National Association of Lift Makers

NALM

33/34 Devonshire Street London W1N 1RF

Director D M Fazakerley

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To: All Members and other possible interests

14th August 1992

Dear Sir,

Gimson Stairlifts Ltd, Leicester

The above company, a subsidiary of a member company of this Association, Thyssen Lifts & Escalators Ltd, has asked that in the interests of safety and good practice we circulate their enclosed letter and Technical Bulletin concerning a particular design of stairlift.

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

Yours faithfully,

D M Fazakerley
Director

Gimson

Gimson Stairlifts Limited
Boston Road,
Beaumont Leys,
Leicester LE4 1AZ

Telephone: 0533 366779
Facsimile: 0533 366198

Dear Sir,

WARNING OF POTENTIAL SAFETY HAZARD
RE: W J FURSE AND FURSE STAIRLIFTS, MODELS 103 AND 185 - MANUFACTURED BETWEEN 1982 AND DECEMBER 1988

All companies involved with servicing or relocation of the above mentioned products should be aware of the following information.

During the period of manufacture some 5,300 units were produced with a common gearbox design. We have 15 failures of the gearbox output shaft reported to us, 14 being sheared keys the other being a sheared shaft.

We attach a technical bulletin, technical drawing (the relevant components are parts numbered 9 and 11) and procedure for removal of the gearbox.

We are advising owners who contact us direct to contact the company from whom they purchased the stairlift. We also explain that due to the time, work and specialist equipment required, the most cost effective solution is to arrange for either the whole gearbox to be returned to ourselves for inspection, and if necessary rectification, or to arrange for the installation of a reconditioned gearbox. Please contact the writer for any further information.

Yours faithfully

Kate Davis.

KATE DAVIS (MISS)
Furse 185 Administrator

185/8/2610/SJP

Gimson

TECHNICAL BULLETIN FOR W J FURSE AND FURSE STAIRLIFTS, MODELS 103 AND 185 STAIRLIFT MANUFACTURED BETWEEN 1982 AND 1988

The components that have given cause for concern are the gearbox final drive shaft and the square key locking the final drive pinion to the shaft, numbered 9 and 11 on the enclosed diagram.

Indications of pending failure are minimal but in some circumstances an increase in the noise levels has been noted, and/or the presence of excessive backlash at the drive sprocket.

The reported failures occurred when the units moved from rest, at the lower position, which is the point of maximum load on the shaft.

The shaft and key have been marked on the enclosed drawing and you will see that the only way to inspect the components is to dismantle the gearbox.

Inspection of the Key and the Keyway is one of a visual nature but inspection of the shaft in a similar fashion will not reveal a possible failure. To determine the integrity of the shaft, crack detection equipment is required.

Should you wish to carry out inspection the procedure for removing and dismantling the equipment is enclosed. This should only be undertaken by suitably trained and experienced stairlift engineers.

As the time to carry out an inspection is approximately 4 hours of site time simply inspecting is not a recommended solution.

