

Aviation Ltd.

For further details of Otffur Release Units and the support services available please contact:

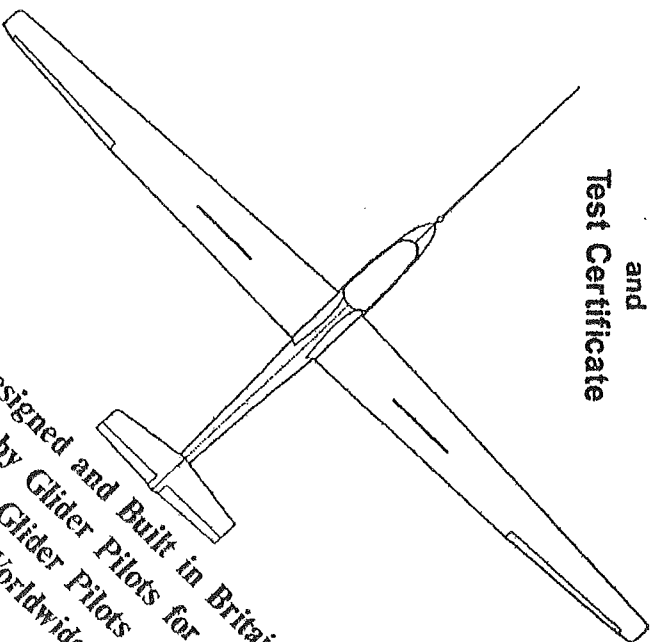
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Aviation Ltd

OTTFUR
Quick Release Unit
LOG BOOK

including
 General Information, Care & Maintenance
 and
 Test Certificate



*Designed and Built in Britain
 by Glider Pilots for
 Glider Pilots
 Worldwide*

OM	Type	Serial No.
106E (Mod)		1E11297R

OTTFUR QUICK RELEASE UNITS

GENERAL INFORMATION, CARE AND MAINTENANCE

IMPORTANT

Keep the LOG BOOK with the glider documents for use when checking the Ottfur Release Unit during C of A's etc. Should it become necessary to return the unit to the manufacturer PLEASE Include this LOG BOOK

1. GENERAL

Each new and reconditioned unit is tested prior to delivery and is accompanied by a Test and Data Sheet and Release Certificate with a Parts and Labour Warranty for a period of 6 months for reconditioned units and 12 months for new units.

NOTE: The test carried out prior to delivery may cause some marking to the hook beak and ring carriage.

In the interest of maintaining the highest level of quality control it is recommended that unserviceable units are always returned for repair and/or reconditioning. Cair Aviation Limited, who own the design and manufacturing rights of the OTTFUR release, operate a return service on standard units.

The Cair Aviation service policy dictates that ready for use standard OTTFUR units are available from off the shelf stock and in consequence, with the exception of Spring Change Kits, sub-assembly spares are not available.

2. MK1 OTTFUR OM100 SERIES Q.R. UNITS

These units are the standard OTTFUR Quick Release Units.

As described above a full support service is available for these units and to avoid any confusion, which may result from the various configurations in service these have been rationalised into FIVE common types:

3.1 CARE AND MAINTENANCE

To ensure a long and trouble free service life it is important that the units are regularly serviced and the following notes are offered as guidance for routine servicing and maintenance.

4.1 SERVICING

Servicing is limited to cleaning and lubrication on a regular basis, the periodicity depending on usage and environment. Ideally this period should not exceed six months.

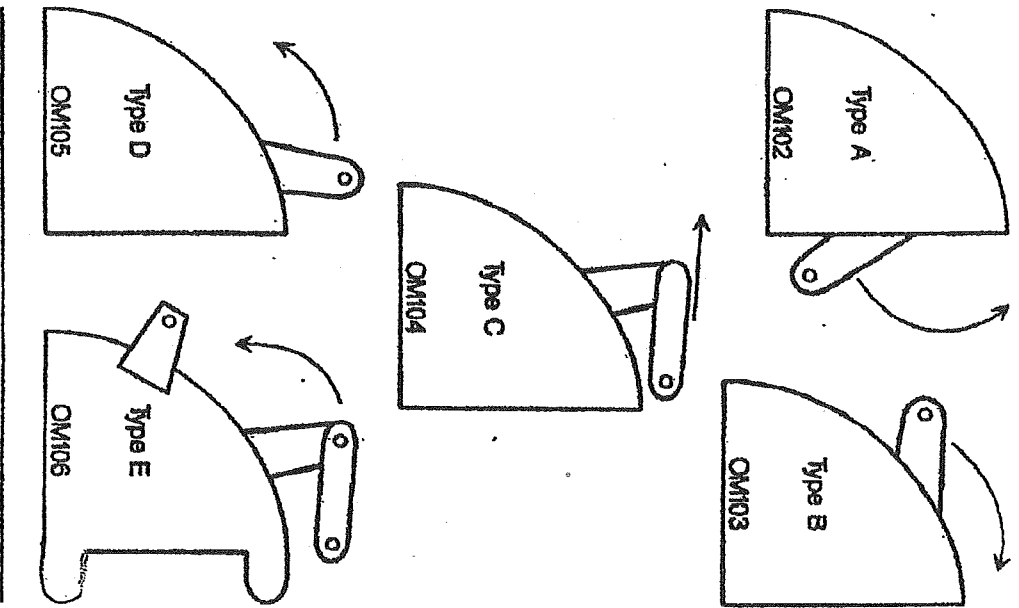
As most units, of necessity, are positioned such that they can collect the maximum amount of mud and dirt the use of grease as a means of lubrication should be avoided.

