

Safety Equipment Technical Services Pty Ltd ABN: 36 083 308 427

MANUFACTURER INSTRUCTION & MAINTENANCE MANUAL (MIMM 200017)

Rescue Strop



Issue 1 January 2025

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GENERAL

This MIMM replaces all previous SETS Rescue Strop Operating Instructions & Limitations and SETS Rescue Strop Installation Instructions and Limitations.

This manual is provided for use with the SETS Rescue Strop (HW-STP) and provides manufacturer and maintenance instructions to the user/operator when utilising and caring for this equipment.

SETS Rescue Strop is approved to the Australian Technical Standard Order ATSO-C1003 which prescribe the minimum performance standards which must be met by this equipment. It is the responsibility of the user/operator to ensure that the installation of the SETS Rescue Strop on or within an aircraft to determine that the aircraft's installation conditions are within the approval requirements. The SETS Rescue Strop may only be installed if further evaluation, by the user/operator, substantiates an acceptable installation and is approved by the local Civil Aviation Safety Authority or other approved local representative.

If the SETS Rescue Strop is used in conjunction with other non-SETS equipment, then it is the responsibility of the user/operator to ensure reference is made to the other manufacturer user/instructions. It should describe the equipment for information concerning technical data, instructions for use and operating limitations.

APPLICABLE MODELS

All SETS HW-STP [-]

Standard Rescue Strop	HW-STP	[]
With hypothermic strap	HW-STP	[h]
With 'lock pin' installed	HW-STP	[p]

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	01-2025	Document Rewrite and Release	1/01/2025	J. Berman
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1. Limitations of Use

The SETS Rescue Strop Assembly is designed for use on its own to enable the user to attach to the aircraft's winch hook for use outside the aircraft cabin during 'down the wire' operations.

The SETS Rescue Strop should only be used by personnel trained in the correct fitting, assembly, disassembly and emergency release of the Rescue Strop, 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.

NOTE

- SETS Rescue Strop is not a 'seat belt'. It is provided for use to attach to the aircraft's winch hook when not in a seat and seat belt/harness.
- SETS Rescue Strop requires additional approval prior to installation onto the aircraft. Refer to that approval for any additional requirements.
 - The Safe Working Load of the SETS Rescue Strop is for use by one single human load with a total weight including equipment of 200kg/440lb

CAUTION

Any modifications, additions or alterations to any part of the SETS Rescue Strop must be approved prior to use.

If any part of the webbing, hardware or stitching becomes exposed to corrosive or hazardous chemicals, the SETS Rescue Strop should be removed from service.

Any repairs must be completed & certified by SETS prior to placing the Rescue Strop back into service.

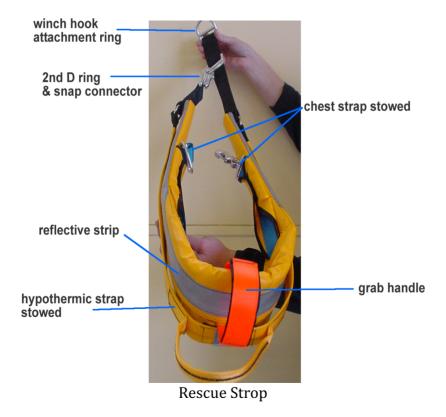
If any part of the assembly is worn or damaged, consult this manual or SETS directly to establish the serviceability of the assembly prior to next use.

2. Design & Construction

- 2.1 SETS Rescue Strop Part Number:
 - HW-STP[-]
- 2.2 The Rescue Strop is a "horse collar" type rescue sling used via attaching to the helicopter winch hook

The SETS Rescue Strops are constructed with:

- Heavy duty polyester safety webbing with a vinyl outer cover
- A chest strap is fitted, with M/F steel adjuster connector hardware
- A hypothermic strap may be fitted to those models designated with the
 part number [h]. It is attached to the outside of the strop between the two
 O rings located below the main attachment and coupling hardware. This
 strap is designed to allow a rescuer to lift a patient/survivor in a semiseated position to reduce the risk of post rescue collapse.
- A lock pin may be installed in the end snap gate to those models designated with the part number [p]. This may be installed as a part of the manufacture process or after manufacture using SETS Approved Drawing – 200028 Lock Pin Assembly.



2.3 SETS Rescue Strop Part Number Variations

HW-STP[]	Standard Rescue Strop
HW-STP [h]	With Hypothermic Strap
HW-STP [p]	With Lock Pin Installed

HW-STP[]

- Rescue Strop without hypothermic strap
- Chest strap with standard QEJ snap & V Ring adjusters
- 2087 D Ring winch attachment hardware; or
- SS Delta Ring winch attachment hardware
- End snap with or without locking pin [-p]
- Yellow main cover fabric
- Reflective tape

HW-STP [h]

- Rescue Strop with hypothermic strap.
- Chest strap with standard QEJ snap & V Ring adjusters
- 2087 D Ring winch attachment hardware; or
- SS Delta Ring winch attachment hardware
- End snap with or without locking pin [-p]
- Yellow main cover fabric
- Reflective tape
- Hypothermic strap included.

HW-STP [-p]

- Rescue Strop with Snap locking pin
- Chest strap with standard QEJ snap & V Ring adjusters
- 2087 D Ring winch attachment hardware; or
- SS Delta Ring winch attachment hardware
- End snap with locking pin [-p]
- Yellow main cover fabric
- Reflective tape
- Hypothermic strap may be included.

