



Best Practice: Bleeding / Purging Air from EA Lift Hydraulics

Purpose

The hydraulic system of an EA inboard lift can develop air lock or unexpected air in the system. This can occur for a number of reasons in the lifetime of a lift.

Air locks in the system can cause the lift to behave in unexpected ways. Signs of an airlock can include:

- Lift lowering/raising very slowly
- Lift juddering/stuttering when lowering/raising
- Squeaking noise coming from lift when operating

These instructions provide guidance on the best practice for bleeding/purging air from the hydraulic system.

Please note: These steps should only be followed by a competent individual.

Steps to Follow

1. Start with the platform fully lowered to the ground.

- Ensure there is no weight on the platform (test weights, passengers or otherwise). This keeps the system pressure as low as possible and reduces the change of air being trapped.

2. Check the oil reservoir level.

- With the lift on the ground the oil level in the tank should be at a level ~25mm below the 'MAX' marking. If the oil level is lower than this it should be topped up using PLS Blue hydraulic oil.
- Ensure the tank cap can breathe freely by loosening or removing it, this will help air escape during the bleed process.

3. Cycle the lift up and down slowly several times (do not stow)

- Avoid powering the lift beyond vehicle floor height (i.e. do not begin stowing the lift) at this stage.

4. Monitor the oil level throughout each cycle

- Ensure the oil level does not run too low and recheck the oil level after each cycle when the lift is at ground level as detailed in point 2 above.
- Top up the oil level if required.

5. After several gentle cycles, stow the lift

- After several cycles move the lift into the vertical stow position.
- Stop once the lift platform is in a vertical position (do not overstay). Overstay can produce high pressure which can:
 - Pull new air into the system
 - Trap existing air
 - Cause microbubbles to combine into larger air bubbles.

6. Use the hand pump to purge air

- With the lift in the vertical stow position use the hand pump several times.
- Manual pumping should be done firmly and at a steady pace, pumping too fast or aggressively may lessen the results.
- You should stop pumping when resistance is felt, excessive pumping risks damaging internal seals.
- This will force extra oil into the cylinders and drive trapped air back toward the reservoir where it can escape.

7. Lower lift to ground and recheck oil level

- Lower the lift to the ground and recheck the oil level is correct as described in point 2 above.
- If the oil level is low, top up using PLS Blue oil.
- Refit the oil tank cap securely.

8. Cycle lift and confirm performance

- Cycle the lift again several times up and down without weight applied
- Check for improvement in performance
- Check for signs of slow movement, juddering/stuttering, and squeaking noises.

If the issue remains after following these steps, please contact our PLS Assist team and we will be happy to provide further guidance and support.

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