ADVANCE IMPRESS 3

User manual

Edition 2 / 04-2012

Contents

Thank you for flying ADVANCE

Congratulations on your choice of an IMPRESS 3, a quality product from ADVANCE. We are confident that you will spend many rewarding hours in the air with it.

This manual contains instructions and important advice about safety, care and maintenance. We strongly advise that you read it carefully before your first flight with the harness. You can always find the latest version of the manual and additional up-to-date information on www.advance.ch. Any new safety-related findings about the product will be published there. For questions or problems please contact your supplier or ADVANCE direct.

We wish you a lot of fun with the IMPRESS 3 and, as always, “happy landings”.

Team ADVANCE

About ADVANCE

ADVANCE is one of the leading worldwide paraglider manufacturers, and is based in Switzerland. Since the company was founded in 1988 it has maintained its own policies and concepts, both in development and production. The results are matured products with unmistakable characteristics.

Backing the brand is a team of experts who share the passion of those who put their trust in ADVANCE products. With their own understanding of flight they bring their personal experience and dedication to the working processes.

For many years ADVANCE has drawn on the competition scene for technical knowledge. A small team of selected test and competition pilots has achieved much sporting success with ADVANCE prototypes, and has won many important international titles.

Total control of the production process and close supervision of the working practices in the dedicated factory in Vietnam guarantee a high standard of workmanship. A long term relationship with fabric and line manufacturers also enables ADVANCE knowledge and expertise to find its way directly into the development of new materials.

ADVANCE puts great importance on after-sales customer support, and has built up a worldwide service network for this purpose. An on-going interaction with customers brings new insights that find their way into ADVANCE products – thus completing the «Circle of Service».

The IMPRESS 3

Welcome on board!

The IMPRESS 3 starts a new generation of harnesses for thermal, cross country and competition pilots. This continued development of the unique LIGHTNESS concept, without seatboard, provides the highest level of comfort and lowest aerodynamic drag. With its LTF certified back protector the IMPRESS 3 weighs only 4.7 kg, and is very light and compact.

Notable features of the IMPRESS 3

Based on the LIGHTNESS concept

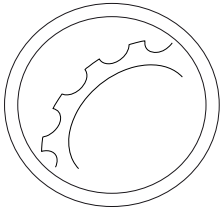
The new design, without a seatboard, supports the pilot's weight over a large area, on an ergonomically shaped and edge-free surface, on which he reclines very comfortably. There are no places to raise pressure points on long flights, and this is a major advantage compared with conventional harnesses.

Much lighter

The IMPRESS 3 weighs only 4.7 kg – something new for a harness with speedbag and approved protector. The weight reduction results from numerous design and material details; the use of lighter materials and clever design also means that the packed volume is markedly reduced.

Perfect aerodynamics

A lot of wind tunnel work was done during the IMPRESS 3 development, mainly concentrating on the airflow around the chest and leg areas. The result is a low drag and geometrically optimised harness with a new Cockpit-Spoiler-Concept.



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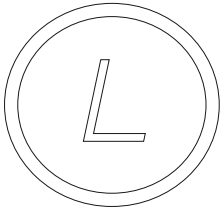

Weight reduction

Perfect aerodynamics

More important details

- The harness has the proven ADVANCE two-buckle strapping system, combining chest and leg straps (called the Safe-T-System).
- A well-placed lead-out for a drink system, to provide for convenient drinking on long flights.
- The speedbag, adjustable in length and angle, guarantees comfortable leg support and helps to minimise aerodynamic drag.
- The speedbag includes a useful cockpit with removable instrument panel, and has integrated side pockets.
- The built-in reserve compartment is in the ideal place, and is large enough for all current reserves, including Rogallo-type steerables.
- The main supports will accept QuickOut carabiners.
- There is an additional pocket for ballast or stores under the seat.
- The speed system has ball bearing pulleys, and can always be easily reached in flight.

Safety advice

As with all commercial reserve parachutes paraglider harnesses, because of their design, are not at all suitable for freefall parachuting. The reserve and its attachments are not designed for an abrupt opening.

All adjustments to the harness should definitely be made before flight. Correct harness settings contribute decisively to functioning, safety and comfort in flight.

