

 DANISH QUALITY

# BOBMAN<sup>®</sup>

MADE BY JYDELAND

## *User manual* **SELFLOAD**



DANGER

***READ  
BEFORE USE***



DANGER

[WWW.BOBMAN.COM](http://WWW.BOBMAN.COM)





**DECLARATION OF CONFORMITY** in accordance with  
MACHINERY DIRECTIVE 2006/42/EC ANNEX II A

**Manufacturer:**

Company: **Jydeland Maskinfabrik A/S**

Address: **Drammelstrupvej 2, 8400 Ebeltøft, Denmark**

**Hereby declares that the following machine type:**

Machine designation: **BOBMAN SELFLOAD – BSL3KD**

Machine number: .....

Year of production: .....

**Product description:** *Agricultural machine / spreader*

**Manufactured in accordance with Council Directive(s):**

2006/42/EC

*MACHINE DIRECTIVE OF THE EUROPEAN PARLIAMENT AND  
OF THE COUNCIL – DIRECTIVE 2006/42/EC of 17 May 2006 on  
machinery, and amending Directive 95/16/EC*

**The following standards are primarily used as a guide for general risk assessment:**

DS/EN ISO 4254-1/2015      *Agricultural machinery – Safety – Part 1: General requirements*

**Technical material is available at our office:** **Jydeland Maskinfabrik A/S**

Place/date:      Drammelstrup, March 2025

Signature:

Flemming Gits Jensen  
*Director | Development*

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## INTRODUCTION

**Congratulations** on your purchase of a Bobman bedding spreader!

Jydeland Maskinfabrik A/S would like to thank you for purchasing the BOBMAN SELFLOAD spreader. It is important to read and understand the manual before starting the machine. This user manual is prepared to aid:

- in the safe and efficient use of the machine;
- in detecting and preventing situations that may pose a risk of injury or damage to property;
- in keeping the machine in good condition and extending its service life.

The following warning symbols and signal words are used in this manual to indicate factors to be taken into account in order to reduce the risk of injury or risk of damage to material:



### ATTENTION: SAFETY WARNING SYMBOL

This symbol has the following meaning: **“Hazard. Attention! It's all about your safety!”**

This safety symbol refers to important safety information contained in this manual. It warns of an imminent danger that may cause serious injury to you or others in the vicinity of the machine. The warning symbol itself and the accompanying text indicate important safety considerations in this manual. It draws attention to instructions that concern the personal safety of the user or the safety of others. Watch out when you see this symbol: it's all about your safety! Carefully read the message that accompanies it and inform other machine operators.

### DANGER

This symbol indicates dangerous situations that may lead to serious injury or death.

### WARNING

This symbol indicates dangerous situations that may lead to serious injury or death.

### CAUTION

This symbol is used when minor damage may occur if the instructions are not followed correctly.

### NOTE

This symbol refers to information on the correct operation and maintenance of the machine. Failure to follow the instructions may lead to equipment failure or other damage.

Make sure all relevant instructions are available.

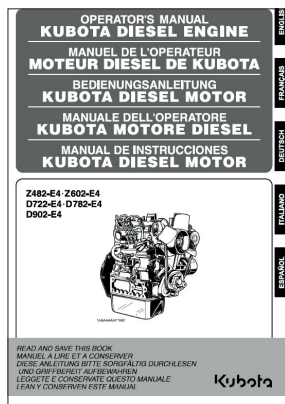


**Improper use of attachments may cause death or serious injury. Read all relevant operating instructions carefully and keep them in a place accessible to all operators.**

It is important to follow the information supplied with each attachment regarding correct use, connection, safety, and how to avoid dangerous situations. The use of some attachments may cause risks that are not present when using other attachments. Always carefully read user manuals for each attachment.

Contact your BOBMAN dealer for service, spare parts, or questions about the operation of your spreader or its attachments. Always keep this manual with the spreader. If the user manual is lost or damaged, you can download it from [www.bobman.dk](http://www.bobman.dk). Make sure that the new owner receives this manual when you sell or transfer the machine.

## Engine manual



In addition to your bedding spreader manual, make sure you have received and read the original engine manual.

Follow the instructions in the engine manual. If there is conflicting information, follow the instructions in the user manual.

**Machine intended purpose**

The BOBMAN spreader was specifically developed to create a cleaner, healthier, and more comfortable environment for cattle to produce the highest quality milk.

The BOBMAN bedding spreader for cattle makes it easy to carry out regular cleaning and maintenance work. The spreader sweeps boxes and spreads new bedding in a single operating cycle. To keep cell levels low, it is important to regularly remove infectious bacteria and replenish fresh bedding in the lairs. When these two activities are performed simultaneously, the result is higher milk quality and greater productivity. At the same time, it takes less time to clean the boxes, which improves productivity.

BOBMAN bedding spreaders include several different models, so as a customer you can be sure to find a spreader that meets all your needs: Bedding spreaders are suitable for farmers of dairy cattle of all sizes and help improve hygiene in areas where cattle live.

The machine is designed to be maintenance-free as far as possible. General maintenance can be carried out by the driver. Demanding repairs and maintenance work must be carried out by professionals. When carrying out any maintenance operations, protect yourself with appropriate personal protective equipment. Use only original spare parts. Familiarise yourself with the operation and maintenance instructions in this manual. Contact your BOBMAN dealer if you have any concerns about the operation or maintenance of the machine, or if you have any questions about service or spare parts.

In addition to the safety instructions in this manual, all occupational safety requirements, applicable regulations, and other restrictions relating to the use of the equipment must be observed. In particular, the mandatory restrictions on the use of equipment on public roads must be familiarised with and observed.

**Operator qualifications**

This bedding spreader may only be used by the drivers who have familiarised themselves with this operating manual and all other relevant instructions. Regardless of any previous experience with mowers, mini-loaders, quads, or other equipment, it is important to know how to operate this bedding spreader. Before using the bedding spreader near others, practice the safe use of the bedding spreader and its attachments in a confined space.

You need to be physically and mentally fit and pay constant attention to what is going on in your environment. Never use the equipment if you are under the influence of medications that may impair your ability to operate the equipment safely. Do not use the bedding spreader if you are under the influence of alcohol or other drugs. Depending on the scope of work, you may also be asked to read, understand, and comply with all applicable employer and national rules, standards, and regulations.

**Versions of this manual**

Jydeland Maskinfabrik A/S has a policy of continuous product development. Updated versions of the user manual replace previous versions of these operating instructions, provided that the year listed on the first page matches the year stated in the original user manual. Ask your distributor for the latest version of the manual. Some features or technical details presented in this manual are subject to change without prior notice. The pictures in this manual may show additional accessories or functions that are not currently available in your market. Jydeland Maskinfabrik A/S reserves the right to change the content of the user manual without prior notice.

**Optional accessories available**

Any accessories or additional equipment shown in this manual may not be available. The illustrations in this manual show some of the optional equipment. Availability of optional equipment may vary. Certain types of optional equipment may prevent the installation and use of optional equipment or accessories. For more information, contact your local Bobman dealer.

**Always keep this manual with the machine.**

**Read this manual before starting the machine.**

Once you have read this manual, and any other manual, place it in the box under the seat. Always keep this manual with the machine. If the manual is lost or damaged, you can ask your Bobman dealer for a new copy. Make sure that the new owner receives this manual when you sell or transfer the machine. Ask your dealer for an soft copy of this manual.

**BOBMAN guarantee**

This guarantee applies specifically to the Bobman SELFLOAD. Any repairs or modifications carried out without prior agreement with Jydeland Maskinfabrik A/S will void this warranty. During the first year or the first 1,000 hours of operation (whichever comes first), Jydeland Maskinfabrik A/S guarantees the replacement or repair of any part or defect that may occur in accordance with the conditions described below:

1. The product was maintained according to the schedules set by the manufacturer.
2. Any damage caused by negligent handling or exceeding the approved specifications described in this manual will void the guarantee.
3. Jydeland Maskinfabrik A/S is not liable for downtime or other consequential damage resulting from product failure.
4. Only original spare parts from Jydeland Maskinfabrik A/S may be used for routine maintenance.
5. Any damage caused by the use of the wrong fuel, lubricants, coolants, or cleaning agents will void the guarantee.
6. The BOBMAN guarantee does not apply to consumables (e.g., tyres, batteries, filters, drive belts, etc.) unless it can be clearly demonstrated that these parts were faulty on delivery.
7. Damage caused by the use of attachments not approved for use with this product will void the guarantee.
8. In the event of defects attributable to manufacturing or installation, return the BOBMAN machine to the dealer for repair. Travel and shipping costs are not covered by the guarantee.

