

Personal Diver Harness (PDH)



User Manual

COPYRIGHT NOTICE

This manual is copyrighted, all rights reserved. It may not, in whole or in part, be copied, photocopied, reproduced, translated or reduced to any electronic medium or machine-readable format without prior consent in writing from Aqua Lung America International, Inc.

©2009 AQUA LUNG AMERICA
PERSONAL DIVER HARNESS USER MANUAL
PN AMTC-H1035-BL
(ALSO AVAILABLE UNDER AQUA LUNG P/N 769178)

You can contact a Technical Adviser via e-mail at:

aqualungcan@eastlink.ca
rbedard@aqualung.com
grubin@aqualung.com
dsumian@aqualung.com
dstancil@aqualung.com

Military sales: ksilver@aqualung.com

Trademark Notice

Aqua Lung® & Aerial® are registered trademarks of Aqua Lung America, Inc.

Warnings, Cautions, & Notes

Pay special attention to information provided in warnings, cautions and notes that are accompanied by one of these symbols:



A **WARNING** indicates a procedure or situation that, if not avoided, could result in serious injury or death to the user.



A **CAUTION** indicates any situation or technique that could cause damage to the product, and could subsequently result in injury to the user.



A **NOTE** is used to emphasize important points, tips and reminders.

CONTENTS

Copyright Notice	2
Change Record	4
Equipment Description and Capability	5
Individual Fitting and Adjustments	6
Waist Band Height Adjustment	6
Waist Band Length Adjustment	7
Leg / Crotch Strap Adjustment	7
Trimming the Waist Band and Leg Straps	7
OPERATING PROCEDURES	8
Before Use	8
Donning The Harness	8
After Use	8
In Use Photo	9
Maintenance Notes	10/11

EQUIPMENT DESCRIPTION AND CAPABILITY:

Basic Description: Strength-rated diving harness for surface-supplied or SCUBA diving.

Functions: 1. Secure attachment of umbilical or lifeline to the diver.
2. Recovery of diver and equipment from the water in an emergency.

Breaking Strength*: 2200 lb / 1000 kg / 9800 N



NOTE: Breaking Strength is defined here as the maximum tensile load that the harness can lift, when the load is applied correctly (i.e. directly in-line and as a static load), without sustaining damage that would render it inoperable or unsafe to use. This is a finite amount and does not include any safety factor.

Design: Full-body type.

Padded Sleeves: Padded sleeves (4 x black, 2 x red) are provided for comfort and protection.
2 x padded sleeves (black) for shoulder straps
2 x padded sleeves (black) for waist band
2 x padded sleeves (red) for leg straps



NOTE: The 4 x black padded sleeves are identical and interchangeable.

D-Rings: Each D-Ring is manufactured from stainless steel.
Each D-Ring has the same strength-rating.
There are 5 in number strength-rated D-Rings as detailed below:
1 x D-Ring, for lifting/recovery, located behind the neck for easy access.
2 x D-Rings, for umbilical attachment, located on upper left and right chest
2 x D-Rings, for umbilical attachment, located on front left and right waist



NOTE: Chest and waist-mounted D-Rings may each be used as secure umbilical attachment points or to hold other items of equipment.

Adjusters: Each of the 3 x Adjusters is manufactured from stainless steel.
Each Adjuster is designed to bind onto the webbing and resist sliding when under load.

Labelling: Each harness is marked with serial number, date of manufacture (MM/YY format), strength rating, part number/description and manufacturer details.

Part Numbers:	Personal Diver Harness (PDH), complete	AMTC-H1035-BL
Spare Items:	Red padded sleeve, 18in.	AMTC-S1232-RD
	Black padded sleeve, 10in.	AMTC-S1233-BL
	Waist band	AMTC-S1234-BL
	Shoulder strap	AMTC-S1235-BL
	Leg strap	AMTC-S1236-BL

INDIVIDUAL FITTING AND ADJUSTMENT:

The Personal Diver Harness (PDH) is intended for individual use and it should be fitted to a specific individual diver. It is essential that the harness fits the diver correctly.



CAUTION: An improperly adjusted or loose harness will be uncomfortable and may shift during use thereby compromising performance, particularly in an emergency.