The foam protector under the seat does not provide total protection from injury. It only serves to dampen impacts and so minimise injuries that might result from a minor collision with the ground from a low height following unfortunate takeoffs or landings.

When carrying out safety training over water you should be aware that the foam protector under the seat, and the comfort foam in the back float in water, and could put the pilot in a head down attitude. There is also a risk that the protector and comfort foam may eventually fill with water and sink – with the pilot.

General advice about paragliding

Flying a paraglider calls for appropriate training and a sound knowledge of the subject, as well as, of course, the necessary insurance cover and licence. A pilot must be able to correctly assess the weather conditions before taking off. His or her capabilities must be adequate for the actual paraglider.

Wearing an adequate helmet, suitable boots and clothing, and carrying an emergency parachute are essential. Before every flight all items of equipment should be checked for damage and airworthiness. A proper pre-takeoff check must also be carried out.

When carrying out paraglider sports every pilot bears sole responsibility for all risks including injury and death. Neither the manufacturer nor the seller of a paraglider can guarantee or be held responsible for the pilot's safety.

Using the harness

Delivery

Before delivery every ADVANCE product has to be checked by the dealer for completeness and correct basic settings. The completed warranty document will ensure that defects in the product attributable to manufacturing faults are covered by the ADVANCE warranty. (See Warranty in the section «Service».)

The IMPRESS 3 harness is delivered with the foam protector installed under the seat, the comfort foam in the back, and a fitted speedbag, footboard and speed lines. The upper and lower speedbag straps are located in the speedbag and already hung in the main carabiners. All harness and speedbag straps will show their basic settings at delivery.

Delivery package

The IMPRESS 3 harness package contains:

- Harness and speedbag with carbon footboard
- 2 Alu main carabiners
- Reserve V-connection and reserve handle with its attached four-flap inner container
- Integrated cockpit with removable instrument panel
- Foam protector under the seat
- Comfort foam in the back
- Speed system (consisting of 2 grey speed lines with Brummel hooks, 2 orange connecting lines for length adjustment, 1 black speed loop with a grey connecting loop)
- Radio pocket
- ‘Getting started’ booklet

Adjusting the harness

The IMPRESS 3 can fit your body shape perfectly. ADVANCE actually recommend the IMPRESS 3 basic setting as an efficient and good set-up; it has been arrived at and refined by the ADVANCE test team. It will give the majority of pilots a comfortable and optimum fitting, assuming you have chosen the right harness size. (See 'Technical Data' in the section "Technical Details".)

Start out from the basic settings and make your own adjustments step by step according to the instructions that follow. They cover all the important criteria, such as upper body support, pressure distribution, speedbag length and the best speedbag angle for performance.

The shoulder, back and chest straps can be adjusted in flight. The rest of the IMPRESS 3 adjustment system can only be set on the ground. ADVANCE therefore recommend that you get well acquainted with the adjustments before your first flight in the harness. In any case your first test should take place in quiet weather conditions.

Caution: Setting up your IMPRESS 3 is not complicated or difficult so long as you follow the recommended step by step procedure. ADVANCE recommend that you try to achieve the ideal position as described.

Caution: Small changes to any of the straps have a large effect on the setting. Proceed towards your individual fitting in very small steps and always set all straps symmetrically, so that your glider wants to fly straight.

Tip: Pack the back pocket and install the reserve before you start adjusting. This will give something close to a realistic flying attitude.


