

LABA7 Vacuum Bleed Pump PRO

User Manual

Lithuania 2022

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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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UAB LABA7
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Vilnius
Lithuania

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 PRO (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 PRO to a grounded power socket.
- Only use the electric cord provided with the Vacuum Bleed Pump PRO.
- 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 PRO 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 PRO 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 PRO 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. Highlights

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

- 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 three shocks simultaneously:
 - If you are using an external tank, it is possible to fill 2 shocks with LABA7 Vacuum Bleed Pump PRO and extend that to 3 shocks at a time. To do so, set the right filling cycles and press the “Start” button.
- Two 6 liter tanks:
 - Two built in 6 liter tanks with oil level monitoring.
- Intuitive control:
 - Easily control, set-up and monitor your tanks and filling process via the 4.3” LCD screen.
- 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.
- External tank option:
 - No oil changing of the built in tanks is needed. With the LABA7 external tanks, have as many different oils as you wish. To achieve this, just connect it to the Vacuum Bleed Pump PRO and fill the shock with the right oil.
- Single stage vacuum pump:
 - The Vacuum Bleed Pump PRO comes with a single stage 60L/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.

4. Technical Specifications

- Maximum vacuum: -0.99 Bar.
- Adjustable pressure: 0.5 to 5.0 Bar.
- Adjustable vacuum: -0.99 to -0.30 Bar.
- Adjustable altitude: 0 to 5000 m.
- Vacuum pump: single stage 230V AC, 50Hz, 300W, 60L/min.
- Voltage availability: 230V AC (110V available on request).
- Required air quality: ISO 8573.1.

5. Know Your Pump

5.1. Overview

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



- 1. Compressed air connector.
- 2. Power cable connector.
- 3. Fuse.
- 4. Power switch.
- 5. Label.
- 6. USB connector.
- 7. 4.3" LCD display.

- 8. Main control button.
- 9. Emergency stop button.
- 10. External tank cable connector.
- 11. External tank hose connector.
- 12. Internal tank 1 connector.
- 13. Internal tank 2 connector.

5.2. Main Button Control

The main control button allows you to fully operate the Vacuum Bleed Pump PRO. 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.

5.3. Emergency Stop Button Control

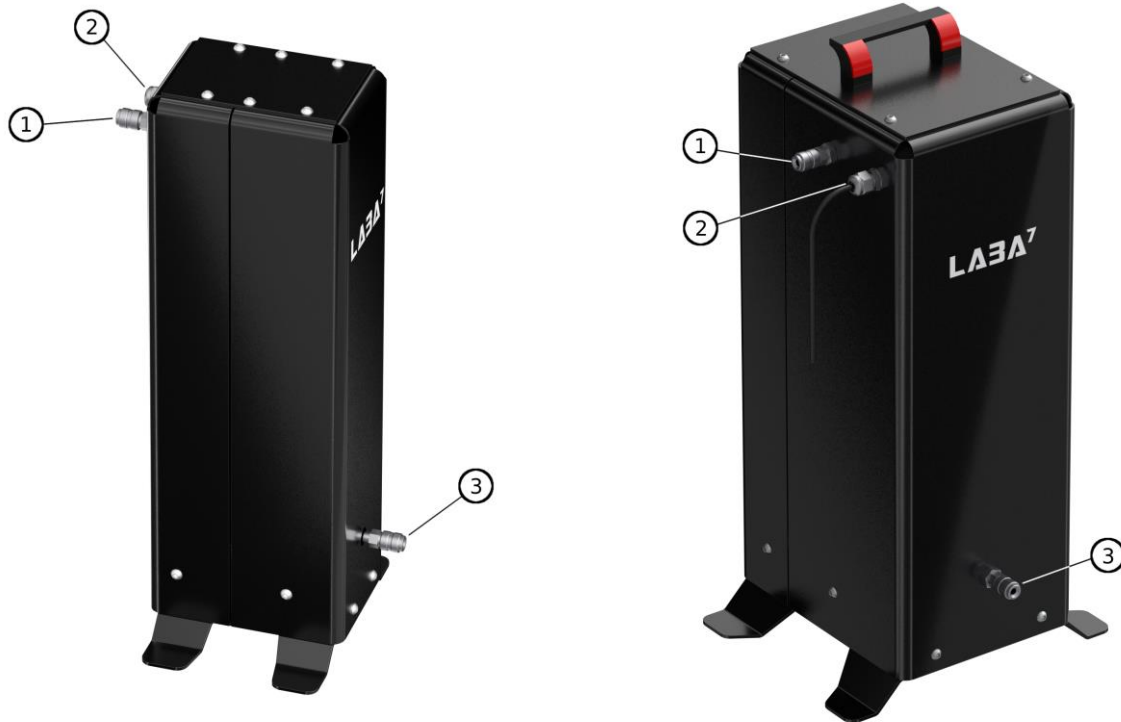
The Emergency Stop button can be activated anytime during operation. To activate emergency button:

