

# National Association of Lift Makers

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# NALM

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To: All Members and Other Possible Interests

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Dear Sir

**DEWHURST PLC, LIFT TECHNICAL BULLETIN No L.131**

The above company has asked that we circulate to all members of the Association and other interested parties a copy of their enclosed Bulletin No L.131.

Could we please request that you be guided accordingly should you be involved with this type of equipment.

Yours faithfully



pp D M Fazakerley  
Director

## LIFT TECHNICAL BULLETIN NO. L.131

### VL SERIES LANDING DOOR LOCKS & BEAKS

TYPE: VL10, VL11, VL20, VL21, VL30, VL31, VL60 & VL61

#### **SAFETY HAZARD WARNING:**

##### **INCORRECTLY INSTALLED OR MAINTAINED LOCKS**

A recent site incident has prompted us to highlight the important precautions that must be taken during installation and maintenance to ensure the safe operation of Dewhurst landing door locking devices.

Each lock is supplied with Installation and Setting Instructions which should be carefully implemented during installation and throughout the time it is in use.

#### **INSTALLATION & ADJUSTMENT**

- Ensure that the beak aperture is below the centre line of the lock box and the face of the box is in line, but not in front of, the entrance slamp post.
- Set the operating arm at 45° to the horizontal, with the actuating roller above the box centre-line and leaning towards the car mounted actuating device. In this position gravity assists locking action.
- Adjust the beak so that it does not touch any part of the lock box aperture or tilt when the associated door is operated. If necessary the door guidance mechanism should be adjusted.
- Check that the beak and/or its fixing do not touch the face of the lock box when the landing door is fully closed.

#### **MAINTENANCE**

- Compare the beak and lock box with new items for signs of wear. Wear on engaging parts must not exceed 1mm.
- Check the beak for wear and damage, particularly on all faces that engage with the locking latch and the lock box aperture. Rounding or tapered wear at the top of the primary or back-up beak catches should not allow the beak to be withdrawn after the prelock contact is closed (Figure 1). Check the locking latch in a similar manner (Figure 2).
- Ensure that there is no distortion of parts, particularly where they could interfere with free movement of the locking latch mechanism.
- Check that clearance is present where the locking latch is guided by the fixed contact carrier moulding and the actuating shaft toggle (Figure 2).
- Check that the beak and prelocking moving contact springs are not broken.
- Ensure that in the fully locked position the door has approximately 3mm of free horizontal movement.

## FUNCTIONAL CHECKS (POWER OFF)

- Position the landing door and associated lock beak so that the locking latch rests on the top surface of the primary beak catch (Figure 1). Observe that the prelock contact is open-circuit by at least 1.5mm on both sides of the movable contact bridge.
- Close the landing door until it is fully locked and observe that there is a minimum of 1.0mm follow-through on the prelocking contacts.
- If necessary, replace the beak in order to satisfy the above criteria.

## FUNCTIONAL CHECKS (POWER ON)

- Arrange for a competent person to drive the lift from the car roof using the car top control facilities. A further person should remain on the landing to control the movement and position of the landing door. Position the car roof adjacent to a landing door but not actuating the locking lever arm. Open the landing door then attempt to move the car using the car top control facility. The car must not move and the car mounted retracting device must not actuate.
- Close the landing door very slowly until the beak contact is just made whilst attempting to move the car using the car top control facilities. Check that the car mounted retracting device actuates. The car must not start to move since the prelock contacts are still open-circuit. Continue to very slowly close the landing door until the prelock contacts are just made and the lift car starts to move. Allow the lift car to travel, say 0.5 metre, then attempt to snatch the door open without excessive force, say 25 - 55kg (55 - 110lbs) applied horizontally at the door handle. The beak must be retained in the lock box. If the locking latch catches the beak back-up catch the lift should stop immediately. If the locking latch catches the beak primary catch the lift should not stop until the car top control facility is released.
- If necessary, replace the beak in order to satisfy the above criteria.

## ACTION RESULTING FROM LOSS OF INTEGRITY

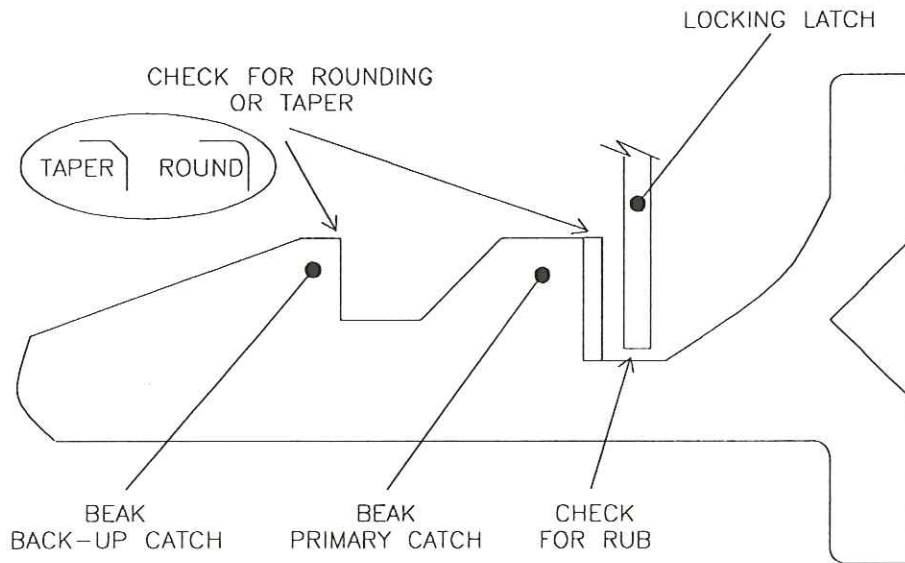
- If the above checks reveal actual or potential failure of integrity, the appropriate landing entrance should be physically secured, to prevent use, until the beak or lock box assemblies are replaced.

## IMPORTANT NOTE

- The above tests do not necessarily completely prove the integrity of the lift safety circuits associated with the landing door locks. It may still be possible that other circuit conditions are present which could nullify all or part of the lock safety circuits when other parts of the lift control system are utilised.

A W Hathaway  
LIFT ENGINEERING MANAGER

**FIGURE 1 - LOCK BEAK**



**FIGURE 2 - LOCK LATCH**