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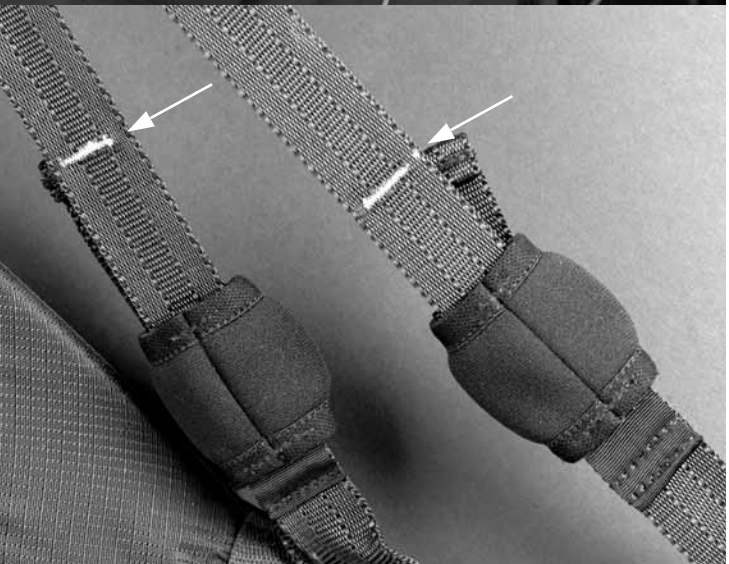

1. Start at the basic settings

To begin with make sure all the straps, including the speedbag straps, are at their basic settings. This is the case when the free end of each strap reaches the white mark. The harness will have been delivered like this.

2. Set the speedbag length

Now you can adjust the speedbag length to suit your leg length. The length of the speedbag and therefore your centre of gravity position sets the speedbag angle. For the best aerodynamic speedbag angle the underside of the speedbag should be horizontal. To set the length first loosen the upper speedbag line (4) completely, then adjust the lower speedbag strap (4) – which carries most of the load – to your perfect speedbag length. Now pull in the upper speedbag strap (4) as far as necessary.

A good speedbag length will lightly support the legs on the footboard, without effort or strain. Upper and lower speedbag straps should both be under light tension, and symmetrical (same left and right).

More adjustment: The angle of the footboard itself can be adjusted by slightly altering the top to bottom relationship of the speedbag straps.

Info: Foot support is part of the speedbag and this is what supports you in your reclining position. The speedbag is removable, but only for repair or replacement (see section “Replacing parts“). The IMPRESS 3 harness only works with its speedbag.

Info: Compared with the Impress 2 you need much less load on the IMPRESS 3 footboard to hold your legs level. New angle geometry has achieved this.

3. Setting the upper body angle

Now you can alter your upper body recline angle using the back straps (5). The back straps at the sides are mounted relatively high. This gives good back support and takes weight off the shoulders.

Finally you can tighten or loosen the shoulder straps (6) as you wish – quite loose, or providing light support – but without putting pressure on the shoulders.

4. Checking the settings

Run through the following points to check your perfect position:

- Is the underside of the speedbag still horizontal? If not you can move your centre of gravity by changing the length of the upper and lower speedbag straps. It’s best to get an observer to check the speedbag angle.
- Are the back straps low enough so that they don’t cut into your armpits?
- The front edge of the harness should not be pressing the backs of your knees.
- The speedbag should not have any obvious creases.

Repeat the procedure as often as necessary – after every flight (if you like). Perfect is best: it works well.

5. Fine adjustments

Adjusting the main support loadshare strap, and seat surface straps

Finally you can check the main support loadshare straps (7) and the seat surface straps (8), which, together with the main support, provide a very individual and precise shape for your body. Basically you should leave the pre-set basic setting of these straps unaltered for the Ideal position, so long as your weight is evenly distributed, all the straps are under load and you don't feel any pressure lines from the seat surface.

If there's pressure from the sides pull in the loadshare straps (7). If you sense annoying pressure under your bottom loosen the load-share straps. Too much pressure at the backs of the knees means loosen the seat surface strap a little (8). If there's not enough support under the knees pull these (8) in slightly.

Adjusting the leg straps

Basically the leg straps (1) are set so that adjustment is not necessary. If these do annoy you, you can lengthen them, to the extent that they don't annoy you in flight, but that you can still get into the speedbag.

To adjust the leg straps (1) open the foam protector compartment by its zip fastener and take the foam out. The length of the leg straps has no effect on agility or weight steering.

Adjusting the chest strap

You can alter the carabiner distance using the chest strap (2). The ADVANCE development team recommend a 'good shoulder width' of about 45 cm as ideal. The possible adjustment range is between 40 und 48 cm, measured between carabiner base centres. The chest strap is closed by automatic quick releases and this makes up the Safe-T-System.