Time taken by the individual diver to ensure a good fit is time well-spent.

The harness must be adjusted to fit snugly around the waist, over the shoulders and through the crotch.

Waist Band Height Adjustment (See photographs)

The waist band may be configured in 2 positions.

Any adjustment must be done before the harness is donned.

Procedure:

- A. Remove the 2 black padded sleeves from the waist band by undoing the Velcro® closure strips.
- B. Undo the waist band adjuster/buckle.
- C. Slide the waist band out through the slots in the front shoulder straps, leg straps and rear back strap.
- D. Re-insert the waistband in the appropriate slots in front shoulder straps, leg straps and rear back strap.
- E. Re-attach the black padded sleeves with the smooth sides facing to the inside of the harness.



Waistband height adjustment slots (front and rear)

Waist Band Length Adjustment

The waist band may be adjusted for length before or after the harness is donned.

Procedure:

- A. Loosen the waist band adjuster/buckle and slide the webbing strap in the appropriate direction.
- B. When adjusted to the correct length ensure that the loose tail is laid back along the waist band.
- C. Use the Velcro® closure strip to assist in securing the loose tail end.



NOTE: The tail of the waist band does not have to be threaded back through the waist band slot.

Leg / Crotch Strap Adjustment

The leg straps must be adjusted so that they are snug and the pressure is evenly distributed.

This important procedure is easier to complete before donning the harness.

Procedure:

- A. Remove the 2 red padded sleeves from the leg straps by undoing the Velcro® closure strips.
- B. Loosen each leg strap adjuster/buckle and slide the webbing strap in the appropriate direction.
- C. When adjusted to the correct length ensure that the loose tail is laid back along the strap.
- D. Use the Velcro® closure strip to assist in securing the loose tail end.
- E. Re-attach the red padded sleeves with the smooth sides facing to the inside of the harness.



NOTE: The red padded sleeves should be fitted over the leg strap and tail webbing.

Trimming the Waist Band and Leg Straps

The waist band and leg strap tails may be trimmed to remove excessive length. The Velcro® closure strip is stitched to the webbing with a series of stitched boxes to allow the tail to be cut and resisting any unraveling.

Procedure:

- A. Locate the tail end of the webbing.
- B. Trim the tail by cutting across the webbing and Velcro® closure strip at a right angle.
- C. Heat seal the newly trimmed tail end of the waist band (e.g. with a lighted match or lighter).

OPERATING PROCEDURES:

Before Use:

- Visually check harness to ensure that all webbing, stitching and hardware are in good condition.



CAUTION: DO NOT USE A DAMAGED HARNESS

- Ensure that the waistband height is adjusted, if necessary, before donning the harness.
- Ensure that the harness is correctly adjusted for individual fit - pre-adjust as necessary.

Donning the Harness:

It is recommended that the harness be pre-adjusted (i.e. waist band height and leg/crotch straps).

- With the harness waist band adjuster/buckle held open, step into the leg openings/loops.
- Pull the harness up and insert arms through the shoulder straps.
- Thread the waist band tail through the adjuster/buckle and tighten to desired fit.
- Ensure that the waist band tail is laid back along the waist band and secured using the Velcro® closure strip or tucked behind the waist band.



NOTE: *The tail end of the waist band does NOT have to threaded back through the waist band slot in the shoulder strap or inside the padded sleeve. Doing this may cause a delay in removal of the harness.*

After Use:

- Visually check harness to ensure that all webbing, stitching and hardware are in good condition.
- Thoroughly rinse the harness with fresh water and hang to air dry.
- If dirty, clean using a solution of warm water and household grade detergent. A soft brush may be used as required. Follow this with a thorough fresh water rinse and hang to air dry.



CAUTION: A DAMAGED HARNESS MUST BE REPAIRED OR REMOVED FROM SERVICE



Photograph shows a surface-supplied diver being recovered from the water in an emergency using the Personal Diver Harness (PDH) attached to the recovery hoist.



Personal Diver Harness *P.D.H.*

AQUA  LUNG®

2340 Cousteau Court • Vista, CA 92081
Phone (760) 597-5000 • Fax (760) 597-4900
www.aqualung.com/military