## 1. SAFETY FIRST



**DANGER**

**Careless or improper handling of the bedding spreader may cause serious accidents. Before using the bedding spreader, familiarise yourself with the correct use of the machine. Familiarise yourself with this manual, as well as all relevant safety instructions, local regulations, and safe working practices.**



Familiarise yourself with the speed, braking, steering, and stability of the machine before work. Ensure that everyone working with the equipment is familiar with the safety precautions.

If you have no previous experience with machinery, familiarise yourself with the machine in a safe and open area where there are no people around.

### **General safety instructions:**

1. Apply correct working posture. Make sure you sit well in the driver's seat when driving, keep your feet in the right place, and keep at least one hand on the steering wheel.
2. Always switch off the engine and remove the ignition key before leaving the driver's seat.
3. Switch off the main battery switch after work or when the bedding spreader is left unattended.
4. Always refer to the manual of the attachment and make sure it is always available to all users.
5. Read the attachment manual and follow the instructions provided.
6. Never transport people on the bedding spreader.
7. Be aware of your surroundings and bystanders.
8. Look out for abnormalities in the operation of the bedding spreader, such as changes in noise or vibration, or other signs of malfunction.
9. Keep your hands, feet and clothing away from moving parts, hydraulic components, and hot surfaces.
10. Make sure there is enough space around the machine to drive and work safely.
11. Do not use the machine indoors or in potentially explosive environments, or where dust or gases may present a fire or explosion hazard.
12. Keep flammable materials away from the engine. Materials in the engine compartment, such as dirt, hay or dust, pose a fire hazard.
13. Read the storage and transport instructions on the relevant pages.

14. Follow all instructions for inspection, servicing, and maintenance. If you notice any faults or damage to the machine, they must be repaired before restarting it.
15. Always stop the engine and release pressure from the hydraulic system before carrying out any maintenance or repair. Leave the machine to cool down.
16. It is forbidden to use the machine by anyone who has not read the safety instructions and is not familiar with the safe and correct use of this machine.
17. Never use the machine if you are under the influence of alcohol, drugs or medications that impair judgement or cause drowsiness, or if your health is otherwise impaired.
18. When using the machine on slopes, the operator is responsible for any damage to the machine and personnel.

**Hydraulic pressure – risk of serious injury.**

Residual pressure may remain in hydraulic lines and other hydraulic components, which may cause hydraulic oil to spray and penetrate under the skin. Never use your hands to search for possible leaks in hydraulic systems – use a piece of cardboard instead. Reduce the residual hydraulic pressure before searching for leaks, before disconnecting fittings, and before any service intervention. If hydraulic fluid gets under the skin, immediately seek medical attention. This can quickly cause serious injury, even if the symptoms are minor at first.

**Always fasten the seat belt when operating the machine.**

If the machine tips over, the safety belt will hold you in the safe area.

If you do not fasten the seat belt, you could be crushed between the machine and the ground if the machine tips over. For more information on seat adjustment and seat belts, see page 29.

**Risk of the machine tipping over on uneven ground.**

The machine is not suitable for use on slopes.

Always drive the machine slowly and only on level, firm ground.

**Drive slowly on slopes. Keep your seat belt fastened to stay in the area of the protective structure when the machine tips over.**

**Drive slowly in curves or turns.**

**Never drive diagonally over the edges.**

At full speed, do not turn the machine – reduce speed and take turns in a controlled manner.

Always keep an adequate distance from edges and slopes. Drive straight up or down steep slopes, not across the slope. When using the machine on slopes, the operator is responsible for any damage to the machine and personnel.

**LARGE ROTATING SCREW**

Risk of crushing. Before working near areas marked with this symbol make sure the machine is completely stopped.

**COMPRESSION**

Risk of crushing. Take special care when using this function and ensure that precautions are observed.





### ROTARY BLOWER

Before working near areas marked with this symbol make sure the machine is completely stopped.



### SMALLER ROTATING SCREW

Risk of crushing hands. Before working near areas marked with this symbol make sure the machine is completely stopped.



### HEARING PROTECTORS, SAFETY GOGGLES AND RESPIRATOR MASKS

The use of hearing protectors during normal machine operation is recommended. It is also advisable to wear safety goggles and respirator masks during work that generates dust to ensure optimum safety.

Wear safety goggles when handling hydraulic components and when carrying out maintenance or service work.



### Danger – hand injury!

Hand injuries are the most common occupational injuries. Warning: do not bring your hands close to the areas where this sign is located! There is a risk that hands will be injured in various ways.



**Wear protective gloves**

Wear safety goggles when handling hydraulic components and when carrying out maintenance or service work.

**Warning – hot surface!**

Hot surfaces such as machine parts, containers, hoses, or fluids may not always be visible. Pay attention if such a sign is placed on the machine. Appropriate protective equipment should be used for this purpose.



Hot surfaces must not be touched without appropriate protective equipment.

**Risk of contact with moving parts.**

**Always switch off the engine before opening the engine compartment.**



The engine cooling fan, alternator belt and pulleys move at high speed when the engine is running.

**Never open the engine cover while the engine is running.**

**Changes**

**Never** modify the machines or attachments. Never weld or drill holes in chassis components. Welding repairs can weaken the machine structure and must therefore only be carried out by qualified service personnel. Any modifications to this machine must be approved in advance by an authorised Bobman representative. Modifications to the machine or attachments may cause danger and, in the worst case scenario, serious injury or death. Unauthorised changes may increase the risk of accidents and injuries and shorten the life of the machine. Changes introduced to the engine may cause it to no longer meet the emissions requirements. Use only original spare parts.

### Electrical system and battery operation

The battery (12 V electrical system) of the bedding spreader is located under the seat on the right side of the machine.

Always handle the battery with care. Lead-acid batteries, if handled incorrectly, can emit flammable and explosive gases. Adequate ventilation must be provided when charging the battery. Keep arcs, sparks, open flames, and lit cigarettes away from the battery.



**Short-circuiting the battery may cause sparking or fire.**

**Disconnect the battery using the main battery switch before opening the engine compartment and before carrying out any maintenance on the machine.** Never place metal objects on the battery. Keep the top surface of the battery and the area around it clean.

**Battery acid may cause severe skin burns. Handle damaged batteries with care and wear suitable protective gloves, safety goggles, and protective clothing.** The battery is sealed – never try to open it.

**Lead-acid batteries produce flammable and explosive gases when charged. Adequate ventilation must be provided when charging the battery.** Keep sparks, flames, and lit cigarettes away from the battery. Never charge a frozen battery. A frozen battery may explode when charged.

### Warning – lead

- Wear protective gloves when handling the battery.
- The battery contains lead, which is a harmful substance. Avoid unnecessary contact.
- Wash hands thoroughly with soap and water after contact with the battery.
- Used batteries must be disposed of and recycled in accordance with current legislation.

### Note the following when working with the battery:

- The battery contains corrosive sulphuric acid, which causes severe burns in contact with skin. Avoid contact with skin or clothing. If electrolyte gets on skin or clothing, rinse immediately with plenty of water. In the case of eye contact, rinse with plenty of water for at least 15 minutes and immediately seek medical advice.
- To avoid sparking, disconnect the negative (-) wire first and connect it last.
- Before connecting the battery cables, make sure the polarity is correct: Incorrect connection may cause serious damage to the electrical system of the machine and cause sparking, fire, or explosion of the battery.

- If a fuse repeatedly breaks, you should determine the cause. Always use the fuse of a correct size.

If the battery needs to be replaced, its size, installation, and electrical characteristics must be compatible with the original battery. The battery must be installed correctly and must not move. If the battery is not installed correctly, the battery or its cables may be damaged during use, which may cause sparking, fire, ejection of battery electrolyte, and electric shock. The battery cables must be connected and positioned in such a way that they cannot be cut. When replacing the battery, clean and check the battery connector and battery cables.

