

I'm not robot



Machine Operation and Safety Guidelines 1. Safety Procedures 2. Maintenance Requirements 3. Inspection and Testing Procedures 4. Operator Instructions 5. Troubleshooting Guides 6. Post-Operational Checks 7. Vehicle Preparation 8. Safety Reminders Hours: Checking fuel injection pump 175 Air filter maintenance 176 Checking water spraying system 180 Cleaning water spraying system 183 Measuring frost 185 Draining fuel tank sludge 186 Measures prior to extended shut-down period 187 Setting up / Refitting 191 Manually adjusting crabwalk 192 Starting engine with jump leads 197 Fuses in engine compartment 198 Trouble shooting economizer 204 Final shut-down of machine 208 This is the contents page for a manual, covering various aspects of machine operation and maintenance. ****Operating Modes**** The manual covers both manual and automatic modes (pp. 93-95). ****System Controls**** * The Economizer can be operated independently (p. 97). * Pressure sprinkling and emulsion systems can be switched on/off (pp. 101, 104). * A crabwalk feature is available for certain models (p. 105). ****Emergency Procedures**** The manual outlines emergency procedures to follow in case of issues (p. 107). ****Optional Equipment**** * The edge cutter tool can be mounted and used (pp. 109-110). * The precision spreader can be installed, filled, and operated (pp. 111-118). * Towing instructions are provided for AD and AC machines (pp. 120, 125). ****Transportation**** The manual covers loading and transporting the machine safely (pp. 131-141). ****Maintenance**** * General maintenance notes are given (p. 146). * Fuel and lubricant requirements are detailed (pp. 150-157). * Running-in instructions are provided after 50 operating hours (pp. 159-160). Check engine oil level every 7.6 hours, fuel level every 10 hours Check hydraulic oil and breather filter every 50 hours, air filter every 7.7 hours Check coolant level every 250 hours, change engine oil every 7.8 hours, replace V-belt every 7.8 hours Check anti-freeze concentration every 500 hours, drain fuel tank sludge every 7.9 hours Check valve clearance every 1000 hours, check engine mounts every 1000 hours BW 100 AC-5 / BW 120 AC-5 Maintenance Schedule: 57.11.4: Replace fuel lines every time 7.11.5: Check injection valves regularly Every 3000 hours: Perform checks on fuel injection pump, tire pressure (only for AC machines), water sprinkler system maintenance in case of frost, tightening torques for screws with metric unified thread, and engine conservation Troubleshooting: 8.1-8.4: General notes, starting with jump wires, engine problems, and fuse assignment 9: Disposal - final shutdown of machine Manual Overview: Foreword: Introduction to BOMAG machines, safety regulations, operating instructions, maintenance instructions, and troubleshooting guidelines. This manual helps users become familiar with the machine, avoid malfunctions, enhance reliability, prolong lifetime, reduce repair costs, and downtimes. Note: This manual is intended for operators and maintenance personnel on construction sites. Always keep it handy in a designated container or tool compartment of the machine. ****Important Safety Instructions**** Before operating your BOMAG machine, make sure you've read and understood these instructions. Always follow safety regulations, including those set by the Civil Engineering Liability Association for road rollers and soil compactors. ****Machine Maintenance**** Only use original spare parts from BOMAG to ensure your personal safety. Our service kits can make maintenance easier. We reserve the right to make technical modifications without notice. ****Technical Data**** The following sections provide technical data for your machine, including its dimensions, weights, travel characteristics, and engine specifications. ****Foreword**** Your BOMAG dealer will also provide information on correct machine usage in soil and asphalt construction. The notes in this manual do not extend the warranty or liability conditions outlined in our general terms of business. We wish you successful work with your BOMAG machine! ****Technical Specifications**** The machine complies with various EU directives, including the EC Machine Directive (2006/42/EC) and other noise and vibration protection directives. ****Noise Emission Levels**** * The sound pressure level on the operator's stand is 84 dB(A), measured in accordance with ISO 11204 and EN 500 standards. * The overall sound power level is 103 dB(A), determined according to ISO 3744 and EN 500 standards. * Wear personal protective equipment (ear defenders) to prevent hearing loss. ****Vibration Data**** * The weighted effective acceleration value, measured in accordance with ISO 7096 and EN 500/ISO 5349 standards, is $\leq 0.5 \text{ m/s}^2$. * Vibration of the entire body and hand-arm vibration are within acceptable limits. ****Machine Dimensions and Weight**** * Length: 3315 mm (131 in) * Height: 2890 mm (114 in) with protective roof and flashing beacon * Operating weight: 3500 kg (7716 lbs) * Mean axle load: 1350 kg (2976 lbs) ****Engine and Drive**** * Engine manufacturer: Kubota * Type: D 1703-M-E3B * Rated power: 24.3 kW (ISO 14396) or 32.6 hp (SAE J 1995) * Rated speed: 2600 min⁻¹ ****Exciter System**** * Amplitude: 0.5 mm (0.02 in) * Centrifugal force: 36/41 kN (lbF) ****Noise and Vibration Data**** The