# Chapter 14

(This chapter supersedes that issued with A.L. 48)

# **VISORS**

				LIS.	T, OF	CONTENTS						
					Para.							Para
Introduction					1	Visor, Mk. 2C						
Visors, Mk. I and M	k. IA				3							
Description			- 8 9		4	Description	2.5	555.7	1.000	27		18
Instructions for usa			15.5		7	Fitting a visor				10.55		20
Servicing					12	Changing a screen		5555		1.5	11.7	21
Visors, Mk. IB and i	Mk. IC	110 X		0.00	16	Cleaning a screen	5000	0.000	22.7.5	6655		22
			LI	ST	OF IL	LUSTRATIONS						
					Fig.							Fig
Visors, Mk. I and IB					1	Mk. 2C visor fitte	d to a	Mk.	IA helm	net :	down	
Visors, Mk. IA and IC					2	position					200	4
Mk. 2C visor fitted to	a Mk.	IA h	elmet	: ub		Velveteen cover fit	ted to	screen				5
h 141				25 2011.0	3	Mk. 2C visor : so	creen					6

#### Introduction

- 1. Visors may be worn by flying personnel instead of googles to protect the eyes from glare. The visor, when lowered, will also protect the eyes from flash burn, wind blast and injury such as might be caused by a blow on the upper part of the face.
- 2. The advantage of a visor over goggles is that the visor can be adjusted to any desired position between "fully up" and "fully down", whereas goggles are either on or off.

#### VISORS, Mk. I AND Mk. IA

**3.** These visors are available in one size only under the following Stores References:

Stores Ref. Nomenclature

22C/1351 Visor, flying, Mk. 1, light screen (R.A.F.)

22C/1352 Visor, flying, Mk. 1A, light

In general constructional details the visors are similar, but the Mk. 1A has a deeper transparent screen.

screen (R.N.)

# Description

**4.** The visor (fig. 1 and 2) consists of a transparent screen of neutral tint, mounted on a fibre headband which fits across the wearer's forehead and is held in position by

an elastic strap and slip buckle. The headband is padded with sponge rubber, partly for comfort and partly to cater for various head sizes.

- **5.** The transparent screen is attached to the headband by a stiffnut at one side and a wing nut at the other. The stiffnut can be used to adjust the minimum friction between the headband and the screen, while the wing nut is used by the wearer to lock the screen in the required position.
- **6.** Elastic loops on the strap carry snap-fastener sockets so that the strap can be attached to the helmet. There is also a snap-fastener socket at the centre of the headband.

#### Instructions for use

- 7. The visor will be more comfortable if the helmet is modified by the addition of the stud portion of the snap-fastener in the centre of the forehead panel near the lower edge, so that the headband can be clipped on to the helmet. If this is done, the electic strap need not be pulled very tight.
- **8.** Before the visor is worn, the stiffnut should be adjusted so that, when the wing nut is free, the screen stays in position, but

(A.L. 63, June 57)

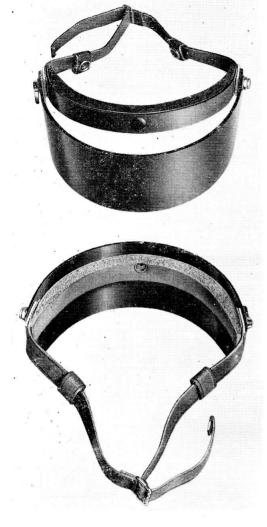


Fig. I. Visors, Mk. I and IB

requires little effort to move it up or down. The wearer can then loosen the wing nut, adjust the position of the screen and tighten the wing nut, using only one hand. The wing nut should not be tightened excessively.

- **9.** The visor head strap should not be passed through the goggles retaining loops on the helmet, but instead, the snapfasteners for the helmet loops should be attached to the corresponding snap-fasteners on the loops of the visor headstrap. If wind blast should get under the screen and lift it, the visor will then come away from the helmet easily.
- **10.** The visor should normally be worn with the screen half raised, so that the wearer



Fig. 2. Visors, Mk. IA and IC

looks ahead under the lower edge. The tinted screen reduces glare in much the same way as a hand across the forehead shades the eyes. If the screen is fully down, it has the same effect as anti-glare goggles; it improves comfort but not visibility. It may be necessary, however, to have the screen fully down when flying in or directly over bright cloud, or directly into the sun.