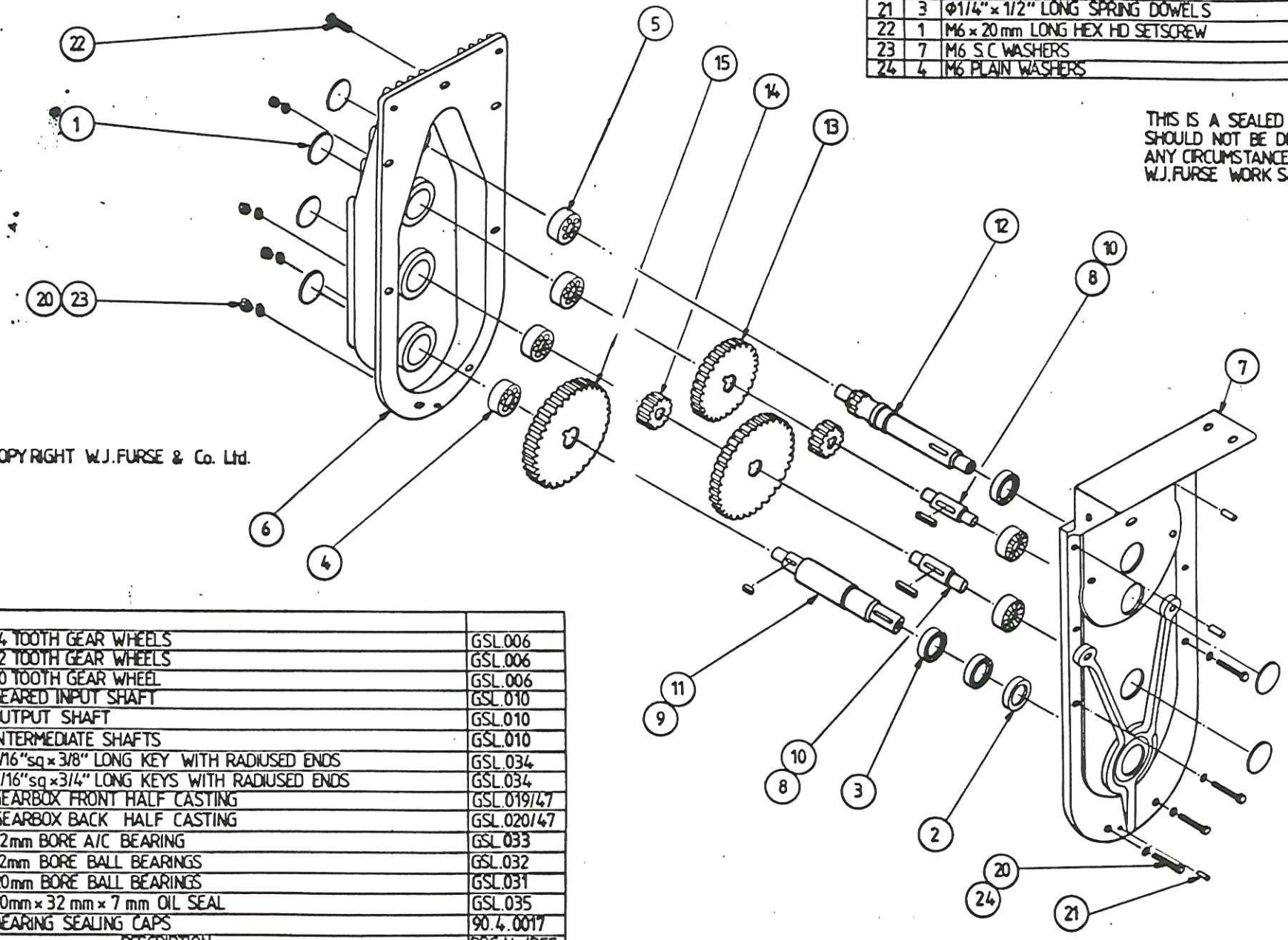
A more cost effective action is one of removing the gearbox and sending to ourselves for dismantling, inspection and, where required, fitting of replacement output shaft and keys. Alternatively, Gimson Stairlifts can supply a service exchange gearbox or visit site and fit a re-built unit on your behalf.

Once again we emphasize that any maintenance or repair work should only be carried out by trained personnel.

29/7/92
GB/2475/JE

ITEM	QTY	DESCRIPTION	DRG No/REF
20	4	M6 x 25mm LONG HEX HD BOLTS AND NUTS	4A0625
21	3	Φ1/4" x 1/2" LONG SPRING DOWELS	75H0816
22	1	M6 x 20 mm LONG HEX HD SETSCREW	57C0620
23	7	M6 S.C WASHERS	111S06
24	4	M6 PLAIN WASHERS	99A06

THIS IS A SEALED FOR LIFE UNIT AND SHOULD NOT BE DISMANTLED UNDER ANY CIRCUMSTANCES OUTSIDE W.J.FURSE WORK SHOPS.