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.

6. Accessories

6.1. External Tanks

Vacuum Bleed Pump PRO supports 3L and 6L external tanks. The overview is presented in the image below:



1. Hose connector.
2. Cable.
3. Filling connector.



ATTENTION: Do not mix the hose and filling connectors. Hose connector is used to connect it with the Vacuum Bleed Pump external tank hose connector. Filling connector is used to connect the shock absorber.



ATTENTION: Do not disconnect the external tank while Filling, Draining or Shock Filling operation is in progress.

6.2. Filling Adapters

LABA7 Vacuum Bleed Pump PRO 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:

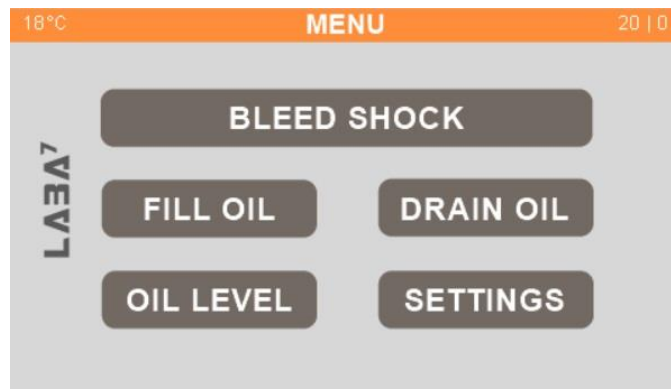


For a complete list and details of all filling adapters please contact the LABA7 team directly.

7. 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 5 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 PRO power switch on. The green light on the switch will light up.
4. The device 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 tanks and external tank, if connected.

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

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



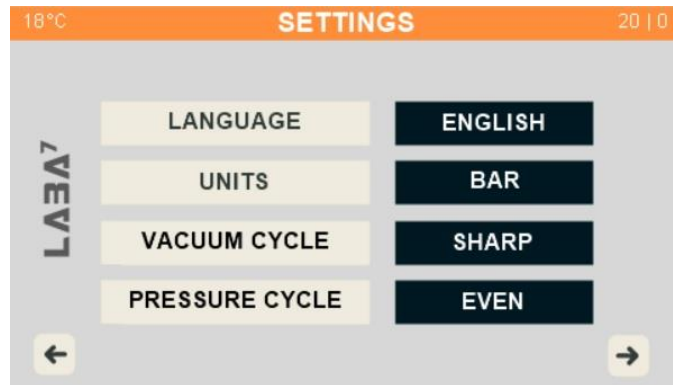
ATTENTION: Check the power supply rating before plugging in the device. The pump might not be suitable for use in your country. Use external voltage transformer if provided with the device (230V / 115V).

