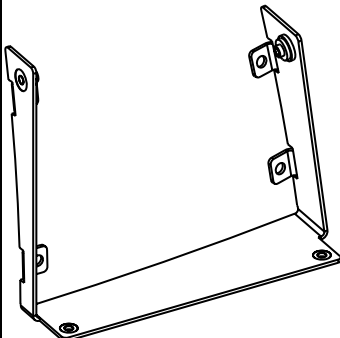
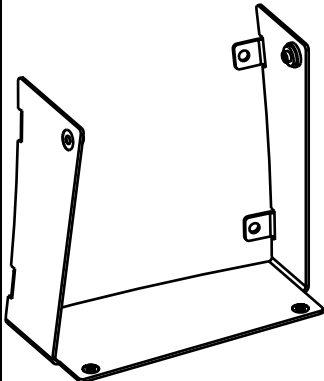


Please note that heat dissipation in the room is obviously less when all projectors are switched off. For good stability of the system, the projection room should be kept to the same temperature level, no matter if the projectors are on or off. Therefore the airco must be controlled in some way by temperature sensors in the projection room.

## 1.3 Kit content

### Bill of material

The following table gives an overview of the parts contained in the Heat Exhaust kit:

Name	Qty	Illustration
Right exhaust bracket	1	
Left exhaust bracket	1	



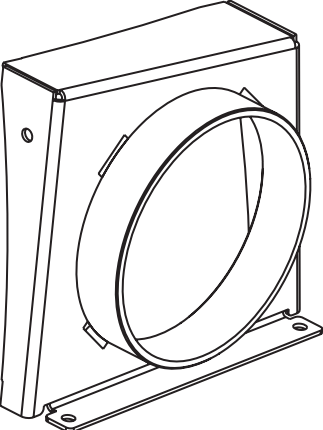
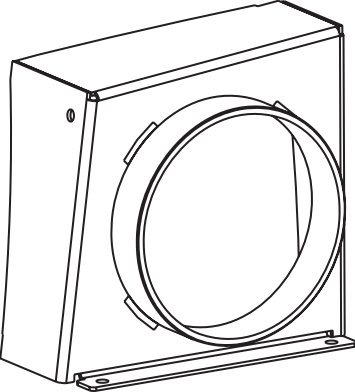
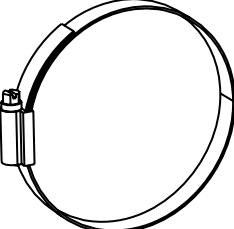
Name	Qty	Illustration
Right exhaust housing	1	
Left exhaust housing	1	
Fastening ring	2	
Screw 3,9 x 10	8	-
Screw 4 x 8	8	-

