



MANUFACTURER INSTRUCTION & MAINTENANCE MANUAL

RESTRAINT BELT

MIM 200031

Issue 1

NOV 2014

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General

This manual is provided for use with the Restraint Belt Assemblies and provides operating and maintenance instruction to be used by the operator/user in using and caring for this equipment.

If SETS Restraint Belt is used in conjunction with other equipment, such as a harness or restraint assembly, reference should be made to the Manufacturer User/Instructions for that equipment for information concerning technical data, instructions for use and operational limitations.

The approvals associated with this equipment prescribe the minimum performance standards, which have been met by this assembly for the purpose of a person using this equipment for helicopter internal restraint. It is the responsibility of those wishing to install the SETS Restraint Belt on or within an aircraft to determine that the aircraft's installation conditions are within the approval requirements. The SETS Restraint Belt may only be installed if further evaluation, by the user/installer, substantiates an acceptable installation and is approved by the local Civil Aviation Safety Authority or approved local representative.

AMENDMENT RECORD

1. All amendments to content are to be recorded below;
2. All new content inserted during an amendment will be shown with a vertical line in the margin indicating the extent of the amended portion.

Amendment		Summary	Incorporated	
No.	Date	Sections/Pages Affected	Date	Name
1				
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1. **Limitations of Use**

The SETS Restraint Belt is not a 'seat belt'. It is provided for use to restrict the movement of the wearer inside the aircraft cabin when not in a seat & seat harness.

The Restraint Belt should be used in conjunction with an 'Approved' Safety Line (Dispatchers Restraint Strap), such as the SETS HW-DRS [], which has been 'installed' to an approved hard-point & which has been established as an appropriate connector between the Restraint Belt & the aircraft attachment point.

The SETS Restraint Belt should only to be used by personnel trained in the correct fitting, assembly, disassembly and emergency release of the Restraint Belt & associated safety line, and who are familiar with the assembly's limitations and guidelines as set out in this manual and in any additional Approved Installation which the operator may gain.

CAUTION

Any modifications, additions or alterations to any part of the Restraint Belt assembly must be approved prior to use.

If any part of the webbing, hardware or stitching becomes exposed to corrosive or hazardous chemicals, the Restraint Belt should be retired from service.

Any repairs must be completed & certified by an approved repairer prior to placing the Restraint Belt back into service.

If any part of the assembly is worn or damaged, consult this manual or the manufacturer direct to establish the serviceability of the assembly prior to next use.

SETS Restraint Belt HW-RB [] requires additional approval prior to installation onto the aircraft. Refer to the approval for any additional requirements.

The Safe Working Load of the SETS Restraint Belt HW-RB [] is:

One Human Load with equipment up to a total weight of 200kg (440lb).

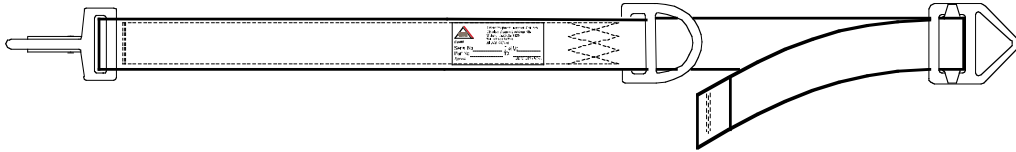
2. Design & Construction

SETS Restraint Belt – Part Number: HW-RB []

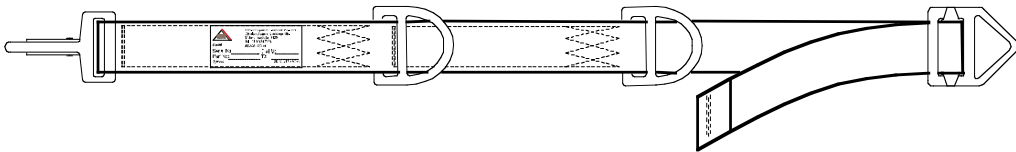
- i. There are eight different Part Numbers for the SETS HW-RB [] shown on the following pages.
- ii. The SETS HW-RB [] is a Safety Belt, which has been designed to safely secure one person (with or without equipment) within the cabin of a helicopter, weighing up to a total of 200kg (440lb).
- iii. The SETS HW-RB [] is constructed using heavy-duty webbing, stitching and hardware.
- iv. These belts are constructed with:
 - a. Heavy duty webbing;
 - b. a single action snap on one end and a V Ring adjuster on the other end; or
 - c. a male cobra fitting on one end and an adjustable female cobra fitting on the other end;
 - d. a single D Ring at the wearers side; or
 - e. a single V Ring at the wearers side; or
 - f. two D Rings at each side of the wearer; or
 - g. two V Rings at each side of the wearer.
- vi. The SETS Restraint Belt is worn around the waist, adjusted so that it is a firm but comfortable fit.