8. Settings

8.1. General Settings

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

1. Scroll to “SETTINGS” and press OK.

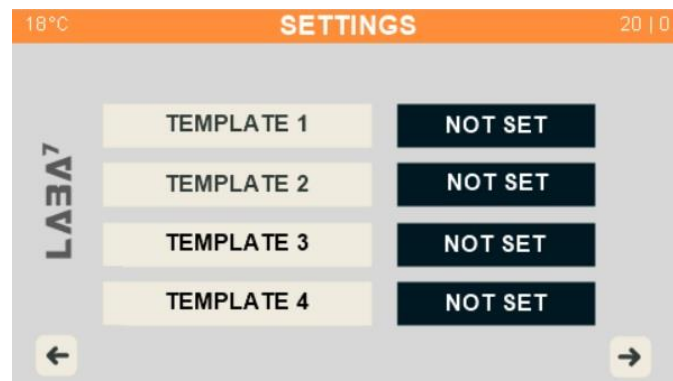


2. Select one of the settings by clicking OK to enter Edit mode and modify it. Rotate the main button to change the selection and then press OK to save the modification. Exit Edit mode.
 - Language – switch the display language of pump interface.
 - Units – switch pressure units between BAR or PSI.
 - Vacuum Cycle – switch between SHARP and EVEN vacuum cycles.
 - Sharp vacuum cycle will open tank connectors 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 connectors 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 connectors 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 connectors 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.

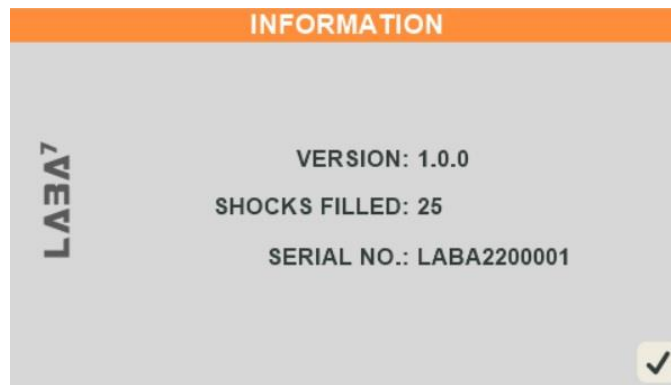


4. Select one of the settings by clicking OK to enter Edit mode and modify it. Rotate the main button to change the selection and then press OK to save the modification. Exit Edit mode.
- Vacuum Limit – set the maximum vacuum limit for shock bleeding cycles.
 - Pressure Limit – set the maximum pressure 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.
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.

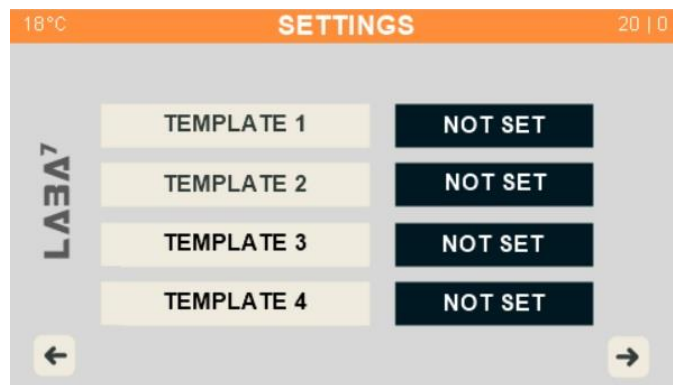


8. This page shows the software version and a total number of shocks filled.
9. Click OK to return back to the main menu.

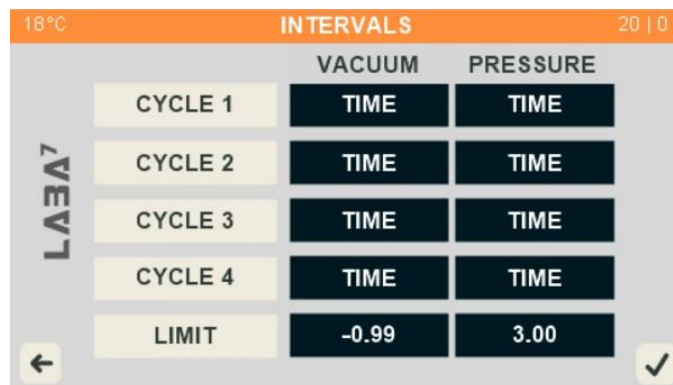
8.2. Configuring Filling Templates

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 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.

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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).