Table 1-2  
Kit content

1. Exhaust kit description

---

## 2. INSTALLATION OF THE EXHAUST

### Overview

- Preparations
- Mounting the parts

### 2.1 Preparations

#### Overview

- Removing the rear cover
- Preparing the rear cover

#### 2.1.1 Removing the rear cover

##### Necessary tools

Philips Ph2

##### How to remove the rear cover?

1. Remove the fixing screw

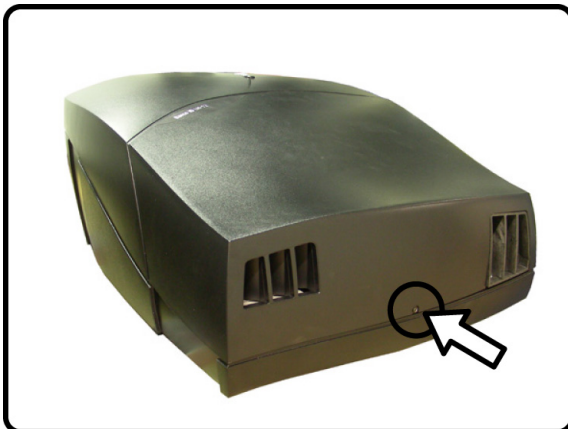


Image 2-1  
Rear cover: fixing screw

2. Lift the back side of the rear cover and pull it backward to remove it

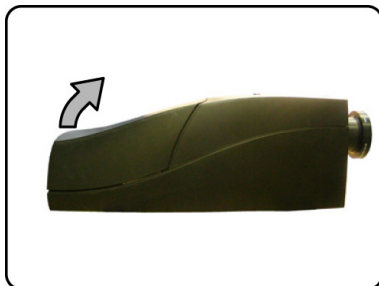


Image 2-2  
Tilt the back side of the rear cover



Image 2-3  
Pull the rear cover backward



Image 2-4  
Rear cover removed

#### 2.1.2 Preparing the rear cover

##### Necessary tools

- Marker pen
- Drill with diameter 3,3 mm

## 2. Installation of the Exhaust

---

### Necessary parts

- Left outlet bracket
- Right outlet bracket
- Projector rear cover

### How to prepare the cover mount the outlet bracket?

1. Position the outlet brackets as indicated below (the brackets must interfere with the open exhaust area) and mark the position of the 8 foreseen fixation holes.

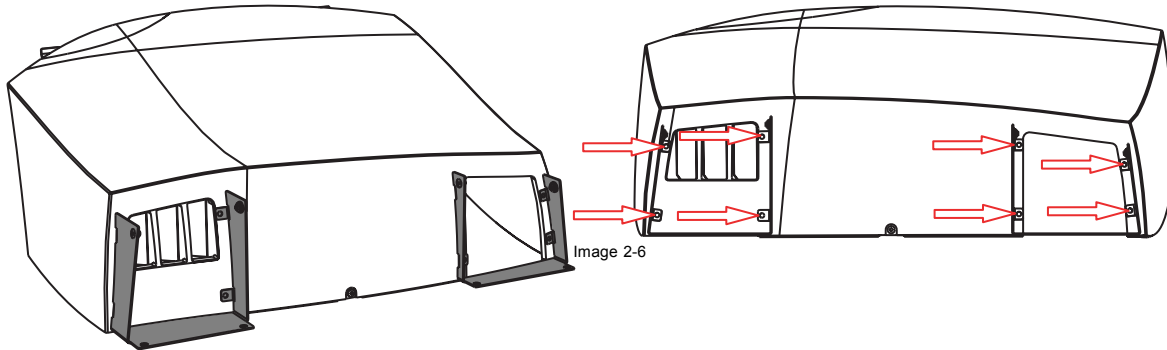


Image 2-5

2. Drill 3,3 mm diameter holes on the 8 marked positions.

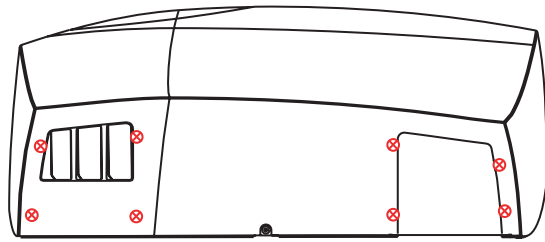


Image 2-7

## 2.2 Mounting the parts

---

### Necessary tools

- Torx
- Philips Screwdriver

### Necessary parts

- 8 delivered screws
- Left outlet bracket
- Right outlet bracket
- Projector rear cover
- Left outlet housing
- Right outlet housing
- Rings
- Tube(s)