Always return used batteries to a recycling station.



### **Main switch**

Using the main switch, the electrical system is disconnected from the battery, so that they can be quickly separated, if required. Before leaving the machine, disconnect the unit to protect it from discharges and accidents, and to ensure additional theft protection.

1. Turn the lever ON clockwise – the battery connection is connected to the electrical system.
2. Turn the lever OFF counterclockwise – the battery connection is disconnected.

Never switch off the main switch during operation. First stop the engine and then switch off the main switch.

## 2. BEDDING SPREADER DESCRIPTION

### 2.1. Machine identification

Record the identification information of the bedding spreader below to facilitate ordering of spare parts etc.

1. Bedding spreader type code:
2. Bedding spreader serial number:
3. Month/year of production
4. Engine serial number:

The bedding spreader serial number is printed on the nameplate, which also indicates the machine model.

The following page describes the location of the engine serial number.

Dealer: \_\_\_\_\_

Contact details: \_\_\_\_\_

#### NOTE

Write down the serial number and month of production of the bedding spreader and always have them at hand when communicating with your Bobman dealer or service partners. The serial number, together with the month/year of production, identifies the relevant parts for the bedding spreader.

#### Bedding spreader nameplate:

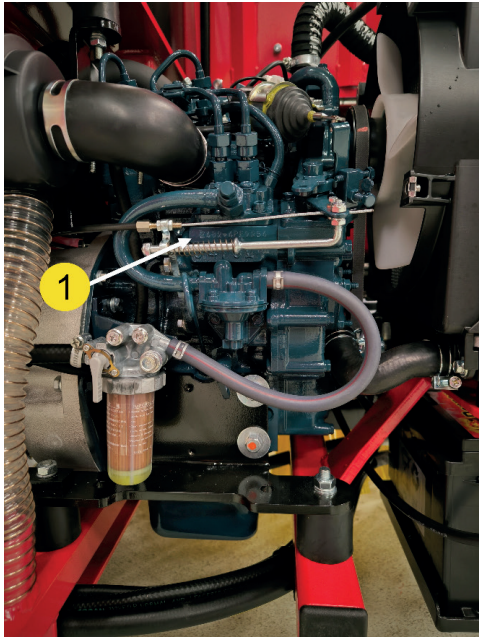
1. Name and address of the manufacturer
2. CE marking
3. Bedding spreader type code
4. Month/year of production
5. Serial number



**Engine nameplate:**

Depending on the model, the engine has one or more markings regarding information on the emission standards met by the engine.

These markings include information on the engine model and serial number, the month and year of production of the engine, and on the type approval.



EU – type-approval label on the engine

## 2.2. Main parts of the machine

The photo below shows the most important parts of the **Bobman Selfload**:



- (1) Bedding container
- (2) Scraper handle
- (3) Screw and blower start switch
- (4) Brush lever
- (5) Brush

- (6) Damper lever
- (7) Blower housing
- (8) Tilt box
- (9) Small box start mechanism
- (10) A-frame

### 2.3. Markings and labels

In the figure below and on the next page, the labels and markings that must be visible on the device are presented. Replace missing or illegible warning labels. For new labels, contact your Bobman dealer or the manufacturer.



**Warning labels contain important safety information to help you remember the risks associated with using the equipment.**

Ensure that the following markings and labels are clean, undamaged, and legible. If any of these labels are illegible or are missing, do not use the charger until they have been replaced. Ask your Bobman dealer about new labels.

1. Manufacturer's marking: "BOBMAN", 85 cm
2. Manufacturer's mark: "SELFLOAD"
3. Warning signs (collective marking)
4. "Hot surface" warning sign
5. "Risk of crushing" warning sign
6. Warning signs (collective marking)
7. "Use seat belt" symbol
8. "Risk of overturning on uneven ground" and "Drive slowly on turns or curves" warning signs.
9. Logo
10. Manufacturer's marking: "BOBMAN", 23 cm
11. "Emergency stop" symbol
12. "Mounting point" symbol
13. Manufacturer's marking: "BOBMAN", 45 cm
14. "Disinfection container min-max" symbol
15. "Engine speed" symbol
16. "Control handle" symbol
17. "Screw on/off" symbol
18. "SL disinfection container on/off" symbol
19. "1WD/3WD" symbol
20. "Rotating fan and brush" warning signs
21. Side label

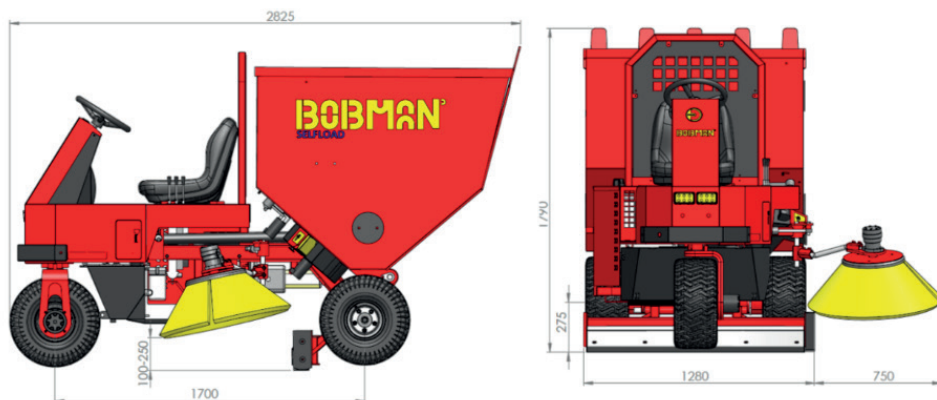






## 2.4. Technical specification

### Bobman Selfload dimensions



General information on Bobman Selfload	
Wheel drive	1WD/3WD
Bedding material	Shredded straw, sawdust, wood chips, paper pellets, lime, or disinfectant powder
Charger	Self-loading
Box volume	1000 l
Spreading range	50–200 cm
Brush diameter	75–85 cm
Scraper width	1.3 m
Width	1.3 m
Length	2.7 m
Height	1.7 m
Weight	950 kg
Turning radius	1.8 m
Clearance	27 cm
Noise	87 dB

## 2.5. Engine specifications

<b>Kubota Z482-E4 specifications</b>	
<b>Type</b>	Vertical, water-cooled, four-stroke Diesel engine
<b>Number of cylinders</b>	2
<b>Drilling and impact (mm)</b>	67 × 68 (2.64 × 2.68 in)
<b>Total displacement (l)</b>	0.479 (29.23 cu. in.)
<b>Combustion chamber</b>	Spherical (ETVCS)
<b>SAE NET intermittent power (kW/rev/min)</b>	9.3 / 3,600 (12.5 HK / 3,600)
<b>SAE NET continuous power (kW/rev/min)</b>	8.1 / 3600 (10.8 HK / 3,600)
<b>Maximum idling speed (rpm)</b>	3,800
<b>Minimum idling speed (rpm)</b>	1,250–1,350
<b>Ignition sequence</b>	1–2
<b>Direction of rotation</b>	Counterclockwise (viewed from the flywheel side)
<b>Injection pump</b>	Bosch MD mini-pump
<b>Injection pressure</b>	13.73 MPa, 1991 psi (140 kgf/cm <sup>2</sup> )
<b>Injection time (before T.D.C.)</b>	0.331 rad (19°)
<b>Compression ratio</b>	23.5:1
<b>Type of fuel</b>	Diesel fuel No. 2-D
<b>Lubricant (API classification)</b>	Above CF
<b>Dimensions (L × W × H) mm (in)</b>	351 × 389 × 520 mm (13.82 × 15.31 × 20.47 in)
<b>Dry weight (kg)</b>	53.1 kg (117.1 lbs)
<b>Starting system</b>	Starting unit (with a glow plug)
<b>Starter</b>	12 V, 0.8 kW
<b>Charge generator</b>	12 V, 150 W
<b>Recommended battery capacity</b>	12 V, 28 Ah (equivalent)
<b>EU engine family name</b>	HKBXL.778KCB
<b>CO<sub>2</sub> emission data (g/kWh) Off-road steady state test cycle</b>	1,019.8

### Information on emissions controls

The manufacturer of the machine engine certifies that the engine meets the emissions requirements listed in the table above and on the engine markings. Changes to the settings of the engine or steering system, fuel injection system, exhaust system, or air intake may cause the engine to no longer comply with the emissions requirements. Use only the specified type of fuel and oil. The engine must be serviced in accordance with the service plan. Any engine-related problems or faults must be rectified to ensure the compliance with the emissions requirements.