9. Filling And Draining Oil

9.1. Oil Level Check

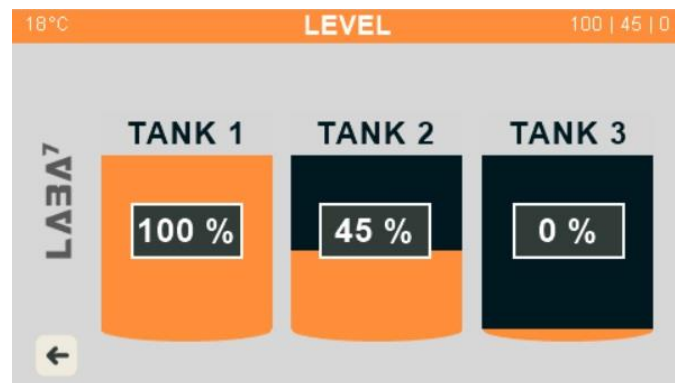
To check the Oil Level of internal tanks, follow the steps below.

1. Select "Oil Level" from the main menu.
2. The "Oil Level" window will appear, providing the oil tanks levels.



In case of connected external tank, follow the steps below:

1. Select "Oil Level" from the main menu.
2. The "Oil Level" window will appear, providing the oil tanks levels.



Oil level indicators also appear in the upper right corner of navigation bar in each screen.

9.2. Internal Oil Tank Fill

This section presents how to fill 2 internal tanks with oil.

1. Select “Fill Oil” from the main window.
2. The “Fill Oil” window will appear.



3. Connect the hose via the quick connector to the desired internal tank connector that you want to fill – “TANK 1” or “TANK 2”.
4. Connect the “Open” adapter to the free hose end.
5. Insert the hose end with the adapter into an oil reservoir from which you want to take out the oil. The adapter should be fully submerged into the oil to prevent air being pulled into the tank.
6. Select the desired tank that you want to fill from the “FILL OIL” menu and press OK.



7. Select “START” and press OK. Filling process will start once the vacuum reaches -0.7 Bar.
8. 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.

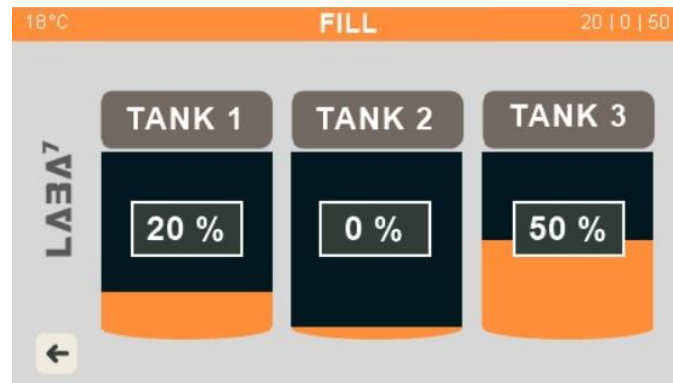


WARNING: Never fill internal oil tanks while connected to the external tank connector!

9.3. External Oil Tank Fill

When using an external oil tank follow the steps below to fill it with oil.

1. Place the external tank near the Vacuum Bleed Pump PRO on a flat and level surface.
2. Connect the external tank to the device with the adaptive hose via a quick connector of the external tank and a quick connector of the Vacuum Bleed Pump PRO.
3. Connect the filling hose with a quick connector to the filling connector of the external tank.
4. Select "Fill Oil" from the main window.
5. The "Fill Oil" window will appear.



6. Connect the "Open" adapter to the free hose end of the external oil tank.
7. Insert the hose end with the adapter into an oil reservoir from which you want to take out the oil. The adapter should be fully submerged into the oil to prevent air entering the tank.
8. Select "TANK 3" from the "FILL OIL" menu.
9. Select "START" and press OK. Filling process will start once the vacuum level reaches -0.7 Bar.
10. Wait until the tank fills up or press OK at any time to stop the oil filling process.

