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|  <p>BIRGER Part of Pincumet Group</p> | Startup Manual – Hydraulic Roof Lifting Mechanism | UM-3 |
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1. Purpose

This manual provides instructions for the **first startup** and safe operation of containers equipped with hydraulic roof lifting mechanisms. It covers both **JR** (pre-filled and tested) and **NR** (oil emptied for transport) configurations, as well as important safety notes.

2. Types of Delivery Configurations

2.1 JR – Ready for Operation

- Container is fully equipped with a hydraulic station.
- Oil is already filled.
- Factory-tested and adjusted.
- Flow valve protected by a thermal film.

2.2 NR – Oil Tank Empty for Transportation

- Container is equipped with a hydraulic station.
- Oil tank is **empty** and must be filled before startup.

3. Safety Precautions

- **Pump Rotation (DRILL option):**

Always ensure the pump rotates **from left to right**.

Incorrect rotation will cause **serious damage**.



- Wear appropriate PPE (gloves, safety glasses).
- Avoid interfering with factory adjustments unless necessary.

4. Startup Steps

4.1 JR – Ready for Operation

1. **Check oil level** in the hydraulic tank and ensure it meets operating requirements.
2. **Inspect protective thermal film** on the regulating (flow) valve. Do not remove unless adjustments are needed.
3. **Verify pump rotation direction** (for DRILL option). Must be from left to right.

The lifting mechanism is ready for use once these checks are complete.

4.2 NR – Oil Empty for Transport

1. Fill the oil tank

Use recommended hydraulic oil

Fill until the level is **20 mm below the top edge**.

2. Remove air from the system

Perform at least 5 full cycles of cylinder operation.

3. **Check oil level** again after air removal.
4. **Connect hydraulic cylinder** to the roof mechanism.
5. **Open the roof** and adjust the flow valve if needed.
6. **Verify pump rotation direction** (for DRILL option).

Must be from left to right.

The lifting mechanism is now ready for operation.

5. Operational Notes

- JR units are already tuned; adjustments to the flow valve are rarely needed.
- NR units may require fine-tuning after oil filling and air removal.
- Always perform a trial lift before loading or using the container for production.



6. Maintenance & Inspection

- Regularly check oil levels.
- Inspect hoses, connections, and seals for leaks.
- Test pump rotation after any electrical or mechanical service.

Appendix: UM-3.1. Hydraulic Roof Lifting Mechanism – Startup Quick Guide