The wider the chest strap the more agile will be the seat, and weight steering will be more effective. A narrow setting gives quiet, damped flying characteristics. The adjustable range is large and you can match harness agility to the conditions during flight, as you wish.

The IMPRESS 3 is provided with the Closure Remember System. This is a safety device attached to the chest/leg straps which draws the pilot's attention to the chest strap when he closes the speedbag before takeoff, thus reminding him that it too should have been closed. This safety device may prevent that pilot – who unfastens the chest strap, leaves the speedbag closed (e.g. following a failed take-off), then takes off again – from falling out of the harness.

Caution: Always close the chest strap first, then the Closure Remember System, and after that the speedbag. Check before every takeoff and especially after a failed takeoff in particular – by a physical tug –, that you have correctly closed both quick release buckles. If the chest strap is not closed you can fall out of the harness.

Caution: Always check that the locks are correctly latched.

Tip: The most important thing about chest strap adjustment is that you feel good in the harness.

Speed system
Connect the speed system to the glider using Brummel hooks or an anchor hitch. The length of the speed system can be adjusted on the short orange lines inside the speedbag. Move the overhand knots symmetrically.

The speed system is correctly adjusted if you can use the glider's whole accelerate range. Make sure the lines are not adjusted so short that the glider is always accelerated.

Closing the speedbag
To close the speedbag lie the left over the right side and clip the plastic hook in the loop. After taking up the flying position and straightening your legs on the footboard the speedbag closes automatically and the cockpit goes into its correct position.

Cockpit and instrument panel

The cockpit is part of the speedbag and has a zip-fastened pocket on top. At delivery there is a foam blank in the pocket which supports the cockpit and makes the spoiler shape. You can leave the blank there or use the space for your own things.

The instrument panel Velcros straight on to the cockpit. The panel

has enough room for a GPS and/or Vario, and there are loops at the side for securing these. The panel itself and the instruments can also be secured by line to loops on the cockpit.

Stowage/Ballast compartment

There is an 8 litre volume compartment in the perfect place under the seat, close to the centre of gravity, for your choice of equipment or ballast.

More details

Shoulder mountings

Both IMPRESS 3 shoulder straps have a Velcro and a loop, suitable for fixing an emergency alarm or Solario.

Drink system

In the back compartment there is a pocket for a drinks container (Camelbak). The drinks tube can be led out through either side of the compartment and secured to a shoulder strap through the neoprene band provided.

Radio pocket

The radio pocket supplied goes over a main carabiner.

Pilot relief system routeing

On the left side of the speedbag at knee height there is an opening in the neoprene for a relief tube to be led out of the speedbag.

Installing the reserve

The following instructions apply to inner containers delivered after 19.03.2012. These new inner containers have a red border.

You can continue to use the old, pre 19.03.2012 container provided that the compatibility test has been correctly carried out and the system works faultlessly. In principle, however, ADVANCE recommend that all pilots get the new container and use it the next time the reserve is repacked and reinstalled, so that there are will be no old containers around, particularly if your harness is sold on, or finds its way onto the second hand market.

General advice

Every reserve/harness combination has its own peculiarities. It is essential that pilots and parachute packers familiarise themselves with the system and how it works – especially if any part of it is new (new reserve in existing harness or vice versa), so that reliable operation will be assured.

Suitable reserves

Reserve compartment volume

Basically, bulky old-style reserves in compact, modern harnesses can be difficult to release, especially under high g loading. The certified volumes for the IMPRESS 3 are specified as a function of harness size: The upper volume limits for the S, M and L harnesses are 6, 6.5 and 7 litres respectively.

A very rough volume approximation can be obtained from the reserve weight by using this formula (Reserve weight in Kgs x 2.7 = Volume in Litres). But, depending on packing quality and style, it could still be possible that a reserve does not release faultlessly, even though it conforms to the approved maximum volume – if calculated by this formula.

In the end analysis a compatibility test will decide in every case whether a particular reserve/harness combination works properly.

Caution: A reserve parachute volume can expand by up to 30% when it has been newly folded. ADVANCE therefore strongly recommend that a new compatibility test is carried out after every repack.

