



Operating Instructions

And

Limitations

Y Piece Assembly

Applicable Model Numbers

HW-YP []

Australian Technical Standard Order

(ATSO)

Number: C1003

This manual is provided for use with the SETS Y Piece Assembly (HW-YP []) and provides operating and maintenance procedures to be used by the operator/user in use and maintenance for these type equipment. Limitations and operational information is contained in the Installation Instructions and Limitations Manual provided to the aircraft.

The ATSO prescribes the minimum performance standard, which must be met by a Helicopter External Lifting Device in order to be identified with the ATSO-C1003 marking.

The SETS Y Piece Assembly is approved under the ATSO-C1003 for use in conjunction with the SETS Restraint Harness (HW-CRW []).

If SETS Y Piece Assembly is used in conjunction with other equipment, reference should be made to the Operator and Instructions manuals for that equipment for information concerning technical data, instructions for use and operational limitations.

It is the responsibility of those wishing to use or install the SETS Y Piece Assembly on or attached to equipment other than the SETS Restraint Harness (HW-CRW []) or on or within an aircraft, that the installation is acceptable and is approved by the Civil Aviation Safety Authority.

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1 Limitations of Use

The SETS Y Piece assembly are only to be used in accordance with the instructions in this manual and the Approved Flight Manual Supplement issued to the aircraft.

The SETS Y Piece Assembly is not designed for use on its own, it is provided for use in conjunction with an approved winch harness to enable the user to attach to the aircraft's winch hook for use outside the aircraft cabin.

The SETS Y Piece Assembly is only to be used by personnel trained in the correct fitting, assembly, disassembly and emergency release of the Y Piece, and who are familiar with the assembly's limitations and guidelines for installation and use as set out in this manual and Approved Flight Manual Supplement.

CAUTION

Any modifications, repairs or additions to the Y Piece assembly must be approved prior to use.

CAUTION

If any part of the webbing becomes exposed to corrosive or hazardous chemicals, the Y Piece should be retired from service.

2 **Description**

- i. HW-YP [a] series Part Numbers
HW-YP [a]
HW-YP [a-1]
HW-YP [a-2]
HW-YP [a-3]
- ii. HW-YP [b] series Part Numbers
HW-YP [b]
HW-YP [b-1]
HW-YP [b-2]
HW-YP [b-3]
- iii. HW-YP [b-L] series Part Numbers
HW-YP [b-L]
HW-YP [b-1L]
HW-YP [b-2L]
HW-YP [b-3L]
- iv. HW-YP [c] series Part Numbers
HW-YP [c]
HW-YP [c-1]
HW-YP [c-2]
HW-YP [c-3]



i HW-YP [a] Series Variants

The Y Piece is a three-legged assembly.

The Y Piece is non-adjustable.

The Y Piece has a quick release mechanism incorporated into its design.

HW-YP [a]



D Ring, winch hook attachment;
Capewell, emergency release;
Standard snaps, harness attachment.

HW-YP [a-1]



D Ring, winch hook attachment;
Capewell, emergency release;
Self locking snaps, harness attachment.

HW-YP [a-2]



Carabiner, winch hook attachment;
Capewell, emergency release;
Standard snaps, harness attachment.

HW-YP [a-3]

Carabiner, winch hook attachment;
Capewell, emergency release;
Self locking snaps, harness attachment

ii HW-YP [b] Series Variants

The Y Piece is a three-legged assembly.

The Y Piece is non-adjustable.

The Y Piece has **NO** quick release mechanism incorporated into its design.

HW-YP [b]



D Ring, winch hook attachment;
Self locking snaps, harness attachment.

HW-YP [b-1]

D Ring, winch hook attachment;
Standard snaps, harness attachment.

HW-YP [b-2]

Carabiner, winch hook attachment;
Standard snaps, harness attachment.

