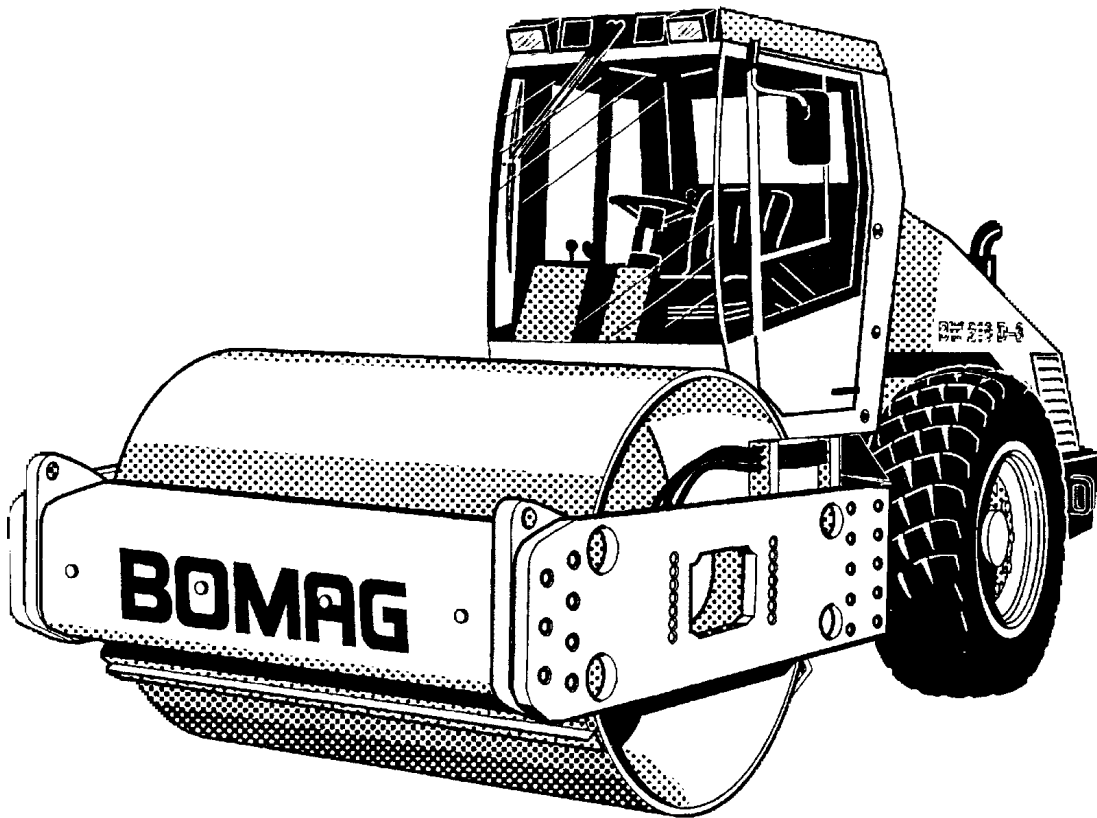


BOMAG

Training Manual



Single Drum Rollers

BW 216 D-3, BW 216 DH-3/PDH-3

BW 219 DH-3/PDH-3, BW 225 D-3/PD-3

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Foreword

This training manual was specifically written for the new single drum rollers BW 216 D-3, BW 216 DH-3/PDH-3, BW 219 DH-3/PDH3 and BW 225 D-3/PD-3 of generation 3. This range of single drum rollers is the consequent further development of the machine range of heavy single drum rollers of generation 2 and is also an adaptation to the presently most modern status of technology.

Single drum rollers of this product ranges are today needed on construction sites all over the world. Rollers of this size are mainly used in earth construction and for the preparation and sealing of sanitary landfill sites.

During the development of this new generation of single drum rollers the requirements and demands of our customers, operators and maintenance personnel were the main aspects which were taken into consideration.

Since we would like to increase the benefit for our customers also in the future, we ask you kindly to inform us about your ideas and suggestions.