Restraint Belt Part Number Variations

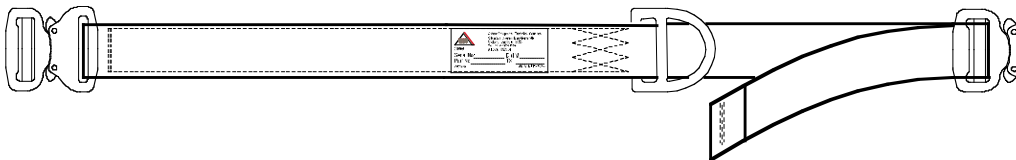
HW-RB [1D-SV]



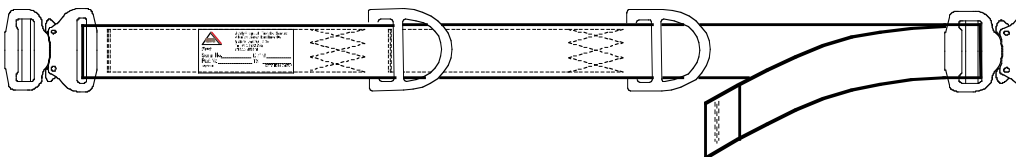
HW-RB [2D-SV]



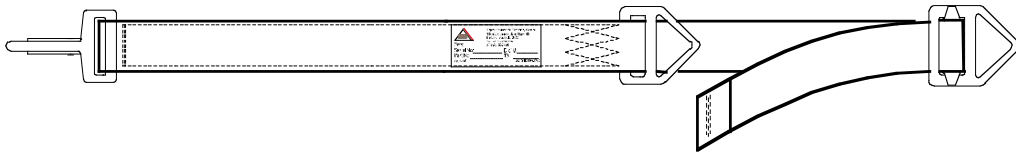
HW-RB [1D-C]



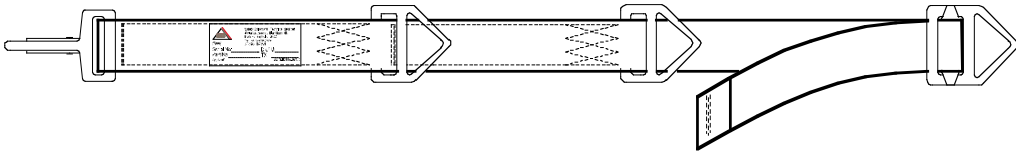
HW-RB [2D-C]



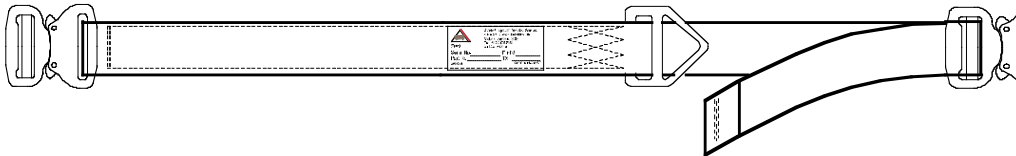
HW-RB [1V-SV]



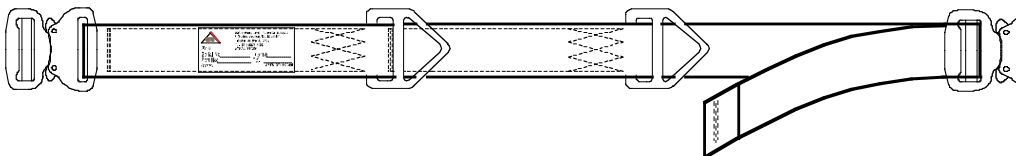
HW-RB [2V-SV]



HW-RB [1V-C]



HW-RB [2V-C]



3. Storage

- i. SETS equipment should be stored in a secure area which is free from dirt, oil, grease, moisture, direct sunlight, extreme changes in temperature & rodents;
- ii. SETS equipment should be stored away from non-aircraft/industrial products.