HW-YP [b-3]

Carabiner, winch hook attachment;
Self locking snaps, harness attachment.

iii. HW-YP [b-L] Series Variants

The Y Piece is a three-legged assembly.

The Y Piece is non-adjustable.

The Y Piece has **NO** quick release mechanism incorporated into its design.

The Y Piece has an extended length upper leg.

The Y Piece has the same hardware options as the HW-YP [b].

HW-YP [b-L]



D Ring, winch hook attachment;
Self locking snaps, harness attachment.

HW-YP [b-1L]

D Ring, winch hook attachment;
Standard snaps, harness attachment.

HW-YP [b-2L]

Carabiner, winch hook attachment;
Standard snaps, harness attachment.

HW-YP [b-3L]

Carabiner, winch hook attachment;
Self locking snaps, harness attachment.

iv. HW-YP [c] Series Variants

The Y Piece is a three-legged assembly.

The Y Piece is non-adjustable.

The Y Piece has a quick release mechanism incorporated into its design.

The Y Piece has an extended length upper leg.

HW-YP [c]



D Ring, winch hook attachment;
Capewell, emergency release;
Standard snaps, harness attachment.

HW-YP [c-1]

D Ring, winch hook attachment;
Capewell, emergency release;
Self locking snaps, harness attachment.

HW-YP [c-2]

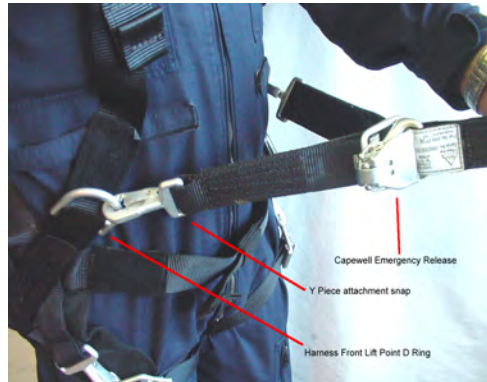
Carabiner, winch hook attachment;
Capewell, emergency release;
Standard snaps, harness attachment.

HW-YP [c-3]

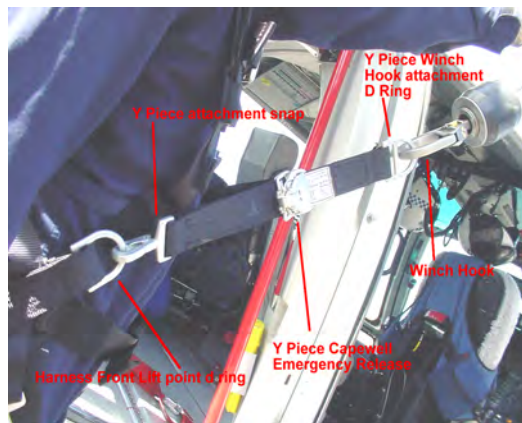
Carabiner, winch hook attachment;
Capewell, emergency release;
Self locking snaps, harness attachment

3 **Fitting of Y Piece**

- a) Attach the lower snaps to each of the winch harness frontal lift point D rings.
- b) Attach the upper winch hook connector hardware (D Ring or Carabiner) to the winch hook.
- c) Close the winch hook gate and install the safety pin.



Y Piece attachment to Harness D Rings.



Y Piece attachment to Winch Hook.

4 Storage

SETS equipment should be stored in a secure area. The storage area should be free from dirt, oil, grease, moisture, direct sunlight, extreme changes in temperature and rodents.

SETS equipment should be stored away from non-aircraft/industrial products.

CAUTION

Inappropriate storage of SETS Restraint Harness may lead to a deterioration of the strength of the webbing.