Units should be thoroughly cleaned with petrol or paraffin, blown out and dried with an air gun and then lubricated with an approved aviation lubricant such as Shell Aviation Fluid 3 or its equivalent.

4.2 INSPECTION

The following inspections and checks should be carried out on an annual basis:

- i) Remove Q.R. unit(s) from the glider.
- ii) Clean and dry the unit thoroughly
- iii) Where applicable inspect the back release ring carriage for excessive wear, especially on the forward inside edge of the ring.
- iv) Check the throat of the Hook for distortion and wear.
- v) Check the Casing at the throat for distortion and wear of the casing side plates.



- vi) Check the Hook, Ring Carriage and Release Lever bearings for war by rocking them laterally.
- vii) Inspect both springs for distortion, misalignment and signs of impending failure, or fracture and check tighten both the 1/4 inch BSF pivot nuts. Carry out a no load pull check on the Release Lever.
- viii) As a guide this figure should be 2.5dan \pm 1.0dan (5.5lbs \pm 2.2lbs)

If the pull force required is less than 1.5dan (3.3lbs) the Lever Spring should be replaced.

A pull force in excess of 3.5dan (7.7lbs) may indicate a lack of lubrication. If further lubrication fails to improve this figure the unit should be rejected.

Free movement of the Beak indicates bush wear (Lateral movement) or linkage wear (Fore and Aft movement). Free fore and aft movement should not exceed 1mm.

- ix) Carry out a no load pull check on the Back Release mechanism by applying a pull force to the rear inside edge of the Ring Carriage.

As a guide this figure should be 5.5dan \pm 1.0dan (12lbs \pm 2lbs). If the force required operate the Back Release is less than 4.5dan (10lbs) the Back Release Spring should be changed.

A pull force of more than 6.5dan (14.5lbs) may indicate a lack of lubrication. If further lubrication fails to improve the test figure the unit should be replaced.

- x) Where the general condition of the unit is good and bush wear acceptable but pull force figures are found to be low, replacing the springs with new items will usually provide a solution. However if the unit exhibits a combination of excessive wear and high pull forces the unit should be returned for overhaul.
- xi) On satisfactory completion of the checks listed above and any associated servicing, lubricate the unit with Shell Aviation Fluid 3 or its equivalent and re-install in the glider.
- xii) Carry out insitu functional check, i.e. Free Drop, Forward and Back Release.

5. RECOMMENDATIONS

- i) Avoid the use of grease as a lubricant
- ii) Avoid acute sideways angles when ground towing
- iii) Avoid applying snatch loads when ground towing
- iv) Invest in a pair of proper cable rings for ground towing
- v) Clean and lubricate regularly -- more often is much better than not enough
- vi) If one Spring needs changing -- change both -- it saves time.

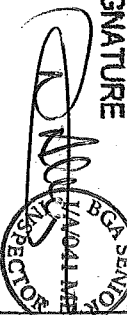
6. RELEVANT PART NUMBERS
6.1. THE OTFUR MK1 OM SERIES

- Type A - OM102
- Type B - OM103
- Type C - OM104
- Type D - OM105
- Type E - OM106

INITIAL FUNCTIONAL TEST RESULTS

TYPE: 106E (MOD)	1E11297R	REPORT No: 297
SERIAL No.		

DATE: 14/02/06

SIGNATURE: 

INSPECTOR

NO LOAD TESTS

RELEASE LEVER UNLOCK (will)	BACK RELEASE BREAKOUT (lx):	BACK RELEASE FULL TRAVEL:
2.3 dan 5.0 lbs	4.1 dan 9.0 lbs	7.3 dan 16.0 lbs

LOAD TEST

TESTED TO SK7/38 & OM100PDT	ISUDATUM 106E @ 20 dan (45lbs)	3.6 dan 8.0 lbs
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WARNING

OM 100 UNITS DO NOT HAVE AN ADJUSTER.