Steerable reserves

A steerable reserve can be connected directly to the two coloured loops under the shoulder strap covers, using two similar Maillons Rapide of 2400 daN minimum total safe load. The parachute risers run into the reserve compartment in the channel provided. The normal harness V-connection (not used) can be led into the back pocket through the existing opening, then stowed away in the comfort foam compartment.

Once again a compatibility test will decide if the chosen reserve works properly with the IMPRESS 3.

Caution: Steerable reserves tend to take up more volume.

Info: You can also use Quick-Out carabiners with a steerable reserve on the IMPRESS 3.

Packing a reserve in the IMPRESS 3.

The IMPRESS 3 reserve compartment is in the best aerodynamic position near the pilot's centre of gravity. The harness/reserve connection runs in a channel at the side of the harness, which is closed by a zip fastener. The reserve compartment is completely closed by zips.

It is simple to operate and works reliably – and at the same time is well protected from the outside world, meaning that accidental releases are most unlikely. A well-designed release system guarantees reliable and fast opening.

Caution: Installing a reserve should be done by a qualified person.

Connecting harness V-connection and reserve bridle

Connect the fitted harness V-connection and the reserve bridle using a Maillon of at least 2400 daN safe load. Stabilise V-connection and bridle on the Maillon using rubber O-rings: this is to prevent them slipping round and side-loading the Maillon when the reserve is thrown.

Making this connection by direct loop should only be done by the harness manufacturer or a trained and qualified person. If this loop is not positioned correctly there is a risk that slipping, heating by friction and failure may occur when the reserve opens.

Caution: Do not use sticky tape or cable ties instead of O-rings to stabilise the Maillon connections.

Inner container and its fixed reserve handle

The reserve handle and the four-flap inner container are permanently connected together, and are designed so that the pull of the handle is directed evenly over the width of the container. This minimises the risk of the container turning and jamming in the compartment, or becoming caught up in the reserve lines, and guaranteeing a perfect reserve throw. The reserve handle and the four-flap container are a part of the harness, and meet the latest LTF certification requirements. Only the original reserve handle and its four-flap inner container may be used.

Packing the reserve in the inner container

Pack your reserve to match the shape and size of the delivered inner container; for the IMPRESS 3 inner container this means that the reserve has to be packed in a long and narrow shape. Put the reserve lines on the opposite side to that of the reserve handle.

Putting the inner container into the reserve compartment

First lay the V-connection and reserve bridle in the reserve compartment, then the inner container. It is essential that the inner container

is installed with the closure flaps facing upwards. The reserve handle connection must not be twisted.

Caution: If the reserve has been packed but does not fit the shape of the inner container it must be folded again to match the inner container.

Closing the reserve compartment

Now fit the reserve handle into its neoprene pocket. Put its connecting strap into the gap provided for it. Lead the reserve handle yellow cable out of the neoprene pocket through its eyelet inside the harness, and then back out again through the buttonhole.

Close both zips. This entails running both zippers backwards to the starts of their tracks, from where they can be easily closed. Stow the zippers in their ‘garages’.

Finally secure the compartment using the round eyelet, its closure loop and the yellow cable. Lead the end of the yellow cable into its channel.

Doing a compatibility test

In every case correct stowage of a reserve must be checked by means of a test release. To do this you must be sitting in the harness while it is hanging up by its carabiners, with the back pocket packed as for flight. It is not good enough to pull out the reserve or release the handle if you are not sitting in the harness. For a successful test you must be able to release the reserve while in the flying position, in accordance with the guidelines in this manual, without problem. Make sure that the release force is not less than 4 daN and not more than 7 daN. If you are not sure about this do not hesitate to contact a qualified person or your ADVANCE dealer.

The reserve must release as a result of the correct throwing action – for the IMPRESS 3 a pull to the side. If this is not the case releasing may be a problem.

The following factors can make reserve throwing difficult or prevent it, especially if they apply together:

- The reserve is too big or too bulky for the compartment or inner container.
- The reserve has not been packed to the lengthwise shape of the inner container.

