LABA7 Vacuum Bleed Pump Industrial
User Manual

Lithuania 2026

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1. Introduction

Dear Customer,

Thank you for purchasing this product.

To ensure this condition and ensure safe operation, you must observe these operating instructions!

Read the entire operating instructions before using the machine for the first time. Observe all operating instructions and safety instructions!

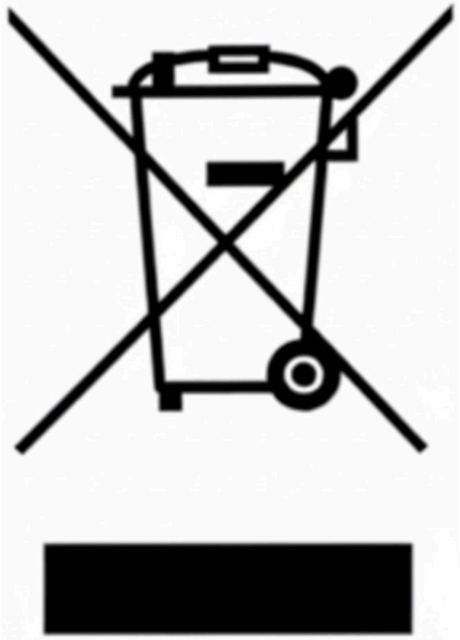
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2. Safety Information

- This manual is designed to be used in conjunction with the service manual and documentation provided by the shock absorber's manufacturer.
- Make sure to read and understand the whole user manual before using the Vacuum Bleed Pump Industrial (further – device).
- The device works under pressure/vacuum, therefore wear protective eye-wear and take all cautions required to work under a safe environment.
- Wear protective gloves to avoid skin contact with the fluids that might leak during the operation.
- Connect the Vacuum Bleed Pump Industrial to a grounded power socket.
- Only use the electric cord provided with the Vacuum Bleed Pump Industrial.
- Do not use the power cord if it is pinched, sheared or cut.
- Do not use any power adapters if the plug doesn't fit your wall socket.
- Do not use an extension cord.
- The power socket to which you are connecting the Vacuum Bleed Pump Industrial needs to be easily accessible in order to be able to easily unplug it in an emergency situation.
- Do not operate nearby an open flame or heat source.
- Place on a flat and level surface.
- Make sure the table or workbench where you are placing the Vacuum Bleed Pump Industrial is rated to sustain its weight.
- Do not place in a highly corrosive or humid environment.
- To avoid overheating, place the device in a well-ventilated room and do not obstruct the sides of the Vacuum Bleed Pump Industrial during operation.
- Do not use the device or any of its components if they have been damaged.
- Do not perform any maintenance while the device is plugged in to the mains.
- The device might have a residual high pressure after the operation is interrupted. Improper use of the device might cause an injury.
- 2000 micron vacuum can damage the shock absorber if it is not suited for such deep vacuum.

3. Safety Labels and Their Meanings

Label	Explanation
	Warning – Electricity (ISO 7010-W012) This safety symbol indicates a potential electrical hazard. It alerts users that electrical components, voltages, or currents are present that could cause electric shock or injury. Users should take appropriate precautions, avoid contact with exposed electrical parts.
	Prohibition – Not to Be Serviced by Users (ISO 7010-P069) This safety symbol indicates that the equipment must not be opened, adjusted, maintained, or serviced by users. It informs users that only qualified or authorized personnel should perform servicing, repair, or internal inspection to avoid risk of injury, electric shock, damage to the equipment, or other hazards.
	Environmental Information – Separate Collection of Electrical and Electronic Equipment (EN 50419) The crossed-out wheeled bin symbol indicates that this product must not be disposed of with unsorted household waste. In accordance with EN 50419 and the EU Waste Electrical and Electronic Equipment (WEEE) Directive, the product must be collected separately and disposed of at an appropriate collection facility for electrical and electronic equipment.

	Emergency – Emergency Stop (ISO 7010-E020) This safety indicates the location of an emergency stop device. It identifies a control that is intended to stop the equipment immediately in an emergency situation to reduce the risk of injury, damage, or hazardous conditions.
	Warning – General Warning (ISO 7010-W001) because of Pressure Systems and Vessels This safety symbol indicates a general hazard. In this application, it warns of pressurized systems or pressure vessels. Users are alerted to the risk of sudden pressure release, rupture, or ejection of components, which may cause injury. Appropriate precautions should be taken.

4. Highlights

Congratulations on your purchase of the LABA7 Vacuum Bleed Pump Industrial!

- Eight programmable filling presets:
  - Save your most used or most complicated filling cycles as a preset and instead of programming it each time, select it from the list. For the activation, press the “Start” button.
- Fill up to 10 shocks simultaneously:
  - It is possible to fill up to 10 shocks with LABA7 Vacuum Bleed Pump Industrial at a time. To do so, install an adapter, set the right filling cycles and press the “Start” button.
- One 20 liter tank:
  - One built in 20 liter tank* with oil level monitoring.

    *Usable oil volume: 16 L (80%).
- External automatic oil filling:
  - Connect the Vacuum Bleed Pump directly to an external oil canister (barrel) and let the machine automatically fill the tank when the oil is low.
- Intuitive control:
  - Easily control, set-up and monitor your tanks and filling process via the external control panel.
- Low oil warning:
  - No more dry tanks and failed bleeds due to low oil in the tank.
- Adjustable vacuum and pressure:
  - Adjustable vacuum and pressure in order to make sure you do not blow the seals of your shocks. Some of them require more gentle settings.
  - Adjustable vacuum and pressure in each individual preset.
- Single stage vacuum pump:
  - The Vacuum Bleed Pump Industrial comes with a single stage 170L/min vacuum pump.
- High accuracy vacuum and pressure sensors:
  - Real time monitoring of the vacuum and pressure values during the bleed process to easily identify seal problems.
- Sound alarm:
  - Convenient sound alarm that indicates the end of operation or a warning message.

5. Standard Package for VBP INDUSTRIAL includes

- Automatic Vacuum Bleed Pump INDUSTRIAL unit.
- Power cable (EU or USA plug).
- Shock absorber filling hose.
- External oil filling hose.
- Remote display (panel).
- Remote emergency button.
- USB cable.
- User manual (free download from website).
- Customer support via email / WhatsApp.

6. Technical Specifications

- Maximum vacuum: -0.99 Bar.
- Adjustable pressure: 0.5 to 4.0 Bar.
- Adjustable vacuum: -0.99 to -0.30 Bar.
- Adjustable altitude: 0 to 5000 m.
- Vacuum pump: two stage 230V AC, 50Hz, 560W, 170L/min.
- Oil pump: 5 Bar, 24V DC, 9 L/min.
- Voltage availability: 230V AC (110V available on request).
- Required air quality: ISO 8573.1.