3. Use of Rescue Strop

- 3.1 Place the rescue strop around the personnel's/survivor's upper body, under the armpits.
 - If the strop is coupled, place the arms and head through the strop until it is sitting comfortably around the upper torso under the armpits.
 - If the strop is uncoupled, place the strop around the upper torso under the armpits and attach the snap to the second (bent) D ring.
- 3.2 Secure the chest strap by attaching the quick eject snap to the V ring adjuster.
 - Ensuring the rear cover of the snap is pushed into place. Adjust the chest strap so it is sitting comfortably against the user's chest.
- 3.3 If the hypothermic strap is fitted and is going to be used.
 - Pull the hypothermic strap away from the Rescue Strop by grasping the large yellow looped handle on the rear at the centre of the strop, pull the strap away from the retention Velcro and position it under the survivor's upper legs allowing it to rest near the survivor's knees.

CAUTION

The user must ensure that webbing or padding material is not inadvertently caught in any of the Rescue Strop connectors, snap hooks or rings when using the Rescue Strop. Doing so may lead to the hardware not engaging and/or locking correcting

4. Storage

- 4.1 SETS equipment should be stored in a secure area. The storage area should be free of foreign matter, moisture, direct sunlight, extreme changes in temperature, high humidity and rodents.
- 4.2 SETS equipment should be stored away from other non-aircraft/industrial products.

CAUTION

Inappropriate storage of SETS Rescue Strop may lead to a deterioration of the strength of the webbing, stitching and hardware

5. Maintenance - General

- 5.1 The recommended maintenance schedules for the inspection of SETS equipment are as follows:
 - Before & After Use Check.
 - 12 monthly Inspection & Recertification by a CASA approved repairer/inspector.

NOTE

Any repairs of SETS Equipment is conducted 'on condition' due to damage or wear. This work may only be carried out by SETS.

Any repairs to SETS equipment will require a full inspection of the equipment prior to releasing.

6. Inspection

6.1 Before & After Use Check

SETS equipment should be checked by the user/operator as follows:

- Check the webbing for any signs of major damage.
- Check the hardware for any signs of damage, ease of use and free of foreign matter.
- Check for any major corrosion on metal hardware, D rings and adjusters.
 If in doubt, contact SETS for advice.
- Check the stitching for any damaged or loose stitching or separating of webbing.
- Ensure the harness is identifiable by SETS ID tag/s or internal asset number.

NOTE

If the Rescue Strop has been exposed to a shock loading event it must be removed from service

6.2 12-Monthly Inspection & Recertification:

The yearly inspection & recertification is more detailed than the Before & After Use Check completed by the user/operator. It ensures the serviceability of all parts & components and is conducted by a suitably experienced & qualified inspector. This inspector should be authorised to issue CASA Approved Authorised Release Certificates (ARC).

SETS will issue an ARC on completion of any service/repair and/or annual inspection and recertification. The equipment will remain 'Approved' for use by SETS from the date on the ARC for a period of 12 months to the end of the month in which the ARC was issued.

SETS may in exceptional circumstances (as deemed by SETS) allow an additional +1 month tolerance to the yearly inspection and recertification if certain conditions are met. The user/operator should contact SETS for approval in relation to this request if it is required.

7. Service Life

- 7.1 SETS equipment has an identification label affixed to it. This label details:
 - Equipment description.
 - Model designation.
 - Date of manufacture.
 - Serial number.
 - Time expire date (TX Date).
 - Approvals applicable to the equipment.
- 7.2 ATSO Approved equipment has a life expectancy of 10 years from the date of manufacture regardless of any service, repairs or overhauls carried out on it during its in-service life.
- 7.3 SETS equipment should be withdrawn from service after the stated TX Date on the label. If there is no TX Date or this date is un-readable, then 10 years after the date of manufacture.
- 7.4 If the user/installer is unsure as to the TX Date of any of SETS equipment, they should contact SETS for confirmation and advice.

8. Cleaning

8.1 Post Saltwater Immersion/Exposure

To clean the Rescue Strop:

- Open the outer yellow vinyl cover to expose the inner webbing and padding
- Thoroughly wash the assembly in clean fresh water.
- Thoroughly rinse the entire assembly in clean water, it is recommended a separate container/bucket is used – it may require several rinses.
- Air-dry the assembly naturally away from direct sunlight & away from any heating elements.
- When dry, lightly lubricate all hardware with LPS1/WD40 or similar anti corrosion lubricant. Spray the lubricant onto a rag & wipe over the hardware or carefully spray the hardware. Wipe or blow any excess off the assembly with an air compressor & complete the 'Before & After Use' Check.
- Ensure the entire assembly is dry prior to storage. If the webbing is stored
 wet, it may reduce the load capacity over time & it will wear the hardware
 plating prematurely around the hardware webbing bars & corrosion will
 occur.
- Ensure outer yellow vinyl cover is correctly closed to protect the inner webbing and padding

8.2 Fresh Water Immersion/Exposure

To clean the Rescue Strop:

- Open the outer yellow vinyl cover to expose the inner webbing and padding
- Thoroughly rinse the entire assembly in clean water it may require several rinses.
- Air-dry the assembly naturally away from direct sunlight & away from any heating elements.
- When dry, lightly lubricate all hardware with LPS1/WD40 or similar anti corrosion lubricant. Spray the lubricant onto a rag & wipe over the hardware or carefully spray the hardware. Wipe or blow any excess off the assembly with an air compressor & complete the 'Before & After Use' Check.
- Ensure the entire assembly is dry prior to storage. If the webbing is stored
 wet, it may reduce the load capacity over time & it will wear the hardware
 plating prematurely around the hardware webbing bars & corrosion will
 occur.
 - Ensure outer yellow vinyl cover is correctly closed to protect the inner webbing and padding

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. If in doubt, complete the washing in clean fresh water only

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

9. Overhaul and Repair

9.1 Overhaul and Repair of the Rescue Strop may only be undertaken by SETS.