### 2.6. Engine oil requirements

Use only good quality engine oil with a viscosity in the range recommended by the engine manufacturer according to API classification CF, CF-4, CG-4, CH-4 or Ci-4. See also the Kubota user manual. At very low temperatures, use a high quality multi-grade oil.

Above 25° C (77° F)	SAE30 or SAE10W-30 SAE15W-40
-10° C to 25° C (14° F to 77° F)	SAE10W-30 or SAE15W-40
Below -10° C (14° F)	SAE10W-30

### IMPORTANT:

If you use a different oil to the previous one, it is essential to drain the entire previous oil before adding a new one.

### 2.7. Tyres



**Tyres: 20\*10.00-10/6 TL LG-306**

**Rim: 7.00lx10 S 5/M12.5/80/115**

**Tyre pressure: 2.2 bar**

### Ballast tyres

Some tyres can be filled with a special type of heavy foam to create additional counterweight. Filled tyres are also useful in areas where standard tyres can be expected to frequently become flat. When driving with ballast tyres, acceleration and braking distances can be enhanced. Ballast tyres contain no air and do require no tyre pressure monitoring.

### 3. START-UP AND CONTROLS



**Always remember – safety first.**

Check all machine functions in an open and safe area. Ensure that there are no persons in the driving area of the machine and in the danger zone of the attachment.



**Danger of suffocation – do not operate the machine in an enclosed space.**

Exhaust gases can be fatal within a few minutes. Do not use the machine in closed or insufficiently ventilated areas. Open doors or garage doors before starting the machine.



**Risk of fire, explosion, and serious damage to the engine.**

Do not use starting fluids. The use of starting aids, such as ether, may cause fire, explosive noise, and serious engine damage. Do not use starting aids. Never mix diesel oil with petrol or other fuel.



**Risk of collision – make sure that the machine cannot move unintentionally.**

Do not bring your hands or feet close to the handles or pedals during start-up.



**Risk of injury and uncontrolled movement – never bypass the standard starter controls.**

Always use the ignition key to start the machine. Omitting the ignition key may cause sparking, burns, fire, engine damage, and contact with moving engine parts.

### 3.1. Commissioning

Every driver and operator must read and understand this manual before start-up.



Damage and faults to the machine/attachments may lead to serious accidents.

- If faults or deficiencies are identified during an upcoming inspection, the machine must not be used until they are corrected.
- The machine may only be used in fault-free mode and for a predetermined purpose.

#### **Check that the machine and attachments are in reliable condition.**

##### **Visual inspection of the machine during rounds:**

- External machine parts must not be broken or deformed.
- There must be no leakage on the machine.
- The hydraulic system must not be defective. Replace hoses or pipes in case of leaks.
- The attachment must be on the ground.
- Is the attachment properly locked and secured?
- Is the walking surface clean?
- Tyres must not be damaged or worn.
- Is the wheel air pressure correct?

##### **Fluid level control:**

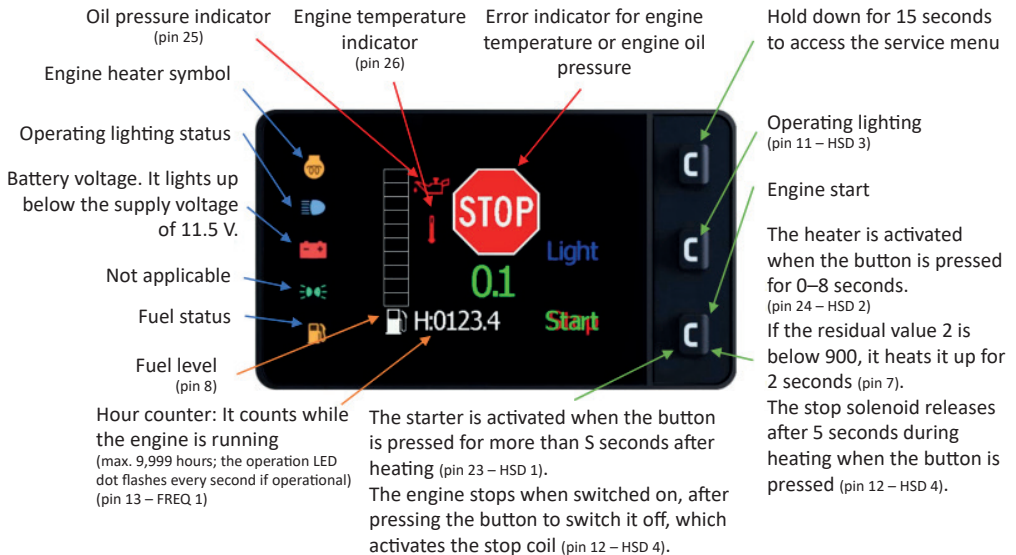
- Is there sufficient amount of diesel oil in the tank?
- Is the engine oil level correct?
- Is the oil level in the hydraulic tank correct?
- Is there sufficient amount of engine coolant?

## 3.2. Multifunction display



Jydeland BOBMAN SELFLOAD  
Smartview manual

Pin = plug end inserted  
JST Smartview plug



Charging relay (pin 5 – LSD 1)

The charging relay is activated 20 seconds after the engine is started

Other connections

- Power supply 12 V DC (pins 1, 2)
- 0 V DC ground (pins 3, 4, 21, 22)

### TECHNICAL FEATURES

**Operating voltage:** 8 – 32 Vdc, protected against reverse polarity

**Operating temperature:** -20°C +70°C

**Material:** PC- ABS

**Sealing:** IP65

**CPU:** - 16 bit Spansion microcontroller

**Memory:** - FLASH: 256,5KB + 32KB  
- RAM: 16KB



### 3.3. Seat belt tensioning and operator seat adjustment

#### Operator seat adjustment:

1. Pull out the handle (3).
2. Push the seat forwards or backwards into the desired position.
3. Release the handle and check that the seat is correctly locked.



**Danger of injury!** Always fasten your seat belt. Do not route the seat belt over hard or fragile objects (e.g., keys or glasses).



#### Seat belt tensioning:

1. Sit in the driver's seat, resting your back against the backrest.
2. Pull the belt across your pelvis.
3. Insert the locking pin (1) into the lock (2).

#### Unfastening the seat belt:

1. Press the red button on the belt lock (2).
2. The belt will be automatically retracted.

### 3.4. Starting the machine

You can set the ignition key to the following positions:

#### **OFF – switch off the engine.**

- Most of the electrical systems on the machine are switched off. To switch off all systems, turn off the main battery switch.
- You can remove the ignition key.

#### **ON – electrical systems can be used.**



#### **Starting the engine:**

1. Perform a daily check.
2. Set the main switch to ON.
3. Sit in the driver's seat, adjust the seat and fasten the seat belt.
4. Move the engine speed control lever to approximately 1/4 of full engine speed control.
5. Ensure that the attachment's hydraulic system is switched off (the lever is set to neutral).

***Do not press the drive pedals.***

6. Turn the ignition key clockwise to ON. The multifunction display will light up.
7. When you press the start button (2), the glow plug heating is activated for 8 seconds, after which the engine starts.

#### **NOTE**

Stop the engine as soon as possible if any of the following occurs. Find the cause before restarting.

**Stop if the following is found:**

- The oil pressure or fault indicator lamp comes on during operation.
- The engine speed increases or decreases rapidly on its own without touching the speed switch.
- There is a sudden and unusual noise.
- Sudden increase in engine vibration.
- The colour of the exhaust gas suddenly becomes darker or white.