7. Know Your Pump

7.1. Overview

The overview of the LABA7 Vacuum Bleed Pump Industrial is presented in the image below:



1. Oil level inspection window
2. Operator control panel.
3. Remote emergency stop button.
4. Control panel port.
5. Emergency stop button port.
6. Trigger connector.
7. USB port.
8. External tank oil filling port.
9. Damper oil filling port.
10. Compressed air connector.
11. Power switch.
12. Fuse.
13. Power cable connector.
14. Serial number label.

7.2. Main Button Control

The main control button allows you to fully operate the Vacuum Bleed Pump Industrial. To use the main button:

1. Rotate the button to the left or right to navigate between menu options or change the settings when in Edit mode.
2. Press button (further – “OK”) to select the highlighted option or exit the Edit mode.

7.3. Emergency Stop Button Control

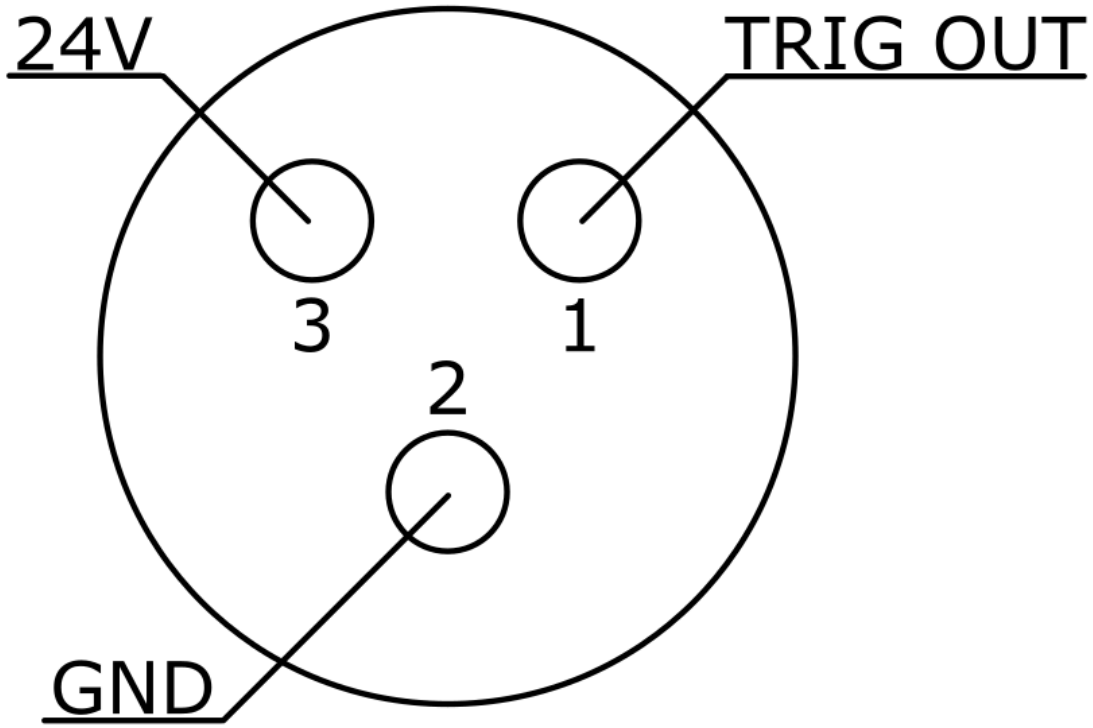
The Emergency Stop button can be activated anytime during operation. To activate emergency button:

1. Press the button to stop any operation.
2. Wait for the pressure inside the pump to reach atmospheric pressure level.
3. Rotate the Emergency Stop button to the right to release it and deactivate the emergency state.

7.4. Trigger Connector

The Trigger Connector provides a single switched output that signals when the pump is in the filling cycle. It can be used to synchronise external equipment with the pump's process, or to drive a load directly or connect solenoid.

Connector type: 3-pin circular panel-mount socket (front panel), pin numbers moulded into the insert.



Pinout

Pin	Signal	Description
1	TRIG OUT	Open-drain (low-side) output. Switched to GND during the filling cycle; pulled up to +24 V through an internal 10 kΩ resistor when the pump is off.
2	GND	Ground.
3	+24 V	Supply output, for powering the connected load or signal loop.

How the output works

- The output is switched by an internal N-channel MOSFET that connects pin 1 to the machine's ground (−).
- **Filling cycle:** pin 1 is switched to GND and the circuit between pins 3 and 1 closes. Voltage between pins 3 and 1 is 24 V; between pins 2 and 1 it is 0 V.
- **Pump off:** pin 1 is released and sits at approximately +24 V (via the internal 10 kΩ pull-up). Voltage between pins 3 and 1 is 0 V; between pins 2 and 1 it is 24 V.
- The gate circuit includes a 10 kΩ pull-down resistor, so the output remains in the pump-off (high) state whenever no control signal is present — including during power-up and shutdown.
- A protection (flyback) diode is integrated between pin 1 and the +24 V rail. Inductive loads such as relay coils can therefore be connected directly, with no external diode required.
- The output is referenced to the machine's internal ground. If the external device has its own supply, the two grounds must be common, or an isolating element (relay or optocoupler) must be used.

Typical wiring

Driving a 24 V relay or solenoid: connect the coil between pin 3 (+24 V) and pin 1. The coil energises during the filling cycle and de-energises when the pump turns off.
Signalling a PLC / controller input: connect the controller's sinking input to pin 1 and its 0 V reference to the machine ground. The input reads high (24 V) when the pump is off and low (0 V) during the filling cycle.

What can be connected

- 24 V relay or contactor coil (for switching larger loads, extractors, external pumps)
- 24 V solenoid valve
- 24 V indicator lamp, beacon or buzzer
- Digital input of a PLC, machine controller or safety circuit
- Optocoupler input of external equipment
- Data logger, counter or cycle-counting device
- Trigger input of a camera, oscilloscope or measurement system
- Start/stop input of another machine in the same production line

Cautions

- Do not apply an external voltage higher than 24 V DC to pin 1.
- Do not connect pin 1 to an AC supply or to mains voltage.
- Pin 3 is a supply output, not an input — do not feed external power into it.