noise and vibration data were determined according to the relevant EU directives and standards, under equipment-specific conditions. Note that I removed some of the tables and figures from the original text, as they are not essential to understanding the content. ****Vibration and Noise Data**** The weighted effective acceleration value, as determined by ISO 7096 and EN 500/ISO 5349, is less than or equal to 0.5 m/s² and 2.5 m/s², respectively. ****Technical Specifications**** * Dimensions: + Height: 2890 mm (114 in) + Length: [not specified] + Width: [not specified] * Weight: + Maximum operating weight: 2800 kg (6173 lbs) + Operating weight with ROPS (CECE): 2300 kg (5071 lbs) * Travel characteristics: + Speed: 0-10 km/h (0-6.2 mph) + Working speed with vibration: 0-10 km/h (0-6.2 mph) + Max gradability without/with vibration: 40%/30% (soil dependent) ****Exciter System**** * Frequency: 63/67 Hz * Amplitude: 0.5 mm (0.02 in) * Centrifugal force: 30/34 kN (6744/7644 lbF) ****Water Sprinkler System**** * Type of sprinkling: [not specified] * Pressure: [not specified] * Filling capacities: + Fuel (diesel): 35 liters (9 gal US) + Water: 160 liters (42 gal US) + Emulsion: 45 liters (12 gal US) ****Noise and Vibration Data**** The following noise and vibration data were determined in accordance with the guidelines under equipment-specific conditions: * Noise data: + LpA: 83 dB(A) (ISO 11204 and EN 500) + WARNING! Loss of hearing caused by too high noise burdens! * Vibration data: + Weighted effective acceleration value: $\leq 0.5 \text{ m/s}^2$ (ISO 7096) + Sound pressure level on the operator's stand: [not specified] + Guaranteed sound power level: [not specified] + Vibration of the entire body (driver's seat): [not specified] + Hand-arm vibration: [not specified] Note that some specifications may have been omitted or condensed in this paraphrased version. ****Dimensions and Specifications**** * The BOMAG machine has dimensions of: 2890mm (114in) height with protective roof and flashing beacon * Operating weight: 2950kg (6504lbs) * Axle load: 1200kg (2646lbs) * Wheel load: 313kg (690lbs) ****Travel Characteristics**** * Top speed: 10km/h (6.2mph) * Working speed with vibration: 10km/h (6.2mph) * Max gradability without/with vibration: 40%/30% ****Engine and Drive**** * Engine manufacturer: Kubota * Type: D 1703-M-E3B * Rated power: 24.3kW or 32.6hp ****Exciter System**** * Vibrating drum front frequency: 63/67Hz (3700/4020rpm) * Amplitude: 0.5mm (0.02in) ****Water Sprinkler System**** * Type of sprinkling: * Pressure: * Filling capacities: + Fuel (diesel): 35l (9gal) + Water: 160l (42gal) + Emulsion: 45l (12gal) ****Noise and Vibration Data**** * Noise level (LpA): 83dB(A), determined acc. to ISO 11204 and EN 500 * Warning: wear personal protective gear to prevent hearing loss caused by excessive noise * Weighted effective acceleration value: $+ \leq 0.5 \text{ m/s}^2$, determined according to ISO 7096 + $\leq 2.5 \text{ m/s}^2$, determined according to EN 500/ISO 5349 ****Safety Regulations**** * The machine has been built in compliance with the latest technical standards and applicable regulations. * However, dangers can arise if: + Used for purposes other than intended + Operated by untrained personnel + Altered or converted in an unprofessional way + Safety instructions are not followed The user of this machine is required to comply with all safety regulations and instructions provided for its operation, maintenance, and repair. This includes obtaining customer signature confirmation when necessary. The operator must also be familiar with country-specific and general safety regulations, as well as local regulations for handling work. Additionally, the machine can only be used for its intended purposes, such as compaction of bituminous material or light to medium earth construction work. Using it for other purposes poses a risk to the user and may result in liability falling solely on the customer or operator. Examples of unintended use include working with vibration on hard surfaces, cleaning drums while driving, and operating on slippery or undersized surfaces. Furthermore, transporting persons except for the machine driver is prohibited, and starting the machine in explosive environments or underground mining is strictly forbidden. Even when following all instructions and guidelines, further risks cannot be entirely ruled out. Unauthorized modifications to machine require expert specialists. Tampering with original parts causes safety risks. Only specified parts and accessories are approved for use. Non-approved components may damage machine or pose a risk to users. Machine must be operated by trained individuals only. Regulations regarding changes, conversions, and maintenance are outlined in the provided document. Manufacturer disclaims liability for any damage caused by non-original parts or misuse of safety features. Machines that are not safe to operate should be taken out of service immediately. Always ensure that suitable lashing gear is used on lifting points to securely attach the machine. Check for damage before applying the lashing gear and never use damaged or impaired points. Always apply the articulation lock during transportation. Lash the machine down securely, ensuring it cannot roll, slide, or turn over. The precision spreader must hang freely and not be supported