The introduction of new or improved products on the market is not possible without thorough training of all persons responsible for the efficient after sales service for all these products.

This is the reason why this document was prepared on the basis of the training material for the new range of single drum rollers of generation 3. This material will help the trainer to transfer the necessary knowledge to the participants in the training session in an easy to understand way.

This manual is by no means complete. Technical data and details, which were not available at the date of release of this manual, or which have changed since the release of this manual, require special attention of the respective trainer during the training course.

These training documents are not subjected to a regular updating service. All important changes to the machine will, however, be worked in during the revision of this training manual.

The chapter "Documentation" contains information about other documents for this machine. The latest operating and maintenance instructions and the up-to-date electric and hydraulic diagrams are part of this training manual.

Documentation

For the single drum rollers BW 216 D-3, BW 216 DH-3/PDH-3, BW 219 DH-3/PDH3 and BW 225 D-3/PD-3 the following documents are additionally available:

1. Operating and maintenance instructions

Machine type	Catalogue No.:	from serial no.	to serial no.
BW 216 D-3	008 140 61	101 580 40 0101	
BW 216 DH-3	008 140 61	101 580 42 0101	
BW 216 PDH-3	008 140 61	101 580 43 0101	
BW 219 DH-3	008 140 61	101 580 50 0101	
BW 219 PDH-3	008 140 61	101 580 51 0101	
BW 225 D-3	008 140 61	101 580 60 0101	
BW 225 PD-3	008 140 61	101 580 61 0101	

2. Spare parts catalogue

Machine type	Catalogue No.:	from serial no.	to serial no.
BW 216 D-3	008 153 40	101 580 40 0101	
BW 216 DH-3	008 153 42	101 580 42 0101	
BW 216 PDH-3	008 153 43	101 580 43 0101	
BW 219 DH-3	008 153 50	101 580 50 0101	
BW 219 PDH-3	008 153 51	101 580 51 0101	
BW 225 D-3	008 153 60	101 580 60 0101	
BW 225 PD-3	008 153 61	101 580 61 0101	

3. Wiring diagram*

Drawing No.:	from serial number	to serial number
582 700 38	for single drum rollers with new monitoring board	

4. Hydraulic diagram*

Machine type	Drawing No.:	from serial number	to serial number
BW 216 D-3	581 201 26	101 580 40 0101	
BW 216 DH-3	581 201 26	101 580 42 0101	
BW 216 PDH-3	581 201 26	101 580 43 0101	
BW 219 DH-3	581 201 27	101 580 50 0101	
BW 219 PDH-3	581 201 27	101 580 51 0101	
BW 225 D-3	581 201 28	101 580 61 0101	
BW 225 PD-3	581 201 28	101 580 61 0101	

General

The new single drum rollers BW 216 D-3, BW 216 DH-3/PDH-3, BW 219 DH-3/PDH3 and BW 225 D-3/PD-3 from BOMAG are mainly further developments of the preceding models BW 219 D-2 and BW 219 DH-2.

These machines have been successfully used over years on construction sites all over the world, especially in earth work and for the construction of sanitary landfill sites.

High compaction performance and extremely good traction are properties, which are of utmost importance for machines of this type.

All components used in these machines are series production products and are permanently subjected to stringent quality checks. This ensures a high level of reliability and safety.

As on many other BOMAG products and here particularly on the large single drum rollers of the new generation, we have also with these machines made a decision in favour of the approved drive system with diesel engine (water cooled) and hydrostatic drive. Hydrostatic drives transfer the output power of the diesel engine directly to the drum, the drive wheels and the steering cylinder.

Drum and drive wheels are driven by fast rotating hydraulic motors and reduction gear (drum) or axle (drive wheels).

On construction equipment the work place of the operator is of utmost importance. Under such operating conditions the health and safety of the operator must be treated with top priority.

The cabin is very spacious and clearly layed out. The operator's seat is very comfortable and can be individually adjusted for every operator, even to the weight.

All controls and gauges are within the reach and the field of vision of the operator.

A monitoring board with light emitting diodes and easy to understand pictograms informs the operator about any faults occurring during operation. The operator is therefore always informed about the condition of the machine.