8. Accessories

8.1. Filling Adapters

LABA7 Vacuum Bleed Pump Industrial can be equipped with various filling adapters for the most common shock absorbers used in the market. We offer the following adapter kits that are already assembled for a specific type of shock absorbers:

- MTB adapter kit.
- Motorcycle adapter kit.
- Gas tank adapter kit.
- Car adapter kit.

Find the examples of adapter kits below:



For a complete list and details of all filling adapters please contact the LABA7 team directly.

8.2. Multi-Fill Adapter

The LABA7 Vacuum Bleed Pump Industrial can also be equipped with a Multi-Fill Adapter, designed for simultaneous filling of multiple shock absorbers.

The adapter connects directly to the main filling hose of the machine and distributes the flow through 5 individual filling hoses. This allows up to 5 shock absorbers to be filled at the same time, increasing productivity and reducing service time.

Two Multi-Fill Adapters can also be connected simultaneously, allowing up to 10 shock absorbers to be serviced at once.

This solution significantly increases productivity and reduces service time when working with larger quantities of shock absorbers.

Examples of Multi-Fill Adapter configurations are shown below:



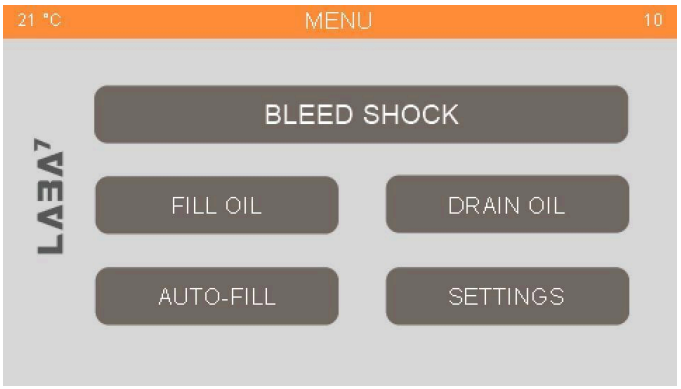
9. First Launch

Follow the steps below to launch the Vacuum Bleed Pump for the first time:

1. Connect an air compressor air hose, using a minimum 4 bar pressure rating and air quality according to ISO 8573 into the compressed air connector.
2. Plug the power cable provided with the device into the power connector and plug into mains.
3. Turn the Vacuum Bleed Pump Industrial power switch on. The green light on the switch will light up.
4. The user control panel will display the initial window. Wait for 2 seconds for the pump to initialize.



5. Press “OK” to start. The main window will appear.



The display has an informational header that appears on most of screens and contains the following information:

- Temperature indicator – displays the current temperature inside the device in °C.
- Title – the summary of the currently active page.
- Oil level – displays the oil level of internal tank.

During the vacuuming cycle of shock filling process, the vacuum pump might produce water vapor which can be visible. This is normal behaviour and no additional measures are required.

Go to the Settings section to configure the device before starting the shock absorber bleeding and filling process.



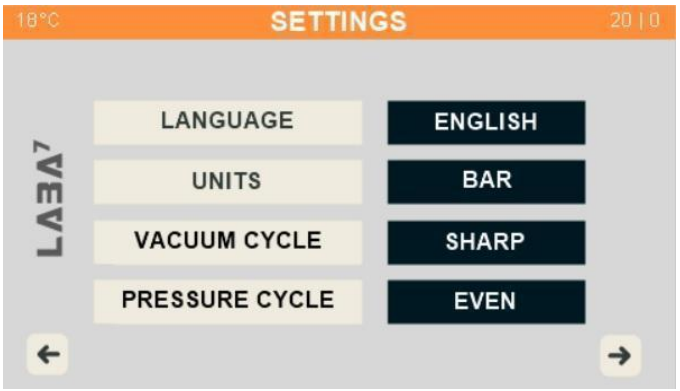
ATTENTION: Check the power supply rating before plugging in the device. The pump might not be suitable for use in your country. Use external voltage transformer if provided with the device (230V 50Hz / 115V 60Hz).

10. Settings

10.1. General Settings

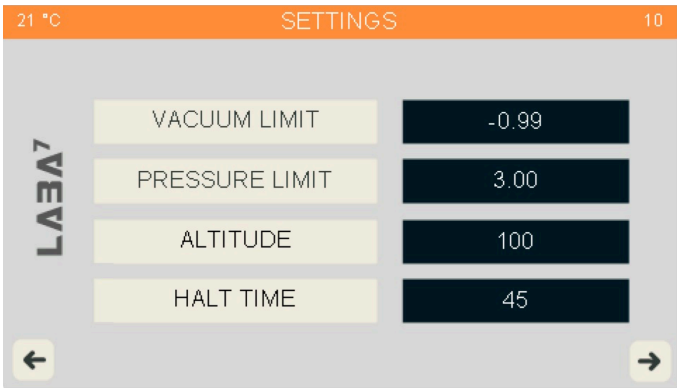
To configure the settings of a Vacuum Bleed Pump Industrial follow the steps below.

1. Scroll to “SETTINGS” and press “OK”.



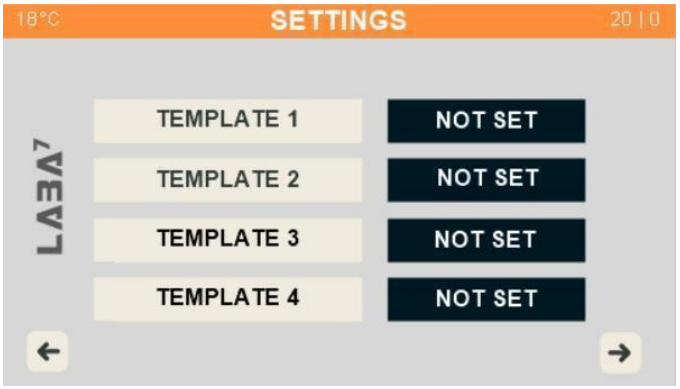
2. Select one of the settings by clicking “OK” to enter Edit mode and modify it. Rotate the main button to change the selection and then press “OK” to save the modification. Exit Edit mode.
    - Language – switch the display language of pump interface.
    - Units – switch pressure units between BAR or PSI.
    - Vacuum Cycle – switch between SHARP and EVEN vacuum cycles.
        - Sharp vacuum cycle will open tank connector once the pressure reaches 80% of configured vacuum limit resulting in a sudden pressure change in the shock absorber.
        - Even vacuum cycle will open the tank connector immediately when switching from pressure to vacuum cycles resulting in even pressure transition in the shock absorber.
    - Pressure Cycle – switch between SHARP and EVEN pressure cycles.
        - Sharp pressure cycle will open tank connector once the pressure reaches 80% of configured pressure limit resulting in a sudden pressure change in the shock absorber.
        - Even pressure cycle will open the tank connector immediately when switching from vacuum to pressure cycles resulting in even pressure transition in the shock absorber.