Each unit set up is physically unique and units should NEVER be made up from a mix of sevicable components from a number of other units.

ON COMPLETION OF SPRING CHANGE ALWAYS RE-ASSEMBLE 3/16" SPACER TUBING IN THEIR ORIGINAL POSITIONS.

7.

7. SPRING REPLACEMENT

7.1 BACK RELEASE SPRING (OM123/13)

Fitting this spring requires some form of compression tool to align the spring ends with the locating split pins. It is also necessary to partially withdraw the hook/ring carriage pivot bolt to facilitate fitting.

7.2 RELEASE LEVER SPRING (OM123/14)

These springs are delivered as standard for the TYPE B (OM103) release units. For other units it will be necessary to bend the spring legs to the correct orientation for the type of release to which it is being fitted. Fitting is achieved by removing the lever pivot bolt and withdrawing the lever from the casing. It is not necessary to disconnect the lever from the link. Where applicable remove the 2BA spring retention bolt, push the spring legs back with a slim screwdriver and replace the 2BA bolt.
NB: The pivot bolt nuts should be tightened to 70-90lbs ins.

7.3 SPRING/BUSH REPLACEMENT KITS.

Spring/Bush change kits are available from Cair Aviation Ltd.
Part No. OM100SK suffixed by the Type letter

Note: T49 Capstan BR Springs are left handed and the RL Spring is also used in the Canopy catch.

7.4 COMPATIBILITY.

All OM Units are compatible with Tost Rings (LN65901).
THE MANUFACTURERS RESERVE THE RIGHT TO ALTER THE SPECIFICATIONS AT ANY TIME, AS THEY HAVE A POLICY OF CONTINUOUS DEVELOPMENT.


6.

OTT-FUR QR UNIT RELEASE CERTIFICATE		No.
CAIR AVIATION LTD, CRAWLEY, RH10 3PA, ENGLAND		
AUTHORITY		BRITISH GLIDING ASSOCIATION

ITEM	PART No.	SERIAL No.	ELIGIBILITY
OTT-FUR QR UNIT	OM106E (Mod)	1611297R	BGA VARIOUS

*NEW	*REFURBISHED	*BCAR(E)	*JAR 22	LIFE USED
		<input checked="" type="checkbox"/>		NIL

Certified that the above QR Unit has been Manufactured/Refurbished and Tested in compliance with the Regulations as indicated above and prepared in accordance with the British Gliding Association's Technical Procedures Manual as amended at the date of this Certificate and is considered to be ready for release to service in installation compatible gliders registered with the British Gliding Association.

Signature: 	Name: D A T Y
BGA Insp. No. IA/041 ME	Date: 14 02 06



Notes:

- Where the end user is subject to the regulations of an Airworthiness Authority other than the British Gliding Association it is essential that the end user ensures that his/her Airworthiness Authority accepts the QR Units certification under the British Gliding Association's regulations.
- This certificate does not constitute installation certification. In all cases, including BGA registered gliders, the installation must be recorded and certified in the Glider Log Book.

*delete as necessary

REFURBISHMENT FUNCTIONAL TEST RESULTS

TYPE:	SERIAL No.	REPORT No.:
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DATE:	SIGNATURE
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NO LOAD TESTS

RELEASE LEVER UNLOCK (viii)	BACK RELEASE BREAKOUT (ix)	BACK RELEASE FULL TRAVEL:
dan	dan	dan
lbs	lbs	lbs

LOAD TEST

TESTED TO SK7/38 & OM100PDT	ISU DATUM @ 20 Dan (45lbs)
	dan
	lbs

WARNING

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Each unit set up is physically unique and units should NEVER be made up from a mix of serviceable components from a number of other units.

ON COMPLETION OF SPRING CHANGE ALWAYS RE-ASSEMBLE 3/16" SPACER TUBING IN THEIR ORIGINAL POSITIONS.

OTT FUR QR UNIT RELEASE CERTIFICATE		No.
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Signature:	Name:
BGA Insp. No.:	Date:

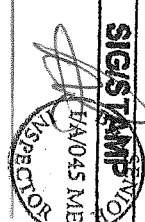
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*delete as necessary

10.

SERVICE RECORDS

DATE	ITEM	SIG/STAMP
5/02/2006	Revised	 TA045 ME INSPECTOR

11.

NOTES SPECIFIC TO THIS UNIT:

BOTH CASING AND DRIFTING LEVEL
HANS BEEN MODIFIED TO SUIT
INSTALLATION IN SKYLINE 4 BAY N° ?
THE STANDARDS ON 106E UNIT
IS NOT INTERCHANGABLE
WITH THIS UNIT.