**3.5. Engine shutdown (safe stop procedure)****NOTE**

Do not switch off the engine immediately after heavy work. Allow the engine to idle for approximately one minute before stopping. This will increase the engine life.

**Engine shutdown**

1. Stop the machine on a flat, firm, and dry surface.
2. Set all hydraulic levers to zero.

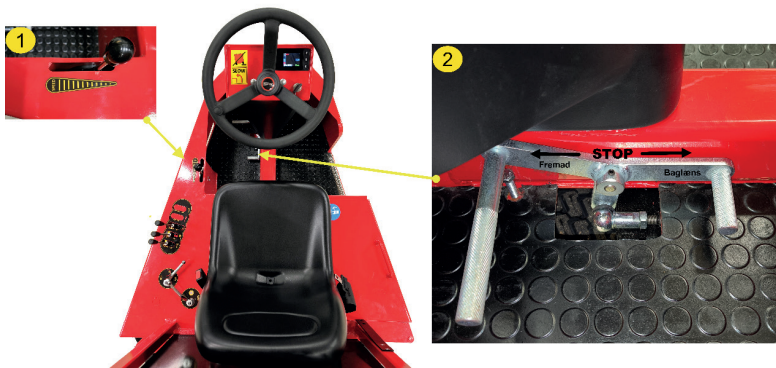
**Ignition key storage**

1. Turn the ignition key anti-clockwise to OFF.
  2. Remove the key from the ignition switch.
  3. Turn the main switch (2) counterclockwise.
  4. Remove the main switch key from the ignition switch (2).
  5. Keep the ignition switch and the main switch in a safe place.
- ✓ The machine is now protected against unauthorised start-up.

### 3.6. Driving the machine

The BOBMAN Selfload is equipped with a hydrostatic drive system. The variable displacement hydraulic pump is controlled proportionally by two pedals. To drive the machine, use the pedals and the accelerator lever.

- The appropriate engine speed is selected using the accelerator lever (1) on the instrument panel, and the desired direction of travel and speed are controlled by the pedals.
- For maximum pushing force, lightly press the pedals (2); for higher travel speed: press the pedals harder.



#### How to use the control pedals:

**Driving forward:** Carefully depress the left drive pedal until the machine starts to move slowly.

**Driving backwards:** carefully press the right drive pedal.

The machine is not equipped with a normal brake. The machine brakes automatically when the accelerator pedal (2) is released. If you want to stop, release the pedal slowly. The machine will slow down and stop. If a quick stop is required, press the drive pedal in the opposite direction of travel.

**The accelerator lever (1)** can also be used to control the engine speed while driving. The basic rule of thumb is to use a lower engine speed for light work and a higher engine speed for heavy work or at high speed.



#### Risk of the machine tipping over – avoid turning at high speed.

If you turn the steering wheel quickly while driving, the machine may tip over. Slow down before sharp turns. Always use smooth movements to steer the machine.

### 3.7. Attachment hydraulics control and other functions

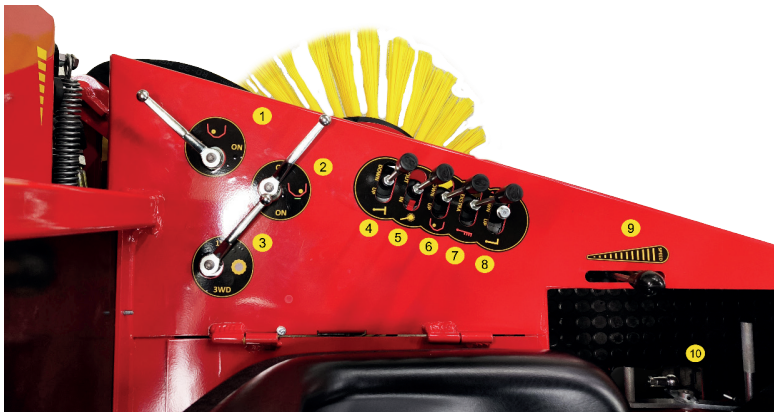
Most of the machine's functions are controlled via the controls on the operator's left-hand side: bedding container, scraper, screw and blower housing, brush, damper, tilt box, small box, and A-frame. The following sections describe various functions.

All functions are hydraulically driven. To activate or deactivate the function, move the lever of the hydraulic valve or rotate the valve to the position indicated in the figure.

When using the attachment/function for the first time, gently move the lever to check and verify movements.

#### NOTE

When working with attachments that require a continuous flow, such as attachments with a hydraulic motor, it is important that the control lever is in the fully activated position. If the control valve is not fully open, which restricts oil flow, the hydraulic system may quickly overheat.



- |                           |                      |
|---------------------------|----------------------|
| 1. Small box start        | 6. Tilt box          |
| 2. Screw and blower start | 7. Additionally..... |
| 3. 1WD/3WD                | 8. A-frame           |
| 4. Scraper handle         | 9. Gas lever         |
| 5. Brush lever            | 10. Drive pedals     |

## 3.7.1 Filling with bedding



Risk of overturning. Do not overfill the box! Overloading may lead to instability and a risk of overturning.

Make sure no-one is in the working area of the machine before lowering or reversing the box.

Always use a low speed when filling to ensure safe and controlled operation.



Filling the box with bedding:

- A. (1) Push the hydraulic lever (6) forward to activate the box cylinders. Lower the box to the ground. (2) Then use the drive pedal to gently turn back towards the bedding until the box is filled.
- B. When the box is full, slowly continue backwards by pulling the hydraulic lever back to raise the box to the vertical position.

### 3.7.2 Brush arm control

Before using the brush, place the machine directly next to the cleaning position and adjust the height and angle of the brush accordingly. All adjustment operations must be carried out with the engine switched off. The engine must only be started when the operator is in the machine and has ensured that all hydraulic levers are in neutral or off.



Ignition of the engine outside the driver's seat may cause serious injury due to contact with rotating brush components.



1. Push the hydraulic lever (5) forward to activate the brushing function. This will pull the arm out and start the brush rotation. The valve lever has a locking function that ensures a continuous flow of oil into the hydraulic system. Pull the hydraulic lever back to deactivate the brush and return the arm to the folded position.
2. To adjust the brush arm, loosen the fixing screws, move the arm to the desired position, and then make sure all screws are properly tightened.
3. The angle of the arm can be adjusted by shortening the chain that secures it.



### 3.7.3 Starting the screw and blower



Make sure no one is near the machine before starting the blower. Starting the machine in the presence of others may lead to dangerous situations.

Turn the lever (2) clockwise until it reaches the ON position to switch on the blower and screw.



1. **Bedding adjustment:** The amount of bedding blown out can be adjusted by tightening the screw (1) (-) or loosening it (+).
2. **Setting bedding distance:** The distance to the bedding can be adjusted on the screen (3), allowing the distribution of material to be fine-tuned.



**If the blower is blocked, switch off the engine immediately.**  
Check the hydraulic system for pressure before repair.

**Avoid contact with the throttle to avoid injury.**  
Special care must be taken when working with the damper as it can move automatically due to spring load.

### 3.8. If the machine tips over

The machine should not tip over if you are careful and follow the instructions in this manual. However, it is important to know what to do if the machine tips over. The machine may tip over on its side.



**Risk of crushing the structure if the machine tips over. Always fasten the seat belt and always remain in the area protected by the seat belt.**

Always fasten the seat belt to prevent crushing between the machine and the ground in the event of a tip-over.



#### **NOTE**

If the machine tips over: switch off the machine engine immediately. **To stop the engine, press the emergency stop button or turn the key to the off position.** If the engine and pumps continue to run after the machine has tipped over, the machine will quickly be damaged and hydraulic oil will leak out. Lift the machine as soon as possible to avoid fuel and oil leaks. Engine oil can leak inside the engine, causing serious engine damage if the engine is restarted when the machine is lifted. **Contact the service department before starting the engine.**

## 4. WORKING WITH ATTACHMENTS

### 4.1. Bobman Selfload attachments

**NOTE**

Wear appropriate protective clothing, safety footwear, and gloves when installing and removing attachments. This also applies to their use and application.

Before installing an attachment that is not specifically designed for this machine, contact the relevant dealer. The dealer checks how and whether such attachment can be installed on the machine and used. This is important for the safety of the operator and the machine, as well as for any warranty claims.