3. Scroll to the Next button and click “OK” to enter the 2nd page of the Settings menu.



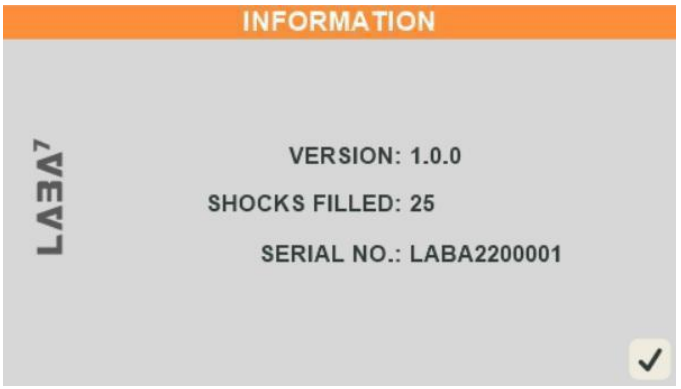
4. Select one of the settings by clicking “OK” to enter Edit mode and modify it. Rotate the main button to change the selection and then press “OK” to save the modification. Exit Edit mode.
   - Vacuum Limit – set the maximum vacuum limit for shock bleeding cycles.
   - Pressure Limit – set the maximum pressure limit for shock bleeding cycles.
   - Altitude – change the altitude of your current location in meters above the sea level to adjust the remaining pressure in the pump after restoring atmospheric pressure.
   - Halt time – defines how long the pump remains at the selected vacuum or pressure before switching to the next stage of the bleeding cycle.

5. Scroll to the Next button and click “OK” to enter the 3rd settings page.



6. Select one of the eight templates and click “OK” to edit it.
   - Follow the “Configuring Filling Templates” section for detailed filling templates configuration.

7. Scroll to the Next button and click “OK” to enter the information page.

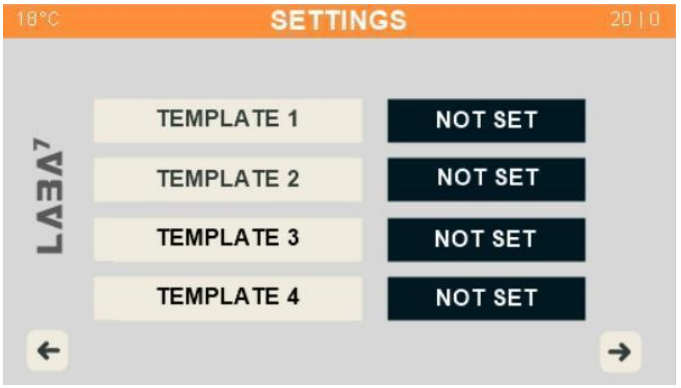


8. This page shows the software version, serial number and a total number of shocks filled.
9. Click “OK” to return back to the main menu.

10.2. Configuring Filling Templates

For configuring the templates that are used as a quick filling option follow the steps below:

1. Select “SETTINGS” from the main window.
2. Scroll to the “Next” button and click “OK” to enter the 2nd settings page.
3. Scroll to the “Next” button and click “OK” to enter the 3nd settings page.



4. Select one of the eight templates and click “OK” to edit it. Template edit screen will appear.



5. Select “CYCLE 1” and click “OK” to enter the edit mode.
6. Select “TIME” below “VACUUM” and click “OK” to modify the time of vacuum interval. Scroll left or right to increase/decrease time. Time increases/decreases in 10 second intervals. Maximum interval value is 8 minutes.
7. Click “OK” to save the value and exit the edit mode.
8. Select “TIME” below “PRESSURE” and click “OK” to modify the time of pressure interval. Scroll to left or right to increase/decrease time. Time increases/decreases in 10 second intervals. Maximum interval value is 8 minutes.
9. To finish “CYCLE 1” configuration scroll to “CYCLE 1” and press “OK” to exit the Edit mode.
10. Configure “CYCLE 2”, “CYCLE 3” and “CYCLE 4” if needed.
11. Select “LIMIT” and click “OK” to enter edit mode.
12. Select number below “VACUUM” and click “OK” to modify the vacuum limit during the vacuuming cycle. Scroll left or right to increase/decrease vacuum limit.
13. Click “OK” to save the value and exit the edit mode.

14. Select number below “PRESSURE” and click “OK” to modify the pressure limit during the pressure cycle. Scroll left or right to increase/decrease pressure limit.
15. To finish “LIMIT” configuration scroll to “LIMIT” and press “OK” to exit the Edit mode.
16. To finish template configuration, scroll to the confirmation icon and press “OK”.
17. Configured templates are indicated as “SET”.
18. Configure “TEMPLATE 2”, “TEMPLATE 3” and “TEMPLATE 4” (or other four in the next page) if needed.

11. Filling And Draining Oil

11.1. Oil Tank Auto-Fill

1. Connect the hose to the Tank Oil Filling Port.
2. Insert the hose end with the adapter into an oil reservoir from which you want to take out the oil. Hose should be fully submerged hose in the oil to prevent air from being pulled into the tank.
3. Select “Auto-Fill” from the main window.



4. Select “START” and press “OK”. The filling process will start once the vacuum reaches -0.7 Bar.
5. Wait until the tank fills up or press “OK” at any time to stop the filling process.

11.2. Oil Tank Fill

This section presents how to fill internal tank with oil.

1. Connect the hose to the Damper Oil Filling Port .
2. Connect the “Open” adapter to the free hose end.
3. Insert the hose end with the adapter into an oil reservoir. The adapter should be fully submerged into the oil to prevent air being pulled into the tank..
4. Select “Fill Oil” from the main window.
5. Select “START” and press “OK”. Filling process will start once the vacuum reaches -0.7 Bar.



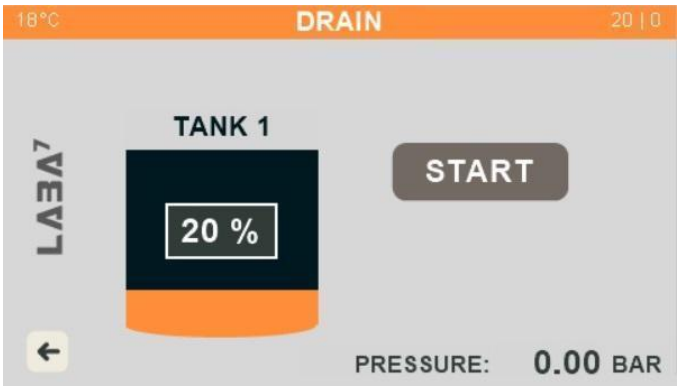
1. Wait until the tank fills up or press “OK” at any time to stop the oil filling process.