### How to mount the brackets and the outlet housings?

1. Mount the left and the right bracket using the 8 screws.

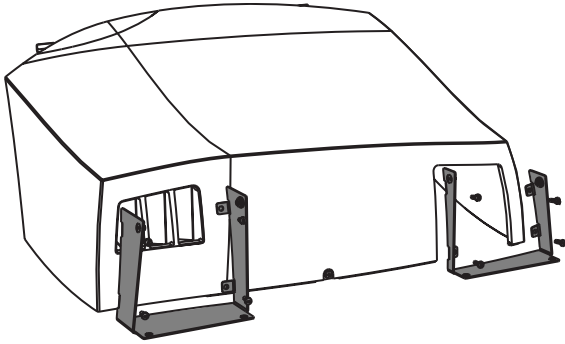


Image 2-8

2. Mount and fix the left and right housings on the brackets using the 8 screws.

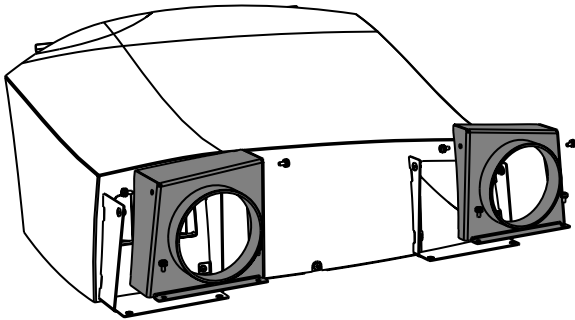


Image 2-9

### How to connect a tube to the exhaust?

1. Mount the rings without fastening them.

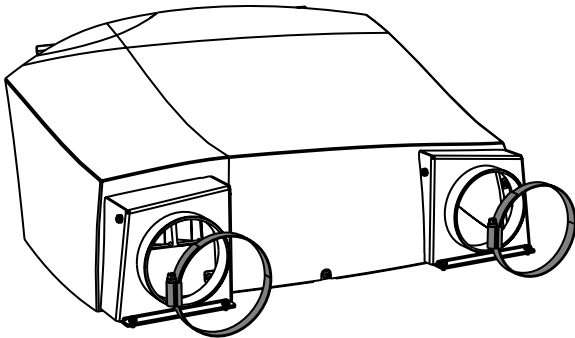


Image 2-10

2. Mount and fix the assembled cover on the projector.

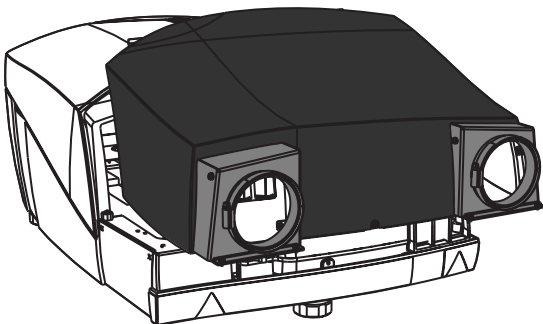


Image 2-11

3. Mount the tube(s) and fasten the rings.

## 2. Installation of the Exhaust

---

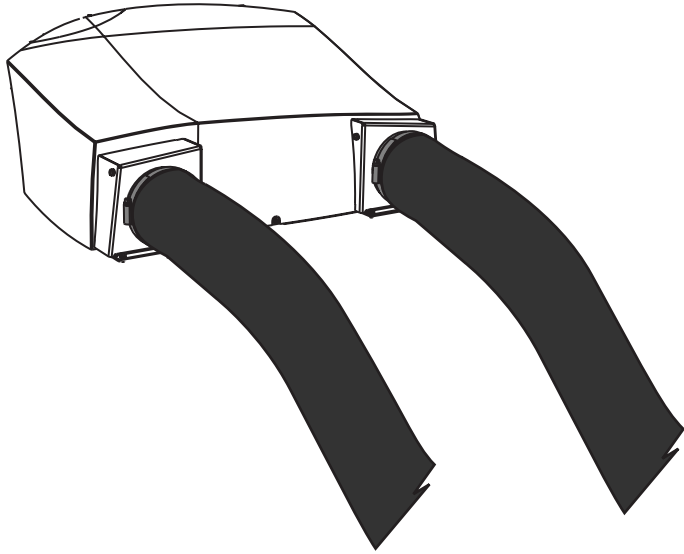


Image 2-12

# INDEX

## D

Domain of application 3

## E

exhaust 3  
exhaust kit description 3

## I

Installation of the Exhaust 7

## K

Kit content 4

## M

Mounting the parts 8

## P

Preparing the cover 7

## R

rear cover 7  
removing 7  
removing 7  
rear cover 7

## S

specifications 3

## Free Manuals Download Website

<http://myh66.com>

<http://usermanuals.us>

<http://www.somanuals.com>

<http://www.4manuals.cc>

<http://www.manual-lib.com>

<http://www.404manual.com>

<http://www.luxmanual.com>

<http://aubethermostatmanual.com>

Golf course search by state

<http://golfingnear.com>

Email search by domain

<http://emailbydomain.com>

Auto manuals search

<http://auto.somanuals.com>

TV manuals search

<http://tv.somanuals.com>