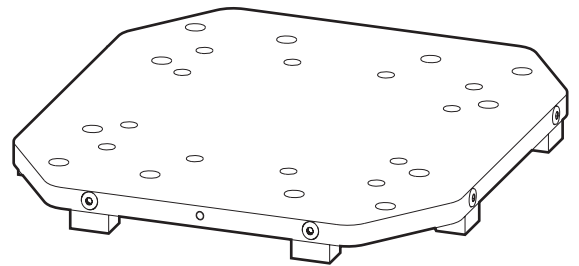


## Assembly and installation instructions





## Introduction

These Assembly and installation instructions describe how to assemble the Water Spraying System and how to install it to your hydraulic attachment.

This Assembly and installation instructions applies to the following:

Part number	Description
3363 1243 54	Version 8
3363 1231 43	Version 9/8
33631 239 92	Version 10/9
3363 1228 53	Version 11/10
3363 1243 51	Version 13/11
3363 1241 87	Version 14
3363 1243 48	Version 15/14

You are only allowed to mount the Water Spraying System to hydraulic attachments with the correct mounting group.

The Assembly and installation instructions complement your hydraulic attachment's Safety and operating instructions.

Follow all instructions in the Assembly and installation instructions and in the Safety and operating instructions.

Store these Assembly and installation instructions together with the Safety and operating instructions in the document compartment of the carrier cab.

All symbols, signal words, and designation of the text used in the Assembly and installation instructions are the same as in the Safety and operating instructions.

The different designation of the texts means as follows:

► Action step in a safety instruction

▷ Action step

1. Established operation process

2.

3.

A Explanation of the elements of a drawing

B

C

● Listing

●

●

## Safety instructions

Read these Assembly and installation instructions and the Safety and operating instructions of the hydraulic attachment. In particular read all safety instructions before:

- assembling the Water Spraying System,
- installing it to the hydraulic attachment,
- operating the hydraulic attachment with the installed Water Spraying System.




This will:

- prevent the risk of injuries and fatal accidents for yourself and others,
- protect the hydraulic attachment and other property against material damage,
- protect the environment against environmental damage.

Follow all instructions in these Assembly and installation instructions.

## Signal words

The signal words Danger, Warning, Caution and Notice are used as follows in these Safety and operating instructions:

	<b>DANGER</b>	indicates a hazardous situation which, if not avoided, will result in death or serious injury.
	<b>WARNING</b>	indicates a hazardous situation which, if not avoided, could result in death or serious injury.
	<b>CAUTION</b>	indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
	<b>NOTICE!</b>	The signal word NOTICE is used to address practices related to possible property damage but not related to personal injury.

## Safety equipment

Personal safety equipment must comply with the applicable health and safety regulations.

Always wear the following personal safety equipment when assembling or installing the Water Spraying System:

- protective helmet
- safety glasses with side protectors
- protective gloves
- protective shoes
- warning vest

## Electrical shock, precautions

### **DANGER**

#### **Electrical shock**

Spraying water over electrical devices or other sources of electricity may lead to an electric shock, resulting in serious injury or death.

- Do not spray water over electrical devices or other sources of electricity.
- Make sure that there are no hidden electrical devices or other sources of electricity in the work area.

## Transport, precautions

### **WARNING**

#### **Heavy parts falling**

The Water Spraying System is heavy. Unsuitable lifting attachments (e.g. ring or eye bolts) may fail and cause heavy parts to fall. Falling parts may cause serious injury.

- Only use the adjustable eyebolt prescribed as lifting lug. Standard eye bolts are not permissible.

## Carrier, precautions

### **WARNING**

#### **Falling carrier**

If the load-bearing capacity of the carrier used is insufficient, the carrier will not be stable. It can topple over and cause injuries and damage. Consider the full load (weight of the hydraulic attachment + Water Spraying System + adapter plate + accessories).

- Only attach the hydraulic attachment with the mounted Water Spraying System to a hydraulic carrier of a suitable load-bearing capacity.
- The carrier must remain stable at all times.