ATTENTION: Overflow danger! We suggest filling tanks up to 70-80% of its volume for the best performance. When filled to 100% there is a risk of overflow when draining oil from the shock absorber.

11.3. Oil Tank Drain

This section presents how to drain oil from internal tank.

1. Connect the hose to the Damper Oil Filling Port.
2. Connect the “Open” adapter to the free hose end.
3. Insert the hose end with the adapter into an oil reservoir.
4. Select “DRAIN OIL” from the main window.



5. Select “START” and press “OK”. The draining process will start.



6. Wait until the tank is drained or press “OK” at any time to stop the oil draining process.

ATTENTION: At the end of the draining process compressed air might bubble in the oil reservoir.

12. Shock Bleeding and Filling

This section presents different steps for filling shock absorbers that use a bladder or a separating piston using automatic mode, or custom intervals. Go to the appropriate section for a detailed step description.

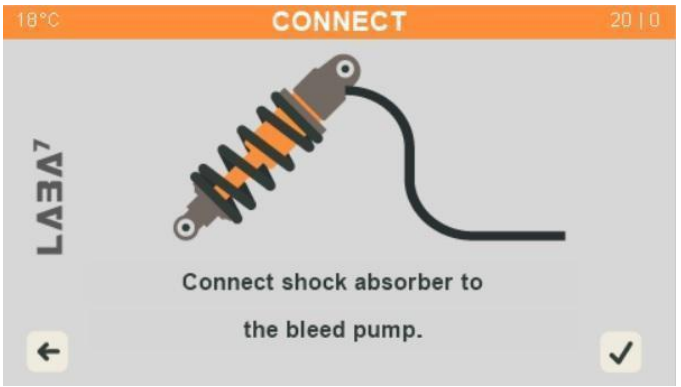
12.1. Automatic Mode – Bladder Shock

For the automatic mode applied for shock absorbers with a bladder follow the steps below:

1. Connect the hose to the Damper Oil Filling Port.
2. Connect the required shock bleed connector to the other end of the hose.
3. Select “BLEED SHOCK” from the main window.
4. Select “BLADDER SHOCK” from the “BLEED” menu.



5. Select “AUTOMATIC BLEED” from the “INTERVALS” menu.
6. Connect the shock absorber to the bleed connector that is attached to the hose.
7. Select the confirmation icon to start the bleed process.



8. Wait until the shock absorber is automatically filled, or stop the filling operation at any time by pressing the back button and selecting the confirmation icon.

ATTENTION: For the best filling performance make sure the shock you are bleeding is lower than the Vacuum Bleed Pump Industrial and the bleed port is oriented upwards.

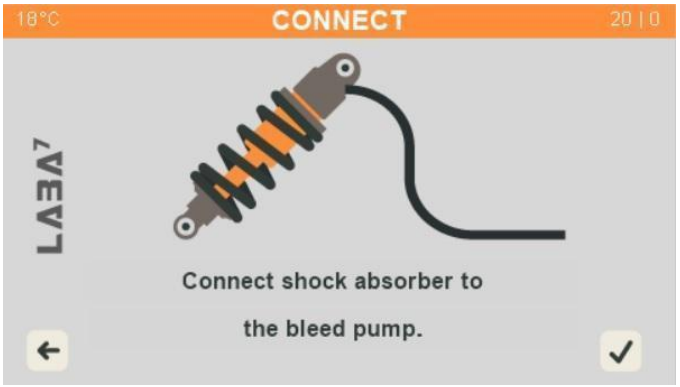
12.2. Template Mode – Bladder Shock

For template mode applied for shock absorbers with a bladder follow the steps below:

1. Connect the hose to the Damper Oil Filling Port.
2. Connect the required shock bleed connector to the other end of the hose.
3. Select “BLEED SHOCK” from the main window.
4. Select “BLADDER SHOCK” from the “BLEED” menu.
5. Select “INTERVAL BLEED” from the “INTERVALS” menu.
6. Select “TEMPLATES” from the “TEMPLATES” menu.
7. Select one of 8 templates. The bleed process will not start if the template is not selected. To configure templates please see the “Configuring Filling Templates” section.



8. Connect the shock absorber to the bleed connector that is attached to the hose.
9. Select the confirmation icon to start the bleed process.



10. Wait until the shock absorber is filled or stop the filling operation at any time by pressing the back button and selecting the confirmation icon.

ATTENTION: For the best filling performance make sure the shock you are bleeding is lower than the Vacuum Bleed Pump Industrial and the bleed port is oriented upwards.

12.3. Custom Interval Mode – Bladder Shock

For custom interval mode applied for shock absorbers with a bladder follow the steps below:

1. Connect the hose to the Damper Oil Filling Port.
2. Connect the required shock bleed connector to the other end of the hose.
3. Select “BLEED SHOCK” from the main window.
4. Select “BLADDER SHOCK” from the “BLEED” menu.
5. Select “INTERVAL BLEED” from the “INTERVALS” menu.
6. Select “CUSTOM INTERVALS” from the “TEMPLATES” menu.
7. Select “CYCLE 1” and click “OK” to enter the Edit mode.



8. Select “TIME” below “VACUUM” and click “OK” to modify the time of vacuum interval. Scroll to increase/decrease time. Time increases/decreases in 10 second intervals. The maximum interval value is 8 minutes.
9. Click “OK” to save the value and exit the Edit mode.
10. Select “TIME” below “PRESSURE” and click “OK” to modify the time of pressure interval. Scroll to increase/decrease time. Time increases/decreases in 10 second intervals. The maximum interval value is 8 minutes.
11. To finish the “CYCLE 1” configuration scroll to “CYCLE 1” and press “OK” to exit the Edit mode.
12. Configure “CYCLE 2”, “CYCLE 3”, “CYCLE 4” and “LIMIT” if needed.
13. To finish the “CUSTOM INTERVALS” configuration, scroll to the confirmation icon and press “OK”.
14. Connect the shock absorber to the bleed connector that is attached to the hose.
15. Select the confirmation icon to start the bleed process.
16. Wait until the shock absorber is automatically filled or stop the filling operation at any time by pressing the back button and selecting the confirmation icon.