5 Pre-Use Check

SETS equipment should be checked prior to and after each use. This check should include checking the safe operation and integrity of the following components and parts:

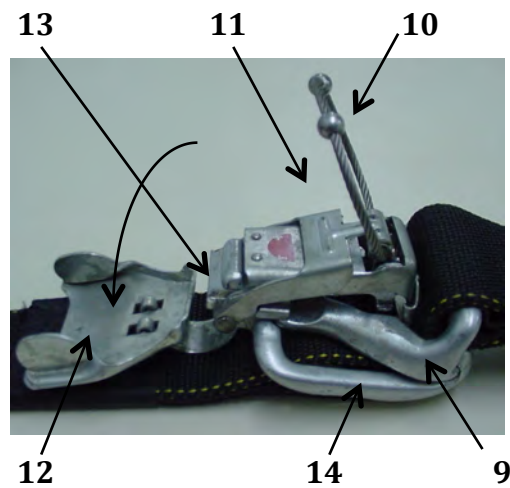
- Inspect the snaps to ensure that the gates and springs are not worn, bent, broken, corroded or choked with dirt, mud, oil or grease.
- Inspect all webbing to ensure there are no abrasions, cuts, burns or contamination by harmful substances.
- Inspect all stitching to ensure the stitching is intact and that there are no broken, pulled, burnt or missing stitches in any part of the assembly.
- Activate the capewell release (if installed) and inspect the components to ensure that they are free from dirt, mud, oil, grease and corrosion. Inspect the wire release handle to ensure that there are no broken strands in the wire and the top cover to ensure that there are no cracks or dents. Ensure that the release operates smoothly and without excessive force.

CAUTION

If there are any corroded, damaged, worn, frayed or contaminated components, webbing or hardware, then the entire assembly should be returned to SETS for evaluation prior to further use.

6 Assembly/Disassembly of Capewell Quick Release Mechanism

- a) Activate the capewell release by pulling back the top cover (12) and then pulling on the wire release handle (10).
- b) To Assemble: (refer to Diagram 1)
- c) Lay the main body (female) of the capewell release (14) flat and fold the latching mechanism (11) back away from the main body.
- d) Lay the rear bar of the triangular shaped (male) piece (9) into the slot at the front of the main body (14) and push the triangular piece (9) downward until flat.
- e) Push the lower latching mechanism (11) downward into place and position the wire release handle (10) under the cover lock groove at the rear of the main body (13).
- f) Push the leading edge of the cover (12) into the groove (13) on the main body and snap the cover (12) into position.



Capewell Release

7 **Service Inspection**

- Each Y Piece should be checked prior to and after each use as described in 'Pre-Use Check'.
- Each Y Piece shall be removed from service for the purpose of a service inspection and re-certification every 12 months from the date of the previous recertification.
- The initial Certificate of Conformance (Authorised Release Certificate) supplied with the equipment from Safety Equipment Technical Services Pty Ltd shall remain current:
 - for 12 months from the date the equipment is first introduced to 'in-service' life; or
 - for two (2) years from the manufacture date if the equipment remains in an unused & appropriately stored state.
- The first twelve (12) monthly service, inspection & recertification, shall fall due twelve months respectively, from the date the equipment was first introduced to 'in-service' life.

CAUTION

If the Y Piece is subjected to a shock load, the entire assembly should be returned to SETS with a full report, for evaluation prior to further use.

8 **Overhaul**

Overhaul and Repair of the Restraint Harness and/or Y Piece may only be undertaken by SETS.

9 Service Life

SETS equipment has an identification label affixed to it. This label details the date of manufacture, model designation, approvals applicable to the equipment and TX date.

The TX date shows the Time Expire date.

SETS equipment has a life expectancy of ten (10) years from the Date of Manufacture regardless of any service and repairs which have been carried out during the service life.

SETS equipment should be withdrawn from service after the stated TX date on the label or, if there is no TX date showing, ten years after the date of manufacture.

If the user/installer is unsure as to the TX date of any SETS equipment they should contact SETS for confirmation.

CAUTION

If any component is removed or disassembled for check or inspection, it must be re-assembled correctly to ensure it operates correctly.