## **Installation, precautions**

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### **⚠ WARNING**

#### **Heavy parts falling**

The hydraulic attachment + Water Spraying System may fall when attached to the adapter plate with too short screws. Due to the thickness of the Water Spraying System fastening screws has to be longer.

- ▶ Only use fastening screws 40 mm (1.58 in.) longer to connect the hydraulic attachment + Water Spraying System to the adapter plate.

## **Changes to the Water Spraying System**

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### **⚠ WARNING**

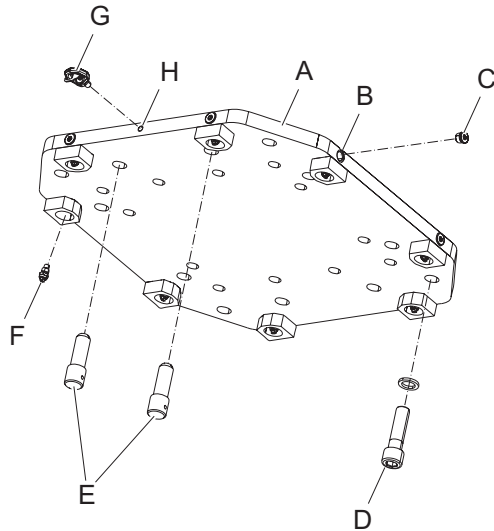
#### **Changes to the Water Spraying System**

Changes to the Water Spraying System may lead to serious injury.

- ▶ Never carry out any changes to the Water Spraying System.
- ▶ Contact the Epiroc Customer Center/Dealer.

## Overview

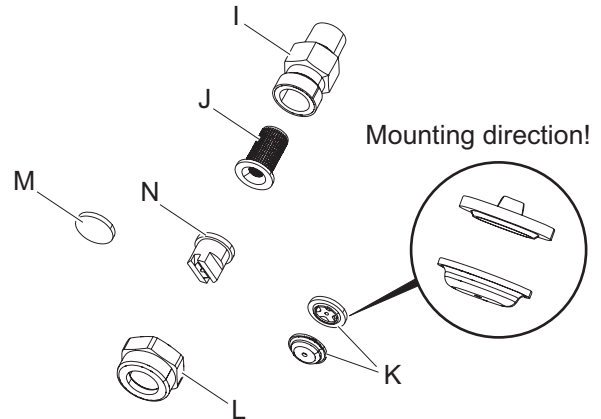
### Water Spraying System



- A The **plate** has two different hole patterns and fits for two different mounting groups.
- B There are 8 **ports water inlets**. They can also be used for additional outlet nozzles.
- C The **plug** seals the ports for water in-/outlet.
- D The **screws** to fix the plate and the adapter plate to the hydraulic attachment (not in the scope of delivery).
- E Two **mounting bolts** are needed for safe mounting of the plate (not in the scope of delivery).
- F The **nozzles** are interchangeable depending on the needed conditions.
- G **Adjustable eyebolt** to lift the plate.
- H Port for the adjustable eyebolt.

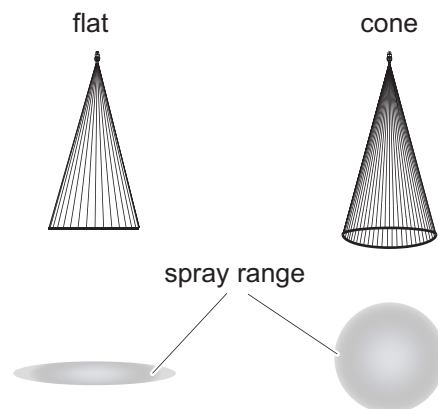
### Nozzles

The Water Spraying System can be assembled with different nozzle types (cone and flat).