It is also forbidden to use attachments that jeopardise the safety or stability of the machine.

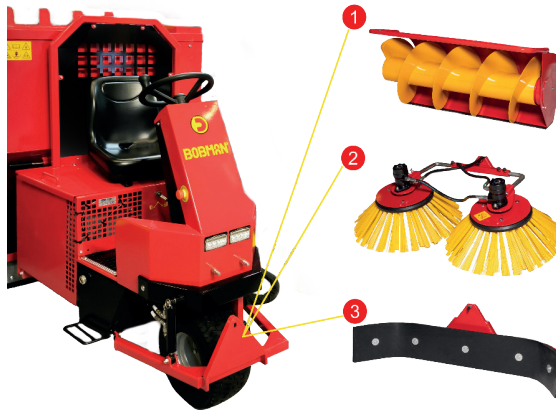
**Risk of trapping during attachment installation.**

Do not place your hands between the front lift and the attachment.

**Danger of burns due to contact with hot hydraulic connectors**

Wear protective gloves when disconnecting hydraulic connectors.

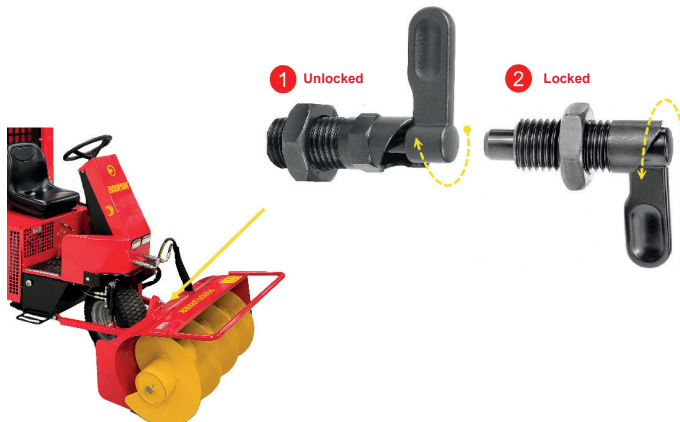
The attachment can be selected as an option and can be mounted on the front of the front lift A.



1. Screw feeder, 110 cm
2. Double brush, 2 × Ø65 cm
3. Scraper, 145 cm

#### 4.1. Connecting attachments to the machine

1. Drive the machine to the attachment.
2. Lower the A-frame so that it can go under the hooks of the attachment.
3. Drive the machine until the A-frame fits snugly under the attachment hooks.

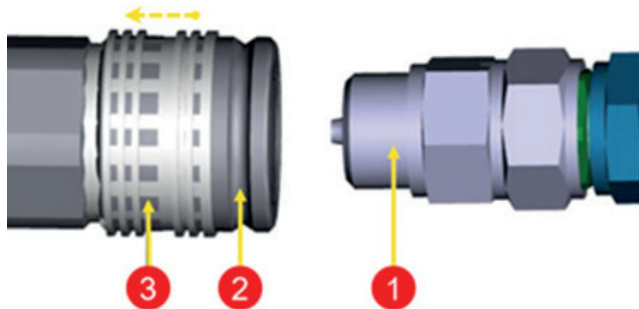


4. Use the lever to lift the A-frame so that the attachment is slightly raised above the ground.
5. Lock the attachments (2).
6. Switch off the engine and remove the ignition key.
7. Move the lever of operating hydraulic components back and forth several times to release the outlet pressure.
8. Install the hydraulic connectors of the attachment to the machine:

**NOTE**

**Risk of damage.** Keep the hydraulic connections clean.

Clean the plug and the coupling with a lint-free cloth before use.



1. Coupling plug / 2. Coupling joint / 3. Ring

1. Pull down and hold the coupling joint ring (3).
2. Push the coupling plug (1) on the attachment's hydraulic line into the coupling joint (2).
3. Release the coupling ring. Check that the connection is secure.
4. When disconnecting, pull the ring down, hold and pull out the hydraulic line.

**NOTE**

**Risk of accidents.**

**Check that all installed equipment is correctly positioned.**

5. Start the engine.
  6. Check the hydraulic functions of the attachment before use.
- ✓ The attachment is ready for use.

#### 4.2. Operation of the attachment's hydraulic system

**NOTE**

When starting the engine, the hydraulic lever must be in the OFF position.

**(1) Activation of the A-frame hydraulic system:**

A lever located under the seat is used to activate the hydraulic system of the attachments.

**(2) A-frame lever:**

The lever is used to raise and lower the A-frame:

- Pull back to lift the A-frame.
- Move forward to lower the A-frame.

## **5. STORAGE, TRANSPORT, MOUNTING POINTS**

### **5.1. Storage**

If the machine is to remain unused for an extended period of time, perform the following steps: Thoroughly clean and dry the machine, including the engine compartment, before stopping. It is important to place the machine in a dry and frost-free place and it is recommended to cover it with a tarpaulin. Top up the fuel tank, lubricate the machine, and change the engine oil and hydraulic oil. During downtime, the engine should be started once a month and the machine should be run for a short distance so that the moving parts receive a new coat of oil. In addition, the battery must be charged.

Check the oil level after a period of downtime and top up if necessary. The machine should also be lubricated.

### **5.2. Transport, mounting points**

Always load the machine without attachments. Clean the machine of coarse sediment before loading. Always transport the machine on suitable equipment and use only undamaged loading ramps. Position the machine correctly on the transport equipment. Secure the operating hydraulic system in the zero position. Remove the ignition key and the main switch key. Secure the machine with clamping straps to the mounting points as shown.



A machine that is not properly secured can lead to the machine.

## 6. SERVICE AND MAINTENANCE



**Always follow basic safety procedures and observe the following instructions when carrying out maintenance or service work:**

1. Switch off the machine and wait for it to cool down before carrying out any service operations.
2. Set the main battery switch to the OFF position.
3. Disconnect the battery before working on the electrical system or battery.
4. Maintenance work on the hydraulic system should only be carried out by people with the appropriate training.

For information on service procedures, contact your Bobman dealer.



**Danger of burning, cutting, and splashing with oil or dirt. Wear safety goggles and protective gloves during all maintenance operations.** Always wear protective gloves, safety goggles, and protective clothing. Hot surfaces and sharp edges may cause injury. General skin contact with oil and grease may be harmful – wash hands thoroughly after contact.

**Fluid ejected under high pressure may penetrate the skin and cause serious injury – do not touch pressurised parts.** Before working on hydraulic components ensure that the hydraulic system on the machine and attachment is fully depressurised. When opening or closing the connector, do not hold your hand near the coupling or use your hands to detect leaks. If a leak is suspected, hold a piece of cardboard below the leak. If hydraulic fluid gets into the skin or is suspected to have penetrated into the skin, seek medical attention immediately.



**Risk of damage and burns from spilled hydraulic oil – never use the machine or attachments if there are leaks in the hydraulic system.** Hydraulic lines and their components should only be checked when the machine is safely stopped and the hydraulic system is depressurised. Repair leaks as soon as they are detected – a small leak may quickly become dangerous. Leaking hydraulic fluid may cause serious injury and be harmful to the environment. Hot hydraulic oil may cause serious burns. Check the hydraulic lines for cracks and wear. Stop work immediately and stop using



the machine if the outer layer of one of the hoses appears worn. If a fault is detected, replace the hose or component.

**NOTE**

**The fluids in the machine are harmful to the environment.** Prevent leaks as far as possible.

Take used oil and fluids to a recycling centre. Familiarise yourself with local requirements for recycling or disposal of other components.

### **6.1. Daily inspections and periodic maintenance schedule**

The machine needs to be serviced and maintained to be kept in good and safe condition. This section of the manual describes the service and maintenance points and maintenance intervals for the machine and its engine. For more detailed instructions for each service operation, see the following pages.

The required maintenance operations in this manual are divided into the following sections:

1. Daily maintenance that all machine users may perform without special equipment or training. As part of your daily routine, check the condition of the machine and its equipment before starting it up. Solve any problems found.
2. Periodic maintenance of the machine and its engine, for which special equipment and training may be required. The service plan provides for a more thorough inspection of the machine, in addition to daily maintenance.