The generously dimensioned windows in the cabin with windscreen wiper and washer systems for front and rear windscreens allow excellent view to all directions.

- strong ROPS/FOPS according to SAE standard
- wear free service brake due to the closed hydraulic travel circuits
- multi-disc brakes in the planetary drives working as parking and emergency brakes
- high stability due to the low centre of gravity and the use of an articulated joint
- operational safety due to the use of monitoring boards for all important system data

- automatic engine shut down at too high coolant temperature, too low hydraulic oil level (when reaching the lowest level the engine will be shut down after 20 seconds) and too low engine oil pressure.

The single drum rollers BW 216 D-3, BW 216 DH-3/PDH-3, BW 219 DH-3/PDH3 and BW 225 D-3/PD-3 are very well designed down to the smallest detail, suitable for the tough requirements on large scale construction sites all over the world.

List of components

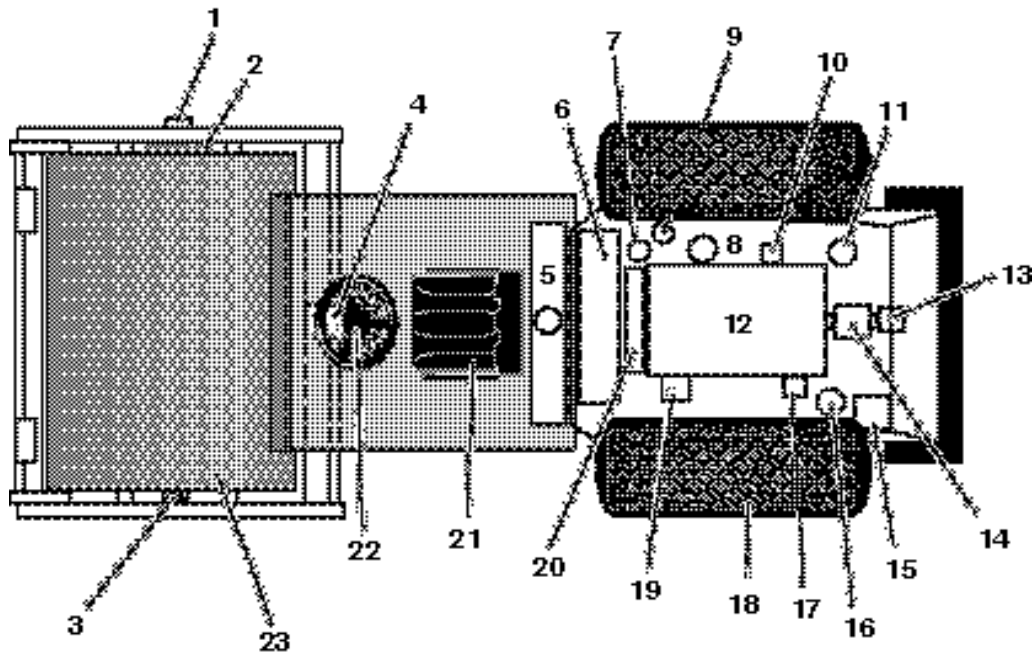


Fig. 1 Position of important service points

- | | | | |
|----|--|----|---|
| 1 | Drum drive motor | 13 | Vibration pump |
| 2 | Reduction gear | 14 | Travel pump |
| 3 | Vibration motor | 15 | Hand pump for hood |
| 4 | Articulated joint | 16 | Hydraulic oil filter |
| 5 | Hydraulic oil cooler | 17 | Starter |
| 6 | Radiator | 18 | Wheels (with axle and axle drive motor) |
| 7 | Fuel filter | 19 | Generator |
| 8 | Pressure accumulator to compensate vibrations in the steering system | 20 | Radiator blower |
| 9 | Engine oil filter | 21 | Operator's seat |
| 10 | Steering/charge pump | 22 | Steering wheel with steering valve |
| 11 | Fuel pre-filter | 23 | Drum |
| 12 | Deutz engine BF6M 1013 E | | |

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