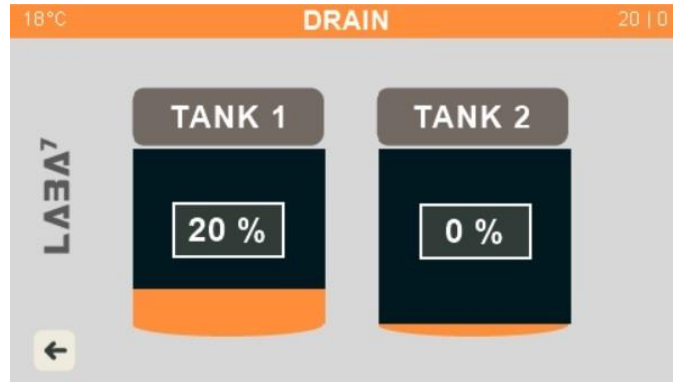


ATTENTION: Overflow danger! We suggest filling tanks up to 70-80% of its volume for best performance. When filled to 100% there is a risk of overflow when draining oil from the shock absorber.

9.4. Internal Oil Tank Drain

This section presents how to drain oil from 2 internal tanks.

1. Select “DRAIN OIL” from the main window.
2. The “DRAIN Oil” window will appear.



3. Connect the hose via a quick connector to the desired internal tank connector that you want to drain – “TANK 1” or “TANK 2”.
4. Connect the “Open” adapter to the free hose end.
5. Insert the hose end with the adapter into an oil reservoir.
6. Select the desired tank that you want to drain from the “DRAIN OIL” menu and press OK.



7. Select “START” and press OK. The draining process will start.
8. Wait until the tank is drained or press OK at any time to stop the oil draining process.

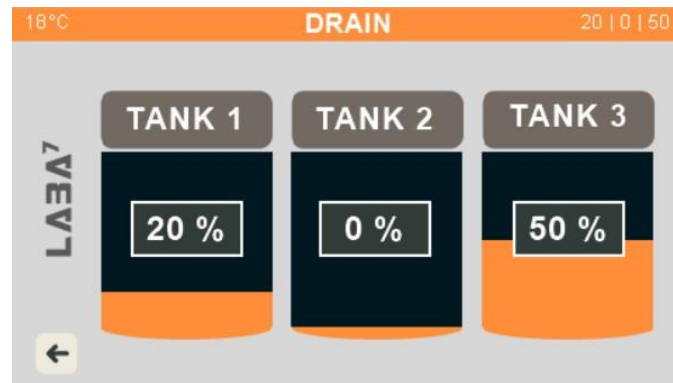


ATTENTION: At the end of the draining process compressed air might bubble in the oil reservoir.

9.5. External Oil Tank Drain

When using an external oil tank follow the steps below to drain oil from it.

1. Place the external tank near the Vacuum Bleed Pump PRO on a flat leveled surface.
2. Connect the external tank to the device with the adaptive hose via a quick connector of the external tank and a quick connector of the Vacuum Bleed Pump PRO.
3. Connect the filling hose with a quick connector to a filling connector of the external tank.
4. Select "DRAIN OIL" from the main window
5. The "DRAIN OIL" window will appear.



6. Connect the "Open" adapter to the free hose end of the external oil tank.
7. Insert the hose end with the adapter into an oil reservoir.
8. Select "TANK 3" from the "DRAIN OIL" menu.
9. Select "START" and press OK. The draining process will start.
10. 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.

10. Shock Bleeding and Filling

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

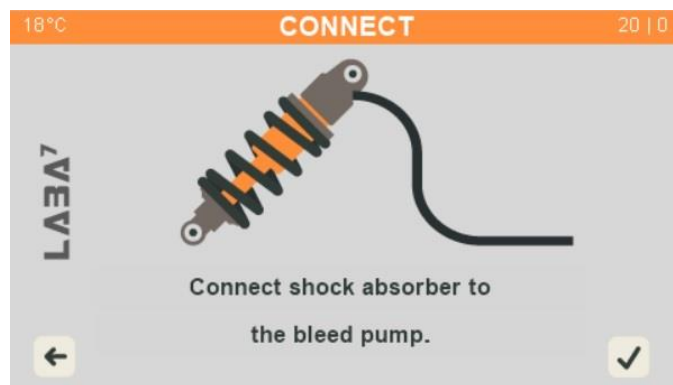
10.1. Automatic Mode – Bladder Shock

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

1. Connect the hose to the “TANK 1” and/or “TANK 2” pump connectors.
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 PRO and the bleed port is oriented upwards.