Some periodic maintenance procedures are intended to be performed by qualified service personnel. These service functions are indicated in the service plan and in the instructions for each maintenance operation. Bobman's authorised service workshops have the necessary special attachments and equipment.

All maintenance and service functions are designed to be carried out when the machine is switched off, with the exception of those to be carried out while the engine is running.

Follow the recommended service plan. Create reports on the maintenance operations performed. Contact Bobman service centre if you are unsure of the completion of service procedures or need spare parts.



## 6.2. First inspection after 50 hours of operation

### NOTE


**Remember to perform the first inspection after 50 hours of operation.** Initial servicing is crucial to the performance and durability of hydraulic systems. All hydraulic components run in within the first 50 hours of operation. Hydraulic oil and filters collect these original wear products. Failure to carry out the first inspection in time may cause wear and tear on hydraulic pumps, engines, and valves, making them impossible to repair. The guarantee does not cover defects caused by: The first servicing also covers tasks that are important for the safety and reliability of the machine.

Periodic maintenance time	After the first 50 hours of operation	Every 400 hours of use or once a year (whichever comes first)
Engine air filter replacement	●	●
Change the engine oil	●	●*
Change the engine oil filter	●	●*
Change the hydraulic oil		●
Change the hydraulic oil filters	●	●
Check the level and condition of the hydraulic oil tank and fuel tank	●	●
Replace fuel filters	●	●
Check fuel lines	●	●
Check the battery and cable connections	●	●
Check electrical cables, relays, and other electrical components	●	●
Check the hydraulic lines and fittings	●	●
Measure the pressure in the hydraulic circuits	●	●
Check the installation and operation of drive motors	●	●
Check the engine and check its vibration and general operation	●	●
Check the seats, lights, and other safety equipment	●	●
Tighten the screws and fastening screws	●	●
* Every 100 hours of use or once a year (whichever comes first)		

### 6.3. Engine maintenance intervals

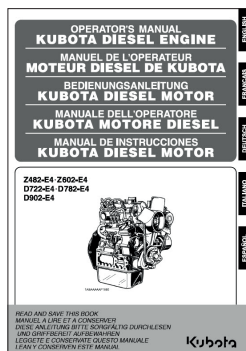
Interval	Activity	Page
Every 50 hours	Check fuel lines and clamps	13 @
See NOTE	Change the engine oil	14, 15 
Every 100 hours	Clean the air filter element	19 *1 @
	Clean the fuel filter	14
	Check fan belt tension	20
	Drain water from the separator	-
Every 200 hours	Changing the oil filter element (depending on the oil tank)	16 
	Check the intake air duct	- @
Every 200 hours or every six months	Check the radiator hoses and clamps	18
Every 400 hours	Replace the fuel filter element	14 @
	Clean the water separator in the fuel tank	-
Every 500 hours	Clean the water jacket (inside the radiator)	-
	Replace the fan belt	20
Every year or after every sixth cleaning of the air filter element	Replace the air filter element	19 *2 @
Every 800 hours	Check valve clearance	- *3
Every 1,500 hours	Check the fuel injection nozzle pressure	- *3 @
Every 3,000 hours	Check the intake air duct	- *3 @
Every two years	Replace the radiator hoses and clamps	18
	Replace the fuel lines and clamps	13 *3 @
	Change the coolant (L.L.C.)	16
	Replace the air intake duct	- *4 @

**Important:**

- Tasks marked with the  symbol must be performed after the first 50 hours of operation.
- \*1 Clean the air filter more frequently in dusty conditions than under normal conditions.
- \*2 After 6 cleaning operations.
- \*3 Please contact your local KUBOTA dealer for this service.
- \*4 Replace only if necessary.

- Components marked with the @ mark are registered as KUBOTA emission-related critical parts according to U.S. EPA standards for off-road engines. As the engine owner, you are responsible for maintenance in accordance with the above instructions. For more information, please refer to the guarantee conditions.

## NOTE



For more information on engine servicing and maintenance, please refer to the engine manual. As part of the periodic maintenance and servicing of the machine, additional engine tasks must be carried out as specified in the engine manual. Some engine tasks may require special tools or knowledge to perform them correctly. For periodic maintenance and service, contact an authorised Kubota service centre.

Use only the fuels and oils that meet the requirements of this machine manual. If there is conflicting information in the engine manual, follow the information in the machine manual.

## OPENING THE ENGINE COVER

### NOTE

Ensure that the engine is switched off and the machine is on a level and stable surface.



1. Press the safety catch (located on the left side of the engine cover) and (2) simultaneously while lifting the cover.
2. Check that the engine cover is well supported by the gas spring.

✓ The engine cover is now open and ready to perform the necessary service operations.

## 6.4. Maintenance work

### 6.4.1 Adding grease to lubrication points

**NOTE**

Lubrication of the pivot points is very important to avoid wear on the connections. Lack of lubrication may cause significant damage in a short period of time.

The figure below shows the position of the grease nipples.



Ensure that all connections are lubricated and clean. The appropriate lubrication interval depends to a large extent on the operating conditions. The need for lubrication should be checked at least every 10 operating hours. If the joints have become dirty, add lubricant. Ensure that the connections are properly lubricated. Inadequate lubrication results in rapid wear of the joints.

Use multipurpose grease to lubricate the machine. A grease gun is required to fill the grease nipples with grease. All grease nipples are standard. Replace any damaged grease nipples.

Before lubricating, clean the tip of the grease nipple and apply a small amount of grease at a time. The new lubricant draws dirt away from the joints. Wipe off excess grease with a cloth.

Function	Item No.
1. Front-wheel steering system	1
2. Drive pedal system	1
3. Brush cylinder	2
4. Scraper cylinder	2
5. Scraper shaft	1
6. Bedding box shaft	1
7. Tilt box cylinder	1
8. Bedding box damper adjustment	1
9. Screw flange bearing	2
10. Steering system	1



Any area requiring lubrication will be marked with the above sticker.

### 6.4.2 Filling with fuel

Check the fuel level on the fuel level indicator on the display and top up if necessary. For a more accurate level reading, the machine must be on level ground. It is advisable to refuel before the fuel tank is empty; to prevent condensation in the fuel tank, the tank should be full.

Add diesel fuel complying with the standards shown on page ... Use only clean fuel and avoid the ingress of dirt and water into the machine's fuel tank during filling. Using any other fuel will result in the engine failing to meet the emissions requirements.



#### **Risk of fire or explosion.**

Do not refuel in enclosed spaces.

Do not smoke. Avoid open flames.

It is important to ensure that fuel does not get on hot surfaces during refuelling.



1. Switch off the ignition switch.
2. Open the fuel filler cap.
3. Refuel.
4. Use only the fuel specified in the manual.
5. Wipe the fuel drain and close the fuel filler cap.

### 6.4.3 Checking the hydraulic oil level

Check the hydraulic oil level, especially after using a new attachment that drains hydraulic oil from the machine when filling the attachment hydraulic system. Also check that you have not noticed any leakage of hydraulic oil.

**NOTE**

To check the hydraulic oil, park the machine on a level and stable surface. The engine must be switched off, and all moving parts must be at rest. Wait a few minutes for the oil to drain back into the tank.



(1) Hydraulic oil tank plug / (2) Oil level indicator

Add oil if the oil level is below the control indicator:

- Slowly fill the oil into the filler hole until the correct level is reached.
- Do not overfill – excess oil may cause problems in the hydraulic system.

Close the fuel filler cap when the check is complete. Then start the machine and check the operation of the hydraulic system. If the system operates properly, the machine is ready for use.