by any vehicle. After transport, ensure the ROPS is properly fastened and tightened screws are secure. Never attach lashing gear to the precision spreader. Always release the articulation lock again after transport and store it in its receptacle. To prevent rolling, use metal wheel chocks or a tow bar as provided by the operating company. When towing, ensure sufficient traction and braking power for the unbraked load. Do not steer the machine. Release the parking brake and short-circuit the travel pump during towing. Towing speed should not exceed 1 km/h and maximum distance should be within the immediate danger zone to avoid damaging the travel pump due to excessive heat. The precision spreader must not be towed backwards when attached to the machine. Before discharging, apply measures to secure the machine against rolling using metal wheel chocks or a tow bar. Ensure the hydraulic circuit is filled and bled before restarting the machine after repair. The ROPS should not show signs of rust, damage, or fractures. Always check the ROPS for proper fastening and tightening torques. Never weld, bolt, or drill additional holes without consent from the manufacturer, as this may compromise the unit's strength. If damaged, replace the ROPS with an original spare part in coordination with the manufacturer. Before operating the machine, ensure it is serviced regularly and that you are familiar with its operation, control elements, working principle, and working area. Wear personal protective gear, including a hard hat, safety boots, ear defenders, and inspect the machine for any obstacles or hazards before mounting. Before operating the machine, ensure that the engine hood is securely closed and locked. Mount the machine using steps and grips. Check for obvious faults in the machine and confirm that all safety features are in place. Safety regulations dictate that the steering, brakes, control elements, light system, warning horn, seat adjustment, and mirror alignment must be functioning correctly. Avoid starting the machine with faulty gauges or control lights. Remove any loose objects from the operator's area. On machines equipped with rollover protection systems, wear a seatbelt at all times. Start the engine only from the driver's seat, setting all control levers to neutral position. When connecting jump wires, connect plus to plus and minus to minus (ground cable), ensuring that the ground strap is disconnected first to avoid electrical damage. Never start the engine by shorting electric terminals on the starter motor. Operating in enclosed spaces or trenches requires an adequate supply of fresh air to prevent exposure to hazardous exhaust gases. Before commencing work, verify that the surrounding area is clear of people and obstructions, especially when reversing. Give warning signals if necessary and cease operations immediately if individuals remain in the danger zone despite warnings. When driving, always wear a seatbelt and avoid operating on surfaces with inadequate load-bearing capacity or on icy conditions. In emergency situations, actuate the emergency stop switch promptly and do not restart until the hazardous condition has been resolved. If the machine comes into contact with high-voltage power lines, remain in the operator's stand, warn others to keep their distance, attempt to drive away from the danger zone if possible, and have the power switched off. Operating safety regulations are outlined in BW 100 AD-5 / BW 120 AD-5 / BW 100 AC-5 / BW 120 AC-5. When driving on inclines or slopes, adhere to maximum gradability limits to prevent accidents and ensure stable operation. Be extremely cautious when driving on slopes. Always maintain a direct up or down incline, as deviating from this can lead to reduced ground adhesion due to wet or loose soil. This significantly increases the risk of accidents. The tipping angle is measured in static conditions and should not be exceeded. With loose soil, acceleration/deceleration, running vibrations, steering, or attached accessories, the tipping angle may be severely compromised. Driving across slopes should be avoided entirely, as it poses a high risk of tipping over and subsequent severe or fatal accidents. It is essential to drive straight up or down a slope at all times. This precautionary measure applies especially when operating rollers with drum widths of 1 m or less, which are more susceptible to tipping near edges. When driving on public roads, match your speed to the working conditions. Avoid making extreme steering movements at high speeds, as this can lead to tipping over. Always wait to loaded transport vehicles and switch your lights on if visibility is poor. Maintain a safe distance from edges and embankments, and refrain from driving on public roads with the precision spreader laterally extended. Optional equipment requires specific precautions when using vibration for compaction. Check the effect of vibrations on nearby buildings and underground supply lines, and stop work if necessary to prevent damage. Avoid working with vibration on hard concrete, cured bitumen layers, or extremely frozen ground, as this can cause bearing damage. When parking the machine: Shift the travel lever to neutral position and lock it in parking brake position. Shut down the engine and remove the ignition key Mark any machines that could be