ATTENTION: For the best filling performance make sure the shock you are bleeding is lower than the Vacuum Bleed Pump Industrial and the bleed port is oriented upwards.

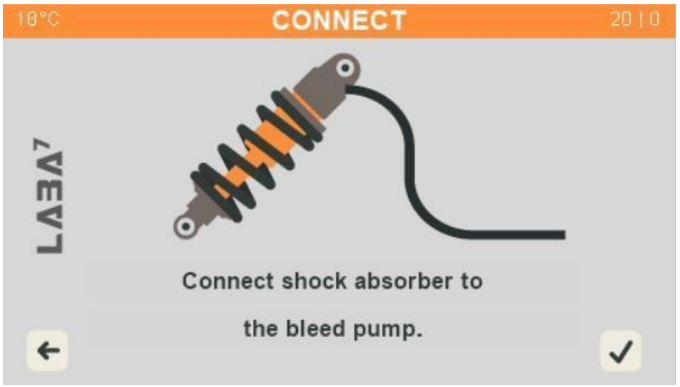
12.4. Automatic Mode – Separating Piston

For automatic mode applied for shock absorbers with a separating piston follow the steps below:

1. Connect the hose to the Damper Oil Filling Port.
2. Connect the required shock bleed connector to the other end of the hose.
3. Select “BLEED SHOCK” from the main window.
4. Select “SEPARATING PISTON” from the “BLEED” menu.

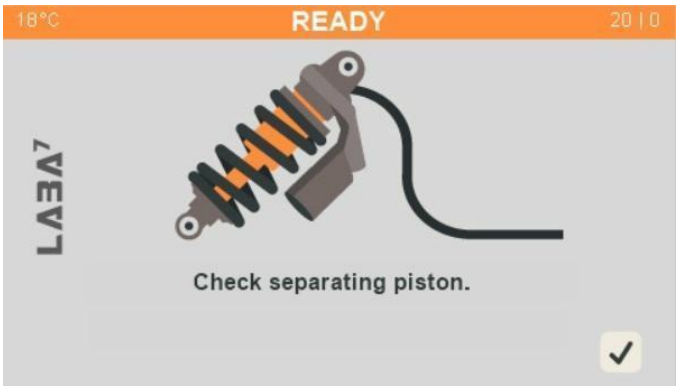


5. Select “AUTOMATIC BLEED” from the “INTERVALS” menu.
6. Connect the shock absorber to the bleed connector that is attached to the hose.
7. Select the confirmation icon to start the bleed process.



8. Wait until the shock absorber is filled or stop the filling operation at any time by pressing the back button and selecting the confirmation icon.

9. After the process finishes, the pump will stop the oil filling procedure, and the “Check separating piston” window will be display. Position the separating piston and confirm.



ATTENTION: For the best filling performance make sure the shock you are bleeding is lower than the Vacuum Bleed Pump Industrial and the bleed port is oriented upwards.

ATTENTION: Open all external adjusters on the shock absorber. Push the separating piston to the bottom. Install the circlip (fastener) to prevent the free piston from shooting out when filling.

ATTENTION: To prevent the filling tube from being clogged make sure to hold the shock absorber below the inlet holes during the Vacuum mode.

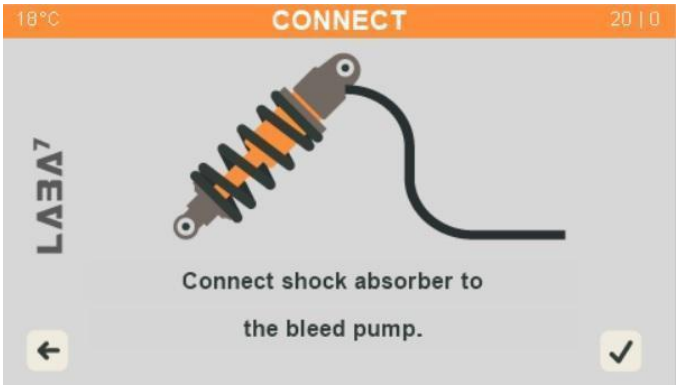
12.5. Template Mode – Separating Piston

For template mode applied for shock absorbers with a separating piston follow the steps below:

1. Connect the hose to the Damper Oil Filling Port.
2. Connect the required shock bleed connector to the other end of the hose.
3. Select “BLEED SHOCK” from the main window.
4. Select “SEPARATING PISTON” from the “BLEED” menu.
5. Select “INTERVAL BLEED” from the “INTERVALS” menu.
6. Select “TEMPLATES” from the “TEMPLATES” menu.
7. Select one of 8 templates. The bleed process will not start if the template is not selected. To configure templates please see the “Configuring Filling Templates” section.

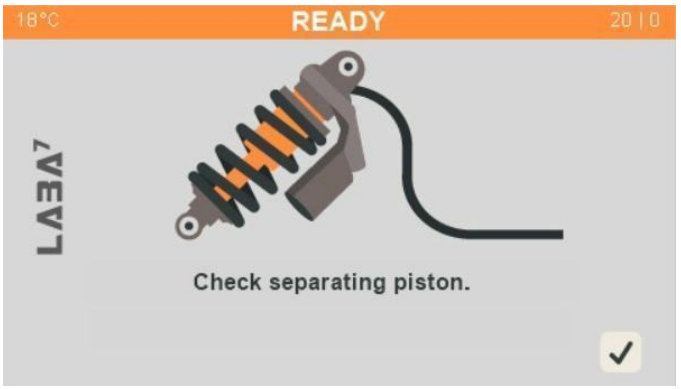


8. Connect the shock absorber to the bleed connector that is attached to the hose.
9. Select the confirmation icon to start the bleed process.



10. Wait until the shock absorber is filled or stop the filling operation at any time by pressing the back button and selecting the confirmation icon.

11. After the procedure is finished the pump will stop the oil filling procedure and the “Check separating piston” window will be displayed. Position the separating piston and confirm.



ATTENTION: For the best filling performance make sure the shock you are bleeding is lower than the Vacuum Bleed Pump Industrial and the bleed port is oriented upwards.

ATTENTION: Open all external adjusters on the shock absorber. Push the separating piston to the bottom. Install the circlip (fastener) to prevent the free piston from shooting out when filling.

ATTENTION: To prevent the filling tube from being clogged, hold the shock absorber below the inlet holes during the vacuum mode.

