

National Association of Lift Makers

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Director D M Fazakerley

NALM

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To: All Members

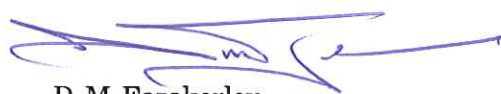
4th February 1993

Dear Sir,

Employer: South Eastern Assured Homes, Park Crescent, Glasgow
Architect: PDD Architects, 667 Silbury, Boulevard, Central Milton Keynes, Buckinghamshire
Contractor: Robinson and White Ltd, Icknield House, 40 West Street, Dunstable, Bedfordshire
Site: B.1.2.3 Housing, Central Milton Keynes

In the event of a member being approached in connection with the new installation at the above address they might wish to contact the Association for further information.

Yours faithfully,



D M Fazakerley
Director

Per David Humphrey, Puranga
£60,000 of equipment on site, paid £10,000, client under certifying
so withdrawn, some bits outstanding.

TORPEDO ROPE RELEASE DEVICE TYPE LCT

WARNING OF POTENTIAL SAFETY HAZARD

Recent investigations have revealed that over a period of years wear can develop on the spring loaded brass plunger which in extreme cases can cause it to stick in its cast-iron housing. If this occurs, the overspeed governor may not exert sufficient pulling force when required to free the torpedo and operate the safety gear.

ACTION REQUIRED

Recommended maintenance procedures require that the torpedo plunger should be visually inspected for wear and lubricated with grease at intervals no greater than 6 months. Unless you are certain that this has been done, and your records can prove it, we strongly recommend in the interests of safety that all torpedo releases type LCT should be inspected as soon as possible and thereafter at regular 6 monthly intervals as recommended in Dewhurst Data Sheet QB250-25.

The following instructions give a step-by-step explanation of the work required to inspect and if necessary renew a worn plunger.

1. PLUNGER DISMANTLING PROCEDURE (Refer To Fig A)

- 1.1 Loosen locknut (2) just sufficient to enable the adjusting screw (1) to become free.
- 1.2 Simultaneously unscrew the adjusting screw (1) and locknut (2) thus retaining the original setting for reassembly.
- 1.3 Carefully remove the adjusting screw (1) and locknut (2) complete with spring (5) whilst temporarily restraining the plunger (6) with a finger.
- 1.4 Carefully withdraw plunger (6) whilst holding a hand beneath to prevent it falling.
- 1.5 Pull the torpedo (7) sufficiently clear of its cast-iron housing (4) to enable visual inspection. It may be necessary to temporarily disconnect the steel rope to the safety gear to meet this requirement.

2. INSPECTION PROCEDURE

- 2.1 Clean all parts to remove dirt, grease etc. and dry with a soft lint-free cloth or equal.
- 2.2 Check that the torpedo (7) can be freely engaged and disengaged with the transverse pin (8) and any casting blemishes do not prevent its free upward movement.
- 2.3 Check that any casting blemishes on the face of the torpedo (7) where it engages the plunger (6) does not prevent its free upward movement.

2.4 Check the outside surface and front face of the plunger (6) for wear. Some wear on plunger (6) is to be expected and is acceptable providing lips are not formed which may cause jamming of the plunger. As a guide, if there is sufficient lip to prevent a finger nail passing across the surface then the plunger should be renewed. See fig B.

2.5 Check the plunger bearing hole in the cast-iron housing (4) for wear and sharp corners. See Fig C and enlarged section XX.

3. REMEDIAL PROCEDURE

3.1 Apply emery cloth to the end of the plunger bearing surface in the cast-iron housing to remove sharp corners and form a small radius on the bearing periphery. See fig C and enlarged section XX.

3.2 Remove any blemishes which could cause maloperation.

3.3 Check that the plunger slides freely in its bearing and does not jam at its normal setting.

4. REASSEMBLY PROCEDURE

4.1 Reconnect the safety rope if it was disconnected during the dismantling procedure. Leave sufficient slack in the safety rope so that the torpedo (7) can be disengaged from the transverse pin (8) before the safety gear is actuated.

4.2 Lightly lubricate the transverse pin (8) and outside surface of the plunger (6) with grease.

4.3 Insert the plunger (6) into its bearing ensuring that it is correctly orientated. See fig A.

4.4 Insert the spring (5) into the recess in the rear of the plunger then fit the adjusting screw (1) and locknut (2) over the protruding end of the spring. Carefully screw this sub-assembly into the end of the cast-iron housing (4) until the locknut (2) just touches the face of the housing. Tighten the locknut. Take care that the locknut does not move relative to the adjusting screw during this procedure.

4.5 Insert the torpedo (7) into the housing (4) until it engages on the transverse pin (8).

4.6 If the position of the locknut relative to the adjusting screw has been disturbed during any of the procedures 1 to 4 inclusive, then follow adjustment procedure 5. If not continue with test procedure 6.

5. ADJUSTMENT PROCEDURE

5.1 Adjust the torpedo release to give a net minimum pull out force required by the safety gear. This force must not exceed 50% of the force capable of being exerted by the gripper jaws on the overspeed governor.

- 5.2 To adjust the pull out force of the torpedo release device undo the locknut (2), rotate the adjusting screw (1) clockwise to increase the pull out force (anticlockwise to decrease pull out force). When required adjustment has been achieved hold adjusting screw (1) and tighten locknut (2). Check pull out force with a spring balance.