- The reserve is not thrown using the correct technique. A sideways throwing motion is required (Caution: don't pull it upwards).
- The reserve volume was OK when fitted into a new harness, but it became too big after a repack.
- The pilot's arm length can be a factor for successful reserve throwing. Small people with short arms cannot release the reserve under some circumstances.
- When throwing is attempted under high g-loading (> 3G, e.g. in a spiral).

Info: A successful compatibility test carried out by a pilot promotes their confidence in their emergency system.

Caution: Before every flight check that the reserve handle is in the correct position, and that the yellow cable is correctly routed.

Tip: We recommend that, during every flight, you briefly put a hand on the reserve handle – so as to remind yourself of its position. We advise that you mentally rehearse the sideways throwing action.

Using the harness in flight

General

The IMPRESS 3 is flown in a reclining position. If you have adjusted the harness correctly information from the wing will be transmitted directly to your nether regions. Your weight will be even distributed from the thighs to the shoulder blades. This means that pressure-points will be avoided, circulation will continue unimpeded, and you will keep your concentration on long flights. The aerodynamically optimised Speedbag protects you from the cold while serving as a foot support.

Do the following takeoff check before every takeoff:
1. Helmet and harness chest strap fastened, reserve ok
2. Lines free
3. Canopy open
4. Wind direction and strength checked
5. Airspace and view free

Caution: Always fasten the chest strap first, then the speedbag. Check before every takeoff, but especially after a failed takeoff – by a physical pull with the hand – that you have closed both quick release buckles correctly. If the chest strap is not closed you can fall out of the harness.

Using the speedbag

Keep a forward upper body position after lift off and pick up the speedbag (which will be hanging slightly behind) with your right heel. With the help of the footboard you will then be able to push yourself into a comfortable reclining position. After taking up the flying position and stretching out your legs the speedbag closure system will automatically close the speedbag top and bring the cockpit into position.

For landing take both feet out of the speedbag in good time, and take up an upright position. Always make a stand up landing, so as to avoid damage to body or equipment.

Tip: The speedbag is very warm; if it gets too warm let some air in by bending a leg.

Using the speed system

The speed loop is tensioned forward so you can always easily reach it. One leg should always be straight to keep tension in the speedbag. When you wish to use the second speed loop step, the foot already on the first speed step automatically takes over this function. Accelerating with one foot means you can feel the wing better and

use the speed system effectively for active flying. While pushing the speed system you must be careful not to push your heels into the speedbag floor in your enthusiasm to burn rubber. This could overstress the speedbag material. (See also “Fitting the speed system” in the section ”Using the harness“.)

Caution: Always connect your speed system to the wing. Free-hanging speed lines could interfere with a reserve throwing.

Throwing the reserve

In an emergency pull the reserve handle out with a firm tug and throw it (and the inner container) into free airspace. The lines will pay out, which will open the inner container. The reserve canopy will extend and fill. Disable the paraglider by pulling down strongly on the B or C risers, so that it does not compete with the reserve and encourage scissoring. This happens when both canopies pull against each other on opposite sides of the vertical flight path.

Using the harness with other brands of paraglider

The IMPRESS 3 can be used with any glider. There is no restriction.

Winching

All ADVANCE harnesses are suitable for winching. Connect your IMPRESS 3 to the tow link using rope loops or Maillons from the main carabiners. If in doubt always consult the winch driver, or someone authorised by the manufacturer.

Acro flying

The IMPRESS 3 is not suitable for acro flying. But freestyle manoeuvres pose no problem.

Tandem flying

The IMPRESS 3’s size and shape means that it is not at all suitable for tandem flying – whether for pilot or passenger.


ADVANCE

Replacing parts

The IMPRESS 3 harness is delivered with a foam protector under the seat, comfort foam in the back and a fitted speedbag, footboard and speed lines. These parts can be removed for replacement or repair.

Foam protector and comfort foam

The foam protector compartment is under the seat, between the reserve and the ballast stowage. Open the zip fastener, and take out the foam protector.

The comfort foam is in its own compartment in the back pocket. Open the zip fastener, and take out the comfort foam.

