



## Installation Instructions Lubrication Plate SPL for MONORAIL

### 1 About these installation instructions

#### Function and extent of validity

These installation instructions **Lubrication Plate for MONORAIL** describe the retrofitting, resp., the exchanging of a lubrication plate SPL. These instructions are a supplement to the Installation Instructions **MONORAIL**.

### 2 For your own safety

#### Authorized personnel

The lubrication plate SPL must only be installed by specialist personnel, who have read and understand these instructions.

### 3 Preparation for the installation



#### Remark

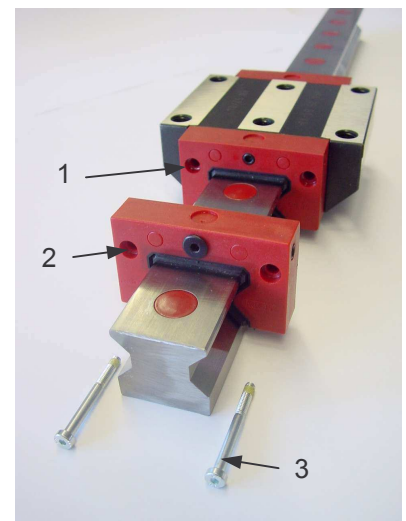
- Lubrication plates are supplied ready for installation (oil filled) and they have to be carefully slid-on over the end of the rail, because the oil dispensing contact points are slightly pre-tensioned and can be destroyed by incorrect handling.
- Only install the lubrication plate when the carriage is on the rail. If so required, install a lubricating nipple. (The lubricating nipple is included in the scope of supply).

### 4 Installation

1. Release and remove the screws from the standard front plate.
2. If the lubrication connection in the center of the front plate is closed with a plastic plug replace this by a set screw.
3. Carefully slide the lubrication plate over the end of the rail to the carriage.
4. With the longer screws forming part of the "SPL" scope of supply, attach the lubrication plate to the carriage.

### 5 Exchanging

1. Release and remove the screws from the lubrication plate.
2. Remove the lubrication plate by sliding it over the end of the rail.
3. Carefully slide the new lubrication plate over the end of the rail.
4. Attach the new lubrication plate with the screws.



1 Front plate, 2 lubrication plate SPL  
3 Fixing screws

## 6 Attachment

When tightening the fixing screws, the following maximum torques must not be exceeded.

Size	15, 20	25, 30, 35	45	55, 65
Screw	M 2,5	M 4	M 5	M 6
SW – hexagon socket	1,5	2,5	3,0	4,0
Torque $M_{A\ max}$ (Nm)	0,6	0,8	1,1	1,1

## 7 Installation of additional wipers



### Remark

If an additional wiper ASM/ABM, ZBN/ZCN, ZBV/ZCV is to be installed in front of the lubrication plate, then the screw plug of the lubrication bore at the centre in front has to be removed. Regarding the installation of the additional wiper, please refer to the installation instructions of the corresponding product. The additional wiper is now installed on the lubrication plate with the screws supplied. The lubrication bore at the centre in front now has to be sealed again with the screw plug that was removed initially or else – as described under point 8 – provided with a lubricating nipple.

## 8 Replenishment

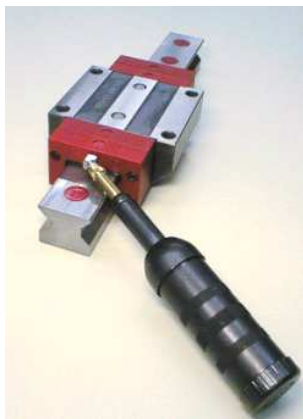
### 8.1 Preparation



A replenishment of the lubrication plate is possible through the lubrication bores at the centre in front or on the side. (Size MR 25 only from the front). For ordering information and dimensions, please refer to the MONORAIL catalogue, chapter Technical Data. To do so, the corresponding screw plug has to be removed with an Allen key size 4 and replaced by a lubricating nipple. A hydraulic-type lubricating nipple is included as an accessory in the scope of supply of the lubrication plate.

The replenishment takes place, for example, with an oil expeller through a hydraulic- type or funnel-type lubricating nipple, which is screwed into one of the three prepared lubrication bores, at the centre in front or on the side. It is also possible to use a special little oil bottle, which SCHNEEBERGER offers as an accessory. In this case the replenishment takes place directly into the lubrication bore of the SPL and therefore a lubricating nipple is not necessary.

### 8.2 Filling



The lubrication plates are replenished with the oil quantity in accordance with the following table in approx. 4 to 5 stages, depending on the size and on the location of the lubricating connection utilised. In order to obtain the best replenishment result, the utilisation of both of the lubrication connections on the side is recommended. Between the individual filling stages, a waiting time of approx. 5 minutes has to be adhered to. The verification of the oil release takes place at the oil contact points to the rail. In principle, the filling quantity depends on the degree of emptiness of the lubrication plates.

Replenishment SPL-MR				
Oil quantity per 1 x SPL in cm <sup>3</sup>				
MR 25	MR 35	MR 45	MR 55	MR 65
2,2	6,0	11,0	19,0	43,0

Replenishment SPL-BM					
Oil quantity per 1 x SPL in cm <sup>3</sup>					
BM 15	BM 20	BM 25	BM 30	BM 35	BM 45
0,5	1,4	2,4	2,9	5,8	10,9

### 8.3 Replenishment intervals

The replenishment of the lubrication plates should take place in function of the operating conditions. As a guideline value, the following replenishment intervals may be assumed:

- **BM 15 - BM/MR 35: 2500 km**
- **MR/BM 45 - MR 65: 5000 km.**

A precise determination of the intervals can only take place under real operating conditions. In case of unfavourable conditions, loads, climate, environment, more frequent replenishment is necessary. Independent of the running distance, replenishment is necessary after a maximum of **12 months**.

### 8.4 Oil

The SPL has to be refilled with the oil **KLÜBER Lamora D 220**. For a filling with other lubricants, the Schneeberger GmbH Höfen/Enz company cannot assume any liability.

## 9 General remarks



- When utilising lubrication plates, in addition a filling with grease has to be carried out on the carriages. For the recommended filling quantities, refer to the MONORAIL catalogue, chapter Lubrication with Grease.
- Only utilise lubrication plates in pairs.
- Protect the guide-ways with covers against dirt, metal chips and coolants, if so required, utilise additional wipers.
- Do not utilise lubrication plates in case of direct contact of the guide-ways with coolants.
- Run regular lubrication strokes over the complete travel of the axis.
- Include the lubrication plates in the maintenance schedule of the machine:
  - Regular checking of the wipers for wear.
  - Checking of the oil film on the rail running surface.
  - Running of lubrication strokes.
  - Replenishment of the SPL.

You can order our Installation Instructions MONORAIL free of charge from your Schneeberger partner or else you can download them as a \*.pdf file from [www.schneeberger.com](http://www.schneeberger.com), menu point Services / Installation Instructions.

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