11. The visor does not interfere with the ejection seat blind, because even if the screen is raised, the action of pulling the blind over the face automatically brings it down over the eyes.

#### Servicing

- **12.** Protect the transparent screen as much as possible from scratches or other damage. It is made of perspex, which is relatively soft material.
- **13.** Remove dirt and fingermarks by washing the screen in cold or tepid water, using soap or one of the household detergents. Rinse well after washing. Hot water must NOT be used, because it may cause warping. If possible, do not immerse the headband and elastic strap. Use a soft clean dry cloth to wipe the screen.
- **14.** Alternatively, the screen may be cleaned with the plastic polishing set

(Stores Ref. 33C/1204) used for aircraft transparent plastic windows. Do not use gasoline or any solvent-containing liquid.

**15.** If the sponge rubber strip is pulled away from the headband, cement it in position with rubber solution, KB62 (Stores Ref. 27C/1192 or 2063).

#### VISORS, Mk. IB AND Mk. IC

**16.** In constructional details these are identical with the Mk. 1 and Mk. 1A, except that the transparent screen is of a darker tint. These visors are available in one size only under the following Stores References:—

Stores Ref.	Nomenclature
<b>22</b> C/1655	Visor, flying, dark screen, Mk. 1B (R.A.F.)
22C/1656	Visor, flying, dark screen, Mk. 1C (R.N.)

**17.** The Mk. 1B and 1C visors are provided for use with the Type F flying helmet.

## VISOR, Mk. 2C

#### Description

**18.** The visor consists of the screen, track and the mechanism on which the screen is mounted. The components are issued in two sizes suitable for different sizes of helmets under the following Stores References:—

Size	Stores Ref.	Nomenclature
Medium	22C/1650	Screen, anti-glare,
	000 /1051	CLULA
Large	22C/1651	Screen, anti-glare,
M 11	000 /1046	Track and
Medium	22C/1646	mechanism
•	000 /1017	
Large	220/1647	Track and
		mechanism

Screens are issued complete with a velveteen cover which should always be placed on the screen when a helmet is not in use. The covers are not provisioned separately.

19. The screen is mounted on a carrier which includes the operating mechanism, the carrier being attached to the track which gives a large number of alternative positions for the screen. The screen may, therefore, be adjusted to any required position providing both protection from sun glare and a clear view. In the fully down

position all objects below the rim of the cockpit may be clearly seen. When no protection from glare is necessary the screen may be lifted to the fully up position.

### Fitting a visor

20. Instructions for fitting a visor to a helmet are contained in a leaflet issued in the container in which the equipment is received. The track is positioned on the front centre line of the helmet and secured with self tapping screws. Care should be taken to ensure that the screws enter the material of the helmet at the correct angle and are not driven in too far.

#### Changing a screen

**21.** When it is necessary to change a screen the old one is removed by taking out the four screws holding it to the carrier and fastening the new screen in its place.

# Cleaning a screen

**22.** Dirt, grease and finger marks should be removed by cleaning the screen with a plastic polishing set (*Stores Ref.* 33C/1204) or by washing with a household detergent using tepid water, thoroughly rinsing and drying the screen and polishing it with a soft cloth. Hot water and chemical solvents must not be used.



Fig. 3. Mk. 2C visor fitted to a Mk. IA helmet : up position

(A.L. 63, June 57)



Fig. 4. Mk. 2C visor fitted to a Mk. IA helmet: down position



Fig. 5. Velveteen cover fitted to screen

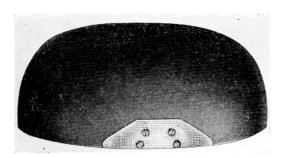


Fig. 6. Mk. 2C visor : screen