- I Nozzle body
- J Filter
- K Cone nozzle
- L Union nut
- M Blind plate
- N Flat nozzle

### Spray schema



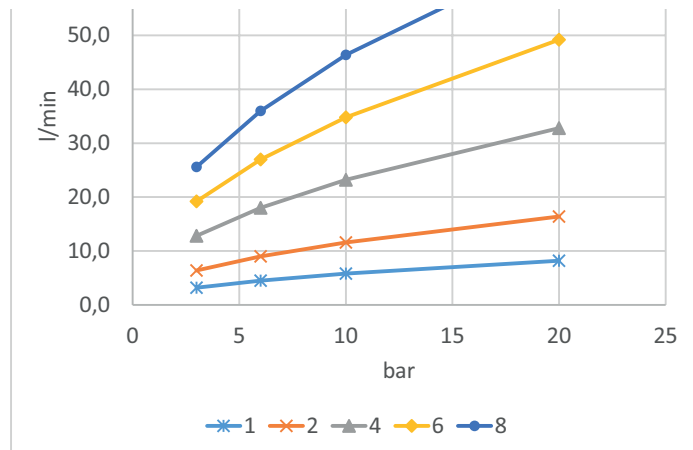
### Nozzle types

- D5-56 (cone)
- TP1508 (flat)

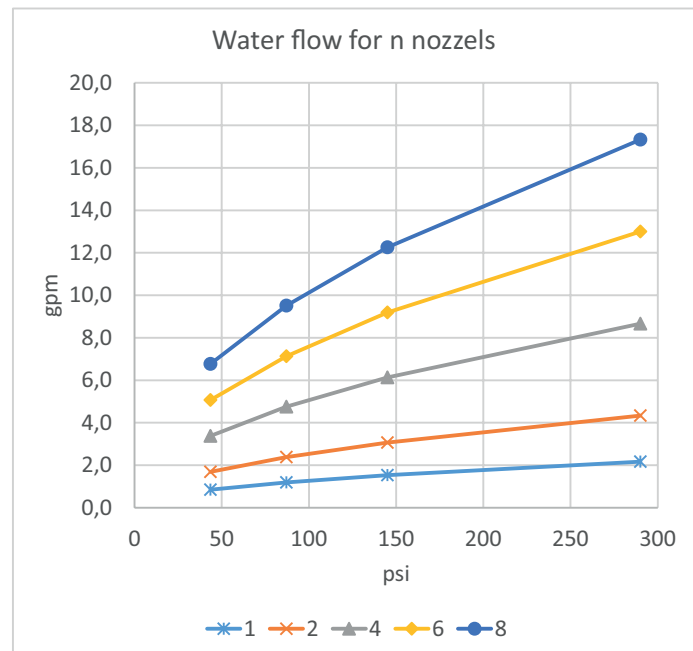
## Water requirements

Recommended: 20 bar (290 psi)

Flow in l/min					
p in bar		3	6	10	20
Nozzels	1	3.2	4.5	5.8	8.2
	2	6.4	9.0	11.6	16.4
	4	12.8	18.0	23.2	32.8
	6	19.2	27.0	34.8	49.2
	8	25.6	36.0	46.4	65.6



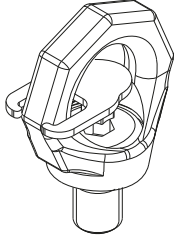
Flow in gpm					
p in psi		44	87	145	290
Nozzels	1	0.8	1.2	1.5	2.2
	2	1.7	2.4	3.1	4.3
	4	3.4	4.8	6.1	8.7
	6	5.1	7.1	9.2	13.0
	8	6.8	9.5	12.3	17.3



## Adjustable eyebolt

For lifting the Water Spraying System use only the adjustable eyebolt provided as lifting lug. Standard eye bolts are not permissible.

M16 x 24: Part no.: 3363 1032 49



1. Engage the star profile key in the hexagonal socket screw.
2. Screw in the adjustable eyebolt by hand.
3. Disengage the star profile key again before attaching the lifting gear. When firmly screwed in with the star profile key disengaged, the ring body must be able to rotate by 360°.
4. Before attaching the lifting gear, set it in the direction of force.

### Note

The adjustable eyebolt is not designed for turning under load.

## Scope of delivery

- Plate  
8 Plugs for water ports
- Nozzle kit (3363 1241 67):  
9 Nozzle bodies  
9 Union nuts  
9 Filters  
9 Cone nozzles  
9 Flat nozzles  
9 Blind plates

### Note:

Fastening screws are not in the scope of delivery. You need fastening screws 40 mm (1.58 in.) longer than the one you use when working without Water Spraying System.

Contact the authorized Customer Center / Dealer in your area for support.