12.6. Custom Interval Mode – Separating Piston

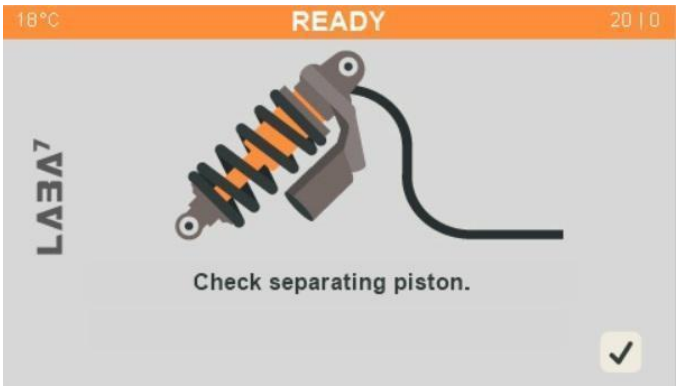
For custom interval mode applied for shock absorbers with a bladder follow the steps below.

1. Connect the hose to the Damper Oil Filling Port.
2. Connect the required shock bleed connector to the other end of the hose.
3. Select “BLEED SHOCK” from the main window.
4. Select “BLADDER SHOCK” from the “BLEED” menu.
5. Select “INTERVAL BLEED” from the “INTERVALS” menu.
6. Select “CUSTOM INTERVALS” from the “TEMPLATES” menu.
7. Select “CYCLE 1” and click “OK” to enter the Edit mode.



8. Select “TIME” below “VACUUM” and click “OK” to modify the time of vacuum interval. Scroll left or right to increase/decrease time. Time increases/decreases in 10 second intervals. Maximum interval value is 8 minutes.
9. Click “OK” to save the value and exit the Edit mode.
10. Select “TIME” below “PRESSURE” and click “OK” to modify the time of pressure interval. Scroll left or right to increase/decrease time. Time increases/decreases in 10 second intervals. Maximum interval value is 8 minutes.
11. To finish “CYCLE 1” configuration scroll to “CYCLE 1” and press “OK” to exit the Edit mode.
12. Configure “CYCLE 2”, “CYCLE 3”, “CYCLE 4” and “LIMIT” if needed.
13. To finish “CUSTOM INTERVALS” configuration, scroll to the confirmation icon and press “OK”.
14. Connect the shock absorber to the bleed connector that is attached to the hose.
15. Select the confirmation icon to start the bleed process.
16. Wait until the shock absorber is automatically filled or stop the filling operation at any time by pressing the back button and selecting the confirmation icon.

17. After the procedure is finished the pump will stop the oil filling procedure and the “Check separating piston” window will be displayed. Position the separating piston and confirm.



ATTENTION: For the best filling performance make sure the shock you are bleeding is lower than the Vacuum Bleed Pump Industrial and the bleed port is oriented upwards.

ATTENTION: Open all external adjusters on the shock absorber. Push the separating piston to the bottom. Install the circlip (fastener) to prevent the free piston from shooting out when filling.

ATTENTION: To prevent the filling tube from being clogged, hold the shock absorber below the inlet holes during the vacuum mode.

13. Troubleshooting

13.1. Messages and Warnings

Message	Cause	Solution
COMPLETED Shock absorber filling is complete.	A confirmation message appeared after the filling cycle has completed.	Click the “OK” button and proceed with the normal device usage.
EMERGENCY Restoring atmospheric pressure. Release STOP button and press “OK”.	The emergency stop button has been pressed during operation.	Wait for the pressure inside device to reach atmospheric pressure, release the emergency stop button by slightly rotating it clockwise. Click the “OK” button to exit the emergency window.
WARNING At least 1 interval is required.	The confirmation button has been pressed in interval edit screen without any filling cycles configured.	Configure at least 1 filling cycle before proceeding.
LEAKAGE System is not airtight. Check connections and click “OK”.	The pressure inside the device has dropped by at least 0.2 BAR in less than 2 seconds during the vacuuming cycle.	Check all the hoses and tubes for any leakage, check if all the connectors are properly connected and perform the last operation again.
WARNING Low oil level. Do you want to continue?	The oil level in one of the tanks is less than 20%.	Fill the tank that is being used with additional oil or proceed with caution, air can get pushed into the shock absorber.
WARNING Maintenance required. Read manual to reset. Continue?	The device has been used to fill over 300 shock absorbers since the last maintenance has been performed.	Go to the “Maintenance” section to perform proper device maintenance.

OVERFLOW Oil levels too high. Drain oil to continue.	During operation one of the oil tanks has detected an oil level above 100%.	Drain oil from the tank that is being used or drain the oil from the shock absorber.
QUESTION Do you want to cancel filling the shock absorber?	A message that appears when trying to cancel a shock-filling operation.	Confirm the dialog to stop the filling process. Click back to cancel the message.
WARNING Temperature too high inside Pump. Wait before proceeding.	A temperature inside the device has reached 60 °C or more.	Wait for the temperature inside the device to drop. Make sure the sides are not covered.
WARNING Low oil level. Do you want to refill automatically?	The oil level the tanks is less than 20%.	Fill the tank that is being used with additional oil or proceed with caution, air can get pushed into the shock absorber.

13.2. Malfunctions

Malfunction	Cause	Solution
Vacuum Bleed Pump Industrial is not filling a tank during fill oil operation.	The free flow adapter is not connected.	Connect one of the shock bleed adapters.
Vacuum Bleed Pump Industrial is not draining a tank during drain oil operation.	The free flow adapter is not connected.	Connect one of the shock bleed adapters.
The shock absorber piston rod is not moving on the vacuuming cycle.	Friction of the piston is too high to overcome vacuum force. The lock lever for MTB shock is in the locked position.	Check if the shock absorber is assembled correctly. Check that the lock lever is in the open position for MTB shocks.
The shock absorber piston rod is not moving on the oil filling cycle.	Friction of the piston is too high to overcome the vacuum force.	Check if the shock absorber is assembled correctly.
Vacuum Bleed Pump Industrial does not react to navigation button presses.	The software has frozen in the device.	Turn the device off and on.
Vacuuming or oil filling is very slow.	Closed rebound/compression port.	Open rebound/compression port/push back rebound needle.
The vacuum Bleed Pump Industrial power switch does not light and the device does not start.	The fuse is blown.	Unplug the power cable and change the fuse near the power switch. Fuse parameters: 5x20/10A.
The oil is leaking from under the pump.	Oil catch can is full of oil.	Check maintenance section to drain the oil.
After power on the pump buzzer is ON and user cannot proceed to Main Menu.	Emergency Stop button is engaged and prevents the pump from starting.	Release the Emergency Stop button and click “OK” to proceed to Main Menu.