Speedbag

To fit a new speedbag take both carabiners out of the red loops. Then open the two speedbag zips and the Velcro, and take the speed lines out. Remove the old speedbag and fit the new one, reversing the process – routeing the speed lines and closing the zips and Velcro.

Caution: Hang all the red loops in the carabiners, otherwise the speedbag zips will be irreparably damaged by loading.

Info: The footboard is a part of the speedbag, and provides an essential support for the reclining position. The IMPRESS 3 harness only works with the speedbag.

Footboard

A new footboard should be pushed into the footboard pocket in the speedbag, and the pocket secured with the Velcro.

Speed loop

To fit a new speed loop start at the grey connecting loop on the end. This attaches to the bungee coming from the footboard inside the speedbag. Now lead the grey speed lines through the first pulleys, (1) then through the red markings (2). Pull them through the second pulleys, and out of the harness through the openings in the sides of the speedbag (3), where they can be connected to the wing by Brummel hooks or anchor hitches. Speed line length is set by the position of the knots on the orange lines on the speed loop inside the speedbag. These overhand (half hitch) knots should be moved symmetrically (same both sides).

Caution: Check that the speed lines do not cross and rub against the lower speedbag straps.

Caution: Only use the original speed lines and loop. Other lines, or a speedbar, could chafe and damage the speedbag and harness.

Maintenance, repair and care

Maintenance

The life of your harness depends very much on how you look after it. We recommend that you investigate any signs of wear, damaged seams and webbing and, if necessary, replace individual components. After a specially high loading (e.g. heavy crash) we recommend that you have your harness checked by a qualified person, and that you take it to an authorised Service Centre if a defect is suspected. (See also ‘Check’ in this section.)

Caution: Do not modify your harness, and never fly a harness whose webbing shows any sign of damage.

Caution: Only clean the harness with fresh water and neutral soap, if necessary - never solvents.

Info: Ultraviolet light, heat, humidity, seawater, aggressive cleaning substances, careless storage and physical abuse (dragging over ground) speed up the ageing process.

Info: Do not expose your packed harness to large changes of temperature, and make sure it gets enough ventilation; to prevent condensation forming.

Info: Before and after flight do not leave the harness in the sun for no reason (UV-light).

Reserve parachute

Most reserve manufacturers recommend servicing or repacking every 6 months; this will guarantee reliable and fast opening every time (see the manufacturer’s information for your reserve). If the reserve gets wet, or just damp, or very hot, it needs immediate repacking. After every reserve throwing the reserve, and especially the connection between harness and reserve, must be carefully checked over.

We strongly recommend that you let your reserve be packed by a trained and authorised person. In addition ADVANCE emphatically recommend that you regularly check the outer container, and the yellow cable running through the closure loop – the yellow cable should move easily through the loop.

Foam protector

The foam protector does not need special attention, but should definitely be checked for damage after a crash. If the outer cover is damaged the protector must be replaced.

Wet harness

Your wet or damp harness must be allowed to fully dry out at room temperature, or outside in the shade. Take the foam protector out of its compartment under the seat, and the comfort foam out of the back (see ‘Foam protector and Comfort foam’ in section “Replacing parts“). Take the speedbag off the harness and leave it to dry separately (see ‘Speedbag’ in section “Replacing parts“). Take the reserve out (always repack it) and open all the compartments to dry.

If the harness has been in contact with seawater it must be thoroughly rinsed with freshwater before drying.

Check

Your harness must have a check every 24 months. This inspection includes a visual assessment of the material, webbings and connections, the most important seams and the main carabiner supports. All parts are checked for tears, creases, worn seams, damage and serious wear.

There is more information about the check in this manual in the section «Service» or on www.advance.ch.

Repairs

You should never repair your harness yourself. The various seams are sewn with great precision. Because of this you should only have repairs done by the manufacturer or an authorised Service Centre, using original parts.

Disposal

Environmental considerations play an important role in the choice of materials and the production of an ADVANCE product. We use only non-toxic materials that are subjected to continuous quality and environmental impact assessments. When your harness reaches the end of its life please remove all metal parts and dispose of the rest of the harness in a waste incineration plant.