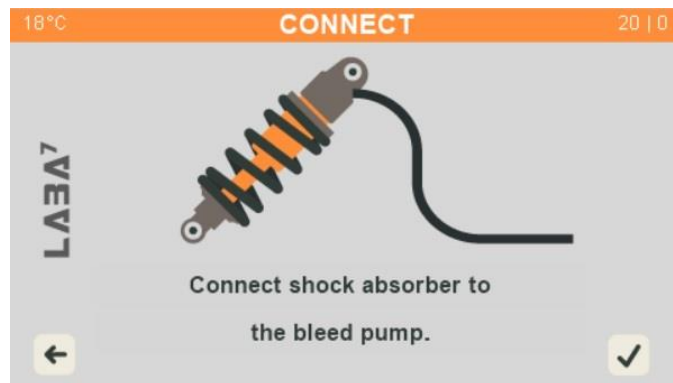
10.2. Template Mode – Bladder Shock

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

1. Connect the hose to the “TANK 1” and/or “TANK 2” pump connectors.
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 PRO and the bleed port is oriented upwards.

10.3. 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 “TANK 1” and/or “TANK 2” pump connectors.
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 PRO and the bleed port is oriented upwards.

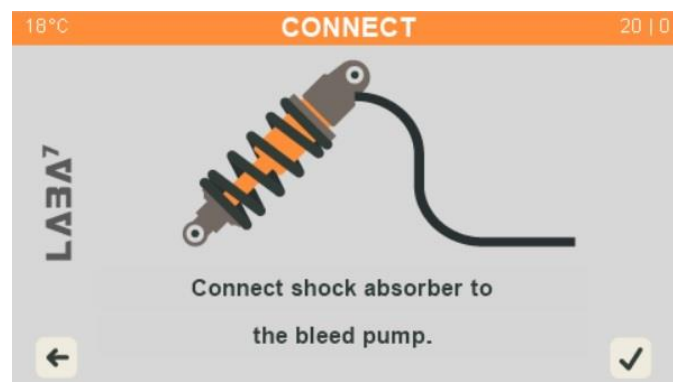
10.4. Automatic Mode – Separating Piston

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

1. Connect the hose to the “TANK 1” and/or “TANK 2” pump connectors.
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.

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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 PRO 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.

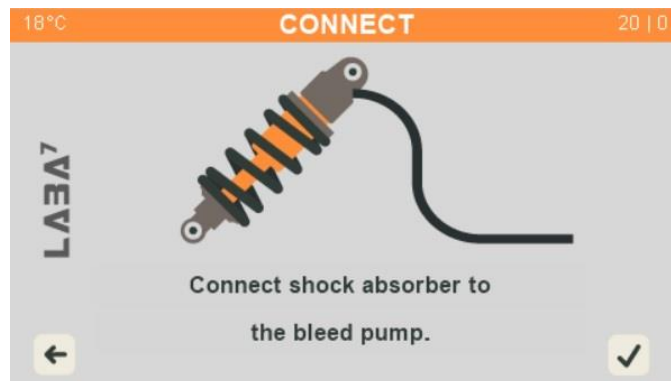
10.5. Template Mode – Separating Piston

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

1. Connect the hose to the “TANK 1” and/or “TANK 2” pump connectors.
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.

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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 PRO 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.

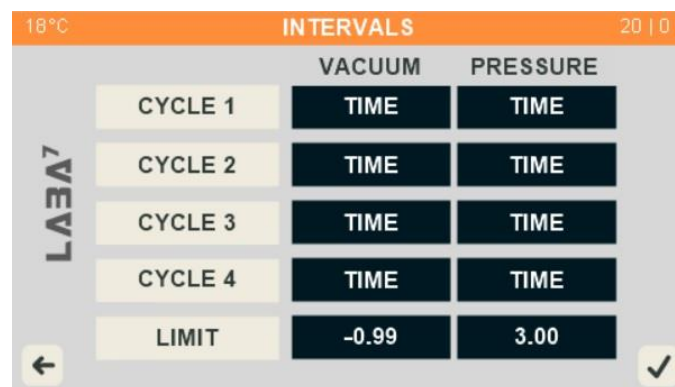


ATTENTION: To prevent the filling tube from being clogged, hold the shock absorber below the inlet holes during the vacuum mode.