## Technical data

	Version 8	Version 9/8	Version 10/9
Weight	130 kg (287 lbs)	175 kg (385 lbs)	206 kg (454 lbs)
Length	730 mm (29 in.)	860 mm (34 in.)	890 mm (35 in.)
Width	580 mm (23 in.)	700 mm (28 in.)	820 mm (32 in.)
Height	75 mm (2.95 in.)	75 mm (2.95 in.)	75 mm (2.95 in.)
Part no.	3363 1243 54	3363 1231 43	3363 1239 92
Classification	Mounting group 8 MB 750 - MB 1000 (8) EC 90 - EC 100 (8)	Mounting group 9/8 MB 750 - MB 1000 (8) MB 1200 - MB 1650 (9) EC 90 - EC 100 (8) EC 120 - EC 140 (9)	Mounting group 10/9 MB 1200 - MB 1650 (9) HB 2000 - HB 2500 (10) EC 120 - EC 140 (9) EC 150 - EC 155 (10)

	Version 11/10	Version 13/11	Version 14
Weight	270 kg (595 lbs)	323 kg (712 lbs)	357 kg (787 lbs)
Length	1020 mm (40 in.)	1110 mm (44 in.)	1205 mm (47 in.)
Width	930 mm (37 in.)	1010 mm (40 in.)	1010 mm (40 in.)
Height	75 mm (2.95 in.)	75 mm (2.95 in.)	75 mm (2.95 in.)
Part no.	3363 1228 53	3363 1243 51	3363 1241 87
Classification	Mounting group 11/10 HB 2000 - HB 2500 (10) HB 3100 - HB 4700 (11) EC 150 - EC 155 (10) EC 165 - EC 185 (11)	Mounting group 13/11 HB 3100 - HB 4700 (11) HB 5800 (13) EC 165 - EC 185 (11)	Mounting group 14 HB 7000 (14)

	Version 15/14		
Weight	427 kg (941 lbs)		
Length	1250 mm (49 in.)		
Width	1170 mm (46 in.)		
Height	75 mm (2.95 in.)		
Part no.	3363 1243 48		
Classification	Mounting group 15/14 HB 7000 (14) HB 10000 (15)		

# Installation

## Preparation of Water Spraying System

Before you mount the Water Spraying System to the hydraulic attachment you have to prepare the nozzles in the plate according to the requirements at your job site.

- ▷ Select the nozzle type.
- ▷ Decide how many nozzles at which locations you want to use.
- ▷ Unscrew the union nut from the nozzle body.
- ▷ Fit the correct nozzle type (cone/flat) to the nozzles you want to use.
- ▷ Coat the thread of the union nut with Loctite 243 and tighten with 15 Nm (11 ft lbs).
- ▷ Fit the blind plate to the nozzles you don't want to use.
- ▷ Coat the thread of the union nut with Loctite 243 and tighten with 15 Nm (11 ft lbs).
- ▷ Select the port you want to use as water inlet.
- ▷ Close all unused water ports with a plug.

### Note:

Coat the thread of the new nozzle body with Loctite 270 when you exchange the nozzle body and tighten with 15 Nm (11 ft lbs).

## Mounting to the hydraulic attachment

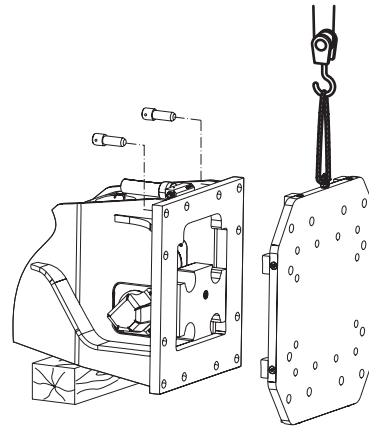
### ⚠ WARNING

#### Hands and fingers being cut off or hurt

Bores and surfaces can act like a pair of scissors and cut off or hurt parts of your body.

- ▶ Never use your fingers to check bores or fitting surfaces.
1. Place the hydraulic attachment on timber support blocks within the range of the carrier.
  2. Remove the adapter plate (see *Safety and operating instructions of the hydraulic attachment*).
  3. Save the (shorter) fastening screws for further use.
  4. Screw the adjustable eyebolt into the plate of the Water Spraying System.