CAUTION

Inappropriate storage of the SETS equipment may lead to a deterioration of the webbing, stitching and hardware.

4. Maintenance - General

- i. The recommended maintenance schedules for the inspection of SETS equipment is as follows:
 - a) Before & after use;
 - b) Once yearly inspection & recertification by an approved repairer.
- ii. The recommended maintenance repair of SETS Equipment is 'on condition' due to damage or wear. This maintenance may be carried out by an local Civil Aviation Authority Approved maintenance workshop using appropriate tools & materials which are available from the Manufacturer.

5. Inspection

i. Before & After Use:

SETS equipment should be inspected by the crewmember as follows:

- a) Inspect the webbing for any signs of cuts, abrasions & wear;
- b) Inspect the hardware for signs of plating wear. This can lead to a susceptibility to salt water corrosion;
- c) Inspect the hardware for corrosion on the webbing bars & areas of metal on metal contact;
- d) Inspect the stitching for any broken, worn or missing stitches, with special attention to the upper 4 point double w box stitch;
- e) Inspect the ID Tag to ensure it is legible & intact;
- f) Inspect the hardware lock mechanism & springs to ensure they move freely & don't catch.

ii. Yearly recertification:

The yearly inspection & recertification should be carried out per the Before & After Use inspection by a suitably experienced & qualified inspector.

6. Salt Water Immersion

To clean the belt:

- i. Thoroughly wash the belt in warm water;

CAUTION

If using soaps & detergents in the cleaning of SETS equipment, the product should be checked to ensure there would be no detrimental effect on the webbing, stitching & hardware.

- ii. Thoroughly rinse the entire assembly in clean water – it may require several rinses;
- iii. Air-dry the assembly out of sunlight & away from any heating elements;
- iv. When dry, lightly lubricate all hardware with WD40 or similar. Spray the lubricant onto a rag & wipe over the hardware or carefully spray the hardware. Blow the excess off the assembly with an air compressor & complete the 'Before & After Use' inspection;
- v. Ensure the entire assembly is dry prior to use. If the webbing is used wet it may reduce the load capacity & it will wear the hardware plating prematurely around the hardware webbing bars.

7. Fresh Water Immersion

To clean the belt:

- i. Thoroughly rinse the entire assembly in clean water – it may require several rinses;
- ii. Air-dry the assembly out of sunlight & away from any heating elements;
- iii. When dry, lightly lubricate all hardware with WD40 or similar. Spray the lubricant onto a rag & wipe over the hardware or carefully spray the hardware. Blow the excess off the assembly with an air compressor & complete the 'Before & After Use' inspection.
- iv. Ensure the entire assembly is dry prior to use. If the webbing is used wet it may reduce the load capacity & it will wear the hardware plating prematurely around the hardware webbing bars.

CAUTION

If using lubricants in the care of SETS equipment, the product should be checked to ensure there would be no detrimental effect on the webbing, stitching & hardware.

8. Inspection Sheet - Example

- i. The following Inspection Sheet can be used for the purpose of logging maintenance as completed.

Restraint Belt - Inspection Sheet				
Date:		Job No.		
Name:		Contact No.		
Address:				
Description				
Model:		Part No.		
Sno.		DoM.		
Manufacture:		Approval.		
Data Referenced:				
Inspection				
Item		Check	Work Required	Work Completed By.
Connector hardware	snap & v ring			
	cobra side release			
Webbing - all				
Stitching - dbl/w box				
Stitching - straight stitch around edge				
Connector hardware	1 D Ring/V Ring			
	2 D Ring/V Ring			
	Ring			
ID Tag				
Final Inspection By:		Date:		

Inspection Sheet Sample