obstructing the path with a clearly visible sign When parking on slopes and inclinations, apply appropriate measures (such as using metal wheel chocks) to secure the machine against rolling away. Always follow proper refueling procedures to prevent static charges from causing fires or explosions. Ensure the filling system is properly earthed, and monitor the entire refueling process. If you see that the fuel tank cover is loose, it's best to replace it right away. Get familiar with the fire-fighting equipment's location and operation, including reporting and fighting fires. Familiarize yourself with refueling safety rules for your specific machine type (BW 100 AD-5 / BW 120 AD-5 / BW 100 AC-5 / BW 120 AC-5). Mounting/removing precision spreader Always park the machine on level ground when mounting or removing the precision spreader, and ensure the engine is turned off. Do not step between the spreader and the machine while it's running. The precision spreader should only be mounted when empty. Before removing the bolts, verify that the lifting tackle has suspended it correctly. Only trained personnel (experts) are allowed to lift loads securely attached with shackles on lifting points. Ensure all lifting points are undamaged before lifting the precision spreader. Never use damaged or compromised lifting gear, and only use suitable lifting equipment for the job. Check that the tension is always in a vertical direction when lifting, ensuring it doesn't swing about while suspended. Do not stand underneath loads being lifted. Always park the precision spreader on firm ground. Filling/emptying the precision spreader Never fill the hopper with more than 200 litres of chipping materials to avoid exceeding the permitted weight limit. When emptying the hopper, ensure the engine is turned off for your safety. Optional equipment (Precision spreader) Safety regulations apply according to machine type. Empty the hopper only after shutting down the engine. Operating precision spreader Always lock the precision spreader in a lateral position before moving it during operations. Finishing spreading operation Only perform work on the precision spreader with the engine turned off. After finishing, empty and clean the spreading beam. Maintenance Work must be done by authorized personnel according to operating and maintenance instructions. Avoid touching hot engine parts. Use provided access steps and working platforms for overhead tasks or secure alternatives. Do not use machine parts as makeshift ladders. Keep unauthorized individuals away from the machine while it's running. Refrain from performing any maintenance while the machine is in motion or the engine is running. Secure the articulated joint with an articulation lock before starting work. Work on hydraulic lines Relief hydraulic pressures before working on hydraulic lines to prevent severe injury. Be cautious not to get caught by escaping hydraulic oil, and seek medical attention immediately if injured. Never step in front of or behind drums/wheels when adjusting the hydraulic system's settings. Never alter pressure relief valve settings. Drain the hydraulic oil at operating temperature - this can lead to scalding injuries. Always catch any leaked hydraulic oil safely. Always drain hydraulic oils in a way that's friendly to the environment. Dispose of them separately from other materials. Never turn on the engine after draining hydraulic oil. Once all work is done, check connections and fittings for leaks while the system remains depressurized. Regularly inspect hydraulic hoses visually. Replace them right away if you notice any damage or wear, such as cuts, cracks, or brittleness in the material. Also, be aware of deformations that don't match the original shape of the hose. This can include bending, buckling, layer separation, blister formation, or leaks. Always follow safety guidelines for BW 100 AD-5 / BW 120 AD-5 / BW 100 AC-5 / BW 120 AC-5 machines. Be cautious with hoses that are damaged, improperly installed, or have separated from their fittings. Similarly, check for signs of corrosion on fittings and make sure they're not damaged. Mixing up hoses can be a problem too, so ensure you're using the right type of hose (pressure range) at the correct location. Only genuine BOMAG replacement hydraulic hoses will guarantee this. Before working on the engine, turn it off and then drain the oil when it's operating at its usual temperature - be careful not to get scalded! Clean up spilled oil, catch any that's still running, and dispose of it properly. Store used filters and other materials contaminated with oil in a separate container and discard them responsibly. Don't leave tools or objects inside the engine compartment that could cause damage. Also, only change coolant when the engine is cold, and be sure to catch and dispose of it properly. Before working on electric parts, disconnect the battery and cover it for protection. Always follow safety guidelines outlined in the manual for your BW 100 AD-5 / BW 120 AD-5 / BW 100 AC-5 / BW 120 AC-5 machine or similar models like the BW 120 AD-4 or BW 120 AC-4.

Bomag bw 135 ad specs. Bomag bw 120 ad 5 parts manual. Bomag bw 120 ad-3 service manual. Bomag bw 120 ad-3 specs. Bomag bw 120 ad-3 wiring diagram. Bomag bw 124 specs. Bomag bw 120 ad specs. Bomag bw120ad-5 specs. Bomag bw 120 ad 5 service manual.