5. Lift the plate with suitable equipment and adjust it to the hydraulic attachment.



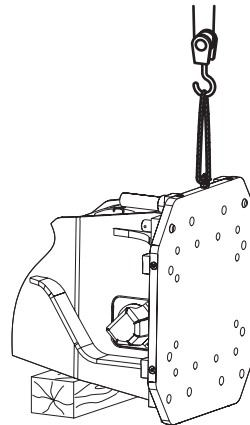
6. Use the two mounting bolts to adjust the holes and fit them to hold the plate in place until the adapter plate is fixed.

### ⚠ WARNING

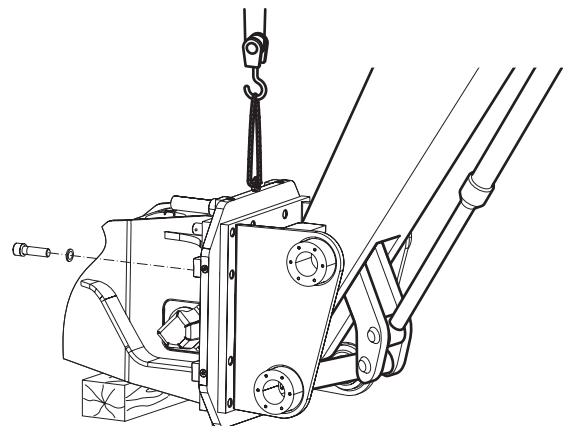
#### Heavy parts falling/tipping over

The plate is not securely fixed with the mounting bolts and may tip over and cause serious injury.

- ▶ Keep the plate attached to the crane to prevent it from tipping over until the adapter plate is mounted.



7. Adjust the adapter plate.



**⚠ WARNING**

**Heavy parts falling**

The hydraulic attachment + Water Spraying System may fall when attached to the adapter plate with too short screws. Due to the thickness of the Water Spraying System fastening screws has to be longer.

- ▶ Only use the fastening screws 40 mm (1.58 in.) longer to connect the hydraulic attachment + Water Spraying System to the adapter plate.
- 8. Prepare the (40 mm (1.58 in.) longer) fastening screws prescribed to connect the hydraulic attachment + Water Spraying System to the adapter plate
- 9. Prepare each fastening screw with a pair of lock washers.
- 10. Apply Anti-Seize to the fastening screw threads before inserting them.

The contact faces of the screw head and the pair of lock washers must not be lubricated.

- 11. Mount the fastening screws and tighten.

The two mounting bolts remain until you have placed and tightened a fastening screw to all other holes of the hole pattern.

- 12. Remove the two mounting bolts and keep them for further use.
- 13. Fit the last two fastening screws to the adapter plate.

**NOTICE** Adapter plate can come loose

The adapter plate can come loose if the fastening screws are not tightened with the correct tightening torque.

- 14. Tighten all fastening screws with the correct tightening torque (see *Safety and operating instructions of the hydraulic attachment*).
- 15. Remove the adjustable eyebolt from the Water Spraying System's plate and keep it for further use.
- 16. Connect the water supply to the water inlet you selected.

## Removing from the hydraulic attachment

- 1. Disconnect the water supply.

**⚠ WARNING**

**Heavy parts falling/tipping over**

The plate is not securely fixed when you remove the adapter plate. It may tip over and cause serious injury.

- ▶ Attach the plate to the crane to prevent it from tipping over before dismantling the adapter plate.
- 2. Screw the adjustable eyebolt into the plate of the Water Spraying System.
- 3. Secure the plate with suitable lifting equipment to the crane.
- 4. Remove the adapter plate (see *Safety and operating instructions of the hydraulic attachment*).
- 5. Remove the plate from the hydraulic attachment with the crane.
- 6. Release the water from the plate.
- 7. Protect the plate with a rust inhibitor.
- 8. Store the Water Spraying System laying on a pallet and so that it cannot topple over.
- 9. Store the Water Spraying System in a dry, properly ventilated room.

## Installation schema