6. TEST PROCEDURE

After reassembly and adjustment check that -

- 6.1 Normal starting and stopping does not affect the safety gear pull out.
- 6.2 The governor rope runs free of the governor rope gripper jaw faces.
- 6.3 Whilst the lift is moving down, manually trip the governor to operate the rope gripper jaws. Check that the torpedo is pulled clear of its frame. Note - if it is not desired to operate the safety gear at the same time the safety rope should be temporarily disconnected for this test.
Reconnect rope after successfully completing test
- 6.4 Move lift car up a short distance, reset overspeed governor, torpedo and safety gear. Reconnect safety rope where appropriate.
- 6.5 Check security and condition of all rope clamps
- 6.6 If a test failure occurs carry out adjustment procedure 5 and retest.

7. MAINTENANCE

Maintenance is required at regular intervals of not more than 6 months. The maintenance routine should include:

- 7.1 Disengage torpedo (7), clean away all accumulated fluff and dirt.
- 7.2 Lightly lubricate the plunger (6) and transverse pin (8) with grease.
- 7.3 Check that the plunger operates smoothly and shows no sign of excessive wear.
- 7.4 Check that the torpedo (7) can be correctly seated on transverse pin (8) and that the normally expected upward force on the governor rope will cause it to release.
- 7.5 Check security and condition of all rope clamps.
- 7.6 If the condition of the device is unsatisfactory carry out procedures 1 to 6 inclusive.

8. ROUTINE SAFETY CHECK

The performance of the torpedo release device must be checked in accordance with test procedure 6 on each occasion that the overspeed governor and safety gear are inspected and tested in accordance with Statutory requirements on these devices.

If at any time there is any uncertainty in regard to the condition or correct operation of the torpedo rope release device, then in the interests of safety we strongly recommend that the detailed procedures detailed in this Lift Technical Bulletin be implemented

9. SPARE PARTS

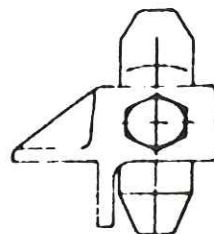
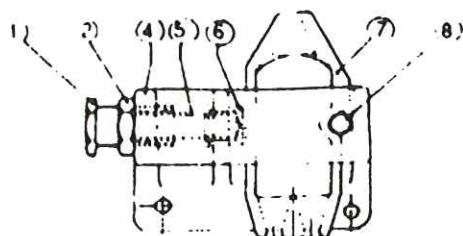
<u>Description</u>	<u>Drawing No.</u>	<u>Order Code</u>
Plunger	3DS975-4	002036-0000-03

10. CIRCULATION

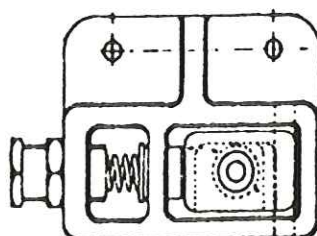
All Dewhurst Customers
Mr. L.R. Forryan (H&SE)
Mr. D. Fazakerley (NALM)
Mr. W.J. Gale (BLA)
Insurance Companies (AOTC & IEIC)

A.W. Hathaway

A.W. HATHAWAY
LIFT ENGINEERING MANAGER



Pull out adjustable from 0 to 225 Kg



ROPE ARRANGEMENT
FOR TORPEDO
RELEASE

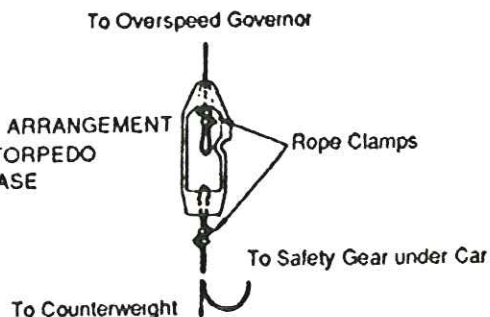
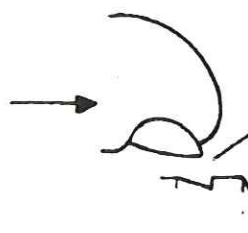
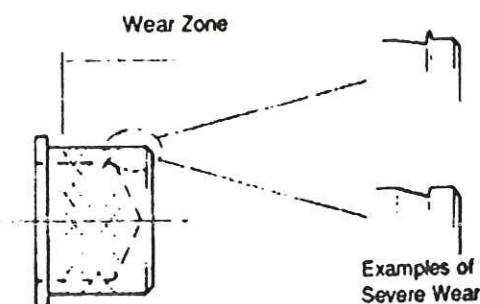
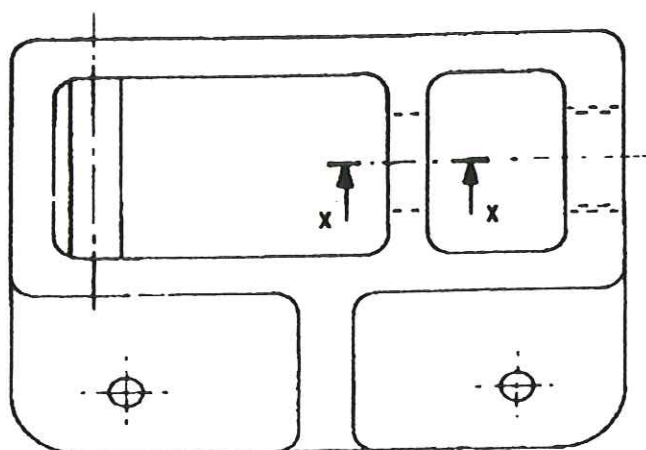


FIGURE A - TORPEDO ROPE RELEASE DEVICE TYPE LCT



Guide for
Acceptable Wear
If finger nail does not
catch.
Recheck within 6 months.

FIGURE B - PLUNGER SHOWING TYPICAL WEAR CHARACTERISTICS



Apply emery cloth to
remove sharp corners
and form small radius
on both sides of bearing
periphery.



FIGURE C - CAST IRON HOUSING & PLUNGER BEARING DETAIL