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**INTRODUCTION**

1 The GQ 650 "Silhouette" parachute assembly is a lightweight emergency parachute, designed for use in sailplanes, aerobatic aircraft and general aviation aircraft.

**DESCRIPTION**

2 The assembly components are listed in Table 1 and described in the following paragraphs.

**TABLE 1 LIST OF COMPONENT PARTS**  
(Pictorial view of components is shown in Chap 3, Page 2 Fig 1)

<b>GQ Drg/Part No</b>	<b>Nomenclature</b>	<b>Qty</b>
MRI GQ 1293	Canopy, Aeroconical® 4.8 m (c/w diaper)	1
MRI GQ 1459	Container and harness	1
GQ D 18656	Pilot chute	1
GQ D 30133	Kicker plate	1
GQ D 18716	Connecting line	1
GQ D 18854	Ripcord	1
GQ D 18682	Closure spring	1
GQ D 18681	Closure loop	2

### **CANOPY**

3 The canopy used in this assembly is the 4.8 m Aeroconical® (U.S. Patent 3758056). It has 20 gores and lines and is bias constructed in 1.1 oz nylon ripstop fabric calendered to a porosity of 0-3cfm. The suspension and vent lines are 400 lb tensile strength braided nylon. The canopy is constructed with three mesh covered vents to the rear which provide forward drive and turn control via the rear risers.

### **PILOT CHUTE**

4 The pilot chute is a 91 cm diameter, 8 gore, MA1 vane Type, coil spring activated. The spring is rated at 35 lb when compressed to a 25 mm height. The spring cap is equipped with a positioning/retaining strop.

### **PILOT CHUTE CONNECTING LINE**

5 The pilot chute connecting bridle is constructed of 14 mm, 1500 lb tensile strength tubular nylon webbing and connects the pilot chute to the canopy vent lines.

### **HARNES AND LIFT WEBS**

6 The harness and lift webs are constructed from abrasion resistant 6000 lb. tensile strength nylon webbing to MIL-W-27265 Type VII. The adjustable V rings, snaphooks and sliding bar adapters conform to military standards. The harness is integral with the container.

### **CONTAINER**

7 The parachute container is a back-seat combination 38 cm wide 127 cm in total length, with a constructed thickness of 60 mm. The container base is ballistic nylon to which are sewn the cover flaps to form the parachute stowage compartment 38 cm wide by 81 cm in length. The flap design is such that, the pilot chute stowage compartment is formed by the closure of the upper and lower flaps, the pilot chute is retained in its stowage compartment by the side flaps.



Fig 1 GQ 650 "Silhouette" parachute assembly

**BACK AND SEAT PAD**

8 The inside of the back and seat pad nearest the wearer is velour faced and padded for comfort by 12 mm thick foam. Under the centre back pad cushion which is secured in position by touch and close fastener, the ripcord access flap is located, attached to the central body panel of the container.

**SPECIAL OPTIONS**

**INFLATABLE AIR CUSHIONS**

9 The GQ 650 "Silhouette" parachute assembly may be fitted with a special inflatable air cushions for both the seat and/or lower back to provide added comfort in seating arrangements.

## **OPERATION**

10 The GQ 650 "Silhouette" parachute assembly is a conventional ripcord operated, pilot chute deployed parachute system.

## **CLEARING THE AIRCRAFT**

11 There are no simple rules for jumping clear of a disabled aircraft. The one basic rule is:

**ENSURE THAT YOU ARE ABSOLUTELY CLEAR OF THE AIRCRAFT STRUCTURE BEFORE PULLING THE RIPCORD.**

Practice climbing out of your aircraft with your parachute on whilst on the ground. Check out obstructions and items of equipment that may snag you or your parachute, remember to avoid them when an actual emergency arises.

### Exit sequence

12 Carry out the following sequence of events:

12.1 Release your safety belt and shoulder harness.

12.2 Disconnect or remove headsets, microphones, oxygen.

12.3 Look to the left body panel and locate the ripcord (become familiar with ripcord location on the ground).

### Pulling the ripcord

13 Having cleared the aircraft, immediately grasp the ripcord handle with the left hand. With a hard, quick pull, clear the ripcord from its stowage pocket as far as possible. The pilot chute will then be released. Approximately 2 seconds after the ripcord is pulled, the canopy will be fully inflated. You are now in your descent phase.

## **STEERING**

14 The GQ 650 "Silhouette" parachute assembly is fully steerable. Steering is accomplished by pulling down on the rear lift webs. Pulling down on the right rear lift web will cause the canopy to turn right. Conversely, pulling down on the left lift web, the canopy turns left.

## **LANDING**

15 In preparing to land, **FACE INTO THE WIND**, to reduce your forward speed, for different types of landings proceed as follows:

### Normal landing

16 Put your feet together and slightly flex your knees. Land on the balls of your feet, relax and go with the parachute, rolling with the landing. Remove the harness.

### High winds

17 Re-emphasize **FACE INTO THE WIND** to reduce ground speed to a minimum. After landing, if you are able to stand up, run around to the downwind side of the canopy, thus deflating it. If you are unable to stand and are being dragged by the parachute, you should first roll over onto your back so that the pack will act as protection. After rolling over, reach up and grasp **ONE** rigging line and pull it towards you hand over hand until the canopy deflates.

### Water landing

18 Since your landing area cannot be pre-determined, it is always a good idea to wear flotation equipment. The type that is gas inflated with a manual override is recommended. If you cannot successfully steer your canopy away from a water hazard, you should attempt inflation of your flotation equipment high enough to allow for manual inflation should the gas cartridge fail. Your landing position should be as described in para 16. The water may be shallow causing you to strike the bottom so you should be prepared. After landing, disconnect and remove the harness. Swim or paddle on the flotation equipment to the nearest shore.

## **NOTE**

When using a vest type lifepreserver, care must be taken to ensure the lifepreserver lobes are clear of the parachute harness.