14. Maintenance

Proper maintenance is required to ensure maximum efficiency and reliability of the Vacuum Bleed Pump Industrial. The device has a built-in reminder for a user.

If the Vacuum Bleed Pump Industrial has been used to fill over 300 shock absorbers since the last maintenance has been performed, a notification will be shown to the user during the transition from the main window to the shock bleeding page.



Select the confirmation button and press “OK” to proceed with the normal device operation, or select the back button and click “OK” to return to the main screen.

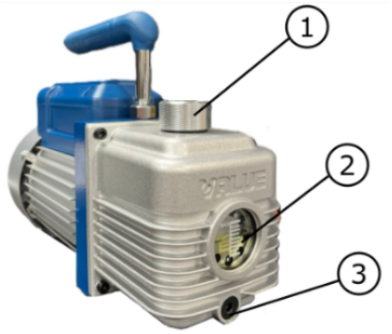
We strongly suggest not to postpone device maintenance as it can lead to improper operation

Follow the steps below to perform a maintenance:

1. Power off the device.
2. Disconnect compressed air supply.
3. Disconnect the mains cable.
4. Inspect the oil level of the vacuum pump inside device from the oil level inspection window (see a diagram below).
5. The oil level should be between the Low and High positions.
6. Unscrew the bolts holding the side door and remove the door.

7. Unscrew and remove the cap located on top of the vacuum pump.
8. Add or remove excessive oil depending on the oil level until the oil level is between the Low and High markings.

Below is an overview diagram of a vacuum pump:



1. Oil cap
2. Oil level indicator
3. Oil drain bolt



ATTENTION: Use only dedicated deep vacuum pump oil to refill the oil to the right level. After the refill put back the cap and tighten it.

9. Inspect the oil catcher which is attached to the back of the pump.
10. If the oil catcher is more than 1/3 full of oil, remove it, and by pressing the pin in the bottom – clean the catcher. To clean the bottle, unscrew it, spill the oil and screw it back again.

1. Oil level



11. Assemble everything back in the same order.

Below is an overview diagram of a Vacuum Bleed Pump Industrial:



1. Screws holding the side door.
2. Oil level inspection window.



ATTENTION: After the maintenance is completed, power off the device, and while holding the “OK” button pressed, power on the Vacuum Bleed Pump Industrial. Wait for the beep and then release the button. This will reset the maintenance reminder.

15. Additional information

This section provides additional information related to conformity with the relevant Union harmonisation legislation:

- The crossed-out wheeled bin symbol with a solid bar shown on this equipment indicates that it must not be disposed of as unsorted municipal waste at the end of its life. It must be collected separately and sent for recycling in accordance with applicable WEEE regulations. For information on the return, collection and recycling of this product, please contact the manufacturer or your local supplier.

- LABA7 complies with the applicable obligations of the REACH Regulation (EC) No 1907/2006. If any component of this equipment contains a substance of very high concern (SVHC) in a concentration above 0.1 % w/w, information in accordance with REACH Article 33 will be provided on request.

16. Warranty Information

LABA7 vacuum bleed pump is covered for 1 year of manufacturer warranty starting from the date of purchase and, it covers any manufacturer-related failures during that period.

WHAT IS NOT COVERED

ALTERATION, MISUSE, OR ACCIDENT DAMAGE

Examples are:

- Failure to operate the device in accordance with the Owner's manual.
- Collision, fire, theft, freezing, vandalism, riot, explosion, or objects striking your Pump.
- Alteration of your Pump including software programming or other components.
- Damage caused by improper maintenance or failure to follow the recommended maintenance schedule.

The repair of damages that are caused because parts or services used were not those prescribed in this manual's recommended maintenance schedule is not covered under warranty. It is the owner's responsibility to maintain the Vacuum Bleed Pump as more fully set forth in, and in accordance with, the maintenance schedules outlined in this manual.

MODIFICATIONS

Damage or performance problems resulting from modifications to your Vacuum Bleed Pump are not covered under warranty.

Examples of modifications:

- Running the pressure above the maximum setting described in the Owner's manual.
- Using other fluids instead of fork oil in the tanks.
- Altering any mechanical parts or software programming.

The manufacturer is not responsible for any damages to the device during the transportation. During accepting the shipment, please inspect the package for any visual damage. If the package is damaged, do not accept it.

17. Contact

If you have further questions about the product or need help with the installation, our technical staff will be happy to help you. Contact information can be found on our website www.laba7.com.

UAB LABA7
Address: Vakarinė st. 10, Vilnius LT-06298, Lithuania
Email: info@laba7.com
Mobile phone: +37065715336

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LABA7

EU Declaration of Conformity

Date of Issue 26th January 2026 Vilnius, Declaration Number 2026-01-26/01

Name of the manufacturer:	LTD "LABA7"
Address of the manufacturer:	Gilužio str. 15, LT-06239, Vilnius, Lithuania
Contacts of the manufacturer:	info@laba7.com
Object of the declaration:	Vacuum Bleed Pump INDUSTRIAL
Identification code of the object:	LSP2-00029
Description of the object:	Vacuum Bleed Pump INDUSTRIAL is advanced vacuum bleed pump, which has large single tank that enable to service even the largest dampers easily. Pump has algorithm that detect if there is a leak in the shock or the system. Also, pump has adjustable altitude settings. Main specifications: 20-liter internal tank; adjustable pressure 0.5 – 4 BAR; adjustable vacuum -0.3 – -0.99 BAR; dimensions are 672x424x654 mm; weight: 80 kg.
Object of the declaration described above is in conformity with the relevant Union harmonisation legislation:	– Machinery (MD) Directive 2006/42/EC – Pressure Equipment (PED) Directive 2014/68/EU – Electromagnetic Compatibility (EMC) Directive 2014/30/EU – Low voltage (LVD) Directive 2014/35/EU – Restricts hazardous substances in electrical and electronic components (RoHS) Directive 2011/65/EU
References to the relevant harmonized standards used or references to the other technical specifications in relation to which conformity is declared:	– EN IEC 61000-6-1:2019 – EN IEC 61000-6-2:2019 – EN IEC 61000-6-3:2021 – EN IEC 61000-6-4:2020 – EN IEC 61000-3-2:2019 – EN IEC 61000-3-3:2013+A1:2019
Additional information:	This declaration certifies compliance with the above-mentioned directives. This declaration of conformity is issued under the sole responsibility of the manufacturer. The technical documentation for the object of declaration is available from the manufacturer at the address above.
Name and title of the manufacturers' representative:	Andrius Liškus CEO
Signature of the manufacturers' representative:	