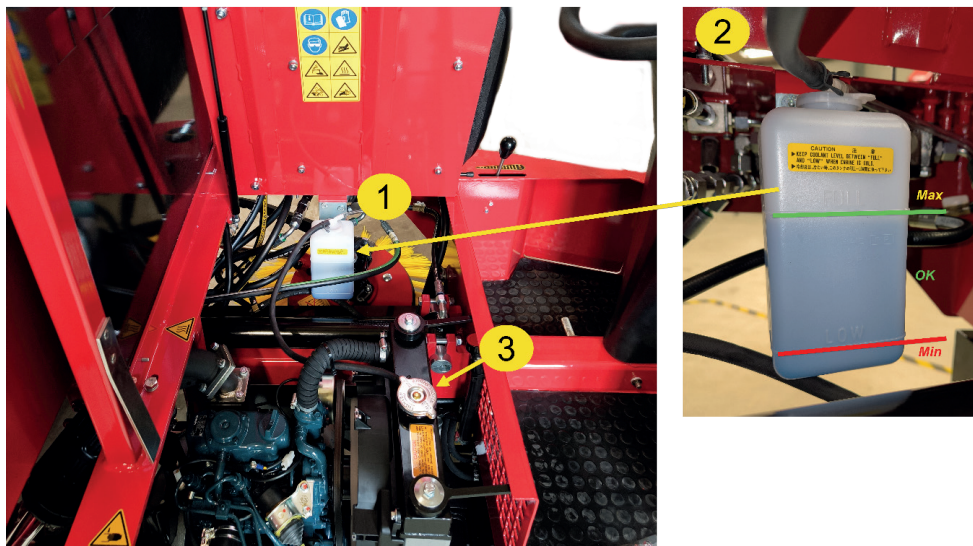
#### 6.4.4 Checking the coolant level

Never open the coolant reservoir if the engine is hot! Always check the coolant level when the engine is cold. The coolant level is visible through the transparent container.



**Danger of burns due to hot coolant – never open a hot radiator or coolant reservoir.** Never open the pressurised cooling system when the engine is hot. Risk of a blast of hot coolant that may cause severe burns. Allow the engine to cool completely before opening the radiator.

If necessary, add a 50% mixture of non-freezing glycol and clean water to prevent internal corrosion of the engine. Do not mix different types of refrigerants, as they can enter into chemical reactions. If you frequently need to top up the coolant, this could be a sign of a leak or other engine damage. Contact the BOBMAN service centre.



Check the coolant level in the coolant reservoir (1) on the left side of the engine.

The coolant level (2) is visible through the transparent container. The coolant level should be between FULL and LOW in the reservoir when the engine is cold and switched off.

Check only the coolant level in a separate reservoir (1).

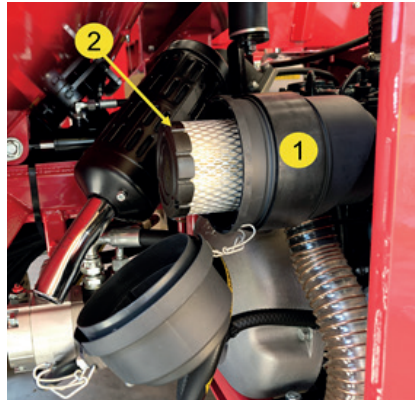
Never open the coolant filler cap (3) to check the coolant level or to add coolant.

#### *6.4.5 Checking the engine air filter element*

The engine air filter prevents dust and dirt from entering the engine. In dusty conditions, it may be necessary to clean the air filter element between scheduled changes.

Check, clean and, if necessary, replace the air filter element. The filter should be replaced after 6 cleaning operations or once a year, whichever comes first.

Open the filter housing and check the filter element. If dust or dirt is visible on the filter, clean or replace it as follows:

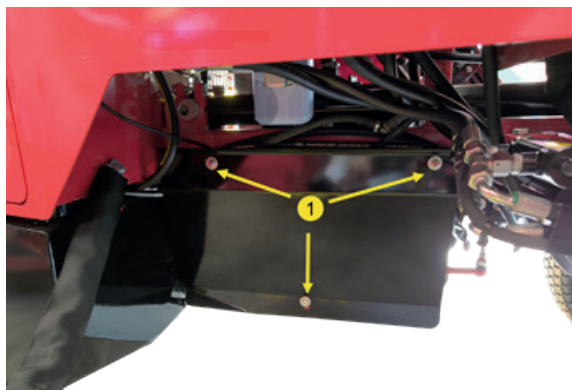


1. Carefully pull out the filter element (2).
2. Gently tap the closed end of the filter against a clean, smooth surface to clean it. **Do not use excessive pressure to clean the filter. The maximum allowable air pressure is 205 kPa (2.1 kgf/cm<sup>2</sup>, 30 psi).**
3. Clean the inner parts of the filter housing (1) with a damp cloth. Fit the filter element and seal. Check that the seal between the filter and the filter housing cover is correct.

#### 6.4.6 Changing the hydraulic oil filter

**NOTE**

Switch off the machine and make sure the hydraulic system is cool.  
**Use protective gloves.**



1. Remove the left side cover (1) from the engine.
2. Locate the hydraulic oil filter (2) between the hydraulic oil tank and the engine.
3. Unscrew the old filter using a filter spanner. Look out for any oil leaks.
4. Apply a small amount of hydraulic oil to the gasket of the new filter to ensure a good seal.
5. Fit the new filter by screwing it in by hand until it is securely seated. Tighten slightly if necessary.
6. Start the machine and check for leaks around the filter.
7. Check the oil level in the hydraulic tank and top up if necessary.
8. Install the left engine cover.

#### 6.4.7 Changing the engine oil filter



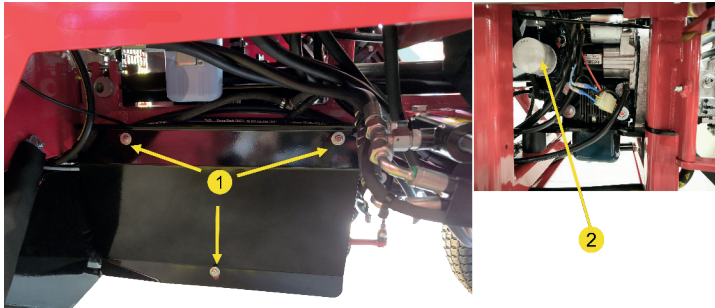
**Always use protective gloves to avoid contact with hot oil.**

**Ensure the engine is switched off and the key is removed from the ignition switch.**

**Allow the engine to cool down, but the oil must still be warm (approx. 50–60°C) to ensure good oil drainage.**

**Avoid oil spills – use a suitable container to collect the old oil.**

1. **Preparation:** Place the machine on a level and stable surface. Run the engine for



5–10 minutes to allow the oil to flow smoothly. Switch off the engine and wait for it to cool down to 50–60°C.

2. **Draining old oil:** Place a drainage container under the drain plug, unscrew the plug, and drain the oil. After draining the entire oil, tighten the plug.
3. **Changing oil filter:** Remove the left cover (1) and using an oil filter spanner remove the old filter (2). Apply a thin film of oil to the gasket of the new filter and tighten it firmly.
4. **Topping up with new oil:** Using a funnel, fill the recommended oil into the engine. Check the oil level with a dipstick and top up if necessary.
5. **Starting and control:** Start the engine, let it run for a few minutes, and check for oil leaks around the filter and drain plug. Switch off the engine and adjust the oil level if necessary.
6. **Waste disposal:** Dispose of used oil and oil filter in accordance with local regulations.



Your Kubota engine is now ready with fresh oil and a new filter!

#### 6.4.8 Checking the battery and electrical cables



**WARNING**

Danger of short-circuiting and exposure to battery acid and lead. Read the safety instructions before handling the battery – see the battery handling section on page 15.



#### **Check the condition and tightness of the battery, battery main switch, and cables.**

1. Check and clean the battery terminals regularly. If the clamps are corroded, clean them.
2. Check that the battery is properly secured and does not move. A moving battery may damage the electrical cables and cause a short circuit.
3. Make sure you use a battery pack of the correct size and shape so that it can be attached correctly. Use only a battery that meets all the same requirements as the original battery, not just the capacity specifications.
4. Thoroughly clean the battery and its surroundings. Regularly remove dirt from, under and around the battery.

#### **Checking the machine's electrical cables**

Check other electrical cables, their routing and fixing. If you detect any signs of damage to electrical cables or components, stop using the machine and disconnect the battery. You have to replace the cables before continuing to use the machine.





# BOBMAN<sup>®</sup>

MADE BY JYDELAND

## Jydeland Maskinfabrik A/S

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