10.6. 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 “TANK 1” and/or “TANK 2” pump connectors.
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.

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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 PRO 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.

11. Troubleshooting

11.1. Messages and Warnings

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

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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 Template [x] not set. Go to settings to adjust templates.	The selected template is not configured in the settings menu.	Go to the “Configuring filling templates” section to configure the templates.

11.2. Malfunctions

Malfunction	Cause	Solution
Vacuum Bleed Pump PRO 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 PRO 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 PRO 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 PRO 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.

12. Maintenance

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

If the Vacuum Bleed Pump PRO 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.

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7. Unscrew and remove the first oil catcher located on top of the 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.

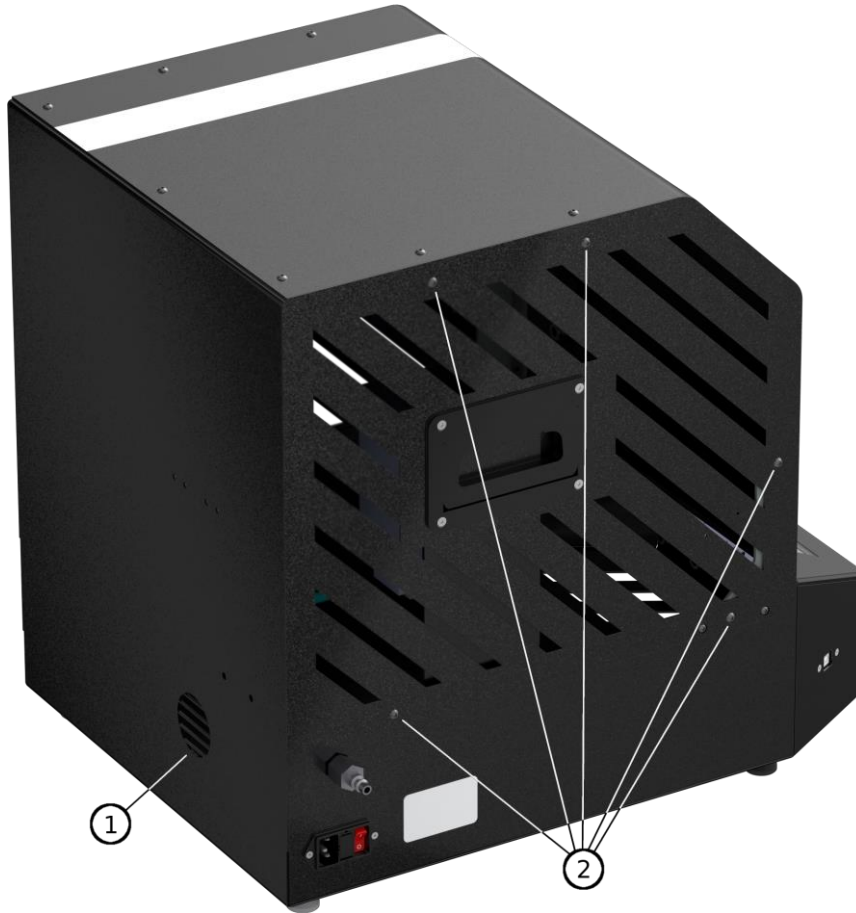
9. Inspect the second oil catcher which is attached to the back of the pump.
10. If the oil catcher is more than 1/3 full of oil, remove it, and by pressing the pin on the bottom-clean the catcher. To clean the bottle, unscrew it, spill the oil, and screw everything back again.

1. Oil level



11. Assemble everything back in the same order.

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



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



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

13. 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.

14. 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.

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LABA7

EU Declaration of Conformity

Date of Issue 18th May 2021 Vilnius, Declaration Number 2021-05-18/01

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 PRO

Identification code of the object: LSP2-00002

Description of the object: Vacuum Bleed Pump PRO is advanced vacuum bleed pump, which has large tanks 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: two 6-liter internal tanks; adjustable pressure 0.5 – 4 BAR; adjustable vacuum -0.3 – -0.99 BAR; dimensions are 411x497x551 mm.

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

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: 