ITEM	QTY	DESCRIPTION	DRG No/REF
16			
15	2	74 TOOTH GEAR WHEELS	GSL.006
14	2	22 TOOTH GEAR WHEELS	GSL.006
13	1	60 TOOTH GEAR WHEEL	GSL.006
12	1	GEARED INPUT SHAFT	GSL.010
11	1	OUTPUT SHAFT	GSL.010
10	2	INTERMEDIATE SHAFTS	GSL.010
9	1	3/16"sq x 3/8" LONG KEY WITH RADIUSED ENDS	GSL.034
8	2	3/16"sq x 3/4" LONG KEYS WITH RADIUSED ENDS	GSL.034
7	1	GEARBOX FRONT HALF CASTING	GSL.019/47
6	1	GEARBOX BACK HALF CASTING	GSL.020/47
5	1	12mm BORE A/C BEARING	GSL.033
4	5	12mm BORE BALL BEARINGS	GSL.032
3	3	20mm BORE BALL BEARINGS	GSL.031
2	1	20mm x 32 mm x 7 mm OIL SEAL	GSL.035
1	6	BEARING SEALING CAPS	90.4.0017
ITEM	QTY	DESCRIPTION	DRG No/REF

TITLE GEARBOX SHAFT AND BEARING ASSEMBLY	SCALE 1:2.5	DATE 28.6.82	REV.C.	REV.B.	REV.A.	NOT APPROVED	SITE
W. J. FURSE & CO. LTD. NOTTINGHAM	DRAWN Z. MARTIN	CHECKED					DO NOT SCALE — DRG. No.

Gimson

PROCEDURE FOR REMOVAL OF MOTOR GEARBOX FROM W J FURSE AND FURSE STAIRLIFTS, MODELS 103 AND 185 STAIRLIFTS MANUFACTURED BETWEEN 1982 AND 1988

1. With the chair near to the top of the track

1.1 Switch the power off
1.2 Remove 2 or 6 cover screws (remove front cover)
1.3 Reset safety switch so lift will work
1.4 Remove top flap (possible 4 screws)
1.5 Unplug arm socket
1.6 Remove the 2 x 13mm bolts holding the seat in place + 5mm allen bolt
1.7 Seat and arms will lift off

2. Bottom of the track

2.1 Remove the 13mm chain anchorage nuts to free chain
2.2 Move the chair up the track making sure the safety gear comes in
2.3 Remove the track cover (2 screws)
2.4 Remove over travel limit 2 x 10mm Bolts
2.5 With the slack on the chain remove the top chain anchorage 13mm

3. Chair ready to be removed from track

3.1 Taking care pull chair from track (careful of the chain & T/cable)
3.2 Lift off the back cover
3.3 Remove the trailing cable/snake remove the 2 screws top/bottom and one to the side
3.4 Pull plate clear - unplug the 2 cables
3.5 To remove the back cover 3 x 10mm bolts 1 x screw near T/cable plugs remove top over travel switch, undo capacitor 13mm. (O/Travel switch may need to be taken apart and arm socket removed to free wires).

4. Removing motor/gearbox

4.1 Remove the four 10mm bolts supporting the motor gearbox
4.2 Lift the chain from the gear
4.3 Unplug the wires leading from the motor gearbox
4.4 Remove the earth wires 10mm
4.5 The motor gearbox will now lift out

5. Repeat one if reverse

5.1 Make sure

- Trailing cable plugs fitted when chair is off the track
- Safety device correctly set
- Do not over tighten chain

5.2 Other information/checks

- If direction of travel is wrong, change capacitor wires
- Seat to be level and tight
- All safety edges and limit switches work
- Over travel limit switches should not be set too close top and bottom
- No trapped wires

6. Test Certificate: Complete as required by BS 5776: 1979

Note

When testing if you link out 2 & 5 on the Din Socket you can use the wall pushes.

29/7/92
LKW/2473/JE