Technical details

IMPRESS 3		S	M	L
Pilot height	cm	155-170	171-185	186-200
Seatboard width	cm	n/a *	n/a *	n/a *
Carabiner height	cm	n/a *	n/a *	n/a *
Chest strap width	cm	40-48	40-48	40-48
Weight of harness incl. Speedbag, 2 Alu carabiners	kg	4.5	4.7	4.9
Load test		DIN EN 1651 / LTF 91/09, 120 kg		
Foam protector certification		LTF 91/09		

*) Because the hammock system follows the body shape exactly the seating width together with the carabiner height will vary with the pilot dimensions.

Materials used

We routinely inspect and test the materials available to us many times over. Like all ADVANCE products the IMPRESS 3 is developed and produced using the latest developments and knowledge. We have chosen the materials very carefully, under the strictest quality demands.

Outer fabric
Oxford Ripstop 210D

Inner fabric
Nylon Oxford 210D PU3 / Nylon Oxford Ripstop 210D

Speedbag
Neoprene 1.5 mm

Straps
Polyester 25 mm 800 kg

Chest strap buckle system
AustriAlpin Cobra

Harness/reserve V-connection
Dyneema 10

Certification

The IMPRESS 3 harness has been tested and approved in accordance with LTF II 91/09 and DIN EN-Norm 1651 at a weight of 120 kg. The foam protector has LTF certification.

The most recent LTF certification requires that the harness may only be used with the original reserve handle and its attached four-flap inner container.

Service

ADVANCE Service Centres

ADVANCE operates two of its own service centres that carry out checks and repairs of any kind. These service centres, based in Switzerland and France, are official maintenance operations approved by the DHV, and they possess many years' experience and in-depth product-specific expertise. The worldwide ADVANCE service network includes other authorised service centres which provide the same quality of service. All these facilities use original ADVANCE parts exclusively.

You can find all the information about Checks and Repairs, and the relevant addresses on www.advance.ch.

ADVANCE website

On www.advance.ch you will find detailed information about ADVANCE and its products, and useful addresses to contact if you have a question.

On the website you can:

- complete the warranty card up to 10 days after purchase, and get the full advantage of the ADVANCE warranty.
- find out about new, safety-related knowledge and advice about ADVANCE products.
- download the PDF form you can use when sending your equipment to ADVANCE for a check.
- find an answer to urgent questions in the FAQs (frequently asked questions).
- sign up for the ADVANCE Newsletter so that you will be regularly informed by E-Mail about news and products.

A regular visit to the ADVANCE Homepage is a good idea because the range of services is continually developing.

Warranty

To benefit from the comprehensive ADVANCE warranty please fill in the appropriate form within 10 days of purchase. This form is available on the website under «Warranty».

As part of the ADVANCE warranty we undertake to rectify any defects in our products that are attributable to manufacturing faults. To make a claim on the warranty you must notify ADVANCE immediately on discovering the defect, and send the defective product in for inspection. The manufacturer will then decide how a possible manu-

facturing fault is to be rectified (repair, replacement of parts, or of the product). This warranty is valid for 3 years from the date of purchase of the product.

The ADVANCE warranty does not cover any other claim. In particular it does not cover damage caused by careless or incorrect use of a product (e.g. inadequate maintenance, unsuitable storage, overloading, exposure to extreme temperatures etc.). The same applies to damage attributable to an accident or normal wear and tear.

Size guide

Height (cm)
↓ → Weight (kg)

	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120
155																
160				S												
165																
170																
175							M									
180																
185																
190											L					
195																
200																

generally fits well
has to be tested individually (depends on the back and leg length)


ADVANCE

List of components

1 Main suspension points
2 Main strap
3 Shoulder straps
4 Back straps
5 Chest strap
6 Safe-T-System
7 Leg straps
8 Main support loadshare strap
9 Speedbag
10 Upper and lower speedbag straps
11 Speed lines
12 Stowage for stores/ballast
13 Stowage for stores/ballast
14 Harness/reserve V-connection cover
15 Back pocket
16 Hole for drinking tube
17 Foam protector under the seat
18 Comfort foam in the back
19 Velcro for a Solario Vario / SPOT
20 Speed system pullleys


19
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ADVANCEIMPRESS
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